VOLUME 3
RESULTS OF ENVIRONMENTAL INVESTIGATIONS
APPENDIX 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

MAY 14 1993

LABORATORY ANALYSIS REPORT

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

Project Manager: Andreas Eisenberger

Project: Plainview
Plainview, NJ

Laboratory Report #: T304138

Lab ID No.:	Sample Reference	Matrix	Collection Date & Time
T304138-01	MW3-1	Aqueous	04/07/93 11:40
T304138-02	Field Blk	Aqueous	04/07/93 13:35
T304138-03	Trip Blk	Aqueous	04/07/93 ---

Date Received: April 7, 1993

Date of Report: May 12, 1993

Stephanie Majeski for
Mo Amirsoleymani
Quality Assurance Manager

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

TABLE OF CONTENTS

BILLING INFORMATION

CUSTOMER: EXXON
ADDRESS: P.O. BOX 469, 22 HIGH ST.
HACKETTSTOWN, NJ 07840
PROJECT: PLAINVIEW
PROJECT MANAGER: ANDREAS EISENBERGER
PROJECT LOCATION: PLAINVIEW STATE: NY
PO NUMBER: PPB

REPORT INFORMATION

SEND REPORT TO: RICH WITZAK

DATE REPORT REQUIRED: [redacted] 5/7/93
RUSH RESULTS: FAX (908) 213-0526

PROJECT INFORMATION

DELIVERABLES/REGULATION (PLEASE INDICATE): TIER II

TURNAROUND (INDICATE CALENDAR DAYS. CONFIRM WITH LAB): NAME OF PERSON CONFIRMING: 28 days

IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:
NAME: RICH WITZAK
TELEPHONE: (908) 213-2328

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	MW3-1	5	4/7/93	11:40		X		X				VOA-HW; Total Xylenes; TPHC			✓		✓
02	ECD BLK, 4/7/93	3	4/7/93	13:35		X		X				VOA-HW; Total Xylenes; TPHC			✓		✓
03	TB, 4/7/93	3	4/7/93	N/A		X		X				VOA-HW; Total Xylenes			✓		

CUSTODY

RELINQUISHED: Rich Witzak	DATE: 4/7/93	
RECEIVED: Neil Sherry	TIME: 2143 PM	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	
RELINQUISHED:	DATE:	
RECEIVED:	TIME:	

COMMENTS, REQUESTS OR REMARKS:

NO SUBCONTRACTORS WITHOUT PRIOR EXXON APPROVAL.

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

CONCENTRATIONS EXPECTED High ☐ Medium ☐ Low ☐

KNOWN HAZARD YES ☐ NO ☐

DESCRIBE:

VOLATILE ORGANICS METHODOLOGY

Extraction and Analysis, Aqueous

Code of Federal Regulations, Title 40, Part 136, Office of the Federal Register, National Archives and Records Administration, Washington, DC 20402, Method 624, "Purgeables"; modified using EPA/CLP internal and surrogate standards.

Sample Extraction, Nonaqueous

Test Methods for Evaluating Solid Waste (SW-846), USEPA Office of Solid Waste and Emergency Response, Washington, DC 20460, 3rd Edition, November 1986, Method 5030, "Purge-and-Trap."

Analysis, Nonaqueous

Test Methods for Evaluating Solid Waste (SW-846), USEPA Office of Solid Waste and Emergency Response, Washington, DC 20460, 3rd Edition, November 1986, Method 8240, "Gas Chromatography/Mass Spectrometry for Volatile Organics."

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

PARAMETER	METHOD (1)
Acidity	305.1
Alkalinity	310.1
BOD, 5 day	507(3)
BOD, 20 day	507(3)
Chloride	325.3
Chlorine, Residual	330.5
COD	HACH
Chromium Hexavalent	307B
Conductivity	120.1
Cyanide, Total	335.2
Cyanide, Amenable	335.1
Hardness	130.2
MBAS, Surfactants	512B(3)
Nitrogen, NH3	350.1
Nitrogen, NO3	353.1
Nitrogen, NO2	354.1
Nitrogen, TKN	351.2
Odor	140.1
Oil & Grease, Gr	413.1
Oxygen, Dissolved	421B(3)
Petroleum Hydro, IR	418.1
pH	150.1
Phenolics, Total	420.1
Phosphorous, Total	365.2
Solids, Total Dissolved	160.1
Solids, Fixed	209D(3)
Solids, Total Suspended	160.2
Solids, Volatile	209D(3)
Sulfate	375.4
Sulfide	376.1
Sulfite	377.1
TOC	415.1
Turbidity	180.1

(1) = Water and wastewater methods approved in the Federal Register in section 40 CFR 136 and listed in EPA 600/4-79-020.
(3) = Methods cited in Standard Methods 16th Edition, 1986.
HACH= Method 8000, Hach Handbook of Water Analysis, 1979. Approved in the Federal Register, April 21, 1980, page 26811.

ORGANIC NON-CONFORMANCE SUMMARY

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

INORGANIC NON-CONFORMANCE SUMMARY

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

LABORATORY RESOURCES, INC. T304138 LABORATORY CHRONICLES

Sample Number	Analyst Initial	01	02	03						
Received & Refrigerated Date:	MS	4-7-93	→	→						
Organics Extraction Date:										
Base/Neutrals/Acids										
Acids Extractables										
Pesticides/PCBs										
Herbicides										
Analysis Date :										
Volatiles/GCMS	AP	4-15-93	→	→						
Base/Neutrals/Acids										
Pesticides/PCBs										
Herbicides										
Volatiles/GC										
Total Solids										
Organic Supervisor Review & Approval	MPB	5-11-93	→	→						

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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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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)

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CASE NARRATIVE

Laboratory Resources, New Jersey Division, received one aqueous sample plus a field and trip blank for Reduced Deliverables Format on April 7, 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		
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:		✓

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Laboratory Supervisor: BJ Date: 5-11-93

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: MW3

Lab Sample ID: T304138-01

Matrix: [soil/water] WATER

Lab File ID: >C8966

Sample wt/vol: 5.0 [g/mL] ML

Run Type: VOA-624

Level: [low/med] LOW

Date Received: 04/07/93

% Moisture: NA

Date Analyzed : 04/15/93

GC Column : CAP ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	2	J
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	4	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U

C11

SADF: 1.00

LABORATORY
RESOURCES

ANALYTICAL RESULTS: TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID Number : T304138-01
Client ID Number : MW3
Data File : >C8966
Calculation Factor: 1.00
Matrix : Water
Fraction : VOA

Total Hit(s): 2

	CAS Number	Compound Name	RT.	Est. Concenc. UG/ L
1		UNKNOWN	0.96	5
2		UNKNOWN	23.15	3

B - Compound detected in blank
** - Nontarget compound quantitated from calibration response factor

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Client Sample ID No.: FB

Lab Name: LRI

Lab Sample ID: T304138-02

Matrix: [soil/water] WATER

Lab File ID: >C8967

Sample wt/vol: 5.0 [g/mL] ML

Run Type: VOA-624

Level: [low/med] LOW

Date Received: 04/07/93

% Moisture: NA

Date Analyzed : 04/15/93

GC Column : CAP ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U

013

SADF: 1.00

LABORATORY
RESOURCES

ANALYTICAL RESULTS: TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID Number : T304138-02
Client ID Number : FB
Data File : >C8967
Calculation Factor: 1.00
Matrix : Water
Fraction : VOA

Total Hit(s): 0

CAS Number	Compound Name	RT.	Est. Concenc. UG/ L
	NO NON-TARGET COMPOUNDS FOUND		

B - Compound detected in blank
** - Nontarget compound quantitated from calibration response factor

