VOLUME 3
RESULTS OF ENVIRONMENTAL INVESTIGATIONS
APPENDIX 1, PART 1 OF 2

Of The

COMM 100 ASSOCIATES FACILITY
100 COMMERCIAL STREET
PLAINVIEW, NASSAU COUNTY, NEW YORK
SITE NO. 1-30-075

For

ROBIN S. WEINSTEIN, ESQ.
KENSINGTON & RESSLER, P.C.
400 MADISON AVENUE
NEW YORK, NEW YORK 10017-1910

By

EIKON PLANNING AND DESIGN CORP.
P.O. BOX 469 - 221 HIGH STREET
HACKETTSTOWN, NEW JERSEY 07840

February 1, 1995

Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700 800-729-0852

APR 09 1993

LABORATORY ANALYSIS REPORT

Client: Eikon Planning & Design
221 High Street, P.O. Box 469
Hackettstown, NJ 07840

Project Manager: Andreas Eisenberger

Project: Plainview
Plainview, NJ

Laboratory Report #: T303072

Lab ID No.:	Sample Reference	Matrix	Collection Date & Time
T303072-01	SB1-3	Soil	03/01/93 14:35
T303072-02	SB2-3	Soil	03/01/93 17:05
T303072-03	FB 3-1-93	Aqueous	03/01/93 16:00

Date Received: March 3, 1993

Date of Report: April 7, 1993

Stephanie Majeski for
Kenneth Vara
Systems Manager

N.J. Certification #02046
N.Y. Certification #10588

TABLE OF CONTENTS

CHAIN OF CUSTODY

BILLING INFORMATION

CUSTOMER: EIKON PLANNING & DESIGN CORP.
ADDRESS: P.O. BOX 469, 221 HIGH ST.
HACKENSTOWN, NJ 07840
PROJECT: PLAINVIEW
PROJECT MANAGER: ANDREAS EISENBERGER
PROJECT LOCATION: PLAINVIEW STATE: N.Y.
PO NUMBER: 88B

REPORT INFORMATION

SEND REPORT TO: ANDREAS EISENBERGER
DATE REPORT REQUIRED: 3/12/93
RUSH RESULTS: FAX (908) 813-8360

PROJECT INFORMATION

DELIVERABLES/REGULATION (PLEASE INDICATE): TIER II
TURNAROUND (INDICATE CALENDAR DAYS. CONFIRM WITH LAB): NAME OF PERSON CONFIRMING:
21 days
IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:
NAME: ANDREAS EISENBERGER / RICH WITZAK
TELEPHONE: (908) 813-1323

ANALYTICAL REQUESTS

LAB ID CODE	SAMPLE IDENTIFICATION	NO. BOTTLES	COLLECTED DATE	COLLECTED TIME	SAMPLE TYPE: COMPOSITE	SAMPLE TYPE: GRAB	SAMPLE MATRIX: SOLID	SAMPLE MATRIX: LIQUID	SAMPLE MATRIX: PHASIC	SAMPLE MATRIX: SLUDGE	SAMPLE MATRIX: OTHER	ANALYSES	H_2SO_4	NaOH	HCl	HNO_3	OTHER
-01	SB 1-3	1	3-1-93	14:35		X	X					VOA-HS, TOTAL XYLENES					
-02	SB 2-3	1	3-1-93	17:05		X	X					VOA-HS, TOTAL XYLENES					
-03	EQ BLK, 3-1-93	3	3-1-93	16:00		X		X			P	VOA-HS, TOTAL XYLENES			X		

CUSTODY

RELINQUISHED:	DATE: 3-3-93	
RECEIVED: John Pool LABORATORY RES.	TIME: 11:00	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	

COMMENTS, REQUESTS OR REMARKS:

NO SUBCONTRACTORS WITHOUT PRIOR EIKON APPROVAL.

SAMPLE DISPOSAL: Return to Client ☐ Lab Disposal ☐ (additional Fee)

CONCENTRATIONS EXPECTED High ☐ Medium ☐ Low ☐

KNOWN HAZARD YES ☐ NO ☐

DESCRIBE:

METHODS SUMMARY

ORGANIC EXTRACTIONS

Routine aqueous samples are prepared using Method 3510 (separatory funnel extraction) or Method 3520 (continuous liquid-liquid extraction) cited in SW846. Soil samples are extracted using Method 3550 (sonication extraction) from SW846.

ALUMINA COLUMN CLEANUP

After the sample has been extracted for base/neutral semivolatiles using Method 3550, it then undergoes acid-base partition cleanup using SW846 Method 3650. The base neutral extract is then further separated using alumina column cleanup Method 3611 in SW846.

TCLP EXTRACTION SUMMARY

Sample requiring TCLP analyses are extracted according to Method 1311, cited in 40 CFR 261 et seq, June 29, 1990.

VOLATILES BY GC/MS

Samples requesting volatiles by GC/MS have been analyzed using Method 8240 as cited in USEPA SW846.

BASE/NEUTRALS AND ACID EXTRACTABLES BY GC/MS

Samples requesting semi-volatiles have been analyzed using Method 8270 as cited in USEPA SW846.

PESTICIDES/PCBs

Aqueous samples are analyzed for pesticides and PCBs via USEPA Method 608. Non-aqueous samples are analyzed using Method 8080 as cited in USEPA SW846.

HERBICIDES

The herbicide extraction and analysis is performed according to Method 509B, cited in the 16th edition of Standard Methods. Samples are extracted, derivitized, and then analyzed via a gas chromatograph utilizing an electron capture detector (ECD).

LABORATORY RESOURCES, INC. - TETERBORO 1993
GENERAL CHEMISTRY METHODOLOGY
SOIL MATRIX

PARAMETER	METHOD (1)
Acidity	305.1
Alkalinity	310.1
BOD, 5 day	507(4)
BOD, 20 day	507(4)
Chloride	9252
Chlorine, Residual	330.5
COD	HACH
Conductivity	9050
Cyanide, Total	9010
Cyanide, Amenable	9010
Ignitability	1010
MBAS, Surfactants	512B(4)
Nitrogen, NH3	350.1(2)
Nitrogen, NO3	9200
Nitrogen, NO2	354.1
Nitrogen, TKN	351.2(2)
Odor	140.1
Petroleum Hydro, Soil	418.1(5)
pH	9045
Phenolics, Total	9065
Phosphorous, Total	365.2(2)
Solids, Fixed	209D(4)
Solids, Total	CLP
Solids, Volatile	209D(4)
Sulfate	9038
Sulfide	9030
Sulfite	377.1(2)
TOC	415.1
Turbidity	180.1

(1) = Solid and hazardous waste methods approved by NJDEP ECRA and RCRA and listed in EPS SW 846 3rd Edition, 1986.
(2) = Water and wastewater methods approved in the Federal Register in section 40 CFR 136 and listed in EPA 600/4-79-020.
(4) = Methods cited in Standard Methods 16th Edition, 1986.
(5) = NJDEP modification of EPA Method 418.1.
CLP = Contract Laboratory Program procedure for total solids determination, SOW 7/88, Part F, page D-83.
HACH = Method 8000, Hach Handbook of Water Analysis, 1979. Approved in the Federal Register, April 21, 1980, page 26811.

ORGANIC NON-CONFORMANCE SUMMARY

GC/MS VOLATILES

1. The quantitation limits are elevated due to a dilution required for sample SB2-3 (T303072-02).

INORGANIC NON-CONFORMANCE SUMMARY

There were no non-conformances encountered during the analyses of these samples.

LABORATORY RESOURCES, INC.

LABORATORY CHRONICLES

Sample Number T303072	Analyst Initial	SB1-3 01	SB2-3 02	FB 03						
Received & Refrigerated Date:	JT	3-3-93	→	→						
Organics Extraction Date:										
Base/Neutrals/Acids										
Acids Extractables										
Pesticides/PCBs										
Herbicides										
Analysis Date :										
Volatiles/GCMS	EM/AP	3/9/93	3/8/93	3/10/93						
Base/Neutrals/Acids										
Pesticides/PCBs										
Herbicides										
Volatiles/GC										
Total Solids										
Organic Supervisor Review & Approval	JO	4-7-93	→	→						

Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700 800-729-0852

TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES

Name	Container[1]	Preservation	Maximum holding time
Bacterial Tests:			
Coliform, fecal and total	P, G	Cool, 4°C, 0.008% $Na_2S_2O_3$	6 hours
Fecal streptococci	P, G	Cool, 4°C, 0.008% $Na_2S_2O_3$	6 hours
Inorganic Tests:			
Acidity	P, G	Cool, 4°C	14 days
Alkalinity	P, G	Cool, 4°C	14 days
Ammonia	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Biochemical oxygen demand	P, G	Cool, 4°C	48 hours
Bromide	P, G	None required	28 days
Biochemical oxygen demand, carbonaceous	P, G	Cool, 4°C	48 hours
Chemical oxygen demand	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Chloride	P, G	None required	28 days
Chlorine, total residual	P, G	None required	Analyze immediately
Color	P, G	Cool, 4°C	48 hours
Cyanide, total and amenable to chlorination	P, G	Cool, 4°C, NaOH to pH>12, 0.6g ascorbic acid	14 days
Fluoride	P	None required	28 days
Hardness	P, G	HNO_3 to pH<2, H_2SO_4 to pH<2	6 months
Hydrogen ion (pH)	P, G	None required	Analyze immediately
Kjeldahl and organic nitrogen	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Metals:			
Chromium VI	P, G	Cool, 4°C	24 hours
Mercury	P, G	HNO_3 to pH<2	28 days
Metals, except chromium VI and mercury	P, G	HNO_3 to pH<2	6 months
Nitrate	P, G	Cool, 4°C	48 hours
Nitrate-nitrite	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Nitrite	P, G	Cool, 4°C	48 hours
Oil and grease	G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Organic carbon	P, G	Cool, 4°C, HCl or H_2SO_4 to pH<2	28 days
Orthophosphate	P, G	Filter immediately, cool, 4°C	48 hours
Oxygen, Dissolved Probe	G Bottle and top	None required	Analyze immediately
Winkler	do	Fix on site and store in dark	8 hours
Phenols	G only	Cool, 4°C, H_2SO_4 to pH<2	28 days
Phosphorus (elemental)	G	Cool, 4°C	48 hours
Phosphorus, total	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Residue, total	P, G	Cool, 4°C	7 days
Residue, Filterable	P, G	Cool, 4°C	7 days
Residue, Nonfilterable (TSS)	P, G	Cool, 4°C	7 days
Residue, Settleable	P, G	Cool, 4°C	48 hours
Residue, volatile	P, G	Cool, 4°C	7 days
Silica	P	Cool, 4°C	28 days
Specific conductance	P, G	Cool, 4°C	28 days

Laboratory Resources INC.
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TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES (CONTINUED)

Name	Container[1]	Preservation	Maximum holding time
Sulfate	P, G	Cool, 4°C	28 days
Sulfide	P, G	Cool, 4°C, add zinc acetate plus sodium hydroxide to pH>9	7 days
Sulfite	P, G	None required	Analyze immediately
Surfactants	P, G	Cool, 4°C	48 hours
Temperature	P, G	None required	Analyze
Turbidity	P, G	Cool, 4°C	48 hours
Organic Tests:			
Purgeable Halocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$	14 days
Purgeable aromatic hydrocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$, HCl to pH2	14 days
Acrolein and acrylonitrile	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$, Adjust pH to 4-5	14 days
Phenols	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	7 days until extraction, 40 days after extraction
Benzidines	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	7 days until extraction
Phthalate esters	G, Teflon-lined cap	Cool, 4°C	7 days until extraction 40 days after extraction
Nitrosamines	G, Teflon-lined cap	Cool, 4°C, store in dark, 0.008% $Na_2S_2O_3$	40 days after extraction
PCBs, acrylonitrile	G, Teflon-lined cap	Cool, 4°C	40 days after extraction
Nitroaromatics and isophorone	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$ store in dark	40 days after extraction
Polynuclear aromatic hydrocarbons	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$ store in dark	40 days after extraction
Haloethers	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	40 days after extraction
Chlorinated hydrocarbons	G, Teflon-lined cap	Cool, 4°C	40 days after extraction
TCDD	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	40 days after extraction
Total organic halogens	G, Teflon-lined cap	Cool, 4°C; H_2SO_4 to pH<2	7 days
Pesticides Tests:			
Pesticides	G, Teflon-lined cap	Cool, 4°C, pH 5-9	40 days after extraction
Radiological Tests:			
Alpha, beta and radium	P, G	HNO_3 to pH<2	6 months

[1] Polyethylene (P) or Glass (G)

CASE NARRATIVE

Laboratory Resources, Teterboro, received two soil samples plus a field blank for Reduced Deliverables Format on March 3, 1993. The samples were analyzed for the parameters outlined in the chain of custody.

The samples were analyzed within the required holding time. Any parameters which were outside of their respective quality control ranges are noted in the non-conformance summaries.

Please contact us if there are any questions regarding the enclosed results.

GC/MS CONFORMANCE/NONCONFORMANCE SUMMARY

		No	Yes
1.	Chromatograms Labeled/Compounds Identified	—	✓
2.	Tune Specifications		
	a. BFB Meets Criteria	—	✓
	b. DFTPP Meets Criteria	—	NA
3.	Tuning Frequency Performed every 24 hours for 600 series and 12 hours for 8000 series	—	✓
4.	Calibration Frequency Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	—	✓
5.	Calibration Requirements		
	a. Calibration Check Compounds (CCCs)	—	✓
	b. System Performance Check Compounds (SPCCs)	—	✓
6.	Blank Contamination If yes, list compounds and concentrations in each blank:	✓	—
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	If not met, were the calculations checked and the results qualified as estimated?	—	—
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Areas and Retention Time Shifts Meet Criteria Internal standard areas between -50% and +100% of daily standard	—	✓
10.	Extraction Holding Time Met If not met, list number of days exceeded for each sample:	—	NA
11.	Analysis Holding Time Met If not met, list number of days exceeded for each sample:	—	✓

Laboratory Supervisor: Bill J / [illegible] Date: 4/7/93

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/01/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/09/93
DILUTION FACT.: 1.0

CLIENT : EIKON SB 1-3
LAB SAMPLE : T303072-01A
ANALYST : ED
FILE NAME : >B8946

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	52	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	12	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	52	TOLUENE	ND	5
METHYLENE CHLORIDE	2 J	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	102 %	70 - 121	OK
TOLUENE-D8	101 %	81 - 117	OK
4-BROMOFLUOROBENZENE	97 %	74 - 121	OK

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

Percent Solid of 96.8 is used for all Target compounds.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SB 1-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303072-01A

Sample wt/vol: 5.0 (g/ml) g Lab File ID: >B8946

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 96.8 Date Analyzed: 03/09/93

Column: CAP Dilution Factor: 1

Number of TICs found: 1 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 124389	Carbon Dioxide (B)	1.88	32	

FORM I VOA-TIC 1/87 Rev

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/01/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/08/93
DILUTION FACT.: 5.0

CLIENT : EIKON SB 2-3
LAB SAMPLE : T303072-02A
ANALYST : ED
FILE NAME : >B8932

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	58	1,2-DICHLOROPROPANE	ND	29
VINYL CHLORIDE	ND	58	BROMODICHLOROMETHANE	ND	29
BROMOMETHANE	ND	58	2-CHLOROETHYLVINYLETHER	ND	29
CHLOROETHANE	ND	58	TRANS-1,3-DICHLOROPROPENE	ND	29
ACROLEIN	ND	291	CIS-1,3-DICHLOROPROPENE	ND	29
TRICHLOROFLUOROMETHANE	ND	29	1,1,2-TRICHLOROETHANE	ND	29
1,1-DICHLOROETHENE	ND	29	DIBROMOCHLOROMETHANE	ND	29
CARBON DISULFIDE	ND	29	BROMOFORM	ND	29
ACETONE	105	58	4-METHYL-2-PENTANONE	ND	58
ACRYLONITRILE	ND	291	TOLUENE	491	29
METHYLENE CHLORIDE	ND	29	TETRACHLOROETHENE	ND	29
TRANS-1,2-DICHLOROETHENE	ND	29	2-HEXANONE	ND	58
1,1-DICHLOROETHANE	ND	29	CHLOROBENZENE	ND	29
CHLOROFORM	ND	29	ETHYLBENZENE	ND	29
1,2-DICHLOROETHANE	ND	29	M,P-XYLENE	9 J	29
VINYL ACETATE	ND	58	O-XYLENE	ND	29
2-BUTANONE	ND	58	STYRENE	ND	29
1,1,1-TRICHLOROETHANE	ND	29	1,1,2,2-TETRACHLOROETHANE	ND	29
CARBON TETRACHLORIDE	ND	29	1,3-DICHLOROBENZENE	ND	29
BENZENE	ND	29	1,4-DICHLOROBENZENE	ND	29
TRICHLOROETHENE	ND	29	1,2-DICHLOROBENZENE	ND	29

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	112 %	70 - 121	OK
TOLUENE-D8	106 %	81 - 117	OK
4-BROMOFLUOROBENZENE	91 %	74 - 121	OK

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

Percent Solid of 85.9 is used for all Target compounds.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SB 2-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303072-02A

Sample wt/vol: 1.0 (g/ml) g Lab File ID: >B8932

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 85.9 Date Analyzed: 03/08/93

Column: CAP Dilution Factor: 5

Number of TICs found: 2 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	124389	Carbon Dioxide (B)	1.64	197	
2		Unknown Alkane	9.35	34	

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LABURATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/01/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/10/93
DILUTION FACT.: 1.0

CLIENT : EIKON FB
LAB SAMPLE : T303072-03A
ANALYST : ANDY
FILE NAME : >CB411

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	2 J	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	102 %	76 - 114	OK
TOLUENE-D8	98 %	88 - 110	OK
4-BROMOFLUOROBENZENE	100 %	86 - 115	OK

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

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

FB

Lab Name: Laboratory Resources, Inc.   Contract: -------

Lab Code: GC/MS   Case No.: -----   SAS No.: -----   SDG No.: -----

Matrix: WATER   Lab Sample ID: T303072-03A

Sample wt/vol: 5.0 (g/ml) ml   Lab File ID: >C8411

Level: (low/med) LOW   Date Received: 03/01/93

% Solid: 0   Date Analyzed: 03/10/93

Column: CAP   Dilution Factor: 1

CONCENTRATION UNITS: ug/L

Number of TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE RECEIVED :
DATE ANALYZED : 03/08/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : ED
FILE NAME : >B8925

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	87 %	70 - 121	OK
TOLUENE-D8	100 %	81 - 117	OK
4-BROMOFLUOROBENZENE	95 %	74 - 121	OK

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

METHOD BLANK

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: METHOD BLANK

Sample wt/vol: 5.0 (g/ml) g Lab File ID: >B8925

Level: (low/med) LOW Date Received:

% Solid: 100 Date Analyzed: 03/08/93

Column: CAP Dilution Factor: 1

Number of TICs found: 1 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 124389	Carbon Dioxide	1.65	37	

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LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE RECEIVED :
DATE ANALYZED : 03/09/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : ED
FILE NAME : >88942

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	99 %	70 - 121	OK
TOLUENE-D8	99 %	81 - 117	OK
4-BROMOFLUOROBENZENE	97 %	74 - 121	OK

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
METHOD BLANK

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: METHOD BLANK

Sample wt/vol: 5.0 (g/ml) g Lab File ID: >B8942

Level: (low/med) LOW Date Received:

Solid: 100 Date Analyzed: 03/09/93

Column: CAP Dilution Factor: 1

Number of TICs found: 1 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 124389	Carbon Dioxide	1.63	29	

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LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE RECEIVED :
DATE ANALYZED : 03/10/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : ANDY
FILE NAME : >C8403

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	96 %	76 - 114	OK
TOLUENE-D8	100 %	88 - 110	OK
4-BROMOFLUOROBENZENE	99 %	86 - 115	OK

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

METHOD BLAN

Lab Name: Laboratory Resources, Inc.   Contract:-------

Lab Code: GC/MS   Case No.: -----   SAS No.: -----   SDG No.: -----

Matrix: WATER   Lab Sample ID: METHOD BLAN

Sample wt/vol: 5.0 (g/ml) ml   Lab File ID: >C8403

Level: (low/med) LOW   Date Received:

% Solid: 0   Date Analyzed: 03/10/93

Column: CAP   Dilution Factor: 1

CONCENTRATION UNITS:
Number of TICs found: 0   ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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5A

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

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TC505 BFB Injection date: 2/15/93

Instrument ID: 0881 BFB Injection time: 9:30

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	21.7
75	30-60% of mass 95	53.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	87.3
175	5.0 - 9.0% of mass 174	7.6(8.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	83.1(95.3)1
177	5.0 - 9.0% of mass 176	5.7(6.9)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	VSTD 50 PPB	>C8059	2/15/93	11:29
2	----------	VSTD 20 PPB	>C8058	2/15/93	10:53
3	----------	VSTD 100 PPB	>C8060	2/15/93	12:05
4	----------	VSTD 150 PPB	>C8061	2/15/93	12:40
5	----------	VSTD 200 PPB	>C8062	2/15/93	13:16
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7					
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20					
21					
22					

5A

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

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TB702 BFB Injection date: 2/24/93

Instrument ID: 0881 BFB Injection time: 8:56

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	20.5
75	30-60% of mass 95	46.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	.5(.6)1
174	Greater than 50.0% of mass 95	78.5
175	5.0 - 9.0% of mass 174	5.7(7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	78.3(99.7)1
177	5.0 - 9.0% of mass 176	4.7(6.0)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPB VOA S	>B8820	2/24/93	9:37
2	----------	20 PPB VOA	>B8822	2/24/93	11:09
3	----------	200 PPB STD	>B8827	2/24/93	14:58
4	----------	150 PPB STD	>B8828	2/24/93	15:38
5	----------	100 PPB STD	>B8829	2/24/93	16:19
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18					
19					
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21					
22					

5A

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

Name: Laboratory Resources Inc., Contract: -----

File ID: >TB710 BFB Injection date: 3/08/93

nstrument ID: 0881 BFB Injection time: 8:34

/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	19.3
5	30-60% of mass 95	47.1
5	Base peak, 100% relative abundance	100.
76	5.0 - 9.0% of mass 95	6.5
73	Less than 2.0% of mass 174	.5(.5)1
74	Greater than 50.0% of mass 95	92.5
75	5.0 - 9.0% of mass 174	6.4(7.0)1
76	Greater than 95.0%, but less than 101.0% of mass 174	88.9(96.1)1
77	5.0 - 9.0% of mass 176	5.4(6.1)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPB VOA S	>B8924	3/08/93	9:18
2	----------	METHOD BLANK	>B8925	3/08/93	10:04
3	----------	T302351-01B	>B8926	3/08/93	11:04
4	----------	071-03 MS	>B8927	3/08/93	11:49
5	----------	071-03MSD	>B8928	3/08/93	12:35
6	----------	T303072-02A	>B8932	3/08/93	16:03
7	----------	T303071-02A	>B8934	3/08/93	17:35
8	----------	T303071-03A	>B8935	3/08/93	18:21
9	----------	T303047-01A	>B8937	3/08/93	19:53
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21					
22					

1 of 1

5A

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

Name: Laboratory Resources Inc., Contract: -----

File ID: >TB711 BFB Injection date: 3/09/93

nstrument ID: 0881 BFB Injection time: 9:24

/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	20.0
5	30-60% of mass 95	49.0
5	Base peak, 100% relative abundance	100.
6	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	.7(.7)1
74	Greater than 50.0% of mass 95	89.7
75	5.0 - 9.0% of mass 174	6.3(7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	88.6(98.8)1
77	5.0 - 9.0% of mass 176	5.7(6.5)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPB VOA S	>B8941	3/09/93	10:11
2	----------	METHOD BLANK	>B8942	3/09/93	11:28
3	----------	T302351-01B	>B8943	3/09/93	12:20
4	----------	T302334-08A	>B8944	3/09/93	13:06
5	----------	T302359-03B	>B8945	3/09/93	13:51
6	----------	T303072-01A	>B8946	3/09/93	14:37
7	----------	T303071-04B	>B8947	3/09/93	15:23
8	----------	T303047-03B	>B8948	3/09/93	16:09
9	----------	T303047-04A	>B8949	3/09/93	16:54
10	----------	MS	>B8950	3/09/93	17:39
11	----------	MSD	>B8951	3/09/93	18:27
12	----------	T303095-01A	>B8954	3/09/93	20:45
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20					
21					
22					

5A

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

Name: Laboratory Resources Inc., Contract: -----

File ID: >TC524 BFB Injection date: 3/10/93

nstrument ID: 0881 BFB Injection time: 10:39

/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	20.3
95	30-60% of mass 95	51.2
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	94.9
175	5.0 - 9.0% of mass 174	6.9(7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.0(100.2)1
177	5.0 - 9.0% of mass 176	6.3(6.6)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	VSTD 50 PPB	>C8402	3/10/93	12:20
2	----------	METHOD BLANK	>C8403	3/10/93	13:32
3	----------	MED LEVEL BL	>C8404	3/10/93	14:21
4	----------	T303042-01C	>C8405	3/10/93	15:12
5	----------	T303042-02D	>C8406	3/10/93	16:02
6	----------	T303104-03A	>C8408	3/10/93	17:16
7	----------	T303111-03A	>C8409	3/10/93	17:51
8	----------	T303071-01A	>C8410	3/10/93	18:27
9	----------	T303072-03A	>C8411	3/10/93	19:03
10	----------	T303111-03 MS	>C8412	3/10/93	19:38
11	----------	T303111-03 MSD	>C8413	3/10/93	20:14
12					
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21					
22					

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8925 Lab Sample ID: METHOD BLAN

Date Analyzed: 03/08/93 Time Analyzed: 10:04

Matrix: Soil

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

LAB FILE NO.	LAB SAMPLE ID	TIME ANALYZED
>B8926	T302351-01B	11:04
>B8927	071-03 MS	11:49
>B8928	071-03MSD	12:35
>B8932	T303072-02A	16:03
>B8934	T303071-02A	17:35
>B8935	T303071-03A	18:21
>B8937	T303047-01A	19:53

Comments: _____

_____

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8942 Lab Sample ID: METHOD BLAN

Date Analyzed: 03/09/93 Time Analyzed: 11:28

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	TIME ANALYZED
>B8943	T302351-01B	12:20
>B8944	T302334-08A	13:06
>B8945	T302359-03B	13:51
>B8946	T303072-01A	14:37
>B8947	T303071-04B	15:23
>B8948	T303047-03B	16:09
>B8949	T303047-04A	16:54
>B8950	MS	17:39
>B8951	MSD	18:27
>B8954	T303095-01A	20:45

Comments: _____

_____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >C8403 Lab Sample ID: METHOD BLAN

Date Analyzed: 03/10/93 Time Analyzed: 13:32

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	TIME ANALYZED
>C8405	T303042-01C	15:12
>C8406	T303042-02D	16:02
>C8408	T303104-03A	17:16
>C8409	T303111-03A	17:51
>C8411	T303072-03A	19:03
>C8412	T303111-03 MI	19:38
>C8413	T303111-03 MI	20:14

Comments: _____

_____

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 2824A11 191

ntractor: LAB. RESOURCES Calibration Date: 02/15/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .3 Maximum % RSD for CCC is 30%

Laboratory ID:	>C8058	>C8059	>C8060	>C8061	>C8062					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
LOROMETHANE	.56178	.46703	.45940	.39940	.37636	.204	.45279	15.932		**
VINYL CHLORIDE	.79809	.64372	.62858	.55596	.54459	.219	.63419	15.990	*	
OMOMETHANE	1.40693	1.10840	1.06618	.98316	.93945	.266	1.10083	16.679		
LOROETHANE	.51169	.41347	.40861	.37535	.36167	.289	.41416	14.185		
ACROLEIN	.07306	.06078	.06294	.04350	.04829	.407	.05771	20.559		(Conc=40.0,100.0,200.0,30
ICHLOROFLUOROMETHANE	4.38764	2.80740	2.84101	2.54561	2.37968	.321	2.99227	26.834		
1-DICHLOROETHENE	1.39548	.99695	1.10517	1.00976	.94897	.413	1.09127	16.426	*	
ARBON DISULFIDE	3.01127	2.17090	2.54821	2.31613	2.28904	.434	2.46711	13.518		
ETONE	.18377	.15812	.16921	.14531	.14377	.449	.16004	10.515		
RYLONITRILE	.08486	.11617	.13302	.13071	.10743	.625	.11444	17.129		
THYLENE CHLORIDE	1.57139	1.03303	1.16145	1.04823	1.01916	.540	1.16665	19.986		
METHYL-TERT-BUTYL-ETHER	3.30069	2.84803	2.94364	2.54706	2.42094	.639	2.81207	12.326		
RT-BUTYL-ALCOHOL	.07963	.07159	.08134	.07021	.07956	.662	.07647	6.738		(Conc=40.0,100.0,200.0,30
ANS-1,2-DICHLOROETHENE	1.66882	1.17481	1.34004	1.22493	1.18584	.615	1.31889	15.640		
DI-ISOPROPYL-ETHER	2.66558	4.00582	4.28174	3.70733	3.61455	.827	3.65500	16.750		
1-DICHLOROETHANE	1.65786	2.00277	2.30184	2.11154	2.05835	.751	2.02647	11.586		**
S-1,2-DICHLOROETHENE	1.72432	1.23690	1.42345	1.31420	1.28187	.938	1.39615	14.035		
HLOROFORM	4.27412	3.06166	3.43773	3.17597	3.03512	1.051	3.39692	15.178	*	
2-DICHLOROETHANE	2.66003	1.98865	2.22274	2.09725	2.01422	1.188	2.19658	12.506		
2-DICHLOROETHANE-D4	2.24001	1.71735	2.01788	1.85130	1.76341	1.166	1.91799	11.130		
NYL ACETATE	.97909	.83205	.79539	.63723	.63155	.626	.77506	18.795		
2-BUTANONE	.05504	.04879	.02635	.04937	.04974	.736	.04586	24.401		
1,1-TRICHLOROETHANE	.98958	.72823	.78134	.71297	.68768	.813	.77996	15.653		
RBON TETRACHLORIDE	.98364	.73309	.79878	.73666	.71195	.847	.79283	14.061		
ENZENE	.89357	.66353	.73522	.68556	.67626	.891	.73083	12.992		
ICHLOROETHENE	.59675	.43696	.47150	.43698	.42827	1.038	.47409	14.880		
2-DICHLOROPROPANE	.34061	.26190	.28840	.27250	.27063	1.078	.28681	11.004	*	
ROMODICHLOROMETHANE	.96878	.72855	.80237	.75754	.74655	1.150	.80076	12.213		
CHLOROETHYLVINYLETHER	.12513	.10960	.11952	.07300	.11730	1.233	.10891	19.128		
ANS-1,3-DICHLOROPROPENE	.62449	.48401	.53030	.51820	.51032	1.366	.53347	10.056		

- RF - Response Factor (Subscript is amount in UG/L)

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

- $\overline{RF}$ - Average Response Factor

- RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 2824A11 191

ntractor: LAB. RESOURCES Calibration Date: 02/15/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .3 Maximum % RSD for CCC is 30%

Laboratory ID:	>C8058	>C8059	>C8060	>C8061	>C8062					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
S-1,3-DICHLOROPROPENE	.58110	.43654	.48167	.46576	.45337	1.244	.48369	11.767		
1,1,2-TRICHLOROETHANE	.36219	.27494	.29009	.28375	.27640	1.397	.29747	12.331		
BROMOCHLOROMETHANE	.90836	.69644	.75384	.72077	.70637	1.468	.75716	11.526		
OMOFORM	.68654	.53781	.57918	.57874	.55197	1.763	.58685	9.967		**
4-METHYL-2-PENTANONE	.24658	.20848	.21267	.19670	.19444	.816	.21177	9.879		
LUENE-D8	1.30408	1.02740	1.17643	1.05733	1.02111	.814	1.11727	10.899		
LUENE	.82991	.61495	.68143	.64642	.62351	.823	.67924	12.966	*	
TRACHLOROETHENE	.75302	.55462	.61069	.57836	.54218	.891	.60777	14.033		
HEXANONE	.13594	.12197	.12371	.10945	.11146	.927	.12051	8.848		
LOROBENZENE	1.29309	.94021	1.04301	.97898	.95005	1.003	1.04107	14.071		**
HYLBENZENE	.57086	.42444	.47065	.44177	.43031	1.026	.46761	12.917	*	
M,P-XYLENE	.73229	.53458	.58753	.54507	.52234	1.044	.58436	14.761		(Conc=40.0,100.0,200.0,30
XYLENE	.70698	.51348	.56782	.53000	.51613	1.094	.56688	14.336		
YRENE	1.23418	.89662	.99617	.92715	.90489	1.098	.99180	14.220		
4-BROMOFLUOROBENZENE	1.16335	.86286	.97972	.88971	.84937	1.164	.94900	13.714		
1,2,2-TETRACHLOROETHANE	.57502	.44570	.48213	.46758	.44829	1.199	.48374	10.987		**
3-DICHLOROBENZENE	1.53747	1.08895	1.22612	1.11647	1.06987	1.312	1.20778	16.061		
,4-DICHLOROBENZENE	1.60365	1.12388	1.24064	1.15122	1.10919	1.326	1.24572	16.576		
2-DICHLOROBENZENE	1.44982	1.03353	1.13647	1.06136	1.00979	1.374	1.13820	15.867		

- Response Factor (Subscript is amount in UG/L)

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

- Average Response Factor

RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 2637A0 1713

ntractor: LAB RESOURCES Calibration Date: 02/24/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % RSD for CCC is 30%

Laboratory ID:	>B8822	>B8820	>B8829	>B8828	>B8827					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
LOROMETHANE	.74654	.83656	.87735	.92764	1.02959	.232	.88354	11.909		**
VINYL CHLORIDE	.85797	.94972	.96589	1.04492	1.17866	.251	.99943	12.028	*	
OMOMETHANE	1.05417	1.17480	1.06690	1.08947	1.23146	.303	1.12336	6.817		
LOROETHANE	.52422	.60704	.53284	.54613	.62139	.324	.56632	7.893		
ACROLEIN	.10793	.11949	.14269	.11760	.09008	.485	.11556	16.548		(Conc=40.0,100.0,200.0,30
ICHLOROFLUOROMETHANE	1.72497	1.86360	1.66117	1.60695	1.65405	.372	1.70215	5.849		
1-DICHLOROETHENE	.89381	.98921	.90144	.89475	.88515	.481	.91287	4.717	*	
ARBON DISULFIDE	1.52504	2.02947	1.97607	1.98837	2.06875	.505	1.91754	11.600		
ETONE	.30447	.46704	.51157	.42492	.28576	.542	.39875	24.994		
RYLONITRILE	.26411	.26661	.33178	.28876	.22857	.717	.27597	13.742		
THYLENE CHLORIDE	1.09227	1.08196	1.02181	1.10191	1.03923	.631	1.06744	3.277		
TRANS-1,2-DICHLOROETHENE	1.12360	1.22109	1.18339	1.22279	1.17024	.698	1.18422	3.461		
THYL-TERT-BUTYL-ETHER	3.29668	3.31720	3.30227	3.18886	2.97300	.725	3.21560	4.506		(Conc=20.0,50.0,100.0,150
RT-BUTYL-ALCOHOL	.12706	.18580	.36052	.22228	.12320	.766	.20377	47.588		(Conc=40.0,100.0,200.0,30
1,1-DICHLOROETHANE	2.06461	2.12690	2.14618	2.12686	2.02760	.806	2.09843	2.390		**
-ISOPROPYL-ETHER	4.22891	4.39473	4.52729	4.32518	3.97893	.865	4.29101	4.790		(Conc=20.0,50.0,100.0,150
S-1,2-DICHLOROETHENE	1.68140	1.80323	1.88762	1.83541	1.64812	.949	1.77116	5.780		
LOROFORM	2.47735	2.63792	2.67729	2.74731	2.54331	1.038	2.61663	4.098	*	
2-DICHLOROETHANE	1.76350	1.88126	1.91871	1.88769	1.70042	1.149	1.83032	5.113		
2-DICHLOROETHANE-D4	1.97305	1.63291	2.20025	1.47553	1.32562	1.132	1.72147	20.895		(Conc=20.0,50.0,100.0,150
NYL ACETATE	.99108	1.08141	1.20785	1.18348	1.01637	.686	1.09604	8.861		
2-BUTANONE	.02551	.02742	.03920	.03478	.02237	.788	.02986	23.236		
1,1-TRICHLOROETHANE	.52675	.60195	.63017	.66796	.62508	.843	.61038	8.587		
RBON TETRACHLORIDE	.50822	.59924	.63168	.68062	.63782	.871	.61152	10.565		
ENZENE	.65736	.73895	.78440	.82672	.75158	.910	.75180	8.349		
ICHLOROETHENE	.40868	.43664	.46635	.45833	.42817	1.032	.43964	5.287		
2-DICHLOROPROPANE	.28087	.28816	.32417	.34646	.29139	1.070	.30621	9.135	*	
ROMODICHLOROMETHANE	.57004	.59229	.67583	.74771	.59914	1.130	.63700	11.598		
CHLOROETHYLVINYLETHER	.19986	.20677	.25319	.19790	.18234	1.201	.20801	12.878		
ANS-1,3-DICHLOROPROPENE	.47769	.53840	.59649	.58686	.55238	1.321	.55036	8.565		

- Response Factor (Subscript is amount in UG/L)

RT - Average Relative Retention Time (RT Std/RT Istd)

- Average Response Factor

SD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Lase No: Instrument ID: 2637A0 1713

tractor: LAB RESOURCES Calibration Date: 02/24/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % RSD for CCC is 30%

Laboratory ID:	>B8822	>B8820	>B8829	>B8828	>B8827					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
3-1,3-DICHLOROPROPENE	.41230	.46953	.52589	.53511	.43662	1.212	.47589	11.333		
1,1,2-TRICHLOROETHANE	.36300	.34256	.38793	.37649	.32703	1.350	.35940	6.886		
BROMOCHLOROMETHANE	.66572	.70220	.80431	.79379	.68848	1.416	.73090	8.711		
MOFORM	.62918	.76558	.89072	.84726	.73978	1.684	.77450	13.104		**
4-METHYL-2-PENTANONE	.39493	.43610	.59093	.48238	.35869	.828	.45261	19.897		
LUENE-D8	1.16472	1.09604	1.39714	.89161	.88592	.825	1.08709	19.564		(Conc=20.0,50.0,100.0,150
LUENE	.57401	.64124	.68505	.64205	.62206	.832	.63288	6.349	*	
TRACHLOROETHENE	.60261	.63163	.65073	.60602	.56255	.896	.61071	5.459		
EXANONE	.29620	.31478	.43767	.34696	.23192	.931	.32551	23.181		
LOROBENZENE	.84320	.88761	.99460	.95022	.88143	1.003	.91141	6.616		**
YLBENZENE	.38584	.40641	.46362	.42738	.41821	1.023	.42029	6.846	*	
M,P-XYLENE	.47483	.51915	.55892	.50450	.49168	1.040	.50982	6.264		(Conc=40.0,100.0,200.0,30
YLENE	.45505	.52309	.55137	.50266	.47717	1.088	.50187	7.524		
RENE	.79482	.94402	.97015	.89544	.84040	1.092	.88897	8.129		
4-BROMOFLUOROBENZENE	1.11969	.99986	1.19883	.76827	.72585	1.155	.96250	21.774		(Conc=20.0,50.0,100.0,150
L,2,2-TETRACHLOROETHANE	.69964	.72746	.84859	.74158	.59773	1.186	.72300	12.444		**
-DICHLOROBENZENE	1.01271	1.05318	1.13857	1.10025	.99394	1.295	1.05973	5.669		
4-DICHLOROBENZENE	1.03228	1.08674	1.18576	1.10032	1.01691	1.308	1.08440	6.152		
2-DICHLOROBENZENE	1.02219	1.08332	1.11861	1.04007	.92713	1.355	1.03826	6.995		

- Response Factor (Subscript is amount in UG/L)

T - Average Relative Retention Time (RT Std/RT Istd)

- Average Response Factor

SD - Percent Relative Standard Deviation

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

Continuing Calibration Check
HSL Compounds

ase No: Calibration Date: 03/08/93

ntractor: LAB RESOURCES Time: 09:18

Contract No: Laboratory ID: >B8924

strument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
LOROMETHANE	.88354	.95540	8.13		**	
VINYL CHLORIDE	.99943	1.15717	15.78	*		
OMOMETHANE	1.12336	1.30293	15.99			
LOROETHANE	.56632	.69913	23.45			
ROLEIN	.11556	.06233	46.06			(Conc=100.00)
ICHLOROFLUOROMETHANE	1.70215	2.11082	24.01			
1-DICHLOROETHENE	.91287	1.04303	14.26	*		
RBON DISULFIDE	1.91754	2.04811	6.81			
ETONE	.39875	.81199	103.63			
RYLONITRILE	.27597	.30796	11.59			
THYLENE CHLORIDE	1.06744	1.21651	13.97			
RANS-1,2-DICHLOROETHENE	1.18422	1.35836	14.70			
THYL-TERT-BUTYL-ETHER	3.21560	3.65475	13.66			
RT-BUTYL-ALCOHOL	.20377	.29565	45.09			(Conc=100.00)
1-DICHLOROETHANE	2.09843	2.39410	14.09		**	
-ISOPROPYL-ETHER	4.29101	4.76449	11.03			
S-1,2-DICHLOROETHENE	1.77116	2.06036	16.33			
LOROFORM	2.61663	3.06326	17.07	*		
2-DICHLOROETHANE	1.83032	2.20612	20.53			
2-DICHLOROETHANE-D4	1.72147	1.54187	10.43			(Conc=50.00)
NYL ACETATE	1.09604	1.13434	3.49			
2-BUTANONE	.02986	.03595	20.42			
1,1-TRICHLOROETHANE	.61038	.69464	13.80			
RBON TETRACHLORIDE	.61152	.71792	17.40			
NZENE	.75180	.82589	9.85			
ICHLOROETHENE	.43964	.51098	16.23			
2-DICHLOROPROPANE	.30621	.33252	8.59	*		
OMODICHLOROMETHANE	.63700	.75721	18.87			
CHLOROETHYLVINYLETHER	.20801	.19330	7.07			
ANS-1,3-DICHLOROPROPENE	.55036	.56420	2.51			
S-1,3-DICHLOROPROPENE	.47589	.50824	6.80			
1,2-TRICHLOROETHANE	.35940	.36900	2.67			

- Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

iff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/08/93

ntractor: LAB RESOURCES Time: 09:18

Contract No: Laboratory ID: >88924

strument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
BROMOCHLOROMETHANE	.73090	.82210	12.48			
BROMOFORM	.77450	.85137	9.92		**	
METHYL-2-PENTANONE	.45261	.52242	15.43			
LUENE-D8	1.08709	.90594	16.66			(Conc=50.00)
OLUENE	.63288	.74127	17.13	*		
TRACHLOROETHENE	.61071	.73514	20.37			
HEXANONE	.32551	.39913	22.62			
LOROBENZENE	.91141	1.05133	15.39		**	
THYLBENZENE	.42029	.47483	12.98	*		
P-XYLENE	.50982	.59321	16.36			(Conc=100.00)
-XYLENE	.50187	.59692	18.94			
STYRENE	.88897	1.02285	15.06			
BROMOFLUOROBENZENE	.96250	.84296	12.42			(Conc=50.00)
1,2,2-TETRACHLOROETHANE	.72300	.81869	13.23		**	
1,3-DICHLOROBENZENE	1.05973	1.22715	15.80			
4-DICHLOROBENZENE	1.08440	1.25329	15.57			
2-DICHLOROBENZENE	1.03826	1.25698	21.07			

F - Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

iff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/09/93

Contractor: LAB RESOURCES Time: 10:11

Contract No: Laboratory ID: >88941

Instrument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
HLOROMETHANE	.88354	.59684	32.45		**	
INYL CHLORIDE	.99943	.82854	17.10	*		
ROMOMETHANE	1.12336	1.08376	3.53			
LOROETHANE	.56632	.57989	2.40			
CROLEIN	.11596	.02318	79.94			(Conc=100.00)
ICHLOROFLUOROMETHANE	1.70215	1.98538	16.64			
1-DICHLOROETHENE	.91287	.86066	5.72	*		
ARBON DISULFIDE	1.91754	1.72773	9.90			
ETONE	.39875	.56504	41.70			
RYLONITRILE	.27597	.24454	11.39			
THYLENE CHLORIDE	1.06744	.96949	9.18			
RANS-1,2-DICHLOROETHENE	1.18422	1.14095	3.65			
THYL-TERT-BUTYL-ETHER	3.21560	3.72738	15.92			
RT-BUTYL-ALCOHOL	.20377	.28364	39.19			(Conc=100.00)
1,1-DICHLOROETHANE	2.09843	2.05969	1.85		**	
-ISOPROPYL-ETHER	4.29101	4.16269	2.99			
S-1,2-DICHLOROETHENE	1.77116	1.78493	.78			
HLOROFORM	2.61663	2.97897	13.85	*		
2-DICHLOROETHANE	1.83032	2.07622	13.43			
2-DICHLOROETHANE-D4	1.72147	1.82243	5.86			(Conc=50.00)
INYL ACETATE	1.09604	1.08561	.95			
-BUTANONE	.02986	.02763	7.45			
1,1-TRICHLOROETHANE	.61038	.77285	26.62			
ARBON TETRACHLORIDE	.61152	.76103	24.45			
ENZENE	.75180	.72268	3.87			
ICHLOROETHENE	.43964	.46360	5.45			
2-DICHLOROPROPANE	.30621	.25838	15.62	*		
ROMODICHLOROMETHANE	.63700	.72920	14.47			
-CHLOROETHYLVINYLETHER	.20801	.16968	18.43			
RANS-1,3-DICHLOROPROPENE	.55036	.53449	2.88			
IS-1,3-DICHLOROPROPENE	.47589	.45764	3.83			
1,2-TRICHLOROETHANE	.35940	.31531	12.27			

F - Response Factor from daily standard file at 50.00 UG/L

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

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/09/93

Contractor: LAB RESOURCES Time: 10:11

Contract No: Laboratory ID: >B8941

Instrument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
BROMOCHLOROMETHANE	.73090	.77675	6.27			
BROMOFORM	.77450	.83316	7.57		**	
METHYL-2-PENTANONE	.45261	.40038	11.54			
LUENE-D8	1.08709	.89304	17.85			(Conc=50.00)
OLUENE	.63288	.61947	2.12	*		
TRACHLOROETHENE	.61071	.68879	12.79			
HEXANONE	.32551	.29067	10.70			
LOROBENZENE	.91141	.90920	.24		**	
ETHYLBENZENE	.42029	.42016	.03	*		
-XYLENE	.50982	.53415	4.77			(Conc=100.00)
XYLENE	.50187	.50573	.77			
STYRENE	.88897	.87993	1.02			
ROMOFLUOROBENZENE	.96250	.86391	10.24			(Conc=50.00)
1,2,2-TETRACHLOROETHANE	.72300	.64898	10.24		**	
1,3-DICHLOROBENZENE	1.05973	1.16707	10.13			
-DICHLOROBENZENE	1.08440	1.18894	9.64			
-DICHLOROBENZENE	1.03826	1.11359	7.26			

- Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

ff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

ase No: Calibration Date: 03/10/93

ntractor: LAB. RESOURCES Time: 12:20

Contract No: Laboratory ID: >C8402

nstrument ID: 2824A11 191 Initial Calibration Date: 03/15/93

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
LOROMETHANE	.63982	.30568	52.22		**	
VINYL CHLORIDE	.81951	.47615	41.90	*		
OMOMETHANE	1.22430	.90273	26.27			
LOROETHANE	.48413	.34510	28.72			
ROLEIN	.07110	.06534	8.10			(Conc=100.00)
ICHLOROFLUOROMETHANE	2.18937	2.35275	7.46			
1-DICHLOROETHENE	.98764	.94779	4.04	*		
RBON DISULFIDE	2.29296	1.84146	19.69			
ETONE	.14548	.16129	10.87			
RYLONITRILE	.13002	.12534	3.60			
THYLENE CHLORIDE	1.12747	1.06544	5.50			
THYL-TERT-BUTYL-ETHER	2.50633	2.65157	5.79			
RT-BUTYL-ALCOHOL	.06126	.06967	13.73			(Conc=100.00)
ANS-1,2-DICHLOROETHENE	1.27160	1.25250	1.50			
-ISOPROPYL-ETHER	4.17452	3.87634	7.14			
1-DICHLOROETHANE	2.23851	2.09372	6.47		**	
S-1,2-DICHLOROETHENE	1.38994	1.38465	.38			
LOROFORM	3.22075	3.28927	2.13	*		
2-DICHLOROETHANE	1.91350	2.04575	6.91			
2-DICHLOROETHANE-D4	1.49980	1.69998	13.35			
NYL ACETATE	.82868	.80142	3.29			
-BUTANONE	.05392	.05339	.98			
1,1-TRICHLOROETHANE	.66554	.73957	11.12			
RBON TETRACHLORIDE	.66007	.74002	12.11			
NZENE	.75578	.74731	1.12			
ICHLOROETHENE	.46993	.50488	7.44			
2-DICHLOROPROPANE	.30556	.28193	7.73	*		
OMODICHLOROMETHANE	.75721	.78872	4.16			
CHLOROETHYLVINYLETHER	.14392	.14073	2.21			
ANS-1,3-DICHLOROPROPENE	.52643	.53413	1.46			
S-1,3-DICHLOROPROPENE	.50136	.50286	.30			
1,2-TRICHLOROETHANE	.29534	.30858	4.49			

- Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

iff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

se No: Calibration Date: 03/10/93

ntractor: LAB. RESOURCES Time: 12:20

Contract No: Laboratory ID: >C8402

strument ID: 2824A11 191 Initial Calibration Date: 03/15/93

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
BROMOCHLOROMETHANE	.72829	.75828	4.12			
BROMOFORM	.55138	.57928	5.06		**	
METHYL-2-PENTANONE	.21382	.12478	41.64			
LUENE-D8	1.06143	1.06133	.01			
JLUENE	.70266	.68115	3.06	*		
TRACHLOROETHENE	.56863	.62891	10.60			
HEXANONE	.12316	.12478	1.32			
LOROBENZENE	1.01451	1.01650	.20		**	
ETHYLBENZENE	.46449	.45423	2.21	*		
P-XYLENE	.57982	.58100	.20			(Conc=100.00)
KYLENE	.56094	.55763	.59			
YRENE	.99585	.98834	.75			
BROMOFLUOROBENZENE	.99606	.85826	13.83			
1,2,2-TETRACHLOROETHANE	.47021	.46347	1.43		**	
3-DICHLOROBENZENE	1.13910	1.21987	7.09			
4-DICHLOROBENZENE	1.18831	1.20570	1.46			
2-DICHLOROBENZENE	1.07954	1.14586	6.14			

- Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

iff - % Difference from original average or curve

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

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/08/93

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	OTHER	TOT OUT
METHOD BLA	S	87	100	95		0
T302351-01	S	100	120*	79		1
071-03 MS	S	101	100	94		0
071-03MSD	S	101	102	89		0
T303072-02	S	112	106	91		0
T303071-02	S	117	99	100		0
T303071-03	S	117	101	103		0
T303047-01	S	119	101	103		0

EPA CLP QC Limits For:	Soil	Water
S1 (DCE) = 1,2-DICHLOROETHANE-D4	70-121	76-114
S2 (TOL) = TOLUENE-D8	81-117	88-110
S3 (BFB) = 4-BROMOFLUOROBENZENE	74-121	86-115

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/09/93

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	OTHER	TOT OUT
METHOD BLA	S	99	99	97		0
T302351-01	S	94	108	87		0
T302334-08	S	104	105	93		0
T302359-03	S	99	100	95		0
T303072-01	S	102	101	97		0
T303071-04	S	99	103	90		0
T303047-03	S	100	101	95		0
T303047-04	S	98	100	96		0
MS	S	98	100	96		0
MSD	S	97	102	97		0
T303095-01	S	100	113	98		0

EPA CLP QC Limits For:	Soil	Water
S1 (DCE) = 1,2-DICHLOROETHANE-D4	70-121	76-114
S2 (TOL) = TOLUENE-D8	81-117	88-110
S3 (BFB) = 4-BROMOFLUOROBENZENE	74-121	86-115

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/10/93

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	OTHER	TOT OUT
METHOD BLA	W	96	100	99		0
MED LEVEL	S	97	101	98		0
T303042-01	W	96	98	98		0
T303042-02	W	97	97	98		0
T303104-03	W	100	101	96		0
T303111-03	W	101	98	99		0
T303071-01	S	98	107	102		0
T303072-03	W	102	98	100		0
T303111-03	WM	99	102	97		0
T303111-03	WM	101	99	98		0

EPA CLP QC Limits For:	Soil	Water
S1 (DCE) = 1,2-DICHLOROETHANE-D4	70-121	76-114
S2 (TOL) = TOLUENE-D8	81-117	88-110
S3 (BFB) = 4-BROMOFLUOROBENZENE	74-121	86-115

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits

LABORATORY RESOURCES INC.

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Name: Laboratory Resources Contract:

Code: Case No.: SAS No.: DATE : 03/08/93

Matrix Spike - EPA Sample No.: T303071-03 Level: LOW

COMPOUNDS	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-DICHLOROETHENE	50.00	0.00	51.82	104	59-172
BENZENE	50.00	0.00	49.06	98	66-142
TRICHLOROETHENE	50.00	0.00	47.05	94	62-137
TOLUENE	50.00	0.00	48.10	96	59-139
CHLOROBENZENE	50.00	0.00	49.94	100	60-133

COMPOUNDS	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-DICHLOROETHENE	50.00	59.03	118	13	22	59-172
BENZENE	50.00	57.15	114	15	21	66-142
TRICHLOROETHENE	50.00	50.84	102	8	24	62-137
TOLUENE	50.00	52.20	104	8	21	59-139
CHLOROBENZENE	50.00	52.71	105	5	21	60-133

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

Values outside of advisory EPA contract Lab QC limits.

