MAYOR, DAY, CALDWELL & KEETON, L.L.P.
700 LOUISIANA, SUITE 1900
HOUSTON, TEXAS 77002-2778
(713) 225-7000
TELECOPIER (713) 225-7047

100 CONGRESS AVENUE
SUITE 1500
AUSTIN, TEXAS 78701-4042
(512) 320-9200
TELECOPIER (512) 320-9292

DEBRA L. BAKER
PARTNER
225-7369

November 8, 1996

VIA FEDERAL EXPRESS

Mr. William Honker
Chief, Superfund Enforcement Branch (6H-E)
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

Office of Regional Counsel
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Bailey Site

Dear Mr. Honker and Regional Counsel:

Enclosed please find the Bailey Site Settlors Committee's submission of the monthly progress report due November 10, 1996, pursuant to Section VIII of the Bailey Consent Decree.

Please do not hesitate to contact me at (713) 225-7369 if you have any questions or need any additional information.

Very truly yours,

Debra L. Baker, Counsel
Bailey Site Settlors Committee

cc: Superfund Texas Enforcement Section (6H-ET)
Bailey Waste Disposal Project Officer
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

801370

Mr. Trey Collins, Project Manager
Texas Natural Resource Conservation Commission
Superfund Section
12100 Park 35 Circle
Austin, Texas 78753

Mr. Mark McDonnell
Fluor Daniel
12790 Merit Drive
Suite 200
Dallas, Texas 75251

Mr. Ernest J. Schroeder
Parsons Engineering Science, Inc.
8000 Centre Park Drive, Suite 200
Austin, Texas 78754

0231842.04
119605/0912

BAILEY SUPERFUND SITE

MONTHLY PROJECT STATUS REPORT
OCTOBER 1996

General Description of Activities and Progress Made this Reporting Period:

Focused Feasibility Study

- EPA approved the Focused Feasibility Study in a letter dated October 24, 1996.

Revised Remedial Design

- Design documents and drawings were submitted to EPA on September 9, 1996. No comments have been received from EPA yet.
- GeoSyntec submitted the draft Health and Safety Plan and Quality Assurance Project Plan for the Revised Remedial Design and Remedial Action to EPA on August 13, 1996. Comments from EPA have not been received yet.

Contractor Procurement for Revised Final Remediation

- The bid evaluation criteria were submitted to EPA on October 11, 1996.
- Parsons ES submitted additional information to EPA regarding the pre-qualifications of Foster Wheeler (who acquired Ebasco, a pre-qualified bidder) and WASECO (who wishes to subcontract to RETEC). This letter was sent on October 11, 1996.
- Six bids were received in response to the RFP for the revised final remediation. Brown & Root, Foster Wheeler, Laidlaw, Smith, RETEC/WASECO, and OHM submitted bids. Based on the evaluation attached, Parsons ES recommended OHM for the revised final remediation. A meeting was held on October 17, 1996 at the Bailey site with EPA to discuss contractor selection. A letter dated October 16, 1996 was given to EPA explaining the basis for selecting OHM as the lowest, responsive, responsible bidder. EPA corresponded on October 24, 1996 that EPA did not disapprove of the OHM selection.

ROD Amendment and Public Comment Period

- The public meeting for the ROD Amendment was held on October 17, 1996 at the Ramada Inn in Port Arthur, TX.

Closure of On-Site Water Well

- A water well at the site located in the material laydown area needs to be closed prior to the next phase of work. Parsons ES gave EPA a draft scope of work for the well closure for review at a meeting held on October 17, 1996 at the site. Well closure is expected to take place next month.

Wastewater Management and Treatment

- No wastewater management was necessary this month, since the East Dike Active area was temporarily closed last month. Data from East Dike Treatment Plant

samples collected during July and August are summarized in Table 1 and are provided in an attachment to this report.

Air Monitoring

- The Air Monitoring Plan for the next phase of work was submitted to EPA on September 12, 1996. No comments have been received from EPA yet.

Activities to be Commenced or Completed During Next Reporting Period:

- Notification regarding closure of the water well on site should be submitted to EPA.
- The Construction Quality Assurance Plan should be submitted to EPA.

Problems Encountered in Commencing or Completing Remedial Action:

- Finalization of the ROD Amendment and an amendment to the Consent Decree may be needed to proceed with the next construction phase of work.

Schedule:

The tentative schedule for the Revised Remedial Design is attached.

TABLE 1
WATER TREATMENT DATA FOR OCTOBER 1996 MONTHLY REPORT

WATER SAMPLES - 7/24/96, 8/1/96, 8/2/96, and 8/20/96: Grab and composite samples taken from teh sampling port on the downstream side of the East Dike treatment system.

Sample ID Number	Discharge Criteria - Composite Sample	Discharge Criteria - Grab Sample	EWTP-6G	EWTP-6GA	EWTP-7R	EWTP-7G	EWTP-7GA	EWTP-7C
Type			Grab Sample 7/24/96	Grab Duplicate Sample 7/24/96	Rinse Blank Sample 8/1/96	Grab Sample 8/2/96	Grab Duplicate Sample 8/2/96	Composite Sample 8/2/96
Compound (mg/L)								
Arsenic	0.2	0.4	<0.005	<0.005	<0.020	<0.020	<0.020	<0.020
Cadmium	0.1	0.2	<0.005	<0.005	<0.020	<0.020	<0.020	<0.020
Chromium	0.2	0.4	<0.050	<0.050	<0.020	<0.020	<0.020	<0.020
Lead	0.5	1.0	<0.050	<0.050	<0.020	<0.020	<0.020	<0.020
Mercury	0.01	0.02	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001
Selenium	0.2	0.4	<0.005	<0.005	<0.020	<0.020	<0.020	<0.020
Silver	0.1	0.2	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Pentachlorophenol	1.23	2.60	<0.05	<0.05	<0.05	<0.050	<0.050	<0.050
Phenanthrene	0.62	1.32	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil & Grease		15	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
24 hr Toxicity / 50% Survival	50% SURVIVAL	50% SURVIVAL	100% SURVIVAL	100% SURVIVAL	NA	100% SURVIVAL	100% SURVIVAL	100% SURVIVAL
TDS	13,000	15,000	2800	2744	80	2680	2640	2460
VOC	<1.0	<1.0	<0.050	<0.050	<0.050	<0.050	<0.051	<0.052
TOC	15	15	10	11	6	8	9	7
pH	6-9	6-9	8.4	8.3	5.7	8.3	8.4	8.1

TABLE 1
WATER TREATMENT DATA FOR OCTOBER 1996 MONTHLY REPORT

WATER SAMPLES 7/24/96, 8/1/96, 8/2/96, and 8/20/96: Grab and composite samples taken from teh sampling port on the downstream side of the East Dike treatment system.

Sample ID Number	Discharge Criteria - Composite Sample	Discharge Criteria - Grab Sample	EWTP-8G	EWTP-8R	EWTP-8GA	EWTP-8C
Type			Grab Sample 8/20/96	Rinse Blank Sample 8/20/96	Grab Duplicate Sample 8/20/96	Composite Sample 8/20/96
Compound (mg/L)						
Arsenic	0.2	0.4	<0.020	<0.020	<0.020	<0.020
Cadmium	0.1	0.2	<0.020	<0.020	<0.020	<0.020
Chromium	0.2	0.4	<0.020	<0.020	<0.020	<0.020
Lead	0.5	1.0	<0.020	<0.020	<0.020	<0.020
Mercury	0.01	0.02	<0.001	<0.001	<0.001	<0.001
Selenium	0.2	0.4	<0.020	<0.020	<0.020	<0.020
Silver	0.1	0.2	<0.020	<0.020	<0.020	<0.020
Pentachlorophenol	1.23	2.60	<0.050	<0.050	<0.050	<0.050
Phenanthrene	0.62	1.32	<0.010	<0.010	<0.010	<0.010
Oil & Grease		15	<1.0	<1.0	<1.0	<1.0
24 hr Toxicity / 50% Survival	50% SURVIVAL	50% SURVIVAL	100% SURVIVAL	NA	100% SURVIVAL	100% SURVIVAL
TDS	13,000	15,000	2260	20	2250	2240
VOC	<1.0	<1.0	<0.050	<0.050	<0.050	<0.050
TOC	15	15	19	2	18	17
pH	6-9	6-9	7.8	7	7.8	7.5

MAYOR, DAY, CALDWELL & KEETON, L.L.P.
700 LOUISIANA, SUITE 1900
HOUSTON, TEXAS 77002-2778
(713) 225-7000
TELECOPIER (713) 225-7047

100 CONGRESS AVENUE
SUITE 1500
AUSTIN, TEXAS 78701-4042
(512) 320-9200
TELECOPIER (512) 320-9292

DEBRA L. BAKER
PARTNER
225-7369

October 7, 1996

VIA FEDERAL EXPRESS

Mr. William Honker
Chief, Superfund Enforcement Branch (6H-E)
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

Office of Regional Counsel
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Bailey Site

Dear Mr. Honker and Regional Counsel:

Enclosed please find the Bailey Site Settlors Committee's submission of the monthly progress report due October 10, 1996, pursuant to Section VIII of the Bailey Consent Decree.

Please do not hesitate to contact me at (713) 225-7369 if you have any questions or need any additional information.

Very truly yours,

Debra L. Baker, Counsel
Bailey Site Settlors Committee

cc: Superfund Texas Enforcement Section (6H-ET)
Bailey Waste Disposal Project Officer
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

Mr. Trey Collins, Project Manager
Texas Natural Resource Conservation Commission
Superfund Section
12100 Park 35 Circle
Austin, Texas 78753

Mr. Mark McDonnell
Fluor Daniel
12790 Merit Drive
Suite 200
Dallas, Texas 75251

Mr. Ernest J. Schroeder
Parsons Engineering Science, Inc.
8000 Centre Park Drive, Suite 200
Austin, Texas 78754

0231842.03
109607/1210

BAILEY SUPERFUND SITE

MONTHLY PROJECT STATUS REPORT
SEPTEMBER 1996

General Description of Activities and Progress Made this Reporting Period:

Focused Feasibility Study

- The Final FFS, Revision 1 was submitted to EPA on September 3, 1996.

Pit B Remediation and Early Closure of the East Dike Active Area

- OHM has completed remediation work and has demobilized from the site.

Revised Remedial Design

- A meeting with EPA was held on September 5, 1996 to discuss the 95 percent remedial design. Since Trey Collins of TNRCC could not attend the meeting, Ernie Schroeder of Parsons ES met with him on September 13, 1996 to review the design. Design documents and drawings were submitted to EPA on September 9, 1996.

- GeoSyntec submitted the draft Health and Safety Plan and Quality Assurance Project Plan for the Revised Remedial Design and Remedial Action to EPA on August 13, 1996. Comments from EPA have not been received yet.

Contractor Procurement for Revised Final Remediation

- A pre-bid meeting was held with bidders on September 11, 1996 at the Bailey Site. Parsons ES summarized the attendance at the pre-bid meeting in a letter to EPA sent on September 12, 1996.

- A letter to EPA regarding contractor procurement and pre-qualification of contractors for the next phase of work was distributed to EPA on August 23, 1996. Approval of the contractor procurement has not been received from EPA yet. Sevenson and ITEX have informed Parsons ES that they will not bid on the work at the Bailey Site.

- An addendum to the bid documents based on questions received from bidders will be distributed to EPA and bidders early next month.

- WASECO, one of the pre-qualified bidders, requested to be allowed to subcontract to RETEC in bidding the final remediation work. WASECO was pre-qualified for the North Marsh work and bid both previous North Marsh projects as a proposed subcontractor to a different company, ITS.

- Parsons ES was contacted by Foster Wheeler this week and informed that although their Atlanta office initially declined to bid, their Houston office would like to bid on the Final Remediation work at the Bailey Site. Foster Wheeler was not on the original bidders list. However, they acquired EBASCO, who was on the original bidders list. Parsons ES informed them that they would be permitted to bid, but no bid extension would be given.

Closure of On-Site Water Well

- A water well at the site located in the material laydown area needs to be closed prior to the next phase of work. This issue was discussed with EPA during the September 5, 1996 meeting. EPA agreed that the well should be closed. A preliminary assessment of the well indicates that the well is a 2" steel well, approximately 735 feet deep. Parsons ES will notify EPA next month about when and how the well will be closed.

Wastewater Management and Treatment

- Off-site disposal of 457,264 gallons of Pit B water was completed this month. This water was transported to the CECOS West Lake facility in Louisiana. The Pit B water was disposed off site since this option was more economical than on-site treatment.

Air Monitoring

- The Air Monitoring Plan for the next phase of work was submitted to EPA on September 12, 1996.

Activities to be Commenced or Completed During Next Reporting Period:

- Bid evaluation criteria for the next phase of work is expected to be submitted to EPA.
- The public meeting for the ROD Amendment is expected to be held.
- Bids on the final remediation at the Bailey Site will be reviewed and a contractor is expected to be selected.
- Notification regarding closure of the water well on site will be submitted to EPA.
- The Construction Quality Assurance Plan will be submitted to EPA.

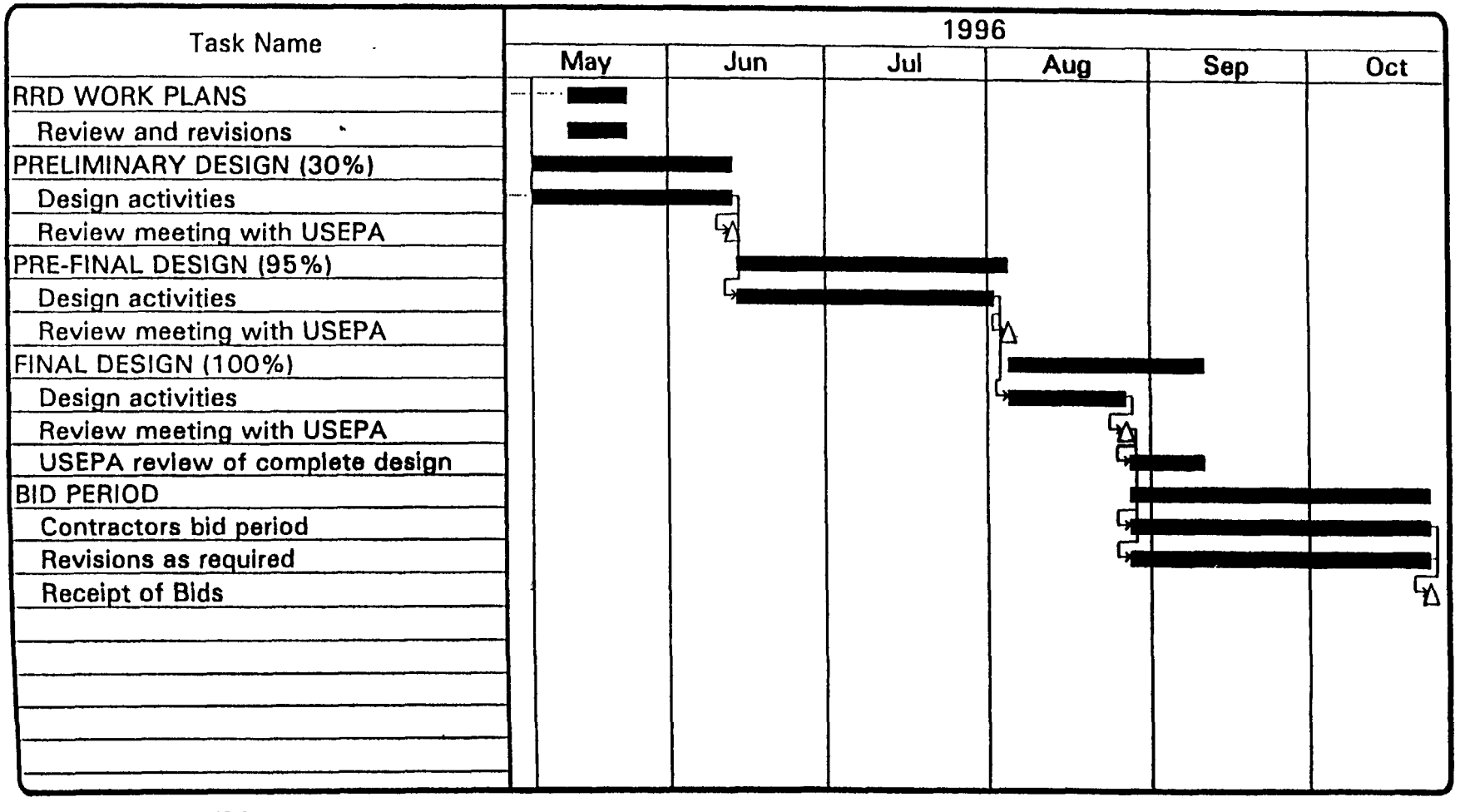
Problems Encountered in Commencing or Completing Remedial Action:

- Approval is needed by EPA for the contractor selection procedure.
- Completion of the ROD Amendment is needed to proceed with the next construction phase of work.

Schedule:

The tentative schedule for the Revised Remedial Design is attached.

Bailey Superfund Site
Preliminary Schedule - Revised Remedial Design



Printed: May/06/96
Page 1

Milestone Δ Summary ▬
Fixed Delay ····· ····

ATTACHMENT

WATER TREATMENT ANALYTICAL DATA

BAILEY SUPERFUND SITE
MONTHLY REPORT FOR OCTOBER 1996

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

Memo

225 W. Airtex Blvd • Houston, Texas 77090 *Southern Region, Southwest District*

TO: Gary Foster

FROM: Chet Scheibel

DATE: August 23, 1996

SUBJECT: Data Review for the Project 18464 - Bailey Disposal Site

The Southern Region Project Chemist has performed a QA Audit of the data submitted by the Chemtex laboratory for the three water samples collected on July 24, 1996. This data is for the analysis of volatiles, semivolatiles, metals, and conventionals. The lab met the requested 3 day turn-around-time. The sample numbers are EWTP-6G, EWTP-6GA, and TB.

The results of this audit are presented in the attached Data Evaluation Checklist. The data conforms to the requirements of USEPA Method 624, 625, 200 series, 150.1, 413.1, 160.1, and 415.1.

The data is deemed acceptable according to USEPA guidelines and should be used in this project's decision making process.

Chet S Scheibel

Chet Scheibel - Project Chemist
Southern Region, Southwest District

OHM SOUTHERN REGION, SOUTHWEST DISTRICT

TECHNICAL SERVICES GROUP

ANALYTICAL DATA VALIDATION

The attached Data Package has been reviewed by the Southern Region, Southwest District Technical Services Group. Detailed comments concerning specific analyses (ie, GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below.

COMMENTS: _____

Data Validated by: Chet Scheibel Date: 8/23/96

Name (Printed): CHET SCHEIBEL

3/18/96

DATA VALIDATION FORMS

HOLDING TIMES	REQUIREMENTS	YES	NO
METALLIC/CONVENTIONAL INORGANIC			
Metals	6 Months	✓	
Cyanide	14 Days		
Mercury	28 Days	✓	
Hexavalent Chromium	24 Hours		
Other		✓	
SEMIVOLATILE - GC, GC/MS, OR HPLC			
WATER	7 Days to Extraction	✓	
	Within 40 days of extraction	✓	
SOIL	14 Days to Extraction		
	Within 40 days of extraction		
VOLATILES - GC OR GC/MS			
WATERS for AROMATICS	7 Days unpreserved		
	14 Days preserved		
SOILS, SLUDGES, SEDIMENTS	14 Days	✓	
WATER or OTHER	14 Days		
PESTICIDES/PCBs			
WATER	7 Days to extraction		
	Within 40 days of extraction		
SOILS, SEDIMENTS, SLUDGES, SOLIDS	14 Days to extraction		
	Within 40 days of extraction		
OTHER ORGANICS			
SOLIDS/SLUDGES Analyzed Within Holding Time	Per Method		
WATERS/LIQUIDS Analyzed Within Holding Time	Per Method		
PRESERVATION			
Preserved at field site?		✓	
Lab preserved sample.			

LIST DEFICIENCIES IN DETAIL. _____

2/16/96

DATA VALIDATION AND QUALITY CONTROL

VOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID/SOIL ____ TCLP ____			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	BFB EVERY 12 HRS	NA	
INITIAL CALIBRATION	%RSD: < or = 30%	✓	
CONTINUING CALIBRATION CHECK	%DIFF: < OR = 25%(A) or 20%(B)	✓	
SPCC COMPOUNDS	RF: > OR = 0.300	✓	
	Bromoform: > OR = 0 25 (A) or 0.10 (B)	✓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS <MDL	✓	
MATRIX SPIKE % RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
MATRIX SPIKE DUP. % RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
MS/MSD RPD	< LAB QC LIMITS	✓	
% LCS RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
% SURROGATE RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

SEMIVOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID/SOIL ___ TCLP ___			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	DFTPP EVERY 12 HRS	N/A	
INITIAL CCC COMPOUNDS	%RSD: < OR = 30%	↓	
INITIAL SPCC COMPOUNDS	% RF: > OR = 0.05	↓	
CONTINUING CCC COMPOUNDS	% DIFF: < OR = 30%(A) or 20%(B)	↓	
CONTINUING SPCC	RF: > OR = 0.05	↓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS <MDL	✓	
MATRIX SPIKE % RECOVERY VALUES	WITHIN THOSE SET BY LAB	N/A	
MATRIX SPIKE DUP. % RECOVERY VALUES	WITHIN THOSE SET BY LAB	N/A	
MS/MSD RPD	< LAB QC LIMITS	—	
% LCS RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	
% SURROGATE RECOVERY LIMITS	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ SOLID/SOIL ____ TCLP ____

METALS - INORGANICS	REQUIREMENTS	YES	NO
% RECOVERY - ICV & CCV	90-110%(ICP) 80-120%(GFAA)	NA	
CCV	Beginning and every 10 samples	✓	
ICV	Beginning and every 10 samples	✓	
1 CALIBRATION BLANK	Beginning and every 10 samples	✓	
RSD OF INITIAL CALIBRATION	<30% or LINEAR CORRELATION OF 0.995 OR BETTER	✓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds <MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	NA	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	NA	
MS/MSD RPD	< 20 %	✓	
LCS RECOVERY VALUES	80 - 120 %	✓	
POST DIGEST SPIKE RECOVERY	75 - 125 %	✓	
OTHER (LIST) Duplicate RPD	< 20%	✓	

LIST DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ SOLID/SOIL ____

CONVENTIONAL ANALYSIS	REQUIREMENTS	YES	NO
% RECOVERY OF CCV	80-120%	N.A	
RSD OF INITIAL CALIBRATION	<30% or Linear Correlation of 0.995 of Better	✓	
CONTINUING CALIBRATION	Beginning and Every 10 Samples	✓	
CALIBRATION BLANK	Beginning and Every 10 Samples	✓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds <MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	N/A	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	N.A	
LCS RECOVERY VALUES	80 - 120 %	—	
DUPLICATE % RPD	< 20 %	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: ____

Memo

OHM Remediation Services Corp.

225 W. Airtex Blvd., Houston, TX 77073
(713) 775-7629 • Fax (713) 775-7659

Southern Region, Southwest District

TO: Gary Foster
FROM: Chet Scheibel CDS
DATE: July 30, 1996
SUBJECT: Review of EWTP-6G/EWTP-6GA Analysis

The analytical data of the EWTP-6G and EWTP-6GA samples collected on July 24, 1996 are sumarized in the attached table. As shown, the discharge criteria is not exceeded for any parameter or analyte. Based on the anaytical data OHM proposes that the treated water meets all criteria for discharge.

Wastewater Discharge Criteria and Analysis

POLLUTANT	COMPOSITE CRITERIA- mg/L	SAMPLE RESULT- mg/l	DUPLICATE RESULT- mg/l	GRAB CRITERIA- mg/L	SAMPLE RESULT- mg/l	DUPLICATE RESULT - mg/l
	SAMPLE NO	NA	NA	SAMPLE NO.	EWTP-6G	EWTP-6GA
	DATE SAMPLED			DATE SAMPLED	7/24/96	7/24/96
Arsenic	0.2			0.4	< 0.005	<0.005
Cadmium	0.1			0.2	< 0.005	< 0.005
Chromium	0.2			0.4	< 0.050	< 0.050
Lead	0.5			1.0	< 0.050	< 0.050
Mercury	0.01			0.02	< 0.001	< 0.001
Selenium	0.2			0.4	< 0.005	< 0.005
Silver	0.1			0.2	< 0.020	< 0.020
Pentachloro-phenol (PCP)	1.23			2.60	< 0.05	< 0.05
Phenanthrene	0.62			1.32	< 0.010	< 0.010
O & G	NA			15	< 5.0	< 5.0
TDS	13,000			15,000	2,800	2,744
TOC	15			30	10	11
pH	6-9			6-9	8.4	8.3
VOC	< 1.0			< 1.0	< 0.050	< 0.050
24 Hr Acute Toxicity	> 50% Survival			> 50% Survival	100%	100%

NOTE: EWTP - East Water Treatment Plant

TRIP BLANK ANALYSIS: Sample Number: TB
Analysis <0.010 mg/L

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 7/29/96
Date Collected: 7/24/96
Collected By: B. Riggs
Date Received: 7/24/96
Date Analyzed: 7/26/96
Analyst: MSR
CHEMTEX FILE #: P6070610

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-6G

CHEMTEX #: P6070611

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Report Date: 7/29/96
Date Collected: 7/24/96
Collected By: B. Riggs
Date Received: 7/24/96
Date Analyzed: 7/26/96
Analyst: MSR
CHEMTEX FILE #: P6070610

Attn: Mr. Chet Schiebel

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-6GA

CHEMTEX #: P6070610

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 7/29/96
Date Collected: 7/24/96
Collected By: B. Riggs
Date Received: 7/24/96
Date Analyzed: 7/28/96
Analyst: MR
CHEMTEX FILE #: P6070610

SEMIVOLATILE ANALYSES BY GCMS - EPA METHOD 625

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
P6070610	EWTP-6GA	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
P6070611	EWTP-6G	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
Method Blank		Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 7/29/96

CHEMTEX FILE #: P6070610

PERCENT RECOVERY OF SURROGATES - EPA METHOD 625

CHEMTEX #	COMPOUND NAME	% Recovery
P6070610	2-Fluorophenol	41
	Phenol-d_5	46
	Nitrobenzene-d_5	48
	2-Fluorobiphenyl	65
	2,4,6-Tribromophenol	48
	p-Terphenyl-d_{14}	72
P6070611	2-Fluorophenol	31
	Phenol-d_5	32
	Nitrobenzene-d_5	40
	2-Fluorobiphenyl	54
	2,4,6-Tribromophenol	32
	p-Terphenyl-d_{14}	60
Method Blank	2-Fluorophenol	55
	Phenol-d_5	61
	Nitrobenzene-d_5	68
	2-Fluorobiphenyl	83
	2,4,6-Tribromophenol	56
	p-Terphenyl-d_{14}	92
Method Spike	2-Fluorophenol	74
	Phenol-d_5	69
	Nitrobenzene-d_5	57
	2-Fluorobiphenyl	72
	2,4,6-Tribromophenol	70
	p-Terphenyl-d_{14}	66

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Phenol	64
		2-Chlorophenol	60
		1,4-Dichlorobenzene	53
		n-Nitro-di-n-propylamine	52
		1,2,4-Trichlorobenzene	52
		4-Chloro-3-methylphenol	57
		Acenaphthene	54
		4-Nitrophenol	43
		2,4-Dinitrotoluene	51
		Pentachlorophenol	53
		Pyrene	52

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 7/29/96

CHEMTEX FILE #: P6070610

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Arsenic	104
		Cadmium	101
		Chromium, total	102
		Lead	106
		Mercury	96
		Selenium	118
		Silver	100

QUALITY ASSURANCE/QUALITY CONTROL DATA

Contaminant	True Value	Obtained Value
Arsenic (ug/l)	25	29/25*
Cadmium (ug/l)	500	503/499*
Chromium (ug/l)	1,000	900/960*
Lead (ug/l)	1,000	1,020/980*
Mercury (ug/l)	10.0	10.0/10.5*
Selenium (ug/l)	25	29/28*
Silver (ug/l)	500	490/480*

* Duplicate Analysis

Contaminant	Method Reference	Date Analyzed/Analysts
Arsenic	EPA Method 206.2	7/29/96 MRP/SM/KCK
Cadmium	EPA Method 213.1	7/29/96 MRP/SM/KCK
Chromium, total	EPA Method 218.1	7/29/96 MRP/SM/KCK
Lead	EPA Method 239.1	7/29/96 MRP/SM/KCK
Mercury	EPA Method 245.1	7/29/96 MRP/SM/KCK
Selenium	EPA Method 270.2	7/29/96 MRP/SM/KCK
Silver	EPA Method 272.1	7/29/96 MRP/SM/KCK

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 7/29/96

CHEMTEX FILE #: P6070610

QUALITY ASSURANCE/QUALITY CONTROL DATA

Contaminant	True Value	Obtained Value
Oil & Grease (mg/l)	10.0	9.4/9.6*
T D S (mg/l)	100	98/96*
T O C (mg/l)	30	98/100*
pH (units)	8.0	8.0/8.0*

* Duplicate Analysis

Contaminant	Method Reference	Date Analyzed/Analysts
Oil & Grease	EPA Method 413.1	7/26/96 LKP/MMP
Solids, Total Dissolved (TDS)	EPA Method 160.1	7/25/96 LKP/MMP
Total Organic Carbon (TOC)	EPA Method 415.1	7/24/96 LKP/MMP
pH	EPA Method 150.1	7/24/96 14:50 MMP

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Report Date: 7/29/96
Date Collected: 7/24/96
Time Collected: N/A
Collected By: B. Riggs
Date Received: 7/24/96
Time Received: 14:50 PM
Date Analyzed: 7/24-25/96
Analyst: DE
CHEMTEX FILE #: P6070610

Attn: Mr. Chet Schiebel

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-6GA

CHEMTEX #: P6070610

24-HOUR MYSID ACUTE TOXICITY TEST
EPA METHOD 600/4-90/027

MYSIDOPSIS BAHIA SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24 hr	A	100					100
	B	100					100
	C	100					100
	D	100					100
	E	100					100
	MEAN	100					100

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0019
Field Technical Services
Rev. 08/89

182113

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE
PROJECT LOCATION: 9501 HWY 87 BRIDGE CITY, TX 77611
PROJ. NO.: 18464
PROJECT CONTACT: CHET SCHEIBEL
PROJECT TELEPHONE NO.: 409 738-2212
CLIENT'S REPRESENTATIVE: MARK MURPHY
PROJECT MANAGER/SUPERVISOR: GARY FOSTER/SID RICHARD

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): VOA, TOC, TDS/pH, ACUTE TOXICITY

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	VOA	TOC	TDS/pH	ACUTE TOXICITY					REMARKS CHEMTECH
1	EWTP-6GA	7/24/96			X	TREATED WATER	2-40ml VIAL	X								HCL P6070610
2	EWTP-6GA	7/24/96			X	"	1-4oz.		X							H_2SO_4
3	EWTP-6GA	7/24/96			X	"	1-16oz.			X						
4	EWTP-6GA	7/24/96			X	"	1-GAL				X					
5																
6																
7																
8																
9																
10																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-4	Blake Rivas 7/24/96 1450	CM Reddy Chemtech	7/24	14.52
2					
3					
4					

REMARKS: SEE ARF
ANALYZE TOC FIRST.
- CONTACT SITE
3 DAY TAT

SAMPLER'S SIGNATURE: Blake Rivas

OHM REMEDIATION SERVICES CORP
SOUTHERN REGION, SOUTHWEST DISTRICT - TECHNICAL SERVICES
LABORATORY SAMPLE RECEPTION CONFIRMATION

Telephone #: 713/775-7629 FAX #: 713/775-7659

Send to the Attention of: Chet Scheibel

TO BE COMPLETED BY THE LABORATORY WITHIN 24 HOURS OF SAMPLE RECEPTION

NOTE: A Copy of the COC Must Be Enclosed With This Form

DATE: 7/24/96

LABORATORY NAME: CHEMTEX

LABORATORY LOCATION: Port Arthur, TX

PREPARED BY: MULA M
(PRINT LEGIBLY)

PROJECT NUMBER: 18464 - Bailey

DATE SAMPLES RECEIVED: 7/24/96

TOTAL NUMBER OF SAMPLES: 2

SOIL: ____ #

WATERS: ✓ #

SOLIDS: ____ #

TURN-AROUND-TIME REQ: XXX (TOR) 24 hr ____ 48 hr X (ALL OTHERS) 3 Days ____ 5 Days

____ 7 Days ____ 14 Days ____ OTHER

TO BE COMPLETED BY OHM TECHNICAL SERVICE DEPARTMENT:

DATE RESULTS RECEIVED BY OHM: Initial (I) 7/29/96 Final (F) 8/22/96

METHOD OF RECEPTION: F Fax ____ Fed X F Mail

ACTUAL TURN-AROUND-TIME: I 5 F 1 18

Calibration Report

Title: CLP BNA Standards
Calibrated: 960707 10:38

Compound	Files: >BN020 RF 20.00	>BN050 RF 50.00	>BN080 RF 80.00	>BN120 RF 120.00	>BN160 RF 160.00	RF	% RSD	
Pyridine	1.22169	1.77605	1.96280	1.84484	1.09110	1.57929	24.979	
2-Fluorophenol (S)	.98219	.98097	.98237	1.00854	1.03017	.99685	2.200	(Conc=200.0,200.0,200.0,200.0,200.0)
Phenol-d6 (S)	1.31078	1.33071	1.27762	1.31378	1.28089	1.30276	1.749	(Conc=200.0,200.0,200.0,200.0,200.0)
Phenol	1.29505	1.31491	1.32599	1.33072	1.18542	1.29042	4.671	
bis(2-Chloroethyl)ether	1.06835	1.07641	1.02129	1.10007	1.09983	1.07319	3.005	
2-Chlorophenol	1.25463	1.20925	1.17013	1.21460	1.22303	1.21433	2.497	
Benzyl alcohol	.68050	.73070	.71235	.75679	.76928	.72992	4.855	
1,3-Dichlorobenzene	1.42909	1.45983	1.38573	1.40937	1.32804	1.40242	3.543	
1,4-Dichlorobenzene	1.52716	1.59824	1.42194	1.57850	1.12904	1.45098	13.267	
1,2-Dichlorobenzene	1.45409	1.48383	1.42244	1.47922	1.40434	1.44878	2.404	
2-Methylphenol	1.01670	1.04808	1.00809	1.01465	.99443	1.01639	1.942	
2,2'-oxybis(1-Chloropropane)	1.12778	1.15816	1.07468	1.09275	1.06945	1.10456	3.411	
4-Methylphenol	1.04570	1.10378	1.06394	1.08472	1.04572	1.06877	2.370	
N-Nitroso-di-n-propylamine	.74016	.77203	.72930	.75146	.71513	.74162	2.921	
Hexachloroethane	.58455	.59781	.55031	.56458	.56220	.57189	3.324	
Nitrobenzene-d5 (S)	.64669	.64197	.62523	.61446	.62369	.63041	2.136	(Conc=100.0,100.0,100.0,100.0,100.0)
Nitrobenzene	.51147	.48914	.47475	.46735	.47635	.48381	3.583	
Isophorone	.66083	.65400	.63912	.64285	.60014	.63939	3.689	
2-Nitrophenol	.21249	.20797	.20356	.21171	.23306	.21376	5.312	
2,4-Dimethylphenol	.40663	.39334	.38309	.39194	.40000	.39500	2.244	
bis(2-Chloroethoxy)methane	.39208	.38642	.37224	.38171	.36157	.37880	3.186	
2,4-Dichlorophenol	.34098	.34067	.32765	.32901	.32585	.33283	2.218	
1,2,4-Trichlorobenzene	.40778	.40079	.38644	.39351	.38360	.39442	2.537	
Naphthalene	1.03856	1.02204	.98088	.99975	.83611	.97547	8.295	
4-Chloroaniline	.39901	.43893	.44854	.45388	.44714	.43750	5.069	
Hexachlorobutadiene	.26692	.24686	.24110	.24197	.23294	.24596	5.180	
4-Chloro-3-methylphenol	.29505	.30111	.29564	.30001	.29306	.29697	1.156	
2-Methylnaphthalene	.71303	.74373	.70644	.71489	.70814	.71724	2.120	
Hexachlorocyclopentadiene	.31984	.31377	.30589	.31037	.33706	.31739	3.819	
2,4,6-Trichlorophenol	.41902	.42194	.39723	.39904	.42321	.41209	3.116	
2,4,5-Trichlorophenol	.40834	.43006	.41062	.41433	.40669	.41401	2.276	
2-Chloronaphthalene	1.14892	1.11747	1.04459	1.04661	1.05935	1.08363	4.329	
2-Fluorobiphenyl (S)	2.62422	2.80829	2.89294	2.80679	2.39290	2.70501	7.399	(Conc=100.0,100.0,100.0,100.0,100.0)
2-Nitroaniline	.26533	.29040	.30049	.31333	.33399	.30169	9.032	
Dimethylphthalate	1.29613	1.33681	1.23197	1.29129	1.20717	1.27269	4.113	
Acenaphthylene	1.41624	1.40492	1.34248	1.36635	1.23754	1.35365	5.272	
2,6-Dinitrotoluene	.25378	.27983	.27034	.28595	.29460	.27790	4.994	
Acenaphthene	1.07167	1.06717	1.00739	1.01443	.99370	1.03147	3.417	
3-Nitroaniline	.18284	.26301	.27599	.31002	.32412	.27261	20.745	
2,4-Dinitrophenol	.08977	.11743	.12160	.16413	.19039	.13646	29.353	
4-Nitrophenol	.12817	.21312	.21433	.24779	.25650	.21198	23.934	

RF - Response Factor (Subscript is amount in mg/l)

RF - Average Response Factor

RSD - Percent Relative Standard Deviation

[illegible]

[illegible] CLP [illegible] Standards

Calibration [illegible]

Check Standard Data File [illegible]

Injection Time [illegible]

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
Pyridine	1.57729	.[illegible]952	43.[illegible]	Average	
2-Fluorophenol (S)	.99685	1.[illegible]	13.18	Average	(Conc=200.00)
Phenol-d6 (S)	1.30276	1.[illegible]	30.[illegible]	Average	(Conc=200.00)
Phenol	1.25242	1.[illegible]	15.23	Average	
bis(2-Chloroethyl)ether	1.07319	1.34547	25.37	Average	
2-Chlorophenol	1.21433	1.38549	14.10	Average	
Benzyl alcohol	[illegible]	[illegible]	[illegible]	Average	
1,3-Dichlorobenzene	1.40242	1.46973	4.73	Average	
1,4-Dichlorobenzene	1.45098	1.63021	12.35	Average	
1,2-Dichlorobenzene	1.44878	1.62188	11.95	Average	
2-Methylphenol	1.01639	.94685	6.84	Average	
2,2'-oxybis(1-Chloropropane)	1.10456	.83863	24.13	Average	
4-Methylphenol	1.06877	1.16716	9.21	Average	
N-Nitroso-di-n-propylamine	.74162	1.08954	46.83	Average	
Hexachloroethane	.57189	.61679	7.85	Average	
Nitrobenzene-d5 (S)	.63041	.83342	32.20	Average	(Conc=100.00)
Nitrobenzene	.48381	.33283	31.21	Average	
Isophorone	.63939	.82972	29.77	Average	
2-Nitrophenol	.21376	.23369	9.32	Average	
2,4-Dimethylphenol	.39500	.43240	9.47	Average	
bis(2-Chloroethoxy)methane	.37880	.49171	29.81	Average	
2,4-Dichlorophenol	.33283	.34900	4.86	Average	
1,2,4-Trichlorobenzene	.39442	.41782	5.93	Average	
Naphthalene	.97547	1.10834	13.62	Average	
4-Chloroaniline	.43750	.45695	4.42	Average	
Hexachlorobutadiene	.24596	.26391	7.30	Average	
4-Chloro-3-methylphenol	.29697	.37222	25.34	Average	
2-Methylnaphthalene	.71724	.72159	.61	Average	
Hexachlorocyclopentadiene	.31739	.26478	16.58	Average	
2,4,6-Trichlorophenol	.41209	.44326	7.57	Average	
2,4,5-Trichlorophenol	.41401	.41470	.17	Average	
2-Chloronaphthalene	1.08363	1.16233	7.26	Average	
2-Fluorobiphenyl (S)	2.70501	2.85865	5.68	Average	(Conc=100.00)
2-Nitroaniline	.30169	.37328	23.73	Average	
Dimethylphthalate	1.27268	1.45106	14.02	Average	
Acenaphthylene	1.35365	1.53173	13.16	Average	
2,6-Dinitrotoluene	.27790	.33648	21.08	Average	
Acenaphthene	1.03147	1.13217	9.76	Average	
3-Nitroaniline	.27261	.30430	11.63	Average	
2,4-Dinitrophenol	.13666	.10288	24.72	Average	

RF - Response Factor from daily standard file at 50.00 ug/l

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

%Diff - % Difference from original average or curve

Calibration Check Report

Title: CLP BNA Standards
Calibrated: 940707 10:39

Check Standard Data File: >HW050
Injection Time: 940729 18:39

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
4-Nitrophenol	.21193	.15165	28.44	Average	
Dibenzofuran	1.79440	1.68170	6.29	Average	
2,4-Dinitrotoluene	.38416	.44690	16.33	Average	
Diethylphthalate	1.37679	1.51372	9.95	Average	
4-Chlorophenyl-phenylether	.65116	.65340	.37	Average	
Fluorene	1.25919	1.26392	.38	Average	
4-Nitroaniline	.19777	.22672	14.67	Average	
4,6-Dinitro-2-methylphenol	.19892	.24123	21.37	Average	
N-Nitrosodiphenylamine	.55455	.59572	7.37	Average	
2,4,6-Tribromophenol (S)	.14916	.15977	7.11	Average	(Conc=200.00)
4-Bromophenyl-phenylether	.31261	.28976	7.31	Average	
Hexachlorobenzene	.34357	.35232	2.55	Average	
Pentachlorophenol	.19812	.16605	16.19	Average	
Phenanthrene	1.34014	1.20825	9.84	Average	
Anthracene	1.23509	1.11915	9.39	Average	
Carbazole	2.27730	2.04023	10.41	Average	
Di-n-butylphthalate	.58659	.40227	31.42	Average	
Fluoranthene	1.23869	1.05456	14.88	Average	
Pyrene	1.62176	2.34972	44.89	Average	
Terphenyl-d14 (S)	2.50921	3.62984	44.66	Average	(Conc=100.00)
Butylbenzylphthalate	.74914	.91954	22.75	Average	
3,3'-Dichlorobenzidine	.77672	.80011	3.01	Average	
Benzo(a)anthracene	1.13140	1.20457	6.47	Average	
Chrysene	1.12364	1.20457	7.20	Average	
Bis(2-Ethylhexyl)phthalate	.88935	.87833	1.24	Average	
Di-n-octylphthalate	1.92527	3.00005	55.82	Average	
Benzo(b)fluoranthene	1.45702	2.20970	51.66	Average	
Benzo(k)fluoranthene	1.37746	2.11854	53.83	Average	
Benzo(a)pyrene	1.05749	1.49563	41.43	Average	
Indeno(1,2,3-cd)pyrene	.82906	.97174	17.21	Average	
Dibenz(a,h)anthracene	.68427	.90962	32.93	Average	
Benzo(g,h,i)perylene	.72719	.97503	34.08	Average	

RF - Response Factor from daily standard file at 50.00 ug/l

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

%Diff - % Difference from original average or curve

Operator ID: CHEMTEX
Output File: ^NW050::ME
Data File: ^NW050::D2
Name: 50 PPM BNA STD
Misc: CC CHECK 7/28/96

Quant Rev: 7
Quant Time: 960728 22:16
Injected at: 960728 18:39
Dilution Factor: 1.00000
Instrument ID: BNA
BTL# 6

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51
Last Qual Time: 960727 18:58