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: TB

Lab Sample ID: T304138-03

Matrix: [soil/water] WATER

Lab File ID: >C8968

Sample wt/vol: 5.0 [g/mL] ML

Run Type: VOA-624

Level: [low/med] LOW

Date Received: 04/07/93

% Moisture: NA

Date Analyzed : 04/15/93

GC Column : CAP ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U

015

SADF: 1.00

LABORATORY
RESOURCES

ANALYTICAL RESULTS: TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID Number : T304138-03
Client ID Number : TB
Data File : >C8968
Calculation Factor: 1.00
Matrix : Water
Fraction : VOA

Total Hit(s): 0

CAS Number	Compound Name	RT.	Est. Concenc. UG/ L
	NO NON-TARGET COMPOUNDS FOUND		

B - Compound detected in blank
** - Nontarget compound quantitated from calibration response factor

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

METHOD BLANK

Lab Name: LRI

Lab Sample ID: VBLK-QC0415 | VBLK-QC0415

Matrix: [soil/water] WATER | Lab File ID: >C8959

Sample wt/vol: 5.0 [g/mL] ML | Run Type: VOA-624

Level: [low/med] LOW | Date Received:

% Moisture: NA | Date Analyzed : 04/15/93

GC Column : CAP ID: 0.53 (mm) | Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U

C17

SADF: 1.00

LABORATORY
RESOURCES

ANALYTICAL RESULTS: TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID Number : VBLK-QC0415
Client ID Number : VBLK-QC0415
Data File : >C8959
Calculation Factor: 1.00
Matrix : Water
Fraction : VOA

Total Hit(s): 0

CAS Number	Compound Name	RT.	Est. Concenc. UG/ L
	NO NON-TARGET COMPOUNDS FOUND		

B - Compound detected in blank
** - Nontarget compound quantitated from calibration response factor

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: LRI

Lab Code: LRI

Lab File ID: >TC538 BFB Injection Date: 3/29/93

Instrument ID: MSD/C BFB Injection Time: 10:00

GC Column : CAP ID: 0.53 Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	47.9
95	Base Peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.6
173	Less than 1.0% of mass 95	0.0(0.0)1
174	Greater than 50% of mass 95	86.2
175	5.0 - 9.0 % of mass 174	6.8(7.9)1
176	95.0 - 101.0% of mass 174	84.6(98.1)1
177	5.0 - 9.0% of mass 176	5.6(6.7)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	>C8653	930329	12:25
2	VSTD020	VSTD020	>C8654	930329	13:07
3	VSTD100	VSTD100	>C8655	930329	13:43
4	VSTD150	VSTD150	>C8656	930329	14:24
5	VSTD200	VSTD200	>C8658	930329	16:38

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: LRI

Lab Code: LRI

Lab File ID: >C8957 BFB Injection Date: 4/15/93

Instrument ID: MSD/C BFB Injection Time: 8:03

GC Column : CAP ID: 0.53 Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	18.5	
75	30.0 - 60.0% of mass 95	41.7	
95	Base Peak, 100% relative abundance	100.	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 1.0% of mass 95	0.0(	0.0)1
174	Greater than 50% of mass 95	82.2	
175	5.0 - 9.0 % of mass 174	6.5(	7.9)1
176	95.0 - 101.0% of mass 174	81.9(	99.6)1
177	5.0 - 9.0% of mass 176	5.3(	6.4)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	>C8959	930415	08:46
2	VBLK-DC0415	VBLK-DC0415	>C8959	930415	09:22
3	APRIL EIP-C/MS	T304021-01	>C8960	930415	09:57
4	FB	T304120-01	>C8961	930415	10:34
5	SEWER EFFLUENT	T304174-01	>C8965	930415	13:13
6	MW3	T304139-01 ✓	>C8966	930415	13:52
7	FB	T304139-02 ✓	>C8967	930415	14:28
8	TB	T304139-03 ✓	>C8968	930415	15:03
9	DISCHARGE	T304179-01	>C8969	930415	15:39
10	DISCHARGE GRAB	T304144-02	>C8970	930415	16:15
11	TB-1	T304172-01	>C8971	930415	16:50
12	FB-1	T304172-02A	>C8972	930415	17:26
13	MW-1	T304172-03A	>C8973	930415	18:01
14	MW-2	T304172-04	>C8974	930415	18:38
15	NORTH EFFLUENT	T304213-01	>C8975	930415	19:16
16	NORTH EFFLUENT	T304214-01	>C8977	930415	20:30
17	SOUTH EFFLUENT	T304214-02	>C8978	930415	21:07
18	MW13	T304120-03	>C8980	930415	22:18
19	MW-3	T304138-01 MS	>C8981	930415	22:54

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources, Inc.

Lab Sample ID: VBLK-QC0415

Data File of Method Blank: >C8959

Instrument ID: MSD/C

Date Analyzed: 930415 Time Analyzed: 09:22

Matrix: WATER

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

LAB FILE ID	LAB SAMPLE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
>C8966	T304138-01	930415	13:52
>C8967	T304138-02	930415	14:28
>C8968	T304138-03	930415	15:03
>C8981	T304138-01 MS	930415	22:54

COMMENTS:

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 2824A11 191

Contractor: LAB RESOURCES Calibration Date: 03/29/93

Contract No: _____

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

Laboratory ID:	>C8654	>C8653	>C8655	>C8656	>C8658					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	.56319	.54404	.66046	.37393	.45613	.189	.51955	20.994		**
Vinyl Chloride	.86964	.76260	.80908	.68697	.67090	.205	.75984	10.954	*	
Bromomethane	1.18311	1.06071	1.11225	1.01113	.94218	.250	1.06187	8.700		
Chloroethane	.45491	.42624	.45797	.41280	.40303	.273	.43099	5.725		
Acrolein	.07532	.08069	.05759	.05940	.05759	.386	.06612	16.699		(Conc=40.0,100.0,200.0,
Trichlorofluoromethane	2.39364	2.20289	2.23557	1.85720	1.68867	.302	2.07559	14.054		
1,1-Dichloroethene	1.07302	1.07053	1.14545	.73639	.68945	.391	.94297	22.567	*	
Carbon Disulfide	2.64952	2.76490	3.06515	2.39334	2.42317	.410	2.65922	10.341		
Acetone	.25482	.22464	.18129	.21240	.21905	.425	.21844	12.066		
Acrylonitrile	.11009	.15318	.11854	.14860	.14288	.591	.13466	14.230		
Methylene Chloride	1.16134	1.09718	1.20085	1.04908	.98140	.510	1.09797	7.963		
tert-Butyl Methyl Ether	2.63459	2.61908	2.27574	2.34130	2.17941	.607	2.41003	8.556		
tert-Butyl Alcohol	.05896	.07497	.04824	.07024	.07679	.642	.06584	18.284		(Conc=40.0,100.0,200.0,
Trans-1,2-Dichloroethene	1.27821	1.23219	1.37029	1.16305	1.09975	.583	1.22870	8.482		
Diisopropyl Ether	4.24698	4.15889	3.95808	3.76217	3.59142	.804	3.94351	6.893		
1,1-Dichloroethane	2.12359	2.10636	2.31106	2.01333	1.85315	.716	2.08150	8.035		**
Cis-1,2-Dichloroethene	1.37592	1.32058	1.48343	1.29501	1.21224	.928	1.33744	7.529		
Chloroform	2.81185	2.71525	2.97571	2.58176	2.40987	1.056	2.69889	8.009	*	
1,2-Dichloroethane	1.73212	1.66299	1.66788	1.58902	1.45526	1.209	1.62145	6.527		
1,2-Dichloroethane-d4 (S)	1.58788	1.67592	1.51862	1.53060	1.35541	1.185	1.53369	7.659		
Vinyl Acetate	.91772	.85220	.71133	.83191	.76073	.585	.81478	9.879		
2-Butanone	.06522	.06179	.04769	.05972	.05558	.712	.05800	11.616		
1,1,1-Trichloroethane	.58872	.55599	.59785	.53286	.48927	.795	.55294	7.968		
Carbon Tetrachloride	.56041	.53689	.57711	.52560	.48078	.831	.53616	6.881		
Benzene	.76661	.69399	.75174	.68309	.63996	.880	.70708	7.346		
Trichloroethene	.44090	.41275	.42617	.39162	.35952	1.040	.40619	7.821		
1,2-Dichloropropane	.30468	.28657	.29818	.28389	.25604	1.083	.28587	6.544	*	
Bromodichloromethane	.65243	.60822	.63786	.62275	.57531	1.162	.61931	4.785		
2-Chloroethyl vinyl ether	.15038	.12300	.12422	.14685	.13403	1.252	.13569	9.291		
Trans-1,3-Dichloropropene	.52168	.48233	.49682	.48497	.45121	1.262	.48740	5.236		