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

Comments: _____

_____

FORM III VOA-2 Rev. 7/89

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8924 Lab Sample ID: 50 PPB VOA

Date Analyzed: 03/08/93 Time Analyzed: 09:18

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	32423	8.89	129232	11.08	105658	16.79
UPPER LIMIT	64846		258464		211316	
LOWER LIMIT	16212		64616		52829	
LAB SAMPLE #						
METHOD BLA	39781	8.88	159884	11.08	131464	16.78
T302351-01	26931	8.88	86034	11.08	46787*	16.78
071-03 MS	35821	8.90	156514	11.11	124568	16.80
071-03MSD	34999	8.90	141751	11.09	135187	16.80
T303072-02	29484	8.88	112215	11.09	86660	16.79
T303071-02	23429	8.89	93339	11.11	80631	16.80
T303071-03	26226	9.30	104905	11.48	87167	17.13
T303047-01	27093	8.88	110050	11.09	93526	16.79

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

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

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8941 Lab Sample ID: 50 PPB VOA

Date Analyzed: 03/09/93 Time Analyzed: 10:11

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	30911	8.88	115599	11.08	96328	16.79
UPPER LIMIT	61822		231198		192656	
LOWER LIMIT	15456		57800		48164	
LAB SAMPLE #						
METHOD BLA	32555	8.87	133567	11.07	113059	16.79
T302351-01	27008	8.87	88589	11.07	61148	16.78
T302334-08	22747	8.87	88227	11.08	66776	16.78
T302359-03	33727	8.93	135937	11.13	115512	16.82
T303072-01	25896	8.99	106092	11.17	89577	16.84
T303071-04	27025	8.91	105774	11.10	85820	16.80
T303047-03	28669	8.89	115237	11.09	98776	16.80
T303047-04	29547	8.94	119433	11.13	101285	16.82
MS	29900	8.94	124768	11.13	105015	16.83
MSD	31708	8.92	128803	11.12	107123	16.81
T303095-01	27998	8.92	114114	11.12	87462	16.81

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

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

olumn used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >C8402 Lab Sample ID: VSTD 50 PP

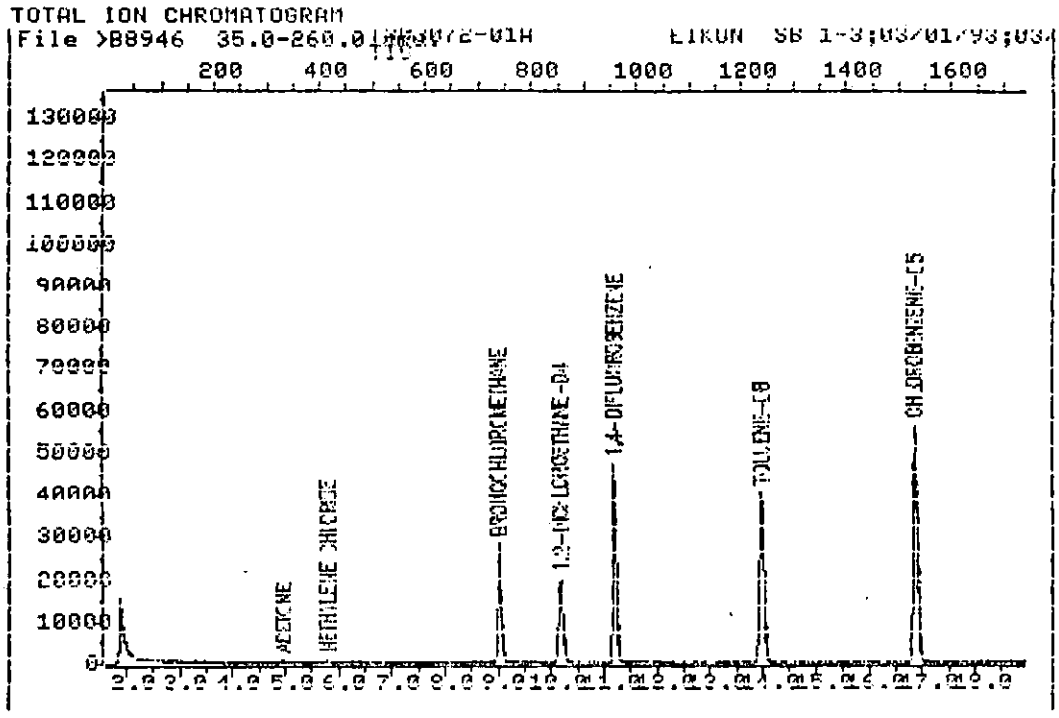
Date Analyzed: 03/10/93 Time Analyzed: 12:20

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	40281	7.46	167902	9.79	142764	15.46
UPPER LIMIT	80562		335804		285528	
LOWER LIMIT	20141		83951		71382	
LAB SAMPLE #						
METHOD BLA	39861	7.44	170578	9.77	142273	15.47
MED LEVEL	39197	7.47	169029	9.80	140968	15.47
T303042-01	39952	7.47	173084	9.78	144954	15.45
T303042-02	40547	7.47	171421	9.78	149813	15.47
T303104-03	35791	7.45	157190	9.77	131647	15.47
T303111-03	35453	7.46	153940	9.80	132936	15.47
T303071-01	39407	7.47	172719	9.79	143862	15.46
T303072-03	37764	7.44	160305	9.80	137804	15.51
T303111-03M	35167	7.48	155981	9.89	128946	15.63
T303111-03M	35017	7.48	150155	9.81	130118	15.50

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

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

olumn used to flag internal standard are values with an asterisk



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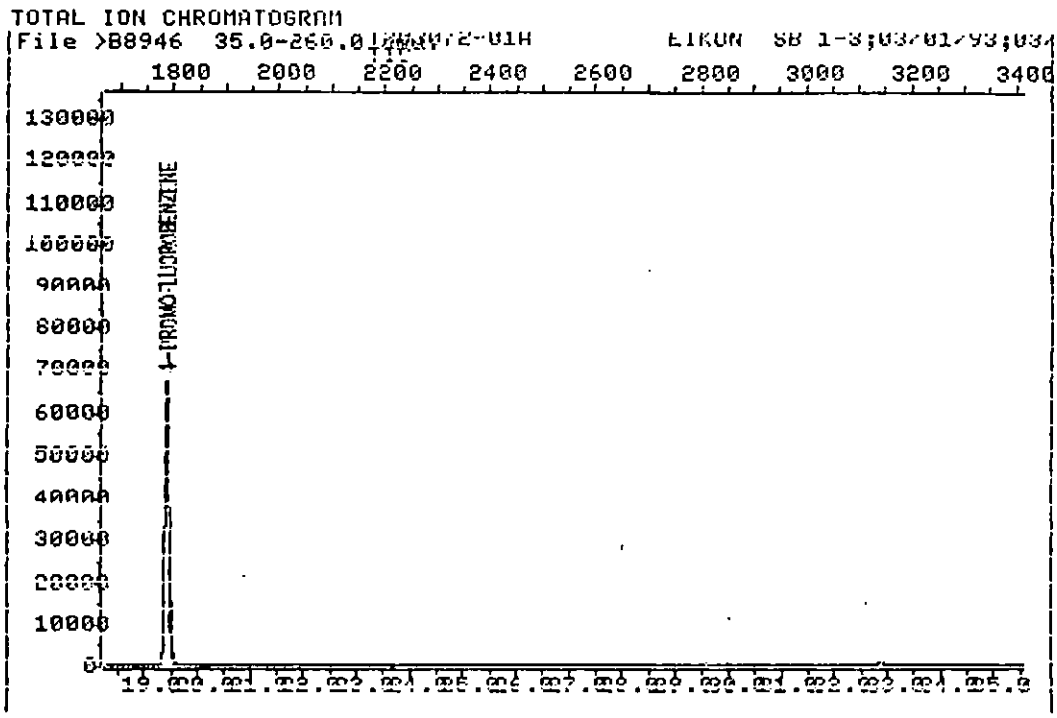
Misc: EIKON SB 1-3;03/01/93;03/03/93

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

Operator ID: ED
Quant Time : 930309 15:22
Injected at: 930309 14:37

Page 1 of 2



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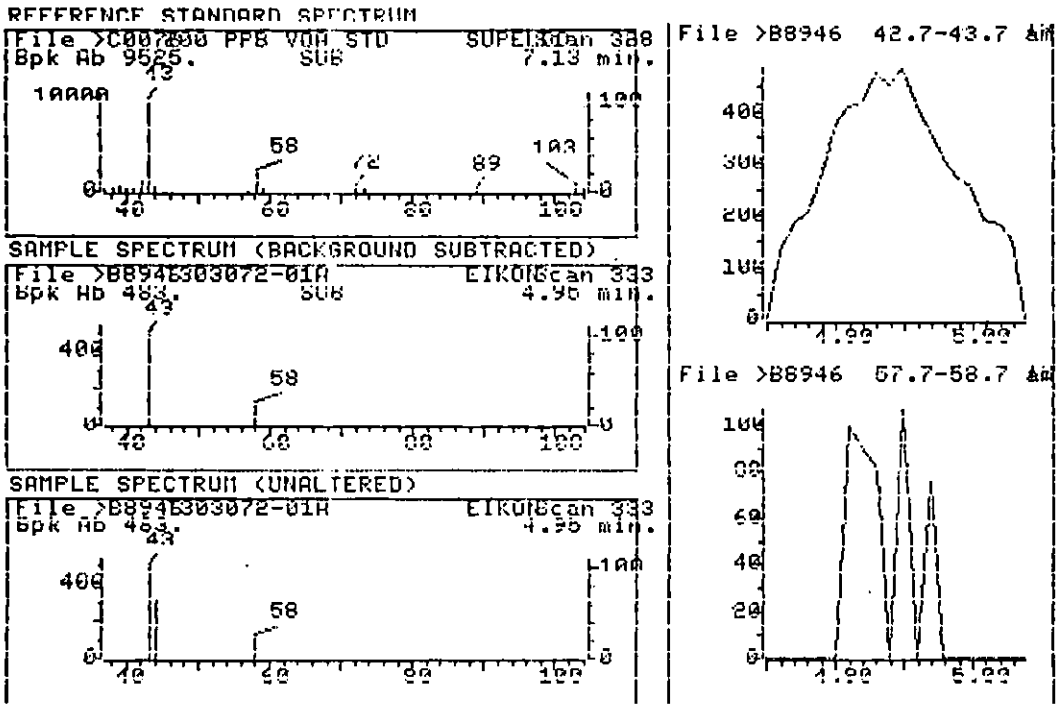
Name: T303072-01A Instrument ID: B
Misc: EIKON SB 1-3;03/01/93;03/03/93

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

Operator ID: ED
Quant Time : 930309 15:22
Injected at: 930309 14:37



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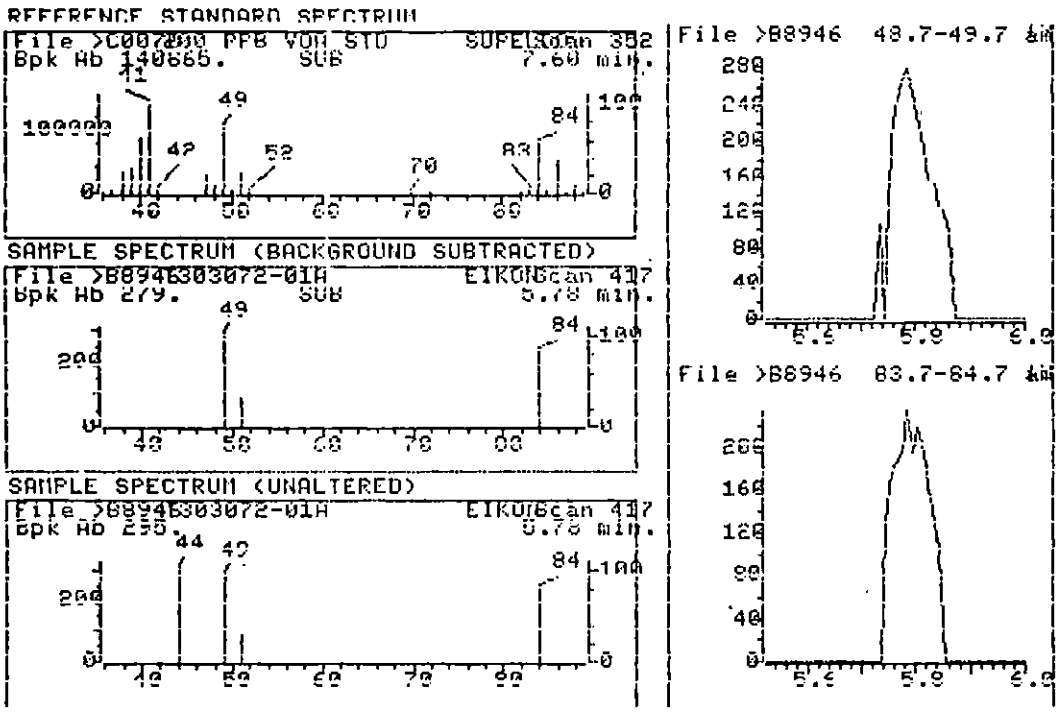
Name: T303072-01A Instrument ID: B
Misc: EIKON SB 1-3:03/01/93;03/03/93
Quant Time: 930309 15:22 Quant ID File: IDDSUD::C4
Injected at: 930309 14:37 Last Calibration: 930224 17:25
Last Qcal Time: 930309 10:11

Compound No : 10
Compound Name : ACETONE
Scan Number : 333
Retention Time: 4.95 min.
Quant Ion : 43.0
Area : 3308
Concentration : 11.30 UG/L
q-value : 90



Data File: >B8946::B2 Quant Output File: ^B8946::QT
Name: T303072-01A Instrument ID: B
Misc: EIKON SB 1-3:03/01/93:03/03/93
Quant Time: 930309 15:22 Quant ID File: IDDSVO::C4
Injected at: 930309 14:37 Last Calibration: 930224 17:25
Last Qcal Time: 930309 10:11

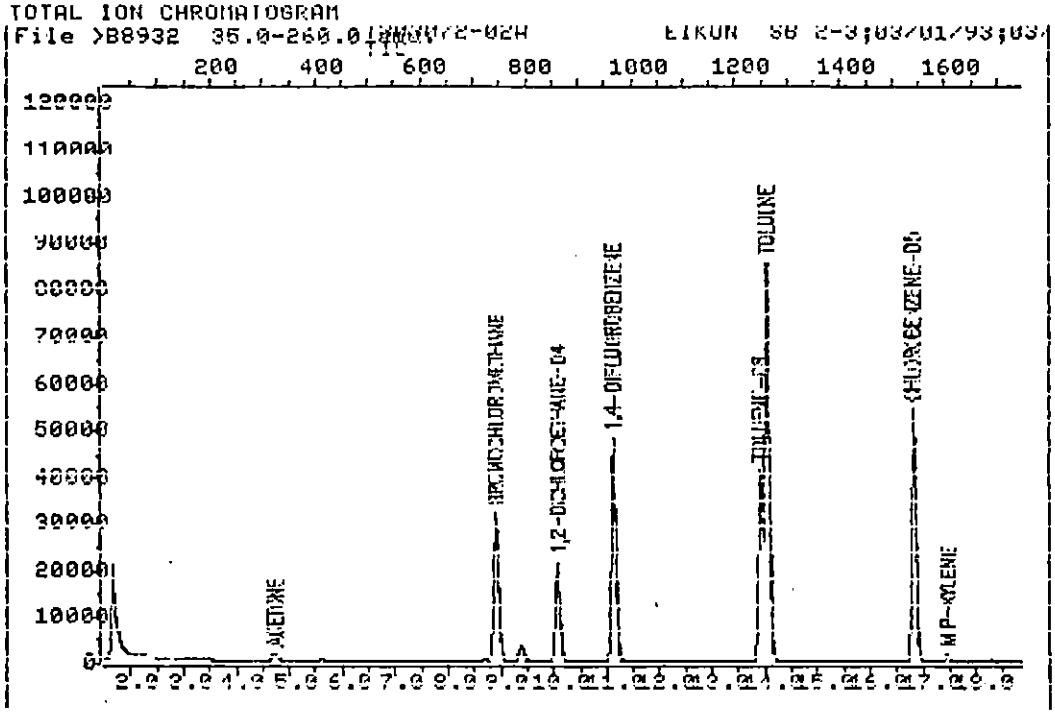
Compound No : 12
Compound Name : METHYLENE CHLORIDE
Scan Number : 417
Retention Time: 5.78 min.
Quant Ion : 84.0
Area : 1150M
Concentration : 2.29 UG/L
q-value : 96

Operator ID: ED Quant Rev: 7 Quant Time: 930309 15:22
Output File: ^B8946::QT Injected at: 930309 14:37
Data File: >B8946::B2 Dilution Factor: 1.00000
Name: T303072-01A Instrument ID: B
Misc: EIKON SB 1-3:03/01/93:03/03/93

ID File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	8.99	127.9	25896	50.00	UG/L	91
10)	ACETONE	4.95	43.0	3308	11.30	UG/L	90
12)	METHYLENE CHLORIDE	5.78	84.0	1150M	2.29	UG/L	96
21)	1,2-DICHLOROETHANE-D4	10.16	65.0	48119	50.98	UG/L	95
22)	*1,4-DIFLUOROBENZENE	11.17	114.0	106092	50.00	UG/L	99
37)	*CHLOROBENZENE-D5	16.84	117.0	89577	50.00	UG/L	95
39)	TOLUENE-D8	13.96	98.0	80541	50.34	UG/L	94
48)	4-BROMOFLUOROBENZENE	19.42	95.0	75334	48.67	UG/L	97

* Compound is ISTD



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Name: T303072-02A Instrument ID: B
Misc: EIKON SB 2-3;03/01/93;03/03/93

Id File: IDDSVO::C4
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Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 16:46
Injected at: 930308 16:03

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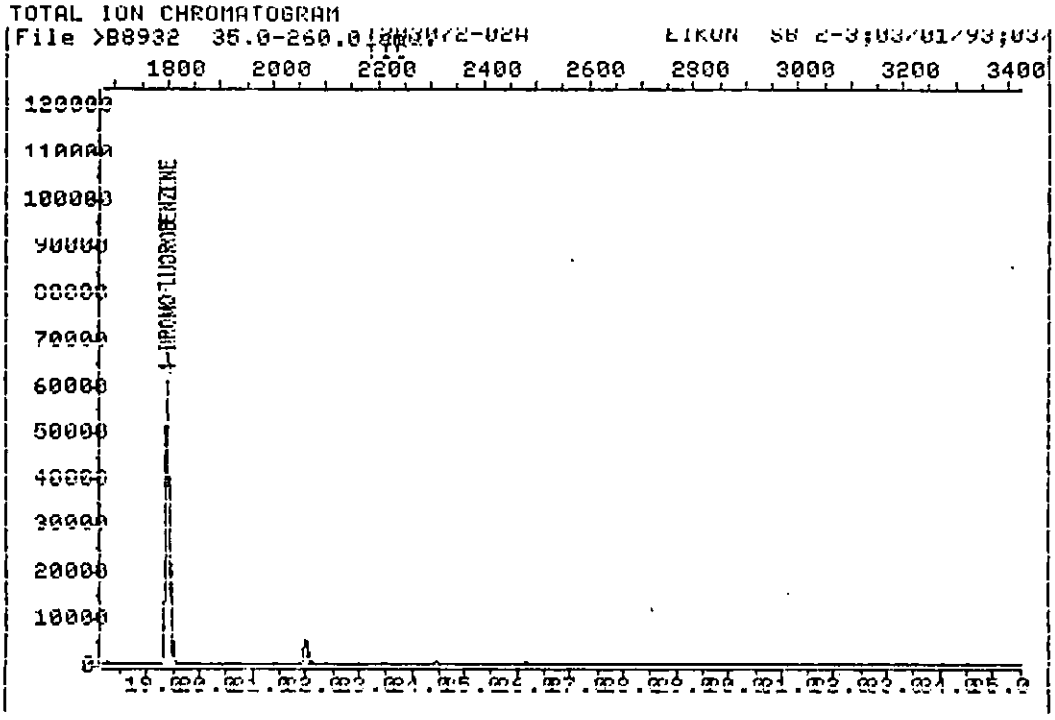

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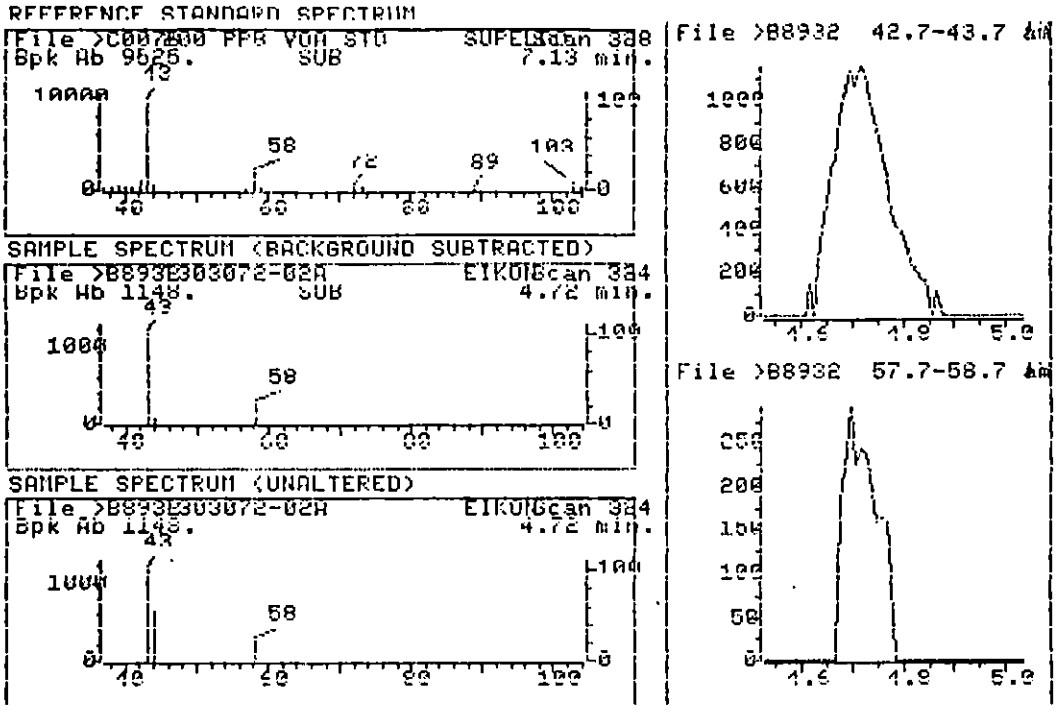
Misc: EIKUN SB 2-3;03/01/93;03/03/93

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 16:46
Injected at: 930308 16:03

Page 2 of 2



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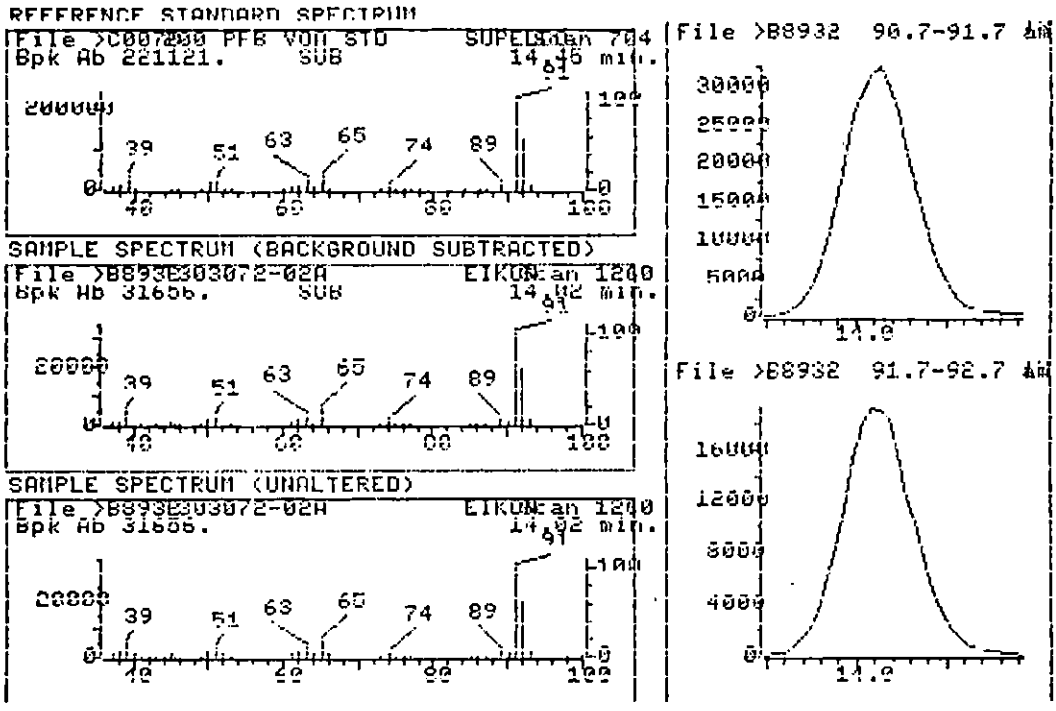
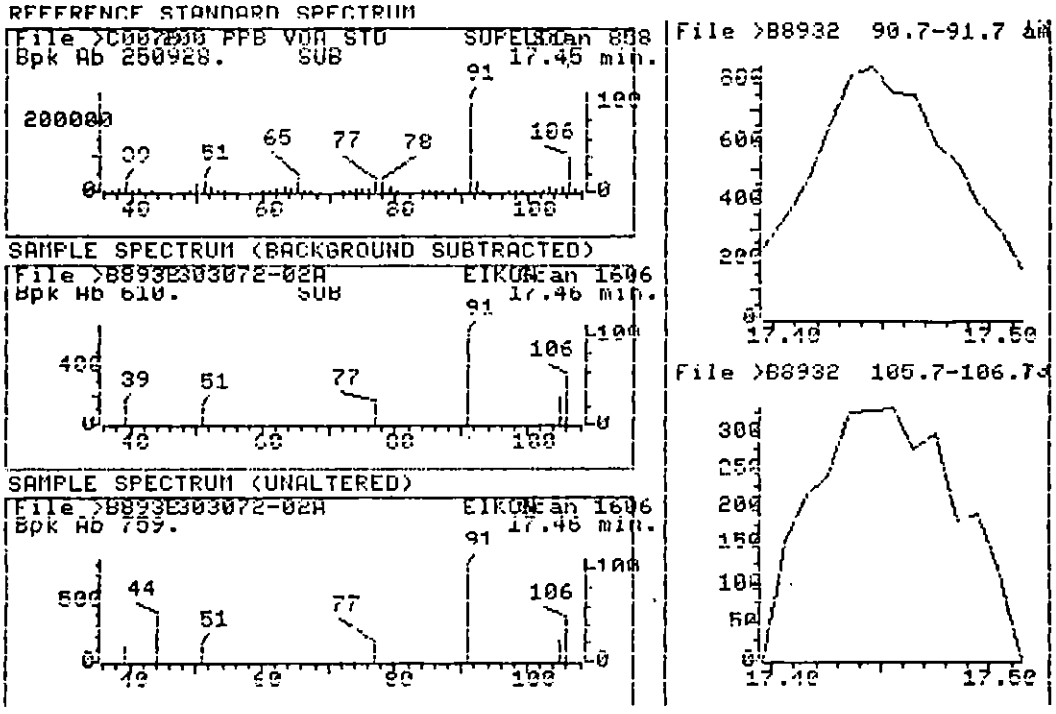
Name: T303072-02A Instrument ID: B
Misc: EIKON SB 2-3;03/01/93;03/03/93
Quant Time: 930308 16:46 Quant ID File: IDDSVO::C4
Injected at: 930308 16:03 Last Calibration: 930224 17:25
Last Qcal Time: 930308 09:18

Compound No : 10
Compound Name : ACETONE
Scan Number : 324
Retention Time: 4.72 min.
Quant Ion : 43.0
Area : 8672M
Concentration : 18.11 UG/L
q-value : 72



Data File: >B8932::B2 Quant Output File: ^B8932::QT
Name: T303072-02A Instrument ID: B
Misc: EIKON SB 2-3;03/01/93:03/03/93
Quant Time: 930308 16:46 Quant ID File: IDDSVO::C4
Injected at: 930308 16:03 Last Calibration: 930224 17:25
Last Qcal Time: 930308 09:18

Compound No : 40
Compound Name : TOLUENE
Scan Number : 1260
Retention Time: 14.02 min.
Quant Ion : 92.0
Area : 108331
Concentration : 84.32 UG/L
q-value : 96



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Name: T303072-02A Instrument ID: B
Misc: EIKON SB 2-3;03/01/93;03/03/93
Quant Time: 930308 16:46 Quant ID File: IDDSVO::C4
Injected at: 930308 16:03 Last Calibration: 930224 17:25
Last Qcal Time: 930308 09:18

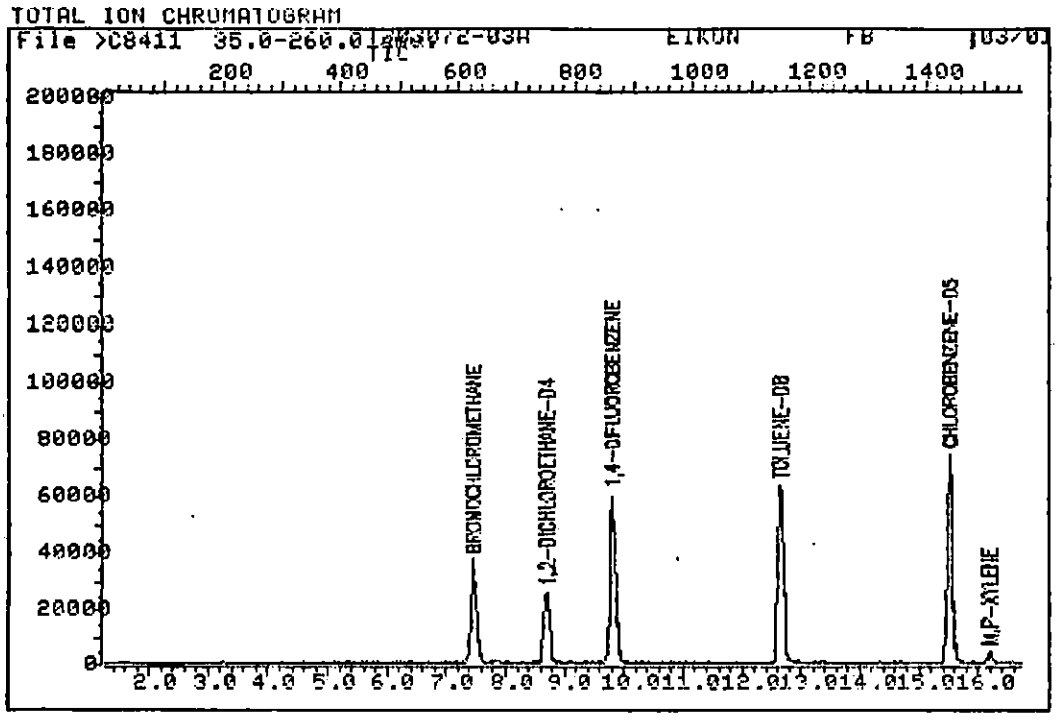
Compound No : 45
Compound Name : M,P-XYLENE
Scan Number : 1606
Retention Time: 17.46 min.
Quant Ion : 106.0
Area : 1575
Concentration : 1.53 UG/L
q-value : 78

Operator ID: ED Quant Rev: 7 Quant Time: 930308 16:46
Output File: ^B8932::QT Injected at: 930308 16:03
Data File: >B8932::B2 Dilution Factor: 1.00000
Name: T303072-02A Instrument ID: B
Misc: EIKON SB 2-3;03/01/93;03/03/93

ID File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*BROMOCHLOROMETHANE	8.88	127.9	29484	50.00	UG/L	
10)	ACETONE	4.72	43.0	8672M	18.11	UG/L	
21)	1,2-DICHLOROETHANE-D4	10.06	65.0	51036	56.13	UG/L	
22)	*1,4-DIFLUOROBENZENE	11.09	114.0	112215	50.00	UG/L	
37)	*CHLOROBENZENE-D5	16.79	117.0	86660	50.00	UG/L	
39)	TOLUENE-D8	13.90	98.0	82933	52.82	UG/L	
40)	TOLUENE	14.02	92.0	108331	84.32	UG/L	
45)	M,P-XYLENE	17.46	106.0	1575	1.53	UG/L	
48)	4-BROMOFLUOROBENZENE	19.36	95.0	66541	45.54	UG/L	

* Compound is ISTD



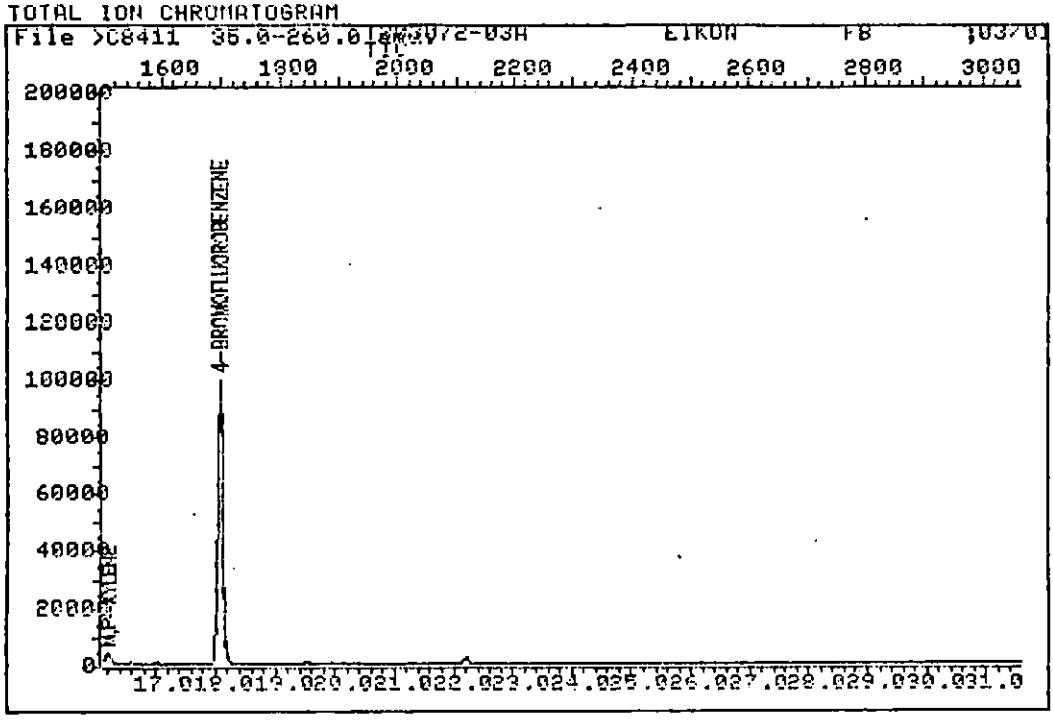
Data File: >C8411::C3 Quant Output File: ^C8411::QT
Name: T303072-03A Instrument ID: C
Misc: EIKON FB ;03/01/93;03/03/93

Id File: IDDVOC::SC
Title: LABURATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 19:35
Injected at: 930310 19:03

Page 1 of 2

TOTAL ION CHROMATOGRAM



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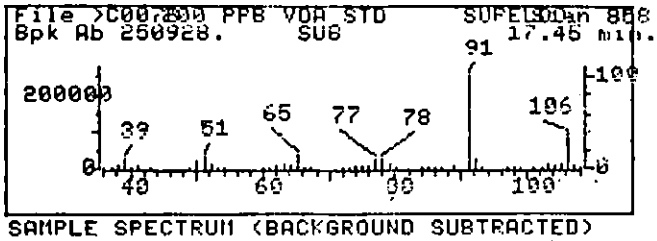
Name: T3030/2-03A Instrument ID: C
Misc: EIKON FB ;03/01/93;03/03/93

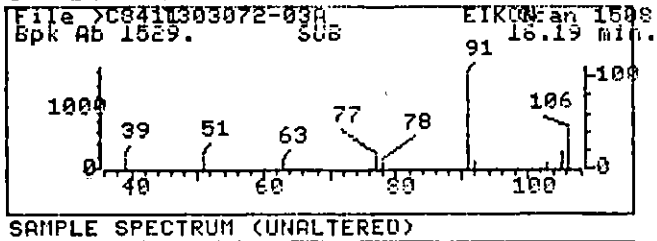
Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 19:35
Injected at: 930310 19:03

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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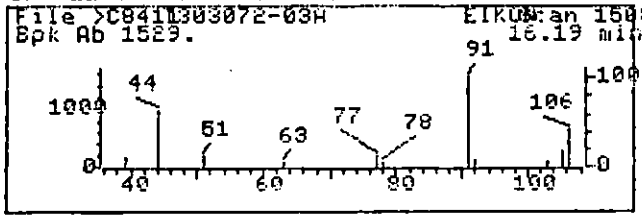
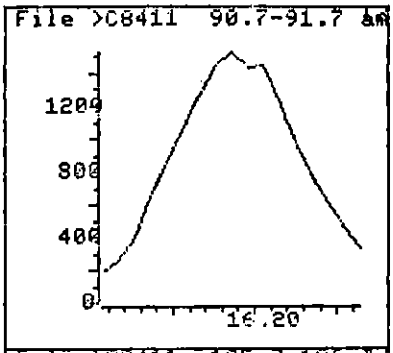
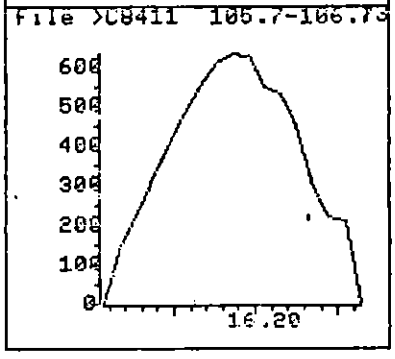






Data File: >C8411::C3 Quant Output File: ^C8411::QT
Name: T303072-03A Instrument ID: C
Misc: EIKON FB ;03/01/93;03/03/93
Quant Time: 930310 19:35 Quant ID File: IDDVOC::SC
Injected at: 930310 19:03 Last Calibration: 930215 15:35
Last Qcal Time: 930310 12:20

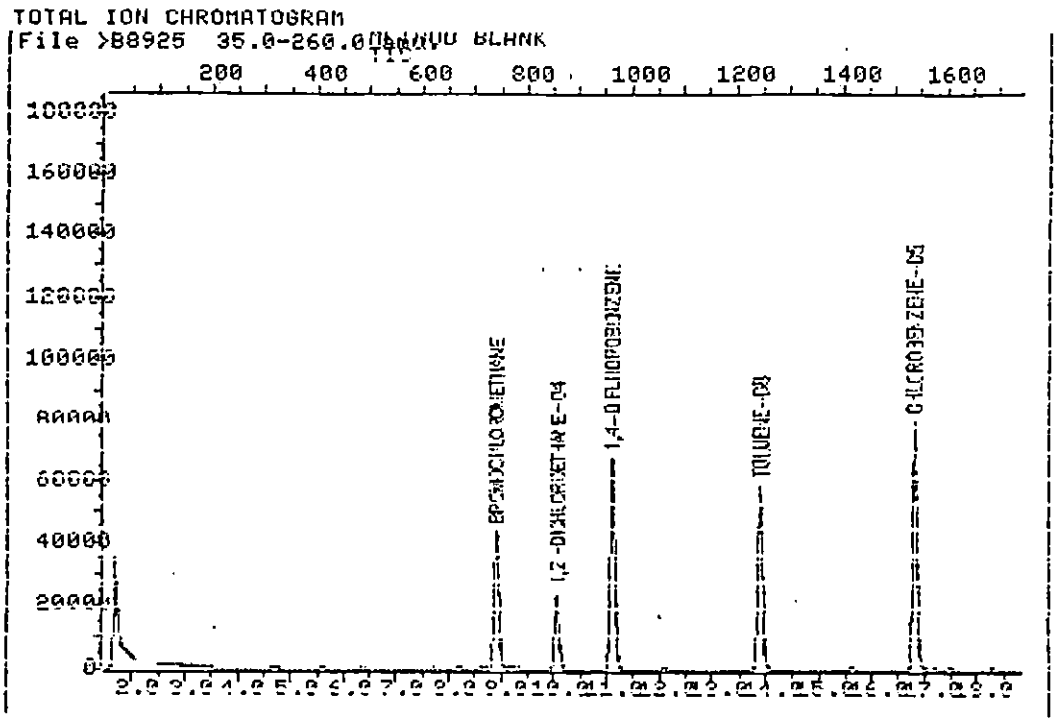
Compound No : 45
Compound Name : M,P-XYLENE
Scan Number : 1508
Retention Time: 16.19 min.
Quant Ion : 106.0
Area : 3700
Concentration : 2.31 UG/L
q-value : 89

Operator ID: ANDY Quant Rev: 7 Quant Time: 930310 19:35
Output File: ^C8411::QT Injected at: 930310 19:03
Data File: >C8411::C3 Dilution Factor: 1.00000
Name: T303072-03A Instrument ID: C
Misc: EIKON FB ;03/01/93;03/03/93

ID File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	7.44	128.0	37764	50.00	UG/L	92
21)	1,2-DICHLOROETHANE-D4	8.70	65.0	65515	51.03	UG/L	97
22)	*1,4-DIFLUOROBENZENE	9.80	114.0	160305	50.00	UG/L	90
37)	*CHLOROBENZENE-D5	15.51	117.0	137804	50.00	UG/L	87
39)	TOLUENE-D8	12.64	98.0	143819	49.17	UG/L	97
45)	M,P-XYLENE	16.19	106.0	3700	2.31	UG/L	89
48)	4-BROMOFLUOROBENZENE	18.05	95.0	117714	49.76	UG/L	92

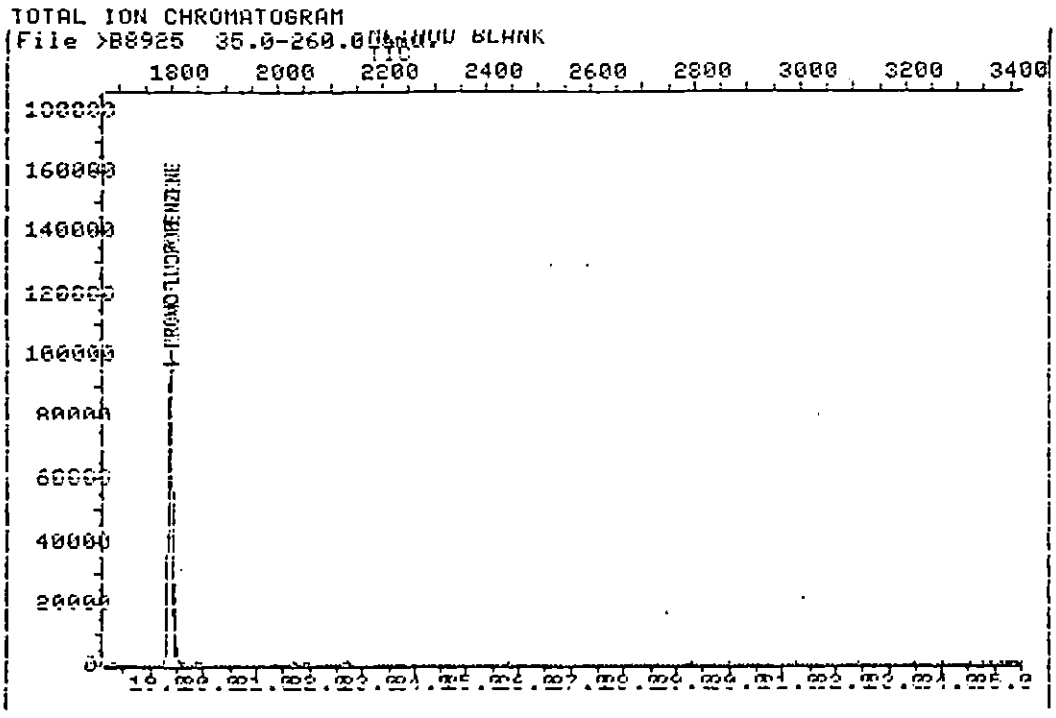
* Compound is ISTD



Data File: >B8925::B2 Quant Output File: ^B8925::QT
Name: METHOD BLANK Instrument ID: B
Misc:

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 10:48
Injected at: 930308 10:04



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Name: METHOD BLANK Instrument ID: B
Misc:

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

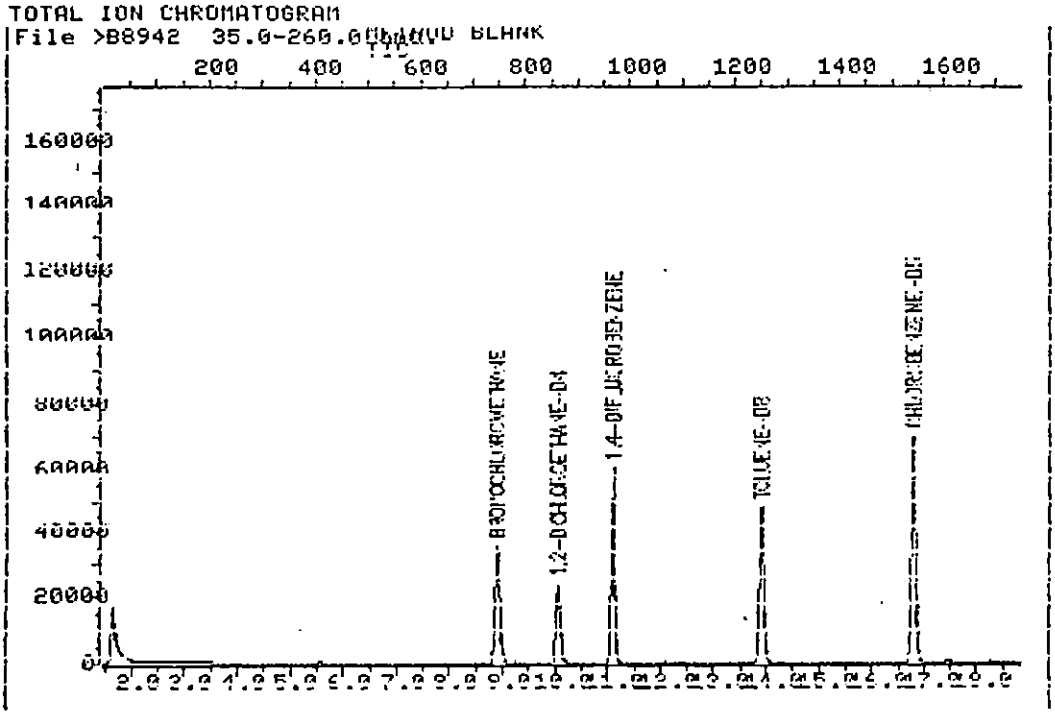
Operator ID: ED
Quant Time : 930308 10:48
Injected at: 930308 10:04

Operator ID: ED Quant Rev: 7 Quant Time: 930308 10:48
Output File: ^B8925::QT Injected at: 930308 10:04
Data File: >B8925::B2 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: B
Misc:

ID File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	8.88	127.9	39781	50.00	UG/L	9
21)	1,2-DICHLOROETHANE-D4	10.05	65.0	53343	43.48	UG/L	9
22)	*1,4-DIFLUOROBENZENE	11.08	114.0	159884	50.00	UG/L	9
37)	*CHLOROBENZENE-D5	16.78	117.0	131464	50.00	UG/L	9
39)	TOLUENE-D8	13.89	98.0	119629	50.22	UG/L	9
48)	4-BROMOFLUOROBENZENE	19.36	95.0	105664	47.67	UG/L	9

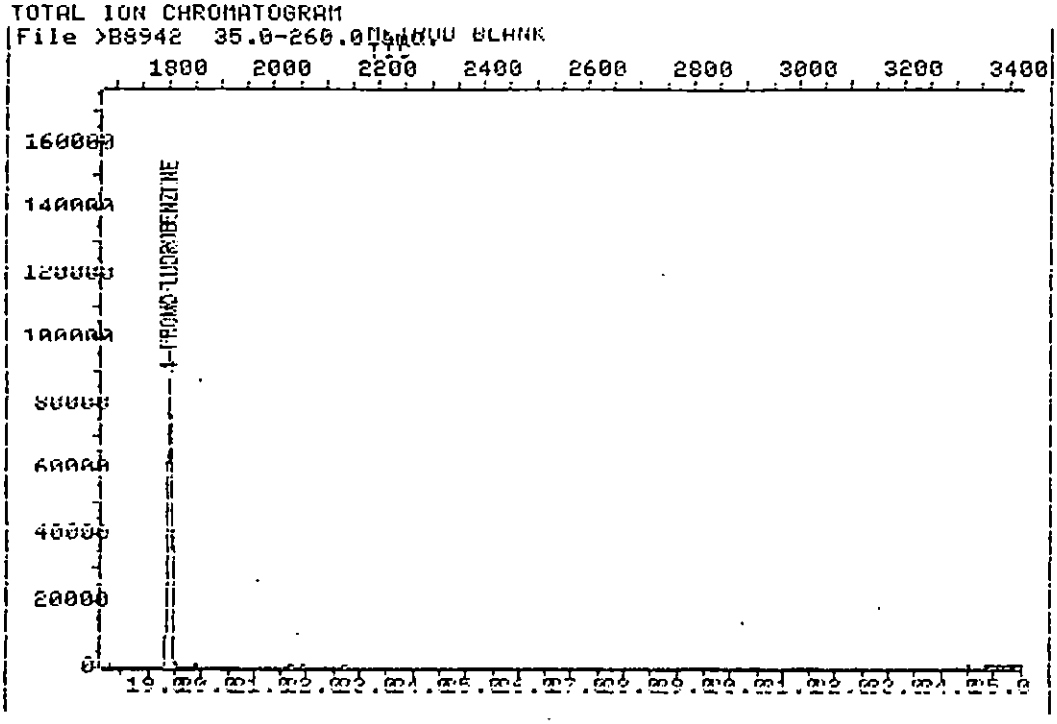
* Compound is ISTD



Data File: >B8942::B2 Quant Output File: ^B8942::QT
Name: METHOD BLANK Instrument ID: B
Misc:

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

Operator ID: ED
Quant Time : 930309 12:12
Injected at: 930309 11:28



Data File: >B8942::B2 Quant Output File: ^B8942::QT
Name: METHOD BLANK Instrument ID: 8
Misc:

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

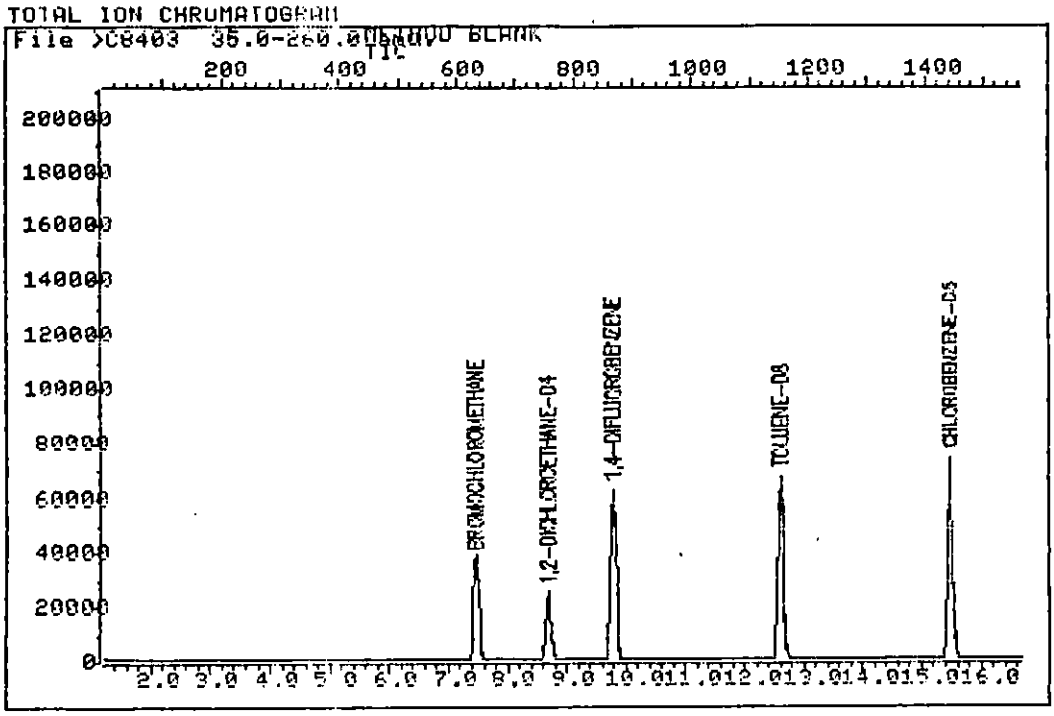
Operator ID: ED
Quant Time : 930309 12:12
Injected at: 930309 11:28

Operator ID: ED Quant Rev: 7 Quant Time: 930309 12:12
Output File: ^B8942::QT Injected at: 930309 11:28
Data File: >B8942::B2 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: B
Misc:

ID File: IDOSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	8.87	127.9	32555	50.00	UG/L	97
21)	1,2-DICHLOROETHANE-D4	10.04	65.0	59006	49.73	UG/L	95
22)	*1,4-DIFLUOROBENZENE	11.07	114.0	133567	50.00	UG/L	98
37)	*CHLOROBENZENE-D5	16.79	117.0	113059	50.00	UG/L	96
39)	TOLUENE-D8	13.89	98.0	99950	49.50	UG/L	96
48)	4-BROMOFLUOROBENZENE	19.35	95.0	94352	48.30	UG/L	90

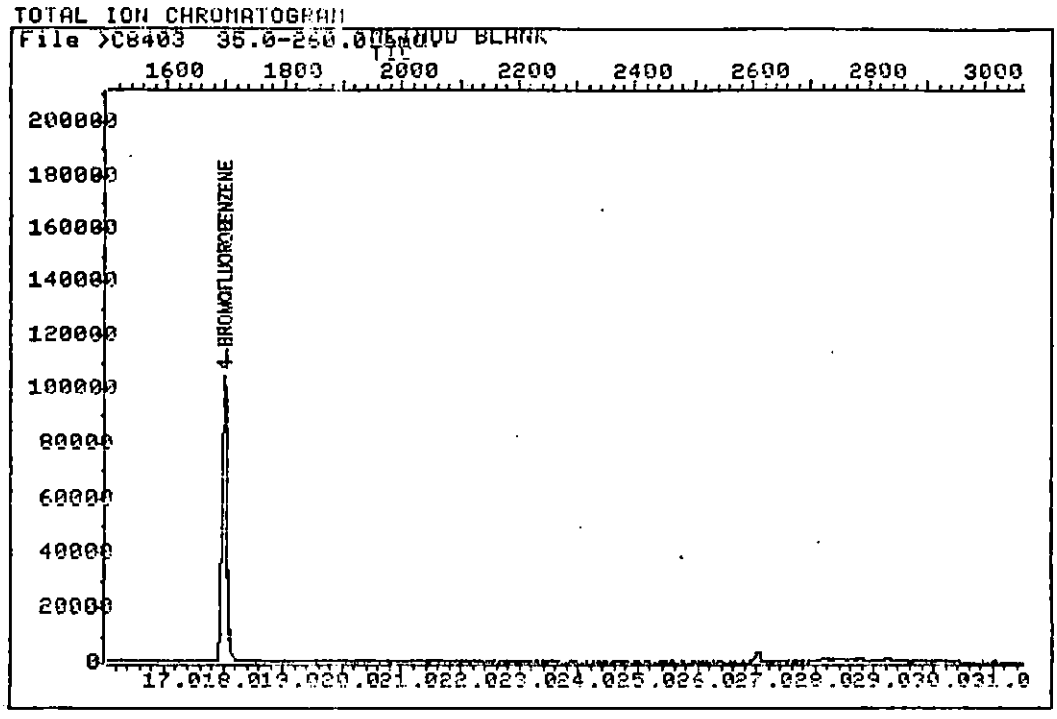
* Compound is ISTD



Data File: >C8403::C3 Quant Output File: ^C8403::QT
Name: METHOD BLANK Instrument ID: C
Misc:

Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 14:04
Injected at: 930310 13:32



Data File: >C8403::C3 Quant Output File: ^C8403::QT
Name: METHOD BLANK Instrument ID: C
Misc:

Id File: IDDVLC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 14:04
Injected at: 930310 13:32

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Operator ID: ANDY Quant Rev: 7 Quant Time: 930310 14:04
Output File: ^C8403::QT Injected at: 930310 13:32
Data File: >C8403::C3 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: C
Misc:

ID File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	7.44	128.0	39861	50.00	UG/L	91
21)	1,2-DICHLOROETHANE-D4	8.67	65.0	65265	48.16	UG/L	95
22)	*1,4-DIFLUOROBENZENE	9.77	114.0	170578	50.00	UG/L	89
37)	*CHLOROBENZENE-D5	15.47	117.0	142273	50.00	UG/L	89
39)	TOLUENE-D8	12.60	98.0	151409	50.14	UG/L	96
48)	4-BROMOFLUOROBENZENE	18.01	95.0	120563	49.37	UG/L	92

* Compound is ISTD

Laboratory Resources INC.

100 Hollister Road
Teterboro, New Jersey 07608-1111
(201) 288-3700 • FAX: (201) 288-5311

NJ Certification # 02046
NY Certification # 10588

Eikon Planning & Design
221 High St
Hackettstown, NJ 07840

Attn: Raul Dequina

Date of Report: 04/07/93
Work Order #: T3-03-072
Date Received: 03/03/93
Client #: 090112
P.O./Project #: 880789

PARAMETER	SB 1-3	SB 2-3
SOLIDS, TOTAL %	96.8	85.9

Stephanie Majeski
Laboratory Manager
for Kenneth Vail

072

All results expressed as mg/L unless otherwise stated

Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700 800-729-0852

APR 09 1993

LABORATORY ANALYSIS REPORT

Client: Eikon Planning & Design
221 High Street, P.O. Box 469
Hackettstown, NJ 07840

Project Manager: Andreas Eisenberger

Project: Plainview
Plainview, NJ

Laboratory Report #: T303071

Lab ID No.:	Sample Reference	Matrix	Collection Date & Time
T303071-01	SB3-3	Soil	03/02/93 08:50
T303071-02	SB4-3	Soil	03/02/93 12:50
T303071-03	SS2-3	Soil	03/02/93 15:35
T303071-04	SS3-3	Soil	03/02/93 15:45
T303071-05	FB 3-2-93	Aqueous	03/02/93 17:15

Date Received: March 3, 1993

Date of Report: April 7, 1993

N.J. Certification #02046
N.Y. Certification #10588

for Kenneth Vara
Systems Manager

TABLE OF CONTENTS

BILLING INFORMATION

CUSTOMER: EIKON PLANNING & DESIGN CORP.
ADDRESS: P.O. BOX 469, 221 HIGH ST.
HACKETTSTOWN, NJ 07840
PROJECT: PLAINVIEW
PROJECT MANAGER: ANDREAS EISENBERGER
PROJECT LOCATION: PLAINVIEW STATE: NY
PO NUMBER: DDB

REPORT INFORMATION

SEND REPORT TO: ANDREAS EISENBERGER
DATE REPORT REQUIRED: 3/28/93
RUSH RESULTS: FAX (908) 813-8360

PROJECT INFORMATION

DELIVERABLES/REGULATION (PLEASE INDICATE): TIER II
TURNAROUND (INDICATE CALENDAR DAYS. CONFIRM WITH LAB): NAME OF PERSON CONFIRMING: 21 days
IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:
NAME: ANDREAS EISENBERGER
TELEPHONE: (908) 813-2313

ANALYTICAL REQUESTS

LAB ID CODE	SAMPLE IDENTIFICATION	NO. BOTTLES	COLLECTED DATE	COLLECTED TIME	SAMPLE TYPE: COMPOSITE	SAMPLE TYPE: GRAB	SAMPLE MATRIX: SOLID	SAMPLE MATRIX: LIQUID	SAMPLE MATRIX: PHASIC	SAMPLE MATRIX: SLUDGE	SAMPLE MATRIX: OTHER	ANALYSES	$HaSO_4$	NaOH	HCl	HNO_3	OTHER
-01	SB3-3	1	3-2-93	8:50		X	X					VOA+15, TOTAL XYLENES					
-02	SB4-3	1	3-2-93	12:50		X	X					VOA+15, TOTAL XYLENES					
-03	SS2-3	2	3-2-93	15:35		X	X					VOA+15, TOTAL XYLENES, TCLP-VOA (6&7+25) P.P. Metals					
-04	SS3-3	2	3-2-93	15:45		X	X					VOA+15, TOTAL XYLENES, TCLP-VOA (6&7+25) P.P. Metals					
-05	FLD BLK, 3-2-93	3	3-2-93	17:15		X		X				VOA+15, TOTAL XYLENES			X		

CUSTODY

RELINQUISHED: John Fosel LABORATORY RES.	DATE: 3-3-93	
RECEIVED:	TIME: 11:00	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	

COMMENTS, REQUESTS OR REMARKS:

NO SUBCONTRACTORS WITHOUT PRIOR EIKON APPROVAL.

SAMPLE DISPOSAL: Return to Client ☐ Lab Disposal ☐ (additional Fee)

CONCENTRATIONS EXPECTED High ☐ Medium ☐ Low ☐

KNOWN HAZARD YES ☐ NO ☐

DESCRIBE:

METHODS SUMMARY

ORGANIC EXTRACTIONS

Routine aqueous samples are prepared using Method 3510 (separatory funnel extraction) or Method 3520 (continuous liquid-liquid extraction) cited in SW846. Soil samples are extracted using Method 3550 (sonication extraction) from SW846.

ALUMINA COLUMN CLEANUP

After the sample has been extracted for base/neutral semivolatiles using Method 3550, it then undergoes acid-base partition cleanup using SW846 Method 3650. The base neutral extract is then further separated using alumina column cleanup Method 3611 in SW846.

TCLP EXTRACTION SUMMARY

Sample requiring TCLP analyses are extracted according to Method 1311, cited in 40 CFR 261 et seq, June 29, 1990.

VOLATILES BY GC/MS

Samples requesting volatiles by GC/MS have been analyzed using Method 8240 as cited in USEPA SW846.

BASE/NEUTRALS AND ACID EXTRACTABLES BY GC/MS

Samples requesting semi-volatiles have been analyzed using Method 8270 as cited in USEPA SW846.

PESTICIDES/PCBs

Aqueous samples are analyzed for pesticides and PCBs via USEPA Method 608. Non-aqueous samples are analyzed using Method 8080 as cited in USEPA SW846.

HERBICIDES

The herbicide extraction and analysis is performed according to Method 509B, cited in the 16th edition of Standard Methods. Samples are extracted, derivitized, and then analyzed via a gas chromatograph utilizing an electron capture detector (ECD).

METHODS SUMMARY

TRACE METALS

Reference: EPA SW846 3rd Edition, 1986 Vol. 1 A

Non-aqueous samples are digested for ICAP and GFAA according to method 3050 and for CV according to method 7470. Extracts and aqueous samples (ECRA and RCRA projects) are digested for ICAP, GFAA, and CV according to methods 3010, 3020, and 7470 respectively.

ICAP analyses are conducted in accordance with Method 6010. GFAA analyses are conducted in accordance with methods 7041 for antimony, 7060 for arsenic, 7740 for selenium and 7841 for thallium. CV analyses are conducted in accordance with method 7470.

Titanium and tin are analyzed for GFAA according to methods 282.2 and 283.3 respectively (EPA 600/4-79-020, 1983 revision).

TRACE METALS

Reference: EPA 600/4-79-020, 1983 revision.

Potable water, aqueous wastes, and surface water are digested according to EPA methods 4.1.4 for GFAA and FLAA, 200.7 for ICAP, and 245.1 for CV. GFAA analyses are conducted in accordance with methods 204.4 for antimony, 206.2 for arsenic, 239.2 for lead, 270.2 for selenium, 279.2 for thallium, 282.2 for tin, and 283.2 for titanium. ICAP analyses are conducted in accordance with method 200.7, CV analyses with method 245.1, and FLAA analyses with method 273.1 for sodium only.

GFAA = Graphite furnace atomic absorption.
ICAP = Inductively Coupled Argon Plasma.
FLAA = Flame atomic absorption.
CV = Cold vapor atomic absorption for Hg.

TCLP METALS

Samples are extracted and analyzed in accordance with method 1311 published in the Federal Register, 40 CFR 261, June 29, 1990.

LABORATORY RESOURCES, INC. - TETERBORO 1993
GENERAL CHEMISTRY METHODOLOGY
SOIL MATRIX

PARAMETER	METHOD (1)
Acidity	305.1
Alkalinity	310.1
BOD, 5 day	507(4)
BOD, 20 day	507(4)
Chloride	9252
Chlorine, Residual	330.5
COD	HACH
Conductivity	9050
Cyanide, Total	9010
Cyanide, Amenable	9010
Ignitability	1010
MBAS, Surfactants	512B(4)
Nitrogen, NH3	350.1(2)
Nitrogen, NO3	9200
Nitrogen, NO2	354.1
Nitrogen, TKN	351.2(2)
Odor	140.1
Petroleum Hydro, Soil	418.1(5)
pH	9045
Phenolics, Total	9065
Phosphorous, Total	365.2(2)
Solids, Fixed	209D(4)
Solids, Total	CLP
Solids, Volatile	209D(4)
Sulfate	9038
Sulfide	9030
Sulfite	377.1(2)
TOC	415.1
Turbidity	180.1

(1) = Solid and hazardous waste methods approved by NJDEP ECRA and RCRA and listed in EPS SW 846 3rd Edition, 1986.
(2) = Water and wastewater methods approved in the Federal Register in section 40 CFR 136 and listed in EPA 600/4-79-020.
(4) = Methods cited in Standard Methods 16th Edition, 1986.
(5) = NJDEP modification of EPA Method 418.1.
CLP = Contract Laboratory Program procedure for total solids determination, SOW 7/88, Part F, page D-83.
HACH = Method 8000, Hach Handbook of Water Analysis, 1979. Approved in the Federal Register, April 21, 1980, page 26811.

ORGANIC NON-CONFORMANCE SUMMARY

GC/MS VOLATILES

1. Three tentatively identified compounds were present in the library search of method blank, C8366.

2. One tentatively identified compound was present in the library search of method blanks, B8925 and B8942.

3. The quantitation limits are elevated due to the high concentration of some analytes in sample SB3-3 (T303071-01).

GC/MS SEMI-VOLATILES

1. Two tentatively identified compound were present in the library search of method blank, A5445.

2. One tentatively identified compound was present in the library search of method blank, D4759.

3. The samples SS2-3 and SS3-3 (T303071-03 and 04) were re-extracted beyond the required holding time due to poor acid surrogate recoveries in the initial analysis.

