NEW YORK STATE SUPERFUND CONTRACT

MULTISITE PSA TASK 4 REPORT

New Cassel Industrial Area Site
North Hempstead, Nassau County

Hopper/Main Street Site	Site No. 130043J
E-Z-EM Site	Site No. 130043N
Tops Appliance City Site	Site No. 130043O
Swalm Avenue Site	Site No. 130043P
Sylvester Street Site	Site No. 130043Q
New Cassel Data Review Sites	Site No. 130043

Work Assignment No. D002676-12B-1

DATE: March 1997

Supporting Documentation - Volume I
GPR Data and SVOC Analytical Data

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
John Cahill, *Acting Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

By:
Lawler, Matusky & Skelly Engineers LLP

NEW YORK STATE SUPERFUND CONTRACT

MULTISITE PSA TASK 4 REPORT

SUPPORTING DOCUMENTATION - VOLUME I
GPR DATA SUMMARY AND SVOC ANALYTICAL DATA

New Cassel Industrial Area Site
North Hempstead, Nassau County

HOPPER/MAIN STREET SITE (Site No. 130043 J)

E-Z-EM SITE (Site No. 130043 N)

TOPS APPLIANCE CITY SITE (Site No. 130043 O)

SWALM AVENUE SITE (Site No. 130043 P)

SYLVESTER STREET SITE (Site No. 130043 Q)

NEW CASSEL DATA REVIEW SITES (Site No. 130043)

Work Assignment No. D002676-12B.1

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233

March 1997

LMSE-97/0081&650/622/623//624/625/626

Prepared by:

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

GPR DATA SUMMARY

SUB-SURFACE INFORMATIONAL SURVEYS, INC. - TABLE OF CONTENTS

GROUND PENETRATING RADAR RESULTS

PRESENTATION MADE TO
LMS Engineers
November 11, 1996
Task 4 - 29 New York Avenue
New Cassel Industrial Area
Westbury, NY

SUB-SURFACE INFORMATIONAL SURVEYS, INC.
P. O. BOX 759 - SOMERS, CT 06071-0759
(CORPORATE HEADQUARTERS)
145 Shaker Road - P. O. Box 452
E. Longmeadow, MA 01028-0452
(203) 749-8434 - (413) 525-4666
FAX (413) 525-2887

November 12, 1996

Mr. Michael Lehtinen, Project Manager
LMS Engineering
1 Blue Hill Plaza
Pearl River, NY 10965

Dear Mr. Lehtinen:

A Ground Penetrating Radar (GPR) survey was conducted at your Super Fund Site - Task 4, 29 New York Avenue, New Cassel Industrial Area, Wesbbury, NY on November 11, 1996. The purpose of the investigation was to delineate possible presence of ***pools*** and some ***pipes/utilities*** within designated area's.

There were two specific area's of concern (AOC) where we profiled a homogeneous signal which was noted on site. In addition, there were several area's within the building which we marked on the floor where there were possible drain pipes. This was done in several rooms. Outside, in the main parking lot, we had observed some profiles of which appeared to be that of possible electrical and sewer lines. These were also noted on site. (See attached overview for their orientation)

Respectfully submitted,

Paul H. Bacon, Jr.
Supervising Technician
PHB/ks

COVER LETTER WITH GRID DEFINITION

The information contained in this report represents the results of a Ground Penetrating Radar (GPR) survey conducted on (November 11, 1996) for (**LMS Engineering)** at the (1) property location of (29 New York Avenue, Westbury, NY) .

The grid for this survey was set up on 2' traverses with transects (@ 90 degree's) the same.

Sub-Surface Informational Surveys, Inc. uses a Subsurface Interface Radar (SIR) System-3 for all of it's surveys. The SIR technique utilizes a high frequency impulse radar technology to obtain a continuous high resolution profile of the subsurface. The system radiates repetitive short-term duration electromagnetic pulses into a dielectric material from a broad band width antenna electromagnetically coupled to the ground surface. The system functions as an echo sounding system using EM impulses of only a few nanoseconds (a billionth of a second) duration and is able to detect the exact location and measure the approximate depth of reflected targets.

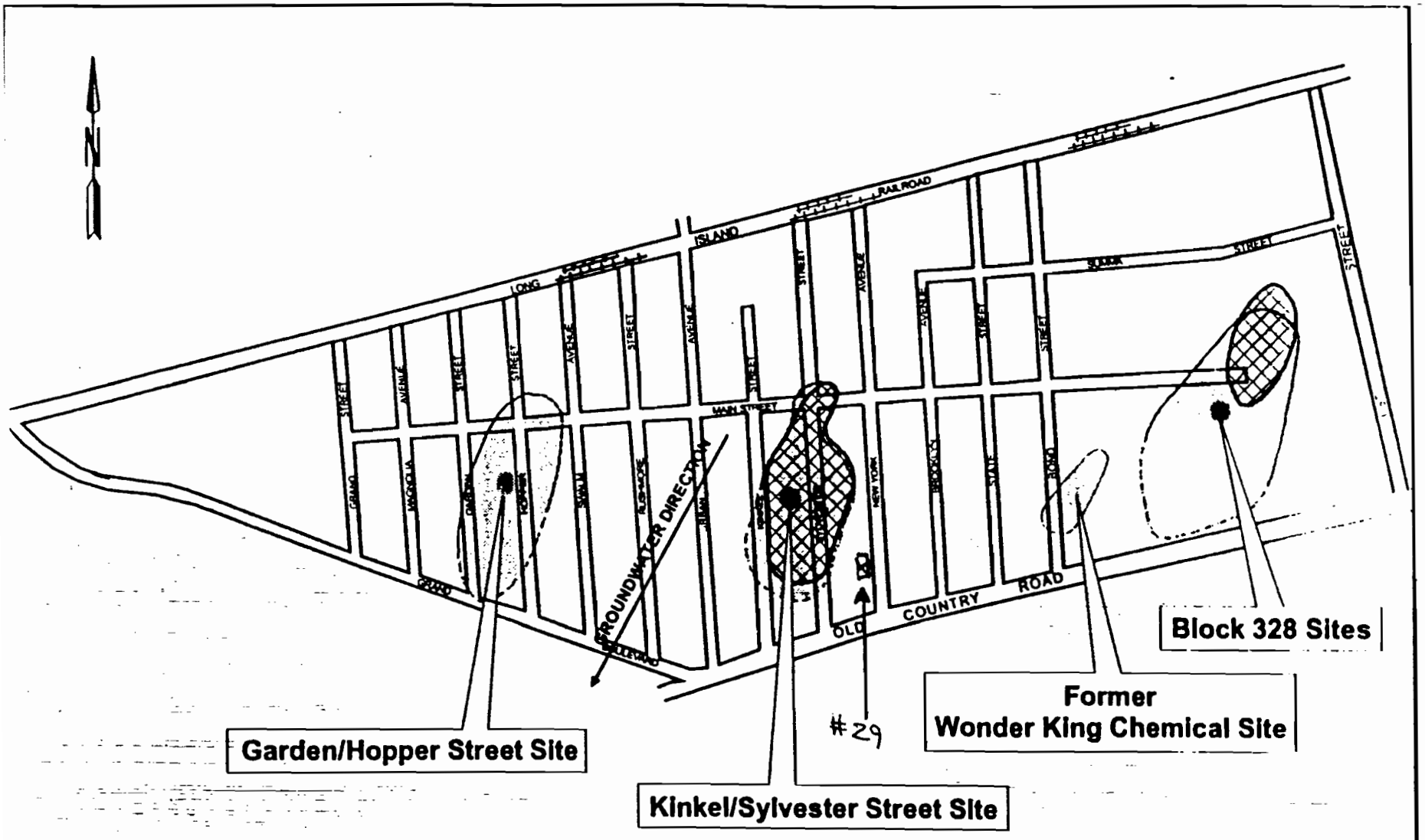
The SIR System-3 used in this investigation consisted of a radar control unit, a line scan graph recorder, and a high frequency transmitter/receiver antenna across the soil/tar to be scanned. The pulses are transmitted into the subsurface and reflected by buried objects within. Reflected signals are detected, processed by the control electronics and printed on the graph recorder. The recorder produces an image by printing strong signals as black and weak signals as white. Intermediate signals such as noise between the surface and interface reflection are in the gray range. By adjusting threshold and controlling gain levels, and the timing function, a quality profile will be obtained.

Subsurface objects reflect EM pulses and produce a "Hyperbola" that identifies precisely the location of the center of the target.

GENERAL MAPS AND/OR SITE MAPS

Any and all site maps and/or plans that have been supplied by you have been duplicated and are part of this report. These are used for reference only and are not necessarily to scale.

NOTE:
THE SUB-SURFACE DRAWINGS CONTAINED IN THIS REPORT ARE NOT MEANT TO BE CAD DRAWINGS. THE PURPOSE OF OUR DRAWINGS ARE TO IDENTIFY THE LOCATION AND/OR ORIENTATION OF SUSPECTED ANOMALIES. THESE DRAWINGS ARE NOT TO SCALE



LEGEND

Total PCE plume (PCE, TCE, DCEs, VC), >100 ppb

Total TCA plume (1,1,1-TCA, DCAs), >100 ppb

0 ~500 ft

APPROXIMATE SCALE
1 in. = 500 ft

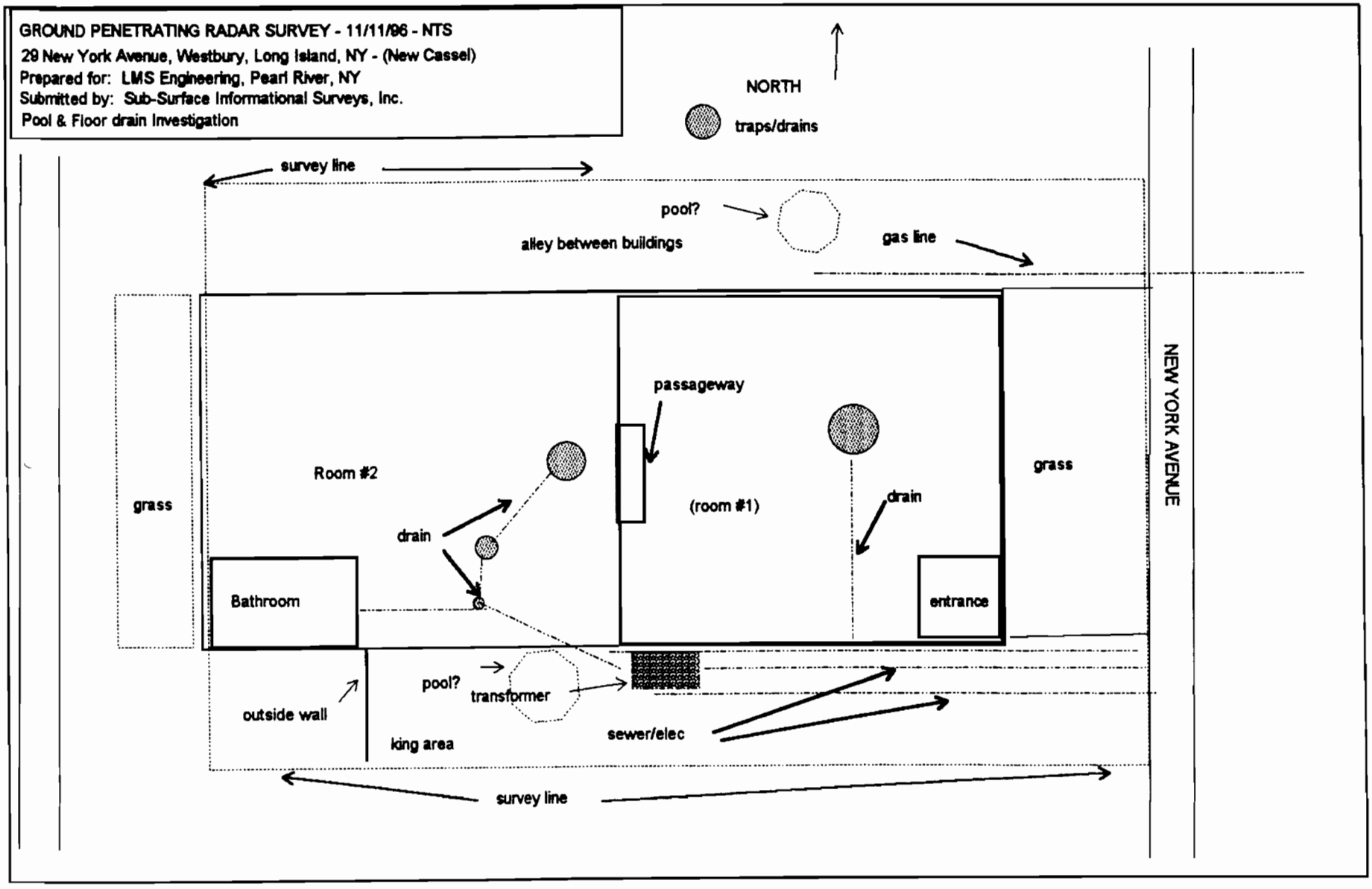
\121plume.ds4

FIGURE 2

SITE PLAN

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043

LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York


GROUND PENETRATING RADAR SURVEY - 11/11/96 - NTS
29 New York Avenue, Westbury, Long Island, NY - (New Cassel)
Prepared for: LMS Engineering, Pearl River, NY
Submitted by: Sub-Surface Informational Surveys, Inc.
Pool & Floor drain Investigation
NORTH
traps/drains
survey line
pool?
alley between buildings
gas line
NEW YORK AVENUE
passageway
Room #2
(room #1)
grass
drain
drain
grass
Bathroom
entrance
pool?
transformer
outside wall
king area
sewer/elec
survey line

GPR OVERVIEW & EXPLANATION

THE ATTACHED PROFILE COPIES ARE A VERY SMALL PORTION OF THE ACTUAL PROFILES TAKEN DURING THIS SURVEY. SOME OF THESE PROFILES HAVE BEEN REDUCED 65% FOR BETTER VIEWING. THE AREA'S OF CONCERN (AOC) HAVE BEEN HIGHLIGHTED IN (YELLOW) FOR QUICK REFERENCE.

THIS REPORT HAS BEEN BROKEN DOWN INTO SECTOR'S. A SECTOR CHANGE WOULD OCCUR WHEN THERE ARE SIGNIFICANT CHANGES IN THE TERRAIN FROM ONE AREA TO ANOTHER OR CHANGE IN VEHICLE/COMPUTER POSITION. (Example: If we had two area's to be surveyed such as a parking lot and a field, we would break this down into two separate sector's for quick & easy reference. Inside of buildings we may break each room or corridor down by sector's)

P-1 through P-4 represents individual transects (@ 90 degree's) of a suspected drain pipe from the former bathroom area in Room #1. This suspect pipe appears to run in a southerly direction to the outside.

P-5 shows a traverse running parallel to New York Avenue running from the south side of room #1 to the north side. The two bench marks (BM) are as we enter the former bathroom area showing what appears to be some of the connecting pipes to the drain area.

P-6 and P-7 appear to show a hyperbolic feature of the continuation of the floor drain from room #2. (see overview for their orientation)

P-8 shows two anomalies. It shows a pipe which was marked on site along with a homogeneous area which was marked a possible *pool* area.

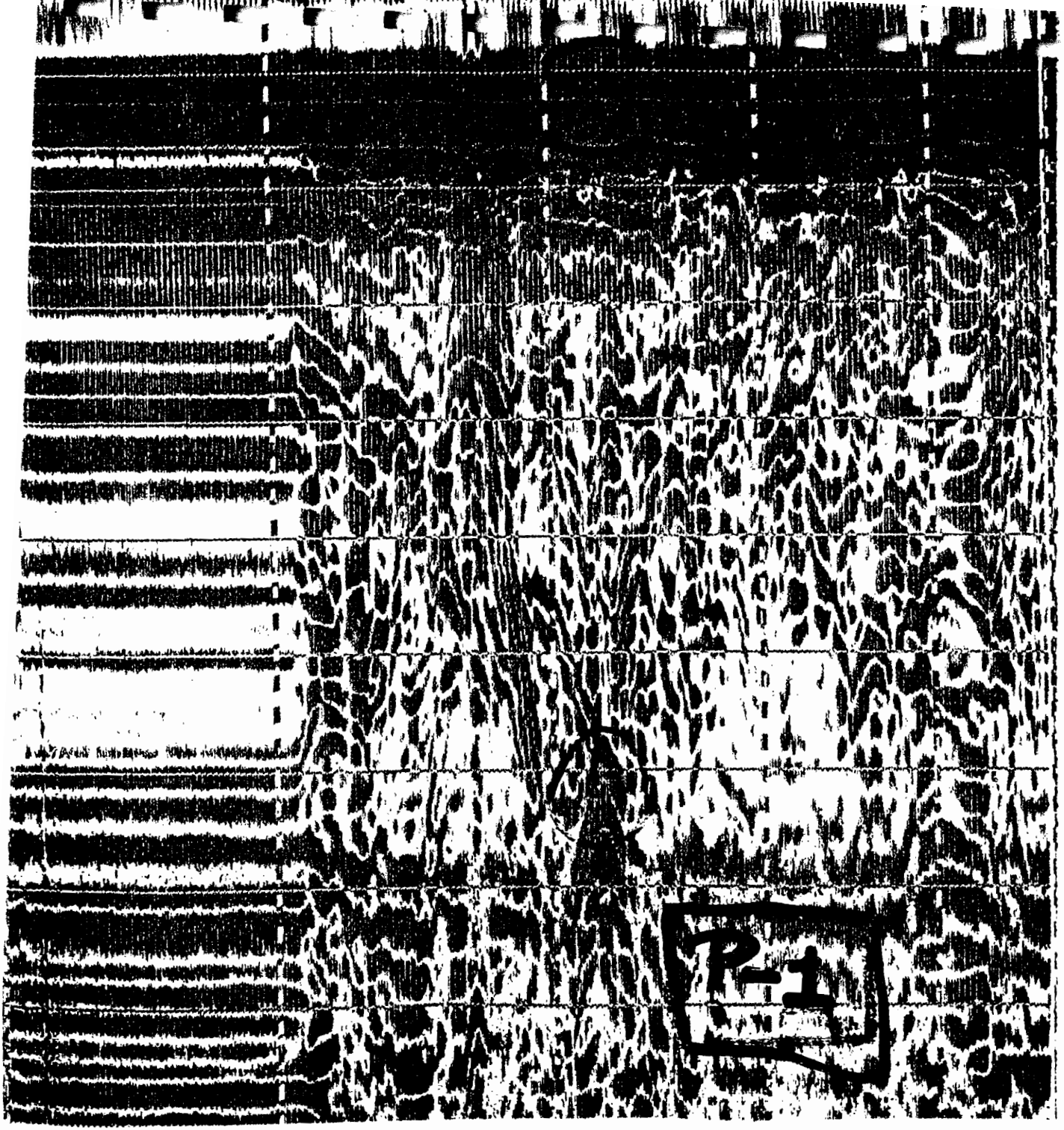
P-9 represents a traverse on the north side of the building (outside) showing another suspected pipe and a homogeneous area which was also noted.

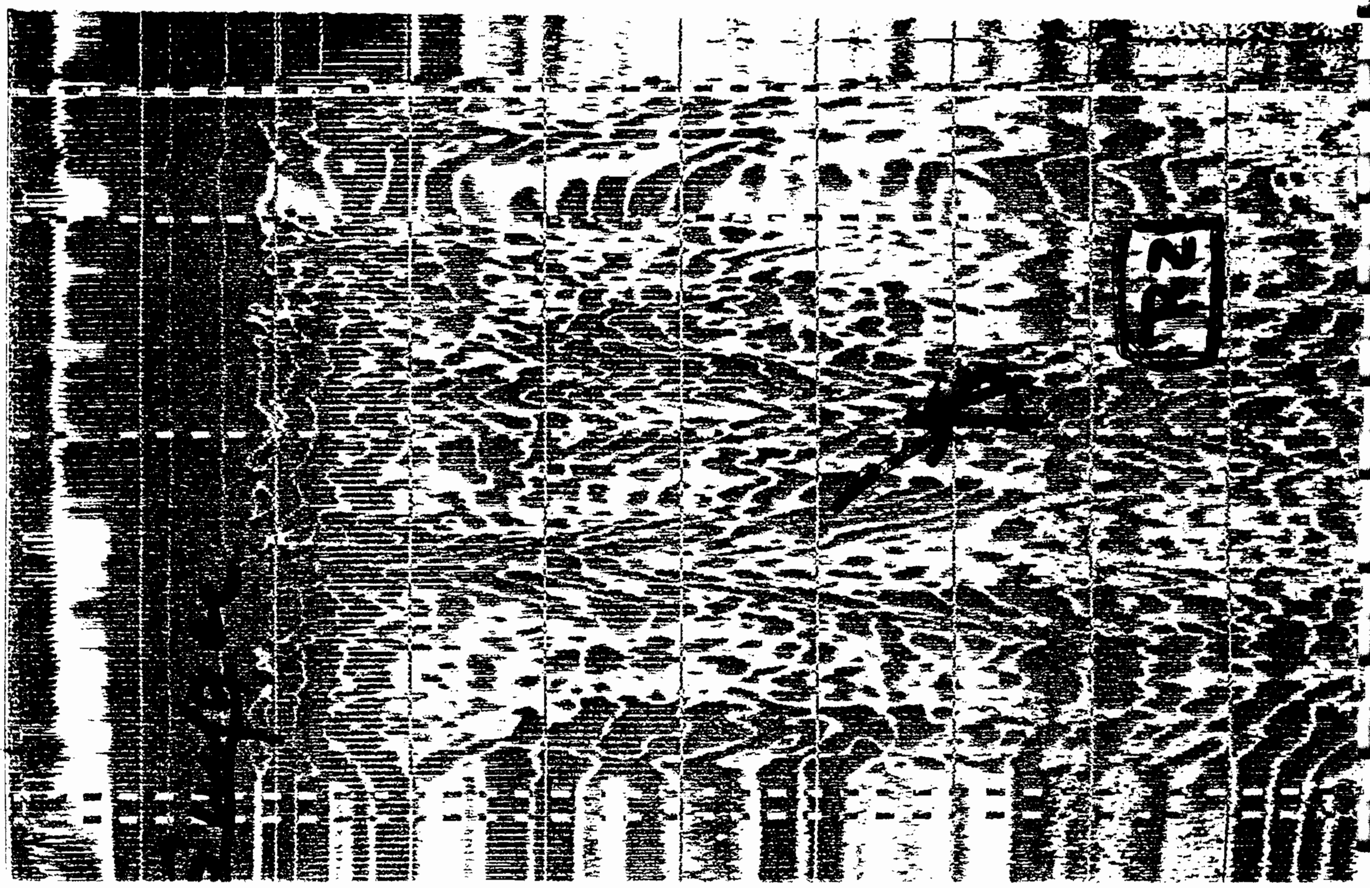
Both of the homogeneous area's appeared to be small (10' X 10") and were marked on site as AOC's.

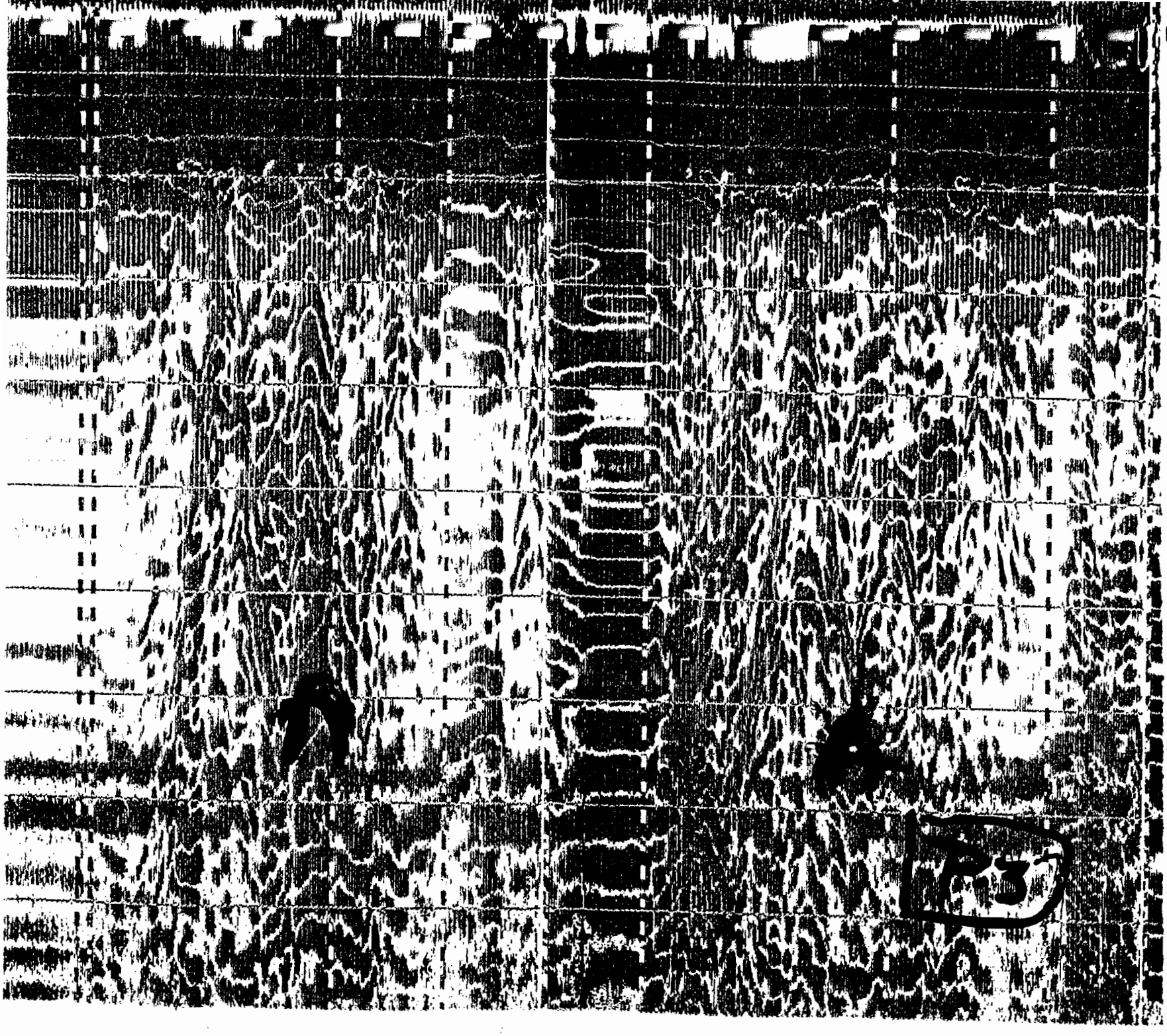
(EOS)

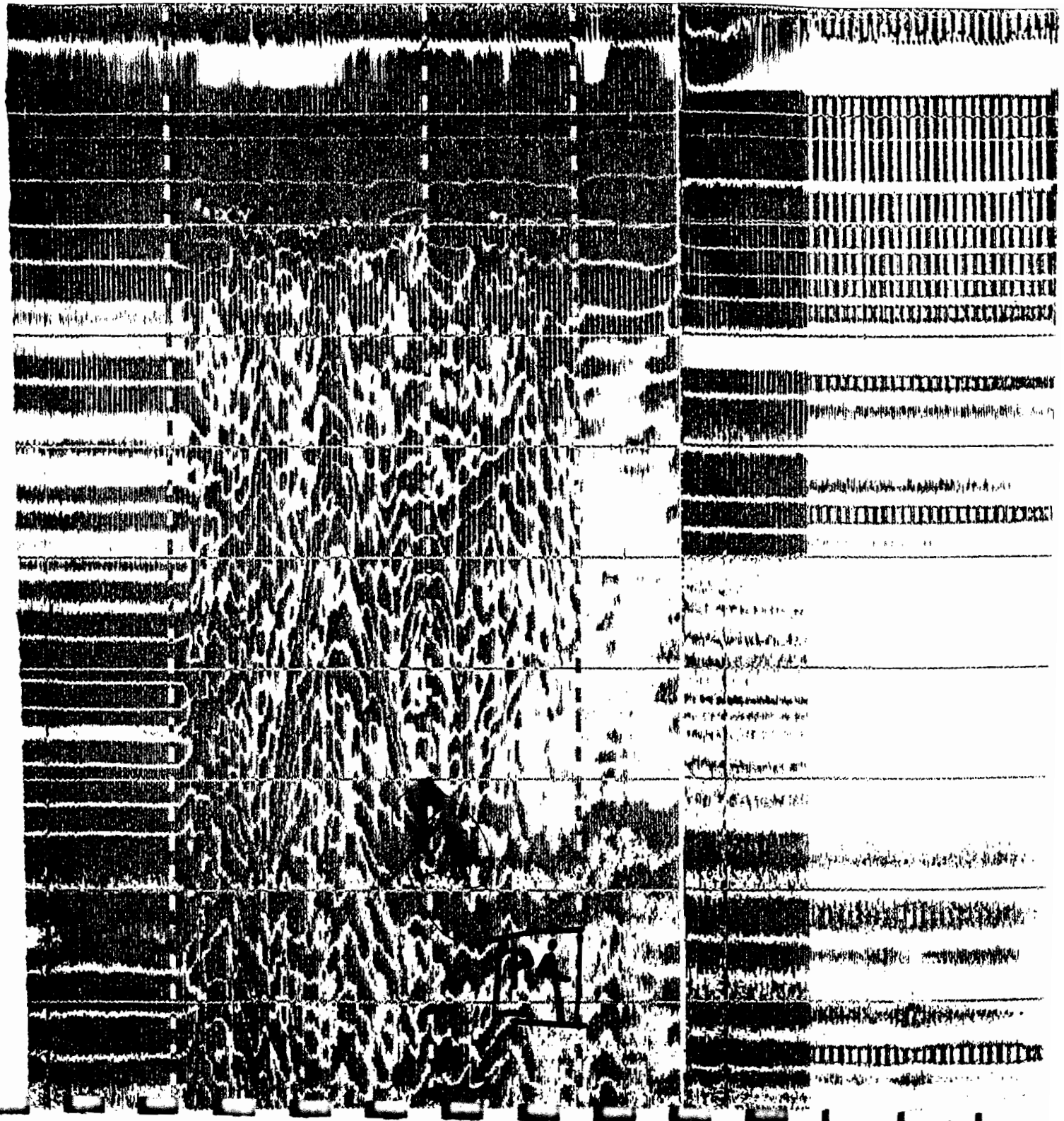
PROFILE COPIES OBTAINED ON SITE

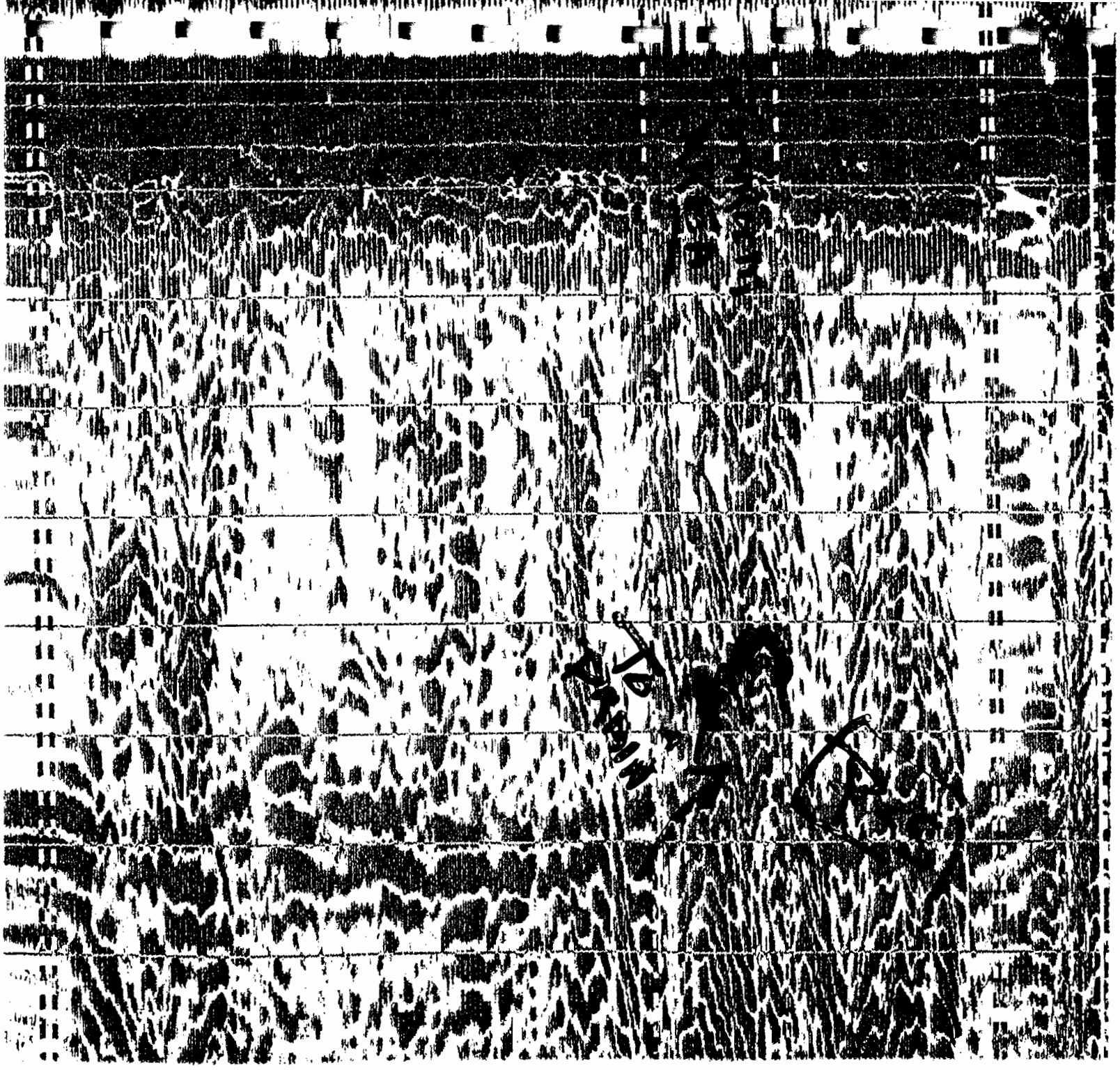
The attached profile copies are a very small portion of the actual profiles taken during the survey. Some of these profiles have been reduced up to 65% for better viewing of an individual traverse. The area's of concern (AOC) have been highlighted for your quick reference

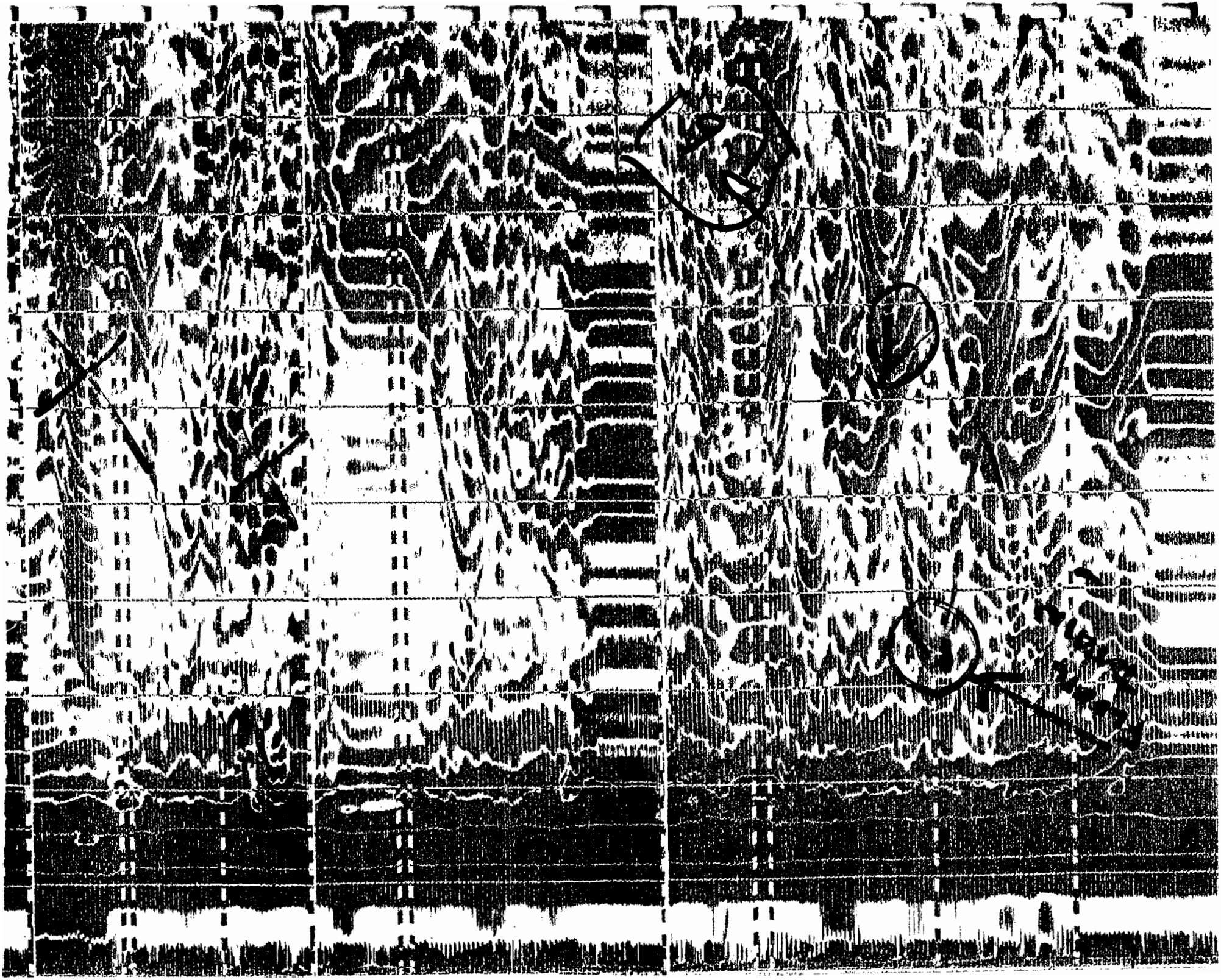

P-1




23

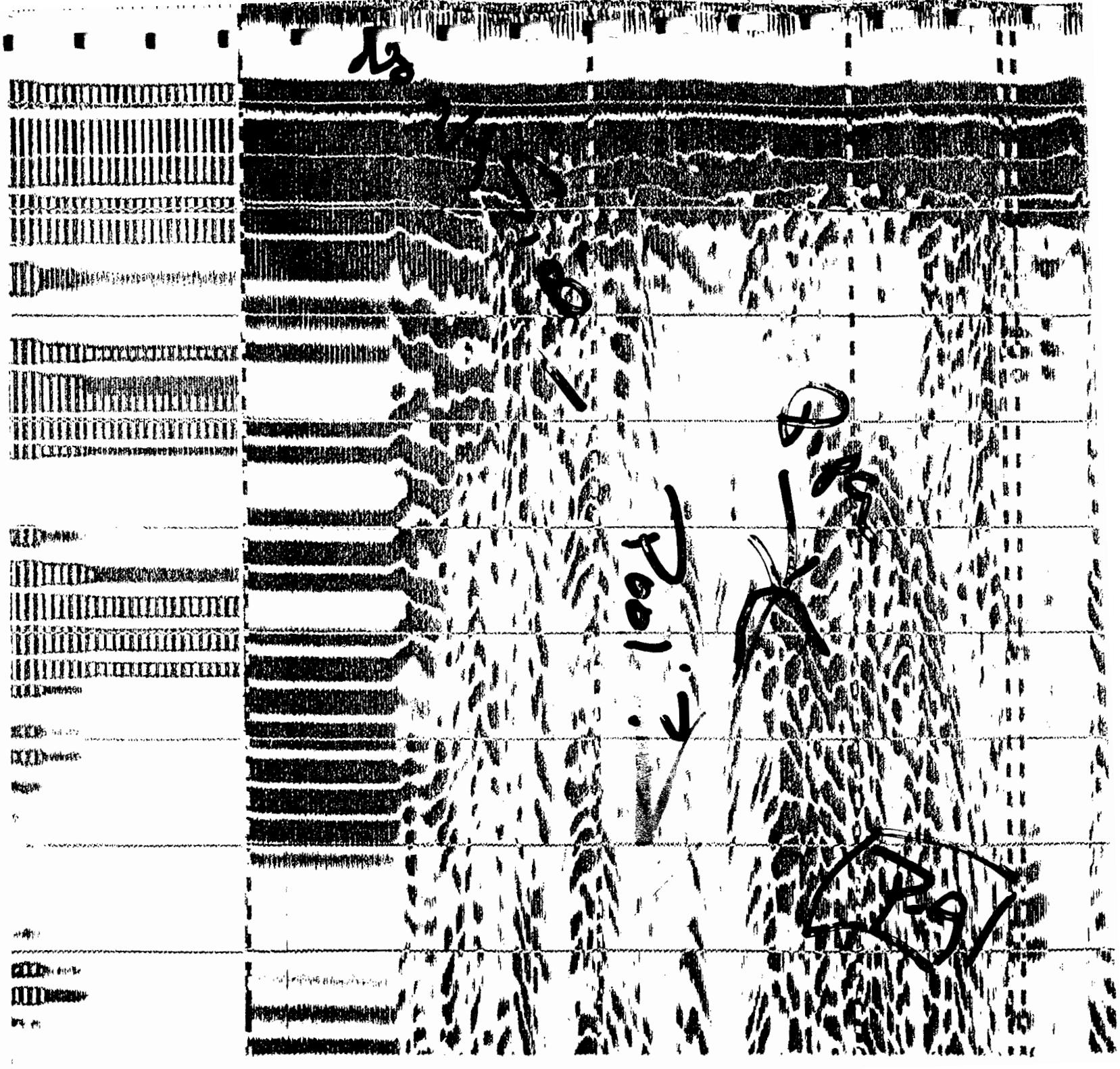






TO OUTSIDE

Nonprofit Agency
Pool
Marked
Site
Proposed
Pool



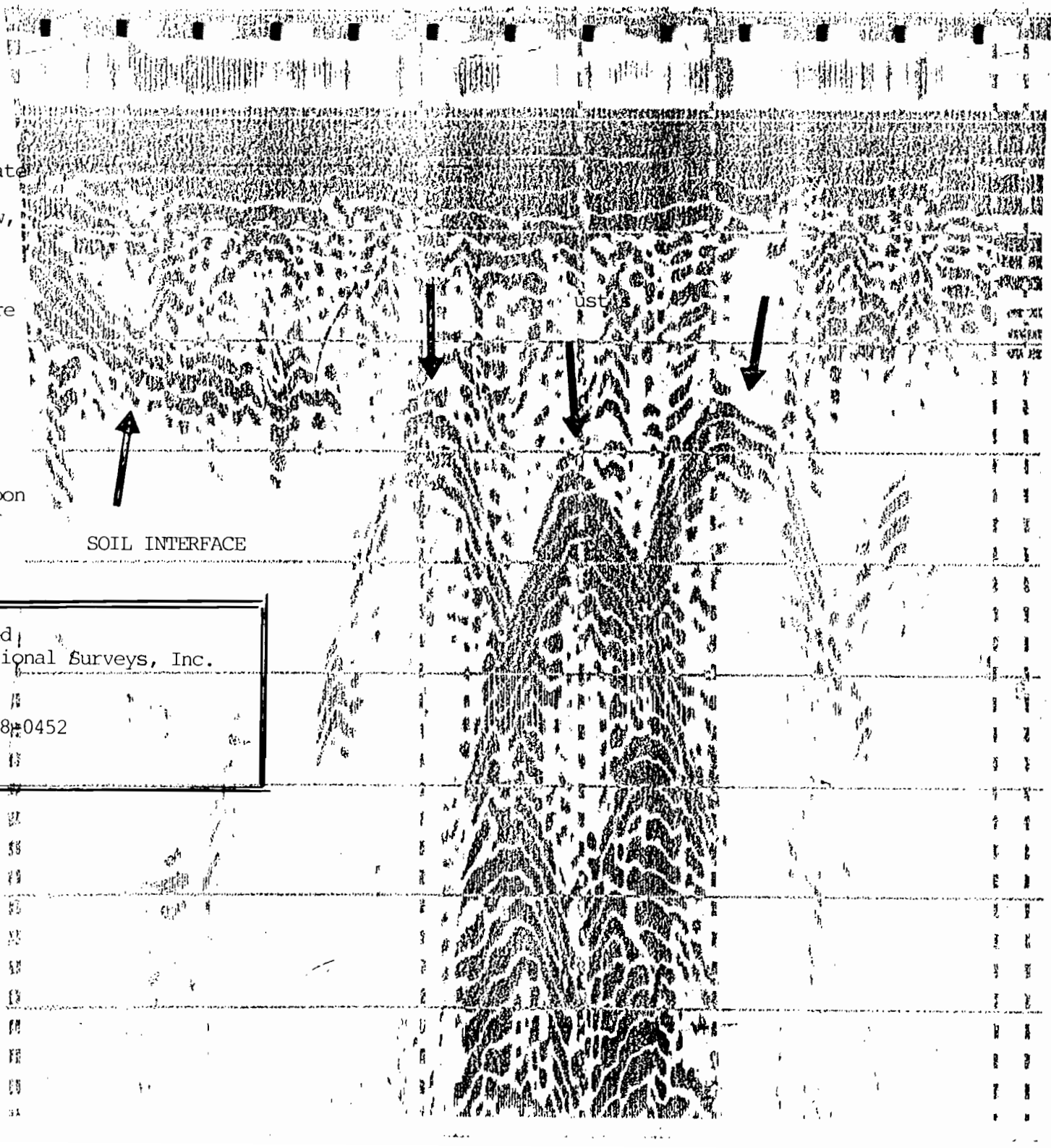
OTHER APPLICATIONS/ADD'L INFORMATION

Additional information may be requested as part of this report such as comparative profiles of similar anomalies or specific information relating to other definitive applications.

Sub-Surface Informational Surveys, Inc. has been a leader in the ground penetrating radar (GPR) industry. In addition to GPR, ferromagnetic magnetometers are used in all of our surveys as needed to get the end results for you, our customer. We service all of the New England area as well as all of New York State and New Jersey.
Offices in Connecticut & Massachusetts
Founded 1988

The profile on right represents three seperate UST's located in the center of E. Longmeadow, Mass. Notice soil interface on left of profile which shows that at some point there was excavation in the area of concern.

This visual profile was seen immediately upon transducer passing over the top of the tank



This service is provided
by Sub-Surface Informational Surveys, Inc.
143E Shaker Rd.,
POB 452
E. Longmeadow, Ma. 01028-0452
(413) 525-4666

SVOC ANALYTICAL DATA

SAMPLE DATA SUMMARY PACKAGE

LAB CODE: INCHVT

CONTRACT NO.: 95212

CASE NO.: 95212

SDG NO.: 62586

New Assel PSA
Project # 650-622-626

Inchcape Testing Services

Inchcape Testing Services
Environmental Laboratories

55 South Park Drive
Colchester, VT 05446
Tel. 802-655-1203
Fax. 802-655-1248

November 29, 1996

LAWLER, MATUSKY &
SKELLY ENGINEERS LLP

DEC 0 2 1996

For Hazardous Waste Section

Ms. Maria Heincz
Lawler, Matusky and Skelly Engineers
One Blue Hill Plaza
Pearl River, NY 10965

Re: LMS Project Name: LMS NYS Standby
Project No. 95212; Case 95212; SDG 62586

Dear Ms. Heincz:

Enclosed are the analytical results for samples received intact by ITS Laboratories onNovember 13, 1996. Laboratory numbers and quality control samples were assigned as follows:

Lab Id	Client Sample ID	Sample Date	Sample Matrix
Received on: 11/13/96 ETR No. 62586			
318889	SGP247810	11/12/96	Soil
318890	MSB		Solid

For the benefit of interested parties, documentation of sample handling and preparation is included at the end of the "Sample Data Package". A colored sheet of paper entitled "Sample Preparation Package" has been used to explicitly mark the location of these documents.

If there are any questions regarding this submittal, please contact Christopher A. Ouellette at (802) 655-1203.

Sincerely,

Karen R. Chirgwin
Laboratory Operations Director

KRC/bss
Enclosure

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SGP247810

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318889

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318889DS

Level: (low/med) MED Date Received: 11/13/96

% Moisture: 47 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380000	U
111-44-4	bis(2-Chloroethyl)Ether	380000	U
95-57-8	2-Chlorophenol	380000	U
541-73-1	1,3-Dichlorobenzene	380000	U
106-46-7	1,4-Dichlorobenzene	380000	U
95-50-1	1,2-Dichlorobenzene	380000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380000	U
95-48-7	2-Methylphenol	380000	U
621-64-7	N-Nitroso-di-n-propylamine	380000	U
67-72-1	Hexachloroethane	380000	U
106-44-5	4-Methylphenol	110000	J
98-95-3	Nitrobenzene	380000	U
78-59-1	Isophorone	380000	U
88-75-5	2-Nitrophenol	380000	U
105-67-9	2,4-Dimethylphenol	380000	U
111-91-1	bis(2-Chloroethoxy)methane	380000	U
120-83-2	2,4-Dichlorophenol	380000	U
120-82-1	1,2,4-Trichlorobenzene	380000	U
91-20-3	Naphthalene	380000	U
106-47-8	4-Chloroaniline	380000	U
87-68-3	Hexachlorobutadiene	380000	U
59-50-7	4-Chloro-3-Methylphenol	380000	U
91-57-6	2-Methylnaphthalene	380000	U
77-47-4	Hexachlorocyclopentadiene	380000	U
88-06-2	2,4,6-Trichlorophenol	380000	U
95-95-4	2,4,5-Trichlorophenol	940000	U
91-58-7	2-Chloronaphthalene	380000	U
88-74-4	2-Nitroaniline	940000	U
131-11-3	Dimethylphthalate	380000	U
208-96-8	Acenaphthylene	380000	U
606-20-2	2,6-Dinitrotoluene	380000	U
83-32-9	Acenaphthene	380000	U
99-09-2	3-Nitroaniline	940000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SGP247810

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318889

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318889DS

Level: (low/med) MED Date Received: 11/13/96

% Moisture: 47 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	940000	U
132-64-9	Dibenzofuran	380000	U
121-14-2	2,4-Dinitrotoluene	380000	U
100-02-7	4-Nitrophenol	940000	U
84-66-2	Diethylphthalate	380000	U
86-73-7	Fluorene	380000	U
7005-72-3	4-Chlorophenyl-phenylether	380000	U
100-01-6	4-Nitroaniline	940000	U
86-30-6	N-nitrosodiphenylamine (1)	380000	U
534-52-1	4,6-Dinitro-2-methylphenol	940000	U
101-55-3	4-Bromophenyl-phenylether	380000	U
118-74-1	Hexachlorobenzene	380000	U
87-86-5	Pentachlorophenol	940000	U
85-01-8	Phenanthrene	380000	U
120-12-7	Anthracene	380000	U
86-74-8	Carbazole	380000	U
84-74-2	Di-n-butylphthalate	380000	U
206-44-0	Fluoranthene	380000	U
129-00-0	Pyrene	380000	U
85-68-7	Butylbenzylphthalate	380000	U
56-55-3	Benzo(a)anthracene	380000	U
91-94-1	3,3'-Dichlorobenzidine	380000	U
218-01-9	Chrysene	380000	U
117-81-7	bis(2-Ethylhexyl)phthalate	75000	J
117-84-0	Di-n-octylphthalate	380000	U
205-99-2	Benzo(b)fluoranthene	380000	U
207-08-9	Benzo(k)fluoranthene	380000	U
50-32-8	Benzo(a)pyrene	380000	U
193-39-5	Indeno(1,2,3-cd)pyrene	380000	U
53-70-3	Dibenz(a,h)anthracene	380000	U
191-24-2	Benzo(g,h,i)perylene	380000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SGP247810

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318889

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318889DS

Level: (low/med) MED Date Received: 11/13/96

% Moisture: 47 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 6.6

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	7.36	150000	J
2.	116-53-0	BUTANOIC ACID, 2-METHYL-	7.93	200000	NJ
3.		UNKNOWN ALKANE	8.22	180000	J
4.		UNKNOWN ALKANE	8.66	810000	J
5.		UNKNOWN ALKYLCYCLOHEXANE	9.14	240000	J
6.		UNKNOWN ALKANE	9.37	220000	J
7.		UNKNOWN ALKANE	9.45	170000	J
8.		UNKNOWN ALKANE	9.52	200000	J
9.		UNKNOWN ALKANE	10.05	170000	J
10.		UNKNOWN ALKANE	15.46	140000	J
11.	57-10-3	HEXADECANOIC ACID	17.40	680000	NJ
12.	544-63-8	TETRADECANOIC ACID	18.73	990000	NJ
13.		UNKNOWN ALIPHATIC KETONE	20.75	300000	J
14.		UNKNOWN ALKANE	21.42	240000	J
15.		UNKNOWN ALKANE	21.56	280000	J
16.		UNKNOWN ALIPHATIC ACID	21.81	220000	J
17.		UNKNOWN ALKANE	22.00	690000	J
18.		UNKNOWN POLYCYCLIC HYDROCARB	24.26	200000	J
19.	59-02-9	VITAMIN E	24.36	520000	NJ
20.	59-02-9	VITAMIN E	24.71	3900000	NJ
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKT5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: SBLKT5

Sample wt/vol: 2.0 (g/mL) G Lab File ID: RB1118T5S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	10000	U
111-44-4	bis(2-Chloroethyl)Ether	10000	U
95-57-8	2-Chlorophenol	10000	U
541-73-1	1,3-Dichlorobenzene	10000	U
106-46-7	1,4-Dichlorobenzene	10000	U
95-50-1	1,2-Dichlorobenzene	10000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10000	U
95-48-7	2-Methylphenol	10000	U
621-64-7	N-Nitroso-di-n-propylamine	10000	U
67-72-1	Hexachloroethane	10000	U
106-44-5	4-Methylphenol	10000	U
98-95-3	Nitrobenzene	10000	U
78-59-1	Isophorone	10000	U
88-75-5	2-Nitrophenol	10000	U
105-67-9	2,4-Dimethylphenol	10000	U
111-91-1	bis(2-Chloroethoxy)methane	10000	U
120-83-2	2,4-Dichlorophenol	10000	U
120-82-1	1,2,4-Trichlorobenzene	10000	U
91-20-3	Naphthalene	10000	U
106-47-8	4-Chloroaniline	10000	U
87-68-3	Hexachlorobutadiene	10000	U
59-50-7	4-Chloro-3-Methylphenol	10000	U
91-57-6	2-Methylnaphthalene	10000	U
77-47-4	Hexachlorocyclopentadiene	10000	U
88-06-2	2,4,6-Trichlorophenol	10000	U
95-95-4	2,4,5-Trichlorophenol	25000	U
91-58-7	2-Chloronaphthalene	10000	U
88-74-4	2-Nitroaniline	25000	U
131-11-3	Dimethylphthalate	10000	U
208-96-8	Acenaphthylene	10000	U
606-20-2	2,6-Dinitrotoluene	10000	U
83-32-9	Acenaphthene	10000	U
99-09-2	3-Nitroaniline	25000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKT5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: SBLKT5

Sample wt/vol: 2.0 (g/mL) G Lab File ID: RB1118T5S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	25000	U
132-64-9	Dibenzofuran	10000	U
121-14-2	2,4-Dinitrotoluene	10000	U
100-02-7	4-Nitrophenol	25000	U
84-66-2	Diethylphthalate	10000	U
86-73-7	Fluorene	10000	U
7005-72-3	4-Chlorophenyl-phenylether	10000	U
100-01-6	4-Nitroaniline	25000	U
86-30-6	N-nitrosodiphenylamine (1)	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	25000	U
101-55-3	4-Bromophenyl-phenylether	10000	U
118-74-1	Hexachlorobenzene	10000	U
87-86-5	Pentachlorophenol	25000	U
85-01-8	Phenanthrene	10000	U
120-12-7	Anthracene	10000	U
86-74-8	Carbazole	10000	U
84-74-2	Di-n-butylphthalate	10000	U
206-44-0	Fluoranthene	10000	U
129-00-0	Pyrene	10000	U
85-68-7	Butylbenzylphthalate	10000	U
56-55-3	Benzo(a)anthracene	10000	U
91-94-1	3,3'-Dichlorobenzidine	10000	U
218-01-9	Chrysene	10000	U
117-81-7	bis(2-Ethylhexyl)phthalate	10000	U
117-84-0	Di-n-octylphthalate	10000	U
205-99-2	Benzo(b)fluoranthene	10000	U
207-08-9	Benzo(k)fluoranthene	10000	U
50-32-8	Benzo(a)pyrene	10000	U
193-39-5	Indeno(1,2,3-cd)pyrene	10000	U
53-70-3	Dibenz(a,h)anthracene	10000	U
191-24-2	Benzo(g,h,i)perylene	10000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLKT5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: SBLKT5

Sample wt/vol: 2.0 (g/mL) G Lab File ID: RB1118T5S

Level: (low/med) MED Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.60	12000	NJA
2.					
3.					
4.					
5.					
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30.					