RF - Response Factor (Subscript is amount in ppb)

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 2B24A11 191

Contractor: LAB RESOURCES Calibration Date: 03/29/93

Contract No:

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

Laboratory ID:		>C8654	>C8653	>C8655	>C8656	>C8658					
Compound		RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Cis-1,3-Dichloropropene		.52168	.48233	.49682	.48497	.45121	1.262	.48740	5.236		
1,1,2-Trichloroethane		.30339	.28397	.26168	.27521	.24563	1.427	.27398	8.000		
Dibromochloromethane		.62529	.60886	.58693	.60499	.55213	1.503	.59564	4.681		
Bromoform		.46370	.47328	.41998	.47525	.43245	1.817	.45293	5.557		**
4-Methyl-2-Pentanone		.25710	.23885	.19712	.22671	.20128	.809	.22421	11.286		
Toluene-d8	(S)	1.10853	1.13987	1.07678	1.04240	.93679	.807	1.06088	7.378		
Toluene		.68433	.62583	.67790	.61118	.56963	.815	.63377	7.563	*	
Tetrachloroethene		.52096	.49388	.51368	.46189	.41896	.886	.48188	8.707		
2-Hexanone		.14615	.14725	.11295	.14262	.12493	.926	.13478	11.250		
Chlorobenzene		.97905	.90004	.95649	.88311	.79890	1.004	.90352	7.804		**
Ethylbenzene		.43712	.40855	.44217	.39607	.36340	1.028	.40946	7.854	*	
meta + para-Xylenes		.57687	.52573	.55813	.49788	.46035	1.046	.52379	8.902		(Conc=40.0,100.0,200.0,3
ortho-Xylene		.54059	.50790	.54403	.49112	.44295	1.098	.50532	8.184		
Styrene		.95090	.89090	.94493	.87458	.78866	1.102	.88999	7.375		
Bromofluorobenzene	(S)	.87113	.90159	.82847	.82538	.74294	1.171	.83390	7.181		
1,1,2,2-Tetrachloroethane		.53968	.53393	.44002	.51250	.45607	1.208	.49644	9.201		**
1,3-Dichlorobenzene		1.13108	1.03685	1.08402	.98091	.89506	1.323	1.02558	8.950		
1,4-Dichlorobenzene		1.20210	1.06537	1.08263	.99229	.91668	1.339	1.05181	10.143		
1,2-Dichlorobenzene		1.09028	1.01042	.99730	.94118	.84634	1.388	.97710	9.256		

RF - Response Factor (Subscript is amount in ppb)

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

QC Acceptance Criteria - Method 624

Laboratory: Laboratory Resources, Inc.

Data File: >C8958 Analysis Date: 930415

Compound Name	Range	Result	Check
Chloromethane	8.9- 91.3	41.0	ok
Bromomethane	7.0- 93.0	52.5	ok
Vinyl Chloride	2.0- 98.0	53.1	ok
Chloroethane	27.7- 72.3	57.0	ok
Methylene Chloride	34.2- 65.8	52.4	ok
1,1-Dichloroethene	28.6- 71.4	47.5	ok
1,1-Dichloroethane	36.4- 63.6	53.3	ok
Trans-1,2-Dichloroethene	35.1- 65.0	49.6	ok
Cis-1,2-Dichloroethene	35.1- 65.0	52.9	ok
Chloroform	34.6- 65.4	53.3	ok
1,2-Dichloroethane	33.1- 66.9	50.9	ok
1,1,1-Trichloroethane	37.4- 62.6	49.5	ok
Carbon Tetrachloride	36.7- 63.3	47.2	ok
Bromodichloromethane	33.8- 66.2	54.9	ok
1,2-Dichloropropane	17.0- 83.0	59.1	ok
Trans-1,3-Dichloropropene	25.0- 75.0	59.4	ok
Trichloroethene	35.2- 64.8	56.2	ok
Benzene	28.3- 71.7	56.1	ok
Cis-1.3-Dichloropropene	25.0- 75.0	50.4	ok
1,1,2-Trichloroethane	36.2- 63.8	56.5	ok
Dibromochloromethane	33.2- 66.8	53.7	ok
2-Chloroethyl vinyl ether	D-112.0	58.0	ok
Bromoform	35.7- 64.3	51.1	ok
Tetrachloroethene	36.4- 63.6	56.7	ok
1,1,2,2-Tetrachloroethane	33.2- 66.8	53.5	ok
Toluene	36.1- 63.9	56.7	ok
Chlorobenzene	33.8- 66.2	56.5	ok
Ethylbenzene	33.6- 66.4	55.5	ok
1,3-Dichlorobenzene	35.6- 64.4	51.8	ok
1,2-Dichlorobenzene	30.3- 69.7	52.1	ok
1,4-Dichlorobenzene	30.3- 69.7	50.5	ok

D = Detected

** : out of control range

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 04/15/93

Contractor: LAB RESOURCES Time: 08:46

Contract No: Laboratory ID: `C8958

Instrument ID: 2824A11 191 Initial Calibration Date: 03/30/93

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.51955	.42557	18.09		**	
Vinyl Chloride	.75994	.80751	6.27	*		
Bromomethane	1.06187	1.11587	5.09			
Chloroethane	.43099	.49154	14.05			
Acrolein	.06612	.08066	21.99			(Conc=100.00)
Trichlorofluoromethane	2.07547	1.49665	27.89			
1,1-Dichloroethene	.94297	.89548	5.04	*		
Carbon Disulfide	2.65922	1.80676	32.06			
Acetone	.21874	.19270	11.91			
Acrylonitrile	.13466	.12967	3.71			
Methylene Chloride	1.09786	1.15150	4.89			
tert-Butyl Methyl Ether	2.41000	2.62737	9.02			
tert-Butyl Alcohol	.06584	.05281	19.78			(Conc=100.00)
Trans-1,2-Dichloroethene	1.22870	1.21995	.71			
Diisopropyl Ether	3.94169	4.33793	10.05			
1,1-Dichloroethane	2.00125	2.21844	6.59		**	
Cis-1,2-Dichloroethene	1.33744	1.41394	5.72			
Chloroform	2.69890	2.87642	6.58	*		
1,2-Dichloroethane	1.62143	1.65033	1.78			
1,2-Dichloroethane-d4 (S)	1.53369	1.39981	8.73			
Vinyl Acetate	.81493	.82292	.98			
2-Butanone	.05800	.05505	5.09			
1,1,1-Trichloroethane	.55293	.54785	.92			
Carbon Tetrachloride	.53606	.50610	5.59			
Benzene	.70708	.79327	12.19			
Trichloroethene	.40619	.45677	12.45			
1,2-Dichloropropane	.29597	.33817	18.30	*		
Bromodichloromethane	.61931	.68038	9.86			
2-Chloroethyl vinyl ether	.13569	.15744	16.03			
Trans-1,3-Dichloropropene	.42060	.49969	18.80			
Cis-1,3-Dichloropropene	.48740	.49084	.70			
1,1,2-Trichloroethane	.27398	.30955	12.99			