INORGANIC NON-CONFORMANCE SUMMARY

METALS

1. The relative percent difference was outside of the required quality control limits for the QC sample (T302358-04) due to matrix interference for arsenic analysis.

2. The matrix spike/matrix spike duplicate was outside of the required quality control limits for the QC sample (T302358-04) due to matrix interference for the silver analysis.

LABORATORY RESOURCES, INC.

LABORATORY CHRONICLES

Sample Number T303071	Analyst Initial	SB3-3 01	SB4-3 02	SS2-3 03	SS3-3 04	FB 05				
Received & Refrigerated Date:	JT	3/8/93	→	→	→	→				
Organics Extraction Date:										
Base/Neutrals/Acids	MD			3/16	3/16					
Acids Extractables				3/18	3/18					
Pesticides/PCBs										
Herbicides										
Analysis Date :										
Volatiles/GCMS	EM/AP	3/10	3/8	3/8	3/9	3/8				
Base/Neutrals/Acids	GT			3/17 3/19	3/17 3/19					
Pesticides/PCBs										
Herbicides										
Volatiles/GC										
Total Solids	OD	3/9/93	→	→	→	→				
Organic Supervisor Review & Approval	WJ	4/6/93	→	→	→	→				

LABORATORY RESOURCES, INC.		LABORATORY CHRONICLES							
Sample Number T303071	Analyst Initial	SB3-3 01	SB4-3 02	SS2-3 03	SS3-3 04				
Received & Refrigerated Date:	JT	3/3/93	→	→	→				
Inorganic Extraction Date:									
Metals - ICAP									
Metals - GFAA									
Metals - Hg									
Analysis Date:									
Metals - ICAP + Pb + Sb	MG			3/25/93	→				
Antimony (Sb) - GFAA									
Arsenic (As) - GFAA	MP			3/24/93	→				
Lead (Pb) - GFAA									
Selenium (Se) -GFAA	MP			3/24/93	3/25/93				
Thallium (Tl) - GFAA	MP			3/24/93	→				
Tin (Sn) - GFAA									
Titanium (Ti) - GFAA									
Mercury (Hg) - CVAA	BD			3/24/93	→				
008									
Inorganic Supervisor Review & Approval	MG	4/6/93	→	→	→				

Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700 800-729-0852

TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES

Name	Container[1]	Preservation	Maximum holding time
Bacterial Tests:			
Coliform, fecal and total	P, G	Cool, 4°C, 0.008% $Na_2S_2O_3$	6 hours
Fecal streptococci	P, G	Cool, 4°C, 0.008% $Na_2S_2O_3$	6 hours
Inorganic Tests:			
Acidity	P, G	Cool, 4°C	14 days
Alkalinity	P, G	Cool, 4°C	14 days
Ammonia	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Biochemical oxygen demand	P, G	Cool, 4°C	48 hours
Bromide	P, G	None required	28 days
Biochemical oxygen demand, carbonaceous	P, G	Cool, 4°C	48 hours
Chemical oxygen demand	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Chloride	P, G	None required	28 days
Chlorine, total residual	P, G	None required	Analyze immediately
Color	P, G	Cool, 4°C	48 hours
Cyanide, total and amenable to chlorination	P, G	Cool, 4°C, NaOH to pH>12, 0.6g ascorbic acid	14 days
Fluoride	P	None required	28 days
Hardness	P, G	HNO_3 to pH<2, H_2SO_4 to pH<2	6 months
Hydrogen ion (pH)	P, G	None required	Analyze immediately
Kjeldahl and organic nitrogen	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Metals:			
Chromium VI	P, G	Cool, 4°C	24 hours
Mercury	P, G	HNO_3 to pH<2	28 days
Metals, except chromium VI and mercury	P, G	HNO_3 to pH<2	6 months
Nitrate	P, G	Cool, 4°C	48 hours
Nitrate-nitrite	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Nitrite	P, G	Cool, 4°C	48 hours
Oil and grease	G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Organic carbon	P, G	Cool, 4°C, HCl or H_2SO_4 to pH<2	28 days
Orthophosphate	P, G	Filter immediately, cool, 4°C	48 hours
Oxygen, Dissolved Probe	G Bottle and top	None required	Analyze immediately
Winkler	do	Fix on site and store in dark	8 hours
Phenols	G only	Cool, 4°C, H_2SO_4 to pH<2	28 days
Phosphorus (elemental)	G	Cool, 4°C	48 hours
Phosphorus, total	P, G	Cool, 4°C, H_2SO_4 to pH<2	28 days
Residue, total	P, G	Cool, 4°C	7 days
Residue, Filterable	P, G	Cool, 4°C	7 days
Residue, Nonfilterable (TSS)	P, G	Cool, 4°C	7 days
Residue, Settleable	P, G	Cool, 4°C	48 hours
Residue, volatile	P, G	Cool, 4°C	7 days
Silica	P	Cool, 4°C	28 days
Specific conductance	P, G	Cool, 4°C	28 days

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Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700 800-729-0852

TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES (CONTINUED)

Name	Container[1]	Preservation	Maximum holding time
Sulfate	P, G	Cool, 4°C	28 days
Sulfide	P, G	Cool, 4°C, add zinc acetate plus sodium hydroxide to pH9	7 days
Sulfite	P, G	None required	Analyze immediately
Surfactants	P, G	Cool, 4°C	48 hours
Temperature	P, G	None required	Analyze
Turbidity	P, G	Cool, 4°C	48 hours
Organic Tests:			
Purgeable Halocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$	14 days
Purgeable aromatic hydrocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$, HCl to pH2	14 days
Acrolein and acrylonitrile	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$, Adjust pH to 4-5	14 days
Phenols	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	7 days until extraction, 40 days after extraction
Benzidines	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	7 days until extraction
Phthalate esters	G, Teflon-lined cap	Cool, 4°C	7 days until extraction, 40 days after extraction
Nitrosamines	G, Teflon-lined cap	Cool, 4°C, store in dark, 0.008% $Na_2S_2O_3$	40 days after extraction
PCBs, acrylonitrile	G, Teflon-lined cap	Cool, 4°C	40 days after extraction
Nitroaromatics and isophorone	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$ store in dark	40 days after extraction
Polynuclear aromatic hydrocarbons	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$ store in dark	40 days after extraction
Haloethers	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	40 days after extraction
Chlorinated hydrocarbons	G, Teflon-lined cap	Cool, 4°C	40 days after extraction
TCDD	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	40 days after extraction
Total organic halogens	G, Teflon-lined cap	Cool, 4°C; H_2SO_4 to pH<2	7 days
Pesticides Tests:			
Pesticides	G, Teflon-lined cap	Cool, 4°C, pH 5-9	40 days after extraction
Radiological Tests:			
Alpha, beta and radium	P, G	HNO_3 to pH<2	6 months

[1] Polyethylene (P) or Glass (G)

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CASE NARRATIVE

Laboratory Resources, Teterboro, received four soil samples plus a field blank for Reduced Deliverables Format on March 3, 1993. The samples were analyzed for the parameters outlined in the chain of custody.

The samples were analyzed within the required holding time. Any parameters which were outside of their respective quality control ranges are noted in the non-conformance summaries.

Please contact us if there are any questions regarding the enclosed results.

130371

GC/MS CONFORMANCE/NONCONFORMANCE SUMMARY

	No	Yes
1. Chromatograms Labeled/Compounds Identified	—	✓
2. Tune Specifications		
a. BFB Meets Criteria	—	✓
b. DFTPP Meets Criteria	—	✓
3. Tuning Frequency Performed every 24 hours for 600 series and 12 hours for 8000 series	—	✓
4. Calibration Frequency Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	—	✓
5. Calibration Requirements		
a. Calibration Check Compounds (CCCs)	—	✓
b. System Performance Check Compounds (SPCCs)	—	✓
6. Blank Contamination If yes, list compounds and concentrations in each blank:	—	—
a. VOA Fraction		
b. B/N Fraction		
c. Acid Fraction		
7. Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
a. VOA Fraction		
b. B/N Fraction		
c. Acid Fraction		
If not met, were the calculations checked and the results qualified as estimated?	—	—
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
a. VOA Fraction		
b. B/N Fraction		
c. Acid Fraction		
9. Internal Standard Areas and Retention Time Shifts Meet Criteria Internal standard areas between -50% and +100% of daily standard	—	✓
10. Extraction Holding Time Met If not met, list number of days exceeded for each sample:	—	✓
11. Analysis Holding Time Met If not met, list number of days exceeded for each sample:	—	✓

012

Laboratory Supervisor: Bill Jimenez / MRD Date: 4/6/93

LABORATORY RESOURCES, INC.
OLD HOOK ROAD
WOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/10/93
DILUTION FACT.: 300.0

CLIENT : EIKON SB3-3
LAB SAMPLE : T303071-01A
ANALYST : ANDY
FILE NAME : >C8410

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	3401	1,2-DICHLOROPROPANE	ND	1701
VINYL CHLORIDE	ND	3401	BROMODICHLOROMETHANE	ND	1701
BROMOMETHANE	ND	3401	2-CHLOROETHYLVINYLETHER	ND	1701
CHLOROETHANE	ND	3401	TRANS-1,3-DICHLOROPROPENE	ND	1701
ACROLEIN	ND	17007	CIS-1,3-DICHLOROPROPENE	ND	1701
TRICHLOROFLUOROMETHANE	ND	1701	1,1,2-TRICHLOROETHANE	ND	1701
1,1-DICHLOROETHENE	ND	1701	DIBROMOCHLOROMETHANE	ND	1701
CARBON DISULFIDE	ND	1701	BROMOFORM	ND	1701
ACETONE	ND	3401	4-METHYL-2-PENTANONE	ND	3401
ACRYLONITRILE	ND	17007	TOLUENE	2193	1701
METHYLENE CHLORIDE	ND	1701	TETRACHLOROETHENE	ND	1701
TRANS-1,2-DICHLOROETHENE	ND	1701	2-HEXANONE	ND	3401
1,1-DICHLOROETHANE	ND	1701	CHLOROBENZENE	ND	1701
CHLOROFORM	ND	1701	ETHYLBENZENE	11296	1701
1,2-DICHLOROETHANE	ND	1701	M,P-XYLENE	106971	1701
VINYL ACETATE	ND	3401	O-XYLENE	20940	1701
2-BUTANONE	ND	3401	STYRENE	ND	1701
1,1,1-TRICHLOROETHANE	ND	1701	1,1,2,2-TETRACHLOROETHANE	ND	1701
CARBON TETRACHLORIDE	ND	1701	1,3-DICHLOROBENZENE	ND	1701
BENZENE	ND	1701	1,4-DICHLOROBENZENE	ND	1701
TRICHLOROETHENE	ND	1701	1,2-DICHLOROBENZENE	ND	1701

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	98 %	70 - 121	OK
TOLUENE-D8	107 %	81 - 117	OK
4-BROMOFLUOROBENZENE	102 %	74 - 121	OK

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

Percent Solid of 88.2 is used for all Target compounds.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SB 3-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303071-01A

Sample wt/vol: 0.013 (g/ml) g Lab File ID: >C8410

Level: (low/med) MED Date Received: 03/03/93

% Solid: 88.2 Date Analyzed: 03/10/93

Column: CAP Dilution Factor: 300

Number of TICs found: 15 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Unknown Alkane	12.10	11904	
2		Unknown Alkane	13.31	21768	
3		Unknown	14.27	5782	
4		Unknown Alkane	14.41	3741	
5		Unknown Alkane	15.01	4081	
6		Unknown Alkane	16.53	11564	
7		Unknown Alkane	17.50	5782	
8		Unknown Alkane	18.39	7482	
9		Unknown Alkane	18.65	3401	
10		Ethyl Methyl Benzene Isomer	18.90	8503	
11		Trimethyl Benzene Isomer	19.11	5442	
12	124185	Decane (8CI9CI)	19.44	20748	
13		Trimethyl Benzene Isomer	19.87	9863	
14		Unknown	21.14	6802	
15		Unknown Alkane	22.14	15646	

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/08/93
DILUTION FACT.: 1.0

CLIENT : EIKON SB 4-3
LAB SAMPLE : T303071-02A
ANALYST : ED
FILE NAME : >B8934

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	52	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	52	TOLUENE	7	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	117 %	70 - 121	OK
TOLUENE-D8	99 %	81 - 117	OK
4-BROMOFLUOROBENZENE	100 %	74 - 121	OK

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

Percent Solid of 96.6 is used for all Target compounds.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SB 4-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303071-02A

Sample wt/vol: 5.0 (g/ml) g Lab File ID: >B8934

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 96.6 Date Analyzed: 03/08/93

Column: CAP Dilution Factor: 1

Number of TICs found: 1

CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 124389	Carbon Dioxide (B)	1.68	30	

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/08/93
DILUTION FACT.: 1.0

CLIENT : EIKON SS 2-3
LAB SAMPLE : T303071-03A
ANALYST : ED
FILE NAME : >B8935

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	11	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	11	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	11	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	11	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	53	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	11	4-METHYL-2-PENTANONE	ND	11
ACRYLONITRILE	ND	53	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	2 J	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	11
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	11	O-XYLENE	ND	5
2-BUTANONE	ND	11	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	117 %	70 - 121	OK
TOLUENE-D8	101 %	81 - 117	OK
4-BROMOFLUOROBENZENE	103 %	74 - 121	OK

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

Percent Solid of 94.1 is used for all Target compounds.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SB 2-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303071-03A

Sample wt/vol: 5.0 (g/ml) g Lab File ID: >88935

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 94.1 Date Analyzed: 03/08/93

Column: CAP Dilution Factor: 1

Number of TICs found: 1 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 124389	Carbon Dioxide (B)	2.20	35	

FORM I VOA-TIC 1/87 Rev

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/09/93
DILUTION FACT.: 1.0

CLIENT : EIKON SS 3-3
LAB SAMPLE : T303071-048
ANALYST : ED
FILE NAME : >B8947

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	11	1,2-DICHLOROPROPANE	ND	6
VINYL CHLORIDE	ND	11	BROMODICHLOROMETHANE	ND	6
BROMOMETHANE	ND	11	2-CHLOROETHYLVINYLETHER	ND	6
CHLOROETHANE	ND	11	TRANS-1,3-DICHLOROPROPENE	ND	6
ACROLEIN	ND	56	CIS-1,3-DICHLOROPROPENE	ND	6
TRICHLOROFLUOROMETHANE	ND	6	1,1,2-TRICHLOROETHANE	ND	6
1,1-DICHLOROETHENE	ND	6	DIBROMOCHLOROMETHANE	ND	6
CARBON DISULFIDE	ND	6	BROMOFORM	ND	6
ACETONE	ND	11	4-METHYL-2-PENTANONE	ND	11
ACRYLONITRILE	ND	56	TOLUENE	3 J	6
METHYLENE CHLORIDE	2 J	6	TETRACHLOROETHENE	14	6
TRANS-1,2-DICHLOROETHENE	ND	6	2-HEXANONE	ND	11
1,1-DICHLOROETHANE	ND	6	CHLOROBENZENE	ND	6
CHLOROFORM	ND	6	ETHYLBENZENE	ND	6
1,2-DICHLOROETHANE	ND	6	M,P-XYLENE	ND	6
VINYL ACETATE	ND	11	O-XYLENE	ND	6
2-BUTANONE	ND	11	STYRENE	ND	6
1,1,1-TRICHLOROETHANE	ND	6	1,1,2,2-TETRACHLOROETHANE	ND	6
CARBON TETRACHLORIDE	ND	6	1,3-DICHLOROBENZENE	ND	6
BENZENE	ND	6	1,4-DICHLOROBENZENE	ND	6
TRICHLOROETHENE	ND	6	1,2-DICHLOROBENZENE	ND	6

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	99 %	70 - 121	OK
TOLUENE-D8	103 %	81 - 117	OK
4-BROMOFLUOROBENZENE	90 %	74 - 121	OK

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

Percent Solid of 88.5 is used for all Target compounds.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SB 3-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL

Lab Sample ID: T303071-04B

Sample wt/vol: 5.0 (g/ml) g

Lab File ID: >B8947

Level: (low/med) LOW

Date Received: 03/03/93

% Solid: 88.5

Date Analyzed: 03/09/93

Column: CAP

Dilution Factor: 1

Number of TICs found: 1

CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 124389	Carbon Dioxide (B)	1.67	27	

FORM I VOA-TIC 1/87 Rev

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE RECEIVED : 03/03/93
DATE ANALYZED : 03/08/93
DILUTION FACT.: 1.0

CLIENT : EIKON FB
LAB SAMPLE : T303071-05A
ANALYST : ANDY
FILE NAME : >C8373

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLORDETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	99 %	76 - 114	OK
TOLUENE-D8	100 %	88 - 110	OK
4-BROMOFLUOROBENZENE	98 %	86 - 115	OK

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: FB

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: WATER Lab Sample ID: T303071-05A

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >C8373

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 0 Date Analyzed: 03/08/93

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE RECEIVED :
DATE ANALYZED : 03/08/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : ED
FILE NAME : >C8366

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLORDFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE.	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	2 J	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	4 J	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	2 J	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	98 %	76 - 114	OK
TOLUENE-D8	99 %	88 - 110	OK
4-BROMOFLUOROBENZENE	99 %	86 - 115	OK

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
METHOD BLANK

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: WATER Lab Sample ID: METHOD BLAN

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >C8366

Level: (low/med) LOW Date Received:

% Solid: 0 Date Analyzed: 03/08/93

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE RECEIVED :
DATE ANALYZED : 03/08/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : ED
FILE NAME : >B8925

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	87 %	70 - 121	OK
TOLUENE-D8	100 %	81 - 117	OK
4-BROMOFLUOROBENZENE	95 %	74 - 121	OK

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
METHOD BLANK

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: METHOD BLANK

Sample wt/vol: 5.0 (g/ml) g Lab File ID: >B8925

Level: (low/med) LOW Date Received:

% Solid: 100 Date Analyzed: 03/08/93

Column: CAP Dilution Factor: 1

Number of TICs found: 1 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	124389	Carbon Dioxide	1.65	37	

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LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE RECEIVED :
DATE ANALYZED : 03/09/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : ED
FILE NAME : >B8942

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	99 %	70 - 121	OK
TOLUENE-D8	99 %	81 - 117	OK
4-BROMOFLUOROBENZENE	97 %	74 - 121	OK

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
METHOD BLANK

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: METHOD BLANK

Sample wt/vol: 5.0 (g/ml) g Lab File ID: >B8942

Level: (low/med) LOW Date Received:

% Solid: 100 Date Analyzed: 03/09/93

Column: CAP Dilution Factor: 1

Number of TICs found: 1 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 124389	Carbon Dioxide	1.63	29	

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE RECEIVED :
DATE ANALYZED : 03/10/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : MED LEVEL BL
ANALYST : ANDY
FILE NAME : >CB404

GC/MS VOLATILE ORGANICS REPORT

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
CHLOROMETHANE	ND	10	1,2-DICHLOROPROPANE	ND	5
VINYL CHLORIDE	ND	10	BROMODICHLOROMETHANE	ND	5
BROMOMETHANE	ND	10	2-CHLOROETHYLVINYLETHER	ND	5
CHLOROETHANE	ND	10	TRANS-1,3-DICHLOROPROPENE	ND	5
ACROLEIN	ND	50	CIS-1,3-DICHLOROPROPENE	ND	5
TRICHLOROFLUOROMETHANE	ND	5	1,1,2-TRICHLOROETHANE	ND	5
1,1-DICHLOROETHENE	ND	5	DIBROMOCHLOROMETHANE	ND	5
CARBON DISULFIDE	ND	5	BROMOFORM	ND	5
ACETONE	ND	10	4-METHYL-2-PENTANONE	ND	10
ACRYLONITRILE	ND	50	TOLUENE	ND	5
METHYLENE CHLORIDE	ND	5	TETRACHLOROETHENE	ND	5
TRANS-1,2-DICHLOROETHENE	ND	5	2-HEXANONE	ND	10
1,1-DICHLOROETHANE	ND	5	CHLOROBENZENE	ND	5
CHLOROFORM	ND	5	ETHYLBENZENE	ND	5
1,2-DICHLOROETHANE	ND	5	M,P-XYLENE	ND	5
VINYL ACETATE	ND	10	O-XYLENE	ND	5
2-BUTANONE	ND	10	STYRENE	ND	5
1,1,1-TRICHLOROETHANE	ND	5	1,1,2,2-TETRACHLOROETHANE	ND	5
CARBON TETRACHLORIDE	ND	5	1,3-DICHLOROBENZENE	ND	5
BENZENE	ND	5	1,4-DICHLOROBENZENE	ND	5
TRICHLOROETHENE	ND	5	1,2-DICHLOROBENZENE	ND	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-DICHLOROETHANE-D4	97 %	76 - 114	OK
TOLUENE-D8	101 %	88 - 110	OK
4-BROMOFLUOROBENZENE	98 %	86 - 115	OK

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

MED LEVEL B

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: WATER Lab Sample ID: MED LEVEL B

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >C8404

Level: (low/med) LOW Date Received:

% Solid: 0 Date Analyzed: 03/10/93

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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5A

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

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TC505 BFB Injection date: 2/15/93

Instrument ID: 0881 BFB Injection time: 9:30

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	21.7
75	30-60% of mass 95	53.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	87.3
175	5.0 - 9.0% of mass 174	7.6(8.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	83.1(95.3)1
177	5.0 - 9.0% of mass 176	5.7(6.9)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	VSTD 50 PPB	>C8059	2/15/93	11:29
2	----------	VSTD 20 PPB	>C8058	2/15/93	10:53
3	----------	VSTD 100 PPB	>C8060	2/15/93	12:05
4	----------	VSTD 150 PPB	>C8061	2/15/93	12:40
5	----------	VSTD 200 PPB	>C8062	2/15/93	13:16
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

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

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TB702 BFB Injection date: 2/24/93

Instrument ID: 0881 BFB Injection time: 8:56

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	20.5
75	30-60% of mass 95	46.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	.5(.6)1
174	Greater than 50.0% of mass 95	78.5
175	5.0 - 9.0% of mass 174	5.7(7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	78.3(99.7)1
177	5.0 - 9.0% of mass 176	4.7(6.0)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPB VOA S	>B8820	2/24/93	9:37
2	----------	20 PPB VOA	>B8822	2/24/93	11:09
3	----------	200 PPB STD	>B8827	2/24/93	14:58
4	----------	150 PPB STD	>B8828	2/24/93	15:38
5	----------	100 PPB STD	>B8829	2/24/93	16:19
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

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

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TB710 BFB Injection date: 3/08/93

Instrument ID: 0881 BFB Injection time: 8:34

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	19.3
75	30-60% of mass 95	47.1
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	.5(.5)1
174	Greater than 50.0% of mass 95	92.5
175	5.0 - 9.0% of mass 174	6.4(7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	88.9(96.1)1
177	5.0 - 9.0% of mass 176	5.4(6.1)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPB VOA S	>B8924	3/08/93	9:18
2	----------	METHOD BLANK	>B8925	3/08/93	10:04
3	----------	T302351-01B	>B8926	3/08/93	11:04
4	----------	071-03 MS	>B8927	3/08/93	11:49
5	----------	071-03MSD	>B8928	3/08/93	12:35
6	----------	T303072-02A	>B8932	3/08/93	16:03
7	----------	T303071-02A	>B8934	3/08/93	17:35
8	----------	T303071-03A	>B8935	3/08/93	18:21
9	----------	T303047-01A	>B8937	3/08/93	19:53
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

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

Name: Laboratory Resources Inc., Contract: -----

File ID: >TB711 BFB Injection date: 3/09/93

Instrument ID: 0881 BFB Injection time: 9:24

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	20.0
75	30-60% of mass 95	49.0
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	.7(.7)1
174	Greater than 50.0% of mass 95	89.7
175	5.0 - 9.0% of mass 174	6.3(7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	88.6(98.8)1
177	5.0 - 9.0% of mass 176	5.7(6.5)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPB VOA S	>B8941	3/09/93	10:11
2	----------	METHOD BLANK	>B8942	3/09/93	11:28
3	----------	T302351-01B	>B8943	3/09/93	12:20
4	----------	T302334-08A	>B8944	3/09/93	13:06
5	----------	T302359-03B	>B8945	3/09/93	13:51
6	----------	T303072-01A	>B8946	3/09/93	14:37
7	----------	T303071-04B	>B8947	3/09/93	15:23
8	----------	T303047-03B	>B8948	3/09/93	16:09
9	----------	T303047-04A	>B8949	3/09/93	16:54
10	----------	MS	>B8950	3/09/93	17:39
11	----------	MSD	>B8951	3/09/93	18:27
12	----------	T303095-01A	>B8954	3/09/93	20:45
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

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

Name: Laboratory Resources Inc., Contract: -----

File ID: >TC521 BFB Injection date: 3/08/93

Instrument ID: 0881 BFB Injection time: 13:16

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	23.8
75	30-60% of mass 95	59.6
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	87.4
175	5.0 - 9.0% of mass 174	7.6(8.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	87.2(99.7)1
177	5.0 - 9.0% of mass 176	5.6(6.4)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPB STD	>C8365	3/08/93	14:42
2	----------	METHOD BLANK	>C8366	3/08/93	15:34
3	----------	T303018-04B	>C8368	3/08/93	16:55
4	----------	T302358-07	>C8370	3/08/93	18:07
5	----------	T303056-02A	>C8371	3/08/93	18:42
6	----------	T303062-01A	>C8372	3/08/93	19:18
7	----------	T303071-05A	>C8373	3/08/93	19:54
8	----------	T303085-02A	>C8374	3/08/93	20:29
9	----------	T303087-03A	>C8375	3/08/93	21:05
10	----------	T303092-01E	>C8376	3/08/93	21:41
11	----------	T303068-08	>C8377	3/08/93	22:16
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

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

Name: Laboratory Resources Inc., Contract: -----

File ID: >TC524 BFB Injection date: 3/10/93

Instrument ID: 0881 BFB Injection time: 10:39

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	20.3
75	30-60% of mass 95	51.2
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	94.9
175	5.0 - 9.0% of mass 174	6.9(7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.0(100.2)1
177	5.0 - 9.0% of mass 176	6.3(6.6)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	VSTD 50 PPB	>C8402	3/10/93	12:20
2	----------	METHOD BLANK	>C8403	3/10/93	13:32
3	----------	MED LEVEL BL	>C8404	3/10/93	14:21
4	----------	T303042-01C	>C8405	3/10/93	15:12
5	----------	T303042-02D	>C8406	3/10/93	16:02
6	----------	T303104-03A	>C8408	3/10/93	17:16
7	----------	T303111-03A	>C8409	3/10/93	17:51
8	----------	T303071-01A	>C8410	3/10/93	18:27
9	----------	T303072-03A	>C8411	3/10/93	19:03
10	----------	T303111-03 MS	>C8412	3/10/93	19:38
11	----------	T303111-03 MSD	>C8413	3/10/93	20:14
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8942 Lab Sample ID: METHOD BLAN

Date Analyzed: 03/09/93 Time Analyzed: 11:28

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	TIME ANALYZED
>B8943	T302351-01B	12:20
>B8944	T302334-08A	13:06
>B8945	T302359-03B	13:51
>B8946	T303072-01A	14:37
>B8947	T303071-04B	15:23
>B8948	T303047-03B	16:09
>B8949	T303047-04A	16:54
>B8950	MS	17:39
>B8951	MSD	18:27
>B8954	T303095-01A	20:45

Comments: _____

_____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8925 Lab Sample ID: METHOD BLAN

Date Analyzed: 03/08/93 Time Analyzed: 10:04

Matrix: Soil

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

LAB FILE NO.	LAB SAMPLE ID	TIME ANALYZED
>B8926	T302351-01B	11:04
>B8927	071-03 MS	11:49
>B8928	071-03MSD	12:35
>B8932	T303072-02A	16:03
>B8934	T303071-02A	17:35
>B8935	T303071-03A	18:21
>B8937	T303047-01A	19:53

Comments: _____

_____

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >C8366 Lab Sample ID: METHOD BLAN

Date Analyzed: 03/08/93 Time Analyzed: 15:34

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	TIME ANALYZED
>C8368	T303018-04B	16:55
>C8370	T302358-07	18:07
>C8371	T303056-02A	18:42
>C8372	T303062-01A	19:18
>C8373	T303071-05A	19:54
>C8374	T303085-02A	20:29
>C8375	T303087-03A	21:05
>C8376	T303092-01E	21:41
>C8377	T303068-08	22:16

Comments: _____

_____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >C8404 Lab Sample ID: MED LEVEL B

Date Analyzed: 03/10/93 Time Analyzed: 14:21

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	TIME ANALYZED
>C8410	T303071-01A	18:27

Comments: _____

_____

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 2B24A11 191

ntractor: LAB. RESOURCES Calibration Date: 02/15/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .3 Maximum % RSD for CCC is 30%

Laboratory ID:	>C8058	>C8059	>C8060	>C8061	>C8062						
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
LOROMETHANE	.56178	.46703	.45940	.39940	.37636	.204	.45279	15.932		**	
VINYL CHLORIDE	.79809	.64372	.62858	.55596	.54459	.219	.63419	15.990	*		
OMOMETHANE	1.40693	1.10840	1.06618	.98316	.93945	.266	1.10083	16.679			
LOROETHANE	.51169	.41347	.40861	.37535	.36167	.289	.41416	14.185			
ACROLEIN	.07306	.06078	.06294	.04350	.04829	.407	.05771	20.559			(Conc=40.0,100.0,200.0,30
ICHLOROFLUOROMETHANE	4.38764	2.80740	2.84101	2.54561	2.37968	.321	2.99227	26.834			
1-DICHLOROETHENE	1.39548	.99695	1.10517	1.00976	.94897	.413	1.09127	16.426	*		
RBON DISULFIDE	3.01127	2.17090	2.54821	2.31613	2.28904	.434	2.46711	13.518			
ACETONE	.18377	.15812	.16921	.14531	.14377	.449	.16004	10.515			
RYLONITRILE	.08486	.11617	.13302	.13071	.10743	.625	.11444	17.129			
THYLENE CHLORIDE	1.57139	1.03303	1.16145	1.04823	1.01916	.540	1.16665	19.986			
METHYL-TERT-BUTYL-ETHER	3.30069	2.84803	2.94364	2.54706	2.42094	.639	2.81207	12.326			
RT-BUTYL-ALCOHOL	.07963	.07159	.08134	.07021	.07956	.662	.07647	6.738			(Conc=40.0,100.0,200.0,30
ANS-1,2-DICHLOROETHENE	1.66882	1.17481	1.34004	1.22493	1.18584	.615	1.31889	15.640			
DI-ISOPROPYL-ETHER	2.66558	4.00582	4.28174	3.70733	3.61455	.827	3.65500	16.750			
1-DICHLOROETHANE	1.65786	2.00277	2.30184	2.11154	2.05835	.751	2.02647	11.586		**	
S-1,2-DICHLOROETHENE	1.72432	1.23690	1.42345	1.31420	1.28187	.938	1.39615	14.035			
LOROFORM	4.27412	3.06166	3.43773	3.17597	3.03512	1.051	3.39692	15.178	*		
2-DICHLOROETHANE	2.66003	1.98865	2.22274	2.09725	2.01422	1.188	2.19658	12.506			
2-DICHLOROETHANE-D4	2.24081	1.71735	2.01788	1.85130	1.76341	1.166	1.91799	11.130			
NYL ACETATE	.97909	.83205	.79539	.63723	.63155	.626	.77506	18.795			
2-BUTANONE	.05504	.04879	.02635	.04937	.04974	.736	.04586	24.401			
1,1-TRICHLOROETHANE	.98958	.72823	.78134	.71297	.68768	.813	.77996	15.653			
RBON TETRACHLORIDE	.98364	.73309	.79878	.73666	.71195	.847	.79283	14.061			
ENZENE	.89357	.66353	.73522	.68556	.67626	.891	.73083	12.992			
ICHLOROETHENE	.59675	.43696	.47150	.43698	.42827	1.038	.47409	14.880			
2-DICHLOROPROPANE	.34061	.26190	.28840	.27250	.27063	1.078	.28681	11.004	*		
ROMODICHLOROMETHANE	.96878	.72855	.80237	.75754	.74655	1.150	.80076	12.213			
2-CHLOROETHYLVINYLETHER	.12513	.10960	.11952	.07300	.11730	1.233	.10891	19.128			
ANS-1,3-DICHLOROPROPENE	.62449	.48401	.53030	.51820	.51032	1.366	.53347	10.056			

- Response Factor (Subscript is amount in UG/L)

RT - Average Relative Retention Time (RT Std/RT Istd)

- Average Response Factor

RSD - Percent Relative Standard Deviation

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

041

Initial Calibration Data
HSL Compounds

ase No: Instrument ID: 2824A11 191

ntractor: LAB. RESOURCES Calibration Date: 02/15/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .3 Maximum % RSD for CCC is 30%

Laboratory ID:	>C8058	>C8059	>C8060	>C8061	>C8062					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
IS-1,3-DICHLOROPROPENE	.58110	.43654	.48167	.46576	.45337	1.244	.48369	11.767		
1,1,2-TRICHLOROETHANE	.36219	.27494	.29009	.28375	.27640	1.397	.29747	12.331		
IBROMOCHLOROMETHANE	.90836	.69644	.75384	.72077	.70637	1.468	.75716	11.526		
ROMOFORM	.68654	.53781	.57918	.57874	.55197	1.763	.58685	9.967		**
4-METHYL-2-PENTANONE	.24658	.20848	.21267	.19670	.19444	.816	.21177	9.879		
OLUENE-D8	1.30408	1.02740	1.17643	1.05733	1.02111	.814	1.11727	10.899		
OLUENE	.82991	.61495	.68143	.64642	.62351	.823	.67924	12.966	*	
ETRACHLOROETHENE	.75302	.55462	.61069	.57836	.54218	.891	.60777	14.033		
2-HEXANONE	.13594	.12197	.12371	.10945	.11146	.927	.12051	8.848		
HLOROBENZENE	1.29309	.94021	1.04301	.97898	.95005	1.003	1.04107	14.071		**
THYLBENZENE	.57086	.42444	.47065	.44177	.43031	1.026	.46761	12.917	*	
M,P-XYLENE	.73229	.53458	.58753	.54507	.52234	1.044	.58436	14.761		(Conc=40.0,100.0,200.0,30
-XYLENE	.70698	.51348	.56782	.53000	.51613	1.094	.56688	14.336		
TYRENE	1.23418	.89662	.99617	.92715	.90489	1.098	.99180	14.220		
4-BROMOFLUOROBENZENE	1.16335	.86286	.97972	.88971	.84937	1.164	.94900	13.714		
1,1,2,2-TETRACHLOROETHANE	.57502	.44570	.48213	.46758	.44829	1.199	.48374	10.987		**
3-DICHLOROBENZENE	1.53747	1.08895	1.22612	1.11647	1.06987	1.312	1.20778	16.061		
4-DICHLOROBENZENE	1.60365	1.12388	1.24064	1.15122	1.10919	1.326	1.24572	16.576		
2-DICHLOROBENZENE	1.44982	1.03353	1.13647	1.06136	1.00979	1.374	1.13820	15.867		

F - Response Factor (Subscript is amount in UG/L)

RT - Average Relative Retention Time (RT Std/RT Istd)

F - Average Response Factor

RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 2637A0 1713

ntractor: LAB RESOURCES Calibration Date: 02/24/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % RSD for CCC is 30%

Laboratory ID:	>B8822	>B8820	>B8829	>B8828	>B8827						
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
ILOROMETHANE	.74654	.83656	.87735	.92764	1.02959	.232	.88354	11.909		**	
VINYL CHLORIDE	.85797	.94972	.96589	1.04492	1.17866	.251	.99943	12.028	*		
ROMOMETHANE	1.05417	1.17480	1.06690	1.08947	1.23146	.303	1.12336	6.817			
ILOROETHANE	.52422	.60704	.53284	.54613	.62139	.324	.56632	7.893			
ACROLEIN	.10793	.11949	.14269	.11760	.09008	.485	.11556	16.548			(Conc=40.0,100.0,200.0,30
TRICHLOROFLUOROMETHANE	1.72497	1.86360	1.66117	1.60695	1.65405	.372	1.70215	5.849			
1,1-DICHLOROETHENE	.89381	.98921	.90144	.89475	.88515	.481	.91287	4.717	*		
CARBON DISULFIDE	1.52504	2.02947	1.97607	1.98837	2.06875	.505	1.91754	11.600			
ACETONE	.30447	.46704	.51157	.42492	.28576	.542	.39875	24.994			
CRYLONITRILE	.26411	.26661	.33178	.28876	.22857	.717	.27597	13.742			
METHYLENE CHLORIDE	1.09227	1.08196	1.02181	1.10191	1.03923	.631	1.06744	3.277			
TRANS-1,2-DICHLOROETHENE	1.12360	1.22109	1.18339	1.22279	1.17024	.698	1.18422	3.461			
ETHYL-TERT-BUTYL-ETHER	3.29668	3.31720	3.30227	3.18886	2.97300	.725	3.21560	4.506			(Conc=20.0,50.0,100.0,150
ERT-BUTYL-ALCOHOL	.12706	.18580	.36052	.22228	.12320	.766	.20377	47.588			(Conc=40.0,100.0,200.0,30
1,1-DICHLOROETHANE	2.06461	2.12690	2.14618	2.12686	2.02760	.806	2.09843	2.390		**	
DI-ISOPROPYL-ETHER	4.22891	4.39473	4.52729	4.32518	3.97893	.865	4.29101	4.790			(Conc=20.0,50.0,100.0,150
IS-1,2-DICHLOROETHENE	1.68140	1.80323	1.88762	1.83541	1.64812	.949	1.77116	5.780			
CHLOROFORM	2.47735	2.63792	2.67729	2.74731	2.54331	1.038	2.61663	4.098	*		
1,2-DICHLOROETHANE	1.76350	1.88126	1.91871	1.88769	1.70042	1.149	1.83032	5.113			
2-DICHLOROETHANE-D4	1.97305	1.63291	2.20025	1.47553	1.32562	1.132	1.72147	20.895			(Conc=20.0,50.0,100.0,150
NYL ACETATE	.99108	1.08141	1.20785	1.18348	1.01637	.686	1.09604	8.861			
2-BUTANONE	.02551	.02742	.03920	.03478	.02237	.788	.02986	23.236			
1,1,1-TRICHLOROETHANE	.52675	.60195	.63017	.66796	.62508	.843	.61038	8.587			
RBON TETRACHLORIDE	.50822	.59924	.63168	.68062	.63782	.871	.61152	10.565			
BENZENE	.65736	.73895	.78440	.82672	.75158	.910	.75180	8.349			
TRICHLOROETHENE	.40868	.43664	.46635	.45833	.42817	1.032	.43964	5.287			
2-DICHLOROPROPANE	.28087	.28816	.32417	.34646	.29139	1.070	.30621	9.135	*		
ROMODICHLOROMETHANE	.57004	.59229	.67583	.74771	.59914	1.130	.63700	11.558			
2-CHLOROETHYLVINYLETHER	.19986	.20677	.25319	.19790	.18234	1.201	.20801	12.878			
ANS-1,3-DICHLOROPROPENE	.47769	.53840	.59649	.58686	.55238	1.321	.55036	8.565			

- Response Factor (Subscript is amount in UG/L)

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

043

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 2637A0 1713

Contractor: LAB RESOURCES Calibration Date: 02/24/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % RSD for CCC is 30%

Laboratory ID:	>B8822	>B8820	>B8829	>B8828	>B8827					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
IS-1,3-DICHLOROPROPENE	.41230	.46953	.52589	.53511	.43662	1.212	.47589	11.333		
1,1,2-TRICHLOROETHANE	.36300	.34256	.38793	.37649	.32703	1.350	.35940	6.886		
IBROMOCHLOROMETHANE	.66572	.70220	.80431	.79379	.68848	1.416	.73090	8.711		
ROMOFORM	.62918	.76558	.89072	.84726	.73978	1.684	.77450	13.104		**
4-METHYL-2-PENTANONE	.39493	.43610	.59093	.48238	.35869	.828	.45261	19.897		
TOLUENE-D8	1.16472	1.09604	1.39714	.89161	.88592	.825	1.08709	19.564		(Conc=20.0,50.0,100.0,150
LUENE	.57401	.64124	.68505	.64205	.62206	.832	.63288	6.349	*	
ETRACHLOROETHENE	.60261	.63163	.65073	.60602	.56255	.896	.61071	5.459		
2-HEXANONE	.29620	.31478	.43767	.34696	.23192	.931	.32551	23.181		
LOROBENZENE	.84320	.88761	.99460	.95022	.88143	1.003	.91141	6.616		**
HYLBENZENE	.38584	.40641	.46362	.42738	.41821	1.023	.42029	6.846	*	
M,P-XYLENE	.47483	.51915	.55892	.50450	.49168	1.040	.50982	6.264		(Conc=40.0,100.0,200.0,30
XYLENE	.45505	.52309	.55137	.50266	.47717	1.088	.50187	7.524		
YRENE	.79482	.94402	.97015	.89544	.84040	1.092	.88897	8.129		
4-BROMOFLUOROBENZENE	1.11969	.99986	1.19883	.76827	.72585	1.155	.96250	21.774		(Conc=20.0,50.0,100.0,150
1,2,2-TETRACHLOROETHANE	.69964	.72746	.84859	.74158	.59773	1.186	.72300	12.444		**
3-DICHLOROBENZENE	1.01271	1.05318	1.13857	1.10025	.99394	1.295	1.05973	5.669		
4-DICHLOROBENZENE	1.03228	1.08674	1.18576	1.10032	1.01691	1.308	1.08440	6.152		
1,2-DICHLOROBENZENE	1.02219	1.08332	1.11861	1.04007	.92713	1.355	1.03826	6.995		

RF - Response Factor (Subscript is amount in UG/L)

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/08/93

Contractor: LAB RESOURCES Time: 09:18

Contract No: Laboratory ID: 388924

Instrument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
CHLOROMETHANE	.88354	.95540	8.13		**	
VINYL CHLORIDE	.99943	1.15717	15.78	*		
BROMOMETHANE	1.12336	1.30293	15.99			
CHLOROETHANE	.56632	.69913	23.45			
ACROLEIN	.11556	.06233	46.06			(Conc=100.00)
TRICHLOROFLUOROMETHANE	1.70215	2.11082	24.01			
1,1-DICHLOROETHENE	.91287	1.04303	14.26	*		
CARBON DISULFIDE	1.91754	2.04811	6.81			
ACETONE	.39875	.81199	103.63			
ACRYLONITRILE	.27597	.30796	11.59			
METHYLENE CHLORIDE	1.06744	1.21651	13.97			
TRANS-1,2-DICHLOROETHENE	1.18422	1.35836	14.70			
METHYL-TERT-BUTYL-ETHER	3.21560	3.65475	13.66			
TERT-BUTYL-ALCOHOL	.20377	.29565	45.09			(Conc=100.00)
1,1-DICHLOROETHANE	2.09843	2.39410	14.09		**	
DI-ISOPROPYL-ETHER	4.29101	4.76449	11.03			
CIS-1,2-DICHLOROETHENE	1.77116	2.06036	16.33			
CHLOROFORM	2.61663	3.06326	17.07	*		
1,2-DICHLOROETHANE	1.83032	2.20612	20.53			
1,2-DICHLOROETHANE-D4	1.72147	1.54187	10.43			(Conc=50.00)
VINYL ACETATE	1.09604	1.13434	3.49			
2-BUTANONE	.02986	.03595	20.42			
1,1,1-TRICHLOROETHANE	.61038	.69464	13.80			
CARBON TETRACHLORIDE	.61152	.71792	17.40			
BENZENE	.75180	.82589	9.85			
TRICHLOROETHENE	.43964	.51098	16.23			
1,2-DICHLOROPROPANE	.30621	.33252	8.59	*		
BROMODICHLOROMETHANE	.63700	.75721	18.87			
2-CHLOROETHYLVINYLETHER	.20801	.19330	7.07			
TRANS-1,3-DICHLOROPROPENE	.55036	.56420	2.51			
CIS-1,3-DICHLOROPROPENE	.47589	.50824	6.80			
1,1,2-TRICHLOROETHANE	.35940	.36900	2.67			

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

ase No: Calibration Date: 03/08/93

ntractor: LAB RESOURCES Time: 09:18

Contract No: Laboratory ID: >88924

strument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
BROMOCHLOROMETHANE	.73090	.82210	12.48			
BROMOFORM	.77450	.85137	9.92		**	
METHYL-2-PENTANONE	.45261	.52242	15.43			
LUENE-D8	1.08709	.90594	16.66			(Conc=50.00)
OLUENE	.63288	.74127	17.13	*		
ETRACHLOROETHENE	.61071	.73514	20.37			
HEXANONE	.32551	.39913	22.62			
LOROBENZENE	.91141	1.05133	15.35		**	
ETHYLBENZENE	.42029	.47483	12.98	*		
P-XYLENE	.50982	.59321	16.36			(Conc=100.00)
XYLENE	.50187	.59692	18.94			
STYRENE	.88897	1.02285	15.06			
BROMOFLUOROBENZENE	.96250	.84296	12.42			(Conc=50.00)
1,2,2-TETRACHLOROETHANE	.72300	.81869	13.23		**	
1,3-DICHLOROBENZENE	1.05973	1.22715	15.80			
4-DICHLOROBENZENE	1.08440	1.25329	15.57			
2-DICHLOROBENZENE	1.03826	1.25698	21.07			

F - Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/09/93

Contractor: LAB RESOURCES Time: 10:11

Contract No: Laboratory ID: >B8941

Instrument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
CHLOROMETHANE	.88354	.59684	32.45		**	
VINYL CHLORIDE	.99943	.82854	17.10	*		
BROMOMETHANE	1.12336	1.08376	3.53			
CHLOROETHANE	.56632	.57989	2.40			
ACROLEIN	.11556	.02318	79.94			(Conc=100.00)
TRICHLOROFLUOROMETHANE	1.70215	1.98538	16.64			
1,1-DICHLOROETHENE	.91287	.86066	5.72	*		
CARBON DISULFIDE	1.91754	1.72773	9.90			
ACETONE	.39875	.56504	41.70			
ACRYLONITRILE	.27597	.24454	11.39			
METHYLENE CHLORIDE	1.06744	.96949	9.18			
TRANS-1,2-DICHLOROETHENE	1.18422	1.14095	3.65			
METHYL-TERT-BUTYL-ETHER	3.21560	3.72738	15.92			
TERT-BUTYL-ALCOHOL	.20377	.28364	39.19			(Conc=100.00)
1,1-DICHLOROETHANE	2.09843	2.05969	1.85		**	
DI-ISOPROPYL-ETHER	4.29101	4.16269	2.99			
CIS-1,2-DICHLOROETHENE	1.77116	1.78493	.78			
CHLOROFORM	2.61663	2.97897	13.85	*		
1,2-DICHLOROETHANE	1.83032	2.07622	13.43			
1,2-DICHLOROETHANE-D4	1.72147	1.82243	5.86			(Conc=50.00)
VINYL ACETATE	1.09604	1.08561	.95			
2-BUTANONE	.02986	.02763	7.45			
1,1,1-TRICHLOROETHANE	.61038	.77285	26.62			
CARBON TETRACHLORIDE	.61152	.76103	24.45			
BENZENE	.75180	.72268	3.87			
TRICHLOROETHENE	.43964	.46360	5.45			
1,2-DICHLOROPROPANE	.30621	.25838	15.62	*		
BROMODICHLOROMETHANE	.63700	.72920	14.47			
2-CHLOROETHYLVINYLETHER	.20801	.16968	18.43			
TRANS-1,3-DICHLOROPROPENE	.55036	.53449	2.88			
CIS-1,3-DICHLOROPROPENE	.47589	.45764	3.83			
1,1,2-TRICHLOROETHANE	.35940	.31531	12.27			

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

047

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/09/93

Contractor: LAB RESOURCES Time: 10:11

Contract No: Laboratory ID: >BB941

Instrument ID: 2637A0 1713 Initial Calibration Date: 02/24/93

Minimum $\overline{RF}$ for SPCC is 0.3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
IBROMOCHLOROMETHANE	.73090	.77675	6.27			
BROMOFORM	.77450	.83316	7.57		**	
-METHYL-2-PENTANONE	.45261	.40038	11.54			
OLUENE-D8	1.08709	.89304	17.85			(Conc=50.00)
TOLUENE	.63288	.61947	2.12	*		
ETRACHLOROETHENE	.61071	.68879	12.79			
-HEXANONE	.32551	.29067	10.70			
CHLOROBENZENE	.91141	.90920	.24		**	
ETHYLBENZENE	.42029	.42016	.03	*		
,P-XYLENE	.50982	.53415	4.77			(Conc=100.00)
-XYLENE	.50187	.50573	.77			
STYRENE	.88897	.87993	1.02			
-BROMOFLUOROBENZENE	.96250	.86391	10.24			(Conc=50.00)
,1,2,2-TETRACHLOROETHANE	.72300	.64898	10.24		**	
1,3-DICHLOROBENZENE	1.05973	1.16707	10.13			
,4-DICHLOROBENZENE	1.08440	1.18894	9.64			
,2-DICHLOROBENZENE	1.03826	1.11359	7.26			

nF - Response Factor from daily standard file at 50.00 UG/L

F - Average Response Factor from Initial Calibration Form VI

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/08/93

Contractor: LAB. RESOURCES Time: 14:42

Contract No: Laboratory ID: >C8365

Instrument ID: 2824A11 191 Initial Calibration Date: 02/15/93

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
CHLOROMETHANE	.45279	.32186	28.92		**	
VINYL CHLORIDE	.63419	.52770	16.79	*		
BROMOMETHANE	1.10083	.91300	17.06			
CHLOROETHANE	.41416	.35924	13.26			
ACROLEIN	.05771	.06665	15.48			(Conc=100.00)
TRICHLOROFLUOROMETHANE	2.99227	2.41686	19.23			
1,1-DICHLOROETHENE	1.09127	.90814	16.78	*		
CARBON DISULFIDE	2.46711	2.00350	18.79			
ACETONE	.16004	.15369	3.96			
ACRYLONITRILE	.11444	.12732	11.25			
METHYLENE CHLORIDE	1.16665	.99490	14.72			
METHYL-TERT-BUTYL-ETHER	2.81207	2.62876	6.52			
TERT-BUTYL-ALCOHOL	.07647	.07808	2.12			(Conc=100.00)
TRANS-1,2-DICHLOROETHENE	1.31889	1.13688	13.80			
DI-ISOPROPYL-ETHER	3.65500	3.63993	.41			
1,1-DICHLOROETHANE	2.02647	1.94773	3.89		**	
CIS-1,2-DICHLOROETHENE	1.39615	1.23946	11.22			
CHLOROFORM	3.39692	3.08183	9.28	*		
1,2-DICHLOROETHANE	2.19658	1.95694	10.91			
1,2-DICHLOROETHANE-D4	1.91799	1.77462	7.48			
VINYL ACETATE	.77506	.80705	4.13			
2-BUTANONE	.04586	.05535	20.69			
1,1,1-TRICHLOROETHANE	.77996	.72859	6.59			
CARBON TETRACHLORIDE	.79283	.72981	7.95			
BENZENE	.73083	.67847	7.16			
TRICHLOROETHENE	.47409	.45678	3.65			
1,2-DICHLOROPROPANE	.28681	.25856	9.85	*		
BROMODICHLOROMETHANE	.80076	.74762	6.64			
2-CHLOROETHYLVINYLETHER	.10891	.12494	14.72			
TRANS-1,3-DICHLOROPROPENE	.53347	.51156	4.11			
CIS-1,3-DICHLOROPROPENE	.48369	.46235	4.41			
1,1,2-TRICHLOROETHANE	.29747	.28117	5.48			

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/08/93

Contractor: LAB. RESOURCES Time: 14:42

Contract No: Laboratory ID: >C8365

Instrument ID: 2824A11 191 Initial Calibration Date: 02/15/93

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
DIBROMOCHLOROMETHANE	.75716	.72250	4.58			
BROMOFORM	.58685	.56963	2.93		**	
4-METHYL-2-PENTANONE	.21177	.21223	.21			
TOLUENE-D8	1.11727	1.06847	4.37			
TOLUENE	.67924	.63807	6.06	*		
TETRACHLOROETHENE	.60777	.56892	6.39			
2-HEXANONE	.12051	.12581	4.40			
CHLOROBENZENE	1.04107	.92413	11.23		**	
ETHYLBENZENE	.46761	.41757	10.70	*		
M,P-XYLENE	.58436	.52818	9.61			(Conc=100.00)
O-XYLENE	.56688	.50489	10.94			
STYRENE	.99180	.89419	9.84			
4-BROMOFLUOROBENZENE	.94900	.87580	7.71			
1,1,2,2-TETRACHLOROETHANE	.48374	.47851	1.08		**	
1,3-DICHLOROBENZENE	1.20778	1.11292	7.85			
1,4-DICHLOROBENZENE	1.24572	1.13124	9.19			
1,2-DICHLOROBENZENE	1.13820	1.06019	6.85			

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/10/93

Contractor: LAB. RESOURCES Time: 12:20

Contract No: Laboratory ID: >C8402

Instrument ID: 2824A11 191 Initial Calibration Date: 02/15/93

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
CHLOROMETHANE	.45279	.30568	32.49		**	
VINYL CHLORIDE	.63419	.47615	24.92	*		
BROMOMETHANE	1.10083	.90273	17.99			
CHLOROETHANE	.41416	.34510	16.67			
ACROLEIN	.05771	.06534	13.22			(Conc=100.00)
TRICHLOROFLUOROMETHANE	2.99227	2.35275	21.37			
1,1-DICHLOROETHENE	1.09127	.94779	13.15	*		
CARBON DISULFIDE	2.46711	1.84146	25.36			
ACETONE	.16004	.16129	.78			
ACRYLONITRILE	.11444	.12534	9.53			
METHYLENE CHLORIDE	1.16665	1.06544	8.68			
METHYL-TERT-BUTYL-ETHER	2.81207	2.65157	5.71			
TERT-BUTYL-ALCOHOL	.07647	.06967	8.88			(Conc=100.00)
TRANS-1,2-DICHLOROETHENE	1.31889	1.25250	5.03			
DI-ISOPROPYL-ETHER	3.65500	3.87634	6.06			
1,1-DICHLOROETHANE	2.02647	2.09372	3.32		**	
CIS-1,2-DICHLOROETHENE	1.39615	1.38465	.82			
CHLOROFORM	3.39692	3.28927	3.17	*		
1,2-DICHLOROETHANE	2.19658	2.04575	6.87			
1,2-DICHLOROETHANE-D4	1.91799	1.69998	11.37			
VINYL ACETATE	.77506	.80142	3.40			
2-BUTANONE	.04586	.05339	16.43			
1,1,1-TRICHLOROETHANE	.77996	.73957	5.18			
CARBON TETRACHLORIDE	.79283	.74002	6.66			
BENZENE	.73083	.74731	2.26			
TRICHLOROETHENE	.47409	.50488	6.49			
1,2-DICHLOROPROPANE	.28681	.28193	1.70	*		
BROMODICHLOROMETHANE	.80076	.78872	1.50			
2-CHLOROETHYLVINYLETHER	.10891	.14073	29.22			
TRANS-1,3-DICHLOROPROPENE	.53347	.53413	.12			
CIS-1,3-DICHLOROPROPENE	.48369	.50286	3.96			
1,1,2-TRICHLOROETHANE	.29747	.30858	3.73			

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/10/93

Contractor: LAB. RESOURCES Time: 12:20

Contract No: Laboratory ID: >C8402

Instrument ID: 2824A11 191 Initial Calibration Date: 02/15/93

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
DIBROMOCHLOROMETHANE	.75716	.75828	.15			
BROMOFORM	.58685	.57928	1.29		**	
4-METHYL-2-PENTANONE	.21177	.12478	41.08			
TOLUENE-D8	1.11727	1.06133	5.01			
TOLUENE	.67924	.68115	.28	*		
TETRACHLOROETHENE	.60777	.62891	3.48			
2-HEXANONE	.12051	.12478	3.55			
CHLOROBENZENE	1.04107	1.01650	2.36		**	
ETHYLBENZENE	.46761	.45423	2.86	*		
M,P-XYLENE	.58436	.58100	.58			(Conc=100.00)
O-XYLENE	.56688	.55763	1.63			
STYRENE	.99180	.98834	.35			
4-BROMOFLUOROBENZENE	.94900	.85826	9.56			
1,1,2,2-TETRACHLOROETHANE	.48374	.46347	4.19		**	
1,3-DICHLOROBENZENE	1.20778	1.21987	1.00			
1,4-DICHLOROBENZENE	1.24572	1.20570	3.21			
1,2-DICHLOROBENZENE	1.13820	1.14586	.67			

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/08/93

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	OTHER	TOT OUT
METHOD BLA	S	87	100	95		0
T302351-01	S	100	120*	79		1
071-03 MS	S	101	100	94		0
071-03MSD	S	101	102	89		0
T303072-02	S	112	106	91		0
T303071-02	S	117	99	100		0
T303071-03	S	117	101	103		0
T303047-01	S	119	101	103		0

EPA CLP QC Limits For:	Soil	Water
S1 (DCE) = 1,2-DICHLOROETHANE-D4	70-121	76-114
S2 (TOL) = TOLUENE-D8	81-117	88-110
S3 (BFB) = 4-BROMOFLUOROBENZENE	74-121	86-115

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/09/93

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	OTHER	TOT OUT
METHOD BLA	S	99	99	97		0
T302351-01	S	94	108	87		0
T302334-08	S	104	105	93		0
T302359-03	S	99	100	95		0
T303072-01	S	102	101	97		0
T303071-04	S	99	103	90		0
T303047-03	S	100	101	95		0
T303047-04	S	98	100	96		0
MS	S	98	100	96		0
MSD	S	97	102	97		0
T303095-01	S	100	113	98		0

EPA CLP QC Limits For:	Soil	Water
S1 (DCE) = 1,2-DICHLOROETHANE-D4	70-121	76-114
S2 (TOL) = TOLUENE-D8	81-117	88-110
S3 (BFB) = 4-BROMOFLUOROBENZENE	74-121	86-115

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/08/93

LAB SAMP NO. ($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	OTHER	TOT OUT
METHOD BLA W	98	99	99		0
T303018-04 W	100	98	97		0
T302358-07 W	98	99	98		0
T303056-02 W	98	99	98		0
T303062-01 W	102	97	100		0
T303071-05 W	99	100	98		0
T303085-02 W	100	97	99		0
T303087-03 W	99	97	102		0
T303092-01 W	99	97	98		0
T303068-08 W	99	98	98		0

EPA CLP QC Limits For:	Soil	Water
S1 (DCE) = 1,2-DICHLOROETHANE-D4	70-121	76-114
S2 (TOL) = TOLUENE-D8	81-117	88-110
S3 (BFB) = 4-BROMOFLUOROBENZENE	74-121	86-115

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/10/93

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	OTHER	TOT OUT
METHOD BLA	W	96	100	99		0
MED LEVEL	S	97	101	98		0
T303042-01	W	96	98	98		0
T303042-02	W	97	97	98		0
T303104-03	W	100	101	96		0
T303111-03	W	101	98	99		0
T303071-01	S	98	107	102		0
T303072-03	W	102	98	100		0
T303111-03	WM	99	102	97		0
T303111-03	WM	101	99	98		0

EPA CLP QC Limits For:	Soil	Water
S1 (DCE) = 1,2-DICHLOROETHANE-D4	70-121	76-114
S2 (TOL) = TOLUENE-D8	81-117	88-110
S3 (BFB) = 4-BROMOFLUOROBENZENE	74-121	86-115

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits

LABORATORY RESOURCES INC.