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318890

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318890S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	64000	
111-44-4	bis(2-Chloroethyl)Ether	10000	U
95-57-8	2-Chlorophenol	71000	
541-73-1	1,3-Dichlorobenzene	10000	U
106-46-7	1,4-Dichlorobenzene	42000	
95-50-1	1,2-Dichlorobenzene	10000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10000	U
95-48-7	2-Methylphenol	10000	U
621-64-7	N-Nitroso-di-n-propylamine	46000	
67-72-1	Hexachloroethane	10000	U
106-44-5	4-Methylphenol	10000	U
98-95-3	Nitrobenzene	10000	U
78-59-1	Isophorone	10000	U
88-75-5	2-Nitrophenol	10000	U
105-67-9	2,4-Dimethylphenol	10000	U
111-91-1	bis(2-Chloroethoxy)methane	10000	U
120-83-2	2,4-Dichlorophenol	10000	U
120-82-1	1,2,4-Trichlorobenzene	44000	
91-20-3	Naphthalene	10000	U
106-47-8	4-Chloroaniline	10000	U
87-68-3	Hexachlorobutadiene	10000	U
59-50-7	4-Chloro-3-Methylphenol	64000	
91-57-6	2-Methylnaphthalene	10000	U
77-47-4	Hexachlorocyclopentadiene	10000	U
88-06-2	2,4,6-Trichlorophenol	10000	U
95-95-4	2,4,5-Trichlorophenol	25000	U
91-58-7	2-Chloronaphthalene	10000	U
88-74-4	2-Nitroaniline	25000	U
131-11-3	Dimethylphthalate	10000	U
208-96-8	Acenaphthylene	10000	U
606-20-2	2,6-Dinitrotoluene	10000	U
83-32-9	Acenaphthene	41000	
99-09-2	3-Nitroaniline	25000	U

000007

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318890

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318890S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	25000	U
132-64-9	Dibenzofuran	10000	U
121-14-2	2,4-Dinitrotoluene	44000	
100-02-7	4-Nitrophenol	55000	
84-66-2	Diethylphthalate	10000	U
86-73-7	Fluorene	10000	U
7005-72-3	4-Chlorophenyl-phenylether	10000	U
100-01-6	4-Nitroaniline	25000	U
86-30-6	N-nitrosodiphenylamine (1)	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	25000	U
101-55-3	4-Bromophenyl-phenylether	10000	U
118-74-1	Hexachlorobenzene	10000	U
87-86-5	Pentachlorophenol	70000	
85-01-8	Phenanthrene	10000	U
120-12-7	Anthracene	10000	U
86-74-8	Carbazole	10000	U
84-74-2	Di-n-butylphthalate	10000	U
206-44-0	Fluoranthene	10000	U
129-00-0	Pyrene	52000	
85-68-7	Butylbenzylphthalate	10000	U
56-55-3	Benzo(a)anthracene	10000	U
91-94-1	3,3'-Dichlorobenzidine	10000	U
218-01-9	Chrysene	10000	U
117-81-7	bis(2-Ethylhexyl)phthalate	10000	U
117-84-0	Di-n-octylphthalate	10000	U
205-99-2	Benzo(b)fluoranthene	10000	U
207-08-9	Benzo(k)fluoranthene	10000	U
50-32-8	Benzo(a)pyrene	10000	U
193-39-5	Indeno(1,2,3-cd)pyrene	10000	U
53-70-3	Dibenz(a,h)anthracene	10000	U
191-24-2	Benzo(g,h,i)perylene	10000	U

(1) - Cannot be separated from Diphenylamine

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Level: (low/med) MED

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (2CP) #	S4 (DCB) #	S5 (NBZ) #	S6 (FBP) #	S7 (TBP) #	S8 (TPH) #	TOT OUT
01	SBLKT5	95	86	89	103	95	88	85	70	0
02	MBS	100	95	99	103	95	86	96	102	0
03	SGP247810	92	73	86	95	72	83	60	87	0
04										
05										
06										
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		QC LIMITS	
S1 (2FP)	= 2-Fluorophenol	(25-121)	
S2 (PHL)	= Phenol-d5	(24-113)	
S3 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S4 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)
S5 (NBZ)	= Nitrobenzene-d5	(23-120)	
S6 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S7 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S8 (TPH)	= Terphenyl-d14	(18-137)	

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 3
SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix Spike - LAWMAT Sample No.: MBS Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC. LIMITS REC.
Phenol	75000		64000	85	26- 90
2-Chlorophenol	75000		71000	95	25-102
1,4-Dichlorobenzene	50000		42000	84	28-104
N-Nitroso-di-n-prop.(1)	50000		46000	92	41-126
1,2,4-Trichlorobenzene	50000		44000	88	38-107
4-Chloro-3-Methylphenol	75000		64000	85	26-103
Acenaphthene	50000		41000	82	31-137
2,4-Dinitrotoluene	50000		44000	88	28- 89
4-Nitrophenol	75000		55000	73	11-114
Pentachlorophenol	75000		70000	93	17-109
Pyrene	50000		52000	104	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 11 outside limits

COMMENTS: _____

4B

EPA SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

SBLKT5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID: RB1118T5S Lab Sample ID: SBLKT5

Instrument ID: R Date Extracted: 11/18/96

Matrix: (soil/water) SOIL Date Analyzed: 11/25/96

Level: (low/med) MED Time Analyzed: 2237

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	MBS	318890	R318890S	11/25/96
02	SGP247810	318889	R318889DS	11/25/96
03				
04				
05				
06				
07				
08				
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID: RHX001PS DFTPP Injection Date: 11/25/96

Instrument ID: R DFTPP Injection Time: 0844

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	47.0
68	Less than 2.0% of mass 69	0.2 (0.4)1
69	Mass 69 relative abundance	49.6
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	51.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	16.9
365	Greater than 1.0% of mass 198	2.07
441	Present, but less than mass 443	7.7
442	40.0 - 110.0% of mass 198	53.5
443	17.0 - 23.0% of mass 442	10.5 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	SSTD160	RHX160BS	11/25/96	0943
02	SSTD120	SSTD120	RHX120BS	11/25/96	1011
03	SSTD080	SSTD080	RHX080BS	11/25/96	1046
04	SSTD050	SSTD050	RHX050BS	11/25/96	1121
05	SSTD020	SSTD020	RHX010BS	11/25/96	1156
06					
07					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID: RHX002PS DFTPP Injection Date: 11/25/96

Instrument ID: R DFTPP Injection Time: 2137

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	45.9
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	51.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	5.9
275	10.0 - 30.0% of mass 198	16.5
365	Greater than 1.0% of mass 198	1.94
441	Present, but less than mass 443	7.8
442	40.0 - 110.0% of mass 198	50.2
443	17.0 - 23.0% of mass 442	9.3 (18.5)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	RHX050ABS	11/25/96	2153
02	SBLKT5	SBLKT5	RB1118T5S	11/25/96	2237
03	MBS	318890	R318890S	11/25/96	2305
04	SGP247810	318889	R318889DS	11/25/96	2340
05					
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6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date(s): 11/25/96 11/25/96

Calibration Time(s): 0943 1156

LAB FILE ID: RRF20 =RHX010BS RRF50 =RHX050BS
RRF80 =RHX080BS RRF120=RHX120BS RRF160=RHX160BS

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol		1.351	1.257	1.168	1.008	1.051	1.167	12.2
bis(2-Chloroethyl)Ether		1.070	1.018	0.955	0.825	0.793	0.932	12.9
2-Chlorophenol		0.989	0.910	0.846	0.742	0.737	0.845	12.9
1,3-Dichlorobenzene		1.403	1.242	1.161	0.999	0.985	1.158	15.1
1,4-Dichlorobenzene		1.430	1.246	1.172	1.013	1.009	1.174	15.0
1,2-Dichlorobenzene		1.311	1.140	1.051	0.914	0.924	1.068	15.5
2,2'-oxybis(1-Chloropropane)		1.381	1.220	1.130	1.009	1.087	1.165	12.2
2-Methylphenol		0.793	0.791	0.734	0.648	0.654	0.724	9.7
N-Nitroso-di-n-propylamine	*	0.572	0.506	0.478	0.438	0.460	0.491	10.6*
Hexachloroethane		0.376	0.354	0.331	0.298	0.301	0.332	10.1
4-Methylphenol		0.822	0.807	0.747	0.664	0.703	0.749	9.0
Nitrobenzene		0.349	0.338	0.312	0.277	0.279	0.311	10.6
Isophorone		0.683	0.691	0.621	0.585	0.564	0.629	9.1
2-Nitrophenol		0.273	0.294	0.269	0.244	0.238	0.264	8.6
2,4-Dimethylphenol		0.279	0.272	0.258	0.228	0.235	0.254	8.7
bis(2-Chloroethoxy)methane		0.461	0.440	0.405	0.357	0.348	0.402	12.4
2,4-Dichlorophenol		0.414	0.406	0.380	0.334	0.356	0.378	8.9
1,2,4-Trichlorobenzene		0.357	0.343	0.320	0.289	0.298	0.321	8.9
Naphthalene		1.078	0.923	0.858	0.728	0.744	0.866	16.6
4-Chloroaniline		0.442	0.446	0.411	0.380	0.374	0.411	8.2
Hexachlorobutadiene		0.093	0.098	0.091	0.086	0.086	0.091	5.3
4-Chloro-3-Methylphenol		0.234	0.273	0.239	0.227	0.245	0.244	7.2
2-Methylnaphthalene		0.866	0.759	0.706	0.622	0.638	0.718	13.8
Hexachlorocyclopentadiene	*	0.154	0.158	0.161	0.146	0.143	0.152	5.0*
2,4,6-Trichlorophenol		0.230	0.249	0.235	0.210	0.217	0.228	6.6
2,4,5-Trichlorophenol			0.262	0.248	0.229	0.242	0.245	5.5
2-Chloronaphthalene		1.315	1.042	1.012	0.858	0.818	1.009	19.4
2-Nitroaniline			0.251	0.240	0.215	0.223	0.232	7.1
Dimethylphthalate		1.531	1.239	1.170	1.005	0.988	1.187	18.6
Acenaphthylene		2.060	1.606	1.528	1.200	1.184	1.516	23.7
2,6-Dinitrotoluene		0.373	0.365	0.347	0.311	0.317	0.343	8.1
Acenaphthene		1.222	1.016	0.970	0.812	0.808	0.966	17.7
3-Nitroaniline			0.327	0.325	0.293	0.288	0.308	6.7
2,4-Dinitrophenol	*		0.162	0.157	0.151	0.148	0.154	4.0*
Dibenzofuran		1.635	1.314	1.258	1.039	1.037	1.257	19.6
2,4-Dinitrotoluene		0.492	0.462	0.452	0.414	0.409	0.446	7.8
4-Nitrophenol	*		0.076	0.075	0.070	0.069	0.072	4.9*

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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date(s): 11/25/96 11/25/96

Calibration Time(s): 0943 1156

LAB FILE ID: RRF20 =RHX010BS RRF50 =RHX050BS
RRF80 =RHX080BS RRF120=RHX120BS RRF160=RHX160BS

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Diethylphthalate	1.385	1.050	1.000	0.828	0.829	1.018	22.4
Fluorene	1.334	1.050	0.997	0.838	0.847	1.013	19.9
4-Chlorophenyl-phenylether	0.346	0.328	0.314	0.275	0.292	0.311	9.1
4-Nitroaniline		0.336	0.342	0.312	0.273	0.316	9.9
N-nitrosodiphenylamine (1)	0.840	0.794	0.731	0.643	0.647	0.731	12.0
4,6-Dinitro-2-methylphenol		0.158	0.152	0.150	0.147	0.152	3.0
4-Bromophenyl-phenylether	0.160	0.168	0.158	0.147	0.152	0.157	5.0
Hexachlorobenzene	0.196	0.197	0.184	0.175	0.173	0.185	6.2
Pentachlorophenol		0.119	0.121	0.114	0.115	0.117	2.9
Phenanthrene	1.443	1.231	1.174	0.971	0.970	1.158	17.1
Anthracene	1.480	1.224	1.153	0.951	0.941	1.150	19.3
Carbazole	1.423	1.245	1.198	1.019	0.951	1.167	16.1
Di-n-butylphthalate	1.994	1.389	1.330	1.929	1.965	1.721	19.3
Fluoranthene	0.908	0.781	0.804	0.694	0.664	0.770	12.6
Pyrene	1.660	1.748	1.493	1.331	1.341	1.515	12.4
Butylbenzylphthalate	1.667	1.530	1.363	1.168	1.209	1.387	15.2
Benzo(a)anthracene	1.222	1.160	1.107	0.977	1.002	1.094	9.5
3,3'-Dichlorobenzidine	0.439	0.463	0.472	0.439	0.429	0.448	4.0
Chrysene	1.134	1.066	1.027	0.934	0.935	1.019	8.5
bis(2-Ethylhexyl)phthalate	2.135	1.810	1.666	1.338	1.441	1.678	18.8
Di-n-octylphthalate	3.597	3.269	2.741	3.510	5.272	3.678	25.9
Benzo(b)fluoranthene	1.238	1.413	1.261	1.219	1.219	1.270	6.4
Benzo(k)fluoranthene	1.398	1.259	1.354	1.103	1.148	1.252	10.2
Benzo(a)pyrene	1.015	1.018	1.040	0.946	0.972	0.998	3.8
Indeno(1,2,3-cd)pyrene	0.956	0.953	0.908	0.808	0.918	0.909	6.6
Dibenz(a,h)anthracene	0.728	0.744	0.714	0.642	0.738	0.713	5.8
Benzo(g,h,i)perylene	0.734	0.718	0.673	0.584	0.668	0.675	8.7
2-Fluorophenol	0.820	0.818	0.788	0.677	0.660	0.753	10.4
Phenol-d5	1.146	1.084	1.018	0.891	0.912	1.010	10.8
2-Chlorophenol-d4	0.951	0.942	0.876	0.770	0.769	0.862	10.3
1,2-Dichlorobenzene-d4	0.869	0.831	0.784	0.699	0.713	0.779	9.4
Nitrobenzene-d5	0.396	0.393	0.364	0.326	0.322	0.360	9.9
2-Fluorobiphenyl	1.262	0.993	0.977	0.817	0.801	0.970	19.1
2,4,6-Tribromophenol	0.120	0.120	0.115	0.107	0.107	0.114	5.5
Terphenyl-d14	1.000	1.073	0.950	0.861	0.894	0.956	8.8

(1) Cannot be seperated from Diphenylamine

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

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date: 11/25/96 Time: 2153

Lab File ID: RHX050ABS Init. Calib. Date(s): 11/25/96 11/25/96

Init. Calib. Times: 0943 1156

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.167	1.276		9.3	25.0
bis(2-Chloroethyl)Ether	0.932	1.001		7.4	
2-Chlorophenol	0.845	0.909		7.6	
1,3-Dichlorobenzene	1.158	1.389		19.9	
1,4-Dichlorobenzene	1.174	1.450		23.5	25.0
1,2-Dichlorobenzene	1.068	1.312		22.8	
2,2'-oxybis(1-Chloropropane)	1.165	1.372		17.8	
2-Methylphenol	0.724	0.760		5.0	
N-Nitroso-di-n-propylamine	0.491	0.560	0.050	14.0	
Hexachloroethane	0.332	0.372		12.0	
4-Methylphenol	0.749	0.812		8.4	
Nitrobenzene	0.311	0.319		2.6	
Isophorone	0.629	0.685		8.9	
2-Nitrophenol	0.264	0.268		1.5	25.0
2,4-Dimethylphenol	0.254	0.278		9.4	
bis(2-Chloroethoxy)methane	0.402	0.458		13.9	
2,4-Dichlorophenol	0.378	0.432		14.3	25.0
1,2,4-Trichlorobenzene	0.321	0.350		9.0	
Naphthalene	0.866	1.043		20.4	
4-Chloroaniline	0.411	0.398		3.2	
Hexachlorobutadiene	0.091	0.091		0.0	25.0
4-Chloro-3-Methylphenol	0.244	0.252		3.3	25.0
2-Methylnaphthalene	0.718	0.853		18.8	
Hexachlorocyclopentadiene	0.152	0.137	0.050	9.9	
2,4,6-Trichlorophenol	0.228	0.239		4.8	25.0
2,4,5-Trichlorophenol	0.245	0.246		0.4	
2-Chloronaphthalene	1.009	1.280		26.8	
2-Nitroaniline	0.232	0.235		1.3	
Dimethylphthalate	1.187	1.359		14.5	
Acenaphthylene	1.516	2.018		33.1	
2,6-Dinitrotoluene	0.343	0.331		3.5	
Acenaphthene	0.966	1.190		23.2	25.0
3-Nitroaniline	0.308	0.320		3.9	
2,4-Dinitrophenol	0.154	0.114	0.050	26.0	
Dibenzofuran	1.257	1.505		19.7	
2,4-Dinitrotoluene	0.446	0.435		2.5	
4-Nitrophenol	0.072	0.066	0.050	8.3	

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date: 11/25/96 Time: 2153

Lab File ID: RHX050ABS Init. Calib. Date(s): 11/25/96 11/25/96

Init. Calib. Times: 0943 1156

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.018	1.235		21.3	
Fluorene	1.013	1.192		17.7	
4-Chlorophenyl-phenylether	0.311	0.303		2.6	
4-Nitroaniline	0.316	0.287		9.2	
N-nitrosodiphenylamine(1)	0.731	0.827		13.1	25.0
4,6-Dinitro-2-methylphenol	0.152	0.122		19.7	
4-Bromophenyl-phenylether	0.157	0.156		0.6	
Hexachlorobenzene	0.185	0.184		0.5	
Pentachlorophenol	0.117	0.109		6.8	25.0
Phenanthrene	1.158	1.403		21.2	
Anthracene	1.150	1.413		22.9	
Carbazole	1.167	1.368		17.2	
Di-n-butylphthalate	1.721	2.010		16.8	
Fluoranthene	0.770	0.855		11.0	25.0
Pyrene	1.515	1.657		9.4	
Butylbenzylphthalate	1.387	1.745		25.8	
Benzo(a)anthracene	1.094	1.236		13.0	
3,3'-Dichlorobenzidine	0.448	0.461		2.9	
Chrysene	1.019	1.162		14.0	
bis(2-Ethylhexyl)phthalate	1.678	2.305		37.4	
Di-n-octylphthalate	3.678	3.731		1.4	25.0
Benzo(b)fluoranthene	1.270	1.242		2.2	
Benzo(k)fluoranthene	1.252	1.388		10.9	
Benzo(a)pyrene	0.998	1.069		7.1	25.0
Indeno(1,2,3-cd)pyrene	0.909	1.134		24.8	
Dibenz(a,h)anthracene	0.713	0.877		23.0	
Benzo(g,h,i)perylene	0.675	0.845		25.2	
2-Fluorophenol	0.753	0.779		3.4	
Phenol-d5	1.010	1.070		5.9	
2-Chlorophenol-d4	0.862	0.931		8.0	
1,2-Dichlorobenzene-d4	0.779	0.896		15.0	
Nitrobenzene-d5	0.360	0.365		1.4	
2-Fluorobiphenyl	0.970	1.226		26.4	
2,4,6-Tribromophenol	0.114	0.111		2.6	
Terphenyl-d14	0.956	0.981		2.6	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID (Standard): RHX050ABS Date Analyzed: 11/25/96

Instrument ID: R Time Analyzed: 2153

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	1046072		8.91		2556729		10.95		1715388		13.93	
	UPPER LIMIT	2092144		9.41		5113458		11.45		3430776		14.43	
	LOWER LIMIT	523036		8.41		1278365		10.45		857694		13.43	
	EPA SAMPLE NO.												
01	SBLKT5	1126932		8.92		2662483		10.97		1818048		13.94	
02	MBS	1417038		8.93		3582261		10.97		2431046		13.93	
03	SGP247810	778353		8.91		2030181		10.97		1464302		13.94	
04													
05													
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22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID (Standard): RHX050ABS Date Analyzed: 11/25/96

Instrument ID: R Time Analyzed: 2153

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	176573	16.43	927122	20.97	911753	23.30
	UPPER LIMIT	3531468	16.93	1854244	21.47	1823506	23.80
	LOWER LIMIT	882867	15.93	463561	20.47	455877	22.80
	EPA SAMPLE NO.						
01	SBLKT5	1550772	16.43	1185634	20.97	1180361	23.30
02	MBS	2279313	16.44	1042250	20.96	1074800	23.30
03	SGP247810	1536314	16.44	730654	20.97	721056	23.31
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

NARRATIVE

Inchcape Testing Services

Inchcape Testing Services
Environmental Laboratories

55 South Park Drive
Colchester, VT 05446
Tel. 802-655-1203
Fax. 802-655-1248

November 29, 1996

Ms. Maria Heincz
Lawler, Matusky and Skelly Engineers
One Blue Hill Plaza
Pearl River, NY 10965

Re: LMS Project Name: LMS NYS Standby
Project No. 95212; Case 95212; SDG 62586

Dear Ms. Heincz:

Enclosed are the analytical results for samples received intact by ITS Laboratories onNovember 13, 1996. Laboratory numbers and quality control samples were assigned as follows:

Lab Id	Client Sample ID	Sample Date	Sample Matrix
	Received on: 11/13/96 ETR No. 62586		
318889	SGP247810	11/12/96	Soil
318890	MSB		Solid

For the benefit of interested parties, documentation of sample handling and preparation is included at the end of the "Sample Data Package". A colored sheet of paper entitled "Sample Preparation Package" has been used to explicitly mark the location of these documents.

If there are any questions regarding this submittal, please contact Christopher A. Ouellette at (802) 655-1203.

Sincerely,

Karen R. Chirgwin
Laboratory Operations Director

KRC/bss
Enclosure

001

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Inchcape Testing Services

0002

Chain-of-Custody Record

ITS Environmental Laboratories
55 South Park Drive
Colchester, VT 05446
TEL: (802) 655-1203
FAX: (802) 655-1248

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: LMS Engineers	Project Name: New Cassel Industrial Area (NCIA)	Carrier: Federal Express
Address: One Blue Hill Plaza, Pearl River, NY 10965	Project Number: 650-622 to -626	Airbill Number: 989826061O
Telephone: (914) 735-8300	Sampler Name(s): Karen Ricciardi	Date Shipped: 11.12.96
Facsimile: (914) 735-7466		Hand Delivered: ☐ yes ☒ no
Contact Name: Maria Heinz	ITS LABORATORY INFORMATION	Quote #: / Client Code:

SAMPLE IDENTIFICATION (NOTE 1)	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS (NOTE 2,3)	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4): 40ml/glass/4°C	40ml/glass/HCl	NUMBER OF CONTAINERS
GP-242 (73-75')	11.11.96	1545 MDL	X		GW	EPA 8010/8020	3		
GP-243 (60-62')	11.12.96	0925 MDL	X		GW	EPA 8010/8020	3		
GP-245 (93-95')	11.11.96	1530 MDL	X		GW	EPA 8010/8020	3		
GP-243 (73-75)	11.12.96	0905	X		GW	EPA 8010/8020	3		
GP-244 (93-95')	11.12.96	1205	X		GW	EPA 8010/8020	3		
SGP-247 (8-10')	11.12.96	1645	X		soil	EPA 8270 Semis	1	2	

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Michael Sexton	11.12.96	1800	
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)
	11/13/96	0930	

COPY ORIGINAL ON FILE
ETR # 6-2584

NOTES TO SAMPLERS: (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.: MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.: 40 ml/glass/H_2SO_4

Notes to Lab:

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

To be included with all lab data and with each workplan

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
SLGP247810	318889		✓				
MSB	318890		✓				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
318889	SOIL	11/12/96	11/13/96	11/18/96	11/25/96
318890	SOIL	—	—	"	"

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
318889	SOIL	8270 SW	8270 SW	Yes	20.0
318890	SOIL	"	"	"	1.0

000006

METHOD 8270
SEMIVOLATILE ORGANIC ANALYSIS

QC SUMMARY

Inchcape Testing Services

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Level: (low/med) MED

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (2CP) #	S4 (DCB) #	S5 (NBZ) #	S6 (FBP) #	S7 (TBP) #	S8 (TPH) #	TOT OUT
01	SBLKT5	95	86	89	103	95	88	85	70	0
02	MBS	100	95	99	103	95	86	96	102	0
03	SGP247810	92	73	86	95	72	83	60	87	0
04										
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		QC LIMITS	
S1 (2FP)	= 2-Fluorophenol	(25-121)	
S2 (PHL)	= Phenol-d5	(24-113)	
S3 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S4 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)
S5 (NBZ)	= Nitrobenzene-d5	(23-120)	
S6 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S7 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S8 (TPH)	= Terphenyl-d14	(18-137)	

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 3
SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix Spike - LAWMAT Sample No.: MBS Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC. LIMITS REC.
Phenol	75000		64000	85	26- 90
2-Chlorophenol	75000		71000	95	25-102
1,4-Dichlorobenzene	50000		42000	84	28-104
N-Nitroso-di-n-prop.(1)	50000		46000	92	41-126
1,2,4-Trichlorobenzene	50000		44000	88	38-107
4-Chloro-3-Methylphenol	75000		64000	85	26-103
Acenaphthene	50000		41000	82	31-137
2,4-Dinitrotoluene	50000		44000	88	28- 89
4-Nitrophenol	75000		55000	73	11-114
Pentachlorophenol	75000		70000	93	17-109
Pyrene	50000		52000	104	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 11 outside limits

COMMENTS: _____

4B

EPA SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

SBLKT5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID: RB1118T5S Lab Sample ID: SBLKT5

Instrument ID: R Date Extracted: 11/18/96

Matrix: (soil/water) SOIL Date Analyzed: 11/25/96

Level: (low/med) MED Time Analyzed: 2237

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	MBS	318890	R318890S	11/25/96
02	SGP247810	318889	R318889DS	11/25/96
03				
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID: RHX001PS DFTPP Injection Date: 11/25/96

Instrument ID: R DFTPP Injection Time: 0844

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	47.0
68	Less than 2.0% of mass 69	0.2 (0.4)1
69	Mass 69 relative abundance	49.6
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	51.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	16.9
365	Greater than 1.0% of mass 198	2.07
441	Present, but less than mass 443	7.7
442	40.0 - 110.0% of mass 198	53.5
443	17.0 - 23.0% of mass 442	10.5 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	SSTD160	RHX160BS	11/25/96	0943
02	SSTD120	SSTD120	RHX120BS	11/25/96	1011
03	SSTD080	SSTD080	RHX080BS	11/25/96	1046
04	SSTD050	SSTD050	RHX050BS	11/25/96	1121
05	SSTD020	SSTD020	RHX010BS	11/25/96	1156
06					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID: RHX002PS DFTPP Injection Date: 11/25/96

Instrument ID: R DFTPP Injection Time: 2137

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	45.9
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	51.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	5.9
275	10.0 - 30.0% of mass 198	16.5
365	Greater than 1.0% of mass 198	1.94
441	Present, but less than mass 443	7.8
442	40.0 - 110.0% of mass 198	50.2
443	17.0 - 23.0% of mass 442	9.3 (18.5)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	RHX050ABS	11/25/96	2153
02	SBLKT5	SBLKT5	RB1118T5S	11/25/96	2237
03	MBS	318890	R318890S	11/25/96	2305
04	SGP247810	318889	R318889DS	11/25/96	2340
05					
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090911

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID (Standard): RHX050ABS Date Analyzed: 11/25/96

Instrument ID: R Time Analyzed: 2153

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	1046072	8.91	2556729	10.95	1715388	13.93
	UPPER LIMIT	2092144	9.41	5113458	11.45	3430776	14.43
	LOWER LIMIT	523036	8.41	1278365	10.45	857694	13.43
	EPA SAMPLE NO.						
01	SBLKT5	1126932	8.92	2662483	10.97	1818048	13.94
02	MBS	1417038	8.93	3582261	10.97	2431046	13.93
03	SGP247810	778353	8.91	2030181	10.97	1464302	13.94
04							
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Lab File ID (Standard): RHX050ABS Date Analyzed: 11/25/96

Instrument ID: R Time Analyzed: 2153

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1765734	16.43	927122	20.97	911753	23.30
	UPPER LIMIT	3531468	16.93	1854244	21.47	1823506	23.80
	LOWER LIMIT	882867	15.93	463561	20.47	455877	22.80
	EPA SAMPLE NO.						
01	SBLKT5	1550772	16.43	1185634	20.97	1180361	23.30
02	MBS	2279313	16.44	1042250	20.96	1074800	23.30
03	SGP247810	1536314	16.44	730654	20.97	721056	23.31
04							
05							
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21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

Report Date : 14-Feb-1995 13:19

METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/R.i/R1.p/RDTE_OLM.b/SV_AQ1.m
Batch File: /chem/R.i/R1.p/RDTE_OLM.b
Inst ID: R.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07
FILENAME:	R246354S	R246355S	R246357S	R246358S	R246359S	R246360S	R246361S
INJ.DATE:	26-JAN-1995	26-JAN-1995	26-JAN-1995	26-JAN-1995	26-JAN-1995	27-JAN-1995	27-JAN-1995
INJ.TIME:	20:46	21:20	22:29	23:04	23:38	00:13	00:47

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
	1 N-Nitrosodimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	2 2-Fluorophenol	9.32	9.62	9.42	9.32	9.30	9.53	9.27	9.40	0.13	0.42
$	3 Phenol-d5	9.37	9.80	9.57	9.97	9.52	9.78	9.71	9.68	0.20	0.63
	4 Phenol	8.75	9.22	8.77	9.13	9.10	9.38	9.06	9.06	0.23	0.72
	5 bis(-2-Chloroethyl)Eth	9.78	11.05	8.83	8.79	9.68	9.66	8.98	9.54	0.79	2.49
$	6 2-Chlorophenol-d4	9.31	9.74	9.39	9.68	9.29	9.59	9.59	9.51	0.18	0.57
	7 2-Chlorophenol	9.09	9.26	9.05	9.37	8.99	9.09	9.18	9.15	0.13	0.41
	8 1,3-Dichlorobenzene	10.29	10.26	10.26	10.28	10.08	10.17	10.06	10.20	0.10	0.30
*	9 1,4-Dichlorobenzene-d4	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00
	10 1,4-Dichlorobenzene	10.00	10.14	10.03	10.14	10.22	10.25	9.98	10.11	0.11	0.34
	11 Benzyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	12 1,2-Dichlorobenzene-d4	9.13	9.26	9.17	9.27	9.17	9.26	9.25	9.22	0.06	0.19
	13 1,2-Dichlorobenzene	10.46	10.50	10.35	10.59	10.30	10.51	10.38	10.44	0.10	0.32
	14 2-Methylphenol	9.13	9.25	9.17	9.64	9.06	9.16	9.32	9.25	0.19	0.60
	15 2,2'-oxybis(1-Chloropr	8.96	9.20	9.04	9.41	9.09	9.05	8.89	9.09	0.17	0.54
	16 4-Methylphenol	8.72	9.23	9.03	9.50	8.92	9.04	9.07	9.07	0.24	0.77

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: _____

METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/R.i/R1.p/RDTE_OLM.b/SV_AQ1.m
Batch File: /chem/R.i/R1.p/RDTE_OLM.b
Inst ID: R.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
	17 N-Nitroso-di-n-propyla	8.35	8.50	8.29	9.00	8.44	8.27	8.27	8.44	0.26	0.81
	18 Hexachloroethane	10.35	10.44	10.05	10.28	10.17	10.22	10.10	10.23	0.14	0.43
$	19 Nitrobenzene-d5	8.40	8.99	8.52	9.02	8.46	8.88	8.81	8.73	0.26	0.82
	20 Nitrobenzene	9.80	10.29	9.82	10.34	9.88	10.02	10.10	10.04	0.22	0.69
	21 Isophorone	8.91	8.82	9.19	9.35	9.19	9.14	9.15	9.11	0.18	0.57
	22 2-Nitrophenol	7.61	7.87	7.54	8.07	7.55	7.94	8.20	7.83	0.27	0.84
	23 2,4-Dimethylphenol	9.53	9.64	9.46	9.79	9.52	9.61	9.62	9.60	0.11	0.34
	24 bis(2-Chloroethoxy)met	8.11	8.24	8.16	8.66	8.17	8.21	8.30	8.27	0.19	0.58
	25 Benzoic Acid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	26 2,4-Dichlorophenol	7.93	7.88	8.02	8.07	7.76	7.80	8.29	7.97	0.18	0.57
	27 1,2,4-Trichlorobenzene	9.97	9.82	9.84	9.86	9.76	10.09	9.96	9.90	0.11	0.35
*	28 Naphthalene-d8	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00
	29 Naphthalene	8.83	8.88	8.89	8.95	8.85	8.99	8.94	8.90	0.06	0.18
	30 4-Chloroaniline	8.78	8.90	8.97	9.31	9.08	9.06	9.26	9.05	0.19	0.59
	31 Hexachlorobutadiene	10.12	10.04	10.14	10.06	10.13	9.96	9.80	10.04	0.12	0.38
	32 4-Chloro-3-Methylpheno	7.41	7.57	7.75	7.50	7.73	7.66	7.58	7.60	0.12	0.39
	33 2-Methylnaphthalene	9.02	9.44	9.14	9.03	9.87	9.10	8.99	9.23	0.32	1.01
	34 Hexachlorocyclopentadi	7.92	8.17	7.23	8.21	7.02	7.35	8.39	7.76	0.55	1.72
	35 2,4,6-Trichlorophenol	8.11	8.37	7.71	8.04	7.50	7.84	8.10	7.95	0.29	0.91
	36 2,4,5-Trichlorophenol	8.29	8.32	8.51	8.70	8.41	8.45	8.57	8.46	0.14	0.45
$	37 2-Fluorobiphenyl	9.22	9.23	9.08	9.58	8.95	9.15	9.36	9.22	0.20	0.63
	38 2-Chloronaphthalene	9.97	10.22	9.91	10.37	9.74	9.97	9.96	10.02	0.21	0.66

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: _____

090916

METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/R.i/R1.p/RDTE_OLM.b/SV_AQ1.m
Batch File: /chem/R.i/R1.p/RDTE_OLM.b
Inst ID: R.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
39	2-Nitroaniline	7.81	8.11	7.69	7.93	7.70	7.74	7.82	7.83	0.15	0.46
40	Dimethylphthalate	8.85	8.93	8.96	8.89	8.81	8.86	8.68	8.85	0.09	0.29
41	2,6-Dinitrotoluene	8.30	8.64	8.49	8.42	8.38	8.53	8.42	8.45	0.11	0.35
42	Acenaphthylene	9.10	9.10	8.97	9.14	8.88	9.06	9.02	9.04	0.09	0.28
43	3-Nitroaniline	7.94	7.86	7.72	7.39	7.52	7.82	7.62	7.70	0.20	0.62
44	Acenaphthene-d10	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00
45	Acenaphthene	8.89	8.99	8.78	8.79	8.78	8.85	8.76	8.84	0.08	0.26
46	2,4-Dinitrophenol	1.26	1.80	1.85	1.85	2.00	2.32	2.51	1.94	0.40	1.27
47	4-Nitrophenol	3.13	3.08	3.23	2.99	3.50	3.99	3.96	3.41	0.42	1.31
48	Dibenzofuran	9.16	9.28	9.22	8.99	9.14	9.32	9.13	9.18	0.11	0.34
49	2,4-Dinitrotoluene	7.62	7.62	7.55	7.78	5.95	8.33	6.18	7.29	0.88	2.76
50	Diethylphthalate	8.83	8.51	8.95	8.22	8.83	8.67	8.29	8.61	0.28	0.89
51	4-Chlorophenyl-phenyle	8.90	8.91	8.99	8.52	8.79	8.96	8.78	8.83	0.16	0.51
52	Fluorene	8.82	8.81	8.89	8.47	8.81	9.02	8.60	8.77	0.18	0.58
53	4-Nitroaniline	7.58	7.19	6.87	6.08	7.22	7.57	6.64	7.02	0.54	1.70
54	4,6-Dinitro-2-methylph	3.38	3.75	3.81	3.97	4.01	3.86	4.51	3.90	0.34	1.07
55	N-nitrosodiphenylamine	8.51	8.69	8.75	8.92	8.62	8.60	8.86	8.71	0.15	0.46
56	Azobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 57	2,4,6-Tribromophenol	7.49	7.23	6.82	6.61	7.55	7.40	7.06	7.17	0.35	1.11
58	4-Bromophenyl-phenylet	8.44	8.45	8.60	8.54	8.27	8.37	8.73	8.49	0.15	0.47
59	Hexachlorobenzene	9.82	9.83	9.89	10.20	9.78	9.98	10.24	9.96	0.19	0.59
60	Pentachlorophenol	0.82	1.67	1.62	1.72	1.85	1.72	2.19	1.65	0.42	1.30

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: _____

090917

METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/R.i/R1.p/RDTE_OLM.b/SV_AQ1.m
Batch File: /chem/R.i/R1.p/RDTE_OLM.b
Inst ID: R.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
*	61 Phenanthrene-d10	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00
	62 Phenanthrene	9.04	9.14	9.17	8.96	9.05	9.09	9.03	9.07	0.07	0.22
	63 Anthracene	9.50	9.53	9.70	9.39	9.53	9.62	9.61	9.55	0.10	0.31
	64 Carbazole	10.21	10.14	10.21	9.60	10.18	10.34	9.85	10.07	0.25	0.80
	65 Di-n-butylphthalate	9.12	8.93	9.18	8.76	8.97	9.02	8.89	8.98	0.14	0.45
	66 Fluoranthene	8.91	8.88	9.13	8.41	9.10	9.22	8.72	8.91	0.28	0.88
	67 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	68 Pyrene	8.37	8.48	8.44	8.89	8.12	8.57	8.58	8.49	0.23	0.74
$	69 Terphenyl-d14	8.95	9.01	8.93	9.16	8.61	8.90	8.93	8.93	0.16	0.51
	70 Butylbenzylphthalate	8.28	8.38	8.36	8.38	8.13	8.37	8.14	8.29	0.11	0.36
	71 bis(2-Ethylhexyl)phtha	8.55	8.45	8.34	8.63	8.39	8.31	8.16	8.40	0.16	0.50
	72 3,3'-Dichlorobenzidine	11.30	10.93	10.61	10.74	10.78	10.28	10.47	10.73	0.33	1.04
	73 Benzo(a)anthracene	8.43	8.48	8.58	8.56	8.33	8.59	8.39	8.48	0.10	0.32
*	74 Chrysene-d12	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00
	75 Chrysene	8.80	8.94	8.80	9.02	8.94	9.08	8.86	8.92	0.11	0.34
	76 Di-n-octylphthalate	8.69	8.79	8.58	9.06	8.82	8.88	8.71	8.79	0.15	0.49
	77 Benzo(b)fluoranthene	8.74	9.18	7.67	8.18	7.98	8.06	8.34	8.31	0.51	1.59
	78 Benzo(k)fluoranthene	8.64	8.94	9.95	10.23	10.02	10.29	9.73	9.68	0.65	2.03
	79 Benzo(a)pyrene	8.47	8.73	8.43	8.72	8.74	8.87	8.77	8.68	0.16	0.50
*	80 Perylene-d12	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00
	81 Dibenz(a,h)anthracene	8.59	8.97	8.93	8.91	8.98	8.83	8.68	8.84	0.15	0.48
	82 Indeno(1,2,3-cd)pyrene	8.40	8.64	8.44	8.42	8.56	8.39	8.48	8.47	0.09	0.30

Reviewer 1 _____ Date: _____

Reviewer 2 _____ Date: _____

Report Date : 14-Feb-1995 13:19

METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/R.i/R1.p/RDTE_OLM.b/SV_AQ1.m
Batch File: /chem/R.i/R1.p/RDTE_OLM.b
Inst ID: R.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
83 Benzo(g,h,i)perylene	8.40	8.57	8.57	8.56	8.54	8.58	8.76	8.57	0.10	0.32

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: _____

METHOD 8270
SEMIVOLATILE ORGANIC ANALYSIS

SUPPORTIVE DOCUMENTATION

Inchcape Testing Services

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SGP247810

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318889

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318889DS

Level: (low/med) MED Date Received: 11/13/96

% Moisture: 47 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380000	U
111-44-4	bis(2-Chloroethyl)Ether	380000	U
95-57-8	2-Chlorophenol	380000	U
541-73-1	1,3-Dichlorobenzene	380000	U
106-46-7	1,4-Dichlorobenzene	380000	U
95-50-1	1,2-Dichlorobenzene	380000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380000	U
95-48-7	2-Methylphenol	380000	U
621-64-7	N-Nitroso-di-n-propylamine	380000	U
67-72-1	Hexachloroethane	380000	U
106-44-5	4-Methylphenol	110000	J
98-95-3	Nitrobenzene	380000	U
78-59-1	Isophorone	380000	U
88-75-5	2-Nitrophenol	380000	U
105-67-9	2,4-Dimethylphenol	380000	U
111-91-1	bis(2-Chloroethoxy)methane	380000	U
120-83-2	2,4-Dichlorophenol	380000	U
120-82-1	1,2,4-Trichlorobenzene	380000	U
91-20-3	Naphthalene	380000	U
106-47-8	4-Chloroaniline	380000	U
87-68-3	Hexachlorobutadiene	380000	U
59-50-7	4-Chloro-3-Methylphenol	380000	U
91-57-6	2-Methylnaphthalene	380000	U
77-47-4	Hexachlorocyclopentadiene	380000	U
88-06-2	2,4,6-Trichlorophenol	380000	U
95-95-4	2,4,5-Trichlorophenol	940000	U
91-58-7	2-Chloronaphthalene	380000	U
88-74-4	2-Nitroaniline	940000	U
131-11-3	Dimethylphthalate	380000	U
208-96-8	Acenaphthylene	380000	U
606-20-2	2,6-Dinitrotoluene	380000	U
83-32-9	Acenaphthene	380000	U
99-09-2	3-Nitroaniline	940000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SGP247810

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318889

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318889DS

Level: (low/med) MED Date Received: 11/13/96

% Moisture: 47 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	940000	U
132-64-9	Dibenzofuran	380000	U
121-14-2	2,4-Dinitrotoluene	380000	U
100-02-7	4-Nitrophenol	940000	U
84-66-2	Diethylphthalate	380000	U
86-73-7	Fluorene	380000	U
7005-72-3	4-Chlorophenyl-phenylether	380000	U
100-01-6	4-Nitroaniline	940000	U
86-30-6	N-nitrosodiphenylamine (1)	380000	U
534-52-1	4,6-Dinitro-2-methylphenol	940000	U
101-55-3	4-Bromophenyl-phenylether	380000	U
118-74-1	Hexachlorobenzene	380000	U
87-86-5	Pentachlorophenol	940000	U
85-01-8	Phenanthrene	380000	U
120-12-7	Anthracene	380000	U
86-74-8	Carbazole	380000	U
84-74-2	Di-n-butylphthalate	380000	U
206-44-0	Fluoranthene	380000	U
129-00-0	Pyrene	380000	U
85-68-7	Butylbenzylphthalate	380000	U
56-55-3	Benzo(a)anthracene	380000	U
91-94-1	3,3'-Dichlorobenzidine	380000	U
218-01-9	Chrysene	380000	U
117-81-7	bis(2-Ethylhexyl)phthalate	75000	J
117-84-0	Di-n-octylphthalate	380000	U
205-99-2	Benzo(b)fluoranthene	380000	U
207-08-9	Benzo(k)fluoranthene	380000	U
50-32-8	Benzo(a)pyrene	380000	U
193-39-5	Indeno(1,2,3-cd)pyrene	380000	U
53-70-3	Dibenz(a,h)anthracene	380000	U
191-24-2	Benzo(g,h,i)perylene	380000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SGP247810

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318889

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318889DS

Level: (low/med) MED Date Received: 11/13/96

% Moisture: 47 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 6.6

Number TICs found: 20

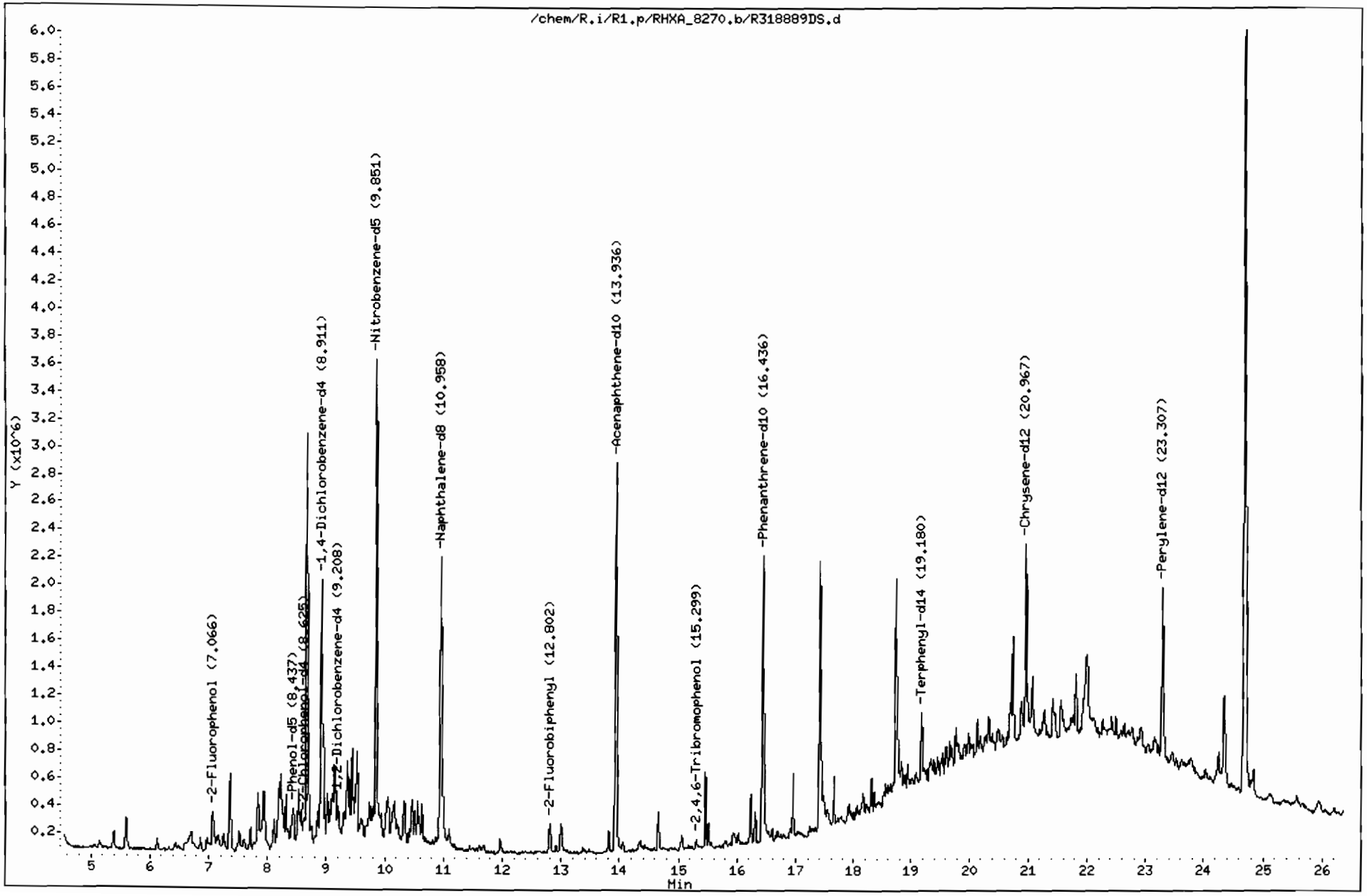
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	7.36	150000	J
2.	116-53-0	BUTANOIC ACID, 2-METHYL-	7.93	200000	NJ
3.		UNKNOWN ALKANE	8.22	180000	J
4.		UNKNOWN ALKANE	8.66	810000	J
5.		UNKNOWN ALKYLCYCLOHEXANE	9.14	240000	J
6.		UNKNOWN ALKANE	9.37	220000	J
7.		UNKNOWN ALKANE	9.45	170000	J
8.		UNKNOWN ALKANE	9.52	200000	J
9.		UNKNOWN ALKANE	10.05	170000	J
10.		UNKNOWN ALKANE	15.46	140000	J
11.	57-10-3	HEXADECANOIC ACID	17.40	680000	NJ
12.	544-63-8	TETRADECANOIC ACID	18.73	990000	NJ
13.		UNKNOWN ALIPHATIC KETONE	20.75	300000	J
14.		UNKNOWN ALKANE	21.42	240000	J
15.		UNKNOWN ALKANE	21.56	280000	J
16.		UNKNOWN ALIPHATIC ACID	21.81	220000	J
17.		UNKNOWN ALKANE	22.00	690000	J
18.		UNKNOWN POLYCYCLIC HYDROCARB	24.26	200000	J
19.	59-02-9	VITAMIN E	24.36	520000	NJ
20.	59-02-9	VITAMIN E	24.71	3900000	NJ
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d
Date : 25-NOV-96 23:40:15
Client ID: SGP247810
Sample Info: L#318889 CLI#SGP247810 ETR#62586
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: BES
Column diameter: 0.25



Inchcape Environmental

SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d
Lab Smp Id: 318889 Client Smp ID: SGP247810
Inj Date : 25-NOV-96 23:40:15
Operator : BES Inst ID: R.i
Smp Info : L#318889 CLI#SGP247810 ETR#62586
Misc Info : 5% ANALYSIS
Comment :
Method : /chem/R.i/R1.p/RHXA_8270.b/SV_8270v6RTE.m
Meth Date : 27-Nov-96 18:50:33 je Quant Type: ISTD
Cal Date : 25-NOV-96 21:53:00 Cal File: RHX050ABS.d
Als bottle: 3
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: OLM.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vi * Ws * (100-M)/100)*GPC

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Ws	2.000	Weight of sample extracted (g)
M	47.000	% Moisture
GPC	2.000	GPC Factor

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$ 3	2-Fluorophenol	112	7.066	7.057	(0.793)	104883	6.9	130000(a)
$ 5	Phenol-d5	99	8.437	8.425	(0.947)	113935	5.5	100000(a)
6	Phenol	94.00	Compound Not Detected.					
7	bis(2-Chloroethyl)Ether	93.00	Compound Not Detected.					
$ 8	2-Chlorophenol-d4	132	8.625	8.613	(0.968)	116458	6.4	120000(a)
9	2-Chlorophenol	128.00	Compound Not Detected.					
10	1,3-Dichlorobenzene	146.00	Compound Not Detected.					
* 11	1,4-Dichlorobenzene-d4	152	8.911	8.909	(1.000)	778353	40	
12	1,4-Dichlorobenzene	146.00	Compound Not Detected.					
$ 13	1,2-Dichlorobenzene-d4	152	9.218	9.205	(1.034)	82603	4.7	89000(a)
14	1,2-Dichlorobenzene	146.00	Compound Not Detected.					
16	2,2'-oxybis(1-Chloropropane)	45.00	Compound Not Detected.					
17	2-Methylphenol	108.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	18 N-Nitroso-di-n-propylamine	70.00	Compound Not Detected.					
	19 Hexachloroethane	117.00	Compound Not Detected.					
	20 4-Methylphenol	108	9.594	9.590	(1.077)	93782	5.9	110000(a)
$	21 Nitrobenzene-d5	82	9.851	9.827	(0.898)	66602	3.6	68000(a)
	22 Nitrobenzene	77.00	Compound Not Detected.					
	23 Isophorone	82.00	Compound Not Detected.					
	24 2-Nitrophenol	139.00	Compound Not Detected.					
	25 2,4-Dimethylphenol	107.00	Compound Not Detected.					
	26 bis(2-Chloroethoxy)methane	93.00	Compound Not Detected.					
	27 2,4-Dichlorophenol	162.00	Compound Not Detected.					
	28 1,2,4-Trichlorobenzene	180.00	Compound Not Detected.					
*	30 Naphthalene-d8	136	10.968	10.953	(1.000)	2030181	40	
	31 Naphthalene	128.00	Compound Not Detected.					
	32 4-Chloroaniline	127.00	Compound Not Detected.					
	33 Hexachlorobutadiene	225.00	Compound Not Detected.					
	34 4-Chloro-3-Methylphenol	107.00	Compound Not Detected.					
	35 2-Methylnaphthalene	142.00	Compound Not Detected.					
	36 Hexachlorocyclopentadiene	237.00	Compound Not Detected.					
	37 2,4,6-Trichlorophenol	196.00	Compound Not Detected.					
	38 2,4,5-Trichlorophenol	196.00	Compound Not Detected.					
$	39 2-Fluorobiphenyl	172	12.802	12.789	(0.919)	187311	4.2	79000(a)
	40 2-Chloronaphthalene	162.00	Compound Not Detected.					
	41 2-Nitroaniline	65.00	Compound Not Detected.					
	42 Dimethylphthalate	163.00	Compound Not Detected.					
	43 Acenaphthylene	152.00	Compound Not Detected.					
	44 2,6-Dinitrotoluene	165.00	Compound Not Detected.					
*	45 Acenaphthene-d10	164	13.936	13.934	(1.000)	1464302	40	
	46 Acenaphthene	153.00	Compound Not Detected.					
	47 3-Nitroaniline	138.00	Compound Not Detected.					
	48 2,4-Dinitrophenol	184.00	Compound Not Detected.					
	49 Dibenzofuran	168.00	Compound Not Detected.					
	50 2,4-Dinitrotoluene	165.00	Compound Not Detected.					
	51 4-Nitrophenol	109.00	Compound Not Detected.					
	52 Diethylphthalate	149.00	Compound Not Detected.					
	53 Fluorene	166.00	Compound Not Detected.					
	54 4-Chlorophenyl-phenylether	204.00	Compound Not Detected.					
	55 4-Nitroaniline	138.00	Compound Not Detected.					
	56 N-nitrosodiphenylamine	169.00	Compound Not Detected.					
	57 4,6-Dinitro-2-methylphenol	198.00	Compound Not Detected.					
$	59 2,4,6-Tribromophenol	330	15.299	15.299	(1.098)	18311	4.5	85000(a)
	60 4-Bromophenyl-phenylether	248.00	Compound Not Detected.					
	61 Hexachlorobenzene	283.81	Compound Not Detected.					
	62 Pentachlorophenol	266.00	Compound Not Detected.					
*	63 Phenanthrene-d10	188	16.436	16.434	(1.000)	1536314	40	
	64 Phenanthrene	178.00	Compound Not Detected.					
	65 Anthracene	178.00	Compound Not Detected.					
	66 Carbazole	167.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	67 Di-n-butylphthalate	149.00	Compound Not Detected.					
	68 Fluoranthene	202.00	Compound Not Detected.					
	70 Pyrene	202.00	Compound Not Detected.					
$	71 Terphenyl-d14	244	19.170	19.177	(0.914)	77964	4.3	82000(a)
	72 Butylbenzylphthalate	149.00	Compound Not Detected.					
	73 Benzo(a)anthracene	228.00	Compound Not Detected.					
	74 3,3'-Dichlorobenzidine	252.00	Compound Not Detected.					
*	75 Chrysene-d12	240	20.967	20.972	(1.000)	730654	40	
	76 Chrysene	228.00	Compound Not Detected.					
	77 bis(2-Ethylhexyl)phthalate	149	21.067	21.072	(1.005)	167808	4.0	75000(a)
	78 Di-n-octylphthalate	149.00	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252.00	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252.00	Compound Not Detected.					
	81 Benzo(a)pyrene	252.00	Compound Not Detected.					
*	82 Perylene-d12	264	23.307	23.298	(1.000)	721056	40	
	83 Indeno(1,2,3-cd)pyrene	276.00	Compound Not Detected.					
	84 Dibenz(a,h)anthracene	278.00	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276.00	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

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SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d
Lab Smp Id: 318889 Client Smp ID: SGP247810
Inj Date : 25-NOV-96 23:40:15
Operator : BES Inst ID: R.i
Smp Info : L#318889 CLI#SGP247810 ETR#62586
Misc Info : 5% ANALYSIS
Comment :
Method : /chem/R.i/R1.p/RHXA_8270.b/SV_8270v6RTE.m
Meth Date : 27-Nov-96 18:50:33 je Quant Type: ISTD
Cal Date : 25-NOV-96 21:53:00 Cal File: RHX050ABS.d
Als bottle: 3
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: OLM.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vi * Ws * (100-M)/100)*GPC

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Ws	2.000	Weight of sample extracted (g)
M	47.000	% Moisture
GPC	2.000	GPC Factor

ISTD		RT	AREA	AMOUNT
* 11	1,4-Dichlorobenzene-d4	8.911	5531284	40.000
* 30	Naphthalene-d8	10.968	5593302	40.000
* 63	Phenanthrene-d10	16.436	4247745	40.000
* 75	Chrysene-d12	20.967	2856279	40.000
* 82	Perylene-d12	23.307	2812471	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown alkane				CAS #:			
7.362	1114702	8.1	150000	0		0	11
Butanoic acid, 2-methyl-				CAS #: 116-53-0			
7.934	1507803	11	200000	72	NBS75K.l	63484	11
Unknown alkane				CAS #:			
8.220	1362378	9.8	180000	0		0	11(L)
Unknown alkane				CAS #:			
8.664	5927002	43	810000	0		0	11
Unknown alkylcyclohexane				CAS #:			
9.139	1739419	12	240000	0		0	11
Unknown alkane				CAS #:			
9.366	1596176	12	220000	0		0	11(L)
Unknown alkane				CAS #:			
9.445	1282403	9.3	170000	0		0	11
Unknown alkane				CAS #:			
9.524	1471484	11	200000	0		0	11
Unknown alkane				CAS #:			
10.049	1289047	9.2	170000	0		0	30
Unknown alkane				CAS #:			
15.457	786901	7.4	140000	0		0	63
Hexadecanoic acid				CAS #: 57-10-3			
17.398	3855222	36	680000	94	NBS75K.l	71607	63
Tetradecanoic acid				CAS #: 544-63-8			
18.731	3760505	53	990000	97	NBS75K.l	70843	75
Unknown aliphatic ketone				CAS #:			
20.747	1132082	16	300000	0		0	75
Unknown alkane				CAS #:			
21.416	903390	13	240000	0		0	75
Unknown alkane				CAS #:			
21.556	1062736	15	280000	0		0	75

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown aliphatic acid					CAS #:		
21.806	850467	12	220000	0		0	75
Unknown alkane					CAS #:		
21.997	2627472	37	690000	0		0	75(M)
Unknown polycyclic hydrocarbon					CAS #:		
^4.256	749695	11	200000	0		0	82
Vitamin E					CAS #: 59-02-9		
24.356	1940661	28	520000	78	NBS75K.l	74415	82
Vitamin E					CAS #: 59-02-9		
24.706	14532897	210	3900000	97	NBS75K.l	74415	82

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

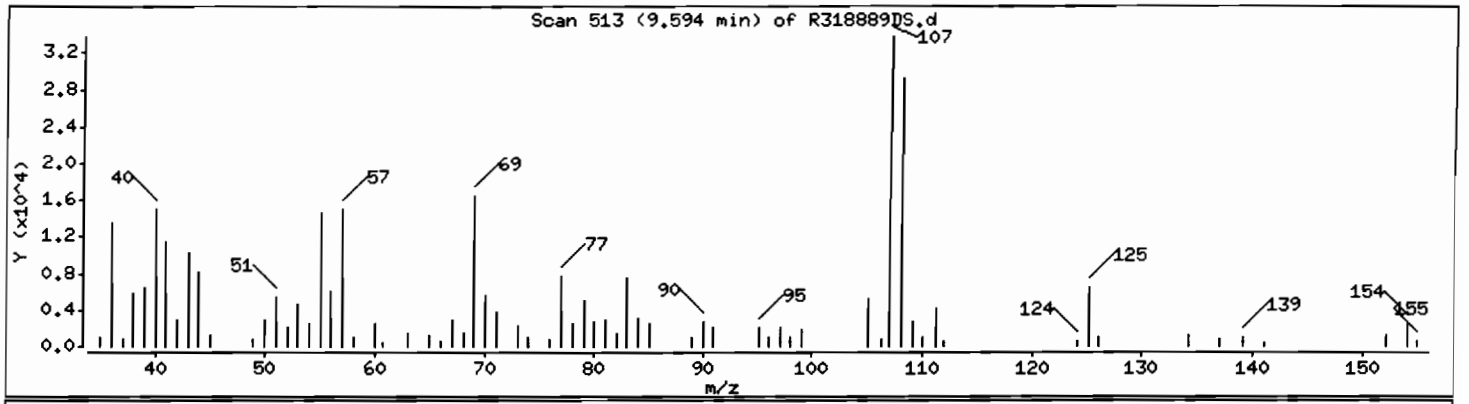
Client ID: SGP247810 Instrument: R.i

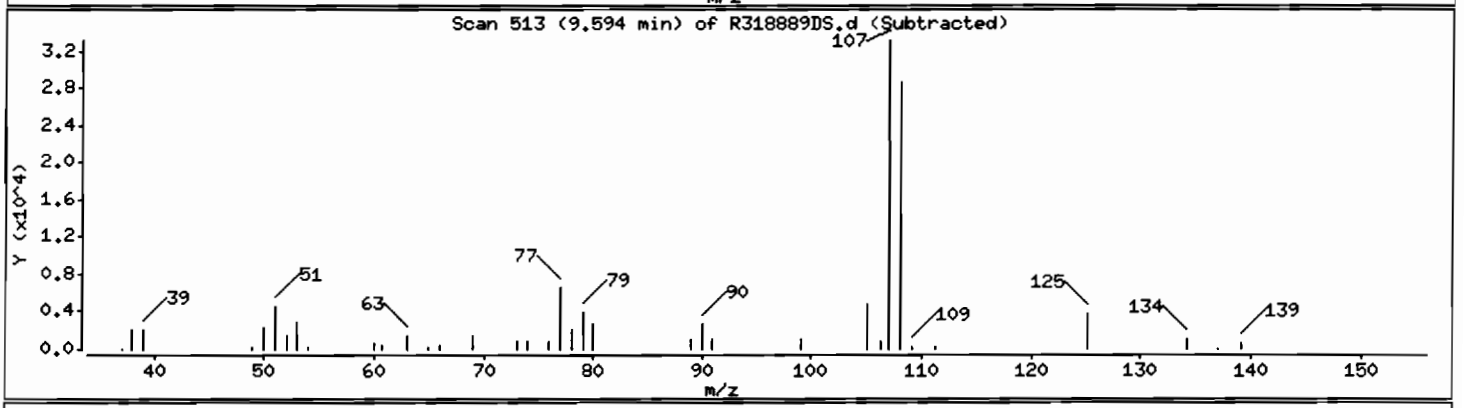
Sample Info: L#318889 CLI#SGP247810 ETR#62586

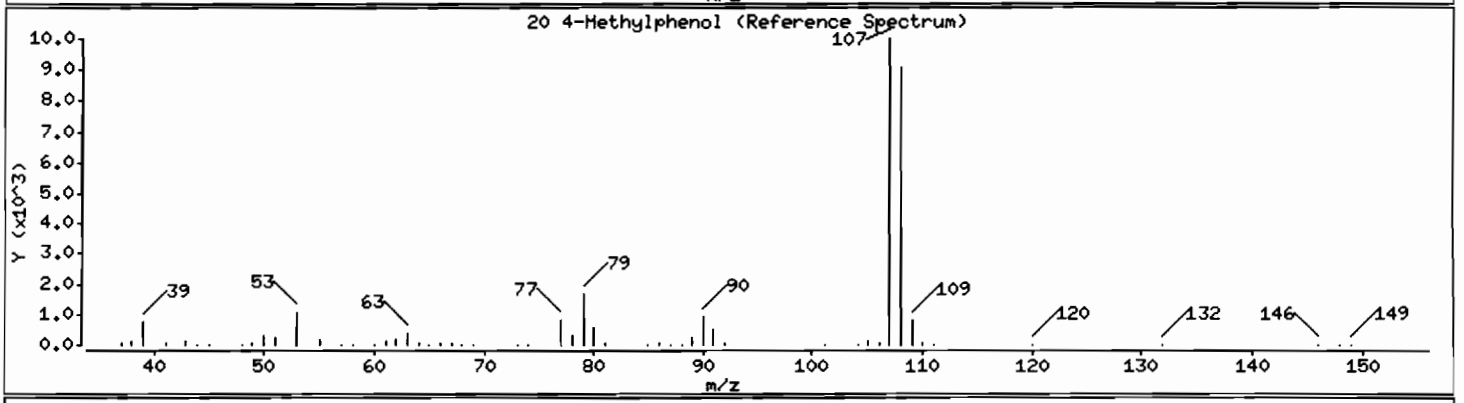
Volume Injected (uL): 2.0 Operator: BES

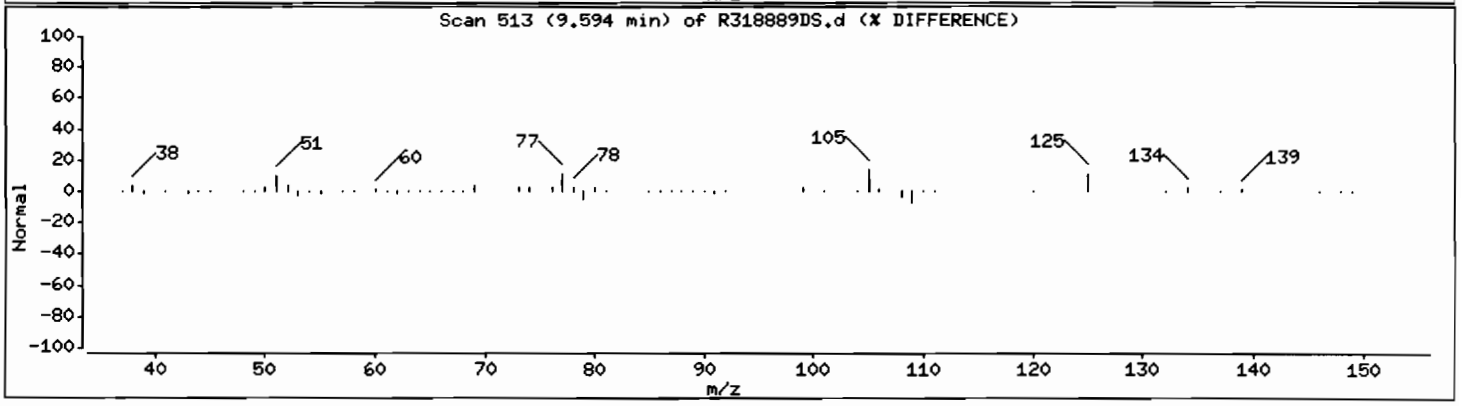
Column phase: RTX-5 Column diameter: 0.25

20 4-Methylphenol Concentration: 110000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

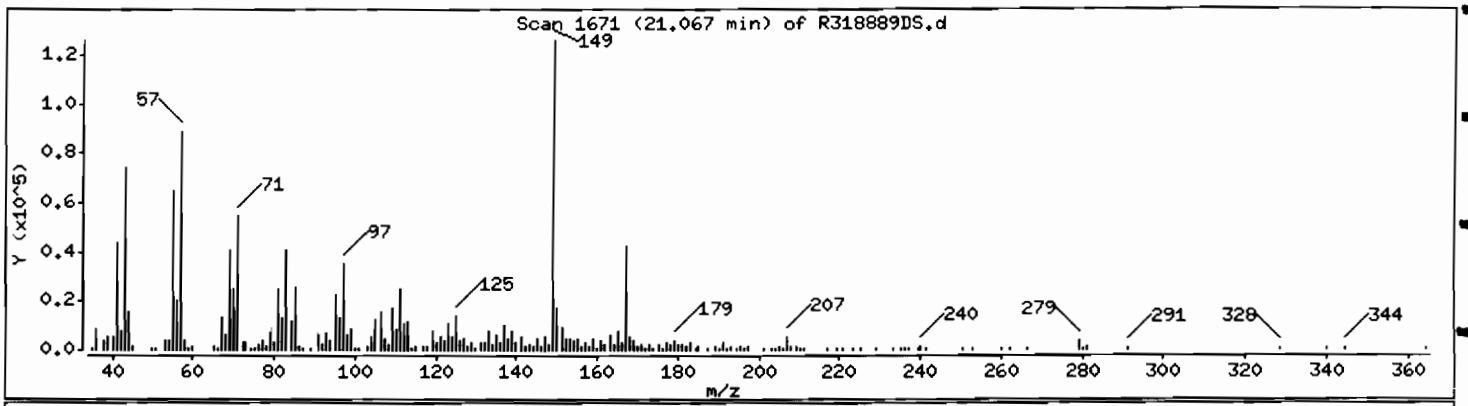
Client ID: SGP247810 Instrument: R.i

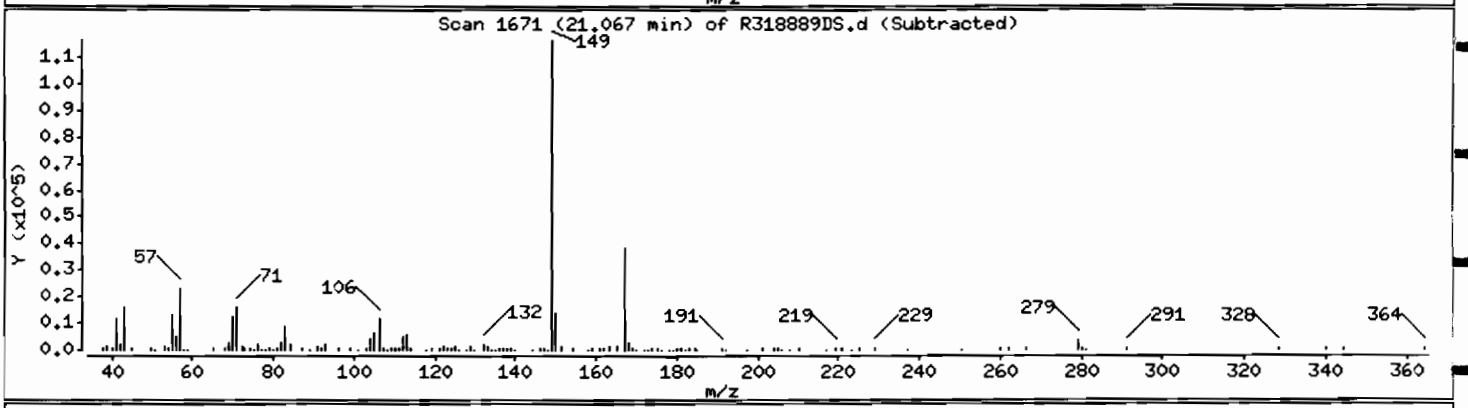
Sample Info: L#318889 CLI#SGP247810 ETR#62586