RF - Response Factor from daily standard file at 50.00 ppb

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 04/15/93

Contractor: LAB RESOURCES Time: 08:46

Contract No: Laboratory ID: >C8958

Instrument ID: 2824A11 191 Initial Calibration Date: 03/30/93

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

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC	
Dibromochloromethane		.59564	.63989	7.43			
Bromoform		.45293	.46311	2.25		**	
4-Methyl-2-Pentanone		.22421	.22474	.24			
Toluene-d8	(S)	1.06217	1.09073	2.69			
Toluene		.63377	.71931	13.50	*		
Tetrachloroethene		.48188	.54617	13.34			
2-Hexanone		.13478	.13226	1.87			
Chlorobenzene		.90352	1.02033	12.93		**	
Ethylbenzene		.40946	.45472	11.05	*		
meta + para-Xylenes		.52379	.56762	8.37			(Conc=100.00)
ortho-Xylene		.50532	.54326	7.51			
Styrene		.89064	.95313	7.02			
Bromofluorobenzene	(S)	.83390	.84077	.82			
1,1,2,2-Tetrachloroethane		.49644	.53148	7.06		**	
1,3-Dichlorobenzene		1.02558	1.06321	3.67			
1,4-Dichlorobenzene		1.05181	1.06182	.95			
1,2-Dichlorobenzene		.97710	1.01835	4.22			

RF - Response Factor from daily standard file at 50.00 ppb

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

%Diff - % Difference from original average or curve

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

VOLATILE - WATER SURROGATE PERCENT RECOVERY SUMMARY

Lab Name: LRI

	SAMPLE #NO	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	TOT OUT
1	VBLK-QC0415	92	104	102	0
2	T304138-01	91	104	101	0
3	T304138-02	93	103	103	0
4	T304138-03	89	106	93	0
5	T304138-01 MS	97	101	102	0

S1 (DCE) = 1,2-Dichloroethane (76-114)
S2 (TOL) = Toluene-d8 (88-110)
S3 (BFB) = Bromofluorobenzene (86-115)

Column to be used to flag recovery values
* Values outside of QC limits

VOLATILE QC SPIKED SAMPLE RECOVERY: SAMPLE SPIKE SUMMARY

Laboratory Resources, Inc.

Sample ID: T304138-01 Sample Data File: >C8966

Spike Data File: >C8981 Analysis Date: 930415

Compound Name	Result Conc.	Theo. Spike Conc.	Result Spike Conc.	Result % Rec.	Range for % Rec.
Chloromethane	ND	50	34.6	69	D-273
Bromomethane	ND	50	45.8	92	D-242
Vinyl Chloride	ND	50	45.8	92	D-251
Chloroethane	ND	50	45.8	92	14-230
Methylene Chloride	ND	50	48.5	97	D-221
1,1-Dichloroethene	ND	50	46.1	92	D-234
1,1-Dichloroethane	ND	50	29.7	59	59-155
Trans-1,2-Dichloroethene	ND	50	45.2	90	58-156
Cis-1,2-Dichloroethene	ND	50	49.0	98	58-156
Chloroform	ND	50	47.2	94	51-138
1,2-Dichloroethane	ND	50	46.7	93	49-155
1,1,1-Trichloroethane	3.3	50	47.1	88	52-162
Carbon Tetrachloride	ND	50	42.0	84	70-140
Bromodichloromethane	ND	50	46.9	94	35-155
1,2-Dichloropropane	ND	50	56.3	113	D-210
Trans-1,3-Dichloropropene	ND	50	46.6	93	17-183
Trichloroethene	2.2	50	48.3	92	71-157
Benzene	ND	50	52.6	105	37-151
Cis-1,3-Dichloropropene	ND	50	47.6	95	D-227
1,1,2-Trichloroethane	ND	50	52.2	104	52-150
Dibromochloromethane	ND	50	46.9	94	53-149
2-Chloroethyl vinyl ether	ND	50	0.0	0	D-305
Bromoform	ND	50	47.8	96	45-169
Tetrachloroethene	3.9	50	51.3	95	64-148
1,1,2,2-Tetrachloroethane	ND	50	54.0	108	46-157
Toluene	ND	50	49.1	98	47-150
Chlorobenzene	ND	50	49.1	98	37-160
Ethylbenzene	ND	50	49.9	100	37-162
1,3-Dichlorobenzene	ND	50	48.3	97	59-158
1,2-Dichlorobenzene	ND	50	49.2	98	18-190
1,4-Dichlorobenzene	ND	50	48.2	96	18-190

$$\text{Result \%Rec.} = \frac{\text{Result Spike Conc.} - \text{Result Conc.}}{\text{Theo. Spike Conc.}} * 100$$

Range for % Recovery From CFR Part 136, (October 26, 1984) Method 624

D = Detected

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.

Lab File ID (Standard): >C8958 Instrument ID: MSD/C

Date Analyzed: 930415 Time Analyzed: 08:46

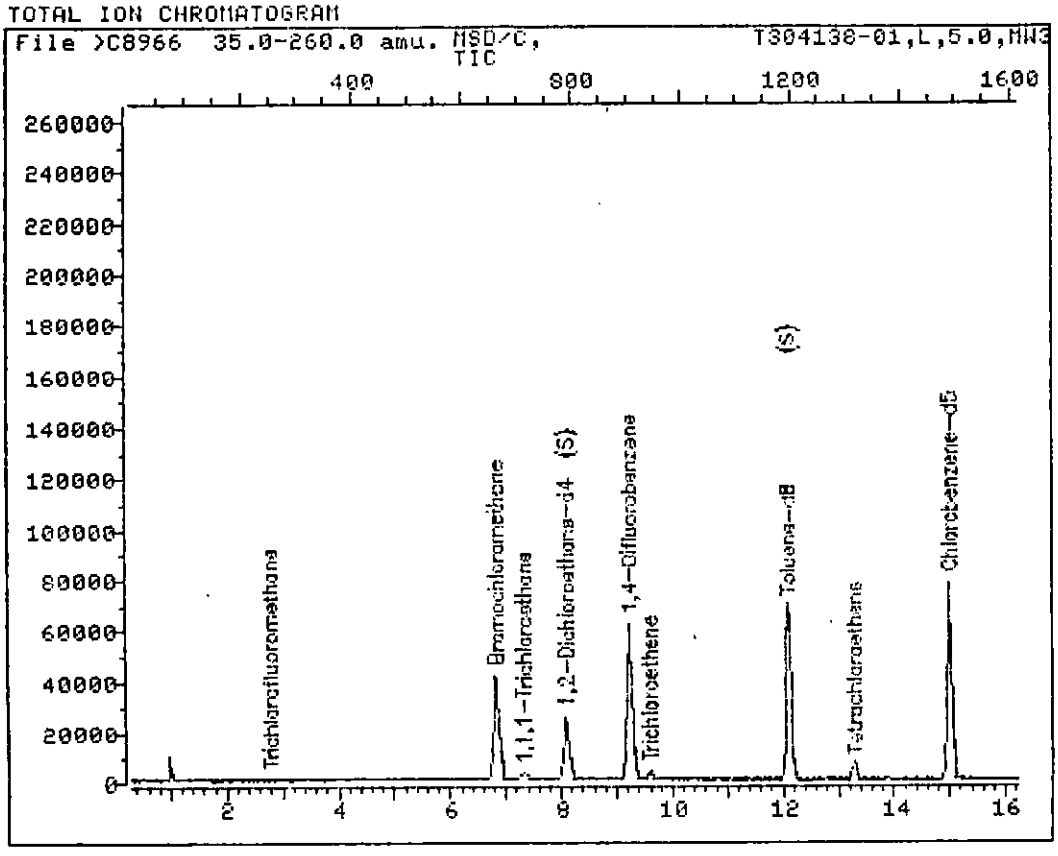
	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	38931	6.84	167337	9.22	136872	14.98
UPPER LIMIT	77862		334674		273744	
LOWER LIMIT	19466		83668		68436	
LAB SAMPLE NO.						
VBLK-QC0415	39888	6.85	169721	9.25	139259	14.98
T304138-01	42247	6.82	181186	9.22	150138	14.99
T304138-02	38986	6.85	166531	9.28	138501	15.06
T304138-03	32294	6.84	170855	9.24	140764	15.00
T304138-01 MS	39210	6.87	166012	9.25	140192	15.01