CC Std

	Compound	R.T.	Scan#	Area	Conc	Units	%
1)	*1,4-Dichlorobenzene-d4	7.87	635	38059	40.00	mg/l	97
2)	Pyridine	1.93	63	42808M	46.69	mg/l	
3)	2-Fluorophenol (S)	4.58	318	214691	183.11	mg/l	97
4)	Phenol-d6 (S)	7.64	613	323004	187.17	mg/l	89
5)	Phenol	7.66	615	70739	45.20	mg/l	96
6)	bis(2-Chloroethyl)ether	7.48	598	64009	44.59	mg/l	97
7)	2-Chlorophenol	7.46	596	65913	49.14	mg/l	96
8)	Benzyl alcohol	8.70	715	40262	48.31	mg/l	93
9)	1,3-Dichlorobenzene	7.72	621	69873	44.12	mg/l	96
10)	1,4-Dichlorobenzene	7.92	640	77555	45.36	mg/l	95
11)	1,2-Dichlorobenzene	8.43	689	77159	47.38	mg/l	95
12)	2-Methylphenol	9.28	771	45045	49.78	mg/l	99
13)	2,2'-oxybis(1-Chloropropane)	9.08	752	39868	43.55	mg/l	97
14)	4-Methylphenol	9.77	818	55526	48.00	mg/l	95
15)	N-Nitroso-di-n-propylamine	9.62	804	51805	46.94	mg/l	96
16)	Hexachloroethane	9.28	771	29343	47.14	mg/l	89
17)	*Naphthalene-d8	11.68	1002	139471	40.00	mg/l	90
18)	Nitrobenzene-d5 (S)	9.77	818	290395	94.13	mg/l	88
19)	Nitrobenzene	9.81	822	58025	28.42	mg/l	92
20)	Isophorone	10.55	893	144433	48.08	mg/l	89
21)	2-Nitrophenol	10.72	909	40739	50.24	mg/l	89
22)	2,4-Dimethylphenol	11.26	961	75384	47.21	mg/l	95
23)	bis(2-Chloroethoxy)methane	11.42	977	85724	47.07	mg/l	95
24)	2,4-Dichlorophenol	11.55	989	60844	50.62	mg/l	89
25)	1,2,4-Trichlorobenzene	11.60	994	72842	50.69	mg/l	97
26)	Naphthalene	11.74	1008	193226	49.02	mg/l	98
27)	4-Chloroaniline	12.22	1054	79646	50.37	mg/l	93
28)	Hexachlorobutadiene	12.40	1071	46009	52.32	mg/l	98
29)	4-Chloro-3-methylphenol	13.99	1224	64892	51.95	mg/l	90
30)	2-Methylnaphthalene	13.85	1211	125801	52.16	mg/l	91
31)	*Acenaphthene-d10	17.02	1516	92965	40.00	mg/l	92
32)	Hexachlorocyclopentadiene	14.57	1280	30769	52.00	mg/l	92
33)	2,4,6-Trichlorophenol	14.99	1321	51510	52.04	mg/l	96
34)	2,4,5-Trichlorophenol	15.15	1336	48191	52.41	mg/l	94
35)	2-Chloronaphthalene	15.33	1353	135070	50.68	mg/l	96
36)	2-Fluorobiphenyl (S)	15.24	1345	664386	95.65	mg/l	93
37)	2-Nitroaniline	15.95	1413	43378M	53.34	mg/l	
38)	Dimethylphthalate	16.75	1490	168622	52.04	mg/l	81
39)	Acenaphthylene	16.53	1469	177997	52.23	mg/l	93
40)	2,6-Dinitrotoluene	16.89	1503	39101	53.22	mg/l	92

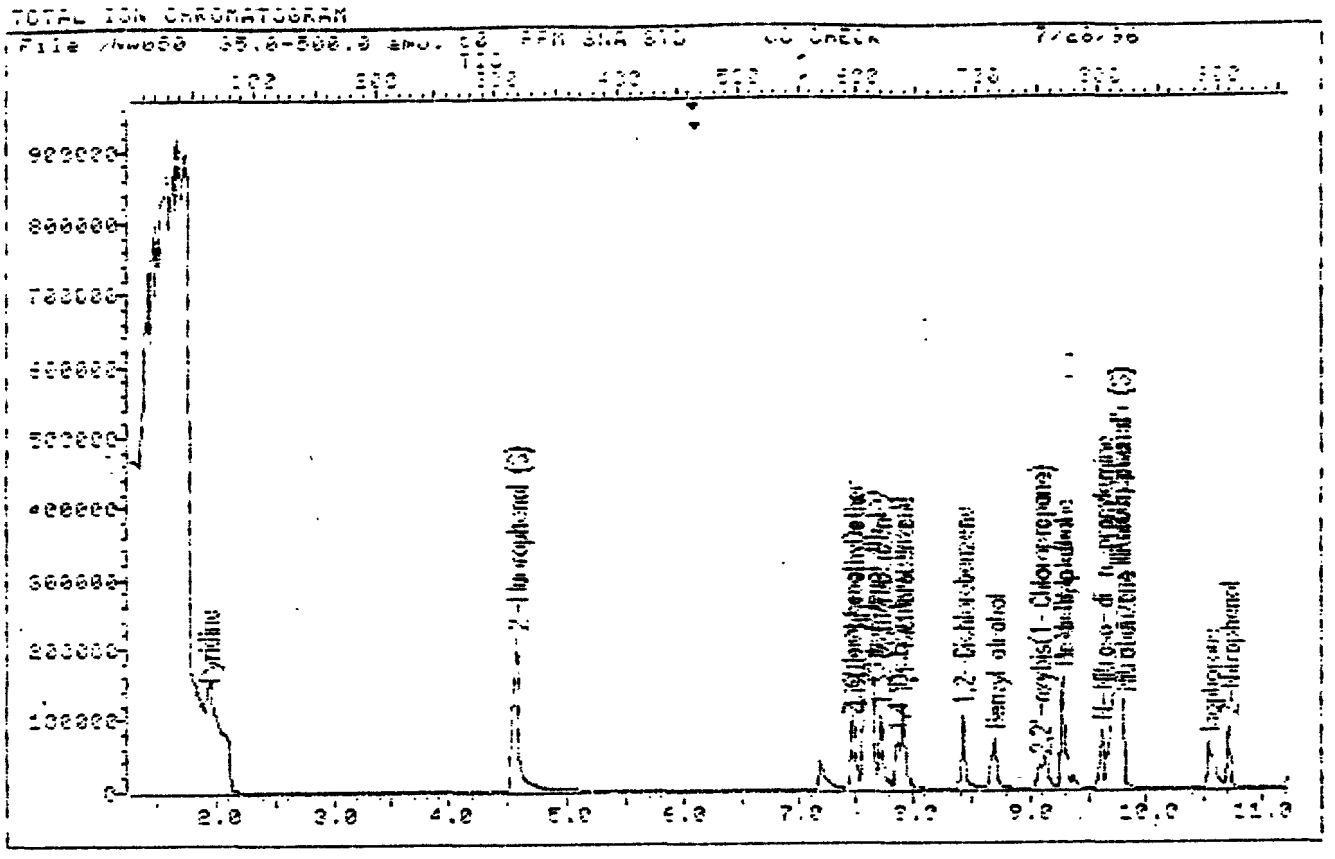
Operator ID: CHEMTEX Quant Rev.: 2 Quant Time: 960728 22:16
Output File: ^NW050::ME Injected at: 960728 18:39
Data File: >NW050::D2 Dilution Factor: 1.00000
Name: 50 PPM BNA STD Instrument ID: BNA
Misc: CC CHECK 7/28/96 BTL# 6

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:58

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Acenaphthene	17.13	1526	131565	51.32	mg/l	97
42)	3-Nitroaniline	17.26	1539	35362	60.96	mg/l	89
43)	2,4-Dinitrophenol	17.55	1567	11955	77.68	mg/l	80
44)	4-Nitrophenol	18.18	1628	17623	49.00	mg/l	89
45)	Dibenzofuran	17.62	1574	195424	51.64	mg/l	78
46)	2,4-Dinitrotoluene	18.03	1613	51932	59.36	mg/l	92
47)	Diethylphthalate	18.94	1701	175904	55.17	mg/l	90
48)	4-Chlorophenyl-phenylether	18.83	1690	75952	52.24	mg/l	86
49)	Fluorene	18.66	1674	146875	53.44	mg/l	91
50)	4-Nitroaniline	19.19	1725	26500M	92.07	mg/l	
51)	*Phenanthrene-d10	21.44	1941	129428	40.00	mg/l	95
52)	4,6-Dinitro-2-methylphenol	16.75	1490	39027M	47.95	mg/l	
53)	N-Nitrosodiphenylamine	19.32	1737	96379	51.56	mg/l	94
54)	2,4,6-Tribromophenol (S)	19.53	1757	103591	202.12	mg/l	90
55)	4-Bromophenyl-phenylether	20.26	1828	46879	50.78	mg/l	89
56)	Hexachlorobenzene	20.55	1856	57000	48.38	mg/l	97
57)	Pentachlorophenol	21.25	1923	26865	53.47	mg/l	96
58)	Phenanthrene	21.51	1948	193477	50.87	mg/l	99
59)	Anthracene	21.64	1961	181062	49.46	mg/l	97
60)	Carbazole	22.35	2029	330279	50.14	mg/l	94
61)	Di-n-butylphthalate	23.34	2606	65081	52.76	mg/l	94
62)	Fluoranthene	25.09	2293	170612	51.32	mg/l	90
63)	*Chrysene-d12	29.49	2716	56631	40.00	mg/l	99
64)	Pyrene	25.73	2354	166334	43.94	mg/l	98
65)	Terphenyl-d14 (S)	26.60	2438	513903	87.70	mg/l	86
66)	Butylbenzylphthalate	28.34	2606	65193	46.56	mg/l	93
67)	3,3'-Dichlorobenzidine	29.49	2716	56639M	50.00	mg/l	
68)	Benzo(a)anthracene	29.56	2723	85270	48.51	mg/l	95
69)	Chrysene	29.56	2723	85270	48.51	mg/l	96
70)	Bis(2-Ethylhexyl)phthalate	30.31	2795	62176	47.91	mg/l	90
71)	*Perylene-d12	33.48	3101	19749	40.00	mg/l	82
72)	Di-n-octylphthalate	32.08	2966	70310	48.46	mg/l	86
73)	Benzo(b)fluoranthene	32.51	3007	51787	46.99	mg/l	70
74)	Benzo(k)fluoranthene	32.58	3014	49660	44.30	mg/l	92
75)	Benzo(a)pyrene	33.33	3086	35052	47.71	mg/l	78
76)	Indeno(1,2,3-cd)pyrene	36.03	3346	22774	49.28	mg/l	80
77)	Dibenz(a,h)anthracene	36.11	3354	21318	50.78	mg/l	97
78)	Benzo(g,h,i)perylene	36.57	3398	22351	45.21	mg/l	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

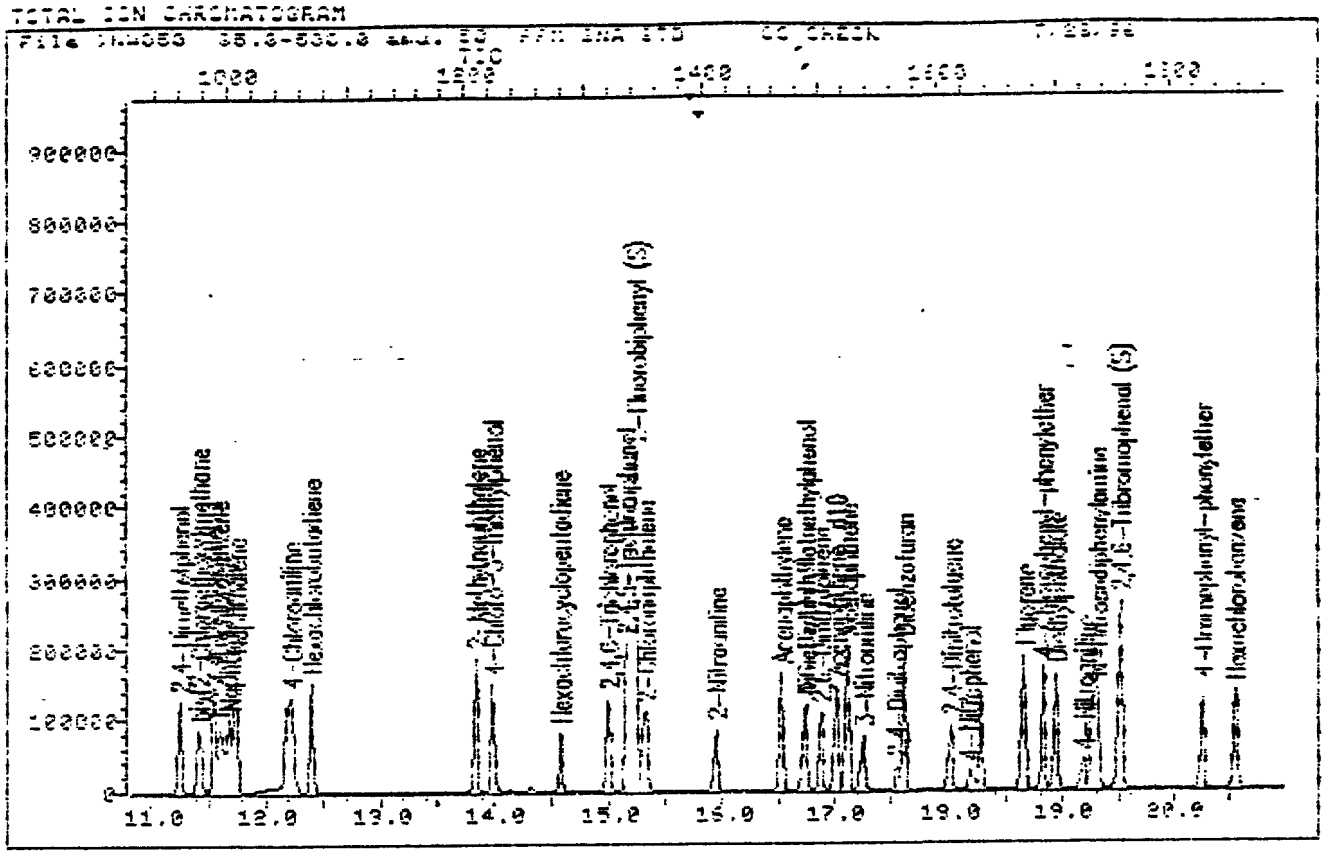


Data File: >NW050::D2 Quant Output File: ^NW050::ME
Name: 50 PPM BNA STD Instrument ID: BNA
Misc: CC CHECK 7/23/96 BTL# 6

Id File: ID_NKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960728 22:16
Injected at: 960728 18:39

Page 1 of 5

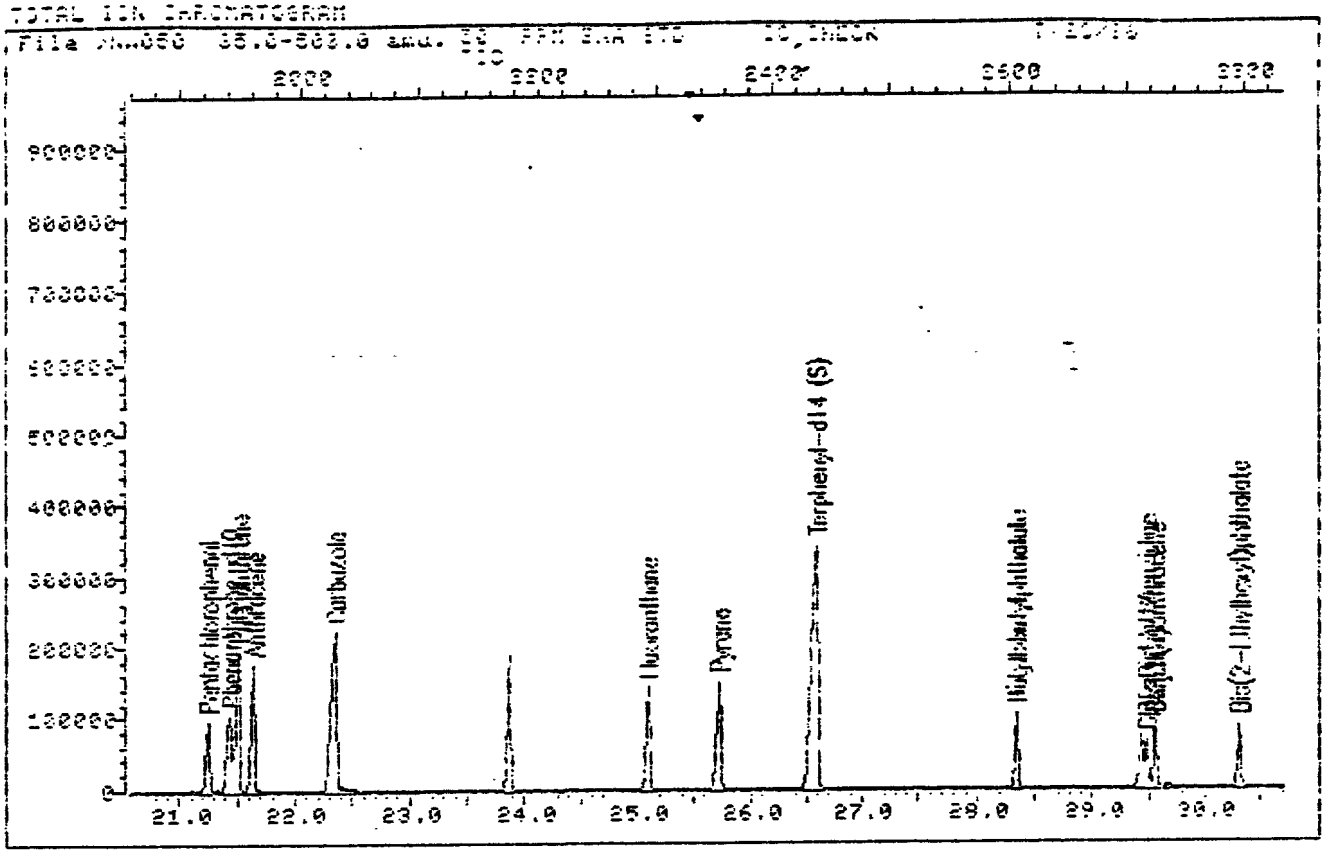


Date File: >NW050::D2 Quant Output File: ^NW050::ME
Name: 50 PPM BNA STD Instrument ID: BNA
Misc: CC CHECK 7/23/96 STL# 6

Id File: ID_MKS::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960727 19:58

Operator ID: CHEMTEX
Quant Time : 960723 22:16
Injected at: 960723 18:39

TOTAL ION CHROMATOGRAM

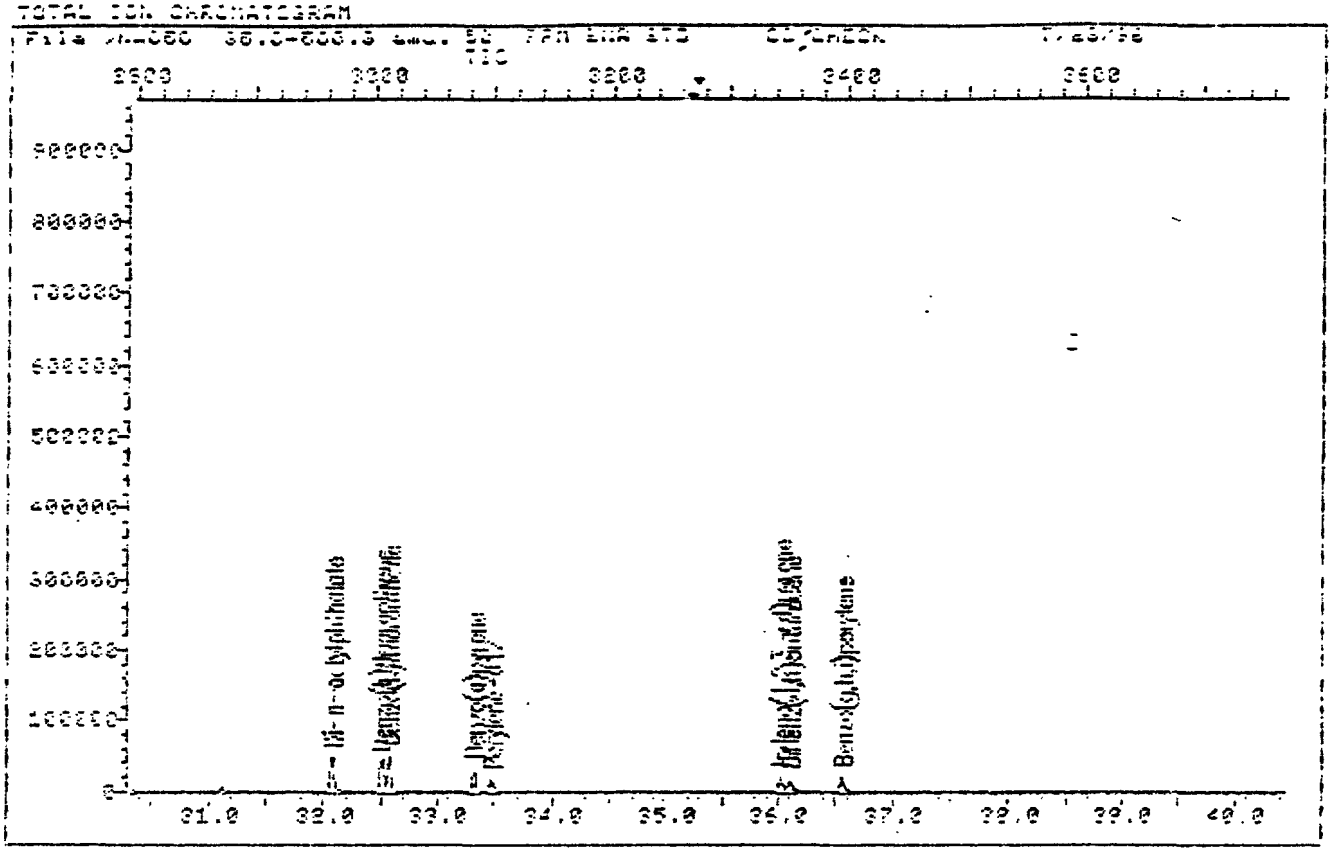


Data File: >NW050::D2 Quant Output File: ^NW050::ME
Name: 50 PPM BNA STD Instrument ID: BNA
Misc: CC CHECK 7/28/96 BTL# 6

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 12:58

Operator ID: CHEMTEX
Quant Time : 960728 22:14
Injected at: 960728 18:39

Page 3 of 5

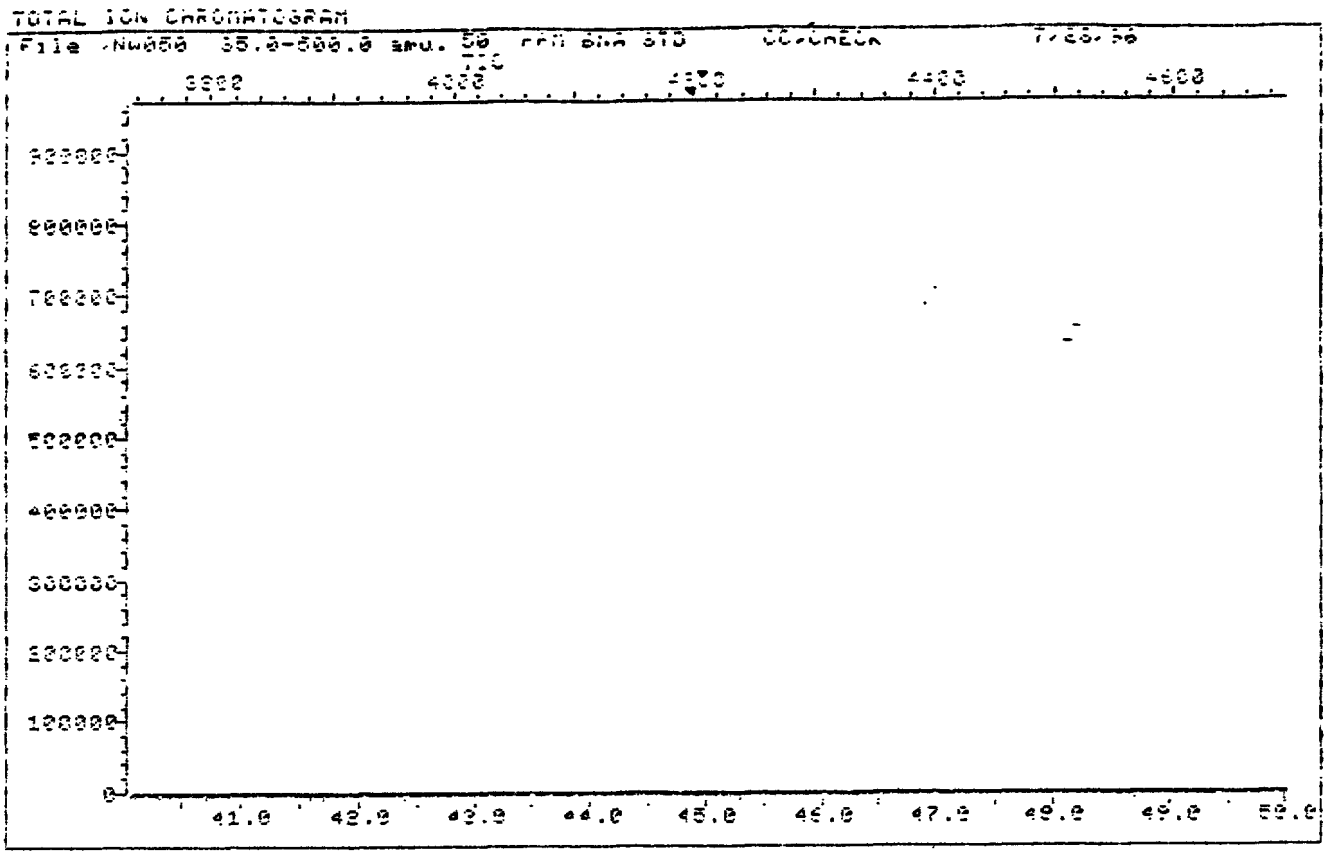


Data File: >NW050::D2 Quant Output File: ^NW050::ME
Name: 50 PPM BNA STD Instrument ID: BNA
Misc: CC CHECK 7/28/96 STL# 6

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960728 22:11
Injected at: 960728 18:07

Page 4 of 5



Data File: >NW050::D2 Quant Output File: ^NW050::ME
Name: 50 PPM BNA STD Instrument ID: BNA
Misc: CC CHECK 7/23/96 BTL# 6

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual: T[redacted] 960727 13:58

Operator ID: CHEMTEX
Quant Time : 960728 22:16
Injected at: 960728 18:70

Page 5 of 5

QUANT REPORT

Operator ID: CHEMTEX
Output File: ^PW728::ME
Data File: >PW728::D2
Name: METHO ~~SPIKE~~ BLANK
Misc: /28/96

Quant Rev: 7
Quant Time: 960729 08:38
Injected at: 960728 23:45
Dilution Factor: 1.00000
Instrument ID: BNA
BTL#11

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51
Last Qcal Time: 960727 15:58

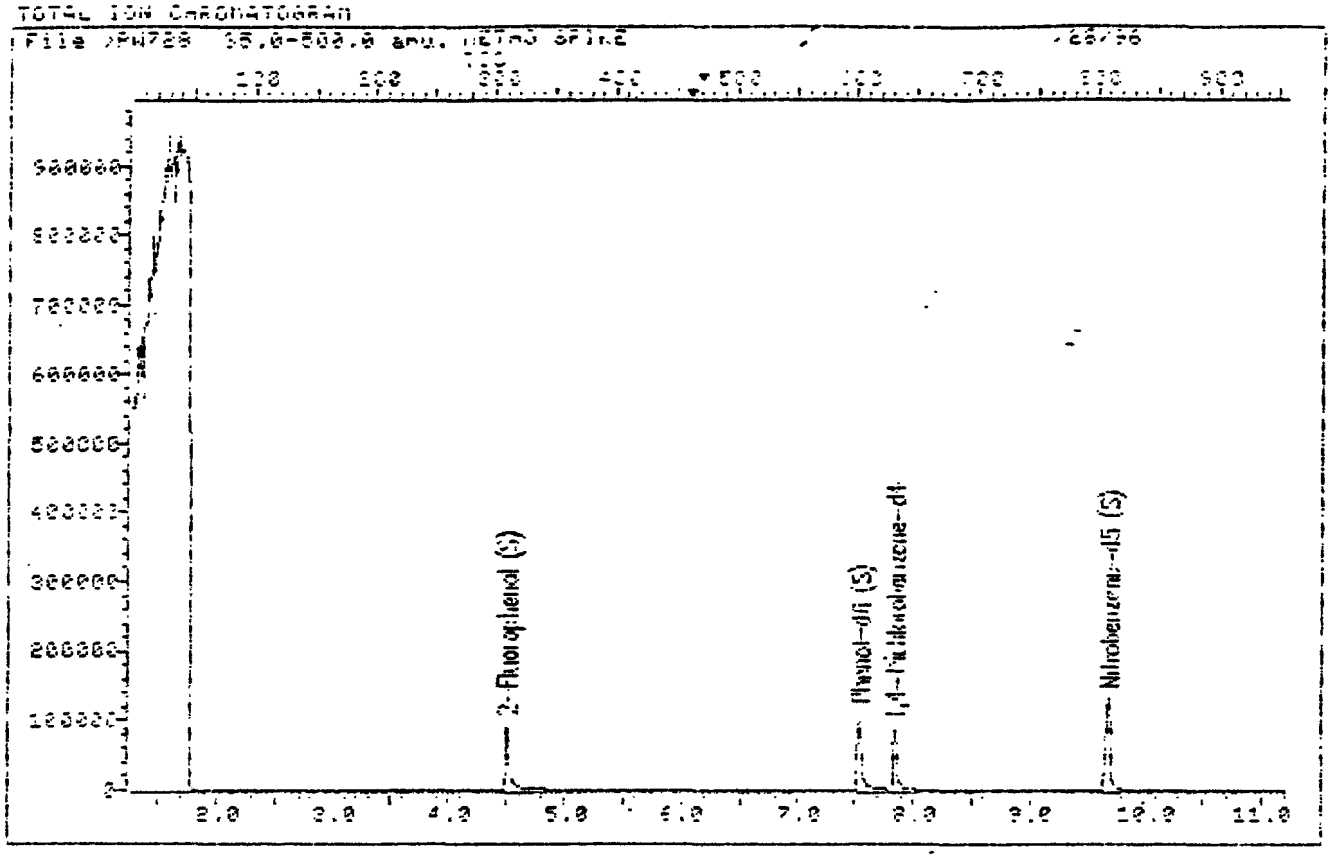
2

	Compound	R.T.	Scan#	Area	Conc	Units	Q
1)	*1,4-Dichlorobenzene-d4	7.85	633	45325	40.00	mg/l	97
3)	2-Fluorophenol (S)	4.50	311	77088	55.21	mg/l	97
4)	Phenol-d6 (S)	7.54	604	125069	60.86	mg/l	89
17)	*Naphthalene-d8	11.66	1000	154790	40.00	mg/l	92
18)	Nitrobenzene-d5 (S)	9.69	811	116494	34.00	mg/l	86
31)	*Acenaphthene-d10	17.01	1516	96898	40.00	mg/l	94
36)	2-Fluorobiphenyl (S)	15.18	1339	301796	41.68	mg/l	93
51)	*Phenanthrene-d10	21.42	1940	119685	40.00	mg/l	92
54)	2,4,6-Tribromophenol (S)	19.47	1752	26632	56.50	mg/l	88
63)	*Chrysene-d12	29.46	2715	34358	40.00	mg/l	98
65)	Terphenyl-d14 (S)	26.55	2434	163635	45.99	mg/l	88
71)	*Perylene-d12	33.48	3102	9986	40.00	mg/l	80

* Compound is ISTD

Method Blank
7/28/96

TOTAL ION CHROMATOGRAM



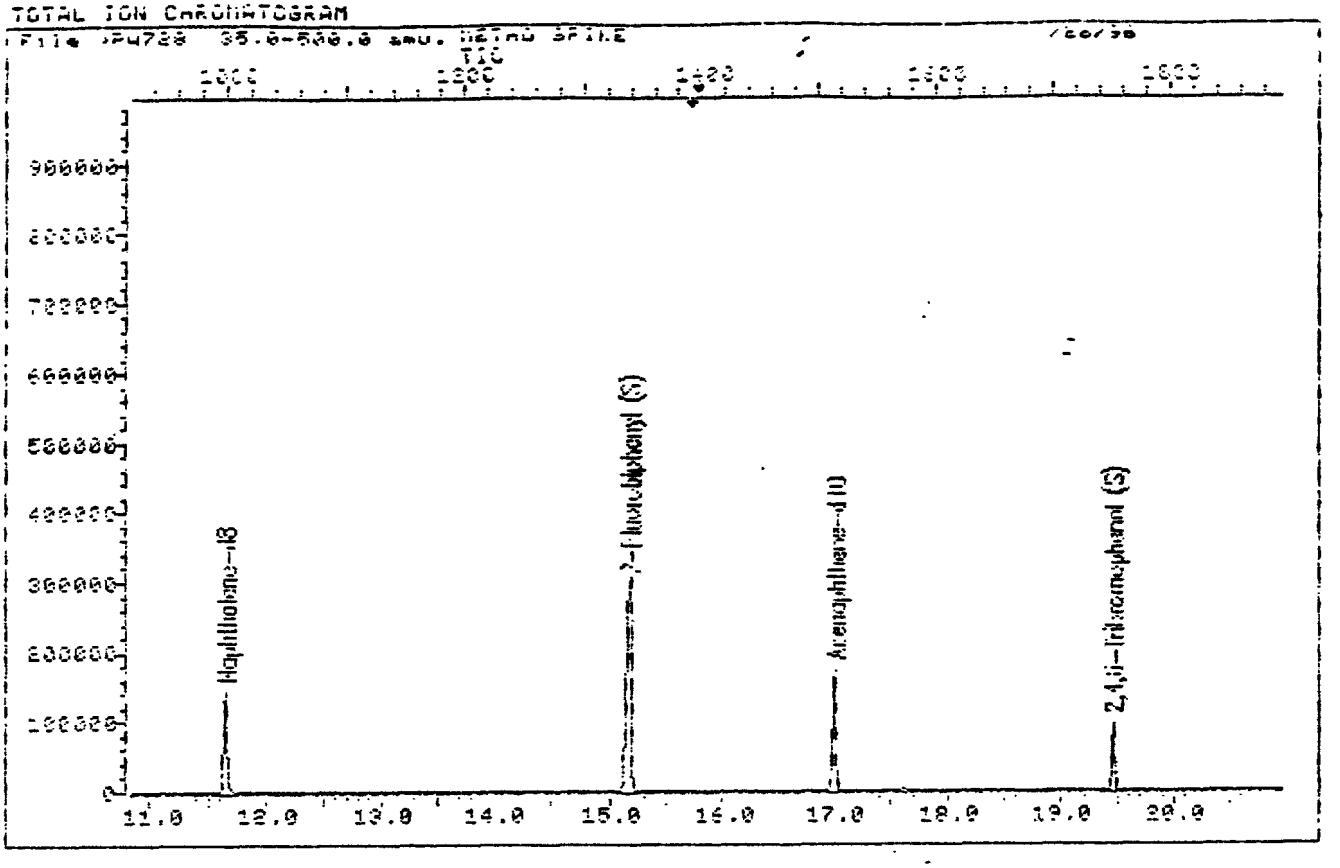
Data File: >PW728::D2 Quant Output File: ^PW728::ME
Instrument ID: BNA
BTL#11

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual [illegible] 960707 18:58

Operator ID: CHEMTEX
Quant Time : 960729 08:38
Injected at: 960728 23:45

Page 1 of 3

TOTAL ION CHROMATOGRAM



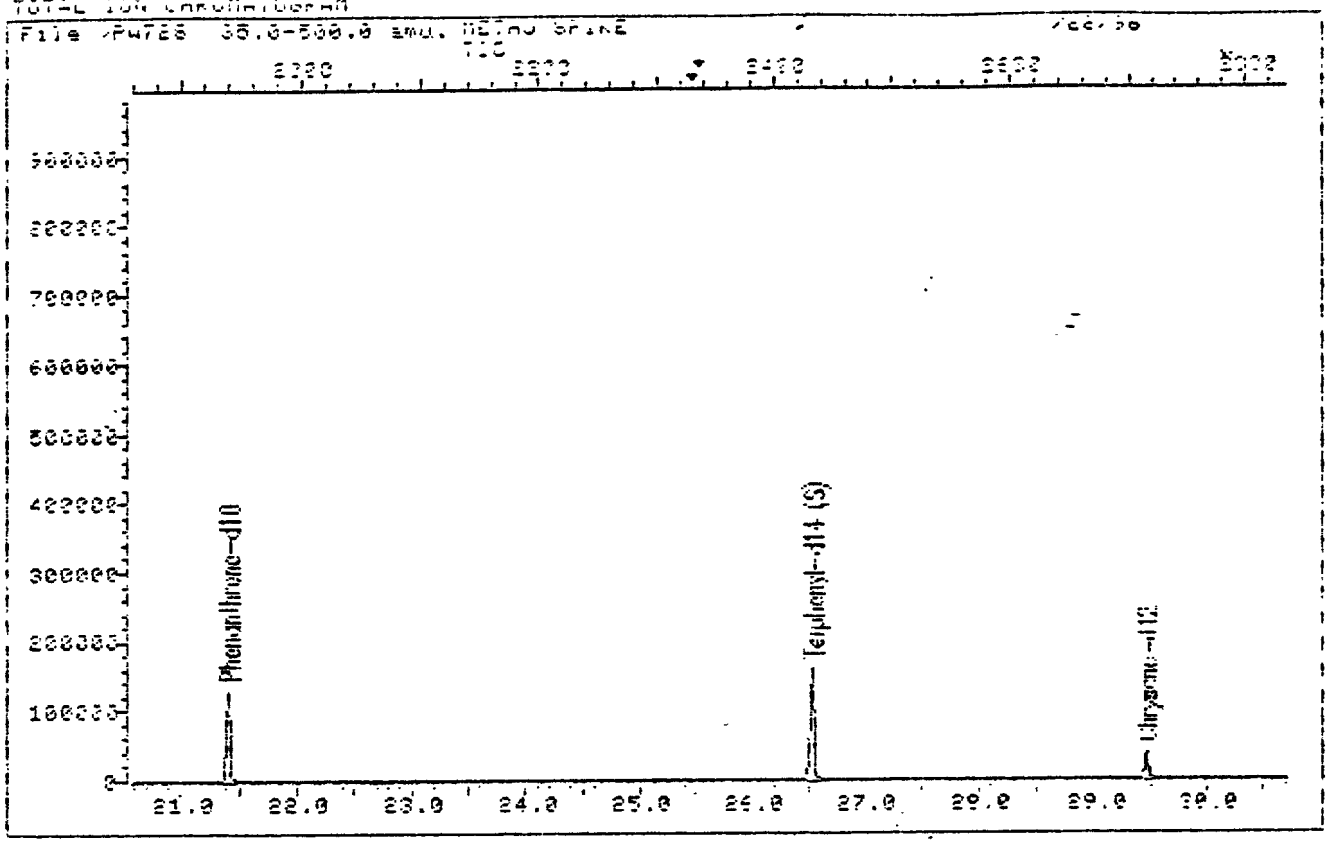
Data File: >PW728::02 Quant Output File: ^PW728::ME
Method: METHO SPIKE Instrument ID: BNA
Mass: /28/96 BTL#11

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Tune: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960729 08:33
Injected at: 960728 23:45

Page 2 of 5

TOTAL ION CHROMATOGRAM



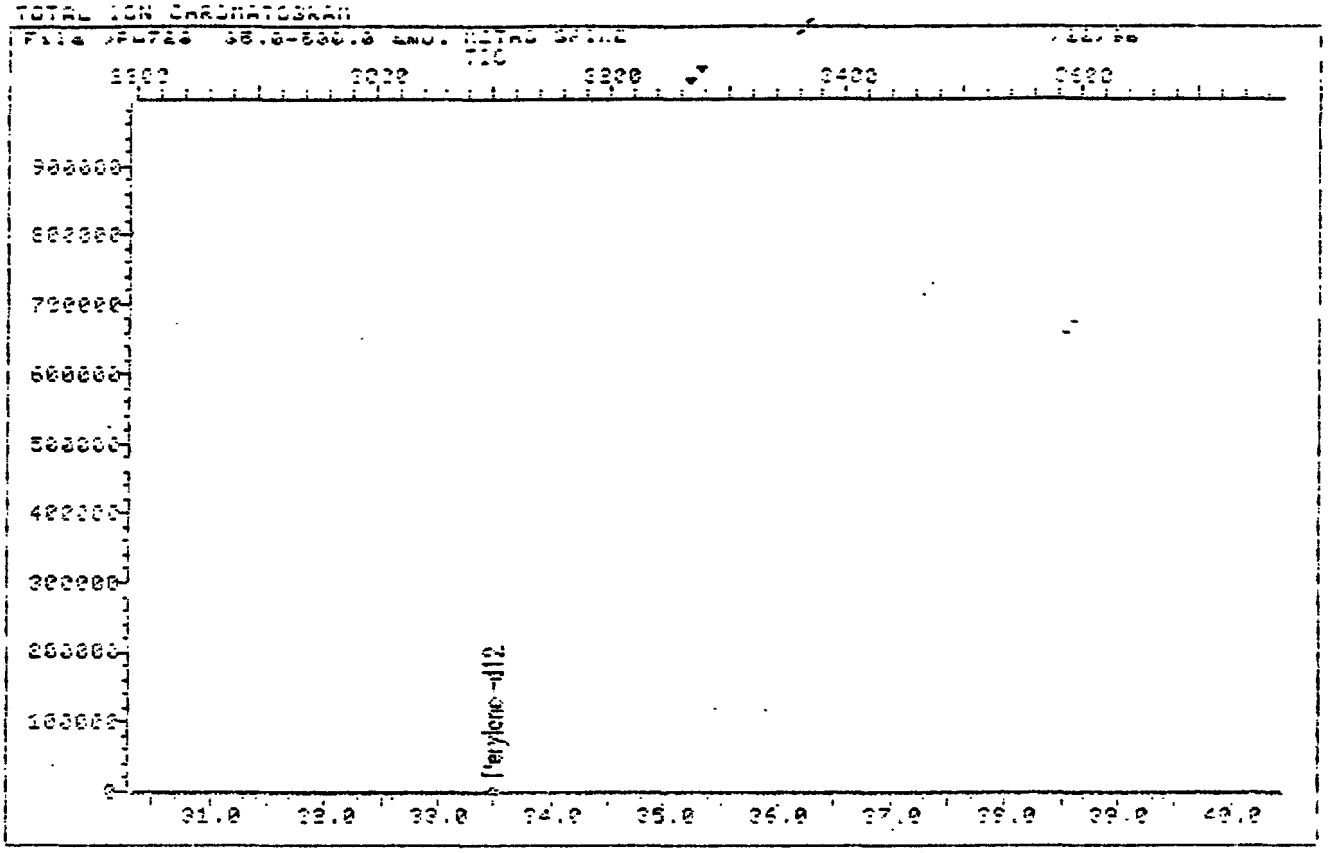
Data File: >PW728::D2 Quant Output File: ^PW728::ME
Name: METHO SPIKE Instrument ID: 5MA
Misc: /28/96 BTL#11

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual [illegible] 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960729 08:38
Injected at: 960729 23:45

Page 3 of 5

TOTAL ION CHROMATOGRAM

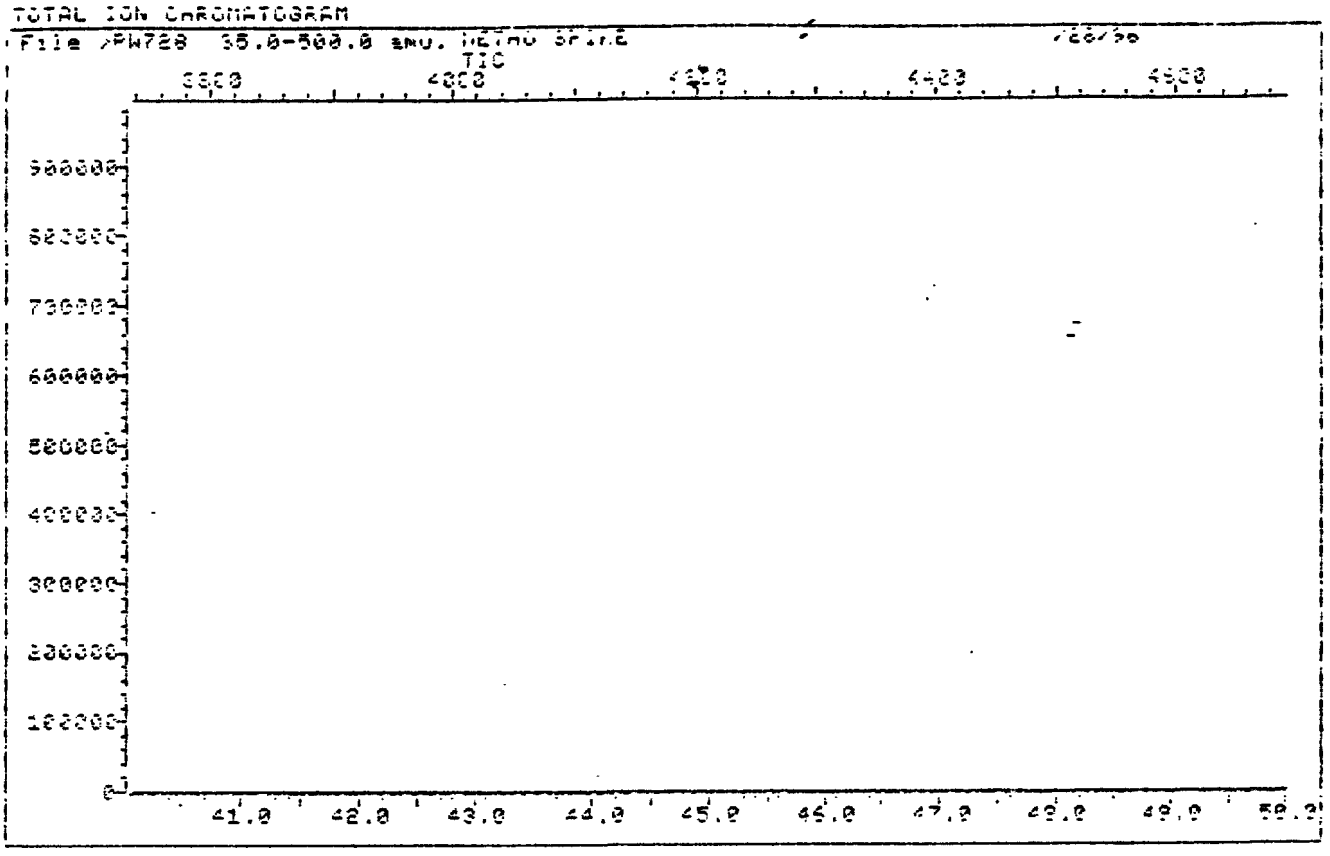


Data File: >PW728::D2 Quant Output File: ^P4728::ME
Name: METHO SPIKE Instrument ID: BNA
Misc: /28/96 BTL#11