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Name: Laboratory Resources Contract:

Code: Case No.: SAS No.: DATE : 03/08/93

Matrix Spike - EPA Sample No.: T303071-03 Level: LOW

COMPOUNDS	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-DICHLOROETHENE	50.00	0.00	51.82	104	59-172
BENZENE	50.00	0.00	49.06	98	66-142
TRICHLOROETHENE	50.00	0.00	47.05	94	62-137
TOLUENE	50.00	0.00	48.10	96	59-139
CHLOROBENZENE	50.00	0.00	49.94	100	60-133

COMPOUNDS	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-DICHLOROETHENE	50.00	59.03	118	13	22	59-172
BENZENE	50.00	57.15	114	15	21	66-142
TRICHLOROETHENE	50.00	50.84	102	8	24	62-137
TOLUENE	50.00	52.20	104	8	21	59-139
CHLOROBENZENE	50.00	52.71	105	5	21	60-133

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

Values outside of advisory EPA contract Lab QC limits.

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

Comments: _____

_____

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8924 Lab Sample ID: 50 PPB VOA

Date Analyzed: 03/08/93 Time Analyzed: 09:18

	IS1(BCM)		IS2(DFB)		IS3(CBZ)	
	AREA #	RT	AREA #	RT	AREA #	RT
12 HOUR STD	32423	8.89	129232	11.08	105658	16.79
UPPER LIMIT	64846		258464		211316	
LOWER LIMIT	16212		64616		52829	
LAB SAMPLE #						
METHOD BLA	39781	8.88	159884	11.08	131464	16.78
T302351-01	26931	8.88	86034	11.08	46787*	16.78
071-03 MS	35821	8.90	156514	11.11	124568	16.80
071-03MSD	34999	8.90	141751	11.09	135187	16.80
T303072-02	29484	8.88	112215	11.09	86660	16.79
T303071-02	23429	8.89	93339	11.11	80631	16.80
T303071-03	26226	9.30	104905	11.48	87167	17.13
T303047-01	27093	8.88	110050	11.09	93526	16.79

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

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

Column used to flag internal standard are values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >B8941 Lab Sample ID: 50 PPB VOA

Date Analyzed: 03/09/93 Time Analyzed: 10:11

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	30911	8.88	115599	11.08	96328	16.79
UPPER LIMIT	61822		231198		192656	
LOWER LIMIT	15456		57800		48164	
LAB SAMPLE #						
METHOD BLA	32555	8.87	133567	11.07	113059	16.79
T302351-01	27008	8.87	88589	11.07	61148	16.78
T302334-08	22747	8.87	88227	11.08	66776	16.78
T302359-03	33727	8.93	135937	11.13	115512	16.82
T303072-01	25896	8.99	106092	11.17	89577	16.84
T303071-04	27025	8.91	105774	11.10	85820	16.80
T303047-03	28669	8.89	115237	11.09	98776	16.80
T303047-04	29547	8.94	119433	11.13	101285	16.82
MS	29900	8.94	124768	11.13	105015	16.83
MSD	31708	8.92	128803	11.12	107123	16.81
T303095-01	27998	8.92	114114	11.12	87462	16.81

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

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

059

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >C8365 Lab Sample ID: 50 PPB STD

Date Analyzed: 03/08/93 Time Analyzed: 14:42

	IS1(BCM)		IS2(DFB)		IS3(CBZ)	
	AREA #	RT	AREA #	RT	AREA #	RT
12 HOUR STD	47999	7.48	195260	9.79	163590	15.47
UPPER LIMIT	95998		390520		327180	
LOWER LIMIT	23999		97630		81795	
LAB SAMPLE #						
METHOD BLA	39340	7.40	163904	9.75	137974	15.46
T303018-04	37508	7.44	161519	9.76	138082	15.46
T302358-07	37907	7.47	160347	9.79	138292	15.48
T303056-02	36095	7.48	156911	9.80	134281	15.48
T303062-01	35526	7.46	150370	9.78	130909	15.48
T303071-05	36486	7.39	157521	9.75	132662	15.47
T303085-02	32155	7.45	74937*	9.78	120202	15.50
T303087-03	35564	7.48	152313	9.87	131827	15.61
T303092-01	34212	7.45	146669	9.78	127606	15.47
T303068-08	35093	7.27	151278	9.73	131291	15.56

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

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

olumn used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >C8402 Lab Sample ID: VSTD 50 PP

Date Analyzed: 03/10/93 Time Analyzed: 12:20

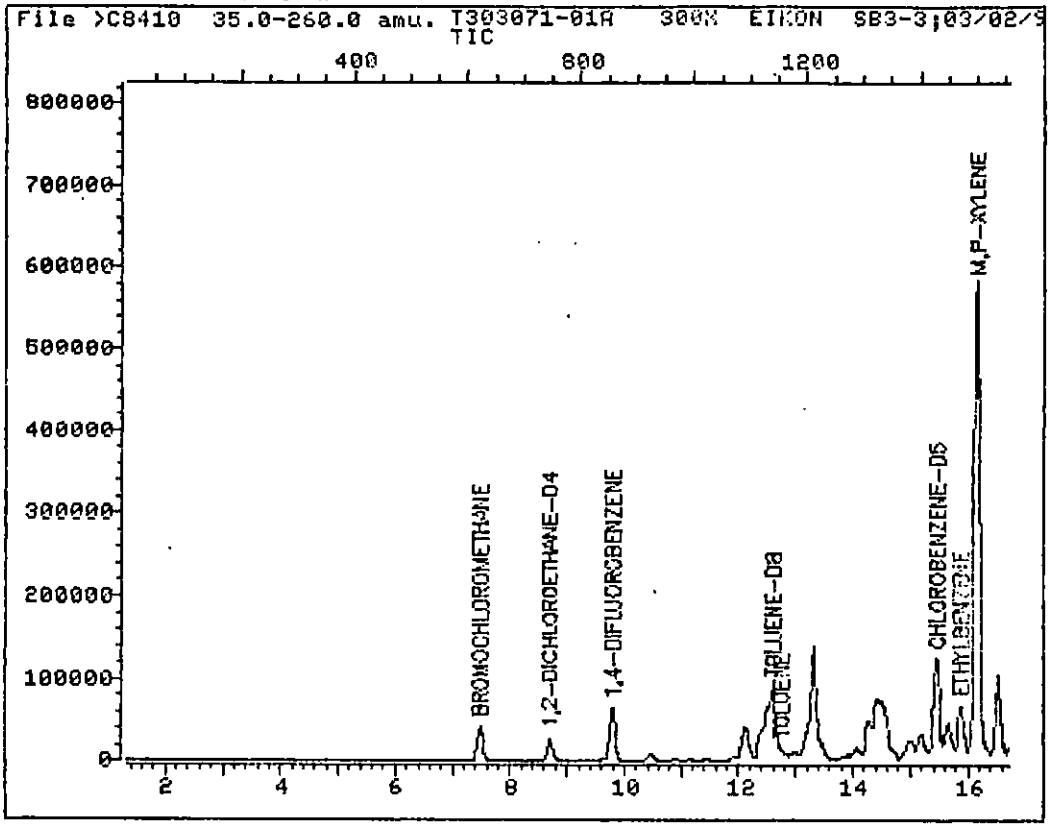
	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	40281	7.46	167902	9.79	142764	15.46
UPPER LIMIT	80562		335804		285528	
LOWER LIMIT	20141		83951		71382	
LAB SAMPLE #						
METHOD BLA	39861	7.44	170578	9.77	142273	15.47
MED LEVEL	39197	7.47	169029	9.80	140968	15.47
T303042-01	39952	7.47	173084	9.78	144954	15.45
T303042-02	40547	7.47	171421	9.78	149813	15.47
T303104-03	35791	7.45	157190	9.77	131647	15.47
T303111-03	35453	7.46	153940	9.80	132936	15.47
T303071-01	39407	7.47	172719	9.79	143862	15.46
T303072-03	37764	7.44	160305	9.80	137804	15.51
T303111-03M	35167	7.48	155981	9.89	128946	15.63
T303111-03M	35017	7.48	150155	9.81	130118	15.50

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

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

Column used to flag internal standard are values with an asterisk

TOTAL ION CHROMATOGRAM



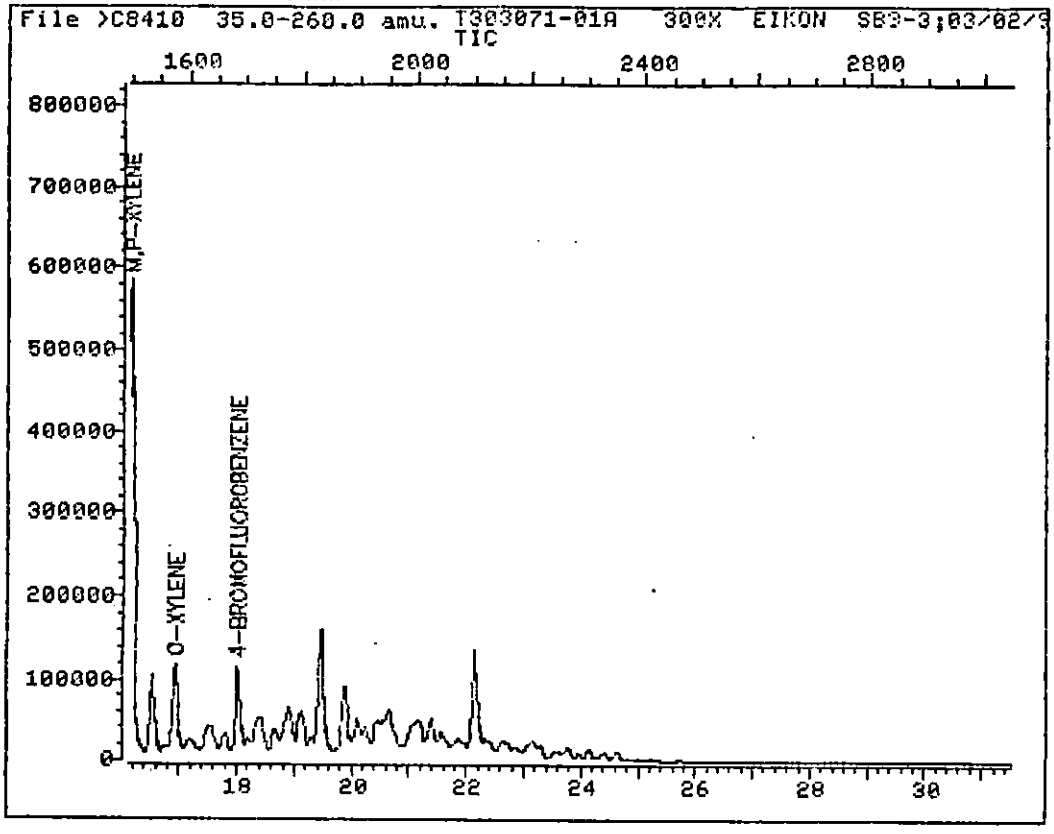
Data File: >C8410::C3 Quant Output File: ^C8410::QT
Name: T303071-01A 300X Instrument ID: C
Misc: EIKON SB3-3;03/02/93;03/03/93

Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 19:00
Injected at: 930310 18:27

Page 1 of 2

TOTAL ION CHROMATOGRAM

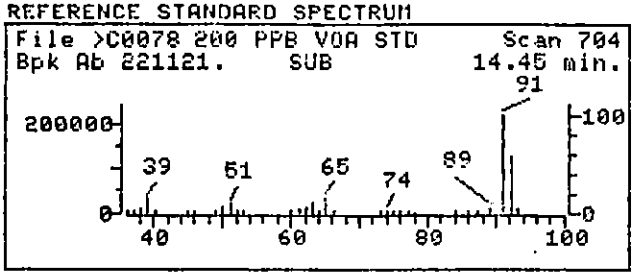


Data File: >C8410::C3 Quant Output File: ^C8410::QT
Name: T303071-01A 300X Instrument ID: C
Misc: EIKON SB3-3;03/02/93;03/03/93

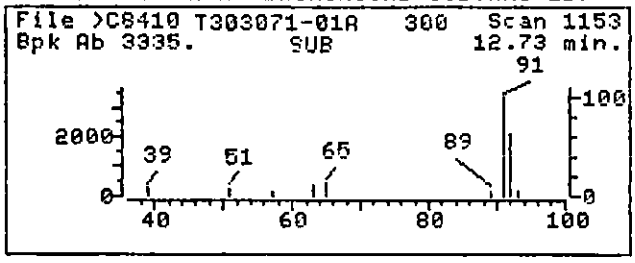
Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 19:00
Injected at: 930310 18:27

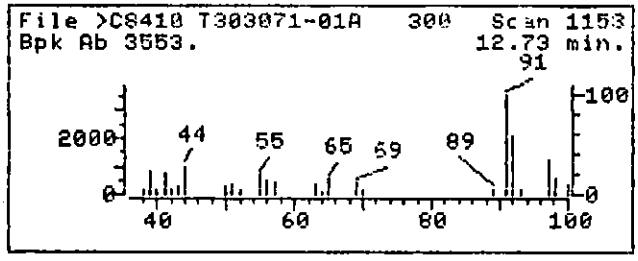
REFERENCE STANDARD SPECTRUM

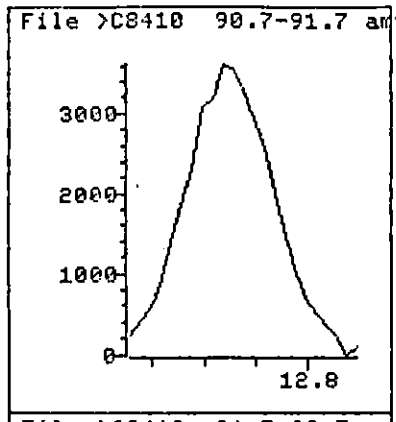


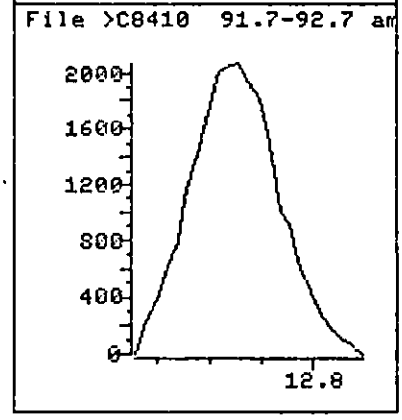
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



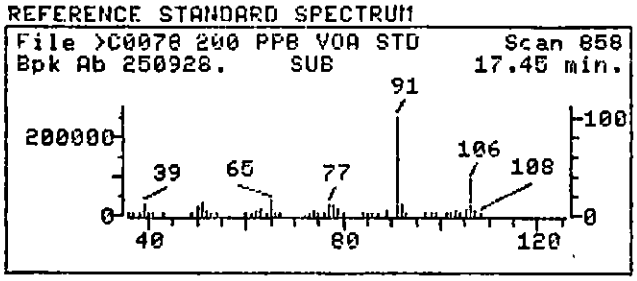




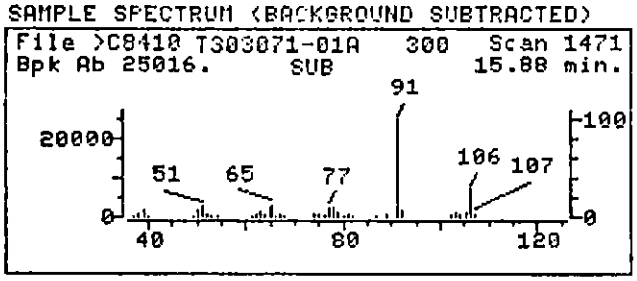
Data File: >C8410::C3 Quant Output File: ^C8410::QT
Name: T303071-01A 300X Instrument ID: C
Misc: EIKON SB3-3;03/02/93;03/03/93
Quant Time: 930310 19:00 Quant ID File: IDDVOC::SC
Injected at: 930310 18:27 Last Calibration: 930215 15:35
Last Qcal Time: 930310 12:20

Compound No : 40
Compound Name : TOLUENE
Scan Number : 1153
Retention Time: 12.73 min.
Quant Ion : 92.0
Area : 12637
Concentration : 6.45 UG/L
q-value : 97

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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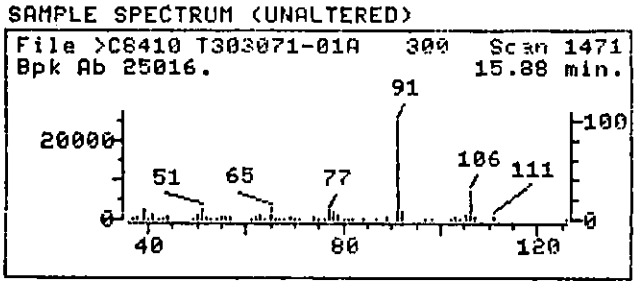
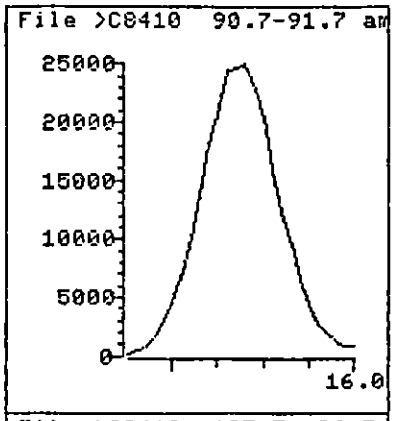
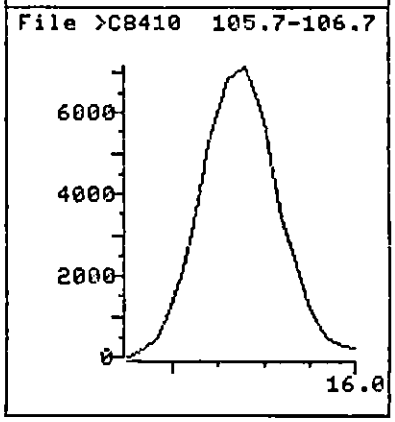


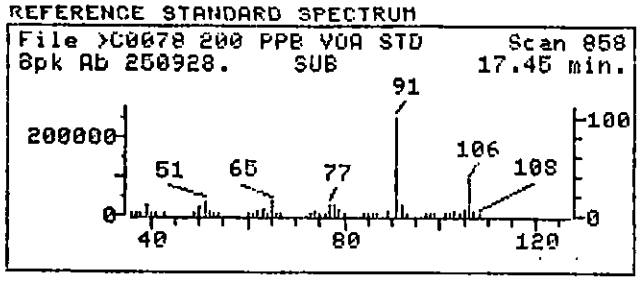




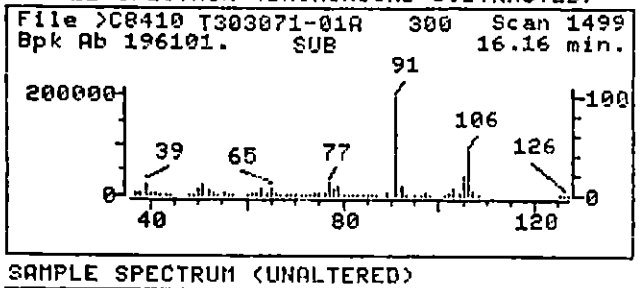
Data File: >C8410::C3 Quant Output File: ^C8410::QT
Name: T303071-01A 300X Instrument ID: C
Misc: EIKON SB3-3;03/02/93;03/03/93
Quant Time: 930310 19:00 Quant ID File: IDDVOC::SC
Injected at: 930310 18:27 Last Calibration: 930215 15:35
Last Qcal Time: 930310 12:20

Compound No : 44
Compound Name : ETHYLBENZENE
Scan Number : 1471
Retention Time: 15.88 min.
Quant Ion : 106.0
Area : 43403
Concentration : 33.21 UG/L
q-value : 93

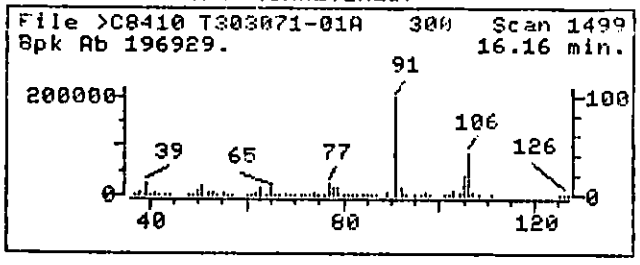
REFERENCE STANDARD SPECTRUM

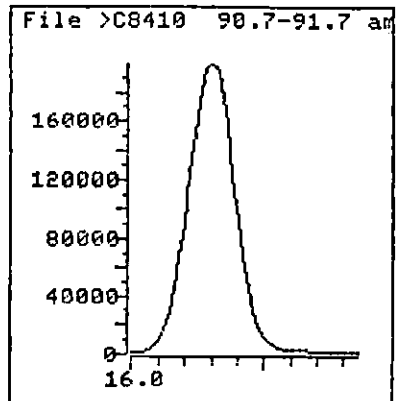


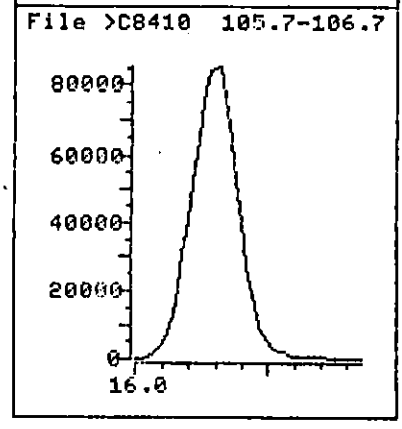
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



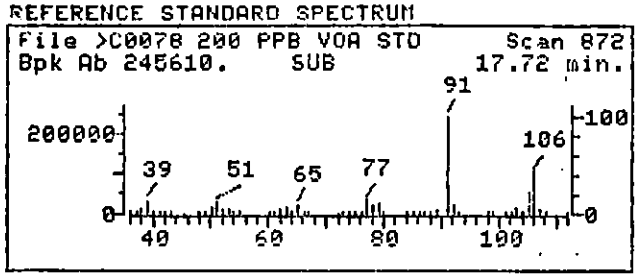




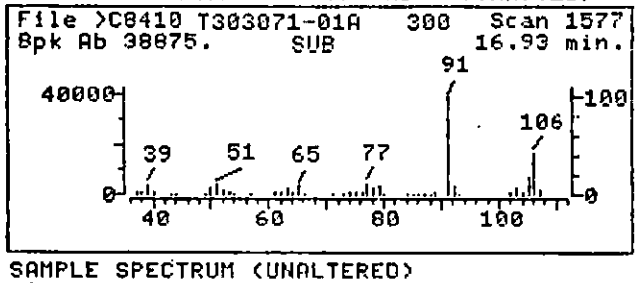
Data File: >C8410::C3 Quant Output File: ^C8410::QT
Name: T303071-01A 300X Instrument ID: C
Misc: EIKON SB3-3;03/02/93;03/03/93
Quant Time: 930310 19:00 Quant ID File: IDDVOC::SC
Injected at: 930310 18:27 Last Calibration: 930215 15:35
Last Qcal Time: 930310 12:20

Compound No : 45
Compound Name : M,P-XYLENE
Scan Number : 1499
Retention Time: 16.16 min.
Quant Ion : 106.0
Area : 525734
Concentration : 314.49 UG/L
q-value : 94

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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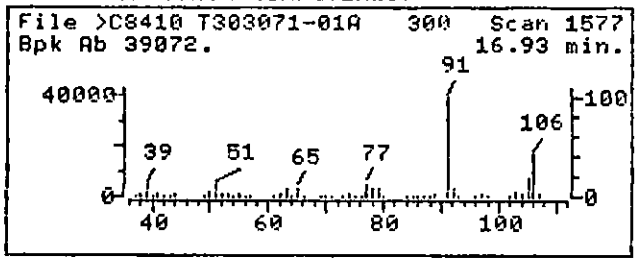
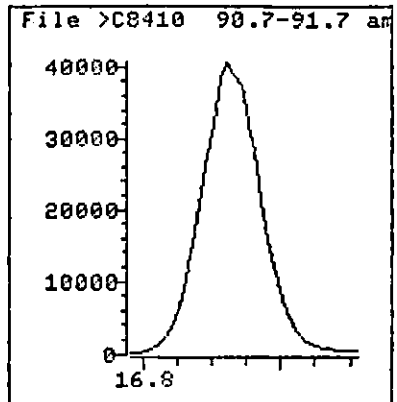
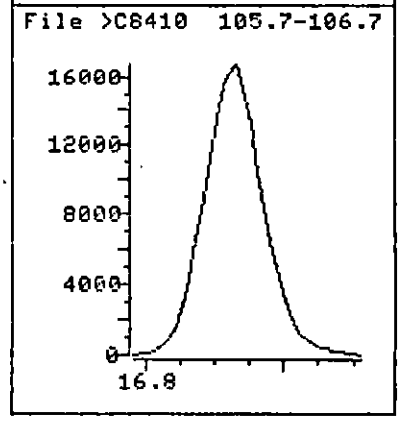






Data File: >C8410::C3 Quant Output File: ^C8410::QT
Name: T303071-01A 300X Instrument ID: C
Misc: EIKON SB3-3;03/02/93;03/03/93
Quant Time: 930310 19:00 Quant ID File: IDDVOC::SC
Injected at: 930310 18:27 Last Calibration: 930215 15:35
Last Qcal Time: 930310 12:20

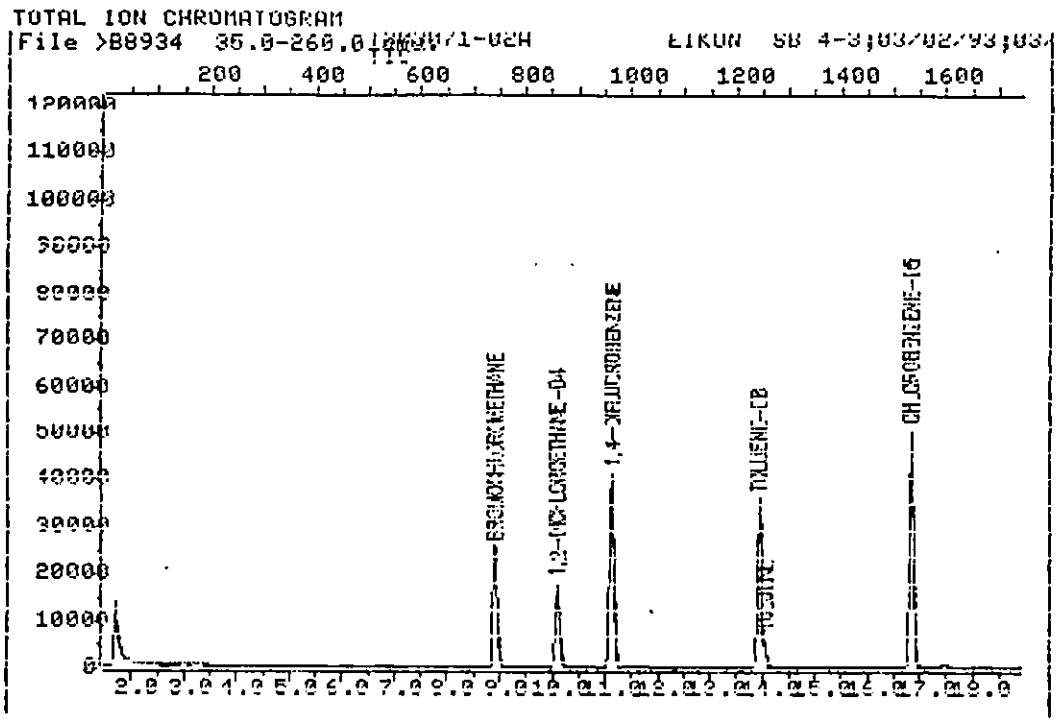
Compound No : 46
Compound Name : O-XYLENE
Scan Number : 1577
Retention Time: 16.93 min.
Quant Ion : 106.0
Area : 98776
Concentration : 61.56 UG/L
q-value : 89

Operator ID: ANDY Quant Rev: 7 Quant Time: 930310 19:00
Output File: ^C8410::QT Injected at: 930310 18:27
Data File: >C8410::C3 Dilution Factor: 1.00000
Name: T303071-01A 300X Instrument ID: C
Misc: EIKON SB3-3;03/02/93;03/03/93

ID File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	7.47	128.0	39407	50.00	UG/L	9
21)	1,2-DICHLOROETHANE-D4	8.69	65.0	65803	49.11	UG/L	9
22)	*1,4-DIFLUOROBENZENE	9.79	114.0	172719	50.00	UG/L	8
37)	*CHLOROBENZENE-D5	15.46	117.0	143862	50.00	UG/L	8
39)	TOLUENE-D8	12.60	98.0	163738	53.62	UG/L	9
40)	TOLUENE	12.73	92.0	12637	6.45	UG/L	9
44)	ETHYLBENZENE	15.88	106.0	43403	33.21	UG/L	9
45)	M,P-XYLENE	16.16	106.0	525734	314.49	UG/L	9
46)	O-XYLENE	16.93	106.0	98776	61.56	UG/L	8
48)	4-BROMOFLUOROBENZENE	18.01	95.0	125979	51.02	UG/L	9

* Compound is ISTD

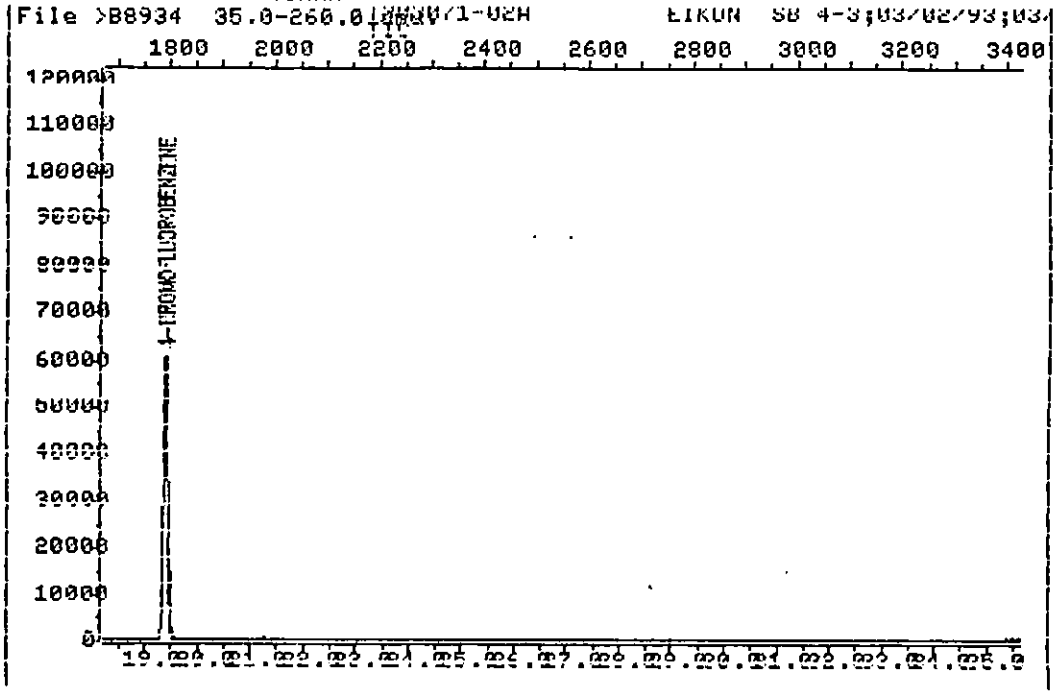


Data File: >B8934::B2 Quant Output File: ^B8934::QT
Name: T303071-02A Instrument ID: B
Misc: EIKUN SB 4-3:03/02/93:03/03/93

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 18:18
Injected at: 930308 17:35

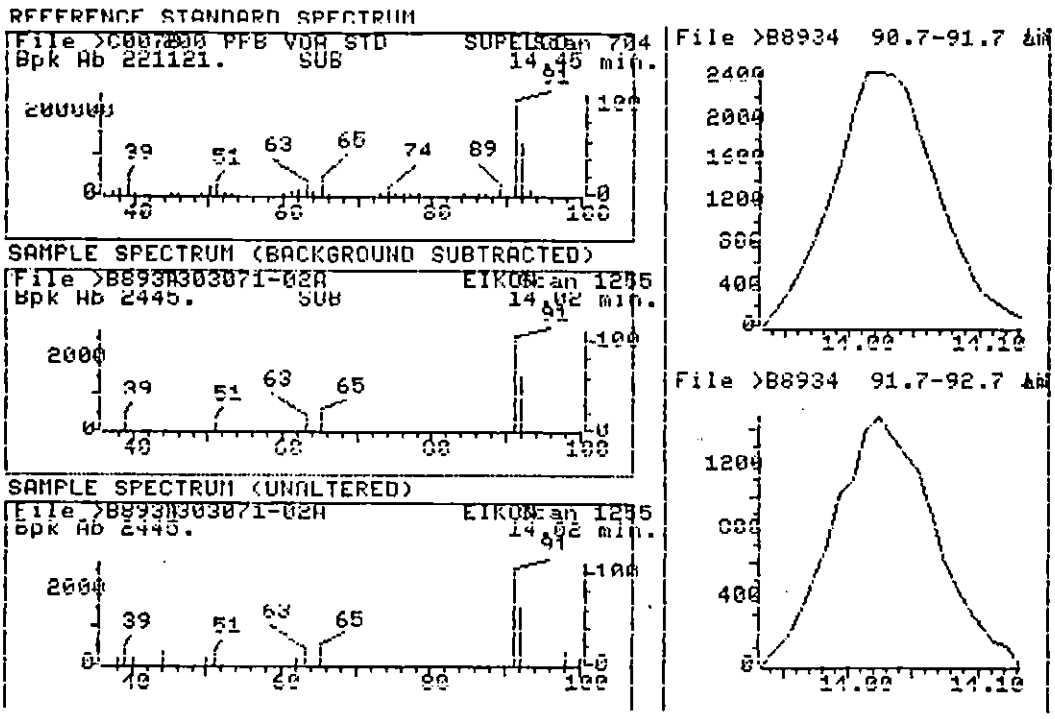
TOTAL ION CHROMATOGRAM



Data File: >B8934::B2 Quant Output File: ^B8934::QT
Name: T303071-02A Instrument ID: B
Misc: EIKON SB 4-3:03/02/93:03/03/93

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 18:18
Injected at: 930308 17:35



Data File: >B8934::B2 Quant Output File: ^B8934::QT
Name: T303071-02A Instrument ID: B
Misc: EIKON SB 4-3;03/02/93;03/03/93
Quant Time: 930308 18:18 Quant ID File: IDDSVO::C4
Injected at: 930308 17:35 Last Calibration: 930224 17:25
Last Qcal Time: 930308 09:18

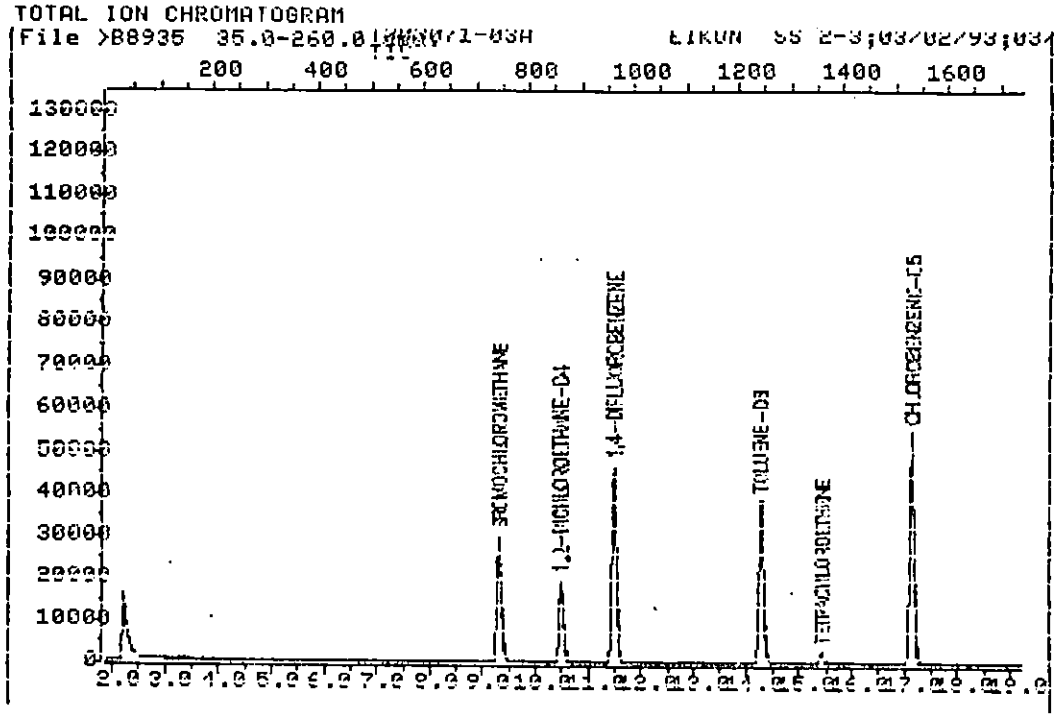
Compound No : 40
Compound Name : TOLUENE
Scan Number : 1255
Retention Time: 14.02 min.
Quant Ion : 92.0
Area : 8025
Concentration : 6.71 UG/L
q-value : 94

Operator ID: ED Quant Rev: 7 Quant Time: 930308 18:18
Output File: ^B8934::QT Injected at: 930308 17:35
Data File: >B8934::B2 Dilution Factor: 1.00000
Name: T303071-02A Instrument ID: B
Misc: EIKON SB 4-3;03/02/93;03/03/93

ID File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*BROMOCHLOROMETHANE	8.89	127.9	23429	50.00	UG/L
21)	1,2-DICHLOROETHANE-D4	10.07	65.0	42321	58.58	UG/L
22)	*1,4-DIFLUOROBENZENE	11.11	114.0	93339	50.00	UG/L
37)	*CHLOROBENZENE-D5	16.80	117.0	80631	50.00	UG/L
39)	TOLUENE-D8	13.90	98.0	72638	49.72	UG/L
40)	TOLUENE	14.02	92.0	8025	6.71	UG/L
48)	4-BROMOFLUOROBENZENE	19.37	95.0	68302	50.25	UG/L

* Compound is ISTD



Data File: >B8935::B2 Quant Output File: ^B8935::QT
Name: T303071-03A Instrument ID: B
Misc: EIKON SS 2-3;03/02/93;03/03/93

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 19:05
Injected at: 930308 18:21

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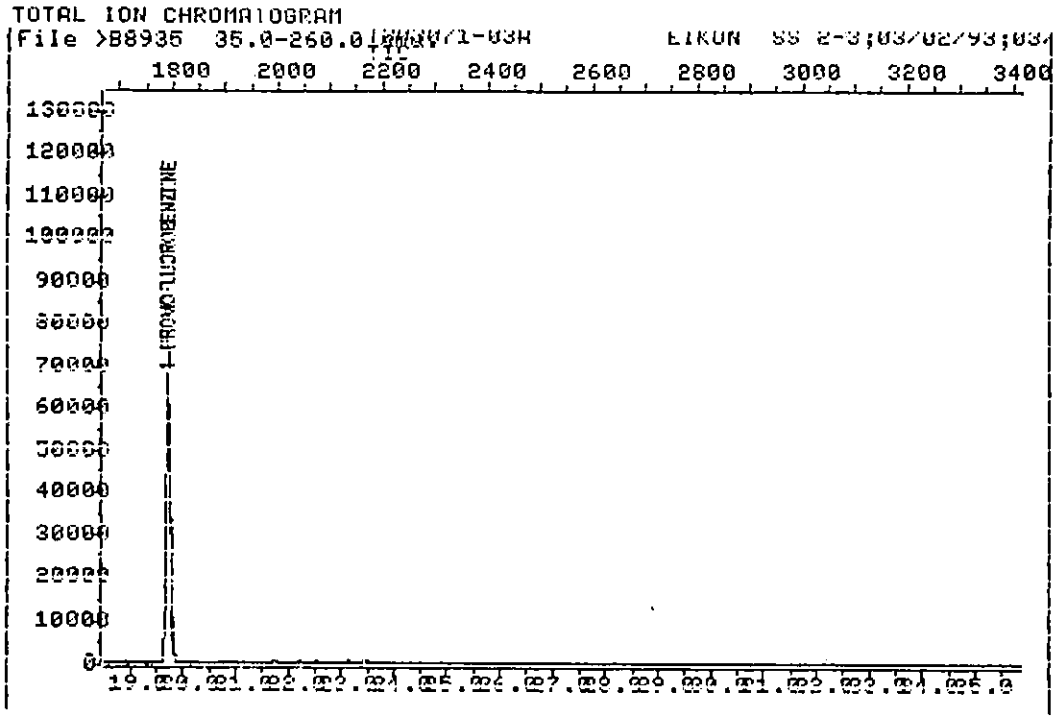
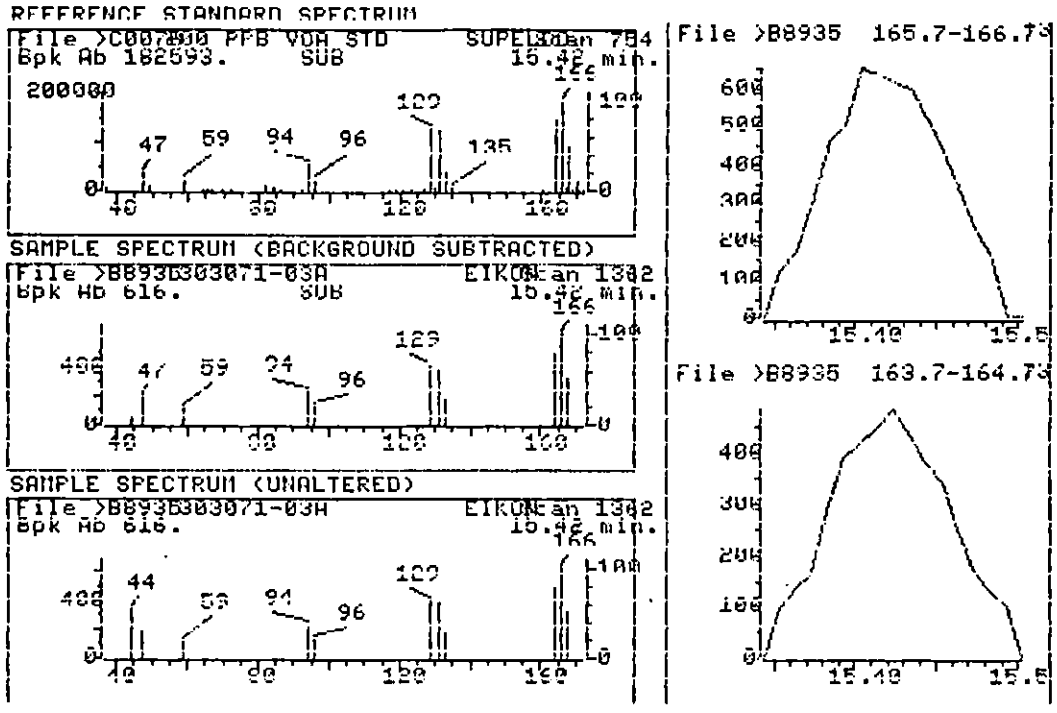


Data File: >B8935::B2 Quant Output File: ^B8935::QT
Name: T303071-03A Instrument ID: B
Misc: EIKON SS 2-3:03/02/93;03/03/93

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 19:05
Injected at: 930308 18:21



Data File: >B8935::B2 Quant Output File: ^B8935::QT
Name: T303071-03A Instrument ID: B
Misc: EIKON SS 2-3;03/02/93:03/03/93
Quant Time: 930308 19:05 Quant ID File: IDDSVO::C4
Injected at: 930308 18:21 Last Calibration: 930224 17:25
Last Qcal Time: 930308 09:18

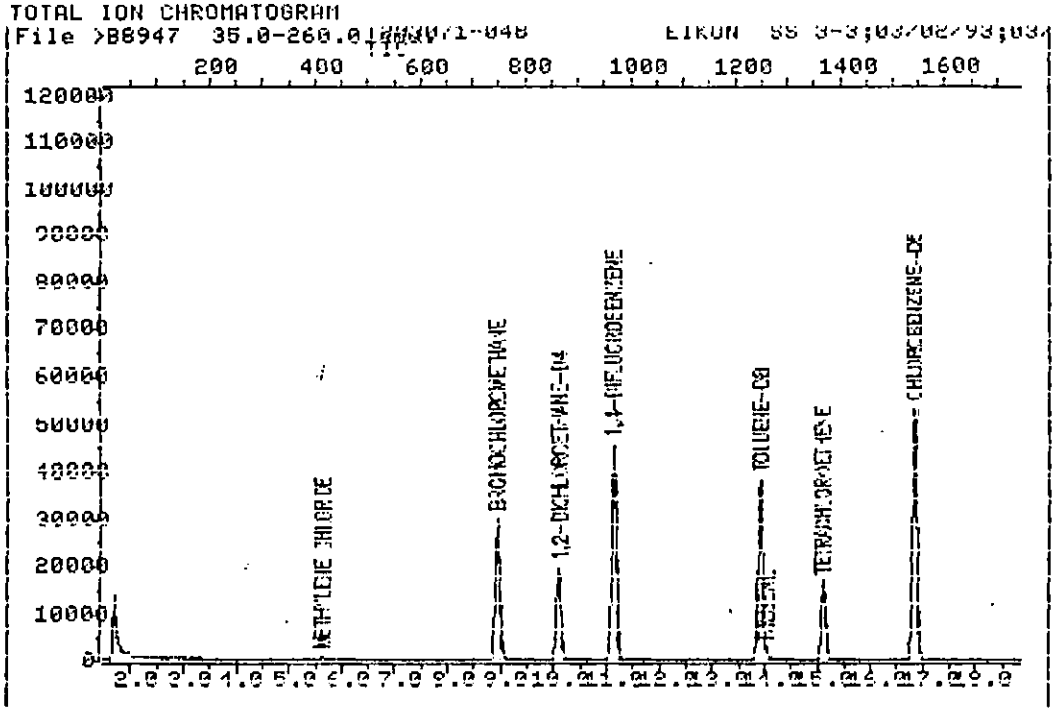
Compound No : 41
Compound Name : TETRACHLOROETHENE
Scan Number : 1362
Retention Time: 15.42 min.
Quant Ion : 164.0
Area : 2537
Concentration : 1.98 UG/L
q-value : 98

Operator ID: ED Quant Rev: 7 Quant Time: 930308 19:05
Output File: ^B8935::QT Injected at: 930308 18:21
Data File: >B8935::B2 Dilution Factor: 1.00000
Name: T303071-03A Instrument ID: B
Misc: EIKON SS 2-3:03/02/93:03/03/93

ID File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.30	127.9	26226	50.00	UG/L	9
21)	1,2-DICHLOROETHANE-D4	10.46	65.0	47133	58.28	UG/L	9
22)	*1,4-DIFLUOROBENZENE	11.48	114.0	104905	50.00	UG/L	9
37)	*CHLOROBENZENE-D5	17.13	117.0	87167	50.00	UG/L	9
39)	TOLUENE-D8	14.25	98.0	79757	50.50	UG/L	9
41)	TETRACHLOROETHENE	15.42	164.0	2537	1.98	UG/L	9
48)	4-BROMOFLUOROBENZENE	19.70	95.0	75536	51.40	UG/L	9

* Compound is ISTD



Data File: >B8947::B2 Quant Output File: ^B8947::QT
Name: T303071-04B Instrument ID: B
Misc: EIKON SS 3-3;03/02/93:03/03/93

Id File: 1DDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

Operator ID: ED
Quant Time : 930309 16:07
Injected at: 930309 15:23

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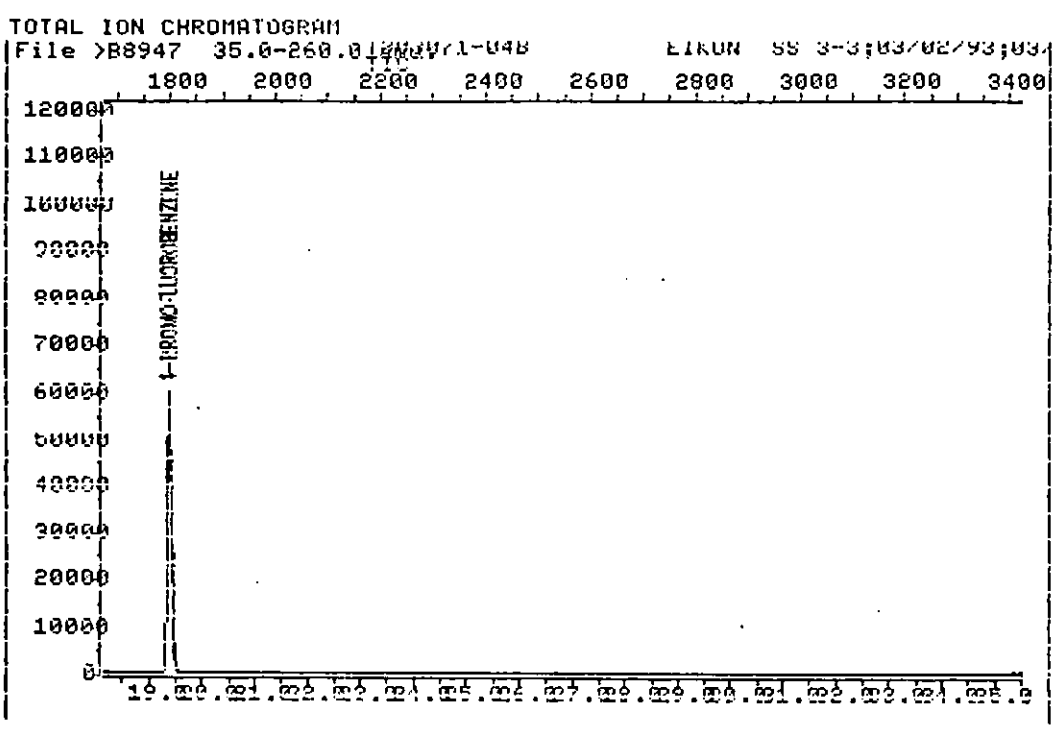
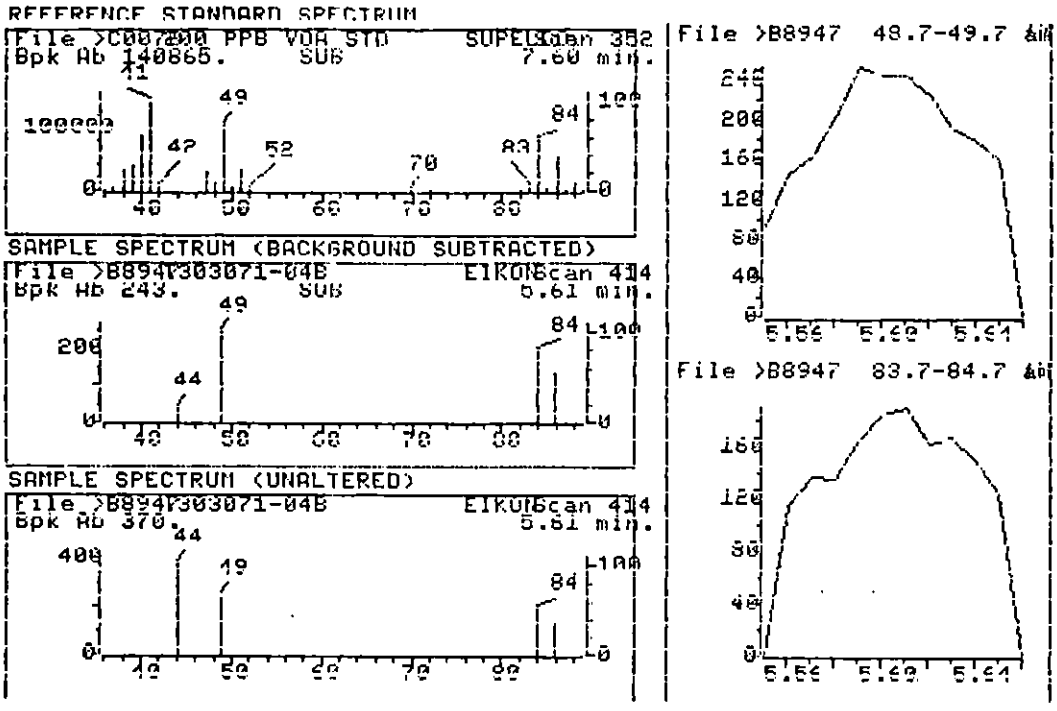


Data File: >B8947::B2 Quant Output File: ^B8947::QT
Name: T303071-04B Instrument ID: B
Misc: EIKON SS 3-3;03/02/93;03/03/93

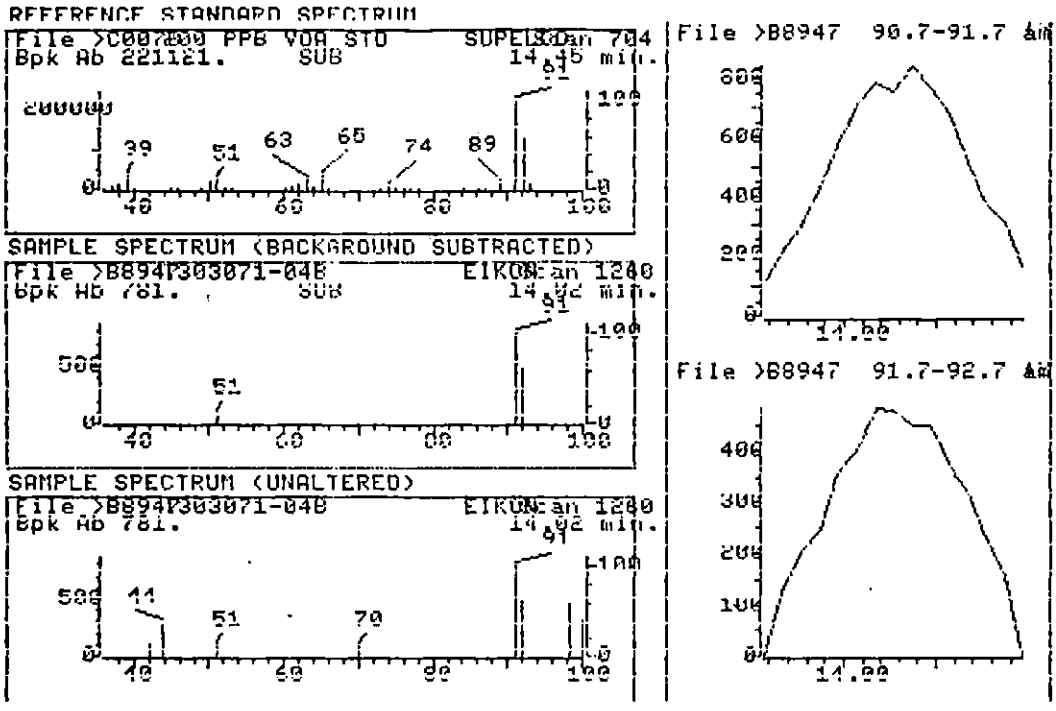
Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

Operator ID: ED
Quant Time : 930309 16:07
Injected at: 930309 15:23



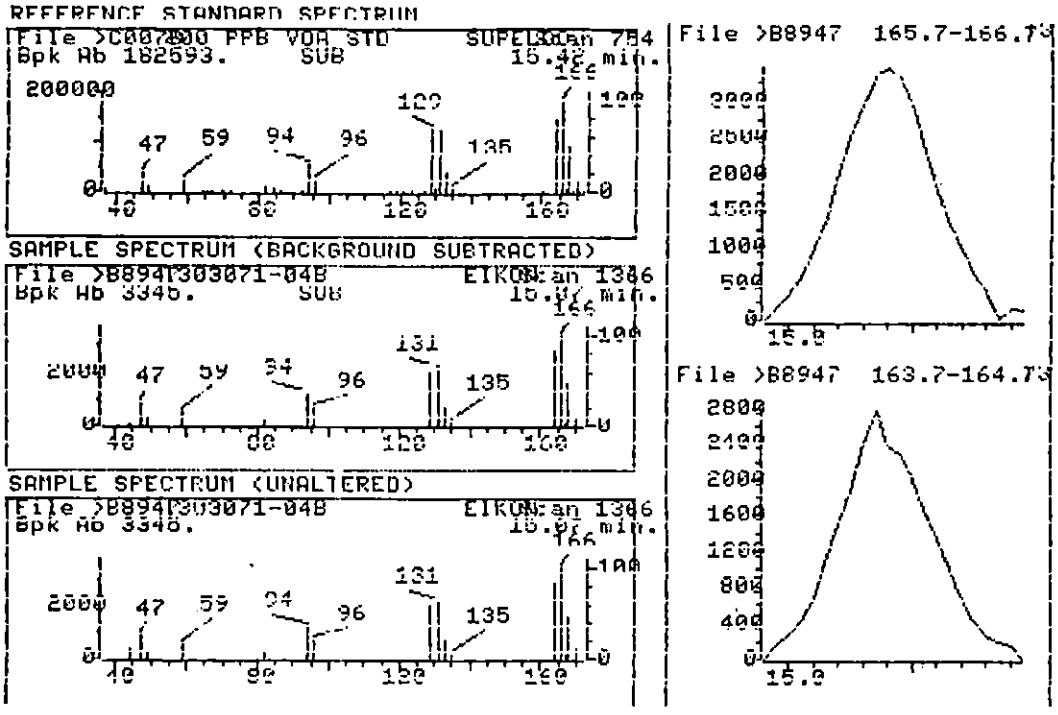
Data File: >B8947::B2 Quant Output File: ^B8947::QT
Name: T303071-04B Instrument ID: B
Misc: EIKON SS 3-3:03/02/93:03/03/93
Quant Time: 930309 16:07 Quant ID File: IDDSV0::C4
Injected at: 930309 15:23 Last Calibration: 930224 17:25
Last Qcal Time: 930309 10:11

Compound No : 12
Compound Name : METHYLENE CHLORIDE
Scan Number : 414
Retention Time: 5.61 min.
Quant Ion : 84.0
Area : 909
Concentration : 1.73 UG/L
q-value : 90



Data File: >B8947::B2 Quant Output File: ^B8947::QT
Name: T303071-04B Instrument ID: B
Misc: EIKON SS 3-3;03/02/93;03/03/93
Quant Time: 930309 16:07 Quant ID File: IDDSVO::C4
Injected at: 930309 15:23 Last Calibration: 930224 17:25
Last Qcal Time: 930309 10:11

Compound No : 40
Compound Name : TOLUENE
Scan Number : 1260
Retention Time: 14.02 min.
Quant Ion : 92.0
Area : 2554
Concentration : 2.40 UG/L
q-value : 87



Data File: >B8947::B2 Quant Output File: ^B8947::QT
Name: T303071-04B Instrument ID: B
Misc: EIKON SS 3-3;03/02/93;03/03/93
Quant Time: 930309 16:07 Quant ID File: IDDSVO::C4
Injected at: 930309 15:23 Last Calibration: 930224 17:25
Last Qcal Time: 930309 10:11

Compound No : 41
Compound Name : TETRACHLOROETHENE
Scan Number : 1366
Retention Time: 15.07 min.
Quant Ion : 164.0
Area : 14128
Concentration : 11.95 UG/L
q-value : 93

