EPA Region 5 Records Ctr.
374311

SCREENING SITE INSPECTION REPORT
FOR
B.J. CARNEY POLE YARD
HENNEPIN COUNTY, MINNESOTA

U.S. EPA ID#: MND981195167

VOLUME I

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EXECUTIVE SUMMARY

Beginning May 30, 1989, the Minnesota Pollution Control Agency (MPCA) staff conducted a Screening Site Inspection (SSI) at B.J. Carney Pole Yard (Site). The Site is located in Hennepin County, Minnesota. The legal description is the south half, Section 11, Township 118 North, Range 21 West. The Site involves approximately 5.7 acres.

B.J. Carney Company leased the property from Soo Lines Railway Company from 1923 until 1973, and operated a pole and railroad tie treating plant. Aerial photographs from this time period revealed widespread dark surface areas which may have been due to soil staining. The aerial photographs also showed the presence of several above ground storage tanks clustered together with a number of buildings. At the present, most of the property is inactive, however, a wholesale lumber company is in operation on the southern portion.

In July 1988, the Soo Line Railway Company contracted Bay West Environmental Services to conduct a preliminary ground water site evaluation on the property. This investigation involved three shallow monitoring wells (MW-1, MW-2, MW-3) and two soil borings. Shallow soil samples were also collected for analysis during the drilling of the boreholes for the three monitoring wells. Both the soil and water samples from this study were found to be contaminated with fuel oil/creosote constituents [polynuclear aromatic hydrocarbons (PAH), phenols and hexane extractables].

Three monitoring wells were installed and sixteen boreholes were sampled for the MPCA SSI. All samples were analyzed for the Target Compound List (TCL)

compounds and Target Analyte List (TAL) analytes. Several water and soil samples were contaminated with PAHs, phenols, tentatively identified heterocyclic compounds and unidentified hydrocarbons and aromatics.

The Site is located in a heavily industrialized area of north Minneapolis and has the potential to affect 16 municipal wells. These wells serve approximately 75,383 people. There are also surface water intakes that may be affected by the Site. This source serves approximately 576,226 people.

The objectives of this SSI were to determine whether the on-site soil and ground water are being impacted by the practices of the pole yard.

1.0 INTRODUCTION

The Minnesota Pollution Control Agency (MPCA), working under a Cooperative Agreement with the U.S. Environmental Protection Agency (EPA) has conducted a Screening Site Inspection (SSI) at the B.J. Carney Pole Yard in Hennepin County, Minnesota (Figure 1.1).

The Site was placed on the EPA Comprehensive Environmental Response, Compensation and Liability Information Systems (CERCLIS) inventory on January 1, 1982, and a preliminary assessment (PA) was conducted on June 26, 1986. A work plan was prepared on April 13, 1989, and was approved by EPA Region V. The plan involved the installation of three monitoring wells, twenty soil borings, and the sampling of four municipal wells in addition to the six monitoring wells on site. All samples were analyzed for the TAL analytes and the TCL compounds by laboratories that participate in the EPA Contract Laboratory Program (CLP).

The purposes of an SSI have been stated by the U.S. EPA in a directive outlining Pre-remedial Strategies. The directive states:

> All sites will receive a SSI to: 1) collect additional data beyond the scope of the PA enabling a more refined preliminary HRS score, 2) establish priorities among sites most likely to qualify for the National Priorities List (NPL), and 3) identify the data requirements for a Listing Site Inspection (LSI).

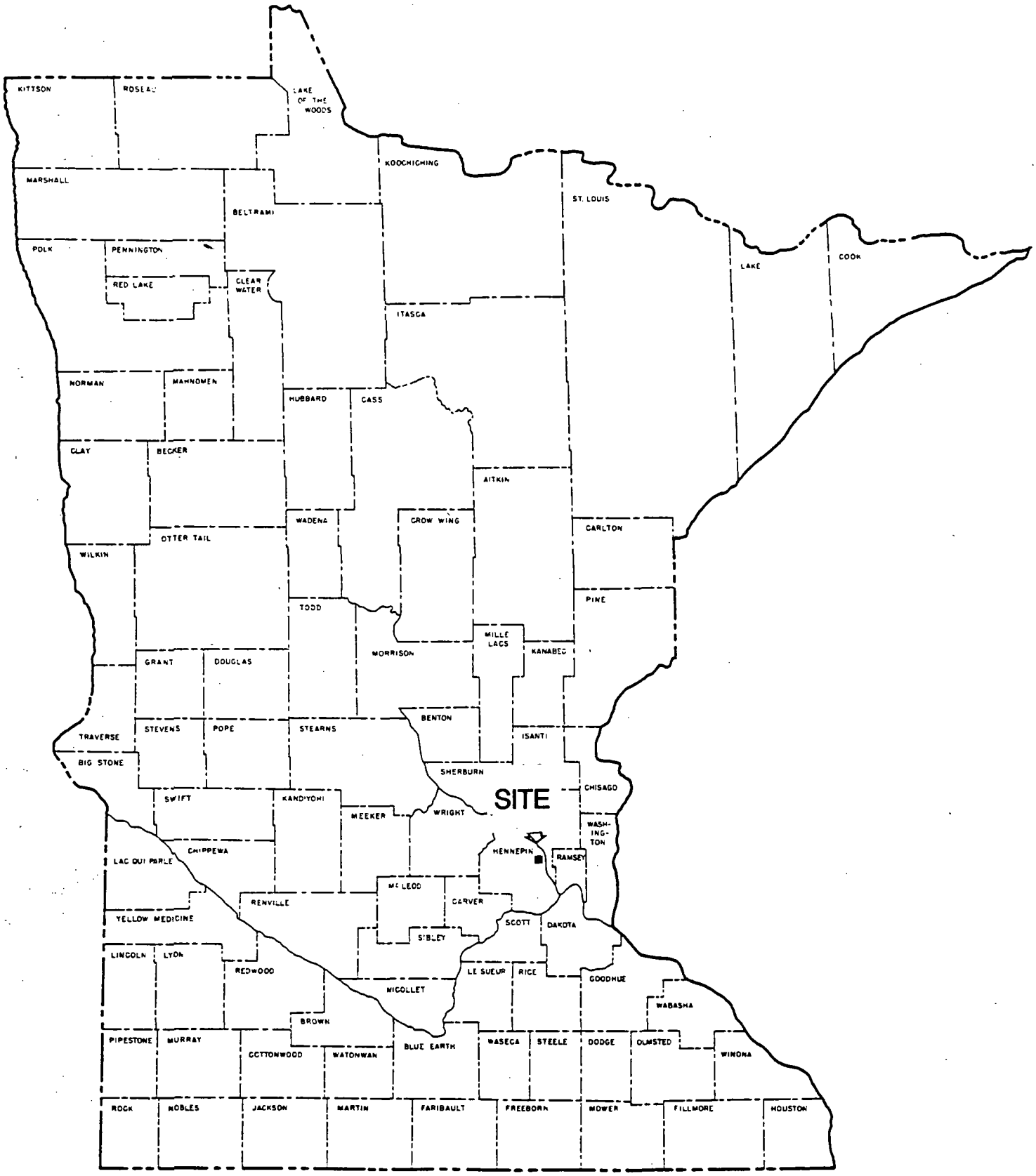


FIGURE 1.1 - SITE LOCATION IN MINNESOTA

2.0 SITE BACKGROUND

2.1 Site Description

The Site is located in an industrialized portion of North Minneapolis (Figure 2.1.) A Soo Line railroad yard is located on the north side of the Site, residential areas border the Site on the far east side, a wholesale lumber company is located on the south side, and residential areas and an agricultural chemical plant are located on the west side.

During a visit in April 1989, piles of waste lumber, empty drums, concrete debris, tires, wire, and piles of plastic ribbon were observed scattered on the Site. Some surface soil staining was also seen. The fencing that surrounds the Site was not secure in all areas and an abandoned shed was located near the gate entrance. A portion of an abandoned railroad track angles from the northeast corner. See photographs in Appendix C.

2.2 Site History

The B.J. Carney Company leased the property from the Soo Line Railway Company between 1923 and 1973. The company operated a wood and pole treatment plant, which utilized oil borne preservatives. Pentachlorophenol (PCP) was the primary preservative but other preservatives may have been used (Remediation Technology, 1988).

The Site was brought to the attention of the MPCA in April 1982, by complaints involving the waste disposal practices on property leased by the Soo Line

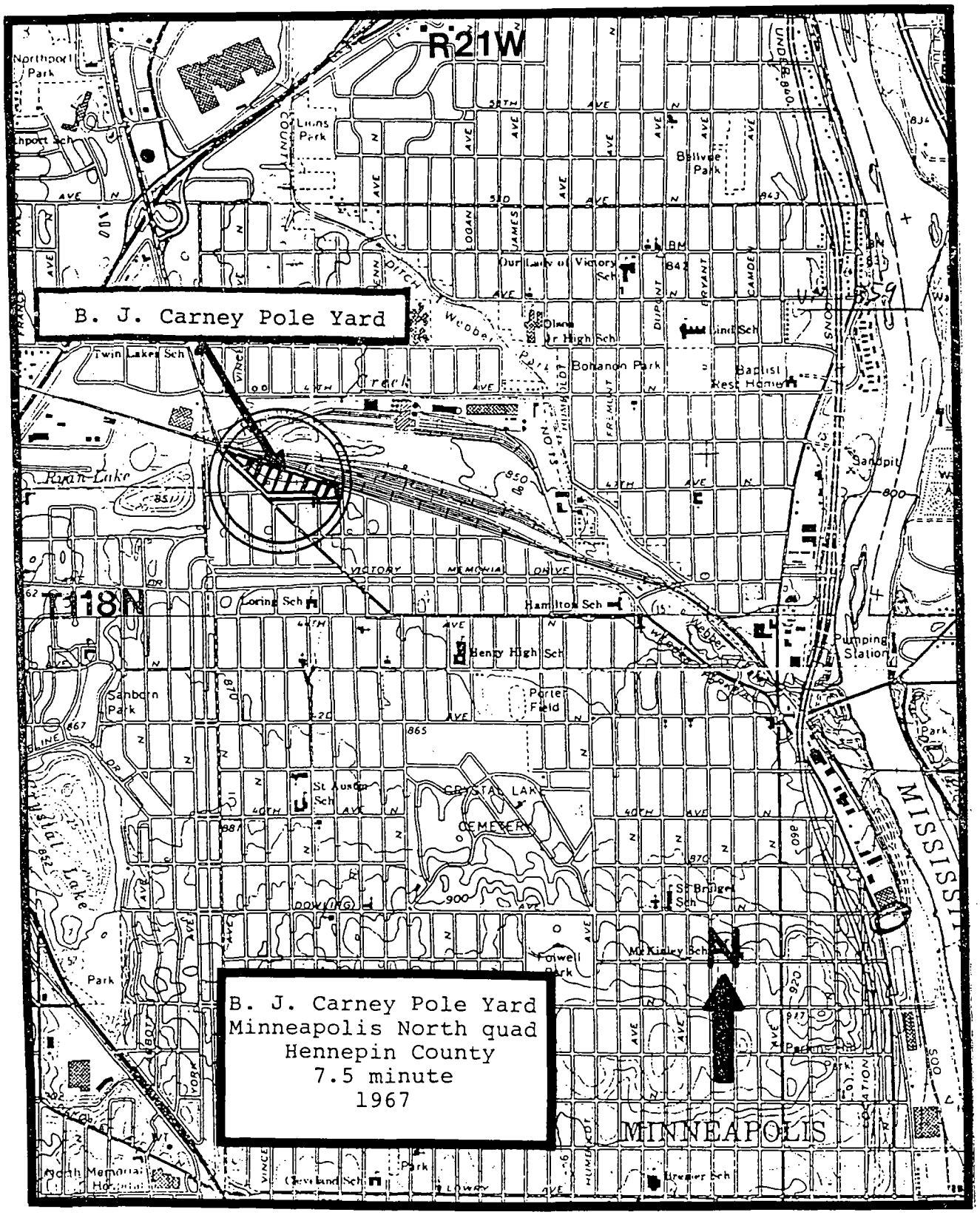


FIGURE 2.1 - Site Map

Railway Company. On September 24, 1985, M. Convery reviewed selected aerial photographs at the Wilson Library of the University of Minnesota (MPCA files). A description of the photographs follows:

Photograph WN-26-2343 (July 1, 1937)

Treatment operations are present in the north-central and northwestern portions of the Site immediately south of the Soo Line tracks. Wood products were stockpiled west, south, and east of the treatment facilities. The wood products included some poles and ties. A number of cylindrical tanks appeared to be clustered in the treatment area. A small pond or lagoon may have been present just east of the treatment area.

Photograph WN-IT-62 (May 6, 1957)

The eastern two thirds of the Site contained stockpiled wood products. Soil in the eastern third of the Site was very dark, perhaps indicating staining. The treatment facilities were present in the northwest corner, including two large, vertical, cylindrical tanks.

Photograph WN-2EE-113 (October 14, 1964)

The treatment facilities were present in the north-central and northwestern portions of the Site. Several buildings and tanks were clustered together. A pond appeared to be present in the north-central part of the Site, just east of the treatment facilities. The south boundary of the Site was very dark,

indicating possible soil staining or ponding of water. Wood products were stored on the eastern half of the Site.

Photograph WN-1KK-170 (October 28, 1969)

This photograph showed the same facilities and storage pattern as in 1964. There were no apparent ponds or lagoons.

In July 1988, the Soo Line Railway Company contracted Bay West Environmental Services to conduct a preliminary ground water site evaluation. This study involved the installation of three shallow monitoring wells and two deep soil borings (30 to 37 feet deep). Shallow soil samples (4 to 5 feet deep) were also collected for analysis during the drilling of the boreholes for MW-1, MW-2, and MW-3. PCP, hexane extractable organics (reported as #2 fuel oil) and PAH were detected in the soil samples.

Water samples were collected from the three Bay West monitoring wells in July 1988, and in September 1988. The laboratory analysis detected the presence of PAH and PCP.

On April 28, 1989, Bay West Environmental Services was notified by the MPCA that the monitoring wells were backfilled with cuttings from the soil boring advancements. In May 1989, Bay West abandoned and replaced the existing wells in accordance with the Minnesota Department of Health (MDH) Well Construction Code Guidelines.

3.0 GEOLOGY

3.1 Site Topography

The topography of Hennepin County was formed by glaciers during late Wisconsin time. The surface relief of the county ranges from outwash plains, till plains and terraces along the Minnesota River, Mississippi River and Crow River, to gently rolling ground moraine and hummocky end moraine throughout the remainder of the county (Balaban, 1989). The Site is relatively flat as a result of being located on a lower terrace deposit, one of three main cutting stages of the Great River Mississippi.

3.2 Hydrology

The average annual water budget for a 30 year period (1939 to 1968) in this portion of the Metropolitan Area Basin indicates that of the 27.6 inches of precipitation entering the system each year, 21.9 inches are lost through evapotranspiration, 3.3 inches are lost through surface runoff, and .1 inch is lost through ground water runoff (Lindholm, et al., 1974).

3.3 Bedrock Geology

Basalt flows of the Precambrian Chengwatana Volcanic Group underlies the Twin Cities Basin.

The basement rock is overlain by sedimentary rock of Cambrian, Ordovician and Quaternary age. The stratigraphic column in Figure 3.1 shows a description of

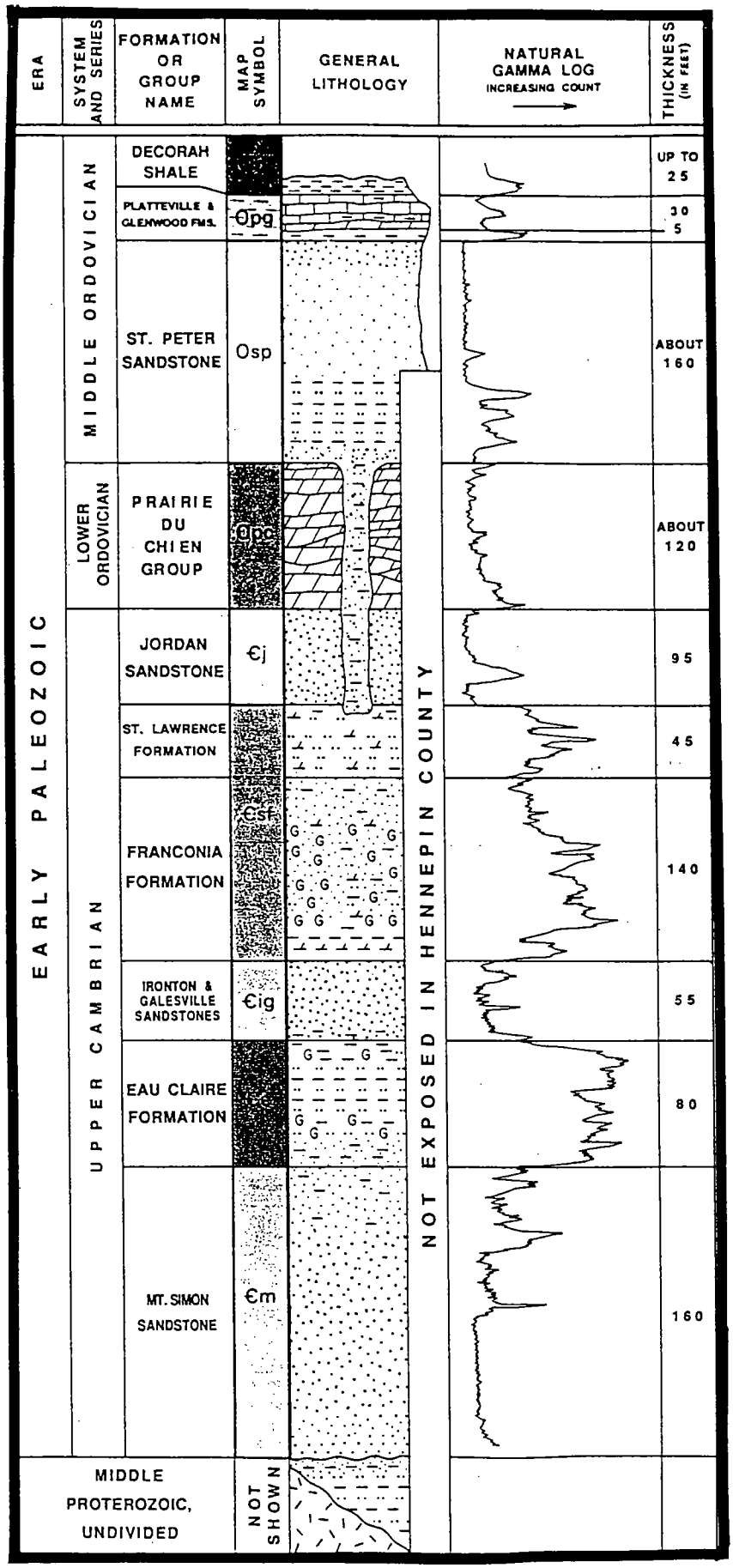


Figure: 3.1 Hydrologic Column

the units and their relationship to one another. The total thickness of the sedimentary deposits at the Site is approximately 895 feet.

3.4 Quarternary Geology

In Hennepin County the Quarternary deposits include terrace, till and outwash. Distinctive landforms resulting from glaciation include end moraines, ground moraines and outwash plains. An end moraine consists of unsorted glacial materials ranging in size from clay particles to boulders and may contain stratified sand and gravel. An end moraine typically is a ridge with a rolling to hummocky surface. A ground moraine is comprised of clay rich till sediments and forms undulating plains marked by gently sloping swells, sags and depressions. Outwash plains consist of stratified sand and gravel deposits, interbedded with silt, clay and organic materials. These deposits are found on flood plains of major streams and are represented by train valleys and alluvial fans (Flint, 1971).

The thickness of the Quaternary deposits in Hennepin County range from 50 to 300 feet (Flint, 1971). The total thickness of these deposits at the Site is approximately 45 feet in the northwest region to 68 feet in the northeast region (Appendix G).

3.5 Soils

A continuous layer of topsoil (black silty loam), 6 inches to 3 feet in thickness, was encountered throughout the Site (Appendix G). Actual soil classification (series) cannot be determined because the soil survey conducted

for Hennepin County omitted this region due to heavy commercial development (Soil Survey of Hennepin County, 1974).

3.6 Hydrogeology

Throughout Hennepin County, all potable water supplies are obtained from surface water and ground water. The principal surface water source is the Mississippi River which supplies Minneapolis, New Hope, Crystal and Golden Valley with drinking water and serves approximately 576,226 people. The Prairie du Chien and Jordan aquifers discharge into the Mississippi River, thus this surface water source is considered to be potentially affected by the Site.

The principal ground water sources are the glacial drift aquifer, the St. Peter Sandstone aquifer, the Prairie du Chien-Jordan aquifer, the Franconia-Ironton-Galesville aquifer and the Mount Simon-Hinckley aquifer. (Figure 3.1). The cities of Fridley, Brooklyn Center and Robbinsdale (approximately 75,383 people) presently obtain their drinking water from these aquifer systems. In addition to the target municipal wells within a three mile radius of the Site, four municipal wells for Brooklyn Center and one municipal well for Fridley are also considered to be potentially affected. The drawdown area of these wells may extend into the three mile radius zone. The logs for these wells are in Appendix E.

The glacial drift aquifer at the Site is a water bearing sand and gravel deposit that is between 45 and 68 feet thick. This system is known to support high yield withdrawals and is used for municipal, private and industrial purposes

throughout Hennepin County (Lindholm, et al., 1974). The on-site monitoring wells are finished in the glacial drift between 28 and 30 feet deep.

The St. Peter aquifer, of Ordovician age, underlies the Quaternary deposits. The aquifer is predominantly a fine to medium grained sandstone overlying a few feet of thinly bedded green shale. Yields typically range from 100 to 250 gallons/minute (Balaban, 1989). The total thickness of the St. Peter aquifer within the study area is 160 feet.

The Prairie du Chien-Jordan aquifer, a principal water supply source for the region, underlies the St. Peter aquifer. The Prairie du Chien-Jordan aquifer is comprised mainly of dolomite with shale partings and some sandstone. Yields within this system range from 500 to 1,000 gallons/minute and can exceed 2,000 gallons/minute. The thickness of the aquifer at the Site is about 215 feet (Appendix G).

Underlying the Prairie du Chien-Jordan aquifer is the St. Lawrence Formation which acts as a confining bed. The unit is characterized by shale, siltstone, and fine grained sandstone. The maximum thickness of the formation is 45 feet (Figure 3.1).

The Franconia-Ironton-Galeville aquifer underlies the St. Lawrence Formation. It is a sandstone with interbedded shale layers and has a maximum thickness of 195 feet (Figure 3.1). Typical yields range from 40 to 400 gallons/minute (Guswa, et al., 1982). The city of Fridley has one municipal well and the city of Robbinsdale has two wells finished within this system.

The Eau Claire confining bed underlies the Franconia-Ironton-Galeville aquifer. This formation is characterized by siltstone, thinly bedded shale and silty sandstone. The maximum thickness of the formation is 80 feet (Figure 3.1).

Lying directly below the Eau Claire is the deepest primary water bearing formation, the Mount Simon-Hinckley. The formation is characterized by thinly bedded shales underlain by fine, medium and coarse grained sandstone (Figure 3.1). The water yield is moderate to high, ranging from 200 to 700 gallons/minute (Delin and Woodward, 1984). The city of Fridley presently obtains a portion of its potable water from four municipal wells finished within the Mount Simon-Hinckley aquifer (Appendix E).

3.7 Ground Water Quality

The ground water in the vicinity of the Site is classified as a "calcium-magnesium bicarbonate type," which is consistent with glacial and bedrock aquifers throughout the Metropolitan Area Basin. The water hardness in the the area is relatively high, ranging from 250 to 350 mg/L due to leaching of calcium from calcareous clay and limestone. Naturally elevated levels of iron, magnesium, manganese, chlorides and sulfates also result from mineral leaching of these deposits. Treatment of municipal wells for hardness and iron is common throughout the region (Lindholm, et al., 1974).

3.8 Surface Water

The Site is located in the northwestern portion of the Metropolitan Area Basin. The region has a drainage network of small perched water table ponds, and

tributaries that flow with the gentle slope of the topography and eventually discharges into the Mississippi River. The Mississippi River is located approximately 1 mile east of the Site and flows in a southeasterly direction (USGS, 1974).

4.0 SSI PROCEDURES AND FIELD OBSERVATIONS

4.1 Soil Sampling Locations

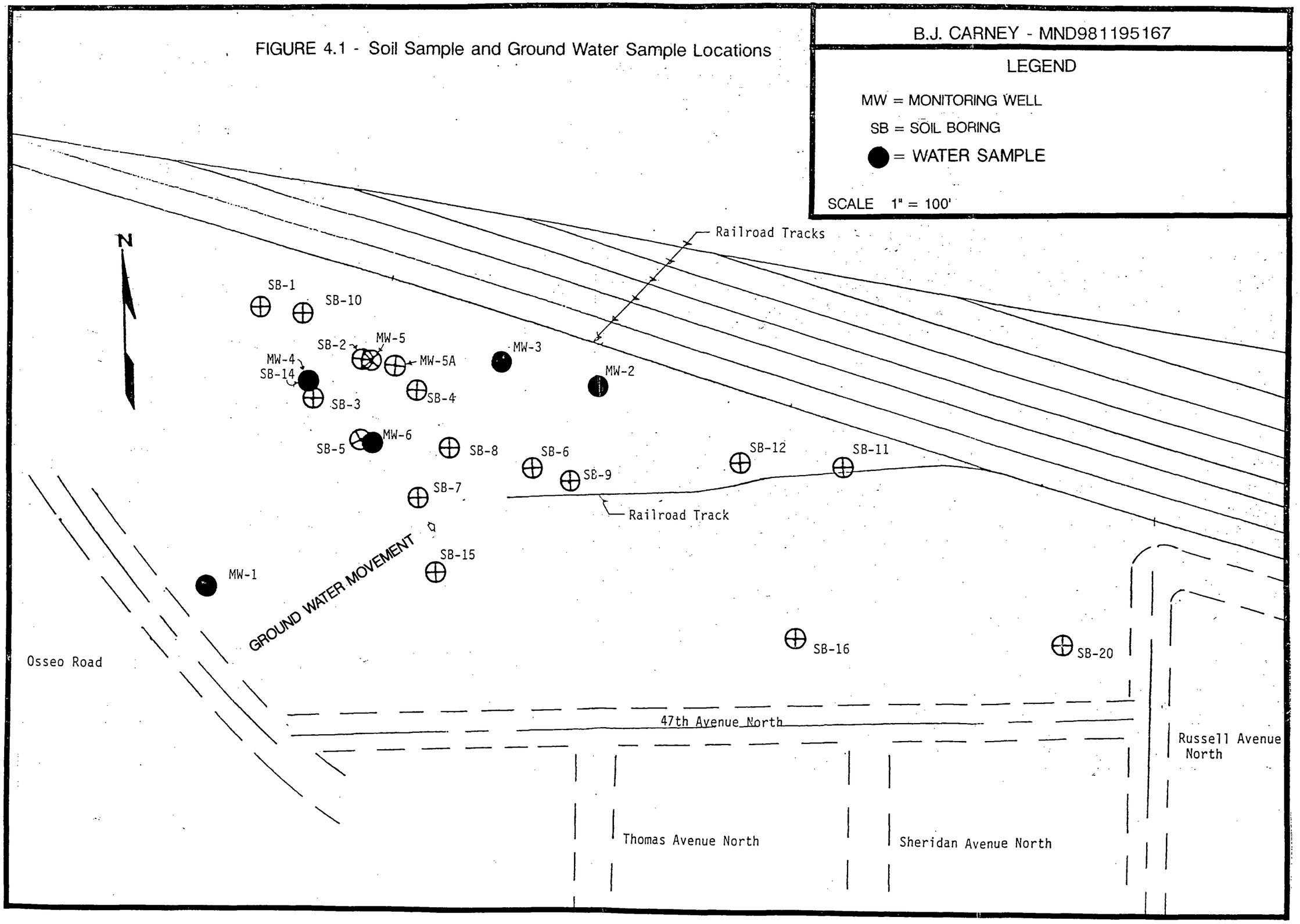
A total of 19 soil borings were drilled at the Site. The placement of the borings were chosen after reviewing aerial photographs showing past industrial practices, storage tank locations and stained soil regions. Boring locations are shown in Figure 4.1.

A total of 22 soil samples were collected from sixteen of the soil borings. Table I summarizes the sample information.

4.2 Soil Sampling Methodology

Soil borings were advanced with a CME 550 and Mobile B-57 truck mounted drill rigs. The borehole was advanced using a 2-1/4 inch internal diameter hollow stem auger (HSA) with an inter pilot assembly to sampling depths. Samples were obtained with a 1-3/8 inch internal diameter stainless steel split spoon barrel. Standard decontamination procedures were followed during the collection of all soil samples. Sampling methods are referenced in Appendix F.

FIGURE 4.1 - Soil Sample and Ground Water Sample Locations



B.J. CARNEY
TABLE I - SAMPLE SUMMARY

Sample Number	Sample Type	Soil Boring	Sampling Depth
SØ1	Composite	SB-1	Ø-15'
SØ2	Composite	SB-2	Ø-1Ø'
SØ3	Composite	SB-2	1Ø-22'
SØ4	Composite	SB-5	5-7', 1Ø-12', 15-24'
SØ5	Composite	SB-2Ø	5-7', 1Ø-12', 15-22'
SØ6	Composite	SB-11	5-7', 1Ø-12', 15-22'
SØ7	Composite	SB-12	5-7', 1Ø-12', 15-22'
SØ8	Composite	SB-16	5-7', 1Ø-12', 15-22'
SØ9	Composite	SB-9	5-7', 8-1Ø', 12-14'
S1Ø	Composite	SB-9	15-22'
S11	Composite	SB-15	5-7', 1Ø-12', 15-24'
S12	Composite	SB-7	5-7', 1Ø-12', 15-24'
S13	Composite	SB-8	5-7', 8-12'
S14	Composite	SB-8	15-24'
S15	Composite	SB-6	5-7, 1Ø-12', 15-24'
S16	Composite	SB-4	Ø-8'
S17	Composite	SB-4	8-16'
S18	Composite	SB-4	16-24'
S19	Composite	SB-3	5-7', 1Ø-12', 15-24'
S2Ø	Composite	SB-14	5-7', 1Ø-12', 13-17'
S21	Composite	SB-14	17-24'
S22	Composite	SB-1Ø	17-24'

All soil samples were packaged and shipped in accordance with EPA required procedures and the Minnesota Site Inspection Quality Assurance Project Plan (QAPP, 1988). The samples were analyzed for TCL compounds by S-Cubed in San Diego, California and INTECH Biolabs in E. Brunswick, New Jersey. The TAL analyte fraction was analyzed by Enseco/Rocky Mountain Analytical in Arvada, Colorado and NET Mid-Atlantic, Inc. in Thorofare, New Jersey.

The soil samples were split with Geotechnical Engineering Corporation (Contractor). They classified the soils in accordance with ASTM D248F, "Unified Soil Classification System" and ASTM D2488, "Recommended Practices for Visual and Manual Description of Soil" (Appendix F). In addition, the MPCA hydrogeologist also constructed boring logs from field notes and soil sample descriptions (Appendix G).

4.3 Monitoring Well Location and Installation

Three monitoring wells (MW-4, MW-5A, MW-6) were installed to aid in additional monitoring of subsurface conditions. The wells were placed along what was believed to be the zone of contamination and subsurface migration pathway Figure 4.1. MW-5A was installed about 90 feet east of the original location (SB-10) due to drilling difficulties.

These monitoring wells were screened in glacial outwash deposits at depths of 29 feet (MW-4), 35 feet (MW-5A), and 29 feet (MW-6) and were constructed in accordance with the MDH, Water Well Construction Code (MDH, 1984). Monitoring well design and construction procedures are reported in Appendix F.

4.4 Water Sampling

Five of the six monitoring wells were successfully developed and stabilized by Precision Environmental Field Monitoring and Testing Services on June 13, 1989. The report of the development methods and stabilization procedures are in Appendix H. Monitoring well MW-5A was not developed or stabilized as a result of grout contamination. The well was abandoned on June 27, 1989, by Geotechnical Engineering Corporation.

Ground water samples were obtained with stainless steel bailers following the stabilization of the wells. Dedicated bailers were used for each well to prevent cross contamination. The metal/cyanide sample and duplicate sample from MW-1 was not filtered due to equipment malfunction. All other metal/cyanide samples were filtered.

The ground water samples were packaged and shipped in accordance with EPA required procedures and the Minnesota Site Inspection Quality Assurance Project Plan (QAPP, 1987). The ground water samples were analyzed by Special Analytical Services (SAS) for TCL compounds by Hazelton Labs, Inc. in Madison, Wisconsin and for TAL analytes by Nanco Laboratories in Wappinger Falls, New York.

Water samples from the four municipal wells were not taken as proposed in the work plan. It was decided that there was an excessive number of industrial sites between the wells and the Site and that the chemical analysis would not be beneficial.

5.0 ANALYTICAL RESULTS

The chemical analysis of soil and ground water samples detected various contaminants, including solvents, hydrocarbons, PAH, phthalates, polychorinated phenols, and common laboratory artifacts. The concentration of inorganic compounds were within normal range for soils and waters in the area (except water samples from MW-1, see discussion in Section 6.1). Tables II-IV summarize the soil analyses and Table V summarizes the ground water analyses. The laboratory narrative and data package is in Appendix D.

6.0 DISCUSSION OF MIGRATION PATHWAYS

6.1 Ground Water

The types of contaminants found in the soil samples are solvents, several PAH, polychlorinated phenols (pentachlorophenol), pesticides (4,4-DDT, chlordane) and a number of Tentatively Identified Compounds (TIC) (Tables II-IV). Composite samples were generally taken, thus the zone of contamination can not be specifically defined.

The chemical analysis of ground water samples from monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-6 documented a release of TCL compounds to the surficial aquifer. The compounds include solvents, several PAH, polychlorinated phenols (pentachlorophenol, 2,4,5-trichlorophenol), pesticides (gamma-chlordane), and TIC (Table V). The source of this contamination can be attributed to the on-site soil discussed above.

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TABLE II
Summary of Chemical
Analysis for Soil
Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number S01	S02	S03	S04	S05	S06	S07	S08
Field Location	SB-1	SB-2	SB-2	SB-5	SB-20	SB-11	SB-12	SB-16
Date	5/30/89	5/31/89	5/31/89	5/31/89	5/31/89	6/1/89	6/2/89	6/2/89
Time	11:37	9:15	9:35	11:55	16:23	11:00	10:37	11:36
Organic Traffic Report Number	EDH42	EDH43	EDH44	EDH45	EDH46	EDH47	EDH48	EDH49
Inorganic Traffic Report Number	MECS39	MECS40	MECS41	MECS42	MECS43	MECS44	MECS45	MECS46
Compound Detected - ug/kg								
Acetone	_____	_____	_____	120	130	81	_____	_____
2-Butanone	_____	10J	_____	45	58	58	20	23
Toluene	_____	6	_____	11	1J	_____	4J	_____
1H-Indene, 2,3-Dihydro-1-met, TIC	_____	_____	_____	_____	_____	8J	_____	_____
Dodecane, TIC	_____	23J	_____	_____	_____	_____	_____	_____
Dihydromethyl 1H-Ind, TIC	_____	_____	_____	_____	_____	21J	_____	_____
Ethyldimethyl Benzene, TIC	_____	_____	_____	_____	7J	_____	_____	_____
Ethylmethyl Benzene, TIC	_____	_____	_____	_____	18J	_____	_____	_____
Hydroxylamine, TIC	_____	_____	_____	5J	_____	_____	_____	_____
Unknown, TIC, RT=20.0-30.0	_____	_____	_____	_____	5J	_____	_____	18J
Unknown, TIC, RT=30.0-40.0	_____	_____	_____	29J	5J	8J	16J	50J

TIC = Tenatively Identified Compound

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TABLE II.
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number S01	S02	S03	S04	S05	S06	S07	S08
Field Location	SB-1	SB-2	SB-2	SB-5	SB-20	SB-11	SB-12	SB-16
Date	5/30/89	5/31/89	5/31/89	5/31/89	5/31/89	6/1/89	6/2/89	6/2/89
Time	11:37	9:15	9:35	11:55	16:23	11:00	10:37	11:36
Organic Traffic Report Number	EDH42	EDH43	EDH44	EDH45	EDH46	EDH47	EDH48	EDH49
Inorganic Traffic Report Number	MECS39	MECS40	MECS41	MECS42	MECS43	MECS44	MECS45	MECS46
Compound Detected - ug/kg								
2,4,5-Trichlorophenol								
2-Chloronaphthalene								
2-Methylnaphthalene			96J	2100J				
Acenaphthene			93J	5000J	260J			
Anthracene				4300J	180J			
Benzo-A-Anthracene				3600J				
Benzo-A-Pyrene				2600J				
Benzo-B-Fluoranthene				4700J				
Benzo-G,H,I-Perylene								
Benzo-K-Fluoranthene				6800J				
Bis2-Ethylhexyl Phthalate								
Chrysene				4500J				
Di-N-Butylphthalate								

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TABLE II

Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number							
	S01	S02	S03	S04	S05	S06	S07	S08
Field Location	SB-1	SB-2	SB-2	SB-5	SB-20	SB-11	SB-12	SB-16
Date	5/30/89	5/31/89	5/31/89	5/31/89	5/31/89	6/1/89	6/2/89	6/2/89
Time	11:37	9:15	9:35	11:55	16:23	11:00	10:37	11:36
Organic Traffic Report Number	EDH42	EDH43	EDH44	EDH45	EDH46	EDH47	EDH48	EDH49
Inorganic Traffic Report Number	MECS39	MECS40	MECS41	MECS42	MECS43	MECS44	MECS45	MECS46
Compound Detected - ug/kg								
Di-N-Octylphthalate	_____	_____	_____	_____	_____	_____	_____	_____
Dibenz-A,H-Anthracene	_____	_____	_____	_____	_____	_____	_____	_____
Dibenzofuran	_____	_____	_____	3700J	_____	_____	_____	_____
Diethylphthalate	_____	_____	_____	_____	_____	_____	_____	_____
Dimethylphthalate	_____	_____	_____	_____	_____	_____	_____	_____
Fluoranthene	_____	_____	110J	13000	340	_____	_____	_____
Fluorene	_____	_____	_____	5900J	140J	_____	_____	_____
Indeno-1,2,3cd-Pyrene	_____	_____	_____	_____	_____	_____	_____	_____
Naphthalene	_____	_____	_____	_____	_____	_____	_____	_____
Pentachlorophenol	_____	510J	460J	_____	430J	_____	430J	310J
Phenanthrene	_____	_____	72J	19000J	640J	_____	_____	_____
Pyrene	_____	_____	180J	9600J	220J	_____	_____	_____

16-NOV-1989,09:36:47 AM

B.J.Carney
Minneapolis, MN

TABLE II
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number S01	S02	S03	S04	S05	S06	S07	S08
Field Location	SB-1	SB-2	SB-2	SB-5	SB-20	SB-11	SB-12	SB-16
Date	5/30/89	5/31/89	5/31/89	5/31/89	5/31/89	6/1/89	6/2/89	6/2/89
Time	11:37	9:15	9:35	11:55	16:23	11:00	10:37	11:36
Organic Traffic Report Number	EDH42	EDH43	EDH44	EDH45	EDH46	EDH47	EDH48	EDH49
Inorganic Traffic Report Number	MECS39	MECS40	MECS41	MECS42	MECS43	MECS44	MECS45	MECS46
Compound Detected - ug/kg								
4,4-DDT	_____	5.2J	_____	_____	_____	_____	_____	_____
Chlordane	_____	3.5J	_____	_____	_____	_____	_____	_____
1-Methyl Naphthalene,TIC	_____	_____	_____	36000J	_____	_____	_____	_____
Unknown,TIC, RT=5.0-6.0	680JB	840JB	2000JB	_____	910JB	370JB	980JB	820JB
Unknown,TIC, RT=19.0-20.0	_____	_____	_____	_____	_____	_____	270J	_____
Unknown,TIC, RT=20.0-21.0	_____	_____	_____	_____	_____	_____	520J	_____
Unknown,TIC, RT=21.0-22.0	_____	_____	860J	_____	_____	_____	650J	_____
Unknown,TIC, RT=22.0-23.0	730J	_____	990J	_____	720J	_____	1400J	850J
Unknown,TIC, RT=23.0-24.0	940J	500J	_____	_____	990J	500J	1240J	910J
Unknown,TIC, RT=24.0-25.0	320J	_____	_____	_____	320J	_____	370J	370J
Unknown,TIC, RT=38.0-39.0	_____	660J	_____	_____	_____	_____	_____	_____
Unknown Hydrocarbon,TIC, RT=17.0-18.0	_____	_____	2800J	_____	_____	_____	_____	_____
Unknown Hydrocarbon,TIC, RT=18.0-19.0	_____	_____	1500JB	_____	_____	_____	_____	_____

TIC=Tenatively Identified Compound

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B.J.Carney
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TABLE II
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number S01	S02	S03	S04	S05	S06	S07	S08
Field Location	SB-1	SB-2	SB-2	SB-5	SB-20	SB-11	SB-12	SB-16
Date	5/30/89	5/31/89	5/31/89	5/31/89	5/31/89	6/1/89	6/2/89	6/2/89
Time	11:37	9:15	9:35	11:55	16:23	11:00	10:37	11:36
Organic Traffic Report Number	EDH42	EDH43	EDH44	EDH45	EDH46	EDH47	EDH48	EDH49
Inorganic Traffic Report Number	MECS39	MECS40	MECS41	MECS42	MECS43	MECS44	MECS45	MECS46
Compound Detected - ug/kg								
Unknown Hydrocarbon,TIC, RT=19.0-20.0	_____	_____	3600J	61000J	_____	_____	_____	_____
Unknown Hydrocarbon,TIC, RT=20.0-21.0	_____	_____	3700J	67000J	_____	_____	_____	_____
Unknown Hydrocarbon,TIC, RT=21.0-22.0	_____	_____	2100J	28000J	_____	_____	390J	310J
Unknown Hydrocarbon,TIC, RT=22.0-23.0	_____	_____	6100J	120000J	_____	_____	_____	_____
Unknown Hydrocarbon,TIC, RT=23.0-24.0	_____	290J	6930J	93000J	_____	280J	_____	_____
Unknown Hydrocarbon,TIC, RT=24.0-25.0	_____	_____	_____	56000J	_____	_____	_____	_____
Unknown Hydrocarbon,TIC, RT=25.0-26.0	390J	_____	3700J	_____	390J	310J	570J	460J
Unknown Hydrocarbon,TIC, RT=26.0-27.0	440J	660J	2000J	37000J	370J	290J	440J	420J
Unknown Hydrocarbon,TIC, RT=27.0-28.0	1300JB	1100JB	1900JB	_____	1200JB	940JB	1400JB	1300JB
Unknown Trimethyl Naphthalene,TIC	_____	_____	3030J	150000J	_____	_____	_____	_____
Unknown Ethyl Naphthalene,TIC	_____	_____	_____	26000J	_____	_____	_____	_____
Unknown Dimethyl Naphthalene,TIC	_____	_____	_____	209000J	_____	_____	_____	_____

TIC=Tenatively Identified Compound

B.J.Carney
Minneapolis, MN

TABLE II

Summary of Chemical
Analysis for Soil - Metals

Sample Collection Information and Detected Parameter	Sample Number							
	S01	S02	S03	S04	S05	S06	S07	S08
Field Location	SB-1	SB-2	SB-2	SB-5	SB-20	SB-11	SB-12	SB-16
Date	5/30/89	5/31/89	5/31/89	5/31/89	5/31/89	6/1/89	6/2/89	6/2/89
Time	11:37	9:15	9:35	11:55	16:23	11:00	10:37	11:36
Organic Traffic Report Number	EDH42	EDH43	EDH44	EDH45	EDH46	EDH47	EDH48	EDH49
Inorganic Traffic Report Number	MECS39	MECS40	MECS41	MECS42	MECS43	MECS44	MECS45	MECS46
Compound Detected - (mg/kg)								
Aluminum	1540	3510	1580	1980	1970	1940	2480	2270
Antimony	———	———	———	———	———	———	———	———
Arsenic	1.5B	1.5B	1.1B	1.3B	1.2B	0.5B	0.59B	0.83B
Barium	26.5B	42.9B	38.7B	34.2B	29.8B	14.9B	118B	27.4B
Calcium	12300	3530	26000	14400	17100	13600	9100	15100
Chromium	3.8B	6.5B	4.3B	6.4B	6.6B	6.9B	8.7B	6.4B
Cobalt	4.1B	5.7B	5.7B	6.2B	5.6B	5.1B	14.5B	5.0B
Copper	5.8B	7.5B	5.9B	6.6B	9.0B	7.1B	14.8B	7.6B
Iron	4900	7030	4780	14000	6840	5810	8490	6990
Lead	2.5	8.0	2.1	2.3	2.4	1.2	1.4	2.2
Magnesium	3190B	1650B	7450	4130B	5410	2900B	2790B	6040
Manganese	293J	404J	498J	1110J	391J	188J	2500J	349J
Nickel	8.9B	9.5B	10.9B	9.4B	10.6B	9.9B	33.4B	10.5B
Potassium	213B	316B	185B	196B	216B	189B	239B	288B
Selenium	———	———	———	———	———	———	———	0.42
Sodium	———	———	———	———	———	———	———	———
Vanadium	7.1B	12.0B	7.4B	14.5B	10.1B	10.7B	13.3B	10.9B
Zinc	14.2B	21.7	13.4B	15.3B	18.8B	12.6B	29.5	18B

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TABLE III
Summary of Chemical
Analysis for Soil
Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number S09	S10	S11	S12	S13	S14	S15	S16
Field Location	SB-9	SB-9	SB-15	SB-7	SB-8	SB-8	SB-6	SB-4
Date	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/6/89	6/6/89
Time	10:00	10:20	11:20	14:45	16:00	16:15	11:30	14:00
Organic Traffic Report Number	EDH50	EDH51	EDH52	EDH53	EDH54	EDH55	EDH56	EDH57
Inorganic Traffic Report Number	MECS47	MECS48	MECS49	MECS50	MECS51	MECS52	MECS53	MECS54
Compound Detected - ug/kg								
Acetone	120J	24J	230JE	230JE	120J	16	37	_____
2-Butanone	_____	_____	_____	_____	_____	_____	_____	_____
Toluene	_____	3J	_____	_____	2J	2J	_____	_____
Dodecane, TIC	_____	_____	_____	_____	_____	_____	_____	_____
Ethane, TIC	_____	_____	_____	_____	_____	_____	20J	_____
Unknown, TIC, RT=8.0-8.5	5J	_____	_____	8J	_____	_____	_____	_____
Unknown, TIC, RT=11.73	_____	_____	_____	_____	_____	_____	_____	5J

TIC = Tenatively Identified Compound

27-NOV-1989,09:05:33 AM

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Minneapolis, MN

TABLE III
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number S09	S10	S11	S12	S13	S14	S15	S16
Field Location	SB-9	SB-9	SB-15	SB-7	SB-8	SB-8	SB-6	SB-4
Date	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/6/89	6/6/89
Time	10:00	10:20	11:20	14:45	16:00	16:15	11:30	14:00
Organic Traffic Report Number	EDH50	EDH51	EDH52	EDH53	EDH54	EDH55	EDH56	EDH57
Inorganic Traffic Report Number	MECS47	MECS48	MECS49	MECS50	MECS51	MECS52	MECS53	MECS54
Compound Detected - ug/kg								
2,4,5-Trichlorophenol	_____	_____	_____	_____	_____	_____	_____	_____
2-Chloronaphthalene	_____	_____	_____	_____	_____	_____	_____	_____
2-Methylnaphthalene	_____	_____	310J	_____	_____	_____	_____	_____
Acenaphthene	_____	_____	_____	_____	_____	_____	_____	_____
Anthracene	_____	_____	_____	_____	_____	_____	_____	_____
Benzo-A-Anthracene	_____	_____	_____	_____	_____	_____	_____	_____
Benzo-A-Pyrene	_____	_____	_____	_____	_____	_____	_____	_____
Benzo-B-Fluoranthene	_____	_____	_____	_____	_____	_____	_____	_____
Benzo-G,H,I-Perylene	_____	_____	_____	_____	_____	_____	_____	_____
Benzo-K-Fluoranthene	_____	_____	_____	_____	_____	_____	_____	_____
Bis2-Ethylhexyl Phthalate	150J	290J	100J	98J	990	2000	260J	130J
Chrysene	_____	_____	_____	_____	_____	_____	_____	_____
Di-N-Butylphthalate	_____	_____	_____	_____	_____	_____	38J	_____

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TABLE III

Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number S09	S10	S11	S12	S13	S14	S15	S16
Field Location	SB-9	SB-9	SB-15	SB-7	SB-8	SB-8	SB-6	SB-4
Date	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/6/89	6/6/89
Time	10:00	10:20	11:20	14:45	16:00	16:15	11:30	14:00
Organic Traffic Report Number	EDH50	EDH51	EDH52	EDH53	EDH54	EDH55	EDH56	EDH57
Inorganic Traffic Report Number	MECS47	MECS48	MECS49	MECS50	MECS51	MECS52	MECS53	MECS54
Compound Detected - ug/kg								
Di-N-Octylphthalate	_____	_____	_____	_____	150J	_____	_____	_____
Dibenz-A,H-Anthracene	_____	_____	_____	_____	_____	_____	_____	_____
Dibenzofuran	_____	_____	_____	_____	_____	_____	_____	_____
Diethylphthalate	_____	_____	_____	_____	_____	_____	_____	_____
Dimethylphthalate	_____	_____	_____	_____	_____	_____	_____	_____
Fluoranthene	_____	_____	_____	_____	_____	_____	_____	_____
Fluorene	_____	_____	_____	_____	_____	_____	_____	_____
Indeno-1,2,3cd-Pyrene	_____	_____	_____	_____	_____	_____	_____	_____
Naphthalene	_____	_____	290J	_____	_____	_____	_____	_____
Pentachlorophenol	_____	_____	_____	_____	_____	_____	_____	_____
Phenanthrene	_____	_____	51J	_____	_____	_____	_____	_____
Pyrene	_____	_____	_____	_____	_____	_____	_____	_____

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B.J.Carney
Minneapolis, MN

TABLE III
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number S09	S10	S11	S12	S13	S14	S15	S16
Field Location	SB-9	SB-9	SB-15	SB-7	SB-8	SB-8	SB-6	SB-4
Date	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/6/89	6/6/89
Time	10:00	10:20	11:20	14:45	16:00	16:15	11:30	14:00
Organic Traffic Report Number	EDH50	EDH51	EDH52	EDH53	EDH54	EDH55	EDH56	EDH57
Inorganic Traffic Report Number	MECS47	MECS48	MECS49	MECS50	MECS51	MECS52	MECS53	MECS54
Compound Detected - ug/kg								
Methane, trichloro, TIC	500J	400J	500J	500J	400J	600J	400J	500J
Unknown, TIC, RT=3.0-4.0	100J					400J	1000J	
Unknown, TIC, RT=4.0-5.0	100J							
Unknown, TIC, RT=5.0-6.0				100J				
Unknown, TIC, RT=6.0-7.0	200J	300J	400J	400J	300J	100J	400J	400J
Unknown, TIC, RT=7.0-8.0	7000JA					7000JA	7000JA	7000JA
Unknown, TIC, RT=8.0-9.0				100J				
Unknown, TIC, RT=14.0-15.0							400J	
Unknown, TIC, RT=20.0-30.0							500J	
Unknown, TIC, RT=30.0-40.0		200J	300J	100J	900J		400J	
Unknown, TIC, RT=40.0-45.0					200J			
Unknown Aromatic, TIC, RT=3.0-4.0		7000JB	7000JB	7000JB	7000JB		4000J	7000J
Unknown Aromatic, TIC, RT=17.0-18.0			100J					
Unknown Aromatic, TIC, RT=25.0-30.0							200J	

TIC = Tenatively Identified Compound

27-NOV-1989,09:08:15 AM

B.J.Carney
Minneapolis, MN

TABLE III
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number							
	S09	S10	S11	S12	S13	S14	S15	S16
Field Location	SB-9	SB-9	SB-15	SB-7	SB-8	SB-8	SB-6	SB-4
Date	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/6/89	6/6/89
Time	10:00	10:20	11:20	14:45	16:00	16:15	11:30	14:00
Organic Traffic Report Number	EDH50	EDH51	EDH52	EDH53	EDH54	EDH55	EDH56	EDH57
Inorganic Traffic Report Number	MECS47	MECS48	MECS49	MECS50	MECS51	MECS52	MECS53	MECS54
Compound Detected - ug/kg								
Unknown Hydrocarbon, TIC,RT=3.0-4.0	1000J	_____	_____	_____	_____	_____	_____	_____
Unknown Hydrocarbon, TIC, RT=19.0-28.0	_____	_____	_____	_____	_____	_____	1700J	_____
Unknown Hydrocarbon, TIC, RT=36.0-37.0	_____	_____	_____	_____	_____	_____	200J	_____
Unknown Phthalate, TIC, RT=30.0-31.5	_____	_____	_____	_____	1000J	_____	_____	_____

TIC = Tenatively Identified Compound

B.J.Carney
Minneapolis, MN

TABLE III
Summary of Chemical
Analysis for Soil - Metals

Sample Collection Information and Detected Parameter	Sample Number S09	S10	S11	S12	S13	S14	S15	S16
Field Location	SB-9	SB-9	SB-15	SB-7	SB-8	SB-8	SB-6	SB-4
Date	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/6/89	6/6/89
Time	10:00	10:20	11:20	14:45	16:00	16:15	11:30	14:00
Organic Traffic Report Number	EDH50	EDH51	EDH52	EDH53	EDH54	EDH55	EDH56	EDH57
Inorganic Traffic Report Number	MECS47	MECS48	MECS49	MECS50	MECS51	MECS52	MECS53	MECS54
Compound Detected - (mg/kg)								
Aluminum	1380	2400	1800	2080	1110	2770	3230	3100
Antimony	———	5.0B	———	———	———	———	———	———
Arsenic	1.2B	1.0B	1.5B	1.3B	1.0B	1.5B	1.9B	1.3B
Barium	27.7B	14.9B	31.4B	35.2B	27.8B	18.3B	28.9B	35.0B
Calcium	19200J	22800J	7450J	14700J	7900J	16800J	20200J	1580J
Chromium	3.1B	6.6	4.2B	5.1B	3.3B	7.0B	9.0B	4.8B
Cobalt	———	———	4.5	5.7B	———	———	———	———
Copper	3.8B	9.9B	5.3B	8.2B	3.3B	8.7B	15.3B	3.2B
Iron	3910	6030	5570	6420	3310	7640	8540	4860
Lead	2.3	2.9	2.3	1.9	2.1	1.5	2.4	2.7
Magnesium	3630	5230	3260	3810	1860	5200	8080	1210
Manganese	299	165	319	377	275	184	242	318
Nickel	8.1B	7.0B	7.4B	10.7	7.0B	8.3B	11.0	6.8B
Potassium	———	———	———	———	———	———	———	———
Selenium	———	———	———	———	———	———	———	———
Sodium	51.9B	77.8B	57.7B	88.7B	69.3B	90.0B	104.0B	62.0B
Vanadium	5.6B	9.9B	7.4B	9.3B	5.2B	10.0B	11.6	8.2B
Zinc	12.3B	14.1B	12.3B	14.3B	11.8B	14.1B	15.3B	12.7B

16-NOV-1989,10:55:40 AM

B.J.Carney
Minneapolis, MN

TABLE IV

Summary of Chemical
Analysis for Soil
Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number S17	S18	S19	S20	S21	S22
Field Location	SB-4	SB-4	SB-3	SB-14	SB-14	SB-10
Date	6/6/89	6/6/89	6/7/89	6/7/89	6/7/89	6/8/89
Time	14:20	14:30	9:20	13:00	13:30	9:30
Organic Traffic Report Number	EDH58	EDH59	EDH60	EDH61	EDH62	EDH63
Inorganic Traffic Report Number	MECS55	MECS56	MECS57	MECS58	MECS59	MECS60
Compound Detected - ug/kg						
Acetone	32	49	120	_____	160	25
2-Butanone	_____	_____	_____	_____	_____	_____
Toluene	_____	_____	_____	_____	12	_____
Xylene (total)	_____	_____	_____	_____	18	_____
Dodecane, TIC	_____	_____	_____	_____	_____	_____
Ethane, 1,1,3-trichloro, TIC	_____	_____	_____	_____	20J	_____
Unknown Hydrocarbon, TIC, RT=20.0-30.0	_____	_____	_____	_____	19J	_____
Unknown Hydrocarbon, TIC, RT=32.2	_____	_____	_____	_____	5J	_____
Unknown, TIC, RT=29.01	_____	_____	_____	_____	5J	_____

TIC = Tenatively Identified Compound

B.J.Carney
Minneapolis, MN

TABLE IV

Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number S17	S18	S19	S20	S21	S22
Field Location	SB-4	SB-4	SB-3	SB-14	SB-14	SB-10
Date	6/6/89	6/6/89	6/7/89	6/7/89	6/7/89	6/8/89
Time	14:20	14:30	9:20	13:00	13:30	9:30
Organic Traffic Report Number	EDH58	EDH59	EDH60	EDH61	EDH62	EDH63
Inorganic Traffic Report Number	MECS55	MECS56	MECS57	MECS58	MECS59	MECS60
Compound Detected - ug/kg						
2,4,5-Trichlorophenol	_____	_____	_____	_____	_____	_____
2-Chloronaphthalene	_____	_____	_____	_____	8200	_____
2-Methylnaphthalene	_____	_____	_____	_____	37000	_____
Acenaphthene	_____	_____	2300	_____	4200J	_____
Acenaphthylene	_____	_____	_____	_____	1200J	_____
Anthracene	_____	_____	2100	160J	990J	_____
Benzo-A-Anthracene	_____	_____	1200J	_____	710J	_____
Benzo-A-Pyrene	_____	39J	780J	_____	440J	_____
Benzo-B-Fluoranthene	_____	_____	920J	_____	740J	_____
Benzo-G,H,I-Perylene	_____	_____	890J	_____	_____	_____
Benzo-K-Fluoranthene	_____	_____	_____	_____	880J	_____
Bis2-Ethylhexyl Phthalate	230J	350J	190J	120J	390J	300J
Chrysene	_____	_____	2400	_____	1300J	_____
Di-N-Butylphthalate	_____	_____	_____	_____	_____	_____

16-NOV-1989,10:00:47 AM

B.J.Carney
Minneapolis, MN

TABLE IV

Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number S17	S18	S19	S20	S21	S22
Field Location	SB-4	SB-4	SB-3	SB-14	SB-14	SB-10
Date	6/6/89	6/6/89	6/7/89	6/7/89	6/7/89	6/8/89
Time	14:20	14:30	9:20	13:00	13:30	9:30
Organic Traffic Report Number	EDH58	EDH59	EDH60	EDH61	EDH62	EDH63
Inorganic Traffic Report Number	MECS55	MECS56	MECS57	MECS58	MECS59	MECS60
Compound Detected - ug/kg						
Di-N-Octylphthalate	_____	_____	_____	_____	_____	_____
Dibenz-A,H-Anthracene	_____	_____	_____	_____	_____	_____
Dibenzofuran	_____	_____	4000	_____	8500	_____
Diethylphthalate	_____	_____	_____	_____	_____	_____
Dimethylphthalate	_____	_____	_____	_____	390J	_____
Fluoranthene	_____	49J	4100	_____	2200J	_____
Fluorene	_____	_____	3200	_____	6000J	_____
Indeno-1,2,3cd-Pyrene	_____	_____	_____	_____	_____	_____
Naphthalene	_____	_____	1100J	_____	_____	_____
Pentachlorophenol	_____	850J	_____	460J	46000J	_____
Phenanthrene	_____	68J	6600	_____	8600	_____
Pyrene	_____	36J	2900	_____	3000J	_____

16-NOV-1989,10:02:06 AM

B.J.Carney
Minneapolis, MN

TABLE IV
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number S17	S18	S19	S20	S21	S22
Field Location	SB-4	SB-4	SB-3	SB-14	SB-14	SB-10
Date	6/6/89	6/6/89	6/7/89	6/7/89	6/7/89	6/8/89
Time	14:20	14:30	9:20	13:00	13:30	9:30
Organic Traffic Report Number	EDH58	EDH59	EDH60	EDH61	EDH62	EDH63
Inorganic Traffic Report Number	MECS55	MECS56	MECS57	MECS58	MECS59	MECS60
Compound Detected - ug/kg						
Methane, trichloro-, TIC	500J	700J	_____	_____	_____	400J
Unknown, TIC, RT=2.0-3.0	_____	_____	_____	_____	_____	200J
Unknown, TIC, RT=3.0-4.0	200J	2300J	_____	_____	90000J	_____
Unknown, TIC, RT=6.0-7.0	100J	800J	_____	_____	_____	800J
Unknown, TIC, RT=7.0-8.0	500J	_____	_____	70J	_____	_____
Unknown, TIC, RT=7.0-8.0	10000JA	20000JA	_____	1000JA	_____	9000JA
Unknown, TIC, RT=9.0-10.0	200J	200J	_____	_____	_____	200J
Unknown, TIC, RT=22.0-23.0	_____	_____	5000J	_____	30000J	_____
Unknown, TIC, RT=23.0-24.0	_____	_____	6000J	_____	30000J	_____
Unknown Aromatic, TIC, RT=3.0-4.0	6000J	2000J	30000J	400J	_____	9000J
Unknown Aromatic, TIC, RT=17.0-18.0	_____	_____	10000J	_____	50000J	_____
Unknown Aromatic, TIC, RT=18.0-19.0	_____	_____	10000J	_____	_____	_____
Unknown Aromatic, TIC, RT=19.0-20.0	_____	_____	52000J	_____	50000J	_____
Unknown Aromatic, TIC, RT=20.0-21.0	_____	_____	7000J	_____	30000J	400J
Unknown Aromatic, TIC, RT=21.0-22.0	_____	_____	20000J	_____	_____	200J

TIC = Tenatively Identified Compound

16-NOV-1989,10:03:28 AM

B.J.Carney
Minneapolis, MN

TABLE IV
Summary of Chemical
Analysis for Soil
Semi-Volatile Organic Compounds - con't

Sample Collection Information and Detected Parameter	Sample Number S17	S18	S19	S20	S21	S22
Field Location	SB-4	SB-4	SB-3	SB-14	SB-14	SB-10
Date	6/6/89	6/6/89	6/7/89	6/7/89	6/7/89	6/8/89
Time	14:20	14:30	9:20	13:00	13:30	9:30
Organic Traffic Report Number	EDH58	EDH59	EDH60	EDH61	EDH62	EDH63
Inorganic Traffic Report Number	MECS55	MECS56	MECS57	MECS58	MECS59	MECS60
Compound Detected - ug/kg						
Unknown Aromatic, TIC, RT=25.0-26.0	_____	_____	5000J	_____	_____	_____
Unknown Dimethylnaphthalene, TIC	_____	_____	_____	_____	190000J	_____
Unknown Dimethylphenanthrene, TIC	_____	_____	_____	_____	20000J	_____
Unknown Hydrocarbon, TIC, RT=20.0-30.0	_____	_____	48000J	_____	240000J	_____
Unknown Phthalate, TIC, RT=33.0-34.0	_____	_____	_____	1010J	_____	_____
Unknown Trimethylnaphthalene, TIC	_____	_____	_____	_____	60000J	_____

TIC = Tenatively Identified Compounds

B.J.Carney
Minneapolis, MN

TABLE IV

Summary of the Chemical
Analysis for Soil - Metals

Sample Collection Information and Detected Parameter	Sample Number S17	S18	S19	S20	S21	S22
Field Location	SB-4	SB-4	SB-3	SB-14	SB-14	SB-10
Date	6/6/89	6/6/89	6/7/89	6/7/89	6/7/89	6/8/89
Time	14:20	14:30	9:20	13:00	13:30	9:30
Organic Traffic Report Number	EDH58	EDH59	EDH60	EDH61	EDH62	EDH63
Inorganic Traffic Report Number	MECS55	MECS56	MECS57	MECS58	MECS59	MECS60
Compound Detected - mg/kg						
Aluminum	2110	3640	1800	2070	2500	2750
Antimony	_____	_____	_____	_____	_____	_____
Arsenic	2.1B	2.0B	1.5B	1.3B	2.6	2.1B
Barium	31.2B	178.0B	24.2B	43.8B	54.0B	17.9B
Calcium	14100J	23700J	11900J	8050J	36700J	36900J
Chromium	4.5B	6.7B	3.9B	4.2B	4.6B	3.6B
Cobalt	_____	_____	_____	_____	1.3	_____
Copper	6.0B	7.6B	3.9B	4.5B	7.1B	10.3B
Iron	4390	8780	5210	4820	7470	7810
Lead	2.1	2.4	2.4	2.8	1.8	1.7
Magnesium	3860	7870	3970	3030	11500	14100
Manganese	218	1340	227	309	481	237
Nickel	8.1B	11.7B	_____	11.5B	_____	_____
Potassium	_____	_____	_____	_____	_____	_____
Selenium	_____	_____	_____	_____	_____	_____
Sodium	89.0B	185.0B	45.1B	72.5B	78.8B	70.4B
Vanadium	10.0B	10.8B	8.0B	9.6B	11.7B	13.0B
Zinc	14.2B	18.0B	13.4B	17.8B	12.4B	14.1B

06-NOV-1989,11:56:07 AM

B.J.Carney
Minneapolis, MN

TABLE V
Summary of
Chemical Analysis for
Ground Water
Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number							
	R01	R02	D01	S31	S32	S33	S34	S35
Field Location	Trip Blank	Field Blank	MW-1	MW-2	MW-1	MW-3	MW-4	MW-6
Date	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89
Time	10:33	10:33	10:55	12:45	10:55	13:25	14:55	16:10
Organic Traffic Report Number	EDH72	EDH73	EDH74	EDH75	EDH76	EDH77	EDH78	EDH79
Inorganic Traffic Report Number		MECS70	MECS71	MECS72	MECS73	MECS74	MECS75	MECS76
Compound Detected - ug/L								
Benzene	_____	_____	_____	_____	_____	0.2J	_____	_____
Chloroform	_____	0.7J	_____	_____	_____	_____	_____	_____
Ethylbenzene	_____	_____	_____	0.4J	_____	_____	_____	0.6J
Toluene	_____	0.6J	2J	_____	2J	_____	0.7J	0.6J
1,1,1-Trichloroethane	_____	_____	_____	_____	_____	_____	0.6J	_____
Xylenes	_____	_____	_____	3J	_____	_____	_____	3J
2-Propanol, TIC	5J	_____	_____	_____	_____	_____	_____	_____

TIC = Tenatively Identified Compound

03-NOV-1989,04:15:32 PM

B.J.Carney
Minneapolis, MN

TABLE V
Summary of
Chemical Analysis for
Ground Water
Semi-Volatile Organic Compounds

Sample Collection Information and Detected Parameter	Sample Number						
	R02	D01	S31	S32	S33	S34	S35
Field Location	Field Blank	MW-1	MW-2	MW-1	MW-3	MW-4	MW-6
Date	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89
Time	10:33	10:55	12:45	10:55	13:25	14:55	16:10
Organic Traffic Report Number	EDH73	EDH74	EDH75	EDH76	EDH77	EDH78	EDH79
Inorganic Traffic Report Number	MECS70	MECS71	MECS72	MECS73	MECS74	MECS75	MECS76
Compound Detected (ug/L)							
2,4,5-Trichlorophenol	_____	_____	2J	_____	0.9J	_____	_____
2-Methylnaphthalene	_____	_____	_____	_____	_____	77.0	35.0
Acenaphthalene	_____	_____	1.0	_____	_____	_____	_____
Acenaphthene	_____	_____	56.0	_____	6.0	10.0	39.0
Anthracene	_____	0.3J	2.0	0.3J	0.6	1.0	23.0
Benzo-A-Anthracene	_____	_____	_____	_____	_____	0.7	31.0
Benzo-A-Pyrene	_____	_____	_____	_____	_____	_____	16.0
Benzo-B-Fluoranthene	_____	_____	_____	_____	_____	1.0	34.0
Benzo-G,H,I-Perylene	_____	_____	_____	_____	_____	_____	4.0
Chrysene	_____	_____	_____	_____	_____	1.0	24.0
Dibenz-A,H-Anthracene	_____	_____	_____	_____	_____	_____	2.0
Dibenzofuran	_____	_____	29.0	_____	5.0	_____	36.0
Diethylphthalate	0.2J	0.2J	_____	0.3J	_____	_____	_____
Fluoranthene	_____	_____	4.0	_____	1.0J	2.0	100.0E
Fluorene	_____	_____	34.0	_____	5.0	15.0	56.0
Indeno-1,2,3cd-Pyrene	_____	_____	_____	_____	_____	_____	5.0

03-NOV-1989,04:14:45 PM

B.J.Carney
Minneapolis, MN

TABLE V
Summary of
Chemical Analysis for
Ground Water
Semi-Volatile Organic Compounds con't

Sample Collection Information and Detected Parameter	Sample Number						
	R02	D01	S31	S32	S33	S34	S35
Field Location	Field Blank	MW-1	MW-2	MW-1	MW-3	MW-4	MW-6
Date	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89
Time	10:33	10:55	12:45	10:55	13:25	14:55	16:10
Organic Traffic Report Number	EDH73	EDH74	EDH75	EDH76	EDH77	EDH78	EDH79
Inorganic Traffic Report Number	MECS70	MECS71	MECS72	MECS73	MECS74	MECS75	MECS76
Compound Detected (ug/L)							
Naphthalene	_____	_____	7.0	_____	0.4J	_____	21.0
Pentachlorophenol	_____	_____	11.0	_____	4.0J	49.0	17.0
Phenanthrene	_____	_____	1.0	_____	0.2J	16.0	82.0
Pyrene	_____	_____	2.0	_____	1.0J	3.0	96.0E
Gamma-Chlordane	_____	_____	_____	_____	_____	_____	0.55
1,1-Biphenyl, TIC	_____	_____	_____	_____	_____	37.0J	_____
1,4-Methanonaphthalene, TIC	_____	_____	_____	_____	21.0J	_____	_____
1H-Indene, TIC	_____	_____	106.1J	_____	4.4J	130J	180J
4H-Cyclopenta[def]phenanthrene, TIC	_____	_____	9.0J	_____	3.4J	_____	_____
9H-Carbazole, TIC	_____	_____	37.0J	_____	3.4J	_____	_____
9H-Fluorene, TIC	_____	_____	9.1J	_____	3.1J	_____	_____
Azo Compound, TIC	_____	6.2J	_____	_____	_____	_____	_____
Benzo-B-Thiophene, TIC	_____	_____	80.0J	_____	28.4J	_____	79J
Decane, TIC	_____	_____	_____	_____	_____	_____	58.0J
Dibenzothiophene, TIC	_____	_____	_____	_____	_____	37.0J	53.0J
Dodecane, TIC	_____	_____	_____	_____	_____	54.0J	56.0J

TIC = Tenatively Identified Compound

27-NOV-1989,09:13:18 AM

B.J.Carney
Minneapolis, MN

TABLE V
Summary of
Chemical Analysis for
Ground Water
Semi-Volatile Organic Compounds-con't

Sample Collection Information and Detected Parameter	Sample Number						
	R02	D01	S31	S32	S33	S34	S35
Field Location	Field Blank	MW-1	MW-2	MW-1	MW-3	MW-4	MW-6
Date	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89
Time	10:33	10:55	12:45	10:55	13:25	14:55	16:10
Organic Traffic Report Number	EDH73	EDH74	EDH75	EDH76	EDH77	EDH78	EDH79
Inorganic Traffic Report Number	MECS70	MECS71	MECS72	MECS73	MECS74	MECS75	MECS76
Compound Detected (ug/L)							
Heptadecane, TIC	_____	_____	_____	_____	_____	79.0J	_____
Hexanol, TIC	_____	3.6J	_____	4.8J	_____	_____	_____
Iron, TIC	_____	_____	_____	_____	_____	169.0J	208.0J
Naphthalene, TIC	_____	_____	110.5J	_____	32.0J	955J	676.0J
Pentadecane, TIC	_____	_____	_____	_____	_____	_____	110.0J
Phenanthrene, TIC	_____	_____	_____	_____	_____	_____	58.0J
Phenol, TIC	_____	_____	25.0J	_____	11J	_____	_____
Piperdine, TIC	_____	_____	_____	4.0J	_____	_____	_____
Propanoic Acid, TIC	9.5J	7.5J	_____	10.3J	9.4J	_____	_____
Pyridazine, TIC	_____	_____	_____	_____	5.6J	_____	_____
Tetradecane, TIC	_____	_____	_____	_____	_____	_____	85.0J
Tridecane, TIC	_____	_____	_____	_____	_____	140.0J	184.0J
Undecane, TIC	_____	_____	_____	_____	_____	77.0J	_____

TIC = Tenatively Identified Compound

03-NOV-1989,04:16:42 PM

B.J. Carney
Minneapolis, MN

TABLE V
Summary of
Chemical Analysis for
Ground Water
Metals

Sample Collection Information and Detected Parameter	Sample Number						
	R02	D01	S31	S32	S33	S34	S35
Field Location	Field Blank	MW-1	MW-2	MW-1	MW-3	MW-4	MW-6
Date	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89
Time	10:33	10:55	12:45	10:55	13:25	14:55	16:10
Organic Traffic Report Number	EDH73	EDH74	EDH75	EDH76	EDH77	EDH78	EDH79
Inorganic Traffic Report Number	MECS70	MECS71	MECS72	MECS73	MECS74	MECS75	MECS76
Compound Detected - ug/L							
Aluminum	_____	28600	_____	31200	_____	_____	_____
Antimony	_____	106	_____	108	_____	_____	_____
Arsenic	_____	11	_____	22.8	_____	_____	_____
Barium	_____	538	210	579	189B	186B	172B
Beryllium	_____	9	_____	10	_____	_____	_____
Cadmium	_____	5	_____	4B	_____	_____	_____
Calcium	726B	174000	108000	204000	101000	98400	102000
Chromium	_____	89	9B	93	_____	_____	_____
Cobalt	_____	43B	_____	47B	_____	_____	_____
Copper	_____	28B	_____	30B	_____	_____	_____
Iron	_____	108000	1530	125000	2150	1110	1670
Lead	_____	175J	_____	181J	_____	_____	_____
Magnesium	_____	48300	22900	57000	19400	20200	21600
Manganese	_____	3420	1960	3690	1330	696	769
Mercury	_____	_____	_____	0.44	_____	_____	_____
Nickel	_____	118	_____	135	_____	_____	_____

03-NOV-1989,04:17:17 PM

B.J. Carney
Minneapolis, MN

TABLE V
Summary of
Chemical Analysis for
Ground Water
Metals - con't

Sample Collection Information and Detected Parameter	Sample Number						
	R02	D01	S31	S32	S33	S34	S35
Field Location	Field Blank	MW-1	MW-2	MW-1	MW-3	MW-4	MW-6
Date	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89
Time	10:33	10:55	12:45	10:55	13:25	14:55	16:10
Organic Traffic Report Number	EDH73	EDH74	EDH75	EDH76	EDH77	EDH78	EDH79
Inorganic Traffic Report Number	MECS70	MECS71	MECS72	MECS73	MECS74	MECS75	MECS76
Compound Detected - ug/L							
Potassium	_____	7690	4180B	8350	4160B	4030B	4570B
Selenium	_____	6B	_____	7B	_____	_____	_____
Sodium	_____	58500	45100	63100	41700	40200	42500
Vanadium	_____	147	6B	168	_____	_____	_____
Zinc	_____	378	122	355	_____	104	

EPA Contract Laboratory Program (CLP) Qualifiers

Organics:

U - Compound was analyzed for but not detected
J - Compound was detected but numerical value is estimated because certain sample preparation or instrument QC criteria were not met
R - Unusable; compound may or may not be present but it is not possible to determine due to some critical failure in sample preparation or analysis
N - Presumtive evidence of the presence of the compound
NJ- Presumptive evidence of the presence of the compound at an estimated quantity
UJ- Compound was analyzed for but not detected; sample quantitation limit because certain sample preparation or instrument QC criteria were not met
B - Compound was detected in one or more blanks
JB- Compound concentration is estimated because it was 1.) detected in one or more blanks, and 2.) the sample concentration was not sufficiently higher than the blank(s) concentration to consider it a good quantification

Laboratory Blanks

VBlank - Laboratory Volatiles Blank
SBlank - Laboratory Semi-volatiles Blank
PBlank - Pesticide PCB Blank

Inorganics:

Data Qualifiers

U - Element was analyzed for but not detected
J - Element was detected but numerical value is estimated because certain sample prep. or instrument QC criteria were not met
R - Unusable; element may or may not be present but it is not possible to determine due to some critical failure in sample prep. or analysis
Z - No result
B - Concentration found was less than the Contract Required Detection Limit but greater than the Instrument Detection Limit

Quality Control Qualifiers

E - Concentration reported is estimated due to the presence of an interferent
M - Duplicate injection precision levels not met
N - Spiked sample recovery limits not met
S - Reported concentration was obtained using the Method of Standard Additions
W - Post-digestion spike for Furnace-AA analysis is outside control limits, while sample absorbance is less than 50% of spike absorbance
* - Duplicate analyses outside control limits
+ - Correlation coefficient for the Method of Standard Additions is less than the required limit

(S, W or + are mutally exclusive and cannot appear together)

Method Qualifier

P - ICP (Inductively Coupled Argon Plasma)
A - Flame Aspiration Atomic Absorption Spectrophotmetric
F - Furnace (Graphite) Atomic Absorption Spectrophotometric
CV- Manual Cold Vapor Atomic Absorption Spectrophotometric (Mercury)
AV- Automated Cold Vapor Atomic Absorption Spectrophotometric (Mercury)
AS- Semi-automated Specrophotometric
C - Manual Spectrophotometric
T - Titrimetric
NR- Not Required to be analyzed

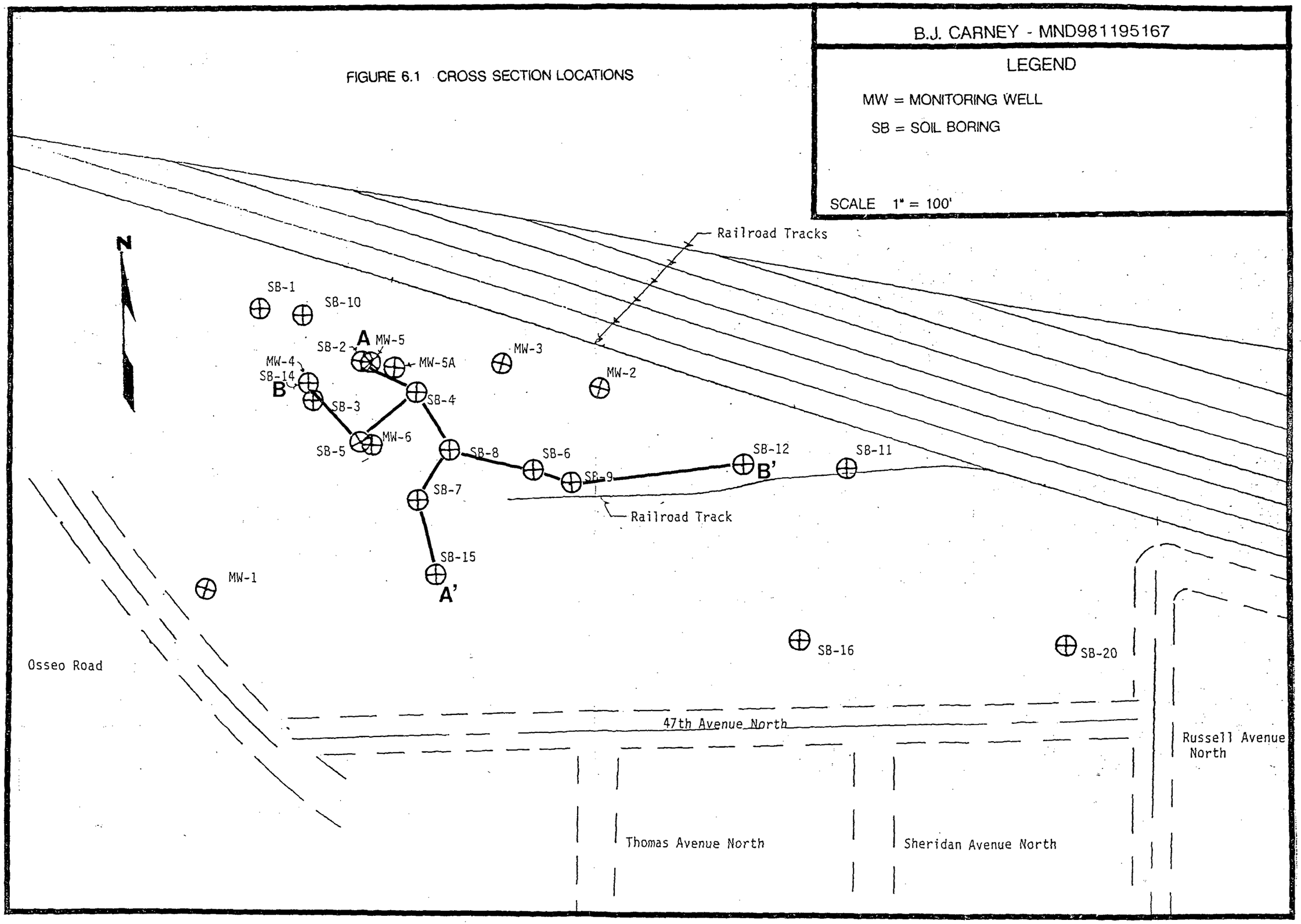
The analytes detected in monitoring well MW-1 were in concentrations considerably higher than the analytes detected in the other monitoring wells. The higher levels can be attributed to unfiltered total metal samples for MW-1 (D01 and S32). All other water samples for this fraction were filtered. Manganese and iron were above the secondary drinking water standards in all monitoring wells. The detection levels for total metals are consistent with levels associated with glacial water quality throughout the region (Balaban, 1989).

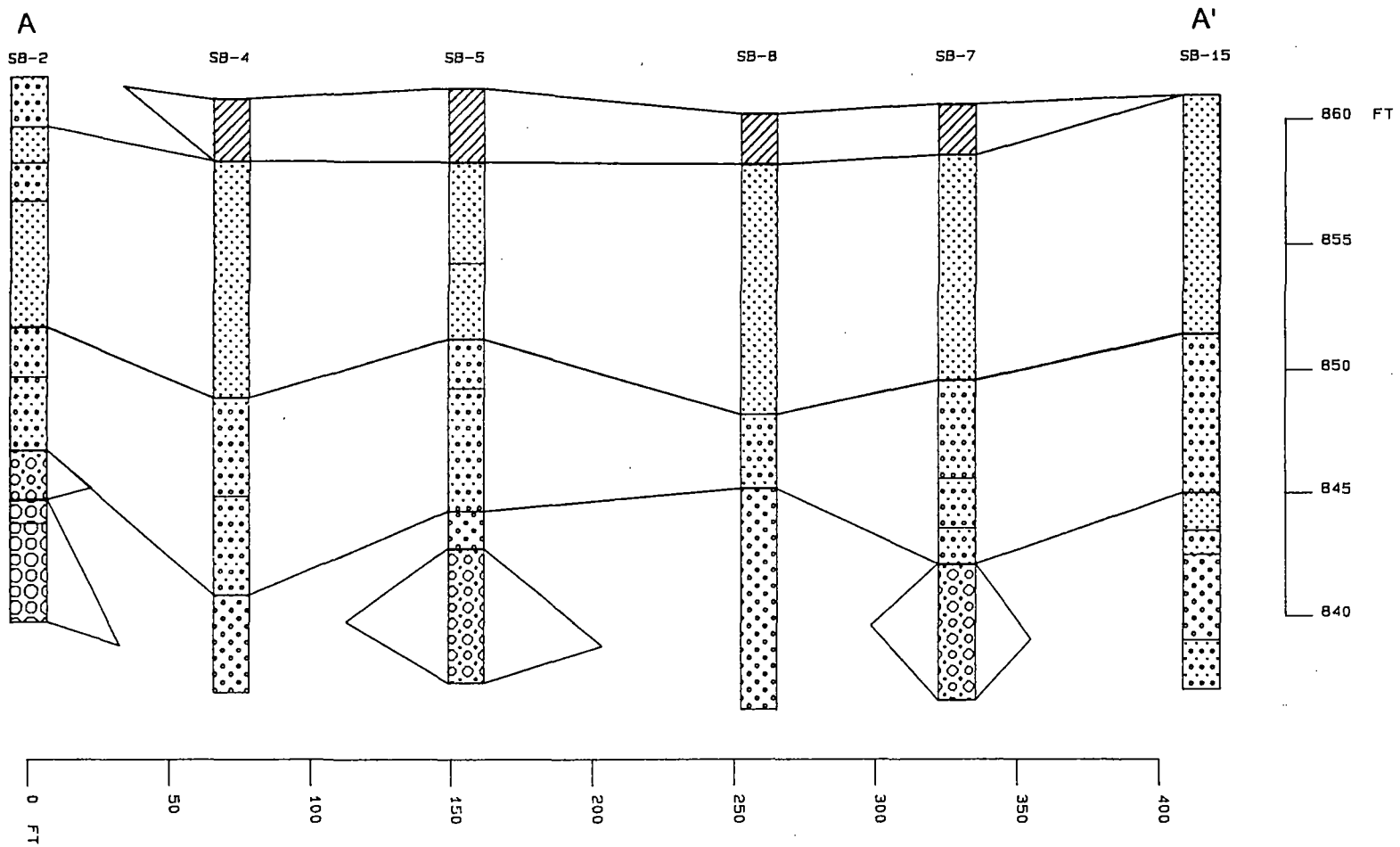
The concentration of volatile organic compounds and PCP in the ground water samples were below the Recommended Allowable Limits (RAL) for drinking water. The majority of the PAH compounds were above the RAL for drinking water. The concentration of total PAH was highest in monitoring well MW-6 (568 ug/L). Total PAH was 49.7 ug/L in MW-4, 13.2 ug/L in MW-3, 107 ug/L in MW-2 and .3 ug/L in MW-1. The distribution of these compounds may reflect migration from the area around MW-6, which from aerial photographs is believed to have been the location of a pole treatment pond.

Potentiometric levels were taken in September 1989, and indicate that ground water flow is to the northeast.

The glacial outwash deposits have an estimated permeability rate ranging from 10^{-3} to 10^{-5} cm/sec. Therefore, contaminants may migrate to the water table very rapidly. No continuous clay deposit was encountered while drilling, which may prevent or impede the migration of contamination. (Figure 6.1, 6.2, 6.3). The St. Peter aquifer therefore is considered to be hydrologically connected to the overlying glacial aquifer.

FIGURE 6.1 CROSS SECTION LOCATIONS





LEGEND

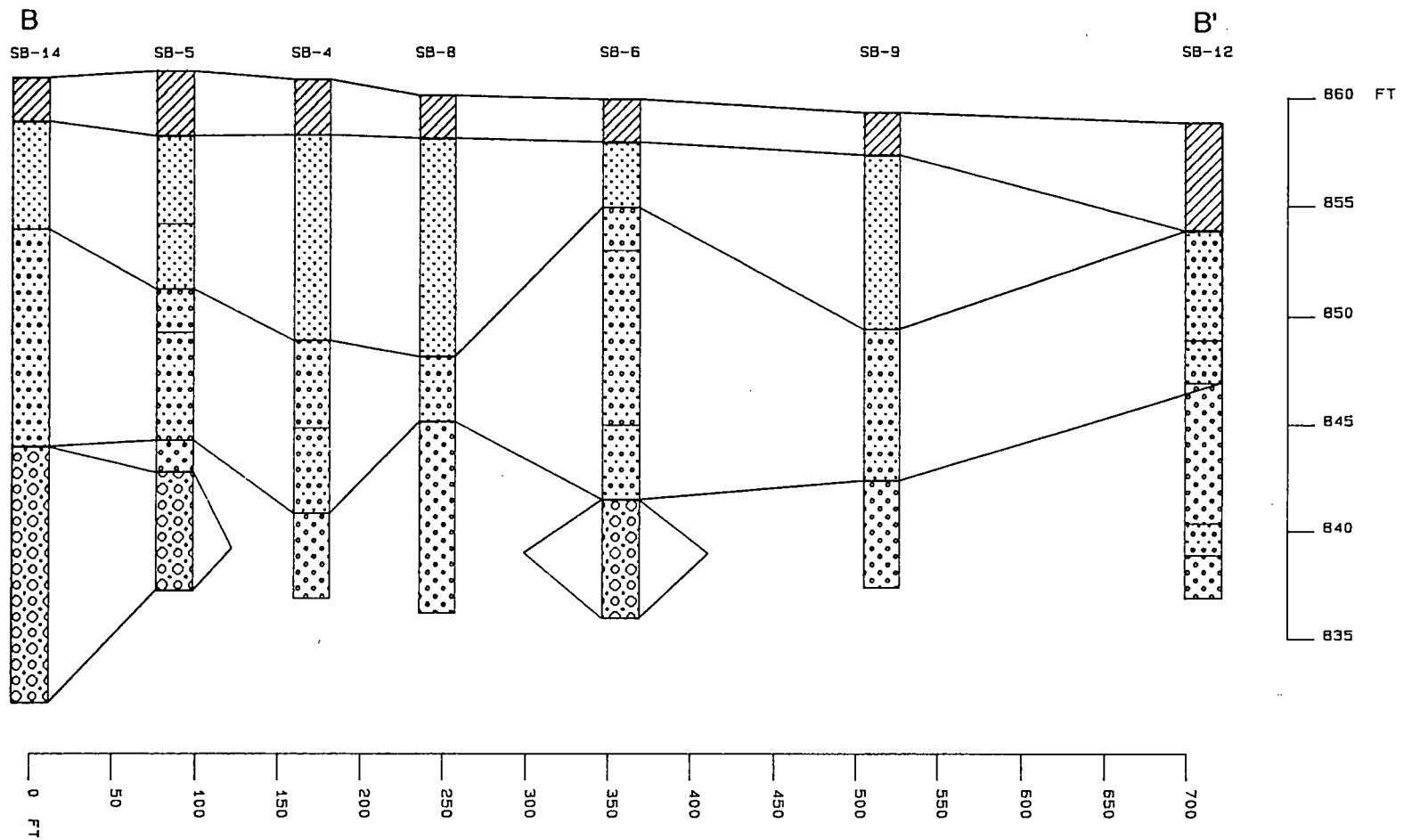
TOPSOIL | SAND-FINE | SAND-MEDIUM | SAND-COARSE | SAND/GRAVEL | GRAVEL

TITLE: B.J. CARNEY - AA' CROSS SECTION

PREPARED BY: MPCA STAFF DATE: 12/5/89

MINNESOTA POLLUTION CONTROL AGENCY

FIGURE: 6.2



LEGEND

TOPSOIL | SAND-FINE | SAND-MEDIUM | SAND-COARSE | SAND/GRAVEL

TITLE: B.J. CARNEY - BB' CROSS SECTION

PREPARED BY: MPCA STAFF DATE: 12/5/89

MINNESOTA POLLUTION CONTROL AGENCY

FIGURE: 6.3

Municipal wells finished in the bedrock aquifer system above the St. Lawrence aquitard and private wells finished in the surficial aquifer appear to be the most susceptible targets from this Site. Although the local ground water flow direction is generally to the northeast there may be variations in the flow direction. These may be the result of changing hydrologic conditions which are man induced, i.e., drawdown of the water table by pumping from municipal well systems and large consumptions of water used for industrial purposes. Further hydrological investigation may be needed to evaluate these possibilities.

The cities of Robbinsdale, Brooklyn Center, and Fridley provide drinking water to over 75,000 residents. In addition, an undetermined number of residents within a three mile radius of the Site obtain drinking water from private wells. (Barr Engineering, 1985).

6.2 Surface Water

The potential for migration of contaminants via surface water drainage is low due to the flat terrain at the Site. The surficial deposits are also highly permeable (10^{-3} to 10^{-5} cm/sec) which results in rapid infiltration of precipitation rather than runoff.

6.3 Air

A release of potentially hazardous contaminants to the air was not documented during the SSI. Because the observed contamination is subsurface, there is low potential for contaminants to be released to the air.

6.4 Direct Contact

The potential for direct contact with contaminants is very low as all the compounds were detected in the subsurface.

6.5 Fire and Explosion

There have been no fire or explosions reported at the Site. The potential for fire and/or explosion is low.

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APPENDIX A

SITE FOUR MILE RADIUS MAP

SDMS US EPA Region V

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APPENDIX B

U.S. EPA FORM 2070-13

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MN	D981195167

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
B.J. Carney	47th Ave and Osseo Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Minneapolis	MN	55440	Hennepin	053	5

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
45 0 25.__	093 18 57.__	☒ A. PRIVATE ☐ B. FEDERAL ____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
Begin 5 30 89 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1923 (BEGINNING YEAR) 1973 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR ____ (Name of firm) ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
			( )

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Elizabeth Cody	Project Manager	MPCA	(612) 296-6973
Bradley Nordberg	Hydrogeologist	MPCA	(612) 296-7391
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Mr. Bob Kale - Soo Line RR	Engineer - Environmental Control	P.O. Box 530 Minneapolis, MN 55440	(612) 337-7559
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	5/30/89 10:00 AM	Cloudy, 54°

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Elizabeth Cody	MPCA	(612) 296-6973

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Elizabeth Cody	MPCA			10 3 89 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MN	D981195167

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

unknown

TONS _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☒ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	unknown		
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown		
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	See Chemical Summary Tables in the Site Inspect Report.				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

MPCA files

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MN | 02 SITE NUMBER: D981195167

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [X] OBSERVED (DATE: 6/13/89) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

All monitoring wells on the Site were contaminated

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

unknown - samples were not taken

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None

01 [X] E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) [X] POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Very low potential as the contaminated soil is at the water table/unsaturated zone interface; approximately 17 feet below grade.

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE: 5/31/89) ☐ POTENTIAL [X] ALLEGED
03 AREA POTENTIALLY AFFECTED: 5.74 (Acres) 04 NARRATIVE DESCRIPTION

Contaminated soil samples were collected from some of the soil borings

01 [X] G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) [X] POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 75,000 ground water; 576,000 - surface water 04 NARRATIVE DESCRIPTION

Minneapolis has intakes on the Mississippi River, which lies approximately 1 mile east of the Site. The Cities of Robbinsdale Brooklyn Center, and Fridley including an undetermined number of private wells, all located within a three mile radius of the site, obtain their drinking water from potentially affected groundwater sources.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: N/A 04 NARRATIVE DESCRIPTION

An inactive site

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MN | 02 SITE NUMBER: D981195167

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

NA

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE: 5/31/89) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Soil samples were contaminated with oily, black substance

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Contamination in the groundwater may have migrated off site by this time as the site is old.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

unknown

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

unknown

III. TOTAL POPULATION POTENTIALLY AFFECTED: 75,000 (groundwater)

IV. COMMENTS
576,000 (surface water)
651,000 (TOTAL)

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

MPCA files, Ground Water samples taken 6/13/89, Soil samples taken 5/89

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MN	D981195167

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☒ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☒ I. OTHER Treatment Ponds Unknown (Specify)		

04 TREATMENT (Check all that apply) N/A
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER _____ (Specify)

05 OTHER
- ☐ A. BUILDINGS ON SITE

NONE

06 AREA OF SITE: 5.74 (Acres)

07 COMMENTS: Wood treating ponds were utilized on-site without the aid of confincing materials.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one) wastes are not contained, it has entered the glacial aquifer
- ☐ A. ADEQUATE, SECURE
- ☐ B. MODERATE
- ☐ C. INADEQUATE, POOR
- ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

N/A

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

Soil contamination was not found at the surface, but rather at the water table interface (~ 17' below grade)

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Site Investigation May 1989, MPCA Files,

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MN	D981195167

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. X	B. X	A. ☐	B. ☐	C. X	A. 1.0 (mi)
NON-COMMUNITY	C. ☐	D. ☐	D. ☐	E. ☐	F. ☐	B. 2.0 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING
X B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (no other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 75,000

03 DISTANCE TO NEAREST DRINKING WATER WELL 2.0 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
22.0 (ft)	North east	22.0 (ft)	7,200,000 (gpd)	☐ YES X NO

09 DESCRIPTION OF WELLS (including use, depth, and location relative to population and buildings)
The Cities of Robbinsdale, Brooklyn Center, and Fridley obtain their drinking water from 27 municipal wells. The wells are screened at depths ranging from 162 ft to 925 and are all located within heavily populated areas. In addition, a undetermined number private wells are screened in outwash deposits within a 3 mile radius.

10 RECHARGE AREA		11 DISCHARGE AREA	
X YES ☐ NO	COMMENTS Precipitation	X YES ☐ NO	COMMENTS Mississippi River located 1 mile east of the Site.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

X A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
RYAN LAKE	☐	1/6 (mi)
Mississippi River	☐	1.0 (mi)
Shingle Creek	☐	.75 (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 15,000 NO. OF PERSONS	B. 35,000 NO. OF PERSONS	C. 100,000 + NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 200 ft ~~(mi)~~

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: >1,000 located within the City

04 DISTANCE TO NEAREST OFF-SITE BUILDING: 50 feet ~~(mi)~~

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)
The Site is surrounded by residential housing on the east, south and west with an estimated population of 1,500 people with in a 1/4 mile.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: MN. 02 SITE NUMBER: D981195167

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☒ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☒ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
48 (ft)	0-24 (ft)	unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
27.6 (in)	2.35 (in)	0 %	N/A	0-1 %

09 FLOOD POTENTIAL
SITE IS IN 500 YEAR FLOODPLAIN

10 N/A ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE: A. N/A (mi) OTHER: B. N/A (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
_____ (mi)
ENDANGERED SPECIES: N/A.

13 LAND USE IN VICINITY
DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 500 yds ~~(mi)~~	B. N/A (mi)	C. N/A (mi)	D. N/A (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY
The Site is considerably flat and closely resembles the over all topograph of the region. The entire area is situated on a glacial outwash plain.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection Report.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MN	D981195167

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Sooline Railroad Co.		P.O. Box 530		Minneapolis	MN	55440

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MN	D981195167

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Walker Lumber Company	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
47th Ave and Osseo Rd	

05 CITY	06 STATE	07 ZIP CODE
Minneapolis	MN	

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER
B.J. Carney Company	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
47th Ave and Osseo Rd	

05 CITY	06 STATE	07 ZIP CODE
Minneapolis	MN	

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
1923 - 1973	

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MN	D981195167

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Inactive	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MN	D981195167

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MN	D981195167

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

APPENDIX C

SITE PHOTOGRAPHS

Site B.J. Carney

EPA # MND981195167

Date 4/13/89

Time _____ a.m. p.m.

Direction NE

Weather _____

Photographed by: B. Nordberg

Sample ID # _____

Description Broken fence along the north side of the site. Wood scraps scattered in right background Concrete pillars in foreground

Site B.J. Carney

EPA # MND981195167

Date 4/13/89

Time _____ a.m. p.m.

Direction _____

Weather _____

Photographed by: B. Lofgren B. Nordberg

Sample ID# _____

Description Wood, metal and plastic scraps on the site. Soil staining in center of photograph

Site B.J. Carney

EPA # MND981195167

Date 5/30/89

Time 9:30 a.m. p.m.

Direction East

Weather 54° Overcast slight breeze.

Photographed by: E. Cody

Sample ID # 89YC24

Description View east across the Site - scattered piles of wood, wire and plastic debris

---

Site B.J. Carney

EPA # MND981195167

Date 5/30/89

Time 11:37 a.m. p.m.

Direction SE

Weather 54° Overcast slight breeze.

Photographed by: E. Cody

Sample ID# 89YC24S01

Description Soil Boring #1 - located on west side of the Site

Site B.J. Carney

EPA # MND981195167

Date 5/30/89

Time 11:37 (a.m.) p.m.

Direction SE

Weather 54° Overcast breezy

Photographed by: E. Cody

Sample ID # 89YC24S01

Description Soil Boring #1 - located on west side of the Site

---

Site B.J. Carney

EPA # MND981195167

Date 5/31/89

Time 9:15 (a.m.) p.m.

Direction E

Weather 50° Overcast slight breeze

Photographed by: E. Cody

Sample ID# 89YC24S02 S03

Description Soil Boring #2 - located on the west side of the Site

Site B.J. Carney

EPA # MND981195167

Date 5/31/89

Time 9:15 (a.m.) p.m.

Direction E

Weather 50° Overcast slight breeze

Photographed by: E. Cody

Sample ID # 89YC24S02 S03

Description Soil Boring #2 located on west side of the Site

Site B.J. Carney

EPA # MND981195167

Date 5/31/89

Time 11:55 (a.m.) p.m.

Direction NE

Weather 50° Overcast slight breeze

Photographed by: E. Cody

Sample ID# 89YC24S04

Description Soil Boring #5 located in the central portion of the Site

Site B.J. Carney

EPA # MND981195167

Date 5/31/89

Time 11:55 a.m. p.m.

Direction NE

Weather 50° Overcast slight breeze

Photographed by: E. Cody

Sample ID # 89YC24S04

Description Soil Boring #5 - located in the central portion of the Site.

Site B.J. Carney

EPA # MND981195167

Date 5/31/89

Time 11:55 a.m. p.m.

Direction NE

Weather 56° Overcast slight breeze

Photographed by: E. Cody

Sample ID# 89YC24S04

Description Sample from Soil Boring # 5 - Depth 22-24' - Very odorous, black, oily

Site B.J. Carney

EPA # MND981195167

Date 5/31/89

Time 4:33 a.m. (p.m.)

Direction SE

Weather 60° Overcast

Photographed by: E. Cody

Sample ID # 89YC24505

Description Soil Boring #20 located in the SE corner of the Site - borehole in the center right of the photograph

Site B.J. Carney

EPA # MND981195167

Date 5/31/89

Time 4:23 a.m. (p.m.)

Direction SE

Weather 60° Overcast

Photographed by: E. Cody

Sample ID# 89YC24505

Description Soil Boring #20 - located in the SE corner of the Site

Site B.J. Carney

EPA # MND981195167

Date 6/1/89

Time 11:00 a.m. p.m.

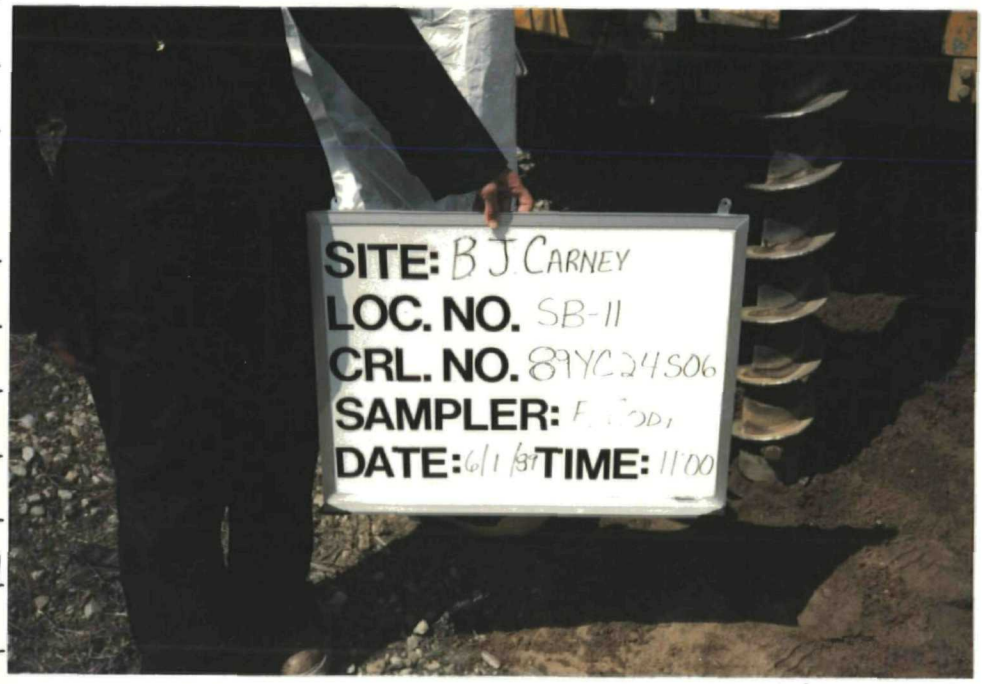
Direction W

Weather 63° Slightly overcast

Photographed by: E. Cody

Sample ID # 89YC24S06

Description Soil Boring #11 located north of the abandoned railroad track



Site B.J. Carney

EPA # MND981195167

Date 6/1/89

Time 11:00 a.m. p.m.

Direction W

Weather 63° Slightly overcast

Photographed by: E. Cody

Sample ID# 89YC24S06

Description Soil Boring #11 located north of the abandoned railroad track

Site B.J. Carney

EPA # MND981195167

Date 6/1/89

Time 11:00 a.m. p.m.

Direction

Weather 63° Slightly overcast

Photographed by: E. Cody

Sample ID # 89YC24S06

Description Soil Boring #11 located north of abandoned railroad track

---

Site B.J. Carney

EPA # MND981195167

Date 6/2/89

Time 10:37 a.m. p.m.

Direction

Weather 78° Slightly cloudy and breezy

Photographed by: E. Cody

Sample ID# 89YC24S07

Description Soil Boring #12 located north of abandoned railroad track.

Site B.J. Carney

EPA # MND981195167

Date 6/2/89

Time 10:37 a.m. p.m.

Direction S

Weather 78° Slightly cloudy and breezy

Photographed by: E. Cody

Sample ID # 89YC24S07

Description Soil Boring #12 located north of the abandoned railroad track

---

Site B.J. Carney

EPA # MND981195167

Date 6/2/89

Time 11:36 a.m. p.m.

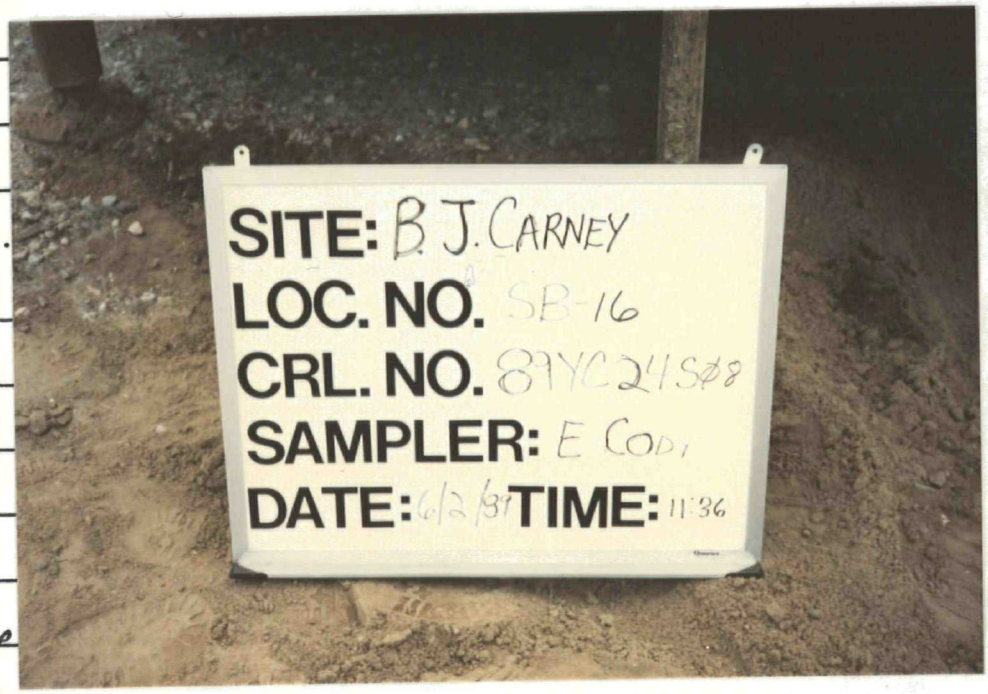
Direction S

Weather 75° Overcast windy

Photographed by: E. Cody

Sample ID# 89YC24S08

Description Soil Boring #16 located on south side of the site



Site B.J. Carney

EPA # MND981195167

Date 6/2/89

Time 11:36 a.m. p.m.

Direction S

Weather 75° Overcast

Windy

Photographed by: E. Cody

Sample ID # 89YC24S08

Description Soil Boring #16

located on the south

side of the Site

Site B.J. Carney

EPA # MND981195167

Date 6/2/89

Time 1:20 a.m. p.m.

Direction

Weather

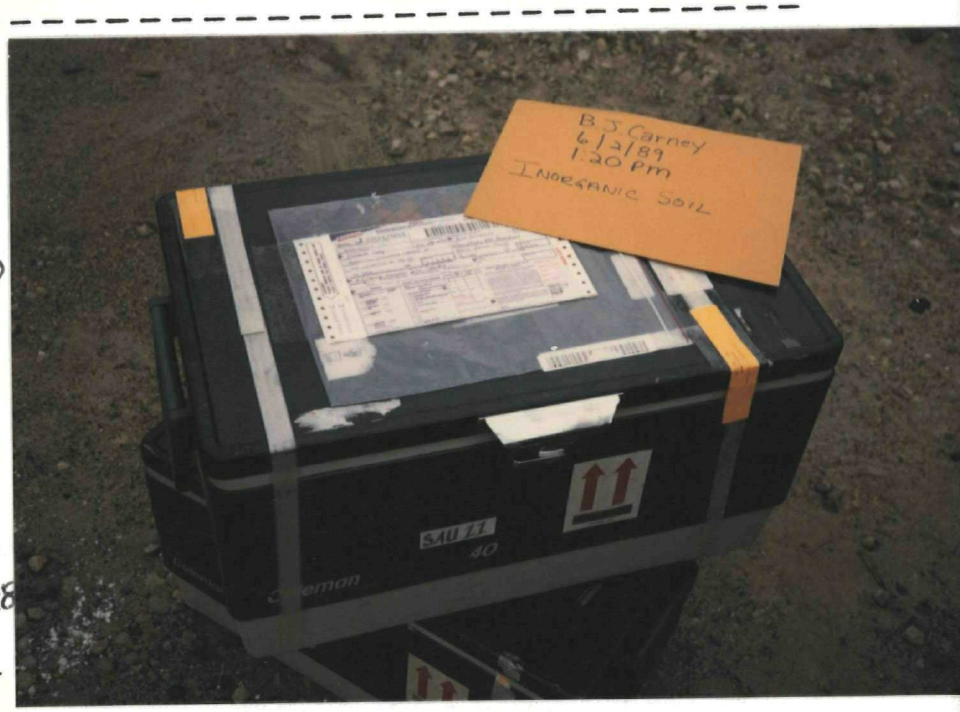
Photographed by: E. Cody

Sample ID# 89YC24S01-S08

Description Inorganic Soil

Samples packed in cooler

(Cooler # SAU 11)



Site B.J. Carney

EPA # MND981195167

Date 6/2/89

Time 2:40 a.m. (p.m.)

Direction

Weather

Photographed by: E. Cody

Sample ID # 89YC24501-508

Description Organic Soil Samples packed in Cooler

Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 10:00 (a.m.) p.m.

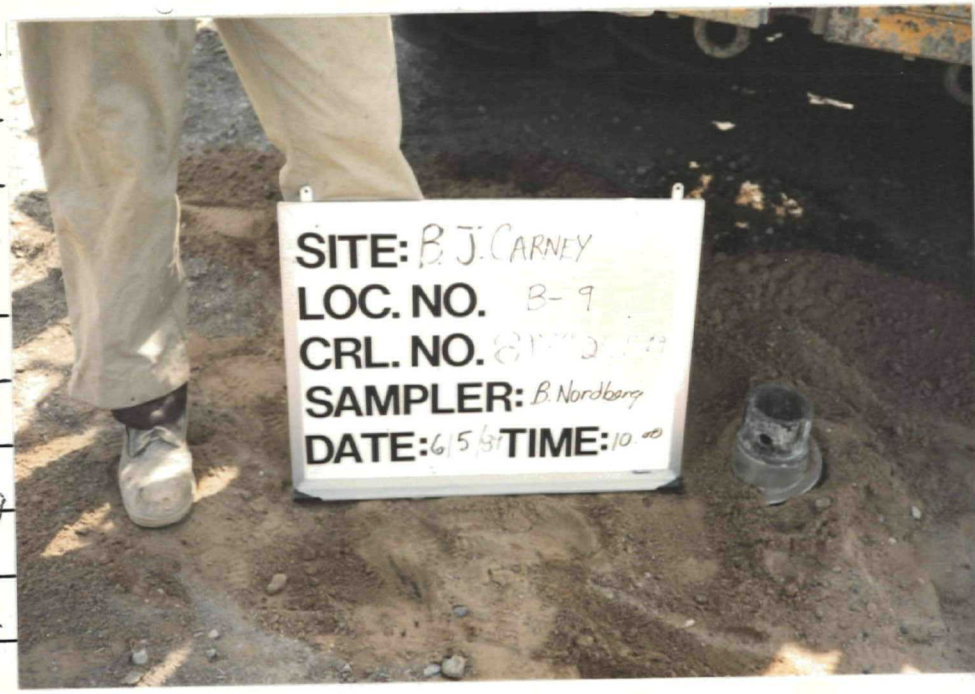
Direction E

Weather 74° Clear windy

Photographed by: B. Nordberg

Sample ID# 89YC24509

Description Soil Boring #9 - located north of the abandoned railroad track



Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 10:00 (a.m.) p.m.

Direction E

Weather 74° Clear

windy

Photographed by: B. Nordberg

Sample ID # 89YC24S09

Description Soil Boring #9-

located north of the

abandoned railroad tracks-

the borehole is located on the

right of the placard

Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 10:20 (a.m.) p.m.

Direction E

Weather 74° Clear

windy

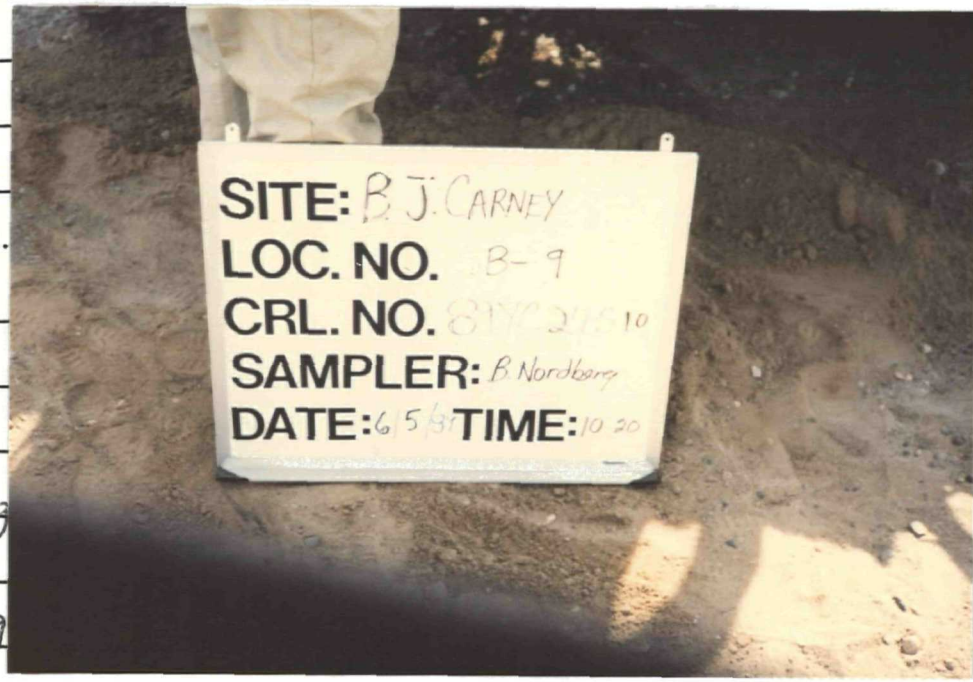
Photographed by: B. Nordberg

Sample ID# 89YC24S10

Description Soil Boring #9

located north of the

abandoned railroad tracks



Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 10:20 (a.m.) p.m.

Direction E

Weather 74° Clear

windy

Photographed by: B. Nordberg

Sample ID # 89YC24S10

Description Soil Boring #9- located north of the abandoned railroad tracks - the soil boring is behind the plexard

---

Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 11:20 (a.m.) p.m.

Direction E

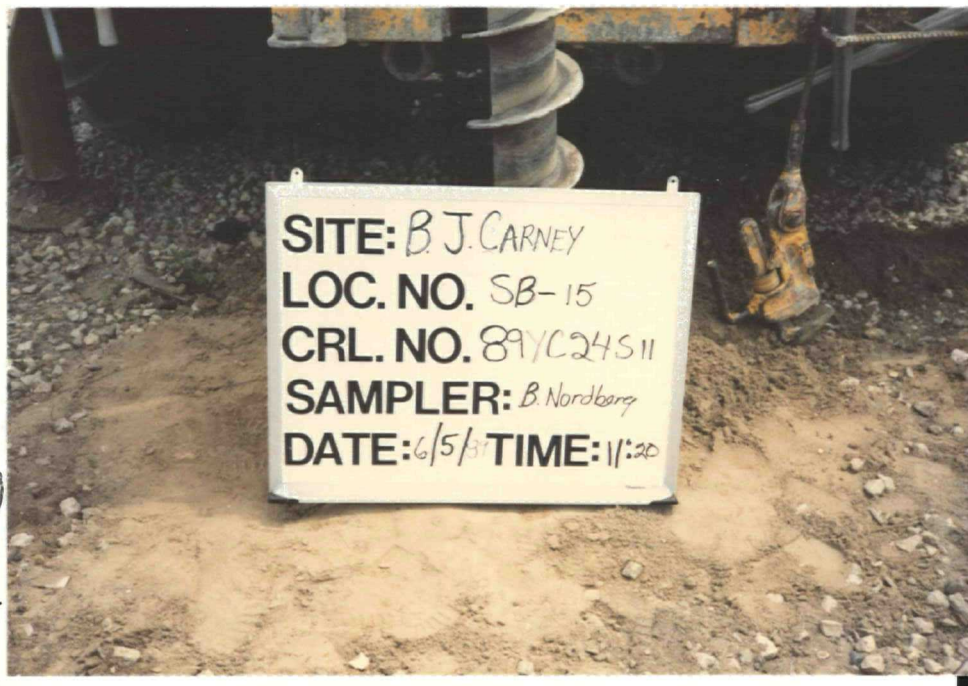
Weather 80° Overcast

slight breeze

Photographed by: B. Nordberg

Sample ID# 89YC24S11

Description Soil Boring #15- located in the south central portion of the site



Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 11:20 a.m. p.m.

Direction E

Weather 80° Overcast

Slight breeze

Photographed by: B. Nordberg

Sample ID # 89YC24S11

Description Soil Boring #15 located in the south central portion of the Site - the borehole is behind the placard

---

Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 14:45 a.m. p.m.

Direction SE

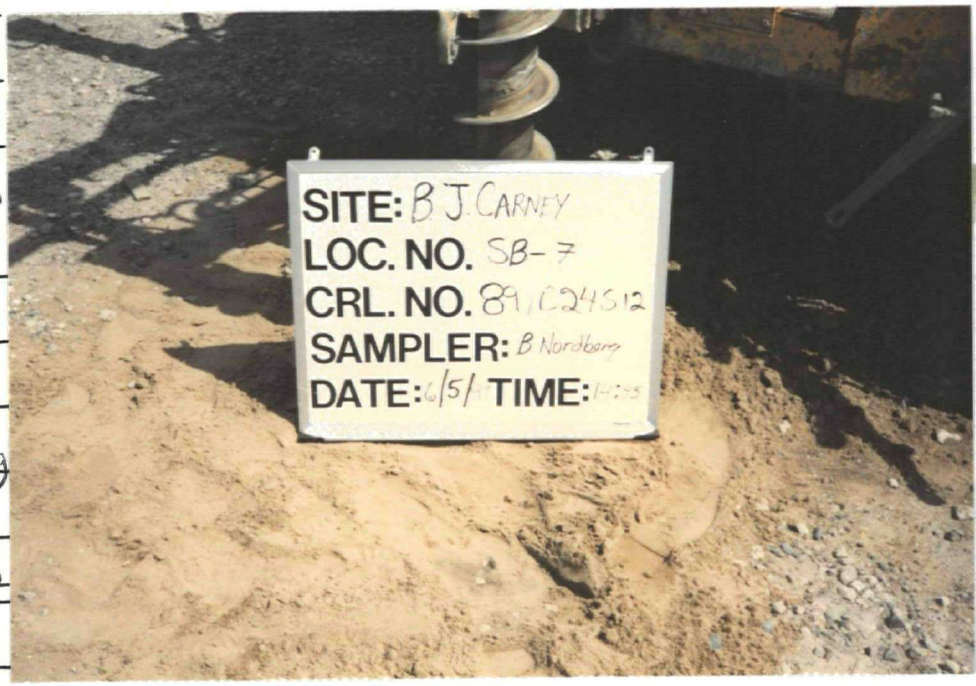
Weather 80° Overcast

Windy

Photographed by: B. Nordberg

Sample ID# 89YC24S12

Description Soil Boring #7 located in the central portion of the Site



Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 14:45 a.m. (p.m.)

Direction SE

Weather 80° Overcast

Windy

Photographed by: B. Nordberg

Sample ID # 89YC24512

Description Soil Boring #7

located in the central

portion of the Site

Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 16:00 a.m. (p.m.)

Direction NE

Weather 80° Overcast

Windy

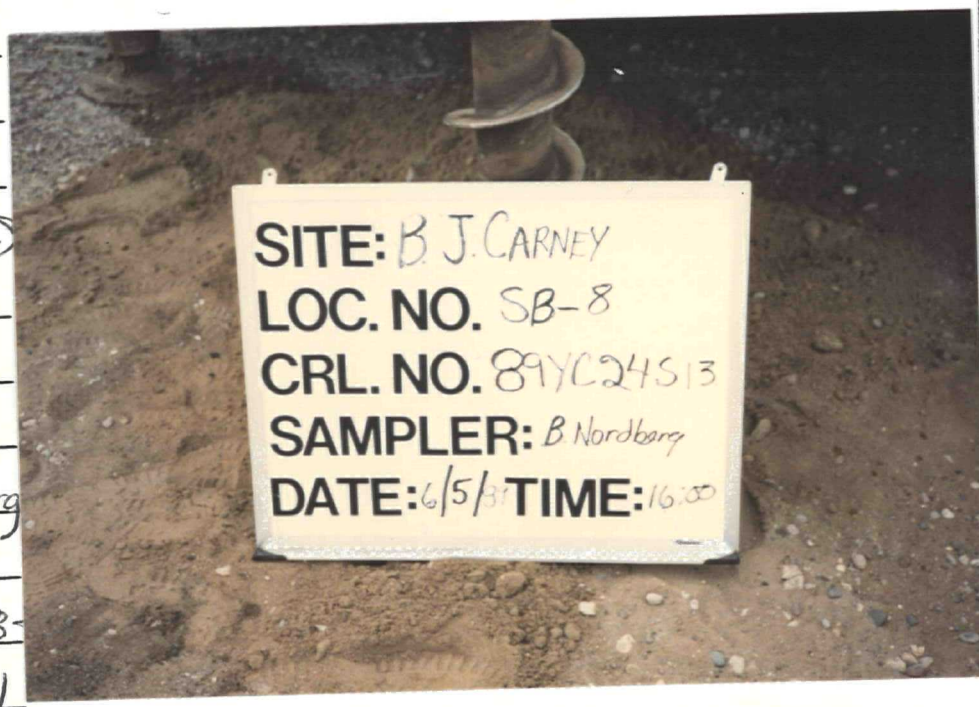
Photographed by: B. Nordberg

Sample ID# 89YC24513

Description Soil Boring #8

located in the central

portion of the Site



Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 16:05 a.m. p.m.

Direction NE

Weather 80° Overcast

Windy

Photographed by: B. Nordberg

Sample ID # 89YC24513

Description Soil Boring #8 - located in the central portion of the Site

---

Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 16:15 a.m. p.m.

Direction NE

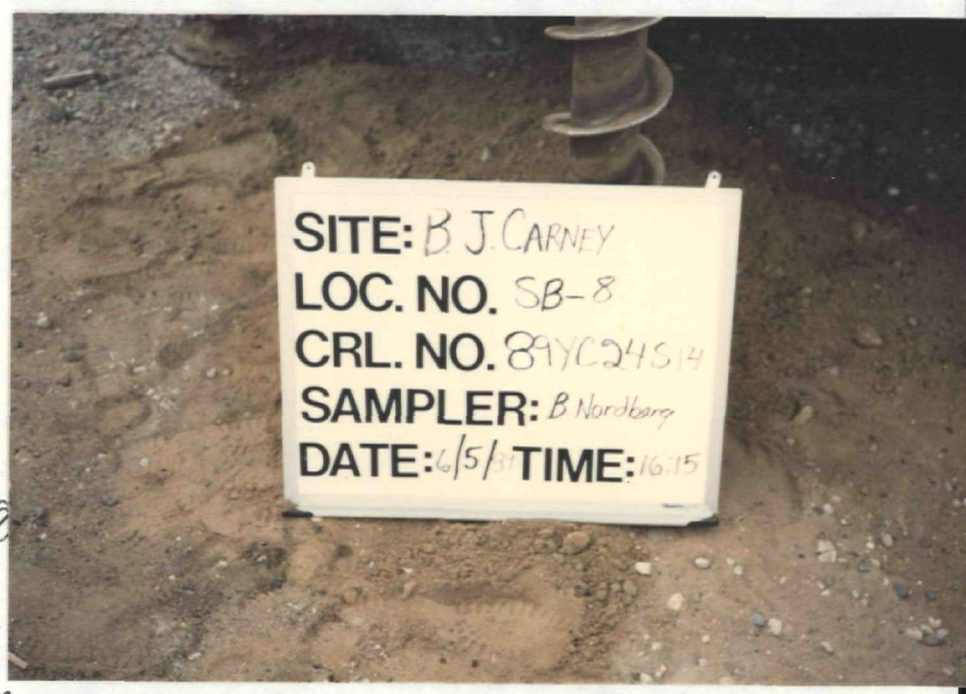
Weather 80° Overcast

Windy

Photographed by: B. Nordberg

Sample ID# 89YC24514

Description Soil Boring #8 - located in the central portion of the Site



Site B.J. Carney

EPA # MND981195167

Date 6/5/89

Time 16:15 a.m. p.m.

Direction NE

Weather 80° Overcast windy

Photographed by: B. Nordberg

Sample ID # 89YC24514

Description Soil Boring #8 located in the central portion of the Site

---

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 11:30 a.m. p.m.

Direction NE

Weather 80° slightly windy, clear

Photographed by: B. Nordberg

Sample ID# 89YC24515

Description Soil Boring #6 located north of the abandoned railroad track

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 11:30 a.m. p.m.

Direction NE

Weather 80° slightly windy, clear

Photographed by: B. Nordberg

Sample ID # 89YC24515

Description Soil Boring #6 located north of the abandoned railroad track

---

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 11:30 a.m. p.m.

Direction SE

Weather 80° slightly windy, clear

Photographed by: B. Nordberg

Sample ID# 89YC24515

Description Soil Boring #6 located north of the abandoned railroad track

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 14:00 a.m. (p.m.)

Direction NE

Weather 75° Overcast slightly windy

Photographed by: B. Nordberg

Sample ID # 89YC24516

Description Soil Boring #4 located in the north central portion of the Site

---

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 14:00 a.m. (p.m.)

Direction NE

Weather 75° Overcast slightly windy

Photographed by: B. Nordberg

Sample ID# 89YC24516

Description Soil Boring #4 located in the north central portion of the Site

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 14:20 a.m. p.m.