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

UPPER LIMIT = + 100%
ofinternal standard area
LOW LIMIT = - 50%
of internal standard area

Column used for flag internal standard areavalues with an asterisk

TOTAL ION CHROMATOGRAM



Data File: >C8966::C1 Quant Output File: ^C8966::QT
Name: MSD/C, Instrument ID: C
Misc: T304138-01,L,5.0,MW3,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 14:28
Injected at: 930415 13:52

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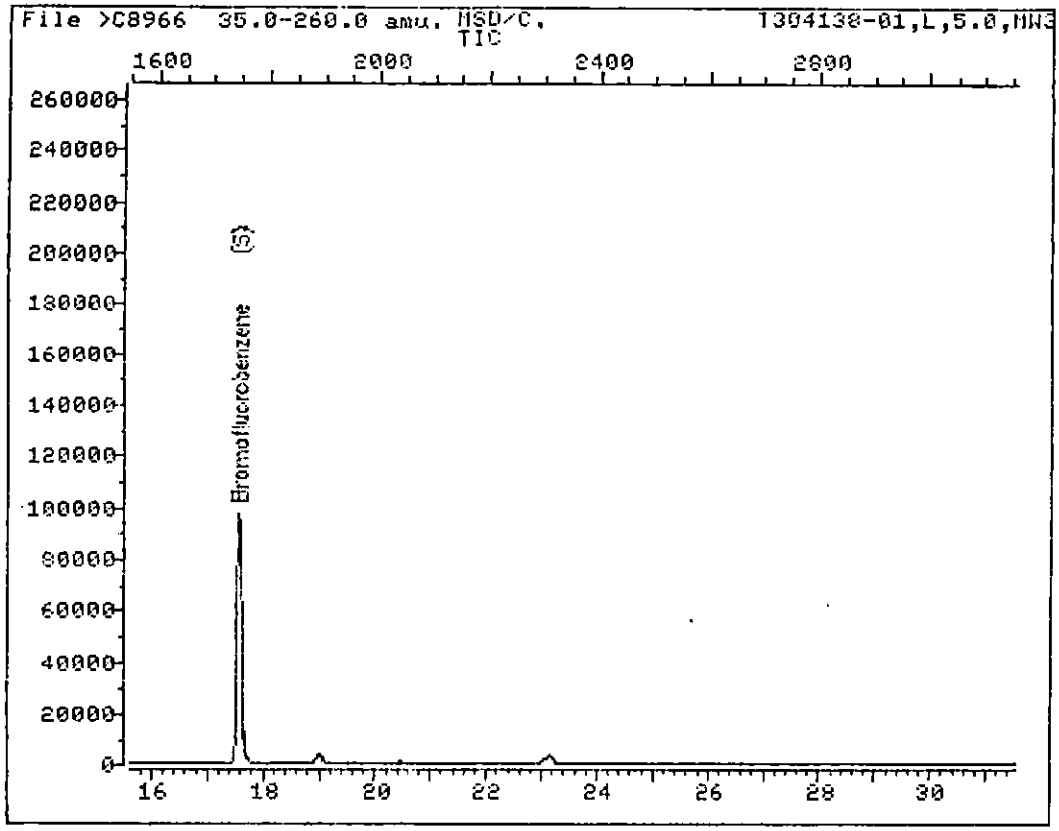
TOTAL ION CHROMATOGRAM



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Name: MSD/C, Instrument ID: C
Misc: T304138-01,L,5.0,MW3,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 14:28
Injected at: 930415 13:52

Operator ID: ANDY Quant Rev: 7 Quant Time: 930415 14:28
Output File: ^C8966::QT Injected at: 930415 13:52
Data File: >C8966::C1 Dilution Factor: 1.00000
Name: MSD/C, Instrument ID: C
Misc: T304138-01,L,5.0,MW3,

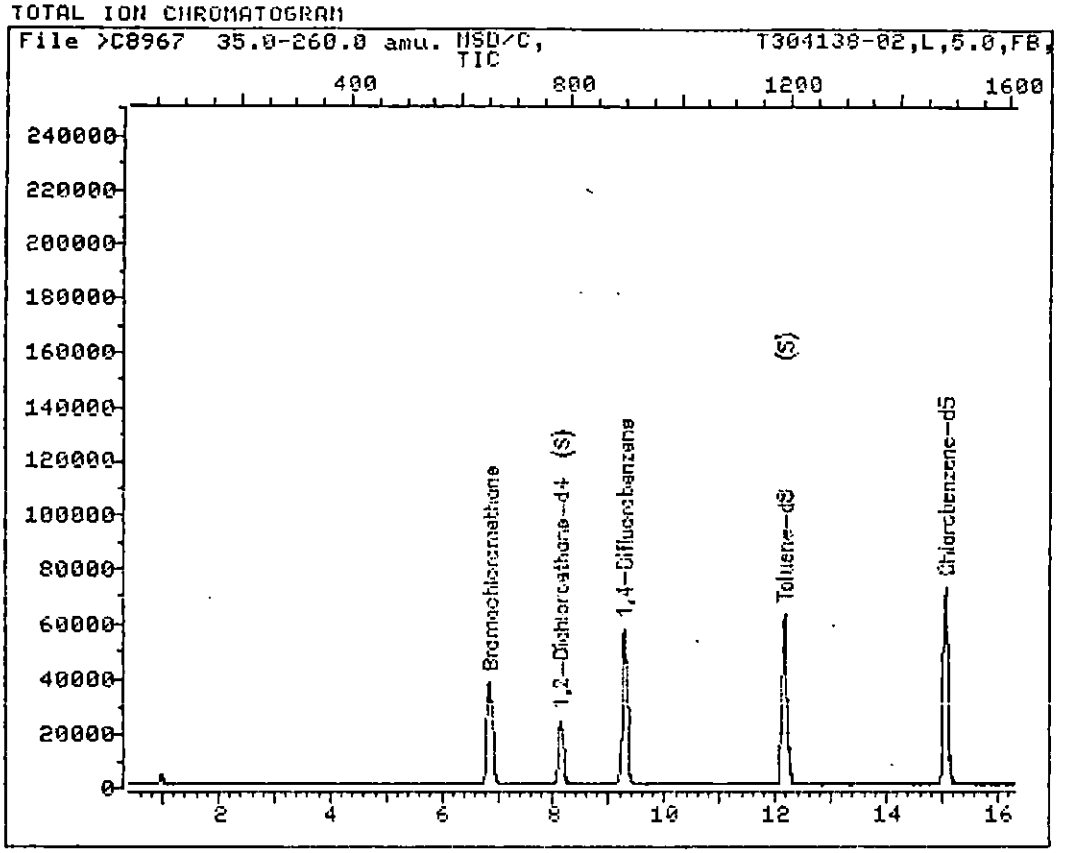
ID File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		6.82	128.0	42247	50.00	UG/L	93
7)	Trichlorofluoromethane		2.77	101.0	~~159~~	~~.0907~~	~~UG/L~~	93
21)	1,2-Dichloroethane-d4	(S)	8.09	65.0	59173	45.66	UG/L	93
22)	*1,4-Difluorobenzene		9.22	114.0	181186	50.00	UG/L	91
25)	1,1,1-Trichloroethane		7.32	97.0	6634	3.31 ✓	UG/L	98
28)	Trichloroethene		9.59	130.0	1751	1.19 ✓	UG/L	90
37)	*Chlorobenzene-d5		14.99	117.0	150138	50.00	UG/L	87
39)	Toluene-d8	(S)	12.09	98.0	165974	52.04	UG/L	99
41)	Tetrachloroethene		13.28	164.0	5714	3.95 ✓	UG/L	97
48)	Bromofluorobenzene	(S)	17.55	95.0	126960	50.70	UG/L	99