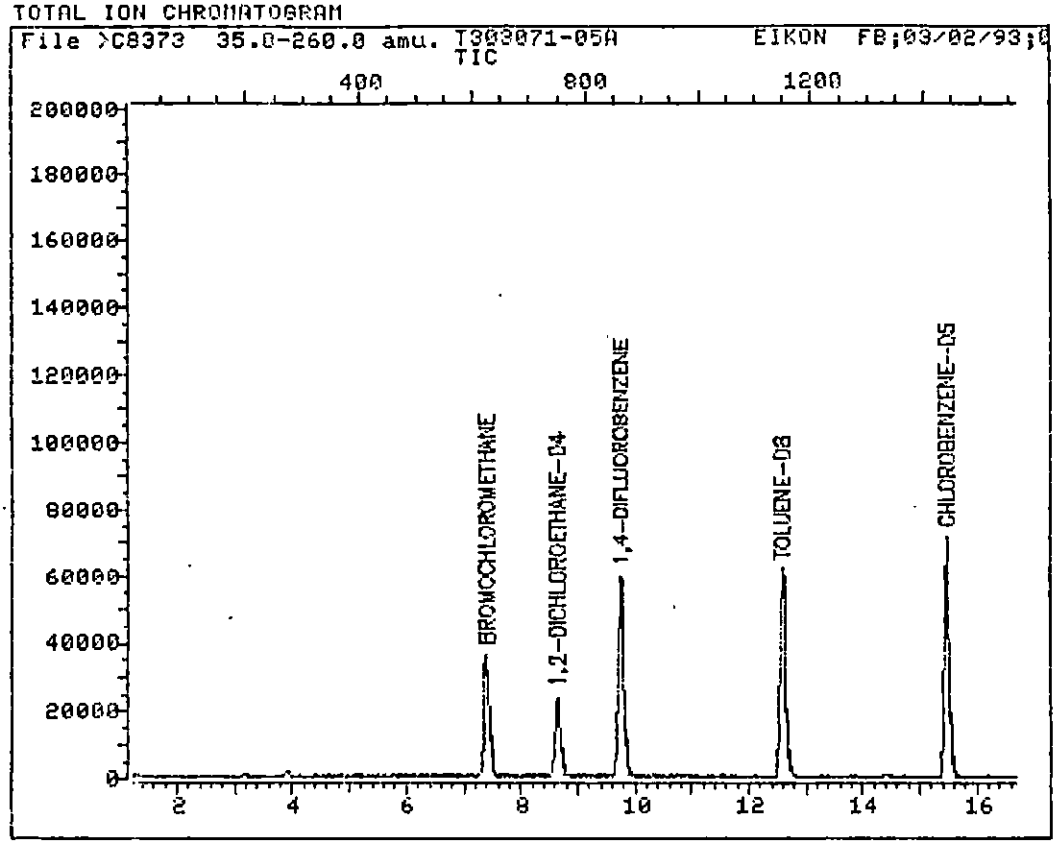
Operator ID: ED Quant Rev: 7 Quant Time: 930309 16:07
Output File: ^B8947::QT Injected at: 930309 15:23
Data File: >B8947::B2 Dilution Factor: 1.00000
Name: T303071-04B Instrument ID: B
Misc: EIKON SS 3-3:03/02/93:03/03/93

ID File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	8.91	127.9	27025	50.00	UG/L	89
12)	METHYLENE CHLORIDE	5.61	84.0	909	1.73	UG/L	90
21)	1,2-DICHLOROETHANE-D4	10.08	65.0	48670	49.41	UG/L	97
22)	*1,4-DIFLUOROBENZENE	11.10	114.0	105774	50.00	UG/L	99
37)	*CHLOROBENZENE-D5	16.80	117.0	85820	50.00	UG/L	96
39)	TOLUENE-D8	13.91	98.0	78863	51.45	UG/L	98
40)	TOLUENE	14.02	92.0	2554	2.40	UG/L	87
41)	TETRACHLOROETHENE	15.07	164.0	14128	11.95	UG/L	93
48)	4-BROMOFLUOROBENZENE	19.36	95.0	66550	44.88	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

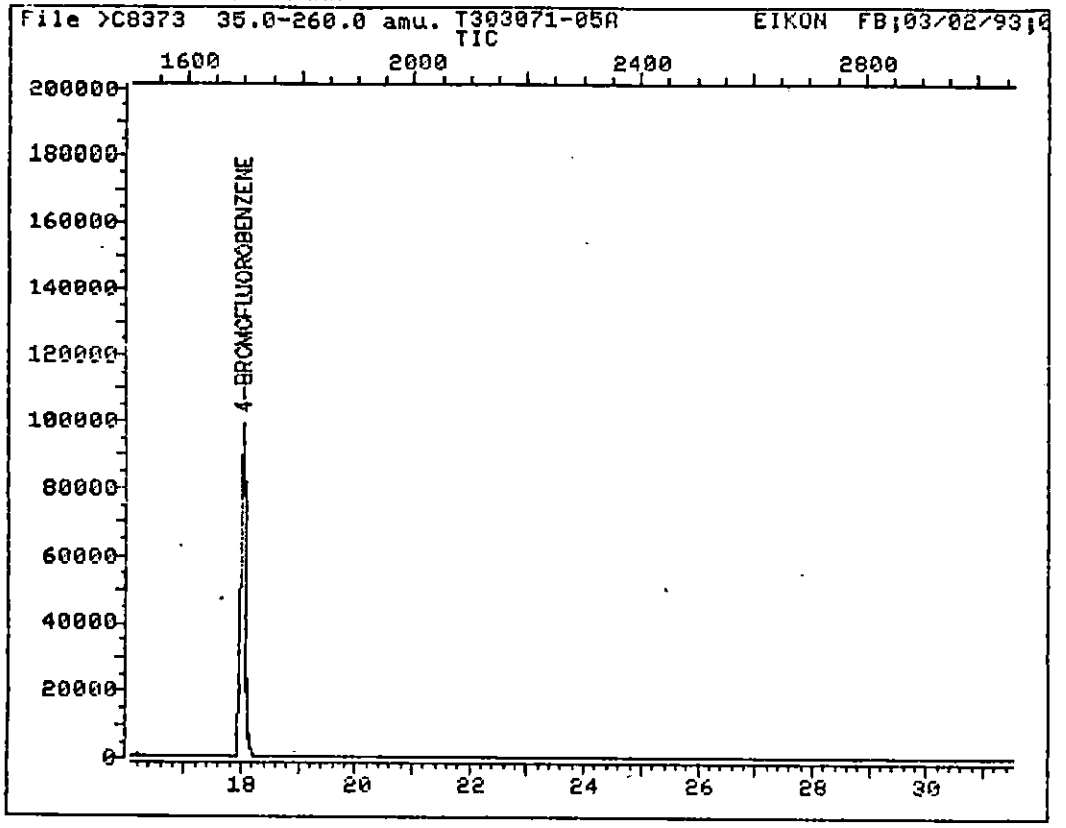


Data File: >C8373::C3 Quant Output File: ^C8373::QT
Name: T303071-05A Instrument ID: C
Misc: EIKON FB;03/02/93;03/03/93

Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930308 14:42

Operator ID: ANDY
Quant Time : 930308 20:27
Injected at: 930308 19:54

TOTAL ION CHROMATOGRAM



Data File: >C8373::C3 Quant Output File: ^C8373::QT
Name: T303071-05A Instrument ID: C
Misc: EIKON FB;03/02/93;03/03/93

Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930308 14:42

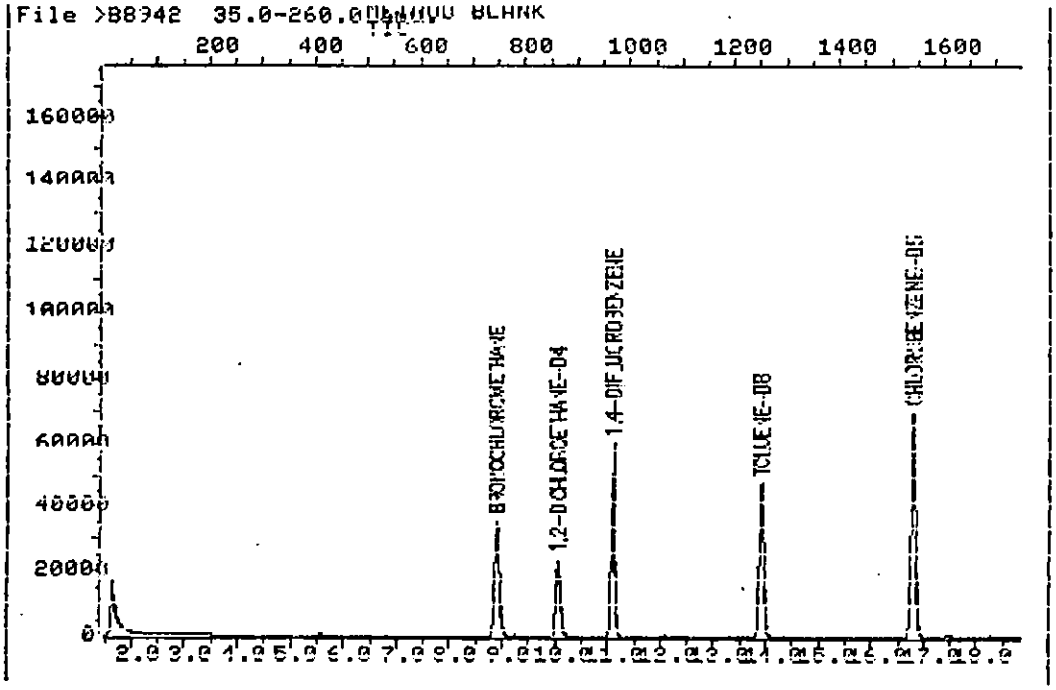
Operator ID: ANDY
Quant Time : 930308 20:27
Injected at: 930308 19:54

Operator ID: ANDY Quant Rev: 7 Quant Time: 930308 20:27
Output File: ^C0373::QT Injected at: 930308 19:54
Data File: >C0373::C3 Dilution Factor: 1.00000
Name: T303071-05A Instrument ID: C
Misc: EIKON FB;03/02/93;03/03/93

ID File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930308 14:42

	Compound	R.T.	Q ion	Area	Conc	Units	c
1)	*BROMOCHLOROMETHANE	7.39	128.0	36486	50.00	UG/L	9
21)	1,2-DICHLOROETHANE-D4	8.64	65.0	64109	49.51	UG/L	9
22)	*1,4-DIFLUOROBENZENE	9.75	114.0	157521	50.00	UG/L	9
37)	*CHLOROBENZENE-D5	15.47	117.0	132662	50.00	UG/L	9
39)	TOLUENE-D8	12.59	98.0	141300	49.84	UG/L	9
48)	4-BROMOFLUOROBENZENE	18.02	95.0	113583	48.88	UG/L	9

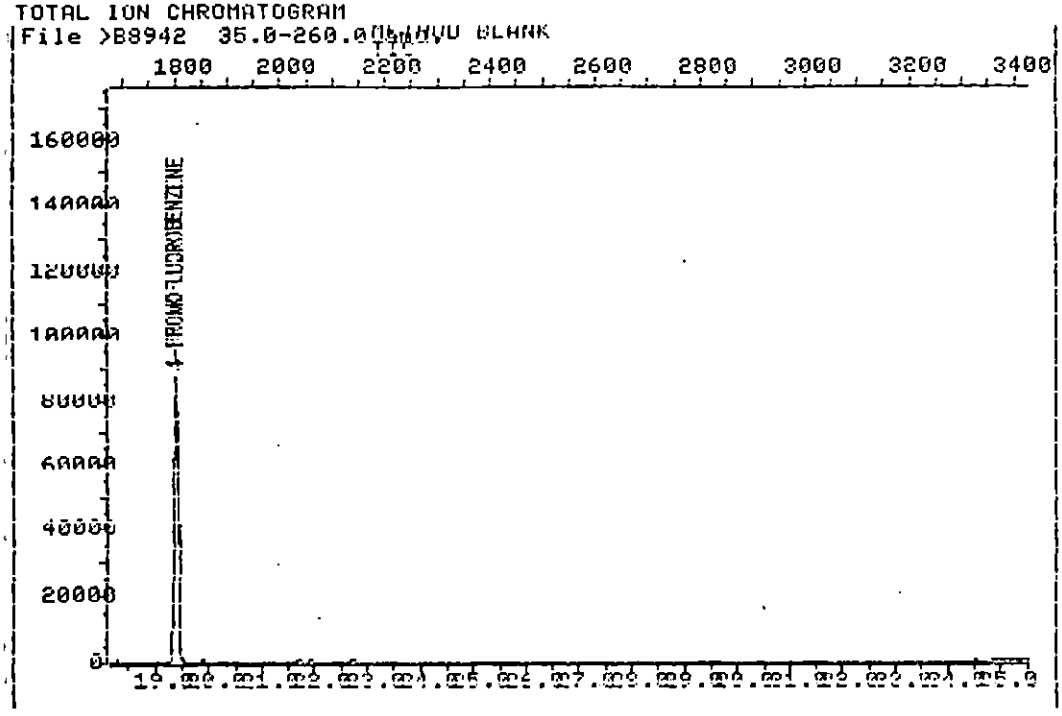
* Compound is ISTD



Data File: >B8942::B2 Quant Output File: ^B8942::QT
Name: METHOD BLANK Instrument ID: B
Misc:

Id File: IDDSVD::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

Operator ID: ED
Quant Time : 930309 12:12
Injected at: 930309 11:28



Data File: >B8942::B2 Quant Output File: ^B8942::QT
Name: METHOD BLANK Instrument ID: B
Misc:

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

Operator ID: ED
Quant Time : 930309 12:12
Injected at: 930309 11:28

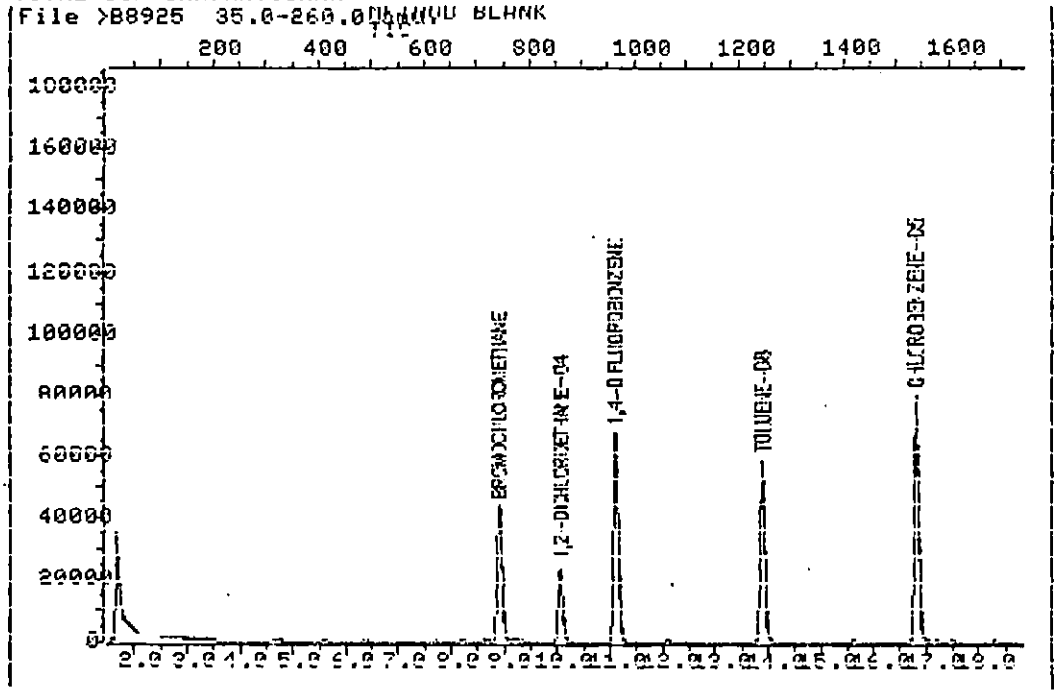
perator ID: ED Quant Rev: 7 Quant Time: 930309 12:12
Output File: ^B8942::QT Injected at: 930309 11:28
ata File: >B8942::B2 Dilution Factor: 1.00000
ame: METHOD BLANK Instrument ID: B
isc:

D File: IDDSVO::C4
itle: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930309 10:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	8.87	127.9	32555	50.00	UG/L	97
21)	1,2-DICHLOROETHANE-D4	10.04	65.0	59006	49.73	UG/L	95
22)	*1,4-DIFLUOROBENZENE	11.07	114.0	133567	50.00	UG/L	98
37)	*CHLOROBENZENE-D5	16.79	117.0	113059	50.00	UG/L	96
39)	TOLUENE-D8	13.89	98.0	99950	49.50	UG/L	96
48)	4-BROMOFLUOROBENZENE	19.35	95.0	94352	48.30	UG/L	90

* Compound is ISTD

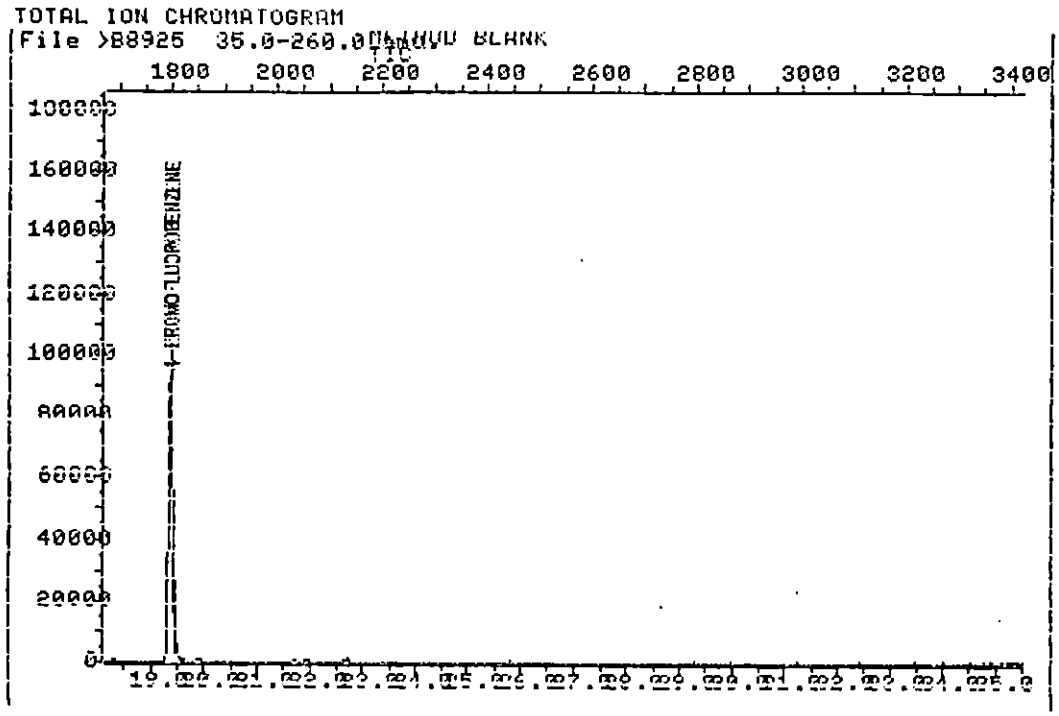
TOTAL ION CHROMATOGRAM
File >B8925 35.0-260.0DA\WVU BLANK



Data File: >B8925::B2 Quant Output File: ^B8925::QT
Name: METHOD BLANK Instrument ID: B
Misc:

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 10:48
Injected at: 930308 10:04



Data File: >B8925::B2 Quant Output File: ^B8925::QT
Name: METHOD BLANK Instrument ID: B
Misc:

Id File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

Operator ID: ED
Quant Time : 930308 10:48
Injected at: 930308 10:04

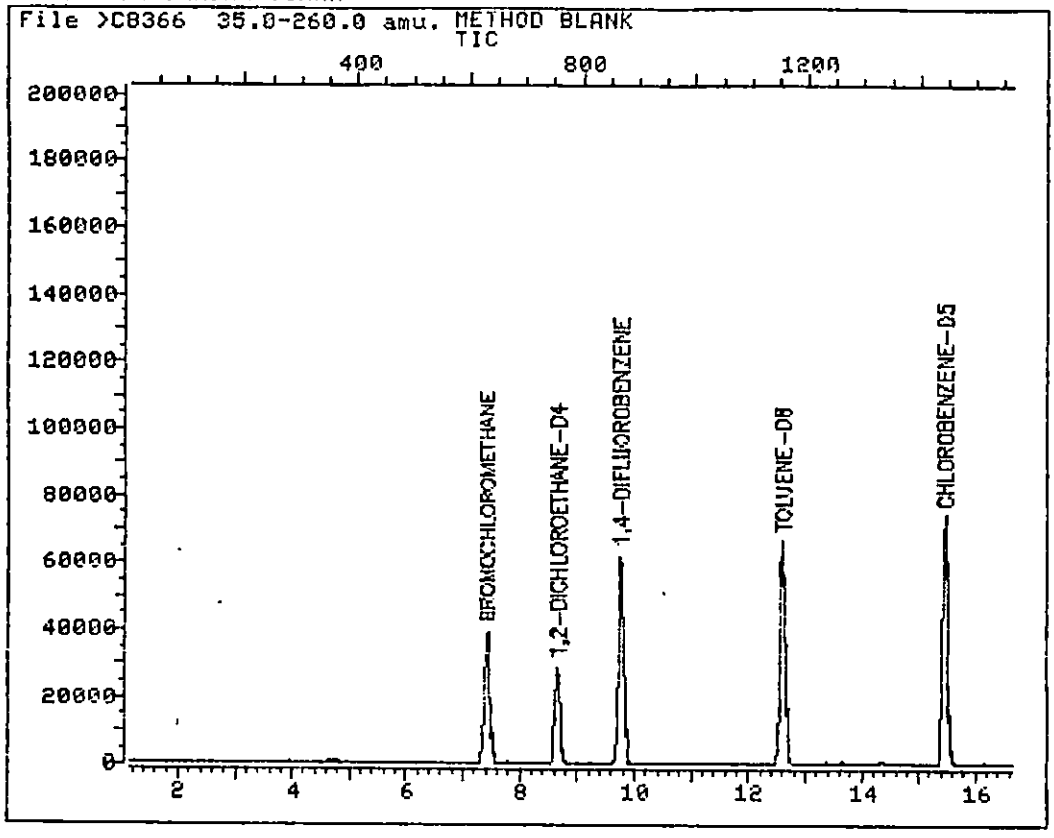
Operator ID: ED Quant Rev: 7 Quant Time: 930308 10:48
Output File: ^B8925::QT Injected at: 930308 10:04
Data File: >B8925::B2 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: B
Misc:

ID File: IDDSVO::C4
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930224 17:25 Last Qcal Time: 930308 09:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	8.88	127.9	39781	50.00	UG/L	9
21)	1,2-DICHLOROETHANE-D4	10.05	65.0	53343	43.48	UG/L	9
22)	*1,4-DIFLUOROBENZENE	11.08	114.0	159884	50.00	UG/L	9
37)	*CHLOROBENZENE-D5	16.78	117.0	131464	50.00	UG/L	9
39)	TOLUENE-D8	13.89	98.0	119629	50.22	UG/L	9
48)	4-BROMOFLUOROBENZENE	19.36	95.0	105664	47.67	UG/L	9

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C8366::C3 Quant Output File: ^C8366::QT
Name: METHOD BLANK Instrument ID: C
Misc:

Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930308 14:42

Operator ID: ED
Quant Time : 930308 16:07
Injected at: 930308 15:34

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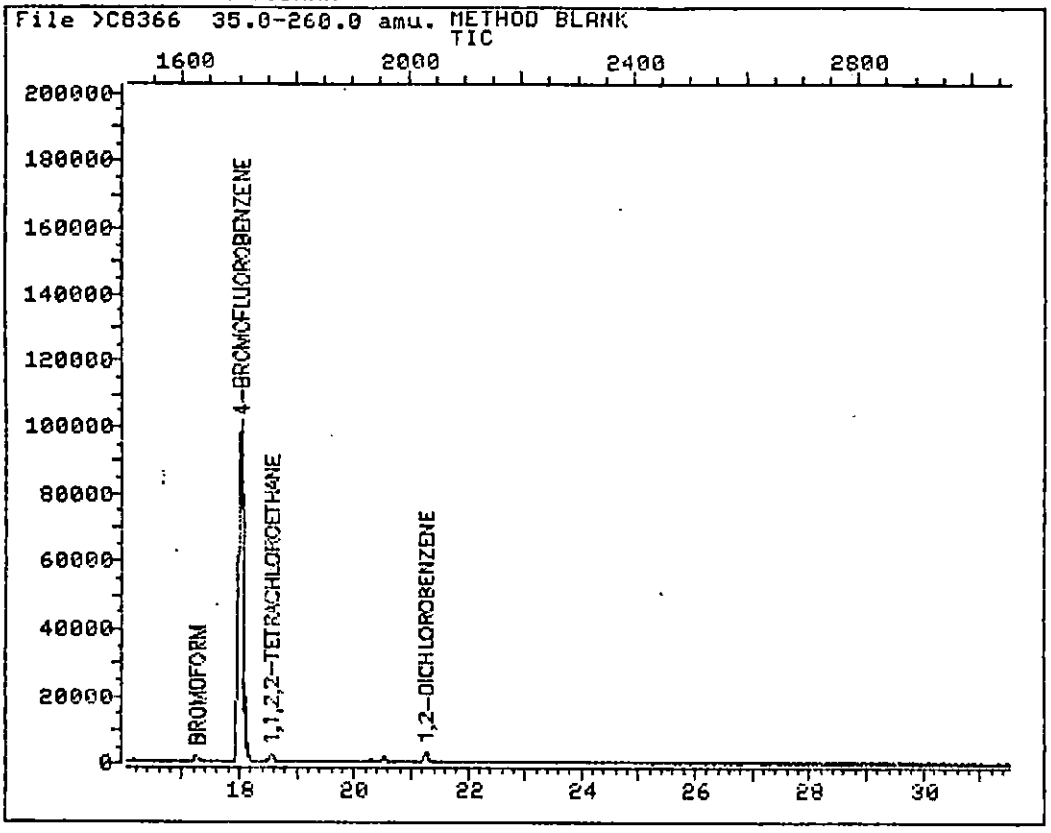
TOTAL ION CHROMATOGRAM

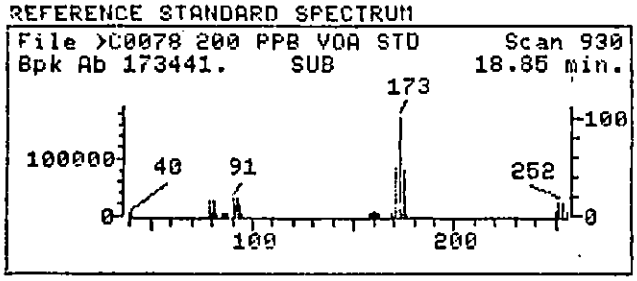


Data File: >C8366::C3 Quant Output File: ^C8366::QT
Name: METHOD BLANK Instrument ID: C
Misc:

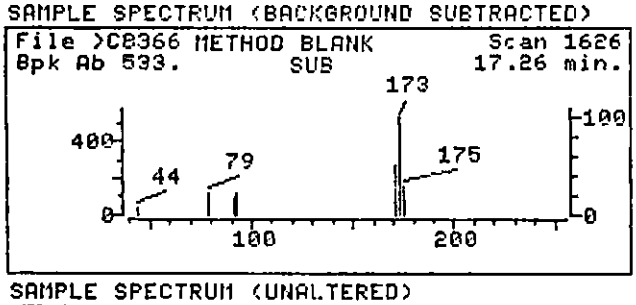
Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930308 14:42

Operator ID: ED
Quant Time : 930308 16:07
Injected at: 930308 15:34

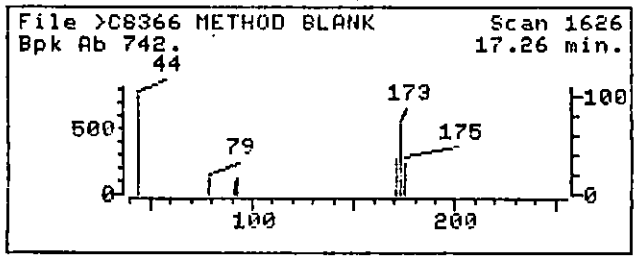
REFERENCE STANDARD SPECTRUM

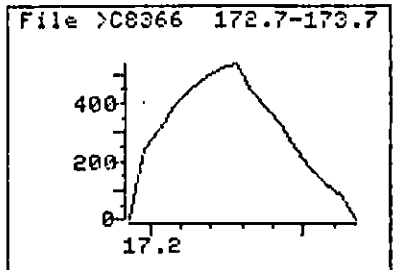


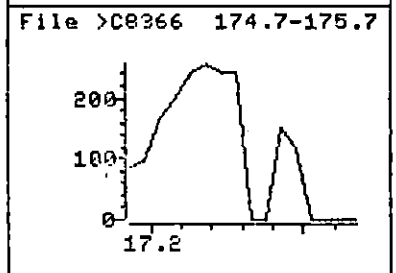
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

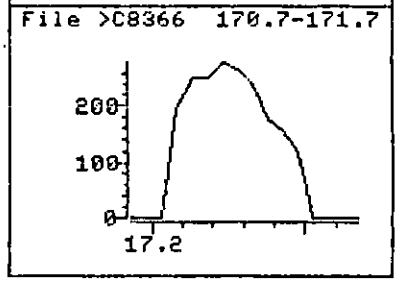


SAMPLE SPECTRUM (UNALTERED)









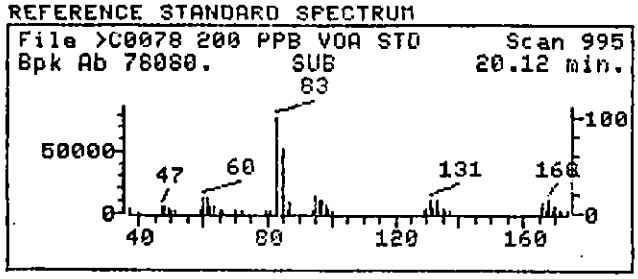
Data File: >C8366::C3
Name: METHOD BLANK
Misc:
Quant Time: 930308 16:07
Injected at: 930308 15:34
Last Qcal Time: 930308 14:42

Quant Output File: ^C8366::QT
Instrument ID: C

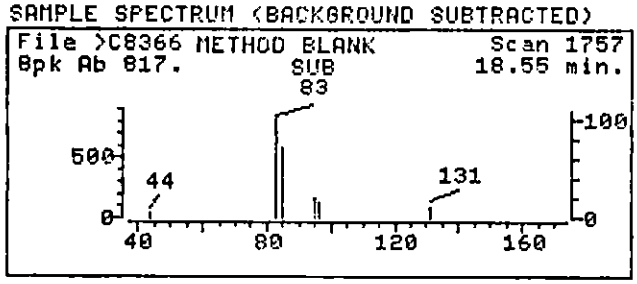
Quant ID File: IDDVOC::SC
Last Calibration: 930215 15:35

Compound No : 36
Compound Name : BROMOFORM
Scan Number : 1626
Retention Time: 17.26 min.
Quant Ion : 173.0
Area : 2805
Concentration : 1.50 UG/L
q-value : 90

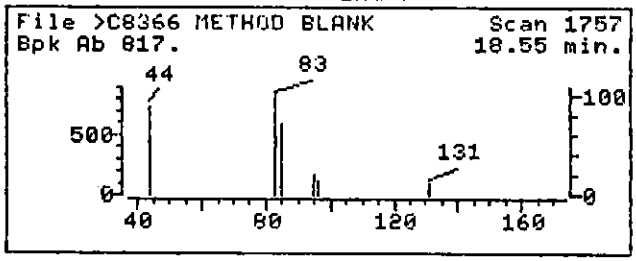
REFERENCE STANDARD SPECTRUM

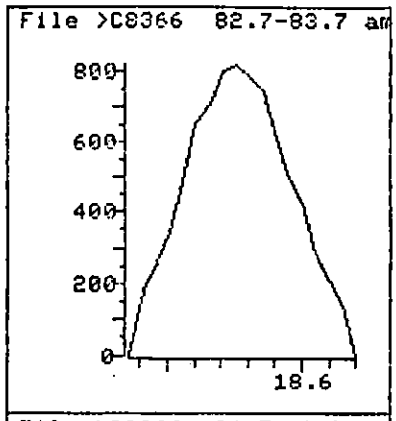


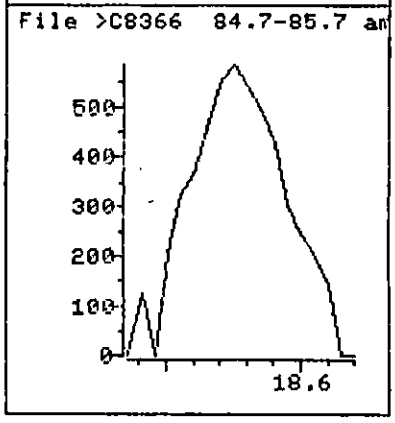
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





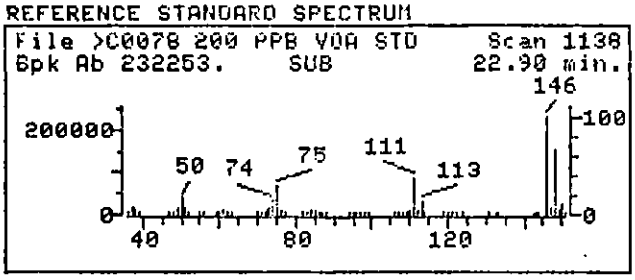


Data File: >C8366::C3
Name: METHOD BLANK
Misc:
Quant Time: 930308 16:07
Injected at: 930308 15:34
Last Qcal Time: 930308 14:42

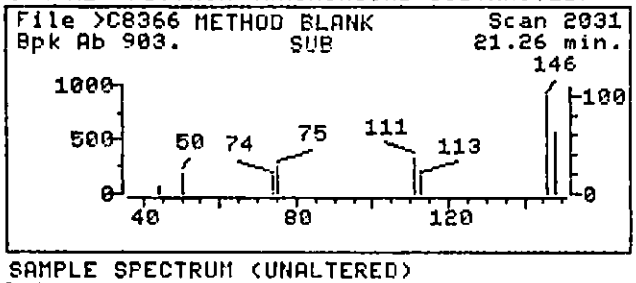
Quant Output File: ^C8366::QT
Instrument ID: C
Quant ID File: IDDVOC::SC
Last Calibration: 930215 15:35

Compound No : 49
Compound Name : 1,1,2,2-TETRACHLOROETHANE
Scan Number : 1757
Retention Time: 18.55 min.
Quant Ion : 83.0
Area : 4707
Concentration : 3.56 UG/L
q-value : 95

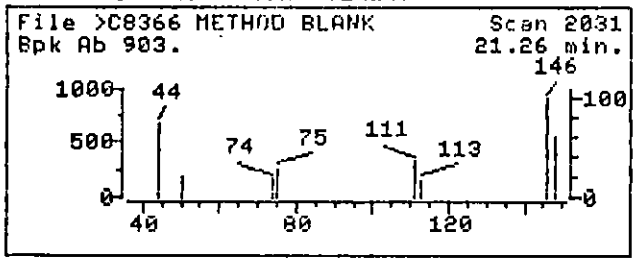
REFERENCE STANDARD SPECTRUM

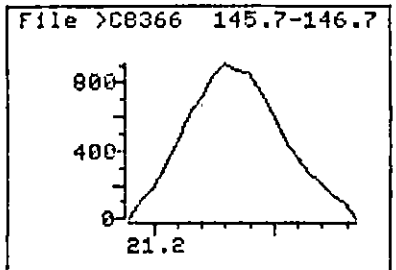


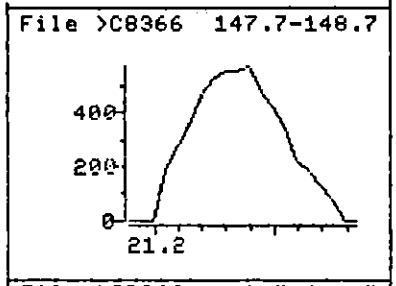
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

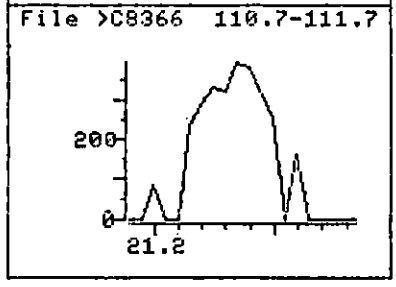


SAMPLE SPECTRUM (UNALTERED)









Data File: >C8366::C3
Name: METHOD BLANK
Misc:
Quant Time: 930308 16:07
Injected at: 930308 15:34
Last Qcal Time: 930308 14:42

Quant Output File: ^C8366::QT
Instrument ID: C

Quant ID File: IDDVOC::SC
Last Calibration: 930215 15:35

Compound No : 52
Compound Name : 1,2-DICHLOROBENZENE
Scan Number : 2031
Retention Time: 21.26 min.
Quant Ion : 146.0
Area : 5233
Concentration : 1.79 UG/L
q-value : 90

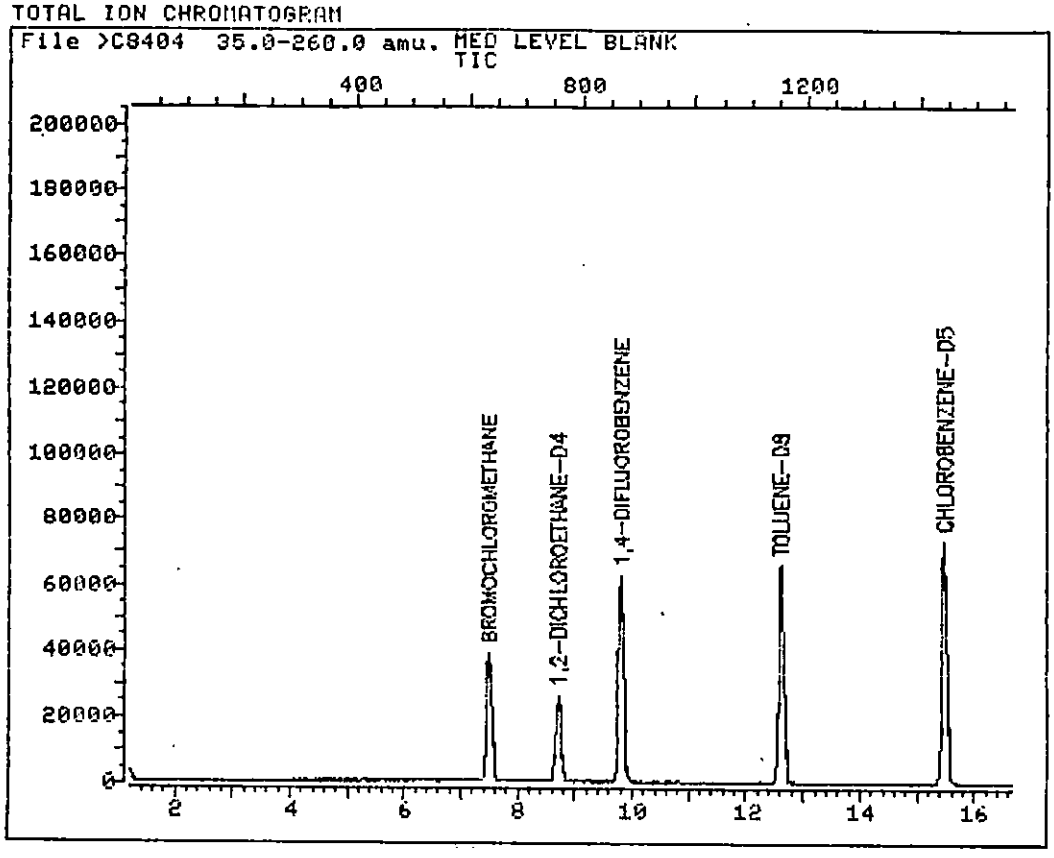
Operator ID: ED Quant Rev: 7 Quant Time: 930308 16:07
Output File: ^C8366::QT Injected at: 930308 15:34
Data File: >C8366::C3 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: C
Misc:

ID File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930308 14:42

	Compound	R.T.	Q ion	Area	Conc	Units	c
1)	*BROMOCHLOROMETHANE	7.40	128.0	39340	50.00	UG/L	9
21)	1,2-DICHLOROETHANE-D4	8.65	65.0	68682	49.19	UG/L	9
22)	*1,4-DIFLUOROBENZENE	9.75	114.0	163904	50.00	UG/L	9
36)	BROMOFORM	17.26	173.0	2805	1.50	UG/L	9
37)	*CHLOROBENZENE-D5	15.46	117.0	137974	50.00	UG/L	9
39)	TOLUENE-D8	12.59	98.0	146587	49.72	UG/L	9
48)	4-BROMOFLUOROBENZENE	18.02	95.0	119709	49.53	UG/L	9
49)	1,1,2,2-TETRACHLOROETHANE	18.55	83.0	4707	3.56	UG/L	9
52)	1,2-DICHLOROBENZENE	21.26	146.0	5233	1.79	UG/L	9

* Compound is ISTD

TOTAL ION CHROMATOGRAM

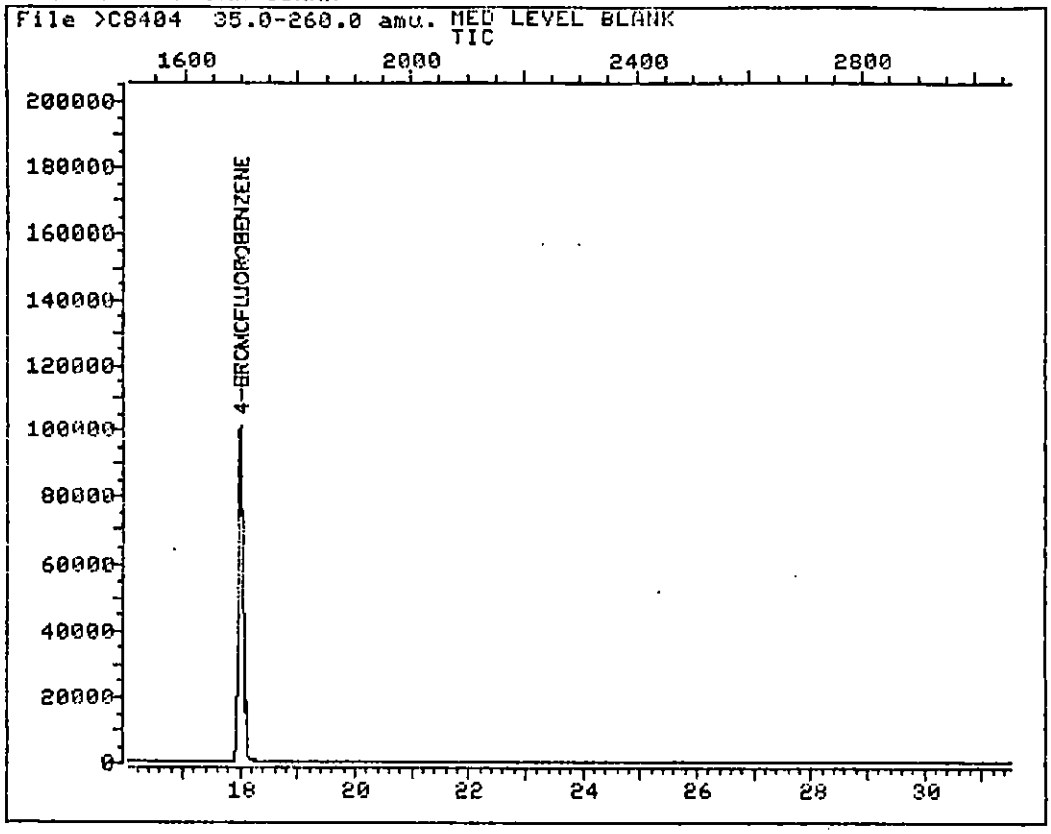


Data File: >C8404::C3 Quant Output File: ^C8404::QT
Name: MED LEVEL BLANK Instrument ID: C
Misc:

Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 14:54
Injected at: 930310 14:21

TOTAL ION CHROMATOGRAM



Data File: >C8404::C3 Quant Output File: ^C8404::QT
Name: MED LEVEL BLANK Instrument ID: C
Misc:

Id File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

Operator ID: ANDY
Quant Time : 930310 14:54
Injected at: 930310 14:21

Operator ID: ANDY Quant Rev: 7 Quant Time: 930310 14:54
Output File: ^C8404::QT Injected at: 930310 14:21
Data File: >C8404::C3 Dilution Factor: 1.00000
Name: MED LEVEL BLANK Instrument ID: C
Misc:

ID File: IDDVOC::SC
Title: LABORATORY RESOURCES ID FILE FOR VOLATILES ORGANICS GC/MS
Last Calibration: 930215 15:35 Last Qcal Time: 930310 12:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	7.47	128.0	39197	50.00	UG/L	9
21)	1,2-DICHLOROETHANE-D4	8.70	65.0	64858	48.67	UG/L	9
22)	*1,4-DIFLUOROBENZENE	9.80	114.0	169029	50.00	UG/L	9
37)	*CHLOROBENZENE-D5	15.47	117.0	140968	50.00	UG/L	8
39)	TOLUENE-D8	12.60	98.0	150811	50.40	UG/L	9
48)	4-BROMOFLUOROBENZENE	18.01	95.0	118992	49.18	UG/L	9

* Compound is ISTD

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE EXTRACTED: 03/16/93
DATE ANALYZED : 03/17/93
DILUTION FACT.: 1.0

CLIENT : ETKON SS2-3
LAB SAMPLE : T303071-03
ANALYST : BILL
FILE NAME : >A5438

GC/MS BASE NEUTRALS ACIDS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-NITROSODIMETHYLAMINE	ND	351	3-NITROANILINE	ND	1753
PHENOL	ND	351	ACENAPHTHENE	ND	351
2-CHLOROPHENOL	ND	351	2,4-DINITROPHENOL	ND	1753
BIS(2-CHLOROETHYL)ETHER	ND	351	DIBENZOFURAN	ND	351
1,3-DICHLOROBENZENE	ND	351	4-NITROPHENOL	ND	1753
1,4-DICHLOROBENZENE	ND	351	2,4-DINITROTOLUENE	ND	351
BENZYL ALCOHOL	ND	351	FLUORENE	ND	351
1,2-DICHLOROBENZENE	ND	351	4-NITROANILINE	ND	1753
2-METHYLPHENOL	ND	351	DIETHYLPHTHALATE	ND	351
BIS(2-CHLOROISOPROPYL)ETHER	ND	351	4-CHLOROPHENYL-PHENYLETHER	ND	351
N-NITROSO-DI-N-PROPYLAMINE	ND	351	4,6-DINITRO-2-METHYLPHENOL	ND	1753
HEXACHLOROETHANE	ND	351	N-NITROSODIPHENYLAMINE	ND	351
3- and 4-METHYLPHENOL	ND	701	4-BROMOPHENYL-PHENYLETHER	ND	351
NITROBENZENE	ND	351	HEXACHLOROBENZENE	ND	351
ISOPHORONE	ND	351	PENTACHLOROPHENOL	ND	1753
2-NITROPHENOL	ND	351	PHENANTHRENE	ND	351
2,4-DIMETHYLPHENOL	ND	351	ANTHRACENE	ND	351
BIS(2-CHLOROETHOXY)METHANE	ND	351	DI-N-BUTYLPHTHALATE	52 J	351
2,4-DICHLOROPHENOL	ND	351	FLUORANTHENE	ND	351
BENZOIC ACID	ND	1753	BENZIDINE	ND	351
1,2,4-TRICHLOROBENZENE	ND	351	PYRENE	ND	351
NAPHTHALENE	ND	351	BUTYLBENZYLPHTHALATE	ND	351
4-CHLOROANILINE	ND	351	BENZO(A)ANTHRACENE	ND	351
HEXACHLOROBUTADIENE	ND	351	3,3'-DICHLOROBENZIDINE	ND	701
2-METHYLNAPHTHALENE	ND	351	CHRYSENE	ND	351
4-CHLORO-3-METHYLPHENOL	ND	351	BIS(2-ETHYLHEXYL)PHTHALATE	238 J	351
HEXACHLOROCYCLOPENTADIENE	ND	351	DI-N-OCTYLPHTHALATE	ND	351
2,4,5-TRICHLOROPHENOL	ND	1753	BENZO(B)FLUORANTHENE	ND	351
2,4,6-TRICHLOROPHENOL	ND	351	BENZO(K)FLUORANTHENE	ND	351
2-CHLORONAPHTHALENE	ND	351	BENZO(A)PYRENE	ND	351
2-NITROANILINE	ND	1753	INDENO(1,2,3-CD)PYRENE	ND	351
ACENAPHTHYLENE	ND	351	DIBENZO(A,H)ANTHRACENE	ND	351
DIMETHYLPHTHALATE	ND	351	BENZO(G,H,I)PERYLENE	ND	351
2,6-DINITROTOLUENE	ND	351			

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
NITROBENZENE-D5	33 %	23 - 120	OK
2-FLUOROBIPHENYL	36 %	30 - 115	OK
4-TERPHENYL-D14	39 %	18 - 137	OK
PHENOL-D6	0 %	24 - 113	
2-FLUOROPHENOL	0 %	25 - 121	
2,4,6-TRIBROMOPHENOL	0 %	19 - 122	

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

Percent Solid of 94.1 is used for all Target compounds.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SS 2-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303071-03

Sample wt/vol: 30 (g/ml) g Lab File ID: >A5438

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 94.1 Date Extracted: 03/16/93

Extraction: (Sepf/Cont/Sonc) Sonc Date Analyzed: 03/17/93

GPC Cleanup: (Y/N) N Dilution Factor: 1

Number of TICs found: 2

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Condensation product (B)	6.44	12274	
2		Unknown	30.21	526	

(B) Compound present in blank

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE EXTRACTED: 03/18/93
DATE ANALYZED : 03/19/93
DILUTION FACT.: 1.0

CLIENT : EIKON SS 2-3
LAB SAMPLE : T303071-03
ANALYST : GREG
FILE NAME : >D4760

GC/MS BASE NEUTRALS ACIDS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-NITROSODIMETHYLAMINE	ND	351	3-NITROANILINE	ND	1753
PHENOL	ND	351	ACENAPHTHENE	ND	351
2-CHLOROPHENOL	ND	351	2,4-DINITROPHENOL	ND	1753
BIS(2-CHLOROETHYL)ETHER	ND	351	DIBENZOFURAN	ND	351
1,3-DICHLOROBENZENE	ND	351	4-NITROPHENOL	ND	1753
1,4-DICHLOROBENZENE	ND	351	2,4-DINITROTOLUENE	ND	351
BENZYL ALCOHOL	ND	351	FLUORENE	ND	351
1,2-DICHLOROBENZENE	ND	351	4-NITROANILINE	ND	1753
2-METHYLPHENOL	ND	351	DIETHYLPHTHALATE	ND	351
BIS(2-CHLOROISOPROPYL)ETHER	ND	351	4-CHLOROPHENYL-PHENYLETHER	ND	351
N-NITROSO-DI-N-PROPYLAMINE	ND	351	4,6-DINITRO-2-METHYLPHENOL	ND	1753
HEXACHLOROETHANE	ND	351	N-NITROSODIPHENYLAMINE	ND	351
3- and 4-METHYLPHENOL	ND	701	4-BROMOPHENYL-PHENYLETHER	ND	351
NITROBENZENE	ND	351	HEXACHLOROBENZENE	ND	351
ISOPHORONE	ND	351	PENTACHLOROPHENOL	ND	1753
2-NITROPHENOL	ND	351	PHENANTHRENE	ND	351
2,4-DIMETHYLPHENOL	ND	351	ANTHRACENE	ND	351
BIS(2-CHLOROETHOXY)METHANE	ND	351	DI-N-BUTYLPHTHALATE	ND	351
2,4-DICHLOROPHENOL	ND	351	FLUORANTHENE	ND	351
BENZOIC ACID	ND	1753	BENZIDINE	ND	351
1,2,4-TRICHLOROBENZENE	ND	351	PYRENE	ND	351
NAPHTHALENE	ND	351	BUTYLBENZYLPHTHALATE	ND	351
4-CHLOROANILINE	ND	351	BENZO(A)ANTHRACENE	ND	351
HEXACHLOROBUTADIENE	ND	351	3,3'-DICHLOROBENZIDINE	ND	701
2-METHYLNAPHTHALENE	ND	351	CHRYSENE	ND	351
4-CHLORO-3-METHYLPHENOL	ND	351	BIS(2-ETHYLHEXYL)PHTHALATE	1206	351
HEXACHLOROCYCLOPENTADIENE	ND	351	DI-N-OCTYLPHTHALATE	ND	351
2,4,5-TRICHLOROPHENOL	ND	1753	BENZO(B)FLUORANTHENE	ND	351
2,4,6-TRICHLOROPHENOL	ND	351	BENZO(K)FLUORANTHENE	ND	351
2-CHLORONAPHTHALENE	ND	351	BENZO(A)PYRENE	ND	351
2-NITROANILINE	ND	1753	INDENO(1,2,3-CD)PYRENE	ND	351
ACENAPHTHYLENE	ND	351	DIBENZO(A,H)ANTHRACENE	ND	351
DIMETHYLPHTHALATE	ND	351	BENZO(G,H,I)PERYLENE	ND	351
2,6-DINITROTOLUENE	ND	351			

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
NITROBENZENE-D5	71 %	23 - 120	OK
2-FLUOROBIPHENYL	71 %	30 - 115	OK
4-TERPHENYL-D14	74 %	18 - 137	OK
PHENOL-D6	73 %	24 - 113	OK
2-FLUOROPHENOL	70 %	25 - 121	OK
2,4,6-TRIBROMOPHENOL	69 %	19 - 122	OK

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

Percent Solid of 94.1 is used for all Target compounds.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SS 2-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303071-03

Sample wt/vol: 30 (g/ml) g Lab File ID: >D4760

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 94.1 Date Extracted: 03/18/93

Extraction: (Sepf/Cont/Sonc) Sonc Date Analyzed: 03/19/93

GPC Cleanup: (Y/N) N Dilution Factor: 1

Number of TICs found: 23

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Condensation product (B)	4.66	21742	
2		Unknown alkyl benzne	5.13	315	
3		Unknown	6.53	210	
4		Unknown	7.67	210	
5		Unknown	7.89	280	
6		Unknown alkane	8.73	1052	
7		Unknown	8.83	526	
8		Unknown	9.01	420	
9		Unknown	9.23	631	
10		Unknown	9.44	526	
11		Unknown	9.62	526	
12		Unknown	9.80	210	
13		Unknown	10.09	666	
14		Unknown	10.25	315	
15		Unknown alkane	10.42	350	
16		Unknown	10.54	666	
17		Unknown	11.05	140	
18		Unknown	15.48	175	
19		Unknown alkane	18.39	420	
20		Unknown alkane	19.53	245	
21		Unknown carboxylic acid	23.11	175	
22		Unknown amide	28.18	526	
23		Unknown	30.83	420	

(B) Compound present in blank

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED: 03/02/93
DATE EXTRACTED: 03/16/93
DATE ANALYZED : 03/17/93
DILUTION FACT.: 5.0

CLIENT : EIKON SS3-3
LAB SAMPLE : T303071-04
ANALYST : BILL
FILE NAME : >A5439

GC/MS BASE NEUTRALS ACIDS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-NITROSODIMETHYLAMINE	ND	1864	3-NITROANILINE	ND	9322
PHENOL	ND	1864	ACENAPHTHENE	ND	1864
2-CHLOROPHENOL	ND	1864	2,4-DINITROPHENOL	ND	9322
BIS(2-CHLOROETHYL)ETHER	ND	1864	DIBENZOFURAN	ND	1864
1,3-DICHLOROBENZENE	ND	1864	4-NITROPHENOL	ND	9322
1,4-DICHLOROBENZENE	ND	1864	2,4-DINITROTOLUENE	ND	1864
BENZYL ALCOHOL	ND	1864	FLUORENE	ND	1864
1,2-DICHLOROBENZENE	ND	1864	4-NITROANILINE	ND	9322
2-METHYLPHENOL	ND	1864	DIETHYLPHTHALATE	ND	1864
BIS(2-CHLOROISOPROPYL)ETHER	ND	1864	4-CHLOROPHENYL-PHENYLETHER	ND	1864
N-NITROSO-DI-N-PROPYLAMINE	ND	1864	4,6-DINITRO-2-METHYLPHENOL	ND	9322
HEXACHLOROETHANE	ND	1864	N-NITROSODIPHENYLAMINE	ND	1864
3- and 4-METHYLPHENOL	ND	3729	4-BROMOPHENYL-PHENYLETHER	ND	1864
NITROBENZENE	ND	1864	HEXACHLOROBENZENE	ND	1864
ISOPHORONE	ND	1864	PENTACHLOROPHENOL	ND	9322
2-NITROPHENOL	ND	1864	PHENANTHRENE	ND	1864
2,4-DIMETHYLPHENOL	ND	1864	ANTHRACENE	ND	1864
BIS(2-CHLOROETHOXY)METHANE	ND	1864	DI-N-BUTYLPHTHALATE	204 J	1864
2,4-DICHLOROPHENOL	ND	1864	FLUORANTHENE	ND	1864
BENZOIC ACID	ND	9322	BENZIDINE	ND	1864
1,2,4-TRICHLOROBENZENE	ND	1864	PYRENE	ND	1864
NAPHTHALENE	ND	1864	BUTYLBENZYLPHTHALATE	839 J	1864
4-CHLOROANILINE	ND	1864	BENZO(A)ANTHRACENE	ND	1864
HEXACHLOROBUTADIENE	ND	1864	3,3'-DICHLOROBENZIDINE	ND	3729
2-METHYLNAPHTHALENE	ND	1864	CHRYSENE	ND	1864
4-CHLORO-3-METHYLPHENOL	ND	1864	BIS(2-ETHYLHEXYL)PHTHALATE	534 J	1864
HEXACHLOROCYCLOPENTADIENE	ND	1864	DI-N-OCTYLPHTHALATE	ND	1864
2,4,5-TRICHLOROPHENOL	ND	9322	BENZO(B)FLUORANTHENE	ND	1864
2,4,6-TRICHLOROPHENOL	ND	1864	BENZO(K)FLUORANTHENE	ND	1864
2-CHLORONAPHTHALENE	ND	1864	BENZO(A)PYRENE	ND	1864
2-NITROANILINE	ND	9322	INDENO(1,2,3-CD)PYRENE	ND	1864
ACENAPHTHYLENE	ND	1864	DIBENZO(A,H)ANTHRACENE	ND	1864
DIMETHYLPHTHALATE	ND	1864	BENZO(G,H,I)PERYLENE	ND	1864
2,6-DINITROTOLUENE	ND	1864			

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
NITROBENZENE-D5	48 %	23 - 120	OK
2-FLUOROBIPHENYL	51 %	30 - 115	OK
4-TERPHENYL-D14	46 %	18 - 137	OK
PHENOL-D6	0 %	24 - 113	
2-FLUOROPHENOL	0 %	25 - 121	
2,4,6-TRIBROMOPHENOL	0 %	19 - 122	

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

Percent Solid of 88.5 is used for all Target compounds.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SS 3-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303071-04

Sample wt/vol: 30 (g/ml) g Lab File ID: >A5439

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 88.5 Date Extracted: 03/16/93

Extraction: (Sepf/Cont/Sonc) Sonc Date Analyzed: 03/17/93

GPC Cleanup: (Y/N) N Dilution Factor: 5

Number of TICs found: 2

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Condensation product (B)	6.39	17525	
2		Unknown ester	27.13	7084	

(B) Compound present in blank

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046 - NY 10588

DATE COLLECTED: 03/02/93
DATE EXTRACTED: 03/18/93
DATE ANALYZED : 03/19/93
DILUTION FACT.: 1.0

CLIENT : EIKON SS 3-3
LAB SAMPLE : T303071-04
ANALYST : GREG
FILE NAME : >D4761

GC/MS BASE NEUTRALS ACIDS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-NITROSODIMETHYLAMINE	ND	373	3-NITROANILINE	ND	1864
PHENOL	ND	373	ACENAPHTHENE	ND	373
2-CHLOROPHENOL	ND	373	2,4-DINITROPHENOL	ND	1864
BIS(2-CHLOROETHYL)ETHER	ND	373	DIBENZOFURAN	ND	373
1,3-DICHLOROBENZENE	ND	373	4-NITROPHENOL	ND	1864
1,4-DICHLOROBENZENE	ND	373	2,4-DINITROTOLUENE	ND	373
BENZYL ALCOHOL	ND	373	FLUORENE	ND	373
1,2-DICHLOROBENZENE	ND	373	4-NITROANILINE	ND	1864
2-METHYLPHENOL	ND	373	DIETHYLPHTHALATE	ND	373
BIS(2-CHLOROISOPROPYL)ETHER	ND	373	4-CHLOROPHENYL-PHENYLETHER	ND	373
N-NITROSO-DI-N-PROPYLAMINE	ND	373	4,6-DINITRO-2-METHYLPHENOL	ND	1864
HEXACHLOROETHANE	ND	373	N-NITROSODIPHENYLAMINE	ND	373
3- and 4-METHYLPHENOL	ND	746	4-BROMOPHENYL-PHENYLETHER	ND	373
NITROBENZENE	ND	373	HEXACHLOROBENZENE	ND	373
ISOPHORONE	ND	373	PENTACHLOROPHENOL	ND	1864
2-NITROPHENOL	ND	373	PHENANTHRENE	ND	373
2,4-DIMETHYLPHENOL	ND	373	ANTHRACENE	ND	373
BIS(2-CHLOROETHOXY)METHANE	ND	373	DI-N-BUTYLPHTHALATE	ND	373
2,4-DICHLOROPHENOL	ND	373	FLUORANTHENE	55 J	373
BENZOIC ACID	ND	1864	BENZIDINE	ND	373
1,2,4-TRICHLOROBENZENE	ND	373	PYRENE	51 J	373
NAPHTHALENE	ND	373	BUTYLBENZYLPHTHALATE	1105	373
4-CHLOROANILINE	ND	373	BENZO(A)ANTHRACENE	ND	373
HEXACHLOROBUTADIENE	ND	373	3,3'-DICHLOROBENZIDINE	ND	746
2-METHYLNAPHTHALENE	ND	373	CHRYSENE	52 J	373
4-CHLORO-3-METHYLPHENOL	ND	373	BIS(2-ETHYLHEXYL)PHTHALATE	742	373
HEXACHLOROCYCLOPENTADIENE	ND	373	DI-N-OCTYLPHTHALATE	ND	373
2,4,5-TRICHLOROPHENOL	ND	1864	BENZO(B)FLUORANTHENE	46 J	373
2,4,6-TRICHLOROPHENOL	ND	373	BENZO(K)FLUORANTHENE	ND	373
2-CHLORONAPHTHALENE	ND	373	BENZO(A)PYRENE	ND	373
2-NITROANILINE	ND	1864	INDENO(1,2,3-CD)PYRENE	ND	373
ACENAPHTHYLENE	ND	373	DIBENZO(A,H)ANTHRACENE	ND	373
DIMETHYLPHTHALATE	ND	373	BENZO(G,H,I)PERYLENE	ND	373
2,6-DINITROTOLUENE	ND	373			