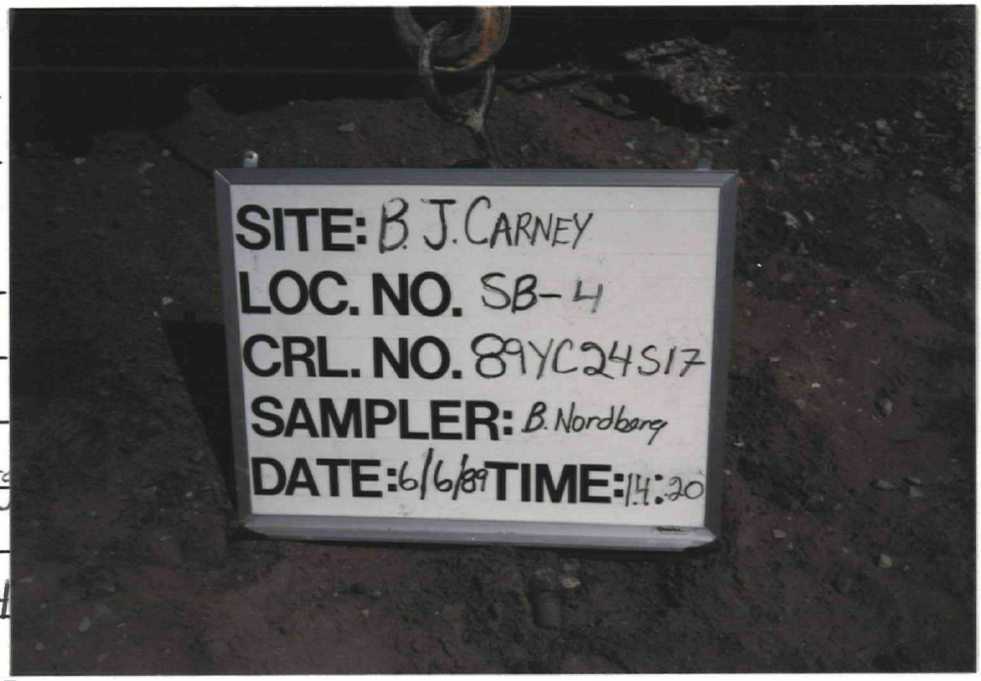
Direction NE

Weather 80° Clear

Photographed by: B. Nordberg

Sample ID # 89YC24517

Description Soil Boring #4 located in the north central portion of the Site.



Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 14:20 a.m. p.m.

Direction NE

Weather 80° Clear

Photographed by: B. Nordberg

Sample ID# 89YC24517

Description Soil Boring #4 located in the north central portion of the Site - the borehole is behind the placard

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 14:30 a.m. (p.m.)

Direction NE

Weather 80° clear

Photographed by: B. Nordberg

Sample ID # 89YC24S18

Description Soil Boring #4 - located in the north central portion of the Site

---

Site B.J. Carney

EPA # MND981195167

Date 6/6/89

Time 14:30 a.m. (p.m.)

Direction NE

Weather 80° clear

Photographed by: B. Nordberg

Sample ID# 89YC24S18

Description Soil Boring #4 located in the north central portion of the Site - the borehole is behind the placard

Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time 9:20 (a.m.) p.m.

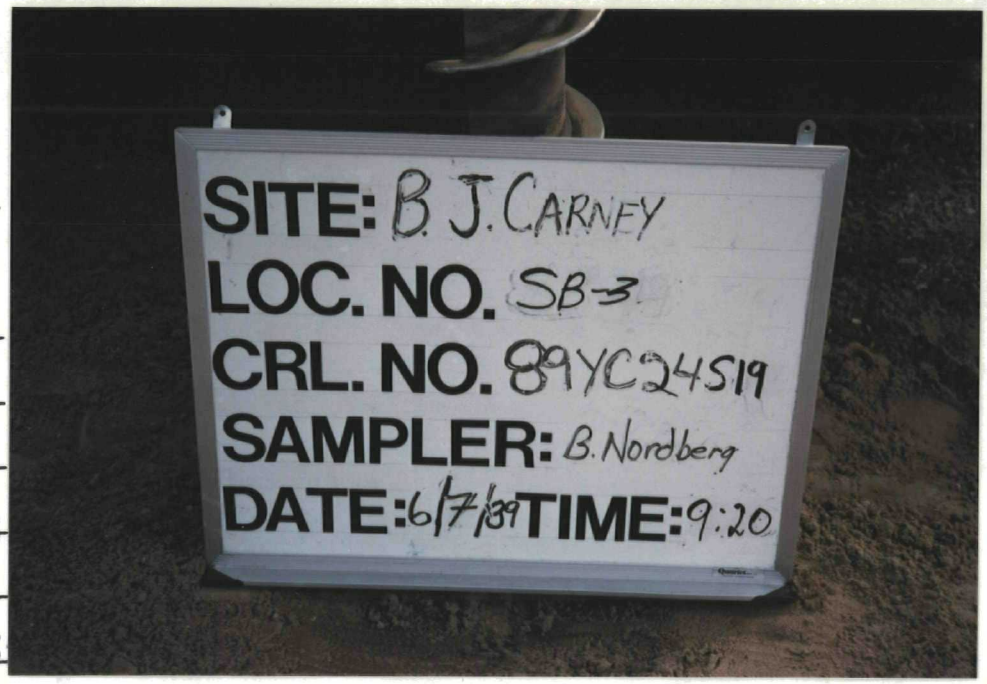
Direction NE

Weather 72° Overcast windy

Photographed by: B. Nordberg

Sample ID # 89YC24519

Description Soil Boring #3 located in the north central portion of the Site



Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time 9:20 (a.m.) p.m.

Direction NE

Weather 72° Overcast windy

Photographed by: B. Nordberg

Sample ID# 89YC24519

Description Soil Boring #3 located in the north central portion of the Site

Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time 13:00 a.m. p.m.

Direction NE

Weather 73° Overcast

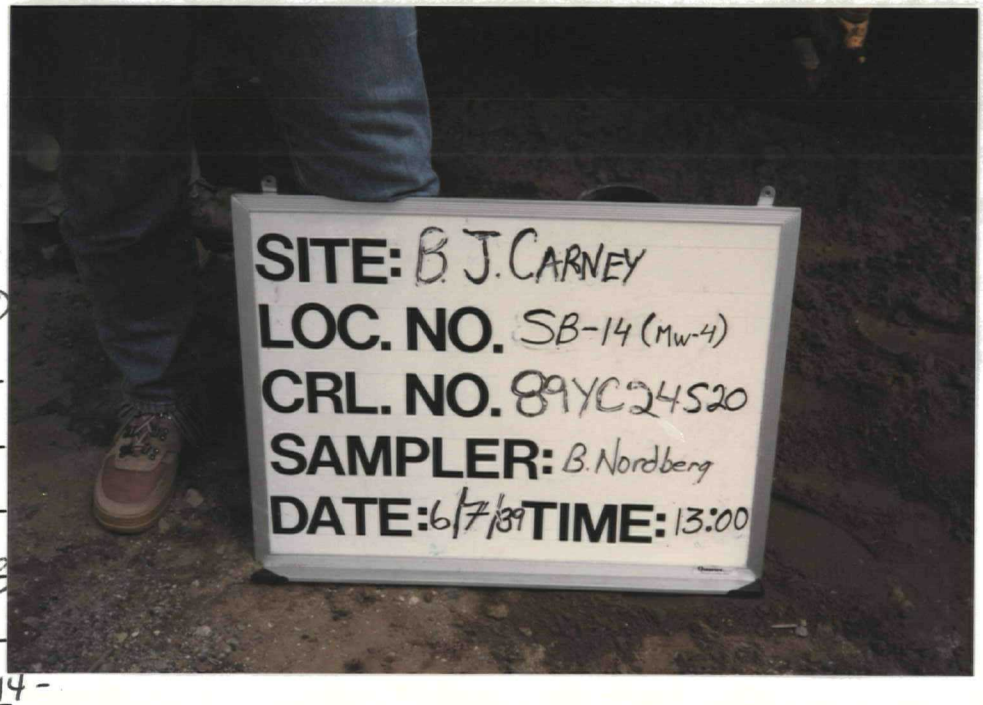
Windy

Photographed by: B. Nordberg

Sample ID # 89YC24520

Description Soil Boring #14 -

borehole for MW-4



Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time 13:00 a.m. p.m.

Direction NE

Weather 73° Overcast

Windy

Photographed by: B. Nordberg

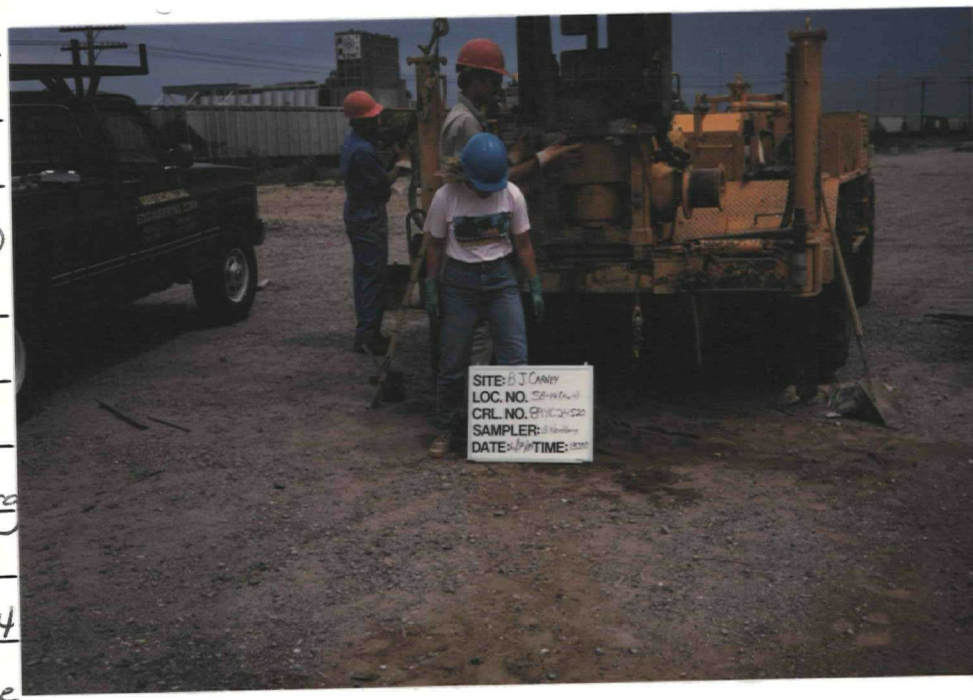
Sample ID# 89YC24520

Description Soil Boring #14

borehole for MW-4 - the

borehole is behind the

placard



Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time 13:30 a.m. (p.m.)

Direction NE

Weather 73° Overcast

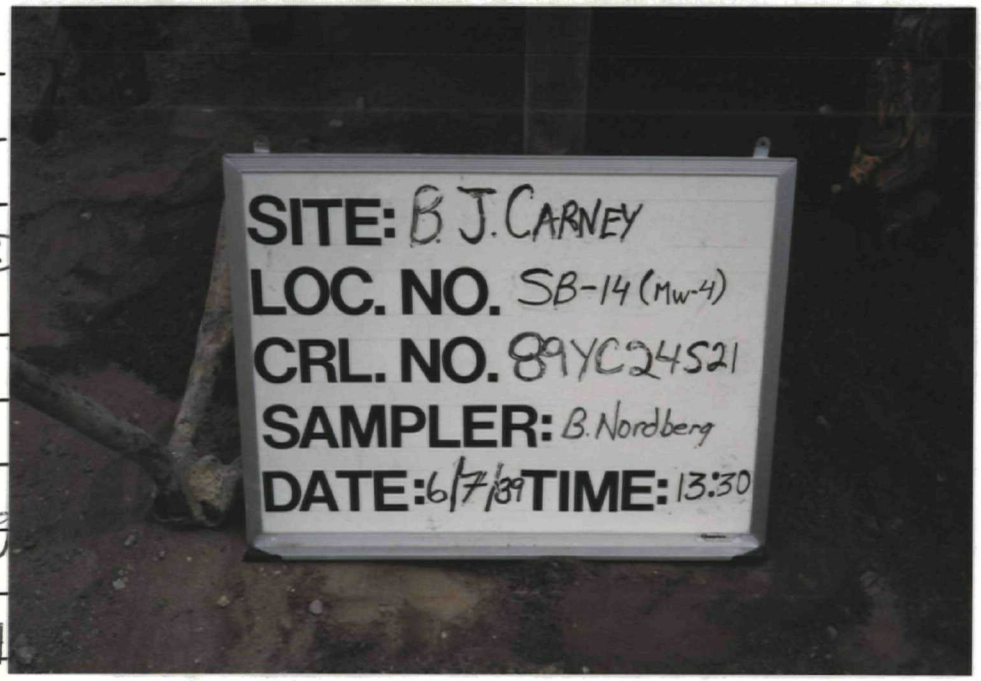
Windy

Photographed by: B. Nordberg

Sample ID # 89YC24521

Description Soil Boring #14

borehole for MW-4



Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time 13:30 a.m. (p.m.)

Direction NE

Weather 73° Overcast

Windy

Photographed by: B. Nordberg

Sample ID# 89YC24521

Description Soil Boring #14

borehole for MW-4

Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time _____ a.m. p.m.

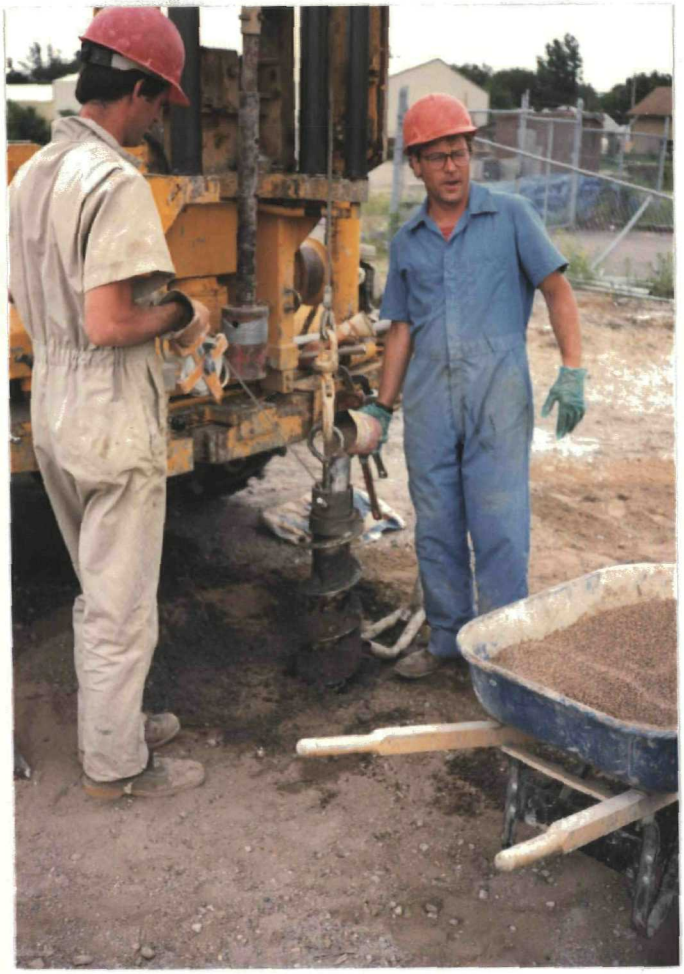
Direction SW

Weather 73° Overcast

Photographed by: B. Nordberg

Sample ID # _____

Description Installation of MW-4 - gravel pack



Site B.J. Carney

EPA # MND981195167

Date 6/7/89

Time _____ a.m. p.m.

Direction SW

Weather 73° Overcast

Photographed by: B. Nordberg

Sample ID# _____

Description Installation of MW-4 - gravel pack

Site B.J. Carney

EPA # MND981195167

Date 6/8/89

Time 9:30 (a.m.) p.m.

Direction SE

Weather 50° Overcast Windy

Photographed by: B. Nordberg

Sample ID # 89YC24522

Description Soil Boring #10 located in the northern portion of the Site

---

Site B.J. Carney

EPA # MND981195167

Date 6/8/89

Time 9:30 (a.m.) p.m.

Direction SE

Weather 50° Overcast Windy

Photographed by: B. Nordberg

Sample ID# 89YC24522

Description Soil Boring #10 - located in the northern portion of the Site

Site B.J. Carney

EPA # MND981195167

Date 6/8/89

Time 11:00 (a.m.) p.m.

Direction SE

Weather 50° Overcast windy

Photographed by: B. Nordberg

Sample ID #

Description Installation of MW-6

Site B.J. Carney

EPA # MND981195167

Date 6/8/89

Time 11:00 (a.m.) p.m.

Direction SE

Weather 50° Overcast windy

Photographed by: B. Nordberg

Sample ID#

Description Installation of MW-6 - riser pipe of the well is behind the placard

Site B.J. Carney

EPA # MND981195167

Date 6/9/89

Time 10:00 a.m. p.m.

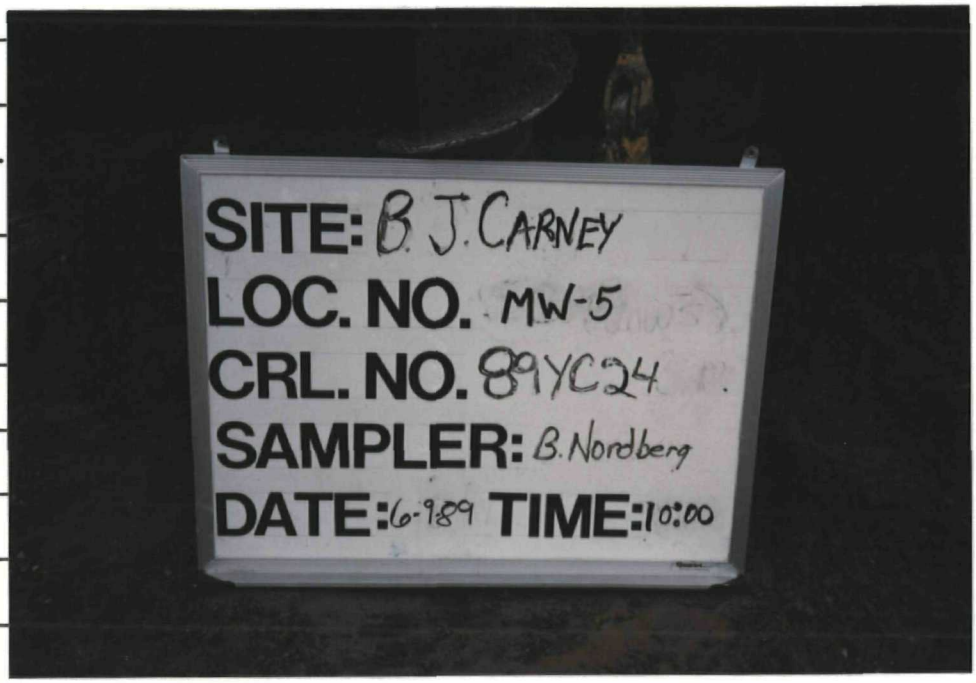
Direction SW

Weather 50° Overcast

Photographed by: B. Nordberg

Sample ID #

Description Installation of MW-5



Site B.J. Carney

EPA # MND981195167

Date 6/9/89

Time 10:00 a.m. p.m.

Direction SW

Weather 50° Overcast

Photographed by: B. Nordberg

Sample ID#

Description Installation of MW-5

Site B.J. Carney

EPA # MND981195167

Date 6/9/89

Time _____ a.m. p.m.

Direction SW

Weather 50° Overcast

Photographed by: B. Nordberg

Sample ID # 89YC24

Description MW-6 - looking SW of Site - Walker Lumber building in background

---

Site B.J. Carney

EPA # MND981195167

Date 6/9/89

Time _____ a.m. p.m.

Direction W

Weather 50° Overcast

Photographed by: B. Nordberg

Sample ID# 89YC24

Description MW-4 - looking to the west, Osseo Rd in the background

Site B.J. Carney

EPA # MND981195167

Date 6/9/89

Time _____ a.m. p.m.

Direction N

Weather 50° Overcast

Photographed by: B. Nordberg

Sample ID # [illegible]

Description Location of MW-5 - 800 Line railroad in the background

---

Site B.J. Carney

EPA # MND981195167

Date _____

Time _____ a.m. p.m.

Direction _____

Weather _____

Photographed by: E. Cody

Sample ID# 89YC24

Description _____

Site B.J. Carney

EPA # MND981195167

Date 6/9/89

Time 11:00 (a.m.) p.m.

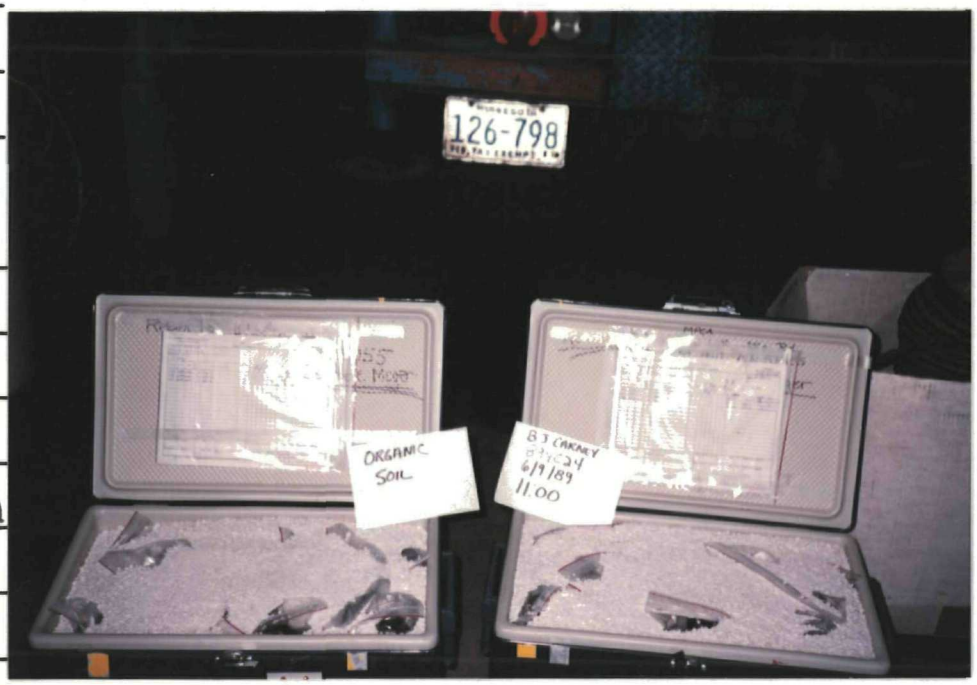
Direction

Weather

Photographed by: E. Cody

Sample ID # 89YC24509-S22

Description Organic soil samples - packed in Coolers



Site B.J. Carney

EPA # MND981195167

Date 6/9/89

Time 11:00 (a.m.) p.m.

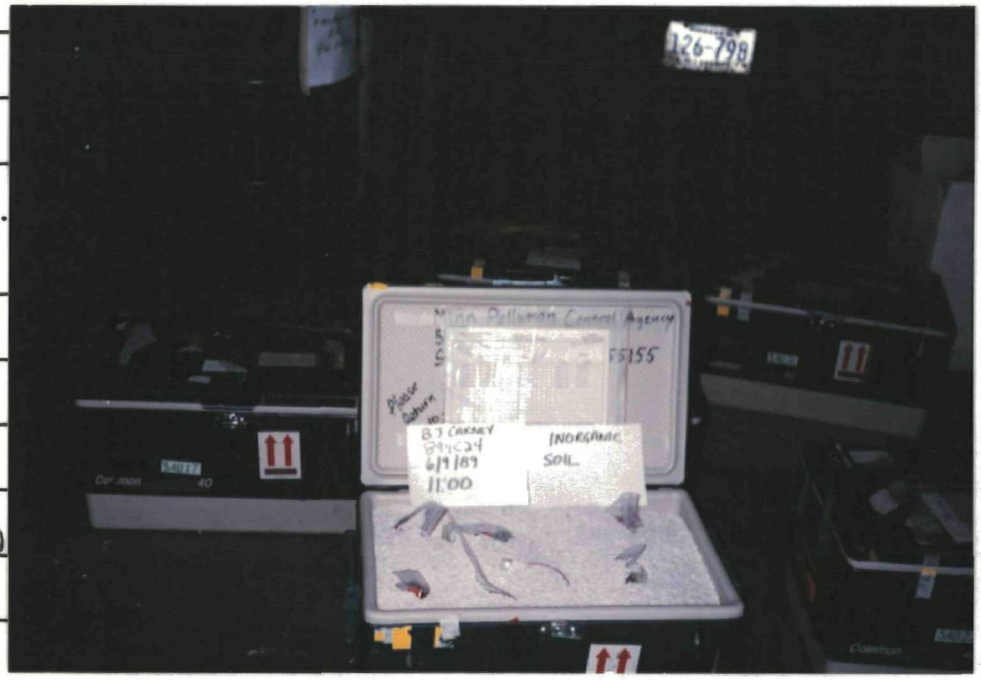
Direction

Weather

Photographed by: E. Cody

Sample ID# 89YC24509-S22

Description Inorganic soil samples packed in Coolers



Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 11:30 a.m. p.m.

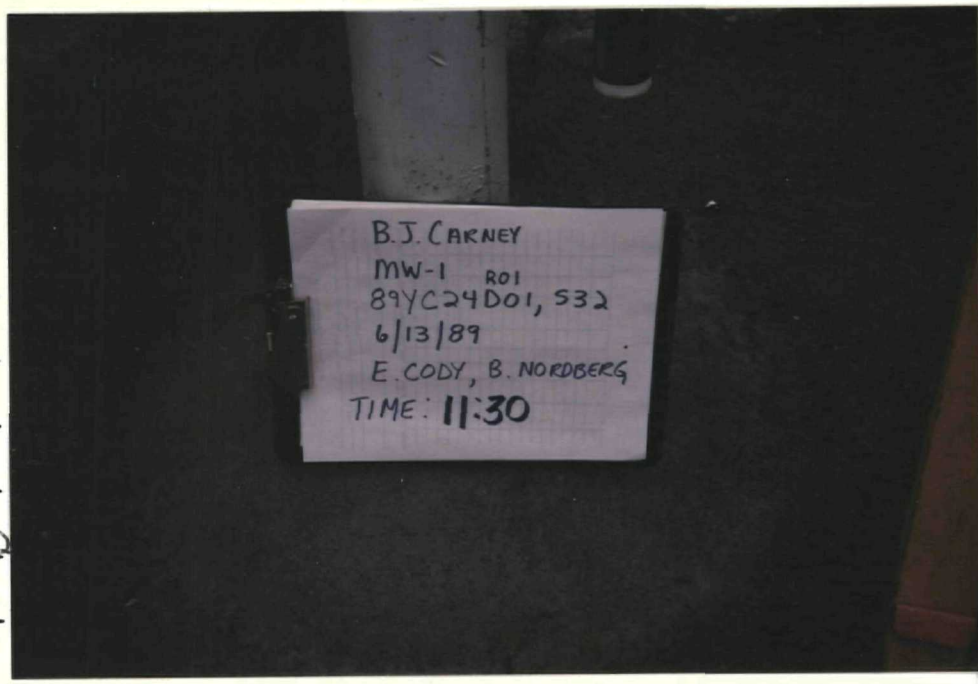
Direction

Weather

Photographed by: B. Nordberg E. Cody

Sample ID# 89YC24D01, S32 R01

Description Water sample from mw-1, duplicate sample and field blank



Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 11:30 a.m. p.m.

Direction N

Weather

Photographed by: B. Nordberg E. Cody

Sample ID # 89YC24 R01, D01, S32

Description Water sample from MW-1, duplicate sample and field blank

---

Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 13:18 a.m. p.m.

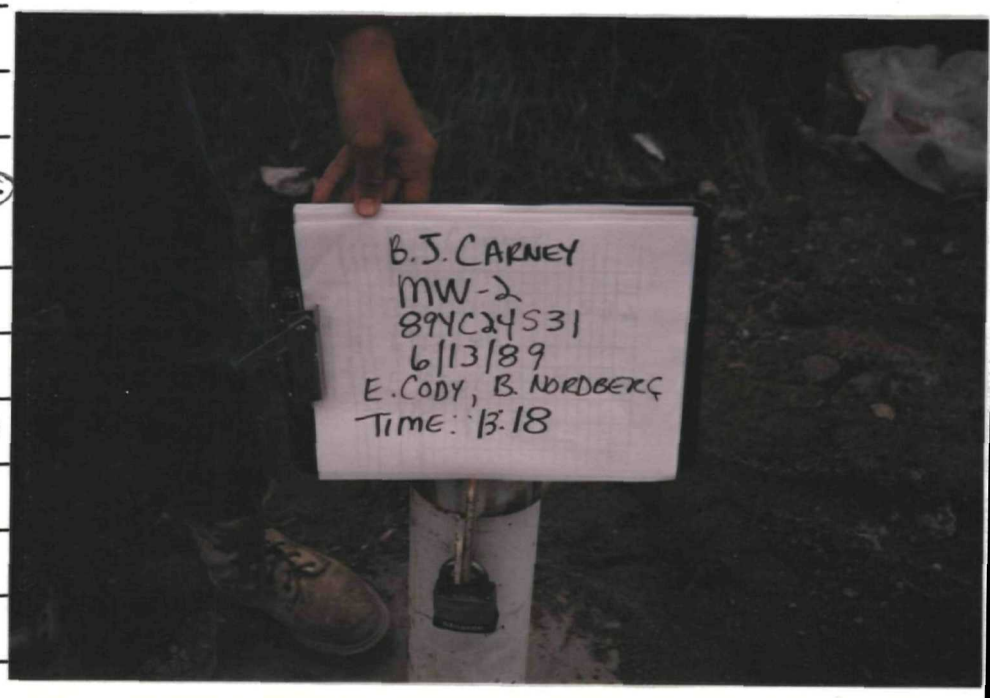
Direction N

Weather

Photographed by: B. Nordberg E. Cody

Sample ID# 89YC24S31

Description Water sample from MW-2



Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 13:18 a.m. p.m.

Direction N

Weather

Photographed by: B. Nordberg E. Cody

Sample ID # 89YC24831

Description Water sample from MW-2

Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 13:48 a.m. p.m.

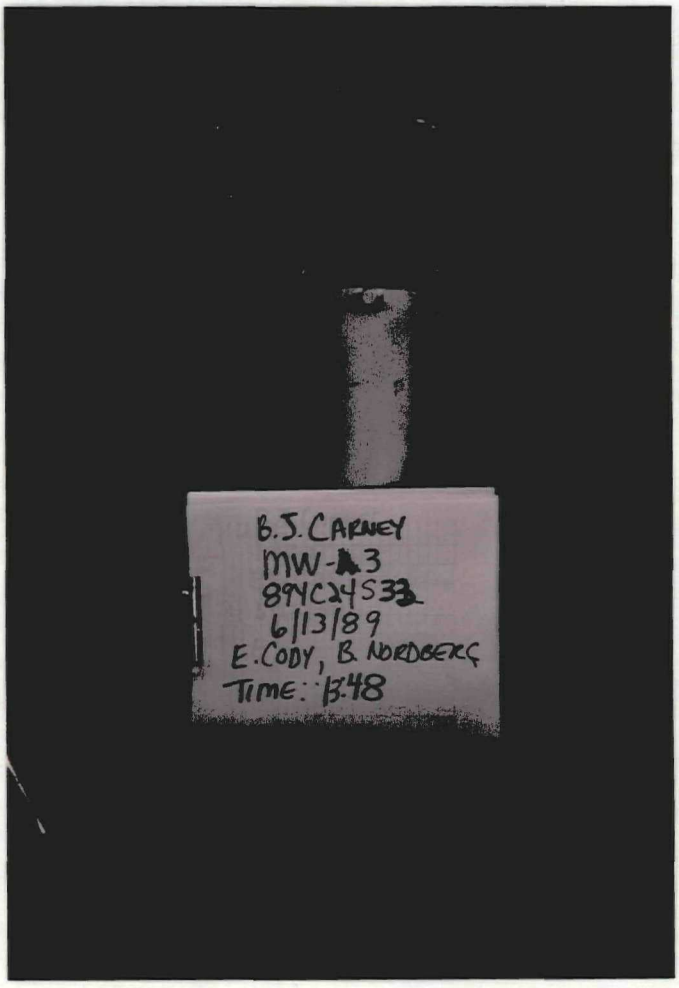
Direction SE

Weather

Photographed by: B. Nordberg E. Cody

Sample ID# 89YC24833

Description Water sample from MW-3



Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 13:48 a.m. p.m.

Direction SE

Weather

Photographed by: B. Nordberg E. Cody

Sample ID # 89YC24S33

Description Water sample from MW-3

Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 15:15 a.m. p.m.

Direction

Weather

Photographed by: B. Nordberg E. Cody

Sample ID# 89YC24S34

Description Water Sample from MW-4

Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 16:25 a.m. p.m.

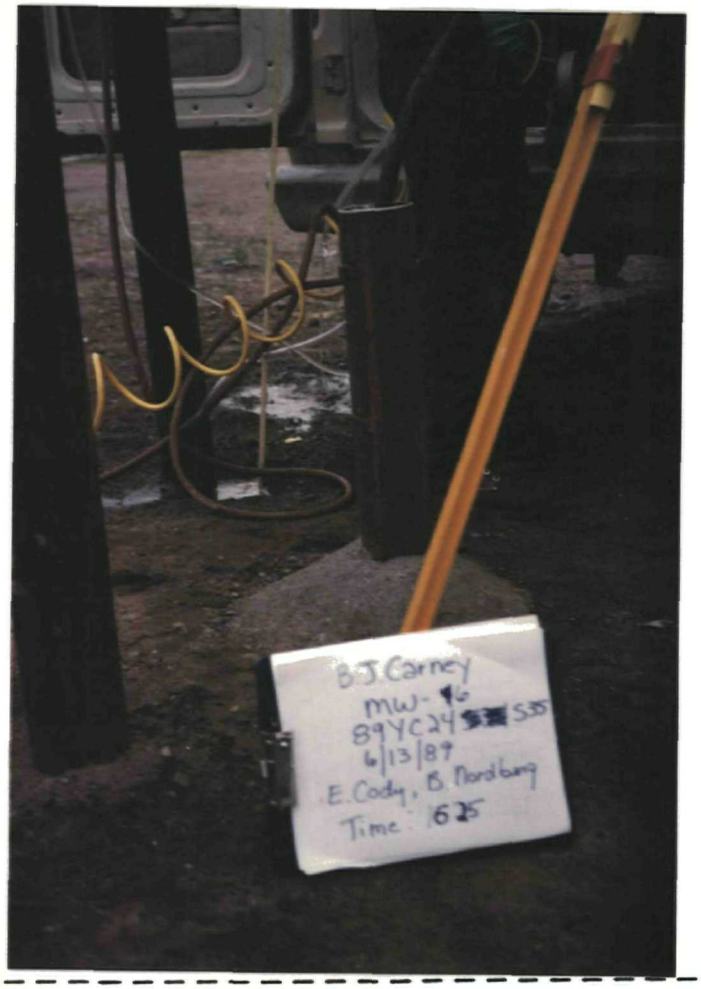
Direction

Weather

Photographed by: B. Nordberg E. Cody

Sample ID # 89YC24S35

Description Water sample from MW-6



Site B.J. Carney

EPA # MND981195167

Date 6/13/89

Time 16:25 a.m. p.m.

Direction

Weather

Photographed by: B. Nordberg E. Cody

Sample ID# 89YC24S35

Description Water sample from MW-6

Site B.J. Carney

EPA # MND981195167

Date 6/15/89

Time 10:00 (a.m.) p.m.

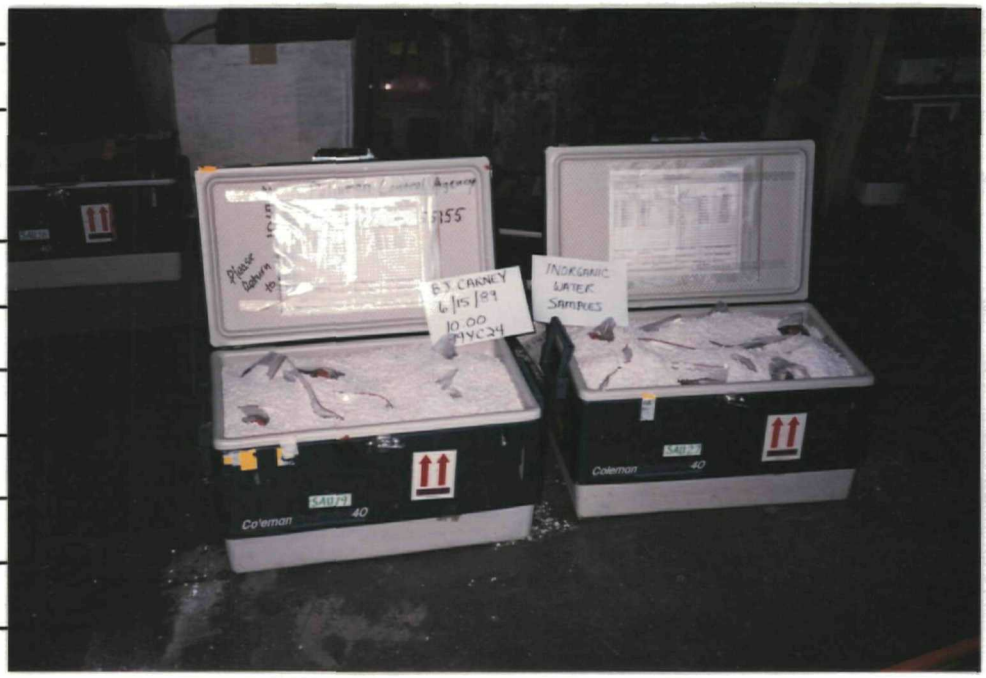
Direction

Weather

Photographed by: E. Cody

Sample ID # 89YC24

Description Inorganic water samples - Coolers SAU #19, 27



Site B.J. Carney

EPA # MND981195167

Date 6/15/89

Time 10:00 (a.m.) p.m.

Direction

Weather

Photographed by: E. Cody

Sample ID# 89YC24

Description Organic water samples - Coolers SAU #17, 6

Site B.J. Carney

EPA # MND981195167

Date 6/15/89

Time 10:00 a.m. p.m.

Direction

Weather

Photographed by: E. Cody

Sample ID # 89YC24

Description Organic water samples - Coolers SAU #5, 16

Site B.J. Carney

EPA # MND981195167

Date

Time a.m. p.m.

Direction

Weather

Photographed by: E. Cody

Sample ID# 89YC24

Description

APPENDIX D

CHEMICAL DATA

RECEIVED

JUL 24 89

MPCA, Ground Water
& Solid Waste Div.

DATE: July 19, 1989

TO: Minnesota Pollution Control Agency
Site Assessment Unit
Program Development Section
Groundwater and Solid Waste Division
520 Lafayette Road
St. Paul, MN 55155

ATTN: RON SVENSON

Case No.	Contract Lab	SF No.	No. Samples
12114	INTECH	6279	14

DATA USERS:

Upon receipt of the above mentioned cases of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by: _____ Date: _____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Date: _____

Signature: _____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

SENT BY U. Talia ESAT/EPA

RECEIVED
JUL 18 1989
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

CASE NARRATIVE

Lab Name: INTECH
Case No.: 12114

Contract No. 68-D9-0048
SDG No.: EDH50

The following samples are included in this Sample Delivery Group:

EDH50	EDH51	EDH52	EDH53	EDH54	EDH55	EDH56
EDH57	EDH58	EDH59	EDH60	EDH61	EDH62	EDH63

Detailed Documentation of Problems Encountered With These Samples

Volatile Fraction

1. The relative abundances on Form V for files C7899 and C7965 are erroneous due to an unresolved problem with transfer of data from the GC/MS to the IBM/PC.

Semivolatile Fraction

1. One surrogate spike was outside control limits for EDH50MSD and EDH62.
2. The area for one internal standard was outside control limits for sample EDH61.
3. The percent difference for pentachlorophenol was outside control limits in standards J5188, J5245, and J5259.

Pesticide Fraction

1. DBC is outside advisory limits for samples EDH51, EDH54, EDH55, and EDH62.
2. The retention time shift for DBC was outside control limits for EDH51.
3. The percent difference was greater than 15% for endrin in INDBs.

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

INTECH BIOLABS, INC.

Lee F. Cramer

Lee F. Cramer
Director of Quality Assurance
and Data Validation

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data Received for Review on July 24 1989

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory

TO: Data User: MPCA

We have reviewed the data for the following case(s).

SITE NAME: BJ Carney SMO Case No. 12114

EPA Data Set No. SF 6279 No. of Samples: 14 D.U./Activity Numbers TFA/TFA102

CRL No. 89 YC 24 509 - 522

SMO Traffic No. EDH 50 - 63

CLP Laboratory: INTECH Hrs. Required for Review: 7

Following are our findings: The following review covers the analyses of 14 soil samples for RAS organics. Please see attached narrative and outlier sheets for qualifications.

[signature]
MPCA
11/6/89

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications referenced above. See Data Qualifier sheets and Calibration Outlier forms for flags and additional comments.
( ) Data are preliminary - pending verification by Contractor Laboratory. See Case Summary above.
( ) Data are unacceptable.

cc: Carla Dempsey, CLP Quality Assurance Officer, Analytical Operations Branch
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

EPA FORM 1320-6 (REV. 3-78)

DATA QUALIFIERS

Contractor: INTECH

Case 12114

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(1) Holding Times: Holding Times were met for all fractions.

(2) GC/MS Tuning & Instrument Calibration: GC/MS tuning and mass calibrations were within QC limits for the volatiles fraction. Minor deviations from acceptable Relative Abundance limits were noted for m/e 51 and 127 on one semi-volatile tune; no action was taken. Pesticide Degradation was within the 20% maximum.

(3) Calibration: Calibration outliers are noted on the outlier form.

(4) Method Blanks: Both volatiles method blanks
VBlk 15+16 contained methylene Chloride; this compound was qualified as "U" (not present) in associated samples. VBlk 17 was free of contaminants.

Semi-volatiles method blank SBlk 09 contained nine TIC's. The laboratory has identified compounds as "JB" (possibly blank contaminants).

The Pesticide method blank PBlk 13 was free of contaminants.

Reviewed by: Wayne Matthews NSCA

Phone: (612) 296-9207

Date: 11/6/88

DATA QUALIFIERS

Contractor: INTECH

Case 12114

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(5) Surrogate recovery: Volatiles surrogate recoveries were within QC limits.

Semi-volatile surrogate recoveries were extremely low (<10%) for EDH 55, but upon re-analyses surrogates met QC specifications. Samples EDH 50, 58, 59 and 61 and 62 also had surrogates that were outside QC limits; all were reanalyzed and the surrogates in reanalyses were within QC limits

Pesticide/PCB surrogate recovery of DBC was extremely high (338%) and high (183%) for EDH 62 and 51 respectively; EDH 55 was low (13%). Pesticide/PCB results were qualified as "UJ" (estimated, not detected) due to possible low bias in EDH 55. EDH 51 and 62 were not qualified.

(6) Matrix Spike/Matrix Spike Duplicate – Matrix Spike/Matrix Spike Duplicates were within QC limits for all fractions

(7) Field Duplicates: A field Duplicate was not identified for this case.

Reviewed by: WM

Phone:

Date: 11/6/89

DATA QUALIFIERS

Contractor: INTECH

Case ~~[illegible]~~ 12114

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(8) Internal Standards Performance: Volatiles Internal standards were within acceptable limits.

Semi-volatiles internal standards had some problems on initial analyses. EPH 50 and EPH 62 had to be re-analyzed until standards were within acceptable limits. No qualifications of data were made because re-analyses were acceptable.

(9) TCL Compound Identification: Compound identity appears to be confirmed by the mass spectra.

(10) Compound Quantitation & Reported Detection Limits: Detection limits were not provided for this case.

(11) Tentatively Identified Compounds: TIC compounds identified in the library search appear to be properly verified.

Reviewed by: WM

Phone:

Date: 11/6/89

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 12114 CONTRACTOR INTECH

Instrument # 59953	Init. Cal.			~~Cont.~~ Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/14/89			6/19/89			6/20/89 1158								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane															
Bromomethane	.782	38.5	J				1.125	32.1	J						
Vinyl Chloride															
Chloroethane	.109	33.3	J	1.304	50.1	J	.707	137.3	J						
Methylene Chloride	.716	49.7	J	1.18	31.0	J	1.57	33.3	J						
Acetone	1.062	34.0	J												
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene							.984	26.5	J						
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	.103	54.4	J				.04	59.0	R/J						
1,2-Dichloroethane				.098	57.5	J									
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate	.142	77.0	J	.345	86.4	J									
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

YBLK 15	YBLK 16	YBLK 17
EDH 50	EDH 57	EDH 56
EDH 50 MS	EDH 58	EDH 62
EDH 50 MSD	EDH 59	
EDH 51	EDH 61	
EDH 52	EDH 63	
EDH 53	EDH 55	
EDH 54	EDH 60	

Reviewer's Initials/Date: WW 11/6/89

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 12114 CONTRACTOR INTECH

Instrument # 59953	Init. Cal.			~~Cont.~~ INIT. Cal.			~~Cont.~~ INIT. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/30/89			7/6/89 1720			7/11/89			6/30/89 2022			7/7/89 7 28		
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
bis(-2-Chloroethyl)Ether															
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid	.148	39.6	J	.179	37.9	J	.214	35.2	J	.108	27.5	J	.122	31.8	J
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline															
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol										.347	25.6	J	.302	26.1	J
2-Chloronaphthalene															
2-Nitroaniline										.204	31.0	J	.163	35.8	J
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline													.123	37.5	J
Acenaphthene															
2,4-Dinitrophenol	.178	30.1	J							.120	32.7	J			
4-Nitrophenol										.174	25.1	J	.150	33.1	J
Dibenzofuran															

AFFECTED SAMPLES:

EDH 58	EDH 62	SBIK 09	EDH 60
EDH 59		EDH 50	EDH 61
		EDH 50 MS	EDH 62
		EDH 50 MSD	EDH 63
		EDH 51	EDH 50
		EDH 52	EDH 55
		EDH 53	
		EDH 54	
		EDH 55	

Reviewer Initials/Date: WW 11/6/89

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 12114 CONTRACTOR INTECH

Instrument #	Init. Cal.			~~Cont.~~ INIT Cal.			~~Cont.~~ INIT Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/30			7/6			7/11			6/30			7/7		
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene															
2,6-Dinitrotoluene															
Diethylphthalate										1.935	30.5	J			
4-Chlorophenyl-phenylether										.690	25.5	J			
Fluorene										1.950	26.2	J			
4-Nitroaniline													.142	36.2	J
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol										.110	25.4	J	.111	30.0	J
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene										2.037	27.4	J			
Di-n-Octyl Phthalate															
Benzo(b)Fluoranthene															
Benzo(k)Fluoranthene				1.524	40.7	J				3.516	37.1	J	2.246	47.2	J
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene	1.405	47.4	J	.483	72.3	J									
Dibenz(a,h)Anthracene	1.269	59.7	J	.551	62.6	J				1.701	34.1	J			
Benzo(g,h,i) Perylene	1.277	70.2	J	.401	74.6	J				1.770	38.6	J			

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: 11/6/89

8/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 12114 CONTRACTOR INTECH

Instrument # 59953	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:				7/10/87 2052											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
bis(-2-Chloroethyl)Ether															
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid															
bis(2-Chloroethoxy)Methane				.121	32.5	J									
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline															
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol				.275	32.8	J									
2-Chloronaphthalene															
2-Nitroaniline				.154	37.4	J									
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline				.123	37.8	J									
Acenaphthene															
2,4-Dinitrophenol				.128	27.1	J									
4-Nitrophenol				.138	40.3	J									
Dibenzofuran															

AFFECTED SAMPLES:

EDH 56
EDH 57
EDH 60
EDH 62
EDH 58
EDH 59
EDH 61

Reviewer Initials/Date: 11/6/89

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 12114 CONTRACTOR INTECH

Instrument #	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:				7/10											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene															
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline				.133	40.0	J									
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol				.160	27.0	J									
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene															
Di-n-Octyl Phthalate				4.361	51.7	J									
Benzo(b)Fluoranthene															
Benzo(k)Fluoranthene				0.520	65.2	J									
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene				1.052	54.8	J									
Dibenz(a,h)Anthracene				.831	42.0	J									
Benzo(g,h,i) Perylene				.574	66.7	J									

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: 11/6/89

8/87

Case: 12114

Contractor: INTECH

TENTATIVELY IDENTIFIED COMPOUNDS
WATCH ASSESSMENT

NOTE: Reviewer should note directly on Organic Analysis Data Sheet (OADS) those matches that in his opinion (based on contract criteria) are unreasonable.

CRITERIA

(1) Relative intensities of major ions (>10%) reference spectrum should be present in the sample spectrum.

(2) Relative intensities of major ions in sample spectrum should agree to within ± 20% of reference spectrum intensities.

(3) Molecular ions present in reference spectrum should be present in sample spectrum.

(4) Ions present in sample spectrum, but not in reference spectrum should be reviewed for possible background contamination or presence of coeluting interferences.

(5) Ions present in reference spectrum, but not in the sample spectrum should be reviewed for possible subtraction from the sample spectrum because of background contamination or coeluting interferences.

(6) If, in the reviewer's opinion, no valid identification can be made the compound should be labelled as "unknown" and the initials and date of the reviewer placed on the OADS.

Reviewer's Initials/Date: Wm 11/6/89

USEPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 ALEXANDRIA, VA 22313
703 557-2490 FTS-557-2490

CASE NO: 12114 | SAS NO: (IF APPLICABLE)

ORGANIC TRAFFIC REPORT

TYPE OF ACTIVITY (CIRCLE ONE) ①
SUPERFUND—PA (SI) ESI RIFS RD RA ER NPLD O&M OTHER _____
NON-SUPERFUND—_____ PROGRAM

SAMPLE DESCRIPTION (ENTER IN BOX A)
1. SURFACE WATER 4. SOIL
2. GROUND WATER 5. SEDIMENT
3. LEACHATE 6. OIL (SAS) 7. WASTE (SAS)

REGION NO: V
SAMPLING COMPANY ② MPCA
SAMPLER: (NAME) E. Cady Mike Connally

SHIP TO: ③ INTECH Biolabs, Inc. 158 Tices Lane E. Brunswick, NJ 08816
ATTN: Richard Della Rovere

SAMPLING DATE: ④
BEGIN: 6/5/89 END: 6/8/89
DATE SHIPPED: 6/9/89 CARRIER: Fed Express ⑤
AIRBILL NO: 3302879230

DATE REC'D: 6/9/89
SDG NO: ⑥ EDH50
REC'D BY: Judith Stiles
LABORATORY CONTRACT NO. 68-D9-0048
UNIT PRICE 775.00
TRANSFER TO: ⑦
DATE REC'D:
REC'D BY:
CONTRACT NO./PRICE:

CLP SAMPLE NUMBER (FROM LABELS)	SAMPLE DESCRIPTION (FROM BOX 1) Ⓐ	CONCENTRATION L = LOW/MED, H = HIGH (SAS) Ⓑ	RAS ANALYSIS Ⓒ VOLATILE	BASE/NEUT /ACID	PESTICIDE /PCB's		SPECIAL HANDLING Ⓓ	STATION LOCATION Ⓔ	SAMPLE CONDITION ON RECEIPT Ⓕ	HIGH CONC. PHASES (CHECK) Ⓖ SOLID	WATER—MIS LIQUID	NON WATER—MIS LIQUID
EDH 50	4	L	X	X	X			Soil Boring (SB) 9				
EDH 51	4	L	X	X	X			SB 10				
EDH 52	4	L	X	X	X			SB 15				
EDH 53	4	L	X	X	X			SB 7				
EDH 54	4	L	X	X	X			SB 8				
EDH 55	4	L	X	X	X			SB 8				
EDH 56	4	L	X	X	X			SB 5				
EDH 57	4	L	X	X	X			SB 4				
EDH 58	4	L	X	X	X			SB 4				
EDH 59	4	L	X	X	X			SB 4				
EDH 60	4	L	X	X	X			SB 3				
EDH 61	4	L	X	X	X			SB 14				
EDH 62	4	L	X	X	X			SB 14				
EDH 63	4	L	X	X	X			SB 10				

1 of (2 Coolers)

• End of Shipment •

EPA Form 2075-7 (8-87)

WHITE — SMO COPY PINK — CLIENT COPY WHITE — LAB COPY FOR RETURN TO SMO YELLOW — LAB COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.2 (g/mL) G Lab File ID: D7908

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: .98

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	15.	~~U~~ 5
67-64-1	Acetone	120.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

10/13/88

15

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.2 (g/mL) G Lab File ID: C7908

Level: (low/med) LOW Date Received: 5/10/89

% Moisture: not dec. 5. Date Analyzed: 6/14/89

Column: (packed/cap) PACK Dilution Factor: .96

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	G
1. - -	UNKNOWN	9.37	5.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDHE1

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDHE0

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7911

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	15.	~~U~~ J
67-64-1	Acetone	24.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	3.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

10/11/89 [illegible]

15

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12111 CAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7911

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4 Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7912

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: .98

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	21.	~~B~~ U
67-64-1	Acetone	230.	J E
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

10/11/89

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7912

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: .98

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	I
1.					
2.					
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30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH53

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7912

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: .99

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	23.	B
67-64-1	Acetone	230.	~~B~~ 5 E
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

10/11/89

QUANT REPORT

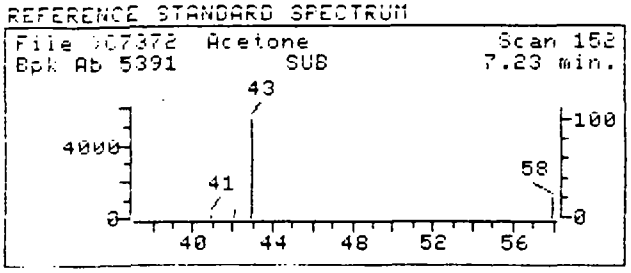
Operator ID: STEVE Quant Rev: 6 Quant Time: 890614 22:33
Output File: ^C7913::QT Injected at: 890614 21:59
Data File: >C7913::N1 Dilution Factor: 1.00000
Name: S030-02509
Misc: SB7 EDH 53 5.1G/5ML INTECH Instrument #3

ID File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

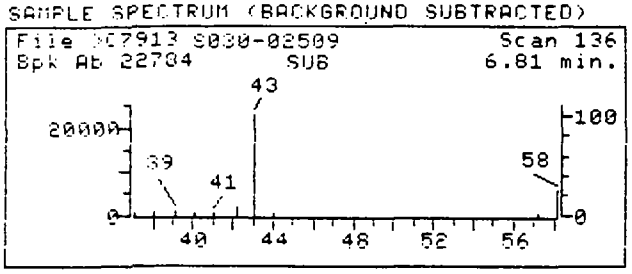
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.24	128.0	58105	50.00	UG/L	71
6)	Methylene Chloride	6.14	84.0	16755	20.13	UG/L	78
7)	Acetone	6.81	43.0	271593	220.09	UG/L	91
13)	1,2-Dichloroethane-d4	11.99	65.0	179652	52.52	UG/L	79
15)	*1,4-Difluorobenzene	19.48	114.0	257384	50.00	UG/L	69
29)	*Chlorobenzene-d5	24.29	117.0	246183	50.00	UG/L	96
35)	Toluene-d8	23.10	98.0	286919	51.54	UG/L	97
40)	Bromofluorobenzene	28.32	95.0	215578	54.36	UG/L	98

* Compound is ISTD

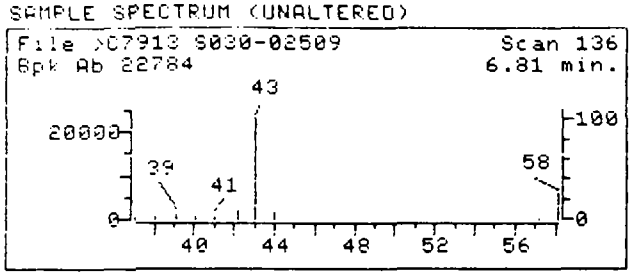
REFERENCE STANDARD SPECTRUM

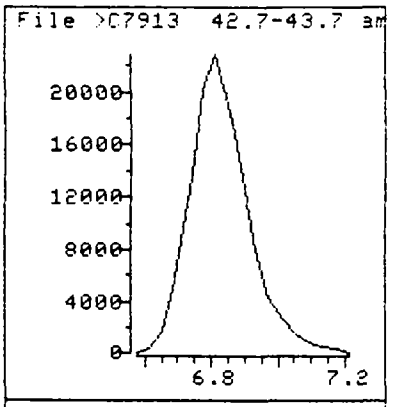


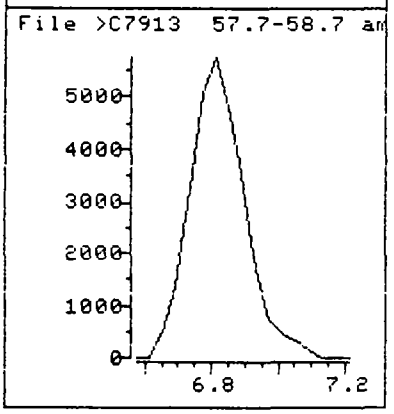
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >C7913::N1
Name: S030-02509
Misc: SB7 EDH 53 5.1G/5ML
Quant Time: 890614 22:33
Injected at: 890614 21:59

Quant Output File: ^C7913::QT
INTECH Instrument #3
Quant ID File: CLPVOA::N3
Last Calibration: 890614 18:05

Compound No: 7
Compound Name: Acetone
Scan Number: 136
Retention Time: 6.81 min.
Quant Ion: 43.0
Area: 271593
Concentration: 220.09 UG/L
q-value: 91

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDWEC

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDWEC

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7913

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: .98

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	8.32	8.	J
2.				
3.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH54

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7914

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	14.	~~B~~ U
67-64-1	Acetone	120.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	2.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

10/11/89 UM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH54

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7914

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH5I

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7979

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	C
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	16.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	2.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7979

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH56

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7994

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. Date Analyzed: 6/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	2.	~~J~~ U 10/11/89
67-64-1	Acetone	37.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1B

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7994

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. Date Analyzed: 6/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	79-13-1	Ethane, 1,1,2-trichloro-1,2,	11.77	20.	J
2.					
3.					
4.					
5.					
6.					
7.					
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12.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ED457

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: ED450

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7974

Level: (low/med) LOW Date Received: 6/10/99

% Moisture: not dec. 5. Date Analyzed: 6/19/99

Column: (pack/cap) PACK Dilution Factor: .98

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH57

Lab Name: INTECH Contract: 68-D9-0049

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7974

Level: (low/med) LOW Date Received: 6/10/99

% Moisture: not dec. 5. Date Analyzed: 6/19/99

Column: (pack/cap) PACK Dilution Factor: .98

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	11.73	5.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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12.					
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SP: SAMPLE VOL

VOLATILE ORGANICS ANALYSIS DATA SHEET

EDH58

Lab Name: INTECH Contract: 88-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH58

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

Sample wt/vol: 5.2 (g/mL) G Lab File ID: C7975

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec. 6. Date Analyzed: 8/19/89

Column: (pack/cap) PACK Dilution Factor: .96

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	32.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

C7

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68-D9-0042

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.2 (g/mL) G Lab File ID: C7975

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. Date Analyzed: 6/19/89

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

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EDW39

Lab Name: INTECH Contract: 68-D9-0040

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: ED4E0

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 07876

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 8. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	49.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

EPA SAMPLE NO.

5DW59

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH Contract: 68-D9-0049

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: 5DH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7976

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH60

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 4.9 (g/mL) G Lab File ID: C7982

Level: (low/med) LOW Date Received: 6/10/99

% Moisture: not dec. 8. Date Analyzed: 6/19/99

Column: (pack/cap) PACK Dilution Factor: 1.01

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	2.	~~B~~ U
67-64-1	Acetone	120.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

10/11/99

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH61

Lab Name: INTECH Contract: 68-D9-0049

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EI450

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

Sample wt/vol: 4.9 (g/mL) G Lab File ID: C7992

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: 1.02

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH51

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7977

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: .95

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDM61

Lab Name: INTECH Contract: 68-D9-0018

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDM50

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

Sample wt/vol: 5.1 (g/mL) G Lab File ID: C7977

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: .98

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

EDH50

Lab Name: INTECH Contract: 68-D0-0049

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/ml) G Lab File ID: C7995

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. Date Analyzed: 6/20/89

Column: (pack/cap) PACK Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	5.	J
67-64-1	Acetone	160.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	12.	
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	18.	

10/11/89

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7995

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. Date Analyzed: 6/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76 12-1	Ethane, 1,1,2-trichloro-1,2,	11.73	20.	J
2.	- -	UNKNOWN HYDROCARBON	20.33	4.	J
3.	- -	UNKNOWN HYDROCARBON	21.56	10.	J
4.	- -	UNKNOWN HYDROCARBON	22.04	5.	J
5.	- -	UNKNOWN	29.01	5.	J
6.	- -	UNKNOWN HYDROCARBON	32.20	5.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EDH63

Lab Name: INTECH Contract: 68-D9-0049

Lab Code: INTECH Case No.: 10114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7976

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. Date Analyzed: 6/10/89

Column: (pack/cap) PACK Dilution Factor: .99

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	25.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EDW50

Lab Name: INTECH Contract: 68 [illegible]

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDW50

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

Sample wt/vol: 5.2 (g/ml) G Lab File ID: [illegible]

Level: (low/med) LOW Date Received: 6/[illegible]/89

% Moisture: not dec. 5. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: .86

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SPIKE

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 10114 SAS No.: SDG No.: MDW00

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 27507

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 6/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	13.	
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH Contract: 68-D8-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: SDH50

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7907

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0% Date Analyzed: 6/14/08

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

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: INTECH Contract: 68-D9-0047

Lab Code: INTECH Case No.: 10114 SAS No.: SDG No.: [illegible]

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

Sample wt/vol: [illegible] (g/ml) G Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. [illegible] Date Analyzed: [illegible]

Column: (pack/cap) PACK Dilution Factor: [illegible]

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	2.	[illegible]
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

FORM I VOA

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH Contract: 68-D9-0045

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH3[illegible]

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

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C7971

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 6/19/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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[illegible] ANALYSIS DATA SHEET

Lab Name: [illegible] Contract: [illegible]

Lab Code: [illegible] Case No.: [illegible] SAS No.: [illegible] SDG No.: [illegible]

Matrix: [illegible] (water) [illegible] Lab Sample ID: [illegible]

Sample Wt/Vol: [illegible] Lab File ID: [illegible]

Level: [illegible] Date Received: [illegible]

[illegible] Date Analyzed: [illegible]

Column: [illegible] PACK Dilution Factor: [illegible]

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
[illegible]	Chloromethane	10.	U
[illegible]	Bromomethane	10.	U
[illegible]	Vinyl Chloride	10.	U
[illegible]	Chloroethane	10.	U
[illegible]	Methylene Chloride	5.	U
[illegible]	Acetone	10.	U
[illegible]	Carbon Disulfide	5.	U
[illegible]	1,1-Dichloroethene	5.	U
[illegible]	1,1-Dichloroethane	5.	U
[illegible]	1,2-Dichloroethane (total)	5.	U
[illegible]	Chloroform	5.	U
[illegible]	1,2-Dichloroethane	5.	U
[illegible]	2-Butanone	10.	U
[illegible]	1,1,1-Trichloroethane	5.	U
[illegible]	Carbon Tetrachloride	5.	U
[illegible]	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
[illegible]	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
[illegible]	Trichloroethene	5.	U
124-[illegible]	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
[illegible]	1,1,2,2-Tetrachloroethane	5.	U
108-[illegible]	Toluene	5.	U
[illegible]	Chlorobenzene	5.	U
[illegible]	Ethylbenzene	5.	U
[illegible]	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

150

VOLATILE ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Case No.: SAS No.: SDG No.:

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

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

Level: (low/med) LOW Date Received:

% Moisture: not dec. 0 Date Analyzed:

Column: (packed/cap) PACK Dilution Factor:

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
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27.				
28.				
29.				
30.				

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SDW51

Lab Name: INTECH Contract: 68D90042

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: SDW50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5252

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 7/ 5/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/89

GPC Cleanup: (Y/N) N pH: 0.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EDW50

Lab Name: INTECH Contract: 68D90049

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDW50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5252

Level: (low/med) LOW Date Received: 6/10/93

% Moisture: not dec. 5. dec. 0. Date Extracted: 7/ 5/93

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/93

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	350.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene	350.	U
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	700.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	150.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

0	500.	8.18	7.58	UNKNOWN	-	-	-	-	0.0
0	100.	2.57	7.58	UNKNOWN	-	-	-	-	0.0
0	1000.	2.72	7.58	UNKNOWN	-	-	-	-	0.0
0	100.	4.05	9.99	UNKNOWN	-	-	-	-	0.0
0	200.	9.99	9.99	UNKNOWN	-	-	-	-	0.0
0	500.	7.58	7.58	UNKNOWN	-	-	-	-	0.0

CONCENTRATION UNITS: SS/90 (SS/SS ug/L or ug/kg) UG/KG

Dilution Factor: 1.00 Date Analyzed: 7/ 7/95 Date Extracted: 06/ 6/95 Date Received: 06/06/95

Lab Sample ID: 95E7 Lab Sample ID: 95E7 Lab Data File: 7108 Matrix: Soil/Water

Percent Solids: 80.0 Sample Wt/Vol: 30.0 (g/mL) g Final Volume: 1.0 (mL)

% Moisture: not dec. Decanted: (Y/N) N pH: 8.6 Dilution Factor: 1.00

GPC Cleanup: (Y/N) N Sulfur Cleanup: (Y/N) N Acid Cleanup: (Y/N) N

Extraction Method: 3550B/Sonication Solvent: Methanol, Methylene Chloride

Injection Volume: 1.0 (uL) Concentration Factor: 1.0 (mL)

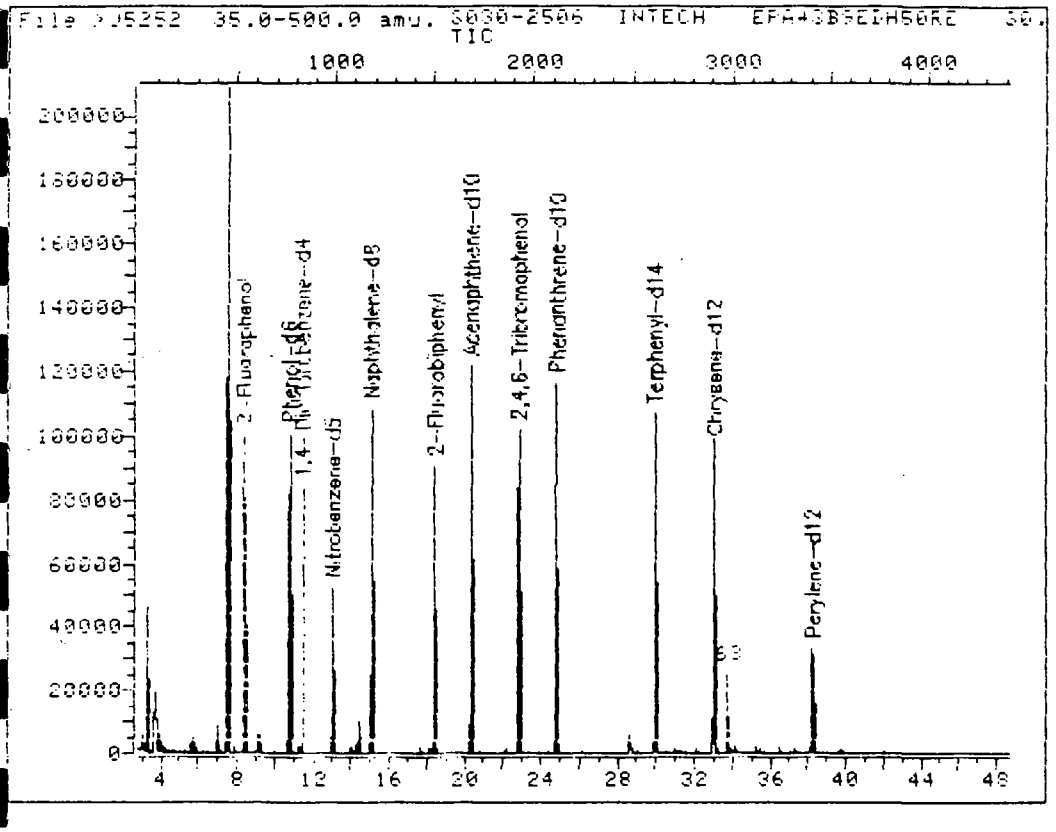
Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EF0015

Contract: SDB900049 Matrix: SOIL SDG Type: CLP

COMMENTS: SEE ATTACHED SHEET FOR ANALYSIS DATA SHEET

CAS NO.	COMPOUND NAME	RT	CONC. ug/kg	Q
108-88-3	Toluene	8.58	1.0	U
100-41-4	Ethylbenzene	9.99	1.0	U
1330-20-7	Xylene (total)	9.99	2.0	U
95-48-7	o-Cresol	9.99	0.9	U
108-39-4	m-Cresol	9.99	0.9	U
106-44-5	p-Cresol	9.99	0.9	U
95-50-1	1,2-Dichlorobenzene	9.99	0.9	U
541-73-1	1,3-Dichlorobenzene	9.99	0.9	U
106-46-7	1,4-Dichlorobenzene	9.99	0.9	U
95-57-8	2-Chlorophenol	9.99	0.9	U
120-83-2	2,4-Dichlorophenol	9.99	0.9	U
105-67-9	2,4-Dimethylphenol	9.99	0.9	U
51-28-5	2,4-Dinitrophenol	9.99	0.9	U
88-75-5	2-Nitrophenol	9.99	0.9	U
100-02-7	4-Nitrophenol	9.99	0.9	U
59-50-7	4-Chloro-3-methylphenol	9.99	0.9	U
87-86-5	Pentachlorophenol	9.99	0.9	U
88-06-2	2,4,6-Trichlorophenol	9.99	0.9	U
65-85-0	Benzoic acid	9.99	0.9	U
95-95-4	2,4,5-Trichlorophenol	9.99	0.9	U
91-20-3	Naphthalene	9.99	0.9	U
91-58-7	2-Chloronaphthalene	9.99	0.9	U
208-96-8	Acenaphthylene	9.99	0.9	U
83-32-9	Acenaphthene	9.99	0.9	U
51-20-3	2,4-Dinitrophenol	9.99	0.9	U
51-28-5	2,4-Dinitrophenol	9.99	0.9	U
132-64-9	Dibenzofuran	9.99	0.9	U
121-14-2	2,4-Dinitrotoluene	9.99	0.9	U
606-20-2	2,6-Dinitrotoluene	9.99	0.9	U
84-66-2	Diethylphthalate	9.99	0.9	U
7005-72-3	4-Chlorophenyl-phenylether	9.99	0.9	U
86-73-7	Fluorene	9.99	0.9	U
100-01-6	4-Nitroaniline	9.99	0.9	U
534-52-1	4,6-Dinitro-2-methylphenol	9.99	0.9	U
86-30-6	N-Nitrosodiphenylamine	9.99	0.9	U
101-55-3	4-Bromophenyl-phenylether	9.99	0.9	U
118-74-1	Hexachlorobenzene	9.99	0.9	U
87-68-3	Hexachlorobutadiene	9.99	0.9	U
59-50-7	4-Chloro-3-methylphenol	9.99	0.9	U
91-57-6	2-Methylnaphthalene	9.99	0.9	U
77-47-4	Hexachlorocyclopentadiene	9.99	0.9	U
88-06-2	2,4,6-Trichlorophenol	9.99	0.9	U
95-95-4	2,4,5-Trichlorophenol	9.99	0.9	U
91-20-3	Naphthalene	9.99	0.9	U
91-58-7	2-Chloronaphthalene	9.99	0.9	U
208-96-8	Acenaphthylene	9.99	0.9	U
83-32-9	Acenaphthene	9.99	0.9	U
51-20-3	2,4-Dinitrophenol	9.99	0.9	U
51-28-5	2,4-Dinitrophenol	9.99	0.9	U
132-64-9	Dibenzofuran	9.99	0.9	U
121-14-2	2,4-Dinitrotoluene	9.99	0.9	U
606-20-2	2,6-Dinitrotoluene	9.99	0.9	U
84-66-2	Diethylphthalate	9.99	0.9	U
7005-72-3	4-Chlorophenyl-phenylether	9.99	0.9	U
86-73-7	Fluorene	9.99	0.9	U
100-01-6	4-Nitroaniline	9.99	0.9	U
534-52-1	4,6-Dinitro-2-methylphenol	9.99	0.9	U
86-30-6	N-Nitrosodiphenylamine	9.99	0.9	U
101-55-3	4-Bromophenyl-phenylether	9.99	0.9	U
118-74-1	Hexachlorobenzene	9.99	0.9	U
87-68-3	Hexachlorobutadiene	9.99	0.9	U
59-50-7	4-Chloro-3-methylphenol	9.99	0.9	U
91-57-6	2-Methylnaphthalene	9.99	0.9	U
77-47-4	Hexachlorocyclopentadiene	9.99	0.9	U

TOTAL ION CHROMATOGRAM



Data File: >J5252::D3 Quant Output File: ^J5252::N1
Name: 5030-2506 INTECH
Misc: EPA#SB9EDH50RE 30.1G/1ML Instr. #2 BTL#33

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890707 08:53

Operator ID: MANAGER
Quant Time: 890707 15:34
Injected at: 890707 14:42

QUANT REPORT

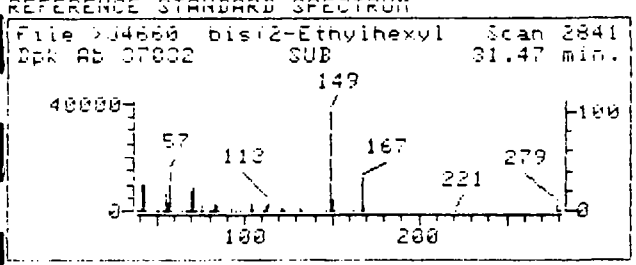
Operator ID: MANAGER Quant Rev: 6 Quant Time: 890707 15:34
Output File: ^J5252::N1 Injected at: 890707 14:42
Data File: >J5252::D3 Dilution Factor: 1.00000
Name: S030-2506 INTECH
Misc: EPA#SB9EDH50RE 30.1G/1ML Instr. #2 BTL#33

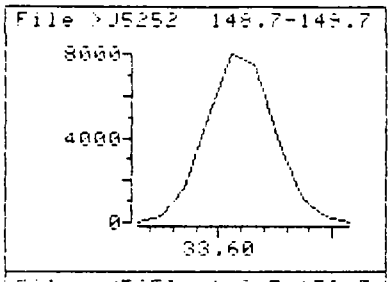
ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890707 08:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	11.38	152.0	25583	40.00	UG/ML	98
2)	2-Fluorophenol	8.31	112.0	51602	74.84	UG/ML	94
3)	Phenol-d6	10.71	99.0	71457	168.75	UG/ML	86
16)	*Naphthalene-d8	15.00	136.0	108178	40.00	UG/ML	89
17)	Nitrobenzene-d5	13.02	82.0	34905	34.94	UG/ML	82
31)	*Acenaphthene-d10	20.31	164.0	62251	40.00	UG/ML	98
36)	2-Fluorobiphenyl	18.37	172.0	63589	35.87	UG/ML	93
51)	2,4,6-Tribromophenol	22.77	330.0	28068	66.43	UG/ML	93
52)	*Phenanthrene-d10	24.82	188.0	127982	40.00	UG/ML	99
62)	*Chrysene-d12	32.99	240.0	108230	40.00	UG/ML	98
64)	Terphenyl-d14	29.88	244.0	99892	32.18	UG/ML	90
68)	bis(2-Ethylhexyl)phthalate	33.61	149.0	17153	4.41	UG/ML	94
70)	*Perylene-d12	38.24	264.0	53598	40.00	UG/ML	96

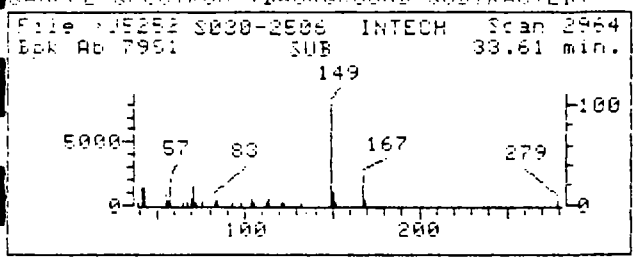
* Compound is ISTD

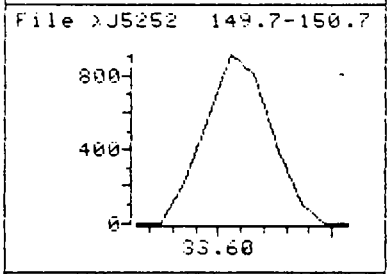
REFERENCE STANDARD SPECTRUM





SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





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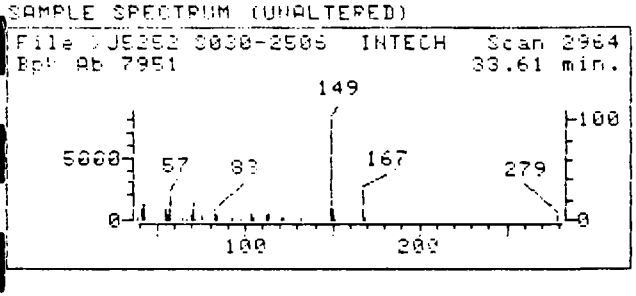
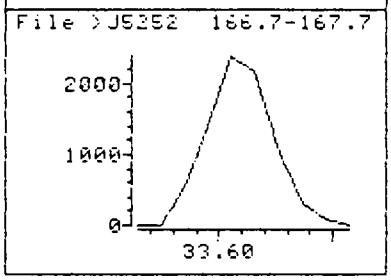
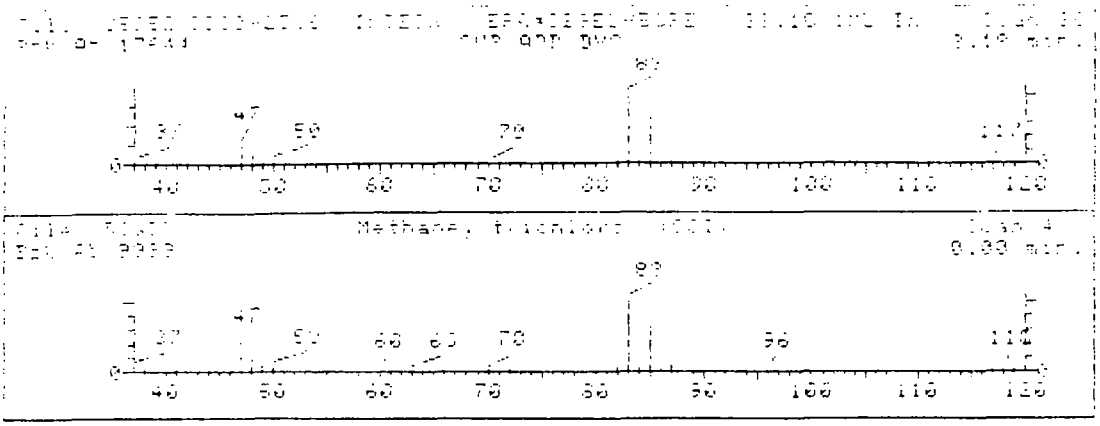




Data File: >J5252::D3 Quant Output File: ^J5252::N1
Name: S030-2506 INTECH
Misc: EPA#SB9EDH50RE 30.1G/1ML Instr. #2 BTL#33
Quant Time: 890707 15:34 Quant ID File: CLPBNA::SC
Injected at: 890707 14:42 Last Calibration: 890707 08:53

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2964
Retention Time: 33.61 min.
Quant Ion: 149.0
Area: 17153
Concentration: 4.41 UG/ML
q-value: 94

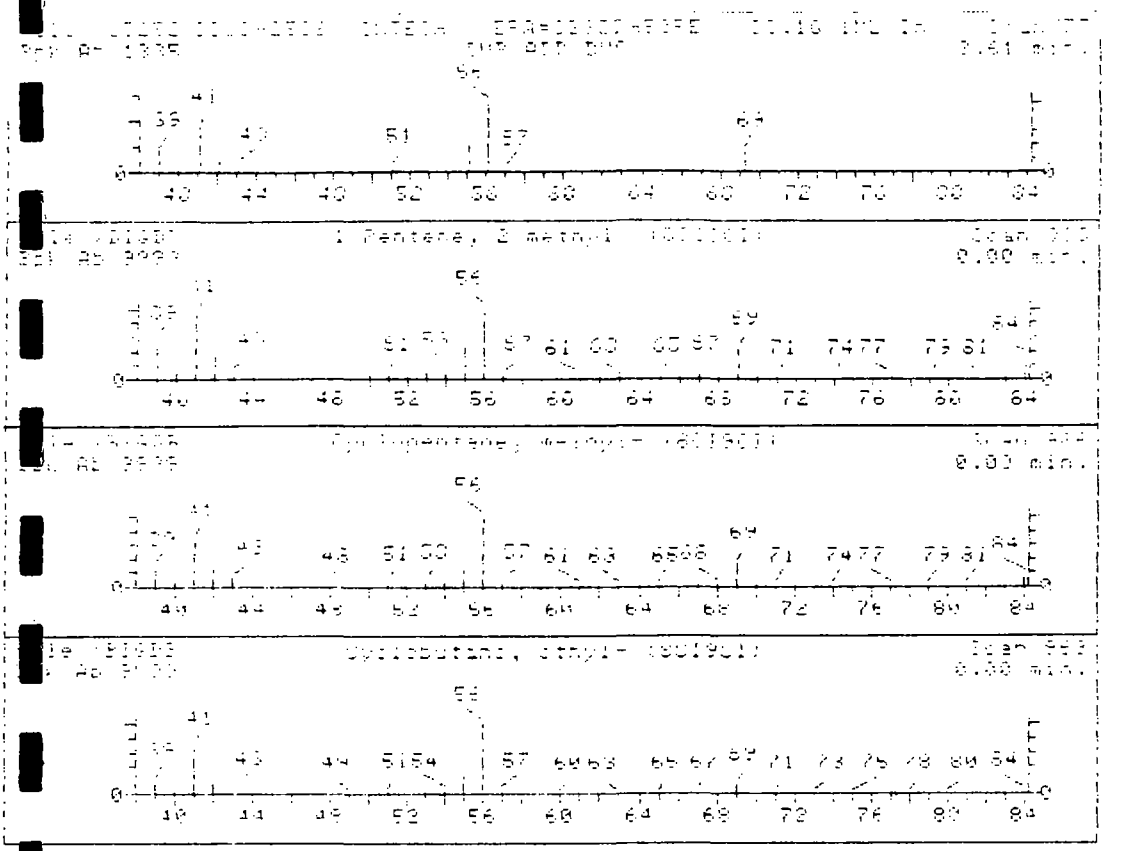


Unknown #.1
Area = [illegible] Tentative Concentration is 14.00

1. Methane, trichloro- (9CI) 119 [illegible]

Sample file: [illegible] Spectrum #: 56
Search speed: [illegible] Filting option: F No. of ion ranges searched: [illegible]

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	[illegible]	%	CON	[illegible]	[illegible]
1.	91*	62663	439	[illegible]	24	32	0	0	6[illegible]	[illegible]	[illegible]	[illegible]

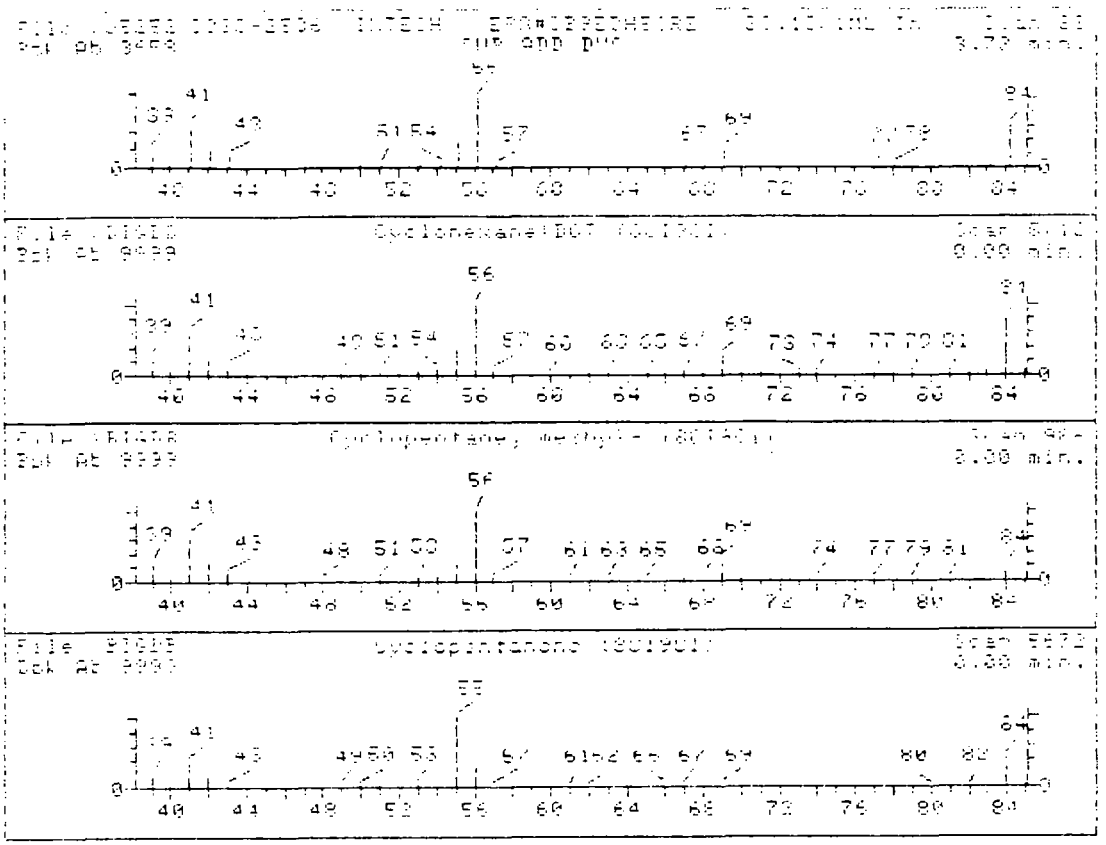


Unknown #,2
Area = 7458.00 Tentative Concentration is 4.00

1. 1-Pentene, 2-methyl- (8C19CI) 84 C6H12
2. Cyclopentane, methyl- (8C19CI) 84 C6H12
3. Cyclobutane, ethyl- (8C19CI) 84 C6H12
4. Cyclopropane, propyl- (9CI) 84 C6H12
5. Cyclopropane, (1-methylethyl)- (9CI) 84 C6H12
6. 1H-Tetrazole, 5-methyl- (8C19CI) 84 C2H4N4
7. Pentane, 3-methylene- (9CI) 84 C6H12

Sample file: 305252 Spectrum #: 22
Search speed: 3 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_TO
1.	60*	763291	995	"BIGDB	31	70	3	0	72	12	30	13
2.	52*	96377	986	"BIGDB	32	55	2	0	79	18	20	15
3.	43*	4806615	963	"BIGDB	29	54	2	0	98	25	17	14
4.	42*	2415727	997	"BIGDB	30	58	3	0	73	23	17	13
5.	31*	3638355	962	"BIGDB	24	59	2	0	86	31	12	14
6.	29*	4076362	998	"BIGDB	24	40	2	0	100	39	10	14
7.	27*	760214	5694	"BIGDB	25	22	3	0	64	39	10	13

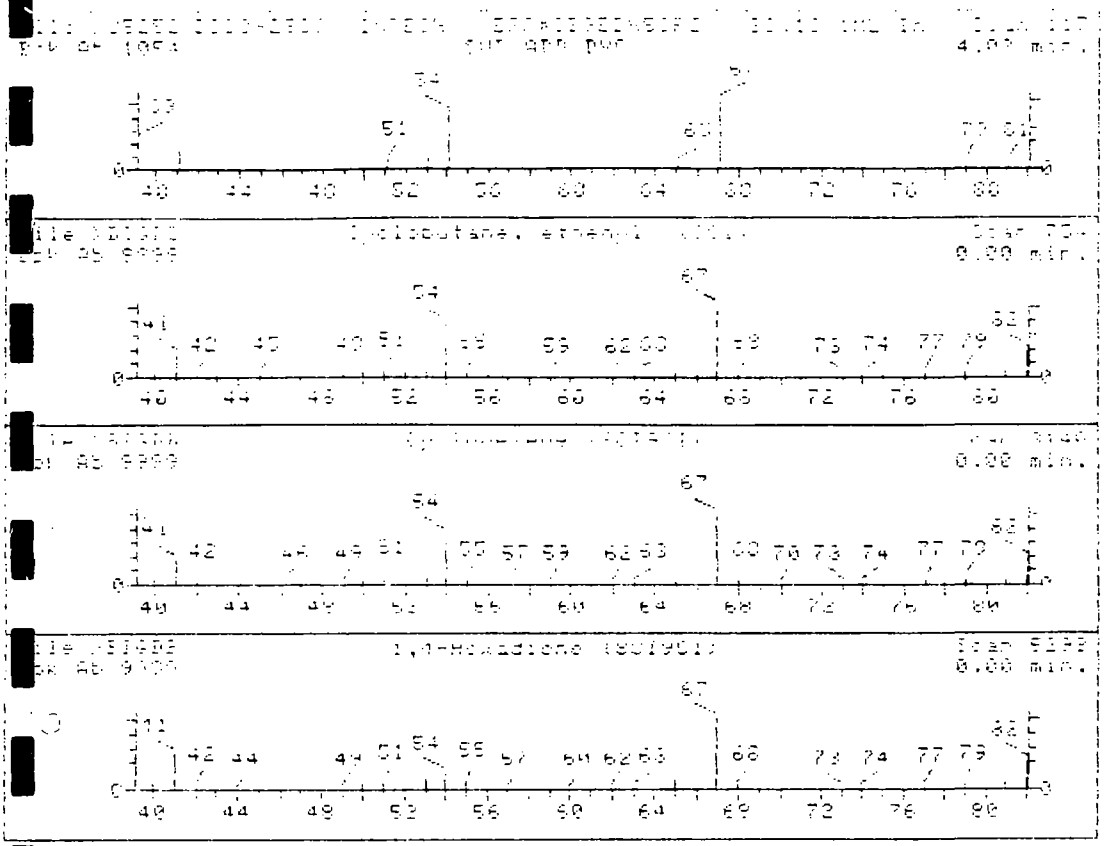


Unknown #,3
Area = 127464.0 Tentative Concentration is 32.00

1. Cyclohexane(DU) (8CI9CI) 84 C6H12
2. Cyclopentane, methyl- (8CI9CI) 84 C6H12
3. Cyclopentanone (8CI9CI) 84 C5H8O
4. Cyclobutane, ethyl- (8CI9CI) 84 C6H12
5. Cyclopropane, (1-methylethyl)- (9CI) 84 C6H12
6. 1H-tetrazole, 5-methyl- (8CI9CI) 84 C2H4N4
7. 2-Hexene (8CI9CI) 84 C6H12

Sample File: >J5252 Spectrum #: 88
Search speed: 3 Tilting option: F No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROUT	K	OK	#FLG	TILT	%	CON	C_I	R_IO
1.	29*	110827	5712	"BIGDB	25	18	2	4	87	12	43	60
2.	21*	96377	996	"BIGDB	51	36	0	0	26	30	29	61
3.	33*	120923	5672	"BIGDB	32	52	2	0	141	36	17	15
4.	31*	4806615	963	"BIGDB	28	55	0	0	79	42	9	19
5.	30*	3638355	962	"BIGDB	29	54	0	0	83	42	17	21
6.	29*	4076367	998	"BIGDB	22	62	1	0	27	40	10	14
7.	27*	592439	5676	"BIGDB	30	59	3	0	130	37	10	13

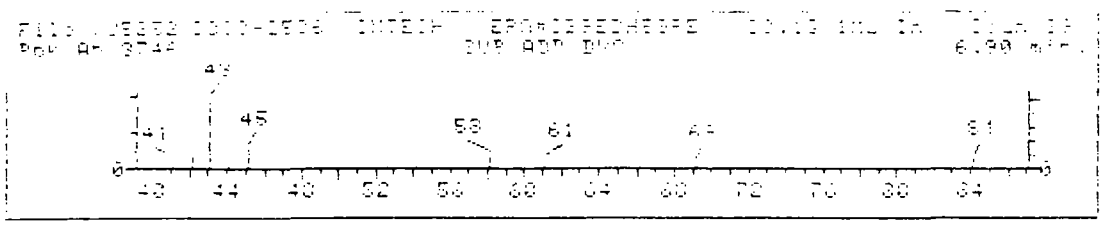


Unknown #,4
Area = 14[illegible] Tentative Concentration is 4.00

1. Cyclobutane, ethenyl- (9CI) 82 C6H10
2. Cyclohexene (8CI9CI) 82 C6H10
3. 1,4-Hexadiene (8CI9CI) 82 C6H10
4. 1,3-Pentadiene, 2-methyl- (8CI9CI) 82 C6H10
5. Bicyclo[3.1.0]hexane (8CI9CI) 82 C6H10
6. Cyclopropane, (1-methylethenyl)- (9CI) 82 C6H10
7. 1,1'-Bicyclopropyl (9CI) 82 C6H10

Sample file: >05252 Spectrum #: 112
Search speed: 3 Tilting option: F No. of ion ranges searched: 4[illegible]

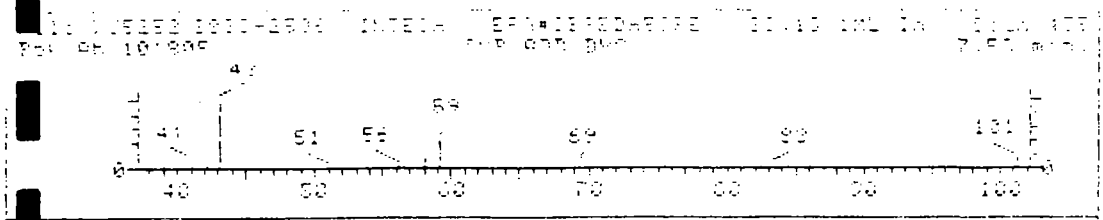
	Prob.	CAS #	CON #	ROUT	K	UK	#FLG	TILT	%	CON	C_I	R_[illegible]
1.	58*	2597491	754	"BIGDB	44	49	2	0	100	16	25	[illegible]
2.	58*	110838	3140	"BIGDB	48	42	2	0	100	16	25	[illegible]
3.	47*	592450	5298	"BIGDB	51	51	2	0	77	26	19	[illegible]
4.	37*	1118587	5300	"BIGDB	50	56	3	0	75	28	14	[illegible]
5.	35*	285595	3141	"BIGDB	23	65	3	0	100	27	14	[illegible]
6.	30*	4663223	3150	"BIGDB	39	55	[illegible]	0	90	33	12	[illegible]
7.	30*	5685461	746	"BIGDB	34	59	3	0	63	31	[illegible]	[illegible]

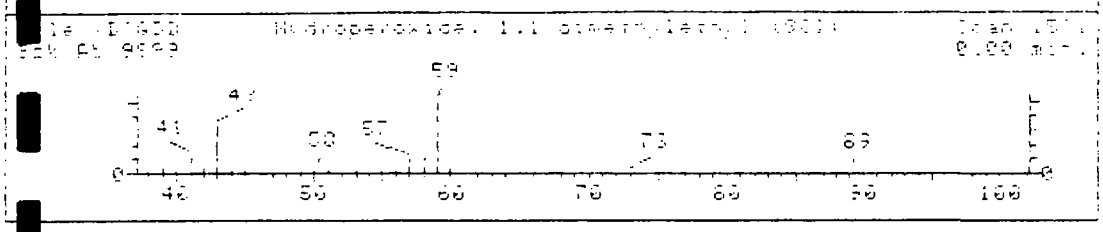


Unknown # 5
Area = 13573.00 Tentative Concentration is 5.00

Sample File: >15252 Spectrum #: 394

No data base entries were retrieved.





Unknown #,6
rea = [illegible] Tentative Concentration is 200.00

1. Hydroperoxide, 1,1-dimethylethyl (9CI) 90 C4H10O2

Sample file: [illegible] Spectrum #: 455
earch speed: 3 Filting option: F No. of ion ranges searched: 4[illegible]

	Prob.	CAS #	CHN #	RUOT	K	UK	#FLG	FILT	%	CON	C_I	P_[illegible]
1.	20	25912	1591	"BIGDB	34	31	1	0	3[illegible]	51	5	1[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH51

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J5195

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 9.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340.	U
111-44-4	bis(2-Chloroethyl)ether	340.	U
95-57-8	2-Chlorophenol	340.	U
541-73-1	1,3-Dichlorobenzene	340.	U
106-46-7	1,4-Dichlorobenzene	340.	U
100-51-6	Benzyl alcohol	340.	U
95-50-1	1,2-Dichlorobenzene	340.	U
95-48-7	2-Methylphenol	340.	U
108-60-1	bis(2-Chloroisopropyl)ether	340.	U
106-44-5	4-Methylphenol	340.	U
621-64-7	N-Nitroso-di-n-propylamine	340.	U
67-72-1	Hexachloroethane	340.	U
98-95-3	Nitrobenzene	340.	U
78-59-1	Isophorone	340.	U
88-75-5	2-Nitrophenol	340.	U
105-67-9	2,4-Dimethylphenol	340.	U
65-85-0	Benzoic acid	1700.	U
111-91-1	bis(2-Chloroethoxy)methane	340.	U
120-83-2	2,4-Dichlorophenol	340.	U
120-82-1	1,2,4-Trichlorobenzene	340.	U
91-20-3	Naphthalene	340.	U
106-47-8	4-Chloroaniline	340.	U
87-68-3	Hexachlorobutadiene	340.	U
59-50-7	4-Chloro-3-methylphenol	340.	U
91-57-6	2-Methylnaphthalene	340.	U
77-47-4	Hexachlorocyclopentadiene	340.	U
88-06-2	2,4,6-Trichlorophenol	340.	U
95-95-4	2,4,5-Trichlorophenol	1700.	U
91-58-7	2-Chloronaphthalene	340.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	340.	U
208-96-8	Acenaphthylene	340.	U
606-20-2	2,6-Dinitrotoluene	340.	U

193

1L

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH51

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5195

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 9.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-74-4	2-Nitroaniline	1700.	U
83-32-9	Acenaphthene	340.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	340.	U
121-14-2	2,4-Dinitrotoluene	340.	U
84-66-2	Diethylphthalate	340.	U
7005-72-3	4-Chlorophenyl-phenylether	340.	U
86-73-7	Fluorene	340.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	4,6-Dinitro-2-methylphenol	1700.	U
86-30-6	N-Nitrosodiphenylamine (1)	340.	U
101-55-3	4-Bromophenyl-phenylether	340.	U
118-74-1	Hexachlorobenzene	340.	U
87-86-5	Pentachlorophenol	1700.	U
85-01-8	Phenanthrene	340.	U
120-12-7	Anthracene	340.	U
84-74-2	Di-n-butylphthalate	340.	U
206-44-0	Fluoranthene	340.	U
129-00-0	Pyrene	340.	U
85-68-7	Butylbenzylphthalate	340.	U
91-94-1	3,3'-Dichlorobenzidine	690.	U
56-55-3	Benzo(a)anthracene	340.	U
218-01-9	Chrysene	340.	U
117-81-7	bis(2-Ethylhexyl)phthalate	290.	J
117-84-0	Di-n-octylphthalate	340.	U
205-99-2	Benzo(b)fluoranthene	340.	U
207-08-9	Benzo(k)fluoranthene	340.	U
50-32-8	Benzo(a)pyrene	340.	U
193-39-5	Indeno(1,2,3-cd)pyrene	340.	U
53-70-3	Dibenz(a,h)anthracene	340.	U
191-24-2	Benzo(g,h,i)perylene	340.	U

(1) - Cannot be separated from diphenylamine

194

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH51

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J5195

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 9.5 Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 67-66-3	Methane, trichloro- (9CI)	2.96	400.	J
2. - -	UNKNOWN AROMATIC	3.47	7000.	BJ
3. - -	UNKNOWN	6.55	300.	J
4. - -	UNKNOWN	37.10	200.	J
5.				
6.				
7.				
8.				
9.				
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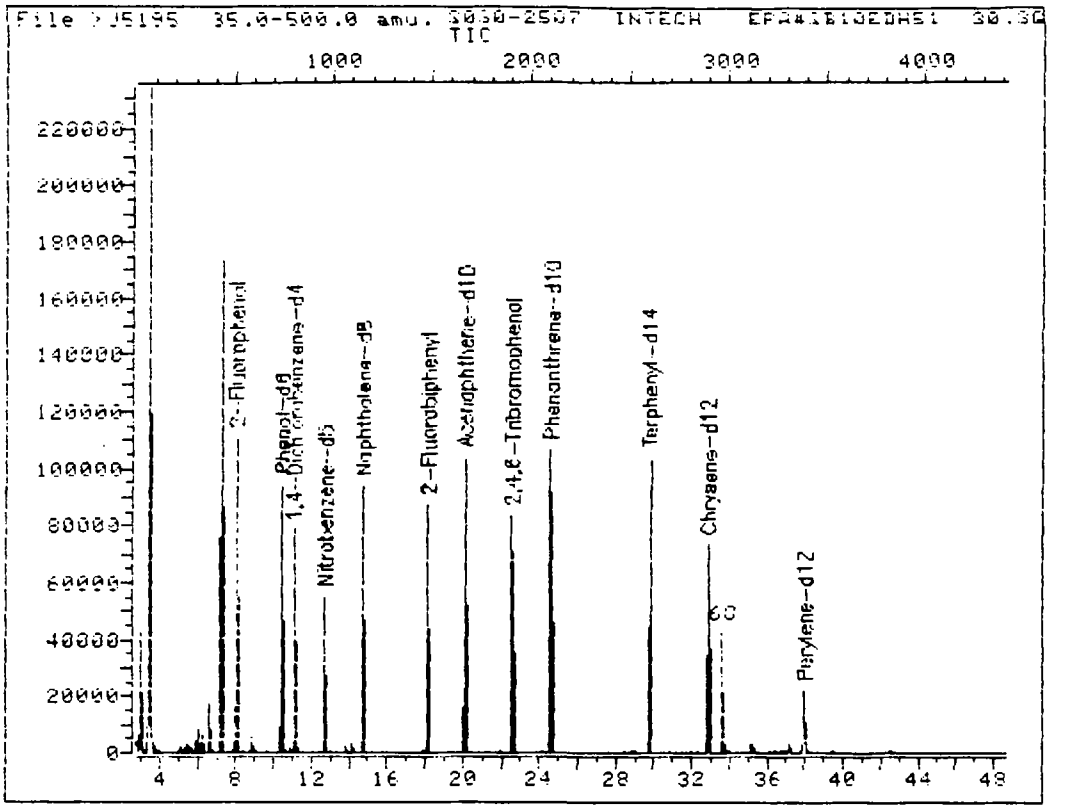
FORM I SV-TIC

1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >J5195::D2 Quant Output File: ^J5195::N1
Name: S030-2507 INTECH
Misc: EPA#SB10EDH51 30.3G/1ML Instr. #2 BTL# 9

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

Operator ID: DAVE
Quant Time: 890701 04:20
Injected at: 890701 03:28

QUANT REPORT

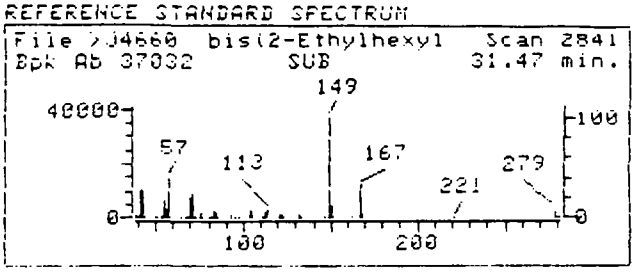
Operator ID: DAVE Quant Rev: 6 Quant Time: 890701 04:20
Output File: ^J5195::N1 Injected at: 890701 03:28
Data File: >J5195::D2 Dilution Factor: 1.00000
Name: S030-2507 INTECH
Misc: EPA#SB10EDH51 30.3G/1ML Instr. #2 BTL# 9

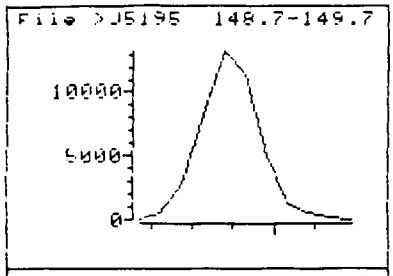
ID File: CLPSNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	11.06	152.0	24724	40.00	UG/ML	98
2)	2-Fluorophenol	7.99	112.0	53469	71.44	UG/ML	94
3)	Phenol-d6	10.40	99.0	68573	136.79	UG/ML	93
16)	*Naphthalene-d8	14.69	136.0	93088	40.00	UG/ML	92
17)	Nitrobenzene-d5	12.70	82.0	33413	32.20	UG/ML	85
31)	*Acenaphthene-d10	20.06	164.0	52132	40.00	UG/ML	96
36)	2-Fluorobiphenyl	18.11	172.0	58882	32.79	UG/ML	93
51)	2,4,6-Tribromophenol	22.51	330.0	20373	45.76	UG/ML	93
52)	*Phenanthrene-d10	24.59	188.0	106748	40.00	UG/ML	99
62)	*Chrysene-d12	32.83	240.0	74653	40.00	UG/ML	98
64)	Terphenyl-d14	29.71	244.0	92252	33.45	UG/ML	90
68)	bis(2-Ethylhexyl)phthalate	33.48	149.0	27002	8.41	UG/ML	99
70)	*Perylene-d12	37.95	264.0	34498	40.00	UG/ML	96

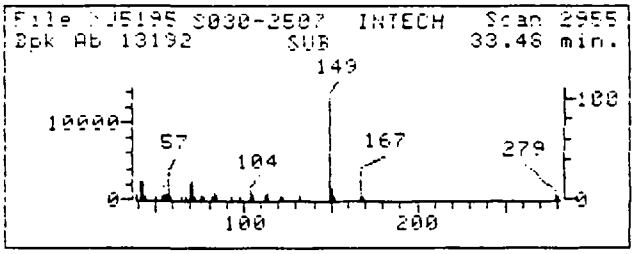
* Compound is ISTD

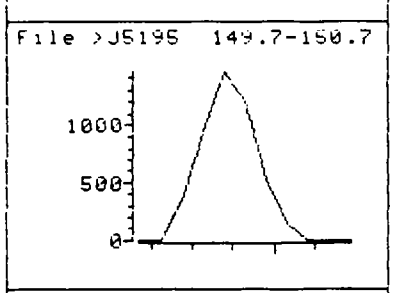
REFERENCE STANDARD SPECTRUM



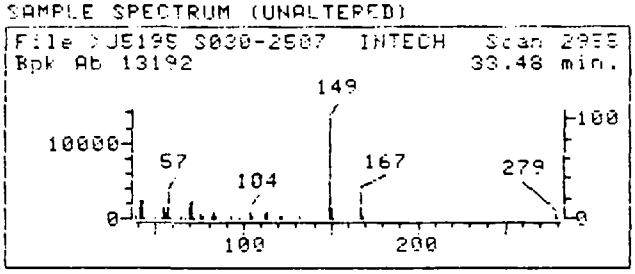


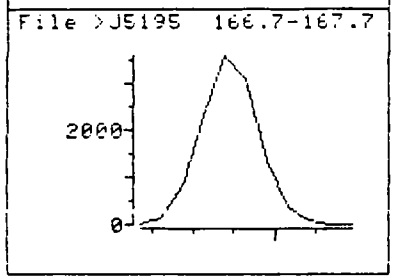
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





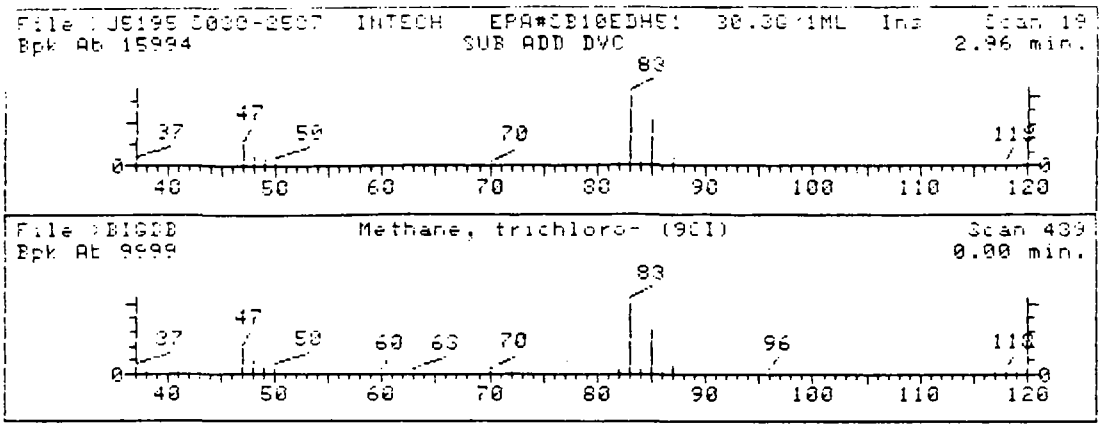
SAMPLE SPECTRUM (UNALTERED)





Data File: >J5195::D2 Quant Output File: ^J5195::N1
Name: S030-2507 INTECH
Misc: EPA#SB10EDH51 30.3G/1ML Instr. #2 BTL# 9
Quant Time: 890701 04:20 Quant ID File: CLPBNA::SC
Injected at: 890701 03:28 Last Calibration: 890630 21:26

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2955
Retention Time: 33.48 min.
Quant Ion: 149.0
Area: 27002
Concentration: 8.41 UG/ML
q-value: 99

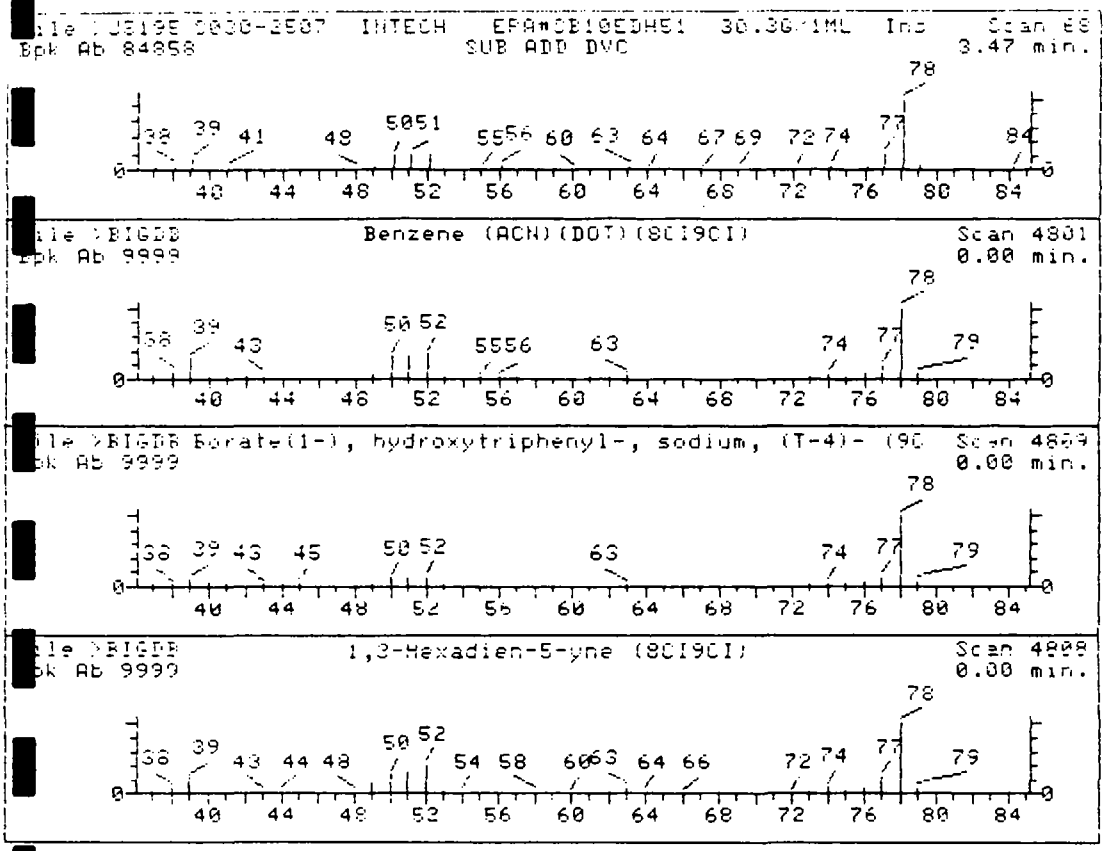


Unknown #,1
Area = 49872.00 Tentative Concentration is 13.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5195 Spectrum #: 19
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IW
1.	91*	67663	439	"BIGDB	74	32	0	0	66	21	53	92

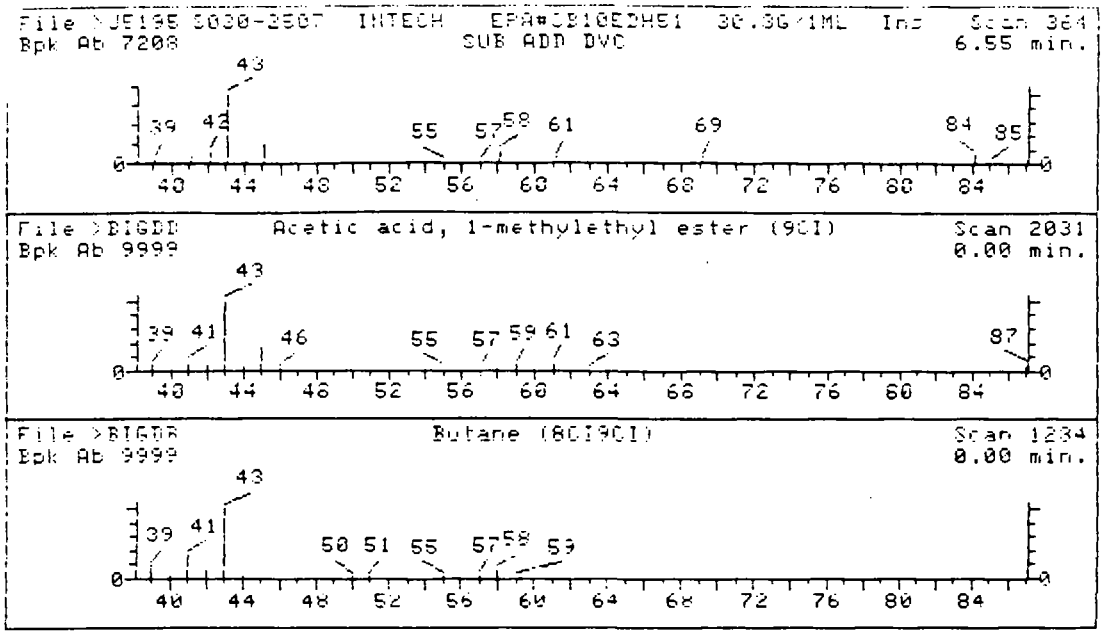


Unknown #,2
Area = 827305.0 Tentative Concentration is 210.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78	C6H6
2.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0	
3.	1,3-Hexadien-5-yne (8CI9CI)	78	C6H6
4.	1,5-Hexadiyne (8CI9CI)	78	C6H6
5.	2,4-Hexadiyne (8CI9CI)	78	C6H6
6.	Propanedinitrile, methylene- (9CI)	78	C4H2N2
7.	2-Butenedinitrile, (E)- (9CI)	78	C4H2N2

Sample file: >J5195 Spectrum #: 68
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	93*	71432	4801	"BIGDB	90	8	0	-3	75	4	68	83
2.	70	12113074	4809	"BIGDB	74	33	2	4	100	6	42	19
3.	61*	10420903	4808	"BIGDB	67	34	2	0	52	31	22	46
4.	51*	628160	4802	"BIGDB	67	56	2	-4	54	28	19	29
5.	47*	2809690	4806	"BIGDB	43	45	0	2	25	45	16	46
6.	15*	922645	4805	"BIGDB	30	75	1	0	50	59	3	16
7.	15*	764421	4803	"BIGDB	27	78	2	0	64	52	3	14

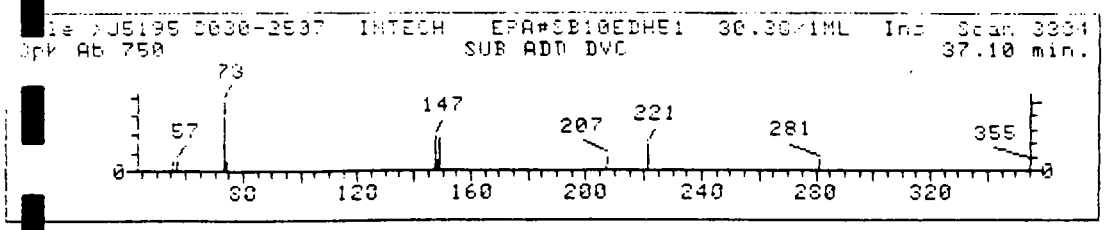


. Unknown #,6
Area = 34100.00 Tentative Concentration is 9.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2
2. Butane (8CI9CI) 58 C4H10

Sample file: >J5195 Spectrum #: 364
Search speed: 3 Tilting option: F No. of ion ranges searched: 50

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	42	108214	2031	"BIGDB	39	40	2	0	78	23	17	13
2.	27*	106978	1234	"BIGDB	23	56	2	0	100	37	10	13



Unknown #,11
rea = 10800.00 Tentative Concentration is 5.00

Sample file: >J5195 Spectrum #: 3304

No data base entries were retrieved.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SDH52

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: SDH52

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

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J5196

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360.	U
111-44-4	bis(2-Chloroethyl)ether	360.	U
95-57-8	2-Chlorophenol	360.	U
541-73-1	1,3-Dichlorobenzene	360.	U
106-46-7	1,4-Dichlorobenzene	360.	U
100-51-6	Benzyl alcohol	360.	U
95-50-1	1,2-Dichlorobenzene	360.	U
95-48-7	2-Methylphenol	360.	U
108-60-1	bis(2-Chloroisopropyl)ether	360.	U
106-44-5	4-Methylphenol	360.	U
621-64-7	N-Nitroso-di-n-propylamine	360.	U
67-72-1	Hexachloroethane	360.	U
98-95-3	Nitrobenzene	360.	U
78-59-1	Isophorone	360.	U
88-75-5	2-Nitrophenol	360.	U
105-67-9	2,4-Dimethylphenol	360.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	360.	U
120-83-2	2,4-Dichlorophenol	360.	U
120-82-1	1,2,4-Trichlorobenzene	360.	U
91-20-3	Naphthalene	290.	J
106-47-8	4-Chloroaniline	360.	U
87-68-3	Hexachlorobutadiene	360.	U
59-50-7	4-Chloro-3-methylphenol	360.	U
91-57-6	2-Methylnaphthalene	310.	J
77-47-4	Hexachlorocyclopentadiene	360.	U
88-06-2	2,4,6-Trichlorophenol	360.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	360.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	360.	U
208-96-8	Acenaphthylene	360.	U
606-20-2	2,6-Dinitrotoluene	360.	U

203

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ED45C

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: ED450

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

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J5196

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-02-2	2-Nitroaniline	1800.	U
83-32-9	Acenaphthene	360.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	360.	U
121-14-2	2,4-Dinitrotoluene	360.	U
84-66-2	Diethylphthalate	360.	U
7005-72-3	4-Chlorophenyl-phenylether	360.	U
86-73-7	Fluorene	360.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	360.	U
101-55-3	4-Bromophenyl-phenylether	360.	U
118-74-1	Hexachlorobenzene	360.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	51.	J
120-12-7	Anthracene	360.	U
84-74-2	Di-n-butylphthalate	360.	U
206-44-0	Fluoranthene	360.	U
129-00-0	Pyrene	360.	U
85-68-7	Butylbenzylphthalate	360.	U
91-94-1	3,3'-Dichlorobenzidine	710.	U
56-55-3	Benzo(a)anthracene	360.	U
218-01-9	Chrysene	360.	U
117-81-7	bis(2-Ethylhexyl)phthalate	100.	J
117-84-0	Di-n-octylphthalate	360.	U
205-99-2	Benzo(b)fluoranthene	360.	U
207-08-9	Benzo(k)fluoranthene	360.	U
50-32-8	Benzo(a)pyrene	360.	U
193-39-5	Indeno(1,2,3-cd)pyrene	360.	U
53-70-3	Dibenz(a,h)anthracene	360.	U
191-24-2	Benzo(g,h,i)perylene	360.	U

(1) - Cannot be separated from diphenylamine

204

1E

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SDH52

Lab Name: INTECH Contract: 89D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: SDH52

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

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J5196

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

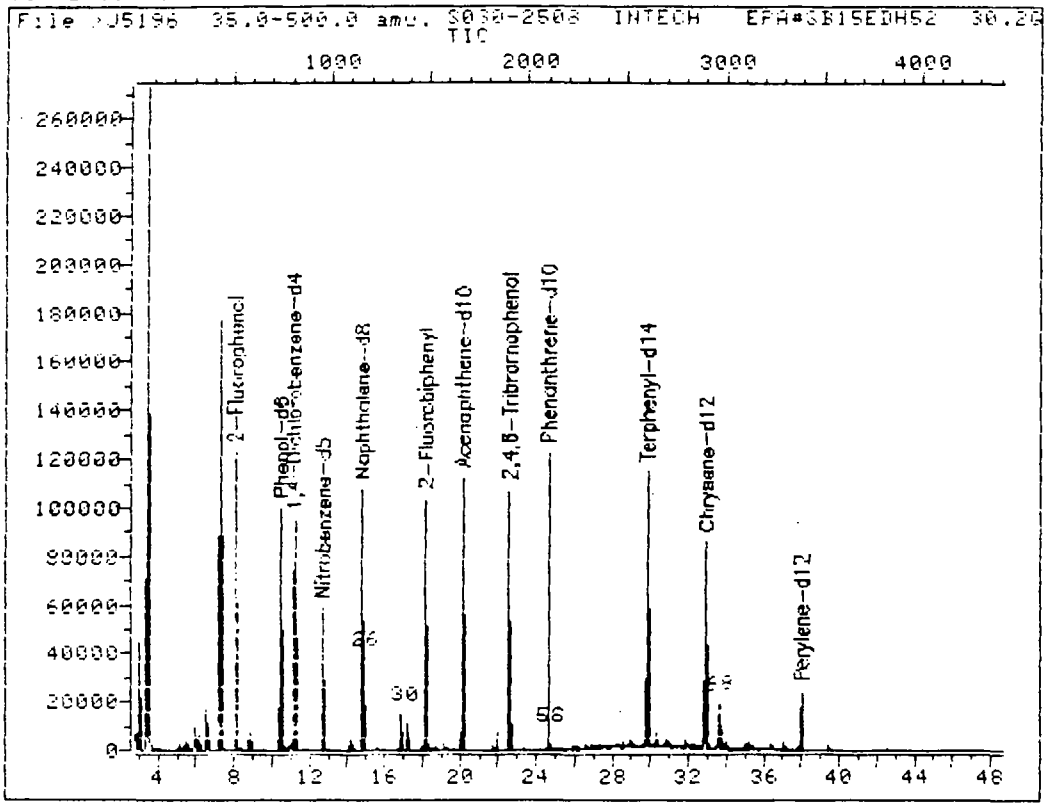
GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.00

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67 66-3	Methane, trichloro- (9CI)	2.93	500.	J
2.	- -	UNKNOWN AROMATIC	3.45	7000.	BJ
3.	- -	UNKNOWN	6.53	400.	J
4.	- -	UNKNOWN AROMATIC	17.18	100.	J
5.	- -	UNKNOWN	33.58	200.	J
6.	- -	UNKNOWN	37.06	100.	J
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >J5196::D2 Quant Output File: ^J5196::N1
Name: S030-2508 INTECH
Misc: EPA#SB15EDH52 30.2G/1ML Instr. #2 BTL#10

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

Operator ID: DAVE
Quant Time: 890701 05:21
Injected at: 890701 04:29

QUANT REPORT

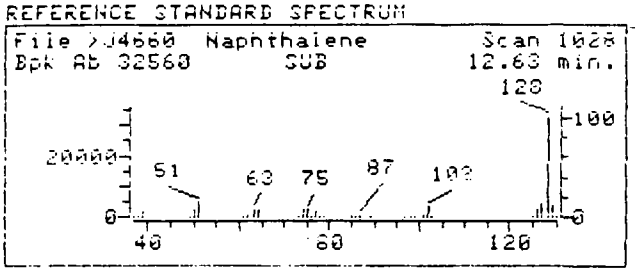
Operator ID: DAVE Quant Rev: 6 Quant Time: 890701 05:21
Output File: ^J5196::N1 Injected at: 890701 04:29
Data File: >J5196::D2 Dilution Factor: 1.00000
Name: S030-2508 INTECH
Misc: EPA#SB15EDH52 30.2G/1ML Instr. #2 BTL#10

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	11.11	801	26965	40.00	UG/ML	96
2)	2-Fluorophenol	8.04	506	63793	78.15	UG/ML	93
3)	Phenol-d6	10.42	735	81300	148.69	UG/ML	92
6)	*Naphthalene-d8	14.73	1149	102093	40.00	UG/ML	91
17)	Nitrobenzene-d5	12.67	951	38943	34.21	UG/ML	85
26)	Naphthalene	14.77	1153	26468	8.05	UG/ML	99
30)	2-Methylnaphthalene	16.85	1353	8439	8.77	UG/ML	95
31)	*Acenaphthene-d10	20.09	1665	59644	40.00	UG/ML	94
36)	2-Fluorobiphenyl	18.11	1475	64472	31.38	UG/ML	94
41)	2,4,6-Tribromophenol	22.52	1899	29701	58.30	UG/ML	94
42)	*Phenanthrene-d10	24.58	2097	116762	40.00	UG/ML	99
58)	Phenanthrene	24.62	2101	5413	1.43	UG/ML	98
62)	*Chrysene-d12	32.87	2894	88512	40.00	UG/ML	99
64)	Terphenyl-d14	29.75	2594	103085	31.53	UG/ML	90
68)	bis(2-Ethylhexyl)phthalate	33.49	2953	10792	2.83	UG/ML	97
70)	*Perylene-d12	37.96	3383	42350	40.00	UG/ML	95

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



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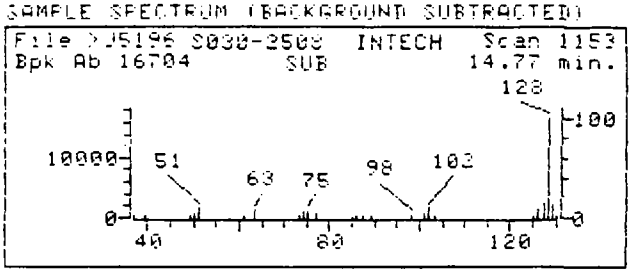

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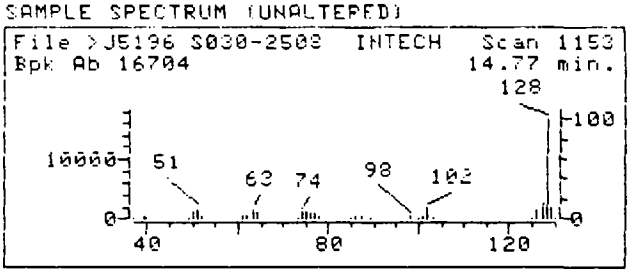
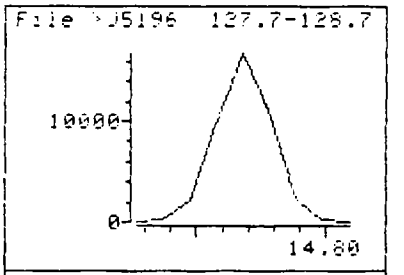
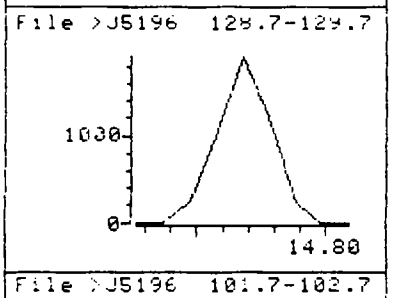
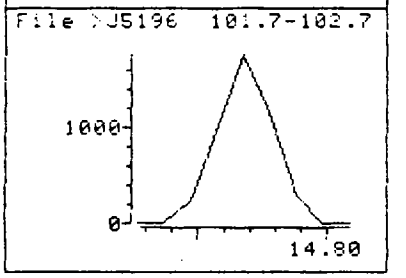