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:56

Operator ID: CHEMTEX
Quant Time : 960729 08:58
Injected at: 960728 23:40

TOTAL ION CHROMATOGRAM



Data File: >PW728::D2 Quant Output File: ^PW728::ME
Name: METHO SPIKE Instrument ID: DMS
Misc: /28/96 STL#11

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION SMA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:53

Operator ID: CHEMTEX
Quant Time : 960729 03:38
Injected at: 960728 23:45

Page 5 of 5

QUANT REPORT

Operator ID: CHEMTEX
Output File: ^P0728::ME
Data File: >P0728::D2
Name: METHOD SPIKE
Misc: 7/28/96

Quant Rev: 7
Quant Time: 960728 22:36
Injected at: 960728 20:41
Dilution Factor: 1.00000
Instrument ID: BNA
BTL# 8

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51
Last Qual Time: 960727 13:58

	Compound	R.T.	Scan#	Area	Conc	Units	Q
1)	*1,4-Dichlorobenzene-d4	7.26	634	23654	40.00	mg/l	94
2)	Pyridine	1.90	60	16690	29.29	mg/l	92
3)	2-Fluorophenol (S)	4.50	711	71471	98.08	mg/l	95
4)	Phenol-d6 (S)	7.56	605	98336	91.69	mg/l	89
5)	Phenol	7.59	608	41709	42.88	mg/l	84
6)	bis(2-Chloroethyl)ether	7.46	596	30732	34.44	mg/l	88
7)	2-Chlorophenol	7.44	594	33532	40.22	mg/l	97
8)	Benzyl alcohol	8.64	709	17137	33.09	mg/l	95
9)	1,3-Dichlorobenzene	7.71	620	34250	34.90	mg/l	91
10)	1,4-Dichlorobenzene	7.90	638	37288	35.09	mg/l	95
11)	1,2-Dichlorobenzene	8.42	688	37535	37.47	mg/l	94
12)	2-Methylphenol	9.24	767	22772	40.49	mg/l	97
13)	2,2'-oxybis(1-Chloropropane)	9.06	750	19267	33.87	mg/l	92
14)	4-Methylphenol	9.73	814	35374	49.21	mg/l	96
15)	N-Nitroso-di-n-propylamine	9.54	796	23842	34.76	mg/l	97
16)	Hexachloroethane	9.27	770	14121	36.50	mg/l	90
17)	*Naphthalene-d8	11.66	1000	107614	40.00	mg/l	89
18)	Nitrobenzene-d5 (S)	9.69	811	91[illegible]	38.38	mg/l	83
19)	Nitrobenzene	9.74	815	51609	32.76	mg/l	93
20)	Isophorone	10.49	883	75657	32.59	mg/l	90
21)	2-Nitrophenol	10.69	907	23413	37.42	mg/l	91
22)	2,4-Dimethylphenol	11.22	953	47334	38.42	mg/l	93
23)	bis(2-Chloroethoxy)methane	11.40	975	45339	32.26	mg/l	87
24)	2,4-Dichlorophenol	11.52	987	35164	37.91	mg/l	92
25)	1,2,4-Trichlorobenzene	11.59	993	38594	34.81	mg/l	95
26)	Naphthalene	11.71	1003	100699	33.11	mg/l	99
27)	4-Chloroaniline	12.19	1051	39700	32.54	mg/l	92
28)	Hexachlorobutadiene	12.38	1070	24581	36.23	mg/l	99
29)	4-Chloro-3-methylphenol	13.96	1222	36503	37.88	mg/l	86
30)	2-Methylnaphthalene	13.83	1209	66210	35.58	mg/l	90
31)	*Acenaphthene-d10	17.01	1515	66392	40.00	mg/l	96
32)	Hexachlorocyclopentadiene	14.57	1280	13105	31.01	mg/l	89
33)	2,4,6-Trichlorophenol	14.96	1319	29350	40.11	mg/l	91
34)	2,4,5-Trichlorophenol	15.12	1333	25920	39.48	mg/l	96
35)	2-Chloronaphthalene	15.28	1349	67586	35.09	mg/l	97
36)	2-Fluorobiphenyl (S)	15.18	1339	256469	47.67	mg/l	92
38)	Dimethylphthalate	16.71	1486	81937	35.43	mg/l	91
39)	Acenaphthylene	16.51	1467	87069	35.77	mg/l	92
40)	2,6-Dinitrotoluene	16.85	1500	17559	33.47	mg/l	96
41)	Acenaphthene	17.10	1524	66082	36.10	mg/l	93

Method Spike
7/28/96

Operator ID: CHEMTEX Quant Rev: 7 Quant Time: 960728 22:56
Output File: ^P0728::ME Injected at: 960728 20:41
Data File: >P0728::D2 Dilution Factor: 1.00000
Name: METHOD SPIKE Instrument ID: BNA
Misc: 7/28/96 BTL# 9

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960727 18:58

	Compound	R.T.	Scan#	Area	Conc	Units	%
42)	3-Nitroaniline	17.21	1535	12540	30.27	mg/l	93
43)	2,4-Dinitrophenol	17.52	1564	2539M	23.10	mg/l	
44)	4-Nitrophenol	18.26	1636	7341M	28.58	mg/l	
45)	Dibenzofuran	17.60	1572	93637	34.64	mg/l	84
46)	2,4-Dinitrotoluene	17.98	1609	21277	34.05	mg/l	89
47)	Diethylphthalate	18.89	1696	85467	37.54	mg/l	89
48)	4-Chlorophenyl-phenylether	18.81	1689	36995	35.63	mg/l	86
49)	Fluorene	18.64	1672	71191	36.27	mg/l	92
51)	*Phenanthrene-d10	21.41	1939	84536	40.00	mg/l	96
52)	4,6-Dinitro-2-methylphenol	16.71	1426	18376M	34.57	mg/l	
53)	N-Nitrosodiphenylamine	19.27	1733	42741	35.01	mg/l	93
54)	2,4,6-Tribromophenol (S)	19.48	1753	31246	93.52	mg/l	95
55)	4-Bromophenyl-phenylether	20.25	1827	21362	35.43	mg/l	92
56)	Hexachlorobenzene	20.53	1854	26480	34.41	mg/l	88
57)	Pentachlorophenol	21.21	1920	11510	35.08	mg/l	95
58)	Phenanthrene	21.47	1945	89078	35.49	mg/l	97
59)	Anthracene	21.61	1958	83048	34.74	mg/l	99
60)	Carbazole	22.29	2024	56076	13.03	mg/l	98
61)	Di-n-butylphthalate	28.33	2605	26481	32.87	mg/l	96
62)	Fluoranthene	25.08	2292	74945	34.52	mg/l	95
63)	*Chrysene-d12	29.46	2714	32616	40.00	mg/l	98
64)	Pyrene	25.70	2352	74996	34.40	mg/l	98
65)	Terphenyl-d14 (S)	26.53	2432	147575	43.73	mg/l	97
66)	Butylbenzylphthalate	29.33	2605	26484	32.89	mg/l	90
68)	Benzo(a)anthracene	29.53	2721	34280	33.86	mg/l	96
69)	Chrysene	29.53	2721	34280	33.86	mg/l	93
70)	Bis(2-Ethylhexyl)phthalate	30.50	2795	24347	32.57	mg/l	90
71)	*Perylene-d12	33.48	3101	10969M	40.00	mg/l	
73)	Benzo(b)fluoranthene	32.50	3007	19294	29.92	mg/l	95
74)	Benzo(k)fluoranthene	32.56	3013	21387	32.61	mg/l	92
75)	Benzo(a)pyrene	33.31	3085	12717	29.58	mg/l	95

* Compound is ISTD

Operator ID: CHEMTEX
Output File: ^OS611::ME
Data File: >OS611::D2
Name: O H M
Misc: C # P6070611 7/22/96

Quant Rev: 7
Quant Time: 960728 22:53
Injected at: 960723 21:42
Dilution Factor: 1.00000
Instrument ID: BNA
BTL# 9

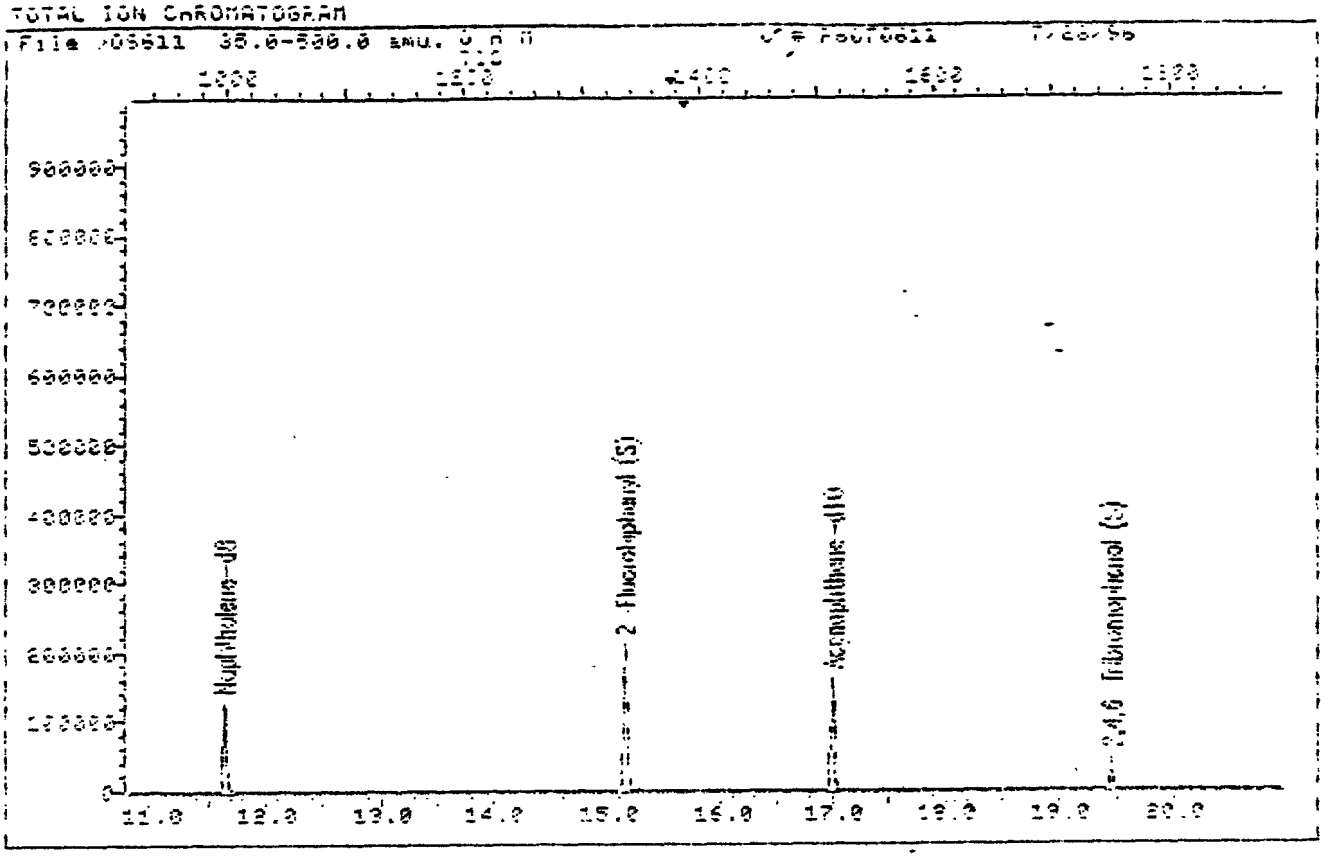
ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51
Last Qual Time: 960727 18:58

P6070611

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.54	633	79044	40.00	mg/l	97
3)	2-Fluorophenol (S)	4.49	310	36834	30.62	mg/l	97
4)	Phenol-d6 (S)	7.52	632	54874	32.13	mg/l	99
17)	*Naphthalene-d8	11.64	999	138797	40.00	mg/l	91
18)	Nitrobenzene-d5 (S)	9.67	809	61967	20.17	mg/l	85
31)	*Acenaphthene-d10	17.00	1515	97229	40.00	mg/l	99
36)	2-Fluorobiphenyl (S)	15.15	1337	176147	27.63	mg/l	92
51)	*Phenanthrene-d10	21.41	1939	108846	40.00	mg/l	95
54)	2,4,6-Tribromophenol (S)	19.45	1751	13732	32.07	mg/l	86
63)	*Chrysene-d12	29.46	2714	31354	40.00	mg/l	94
67)	Terphenyl-d14 (S)	26.52	2431	97542	30.07	mg/l	86
71)	*Perylene-d12	33.48	3101	9307	40.00	mg/l	80

[illegible]

TOTAL ION CHROMATOGRAM



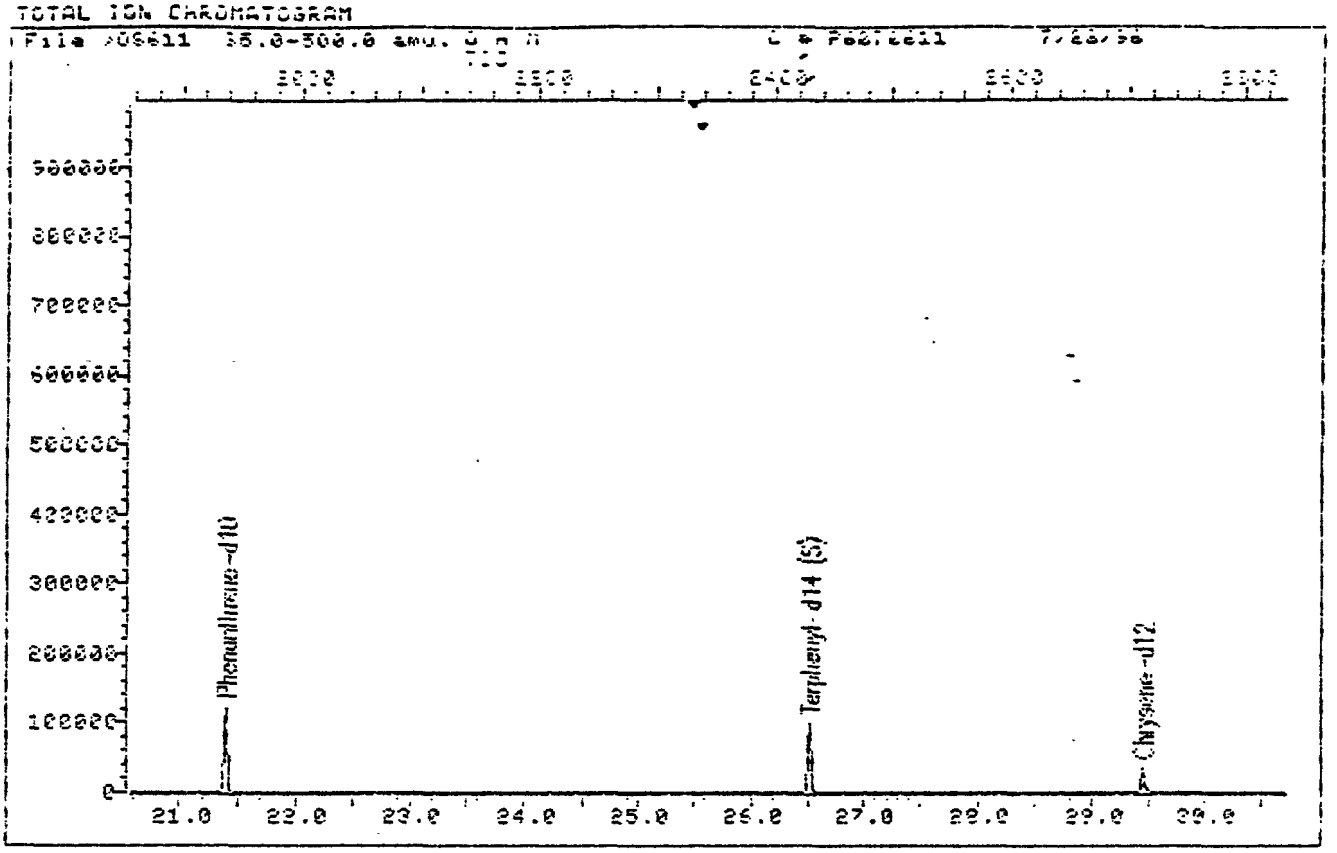
Data File: >09611::D2 Quant Output File: ^09611::ME
Name: O H M Instrument ID: BNA
Misc: C # P6070611 7/28/96 BTL# 9

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:31 Last Qual Time: 960727 18:50

Operator ID: CHEMTEX
Quant Time : 960729 22:39
Injected at: 960729 21:42

Page 2 of 5

TOTAL ION CHROMATOGRAM

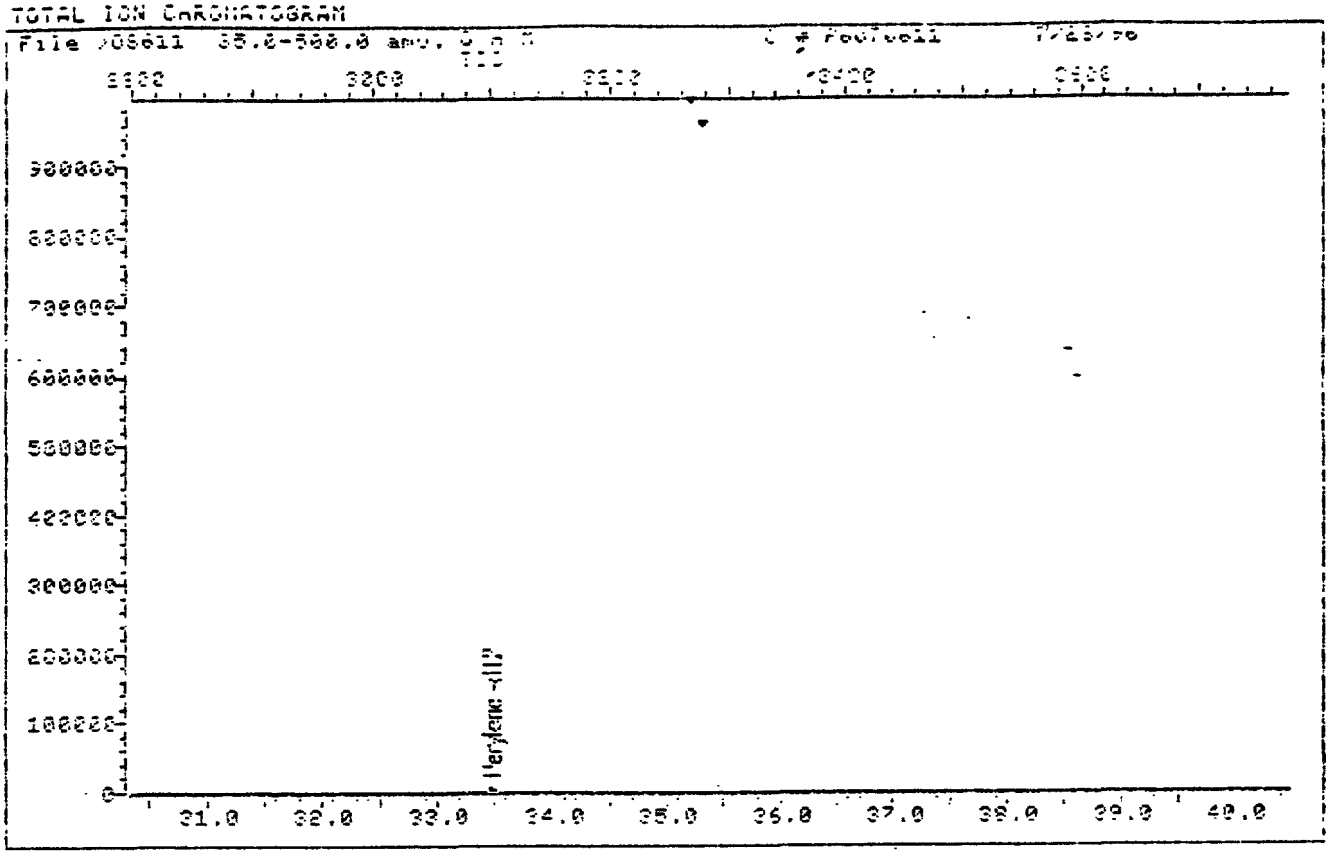


Data File: >OS611::D2 Quant Output File: ^OC611::ME
Name: O H M Instrument ID: BNA
Misc: C # P6070611 7/28/96 BTL# 9

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:53

Operator ID: CHEMTEX
Quant Time : 960728 22:38
Injected at: 960728 21:42

TOTAL ION CHROMATOGRAM



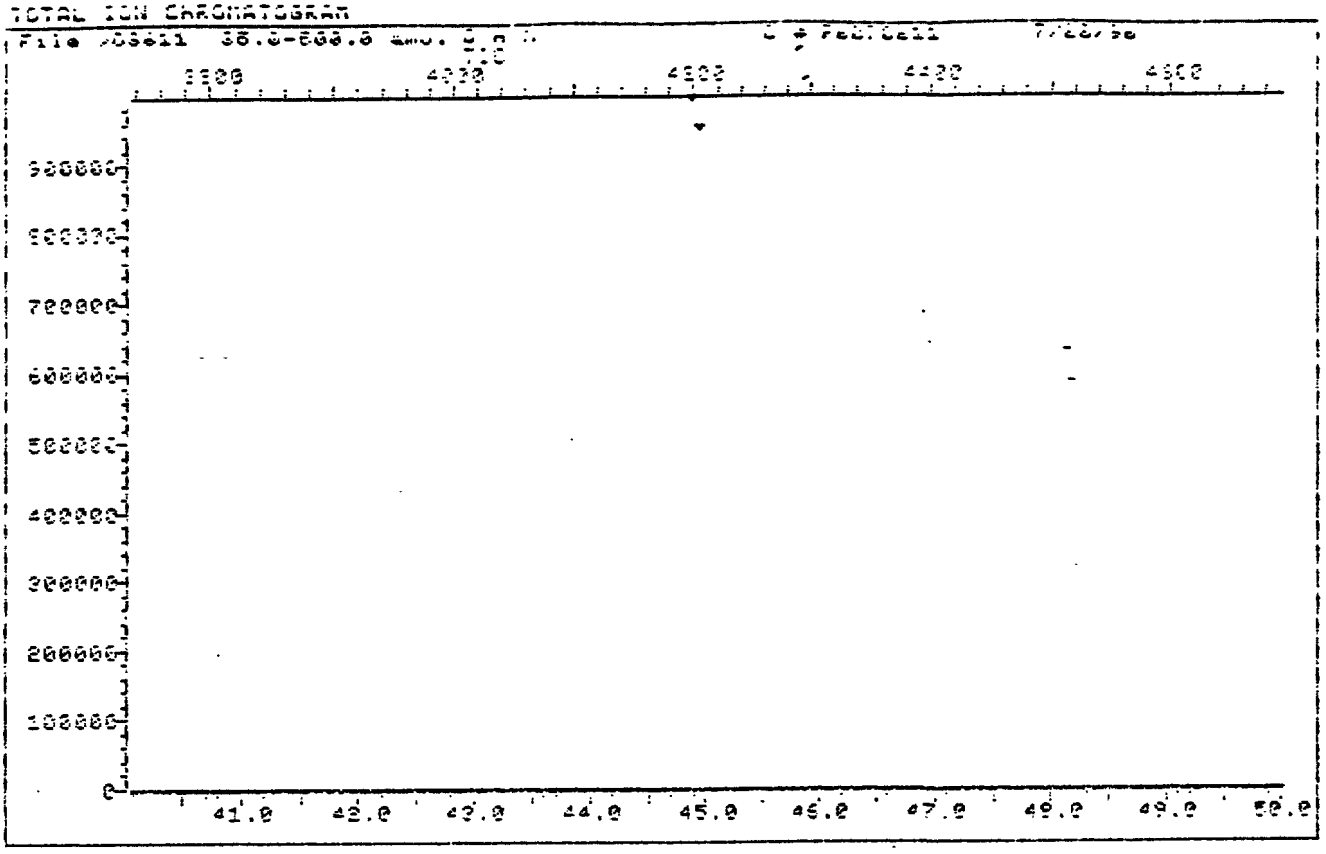
Data File: >OS611::D2 Quant Output File: ^OS611::ME
Name: C H M Instrument ID: BNP
Misc: C # P6070611 7/28/96 BTL# 9

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960727 10:51 Last Qual Time: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960728 22:33
Injected at: 960728 21:42

Page 4 of 5

TOTAL ION CHROMATOGRAM



Data File: >09611::D2 Quant Output File: ^09611::ME
Name: D H M Instrument ID: BNA
Misc: C # P6070611 7/28/96 BTL# 9

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960728 22:78
Injected at: 960728 21:42

Page 5 of 5

Operator ID: CHEMTEX Quant Rev: 7 Quant Time: 960729 08:40
Output File: ^C3612::ME Injected at: 960728 22:44
Data File: >C3612::C2 Dilution Factor: 1.00000
Name: O H M Instrument ID: BNA
Misc: C # P6070612 7/29/96 BTL#10

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Date: 960727 18:58

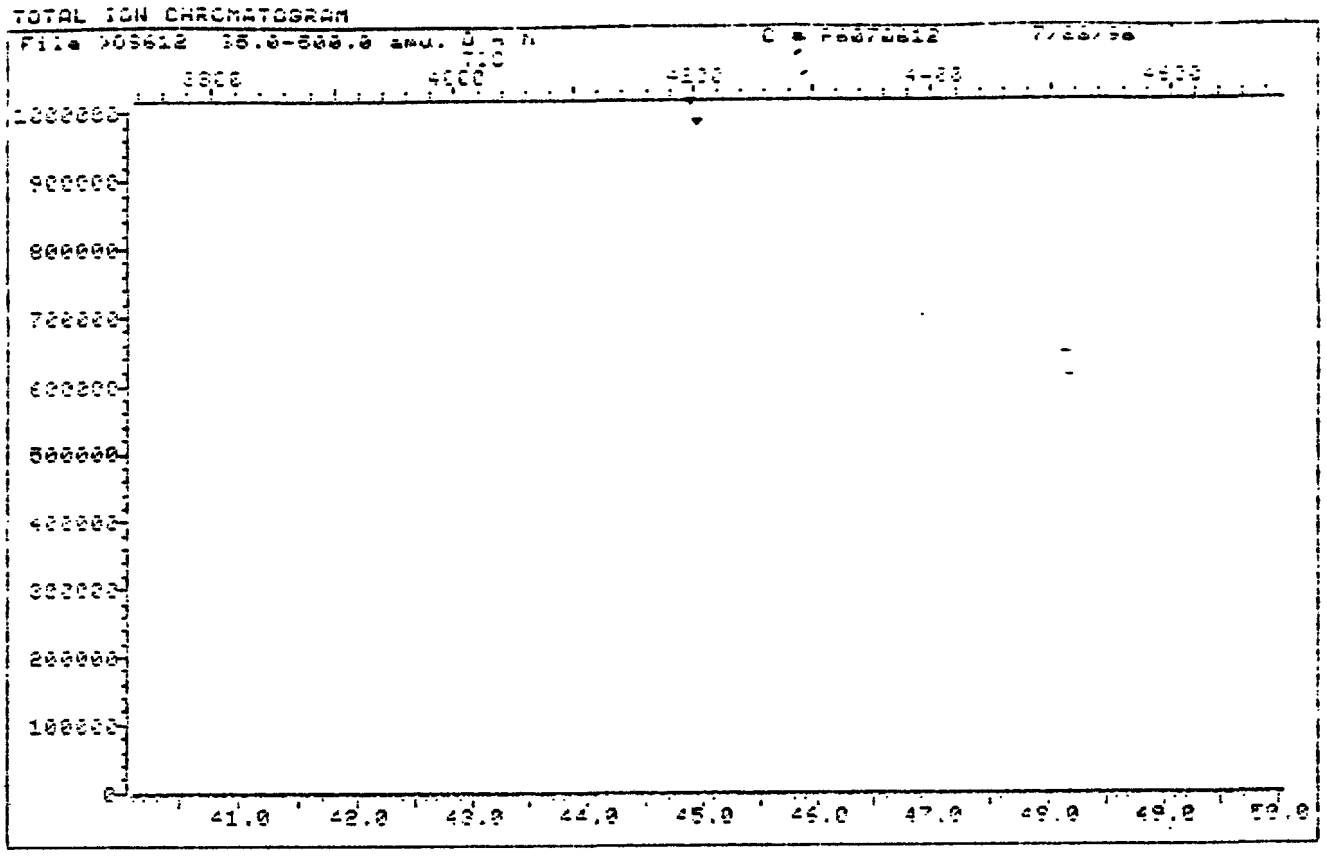
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.84	631	37164	40.00	mg/l	97
3)	2-Fluorophenol (S)	4.49	308	47322	41.33	mg/l	95
4)	Phenol-d6 (S)	7.53	601	77478	45.93	mg/l	99
17)	*Naphthalene-d8	11.64	997	132726	40.00	mg/l	90
18)	Nitrobenzene-d5 (S)	9.67	807	70050	23.54	mg/l	84
31)	*Acenaphthene-d10	17.01	1513	81309	40.00	mg/l	98
36)	2-Fluorobiphenyl (S)	15.17	1336	196570	32.35	mg/l	92
51)	*Phenanthrene-d10	21.40	1936	100391	40.00	mg/l	99
54)	2,4,6-Tribromophenol (S)	19.46	1749	19202	48.30	mg/l	96
63)	*Chrysene-d12	29.46	2712	29830	40.00	mg/l	98
65)	Terphenyl-d14 (S)	26.52	2429	110535	35.81	mg/l	85
71)	*Perylene-d12	33.48	3099	3614M	40.00	mg/l	

* Compound is ISTD

P6070610

705612

TOTAL ION CHROMATOGRAM



Data File: >OS612::D2 Quant Output File: ^OS612::ME
Name: O H M Instrument ID: BNA
Misc: C # P6070612 7/28/96 BTL#10

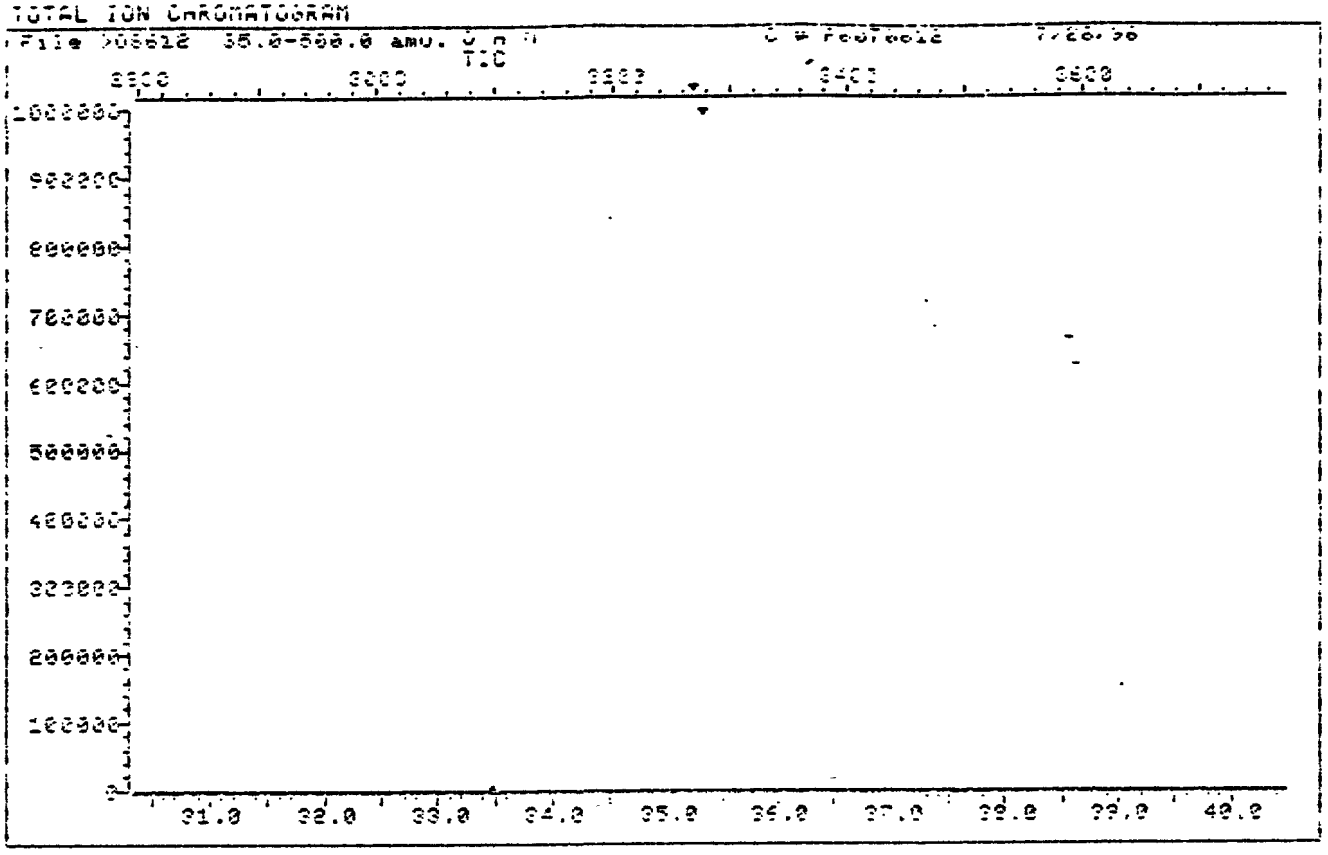
Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960729 08:40
Injected at: 960728 22:44

Page 5 of 5

P6070610

TOTAL ION CHROMATOGRAM

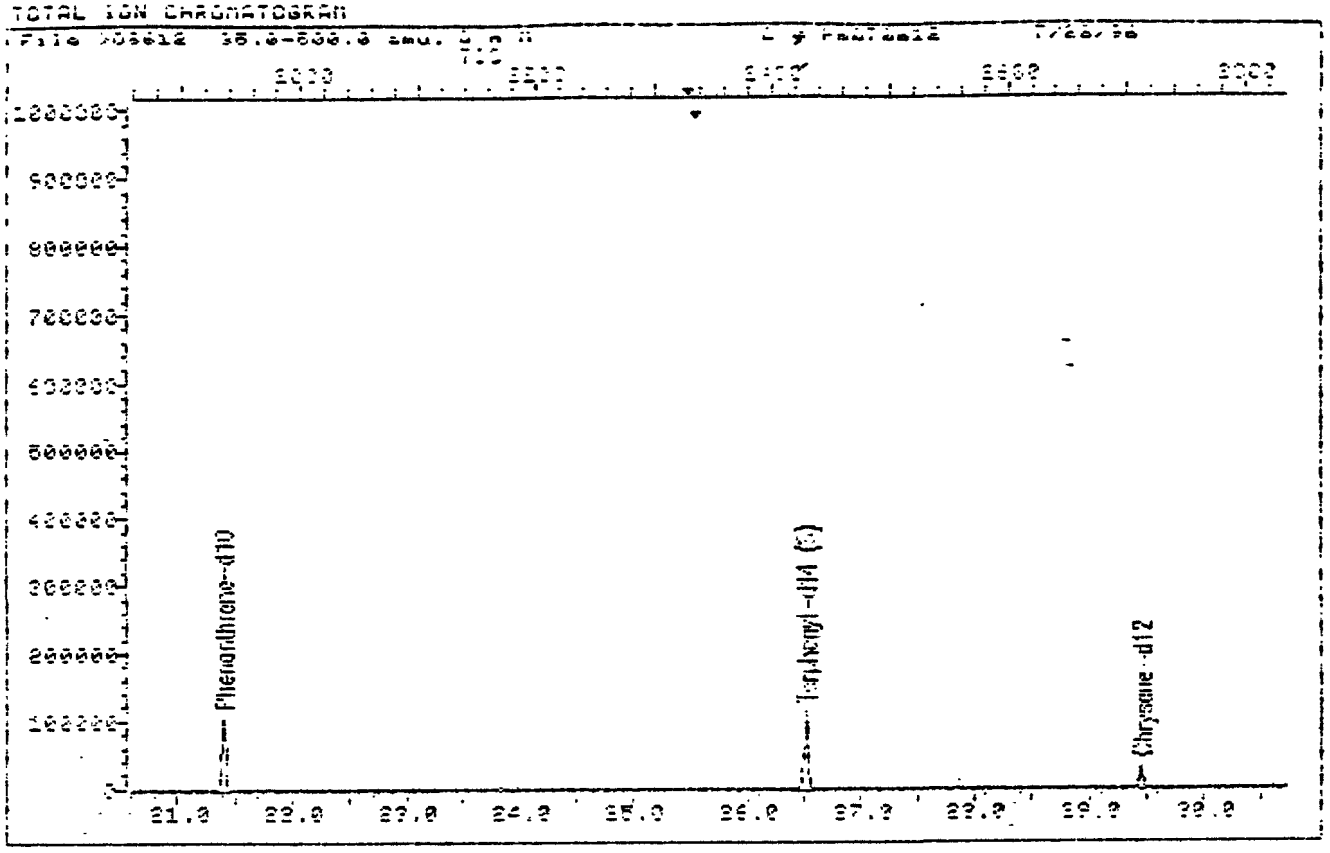


Data File: >0S612::D2 Quant Output File: ^0S612::ME
Name: O H M Instrument ID: BNA
Misc: C # P6070612 7/28/96 BTL#10

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: P60707 10:F1 Last Qual Time: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960729 08:40
Injected at: 960728 22:44

TOTAL ION CHROMATOGRAM



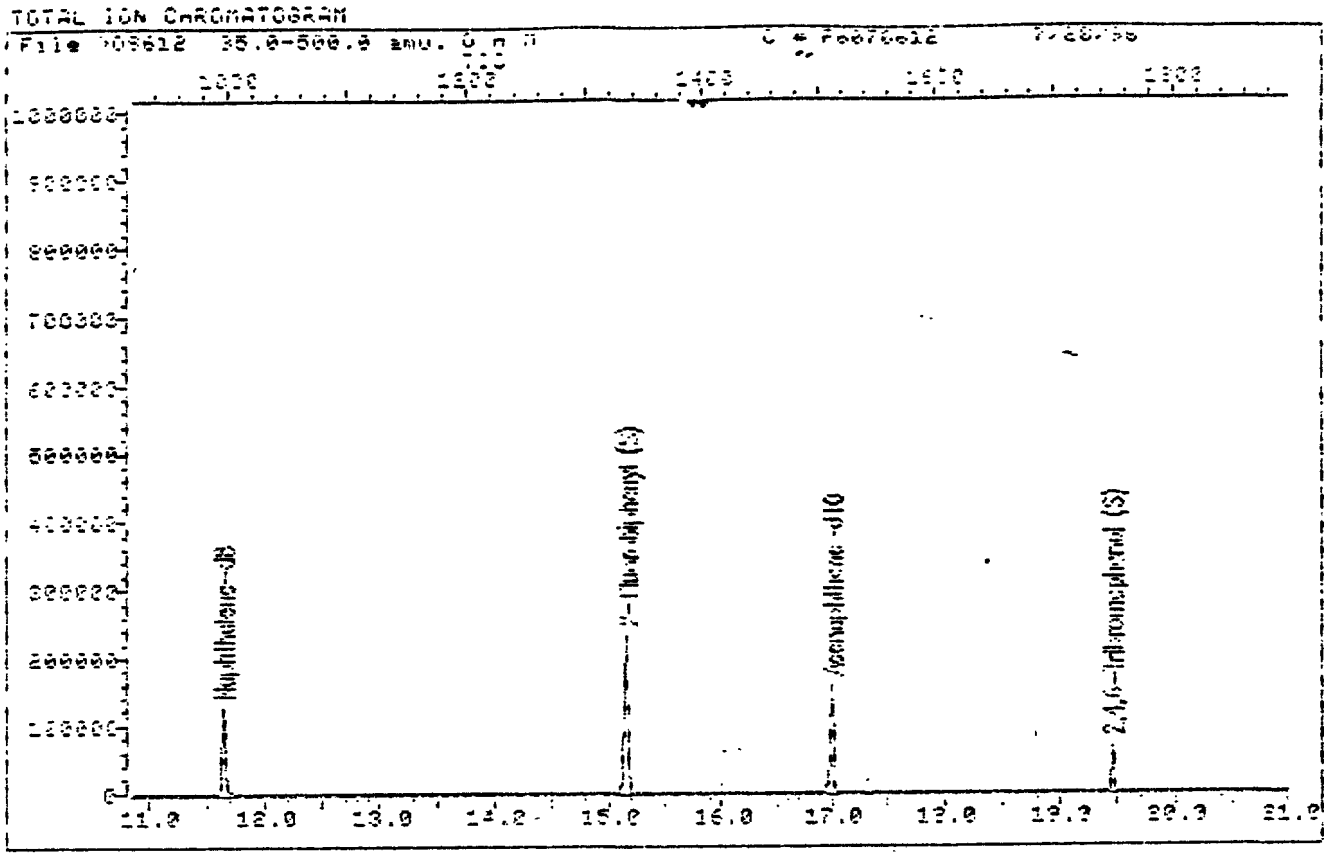
Data File: >CS612::D2 Quant Output File: ^CS612::ME
Name: O H M Instrument ID: BNA
Misc: C # P6070612 7/28/96 BTL#10