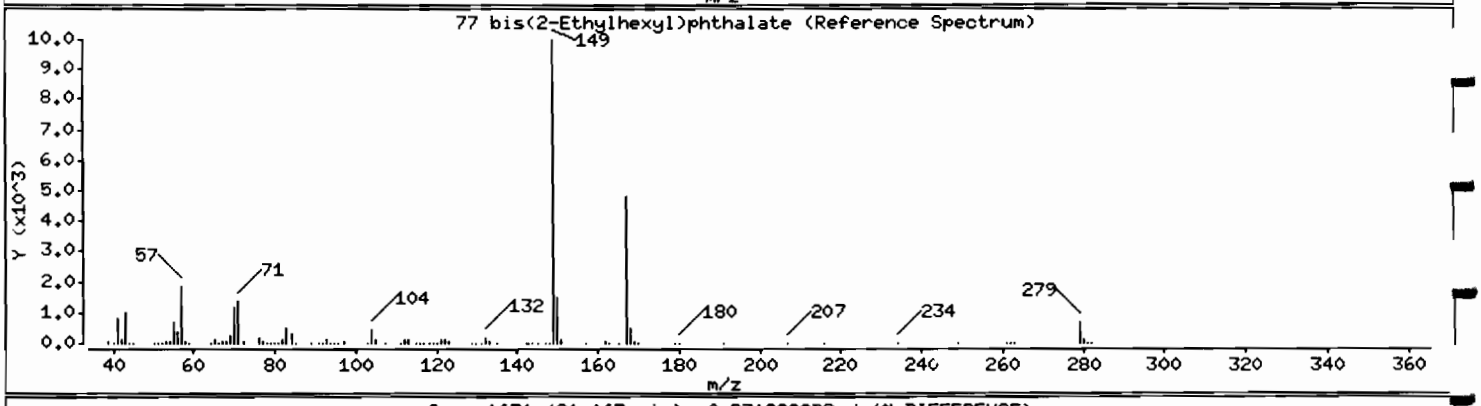
Volume Injected (uL): 2.0 Operator: BES

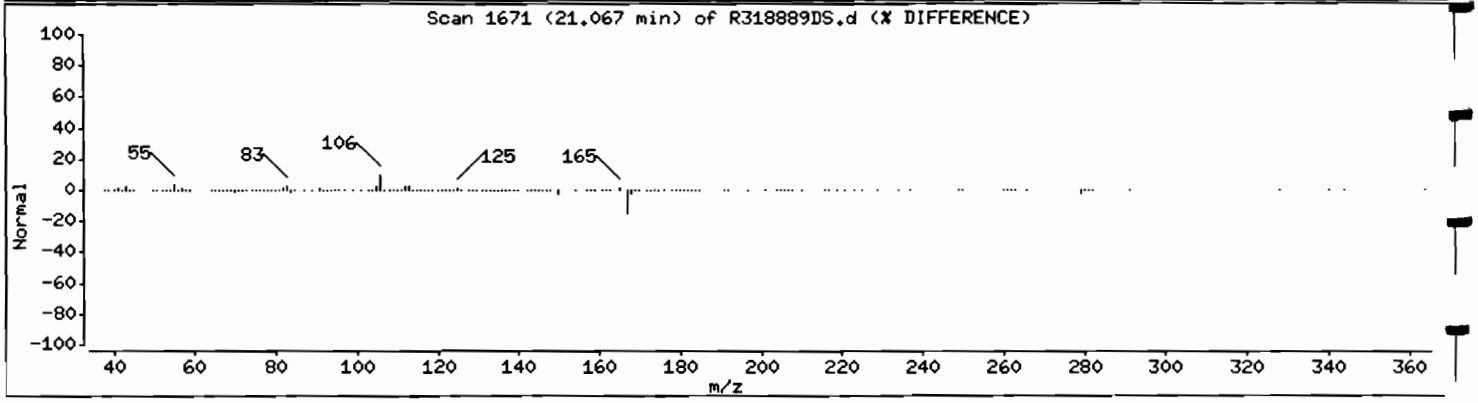
Column phase: RTX-5 Column diameter: 0.25

77 bis(2-Ethylhexyl)phthalate Concentration: 75000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

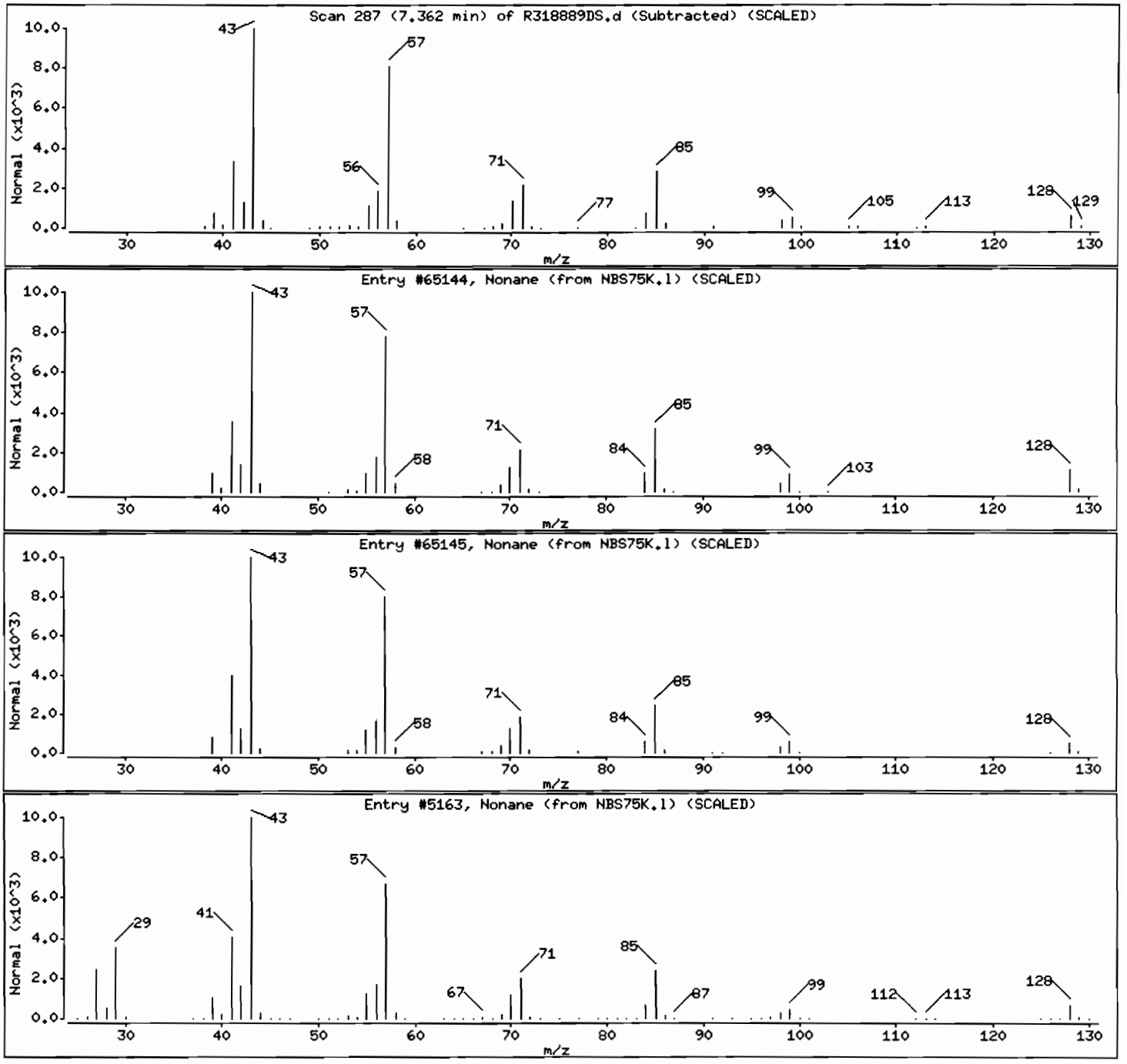
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Nonane	111-84-2	NBS75K.l	65144	95	C9H20	128
Nonane	111-84-2	NBS75K.l	65145	94	C9H20	128
Nonane	111-84-2	NBS75K.l	5163	93	C9H20	128



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

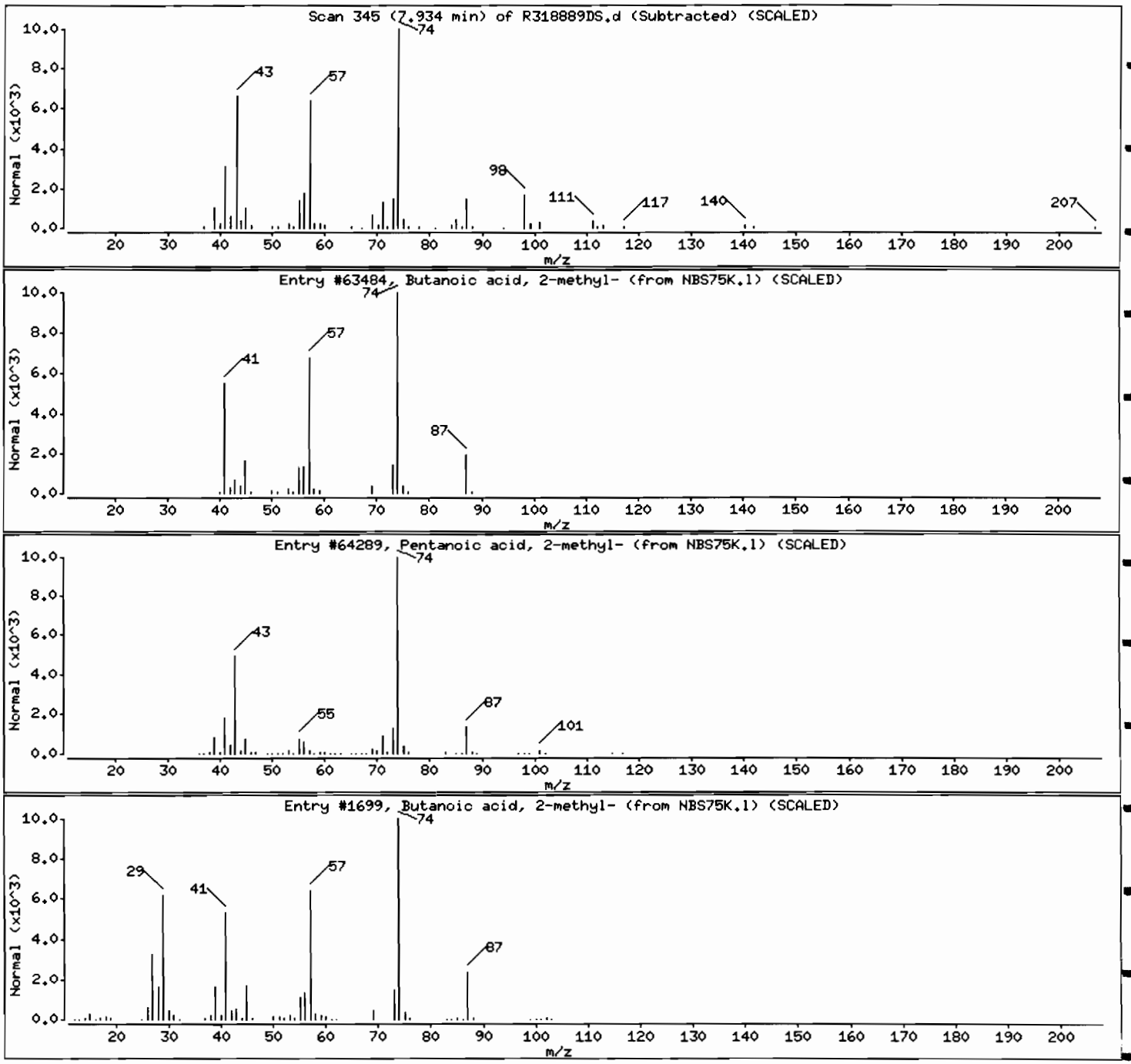
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butanoic acid, 2-methyl-	116-53-0	NBS75K.l	63484	72	C5H1002	102
Pentanoic acid, 2-methyl-	97-61-0	NBS75K.l	64289	72	C6H1202	116
Butanoic acid, 2-methyl-	116-53-0	NBS75K.l	1699	64	C5H1002	102



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

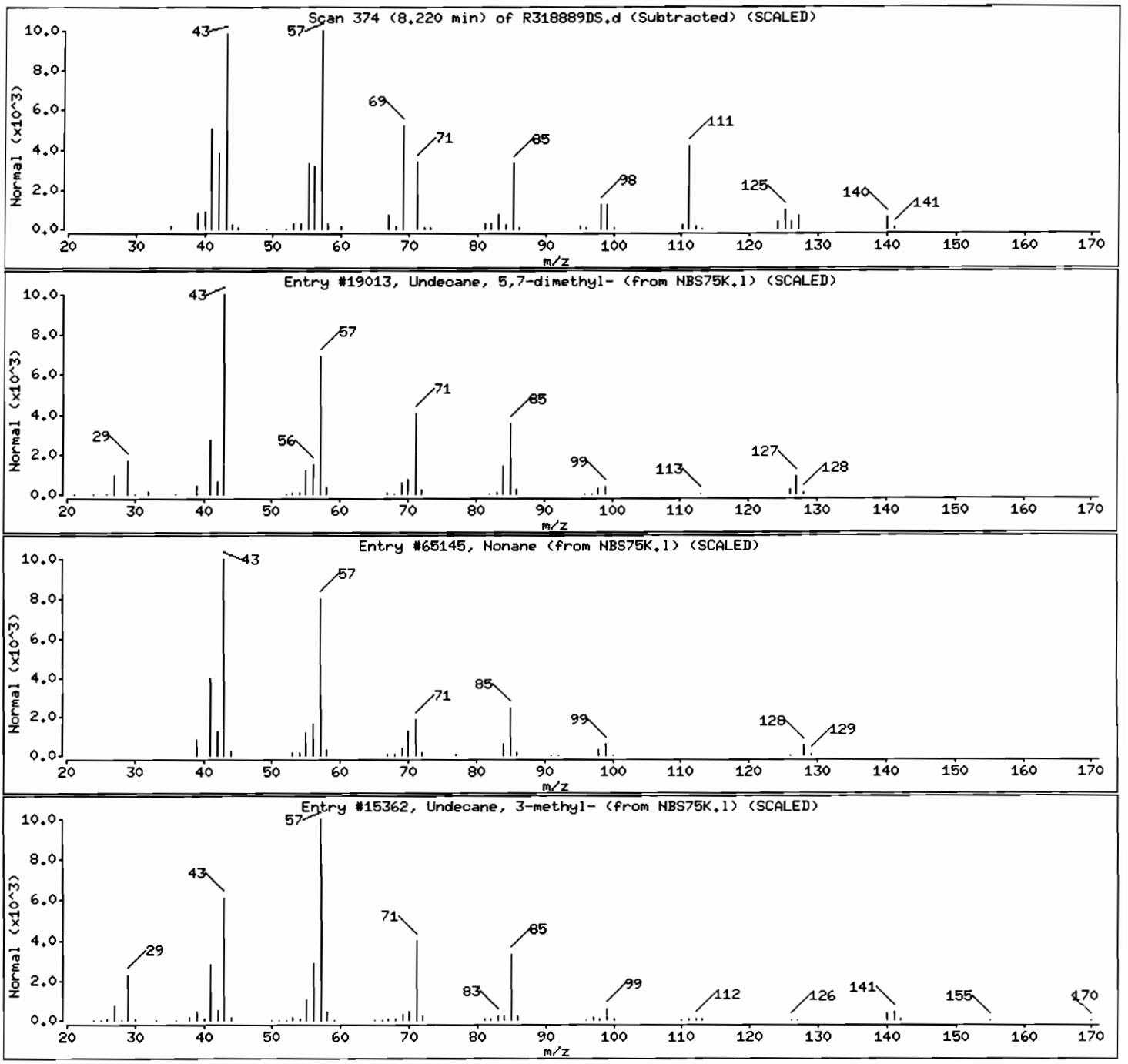
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Undecane, 5,7-dimethyl-	17312-83-3	NBS75K.l	19013	10	C13H28	184
Nonane	111-84-2	NBS75K.l	65145	38	C9H20	128
Undecane, 3-methyl-	1002-43-3	NBS75K.l	15362	38	C12H26	170



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

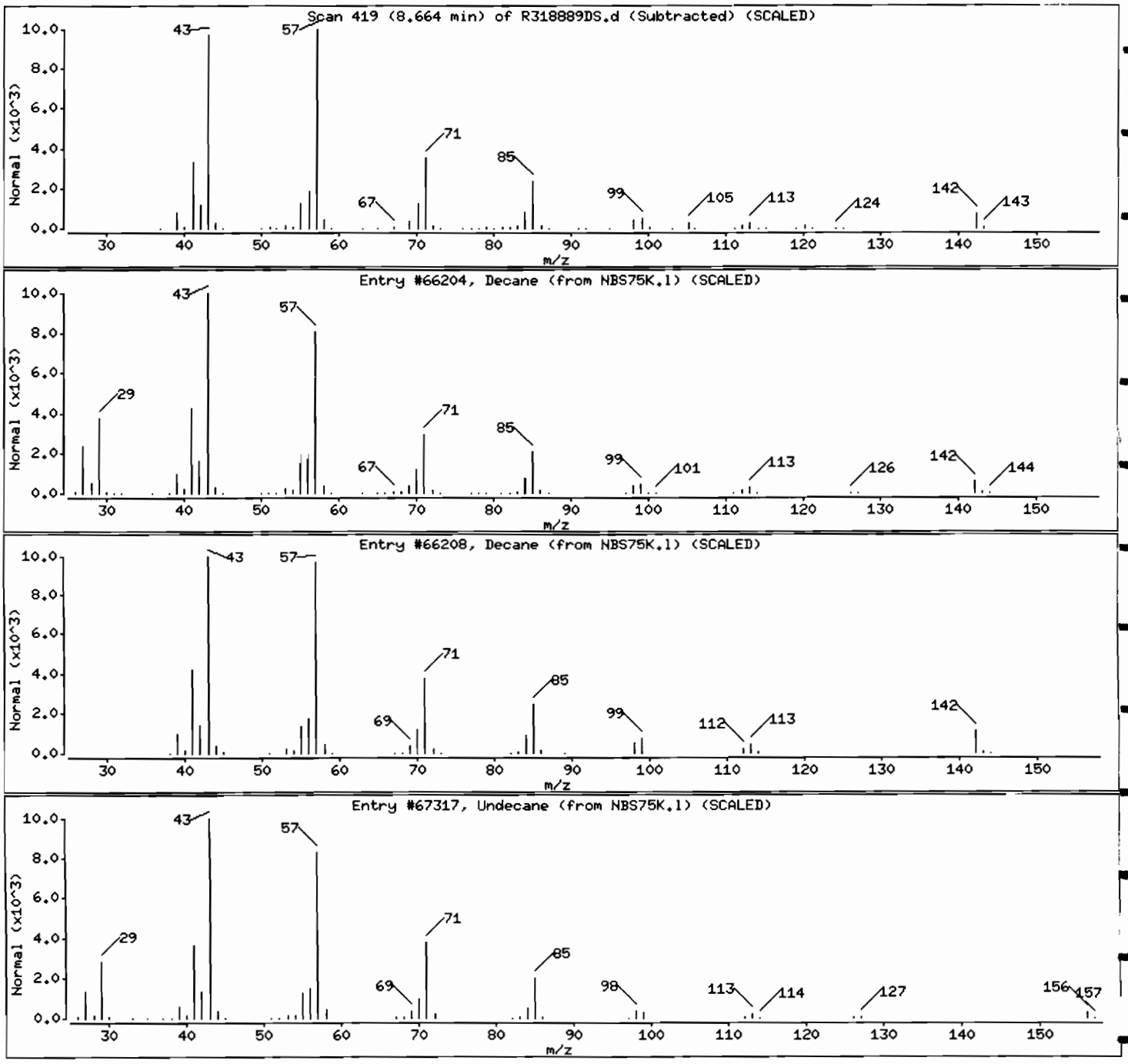
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Decane	124-18-5	NBS75K.l	66204	94	C10H22	142
Decane	124-18-5	NBS75K.l	66208	91	C10H22	142
Undecane	1120-21-4	NBS75K.l	67317	90	C11H24	156



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

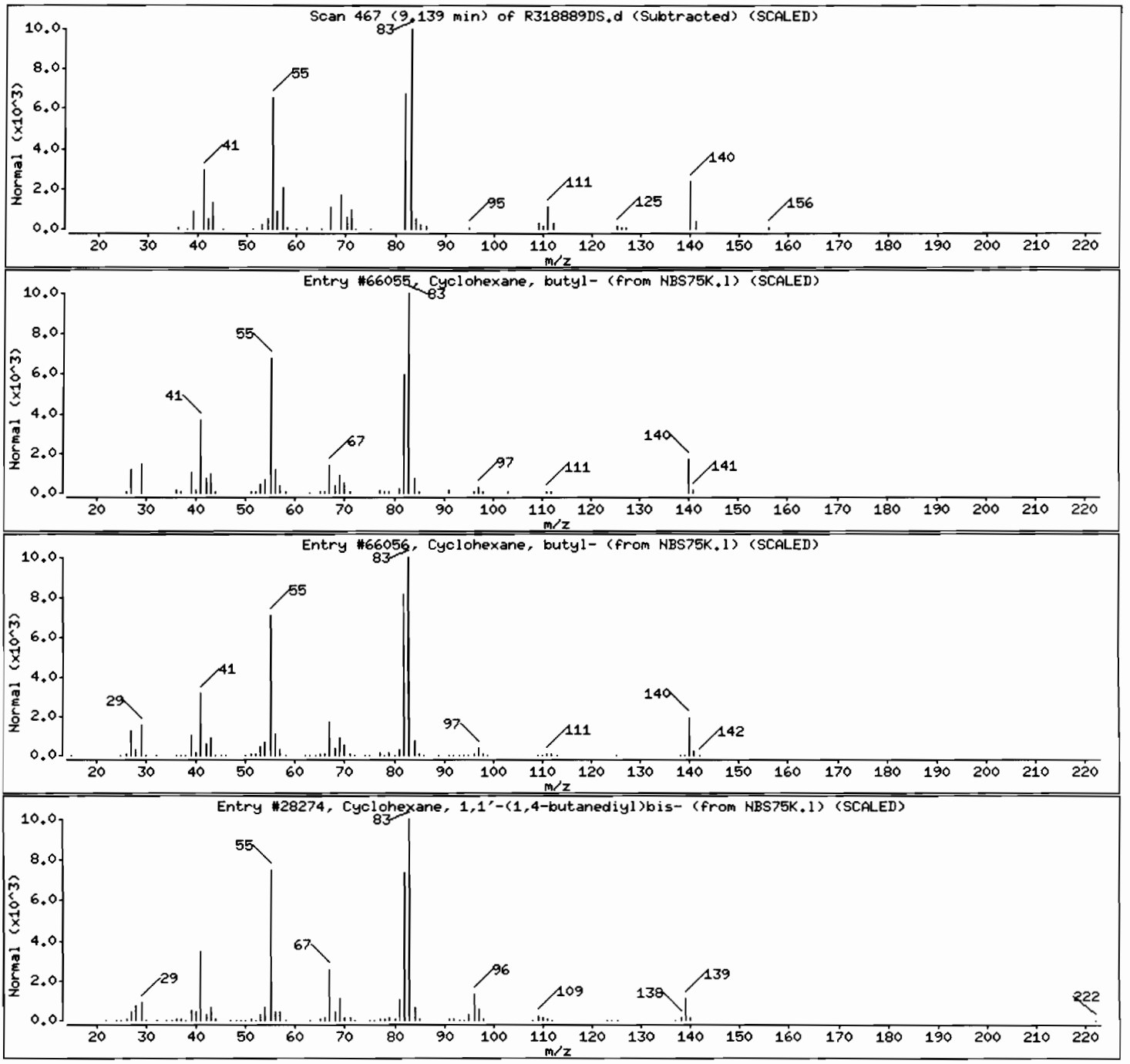
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkylcyclohexane						
Cyclohexane, butyl-	1678-93-9	NBS75K.l	66055	64	C10H20	140
Cyclohexane, butyl-	1678-93-9	NBS75K.l	66056	59	C10H20	140
Cyclohexane, 1,1'-(1,4-butanediyl)bis-	6165-44-2	NBS75K.l	28274	53	C16H30	222



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

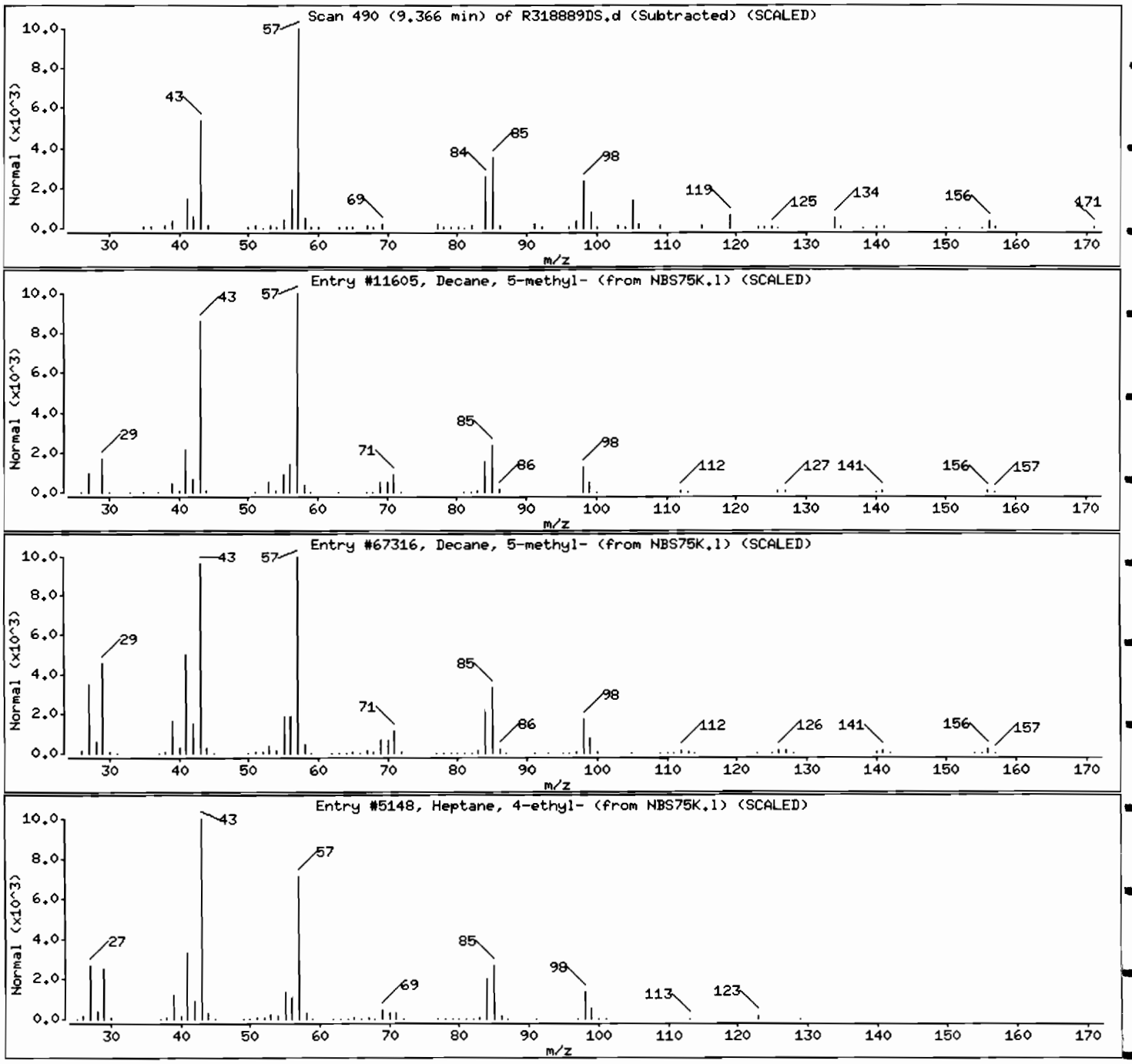
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Decane, 5-methyl-	13151-35-4	NBS75K.l	11605	83	C11H24	156
Decane, 5-methyl-	13151-35-4	NBS75K.l	67316	80	C11H24	156
Heptane, 4-ethyl-	2216-32-2	NBS75K.l	5148	64	C9H20	128



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

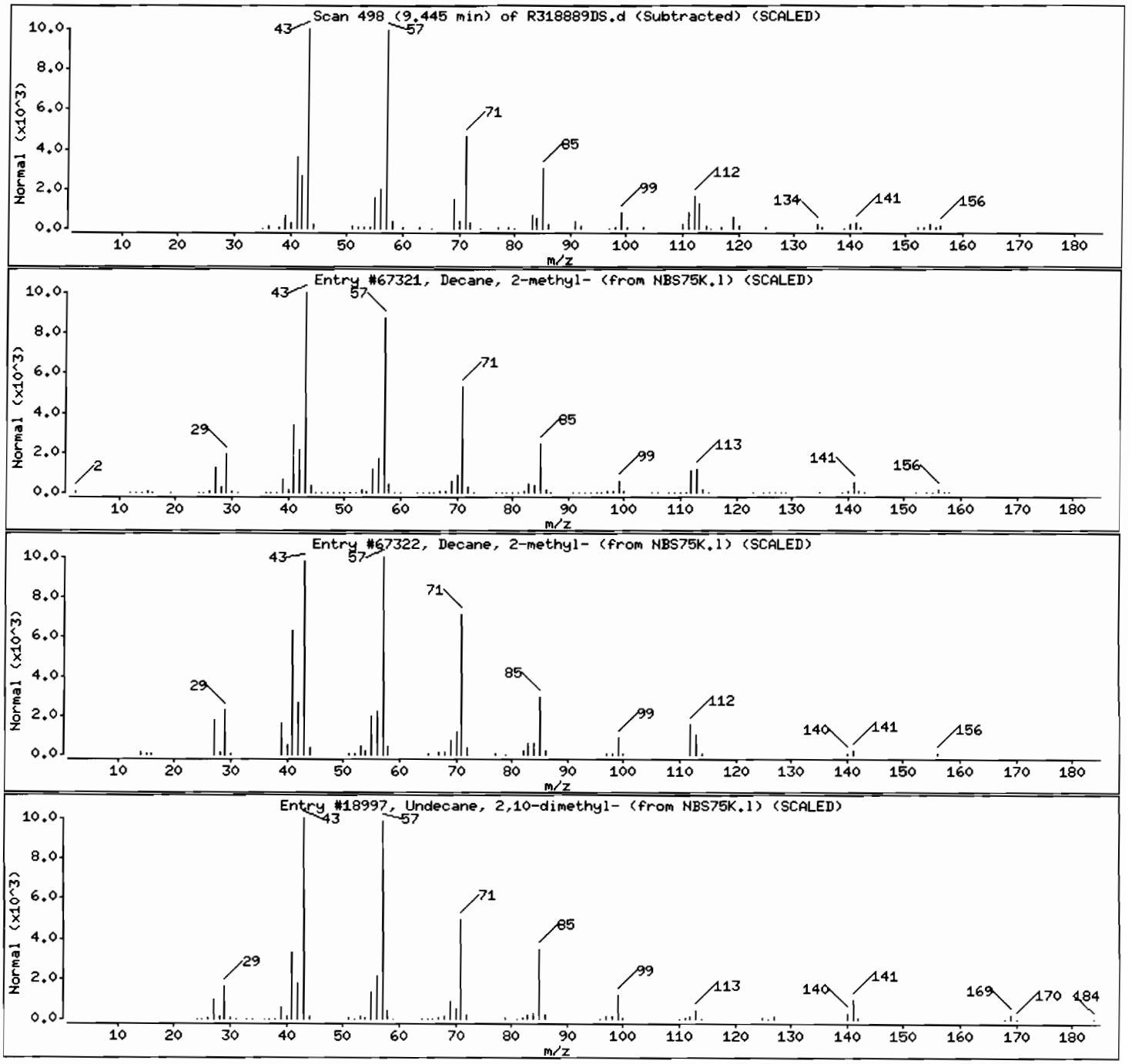
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Decane, 2-methyl-	6975-98-0	NBS75K.l	67321	94	C11H24	156
Decane, 2-methyl-	6975-98-0	NBS75K.l	67322	64	C11H24	156
Undecane, 2,10-dimethyl-	17301-27-8	NBS75K.l	18997	59	C13H28	184



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

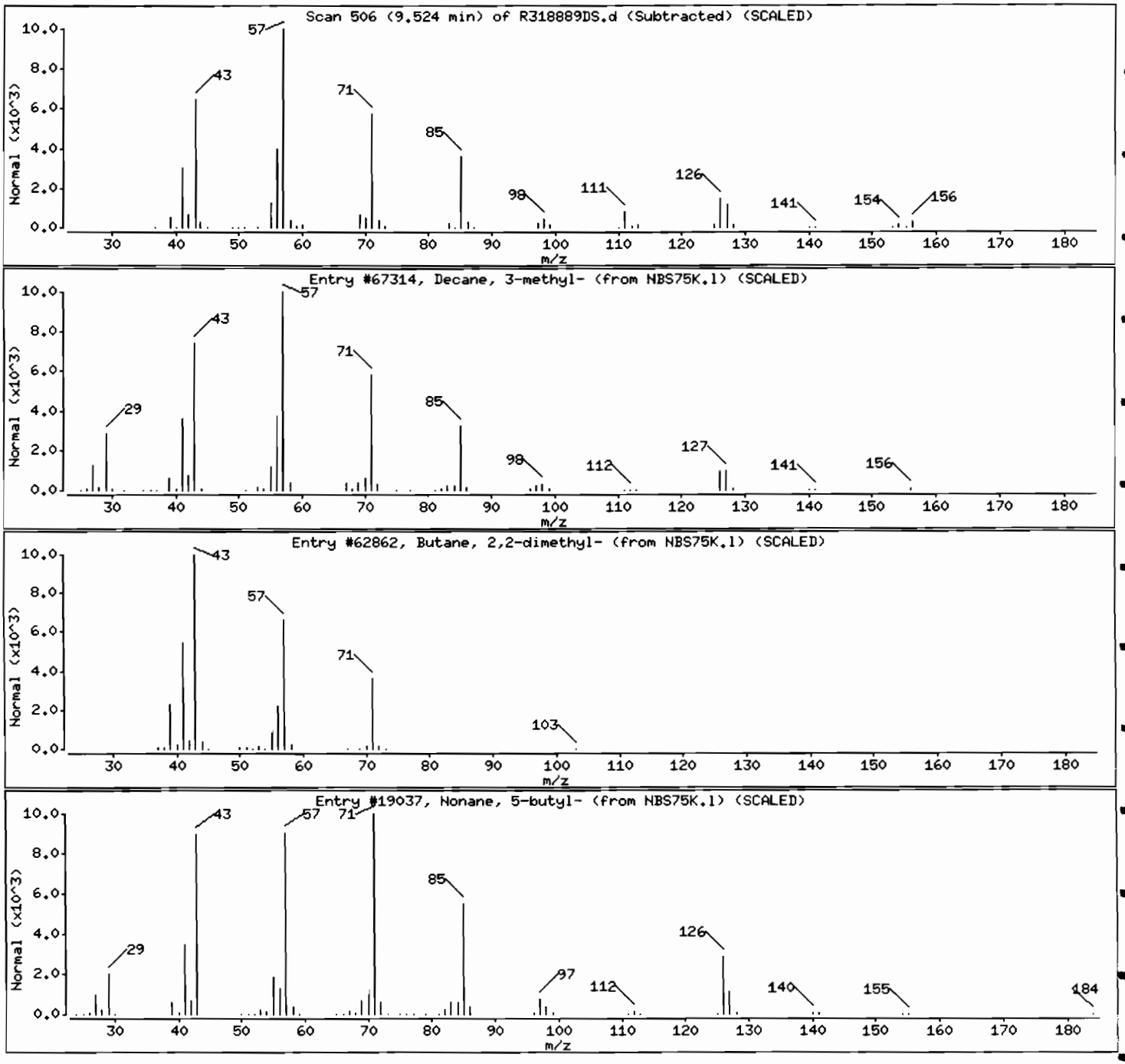
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Decane, 3-methyl-	13151-34-3	NBS75K.l	67314	90	C11H24	156
Butane, 2,2-dimethyl-	75-83-2	NBS75K.l	62862	50	C6H14	86
Nonane, 5-butyl-	17312-63-9	NBS75K.l	19037	50	C13H28	184



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

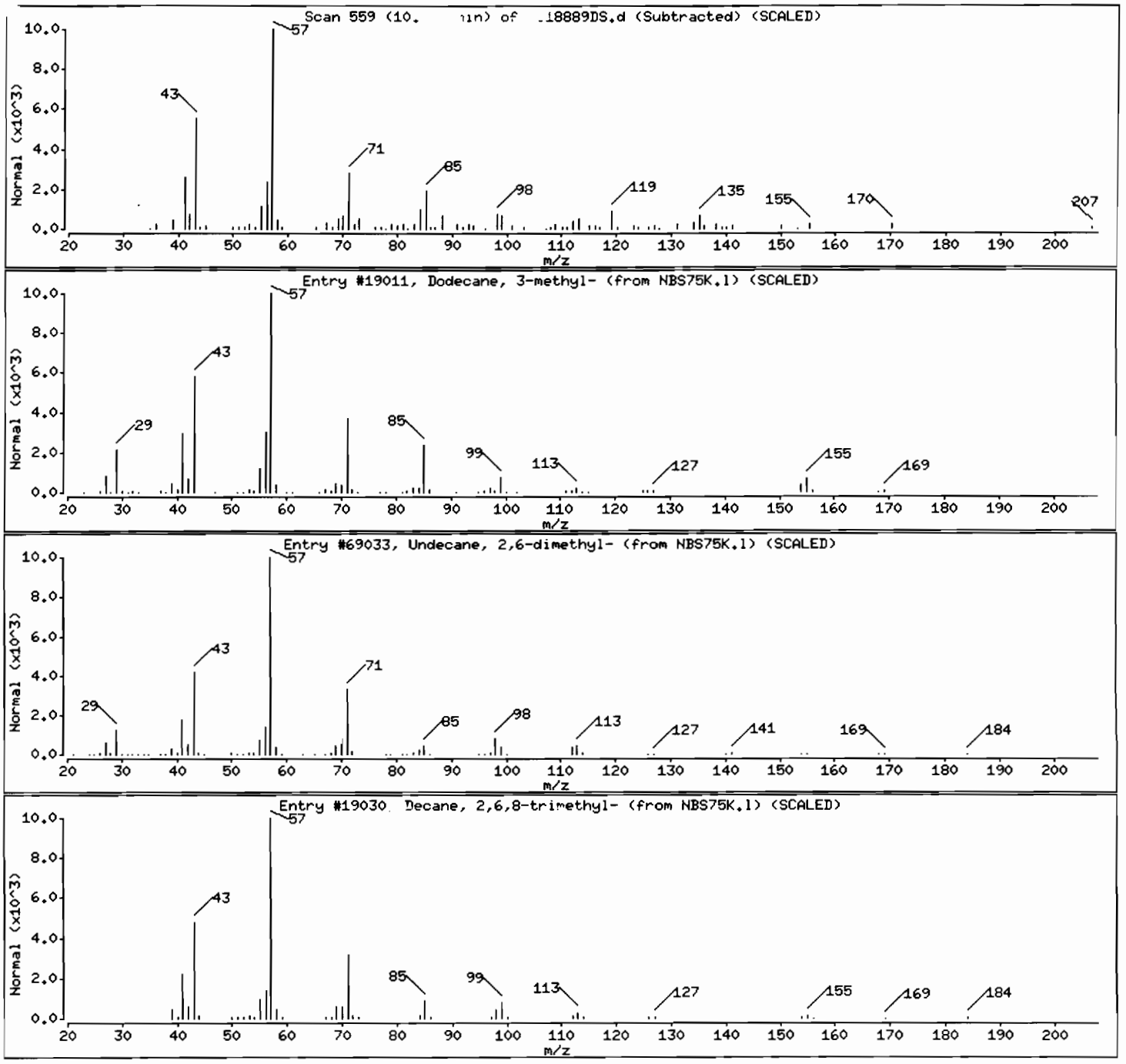
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Dodecane, 3-methyl-	17312-57-1	NBS75K.l	19011	53	C13H28	184
Undecane, 2,6-dimethyl-	17301-23-4	NBS75K.l	69033	47	C13H28	184
Decane, 2,6,8-trimethyl-	62108-26-3	NBS75K.l	19030	47	C13H28	184



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

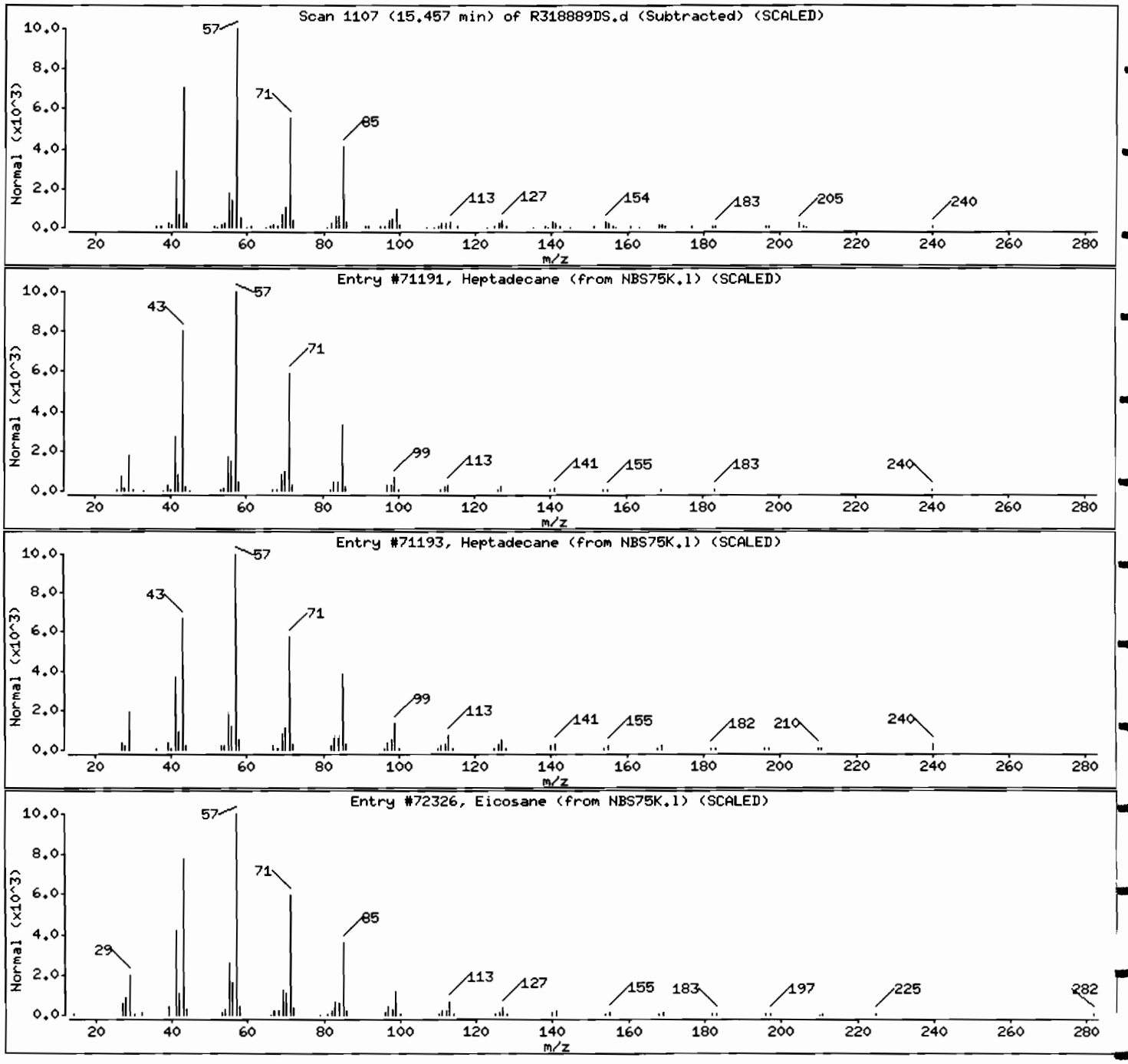
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Heptadecane	629-78-7	NBS75K.l	71191	98	C17H36	240
Heptadecane	629-78-7	NBS75K.l	71193	94	C17H36	240
Eicosane	112-95-8	NBS75K.l	72326	90	C20H42	282



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

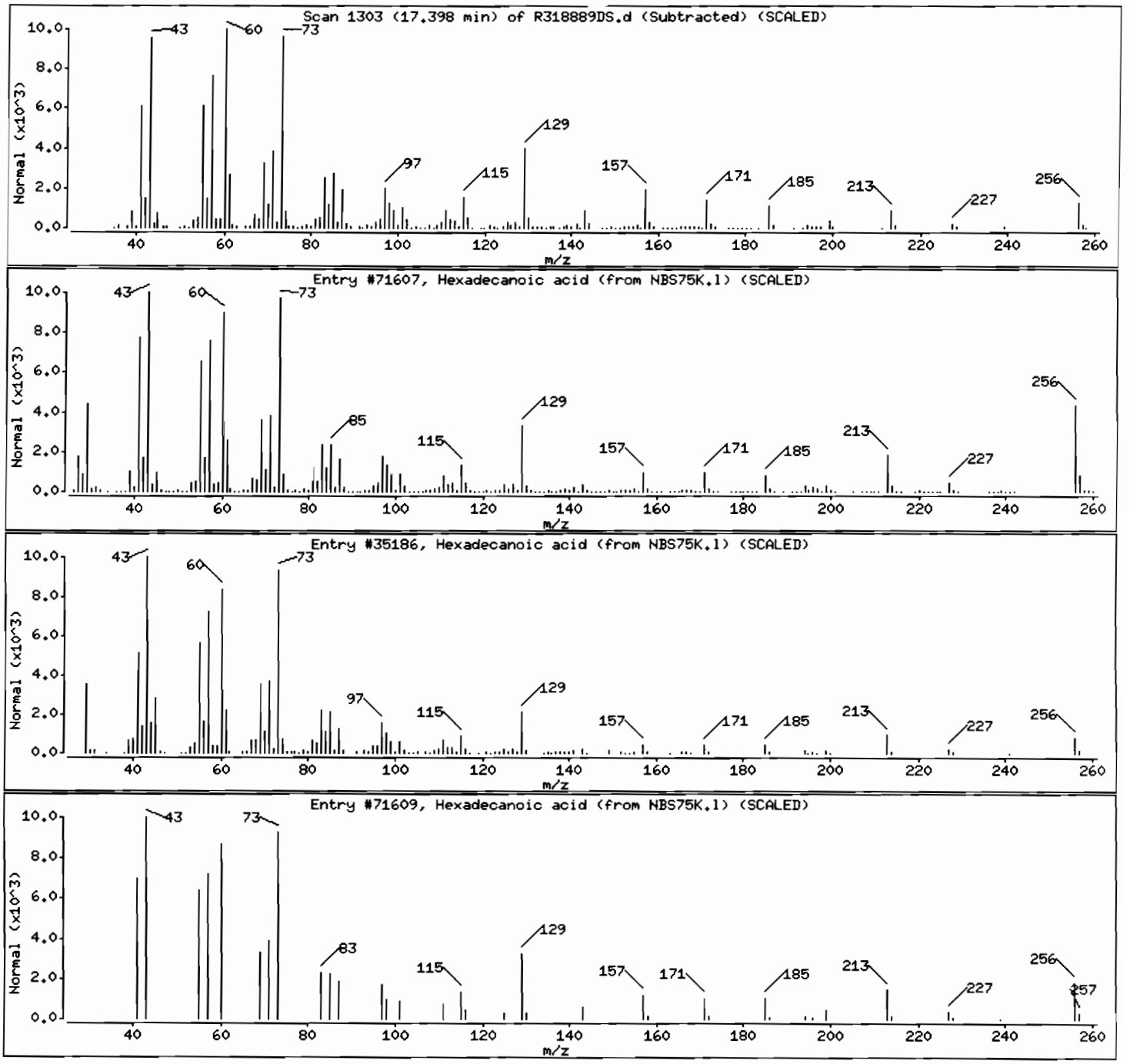
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecanoic acid	57-10-3	NBS75K.1	71607	94	C16H32O2	256
Hexadecanoic acid	57-10-3	NBS75K.1	35186	94	C16H32O2	256
Hexadecanoic acid	57-10-3	NBS75K.1	71609	93	C16H32O2	256



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

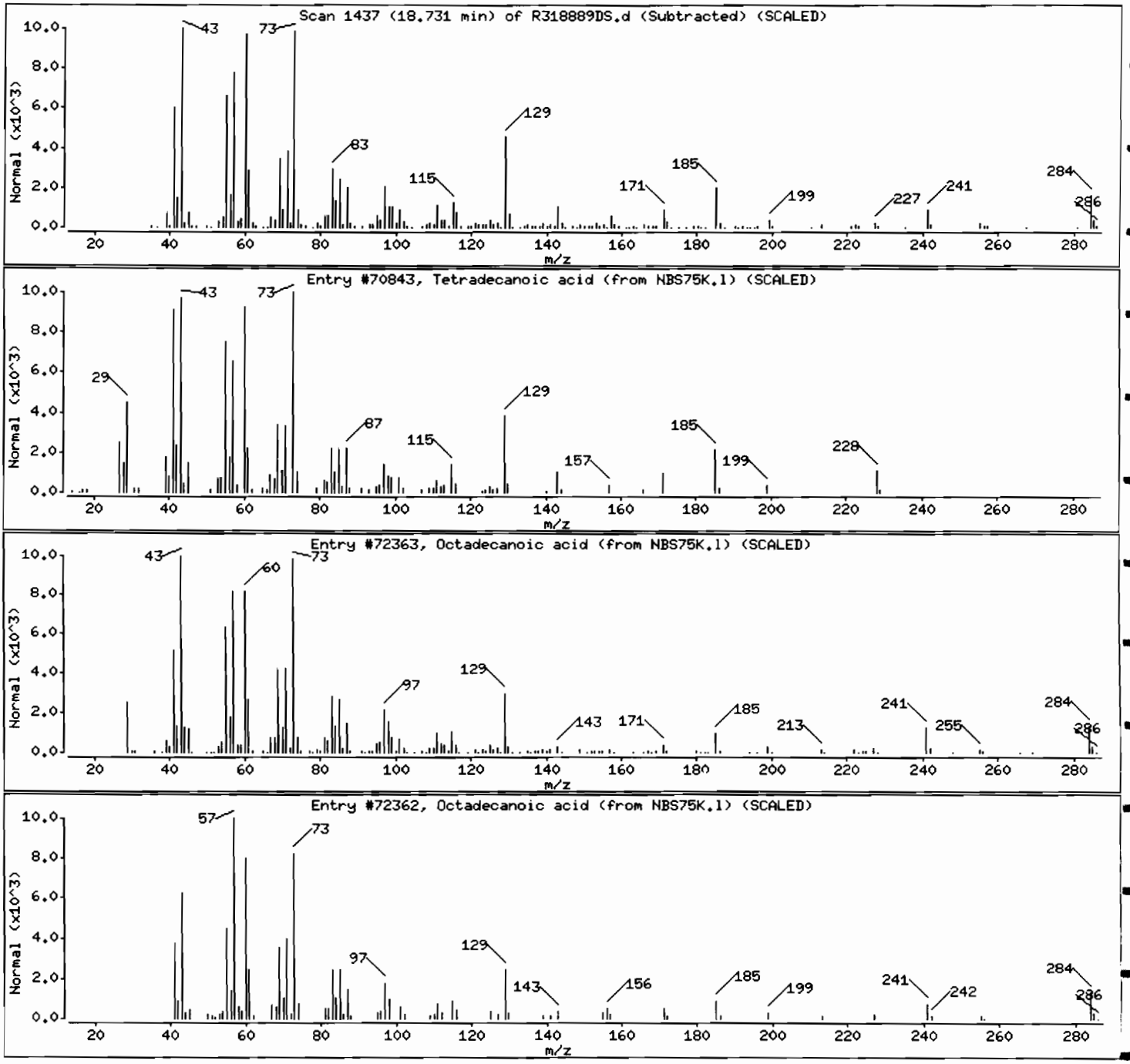
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetradecanoic acid	544-63-8	NBS75K.l	70843	97	C14H2802	228
Octadecanoic acid	57-11-4	NBS75K.l	72363	95	C18H3602	284
Octadecanoic acid	57-11-4	NBS75K.l	72362	94	C18H3602	284



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

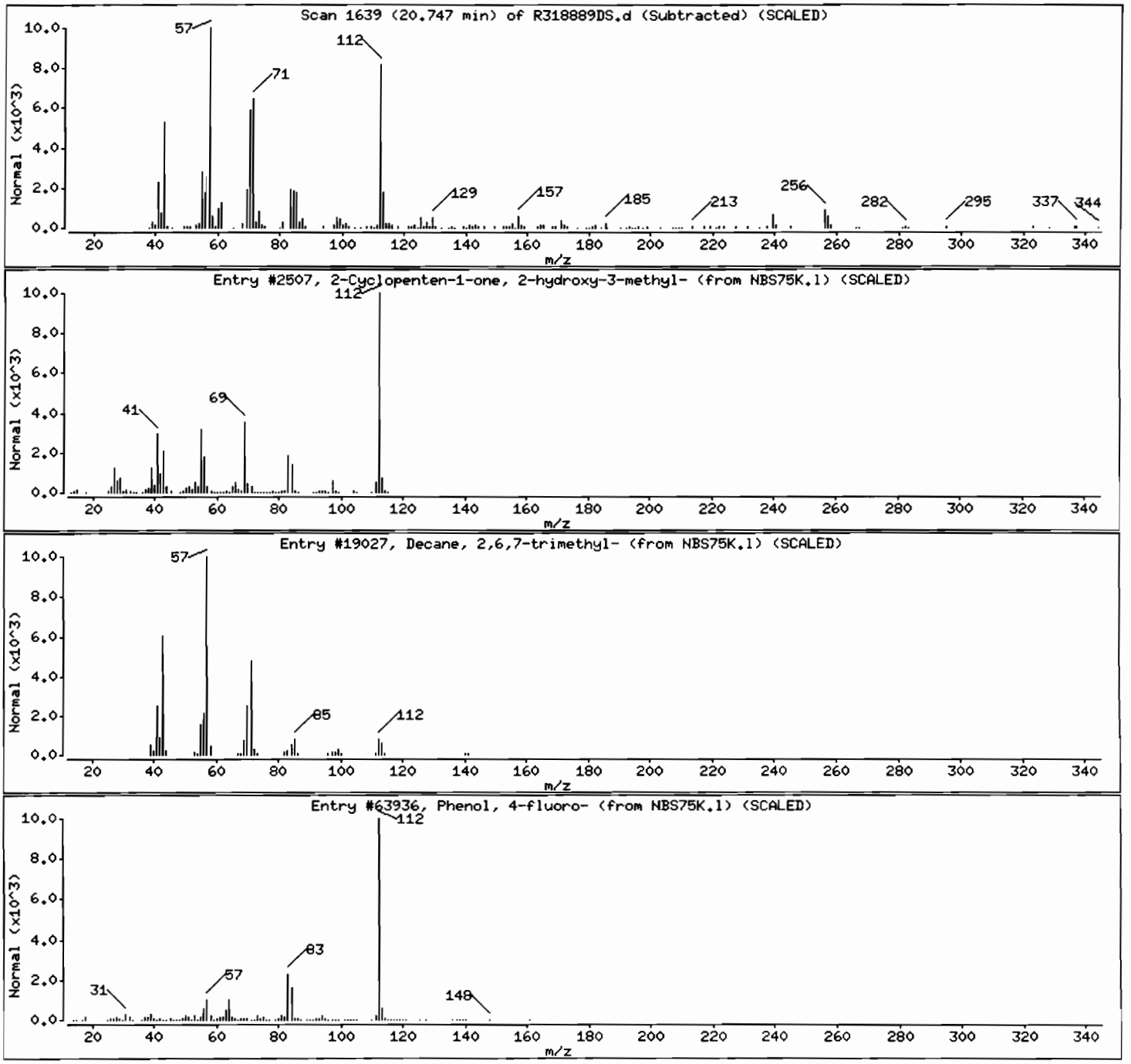
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown aliphatic ketone						
2-Cyclopenten-1-one, 2-hydroxy-3-methyl-	80-71-7	NBS75K.l	2507	38	C6H8O2	112
Decane, 2,6,7-trimethyl-	62108-25-2	NBS75K.l	19027	32	C13H28	184
Phenol, 4-fluoro-	371-41-5	NBS75K.l	63936	32	C6H5FO	112



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

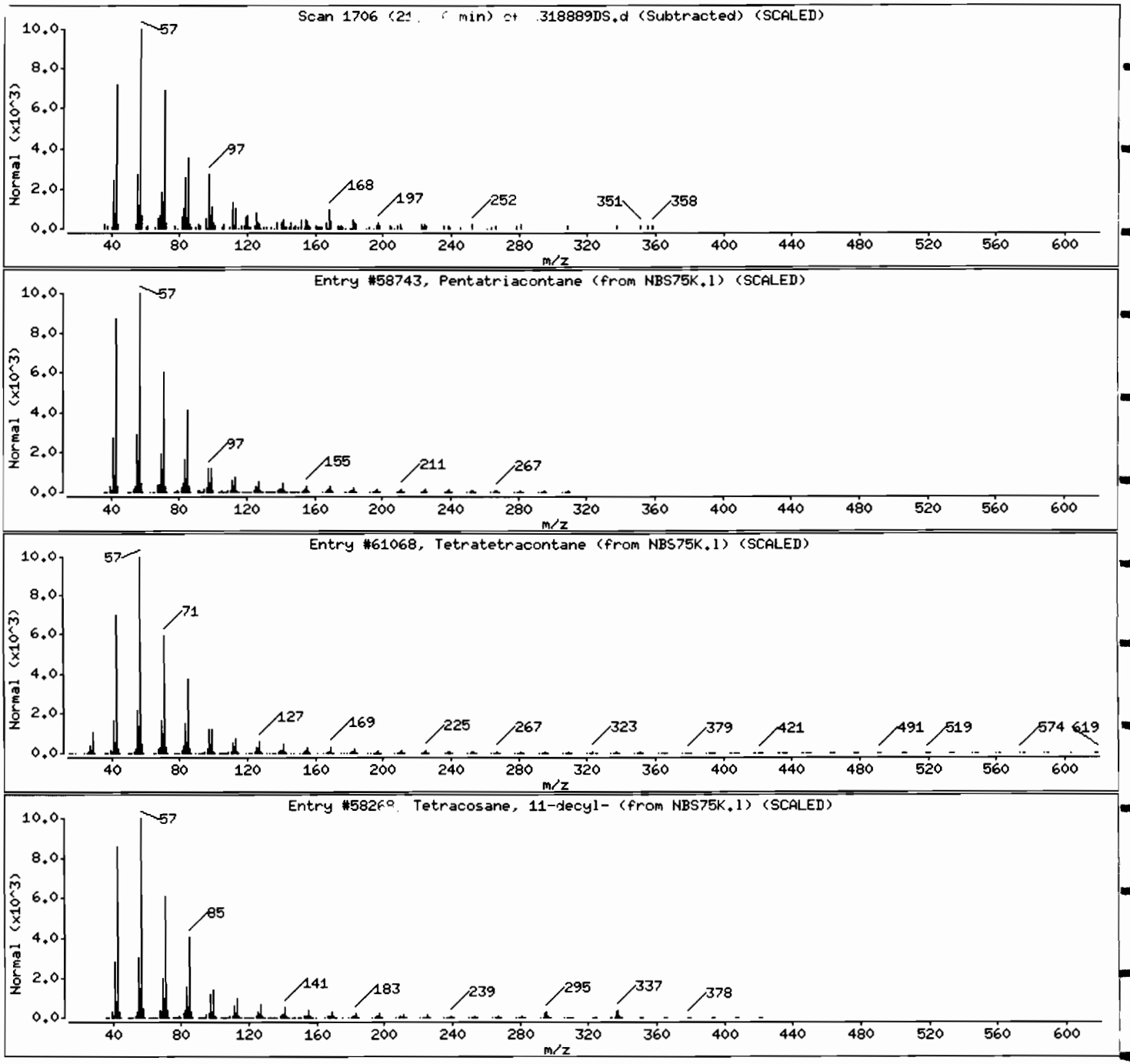
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Pentatriacontane	630-07-9	NBS75K.1	58743	76	C35H72	493
Tetratetracontane	7098-22-8	NBS75K.1	61068	68	C44H90	619
Tetracosane, 11-decyl-	55429-84-0	NBS75K.1	58268	64	C34H70	479



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

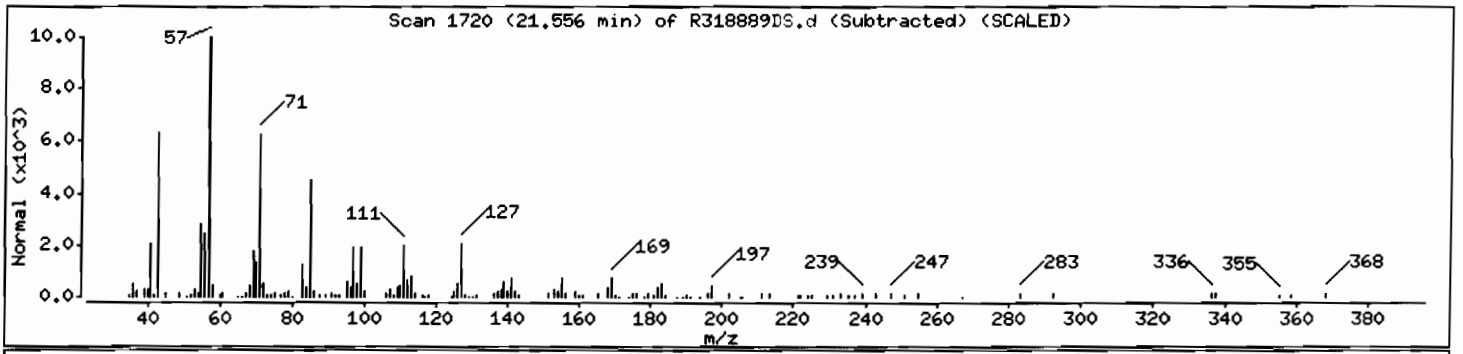
Client ID: SGP247810 Instrument: R.i

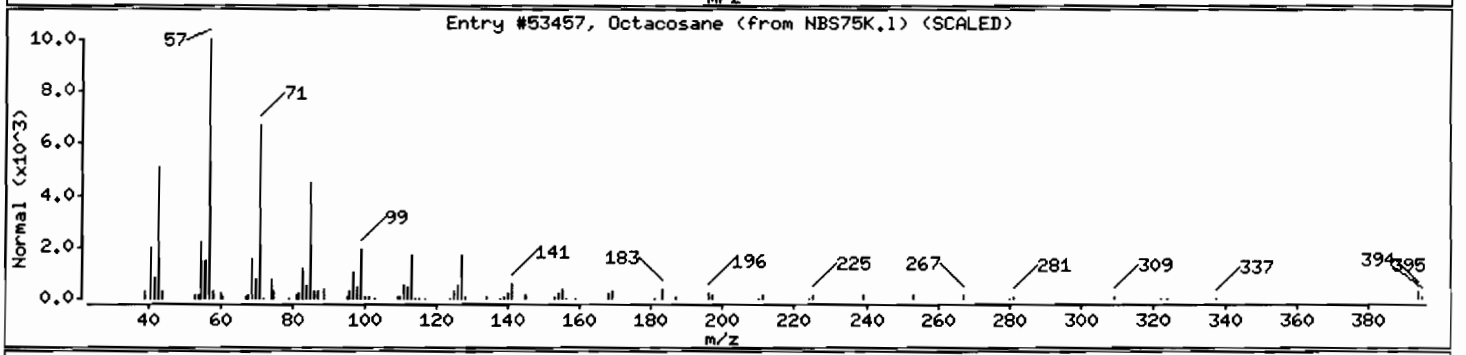
Sample Info: L#318889 CLI#SGP247810 ETR#62586