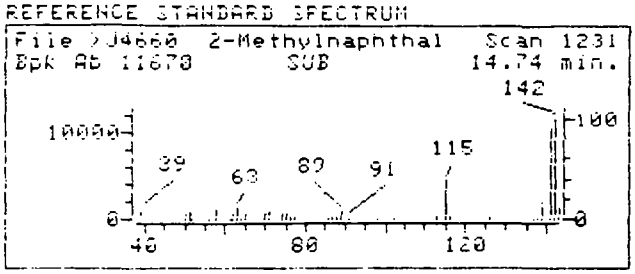


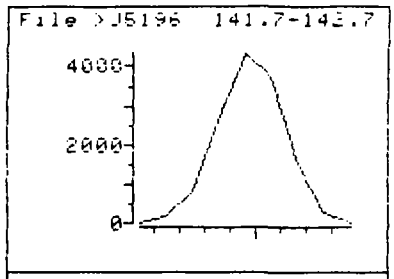
Data File: >J5196::D2
Name: S030-2508 INTECH
Misc: EPA#SB15EDH52 30.2G/1ML
Quant Time: 890701 05:21
Injected at: 890701 04:29

Quant Output File: ^J5196::N1
Instr. #2 BTL#10
Quant ID File: CLPBNA::SC
Last Calibration: 890630 21:26

Compound No: 26
Compound Name: Naphthalene
Scan Number: 1153
Retention Time: 14.77 min.
Quant Ion: 128.0
Area: 26468
Concentration: 8.05 UG/ML
q-value: 99

REFERENCE STANDARD SPECTRUM





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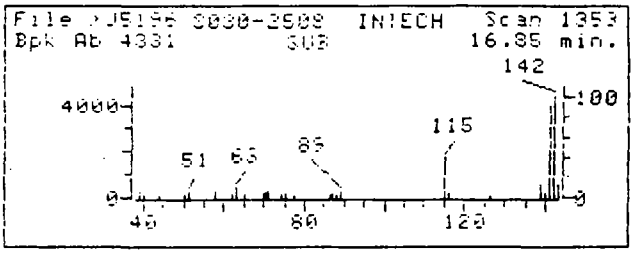

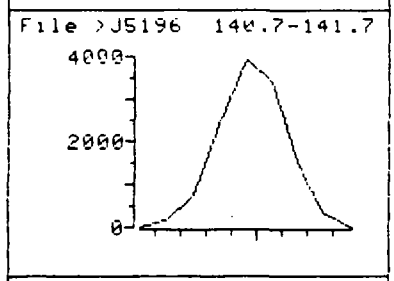

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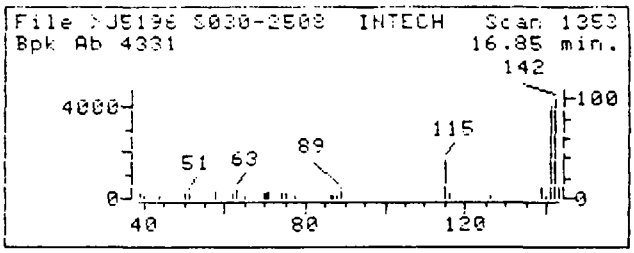
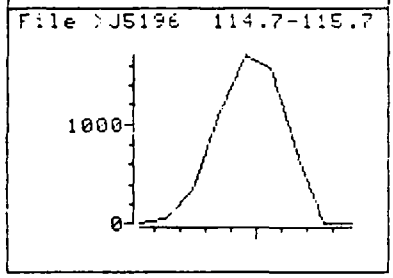
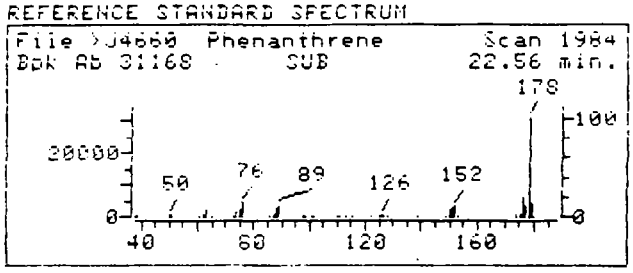




Data File: >J5196::D2 Quant Output File: ^J5196::N1
Name: S030-2508 INTECH
Misc: EPA#SB15EDH52 30.2G/1ML Instr. #2 BTL#10
Quant Time: 890701 05:21 Quant ID File: CLPBNA::SC
Injected at: 890701 04:29 Last Calibration: 890630 21:26

Compound No: 30
Compound Name: 2-Methylnaphthalene
Scan Number: 1353
Retention Time: 16.85 min.
Quant Ion: 142.0
Area: 8439
Concentration: 8.77 UG/ML
q-value: 95

REFERENCE STANDARD SPECTRUM



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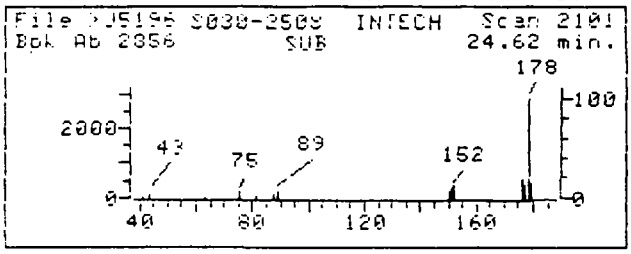

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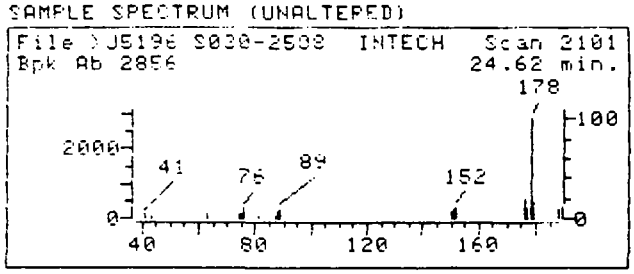
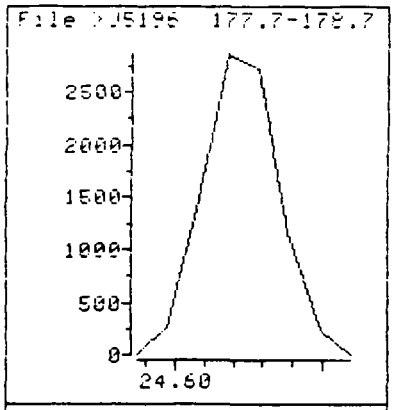
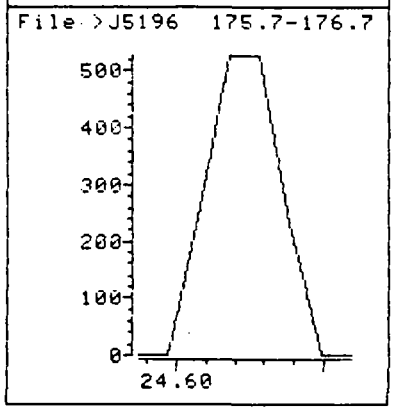




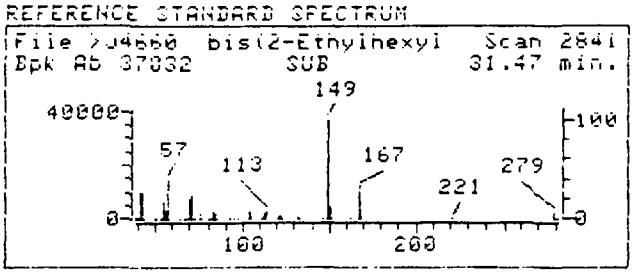


Data File: >J5196::D2
Name: S030-2508 INTECH
Misc: EPA#SB15EDH52 30.2G/1ML
Quant Time: 890701 05:21
Injected at: 890701 04:29

Quant Output File: ^J5196::N1
Instr. #2 BTL#10
Quant ID File: CLPBNA::SC
Last Calibration: 890630 21:26

Compound No: 58
Compound Name: Phenanthrene
Scan Number: 2101
Retention Time: 24.62 min.
Quant Ion: 178.0
Area: 5413
Concentration: 1.43 UG/ML
q-value: 98

REFERENCE STANDARD SPECTRUM



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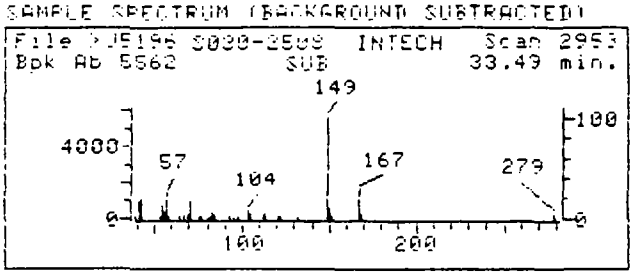

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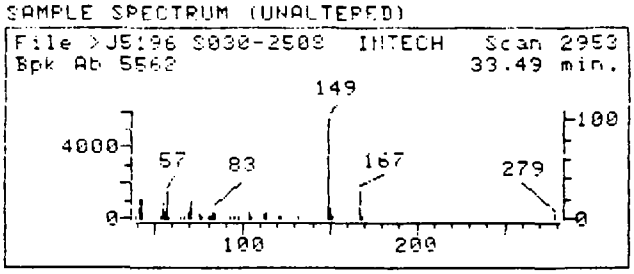
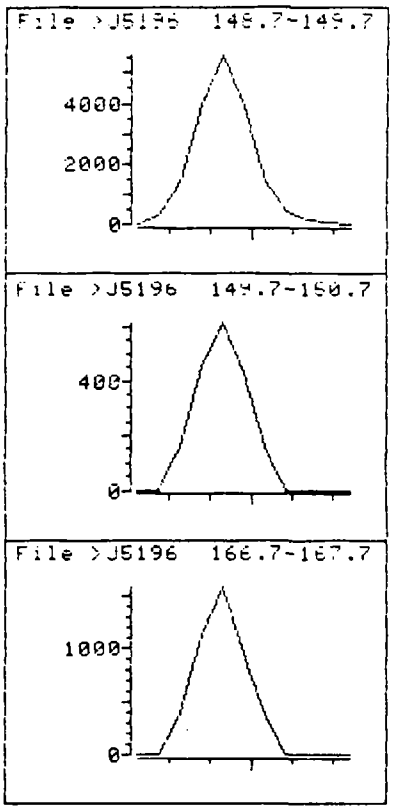
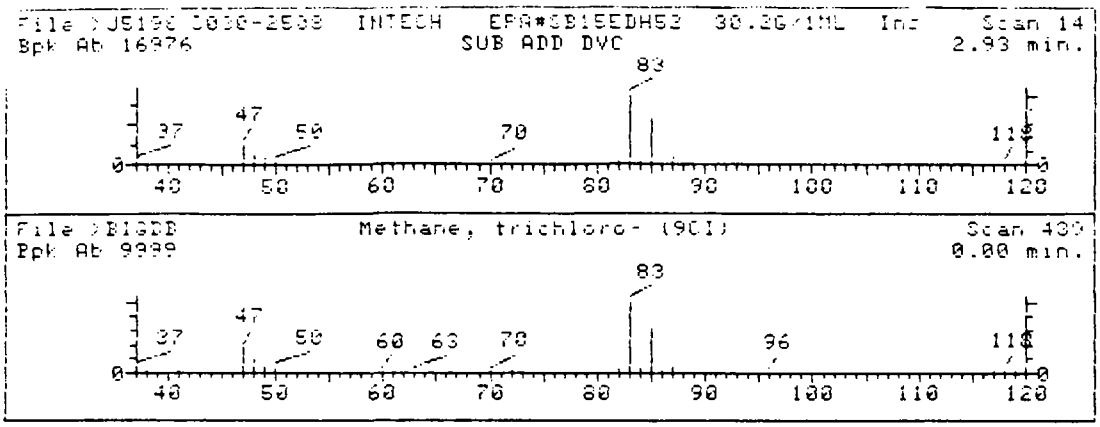




Data File: >J5196::D2 Quant Output File: ^J5196::N1
Name: S030-2508 INTECH
Misc: EPA#SB15EDH52 30.2G/1ML Instr. #2 BTL#10
Quant Time: 890701 05:21 Quant ID File: CLPBNA::SC
Injected at: 890701 04:29 Last Calibration: 890630 21:26

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2953
Retention Time: 33.49 min.
Quant Ion: 149.0
Area: 10792
Concentration: 2.83 UG/ML
q-value: 97

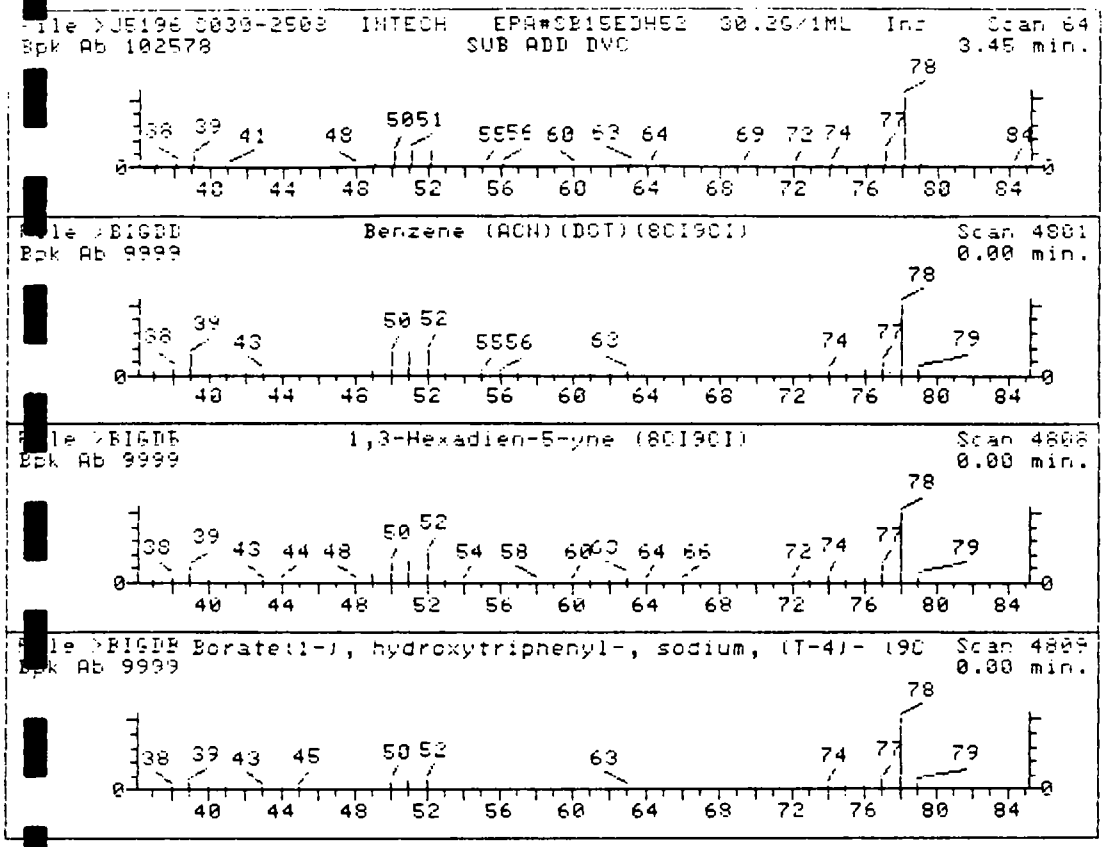


. Unknown #,1
Area = 55189.00 Tentative Concentration is 13.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5196 Spectrum #: 14
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	96*	67663	439	"BIGDB	94	12	0	0	71	0	72	94



Unknown #,2

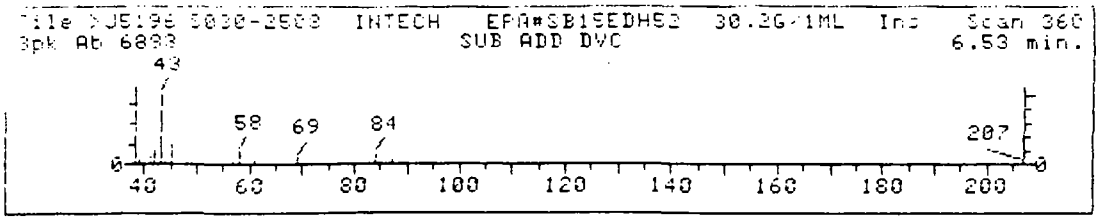
Area = 853599.0 Tentative Concentration is 200.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78 C6H6
2.	1,3-Hexadien-5-yne (8CI9CI)	78 C6H6
3.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0
4.	1,5-Hexadien-3-yne (8CI9CI)	78 C6H6
5.	1,5-Hexadiyne (8CI9CI)	78 C6H6
6.	2,4-Hexadiyne (8CI9CI)	78 C6H6
7.	Propanedinitrile, methylene- (9CI)	78 C4H2N2

Sample file: >J5196 Spectrum #: 64

Search speed: 3 Tilting option: F No. of ion ranges searched: 40

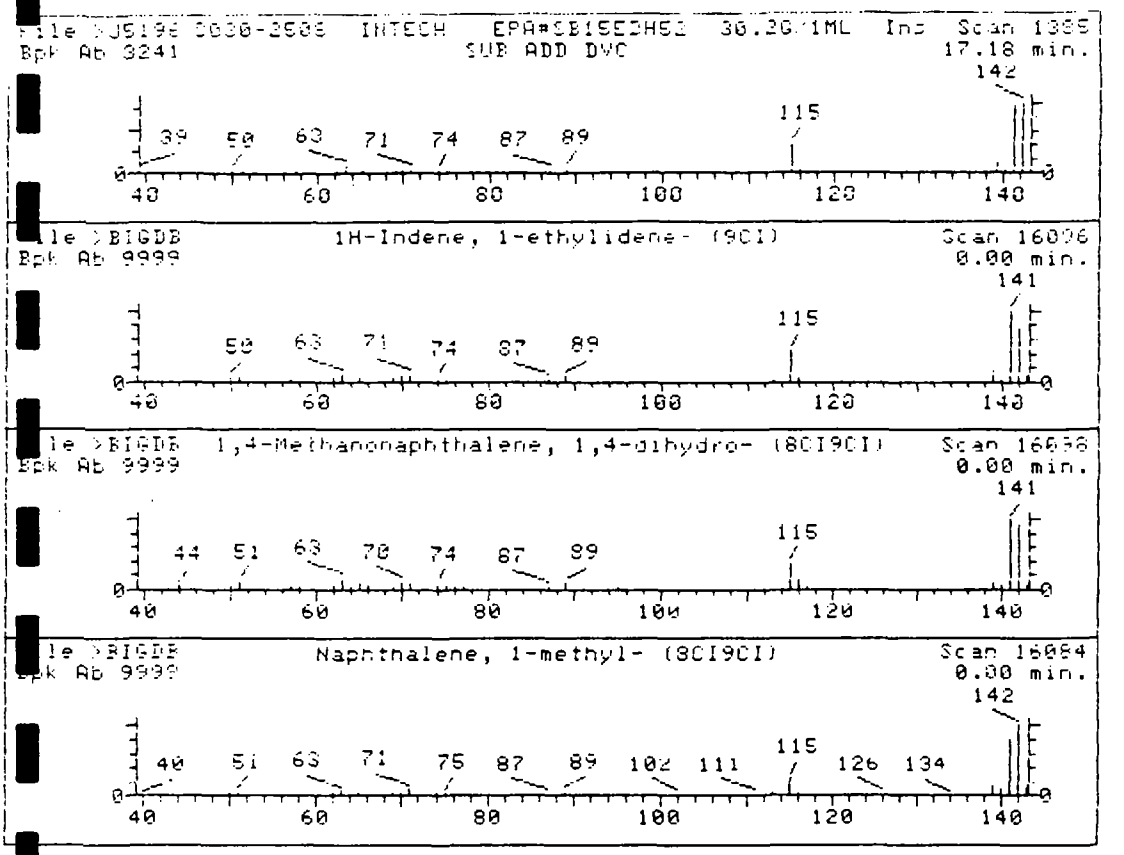
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	71432	4801	"BIGDB	78	20	0	0	55	28	57	93
2.	71*	10420903	4808	"BIGDB	67	34	1	0	55	30	29	66
3.	70	12113074	4809	"BIGDB	65	42	2	4	100	6	42	14
4.	50*	821089	4804	"BIGDB	49	39	0	4	26	43	17	53
5.	49*	628160	4802	"BIGDB	60	63	2	-3	51	24	22	21
6.	35*	2809690	4806	"BIGDB	35	38	0	4	22	47	11	30
7.	31*	922645	4805	"BIGDB	36	69	2	0	81	35	12	14



. Unknown #,6
Area = 43424.00 Tentative Concentration is 10.00

Sample file: >J5196 Spectrum #: 360

No data base entries were retrieved.

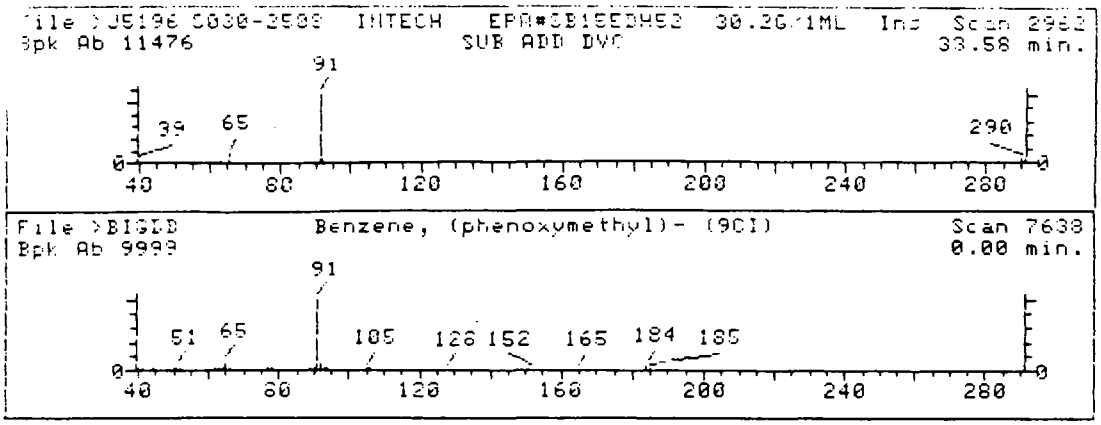


Unknown #,9
Area = 20644.00 Tentative Concentration is 4.00

1.	1H-Indene, 1-ethylidene- (9CI)	142	C11H10
2.	1,4-Methanonaphthalene, 1,4-dihydro- (8CI9CI)	142	C11H10
3.	Naphthalene, 1-methyl- (8CI9CI)	142	C11H10
4.	Naphthalene, 2-methyl- (8CI9CI)	142	C11H10
5.	Benzeneacetonitrile, 4-cyano- (9CI)	142	C9H6N2
6.	Benzeneacetonitrile, 2-cyano- (9CI)	142	C9H6N2

Sample file: >J5196 Spectrum #: 1385
Search speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	88*	2471832	16096	"BIGDB	76	24	1	-3	88	4	65	57
2.	86*	4453901	16098	"BIGDB	64	38	2	-2	95	3	60	32
3.	86*	90120	16084	"BIGDB	60	40	2	3	94	2	60	33
4.	83*	91576	16085	"BIGDB	54	44	2	4	95	2	57	27
5.	31*	876313	16090	"BIGDB	31	68	2	0	100	35	12	14
6.	25*	3759282	16097	"BIGDB	25	84	3	0	49	50	7	13

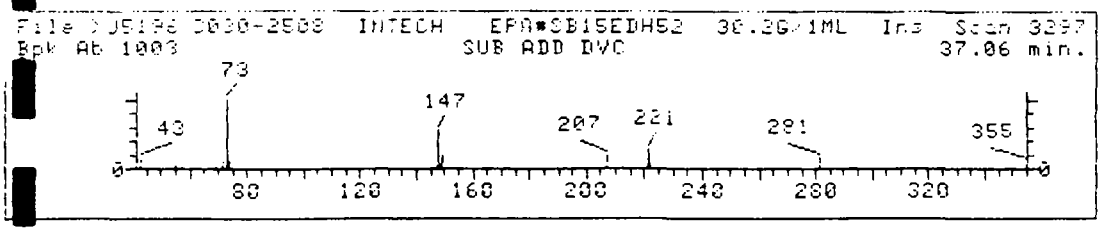


. Unknown #,11
Area = 38210.00 Tentative Concentration is 6.00

1. Benzene, (phenoxymethyl)- (9CI) 184 C13H12O

Sample file: >J5196 Spectrum #: 2962
Search speed: 3 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70	946805	7638	"BIGDB	35	43	2	0	100	8	42	12



Unknown #,13
Area = 12007.00 Tentative Concentration is 4.00

Sample file: >J5196 Spectrum #: 3297

No data base entries were retrieved.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68D90049

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.9 (g/mL) G Lab File ID: J5197

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340.	U
111-44-4	bis(2-Chloroethyl)ether	340.	U
95-57-8	2-Chlorophenol	340.	U
541-73-1	1,3-Dichlorobenzene	340.	U
106-46-7	1,4-Dichlorobenzene	340.	U
100-51-6	Benzyl alcohol	340.	U
95-50-1	1,2-Dichlorobenzene	340.	U
95-48-7	2-Methylphenol	340.	U
108-60-1	bis(2-Chloroisopropyl)ether	340.	U
106-44-5	4-Methylphenol	340.	U
621-64-7	N-Nitroso-di-n-propylamine	340.	U
67-72-1	Hexachloroethane	340.	U
98-95-3	Nitrobenzene	340.	U
78-59-1	Isophorone	340.	U
88-75-5	2-Nitrophenol	340.	U
105-67-9	2,4-Dimethylphenol	340.	U
65-85-0	Benzoic acid	1700.	U
111-91-1	bis(2-Chloroethoxy)methane	340.	U
120-83-2	2,4-Dichlorophenol	340.	U
120-82-1	1,2,4-Trichlorobenzene	340.	U
91-20-3	Naphthalene	340.	U
106-47-8	4-Chloroaniline	340.	U
87-68-3	Hexachlorobutadiene	340.	U
59-50-7	4-Chloro-3-methylphenol	340.	U
91-57-6	2-Methylnaphthalene	340.	U
77-47-4	Hexachlorocyclopentadiene	340.	U
88-06-2	2,4,6-Trichlorophenol	340.	U
95-95-4	2,4,5-Trichlorophenol	1700.	U
91-58-7	2-Chloronaphthalene	340.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	340.	U
208-96-8	Acenaphthylene	340.	U
606-20-2	2,6-Dinitrotoluene	340.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH52

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 10114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.9 (g/mL) G Lab File ID: J5197

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 9.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700.	U
83-32-9	Acenaphthene	340.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	340.	U
121-14-2	2,4-Dinitrotoluene	340.	U
84-66-2	Diethylphthalate	340.	U
7005-72-3	4-Chlorophenyl-phenylether	340.	U
86-73-7	Fluorene	340.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	4,6-Dinitro-2-methylphenol	1700.	U
86-30-6	N-Nitrosodiphenylamine (1)	340.	U
101-55-3	4-Bromophenyl-phenylether	340.	U
118-74-1	Hexachlorobenzene	340.	U
87-86-5	Pentachlorophenol	1700.	U
85-01-8	Phenanthrene	340.	U
120-12-7	Anthracene	340.	U
84-74-2	Di-n-butylphthalate	340.	U
206-44-0	Fluoranthene	340.	U
129-00-0	Pyrene	340.	U
85-68-7	Butylbenzylphthalate	340.	U
91-94-1	3,3'-Dichlorobenzidine	690.	U
56-55-3	Benzo(a)anthracene	340.	U
218-01-9	Chrysene	340.	U
117-81-7	bis(2-Ethylhexyl)phthalate	98.	J
117-84-0	Di-n-octylphthalate	340.	U
205-99-2	Benzo(b)fluoranthene	340.	U
207-08-9	Benzo(k)fluoranthene	340.	U
50-32-8	Benzo(a)pyrene	340.	U
193-39-5	Indeno(1,2,3-cd)pyrene	340.	U
53-70-3	Dibenz(a,h)anthracene	340.	U
191-24-2	Benzo(g,h,i)perylene	340.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ED-50

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: ED-50

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

Sample wt/vol: 30.9 (g/mL) G Lab File ID: J5197

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.00

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67-66-3	Methane, trichloro- (9CI)	2.94	500.	J
2.	- -	UNKNOWN AROMATIC	3.48	7000.	EJ
3.	- -	UNKNOWN	5.89	100.	J
4.	- -	UNKNOWN	6.56	400.	J
5.	- -	UNKNOWN	8.87	100.	J
6.	- -	UNKNOWN	37.06	100.	J
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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23.					
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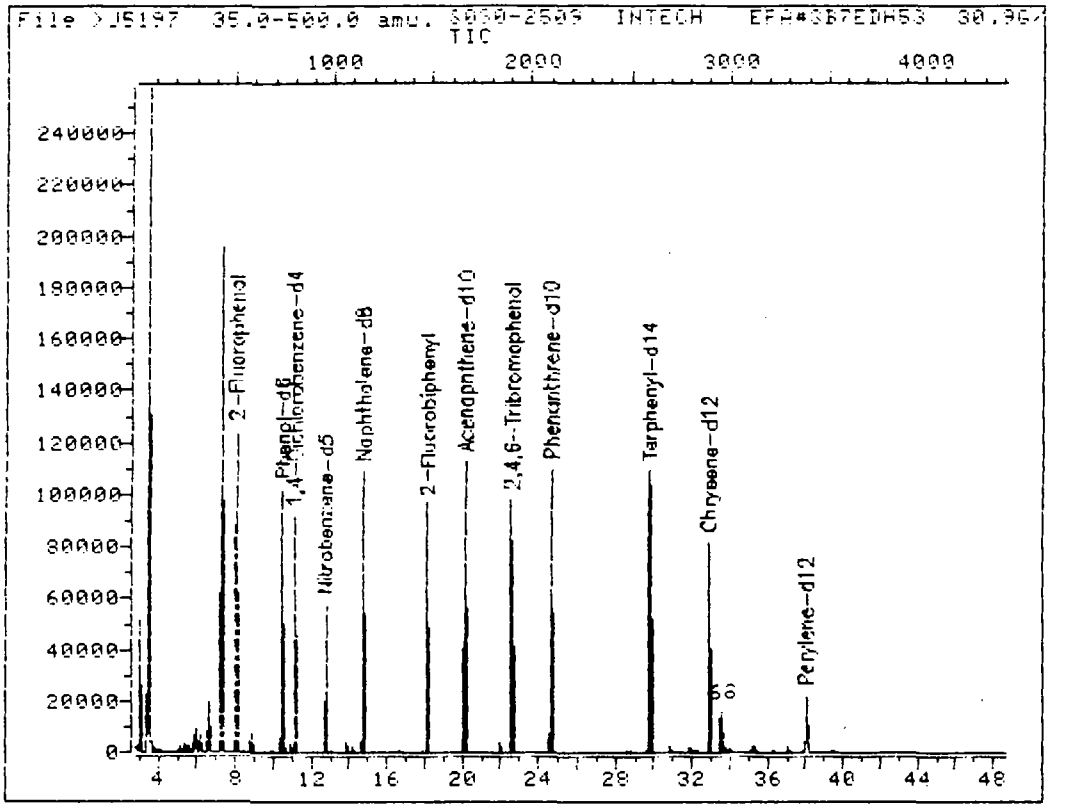
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >J5197::D2 Quant Output File: ^J5197::N1
Name: S030-2509 INTECH
Misc: EPA#SB7EDH53 30.9G/1ML Instr. #2 BTL#11

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

Operator ID: DAVE
Quant Time: 890701 06:21
Injected at: 890701 05:29

QUANT REPORT

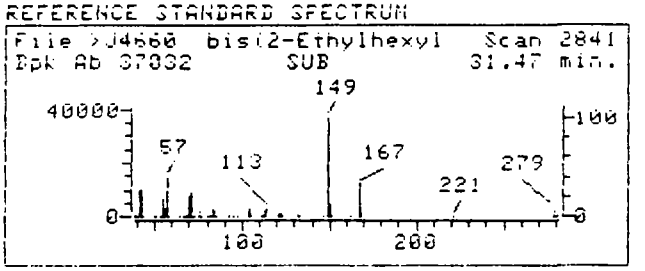
Operator ID: DAVE Quant Rev: 6 Quant Time: 890701 06:21
Output File: ^J5197::N1 Injected at: 890701 05:29
Data File: >J5197::D2 Dilution Factor: 1.00000
Name: S030-2509 INTECH
Misc: EPA#SB7EDH53 30.9G/1ML Instr. #2 BTL#11

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

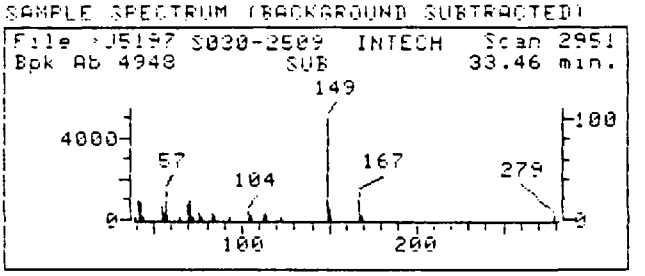
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	11.07	152.0	26296	40.00	UG/ML	97
2)	2-Fluorophenol	8.01	112.0	61536	77.30	UG/ML	93
3)	Phenol-d6	10.44	99.0	80702	151.36	UG/ML	92
16)	*Naphthalene-d8	14.69	136.0	101104	40.00	UG/ML	91
17)	Nitrobenzene-d5	12.70	82.0	40355	35.80	UG/ML	87
31)	*Acenaphthene-d10	20.08	164.0	55489	40.00	UG/ML	99
36)	2-Fluorobiphenyl	18.10	172.0	68326	35.74	UG/ML	94
51)	2,4,6-Tribromophenol	22.54	330.0	25758	54.35	UG/ML	92
52)	*Phenanthrene-d10	24.57	188.0	114015	40.00	UG/ML	99
62)	*Chrysene-d12	32.84	240.0	82875	40.00	UG/ML	98
64)	Terphenyl-d14	29.71	244.0	99924	32.64	UG/ML	88
68)	bis(2-Ethylhexyl)phthalate	33.46	149.0	10138	2.84	UG/ML	99
70)	*Perylene-d12	37.98	264.0	36990	40.00	UG/ML	95

* Compound is ISTD

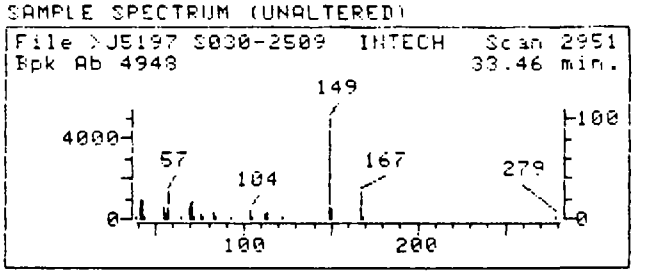
REFERENCE STANDARD SPECTRUM

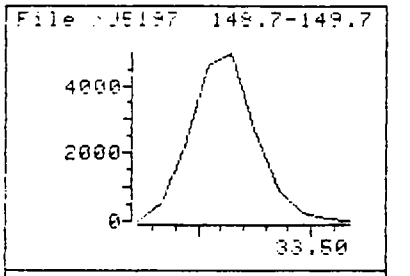


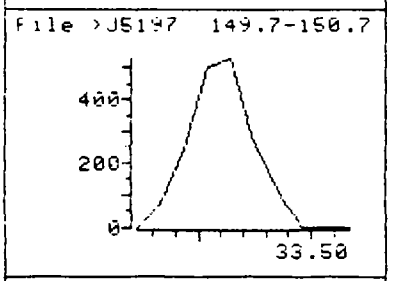
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

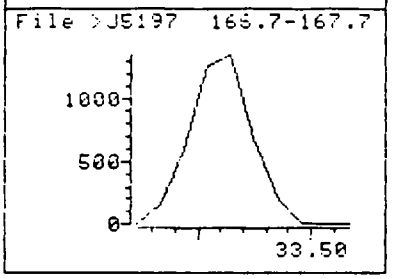


SAMPLE SPECTRUM (UNALTERED)



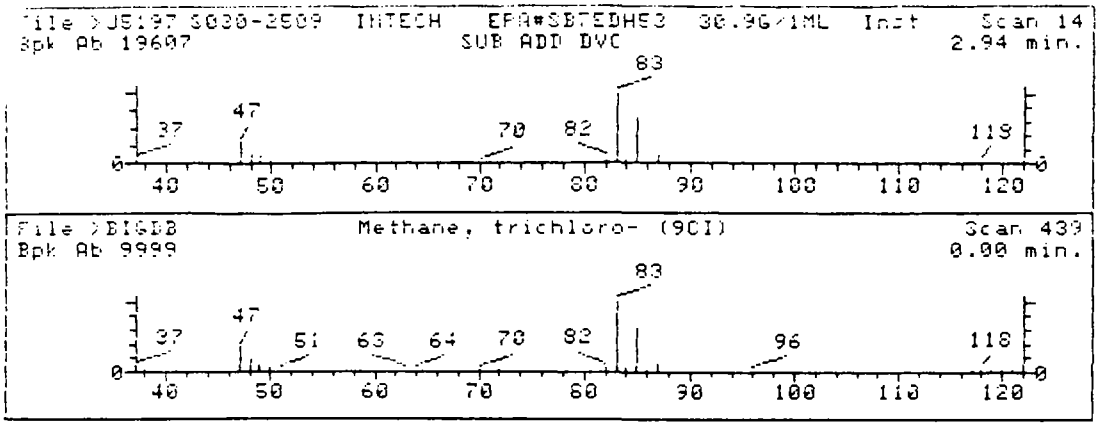






Data File: >J5197::D2 Quant Output File: ^J5197::N1
Name: S030-2509 INTECH
Misc: EPA#SB7EDH53 30.9G/1ML Instr. #2 BTL#11
Quant Time: 890701 06:21 Quant ID File: CLPBNA::SC
Injected at: 890701 05:29 Last Calibration: 890630 21:26

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2951
Retention Time: 33.46 min.
Quant Ion: 149.0
Area: 10138
Concentration: 2.84 UG/ML
q-value: 99

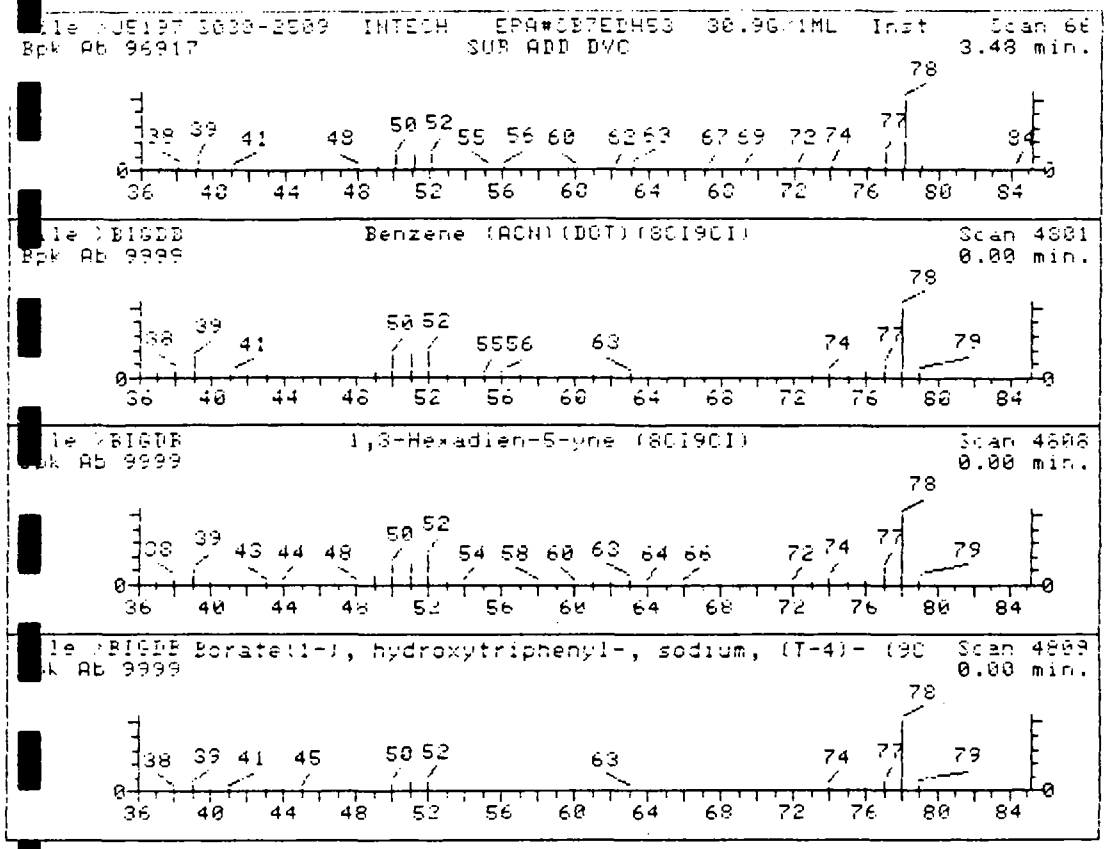


Unknown #,1
Area = 57495.00 Tentative Concentration is 14.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5197 Spectrum #: 14
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	67663	439	"BIGDB	94	12	0	0	69	0	72	96



Unknown #,2

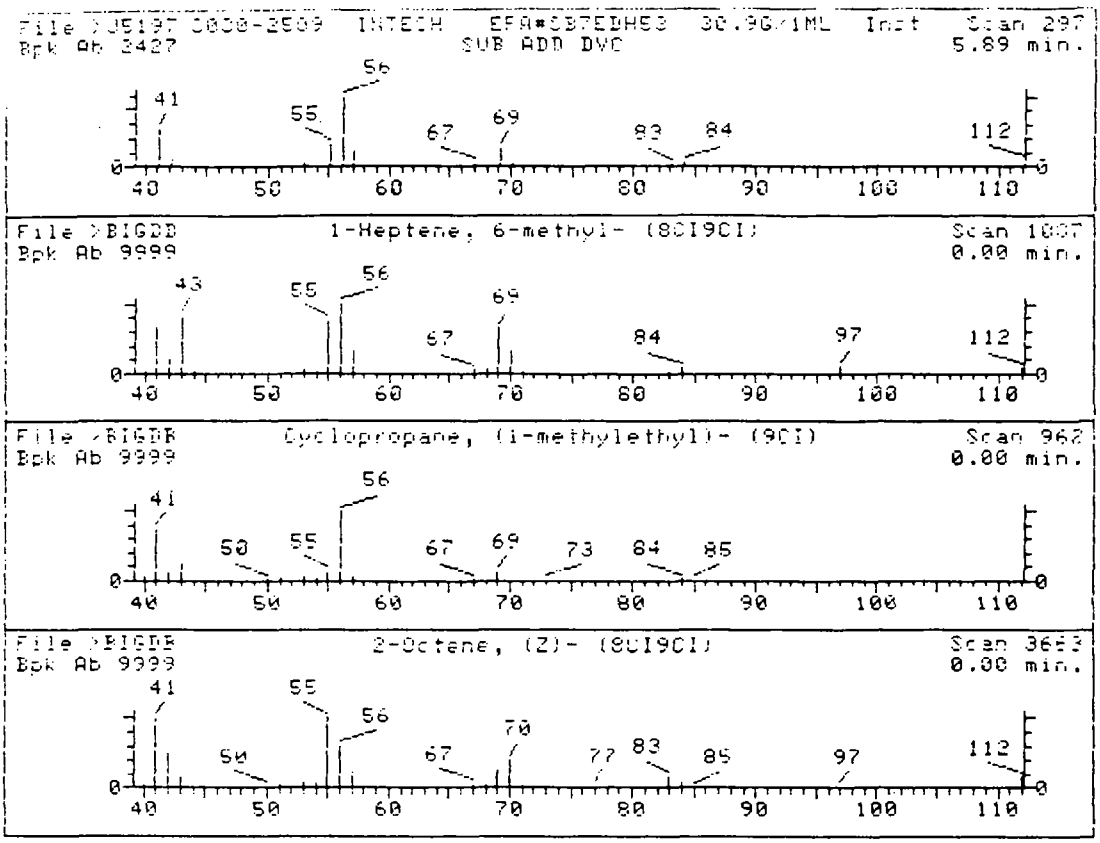
rea = 895875.0 Tentative Concentration is 210.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78	C6H6
2.	1,3-Hexadien-5-yne (8CI9CI)	78	C6H6
3.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0	
4.	1,5-Hexadiyne (8CI9CI)	78	C6H6
5.	1,5-Hexadien-3-yne (8CI9CI)	78	C6H6
6.	2-Butenedinitrile, (E)- (9CI)	78	C4H2N2
7.	2,4-Hexadiyne (8CI9CI)	78	C6H6

Sample file: >J5197 Spectrum #: 66

earch speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV
1.	90*	71432	4801	"BIGDB	73	25	0	0	51	30	57	92
2.	71*	10420903	4808	"BIGDB	67	34	1	0	53	29	29	66
3.	70	12113074	4809	"BIGDB	74	33	2	4	100	6	42	19
4.	57*	628160	4802	"BIGDB	67	56	2	-4	54	25	22	29
5.	55*	821089	4804	"BIGDB	55	33	0	4	25	44	18	60
6.	50*	764421	4803	"BIGDB	49	56	2	0	67	23	22	22
7.	35*	2809690	4806	"BIGDB	35	38	0	4	21	48	11	30

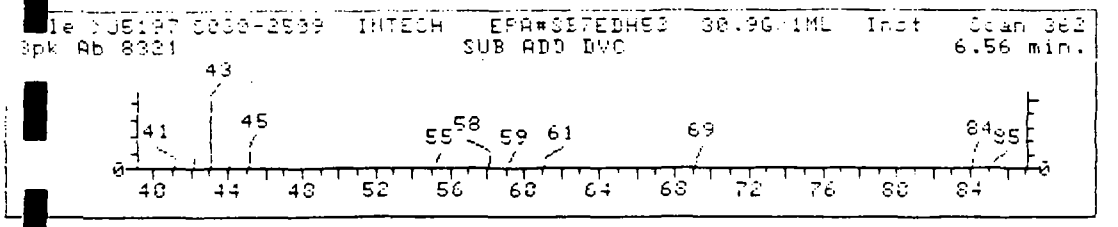


. Unknown #,4
Area = 15360.00 Tentative Concentration is 4.00

1. 1-Heptene, 6-methyl- (8CI9CI) 112 C8H16
2. Cyclopropane, (1-methylethyl)- (9CI) 84 C6H12
3. 2-Octene, (Z)- (8CI9CI) 112 C8H16

Sample file: >J5197 Spectrum #: 297
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

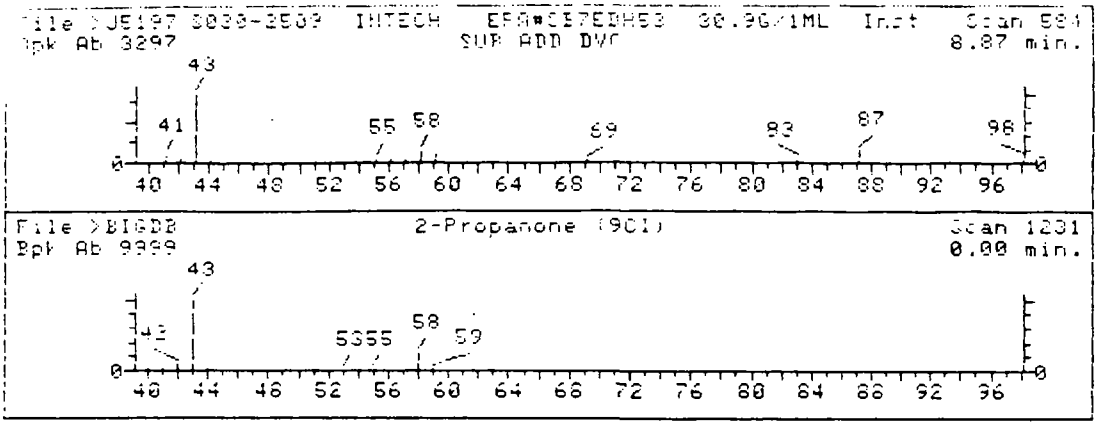
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	78*	5026766	1087	"BIGDB	28	68	3	0	82	5	55	13
2.	36*	3638355	962	"BIGDB	21	62	2	0	72	29	14	13
3.	11*	7642048	3663	"BIGDB	22	78	3	0	54	63	2	12



Unknown #,6
rea = 48677.00 Tentative Concentration is 12.00

Sample file: >J5197 Spectrum #: 362

No data base entries were retrieved.

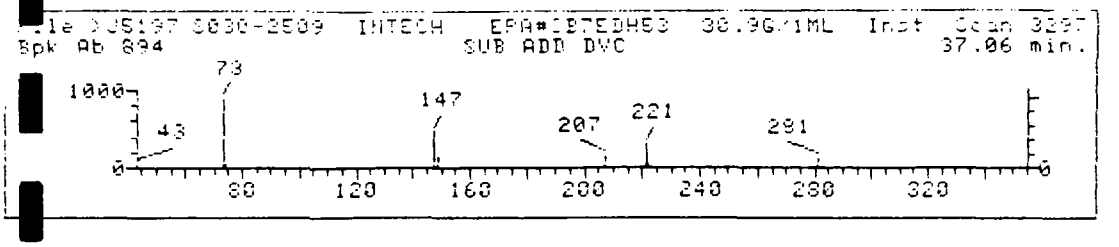


Unknown #,8
Area = 13370.00 Tentative Concentration is 3.00

1. 2-Propanone (9CI) 58 C3H6O

Sample file: >J5197 Spectrum #: 584
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	29*	67641	1231	"BIGDB	21	50	0	0	71	36	10	15



Unknown #,10
rea = 9616.00 Tentative Concentration is 4.00

Sample file: >J5197 Spectrum #: 3297

No data base entries were retrieved.

1E

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EDH54

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J5198

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340.	U
111-44-4	bis(2-Chloroethyl)ether	340.	U
95-57-8	2-Chlorophenol	340.	U
541-73-1	1,3-Dichlorobenzene	340.	U
106-46-7	1,4-Dichlorobenzene	340.	U
100-51-6	Benzyl alcohol	340.	U
95-50-1	1,2-Dichlorobenzene	340.	U
95-48-7	2-Methylphenol	340.	U
108-60-1	bis(2-Chloroisopropyl)ether	340.	U
106-44-5	4-Methylphenol	340.	U
621-64-7	N-Nitroso-di-n-propylamine	340.	U
67-72-1	Hexachloroethane	340.	U
98-95-3	Nitrobenzene	340.	U
78-59-1	Isophorone	340.	U
88-75-5	2-Nitrophenol	340.	U
105-67-9	2,4-Dimethylphenol	340.	U
65-85-0	Benzoic acid	1700.	U
111-91-1	bis(2-Chloroethoxy)methane	340.	U
120-83-2	2,4-Dichlorophenol	340.	U
120-82-1	1,2,4-Trichlorobenzene	340.	U
91-20-3	Naphthalene	340.	U
106-47-8	4-Chloroaniline	340.	U
87-68-3	Hexachlorobutadiene	340.	U
59-50-7	4-Chloro-3-methylphenol	340.	U
91-57-6	2-Methylnaphthalene	340.	U
77-47-4	Hexachlorocyclopentadiene	340.	U
88-06-2	2,4,6-Trichlorophenol	340.	U
95-95-4	2,4,5-Trichlorophenol	1700.	U
91-58-7	2-Chloronaphthalene	340.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	340.	U
208-96-8	Acenaphthylene	340.	U
606-20-2	2,6-Dinitrotoluene	340.	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SD12

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: SD450

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

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J5198

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 7.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700.	U
83-32-9	Acenaphthene	340.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	340.	U
121-14-2	2,4-Dinitrotoluene	340.	U
84-66-2	Diethylphthalate	340.	U
7005-72-3	4-Chlorophenyl-phenylether	340.	U
86-73-7	Fluorene	340.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	4,6-Dinitro-2-methylphenol	1700.	U
86-30-6	N-Nitrosodiphenylamine (1)	340.	U
101-55-3	4-Bromophenyl-phenylether	340.	U
118-74-1	Hexachlorobenzene	340.	U
87-86-5	Pentachlorophenol	1700.	U
85-01-8	Phenanthrene	340.	U
120-12-7	Anthracene	340.	U
84-74-2	Di-n-butylphthalate	340.	U
206-44-0	Fluoranthene	340.	U
129-00-0	Pyrene	340.	U
85-68-7	Butylbenzylphthalate	340.	U
91-94-1	3,3'-Dichlorobenzidine	590.	U
56-55-3	Benzo(a)anthracene	340.	U
218-01-9	Chrysene	340.	U
117-81-7	bis(2-Ethylhexyl)phthalate	990.	
117-84-0	Di-n-octylphthalate	150.	J
205-99-2	Benzo(b)fluoranthene	340.	U
207-08-9	Benzo(k)fluoranthene	340.	U
50-32-8	Benzo(a)pyrene	340.	U
193-39-5	Indeno(1,2,3-cd)pyrene	340.	U
53-70-3	Dibenz(a,h)anthracene	340.	U
191-24-2	Benzo(g,h,i)perylene	340.	U

(1) - Cannot be separated from diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EDH54

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J5199

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

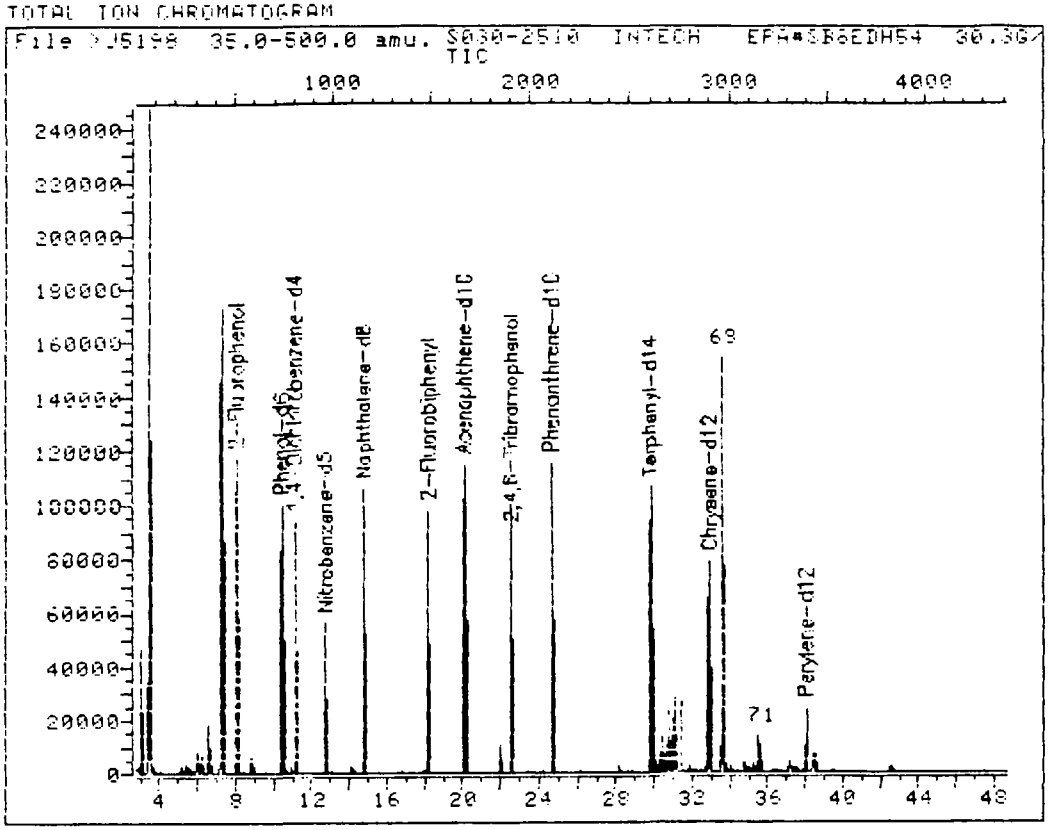
GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.00

Number TICs found: 11

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67-66-3	Methane, trichloro- (3CI)	2.96	400.	J
2.	- -	UNKNOWN AROMATIC	3.46	7000.	BJ
3.	- -	UNKNOWN	6.55	300.	J
4.	- -	UNKNOWN PHTHALATE	30.41	200.	J
5.	- -	UNKNOWN PHTHALATE	30.76	300.	J
6.	- -	UNKNOWN PHTHALATE	30.97	200.	J
7.	- -	UNKNOWN PHTHALATE	31.05	300.	J
8.	- -	UNKNOWN	31.37	300.	J
9.	- -	UNKNOWN	37.17	300.	J
10.	- -	UNKNOWN	38.46	300.	J
11.	- -	UNKNOWN	42.53	200.	J
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >J5198::D2 Quant Output File: ^J5198::N1
Name: S030-2510 INTECH
Misc: EPA#SB8EDH54 30.3G/1ML Instr. #2 BTL#12

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

Operator ID: DAVE
Quant Time: 890701 07:21
Injected at: 890701 06:30

QUANT REPORT

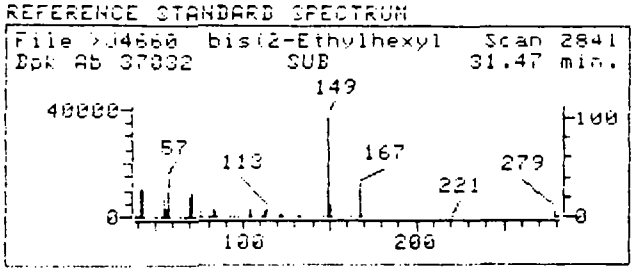
Operator ID: DAVE Quant Rev: 6 Quant Time: 890701 07:21
Output File: ^J5198::N1 Injected at: 890701 06:30
Data File: ^J5198::D2 Dilution Factor: 1.00000
Name: S030-2510 INTECH
Misc: EPA#SB8EDH54 30.3G/1ML Instr. #2 BTL#12

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

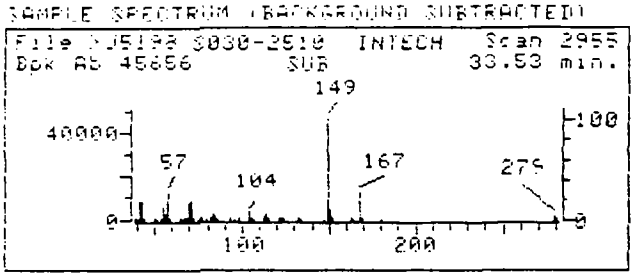
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	11.09	152.0	27528	40.00	UG/ML	96
2)	2-Fluorophenol	8.02	112.0	60697	72.83	UG/ML	95
3)	Phenol-d6	10.41	99.0	76669	137.36	UG/ML	90
16)	*Naphthalene-d8	14.73	136.0	105489	40.00	UG/ML	91
17)	Nitrobenzene-d5	12.70	82.0	35480	30.17	UG/ML	86
31)	*Acenaphthene-d10	20.08	164.0	58565	40.00	UG/ML	97
36)	2-Fluorobiphenyl	18.14	172.0	62428	30.94	UG/ML	94
51)	2,4,6-Tribromophenol	22.52	330.0	25720	51.42	UG/ML	92
52)	*Phenanthrene-d10	24.62	188.0	113328	40.00	UG/ML	99
62)	*Chrysene-d12	32.86	240.0	85595	40.00	UG/ML	98
64)	Terphenyl-d14	29.74	244.0	97826	30.94	UG/ML	88
68)	bis(2-Ethylhexyl)phthalate	33.53	149.0	105712	28.71	UG/ML	98
70)	*Perylene-d12	37.98	264.0	39152	40.00	UG/ML	97
71)	Di-n-octylphthalate	35.55	149.0	21685	4.22	UG/ML	88

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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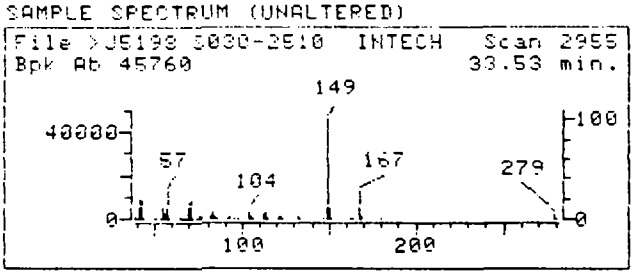
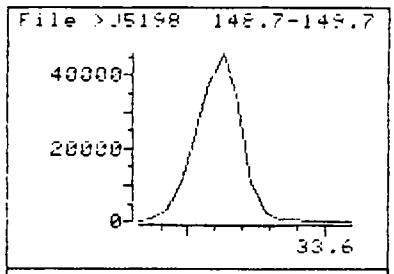
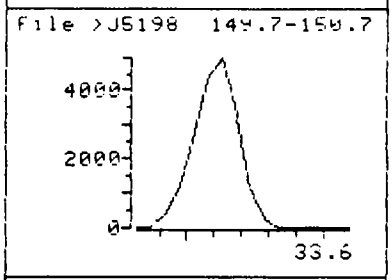
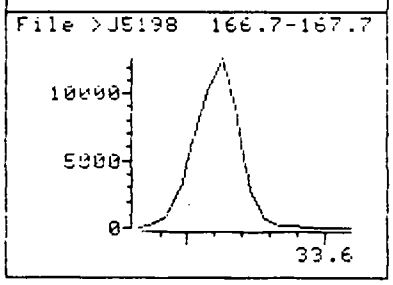




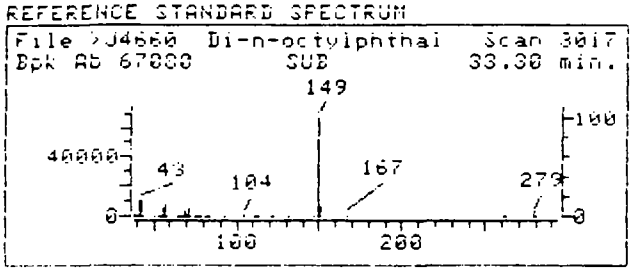




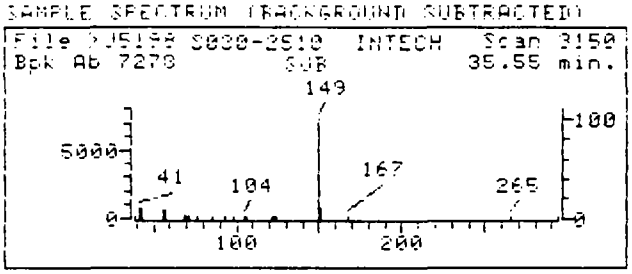
Data File: >J5198::D2 Quant Output File: ^J5198::N1
Name: S030-2510 INTECH
Misc: EPA#SB8EDH54 30.3G/1ML Instr. #2 BTL#12
Quant Time: 890701 07:21 Quant ID File: CLPBNA::SC
Injected at: 890701 06:30 Last Calibration: 890630 21:26

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2955
Retention Time: 33.53 min.
Quant Ion: 149.0
Area: 105712
Concentration: 28.71 UG/ML
q-value: 98

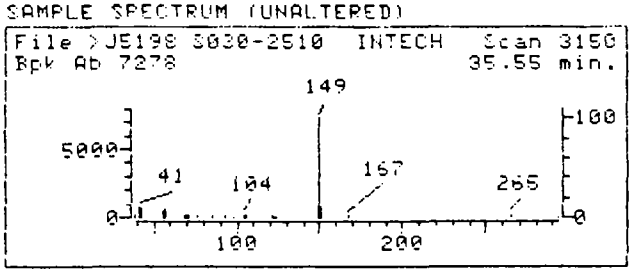
REFERENCE STANDARD SPECTRUM

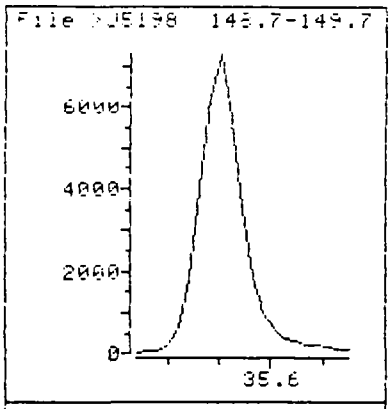


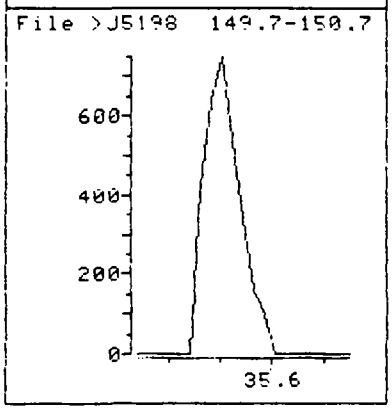
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

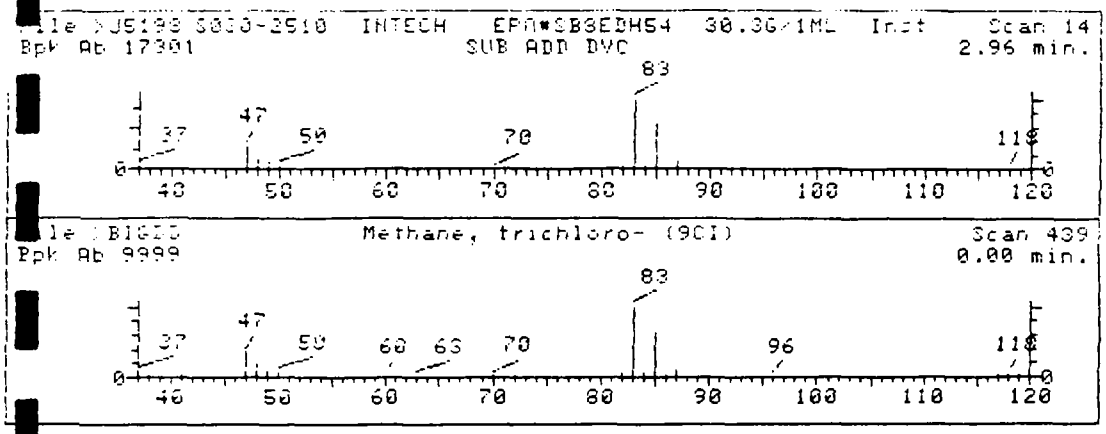






Data File: >J5198::D2 Quant Output File: ^J5198::N1
Name: S030-2510 INTECH
Misc: EPA#S88EDH54 30.3G/1ML Instr. #2 BTL#12
Quant Time: 890701 07:21 Quant ID File: CLPBNA::SC
Injected at: 890701 06:30 Last Calibration: 890630 21:26

Compound No: 71
Compound Name: Di-n-octylphthalate
Scan Number: 3150
Retention Time: 35.55 min.
Quant Ion: 149.0
Area: 21685
Concentration: 4.22 UG/ML
q-value: 88



Unknown #,1

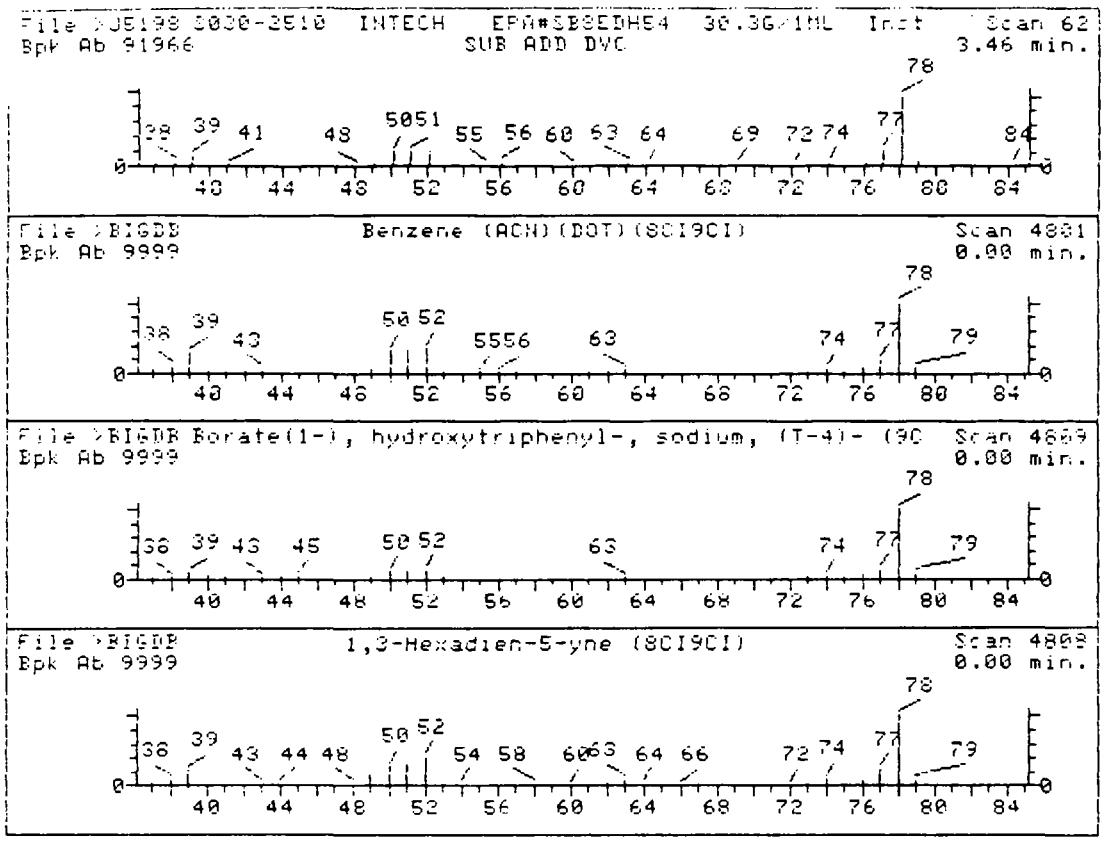
Area = 46504.00 Tentative Concentration is 11.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5198 Spectrum #: 14

Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	95*	67663	439	"BIGDB	84	22	0	0	67	0	72	95



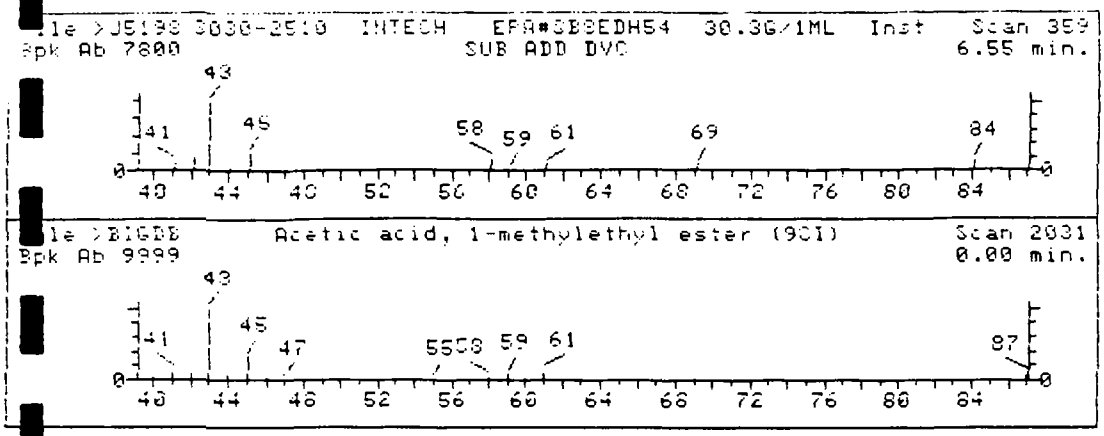
Unknown #,2

Area = 828674.0 Tentative Concentration is 190.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78 C6H6
2.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0
3.	1,3-Hexadien-5-yne (8CI9CI)	78 C6H6
4.	1,5-Hexadiyne (8CI9CI)	78 C6H6
5.	1,5-Hexadien-3-yne (8CI9CI)	78 C6H6
6.	2,4-Hexadiyne (8CI9CI)	78 C6H6
7.	Propanedinitrile, methylene- (9CI)	78 C4H2N2

Sample file: >J5198 Spectrum #: 62
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	71432	4801	"BIGDB	78	20	0	0	51	29	57	93
2.	70	12113074	4809	"BIGDB	74	33	2	4	100	8	42	19
3.	67*	10420903	4808	"BIGDB	60	26	1	2	43	29	27	59
4.	57*	628160	4802	"BIGDB	67	56	2	-4	54	23	22	29
5.	55*	821089	4804	"BIGDB	55	33	0	4	25	43	18	60
6.	35*	2809690	4806	"BIGDB	35	38	0	4	21	47	11	30
7.	31*	922645	4805	"BIGDB	36	69	2	0	78	34	12	14

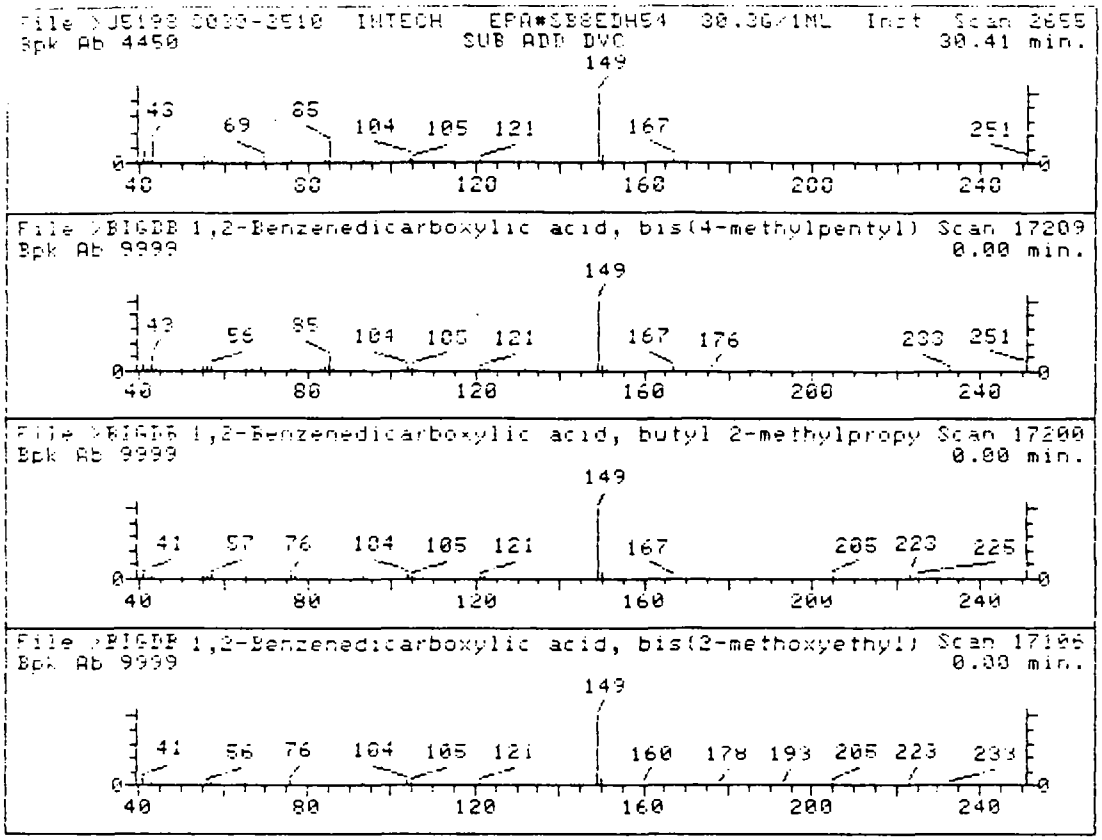


Unknown #,6
rea = 38259.00 Tentative Concentration is 9.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2

Sample file: >J5198 Spectrum #: 359
earch speed: 3 Tilting option: F No. of ion ranges searched: 49

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	41	108214	2031	"BIGDB	35	44	2	0	76	23	17	12

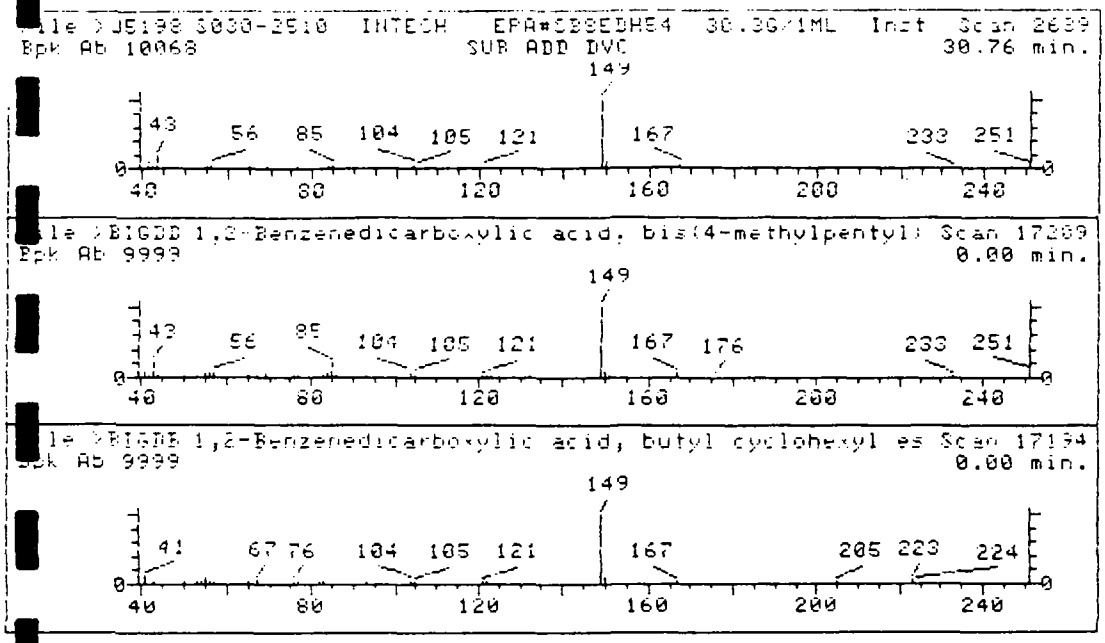


Unknown #,11
Area = 28192.00 Tentative Concentration is 5.00

1. 1,2-Benzenedicarboxylic acid, bis(4-methylpentyl) es 334 C20H30O4
   ter (9CI)
2. 1,2-Benzenedicarboxylic acid, butyl 2-methylpropyl e 278 C16H22O4
   ster (9CI)
3. 1,2-Benzenedicarboxylic acid, bis(2-methoxyethyl) es 282 C14H18O6
   ter (9CI)

Sample file: >J5198 Spectrum #: 2655
Search speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83	146509	17209	"BIGDB	91	32	2	1	100	0	57	23
2.	41	17851535	17200	"BIGDB	58	48	2	0	100	25	17	12
3.	35	117828	17106	"BIGDB	53	49	2	0	100	26	14	12

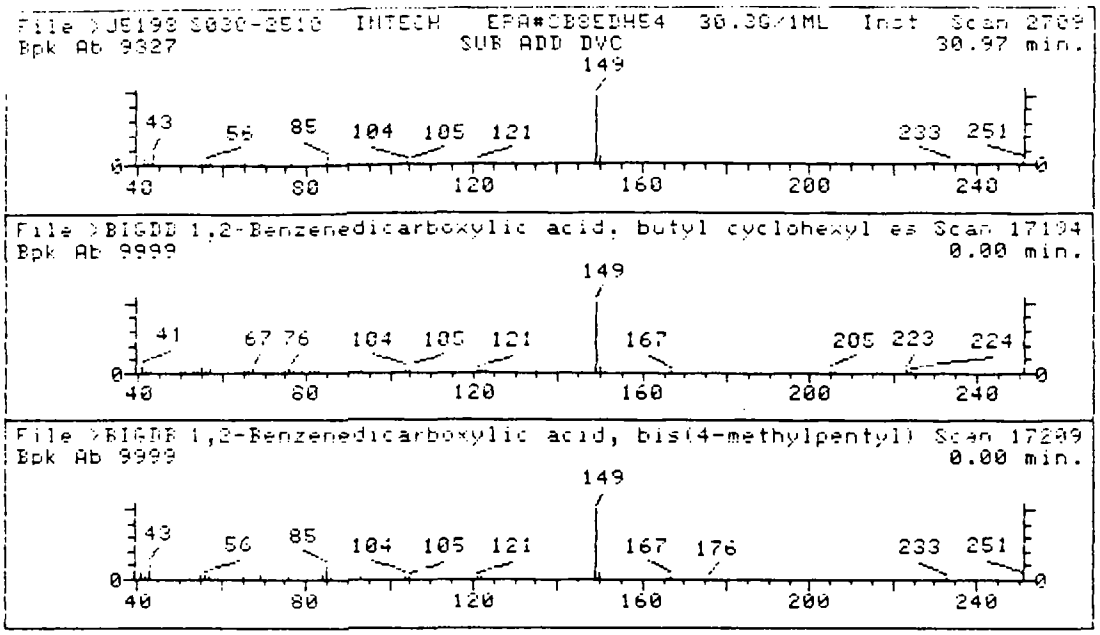


Unknown #,14
Area = 46218.00 Tentative Concentration is 8.00

1. 1,2-Benzenedicarboxylic acid, bis(4-methylpentyl) es ter (9CI) 334 C20H30O4
2. 1,2-Benzenedicarboxylic acid, butyl cyclohexyl ester (9CI) 304 C18H24O4

Sample file: >J5198 Spectrum #: 2689
Search speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	78	146509	17209	"BIGDB	70	53	2	0	100	0	55	16
2.	52	84640	17194	"BIGDB	59	49	2	0	100	16	20	12

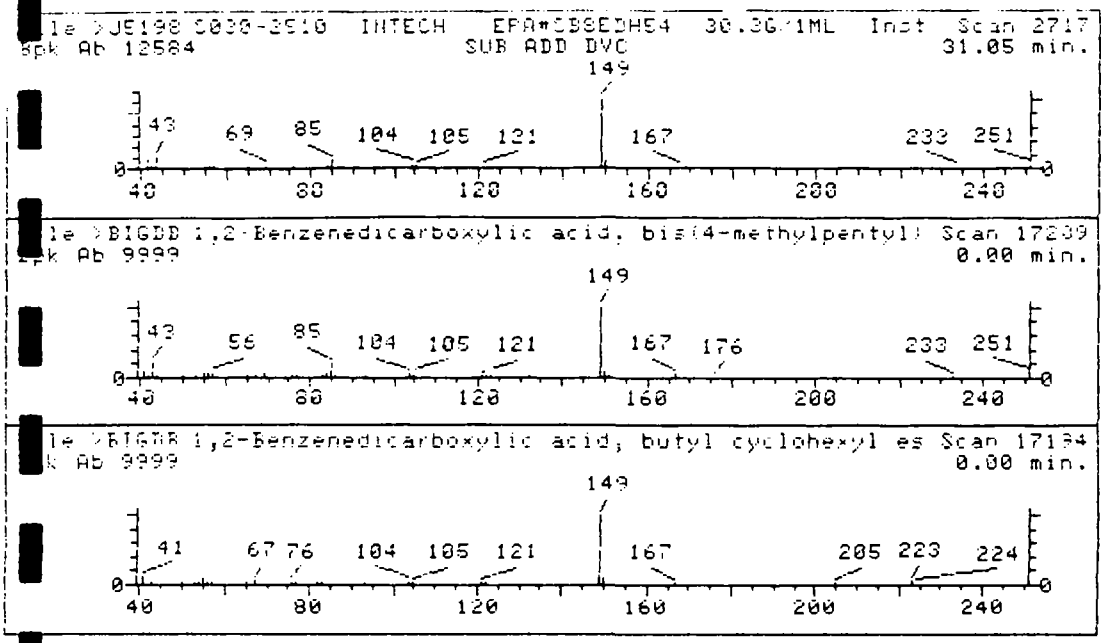


. Unknown #,16
Area = 37302.00 Tentative Concentration is 6.00

1. 1,2-Benzenedicarboxylic acid, butyl cyclohexyl ester 304 C18H24O4 (9CI)
2. 1,2-Benzenedicarboxylic acid, bis(4-methylpentyl) es 334 C20H30O4 ter (9CI)

Sample file: >J5198 Spectrum #: 2709
Search speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60	84640	17194	"BIGDB	59	49	2	0	100	14	30	12
2.	33	146509	17209	"BIGDB	70	53	2	0	64	34	12	16

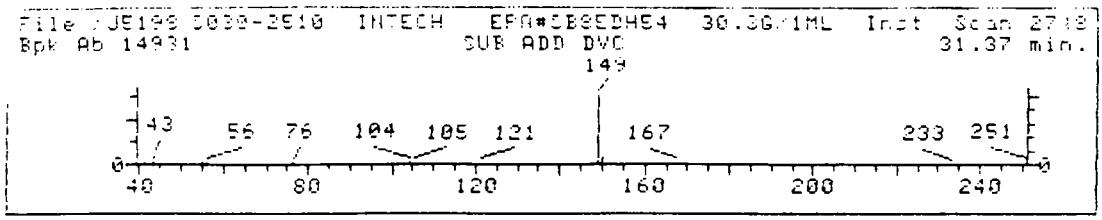


Unknown #,17
rea = 55469.00 Tentative Concentration is 9.00

1. 1,2-Benzenedicarboxylic acid, bis(4-methylpentyl) es 334 C20H3004
   ter (9CI)
2. 1,2-Benzenedicarboxylic acid, butyl cyclohexyl ester 304 C18H2404
   (9CI)

Sample file: >J5198 Spectrum #: 2717
Search speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83	146509	17209	"BIGDB	92	31	2	0	68	3	57	27
2.	52	84640	17194	"BIGDB	60	48	2	0	98	17	20	12



Unknown #,18
Area = 49940.00 Tentative Concentration is 8.00

Sample file: >J5198 Spectrum #: 2748

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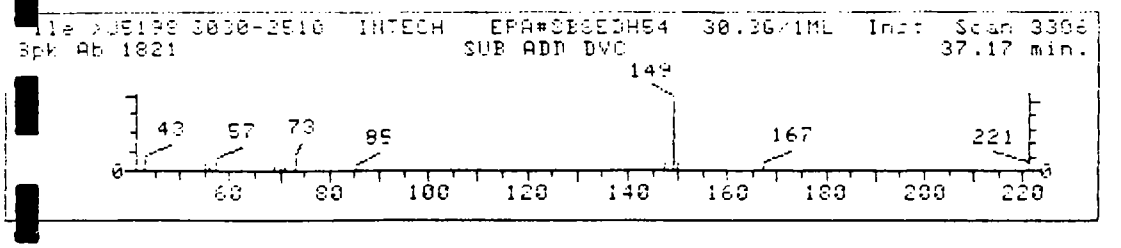

Unknown #,22
rea = 26123.00 Tentative Concentration is 10.00

Sample file: >J5198 Spectrum #: 3306

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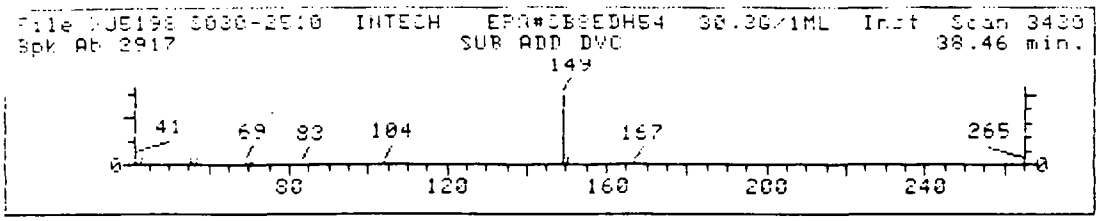

. Unknown #,23
Area = 24907.00 Tentative Concentration is 10.00

Sample file: >J5198 Spectrum #: 3430

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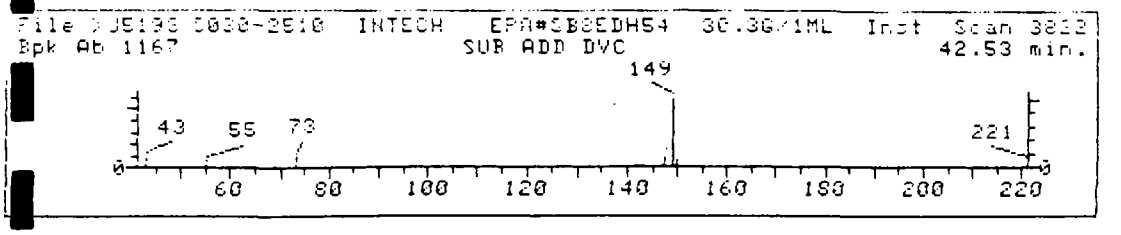

Unknown #,24
rea = 12815.00 Tentative Concentration is 5.00

Sample file: >J5198 Spectrum #: 3822

No data base entries were retrieved.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EDH55

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.2 (g/mL) S Lab File ID: J5253

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 7/ 5/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/89

GPC Cleanup: (Y/N) N pH: 9.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1800.	U
121-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SDW53

Lab Name: INTECH Contract: 68D90148

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: SDW50

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

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J8253

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 7/ 5/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/89

GPC Cleanup: (Y/N) N pH: 9.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	2-Nitroaniline	1800.	U
83-32-9	Acenaphthene	350.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene	350.	U
85-68-7	Butylbenzylphthalate	330.	U
91-94-1	3,3'-Dichlorobenzidine	710.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	2000.	
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

1F

EPA SAMPLE NO.

SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EDW5F

Lab Name: INTECH Contract: 68D90049

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDW50

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

Sample wt/vol: 30.3 (g/mL) G Lab File ID: I5253

Level: (low/med) LOW Date Received: 6/10/99

% Moisture: not dec. 7. dec. 0. Date Extracted: 7/ 5/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/99

GPC Cleanup: (Y/N) N pH: 9.9 Dilution Factor: 1.00

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 67-66-3	Methane, trichloro- (9CI)	3.16	600.	J
2. -	UNKNOWN	2.59	100.	J
3. - -	UNKNOWN	2.65	300.	J
4. - -	UNKNOWN	6.91	100.	J
5. - -	UNKNOWN	7.56	7000.	J A
6.				
7.				
8.				
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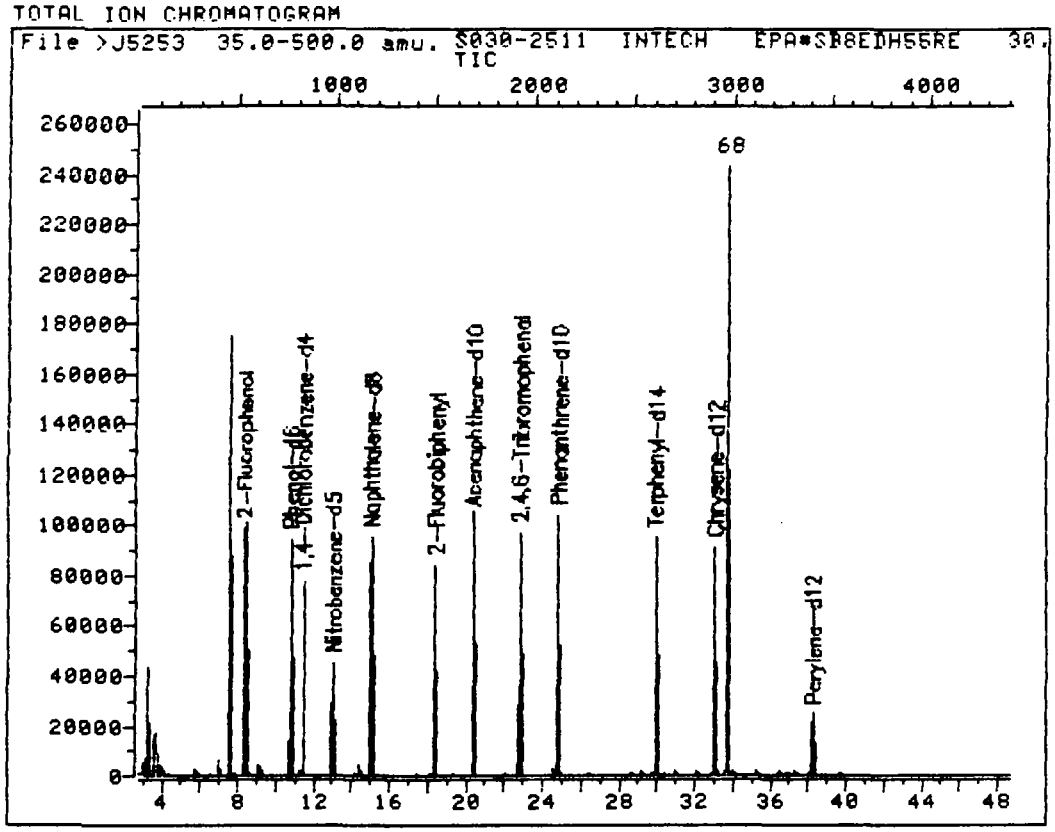
FORM I SV-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >J5253::D3 Quant Output File: ^J5253::N1
Name: S030-2511 INTECH
Misc: EPA#SB8EDH55RE 30.3G/1ML Instr. #2 BTL#34

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890707 08:53

Operator ID: MANAGER
Quant Time: 890707 16:36
Injected at: 890707 15:44

QUANT REPORT

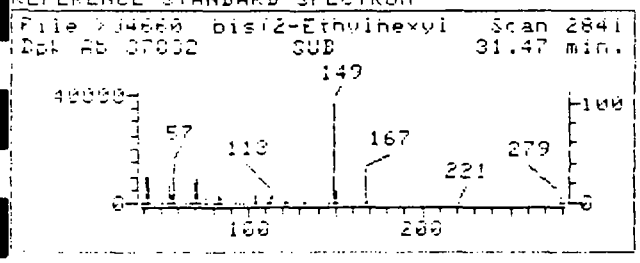
Operator ID: MANAGER Quant Rev: 6 Quant Time: 890707 16:36
Output File: ^J5253::N1 Injected at: 890707 15:44
Data File: >J5253::D3 Dilution Factor: 1.00000
Name: S030-2511 INTECH
Misc: EPA#SB8EDH55RE 30.3G/1ML Instr. #2 BTL#34

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890707 08:53

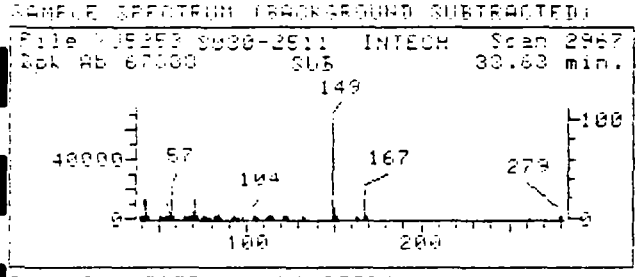
	Compound	R.T.	Q ion	Area	Conc	Units
1)	*1,4-Dichlorobenzene-d4	11.38	152.0	22165	40.00	UG/ML
2)	2-Fluorophenol	8.32	112.0	51137	85.60	UG/ML
3)	Phenol-d6	10.75	99.0	67915	185.12	UG/ML
16)	*Naphthalene-d8	14.98	136.0	91693	40.00	UG/ML
17)	Nitrobenzene-d5	13.00	82.0	32297	38.14	UG/ML
31)	*Acenaphthene-d10	20.32	164.0	53268	40.00	UG/ML
36)	2-Fluorobiphenyl	18.35	172.0	54685	36.05	UG/ML
51)	2,4,6-Tribromophenol	22.79	330.0	28556	78.99	UG/ML
52)	*Phenanthrene-d10	24.79	188.0	109201	40.00	UG/ML
62)	*Chrysene-d12	33.01	240.0	89242	40.00	UG/ML
64)	Terphenyl-d14	29.89	244.0	80225	31.35	UG/ML
68)	bis(2-Ethylhexyl)phthalate	33.63	149.0	178162	55.54	UG/ML
70)	*Perylene-d12	38.24	264.0	46107	40.00	UG/ML

* Compound is ISTD

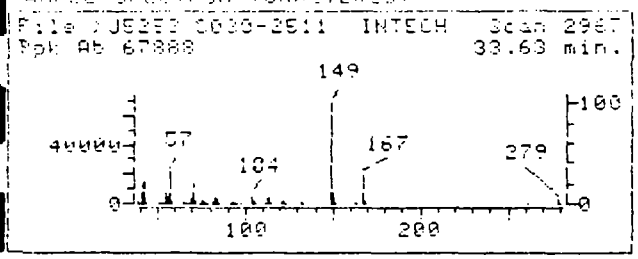
REFERENCE STANDARD SPECTRUM

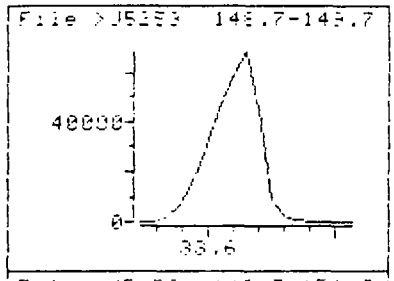


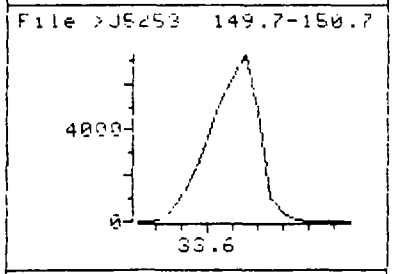
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

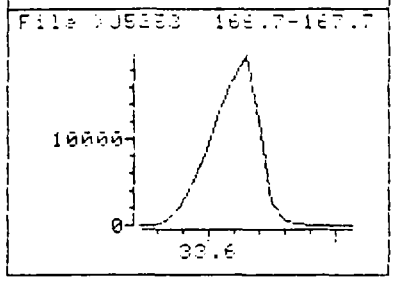


SAMPLE SPECTRUM (UNALTERED)



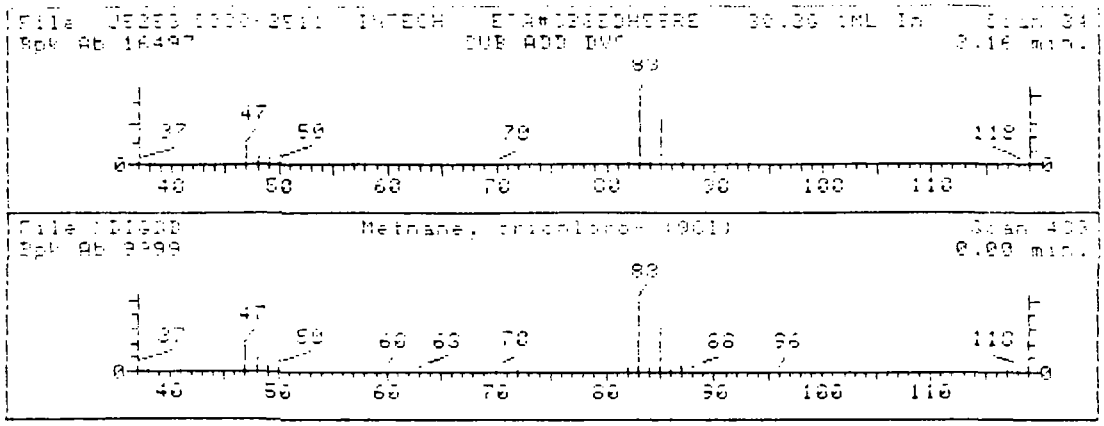






Data File: >J5253::D3 Quant Output File: ^J5253::N1
Name: 5030-2511 INTECH
Misc: EPA#588EDH55PE 30.3G/1ML Instr. #2 BTL#34
Quant Time: 890707 16:36 Quant ID File: CLPBNA::SC
Injected at: 890707 15:44 Last Calibration: 890707 08:53

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2967
Retention Time: 33.63 min.
Quant Ion: 149.0
Area: 178162
Concentration: 55.54 UG/ML
q-value: 96

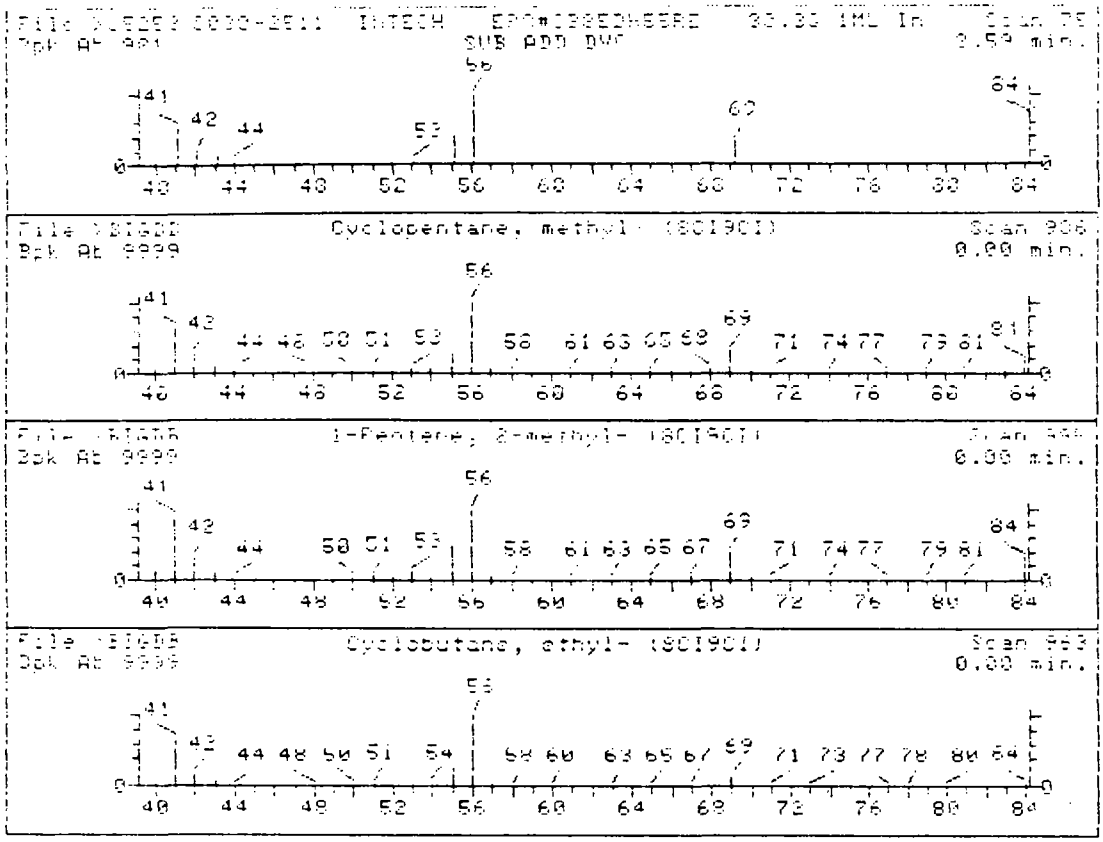


Unknown #,1
Area = 56039.00 Tentative Concentration is 16.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5253 Spectrum #: 34
Search speed: 3 Tilting option: F No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	88	67663	439	"BIGDB	89	17	1	0	68	0	65	57

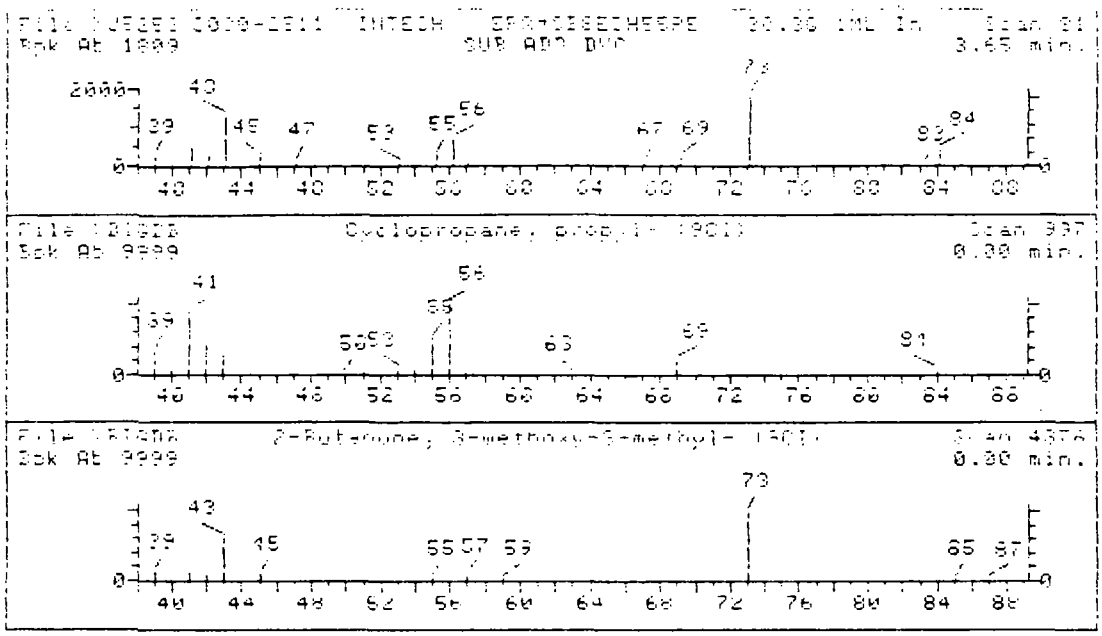


Unknown #,2
Area = 12178.00 Tentative Concentration is 4.00

1.	Cyclopentane, methyl- (8CI9CI)	84 C6H12
2.	1-Pentene, 2-methyl- (8CI9CI)	84 C6H12
3.	Cyclobutane, ethyl- (8CI9CI)	84 C6H12
4.	1H-Tetrazole, 5-methyl- (8CI9CI)	84 C2H4N4
5.	6-Oxabicyclo[3.1.0]hexane (8CI9CI)	84 C5H8O
6.	Pentane, 3-methylene- (9CI)	84 C6H12

Sample file: >J5253 Spectrum #: 75
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	39*	96377	986	"BIGDB	32	55	2	0	79	29	14	16
2.	28*	763291	995	"BIGDB	27	74	2	0	57	36	10	14
3.	27*	4806615	963	"BIGDB	22	61	2	0	85	39	10	13
4.	25*	4076362	998	"BIGDB	24	60	2	0	100	46	7	14
5.	25*	285676	59	"BIGDB	27	63	3	0	45	50	7	13
6.	25*	760214	5684	"BIGDB	28	74	3	0	55	43	8	13

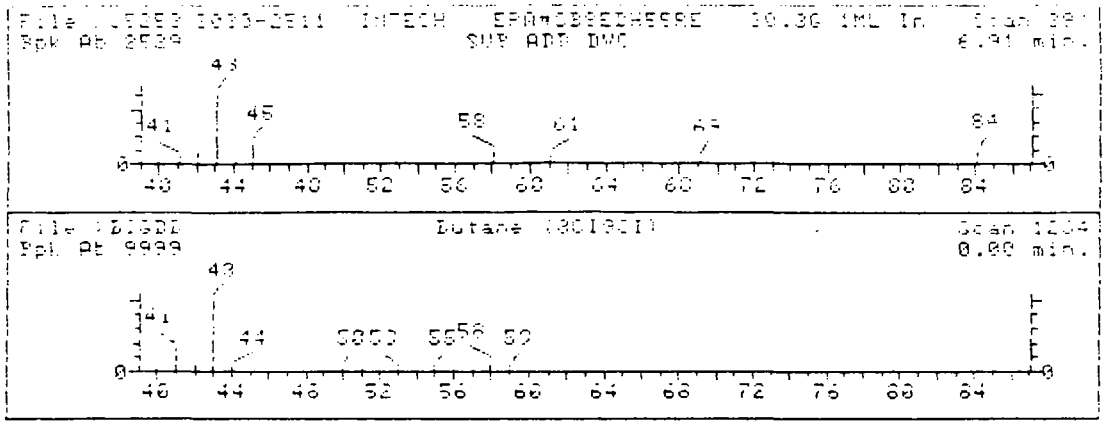


. Unknown #,3
Area = 27595.00 Tentative Concentration is 8.00

1. Cyclopropane, propyl- (9CI) 84 C6H12
2. 2-Butanone, 3-methoxy-3-methyl- (9CI) 116 C6H12O2

Sample file: >J5253 Spectrum #: 81
Search speed: 3 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	26*	2415727	997	"BIGDB	39	34	2	1	29	38	10	
2.	25	36687986	4376	"BIGDB	36	18	2	0	100	47	7	

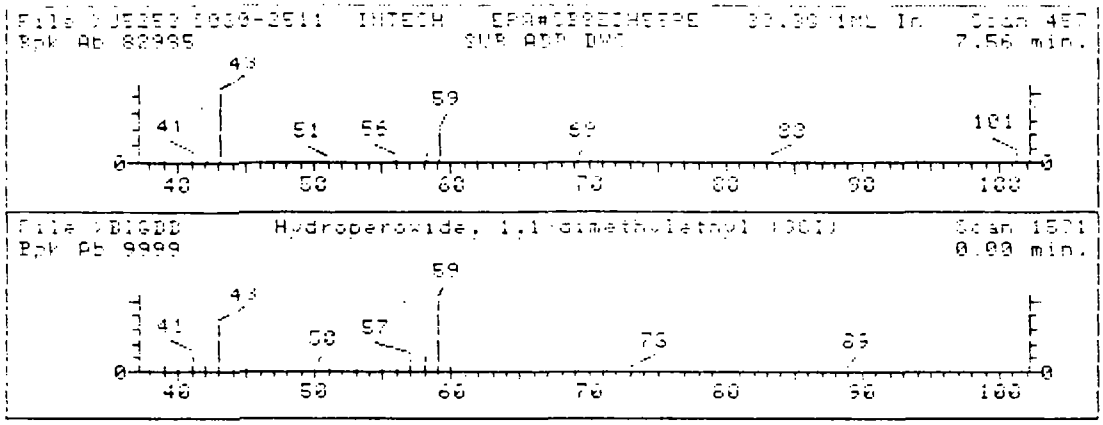


Unknown #,4
Area = 14948.00 Tentative Concentration is 4.00

1. Butane (8CI9CI) 58 C4H10

Sample file: >J5253 Spectrum #: 394
Search speed: 3 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	30*	106978	1234	"BIGDB	23	56	2	0	100	34	12	13



. Unknown #,5
Area = 668688.0 Tentative Concentration is 190.00

1. Hydroperoxide, 1,1-dimethylethyl (9CI) 90 C4H10O2

Sample file: >J5253 Spectrum #: 457
Search speed: 3 Tilting option: F No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	25	75912	1591	"BIGDB	34	31	1	0	37	50	7	12

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH52

Lab Name: INTECH Contract: 68D90043

Lab Code: INTECH Case No.: 13114 SAC No.: SDG No.: [illegible]

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: [illegible]

Level: (low/med) LOW Date Received: 6/10/[illegible]

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/[illegible]

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/10/[illegible]

GPC Cleanup: (Y/N) N pH: 10.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360.	U
111-44-4	bis(2-Chloroethyl)ether	360.	U
95-57-8	2-Chlorophenol	360.	U
541-73-1	1,3-Dichlorobenzene	360.	U
106-46-7	1,4-Dichlorobenzene	360.	U
100-51-6	Benzyl alcohol	360.	U
95-50-1	1,2-Dichlorobenzene	360.	U
95-48-7	2-Methylphenol	360.	U
108-60-1	bis(2-Chloroisopropyl)ether	360.	U
106-44-5	4-Methylphenol	360.	U
621-64-7	N-Nitroso-di-n-propylamine	360.	U
67-72-1	Hexachloroethane	360.	U
98-95-3	Nitrobenzene	360.	U
78-59-1	Isophorone	360.	U
88-75-5	2-Nitrophenol	360.	U
105-67-9	2,4-Dimethylphenol	360.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	360.	U
120-83-2	2,4-Dichlorophenol	360.	U
120-82-1	1,2,4-Trichlorobenzene	360.	U
91-20-3	Naphthalene	360.	U
106-47-8	4-Chloroaniline	360.	U
87-68-3	Hexachlorobutadiene	360.	U
59-50-7	4-Chloro-3-methylphenol	360.	U
91-57-6	2-Methylnaphthalene	360.	U
77-47-4	Hexachlorocyclopentadiene	360.	U
88-06-2	2,4,6-Trichlorophenol	360.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	360.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	360.	U
208-96-8	Acenaphthylene	360.	U
606-20-2	2,6-Dinitrotoluene	360.	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EDH56

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 13114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: I5250

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/10/89

GPC Cleanup: (Y/N) N pH: 10.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		C
99-09-2	3-Nitroaniline	1800.	U	
83-32-9	Acenaphthene	360.	U	
51-28-5	2,4-Dinitrophenol	1800.	U	
100-02-7	4-Nitrophenol	1800.	U	
132-64-9	Dibenzofuran	360.	U	
121-14-2	2,4-Dinitrotoluene	360.	U	
84-66-2	Diethylphthalate	360.	U	
7005-72-3	4-Chlorophenyl-phenylether	360.	U	
86-73-7	Fluorene	360.	U	
100-01-6	4-Nitroaniline	1800.	U	
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U	
86-30-6	N-Nitrosodiphenylamine (1)	360.	U	
101-55-3	4-Bromophenyl-phenylether	360.	U	
118-74-1	Hexachlorobenzene	360.	U	
87-86-5	Pentachlorophenol	1800.	U	
85-01-8	Phenanthrene	360.	U	
120-12-7	Anthracene	360.	U	
84-74-2	Di-n-butylphthalate	39.	J	
206-44-0	Fluoranthene	360.	U	
129-00-0	Pyrene	360.	U	
85-68-7	Butylbenzylphthalate	360.	U	
91-94-1	3,3'-Dichlorobenzidine	720.	U	
56-55-3	Benzo(a)anthracene	360.	U	
218-01-9	Chrysene	360.	U	
117-81-7	bis(2-Ethylhexyl)phthalate	360.	J	
117-84-0	Di-n-octylphthalate	360.	U	
205-99-2	Benzo(b)fluoranthene	360.	U	
207-08-9	Benzo(k)fluoranthene	360.	U	
50-32-8	Benzo(a)pyrene	360.	U	
193-39-5	Indeno(1,2,3-cd)pyrene	360.	U	
53-70-3	Dibenz(a,h)anthracene	360.	U	
191-24-2	Benzo(g,h,i)perylene	360.	U	

(1) - Cannot be separated from diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDW99

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDW99

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5269

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

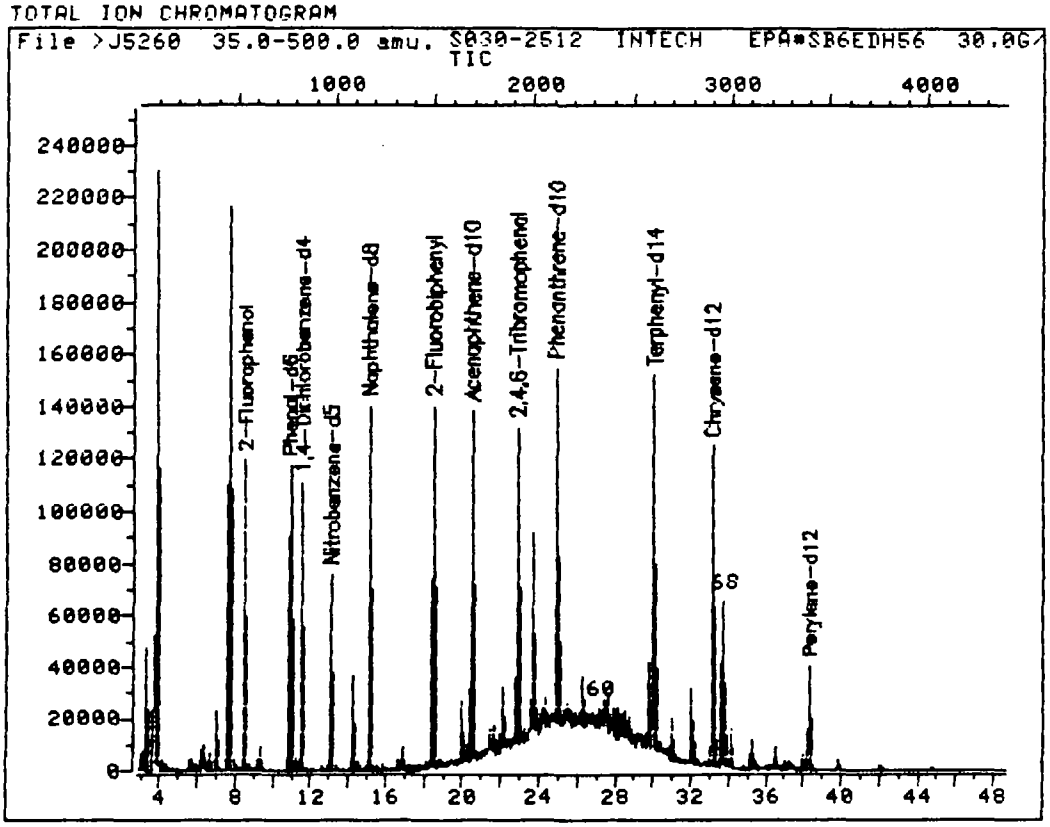
Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/89

GPC Cleanup: (Y/N) N pH: 10.0 Dilution Factor: 1.00

Number TICs found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67-66-3	Methane, trichloro- (9CI)	3.22	400.	J
2.	- -	UNKNOWN	3.68	1000.	J
3.	- -	UNKNOWN AROMATIC	3.79	4000.	J
4.	- -	UNKNOWN	6.92	400.	J
5.	- -	UNKNOWN	7.64	7000.	J A
6.	- -	UNKNOWN	14.15	400.	J
7.	- -	UNKNOWN HYDROCARBON	19.92	200.	J
8.	- -	UNKNOWN	22.09	200.	J
9.	- -	UNKNOWN HYDROCARBON	23.65	600.	J
10.	- -	UNKNOWN HYDROCARBON	25.04	600.	J
11.	- -	UNKNOWN HYDROCARBON	26.16	200.	J
12.	- -	UNKNOWN HYDROCARBON	27.49	100.	J
13.	- -	UNKNOWN AROMATIC	27.94	100.	J
14.	- -	UNKNOWN AROMATIC	28.18	100.	J
15.	- -	UNKNOWN	28.43	100.	J
16.	- -	UNKNOWN	29.74	200.	J
17.	- -	UNKNOWN	31.92	200.	J
18.	- -	UNKNOWN	33.73	200.	J
19.	- -	UNKNOWN HYDROCARBON	36.50	200.	J
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >J5260::D2 Quant Output File: ^J5260::N1
Name: S030-2512 INTECH
Misc: EPA#SB6EDH56 30.0G/1ML Instr. #2 BTL# 3

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

Operator ID: JULIE
Quant Time: 890711 15:45
Injected at: 890710 21:54

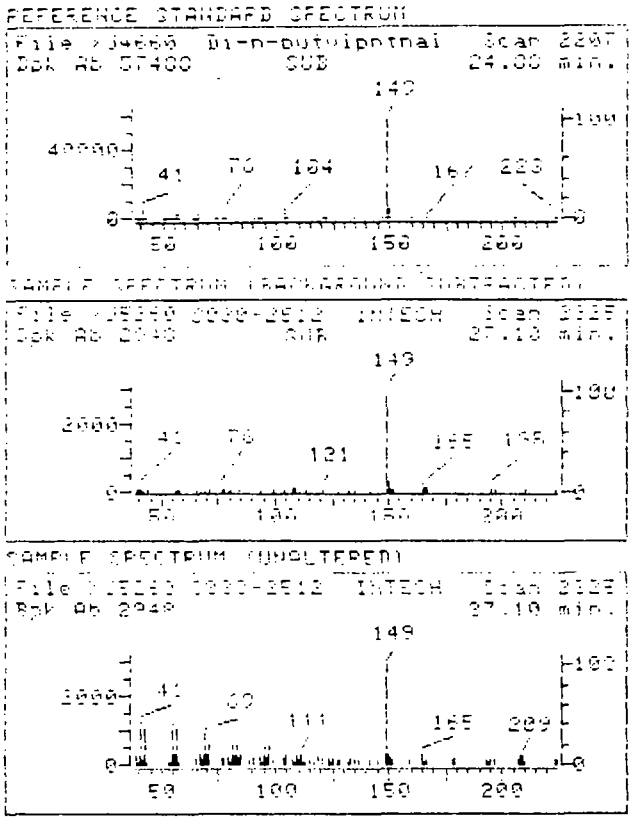
QUANT REPORT

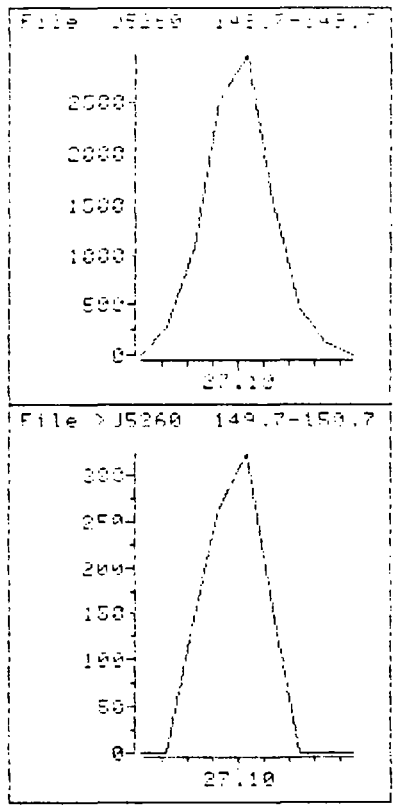
Operator ID: JULIE Quant Rev: 6 Quant Time: 890711 15:45
Output File: ^J5260::N1 Injected at: 890710 21:54
Data File: >J5260::D2 Dilution Factor: 1.00000
Name: S030-2512 INTECH
Misc: EPA#SB6EDH56 30.0G/1ML Instr. #2 BTL# 3

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*1,4-Dichlorobenzene-d4	11.48	152.0	32533	40.00	UG/ML
2)	2-Fluorophenol	8.42	112.0	62467	72.06	UG/ML
3)	Phenol-d6	10.81	99.0	106623	185.47	UG/ML
16)	*Naphthalene-d8	15.04	136.0	128468	40.00	UG/ML
17)	Nitrobenzene-d5	13.02	82.0	55312	46.18	UG/ML
31)	*Acenaphthene-d10	20.40	164.0	73599	40.00	UG/ML
36)	2-Fluorobiphenyl	18.40	172.0	90724	45.87	UG/ML
51)	2,4,6-Tribromophenol	22.79	330.0	25983	57.64	UG/ML
52)	*Phenanthrene-d10	24.83	188.0	149108	40.00	UG/ML
60)	Di-n-butylphthalate	27.10	149.0	5625	1.06	UG/ML
62)	*Chrysene-d12	33.08	240.0	138265	40.00	UG/ML
64)	Terphenyl-d14	29.97	244.0	147907	34.53	UG/ML
68)	bis(2-Ethylhexyl)phthalate	33.64	149.0	38641	7.29	UG/ML
70)	*Perylene-d12	38.27	264.0	77614	40.00	UG/ML

* Compound is ISTD

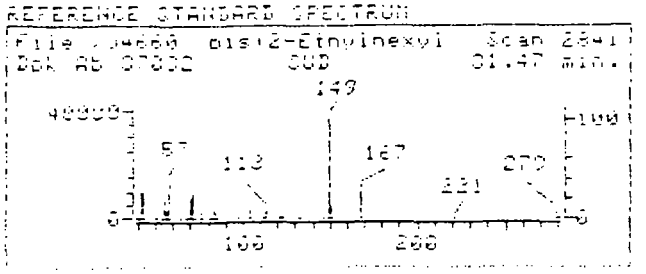


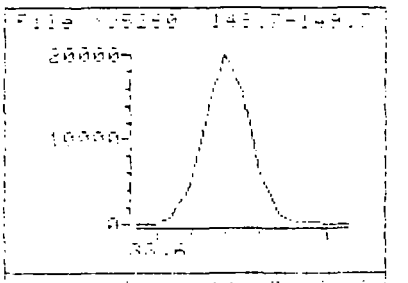


Data File: >J5260::D2 Quant Output File: ^J5260::N1
Name: 5030-2512 INTECH
Misc: EPA#SB6EDH56 30.0G/1ML Instr. #2 BIL# 4
Quant Time: 890711 15:45 Quant ID File: CLPBNA::SC
Injected at: 890710 21:54 Last Calibration: 890711 15:49

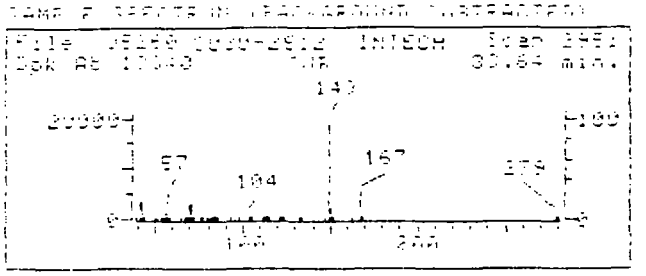
Compound No: 60
Compound Name: Di-n-butylphthalate
Scan Number: 2325
Retention Time: 27.10 min.
Quant Ion: 149.0
Area: 5625
Concentration: 1.06 UG/ML
q-value: 97

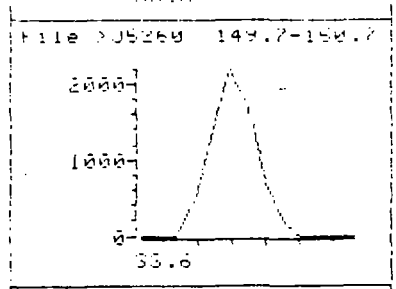
REFERENCE STANDARD SPECTRUM



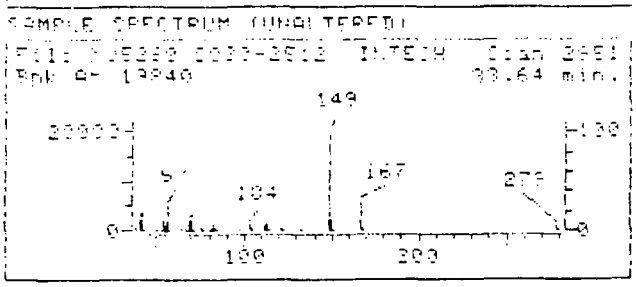


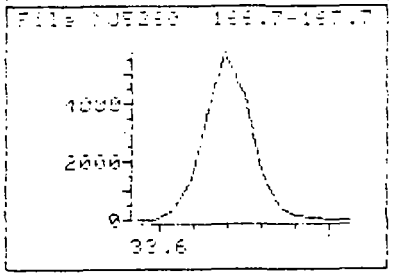
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





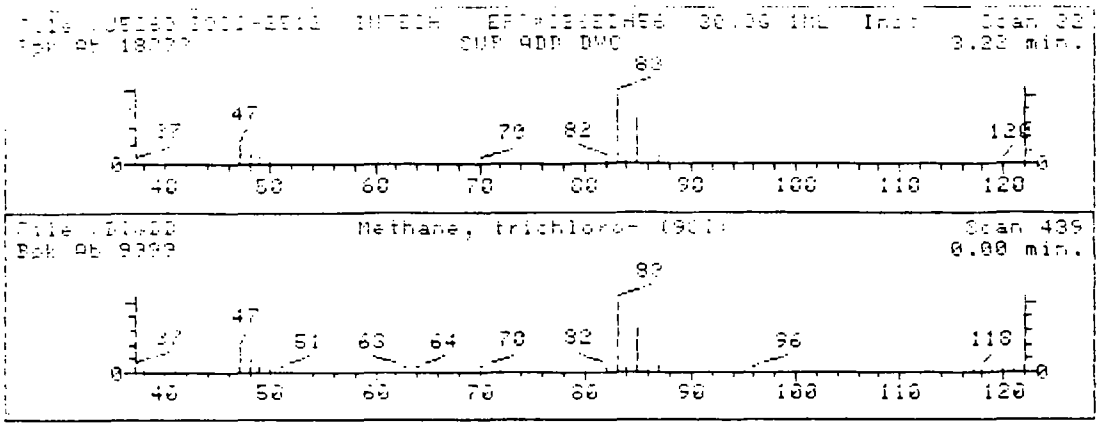
SAMPLE SPECTRUM (UNALTERED)





Data File: >J5260::U2 Quant Output File: >J5260::N1
Name: S030-2512 INTECH
Misc: EPA#SB6EDH56 30.UG/1ML Instr. #2 BIL# 3
Quant Time: 890711 15:45 Quant ID File: CLPBNA::SC
Injected at: 890710 21:54 Last Calibration: 890711 15:38

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2951
Retention Time: 33.64 min.
Quant Ion: 149.0
Area: 38641
Concentration: 7.29 UG/ML
q-value: 97

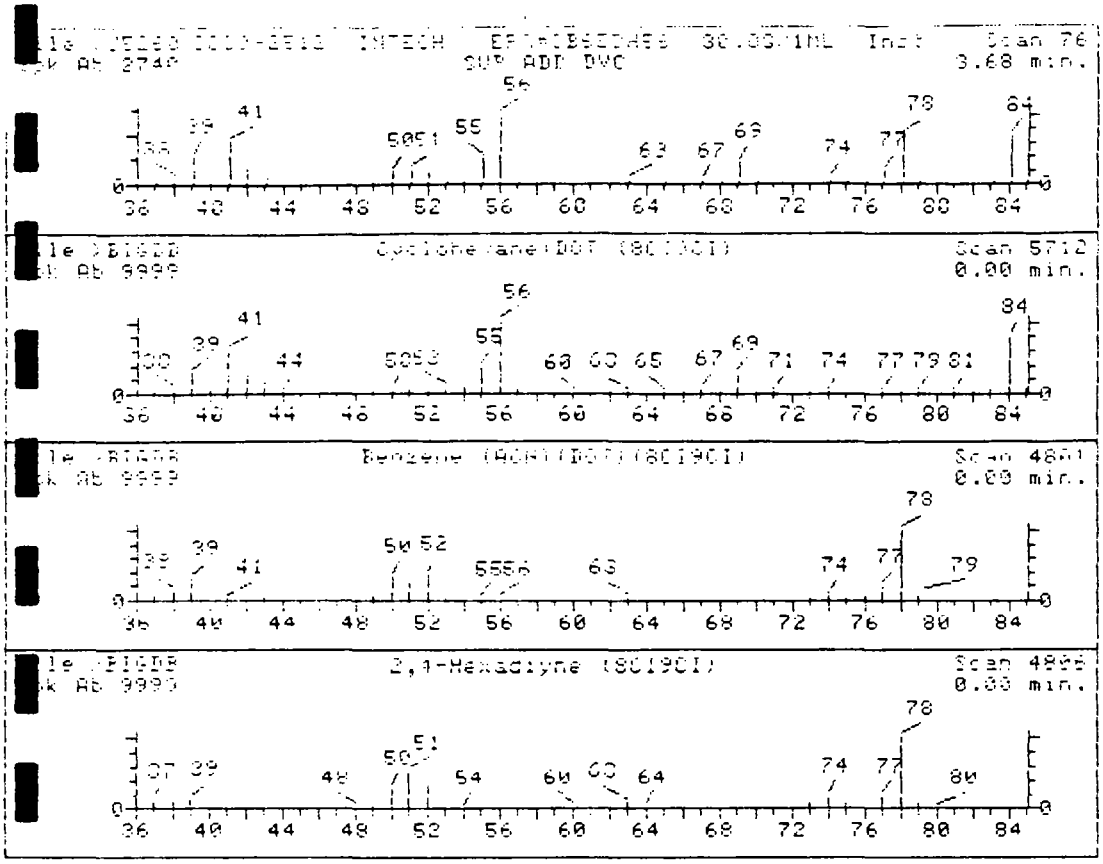


Unknown #,1
Area = 59811.00 Tentative Concentration is 11.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5260 Spectrum #: 32
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	UK	#FLG	TILT	%	CON	C_I	P_IO
1.	95*	67663	439	"BIGDB	84	22	0	0	66	0	72	95

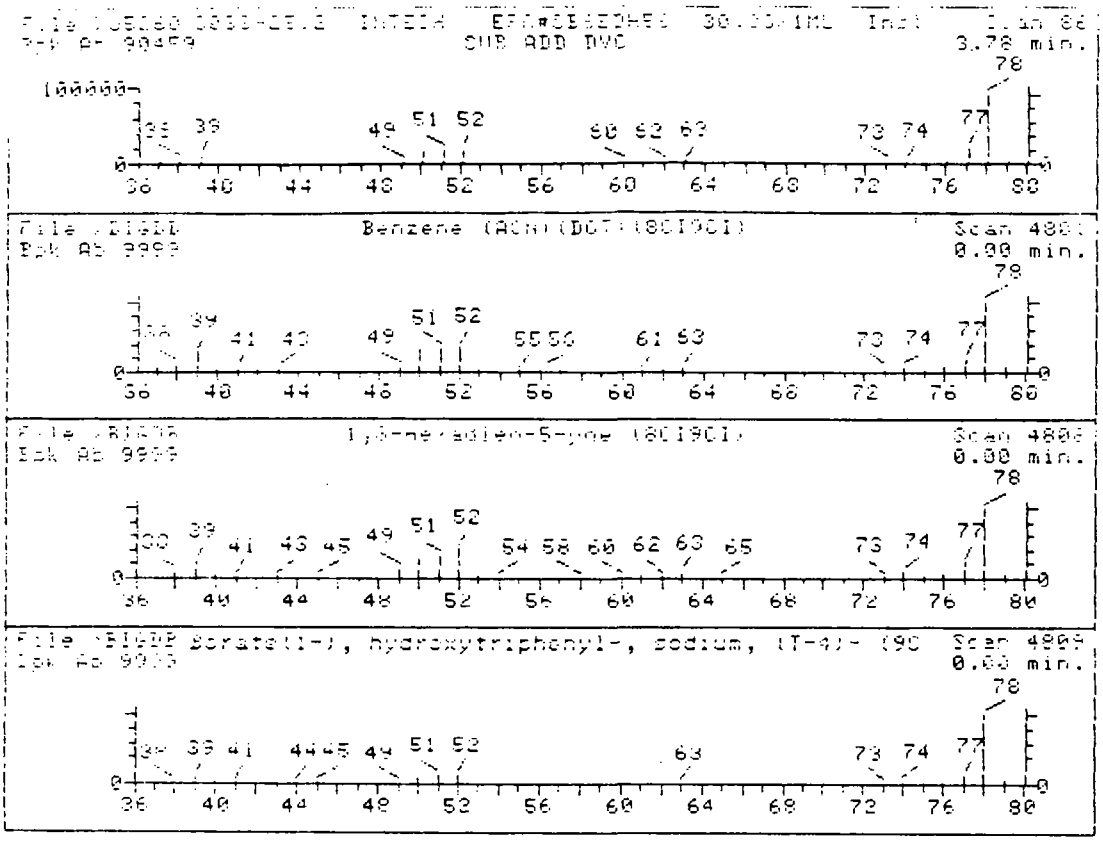


Unknown #,2
rea = 141949.0 Tentative Concentration is 27.00

1. Cyclohexane(DOT (8C19C1)	84	C6H12
2. Benzene (ACN)(DOT)(8C19C1)	78	C6H6
3. 2,4-Hexadiyne (8C19C1)	78	C6H6
4. 2-Butene, (Z)- (8C19C1)	56	C4H8
5. 2-Butene, (E)- (8C19C1)	56	C4H8
6. Cyclobutanone, 2-methyl- (8C19C1)	84	C5H8O
7. 1-Propene, 2-methyl- (9C1)	56	C4H8

Sample file: >J5260 Spectrum #: 76
Search speed: 3 Tilting option: F No. of ion ranges searched: 54

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	85*	110827	5712	"B1GDB	75	18	0	0	80	48	40	96
2.	65*	71432	4801	"B1GDB	76	22	2	-4	52	33	22	49
3.	32*	2809690	4806	"B1GDB	52	36	2	-4	42	32	10	18
4.	25*	590181	942	"B1GDB	37	42	2	0	128	46	7	19
5.	25*	624646	943	"B1GDB	37	42	2	0	129	46	7	18
6.	25*	1517153	5726	"B1GDB	22	40	3	0	100	50	7	12
7.	25*	115117	940	"B1GDB	26	42	2	0	108	49	7	14

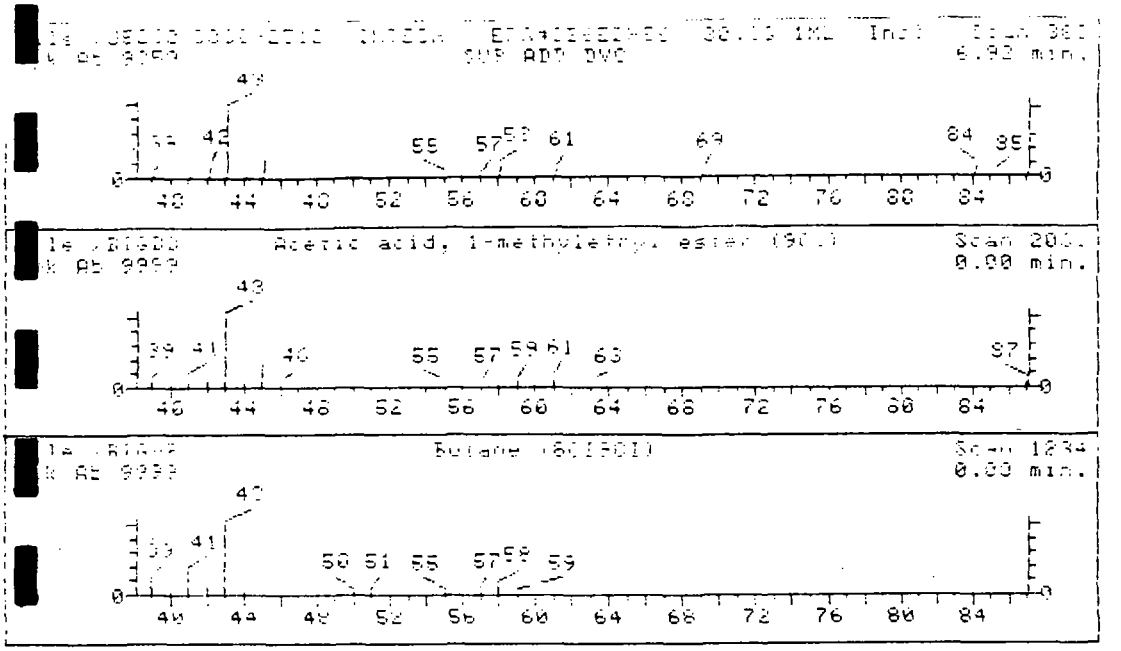


Unknown #,5
Area = 592651.0 Tentative Concentration is 110.00

1. Benzene (ALN)(DOT)(8C19CI) 78 C6H6
2. 1,3-Hexadien-5-yne (8C19CI) 78 C6H6
3. Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI) 0
4. 1,5-Hexadiyne (8C19CI) 78 C6H6
5. 1,5-Hexadien-3-yne (8C19CI) 78 C6H6
6. 2,4-Hexadiyne (8C19CI) 78 C6H6
7. 2-Butenedinitrile, (E)- (9CI) 78 C4H2N2

Sample file: >J5260 Spectrum #: 86
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_M
1.	84*	71432	4801	"BIGDB	90	8	0	-3	69	6	62	84
2.	71*	10420903	4808	"BIGDB	67	34	1	0	50	29	29	44
3.	20	1?113074	4809	"BIGDB	69	38	2	4	82	6	42	17
4.	67*	628160	4802	"BIGDB	67	56	2	-4	51	25	22	99
5.	55*	821089	4804	"BIGDB	56	33	0	3	26	44	19	60
6.	36*	2809690	4806	"BIGDB	36	38	0	4	20	50	11	40
7.	24*	764421	4803	"BIGDB	37	69	2	0	65	45	8	18

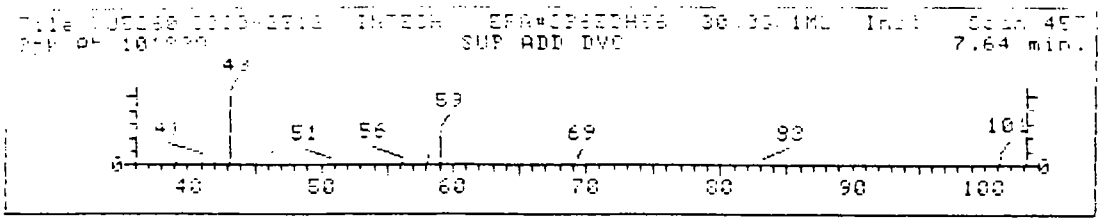


Unknown #.4
Area = 55962.00 Tentative Concentration is 11.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2
2. Butane (8CI9CI) 58 C4H10

Sample file: >JK260 Spectrum #: 388
Search speed: 3 Filtering option: F No. of ion ranges searched: 49

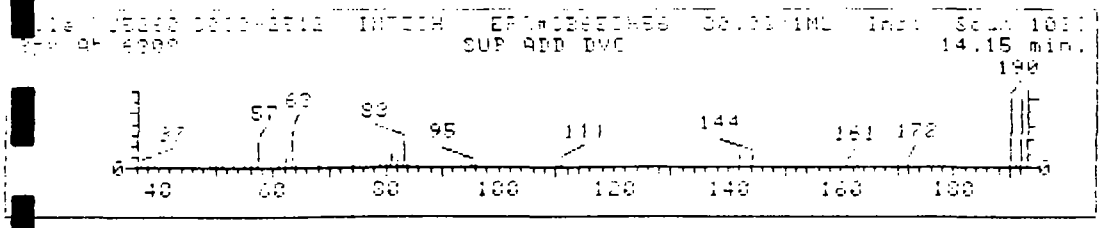
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_1	R_1U
1.	52	108214	2031	"BIGDB	39	40	2	0	86	19	29	13
2.	32*	106978	1234	"BIGDB	31	49	2	0	100	34	12	19



Unknown #,5
Area = 1027119. Tentative Concentration is 200.00

Sample File: >J5260 Spectrum #: 457

No data base entries were retrieved.