* Compound is ISTD

Conc 28

TOTAL ION CHROMATOGRAM



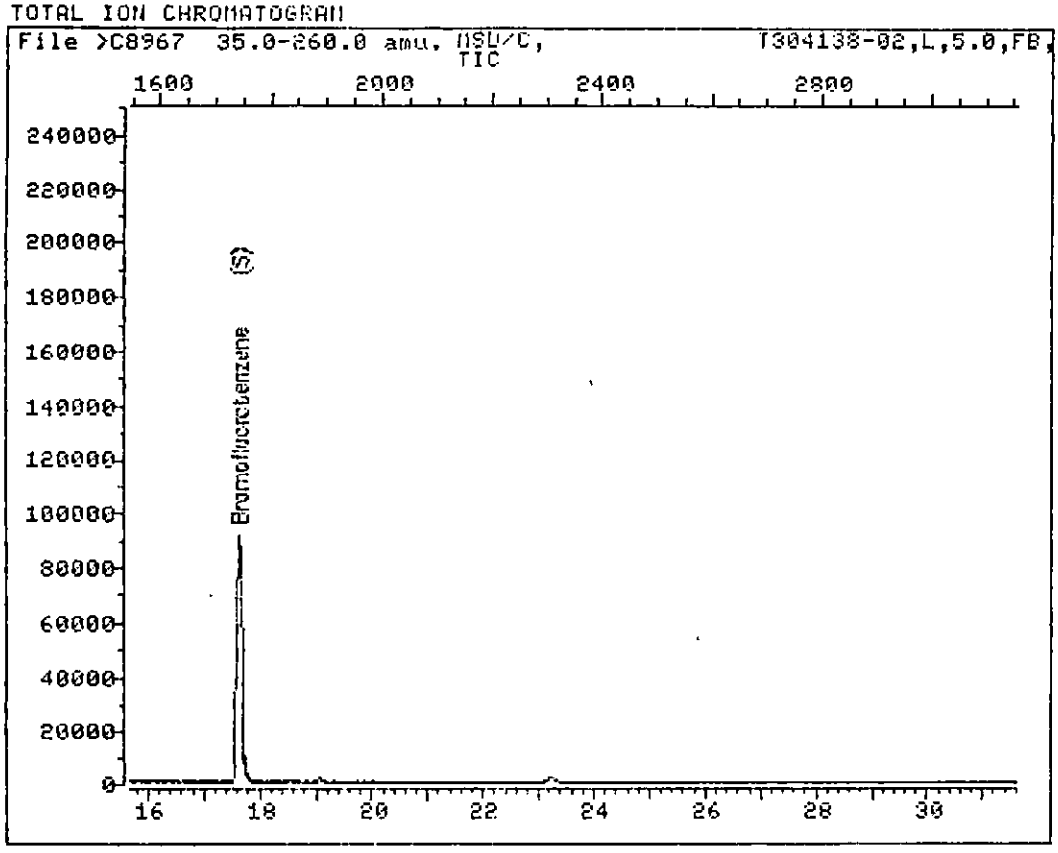
Data File: >C8967::C1 Quant Output File: ^C8967::QT
Name: MSD/C, Instrument ID: C
Misc: T304138-02,L,5.0,FB,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 15:00
Injected at: 930415 14:28

Page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >C8967::C1 Quant Output File: ^C8967::QT
Name: MSD/C, Instrument ID: C
Misc: T304138-02,L,5.0,FB,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 15:00
Injected at: 930415 14:28

Page 2 of 2

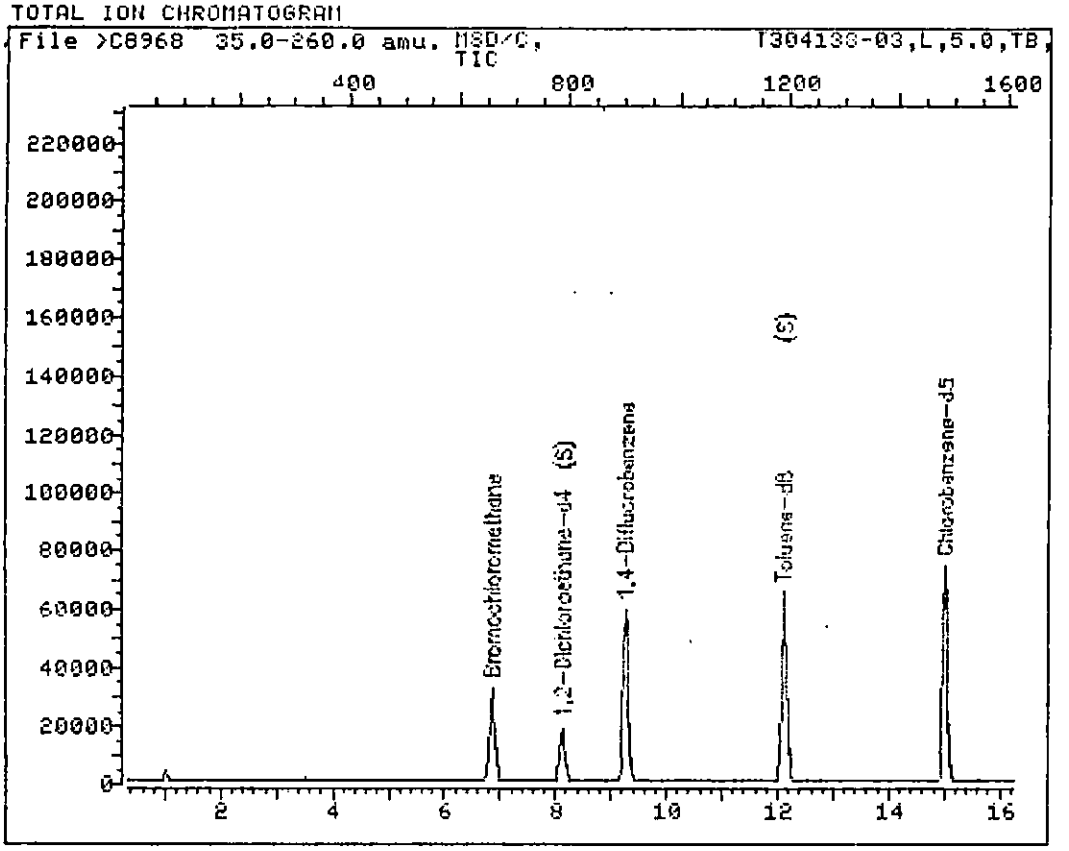
Operator ID: ANDY Quant Rev: 7 Quant Time: 930415 15:00
Output File: ^C8967::QT Injected at: 930415 14:28
Data File: >C8967::C1 Dilution Factor: 1.00000
Name: MSD/C, Instrument ID: C
Misc: T304138-02,L,5.0,FB,