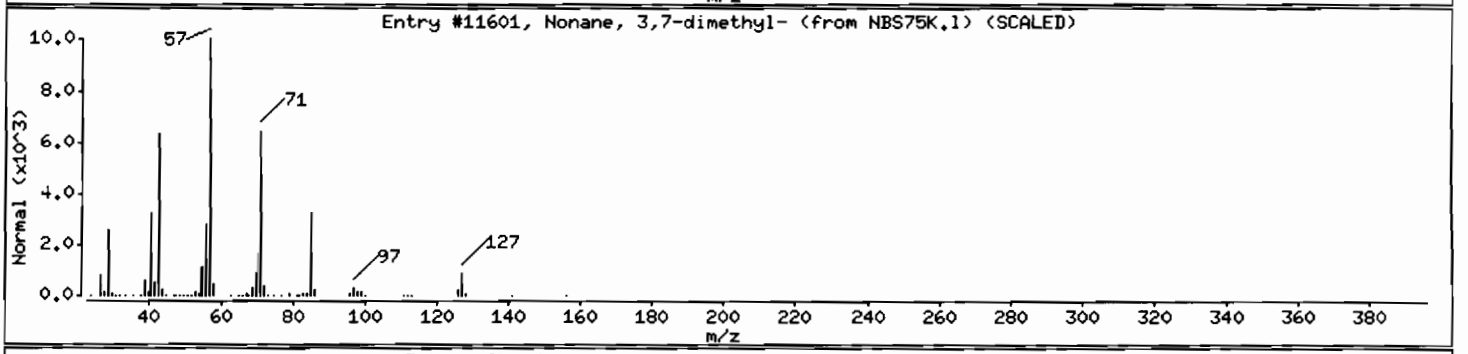
Volume Injected (uL): 2.0 Operator: BES

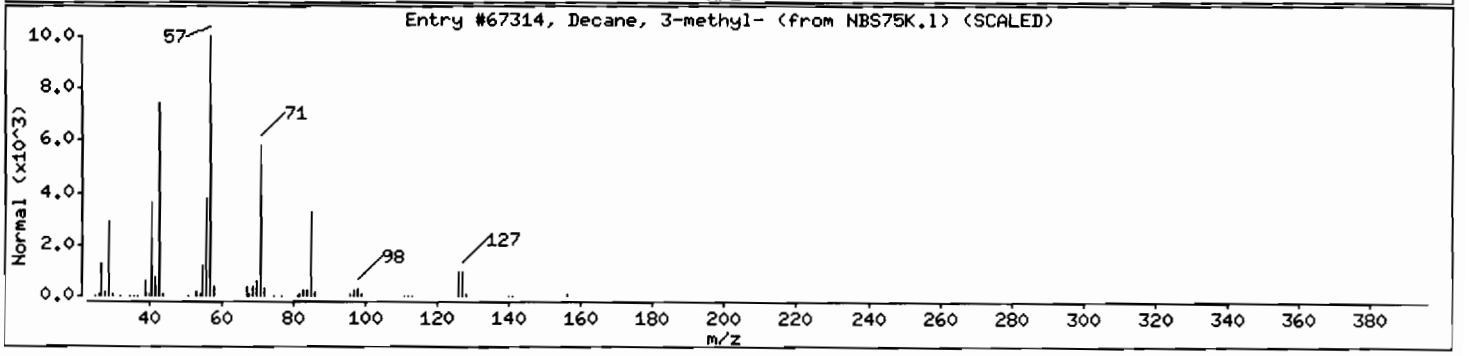
Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Octacosane	630-02-4	NBS75K.l	53457	72	C28H58	394
Nonane, 3,7-dimethyl-	17302-32-8	NBS75K.l	11601	70	C11H24	156
Decane, 3-methyl-	13151-34-3	NBS75K.l	67314	53	C11H24	156









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

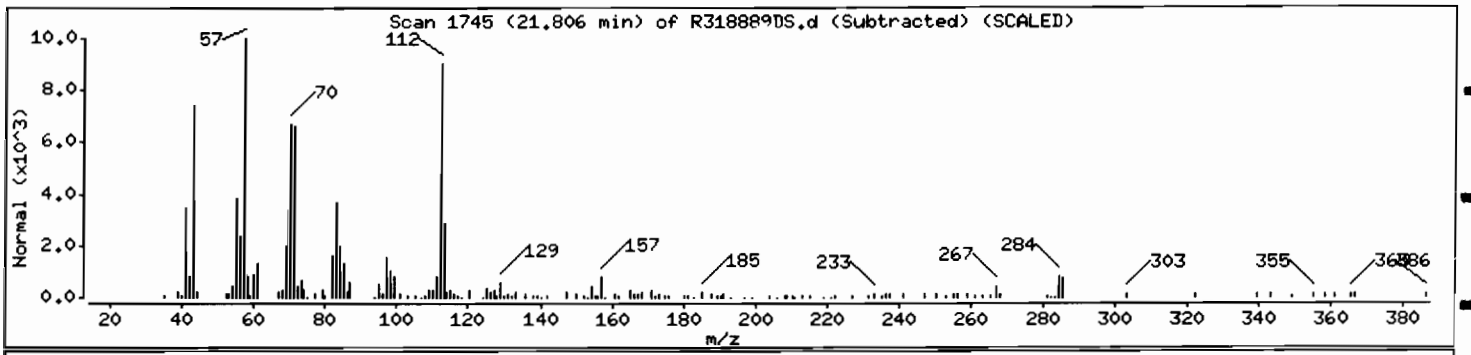
Client ID: SGP247810 Instrument: R.i

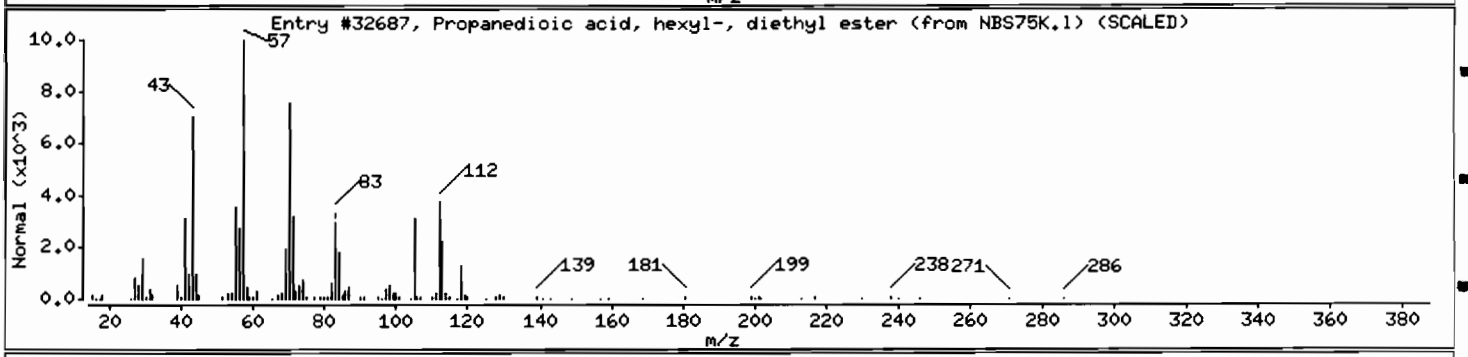
Sample Info: L#318889 CLI#SGP247810 ETR#62586

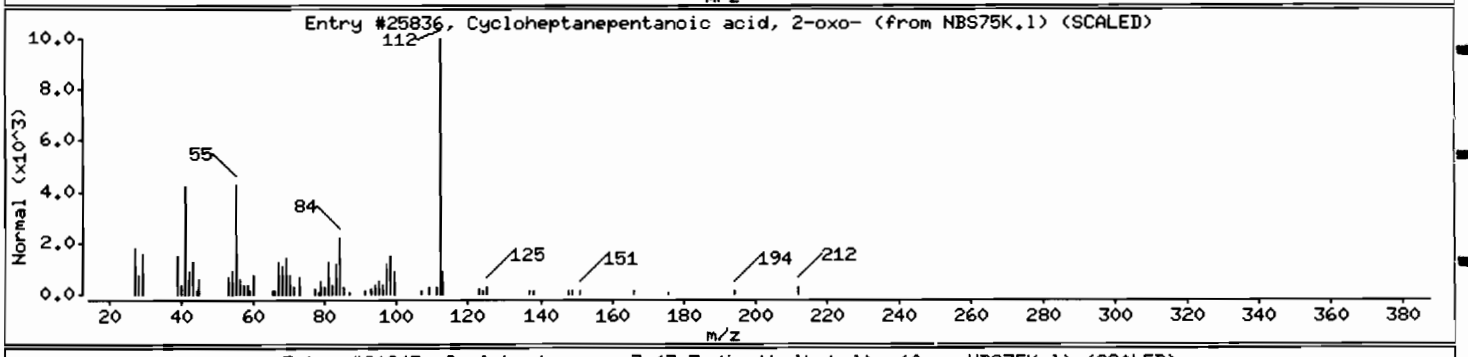
Volume Injected (uL): 2.0 Operator: BES

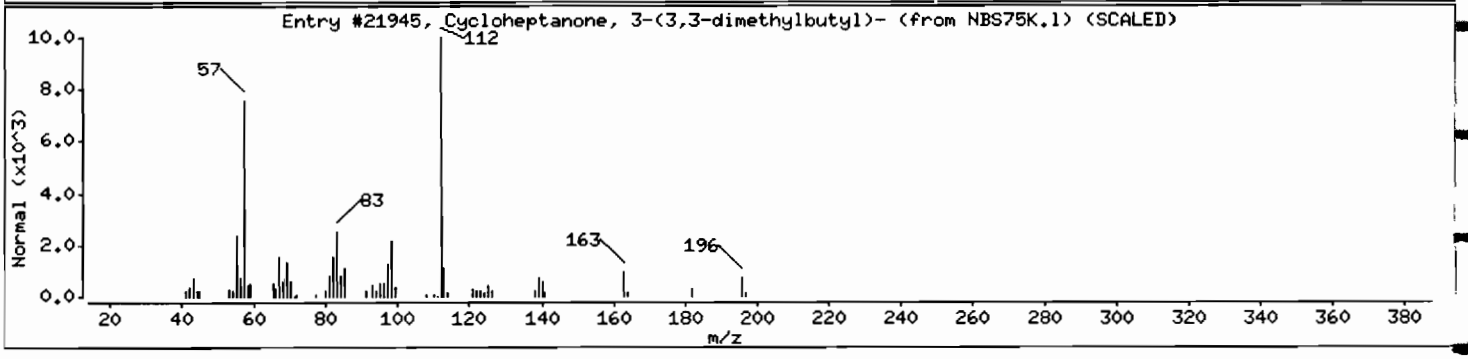
Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown aliphatic acid						
Propanedioic acid, hexyl-, diethyl ester	5398-10-7	NBS75K.l	32687	43	C13H2404	244
Cycloheptanepentanoic acid, 2-oxo-	33371-95-8	NBS75K.l	25836	38	C12H2003	212
Cycloheptanone, 3-(3,3-dimethylbutyl)-	40564-95-2	NBS75K.l	21945	35	C13H240	196









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

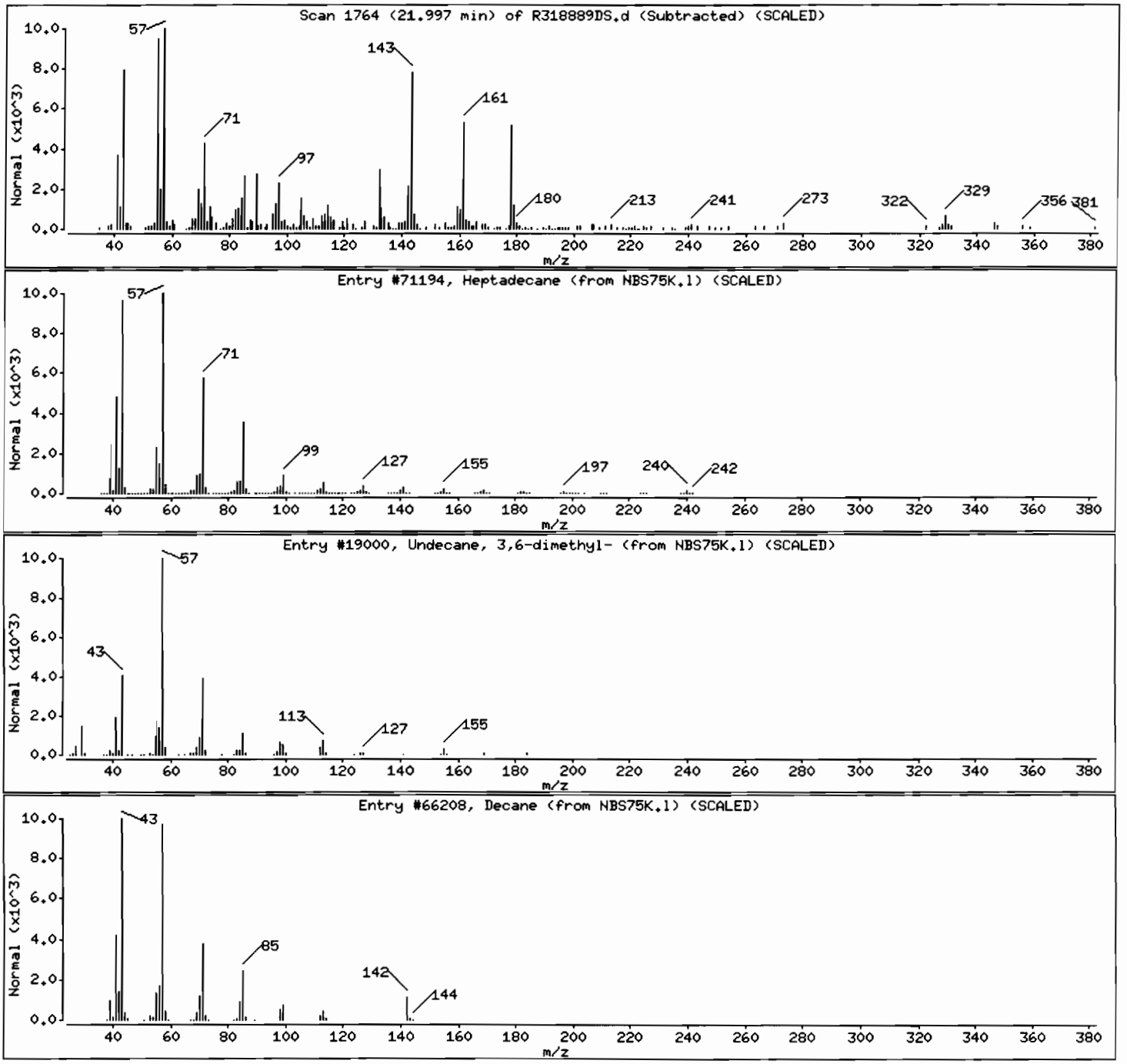
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown alkane						
Heptadecane	629-78-7	NBS75K.l	71194	25	C17H36	240
Undecane, 3,6-dimethyl-	17301-28-9	NBS75K.I	19000	25	C13H28	184
Decane	124-18-5	NBS75K.l	66208	20	C10H22	142



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

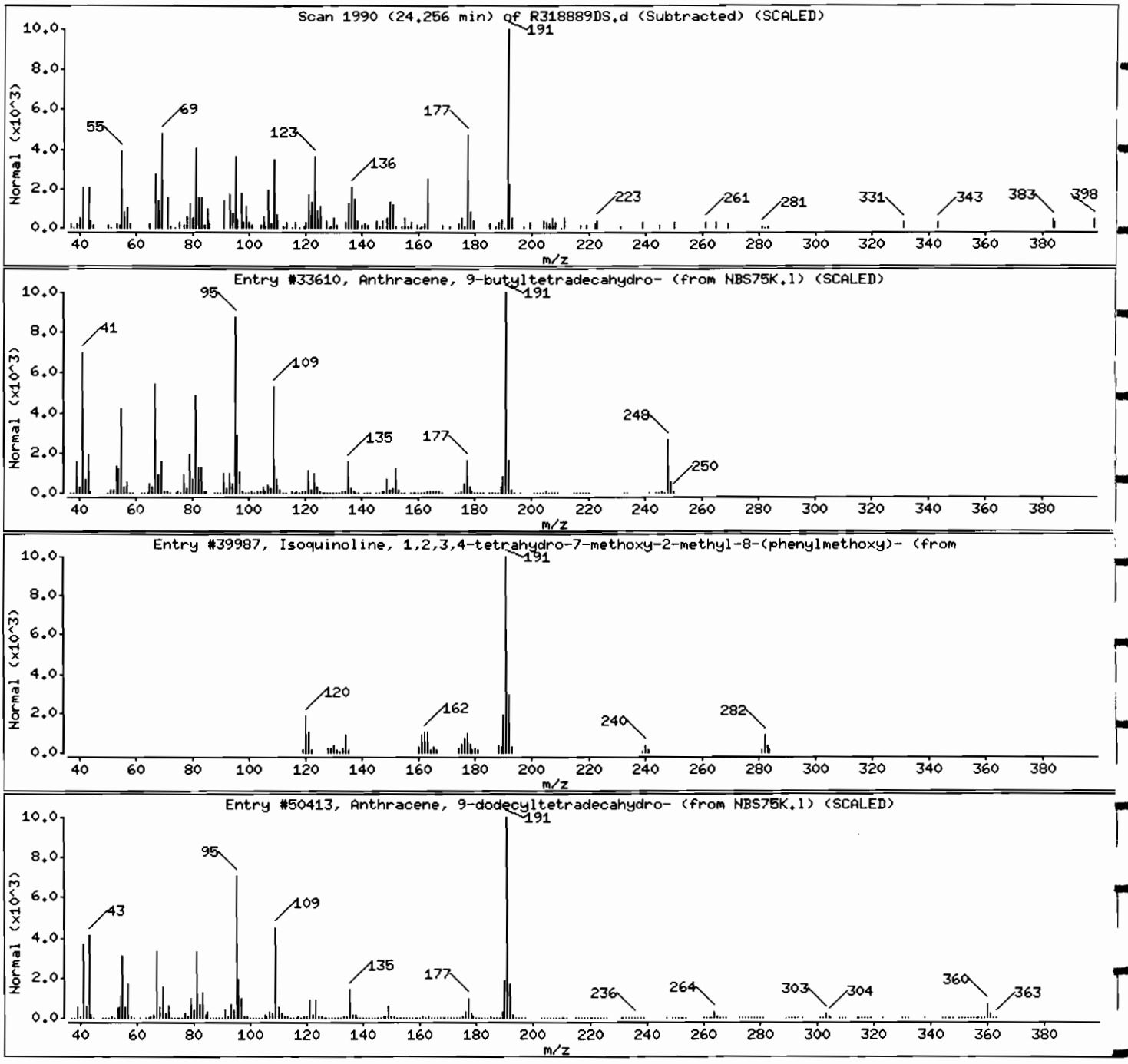
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown polycyclic hydrocarbon						
Anthracene, 9-butyltetradecahydro-	55133-89-6	NBS75K.l	33610	37	C18H32	248
Isoquinoline, 1,2,3,4-tetrahydro-7-metho	36646-87-4	NBS75K.l	39987	32	C18H21NO2	283
Anthracene, 9-dodecyltetradecahydro-	55401-75-7	NBS75K.l	50413	32	C26H48	360



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

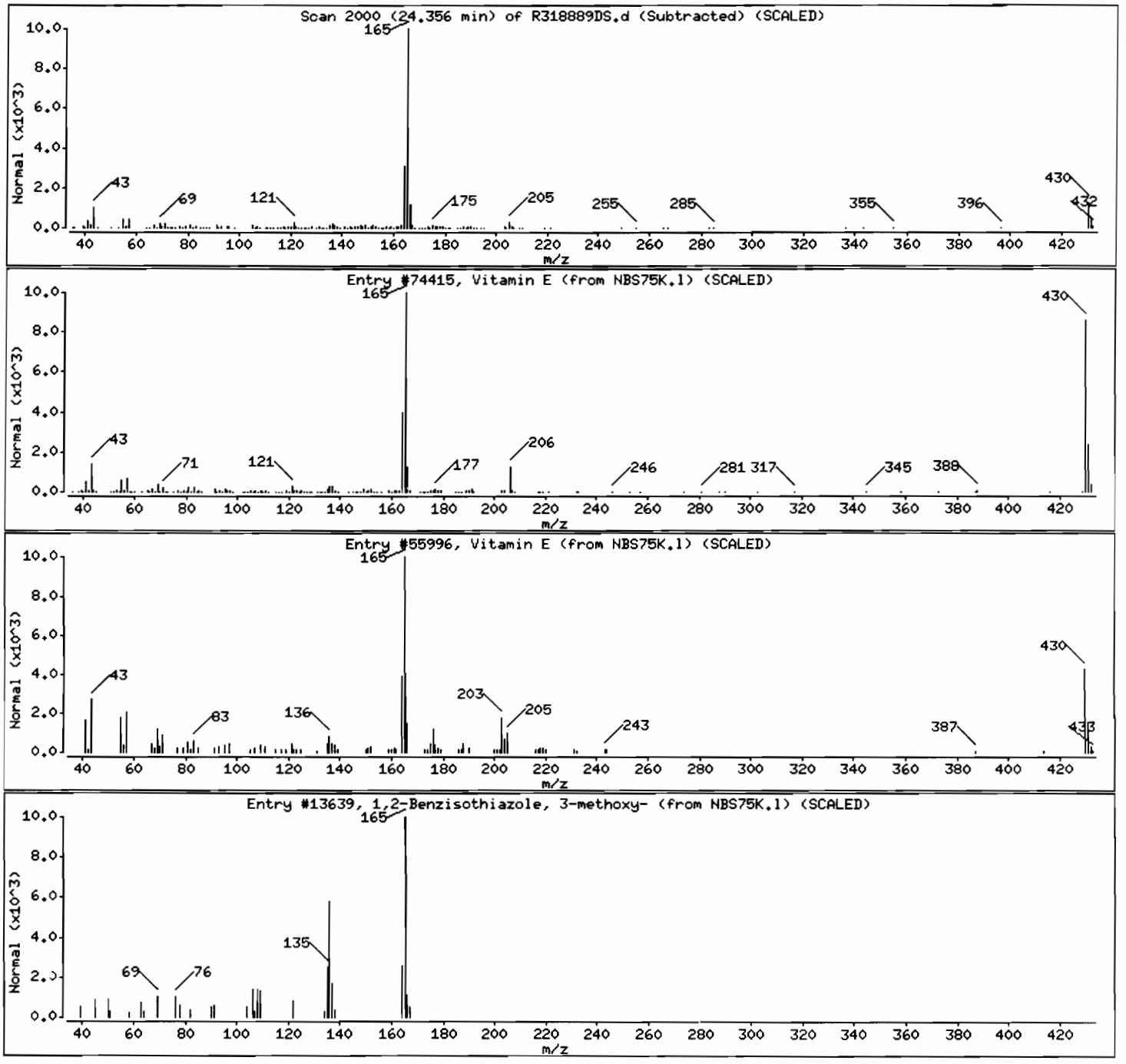
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Vitamin E	59-02-9	NBS75K.l	74415	78	C29H50O2	430
Vitamin E	59-02-9	NBS75K.l	55996	10	C29H50O2	430
1,2-Benzisothiazole, 3-methoxy-	40991-38-6	NBS75K.l	13639	9	C8H7NOS	165



Data File: /chem/R.i/R1.p/RHXA_8270.b/R318889DS.d

Date : 25-NOV-96 23:40:15

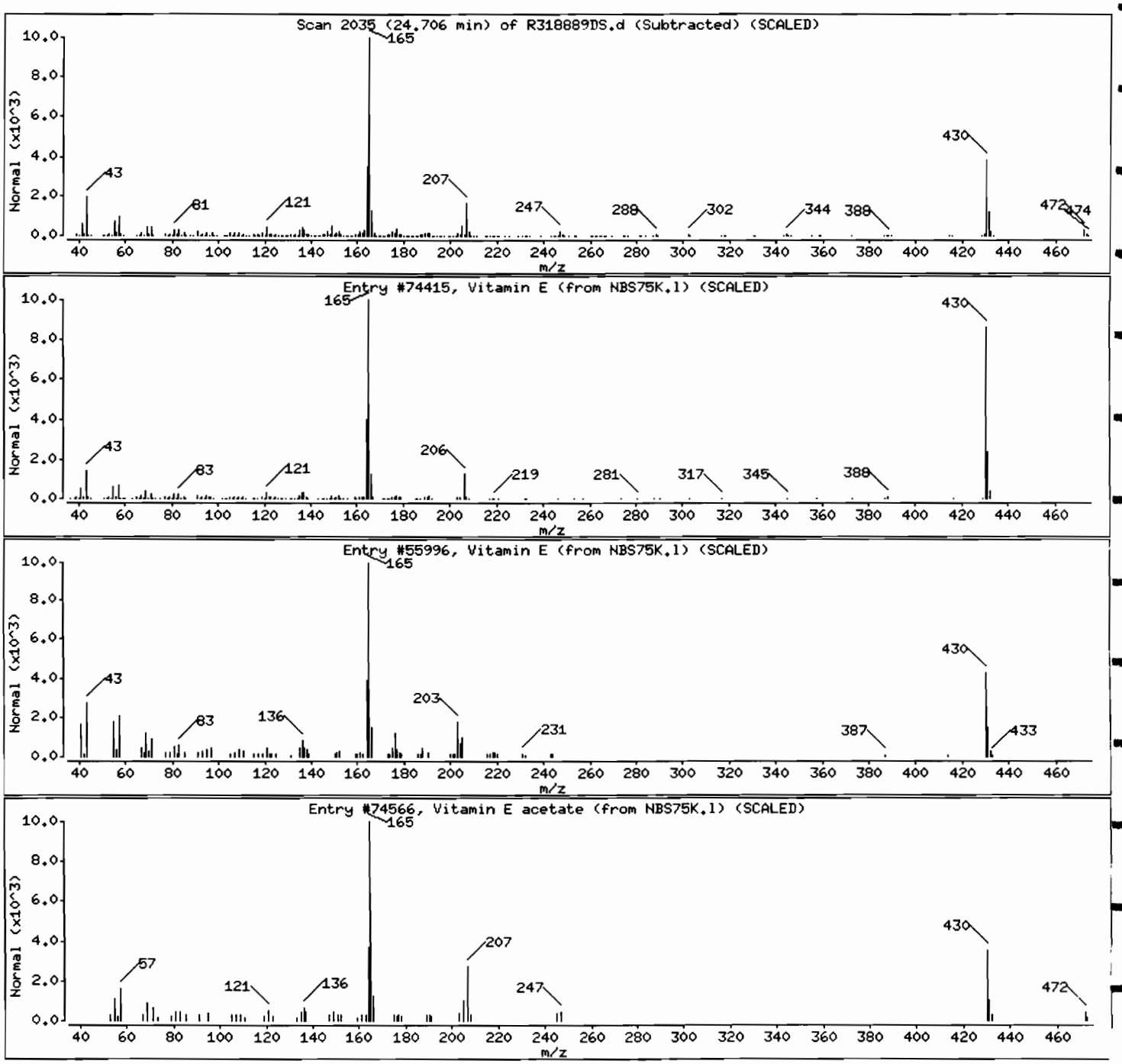
Client ID: SGP247810 Instrument: R.i

Sample Info: L#318889 CLI#SGP247810 ETR#62586

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Vitamin E	59-02-9	NBS75K.l	74415	97	C29H5002	430
Vitamin E	59-02-9	NBS75K.l	55996	72	C29H5002	430
Vitamin E acetate	58-95-7	NBS75K.l	74566	70	C31H5203	472



METHOD 8270
SEMIVOLATILE ORGANIC ANALYSIS

STANDARDS

Inchcape Testing Services

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date(s): 11/25/96 11/25/96

Calibration Time(s): 0943 1156

LAB FILE ID: RRF20 =RHX010BS RRF50 =RHX050BS
RRF80 =RHX080BS RRF120=RHX120BS RRF160=RHX160BS

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol	1.351	1.257	1.168	1.008	1.051	1.167	12.2
bis(2-Chloroethyl)Ether	1.070	1.018	0.955	0.825	0.793	0.932	12.9
2-Chlorophenol	0.989	0.910	0.846	0.742	0.737	0.845	12.9
1,3-Dichlorobenzene	1.403	1.242	1.161	0.999	0.985	1.158	15.1
1,4-Dichlorobenzene	1.430	1.246	1.172	1.013	1.009	1.174	15.0
1,2-Dichlorobenzene	1.311	1.140	1.051	0.914	0.924	1.068	15.5
2,2'-oxybis(1-Chloropropane)	1.381	1.220	1.130	1.009	1.087	1.165	12.2
2-Methylphenol	0.793	0.791	0.734	0.648	0.654	0.724	9.7
N-Nitroso-di-n-propylamine *	0.572	0.506	0.478	0.438	0.460	0.491	10.6*
Hexachloroethane	0.376	0.354	0.331	0.298	0.301	0.332	10.1
4-Methylphenol	0.822	0.807	0.747	0.664	0.703	0.749	9.0
Nitrobenzene	0.349	0.338	0.312	0.277	0.279	0.311	10.6
Isophorone	0.683	0.691	0.621	0.585	0.564	0.629	9.1
2-Nitrophenol	0.273	0.294	0.269	0.244	0.238	0.264	8.6
2,4-Dimethylphenol	0.279	0.272	0.258	0.228	0.235	0.254	8.7
bis(2-Chloroethoxy)methane	0.461	0.440	0.405	0.357	0.348	0.402	12.4
2,4-Dichlorophenol	0.414	0.406	0.380	0.334	0.356	0.378	8.9
1,2,4-Trichlorobenzene	0.357	0.343	0.320	0.289	0.298	0.321	8.9
Naphthalene	1.078	0.923	0.858	0.728	0.744	0.866	16.6
4-Chloroaniline	0.442	0.446	0.411	0.380	0.374	0.411	8.2
Hexachlorobutadiene	0.093	0.098	0.091	0.086	0.086	0.091	5.3
4-Chloro-3-Methylphenol	0.234	0.273	0.239	0.227	0.245	0.244	7.2
2-Methylnaphthalene	0.866	0.759	0.706	0.622	0.638	0.718	13.8
Hexachlorocyclopentadiene *	0.154	0.158	0.161	0.146	0.143	0.152	5.0*
2,4,6-Trichlorophenol	0.230	0.249	0.235	0.210	0.217	0.228	6.6
2,4,5-Trichlorophenol		0.262	0.248	0.229	0.242	0.245	5.5
2-Chloronaphthalene	1.315	1.042	1.012	0.858	0.818	1.009	19.4
2-Nitroaniline		0.251	0.240	0.215	0.223	0.232	7.1
Dimethylphthalate	1.531	1.239	1.170	1.005	0.988	1.187	18.6
Acenaphthylene	2.060	1.606	1.528	1.200	1.184	1.516	23.7
2,6-Dinitrotoluene	0.373	0.365	0.347	0.311	0.317	0.343	8.1
Acenaphthene	1.222	1.016	0.970	0.812	0.808	0.966	17.7
3-Nitroaniline		0.327	0.325	0.293	0.288	0.308	6.7
2,4-Dinitrophenol *		0.162	0.157	0.151	0.148	0.154	4.0*
Dibenzofuran	1.635	1.314	1.258	1.039	1.037	1.257	19.6
2,4-Dinitrotoluene	0.492	0.462	0.452	0.414	0.409	0.446	7.8
4-Nitrophenol *		0.076	0.075	0.070	0.069	0.072	4.9*

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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date(s): 11/25/96 11/25/96

Calibration Time(s): 0943 1156

LAB FILE ID: RRF20 =RHX010BS RRF50 =RHX050BS
RRF80 =RHX080BS RRF120=RHX120BS RRF160=RHX160BS

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Diethylphthalate	1.385	1.050	1.000	0.828	0.829	1.018	22.4
Fluorene	1.334	1.050	0.997	0.838	0.847	1.013	19.9
4-Chlorophenyl-phenylether	0.346	0.328	0.314	0.275	0.292	0.311	9.1
4-Nitroaniline		0.336	0.342	0.312	0.273	0.316	9.9
N-nitrosodiphenylamine (1)	0.840	0.794	0.731	0.643	0.647	0.731	12.0
4,6-Dinitro-2-methylphenol		0.158	0.152	0.150	0.147	0.152	3.0
4-Bromophenyl-phenylether	0.160	0.168	0.158	0.147	0.152	0.157	5.0
Hexachlorobenzene	0.196	0.197	0.184	0.175	0.173	0.185	6.2
Pentachlorophenol		0.119	0.121	0.114	0.115	0.117	2.9
Phenanthrene	1.443	1.231	1.174	0.971	0.970	1.158	17.1
Anthracene	1.480	1.224	1.153	0.951	0.941	1.150	19.3
Carbazole	1.423	1.245	1.198	1.019	0.951	1.167	16.1
Di-n-butylphthalate	1.994	1.389	1.330	1.929	1.965	1.721	19.3
Fluoranthene	0.908	0.781	0.804	0.694	0.664	0.770	12.6
Pyrene	1.660	1.748	1.493	1.331	1.341	1.515	12.4
Butylbenzylphthalate	1.667	1.530	1.363	1.168	1.209	1.387	15.2
Benzo(a)anthracene	1.222	1.160	1.107	0.977	1.002	1.094	9.5
3,3'-Dichlorobenzidine	0.439	0.463	0.472	0.439	0.429	0.448	4.0
Chrysene	1.134	1.066	1.027	0.934	0.935	1.019	8.5
bis(2-Ethylhexyl)phthalate	2.135	1.810	1.666	1.338	1.441	1.678	18.8
Di-n-octylphthalate	3.597	3.269	2.741	3.510	5.272	3.678	25.9
Benzo(b)fluoranthene	1.238	1.413	1.261	1.219	1.219	1.270	6.4
Benzo(k)fluoranthene	1.398	1.259	1.354	1.103	1.148	1.252	10.2
Benzo(a)pyrene	1.015	1.018	1.040	0.946	0.972	0.998	3.8
Indeno(1,2,3-cd)pyrene	0.956	0.953	0.908	0.808	0.918	0.909	6.6
Dibenz(a,h)anthracene	0.728	0.744	0.714	0.642	0.738	0.713	5.8
Benzo(g,h,i)perylene	0.734	0.718	0.673	0.584	0.668	0.675	8.7
2-Fluorophenol	0.820	0.818	0.788	0.677	0.660	0.753	10.4
Phenol-d5	1.146	1.084	1.018	0.891	0.912	1.010	10.8
2-Chlorophenol-d4	0.951	0.942	0.876	0.770	0.769	0.862	10.3
1,2-Dichlorobenzene-d4	0.869	0.831	0.784	0.699	0.713	0.779	9.4
Nitrobenzene-d5	0.396	0.393	0.364	0.326	0.322	0.360	9.9
2-Fluorobiphenyl	1.262	0.993	0.977	0.817	0.801	0.970	19.1
2,4,6-Tribromophenol	0.120	0.120	0.115	0.107	0.107	0.114	5.5
Terphenyl-d14	1.000	1.073	0.950	0.861	0.894	0.956	8.8

(1) Cannot be seperated from Diphenylamine

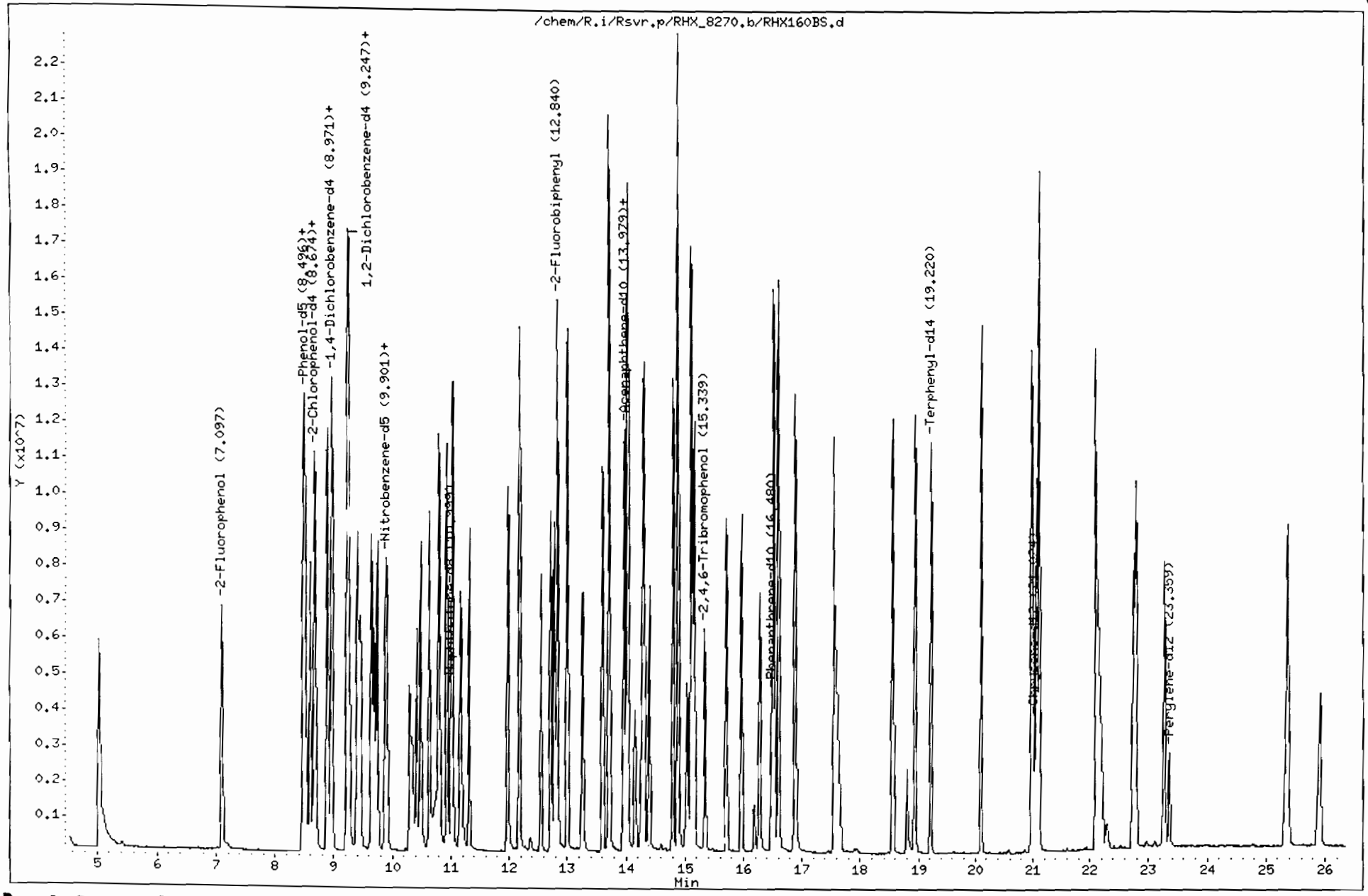
* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX160BS.d
Date : 25-NOV-96 09:43:40
Client ID: SSTD160
Sample Info: SSTD160 CRV#RHX
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: DJB
Column diameter: 0.25

000953



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SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/Rsvr.p/RHX_8270.b/RHX160BS.d
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 25-NOV-96 09:43:40
Operator : DJB Inst ID: R.i
Smp Info : SSTD160 CRV#RHX
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Meth Date : 25-Nov-96 14:18:08 je Quant Type: ISTD
Cal Date : 25-NOV-96 11:21:16 Cal File: RHX050BS.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 N-Nitrosodimethylamine	42	5.039	5.147	(0.563)	1985227	160	160(Q)
	2 Pyridine	79	5.039	5.147	(0.563)	5208663	160	140
$	3 2-Fluorophenol	112	7.097	7.118	(0.793)	4540708	160	140
	4 Aniline	93	8.516	8.518	(0.951)	7228349	160	140
$	5 Phenol-d5	99	8.476	8.479	(0.947)	6277132	160	150
	6 Phenol	94	8.496	8.498	(0.949)	7235132	160	140
	7 bis(2-Chloroethyl)Ether	93	8.595	8.597	(0.960)	5459135	160	140
$	8 2-Chlorophenol-d4	132	8.664	8.667	(0.968)	5294232	160	140
	9 2-Chlorophenol	128	8.684	8.686	(0.970)	5070826	160	140
	10 1,3-Dichlorobenzene	146	8.891	8.894	(0.993)	6777995	160	140
*	11 1,4-Dichlorobenzene-d4	152	8.951	8.953	(1.000)	1720885	40	
	12 1,4-Dichlorobenzene	146	8.971	8.973	(1.002)	6947897	160	140
$	13 1,2-Dichlorobenzene-d4	152	9.237	9.240	(1.032)	4909908	160	150
	14 1,2-Dichlorobenzene	146	9.267	9.270	(1.035)	6359546	160	140
	15 Benzyl Alcohol	108	9.218	9.210	(1.030)	3239766	160	150

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	16 2,2'-oxybis(1-Chloropropane)	45	9.436	9.428	(1.054)	7484544	160	150
	17 2-Methylphenol	108	9.396	9.399	(1.050)	4505113	160	140
	18 N-Nitroso-di-n-propylamine	70	9.693	9.685	(1.083)	3168628	160	150
	19 Hexachloroethane	117	9.742	9.745	(1.088)	2071627	160	150
	20 4-Methylphenol	108	9.643	9.636	(1.077)	4842519	160	150
$	21 Nitrobenzene-d5	82	9.881	9.874	(0.898)	5266254	160	140
	22 Nitrobenzene	77	9.911	9.903	(0.901)	4574852	160	140
	23 Isophorone	82	10.296	10.289	(0.936)	9238601	160	140
	24 2-Nitrophenol	139	10.424	10.417	(0.948)	3902112	160	140
	25 2,4-Dimethylphenol	107	10.484	10.477	(0.953)	3846530	160	150
	26 bis(2-Chloroethoxy)methane	93	10.632	10.625	(0.967)	5698743	160	140
	27 2,4-Dichlorophenol	162	10.800	10.793	(0.982)	5826226	160	150
	28 1,2,4-Trichlorobenzene	180	10.929	10.932	(0.994)	4878282	160	150
	29 Benzoic Acid	122	10.800	10.764	(0.982)	3355711	160	160
*	30 Naphthalene-d8	136	10.999	10.992	(1.000)	4092797	40	
	31 Naphthalene	128	11.038	11.032	(1.004)	12175385	160	140
	32 4-Chloroaniline	127	11.167	11.161	(1.015)	6118657	160	140
	33 Hexachlorobutadiene	225	11.316	11.319	(1.029)	1412155	160	150
	34 4-Chloro-3-Methylphenol	107	11.978	11.971	(1.089)	4008665	160	150
	35 2-Methylnaphthalene	142	12.186	12.179	(1.108)	10441561	160	150
	36 Hexachlorocyclopentadiene	237	12.552	12.545	(0.898)	1819715	160	150
	37 2,4,6-Trichlorophenol	196	12.721	12.714	(0.910)	2755395	160	150
	38 2,4,5-Trichlorophenol	196	12.780	12.773	(0.914)	3071855	160	150
$	39 2-Fluorobiphenyl	172	12.840	12.823	(0.918)	10163436	160	140
	40 2-Chloronaphthalene	162	13.009	12.992	(0.931)	10376642	160	140
	41 2-Nitroaniline	65	13.256	13.249	(0.948)	2824268	160	150
	42 Dimethylphthalate	163	13.613	13.596	(0.974)	12534541	160	140
	43 Acenaphthylene	152	13.722	13.715	(0.982)	15018327	160	140
	44 2,6-Dinitrotoluene	165	13.732	13.715	(0.982)	4023706	160	150
*	45 Acenaphthene-d10	164	13.979	13.972	(1.000)	3171103	40	
	46 Acenaphthene	153	14.029	14.022	(1.004)	10243289	160	140
	47 3-Nitroaniline	138	13.979	13.962	(1.000)	3652934	160	150
	48 2,4-Dinitrophenol	184	14.158	14.141	(1.013)	1876034	160	150
	49 Dibenzofuran	168	14.307	14.300	(1.023)	13149024	160	140
	50 2,4-Dinitrotoluene	165	14.406	14.389	(1.031)	5183958	160	150
	51 4-Nitrophenol	109	14.267	14.250	(1.021)	878775	160	150
	52 Diethylphthalate	149	14.803	14.795	(1.059)	10518601	160	140
	53 Fluorene	166	14.892	14.885	(1.065)	10743772	160	140
	54 4-Chlorophenyl-phenylether	204	14.882	14.875	(1.065)	3707876	160	150
	55 4-Nitroaniline	138	15.041	15.024	(1.076)	3462877	160	140
	56 N-nitrosodiphenylamine	169	15.121	15.103	(0.917)	8586797	160	140
	57 4,6-Dinitro-2-methylphenol	198	15.111	15.093	(0.917)	1948192	160	150
	58 Azobenzene	77	15.160	15.143	(1.084)	9031306	160	150
$	59 2,4,6-Tribromophenol	330	15.339	15.331	(1.097)	1357256	160	150
	60 4-Bromophenyl-phenylether	248	15.716	15.698	(0.954)	2022904	160	150
	61 Hexachlorobenzene	284	15.974	15.965	(0.969)	2297901	160	150
	62 Pentachlorophenol	266	16.281	16.273	(0.988)	1523145	160	160

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
*	63 Phenanthrene-d10	188	16.480	16.472	(1.000)	3318179	40	
	64 Phenanthrene	178	16.520	16.512	(1.002)	12870645	160	140
	65 Anthracene	178	16.600	16.591	(1.007)	12491431	160	140
	66 Carbazole	167	16.888	16.879	(1.025)	12621718	160	140
	67 Di-n-butylphthalate	149	17.551	17.551	(1.065)	26083765	160	190(A)
	68 Fluoranthene	202	18.565	18.549	(1.127)	8813642	160	150
	69 Benzidine	184	18.803	18.787	(0.894)	2191511	160	140
	70 Pyrene	202	18.943	18.936	(0.901)	8940451	160	140
$	71 Terphenyl-d14	244	19.220	19.214	(0.914)	5959491	160	140
	72 Butylbenzylphthalate	149	20.112	20.094	(0.957)	8062716	160	140
	73 Benzo(a)anthracene	228	20.994	20.975	(0.999)	6681212	160	150
	74 3,3'-Dichlorobenzidine	252	20.984	20.965	(0.998)	2858524	160	150
*	75 Chrysene-d12	240	21.024	21.015	(1.000)	1666559	40	
	76 Chrysene	228	21.074	21.055	(1.002)	6230636	160	150
	77 bis(2-Ethylhexyl)phthalate	149	21.114	21.105	(1.004)	9603398	160	140
	78 Di-n-octylphthalate	149	22.098	22.086	(0.946)	31420286	160	200(A)
	79 Benzo(b)fluoranthene	252	22.750	22.732	(0.974)	7264469	160	150
	80 Benzo(k)fluoranthene	252	22.790	22.772	(0.976)	6844764	160	150
	81 Benzo(a)pyrene	252	23.279	23.249	(0.997)	5791134	160	160
*	82 Perylene-d12	264	23.359	23.349	(1.000)	1489953	40	
	83 Indeno(1,2,3-cd)pyrene	276	25.361	25.327	(1.086)	5471012	160	160
	84 Dibenz(a,h)anthracene	278	25.371	25.337	(1.086)	4396219	160	160
	85 Benzo(g,h,i)perylene	276	25.919	25.884	(1.110)	3978192	160	150

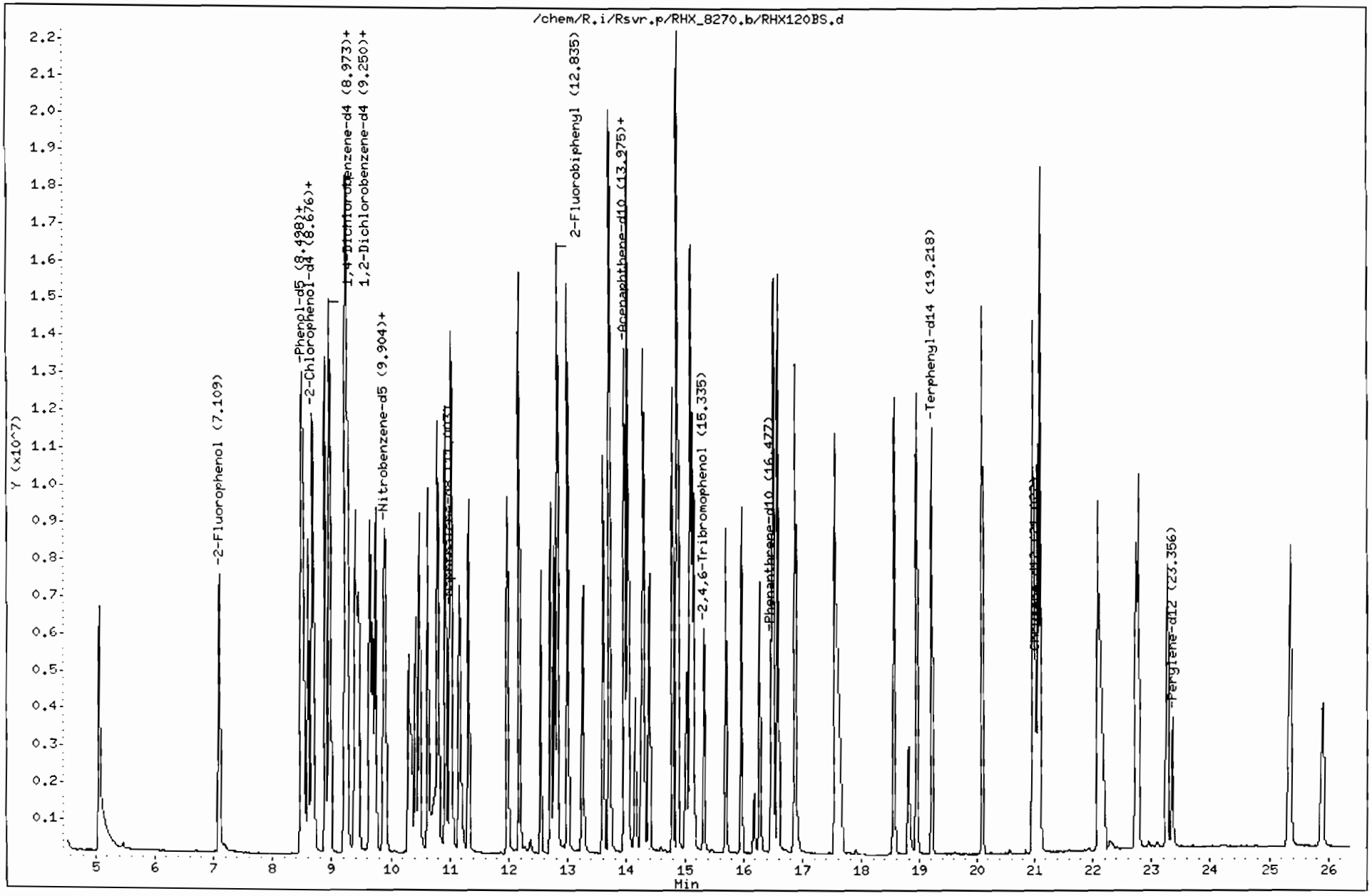
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX120BS.d
Date : 25-NOV-96 10:11:29
Client ID: SSTD120
Sample Info: SSTD120 CRV#RHX
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: DJB
Column diameter: 0.25



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SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/Rsvr.p/RHX_8270.b/RHX120BS.d
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 25-NOV-96 10:11:29
Operator : DJB Inst ID: R.i
Smp Info : SSTD120 CRV#RHX
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Meth Date : 25-Nov-96 14:18:13 je Quant Type: ISTD
Cal Date : 25-NOV-96 11:21:16 Cal File: RHX050BS.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 N-Nitrosodimethylamine	42	5.068	5.147	(0.566)	2088060	120	110
	2 Pyridine	79	5.068	5.147	(0.566)	6279847	120	120
$	3 2-Fluorophenol	112	7.109	7.118	(0.794)	5256627	120	110
	4 Aniline	93	8.528	8.518	(0.952)	8080022	120	110
$	5 Phenol-d5	99	8.478	8.479	(0.947)	6923929	120	110
	6 Phenol	94	8.498	8.498	(0.949)	7830488	120	110
	7 bis(2-Chloroethyl)Ether	93	8.597	8.597	(0.960)	6407234	120	110
$	8 2-Chlorophenol-d4	132	8.667	8.667	(0.968)	5980108	120	110
	9 2-Chlorophenol	128	8.686	8.686	(0.970)	5761009	120	110
	10 1,3-Dichlorobenzene	146	8.894	8.894	(0.993)	7758581	120	110
*	11 1,4-Dichlorobenzene-d4	152	8.953	8.953	(1.000)	2589440	40	
	12 1,4-Dichlorobenzene	146	8.973	8.973	(1.002)	7867271	120	110
$	13 1,2-Dichlorobenzene-d4	152	9.240	9.240	(1.032)	5433525	120	110
	14 1,2-Dichlorobenzene	146	9.270	9.270	(1.035)	7097367	120	110
	15 Benzyl Alcohol	108	9.220	9.210	(1.030)	3467800	120	110

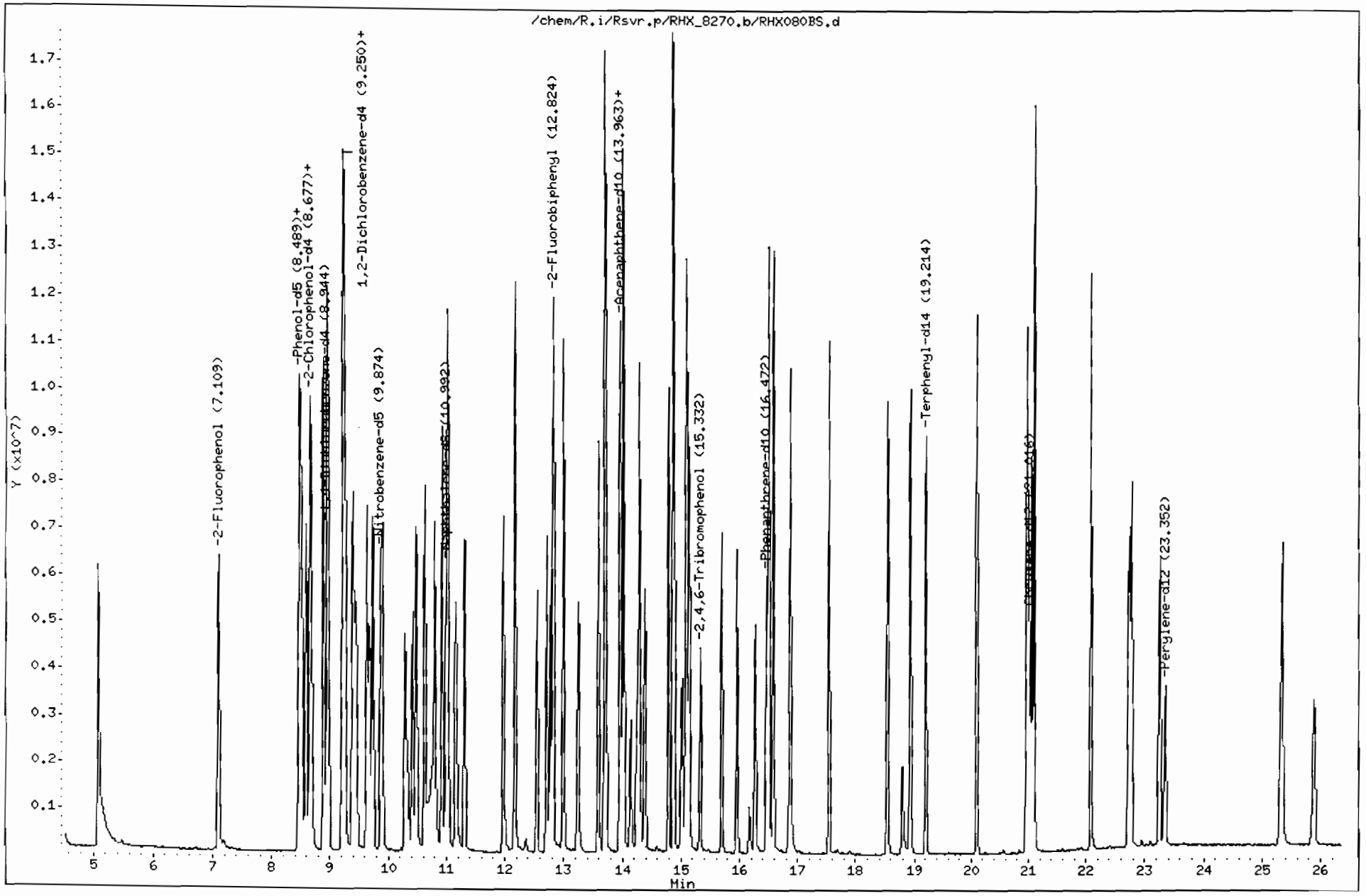
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	16 2,2'-oxybis(1-Chloropropane)	45	9.438	9.428	(1.054)	7840093	120	110
	17 2-Methylphenol	108	9.399	9.399	(1.050)	5037840	120	110
	18 N-Nitroso-di-n-propylamine	70	9.696	9.685	(1.083)	3404557	120	110
	19 Hexachloroethane	117	9.745	9.745	(1.088)	2314505	120	110
	20 4-Methylphenol	108	9.646	9.636	(1.077)	5154582	120	110
$	21 Nitrobenzene-d5	82	9.884	9.874	(0.898)	5793796	120	110
	22 Nitrobenzene	77	9.914	9.903	(0.901)	4932655	120	110
	23 Isophorone	82	10.299	10.289	(0.936)	10408567	120	110
	24 2-Nitrophenol	139	10.428	10.417	(0.948)	4348305	120	110
	25 2,4-Dimethylphenol	107	10.487	10.477	(0.953)	4068476	120	110
	26 bis(2-Chloroethoxy)methane	93	10.636	10.625	(0.967)	6348650	120	110
	27 2,4-Dichlorophenol	162	10.804	10.793	(0.982)	5938079	120	110
	28 1,2,4-Trichlorobenzene	180	10.933	10.932	(0.994)	5150341	120	110
	29 Benzoic Acid	122	10.794	10.764	(0.981)	3415039	120	110
*	30 Naphthalene-d8	136	11.003	10.992	(1.000)	5932720	40	
	31 Naphthalene	128	11.032	11.032	(1.003)	12957586	120	110
	32 4-Chloroaniline	127	11.171	11.161	(1.015)	6770928	120	110
	33 Hexachlorobutadiene	225	11.320	11.319	(1.029)	1530250	120	110
	34 4-Chloro-3-Methylphenol	107	11.983	11.971	(1.089)	4035260	120	110
	35 2-Methylnaphthalene	142	12.180	12.179	(1.107)	11075128	120	110
	36 Hexachlorocyclopentadiene	237	12.547	12.545	(0.898)	1879180	120	120
	37 2,4,6-Trichlorophenol	196	12.716	12.714	(0.910)	2703710	120	110
	38 2,4,5-Trichlorophenol	196	12.775	12.773	(0.914)	2948239	120	110
$	39 2-Fluorobiphenyl	172	12.835	12.823	(0.918)	10500601	120	110
	40 2-Chloronaphthalene	162	13.004	12.992	(0.930)	11032232	120	110
	41 2-Nitroaniline	65	13.262	13.249	(0.949)	2763912	120	110
	42 Dimethylphthalate	163	13.608	13.596	(0.974)	12922725	120	110
	43 Acenaphthylene	152	13.717	13.715	(0.982)	15428630	120	110
	44 2,6-Dinitrotoluene	165	13.727	13.715	(0.982)	3997827	120	110
*	45 Acenaphthene-d10	164	13.975	13.972	(1.000)	4285896	40	
	46 Acenaphthene	153	14.035	14.022	(1.004)	10440182	120	110
	47 3-Nitroaniline	138	13.975	13.962	(1.000)	3773133	120	120
	48 2,4-Dinitrophenol	184	14.154	14.141	(1.013)	1939103	120	120
	49 Dibenzofuran	168	14.303	14.300	(1.023)	13360602	120	110
	50 2,4-Dinitrotoluene	165	14.402	14.389	(1.031)	5317997	120	120
	51 4-Nitrophenol	109	14.273	14.250	(1.021)	901550	120	120
	52 Diethylphthalate	149	14.799	14.795	(1.059)	10646826	120	110
	53 Fluorene	166	14.888	14.885	(1.065)	10782116	120	110
	54 4-Chlorophenyl-phenylether	204	14.878	14.875	(1.065)	3535529	120	110
	55 4-Nitroaniline	138	15.047	15.024	(1.077)	4012204	120	120
	56 N-nitrosodiphenylamine	169	15.117	15.103	(0.917)	8656074	120	110
	57 4,6-Dinitro-2-methylphenol	198	15.107	15.093	(0.917)	2024282	120	120
	58 Azobenzene	77	15.157	15.143	(1.085)	8874099	120	120
$	59 2,4,6-Tribromophenol	330	15.345	15.331	(1.098)	1380152	120	120
	60 4-Bromophenyl-phenylether	248	15.712	15.698	(0.954)	1979165	120	110
	61 Hexachlorobenzene	284	15.970	15.965	(0.969)	2352461	120	120
	62 Pentachlorophenol	266	16.278	16.273	(0.988)	1536036	120	120

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
*	63 Phenanthrene-d10	188	16.477	16.472	(1.000)	4489700	40	
	64 Phenanthrene	178	16.527	16.512	(1.003)	13080536	120	110
	65 Anthracene	178	16.597	16.591	(1.007)	12808914	120	110
	66 Carbazole	167	16.884	16.879	(1.025)	13723018	120	110
	67 Di-n-butylphthalate	149	17.548	17.551	(1.065)	25980732	120	130
	68 Fluoranthene	202	18.563	18.549	(1.127)	9348741	120	120
	69 Benzidine	184	18.801	18.787	(0.894)	2742638	120	120
	70 Pyrene	202	18.940	18.936	(0.901)	9491116	120	110
$	71 Terphenyl-d14	244	19.218	19.214	(0.914)	6142837	120	110
	72 Butylbenzylphthalate	149	20.109	20.094	(0.957)	8334117	120	110
	73 Benzo(a)anthracene	228	20.991	20.975	(0.999)	6968595	120	110
	74 3,3'-Dichlorobenzidine	252	20.982	20.965	(0.998)	3130841	120	120
*	75 Chrysene-d12	240	21.022	21.015	(1.000)	2377430	40	
	76 Chrysene	228	21.072	21.055	(1.002)	6664233	120	110
	77 bis(2-Ethylhexyl)phthalate	149	21.112	21.105	(1.004)	9541421	120	100
	78 Di-n-octylphthalate	149	22.095	22.086	(0.946)	21077552	120	100
	79 Benzo(b)fluoranthene	252	22.747	22.732	(0.974)	7321941	120	110
	80 Benzo(k)fluoranthene	252	22.787	22.772	(0.976)	6625781	120	110
	81 Benzo(a)pyrene	252	23.276	23.249	(0.997)	5680058	120	120
*	82 Perylene-d12	264	23.356	23.349	(1.000)	2001545	40	
	83 Indeno(1,2,3-cd)pyrene	276	25.346	25.327	(1.085)	4852841	120	110
	84 Dibenz(a,h)anthracene	278	25.356	25.337	(1.086)	3854389	120	110
	85 Benzo(g,h,i)perylene	276	25.905	25.884	(1.109)	3504192	120	110

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX080BS.d
Date : 25-NOV-96 10:46:25
Client ID: SSTD080
Sample Info: SSTD080 CRV#RHX
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: DJB
Column diameter: 0.25