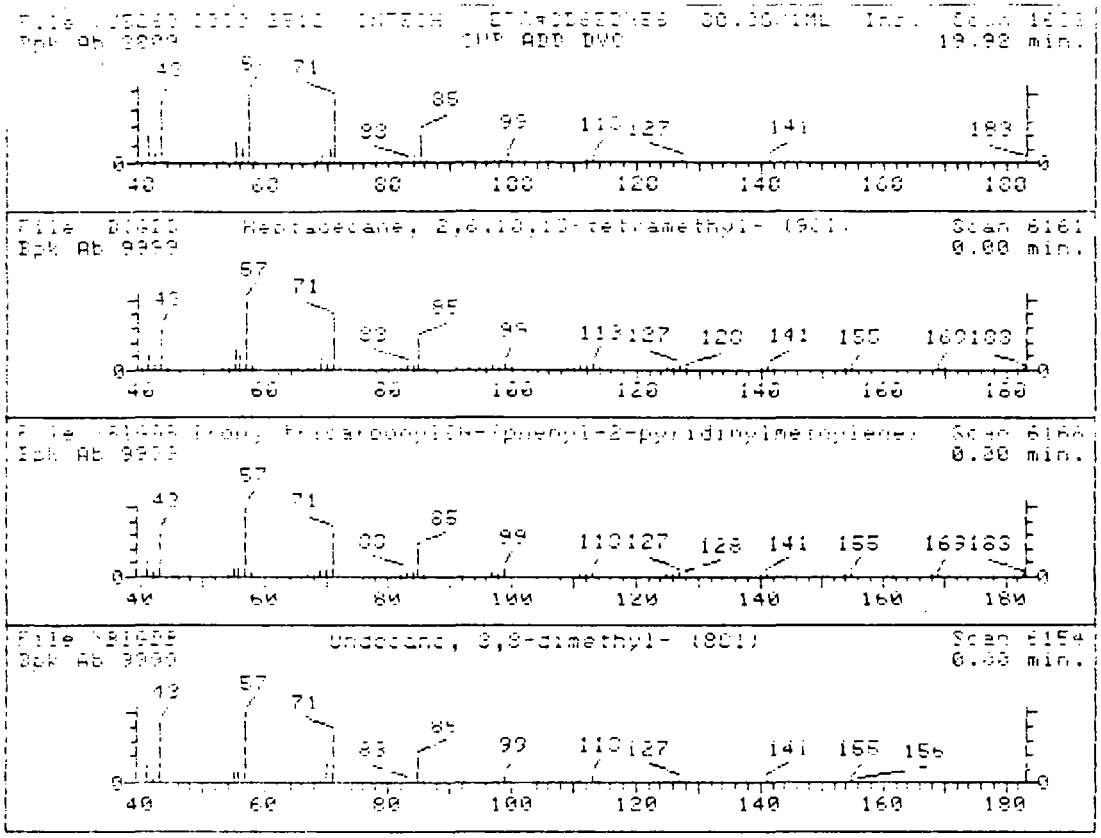


Unknown #,4

rea = 68269.00 Tentative Concentration is 10.00

Sample file: >J5260 Spectrum #: 1083

o data base entries were retrieved.

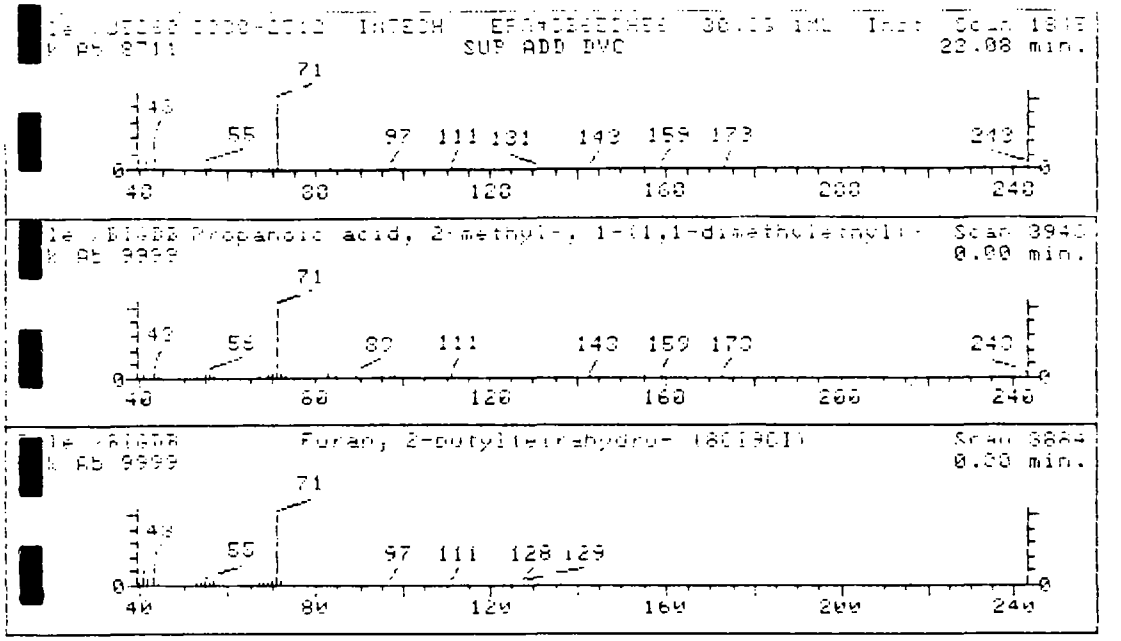


Unknown #,8
Area = 44952.00 Tentative Concentration is 5.00

1. Heptadecane, 2,6,10,15-tetramethyl- (9CI) 296 C21H44
2. Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']- (9CI) 348 C21H14FeN2O3
3. Undecane, 3,8-dimethyl- (8CI) 184 C13H28
4. Decane, 5-propyl- (8CI) 184 C13H28
5. Pentane, 2,3,3-trimethyl- (8CI,9CI) 114 C8H18
6. Dodecane, 2,7,10-trimethyl- (9CI) 212 C15H32
7. Nonane, 2,6-dimethyl- (8CI,9CI) 156 C11H24

Sample File: >J5260 Spectrum #: 1638
Search speed: 3 Tilting option: F No. of ion ranges searched: 55

	Prob.	CAS #	CON #	RUNT	K	DK	#FLG	TILT	%	CUM	C_I	R_IU
1.	70	54833486	6161	"BIGDB	78	55	2	0	100	7	42	14
2.	60	74764117	6168	"BIGDB	61	76	2	0	99	13	30	12
3.	60	17301303	6154	"BIGDB	70	38	3	0	100	14	30	13
4.	60	17312628	4003	"BIGDB	61	51	2	0	100	11	30	12
5.	47	560214	5990	"BIGDB	53	35	2	0	196	23	17	19
6.	47	74646990	3988	"BIGDB	60	49	1	0	100	23	17	18
7.	42	17302282	3956	"BIGDB	58	33	1	0	90	32	16	25

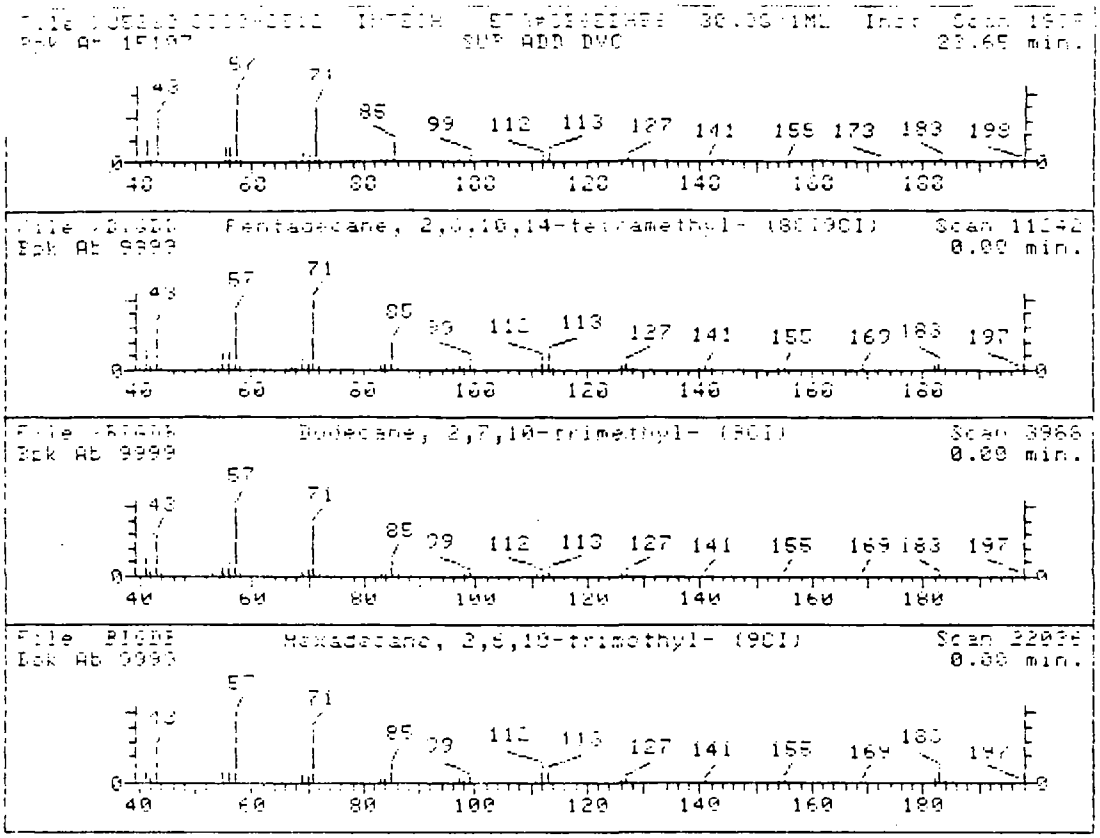


Unknown #,9
Area = 41664.00 Tentative Concentration is 5.00

1. Propanoic acid, 2-methyl-,·1-(1,1-dimethylethyl)-2-m 286 C16H30O4
   ethyl-1,3-propanediyl ester (9CI)
2. Furan, 2-butyltetrahydro- (8CI9CI) 128 C8H16O

Sample File: >J9260 Spectrum #: 1845
Search speed: 3 Tilting option: F No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROUT	K	OK	#FLG	TILT	%	CON	C_I	R_I
1.	78	74381401	3943	"BIGDB	59	49	2	0	100	2	55	12
2.	37*	1004291	3884	"BIGDB	26	50	2	0	100	26	14	14

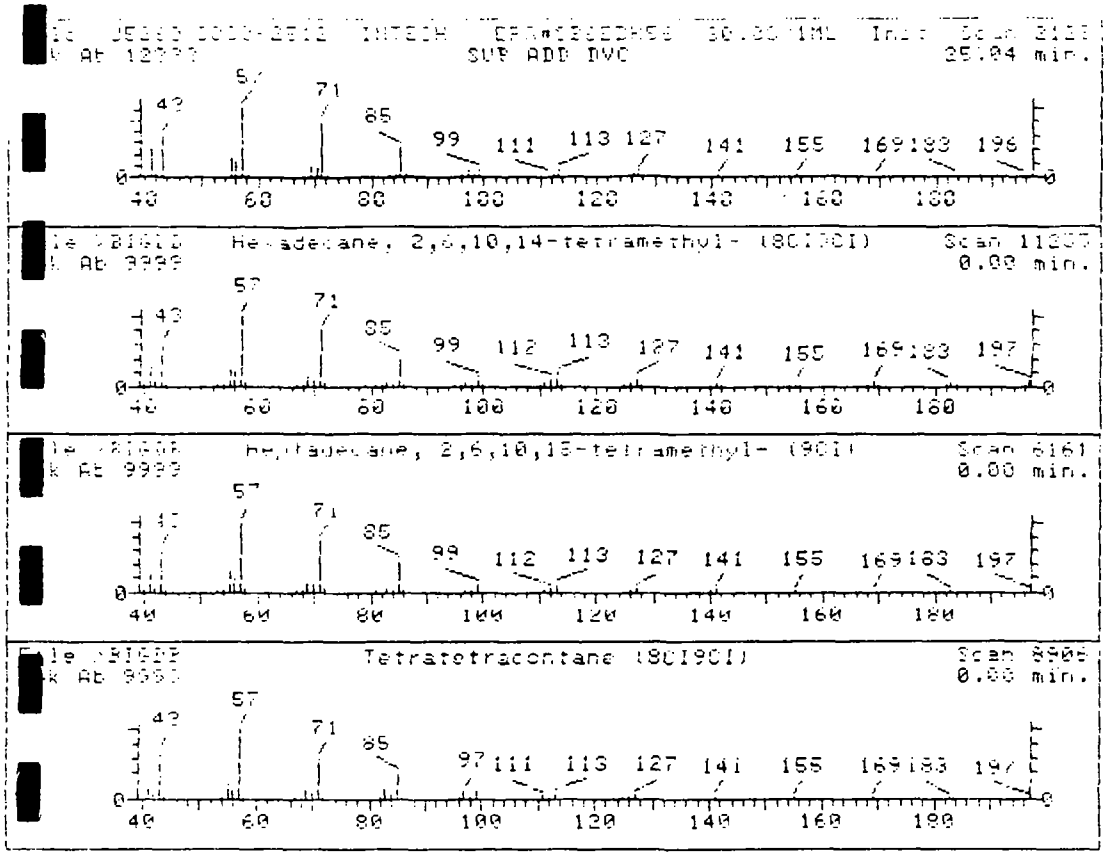


Unknown #,10
Area = 173813.0 Tentative Concentration is 18.00

1.	Pentadecane, 2,6,10,14-tetramethyl- (8CI9CI)	269 C19H40
2.	Dodecane, 2,7,10-trimethyl- (9CI)	212 C15H32
3.	Hexadecane, 2,6,10-trimethyl- (9CI)	268 C19H40
4.	Dodecane, 2-methyl-8-propyl- (9CI)	226 C16H34
5.	Decane, 5-ethyl-5-methyl- (8CI)	184 C13H28
6.	Tridecane, 5-propyl- (9CI)	226 C16H34
7.	Heptadecane, 7-methyl- (8CI9CI)	254 C18H38

Sample file: >J5260 Spectrum #: 1995
Search speed: 3 Tilting option: F No. of ion ranges searched: 60

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	L_I	R_IN
1.	87	1921706	11242	"BIGDB	112	23	2	2	86	0	63	43
2.	84	74645980	3988	"BIGDB	92	17	0	0	100	8	55	69
3.	79	55000527	22036	"BIGDB	87	47	2	3	100	0	55	19
4.	78	55045073	22037	"BIGDB	82	46	2	-2	75	1	55	13
5.	70	17312742	11185	"BIGDB	75	41	2	1	75	8	42	14
6.	70	55045119	10998	"BIGDB	73	40	2	0	100	8	42	18
7.	70	20959335	10979	"BIGDB	82	53	3	0	100	8	42	15



Unknown #,12

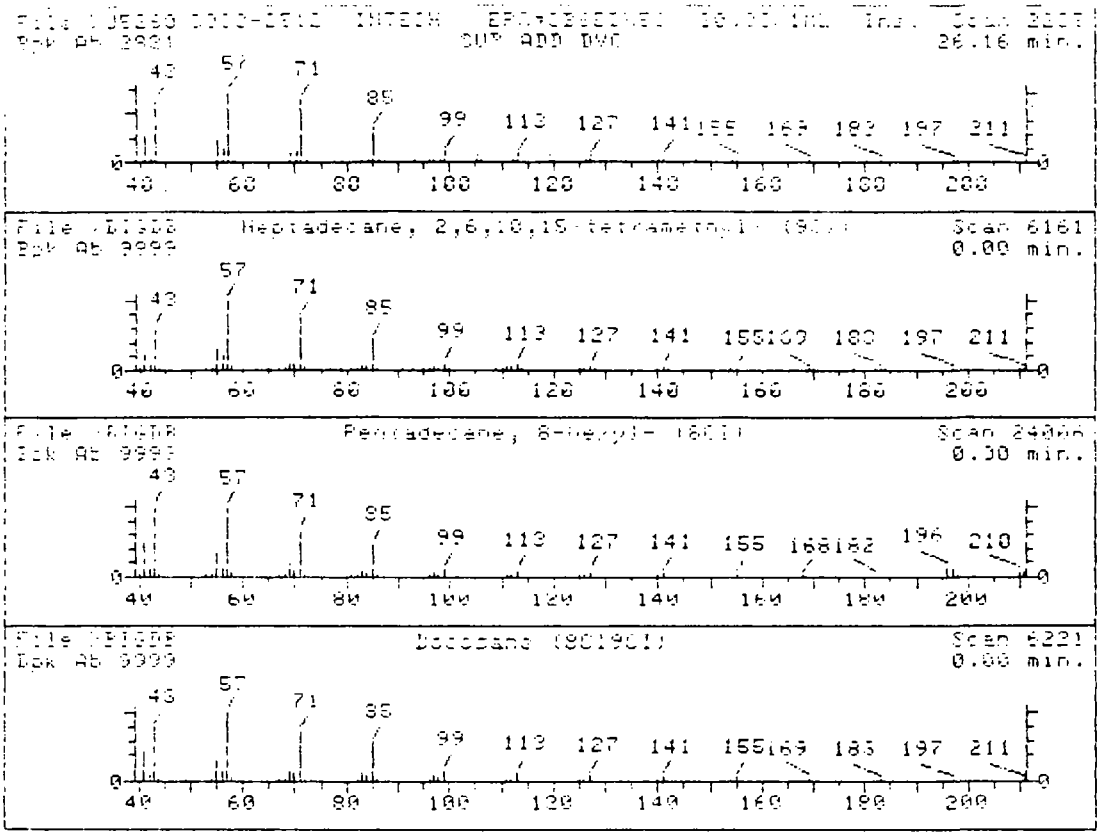
Area = 1h2656.0 Tentative Concentration is 16.00

1.	Hexadecane, 2,6,10,14-tetramethyl- (8CI9CI)	282	C20H42
2.	Heptadecane, 2,6,10,15-tetramethyl- (9CI)	296	C21H44
3.	Tetratetracontane (8CI9CI)	618	C44H90
4.	Tritetracontane (8CI9CI)	604	C43H88
5.	Undecane, 3,8-dimethyl- (8CI)	184	C13H28
6.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']- (9CI)	348	C21H14FeN2O3
7.	Docosane (8CI9CI)	310	C22H46

Sample File: >J5260 Spectrum #: 2128

Search speed: 3 Tilting option: F No. of ion ranges searched: 64

	Prob.	CAS #	CON #	RDUT	K	DK	#HLG	TILT	%	CUM	C_I	R_IV
1.	83	638368	11255	"BIGDB	92	50	2	3	100	3	52	21
2.	76	54833486	6161	"BIGDB	91	42	2	0	97	7	46	22
3.	76	7098228	8906	"BIGDB	81	75	2	0	92	9	45	22
4.	70	7098217	6150	"BIGDB	70	99	3	0	100	7	42	12
5.	70	17301303	6154	"BIGDB	71	37	3	0	100	9	42	14
6.	70	74264117	6168	"BIGDB	82	56	2	1	100	9	42	18
7.	67	629970	6221	"BIGDB	96	51	2	3	95	15	44	23

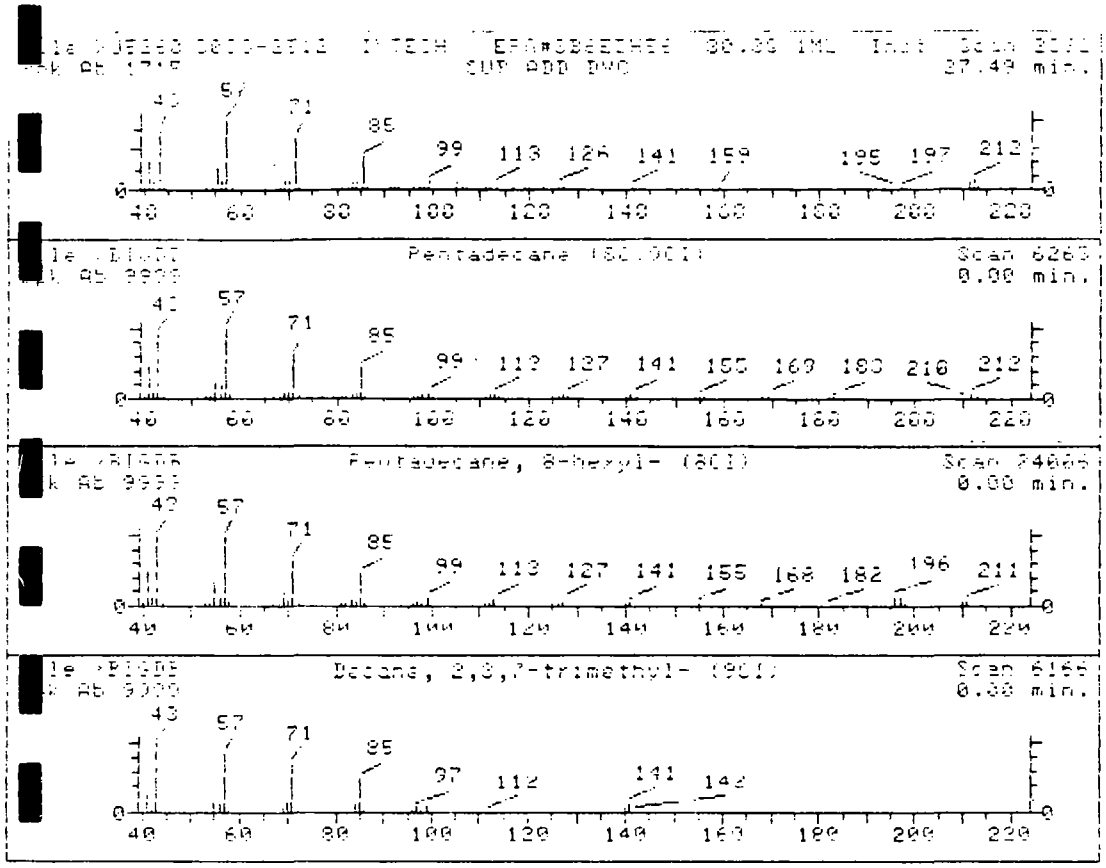


Unknown #,13
Area = 51440.00 Tentative Concentration is 5.00

1. Heptadecane, 2,6,10,15-tetramethyl- (9CI) 296 C21H44
2. Pentadecane, 8-hexyl- (8CI) 296 C21H44
3. Docosane (8CI9CI) 310 C22H46
4. Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']- (9CI) 348 C21H14FeN2O3
5. Hexatriacontane (8CI9CI) 506 C36H74
6. Nonane, 3-methyl-5-propyl- (8CI) 184 C13H28
7. Pentatriacontane (8CI9CI) 492 C35H72

Sample File: >J5260 Spectrum #: 2235
Search speed: 3 Filtering option: F No. of ion ranges searched: [illegible]

	Prob.	CAS #	CON #	ROOT	K	DK	#HIG	TILT	%	CON	C_I	R_IU
1.	86	54833486	6161	"BIGDB	108	26	2	-1	89	4	60	[illegible]
2.	29	13475252	24006	"BIGDB	81	55	2	-1	90	1	55	[illegible]
3.	26	629940	6221	"BIGDB	92	50	3	0	84	9	45	[illegible]
4.	26	24764112	6168	"BIGDB	82	50	2	0	100	8	45	[illegible]
5.	26	630068	6193	"BIGDB	96	62	2	0	80	7	45	[illegible]
6.	21	31081182	6159	"BIGDB	73	32	1	0	100	15	39	[illegible]
7.	20	630029	6142	"BIGDB	96	65	3	0	99	9	42	[illegible]

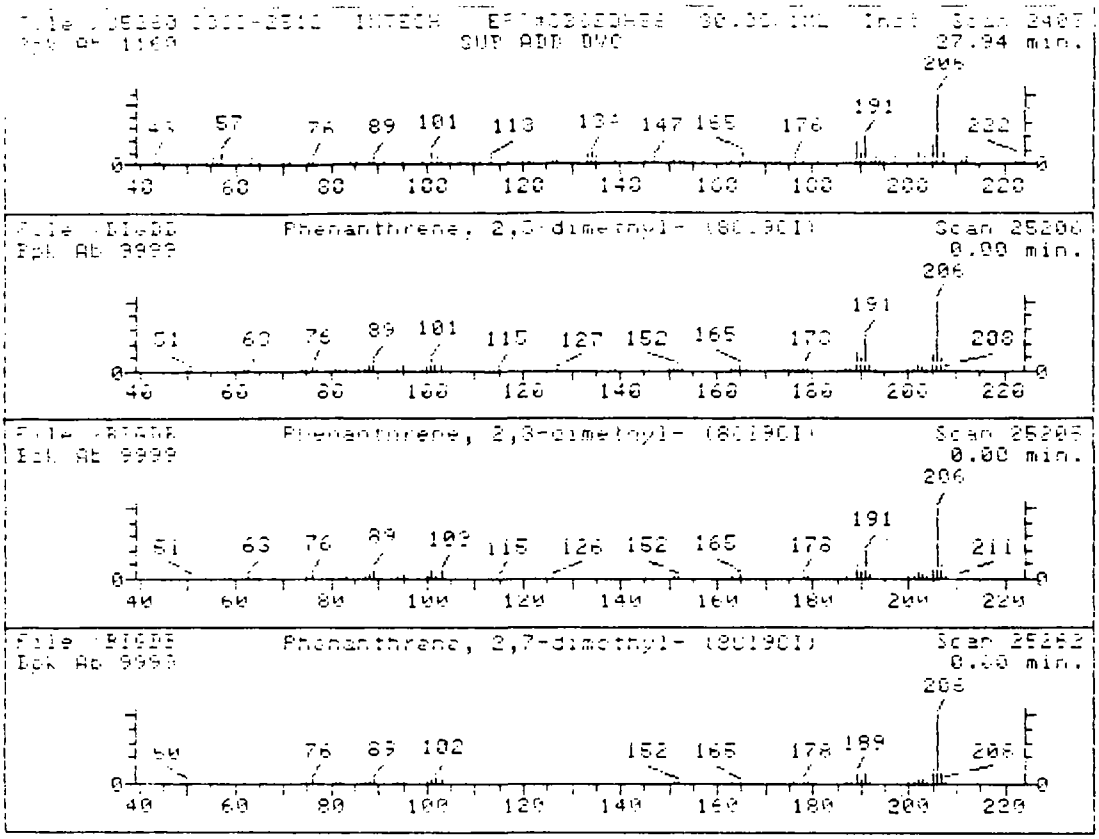


Unknown #,14
rea = 42417.00 Tentative Concentration is 4.00

1. Pentadecane (8CI9CI)	212	C15H32
2. Pentadecane, 8-hexyl- (8CI)	296	C21H44
3. Decane, 2,3,7-trimethyl- (9CI)	184	C13H28
4. Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']- (9CI)	398	C21H14FeN2O3
5. Eicosane, 10-methyl- (9CI)	296	C21H44
6. Docosane (8CI9CI)	310	C22H46
7. Pentatriacontane (8CI9CI)	492	C35H72

Sample file: >J5260 Spectrum #: 2362
earch speed: 3 Tilting option: F No. of ion ranges searched: 90

	Prob.	CAS #	CON #	ROUT	K	DK	#PLG	TILT	%	CUN	C_I	R_IV
1.	29*	629629	6265	"BIGDB	100	20	2	-1	78	13	43	46
2.	60	13475257	24006	"BIGDB	93	44	3	0	84	14	30	19
3.	58	62258155	6166	"BIGDB	75	34	2	1	79	20	25	21
4.	59	74764117	6168	"BIGDB	80	52	2	0	100	19	25	21
5.	57	54833237	6226	"BIGDB	96	38	2	0	94	23	22	20
6.	54	629970	6221	"BIGDB	89	59	2	0	70	23	29	24
7.	52	630079	6142	"BIGDB	75	76	3	0	97	19	20	16

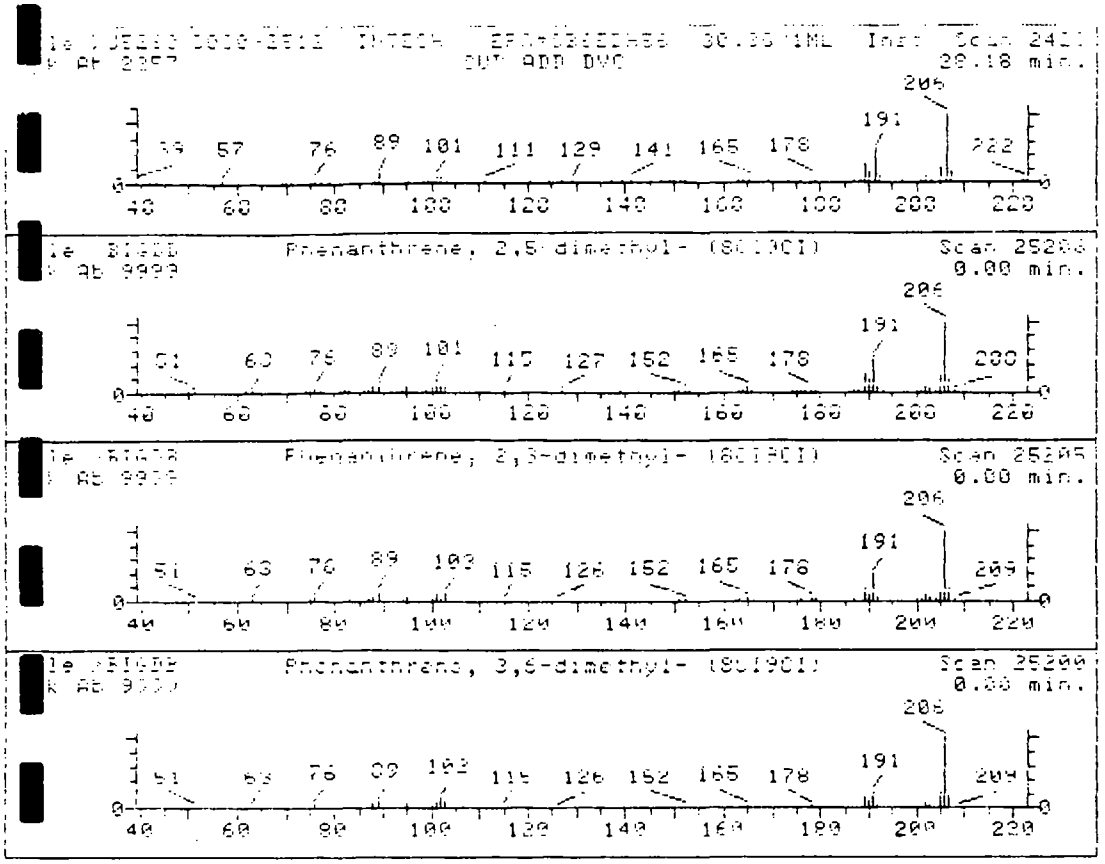


Unknown #,15
Area = 351[illegible]1.00 Tentative Concentration is 4.00

1. Phenanthrene, 2,5-dimethyl- (8CI,9CI)	206	C16H14
2. Phenanthrene, 2,3-dimethyl- (8CI,9CI)	206	C16H14
3. Phenanthrene, 2,7-dimethyl- (8CI,9CI)	206	C16H14
4. Benzene, 1,1'-(1-cyclobutene-1,2-diyl)bis- (9CI)	206	C16H14
5. Phenanthrene, 3,6-dimethyl- (8CI,9CI)	206	C16H14
6. Naphthalene, 1,2-dihydro-4-phenyl- (8CI,9CI)	206	C16H14
7. Anthracene, 2-ethyl- (9CI)	206	C16H14

Sample File: >J5260 Spectrum #: 2405
Search speed: 3 Tilting option: F No. of ion ranges searched: 50

	Prob.	CAS #	CON #	ROOT	K	DK	#PLG	TILT	%	CON	[illegible]	[illegible]
1.	71*	3674666	25206	"BIGDB	80	52	2	0	75	24	29	61
2.	51*	3674655	25205	"BIGDB	54	76	2	0	74	28	24	51
3.	50*	1576698	25262	"BIGDB	61	59	2	0	95	39	19	41
4.	42*	3306023	25203	"BIGDB	41	109	3	0	100	23	12	[illegible]
5.	41*	1576676	25200	"BIGDB	56	74	2	0	72	42	14	[illegible]
6.	36*	7469401	25221	"BIGDB	33	110	3	0	100	26	14	[illegible]
7.	30*	52251715	25250	"BIGDB	58	72	3	0	100	42	10	[illegible]

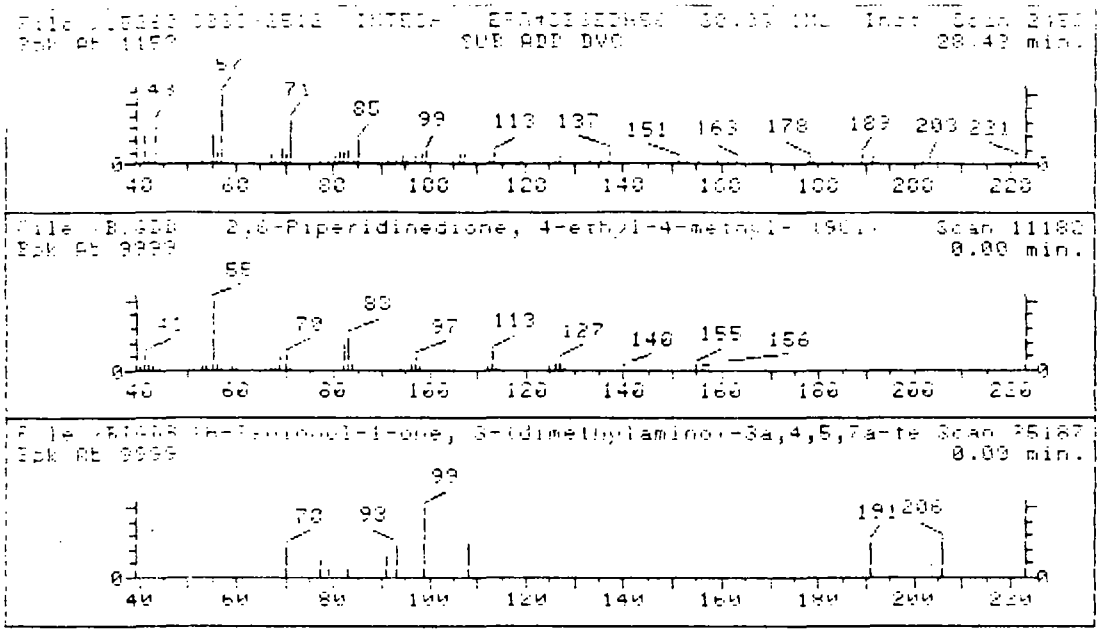


Unknown #,16
Area = 33731.00 Tentative Concentration is 4.00

1. Phenanthrene, 2,5-dimethyl- (8CI9CI) 206 C16H14
2. Phenanthrene, 2,3-dimethyl- (8CI9CI) 206 C16H14
3. Phenanthrene, 3,6-dimethyl- (8CI9CI) 206 C16H14
4. Phenanthrene, 2,7-dimethyl- (8CI9CI) 206 C16H14
5. Benzene, 1,1'-(1-cyclobutene-1,2-diyl)bis- (9CI) 206 C16H14
6. Naphthalene, 1,2-dihydro-4-phenyl- (8CI9CI) 206 C16H14
7. Phenanthrene, 9,10-dimethyl- (8CI9CI) 206 C16H14

Sample file: >05260 Spectrum #: 2428
Search speed: 3 Tilting option: F No. of ion ranges searched: 4-

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	P_TO
1.	86*	3674666	25206	"BIGDB	99	33	2	0	73	7	59	26
2.	84*	3674655	25205	"BIGDB	89	41	2	0	95	9	55	67
3.	64*	1576676	25200	"BIGDB	66	64	2	0	91	21	29	45
4.	61*	1576698	25262	"BIGDB	57	65	1	0	79	32	22	46
5.	60*	3306023	25203	"BIGDB	25	125	3	0	100	14	30	13
6.	52*	7469401	25221	"BIGDB	70	73	2	-3	75	30	24	32
7.	47*	604831	25195	"BIGDB	56	75	1	0	57	44	16	44

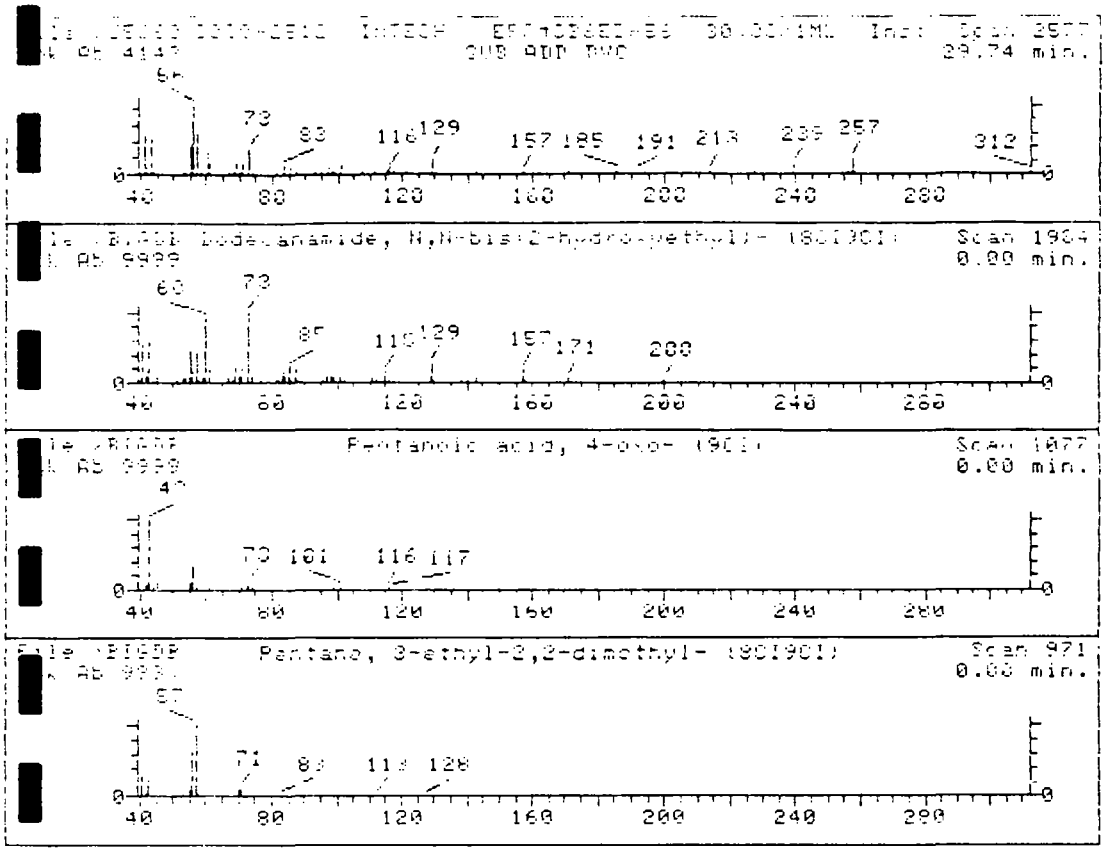


Unknown #,12
Area = 14884.00 Tentative Concentration is 4.00

1. 2,6-Piperidinedione, 4-ethyl-4-methyl- (9CI) 155 C8H13NO2
2. 1H-Isoindol-1-one, 3-(dimethylamino)-3a,4,5,7a-tetra 206 C12H18N2O
hydro-3a,6-dimethyl- (9CI)

Sample file: 306260 Spectrum #: 2452
Search speed: 3 Tilting option: F No. of ion ranges searched: 84

	Prob.	CAS #	CON #	ROUT	K	UK	#FLG	TILT	%	CUN	C_I	R_IV
1.	19*	64653	11182	"BIGDB	59	31	2	-2	33	59	4	29
2.	15*	25378982	25187	"BIGDB	30	35	1	0	13	58	3	16



Unknown #,18

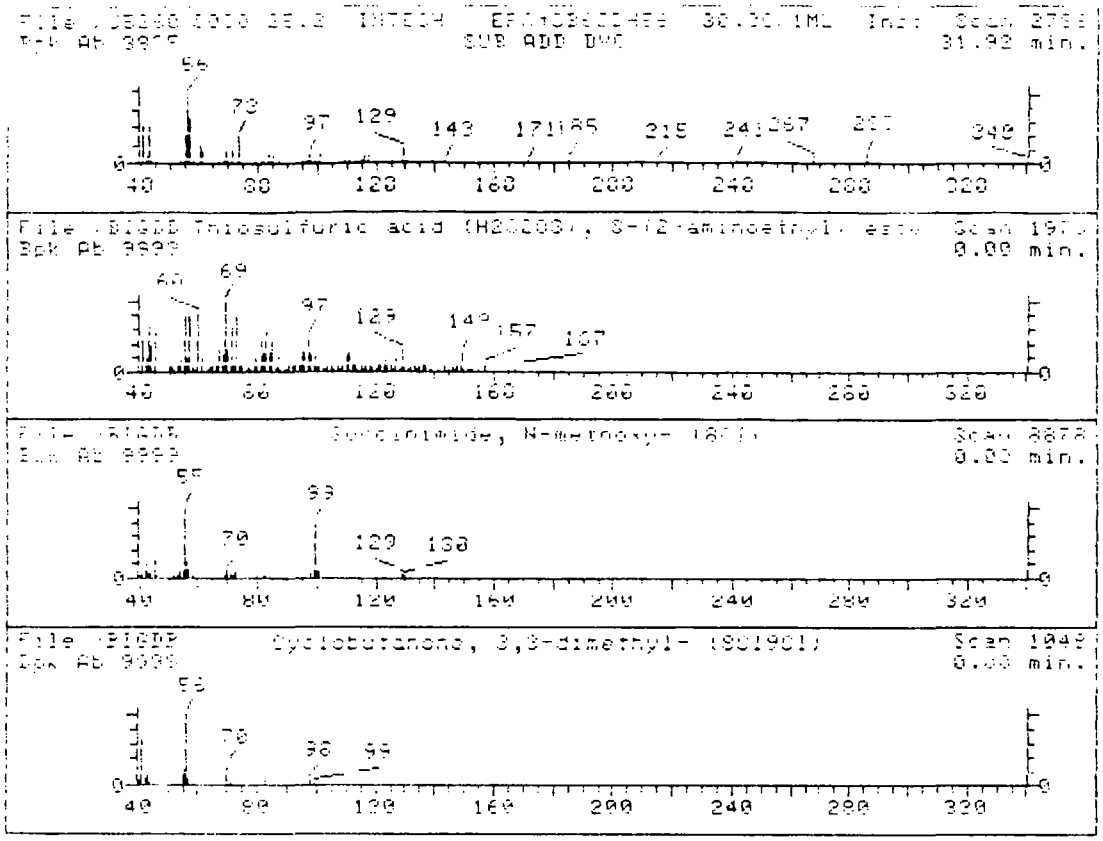
Area = 55009.00 Tentative Concentration is 5.00

1.	Dodecanamide, N,N-bis(2-hydroxyethyl)- (8CI9CI)	287 C16H33NO3
2.	Pentanoic acid, 4-oxo- (9CI)	116 C5H8O3
3.	Pentane, 3-ethyl-2,2-dimethyl- (8CI9CI)	128 C9H20
4.	Cyclobutanone, 3,3-dimethyl- (8CI9CI)	98 C6H10O
5.	1-Hexene, 3,4-dimethyl- (8CI9CI)	112 C8H16
6.	1-Pentene, 2,4-dimethyl- (8CI9CI)	98 C7H14
7.	1-Hexene, 2-methyl- (8CI9CI)	98 C7H14

Sample file: >J5260 Spectrum #: 2577

Search speed: 3 Tilting option: F No. of ion ranges searched: 49

	Prob.	CAS #	CUN #	ROUT	K	UK	#FLG	TILT	%	CUN	C_I	R_IU
1.	30	120401	1984	"BIGDB	60	72	0	1	34	49	10	23
2.	20*	123762	1077	"BIGDB	26	50	2	0	213	54	5	14
3.	15	16747323	971	"BIGDB	37	42	2	0	153	57	3	12
4.	15*	1192332	1048	"BIGDB	33	45	2	0	87	57	3	14
5.	15*	16745941	1002	"BIGDB	34	54	2	0	99	57	3	12
6.	15*	2213323	1051	"BIGDB	31	55	1	0	69	57	3	12
7.	15*	6094026	1055	"BIGDB	28	56	2	0	100	57	3	14

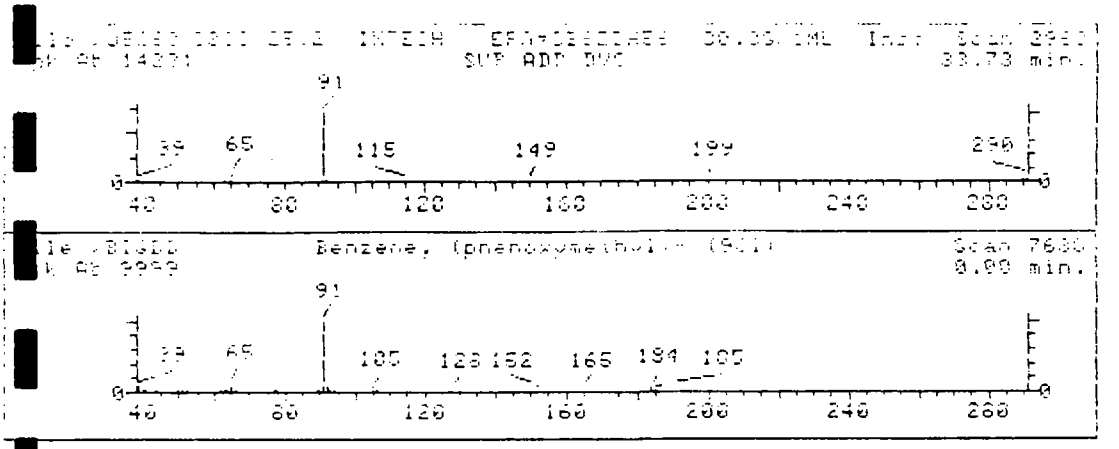


Unknown #,20
Area = 54910.00 Tentative Concentration is 5.00

1. Thiosulfuric acid (H2S2O3), S-(2-aminoethyl) ester (8CI) 157 C2H7NO3S2
2. Succinimide, N-methoxy- (8CI) 129 C5H7NO3
3. Cyclobutanone, 3,3-dimethyl- (8CI9CI) 98 C6H10O
4. Urea, N,N'-di-2-propenyl- (9CI) 140 C7H12N2O
5. 1-Hexene, 3,4-dimethyl- (8CI9CI) 112 C8H16
6. 2H-Pyran, 2-butoxytetrahydro- (8CI9CI) 158 C9H18O2
7. Cyclooctanamine (9CI) 127 C8H17N

Sample file: >J5260 Spectrum #: 2786
Search speed: 3 Tilting option: F No. of ion ranges searched: 62

	Prob.	CAS #	CON #	RUOT	K	DK	#FLG	TILT	%	CUN	C_I	R_IV
1.	40*	2937533	1973	"BIGDB	62	44	1	1	19	47	13	50
2.	25*	5904507	8878	"BIGDB	27	82	3	0	392	42	8	13
3.	20*	1192332	1048	"BIGDB	33	45	2	0	82	53	5	16
4.	20	1801725	1116	"BIGDB	38	52	1	0	72	53	5	14
5.	20	16745941	1002	"BIGDB	37	53	1	0	72	53	5	13
6.	20	1927680	6204	"BIGDB	37	54	1	0	109	53	5	13
7.	20	5452379	1000	"BIGDB	30	50	0	0	80	53	5	12

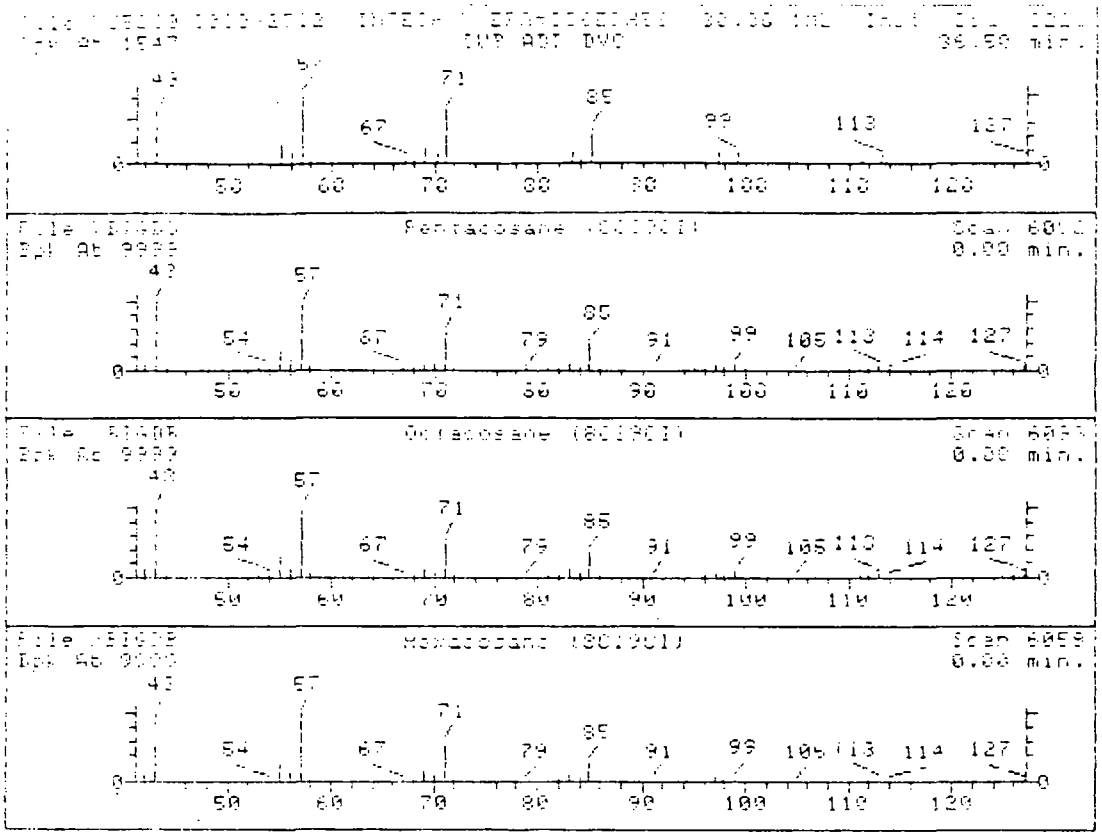


Unknown #,22
Area = 52153.00 Tentative Concentration is 5.00

1. Benzene, (phenoxymethyl)- (9Cl) 184 C13H12O

Sample File: [illegible]5260 Spectrum #: 2960
Search speed: 3 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_[illegible]
1.	70	946805	7638	"BIGDB	35	45	2	0	93	8	4[illegible]	1[illegible]



Unknown #,25
Area = 25414.00 Tentative Concentration is 5.00

1. Pentacosane (8C19C1) 352 C25H52
2. Octacosane (8C19C1) 394 C28H58
3. Hexacosane (8C19C1) 366 C26H54
4. Heptadecane (8C19C1) 240 C17H36
5. Octane, 2,3,7-trimethyl- (9C1) 156 C11H24
6. 1H-Tetrazol-5-amine (9C1) 95 CH3N5
7. 1-Propanamine, 2-methyl-N-(2-methylpropylidene)- (9C 127 C8H17N

Sample file: >J5260 Spectrum #: 3226
Search speed: 3 Tilting option: F No. of ion ranges searched: 55

	Prob.	CAS #	CUN #	PDOT	K	DK	#FLG	TILT	%	CUN	L_I	H_TO
1.	83	629992	6092	"BIGDB	97	43	2	-4	84	0	57	23
2.	83	630024	6093	"BIGDB	95	42	2	-4	90	0	57	21
3.	78	630013	6058	"BIGDB	89	52	2	-3	90	5	55	14
4.	70	629787	6090	"BIGDB	64	57	2	0	100	7	42	14
5.	40	62016346	3962	"BIGDB	53	40	2	0	90	29	14	17
6.	20*	4418615	5	"BIGDB	22	103	2	0	79	54	5	13
7.	15*	6998924	5812	"BIGDB	29	63	3	0	129	59	4	13

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: INTECH Contract: [illegible]

Lab Code: INTECH Case No.: [illegible] SAS No.: SDG No.: [illegible]

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

Sample wt/vol: 30.2 (g/ml) G Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. 5. dec. 0. Date Extracted: [illegible]

Extraction: (Sep/Cont/Sonc) SONC Date Analyzed: [illegible]

GPC Cleanup: (Y/N) N pH: 7.4 Dilution Factor: [illegible]

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1700.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1700.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SD-6T

Lab Name: INTECH Contract: 68D90048

Lab Order: INTECH Case No.: 12111 SAS No.: SDG No.: [illegible]

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

Sample wt/vol: 30.2 (g/ml) G Lab File ID: J5261

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: [illegible]

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: [illegible]

GPC Cleanup: (Y/N) N pH: 7.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-89-1	2-Nitroaniline	1700.	U
83-32-9	Acenaphthene	350.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	4,6-Dinitro-2-methylphenol	1700.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	1700.	U
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene	350.	U
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	700.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	120.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

[illegible]

[illegible] ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

[illegible] SAMPLE NO.

EDHE7

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDHE7

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

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J5261

Level: [illegible] Date Received: 6/10/89

% Moisture: [illegible] 5. dec. [illegible] Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) CONC Date Analyzed: 7/10/89

GPC Cleanup: [illegible] pH: 7.4 Dilution Factor: [illegible]

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

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 67-66-3	Methane, trichloro- (9CI)	5.25	500.	J
2. -	UNKNOWN AROMATIC	2.84	7000.	J
3. -	UNKNOWN	6.96	400.	J
4. -	UNKNOWN	7.61	7000.	J A
5.				
6.				
7.				
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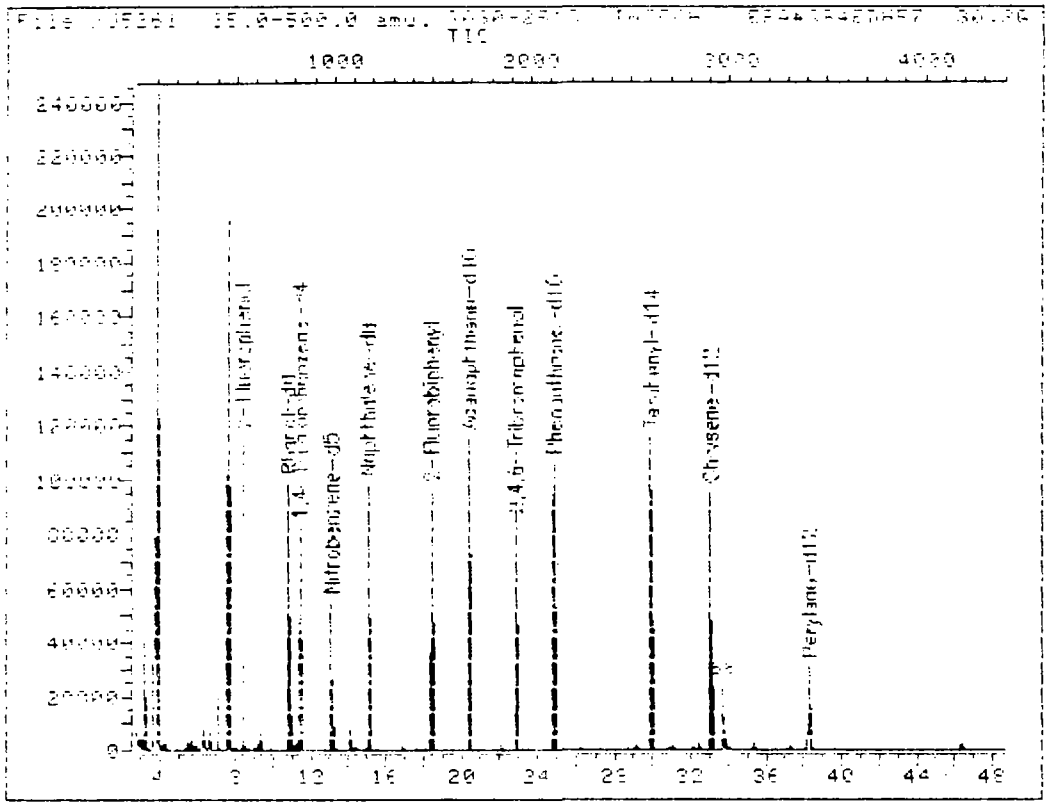
30.				

TOTAL ION CHROMATOGRAM



Data File: JJ5261::D2 Quant Output File: JJ5261::N1
Name: S030-2513 INTECH
Misc: EPA#SB4E0H57 30.2G/1ML Instr. #2 RI# 4

Id File: CLPBNA::SL
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

Operator ID: JULIE
Quant Time: 890711 15:51
Injected at: 890710 22:58

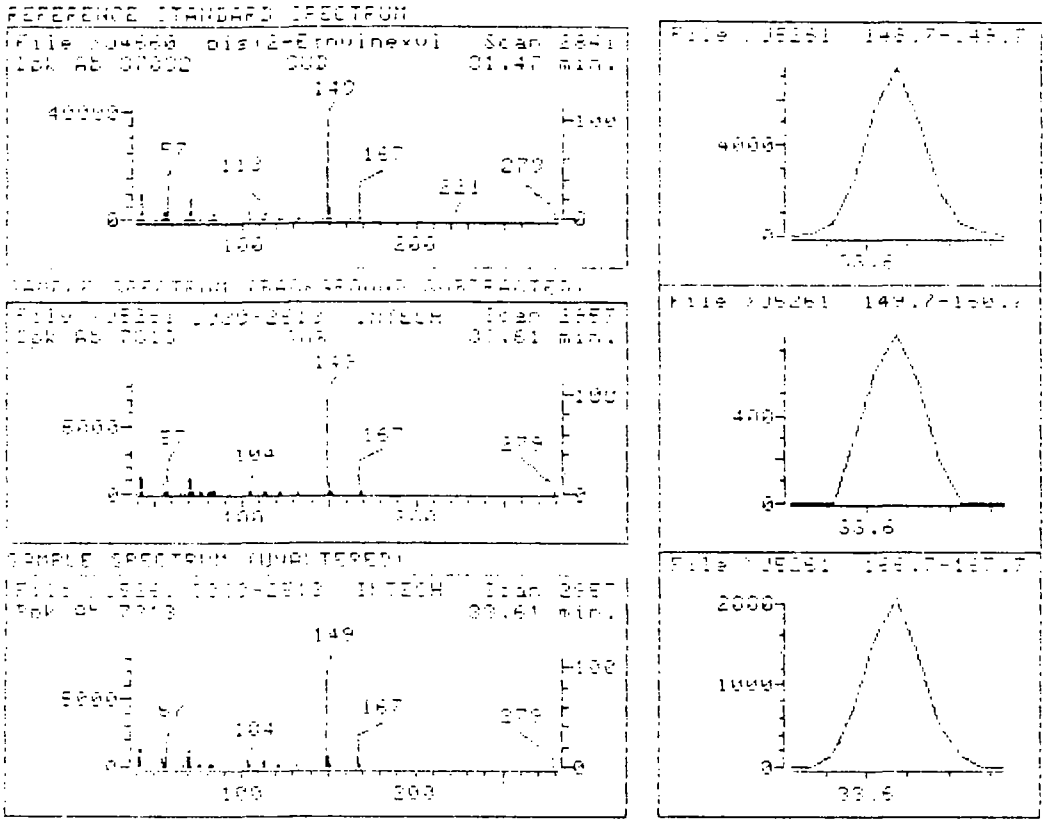
QUANT REPORT

Operator ID: JULIE Quant Rev: 6 Quant Time: 890711 [illegible]
Output File: [illegible]N1 Injected at: 890710 22:55
Data File: [illegible]02 Dilution Factor: 1.00000
Name: [illegible] INTECH
Dir: [illegible] 30.0G/ML Instr. #2 Bill # 4

ID File: [illegible]
Title: [illegible] SEMI-[illegible] TO FILE
Last Calibration: 890711 15:39

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*1,2-Dichlorobenzene-d4	11.41	152.0	25670	40.00	UG/ML	[illegible]
2)	2-Fluorophenol	8.32	112.0	56192	92.15	UG/ML	[illegible]
3)	Phenol-d6	10.22	99.0	266[illegible]	166.2[illegible]	UG/ML	[illegible]
5)	*Naphthalene-d8	15.01	136.0	100906	40.00	UG/ML	[illegible]
7)	Nitrobenzene-d5	15.06	82.0	39105	41.52	UG/ML	[illegible]
11)	*Acenaphthene-d10	20.54	164.0	[illegible]	40.00	UG/ML	[illegible]
16)	2-Fluorobiphenyl	18.39	172.0	65136	45.60	UG/ML	[illegible]
18)	2,4,6-Tribromophenol	22.49	330.0	2[illegible]31	71.[illegible]	UG/ML	[illegible]
21)	*Phenanthrene-d10	24.82	188.0	114952	40.00	UG/ML	[illegible]
22)	*Chrysene-d12	33.01	240.0	102746	40.00	UG/ML	[illegible]
24)	Terphenyl-d14	29.90	244.0	109497	34.40	UG/ML	[illegible]
28)	bis(2-Ethylhexyl)phthalate	33.41	149.0	14835	3.76	UG/ML	[illegible]
29)	*Perylene-d12	38.27	264.0	54646	40.00	UG/ML	[illegible]

* Compound is ISTD



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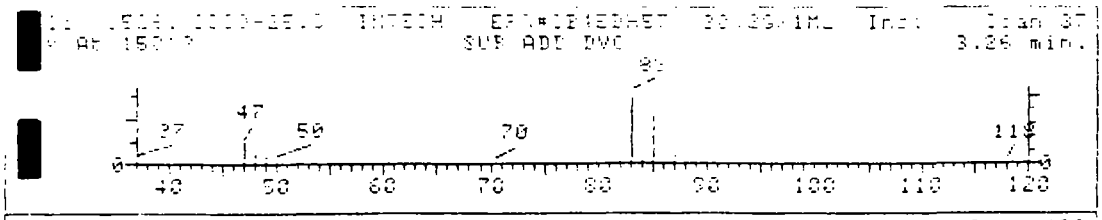
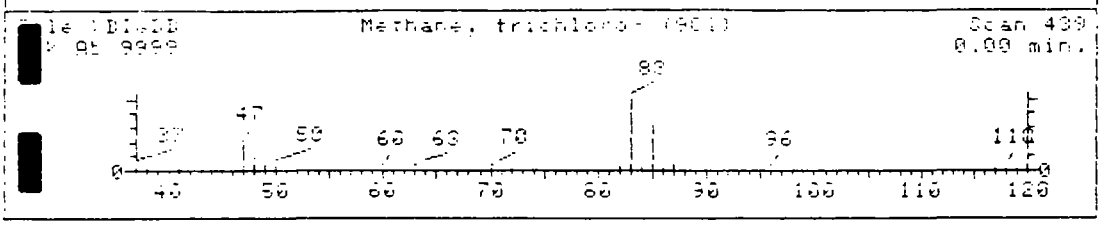
Misc: [illegible] Instr. #2 [illegible]
Quant Time: [illegible] 15:51 Quant ID File: [illegible]
Injected at: [illegible] Last Calibration: [illegible]

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2957
Retention Time: 33.61 min.
Quant Ion: 149.0
Area: 14835
Concentration: 3.76 UG/ML
q-value: 98



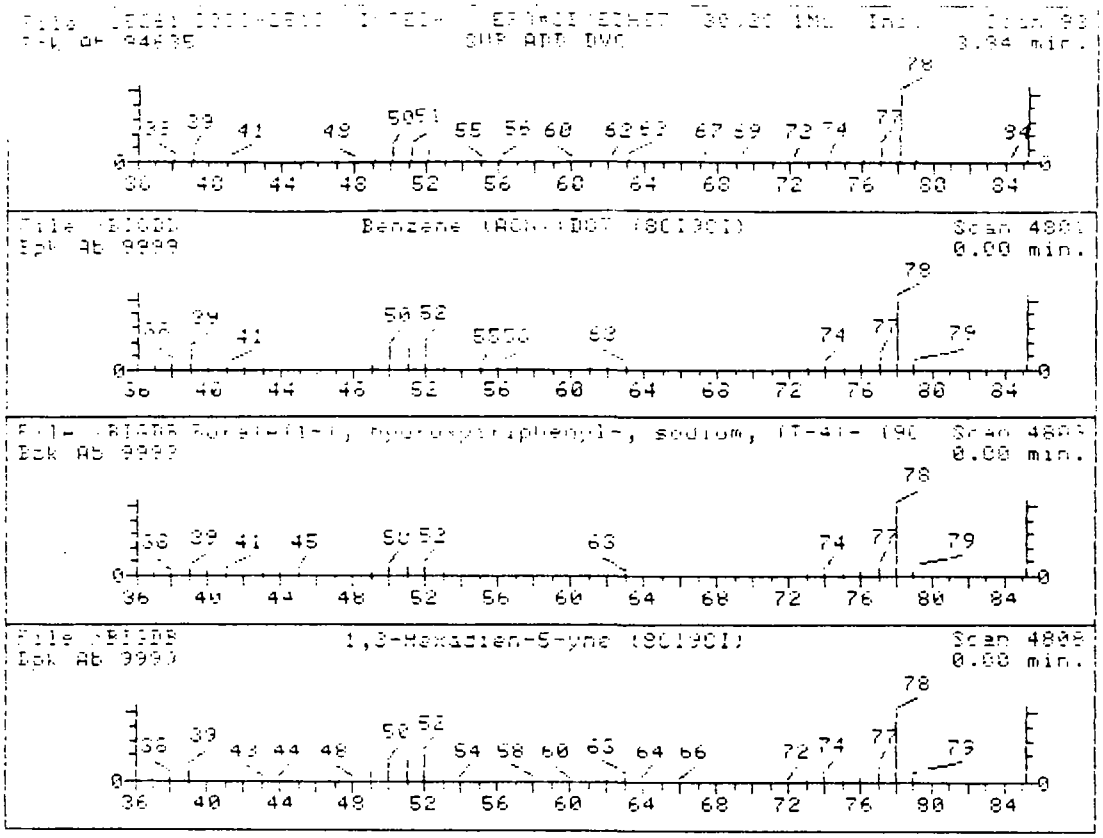


Unknown #,1
Area = .55158.00 Tentative Concentration is 14.00

1. Methane, trichloro- (9CI) 119 CHCl3

Sample File: >J5261 Spectrum #: 37
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROUT	K	UK	#FLG	TILT	%	CON	C_I	R_[illegible]
1.	96*	67663	439	"BIGDB	84	22	0	0	70	0	72	96

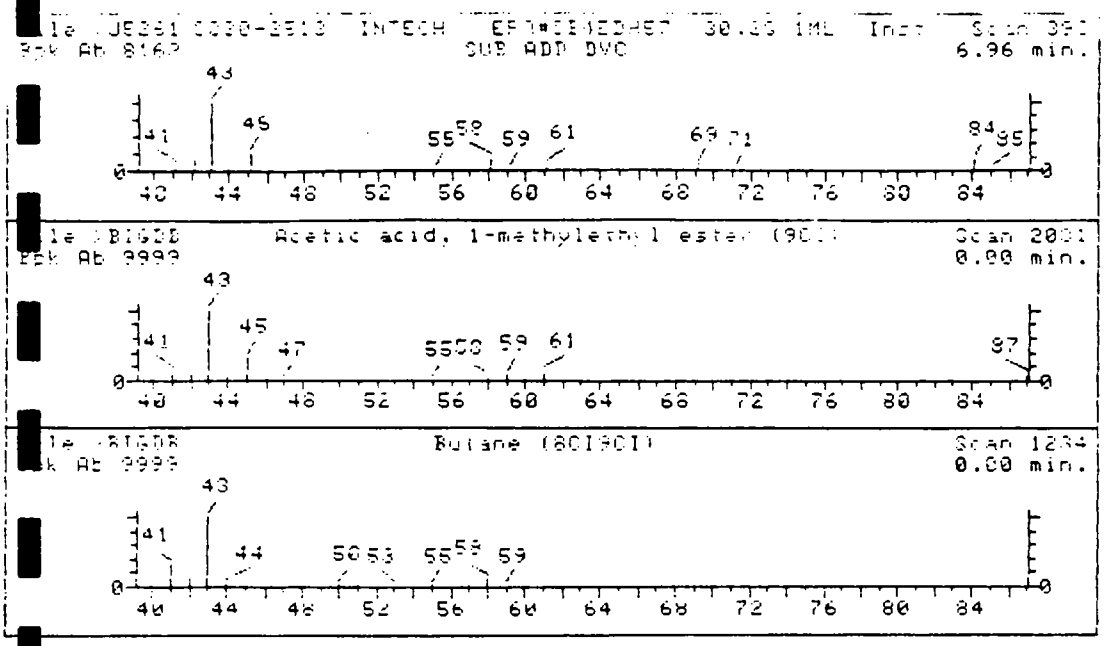


Unknown #.2
Area = .812909.0 Tentative Concentration is 200.00

1. Benzene (ACN)(DOT)(8CI9CI) 78 C6H6
2. Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI) 0
3. 1,3-Hexadien-5-yne (8CI9CI) 78 C6H6
4. 1,5-Hexadiyne (8CI9CI) 78 C6H6
5. 2,4-Hexadiyne (8CI9CI) 78 C6H6
6. 2-Butenedinitrile, (E)- (9CI) 78 C4H2N2
7. Propanedinitrile, methylene- (9CI) 78 C4H2N2

Sample file: >J5261 Spectrum #: 93
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IO
1.	9[illegible]*	71432	4801	"BIGDB	90	8	0	-3	74	1	68	83
2.	78	12113074	4809	"BIGDB	74	33	2	4	97	3	55	19
3.	67*	10420903	4808	"BIGDB	60	26	1	2	44	26	27	59
4.	51*	628160	4802	"BIGDB	67	56	2	-4	54	29	19	29
5.	41*	2809690	4806	"BIGDB	35	38	0	4	21	44	14	30
6.	25*	764421	4803	"BIGDB	37	68	2	0	65	50	7	34
7.	15*	922645	4805	"BIGDB	24	81	1	0	51	59	3	14



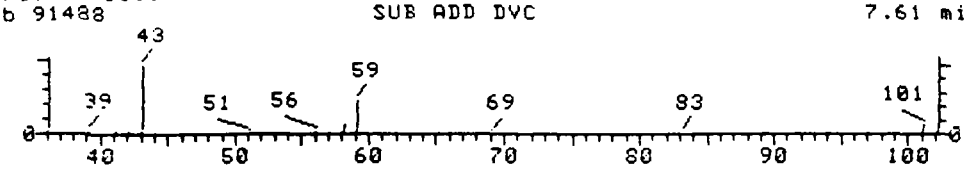
Unknown #,3
rea = 43279.00 Tentative Concentration is 11.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2
2. Butane (8CI9CI) 58 C4H10

Sample File: >J5261 Spectrum #: 393
Search speed: 3 Filtering option: F No. of ion ranges searched: 48

	Prob.	CAS #	CON #	RUOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	52	108214	2031	"BIGDB	39	44	2	0	81	17	20	12
2.	31*	106978	1234	"BIGDB	27	52	2	0	100	32	12	14

File >J5261 S030-2513 INTECH EPA*SB4EDH57 30.2G/1ML Inst Scan 455
Bpk Ab 91488 SUB ADD DVC 7.61 min.



Unknown #,4
Area = 807924.0 Tentative Concentration is 200.00

Sample file: >J5261 Spectrum #: 455

No data base entries were retrieved.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH58

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.5 (g/mL) G Lab File ID: J5264

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. dec. 0. Date Extracted: 7/10/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1700.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1700.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH58

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.5 (g/mL) G Lab File ID: J5264

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. dec. 0. Date Extracted: 7/10/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700.	U
83-32-9	Acenaphthene	350.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	4,6-Dinitro-2-methylphenol	1700.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	1700.	U
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene	350.	U
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	700.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	230.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH58

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.5 (g/mL) G Lab File ID: J5264

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. dec. 0. Date Extracted: 7/10/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

Number TICs found: 7

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67-66-3	Methane, trichloro- (9CI)	3.30	500.	J
2.	- -	UNKNOWN	3.71	200.	J
3.	- -	UNKNOWN AROMATIC	3.88	6000.	J
4.	- -	UNKNOWN	6.28	100.	J
5.	- -	UNKNOWN	7.03	500.	J
6.	- -	UNKNOWN	7.67	10000.	J A
7.	- -	UNKNOWN	9.31	200.	J
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
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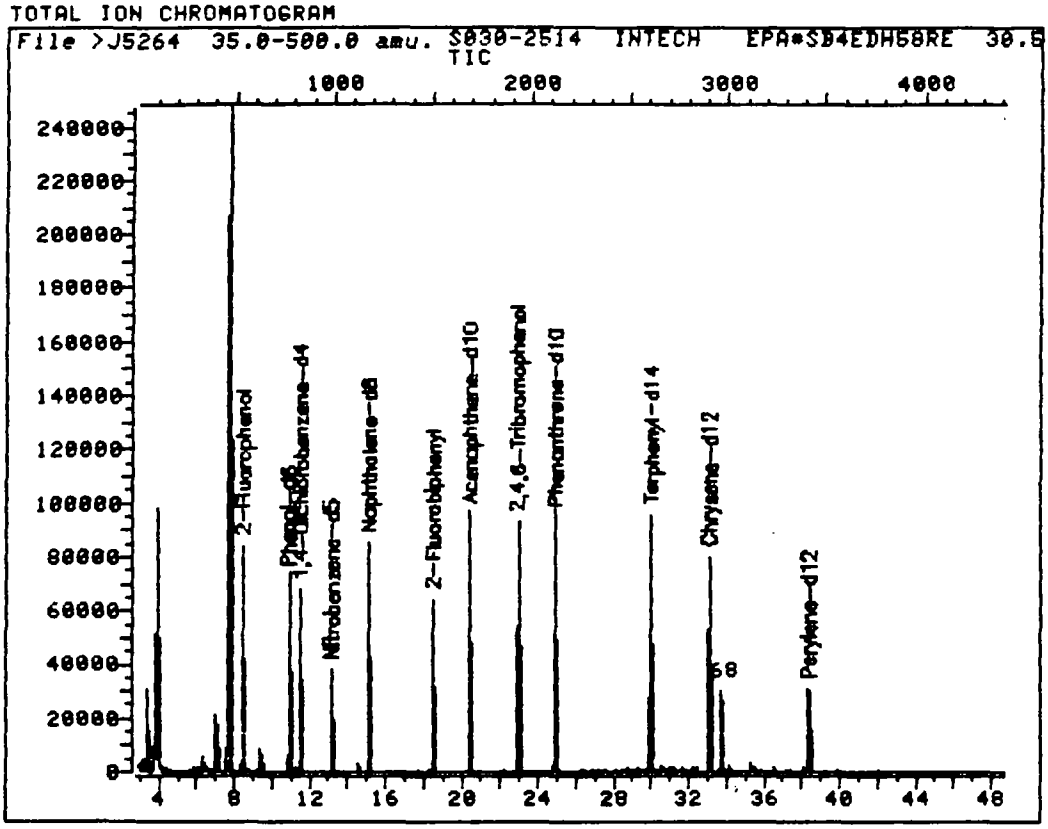
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >J5264::D2 Quant Output File: ^J5264::N1
Name: S030-2514 INTECH
Misc: EPA#SB4EDH58RE 30.5G/1ML Instr. #2 BTL# 7

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

Operator ID: JULIE
Quant Time: 890711 16:10
Injected at: 890711 02:02

QUANT REPORT

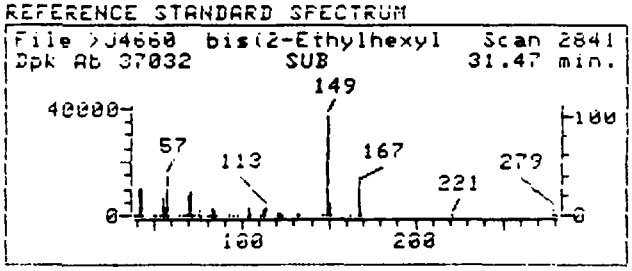
Operator ID: JULIE Quant Rev: 6 Quant Time: 890711 16:10
Output File: ^J5264::N1 Injected at: 890711 02:02
Data File: >J5264::D2 Dilution Factor: 1.00000
Name: S030-2514 INTECH
Misc: EPA#SB4EDH58RE 30.5G/1ML Instr. #2 BTL# 7

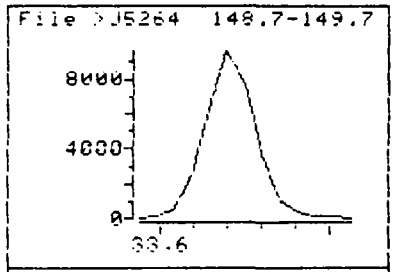
ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*1,4-Dichlorobenzene-d4	11.47	152.0	21099	40.00	UG/ML
2)	2-Fluorophenol	8.41	112.0	41504	73.82	UG/ML
3)	Phenol-d6	10.80	99.0	50143	134.49	UG/ML
16)	*Naphthalene-d8	15.06	136.0	84182	40.00	UG/ML
17)	Nitrobenzene-d5	13.11	82.0	23842	30.38	UG/ML
31)	*Acenaphthene-d10	20.37	164.0	47114	40.00	UG/ML
36)	2-Fluorobiphenyl	18.43	172.0	44283	34.97	UG/ML
51)	2,4,6-Tribromophenol	22.85	330.0	26132	90.56	UG/ML
52)	*Phenanthrene-d10	24.85	188.0	102401	40.00	UG/ML
62)	*Chrysene-d12	33.04	240.0	78470	40.00	UG/ML
64)	Terphenyl-d14	29.93	244.0	81546	33.55	UG/ML
68)	bis(2-Ethylhexyl)phthalate	33.64	149.0	20046	6.66	UG/ML
70)	*Perylene-d12	38.32	264.0	54849	40.00	UG/ML

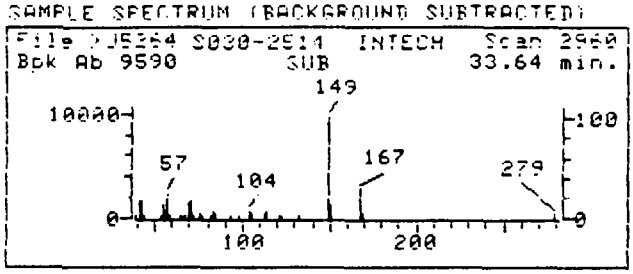
* Compound is ISTD

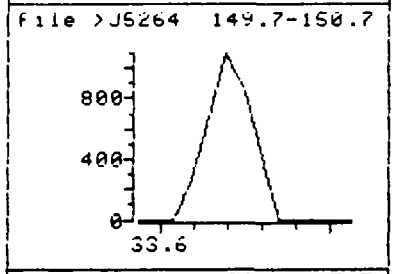
REFERENCE STANDARD SPECTRUM



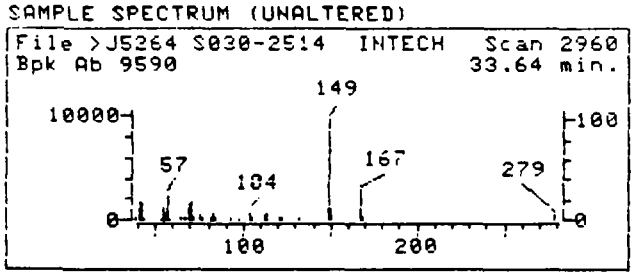


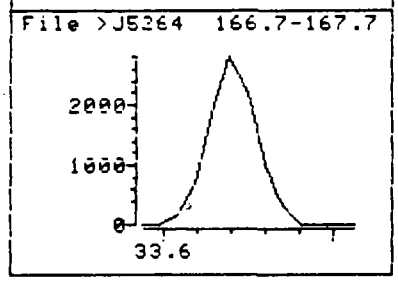
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





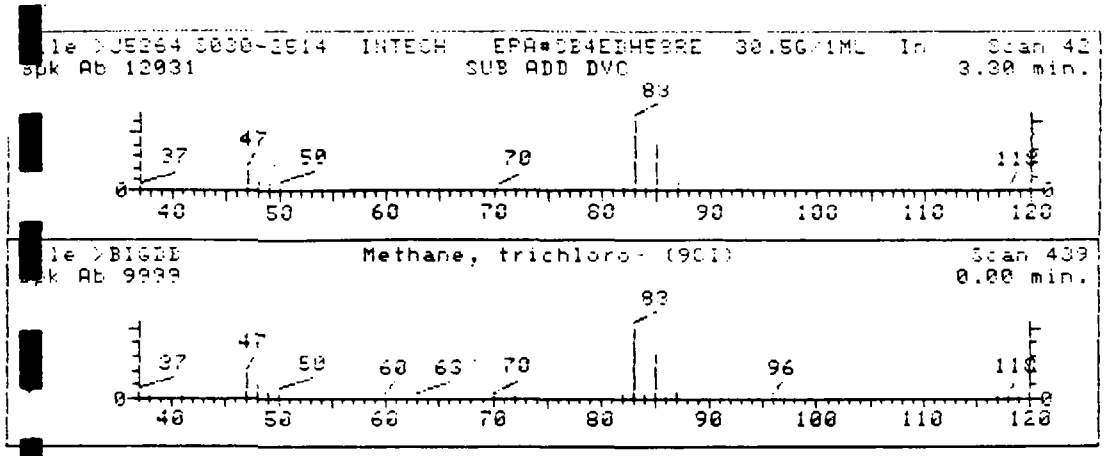
SAMPLE SPECTRUM (UNALTERED)





Data File: >J5264::D2 Quant Output File: ^J5264::N1
Name: S030-2514 INTECH
Misc: EPA#SB4EDH58RE 30.5G/1ML Instr. #2 BTL# 7
Quant Time: 890711 16:10 Quant ID File: CLPBNA::SC
Injected at: 890711 02:02 Last Calibration: 890711 15:38

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2960
Retention Time: 33.64 min.
Quant Ion: 149.0
Area: 20046
Concentration: 6.66 UG/ML
q-value: 95

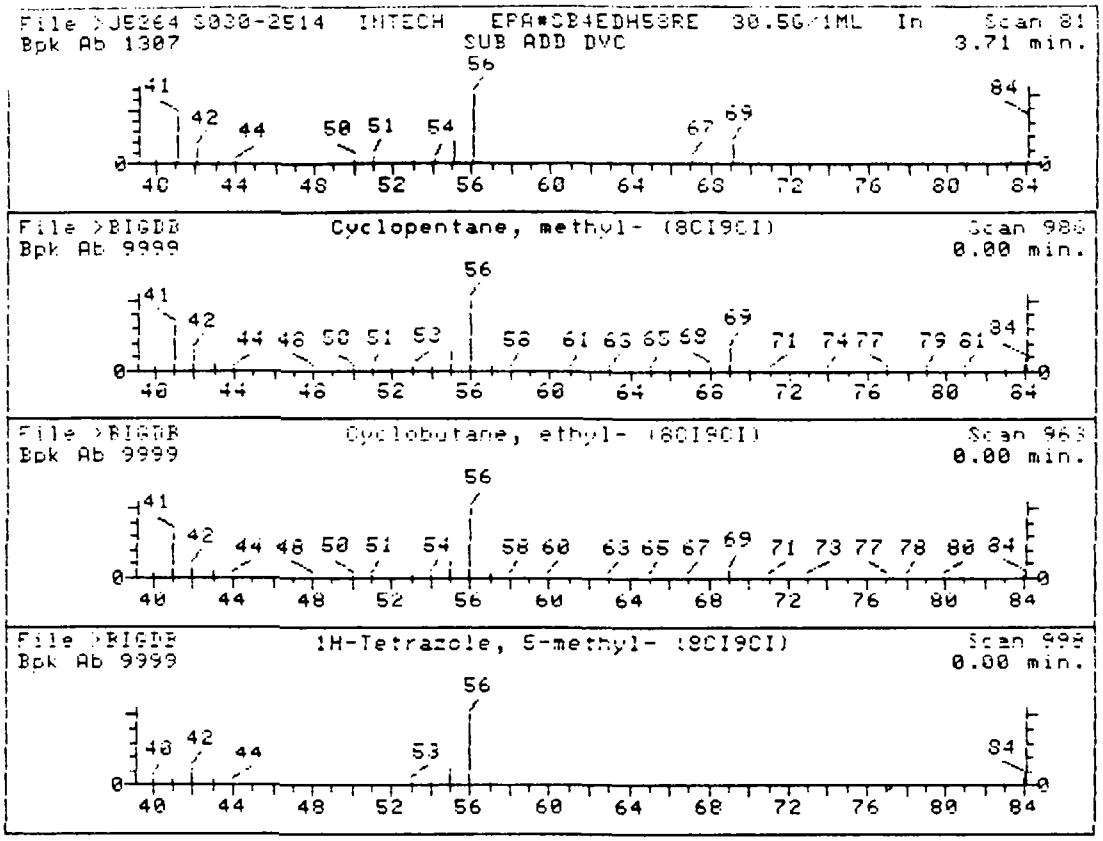


Unknown #,1
rea = 43294.00 Tentative Concentration is 13.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5264 Spectrum #: 42
earch speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	91*	67663	439	"BIGDB	74	32	0	0	66	21	53	92

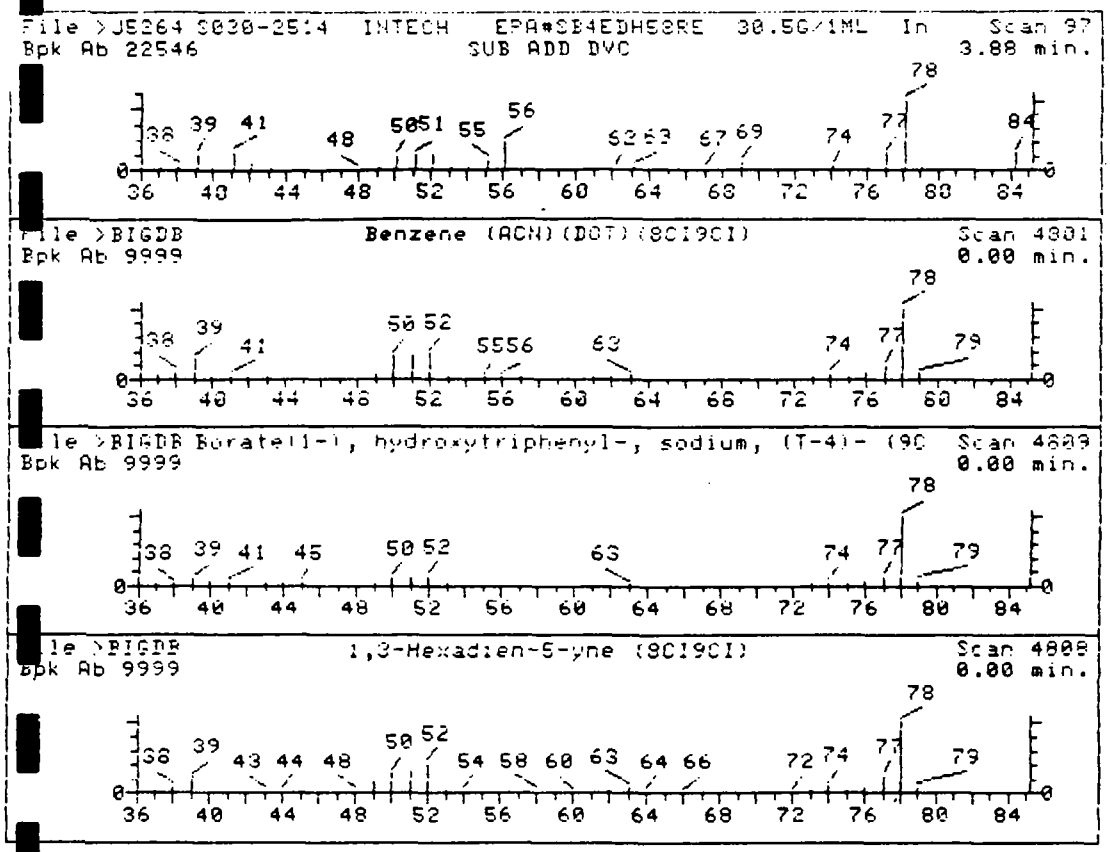


Unknown #,2
Area = 18529.00 Tentative Concentration is 6.00

1.	Cyclopentane, methyl- (8CI9CI)	84 C6H12
2.	Cyclobutane, ethyl- (8CI9CI)	84 C6H12
3.	1H-Tetrazole, 5-methyl- (8CI9CI)	84 C2H4N4
4.	1-Pentene, 2-methyl- (8CI9CI)	84 C6H12
5.	Cyclobutane (8CI9CI)	56 C4H8
6.	3-Hexene, (E)- (8CI9CI)	84 C6H12
7.	Pentane, 3-methylene- (9CI)	84 C6H12

Sample file: >J5264 Spectrum #: 81
Search speed: 3 Tilting option: F No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	40*	96377	986	"BIGDB	43	44	2	0	82	33	16	23
2.	36*	4806615	963	"BIGDB	40	43	1	0	100	36	14	23
3.	29*	4076362	998	"BIGDB	30	54	2	0	100	36	10	15
4.	25*	763291	995	"BIGDB	34	67	2	0	62	50	7	14
5.	25*	287230	941	"BIGDB	21	58	2	0	159	45	8	13
6.	15*	13269528	5702	"BIGDB	28	69	3	0	84	52	3	13
7.	15*	760214	5684	"BIGDB	25	77	3	0	69	52	3	12

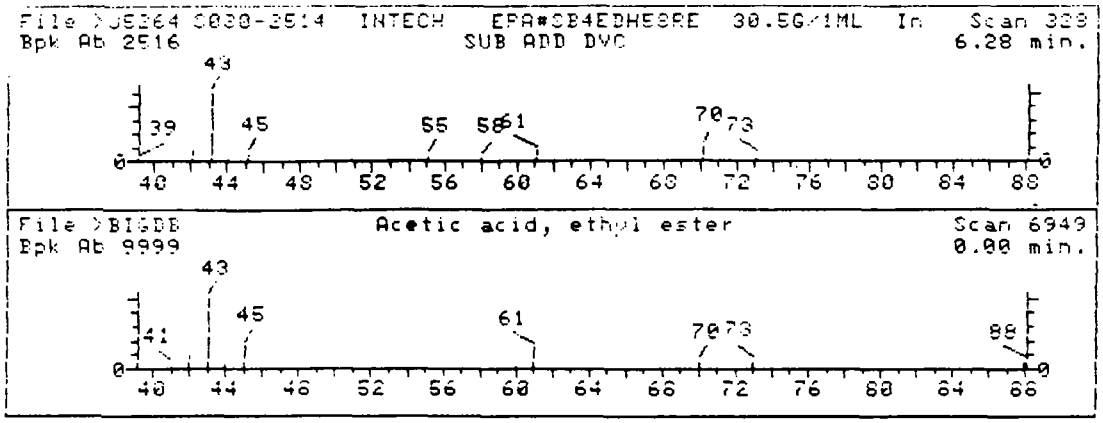


Unknown #,3
Area = 519290.0 Tentative Concentration is 160.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78	C6H6
2.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0	
3.	1,3-Hexadien-5-yne (8CI9CI)	78	C6H6
4.	2,4-Hexadiyne (8CI9CI)	78	C6H6
5.	1,5-Hexadien-3-yne (8CI9CI)	78	C6H6
6.	2-Butenedinitrile, (E)- (9CI)	78	C4H2N2
7.	Cyclohexane(DOT (8CI9CI)	84	C6H12

Sample file: >J5264 Spectrum #: 97
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	85*	71432	4801	"BIGDB	78	20	0	0	55	45	43	93
2.	58	12113074	4809	"BIGDB	81	26	2	4	100	19	25	23
3.	51*	10420903	4808	"BIGDB	60	26	1	0	50	48	14	61
4.	49*	2809690	4806	"BIGDB	54	34	0	3	25	48	13	59
5.	43*	821089	4804	"BIGDB	49	39	0	3	27	47	13	53
6.	31*	764421	4803	"BIGDB	49	56	2	0	69	45	12	22
7.	15*	110827	5712	"BIGDB	56	22	0	0	27	70	8	80

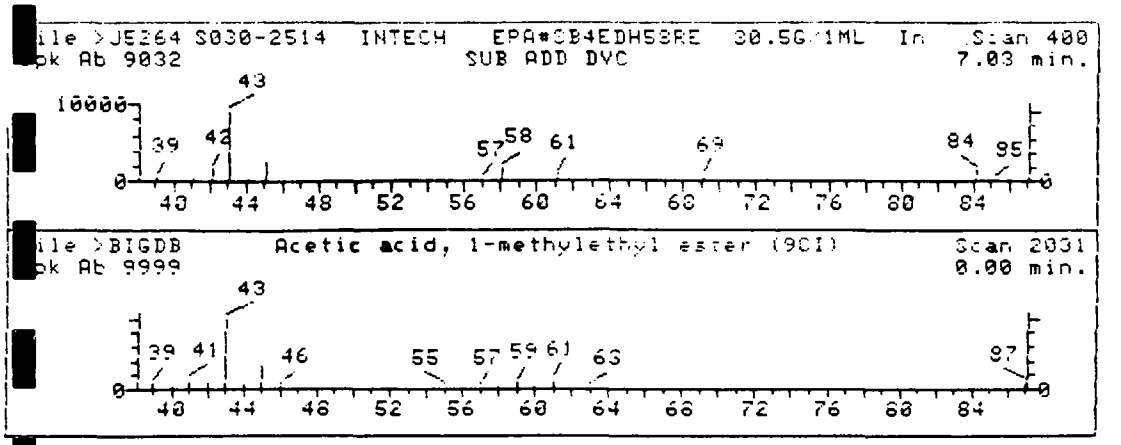


Unknown #,4
Area = 14015.00 Tentative Concentration is 4.00

1. Acetic acid, ethyl ester 88 C4H8O2

Sample file: >J5264 Spectrum #: 328
Search speed: 3 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	141786	6949	"BIGDB	22	55	2	0	35	58	3	13

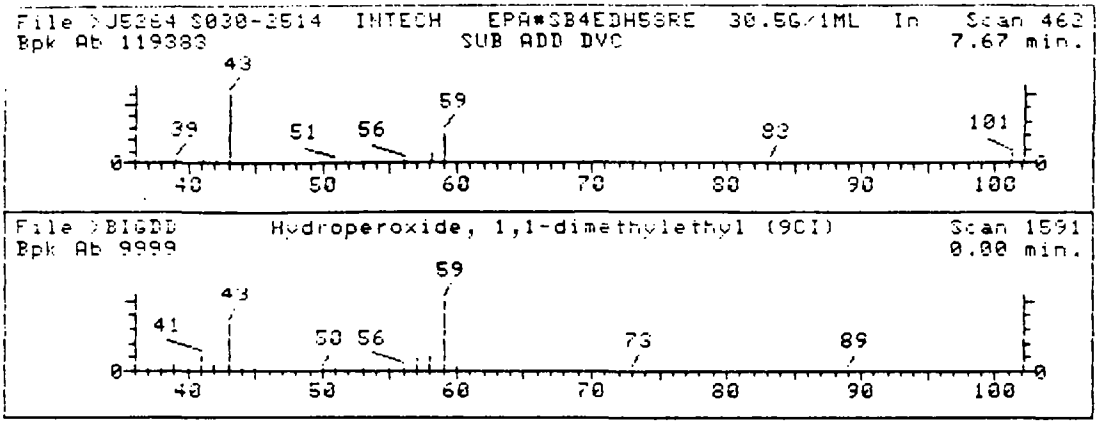


Unknown #,5
Area = 47229.00 Tentative Concentration is 15.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2

Sample file: >J5264 Spectrum #: 400
Search speed: 3 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52	108214	2031	"BIGDB	39	40	2	0	85	16	20	13

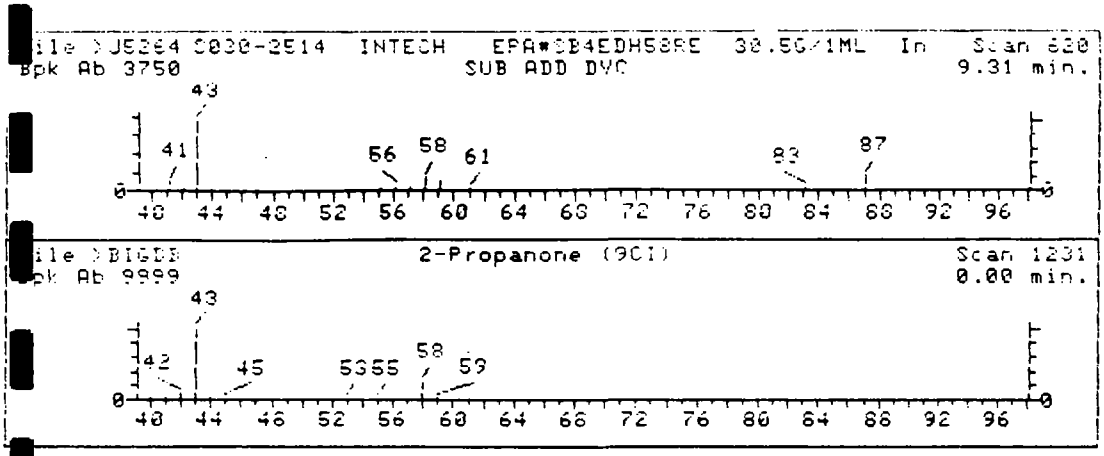


. Unknown #,6
Area = 1086075. Tentative Concentration is 340.00

1. Hydroperoxide, 1,1-dimethylethyl (9CI) 90 C4H10O2

Sample File: >J5264 Spectrum #: 462
Search speed: 3 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	20	75912	1591	"BIGDB	34	31	1	0	37	51	5	12



Unknown #,7
rea = 15548.00 Tentative Concentration is 5.00

1. 2-Propanone (9CI) 58 C3H6O

Sample file: >J5264 Spectrum #: 620
earch speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	32*	67641	1231	"BIGDB	21	50	0	0	82	33	12	15

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH59

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.4 (g/mL) G Lab File ID: J5265

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 7/10/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 9.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EDH59

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.4 (g/mL) G Lab File ID: J5265

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 7/10/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 9.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	350.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	850.	J
85-01-8	Phenanthrene	68.	J
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	49.	J
129-00-0	Pyrene	36.	J
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	710.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	350.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	39.	J
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EDH59

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.4 (g/mL) G Lab File ID: J5265

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 7/10/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 9.0 Dilution Factor: 1.00

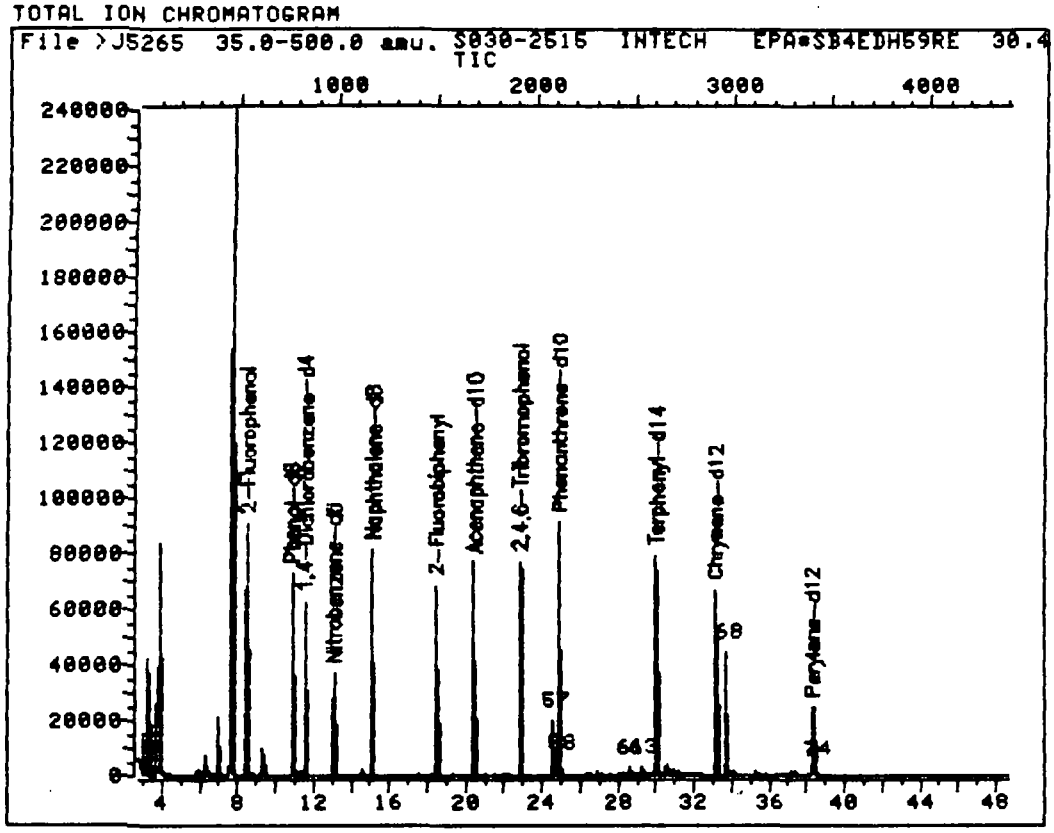
Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	3.10	100.	J
2. 67-66-3	Methane, trichloro- (9CI)	3.26	700.	J
3. - -	UNKNOWN	3.60	200.	J
4. - -	UNKNOWN	3.72	2000.	J
5. - -	UNKNOWN AROMATIC	3.81	2000.	J
6. - -	UNKNOWN	6.25	200.	J
7. - -	UNKNOWN	6.97	600.	J
8. - -	UNKNOWN	7.69	20000.	J A
9. - -	UNKNOWN	9.29	200.	J
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >J5265::D2 Quant Output File: ^J5265::N1
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 8

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

Operator ID: JULIE
Quant Time: 890711 16:16
Injected at: 890711 03:03

QUANT REPORT

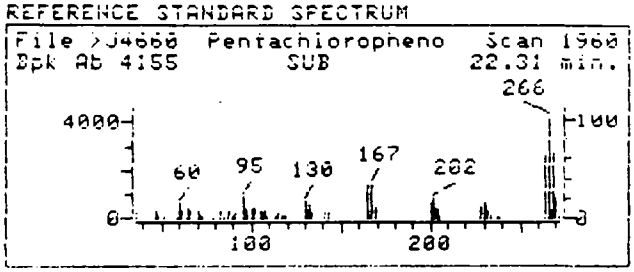
Operator ID: JULIE Quant Rev: 6 Quant Time: 890711 16:16
Output File: ^J5265::N1 Injected at: 890711 03:03
Data File: >J5265::D2 Dilution Factor: 1.00000
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 8

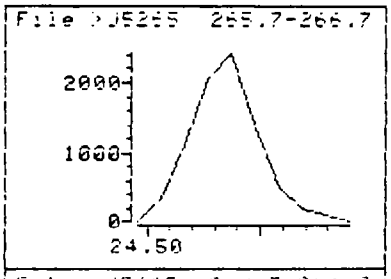
ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*1,4-Dichlorobenzene-d4	11.51	152.0	19499	40.00	UG/ML
2)	2-Fluorophenol	8.47	112.0	42248	81.31	UG/ML
3)	Phenol-d6	10.81	99.0	53255	154.56	UG/ML
16)	*Naphthalene-d8	15.09	136.0	71731	40.00	UG/ML
17)	Nitrobenzene-d5	13.04	82.0	23726	35.48	UG/ML
31)	*Acenaphthene-d10	20.40	164.0	41427	40.00	UG/ML
36)	2-Fluorobiphenyl	18.44	172.0	40490	36.37	UG/ML
51)	2,4,6-Tribromophenol	22.80	330.0	21671	85.41	UG/ML
52)	*Phenanthrene-d10	24.85	188.0	84460	40.00	UG/ML
57)	Pentachlorophenol	24.54	266.0	5082	24.14	UG/ML
58)	Phenanthrene	24.90	178.0	4182	1.92	UG/ML
61)	Fluoranthene	28.55	202.0	3756	1.37	UG/ML
62)	*Chrysene-d12	33.09	240.0	69970	40.00	UG/ML
63)	Pyrene	29.23	202.0	3634	1.02	UG/ML
64)	Terphenyl-d14	29.97	244.0	72664	33.52	UG/ML
68)	bis(2-Ethylhexyl)phthalate	33.69	149.0	26394	9.84	UG/ML
70)	*Perylene-d12	38.29	264.0	48873	40.00	UG/ML
74)	Benzo(a)pyrene	38.39	252.0	3370	1.10	UG/ML

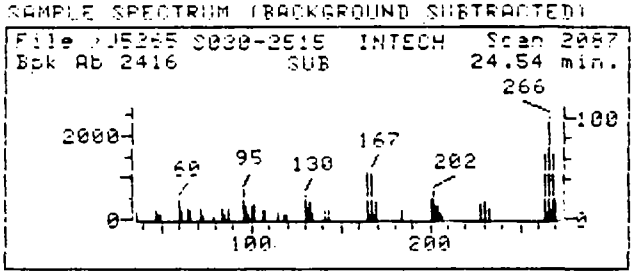
* Compound is ISTD

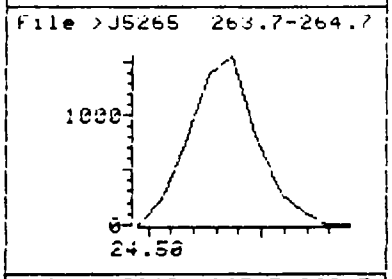
REFERENCE STANDARD SPECTRUM



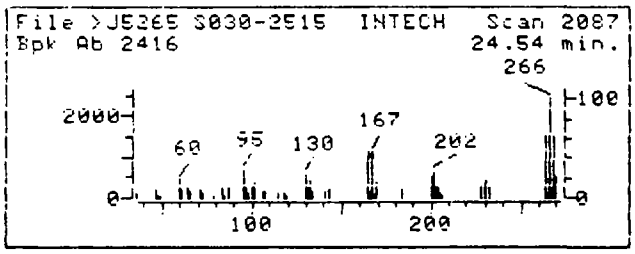


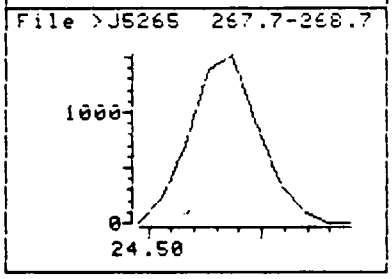
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

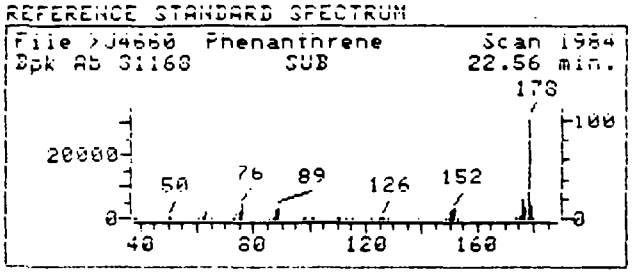




Data File: >J5265::D2 Quant Output File: ^J5265::N1
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 8
Quant Time: 890711 16:16 Quant ID File: CLPBNA::SC
Injected at: 890711 03:03 Last Calibration: 890711 15:38

Compound No: 57
Compound Name: Pentachlorophenol
Scan Number: 2087
Retention Time: 24.54 min.
Quant Ion: 266.0
Area: 5082
Concentration: 24.14 UG/ML
q-value: 98

REFERENCE STANDARD SPECTRUM



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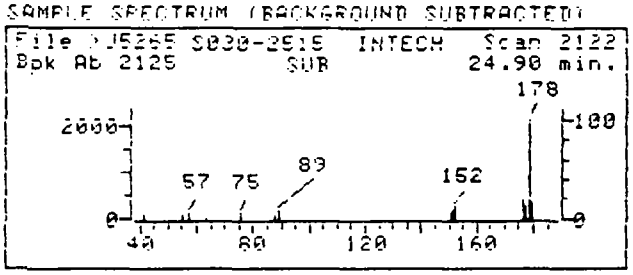
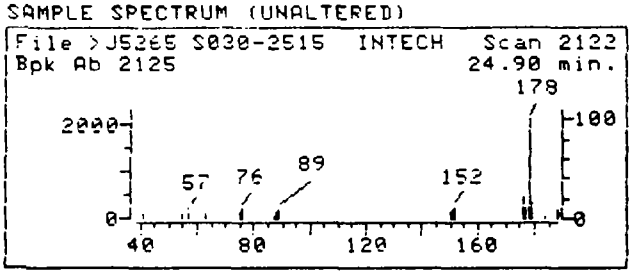
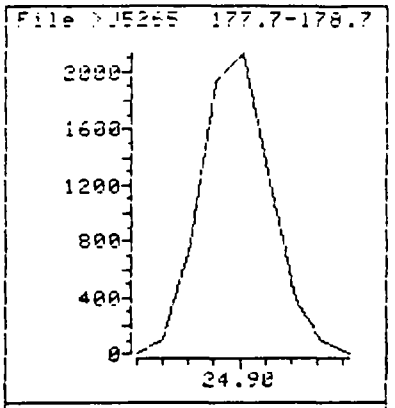
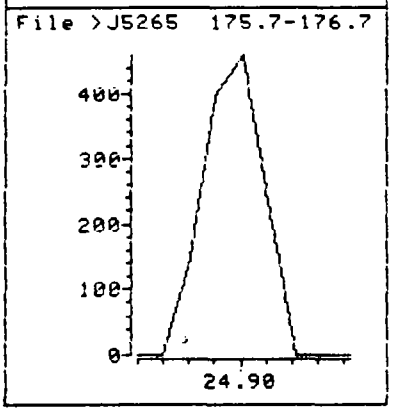


SAMPLE SPECTRUM (UNALTERED)



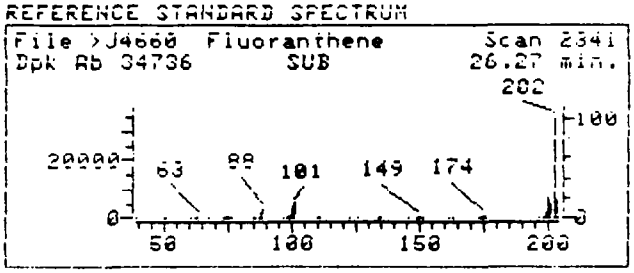


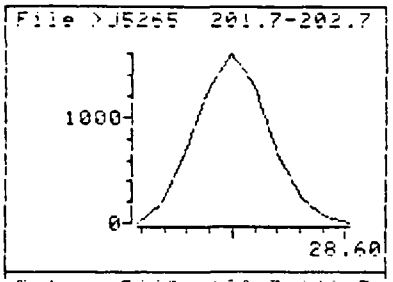


Data File: >J5265::D2 Quant Output File: ^J5265::N1
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 8
Quant Time: 890711 16:16 Quant ID File: CLPBNA::SC
Injected at: 890711 03:03 Last Calibration: 890711 15:38

Compound No: 58
Compound Name: Phenanthrene
Scan Number: 2122
Retention Time: 24.90 min.
Quant Ion: 178.0
Area: 4182
Concentration: 1.92 UG/ML
q-value: 91

REFERENCE STANDARD SPECTRUM





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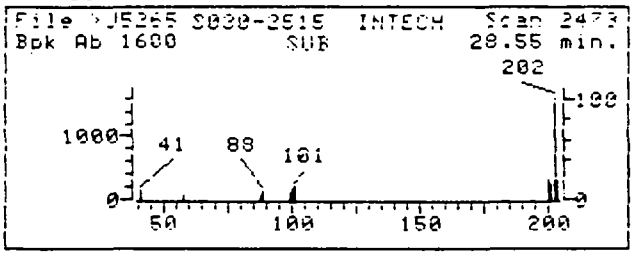
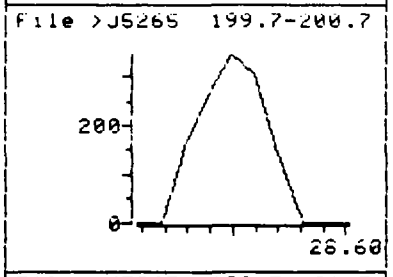
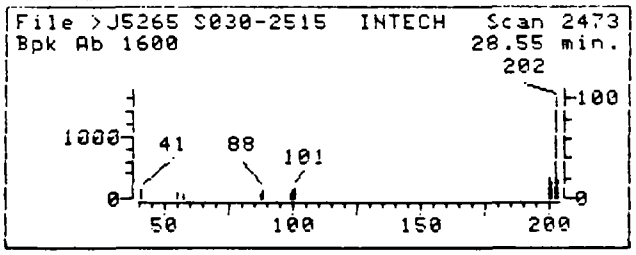
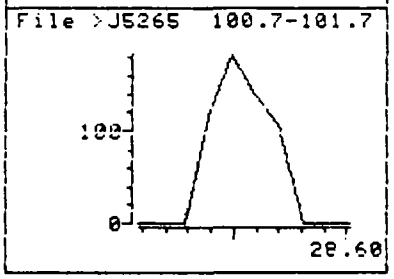




SAMPLE SPECTRUM (UNALTERED)

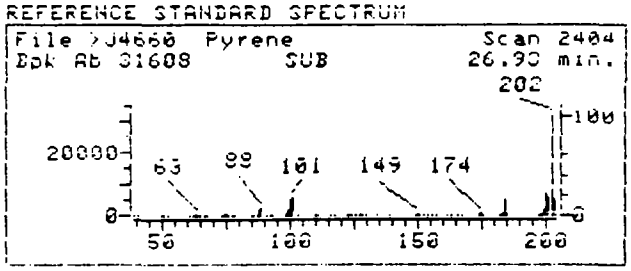




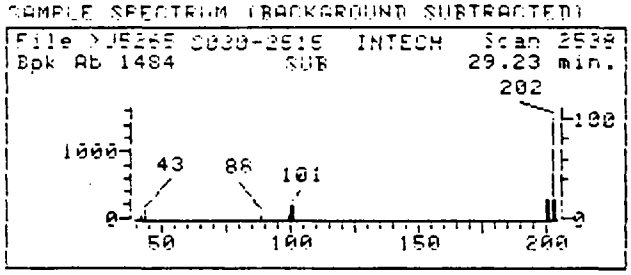
Data File: >J5265::D2 Quant Output File: ^J5265::N1
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 8
Quant Time: 890711 16:16 Quant ID File: CLPBNA::SC
Injected at: 890711 03:03 Last Calibration: 890711 15:38

Compound No: 61
Compound Name: Fluoranthene
Scan Number: 2473
Retention Time: 28.55 min.
Quant Ion: 202.0
Area: 3756
Concentration: 1.37 UG/ML
q-value: 90