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
NITROBENZENE-D5	58 %	23 - 120	OK
2-FLUOROBIPHENYL	54 %	30 - 115	OK
4-TERPHENYL-D14	54 %	18 - 137	OK
PHENOL-D6	59 %	24 - 113	OK
2-FLUOROPHENOL	56 %	25 - 121	OK
2,4,6-TRIBROMOPHENOL	43 %	19 - 122	OK

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

Percent Solid of 88.5 is used for all Target compounds.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: SS 3-3

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: T303071-04

Sample wt/vol: 30 (g/ml) g Lab File ID: >D4761

Level: (low/med) LOW Date Received: 03/03/93

% Solid: 88.5 Date Extracted: 03/18/93

Extraction: (Sepf/Cont/Sonc) Sonc Date Analyzed: 03/19/93

GPC Cleanup: (Y/N) N Dilution Factor: 1

Number of TICs found: 2

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Condensation product (B)	4.62	17898	
2		Unknown	28.18	969	

(B) Compound present in blank

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE EXTRACTED: 03/16/93
DATE ANALYZED : 03/18/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : GREG
FILE NAME : >A5445

GC/MS BASE NEUTRALS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-NITROSODIMETHYLAMINE	ND	330	DIBENZOFURAN	ND	330
BIS(2-CHLOROETHYL)ETHER	ND	330	2,4-DINITROTOLUENE	ND	330
1,3-DICHLOROBENZENE	ND	330	FLUORENE	ND	330
1,4-DICHLOROBENZENE	ND	330	4-NITROANILINE	ND	1650
BENZYL ALCOHOL	ND	330	DIETHYLPHTHALATE	ND	330
1,2-DICHLOROBENZENE	ND	330	4-CHLOROPHENYL-PHENYLETHER	ND	330
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	N-NITROSODIPHENYLAMINE	ND	330
N-NITROSO-DI-N-PROPYLAMINE	ND	330	4-BROMOPHENYL-PHENYLETHER	ND	330
HEXACHLOROETHANE	ND	330	HEXACHLOROBENZENE	ND	330
NITROBENZENE	ND	330	PHENANTHRENE	105 J	330
ISOPHORONE	ND	330	ANTHRACENE	ND	330
BIS(2-CHLOROETHOXY)METHANE	ND	330	DI-N-BUTYLPHTHALATE	ND	330
BENZOIC ACID	ND	1650	FLUORANTHENE	73 J	330
1,2,4-TRICHLOROBENZENE	ND	330	BENZIDINE	ND	330
NAPHTHALENE	ND	330	PYRENE	47 J	330
4-CHLOROANILINE	ND	330	BUTYLBENZYLPHTHALATE	ND	330
HEXACHLOROBUTADIENE	ND	330	BENZO(A)ANTHRACENE	ND	330
2-METHYLNAPHTHALENE	ND	330	3,3'-DICHLOROBENZIDINE	ND	660
HEXACHLOROCYCLOPENTADIENE	ND	330	CHRYSENE	ND	330
2,4,5-TRICHLOROPHENOL	ND	1650	BIS(2-ETHYLHEXYL)PHTHALATE	ND	330
2-CHLORONAPHTHALENE	ND	330	DI-N-OCTYLPHTHALATE	ND	330
2-NITROANILINE	ND	1650	BENZO(B)FLUORANTHENE	ND	330
ACENAPHTHYLENE	ND	330	BENZO(K)FLUORANTHENE	ND	330
DIMETHYLPHTHALATE	ND	330	BENZO(A)PYRENE	ND	330
2,6-DINITROTOLUENE	ND	330	INDENO(1,2,3-CD)PYRENE	ND	330
3-NITROANILINE	ND	1650	DIBENZO(A,H)ANTHRACENE	ND	330
ACENAPHTHENE	ND	330	BENZO(G,H,I)PERYLENE	ND	330

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
NITROBENZENE-D5	56 %	23 - 120	OK
2-FLUOROBIPHENYL	58 %	30 - 115	OK
4-TERPHENYL-D14	64 %	18 - 137	OK

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: METHOD BLANK

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Lab Sample ID: METHOD BLANK

Sample wt/vol: 30 (g/ml) g Lab File ID: >A5445

Level: (low/med) LOW Date Received:

% Solid: 100 Date Extracted: 03/16/93

Extraction: (Sepf/Cont/Sonc) Sonc Date Analyzed: 03/18/93

GPC Cleanup: (Y/N) N Dilution Factor: 1

Number of TICs found: 2

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Unknown	5.73	231	
2		Condensation product	6.48	24420	

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE COLLECTED:
DATE EXTRACTED: 03/18/93
DATE ANALYZED : 03/19/93
DILUTION FACT.: 1.0

CLIENT :
LAB SAMPLE : METHOD BLANK
ANALYST : GREG
FILE NAME : >D4759

GC/MS BASE NEUTRALS ACIDS REPORT

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-NITROSODIMETHYLAMINE	ND	330	3-NITROANILINE	ND	1650
PHENOL	ND	330	ACENAPHTHENE	ND	330
2-CHLOROPHENOL	ND	330	2,4-DINITROPHENOL	ND	1650
BIS(2-CHLOROETHYL)ETHER	ND	330	DIBENZOFURAN	ND	330
1,3-DICHLOROBENZENE	ND	330	4-NITROPHENOL	ND	1650
1,4-DICHLOROBENZENE	ND	330	2,4-DINITROTOLUENE	ND	330
BENZYL ALCOHOL	ND	330	FLUORENE	ND	330
1,2-DICHLOROBENZENE	ND	330	4-NITROANILINE	ND	1650
2-METHYLPHENOL	ND	330	DIETHYLPHTHALATE	ND	330
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	4-CHLOROPHENYL-PHENYLETHER	ND	330
N-NITROSO-DI-N-PROPYLAMINE	ND	330	4,6-DINITRO-2-METHYLPHENOL	ND	1650
HEXACHLOROETHANE	ND	330	N-NITROSODIPHENYLAMINE	ND	330
3- and 4-METHYLPHENOL	ND	660	4-BROMOPHENYL-PHENYLETHER	ND	330
NITROBENZENE	ND	330	HEXACHLOROBENZENE	ND	330
ISOPHORONE	ND	330	PENTACHLOROPHENOL	ND	1650
2-NITROPHENOL	ND	330	PHENANTHRENE	ND	330
2,4-DIMETHYLPHENOL	ND	330	ANTHRACENE	ND	330
BIS(2-CHLOROETHOXY)METHANE	ND	330	DI-N-BUTYLPHTHALATE	ND	330
2,4-DICHLOROPHENOL	ND	330	FLUORANTHENE	ND	330
BENZOIC ACID	ND	1650	BENZIDINE	ND	330
1,2,4-TRICHLOROBENZENE	ND	330	PYRENE	ND	330
NAPHTHALENE	ND	330	BUTYLBENZYLPHTHALATE	ND	330
4-CHLOROANILINE	ND	330	BENZO(A)ANTHRACENE	ND	330
HEXACHLOROBUTADIENE	ND	330	3,3'-DICHLOROBENZIDINE	ND	660
2-METHYLNAPHTHALENE	ND	330	CHRYSENE	ND	330
4-CHLORO-3-METHYLPHENOL	ND	330	BIS(2-ETHYLHEXYL)PHTHALATE	ND	330
HEXACHLOROCYCLOPENTADIENE	ND	330	DI-N-OCTYLPHTHALATE	ND	330
2,4,5-TRICHLOROPHENOL	ND	1650	BENZO(B)FLUORANTHENE	ND	330
2,4,6-TRICHLOROPHENOL	ND	330	BENZO(K)FLUORANTHENE	ND	330
2-CHLORONAPHTHALENE	ND	330	BENZO(A)PYRENE	ND	330
2-NITROANILINE	ND	1650	INDENO(1,2,3-CD)PYRENE	ND	330
ACENAPHTHYLENE	ND	330	DIBENZO(A,H)ANTHRACENE	ND	330
DIMETHYLPHTHALATE	ND	330	BENZO(G,H,I)PERYLENE	ND	330
2,6-DINITROTOLUENE	ND	330			

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
NITROBENZENE-D5	56 %	23 - 120	OK
2-FLUOROBIPHENYL	58 %	30 - 115	OK
4-TERPHENYL-D14	57 %	18 - 137	OK
PHENOL-D6	51 %	24 - 113	OK
2-FLUOROPHENOL	50 %	25 - 121	OK
2,4,6-TRIBROMOPHENOL	48 %	19 - 122	OK

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: METHOD BLANK

Lab Name: Laboratory Resources, Inc. Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL

Lab Sample ID: METHOD BLANK

Sample wt/vol: 30 (g/ml) g

Lab File ID: >D4759

Level: (low/med) LOW

Date Received:

% Solid: 100

Date Extracted: 03/18/93

Extraction: (Sepf/Cont/Sonc) Sonc

Date Analyzed: 03/19/93

GPC Cleanup: (Y/N) N

Dilution Factor: 1

Number of TICs found: 1

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Condensation product (B)	4.78	18480	

(B) Compound present in blank

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Laboratory Resources Inc., Contract: -----

File ID: >TA934 DFTPP Injection date: 2/16/93

Instrument ID: 0881 DFTPP Injection time: 11:01

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
1	30.0 - 60.0% of mass 198	53.9
8	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	64.8
70	Less than 2.0% of mass 69	.2(.4)1
27	40.0 - 60.0% of mass 198	40.8
197	Less than 1.0% of mass 198	.3
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	20.3
365	Greater than 1.00% of mass 198	2.72
441	Present, but less than mass 443	11.7
442	Greater than 40.0% of mass 198	78.2
443	17.0 - 23.0% of mass 442	13.4(17.2)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPM BNA S	>A5285	2/16/93	11:15
2	----------	20 ppm bna	>A5286	2/16/93	12:09
3	----------	80 ppm bna	>A5287	2/16/93	13:03
4	----------	120 ppm bna	>A5288	2/16/93	13:54
5	----------	160 ppm bna	>A5289	2/16/93	14:49
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20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TA949 DFTPP Injection date: 3/02/93

Instrument ID: 0881 DFTPP Injection time: 11:11

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.6
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	65.0
70	Less than 2.0% of mass 69	.3(.4)1
127	40.0 - 60.0% of mass 198	40.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	23.1
365	Greater than 1.00% of mass 198	3.26
441	Present, but less than mass 443	9.9
442	Greater than 40.0% of mass 198	70.3
443	17.0 - 23.0% of mass 442	13.1(18.6)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPM BNA S	>A5362	3/02/93	11:33
2	----------	METHOD BLANK	>A5363	3/02/93	12:25
3	----------	T302232-02	>A5364	3/02/93	13:17
4	----------	METHOD BLANK	>A5366	3/02/93	15:01
5	----------	S93068 MS	>A5367	3/02/93	15:54
6	----------	S93069 MSD	>A5368	3/02/93	16:46
7	----------	METHOD BLANK	>A5369	3/02/93	17:38
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14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Name: Laboratory Resources Inc., Contract: -----

File ID: >TD570 DFTPP Injection date: 3/04/93

Instrument ID: 0881 DFTPP Injection time: 9:35

%e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.8
48	Less than 2.0% of mass 69	0.0(0.0)1
9	Mass 69 relative abundance	79.1
70	Less than 2.0% of mass 69	.4(.5)1
127	40.0 - 60.0% of mass 198	40.8
97	Less than 1.0% of mass 198	0.0
98	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	21.1
65	Greater than 1.00% of mass 198	2.64
441	Present, but less than mass 443	8.9
442	Greater than 40.0% of mass 198	64.6
43	17.0 - 23.0% of mass 442	11.9(18.5)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPM BNAE	>D4647	3/04/93	10:00
2	----------	20 PPM BNA	>D4648	3/04/93	10:47
3	----------	80 PPM BNA	>D4649	3/04/93	11:34
4	----------	120 PPM BNA	>D4650	3/04/93	12:20
5	----------	160 PPM BNA	>D4651	3/04/93	13:07
6					
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22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Name: Laboratory Resources Inc., Contract: -----

File ID: >TA960 DFTPP Injection date: 3/16/93

Instrument ID: 0881 DFTPP Injection time: 9:37

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.8
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	66.6
70	Less than 2.0% of mass 69	.2(.3)1
127	40.0 - 60.0% of mass 198	40.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	21.0
365	Greater than 1.00% of mass 198	2.34
441	Present, but less than mass 443	10.9
442	Greater than 40.0% of mass 198	82.2
443	17.0 - 23.0% of mass 442	15.1(18.4)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPM BNA S	>A5421	3/16/93	10:53
2	----------	20 PPM BNA	>A5422	3/16/93	11:57
3	----------	80 PPM BNA	>A5423	3/16/93	12:45
4	----------	120 PPM BNA	>A5424	3/16/93	13:34
5	----------	160 PPM BNA	>A5425	3/16/93	14:23
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17					
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21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TA962 DFTPP Injection date: 3/17/93

Instrument ID: 0881 DFTPP Injection time: 9:43

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	53.8
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	63.9
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	40.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	22.6
365	Greater than 1.00% of mass 198	1.97
441	Present, but less than mass 443	11.1
442	Greater than 40.0% of mass 198	88.7
443	17.0 - 23.0% of mass 442	15.6(17.6)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPM BNA S	>A5429	3/17/93	10:01
2	----------	METHOD BLANK	>A5430	3/17/93	10:54
3	----------	T303106-02	>A5436	3/17/93	17:27
4	----------	T303106-03	>A5437	3/17/93	18:16
5	----------	T303071-03	>A5438	3/17/93	19:05
6	----------	T303071-04	>A5439	3/17/93	19:53
7	----------	T303095-01	>A5440	3/17/93	20:43
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Laboratory Resources Inc., Contract: -----

Lab File ID: >TD580 DFTPP Injection date: 3/19/93

Instrument ID: 0881 DFTPP Injection time: 9:08

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.8
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	75.1
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	40.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	22.2
365	Greater than 1.00% of mass 198	2.30
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	67.0
443	17.0 - 23.0% of mass 442	13.8(20.5)2

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

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	50 PPM BNAE	>D4749	3/19/93	9:25
2	----------	T303147-02	>D4750	3/19/93	10:20
3	----------	T303042-03	>D4752	3/19/93	11:50
4	----------	T303042-03	>D4753	3/19/93	12:35
5	----------	METHOD BLANK	>D4754	3/19/93	13:20
6	----------	T303087-01	>D4755	3/19/93	14:05
7	----------	T303087-02	>D4756	3/19/93	14:50
8	----------	METHOD BLANK	>D4759	3/19/93	17:06
9	----------	T303071-03	>D4760	3/19/93	17:51
10	----------	T303071-04	>D4761	3/19/93	18:36
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >A5366 Lab Sample ID: METHOD BLANK

Date Extracted: 02/22/93 Extraction: Sonc

Date Analyzed: 03/02/93 Time Analyzed: 15:01

Matrix: SOIL

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>A5367	S93068 MS	03/02/93
>A5368	S93069 MSD	03/02/93

Comments: _____

_____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >A5445 Lab Sample ID: METHOD BLANK

Date Extracted: 03/16/93 Extraction: Sonc

Date Analyzed: 03/18/93 Time Analyzed: 13:27

Matrix: SOIL

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>A5436	T303106-02	03/17/93
>A5437	T303106-03	03/17/93
>A5438	T303071-03	03/17/93
>A5439	T303071-04	03/17/93
>A5440	T303095-01	03/17/93
>A5446	T303106-01	03/18/93

Comments: _____

_____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >D4759 Lab Sample ID: METHOD BLANK

Date Extracted: 03/18/93 Extraction: Sonc

Date Analyzed: 03/19/93 Time Analyzed: 17:06

Matrix: SOIL

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>D4760	T303071-03	03/19/93
>D4761	T303071-04	03/19/93

Comments: _____

_____

Initial Calibration Data
HSL Compounds

ase No: Instrument ID: #2637A01697

ntractor: LABORATORY RESOURCES Calibration Date: 02/16/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>A5286	>A5285	>A5287	>A5288	>A5289					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
RIDINE	.68092	.66030	.66338	.73324	.61964	.389	.67150	6.132		
N-NITROSODIMETHYLAMINE	.96525	.87981	.98812	1.01281	1.12868	.399	.99493	9.044		
-FLUOROPHENOL	1.14665	.95868	.87549	.90351	.96520	.738	.96991	10.900		
ENOL-D6	1.66772	1.45070	1.33152	1.30926	1.41430	.948	1.43470	9.940		
ENOL	1.76871	1.64715	1.59184	1.53477	1.53166	.951	1.61483	6.082	*	
-CHLOROPHENOL	1.44030	1.24462	1.09622	1.04028	1.02829	.962	1.16994	14.865		
S(2-CHLOROETHYL)ETHER	1.52761	1.31024	1.23829	1.10924	1.19301	.960	1.27568	12.432		
3-DICHLOROBENZENE	1.58477	1.33534	1.33769	1.22549	1.24202	.991	1.34506	10.679		
4-DICHLOROBENZENE	1.55304	1.36966	1.33910	1.21357	1.26047	1.004	1.34717	9.701		
NZYL ALCOHOL	.92347	.75922	.65337	.69179	.79604	1.044	.76478	13.703		
2-DICHLOROBENZENE	1.56043	1.19994	1.10075	.99440	1.04886	1.043	1.18088	19.079		
2-METHYLPHENOL	1.34294	1.12089	1.06076	1.08843	1.00282	1.085	1.24317	22.545		
IS(2-CHLOROISOPROPYL)ETHER	4.84258	3.48887	4.55682	4.47541	4.84643	1.081	4.43802	12.558		
-NITROSO-DI-N-PROPYLAMINE	1.52361	1.06733	1.16303	1.36634	1.55947	1.114	1.33596	16.235		**
EXACHLOROETHANE	.75490	.59740	.60444	.60921	.65972	1.111	.64514	10.249		
- and 4-METHYLPHENOL	1.31303	1.02798	.87790	.84422	.90080	1.114	.99278	19.344		(Conc=40.0,100.0,160.0,24
TROBENZENE-D5	.46775	.45695	.42456	.42576	.43664	.879	.44233	4.352		
TROBENZENE	.47789	.45568	.43845	.44393	.44413	.882	.45202	3.488		
SOPHORONE	.89297	.83160	.87478	.87145	.98880	.926	.89192	6.571		
-NITROPHENOL	.22677	.23631	.21419	.20744	.20405	.938	.21775	6.214	*	
4-DIMETHYLPHENOL	.37050	.38150	.33439	.30537	.31587	.954	.34153	9.770		
BIS(2-CHLOROETHOXY)METHANE	.50854	.48558	.43957	.44023	.45813	.972	.46641	6.447		
4-DICHLOROPHENOL	.36280	.34172	.30200	.26062	.27746	.981	.30892	13.875	*	
NZOIC ACID	.21834	.24198	.28967	.29011	.30281	.984	.26858	13.568		
2,4-TRICHLOROBENZENE	.41612	.37021	.35550	.32270	.30665	.995	.35424	12.097		
PHTHALENE	1.13544	1.04638	.85097	.80234	.83101	1.004	.93323	15.897		
-CHLOROANILINE	.54805	.51228	.44454	.39292	.41644	1.022	.46285	14.119		
EXACHLOROBUTADIENE	.31601	.25131	.24061	.20766	.21838	1.040	.24679	17.177	*	
-METHYLNAPHTHALENE	.90870	.74388	.65665	.54346	.53708	1.129	.67796	22.848		
-CHLORO-3-METHYLPHENOL	.43297	.41999	.38026	.33916	.34787	1.115	.38405	10.910	*	

- Response Factor (Subscript is amount in UG/L)

RT - Average Relative Retention Time (RT Std/RT Istd)

- Average Response Factor

RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

ase No: Instrument ID: #2637A01697

ntractor: LABORATORY RESOURCES Calibration Date: 02/16/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>A5286	>A5285	>A5287	>A5288	>A5289					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
XACHLOROCYCLOPENTADIENE	.59783	.48011	.54516	.49819	.49520	.887	.52330	9.223		**
2,4,5-TRICHLOROPHENOL	.59701	.52034	.49152	.45526	.42584	.904	.49799	13.236		
2,4,6-TRICHLOROPHENOL	.52517	.50596	.47492	.43581	.42987	.899	.47395	8.729	*	
FLUOROBIPHENYL	1.51334	1.34609	1.22544	.98520	.98544	.911	1.21110	18.997		
2-CHLORONAPHTHALENE	1.31769	1.14437	1.14261	.97908	.95613	.921	1.10798	13.247		
2-NITROANILINE	.75351	.64887	.76219	.75745	.75034	.943	.73447	6.543		
ENAPHTHYLENE	2.15582	1.92968	1.62585	1.33573	1.23969	.978	1.65735	23.398		
METHYLPHTHALATE	1.87983	1.55151	1.49383	1.23287	1.23325	.977	1.47826	18.124		
2,6-DINITROTOLUENE	.43748	.38902	.45111	.41340	.44563	.984	.42733	6.041		
NITROANILINE	.45251	.40648	.45713	.45678	.44122	1.001	.44282	4.813		
ENAPHTHENE	1.47108	1.22802	1.15925	1.03111	.97875	1.005	1.17364	16.496	*	
2,4-DINITROPHENOL	.19933	.27756	.30398	.33641	.33947	1.015	.29135	19.691		**
IBENZOFURAN	2.36093	1.79686	1.75452	1.56712	1.47711	1.027	1.79131	19.234		
NITROPHENOL	1.28068	1.08948	1.09557	1.01059	.95895	1.027	1.08705	11.250		**
,4-DINITROTOLUENE	.70265	.59210	.67399	.65796	.67644	1.037	.66063	6.286		
FLUORENE	1.71017	1.39796	1.32620	1.08827	1.05759	1.074	1.31604	20.134		
NITROANILINE	.63948	.53878	.66300	.62896	.60244	1.087	.61453	7.747		
ETHYLPHTHALATE	2.14936	1.81186	1.71690	1.40539	1.21573	1.077	1.65985	21.888		
4-CHLOROPHENYL-PHENYLETHER	1.00269	.78823	.76684	.59961	.52375	1.079	.73622	25.271		
,4,6-TRIBROMOPHENOL	.66022	.39376	.59927	.54949	.57132	1.111	.55481	17.872		
6-DINITRO-2-METHYLPHENOL	.16870	.18447	.20088	.16996	.18486	.909	.18177	7.237		
N-NITROSODIPHENYLAMINE	.45770	.36946	.37559	.29904	.27197	.912	.35475	20.524	*	
ZOBENZENE	1.13088	1.06390	1.09115	.84674	.74675	.914	.97588	17.317		
BROMOPHENYL-PHENYLETHER	.29706	.22437	.24229	.19816	.19395	.952	.23117	18.079		
XACHLOROBENZENE	.39108	.27476	.34279	.30622	.31977	.966	.32692	13.306		
PENTACHLOROPHENOL	.25845	.22435	.24237	.21741	.22848	.988	.23421	6.971	*	
IENANTHRENE	1.24708	1.06461	.92901	.69800	.69802	1.003	.92734	25.647		
ITHRACENE	1.18587	1.06055	.90387	.77147	.75308	1.008	.93497	19.974		
DI-N-BUTYLPHTHALATE	1.76329	1.58887	1.49245	1.20264	1.11247	1.084	1.43195	18.892		
LUORANTHENE	1.49556	1.32398	1.21403	1.02099	1.00638	1.142	1.21219	17.092	*	

RF_x - Response Factor (Subscript is amount in UG/L)

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: #2637A01697

ntractor: LABORATORY RESOURCES Calibration Date: 02/16/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>A5286	>A5285	>A5287	>A5288	>A5289					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
NZIDINE	.39965	.33668	.25875	.23612	.29232	.886	.30471	21.398		
PYRENE	1.22323	1.07298	.95706	.82538	.83283	.891	.98229	17.177		
-TERPHENYL-D14	1.00756	.80659	.74958	.59289	.64446	.909	.76021	21.296		
TYLBENZYLPHTHALATE	.71669	.60828	.56544	.48932	.46953	.959	.56985	17.462		
ENZO(A)ANTHRACENE	1.25740	1.03215	1.04093	.87560	.90116	.999	1.02145	14.840		
,3'-DICHLOROBENZIDINE	.33924	.29151	.31992	.29676	.29453	.986	.30839	6.679		
RYSENE	1.14808	.94905	.89146	.73816	.76507	1.002	.89836	18.325		
S(2-ETHYLHEXYL)PHTHALATE	1.01898	.90760	.77242	.61124	.57772	1.014	.77759	24.300		
I-N-OCTYLPHTHALATE	2.12842	1.81247	1.64297	1.23585	1.17402	.949	1.59874	25.025	*	
NZO(B)FLUORANTHENE	1.46017	1.25421	1.22483	1.20605	1.24891	.971	1.27883	8.070		
NZO(K)FLUORANTHENE	1.14263	1.09629	.94674	.66896	.61789	.973	.89450	26.947		
BENZO(A)PYRENE	1.16486	.98950	.99713	.94386	.91505	.995	1.00208	9.681	*	
NDENO(1,2,3-CD)PYRENE	.44750	.52849	.44566	.42240	.45451	1.105	.45971	8.766		
BENZO(A,H)ANTHRACENE	.42140	.40480	.42765	.39701	.45080	1.108	.42033	5.001		
NZO(G,H,I)PERYLENE	.37700	.35530	.36468	.33826	.37698	1.135	.36244	4.501		

RF - Response Factor (Subscript is amount in UG/L)

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

$\overline{RF}$ - Average Response Factor

RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

se No: Instrument ID: #2637A01697

ntractor: LABORATORY RESOURCES Calibration Date: 03/04/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>D4648	>D4647	>D4649	>D4650	>D4651						
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
RIDINE	.65964	.87720	.90026	1.04735	.87576	.274	.87204	15.878			
N-NITROSODIMETHYLAMINE	.98950	.98772	.94180	.99111	1.04680	.286	.99139	3.756			
-FLUOROPHENOL	1.17061	1.05395	1.04893	1.02311	1.08324	.691	1.07597	5.303			
ENOL-D6	1.76750	1.48348	1.23531	1.22015	1.21095	.960	1.38348	17.552			
ENOL	1.83989	1.88167	1.49387	1.35475	1.29828	.964	1.57369	17.282	*		
-CHLOROPHENOL	1.33890	1.36742	1.11348	1.11900	1.09786	.959	1.20733	11.076			
S(2-CHLOROETHYL)ETHER	1.46337	1.33905	1.13685	1.20461	1.22103	.964	1.27298	10.130			
3-DICHLOROBENZENE	1.47749	1.43188	1.35226	1.37139	1.45458	.988	1.41752	3.793			
4-DICHLOROBENZENE	1.46389	1.43088	1.32197	1.32212	1.39622	1.004	1.38702	4.611			
NZYL ALCOHOL	1.61066	1.46565	1.59236	1.55634	1.66530	1.065	1.57806	4.698			
2-DICHLOROBENZENE	1.48317	1.41163	1.30428	1.30906	1.41665	1.052	1.38496	5.550			
2-METHYLPHENOL	1.35526	1.28791	1.21415	1.24682	1.24157	1.112	1.26914	4.325			
S(2-CHLOROISOPROPYL)ETHER	3.39477	3.07243	3.50586	3.42325	3.83588	1.104	3.44644	7.924			
NITROSO-DI-N-PROPYLAMINE	1.48928	1.34162	1.50620	1.45275	1.54786	1.146	1.46754	5.332		**	
XACHLOROETHANE	.83825	.80735	.78820	.79575	.81772	1.128	.80946	2.425			
and 4-METHYLPHENOL	1.67483	1.51694	1.42077	1.42957	1.38905	1.156	1.48623	7.778			(Conc=40.0,100.0,160.0,24
TROBENZENE-D5	.48874	.46972	.46532	.46042	.49464	.869	.47577	3.163			
TROBENZENE	.49528	.47900	.44450	.48838	.53894	.872	.48922	6.942			
SOPHORONE	.99207	.95697	1.01135	.97151	1.11966	.921	1.01031	6.384			
NITROPHENOL	.25347	.28066	.24389	.25392	.26876	.935	.26014	5.579	*		
4-DIMETHYLPHENOL	.44698	.48368	.42041	.40298	.42186	.961	.43518	7.197			
S(2-CHLOROETHOXY)METHANE	.55465	.50549	.52686	.48835	.53348	.978	.52177	4.911			
4-DICHLOROPHENOL	.36478	.37524	.32118	.32491	.32707	.986	.34264	7.399	*		
NZOIC ACID	.33482	.34438	.41961	.40998	.32005	1.011	.36577	12.498			
2,4-TRICHLOROBENZENE	.42189	.39036	.37312	.36836	.38984	.995	.38871	5.399			
PHTHALENE	1.13034	1.00413	.86916	.92598	.99169	1.005	.98426	9.959			
CHLOROANILINE	.53819	.52873	.43915	.42163	.44298	1.034	.47414	11.569			
XACHLOROBUTADIENE	.29115	.26988	.24416	.24961	.26764	1.046	.26449	7.035	*		
METHYLNAPHTHALENE	1.13295	1.03876	.75247	.78056	.79788	1.146	.90052	19.232			
CHLORO-3-METHYLPHENOL	.44793	.45332	.33342	.34819	.34596	1.144	.38577	15.425	*		

- Response Factor (Subscript is amount in UG/L)

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

- Average Response Factor

SD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: #2637A01697

Contractor: LABORATORY RESOURCES Calibration Date: 03/04/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>D4648	>D4647	>D4649	>D4650	>D4651					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	80.00	120.00	160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
XACHLOROCYCLOPENTADIENE	.40177	.43273	.45012	.44293	.47227	.876	.43996	5.869		**
2,4,5-TRICHLOROPHENOL	.58899	.52610	.48214	.48479	.49962	.900	.51633	8.563		
2,4,6-TRICHLOROPHENOL	.53292	.51299	.45466	.44870	.44223	.894	.47830	8.698	*	
-FLUOROBIPHENYL	1.46571	1.24673	1.05204	1.06060	1.12465	.906	1.18995	14.512		
2-CHLORONAPHTHALENE	1.31524	1.13698	1.07108	1.06999	1.07216	.913	1.13309	9.333		
2-NITROANILINE	.75150	.68219	.75645	.70375	.71695	.945	.72217	4.379		
ENAPHTHYLENE	2.06961	1.74069	1.67966	1.70168	1.65826	.976	1.76998	9.619		
IMETHYLPHTHALATE	1.91818	1.55348	1.67297	1.57249	1.68799	.981	1.68102	8.641		
2,6-DINITROTOLUENE	.46214	.42778	.42854	.44153	.49233	.991	.45047	6.043		
-NITROANILINE	.50801	.38962	.45708	.40556	.42772	1.009	.43760	10.696		
ENAPHTHENE	1.32325	1.07793	1.00513	1.02284	1.09211	1.005	1.10425	11.566	*	
2,4-DINITROPHENOL	.09890	.15986	.29547	.26854	.30689	1.024	.22593	40.631		**
IBENZOFURAN	2.24750	1.83895	1.73861	1.72280	1.60905	1.029	1.83138	13.460		
-NITROPHENOL	.43886	.46790	.43769	.40906	.43662	1.047	.43803	4.753		**
4,4-DINITROTOLUENE	.66871	.61536	.65529	.60972	.68196	1.048	.64621	4.985		
LUORENE	1.60644	1.31420	1.21195	1.20751	1.28122	1.081	1.32426	12.398		
-NITROANILINE	.54633	.45207	.48452	.42479	.46092	1.105	.47373	9.683		
IETHYLPHTHALATE	2.20524	1.82761	1.84286	1.83439	1.96070	1.090	1.93416	8.330		
-CHLOROPHENYL-PHENYLETHER	.87455	.71494	.68300	.69770	.67190	1.088	.72842	11.432		
4,6-TRIBROMOPHENOL	.57572	.47044	.46552	.44619	.48443	1.122	.48846	10.372		
6-DINITRO-2-METHYLPHENOL	.15408	.18258	.18649	.19585	.18101	.908	.18000	8.665		
N-NITROSODIPHENYLAMINE	.44731	.33545	.24251	.27424	.28860	.910	.31762	25.139	*	
ZOBENZENE	1.29010	1.09906	.99923	1.01299	.82711	.911	1.04570	16.115		
-BROMOPHENYL-PHENYLETHER	.29211	.24623	.24223	.23963	.24709	.950	.25346	8.608		
EXACHLOROBENZENE	.41803	.37318	.33969	.32925	.37454	.963	.36694	9.509		
ENTACHLOROPHENOL	.25142	.28233	.26593	.24263	.25539	.990	.25954	5.872	*	
HENANTHRENE	1.20402	1.01398	.95872	.90447	.95811	1.003	1.00786	11.539		
NTHRACENE	1.15199	1.00247	.92017	.92788	.96795	1.009	.99409	9.481		
I-N-BUTYLPHTHALATE	2.17470	1.79487	1.78026	1.76571	1.75259	1.095	1.85363	9.720		
LUORANTHENE	1.44839	1.23127	1.20005	1.16860	1.21770	1.151	1.25320	8.906	*	

RF - Response Factor (Subscript is amount in UG/L)

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

$\overline{RF}$ - Average Response Factor

RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: #2637A01697

ntractor: LABORATORY RESOURCES Calibration Date: 03/04/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>D4648	>D4647	>D4649	>D4650	>D4651				
	RF	RF	RF	RF	RF				
Compound	20.00	50.00	80.00	120.00	160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC SPCC
NZIDINE	.14190	.13485	.09584	.07360	.10657	.884	.11055	25.470	
PYRENE	1.25062	1.00998	.96437	.99198	1.10233	.884	1.06386	10.955	
TERPHENYL-D14	.95184	.83787	.79944	.73393	.85394	.906	.83540	9.557	
ITYLBENZYLPHTHALATE	.88769	.73808	.79886	.75448	.87414	.961	.81065	8.396	
ENZO(A)ANTHRACENE	1.20284	1.02664	1.12954	1.03051	1.19266	.998	1.11644	7.613	
,3'-DICHLOROBENZIDINE	.19957	.22054	.16234	.15033	.22262	.990	.19108	17.398	
RYSENE	1.09287	.95481	1.01418	.92846	1.11098	1.002	1.02026	7.940	
IS(2-ETHYLHEXYL)PHTHALATE	1.26107	1.04278	1.05573	1.02080	1.11851	1.019	1.09978	8.838	
I-N-OCTYLPHTHALATE	2.24394	1.92807	1.75368	1.88138	1.88097	.954	1.93761	9.451	*
ENZO(B)FLUORANTHENE	1.53395	1.28091	1.60364	1.46285	1.58026	.973	1.49232	8.700	
ENZO(K)FLUORANTHENE	.71233	.78988	.36983	.50001	.53714	.974	.58184	29.008	
ENZO(A)PYRENE	1.10251	.96446	1.00067	.98225	1.08664	.996	1.02731	6.131	*
NDENO(1,2,3-CD)PYRENE	.81942	.89395	.98767	.97087	1.09551	1.073	.95348	10.894	
IBENZO(A,H)ANTHRACENE	.84382	.73060	.80926	.80800	.91336	1.076	.82101	8.063	
ENZO(G,H,I)PERYLENE	.80273	.70191	.77700	.76092	.86793	1.094	.78210	7.750	

F - Response Factor (Subscript is amount in UG/L)

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

$\overline{\ }$ - Average Response Factor

RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: #2637A01697

Contractor: LABORATORY RESOURCES Calibration Date: 03/16/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>A5422	>A5421	>A5423	>A5424	>A5425					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
RIDINE	.70516	.55966	.75390	.82879	.77794	.344	.72509	14.156		
N-NITROSODIMETHYLAMINE	.90377	.88837	.92044	.93994	1.00570	.351	.93165	4.898		
FLUOROPHENOL	1.18946	.99276	.98544	.99558	1.03515	.725	1.03968	8.266		
ENOL-D6	1.78217	1.57325	1.51866	1.48137	1.55664	.951	1.58242	7.405		
ENOL	1.87964	1.95388	1.72137	1.78740	1.82022	.954	1.83250	4.842	*	
CHLOROPHENOL	1.42605	1.41089	1.22581	1.11584	1.16112	.960	1.26794	11.275		
S(2-CHLOROETHYL)ETHER	1.55478	1.30061	1.28713	1.19071	1.29761	.961	1.32617	10.229		
,3-DICHLOROBENZENE	1.50991	1.37164	1.37035	1.34944	1.38268	.990	1.39680	4.608		
4-DICHLOROBENZENE	1.57473	1.36532	1.42848	1.31552	1.39607	1.004	1.41602	6.921		
NZYL ALCOHOL	.90828	.90525	.85032	.84165	.91441	1.049	.88398	3.957		
2-DICHLOROBENZENE	1.41853	1.31916	1.30712	1.27352	1.37742	1.046	1.33911	4.333		
METHYLPHENOL	1.36067	1.24973	1.22212	1.12104	1.16736	1.087	1.22418	7.437		
S(2-CHLOROISOPROPYL)ETHER	3.84037	3.60064	3.70070	3.63021	3.91470	1.088	3.73733	3.629		
NITROSO-DI-N-PROPYLAMINE	1.53519	1.35442	1.34832	1.19188	1.19616	1.122	1.32520	10.666		**
XACHLOROETHANE	.81026	.75070	.76133	.75577	.76863	1.116	.76934	3.097		
and 4-METHYLPHENOL	1.53395	1.40597	1.31495	1.22434	1.15382	1.125	1.32661	11.291		(Conc=40.0,100.0,160.0,24
TROBENZENE-D5	.45208	.44774	.42953	.44076	.50455	.879	.45493	6.378		
ITROBENZENE	.44815	.44382	.42427	.46849	.54793	.879	.46653	10.318		
OPHORONE	.89547	.91193	.88263	.93069	1.10613	.925	.94537	9.695		
NITROPHENOL	.22228	.25738	.22200	.22425	.23487	.937	.23216	6.487	*	
4-DIMETHYLPHENOL	.41264	.43011	.36950	.35259	.39456	.956	.39188	8.013		
S(2-CHLOROETHOXY)METHANE	.52197	.48484	.46740	.47740	.53306	.973	.49693	5.808		
4-DICHLOROPHENOL	.34045	.35941	.30633	.30483	.33278	.982	.32876	7.082	*	
NZOIC ACID	.26153	.27732	.22051	.31636	.34565	.991	.28427	17.078		
2,4-TRICHLOROBENZENE	.39771	.37198	.34551	.31611	.35156	.995	.35657	8.546		
PHTHALENE	1.09959	1.02621	1.02961	.95520	1.09931	1.004	1.04198	5.786		
CHLOROANILINE	.55984	.56972	.46105	.45606	.53049	1.025	.51543	10.460		
XACHLOROBUTADIENE	.24732	.22772	.21522	.20456	.22257	1.043	.22348	7.122	*	
METHYLNAPHTHALENE	.84904	.77239	.70276	.64618	.73362	1.134	.74080	10.273		
CHLORO-3-METHYLPHENOL	.42973	.46325	.40170	.38716	.39713	1.123	.41580	7.426	*	

- Response Factor (Subscript is amount in UG/L)

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

- Average Response Factor

SD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

ase No: Instrument ID: #2637A01697

ntractor: LABORATORY RESOURCES Calibration Date: 03/16/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>A5422	>A5421	>A5423	>A5424	>A5425					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
XACHLORODCYCLOPENTADIENE	.47622	.44186	.47608	.43969	.44826	.885	.45652	4.035		**
2,4,5-TRICHLOROPHENOL	.52033	.49875	.46609	.45095	.39321	.902	.46587	10.488		
4,6-TRICHLOROPHENOL	.47578	.47718	.45341	.42874	.44577	.898	.45617	4.511	*	
FLUORDBIPHENYL	1.35795	1.24591	1.12554	1.06593	1.12836	.910	1.18474	9.856		
2-CHLORONAPHTHALENE	1.27330	1.15644	1.12924	1.08497	1.11022	.919	1.15083	6.368		
-NITROANILINE	.66236	.66882	.65283	.70505	.67719	.942	.67325	2.954		
ENAPHTHYLENE	1.94900	1.69934	1.63794	1.50719	1.44658	.977	1.64801	11.896		
IMETHYLPHTHALATE	1.66299	1.39451	1.34204	1.30977	1.31017	.979	1.40390	10.606		
,6-DINITROTOLUENE	.38520	.36335	.41314	.39591	.41846	.986	.39521	5.627		
-NITROANILINE	.48173	.44594	.43446	.44606	.35816	1.002	.43327	10.523		
ENAPHTHENE	1.30102	1.11645	1.15783	1.06289	1.00088	1.005	1.12782	10.047	*	
2,4-DINITROPHENOL	.20995	.27459	.30407	.31167	.30782	1.017	.28162	15.149		**
IBENZOFURAN	2.22271	1.89025	1.89482	1.83834	1.66088	1.028	1.90140	10.689		
-NITROPHENOL	.43883	.47451	.41263	.46983	.41719	1.033	.44260	6.507		**
,4-DINITROTOLUENE	.57148	.58546	.61202	.63132	.65911	1.040	.61188	5.743		
LUORENE	1.61917	1.37831	1.43015	1.30168	1.33856	1.077	1.41357	8.803		
-NITROANILINE	.57783	.51689	.55217	.55964	.52549	1.091	.54641	4.579		
IETHYLPHTHALATE	2.01139	1.60400	1.64065	1.54948	1.46927	1.081	1.65496	12.655		
-CHLOROPHENYL-PHENYLETHER	.90712	.68770	.63327	.56520	.54826	1.082	.66831	21.642		
,4,6-TRIBROMOPHENOL	.45260	.36926	.40369	.36819	.37673	1.114	.39409	9.065		
,6-DINITRO-2-METHYLPHENOL	.17164	.19706	.18884	.18958	.19632	.907	.18869	5.429		
N-NITROSODIPHENYLAMINE	.48453	.36891	.38355	.33592	.35102	.911	.38479	15.226	*	
ZOBENZENE	1.20200	1.08928	1.16757	1.13477	.93431	.914	1.10558	9.442		
-BROMOPHENYL-PHENYLETHER	.27293	.22065	.21984	.20208	.23334	.952	.22977	11.565		
EXACHLOROBENZENE	.35316	.29024	.30346	.27753	.29351	.965	.30358	9.626		
ENTACHLOROPHENOL	.23253	.23409	.22416	.20905	.21783	.988	.22353	4.665	*	
HENANTHRENE	1.30122	1.00651	.95885	.87162	1.02189	1.003	1.03202	15.647		
NTHRACENE	1.24025	1.04761	1.06877	.92997	.98914	1.008	1.05515	11.066		
I-N-BUTYLPHTHALATE	1.97116	1.65552	1.50845	1.31500	1.35144	1.088	1.56031	17.088		
LUORANTHENE	1.63401	1.31054	1.21145	1.12854	1.17284	1.144	1.29148	15.713	*	

F - Response Factor (Subscript is amount in UG/L)

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

$\overline{F}$ - Average Response Factor

RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

e No: Instrument ID: #2637A01697

tractor: LABORATORY RESOURCES Calibration Date: 03/16/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .050 Maximum % RSD for CCC is 30%

Laboratory ID:	>A5422	>A5421	>A5423	>A5424	>A5425					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
IZIDINE	.41359	.38187	.23625	.19846	.22084	.885	.29020	34.358		
PYRENE	1.28917	1.06726	1.12787	1.02027	1.04911	.889	1.11074	9.655		
ERPHENYL-D14	.91939	.85604	.82524	.68123	.68356	.909	.79309	13.441		
YLBENZYLPHTHALATE	.69848	.68009	.70726	.61401	.61518	.961	.66300	6.828		
NZO(A)ANTHRACENE	1.17820	1.06002	1.13736	1.01223	1.01880	.999	1.08132	6.806		
3'-DICHLOROBENZIDINE	.31894	.29058	.29909	.27289	.25396	.987	.28709	8.655		
YSENE	1.12266	1.00322	1.03730	.91561	.93197	1.003	1.00215	8.375		
S(2-ETHYLHEXYL)PHTHALATE	1.08690	1.00047	.98281	.90938	.83129	1.017	.96217	10.045		
DI-N-OCTYLPHTHALATE	1.84508	1.68180	1.32437	1.20646	1.07168	.955	1.42588	22.864	*	
ZO(B)FLUORANTHENE	1.26380	1.10017	1.23287	1.20474	1.29325	.974	1.21897	6.089		
ZO(K)FLUORANTHENE	.95752	.94786	.74625	.69778	1.29325	.975	.92853	25.297		
BENZO(A)PYRENE	1.09635	1.01758	.96262	.94805	1.03103	.996	1.01112	5.858	*	
ENO(1,2,3-CD)PYRENE	.92474	.86466	.91839	.97387	1.12348	1.091	.96103	10.272		
ENZO(A,H)ANTHRACENE	.96849	.85550	.93069	.87210	1.00732	1.094	.92682	6.890		
NZO(G,H,I)PERYLENE	1.04587	.92099	.97753	1.00451	1.11733	1.118	1.01325	7.280		

- Response Factor (Subscript is amount in UG/L)

RT - Average Relative Retention Time (RT Std/RT Istd)

- Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/02/93

ontractor: LABORATORY RESOURCES Time: 11:33

Contract No: Laboratory ID: >A5362

nstrument ID: #2637A01697 Initial Calibration Date: 02/16/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
.YRIDINE	.67150	.51290	23.62			
N-NITROSODIMETHYLAMINE	.99493	.96599	2.91			
-FLUOROPHENOL	.96991	.95694	1.34			
HENOL-D6	1.43470	1.54732	7.85			
PHENOL	1.61483	1.64437	1.83	*		
-CHLOROPHENOL	1.16994	1.25169	6.99			
IS(2-CHLOROETHYL)ETHER	1.27568	1.28597	.81			
,3-DICHLOROBENZENE	1.34506	1.36058	1.15			
,4-DICHLOROBENZENE	1.34717	1.28303	4.76			
ENZYL ALCOHOL	.76478	.78219	2.28			
,2-DICHLOROBENZENE	1.18088	1.16678	1.19			
2-METHYLPHENOL	1.24317	1.13463	8.73			
IS(2-CHLOROISOPROPYL)ETHER	4.43802	4.16098	6.24			
-NITROSO-DI-N-PROPYLAMINE	1.33596	1.26611	5.23		**	
HEXACHLOROETHANE	.64514	.70310	8.98			
- and 4-METHYLPHENOL	.99278	1.08905	9.70			(Conc=100.00)
ITROBENZENE-D5	.44233	.46646	5.45			
ITROBENZENE	.45202	.44478	1.60			
SOPHORONE	.89192	.88040	1.29			
-NITROPHENOL	.21775	.25283	16.11	*		
,4-DIMETHYLPHENOL	.34153	.38456	12.60			
IS(2-CHLOROETHOXY)METHANE	.46641	.49311	5.72			
,4-DICHLOROPHENOL	.30892	.34002	10.07	*		
ENZOIC ACID	.26858	.30591	13.90			
,2,4-TRICHLOROBENZENE	.35424	.36803	3.89			
APHTHALENE	.93323	1.03242	10.63			
-CHLOROANILINE	.46285	.51853	12.03			
EXACHLOROBUTADIENE	.24679	.24061	2.51	*		
-METHYLNAPHTHALENE	.67796	.74923	10.51			
-CHLORO-3-METHYLPHENOL	.38405	.42183	9.84	*		
EXACHLOROCYCLOPENTADIENE	.52330	.45591	12.88		**	
,4,5-TRICHLOROPHENOL	.49799	.46620	6.38			

RF - Response Factor from daily standard file at 50.00 UG/L

F - Average Response Factor from Initial Calibration Form VI

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/02/93

ntractor: LABORATORY RESOURCES Time: 11:33

Contract No: Laboratory ID: >A5362

strument ID: #2637A01697 Initial Calibration Date: 02/16/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
,4,6-TRICHLOROPHENOL	.47395	.48949	3.28	*	
2-FLUOROBIPHENYL	1.21110	1.20778	.27		
CHLORONAPHTHALENE.	1.10798	1.08940	1.68		
NITROANILINE	.73447	.66420	9.57		
ACENAPHTHYLENE	1.65735	1.58317	4.48		
METHYLPHTHALATE	1.47826	1.34315	9.14		
6-DINITROTOLUENE	.42733	.42457	.64		
-NITROANILINE	.44282	.41459	6.38		
ACENAPHTHENE	1.17364	1.18949	1.35	*	
4-DINITROPHENOL	.29135	.28827	1.06		**
BENZOFURAN	1.79131	1.86498	4.11		
4-NITROPHENOL	1.08705	.33009	69.63		**
6-DINITROTOLUENE	.66063	.60698	8.12		
ORENE	1.31604	1.47093	11.77		
4-NITROANILINE	.61453	.58604	4.64		
ETHYLPHTHALATE	1.65985	1.75805	5.92		
CHLOROPHENYL-PHENYLETHER	.73622	.69950	4.99		
,4,6-TRIBROMOPHENOL	.55481	.39570	28.68		
-DINITRO-2-METHYLPHENOL	.18177	.20017	10.12		
NITROSODIPHENYLAMINE	.35475	.37381	5.37	*	
OBENZENE	.97588	1.03824	6.39		
4-BROMOPHENYL-PHENYLETHER	.23117	.22548	2.46		
HACHLOROBENZENE	.32692	.26428	19.16		
ITACHLOROPHENOL	.23421	.23559	.59	*	
PHENANTHRENE	.92734	.98296	6.00		
THRACENE	.93497	1.03600	10.81		
-N-BUTYLPHTHALATE	1.43195	1.62534	13.51		
LUORANTHENE	1.21219	1.34431	10.90	*	
ENZIDINE	.30471	.37835	24.17		
RENE	.98229	1.04271	6.15		
-TERPHENYL-D14	.76021	.80579	6.00		
UTYLBENZYLPHTHALATE	.56985	.68669	20.50		

RF - Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

iff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/02/93

Contractor: LABORATORY RESOURCES Time: 11:33

Contract No: Laboratory ID: >A5362

Instrument ID: $2637A01697 Initial Calibration Date: 02/16/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
ENZO(A)ANTHRACENE	1.02145	1.11562	9.22		
3,3'-DICHLOROBENZIDINE	.30839	.35327	14.55		
HRYSENE	.89836	.99785	11.07		
IS(2-ETHYLHEXYL)PHTHALATE	.77759	.94890	22.03		
DI-N-OCTYLPHTHALATE	1.59874	1.51123	5.47	*	
ENZO(B)FLUORANTHENE	1.27883	1.10025	13.96		
ENZO(K)FLUORANTHENE	.89450	.88631	.92		
ENZO(A)PYRENE	1.00208	.98628	1.58	*	
NDENO(1,2,3-CD)PYRENE	.45971	.94144	104.79		
IBENZO(A,H)ANTHRACENE	.42033	.88619	110.83		
ENZO(G,H,I)PERYLENE	.36244	.96301	165.70		

RF - Response Factor from daily standard file at 50.00 UG/L

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

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/17/93

ontractor: LABORATORY RESOURCES Time: 10:01

Contract No: Laboratory ID: >A5429

nstrument ID: #2637A01697 Initial Calibration Date: 03/16/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
.YRIDINE	.72509	.65043	10.30			
N-NITROSODIMETHYLAMINE	.93165	.75403	19.06			
-FLUOROPHENOL	1.03968	.94190	9.41			
HENOL-D6	1.58242	1.42486	9.96			
PHENOL	1.83250	1.88912	3.09	*		
-CHLOROPHENOL	1.26794	1.32592	4.57			
IS(2-CHLOROETHYL)ETHER	1.32617	1.14911	13.35			
,3-DICHLOROBENZENE	1.39680	1.36340	2.39			
,4-DICHLOROBENZENE	1.41602	1.34119	5.29			
ENZYL ALCOHOL	.88398	.82201	7.01			
,2-DICHLOROBENZENE	1.33911	1.23039	8.12			
2-METHYLPHENOL	1.22418	1.19122	2.69			
IS(2-CHLOROISOPROPYL)ETHER	3.73733	2.84399	23.90			
-NITROSO-DI-N-PROPYLAMINE	1.32520	1.17944	11.00		**	
HEXACHLOROETHANE	.76934	.72494	5.77			
- and 4-METHYLPHENOL	1.32661	1.23261	7.09			(Conc=100.00)
ITROBENZENE-D5	.45493	.39884	12.33			
.ITROBENZENE	.46653	.42658	8.56			
SOPHORONE	.94537	.80385	14.97			
-NITROPHENOL	.23216	.24184	4.17	*		
,4-DIMETHYLPHENOL	.39188	.39557	.94			
BIS(2-CHLOROETHOXY)METHANE	.49693	.43726	12.01			
,4-DICHLOROPHENOL	.32876	.35158	6.94	*		
ENZOIC ACID	.28427	.26462	6.92			
,2,4-TRICHLOROBENZENE	.35657	.38115	6.89			
APHTHALENE	1.04198	.96379	7.50			
-CHLOROANILINE	.51543	.54494	5.73			
EXACHLOROBUTADIENE	.22348	.24382	9.10	*		
-METHYLNAPHTHALENE	.74080	.79508	7.33			
-CHLORO-3-METHYLPHENOL	.41580	.42340	1.83	*		
EXACHLOROCYCLOPENTADIENE	.45652	.46988	2.93		**	
?,4,5-TRICHLOROPHENOL	.46587	.50573	8.56			

RF - Response Factor from daily standard file at 50.00 UG/L

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

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/17/93

Contractor: LABORATORY RESOURCES Time: 10:01

Contract No: Laboratory ID: >A5429

Instrument ID: #2637A01697 Initial Calibration Date: 03/16/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
2,4,6-TRICHLOROPHENOL	.45617	.51556	13.02	*	
2-FLUOROBIPHENYL	1.18474	1.26675	6.92		
2-CHLORONAPHTHALENE	1.15083	1.09997	4.42		
2-NITROANILINE	.67325	.54436	19.14		
ACENAPHTHYLENE	1.64801	1.71457	4.04		
DIMETHYLPHTHALATE	1.40390	1.33762	4.72		
2,6-DINITROTOLUENE	.39521	.38140	3.50		
3-NITROANILINE	.43327	.43233	.22		
ACENAPHTHENE	1.12782	1.12894	.10	*	
2,4-DINITROPHENOL	.28162	.22802	19.03		**
DIBENZOFURAN	1.90140	1.99594	4.97		
4-NITROPHENOL	.44260	.44602	.77		**
2,4-DINITROTOLUENE	.61188	.57279	6.39		
FLUORENE	1.41357	1.44143	1.97		
4-NITROANILINE	.54641	.51639	5.49		
DIETHYLPHTHALATE	1.65496	1.54406	6.70		
4-CHLOROPHENYL-PHENYLETHER	.66831	.71091	6.37		
2,4,6-TRIBROMOPHENOL	.39409	.44907	13.95		
4,6-DINITRO-2-METHYLPHENOL	.18869	.18867	.01		
N-NITROSODIPHENYLAMINE	.38479	.37421	2.75	*	
HEXACHLOROBENZENE	1.10558	.99778	9.75		
4-BROMOPHENYL-PHENYLETHER	.22977	.23163	.81		
HEXACHLOROBENZENE	.30358	.33512	10.39		
PENTACHLOROPHENOL	.22353	.25503	14.09	*	
PHENANTHRENE	1.03202	1.01976	1.19		
ANTHRACENE	1.05515	1.04277	1.17		
DI-N-BUTYLPHTHALATE	1.56031	1.55176	.55		
FLUORANTHENE	1.29148	1.30103	.74	*	
BENZIDINE	.29020	.36308	25.11		
PYRENE	1.11074	1.06492	4.12		
p-TERPHENYL-D14	.79309	.87647	10.51		
BUTYLBENZYLPHTHALATE	.66300	.62249	6.11		

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/17/93

ontractor: LABORATORY RESOURCES Time: 10:01

Contract No: Laboratory ID: >A5429

nstrument ID: #2637A01697 Initial Calibration Date: 03/16/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
ENZO(A)ANTHRACENE	1.08132	1.04358	3.49		
3,3'-DICHLOROBENZIDINE	.28709	.36764	28.05		
HRYSENE	1.00215	.95400	4.80		
IS(2-ETHYLHEXYL)PHTHALATE	.96217	.87724	8.83		
DI-N-OCTYLPHTHALATE	1.42588	1.38734	2.70	*	
ENZO(B)FLUORANTHENE	1.21897	1.05112	13.77		
ENZO(K)FLUORANTHENE	.92853	.98138	5.69		
ENZO(A)PYRENE	1.01112	.97518	3.56	*	
NDENO(1,2,3-CD)PYRENE	.96103	.83458	13.16		
IBENZO(A,H)ANTHRACENE	.92682	.79858	13.84		
ENZO(G,H,I)PERYLENE	1.01325	.80114	20.93		

RF - Response Factor from daily standard file at 50.00 UG/L

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

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/19/93

ontractor: LABORATORY RESOURCES Time: 09:25

Contract No: Laboratory ID: >D4749

nstrument ID: #2637A01697 Initial Calibration Date: 03/04/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
YRIDINE	.87204	.19438	77.71			
N-NITROSODIMETHYLAMINE	.99139	.93879	5.31			
-FLUOROPHENOL	1.07597	.92170	14.34			
HENOL-D6	1.38348	1.34921	2.48			
PHENOL	1.57369	1.79481	14.05	*		
-CHLOROPHENOL	1.20733	1.42507	18.03			
BIS(2-CHLOROETHYL)ETHER	1.27298	1.19102	6.44			
,3-DICHLOROBENZENE	1.41752	1.41233	.37			
1,4-DICHLOROBENZENE	1.38702	1.38284	.30			
ENZYL ALCOHOL	1.57806	1.47077	6.80			
,2-DICHLOROBENZENE	1.38496	1.37416	.78			
2-METHYLPHENOL	1.26914	1.27036	.10			
BIS(2-CHLOROISOPROPYL)ETHER	3.44644	3.30119	4.21			
-NITROSO-DI-N-PROPYLAMINE	1.46754	1.28894	12.17		**	
HEXACHLOROETHANE	.80946	.76994	4.88			
- and 4-METHYLPHENOL	1.48623	1.48430	.13			(Conc=100.00)
ITROBENZENE-D5	.47577	.42429	10.82			
ITROBENZENE	.48922	.45185	7.64			
SOPHORONE	1.01031	.88134	12.77			
-NITROPHENOL	.26014	.27167	4.43	*		
,4-DIMETHYLPHENOL	.43518	.44819	2.99			
BIS(2-CHLOROETHOXY)METHANE	.52177	.47354	9.24			
,4-DICHLOROPHENOL	.34264	.39010	13.85	*		
ENZOIC ACID	.36577	.38168	4.35			
,2,4-TRICHLOROBENZENE	.38871	.41195	5.98			
APHTHALENE	.98426	.97193	1.25			
-CHLOROANILINE	.47414	.52087	9.86			
EXACHLOROBUTADIENE	.26449	.30900	16.83	*		
-METHYLNAPHTHALENE	.90052	1.09564	21.67			
-CHLORO-3-METHYLPHENOL	.38577	.48902	26.77	*		
EXACHLOROCYCLOPENTADIENE	.43996	.51921	18.01		**	
,4,5-TRICHLOROPHENOL	.51633	.54491	5.54			