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SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/Rsvr.p/RHX_8270.b/RHX080BS.d
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 25-NOV-96 10:46:25
Operator : DJB Inst ID: R.i
Smp Info : SSTD080 CRV#RHX
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Meth Date : 25-Nov-96 14:18:16 je Quant Type: ISTD
Cal Date : 25-NOV-96 11:21:16 Cal File: RHX050BS.d
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 N-Nitrosodimethylamine	42	5.088	5.147	(0.569)	1651080	80	82
	2 Pyridine	79	5.088	5.147	(0.569)	5142363	80	86
$	3 2-Fluorophenol	112	7.109	7.118	(0.795)	4359664	80	86
	4 Aniline	93	8.518	8.518	(0.952)	6453444	80	82
$	5 Phenol-d5	99	8.479	8.479	(0.948)	5637269	80	83
	6 Phenol	94	8.498	8.498	(0.950)	6466623	80	83
	7 bis(2-Chloroethyl)Ether	93	8.597	8.597	(0.961)	5288737	80	85
$	8 2-Chlorophenol-d4	132	8.657	8.667	(0.968)	4850448	80	84
	9 2-Chlorophenol	128	8.687	8.686	(0.971)	4681918	80	84
	10 1,3-Dichlorobenzene	146	8.894	8.894	(0.994)	6428585	80	85
*	11 1,4-Dichlorobenzene-d4	152	8.944	8.953	(1.000)	2767966	40	
	12 1,4-Dichlorobenzene	146	8.973	8.973	(1.003)	6490860	80	84
$	13 1,2-Dichlorobenzene-d4	152	9.240	9.240	(1.033)	4340057	80	83
	14 1,2-Dichlorobenzene	146	9.260	9.270	(1.035)	5820388	80	84
	15 Benzyl Alcohol	108	9.211	9.210	(1.030)	2778308	80	82

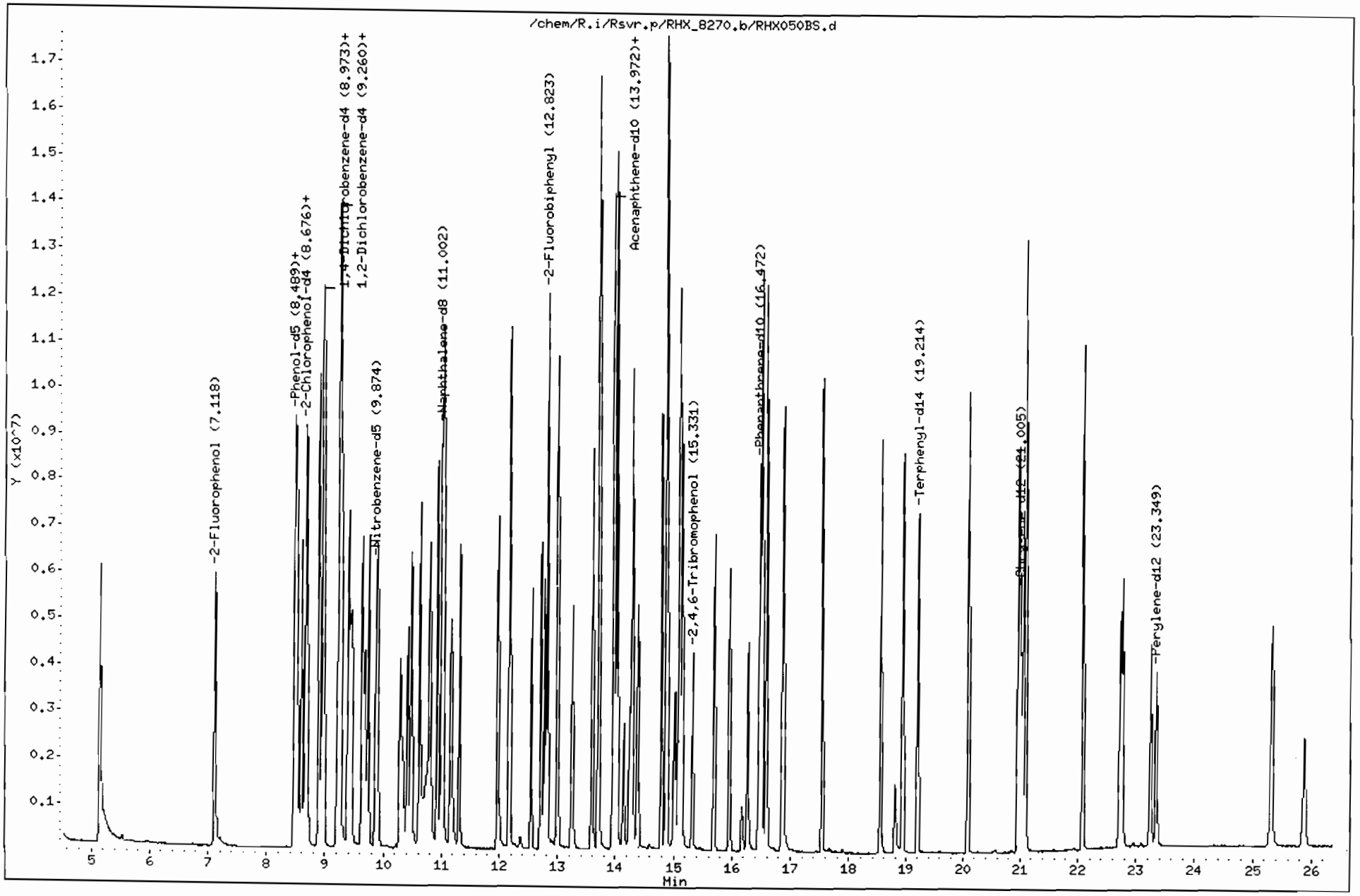
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	16 2,2'-oxybis(1-Chloropropane)	45	9.428	9.428	(1.054)	6253990	80	81
	17 2-Methylphenol	108	9.399	9.399	(1.051)	4062574	80	83
	18 N-Nitroso-di-n-propylamine	70	9.686	9.685	(1.083)	2644080	80	81
	19 Hexachloroethane	117	9.735	9.745	(1.089)	1834566	80	82
	20 4-Methylphenol	108	9.636	9.636	(1.077)	4133804	80	82
$	21 Nitrobenzene-d5	82	9.874	9.874	(0.898)	4511763	80	83
	22 Nitrobenzene	77	9.904	9.903	(0.901)	3866155	80	83
	23 Isophorone	82	10.289	10.289	(0.936)	7703067	80	81
	24 2-Nitrophenol	139	10.417	10.417	(0.948)	3340116	80	82
	25 2,4-Dimethylphenol	107	10.477	10.477	(0.953)	3200646	80	83
	26 bis(2-Chloroethoxy)methane	93	10.625	10.625	(0.967)	5031091	80	84
	27 2,4-Dichlorophenol	162	10.804	10.793	(0.983)	4713135	80	82
	28 1,2,4-Trichlorobenzene	180	10.933	10.932	(0.995)	3967878	80	82
	29 Benzoic Acid	122	10.764	10.764	(0.979)	2376342	80	76
*	30 Naphthalene-d8	136	10.992	10.992	(1.000)	6204379	40	
	31 Naphthalene	128	11.032	11.032	(1.004)	10643244	80	84
	32 4-Chloroaniline	127	11.161	11.161	(1.015)	5105831	80	82
	33 Hexachlorobutadiene	225	11.320	11.319	(1.030)	1129802	80	81
	34 4-Chloro-3-Methylphenol	107	11.972	11.971	(1.089)	2968275	80	78
	35 2-Methylnaphthalene	142	12.179	12.179	(1.108)	8755998	80	83
	36 Hexachlorocyclopentadiene	237	12.546	12.545	(0.898)	1325958	80	85
	37 2,4,6-Trichlorophenol	196	12.714	12.714	(0.910)	1932945	80	82
	38 2,4,5-Trichlorophenol	196	12.774	12.773	(0.914)	2036784	80	81
$	39 2-Fluorobiphenyl	172	12.834	12.823	(0.918)	8037176	80	87
	40 2-Chloronaphthalene	162	13.002	12.992	(0.931)	8323614	80	87
	41 2-Nitroaniline	65	13.250	13.249	(0.948)	1975731	80	83
	42 Dimethylphthalate	163	13.596	13.596	(0.973)	9622627	80	85
	43 Acenaphthylene	152	13.715	13.715	(0.982)	12567785	80	89
	44 2,6-Dinitrotoluene	165	13.715	13.715	(0.982)	2854833	80	83
*	45 Acenaphthene-d10	164	13.973	13.972	(1.000)	4111624	40	
	46 Acenaphthene	153	14.022	14.022	(1.004)	7976909	80	86
	47 3-Nitroaniline	138	13.963	13.962	(0.999)	2674484	80	84
	48 2,4-Dinitrophenol	184	14.141	14.141	(1.012)	1287957	80	81
	49 Dibenzofuran	168	14.300	14.300	(1.023)	10346692	80	87
	50 2,4-Dinitrotoluene	165	14.390	14.389	(1.030)	3721642	80	83
	51 4-Nitrophenol	109	14.250	14.250	(1.020)	619477	80	83
	52 Diethylphthalate	149	14.796	14.795	(1.059)	8225678	80	86
	53 Fluorene	166	14.885	14.885	(1.065)	8202098	80	86
	54 4-Chlorophenyl-phenylether	204	14.875	14.875	(1.065)	2582353	80	83
	55 4-Nitroaniline	138	15.024	15.024	(1.075)	2812588	80	87
	56 N-nitrosodiphenylamine	169	15.104	15.103	(0.917)	6329498	80	83
	57 4,6-Dinitro-2-methylphenol	198	15.093	15.093	(0.916)	1319146	80	80
	58 Azobenzene	77	15.143	15.143	(1.084)	6021155	80	81
$	59 2,4,6-Tribromophenol	330	15.332	15.331	(1.097)	945855	80	82
	60 4-Bromophenyl-phenylether	248	15.698	15.698	(0.953)	1371226	80	81
	61 Hexachlorobenzene	284	15.966	15.965	(0.969)	1590097	80	81
	62 Pentachlorophenol	266	16.273	16.273	(0.988)	1046511	80	82

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
*	63	Phenanthrene-d10	188	16.472	16.472	(1.000)	4326497	40	
	64	Phenanthrene	178	16.512	16.512	(1.002)	10158385	80	86
	65	Anthracene	178	16.592	16.591	(1.007)	9974252	80	86
	66	Carbazole	167	16.879	16.879	(1.025)	10368385	80	87
	67	Di-n-butylphthalate	149	17.552	17.551	(1.066)	11510411	80	64
	68	Fluoranthene	202	18.550	18.549	(1.126)	6957361	80	87
	69	Benzidine	184	18.797	18.787	(0.894)	1900587	80	82
	70	Pyrene	202	18.937	18.936	(0.901)	7127059	80	81
$	71	Terphenyl-d14	244	19.214	19.214	(0.914)	4535710	80	80
	72	Butylbenzylphthalate	149	20.105	20.094	(0.957)	6508479	80	83
	73	Benzo(a)anthracene	228	20.986	20.975	(0.999)	5287633	80	83
	74	3,3'-Dichlorobenzidine	252	20.966	20.965	(0.998)	2253408	80	84
*	75	Chrysene-d12	240	21.016	21.015	(1.000)	2387294	40	
	76	Chrysene	228	21.056	21.055	(1.002)	4903597	80	83
	77	bis(2-Ethylhexyl)phthalate	149	21.106	21.105	(1.004)	7955930	80	85
	78	Di-n-octylphthalate	149	22.088	22.086	(0.946)	10985417	80	59
	79	Benzo(b)fluoranthene	252	22.734	22.732	(0.974)	5054380	80	79
	80	Benzo(k)fluoranthene	252	22.774	22.772	(0.975)	5428394	80	89
	81	Benzo(a)pyrene	252	23.262	23.249	(0.996)	4166152	80	84
*	82	Perylene-d12	264	23.352	23.349	(1.000)	2003801	40	
	83	Indeno(1,2,3-cd)pyrene	276	25.341	25.327	(1.085)	3640134	80	81
	84	Dibenz(a,h)anthracene	278	25.351	25.337	(1.086)	2863007	80	80
	85	Benzo(g,h,i)perylene	276	25.888	25.884	(1.109)	2697573	80	82

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX050BS.d
Date : 25-NOV-96 11:21:16
Client ID: SSTD050
Sample Info: SSTD050 CRV#RHX
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: DJB
Column diameter: 0.25



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SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/Rsvr.p/RHX_8270.b/RHX050BS.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 25-NOV-96 11:21:16
Operator : DJB Inst ID: R.i
Smp Info : SSTD050 CRV#RHX
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Meth Date : 25-Nov-96 14:18:21 je Quant Type: ISTD
Cal Date : 25-NOV-96 11:21:16 Cal File: RHX050BS.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 N-Nitrosodimethylamine	42	5.147	5.147	(0.575)	1483645	50	53
	2 Pyridine	79	5.147	5.147	(0.575)	4684566	50	56
$	3 2-Fluorophenol	112	7.118	7.118	(0.795)	3974951	50	56
	4 Aniline	93	8.518	8.518	(0.951)	6182856	50	56
$	5 Phenol-d5	99	8.479	8.479	(0.947)	5262599	50	56
	6 Phenol	94	8.498	8.498	(0.949)	6106268	50	56
	7 bis(2-Chloroethyl)Ether	93	8.597	8.597	(0.960)	4945820	50	57
$	8 2-Chlorophenol-d4	132	8.667	8.667	(0.968)	4574885	50	56
	9 2-Chlorophenol	128	8.686	8.686	(0.970)	4418959	50	56
	10 1,3-Dichlorobenzene	146	8.894	8.894	(0.993)	6028858	50	57
*	11 1,4-Dichlorobenzene-d4	152	8.953	8.953	(1.000)	3884789	40	
	12 1,4-Dichlorobenzene	146	8.973	8.973	(1.002)	6053178	50	56
$	13 1,2-Dichlorobenzene-d4	152	9.240	9.240	(1.032)	4034907	50	55
	14 1,2-Dichlorobenzene	146	9.270	9.270	(1.035)	5535173	50	56
	15 Benzyl Alcohol	108	9.210	9.210	(1.029)	2590410	50	55

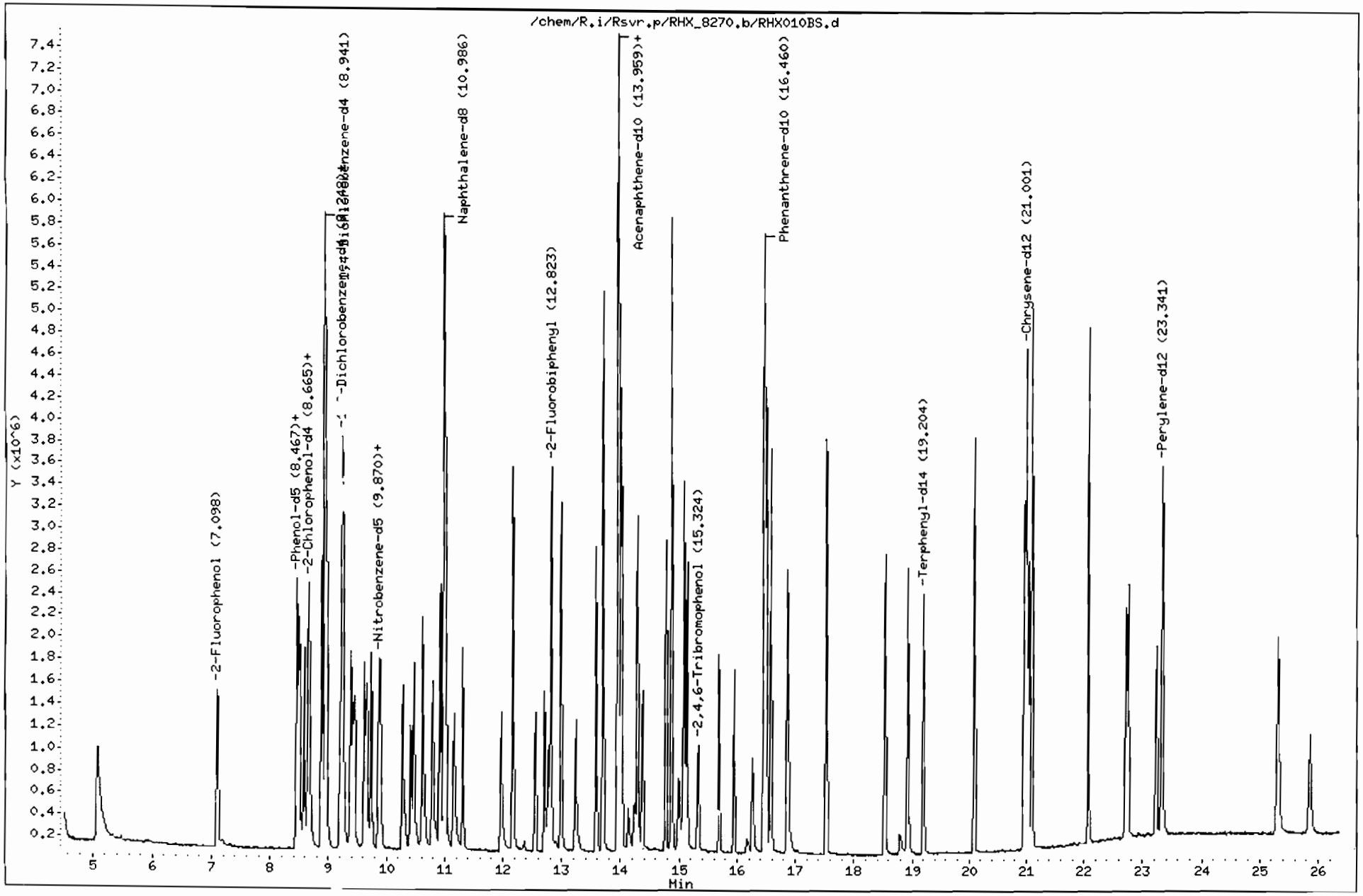
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	16 2,2'-oxybis(1-Chloropropane)	45	9.428	9.428	(1.053)	5927038	50	55
	17 2-Methylphenol	108	9.399	9.399	(1.050)	3839499	50	56
	18 N-Nitroso-di-n-propylamine	70	9.685	9.685	(1.082)	2456444	50	54
	19 Hexachloroethane	117	9.745	9.745	(1.088)	1718544	50	55
	20 4-Methylphenol	108	9.636	9.636	(1.076)	3919944	50	55
$	21 Nitrobenzene-d5	82	9.874	9.874	(0.898)	4313975	50	56
	22 Nitrobenzene	77	9.903	9.903	(0.901)	3706958	50	56
	23 Isophorone	82	10.289	10.289	(0.936)	7585312	50	56
	24 2-Nitrophenol	139	10.417	10.417	(0.948)	3225875	50	56
	25 2,4-Dimethylphenol	107	10.477	10.477	(0.953)	2986532	50	55
	26 bis(2-Chloroethoxy)methane	93	10.625	10.625	(0.967)	4835365	50	57
	27 2,4-Dichlorophenol	162	10.793	10.793	(0.982)	4457748	50	55
	28 1,2,4-Trichlorobenzene	180	10.932	10.932	(0.995)	3762353	50	55
	29 Benzoic Acid	122	10.764	10.764	(0.979)	2390401	50	54
*	30 Naphthalene-d8	136	10.992	10.992	(1.000)	8781904	40	
	31 Naphthalene	128	11.032	11.032	(1.004)	10129922	50	57
	32 4-Chloroaniline	127	11.161	11.161	(1.015)	4896944	50	55
	33 Hexachlorobutadiene	225	11.319	11.319	(1.030)	1070445	50	54
	34 4-Chloro-3-Methylphenol	107	11.971	11.971	(1.089)	2993935	50	55
	35 2-Methylnaphthalene	142	12.179	12.179	(1.108)	8327633	50	56
	36 Hexachlorocyclopentadiene	237	12.545	12.545	(0.898)	1239693	50	52
	37 2,4,6-Trichlorophenol	196	12.714	12.714	(0.910)	1947353	50	55
	38 2,4,5-Trichlorophenol	196	12.773	12.773	(0.914)	2051347	50	53
$	39 2-Fluorobiphenyl	172	12.823	12.823	(0.918)	7772401	50	55
	40 2-Chloronaphthalene	162	12.992	12.992	(0.930)	8156140	50	56
	41 2-Nitroaniline	65	13.249	13.249	(0.948)	1967327	50	54
	42 Dimethylphthalate	163	13.596	13.596	(0.973)	9692322	50	56
	43 Acenaphthylene	152	13.715	13.715	(0.982)	12568571	50	58
	44 2,6-Dinitrotoluene	165	13.715	13.715	(0.982)	2853449	50	54
*	45 Acenaphthene-d10	164	13.972	13.972	(1.000)	6260022	40	
	46 Acenaphthene	153	14.022	14.022	(1.004)	7952631	50	56
	47 3-Nitroaniline	138	13.962	13.962	(0.999)	2561645	50	53
	48 2,4-Dinitrophenol	184	14.141	14.141	(1.012)	1265646	50	52
	49 Dibenzofuran	168	14.300	14.300	(1.023)	10284709	50	56
	50 2,4-Dinitrotoluene	165	14.389	14.389	(1.030)	3615881	50	53
	51 4-Nitrophenol	109	14.250	14.250	(1.020)	596405	50	52
	52 Diethylphthalate	149	14.795	14.795	(1.059)	8214967	50	57
	53 Fluorene	166	14.885	14.885	(1.065)	8216297	50	56
	54 4-Chlorophenyl-phenylether	204	14.875	14.875	(1.065)	2565332	50	54
	55 4-Nitroaniline	138	15.024	15.024	(1.075)	2626835	50	53
	56 N-nitrosodiphenylamine	169	15.103	15.103	(0.917)	6297386	50	56
	57 4,6-Dinitro-2-methylphenol	198	15.093	15.093	(0.916)	1249519	50	52
	58 Azobenzene	77	15.143	15.143	(1.084)	5932095	50	52
$	59 2,4,6-Tribromophenol	330	15.331	15.331	(1.097)	935736	50	53
	60 4-Bromophenyl-phenylether	248	15.698	15.698	(0.953)	1329078	50	54
	61 Hexachlorobenzene	284	15.965	15.965	(0.969)	1562038	50	54
	62 Pentachlorophenol	266	16.273	16.273	(0.988)	945352	50	51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
*	63 Phenanthrene-d10	188	16.472	16.472	(1.000)	6340566	40	
	64 Phenanthrene	178	16.512	16.512	(1.002)	9759659	50	57
	65 Anthracene	178	16.591	16.591	(1.007)	9698733	50	57
	66 Carbazole	167	16.879	16.879	(1.025)	9865943	50	56
	67 Di-n-butylphthalate	149	17.551	17.551	(1.066)	11007286	50	42
	68 Fluoranthene	202	18.549	18.549	(1.126)	6188152	50	53
	69 Benzidine	184	18.787	18.787	(0.894)	1582861	50	57
	70 Pyrene	202	18.936	18.936	(0.901)	6299707	50	59
$	71 Terphenyl-d14	244	19.214	19.214	(0.914)	3868697	50	57
	72 Butylbenzylphthalate	149	20.094	20.094	(0.956)	5515202	50	58
	73 Benzo(a)anthracene	228	20.975	20.975	(0.998)	4181302	50	55
	74 3,3'-Dichlorobenzidine	252	20.965	20.965	(0.998)	1667454	50	51
*	75 Chrysene-d12	240	21.015	21.015	(1.000)	2883282	40	
	76 Chrysene	228	21.055	21.055	(1.002)	3842650	50	54
	77 bis(2-Ethylhexyl)phthalate	149	21.105	21.105	(1.004)	6522419	50	58
	78 Di-n-octylphthalate	149	22.086	22.086	(0.946)	9162647	50	44
	79 Benzo(b)fluoranthene	252	22.732	22.732	(0.974)	3959339	50	55
	80 Benzo(k)fluoranthene	252	22.772	22.772	(0.975)	3528970	50	52
	81 Benzo(a)pyrene	252	23.249	23.249	(0.996)	2852542	50	51
*	82 Perylene-d12	264	23.349	23.349	(1.000)	2242241	40	
	83 Indeno(1,2,3-cd)pyrene	276	25.327	25.327	(1.085)	2672033	50	53
	84 Dibenz(a,h)anthracene	278	25.337	25.337	(1.085)	2086447	50	52
	85 Benzo(g,h,i)perylene	276	25.884	25.884	(1.109)	2012772	50	54

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX010BS.d
Date : 25-NOV-96 11:56:13
Client ID: SSTD010
Sample Info: SSTD010 CRV#RHX
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: DJB
Column diameter: 0.25



Inchcape Environmental

SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/Rsvr.p/RHX_8270.b/RHX010BS.d
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 25-NOV-96 11:56:13
Operator : DJB Inst ID: R.i
Smp Info : SSTD010 CRV#RHX
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Meth Date : 25-Nov-96 14:18:25 je Quant Type: ISTD
Cal Date : 25-NOV-96 11:21:16 Cal File: RHX050BS.d
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 N-Nitrosodimethylamine	42	5.068	5.147	(0.567)	418297	20	23
	2 Pyridine	79	5.098	5.147	(0.570)	1203569	20	22
$	3 2-Fluorophenol	112	7.098	7.118	(0.794)	1008547	20	22
	4 Aniline	93	8.507	8.518	(0.951)	1617098	20	23(a)
$	5 Phenol-d5	99	8.457	8.479	(0.946)	1409436	20	23
	6 Phenol	94	8.477	8.498	(0.948)	1661236	20	23(a)
	7 bis(2-Chloroethyl)Ether	93	8.586	8.597	(0.960)	1315636	20	23
$	8 2-Chlorophenol-d4	132	8.655	8.667	(0.968)	1168993	20	22
	9 2-Chlorophenol	128	8.675	8.686	(0.970)	1215964	20	23
	10 1,3-Dichlorobenzene	146	8.892	8.894	(0.994)	1724311	20	24
*	11 1,4-Dichlorobenzene-d4	152	8.941	8.953	(1.000)	2458712	40	
	12 1,4-Dichlorobenzene	146	8.971	8.973	(1.003)	1757871	20	24
$	13 1,2-Dichlorobenzene-d4	152	9.238	9.240	(1.033)	1068425	20	22
	14 1,2-Dichlorobenzene	146	9.258	9.270	(1.035)	1611583	20	24
	15 Benzyl Alcohol	108	9.208	9.210	(1.030)	618400	20	20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	16 2,2'-oxybis(1-Chloropropane)	45	9.425	9.428	(1.054)	1697584	20	24
	17 2-Methylphenol	108	9.386	9.399	(1.050)	974671	20	22
	18 N-Nitroso-di-n-propylamine	70	9.663	9.685	(1.081)	703620	20	23
	19 Hexachloroethane	117	9.742	9.745	(1.089)	461931	20	23
	20 4-Methylphenol	108	9.613	9.636	(1.075)	1010408	20	22
$	21 Nitrobenzene-d5	82	9.860	9.874	(0.897)	1144446	20	22
	22 Nitrobenzene	77	9.890	9.903	(0.900)	1010101	20	22
	23 Isophorone	82	10.274	10.287	(0.935)	1976334	20	22
	24 2-Nitrophenol	139	10.413	10.417	(0.948)	788956	20	21
	25 2,4-Dimethylphenol	107	10.472	10.477	(0.953)	807378	20	22
	26 bis(2-Chloroethoxy)methane	93	10.620	10.625	(0.967)	1332713	20	23
	27 2,4-Dichlorophenol	162	10.788	10.793	(0.982)	1196057	20	22
	28 1,2,4-Trichlorobenzene	180	10.927	10.932	(0.995)	1031873	20	22
	29 Benzoic Acid	122	10.630	10.764	(0.968)	306837	20	10(a)
*	30 Naphthalene-d8	136	10.986	10.992	(1.000)	5783658	40	
	31 Naphthalene	128	11.026	11.032	(1.004)	3118783	20	25
	32 4-Chloroaniline	127	11.164	11.161	(1.016)	1278160	20	22
	33 Hexachlorobutadiene	225	11.313	11.319	(1.030)	268704	20	20
	34 4-Chloro-3-Methylphenol	107	11.964	11.971	(1.089)	676708	20	19
	35 2-Methylnaphthalene	142	12.171	12.179	(1.108)	2505058	20	24
	36 Hexachlorocyclopentadiene	237	12.546	12.545	(0.899)	277418	20	20
	37 2,4,6-Trichlorophenol	196	12.704	12.714	(0.910)	413784	20	20
	38 2,4,5-Trichlorophenol	196	12.774	12.773	(0.915)	414089	20	19(a)
$	39 2-Fluorobiphenyl	172	12.823	12.823	(0.919)	2274715	20	26
	40 2-Chloronaphthalene	162	12.992	12.992	(0.931)	2369667	20	26
	41 2-Nitroaniline	65	13.238	13.249	(0.948)	483861	20	23(a)
	42 Dimethylphthalate	163	13.584	13.596	(0.973)	2759563	20	26
	43 Acenaphthylene	152	13.702	13.715	(0.982)	3712987	20	27
	44 2,6-Dinitrotoluene	165	13.702	13.715	(0.982)	672638	20	22
*	45 Acenaphthene-d10	164	13.959	13.972	(1.000)	3604544	40	
	46 Acenaphthene	153	14.019	14.022	(1.004)	2203168	20	25
	47 3-Nitroaniline	138	13.949	13.962	(0.999)	624883	20	22(a)
	48 2,4-Dinitrophenol	184	14.137	14.141	(1.013)	192762	20	14(a)
	49 Dibenzofuran	168	14.286	14.300	(1.023)	2946093	20	26
	50 2,4-Dinitrotoluene	165	14.375	14.389	(1.030)	886115	20	22
	51 4-Nitrophenol	109	14.236	14.250	(1.020)	113256	20	17(aM)
	52 Diethylphthalate	149	14.780	14.795	(1.059)	2496948	20	27
	53 Fluorene	166	14.869	14.885	(1.065)	2404147	20	26
	54 4-Chlorophenyl-phenylether	204	14.869	14.875	(1.065)	624365	20	22
	55 4-Nitroaniline	138	14.987	15.024	(1.074)	572596	20	20(a)
	56 N-nitrosodiphenylamine	169	15.086	15.103	(0.917)	1728449	20	23
	57 4,6-Dinitro-2-methylphenol	198	15.067	15.093	(0.915)	251494	20	16(a)
	58 Azobenzene	77	15.136	15.143	(1.084)	1798080	20	26
$	59 2,4,6-Tribromophenol	330	15.324	15.331	(1.098)	215516	20	21
	60 4-Bromophenyl-phenylether	248	15.699	15.698	(0.954)	330551	20	20
	61 Hexachlorobenzene	284	15.956	15.965	(0.969)	404206	20	21
	62 Pentachlorophenol	266	16.262	16.273	(0.988)	185945	20	15(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
*	63 Phenanthrene-d10	188	16.460	16.472	(1.000)	4117335	40	
	64 Phenanthrene	178	16.500	16.512	(1.002)	2970544	20	25
	65 Anthracene	178	16.579	16.591	(1.007)	3046787	20	26
	66 Carbazole	167	16.866	16.879	(1.025)	2929772	20	24
	67 Di-n-butylphthalate	149	17.537	17.551	(1.065)	4104621	20	23
	68 Fluoranthene	202	18.542	18.549	(1.126)	1870190	20	24
	69 Benzidine	184	18.789	18.787	(0.895)	196278	20	8.8(a)
	70 Pyrene	202	18.918	18.936	(0.901)	1919326	20	22
$	71 Terphenyl-d14	244	19.204	19.214	(0.914)	1156100	20	21
	72 Butylbenzylphthalate	149	20.092	20.094	(0.957)	1927066	20	24
	73 Benzo(a)anthracene	228	20.971	20.975	(0.999)	1412427	20	22
	74 3,3'-Dichlorobenzidine	252	20.961	20.965	(0.998)	507797	20	20
*	75 Chrysene-d12	240	21.001	21.015	(1.000)	2311861	40	
	76 Chrysene	228	21.041	21.055	(1.002)	1310780	20	22
	77 bis(2-Ethylhexyl)phthalate	149	21.101	21.105	(1.005)	2468410	20	25
	78 Di-n-octylphthalate	149	22.081	22.086	(0.946)	3749151	20	20
	79 Benzo(b)fluoranthene	252	22.715	22.732	(0.973)	1290188	20	19
	80 Benzo(k)fluoranthene	252	22.755	22.772	(0.975)	1457186	20	22
	81 Benzo(a)pyrene	252	23.241	23.249	(0.996)	1057582	20	20
*	82 Perylene-d12	264	23.341	23.349	(1.000)	2084394	40	
	83 Indeno(1,2,3-cd)pyrene	276	25.305	25.327	(1.084)	996122	20	21
	84 Dibenz(a,h)anthracene	278	25.315	25.337	(1.085)	759038	20	20
	85 Benzo(g,h,i)perylene	276	25.862	25.884	(1.108)	765091	20	22

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Inchcape Environmental

INITIAL CALIBRATION DATA

Start Cal Date : 25-NOV-96 09:43:40
End Cal Date : 25-NOV-96 11:56:13
Quant Method : ISTD
Target Version : 3.30
Integrator : HP RTE
Method file : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Cal Date : 25-Nov-96 14:18:25 je
Curve Type : Average

Calibration File Names:
Level 1: /chem/R.i/Rsvr.p/RHX_8270.b/RHX010BS.d
Level 2: /chem/R.i/Rsvr.p/RHX_8270.b/RHX050BS.d
Level 3: /chem/R.i/Rsvr.p/RHX_8270.b/RHX080BS.d
Level 4: /chem/R.i/Rsvr.p/RHX_8270.b/RHX120BS.d
Level 5: /chem/R.i/Rsvr.p/RHX_8270.b/RHX160BS.d

	Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD
1	N-Nitrosodimethylamine	0.34026	0.30553	0.29825	0.26879	0.28840	0.30025	8.753
2	Pyridine	0.97902	0.96470	0.92891	0.80839	0.75668	0.88754	11.185
4	Aniline	+++++	1.27324	1.16574	1.04012	1.05009	1.13230	9.706
6	Phenol	1.35131	1.25747	1.16812	1.00800	1.05108	1.16720	12.182
7	bis(2-Chloroethyl)Ether	1.07018	1.01850	0.95535	0.82479	0.79307	0.93238	12.906
9	2-Chlorophenol	0.98911	0.91000	0.84573	0.74160	0.73666	0.84462	12.891
10	1,3-Dichlorobenzene	1.40261	1.24153	1.16125	0.99875	0.98467	1.15776	15.099
12	1,4-Dichlorobenzene	1.42991	1.24654	1.17250	1.01274	1.00935	1.17421	14.987
14	1,2-Dichlorobenzene	1.31092	1.13987	1.05138	0.91363	0.92388	1.06793	15.461
15	Benzyl Alcohol	0.50303	0.53345	0.50187	0.44640	0.47065	0.49108	6.805
16	2,2'-oxybis(1-Chloropropane)	1.38087	1.22056	1.12971	1.00924	1.08731	1.16554	12.226
17	2-Methylphenol	0.79283	0.79067	0.73386	0.64851	0.65448	0.72407	9.720
18	N-Nitroso-di-n-propylamine	0.57235	0.50586	0.47762	0.43826	0.46032	0.49088	10.556
19	Hexachloroethane	0.37575	0.35390	0.33139	0.29794	0.30095	0.33199	10.123
20	4-Methylphenol	0.82190	0.80724	0.74672	0.66354	0.70349	0.74858	8.982
22	Nitrobenzene	0.34929	0.33769	0.31157	0.27714	0.27945	0.31103	10.567
23	Isophorone	0.68342	0.69099	0.62078	0.58481	0.56432	0.62886	9.068
24	2-Nitrophenol	0.27282	0.29387	0.26917	0.24431	0.23835	0.26371	8.567
25	2,4-Dimethylphenol	0.27919	0.27206	0.25793	0.22859	0.23496	0.25455	8.748
26	bis(2-Chloroethoxy)methane	0.46085	0.44048	0.40545	0.35670	0.34810	0.40232	12.374
27	2,4-Dichlorophenol	0.41360	0.40608	0.37982	0.33363	0.35588	0.37780	8.894
28	1,2,4-Trichlorobenzene	0.35682	0.34274	0.31976	0.28937	0.29798	0.32134	8.921
29	Benzoic Acid	+++++	0.21776	0.19151	0.19188	0.20498	0.20153	6.204
31	Naphthalene	1.07848	0.92280	0.85772	0.72803	0.74371	0.86615	16.574
32	4-Chloroaniline	0.44199	0.44609	0.41147	0.38043	0.37375	0.41075	8.179

Inchcape Environmental

INITIAL CALIBRATION DATA

Start Cal Date : 25-NOV-96 09:43:40
End Cal Date : 25-NOV-96 11:56:13
Quant Method : ISTD
Target Version : 3.30
Integrator : HP RTE
Method file : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Cal Date : 25-Nov-96 [illegible]:18:2[illegible] je
Curve Type : Average

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD
33 Hexachlorobutadiene	0.09292	0.09751	0.09105	0.08598	0.08626	0.09074	5.327
34 4-Chloro-3-Methylphenol	0.23401	0.27274	0.23921	0.22672	0.24486	0.24351	7.250
35 2-Methylnaphthalene	0.86625	0.75862	0.70563	0.62226	0.63780	0.71811	13.817
36 Hexachlorocyclopentadiene	0.15393	0.15843	0.16125	0.14615	0.14346	0.15264	5.027
37 2,4,6-Trichlorophenol	0.22959	0.24886	0.23506	0.21028	0.21723	0.22820	6.636
38 2,4,5-Trichlorophenol	+++++	0.26215	0.24769	0.22930	0.24218	0.24533	5.547
40 2-Chloronaphthalene	1.31482	1.04231	1.01221	0.85803	0.81806	1.00909	19.438
41 2-Nitroaniline	+++++	0.25141	0.24026	0.21496	0.22266	0.23232	7.127
42 Dimethylphthalate	1.53116	1.23863	1.17017	1.00506	0.98818	1.18664	18.560
43 Acenaphthylene	2.06017	1.60620	1.52832	1.19995	1.18400	1.51573	23.662
44 2,6-Dinitrotoluene	0.37322	0.36466	0.34717	0.31093	0.31722	0.34264	8.115
46 Acenaphthene	1.22244	1.01631	0.97004	0.81198	0.80755	0.96566	17.721
47 3-Nitroaniline	+++++	0.32737	0.32523	0.29345	0.28799	0.30851	6.704
48 2,4-Dinitrophenol	+++++	0.16174	0.15662	0.15081	0.14790	0.15427	3.994
49 Dibenzofuran	1.63466	1.31434	1.25822	1.03911	1.03663	1.25659	19.572
50 2,4-Dinitrotoluene	0.49167	0.46209	0.45258	0.41360	0.40869	0.44572	7.795
51 4-Nitrophenol	+++++	0.07622	0.07533	0.07012	0.06928	0.07274	4.871
52 Diethylphthalate	1.38544	1.04983	1.00030	0.82805	0.82925	1.01858	22.390
53 Fluorene	1.33395	1.05000	0.99743	0.83857	0.84701	1.01339	19.895
54 4-Chlorophenyl-phenylether	0.34643	0.32784	0.31403	0.27497	0.29232	0.31112	9.084
55 4-Nitroaniline	+++++	0.33570	0.34203	0.31205	0.27300	0.31569	9.898
56 N-nitrosodiphenylamine	0.83960	0.79455	0.73148	0.64266	0.64695	0.73105	11.984
57 4,6-Dinitro-2-methylphenol	+++++	0.15765	0.15245	0.15029	0.14678	0.15179	2.999
58 Azobenzene	0.99767	0.75809	0.73221	0.69018	0.71200	0.77803	16.107
60 4-Bromophenyl-phenylether	0.16057	0.16769	0.15847	0.14694	0.15241	0.15722	5.041
61 Hexachlorobenzene	0.19634	0.19708	0.18376	0.17466	0.17313	0.18500	6.188
62 Pentachlorophenol	+++++	0.11928	0.12094	0.11404	0.11476	0.11725	2.881
64 Phenanthrene	1.44295	1.23139	1.17397	0.97115	0.96971	1.15783	17.122
65 Anthracene	1.47998	1.22371	1.15269	0.95099	0.94114	1.14970	19.330
66 Carbazole	1.42314	1.24480	1.19824	1.01885	0.95095	1.16720	16.100
67 Di-n-butylphthalate	1.99382	1.38881	1.33022	1.92891	1.96522	1.72140	19.275
68 Fluoranthene	0.90845	0.78077	0.80404	0.69409	0.66404	0.77028	12.559

Inchcape Environmental

INITIAL CALIBRATION DATA

Start Cal Date : 25-NOV-96 09:43:40
End Cal Date : 25-NOV-96 11:56:13
Quant Method : ISTD
Target Version : 3.30
Integrator : HP RTE
Method file : /chem/R.i/Rsvr.p/RHX_8270.b/SV_8270v6RTE.m
Cal Date : 25-Nov-96 14:18:25 je
Curve Type : Average

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD
69 Benzidine	+++++	0.43918	0.39806	0.38454	0.32875	0.38763	11.769
70 Pyrene	1.66042	1.74793	1.49271	1.33072	1.34115	1.51459	12.355
72 Butylbenzylphthalate	1.66711	1.53026	1.36315	1.16851	1.20949	1.38770	15.236
73 Benzo(a)anthracene	1.22190	1.16015	1.10745	0.97705	1.00225	1.09376	9.481
74 3,3'-Dichlorobenzidine	0.43930	0.46265	0.47196	0.43897	0.42881	0.44834	4.043
76 Chrysene	1.13396	1.06619	1.02702	0.93437	0.93466	1.01924	8.466
77 bis(2-Ethylhexyl)phthalate	2.13543	1.80972	1.66631	1.33778	1.44060	1.67797	18.819
78 Di-n-octylphthalate	3.59735	3.26910	2.74114	3.51021	5.27203	3.67797	25.867
79 Benzo(b)fluoranthene	1.23795	1.41264	1.26120	1.21938	1.21891	1.27002	6.424
80 Benzo(k)fluoranthene	1.39819	1.25909	1.35452	1.10344	1.14849	1.25275	10.153
81 Benzo(a)pyrene	1.01476	1.01775	1.03956	0.94595	0.97170	0.99794	3.816
83 Indeno(1,2,3-cd)pyrene	0.95579	0.95334	0.90831	0.80818	0.91798	0.90872	6.603
84 Dibenz(a,h)anthracene	0.72831	0.74441	0.71439	0.64190	0.73764	0.71333	5.816
85 Benzo(g,h,i)perylene	0.73411	0.71813	0.67311	0.58358	0.66750	0.67529	8.689
$ 3 2-Fluorophenol	0.82039	0.81857	0.78752	0.67667	0.65965	0.75256	10.415
$ 5 Phenol-d5	1.14648	1.08373	1.01831	0.89130	0.91190	1.01035	10.825
$ 8 2-Chlorophenol-d4	0.95090	0.94211	0.87618	0.76981	0.76911	0.86162	10.324
$ 13 1,2-Dichlorobenzene-d4	0.86909	0.83091	0.78398	0.69945	0.71328	0.77934	9.404
$ 21 Nitrobenzene-d5	0.39575	0.39299	0.36360	0.32553	0.32168	0.35991	9.859
$ 39 2-Fluorobiphenyl	1.26214	0.99327	0.97737	0.81668	0.80125	0.97014	19.140
$ 59 2,4,6-Tribromophenol	0.11958	0.11958	0.11502	0.10734	0.10700	0.11371	5.496
$ 71 Terphenyl-d14	1.00015	1.07341	0.94997	0.86127	0.89398	0.95576	8.846

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date: 11/25/96 Time: 2153

Lab File ID: RHX050ABS Init. Calib. Date(s): 11/25/96 11/25/96

Init. Calib. Times: 0943 1156

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.167	1.276		9.3	25.0
bis(2-Chloroethyl)Ether	0.932	1.001		7.4	
2-Chlorophenol	0.845	0.909		7.6	
1,3-Dichlorobenzene	1.158	1.389		19.9	
1,4-Dichlorobenzene	1.174	1.450		23.5	25.0
1,2-Dichlorobenzene	1.068	1.312		22.8	
2,2'-oxybis(1-Chloropropane)	1.165	1.372		17.8	
2-Methylphenol	0.724	0.760		5.0	
N-Nitroso-di-n-propylamine	0.491	0.560	0.050	14.0	
Hexachloroethane	0.332	0.372		12.0	
4-Methylphenol	0.749	0.812		8.4	
Nitrobenzene	0.311	0.319		2.6	
Isophorone	0.629	0.685		8.9	
2-Nitrophenol	0.264	0.268		1.5	25.0
2,4-Dimethylphenol	0.254	0.278		9.4	
bis(2-Chloroethoxy)methane	0.402	0.458		13.9	
2,4-Dichlorophenol	0.378	0.432		14.3	25.0
1,2,4-Trichlorobenzene	0.321	0.350		9.0	
Naphthalene	0.866	1.043		20.4	
4-Chloroaniline	0.411	0.398		3.2	
Hexachlorobutadiene	0.091	0.091		0.0	25.0
4-Chloro-3-Methylphenol	0.244	0.252		3.3	25.0
2-Methylnaphthalene	0.718	0.853		18.8	
Hexachlorocyclopentadiene	0.152	0.137	0.050	9.9	
2,4,6-Trichlorophenol	0.228	0.239		4.8	25.0
2,4,5-Trichlorophenol	0.245	0.246		0.4	
2-Chloronaphthalene	1.009	1.280		26.8	
2-Nitroaniline	0.232	0.235		1.3	
Dimethylphthalate	1.187	1.359		14.5	
Acenaphthylene	1.516	2.018		33.1	
2,6-Dinitrotoluene	0.343	0.331		3.5	
Acenaphthene	0.966	1.190		23.2	25.0
3-Nitroaniline	0.308	0.320		3.9	
2,4-Dinitrophenol	0.154	0.114	0.050	26.0	
Dibenzofuran	1.257	1.505		19.7	
2,4-Dinitrotoluene	0.446	0.435		2.5	
4-Nitrophenol	0.072	0.066	0.050	8.3	

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Instrument ID: R Calibration Date: 11/25/96 Time: 2153

Lab File ID: RHX050ABS Init. Calib. Date(s): 11/25/96 11/25/96

Init. Calib. Times: 0943 1156

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.018	1.235		21.3	
Fluorene	1.013	1.192		17.7	
4-Chlorophenyl-phenylether	0.311	0.303		2.6	
4-Nitroaniline	0.316	0.287		9.2	
N-nitrosodiphenylamine(1)	0.731	0.827		13.1	25.0
4,6-Dinitro-2-methylphenol	0.152	0.122		19.7	
4-Bromophenyl-phenylether	0.157	0.156		0.6	
Hexachlorobenzene	0.185	0.184		0.5	
Pentachlorophenol	0.117	0.109		6.8	25.0
Phenanthrene	1.158	1.403		21.2	
Anthracene	1.150	1.413		22.9	
Carbazole	1.167	1.368		17.2	
Di-n-butylphthalate	1.721	2.010		16.8	
Fluoranthene	0.770	0.855		11.0	25.0
Pyrene	1.515	1.657		9.4	
Butylbenzylphthalate	1.387	1.745		25.8	
Benzo(a)anthracene	1.094	1.236		13.0	
3,3'-Dichlorobenzidine	0.448	0.461		2.9	
Chrysene	1.019	1.162		14.0	
bis(2-Ethylhexyl)phthalate	1.678	2.305		37.4	
Di-n-octylphthalate	3.678	3.731		1.4	25.0
Benzo(b)fluoranthene	1.270	1.242		2.2	
Benzo(k)fluoranthene	1.252	1.388		10.9	
Benzo(a)pyrene	0.998	1.069		7.1	25.0
Indeno(1,2,3-cd)pyrene	0.909	1.134		24.8	
Dibenz(a,h)anthracene	0.713	0.877		23.0	
Benzo(g,h,i)perylene	0.675	0.845		25.2	
2-Fluorophenol	0.753	0.779		3.4	
Phenol-d5	1.010	1.070		5.9	
2-Chlorophenol-d4	0.862	0.931		8.0	
1,2-Dichlorobenzene-d4	0.779	0.896		15.0	
Nitrobenzene-d5	0.360	0.365		1.4	
2-Fluorobiphenyl	0.970	1.226		26.4	
2,4,6-Tribromophenol	0.114	0.111		2.6	
Terphenyl-d14	0.956	0.981		2.6	

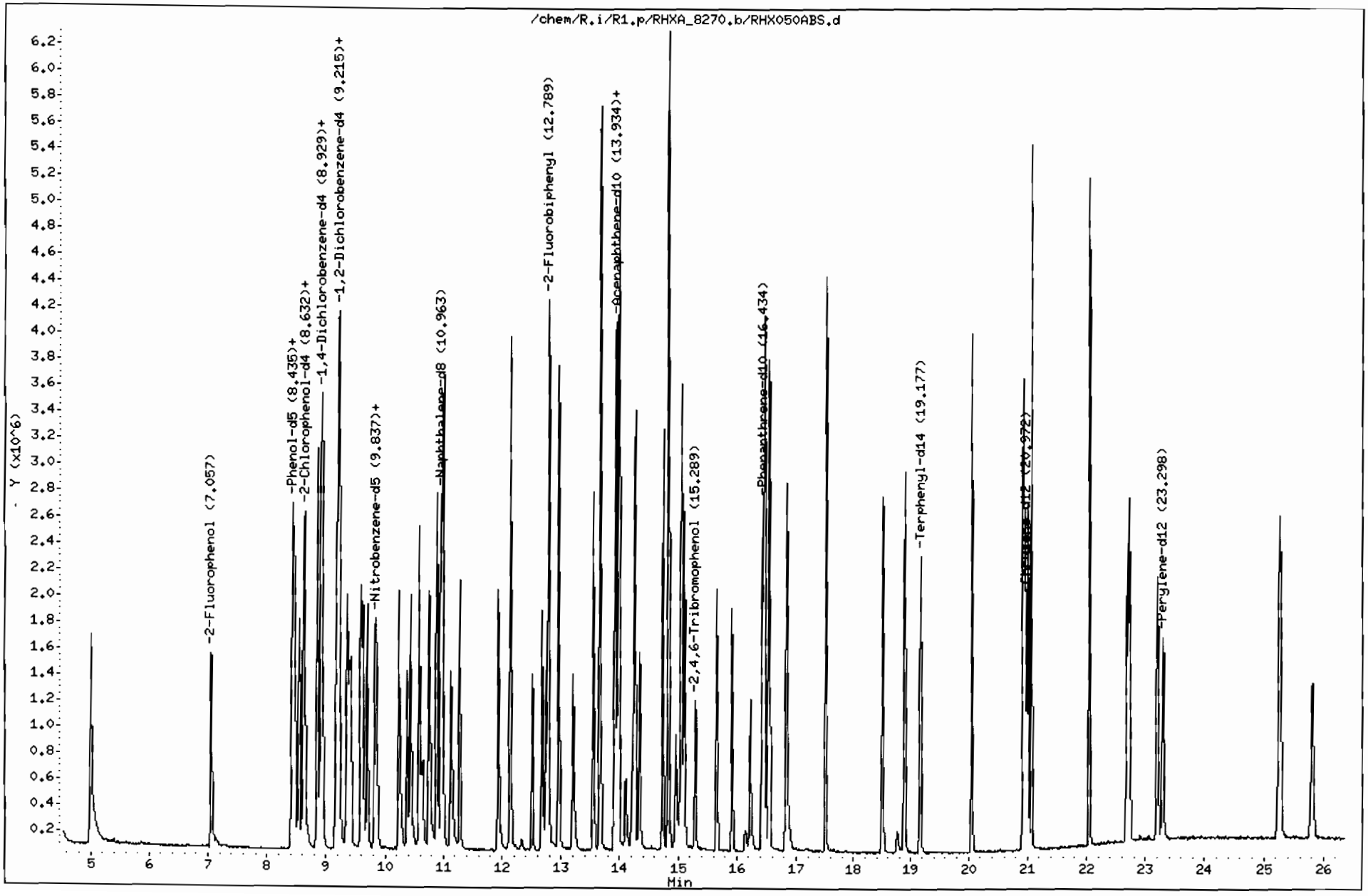
(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/R.i/R1.p/RHXA_8270.b/RHX050ABS.d
Date : 25-NOV-96 21:53:00
Client ID: SSTD050
Sample Info: SSTD050 CRV#RHX-A
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: BES
Column diameter: 0.25



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SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/R1.p/RHXA_8270.b/RHX050ABS.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 25-NOV-96 21:53:00 MS Autotune Date: @
Operator : BES Inst ID: R.i
Smp Info : SSTD050 CRV#RHX-A
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/R1.p/RHXA_8270.b/SV_8270v6RTE.m
Meth Date : 27-Nov-96 18:50:33 je Quant Type: ISTD
Cal Date : 25-NOV-96 21:53:00 Cal File: RHX050ABS.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 N-Nitrosodimethylamine	42	4.999	4.999	(0.561)	428398	50	54
	2 Pyridine	79	5.009	5.009	(0.562)	1131746	50	49
$	3 2-Fluorophenol	112	7.057	7.057	(0.792)	1018547	50	52
	4 Aniline	93	8.474	8.474	(0.951)	1571242	50	53
$	5 Phenol-d5	99	8.425	8.425	(0.946)	1398725	50	53
	6 Phenol	94	8.445	8.445	(0.948)	1668478	50	55
	7 bis(2-Chloroethyl)Ether	93	8.553	8.553	(0.960)	1309271	50	54
$	8 2-Chlorophenol-d4	132	8.613	8.613	(0.967)	1218012	50	54
	9 2-Chlorophenol	128	8.642	8.642	(0.970)	1188701	50	54
	10 1,3-Dichlorobenzene	146	8.850	8.850	(0.993)	1816024	50	60
*	11 1,4-Dichlorobenzene-d4	152	8.909	8.909	(1.000)	1046072	40	
	12 1,4-Dichlorobenzene	146	8.929	8.929	(1.002)	1896273	50	62
$	13 1,2-Dichlorobenzene-d4	152	9.205	9.205	(1.033)	1171262	50	57
	14 1,2-Dichlorobenzene	146	9.225	9.225	(1.035)	1715572	50	61
	15 Benzyl Alcohol	108	9.165	9.165	(1.029)	704673	50	55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	16 2,2'-oxybis(1-Chloropropane)	45	9.393	9.393	(1.054)	1794414	50	59
	17 2-Methylphenol	108	9.363	9.363	(1.051)	994166	50	52
	18 N-Nitroso-di-n-propylamine	70	9.630	9.630	(1.081)	731661	50	57
	19 Hexachloroethane	117	9.699	9.699	(1.089)	486581	50	56
	20 4-Methylphenol	108	9.590	9.590	(1.076)	1062375	50	54
$	21 Nitrobenzene-d5	82	9.827	9.827	(0.897)	1166205	50	51
	22 Nitrobenzene	77	9.857	9.857	(0.900)	1018447	50	51
	23 Isophorone	82	10.242	10.242	(0.935)	2188913	50	54
	24 2-Nitrophenol	139	10.380	10.380	(0.948)	856723	50	51
	25 2,4-Dimethylphenol	107	10.439	10.439	(0.953)	887322	50	54
	26 bis(2-Chloroethoxy)methane	93	10.587	10.587	(0.967)	1462521	50	57
	27 2,4-Dichlorophenol	162	10.755	10.755	(0.982)	1379827	50	57
	28 1,2,4-Trichlorobenzene	180	10.894	10.894	(0.995)	1117775	50	54
	29 Benzoic Acid	122	10.656	10.656	(0.973)	604827	50	47
*	30 Naphthalene-d8	136	10.953	10.953	(1.000)	2556729	40	
	31 Naphthalene	128	10.993	10.993	(1.004)	3333230	50	60
	32 4-Chloroaniline	127	11.131	11.131	(1.016)	1270701	50	48
	33 Hexachlorobutadiene	225	11.279	11.279	(1.030)	291775	50	50
	34 4-Chloro-3-Methylphenol	107	11.940	11.940	(1.090)	803988	50	52
	35 2-Methylnaphthalene	142	12.137	12.137	(1.108)	2727393	50	59
	36 Hexachlorocyclopentadiene	237	12.512	12.512	(0.898)	294218	50	45
	37 2,4,6-Trichlorophenol	196	12.680	12.680	(0.910)	512069	50	52
	38 2,4,5-Trichlorophenol	196	12.739	12.739	(0.914)	527983	50	50
$	39 2-Fluorobiphenyl	172	12.789	12.789	(0.918)	2629549	50	63
	40 2-Chloronaphthalene	162	12.957	12.957	(0.930)	2745583	50	63
	41 2-Nitroaniline	65	13.214	13.214	(0.948)	504332	50	51
	42 Dimethylphthalate	163	13.559	13.559	(0.973)	2913174	50	57
	43 Acenaphthylene	152	13.678	13.678	(0.982)	4326068	50	66
	44 2,6-Dinitrotoluene	165	13.678	13.678	(0.982)	710285	50	48
*	45 Acenaphthene-d10	164	13.934	13.934	(1.000)	1715388	40	
	46 Acenaphthene	153	13.984	13.984	(1.004)	2550909	50	62
	47 3-Nitroaniline	138	13.914	13.914	(0.999)	687359	50	52(H)
	48 2,4-Dinitrophenol	184	14.102	14.102	(1.012)	244955	50	37
	49 Dibenzofuran	168	14.261	14.261	(1.023)	3227015	50	60
	50 2,4-Dinitrotoluene	165	14.340	14.340	(1.029)	931905	50	49
	51 4-Nitrophenol	109	14.211	14.211	(1.020)	142032	50	46
	52 Diethylphthalate	149	14.745	14.745	(1.058)	2648386	50	61
	53 Fluorene	166	14.844	14.844	(1.065)	2556512	50	59
	54 4-Chlorophenyl-phenylether	204	14.844	14.844	(1.065)	649544	50	49
	55 4-Nitroaniline	138	14.962	14.962	(1.074)	615945	50	45
	56 N-nitrosodiphenylamine	169	15.061	15.061	(0.916)	1825440	50	56
	57 4,6-Dinitro-2-methylphenol	198	15.041	15.041	(0.915)	268632	50	40
	58 Azobenzene	77	15.111	15.111	(1.084)	1801028	50	54
$	59 2,4,6-Tribromophenol	330	15.299	15.299	(1.098)	237937	50	49
	60 4-Bromophenyl-phenylether	248	15.664	15.664	(0.953)	344086	50	50
	61 Hexachlorobenzene	284	15.921	15.921	(0.969)	407205	50	50
	62 Pentachlorophenol	266	16.237	16.237	(0.988)	241015	50	46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
*	63 Phenanthrene-d10	188	16.434	16.434	(1.000)	1765734	40	
	64 Phenanthrene	178	16.474	16.474	(1.002)	3096229	50	60
	65 Anthracene	178	16.544	16.544	(1.007)	3119065	50	61
	66 Carbazole	167	16.840	16.840	(1.025)	3020492	50	59
	67 Di-n-butylphthalate	149	17.510	17.510	(1.065)	4437346	50	58
	68 Fluoranthene	202	18.506	18.506	(1.126)	1887057	50	55
	69 Benzidine	184	18.762	18.762	(0.895)	207913	50	23(aM)
	70 Pyrene	202	18.891	18.891	(0.901)	1919882	50	55
$	71 Terphenyl-d14	244	19.177	19.177	(0.914)	1137378	50	51
	72 Butylbenzylphthalate	149	20.064	20.064	(0.957)	2021905	50	63
	73 Benzo(a)anthracene	228	20.943	20.943	(0.999)	1431961	50	56
	74 3,3'-Dichlorobenzidine	252	20.932	20.932	(0.998)	534262	50	51
*	75 Chrysene-d12	240	20.972	20.972	(1.000)	927122	40	
	76 Chrysene	228	21.012	21.012	(1.002)	1346246	50	57
	77 bis(2-Ethylhexyl)phthalate	149	21.072	21.072	(1.005)	2670817	50	69
	78 Di-n-octylphthalate	149	22.050	22.050	(0.946)	4252507	50	51
	79 Benzo(b)fluoranthene	252	22.683	22.683	(0.974)	1415391	50	49
	80 Benzo(k)fluoranthene	252	22.723	22.723	(0.975)	1582261	50	55
	81 Benzo(a)pyrene	252	23.209	23.209	(0.996)	1218789	50	54
*	82 Perylene-d12	264	23.298	23.298	(1.000)	911753	40	
	83 Indeno(1,2,3-cd)pyrene	276	25.260	25.260	(1.084)	1292359	50	62
	84 Dibenz(a,h)anthracene	278	25.270	25.270	(1.085)	1000059	50	62
	85 Benzo(g,h,i)perylene	276	25.816	25.816	(1.108)	963351	50	62

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: R.i
Lab File ID: RHX050ABS.d
Analysis Type: WATER
Lab Sample ID: SSTD050
Quant Type: ISTD

Injection Date: 25-NOV-96 21:53:00
Init. Calibration Date(s): 11/25/96 11/25/96
Init. Calibration Times: 09:43:40 11:56:1
Method File: /chem/R.i/R1.p/RHXA_8270.b/SV_8270

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
	1 N-Nitrosodimethylamine	0.300	0.328	0.010	9.1	40.0
	2 Pyridine	0.888	0.866	0.010	2.5	40.0
$	3 2-Fluorophenol	0.753	0.779	0.010	3.5	40.0
	4 Aniline	1.132	1.202	0.010	6.1	40.0
$	5 Phenol-d5	1.010	1.070	0.010	5.9	40.0
	6 Phenol	1.167	1.276	0.010	9.3	25.0
	7 bis(2-Chloroethyl)Ether	0.932	1.001	0.010	7.4	40.0
$	8 2-Chlorophenol-d4	0.862	0.931	0.010	8.1	40.0
	9 2-Chlorophenol	0.845	0.909	0.010	7.6	40.0
	10 1,3-Dichlorobenzene	1.158	1.389	0.010	20.0	40.0
	12 1,4-Dichlorobenzene	1.174	1.450	0.010	23.5	25.0
$	13 1,2-Dichlorobenzene-d4	0.779	0.896	0.010	14.9	40.0
	14 1,2-Dichlorobenzene	1.068	1.312	0.010	22.9	40.0
	15 Benzyl Alcohol	0.491	0.539	0.010	9.7	40.0
	16 2,2'-oxybis(1-Chloropropane)	1.166	1.372	0.010	17.7	40.0
	17 2-Methylphenol	0.724	0.760	0.010	5.0	40.0
	18 N-Nitroso-di-n-propylamine	0.491	0.560	0.050	14.0	40.0
	19 Hexachloroethane	0.332	0.372	0.010	12.1	40.0
	20 4-Methylphenol	0.749	0.812	0.010	8.5	40.0
$	21 Nitrobenzene-d5	0.360	0.365	0.010	1.4	40.0
	22 Nitrobenzene	0.311	0.319	0.010	2.5	40.0
	23 Isophorone	0.629	0.685	0.010	8.9	40.0
	24 2-Nitrophenol	0.264	0.268	0.010	1.7	25.0
	25 2,4-Dimethylphenol	0.255	0.278	0.010	9.1	40.0
	26 bis(2-Chloroethoxy)methane	0.402	0.458	0.010	13.7	40.0
	27 2,4-Dichlorophenol	0.378	0.432	0.010	14.3	25.0
	28 1,2,4-Trichlorobenzene	0.321	0.350	0.010	8.8	40.0
	29 Benzoic Acid	0.202	0.189	0.010	6.1	40.0
	31 Naphthalene	0.866	1.043	0.010	20.4	40.0
	32 4-Chloroaniline	0.411	0.398	0.010	3.2	40.0
	33 Hexachlorobutadiene	0.091	0.091	0.010	0.6	25.0
	34 4-Chloro-3-Methylphenol	0.244	0.252	0.010	3.3	25.0
	35 2-Methylnaphthalene	0.718	0.853	0.010	18.8	40.0
	36 Hexachlorocyclopentadiene	0.153	0.137	0.050	10.1	40.0
	37 2,4,6-Trichlorophenol	0.228	0.239	0.010	4.6	25.0
	38 2,4,5-Trichlorophenol	0.245	0.246	0.010	0.4	40.0
$	39 2-Fluorobiphenyl	0.970	1.226	0.010	26.4	40.0
	40 2-Chloronaphthalene	1.009	1.280	0.010	26.9	40.0