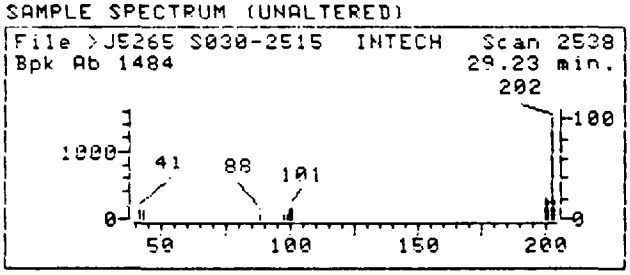
REFERENCE STANDARD SPECTRUM

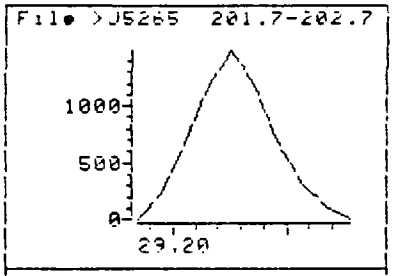


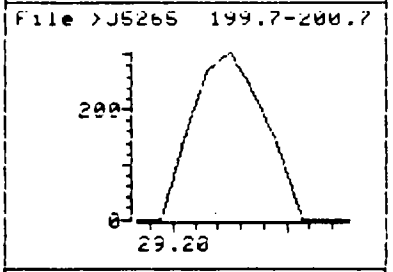
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

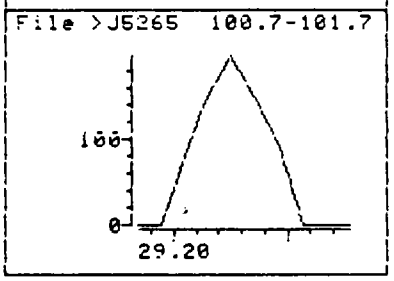


SAMPLE SPECTRUM (UNALTERED)





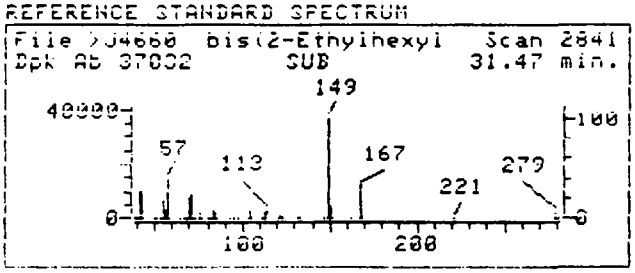


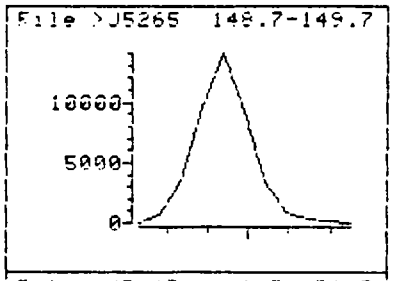


Data File: >J5265::D2 Quant Output File: ^J5265::N1
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 8
Quant Time: 890711 16:16 Quant ID File: CLP8NA::SC
Injected at: 890711 03:03 Last Calibration: 890711 15:38

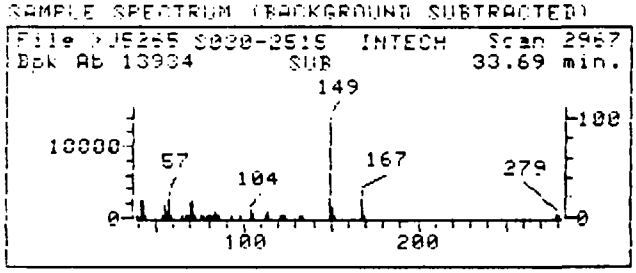
Compound No: 63
Compound Name: Pyrene
Scan Number: 2538
Retention Time: 29.23 min.
Quant Ion: 202.0
Area: 3634
Concentration: 1.02 UG/ML
q-value: 96

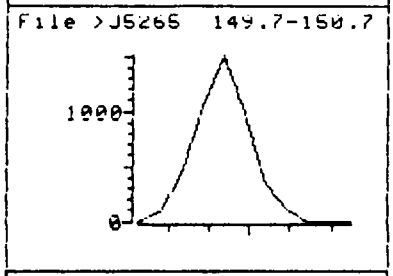
REFERENCE STANDARD SPECTRUM



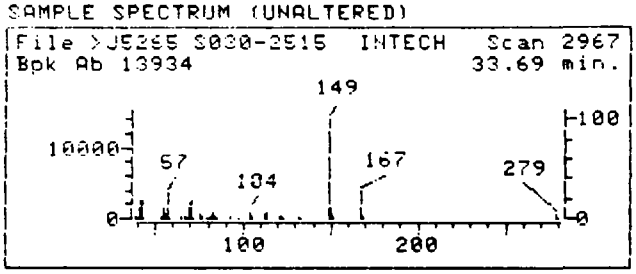


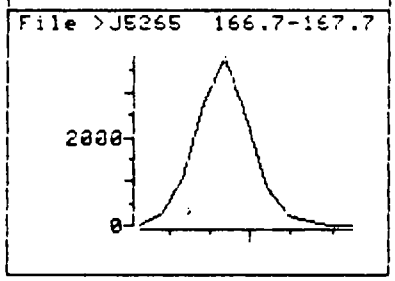
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

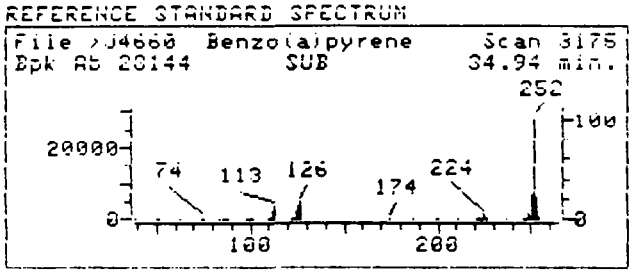




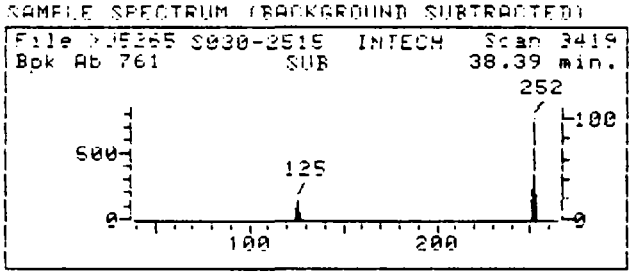
Data File: >J5265::D2 Quant Output File: ^J5265::N1
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 9
Quant Time: 890711 16:16 Quant ID File: CLPBNA::SC
Injected at: 890711 03:03 Last Calibration: 890711 15:38

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2967
Retention Time: 33.69 min.
Quant Ion: 149.0
Area: 26394
Concentration: 9.84 UG/ML
q-value: 99

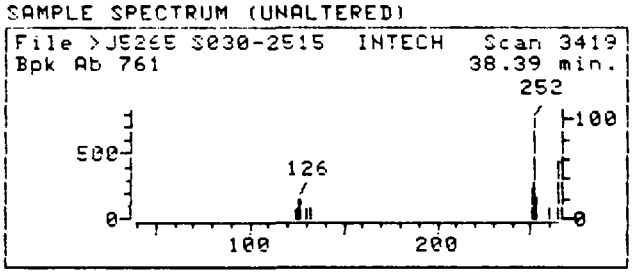
REFERENCE STANDARD SPECTRUM

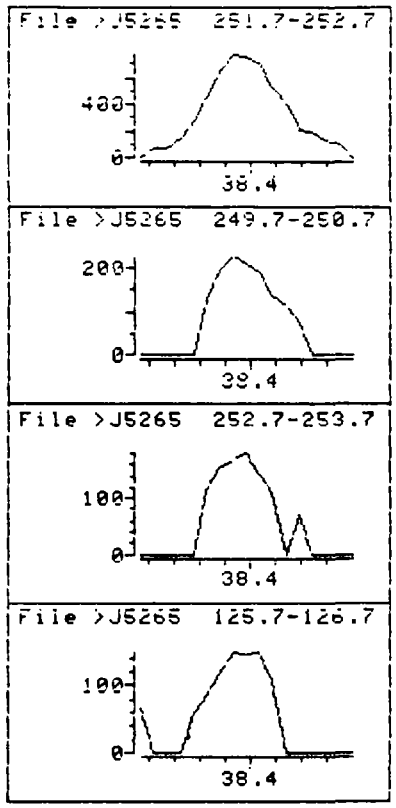


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



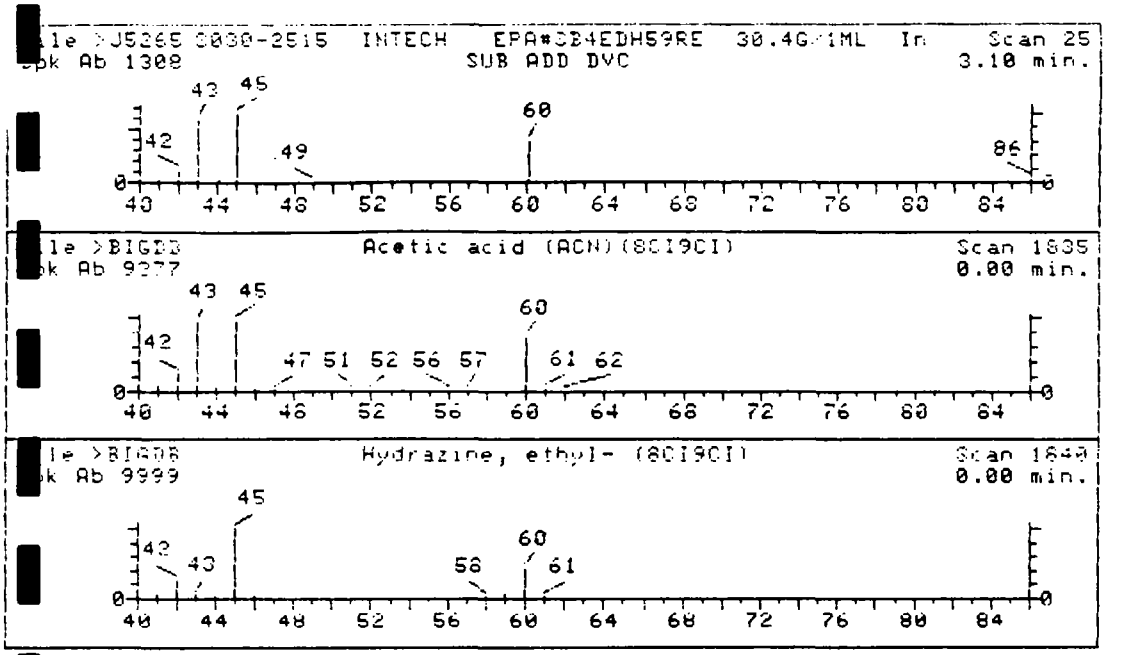
SAMPLE SPECTRUM (UNALTERED)





Data File: >J5265::D2 Quant Output File: ^J5265::N1
Name: S030-2515 INTECH
Misc: EPA#SB4EDH59RE 30.4G/1ML Instr. #2 BTL# 9
Quant Time: 890711 16:16 Quant ID File: CLPBNA::SC
Injected at: 890711 03:03 Last Calibration: 890711 15:38

Compound No: 74
Compound Name: Benzo(a)pyrene
Scan Number: 3419
Retention Time: 38.39 min.
Quant Ion: 252.0
Area: 3370
Concentration: 1.10 UG/ML
q-value: 90

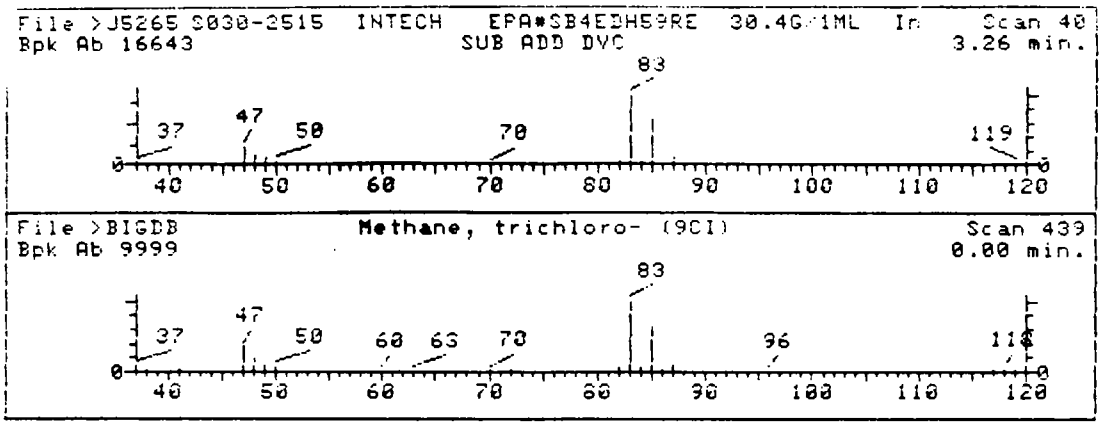


Unknown #,1
rea = 12442.00 Tentative Concentration is 4.00

1. Acetic acid (ACN)(8CI9CI) 60 C2H4O2
2. Hydrazine, ethyl- (8CI9CI) 60 C2H8N2

Sample file: >J5265 Spectrum #: 25
earch speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83*	64197	1835	"BIGDB	42	37	2	0	69	5	57	22
2.	24*	624806	1840	"BIGDB	24	64	3	0	100	41	8	12

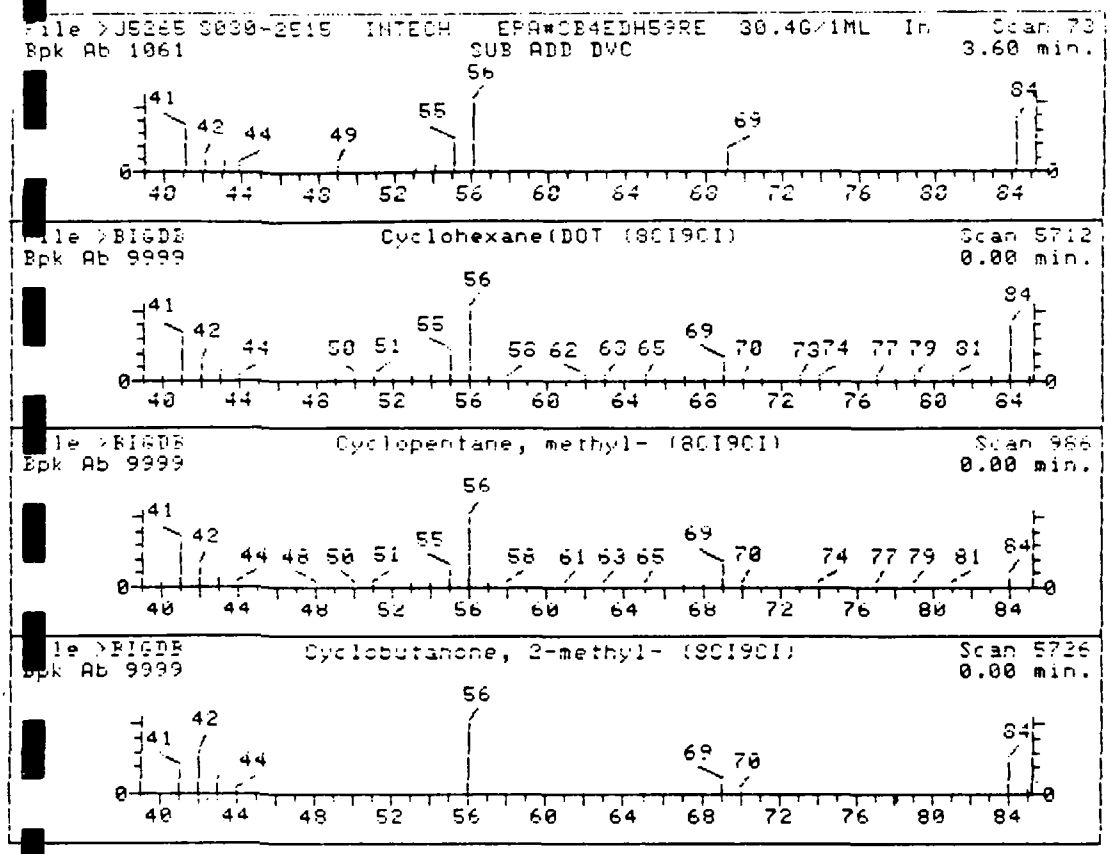


Unknown #,2
Area = 60807.00 Tentative Concentration is 20.00

1. Methane, trichloro- (9CI) 118 CHCl3

Sample file: >J5265 Spectrum #: 40
Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	91*	67663	439	"BIGDB	74	32	0	0	60	22	53	92

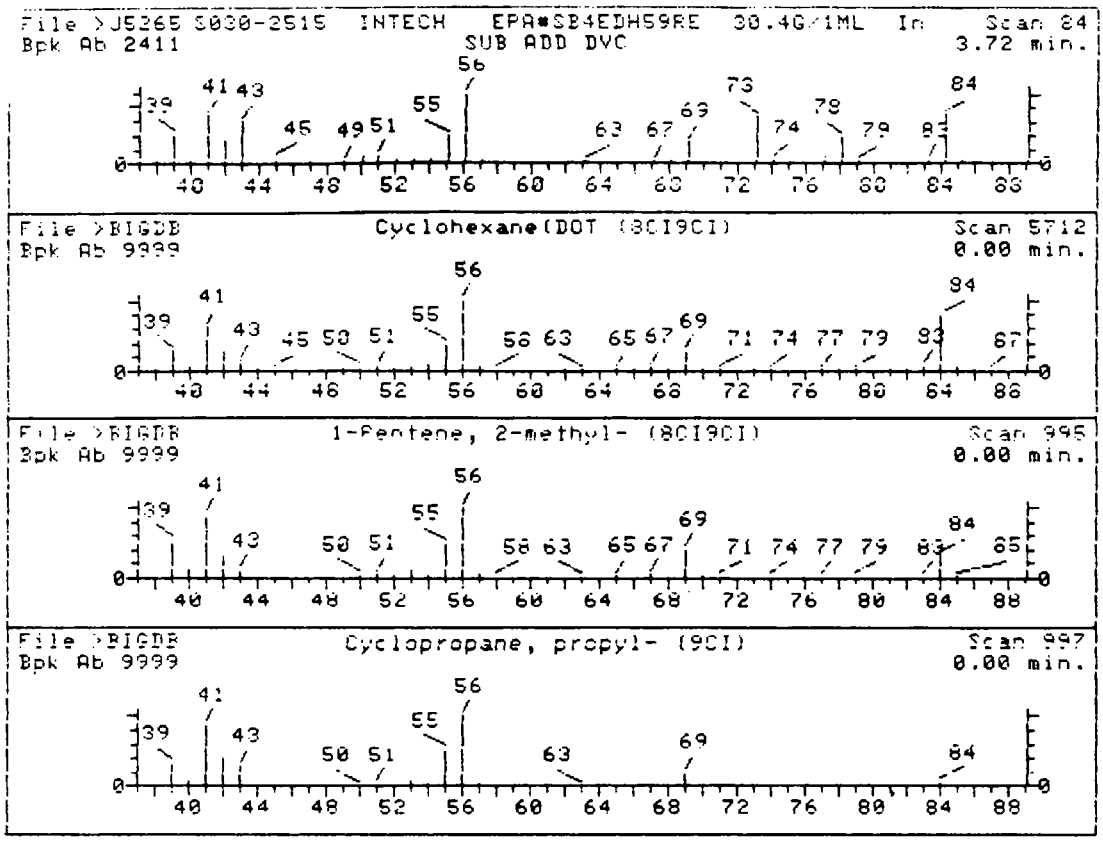


Unknown #,3
rea = 14692.00 Tentative Concentration is 5.00

1. Cyclohexane(DOT (8CI9CI)	84	C6H12
2. Cyclopentane, methyl- (8CI9CI)	84	C6H12
3. Cyclobutanone, 2-methyl- (8CI9CI)	84	C5H8O
4. Cyclobutane, ethyl- (8CI9CI)	84	C6H12
5. 1H-Tetrazole, 5-methyl- (8CI9CI)	84	C2H4N4
6. Cyclopropane, propyl- (9CI)	84	C6H12
7. Hydrazine, 1-methyl-1-(2-propynyl)- (8CI)	84	C4H8N2

Sample file: >J5265 Spectrum #: 73
earch speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	74*	110827	5712	"BIGDB	59	34	2	0	75	11	39	44
2.	30*	96377	986	"BIGDB	32	55	2	0	70	36	10	16
3.	29*	1517153	5726	"BIGDB	23	39	3	0	100	32	12	12
4.	28*	4806615	963	"BIGDB	25	58	2	0	95	40	10	14
5.	28*	4076362	998	"BIGDB	20	64	1	0	89	38	10	14
6.	20*	2415727	997	"BIGDB	31	57	3	0	71	52	5	13
7.	20*	7422824	5698	"BIGDB	23	63	3	0	206	52	5	12

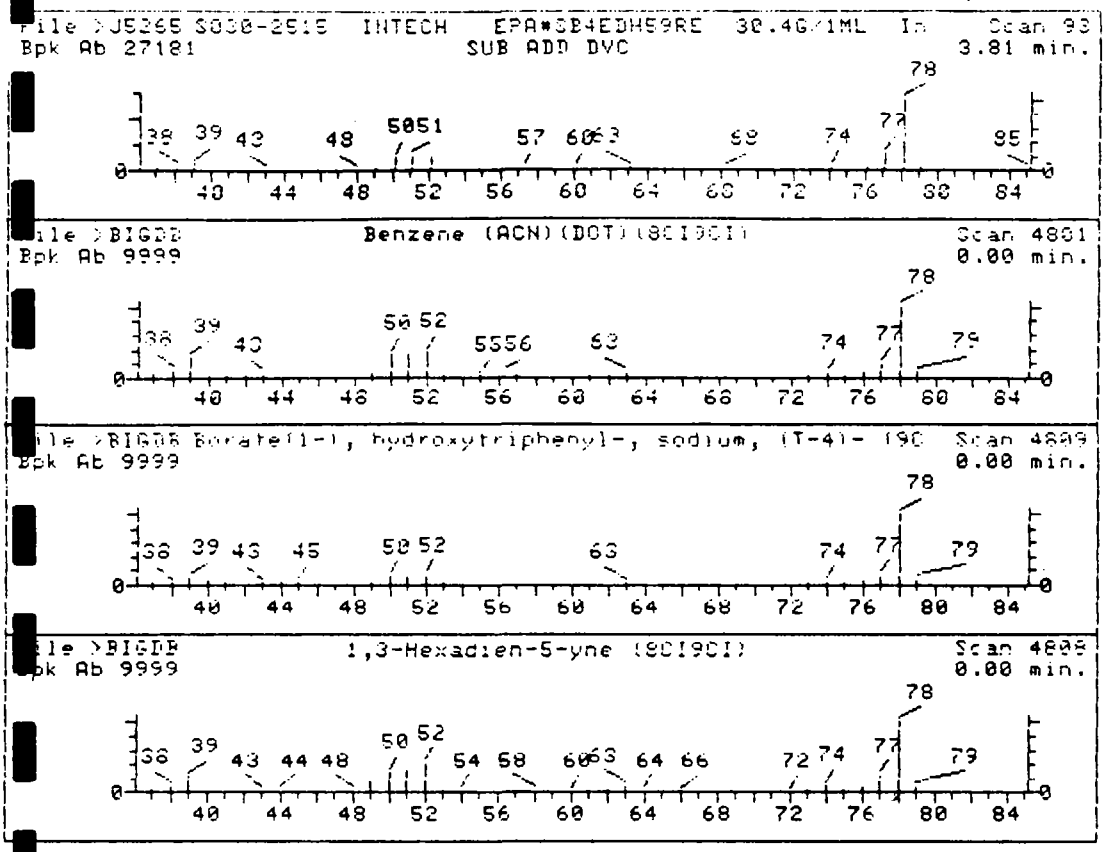


. Unknown #,4
Area = 153567.0 Tentative Concentration is 51.00

1.	Cyclohexane(DOT (8CI9CI)	84	C6H12
2.	1-Pentene, 2-methyl- (8CI9CI)	84	C6H12
3.	Cyclopropane, propyl- (9CI)	84	C6H12
4.	2-Butene, (E)- (8CI9CI)	56	C4H8
5.	2-Butene, (Z)- (8CI9CI)	56	C4H8
6.	2-Butenal, 2-methyl- (9CI)	84	C5H8O
7.	1-Propene, 2-methyl- (9CI)	56	C4H8

Sample file: >J5265 Spectrum #: 84
Search speed: 3 Tilting option: F No. of ion ranges searched: 54

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	73*	110827	5712	"BIGDB	67	26	0	0	82	41	33	80
2.	46*	763291	995	"BIGDB	49	52	1	0	75	34	16	29
3.	28*	2415727	997	"BIGDB	35	53	0	0	80	52	8	36
4.	28*	624646	943	"BIGDB	28	51	2	0	133	40	10	14
5.	26*	590181	942	"BIGDB	28	51	2	0	132	41	8	14
6.	25*	1115113	5722	"BIGDB	47	56	3	0	90	50	7	13
7.	25*	115117	940	"BIGDB	22	51	2	0	112	43	8	13

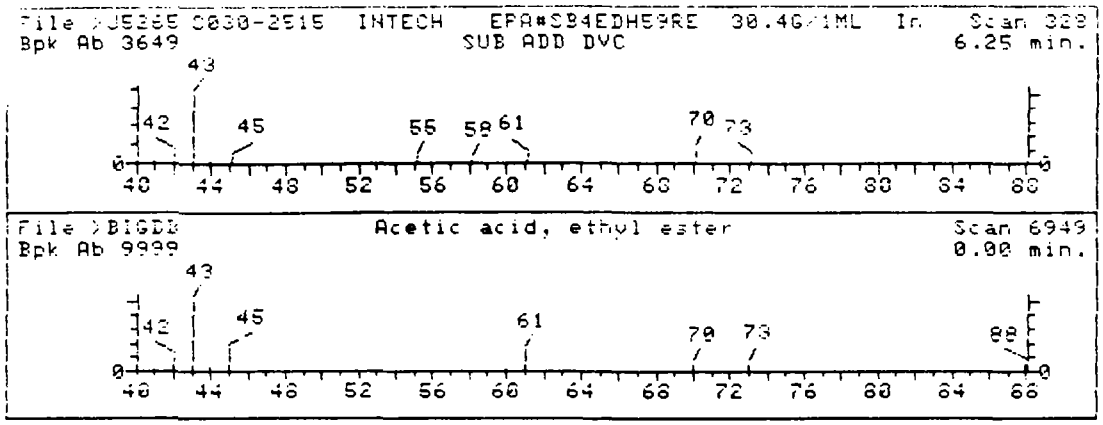


Unknown #,5
Area = 163991.0 Tentative Concentration is 54.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78	C6H6
2.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0	
3.	1,3-Hexadien-5-yne (8CI9CI)	78	C6H6
4.	1,5-Hexadien-3-yne (8CI9CI)	78	C6H6
5.	2,4-Hexadiyne (8CI9CI)	78	C6H6
6.	1,5-Hexadiyne (8CI9CI)	78	C6H6
7.	2-Butenedinitrile, (E)- (9CI)	78	C4H2N2

Sample file: >J5265 Spectrum #: 93
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	93*	71432	4801	"BIGDB	90	8	0	-4	69	1	68	83
2.	78	12113074	4809	"BIGDB	72	35	2	4	71	3	55	19
3.	64*	10420903	4808	"BIGDB	56	30	1	1	43	25	28	46
4.	59*	821089	4804	"BIGDB	49	39	0	2	27	39	21	53
5.	47*	2809690	4806	"BIGDB	58	45	1	-3	51	34	20	31
6.	38*	628160	4802	"BIGDB	51	57	2	0	33	40	14	25
7.	37*	764421	4803	"BIGDB	43	62	2	0	67	27	14	14

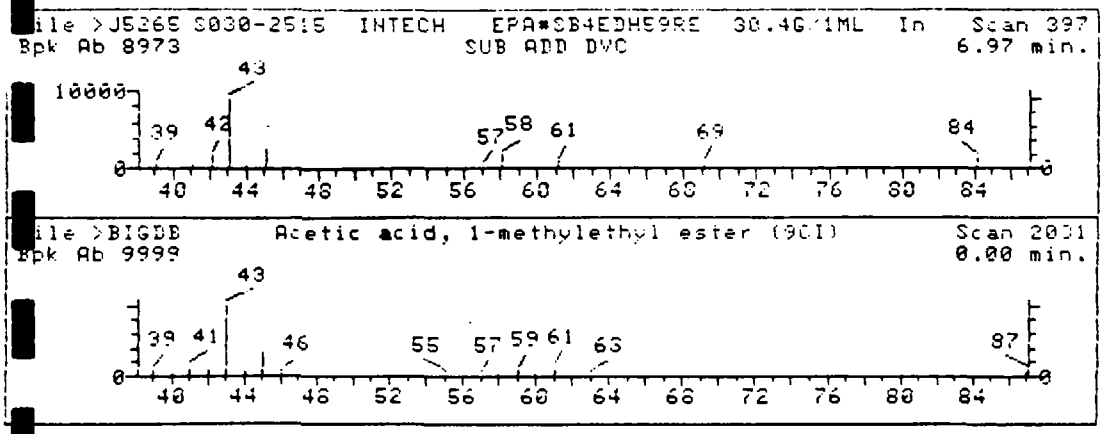


. Unknown #,6
Area = 16061.00 Tentative Concentration is 5.00

1. Acetic acid, ethyl ester 88 C4H8O2

Sample file: >J5265 Spectrum #: 328
Search speed: 3 Tilting option: F No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	141786	6949	"BIGDB	26	51	2	0	43	48	7	14

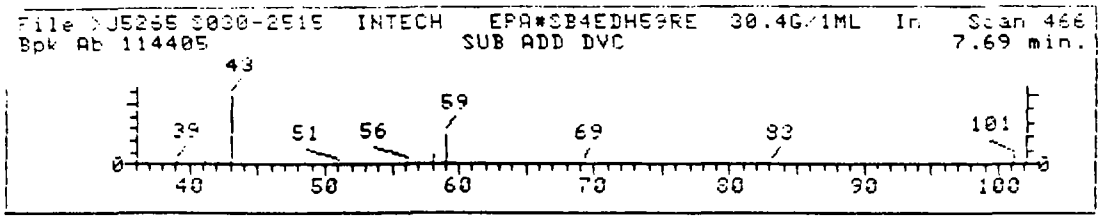


Unknown #,7
rea = 53445.00 Tentative Concentration is 18.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2

Sample file: >J5265 Spectrum #: 397
earch speed: 3 Tilting option: F No. of ion ranges searched: 48

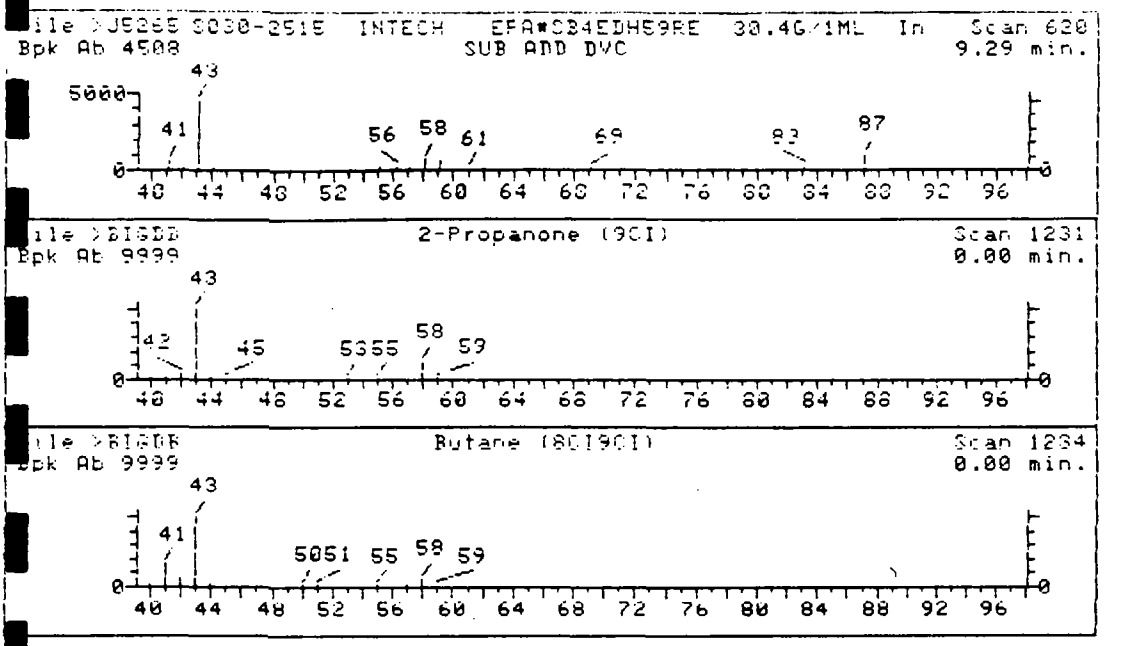
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	42	108214	2031	"BIGDB	39	40	2	0	81	22	17	13



. Unknown #,8
Area = 1286214. Tentative Concentration is 430.00

Sample file: >J5265 Spectrum #: 466

No data base entries were retrieved.



Unknown #,9
Area = 16847.00 Tentative Concentration is 6.00

1. 2-Propanone (9CI) 58 C3H6O
2. Butane (8CI9CI) 58 C4H10

Sample file: >J5265 Spectrum #: 620
Search speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	32*	**67641**	**1231**	"BIGDB	21	50	0	0	69	35	12	15
2.	30*	**106978**	**1234**	"BIGDB	20	59	2	0	100	32	12	13

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH60

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5262

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 8. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/10/89

GPC Cleanup: (Y/N) N pH: 8.3 Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800.	U
111-44-4	bis(2-Chloroethyl)ether	1800.	U
95-57-8	2-Chlorophenol	1800.	U
541-73-1	1,3-Dichlorobenzene	1800.	U
106-46-7	1,4-Dichlorobenzene	1800.	U
100-51-6	Benzyl alcohol	1800.	U
95-50-1	1,2-Dichlorobenzene	1800.	U
95-48-7	2-Methylphenol	1800.	U
108-60-1	bis(2-Chloroisopropyl)ether	1800.	U
106-44-5	4-Methylphenol	1800.	U
621-64-7	N-Nitroso-di-n-propylamine	1800.	U
67-72-1	Hexachloroethane	1800.	U
98-95-3	Nitrobenzene	1800.	U
78-59-1	Isophorone	1800.	U
88-75-5	2-Nitrophenol	1800.	U
105-67-9	2,4-Dimethylphenol	1800.	U
65-85-0	Benzoic acid	9100.	U
111-91-1	bis(2-Chloroethoxy)methane	1800.	U
120-83-2	2,4-Dichlorophenol	1800.	U
120-82-1	1,2,4-Trichlorobenzene	1800.	U
91-20-3	Naphthalene	1100.	J
106-47-8	4-Chloroaniline	1800.	U
87-68-3	Hexachlorobutadiene	1800.	U
59-50-7	4-Chloro-3-methylphenol	1800.	U
91-57-6	2-Methylnaphthalene	1800.	U
77-47-4	Hexachlorocyclopentadiene	1800.	U
88-06-2	2,4,6-Trichlorophenol	1800.	U
95-95-4	2,4,5-Trichlorophenol	9100.	U
91-58-7	2-Chloronaphthalene	1800.	U
88-74-4	2-Nitroaniline	9100.	U
131-11-3	Dimethylphthalate	1800.	U
208-96-8	Acenaphthylene	1800.	U
606-20-2	2,6-Dinitrotoluene	1800.	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH60

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5262

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 8. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/10/89

GPC Cleanup: (Y/N) N pH: 8.3 Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	9100.	U
83-32-9	Acenaphthene	2300.	
51-28-5	2,4-Dinitrophenol	9100.	U
100-02-7	4-Nitrophenol	9100.	U
132-64-9	Dibenzofuran	4000.	
121-14-2	2,4-Dinitrotoluene	1800.	U
84-66-2	Diethylphthalate	1800.	U
7005-72-3	4-Chlorophenyl-phenylether	1800.	U
86-73-7	Fluorene	3200.	
100-01-6	4-Nitroaniline	9100.	U
534-52-1	4,6-Dinitro-2-methylphenol	9100.	U
86-30-6	N-Nitrosodiphenylamine (1)	1800.	U
101-55-3	4-Bromophenyl-phenylether	1800.	U
118-74-1	Hexachlorobenzene	1800.	U
87-86-5	Pentachlorophenol	9100.	U
85-01-8	Phenanthrene	6600.	
120-12-7	Anthracene	2100.	
84-74-2	Di-n-butylphthalate	1800.	U
206-44-0	Fluoranthene	4100.	
129-00-0	Pyrene	2900.	
85-68-7	Butylbenzylphthalate	1800.	U
91-94-1	3,3'-Dichlorobenzidine	3600.	U
56-55-3	Benzo(a)anthracene	1200.	J
218-01-9	Chrysene	2400.	
117-81-7	bis(2-Ethylhexyl)phthalate	190.	J
117-84-0	Di-n-octylphthalate	1800.	U
205-99-2	Benzo(b)fluoranthene	920.	J
207-08-9	Benzo(k)fluoranthene	1800.	U
50-32-8	Benzo(a)pyrene	780.	J
193-39-5	Indeno(1,2,3-cd)pyrene	1800.	U
53-70-3	Dibenz(a,h)anthracene	1800.	U
191-24-2	Benzo(g,h,i)perylene	890.	J

(1) - Cannot be separated from diphenylamine

EPA SAMPLE NO.

EDH60

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5262

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 8. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/10/89

GPC Cleanup: (Y/N) N pH: 8.3 Dilution Factor: 5.00

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN AROMATIC	3.73	30000.	J
2.	- -	UNKNOWN AROMATIC	17.54	10000.	J
3.	- -	UNKNOWN AROMATIC	18.91	10000.	J
4.	- -	UNKNOWN AROMATIC	19.14	20000.	J
5.	- -	UNKNOWN AROMATIC	19.40	20000.	J
6.	- -	UNKNOWN AROMATIC	19.45	6000.	J
7.	- -	UNKNOWN AROMATIC	19.71	6000.	J
8.	- -	UNKNOWN HYDROCARBON	20.58	9000.	J
9.	- -	UNKNOWN AROMATIC	20.79	7000.	J
10.	- -	UNKNOWN AROMATIC	21.20	7000.	J
11.	- -	UNKNOWN AROMATIC	21.44	7000.	J
12.	- -	UNKNOWN AROMATIC	21.49	6000.	J
13.	- -	UNKNOWN HYDROCARBON	22.08	6000.	J
14.	- -	UNKNOWN	22.20	5000.	J
15.	- -	UNKNOWN HYDROCARBON	23.59	10000.	J
16.	- -	UNKNOWN HYDROCARBON	23.66	5000.	J
17.	- -	UNKNOWN	23.88	6000.	J
18.	- -	UNKNOWN AROMATIC	25.92	5000.	J
19.	- -	UNKNOWN HYDROCARBON	26.28	9000.	J
20.	- -	UNKNOWN HYDROCARBON	27.52	9000.	J
21.					
22.					
23.					
24.					
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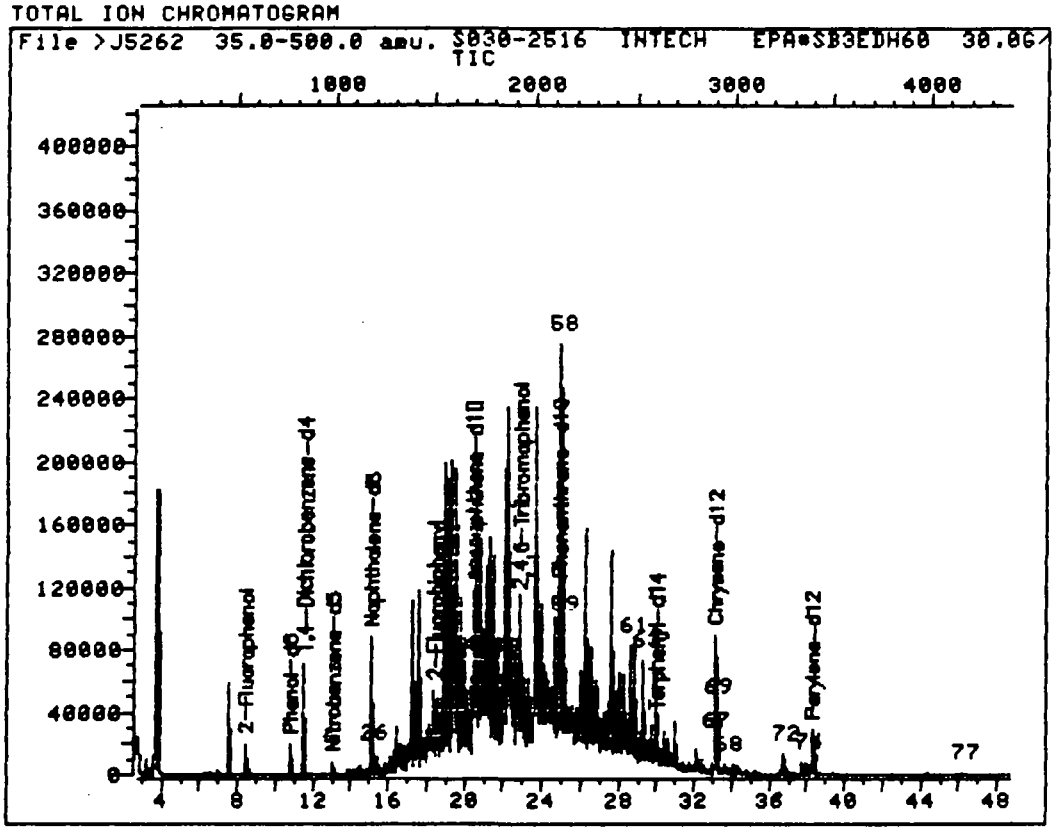
TOTAL ION CHROMATOGRAM



Data File: >J5262::D2 Quant Output File: ^J5262::N1
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML Instr. #2 (X5 DILUTION) BTL# 5

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

Operator ID: JULIE
Quant Time: 890711 15:55
Injected at: 890710 23:59

QUANT REPORT

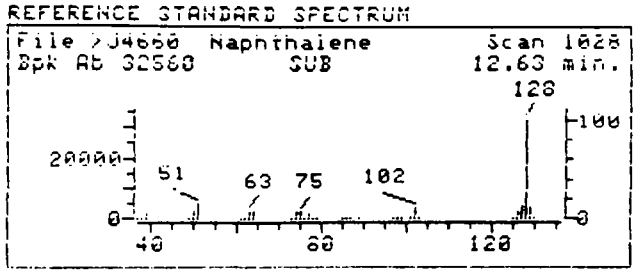
Operator ID: JULIE Quant Rev: 6 Quant Time: 890711 15:55
Output File: ^J5262::N1 Injected at: 890710 23:59
Data File: >J5262::D2 Dilution Factor: 1.00000
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML Instr. #2 (X5 DILUTION) BTL# 5

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

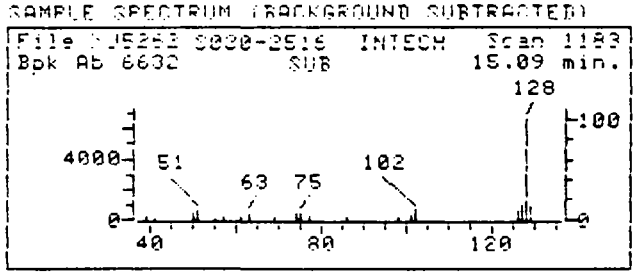
	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*1,4-Dichlorobenzene-d4	11.48	152.0	19694	40.00	UG/ML	96
2)	2-Fluorophenol	8.39	112.0	9655	18.40	UG/ML	[illegible]
3)	Phenol-d6	10.76	99.0	12239	35.17	UG/ML	[illegible]
16)	*Naphthalene-d8	15.04	136.0	76778	40.00	UG/ML	91
17)	Nitrobenzene-d5	13.01	82.0	5550	7.75	UG/ML	81
26)	Naphthalene	15.09	128.0	11675	6.17	UG/ML	[illegible]
31)	*Acenaphthene-d10	20.41	164.0	49750	40.00	UG/ML	[illegible]
36)	2-Fluorobiphenyl	18.39	172.0	12192	9.12	UG/ML	94
41)	Acenaphthene	20.49	153.0	19218	12.60	UG/ML	[illegible]
44)	Dibenzofuran	20.98	168.0	22206	22.24	UG/ML	[illegible]
49)	Fluorene	21.99	166.0	31547	17.68	UG/ML	97
51)	2,4,6-Tribromophenol	22.81	330.0	5315	17.44	UG/ML	97
52)	*Phenanthrene-d10	24.84	188.0	103540	40.00	UG/ML	[illegible]
58)	Phenanthrene	24.92	178.0	96675	36.24	UG/ML	[illegible]
59)	Anthracene	25.03	178.0	32121	11.46	UG/ML	95
61)	Fluoranthene	28.58	202.0	76035	22.67	UG/ML	[illegible]
62)	*Chrysene-d12	33.08	240.0	82282	40.00	UG/ML	[illegible]
63)	Pyrene	29.26	202.0	67805	16.11	UG/ML	98
64)	Terphenyl-d14	29.95	244.0	20034	7.86	UG/ML	[illegible]
67)	Benzo(a)anthracene	33.01	228.0	25674	6.64	UG/ML	[illegible]
68)	bis(2-Ethylhexyl)phthalate	33.64	149.0	3272	1.04	UG/ML	96
69)	Chrysene	33.14	228.0	35533	13.38	UG/ML	96
70)	*Perylene-d12	38.27	264.0	56054	40.00	UG/ML	[illegible]
72)	Benzo(b)fluoranthene	36.67	252.0	21590	5.10	UG/ML	[illegible]
74)	Benzo(a)pyrene	37.96	252.0	15201	4.31	UG/ML	95
77)	Benzo(g,h,i)perylene	46.15	276.0	3972	4.94	UG/ML	[illegible]

* Compound is ISTD

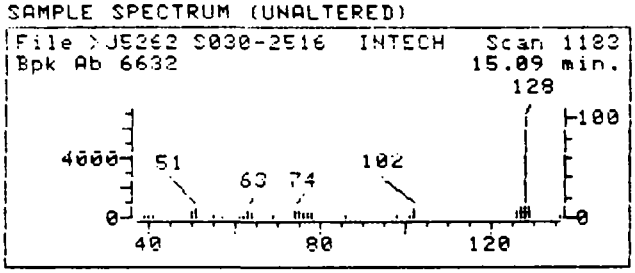
REFERENCE STANDARD SPECTRUM

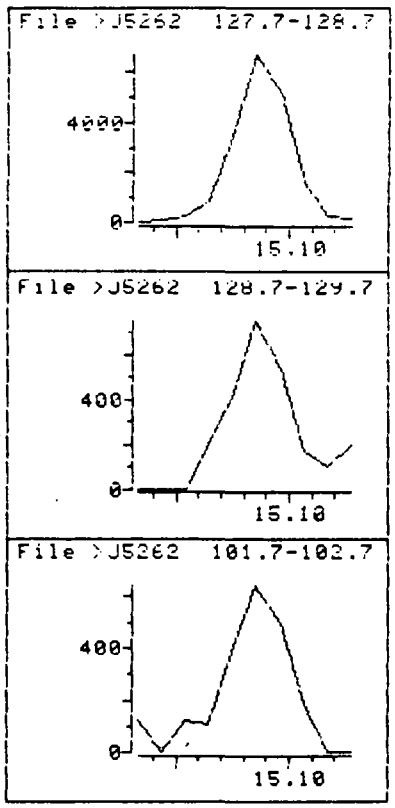


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



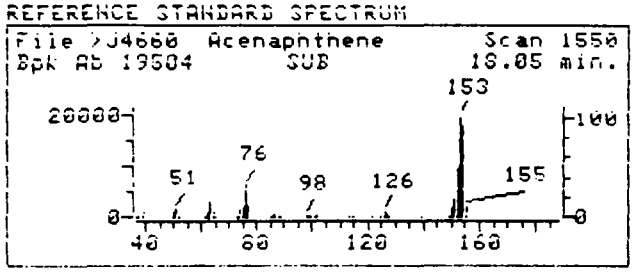


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

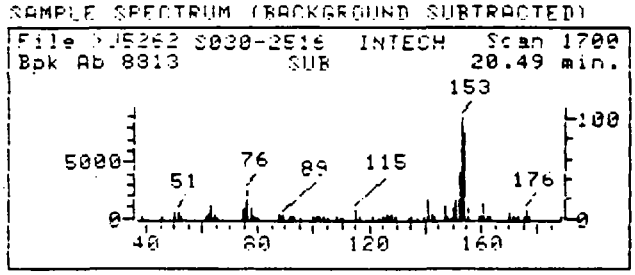
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 26
Compound Name: Naphthalene
Scan Number: 1183
Retention Time: 15.09 min.
Quant Ion: 128.0
Area: 11675
Concentration: 6.17 UG/ML
q-value: 98

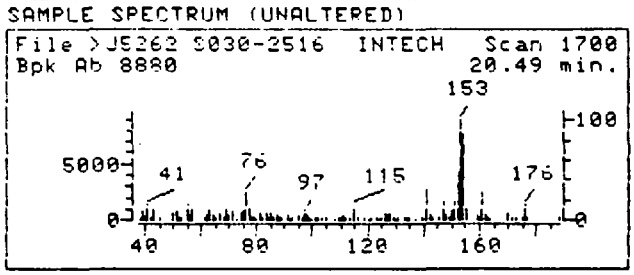
REFERENCE STANDARD SPECTRUM

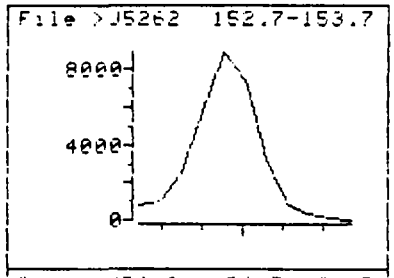


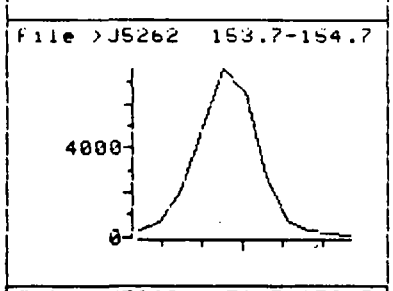
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

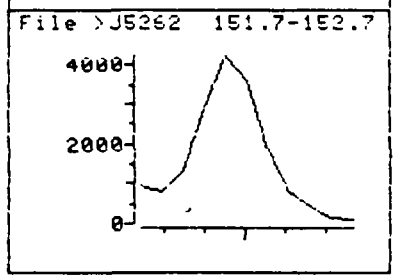


SAMPLE SPECTRUM (UNALTERED)







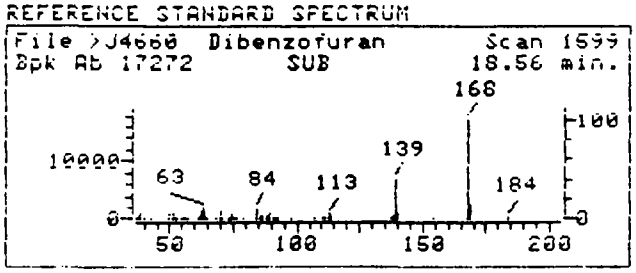


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

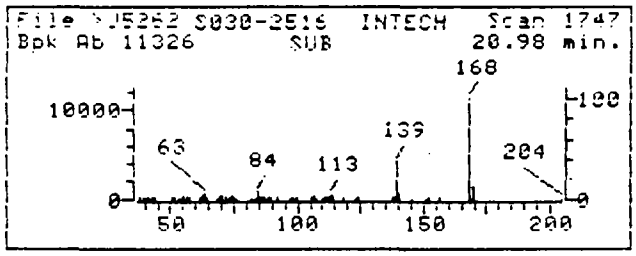
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 41
Compound Name: Acenaphthene
Scan Number: 1700
Retention Time: 20.49 min.
Quant Ion: 153.0
Area: 19218
Concentration: 12.60 UG/ML
q-value: 95

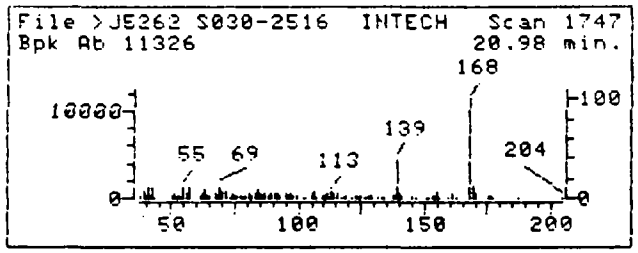
REFERENCE STANDARD SPECTRUM

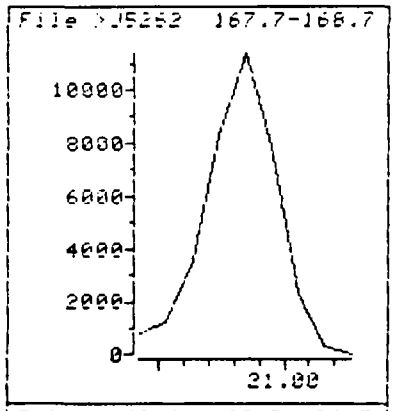


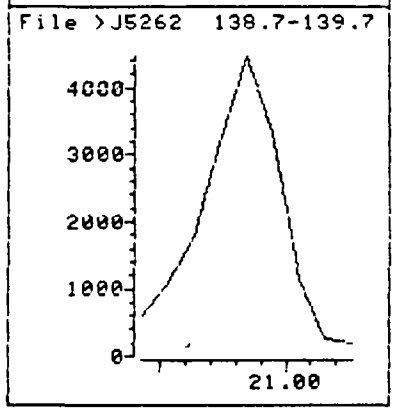
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







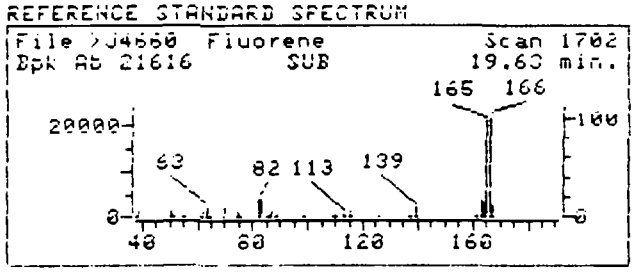
Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

Quant Output File: ^J5262::N1

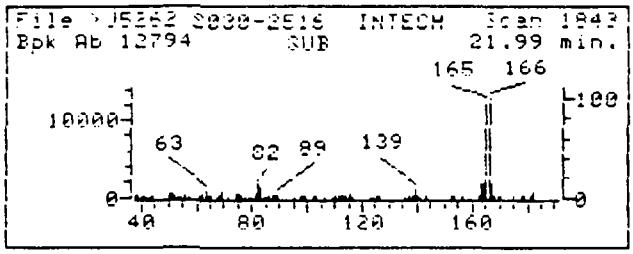
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 44
Compound Name: Dibenzofuran
Scan Number: 1747
Retention Time: 20.98 min.
Quant Ion: 168.0
Area: 22206
Concentration: 22.24 UG/ML
q-value: 94

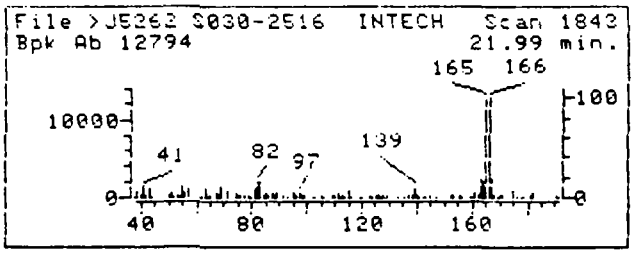
REFERENCE STANDARD SPECTRUM

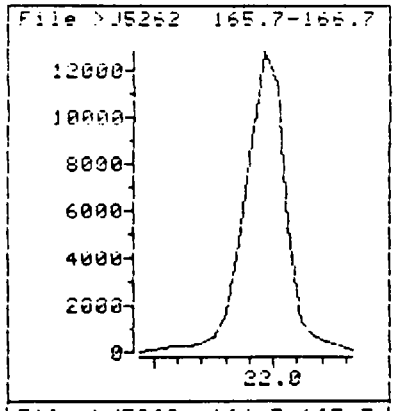


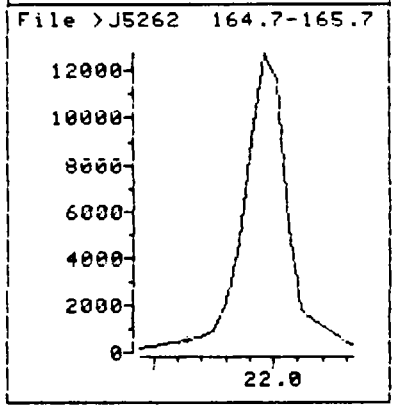
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





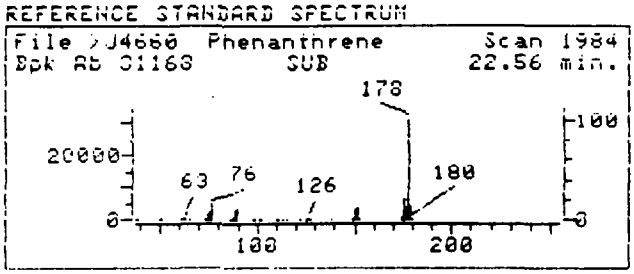


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

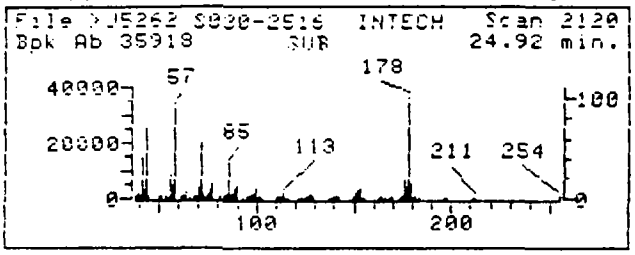
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 49
Compound Name: Fluorene
Scan Number: 1843
Retention Time: 21.99 min.
Quant Ion: 166.0
Area: 31547
Concentration: 17.68 UG/ML
q-value: 97

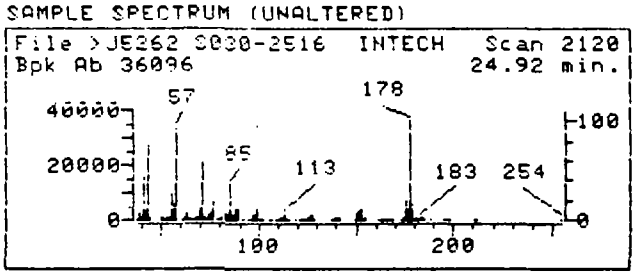
REFERENCE STANDARD SPECTRUM

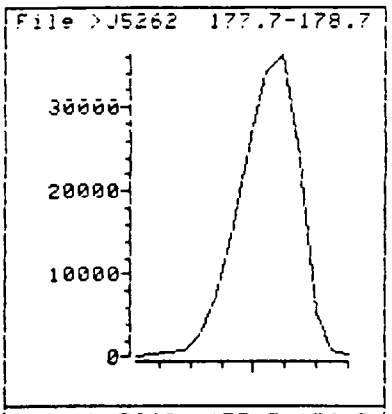


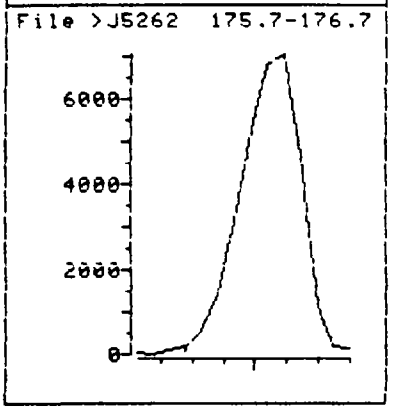
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





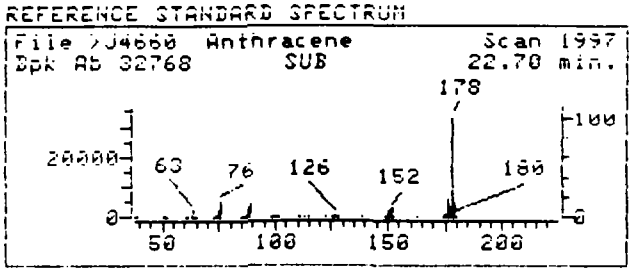


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

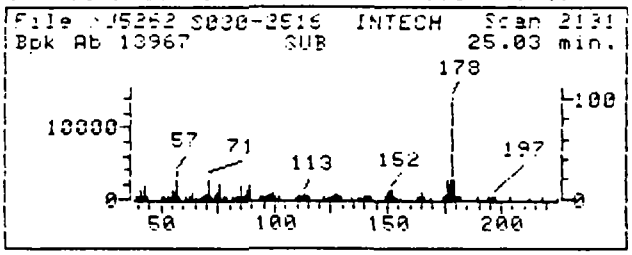
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 58
Compound Name: Phenanthrene
Scan Number: 2120
Retention Time: 24.92 min.
Quant Ion: 178.0
Area: 96675
Concentration: 36.24 UG/ML
q-value: 96

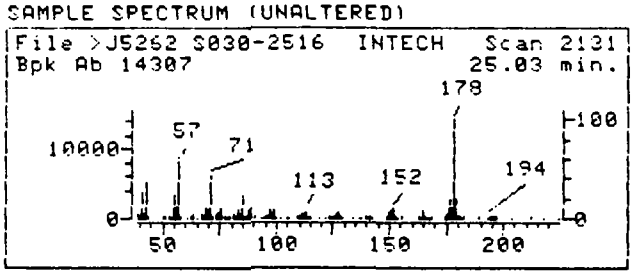
REFERENCE STANDARD SPECTRUM

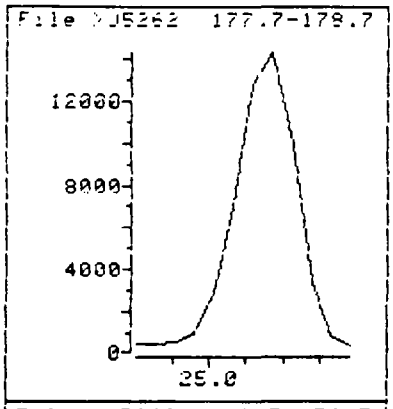


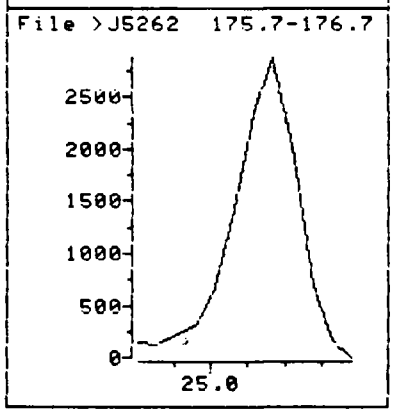
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





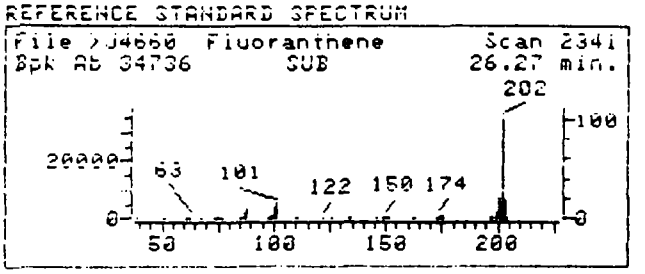


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

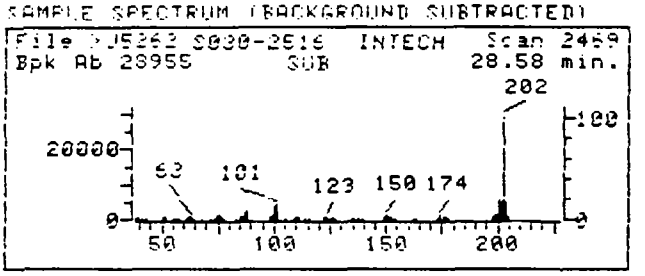
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 59
Compound Name: Anthracene
Scan Number: 2131
Retention Time: 25.03 min.
Quant Ion: 178.0
Area: 32121
Concentration: 11.46 UG/ML
q-value: 95

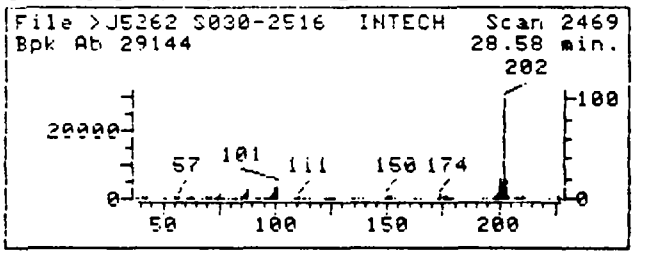
REFERENCE STANDARD SPECTRUM

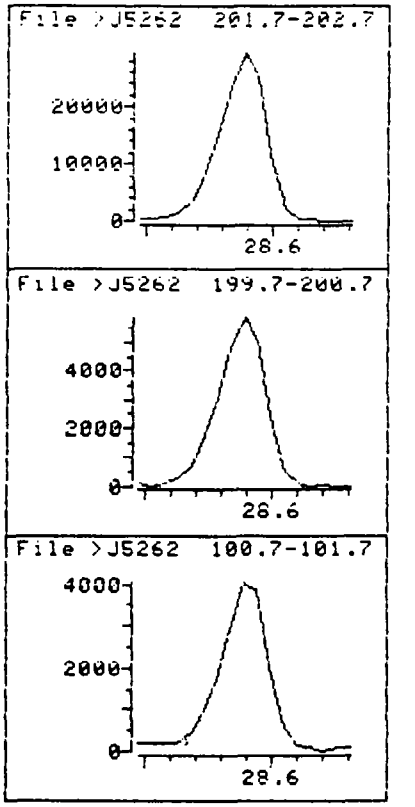


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



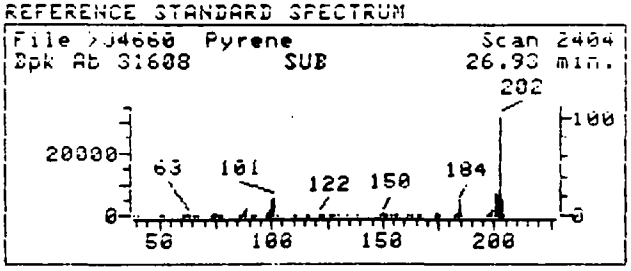


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

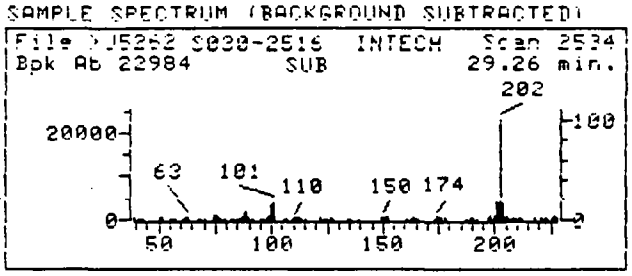
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 61
Compound Name: Fluoranthene
Scan Number: 2469
Retention Time: 28.58 min.
Quant Ion: 202.0
Area: 76035
Concentration: 22.67 UG/ML
q-value: 93

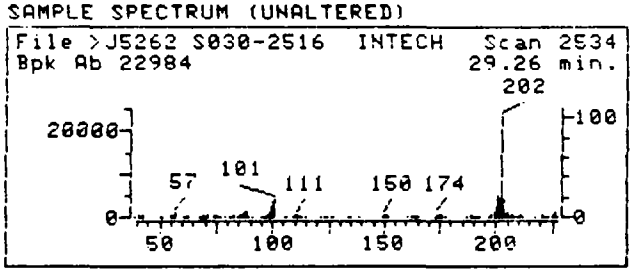
REFERENCE STANDARD SPECTRUM

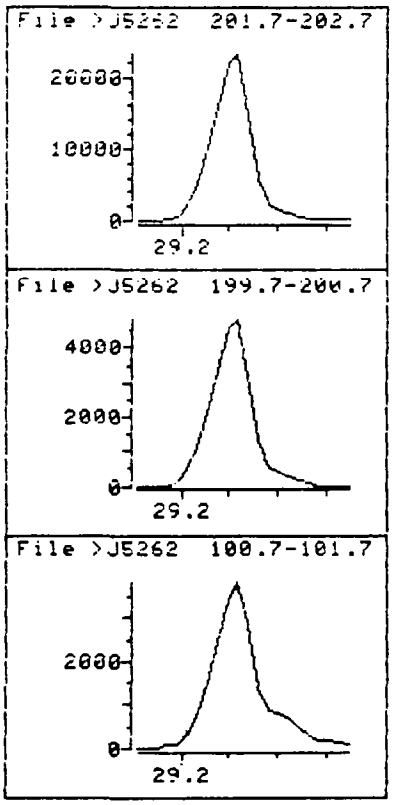


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



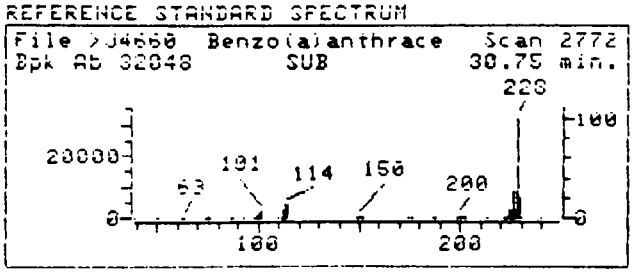


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

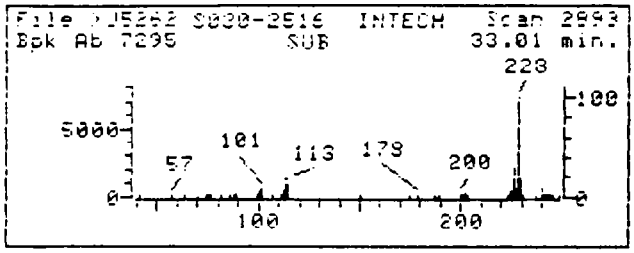
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 63
Compound Name: Pyrene
Scan Number: 2534
Retention Time: 29.26 min.
Quant Ion: 202.0
Area: 67805
Concentration: 16.11 UG/ML
q-value: 98

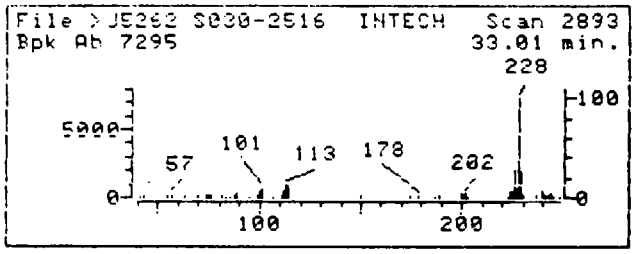
REFERENCE STANDARD SPECTRUM

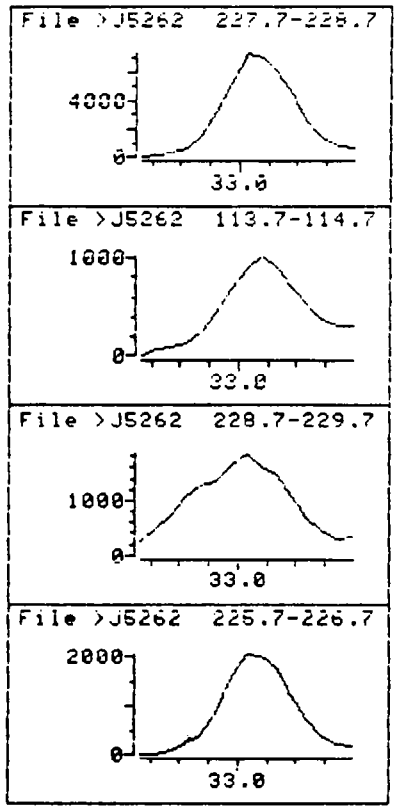


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

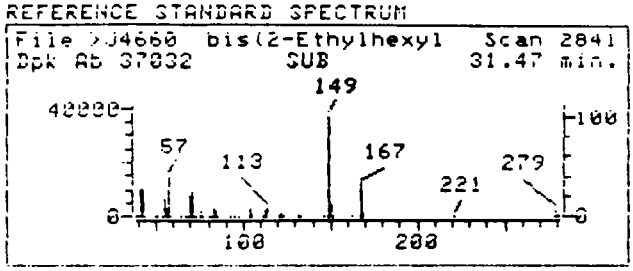


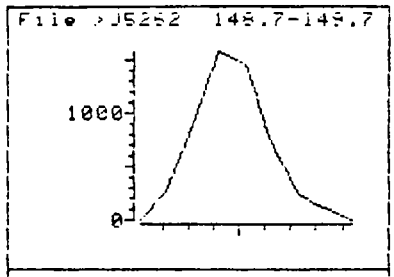


Data File: >J5262::D2 Quant Output File: ^J5262::N1
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML Instr. #2 (X5 DILUTION) BTL#: 5
Quant Time: 890711 15:55 Quant ID File: CLPBNA::SC
Injected at: 890710 23:59 Last Calibration: 890711 15:38

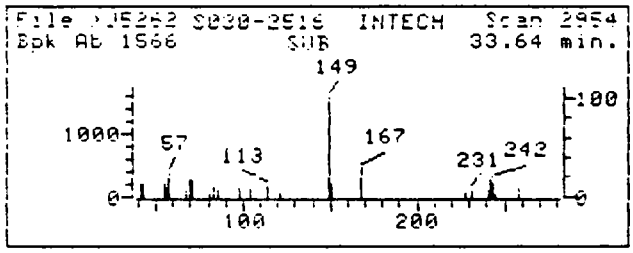
Compound No: 67
Compound Name: Benzo(a)anthracene
Scan Number: 2893
Retention Time: 33.01 min.
Quant Ion: 228.0
Area: 25674
Concentration: 6.64 UG/ML
q-value: 94

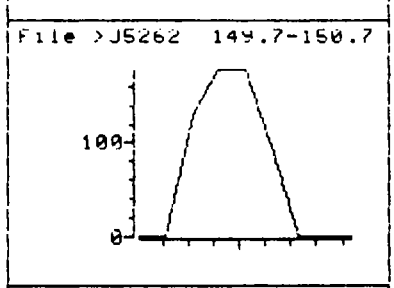
REFERENCE STANDARD SPECTRUM



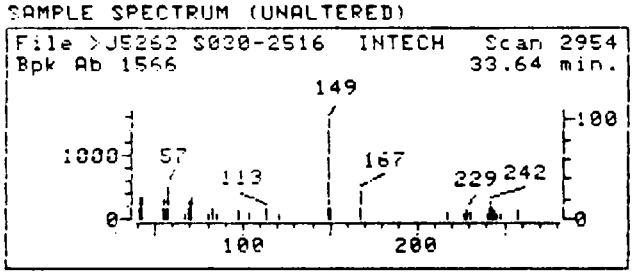


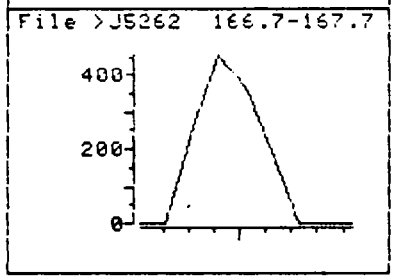
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

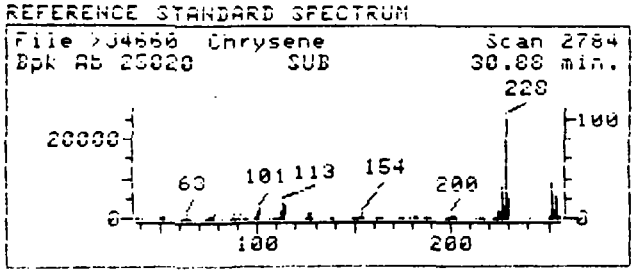




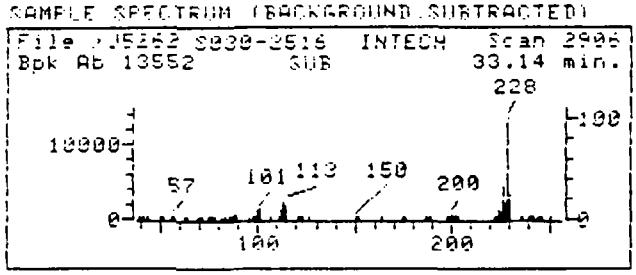
Data File: >J5262::D2 Quant Output File: ^J5262::N1
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML Instr. #2 (X5 DILUTION) BTL# 5
Quant Time: 890711 15:55 Quant ID File: CLPBNA::SC
Injected at: 890710 23:59 Last Calibration: 890711 15:38

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2954
Retention Time: 33.64 min.
Quant Ion: 149.0
Area: 3272
Concentration: 1.04 UG/ML
q-value: 96

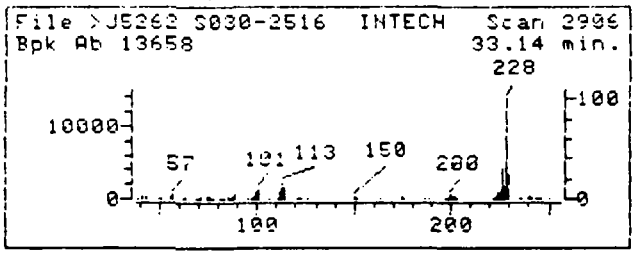
REFERENCE STANDARD SPECTRUM

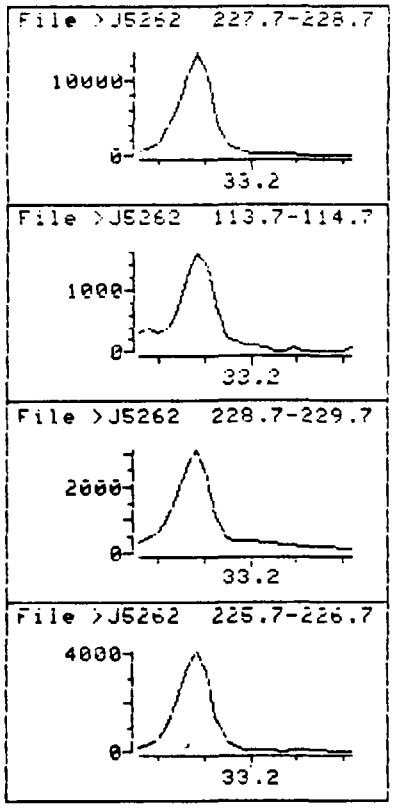


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





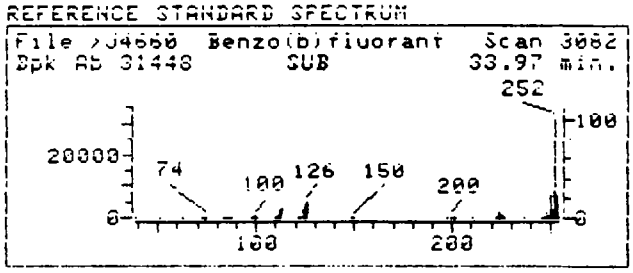
Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

Quant Output File: ^J5262::N1

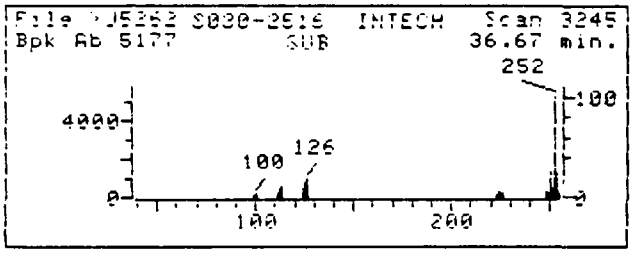
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 69
Compound Name: Chrysene
Scan Number: 2906
Retention Time: 33.14 min.
Quant Ion: 228.0
Area: 35533
Concentration: 13.38 UG/ML
q-value: 96

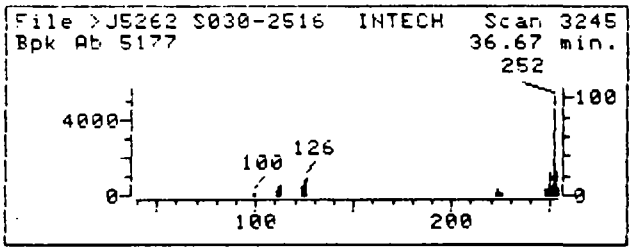
REFERENCE STANDARD SPECTRUM

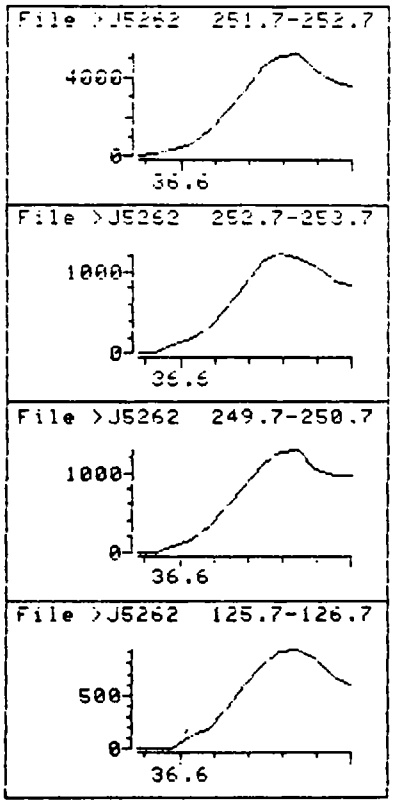


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

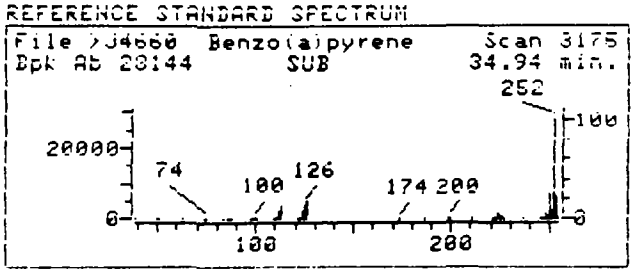




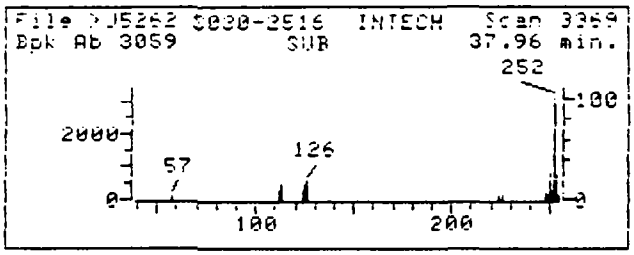
Data File: >J5262::D2 Quant Output File: ^J5262::N1
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML Instr. #2 (X5 DILUTION) BTL# 5
Quant Time: 890711 15:55 Quant ID File: CLPBNA::SC
Injected at: 890710 23:59 Last Calibration: 890711 15:38

Compound No: 72
Compound Name: Benzo(b)fluoranthene
Scan Number: 3245
Retention Time: 36.67 min.
Quant Ion: 252.0
Area: 21590
Concentration: 5.10 UG/ML
q-value: 96

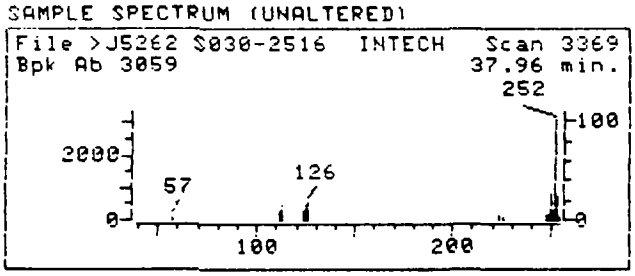
REFERENCE STANDARD SPECTRUM

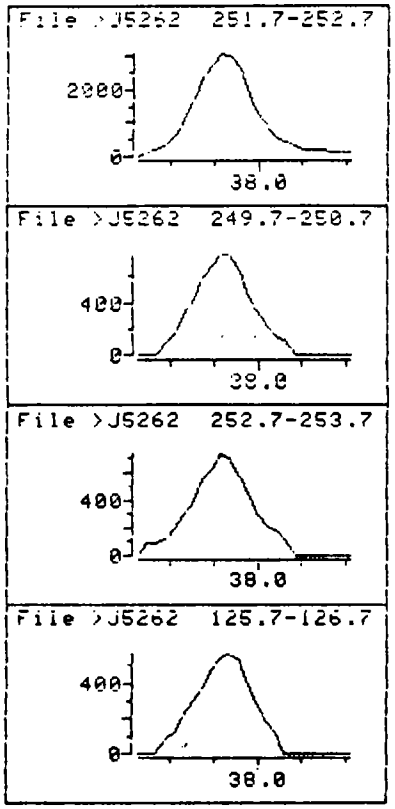


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



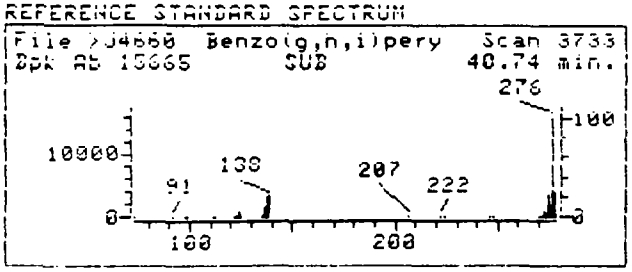


Data File: >J5262::D2
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML
Quant Time: 890711 15:55
Injected at: 890710 23:59

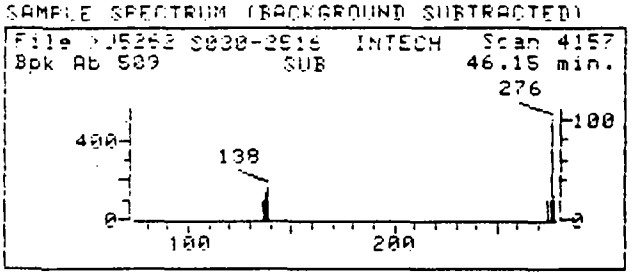
Quant Output File: ^J5262::N1
Instr. #2 (X5 DILUTION) BTL# 5
Quant ID File: CLPBNA::SC
Last Calibration: 890711 15:38

Compound No: 74
Compound Name: Benzo(a)pyrene
Scan Number: 3369
Retention Time: 37.96 min.
Quant Ion: 252.0
Area: 15201
Concentration: 4.31 UG/ML
q-value: 95

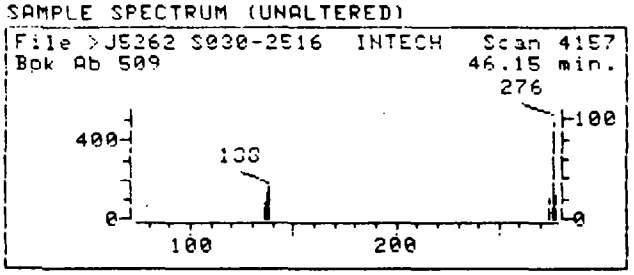
REFERENCE STANDARD SPECTRUM

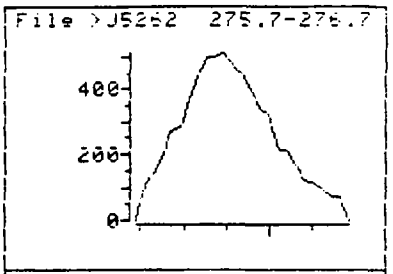


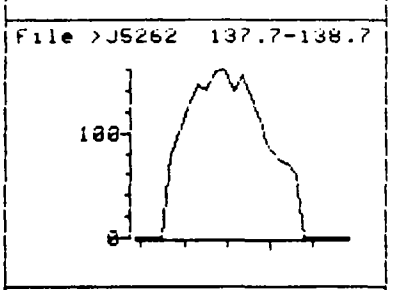
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

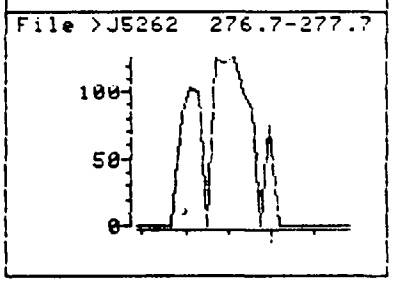


SAMPLE SPECTRUM (UNALTERED)



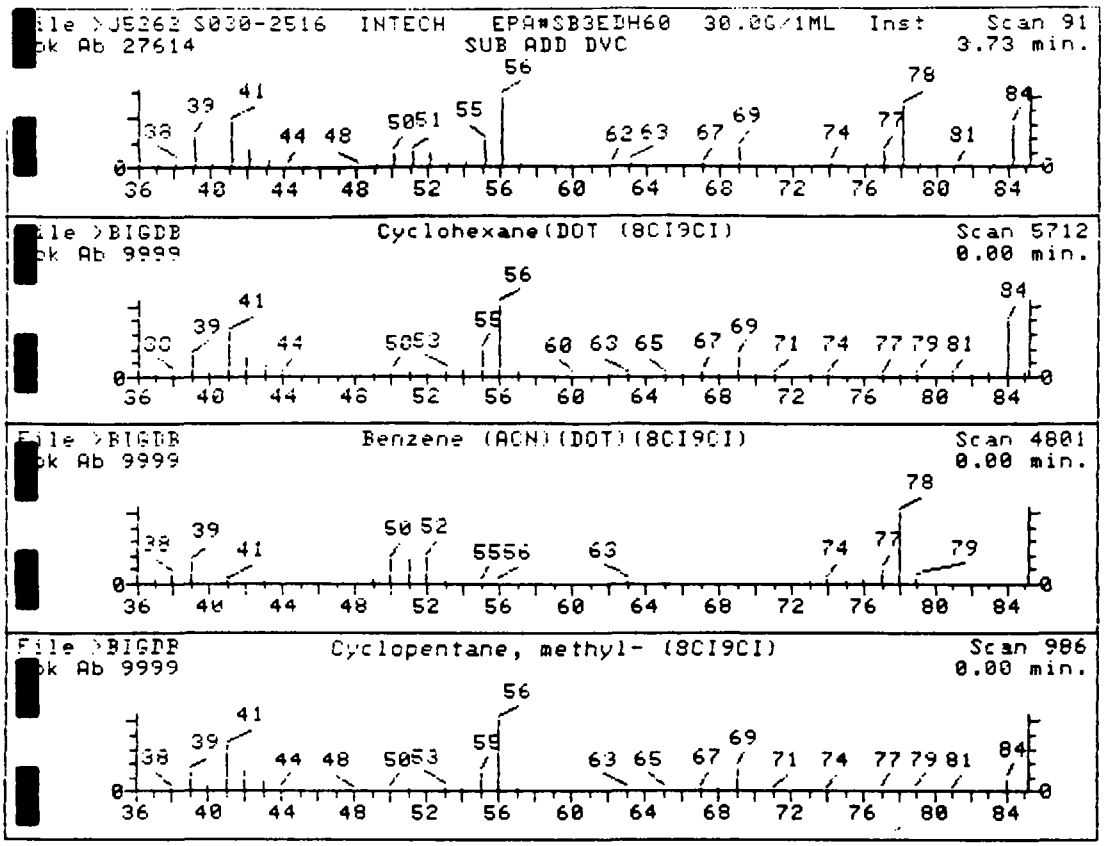






Data File: >J5262::D2 Quant Output File: ^J5262::N1
Name: S030-2516 INTECH
Misc: EPA#SB3EDH60 30.0G/1ML Instr. #2 (X5 DILUTION) BTL# 5
Quant Time: 890711 15:55 Quant ID File: CLPBNA::SC
Injected at: 890710 23:59 Last Calibration: 890711 15:38

Compound No: 77
Compound Name: Benzo(g,h,i)perylene
Scan Number: 4157
Retention Time: 46.15 min.
Quant Ion: 276.0
Area: 3972
Concentration: 4.94 UG/ML
q-value: 92

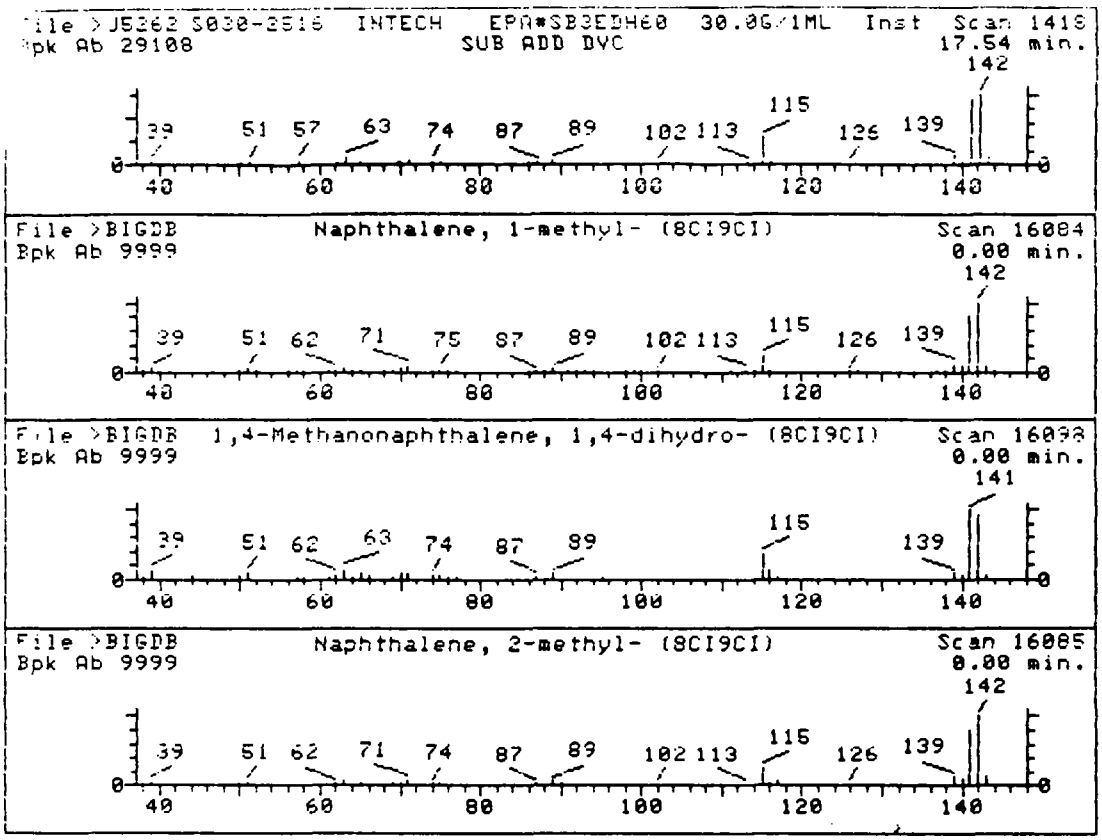


Unknown #,1
Area = 572935.0 Tentative Concentration is 190.00

1.	Cyclohexane(DOT (8CI9CI)	84 C6H12
2.	Benzene (ACN)(DOT)(8CI9CI)	78 C6H6
3.	Cyclopentane, methyl- (8CI9CI)	84 C6H12
4.	1,3-Hexadien-5-yne (8CI9CI)	78 C6H6
5.	1,5-Hexadiyne (8CI9CI)	78 C6H6
6.	2-Butenedinitrile, (E)- (9CI)	78 C4H2N2
7.	1-Pentene, 2-methyl- (8CI9CI)	84 C6H12

Sample file: >J5262 Spectrum #: 91
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70*	110827	5712	"BIGDB	70	23	2	3	76	18	32	53
2.	52*	71432	4801	"BIGDB	73	25	0	0	53	60	27	92
3.	36*	96377	986	"BIGDB	51	36	2	4	63	43	12	27
4.	35*	10420903	4808	"BIGDB	55	46	2	0	73	50	11	32
5.	28*	628160	4802	"BIGDB	50	58	2	4	26	41	8	16
6.	21*	764421	4803	"BIGDB	55	50	2	0	60	59	5	32
7.	18*	763291	995	"BIGDB	54	47	2	1	69	60	4	24

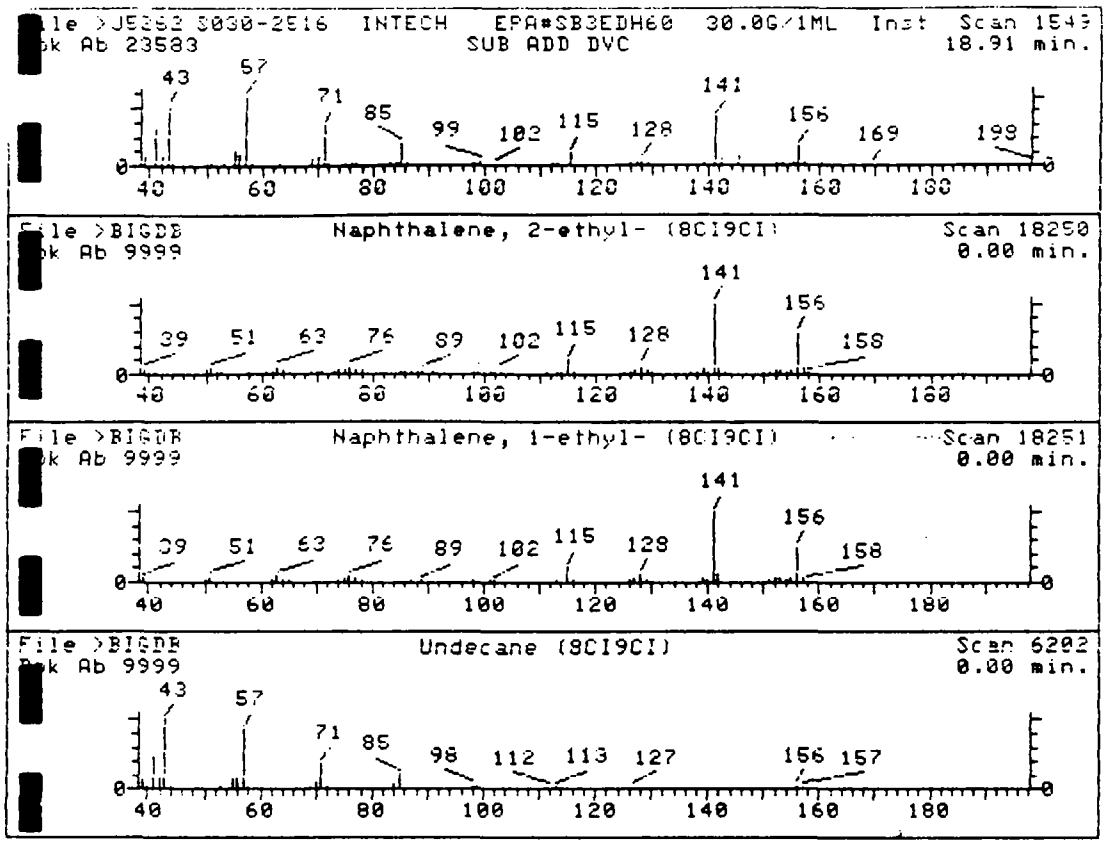


Unknown #,2
Area = 339132.0 Tentative Concentration is 77.00

1.	Naphthalene, 1-methyl- (8CI9CI)	142	C11H10
2.	1,4-Methanonaphthalene, 1,4-dihydro- (8CI9CI)	142	C11H10
3.	Naphthalene, 2-methyl- (8CI9CI)	142	C11H10
4.	1H-Indene, 1-ethylidene- (9CI)	142	C11H10
5.	Benzeneacetonitrile, 4-cyano- (9CI)	142	C9H6N2
6.	Benzeneacetonitrile, 2-cyano- (9CI)	142	C9H6N2

Sample file: >J5262 Spectrum #: 1418
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	90120	16084	"BIGDB	70	30	2	2	100	2	63	45
2.	87*	4453901	16098	"BIGDB	70	32	2	-2	94	3	63	40
3.	87*	91576	16085	"BIGDB	64	34	2	3	89	2	63	41
4.	81*	2471832	16096	"BIGDB	82	18	1	0	69	17	45	78
5.	28*	876313	16090	"BIGDB	37	62	2	0	96	36	10	14
6.	20*	3759282	16097	"BIGDB	30	79	3	0	46	52	5	13

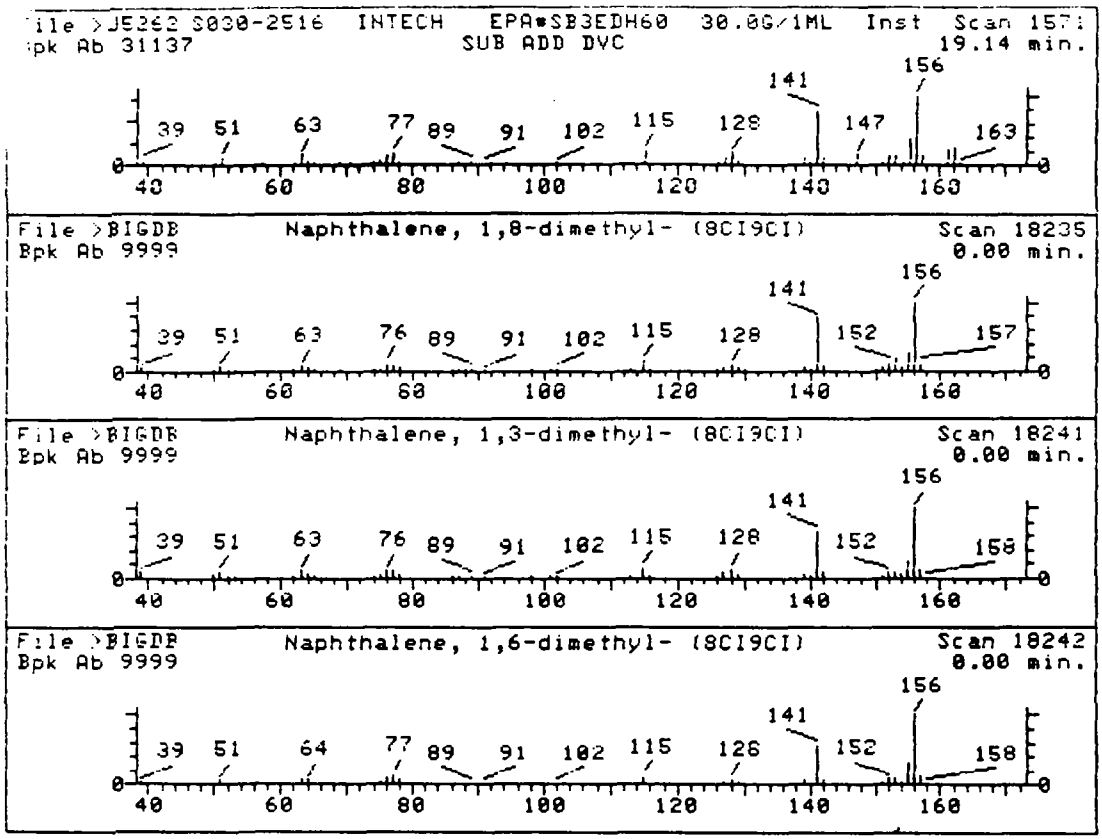


Unknown #,3
Area = 480221.0 Tentative Concentration is 62.00

1.	Naphthalene, 2-ethyl- (8CI9CI)	156	C12H12
2.	Naphthalene, 1-ethyl- (8CI9CI)	156	C12H12
3.	Undecane (8CI9CI)	156	C11H24
4.	Nonane, 5-(2-methylpropyl)- (9CI)	184	C13H28
5.	Tridecane, 2-methyl- (8CI9CI)	198	C14H30
6.	Dodecane, 2,6,11-trimethyl- (8CI9CI)	212	C15H32
7.	Pyrazine, 2-chloro-3-(1-methylethyl)- (9CI)	156	C7H9ClN2

Sample file: >J5262 Spectrum #: 1549
Search speed: 3 Tilting option: F No. of ion ranges searched: 60

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	86*	939275	18250	"BIGDB	80	11	0	0	49	47	40	96
2.	69*	1127760	18251	"BIGDB	79	20	1	0	58	45	24	76
3.	63*	1120214	6202	"BIGDB	67	30	2	-4	97	16	30	37
4.	35	62185539	13288	"BIGDB	56	36	2	4	31	29	14	12
5.	32*	1560969	18120	"BIGDB	62	58	2	0	76	55	9	40
6.	26	31295564	3984	"BIGDB	57	49	1	3	50	37	10	12
7.	25*	57674201	15984	"BIGDB	30	87	3	0	71	47	7	13

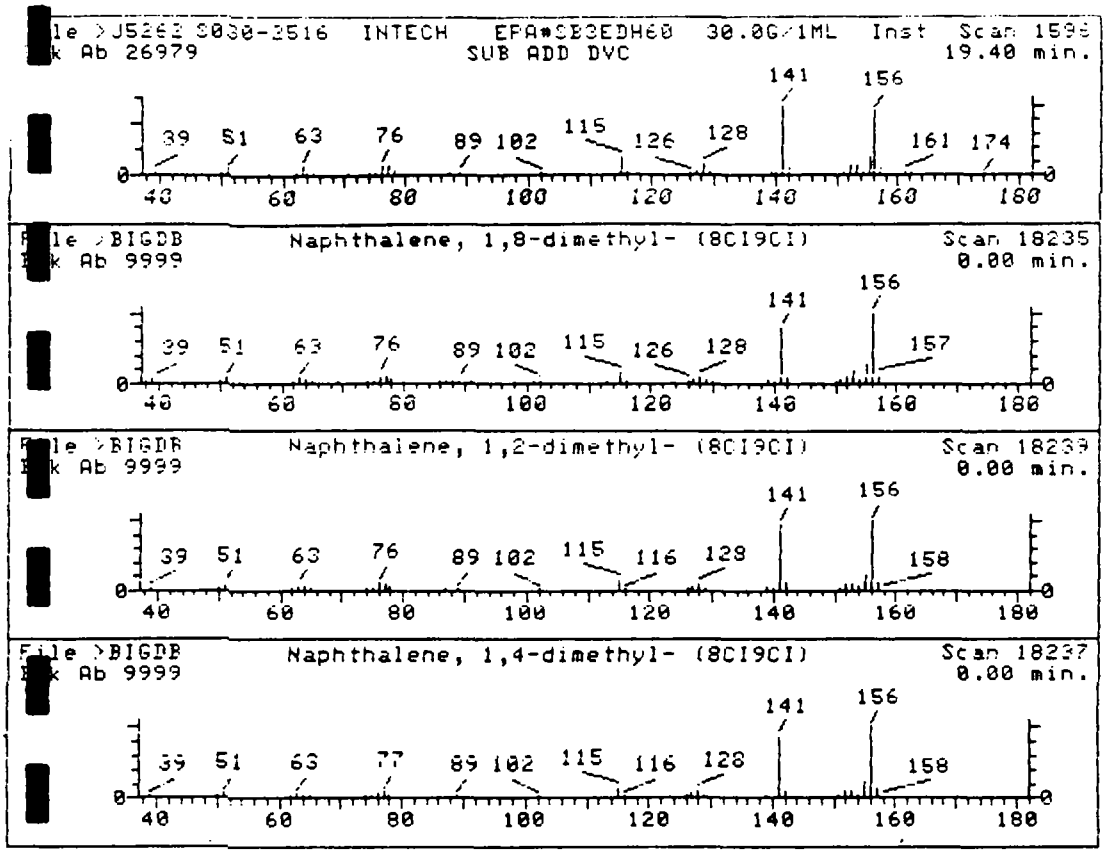


Unknown #,4
Area = 753504.0 Tentative Concentration is 97.00

1. Naphthalene, 1,8-dimethyl- (8CI9CI) 156 C12H12
2. Naphthalene, 1,3-dimethyl- (8CI9CI) 156 C12H12
3. Naphthalene, 1,6-dimethyl- (8CI9CI) 156 C12H12
4. Naphthalene, 1,5-dimethyl- (8CI9CI) 156 C12H12
5. Naphthalene, 1,7-dimethyl- (8CI9CI) 156 C12H12
6. Naphthalene, 1,2-dimethyl- (8CI9CI) 156 C12H12
7. Naphthalene, 2,3-dimethyl- (8CI9CI) 156 C12H12

Sample file: >J5262 Spectrum #: 1571
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	96*	569415	18235	"BIGDB	102	8	0	0	100	14	64	97
2.	96*	575417	18241	"BIGDB	98	9	0	0	98	14	64	97
3.	96*	575439	18242	"BIGDB	95	13	0	0	98	14	64	97
4.	95*	571619	18238	"BIGDB	94	15	0	0	100	14	64	96
5.	94*	575371	18240	"BIGDB	86	22	0	0	100	14	64	95
6.	94*	573988	18239	"BIGDB	80	33	0	0	82	20	60	94
7.	93*	581408	18243	"BIGDB	97	9	0	1	91	14	64	93

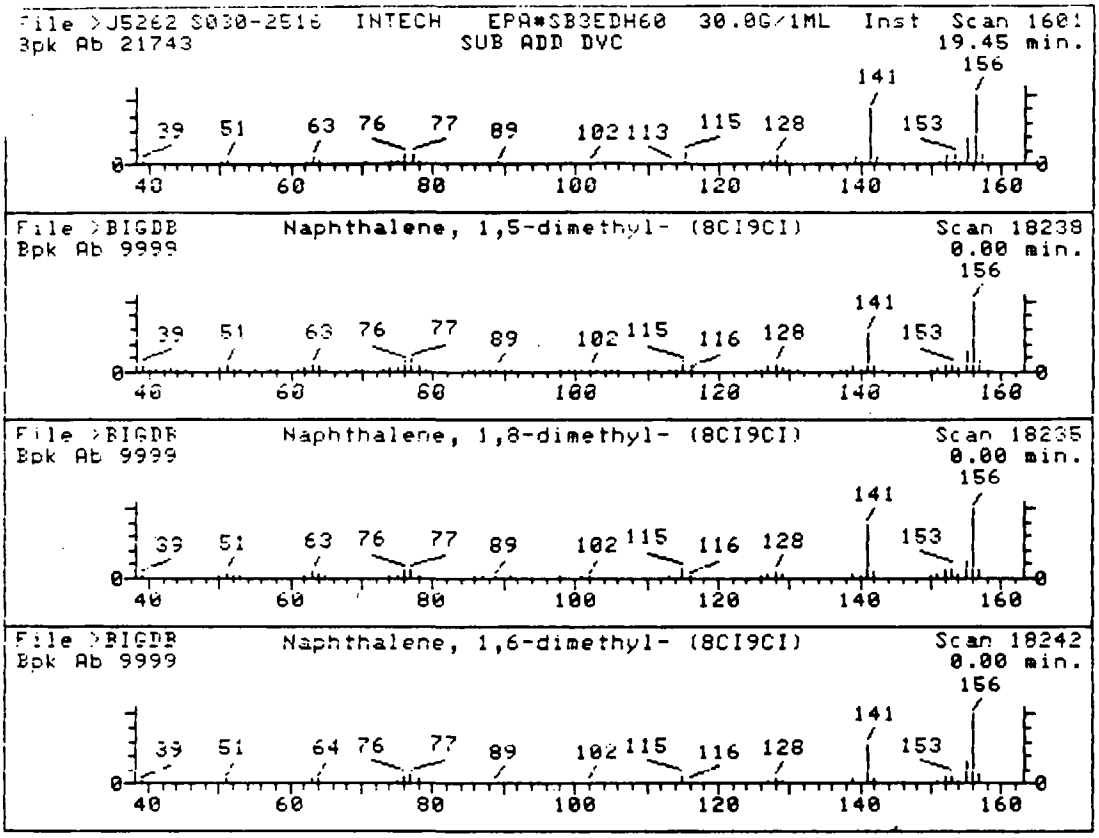


Unknown #,5
Area = 707705.0 Tentative Concentration is 91.00

1. Naphthalene, 1,8-dimethyl- (8CI9CI) 156 C12H12
2. Naphthalene, 1,2-dimethyl- (8CI9CI) 156 C12H12
3. Naphthalene, 1,4-dimethyl- (8CI9CI) 156 C12H12
4. Naphthalene, 1,3-dimethyl- (8CI9CI) 156 C12H12
5. Naphthalene, 1,7-dimethyl- (8CI9CI) 156 C12H12
6. Naphthalene, 1,6-dimethyl- (8CI9CI) 156 C12H12
7. Naphthalene, 2,3-dimethyl- (8CI9CI) 156 C12H12

Sample file: >J5262 Spectrum #: 1596
Search speed: 3 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	97*	569415	18235	"BIGDB	102	8	0	0	92	3	72	97
2.	97*	573988	18239	"BIGDB	98	15	0	0	89	5	72	97
3.	96*	571584	18237	"BIGDB	92	16	0	0	92	3	72	96
4.	95*	575417	18241	"BIGDB	90	17	0	0	89	19	60	96
5.	95*	575371	18240	"BIGDB	89	19	0	0	88	19	60	96
6.	92*	575439	18242	"BIGDB	77	31	0	0	84	25	53	93
7.	92*	581408	18243	"BIGDB	76	30	0	0	82	23	53	93

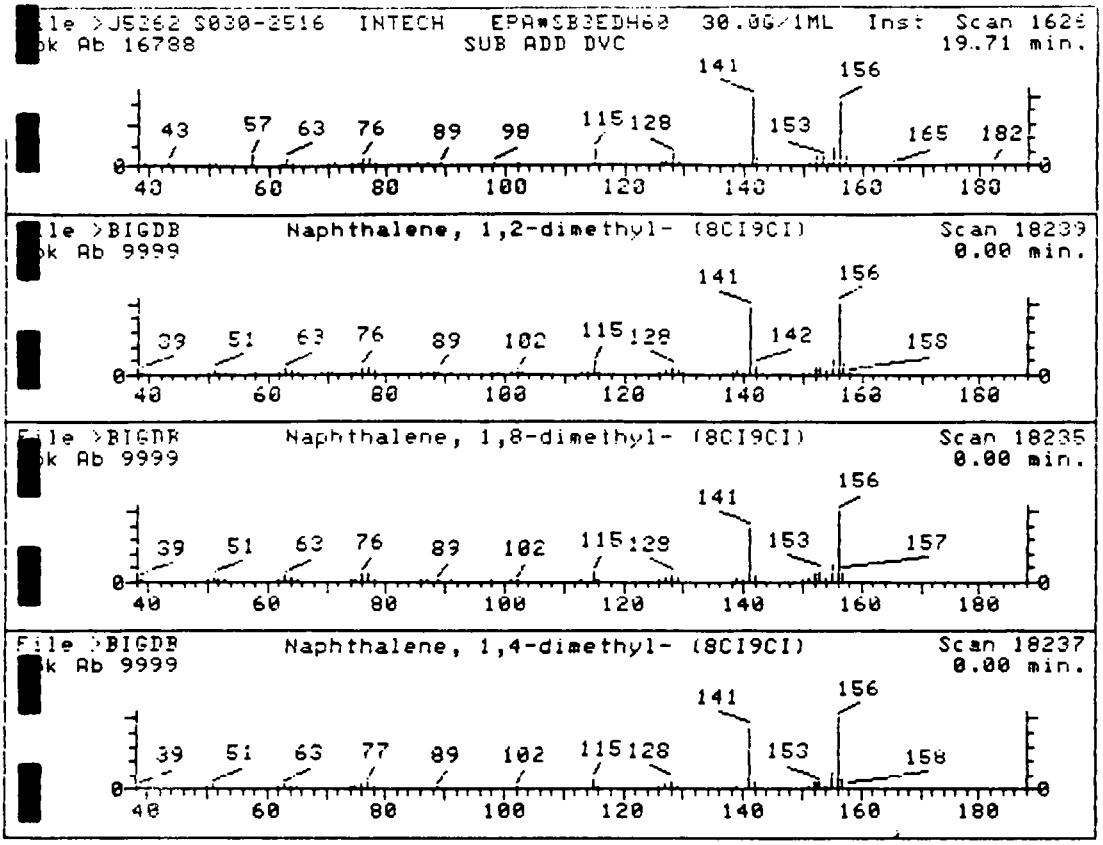


Unknown #,6
Area = 273871.0 Tentative Concentration is 35.00

1. Naphthalene, 1,5-dimethyl- (8CI9CI) 156 C12H12
2. Naphthalene, 1,8-dimethyl- (8CI9CI) 156 C12H12
3. Naphthalene, 1,6-dimethyl- (8CI9CI) 156 C12H12
4. Naphthalene, 1,7-dimethyl- (8CI9CI) 156 C12H12
5. Naphthalene, 1,3-dimethyl- (8CI9CI) 156 C12H12
6. Naphthalene, 1,2-dimethyl- (8CI9CI) 156 C12H12
7. Naphthalene, 2,7-dimethyl- (8CI9CI) 156 C12H12

Sample file: >J5262 Spectrum #: 1601
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	99*	571619	18238	"BIGDB	109	0	0	0	97	2	72	99
2.	97*	569415	18235	"BIGDB	102	8	0	0	100	2	72	97
3.	96*	575439	18242	"BIGDB	93	15	0	0	96	2	72	96
4.	96*	575371	18240	"BIGDB	93	15	0	0	100	2	72	96
5.	96*	575417	18241	"BIGDB	92	15	0	0	93	4	72	96
6.	96*	573988	18239	"BIGDB	94	19	0	0	82	8	68	96
7.	95*	582161	18247	"BIGDB	91	17	0	0	97	18	60	96

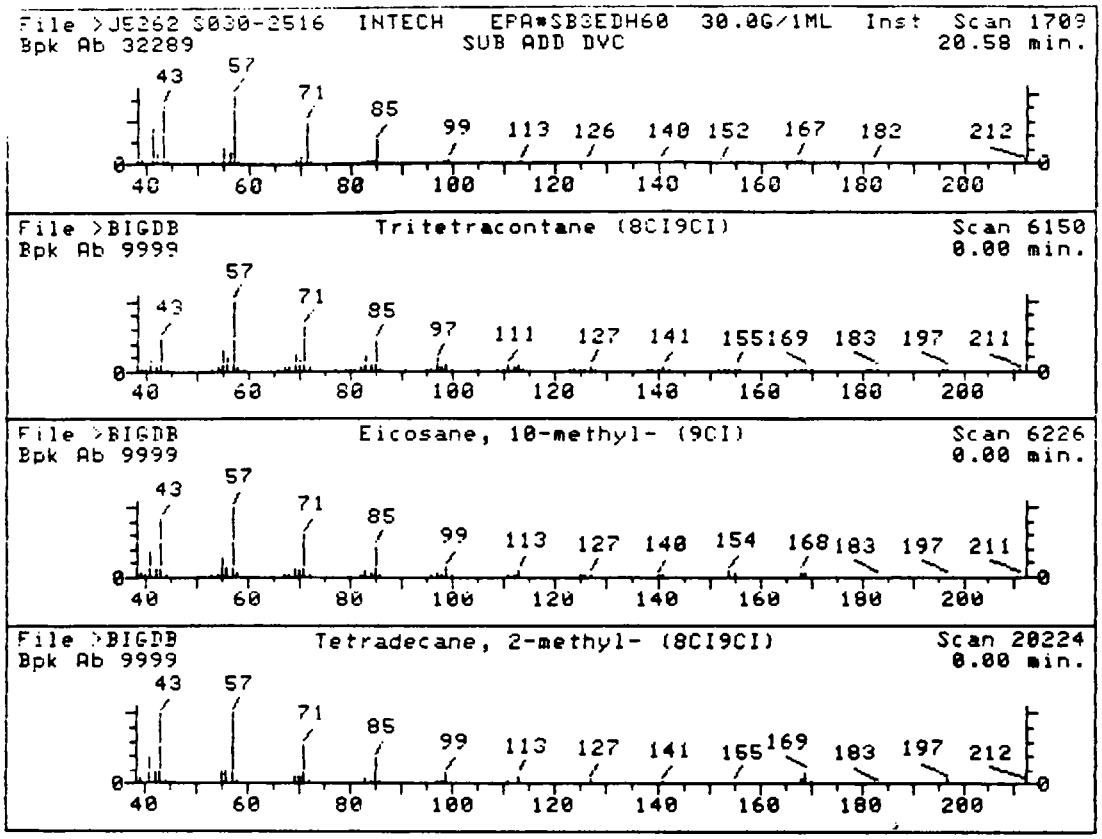


Unknown #,7
Area = 271018.0 Tentative Concentration is 35.00

1. Naphthalene, 1,2-dimethyl- (8CI9CI) 156 C12H12
2. Naphthalene, 1,8-dimethyl- (8CI9CI) 156 C12H12
3. Naphthalene, 1,4-dimethyl- (8CI9CI) 156 C12H12
4. Naphthalene, 1,3-dimethyl- (8CI9CI) 156 C12H12
5. Naphthalene, 1,7-dimethyl- (8CI9CI) 156 C12H12
6. Naphthalene, 2-ethyl- (8CI9CI) 156 C12H12
7. Naphthalene, 1,6-dimethyl- (8CI9CI) 156 C12H12

Sample file: >J5262 Spectrum #: 1626
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	97*	573988	18239	"BIGDB	104	9	0	0	92	3	72	97
2.	97*	569415	18235	"BIGDB	102	8	0	0	92	3	72	97
3.	96*	571584	18237	"BIGDB	92	16	0	0	92	3	72	96
4.	95*	575417	18241	"BIGDB	90	17	0	0	92	19	60	96
5.	93*	575371	18240	"BIGDB	83	25	0	0	85	21	53	95
6.	92*	939275	18250	"BIGDB	81	25	0	0	93	26	57	94
7.	92*	575439	18242	"BIGDB	77	31	0	0	81	25	53	93

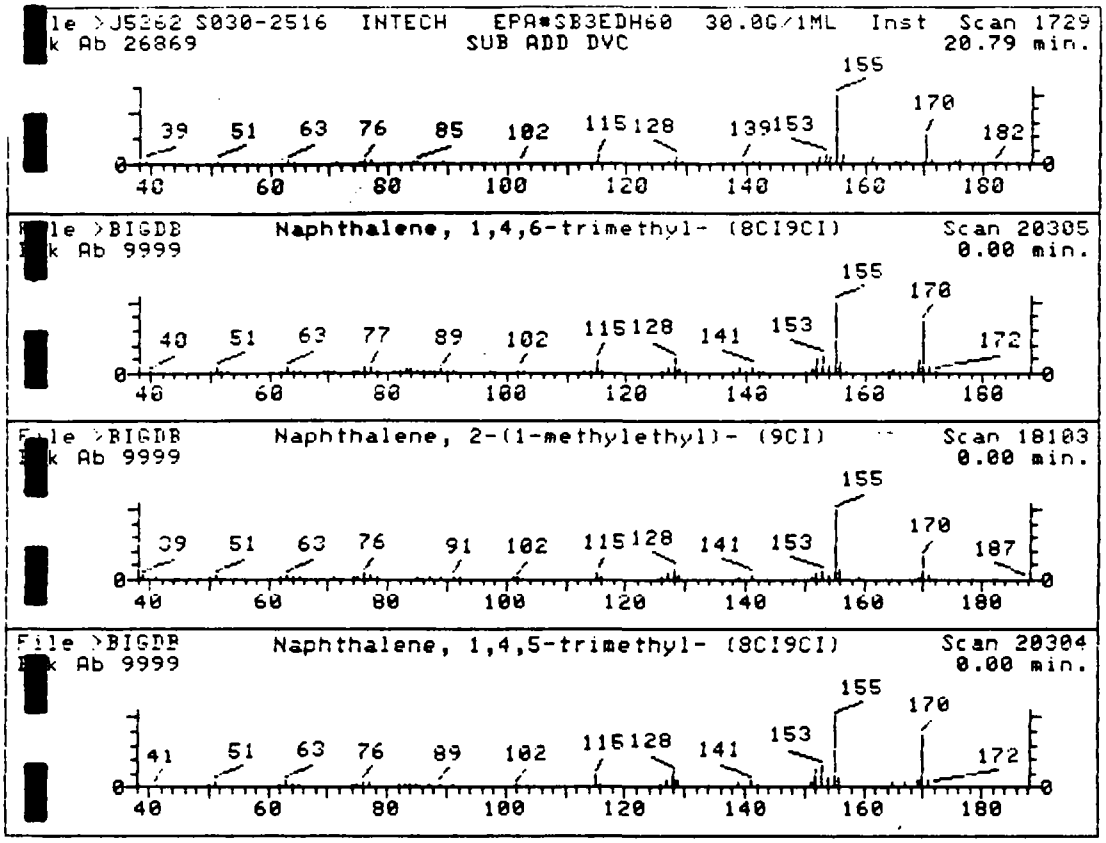


Unknown #,8
Area = 389342.0 Tentative Concentration is 50.00

1. Tritetracontane (8CI9CI)	604	C43H88
2. Eicosane, 10-methyl- (9CI)	296	C21H44
3. Tetradecane, 2-methyl- (8CI9CI)	212	C15H32
4. Hexadecane (8CI9CI)	226	C16H34
5. Octacosane (8CI9CI)	394	C28H58
6. Hexacosane (8CI9CI)	366	C26H54
7. Hexatriacontane (8CI9CI)	506	C36H74

Sample file: >J5262 Spectrum #: 1709
Search speed: 3 Tilting option: F No. of ion ranges searched: 85

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	78	7098217	6150	"BIGDB	76	92	2	4	99	5	55	12
2.	78	54833237	6226	"BIGDB	68	65	2	0	80	5	55	15
3.	76*	1560958	20224	"BIGDB	61	63	3	1	82	10	45	22
4.	76	544763	6146	"BIGDB	93	27	2	3	94	8	45	29
5.	70	630024	6093	"BIGDB	67	70	2	0	84	7	42	14
6.	70	630013	6058	"BIGDB	68	72	2	0	86	8	42	15
7.	70	630068	6193	"BIGDB	77	85	2	3	84	7	42	13



Unknown #,9

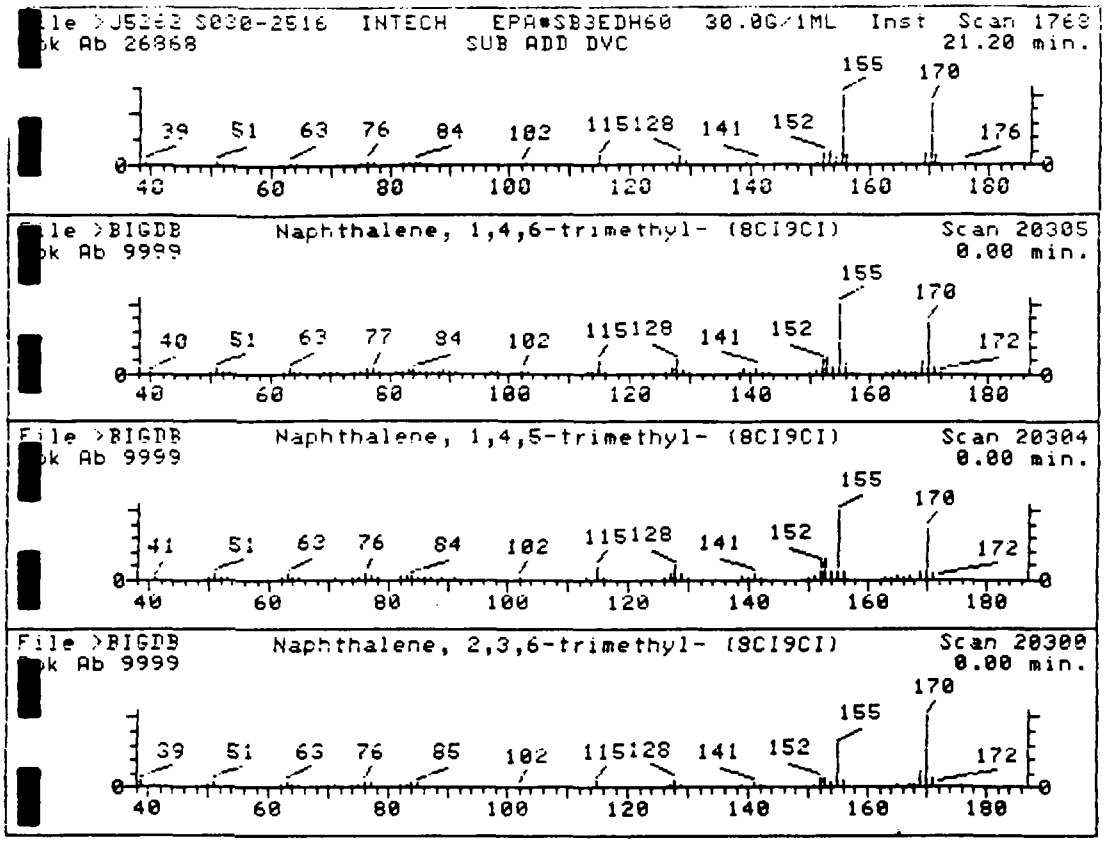
Area = 311649.0 Tentative Concentration is 40.00

1.	Naphthalene, 1,4,6-trimethyl- (8CI9CI)	170	C13H14
2.	Naphthalene, 2-(1-methylethyl)- (9CI)	170	C13H14
3.	Naphthalene, 1,4,5-trimethyl- (8CI9CI)	170	C13H14
4.	Naphthalene, 1,2(or 2,3)-diethyl- (9CI)	184	C14H16
5.	Ethanone, 1-(1-naphthalenyl)- (9CI)	170	C12H10O
6.	Naphthalene, (1-methylethyl)- (9CI)	170	C13H14
7.	Ethanone, 1-(2-naphthalenyl)- (9CI)	170	C12H10O

Sample file: >J5262 Spectrum #: 1729

Search speed: 3 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	90*	2131422	20305	"BIGDB	96	23	1	0	58	34	50	93
2.	79*	2027170	18103	"BIGDB	78	22	1	-3	84	12	43	60
3.	77*	2131411	20304	"BIGDB	82	21	1	0	47	34	32	78
4.	60	74710002	18123	"BIGDB	69	37	2	4	96	12	30	17
5.	56*	941980	20301	"BIGDB	53	56	2	0	87	23	22	28
6.	55*	29253369	18101	"BIGDB	58	42	2	0	70	28	24	35
7.	48*	93083	20295	"BIGDB	48	61	2	0	87	23	17	19

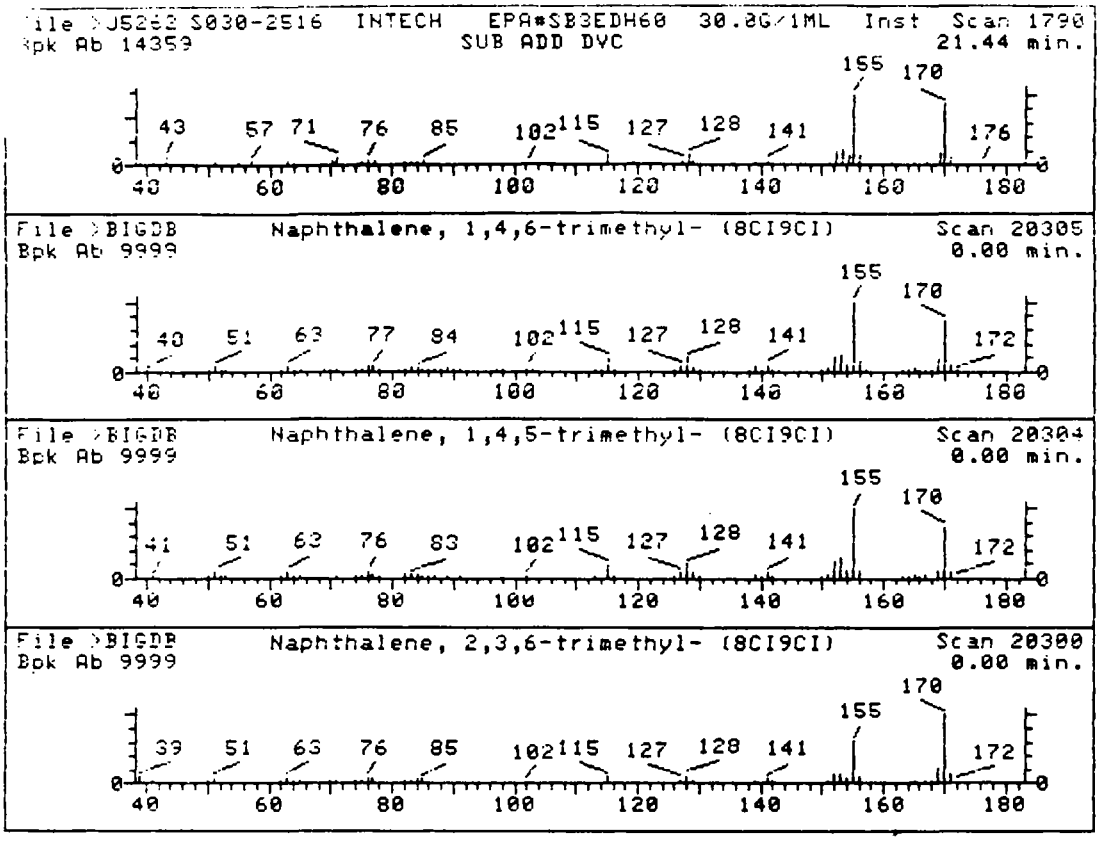


Unknown #,11
Area = 291196.0 Tentative Concentration is 37.00

1.	Naphthalene, 1,4,6-trimethyl- (8CI9CI)	170	C13H14
2.	Naphthalene, 1,4,5-trimethyl- (8CI9CI)	170	C13H14
3.	Naphthalene, 2,3,6-trimethyl- (8CI9CI)	170	C13H14
4.	Naphthalene, 1,6,7-trimethyl- (8CI9CI)	170	C13H14
5.	Naphthalene, 2-(1-methylethyl)- (9CI)	170	C13H14
6.	Naphthalene, 2-methyl-1-propyl- (9CI)	184	C14H16
7.	Naphthalene, 1,3,6-trimethyl- (8CI9CI)	170	C13H14

Sample file: >J5262 Spectrum #: 1768
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	2131422	20305	"BIGDB	84	35	0	0	63	34	50	95
2.	89*	2131411	20304	"BIGDB	107	11	1	-3	69	1	66	78
3.	78*	829265	20300	"BIGDB	76	33	1	0	77	21	41	74
4.	77*	2245387	20306	"BIGDB	75	33	1	0	88	21	41	73
5.	38*	2027170	18103	"BIGDB	49	51	1	0	69	42	12	29
6.	36	54774899	18129	"BIGDB	82	30	2	0	89	45	12	27
7.	30*	3031081	20272	"BIGDB	34	34	1	0	59	44	8	18

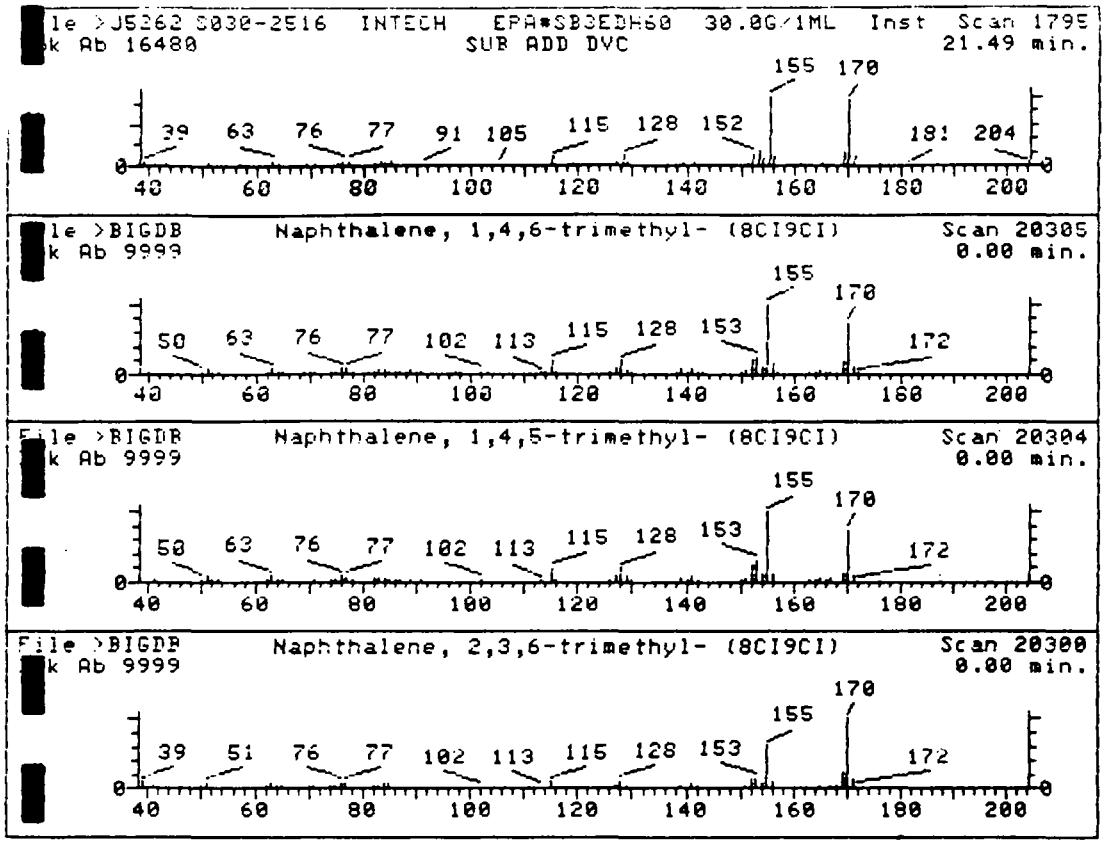


Unknown #,12
Area = 281828.0 Tentative Concentration is 36.00

1.	Naphthalene, 1,4,6-trimethyl- (8CI9CI)	170	C13H14
2.	Naphthalene, 1,4,5-trimethyl- (8CI9CI)	170	C13H14
3.	Naphthalene, 2,3,6-trimethyl- (8CI9CI)	170	C13H14
4.	[1,1'-Biphenyl]-3-ol (9CI)	170	C12H10O
5.	Naphthalene, 1,6,7-trimethyl- (8CI9CI)	170	C13H14
6.	[1,1'-Biphenyl]-4-ol (9CI)	170	C12H10O
7.	Naphthalene, 2-(1-methylethyl)- (9CI)	170	C13H14

Sample file: >J5262 Spectrum #: 1790
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	93*	2131422	20305	"BIGDB	96	23	1	0	68	17	60	93
2.	89*	2131411	20304	"BIGDB	83	35	0	0	57	36	47	95
3.	78*	829265	20300	"BIGDB	77	32	1	0	74	23	41	74
4.	73*	580518	20298	"BIGDB	66	24	1	3	74	24	32	61
5.	73*	2245387	20306	"BIGDB	69	39	1	0	82	23	32	67
6.	43*	92693	20294	"BIGDB	47	48	2	2	76	26	19	21
7.	38*	2027170	18103	"BIGDB	49	51	1	0	68	42	12	29



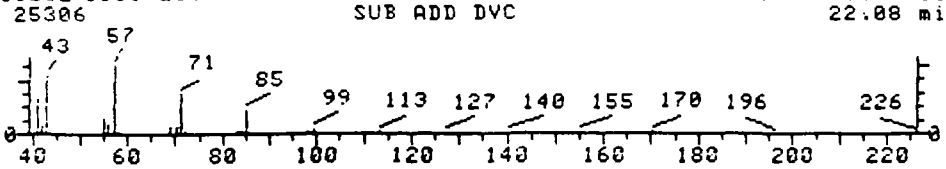
Unknown #,13
Area = 246405.0 Tentative Concentration is 32.00

1.	Naphthalene, 1,4,6-trimethyl- (8CI9CI)	170	C13H14
2.	Naphthalene, 1,4,5-trimethyl- (8CI9CI)	170	C13H14
3.	Naphthalene, 2,3,6-trimethyl- (8CI9CI)	170	C13H14
4.	Naphthalene, 1,6,7-trimethyl- (8CI9CI)	170	C13H14
5.	[1,1'-Biphenyl]-3-ol (9CI)	170	C12H10O
6.	Naphthalene, 2-(1-methylethyl)- (9CI)	170	C13H14
7.	Naphthalene, 1,3,6-trimethyl- (8CI9CI)	170	C13H14

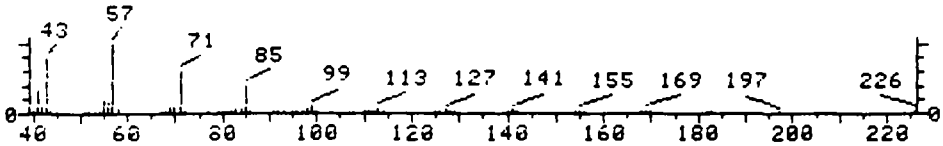
Sample file: >J5262 Spectrum #: 1795
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	2131422	20305	"BIGDB	96	23	0	0	72	20	60	97
2.	93*	2131411	20304	"BIGDB	108	10	1	-4	73	0	68	80
3.	81*	829265	20300	"BIGDB	85	24	1	1	99	19	45	71
4.	75*	2245387	20306	"BIGDB	84	24	1	2	93	20	35	69
5.	62*	580518	20298	"BIGDB	59	31	1	2	73	28	25	49
6.	38*	2027170	18103	"BIGDB	49	51	1	0	74	43	12	29
7.	30*	3031081	20272	"BIGDB	32	36	2	0	72	36	10	16

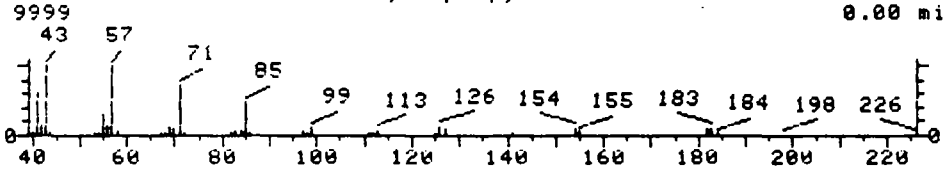
File >J5262 S030-2E16 INTECH EPA*SB3EDH60 30.0G/1ML Inst Scan 1851
Bpk Ab 25306 SUB ADD DVC 22.08 min.