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/19/93

Contractor: LABORATORY RESOURCES Time: 09:25

Contract No: Laboratory ID: >D4749

Instrument ID: $2637A01697 Initial Calibration Date: 03/04/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
2,4,6-TRICHLOROPHENOL	.47830	.53908	12.71	*	
2-FLUOROBIPHENYL	1.18995	1.21936	2.47		
2-CHLORONAPHTHALENE	1.13309	1.13624	.28		
2-NITROANILINE	.72217	.64698	10.41		
ACENAPHTHYLENE	1.76998	1.68462	4.82		
BENZYLPHTHALATE	1.68102	1.54831	7.89		
3,5-DINITROTOLUENE	.45047	.41754	7.31		
3-NITROANILINE	.43760	.42708	2.40		
ACENAPHTHENE	1.10425	1.08272	1.95	*	
2,4-DINITROPHENOL	.22593	.30820	36.41		**
4-DIBENZOFURAN	1.83138	1.91534	4.58		
4-NITROPHENOL	.43803	.47954	9.48		**
2,6-DINITROTOLUENE	.64621	.63949	1.04		
DIBENZOFURENE	1.32426	1.32873	.34		
4-NITROANILINE	.47373	.47722	.74		
DIETHYLPHTHALATE	1.93416	1.90106	1.71		
4-CHLOROPHENYL-PHENYLETHER	.72842	.79983	9.80		
2,4,6-TRIBROMOPHENOL	.48846	.60056	22.95		
4,6-DINITRO-2-METHYLPHENOL	.18000	.23306	29.48		
N-NITROSODIPHENYLAMINE	.31762	.30691	3.37	*	
HEXACHLOROBENZENE	1.04570	.99348	4.99		
4-BROMOPHENYL-PHENYLETHER	.25346	.26362	4.01		
HEXACHLOROBENZENE	.36694	.41599	13.37		
PENTACHLOROPHENOL	.25954	.31133	19.95	*	
PHENANTHRENE	1.00786	.97783	2.98		
ANTHRACENE	.99409	1.01053	1.65		
DI-N-BUTYLPHTHALATE	1.85363	1.72664	6.85		
FLUORANTHENE	1.25320	1.31031	4.56	*	
BENZIDINE	.11055	.15962	44.39		
PYRENE	1.06386	.94435	11.23		
P-TERPHENYL-D14	.83540	.81999	1.84		
BUTYLBENZYLPHTHALATE	.81065	.67498	16.74		

RF - Response Factor from daily standard file at 50.00 UG/L

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

Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/19/93

Contractor: LABORATORY RESOURCES Time: 09:25

Contract No: Laboratory ID: >D4749

Instrument ID: #2637A01697 Initial Calibration Date: 03/04/93

Minimum $\overline{RF}$ for SPCC is .050 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
BENZO(A)ANTHRACENE	1.11644	1.02137	8.52		
3,3'-DICHLOROBENZIDINE	.19108	.20119	5.29		
CHRYSENE	1.02026	.93056	8.79		
BIS(2-ETHYLHEXYL)PHTHALATE	1.09978	.94650	13.94		
DI-N-OCTYLPHTHALATE	1.93761	1.60477	17.18	*	
BENZO(B)FLUORANTHENE	1.49232	1.10777	25.77		
BENZO(K)FLUORANTHENE	.58184	.89171	53.26		
BENZO(A)PYRENE	1.02731	.95346	7.19	*	
INDENO(1,2,3-CD)PYRENE	.95348	.80867	15.19		
DIBENZO(A,H)ANTHRACENE	.82101	.71399	13.04		
BENZO(G,H,I)PERYLENE	.78210	.73671	5.80		

RF - Response Factor from daily standard file at 50.00 UG/L

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

%Diff - % Difference from original average or curve

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

2B
SEMIVOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/02/93

LAB SAMP NO. ($)	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	DF	TOT OUT
METHOD BLA S	73	73	78	N/A	N/A	N/A	1	0
02232-02 S	45	52	62	N/A	N/A	N/A	1	0
METHOD BLA S	67	62	71	N/A	N/A	N/A	1	0
3068 MS S	71	65	69	N/A	N/A	N/A	1	0
3069 MSD S	71	68	67	N/A	N/A	N/A	1	0
METHOD BLA S	40	42	52	N/A	N/A	N/A	1	0

EPA CLP QC Limits For:	Soil	Water
S1 (NBZ) = NITROBENZENE-D5	23-120	35-114
S2 (FBP) = 2-FLUOROBIPHENYL	30-115	43-116
S3 (TPH) = 4-TERPHENYL-D14	18-137	33-141
S4 (PHL) = PHENOL-D6	24-113	10- 94
S5 (2FP) = 2-FLUOROPHENOL	25-121	21-100
S6 (TBP) = 2,4,6-TRIBROMOPHENOL	19-122	10-123

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits
N/A Not applicable
DF Column indicating dilution factor of final extract
DO Surrogates diluted out, no recovery data available

2B
SEMIVOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/17/93

LAB SAMP NO. ($)	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	DF	TOT OUT
THOD BLA S	86	80	79	79	75	86	1	0
03106-02 S	65	63	68	N/A	N/A	N/A	1	0
T303106-03 S	88	86	91	N/A	N/A	N/A	1	0
03071-03 S	33	36	39	0*	0*	0*	1	3
03071-04 S	48	51	46	0*	0*	0*	5	3
303095-01 S	63	62	67	N/A	N/A	N/A	1	0

EPA CLP QC Limits For:	Soil	Water
S1 (NBZ) = NITROBENZENE-D5	23-120	35-114
S2 (FBP) = 2-FLUOROBIPHENYL	30-115	43-116
S3 (TPH) = 4-TERPHENYL-D14	18-137	33-141
S4 (PHL) = PHENOL-D6	24-113	10- 94
S5 (2FP) = 2-FLUOROPHENOL	25-121	21-100
S6 (TBP) = 2,4,6-TRIBROMOPHENOL	19-122	10-123

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits
N/A Not applicable
DF Column indicating dilution factor of final extract
DO Surrogates diluted out, no recovery data available

SEMIVOLATILE SURROGATE RECOVERIES

Lab Name: Laboratory Resources Inc.,

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 03/19/93

LAB SAMP NO.	($)	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	DF	TOT OUT
303147-02	W	72	68	73	N/A	N/A	N/A	1	0
303042-03	W	71	49	48	37	28	36	20	0
T303042-03	W	65	58	59	55	53	53	20	0
ETHOD BLA	S	48	50	53	59	57	55	1	0
303087-01	S	66	62	65	60	62	62	1	0
T303087-02	S	52	55	57	54	53	55	1	0
ETHOD BLA	S	56	58	57	51	50	48	1	0
303071-03	S	71	71	74	73	70	69	1	0
T303071-04	S	58	54	54	59	56	43	1	0

EPA CLP QC Limits For:	Soil	Water
S1 (NBZ) = NITROBENZENE-D5	23-120	35-114
S2 (FBP) = 2-FLUOROBIPHENYL	30-115	43-116
S3 (TPH) = 4-TERPHENYL-D14	18-137	33-141
S4 (PHL) = PHENOL-D6	24-113	10- 94
S5 (2FP) = 2-FLUOROPHENOL	25-121	21-100
S6 (TBP) = 2,4,6-TRIBROMOPHENOL	19-122	10-123

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of CLP QC limits
N/A Not applicable
DF Column indicating dilution factor of final extract
DO Surrogates diluted out, no recovery data available
D Surrogates diluted, recovery estimated

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Laboratory Resources Inc.,

atrix Spike - Lab Sample No. S93068, S93069
171-01SPK, SPKDUP

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC#	QC LIMITS REC
Phenol	6600	0	4053	61	26- 90
2-Chlorophenol	6600	0	4466	68	25-102
1,4-Dichlorobenzene	3300	0	2262	69	28-104
N-Nitroso-di-n-prop.(1)	3300	0	3422	104	41-126
1,2,4-Trichlorobenzene	3300	0	2336	71	38-107
4-Chloro-3-methylphenol	6600	0	4601	70	26-103
Acenaphthene	3300	0	2230	68	31-137
4-Nitrophenol	6600	0	5856	89	11-114
2,4-Dinitrotoluene	3300	0	2519	76	28- 89
Pentachlorophenol	6600	0	4195	64	17-109
Pyrene	3300	0	2157	65	35-142

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC#	% RPD#	QC LIMITS RPD	QC LIMITS REC
Phenol	6600	4420	67	9	35	26- 90
2-Chlorophenol	6600	4464	68	0	50	25-102
1,4-Dichlorobenzene	3300	2314	70	2	27	28-104
N-Nitroso-di-n-prop.(1)	3300	3764	114	10	38	41-126
1,2,4-Trichlorobenzene	3300	2357	71	1	23	38-107
4-Chloro-3-methylphenol	6600	4563	69	1	33	26-103
Acenaphthene	3300	2253	68	1	19	31-137
4-Nitrophenol	6600	6150	93	5	50	11-114
2,4-Dinitrotoluene	3300	2763	84	9	47	28- 89
Pentachlorophenol	6600	4596	70	9	47	17-109
Pyrene	3300	2207	67	2	36	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 11 outside limits
Spike Recovery: 0 of 22 outside limits

COMMENTS:

BB

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >A5362 Lab Sample ID: 50 PPM BNA

Date Analyzed: 03/02/93 Time Analyzed: 11:33

	IS1(DCB)		IS2(NPT)		IS3(ANT)		IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT
12 HOUR STD	10873	10.47	48687	13.55	36688	18.00	88560	21.69	116431	28.47	139342	31.92
UPPER LIMIT	21746		97374		73376		177120		232862		278684	
LOWER LIMIT	5437		24344		18344		44280		58215		69671	
LAB SAMPLE #												
METHOD BLA	7089	10.47	34276	13.55	27153	17.97	70479	21.69	98843	28.45	112946	31.90
T302232-02	6867	10.47	34075	13.56	27219	17.98	69564	21.67	90939	28.45	111631	31.91
METHOD BLA	6483	10.47	30579	13.56	24551	17.98	64815	21.69	96516	28.46	122165	31.91
S93068 MS	6273	10.47	29561	13.55	25846	18.00	68109	21.69	113448	28.46	136998	31.91
S93069 MSD	6687	10.48	31364	13.57	27065	17.99	69060	21.69	119697	28.46	141333	31.91
METHOD BLA	5530	10.48	27694	13.55	23555	17.98	63859	21.67	110439	28.45	134842	31.91

IS1 (DCB) = 1,4-Dichlorobenzene-d4 IS4 (PHN) = Phenanthrene-d10

IS2 (NPT) = Napthalene-d8 IS5 (CRY) = Chrysene-d12

IS3 (ANT) = Acenapthene-d10 IS6 (PRY) = Perylene-d12

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

Column used to flag internal standard are values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID: >A5429 Lab Sample ID: 50 PPM BNA

Date Analyzed: 03/17/93 Time Analyzed: 10:01

	IS1(DCB)		IS2(NPT)		IS3(ANT)		IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT
12 HOUR STD	32125	10.09	135345	13.16	94723	17.57	219832	21.22	276995	27.93	324187	31.30
UPPER LIMIT	64250		270690		189446		439664		553990		648374	
LOWER LIMIT	16063		67673		47361		109916		138497		162093	
LAB SAMPLE #												
METHOD BLA	20059	10.10	82710	13.15	62324	17.55	148280	21.21	196979	27.91	201955	31.28
T303106-02	22749	10.11	97194	13.16	71013	17.56	164352	21.22	228929	27.92	256213	31.28
T303106-03	21783	10.10	97621	13.17	73899	17.57	171462	21.22	190975	27.93	231156	31.30
T303071-03	24580	10.10	106004	13.17	77060	17.55	177702	21.21	261033	27.92	305722	31.27
T303071-04	31292	10.09	128927	13.16	92757	17.56	217604	21.22	333480	27.93	387922	31.29
T303095-01	26055	10.09	107513	13.16	84143	17.56	194127	21.22	276851	27.93	318182	31.29

IS1 (DCB) = 1,4-Dichlorobenzene-d4 IS4 (PHN) = Phenanthrene-d10
IS2 (NPT) = Napthalene-d8 IS5 (CRY) = Chrysene-d12
IS3 (ANT) = Acenapthene-d10 IS6 (PRY) = Perylene-d12

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

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.,

Lab file ID:)D4749 Lab Sample ID: 50 PPM BNAE

Date Analyzed: 03/19/93 Time Analyzed: 09:25

	IS1(DCB)		IS2(NPT)		IS3(ANT)		IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT	AREA #	RT
12 HOUR STD	16578	8.45	68150	11.48	50645	15.78	115574	19.32	162233	25.86	186115	29.12
UPPER LIMIT	33156		136300		101290		231148		324466		372230	
LOWER LIMIT	8289		34075		25323		57787		81116		93058	
LAB SAMPLE #												
T303147-02	14787	8.45	61878	11.47	45091	15.78	103387	19.33	144525	25.85	161023	29.10
T303042-03	13760	8.44	56198	11.47	38777	15.77	73401	19.36	126622	25.87	144270	29.13
T303042-03	11311	8.45	59347	11.49	44254	15.79	98771	19.34	144513	25.87	140609	29.12
METHOD BLA	16546	8.43	67464	11.48	47772	15.77	107799	19.32	151291	25.84	170473	29.12
T303087-01	15725	8.43	64057	11.48	47372	15.77	108173	19.32	142235	25.86	161849	29.12
T303087-02	16749	8.43	69188	11.48	49196	15.77	111365	19.32	159472	25.85	180956	29.11
METHOD BLA	31648	8.46	131083	11.49	92576	15.80	208861	19.36	284277	25.88	311732	29.14
T303071-03	16211	8.46	65662	11.49	48765	15.78	107285	19.35	138408	25.88	150112	29.15
T303071-04	17765	8.44	73632	11.47	53338	15.79	116953	19.33	153370	25.84	135131	29.12

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Napthalene-d8
IS3 (ANT) = Acenapthene-d10
IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

Column used to flag internal standard area values with an asterisk

QUANT REPORT Page 1

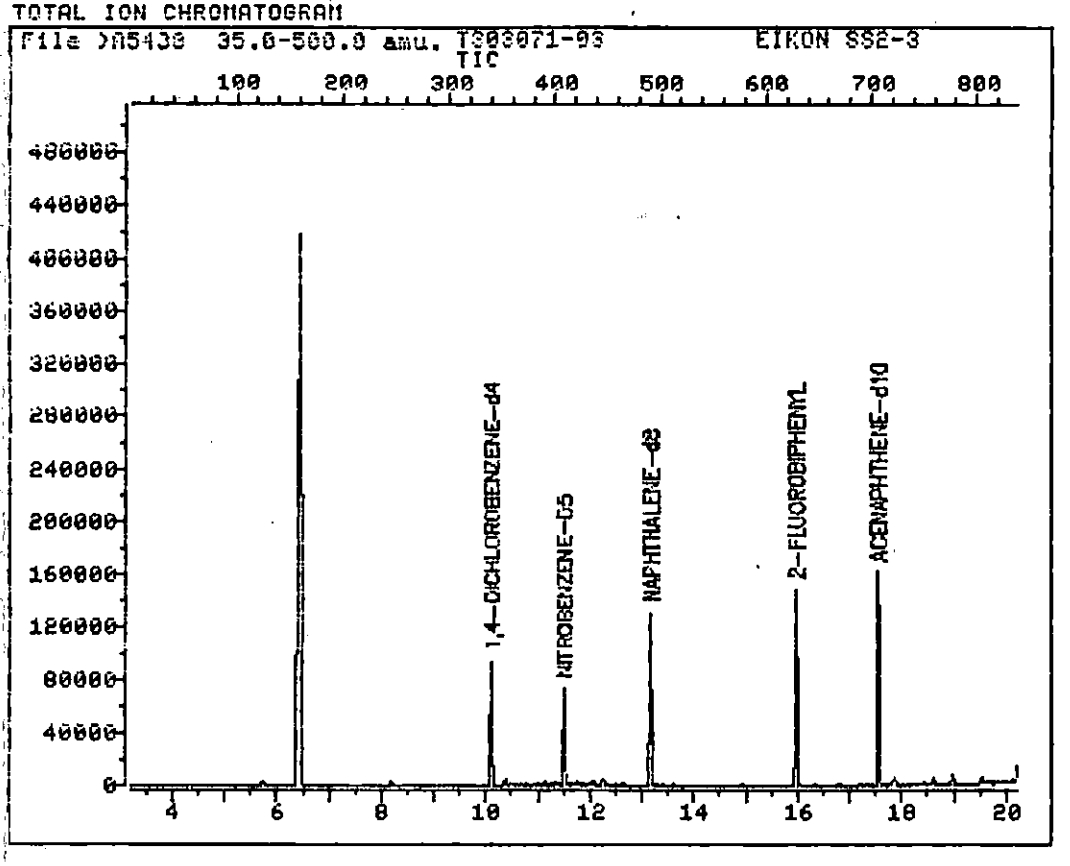
erator ID: BILL Quant Rev: 7 Quant Time: 930317 19:43
Output File: ^A5438::QT Injected at: 930317 19:05
ta File: >A5438::A2 Dilution Factor: 1.00000
me: T303071-03 Instrument ID: A
Misc: EIKON SS2-3 :03/02/93;03/16/93 BTL# 9

File: ID_D25::A1
tle: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930317 10:01

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	10.10	152.0	24580	40.00	UG/L	95
8)	*NAPHTHALENE-d8	13.17	136.0	106004	40.00	UG/L	97
9)	NITROBENZENE-D5	11.50	82.0	34639	32.77	UG/L	92
3)	*ACENAPHTHENE-d10	17.55	164.1	77060	40.00	UG/L	97
37)	2-FLUOROBIPHENYL	15.97	172.0	88175	36.13	UG/L	99
4)	*PHENANTHRENE-d10	21.21	188.1	177702	40.00	UG/L	98
3)	DI-N-BUTYLPHTHALATE	23.09	149.0	10272	1.49	UG/L	98
65)	*CHRYSENE-d12	27.92	240.1	261033	40.00	UG/L	97
8)	4-TERPHENYL-D14	25.39	244.1	222824	38.96	UG/L	96
3)	BIS(2-ETHYLHEXYL)PHTHALATE	28.41	149.0	38788	6.78	UG/L	95
4)	*PERYLENE-d12	31.27	264.1	305722	40.00	UG/L	94

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >A5438::A2 Quant Output File: ^A5438::QT
Name: T303071-03 Instrument ID: A
Misc: EIKON SS2-3 ;03/02/93;03/16/93 BTL# 9

Id File: ID_D25::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930317 10:01

Operator ID: BILL
Quant Time : 930317 19:43
Injected at: 930317 19:05

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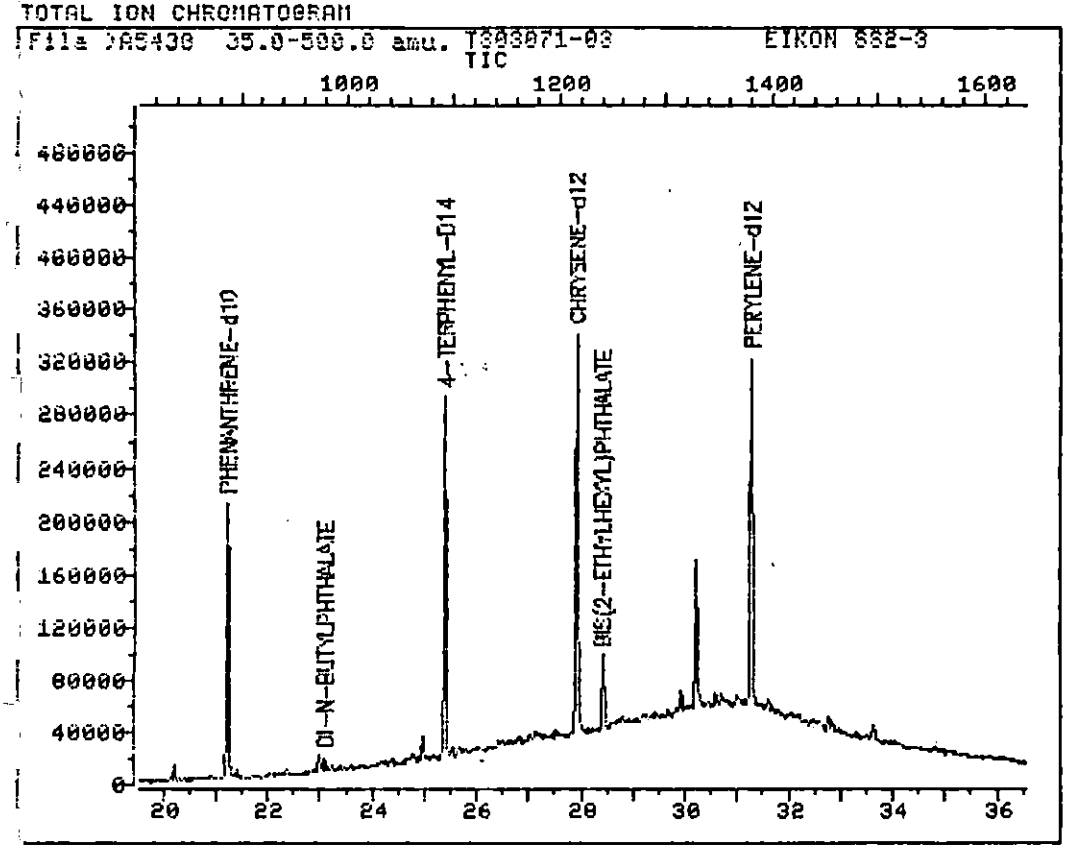
TOTAL ION CHROMATOGRAM



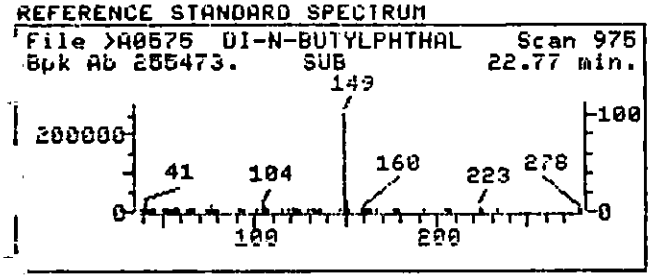
Data File: >A5438::A2 Quant Output File: ^A5438::QT
Name: T303071-03 Instrument ID: A
Misc: EIKON SS2-3 ;03/02/93;03/16/93 BTL# 9

Id File: ID_D25::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930317 10:01

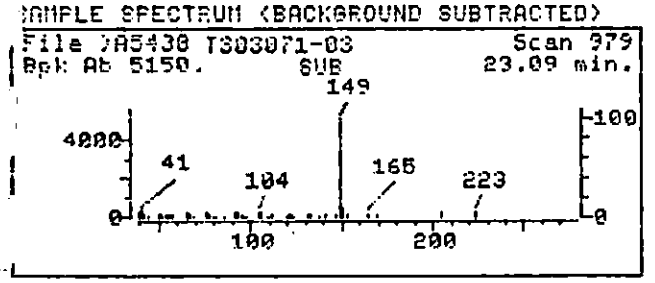
Operator ID: BILL
Quant Time : 930317 19:43
Injected at: 930317 19:05

Page 2 of 2

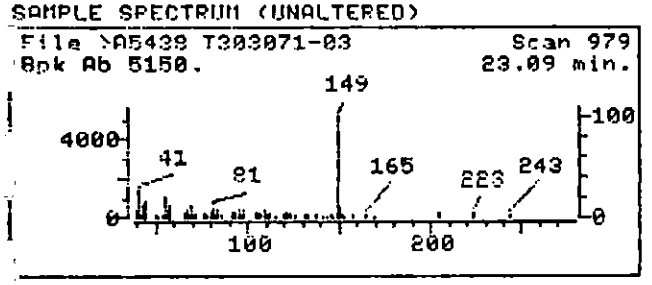
REFERENCE STANDARD SPECTRUM

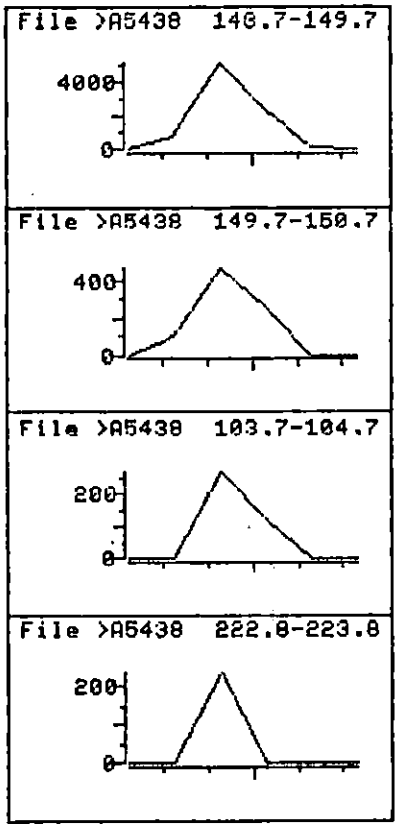


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

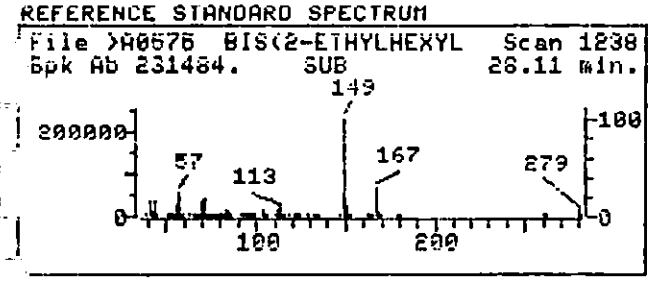




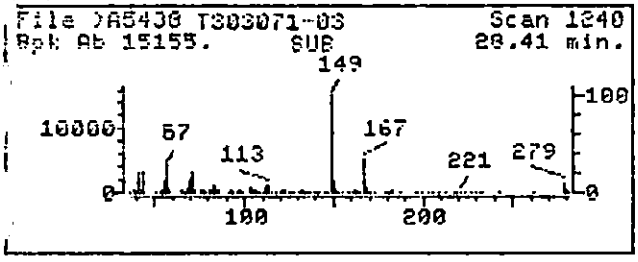
Data File: >A5438::A2 Quant Output File: ^A5438::QT
Name: T303071-03 Instrument ID: A
Misc: EIKON SS2-3 ;03/02/93;03/16/93 BTL# 9
Quant Time: 930317 19:43 Quant ID File: ID_D25::A1
Injected at: 930317 19:05 Last Calibration: 930316 15:21
Last Qcal Time: 930317 10:01

Compound No : 63
Compound Name : DI-N-BUTYLPHTHALATE
Scan Number : 979
Retention Time: 23.09 min.
Quant Ion : 149.0
Area : 10272
Concentration : 1.49 UG/L
q-value : 98

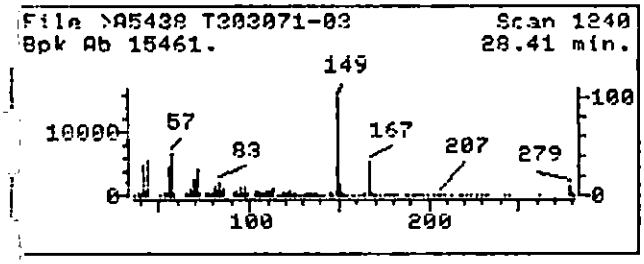
REFERENCE STANDARD SPECTRUM

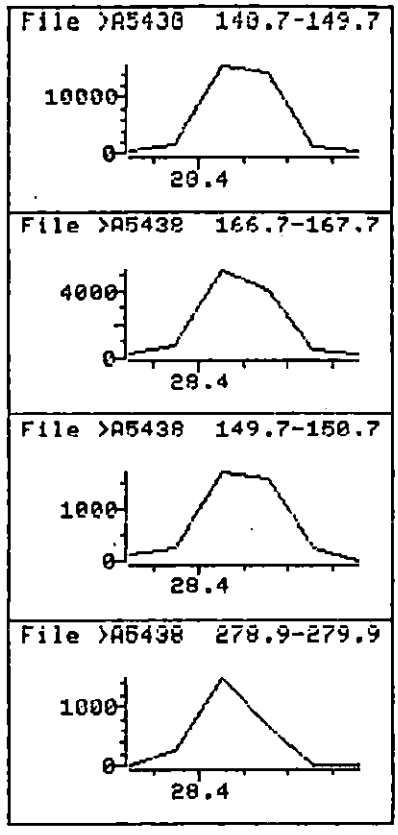


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



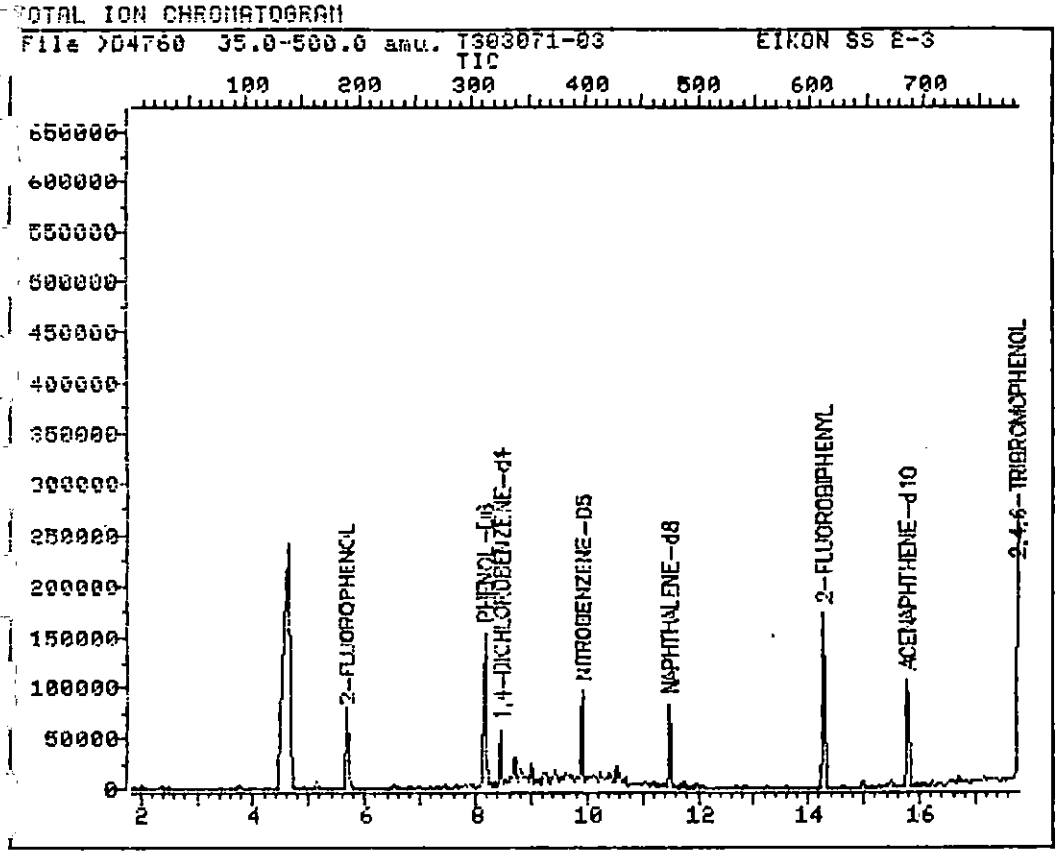
SAMPLE SPECTRUM (UNALTERED)





Data File: >A5438::A2 Quant Output File: ^A5438::QT
Name: T303071-03 Instrument ID: A
Misc: EIKON SS2-3 ;03/02/93;03/16/93 BTL# 9
Quant Time: 930317 19:43 Quant ID File: ID_D25::A1
Injected at: 930317 19:05 Last Calibration: 930316 15:21
Last Qcal Time: 930317 10:01

Compound No : 73
Compound Name : BIS(2-ETHYLHEXYL)PHTHALATE
Scan Number : 1240
Retention Time: 28.41 min.
Quant Ion : 149.0
Area : 38788
Concentration : 6.78 UG/L
q-value : 95



Data File: >D4760::D1 Quant Output File: ^D4760::QT
Name: T303071-03 Instrument ID: D
Misc: EIKON SS 2-3 ;03/02/93;03/18/93 BTL#11

Id File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

Operator ID: GREG
Quant Time : 930319 18:26
Injected at: 930319 17:51

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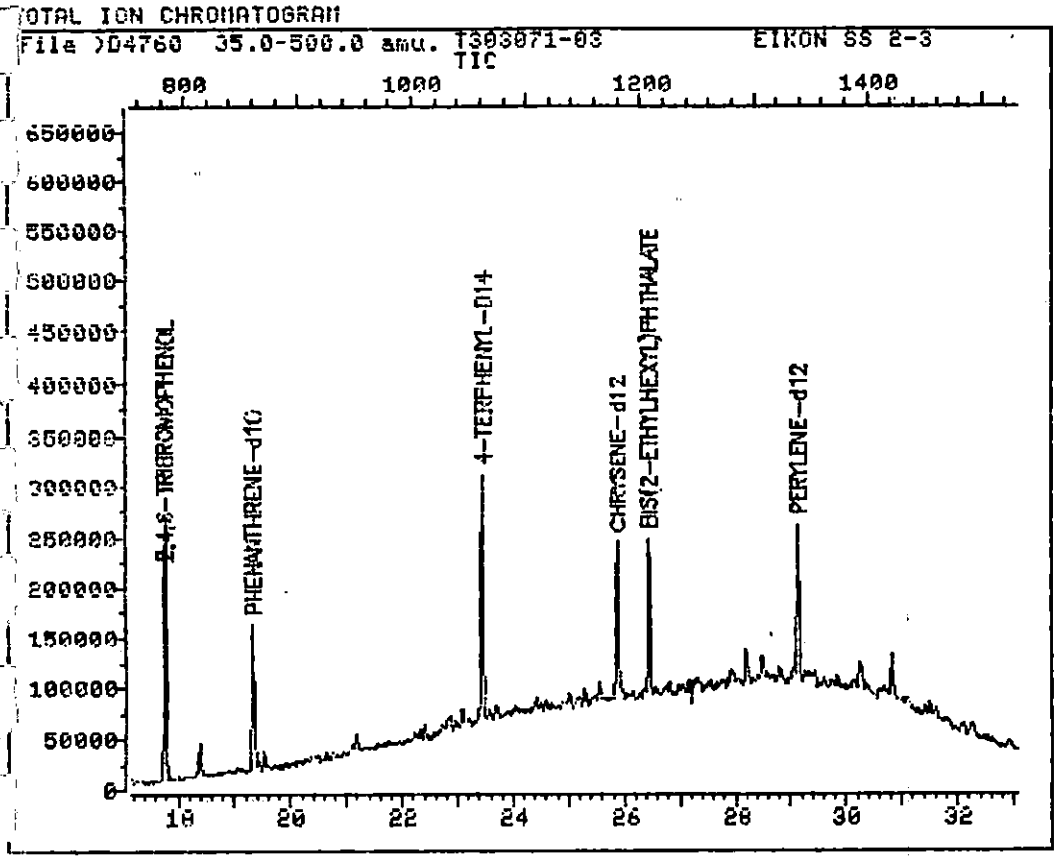
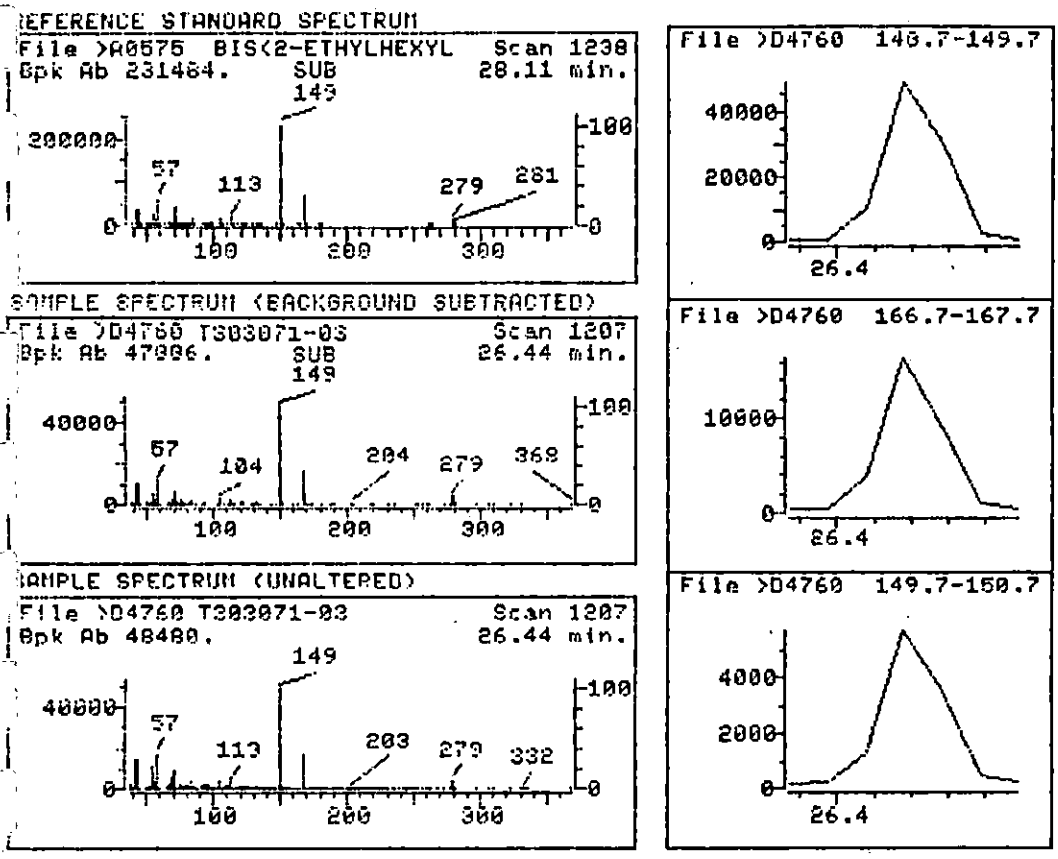


Data File: >D4760::D1 Quant Output File: ^D4760::QT
Name: T303071-03 Instrument ID: D
Misc: EIKON SS 2-3 ;03/02/93;03/18/93 BTL#11

Id File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

Operator ID: GREG
Quant Time : 930319 18:26
Injected at: 930319 17:51



Data File: >D4760::D1 Quant Output File: ^D4760::QT
Name: T303071-03 Instrument ID: D
Misc: EIKON SS 2-3 ;03/02/93;03/18/93 BTL#11
Quant Time: 930319 18:26 Quant ID File: IDD625::FB
Injected at: 930319 17:51 Last Calibration: 930304 14:20
Last Qcal Time: 930319 09:25

Compound No : 73
Compound Name : BIS(2-ETHYLHEXYL)PHTHALATE
Scan Number : 1207
Retention Time: 26.44 min.
Quant Ion : 149.0
Area : 112604
Concentration : 34.38 UG/L
q-value : 97

QUANT REPORT Page 1

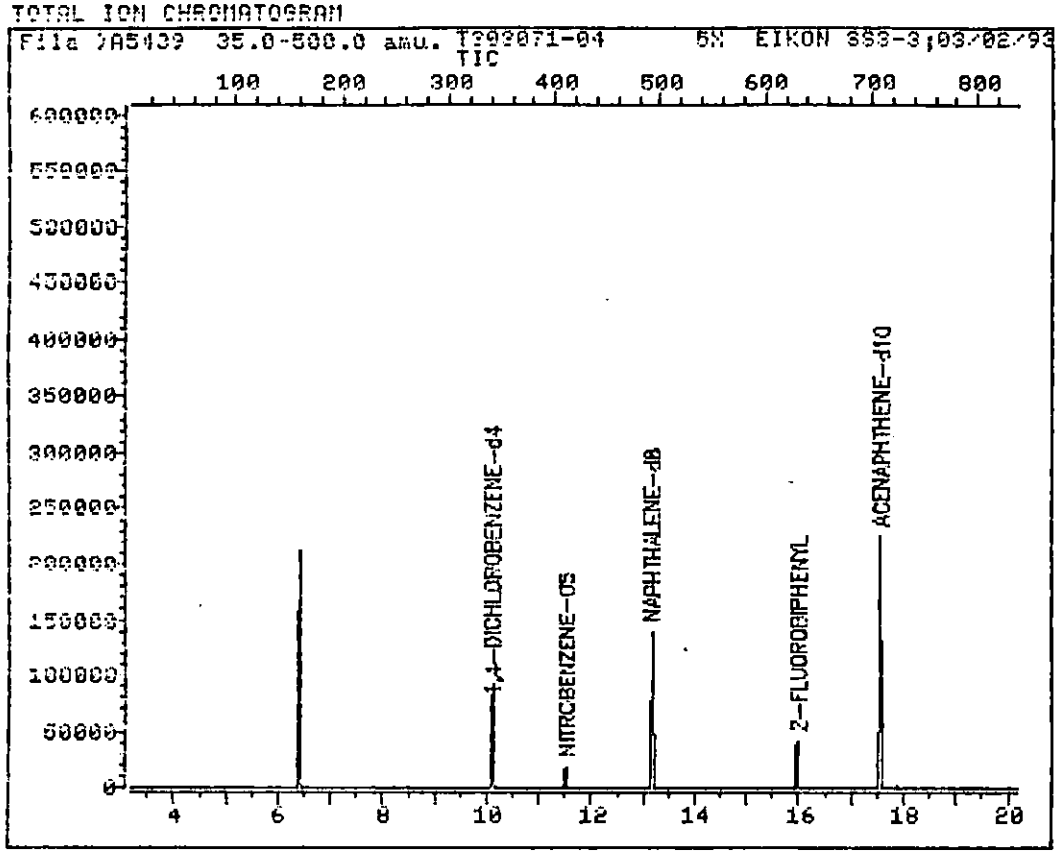
Operator ID: GREG Quant Rev: 7 Quant Time: 930319 18:26
Output File: ^D4760::QT Injected at: 930319 17:51
Data File: >D4760::D1 Dilution Factor: 1.00000
Name: T303071-03 Instrument ID: D
Misc: EIKON SS 2-3 ;03/02/93;03/18/93 BTL#11

ID File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	8.46	152.0	16211	40.00	UG/L	94
4)	2-FLUOROPHENOL	5.68	112.0	51948	139.07	UG/L	82
5)	PHENOL-D6	8.18	99.1	79904	146.13	UG/L	96
8)	*NAPHTHALENE-d8	11.49	136.1	65662	40.00	UG/L	99
9)	NITROBENZENE-D5	9.93	82.1	49713	71.38	UG/L	97
3)	*ACENAPHTHENE-d10	15.78	164.1	48765	40.00	UG/L	95
37)	2-FLUOROBIPHENYL	14.28	172.0	104835	70.52	UG/L	97
6)	2,4,6-TRIBROMOPHENOL	17.76	329.7	100919	137.84	UG/L	86
4)	*PHENANTHRENE-d10	19.35	188.1	107285	40.00	UG/L	90
65)	*CHRYSENE-d12	25.88	240.1	138408	40.00	UG/L	95
3)	4-TERPHENYL-D14	23.46	244.1	211203	74.44	UG/L	98
3)	BIS(2-ETHYLHEXYL)PHTHALATE	26.44	149.0	112604	34.38	UG/L	97
4)	*PERYLENE-d12	29.15	264.1	150112	40.00	UG/L	97

Compound is ISTD

TOTAL ION CHROMATOGRAM



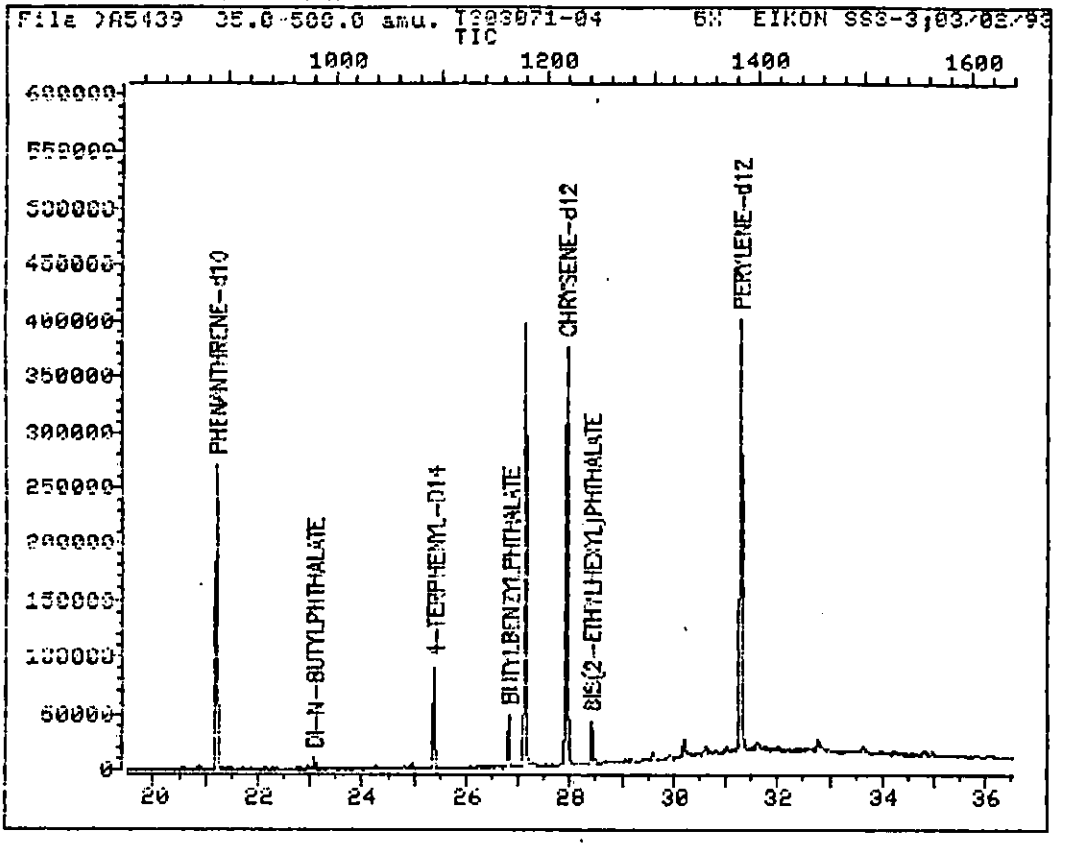
Data File: >A5439::A2 Quant Output File: ^A5439::QT
Name: T303071-04 5X Instrument ID: A
Misc: EIKON SS3-3;03/02/93;03/16/93 BTL#10

Id File: ID_D25::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930317 10:01

Operator ID: BILL
Quant Time : 930317 20:31
Injected at: 930317 19:53

Page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >A5439::A2 Quant Output File: ^A5439::QT
Name: T303071-04 5X Instrument ID: A
Misc: EIKON SS3-3;03/02/93;03/16/93 BTL#10

Id File: ID_D25::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930317 10:01

Operator ID: BILL
Quant Time : 930317 20:31
Injected at: 930317 19:53

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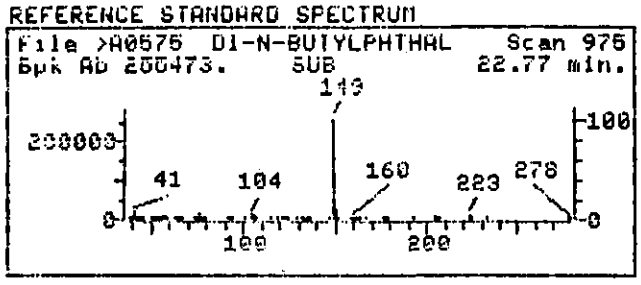
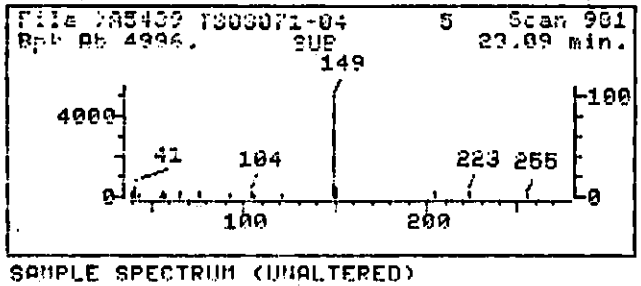
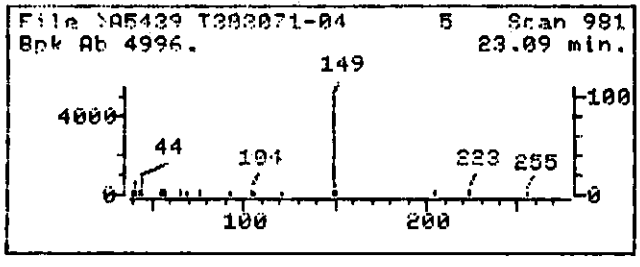
REFERENCE STANDARD SPECTRUM

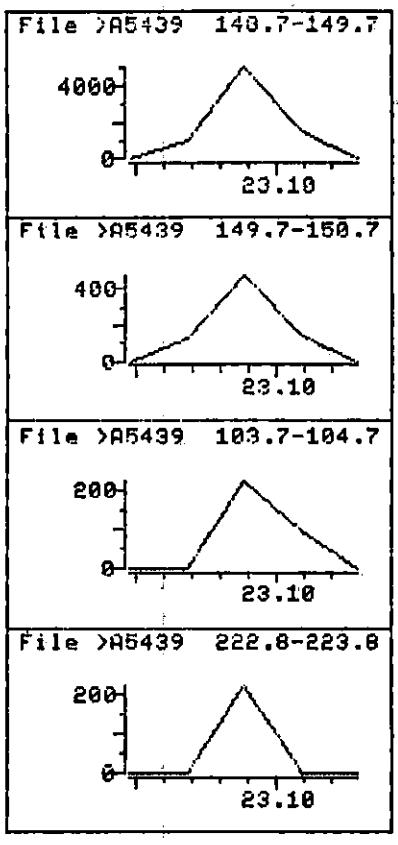


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

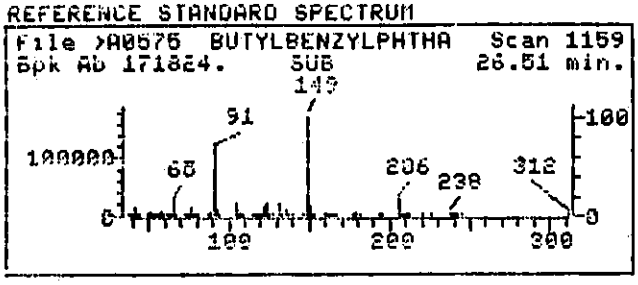




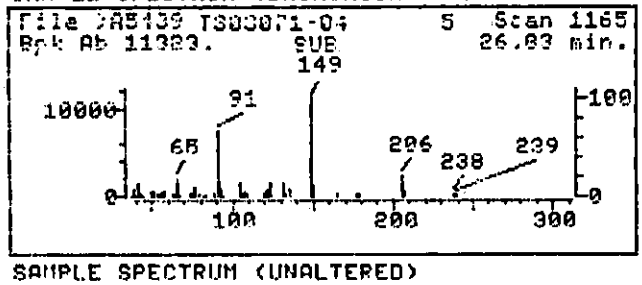
Data File: >A5439::A2 Quant Output File: ^A5439::QT
Name: T303071-04 5X Instrument ID: A
Misc: EIKON SS3-3;03/02/93;03/16/93 BTL#10
Quant Time: 930317 20:31 Quant ID File: ID_D25::A1
Injected at: 930317 19:53 Last Calibration: 930316 15:21
Last Qcal Time: 930317 10:01

Compound No : 63
Compound Name : DI-N-BUTYLPHTHALATE
Scan Number : 981
Retention Time: 23.09 min.
Quant Ion : 149.0
Area : 9247
Concentration : 1.10 UG/L
q-value : 98

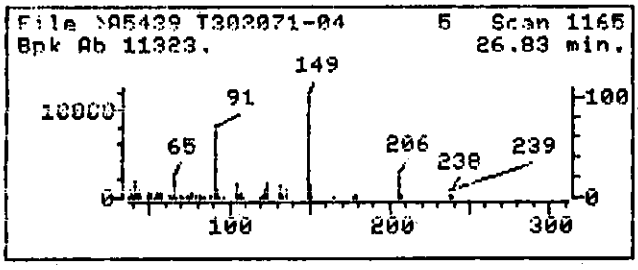
REFERENCE STANDARD SPECTRUM

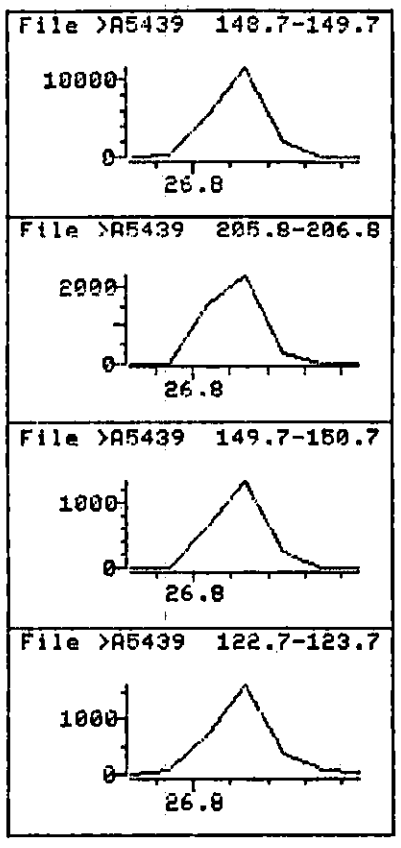


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

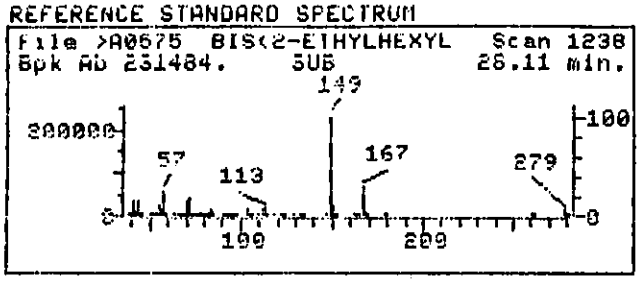




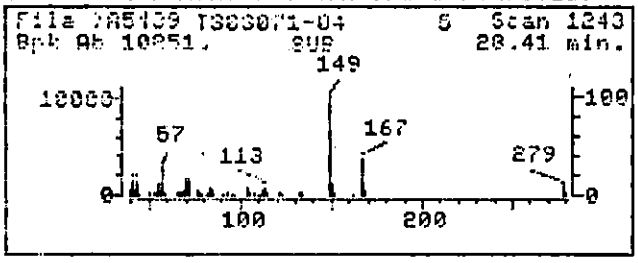
Data File: >A5439::A2 Quant Output File: ^A5439::QT
Name: T303071-04 5X Instrument ID: A
Misc: EIKON SS3-3;03/02/93;03/16/93 BTL#10
Quant Time: 930317 20:31 Quant ID File: ID_D25::A1
Injected at: 930317 19:53 Last Calibration: 930316 15:21
Last Qcal Time: 930317 10:01

Compound No : 69
Compound Name : BUTYLBENZYLPHTHALATE
Scan Number : 1165
Retention Time: 26.83 min.
Quant Ion : 149.0
Area : 23358
Concentration : 4.50 UG/L
q-value : 97

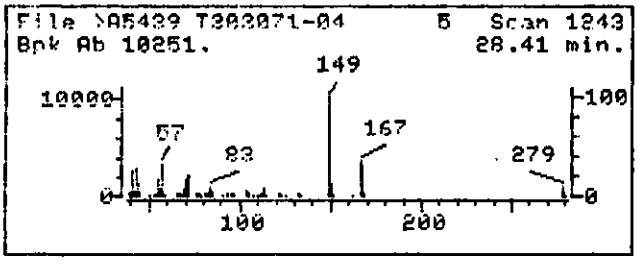
REFERENCE STANDARD SPECTRUM

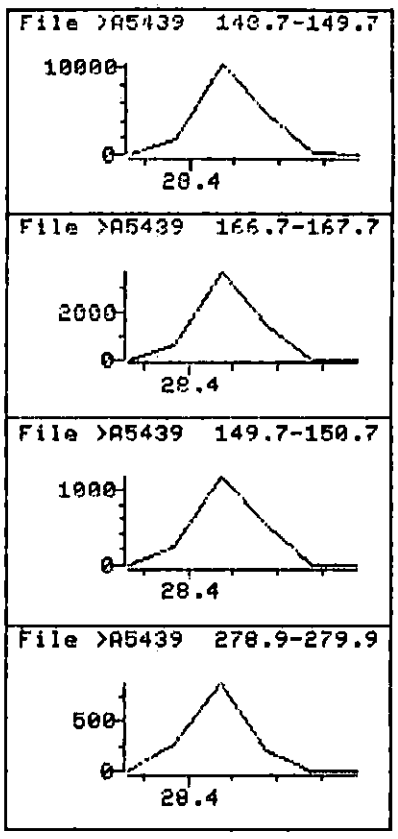


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A5439::A2 Quant Output File: ^A5439::QT
Name: T303071-04 5X Instrument ID: A
Misc: EIKON SS3-3;03/02/93;03/16/93 BTL#10
Quant Time: 930317 20:31 Quant ID File: ID_D25::A1
Injected at: 930317 19:53 Last Calibration: 930316 15:21
Last Qcal Time: 930317 10:01

Compound No : 73
Compound Name : BIS(2-ETHYLHEXYL)PHTHALATE
Scan Number : 1243
Retention Time: 28.41 min.
Quant Ion : 149.0
Area : 20930
Concentration : 2.86 UG/L
q-value : 93

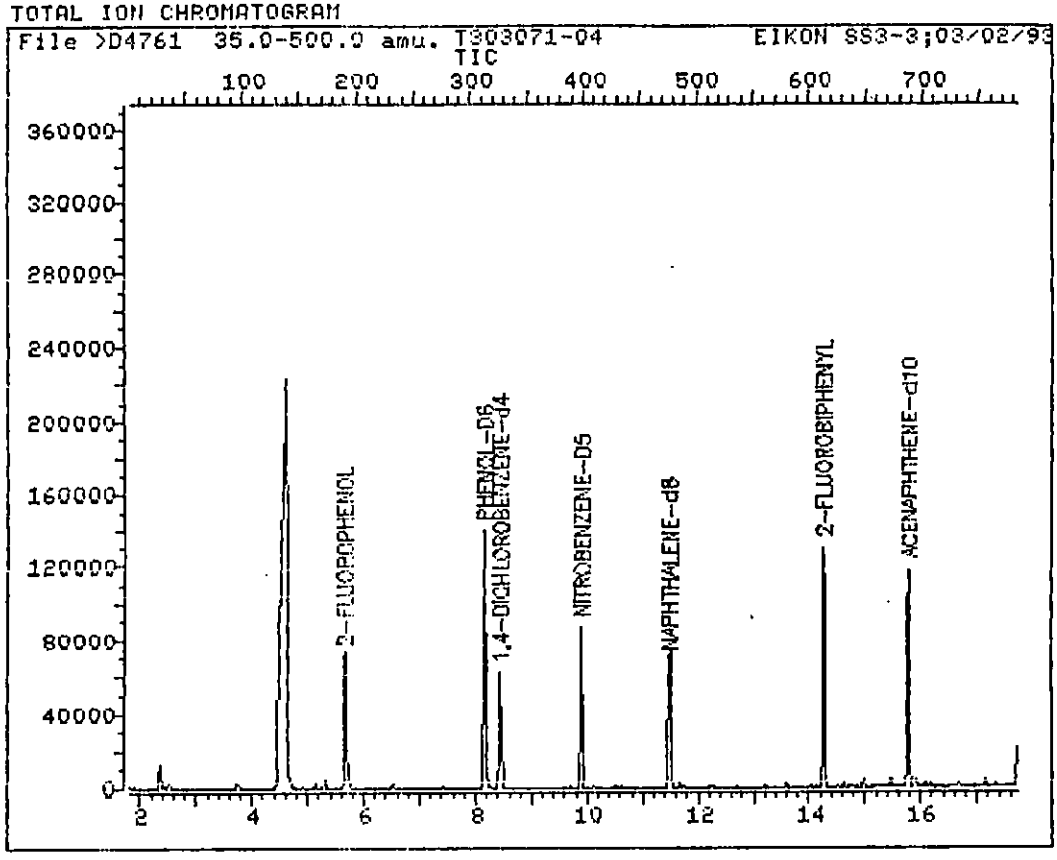
Operator ID: BILL Quant Rev: 7 Quant Time: 930317 20:31
Output File: ^A5439::QT Injected at: 930317 19:53
Data File: >A5439::A2 Dilution Factor: 1.00000
Name: T303071-04 5X Instrument ID: A
Misc: EIKON SS3-3;03/02/93;03/16/93 BTL#10