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 13:58

Operator ID: CHEMTEX
Quant Time : 960729 03:40
Injected at: 960728 22:44

Page 3 of 7

TOTAL ION CHROMATOGRAM

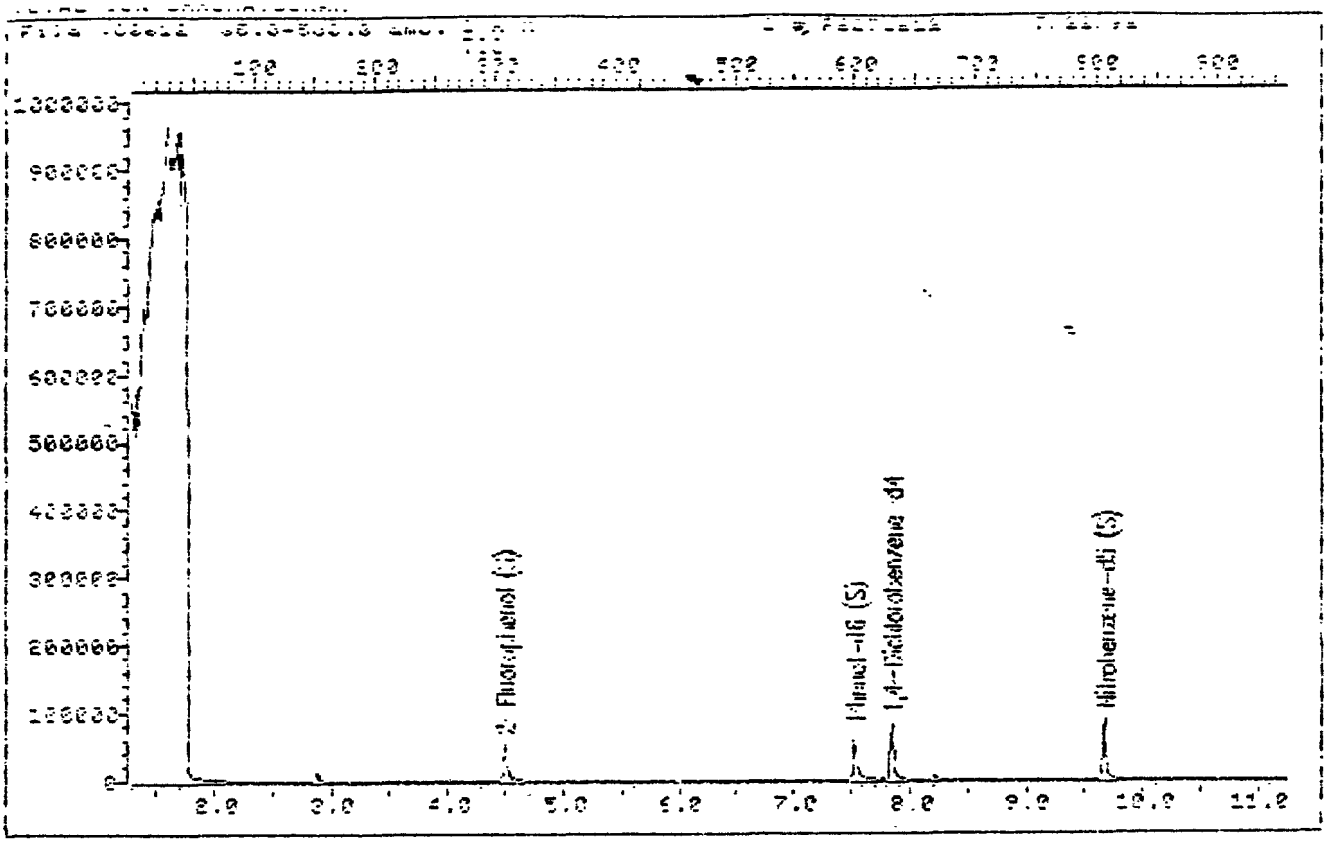


Data File: >08612::D2 Quant Output File: ^08612::ME
Name: O H M Instrument ID: BNA
Misc: C # P6070612 7/28/96 BTL#10

Id File: ID_MKS::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:53

Operator ID: CHEMTEX
Quant Time : 960729 08:40
Injected at: 960728 22:44

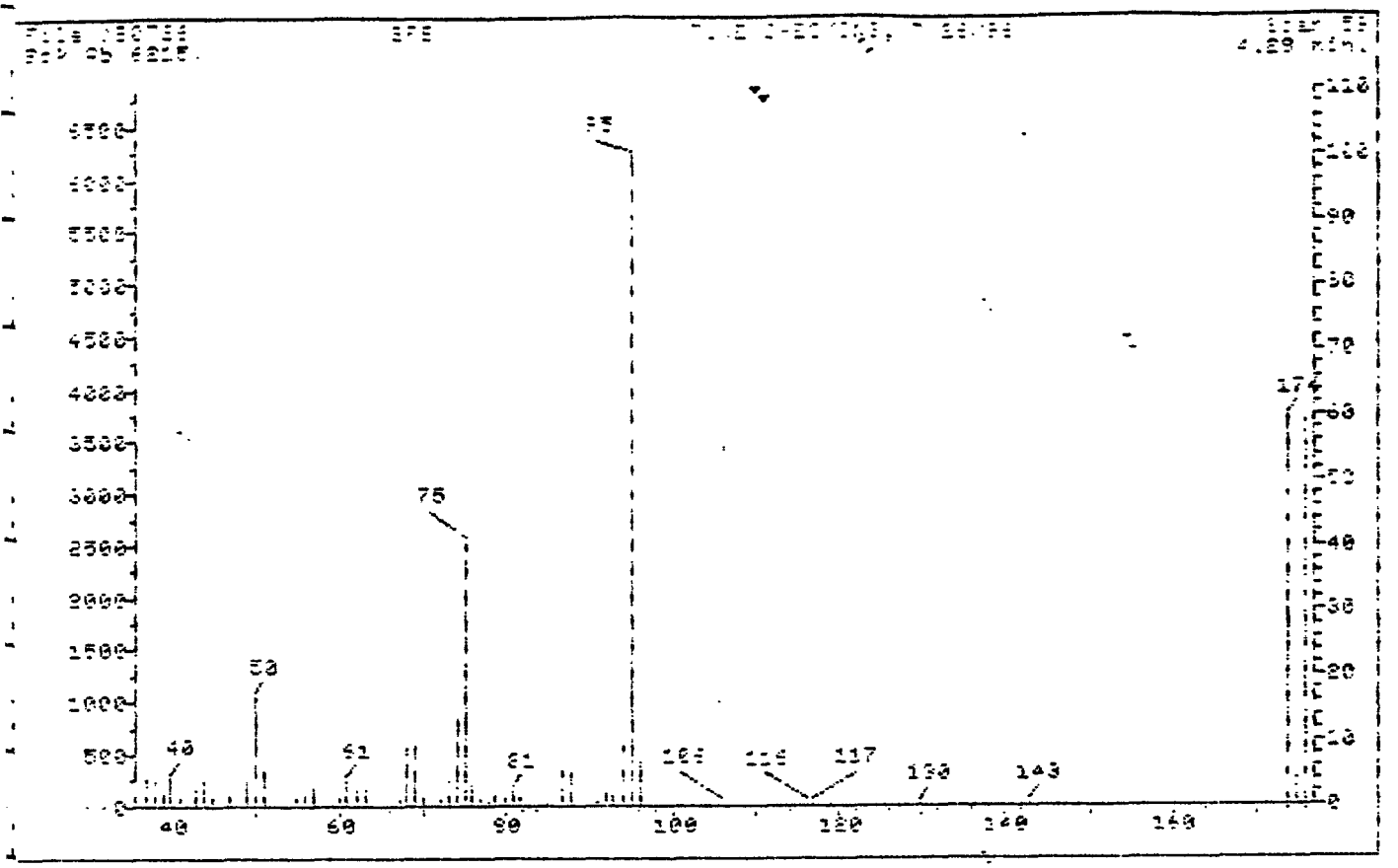
Page 2 of 5



Data File: >03612::D2 Quant Output File: ^03612::ME
Name: O H M Instrument ID: BNA
Misc: C # P6070612 7/28/96 STL#10

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960727 18:58

Operator ID: CHEMTEX
Quant Time : 960729 08:40
Injected at: 960728 22:44



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	16.86	16.86	Ok
75	30-60% of mass 95	40.68	40.68	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.81	6.81	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	59.53	59.53	Ok
175	5-9% of mass 174	4.23	7.11	Ok
176	95-101% of mass 174	58.97	99.05	Ok
177	5-9% of mass 176	3.97	6.74	Ok

Injection Date: 07/26/96
Injection Time: 12:00
Data File: 960726
Scan: 37

Case No: | Calibration Date: 07/24/96

Contractor: CHEMTEX | Time: 13:08

Contract No: | Laboratory ID: >CC726

Instrument ID: | Initial Calibration Date: 07/11/96

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.07573	.06424	15.16		**	
Bromomethane	.62830	.69643	9.25			
Vinyl Chloride	1.15294	1.09954	4.69	*		
Chloroethane	.09411	.08377	1.20			
Methylene Chloride	1.86383	1.86293	.05			
Acetone	.58499	.53178	9.10			
Carbon Disulfide	4.68704	4.94673	5.54			
1,1-Dichloroethene	1.56033	1.73552	11.23	*		
1,1-Dichloroethane	2.79300	2.70274	3.23		**	
trans-1,2-Dichloroethene	1.73048	1.83745	5.95			
cis-1,2-Dichloroethene	1.81708	1.92213	5.78			
Chloroform	2.84929	2.95997	3.88	*		
1,2-Dichloroethane-d4 (S)	1.25478	1.25532	.04			(Conc=50.00)
1,2-Dichloroethane	1.60568	1.59263	.81			
2-Butanone	.99524	.89255	10.14			
1,1,1-Trichloroethane	2.17582	2.32617	6.91			
Carbon Tetrachloride	1.54992	1.56712	1.11			
Vinyl Acetate	1.00089	.96004	4.08			
Bromodichloromethane	2.93191	2.94651	.50			
1,2-Dichloropropane	.39073	.34850	10.81	*		
cis-1,3-Dichloropropene	.28913	.34459	19.18			(Conc=81.00)
Trichloroethene	.47624	.45361	4.75			
Dibromochloromethane	.60953	.54323	10.88			
1,1,2-Trichloroethane	.38165	.36201	5.14			
Benzene	1.10469	1.05435	4.56			
trans-1,3-Dichloropropene	.72087	1.27495	71.59			(Conc=19.00)
2-Chloroethylvinylether	.08980	.08900	.89			
Bromoform	.39777	.36424	8.43		**	
2-Hexanone	1.66451	1.94311	17.02			
4-Methyl-2-Pentanone	.42816	.38994	8.93			
Tetrachloroethene	.48633	.49873	2.13			
1,1,2,2-Tetrachloroethane	.99378	.83842	15.61			

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
VOC Compounds

Case No: Calibration Date: 07/26/96

Contractor: CHEMTEX Time: 13:08

Contract No: Laboratory ID: >CC7C6

Instrument ID: Initial Calibration Date: 07/11/96

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene	1.61385	1.57021	2.70	*		
Toluene-d8 (S)	1.25711	1.19240	5.07			(Conc=50.00)
Chlorobenzene	1.09193	1.06613	2.35		**	
Ethylbenzene	.46300	.55763	20.44	*		
Styrene	1.28736	1.17912	8.41			
Xylene (total)	1.32206	1.48775	12.53			
Bromofluorobenzene (S)	.71881	.71095	1.09			(Conc=50.00)

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 (**)

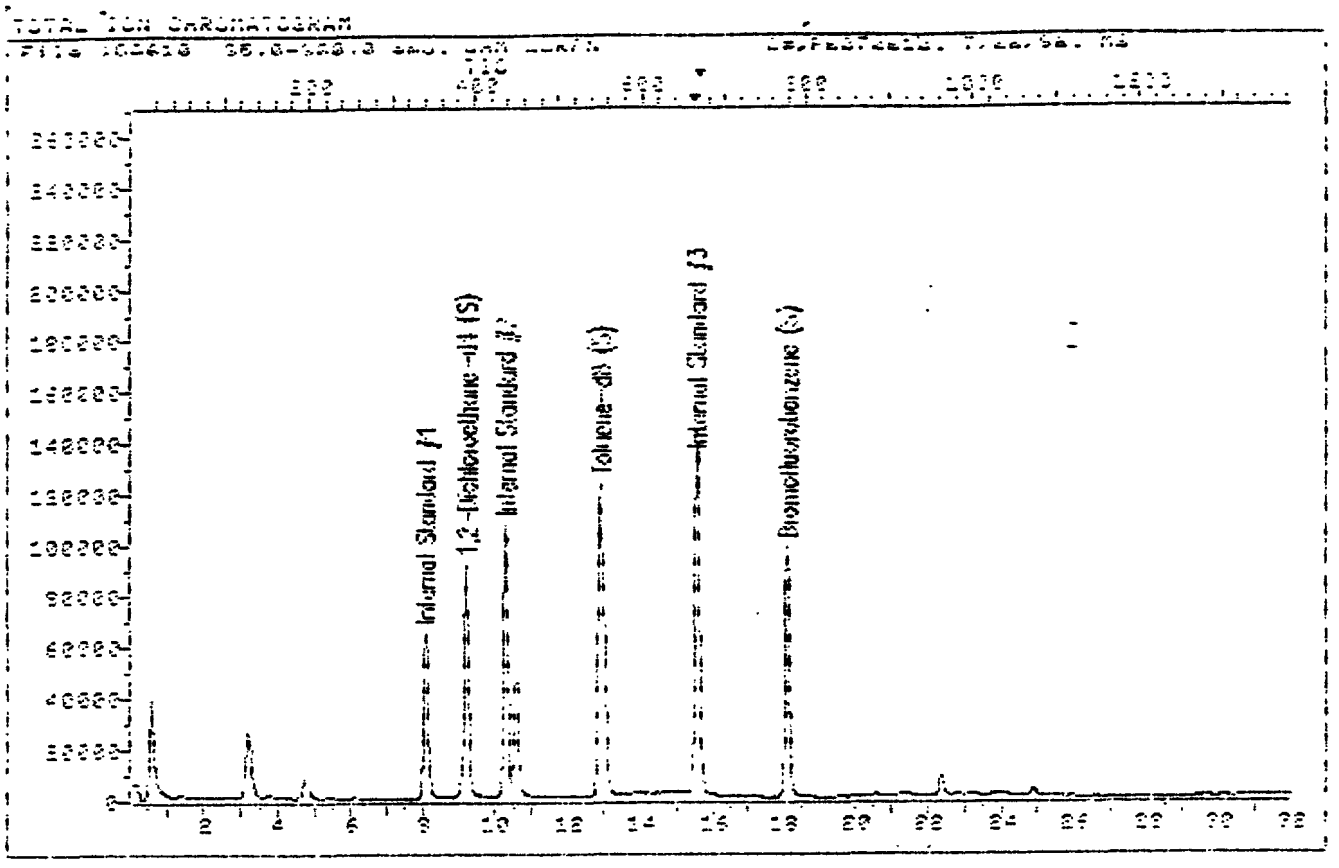
Operator ID: MSR
Output File: VOA610::ME
Data File: >OA610::D1
Name: OHM CORPN
Misc: O# R6070610, 7/26/96, MS

Quant Rev: 7
Quant Time: 960726 16:30
Injected at: 960726 15:07
Dilution Factor: 1.00000
Instrument ID: VOA

ID File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 08:34
Last Qcal Time: 960726 13:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.06	128.0	80377	50.00	ug/L	90
6)	Methylene Chloride	4.69	84.0	3694	1.23	ug/L	91
7)	Acetone	3.31	43.0	249	.291	ug/L	87
8)	Carbon Disulfide	3.24	76.0	4978	.629	ug/L	100
9)	1,1-Dichloroethene 93	3.20	96.0	64579	23.15	ug/L	79
14)	1,2-Dichloroethene-d4 (S)	9.21	65.0	101536M	50.32	ug/L	
16)	2-Butanone	7.95	43.0	2941	2.05	ug/L	74
21)	*1,4-Difluorobenzene	10.29	114.0	376347	50.00	ug/L	90
24)	Trichloroethene	10.57	130.0	80403	23.55	ug/L	88
27)	Benzene	9.21	78.0	194557	24.52	ug/L	92
31)	*Chlorobenzene-d5	15.53	117.0	282632	50.00	ug/L	93
32)	2-Hexanone	16.24	91.0	543	.0836	ug/L	75
33)	4-Methyl-2-Pentanone	15.04	43.0	2812	1.28	ug/L	76
34)	Tetrachloroethene	13.94	164.0	186	.0660	ug/L	81
36)	Toluene	13.00	91.0	202273	22.79	ug/L	96
37)	Toluene-d8 (S)	12.88	98.0	333357	50.16	ug/L	77
38)	Chlorobenzene	15.57	112.0	138848	23.04	ug/L	95
41)	Xylene (total)	16.22	106.0	354	.0422	ug/L	79
42)	Bromofluorobenzene (S)	18.12	95.0	201135	50.05	ug/L	90

* Compound is ISTD



Data File: >OR610::D1
Name: OHM CORPN
Misc: C# P6070610, 7/26/96, MS

Id File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 08:34

Operator ID: MSR
Quart Time : 960726 15:30
Injected at: 960726 15:07

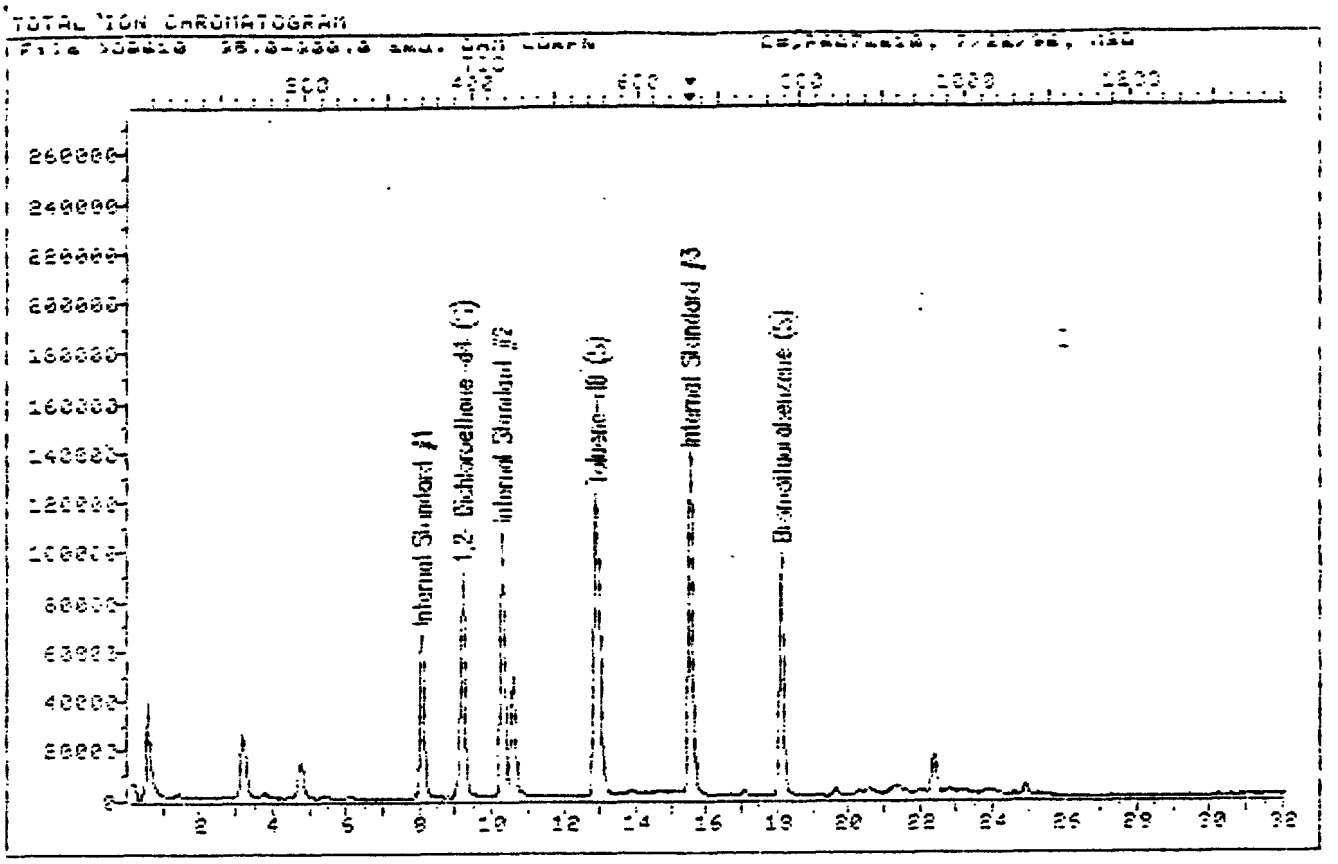
Operator ID: MSR
Output File: ^QB610::ME
Data File: >QB610::D1
Name: GHM CORPN
Misc: C# P6070610, 7/26/96, MSD

Quant Rev: 7
Quant Time: 960726 16:31
Injected at: 960726 15:47
Dilution Factor: 1.00000
Instrument ID: VOA

ID File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 08:54
Last Qcal Time: 960726 13:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.06	128.0	81891	50.00	ug/L	95
2)	Chloromethane	1.36	50.0	15	.143	ug/L	100
6)	Methylene Chloride	4.69	84.0	6395	2.10	ug/L	94
8)	Carbon Disulfide	3.04	76.0	5610	.692	ug/L	100
9)	1,1-Dichloroethene	3.20	96.0	63871	22.47	ug/L	79
13)	Chloroform	8.50	83.0	268	.0593	ug/L	90
14)	1,2-Dichloroethane-d4 (S)	9.21	65.0	102112M	49.67	ug/L	
16)	2-Butanone	7.97	43.0	6376	4.29	ug/L	79
21)	*1,4-Difluorobenzene	10.29	114.0	374979	50.00	ug/L	90
24)	Trichloroethene	10.59	130.0	77794	22.87	ug/L	94
27)	Benzene	9.21	78.0	189591	23.98	ug/L	92
31)	*Chlorobenzene-d5	15.53	117.0	279590	50.00	ug/L	95
33)	4-Methyl-2-Pentanone	14.56	43.0	132	.0677	ug/L	94
34)	Tetrachloroethene	13.94	164.0	234	.0839	ug/L	80
36)	Toluene	12.98	91.0	201941	23.00	ug/L	98
37)	Toluene-d8 (S)	12.88	98.0	340330	51.00	ug/L	91
38)	Chlorobenzene	15.57	112.0	136049	22.82	ug/L	98
42)	Bromofluorobenzene (S)	18.10	95.0	201312	50.64	ug/L	94

* Compound is ISTD



Data File: >CB610::D1 Quant Output File: ^CB610::ME
Name: CHM CCPPN Instrument ID: VOA
Misc: C# P6070610, 7/26/96, MSD

Id File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 08:34 Last Qcal T[illegible] 960726 13:08

Operator ID: MSR
Quant Time : 960726 16:31
Injected at: 960726 15:47

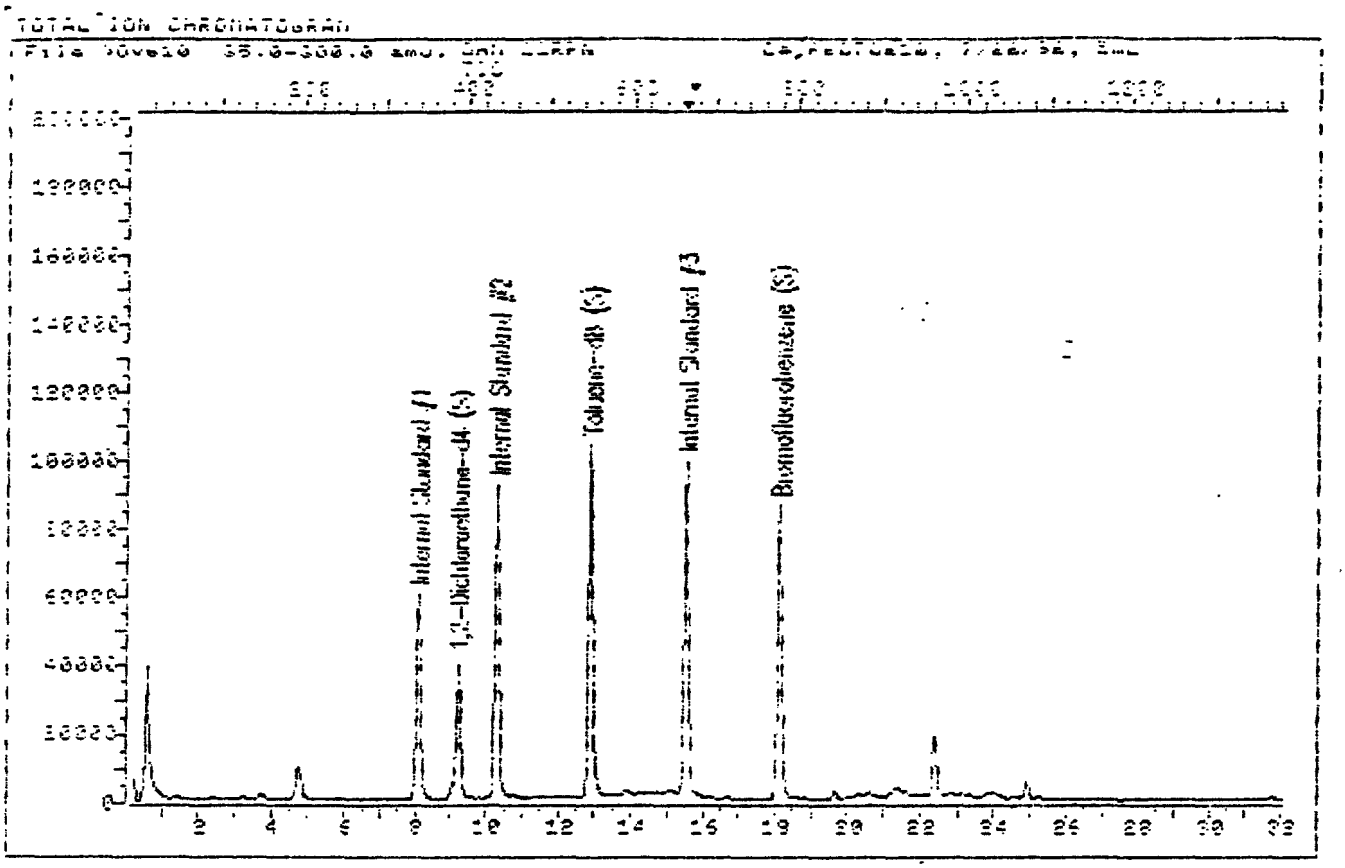
Operator ID: MSR
Output File: ^OV610::ME
Data File: >OV610::01
Name: OHM CORPN
Misc: C# P6070610, 7/26/96, FmL

Quant Rev: 7
Quant Time: 960726 17:19
Injected at: 960726 16:26
Dilution Factor: 1.00000
Instrument ID: VOA

ID File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 03:34
Last Qual Time: 960726 13:08

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	6.07	128.0	72841	50.00	ug/L	94
6)	Methylene Chloride	4.69	84.0	5693	2.10	ug/L	94
8)	Carbon Disulfide	3.27	76.0	4193	.580	ug/L	100
14)	1,2-Dichloroethane-d4 (S)	9.21	65.0	91474M	50.02	ug/L	
16)	2-Butanone	7.95	43.0	5457	4.20	ug/L	64
21)	*1,4-Difluorobenzene	10.29	114.0	333711	50.00	ug/L	91
31)	*Chlorobenzene-d5	15.53	117.0	254536	50.00	ug/L	91
32)	2-Hexanone	15.94	91.0	593	.0595	ug/L	92
33)	4-Methyl-2-Pentanone	14.47	43.0	214	.108	ug/L	91
36)	Toluene	12.99	91.0	7653	.957	ug/L	93
37)	Toluene-d8 (S)	12.89	98.0	303361	49.97	ug/L	77
39)	Ethylbenzene	15.94	106.0	52	.0193	ug/L	68
41)	Xylene (total)	16.22	106.0	545	.0722	ug/L	91
42)	Bromofluorobenzene (S)	19.12	95.0	180243	49.90	ug/L	94

* Compound is ISTD



Data File: >CV610::D1 Quant Output File: 'CV610::ME
Name: OHM CORPN Instrument ID: VOA
Misc: C# P6070610, 7/26/96, 5mL

Id File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 08:34 Last Qcal T[redacted] 960726 13:08

Operator ID: MSR
Quant Time : 960726 17:19
Injected at: 960726 16:26

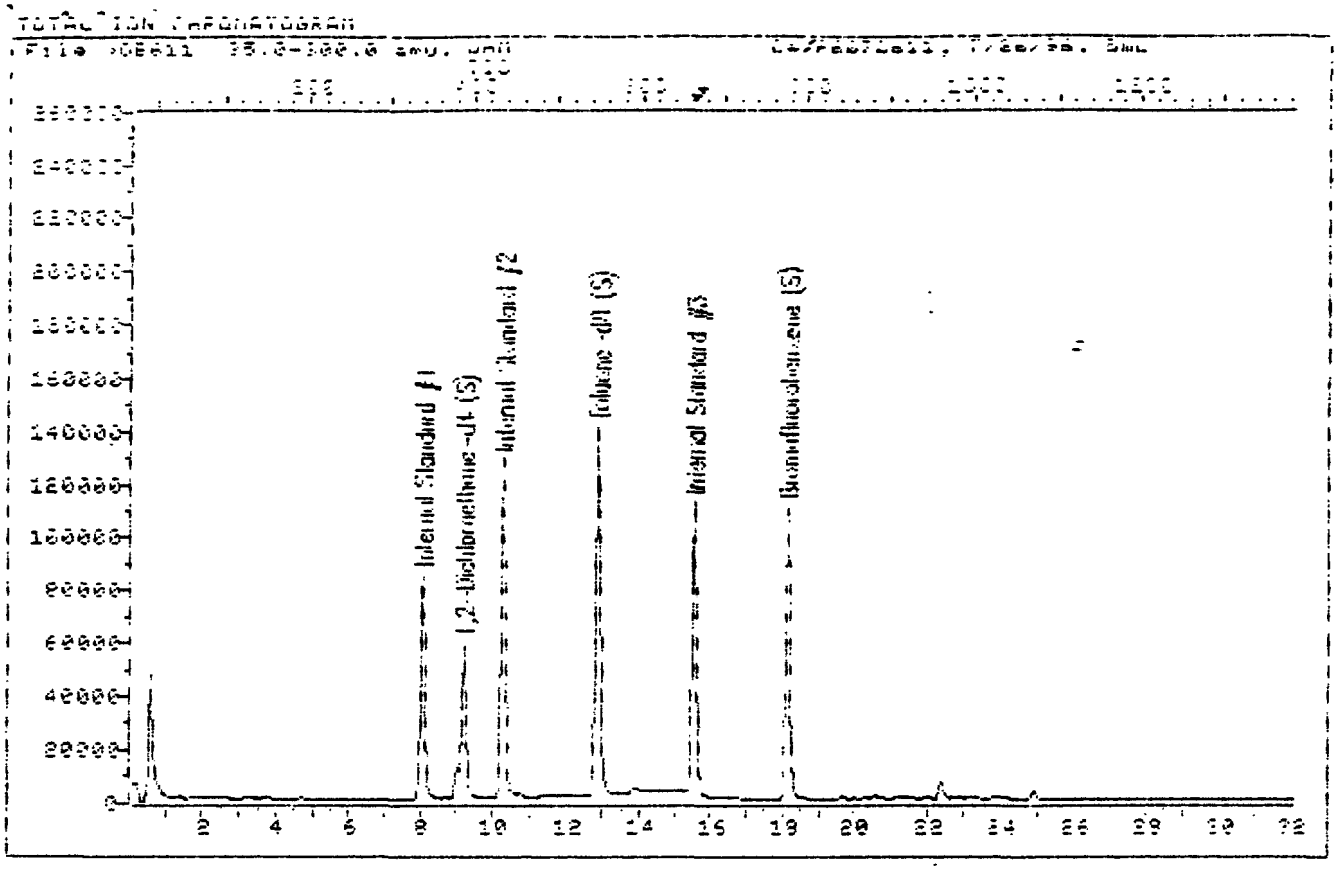
QUANT REPORT

Operator ID: MSR
Quant Rev: 7
Quant Time: 960726 18:18
Input File: ^0B611::ME
Injected at: 960726 17:37
Data File: ^0B611::D1
Dilution Factor: 1.00000
Name: OHM
Instrument ID: VOA
Misc: D# P6070611, 7/26/96, FAL

ID File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 05:54
Last Qual Time: 960726 13:08

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.06	128.0	97288	50.00	ug/L	99
6)	Methylene Chloride	4.69	84.0	1624	.448	ug/L	73
8)	Carbon Disulfide	3.24	76.0	2681	.279	ug/L	100
14)	1,2-Dichloroethane-d4 (S)	9.21	65.0	1234847	50.56	ug/L	
16)	2-Butanone	7.95	43.0	3120	1.33	ug/L	71
21)	*1,4-Difluorobenzene	10.27	114.0	450791	50.00	ug/L	90
26)	1,1,2-Trichloroethane	13.58	97.0	140	.0429	ug/L	94
31)	*Chlorobenzene-d5	15.53	117.0	307510	50.00	ug/L	93
32)	2-Hexanone	14.24	91.0	786	.0656	ug/L	72
33)	4-Methyl-2-Pentanone	14.45	43.0	199	.0550	ug/L	95
34)	Tetrachloroethene	13.92	164.0	348	.117	ug/L	61
36)	Toluene	12.98	91.0	6163	.073	ug/L	77
37)	Toluene-d8 (S)	12.59	98.0	399049	54.37	ug/L	86
42)	Bromofluorobenzene (S)	18.12	95.0	224976	51.46	ug/L	89

* Compound is ISTD



Data File: >0B611::01 Quant Output File: ^0B611::ME
Name: BPM Instrument ID: VOA
Misc: CH P6070611, 7/26/96, FAL

Id File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Pac E
Last Calibration: 960711 08:34 Last Quant Time: 960726 17:08

Operator ID: TSO
Quant Time : 960726 18:18
Injected at: 960726 17:22

Operator ID: MSR Quant Rev: 7 Quant Time: 960726 16:00
Output File: MKR726::MS Injected at: 960726 13:48
Data File: MKR726::C1 Dilution Factor: 1.00000
Name: BLANK Instrument ID: VOA
Misc: 7/26/96

ID File: ID_VOA::MS
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 09:54 Last Qual Time: 960726 15:03

	Compound	R.T.	Q Ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.06	128.0	81940	50.00	ug/L	92
6)	Methylene Chloride	4.69	84.0	8134	2.66	ug/L	78
8)	Carbon Disulfide	3.27	76.0	2989	.369	ug/L	100
13)	Chloroform	8.50	83.0	2609	.536	ug/L	82
14)	1,2-Dichloroethane-d4 (S)	9.21	65.0	100761M	42.74	ug/L	
16)	2-Butanone	7.93	43.0	3998	2.73	ug/L	84
21)	*1,4-Difluorobenzene	10.29	114.0	399717	50.00	ug/L	92
26)	1,1,2-Trichloroethane	13.92	97.0	77	.0274	ug/L	97
30)	Bromoform	17.37	173.0	195	.0653	ug/L	82
31)	*Chlorobenzene-d5	15.55	117.0	279046	50.00	ug/L	97
32)	2-Hexanone	15.94	91.0	973	.0910	ug/L	97
34)	Tetrachloroethene	13.97	164.0	402	.144	ug/L	97
36)	Toluene	12.98	91.0	3595	.410	ug/L	94
37)	Toluene-d8 (S)	12.99	98.0	540216	51.00	ug/L	80
39)	Ethylbenzene	15.92	106.0	189	.0604	ug/L	94
41)	Xylene (total)	15.92	106.0	193	.0207	ug/L	89
42)	Bromofluorobenzene (S)	19.12	95.0	202909	51.14	ug/L	93

* Compound is ISTD

VOLATILES INTERNAL STANDARD RT SUMMARY

LAB FILE ID#CCC COMPDS DATE ANALYSED: 7/26/96
SAMPLE I.D #50 PPM STD
GCMS DATA FILE : >C0726

ISTD	RT STD	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	8.07	7.57	8.57	NA
1,4-Difluorobenzene	10.3	9.8	10.8	NA
Chlorobenzene-d5	15.54	15.04	16.04	NA

LAB FILE ID#P6070610 DATE ANALYSED: 7/26/96
SAMPLE I.D #EWTP-6GA
GCMS DATA FILE : >OV610

ISTD	RT STD	RT SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	8.06	8.18	7.68	8.68	-1.489
1,4-Difluorobenzene	10.29	10.38	9.88	10.88	-0.875
Chlorobenzene-d5	15.53	15.66	15.16	16.16	-0.837

LAB FILE ID#P6070611 DATE ANALYSED: 7/26/96
SAMPLE I.D #EWTP-6G
GCMS DATA FILE : >OB611

ISTD	RT STD	RT SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	8.06	8.15	7.65	8.65	-1.117
1,4-Difluorobenzene	10.27	10.38	9.88	10.88	-1.071
Chlorobenzene-d5	15.53	15.66	15.16	16.16	-0.837

LAB FILE ID#MAT.SPIKE DATE ANALYSED: 7/26/96
SAMPLE I.D #25 PPM MS
GCMS DATA FILE : >OA610

ISTD	RT STD	RT SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	8.06	8.15	7.65	8.65	-1.117
1,4-Difluorobenzene	10.29	10.38	9.88	10.88	-0.875
Chlorobenzene-d5	15.53	15.66	15.16	16.16	-0.837

LAB FILE ID#MAT.SPIKE DATE ANALYSED: 7/26/96
SAMPLE I.D #25 PPM MS
GCMS DATA FILE : >OB610

ISTD	RT STD	RT SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	8.06	8.15	7.65	8.65	-1.117
1,4-Difluorobenzene	10.29	10.38	9.88	10.88	-0.875
Chlorobenzene-d5	15.53	15.66	15.16	16.16	-0.837

VOLATILES INTERNAL STANDARD AREA SUMMARY

LAB FILE ID#CCC COMPDS DATE ANALYSED: 7/26/96
SAMPLE I.D #50 PPM STD
GCMS DATA FILE : >C0726

ISTD	AREA STD	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	86077	43039	172154	NA
1,4-Difluorobenzene	406489	203245	812978	NA
Chlorobenzene-d5	294392	147196	588784	NA

LAB FILE ID#P6070610 DATE ANALYSED: 7/26/96
SAMPLE I.D #EWTP-6GA
GCMS DATA FILE : >OV610

ISTD	AREA STD	AREA SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	86077	72841	36421	145682	15.4
1,4-Difluorobenzene	406489	333711	166856	667422	17.9
Chlorobenzene-d5	294392	254536	127268	509072	13.5

LAB FILE ID#P6070611 DATE ANALYSED: 7/26/96
SAMPLE I.D #EWTP-6G
GCMS DATA FILE : >OB611

ISTD	AREA STD	AREA SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	86077	97288	48644	194576	-13.0
1,4-Difluorobenzene	406489	450791	225396	901582	-10.9
Chlorobenzene-d5	294392	307510	153755	615020	-4.5

LAB FILE ID#MAT.SPIKE DATE ANALYSED: 7/26]/96
SAMPLE I.D #25 PPM MS
GCMS DATA FILE : >OA610

ISTD	AREA STD	AREA SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	86077	80377	40189	160754	6.6
1,4-Difluorobenzene	406489	376347	188174	752694	7.4
Chlorobenzene-d5	294392	282632	141316	565264	4.0

LAB FILE ID#MAT.SPIKE DATE ANALYSED: 7/26]/96
SAMPLE I.D #25 PPM MS
GCMS DATA FILE : >OB610

ISTD	AREA STD	AREA SAMPLE	LOWER LIMIT	UPPER LIMIT	% DIFF.
Bromochloromethane	86077	81891	40946	163782	4.9
1,4-Difluorobenzene	406489	374979	187490	749958	7.8
Chlorobenzene-d5	294392	279590	139795	559180	5.0

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

Memo

225 W. Airtex Blvd • Houston, Texas 77090 *Southern Region, Southwest District*

TO: Gary Foster

FROM: Chet Scheibel

DATE. September 17, 1996

SUBJECT: Data Review for the Project 18464 - Bailey Disposal Site

The Southern Region Project Chemist has performed a QA Audit of the data submitted by the Chemtex laboratory for the water sample collected on August 1, 1996. This data is for the analysis of volatiles, semivolatiles, metals, and conventionals. The lab met the requested 3 day turn-around-time for the initial data. However, the final report was not received from the lab until September 13, 1996. The sample number is EWTP-7R (rinseate).

The results of this audit are presented in the attached Data Evaluation Checklist. The data conforms to the requirements of USEPA Method 624, 625, 200 series, 150.1, 413.1, 160.1, and 415.1 with the following comment:

- Semivolatiles - The recovery of pyrene in the LCS is slightly below control limits. All other base neutral compound recoveries are within control limits and all surrogate recoveries are within control limits. No qualification of the data is necessary.

The data is deemed acceptable according to USEPA guidelines and should be used in this project's decision making process.

Chet Scheibel

Chet Scheibel - Project Chemist
Southern Region, Southwest District

OHM SOUTHERN REGION, SOUTHWEST DISTRICT

TECHNICAL SERVICES GROUP

ANALYTICAL DATA VALIDATION

The attached Data Package has been reviewed by the Southern Region, Southwest District Technical Services Group. Detailed comments concerning specific analyses (ie, GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below

COMMENTS: _____

Data Validated by: Chet Scheibel Date: 8/30/96

Name (Printed): CHET SCHEIBEL

3/18/96

DATA VALIDATION FORMS

HOLDING TIMES	REQUIREMENTS	YES	NO
METALLIC/CONVENTIONAL INORGANIC			
Metals	6 Months	✓	
Cyanide	14 Days		
Mercury	28 Days	✓	
Hexavalent Chromium	24 Hours		
Other		✓	
SEMIVOLATILE - GC, GC/MS, OR HPLC			
WATER	7 Days to Extraction	✓	
	Within 40 days of extraction	✓	
SOIL	14 Days to Extraction		
	Within 40 days of extraction		
VOLATILES - GC OR GC/MS			
WATERS for AROMATICS	7 Days unpreserved		
	14 Days preserved		
SOILS, SLUDGES, SEDIMENTS	14 Days		
WATER or OTHER	14 Days	✓	
PESTICIDES/PCBs			
WATER	7 Days to extraction		
	Within 40 days of extraction		
SOILS, SEDIMENTS, SLUDGES, SOLIDS	14 Days to extraction		
	Within 40 days of extraction		
OTHER ORGANICS			
SOLIDS/SLUDGES Analyzed Within Holding Time	Per Method		
WATERS/LIQUIDS Analyzed Within Holding Time	Per Method		
PRESERVATION			
Preserved at field site?		✓	
Lab preserved sample.			