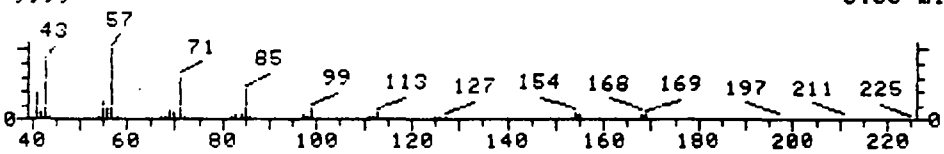
File >BIGDB Hexadecane (8CI9CI) Scan 6146
Bpk Ab 9999 0.00 min.



File >BIGDB Tridecane, 6-propyl- (9CI) Scan 6247
Bpk Ab 9999 0.00 min.



File >BIGDB Eicosane, 10-methyl- (9CI) Scan 6226
Bpk Ab 9999 0.00 min.

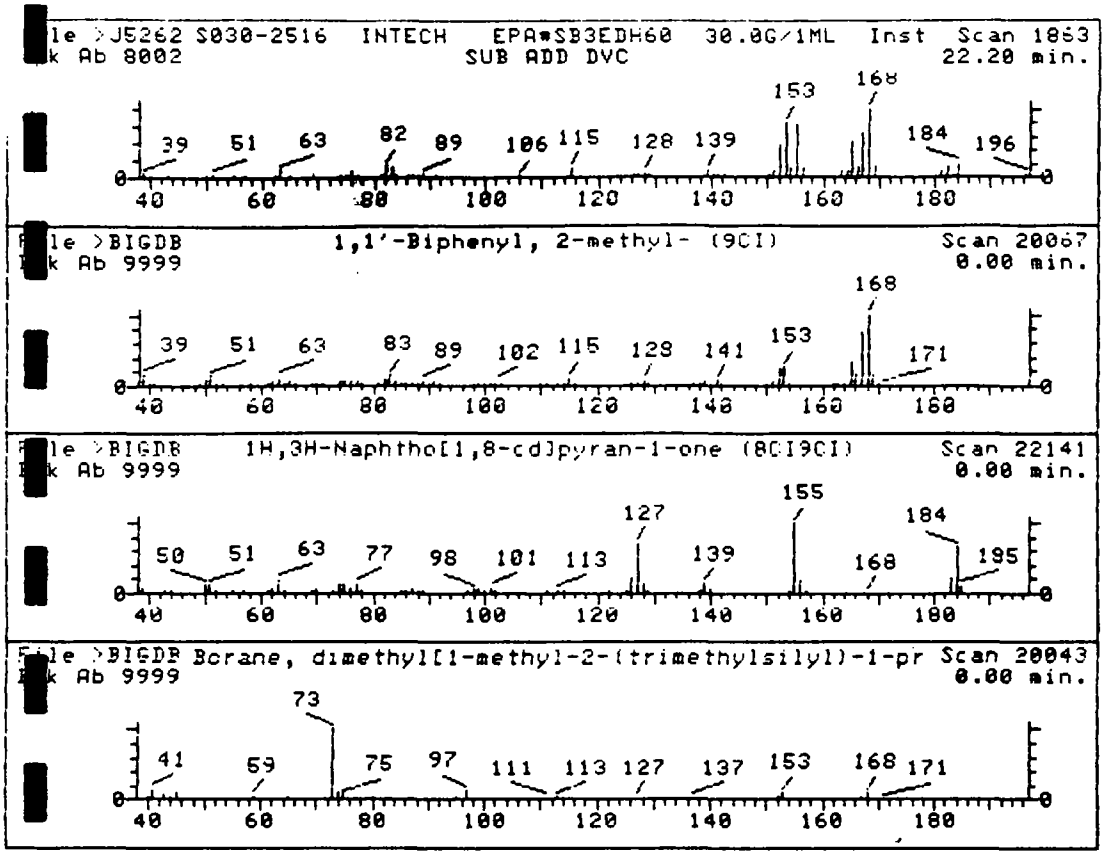


Unknown #,14
Area = 255463.0 Tentative Concentration is 33.00

1.	Hexadecane (8CI9CI)	226	C16H34
2.	Tridecane, 6-propyl- (9CI)	226	C16H34
3.	Eicosane, 10-methyl- (9CI)	296	C21H44
4.	Tridecane, 7-propyl- (9CI)	226	C16H34
5.	Pentadecane, 2-methyl- (8CI9CI)	226	C16H34
6.	Pentadecane (8CI9CI)	212	C15H32
7.	Decane, 2,3,5-trimethyl- (9CI)	184	C13H28

Sample file: >J5262 Spectrum #: 1851
Search speed: 3 Tilting option: F No. of ion ranges searched: 91

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	544763	6146	"BIGDB	98	22	1	3	94	5	66	76
2.	87*	55045108	6247	"BIGDB	74	55	2	3	73	5	63	48
3.	83	54833237	6226	"BIGDB	95	38	2	4	84	5	57	23
4.	81*	55045095	15880	"BIGDB	76	53	2	2	76	7	53	49
5.	78*	1560936	6262	"BIGDB	48	84	3	0	84	5	55	13
6.	76	629629	6265	"BIGDB	87	33	2	3	80	8	45	23
7.	76	62238113	6164	"BIGDB	75	28	2	4	100	7	45	21



Unknown #,15

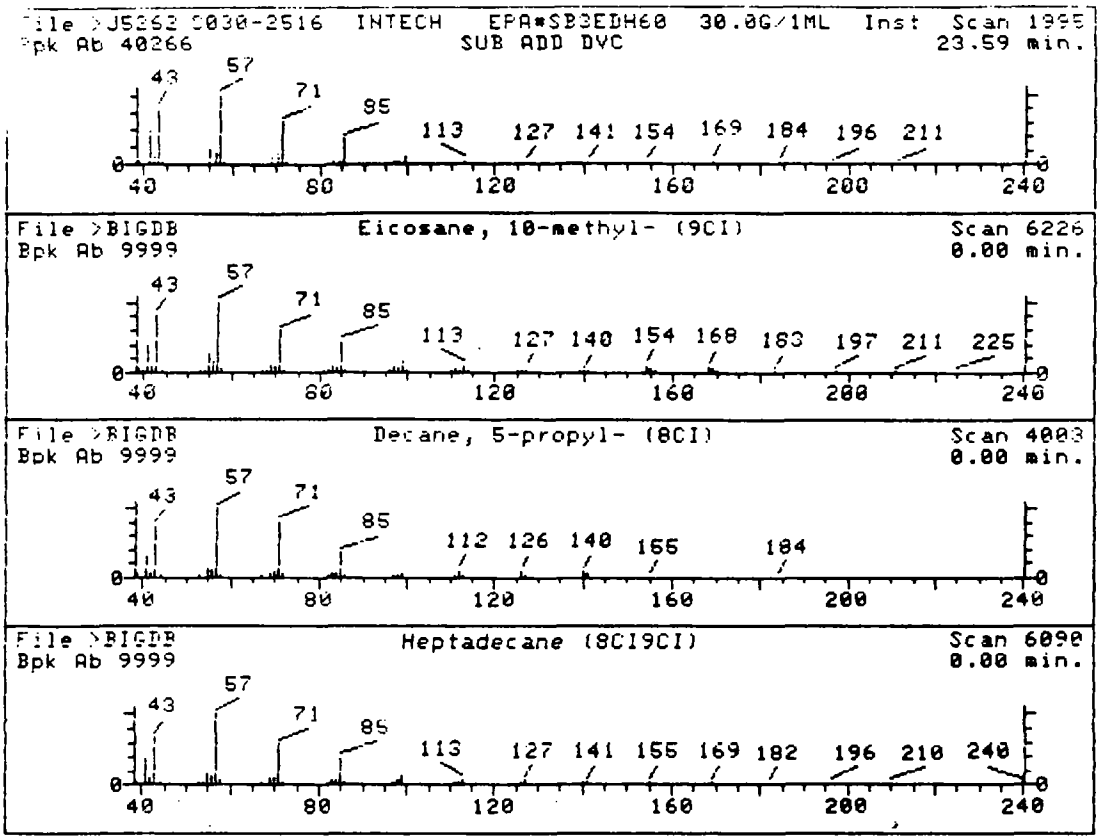
Area = 232581.0 Tentative Concentration is 30.00

1.	1,1'-Biphenyl, 2-methyl- (9CI)	168	C13H12
2.	1H,3H-Naphtho[1,8-cd]pyran-1-one (8CI9CI)	184	C12H8O2
3.	Borane, dimethyl[1-methyl-2-(trimethylsilyl)-1-propenyl]- (9CI)	168	C9H21BSi
4.	Dibenzofuran, 4-methyl- (8CI9CI)	182	C13H10O
5.	Naphthalene, 2-methyl-1-propyl- (9CI)	184	C14H16
6.	1,1'-Biphenyl, 4-methyl- (9CI)	168	C13H12
7.	1,1'-Biphenyl, 3-methyl- (9CI)	168	C13H12

Sample file [illegible] Spectrum #: 1863

Search speed: [illegible] Fitting option: F No. of ion ranges searched: 57

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	31*	643583	20067	"BIGDB	51	59	0	0	83	60	8	61
2.	25*	518865	22141	"BIGDB	46	66	2	2	34	48	7	12
3.	25*	62108354	20043	"BIGDB	25	62	3	0	865	50	7	13
4.	18*	7320538	21885	"BIGDB	32	46	0	3	14	56	4	21
5.	18*	54774899	18129	"BIGDB	62	50	0	2	54	61	5	65
6.	17*	644086	20069	"BIGDB	45	56	0	0	86	62	4	53
7.	15*	643936	20068	"BIGDB	51	53	0	-2	100	62	3	41

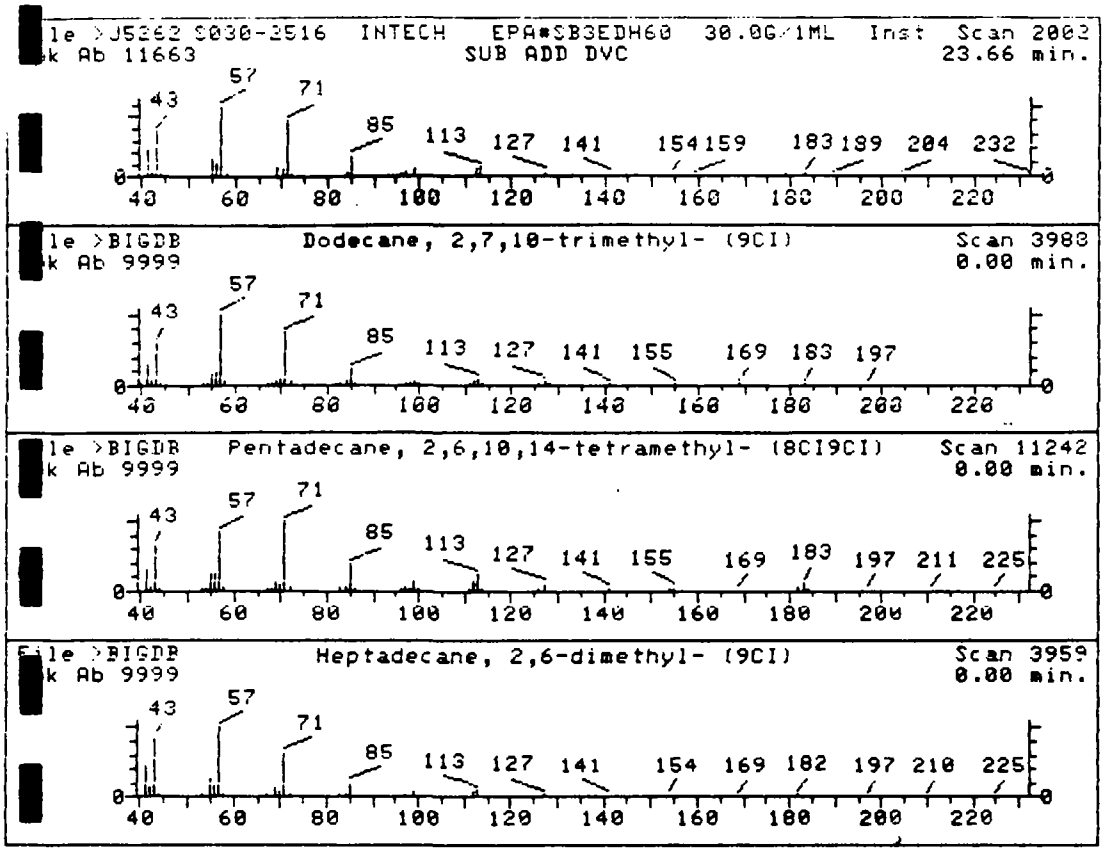


. Unknown #,17
Area = 492134.0 Tentative Concentration is 77.00

1.	Eicosane, 10-methyl- (9CI)	296	C21H44
2.	Decane, 5-propyl- (8CI)	184	C13H28
3.	Heptadecane (8CI9CI)	240	C17H36
4.	Decane, 6-ethyl-2-methyl- (9CI)	184	C13H28
5.	Decane, 2,3,5-trimethyl- (9CI)	184	C13H28
6.	Hexadecane (8CI9CI)	226	C16H34
7.	Docosane (8CI9CI)	310	C22H46

Sample file: >J5262 Spectrum #: 1995
Search speed: 3 Tilting option: F No. of ion ranges searched: 97

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83	54833237	6226	"BIGDB	81	52	2	0	80	4	57	22
2.	79*	17312628	4003	"BIGDB	55	56	2	0	76	8	48	32
3.	78*	629787	6090	"BIGDB	98	23	1	4	97	26	37	76
4.	76	62108218	6163	"BIGDB	68	31	2	0	100	10	45	24
5.	76	62238113	6164	"BIGDB	68	35	2	0	85	8	45	23
6.	74	544763	6146	"BIGDB	99	21	1	2	96	11	39	49
7.	71	629970	6221	"BIGDB	108	39	2	4	69	14	38	37

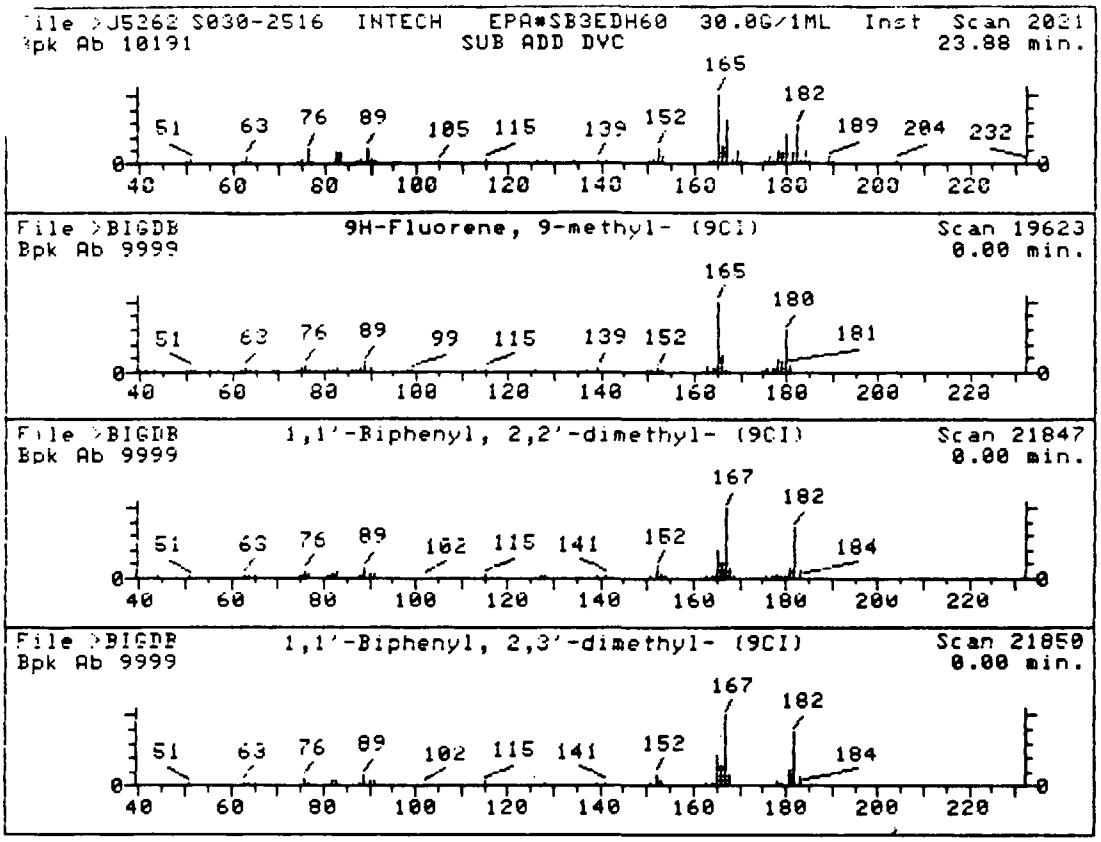


Unknown #,18
Area = 172992.0 Tentative Concentration is 27.00

1.	Dodecane, 2,7,10-trimethyl- (9CI)	212	C15H32
2.	Pentadecane, 2,6,10,14-tetramethyl- (8CI9CI)	268	C19H40
3.	Heptadecane, 2,6-dimethyl- (9CI)	268	C19H40
4.	Octadecane, 2,6-dimethyl- (9CI)	282	C20H42
5.	Tridecane, 5-propyl- (9CI)	226	C16H34
6.	Dodecane, 2,6,11-trimethyl- (8CI9CI)	212	C15H32
7.	Nonane, 3-methyl-5-propyl- (8CI)	184	C13H28

Sample file: >J5262 Spectrum #: 2002
Search speed: 3 Tilting option: F No. of ion ranges searched: 64

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	86	74645980	3988	"BIGDB	98	11	0	0	100	6	59	78
2.	86	1921706	11242	"BIGDB	108	27	2	3	83	1	60	37
3.	76	54105678	3959	"BIGDB	93	23	2	-2	86	9	45	28
4.	76	75163972	11258	"BIGDB	93	46	2	0	77	8	45	28
5.	70	55045119	10998	"BIGDB	75	38	2	0	92	9	42	19
6.	70	31295564	3984	"BIGDB	66	40	2	0	98	9	42	17
7.	60	31081182	6159	"BIGDB	66	39	2	1	77	11	30	16



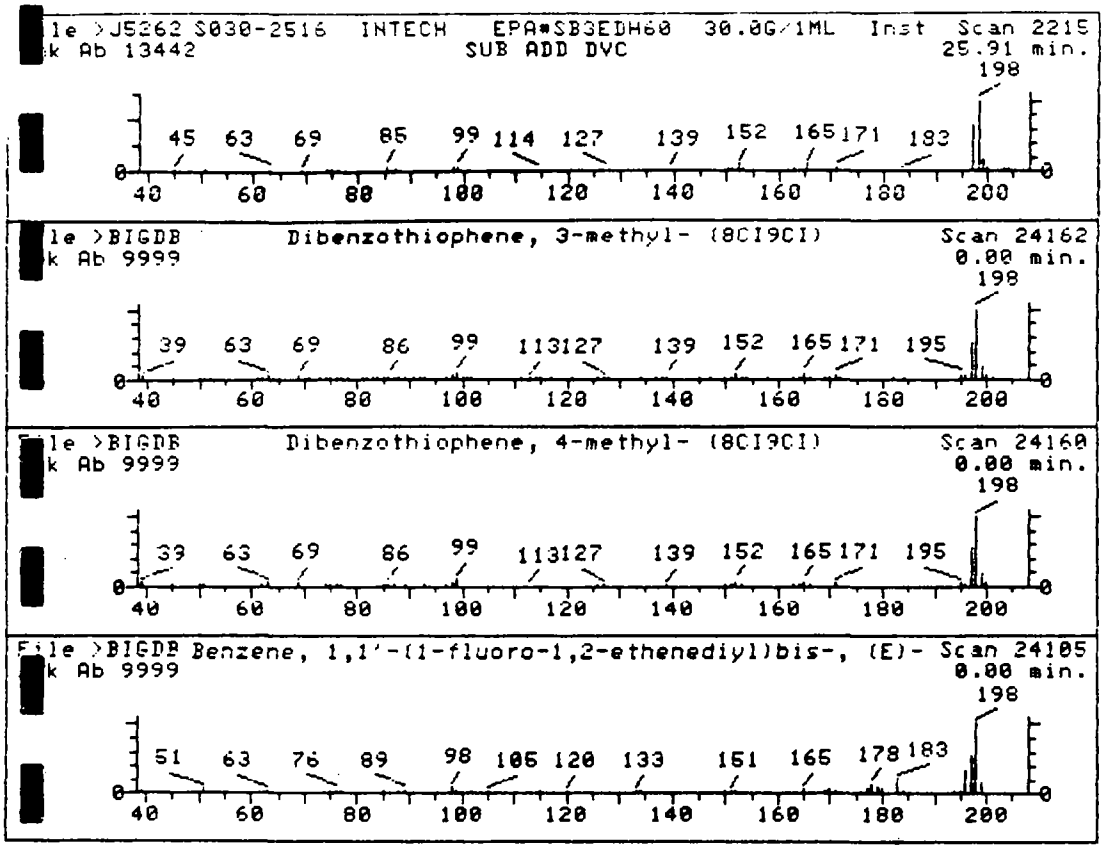
Unknown #,19

Area = 210289.0 Tentative Concentration is 33.00

1.	9H-Fluorene, 9-methyl- (9CI)	180	C14H12
2.	1,1'-Biphenyl, 2,2'-dimethyl- (9CI)	182	C14H14
3.	1,1'-Biphenyl, 2,3'-dimethyl- (9CI)	182	C14H14
4.	1,1'-Biphenyl, 2,4'-dimethyl- (9CI)	182	C14H14
5.	1,1'-Biphenyl, 2-ethyl- (9CI)	182	C14H14
6.	5H-Indeno[1,2-b]pyridine (8CI9CI)	167	C12H9N
7.	Thiazolo[5,4-d]pyrimidine, 5-(ethylamino)- (8CI)	180	C7H8N4S

Sample file: >J5262 Spectrum #: 2021
Search speed: 3 Fitting option: F No. of ion ranges searched: 57

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	66*	2523377	19623	"BIGDB	78	35	0	2	78	46	20	76
2.	34*	605390	21847	"BIGDB	51	74	0	2	57	54	10	53
3.	33*	611438	21850	"BIGDB	60	69	0	0	56	59	12	73
4.	26*	611610	21851	"BIGDB	48	66	0	0	46	60	7	57
5.	26*	1812517	21873	"BIGDB	50	76	0	1	57	56	7	52
6.	20*	244995	19912	"BIGDB	45	50	2	1	64	51	5	17
7.	20*	19835213	19625	"BIGDB	27	91	3	0	79	53	5	13

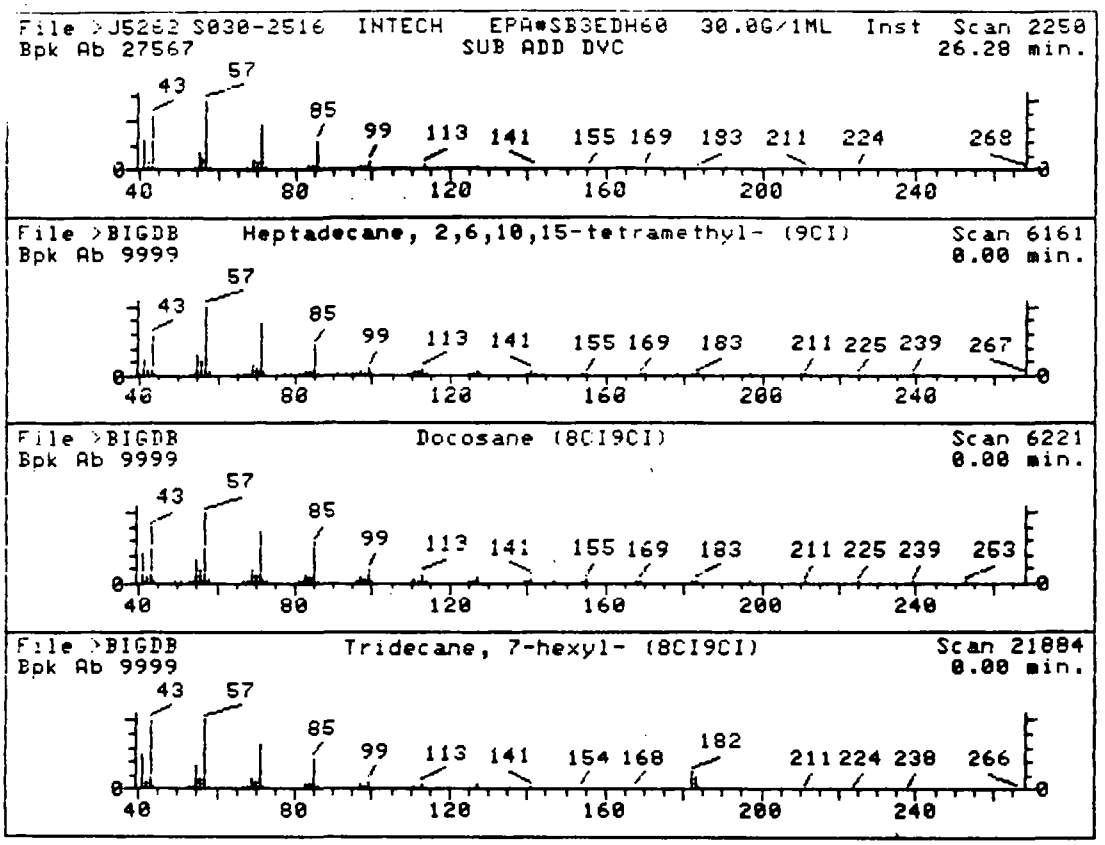


Unknown #,20
Area = 176027.0 Tentative Concentration is 27.00

1.	Dibenzothiophene, 3-methyl- (8CI9CI)	198	C13H10S
2.	Dibenzothiophene, 4-methyl- (8CI9CI)	198	C13H10S
3.	Benzene, 1,1'-(1-fluoro-1,2-ethenediyl)bis-, (E)- (9CI)	198	C14H11F
4.	Benzene, 1-fluoro-4-(2-phenylethenyl)-, (E)- (9CI)	198	C14H11F
5.	Benzene, 1-fluoro-3-(2-phenylethenyl)-, (E)- (9CI)	198	C14H11F
6.	Benzene, 1-methyl-2-(4-methylphenoxy)- (9CI)	198	C14H14O
7.	Thioxanthene (8CI)	198	C13H10S

Sample file: >J5262 Spectrum #: 2215
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	84*	16587523	24162	"BIGDB	89	27	2	0	98	6	55	67
2.	83*	7372885	24160	"BIGDB	72	44	2	0	100	6	54	54
3.	60*	671192	24105	"BIGDB	33	94	3	0	100	15	30	13
4.	52*	718252	24108	"BIGDB	29	93	3	0	100	19	20	13
5.	52*	3041814	24120	"BIGDB	33	97	3	0	100	18	20	13
6.	30*	3402720	24121	"BIGDB	35	91	3	0	100	33	12	13
7.	25*	261314	24003	"BIGDB	36	75	2	0	58	50	7	14

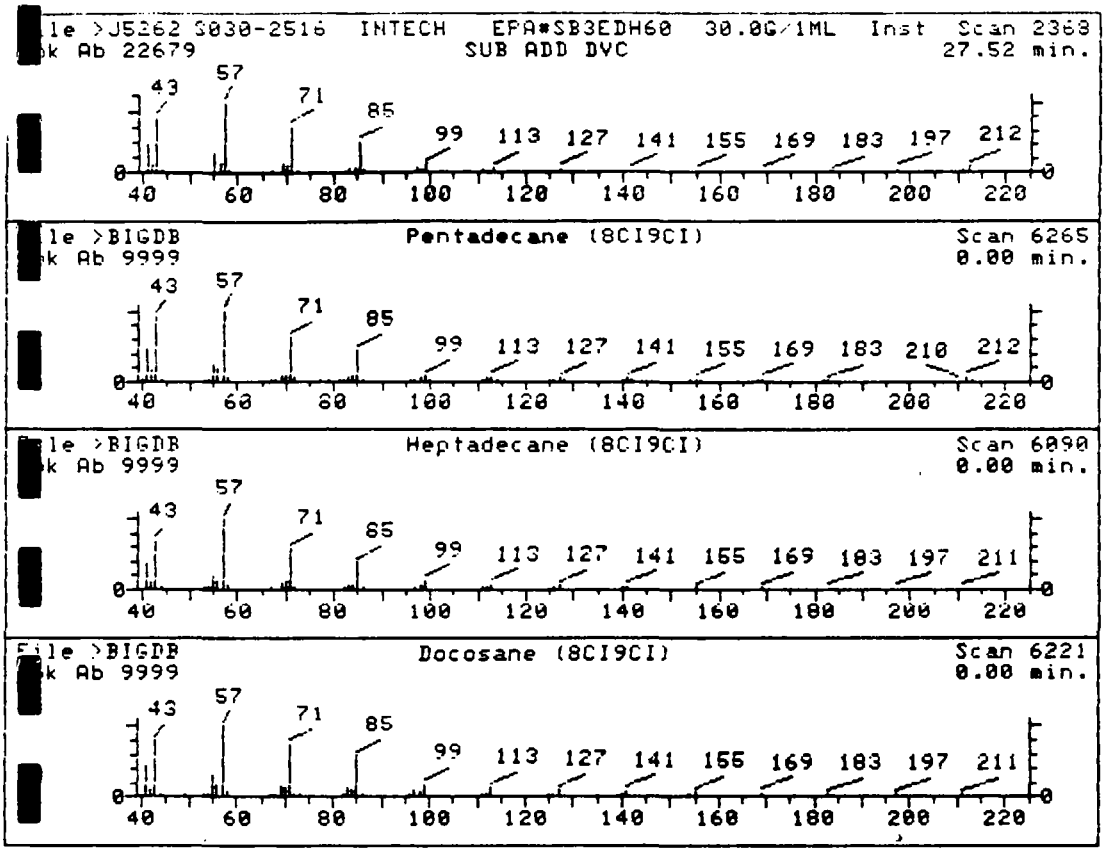


Unknown #,22
Area = 307131.0 Tentative Concentration is 48.00

1.	Heptadecane, 2,6,10,15-tetramethyl- (9CI)	296	C21H44
2.	Docosane (8CI9CI)	310	C22H46
3.	Tridecane, 7-hexyl- (8CI9CI)	268	C19H40
4.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']- (9CI)	398	C21H14FeN2O3
5.	Hexadecane (8CI9CI)	226	C16H34
6.	Eicosane, 10-methyl- (9CI)	296	C21H44
7.	Pentacosane (8CI9CI)	352	C25H52

Sample file: >J[illegible] Spectrum #: 2250
Search speed: 3 [illegible] Filtog option: F No. of ion ranges searched: 64

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89	54833486	6161	"BIGDB	112	21	1	2	79	2	66	60
2.	88	629970	6221	"BIGDB	129	18	2	4	84	3	65	56
3.	88*	7225663	21884	"BIGDB	98	32	3	1	75	2	65	54
4.	83	74764117	6168	"BIGDB	121	16	2	3	100	7	54	50
5.	83	544763	6146	"BIGDB	91	29	2	2	93	3	57	27
6.	83	54833237	6226	"BIGDB	95	38	2	2	85	5	57	23
7.	83	629992	6092	"BIGDB	88	52	2	0	77	2	57	25



Unknown #,25
Area = 337052.0 Tentative Concentration is 52.00

1. Pentadecane (8CI9CI)	212	C15H32
2. Heptadecane (8CI9CI)	240	C17H36
3. Docosane (8CI9CI)	310	C22H46
4. Hexadecane (8CI9CI)	226	C16H34
5. Decane, 5-propyl- (8CI)	184	C13H28
6. Pentacosane (8CI9CI)	352	C25H52
7. Tridecane, 7-hexyl- (8CI9CI)	268	C19H40

Sample file: >J5262 Spectrum #: 2368
Search speed: 3 Fitting option: F No. of ion ranges searched: 75

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	629629	6265	"BIGDB	83	37	1	0	69	13	55	80
2.	81	629787	6090	"BIGDB	99	22	1	1	92	9	53	49
3.	79	629970	6221	"BIGDB	135	12	2	4	94	11	43	60
4.	76	544763	6146	"BIGDB	102	18	1	2	92	15	40	53
5.	68*	17312628	4003	"BIGDB	72	39	2	0	84	22	30	54
6.	67	629992	6092	"BIGDB	88	52	2	0	77	13	34	25
7.	63	7225663	21884	"BIGDB	98	32	2	0	78	16	30	31

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH61

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J5267

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 7/ 7/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1700.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1700.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH61

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J5267

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 7/ 7/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700.	U
83-32-9	Acenaphthene	350.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	4,6-Dinitro-2-methylphenol	1700.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	460.	J
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	160.	J
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene	350.	U
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	700.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	120.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH61

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J5267

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 7/ 7/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	- -	UNKNOWN AROMATIC	3.76	200.	J	
2.	- -	UNKNOWN AROMATIC	3.86	200.	J	
3.	- -	UNKNOWN	7.00	70.	J	
4.	- -	UNKNOWN	7.70	1000.	J	A
5.	- -	UNKNOWN PHTHALATE	33.78	1000.	J	
6.	- -	UNKNOWN PHTHALATE	33.84	10.	J	
7.						
8.						
9.						
10.						
11.						
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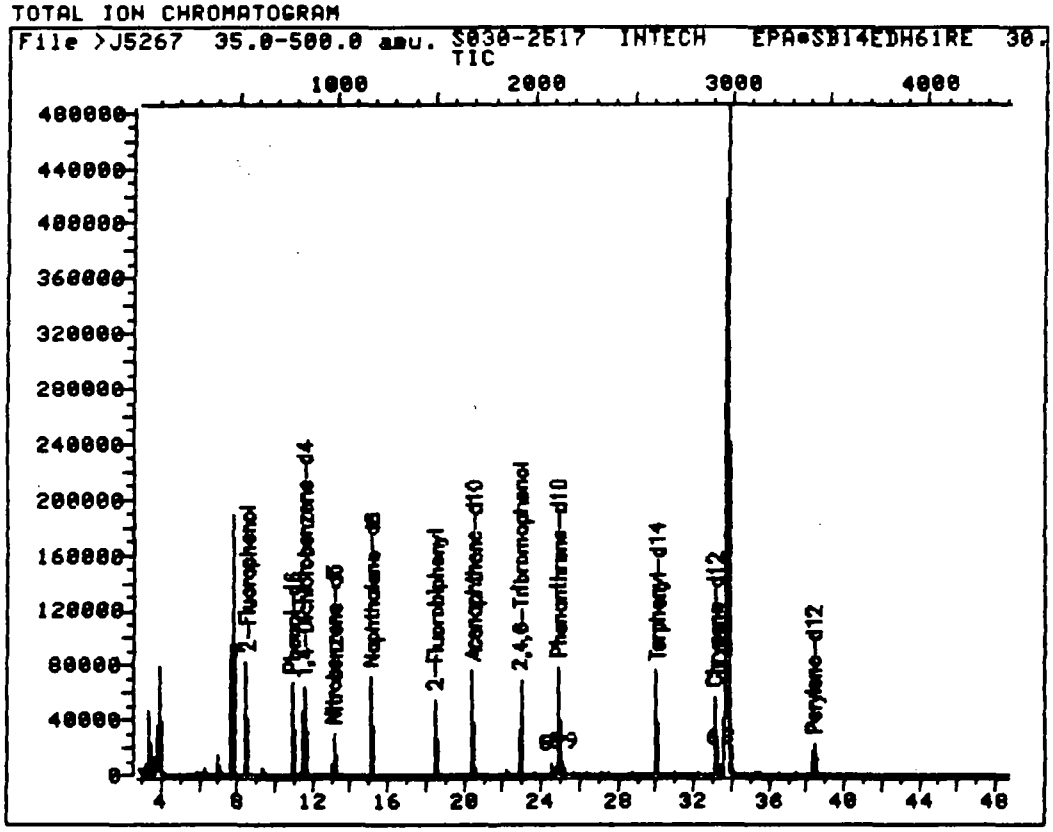
30.						

FORM I SV-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >J5267::D2 Quant Output File: ^J5267::N1
Name: S030-2517 INTECH
Misc: EPA#SB14EDH61RE 30.2G/1ML Instr. #2 BTL#10

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

Operator ID: JULIE
Quant Time: 890711 16:26
Injected at: 890711 05:05

QUANT REPORT

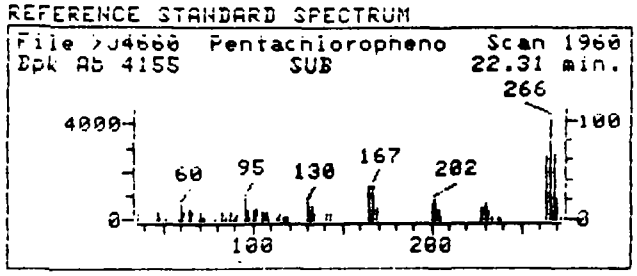
Operator ID: JULIE Quant Rev: 6 Quant Time: 890711 16:26
Output File: ^J5267::N1 Injected at: 890711 05:05
Data File: >J5267::D2 Dilution Factor: 1.00000
Name: S030-2517 INTECH
Misc: EPA#SB14EDH61RE 30.2G/1ML Instr. #2 BTL#10

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 15:38

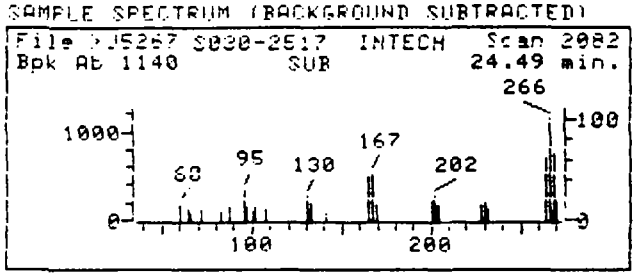
	Compound	R.T.	Q ion	Area	Conc	Units	[illegible]
1)	*1,4-Dichlorobenzene-d4	11.49	152.0	16556	40.00	UG/ML	95
2)	2-Fluorophenol	8.43	112.0	35214	79.82	UG/ML	[illegible]
3)	Phenol-d6	10.83	99.0	44472	152.01	UG/ML	[illegible]
16)	*Naphthalene-d8	15.05	136.0	64026	40.00	UG/ML	92
17)	Nitrobenzene-d5	13.06	82.0	20465	34.28	UG/ML	82
31)	*Acenaphthene-d10	20.41	164.0	35216	40.00	UG/ML	[illegible]
36)	2-Fluorobiphenyl	18.40	172.0	35885	37.92	UG/ML	[illegible]
51)	2,4,6-Tribromophenol	22.83	330.0	18010	83.50	UG/ML	96
52)	*Phenanthrene-d10	24.83	188.0	78236	40.00	UG/ML	[illegible]
57)	Pentachlorophenol	24.49	266.0	2574	13.20	UG/ML	[illegible]
59)	Anthracene	25.02	178.0	9820	4.64	UG/ML	97
62)	*Chrysene-d12	33.05	240.0	55265	40.00	UG/ML	[illegible]
64)	Terphenyl-d14	29.95	244.0	60197	35.16	UG/ML	[illegible]
68)	bis(2-Ethylhexyl)phthalate	33.19	149.0	7413	3.50	UG/ML	90
70)	*Perylene-d12	38.31	264.0	43813	40.00	UG/ML	96

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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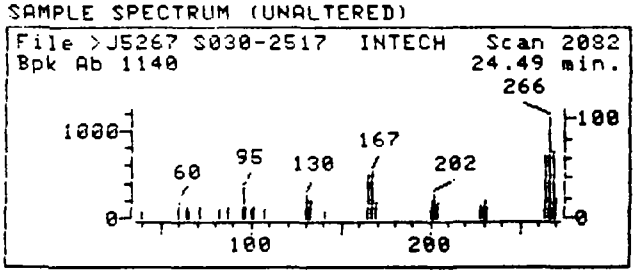
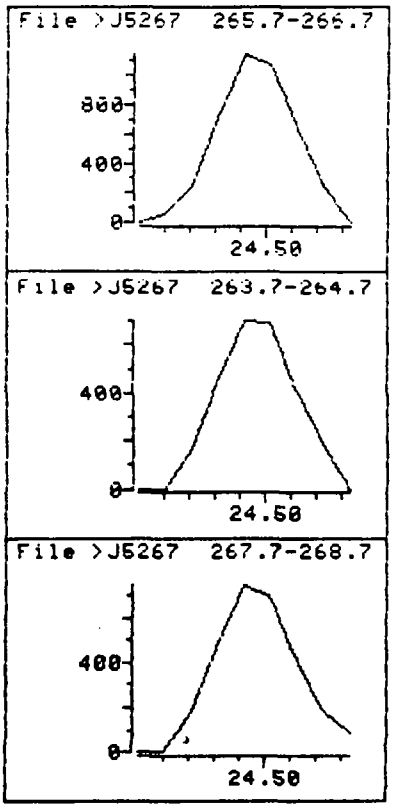
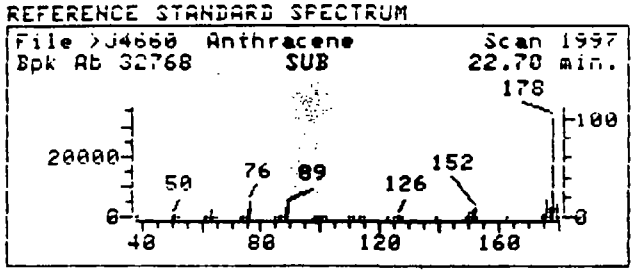




Data File: >J5267::D2 Quant Output File: ^J5267::N1
Name: S030-2517 · INTECH
Misc: EPA#SB14EDH61RE 30.2G/1ML Instr. #2 BTL#10
Quant Time: 890711 16:26 Quant ID File: CLPBNA::SC
Injected at: 890711 05:05 Last Calibration: 890711 15:38

Compound No: 57
Compound Name: **Pentachlorophenol**
Scan Number: 2082
Retention Time: **24.49 min.**
Quant Ion: 266.0
Area: 2574
Concentration: **13.20 UG/ML**
q-value: **96**

REFERENCE STANDARD SPECTRUM



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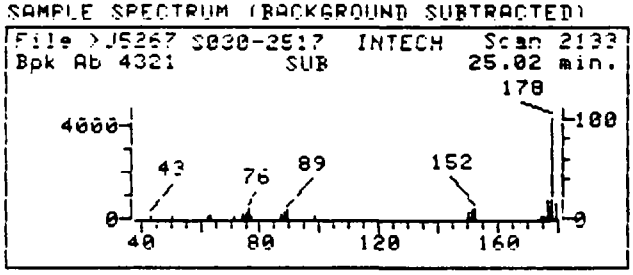

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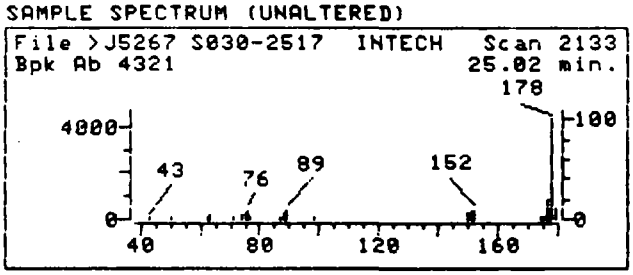
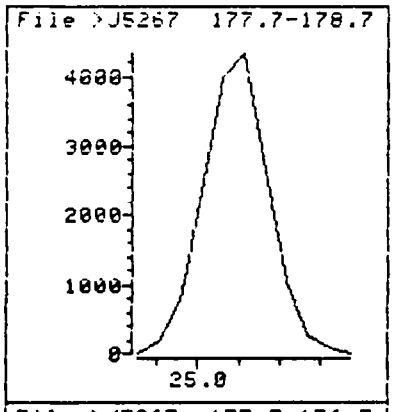
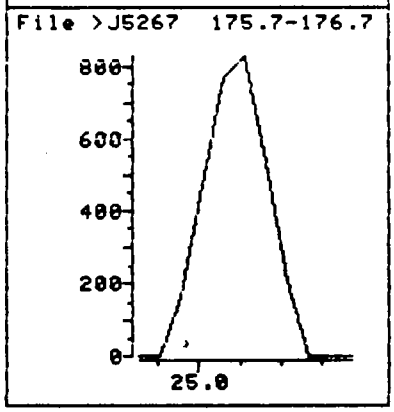


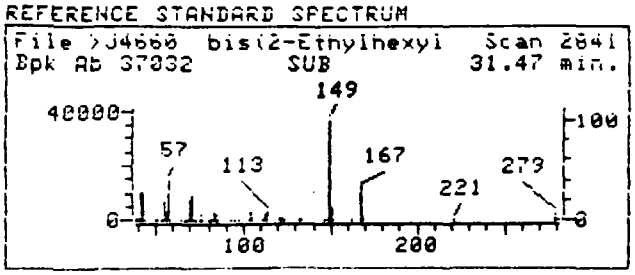




Data File: >J5267::D2 Quant Output File: ^J5267::N1
Name: S030-2517 INTECH
Misc: EPA#SB14EDH61RE 30.2G/1ML Instr. #2 BTL#10
Quant Time: 890711 16:26 Quant ID File: CLPBNA::SC
Injected at: 890711 05:05 Last Calibration: 890711 15:38

Compound No: 59
Compound Name: Anthracene
Scan Number: 2133
Retention Time: 25.02 min.
Quant Ion: 178.0
Area: 9820
Concentration: 4.64 UG/ML
q-value: 97

REFERENCE STANDARD SPECTRUM



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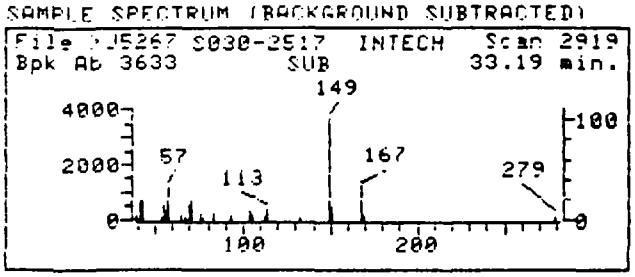

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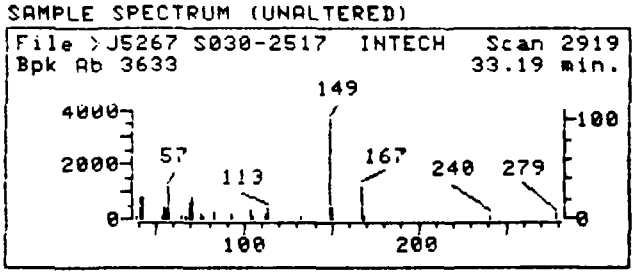
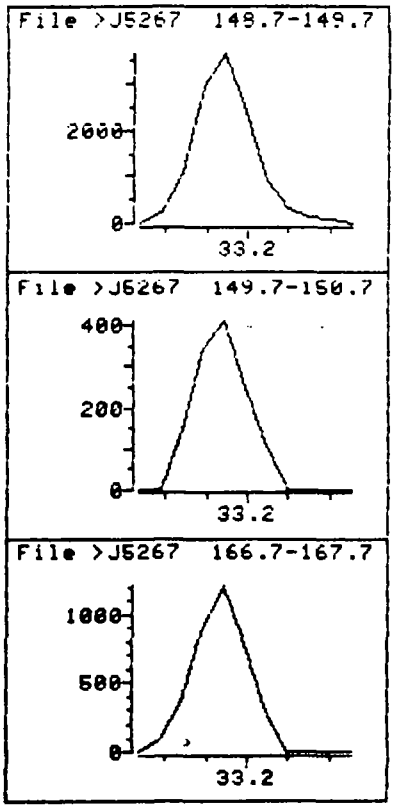
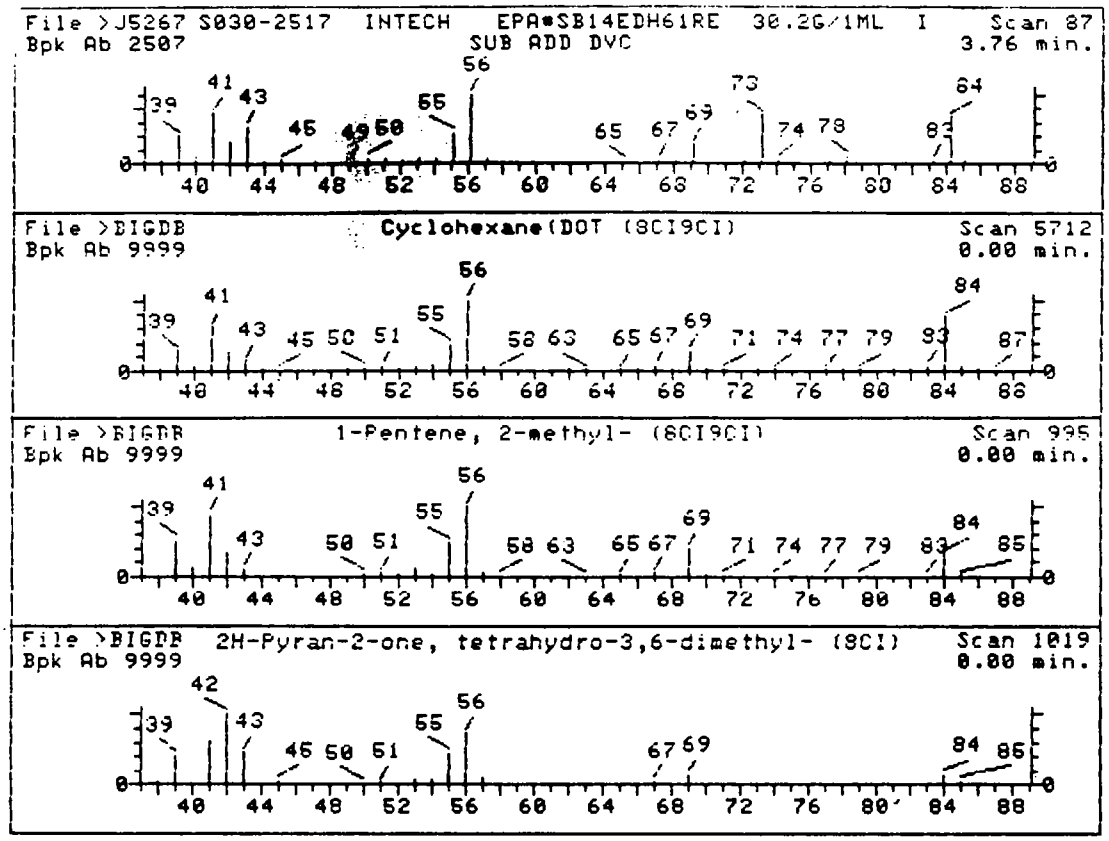




Data File: >J5267::D2 Quant Output File: ^J5267::N1
Name: S030-2517 INTECH
Misc: EPA#SB14EDH61RE 30.2G/1ML Instr. #2 BTL#10
Quant Time: 890711 16:26 Quant ID File: CLPBNA::SC
Injected at: 890711 05:05 Last Calibration: 890711 15:38

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2919
Retention Time: 33.19 min.
Quant Ion: 149.0
Area: 7413
Concentration: 3.50 UG/ML
q-value: 90

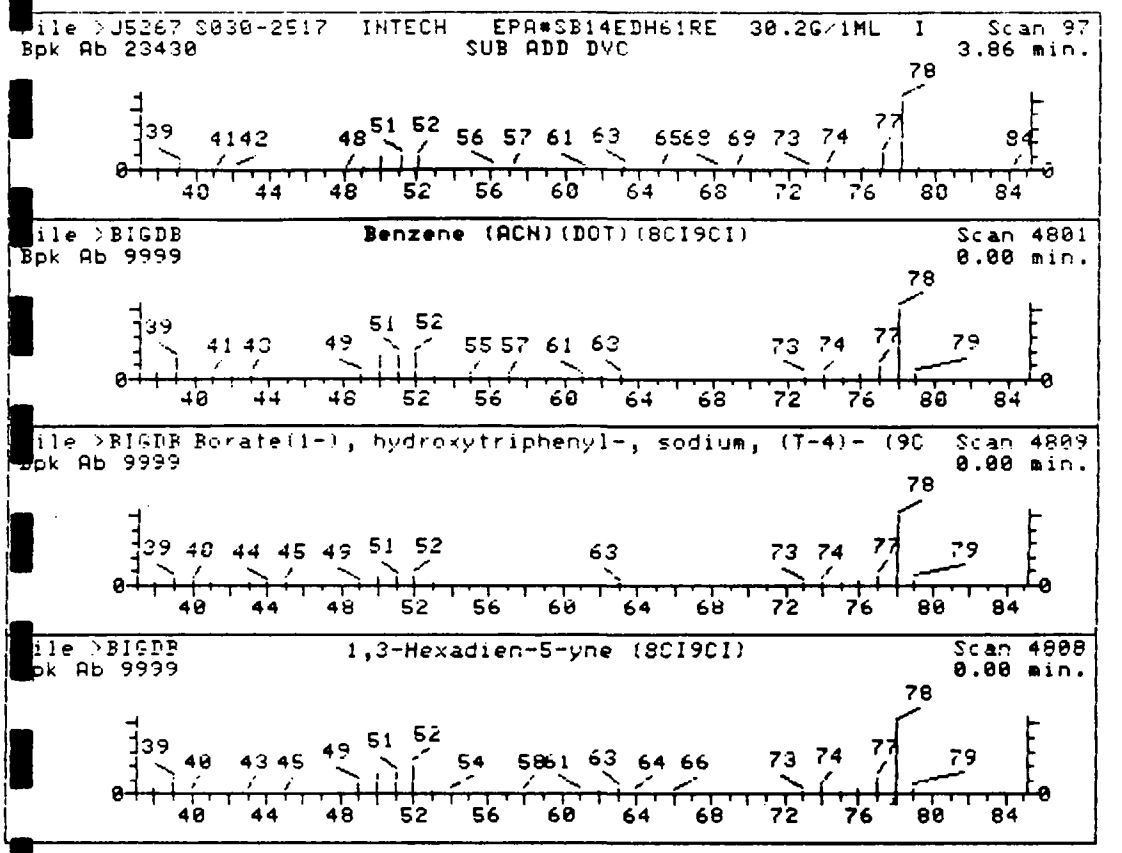


Unknown #,2
Area = 129612.0 Tentative Concentration is 6.00

1.	Cyclohexane(DOT (8CI9CI)	84	C6H12
2.	1-Pentene, 2-methyl- (8CI9CI)	84	C6H12
3.	2H-Pyran-2-one, tetrahydro-3,6-dimethyl- (8CI)	128	C7H12O2
4.	2-Butene, (Z)- (8CI9CI)	56	C4H8
5.	2-Butene, (E)- (8CI9CI)	56	C4H8
6.	Cyclobutanone, 2-methyl- (8CI9CI)	84	C5H8O
7.	Cyclopropane, propyl- (9CI)	84	C6H12

Sample file: [illegible] Spectrum #: 87
Search speed: [illegible] option: F No. of ion ranges searched: 53

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	86*	110827	5712	"BIGDB	85	8	0	0	87	47	40	96
2.	50*	763291	995	"BIGDB	59	42	1	0	70	41	17	53
3.	30	3720227	1019	"BIGDB	60	34	2	0	98	44	12	21
4.	25*	590181	942	"BIGDB	39	40	3	0	127	48	7	16
5.	25*	624646	943	"BIGDB	39	40	3	0	128	48	7	16
6.	25*	1517153	5726	"BIGDB	27	35	2	0	100	48	7	14
7.	21*	2415727	997	"BIGDB	35	53	0	0	77	57	9	36



Unknown #,3

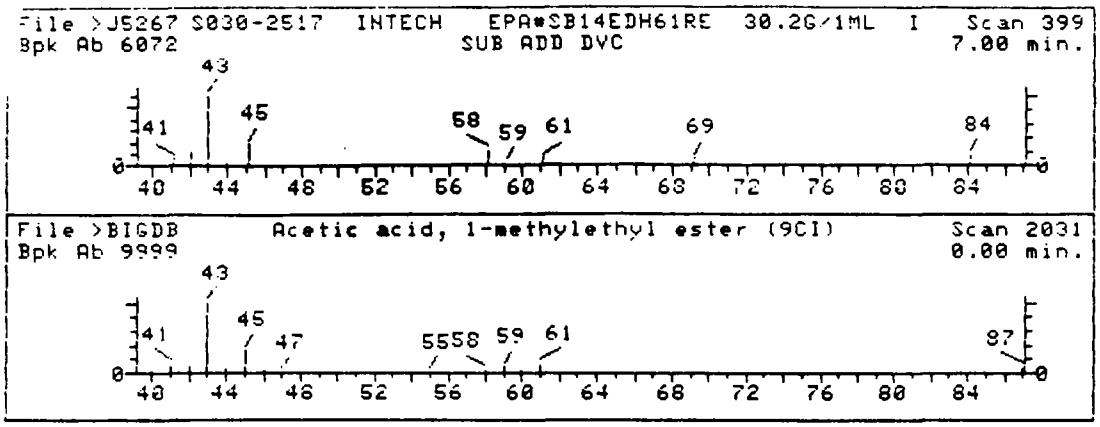
Area = 117636.0 Tentative Concentration is 5.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78	C6H6
2.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0	
3.	1,3-Hexadien-5-yne (8CI9CI)	78	C6H6
4.	1,5-Hexadien-3-yne (8CI9CI)	78	C6H6
5.	2-Butenedinitrile, (E)- (9CI)	78	C4H2N2
6.	2,4-Hexadiyne (8CI9CI)	78	C6H6
7.	1,5-Hexadiyne (8CI9CI)	78	C6H6

Sample file: >J5267 Spectrum #: 97

Search speed: 3 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	71432	4801	"BIGDB	84	14	1	-3	70	1	66	76
2.	78	12113074	4809	"BIGDB	72	35	2	4	73	3	55	19
3.	67*	10420903	4808	"BIGDB	55	31	1	0	45	29	27	52
4.	50*	821089	4804	"BIGDB	49	39	0	2	26	45	17	53
5.	43*	764421	4803	"BIGDB	43	62	2	0	69	22	17	14
6.	40*	2809690	4806	"BIGDB	46	42	0	1	27	47	12	49
7.	30*	628160	4802	"BIGDB	51	57	2	0	32	47	10	25

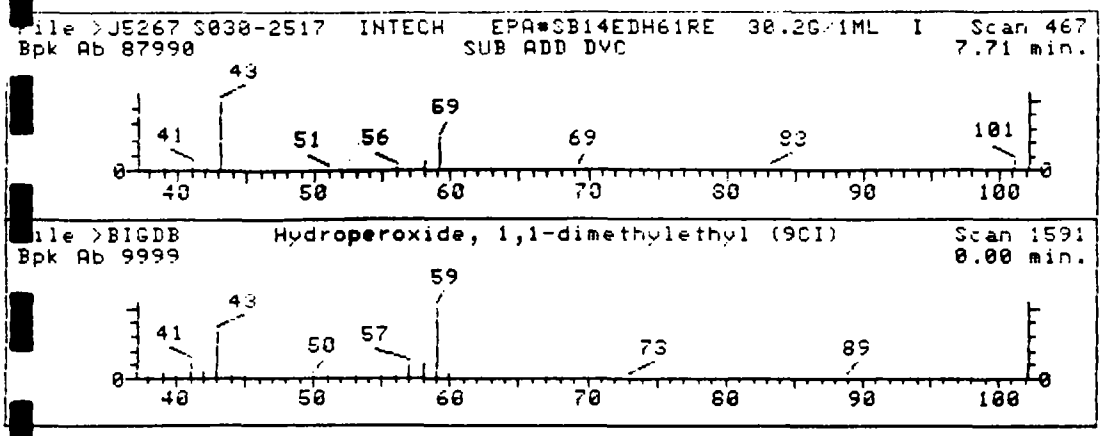


Unknown #,4
Area = 33509.00 Tentative Concentration is 2.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2

Sample file: >J5267 **Spectrum #:** 399
Search speed: 3 **Tilting option: F** No. of ion ranges searched: 49

	Prob.	[illegible]	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	35	[illegible]	"BIGDB	35	44	2	0	84	27	14	12



Unknown #,5

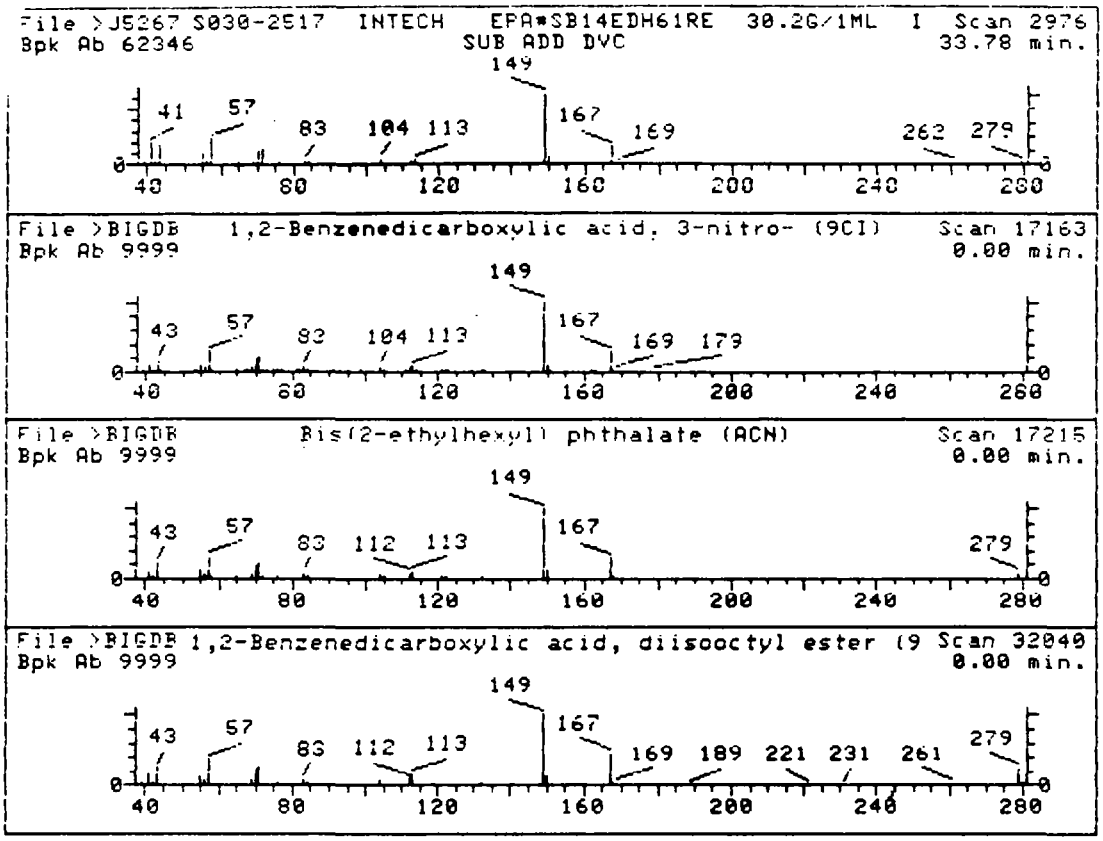
Area = 870789.0 Tentative Concentration is 40.00

1. Hydroperoxide, 1,1-dimethylethyl (9CI) 90 C4H10O2

Sample file: >J5267 Spectrum #: 467

Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	[illegible]	[illegible]	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25	[illegible]	[illegible]	"BIGDB	35	30	1	0	37	50	7	13



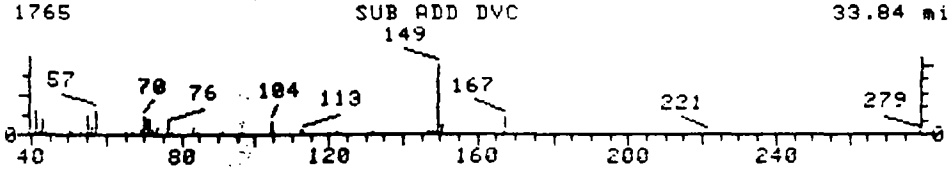
Unknown #,6
Area = 3942559. Tentative Concentration is 40.00

1.	1,2-Benzenedicarboxylic acid, 3-nitro- (9CI)	211	C8H5NO6
2.	Bis(2-ethylhexyl) phthalate (ACN)	390	C24H38O4
3.	1,2-Benzenedicarboxylic acid, diisooctyl ester (9CI)	390	C24H38O4
4.	1,2-Benzenedicarboxylic acid, isodecyl octyl ester (9CI)	418	C26H42O4
5.	1-Heptene, 5-methyl- (8CI9CI)	112	C8H16
6.	Cyclopentane, 1,2,3-trimethyl-, (1.alpha.,2.alpha.,3.alpha.)- (9CI)	112	C8H16

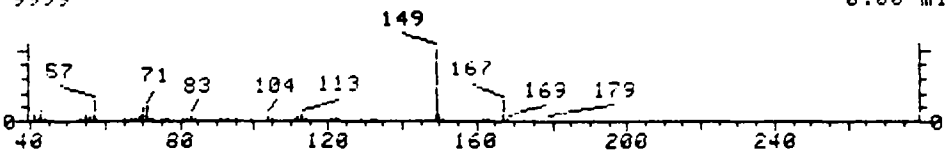
Sample file: >J5267 Spectrum #: 2976
Search speed: 3 Tilting option: F No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89	603112	17163	"BIGDB	97	11	0	1	70	5	66	73
2.	86	117817	17215	"BIGDB	102	35	2	0	86	5	60	36
3.	47	27554263	32040	"BIGDB	88	59	2	2	54	24	17	18
4.	45	1330967	17216	"BIGDB	65	58	1	1	96	23	17	16
5.	30*	13151047	3547	"BIGDB	51	32	1	-2	32	50	10	26
6.	25*	2613696	3658	"BIGDB	48	32	1	-2	34	49	7	18

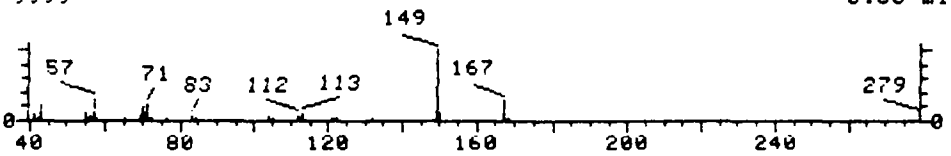
File >J5267 S030-2517 INTECH EPA*SB14EDH61RE 30.2G/1ML I Scan 2982
Bpk Ab 1765 SUB ADD DVC 33.84 min.



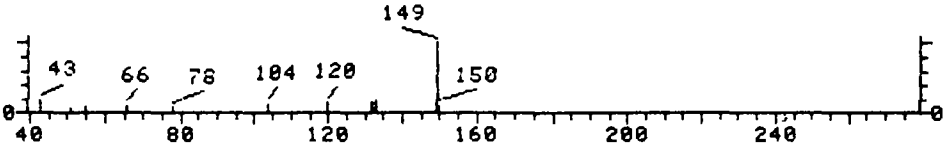
File >BIGDB 1,2-Benzenedicarboxylic acid, 3-nitro- (9CI) Scan 17163
Bpk Ab 9999 0.00 min.



File >BIGDB Bis(2-ethylhexyl) phthalate (ACN) Scan 17215
Bpk Ab 9999 0.00 min.



File >BIGDB Furo[3,2-b]pyridine, 2-methyl-, 4-oxide (9CI) Scan 17136
Bpk Ab 9999 0.00 min.



Unknown #,7
Area = 25275.00 Tentative Concentration is .300

1. 1,2-Benzenedicarboxylic acid, 3-nitro- (9CI) 211 C8H5NO6
2. Bis(2-ethylhexyl) phthalate (ACN) 390 C24H38O4
3. Furo[3,2-b]pyridine, 2-methyl-, 4-oxide (9CI) 149 C8H7NO2

Sample file: >J5267 Spectrum #: 2982
Search speed: 3 Tilting option: F No. of ion ranges searched: 50

	Prob.	[illegible]	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	74	603112	17163	"BIGDB	86	22	1	1	81	11	39	44
2.	60	117817	17215	"BIGDB	83	54	2	1	77	11	30	15
3.	27*	69022839	17136	"BIGDB	28	51	3	0	100	38	10	13

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH62

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5274

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	7300.	U
111-44-4	bis(2-Chloroethyl)ether	7300.	U
95-57-8	2-Chlorophenol	7300.	U
541-73-1	1,3-Dichlorobenzene	7300.	U
106-46-7	1,4-Dichlorobenzene	7300.	U
100-51-6	Benzyl alcohol	7300.	U
95-50-1	1,2-Dichlorobenzene	7300.	U
95-48-7	2-Methylphenol	7300.	U
108-60-1	bis(2-Chloroisopropyl)ether	7300.	U
106-44-5	4-Methylphenol	7300.	U
621-64-7	N-Nitroso-di-n-propylamine	7300.	U
67-72-1	Hexachloroethane	7300.	U
98-95-3	Nitrobenzene	7300.	U
78-59-1	Isophorone	7300.	U
88-75-5	2-Nitrophenol	7300.	U
105-67-9	2,4-Dimethylphenol	7300.	U
65-85-0	Benzoic acid	37000.	U
111-91-1	bis(2-Chloroethoxy)methane	7300.	U
120-83-2	2,4-Dichlorophenol	7300.	U
120-82-1	1,2,4-Trichlorobenzene	7300.	U
91-20-3	Naphthalene	7300.	U
106-47-8	4-Chloroaniline	7300.	U
87-68-3	Hexachlorobutadiene	7300.	U
59-50-7	4-Chloro-3-methylphenol	7300.	U
91-57-6	2-Methylnaphthalene	37000.	
77-47-4	Hexachlorocyclopentadiene	7300.	U
88-06-2	2,4,6-Trichlorophenol	7300.	U
95-95-4	2,4,5-Trichlorophenol	37000.	U
91-58-7	2-Chloronaphthalene	8200.	
88-74-4	2-Nitroaniline	37000.	U
131-11-3	Dimethylphthalate	390.	J
208-96-8	Acenaphthylene	1200.	J
606-20-2	2,6-Dinitrotoluene	7300.	U

381

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH62

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5274

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	37000.	U
83-32-9	Acenaphthene	4200.	J
51-28-5	2,4-Dinitrophenol	37000.	U
100-02-7	4-Nitrophenol	37000.	U
132-64-9	Dibenzofuran	8500.	
121-14-2	2,4-Dinitrotoluene	7300.	U
84-66-2	Diethylphthalate	7300.	U
7005-72-3	4-Chlorophenyl-phenylether	7300.	U
86-73-7	Fluorene	6000.	J
100-01-6	4-Nitroaniline	37000.	U
534-52-1	4,6-Dinitro-2-methylphenol	37000.	U
86-30-6	N-Nitrosodiphenylamine (1)	7300.	U
101-55-3	4-Bromophenyl-phenylether	7300.	U
118-74-1	Hexachlorobenzene	7300.	U
87-86-5	Pentachlorophenol	46000.	J
85-01-8	Phenanthrene	8600.	
120-12-7	Anthracene	990.	J
84-74-2	Di-n-butylphthalate	7300.	U
206-44-0	Fluoranthene	2200.	J
129-00-0	Pyrene	3000.	J
85-68-7	Butylbenzylphthalate	7300.	U
91-94-1	3,3'-Dichlorobenzidine	15000.	U
56-55-3	Benzo(a)anthracene	710.	J
218-01-9	Chrysene	1300.	J
117-81-7	bis(2-Ethylhexyl)phthalate	390.	J
117-84-0	Di-n-octylphthalate	7300.	U
205-99-2	Benzo(b)fluoranthene	740.	J
207-08-9	Benzo(k)fluoranthene	880.	J
50-32-8	Benzo(a)pyrene	440.	J
193-39-5	Indeno(1,2,3-cd)pyrene	7300.	U
53-70-3	Dibenz(a,h)anthracene	7300.	U
191-24-2	Benzo(g,h,i)perylene	7300.	U

(1) - Cannot be separated from diphenylamine

382

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDH62

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5274

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/11/89

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 20.00

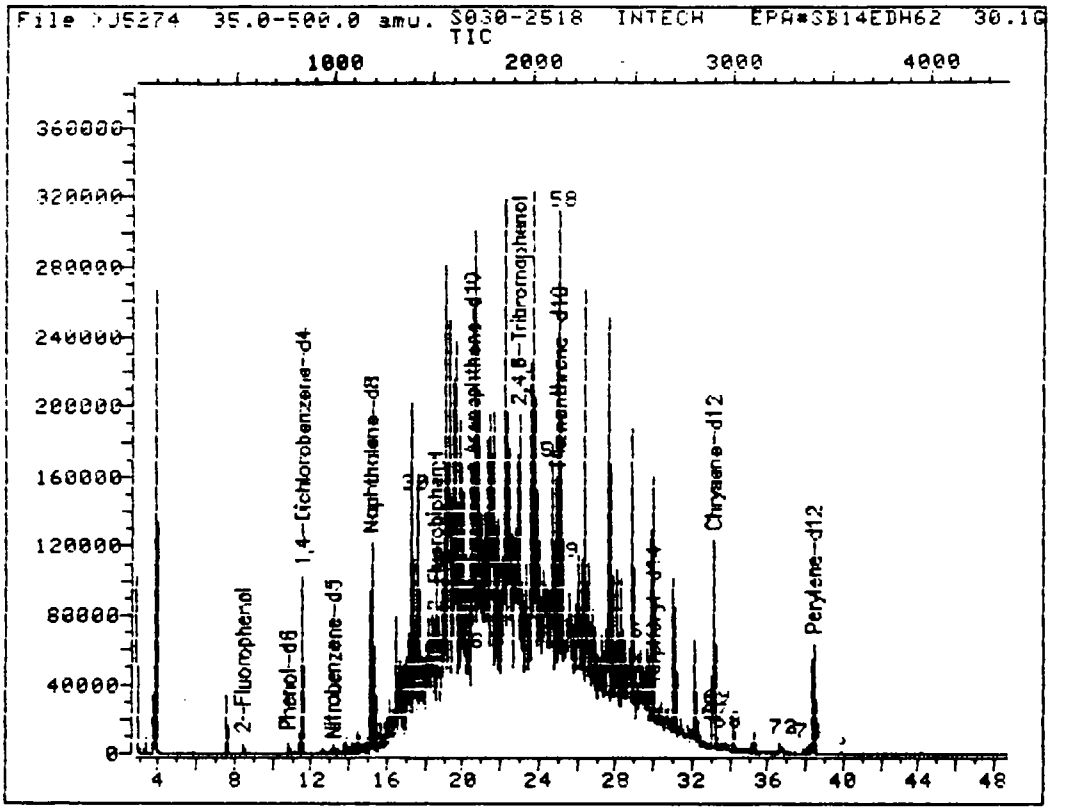
Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	3.81	90000.	J
2. - -	UNKNOWN AROMATIC	17.54	50000.	J
3. - -	UNKNOWN AROMATIC	19.02	50000.	J
4. - -	UNKNOWN DIMETHYLNAPHTHALENE	19.25	70000.	J
5. - -	UNKNOWN DIMETHYLNAPHTHALENE	19.50	70000.	J
6. - -	UNKNOWN DIMETHYLNAPHTHALENE	19.54	20000.	J
7. - -	UNKNOWN DIMETHYLNAPHTHALENE	19.77	30000.	J
8. - -	UNKNOWN HYDROCARBON	20.60	40000.	J
9. - -	UNKNOWN AROMATIC	20.82	30000.	J
10. - -	UNKNOWN TRIMETHYLNAPHTHALENE	21.27	20000.	J
11. - -	UNKNOWN TRIMETHYLNAPHTHALENE	21.53	20000.	J
12. - -	UNKNOWN TRIMETHYLNAPHTHALENE	21.78	20000.	J
13. - -	UNKNOWN	22.30	30000.	J
14. - -	UNKNOWN HYDROCARBON	23.60	60000.	J
15. - -	UNKNOWN HYDROCARBON	23.67	20000.	J
16. - -	UNKNOWN	23.90	30000.	J
17. - -	UNKNOWN HYDROCARBON	26.29	40000.	J
18. - -	UNKNOWN HYDROCARBON	27.58	50000.	J
19. - -	UNKNOWN DIMETHYLPHENANTHRENE	28.30	20000.	J
20. - -	UNKNOWN HYDROCARBON	28.77	30000.	J
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >J5274::D2 Quant Output File: ^J5274::N1
Name: S030-2518 INTECH
Misc: EPA#SB14EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 18:22

Operator ID: DAVE
Quant Time: 890711 18:23
Injected at: 890711 17:11

Diluted for Pentachlorophenol linearity

QUANT REPORT

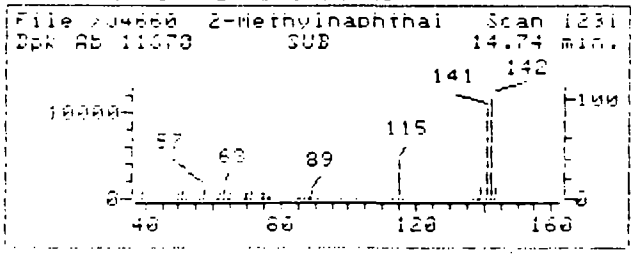
Operator ID: DAVE Quant Rev: 6 Quant Time: 890711 18:26
Output File: ^J5274::N1 Injected at: 890711 17:11
Data File: >J5274::D2 Dilution Factor: 1.00000
Name: 5030-2518 INTECH
Misc: EPA#5814EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1

ID File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890711 18:22

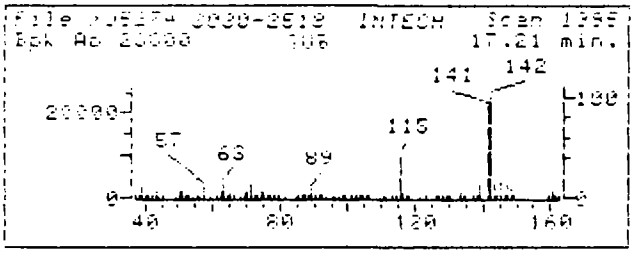
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	11.47	152.0	33052	40.00	UG/ML	96
2)	2-Fluorophenol	8.38	112.0	3052	2.94	UG/ML	99
3)	Phenol-d6	10.74	99.0	4254	6.53	UG/ML	88
16)	*Naphthalene-d8	15.08	136.0	125211	40.00	UG/ML	91
17)	Nitrobenzene-d5	13.08	82.0	1654	1.03	UG/ML	82
30)	2-Methylnaphthalene	17.21	142.0	61872	50.09	UG/ML	96
31)	*Acenaphthene-d10	20.41	164.0	72159	40.00	UG/ML	94
35)	2-Chloronaphthalene	18.91	162.0	32337	12.34	UG/ML	43
36)	2-Fluorobiphenyl	18.47	172.0	3954	1.66	UG/ML	92
38)	Dimethylphthalate	20.19	163.0	1723	.61	UG/ML	94
39)	Acenaphthylene	20.01	152.0	6211	1.82	UG/ML	86
41)	Acenaphthene	20.50	153.0	14793	6.16	UG/ML	97
44)	Dibenzofuran	21.02	168.0	22182	12.35	UG/ML	90
49)	Fluorene	22.09	166.0	23686	9.17	UG/ML	95
51)	2,4,6-Tribromophenol	22.85	330.0	1584	3.04	UG/ML	87
52)	*Phenanthrene-d10	24.95	188.0	128196	40.00	UG/ML	99
57)	Pentachlorophenol	24.63	266.0	40901	63.16	UG/ML	98
58)	Phenanthrene	25.02	178.0	48044	12.92	UG/ML	99
59)	Anthracene	25.12	178.0	5634	1.50	UG/ML	91
61)	Fluoranthene	28.63	202.0	14229	3.37	UG/ML	99
62)	*Chrysene-d12	33.08	240.0	138880	40.00	UG/ML	96
63)	Pyrene	29.26	202.0	22279	3.94	UG/ML	97
64)	Terphenyl-d14	29.93	244.0	6038	1.52	UG/ML	88
67)	Benzo(a)anthracene	33.00	228.0	5247	.90	UG/ML	95
68)	bis(2-Ethylhexyl)phthalate	33.67	149.0	2680	.51	UG/ML	93
69)	Chrysene	33.13	228.0	8740	1.74	UG/ML	93
70)	*Perylene-d12	38.36	264.0	126656	40.00	UG/ML	96
72)	Benzo(b)fluoranthene	36.67	252.0	5727	.98	UG/ML	96
73)	Benzo(k)fluoranthene	36.67	252.0	5727	1.20	UG/ML	94
74)	Benzo(a)pyrene	38.02	252.0	2903	.40	UG/ML	97

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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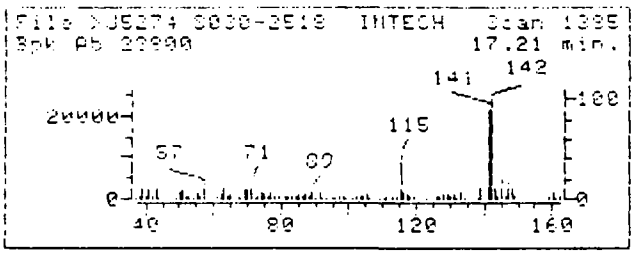
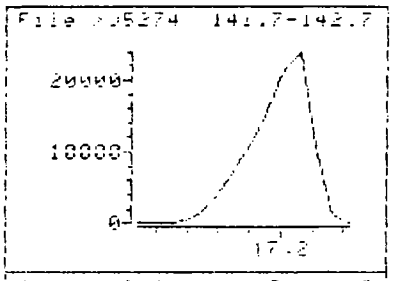
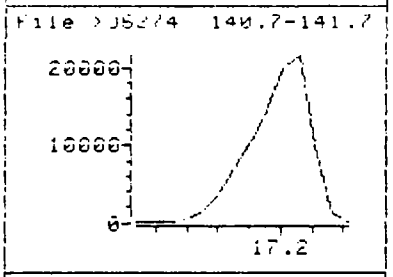
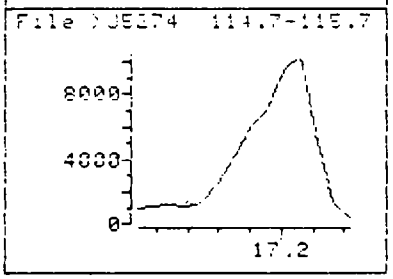




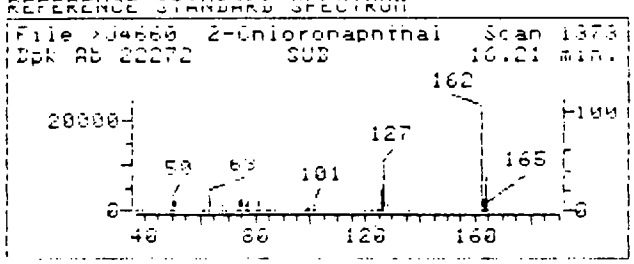




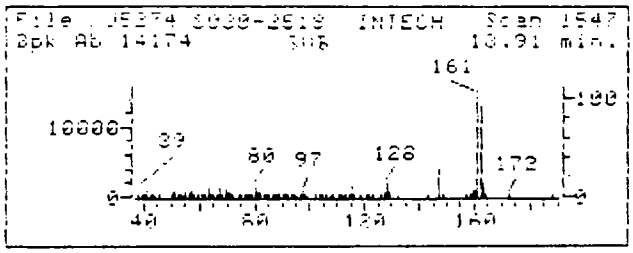
Data File: >J5274::D2 Quant Output File: ^J5274::N1
Name: 5030-2518 INTECH
Misc: EPA#5814EDH62 30.15/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 18:23 Quant ID File: CLPBNA::SC
Injected at: 890711 17:11 Last Calibration: 890711 18:22

Compound No: 30
Compound Name: 2-Methylnaphthalene
Scan Number: 1385
Retention Time: 17.21 min.
Quant Ion: 142.0
Area: 61872
Concentration: 50.09 UG/ML
q-value: 96

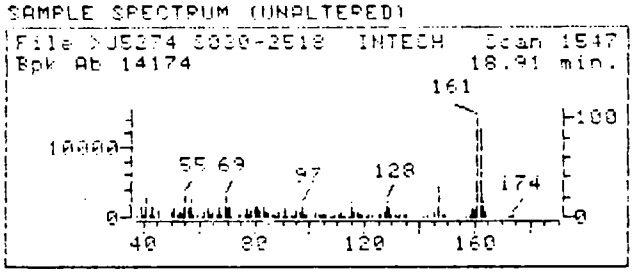
REFERENCE STANDARD SPECTRUM

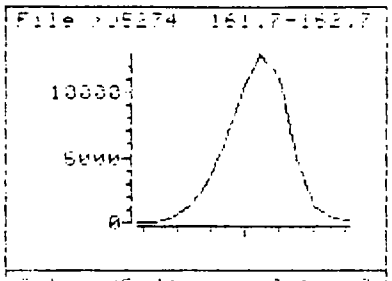


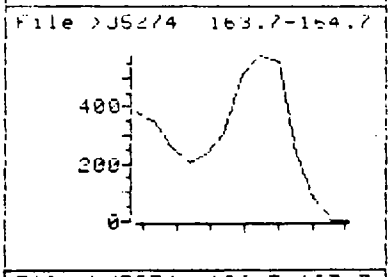
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

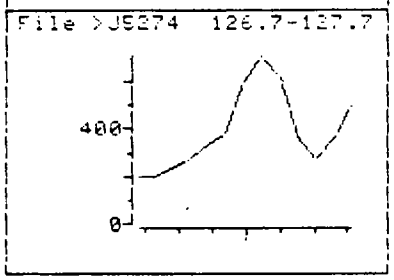


SAMPLE SPECTRUM (UNALTERED)





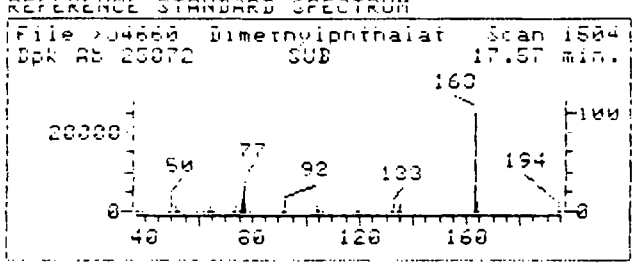


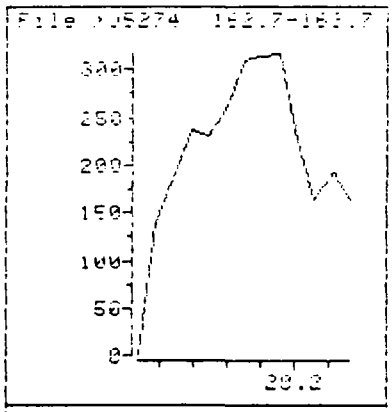


Data File: >J5274::U2 Quant Output File: ^J5274::N1
Name: 5030-2518 INTECH
Misc: EPA#SB14EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 18:23 Quant ID File: CLPBNA::SC
Injected at: 890711 17:11 Last Calibration: 890711 18:22

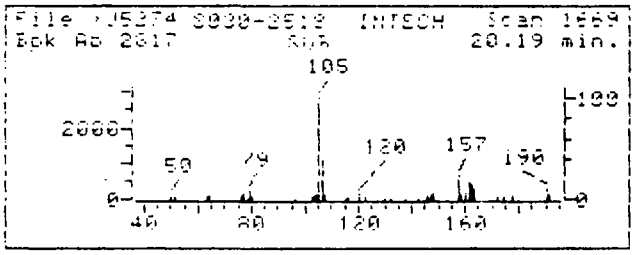
Compound No: 35
Compound Name: 2-Chloronaphthalene
Scan Number: 1547
Retention Time: 18.91 min.
Quant Ion: 162.0
Area: 32337
Concentration: 12.34 UG/ML
q-value: 43

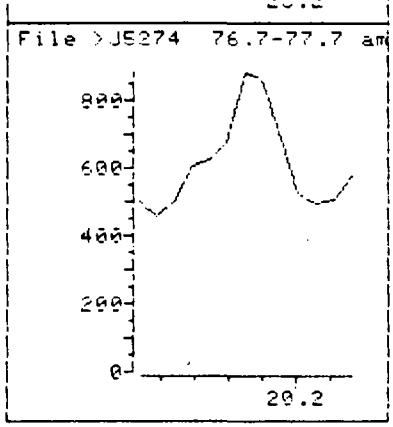
REFERENCE STANDARD SPECTRUM



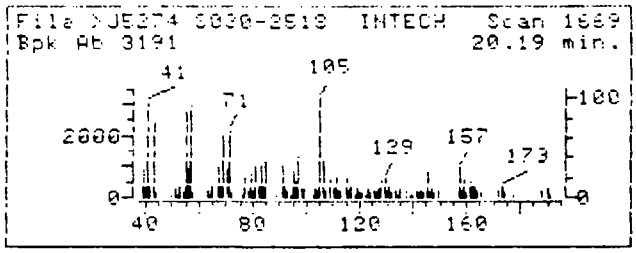


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





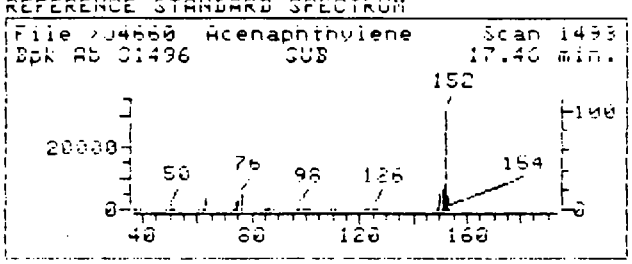
SAMPLE SPECTRUM (UNALTERED)



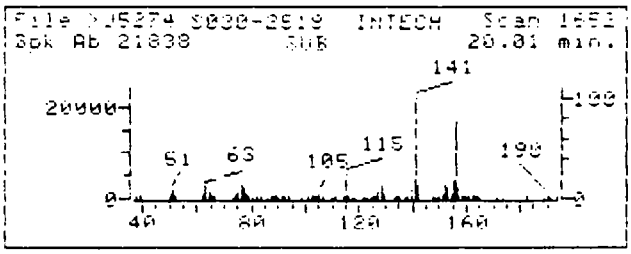
Data File: >U5274::D2 Quant Output File: ^U5274::N1
Name: S030-2518 INTECH
Misc: EPA#5814EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 18:23 Quant ID File: CLPBNA::SC
Injected at: 890711 17:11 Last Calibration: 890711 18:22

Compound No: 38
Compound Name: Dimethylphthalate
Scan Number: 1669
Retention Time: 20.19 min.
Quant Ion: 163.0
Area: 1723
Concentration: .61 UG/ML
q-value: 94

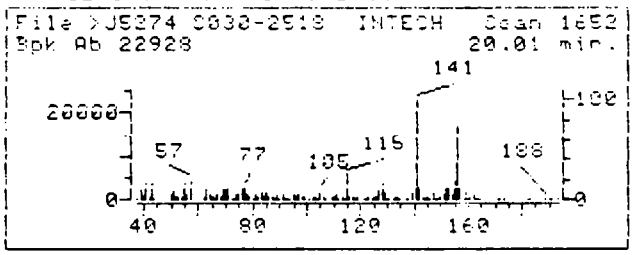
REFERENCE STANDARD SPECTRUM

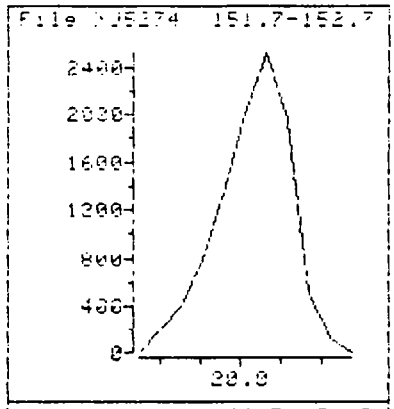


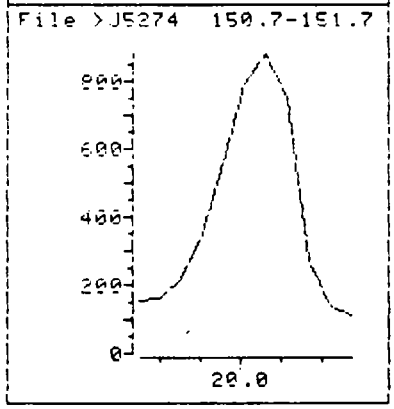
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





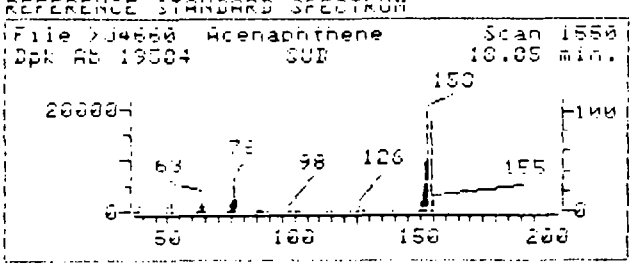


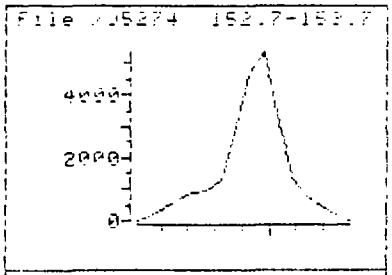
Data File: >J5274::D2
Name: S030-2518 INTECH
Misc: EPA#SB14EDH62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

Quant Output File: >J5274::N1
Instr. #2 (X20 DILUTION) BTL# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

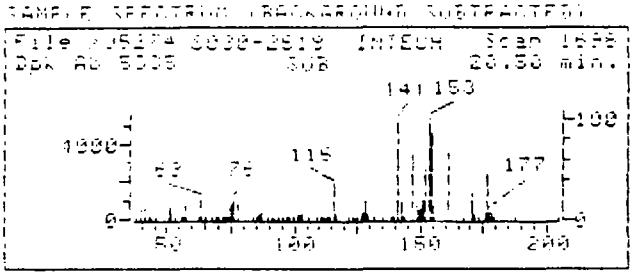
Compound No: 39
Compound Name: Acenaphthylene
Scan Number: 1652
Retention Time: 20.01 min.
Quant Ion: 152.0
Area: 6211
Concentration: 1.82 UG/ML
q-value: 86

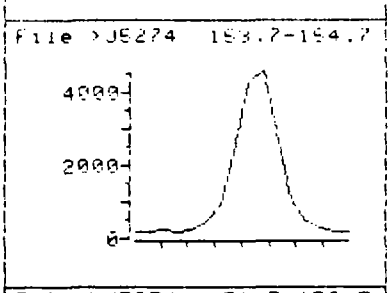
REFERENCE STANDARD SPECTRUM



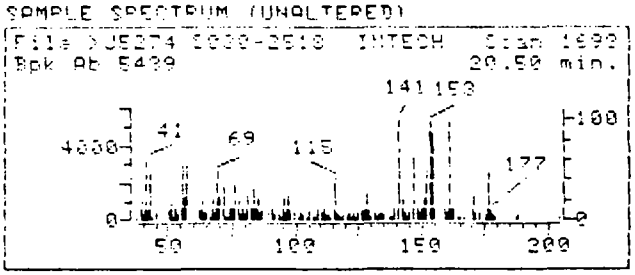


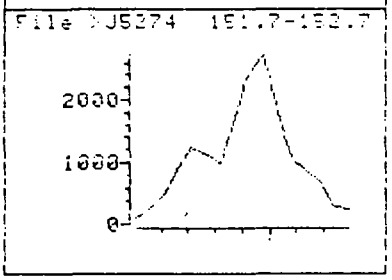
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)



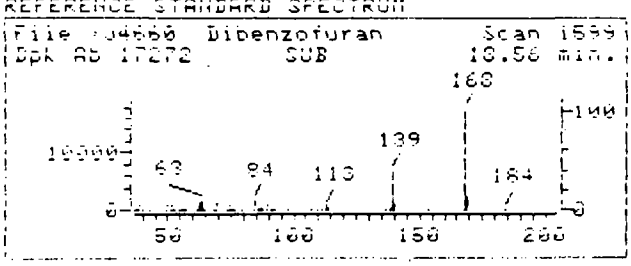


Data File: >J5274::D2
Name: 5030-2519 INTECH
Misc: EPA#5B14ED462 30.19/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

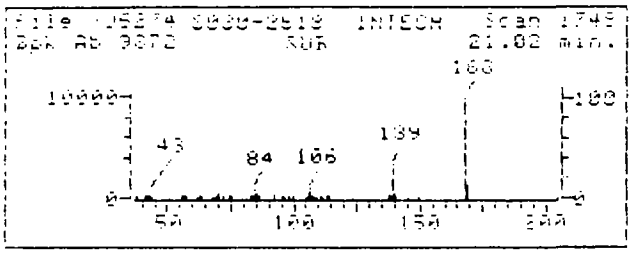
Quant Output File: ^J5274::N1
Instr. #2 (X20 DILUTION) BFL# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

Compound No: 41
Compound Name: Acenaphthene
Scan Number: 1698
Retention Time: 20.50 min.
Quant Ion: 153.0
Area: 14793
Concentration: 6.16 UG/ML
q-value: 97

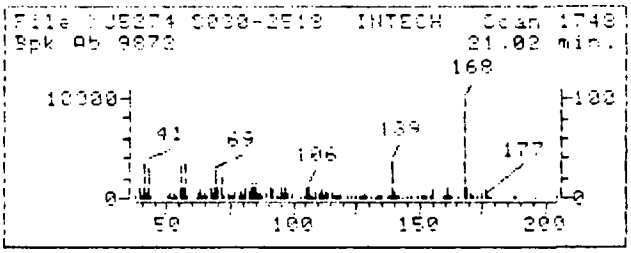
REFERENCE STANDARD SPECTRUM

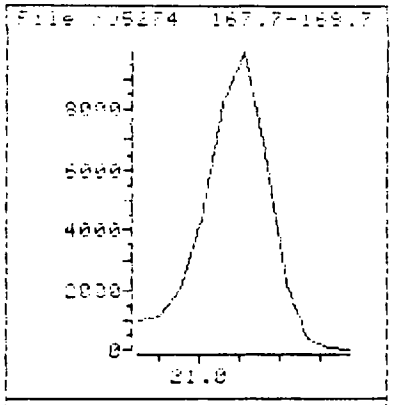


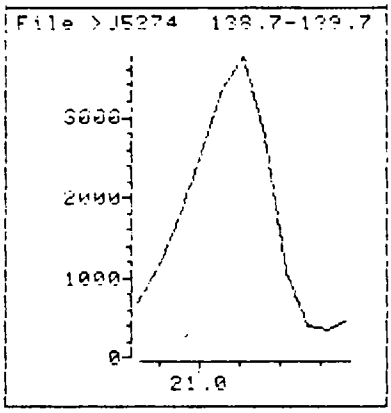
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





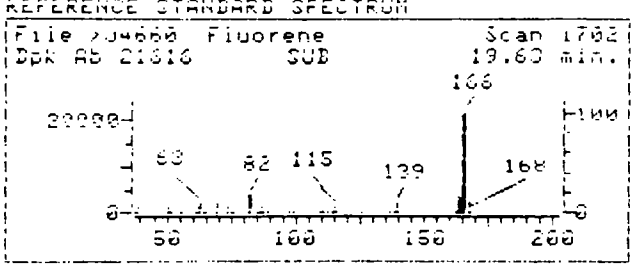


Data File: >J5274::D2
Name: S030-2518 INTECH
Misc: EPA#5814EDH62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

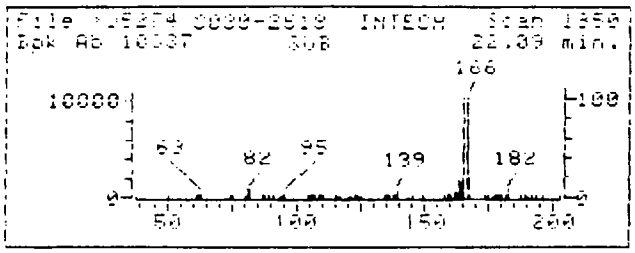
Quant Output File: ^J5274::N1
Instr. #2 (X20 DILUTION) BTL# 1
Quant ID File: CLPBNA::9C
Last Calibration: 890711 18:22

Compound No: 44
Compound Name: Dibenzofuran
Scan Number: 1748
Retention Time: 21.02 min.
Quant Ion: 168.0
Area: 22192
Concentration: 12.35 UG/ML
Q-value: 90

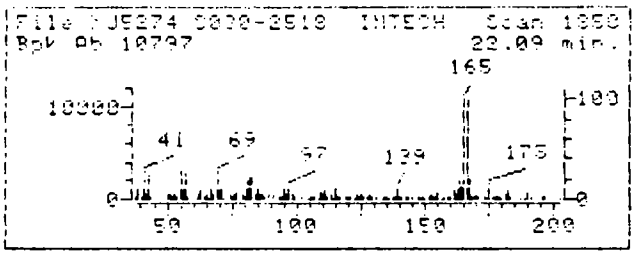
REFERENCE STANDARD SPECTRUM

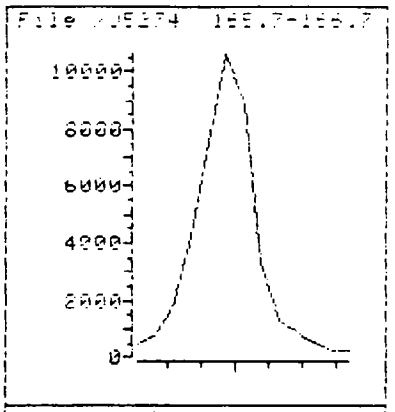


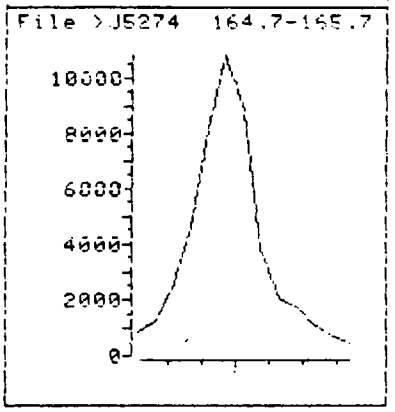
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







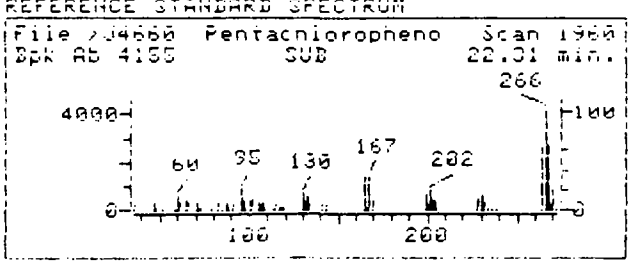
Data File: >J5274::02
Name: 5030-2518 INTECH
Misc: EPA#SB14EDH62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

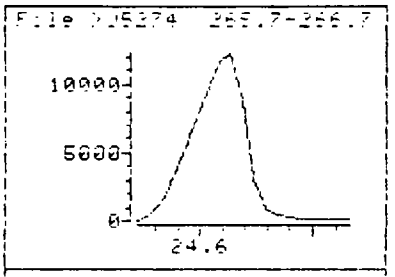
Quant Output File: ^J5274::N1

Instr. #2 (X20 DILUTION) BTI # 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

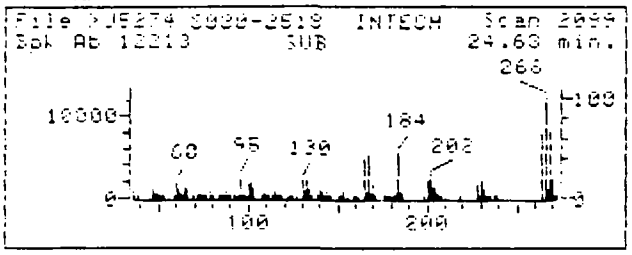
Compound No: 49
Compound Name: Fluorene
Scan Number: 1850
Retention Time: 22.09 min.
Quant Ion: 166.0
Area: 23686
Concentration: 9.17 UG/ML
q-value: 95

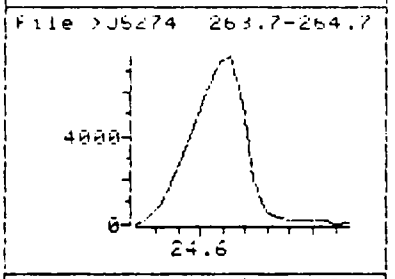
REFERENCE STANDARD SPECTRUM



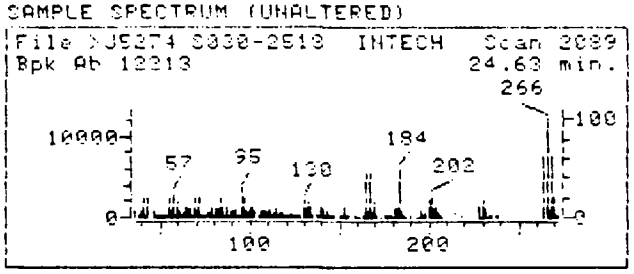


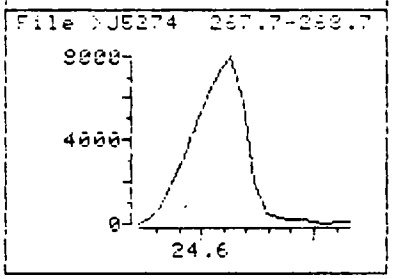
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

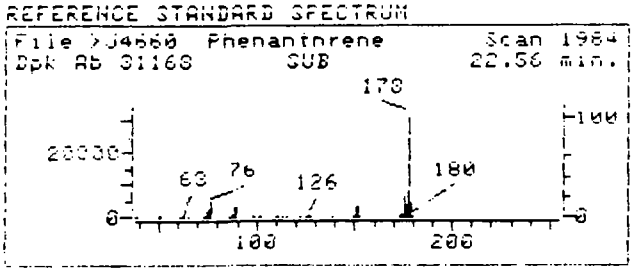




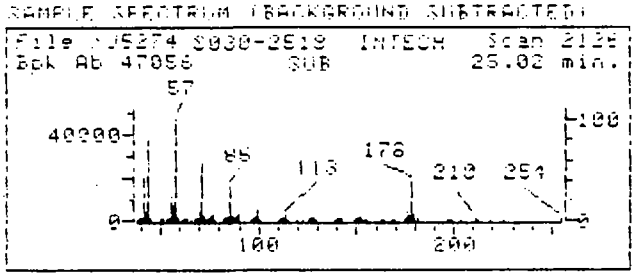
Data File: >J5274::D2 Quant Output File: ^J5274::N1
Name: S030-2518 INTECH
Misc: EPA#5B14EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 18:23 Quant ID File: CLPBNA::SC
Injected at: 890711 17:11 Last Calibration: 890711 18:22

Compound No: 57
Compound Name: Pentachlorophenol
Scan Number: 2089
Retention Time: 24.63 min.
Quant Ion: 266.0
Area: 40901
Concentration: 63.16 UG/ML
q-value: 98

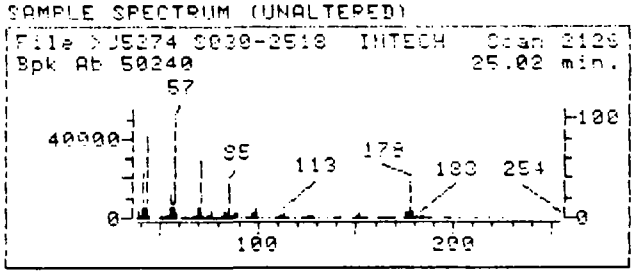
REFERENCE STANDARD SPECTRUM

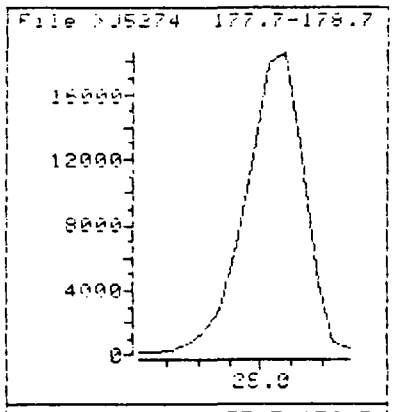


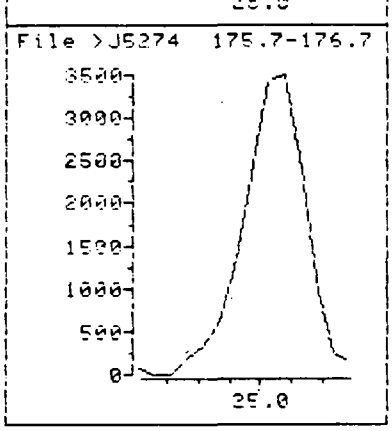
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





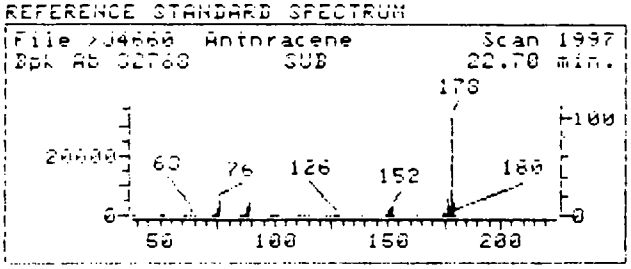


Data File: >J5274::D2
Name: S030-2518 INTECH
Misc: EPA#SB14EDH62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

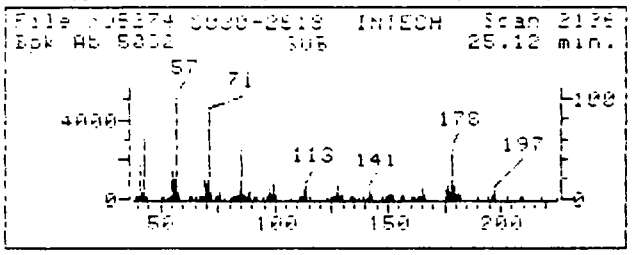
Quant Output File: ^J5274::N1
Instr. #2 (X20 DILUTION) BTL# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

Compound No: 58
Compound Name: Phenanthrene
Scan Number: 2126
Retention Time: 25.02 min.
Quant Ion: 178.0
Area: 48044
Concentration: 12.82 UG/ML
q-value: 98

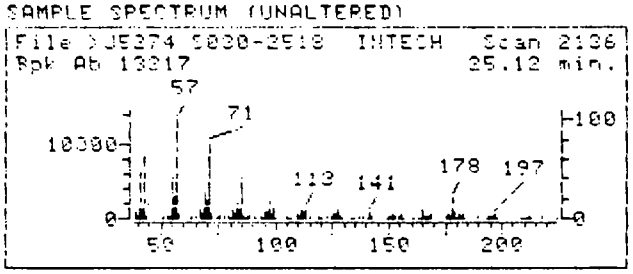
REFERENCE STANDARD SPECTRUM

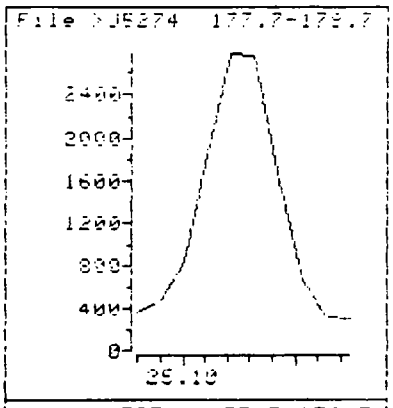


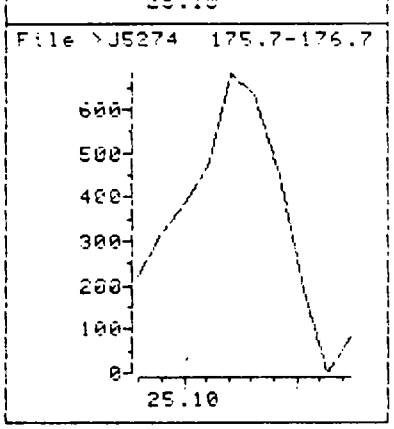
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





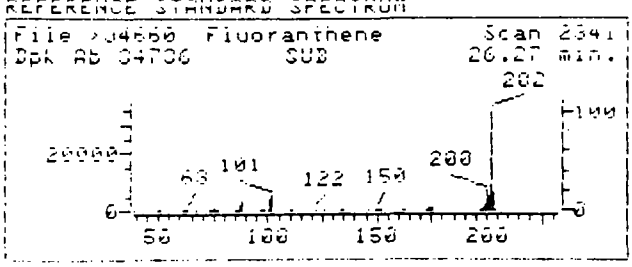


Data File: >J5274::D2
Name: 5030-2518 INTECH
Misc: EPA#5814EDH62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

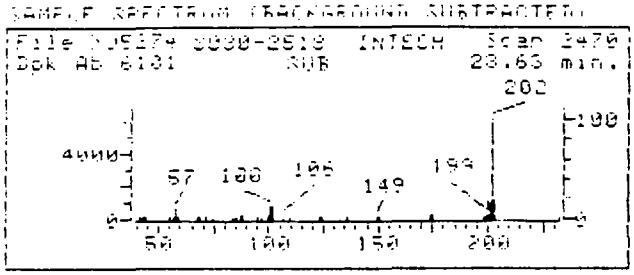
Quant Output File: ^J5274::N1
Instr. #2 (X20 DILUTION) STL# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

Compound No: 59
Compound Name: Anthracene
Scan Number: 2136
Retention Time: 25.12 min.
Quant Ion: 178.0
Area: 5634
Concentration: 1.50 UG/ML
q-value: 91

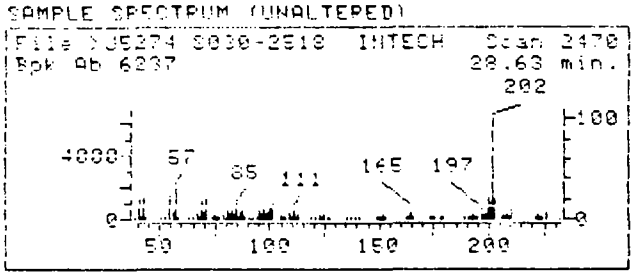
REFERENCE STANDARD SPECTRUM

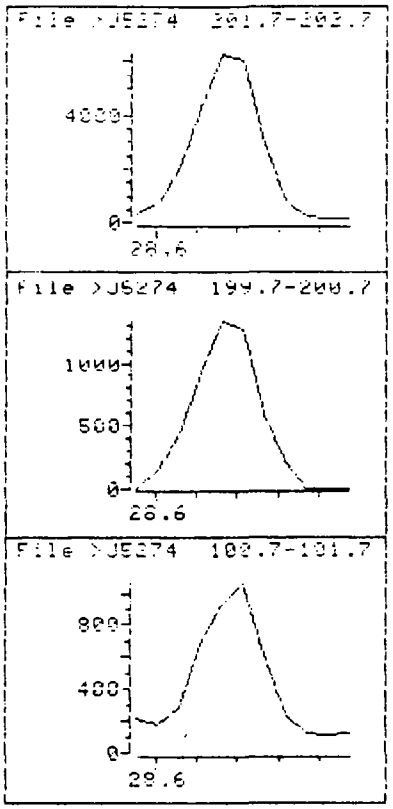


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





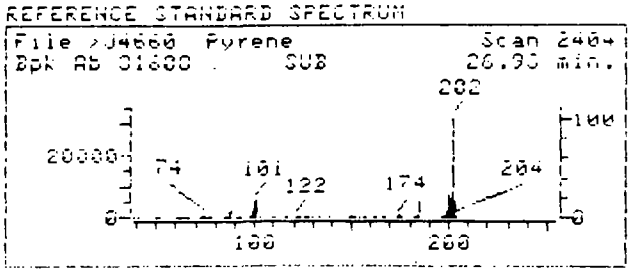
Data File: >J5274::D2
Name: S030-2518 INTECH
Misc: EPA#5B14E0H62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