Inchcape Environmental

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: R.i
Lab File ID: RHX050ABS.d
Analysis Type: WATER
Lab Sample ID: SSTD050
Quant Type: ISTD

Injection Date: 25-NOV-96 21:53:00
Init. Calibration Date(s): 11/25/96 11/25/96
Init. Calibration Times: 09:43:40 11:56:13
Method File: /chem/R.i/R1.p/RHXA_8270.b/SV_8270v

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	41 2-Nitroaniline	0.232	0.235	0.010	1.2	40.0	
	42 Dimethylphthalate	1.187	1.359	0.010	14.5	40.0	
	43 Acenaphthylene	1.516	2.018	0.010	33.1	40.0	
	44 2,6-Dinitrotoluene	0.343	0.331	0.010	3.3	40.0	
	46 Acenaphthene	0.966	1.190	0.010	23.2	25.0	
	47 3-Nitroaniline	0.309	0.321	0.010	3.9	40.0	
	48 2,4-Dinitrophenol	0.154	0.114	0.050	25.9	40.0	
	49 Dibenzofuran	1.257	1.505	0.010	19.8	40.0	
	50 2,4-Dinitrotoluene	0.446	0.435	0.010	2.5	40.0	
	51 4-Nitrophenol	0.073	0.066	0.050	8.9	40.0	
	52 Diethylphthalate	1.019	1.235	0.010	21.3	40.0	
	53 Fluorene	1.013	1.192	0.010	17.7	40.0	
	54 4-Chlorophenyl-phenylether	0.311	0.303	0.010	2.6	40.0	
	55 4-Nitroaniline	0.316	0.287	0.010	9.0	40.0	
	56 N-nitrosodiphenylamine	0.731	0.827	0.010	13.1	25.0	
	57 4,6-Dinitro-2-methylphenol	0.152	0.122	0.010	19.8	40.0	
	58 Azobenzene	0.778	0.840	0.010	8.0	40.0	
$	59 2,4,6-Tribromophenol	0.114	0.111	0.010	2.4	40.0	
	60 4-Bromophenyl-phenylether	0.157	0.156	0.010	0.8	40.0	
	61 Hexachlorobenzene	0.185	0.184	0.010	0.3	40.0	
	62 Pentachlorophenol	0.117	0.109	0.010	6.9	25.0	
	64 Phenanthrene	1.158	1.403	0.010	21.2	40.0	
	65 Anthracene	1.150	1.413	0.010	22.9	40.0	
	66 Carbazole	1.167	1.368	0.010	17.2	40.0	
	67 Di-n-butylphthalate	1.721	2.010	0.010	16.8	40.0	
	68 Fluoranthene	0.770	0.855	0.010	11.0	25.0	
	69 Benzidine	0.388	0.179	0.010	53.7	40.0	<-
	70 Pyrene	1.515	1.657	0.010	9.4	40.0	
$	71 Terphenyl-d14	0.956	0.981	0.010	2.7	40.0	
	72 Butylbenzylphthalate	1.388	1.745	0.010	25.7	40.0	
	73 Benzo(a)anthracene	1.094	1.236	0.010	13.0	40.0	
	74 3,3'-Dichlorobenzidine	0.448	0.461	0.010	2.8	40.0	
	76 Chrysene	1.019	1.162	0.010	14.0	40.0	
	77 bis(2-Ethylhexyl)phthalate	1.678	2.305	0.010	37.3	40.0	
	78 Di-n-octylphthalate	3.678	3.731	0.010	1.4	25.0	
	79 Benzo(b)fluoranthene	1.270	1.242	0.010	2.2	40.0	
	80 Benzo(k)fluoranthene	1.253	1.388	0.010	10.8	40.0	
	81 Benzo(a)pyrene	0.998	1.069	0.010	7.2	25.0	

Inchcape Environmental

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: R.i
Lab File ID: RHX050ABS.d
Analysis Type: WATER
Lab Sample ID: SSTD050
Quant Type: ISTD

Injection Date: 25-NOV-96 21:53:00
Init. Calibration Date(s): 11/25/96 11/25/96
Init. Calibration Times: 09:43:40 11:56:1
Method File: /chem/R.i/R1.p/RHXA_8270.b/SV_8270v

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
83 Indeno(1,2,3-cd)pyrene	0.909	1.134	0.010	24.8	40.0
84 Dibenz(a,h)anthracene	0.713	0.877	0.010	23.0	40.0
85 Benzo(g,h,i)perylene	0.675	0.845	0.010	25.2	40.0

Col # 204-1111 GPC-C DJP 11/13/96

Loop	Sample
2	CH_2Cl_2 Blk-Tol
3	SBlkTS
4	318890MSB
5	318889
6	CH_2Cl_2 Blk-Tol

Col # 204-1111 GPC-C DJP 11-11-96

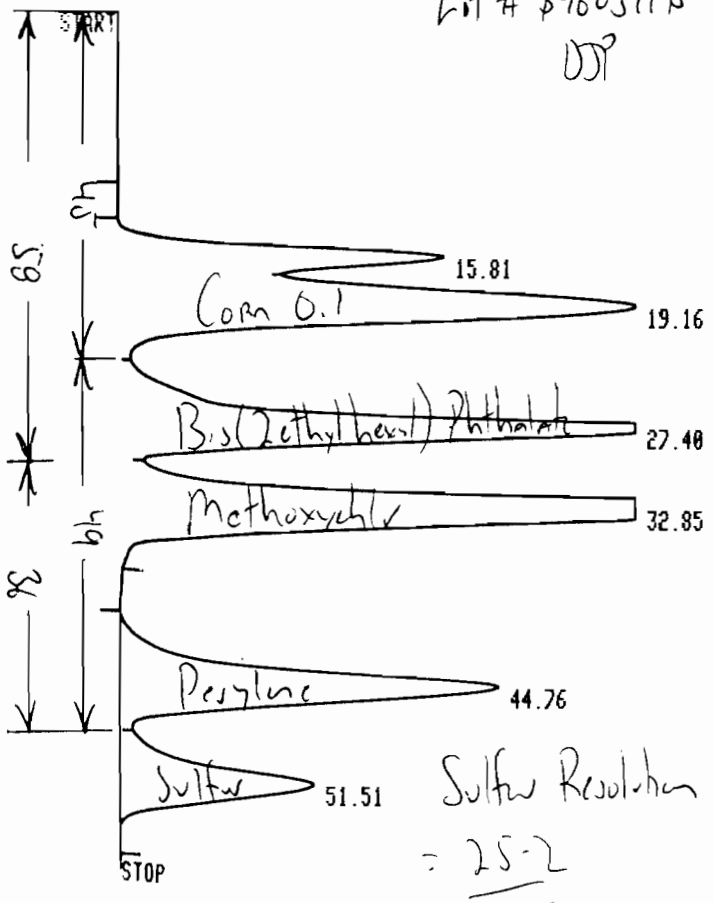
LIST: LIST
PEAK CAPACITY: 996

ZERO = 5,-0.77
ATT 2↑ = 5
CHT SP = 0.2
PK WD = 0.64
THRSH = 4
AR REJ = 0

GPC-C Calibration
Col # 204-1111
5.0l-T Calstd
Lot # B960311B
DJP

	BHA	Rt
Dump:	22.5	29.0
Collect:	28.5	20.0
Wash:	13.0	15.0

Flow Rate: 5.1ml/1min



Sulfur Resolution
$= \frac{25.2}{25}$
$= 92\%$

RUN # 2
WORKFILE ID: B
WORKFILE NAME:

AREA%

RT	AREA	TYPE	AR/HT	AREA%
15.81	1.5351E+07	PV	1.667	8.444
19.16	3.8109E+07	VV	2.584	20.961
27.40	3.5467E+07	VV	2.114	19.508
32.85	4.9656E+07	VB	2.193	27.312
44.76	2.8135E+07	BV	2.617	15.475
51.51	1.5092E+07	VB	2.729	8.301

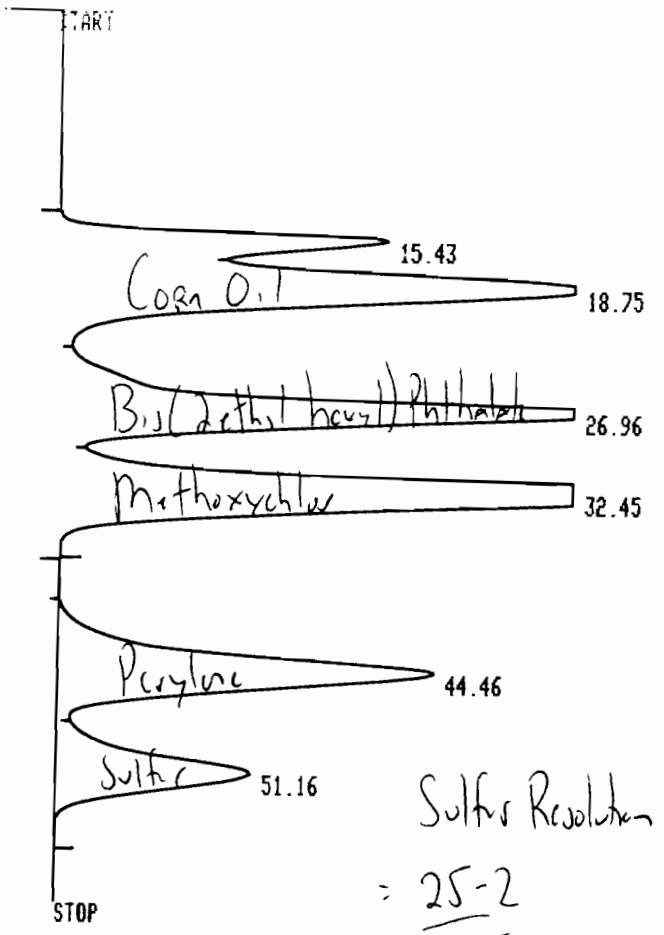
TOTAL AREA= 1.8181E+08
MUL FACTOR= 1.0000E+00

DJP

LIST: LIST
PEAK CAPACITY: 996

ZERO = 5,-0.77
ATT 2↑ = 5
CHT SP = 0.2
PK WD = 0.64
THRSH = 4
AR REJ = 0

GPC-C Calibration
Col # 204-1111
S.O.I. Cal std
Lot # B960311B
DDT



Sulfur Resolution
$= \frac{25-2}{25}$
$= 92\%$

RUN # 1
WORKFILE ID: B
WORKFILE NAME:

AREA%

RT	AREA	TYPE	AR/HT	AREA%
15.43	1.5389E+07	BV	1.652	8.332
18.75	3.9574E+07	VV	2.610	21.427
26.96	3.5727E+07	VV	2.130	19.345
32.45	5.0309E+07	VB	2.220	27.240
44.46	2.8316E+07	PV	2.636	15.332
51.16	1.5372E+07	VB	2.777	8.324

TOTAL AREA= 1.8469E+08
MUL FACTOR= 1.0000E+00

METHOD 8270
SEMIVOLATILE ORGANIC ANALYSIS

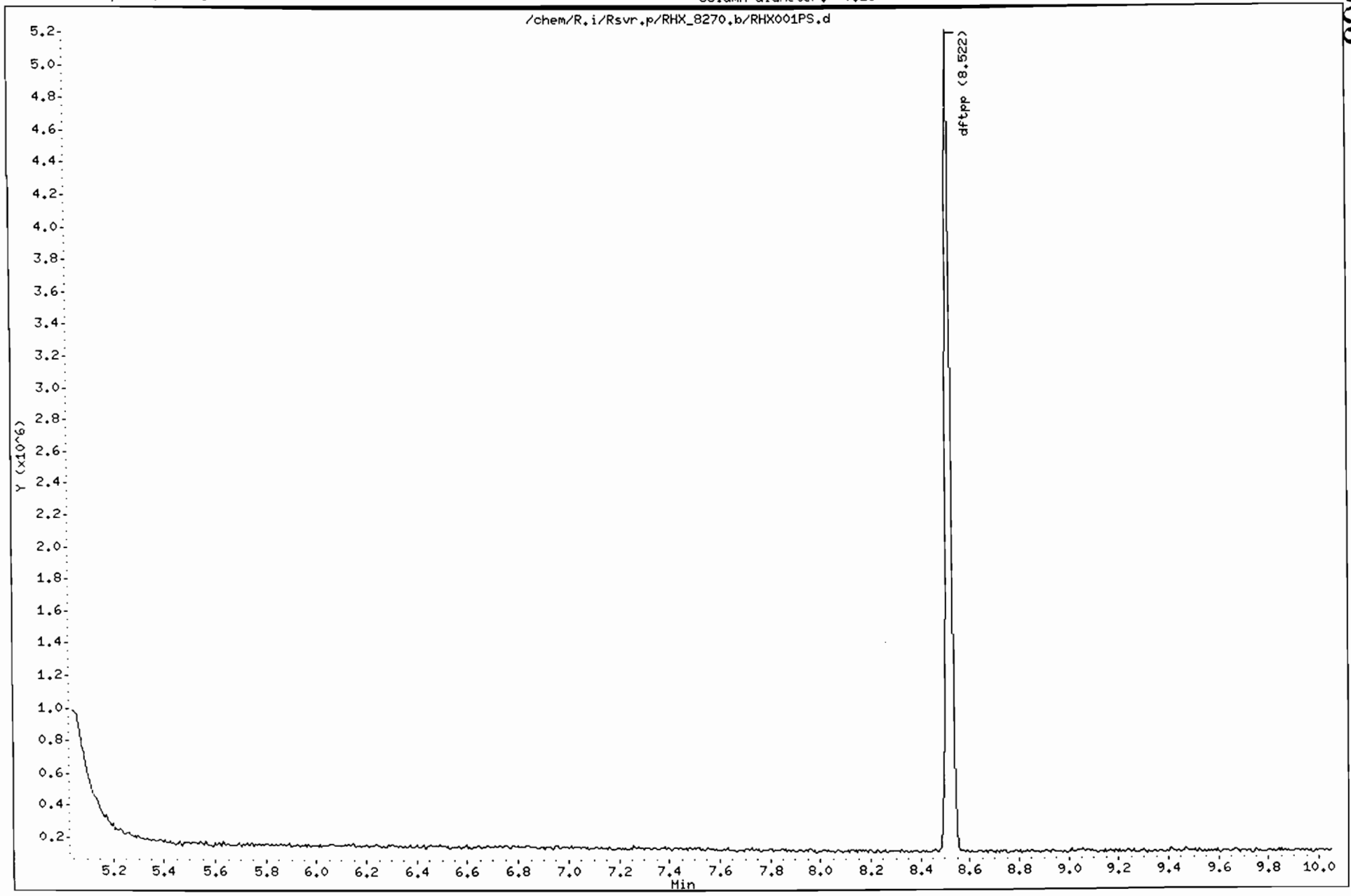
RAW QC DATA

Inchcape Testing Services

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX001PS.d
Date : 25-NOV-96 08:44
Client ID: DFTPPR01
Sample Info: 50 ng DFTPPR01
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i
Operator: DJB
Column diameter: 0.25

000088



Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX001PS.d

Date : 25-NOV-96 08:44

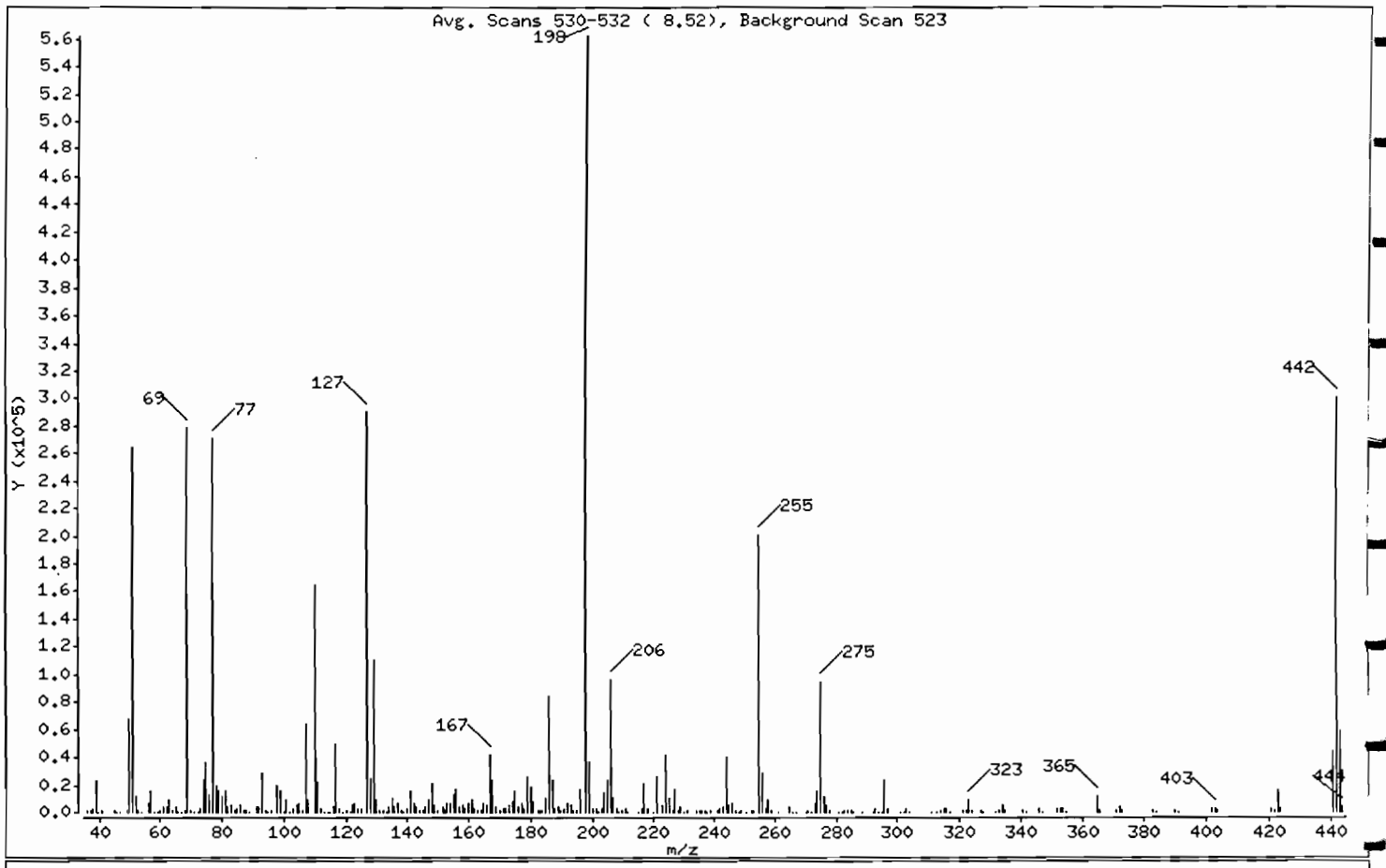
Client ID: DFTPPR01 Instrument: R.i

Sample Info: 50 ng DFTPPR01

Volume Injected (uL): 2.0 Operator: DJB

Column phase: RTX-5 Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	46.98
68	Less than 2.00% of mass 69	0.19 (0.39)
69	Mass 69 relative abundance	49.65
70	Less than 2.00% of mass 69	0.16 (0.32)
127	40.00 - 60.00% of mass 198	51.59
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.35
275	10.00 - 30.00% of mass 198	16.87
365	Greater than 1.00% of mass 198	2.07
441	Present, but less than mass 443	7.72
442	40.00 - 110.00% of mass 198	53.51
443	17.00 - 23.00% of mass 442	10.46 (19.55)

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX001PS.d

Date : 25-NOV-96 08:44

Client ID: DFTPPR01 Instrument: R.i

Sample Info: 50 ng DFTPPR01

Volume Injected (uL): 2.0 Operator: DJB

Column phase: RTX-5 Column diameter: 0.25

Data File: RHX001PS.d

Spectrum: Avg. Scans 530-532 (8.52), Background Scan 523

Location of Maximum: 197.90

Number of points: 281

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	1298	114.95	548	186.95	23464	272.05	473
37.10	1123	115.95	4045	187.90	2005	272.85	6767
37.90	2744	116.95	49064	188.90	4044	273.85	15741
39.00	22992	117.95	2809	189.80	760	274.95	94856
39.90	409	118.85	495	191.00	1963	275.95	11812
40.90	848	119.95	809	191.90	6607	276.95	5706
44.85	1146	121.25	264	192.90	5789	277.95	937
45.85	322	121.95	4663	194.00	1589	280.95	301
46.95	289	122.80	6835	195.10	655	281.85	371
48.95	1904	123.90	2713	195.90	16848	282.85	1256
49.95	67280	124.90	2739	197.90	562176	284.05	873
50.95	264128	126.90	290048	198.90	35712	285.05	1596
51.95	11952	128.00	24568	200.00	2054	285.75	167
52.95	912	128.90	110400	201.40	2605	288.80	320
53.95	248	129.90	9138	202.00	359	292.00	223
55.95	6427	130.90	1439	203.00	3063	292.90	1974
56.95	15143	131.90	1228	204.00	13742	293.90	285
57.90	508	133.00	495	204.95	22816	294.80	230
59.00	295	134.00	3485	205.95	96488	295.90	23920
59.90	714	135.00	9888	206.95	10637	296.90	2970
60.90	3571	135.90	3566	207.95	3230	301.00	224
61.90	3854	137.00	6131	208.75	343	302.00	230
62.90	9554	137.90	994	209.95	1484	302.85	3124
64.00	837	138.80	399	210.95	1955	303.95	216
65.00	3744	139.95	2352	211.75	380	310.95	253
65.80	288	140.85	15876	214.85	467	313.05	199
67.00	378	141.95	6793	216.05	2136	313.95	1534
67.90	1076	142.85	3725	216.85	20584	314.95	2690
68.90	279104	143.95	1207	217.85	2252	315.95	2047
69.90	881	144.95	1315	219.65	217	316.85	197
71.00	235	145.95	3615	219.85	389	320.90	893
72.00	379	146.95	9578	220.90	25304	322.00	771
73.00	2683	147.85	20688	222.90	5150	322.90	8862
73.95	22920	148.95	5501	223.90	40936	323.90	1575
74.85	35928	149.75	1132	224.90	10711	326.90	1771

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX001PS.d

Date : 25-NOV-96 08:44

Client ID: DFTPPR01 Instrument: R.i

Sample Info: 50 ng DFTPPR01

Volume Injected (uL): 2.0 Operator: DJB

Column phase: RTX-5 Column diameter: 0.25

Data File: RHX001PS.d

Spectrum: Avg. Scans 530-532 (8.52), Background Scan 523

Location of Maximum: 197.90

Number of points: 281

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.05	12945	151.55	3447	226.00	1476	327.90	279
76.95	270144	151.95	819	226.90	16808	332.00	269
77.95	19144	152.95	6807	228.00	1674	333.10	684
78.95	15587	153.95	5874	228.90	3999	334.00	5546
79.85	12258	154.95	12333	230.10	185	334.90	1192
80.95	15353	155.90	16241	230.90	1316	340.75	817
81.95	4316	157.00	4532	233.90	855	341.95	201
82.95	4981	157.90	4585	234.90	1228	345.85	2218
83.95	1315	158.90	2721	236.00	691	346.95	484
84.95	2531	159.90	6806	236.90	1460	351.90	2464
85.95	4986	160.90	9606	237.85	238	352.90	2228
86.95	1460	161.90	2980	238.95	716	353.90	2625
87.85	722	162.80	789	240.85	1151	354.80	462
88.95	386	163.90	1410	241.95	2406	364.90	11663
90.90	4530	164.90	7087	243.05	3515	365.80	1258
91.90	4363	166.00	5765	243.95	40752	370.85	1049
92.90	27880	167.00	41936	244.95	5222	371.95	4412
93.90	1738	167.90	23200	245.95	6392	372.85	1441
95.00	8	168.90	3551	246.75	1507	382.95	1174
95.90	825	170.00	1556	247.95	200	383.90	230
97.90	19520	171.00	2146	248.85	1090	390.00	805
98.90	15655	171.95	3139	250.65	569	391.00	619
99.90	637	172.95	4894	250.75	436	401.95	2119
100.90	8970	173.95	7296	252.45	1176	402.85	2877
102.00	602	174.95	15004	252.95	1736	403.75	778
102.90	2925	175.95	4058	254.90	200896	420.90	1995
104.00	5580	176.85	6858	255.90	28416	422.00	1435
104.90	5894	177.95	2412	256.90	3200	422.90	15979
106.10	1282	178.85	25312	257.90	9670	423.90	2888
106.95	63536	179.95	17728	258.90	1341	440.95	43408
107.85	9153	180.95	8394	261.00	519	441.95	300864
109.95	164992	182.55	1521	264.90	4024	442.95	58816
110.95	22192	183.15	709	266.00	373	443.95	4424
111.85	2456	183.85	1720	267.20	255		
113.05	641	184.95	10931	269.85	234		

Data File: /chem/R.i/Rsvr.p/RHX_8270.b/RHX001PS.d

Date : 25-NOV-96 08:44

Client ID: DFTPPR01 Instrument: R.i

Sample Info: 50 ng DFTPPR01

Volume Injected (uL): 2.0 Operator: DJB

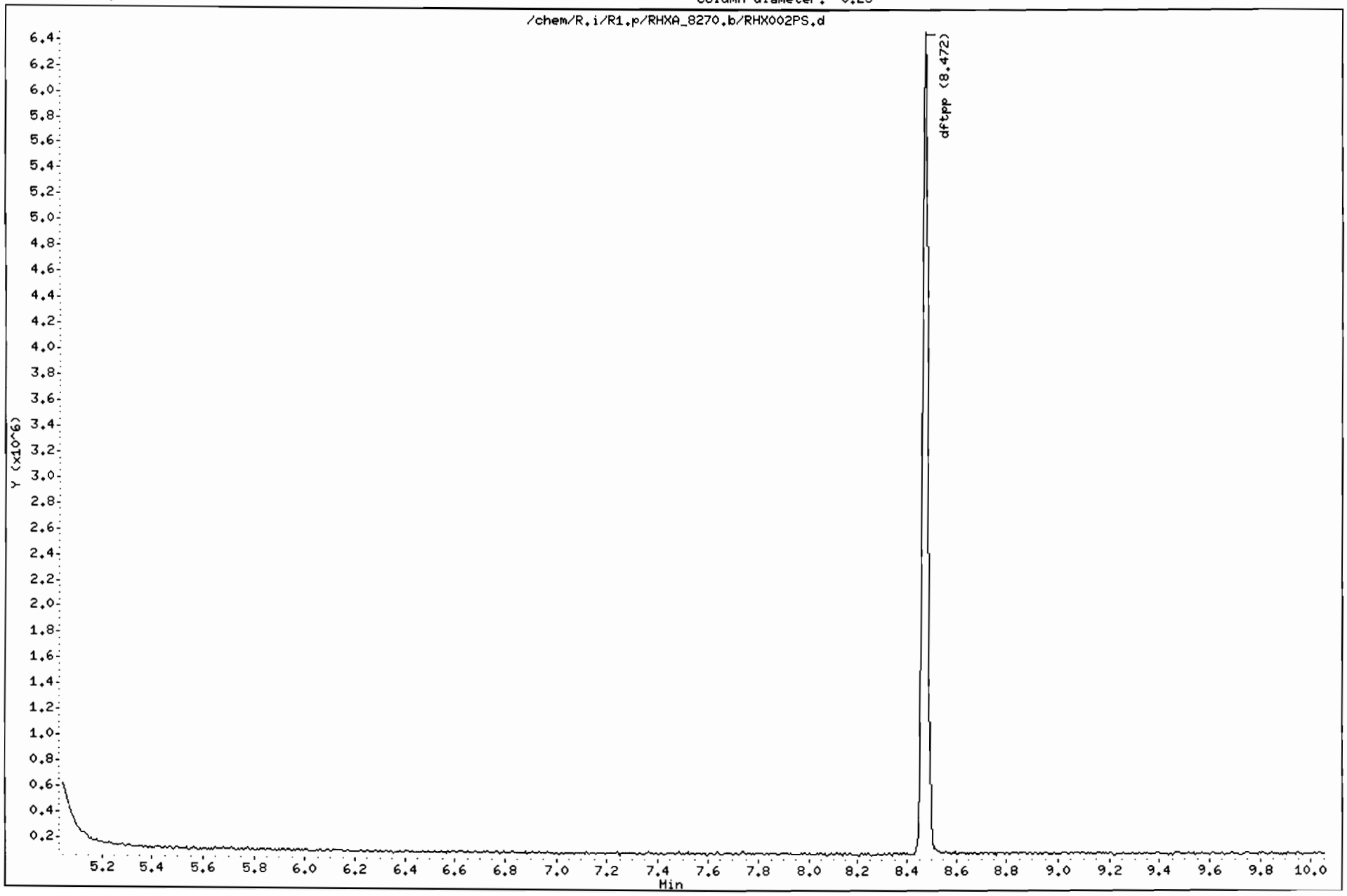
Column phase: RTX-5 Column diameter: 0.25

Data File: RHX001PS.d
Spectrum: Avg. Scans 530-532 (8.52), Background Scan 523
Location of Maximum: 197.90
Number of points: 281

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.35	181	185.95	84400	270.85	863		

Data File: /chem/R.i/R1.p/RHXA_8270.b/RHX002PS.d
Date : 25-NOV-96 21:37
Client ID: DFTPPR02
Sample Info: 50 ng DFTPPR02
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i
Operator: BES
Column diameter: 0.25



Data File: /chem/R.i/R1.p/RHXA_8270.b/RHX002PS.d

Date : 25-NOV-96 21:37

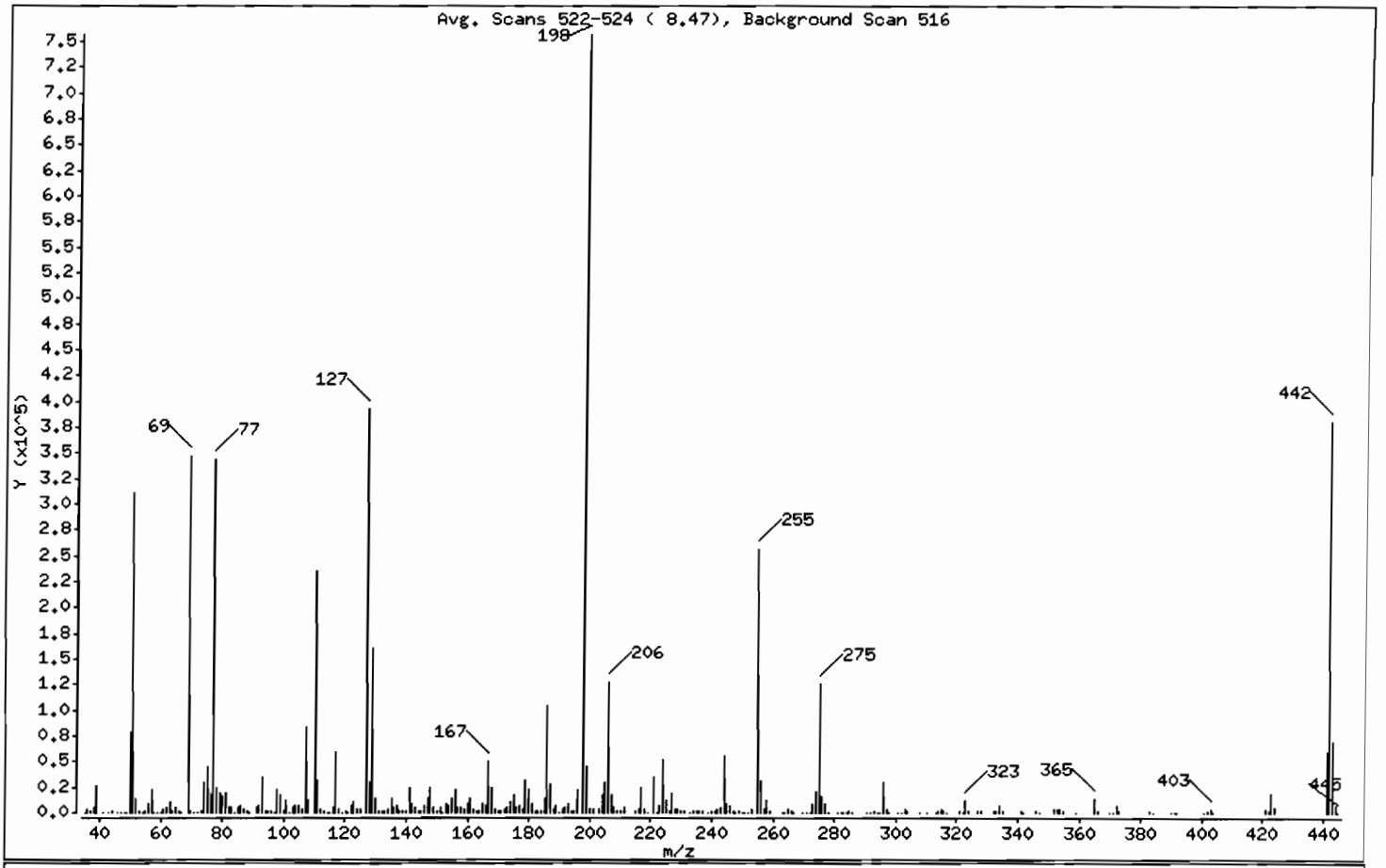
Client ID: DFTPPR02 Instrument: R.i

Sample Info: 50 ng DFTPPR02

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.95
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	45.87
70	Less than 2.00% of mass 69	0.17 (0.36)
127	40.00 - 60.00% of mass 198	51.73
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	5.88
275	10.00 - 30.00% of mass 198	16.54
365	Greater than 1.00% of mass 198	1.94
441	Present, but less than mass 443	7.84
442	40.00 - 110.00% of mass 198	50.21
443	17.00 - 23.00% of mass 442	9.31 (18.54)

Data File: /chem/R.i/R1.p/RHXA_8270.b/RHX002PS.d

Date : 25-NOV-96 21:37

Client ID: DFTPPR02 Instrument: R.i

Sample Info: 50 ng DFTPPR02

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Data File: RHX002PS.d

Spectrum: Avg. Scans 522-524 (8.47), Background Scan 516

Location of Maximum: 197.90

Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	194	114.85	784	189.90	679	277.85	824
35.90	2992	116.05	4410	191.00	2940	281.05	276
36.90	1041	116.95	60048	191.90	6098	281.95	214
38.00	4657	117.95	4112	193.00	8150	282.95	712
39.00	25448	119.05	331	193.90	1938	283.85	512
40.95	528	120.05	1376	194.90	2058	284.85	1601
42.95	404	120.85	508	196.00	21904	286.00	204
43.95	1167	121.95	6654	197.90	757184	290.80	233
45.85	216	122.90	9815	198.90	44504	291.90	238
46.85	172	123.90	3570	200.00	2719	292.90	1989
48.05	194	124.90	3848	201.50	3754	294.00	397
48.95	692	126.90	391680	203.00	3855	295.00	337
49.95	79352	128.00	28952	204.00	18072	295.90	29960
50.95	310080	128.90	159936	204.95	28920	296.90	3919
51.95	14785	129.90	13254	205.95	127040	298.00	526
52.95	1271	130.90	2440	206.95	17776	300.70	370
53.95	192	132.00	1220	207.95	4645	301.90	267
54.95	1831	132.90	1014	208.85	1271	302.95	3729
55.95	9349	134.00	4208	210.15	1701	303.95	907
56.95	22336	135.00	14305	211.55	5025	307.65	186
57.90	795	136.00	4938	214.95	1251	307.85	250
59.00	312	137.00	6129	216.05	2874	310.05	288
60.00	809	137.80	1247	216.95	24352	312.95	188
60.90	3809	138.95	1076	217.95	2917	313.95	1522
62.00	4922	139.85	2374	219.05	364	314.95	3544
63.00	10109	140.95	23680	221.00	35504	315.85	1862
63.90	1736	141.95	8306	221.90	842	316.95	191
65.00	5184	142.95	5735	223.00	6143	321.00	1226
66.00	925	143.95	1699	224.00	52168	321.90	561
66.80	274	144.95	2084	224.90	11503	323.00	11692
68.90	347264	145.95	6167	226.10	1028	323.90	2209
70.00	1252	146.95	13569	226.90	19984	326.80	1620
70.90	165	147.95	24624	227.90	2809	327.90	887
71.90	170	148.95	4717	228.90	4079	332.00	917
73.10	2453	149.95	1460	229.90	894	332.90	929

Data File: /chem/R.i/R1.p/RHXA_8270.b/RHX002PS.d

Date : 25-NOV-96 21:37

Client ID: DFTPPR02 Instrument: R.i

Sample Info: 50 ng DFTPPR02

Volume Injected (uL): 2.0 Operator: BES

Column phase: RTX-5 Column diameter: 0.25

Data File: RHX002PS.d
Spectrum: Avg. Scans 522-524 (8.47), Background Scan 516
Location of Maximum: 197.90
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.95	29560	151.55	4736	230.90	1711	334.00	7421
74.95	45792	152.05	704	232.80	323	334.95	1666
76.05	16808	152.95	9412	233.90	1175	341.05	1404
76.95	342848	153.85	6253	235.00	1870	341.85	180
78.05	24480	155.05	14389	236.00	1083	345.95	1993
78.95	19232	155.90	22912	236.90	1634	346.95	308
79.95	15558	156.90	4977	238.95	761	351.90	3627
80.95	19368	157.90	5425	239.85	895	352.90	2688
81.95	5525	158.90	4205	240.95	1783	353.90	3728
82.95	5233	160.00	8073	241.95	3020	354.90	1160
84.05	618	160.90	13895	243.05	4715	358.80	172
84.95	4890	161.90	2949	243.95	55272	364.90	14657
85.95	7092	162.90	1650	244.95	9127	365.90	1725
86.95	3076	164.00	1695	245.95	7763	369.95	175
88.05	1387	164.90	8781	246.95	1340	370.95	598
88.95	702	166.00	7619	247.95	404	371.95	6419
90.90	5443	166.90	50232	248.95	1571	372.85	1800
91.90	6763	168.00	24896	249.95	562	382.95	1534
92.90	34648	169.00	4179	250.95	380	383.75	215
93.90	2245	170.10	2125	251.95	811	389.90	750
95.00	1266	171.00	2308	253.05	3007	390.90	328
95.90	1651	171.85	4100	254.90	256064	391.90	365
96.90	174	172.85	5008	255.90	32184	400.85	361
97.90	23240	173.95	9684	257.00	3217	401.85	2296
98.90	18168	174.95	17672	257.90	12304	402.95	3870
100.10	1646	175.95	5266	258.90	1881	403.95	862
100.90	12101	176.95	7485	263.10	187	420.80	2900
102.10	848	177.95	2743	264.00	228	422.00	2307
103.00	5526	178.85	32056	265.00	4110	422.90	19096
103.90	7358	179.95	23240	266.00	1208	423.90	4381
105.00	6726	180.95	9346	266.80	185	440.95	59360
106.10	2860	181.95	1707	269.85	245	441.95	380160
106.95	83352	182.95	1239	270.95	809	442.95	70488
107.95	12784	183.95	2263	271.85	743	443.95	7011
109.95	236352	184.95	14160	272.95	8531	444.95	290

Date : 25-NOV-96 21:37

Client ID: DFTPPR02 Instrument: R.i

Sample Info: 50 ng DFTPPR02

Volume Injected (uL): 2.0 Operator: PES

Column phase: RTX-5 Column diameter: 0.25

Data File: RHX002PS.d
Spectrum: Avg. Scans 522-524 (8.47), Background Scan 516
Location of Maximum: 197.90
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.95	31208	185.95	105416	273.95	20712		
111.95	3728	186.95	28536	274.95	125216		
113.05	1398	187.90	3377	275.95	16296		
114.65	529	188.90	6422	276.95	8643		

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLKT5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: SBLKT5

Sample wt/vol: 2.0 (g/mL) G Lab File ID: RB1118T5S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	10000	U
111-44-4	bis(2-Chloroethyl)Ether	10000	U
95-57-8	2-Chlorophenol	10000	U
541-73-1	1,3-Dichlorobenzene	10000	U
106-46-7	1,4-Dichlorobenzene	10000	U
95-50-1	1,2-Dichlorobenzene	10000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10000	U
95-48-7	2-Methylphenol	10000	U
621-64-7	N-Nitroso-di-n-propylamine	10000	U
67-72-1	Hexachloroethane	10000	U
106-44-5	4-Methylphenol	10000	U
98-95-3	Nitrobenzene	10000	U
78-59-1	Isophorone	10000	U
88-75-5	2-Nitrophenol	10000	U
105-67-9	2,4-Dimethylphenol	10000	U
111-91-1	bis(2-Chloroethoxy)methane	10000	U
120-83-2	2,4-Dichlorophenol	10000	U
120-82-1	1,2,4-Trichlorobenzene	10000	U
91-20-3	Naphthalene	10000	U
106-47-8	4-Chloroaniline	10000	U
87-68-3	Hexachlorobutadiene	10000	U
59-50-7	4-Chloro-3-Methylphenol	10000	U
91-57-6	2-Methylnaphthalene	10000	U
77-47-4	Hexachlorocyclopentadiene	10000	U
88-06-2	2,4,6-Trichlorophenol	10000	U
95-95-4	2,4,5-Trichlorophenol	25000	U
91-58-7	2-Chloronaphthalene	10000	U
88-74-4	2-Nitroaniline	25000	U
131-11-3	Dimethylphthalate	10000	U
208-96-8	Acenaphthylene	10000	U
606-20-2	2,6-Dinitrotoluene	10000	U
83-32-9	Acenaphthene	10000	U
99-09-2	3-Nitroaniline	25000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKT5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: SBLKT5

Sample wt/vol: 2.0 (g/mL) G Lab File ID: RB1118T5S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	25000	U
132-64-9	Dibenzofuran	10000	U
121-14-2	2,4-Dinitrotoluene	10000	U
100-02-7	4-Nitrophenol	25000	U
84-66-2	Diethylphthalate	10000	U
86-73-7	Fluorene	10000	U
7005-72-3	4-Chlorophenyl-phenylether	10000	U
100-01-6	4-Nitroaniline	25000	U
86-30-6	N-nitrosodiphenylamine (1)	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	25000	U
101-55-3	4-Bromophenyl-phenylether	10000	U
118-74-1	Hexachlorobenzene	10000	U
87-86-5	Pentachlorophenol	25000	U
85-01-8	Phenanthrene	10000	U
120-12-7	Anthracene	10000	U
86-74-8	Carbazole	10000	U
84-74-2	Di-n-butylphthalate	10000	U
206-44-0	Fluoranthene	10000	U
129-00-0	Pyrene	10000	U
85-68-7	Butylbenzylphthalate	10000	U
56-55-3	Benzo(a)anthracene	10000	U
91-94-1	3,3'-Dichlorobenzidine	10000	U
218-01-9	Chrysene	10000	U
117-81-7	bis(2-Ethylhexyl)phthalate	10000	U
117-84-0	Di-n-octylphthalate	10000	U
205-99-2	Benzo(b)fluoranthene	10000	U
207-08-9	Benzo(k)fluoranthene	10000	U
50-32-8	Benzo(a)pyrene	10000	U
193-39-5	Indeno(1,2,3-cd)pyrene	10000	U
53-70-3	Dibenz(a,h)anthracene	10000	U
191-24-2	Benzo(g,h,i)perylene	10000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SBLKT5

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: SBLKT5

Sample wt/vol: 2.0 (g/mL) G Lab File ID: RB1118T5S

Level: (low/med) MED Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

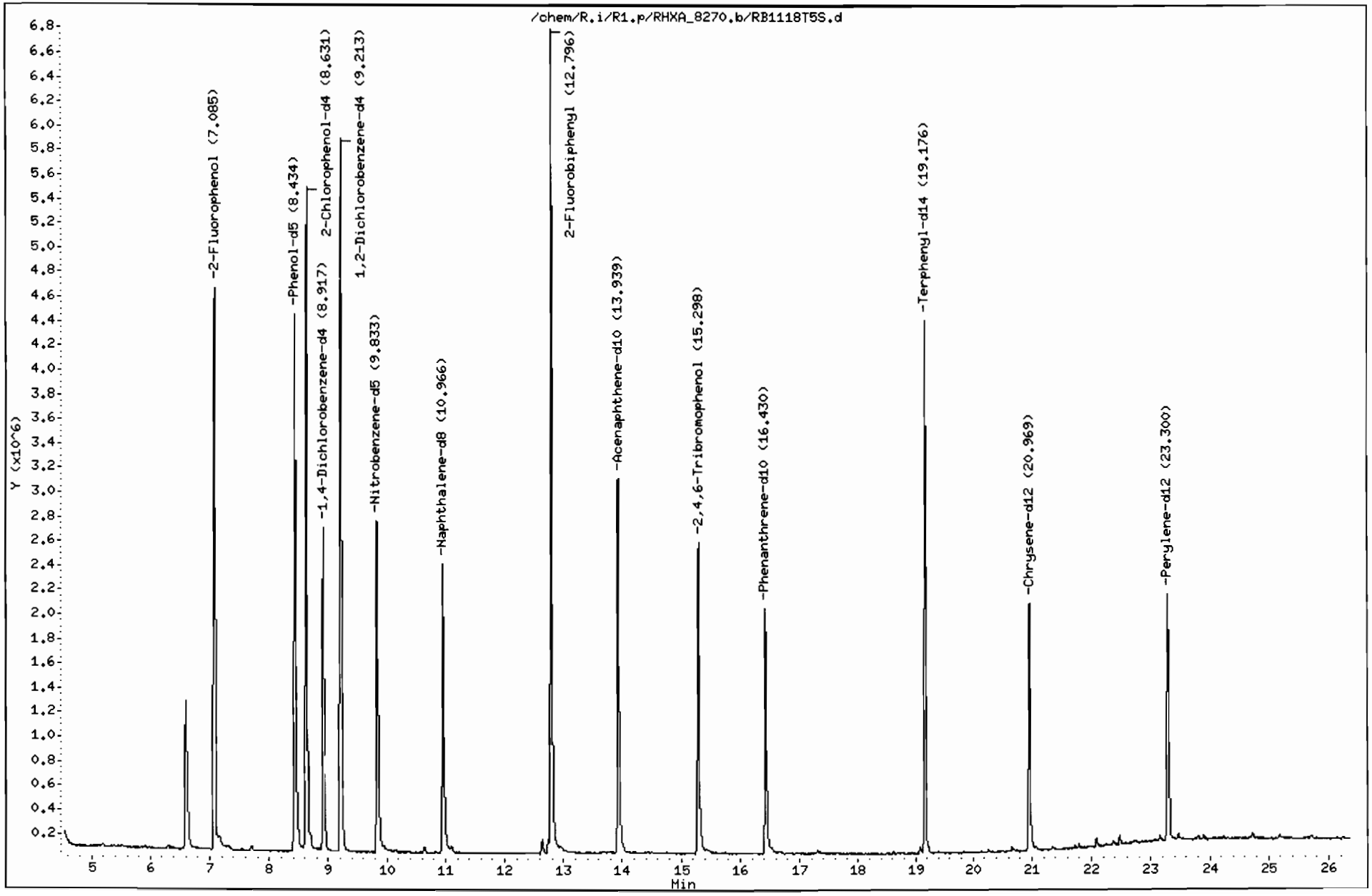
Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.60	12000	NJA
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Data File: /chem/R.i/R1.p/RHXA_8270.b/RB1118T5S.d
Date : 25-NOV-96 22:37:13
Client ID: SBLKT5
Sample Info: BLANK SMO#SBLKT5 ETR#62586
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i
Operator: BES
Column diameter: 0.25



Inchcape Environmental

SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/R1.p/RHXA_8270.b/RB1118T5S.d
Lab Smp Id: SBLKT5 Client Smp ID: SBLKT5
Inj Date : 25-NOV-96 22:37:13
Operator : BES Inst ID: R.i
Smp Info : BLANK SMO#SBLKT5 ETR#62586
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/R1.p/RHXA_8270.b/SV_8270v6RTE.m
Meth Date : 27-Nov-96 18:50:33 je Quant Type: ISTD
Cal Date : 25-NOV-96 21:53:00 Cal File: RHX050ABS.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: OLM.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vi * Ws * (100-M)/100)*GPC

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Ws	2.000	Weight of sample extracted (g)
M	0.000	% Moisture
GPC	2.000	GPC Factor

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	3 2-Fluorophenol	112	7.085	7.057	(0.795)	3114636	140	71000
$	5 Phenol-d5	99	8.434	8.425	(0.946)	3901915	130	65000
	6 Phenol	94.00	Compound Not Detected.					
	7 bis(2-Chloroethyl)Ether	93.00	Compound Not Detected.					
$	8 2-Chlorophenol-d4	132	8.631	8.613	(0.968)	3494985	130	66000
	9 2-Chlorophenol	128.00	Compound Not Detected.					
	10 1,3-Dichlorobenzene	146.00	Compound Not Detected.					
*	11 1,4-Dichlorobenzene-d4	152	8.917	8.909	(1.000)	1126932	40	
	12 1,4-Dichlorobenzene	146.00	Compound Not Detected.					
$	13 1,2-Dichlorobenzene-d4	152	9.213	9.205	(1.033)	2605006	100	52000
	14 1,2-Dichlorobenzene	146.00	Compound Not Detected.					
	16 2,2'-oxybis(1-Chloropropane)	45.00	Compound Not Detected.					
	17 2-Methylphenol	108.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	18 N-Nitroso-di-n-propylamine	70.00	Compound Not Detected.					
	19 Hexachloroethane	117.00	Compound Not Detected.					
	20 4-Methylphenol	108.00	Compound Not Detected.					
$	21 Nitrobenzene-d5	82	9.833	9.827	(0.897)	2309962	95	48000
	22 Nitrobenzene	77.00	Compound Not Detected.					
	23 Isophorone	82.00	Compound Not Detected.					
	24 2-Nitrophenol	139.00	Compound Not Detected.					
	25 2,4-Dimethylphenol	107.00	Compound Not Detected.					
	26 bis(2-Chloroethoxy)methane	93.00	Compound Not Detected.					
	27 2,4-Dichlorophenol	162.00	Compound Not Detected.					
	28 1,2,4-Trichlorobenzene	180.00	Compound Not Detected.					
*	30 Naphthalene-d8	136	10.966	10.953	(1.000)	2662483	40	
	31 Naphthalene	128.00	Compound Not Detected.					
	32 4-Chloroaniline	127.00	Compound Not Detected.					
	33 Hexachlorobutadiene	225.00	Compound Not Detected.					
	34 4-Chloro-3-Methylphenol	107.00	Compound Not Detected.					
	35 2-Methylnaphthalene	142.00	Compound Not Detected.					
	36 Hexachlorocyclopentadiene	237.00	Compound Not Detected.					
	37 2,4,6-Trichlorophenol	196.00	Compound Not Detected.					
	38 2,4,5-Trichlorophenol	196.00	Compound Not Detected.					
$	39 2-Fluorobiphenyl	172	12.796	12.789	(0.918)	4892926	88	44000
	40 2-Chloronaphthalene	162.00	Compound Not Detected.					
	41 2-Nitroaniline	65.00	Compound Not Detected.					
	42 Dimethylphthalate	163.00	Compound Not Detected.					
	43 Acenaphthylene	152.00	Compound Not Detected.					
	44 2,6-Dinitrotoluene	165.00	Compound Not Detected.					
*	45 Acenaphthene-d10	164	13.939	13.934	(1.000)	1818048	40	
	46 Acenaphthene	153.00	Compound Not Detected.					
	47 3-Nitroaniline	138.00	Compound Not Detected.					
	48 2,4-Dinitrophenol	184.00	Compound Not Detected.					
	49 Dibenzofuran	168.00	Compound Not Detected.					
	50 2,4-Dinitrotoluene	165.00	Compound Not Detected.					
	51 4-Nitrophenol	109.00	Compound Not Detected.					
	52 Diethylphthalate	149.00	Compound Not Detected.					
	53 Fluorene	166.00	Compound Not Detected.					
	54 4-Chlorophenyl-phenylether	204.00	Compound Not Detected.					
	55 4-Nitroaniline	138.00	Compound Not Detected.					
	56 N-nitrosodiphenylamine	169.00	Compound Not Detected.					
	57 4,6-Dinitro-2-methylphenol	198.00	Compound Not Detected.					
$	59 2,4,6-Tribromophenol	330	15.298	15.299	(1.097)	644510	130	64000
	60 4-Bromophenyl-phenylether	248.00	Compound Not Detected.					
	61 Hexachlorobenzene	283.81	Compound Not Detected.					
	62 Pentachlorophenol	266.00	Compound Not Detected.					
*	63 Phenanthrene-d10	188	16.430	16.434	(1.000)	1550772	40	
	64 Phenanthrene	178.00	Compound Not Detected.					
	65 Anthracene	178.00	Compound Not Detected.					
	66 Carbazole	167.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	67 Di-n-butylphthalate	149.00	Compound Not Detected.					
	68 Fluoranthene	202.00	Compound Not Detected.					
	70 Pyrene	202.00	Compound Not Detected.					
$	71 Terphenyl-d14	244	19.176	19.177	(0.914)	2050949	70	35000
	72 Butylbenzylphthalate	149.00	Compound Not Detected.					
	73 Benzo(a)anthracene	228.00	Compound Not Detected.					
	74 3,3'-Dichlorobenzidine	252.00	Compound Not Detected.					
*	75 Chrysene-d12	240	20.969	20.972	(1.000)	1185634	40	
	76 Chrysene	228.00	Compound Not Detected.					
	77 bis(2-Ethylhexyl)phthalate	149.00	Compound Not Detected.					
	78 Di-n-octylphthalate	149.00	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252.00	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252.00	Compound Not Detected.					
	81 Benzo(a)pyrene	252.00	Compound Not Detected.					
*	82 Perylene-d12	264	23.300	23.298	(1.000)	1180361	40	
	83 Indeno(1,2,3-cd)pyrene	276.00	Compound Not Detected.					
	84 Dibenz(a,h)anthracene	278.00	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276.00	Compound Not Detected.					