LIST DEFICIENCIES IN DETAIL: _____

DATA VALIDATION AND QUALITY CONTROL

VOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID/SOIL ____ TCLP ____			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	BFb EVERY 12 HRS	NA	
INITIAL CALIBRATION	%RSD: < or = 30%	✓	
CONTINUING CALIBRATION CHECK	%DIFF: < OR = 25%(A) or 20%(B)	✓	
SPCC COMPOUNDS	RF: > OR = 0.300	✓	
	Bromoform: > OR = 0.25 (A) or 0 10 (B)	✓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS <MDL	✓	
MATRIX SPIKE % RECOVERY VALUE	WITHIN THOSE SET BY LAB	NR	
MATRIX SPIKE DUP. % RECOVERY VALUE	WITHIN THOSE SET BY LAB	NR	
MS/MSD RPD	< LAB QC LIMITS	✓	
% LCS RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
% SURROGATE RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL. _____

2/16/96

DATA VALIDATION - CALIBRATION AND QU .LITY CONTROL

SEMIVOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID/SOIL ___ TCLP ___			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	DFTPP EVERY 12 HRS	NA	
INITIAL CCC COMPOUNDS	%RSD: < OR = 30%	↓	
INITIAL SPCC COMPOUNDS	% RF: > OR = 0 05	↓	
CONTINUING CCC COMPOUNDS	% DIFF: < OR = 30%(A) or 20%(B)	↓	
CONTINUING SPCC	RF: > OR = 0.05	↓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS <MDL	✓	
MATRIX SPIKE % RECOVERY VALUES	WITHIN THOSE SET BY LAB	NR	
MATRIX SPIKE DUP. % RECOVERY VALUES	WITHIN THOSE SET BY LAB	NR	
MS/MSD RPD	< LAB QC LIMITS	—	
% LCS RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	/
% SURROGATE RECOVERY LIMITS	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL:

LCS: Xylene rec slightly < lower control limit

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ SOLID/SOIL ____ TCLP ____

METALS - INORGANICS	REQUIREMENTS	YES	NO
% RECOVERY - ICV & CCV	90-110%(ICP) 80-120%(GFAA)	NA	
CCV	Beginning and every 10 samples	✓	
ICV	Beginning and every 10 samples	✓	
1 CALIBRATION BLANK	Beginning and every 10 samples	✓	
RSD OF INITIAL CALIBRATION	<30% or LINEAR CORRELATION OF 0.995 OR BETTER	✓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds <MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	NR	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	NR	
MS/MSD RPD	< 20 %	✓	
LCS RECOVERY VALUES	80 - 120 %	✓	
POST DIGEST SPIKE RECOVERY	75 - 125 %	✓	
OTHER (LIST) Duplicate RPD	< 20	✓	

LIST DEFICIENCIES BELOW IN DETAIL: ____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ **SOLID/SOIL** _____

CONVENTIONAL ANALYSIS	REQUIREMENTS	YES	NO
% RECOVERY OF CCV	80-120%	NA	
RSD OF INITIAL CALIBRATION	<30% or Linear Correlation of 0.995 of Better	✓	
CONTINUING CALIBRATION	Beginning and Every 10 Samples	✓	
CALIBRATION BLANK	Beginning and Every 10 Samples	✓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds <MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	NR	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	NR	
LCS RECOVERY VALUES	80 - 120 %	—	
DUPLICATE % RPD	< 20 %	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/1/96
Collected By: B. Riggs
Date Received: 8/1/96
Date Analyzed: 8/6/96
Analyst: KRP
CHEMTEX FILE #: P6080031

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-7R

CHEMTEX #: P6080031

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Analyzed: 8/6/96
Analyst: MSR
CHEMTEX FILE #: P6080031

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

METHOD BLANK

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

PERCENT RECOVERY OF SURROGATES
EPA 600 METHOD 624

CHEMTEX #	(%) Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	4-Bromofluorobenzene
P6080031	99	96	98
Method Spike	97	100	95
Method Blank	99	98	100

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Benzene	87
		Chlorobenzene	90
		1,1-Dichloroethylene	86
		Toluene	91
		Trichloroethylene	86

CNReddy

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/1/96
Collected By: B. Riggs
Date Received: 8/1/96
Date Analyzed: 8/6/96
Analyst: MR
CHEMTEX FILE #: P6080031

SEMIVOLATILE ANALYSES BY GCMS - EPA METHOD 625

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
P6080031	EWTP-7R	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
Method Blank		Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D./CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

PERCENT RECOVERY OF SURROGATES
EPA METHOD 625

CHEMTEX #	COMPOUND NAME	% Recovery
P6080031	2-Fluorophenol	33
	Phenol-d_5	37
	Nitrobenzene-d_5	40
	2-Fluorobiphenyl	50
	2,4,6-Tribromophenol	33
	p-Terphenyl-d_{14}	47
Method Blank	2-Fluorophenol	82
	Phenol-d_5	84
	Nitrobenzene-d_5	94
	2-Fluorobiphenyl	101
	2,4,6-Tribromophenol	64
	p-Terphenyl-d_{14}	86

CNReddy

Dr. C. N. Reddy, Ph D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96

CHEMTEX FILE #: P6080031

PERCENT RECOVERY OF SURROGATES - EPA METHOD 625

CHEMTEX #	COMPOUND NAME	% Recovery
Method Spike	2-Fluorophenol	88
	Phenol-d_5	90
	Nitrobenzene-d_5	97
	2-Fluorobiphenyl	101
	2,4,6-Tribromophenol	100
	p-Terphenyl-d_{14}	113

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Phenol	60
		2-Chlorophenol	59
		1,4-Dichlorobenzene	63
		n-Nitro-di-n-propylamine	60
		1,2,4-Trichlorobenzene	64
		4-Chloro-3-methylphenol	63
		Acenaphthene	64
		4-Nitrophenol	71
		2,4-Dinitrotoluene	63
		Pentachlorophenol	63
		Pyrene	45

for Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/1/96
Collected By: B. Riggs
Date Received: 8/1/96
CHEMTEX FILE #: P6080031

METALLIC PARAMETERS BY ICP

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	Parameter	Units	Results	MDL
P6080031	EWTP-7R	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
Method Blank		Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D/CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96

CHEMTEX FILE #: P6080031

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Arsenic	96
		Cadmium	100
		Chromium, total	104
		Lead	100
		Mercury	98
		Selenium	96
		Silver	100

QUALITY ASSURANCE/QUALITY CONTROL DATA

Contaminant	True Value	Obtained Value
Arsenic (ug/l)	500	488/496*
Cadmium (ug/l)	500	498/493*
Chromium (ug/l)	500	500/501*
Lead (ug/l)	500	488/501*
Mercury (ug/l)	10.0	10.0/10.5*
Selenium (ug/l)	500	493/494*
Silver (ug/l)	500	482/486*

* Duplicate Analysis

Contaminant	Method Reference	Date Analyzed/Analysts
Arsenic	EPA Method 200.7	8/6/96 MRP/SM
Cadmium	EPA Method 200.7	8/6/96 MRP/SM
Chromium, total	EPA Method 200.7	8/6/96 MRP/SM
Lead	EPA Method 200.7	8/6/96 MRP/SM
Mercury	EPA Method 245.1	8/6/96 MRP/SM
Selenium	EPA Method 200.7	8/6/96 MRP/SM
Silver	EPA Method 200.7	8/6/96 MRP/SM

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752 5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/1/96
Time Collected: 11:40
Collected By: B. Riggs
Date Received: 8/1/96
Time Received: 15:52
CHEMTEX FILE #: P6080031

CONVENTIONAL ANALYSES

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	Parameter	Units	Results	MDL
P6080031	EWTP-7R	Oil & Grease	mg/l	BDL	1.0
		pH	units	5.7	---
		T D S	mg/l	80	2
		T O C	mg/l	6	2
Method Blank		Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	BDL	2
		T O C	mg/l	BDL	2

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

QUALITY ASSURANCE/QUALITY CONTROL DATA

Parameter	True Value	Obtained Value
Oil & Grease (mg/l)	10.0	9.3/9.8*
pH (units)	8.0	8.0/8.0*
T D S (mg/l)	100	94/96*
T O C (mg/l)	30	29/30*

* Duplicate Analysis

Parameter	Method Reference	Date/Time Analyzed/ Analysts
Oil & Grease	EPA Method 413.1	8/5/96 LKP/MMP
pH	EPA Method 150.1	8/1/96 15:55 LKP
Solids, Total Dissolved (TDS)	EPA Method 160.1	8/2/96 LKP/MMP
Total Organic Carbon (TOC)	EPA Method 415.1	8/2/96 LKP/MMP

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

182124

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE

PROJECT LOCATION: 4301 HWY 87 BRIDGE CITY, TX 77611

PROJ. NO.: 18464

PROJECT CONTACT: CHET SCHEIBEL

PROJECT TELEPHONE NO.: (713) 775-7627

CLIENT'S REPRESENTATIVE: MARK MURPHY

PROJECT MANAGER/SUPERVISOR: GARY FOSTER / SID RICHARD

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	BNA	O&G	METALS	VOA	TOC	TDS/pH			REMARKS chemtex
1	EWTP-7R	8/1/96	1133		X	RINSATE - FROM ISCO SAMPLER	1-l	X								P6080031
2	EWTP-7R	8/1/96	1135		X	"	1-l		X							H_2SO_4
3	EWTP-7R	8/1/96	1137		X	"	1-l			X						HNO_3
4	EWTP-7R	8/1/96	1129		X	"	2-40ml				X					
5	EWTP-7R	8/1/96	1139		X	"	1-4oz					X				H_2SO_4
6	EWTP-7R	8/1/96	1140		X	"	1-250ml						X			
7																
8																
9																
10																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-6	Blake Riggs	Chontamuri	8/1/96	1532
2					
3					
4					

REMARKS: PLEASE SEND ANALYTICAL RESULTS WITH EWTP-7G, WHICH YOU 7GA 7C WILL RECEIVE TOMORROW.

SAMPLER'S SIGNATURE: Blake Riggs

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

Memo

225 W. Airtex Blvd • Houston, Texas 77090 *Southern Region, Southwest District*

TO: Gary Foster

FROM: Chet Scheibel

DATE: September 17, 1996

SUBJECT: Data Review for the Project 18464 - Bailey Disposal Site

The Southern Region Project Chemist has performed a QA Audit of the data submitted by the Chemtex laboratory for the four water samples collected on August 2, 1996. This data is for the analysis of volatiles, semivolatiles, metals, and conventionals. The lab exceeded the requested 3 day turn-around-time by two days for the inital data. However, the final report was not received from the lab until September 13, 1996. The sample numbers are EWTP-7G, EWTP-7GA, EWTP-7C, and TB.

The results of this audit are presented in the attached Data Evaluation Checklist. The data conforms to the requirements of USEPA Method 624, 625, 200 series, 150.1, 413.1, 160.1, and 415.1 with the following comment:

- Semivoltiles - The recovery of pyrene in the LCS is slightly below control limits. All other base neutral compound recoveries are within control limits and all surrogate recoveries are within control limits. No qualification of the data is necessary.

The data is deemed acceptable according to USEPA guidelines and should be used in this project's decision making process.

Chet Scheibel

Chet Scheibel - Project Chemist
Southern Region, Southwest District

OHM SOUTHERN REGION, SOUTHWEST DISTRICT

TECHNICAL SERVICES GROUP

ANALYTICAL DATA VALIDATION

The attached Data Package has been reviewed by the Southern Region, Southwest District Technical Services Group. Detailed comments concerning specific analyses (ie, GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below.

COMMENTS: _____

Data Validated by: Chet Scheibel Date: 8/30/96

Name (Printed): CHET SCHEIBEL

3/18/96

DATA VALIDATION FORMS

HOLDING TIMES	REQUIREMENTS	YES	NO
METALLIC/CONVENTIONAL INORGANIC			
Metals	6 Months	✓	
Cyanide	14 Days		
Mercury	28 Days	✓	
Hexavalent Chromium	24 Hours		
Other			
SEMIVOLATILE - GC, GC/MS, OR HPLC			
WATER	7 Days to Extraction	✓	
	Within 40 days of extraction	✓	
SOIL	14 Days to Extraction		
	Within 40 days of extraction		
VOLATILES - GC OR GC/MS			
WATERS for AROMATICS	7 Days unpreserved		
	14 Days preserved		
SOILS, SLUDGES, SEDIMENTS	14 Days		
WATER or OTHER	14 Days	✓	
PESTICIDES/PCBs			
WATER	7 Days to extraction		
	Within 40 days of extraction		
SOILS, SEDIMENTS, SLUDGES, SOLIDS	14 Days to extraction		
	Within 40 days of extraction		
OTHER ORGANICS			
SOLIDS/SLUDGES Analyzed Within Holding Time	Per Method		
WATERS/LIQUIDS Analyzed Within Holding Time	Per Method		
PRESERVATION			
Preserved at field site?		✓	
Lab preserved sample.			

LIST DEFICIENCIES IN DETAIL: _____

DATA VALIDATION AND QUALITY CONTROL

VOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID/SOIL ____ TCLP ____			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	BFB EVERY 12 HRS	NA	
INITIAL CALIBRATION	%RSD: < or = 30%	✓	
CONTINUING CALIBRATION CHECK	%DIFF: < OR = 25%(A) or 20%(B)	✓	
SPCC COMPOUNDS	RF: > OR = 0.300	✓	
	Bromoform: > OR = 0.25 (A) or 0.10 (B)	✓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS <MDL	✓	
MATRIX SPIKE % RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
MATRIX SPIKE DUP. % RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
MS/MSD RPD	< LAB QC LIMITS	✓	
% LCS RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
% SURROGATE RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

SEMIVOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID/SOIL ___ TCLP ___			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	DFTPP EVERY 12 HRS	NA	
INITIAL CCC COMPOUNDS	%RSD: < OR = 30%	✓	
INITIAL SPCC COMPOUNDS	% RF: > OR = 0.05	✓	
CONTINUING CCC COMPOUNDS	% DIFF: < OR = 30%(A) or 20%(B)	✓	
CONTINUING SPCC	RF: > OR = 0.05	✓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS <MDL	✓	
MATRIX SPIKE % RECOVERY VALUES	WITHIN THOSE SET BY LAB	NR	
MATRIX SPIKE DUP. % RECOVERY VALUES	WITHIN THOSE SET BY LAB	NA	
MS/MSD RPD	< LAB QC LIMITS	—	
% LCS RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	/
% SURROGATE RECOVERY LIMITS	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL:

LCS Pyrene rec slightly below cntrl limit.

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ SOLID/SOIL ____ TCLP ____

METALS - INORGANICS	REQUIREMENTS	YES	NC
% RECOVERY - ICV & CCV	90-110%(ICP) 80-120%(GFAA)	NA	
CCV	Beginning and every 10 samples	↓	
ICV	Beginning and every 10 samples	↓	
1 CALIBRATION BLANK	Beginning and every 10 samples	↓	
RSD OF INITIAL CALIBRATION	<30% or LINEAR CORRELATION OF 0.995 OR BETTER	↓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds <MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	NR	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	NR	
MS/MSD RPD	< 20 %	—	
LCS RECOVERY VALUES	80 - 120 %	✓	
POST DIGEST SPIKE RECOVERY	75 - 125 %	—	
OTHER (LIST) Duplicate RPD	<20%	—	

LIST DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ **SOLID/SOIL** ____

CONVENTIONAL ANALYSIS	REQUIREMENTS	YES	NO
% RECOVERY OF CCV	80-120%	NA	
RSD OF INITIAL CALIBRATION	<30% or Linear Correlation of 0.995 or Better	✓	
CONTINUING CALIBRATION	Beginning and Every 10 Samples	✓	
CALIBRATION BLANK	Beginning and Every 10 Samples	✓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds <MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	NR	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	NR	
LCS RECOVERY VALUES	80 - 120 %	—	
DUPLICATE % RPD	< 20 %	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

Memo

OHM Remediation Services Corp.

225 W. Airtex Blvd., Houston, TX 77073
(713) 775-7629 • Fax (713) 775-7659

Southern Region, Southwest District

TO: Gary Foster
FROM: Chet Scheibel CAS
DATE: August 8, 1996
SUBJECT: Review of EWTP-7G/EWTP-7GA/EWTP-7C Analysis

The analytical data of the EWTP-7G, EWTP-7GA, and EWTP-7C samples collected on August 2, 1996 are summarized in the attached table. As shown, the discharge criteria is not exceeded for any parameter or analyte. Based on the analytical data OHM proposes that the treated water meets all criteria for discharge.

Wastewater Discharge Criteria and Analysis

POLLUTANT	COMPOSITE CRITERIA-mg/L	SAMPLE RESULT-mg/l	DUPLICATE RESULT-mg/l	GRAB CRITERIA-mg/L	SAMPLE RESULT-mg/l	DUPLICATE RESULT -mg/l
	SAMPLE NO	EWTP-7C	NA	SAMPLE NO.	EWTP-7G	EWTP-7GA
	DATE SAMPLED	8/2/96		DATE SAMPLED	8/2/96	8/2/96
Arsenic	0.2	< 0.020		0.4	< 0.020	<0.020
Cadmium	0.1	< 0.020		0.2	< 0.020	< 0.020
Chromium	0.2	< 0.020		0.4	< 0.020	< 0.020
Lead	0.5	< 0.020		1.0	< 0.020	< 0.020
Mercury	0.01	< 0.001		0.02	< 0.001	< 0.001
Selenium	0.2	< 0.020		0.4	< 0.020	< 0.020
Silver	0.1	< 0.020		0.2	< 0.020	< 0.020
Pentachloro-phenol (PCP)	1.23	< 0.050		2.60	< 0.050	< 0.050
Phenanthrene	0.62	< 0.010		1.32	< 0.010	< 0.010
O & G	NA	< 1.0		15	< 1.0	< 1.0
TDS	13,000	2,460		15,000	2,680	2,640
TOC	15	7		30	8	9
pH	6-9	8.1		6-9	8.3	8.4
VOC	< 1.0	< 0.050		< 1.0	< 0.050	< 0.050
24 Hr Acute Toxicity	> 50% Survival	100%		> 50% Survival	100%	100%

NOTE: EWTP - East Water Treatment Plant

TRIP BLANK ANALYSIS: Sample Number: TB
Analysis <0.010 mg/L

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Collected By: B. Riggs
Date Received: 8/2/96
Date Analyzed: 8/6/96
Analyst: KRP
CHEMTEX FILE #: P6080058

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-7C

CHEMTEX #: P6080058

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Collected By: B. Riggs
Date Received: 8/2/96
Date Analyzed: 8/6/96
Analyst: KRP
CHEMTEX FILE #: P6080058

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-7G

CHEMTEX #: P6080059

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Collected By: B. Riggs
Date Received: 8/2/96
Date Analyzed: 8/6/96
Analyst: KRP
CHEMTEX FILE #: P6080058

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-7GA

CHEMTEX #: P6080060

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
19[illegible] N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Collected By: B. Riggs
Date Received: 8/2/96
Date Analyzed: 8/6/96
Analyst: KRP
CHEMTEX FILE #: P6080058

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: TB

CHEMTEX #: P6080060A

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Analyzed: 8/6/96
Analyst: KRP
CHEMTEX FILE #: P6080058

VOLATILE ORGANIC ANALYSES BY GCMS
EPA 600 METHOD 624

METHOD BLANK

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

PERCENT RECOVERY OF SURROGATES
EPA 600 METHOD 624

CHEMTEX #	(%) Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	4-Bromofluorobenzene
P6080058	96	101	96
P6080059	97	95	99
P6080060	99	96	97
Trip Blank	96	98	101
Method Blank	99	98	100
Method Spike	97	100	95
Matrix Spike	97	91	99
Matrix Spike Duplicate	90	91	94

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
P6080058	EWTP-7C Matrix Spike	Benzene	80
		Chlorobenzene	81
		1,1-Dichloroethylene	66
		Toluene	77
		Trichloroethylene	80
P6080058	EWTP-7C Matrix Spike Duplicate	Benzene	86
		Chlorobenzene	88
		1,1-Dichloroethylene	72
		Toluene	93
		Trichloroethylene	88
Method Spike		Benzene	87
		Chlorobenzene	90
		1,1-Dichloroethylene	86
		Toluene	91
		Trichloroethylene	86

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Collected By: B. Riggs
Date Received: 8/2/96
Date Analyzed: 8/6/96
Analyst: MSR
CHEMTEX FILE #: P6080058

SEMIVOLATILE ANALYSES BY GCMS - EPA METHOD 625

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
P6080058	EWTP-7C	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
P6080059	EWTP-7G	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
P6080060	EWTP-7GA	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
Method Blank		Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96

CHEMTEX FILE #: P6080058

PERCENT RECOVERY OF SURROGATES - EPA METHOD 625

CHEMTEX #	COMPOUND NAME	% Recovery
P6080058	2-Fluorophenol	41
	Phenol-d_5	40
	Nitrobenzene-d_5	43
	2-Fluorobiphenyl	50
	2,4,6-Tribromophenol	35
	p-Terphenyl-d_{14}	43
P6080059	2-Fluorophenol	48
	Phenol-d_5	41
	Nitrobenzene-d_5	43
	2-Fluorobiphenyl	49
	2,4,6-Tribromophenol	25
	p-Terphenyl-d_{14}	42
P6080060	2-Fluorophenol	44
	Phenol-d_5	42
	Nitrobenzene-d_5	40
	2-Fluorobiphenyl	51
	2,4,6-Tribromophenol	32
	p-Terphenyl-d_{14}	43
Method Blank	2-Fluorophenol	82
	Phenol-d_5	84
	Nitrobenzene-d_5	94
	2-Fluorobiphenyl	101
	2,4,6-Tribromophenol	64
	p-Terphenyl-d_{14}	86

CNReddy

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96

CHEMTEX FILE #: P6080058

PERCENT RECOVERY OF SURROGATES - EPA METHOD 625

CHEMTEX #	COMPOUND NAME	% Recovery
Method Spike	2-Fluorophenol	88
	Phenol-d_5	90
	Nitrobenzene-d_5	97
	2-Fluorobiphenyl	101
	2,4,6-Tribromophenol	100
	p-Terphenyl-d_{14}	113

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Phenol	60
		2-Chlorophenol	59
		1,4-Dichlorobenzene	63
		n-Nitro-di-n-propylamine	60
		1,2,4-Trichlorobenzene	64
		4-Chloro-3-methylphenol	63
		Acenaphthene	64
		4-Nitrophenol	71
		2,4-Dinitrotoluene	63
		Pentachlorophenol	63
		Pyrene	45

for Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Collected By: B. Riggs
Date Received: 8/2/96
CHEMTEX FILE #: P6080058

METALLIC PARAMETERS BY ICP

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	Parameter	Units	Results	MDL
P6080058	EWTP-7C	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
P6080059	EWTP-7G	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
P6080060	EWTP-7GA	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
Method Blank		Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96

CHEMTEX FILE #: P6080058

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Arsenic	96
		Cadmium	100
		Chromium, total	104
		Lead	100
		Mercury	98
		Selenium	96
		Silver	100

QUALITY ASSURANCE/QUALITY CONTROL DATA

Contaminant	True Value	Obtained Value
Arsenic (ug/l)	500	488/496*
Cadmium (ug/l)	500	498/493*
Chromium (ug/l)	500	500/501*
Lead (ug/l)	500	488/501*
Mercury (ug/l)	10.0	10.0/10.5*
Selenium (ug/l)	500	493/494*
Silver (ug/l)	500	482/486*

* Duplicate Analysis

Contaminant	Method Reference	Date Analyzed/Analysts
Arsenic	EPA Method 200.7	8/6/96 MRP/SM
Cadmium	EPA Method 200.7	8/6/96 MRP/SM
Chromium, total	EPA Method 200.7	8/6/96 MRP/SM
Lead	EPA Method 200.7	8/6/96 MRP/SM
Mercury	EPA Method 245.1	8/6/96 MRP/SM
Selenium	EPA Method 200.7	8/6/96 MRP/SM
Silver	EPA Method 200.7	8/6/96 MRP/SM

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Collected By: B. Riggs
Time Collected: 14:02&14:18
Date Received: 8/2/96
Time Received: 15:14
CHEMTEX FILE #: P6080058

CONVENTIONAL ANALYSES

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	Parameter	Units	Results	MDL
P6080058	EWTP-7C 14:02	Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	2,460	10
		T O C	mg/l	7	2
		pH	units	8.1	---
P6080059	EWTP-7G 14:18	Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	2,680	10
		T O C	mg/l	8	2
		pH	units	8.3	---
P6080060	EWTP-7GA 14:18	Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	2,640	10
		T O C	mg/l	9	2
		pH	units	8.4	---
Method Blank		Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	BDL	2
		T O C	mg/l	BDL	2

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Schiebel

Report Date: 8/7/96

CHEMTEX FILE #: P6080058

QUALITY ASSURANCE/QUALITY CONTROL DATA

Contaminant	True Value	Obtained Value
Oil & Grease (mg/l)	10.0	9.3/9.8*
T D S (mg/l)	100	94/96*
T O C (mg/l)	30	30/30*
pH (units)	8.0	8.0/8.0*

* Duplicate Analysis

Contaminant	Method Reference	Date Analyzed/Analysts
Oil & Grease	EPA Method 413.1	8/5/96 LKP/MMP
Solids, Total Dissolved (TDS)	EPA Method 160.1	8/5/96 LKP/MMP
Total Organic Carbon (TOC)	EPA Method 415.1	8/2/96 LKP/MMP
pH	EPA Method 150.1	8/2/96 15:20 MMP

CNReddy

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Schiebel

Report Date: 8/7/96
Date Collected: 8/2/96
Time Collected: 14:06
Collected By: B. Riggs
Date Received: 8/2/96
Time Received: 15:14 PM
Date Analyzed: 8/3-4/96
Analyst: DE
CHEMTEX FILE #: P6080058

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-7C

CHEMTEX #: P6080058

24-HOUR MYSID ACUTE TOXICITY TEST
EPA METHOD 600/4-90/027

MYSIDOPSIS BAHIA SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24 hr	A	100					100
	B	100					100
	C	100					100
	D	100					100
	E	100					100
	MEAN	100					100

CNReddy

Dr. C. N. Reddy, Ph.D., CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Report Date: 8/7/96
Date Collected: 8/2/96
Time Collected: 14:22
Collected By: B. Riggs
Date Received: 8/2/96
Time Received: 15:14 PM
Date Analyzed: 8/3-4/96
Analyst: DE
CHEMTEX FILE #: P6080058

Attn: Mr. Chet Schiebel

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-7G

CHEMTEX #: P6030059

24-HOUR MYSID ACUTE TOXICITY TEST
EPA METHOD 600/4-90/027

MYSIDOPSIS BAHIA SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24 hr	A	100					100
	B	100					100
	C	100					100
	D	100					100
	E	100					100
	MEAN	100					100

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Report Date: 8/7/96
Date Collected: 8/2/96
Time Collected: 14:22
Collected By: B. Riggs
Date Received: 8/2/96
Time Received: 15:14 PM
Date Analyzed: 8/3-4/96
Analyst: DE
CHEMTEX FILE #: P6080058

Attn: Mr. Chet Schiebel

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-7GA

CHEMTEX #: P6080060

24-HOUR MYSID ACUTE TOXICITY TEST
EPA METHOD 600/4-90/027

MYSIDOPSIS BAHIA SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24 hr	A	100					100
	B	100					100
	C	100					100
	D	100					100
	E	100					100
	MEAN	100					100

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

Form 0019
Field Technical Services
Rev. 08/89

182127

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE
PROJECT LOCATION: 4301 Hwy 87 BRIDGE CITY, TX
PROJ. NO.: 18464
PROJECT CONTACT: CHET SCHEIBEL
PROJECT TELEPHONE NO.: 713 775-7629
CLIENT'S REPRESENTATIVE: MARK MURPHY
PROJECT MANAGER/SUPERVISOR: GARY FOSTER/SID RICHARD

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	BNA	O&G	METALS	VOA	TOC	TDS/pH	ACUTE TOXICITY	REMARKS
1	EWTP-7C	8/2/96	1358	X		24 HR COMPOSITE SAMPLE - EWTP WATER	1-l	X							
2	EWTP-7C	8/2/96	1357	X		"	1-l		X						H_2SO_4 P6080058
3	EWTP-7C	8/2/96	14[illegible]	X		"	1-l			X					HNO_3
4	EWTP-7C	8/2/96	1355	X		"	2-40ml				X				
5	EWTP-7C	8/2/96	1401	X		"	1-4oz					X			H_2SO_4
6	EWTP-7C	8/2/96	1402	X		"	1-250ml						X		
7	EWTP-7C	8/2/96	1406	X		"	2-l							X	
8	EWTP-7G	8/2/96	1414		X		1-l	X							P6080059
9	EWTP-7G	8/2/96	1415		X		1-l		X						H_2SO_4
10	EWTP-7G	8/2/96	1416		X		1-l			X					HNO_3

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-10	Blake Riggs	[illegible] for Charlex	8/2/96	3:14
2					
3					
4					

REMARKS
- SEE ARF
- PLEASE ANALYZE TOC FIRST - CALL SITE WITH RESULTS
3 DAY TAT

SAMPLER'S SIGNATURE: Blake Riggs

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

Form 0019
Field Technical Services
Rev. 08/89

182125

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE
PROJECT LOCATION: @ 301 HWY 87 BRIDGE CITY, TX
PROJ. NO.: 1864
PROJECT CONTACT: CHET SCHEIBEL
PROJECT TELEPHONE NO.: 713 775-7629
CLIENT'S REPRESENTATIVE: MARK MURPHY
PROJECT MANAGER/SUPERVISOR: GARY FOSTER/SID RICHARD

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): ACUTE TOXICITY; VOA; CHEMICAL

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ACUTE TOXICITY	VOA							REMARKS
1	ENTP-7GA	8/2/96	1422		X	DUPLICATE - GRAB SAMPLE ENTPWATER	2-l	X								PO 800 60
2	TB					TRIP BLANK	2-40 ml		X							
3																
4																
5																
6																
7																
8																
9																
10																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-2	Blake Rizzo	[signature] for Chestox	8/2/96	3:40pm
2					
3					
4					

REMARKS: SEE ARF

3 DAY TAT

SAMPLER'S SIGNATURE: Blake Rizzo

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE
PROJECT LOCATION: 3301 HWY 87 BRIDGE CITY, TX 77611
PROJ. NO.: 1B464
PROJECT CONTACT: CHET SCHEBEL
PROJECT TELEPHONE NO.: 713 775-7629
CLIENT'S REPRESENTATIVE: MARK MURPHY
PROJECT MANAGER/SUPERVISOR: GARY FOSTER / SID RICHARDS

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	VOA	TOC	TDS/pH	ACUTE TOXICITY	BNA	O&G	METALS	REMARKS
1	EWTP-7G	8/2/96	1408		X	GRAB SAMPLE - EWTP WATER	2-40ml	X							CHEMTECH P6080059
2	EWTP-7G	8/2/96	1417		X	"	1-4oz		X						H_2SO_4
3	EWTP-7G	8/2/96	1418		X	"	1-250ml			X					
4	EWTP-7G	8/2/96	1422		X	"	2-l				X				
5	EWTP-7GA	8/2/96	1414		X	DUPLICATE - GRAB SAMPLE - EWTP WATER	1-l					X			P6080060
6	EWTP-7GA	8/2/96	1415		X	"	1-l						X		H_2SO_4
7	EWTP-7GA	8/2/96	1416		X	"	1-l							X	HNO_3
8	EWTP-7GA	8/2/96	1408		X	"	2-40ml	X							
9	EWTP-7GA	8/2/96	1417		X	"	4oz. 1-250ml		X						H_2SO_4
10	EWTP-7GA	8/2/96	1418		X	"	1-250ml			X					

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-10	Blake Rizzo	Linda [illegible] for Chartex	8/2/96	3:14p
2					
3					
4					

REMARKS: SEE ARF
- PLEASE ANALYZE TOC FIRST
CALL SITE WITH RESULTS

3 DAY TAT

SAMPLER'S SIGNATURE: Blake Rizzo

OHM REMEDIATION SERVICES CORP
SOUTHERN REGION, SOUTHWEST DISTRICT - TECHNICAL SERVICES
LABORATORY SAMPLE RECEPTION CONFIRMATION

Telephone #: 713/775-7629 FAX #: 713/775-7659

Send to the Attention of: Chet Scheibel

TO BE COMPLETED BY THE LABORATORY WITHIN 24 HOURS OF SAMPLE RECEPTION

NOTE: A Copy of the COC Must Be Enclosed With This Form

DATE: 8/2/96

LABORATORY NAME: CHEMTEX

LABORATORY LOCATION: Port Arthur, TX

PREPARED BY: _____
(PRINT LEGIBLY)

PROJECT NUMBER: 18464 - Bailey

DATE SAMPLES RECEIVED: 8/2/96

TOTAL NUMBER OF SAMPLES: 3

SOIL: _____#

WATERS: ✓ #

SOLIDS: _____#

ALL OTHERS

TOC BR

TURN-AROUND-TIME REQ: XXX 24 hr ____ 48 hr ✓ 3 Days BR ____ 5 Days

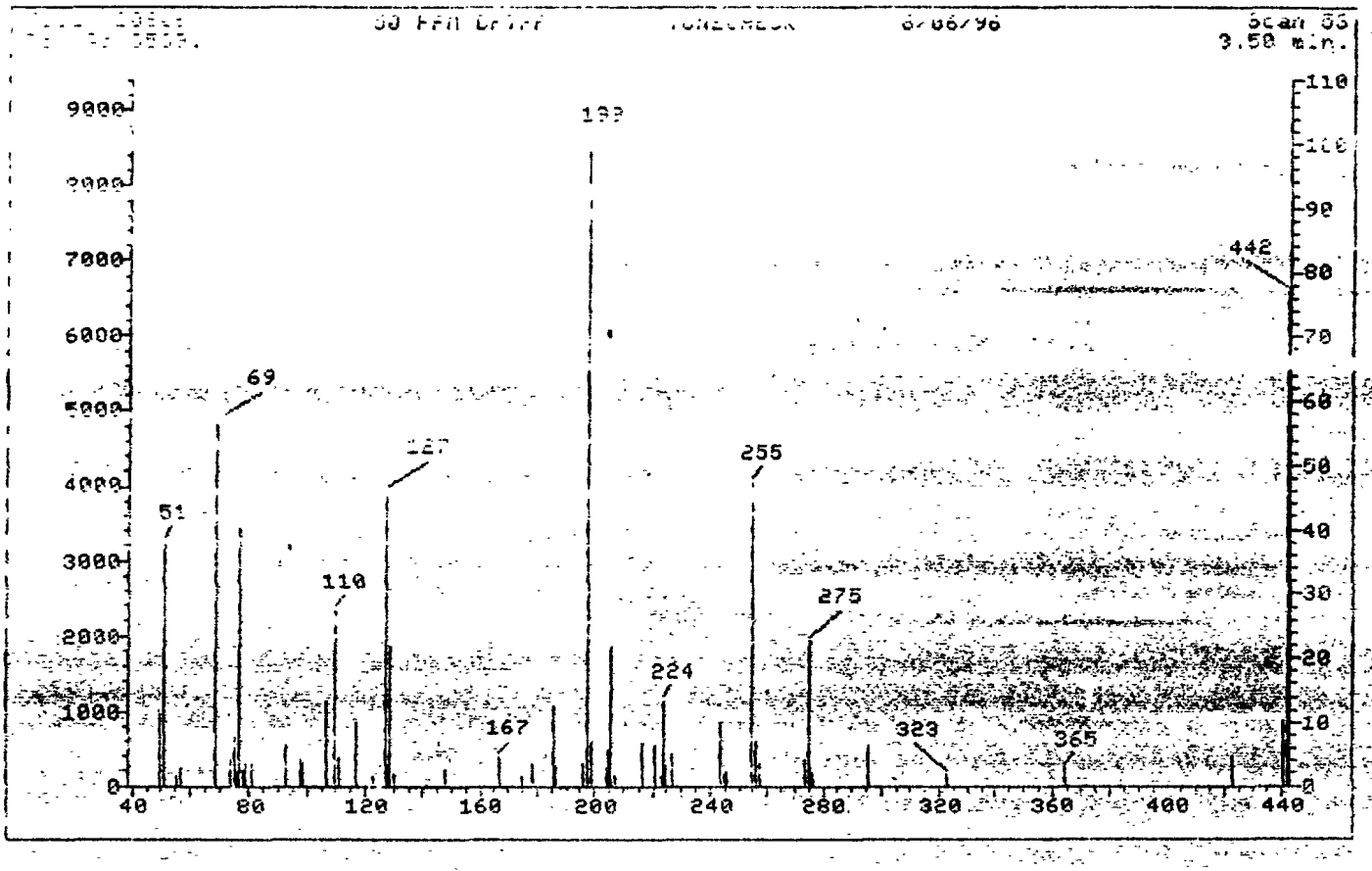
____ 7 Days ____ 14 Days _____ OTHER

TO BE COMPLETED BY OHM TECHNICAL SERVICE DEPARTMENT:

DATE RESULTS RECEIVED BY OHM: Initial (I) _____ Final (F) _____

METHOD OF RECEPTION: ___ Fax ___ Fed X ___ Mail

ACTUAL TURN-AROUND-TIME: I _____ F _____



GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-60% of mass 198	37.99	37.99	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	56.52	56.52	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	40-60% of mass 198	45.79	45.79	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	7.11	7.11	Ok
275	10-30% of mass 198	22.53	22.53	Ok
365	Greater than 1% of mass 198	2.66	2.66	Ok
441	0-100% of mass 442	10.41	68.23	Ok
442	Greater than 40% of mass 198	76.87	76.87	Ok
443	17-23% of mass 442	15.21	19.85	Ok

Injection Date: 08/08/96
Injection Time: 09:26
Data File: >00806
Page: 97

[illegible]

[illegible]

Calibrated: [illegible]

Check Standard Data File: [illegible]
[illegible]

Compound	$\overline{RF}$	RF	%Diff	Calc. Meth	
Pyridine	1.57727	1.[illegible]	[illegible]	Average	
2-Fluorophenol (S)	.99195	1.11143	11.39	Average	(Conc=200.00)
Phenol-d6 (S)	1.30276	1.67465	28.59	Average	(Conc=200.00)
Phenol	1.29342	1.66365	28.62	Average	
bis(2-Chloroethyl)ether	1.07319	1.43760	33.9[illegible]	Average	
2-Chlorophenol	1.21473	1.46211	20.41	Average	
Benzyl alcohol	.72992	.87112	19.34	Average	
1,3-Dichlorobenzene	1.42242	1.42[illegible]	[illegible]	Average	
1,4-Dichlorobenzene	1.45098	1.67759	15.62	Average	
1,2-Dichlorobenzene	1.44879	1.[illegible]	12.[illegible]	Average	
2-Methylphenol	1.01639	.94122	7.4[illegible]	Average	
2,2'-oxybis(1-Chloropropane)	1.10456	.71890	34.92	Average	
3-Methylphenol	1.[illegible]	.93503	12.51	Average	
N-Nitroso-di-n-propylamine	.74162	.77049	1.59	Average	
Hexachloroethane	.97109	[illegible]	22.37	Average	
Nitrobenzene-d5 (S)	[illegible]	[illegible]	37.[illegible]	Average	(Conc=200.00)
Nitrobenzene	.49381	[illegible]	[illegible]	Average	
Isophorone	.63939	.87247	31.13	Average	
2-Nitrophenol	.21376	.27010	11.86	Average	
2,4-Dimethylphenol	.39500	.44729	13.22	Average	
bis(2-Chloroethoxy)methane	.37880	.49387	30.38	Average	
2,4-Dichlorophenol	.37293	.37299	.02	Average	
1,2,4-Trichlorobenzene	.39442	.39609	.41	Average	
Naphthalene	.97547	1.05145	7.79	Average	
4-Chloroaniline	.43750	.45701	4.46	Average	
Hexachlorobutadiene	.24596	.23519	4.42	Average	
4-Chloro-3-methylphenol	.29697	.37922	27.69	Average	
2-Methylnaphthalene	.71724	.75518	5.27	Average	
Hexachlorocyclopentadiene	.31739	.28114	11.42	Average	
2,4,6-Trichlorophenol	.41207	.4[illegible]	14.01	Average	
2,4,5-Trichlorophenol	.41401	.39022	5.75	Average	
2-Chloronaphthalene	1.03363	1.26812	17.03	Average	
2-Fluorobiphenyl (S)	2.70521	3.21754	18.95	Average	(Conc=200.00)
2-Nitroaniline	.30169	.31356	3.93	Average	
Dimethylphthalate	1.27268	1.26154	.88	Average	
Acenaphthylene	1.[illegible]	[illegible]	15.73	Average	
2,6-Dinitrotoluene	.27790	.27477	1.05	Average	
Acenaphthene	1.03147	1.14598	11.10	Average	
3-Nitroaniline	.2[illegible]	[illegible]	[illegible]	Average	
2,4-Dinitrophenol	.13566	.1[illegible]	47.12	Average	

RF - Response Factor from daily standard file as [illegible]

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

%Diff - % Difference from original average [illegible]

Page [illegible]

POOR ORIGINAL

Calibration Check [illegible]

Title: CLP BNA Standards
Calibrated: 960707 10:[illegible]

C[illegible]k Standard Data File: [illegible]NW850
[illegible]

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
4-Nitrophenol	.21198	.17407	17.[illegible]	Average	
Dibenzofuran	1.79460	1.63712	8.[illegible]	Average	
2,4-Dinitrotoluene	.38416	.27672	27.97	Average	
Diethylphthalate	1.37677	1.13[illegible]	[illegible]	Average	
4-Chlorophenyl-phenylether	.65116	.57725	11.35	Average	
F[illegible]rene	1.25919	1.[illegible]	[illegible]	[illegible]	
4-Nitroaniline	.19772	.15343	22.42	Average	
4,6-Dinitro-2-methylphenol	.19892	.2[illegible]	3[illegible]	Average	
N-Nitrosodiphenylamine	.55485	.6[illegible]	23.56	Average	
2,4,6-Tribromophenol (S)	.14916	.15791	4.[illegible]	Average	(Conc=200.00)
4-Bromophenyl-phenylether	.31261	.34421	10.11	Average	
Hexachlorobenzene	.34357	.35750	4.05	Average	
Pentachlorophenol	.19812	.15166	23.45	Average	
Phenanthrene	1.34014	1.2[illegible]03	6.29	Average	
Anthracene	1.23502	1.15764	6.27	Average	
Carbazole	2.27730	1.56826	31.2[illegible]	Average	
Di-n-butylphthalate	.58659	.42970	26.75	Average	
Fluoranthene	1.23889	1.11986	9.[illegible]	[illegible]rage	
Pyrene	1.62176	1.95316	20.44	Average	
Terphenyl-d14 (S)	2.50921	4.37866	72.91	Average	(Conc=100.00)
Butylbenzylphthalate	.74[illegible]	.76162	1.67	Average	
3,3'-Dichlorobenzidine	.77672	.79956	2.94	Average	
Benzo(a)anthracene	1.13140	1.35[illegible]	19.8[illegible]	Average	
Chrysene	1.12364	1.35614	20.[illegible]9	Average	
Bis(2-Ethylhexyl)phthalate	.88935	.87832	1.24	Average	
Di-n-octylphthalate	1.92527	2.29855	19.39	Average	
Benzo(b)fluoranthene	1.45702	2.13953	46.77	Average	
Benzo(k)fluoranthene	1.37746	1.86082	35.0[illegible]	Average	
Benzo(a)pyrene	1.05749	1.03717	4.76	Average	
Indeno(1,2,3-cd)pyrene	.82906	.97158	19.60	Average	
Dibenz(a,h)anthracene	.68427	.60063	12.22	Average	
Benzo(g,h,i)perylene	.72719	.86145	18.46	Average	

RF - Response Factor from daily standard file at 50.00 ug/l

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

%Diff - % Difference from original average or curve

Operator ID: CHEMTEX Quant Rev: 7 Quant Time: 960806 17:29
Output File: ^NW850::ME Injected at: 960806 16:37
Data File: :NW850::D2 Dilution Factor: 1.00000
Name: 50 PPM STANDARD Instrument ID: BNA
Misc: 8/06/9.