Quant Output File: ^J5274::N1

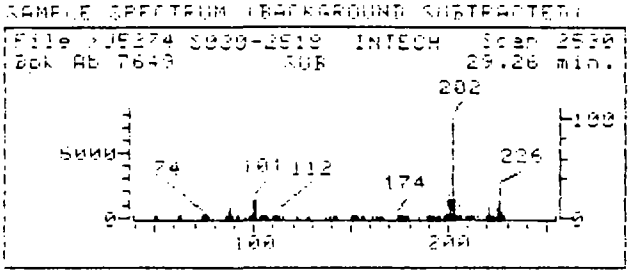
Instr. #2 (X20 DILUTION) BTL# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

Compound No: 61
Compound Name: Fluoranthene
Scan Number: 2470
Retention Time: 28.63 min.
Quant Ion: 202.0
Area: 14229
Concentration: 3.37 UG/ML
q-value: 90

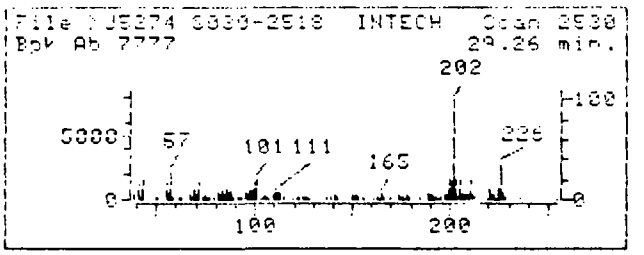
REFERENCE STANDARD SPECTRUM

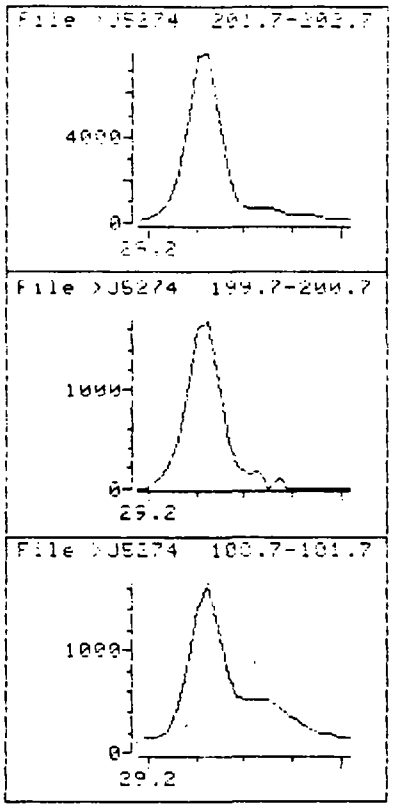


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



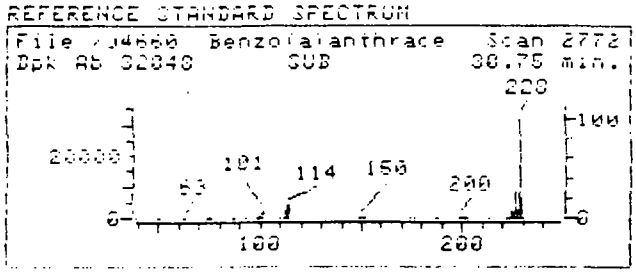


Data File: >J5274::D2
Name: 5030-2518 INTECH
Misc: EPA#5B14EDH62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

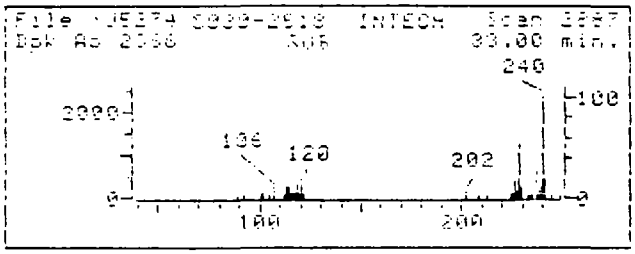
Quant Output File: ^J5274::N1
Instr. #2 (X20 DILUTION) BTL# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

Compound No: 63
Compound Name: Pyrene
Scan Number: 2530
Retention Time: 29.26 min.
Quant Ion: 202.0
Area: 22279
Concentration: 3.84 UG/ML
q-value: 93

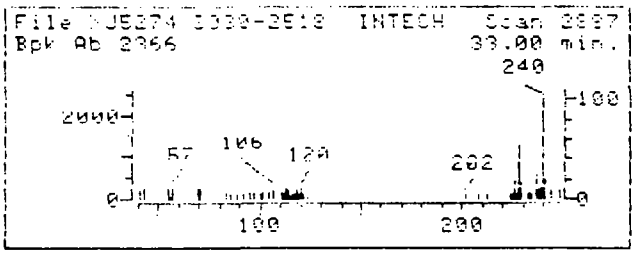
REFERENCE STANDARD SPECTRUM

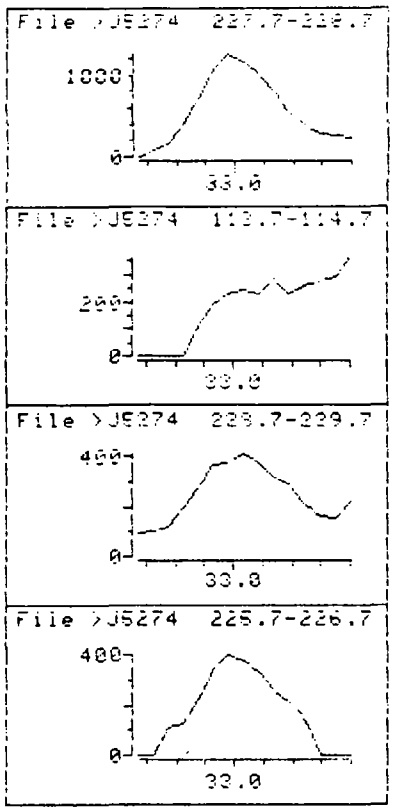


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

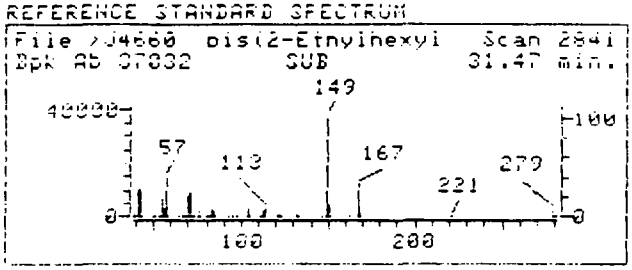


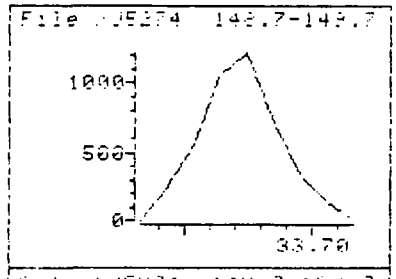


Data File: >J5274::02 Quant Output File: ^J5274::N1
Name: 5030-2519 INTECH
Misc: EPA#5814EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 19:23 Quant ID File: CLPBNA::5C
Injected at: 890711 17:11 Last Calibration: 890711 18:22

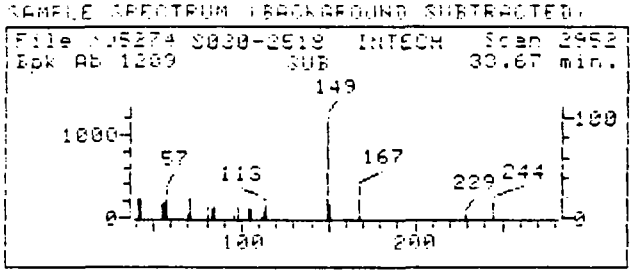
Compound No: 67
Compound Name: Benzo(a)anthracene
Scan Number: 2987
Retention Time: 33.00 min.
Quant Ion: 228.0
Area: 5247
Concentration: .90 UG/ML
q-value: 85

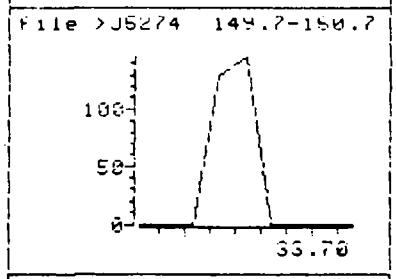
REFERENCE STANDARD SPECTRUM



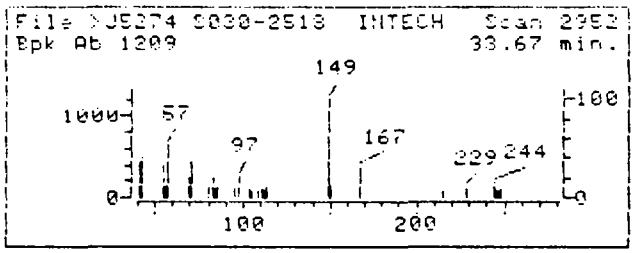


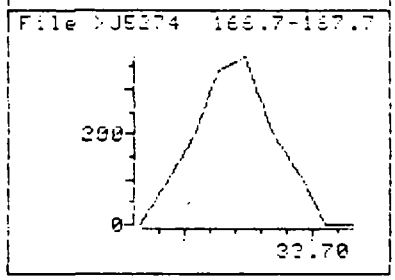
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

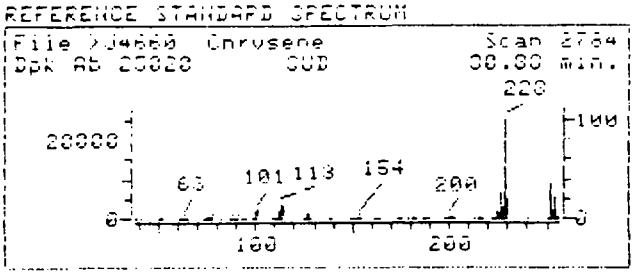




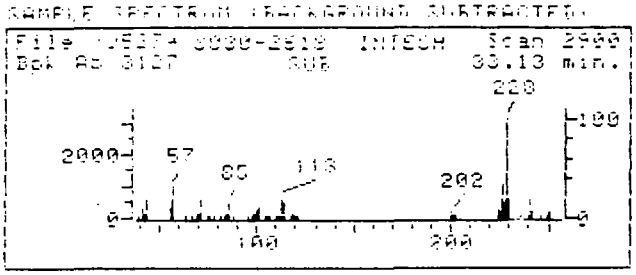
Data File: >J5274::D2 Quant Output File: ^J5274::N1
Name: S030-2518 INTECH
Misc: EPA#SB14EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 18:23 Quant ID File: CLPBNA::SC
Injected at: 890711 17:11 Last Calibration: 890711 18:22

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2952
Retention Time: 33.67 min.
Quant Ion: 149.0
Area: 2680
Concentration: .51 UG/ML
q-value: 93

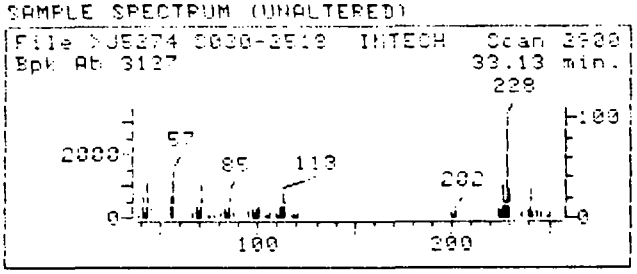
REFERENCE STANDARD SPECTRUM

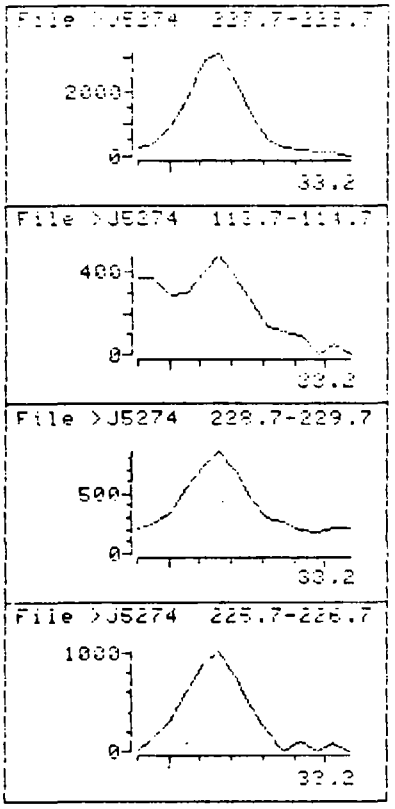


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



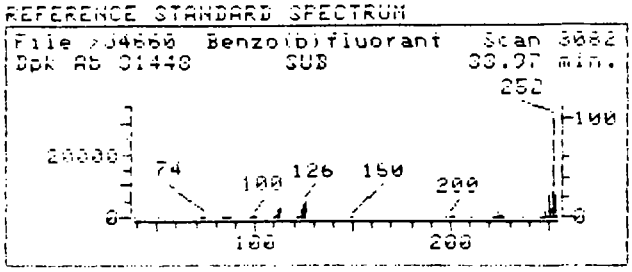


Data File: >J5274::D2
Name: 5030-2519 INTECH
Misc: EPA#5B14E0H62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

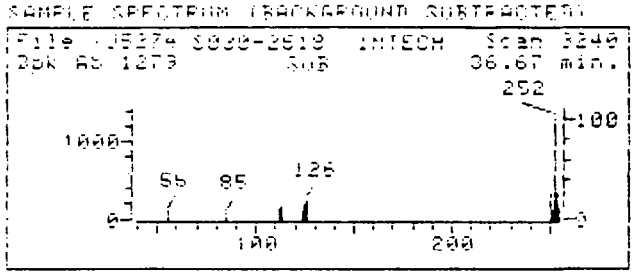
Quant Output File: ^J5274::N1
Instr. #2 (X20 DILUTION) B/L# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

Compound No: 69
Compound Name: Chrysene
Scan Number: 2900
Retention Time: 33.13 min.
Quant Ion: 228.0
Area: 8740
Concentration: 1.74 UG/ML
q-value: 93

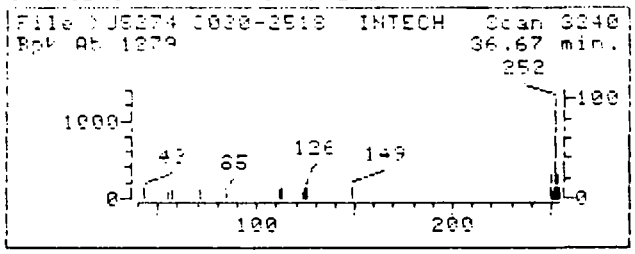
REFERENCE STANDARD SPECTRUM

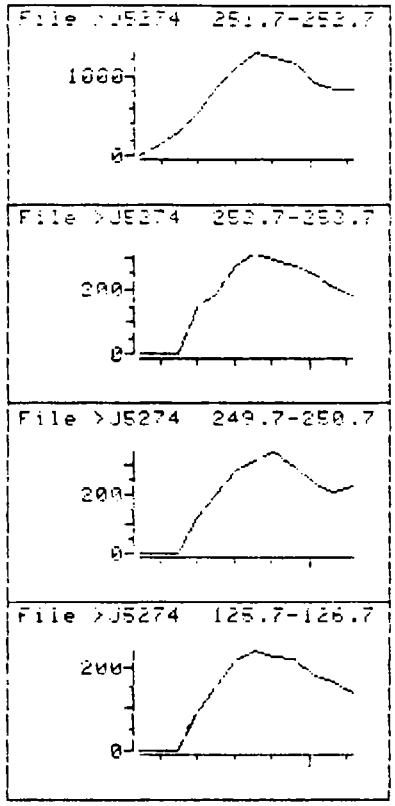


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

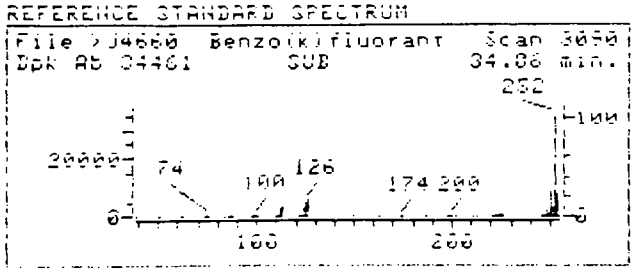




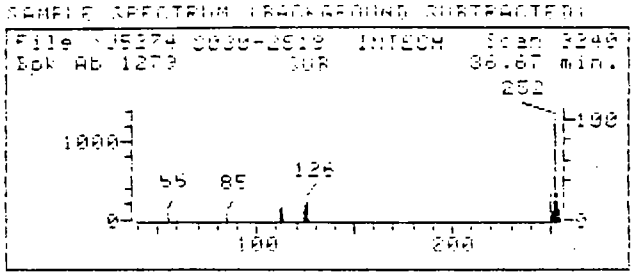
Data File: >J5274::D2 Quant Output File: ^J5274::N1
Name: 5030-2518 INTECH
Misc: EPA#5814EDH62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 18:23 Quant ID File: CLPBNA::SC
Injected at: 890711 17:11 Last Calibration: 890711 18:22

Compound No: 72
Compound Name: Benzo(b)fluoranthene
Scan Number: 3240
Retention Time: 36.67 min.
Quant Ion: 252.0
Area: 5727
Concentration: .88 UG/ML
q-value: 96

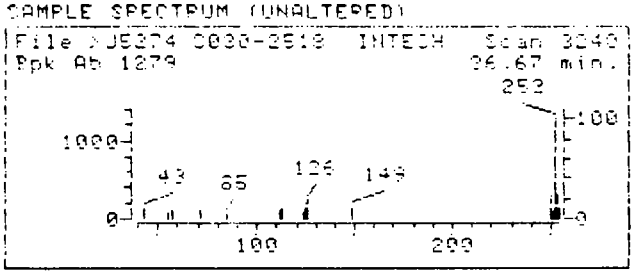
REFERENCE STANDARD SPECTRUM

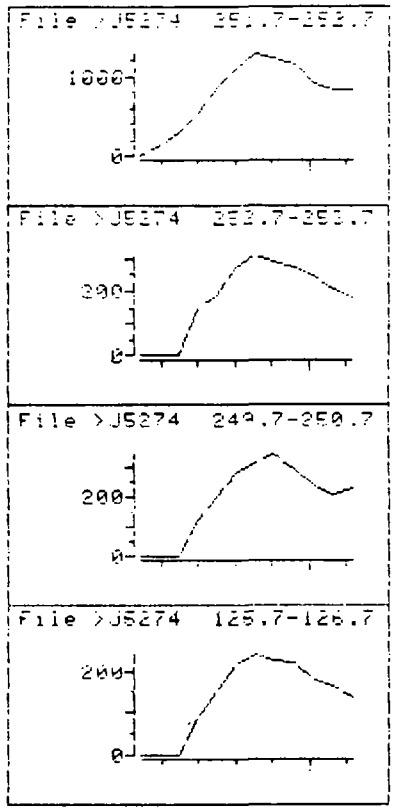


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

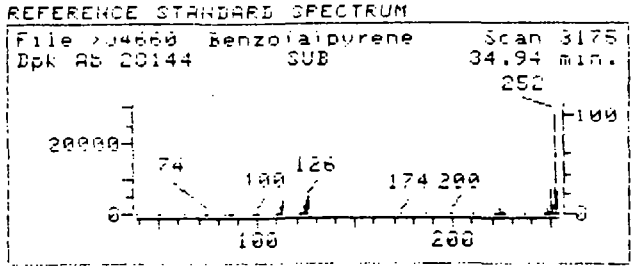




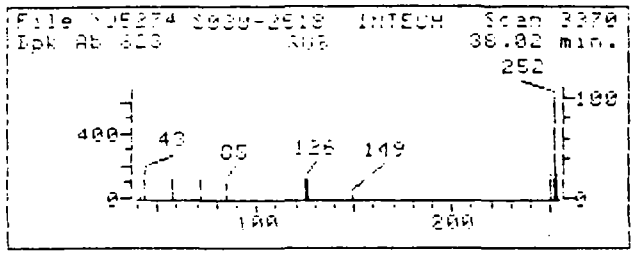
Data File: >J5274::D2 Quant Output File: ^J5274::N1
Name: S030-2518 INTECH
Misc: EPA#5814E0H62 30.1G/1ML Instr. #2 (X20 DILUTION) BTL# 1
Quant Time: 890711 18:23 Quant ID File: CLPBNA::SC
Injected at: 890711 17:11 Last Calibration: 890711 18:22

Compound No: 73
Compound Name: Benzo(k)fluoranthene
Scan Number: 3240
Retention Time: 36.67 min.
Quant Ion: 252.0
Area: 5727
Concentration: 1.20 UG/ML
q-value: 96

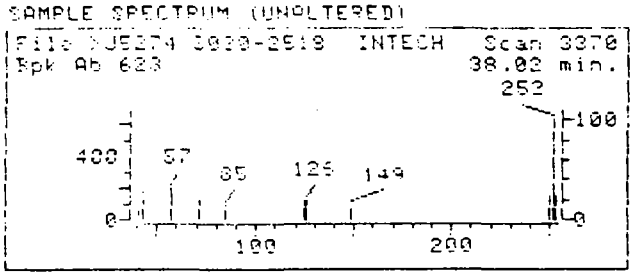
REFERENCE STANDARD SPECTRUM

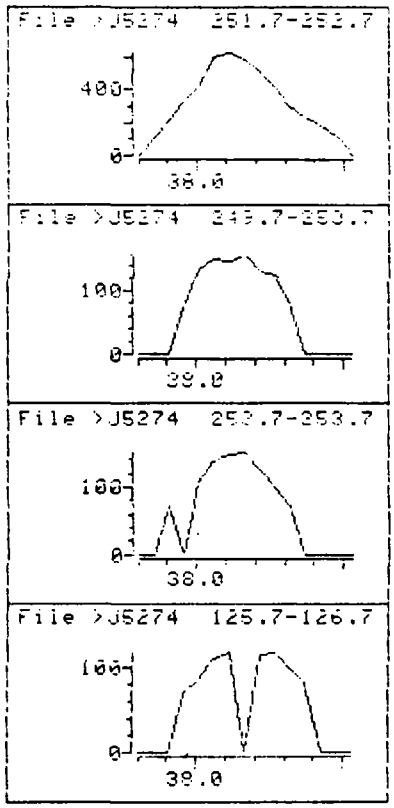


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)

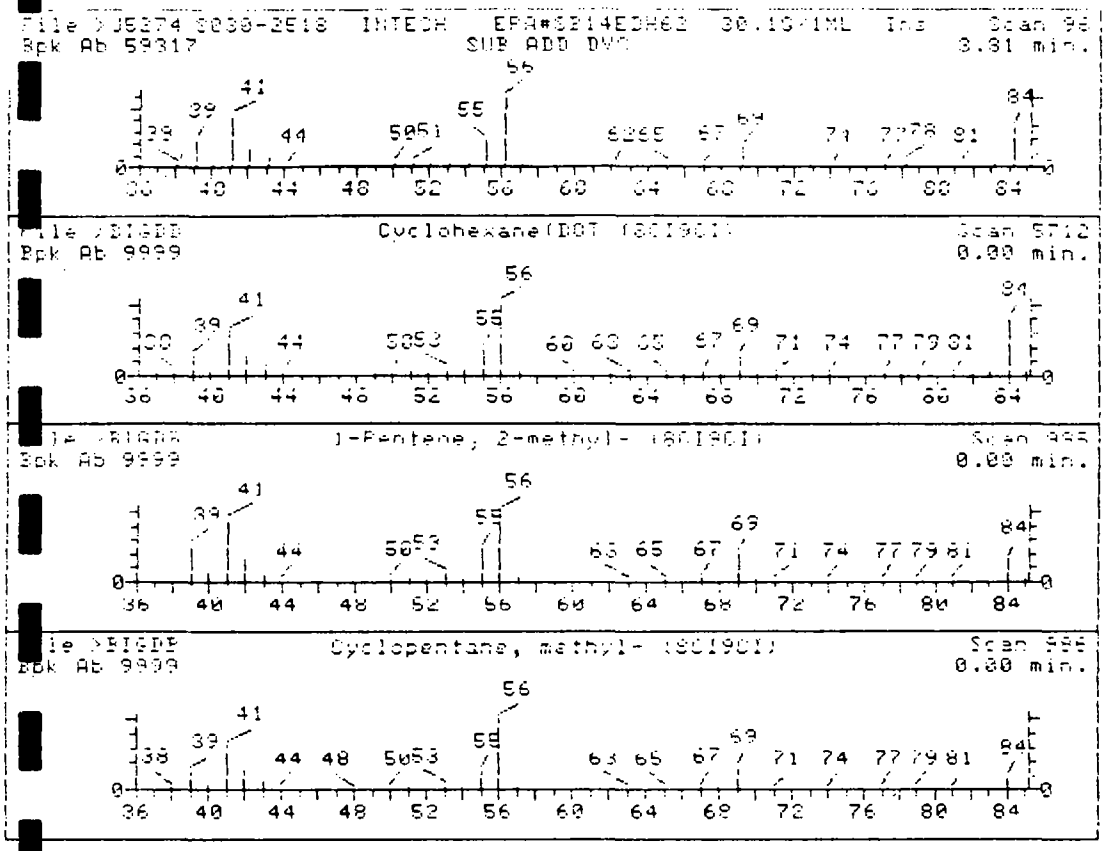




Data File: >J5274::D2
Name: 5030-2518 INTECH
Misc: EPA#5814EDH62 30.1G/1ML
Quant Time: 890711 18:23
Injected at: 890711 17:11

Quant Output File: ^J5274::N1
Instr. #2 (X20 DILUTION) BTL# 1
Quant ID File: CLPBNA::SC
Last Calibration: 890711 18:22

Compound No: 74
Compound Name: Benzo(a)pyrene
Scan Number: 3370
Retention Time: 38.02 min.
Quant Ion: 252.0
Area: 2903
Concentration: .60 UG/ML
q-value: 97

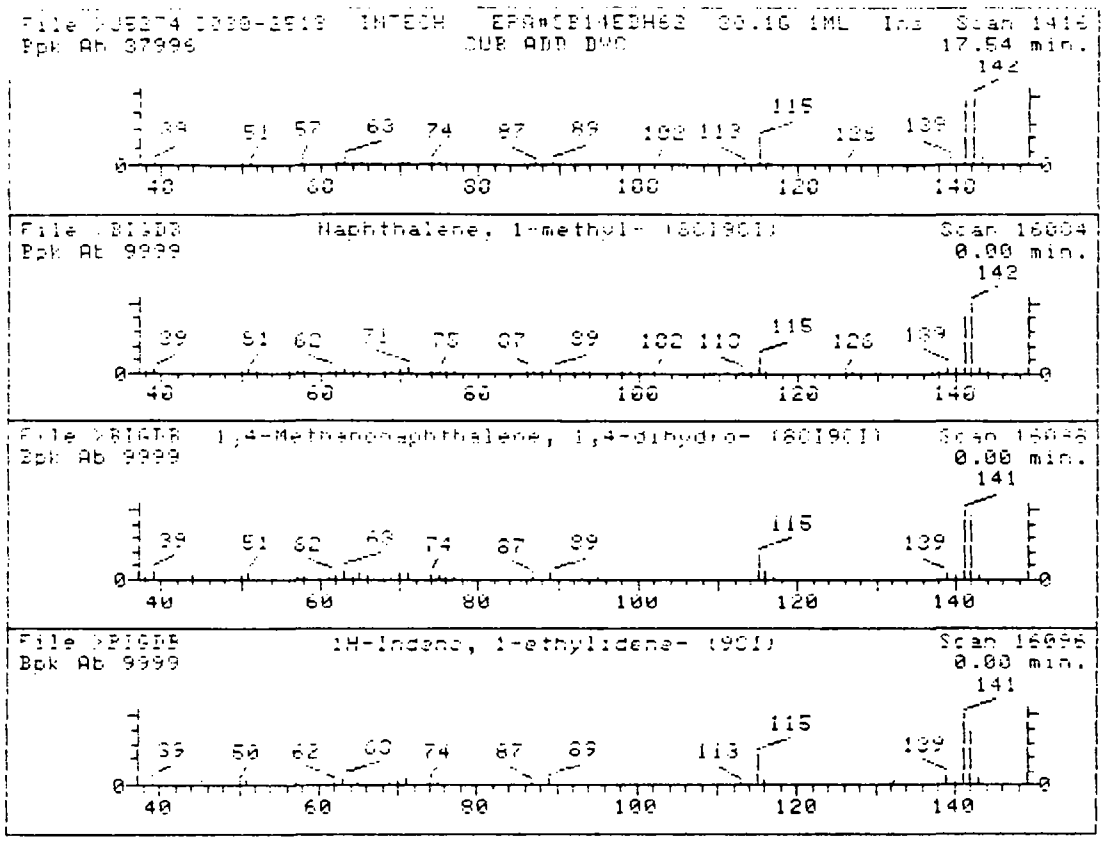


Unknown #,1
rea = 625072.0 Tentative Concentration is 120.00

1.	Cyclohexane(DOT (8CI9CI)	84	C6H12
2.	1-Pentene, 2-methyl- (8CI9CI)	84	C6H12
3.	Cyclopentane, methyl- (8CI9CI)	84	C6H12
4.	Cyclopropane, (1-methylethyl)- (9CI)	84	C6H12
5.	Cyclobutane, ethyl- (8CI9CI)	84	C6H12
6.	Cyclobutane (8CI9CI)	56	C4H8
7.	1-Butene (8CI9CI)	56	C4H8

Sample file: >J5274 Spectrum #: 96
earch speed: 3 Tilting option: F No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROUT	K	UK	#FLG	TILT	%	CON	C_I	R_IU
1.	79*	110827	5712	"BIGDB	80	13	2	4	85	14	43	65
2.	65*	763291	995	"BIGDB	59	42	1	0	67	31	24	53
3.	50*	96377	986	"BIGDB	50	37	1	0	83	36	19	41
4.	47*	3638355	962	"BIGDB	38	45	0	0	93	42	16	44
5.	40*	4806615	963	"BIGDB	32	51	0	0	89	40	14	27
6.	30*	287230	941	"BIGDB	32	47	2	0	189	39	10	16
7.	29*	106989	938	"BIGDB	30	49	2	0	205	37	10	15

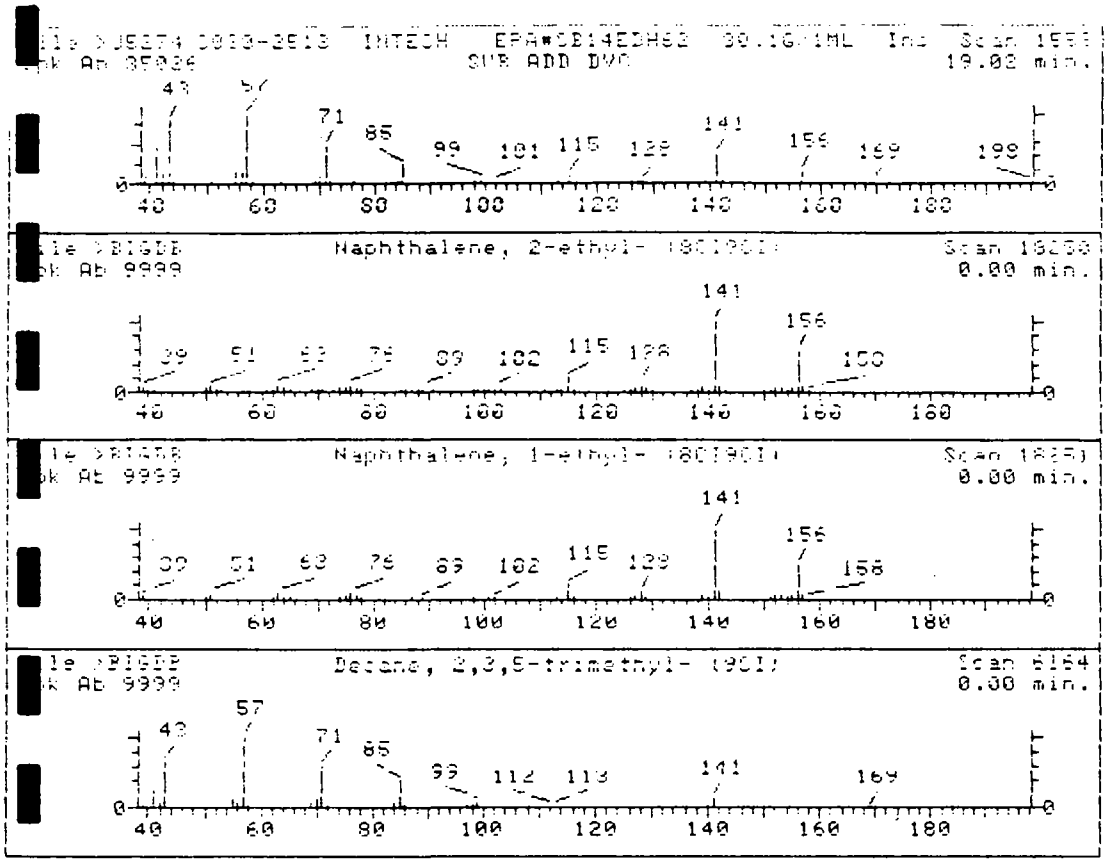


Unknown #,2
Area = 591888.0 Tentative Concentration is 25.00

1. Naphthalene, 1-methyl- (8CI9CI) 142 C11H10
2. 1,4-Methanonaphthalene, 1,4-dihydro- (8CI9CI) 142 C11H10
3. 1H-Indene, 1-ethylidene- (9CI) 142 C11H10
4. Naphthalene, 2-methyl- (8CI9CI) 142 C11H10
5. Benzeneacetonitrile, 4-cyano- (9CI) 142 C9H6N2
6. Benzeneacetonitrile, 2-cyano- (9CI) 142 C9H6N2

Sample file: >J5274 Spectrum #: 1416
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	97*	90120	16084	"BIGDB	70	30	2	2	96	2	63	45
2.	86*	4453901	16098	"BIGDB	64	38	2	-2	94	2	60	32
3.	81*	2471832	16096	"BIGDB	81	19	1	0	62	18	45	22
4.	60*	91576	16085	"BIGDB	49	49	3	0	100	11	30	15
5.	31*	826313	16090	"BIGDB	31	68	2	0	95	35	12	14
6.	20*	3259282	16097	"BIGDB	30	79	3	0	46	54	5	13



Unknown #,3

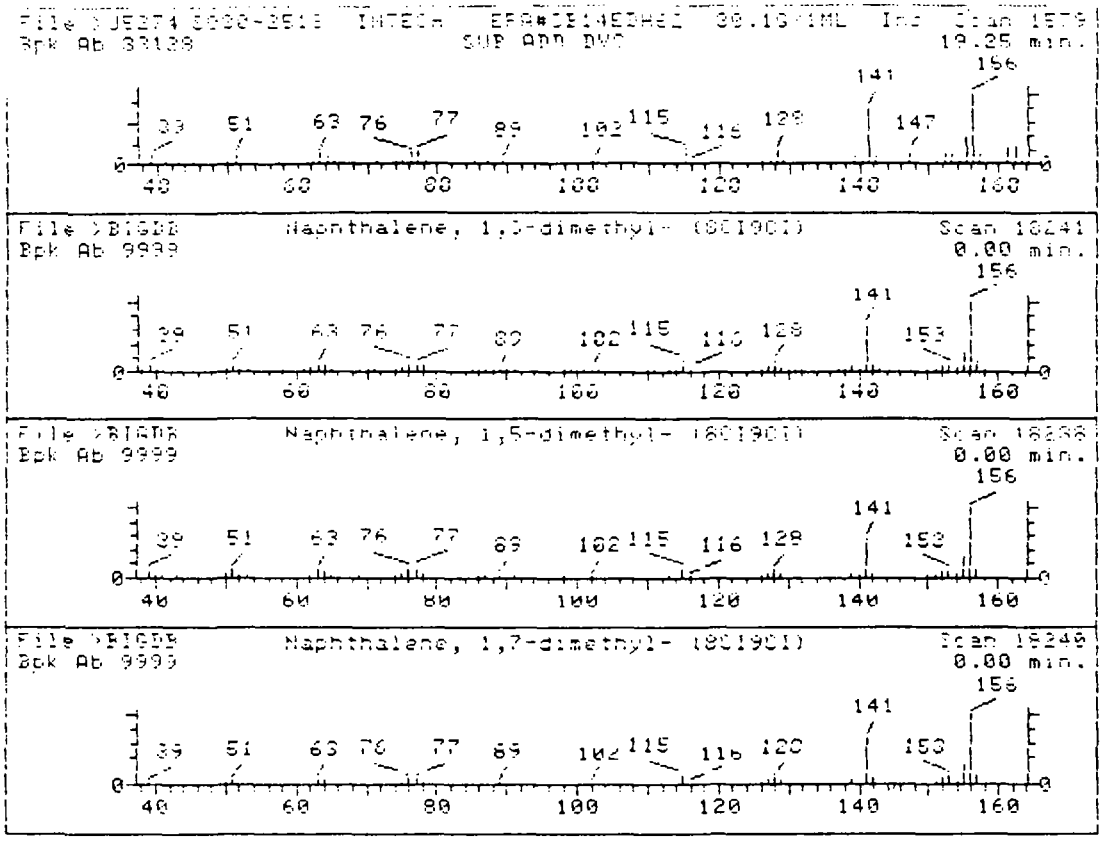
Area = 226174.0 Tentative Concentration is 66.00

1. Naphthalene, 2-ethyl- (8CI9CI)	156	C12H12
2. Naphthalene, 1-ethyl- (8CI9CI)	156	C12H12
3. Decane, 2,3,5-trimethyl- (9CI)	184	C13H28
4. Sydnone, 3-isopentyl- (8CI)	156	C7H12N2O2
5. Heptane, 2,3-dimethyl- (8CI9CI)	128	C9H20
6. Tetradecane, 1-iodo- (8CI9CI)	324	C14H29I
7. Decane, 6-ethyl-2-methyl- (9CI)	184	C13H28

Sample File: >J5274 Spectrum #: 1558

Search speed: 3 Tilting option: F No. of ion ranges searched: 50

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_1	R_1U
1.	85*	939275	18250	"BIGDB	81	10	1	0	28	50	40	95
2.	82*	1127760	18251	"BIGDB	73	11	1	0	33	50	40	92
3.	34	62238113	6164	"BIGDB	68	35	1	0	67	45	12	25
4.	34*	26537519	18215	"BIGDB	37	35	0	-2	27	43	12	25
5.	33*	3074713	5924	"BIGDB	53	38	2	-3	83	40	10	19
6.	30	19218941	6199	"BIGDB	90	38	2	0	68	50	10	22
7.	30	62108218	6163	"BIGDB	73	26	2	0	100	46	10	22

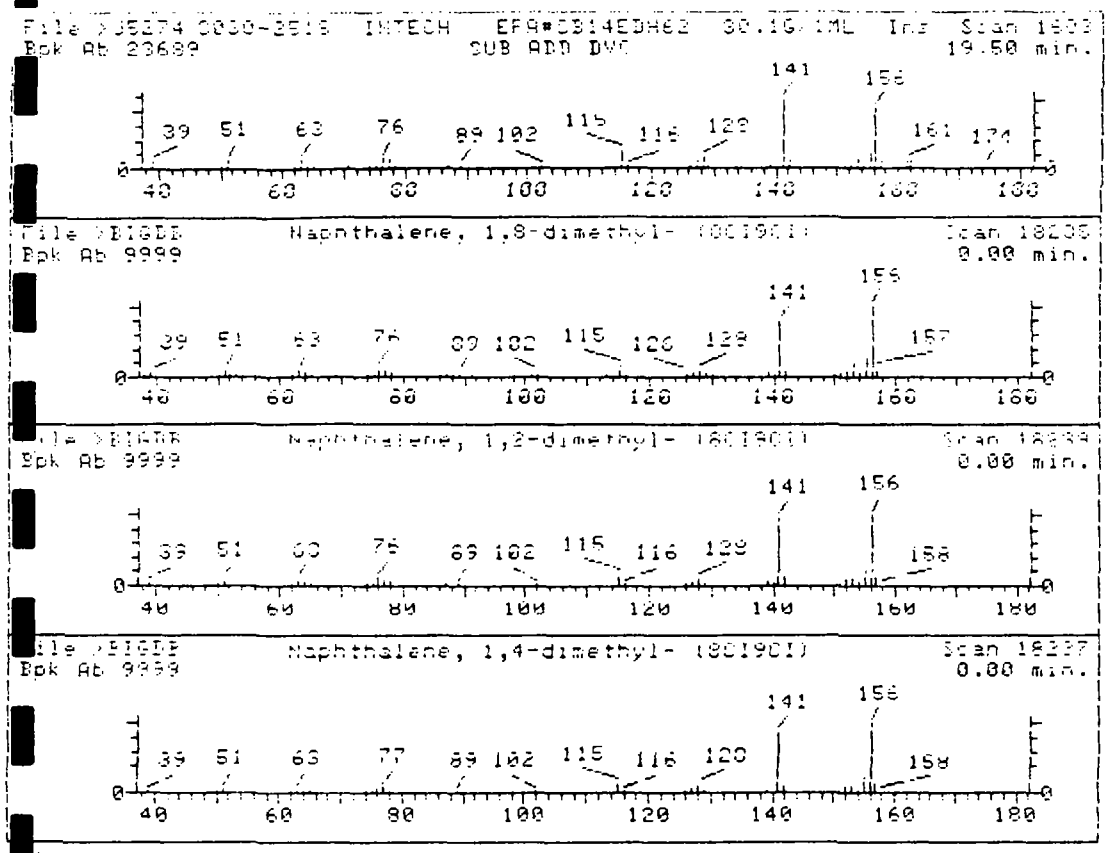


Unknown #,4
Area = 1080611. Tentative Concentration is 99.00

1. Naphthalene, 1,3-dimethyl- (8CI9CI) 156 C12H12
2. Naphthalene, 1,5-dimethyl- (8CI9CI) 156 C12H12
3. Naphthalene, 1,7-dimethyl- (8CI9CI) 156 C12H12
4. Naphthalene, 1,8-dimethyl- (8CI9CI) 156 C12H12
5. Naphthalene, 1,6-dimethyl- (8CI9CI) 156 C12H12
6. Naphthalene, 2,7-dimethyl- (8CI9CI) 156 C12H12
7. Naphthalene, 1,2-dimethyl- (8CI9CI) 156 C12H12

Sample File: >J5274 Spectrum #: 1579
Search speed: 3 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IN
1.	96*	575417	18241	"BIGDB	98	9	0	0	95	14	64	97
2.	95*	571619	18238	"BIGDB	94	15	0	0	97	14	64	96
3.	94*	575371	18240	"BIGDB	86	22	0	0	100	14	64	95
4.	94*	569415	18235	"BIGDB	86	24	0	0	96	14	64	95
5.	94*	575439	18242	"BIGDB	80	28	0	0	95	14	64	94
6.	92*	582161	18247	"BIGDB	83	25	0	0	97	24	52	96
7.	92*	573988	18239	"BIGDB	74	39	0	0	82	20	61	92

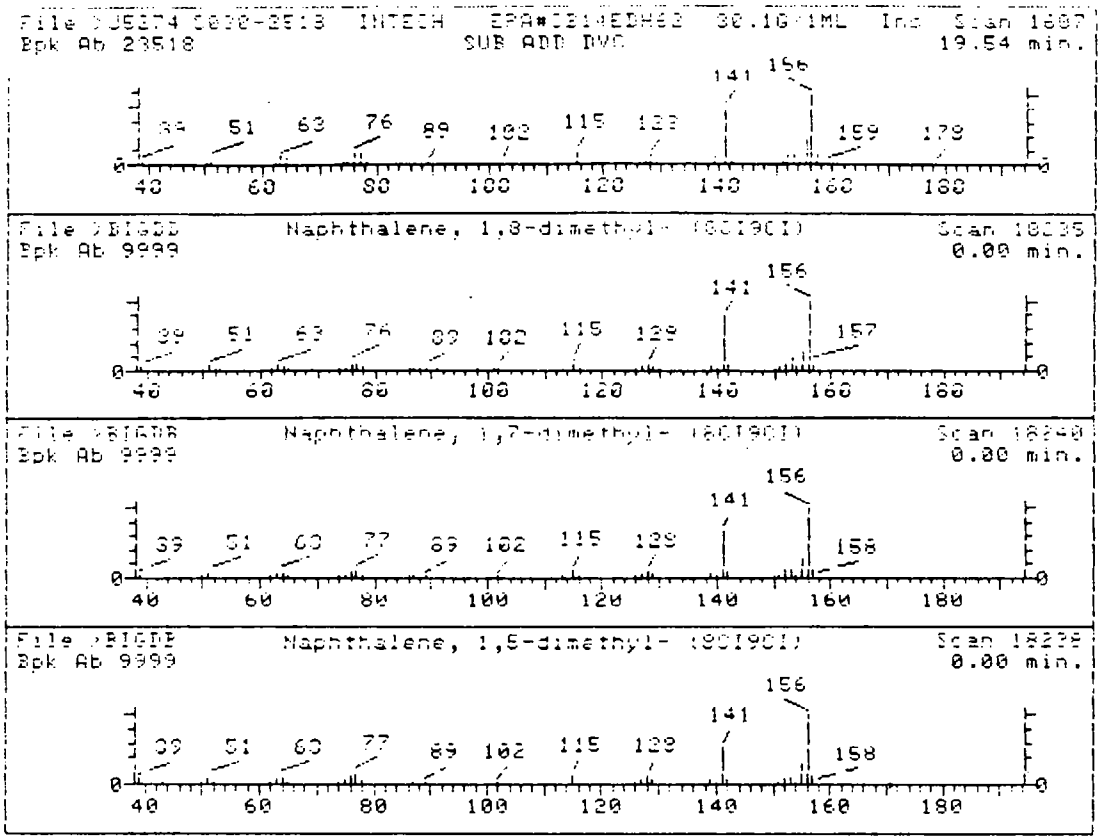


Unknown #,5
Area = 1013922. Tentative Concentration is 93.00

1. Naphthalene, 1,8-dimethyl- (8CI9CI) 156 C12H12
2. Naphthalene, 1,2-dimethyl- (8CI9CI) 156 C12H12
3. Naphthalene, 1,4-dimethyl- (8CI9CI) 156 C12H12
4. Naphthalene, 1,3-dimethyl- (8CI9CI) 156 C12H12
5. Naphthalene, 2,7-dimethyl- (8CI9CI) 156 C12H12
6. Naphthalene, 2,3-dimethyl- (8CI9CI) 156 C12H12
7. Naphthalene, 1,5-dimethyl- (8CI9CI) 156 C12H12

Sample file: >J5274 Spectrum #: 1603
Search speed: 3 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IU
1.	96*	569415	18235	"BIGDB	94	16	0	0	87	8	69	96
2.	96*	573988	18239	"BIGDB	89	24	0	0	86	10	68	96
3.	95*	571584	18237	"BIGDB	87	21	0	0	87	8	68	95
4.	93*	575417	18241	"BIGDB	82	25	0	0	86	24	53	94
5.	88*	582161	18247	"BIGDB	76	32	0	0	69	36	47	93
6.	88*	581408	18243	"BIGDB	70	36	0	0	80	28	43	89
7.	88*	571619	18238	"BIGDB	70	39	0	0	74	28	43	90

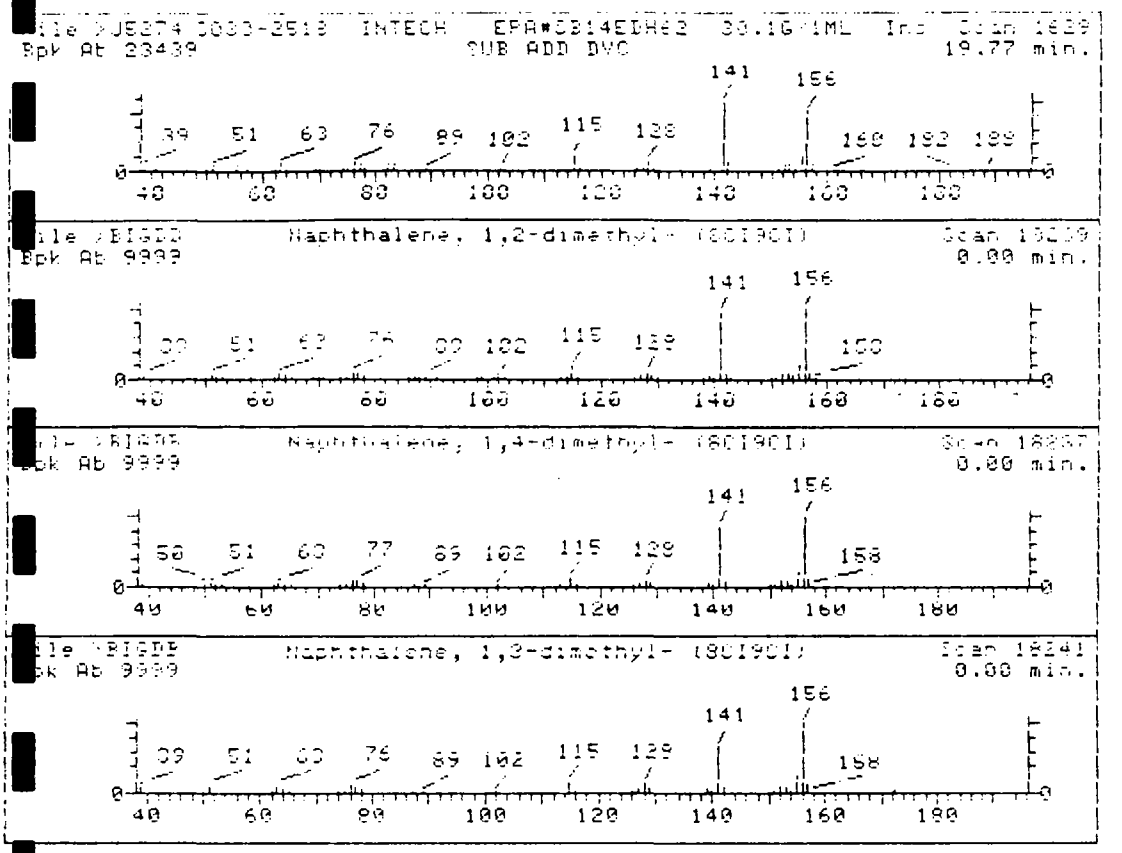


Unknown #,6
Area = 343951.0 Tentative Concentration is 31.00

1. Naphthalene, 1,8-dimethyl- (8CI9CI) 156 C12H12
2. Naphthalene, 1,7-dimethyl- (8CI9CI) 156 C12H12
3. Naphthalene, 1,5-dimethyl- (8CI9CI) 156 C12H12
4. Naphthalene, 1,6-dimethyl- (8CI9CI) 156 C12H12
5. Naphthalene, 1,2-dimethyl- (8CI9CI) 156 C12H12
6. Naphthalene, 2,3-dimethyl- (8CI9CI) 156 C12H12
7. Naphthalene, 2,6-dimethyl- (8CI9CI) 156 C12H12

Sample file: >J5274 Spectrum #: 1607
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	99*	569415	18235	"BIGDB	110	0	0	0	100	0	72	99
2.	97*	575371	18240	"BIGDB	101	7	0	0	100	0	72	97
3.	96*	571619	18238	"BIGDB	99	10	0	0	95	16	60	97
4.	96*	575439	18242	"BIGDB	93	15	0	0	100	0	72	96
5.	95*	573988	18239	"BIGDB	87	26	0	0	84	6	68	95
6.	95*	581408	18243	"BIGDB	83	23	0	0	93	2	72	95
7.	94*	581420	18244	"BIGDB	87	18	0	0	100	16	60	95

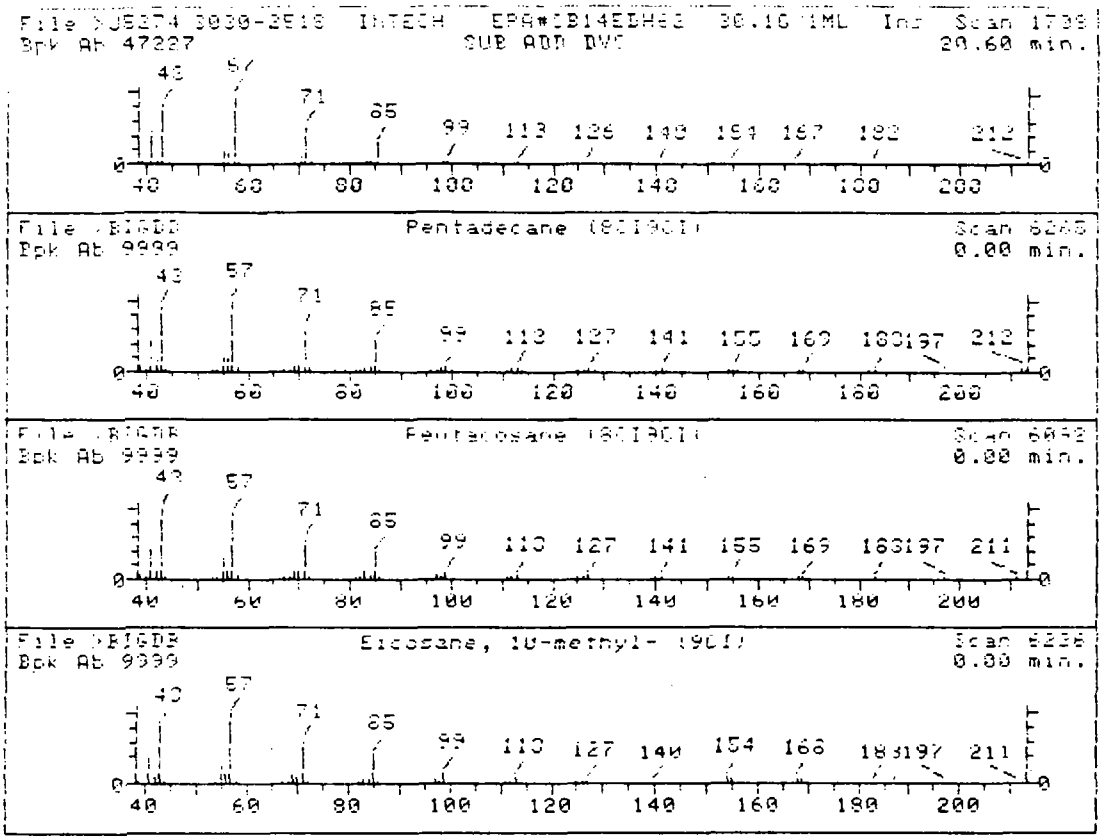


Unknown #,7
Area = 493564.0 Tentative Concentration is 45.00

1.	Naphthalene, 1,2-dimethyl- (8CI9CI)	156	C12H12
2.	Naphthalene, 1,4-dimethyl- (8CI9CI)	156	C12H12
3.	Naphthalene, 1,3-dimethyl- (8CI9CI)	156	C12H12
4.	Naphthalene, 2,3-dimethyl- (8CI9CI)	156	C12H12
5.	Naphthalene, 1,8-dimethyl- (8CI9CI)	156	C12H12
6.	Naphthalene, 1,7-dimethyl- (8CI9CI)	156	C12H12
7.	Naphthalene, 1,5-dimethyl- (8CI9CI)	156	C12H12

Sample file: >J5274 Spectrum #: 1629
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	LAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_IU
1.	92*	573988	18239	"BIGDB	103	10	0	0	86	3	72	97
2.	92*	571584	18237	"BIGDB	99	9	0	0	86	3	72	97
3.	95*	575417	18241	"BIGDB	90	17	0	0	85	19	60	96
4.	95*	581408	18243	"BIGDB	88	18	0	0	82	19	60	96
5.	93*	569415	18235	"BIGDB	85	25	0	0	80	21	53	95
6.	93*	575321	18240	"BIGDB	81	27	0	0	75	23	53	94
7.	92*	571619	18238	"BIGDB	77	32	0	0	69	25	53	93

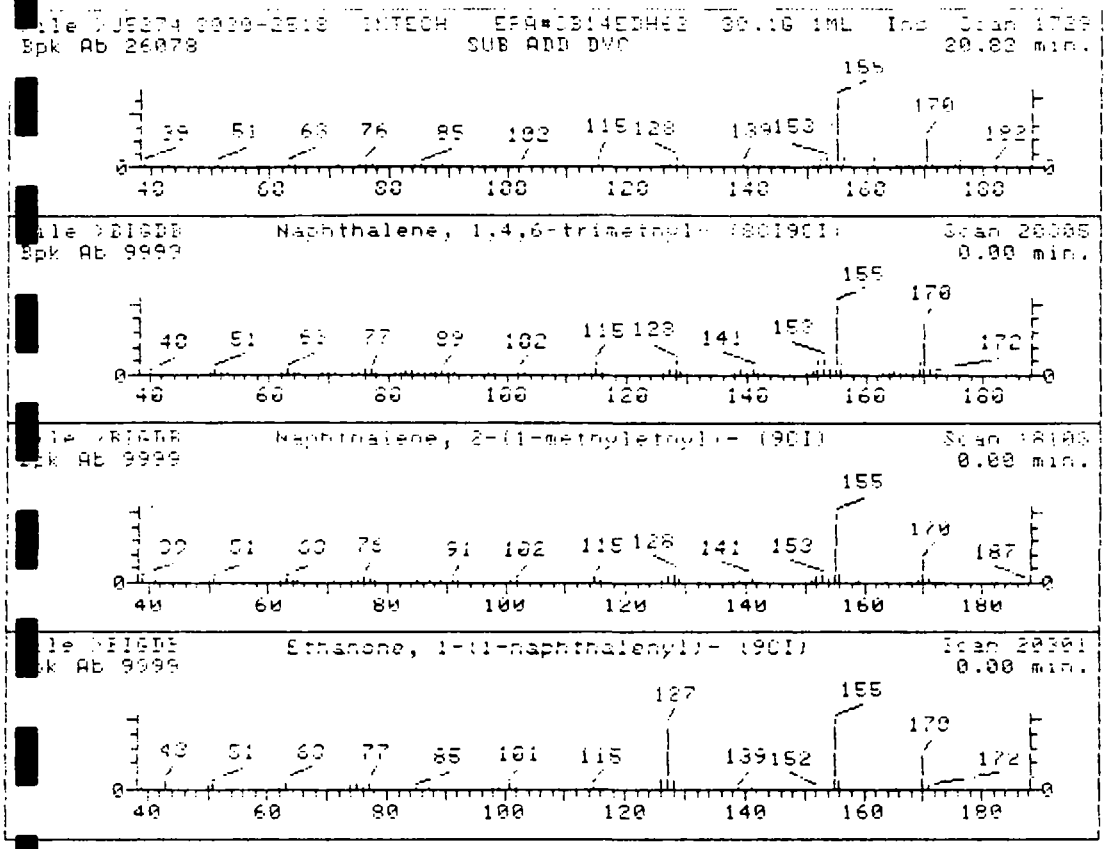


Unknown #,8
Area = 610525.0 Tentative Concentration is 56.00

1. Pentadecane (8CI9CI)	212	C15H32
2. Pentacosane (8CI9CI)	352	C25H52
3. Eicosane, 10-methyl- (9CI)	296	C21H44
4. Hexadecane (8CI9CI)	226	C16H34
5. Decane, 6-ethyl-2-methyl- (9CI)	184	C13H28
6. Hexacosane (8CI9CI)	366	C26H54
7. Tetradecane, 3-methyl- (8CI9CI)	212	C15H32

Sample File: >J5274 Spectrum #: 1708
Search speed: 3 Tilting option: F No. of ion ranges searched: 25

	Prob.	CAS #	CON #	ROOT	K	UK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	629629	6265	"BIGDB	94	26	2	4	78	5	66	61
2.	78	629992	6092	"BIGDB	77	63	2	3	74	5	55	13
3.	78	54833237	6226	"BIGDB	68	65	2	0	70	5	55	15
4.	76	544763	6146	"BIGDB	87	33	2	4	92	7	45	23
5.	76	62108218	6163	"BIGDB	68	31	2	0	100	7	45	24
6.	70	630013	6058	"BIGDB	63	77	2	0	87	7	42	15
7.	70*	18435228	22034	"BIGDB	24	89	3	0	100	10	43	12

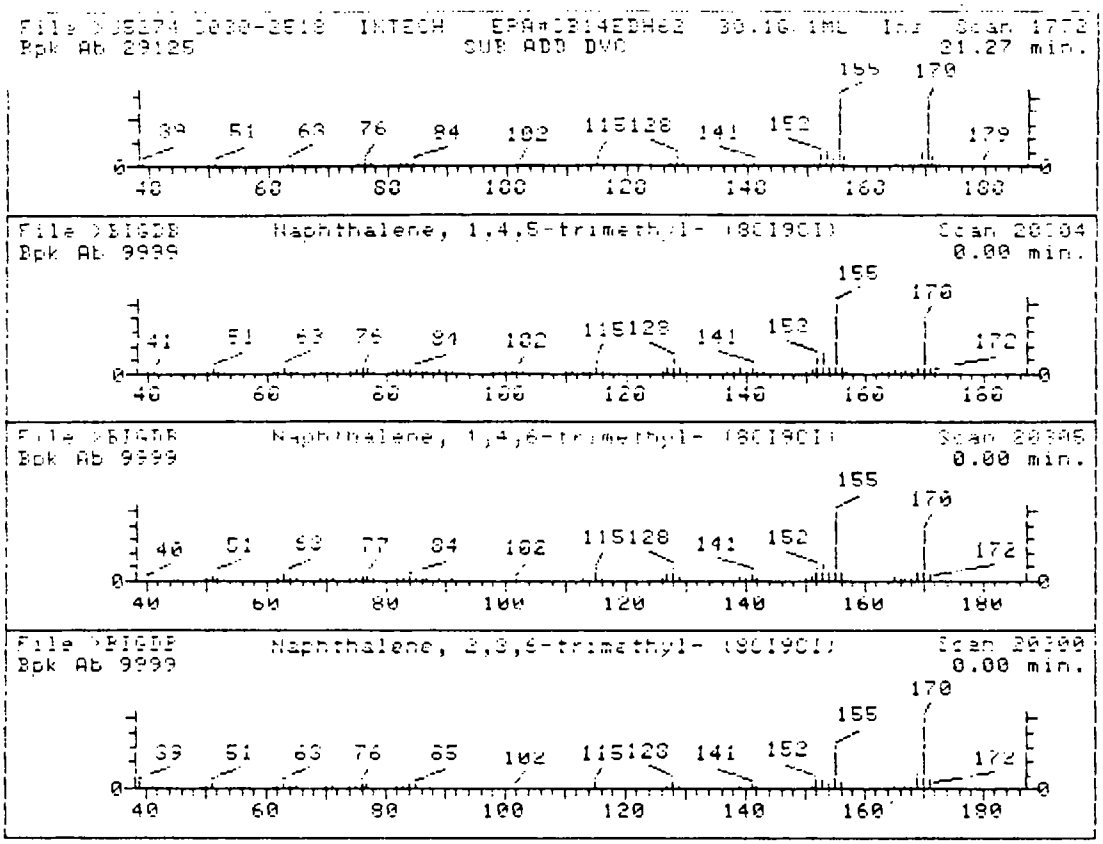


Unknown #,9
rea = 392739.0 Tentative Concentration is 36.00

1. Naphthalene, 1,4,6-trimethyl- (8CI9CI) 170 C13H14
2. Naphthalene, 2-(1-methylethyl)- (9CI) 170 C13H14
3. Ethanone, 1-(1-naphthalenyl)- (9CI) 170 C12H10O
4. Naphthalene, (1-methylethyl)- (9CI) 170 C13H14
5. Ethanone, 1-(2-naphthalenyl)- (9CI) 170 C12H10O
6. Ethanone, 1-(5-chloro-2-hydroxyphenyl)- (9CI) 170 C8H7ClO2
7. Naphthalene, 2-methyl-1-propyl- (9CI) 184 C14H16

Sample File: >J5274 Spectrum #: 1729
earch speed: 3 Tilting option: F No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_U
1.	90*	2131422	20305	"BIGDB	96	23	1	0	54	34	50	93
2.	79*	2027170	18103	"BIGDB	78	22	1	-3	84	13	43	60
3.	56*	941980	20301	"BIGDB	53	56	2	0	89	23	22	29
4.	56*	29253369	18101	"BIGDB	59	41	2	0	72	30	24	46
5.	48*	93083	20295	"BIGDB	48	61	2	0	87	23	12	19
6.	42*	1450744	20331	"BIGDB	44	61	3	0	85	23	12	13
7.	41	54774899	18129	"BIGDB	84	28	2	0	89	36	17	50

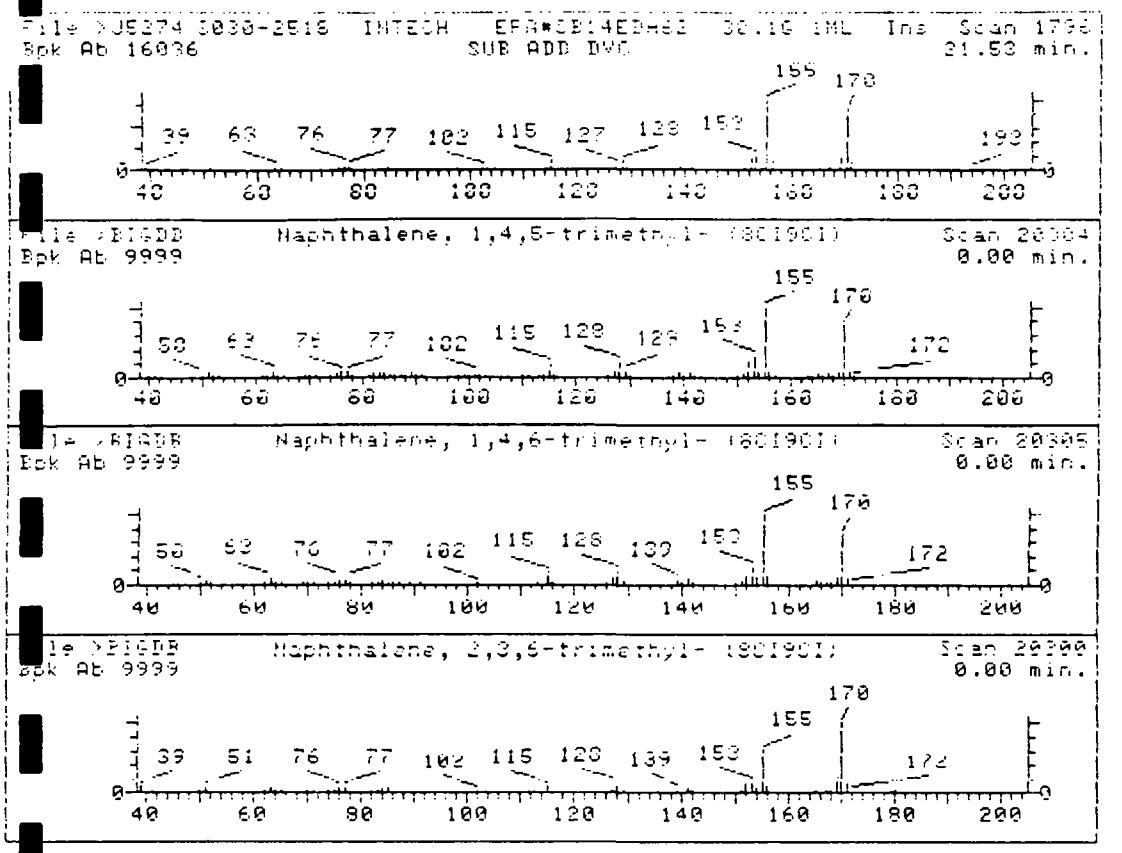


. Unknown #,11
Area = 323051.0 Tentative Concentration is 54.00

1.	Naphthalene, 1,4,5-trimethyl- (8CI9CI)	170	C13H14
2.	Naphthalene, 1,4,6-trimethyl- (8CI9CI)	170	C13H14
3.	Naphthalene, 2,3,6-trimethyl- (8CI9CI) •	170	C13H14
4.	Naphthalene, 1,6,7-trimethyl- (8CI9CI)	170	C13H14
5.	Naphthalene, 2-(1-methylethyl)- (9CI)	170	C13H14
6.	Naphthalene, 1,3,6-trimethyl- (8CI9CI)	170	C13H14
7.	Ethanone, 1-(1-naphthalenyl)- (9CI)	170	C12H10O

Sample File: >J5274 Spectrum #: 1772
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	93*	2131411	20304	"BIGDB	108	10	1	-4	74	1	68	80
2.	86*	2131422	20305	"BIGDB	89	30	1	0	70	17	50	99
3.	81*	829265	20300	"BIGDB	76	33	1	0	81	20	45	74
4.	77*	2245387	20306	"BIGDB	75	33	1	0	84	21	41	73
5.	34*	2027170	18103	"BIGDB	49	51	1	-3	80	39	14	21
6.	30*	3031081	20272	"BIGDB	32	36	2	0	70	38	10	16
7.	27*	941980	20301	"BIGDB	47	62	3	0	100	37	10	13



Unknown #,12

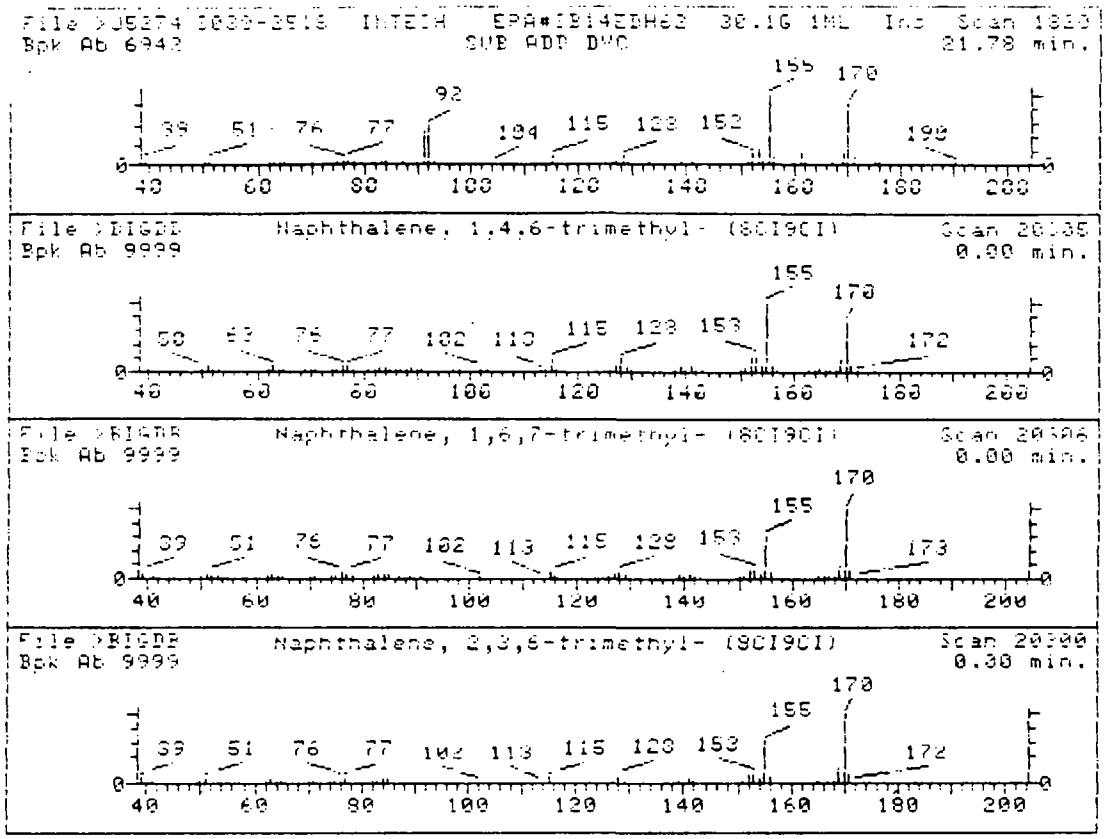
rea = 322425.0 Tentative Concentration is 29.00

1.	Naphthalene, 1,4,5-trimethyl- (8CI9CI)	170	C13H14
2.	Naphthalene, 1,4,6-trimethyl- (8CI9CI)	170	C13H14
3.	Naphthalene, 2,3,6-trimethyl- (8CI9CI)	170	C13H14
4.	Naphthalene, 1,6,7-trimethyl- (8CI9CI)	170	C13H14
5.	[1,1'-Biphenyl]-4-ol (9CI)	170	C12H10O
6.	Naphthalene, 2-(1-methylethyl)- (9CI)	170	C13H14
7.	Naphthalene, 1,3,6-trimethyl- (8CI9CI)	170	C13H14

Sample file: >J5274 Spectrum #: 1796

earch speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	2131411	20304	"BIGDB	83	35	0	0	54	36	42	95
2.	88*	2131422	20305	"BIGDB	75	44	0	0	59	38	42	93
3.	86*	829265	20300	"BIGDB	83	26	1	0	76	20	50	80
4.	81*	2245387	20306	"BIGDB	75	33	1	0	77	20	45	73
5.	42*	92693	20294	"BIGDB	46	49	2	2	74	22	14	19
6.	41*	2027170	18103	"BIGDB	55	45	1	-1	69	39	14	28
7.	30*	3031081	20272	"BIGDB	32	36	2	0	65	39	10	14

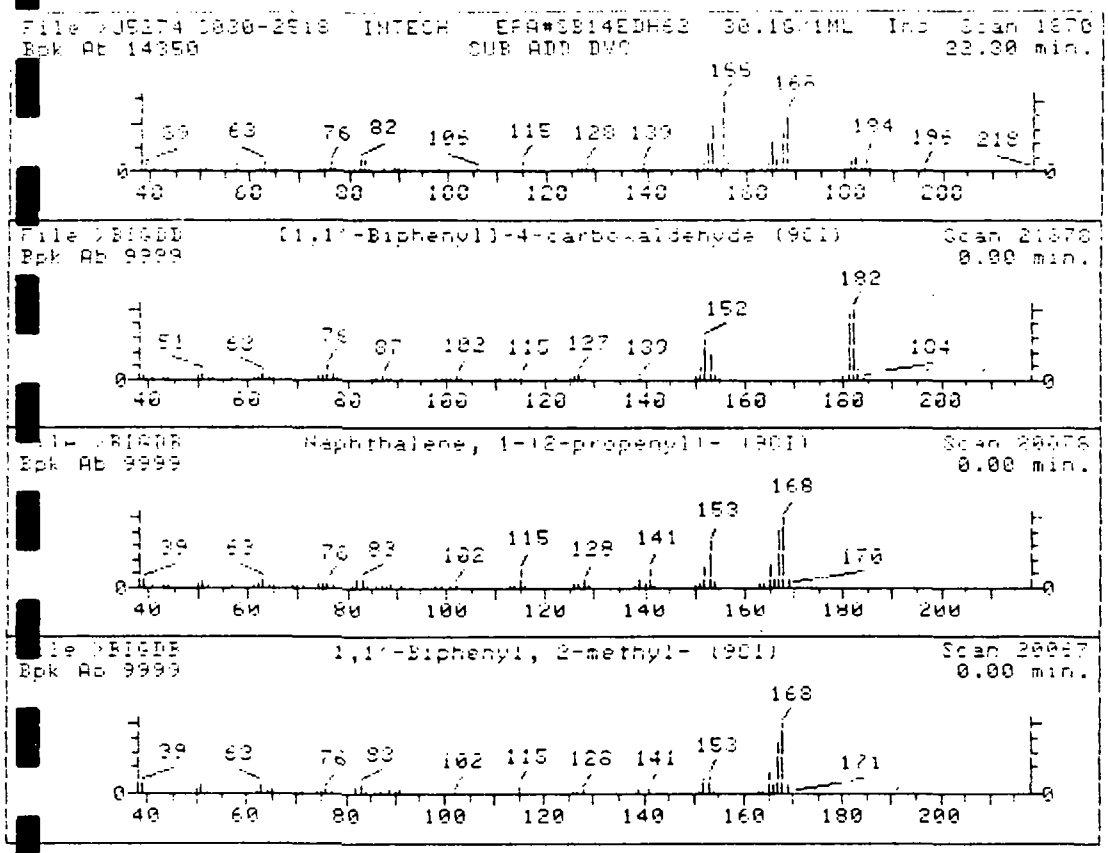


Unknown #,14
Area = 353261.0 Tentative Concentration is 32.00

1.	Naphthalene, 1,4,6-trimethyl- (8CI9CI)	170 C13H14
2.	Naphthalene, 1,6,7-trimethyl- (8CI9CI)	170 C13H14
3.	Naphthalene, 2,3,6-trimethyl- (8CI9CI)	170 C13H14
4.	Naphthalene, 1,4,5-trimethyl- (8CI9CI)	170 C13H14
5.	[1,1'-Biphenyl]-4-ol (9CI)	170 C12H10O
6.	Naphthalene, 1,3,6-trimethyl- (8CI9CI)	170 C13H14
7.	Ethanone, 1-(2-naphthalenyl)- (9CI)	170 C12H10O

Sample File: >J5274 Spectrum #: 1820
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	68*	2131422	20305	"BIGDB	75	44	0	0	55	55	35	93
2.	59*	2245382	20306	"BIGDB	76	32	2	0	70	40	21	59
3.	59*	829265	20300	"BIGDB	71	38	2	0	70	40	21	52
4.	50*	2131411	20304	"BIGDB	83	35	0	0	51	61	17	45
5.	39*	92693	20294	"BIGDB	48	47	2	2	79	35	16	22
6.	25*	3031081	20272	"BIGDB	32	36	2	0	70	48	7	16
7.	25*	93083	20295	"BIGDB	33	76	3	0	100	48	7	13



Unknown #.16

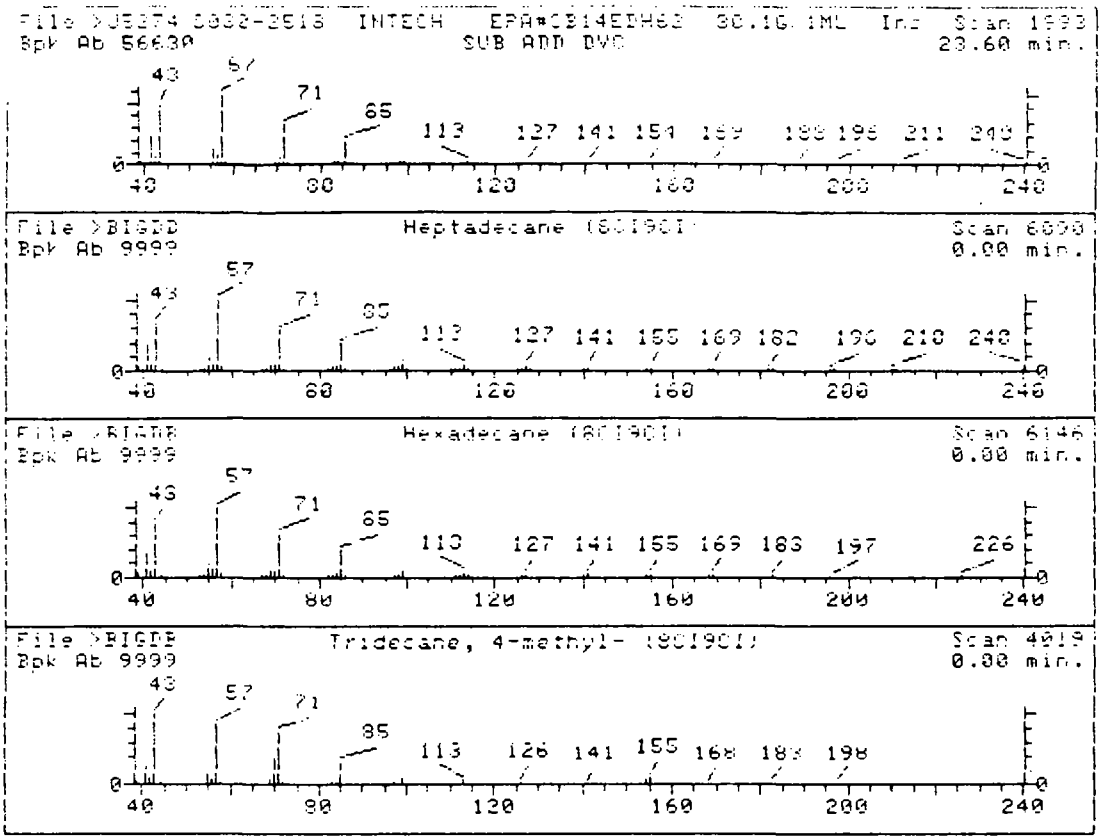
rea = 345628.0 Tentative Concentration is 56.00

1. [1,1'-Biphenyl]-4-carboxaldehyde (9CI)	182	C13H10O
2. Naphthalene, 1-(2-propenyl)- (9CI)	168	C13H12
3. 1,1'-Biphenyl, 2-methyl- (9CI)	168	C13H12
4. 1,1'-Biphenyl, 2-ethyl- (9CI)	182	C14H14
5. Ethanone, 1-[1,1'-biphenyl]-4-yl- (9CI)	196	C14H12O
6. 1,1'-Biphenyl, 4-methyl- (9CI)	168	C13H12
7. Benzene, 1,1'-methylenebis- (9CI)	168	C13H12

Sample File: >J5274 Spectrum #: 1870

earch speed: 3 Tilting option: F No. of ion ranges searched: 54

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	P_IO
1.	32*	3218368	21878	"BIGDB	45	47	0	3	17	51	9	44
2.	30*	2489863	20078	"BIGDB	58	63	3	0	68	49	10	23
3.	18*	643583	20067	"BIGDB	44	66	1	0	67	60	4	21
4.	18*	1812517	21873	"BIGDB	33	76	0	4	39	56	4	23
5.	18*	92911	23757	"BIGDB	59	39	0	4	16	64	5	61
6.	15*	644086	20069	"BIGDB	31	70	2	0	80	60	3	14
7.	15*	101815	20054	"BIGDB	32	78	2	0	58	60	3	14

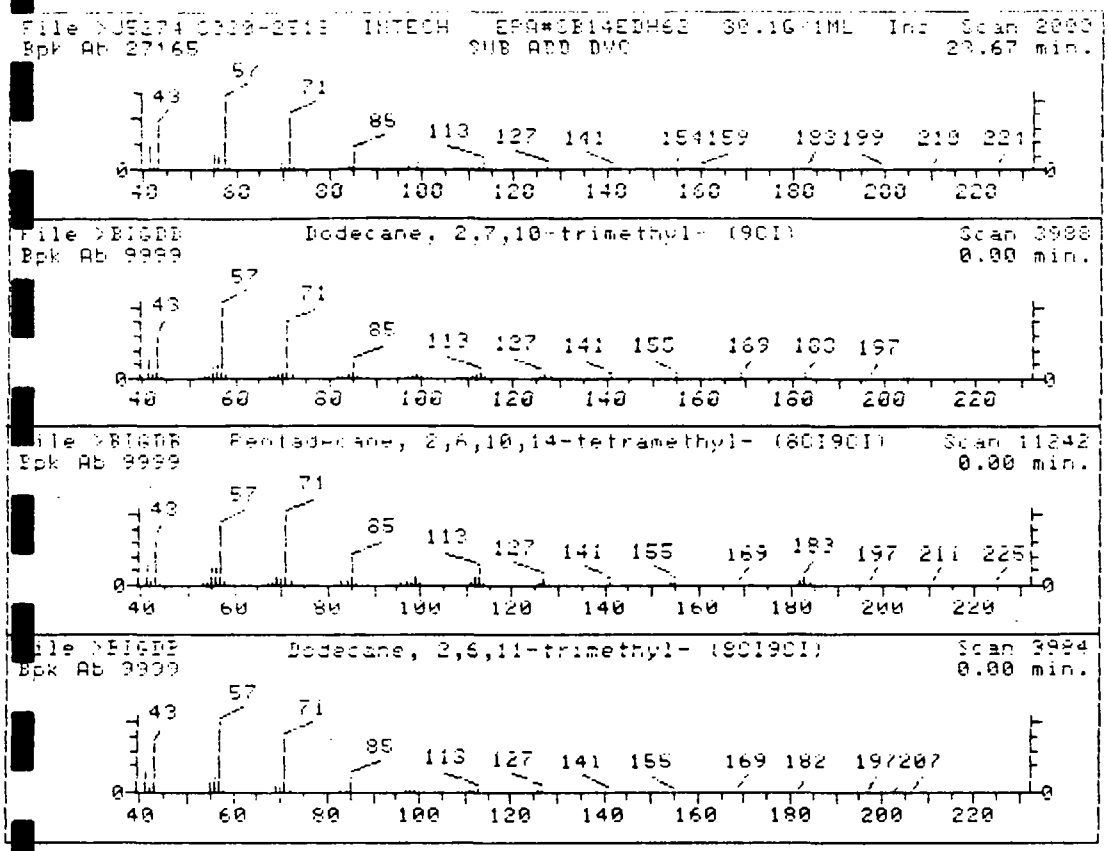


Unknown #,18
Area = 222545.0 Tentative Concentration is 81.00

1. Heptadecane (8CI9CI)	240	C17H36
2. Hexadecane (8CI9CI)	226	C16H34
3. Tridecane, 4-methyl- (8CI9CI)	198	C14H30
4. Decane, 2,3,5-trimethyl- (9CI)	184	C13H28
5. Hexacosane (8CI9CI)	366	C26H54
6. Tritetracontane (8CI9CI)	604	C43H88
7. Eicosane, 10-methyl- (9CI)	296	C21H44

Sample File: >J5274 Spectrum #: 1993
Search speed: 3 Tilting option: F No. of ion ranges searched: 75

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	629787	6090	"BIGDB	92	29	1	3	81	1	66	74
2.	86	544763	6146	"BIGDB	99	21	2	3	95	4	60	34
3.	79*	26730121	4019	"BIGDB	54	60	2	0	79	10	49	31
4.	79	62238113	6164	"BIGDB	79	24	1	4	89	7	48	52
5.	78	630013	6058	"BIGDB	69	71	2	0	86	4	55	15
6.	78	7099217	6150	"BIGDB	81	87	2	4	88	5	55	14
7.	78	54833237	6226	"BIGDB	83	50	2	3	89	5	55	15



Unknown #,19

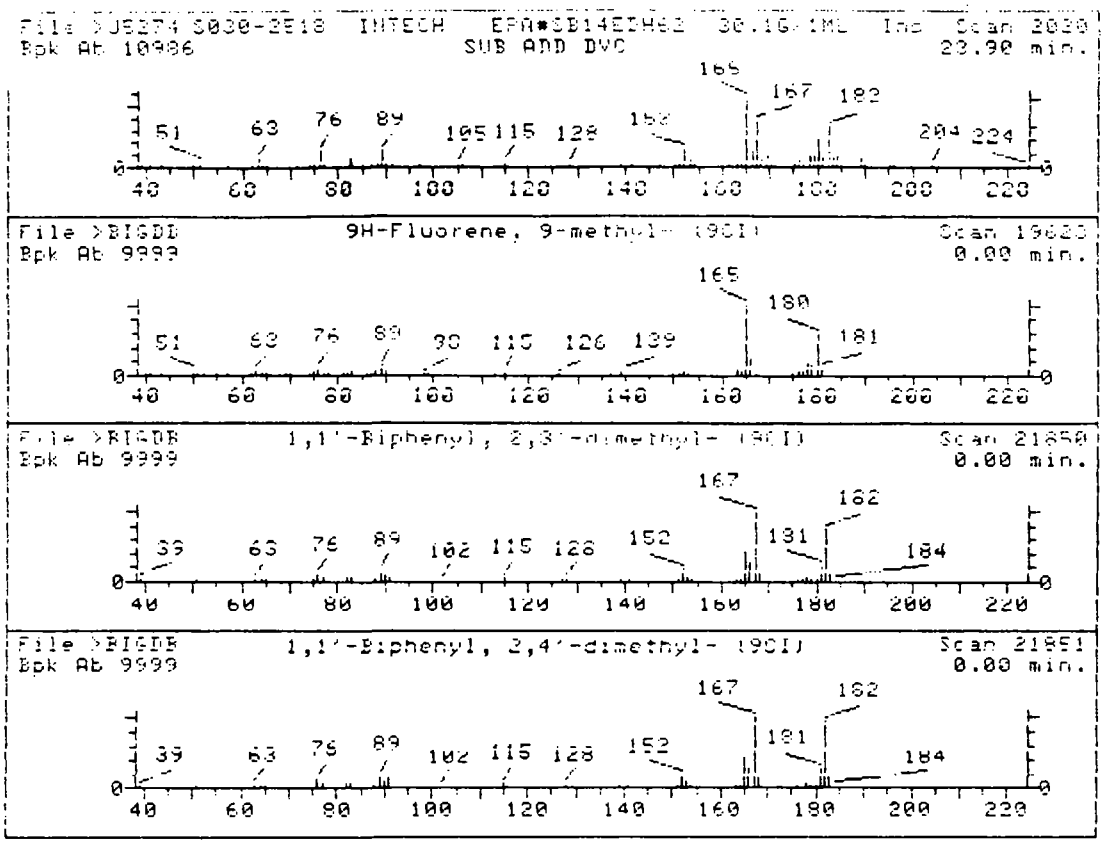
Area = 273596.0 Tentative Concentration is 29.00

1.	Dodecane, 2,7,10-trimethyl- (9CI)	212	C15H32
2.	Pentadecane, 2,6,10,14-tetramethyl- (8CI9CI)	268	C19H40
3.	Dodecane, 2,6,11-trimethyl- (8CI9CI)	212	C15H32
4.	Heptadecane, 2,6-dimethyl- (9CI)	268	C19H40
5.	Tridecane, 5-propyl- (9CI)	226	C16H34
6.	Octane, 2,3,7-trimethyl- (9CI)	156	C11H24
7.	Nonane, 2-methyl-5-propyl- (8CI)	184	C13H28

Sample File: >J5274 Spectrum #: 2000

Search speed: 3 Tilting option: F No. of ion ranges searched: 58

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	88	74645980	3988	"BIGDB	92	17	1	0	89	2	65	57
2.	87	1921706	11242	"BIGDB	113	22	2	4	80	0	63	44
3.	83	31295564	3984	"BIGDB	78	28	2	0	96	1	57	29
4.	78	54105679	3959	"BIGDB	81	35	2	-3	76	2	55	17
5.	78	55045119	10998	"BIGDB	71	42	2	2	100	5	55	14
6.	76	62016346	3962	"BIGDB	69	24	0	0	75	12	40	53
7.	71	31081171	4004	"BIGDB	76	27	1	4	100	12	38	31



Unknown #,20

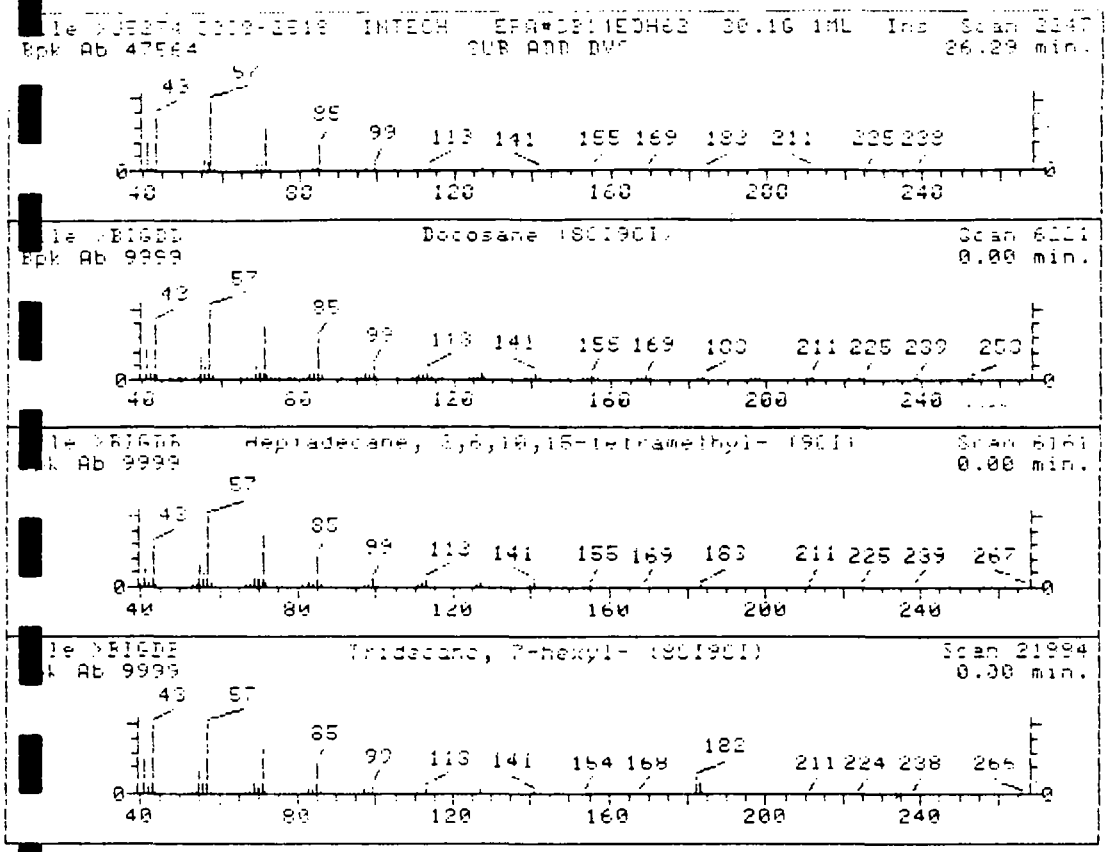
Area = 341729.0 Tentative Concentration is 36.00

1. 9H-Fluorene, 9-methyl- (9CI)	180	C14H12
2. 1,1'-Biphenyl, 2,3'-dimethyl- (9CI)	182	C14H14
3. 1,1'-Biphenyl, 2,4'-dimethyl- (9CI)	182	C14H14
4. 1,1'-Biphenyl, 2,2'-dimethyl- (9CI)	182	C14H14
5. 1,1'-Biphenyl, 2-ethyl- (9CI)	182	C14H14
6. Benzene, 1-methyl-2-(phenylmethyl)- (9CI)	182	C14H14
7. 5H-Indeno[1,2-b]pyridine (8CI9CI)	167	C12H9N

Sample File: >J5274 Spectrum #: 2020

Search speed: 3 Tilting option: F No. of ion ranges searched: 61

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_IU
1.	83*	2523377	19623	"BIGDB	78	35	0	0	74	50	40	93
2.	64*	611438	21850	"BIGDB	70	59	0	0	63	54	25	99
3.	34*	611610	21851	"BIGDB	62	69	0	0	52	58	12	74
4.	31*	605390	21847	"BIGDB	53	72	0	0	64	57	9	66
5.	31*	1812517	21873	"BIGDB	51	75	0	0	64	59	8	61
6.	21*	713360	21859	"BIGDB	59	71	1	-4	59	59	5	44
7.	20*	244995	19912	"BIGDB	40	55	2	1	66	54	5	15

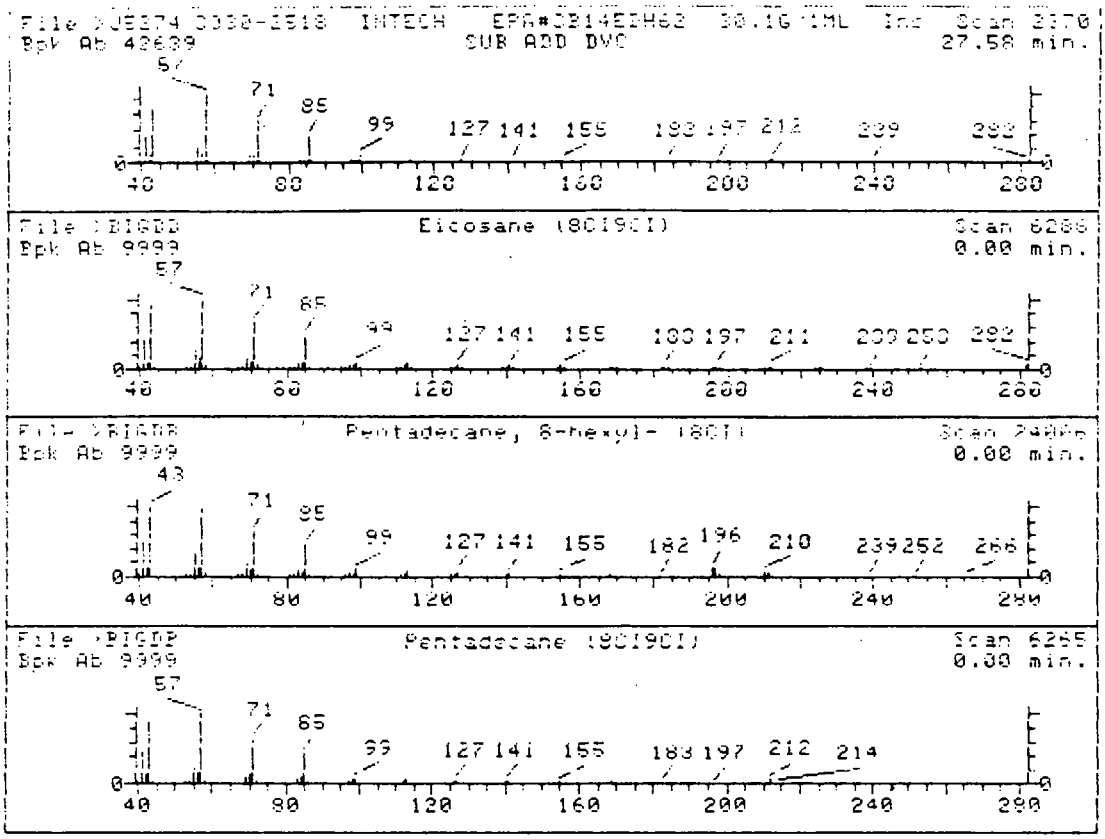


Unknown #,22
rea = 571559.0 Tentative Concentration is 60.00

1.	Docosane (8CI9CI)	310 C22H46
2.	Heptadecane, 2,6,10,15-tetramethyl- (9CI)	296 C21H44
3.	Tridecane, 7-hexyl- (8CI9CI)	268 C19H40
4.	Hexadecane (8CI9CI)	226 C16H34
5.	Nonadecane (8CI9CI)	268 C19H40
6.	Pentadecane (8CI9CI)	212 C15H32
7.	Hexatriacontane (8CI9CI)	506 C36H74

Sample file: >J5274 Spectrum #: 2247
earch speed: 3 Tilting option: F No. of ion ranges searched: 78

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	88	629970	6221	"BIGDB	132	15	2	4	68	5	65	59
2.	88	54833486	6161	"BIGDB	106	27	1	2	69	2	65	56
3.	87*	7225663	21884	"BIGDB	91	39	3	2	72	4	63	49
4.	86	544763	6146	"BIGDB	103	17	2	3	88	5	60	39
5.	86*	629925	6091	"BIGDB	78	56	3	2	74	4	60	36
6.	83	629629	6265	"BIGDB	86	34	2	2	78	5	57	22
7.	83	630068	6193	"BIGDB	100	62	2	3	78	5	57	27



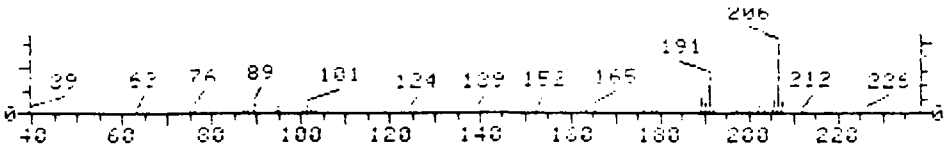
Unknown #.23
Area = 678881.0 Tentative Concentration is 71.00

1. Eicosane (8CI9CI)	282	C20H42
2. Pentadecane, 8-hexyl- (8CI)	296	C21H44
3. Pentadecane (8CI9CI)	212	C15H32
4. Docosane (8CI9CI)	310	C22H46
5. Pentacosane (8CI9CI)	352	C25H52
6. Hexadecane, 5-butyl- (8CI)	282	C20H42
7. Tetratetracontane (8CI9CI)	618	C44H90

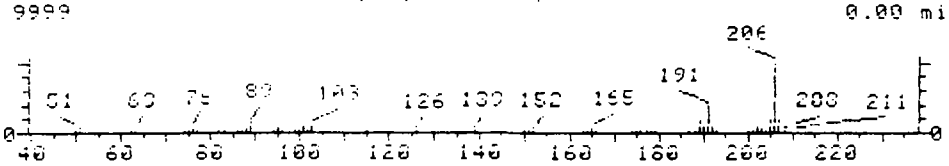
Sample File: >J5274 Spectrum #: 2370
Search speed: 3 Tilting option: F No. of ion ranges searched: 71

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IN
1.	89*	112958	6286	"BIGDB	125	14	1	3	74	10	62	86
2.	84	13475757	24006	"BIGDB	111	26	1	2	71	8	55	60
3.	84*	629629	6265	"BIGDB	82	38	2	0	79	10	55	63
4.	76	629970	6221	"BIGDB	128	19	2	4	80	12	40	55
5.	76	629992	6092	"BIGDB	81	59	2	0	72	10	45	22
6.	74*	6912078	27345	"BIGDB	87	56	3	1	74	12	39	44
7.	70	7098228	8906	"BIGDB	68	88	2	0	71	10	42	15

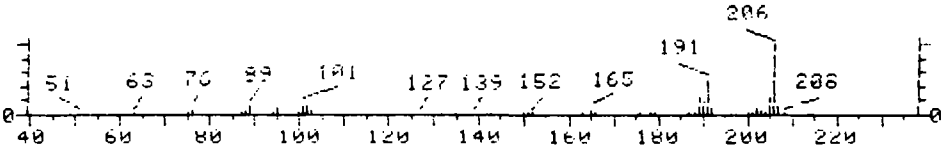
File >J5274 0030-2519 INTECH EPA#CB14EDH63 30.1G/1ML Ins Scan 2438
Bpk Ab 15054 SUB ADD DWC 28.30 min.



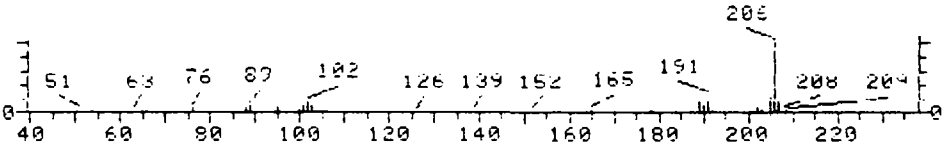
File >BIGDB Phenanthrene, 2,3-dimethyl- (8CI9CI) Scan 25205
Bpk Ab 9999 0.00 min.



File >BIGDB Phenanthrene, 2,5-dimethyl- (8CI9CI) Scan 25206
Bpk Ab 9999 0.00 min.



File >BIGDB Phenanthrene, 3,6-dimethyl- (8CI9CI) Scan 25200
Bpk Ab 9999 0.00 min.

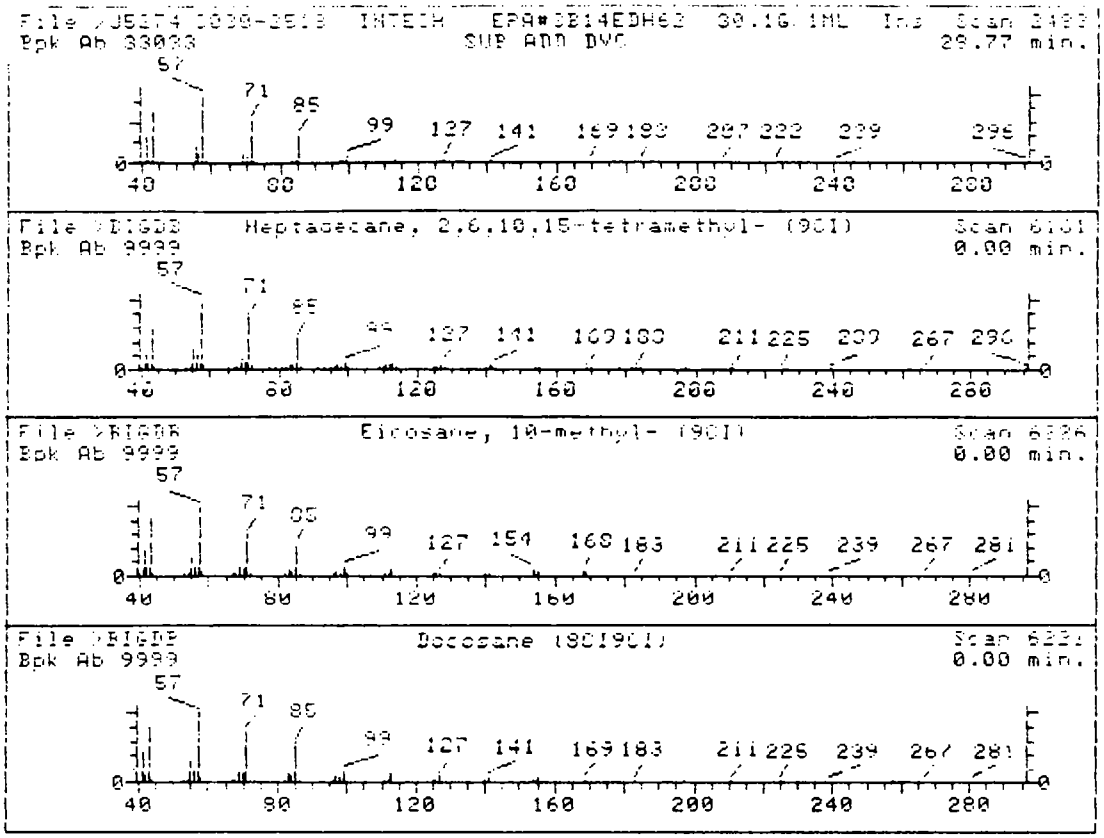


Unknown #,24
Area = 262359.0 Tentative Concentration is 27.00

1. Phenanthrene, 2,3-dimethyl- (8CI9CI) 206 C16H14
2. Phenanthrene, 2,5-dimethyl- (8CI9CI) 206 C16H14
3. Phenanthrene, 3,6-dimethyl- (8CI9CI) 206 C16H14
4. Phenanthrene, 9,10-dimethyl- (8CI9CI) 206 C16H14
5. Phenanthrene, 2,7-dimethyl- (8CI9CI) 206 C16H14
6. Phenanthrene, 4,5-dimethyl- (8CI9CI) 206 C16H14
7. Naphthalene, 1,2-dihydro-4-phenyl- (8CI9CI) 206 C16H14

Sample File: >J5274 Spectrum #: 2438
Search speed: 3 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	93*	3674655	25205	"BIGDB	109	21	2	0	95	2	68	89
2.	93*	3674666	25206	"BIGDB	96	36	0	0	63	34	50	97
3.	83*	1576676	25200	"BIGDB	99	31	2	0	91	14	51	76
4.	67*	604831	25195	"BIGDB	62	69	0	0	52	42	24	74
5.	64*	1576698	25262	"BIGDB	68	54	2	0	85	25	28	44
6.	62*	3674699	25207	"BIGDB	69	48	0	2	37	46	20	72
7.	60*	7469401	25221	"BIGDB	40	103	3	0	100	12	30	15



. Unknown #,25
Area = 350563.0 Tentative Concentration is 32.00

1. Heptadecane, 2,6,10,15-tetramethyl- (9CI)	296	C21H44
2. Eicosane, 10-methyl- (9CI)	296	C21H44
3. Docosane (8CI9CI)	310	C22H46
4. Eicosane (8CI9CI)	282	C20H42
5. Hexadecane (8CI9CI)	226	C16H34
6. Pentacosane (8CI9CI)	352	C25H52
7. Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']- (9CI)	399	C21H14FeN2O3

Sample File: >J5274 Spectrum #: 2483
Search speed: 3 Tilting option: F No. of ion ranges searched: 21

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	54833486	6161	"BIGDB	105	28	2	1	72	1	66	71
2.	89*	54833237	6226	"BIGDB	83	50	2	0	79	3	66	65
3.	88	629970	6221	"BIGDB	129	18	2	4	82	2	65	56
4.	87	112958	6286	"BIGDB	112	27	2	2	74	2	63	43
5.	86	544763	6146	"BIGDB	98	22	2	2	88	2	60	33
6.	83	629992	6092	"BIGDB	81	59	2	0	74	5	57	22
7.	81	24764117	6168	"BIGDB	110	27	2	2	100	2	53	41

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH53

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5249

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH53

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5249

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	350.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene	350.	U
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	700.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	300.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

EPA SAMPLE NO.

EDH62

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J5249

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 7/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.00

Number TICs found: 7

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	2.99	200.	J
2.	67-66-3	Methane, trichloro- (9CI)	3.16	400.	J
3.	- -	UNKNOWN AROMATIC	3.76	9000.	J
4.	- -	UNKNOWN	6.15	200.	J
5.	- -	UNKNOWN	6.92	600.	J
6.	- -	UNKNOWN	7.58	9000.	J A
7.	- -	UNKNOWN	9.21	200.	J
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

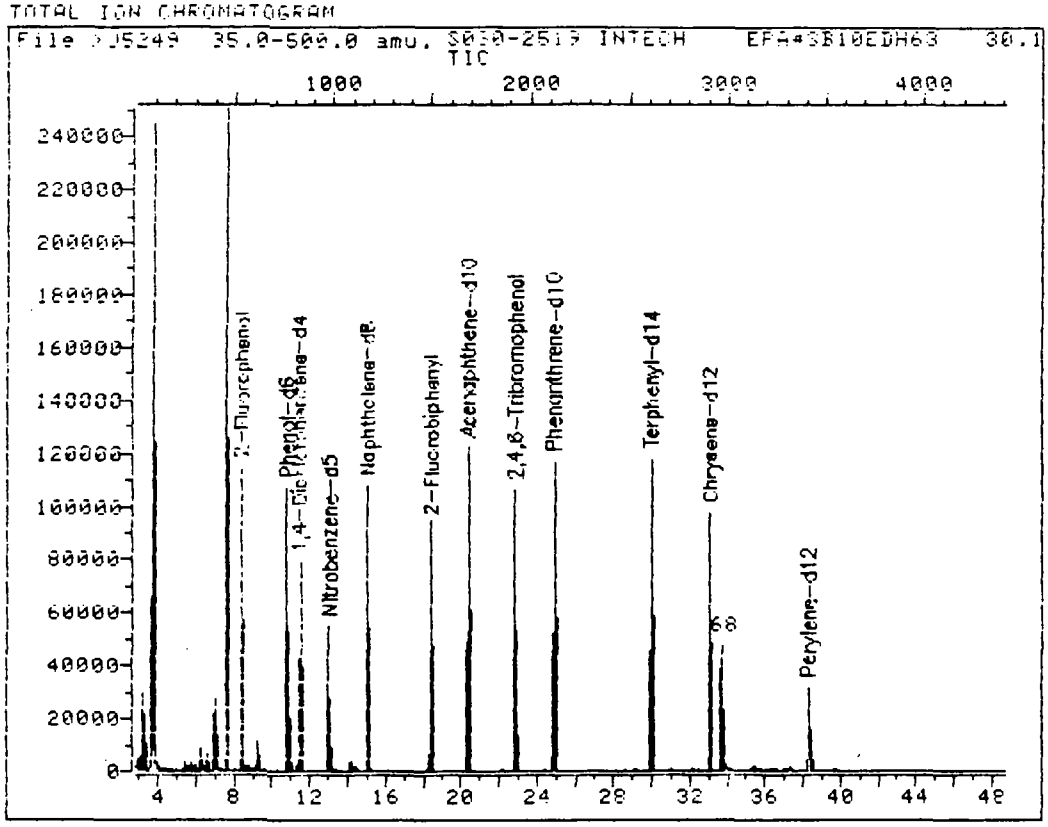
Operator ID: MANAGER Quant Rev: 6 Quant Time: 890707 12:30
Output File: ^J5249::N1 Injected at: 890707 11:38
Data File: >J5249::D3 Dilution Factor: 1.00000
Name: S030-2519 INTECH
Misc: EPA#SB10EDH63 30.1G/1ML Instr. #2 BTL#30

Method File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890707 08:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	11.39	152.0	24712	40.00	UG/ML	98
2)	2-Fluorophenol	8.33	112.0	55415	83.20	UG/ML	98
3)	Phenol-d6	10.75	99.0	75883	185.52	UG/ML	87
[illegible])	*Naphthalene-d8	14.99	136.0	103915	40.00	UG/ML	88
[illegible])	Nitrobenzene-d5	13.03	82.0	38158	39.76	UG/ML	82
31)	*Acenaphthene-d10	20.33	164.0	57831	40.00	UG/ML	95
[illegible])	2-Fluorobiphenyl	18.37	172.0	67786	41.16	UG/ML	95
[illegible])	2,4,6-Tribromophenol	22.79	330.0	31975	81.46	UG/ML	96
[illegible])	*Phenanthrene-d10	24.81	188.0	121310	40.00	UG/ML	98
[illegible])	*Chrysene-d12	33.00	240.0	98017	40.00	UG/ML	97
[illegible])	Terphenyl-d14	29.90	244.0	105450	37.51	UG/ML	89
[illegible])	bis(2-Ethylhexyl)phthalate	33.62	149.0	30478	8.65	UG/ML	97
70)	*Perylene-d12	38.26	264.0	53548	40.00	UG/ML	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

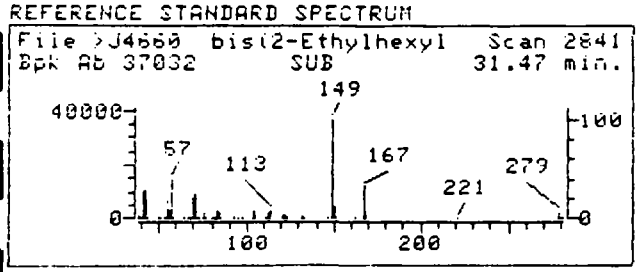


Data File: >J5249::D3 Quant Output File: ^J5249::N1
Name: S030-2519 INTECH
Misc: EPA#SB10EDH63 30.1G/1ML Instr. #2 BTL#30

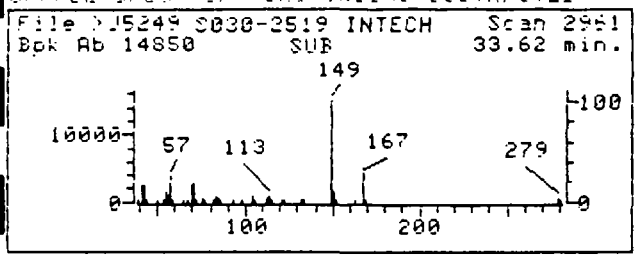
Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890707 08:53

Operator ID: MANAGER
Quant Time: 890707 12:30
Injected at: 890707 11:38

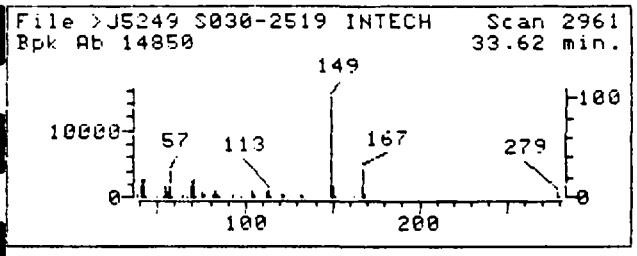
REFERENCE STANDARD SPECTRUM

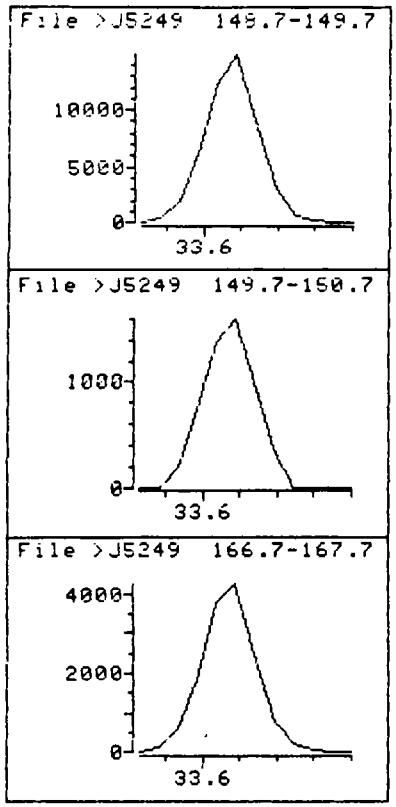


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



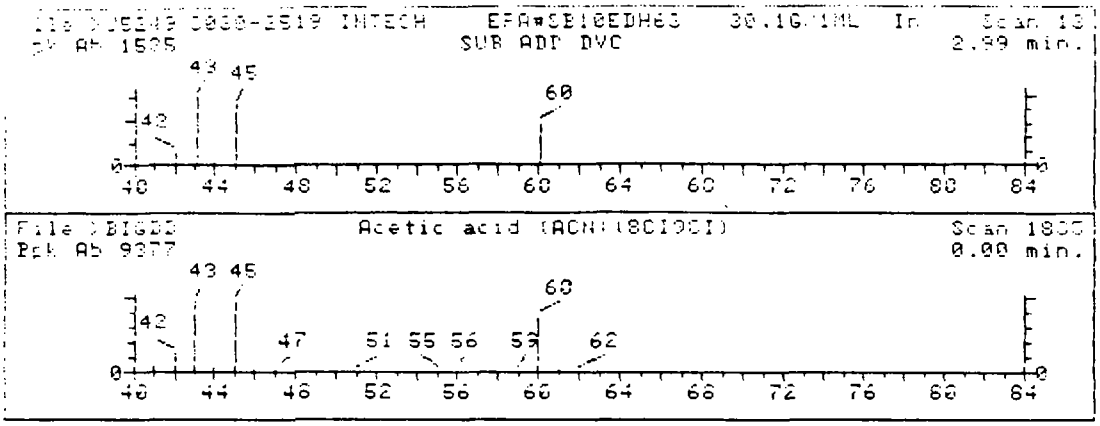
SAMPLE SPECTRUM (UNALTERED)





Data File: >J5249::D3 Quant Output File: ^J5249::N1
Name: S030-2519 INTECH
Misc: EPA#SB10EDH63 30.1G/1ML Instr. #2 BTL#30
Quant Time: 890707 12:30 Quant ID File: CLPBNA::SC
Injected at: 890707 11:38 Last Calibration: 890707 08:53

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2961
Retention Time: 33.62 min.
Quant Ion: 149.0
Area: 30478
Concentration: 8.65 UG/ML
q-value: 97

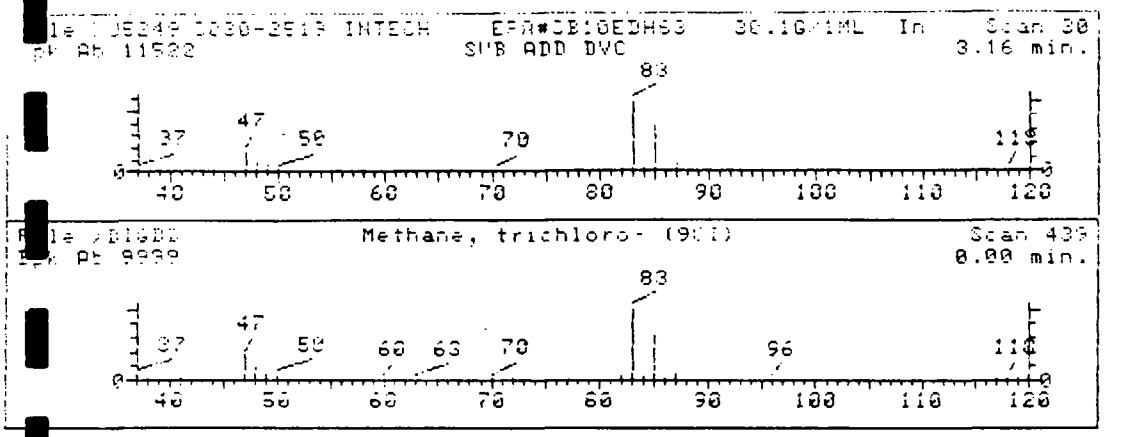


Unknown #,1
Area = 17227.00 Tentative Concentration is 5.00

1. Acetic acid (ACN)(8C19CI) 60 C2H4O2

Sample File: >J5249 Spectrum #: 13
Search speed: 3 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	9_IU
1.	83*	64197	1835	"BIGDB	42	37	2	0	75	2	57	22



Unknown #,2

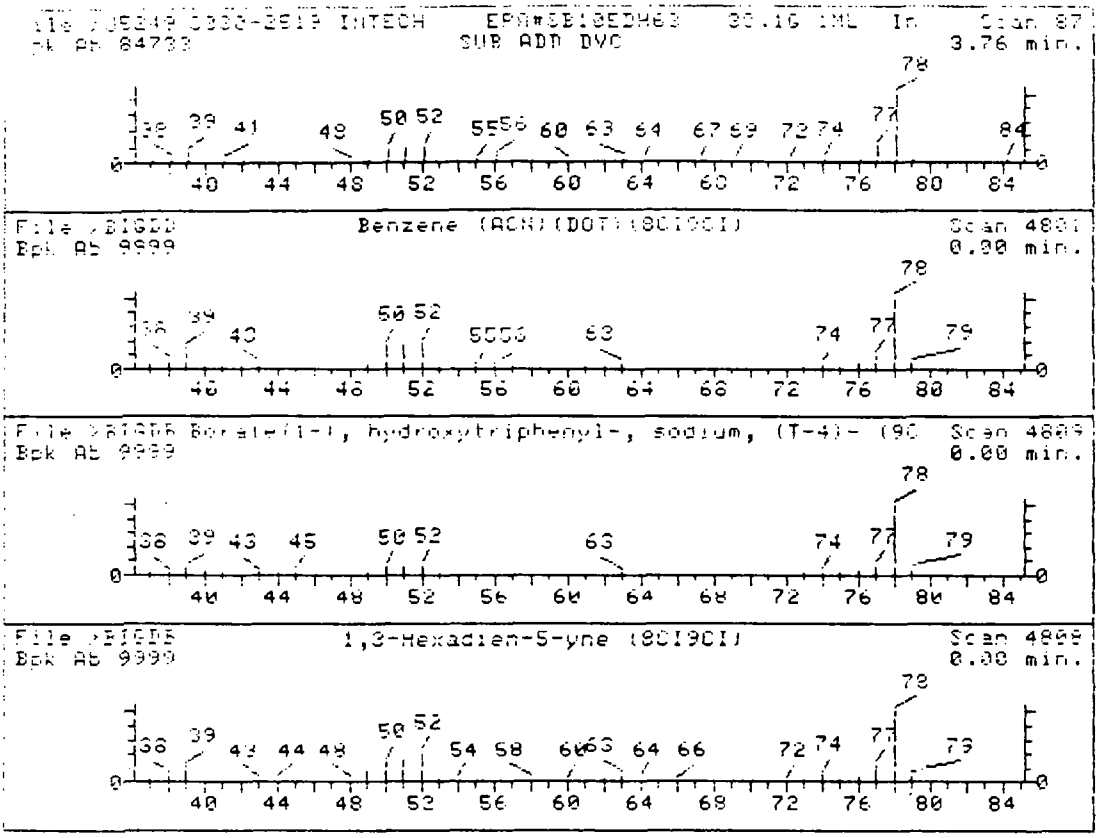
Area = 43543.00 Tentative Concentration is 11.00

1. Methane, trichloro- (9CI) 119 CHCl3

Sample File: >J5249 Spectrum #: 30

Search speed: 3 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	93*	67663	439	"BIGDB	89	17	1	0	79	2	68	99

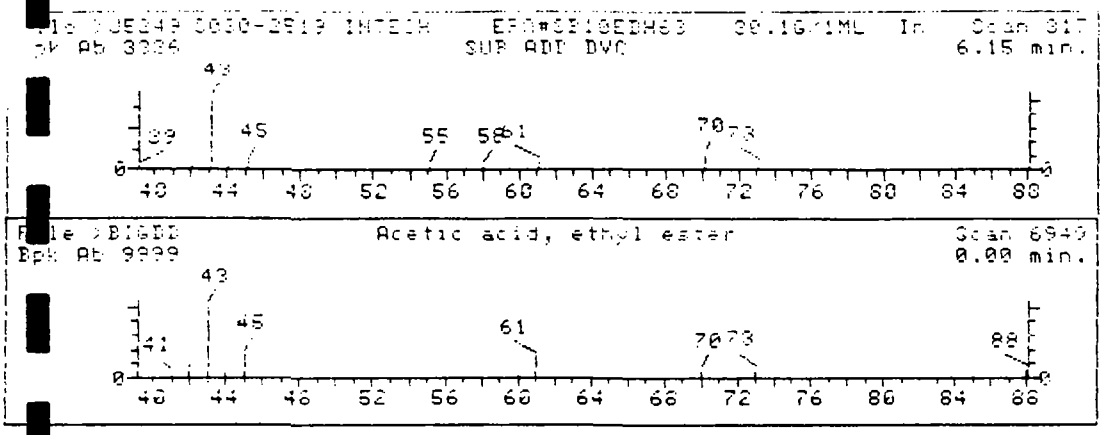


Unknown #,3
Area = 979686.0 Tentative Concentration is 260.00

1.	Benzene (ACN)(DOT)(8CI9CI)	78	C6H6
2.	Borate(1-), hydroxytriphenyl-, sodium, (T-4)- (9CI)	0	
3.	1,3-Hexadien-5-yne (8CI9CI)	78	C6H6
4.	1,5-Hexadien-3-yne (8CI9CI)	78	C6H6
5.	2-Butenedinitrile, (E)- (9CI)	78	C4H2N2
6.	1,5-Hexadiyne (8CI9CI)	78	C6H6
7.	2,4-Hexadiyne (8CI9CI)	78	C6H6

Sample File: >J5249 Spectrum #: 87
Search speed: 3 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	91*	71432	4801	"BIGDB	78	20	0	0	51	28	52	93
2.	83	12113074	4809	"BIGDB	77	30	2	4	100	4	57	22
3.	71*	10420903	4808	"BIGDB	67	34	1	0	54	28	29	66
4.	55*	821089	4804	"BIGDB	55	33	0	3	26	42	18	60
5.	44*	764421	4803	"BIGDB	49	56	2	0	67	28	19	22
6.	43*	628160	4802	"BIGDB	60	63	2	-4	55	30	19	21
7.	35*	2809690	4806	"BIGDB	35	38	0	4	22	46	11	39



Unknown #,4

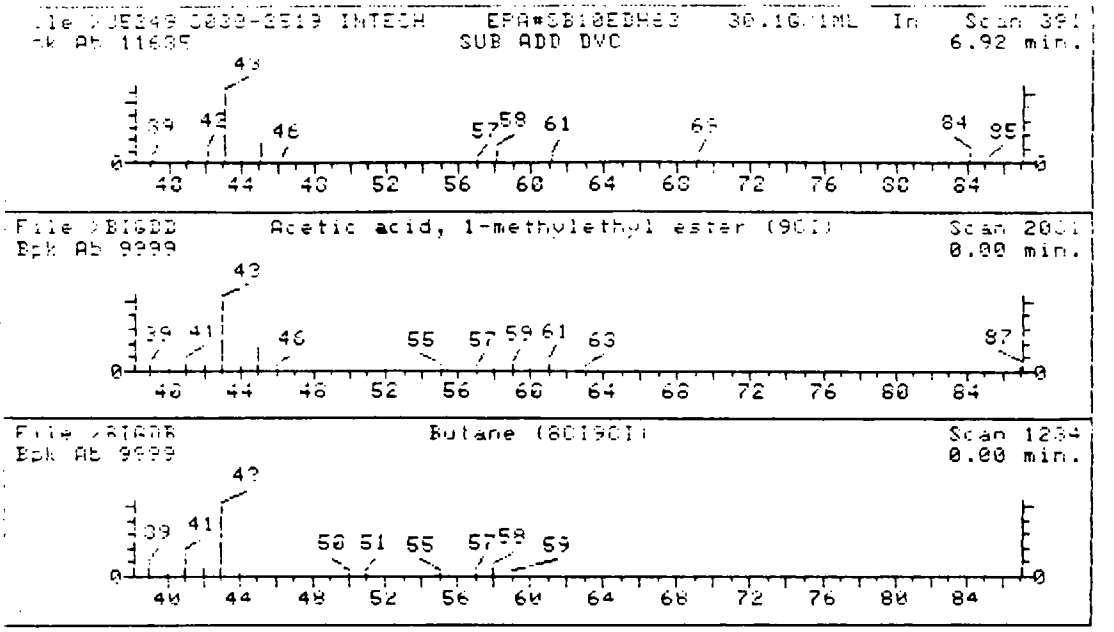
Area = 20561.00 Tentative Concentration is 5.00

1. Acetic acid, ethyl ester 88 C4H8O2

Sample file: >J05249 Spectrum #: 317

Search speed: 3 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	141786	6949	"BIGDB	22	55	2	0	28	59	3	13

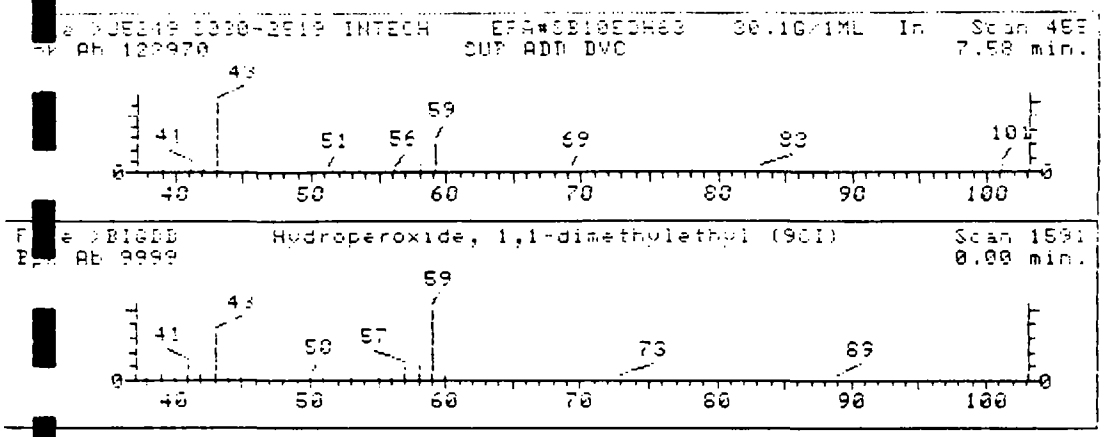


Unknown #,5
Area = 61480.00 Tentative Concentration is 16.00

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2
2. Butane (8CI9CI) 58 C4H10

Sample File: >J5249 Spectrum #: 391
Search speed: 3 Tilting option: F No. of ion ranges searched: 49

	Prob.	CAS #	CON #	RUDT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52	108214	2031	"BIGDB	40	39	1	0	80	18	20	14
2.	30*	106978	1234	"BIGDB	23	56	2	0	100	34	12	13

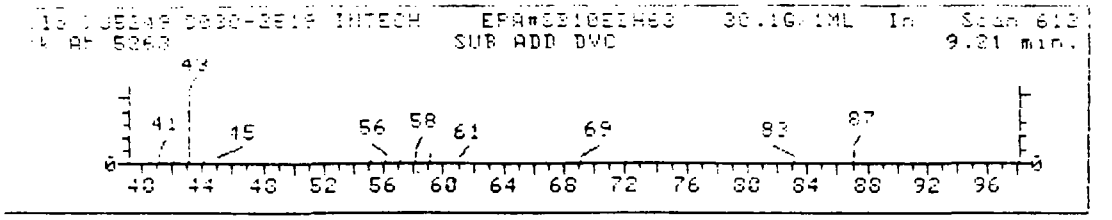


Unknown #,6
Area = 1032549. Tentative Concentration is 270.00

1. Hydroperoxide, 1,1-dimethylethyl (9CI) 90 C4H10O2

Sample file: >05249 Spectrum #: 455
Search speed: 3 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	20	75912	1591	"BIGDB	34	31	1	0	34	51	5	12



Unknown #, ?
Area = 19645.00 Tentative Concentration is 5.00

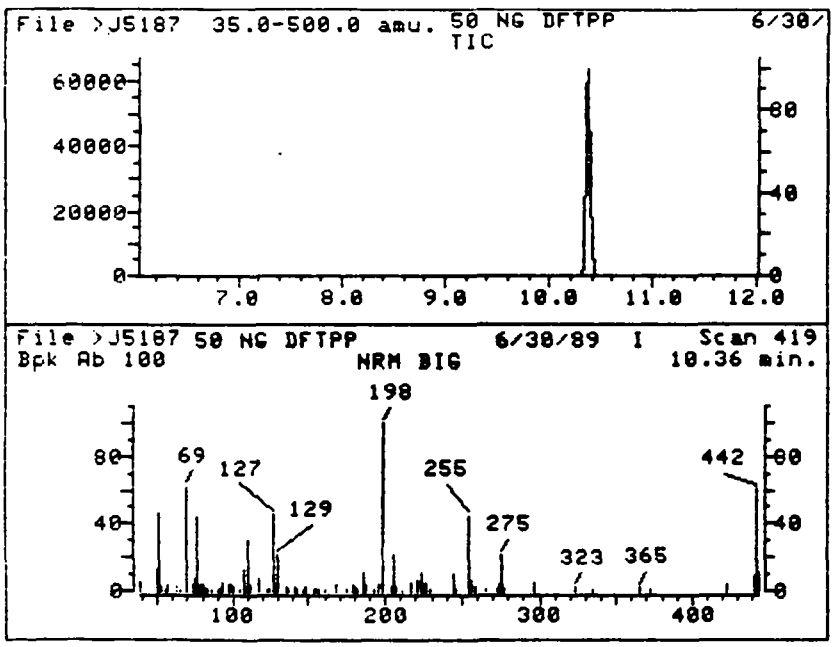
Sample file: >J5249 Spectrum #: 612

No data base entries were retrieved.