Data File: /chem/R.i/R1.p/RHXA_8270.b/RB1118T5S.d

Date : 25-NOV-96 22:37:13

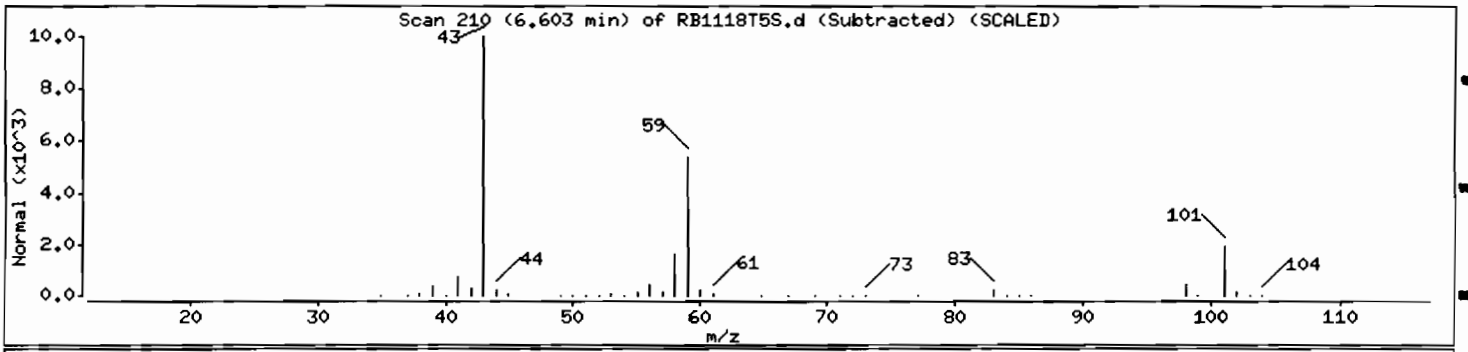
Client ID: SBLKT5 Instrument: R.i

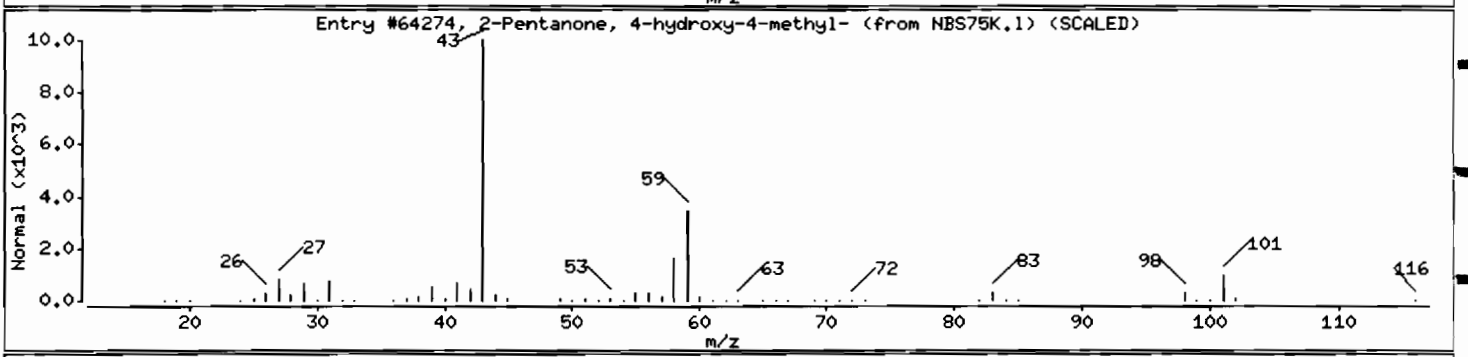
Sample Info: BLANK SMO#SBLKT5 ETR#62586

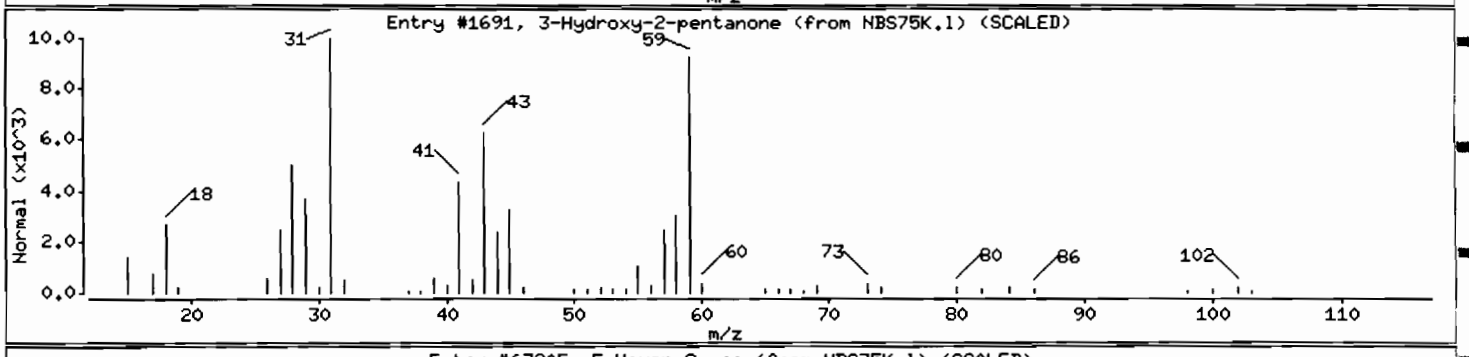
Volume Injected (uL): 2.0 Operator: BES

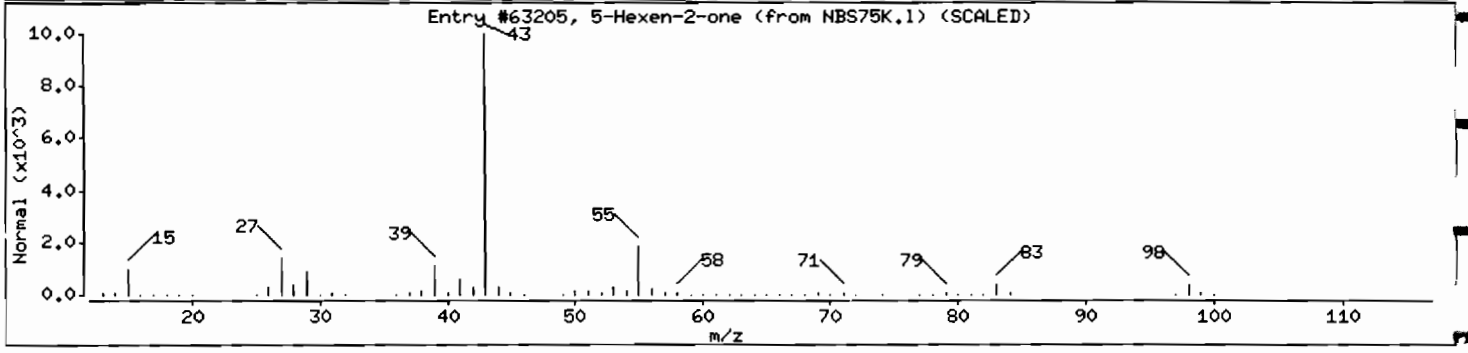
Column phase: RTX-5 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	37	C6H12O2	116
3-Hydroxy-2-pentanone	3142-66-3	NBS75K.l	1691	23	C5H10O2	102
5-Hexen-2-one	109-49-9	NBS75K.l	63205	9	C6H10O	98









1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MBS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318890

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318890S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	64000	
111-44-4	bis(2-Chloroethyl)Ether	10000	U
95-57-8	2-Chlorophenol	71000	
541-73-1	1,3-Dichlorobenzene	10000	U
106-46-7	1,4-Dichlorobenzene	42000	
95-50-1	1,2-Dichlorobenzene	10000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10000	U
95-48-7	2-Methylphenol	10000	U
621-64-7	N-Nitroso-di-n-propylamine	46000	
67-72-1	Hexachloroethane	10000	U
106-44-5	4-Methylphenol	10000	U
98-95-3	Nitrobenzene	10000	U
78-59-1	Isophorone	10000	U
88-75-5	2-Nitrophenol	10000	U
105-67-9	2,4-Dimethylphenol	10000	U
111-91-1	bis(2-Chloroethoxy)methane	10000	U
120-83-2	2,4-Dichlorophenol	10000	U
120-82-1	1,2,4-Trichlorobenzene	44000	
91-20-3	Naphthalene	10000	U
106-47-8	4-Chloroaniline	10000	U
87-68-3	Hexachlorobutadiene	10000	U
59-50-7	4-Chloro-3-Methylphenol	64000	
91-57-6	2-Methylnaphthalene	10000	U
77-47-4	Hexachlorocyclopentadiene	10000	U
88-06-2	2,4,6-Trichlorophenol	10000	U
95-95-4	2,4,5-Trichlorophenol	25000	U
91-58-7	2-Chloronaphthalene	10000	U
88-74-4	2-Nitroaniline	25000	U
131-11-3	Dimethylphthalate	10000	U
208-96-8	Acenaphthylene	10000	U
606-20-2	2,6-Dinitrotoluene	10000	U
83-32-9	Acenaphthene	41000	
99-09-2	3-Nitroaniline	25000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95212

Lab Code: INCHVT Case No.: 95212 SAS No.: SDG No.: 62586

Matrix: (soil/water) SOIL Lab Sample ID: 318890

Sample wt/vol: 2.0 (g/mL) G Lab File ID: R318890S

Level: (low/med) MED Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/18/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/25/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

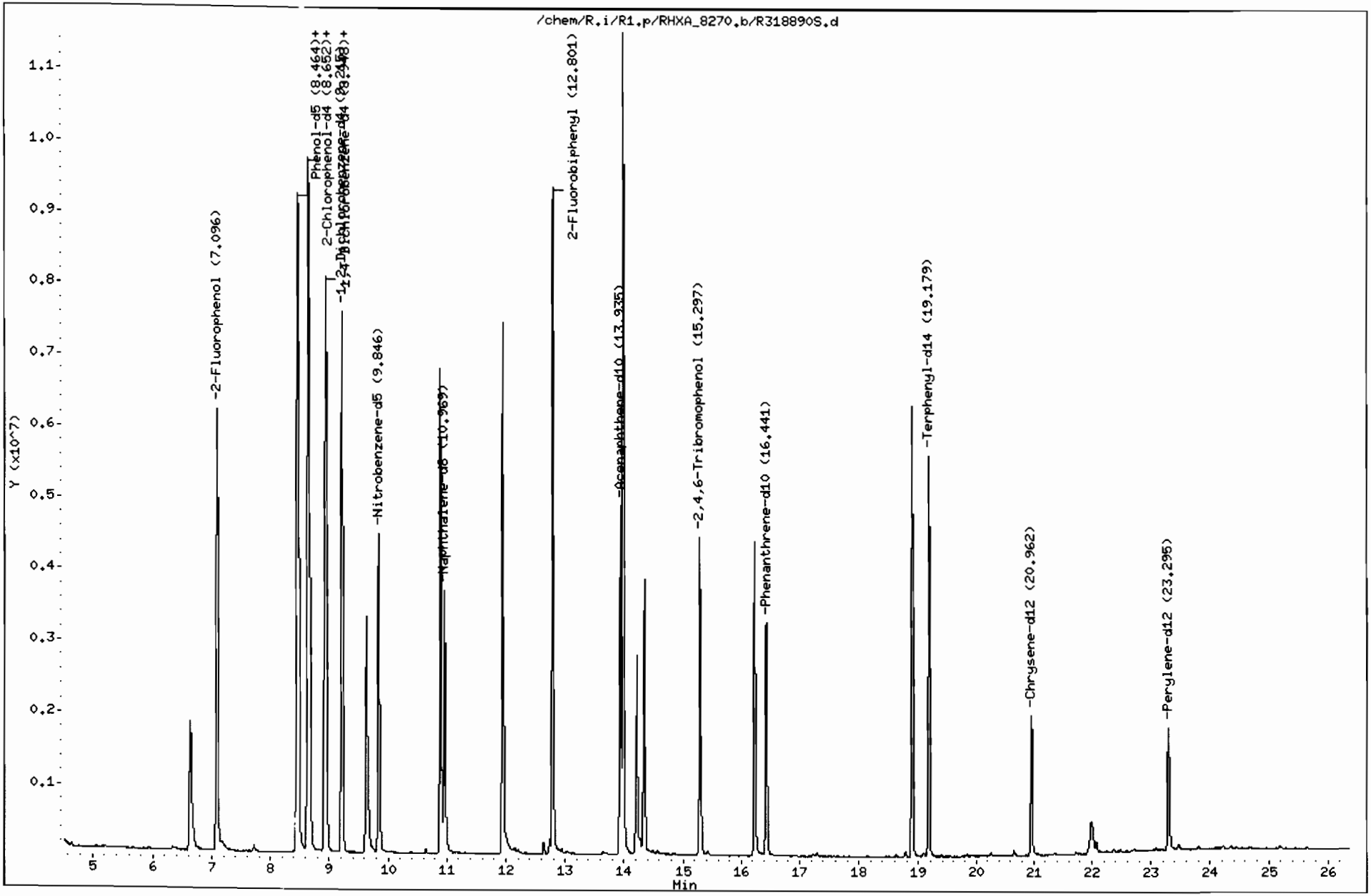
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	25000	U
132-64-9	Dibenzofuran	10000	U
121-14-2	2,4-Dinitrotoluene	44000	
100-02-7	4-Nitrophenol	55000	
84-66-2	Diethylphthalate	10000	U
86-73-7	Fluorene	10000	U
7005-72-3	4-Chlorophenyl-phenylether	10000	U
100-01-6	4-Nitroaniline	25000	U
86-30-6	N-nitrosodiphenylamine (1)	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	25000	U
101-55-3	4-Bromophenyl-phenylether	10000	U
118-74-1	Hexachlorobenzene	10000	U
87-86-5	Pentachlorophenol	70000	
85-01-8	Phenanthrene	10000	U
120-12-7	Anthracene	10000	U
86-74-8	Carbazole	10000	U
84-74-2	Di-n-butylphthalate	10000	U
206-44-0	Fluoranthene	10000	U
129-00-0	Pyrene	52000	
85-68-7	Butylbenzylphthalate	10000	U
56-55-3	Benzo(a)anthracene	10000	U
91-94-1	3,3'-Dichlorobenzidine	10000	U
218-01-9	Chrysene	10000	U
117-81-7	bis(2-Ethylhexyl)phthalate	10000	U
117-84-0	Di-n-octylphthalate	10000	U
205-99-2	Benzo(b)fluoranthene	10000	U
207-08-9	Benzo(k)fluoranthene	10000	U
50-32-8	Benzo(a)pyrene	10000	U
193-39-5	Indeno(1,2,3-cd)pyrene	10000	U
53-70-3	Dibenz(a,h)anthracene	10000	U
191-24-2	Benzo(g,h,i)perylene	10000	U

(1) - Cannot be separated from Diphenylamine

Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d
Date : 25-NOV-96 23:05:00
Client ID: MBS
Sample Info: L#318890 CLI#MSB ETR#62586
Volume Injected (uL): 2.0
Column phase: RTX-5

Instrument: R.i

Operator: BES
Column diameter: 0.25



Inchcape Environmental

SEMIVOLATILE QUANTITATION REPORT

Data file : /chem/R.i/R1.p/RHXA_8270.b/R318890S.d
Lab Smp Id: 318890 Client Smp ID: MBS
Inj Date : 25-NOV-96 23:05:00
Operator : BES Inst ID: R.i
Smp Info : L#318890 CLI#MSB ETR#62586
Misc Info : 100% ANALYSIS
Comment :
Method : /chem/R.i/R1.p/RHXA_8270.b/SV_8270v6RTE.m
Meth Date : 27-Nov-96 18:50:33 je Quant Type: ISTD
Cal Date : 25-NOV-96 21:53:00 Cal File: RHX050ABS.d
Als bottle: 2 QC Sample: BS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: OLM.sub
Target Version: 3.30
Procesing Host: chemsvr4

Concentration Formula: Uf * Vt/(Vi * Ws * (100-M)/100)*GPC

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Ws	2.000	Weight of sample extracted (g)
M	0.000	% Moisture
GPC	2.000	GPC Factor

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	3 2-Fluorophenol	112	7.096	7.057	(0.795)	4127538	150	75000
$	5 Phenol-d5	99	8.454	8.425	(0.947)	5410579	140	71000
	6 Phenol	94	8.474	8.445	(0.949)	5779890	130	64000(QR)
	7 bis(2-Chloroethyl)Ether	93.00	Compound Not Detected.					
$	8 2-Chlorophenol-d4	132	8.642	8.613	(0.968)	4911670	150	74000
	9 2-Chlorophenol	128	8.662	8.642	(0.970)	4572482	140	71000(R)
	10 1,3-Dichlorobenzene	146.00	Compound Not Detected.					
*	11 1,4-Dichlorobenzene-d4	152	8.928	8.909	(1.000)	1417038	40	
	12 1,4-Dichlorobenzene	146	8.948	8.929	(1.002)	4369286	85	42000(R)
$	13 1,2-Dichlorobenzene-d4	152	9.215	9.205	(1.032)	3283305	100	52000
	14 1,2-Dichlorobenzene	146.00	Compound Not Detected.					
	16 2,2'-oxybis(1-Chloropropane)	45.00	Compound Not Detected.					
	17 2-Methylphenol	108.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	18 N-Nitroso-di-n-propylamine	70	9.629	9.630	(1.078)	1831765	92	46000(R)
	19 Hexachloroethane	117.00	Compound Not Detected.					
	20 4-Methylphenol	108.00	Compound Not Detected.					
$	21 Nitrobenzene-d5	82	9.846	9.827	(0.898)	3119848	95	48000
	22 Nitrobenzene	77.00	Compound Not Detected.					
	23 Isophorone	82.00	Compound Not Detected.					
	24 2-Nitrophenol	139.00	Compound Not Detected.					
	25 2,4-Dimethylphenol	107.00	Compound Not Detected.					
	26 bis(2-Chloroethoxy)methane	93.00	Compound Not Detected.					
	27 2,4-Dichlorophenol	162.00	Compound Not Detected.					
	28 1,2,4-Trichlorobenzene	180	10.899	10.894	(0.994)	2749640	88	44000(R)
*	30 Naphthalene-d8	136	10.969	10.953	(1.000)	3582261	40	
	31 Naphthalene	128.00	Compound Not Detected.					
	32 4-Chloroaniline	127.00	Compound Not Detected.					
	33 Hexachlorobutadiene	225.00	Compound Not Detected.					
	34 4-Chloro-3-Methylphenol	107	11.944	11.940	(1.089)	2864317	130	64000(R)
	35 2-Methylnaphthalene	142.00	Compound Not Detected.					
	36 Hexachlorocyclopentadiene	237.00	Compound Not Detected.					
	37 2,4,6-Trichlorophenol	196.00	Compound Not Detected.					
	38 2,4,5-Trichlorophenol	196.00	Compound Not Detected.					
$	39 2-Fluorobiphenyl	172	12.801	12.789	(0.919)	6427490	86	43000
	40 2-Chloronaphthalene	162.00	Compound Not Detected.					
	41 2-Nitroaniline	65.00	Compound Not Detected.					
	42 Dimethylphthalate	163.00	Compound Not Detected.					
	43 Acenaphthylene	152.00	Compound Not Detected.					
	44 2,6-Dinitrotoluene	165.00	Compound Not Detected.					
*	45 Acenaphthene-d10	164	13.935	13.934	(1.000)	2431046	40	
	46 Acenaphthene	153	13.994	13.984	(1.004)	5933082	82	41000(R)
	47 3-Nitroaniline	138.00	Compound Not Detected.					
	48 2,4-Dinitrophenol	184.00	Compound Not Detected.					
	49 Dibenzofuran	168.00	Compound Not Detected.					
	50 2,4-Dinitrotoluene	165	14.350	14.340	(1.030)	2315829	88	44000(R)
	51 4-Nitrophenol	109	14.221	14.211	(1.021)	442165	110	55000(R)
	52 Diethylphthalate	149.00	Compound Not Detected.					
	53 Fluorene	166.00	Compound Not Detected.					
	54 4-Chlorophenyl-phenylether	204.00	Compound Not Detected.					
	55 4-Nitroaniline	138.00	Compound Not Detected.					
	56 N-nitrosodiphenylamine	169.00	Compound Not Detected.					
	57 4,6-Dinitro-2-methylphenol	198.00	Compound Not Detected.					
$	59 2,4,6-Tribromophenol	330	15.297	15.299	(1.098)	975856	140	72000
	60 4-Bromophenyl-phenylether	248.00	Compound Not Detected.					
	61 Hexachlorobenzene	283.81	Compound Not Detected.					
	62 Pentachlorophenol	266	16.233	16.237	(0.987)	876176	140	70000(R)
*	63 Phenanthrene-d10	188	16.441	16.434	(1.000)	2279313	40	
	64 Phenanthrene	178.00	Compound Not Detected.					
	65 Anthracene	178.00	Compound Not Detected.					
	66 Carbazole	167.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	67 Di-n-butylphthalate	149.00	Compound Not Detected.					
	68 Fluoranthene	202.00	Compound Not Detected.					
	70 Pyrene	202	18.902	18.891	(0.902)	4464052	100	52000(R)
$	71 Terphenyl-d14	244	19.179	19.177	(0.915)	2604283	100	51000
	72 Butylbenzylphthalate	149.00	Compound Not Detected.					
	73 Benzo(a)anthracene	228.00	Compound Not Detected.					
	74 3,3'-Dichlorobenzidine	252.00	Compound Not Detected.					
*	75 Chrysene-d12	240	20.962	20.972	(1.000)	1042250	40	
	76 Chrysene	228.00	Compound Not Detected.					
	77 bis(2-Ethylhexyl)phthalate	149.00	Compound Not Detected.					
	78 Di-n-octylphthalate	149.00	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252.00	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252.00	Compound Not Detected.					
	81 Benzo(a)pyrene	252.00	Compound Not Detected.					
*	82 Perylene-d12	264	23.305	23.298	(1.000)	1074800	40	
	83 Indeno(1,2,3-cd)pyrene	276.00	Compound Not Detected.					
	84 Dibenz(a,h)anthracene	278.00	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276.00	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