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960727 18:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.85	152.0	40335	40.00	mg/l	93
2)	Pyridine	1.90	79.0	64873M	66.76	mg/l	
3)	2-Fluorophenol (S)	4.56	112.0	223946	180.23	mg/l	93
4)	Phenol-d6 (S)	7.68	99.0	341769	186.87	mg/l	91
5)	Phenol	7.70	94.0	83879	50.58	mg/l	90
6)	bis(2-Chloroethyl)ether	7.48	93.0	[illegible]482	47.64	mg/l	96
7)	2-Chlorophenol	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8)	Benzyl alcohol	8.73	108.0	43921	49.73	mg/l	95
9)	1,3-Dichlorobenzene	7.71	146.0	74818	44.58	mg/l	96
10)	1,4-Dichlorobenzene	7.89	146.0	84582	46.68	mg/l	96
11)	1,2-Dichlorobenzene	8.41	146.0	82368	48.23	mg/l	96
12)	2-Methylphenol	9.36	108.0	47455M	49.48	mg/l	89
13)	2,2'-oxybis(1-Chloropropane)	9.07	45.0	36246	37.36	mg/l	82
14)	4-Methylphenol	9.80	108.0	47143	38.46	mg/l	96
15)	N-Nitroso-di-n-propylamine	9.78	70.0	36830M	31.49	mg/l	89
16)	Hexachloroethane	9.27	117.0	35406	53.67	mg/l	91
17)	*Naphthalene-d8	11.68	136.0	157972	40.00	mg/l	89
18)	Nitrobenzene-d5 (S)	9.76	82.0	331446	94.79	mg/l	82
19)	Nitrobenzene	9.91	77.0	104243	45.08	mg/l	96
20)	Isophorone	10.56	82.0	165560	48.58	mg/l	89
21)	2-Nitrophenol	10.71	139.0	47214	51.41	mg/l	87
22)	2,4-Dimethylphenol	11.27	107.0	87534	48.40	mg/l	96
23)	bis(2-Chloroethoxy)methane	11.42	93.0	97522	47.27	mg/l	87
24)	2,4-Dichlorophenol	11.56	162.0	65577	48.16	mg/l	92
25)	1,2,4-Trichlorobenzene	11.59	180.0	78207	48.05	mg/l	90
26)	Naphthalene	11.74	128.0	207823	46.55	mg/l	95
27)	4-Chloroaniline	12.23	127.0	90415	50.48	mg/l	91
28)	Hexachlorobutadiene	12.38	225.0	46423	46.61	mg/l	96
29)	4-Chloro-3-methylphenol	14.02	107.0	75002	53.01	mg/l	90
30)	2-Methylnaphthalene	13.85	142.0	149122	54.59	mg/l	87
31)	*Acenaphthene-d10	17.02	164.0	95840	40.00	mg/l	95
32)	Hexachlorocyclopentadiene	14.56	237.0	33680M	55.21	mg/l	95
33)	2,4,6-Trichlorophenol	15.02	196.0	56283	55.16	mg/l	93
34)	2,4,5-Trichlorophenol	15.18	196.0	46748	49.32	mg/l	92
35)	2-Chloronaphthalene	15.53	162.0	151921	54.64	mg/l	96
36)	2-Fluorobiphenyl (S)	15.25	172.0	770922	107.65	mg/l	94
37)	2-Nitroaniline	15.27	65.0	37564M	44.82	mg/l	
38)	Dimethylphthalate	16.74	163.0	151132	45.24	mg/l	77
39)	Acenaphthylene	16.53	152.0	107673	53.41	mg/l	91
40)	2,6-Dinitrotoluene	16.88	165.0	32944	43.50	mg/l	93

Operator ID: CHEM SY Quant Date: 7 Quant Time: 960806 17:29
Output File: ^NW850::ME Injected at: 960806 16:37
Data File: >NW850::02 Dilution Factor: 1.00000
Name: 50 PPM STANDARD Instrument ID: BNA
Misc: 8/06/96

ID File: ID_MKG::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960727 18:58

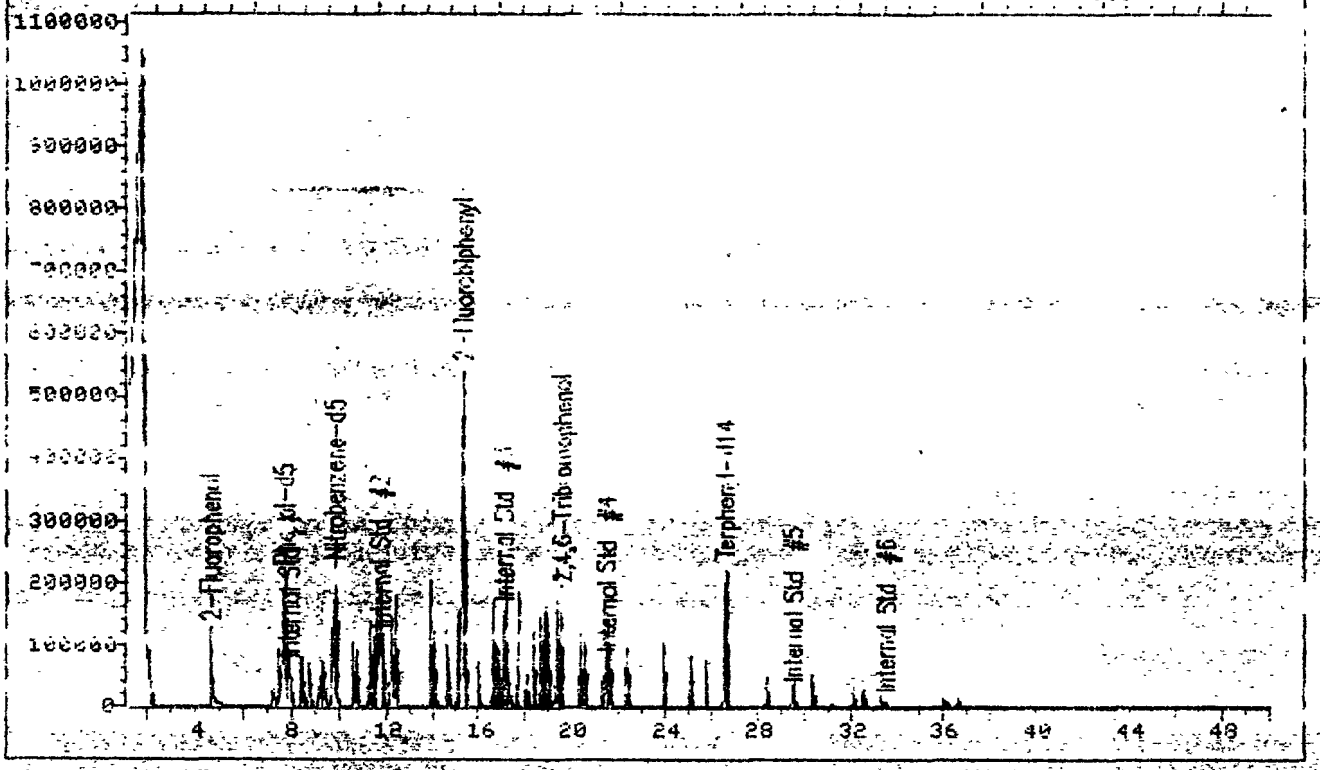
	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Acenaphthene	17.12	153.0	137289	51.95	mg/l	95
42)	3-Nitroaniline	17.28	138.0	26794	44.80	mg/l	97
43)	2,4-Dinitrophenol	17.55	184.0	8330M	52.51	mg/l	81
44)	4-Nitrophenol	18.29	65.0	20950M	56.50	mg/l	
45)	Dibenzofuran	17.62	168.0	96127	50.27	mg/l	87
46)	2,4-Dinitrotoluene	18.01	165.0	33151	36.75	mg/l	96
47)	Diethylphthalate	18.91	149.0	136007	41.38	mg/l	89
48)	4-Chlorophenyl-phenylether	18.83	204.0	69155	46.14	mg/l	92
49)	Fluorene	18.65	166.0	129965	45.87	mg/l	92
50)	4-Nitroaniline	17.29	138.0	18377M	62.40	mg/l	89
51)	*Phenanthrene-d10	21.41	188.0	84754	40.00	mg/l	95
52)	4,6-Dinitro-2-methylphenol	16.74	77.0	28450M	53.38	mg/l	63
53)	N-Nitrosodiphenylamine	19.28	169.0	72631	59.33	mg/l	93
54)	2,4,6-Tribromophenol (S)	19.51	330.0	66072M	197.25	mg/l	
55)	4-Bromophenyl-phenyletner	20.25	248.0	36466	60.32	mg/l	92
56)	Hexachlorobenzene	20.54	284.0	37874	49.09	mg/l	82
57)	Pentachlorophenol	21.23	266.0	16067	48.84	mg/l	95
58)	Phenanthrene	21.49	178.0	133067	52.88	mg/l	98
59)	Anthracene	21.61	178.0	122643	51.16	mg/l	97
60)	Carbazole	22.33	167.0	165934	38.49	mg/l	97
61)	Di-n-butylphthalate	28.32	149.0	45523M	56.36	mg/l	96
62)	Fluoranthene	25.07	202.0	118641M	54.50	mg/l	93
63)	*Chrysene-d12	29.45	240.0	23699	40.00	mg/l	93
64)	Pyrene	25.69	202.0	57860M	36.52	mg/l	98
65)	Terphenyl-d14 (S)	26.55	244.0	257055	104.83	mg/l	88
66)	Butylbenzylphthalate	28.32	149.0	22562M	38.57	mg/l	90
67)	3,3'-Dichlorobenzidine	29.45	240.0	23686M	49.97	mg/l	
68)	Benzo(a)anthracene	29.52	228.0	40174	54.61	mg/l	96
69)	Chrysene	29.52	228.0	40174	54.61	mg/l	94
70)	Bis(2-Ethylhexyl)phthalate	30.28	149.0	26019M	47.91	mg/l	
71)	*Perylene-d12	33.46	264.0	9619M	40.00	mg/l	
72)	Di-n-octylphthalate	32.06	149.0	24764M	37.13	mg/l	86
73)	Benzo(b)fluoranthene	32.49	252.0	23040M	45.48	mg/l	92
74)	Benzo(k)fluoranthene	32.56	252.0	20048M	38.91	mg/l	92
75)	Benzo(a)pyrene	33.30	252.0	10851M	32.13	mg/l	96
76)	Indeno(1,2,3-cd)pyrene	36.01	276.0	10683M	50.29	mg/l	88
77)	Dibenz(a,h)anthracene	36.10	278.0	6471M	33.53	mg/l	94
78)	Benzo(g,h,i)perylene	36.54	276.0	9281M	39.94	mg/l	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

File:>NW850 35.0-500.0 amu. 50 PPM STANDARD 8/06/96

TIC



Data File: >NW850::D2 Quant Output File: ^NW850::ME
Name: 50 PPM STANDARD Instrument ID: BNA
Misc: 8/06/96

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960727 13:58

Operator ID: CHEMTEX
Quant Time: 960806 17:25
Injected at: 960806 16:37

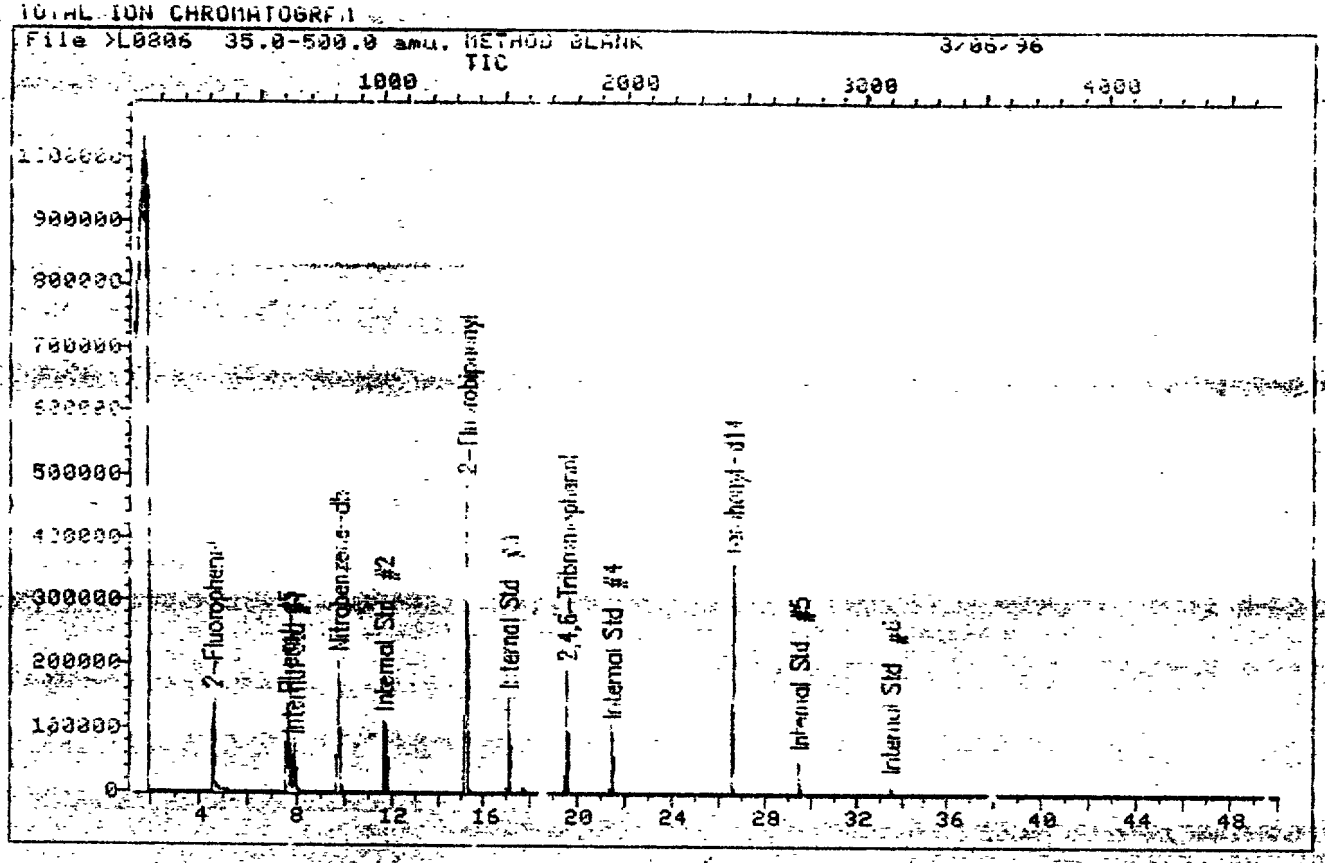
Operator ID: CHEMTEX Quant Rev: 7 Quant Time: 960806 20:34
Output File: ^L080o::ME Injected at: 960806 13:30
Data File: ^L0806::D2 Dilution Factor: 1.00000
Name: METHOD BLANK Injection ID: BNA
Misc: 8/06/96 BTL# 1

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:[illegible] Last Qcal Time: 960806 16:37

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene	7.34	152.0	37056	40.00	mg/l	79
3)	2-Fluorophenol (S)	4.72	112.0	[illegible]	114.06	mg/l	91
4)	Phenol-d6 (S)	7.61	99.0	283679	167.23	mg/l	72
17)	*Naphthalene-d8	11.65	136.0	132578	40.00	mg/l	92
18)	Nitrobenzene-d5 (S)	9.73	82.0	260268	93.57	mg/l	83
31)	*Acenaphthene-d10	17.01	164.0	76127	40.00	mg/l	96
36)	2-Fluorobiphenyl (S)	15.22	172.0	621143	101.44	mg/l	92
51)	*Phenanthrene-d10	21.40	188.0	103637	40.00	mg/l	94
54)	2,4,6-Tribromophenol (S)	19.50	330.0	51765	128.14	mg/l	84
63)	*Chrysene-d12	29.46	240.0	48749	40.00	mg/l	95
65)	Terphenyl-d14 (S)	26.58	244.0	456851	86.78	mg/l	88
71)	*Perylene-d12	33.48	264.0	17684	40.00	mg/l	78

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >L0806::C2 Quant Output File: ^L0806::ME
Name: METHOD BLANK Instrument ID: BNA
Misc: 8/06/96 BTL# 1

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960806 16:37

Operator ID: CHEMTEX
Quant Time: 960806 20:34
Injected at: 960806 13:30

QUANT REPORT

Operator ID: CHEMTEX Quant Rev: 7 Quant Time: 960807 16:12
Output File: [illegible]:ME Injected at: [illegible]
Data File: [illegible]:D2 Dilution Factor: [illegible]
Name: METHOD SPIKE Instrument ID: [illegible]
Misc: 8/06/96

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION [illegible]
Last Calibration: 960707 10:51 Last Qual Time: 960206 16:37

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.87	152.0	40608	40.00	mg/l	96
2)	Pyridine	1.92	79.0	41559M	36.25	mg/l	88
3)	2-Fluorophenol (S)	4.60	112.0	188531M	167.44	mg/l	91
4)	Phenol-d6 (S)	7.69	99.0	325884	189.42	mg/l	90
5)	Phenol	7.71	94.0	80981	47.95	mg/l	86
6)	bis(2-Chloroethyl)ether	7.51	93.0	69352	47.52	mg/l	97
7)	2-Chlorophenol	7.51	128.0	70303	47.36	mg/l	99
8)	Benzyl alcohol	8.74	108.0	42460	48.01	mg/l	94
9)	1,3-Dichlorobenzene	7.74	146.0	76531	50.80	mg/l	95
10)	1,4-Dichlorobenzene	7.92	146.0	85825	50.39	mg/l	94
11)	1,2-Dichlorobenzene	8.44	146.0	79842	48.14	mg/l	95
12)	2-Methylphenol	9.38	108.0	60460	63.27	mg/l	93
13)	2,2'-oxybis(1-Chloropropene)	9.11	45.0	34629	47.45	mg/l	83
14)	4-Methylphenol	9.61	108.0	47949	50.51	mg/l	98
15)	N-Nitroso-di-n-propylamine	9.66	70.0	53070	48.43	mg/l	91
16)	Hexachloroethane	9.29	117.0	31996	44.88	mg/l	91
17)	*Naphthalene-d8	11.70	136.0	150772	40.00	mg/l	89
18)	Nitrobenzene-d5 (S)	9.78	82.0	309004	97.68	mg/l	81
19)	Nitrobenzene	9.82	77.0	98302	49.40	mg/l	94
20)	Isophorone	10.58	82.0	158647	50.20	mg/l	87
21)	2-Nitrophenol	10.74	139.0	44719	49.62	mg/l	89
22)	2,4-Dimethylphenol	11.30	107.0	82831	49.57	mg/l	96
23)	bis(2-Chloroethoxy)methane	11.44	93.0	93557	50.26	mg/l	86
24)	2,4-Dichlorophenol	11.58	162.0	68888	55.03	mg/l	81
25)	1,2,4-Trichlorobenzene	11.62	180.0	76168	51.02	mg/l	95
26)	Naphthalene	11.76	128.0	210301	53.01	mg/l	98
27)	4-Chloroaniline	12.25	127.0	83715	48.51	mg/l	90
28)	Hexachlorobutadiene	12.41	225.0	46396	52.36	mg/l	93
29)	4-Chloro-3-methylphenol	14.06	107.0	72867	50.90	mg/l	90
30)	2-Methylnaphthalene	13.86	142.0	146974	51.63	mg/l	92
31)	*Acenaphthene-d10	17.03	164.0	96690	40.00	mg/l	92
32)	Hexachlorocyclopentadiene	14.59	237.0	43887	64.58	mg/l	96
33)	2,4,6-Trichlorophenol	15.04	196.0	56649	49.88	mg/l	96
34)	2,4,5-Trichlorophenol	15.19	196.0	44499	49.30	mg/l	91
35)	2-Chloronaphthalene	15.34	162.0	149212	48.68	mg/l	97
36)	2-Fluorobiphenyl (S)	15.26	172.0	785936	101.05	mg/l	92
38)	Dimethylphthalate	16.75	163.0	152432	49.99	mg/l	79
39)	Acenaphthylene	16.54	152.0	193799	51.07	mg/l	88
40)	2,6-Dinitrotoluene	16.91	165.0	32206	48.45	mg/l	96
41)	Acenaphthene	17.14	153.0	136064	49.12	mg/l	95

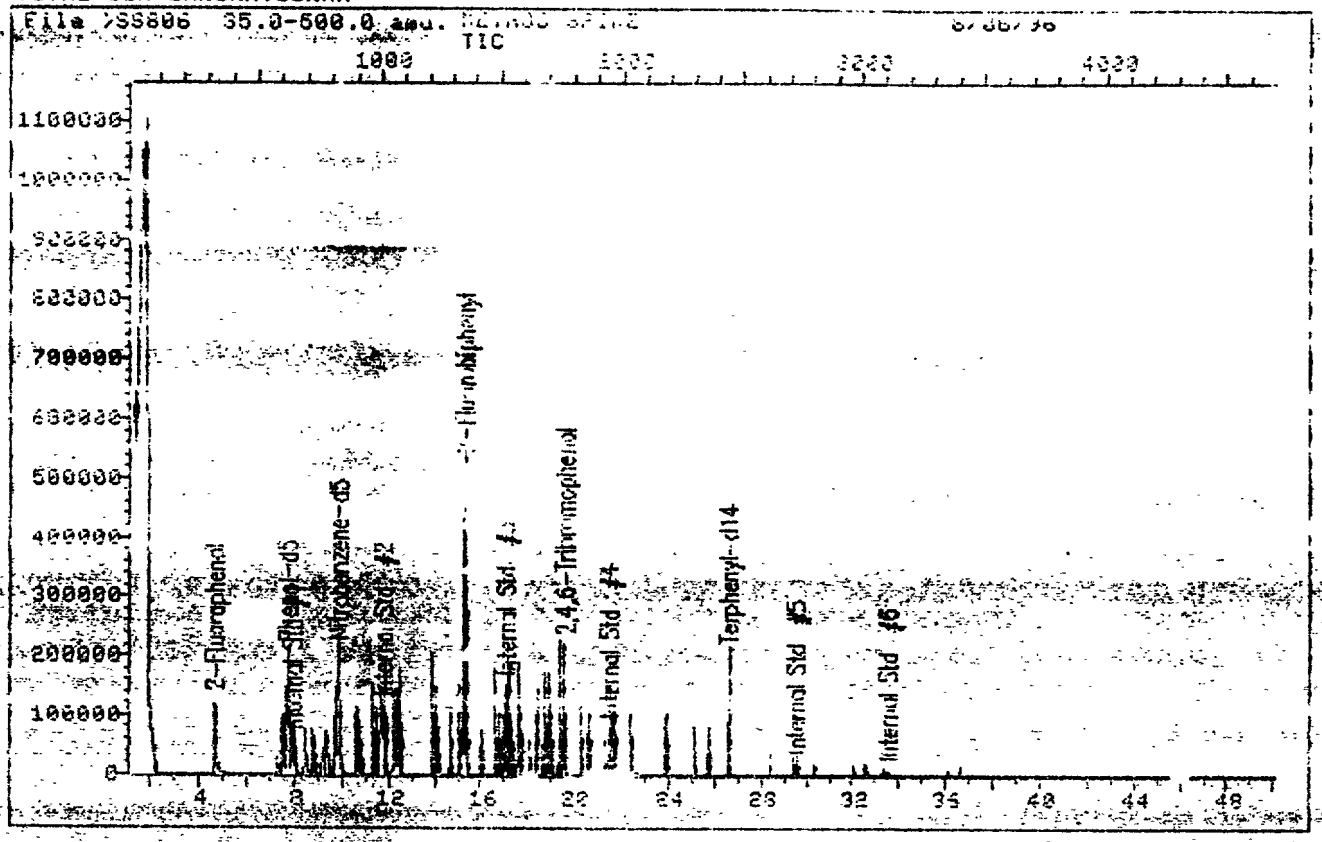
Operator ID: CHEMTEX Quant Run: 7 Quant Time: 960807 16:12
Output File: [illegible]ME Data Acq at: 960806 19:37
Data File: [illegible] Dilution: 1.00000
Name: METHOD SPIKE Instrument ID: BNA
Misc: 8/06/96

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960806 16:37

	Compound	R.T.	Q ion	Area	Conc.	Units	q
42)	[illegible]	17.31	[illegible]	[illegible]	[illegible]	mg/l	94
43)	2,4-Dinitrophenol	17.57	184.0	10739	[illegible]	mg/l	81
44)	4-Nitrophenol	18.31	65.0	17862M	57.28	mg/l	[illegible]
45)	Dibenzofuran	17.64	168.0	198343	50.12	mg/l	82
46)	2,4-Dinitrotoluene	18.03	165.0	33628	50.27	mg/l	95
47)	Diethylphthalate	18.93	149.0	138253	50.36	mg/l	91
48)	4-Chlorophenyl-phenylether	18.84	204.0	71994	51.60	mg/l	88
49)	Fluorene	18.66	166.0	135059	51.50	mg/l	98
51)	*Phenanthrene-d10	21.43	188.0	91241	40.00	mg/l	93
53)	N-Nitrosodiphenylamine	19.32	169.0	72090	46.10	mg/l	94
54)	2,4,6-Tribromophenol (S)	19.54	330.0	71301	200.48	mg/l	88
55)	4-Bromophenyl-phenylether	20.27	248.0	37438	47.68	mg/l	91
56)	Hexachlorobenzene	20.56	284.0	41351	50.71	mg/l	92
57)	Pentachlorophenol	21.25	266.0	17782	51.40	mg/l	89
58)	Phenanthrene	21.50	178.0	140262	48.96	mg/l	99
59)	Anthracene	21.64	178.0	130766	49.52	mg/l	99
60)	Carbazole	22.35	167.0	157679	44.13	mg/l	96
61)	Di-n-butylphthalate	28.33	149.0	24381	35.36	mg/l	93
62)	Fluoranthene	25.09	202.0	86441	46.86	mg/l	92
63)	*Chrysene-d12	29.47	240.0	19246	40.00	mg/l	98
64)	Pyrene	25.72	202.0	79903	59.73	mg/l	98
65)	Terphenyl-d14 (S)	26.56	244.0	236910	113.49	mg/l	87
66)	Butylbenzylphthalate	28.33	149.0	24384	46.87	mg/l	86
68)	Benzo(a)anthracene	29.54	228.0	31767	48.68	mg/l	96
69)	Chrysene	29.54	228.0	31767	48.68	mg/l	93
71)	*Perylene-d12	33.48	264.0	6598M	40.00	mg/l	
72)	Di-n-octylphthalate	32.07	149.0	28194	45.94	mg/l	87
73)	Benzo(b)fluoranthene	32.51	252.0	19065	44.82	mg/l	93
74)	Benzo(k)fluoranthene	32.58	252.0	19988	46.97	mg/l	94
75)	Benzo(a)pyrene	33.32	252.0	12870	44.61	mg/l	95
76)	Indeno(1,2,3-cd)pyrene	36.03	276.0	9949	60.83	mg/l	91
78)	Benzo(g,h,i)perylene	36.56	276.0	14506	66.06	mg/l	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >SS806 :D2 Quant Output File: ^SS806:ME
Name: METHOD SPIKE Instrument ID: BNA
Misc: 8/06/96

Id File: ID_MKB:ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960806 16:37

Operator ID: CHEMTEX
Quant Time: 960807 16:12
Injected at: 960806 19:37

QUANT REPORT

Operator ID: CHEMTEX
Output File: ^CY031::ME
Data File: ^CY031::D2
Name: OHM
Misc: C# 94080031 8/[illegible]

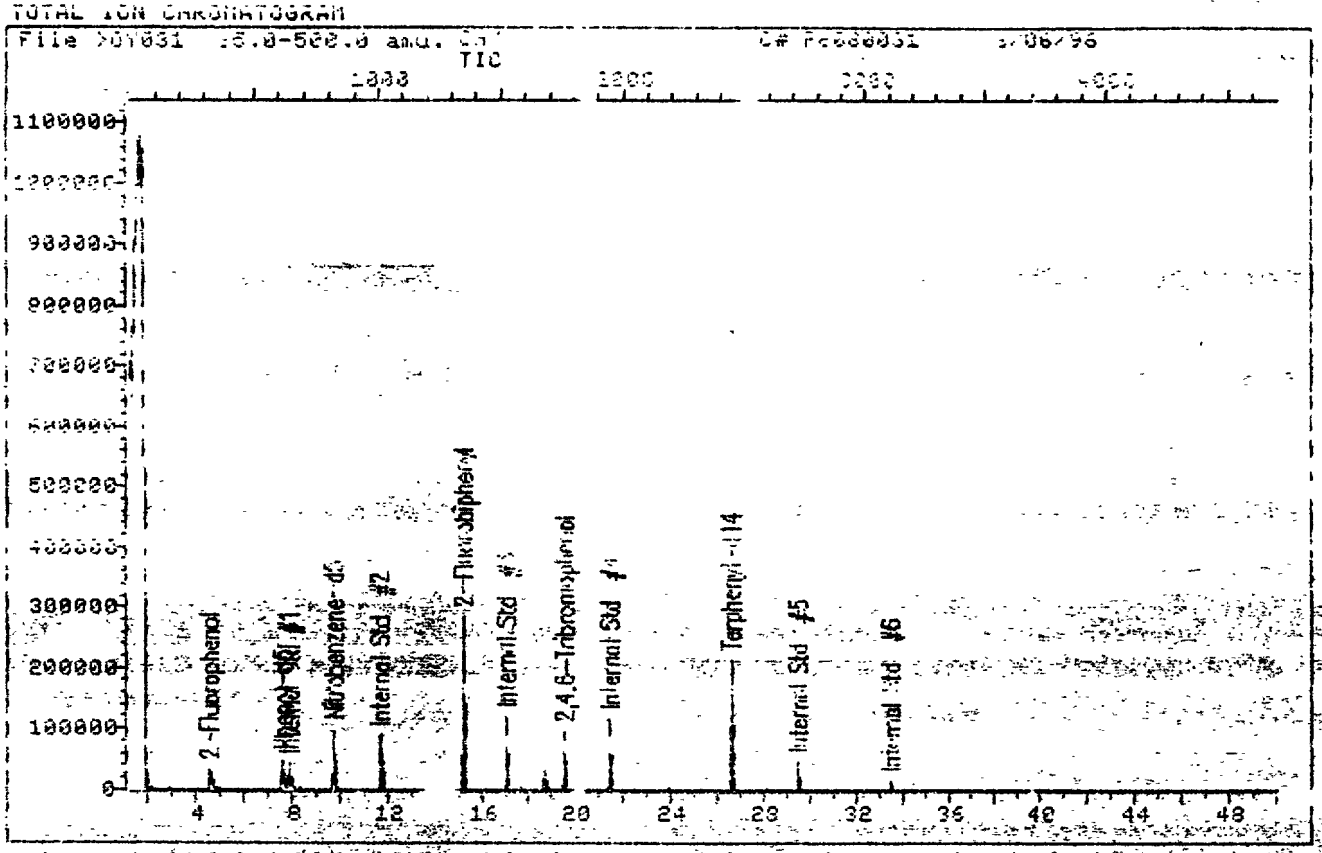
Quan S Rev: 7 Quant Time: 960807 08:33
Injected at: 960806 16:33
Dil Mult Factor: 1.00000
Instrument ID: BNA
Blk 1

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 940707 10:51 Last Cal Time: 940806 16:33

	Compound	R.T.	Q Ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.04	152.0	29969	40.00	mg/l	93
3)	2-Fluorophenol (S)	4.50	112.0	55010	66.34	mg/l	87
4)	Phenol-d6 (S)	7.59	99.0	92995	73.49	mg/l	85
17)	*Naphthalene-d8	11.65	136.0	100505	40.00	mg/l	89
18)	Nitrobenzene-d5 (S)	9.69	82.0	91587	39.86	mg/l	79
31)	*Acenaphthene-d10	17.01	164.0	62466	40.00	mg/l	94
36)	2-Fluorobiphenyl (S)	15.18	172.0	249278	49.61	mg/l	94
51)	*Phenanthrene-d10	21.41	188.0	97268	40.00	mg/l	94
54)	2,4,6-Tribromophenol (S)	19.49	330.0	24851M	65.55	mg/l	
63)	*Chrysene-d12	29.47	240.0	39697	40.00	mg/l	97
65)	Terphenyl-d14 (S)	26.55	244.0	201018	46.69	mg/l	86
71)	*Perylene-d12	33.49	264.0	13245	40.00	mg/l	79

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >DY031::D2 Quant Output File: ^CY031::ME
Name: OHM Instrument ID: BNA
Misc: C# P6080031 8/06/96 BTL# 1

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qual Time: 960806 16:37

Operator ID: CHEMTEX
Quant Time: 960807 08:33
Injected at: 960806 14:33

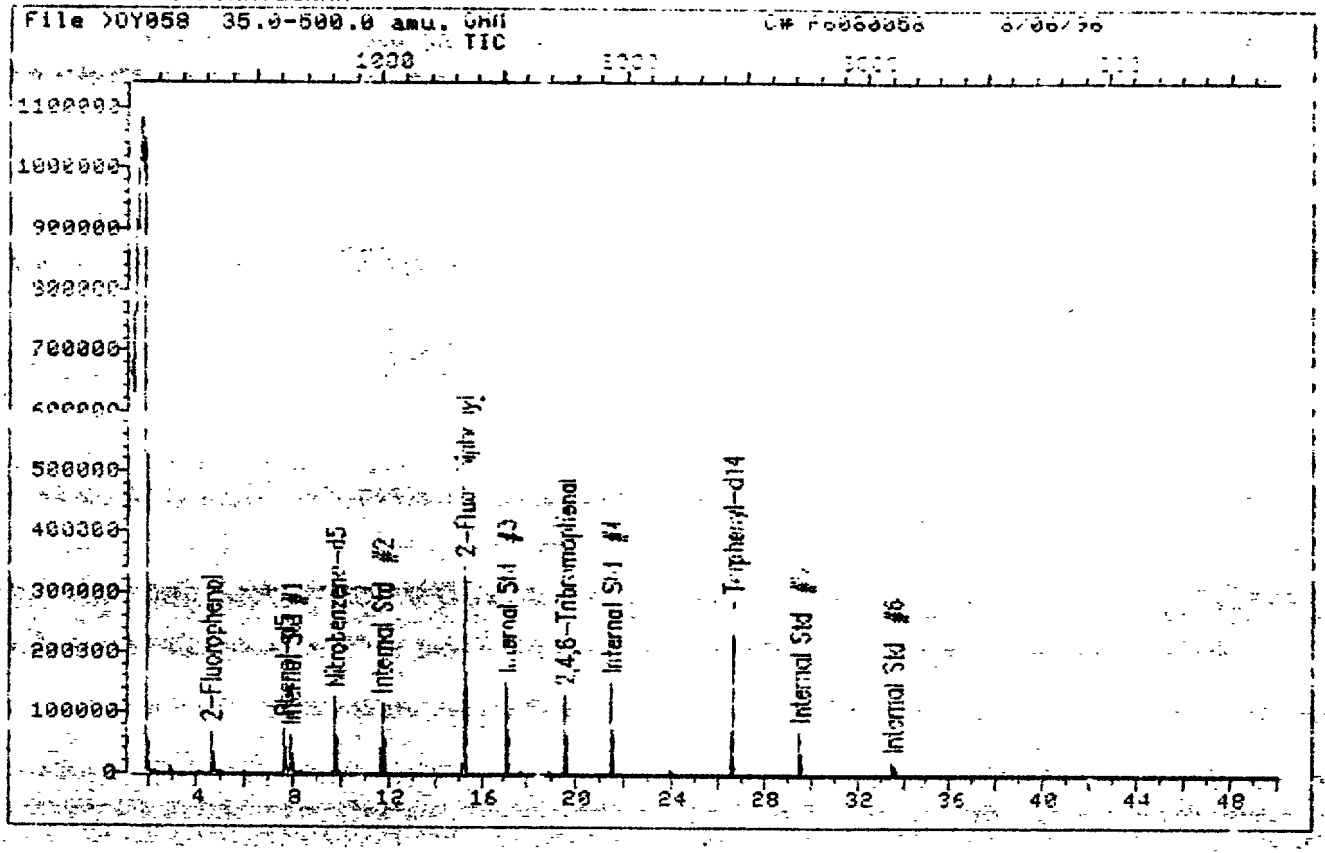
Operator ID: CHEMTEX Quant No.: 7 Quant Time: 960807 08:04
Sample File: [illegible]:ME Injected at: [illegible] 15:47
Data File: [illegible]053::D2 Dilution Factor: 1.00000
Name: OHM Instrument ID: SNA
Misc: C# P6080053 8/[illegible]/96 BTL: 1

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION SNA ST
Last Calibration: 960707 10:51 Last Qual Time: 960306 16:37

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.86	152.0	36383	40.00	mg/l	77
3)	2-Fluorophenol (S)	4.53	112.0	83607	62.78	mg/l	91
4)	Phenol-d6 (S)	7.61	99.0	123516	80.13	mg/l	87
17)	*Naphthalene-d8	11.67	136.0	128280	40.00	mg/l	90
18)	Nitrobenzene-d5 (S)	9.72	82.0	116041	43.11	mg/l	80
31)	*Acenaphthene-d10	17.03	164.0	82087	40.00	mg/l	91
36)	2-Fluorobiphenyl (S)	15.20	172.0	333133	50.45	mg/l	93
51)	*Phenanthrene-d10	21.43	188.0	132114	40.00	mg/l	93
54)	2,4,6-Tribromophenol (S)	19.50	330.0	35908	69.73	mg/l	84
63)	*Chrysene-d12	29.48	240.0	64097	40.00	mg/l	98
65)	Terphenyl-d14 (S)	26.57	244.0	302693	43.54	mg/l	89
71)	*Perylene-d12	33.50	264.0	24726	40.00	mg/l	84

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >OY058::D2 Quant Output File: ^OY058::ME
Name: OHM Instrument ID: BNA
Misc: C# P6080058 8/06/96 BTL# 1

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960806 16:37

Operator ID: CHEMTEX
Quant Time : 960807 6:04
Injected at: 960806 15:43

Operator ID: CHEMTEX
Output File: ^CX059::ME
Data File: 96059::D2
Name: CHM CORP
Misc: C# P6080059, 8/06/96

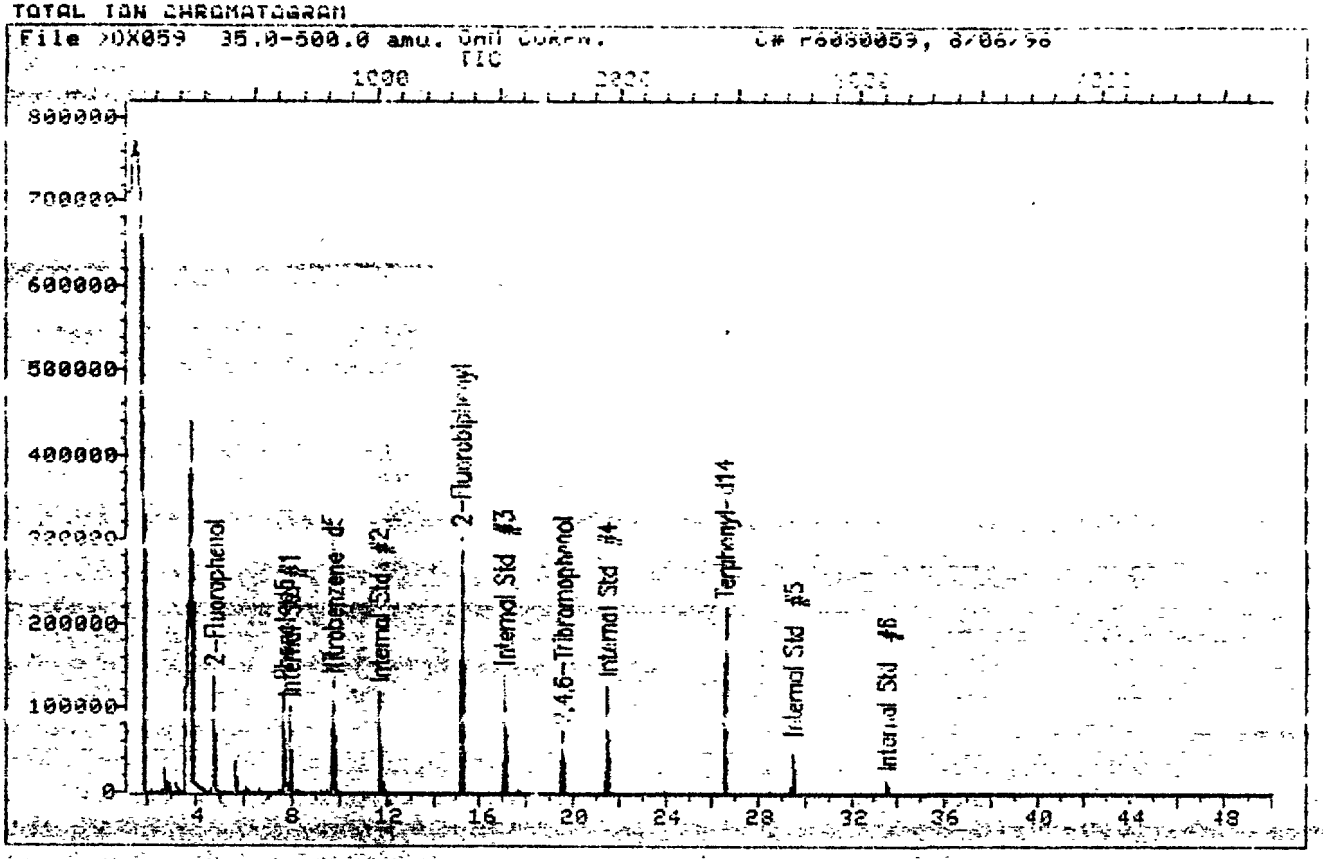
Qual Date: [illegible]
Qual Time: 960806 20:41
Injected at: 960[illegible] 18:10
Dilution Factor: 1.00000
Instrument ID: BMS
STL# 1

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION ING STD
Last Calibration: 960707 10:51
Last Qual Time: 960806 16:37

	Compound	R.T.	Q Ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.36	152.0	38543	40.00	mg/l	98
3)	2-Fluorophenol (S)	4.69	112.0	101664	95.01	mg/l	97
4)	Phenol-d6 (S)	7.64	99.0	135459	82.97	mg/l	87
17)	*Naphthalene-d8	11.64	136.0	132132	40.00	mg/l	91
18)	Nitrobenzene-d5 (S)	9.68	82.0	120129	43.33	mg/l	84
31)	*Acenaphthene-d10	17.00	164.0	75261	40.00	mg/l	97
32)	2-Fluorobiphenyl (S)	15.[illegible]	172.0	255071	48.74	mg/l	92
51)	*Phenanthrene-d10	21.40	188.0	113742	40.00	mg/l	94
54)	2,4,6-Tribromophenol (S)	19.47	330.0	21819	49.21	mg/l	96
63)	*Chrysene-d12	29.46	240.0	47104	40.00	mg/l	98
65)	Terphenyl-d14 (S)	26.54	244.0	216854	42.44	mg/l	88
71)	*Perylene-d12	33.47	264.0	16658	40.00	mg/l	72

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >0X059::D2 Quant Output File: ^0X059::ME
Name: OHM CORPN Instrument ID: BNA
Misc: C# P6080059, 8/06/96 BTL# 1

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960806 16:37

Operator ID: CHEMTEX
Quant Time: 960806 20:41
Injected at: 960806 18:10

Operator ID: CHEMTEX
Output File: [illegible]
Data File: [illegible]
Name: GHM
Misc: CH [illegible]

Quant Rev: [illegible]
Quant Time: [illegible]
Injected at: [illegible]
Injection ID: [illegible]
DT-H [illegible]

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION [illegible]
Last Calibration: 960707 10:51

Last Qcal Time: 960806 16:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.85	634	33121	40.00	mg/l	97
3)	2-Fluorophenol (S)	4.51	313	80611	87.67	mg/l	90
4)	Phenol-d6 (S)	7.60	610	116085	84.15	mg/l	92
17)	*Naphthalene-d8	11.66	1001	124433	40.00	mg/l	90
18)	Nitrobenzene-d5 (S)	9.71	813	121638	46.67	mg/l	83
31)	*Acenaphthene-d10	17.01	1516	78915	40.00	mg/l	96
36)	2-Fluorobiphenyl (S)	15.19	1341	325857	51.33	mg/l	93
51)	*Phenanthrene-d10	21.41	1940	131540	40.00	mg/l	93
54)	2,4,6-Tribromophenol (S)	19.49	1755	32860	64.09	mg/l	90
63)	*Chrysene-d12	29.47	2716	57915	40.00	mg/l	99
65)	Terphenyl-d14 (S)	26.55	2435	267743	42.62	mg/l	88
71)	*Perylene-d12	33.48	3102	22982	40.00	mg/l	82

* Compound is ISTD

QUANT REPORT

Operator ID: CHEMTEX
Output File: ^0Y060::ME
Data File: >0Y060::D2
Name: GHM
Misc: CH P1080060

Quant Time: 960807 08:06
Injected at: 960806 17:02
Dilution Factor: 1.00000
Instrument ID: BNA
ST_# 1

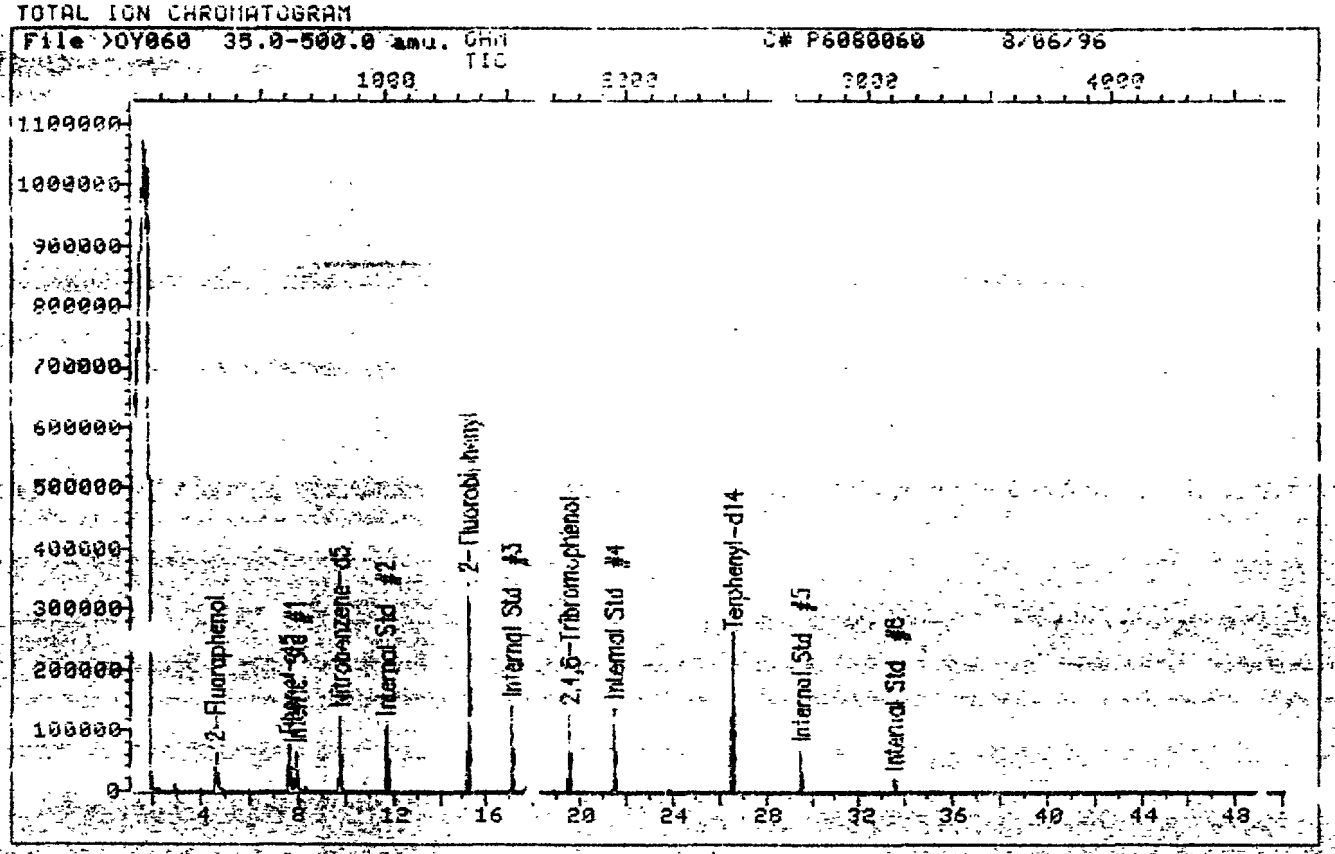
ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51