ID File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		6.85	128.0	38986	50.00	UG/L	93
21)	1,2-Dichloroethane-d4	(S)	8.13	65.0	55317	46.26	UG/L	93
22)	*1,4-Difluorobenzene		9.28	114.0	166531	50.00	UG/L	90
37)	*Chlorobenzene-d5		15.06	117.0	138501	50.00	UG/L	92
39)	Toluene-d8	(S)	12.15	98.0	150994	51.32	UG/L	99
48)	Bromofluorobenzene	(S)	17.63	95.0	118790	51.43	UG/L	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

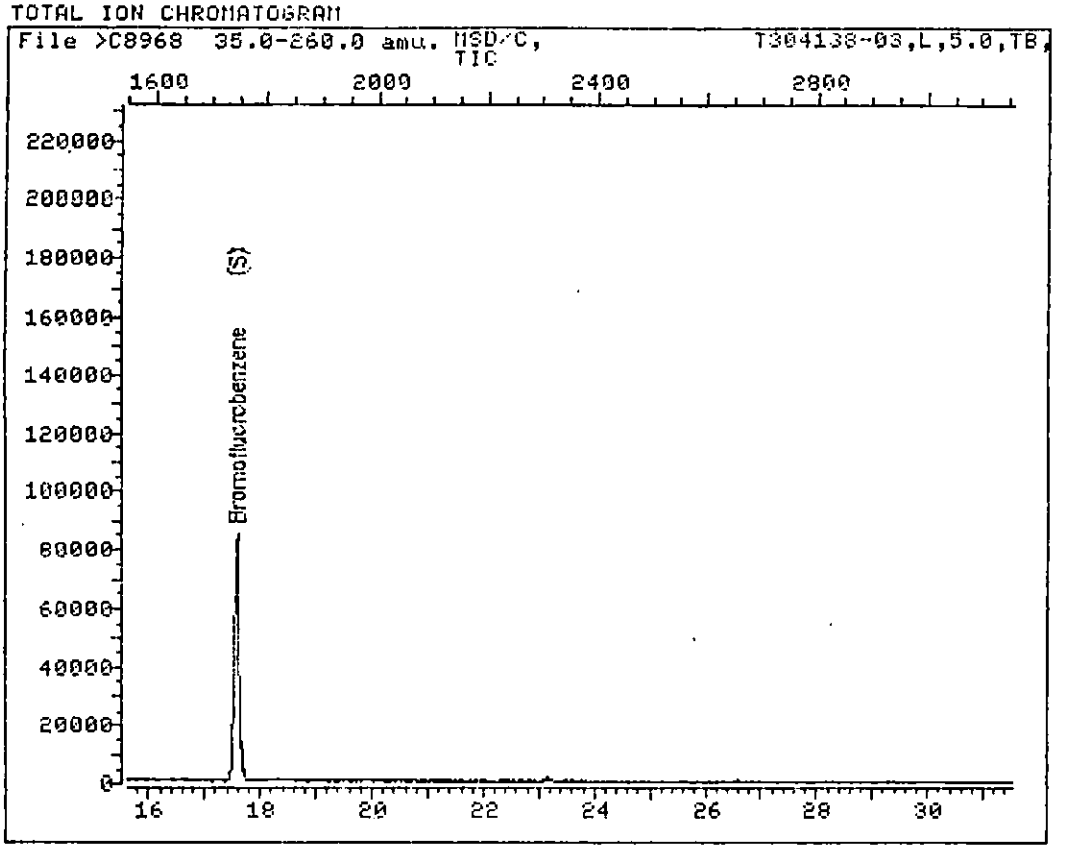


Data File: >C8968::C1 Quant Output File: ^C8968::QT
Name: MSD/C, Instrument ID: C
Misc: T304138-03,L,5.0,TB,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 15:36
Injected at: 930415 15:03

TOTAL ION CHROMATOGRAM



Data File: >C8968::C1 Quant Output File: ^C8968::QT
Name: MSD/C, Instrument ID: C
Misc: T304138-03,L,5.0,TB,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 15:36
Injected at: 930415 15:03

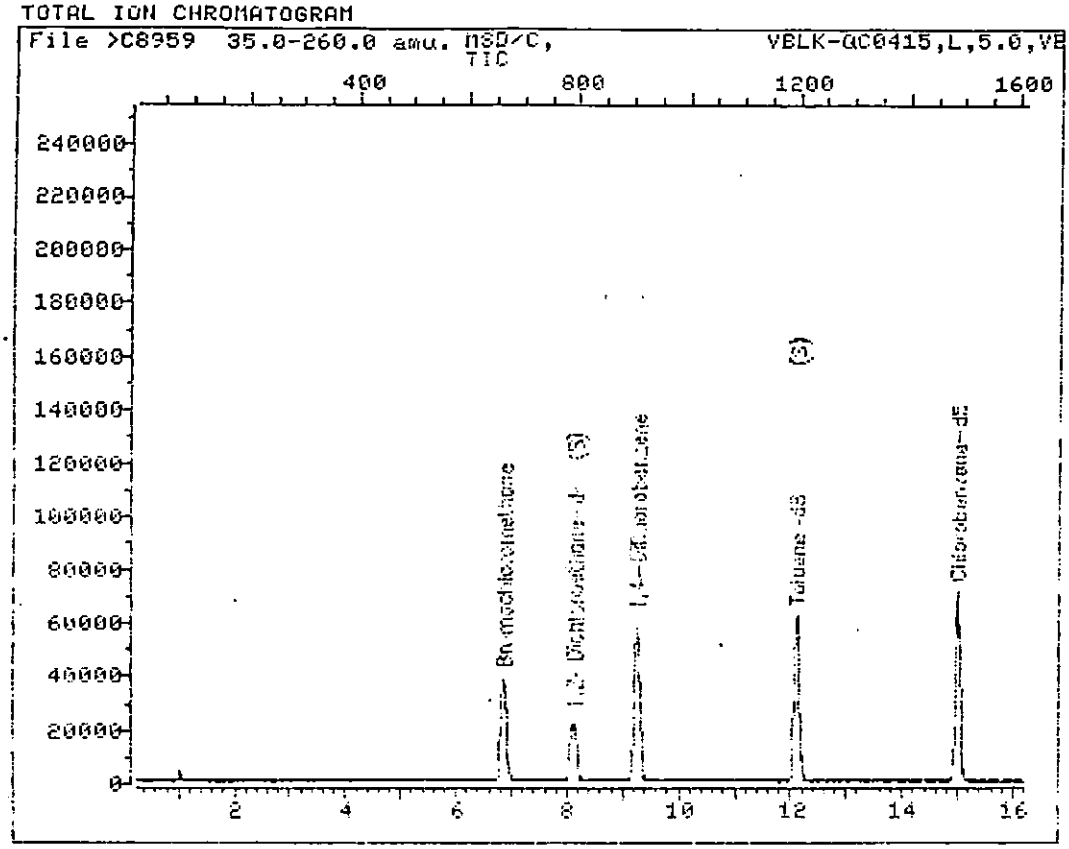
Operator ID: ANDY Quant Rev: 7 Quant Time: 930415 15:36
Output File: ^C8968::QT Injected at: 930415 15:03
Data File: >C8968::C1 Dilution Factor: 1.00000
Name: MSD/C, Instrument ID: C
Misc: T304138-03,L,5.0,TB,

ID File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		6.84	128.0	32294	50.00	UG/L	98
21)	1,2-Dichloroethane-d4	(S)	8.12	65.0	44279	44.70	UG/L	97
22)	*1,4-Difluorobenzene		9.24	114.0	170855	50.00	UG/L	91
37)	*Chlorobenzene-d5		15.00	117.0	140764	50.00	UG/L	93
39)	Toluene-d8	(S)	12.10	98.0	157954	52.82	UG/L	97
48)	Bromofluorobenzene	(S)	17.57	95.0	109004	46.43	UG/L	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: \C8959::C4 Quant Output File: ^C8959::QT
Name: MSD/C. Instrument ID: C
Misc: VBLK-QC0415,L,5.0,VBLK-QC0415,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 09:55
Injected at: 930415 09:22