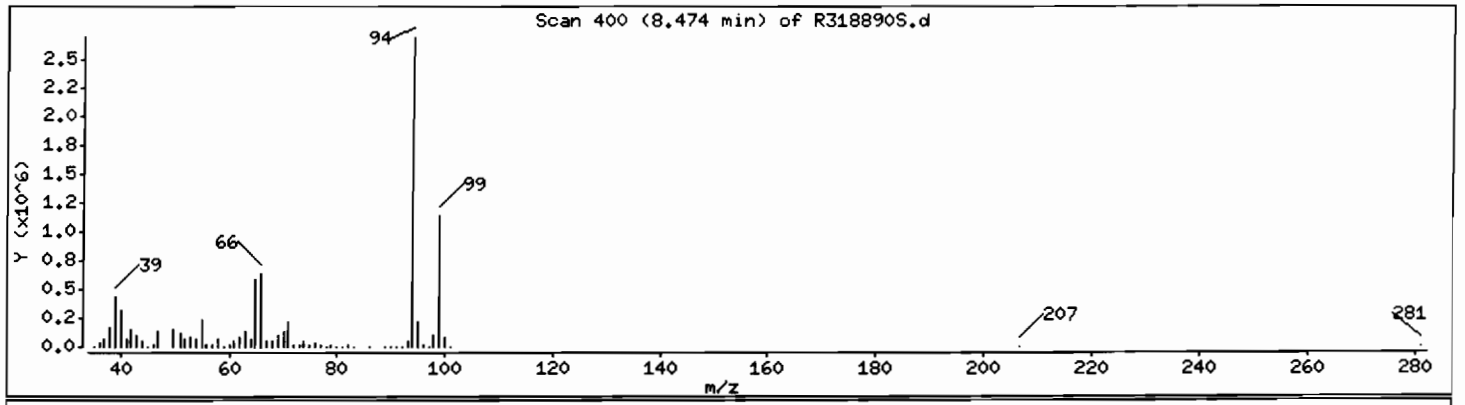
Operator: BES

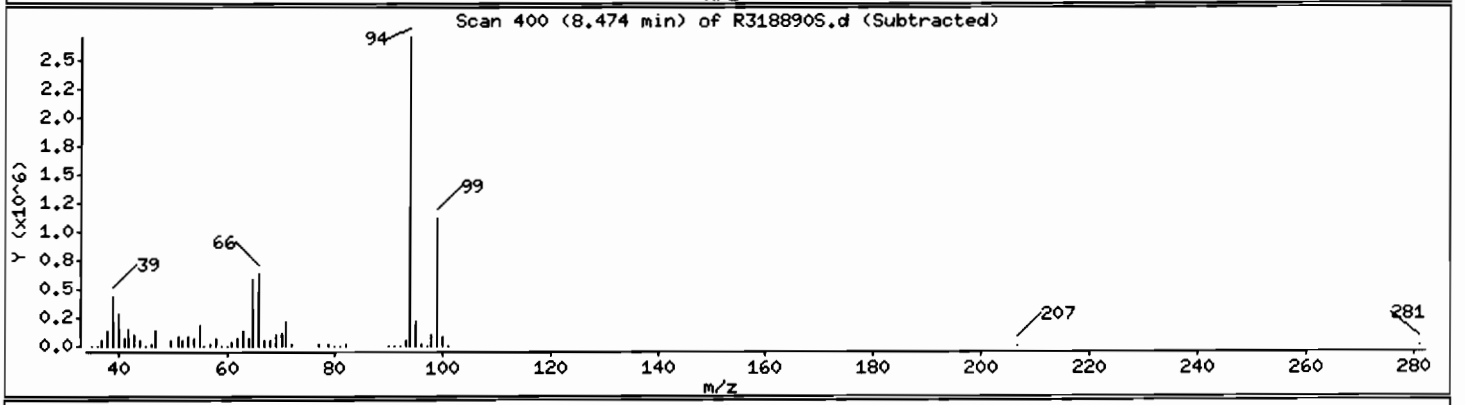
Column phase: RTX-5

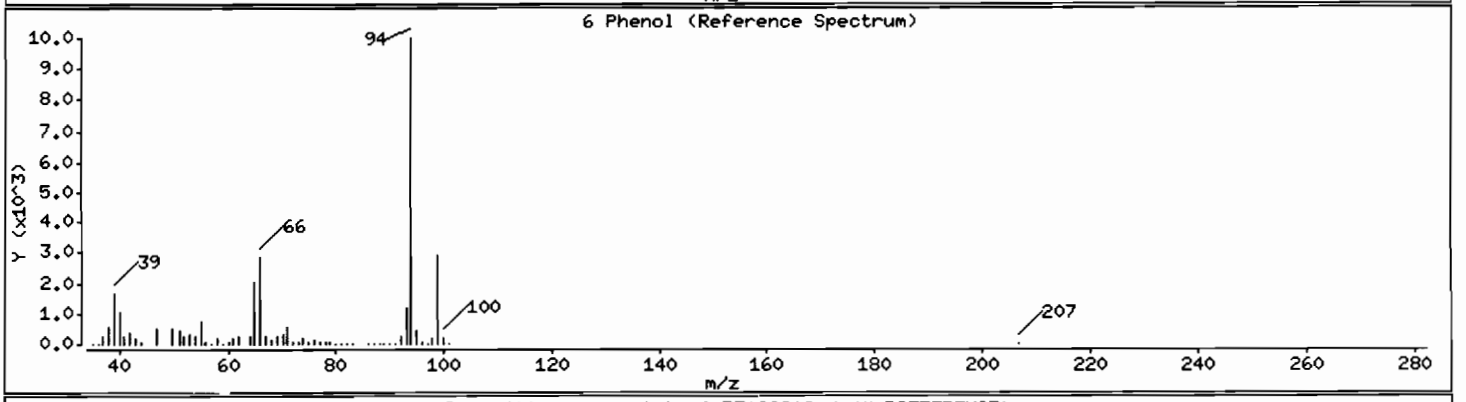
Column diameter: 0.25

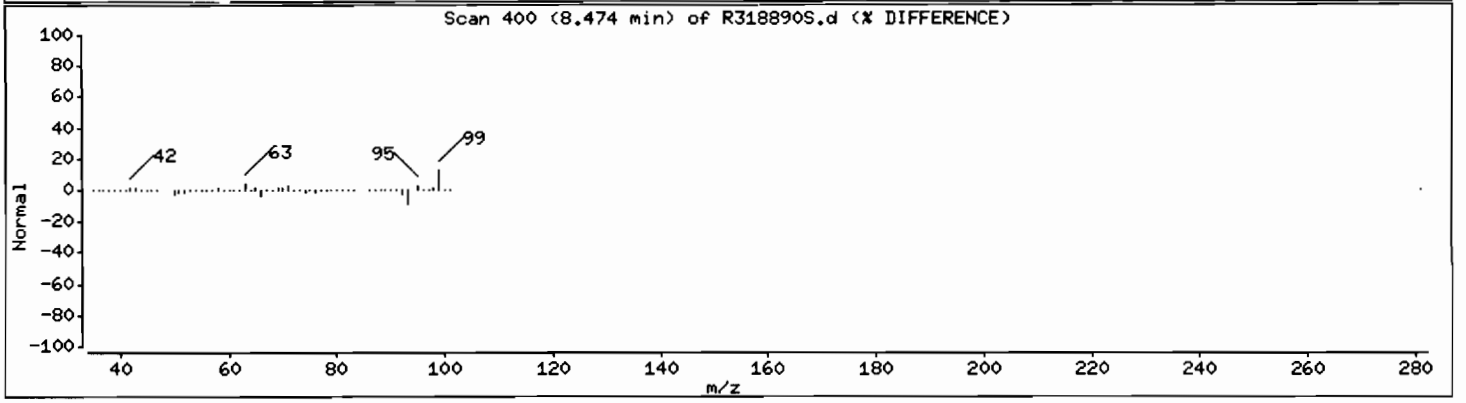
6 Phenol

Concentration: 64000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

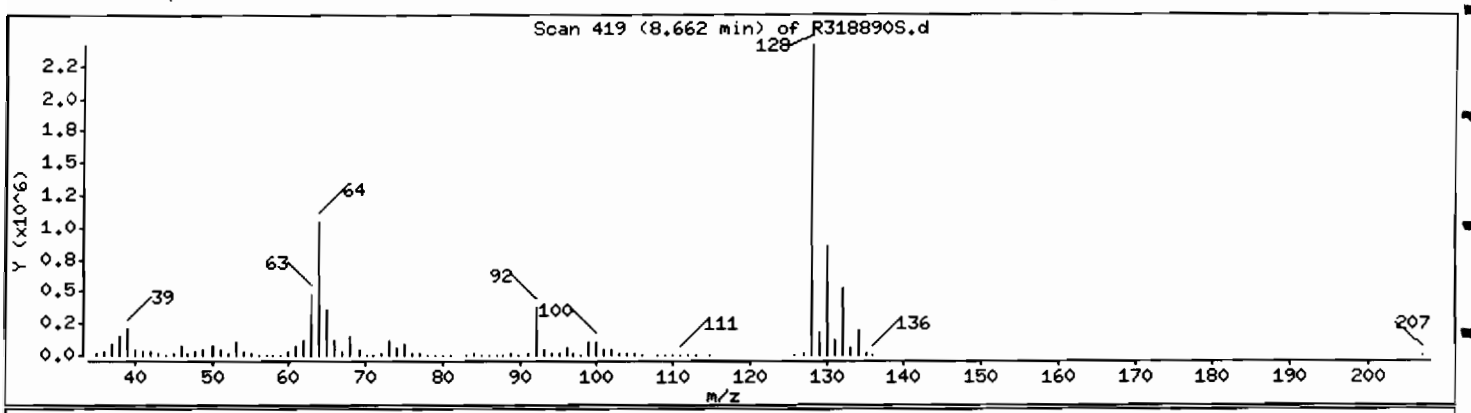
Operator: BES

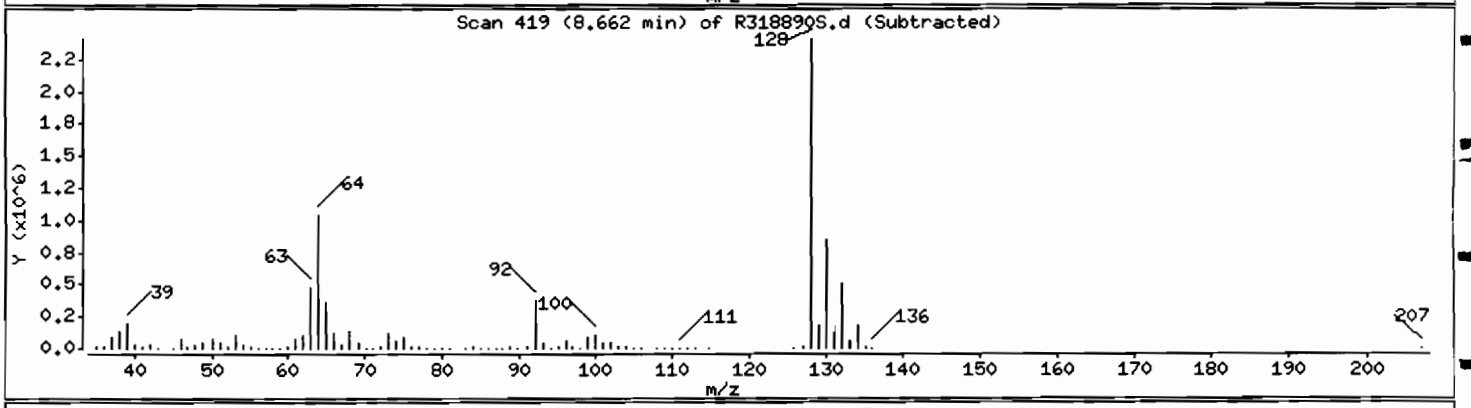
Column phase: RTX-5

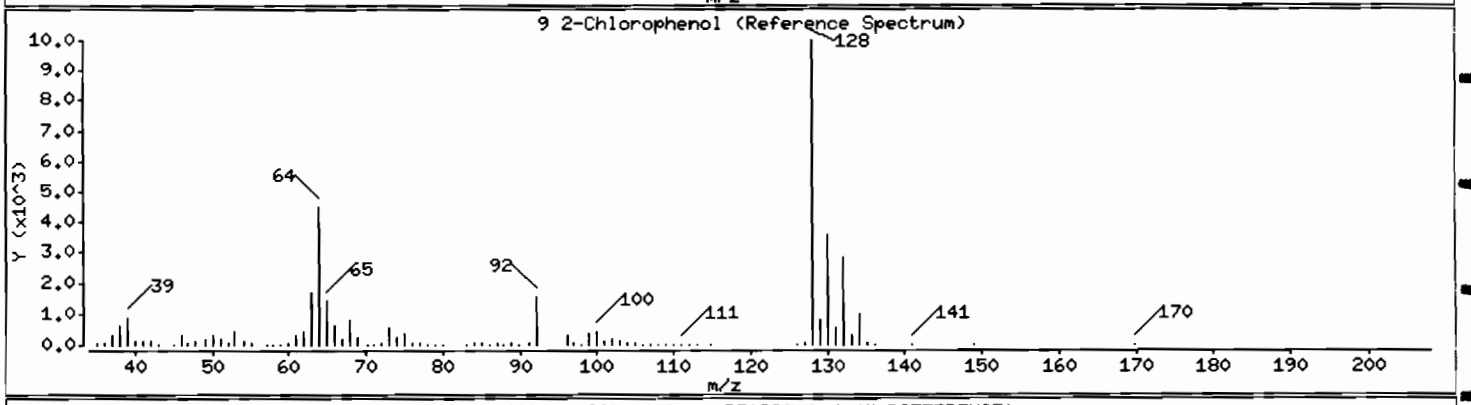
Column diameter: 0.25

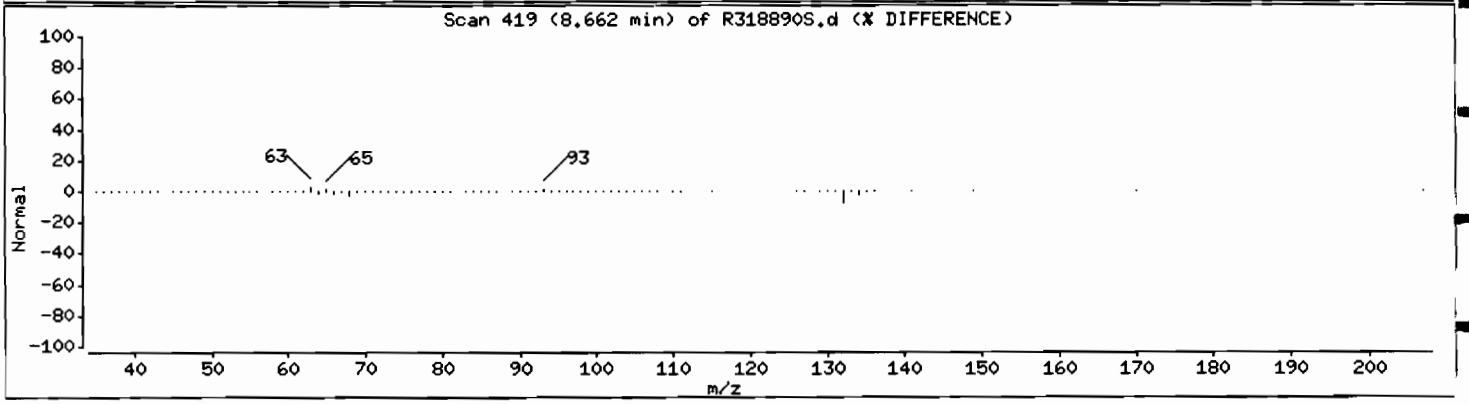
9 2-Chlorophenol

Concentration: 71000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

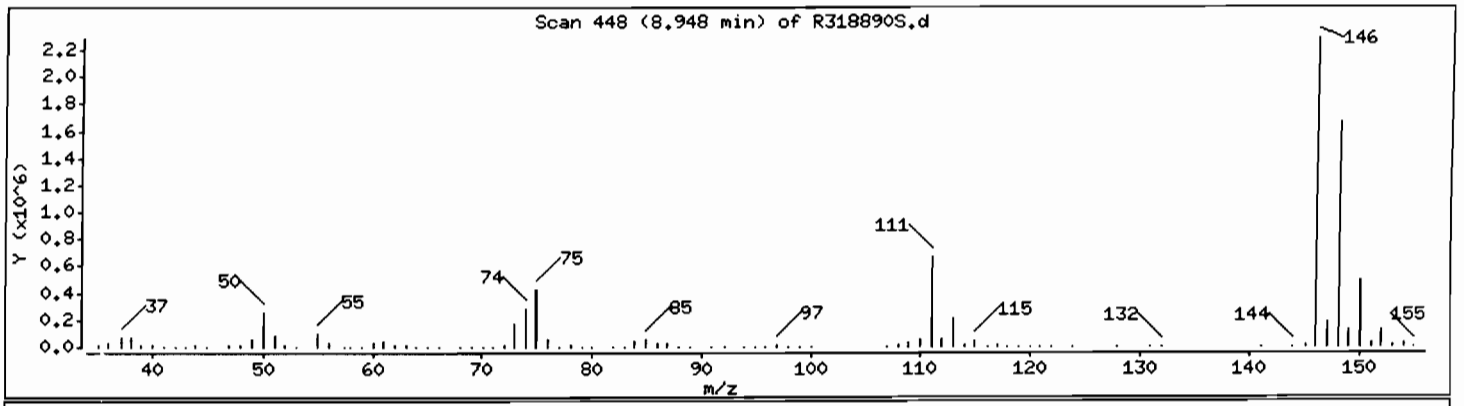
Operator: BES

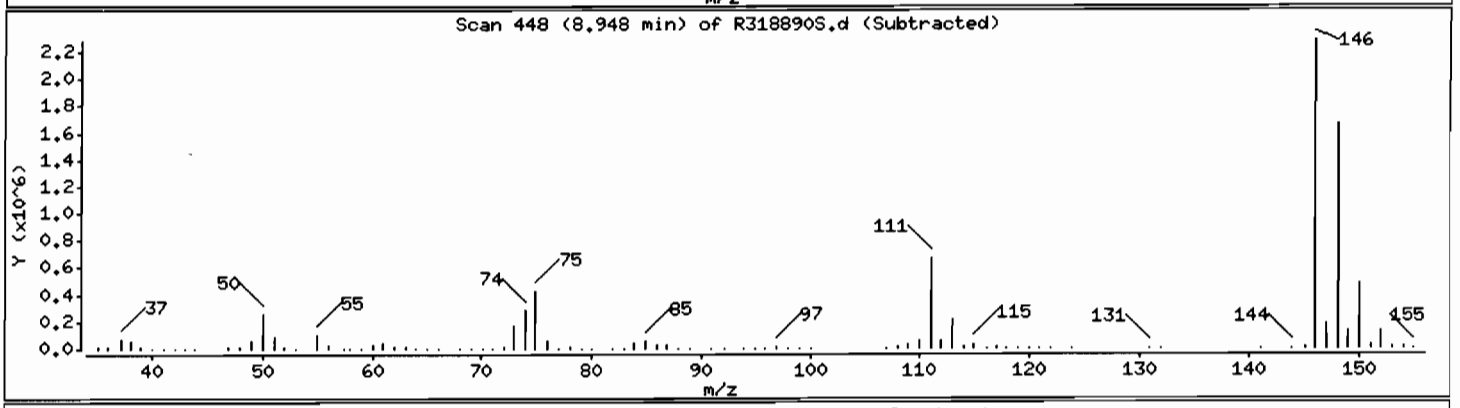
Column phase: RTX-5

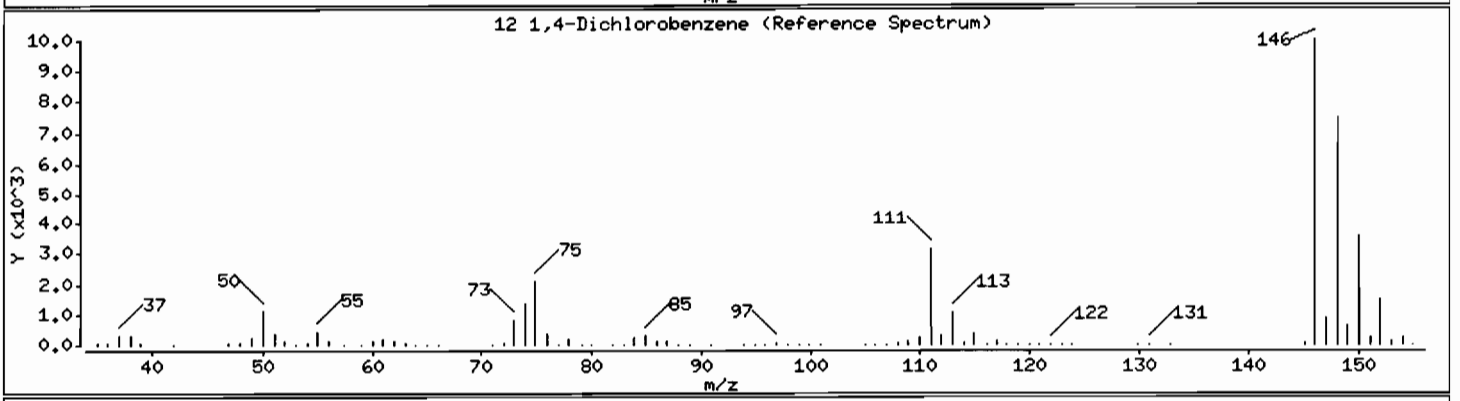
Column diameter: 0.25

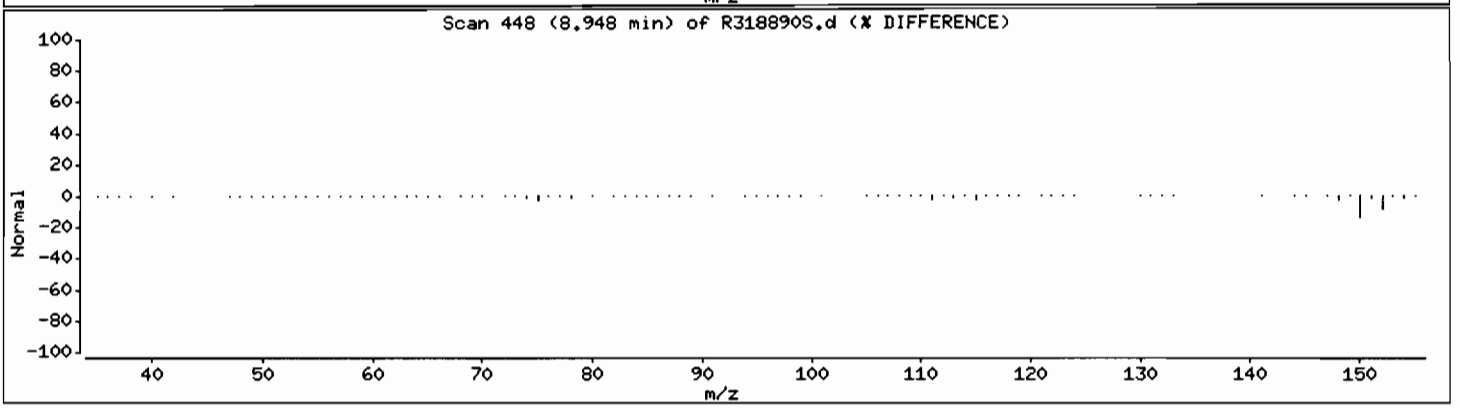
12 1,4-Dichlorobenzene

Concentration: 42000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

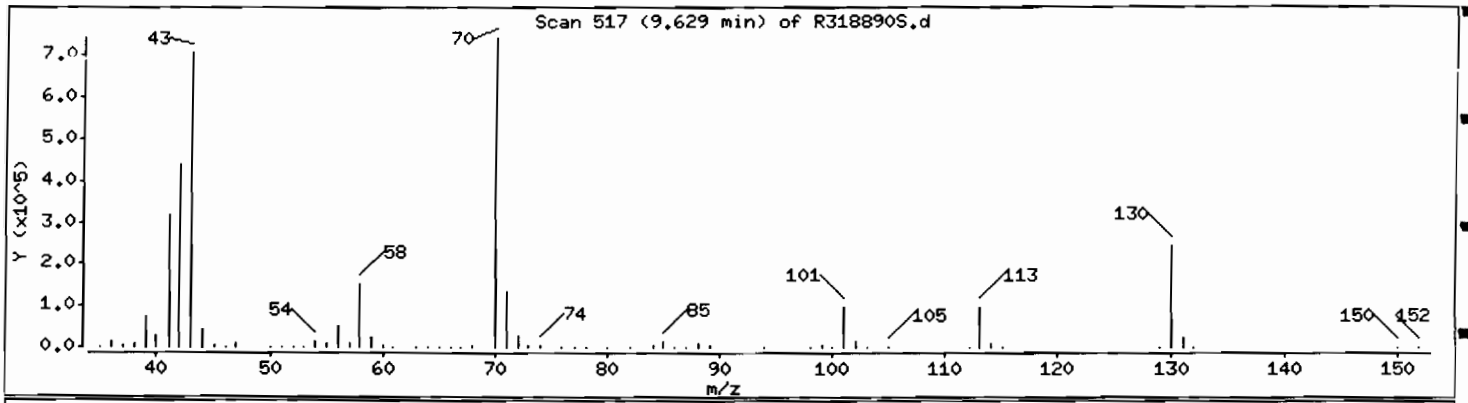
Operator: BES

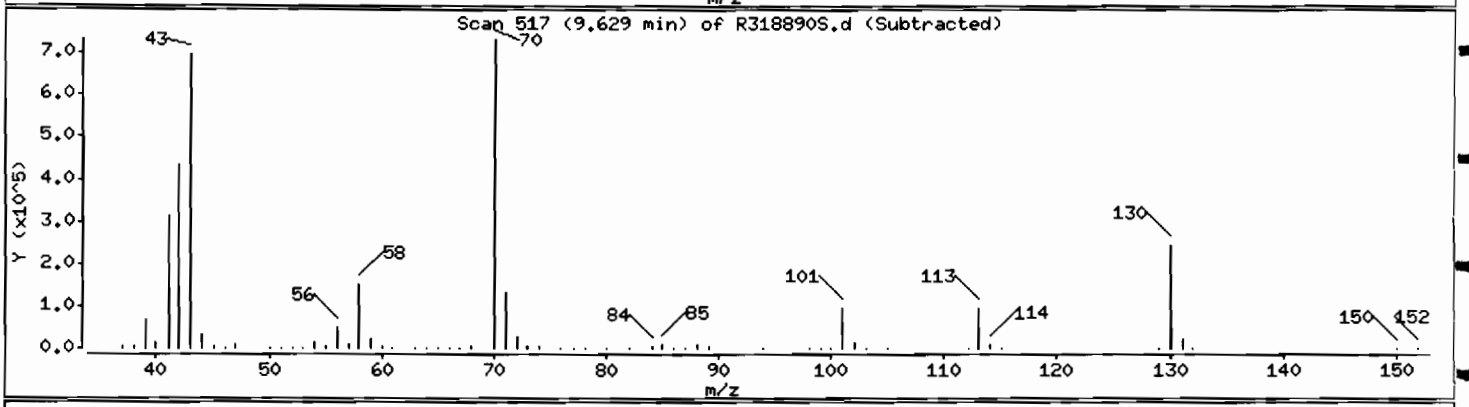
Column phase: RTX-5

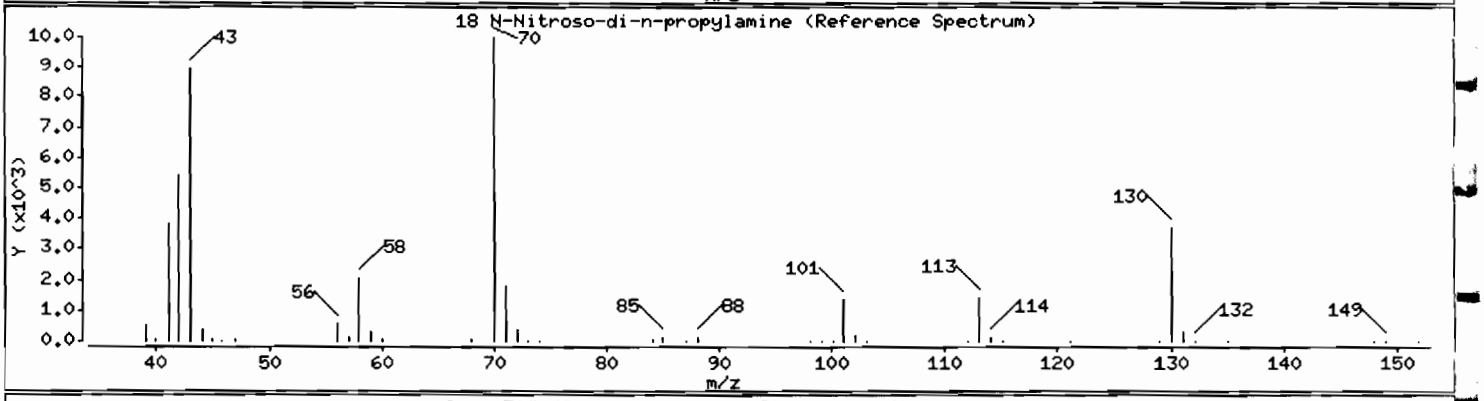
Column diameter: 0.25

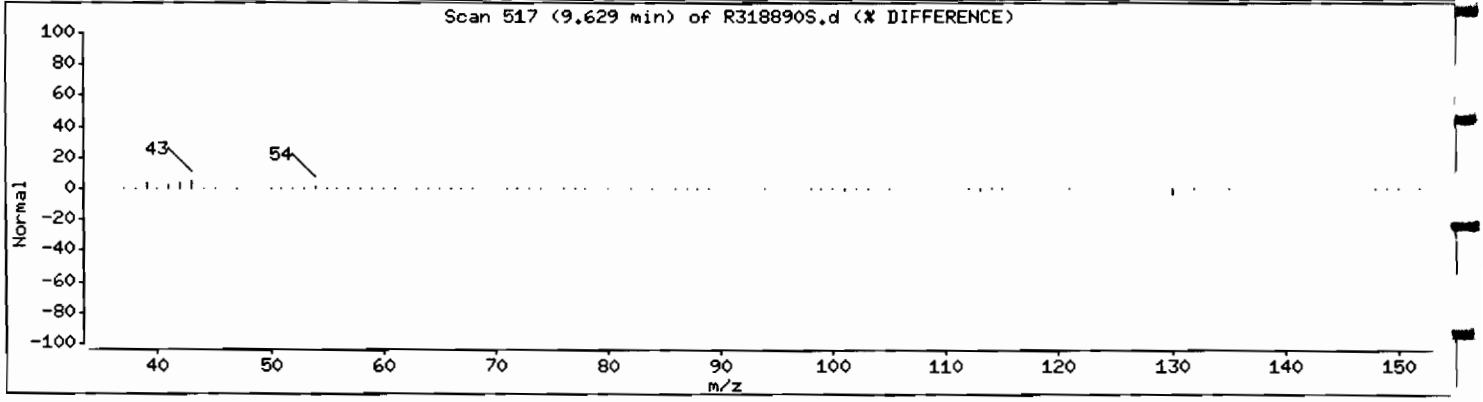
18 N-Nitroso-di-n-propylamine

Concentration: 46000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: HBS

Instrument: R.i

Sample Info: L#318890 CLI#HSB ETR#62586

Volume Injected (uL): 2.0

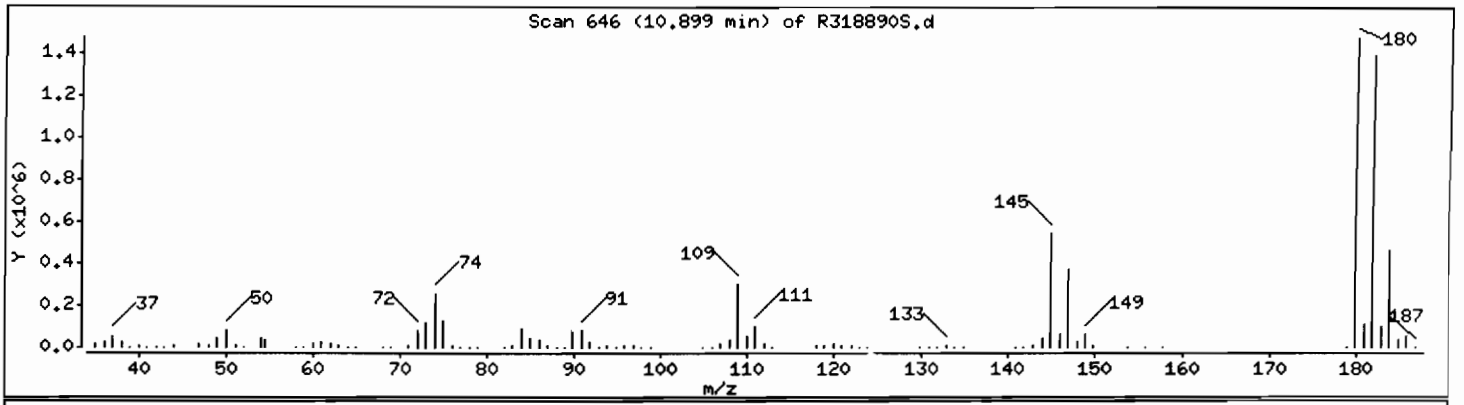
Operator: BES

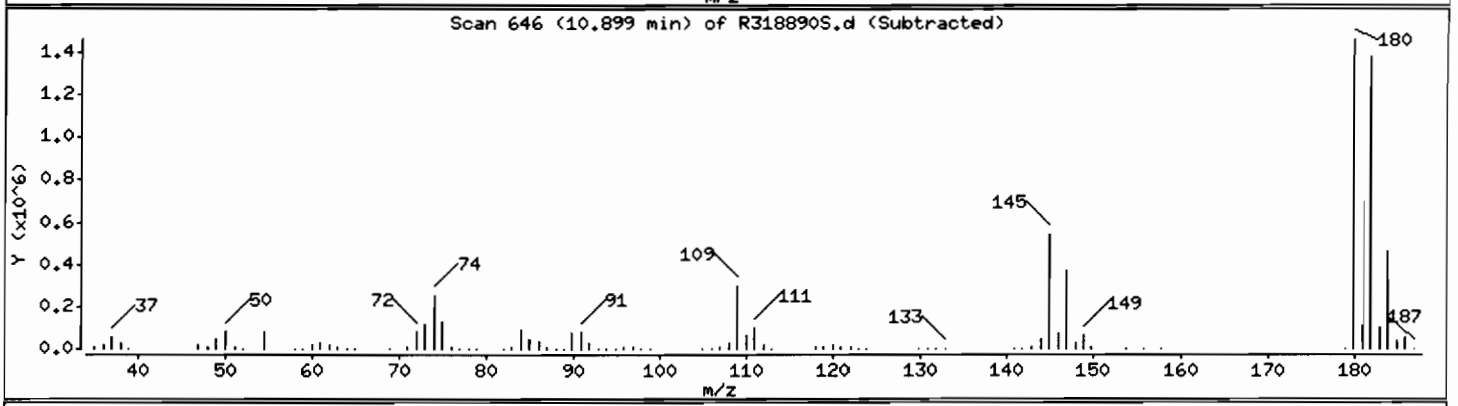
Column phase: RTX-5

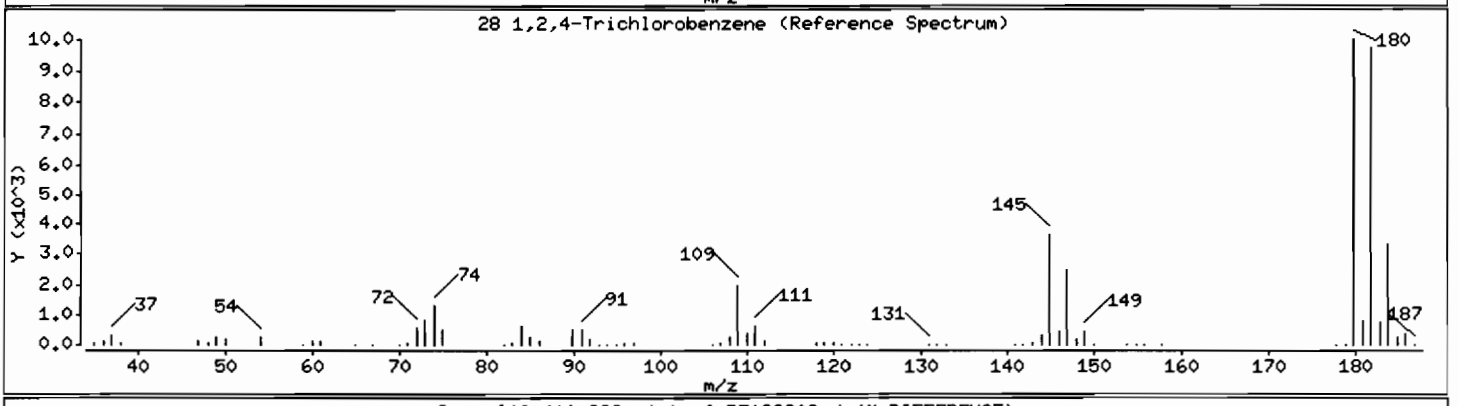
Column diameter: 0.25

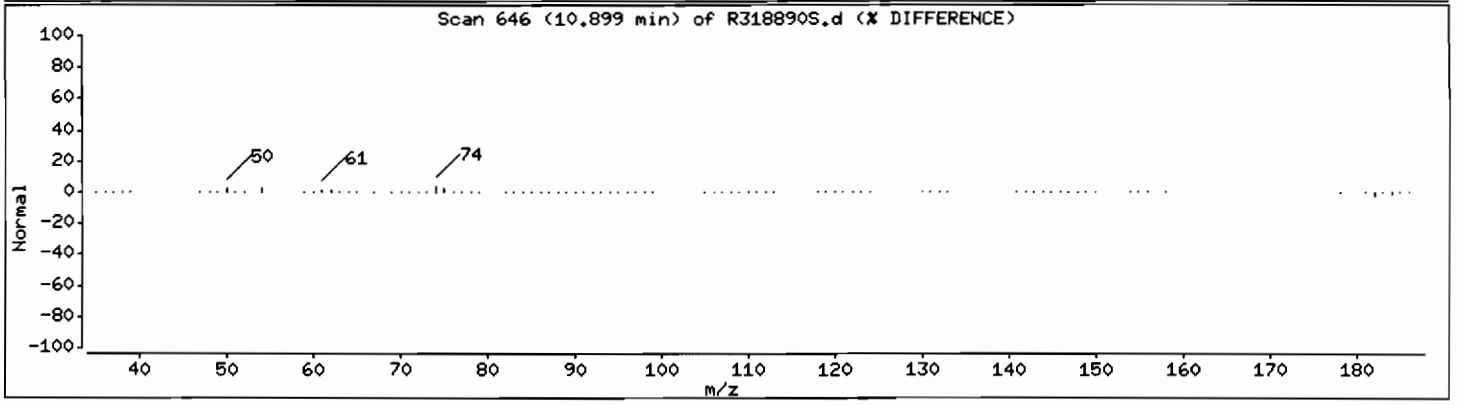
28 1,2,4-Trichlorobenzene

Concentration: 44000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

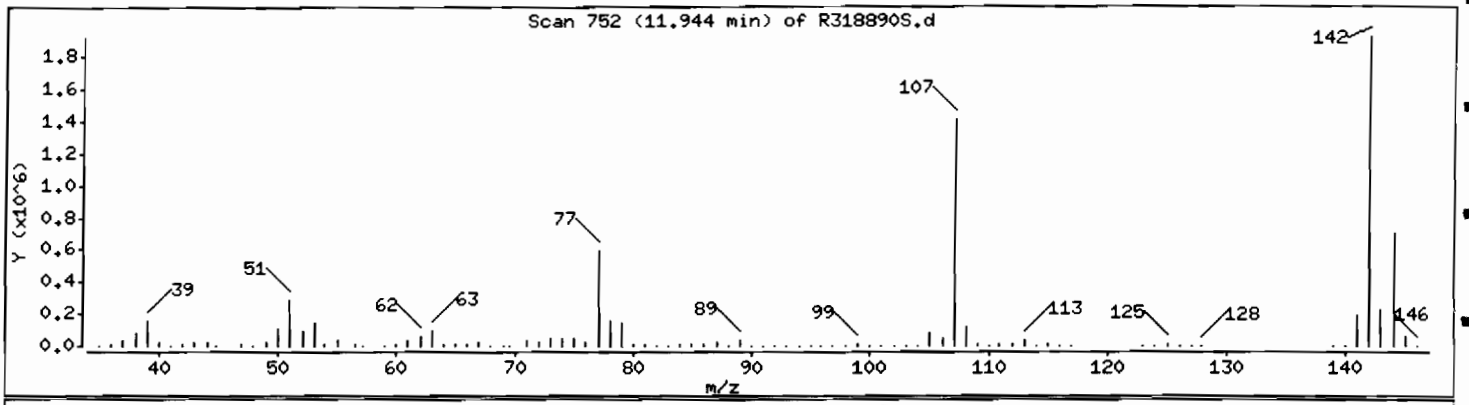
Operator: BES

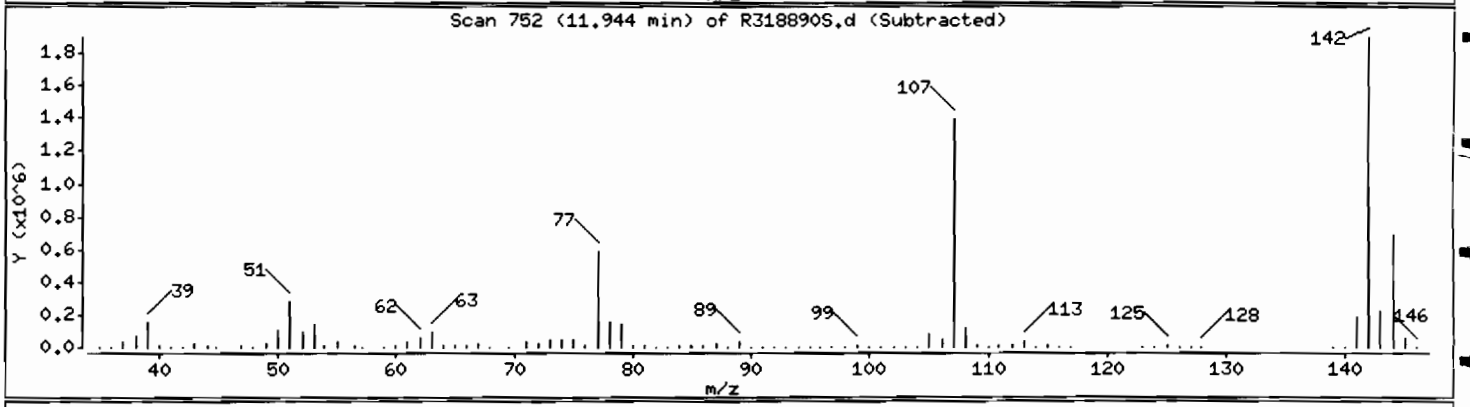
Column phase: RTX-5

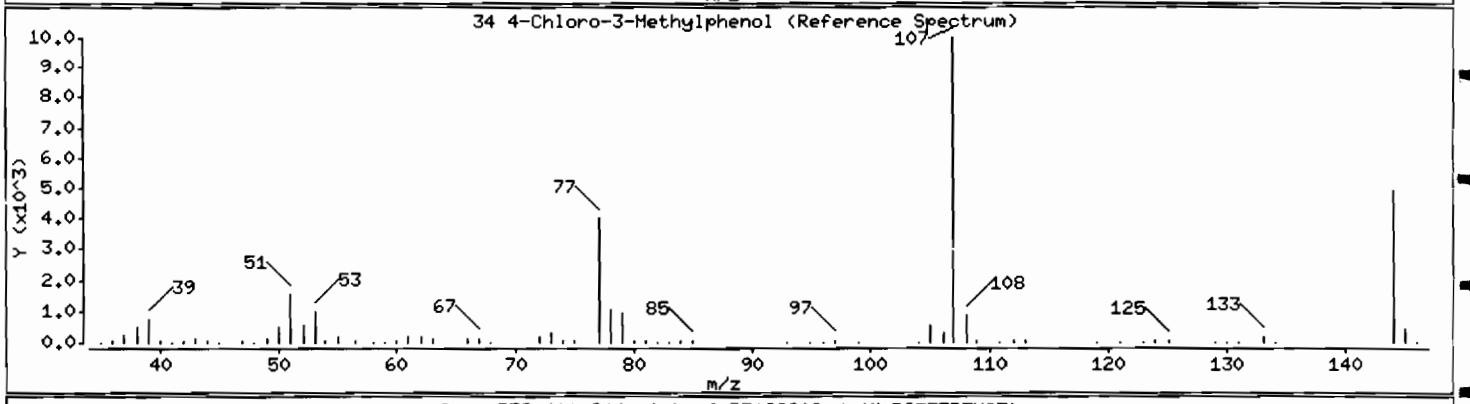
Column diameter: 0.25

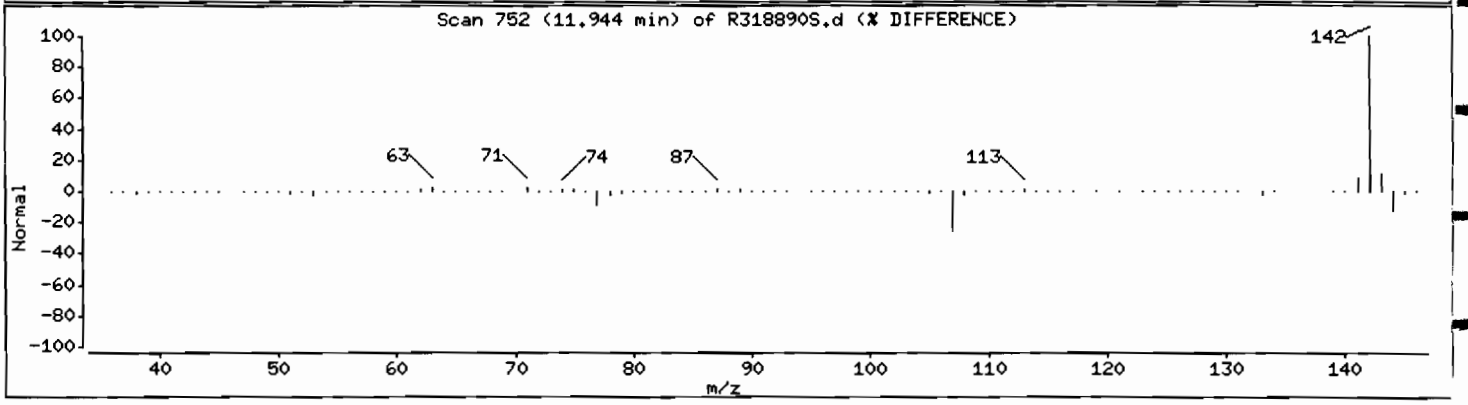
34 4-Chloro-3-Methylphenol

Concentration: 64000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

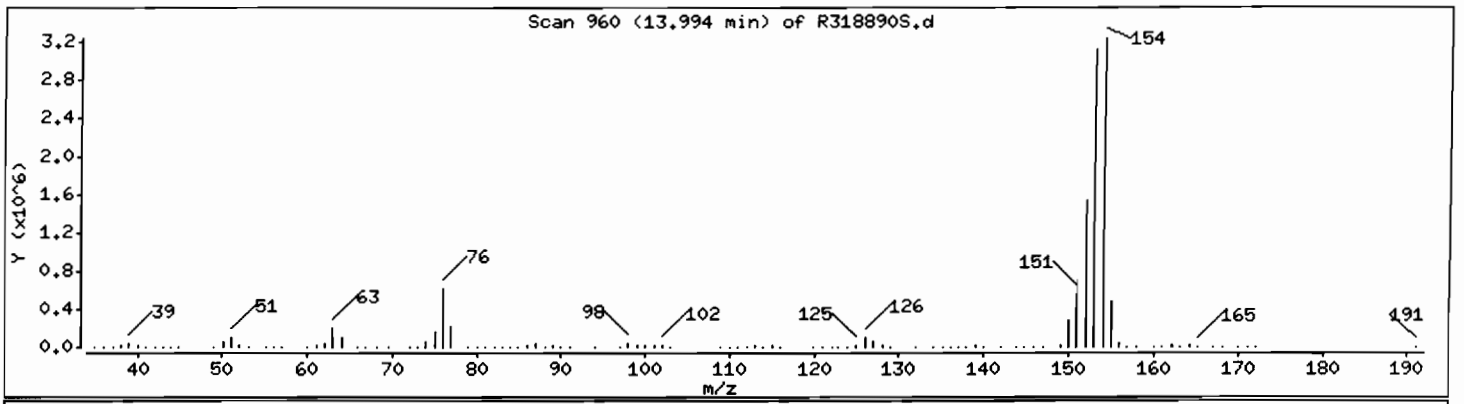
Operator: BES

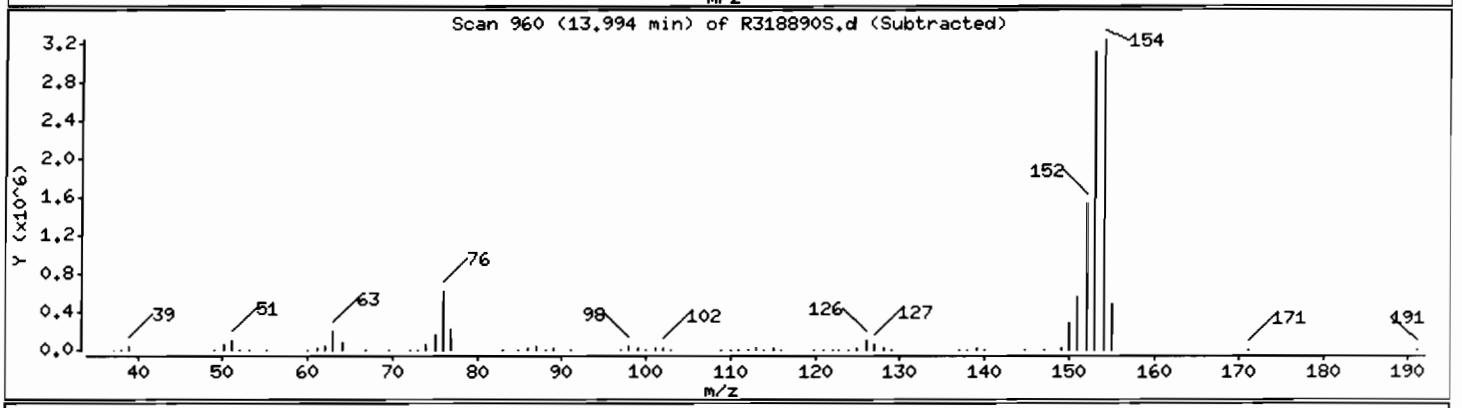
Column phase: RTX-5

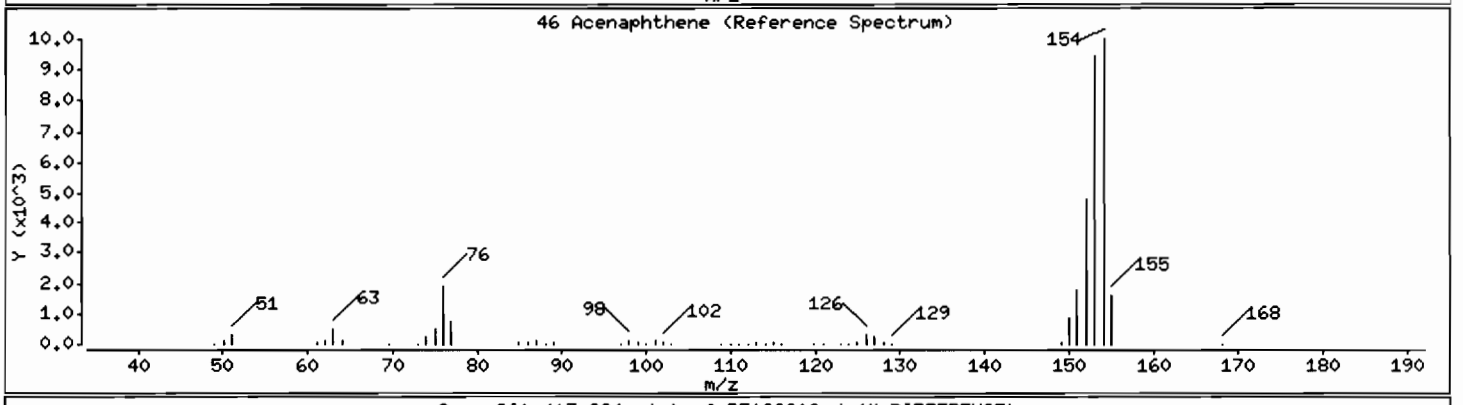
Column diameter: 0.25

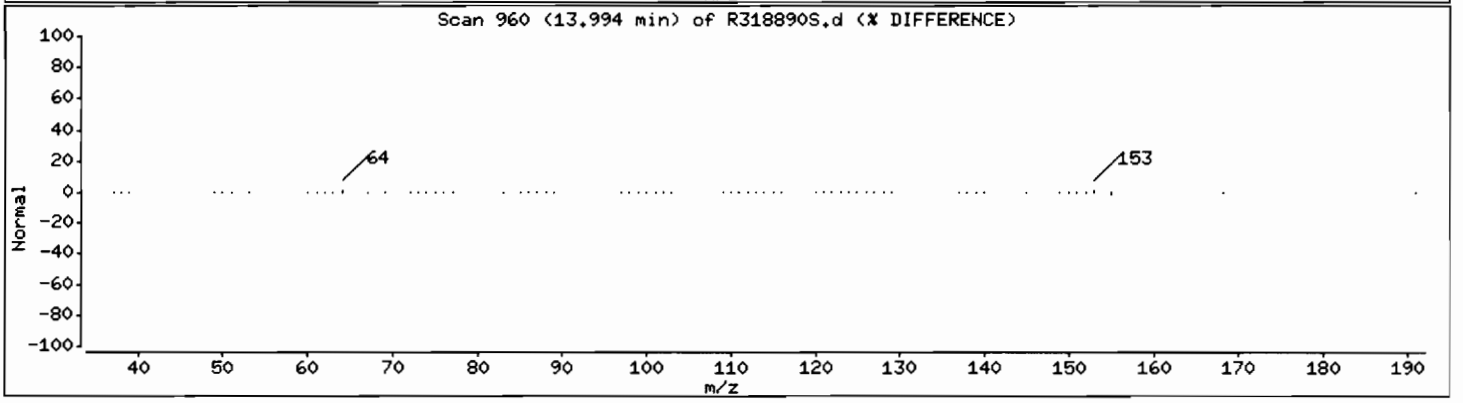
46 Acenaphthene

Concentration: 41000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

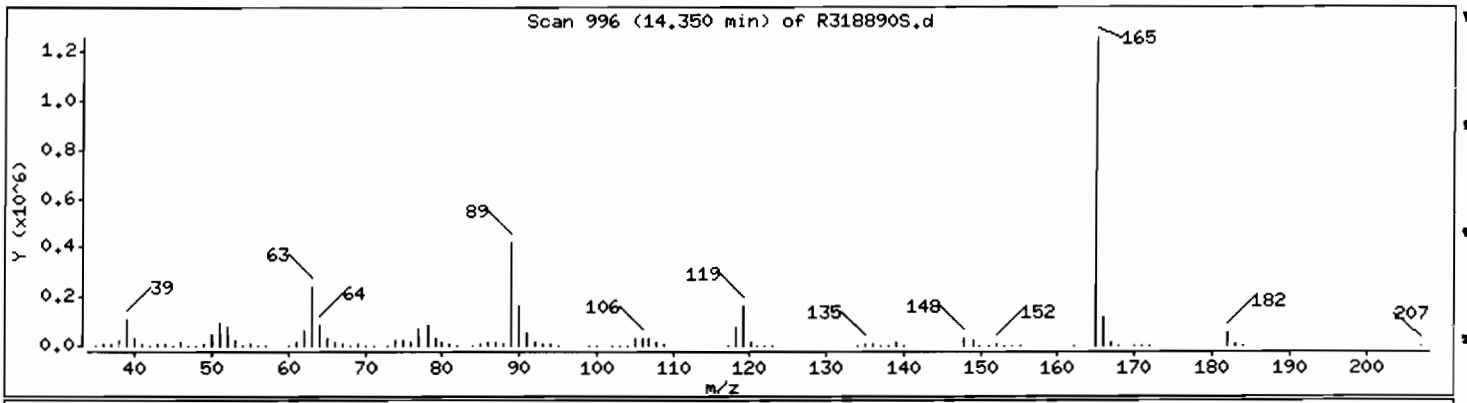
Operator: BES

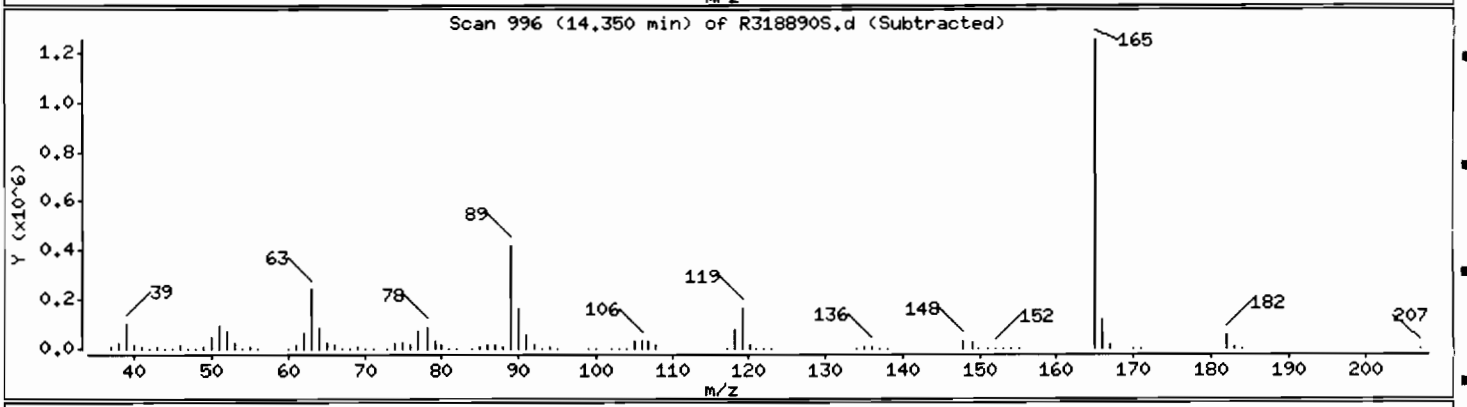
Column phase: RTX-5

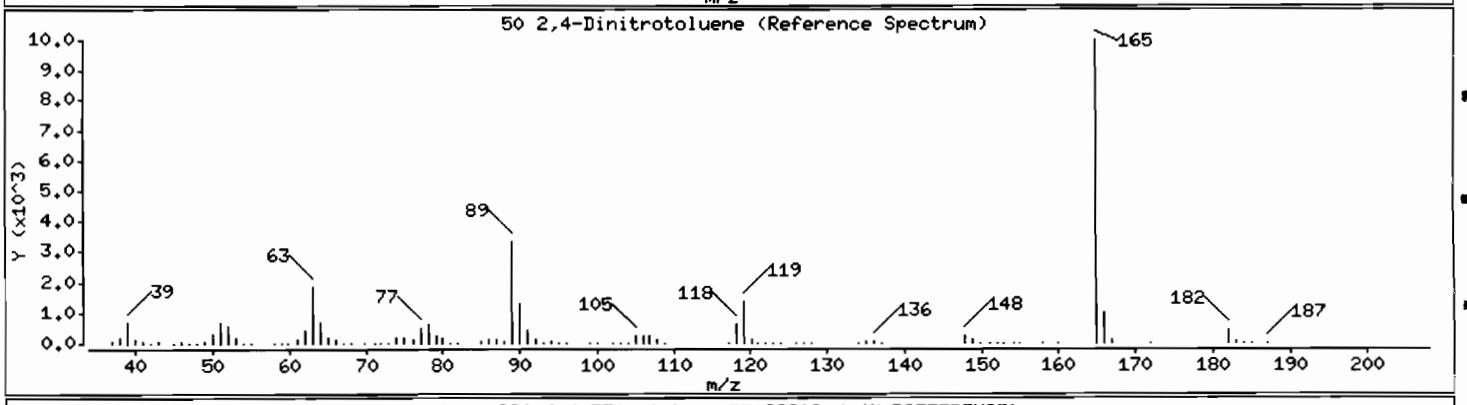
Column diameter: 0.25

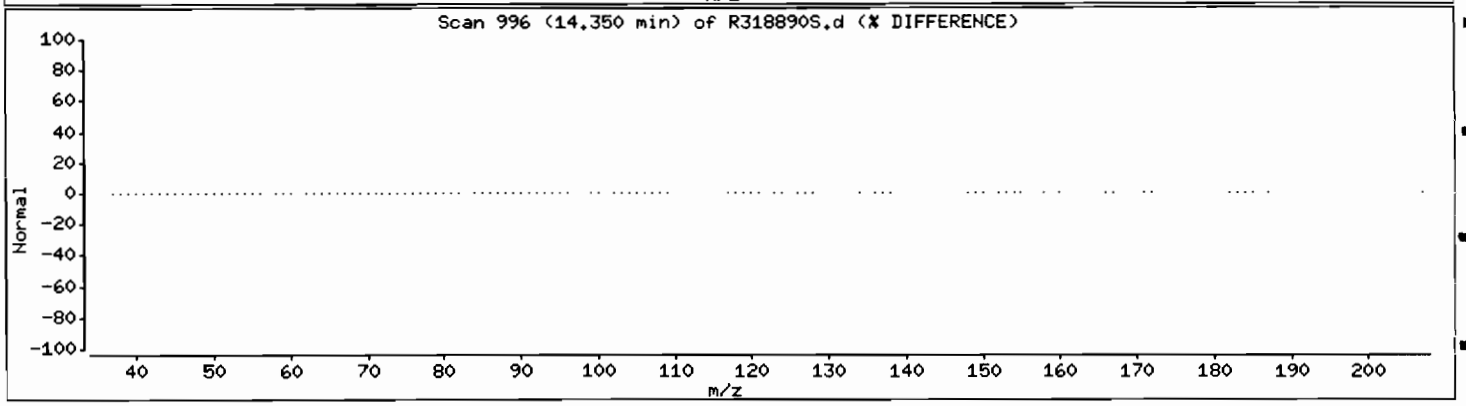
50 2,4-Dinitrotoluene

Concentration: 44000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

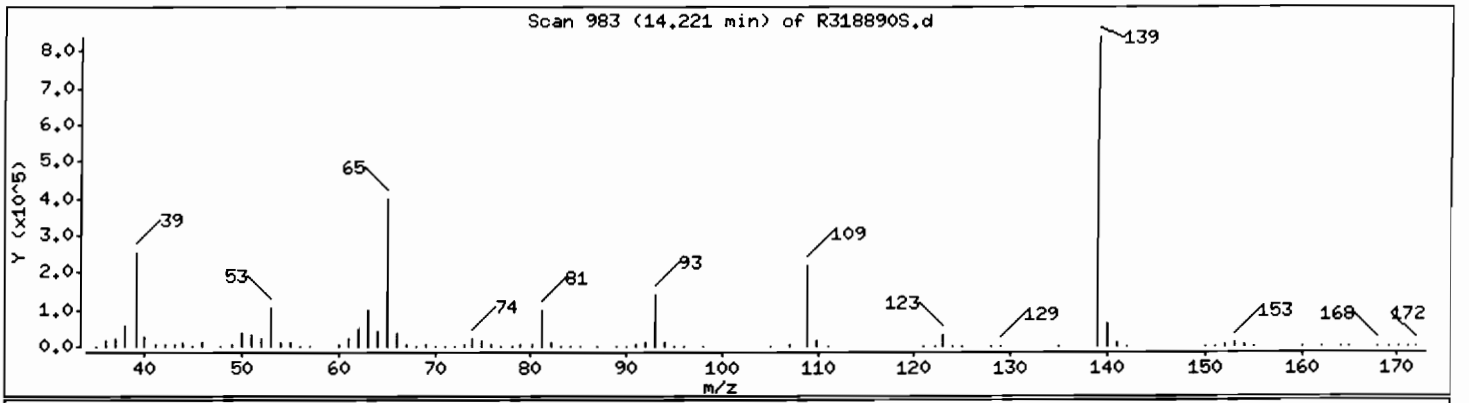
Operator: BES

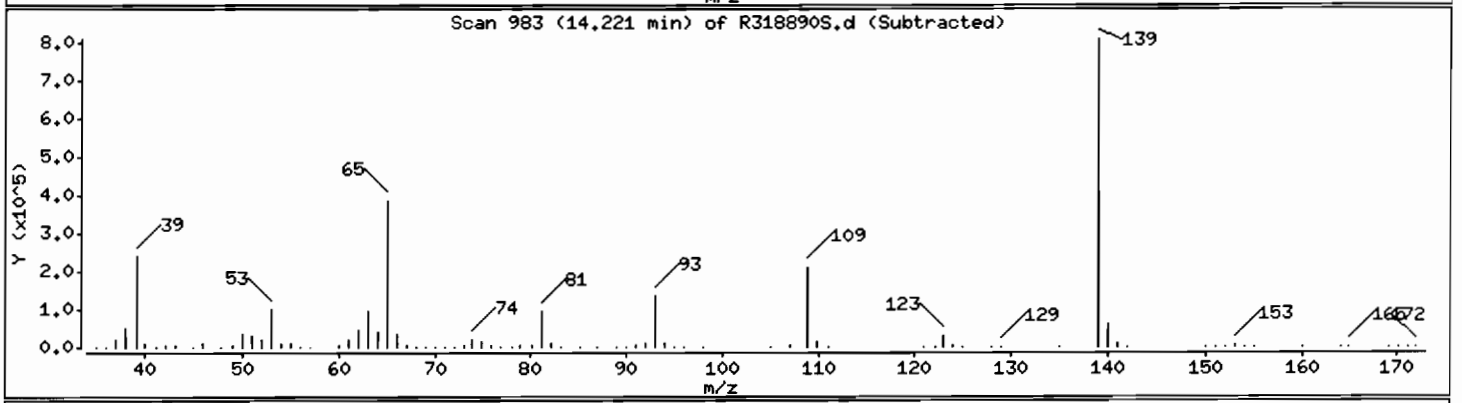
Column phase: RTX-5

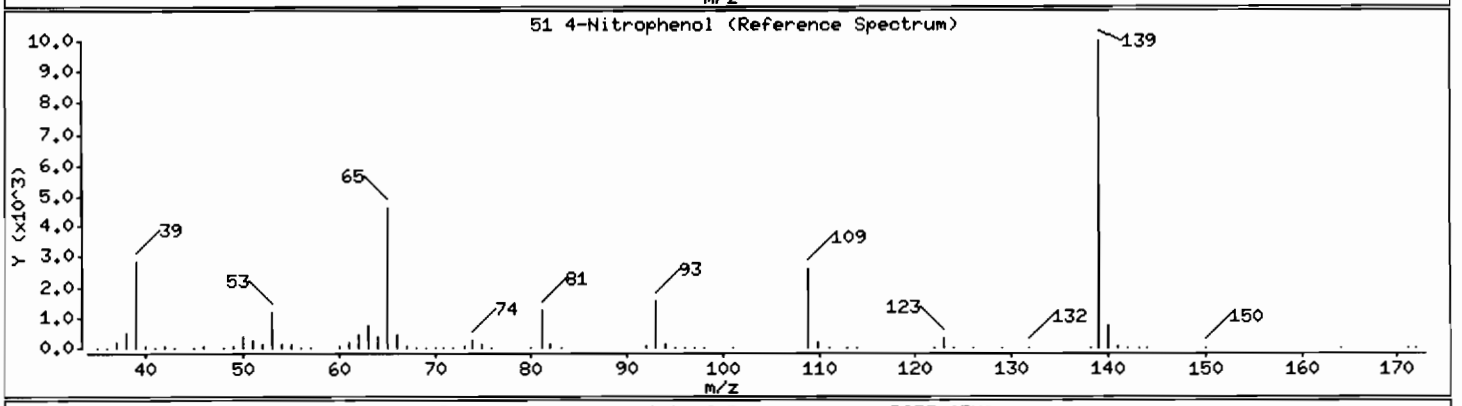
Column diameter: 0.25

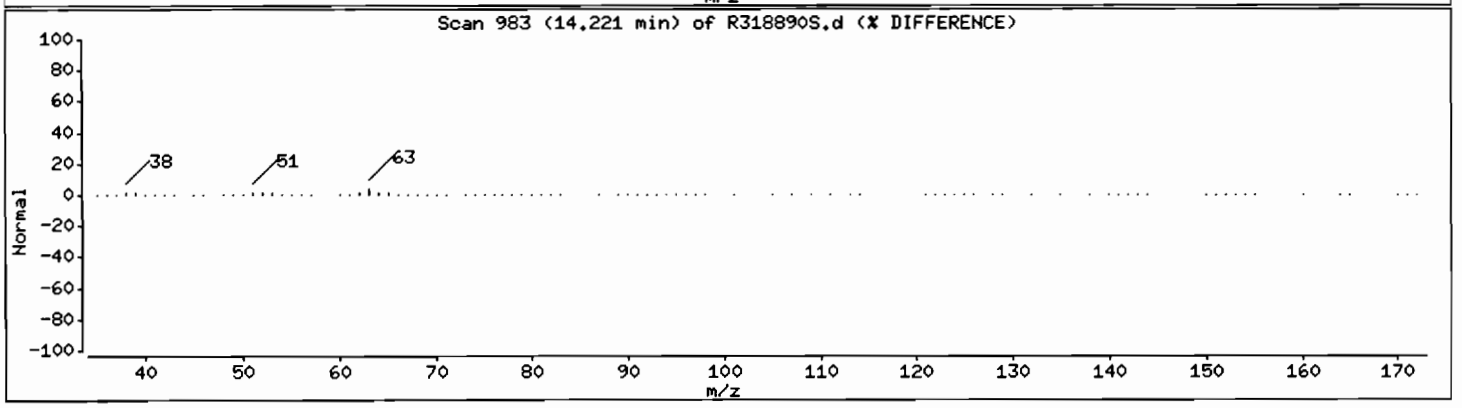
51 4-Nitrophenol

Concentration: 55000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

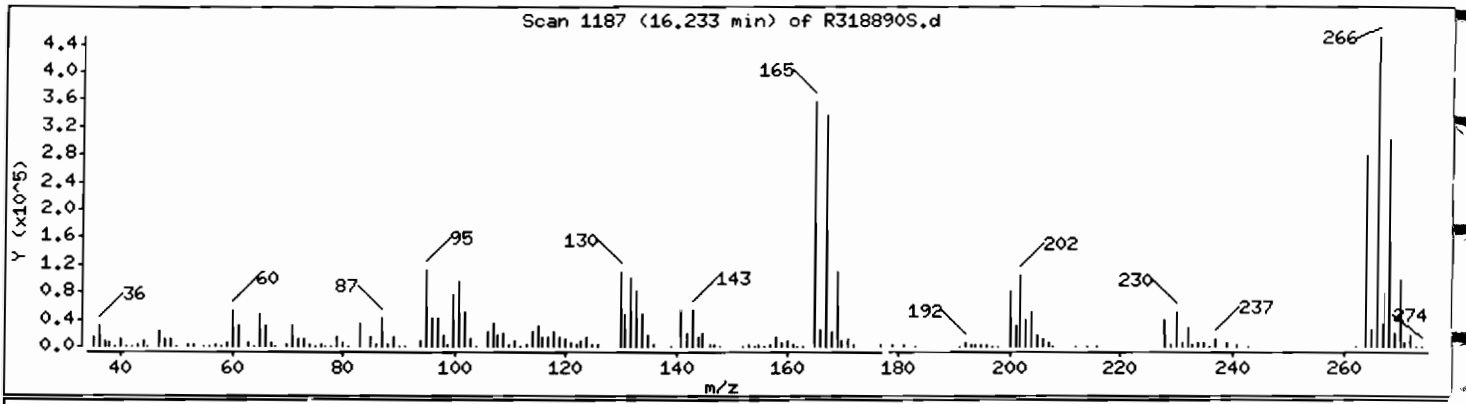
Operator: BES

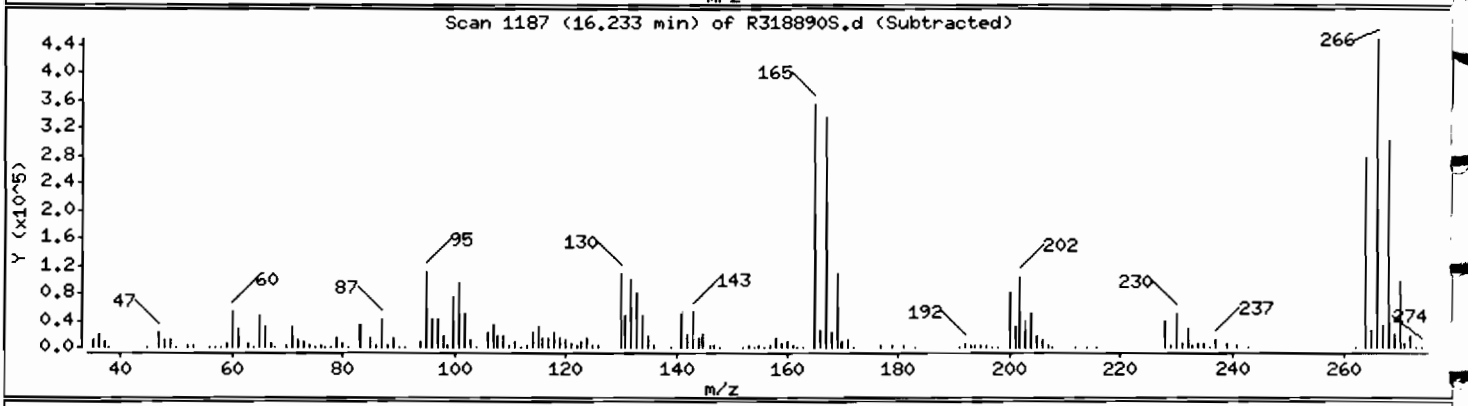
Column phase: RTX-5

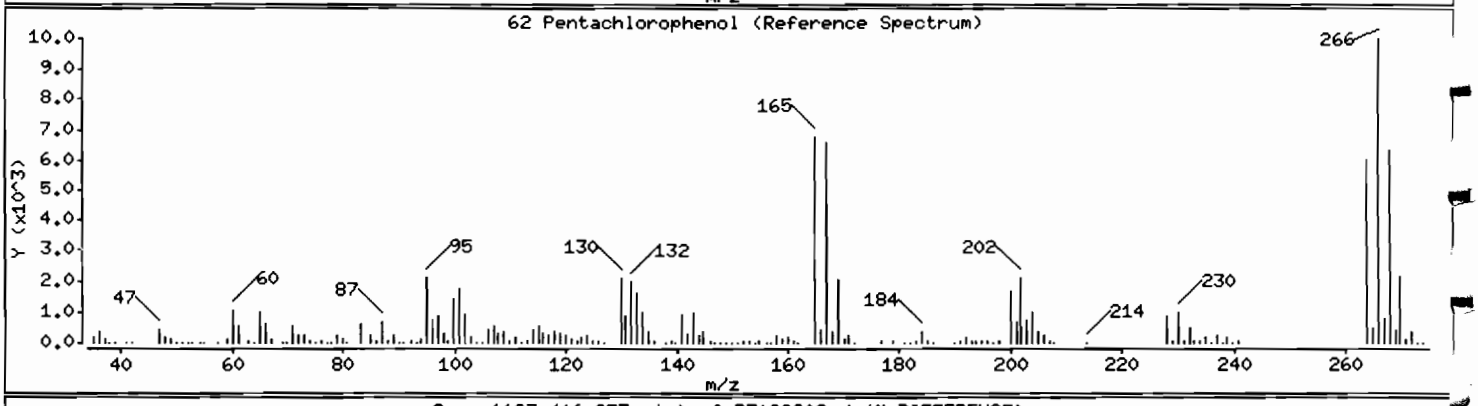
Column diameter: 0.25

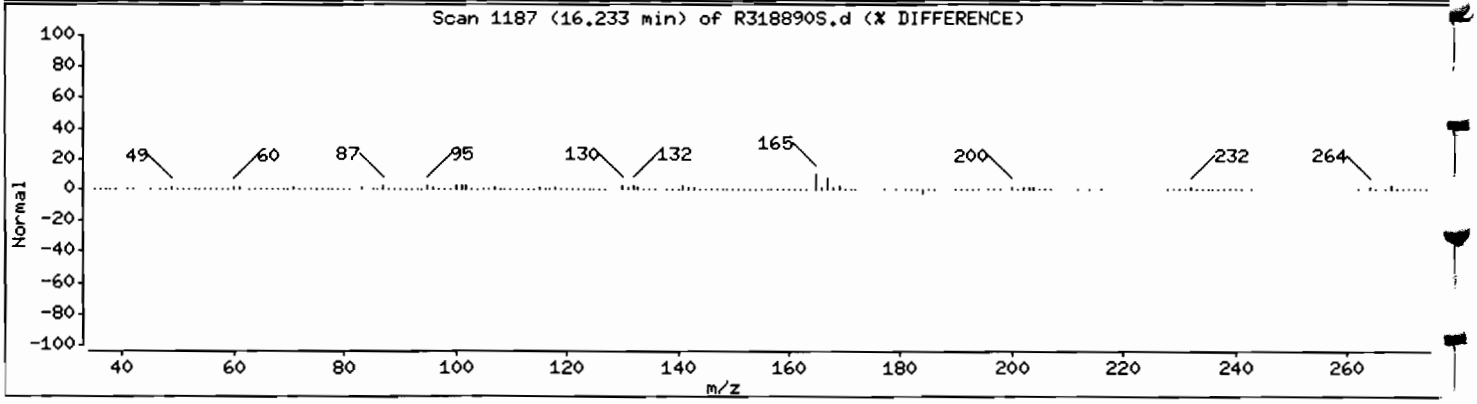
62 Pentachlorophenol

Concentration: 70000 ug/Kg









Data File: /chem/R.i/R1.p/RHXA_8270.b/R318890S.d

Date : 25-NOV-96 23:05:00

Client ID: MBS

Instrument: R.i

Sample Info: L#318890 CLI#MSB ETR#62586

Volume Injected (uL): 2.0

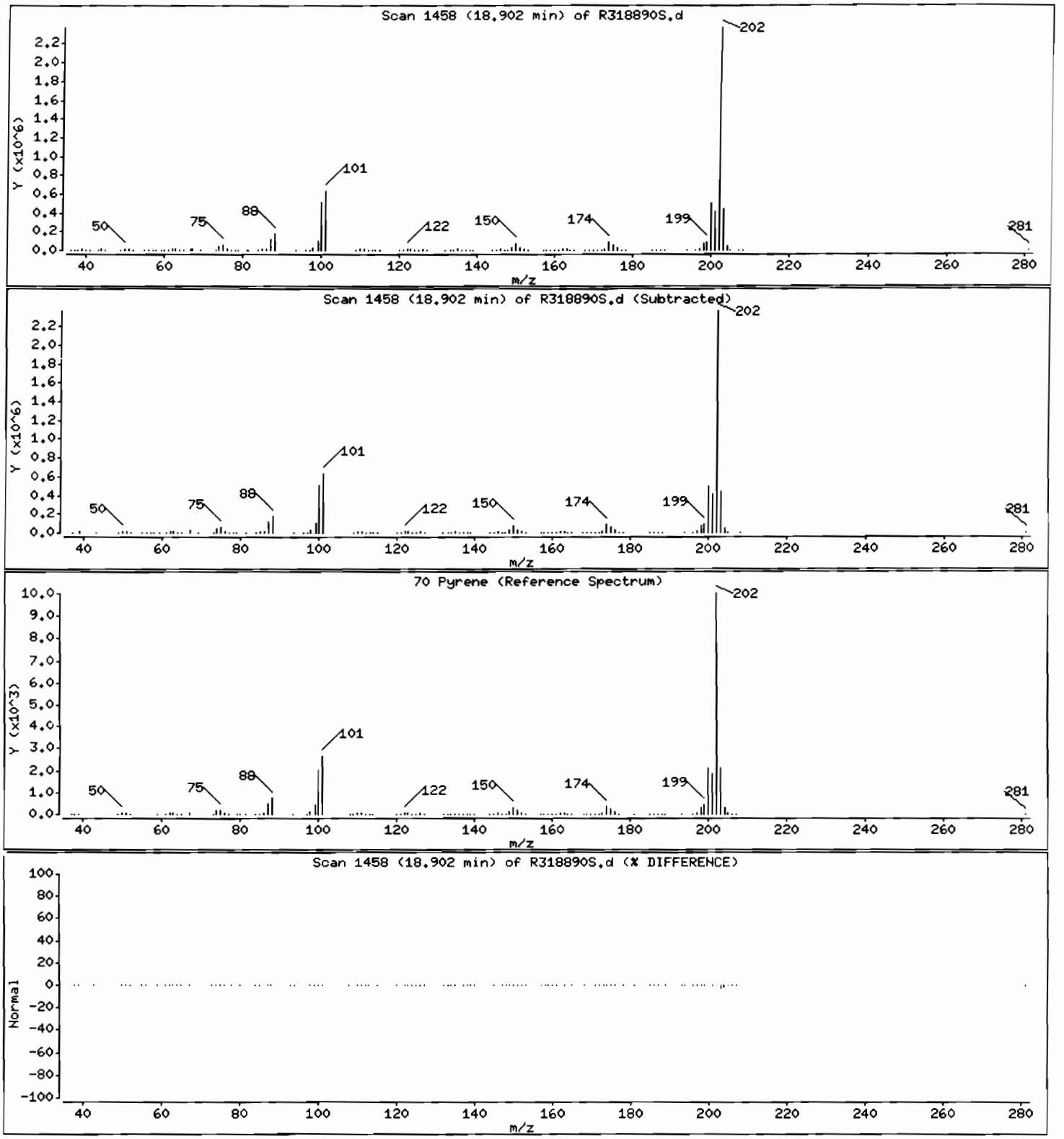
Operator: BES

Column phase: RTX-5

Column diameter: 0.25

70 Pyrene

Concentration: 52000 ug/Kg



SAMPLE PREPARATION

Inchcape Testing Services

Aquatec, Inc. --- PERCENT SOLID REPORT --- 19-NOV-1996 10:00:58 --- KRC

Method: IN623

Analyst: PNT

Date/Time in: 11-14-96 1300

Date/Time out: 11-18-96 0845

Batch: MY

Date Entered: 11-19-96
Entered by: PNT

Date Verified: 11-19-96
Verified by: KRC

Lab ID	Mass of Dish (g)	Mass of Dish and Wet Sample (g)	Mass of Dish and Dry Sample (g)	Percent Solid
318578	0.98	8.73	2.29	16.9032
318579	0.97	9.15	7.79	83.3741
318580	0.97	10.12	8.55	82.8415
318581	0.97	8.02	6.80	82.6950
318582	0.97	11.02	9.40	83.8806
318583	0.97	11.76	9.18	76.0890
318584	0.97	9.69	7.97	80.2752
318585	0.97	9.00	7.62	82.8144
318586	0.97	10.56	9.04	84.1502
318587	0.97	7.28	5.95	78.9223
318588	0.97	8.65	7.32	82.6823
318589	0.98	8.88	7.64	84.3038
318590	0.99	10.41	8.52	79.9363
318591	0.99	9.45	7.92	81.9149
318592	0.99	9.09	7.60	81.6049
318593	0.99	9.72	8.46	85.5670
318593DP	0.99	9.20	7.99	85.2619
318593MS	0.99	9.72	8.46	85.5670
318594	0.99	9.15	8.02	86.1520
318889	0.99	9.82	5.66	52.8879

COPY - ORIGINAL ON FILE
AT INCHCAPE TESTING SERVICES
AQUATEC LABORATORIES

Percent Solids Benchsheet

(Method IN623)

Date In: 11/14/96
Time In: 1300
Analyst: PNT

Date Out: 11/18/96
Time Out: 0845

LAB ID plus EPA ID	Dish #	Mass of Dish (g)	Mass of Dish & Wet Sample (g)	Mass of Dish & Dry Sample (g)
318578	21	0.98	8.73	2.29
318579	22	0.97	9.15	7.79
318580	23	0.97	10.12	8.55
318581	24	0.97	8.02	6.80
318582	25	0.97	11.02	9.40
318583	26	0.97	11.76	9.18
318584	27	0.97	9.69	7.97
318585	28	0.97	9.00	7.62
318586	29	0.97	10.56	9.04
318587	30	0.97	7.28	5.95
318588	31	0.97	8.65	7.32
318589	32	0.98	8.88	7.64
318590	33	0.99	10.41	8.52
318591	34	0.99	9.45	7.92
318592	35	0.99	9.09	7.60
318593	36	0.99	9.72	8.46
318593 ms				
318593 DP	37	0.99	9.20	7.99
318594	38	0.99	9.15	8.02
318889	39	0.99	9.82	5.66

Entered by: PNT
Date: 11/19/96
Batch: my

COPY - ORIGINAL ON FILE
AT INCHCAPE TESTING SERVICES
AQUATEC LABORATORIES

JACOBATEC, INC

MEDIUM LEVEL, 8270, AP ENGINE

CLIENT: Lawmat
CASE: 95212
SDG: 62586
ETR: 62520

DATE: 11/19/96
ANALYST: DTP
SPIKER: DTP
WITNESS:

FILE SIL # M
MeCL2 LOT # K35254
SURR LOT # E1059601
MTX LOT # E0805960 1
ACETONE LOT # NA

AQUATEC ID	CLIENT ID	(gm spl) 2.00g	pH	2gm Na2SO4 (powdered)	1.0 ml of BN/Acid Surr 100/150 ppm	1.0 ml of BN/Acid MTX 100/150 ppm	Add 9 ml MeCL2 except Matrix Samples	Add 8 ml MeCL2 to Matrix Samples	Sonicate 2 min. control setting @ 5.0	Filter entire extract	Archive 1.5 ml	5ml ---> GPC	Conc 1 ml	pH
SBLK TS		2.0	8.0	✓	✓	X	DTP	DTP	DTP	DTP	X	DTP	DTP	8.0
319990	MW	2.0	8.0	✓	✓	X	✓	✓	✓	✓	X	✓	✓	8.0
319999	SBP2760	2.0	6.6	✓	✓	X	✓	✓	✓	✓	X	✓	✓	6.6

11/19/96

2

090125

ITS AQUATEC, INC. GC RUN LOG

Analysis: BNA Semi
Case/SDG No.:
Comp. Method:

Date: 11/18/96
GC Operator: WNJ
GC ID: HP1320
Column ID: RTX-5
STDS: 5C021596-01

Notes: BNA02323

File No.	No.	Sample Description
	01	Blank
	02	BNA Std
62052	03	SBLK56
	04	316394
	05	316396
	06	316396MS
	07	316396
	08	316402
	09	316405
	10	316847
62441	11	SBLK57
	12	LCS
	13	318053
	14	318054
	15	318055
	16	318056
	17	318057
	18	318058
	19	318056MS
	20	318056MD
	21	318056DP
62627	22	SBLKT4
	23	319109
	24	319112
62556	25	SBLKT3
	26	LCS
	27	318632
	28	318633
62602	29	319022
	30	319023
62636	31	319168
	32	319169
	33	319170
	34	319171
62586	35	SBLKT5
	36	318889
	37	MSB
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File No.	No.	Sample Description
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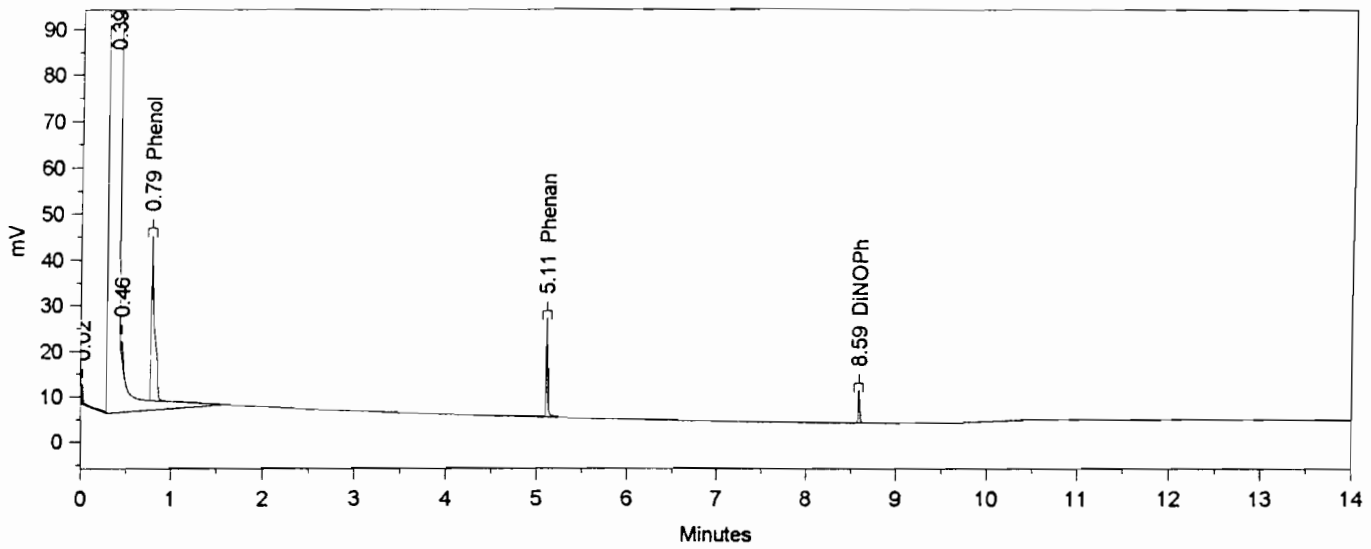
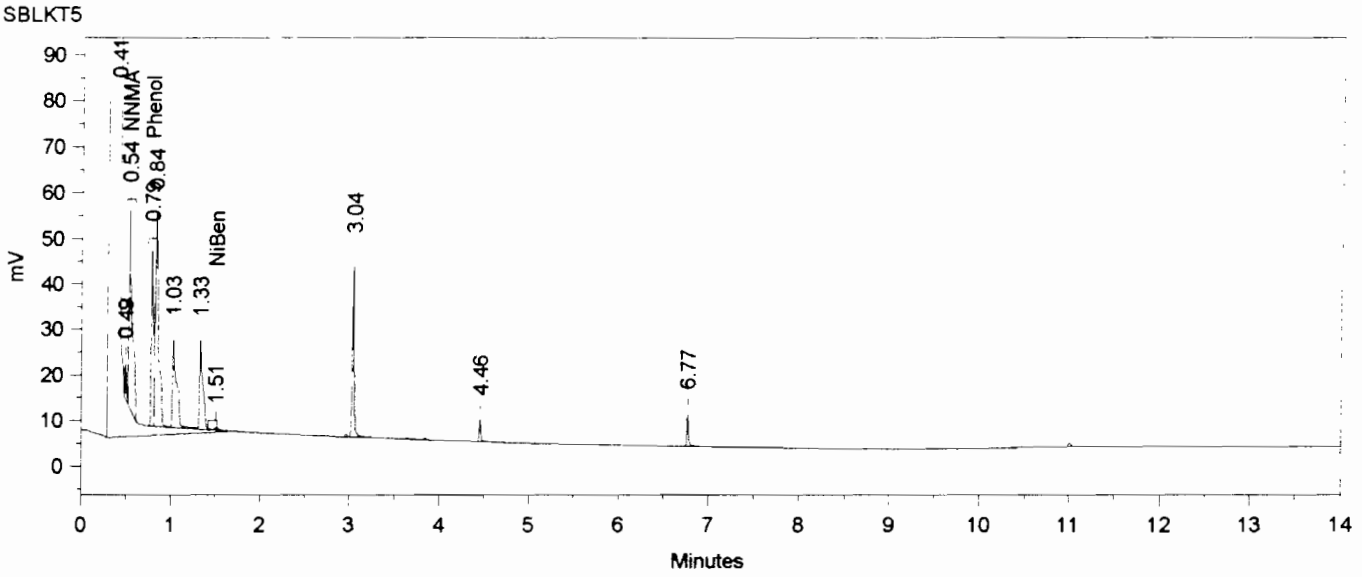
BNA STD



Sample Name: BNA STD
BNA SCREEN ON HP1320
Data File: C:\CPWIN\DATA1\BNA02323.02R
Acquired from Chrom2-Det2A on 11-18-1996 14:07:58 by WRD
Sample BNA STD was diluted 1:1.

RT	Name	Amount	Height	RT	Name	Amount	Height	RT	Name	Amount	Height
0.02		10	4426.57	0.46		8	3718.93	5.11	Phenan	50	21990.26
0.39		2187	969354.40	0.79	Phenol	59	36363.78	8.59	DiNOPh	42	7234.19

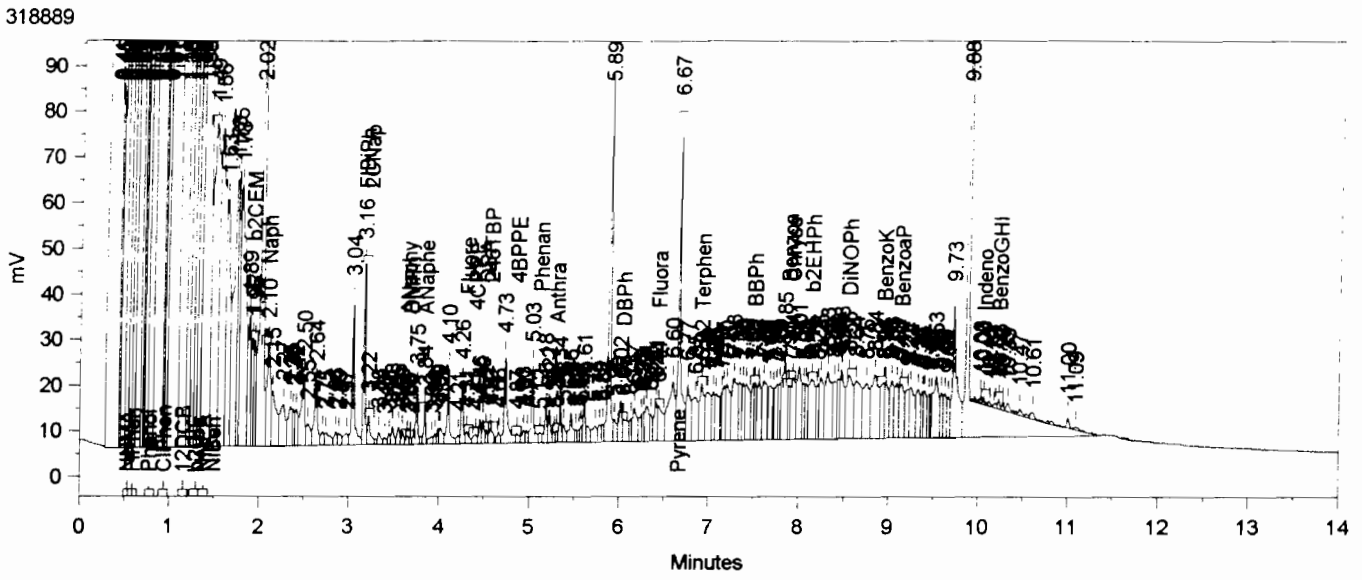
Sample Name: BNA STD



Sample Name: SBLKT5
BNA SCREEN ON HP1320
Data File: C:\CPWIN\DATA1\BNA02323.35R
Acquired from Chrom2--Det2A on 11-19-1996 13:43:43 by WRD
Sample SBLKT5 was diluted 1:1.

RT	Name	Amount	Height	RT	Name	Amount	Height	RT	Name	Amount	Height
0.41		2205	969583.30	0.84		107	47152.02	3.04		91	40078.70
0.49		18	7925.15	1.03		44	19314.39	4.46		11	4996.01
0.54	NNMA	1466	44258.38	1.33		45	19642.16	6.77		17	7409.41
0.79	Phenol	55	39834.94	1.51	NiBen	12	640.63				

Sample Name: SBLKT5



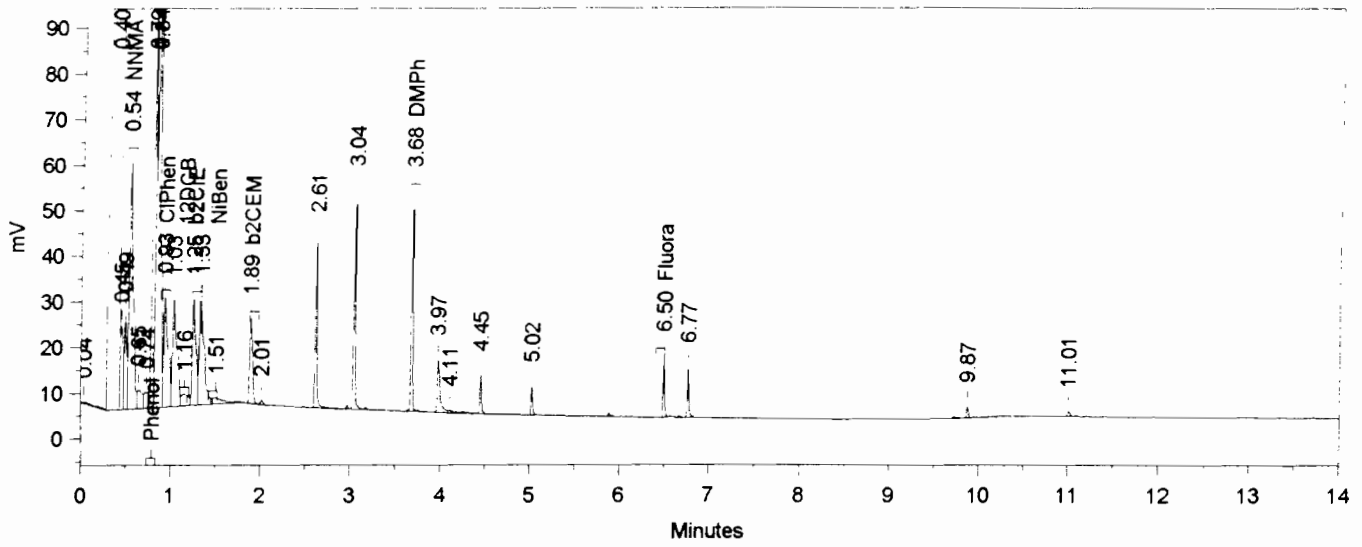
Sample Name: 318889
BNA SCREEN ON HP1320
Data File: C:\CPWIN\DATA1\BNA02323.36R
Acquired from Chrom2--Det2A on 11-19-1996 14:02:45 by WRD
Sample 318889 was diluted 1:1.

RT	Name	Amount	Height	RT	Name	Amount	Height	RT	Name	Amount	Height
0.41		2205	969611.30	3.92		3	1507.10	7.35		29	12665.00
0.45		182	79908.62	3.96		5	2133.75	7.38		29	12635.88
0.49		252	110910.10	3.99		8	3417.06	7.42		28	12406.26
0.54	NNMA	5579	168485.80	4.02		8	3436.77	7.50		28	12305.63
0.57		451	198141.30	4.10		38	16623.86	7.52	BBPh	73	12576.06
0.60	FlPhen	1127	146243.40	4.21		4	1763.84	7.56		28	12355.56
0.67		374	164583.40	4.26		30	13271.95	7.61		29	12919.50
0.71		460	202181.20	4.31	Fluore	3	2541.73	7.69		27	11729.63
0.72		510	224142.40	4.41	4CPPE	2	1853.60	7.72		26	11386.62
0.74		470	206694.80	4.46		12	5305.04	7.76		28	12121.43
0.78	Phenol	271	196938.40	4.49		12	5146.53	7.79		28	12390.38
0.85		1034	454926.60	4.52	DPA	9	3010.77	7.85		42	18413.06
0.94	ClPhen	1551	146253.20	4.57	246TBP	21	3105.76	7.90	Benzoa	61	11829.83
0.97		334	146730.90	4.66		5	2384.10	7.94	Chryse	65	13506.11
1.01		397	174681.40	4.73		43	18991.98	8.01		37	16106.49
1.16	12DCB	2219	165313.30	4.87	4BPPE	4	2125.82	8.05		28	12280.08
1.20		331	145742.00	4.93		6	2833.16	8.08		28	12127.62
1.25		238	104870.70	4.97		6	2599.07	8.15	b2EHPh	69	13114.43
1.31	b2CIE	202	91793.78	5.03		38	16917.85	8.22		27	12083.71
1.33		223	97882.80	5.12	Phenan	5	2138.13	8.25		31	13464.70
1.38	NNPA	489	332496.80	5.18		23	10056.63	8.33		34	14847.53
1.49	NiBen	1376	71040.95	5.22		16	7103.39	8.40		29	12650.47
1.56		159	69919.55	5.28		5	2273.91	8.45		30	13194.71
1.63		124	54516.38	5.31	Anthra	6	2527.48	8.48		34	15120.41
1.73		133	58416.63	5.34		21	9187.69	8.56	DiNOPh	96	13872.39
1.75		137	60158.64	5.38		8	3714.95	8.64		29	12755.92
1.78		130	57287.21	5.46		15	6403.94	8.75		27	12045.29

RT	Name	Amount	Height	RT	Name	Amount	Height	RT	Name	Amount	Height
1.89		66	28891.71	5.52		6	2636.48	8.84		32	13931.32
1.92	b2CEM	59	23765.32	5.55		6	2677.71	8.94	BenzoK	59	12119.37
1.95		53	23137.92	5.58		8	3539.57	8.96		28	12223.75
2.02		244	107411.70	5.61		23	10118.05	9.03		29	12596.45
2.10	Naph	19	22723.26	5.73		8	3492.49	9.09		28	12160.39
2.15		27	11979.43	5.79		8	3707.12	9.14	BenzoaP	74	11772.28
2.27		21	9039.88	5.82		9	3807.92	9.21		24	10664.04
2.35		19	8503.21	5.89		186	81617.97	9.24		25	11199.86
2.38		8	7938.80	5.95		11	4876.27	9.32		24	10625.03
2.42		18	7906.21	6.02		21	9156.27	9.38		23	10105.88
2.50		36	15907.54	6.05	DBPh	11	4890.06	9.40		23	10274.67
2.55		11	4739.35	6.13		12	5064.47	9.45		22	9494.38
2.64		30	13324.77	6.17		17	7344.66	9.48		22	9677.83
2.71		7	2900.75	6.25		13	5715.95	9.53		31	13616.76
2.75		6	2683.02	6.28		15	6533.15	9.59		22	9736.14
2.86		7	2951.32	6.31		17	7659.37	9.63		22	9637.84
2.89		6	2474.05	6.36		13	5826.67	9.66		20	8905.98
2.97		6	2490.45	6.41		20	8736.41	9.73		66	29101.08
3.04		73	31912.64	6.44	Fluora	21	7688.59	9.88		361	158989.30
3.16	FlBiPh	443	40325.36	6.60		30	12974.30	10.03		4	1793.13
3.22	2CNap	5	6324.34	6.67	Pyrene	203	70951.27	10.06	Indeno	13	1856.70
3.33		6	2593.47	6.77		28	12443.66	10.13		3	1200.85
3.40		3	1327.78	6.85		21	9422.44	10.19		3	1125.23
3.45		5	2289.06	6.92	Terphen	52	12555.83	10.23	BenzoGHI	13	2280.21
3.48		9	3889.35	6.99		24	10575.09	10.28		4	1967.64
3.55		8	3653.50	7.05		25	10778.86	10.33		4	1826.49
3.59		6	2786.11	7.08		23	10226.01	10.47		3	1414.74
3.65	ANaphy	1	1756.48	7.15		24	10625.81	10.61		4	1598.49
3.68	DMPh	2	1357.43	7.17		27	11962.63	11.00		5	2135.12
3.75		28	12313.36	7.20		28	12297.04	11.09		1	618.19
3.84	ANaphe	6	7578.39	7.28		31	13604.31				

Sample Name: 318889

LCS



Sample Name: LCS
BNA SCREEN ON HP1320
Data File: C:\CPWIN\DATA1\BNA02323.37R
Acquired from Chrom2--Det2A on 11-19-1996 14:21:43 by WRD
Sample LCS was diluted 1:1.

RT	Name	Amount	Height	RT	Name	Amount	Height	RT	Name	Amount	Height
0.04		1	275.02	1.03		53	23469.37	3.97		27	11662.48
0.40		2204	969467.30	1.16	12DCB	33	2469.50	4.11		1	527.45
0.45		41	18152.40	1.25	b2CIE	52	23467.75	4.45		19	8487.82
0.49		47	20482.38	1.33		53	23442.70	5.02		14	6355.15
0.54	NNMA	1849	55830.38	1.51	NiBen	25	1276.82	6.50	Fluora	37	13551.86
0.65		9	3972.06	1.89	b2CEM	46	18698.13	6.77		25	11202.83
0.74		8	3402.91	2.01		2	893.96	9.87		6	2457.36
0.79	Phenol	126	91391.28	2.61		86	37615.24	11.01		2	1088.44
0.84		236	103997.90	3.04		111	48929.84				
0.93	ClPhen	256	24110.90	3.68	DMPh	58	49418.20				

Sample Name: LCS

Inchcape Testing Services - Aquatec Laboratories
GCMS SVOA RUNLOG Inst: R.L

№ 04971

:ch/Method ID: RHX 8270
ırt Date: 11/25/96. Time: 08:44
ose Date: 11/25/96. Time: 20:44

ETR #	SDG #

ISTD Summaries

Previous Areas	Previous Rt	Current Areas	Current Rt

✓ Tune
___ Response Factor Summary
___ 11-Table Updated (Finn)
___ Rt & Ratios Updated (HP)

cm10169608

j. Time	File Name	CLI/SMO #	ETR #	% Moist	Dil. Wt/Vol	SSTD Rec	ISTD	Conc	Final Report	Analyst	Comments
7844	RHX001DS	DBTPPRC1								DJD	CM10149603
	RHX160BS	SSTD160.								DJD	CM10165607
	RHX120BS	SSTD120								DJD	
	RHX080BS	SSTD080								DJD	
	RHX050BS	SSTD050								DJD	
	RHX020BS	SSTD020								DJD	
731	RQB1107T3S	SOLT3	62478		100%	✓	✓	✓	✓	DJD	C
1506	R3180975	BK-0155A-1	62478		100%	✓	✓	✓	✓	DJD	C
1741	RL2478LCS	LCS	62478		100%	✓	✓	✓	✓	DJD	C
1416	RQR.1114TES	SOLKTZ	62580		100%	✓	✓	✓	✓	DJD	C
1451	R31887ZDS	SL-MW701B	62580		0.5%	—	✓		✓	DJD	C
1526	R31887BDS	SL-MW405A	62580		2%	—	✓		✓	DJD	TIC C
1601	R31845ZDS	SLCW16	62526		50%	✓	✓		✓	DJD	TIC C
1637	R3184535	SLCW17	62526		100%		✓	✓	✓	DJD	FIX 3,5
1712	R31845YDS	SLCW18	62526		50%		306	TIC	✓	DJD	R
1747	R3184555	SLCW19	62526		100%		✓	✓	✓	DJD	FIX 3,5
1823	R3184565	SLCW20	62526		100%		✓	✓	✓	DJD	FIX 3,5
1858	R31845ZDS	SLCW22	62526		25%		4		✓	DJD	R 5%
1934	R31845ZMSS	SLCW22MS	62526		25%		4			DJD	R 5%
2011	R31845ZDS	SLCW22MSD	62526		25%		4			DJD	R 5%

Inchcape Testing Services - Aquatec Laboratories
GCMS SVOA RUNLOG Inst: R

№ 04972

Batch/Method ID: RHXA.8270
Start Date: 11 / 25 / 96 Time: 21 : 37
Close Date: 11 / 26 / 96 Time: 05 : 37

ETR #	SDG #
62586	62585
62578	–
62414	62351

ISTD Summaries

Previous Areas	Previous Rt	Current Areas	Current Rt
		1046072	
		2556729	
		1715388	
		1765734	
		927122	
		911753	

✓ Tune
✓ Response Factor Summary
___ 11-Table Updated (Finn)
✓ Rt & Ratios Updated (HP)

CM10166608

Inj. Time	File Name	CLI/SMO #	ETR #	% Moist	Dil. Wt/Vol	SSTD Rec	ISTD	Conc	Final Report	Analyst	Comments
2137	RHX003PS	DFTPP 802							✓	BGS	CM10149603
2153	RHX050ABS	SSTD050							✓	BGS	CM10166607
2237	RB1118T5S	SBLKTS	62586		100%	✓	✓	✓	✓	BGS	C
2305	R3188905	MSD	62586		100%	✓	✓	✓	✓	BGS	C
2340	R3188890S	SBP247810	62586		5%	✓	✓	TIC	✓	BGS	C R 20%?
0015	RB1114T1S	SBLKT1	62578		100%	✓	✓	✓	✓	BGS	C
0050	R3188520S	SL-IN-1112	62578		5%		✓		✓	BGS	R 15%
0126	R3188535	SL-EF-1112A	62578		100%	✓	✓	✓	✓	BGS	C
0201	R1114T1QS	LCS8T1	62578		100%	2x↓	2x↑	✓	✓	BGS	R ~~MSD~~ 1/2 Spiked Adjust accordingly
0236	RB1107R4S	SBLK R4	62414		100%	✓	✓	✓	✓	BGS	C
0311	R3175815	BK-0155-1	62414		100%	✓	✓	✓	✓	BGS	C
0347	R3175825	BK-0255-1	62414		100%	✓	✓	✓	✓	BGS	C
—	R3176835	BK-0355-1	62414		100%	—	—	—	—	BGS	/ NOT AQUIRED
—	R3175845	BK-0455-1	62414		100%	—	—	—	—	BGS	/ 6
0432	R3175855	BK-0555-1	62414		100%	✓	✓	✓	✓	BGS	C
0501	R3179865	BK-0655-1	62414		100%	✓	✓	✓	✓	BGS	C
0536	R3175875	BK-0655D-1	62414		100%	✓	✓	✓	✓	BGS	C
0611	R3175885	BK-0755-1	62414		100%	✓	✓	✓	✓	BGS	C
0647	R3179895	BK-0855-1	62414		100%	✓	↑	✓	✓	BGS	
0722	R3175905	BK-0955-1	62414		100%	✓	✓	✓	✓	BGS	C
	R3179915	BK-1055-1	62414		100%					BGS	

SAMPLE HANDLING

Inchcape Testing Services

FedEx USA Airbill

Tracking Number 989826061O

Recipient's Copy

11 1000 31406571 6136N

1 From

Date 11.12.96

Sender's Name Michael Lehtinen Phone (914) 735-8300

Dept./Floor/Suite/Room

Company LAWLER MATUSKY & SKELLY ENGINE

Address 1 BLUE HILL PLAZA

City PEARL RIVER State NY Zip 10965

2 Your Internal Billing Reference Information 650-625

3 To

Recipient's Name Sample Recieving Phone (802) 655-1203

Dept./Floor/Suite/Room

Company Its Environmental LAB

Address 55 South PARK DRIVE

(To "HOLD" at FedEx location, print FedEx address here)

City Colchester State VT Zip 05446

For HOLD at FedEx Location check here

☐ Hold Weekday (Not available with FedEx First Overnight)

☐ Hold Saturday (Not available at all locations) (Not available with FedEx First Overnight or FedEx Standard Overnight)

For Saturday Delivery check here

☐ (Extra Charge. Not available to all locations) (Not available with FedEx First Overnight or FedEx Standard Overnight)

11/13/96 0930

989826061O

4 Service Delivery commitment may be later in some areas

☒ FedEx Priority Overnight (Next business morning)

☐ FedEx Standard Overnight (Next business afternoon)

☐ FedEx 2Day* (Second business day)

☐ FedEx Govt. Overnight (Authorized user only)

☐ _____

☐ FedEx Overnight Freight ☐ FedEx 2Day Freight

(For packages over 150 pounds. Call for delivery schedule.)

☐ NEW FedEx First Overnight (Earliest next business morning delivery to select locations) (Higher rates apply)

*FedEx Letter Rate not available. Minimum charge: One pound FedEx 2Day rate

5 Packaging

☐ FedEx Letter* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other Packaging

Declared value limit $500

6 Special Handling

Does this shipment contain dangerous goods?

☐ Yes (As per attached Shipper's Declaration) ☐ Yes (Shipper's Declaration not required)

☐ Dry Ice Dry Ice, 9, UN 1845 III, ____ x ____ kg (Dangerous Goods Shipper's Declaration not required)

CA ☐ Cargo Aircraft Only

7 Payment

Bill to: ☒ Sender (Account no. in Section 1 will be billed) ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

☐ Other Recipient FedEx Account No.

(Enter FedEx account no. or Credit Card no. below)

Total Packages	Total Weight	Total Declared Value*	Total Charges
1	20	$ 00	$

* When declaring a value higher than $100 per package, you pay an additional charge. See SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY section for further information.

Credit Card Auth.

8 Release Signature

Your signature authorizes Federal Express to deliver this shipment without obtaining a signature and agrees to indemnify and hold harmless Federal Express from any resulting claims

232

FORM ID NO 0200

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SDG # 62584 ETR # 62584

001000

INCHCAPE TESTING SERVICES ENVIRONMENTAL LABORATORIES LOG-IN SHEET

Lab Name: Inchcape Testing Services Environmental Laboratories - Burlington, VT Page 1 of 1

Received By (Print Name): FRANK Bessette Log-in Date: 11-13-96

Received By (Signature): Frank Bessette

Case Number: 95212

Sample Delivery Group No: 62586

ETR Number: FnB 62586

REMARKS:

1. Custody Seal (Present/~~Absent~~*) (~~Intact~~/~~Broken~~)
2. Custody Seal Nos.: —
3. Chain-of-Custody Records (Present/~~Absent~~*)
4. Sample Information Sheets (~~Present~~/Absent*)
5. Airbill (~~Airbill~~/~~Sticker~~) (Present/~~Absent~~*)
6. Airbill No.: 989826010
7. Sample Tags (~~Present~~/Absent*) Sample Tag Numbers (Listed/~~Not Listed~~) on Chain-of-Custody
8. Sample Condition: (Intact/~~Broken~~*) (~~Leaking~~)
9. Does information on the custody records, sample information sheets, sample tags and labels agree? (Yes/~~No~~*)
10. Date Received at Lab: 11-13-96
11. Time Received: 0930
12. Cooler Temperature: 3°C

Sample Transfer

Fraction: All

Area #: LvL 4 FRIG

By: FnB

On: 11-13-96

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
SGP247810	NA	318889	Were air bubbles present
MSB	"	~~318890~~ FnB 318890	in any VOA vials? NA
			Samples Rec'd intact on ice at 3°C. Cooler Rec'd intact with unbroken Custody Seals present.
			FnB 11-13-96

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____