Last Qcal Time: 960806 16:37

Compound	RT	Qion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	7.85	152.0	33121	40.00	mg/l	97
3) 2-Fluorophenol (S)	4.51	112.0	80611	87.67	mg/l	90
4) Phenol-d6 (S)	7.60	99.0	118085	84.15	mg/l	92
17) *Naphthalene-d8	11.66	136.0	124433	40.00	mg/l	90
18) Nitrobenzene-d5 (S)	9.71	82.0	121838	46.67	mg/l	83
31) *Acenaphthene-d10	17.01	164.0	78915	40.00	mg/l	96
36) 2-Fluorobiphenyl (S)	15.19	172.0	325857	51.33	mg/l	93
51) *Phenanthrene-d10	21.41	188.0	131540	40.00	mg/l	93
54) 2,4,6-Tribromophenol (S)	19.49	330.0	32860	64.09	mg/l	90
63) *Chrysene-d12	29.47	240.0	57915	40.00	mg/l	99
65) Terphenyl-d14 (S)	26.55	244.0	267743	42.62	mg/l	88
71) *Perylene-d12	33.48	264.0	22982	40.00	mg/l	82

* Compound is ISTD

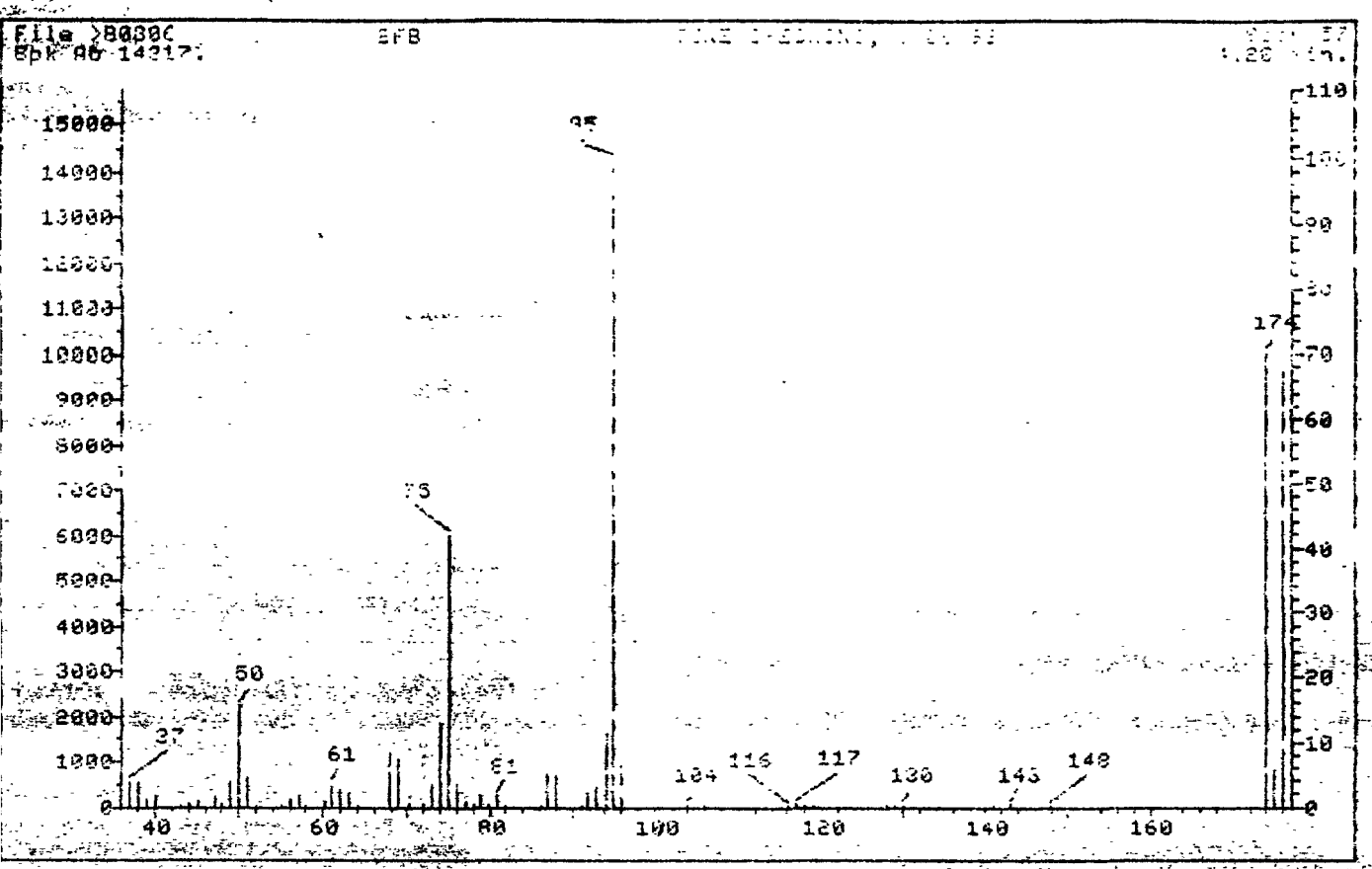
TOTAL ION CHROMATOGRAM



Data File: >OY060::D2 Quant Output File: ^OY060::ME
Name: OHM Instrument ID: BNA
Misc: C# P6080060 8/06/96 BTL# 1

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960707 10:51 Last Qcal Time: 960806 16:37

Operator ID: CHEMTEX
Quant Time: 960807 03:06
Injected at: 960806 17:02



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	15.74	15.74	Ok
75	30-60% of mass 95	41.85	41.85	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.38	6.38	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	70.15	70.15	Ok
175	5-9% of mass 174	5.62	8.01	Ok
176	95-101% of mass 174	67.29	95.90	Ok
177	5-9% of mass 176	4.37	6.49	Ok

Injection Date: 08/06/96
Injection Time: 09:22
Data File: B0306
Scan: 57

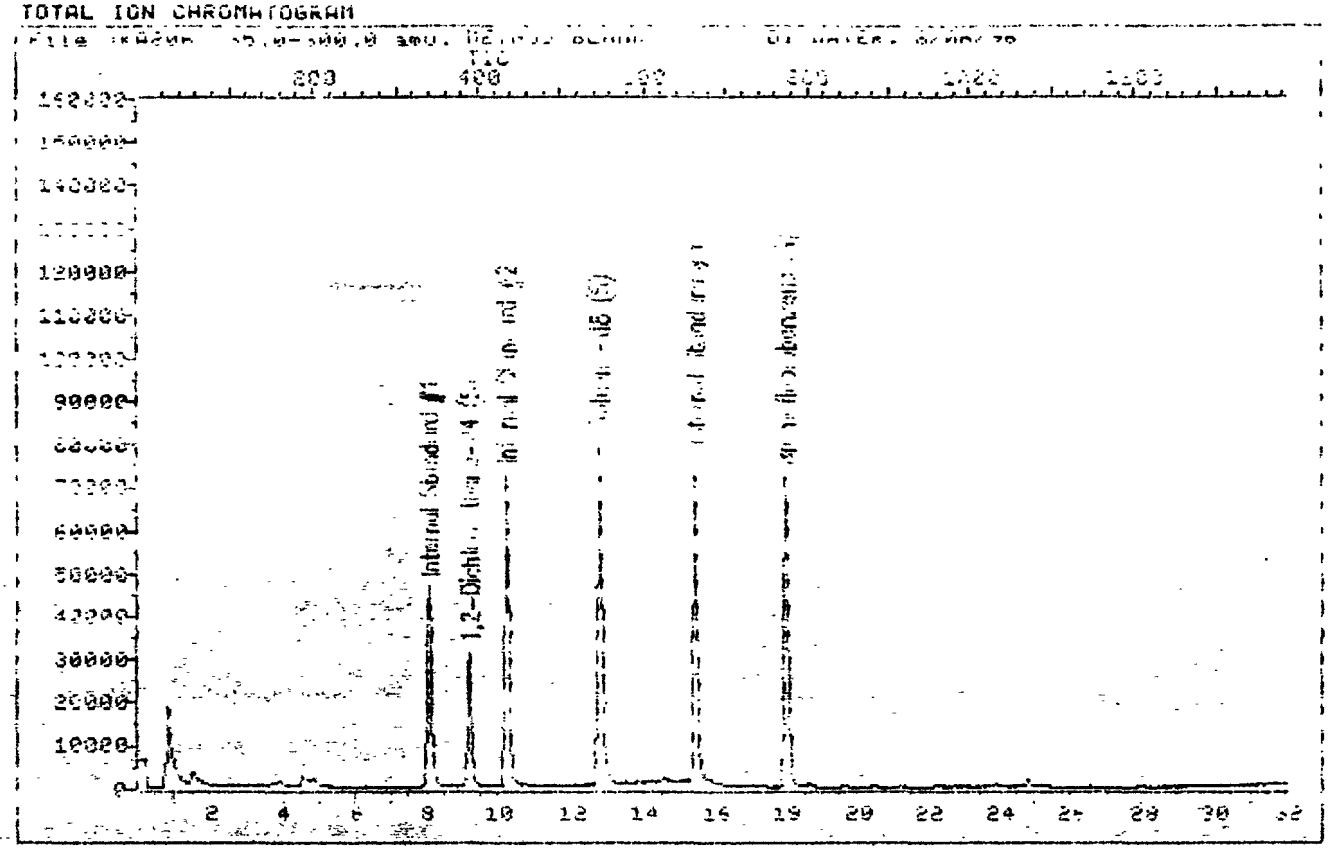
Operator ID: MSR Quant Pkg: 7 Quant Time: 960306 1[illegible]
Quant File: [illegible]ME [illegible]
[illegible] File: [illegible]21 [illegible]
[illegible] METHOD 8 ANK [illegible]
[illegible] VOTER, 2/06/96

[illegible] File: ID_VOA::M[illegible]
Title: 02 VOA Standards for 8 Point Calibration Curve Rev. E
Last Calibration: 960711 08:34 Last [illegible] Time: 960306 11:4[illegible]

	Compound	RT	[illegible]	Area	Conc	Units	%
[illegible]	Dichloromethane	[illegible]	121.0	60437	50.00	ug/L	92
[illegible]	Methylene Chloride	4.37	84.0	4932	2.58	ug/L	97
8)	Carbon Disulfide	3.45	76.0	2605	.457	ug/L	101
[illegible]	Chloroform	9.47	83.0	406	.122	ug/L	90
[illegible]	1,2-Dichloroethane-d4 (S)	9.19	65.0	699904	49.34	ug/L	
16)	2-Butanone	7.02	43.0	2931	3.54	ug/L	78
[illegible]	1,4-Difluorobenzene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1,1,2-Trichloroethane	[illegible]	97.0	212	.1.4	ug/L	95
29)	Bromoform	17.22	173.0	461	.235	ug/L	94
31)	*Chlorobenzene-d5	15.46	117.0	189753	50.00	ug/L	94
32)	2-Hexanone	16.14	91.0	1450	.220	ug/L	69
33)	1,1,2,2-Tetrachloroethane	18.42	83.0	2112	.704	ug/L	98
36)	Toluene	12.91	91.0	1338	.217	ug/L	95
37)	Toluene-d8 (S)	12.81	98.0	240469	49.02	ug/L	81
[illegible]	[illegible]	[illegible]	[illegible]	287	.0596	ug/L	73
42)	Bromofluorobenzene (S)	18.00	95.0	141438	49.[illegible]	ug/L	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >K0806::D1 Quant Output File: ^K0806::MC
Name: METHOD BLANK Instrument ID: VOA
Misc: DI WATER, 8/06/96

IT File: ID_VOA::MC
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 9.0711 08:34 Last Qual Time: 960806 11:40

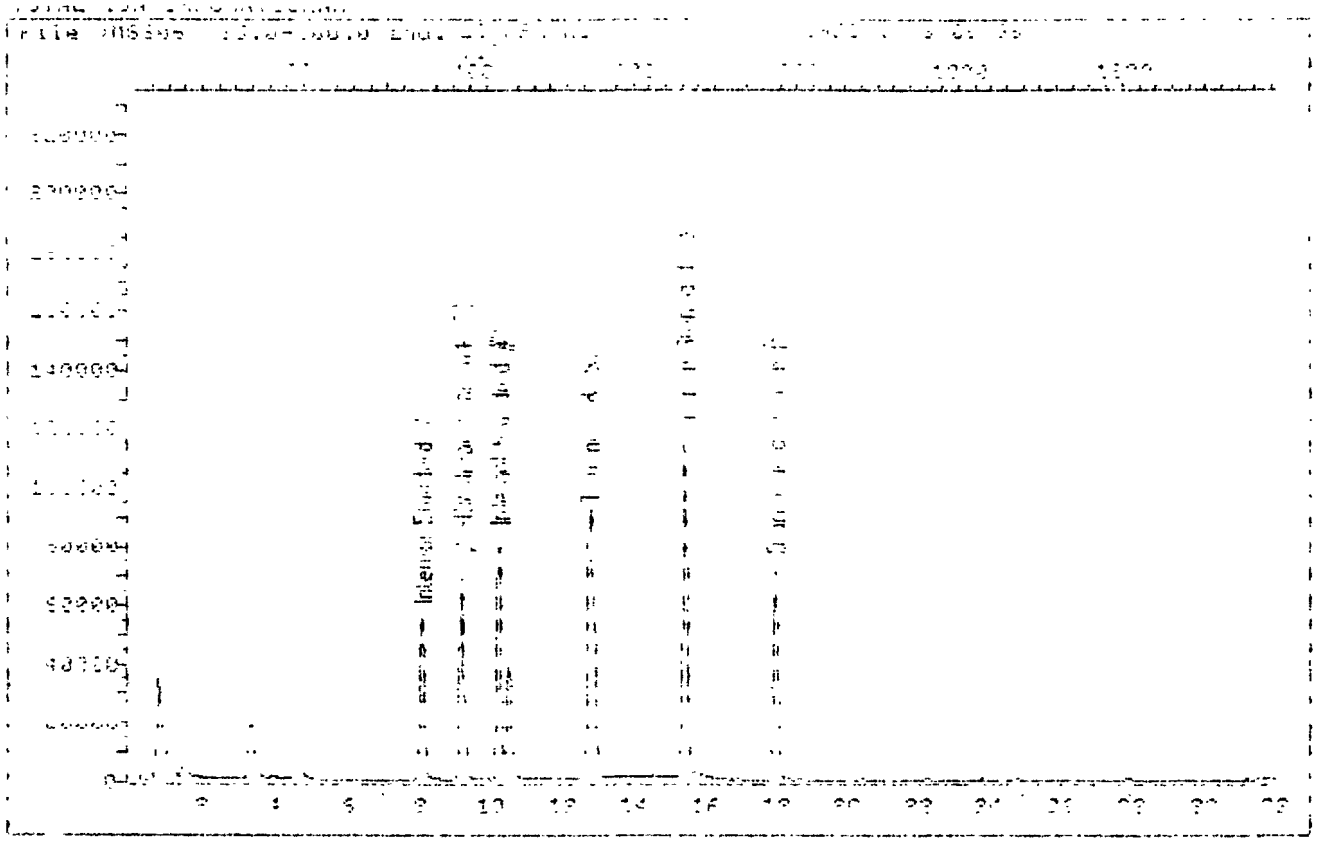
Operator ID: MSR
Quant Time : 960806 13:44
Injected at: 960806 .:11

Operator ID: MSR Client Req: 7 Client Time: 940806 15:24
Output File: AM080[illegible]:MF Injected at: 940806 14:25
[illegible]
Mode: 25 PPM MS [illegible] ID: [illegible]
Mode: MS CHECK 8/0/94

IS File: IS_U00[illegible]:MF
Title: HP V00 Standards for 5 Point Calibration Curve Rep. 5
Last Calibration: 940711 10:51 Last Cal Time: 940806 11:40

	Compound	RT	Resp	Area	Conc	Units	
1)	*Bromochloromethane	8.06	128.0	71412	50.00	ug/L	99
4)	Methylene Chloride	4.85	84.0	2708	1.10	ug/L	95
8)	Carbon Disulfide	3.45	76.0	1444	.244	ug/L	100
9)	1,1-Dichloroethene	3.41	96.0	50619	21.57	ug/L	78
13)	Chloroform	8.46	87.0	370	.0939	ug/L	82
14)	1,2-Dichloroethane-d4 (S)	9.19	65.0	81591M	49.54	ug/L	
16)	2-Butanone	7.95	43.0	2847	2.86	ug/L	76
21)	*1,4-Difluorobenzene	10.35	114.0	[illegible]	[illegible]	ug/L	[illegible]
24)	Trichloroethene	10.55	130.0	46207M	21.42	ug/L	
25)	Dibromochloromethane	14.43	129.0	19	.00555	ug/L	94
26)	1,1,2-Trichloroethane	17.83	97.0	50	.0274	ug/L	94
27)	Benzene	9.13	78.0	134141	21.75	ug/L	96
30)	Bromoform	17.21	173.0	359	.161	ug/L	98
31)	*Chlorobenzene-d5	15.44	117.0	205289	50.00	ug/L	95
32)	2-Hexanone	15.00	91.0	591	.0014	ug/L	82
34)	Tetrachloroethene	12.35	164.0	48	.0211	ug/L	97
[illegible]	1,1,2,2-Tetrachloroethane	12.27	83.0	1777	.574	ug/L	94
36)	Toluene	12.91	91.0	151524	22.76	ug/L	97
[illegible]	Toluene-d8 (S)	12.80	98.0	266544	50.22	ug/L	80
38)	Chlorobenzene	15.51	112.0	103045	22.44	ug/L	97
39)	Ethylbenzene	15.83	106.0	118	.0777	ug/L	81
41)	Xylene (total)	15.83	106.0	118	.0786	ug/L	92
42)	Bromofluorobenzene (S)	18.01	95.0	145326	47.43	ug/L	91

* Compound is ISTD

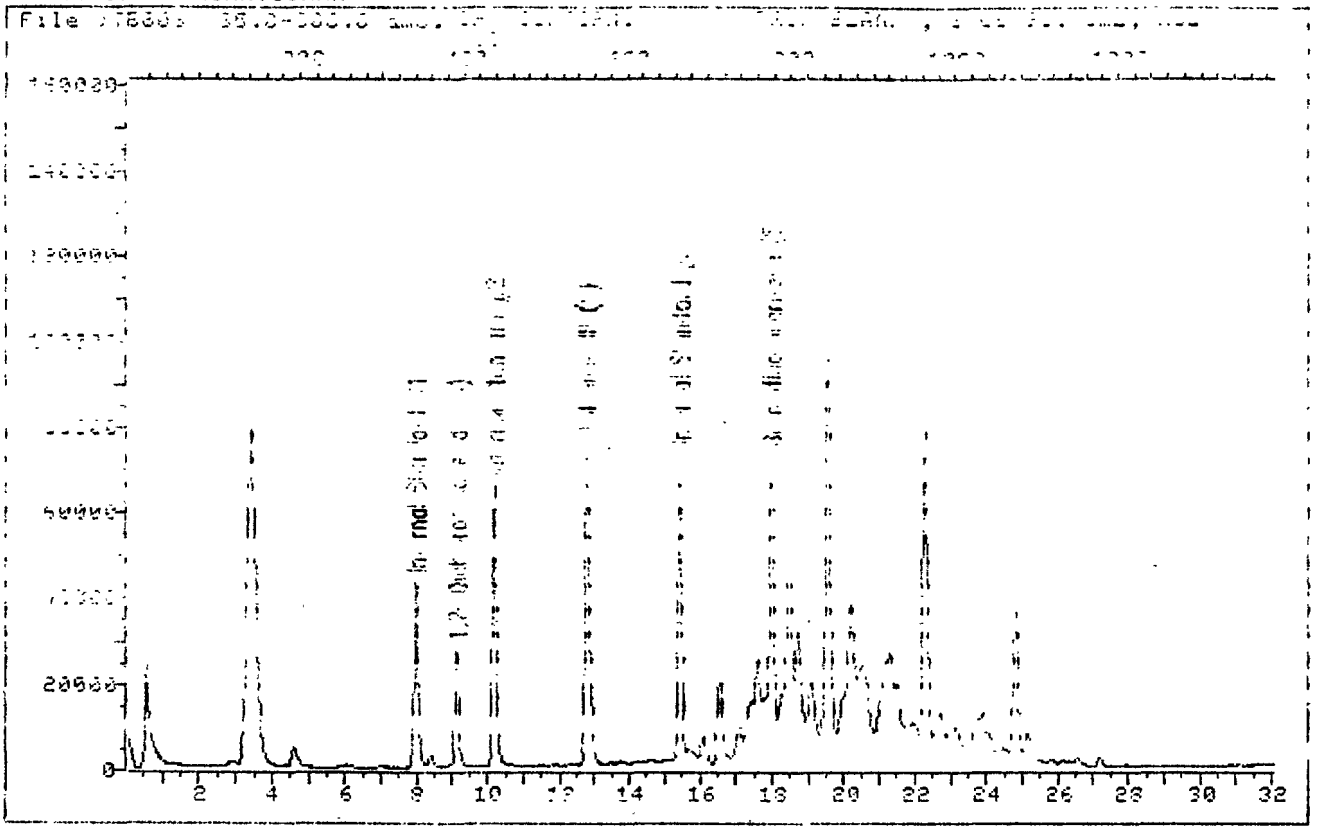


Name: 25 ppm MS
Misc: MS CHECK, 6.6a/Ve

Injected at: 960805 14:35

1)	*Propylene Oxide	7.07	100.0	[illegible]	50.00	ug/L	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Propylene Chloride	4.61	34.0	[illegible]	8.05	ug/L	94
9)	Carbon Disulfide	5.10	74.0	6664	1.24	ug/L	100
13)	Chloroform	8.39	83.0	11144	3.20	ug/L	95
14)	1,2-Dichloroethane-d4 (S)	9.12	65.0	64260M	48.34	ug/L	
(15)	1,2-[illegible]ethane	9.23	62.0	[illegible]	[illegible]	ug/L	81
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19)	Carbon Tetrachloride	9.43	117.0	37	.0223	ug/L	85
21)	1,4-Dichlorobenzene	10.20	111.0	277713	50.00	ug/L	90
22)	1,2-Dichloropropane	10.07	63.0	77	.0446	ug/L	77
31)	*Chlorobenzene-d5	15.43	117.0	176541	50.00	ug/L	95
32)	2-Hexanone	15.85	91.0	3746	.618	ug/L	94
33)	4-Methyl-2-Pentanone	15.96	43.0	743	.511	ug/L	87
34)	Tetrachloroethene	13.85	164.0	341	.176	ug/L	80
37)	[illegible]	16.91	91.0	41094	7.40	ug/L	90
[illegible]	[illegible]	16.70	95.0	[illegible]	40.99	ug/L	83
39)	Ethylbenzene	15.97	106.0	1047	.414	ug/L	83
40)	Styrene	16.85	104.0	861	.191	ug/L	91
41)	Xylenes (total)	16.10	106.0	4050	.750	ug/L	88
42)	Bromofluorobenzene (S)	17.99	95.0	172106	50.70	ug/L	96

* Compound is ISTD



Data File: [illegible]
Name: OHM COPPER
Misc: TRIP BLANK , 6/06/96, 5mL, MEI

Quant Data File: [illegible]
Injection ID: [illegible]

IT File: [illegible]
[illegible] Standard [illegible]
Last Calibration: 960711 08:54

Last Qual File: 960806 11:40

Operator ID: MSR
Quant Time : 960807 [illegible]
Injected at: 960806 [illegible]

Operator ID: MSB [illegible]
Output File: [illegible]
Data File: [illegible] Dilution Factor: [illegible]
Method: [illegible]
[illegible]

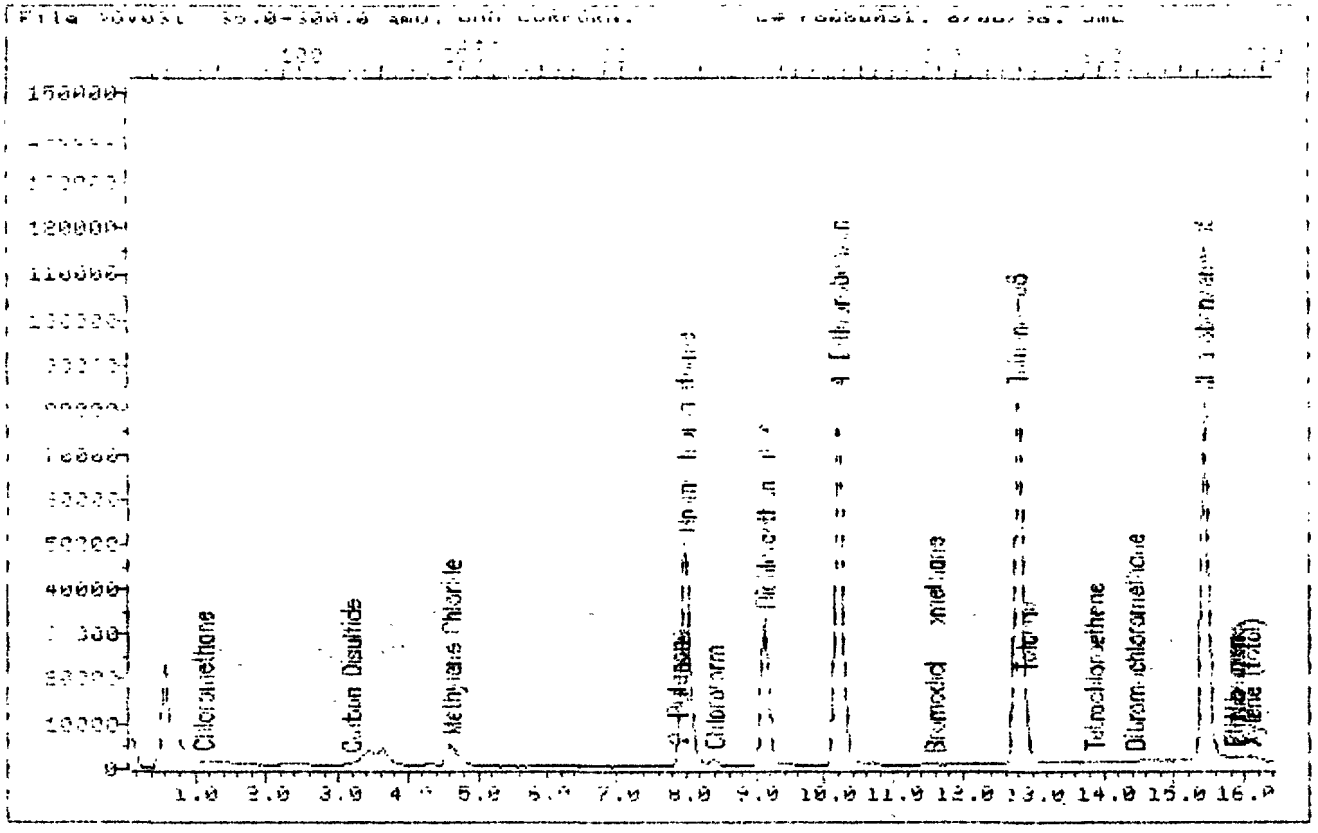
[illegible]

Last Calibration: 960711 [illegible]

[illegible]	Bromomethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Chloroethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Methylene Chloride	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Carbon Disulfide	3.18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13)	Chloroform	8.39	83.0	4304	1.32	ug/L	92
14)	1,2-Dichloroethane-d4 (S)	9.12	65.0	[illegible]	49.29	ug/L	
16)	2-Butanone	7.86	43.0	2977	3.18	ug/L	72
20)	Bromodichloromethane	11.59	83.0	[illegible]	.162	ug/L	79
[illegible]	*1,4-Difluorobenzene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25)	2-Bromochloromethane	[illegible]	[illegible]	[illegible]	.0817	ug/L	96
31)	*Chlorobenzene-d5	15.44	117.0	197[illegible]	[illegible]	[illegible]	94
32)	2-Hexanone	15.85	91.0	734	.109	ug/L	87
33)	Tetrachloroethene	15.35	[illegible]	[illegible]	[illegible]	ug/L	76
36)	Toluene	12.89	91.0	[illegible]	.424	ug/L	93
37)	Toluene-d8 (S)	12.77	98.0	237423	47.77	ug/L	78
39)	Ethylbenzene	15.89	106.0	110	.0570	ug/L	83
41)	Xylene (total)	16.08	106.0	814	.136	ug/L	79
[illegible]	Bromofluorobenzene (S)	[illegible]	[illegible]	[illegible]	43.73	ug/L	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



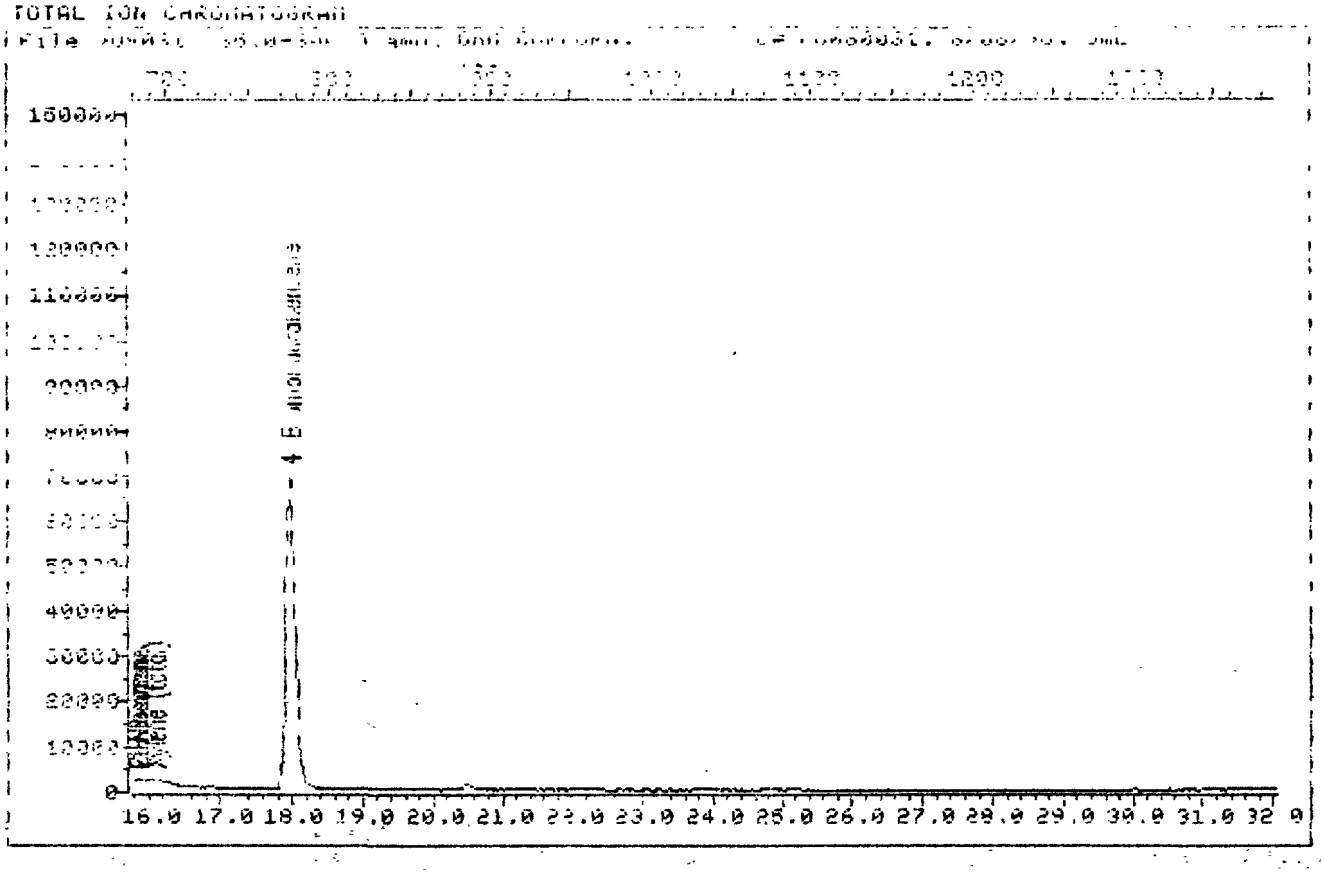
Data File: [illegible]31:01 Report Output File: [illegible]31.RPT
Name: O.M CORPORN. Instrument ID: VOA
Misc: C# P6080031, 8/06/96, 5uL

[illegible]
Method: [illegible] Standard [illegible] Calibration Curve Rev. E
Last Calibration: 960711 [illegible] Last Qcal Time: 960806 11:40

Operator ID: MCR
Quant Time: 960806 20:11
Injected at: 960806 17:13

Page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >QU031:01 Data Output File: >QU031:MF
Name: OHM CORPORN Instrument ID: U09
Misc: C# P6080031, 8/06/96, 5mL

Tune File: TD U09:MF
Title: HP U09 Standards for 5 Point Calibration Curve Rev E
Last Calibration: 960711 09:34 Last Qual Time: 960806 11:40

Operator ID: MSR
Quant Time : 960806 20:11
Injected at: 960806 17:18

Page 2 of 2

Operator ID: MSB
Output File: [illegible]:ME

[illegible]

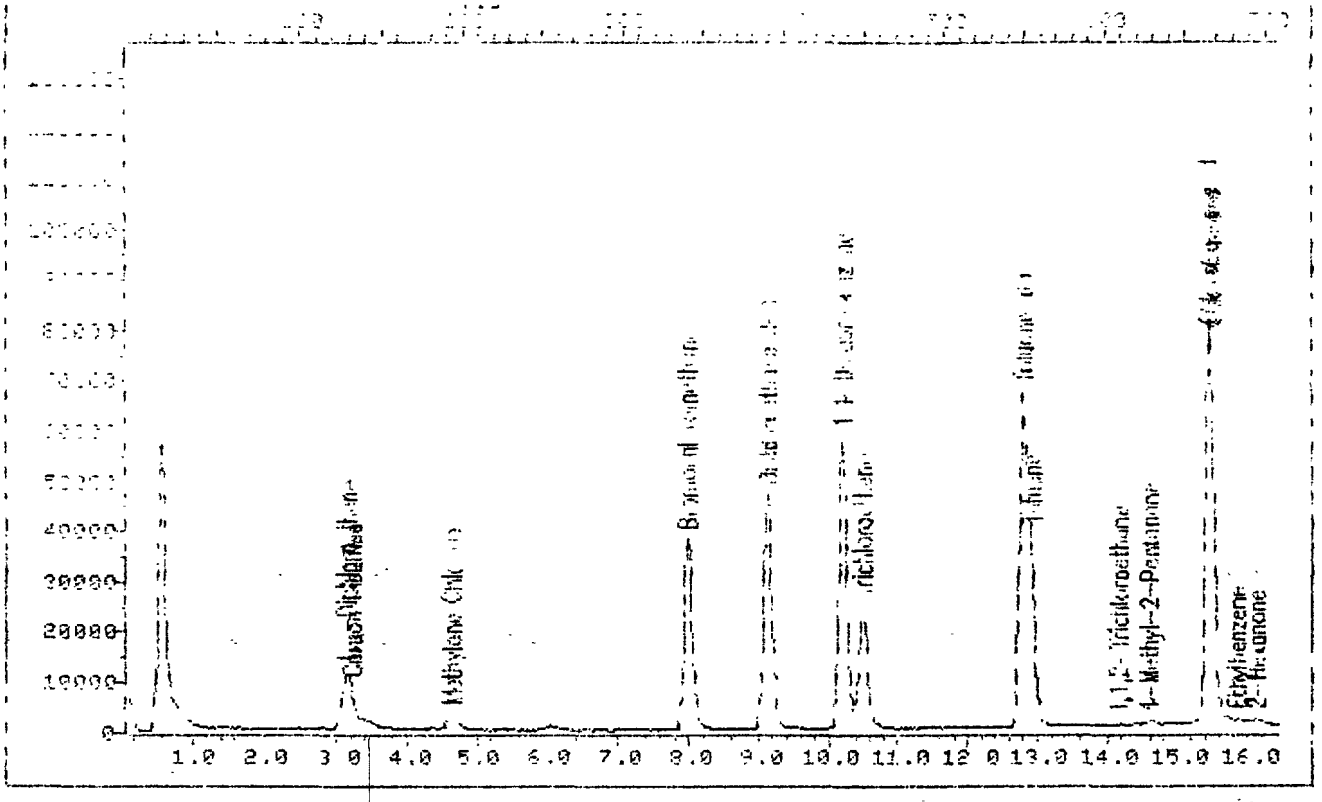
[illegible]

Title: HP VOA Standards for [illegible]
Last Calibration: 940711 [illegible] Last Qual Test: 940806 11:[illegible]

	Compound	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	%
1)	*Bromochloromethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4)	Methylene Chloride	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8)	Carbon Disulfide	3.20	[illegible]	9011	1.[illegible]	ug/L	100
9)	1,1-Dichloroethene	3.[illegible]	[illegible]	[illegible]M	16.43	ug/L	
14)	1,2-Dichloroethane-d4 (S)	9.12	65.0	[illegible]M	48.35	ug/L	
21)	*1,4-Difluorobenzene	10.20	114.0	20732.	50.00	ug/L	90
24)	Trichloroethene	10.48	130.0	4[illegible]M	2[illegible].[illegible]	ug/L	
26)	1,1,2-Trichloroethane	14.15	97.0	41	.0286	ug/L	98
27)	Benzene	9.12	[illegible]	[illegible]	17.94	ug/L	95
31)	*Chlorobenzene-d5	15.44	117.0	157443	50.00	ug/L	96
32)	2-Hexanone	16.10	91.0	1265	.231	ug/L	77
[illegible]	4-Methyl-2-Pentanone	[illegible]	[illegible]	[illegible]	.[illegible]	ug/L	71
36)	Toluene	12.91	91.0	9623[illegible]	19.24	ug/L	75
37)	Toluene-d8 (S)	12.79	98.0	185270M	45.51	ug/L	
38)	Chlorobenzene	15.48	112.0	70978	20.15	ug/L	94
39)	Ethylbenzene	15.[illegible]	[illegible]	[illegible]	.0203	ug/L	64
41)	Styrene	[illegible]	[illegible]	[illegible]	.0167	ug/L	[illegible]
42)	Bromofluorobenzene (S)	17.73	95.0	116674	[illegible].65	ug/L	30

* Compound is ISTD

TOTAL ION CHROMATOGRAM



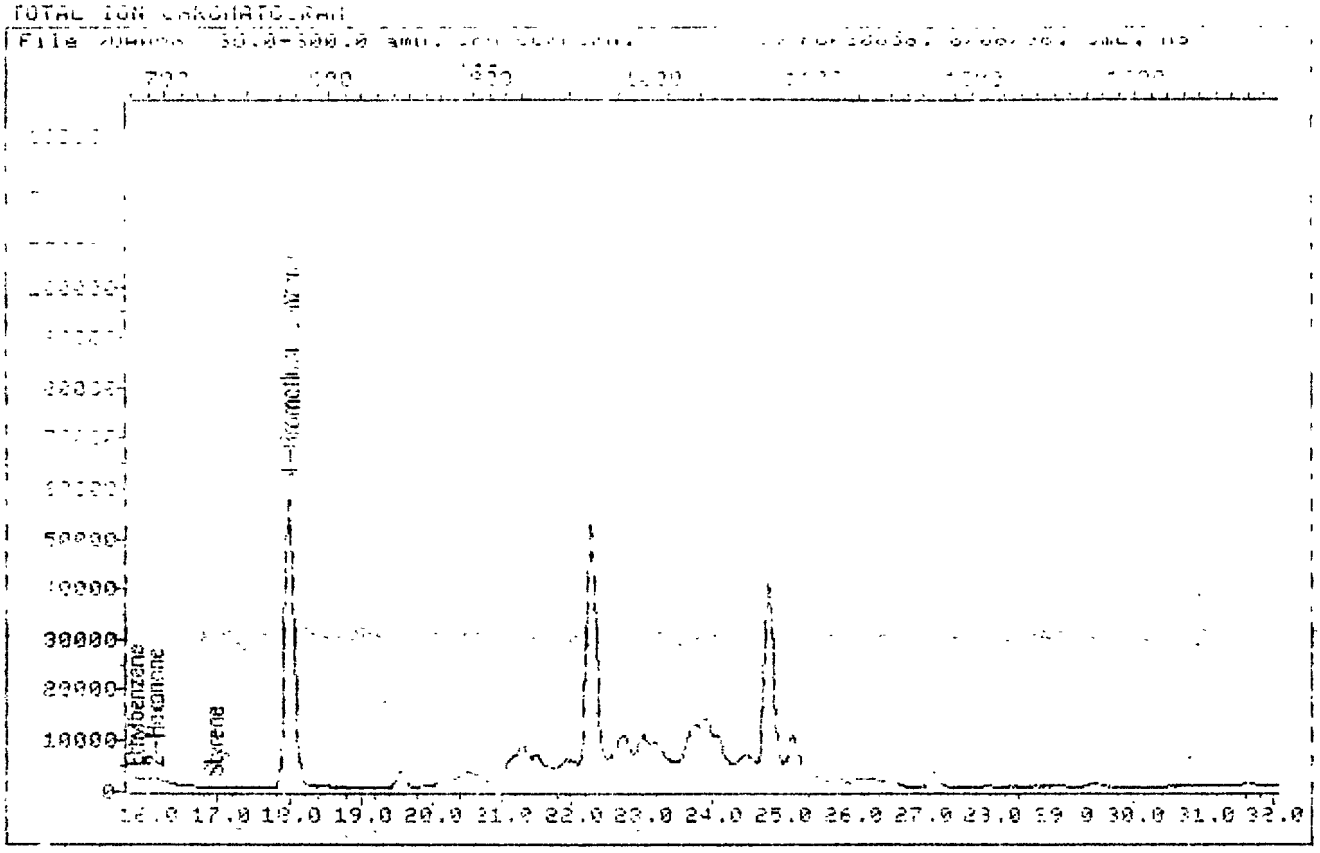
Data File: >00058::D1 Quant Output File: ^00058::ME
Name: OHM CORPORN. Instrument ID: V30
Mode: CH P6080058, 8/06/96, Full, MS

Method File: VOA.MS

Title: HP V8A Standards For 5 Point Calibration Curve Rev. E
Last Calibration: 960711 08:34 Last Qcal Time: 960806 11:40

Operator ID: MS.
Quant Time: 960807 09:28
Injected at: 960806 19:58

Page 1 of 2



Data File: >0A058::D1 Quant Output File: ^0A058::ME
Name: OHM CORPORATION Instrument ID: V0A
Misc: C# P6080058, 8/06/96, 5mL, MS

Title: HP V0A Standards for 5 Point Calibration Curve Se , 5
Last Calibration: 960711 09:34 Last Cal Time: 960804 11:40