ID File: ID_D25::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930317 10:01

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	10.09	152.0	31292	40.00	UG/L	89
18)	*NAPHTHALENE-d8	13.16	136.0	128927	40.00	UG/L	97
19)	NITROBENZENE-D5	11.51	82.0	12325	9.59	UG/L	93
33)	*ACENAPHTHENE-d10	17.56	164.1	92757	40.00	UG/L	95
37)	2-FLUOROBIPHENYL	15.98	172.0	30181	10.27	UG/L	98
54)	*PHENANTHRENE-d10	21.22	188.1	217604	40.00	UG/L	97
63)	DI-N-BUTYLPHTHALATE	23.09	149.0	9247	1.10	UG/L	98
65)	*CHRYSENE-d12	27.93	240.1	333480	40.00	UG/L	94
68)	4-TERPHENYL-D14	25.38	244.1	67036	9.17	UG/L	97
69)	BUTYLBENZYLPHTHALATE	26.83	149.0	23358	4.50	UG/L	97
73)	BIS(2-ETHYLHEXYL)PHTHALATE	28.41	149.0	20930	2.86	UG/L	93
74)	*PERYLENE-d12	31.29	264.1	387922	40.00	UG/L	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM

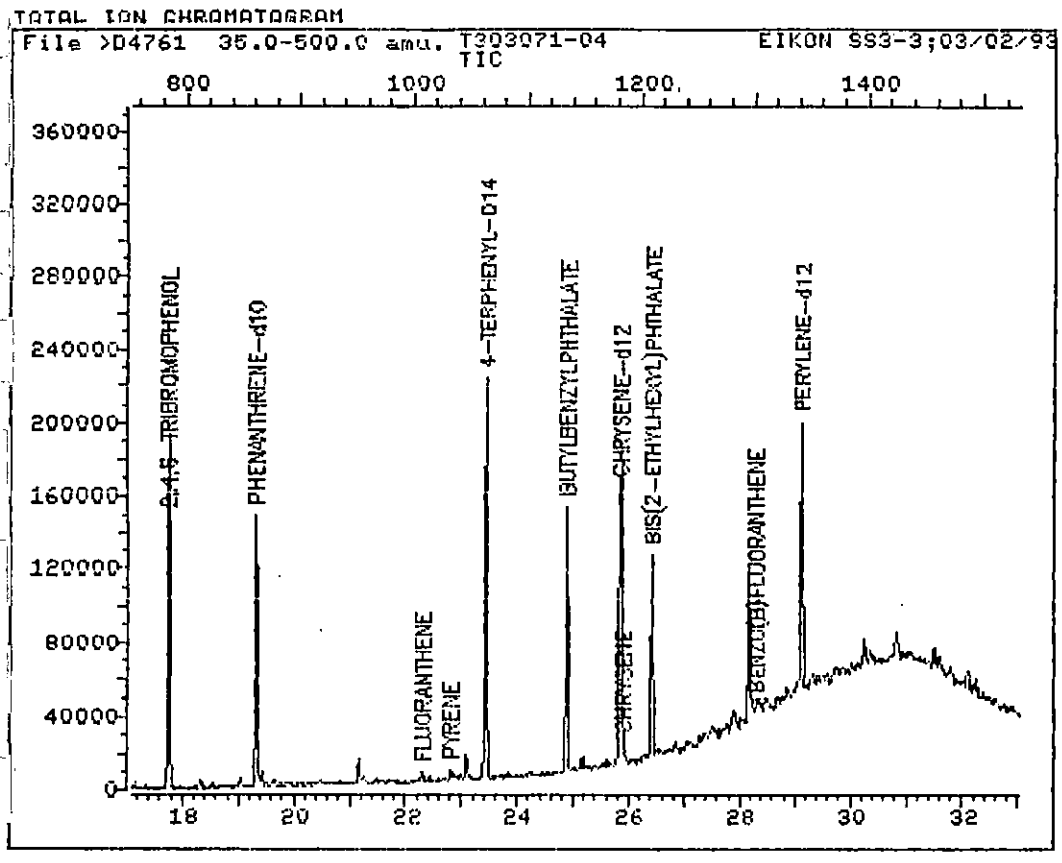


Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12

Id File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

Operator ID: GREG
Quant Time : 930319 19:11
Injected at: 930319 18:36

Page 1 of 2

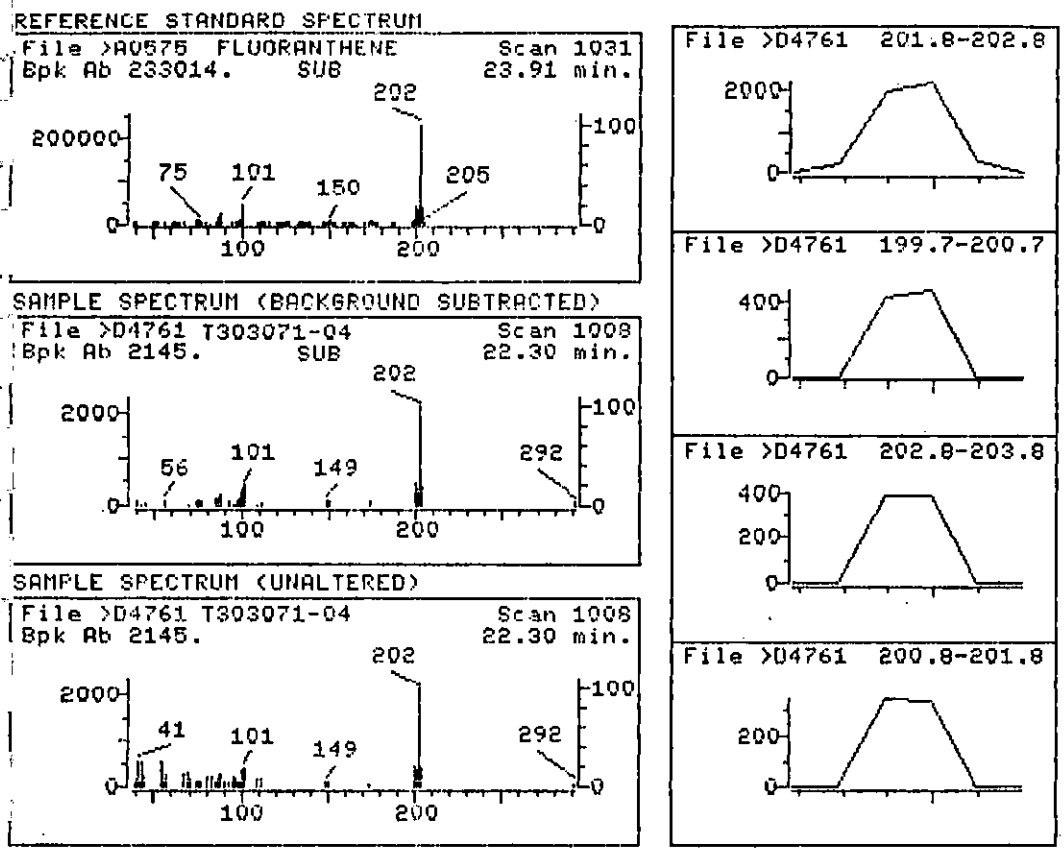


Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12

Id File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

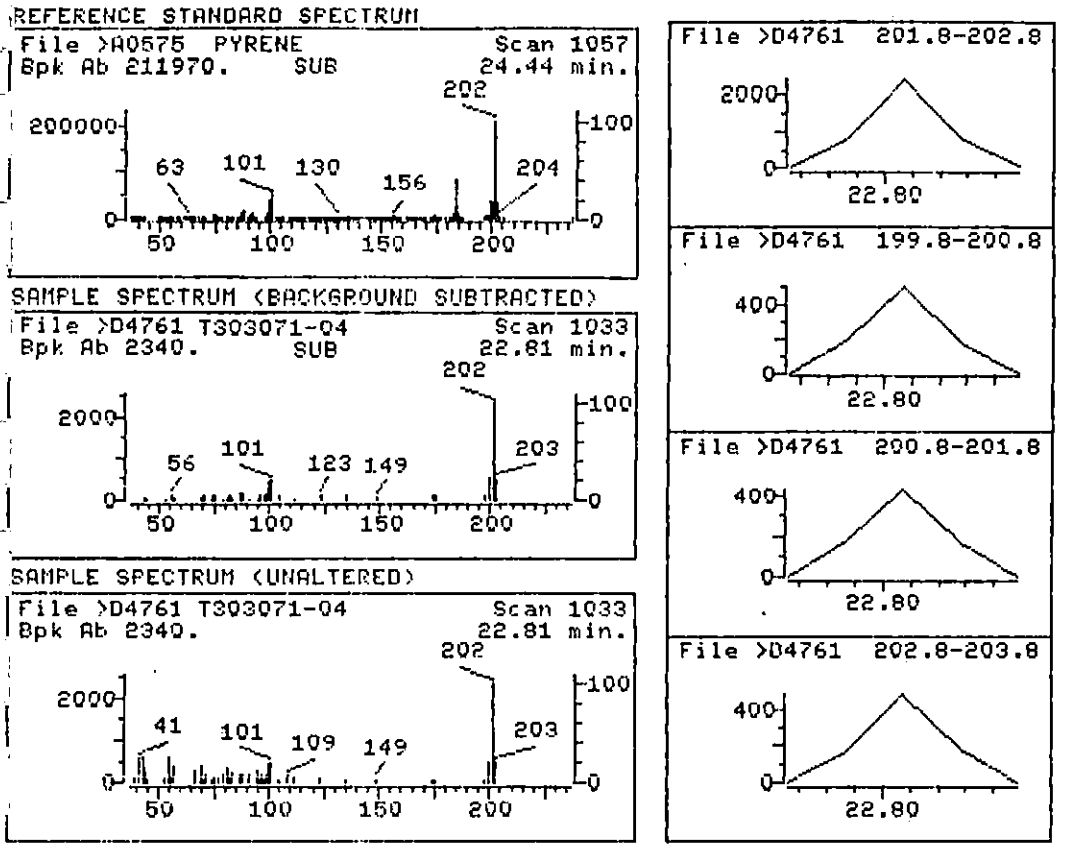
Operator ID: GREG
Quant Time : 930319 19:11
Injected at: 930319 18:36

Page 2 of 2



Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12
Quant Time: 930319 19:11 Quant ID File: IDD625::FB
Injected at: 930319 18:36 Last Calibration: 930304 14:20
Last Qcal Time: 930319 09:25

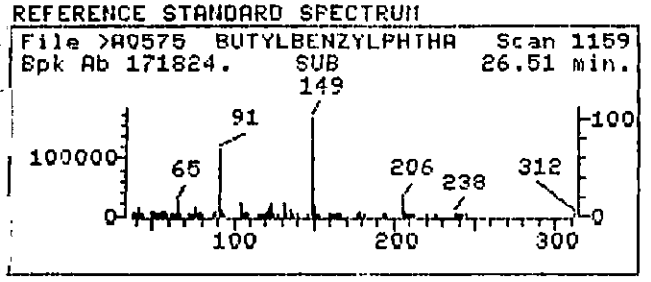
Compound No : 64
Compound Name : FLUORANTHENE
Scan Number : 1008
Retention Time: 22.30 min.
Quant Ion : 202.1
Area : 5646
Concentration : 1.47 UG/L
q-value : 98



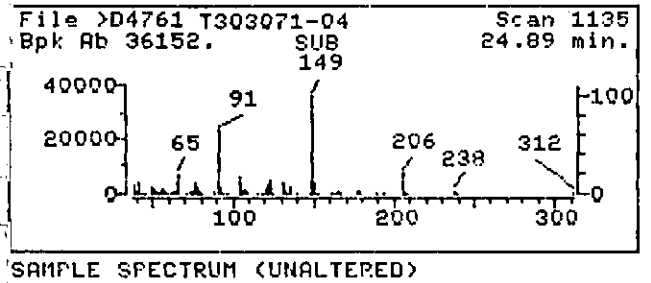
Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12
Quant Time: 930319 19:11 Quant ID File: IDD625::FB
Injected at: 930319 18:36 Last Calibration: 930304 14:20
Last Qcal Time: 930319 09:25

Compound No : 67
Compound Name : PYRENE
Scan Number : 1033
Retention Time: 22.81 min.
Quant Ion : 202.1
Area : 4910
Concentration : 1.36 UG/L
q-value : 96

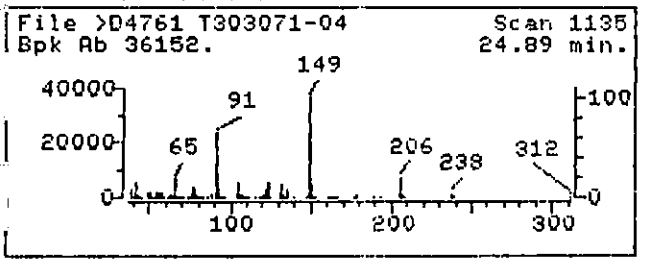
REFERENCE STANDARD SPECTRUM

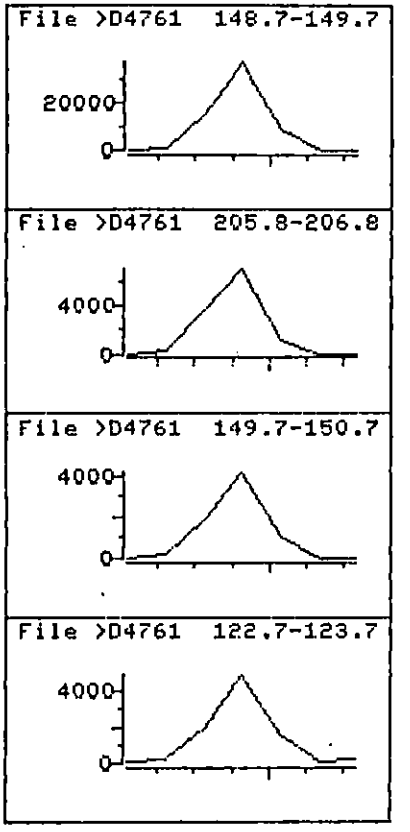


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



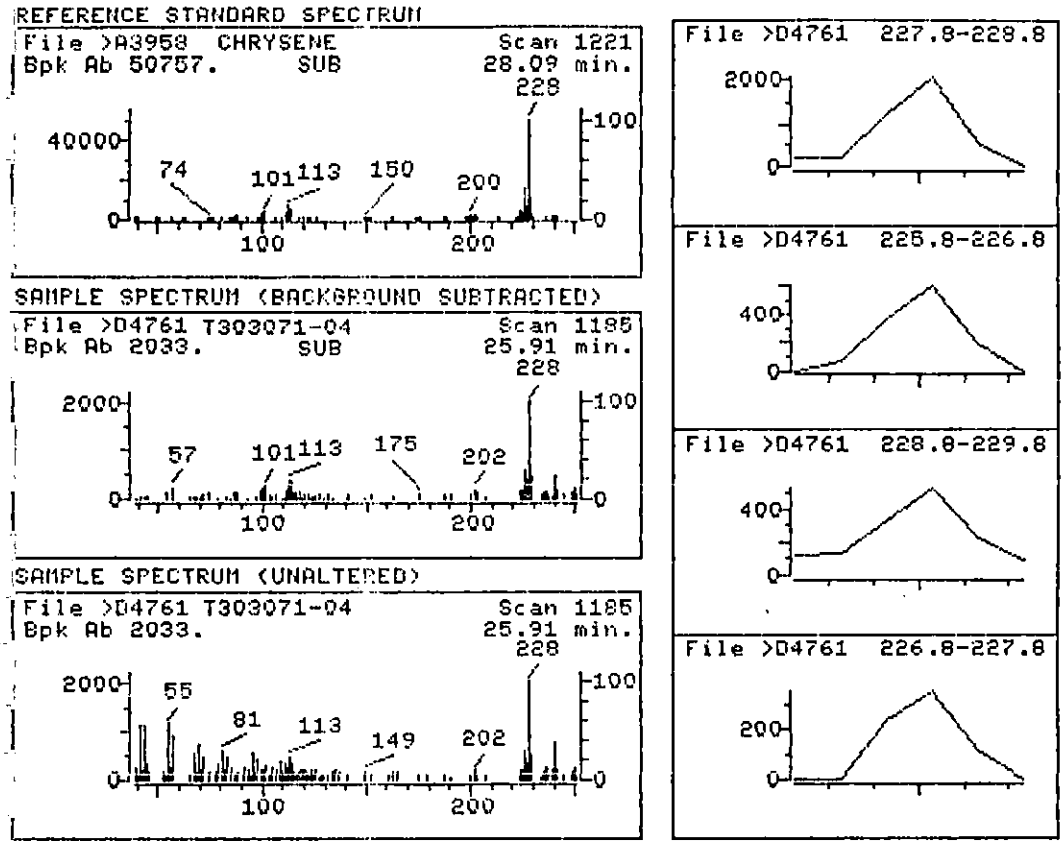
SAMPLE SPECTRUM (UNALTERED)





Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12
Quant Time: 930319 19:11 Quant ID File: IDD625::FB
Injected at: 930319 18:36 Last Calibration: 930304 14:20
Last Qcal Time: 930319 09:25

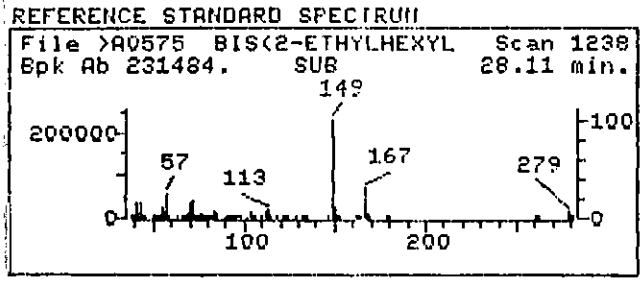
Compound No : 69
Compound Name : BUTYLBENZYLPHTHALATE
Scan Number : 1135
Retention Time: 24.89 min.
Quant Ion : 149.0
Area : 76711
Concentration : 29.64 UG/L
q-value : 97



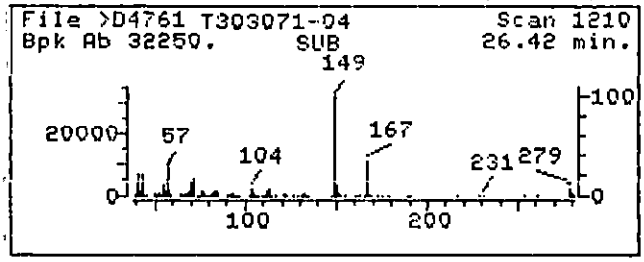
Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12
Quant Time: 930319 19:11 Quant ID File: IDD625::FB
Injected at: 930319 18:36 Last Calibration: 930304 14:20
Last Qcal Time: 930319 09:25

Compound No : 72
Compound Name : CHRYSENE
Scan Number : 1185
Retention Time: 25.91 min.
Quant Ion : 228.1
Area : 4969
Concentration : 1.39 UG/L
q-value : 91

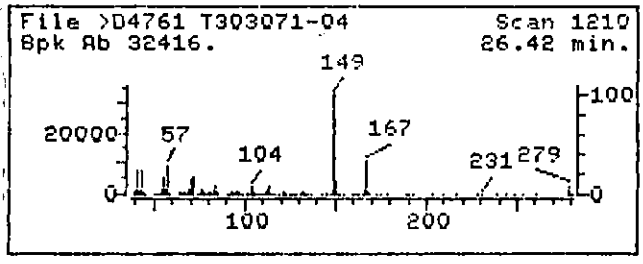
REFERENCE STANDARD SPECTRUM

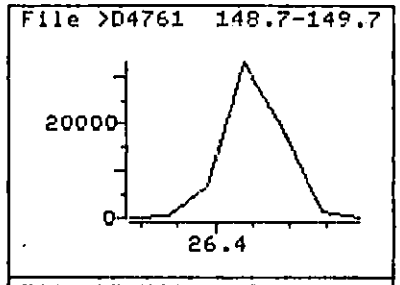


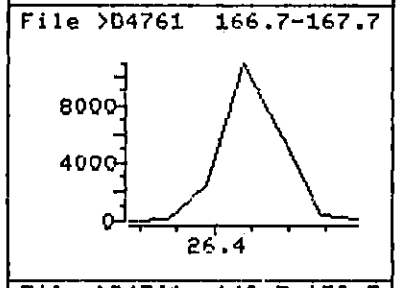
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

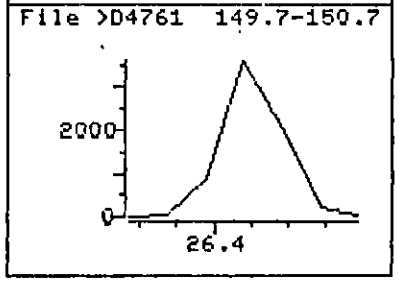


SAMPLE SPECTRUM (UNALTERED)





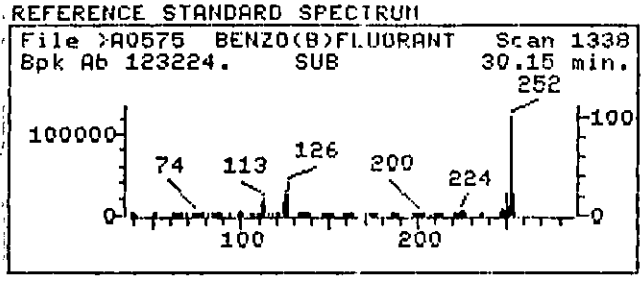




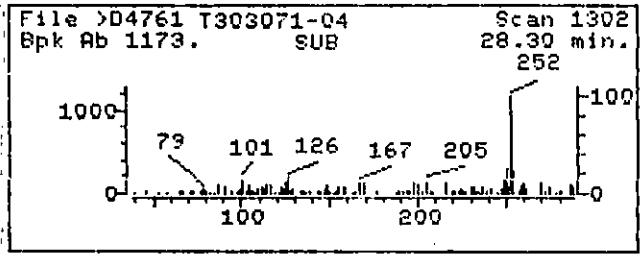
Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12
Quant Time: 930319 19:11 Quant ID File: IDD625::FB
Injected at: 930319 18:36 Last Calibration: 930304 14:20
Last Qcal Time: 930319 09:25

Compound No : 73
Compound Name : BIS(2-ETHYLHEXYL)PHTHALATE
Scan Number : 1210
Retention Time: 26.42 min.
Quant Ion : 149.0
Area : 72221
Concentration : 19.90 UG/L
q-value : 96

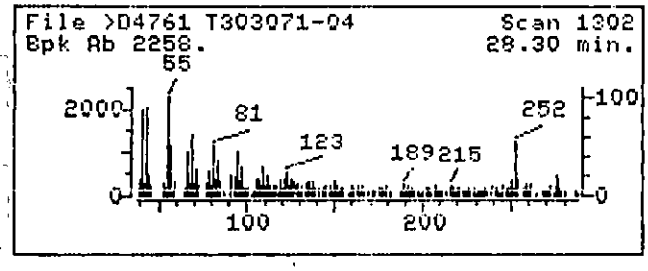
REFERENCE STANDARD SPECTRUM

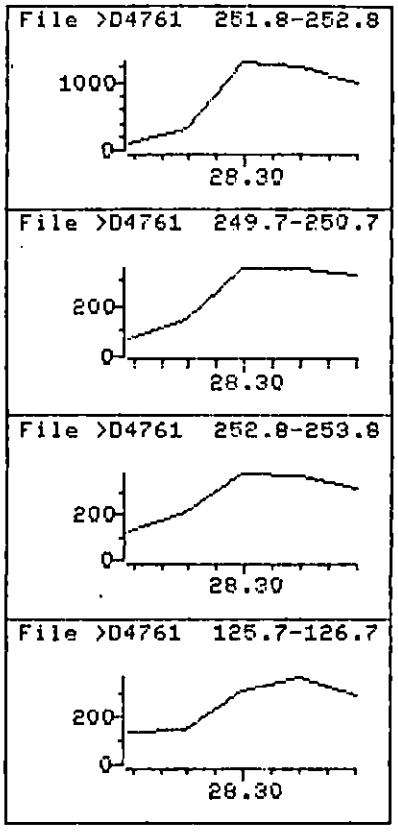


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >D4761::D1 Quant Output File: ^D4761::QT
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12
Quant Time: 930319 19:11 Quant ID File: IDD625::FB
Injected at: 930319 18:36 Last Calibration: 930304 14:20
Last Qcal Time: 930319 09:25

Compound No : 76
Compound Name : BENZO(B)FLUORANTHENE
Scan Number : 1302
Retention Time: 28.30 min.
Quant Ion : 252.1
Area : 4633M
Concentration : 1.24 UG/L
q-value : 96

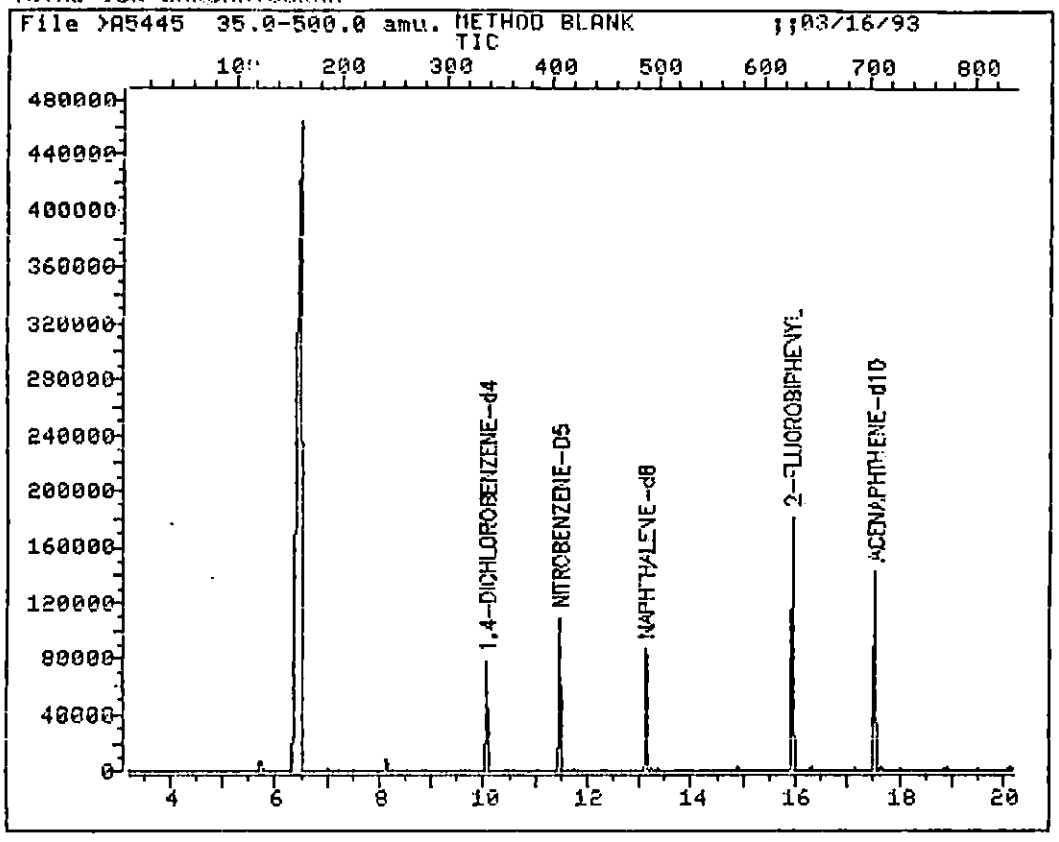
Operator ID: GREG Quant Rev: 7 Quant Time: 930319 19:11
Output File: ^D4761::QT Injected at: 930319 18:36
Data File: >D4761::D1 Dilution Factor: 1.00000
Name: T303071-04 Instrument ID: D
Misc: EIKON SS3-3;03/02/93;03/18/93 BTL#12

ID File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	8.44	152.0	17765	40.00	UG/L	95
4)	2-FLUOROPHENOL	5.66	112.0	45703	111.65	UG/L	86
5)	PHENOL-D6	8.16	99.1	70442	117.56	UG/L	96
18)	*NAPHTHALENE-d8	11.47	136.1	73632	40.00	UG/L	98
19)	NITROBENZENE-D5	9.91	82.1	45295	57.99	UG/L	97
33)	*ACENAPHTHENE-d10	15.79	164.1	53338	40.00	UG/L	92
37)	2-FLUOROBIPHENYL	14.26	172.0	88170	54.23	UG/L	97
53)	2,4,6-TRIBROMOPHENOL	17.74	329.7	69001	86.16	UG/L	97
54)	*PHENANTHRENE-d10	19.33	188.1	116953	40.00	UG/L	96
64)	FLUORANTHENE	22.30	202.1	5646	1.47	UG/L	98
65)	*CHRYSENE-d12	25.84	240.1	153370	40.00	UG/L	98
67)	PYRENE	22.81	202.1	4910	1.36	UG/L	96
68)	4-TERPHENYL-D14	23.44	244.1	168405	53.56	UG/L	97
69)	BUTYLBENZYLPHTHALATE	24.89	149.0	76711	29.64	UG/L	97
72)	CHRYSENE	25.91	228.1	4969	1.39	UG/L	91
73)	BIS(2-ETHYLHEXYL)PHTHALATE	26.42	149.0	72221	19.90	UG/L	96
74)	*PERYLENE-d12	29.12	264.1	135131	40.00	UG/L	97
76)	BENZO(B)FLUORANTHENE	28.30	252.1	4633M	1.24	UG/L	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >A5445::A2 Quant Output File: ^A5445::QT
Name: METHOD BLANK Instrument ID: A
Misc: ;;03/16/93 BIL# 4

Id File: ID_625::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930318 10:00

Operator ID: GREG
Quant Time : 930318 14:05
Injected at: 930318 13:27

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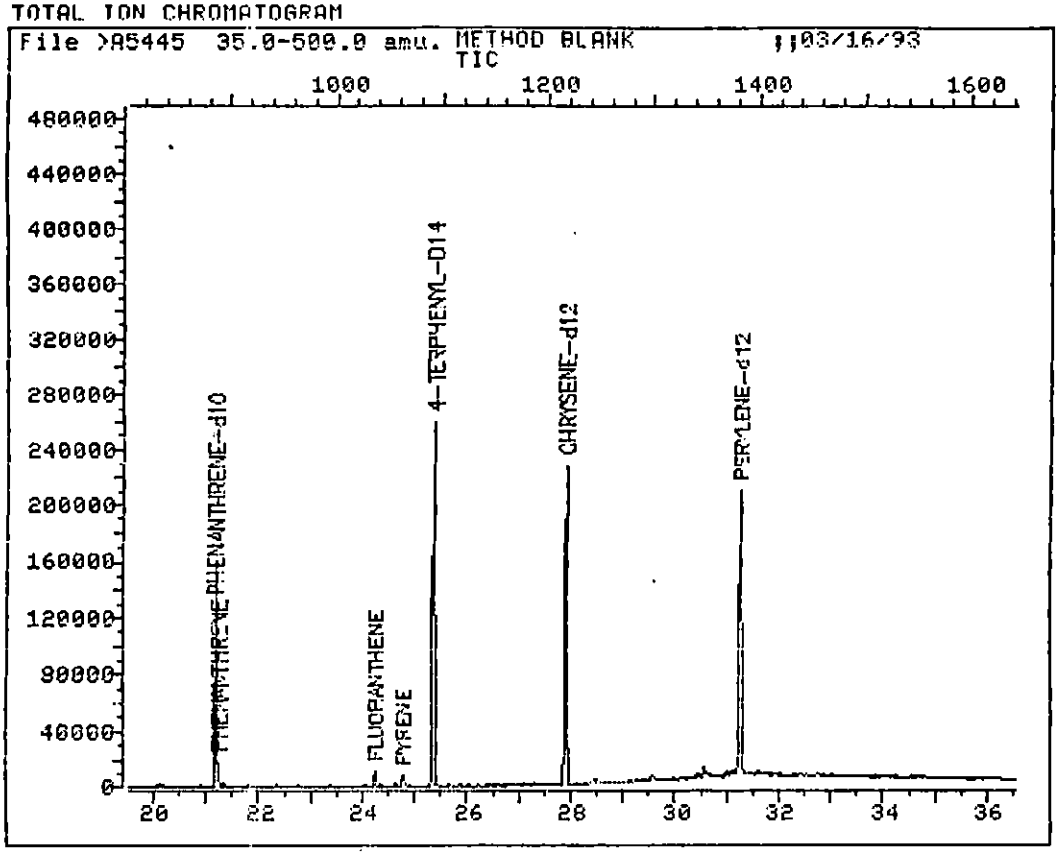
TOTAL ION CHROMATOGRAM



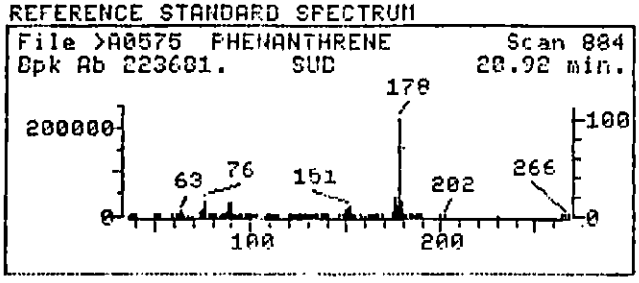
Data File: >A5445::A2 Quant Output File: ^A5445::QT
Name: METHOD BLANK Instrument ID: A
Misc: ;;03/16/93 BTL# 4

Id File: ID_625::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930318 10:00

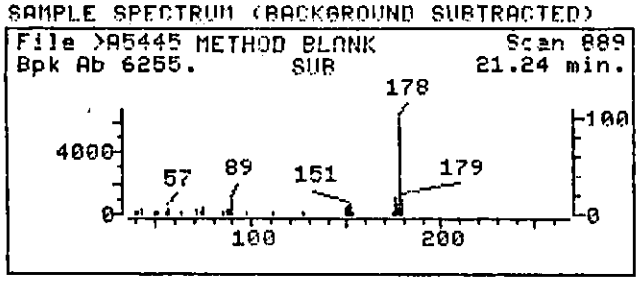
Operator ID: GREG
Quant Time : 930318 14:05
Injected at: 930318 13:27

Page 2 of 2

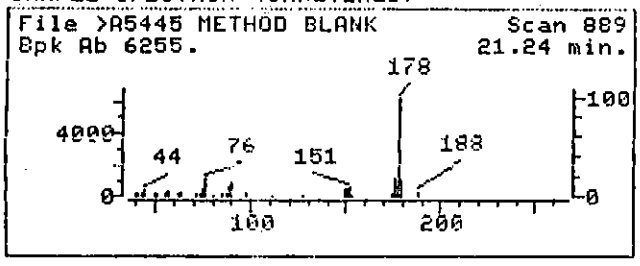
REFERENCE STANDARD SPECTRUM

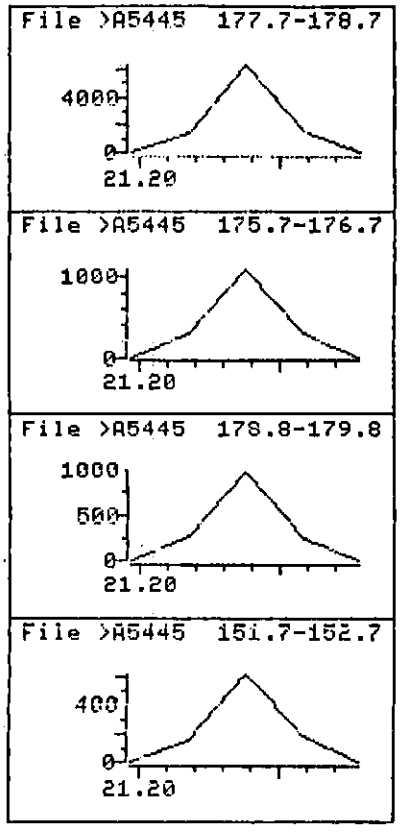


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



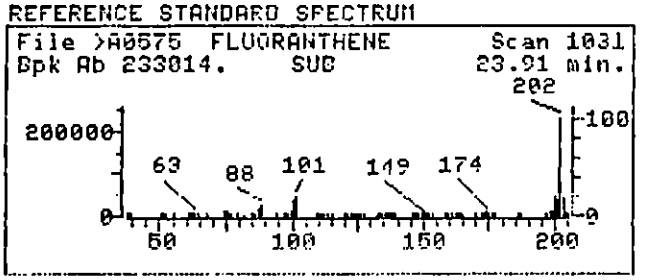


Data File: >A5445::A2
Name: METHOD BLANK
Misc: ;;03/16/93
Quant Time: 930318 14:05
Injected at: 930318 13:27
Last Qcal Time: 930318 10:00

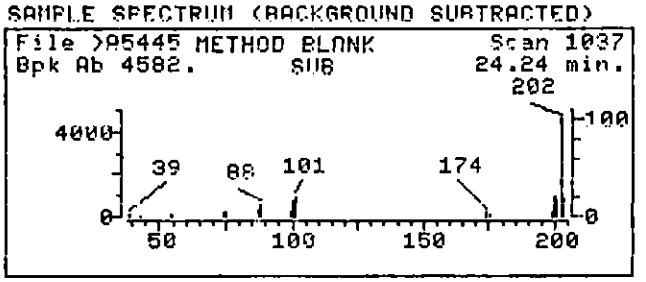
Quant Output File: ^A5445::QT
Instrument ID: A
BIL# 4
Quant ID File: ID_625::A1
Last Calibration: 930316 15:21

Compound No : 61
Compound Name : PHENANTHRENE
Scan Number : 889
Retention Time: 21.24 min.
Quant Ion : 178.0
Area : 1141?
Concentration : 3.18 UG/L
q-value : 95

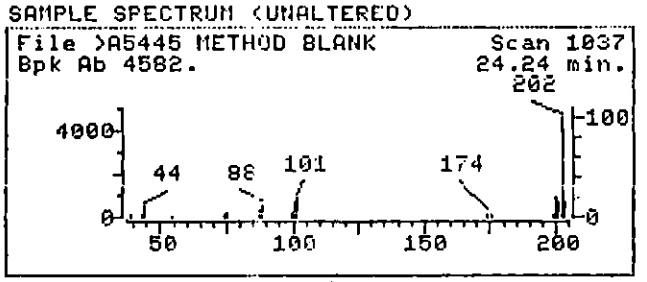
REFERENCE STANDARD SPECTRUM

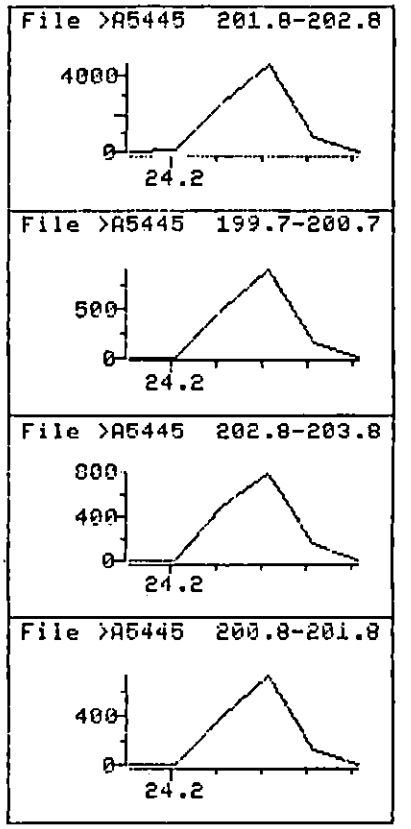


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



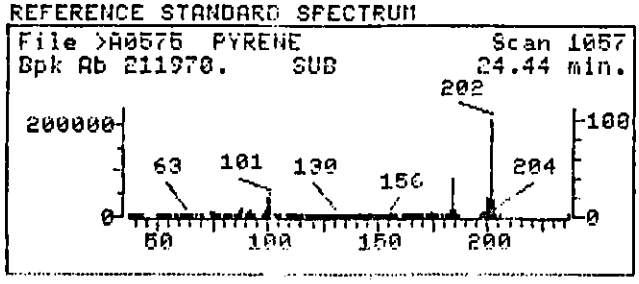


Data File: >A5445::A2
Name: METHOD BLANK
Misc: ;;03/16/93
Quant Time: 930318 14:05
Injected at: 930318 13:27
Last Qcal Time: 930318 10:00

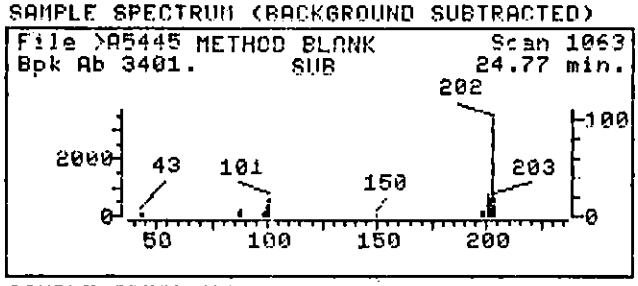
Quant Output File: ^A5445::QT
Instrument ID: A
BTL# 4
Quant ID File: ID_625::A1
Last Calibration: 930316 15:21

Compound No : 64
Compound Name : FLUORANTHENE
Scan Number : 1037
Retention Time: 24.24 min.
Quant Ion : 202.1
Area : 9975
Concentration : 2.22 UG/L
q-value : 98

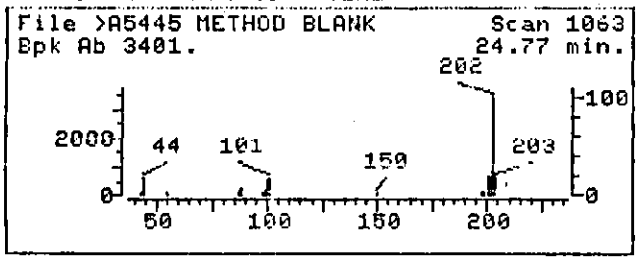
REFERENCE STANDARD SPECTRUM

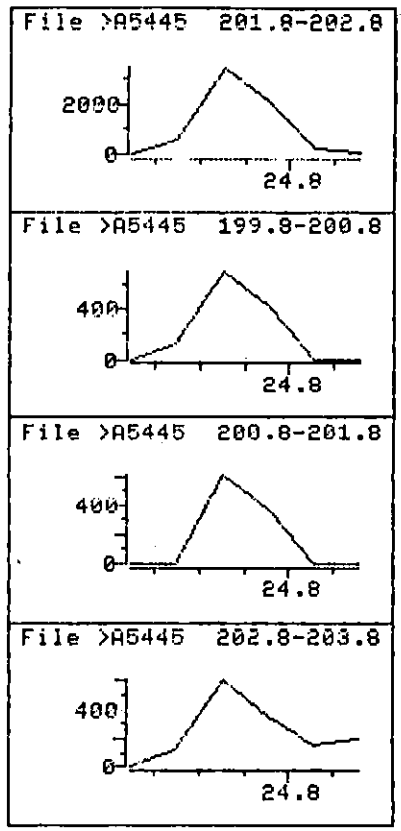


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A5445::A2
Name: METHOD BLANK
Misc: ;;03/16/93
Quant Time: 930318 14:05
Injected at: 930318 13:27
Last Qcal Time: 930318 10:00

Quant Output File: ^A5445::QT
Instrument ID: A
BTL# 4
Quant ID File: ID_625::A1
Last Calibration: 930316 15:21

Compound No : 67
Compound Name : PYRENE
Scan Number : 1063
Retention Time: 24.77 min.
Quant Ion : 202.1
Area : 7869
Concentration : 1.43 UG/L
q-value : 99

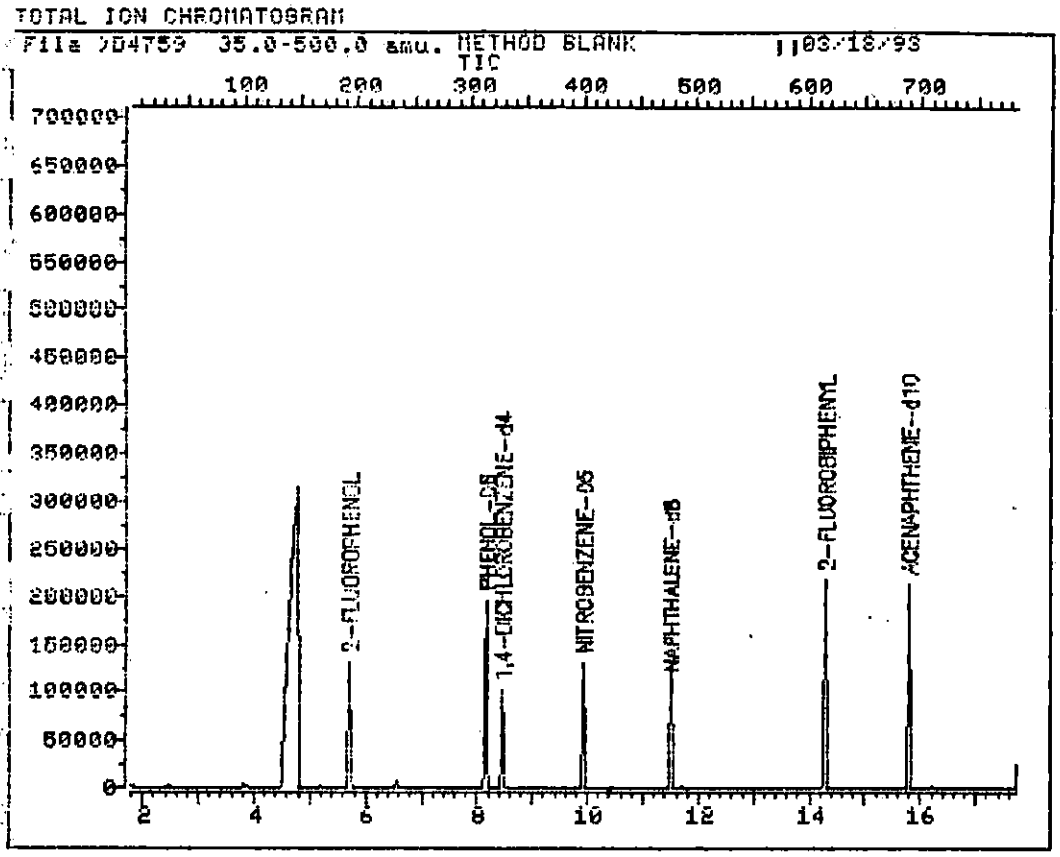
Operator ID: GREG
Output File: ^A5445::Q1
Data File: >A5445::A2
Name: METHOD BLANK
Misc: ;;03/16/93

Quant Rev: 7 Quant Time: 930318 14:05
Injected at: 930318 13:27
Dilution Factor: 1.00000
Instrument ID: A
BTL# 4

ID File: ID_625::A1
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930316 15:21 Last Qcal Time: 930318 10:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	10.07	152.0	21839	40.00	UG/L	9
18)	*NAPHTHALENE-d8	13.12	136.0	84936	40.00	UG/L	9
19)	NITROBENZENE-D5	11.47	82.0	54402	56.32	UG/L	9
33)	*ACENAPHTHENE-d10	17.52	164.1	62580	40.00	UG/L	9
37)	2-FLUOROBIPHENYL	15.94	172.0	107151	57.81	UG/L	9
54)	*PHENANTHRENE-d10	21.18	188.1	139288	40.00	UG/L	9
61)	PHENANTHRENE	21.24	178.0	11417	3.18	UG/L	9
64)	FLUORANTHENE	24.24	202.1	9975	2.22	UG/L	9
65)	*CHRYSENE-d12	27.90	240.1	198444	40.00	UG/L	9
67)	PYRENE	24.77	202.1	7869	1.43	UG/L	9
68)	4-TERPHENYL-D14	25.36	244.1	250227	63.60	UG/L	9
74)	*PERYLENE-d12	31.25	264.1	226012	40.00	UG/L	9

* Compound is ISTD



Data File: >D4759::D1 Quant Output File: ^D4759::QT
Name: METHOD BLANK Instrument ID: D
Misc: ;;03/18/93 BTL#10

Id File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

Operator ID: GREG
Quant Time : 930319 17:45
Injected at: 930319 17:06

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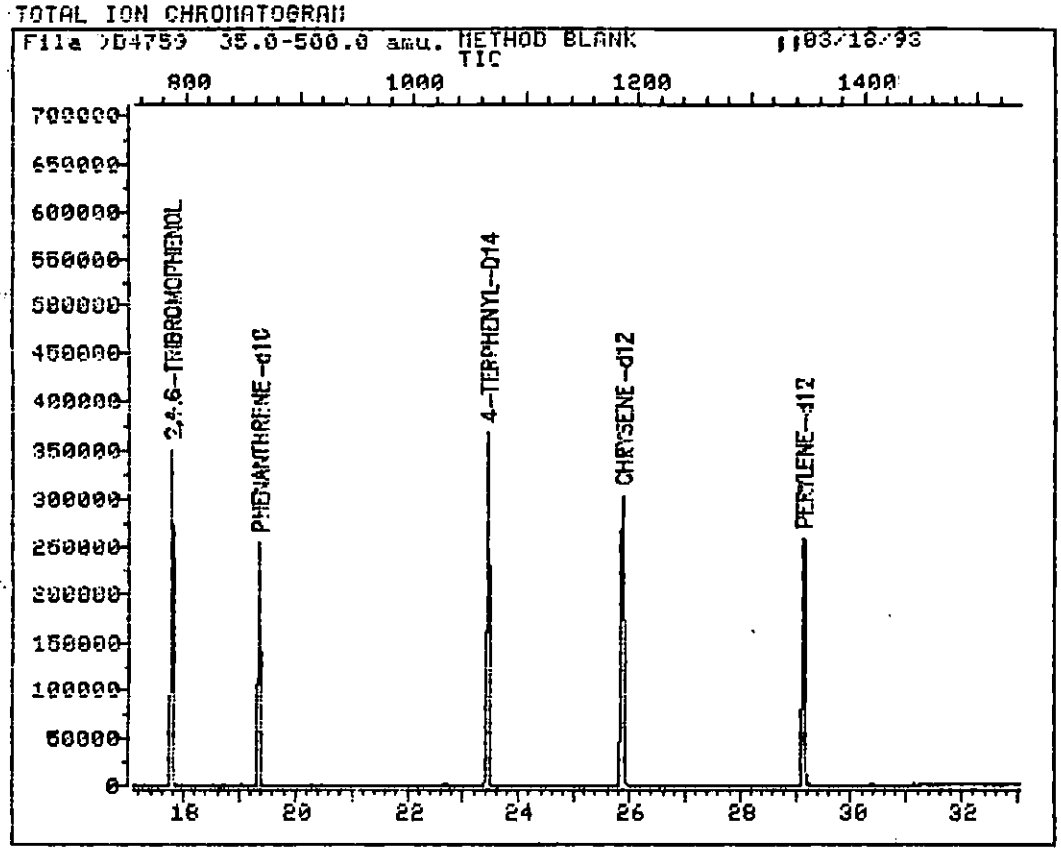
TOTAL ION CHROMATOGRAM



Data File: >D4759::D1 Quant Output File: ^D4759::QT
Name: METHOD BLANK Instrument ID: D
Misc: ;;03/18/93 BTL#10

Id File:]DD625::^B
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

Operator ID: GREG
Quant Time : 930319 17:45
Injected at: 930319 17:06

Page 2 of 2

Operator ID: GREG Quant Rev: 7 Quant Time: 930319 17:45
tput File: ^D4759::QT Injected at: 930319 17:06
ta File: >D4759::D1 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: D
sc: ::03/18/93 BTL#10

Id File: IDD625::FB
Title: LABORATORY RESOURCES AQUARIUS ID FILE FOR SEMIVOLATILES
Last Calibration: 930304 14:20 Last Qcal Time: 930319 09:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	8.46	152.0	31648	40.00	UG/L	98
4)	2-FLUOROPHENOL	5.71	112.0	72740	99.75	UG/L	96
5)	PHENOL-D6	8.17	99.1	108122	101.29	UG/L	92
8)	*NAPHTHALENE-d8	11.49	136.1	131083	40.00	UG/L	98
9)	NITROBENZENE-D5	9.92	82.1	77621	55.83	UG/L	96
3)	*ACENAPHTHENE-d10	15.80	164.1	92576	40.00	UG/L	94
37)	2-FLUOROBIPHENYL	14.29	172.0	163039	57.77	UG/L	98
3)	2,4,6-TRIBROMOPHENOL	17.77	329.7	133978	96.39	UG/L	96
4)	*PHENANTHRENE-d10	19.36	188.1	208861	40.00	UG/L	87
65)	*CHRYSENE-d12	25.88	240.1	284277	40.00	UG/L	96
8)	4-TERPHENYL-D14	23.46	244.1	329400	56.52	UG/L	97
4)	*PERYLENE-d12	29.14	264.1	311732	40.00	UG/L	97

* Compound is ISTD

METALS ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

		No	Yes
1.	Calibration Summaries Meet Criteria		✓
2.	ICP Interference Check Sample (ICS) Results Summary ~~Submitted~~ Meets Criteria (If applicable)		✓
3.	Serial Dilution Summary ~~Submitted~~ Meets Criteria (If applicable)		✓
4.	Laboratory Control Sample (LCS) Summary ~~Submitted~~ Meets Criteria (If applicable)		✓
5.	Blank Contamination If yes, list compounds and concentrations in each blank:	✓	
6.	Matrix Spike Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range: Silver = 51,50 % ; Arsenic = 126 %		✓
7.	Sample Duplicate Analyses Meet QC Criteria If not met, list those compounds and their criteria which fall outside the acceptable range: Arsenic = 27 %		✓
10.	Digestion and Analysis Holding Time Met If not met, list compounds and number of days exceeded for each sample:		✓

Laboratory Supervisor: Mark Gillespie / SCM Date: 4-7-93

Laboratory Resources INC.

100 Hollister Road
Teterboro, New Jersey 07608-1111
(201) 288-3700 • FAX: (201) 288-5311

NJ Certification # 02046
NY Certification # 10588

Eikon Planning & Design
221 High St
Hackettstown, NJ 07840

Attn: Raul Dequina

Date of Report: 04/07/93
Work Order #: T3-03-087
Date Received: 03/04/93
Client #: 090112
P.O./Project #: 880789

PARAMETER	SS 4-3	SS 5-3
ANTIMONY	<1.3*	<1.3*
ARSENIC	1.2*	<1.1*
BERYLLIUM	0.15*	<0.11*
CADMIUM	1.5*	<0.27*
CHROMIUM	34*	2.6*
COPPER	47*	2.6*
LEAD	72*	2.3*
MERCURY	<0.27*	<0.27*
NICKEL	15*	1.2*
SELENIUM	<0.54*	<0.53*
SILVER	<0.27*	<0.27*
THALLIUM	<0.54*	<0.53*
ZINC	67*	5.9*
SOLIDS, TOTAL %	92.0	94.3

Stephanie Cassim-Maja
Laboratory Manager
for Kenneth Vara

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All results expressed as mg/L unless otherwise stated

LABORATORY RESOURCES, INC. - TETERBORO 1993

QUALITY CONTROL REPORT FOR WORK ORDER: T3-03-071

PARAMETER	Q	BLANK mg/L	BLANK SPK % REC	MS TV CONC. (*)	MS %REC	MS DUP %REC	SAMPLE CONC. (*)	MS CONC. (*)	MS DUP CONC. (*)	RPD %
TRACE METALS										
Aluminum (Al)										
Antimony (Sb)		<1.25		32.9	48	49	<1.6	15.9	16.2	1
Arsenic (As)	*,N	<1.00		2.63	126	96	<1.3	3.32	2.53	27
Barium (Ba)										
Beryllium (Be)		<0.100		3.29	84	83	0.71	3.49	3.43	1
Boron (B)										
Cadmium (Cd)		<0.250		3.29	103	98	<0.33	3.39	3.21	5
Calcium (Ca)										
Chromium (Cr)		<0.500		13.2	91	90	14	27.1	27.0	1
Chromium Hex										
Cobalt (Co)										
Copper (Cu)		<0.500		16.4	95	94	14	30.7	30.4	1
Iron (Fe)										
Lead (Pb)		<1.50		32.9	84	82	18	46.2	45.7	2
Magnesium (Mg)										
Manganese (Mn)										
Mercury (Hg)		<0.250		1.97	93	93	<0.33	1.84	1.84	0
Molybdenum (Mo)										
Nickel (Ni)		<1.00		32.9	86	84	10	38.8	38.0	2
Potassium (K)										
Selenium (Se)		<0.50		2.63	116	106	<0.66	3.07	2.78	10
Silicon (Si)										
Silver (Ag)	N	<0.250		3.29	51	50	<0.66	1.67	1.66	1
Sodium (Na)										
Thallium (Tl)		<0.50		2.63	108	114	<0.66	2.83	3.01	6
Tin (Sn)										
Titanium (Ti)										
Vanadium (V)										
Zinc (Zn)		<1.00		32.9	95	92	55	87.5	86.4	3

COMMENTS: The QC is based on a batch system in which a sample is chosen at random for MS and MS/Dup analyses for a given matrix and represents all of the samples included in that batch.

(*) = Results in mg/kg dry weight
MS = Matrix spike
MS DUP = Matrix spike duplicate
TV = True value
Q = Qualifier
RPD = RELATIVE PERCENT DEVIATION SHOULD BE <35%
QUALITY CONTROL LIMITS FOR PERCENT RECOVERY ARE (75-125).
LABORATORY SAMPLE IDENTIFICATION:T302358-04

LABORATORY RESOURCES, INC. - TETERBORO 1993

QUALITY CONTROL REPORT FOR WORK ORDER: T3-03-071

PARAMETER	Q	BLANK MG/KG	BLANK SPK % REC	SAMPLE CONC. (W)	MS TV CONC. MG/L	MS CONC. (W)	MS % REC	SAMPLE CONC.	SAMPLE DUP CONC.	RPD %	LAB SAMPLE I.D.	Q.C. LIMITS %
WET CHEMISTRY												
AMMONIA-NH3												
CYANIDE												
NITRATE												
OIL & GREASE												
pH (CORROSIVITY)												
PET HYDROCARBONS												50-140
PHENOLICS												
TKN												
TOTAL SOLIDS %								88.5	87.8	1	T303071-01	

NOTE: The QC is based on a batch system in which a sample is chosen at random for MS and/or DUP analyses for a given matrix and represents all of the samples included in that batch.

(W) = Results in mg/kg wet weight.
ISV = Insufficient volume.
MS = Matrix spike.
TV = True value.
DUP = Duplicate.
Q = Qualifier
RPD = RELATIVE PERCENT DEVIATION SHOULD BE <20%
RPD = RELATIVE PERCENT DEVIATION FOR PHC SHOULD BE <40%
QUALITY CONTROL LIMITS FOR PERCENT RECOVERY ARE (75-125%) UNLESS OTHERWISE NOTED.

Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700 800-729-0852

QUALIFIERS-INORGANICS

Q	EXPLANATIONS
N	Matrix spiked sample recovery not within internal control limits due to matrix interference.
*	Duplicate analysis not within internal control limits due to matrix interference.
E	Reported value determined from a serial dilution due to matrix interference.
W	Post digestion sample spike recovery outside internal control limits but sample concentration is less than 50% of spiked sample.
N/A	Matrix spike recovery not applicable since sample concentration is greater than 4 times the amount of spike added.
MSA	Sample results determined from 3 point Method of Standards Additions (MSA).
ND	Analyte not detected, relative percent deviation cannot be calculated.