>J5187 50 NG DFTPP 6/30/89 INTECH Instr. #2
419 NRM BIG

File: >J5187 Scan #: 419 Retn. time: 10.36

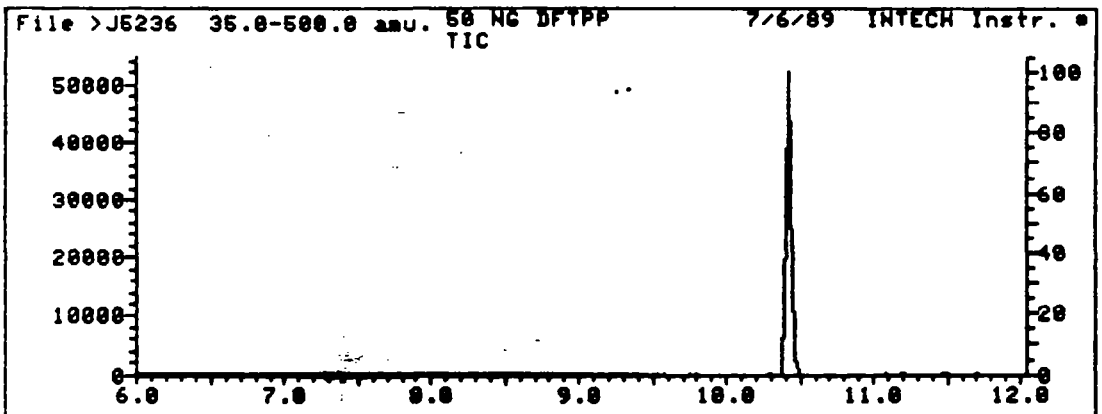
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.00	.846	86.00	.821	135.10	1.606	192.15	.895	255.05	44.342
39.10	4.144	91.10	.932	137.10	.760	193.05	.968	256.05	5.958
50.00	12.137	92.10	.895	141.10	1.937	196.15	2.893	258.05	2.317
51.10	46.794	93.10	4.659	142.00	.883	198.05	100.000	265.05	1.005
52.10	2.366	98.10	3.249	147.10	.981	199.05	7.270	273.05	1.349
56.00	1.569	99.00	3.286	148.10	1.765	204.05	2.562	274.05	3.739
57.10	3.543	101.00	1.716	153.00	.736	205.15	4.573	275.05	20.866
63.10	1.863	104.10	.968	155.20	1.201	206.05	21.528	276.05	2.991
65.10	.932	105.10	1.165	156.20	1.520	207.05	2.673	277.05	1.532
69.00	62.204	107.10	12.100	161.10	.981	211.15	.932	296.05	4.928
74.10	3.555	108.10	1.790	167.05	4.033	217.05	5.075	297.15	.797
75.10	7.184	110.10	29.987	168.05	2.280	221.05	6.166	323.15	1.594
76.10	2.145	111.10	3.666	174.15	.846	223.05	1.189	334.15	1.005
77.10	44.747	117.10	7.589	175.05	1.447	224.05	11.107	365.05	1.765
78.10	2.611	123.10	1.361	179.05	2.979	225.05	2.869	372.15	.968
79.10	3.163	124.00	.821	180.05	1.827	227.05	4.426	423.05	3.371
80.00	2.574	127.10	45.348	181.05	.834	229.05	.785	441.15	8.557
81.10	3.482	128.10	3.322	185.15	1.557	244.05	9.648	442.15	60.427
82.10	.932	129.10	20.682	186.05	11.217	245.15	1.128	443.05	11.021
83.10	.785	130.10	1.680	187.15	2.881	246.05	1.422	444.15	1.116

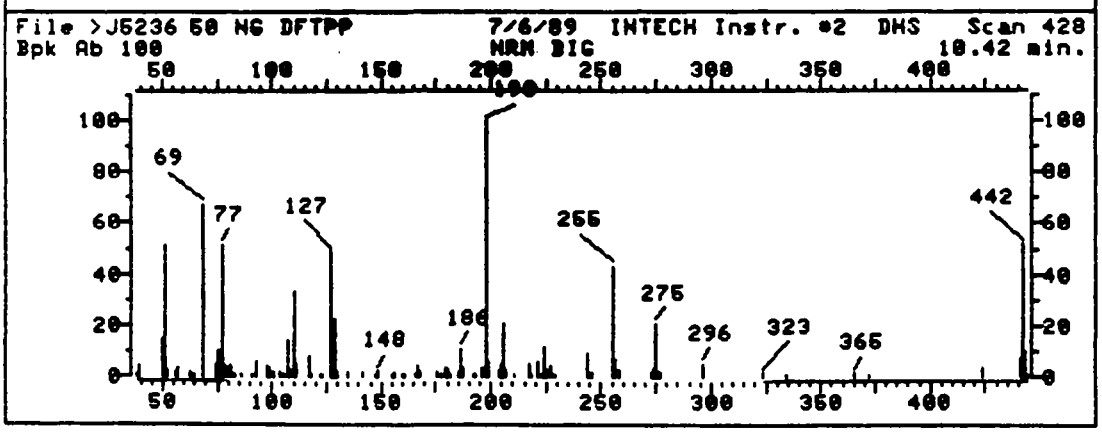


>J5236 50 NG DFTPP 7/6/89 INTECH Instr. #2 DHS
428 NRM BIG

File: >J5236 Scan #: 428 Retn. time: 10.42

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.00	.813	86.10	.938	135.10	1.547	187.05	3.048	245.15	1.235
39.10	4.283	91.10	1.032	141.10	2.094	192.05	.985	246.05	1.641
50.10	14.723	93.10	5.533	142.00	.813	193.05	.813	255.05	43.404
51.10	51.375	98.10	4.033	147.10	1.219	196.15	3.314	256.05	6.674
52.10	2.735	99.10	3.501	148.10	2.344	198.05	100.000	258.05	2.266
56.10	1.766	101.00	1.844	155.20	1.329	199.05	6.002	273.05	1.438
57.10	3.532	104.00	1.344	156.10	1.907	204.15	2.704	274.05	3.611
63.10	1.985	105.10	1.094	160.10	.844	205.15	5.127	275.05	21.100
65.10	1.063	107.10	14.145	161.00	.953	206.05	21.022	276.05	2.079
69.00	67.177	108.10	2.235	166.05	.953	207.05	2.532	277.05	1.657
74.10	5.127	110.10	32.917	167.05	4.126	211.05	1.157	296.05	5.111
75.10	9.800	111.10	4.939	168.05	2.063	217.05	5.283	323.15	1.516
76.10	2.938	117.10	8.378	175.15	1.688	218.05	1.000	334.15	1.032
77.10	51.579	118.00	.844	176.05	.813	221.05	5.752	365.05	1.719
78.10	3.954	122.00	1.110	177.15	.985	223.05	1.110	372.15	.813
79.00	3.720	123.10	1.313	179.05	3.048	224.15	11.582	423.15	3.142
80.10	2.626	127.10	48.812	180.05	2.235	225.05	2.923	441.15	7.409
81.00	4.267	128.10	3.736	181.15	1.219	227.05	4.392	442.15	51.844
82.10	.985	129.10	22.241	185.05	1.500	229.15	1.032	443.15	10.253
83.10	1.094	130.10	1.829	186.05	11.191	244.15	9.409	444.15	.922

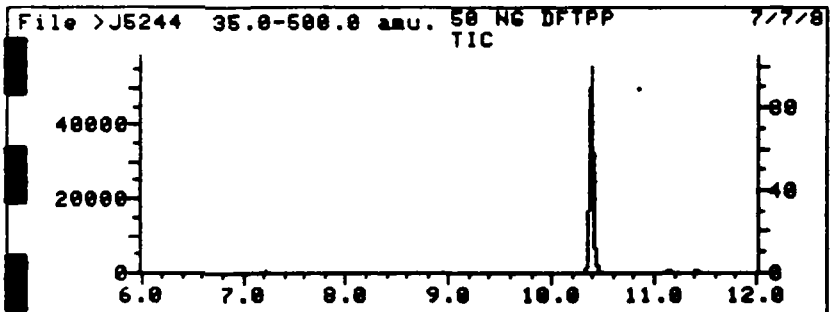


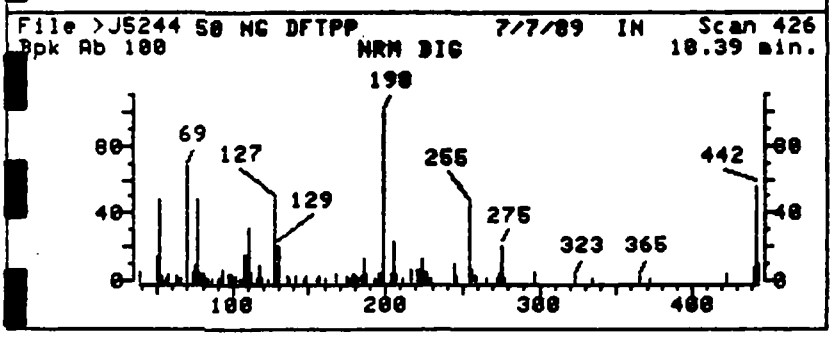


>J5244 50 NG DFTPP 7/7/89 INTECH Instr. #2 DHS
426 NRM BIG

File: >J5244 Scan #: 426 Retn. time: 10.39

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.00	.806	83.10	.879	129.10	20.067	187.05	3.091	245.95	1.772
39.10	4.380	86.00	.981	130.00	1.743	192.15	.908	255.05	45.393
50.10	13.564	91.00	.937	135.10	1.626	193.15	1.157	256.05	6.196
51.10	48.162	92.00	1.128	137.10	.850	196.05	3.208	258.05	2.622
52.10	2.226	93.10	5.478	141.10	2.417	198.05	100.000	265.05	.937
56.00	1.479	98.10	3.603	147.00	1.230	199.05	6.416	273.05	1.392
57.00	3.706	99.10	2.930	148.10	2.241	204.05	3.149	274.05	3.384
62.00	.879	101.00	2.124	155.20	1.435	205.05	5.068	275.05	20.287
63.10	1.846	104.10	1.216	156.10	1.875	206.05	22.484	276.05	3.017
65.10	1.069	105.00	1.084	161.00	1.113	207.05	3.032	277.05	1.465
69.00	67.921	107.10	14.340	167.05	3.896	211.15	1.113	296.05	4.834
74.10	4.980	108.00	2.168	167.95	2.080	217.05	5.683	323.05	1.948
75.00	8.188	110.00	31.903	174.05	1.069	221.05	6.079	334.05	1.069
76.20	2.988	111.10	4.541	175.05	1.875	222.95	1.494	365.05	1.992
77.10	48.074	116.10	.981	177.05	.864	224.05	12.245	372.05	.894
78.10	3.266	117.10	9.199	179.05	3.384	225.05	3.135	423.05	3.369
79.10	3.325	118.10	.835	180.05	2.183	227.05	4.966	441.05	7.880
80.00	2.256	123.00	1.216	180.95	1.040	229.05	1.172	442.05	55.808
81.00	3.428	127.10	47.532	185.05	1.831	244.05	9.448	443.05	10.048
82.00	.923	128.10	3.384	186.05	12.260	245.05	1.377	444.05	.908

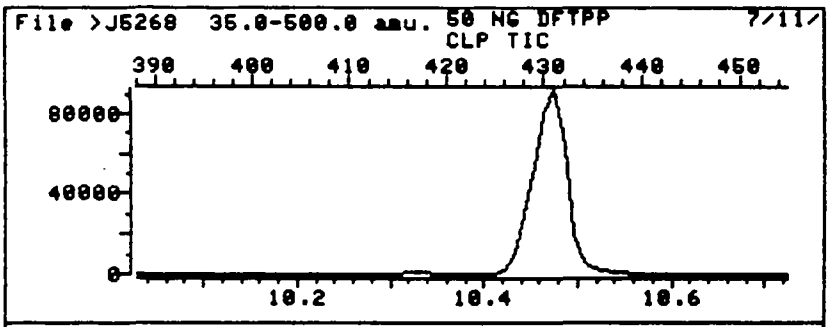


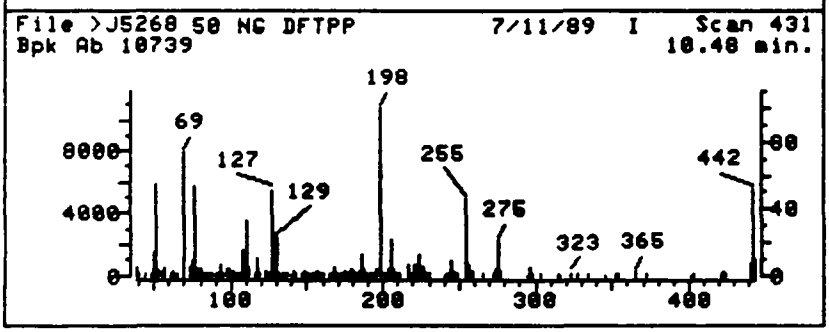


>J5268 50 NG DFTPP 7/11/89 INTECH Instr. #2
431 NRM BIG

File: >J5268 Scan #: 431 Retn. time: 10.48

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
39.00	4.805	83.00	.978	129.10	22.488	185.05	1.741	245.05	1.257
40.00	1.294	86.00	1.024	130.10	1.890	186.05	12.357	246.05	1.695
50.10	13.800	91.00	.959	135.10	1.462	187.05	3.473	255.05	44.930
51.10	54.493	92.10	1.006	141.00	2.039	192.05	1.006	256.05	6.267
52.10	3.054	93.00	6.146	142.00	1.006	193.05	.857	258.05	2.719
56.10	1.993	98.10	3.939	147.00	1.313	196.05	3.268	265.05	1.034
57.10	4.414	99.10	3.455	148.00	2.347	198.05	100.000	273.05	1.462
62.00	.838	101.00	2.170	153.10	.857	199.05	6.677	274.05	3.436
63.10	2.384	104.10	1.434	155.10	1.276	204.05	2.943	275.05	20.980
65.10	1.052	105.10	1.369	156.10	2.011	205.05	5.038	276.05	2.645
69.00	73.210	107.10	14.666	161.10	1.322	206.05	21.529	277.05	1.769
74.10	5.382	108.10	2.235	165.05	.894	207.05	2.915	296.05	4.740
75.00	8.939	110.10	32.321	167.05	4.526	217.05	5.503	323.15	1.574
76.10	2.561	111.10	4.712	168.05	1.574	221.15	5.941	334.05	.987
77.10	52.584	116.00	.838	174.05	1.080	222.95	1.285	365.05	1.853
78.10	3.669	117.10	10.234	175.05	1.630	224.05	12.431	423.05	2.700
79.00	3.818	122.10	.866	177.05	.847	225.05	2.924	441.05	7.692
80.00	2.803	123.10	1.741	179.05	3.557	227.05	4.954	442.05	51.653
81.00	3.771	127.10	51.103	180.05	2.337	229.05	.940	443.05	9.982
82.00	1.043	128.10	4.200	181.05	1.294	244.05	9.144	444.05	.968





1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK09

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5191

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/30/89

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330.	U
111-44-4	bis(2-Chloroethyl)ether	330.	U
95-57-8	2-Chlorophenol	330.	U
541-73-1	1,3-Dichlorobenzene	330.	U
106-46-7	1,4-Dichlorobenzene	330.	U
100-51-6	Benzyl alcohol	330.	U
95-50-1	1,2-Dichlorobenzene	330.	U
95-48-7	2-Methylphenol	330.	U
108-60-1	bis(2-Chloroisopropyl)ether	330.	U
106-44-5	4-Methylphenol	330.	U
621-64-7	N-Nitroso-di-n-propylamine	330.	U
67-72-1	Hexachloroethane	330.	U
98-95-3	Nitrobenzene	330.	U
78-59-1	Isophorone	330.	U
88-75-5	2-Nitrophenol	330.	U
105-67-9	2,4-Dimethylphenol	330.	U
65-85-0	Benzoic acid	1700.	U
111-91-1	bis(2-Chloroethoxy)methane	330.	U
120-83-2	2,4-Dichlorophenol	330.	U
120-82-1	1,2,4-Trichlorobenzene	330.	U
91-20-3	Naphthalene	330.	U
106-47-8	4-Chloroaniline	330.	U
87-68-3	Hexachlorobutadiene	330.	U
59-50-7	4-Chloro-3-methylphenol	330.	U
91-57-6	2-Methylnaphthalene	330.	U
77-47-4	Hexachlorocyclopentadiene	330.	U
88-06-2	2,4,6-Trichlorophenol	330.	U
95-95-4	2,4,5-Trichlorophenol	1700.	U
91-58-7	2-Chloronaphthalene	330.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	330.	U
208-96-8	Acenaphthylene	330.	U
606-20-2	2,6-Dinitrotoluene	330.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK09

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5191

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/30/89

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700.	U
83-32-9	Acenaphthene	330.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	330.	U
121-14-2	2,4-Dinitrotoluene	330.	U
84-66-2	Diethylphthalate	330.	U
7005-72-3	4-Chlorophenyl-phenylether	330.	U
86-73-7	Fluorene	330.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	4,6-Dinitro-2-methylphenol	1700.	U
86-30-6	N-Nitrosodiphenylamine (1)	330.	U
101-55-3	4-Bromophenyl-phenylether	330.	U
118-74-1	Hexachlorobenzene	330.	U
87-86-5	Pentachlorophenol	1700.	U
85-01-8	Phenanthrene	330.	U
120-12-7	Anthracene	330.	U
84-74-2	Di-n-butylphthalate	330.	U
206-44-0	Fluoranthene	330.	U
129-00-0	Pyrene	330.	U
85-68-7	Butylbenzylphthalate	330.	U
91-94-1	3,3'-Dichlorobenzidine	670.	U
56-55-3	Benzo(a)anthracene	330.	U
218-01-9	Chrysene	330.	U
117-81-7	bis(2-Ethylhexyl)phthalate	330.	U
117-84-0	Di-n-octylphthalate	330.	U
205-99-2	Benzo(b)fluoranthene	330.	U
207-08-9	Benzo(k)fluoranthene	330.	U
50-32-8	Benzo(a)pyrene	330.	U
193-39-5	Indeno(1,2,3-cd)pyrene	330.	U
53-70-3	Dibenz(a,h)anthracene	330.	U
191-24-2	Benzo(g,h,i)perylene	330.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2 1/87 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK09

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5191

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/30/89

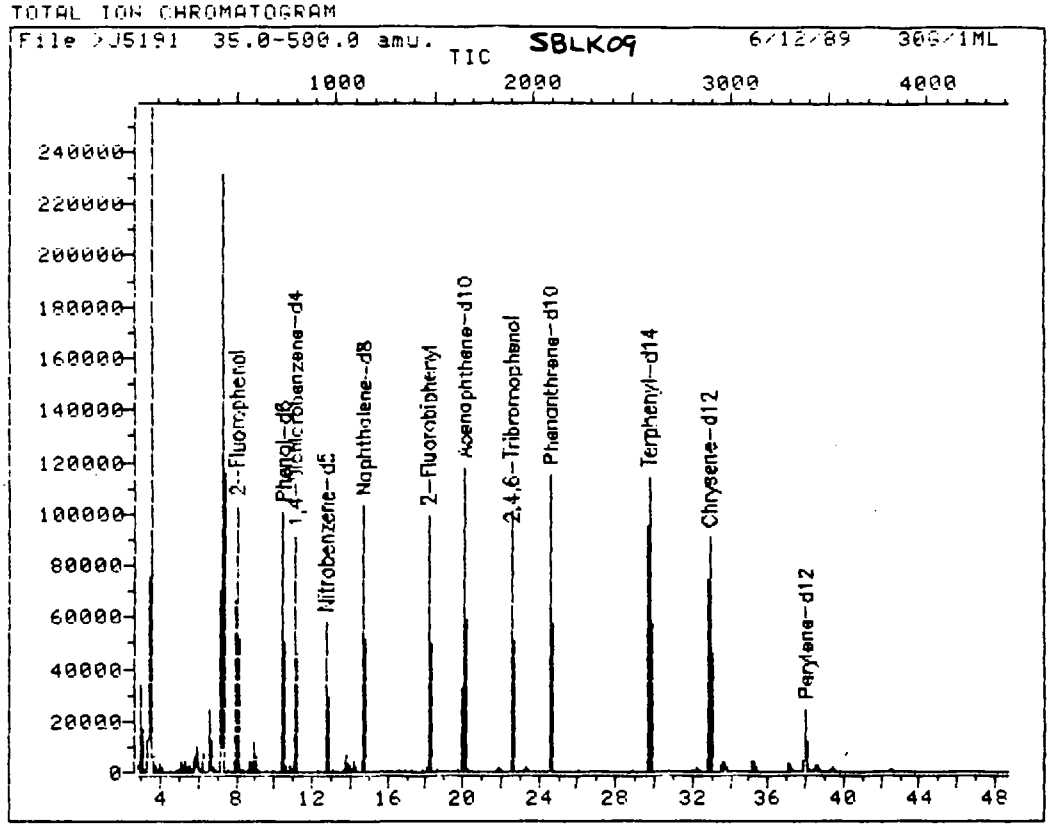
GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN AROMATIC	3.46	8000.	J
2. - -	UNKNOWN	5.79	200.	J
3. - -	UNKNOWN	5.87	100.	J
4. - -	UNKNOWN	6.18	100.	J
5. - -	UNKNOWN	6.55	500.	J
6. - -	UNKNOWN	7.23	8000.	J A
7. - -	UNKNOWN	8.86	200.	J
8. - -	UNKNOWN	37.07	200.	J
9. - -	UNKNOWN	38.50	300.	J
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ION CHROMATOGRAM



Data File: >J5191::D2 Quant Output File: ^J5191::N1
Name: SBLK09
Misc: 6/12/89 30G/1ML Instr. #2 BTL# 5

Id File: CLPBNA::SC
Title: CLP SEMI-VOLATILE ID FILE
Last Calibration: 890630 21:26

Operator ID: DAVE
Quant Time: 890701 00:17
Injected at: 890630 23:25

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50MS

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5193

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene		
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine		
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene		
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol		
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50MS

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5193

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene		
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene		
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene		
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	700.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	160.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

533

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50MSD

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5194

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene		
100-51-6	Benzyl alcohol	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	bis(2-Chloroisopropyl)ether	350.	U
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine		
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	200.	J
105-67-9	2,4-Dimethylphenol	350.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene		
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol		
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50MSD

Lab Name: INTECH Contract: 68D90048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J5194

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 1/89

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene		
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene		
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	350.	U
120-12-7	Anthracene	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	350.	U
129-00-0	Pyrene		
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	700.	U
56-55-3	Benzo(a)anthracene	350.	U
218-01-9	Chrysene	350.	U
117-81-7	bis(2-Ethylhexyl)phthalate	330.	J
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	350.	U
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	350.	U
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

(1) - Cannot be separated from diphenylamine

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1316

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 10. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC (Lindane)	18.	U
76-44-8	Heptachlor	18.	U
309-00-2	Aldrin	18.	U
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	35.	U
72-55-9	4,4'-DDE	35.	U
72-20-8	Endrin	35.	U
33213-65-9	Endosulfan II	35.	U
72-54-8	4,4'-DDD	35.	U
1031-07-8	Endosulfan sulfate	35.	U
50-29-3	4,4'-DDT	35.	U
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	35.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	350.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	350.	U
11096-82-5	Aroclor-1260	350.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH51

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1319

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 9.6 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16.	U
319-85-7	beta-BHC	16.	U
319-86-8	delta-BHC	16.	U
58-89-9	gamma-BHC (Lindane)	16.	U
76-44-8	Heptachlor	16.	U
309-00-2	Aldrin	16.	U
1024-57-3	Heptachlor epoxide	16.	U
959-98-8	Endosulfan I	16.	U
60-57-1	Dieldrin	33.	U
72-55-9	4,4'-DDE	33.	U
72-20-8	Endrin	33.	U
33213-65-9	Endosulfan II	33.	U
72-54-8	4,4'-DDD	33.	U
1031-07-8	Endosulfan sulfate	33.	U
50-29-3	4,4'-DDT	33.	U
72-43-5	Methoxychlor	160.	U
53494-70-5	Endrin ketone	33.	U
5103-71-9	alpha-Chlordane	160.	U
5103-74-2	gamma-Chlordane	160.	U
8001-35-2	Toxaphene	330.	U
12674-11-2	Aroclor-1016	160.	U
11104-28-2	Aroclor-1221	160.	U
11141-16-5	Aroclor-1232	160.	U
53469-21-9	Aroclor-1242	160.	U
12672-29-6	Aroclor-1248	160.	U
11097-69-1	Aroclor-1254	330.	U
11096-82-5	Aroclor-1260	330.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH52

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1321

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	17.	U
319-85-7	beta-BHC	17.	U
319-86-8	delta-BHC	17.	U
58-89-9	gamma-BHC (Lindane)	17.	U
76-44-8	Heptachlor	17.	U
309-00-2	Aldrin	17.	U
1024-57-3	Heptachlor epoxide	17.	U
959-98-8	Endosulfan I	17.	U
60-57-1	Dieldrin	34.	U
72-55-9	4,4'-DDE	34.	U
72-20-8	Endrin	34.	U
33213-65-9	Endosulfan II	34.	U
72-54-8	4,4'-DDD	34.	U
1031-07-8	Endosulfan sulfate	34.	U
50-29-3	4,4'-DDT	34.	U
72-43-5	Methoxychlor	170.	U
53494-70-5	Endrin ketone	34.	U
5103-71-9	alpha-Chlordane	170.	U
5103-74-2	gamma-Chlordane	170.	U
8001-35-2	Toxaphene	340.	U
12674-11-2	Aroclor-1016	170.	U
11104-28-2	Aroclor-1221	170.	U
11141-16-5	Aroclor-1232	170.	U
53469-21-9	Aroclor-1242	170.	U
12672-29-6	Aroclor-1248	170.	U
11097-69-1	Aroclor-1254	340.	U
11096-82-5	Aroclor-1260	340.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH53

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 31. (g/mL) G Lab File ID: GP1322

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 6. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	17.	U
319-85-7	beta-BHC	17.	U
319-86-8	delta-BHC	17.	U
58-89-9	gamma-BHC (Lindane)	17.	U
76-44-8	Heptachlor	17.	U
309-00-2	Aldrin	17.	U
1024-57-3	Heptachlor epoxide	17.	U
959-98-8	Endosulfan I	17.	U
60-57-1	Dieldrin	33.	U
72-55-9	4,4'-DDE	33.	U
72-20-8	Endrin	33.	U
33213-65-9	Endosulfan II	33.	U
72-54-8	4,4'-DDD	33.	U
1031-07-8	Endosulfan sulfate	33.	U
50-29-3	4,4'-DDT	33.	U
72-43-5	Methoxychlor	170.	U
53494-70-5	Endrin ketone	33.	U
5103-71-9	alpha-Chlordane	170.	U
5103-74-2	gamma-Chlordane	170.	U
8001-35-2	Toxaphene	330.	U
12674-11-2	Aroclor-1016	170.	U
11104-28-2	Aroclor-1221	170.	U
11141-16-5	Aroclor-1232	170.	U
53469-21-9	Aroclor-1242	170.	U
12672-29-6	Aroclor-1248	170.	U
11097-69-1	Aroclor-1254	330.	U
11096-82-5	Aroclor-1260	330.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH54

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1323

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 4. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	17.	U
319-85-7	beta-BHC	17.	U
319-86-8	delta-BHC	17.	U
58-89-9	gamma-BHC (Lindane)	17.	U
76-44-8	Heptachlor	17.	U
309-00-2	Aldrin	17.	U
1024-57-3	Heptachlor epoxide	17.	U
959-98-8	Endosulfan I	17.	U
60-57-1	Dieldrin	33.	U
72-55-9	4,4'-DDE	33.	U
72-20-8	Endrin	33.	U
33213-65-9	Endosulfan II	33.	U
72-54-8	4,4'-DDD	33.	U
1031-07-8	Endosulfan sulfate	33.	U
50-29-3	4,4'-DDT	33.	U
72-43-5	Methoxychlor	170.	U
53494-70-5	Endrin ketone	33.	U
5103-71-9	alpha-Chlordane	170.	U
5103-74-2	gamma-Chlordane	170.	U
8001-35-2	Toxaphene	330.	U
12674-11-2	Aroclor-1016	170.	U
11104-28-2	Aroclor-1221	170.	U
11141-16-5	Aroclor-1232	170.	U
53469-21-9	Aroclor-1242	170.	U
12672-29-6	Aroclor-1248	170.	U
11097-69-1	Aroclor-1254	330.	U
11096-82-5	Aroclor-1260	330.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH55

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 31. (g/mL) G Lab File ID: GP1324

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 9.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.4	U
319-85-7	beta-BHC	8.4	U
319-86-8	delta-BHC	8.4	U
58-89-9	gamma-BHC (Lindane)	8.4	U
76-44-8	Heptachlor	8.4	U
309-00-2	Aldrin	8.4	U
1024-57-3	Heptachlor epoxide	8.4	U
959-98-8	Endosulfan I	8.4	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	84.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	84.	U
5103-74-2	gamma-Chlordane	84.	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	84.	U
11104-28-2	Aroclor-1221	84.	U
11141-16-5	Aroclor-1232	84.	U
53469-21-9	Aroclor-1242	84.	U
12672-29-6	Aroclor-1248	84.	U
11097-69-1	Aroclor-1254	170.	U
11096-82-5	Aroclor-1260	170.	U

10/20

WL

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH56

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1325

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 7. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 10.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.6	U
319-85-7	beta-BHC	8.6	U
319-86-8	delta-BHC	8.6	U
58-89-9	gamma-BHC (Lindane)	8.6	U
76-44-8	Heptachlor	8.6	U
309-00-2	Aldrin	8.6	U
1024-57-3	Heptachlor epoxide	8.6	U
959-98-8	Endosulfan I	8.6	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	86.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	86.	U
5103-74-2	gamma-Chlordane	86.	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	86.	U
11104-28-2	Aroclor-1221	86.	U
11141-16-5	Aroclor-1232	86.	U
53469-21-9	Aroclor-1242	86.	U
12672-29-6	Aroclor-1248	86.	U
11097-69-1	Aroclor-1254	170.	U
11096-82-5	Aroclor-1260	170.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH57

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1327

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/25/89

GPC Cleanup: (Y/N) N pH: 7.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.4	U
319-85-7	beta-BHC	8.4	U
319-86-8	delta-BHC	8.4	U
58-89-9	gamma-BHC (Lindane)	8.4	U
76-44-8	Heptachlor	8.4	U
309-00-2	Aldrin	8.4	U
1024-57-3	Heptachlor epoxide	8.4	U
959-98-8	Endosulfan I	8.4	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	84.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	84.	U
5103-74-2	gamma-Chlordane	84.	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	84.	U
11104-28-2	Aroclor-1221	84.	U
11141-16-5	Aroclor-1232	84.	U
53469-21-9	Aroclor-1242	84.	U
12672-29-6	Aroclor-1248	84.	U
11097-69-1	Aroclor-1254	170.	U
11096-82-5	Aroclor-1260	170.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH59

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1329

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 8. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/25/89

GPC Cleanup: (Y/N) N pH: 9.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.7	U
319-85-7	beta-BHC	8.7	U
319-86-8	delta-BHC	8.7	U
58-89-9	gamma-BHC (Lindane)	8.7	U
76-44-8	Heptachlor	8.7	U
309-00-2	Aldrin	8.7	U
1024-57-3	Heptachlor epoxide	8.7	U
959-98-8	Endosulfan I	8.7	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	87.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	87.	U
5103-74-2	gamma-Chlordane	87.	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	87.	U
11104-28-2	Aroclor-1221	87.	U
11141-16-5	Aroclor-1232	87.	U
53469-21-9	Aroclor-1242	87.	U
12672-29-6	Aroclor-1248	87.	U
11097-69-1	Aroclor-1254	170.	U
11096-82-5	Aroclor-1260	170.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH60

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1330

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 8. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/25/89

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	170.	U
319-85-7	beta-BHC	170.	U
319-86-8	delta-BHC	170.	U
58-89-9	gamma-BHC (Lindane)	170.	U
76-44-8	Heptachlor	170.	U
309-00-2	Aldrin	170.	U
1024-57-3	Heptachlor epoxide	170.	U
959-98-8	Endosulfan I	170.	U
60-57-1	Dieldrin	350.	U
72-55-9	4,4'-DDE	350.	U
72-20-8	Endrin	350.	U
33213-65-9	Endosulfan II	350.	U
72-54-8	4,4'-DDD	350.	U
1031-07-8	Endosulfan sulfate	350.	U
50-29-3	4,4'-DDT	350.	U
72-43-5	Methoxychlor	1700.	U
53494-70-5	Endrin ketone	350.	U
5103-71-9	alpha-Chlordane	1700.	U
5103-74-2	gamma-Chlordane	1700.	U
8001-35-2	Toxaphene	3500.	U
12674-11-2	Aroclor-1016	1700.	U
11104-28-2	Aroclor-1221	1700.	U
11141-16-5	Aroclor-1232	1700.	U
53469-21-9	Aroclor-1242	1700.	U
12672-29-6	Aroclor-1248	1700.	U
11097-69-1	Aroclor-1254	3500.	U
11096-82-5	Aroclor-1260	3500.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH61

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1331

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/25/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.4	U
319-85-7	beta-BHC	8.4	U
319-86-8	delta-BHC	8.4	U
58-89-9	gamma-BHC (Lindane)	8.4	U
76-44-8	Heptachlor	8.4	U
309-00-2	Aldrin	8.4	U
1024-57-3	Heptachlor epoxide	8.4	U
959-98-8	Endosulfan I	8.4	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	84.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	84.	U
5103-74-2	gamma-Chlordane	84.	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	84.	U
11104-28-2	Aroclor-1221	84.	U
11141-16-5	Aroclor-1232	84.	U
53469-21-9	Aroclor-1242	84.	U
12672-29-6	Aroclor-1248	84.	U
11097-69-1	Aroclor-1254	170.	U
11096-82-5	Aroclor-1260	170.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH62

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1333

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 9. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/25/89

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 50.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	440.	U
319-85-7	beta-BHC	440.	U
319-86-8	delta-BHC	440.	U
58-89-9	gamma-BHC (Lindane)	440.	U
76-44-8	Heptachlor	440.	U
309-00-2	Aldrin	440.	U
1024-57-3	Heptachlor epoxide	440.	U
959-98-8	Endosulfan I	440.	U
60-57-1	Dieldrin	880.	U
72-55-9	4,4'-DDE	880.	U
72-20-8	Endrin	880.	U
33213-65-9	Endosulfan II	880.	U
72-54-8	4,4'-DDD	880.	U
1031-07-8	Endosulfan sulfate	880.	U
50-29-3	4,4'-DDT	880.	U
72-43-5	Methoxychlor	4400.	U
53494-70-5	Endrin ketone	880.	U
5103-71-9	alpha-Chlordane	4400.	U
5103-74-2	gamma-Chlordane	4400.	U
8001-35-2	Toxaphene	8800.	U
12674-11-2	Aroclor-1016	4400.	U
11104-28-2	Aroclor-1221	4400.	U
11141-16-5	Aroclor-1232	4400.	U
53469-21-9	Aroclor-1242	4400.	U
12672-29-6	Aroclor-1248	4400.	U
11097-69-1	Aroclor-1254	8800.	U
11096-82-5	Aroclor-1260	8800.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH63

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1334

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 5. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/25/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.4	U
319-85-7	beta-BHC	8.4	U
319-86-8	delta-BHC	8.4	U
58-89-9	gamma-BHC (Lindane)	8.4	U
76-44-8	Heptachlor	8.4	U
309-00-2	Aldrin	8.4	U
1024-57-3	Heptachlor epoxide	8.4	U
959-98-8	Endosulfan I	8.4	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	84.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	84.	U
5103-74-2	gamma-Chlordane	84.	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	84.	U
11104-28-2	Aroclor-1221	84.	U
11141-16-5	Aroclor-1232	84.	U
53469-21-9	Aroclor-1242	84.	U
12672-29-6	Aroclor-1248	84.	U
11097-69-1	Aroclor-1254	170.	U
11096-82-5	Aroclor-1260	170.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK13

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1315

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.0	U
319-85-7	beta-BHC	8.0	U
319-86-8	delta-BHC	8.0	U
58-89-9	gamma-BHC (Lindane)	8.0	U
76-44-8	Heptachlor	8.0	U
309-00-2	Aldrin	8.0	U
1024-57-3	Heptachlor epoxide	8.0	U
959-98-8	Endosulfan I	8.0	U
60-57-1	Dieldrin	16.	U
72-55-9	4,4'-DDE	16.	U
72-20-8	Endrin	16.	U
33213-65-9	Endosulfan II	16.	U
72-54-8	4,4'-DDD	16.	U
1031-07-8	Endosulfan sulfate	16.	U
50-29-3	4,4'-DDT	16.	U
72-43-5	Methoxychlor	80.	U
53494-70-5	Endrin ketone	16.	U
5103-71-9	alpha-Chlordane	80.	U
5103-74-2	gamma-Chlordane	80.	U
8001-35-2	Toxaphene	160.	U
12674-11-2	Aroclor-1016	80.	U
11104-28-2	Aroclor-1221	80.	U
11141-16-5	Aroclor-1232	80.	U
53469-21-9	Aroclor-1242	80.	U
12672-29-6	Aroclor-1248	80.	U
11097-69-1	Aroclor-1254	160.	U
11096-82-5	Aroclor-1260	160.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH5UMS

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1317

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 10. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC (Lindane)	37.	
76-44-8	Heptachlor	18.	
309-00-2	Aldrin	28.	
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	62.	
72-55-9	4,4'-DDE	36.	U
72-20-8	Endrin	94.	
33213-65-9	Endosulfan II	36.	U
72-54-8	4,4'-DDD	36.	U
1031-07-8	Endosulfan sulfate	36.	U
50-29-3	4,4'-DDT	66.	
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	36.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	360.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	360.	U
11096-82-5	Aroclor-1260	360.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDH50MSD

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

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

Sample wt/vol: 30. (g/mL) G Lab File ID: GP1318

Level: (low/med) LOW Date Received: 6/10/89

% Moisture: not dec. 10. dec. 0. Date Extracted: 6/12/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 6/24/89

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC (Lindane)	36.	
76-44-8	Heptachlor	18.	
309-00-2	Aldrin	28.	
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	69.	
72-55-9	4,4'-DDE	36.	U
72-20-8	Endrin	99.	
33213-65-9	Endosulfan II	36.	U
72-54-8	4,4'-DDD	36.	U
1031-07-8	Endosulfan sulfate	36.	U
50-29-3	4,4'-DDT	69.	
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	36.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	360.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	360.	U
11096-82-5	Aroclor-1260	360.	U

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

EDH50MS

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

GC Column ID (1): 22502401 GC Column ID (2): 22502401

Instrument ID (1): 5890B Instrument ID (2): 5890B

Lab Sample ID:

Lab File ID: (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
1	gamma-BHC (Linda	Column 1	3.33	3.23	3.37	Y	N
2		Column 2	3.33	3.23	3.37	Y	N
3	Heptachlor	Column 1	4.06	3.93	4.09	Y	N
4		Column 2	4.06	3.93	4.09	Y	N
5	Aldrin	Column 1	4.90	4.76	4.96	Y	N
6		Column 2	4.90	4.76	4.96	Y	N
7	Dieldrin	Column 1	11.43	11.08	11.52	Y	N
8		Column 2	11.43	11.08	11.52	Y	N
9	Endrin	Column 1	13.92	13.51	14.05	Y	N
10		Column 2	13.92	13.51	14.05	Y	N
11	4,4'-DDT	Column 1	19.84	19.20	20.00	Y	N
12		Column 2	19.84	19.20	20.00	Y	N

Comments:

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

EDH50MSD

Lab Name: INTECH Contract: 68-D9-0048

Lab Code: INTECH Case No.: 12114 SAS No.: SDG No.: EDH50

GC Column ID (1): 22502401 GC Column ID (2): 22502401

Instrument ID (1): 5890B Instrument ID (2): 5890B

Lab Sample ID:

Lab File ID: (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
1	gamma-BHC (Linda	Column 1	3.33	3.23	3.37	Y	N
2		Column 2	3.33	3.23	3.37	Y	N
3	Heptachlor	Column 1	4.06	3.93	4.09	Y	N
4		Column 2	4.06	3.93	4.09	Y	N
5	Aldrin	Column 1	4.90	4.76	4.96	Y	N
6		Column 2	4.90	4.76	4.96	Y	N
7	Dieldrin	Column 1	11.43	11.08	11.52	Y	N
8		Column 2	11.43	11.08	11.52	Y	N
9	Endrin	Column 1	13.92	13.51	14.05	Y	N
10		Column 2	13.92	13.51	14.05	Y	N
11	4,4'-DDT	Column 1	19.85	19.20	20.00	Y	N
12		Column 2	19.85	19.20	20.00	Y	N

Comments:

602

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data Received for Review on July 21 1989

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory

TO: Data User: MPCA

We have reviewed the data for the following case(s).

SITE NAME: BJ Carney

SMO Case No. ~~12199~~ 12114

EPA Data Set No. SF 6279

No. of Samples: 14

D.U./Activity Numbers ~~TFA~~/TFA 102

CRL No. 89YC204 S09-S22

SMO Traffic No. MECS 47-60

CLP Laboratory: MID ATLANTIC

Hrs. Required for Review: 2

Following are our findings: This review covers the analyses of 14 soils for RAS Inorganics (metals) & Cyanide.

ICP analyses: Calcium was qualified "J" due to duplicate difference greater than allowed limit.

GFAA analyses: All data acceptable

CN & Hg Analyses: CN was qualified as "R" (unusable) due to extremely low spike recovery.

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications referenced above. See Data Qualifier sheets and Calibration Outlier forms for flags and additional comments.
( ) Data are preliminary - pending verification by Contractor Laboratory. See Case Summary above.
( ) Data are unacceptable.

Why Matt 10/13/89 MPCA

cc: Carla Dempsey, CLP Quality Assurance Officer, Analytical Operations Branch
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

Region V

INORGANIC REGIONAL DATA ASSESSMENT

CASE NO. 12144

SITE BJ Carney

LABORATORY Mid Atlantic

NO. OF SAMPLES/MATRIX 14 land soils

SDG# MECS-47

REVIEWER (IF NOT ESD) MPCA

SOW# 7/87

REVIEWER'S NAME [illegible]

DPO: ACTION _____ FYI _____

COMPLETION DATE 10/13/89

DATA ASSESSMENT SUMMARY

		ICP	AA	Hg	CYANIDE
1.	HOLDING TIMES	O	O	O	O
2.	CALIBRATIONS				
3.	BLANKS				
4.	ICS				
5.	LCS				
6.	DUPLICATE ANALYSIS				✓
7.	MATRIX SPIKE				M
8.	MSA				O
9.	SERIAL DILUTION				
10.	SAMPLE VERIFICATION				
11.	OTHER QC				
12.	OVERALL ASSESSMENT	✓	✓	✓	✓

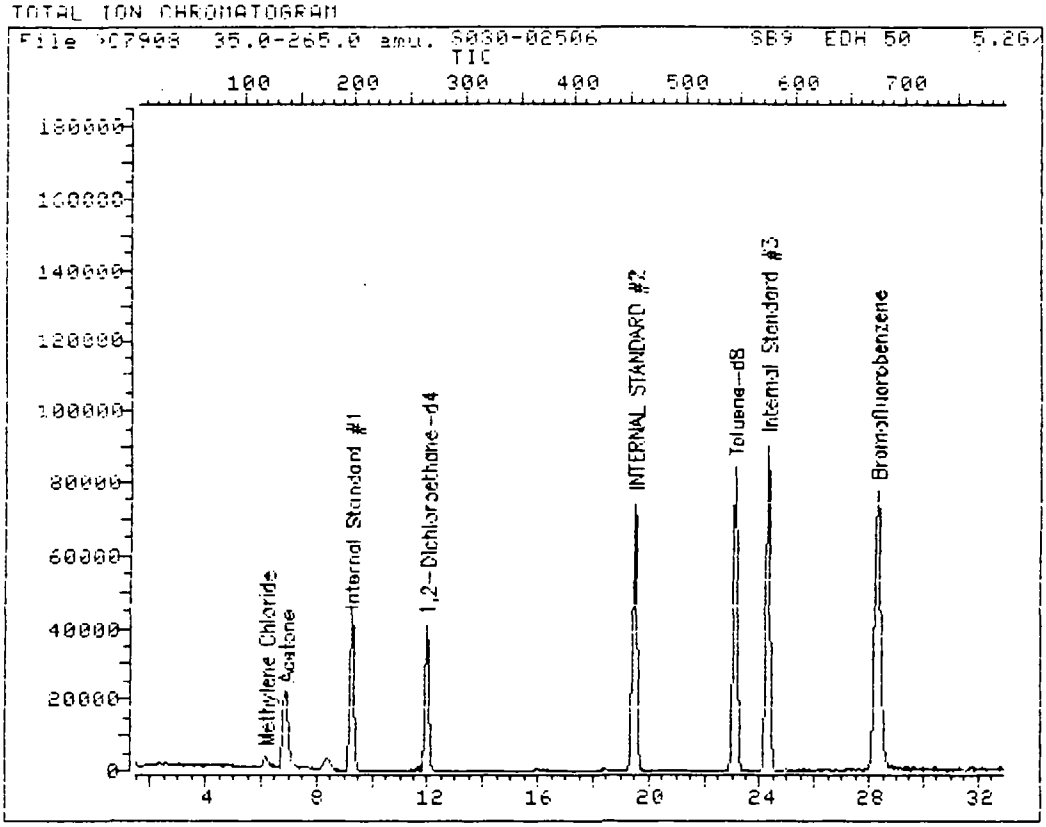
O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: _____

AREAS OF CONCERN: CN data qualified as "R" due to low spike recovery.

NOTABLE PERFORMANCE: _____

TOTAL ION CHROMATOGRAM



Data File: >C7908::N1 Quant Output File: ^C7908::QT
Name: S030-02506
Misc: SB9 EDH 50 5.2G/5ML INTECH Instrument #3

Id File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

Operator ID: STEVE
Quant Time: 890614 19:22
Injected at: 890614 18:49

QUANT REPORT

Operator ID: STEVE Quant Rev: 6 Quant Time: 890614 19:22
Output File: ^C2908::QT Injected at: 890614 18:49
Data File: >C2908::N1 Dilution Factor: 1.00000
Name: 5030-02506
Misc: SB4 EOH 50 5.2G/5ML INTECH Instrument #3

ID File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.24	128.0	71072	50.00	UG/L	5[illegible]
6)	Methylene Chloride	6.18	84.0	13441	13.20	UG/L	9[illegible]
7)	Acetone	6.89	43.0	187845	124.45	UG/L	85
13)	1,2-Dichloroethane-d4	11.99	65.0	191535	45.77	UG/L	8[illegible]
15)	*1,4-Difluorobenzene	19.48	114.0	299553	50.00	UG/L	6[illegible]
29)	*Chlorobenzene-d5	24.29	117.0	291951	50.00	UG/L	94
35)	Toluene-d8	23.10	98.0	330979	50.13	UG/L	94
40)	Bromofluorobenzene	28.32	95.0	241930	51.44	UG/L	9[illegible]

* Compound is ISTD

QC EXCEPTION SUMMARY REPORT

CASE # 12 1144
DATA SET # MECS-47
LAB Q.C. #
DATE: 10/13/89

SITE BJ Carney
LAB M+Q - atlantic
REVIEWED BY Wayne Mansfield NPCB

MATRIX: Soil
CONC. : low

WATER SAMPLE SPK.
WATER SAMPLE DUP.
SOIL SAMPLE SPK. MECS 47S
SOIL SAMPLE DUP. MECS 47D

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Init Calver	Contin Calver	Prep Blk AQ	Prep Blk SOL	KS %R	LCS % AQ	LCS % SOL	Sol Dup RPD	Sol Spk. %R	AQ Dup RPD	AQ Spk. %R	Ser Dilu AQ	Ser Dilu SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike %R	Blind Blank	Blind Spike %R	Split Sample RPD	
Aluminum																								
Antimony		37.0																						
Arsenic																								
Barium																								
Beryllium																								
Cadmium																								
Calcium										48.3														
Chromium																								
Cobalt																								
Copper																								
Iron																								
Lead																								
Magnesium																								
Manganese																								
Mercury																								
Nickel																								
Potassium		1090																						
Selenium																								
Silver																								
Sodium																								
Thallium																								
Tin																								
Vanadium																								
Zinc																								
Cyanide											16.0													

USEPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 ALEXANDRIA, VA 22313
703/557-2490 FTS-557-2490

CASE NO: 12114 (12114)

SAS NO: (IF APPLICABLE)

INORGANIC TRAFFIC REPORT

(FOR CLP USE ONLY)

TYPE OF ACTIVITY (CIRCLE ONE) ①
SUPERFUND—PA (S) ESI RIFS RD RA ER NPLD O&M OTHER _____
NON-SUPERFUND—_____ PROGRAM

SAMPLE DESCRIPTION (ENTER IN BOX A)
1. SURFACE WATER 4. SOIL
2. GROUND WATER 5. SEDIMENT
3. LEACHATE 6. OIL (SAS)
7. WASTE (SAS)

REGION NO: V SAMPLING COMPANY ② MPCA
SAMPLER: (NAME) E. Cody Mike Connolly

SHIP TO: (CENTRY) ③
NET Mid-Atlantic, Inc.
1501 Grandview Ave.
Thorofare, NJ 08086
ATTN: Patricia Will

SAMPLING DATE: ④
BEGIN: 6/5/89 END: 6/8/89

DATE SHIPPED 6/9/89 CARRIER Fed Exp. ⑤
AIRBILL NO: 3302879226

DATE REC'D: 6/12/89 SDG NO: CS47 ⑥
REC'D BY: Sharon Salvatini
LABORATORY CONTRACT NO. 0063 UNIT PRICE #143.00
68-WP-~~0078~~ ~~$ 930.00~~

TRANSFER TO: DATE REC'D: ⑦
REC'D BY: CONTRACT NO./PRICE:

CLP SAMPLE NUMBER (FROM LABELS)	Ⓐ SAMPLE DESCRIPTION (FROM BOX 1 2 3 4 5 6 7)	Ⓑ CONCENTRATION L = LOW M = MED H = HIGH (SAS)	Ⓒ RAS ANALYSIS: TOTAL METALS	CYANIDE	DISSOLVED METALS	HIGH ONLY (SAS): SULFIDE	pH	CONDUCTIVITY	OXIDANTS	Ⓓ SPECIAL HANDLING	Ⓔ STATION LOCATION	Ⓕ SAMPLE CONDITION ON RECEIPT	Ⓖ HIGH CONC. PHASES (CHECK): SOLID	WATER—MIS LIQUID	NON WATER—MIS LIQUID
MECS 47	4	L	X	X							Soil Boring (SB) 9				
MECS 48	4	L	X	X							SB 10				
MECS 49	4	L	X	X							SB 15				
MECS 50	4	L	X	X							SB 7				
MECS 51	4	L	X	X							SB 8				
MECS 52	4	L	X	X							SB 8				
MECS 53	4	L	X	X							SB 6				
MECS 54	4	L	X	X							SB 4				
MECS 55	4	L	X	X							SB 4				
MECS 56	4	L	X	X							SB 4				
MECS 57	4	L	X	X							SB 3				
MECS 58	4	L	X	X							SB 14				
MECS 59	4	L	X	X							SB 14				
MECS 60	4	L	X	X							SB 10				

Cooler #1 (of 1)

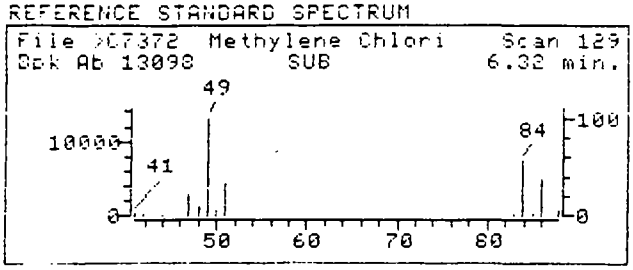
SAMPLING Complete

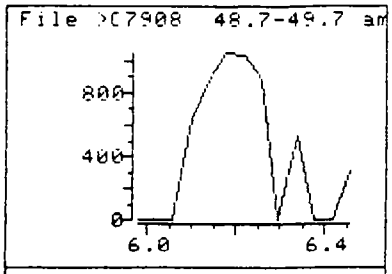
FINAL SDG — MECS60

EPA Form 2075-6 (8-87)

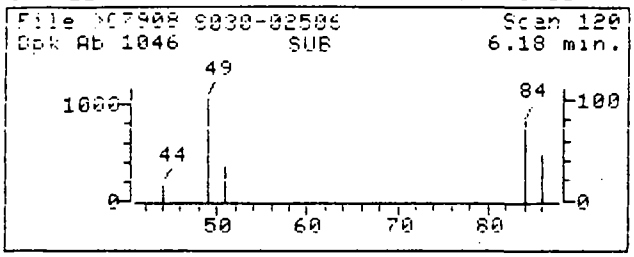
WHITE — SMO COPY PINK — CLIENT COPY WHITE — LAB COPY FOR RETURN TO SMO YELLOW — LAB COPY

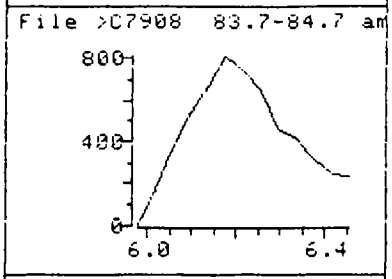
REFERENCE STANDARD SPECTRUM



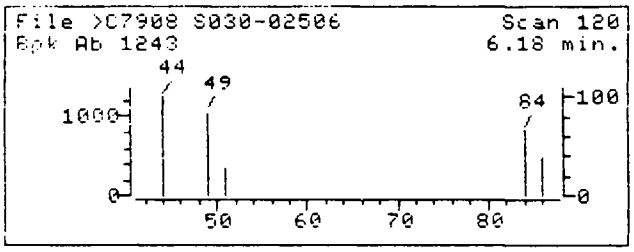


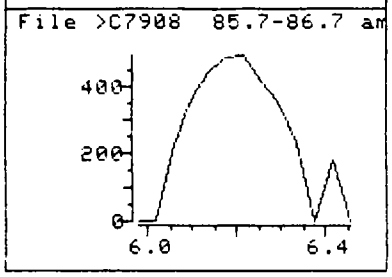
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

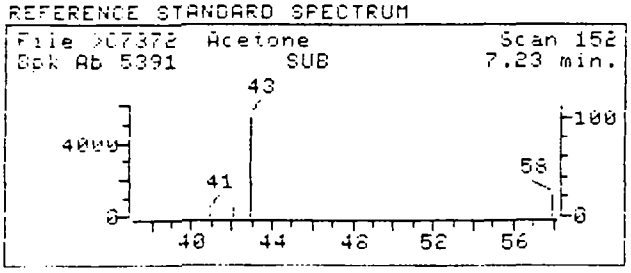




Data File: >C7908::N1 Quant Output File: ^C7908::QT
Name: S030-02506
Misc: SB9 EDH 50 5.2G/5ML INTECH Instrument #3
Quant Time: 890614 19:22 Quant ID File: CLPVOA::N3
Injected at: 890614 18:49 Last Calibration: 890614 18:05

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 120
Retention Time: 6.18 min.
Quant Ion: 84.0
Area: 13441
Concentration: 13.20 UG/L
q-value: 90

REFERENCE STANDARD SPECTRUM



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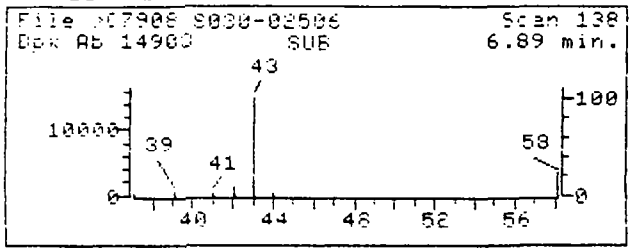

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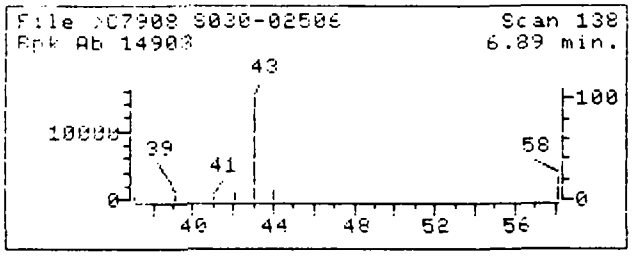
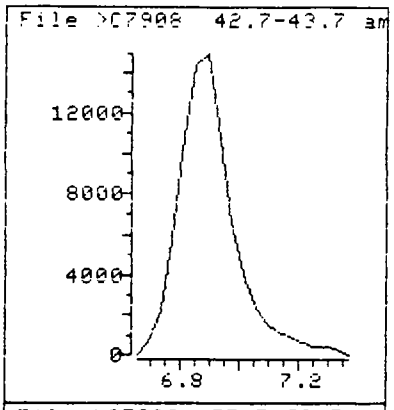
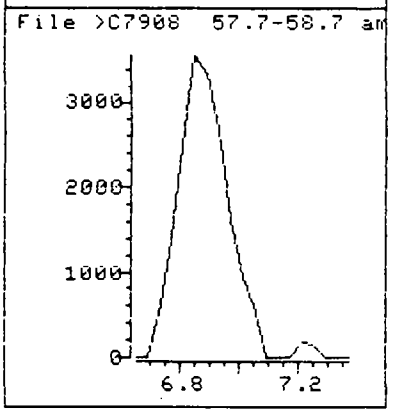


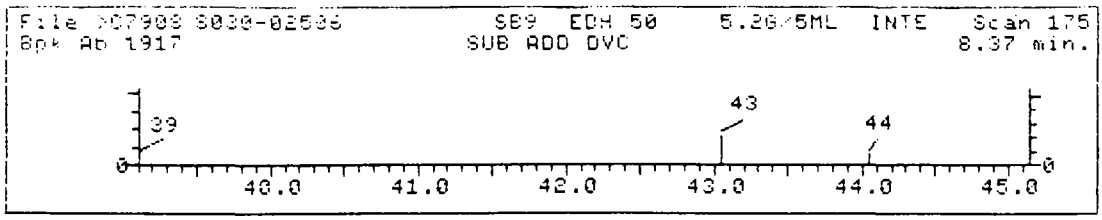




Data File: >C7908::N1
Name: S030-02506
Misc: SB9 EDH 50 5.2G/5ML
Quant Time: 890614 19:22
Injected at: 890614 18:49

Quant Output File: ^C7908::QT
INTECH Instrument #3
Quant ID File: CLPVOA::N3
Last Calibration: 890614 18:05

Compound No: 7
Compound Name: Acetone
Scan Number: 138
Retention Time: 6.89 min.
Quant Ion: 43.0
Area: 187845
Concentration: 124.45 UG/L
q-value: 85

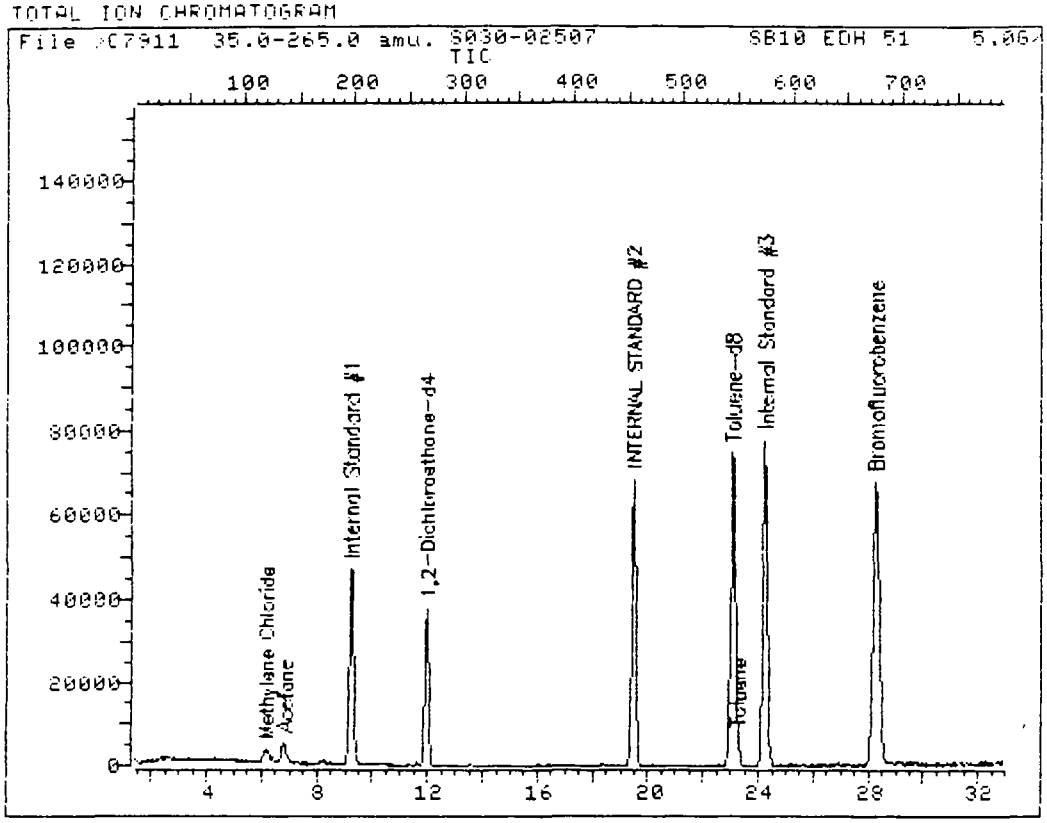


Unknown #,1
Area = 48407.00 Tentative Concentration is 5.00

Sample file: >C7908 Spectrum #: 175

No data base entries were retrieved.

TOTAL ION CHROMATOGRAM



Data File: >C7911::N1 Quant Output File: ^C7911::QT
Name: S030-02507
Misc: SB10 EDH 51 5.0G/5ML INTECH Instrument #3

Id File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

Operator ID: STEVE
Quant Time: 890614 21:17
Injected at: 890614 20:43

QUANT REPORT

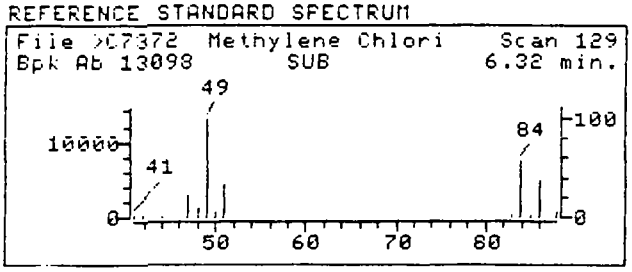
Operator ID: STEVE Quant Rev: 6 Quant Time: 890614 21:17
Output File: ^C7911::QT Injected at: 890614 20:43
Data File: >C7911::N1 Dilution Factor: 1.00000
Name: S030-02507
Misc: SB10 EDH 51 5.0G/5ML INTECH Instrument #3

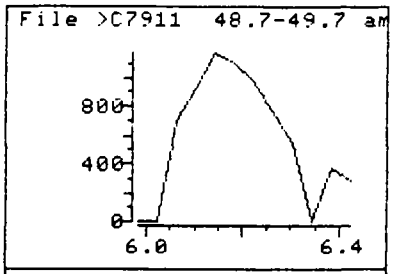
ID File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	74581	50.00	UG/L	77
6)	Methylene Chloride	6.14	84.0	13573	12.70	UG/L	94
7)	Acetone	6.82	43.0	37274	23.53	UG/L	86
13)	1,2-Dichloroethane-d4	11.96	65.0	177182	40.35	UG/L	81
15)	*1,4-Difluorobenzene	19.48	114.0	262720	50.00	UG/L	69
29)	*Chlorobenzene-d5	24.26	117.0	252966	50.00	UG/L	99
34)	Toluene	23.26	92.0	11589	2.95	UG/L	99
35)	Toluene-d8	23.07	98.0	295671	51.68	UG/L	99
40)	Bromofluorobenzene	28.28	95.0	211658	51.94	UG/L	97

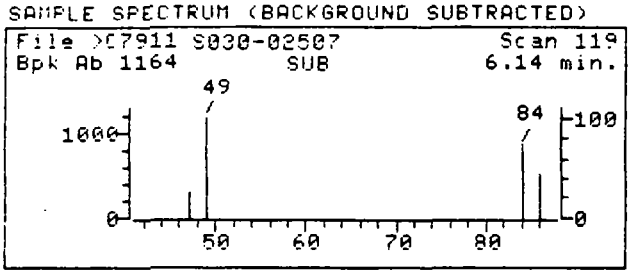
* Compound is ISTD

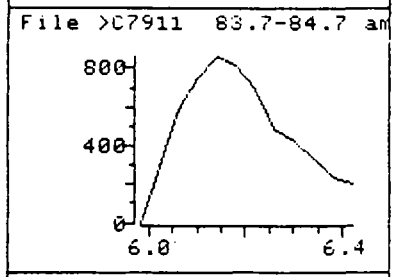
REFERENCE STANDARD SPECTRUM





SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





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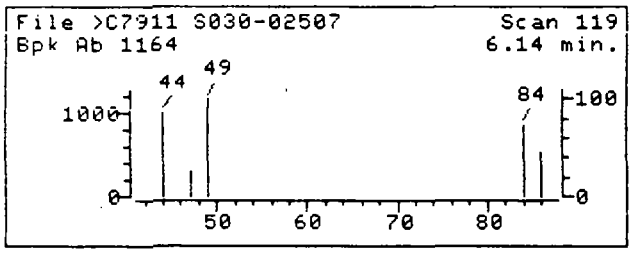
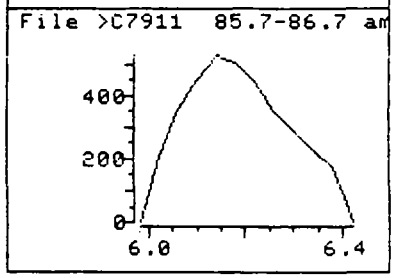
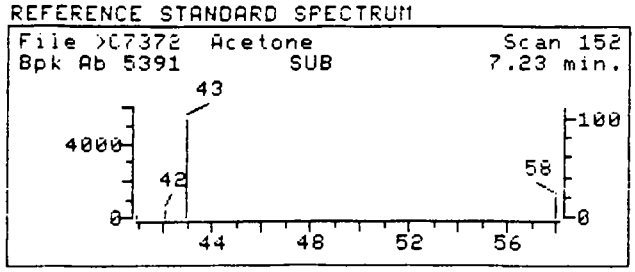




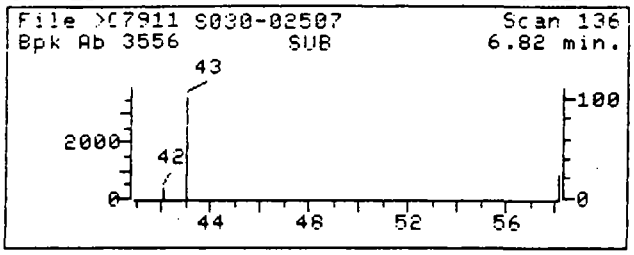
Data File: >C7911::N1 Quant Output File: ^C7911::QT
Name: S030-02507
Misc: SB10 EDH 51 5.0G/5ML INTECH Instrument #3
Quant Time: 890614 21:17 Quant ID File: CLPVOA::N3
Injected at: 890614 20:43 Last Calibration: 890614 18:05

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 119
Retention Time: 6.14 min.
Quant Ion: 84.0
Area: 13573
Concentration: 12.70 UG/L
q-value: 94

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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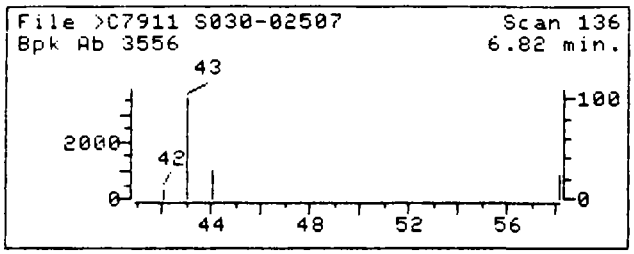
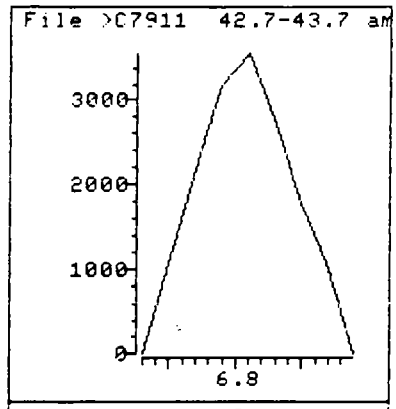
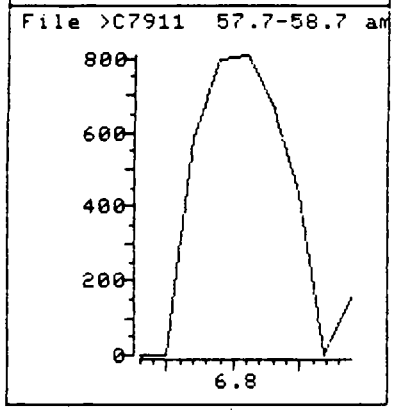




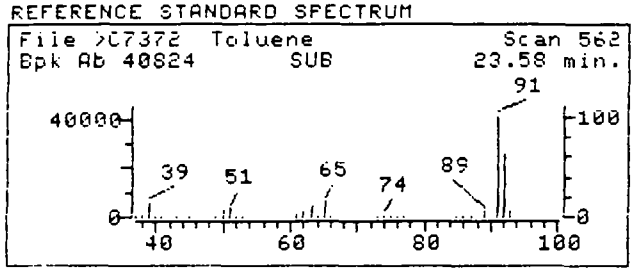


Data File: >C7911::N1
Name: S030-02507
Misc: SB10 EDH 51 5.0G/5ML
Quant Time: 890614 21:17
Injected at: 890614 20:43

Quant Output File: ^C7911::QT
INTECH Instrument #3
Quant ID File: CLPVOA::N3
Last Calibration: 890614 18:05

Compound No: 7
Compound Name: Acetone
Scan Number: 136
Retention Time: 6.82 min.
Quant Ion: 43.0
Area: 37274
Concentration: 23.53 UG/L
q-value: 86

REFERENCE STANDARD SPECTRUM



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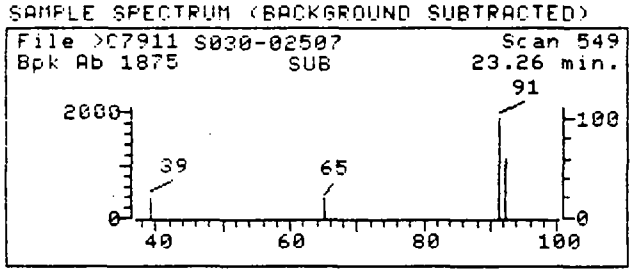
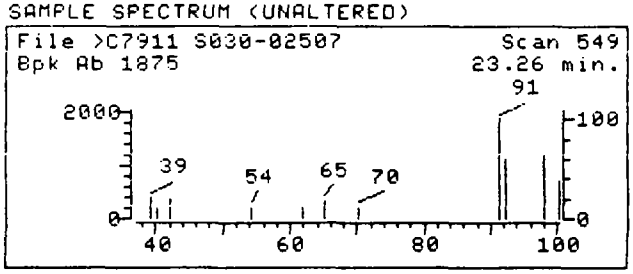
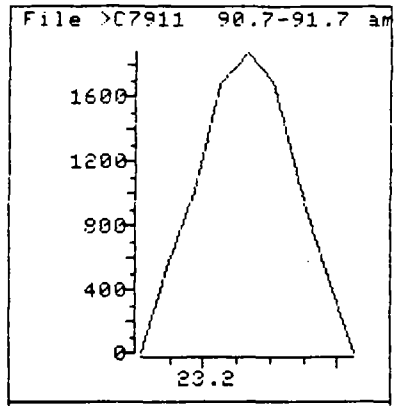
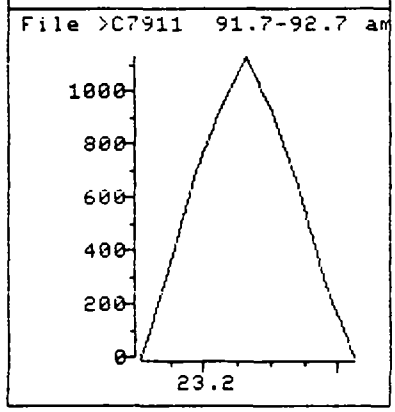


SAMPLE SPECTRUM (UNALTERED)





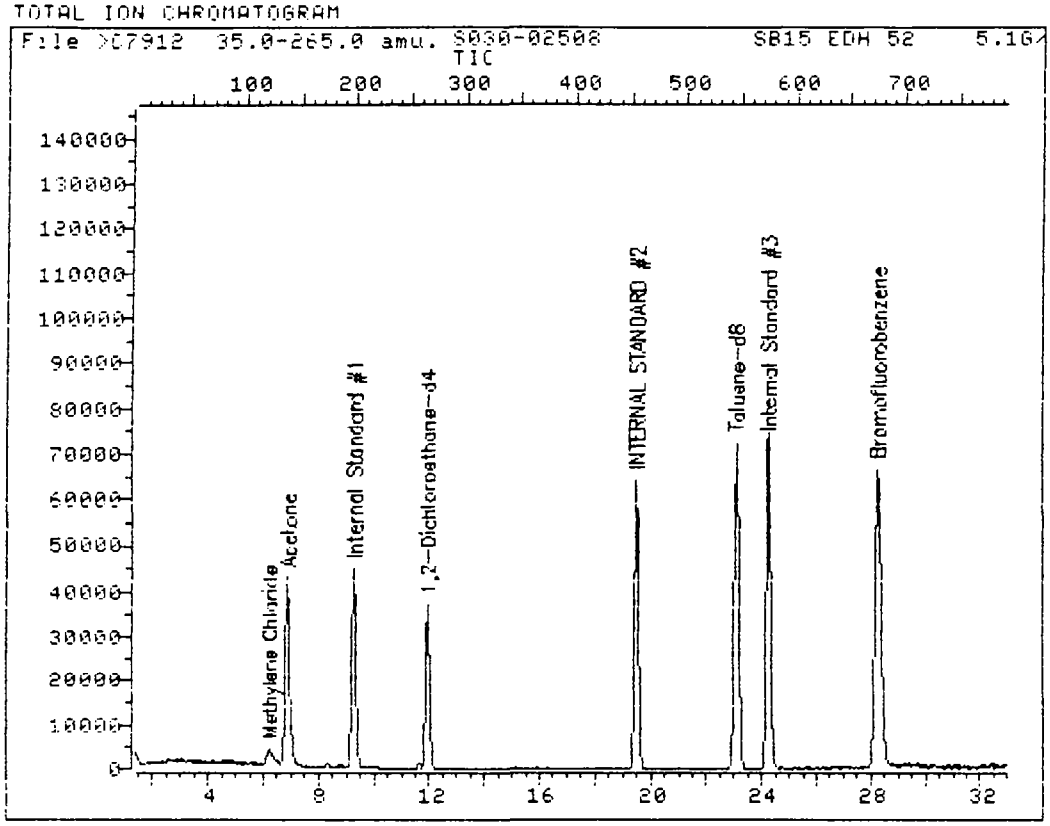


Data File: >C7911::N1
Name: S030-02507
Misc: SB10 EDH 51 5.0G/5ML
Quant Time: 890614 21:17
Injected at: 890614 20:43

Quant Output File: ^C7911::QT
INTECH Instrument #3
Quant ID File: CLPVOA::N3
Last Calibration: 890614 18:05

Compound No: 34
Compound Name: Toluene
Scan Number: 549
Retention Time: 23.26 min.
Quant Ion: 92.0
Area: 11589
Concentration: 2.95 UG/L
q-value: 99

TOTAL ION CHROMATOGRAM



Data File: >C7912::N1 Quant Output File: ^C7912::QT
Name: S030-02508
Misc: SB15 EDH 52 5.1G/5ML INTECH Instrument #3

Id File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

Operator ID: STEVE
Quant Time: 890614 21:55
Injected at: 890614 21:21

QUANT REPORT

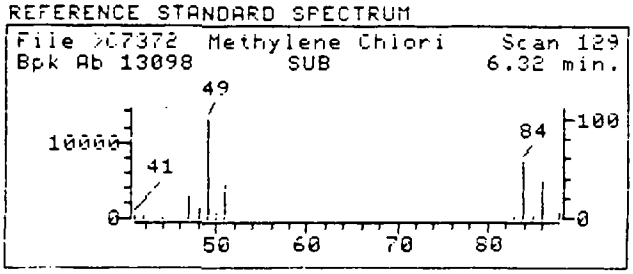
Operator ID: STEVE Quant Rev: 6 Quant Time: 890614 21:55
Output File: ^C7912::QT Injected at: 890614 21:21
Data File: >C7912::N1 Dilution Factor: 1.00000
Name: S030-02508
Misc: SB15 EDH 52 5.1G/5ML INTECH Instrument #3

ID File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

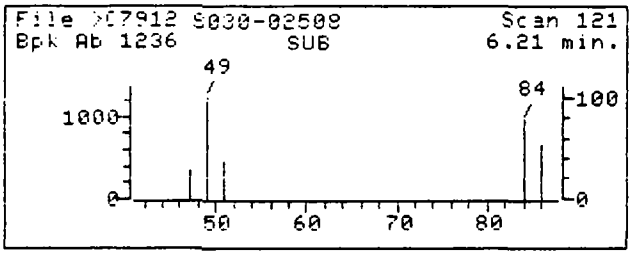
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.28	128.0	68102	50.00	UG/L	91
6)	Methylene Chloride	6.21	84.0	17705	18.15	UG/L	8[illegible]
7)	Acetone	6.89	43.0	315198	217.93	UG/L	88
13)	1,2-Dichloroethane-d4	11.94	65.0	172903	43.12	UG/L	81
15)	*1,4-Difluorobenzene	19.51	114.0	247319	50.00	UG/L	6[illegible]
29)	*Chlorobenzene-d5	24.25	117.0	238026	50.00	UG/L	9[illegible]
35)	Toluene-d8	23.09	98.0	271454	50.43	UG/L	96
40)	Bromofluorobenzene	28.27	95.0	206159	53.76	UG/L	9[illegible]

* Compound is ISTD

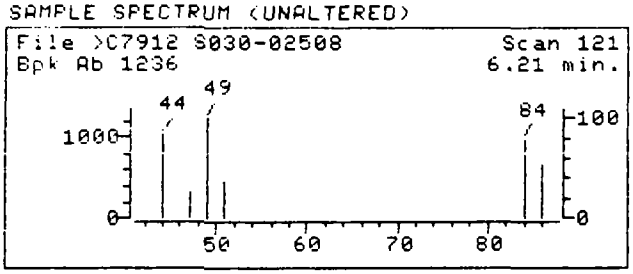
REFERENCE STANDARD SPECTRUM

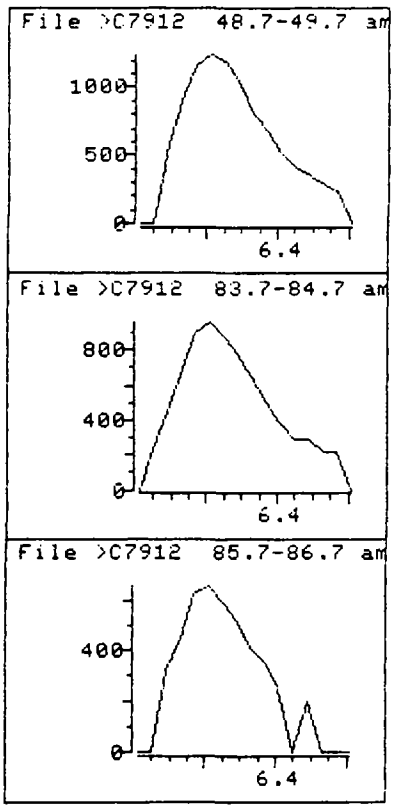


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

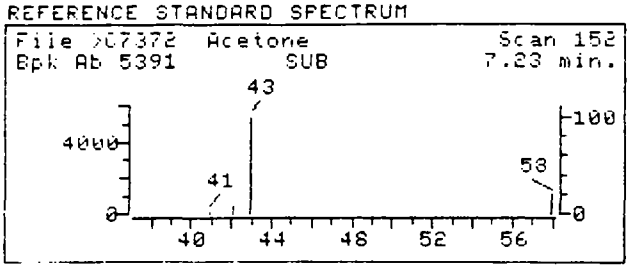




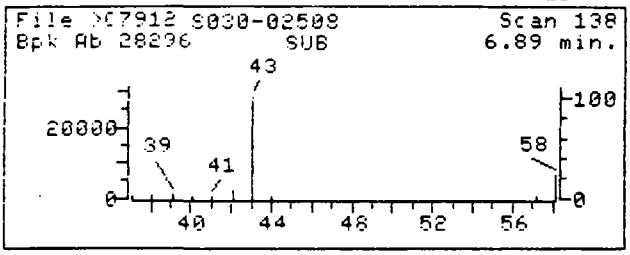
Data File: >C7912::N1 Quant Output File: ^C7912::QT
Name: S030-02508
Misc: SB15 EDH 52 5.1G/5ML INTECH Instrument #3
Quant Time: 890614 21:55 Quant ID File: CLPVOA::N3
Injected at: 890614 21:21 Last Calibration: 890614 18:05

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 121
Retention Time: 6.21 min.
Quant Ion: 84.0
Area: 17705
Concentration: 18.15 UG/L
q-value: 86

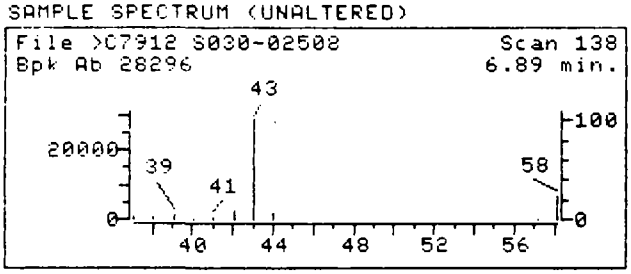
REFERENCE STANDARD SPECTRUM

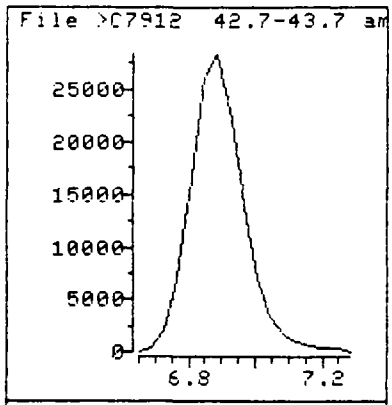


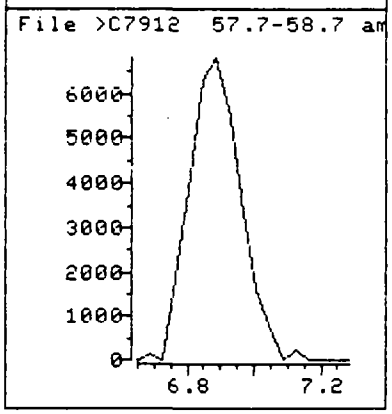
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





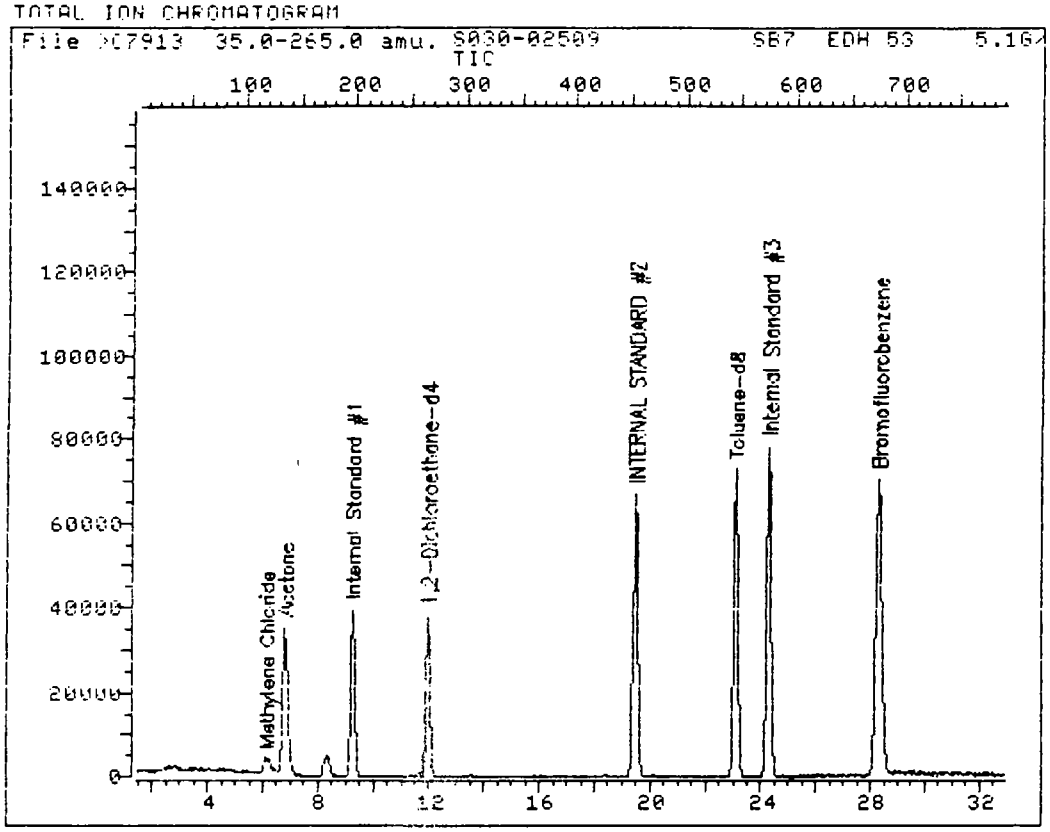


Data File: >C7912::N1
Name: S030-02508
Misc: SB15 EDH 52 5.1G/5ML
Quant Time: 890614 21:55
Injected at: 890614 21:21

Quant Output File: ^C7912::QT
INTECH Instrument #3
Quant ID File: CLPVOA::N3
Last Calibration: 890614 18:05

Compound No: 7
Compound Name: Acetone
Scan Number: 138
Retention Time: 6.89 min.
Quant Ion: 43.0
Area: 315198
Concentration: 217.93 UG/L
q-value: 88

TOTAL ION CHROMATOGRAM

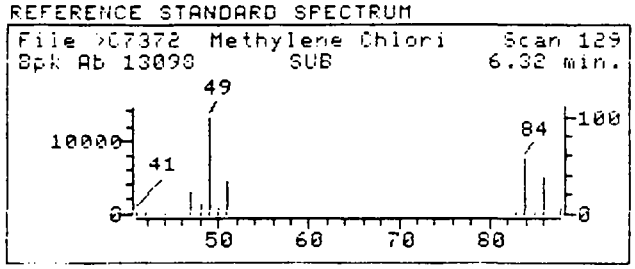


Data File: >C7913::N1 Quant Output File: ^C7913::QT
Name: S030-02509
Misc: SB7 ,EDH 53 5.1G/5ML INTECH Instrument #3

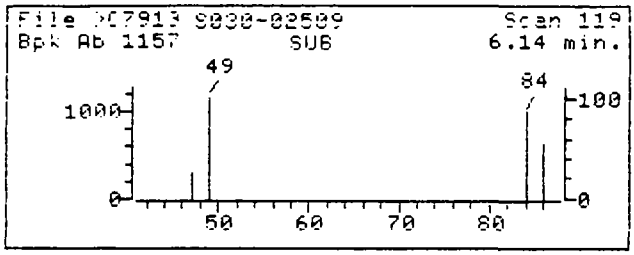
Id File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

Operator ID: STEVE
Quant Time: 890614 22:33
Injected at: 890614 21:59

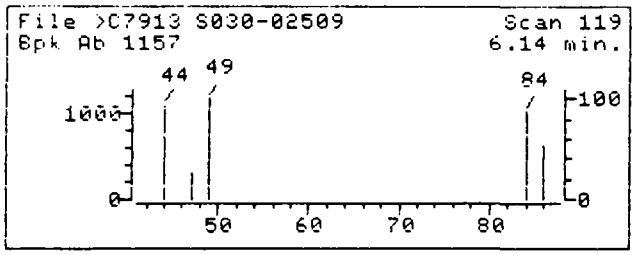
REFERENCE STANDARD SPECTRUM

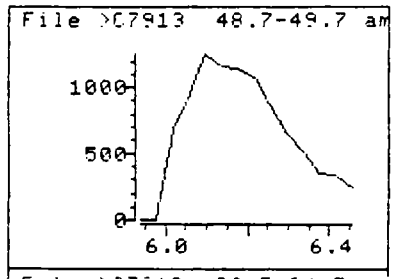


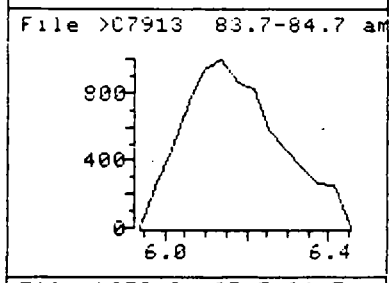
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

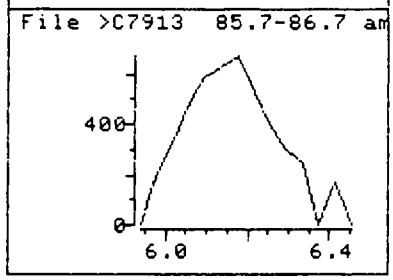


SAMPLE SPECTRUM (UNALTERED)



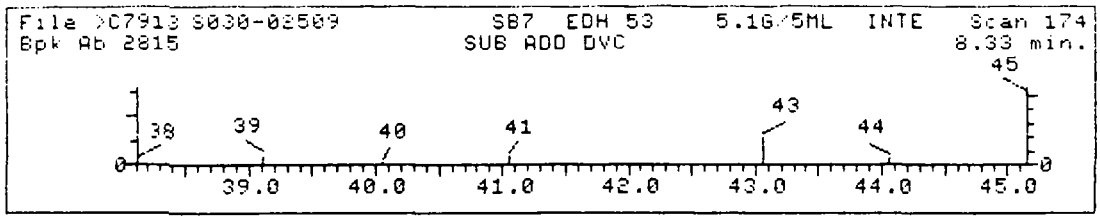






Data File: >C7913::N1 Quant Output File: ^C7913::QT
Name: S030-02509
Misc: SB7 EDH 53 5.1G/5ML INTECH Instrument #3
Quant Time: 890614 22:33 Quant ID File: CLPVOA::N3
Injected at: 890614 21:59 Last Calibration: 890614 18:05

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 119
Retention Time: 6.14 min.
Quant Ion: 84.0
Area: 16755
Concentration: 20.13 UG/L
q-value: 78

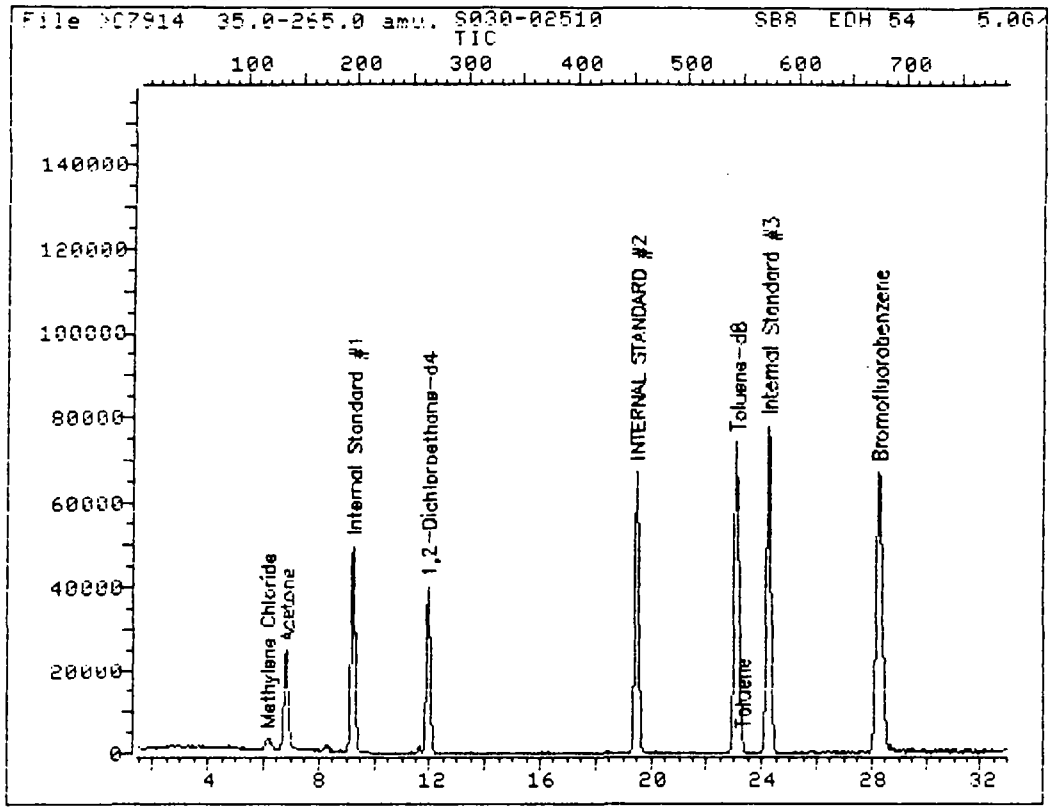


. Unknown #,1
Area = 64148.00 Tentative Concentration is 8.00

Sample file: >C7913 Spectrum #: 174

No data base entries were retrieved.

TOTAL ION CHROMATOGRAM



Data File: >C7914::N1 Quant Output File: ^C7914::QT
Name: S030-02510
Misc: SB8 EDH 54 5.0G/5ML INTECH Instrument #3

Id File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

Operator ID: STEVE
Quant Time: 890614 23:11
Injected at: 890614 22:38

QUANT REPORT

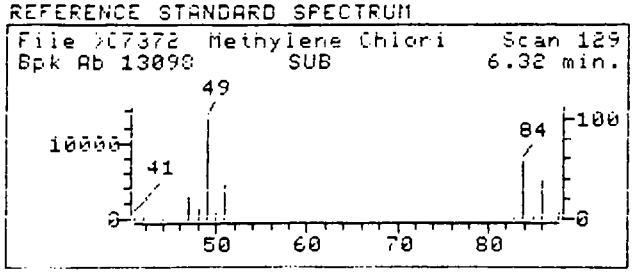
Operator ID: STEVE Quant Rev: 6 Quant Time: 890614 23:11
Output File: ^C7914::QT Injected at: 890614 22:38
Data File: >C7914::N1 Dilution Factor: 1.00000
Name: S030-02510
Misc: SB8 EDH 54 5.0G/5ML INTECH Instrument #3

ID File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890614 18:05

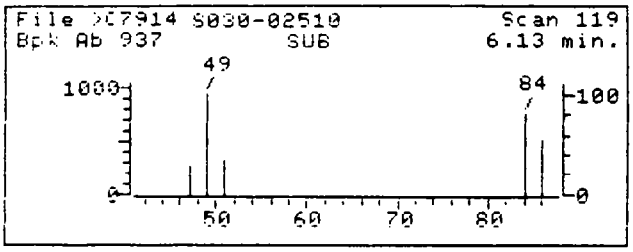
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.23	128.0	73329	50.00	UG/L	88
6)	Methylene Chloride	6.13	84.0	12770	12.16	UG/L	83
7)	Acetone	6.84	43.0	180596	115.96	UG/L	81
13)	1,2-Dichloroethane-d4	11.94	65.0	188121	43.57	UG/L	79
15)	*1,4-Difluorobenzene	19.47	114.0	259564	50.00	UG/L	69
29)	*Chlorobenzene-d5	24.25	117.0	246384	50.00	UG/L	9[illegible]
34)	Toluene	23.29	92.0	6586	1.72	UG/L	9[illegible]
35)	Toluene-d8	23.09	98.0	280150	50.28	UG/L	97
40)	Bromofluorobenzene	28.27	95.0	205679	51.82	UG/L	9[illegible]

* Compound is ISTD

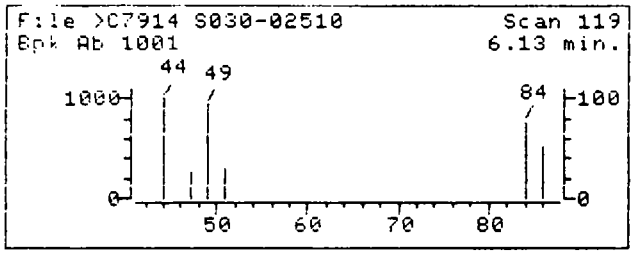
REFERENCE STANDARD SPECTRUM

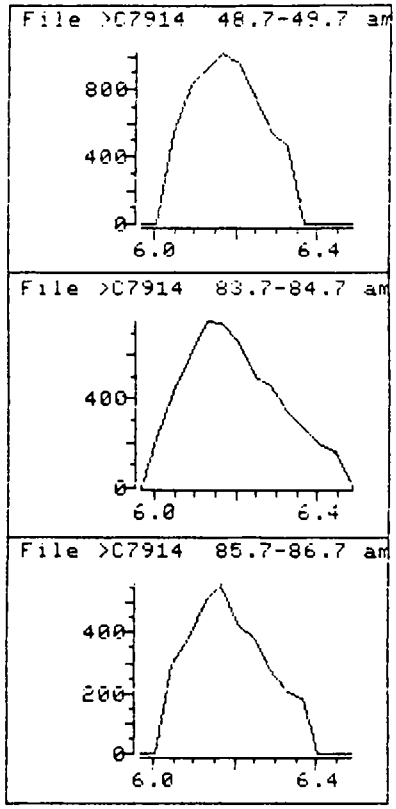


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

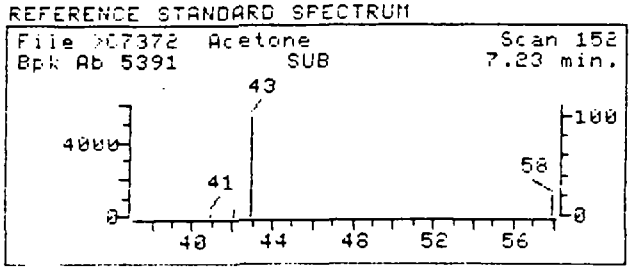




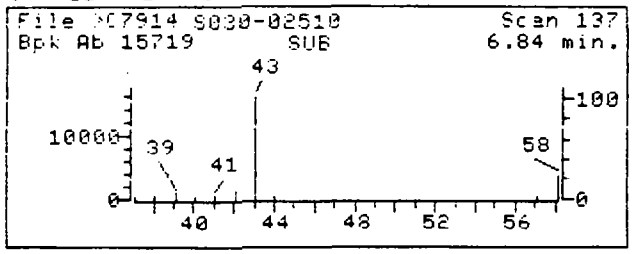
Data File: >C7914::N1 Quant Output File: ^C7914::QT
Name: S030-02510
Misc: SB8 EDH 54 5.0G/5ML INTECH Instrument #3
Quant Time: 890614 23:11 Quant ID File: CLPVOA::N3
Injected at: 890614 22:38 Last Calibration: 890614 18:05

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 119
Retention Time: 6.13 min.
Quant Ion: 84.0
Area: 12770
Concentration: 12.16 UG/L
q-value: 83

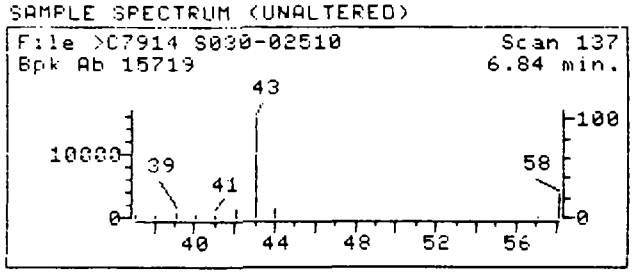
REFERENCE STANDARD SPECTRUM

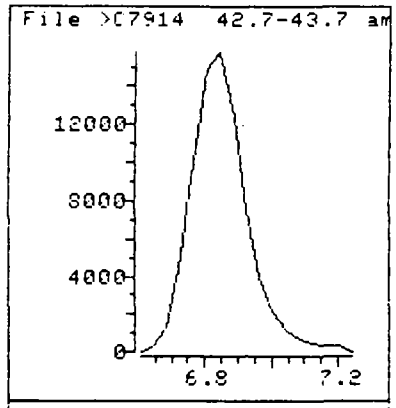


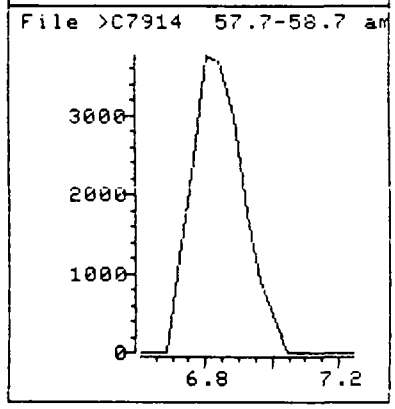
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







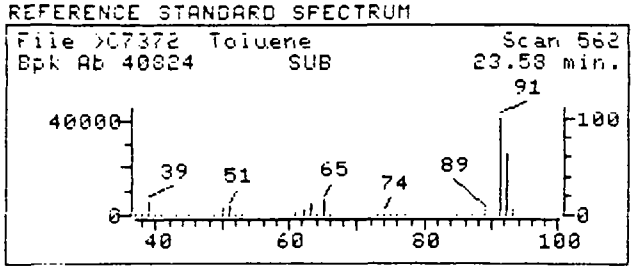
Data File: >C7914::N1
Name: S030-02510
Misc: SB8 EDH 54 5.0G/5ML
Quant Time: 890614 23:11
Injected at: 890614 22:38

Quant Output File: ^C7914::QT

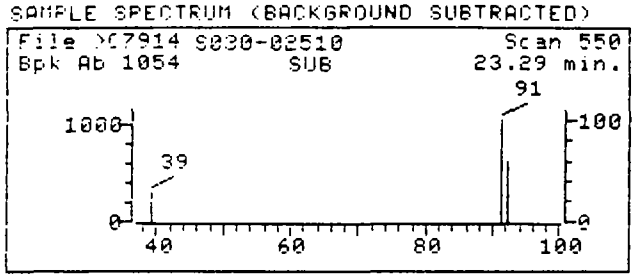
INTECH Instrument #3
Quant ID File: CLPVOA::N3
Last Calibration: 890614 18:09

Compound No: 7
Compound Name: Acetone
Scan Number: 137
Retention Time: 6.84 min.
Quant Ion: 43.0
Area: 180596
Concentration: 115.96 UG/L
q-value: 87

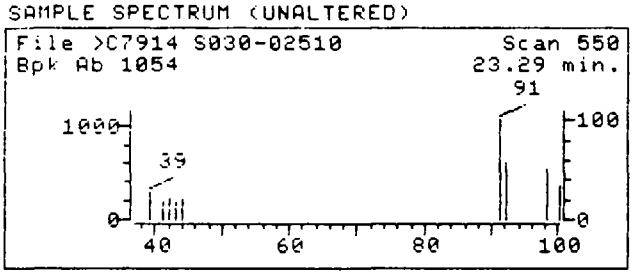
REFERENCE STANDARD SPECTRUM

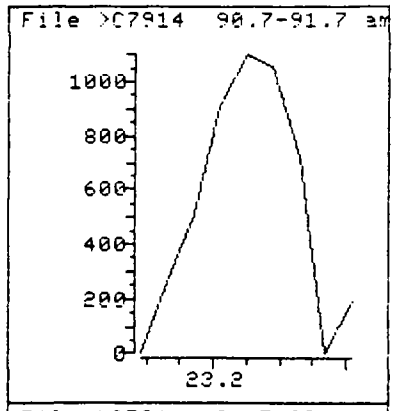


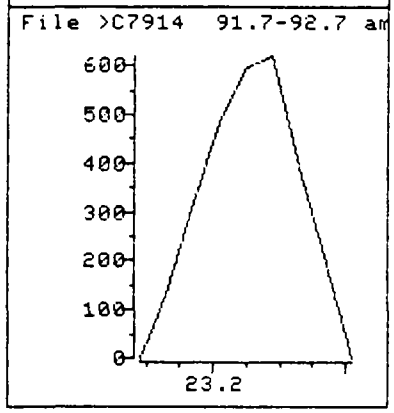
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





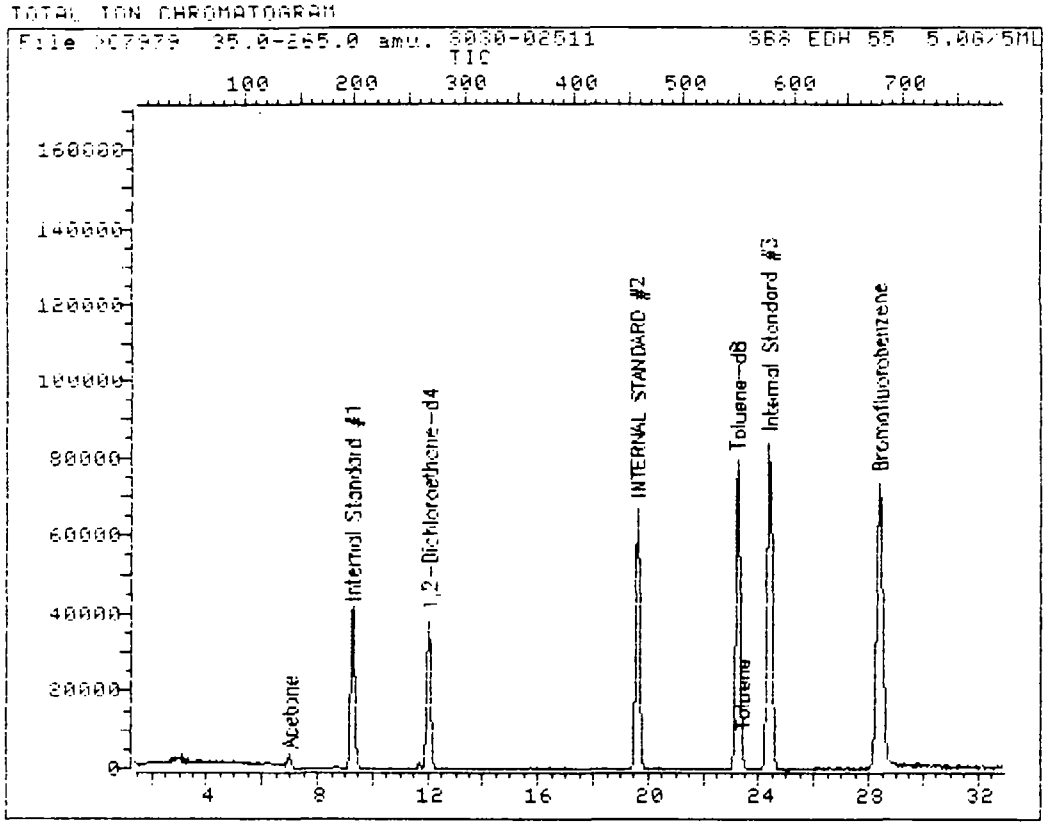


Data File: >C7914::N1
Name: S030-02510
Misc: SB8 EDH 54 5.0G/5ML
Quant Time: 890614 23:11
Injected at: 890614 22:38

Quant Output File: ^C7914::QT
INTECH Instrument #3
Quant ID File: CLPVOA::N3
Last Calibration: 890614 18:05

Compound No: 34
Compound Name: Toluene
Scan Number: 550
Retention Time: 23.29 min.
Quant Ion: 92.0
Area: 6586
Concentration: 1.72 UG/L
q-value: 98

TOTAL ION CHROMATOGRAM



Data File: >C7979::N1 Quant Output File: ^C7979::QT
Name: S030-02511
Misc: SB8 EDH 55 5.0G/5ML INTECH Instrument #3

Id File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890619 12:25

Operator ID: STEVE
Quant Time: 890619 17:47
Injected at: 890619 17:13

QUANT REPORT

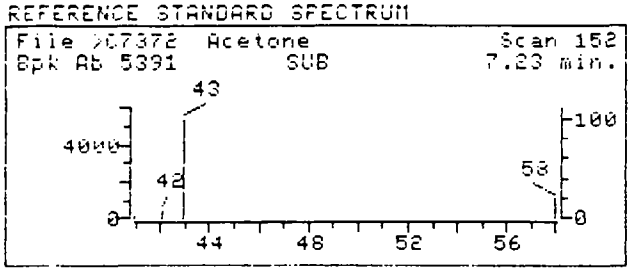
Operator ID: STEVE Quant Rev: 6 Quant Time: 890619 17:47
Output File: ^C7979::QT Injected at: 890619 17:13
Data File: >C7979::N1 Dilution Factor: 1.00000
Name: S030-02511
Misc: S88 EDH 55 5.0G/5ML INTECH Instrument #3

ID File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890619 12:25

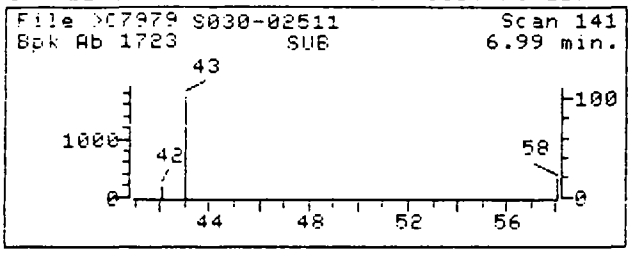
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.26	128.0	59612	50.00	UG/L	71
7)	Acetone	6.99	43.0	15971	14.03	UG/L	78
13)	1,2-Dichloroethane-d4	12.04	65.0	189102	49.82	UG/L	78
15)	*1,4-Difluorobenzene	19.61	114.0	262341	50.00	UG/L	68
29)	*Chlorobenzene-d5	24.39	117.0	248396	50.00	UG/L	91
34)	Toluene	23.39	92.0	5527	1.46	UG/L	95
35)	Toluene-d8	23.23	98.0	301761	51.31	UG/L	98
40)	Bromofluorobenzene	28.41	95.0	226141	54.81	UG/L	94

* Compound is ISTD

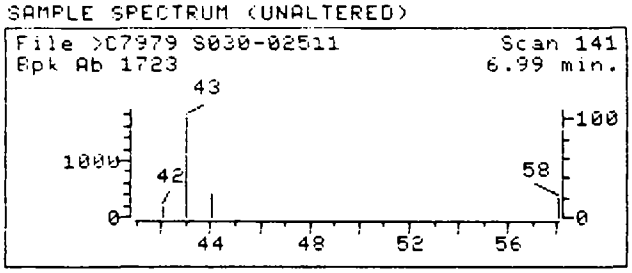
REFERENCE STANDARD SPECTRUM

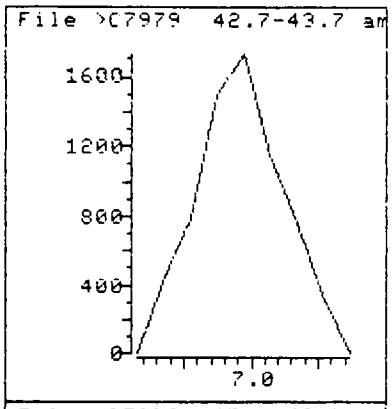


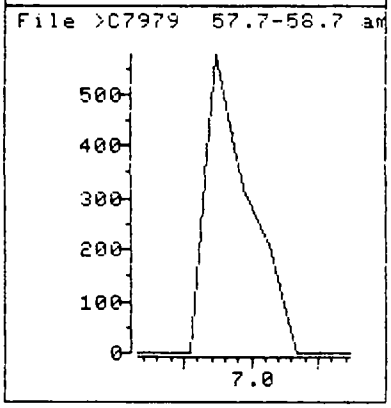
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



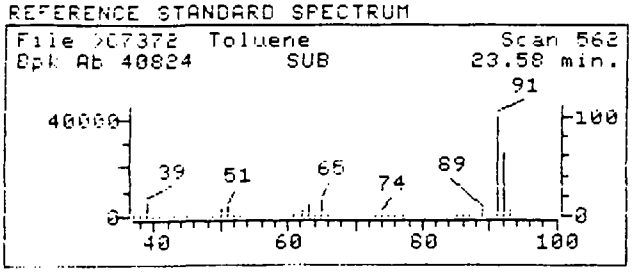




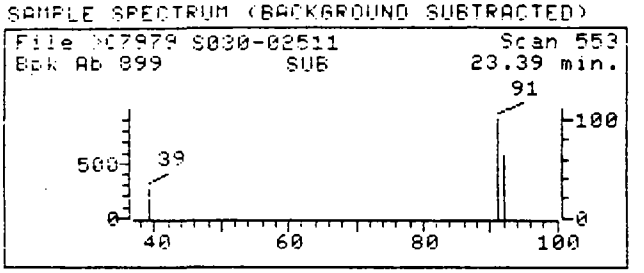
Data File: >C7979::N1 Quant Output File: ^C7979::QT
Name: S030-02511
Misc: SB8 EDH 55 5.0G/5ML INTECH Instrument #3
Quant Time: 890619 17:47 Quant ID File: CLPVOA::N3
Injected at: 890619 17:13 Last Calibration: 890619 12:25

Compound No: 7
Compound Name: Acetone
Scan Number: 141
Retention Time: 6.99 min.
Quant Ion: 43.0
Area: 15971
Concentration: 14.03 UG/L
q-value: 78

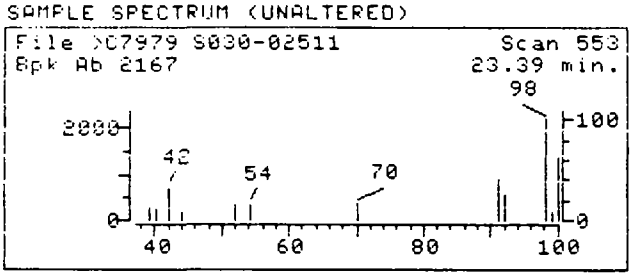
REFERENCE STANDARD SPECTRUM

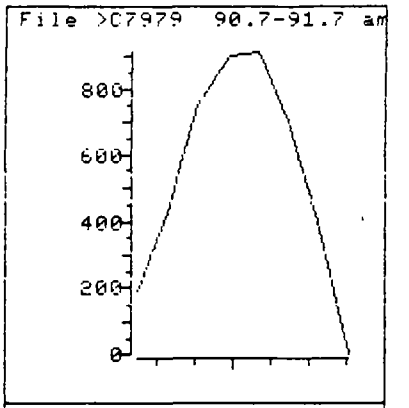


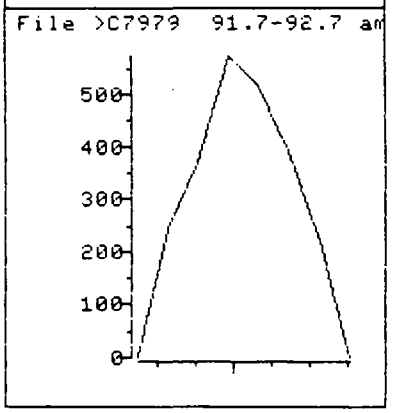
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



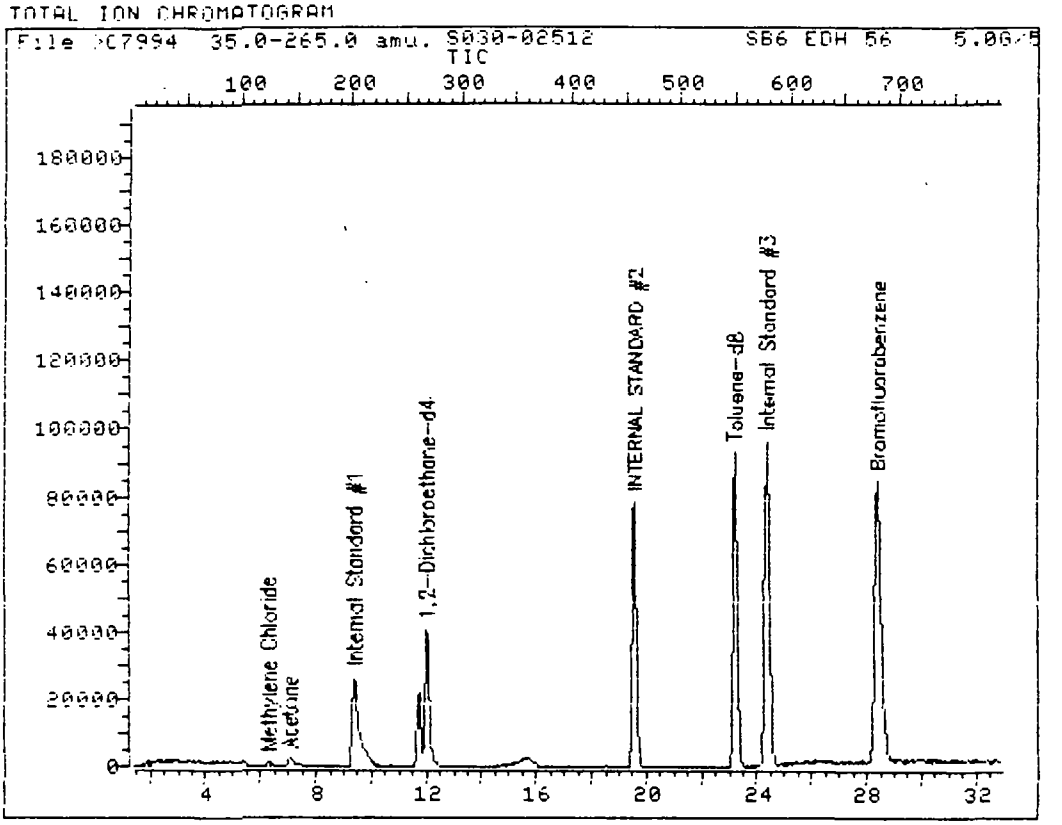




Data File: >C7979::N1 Quant Output File: ^C7979::QT
Name: S030-02511
Misc: SB8 EDH 55 5.0G/5ML INTECH Instrument #3
Quant Time: 890619 17:47 Quant ID File: CLPVOA::N3
Injected at: 890619 17:13 Last Calibration: 890619 12:25

Compound No: 34
Compound Name: Toluene
Scan Number: 553
Retention Time: 23.39 min.
Quant Ion: 92.0
Area: 5527
Concentration: 1.46 UG/L
q-value: 95

TOTAL ION CHROMATOGRAM



Data File: >C7994::N1 Quant Output File: ^C7994::QT
Name: S030-02512
Misc: SB6 EDH 56 5.0G/5ML INTECH Instrument #3

Id File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890620 16:38

Operator ID: STEVE
Quant Time: 890620 17:24
Injected at: 890620 16:50

QUANT REPORT

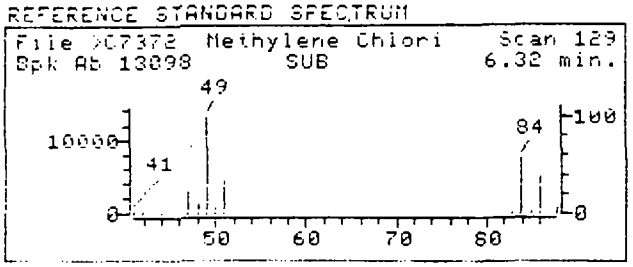
Operator ID: STEVE Quant Rev: 6 Quant Time: 890620 17:24
Output File: ^C7994::QT Injected at: 890620 16:50
Data File: >C7994::N1 Dilution Factor: 1.00000
Name: S030-02512
Misc: SB6 EDH 56 5.0G/5ML INTECH Instrument #3

ID File: CLPVOA::N3
Title: CLP VOA ID FILE
Last Calibration: 890620 16:38

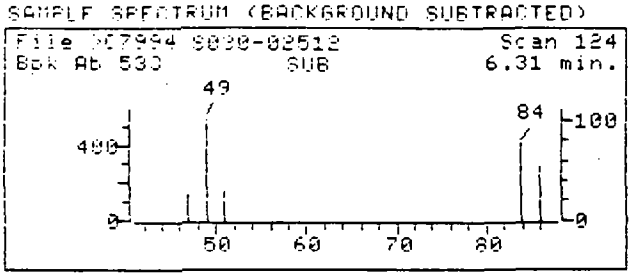
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.42	128.0	66709	50.00	UG/L	73
6)	Methylene Chloride	6.31	84.0	3901	1.86	UG/L	87
7)	Acetone	7.07	43.0	35694	34.54	UG/L	76
13)	1,2-Dichloroethane-d4	12.05	65.0	211463	55.95	UG/L	82
15)	*1,4-Difluorobenzene	19.61	114.0	321395	50.00	UG/L	68
29)	*Chlorobenzene-d5	24.39	117.0	296384	50.00	UG/L	96
35)	Toluene-d8	23.24	98.0	361155	50.45	UG/L	99
40)	Bromofluorobenzene	28.45	95.0	257836	51.24	UG/L	98

* Compound is ISTD

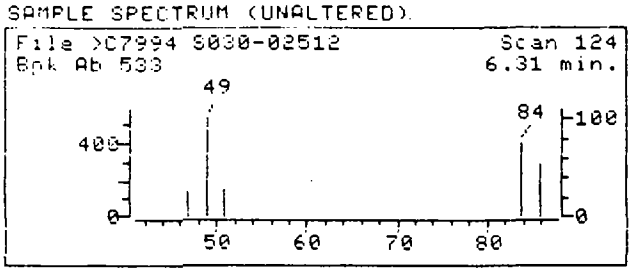
REFERENCE STANDARD SPECTRUM

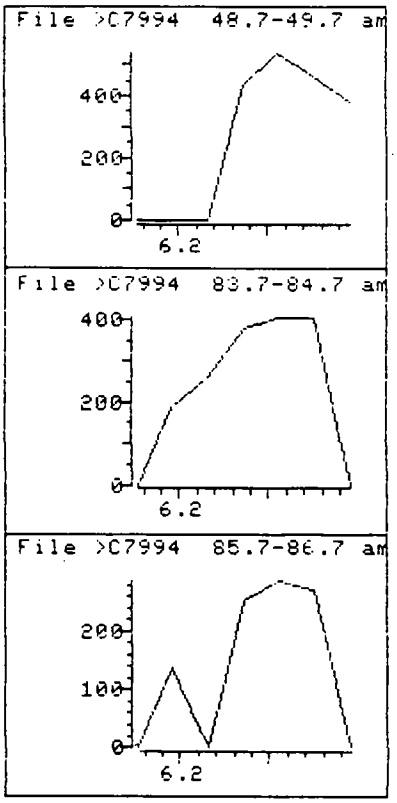


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >C7994::N1 Quant Output File: ^C7994::QT
Name: S030-02512
Misc: SB6 EDH 56 5.0G/5ML INTECH Instrument #3
Quant Time: 890620 17:24 Quant ID File: CLPVOA::N3
Injected at: 890620 16:50 Last Calibration: 890620 16:38

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 124
Retention Time: 6.31 min.
Quant Ion: 84.0
Area: 3901
Concentration: 1.86 UG/L
q-value: 87