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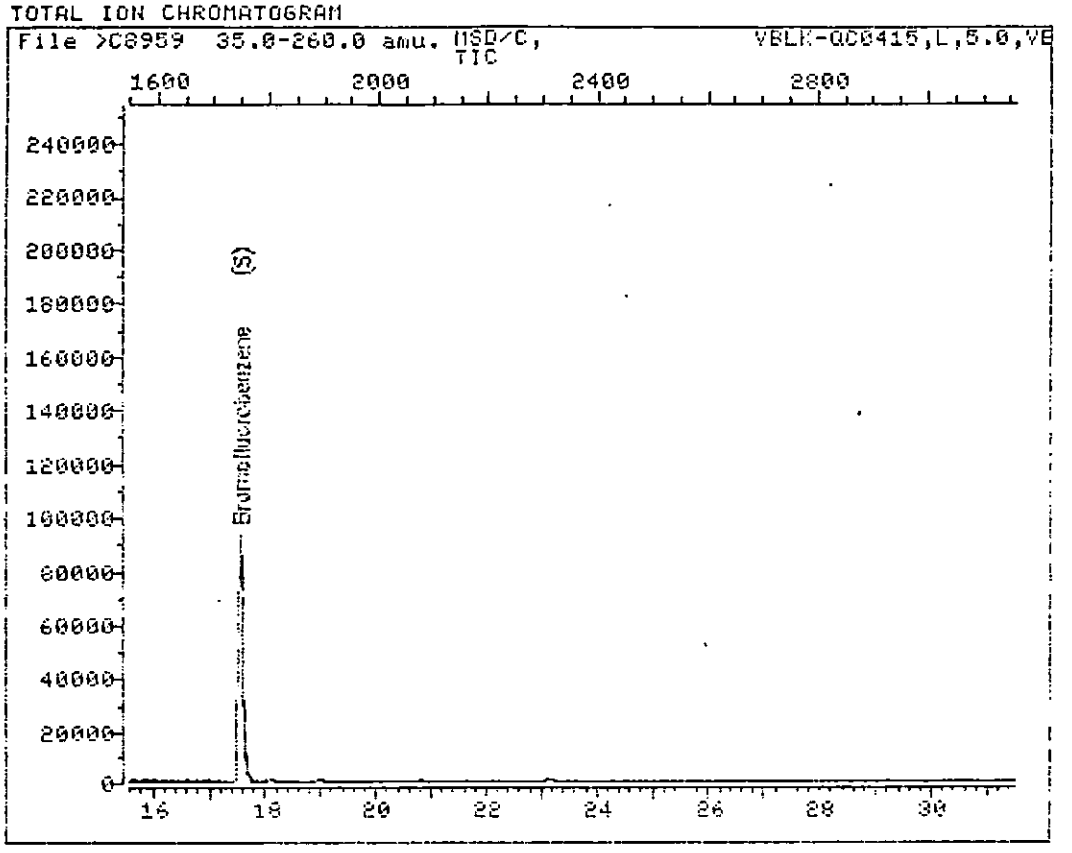
TOTAL ION CHROMATOGRAM



Data File: >C8959::C4 Quant Output File: ^C8959::QT
Name: MSD/C, Instrument ID: C
Misc: VBLK-QC0415,L,5.0,VBLK-QC0415,

Id File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

Operator ID: ANDY
Quant Time : 930415 09:55
Injected at: 930415 09:22

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Operator ID: ANDY Quant Rev: 7 Quant Time: 930415 09:55
Output File: ^C8959::QT Injected at: 930415 09:22
Data File: >C8959::C4 Dilution Factor: 1.00000
Name: MSD/C, Instrument ID: C
Misc: VBLK-QC0415,L,5.0,VBLK-QC0415,

ID File: IDCL::C2
Title: LABORATORY RESOURCES ID FILE FOR VOLATILE ORGANICS GC/MS
Last Calibration: 930330 11:50 Last Qcal Time: <none>

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		6.85	128.0	39888	50.00	UG/L	94
21)	1,2-Dichloroethane-d4	(S)	8.12	65.0	56261	45.98	UG/L	91
22)	*1,4-Difluorobenzene		9.25	114.0	169721	50.00	UG/L	91
37)	*Chlorobenzene-d5		14.98	117.0	139259	50.00	UG/L	92
39)	Toluene-d8	(S)	12.10	98.0	153366	51.84	UG/L	92
48)	Bromofluorobenzene	(S)	17.56	95.0	117938	50.78	UG/L	94

* Compound is ISTD

PETROLEUM HYDROCARBONS CONFORMANCE/NONCONFORMANCE SUMMARY

	No	Yes
1. Blank Contamination If yes, list concentrations in each blank:	✓	
2. Matrix Spike Recoveries Meet Criteria If not met, list those recoveries which fall outside the acceptable range:		✓
3. Sample Duplicate Analyses Meet QC Criteria If not met, list those criteria which fall outside the acceptable range:		✓
4. GC Fingerprinting Chromatograms Submitted for All Standards, Blanks, and Samples (If applicable)		NA
5. Extraction Holding Time Met If not met, list number of days exceeded for each sample:		✓
6. Analysis Holding Time Met If not met, list number of days exceeded for each sample:		✓

NOTE: EPA method 418.1 permits the use of either a scanning or fixed wavelength infrared (IR) spectrophotometer for determining petroleum hydrocarbon concentrations. Laboratory Resources, Inc., uses fixed wavelength instruments; therefore, IR spectra are not included in this data package.

Laboratory Supervisor: RS

Date: 5-11-93

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T304138
LRI Sample No: 1

Customer: Eikon Planning & Design
Location: Plainview (880789)
Project: Plainview
Sample Description: MW-3

Date Collected: 04/07/93
Date Received: 04/07/93

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	Qual	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
PHC (TPH) by 418.1 Petroleum Hydrocarbons, Total Recoverable	0.74		0.20	mg/L	04/14/93	GC	04/15/93	GC	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T304138
LRI Sample No: 2

Customer: Eikon Planning & Design
Location: Plainview (880789)
Project: Plainview
Sample Description: Field Blank 4/7/93

Date Collected: 04/07/93
Date Received: 04/07/93

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	Qual	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
PHC (TPH) by 418.1									
Petroleum Hydrocarbons, Total Recoverable	0.20	U	0.20	mg/L	04/14/93	GC	04/15/93	GC	

LABORATORY RESOURCES, INC. - TETERBORO 1993

QUALITY CONTROL REPORT FOR WORK ORDER: T3-04-138

PARAMETER	Q	BLANK MG/L	BLANK SPK % REC	SAMPLE CONC. MG/L	MS TV CONC. MG/L	MS CONC.	MS % REC	SAMPLE CONC.	SAMPLE DUP CONC.	RPD %	LAB SAMPLE I.D.	Q.C. LIMITS %
WET CHEMISTRY												
AMMONIA-NH3												
BOD												
COD												
CHLORIDE												
CHLORINE,RESIDUAL												
CR HEX												
CYANIDE												
DISS OXYGEN												
MBAS												
NITRATE												
NITRITE												
OIL & GREASE												
pH												
PET HYDROCARBONS		<0.20	97	<0.20	3.1	2.6	84	<0.20	<0.20	ND	T304119-4,5	60-130
PHENOLICS												
PHOSPHORUS												
SULFATE												
SULFIDE												
SULFITE												
DISSOLVED SOLIDS												
TKN												
TOC												
SUSPENDED SOLIDS												

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.

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 <30%
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.

TABLE OF ABBREVIATIONS

EC	Estimated Count
U	Undetected
Qual	Qualifier
QL	Quantitation Limit