Operator ID: MSR
Quant Time : 960807 09:28
Injected at: 960806 17:58

Page 2 of 2

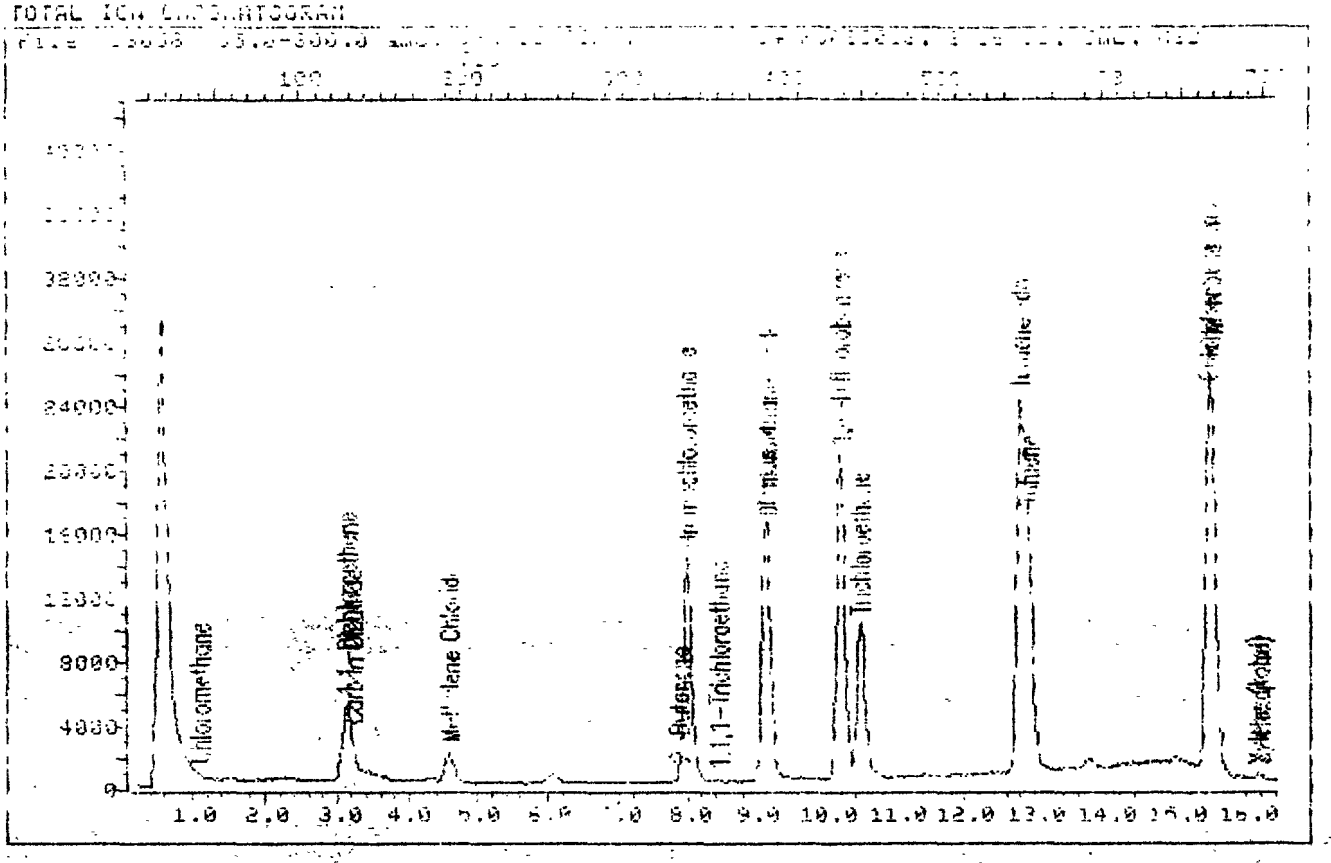
Operator [illegible] MSB
Output File: [illegible]MC

Title: [illegible] Standards for 5 Point Calibration [illegible]
Last Calibration: 860711 [illegible]:36 Last Run Time: [illegible]

	Compound	RT	RF	Area	Conc	Units	%
1)	*Bromomethane	7.97	129.0	1769	[illegible]	ug/L	[illegible]
2)	Chloroethane	[illegible]	50.0	20	[illegible]	ug/L	100
3)	Methylene Chloride	4.51	84.0	4673	[illegible]	ug/L	80
8)	Carbon Disulfide	3.20	76.0	3264	1.96	ug/L	100
9)	1,1-Dichloroethene	3.13	94.0	10341M	17.88	ug/L	81
14)	1,2-Dichloroethane-d4 (S)	9.15	65.0	20570M	49.52	ug/L	
16)	2-Butanone	7.84	43.0	1491	4.07	ug/L	78
17)	1,1,1-Trichloroethane	8.43	97.0	158	.208	ug/L	92
21)	*1,4-Difluorobenzene	10.20	114.0	73204	50.00	ug/L	90
24)	Trichloroethene	10.43	130.0	16196M	21.89	ug/L	
27)	Benzene	9.12	78.0	34101	21.50	ug/L	96
31)	*Chlorobenzene-d5	15.44	117.0	54234	50.00	ug/L	97
32)	2-Hexanone	16.17	91.0	1127	.577	ug/L	71
34)	Toluene	12.81	91.0	12591	23.35	ug/L	91
37)	Toluene-d8 (S)	12.80	98.0	65843	45.29	ug/L	78
38)	Chlorobenzene	15.51	112.0	27797	22.10	ug/L	88
41)	Xylene (total)	16.15	106.0	497	.286	ug/L	87
42)	Bromofluorobenzene (S)	18.07	95.0	79581	47.15	ug/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

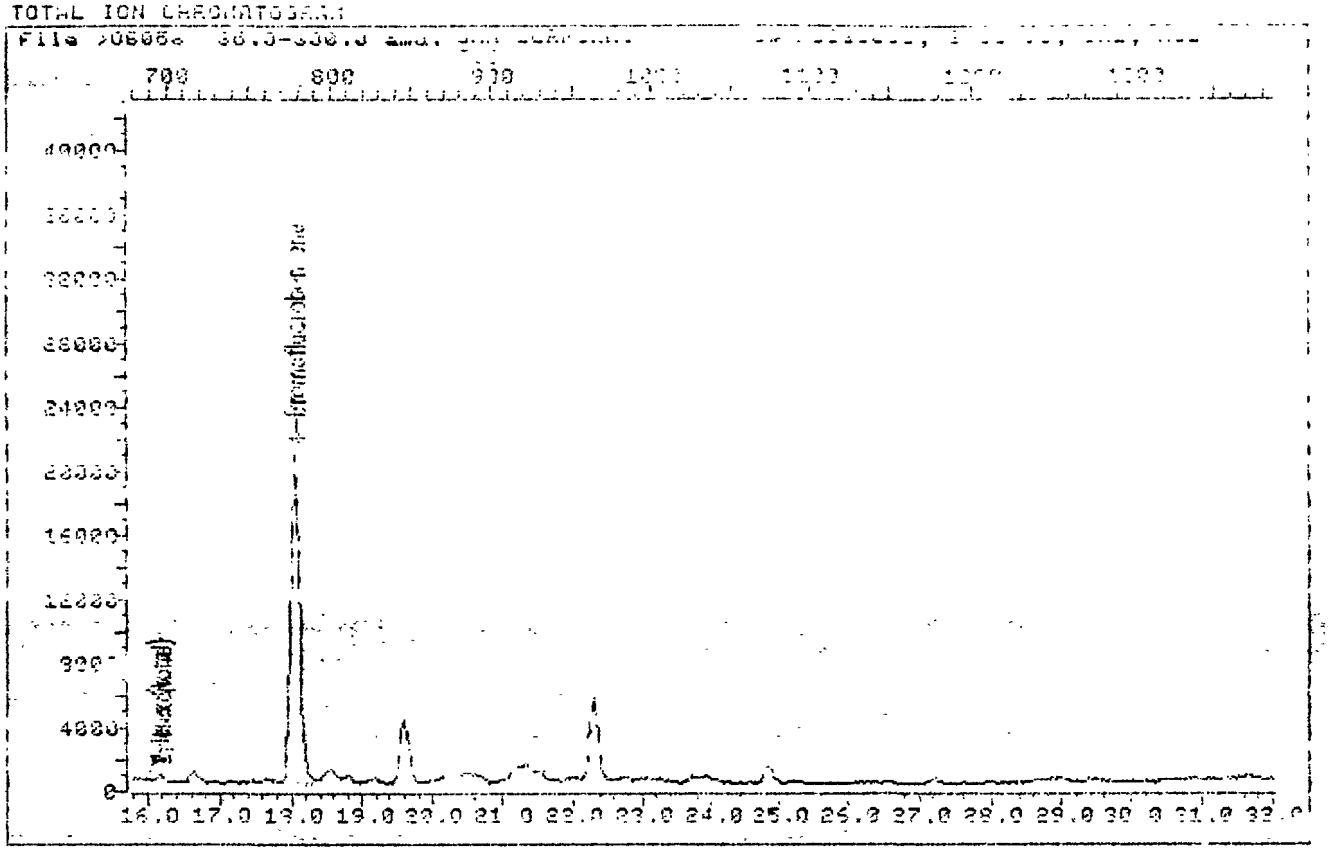


Data File: >0B058::DI Quant Output File: ^0B058::ME
Name: OHM CORPOR Instrument ID: VOA
Misc: C# P6080058, 8/06/96, 5mL, MSD

TD File: TD_VOA::MF
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 08:34 Last Qcal Time: 960806 11:40

Operator ID: MSR
Quant Time : 960806 16:06
Injected at: 960806 20:37

TOTAL ION CHROMATOGRAM



Data File: >08058::V. Quant Output File: ^08058::ME
Name: OHM CORPORN. Instrument ID: V..
Misc: CH P6080058, [illegible], DAL, [illegible]

ID File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev E
Last Calibration: 960711 08:34 Last Qual Time: 960806 11:40

Operator ID: MSR
Quant Time: 960806 16:06
Injected at: 960806 20:37

Operator ID: MSR Quant Seq: 7 Quant Time: [illegible] 20:17
Output File: [illegible]
Data File: [illegible]

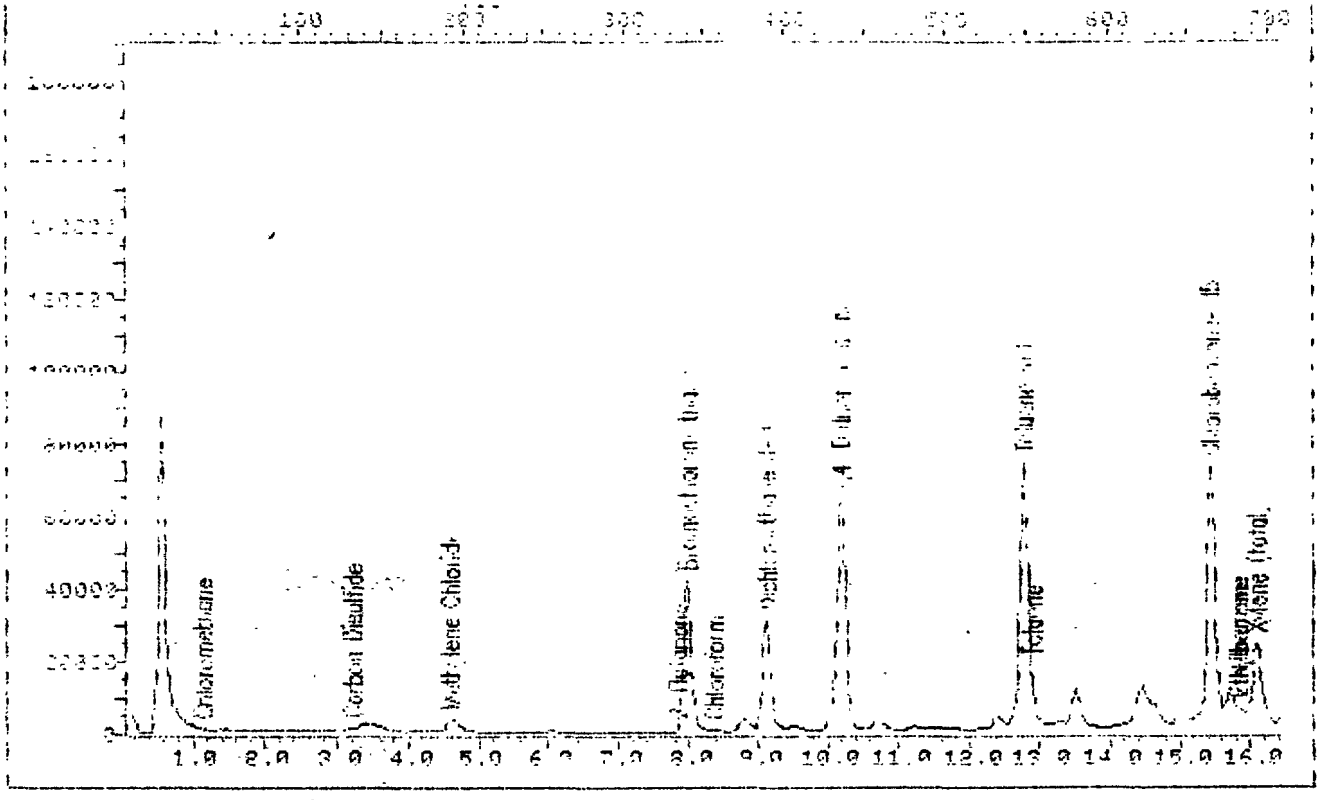
[illegible]

[illegible]
Title: HP 990 Standards for 5 Point Calibration Curve Rev. 5
Last Calibration: 960711 23:34 Last Qual Time: [illegible] 11:40

	Compound	RT	% RT	Area	Conc	Units	%
1)	*Bromochloromethane	7.97	120.0	56791	50.00	[illegible]	9
[illegible]	[illegible]	[illegible]	[illegible]	15	.184	ug/L	100
[illegible]	[illegible] Chloride	4.[illegible]	84.0	[illegible]	[illegible]	[illegible]	[illegible]
8)	Carbon Disulfide	3.20	76.0	5968	1.14	ug/L	100
17)	Chloroform	8.36	83.0	173	.0649	ug/L	93
14)	1,2-Dichloroethane-d4 (S)	5.12	65.0	63217M	46.62	ug/L	[illegible]
1[illegible])	2-Butanone	7.93	47.0	1042	1.37	ug/L	75
21)	*1,4-Difluorobenzene	10.12	114.0	275549	50.00	ug/L	[illegible]
31)	*Chlorobenzene-d5	15.44	117.0	167078	50.00	ug/L	97
32)	2-Hexanone	15.97	91.0	3[illegible]04	.317	ug/L	96
36)	Toluene	12.89	91.0	14842	2.74	ug/L	97
[illegible])	Toluene-d8 (S)	12.[illegible]	98.0	205223	47.51	ug/L	83
39)	Ethylbenzene	15.83	106.0	[illegible]909	.546	ug/L	92
41)	Xylene (total)	16.[illegible]	106.0	15654	3.03	ug/L	99
42)	Bromofluorobenzene (S)	17.[illegible]	95.0	123680	47.[illegible]	ug/L	97

[illegible]

TOTAL ION CHROMATOGRAM

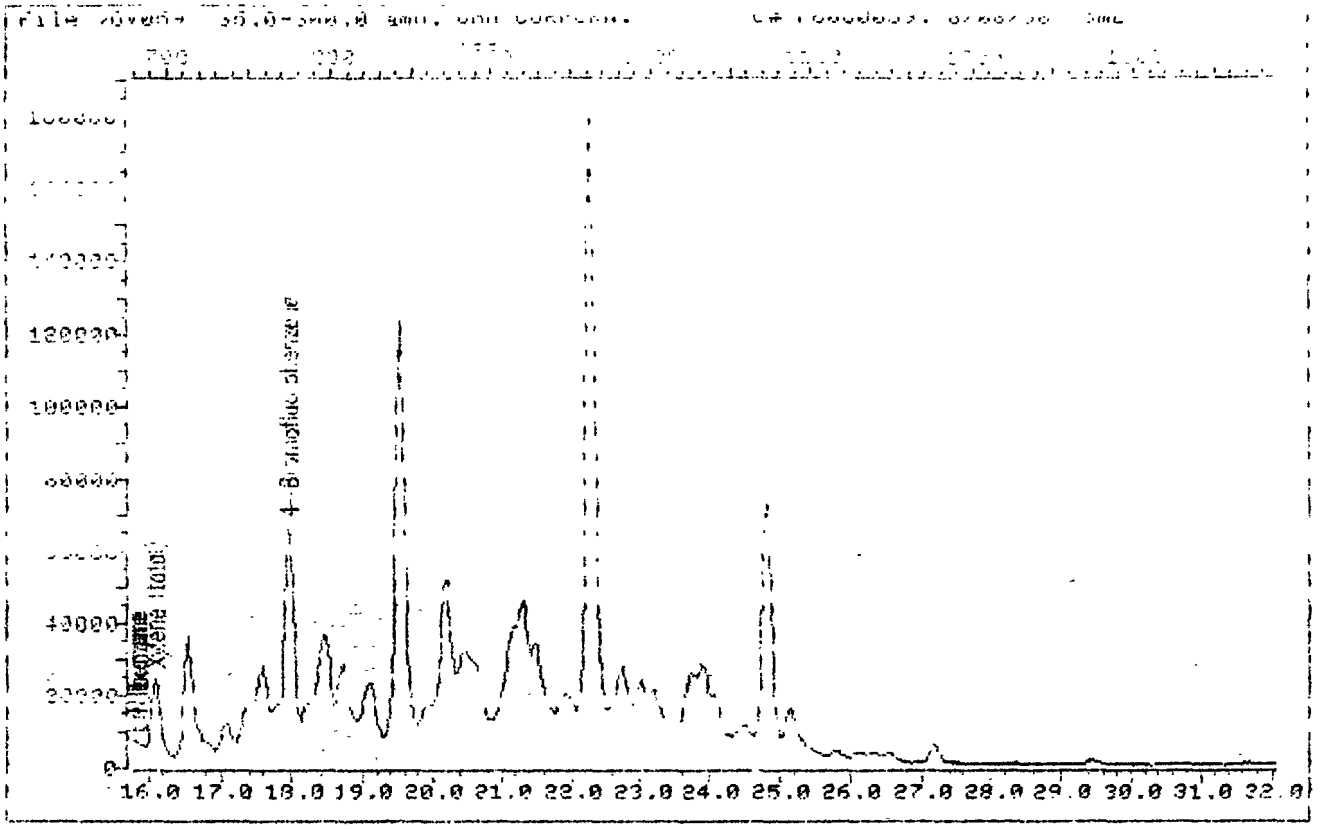


Data File: >QV059::DI
Quant Output File: ^QV059::ME
Misc: CH F6080059, 8/06/96, SAL

Last Calibration: 960711 09:34
Last Qcal Time: 960806 11:40

Operator ID: MSR
Quant Time: 960806 20:13
Injected at: 960806 18:38

TOTAL ION CHROMATOGRAM



Data File: >0V059::01 Quant Output File: ^0V059::ME
Name: OHM CORPORN. Test Seal ID: MGR
Misc: CH F6080059, 8/06/96, 5mL

Method: ID_V8260.MT
Title: HP V8260 Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 09:34 Last Seal Time: 960806 11:0

Operator ID: MGR
Quant Time: 960806 20:13
Injected at: 960806 18:38

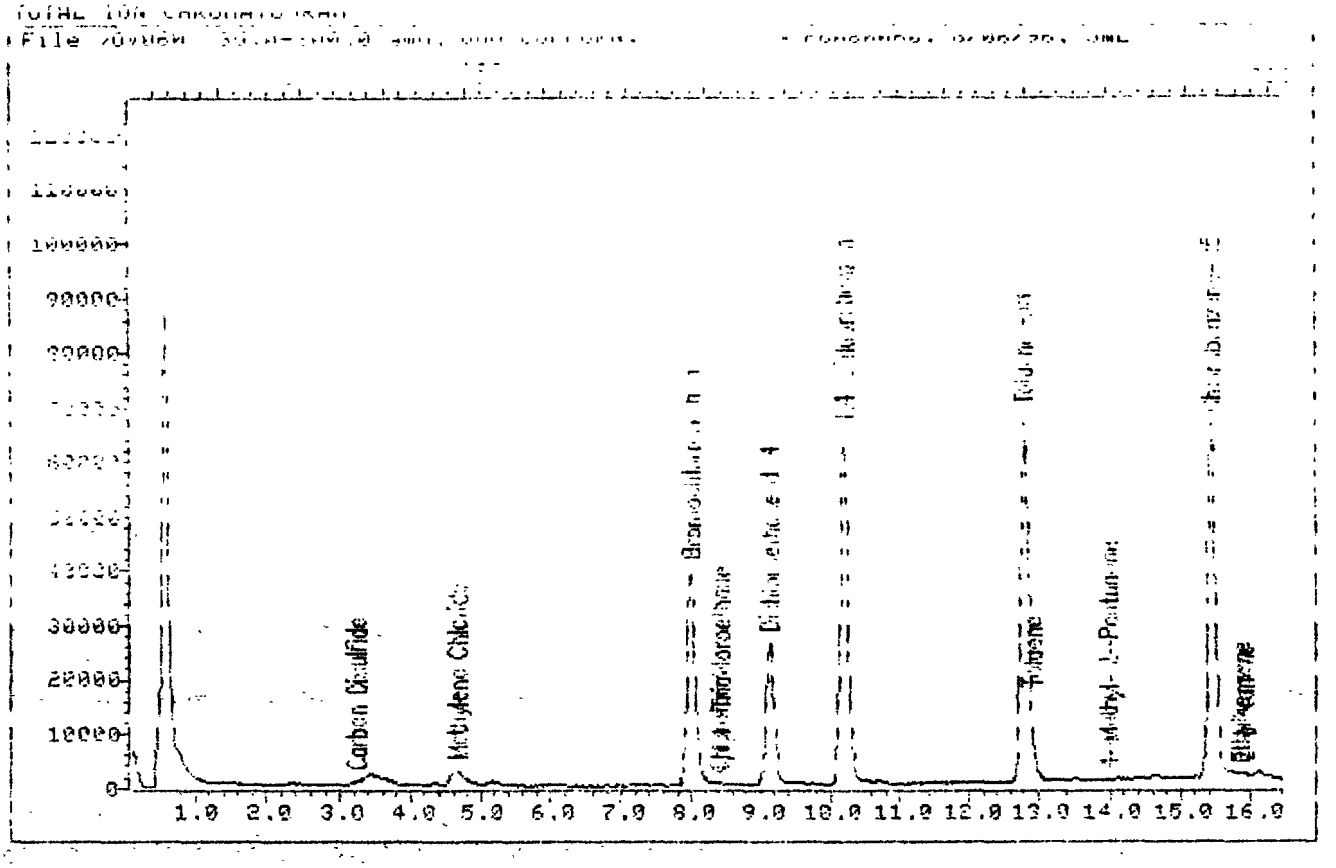
Operator ID [illegible]
Output File: [illegible]

[illegible]

ID [illegible]
Tuner BFB [illegible]
Last Calibrated [illegible]

	Compound	RT	Q Ion	Area	Conc	Units	
1)	*Bromochloromethane	8.00	128.0	5412	50.00	ug/L	98
5)	Methylene Chloride	[illegible]	[illegible]	[illegible]	6.03	ug/L	90
8)	Carbon Disulfide	3.22	76.0	6081	1.17	ug/L	100
13)	Chloroform	8.39	83.0	163	.0547	ug/L	87
14)	1,2-Dichloroethane-d4 (S)	9.12	65.0	62720M	49.37	ug/L	
17)	1,1,1-Trichloroethane	8.41	97.0	162	.267	ug/L	80
21)	*1,4-Difluorobenzene	10.20	114.0	274787	50.00	ug/L	87
71)	*Chlorobenzene-d5	15.43	117.0	145893	50.00	ug/L	91
32)	2-Hexanone	15.87	91.0	443	.0903	ug/L	83
33)	4-Methyl-2-Pentanone	13.96	43.0	141	.0994	ug/L	90
36)	Toluene	12.89	91.0	2325	.432	ug/L	92
37)	Toluene-d8 (S)	12.77	98.0	204912	47.78	ug/L	82
39)	Ethylbenzene	15.83	106.0	42	.0254	ug/L	96
42)	Bromofluorobenzene (S)	17.96	95.0	120193	49.54	ug/L	59

* Compound is ISTD

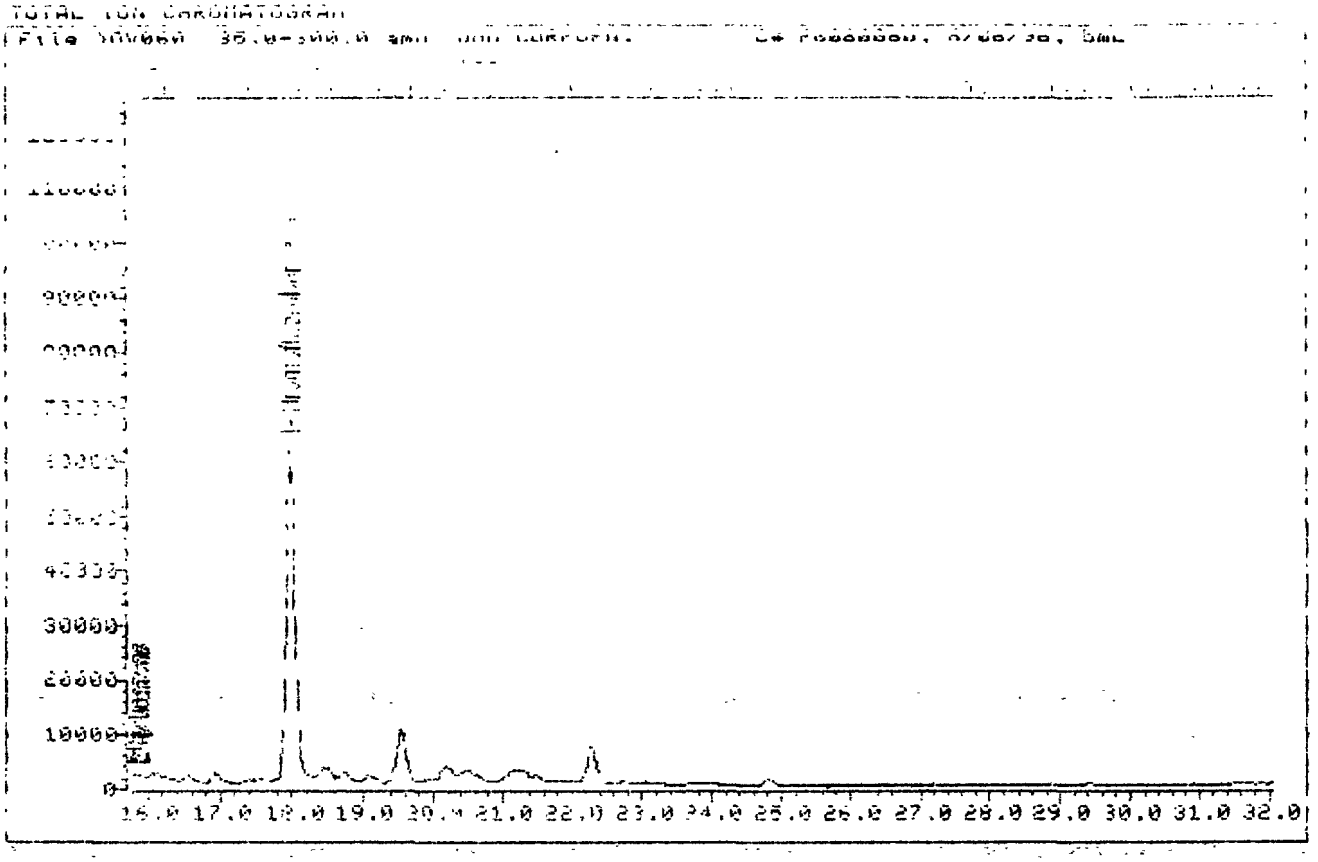


Data File: [illegible]
Name: OHM CORPORN. [illegible]
Misc: C# P6080060, 8/06/96, 5[illegible]

Quant Output File: [illegible]
Instrument ID: VOA

ID File: ID_[illegible]
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960711 [illegible] Quant Time: [illegible]

Operator ID: MSR
Quant Time : 960806 20:14
Injected at: 960806 17:18



Data File: >0V060:*01 Quant Output File: ^0V060::ME
Name: OHM CORPORN. Instrument ID: VOA
Misc: C# P6080060, 8/06/96, 5mL

Title: HP VOA Standards for 5 Point Calibration Curve Rev E
Last Calibration: 960711 08:34 Last Qual Time: 960806 11:40

Operator ID: MSR
Quant Time : 960806 20:14
Injected at: 960806 19:19

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

Memo

225 W. Airtex Blvd • Houston, Texas 77090 *Southern Region, Southwest District*

TO: Gary Foster

FROM: Chet Scheibel

DATE: September 17, 1996

SUBJECT: Data Review for the Project 18464 - Bailey Disposal Site

The Southern Region Southwest District Project Chemist has performed a QA Audit of the data submitted by the Chemtex laboratory for the five water samples collected on August 20, 1996. This data is for the analysis of volatiles, semivolatiles, metals, and conventionals. The lab exceeded the requested 3 day turn-around-time by one day. The final report was received from the lab on September 13, 1996. The sample numbers are EWTP-8C, EWTP-8G, EWTP-8GA, EWTP-8R, and TB.

The results of this audit are presented in the attached Data Evaluation Checklist. The data conforms to the requirements of USEPA Method 624, 625, 200 series, 150.1, 413.1, 160.1, and 415.1.

The data is deemed acceptable according to USEPA guidelines and should be used in this project's decision making process.

Chet Scheibel

Chet Scheibel - Project Chemist
Southern Region, Southwest District

OHM SOUTHWEST REGION
TECHNICAL SERVICES GROUP
ANALYTICAL DATA VALIDATION

The attached Data Package has been reviewed by the Southwest Region Technical Services Group. Detailed comments concerning specific analyses (ie, GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments conerning the data package as a whole are listed below.

COMMENTS: The final report was received on September 13, 1996.

Data Validated by: Chet Scheibel Date: 9/17/96

Name (Printed): CHESTER D. SCHEIBEL

3/18/96

DATA VALIDATION FORMS

HOLDING TIMES	REQUIREMENTS	YES	NO
METALLIC/CONVENTIONAL INORGANIC			
Metals	6 Months	✓	
Cyanide	14 Days		
Mercury	28 Days	✓	
Hexavalent Chromium	24 Hours		
Other			
SEMIVOLATILE - GC, GC/MS, OR HPLC			
WATER	7 Days to Extraction	✓	
	Within 40 Days of Extraction	✓	
SOIL	14 Days to Extraction		
	Within 40 Days of Extraction		
VOLATILES - GC OR GC/MS			
WATERS for AROMATICS	7 Days unpreserved		
	14 Days preserved		
SOILS, SLUDGES, SEDIMENTS	14 Days		
WATER or OTHER	14 Days	✓	
PESTICIDES/PCBs			
WATER	7 Days to extraction		
	Within 40 Days of Extraction		
SOILS, SEDIMENTS, SLUDGES, SOLIDS	14 Days to extraction		
	Within 40 Days of Extraction		
OTHER ORGANICS			
SOLIDS/SLUDGES Analyzed Within Holding Time	Per Method		
WATERS/LIQUIDS Analyzed Within Holding Time	Per Method		
PRESERVATION			
Preserved at field site?		✓	
Lab preserved sample.			

LIST DEFICIENCIES IN DETAIL: _____

DATA VALIDATION AND QUALITY CONTROL

VOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID TCLP			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	BFB EVERY 12 HRS	NA	
INITIAL CALIBRATION	%RSD: < OR = 30%	✓	
CONTINUING CALIBRATION CHECK	%SD: < OR = 25%(A) or 20%(B)	✓	
SPCC COMPOUNDS	RF: > OR = 0.300	✓	
	Bromoform: > OR = 0.25 (A) or 0.10 (B)	✓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS < MDL	✓	
MATRIX SPIKE % RECOVERY VALUE	WITHIN THOSE SET BY LAB	NR	
MATRIX SPIKE DUP. % RECOVERY VALUE	WITHIN THOSE SET BY LAB	NR	
MS/MSD RPD	< LAB QC LIMITS	—	
% LCS RECOVERY VALUE	WITHIN THOSE SET BY LAB	✓	
% SURROGATE RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

SEMIVOLATILE ANALYSIS BY GC/MS: LIQUID ✓ SOLID/SOIL TCLP			
	REQUIREMENT	YES	NO
TUNE CALIBRATION CHECK	DFTPP EVERY 12 HRS	NA	
INITIAL CCC COMPOUNDS	%RSD: < OR = 30%	↓	
INITIAL SPCC COMPOUNDS	% RSD: < OR = 0.05	↓	
CONTINUING CCC COMPOUNDS	% RSD: < OR = 30%(a) OR 20% (B)	↓	
CONTINUING SPCC	RF: > OR = 0.05	↓	
METHOD BLANK	EVERY BATCH OR 20 SAMPLES	✓	
	ALL COMPOUNDS <MDL	✓	
MATRIX SPIKE % RECOVERY VALUES	WITHIN THOSE SET BY LAB	NR	
MATRIX SPIKE DUP. % RECOVERY VALUES	WITHIN THOSE SET BY LAB	NR	
MS/MSD RPD	< LAB QC LIMITS	—	
% LCS RECOVERY VALUES	WITHIN THOSE SET BY LAB	✓	
% SURROGATE RECOVERY LIMITS	WITHIN THOSE SET BY LAB	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ SOLID ____ TCLP ____

METALS - INORGANICS	REQUIREMENTS	YES	NO
% RECOVERY	90-110%(ICP) 80-120%(GFAA)	NA	
CCV	Beginning and every 10 samples	↓	
ICV	Beginning and every 10 samples	↓	
1 CALIBRATION BLANK	Beginning and every 10 samples	↓	
RSD OF INITIAL CALIBRATION - GFAA	<30% or LINEAR CORRELATION OF 0.995 OR BETTER	↓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds < MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	NR	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	NR	
MS/MSD RPD	< 20 %	—	
LCS RECOVERY VALUES	80 - 120 %	✓	
POST DIGEST SPIKE RECOVERY	75 - 125 %	—	
OTHER (LIST) Duplicate RPD	< 20 %	✓	

LIST DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

DATA VALIDATION - CALIBRATION AND QUALITY CONTROL

MATRIX: LIQUID ✓ **SOLID** _____

CONVENTIONAL ANALYSIS	REQUIREMENTS	YES	NO
% RECOVERY OF CCV	80-120%	NA	
RSD OF INITIAL CALIBRATION	<30% or Linear Correlation of 0.995 of Better	✓	
CONTINUING CALIBRATION	Beginning and Every 10 Samples	✓	
CALIBRATION BLANK	Beginning and Every 10 Samples	✓	
METHOD BLANK	Every Batch or 20 Samples	✓	
	All Compounds <MDL	✓	
MATRIX SPIKE RECOVERY VALUES	75 - 125 %	NR	
M. SPIKE DUP. RECOVERY VALUES	75 - 125 %	NR	
LCS RECOVERY VALUES	80 - 120 %	—	
DUPLICATE % RPD	< 20 %	✓	

NOTE DEFICIENCIES BELOW IN DETAIL: _____

2/16/96

Memo

OHM Remediation Services Corp.

225 W. Airtex Blvd., Houston, TX 77073
(713) 775-7629 • Fax (713) 775-7659

Southern Region, Southwest District

TO: Gary Foster
FROM: Chet Scheibel CDS
DATE: August 27, 1996
SUBJECT: Review of EWTP-8G/EWTP-8GA/EWTP-8C Analysis

The analytical data of the EWTP-8G, EWTP-8GA, and EWTP-8C samples collected on August 20, 1996 are summarized in the attached table. As shown, the discharge criteria is not exceeded for any parameter or analyte, except the TOC value for the EWTP-8C composite.

Wastewater Discharge Criteria and Analysis

POLLUTANT	COMPOSITE CRITERIA- mg/L	SAMPLE RESULT- mg/l	DUPLICATE RESULT- mg/l	GRAB CRITERIA- mg/L	SAMPLE RESULT- mg/l	DUPLICATE RESULT - mg/l
	SAMPLE NO	EWTP-8C	NA	SAMPLE NO.	EWTP-8G	EWTP-8GA
	DATE SAMPLED	8/20/96		DATE SAMPLED	8/20/96	8/20/96
Arsenic	0.2	< 0.020		0.4	< 0.020	<0.020
Cadmium	0.1	< 0.020		0.2	< 0.020	< 0.020
Chromium	0.2	< 0.020		0.4	< 0.020	< 0.020
Lead	0.5	< 0.020		1.0	< 0.020	< 0.020
Mercury	0.01	< 0.001		0.02	< 0.001	< 0.001
Selenium	0.2	< 0.020		0.4	< 0.020	< 0.020
Silver	0.1	< 0.020		0.2	< 0.020	< 0.020
Pentachloro-phenol (PCP)	1.23	< 0.050		2.60	< 0.050	< 0.050
Phenanthrene	0.62	< 0.010		1.32	< 0.010	< 0.010
O & G	NA	< 1.0		15	< 1.0	< 1.0
TDS	13,000	2,240		15,000	2,260	2,250
TOC	15	17		30	19	18
pH	6-9	7.[illegible]		6-9	7.8	7.8
VOC	< 1.0	< 0.050		< 1.0	< 0.050	< 0.050
24 Hr Acute Toxicity	> 50% Survival	100%		> 50% Survival	100%	100%

NOTE: EWTP - East Water Treatment Plant

TRIP BLANK ANALYSIS: Sample Number: TB
Analysis <0.010 mg/L

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Date Received: 8/21/96
Date Analyzed: 8/24/96
Analyst: KRP
CHEMTEX FILE #: P6080738

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-8C

CHEMTEX #: P6080738

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy. Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Date Received: 8/21/96
Date Analyzed: 8/24/96
Analyst: KRP
CHEMTEX FILE #: P6080738

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-8G

CHEMTEX #: P6080739

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Date Received: 8/21/96
Date Analyzed: 8/24/96
Analyst: KRP
CHEMTEX FILE #: P6080738

Attn: Mr. Chet Scheibel

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-8A

CHEMTEX #: P6080740

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Date Received: 8/21/96
Date Analyzed: 8/24/96
Analyst: KRP
CHEMTEX FILE #: P6080738

Attn: Mr. Chet Scheibel

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-8R

CHEMTEX #: P6080741

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1 3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Date Received: 8/21/96
Date Analyzed: 8/24/96
Analyst: KRP
CHEMTEX FILE #: P6080738

VOLATILE ORGANIC ANALYSES BY GCMS - EPA 600 METHOD 624

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: TB

CHEMTEX #: P6080742

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

Dr. C. N. Reddy, Ph.D, CIH/ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Analyzed: 8/24/96
Analyst: KRP
CHEMTEX FILE #: P6080738

VOLATILE ORGANIC ANALYSES BY GCMS
EPA 600 METHOD 624

METHOD BLANK

CAS #	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
71-43-2	Benzene	BDL	10
75-27-4	Bromodichloromethane	BDL	10
75-25-2	Bromoform	BDL	10
74-83-9	Bromomethane	BDL	10
56-23-5	Carbon tetrachloride	BDL	10
108-90-7	Chlorobenzene	BDL	10
75-00-3	Chloroethane	BDL	10
100-75-8	2-Chloroethylvinyl ether	BDL	10
67-66-3	Chloroform	BDL	10
74-87-3	Chloromethane	BDL	10
124-48-1	Dibromochloromethane	BDL	10
95-50-1	1,2-Dichlorobenzene	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
75-34-3	1,1-Dichloroethane	BDL	10
107-06-2	1,2-Dichloroethane	BDL	10
75-35-4	1,1-Dichloroethylene	BDL	10
156-60-5	trans-1,2-Dichloroethene	BDL	10
78-87-5	1,2-Dichloropropane	BDL	10
10061-01-5	cis-1,3-Dichloropropene	BDL	10
10061-02-6	trans-1,3-Dichloropropene	BDL	10
100-41-4	Ethylbenzene	BDL	10
75-09-2	Methylene chloride	BDL	10
79-34-5	1,1,2,2-Tetrachloroethane	BDL	10
127-18-4	Tetrachloroethylene	BDL	10
108-88-3	Toluene	BDL	10
71-55-6	1,1,1-Trichloroethane	BDL	10
79-00-5	1,1,2-Trichloroethane	BDL	10
79-01-6	Trichloroethylene	BDL	10
75-69-6	Trichlorofluoromethane	BDL	10
75-01-4	Vinyl chloride	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

PERCENT RECOVERY OF SURROGATES
EPA 600 METHOD 624

CHEMTEX #	(%) Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	4-Bromofluorobenzene
P6080738	100	110	113
P6080739	105	110	114
P6080740	103	110	105
P6080741	104	109	108
P6080742	104	103	114
Method Blank	103	107	111
Method Spike	103	110	110

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Benzene	107
		Chlorobenzene	100
		1,1-Dichloroethylene	106
		Toluene	100
		Trichloroethylene	103

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Date Received: 8/21/96
Date Analyzed: 8/23/96
Analyst: MSR
CHEMTEX FILE #: P6080738

SEMIVOLATILE ANALYSES BY GCMS - EPA METHOD 625

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	COMPOUND NAME	RESULTS (ug/l)	MDL (ug/l)
P6080738	EWTP-8C	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
P6080739	EWTP-8G	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
P6080740	EWTP-8GA	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
P6080741	EWTP-8R	Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10
Method Blank		Pentachlorophenol	BDL	50
		Phenanthrene	BDL	10

BDL: Below Method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Scheibel

Report Date: 8/26/96

CHEMTEX FILE #: P6080738

PERCENT RECOVERY OF SURROGATES - EPA METHOD 625

CHEMTEX #	COMPOUND NAME	% Recovery
P6080738	2-Fluorophenol	46
	Phenol-d_5	39
	Nitrobenzene-d_5	79
	2-Fluorobiphenyl	91
	2,4,6-Tribromophenol	31
	p-Terphenyl-d_{14}	114
P6080739	2-Fluorophenol	40
	Phenol-d_5	34
	Nitrobenzene-d_5	52
	2-Fluorobiphenyl	74
	2,4,6-Tribromophenol	22
	p-Terphenyl-d_{14}	90
P6080740	2-Fluorophenol	39
	Phenol-d_5	34
	Nitrobenzene-d_5	63
	2-Fluorobiphenyl	80
	2,4,6-Tribromophenol	26
	p-Terphenyl-d_{14}	76
P6080741	2-Fluorophenol	34
	Phenol-d_5	26
	Nitrobenzene-d_5	46
	2-Fluorobiphenyl	71
	2,4,6-Tribromophenol	18
	p-Terphenyl-d_{14}	81
Method Blank	2-Fluorophenol	33
	Phenol-d_5	29
	Nitrobenzene-d_5	52
	2-Fluorobiphenyl	71
	2,4,6-Tribromophenol	17
	p-Terphenyl-d_{14}	80

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Scheibel

Report Date: 8/26/96

CHEMTEX FILE #: P6080738

PERCENT RECOVERY OF SURROGATES - EPA METHOD 625

CHEMTEX #	COMPOUND NAME	% Recovery
Method Spike	2-Fluorophenol	31
	Phenol-d_5	32
	Nitrobenzene-d_5	54
	2-Fluorobiphenyl	72
	2,4,6-Tribromophenol	31
	p-Terphenyl-d_{14}	85

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Phenol	43
		2-Chlorophenol	41
		1,4-Dichlorobenzene	42
		n-Nitro-di-n-propylamine	42
		1,2,4-Trichlorobenzene	40
		4-Chloro-3-methylphenol	46
		Acenaphthene	55
		4-Nitrophenol	43
		2,4-Dinitrotoluene	32
		Pentachlorophenol	50
		Pyrene	61

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Date Received: 8/21/96
CHEMTEX FILE #: P6080738

METALLIC PARAMETERS BY ICP

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	Parameter	Units	Results	MDL
P6080738	EWTP-8C	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
P6080739	EWTP-8G	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
P6080740	EWTP-8GA	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
P6080741	EWTP-8R	Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20
Method Blank		Arsenic	ug/l	BDL	20
		Cadmium	ug/l	BDL	20
		Chromium, total	ug/l	BDL	20
		Lead	ug/l	BDL	20
		Mercury	ug/l	BDL	0.5
		Selenium	ug/l	BDL	20
		Silver	ug/l	BDL	20

BDL: Below method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Scheibel

Report Date: 8/26/96

CHEMTEX FILE #: P6080738

LABORATORY QUALITY ASSURANCE/QUALITY CONTROL DATA

CHEMTEX #	Sample Identification	Constituents	(%) Recovery
Method Spike		Arsenic	100
		Cadmium	103
		Chromium, total	102
		Lead	101
		Mercury	95
		Selenium	101
		Silver	102

QUALITY ASSURANCE/QUALITY CONTROL DATA

Contaminant	True Value	Obtained Value
Arsenic (ug/l)	500	490/510*
Cadmium (ug/l)	500	510/520*
Chromium (ug/l)	500	510/500*
Lead (ug/l)	500	500/520*
Mercury (ug/l)	10.0	10.0/9.5*
Selenium (ug/l)	500	510/500*
Silver (ug/l)	500	520/510*

* Duplicate Analysis

Contaminant	Method Reference	Date Analyzed/Analysts
Arsenic	EPA Method 200.7	8/23/96 MRP/SM
Cadmium	EPA Method 200.7	8/23/96 MRP/SM
Chromium, total	EPA Method 200.7	8/23/96 MRP/SM
Lead	EPA Method 200.7	8/23/96 MRP/SM
Mercury	EPA Method 245.1	8/23/96 MRP/SM
Selenium	EPA Method 200.7	8/23/96 MRP/SM
Silver	EPA Method 200.7	8/23/96 MRP/SM

CN Reddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services
3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Collected By: B. Riggs
Time Collected: 18:07-18:32
Date Received: 8/21/96
Time Received: 9:25 AM
CHEMTEX FILE #: P6080738

CONVENTIONAL ANALYSES

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

CHEMTEX #	Sample Identification	Parameter	Units	Results	MDL
P6080738	EWTP-8C 18:07	Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	2,240	10
		T O C	mg/l	17	2
		pH	units	7.5	---
P6080739	EWTP-8G 18:20	Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	2,260	10
		T O C	mg/l	19	2
		pH	units	7.8	---
P6080740	EWTP-8GA 18:20	Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	2,250	10
		T O C	mg/l	18	2
		pH	units	7.8	---
P6080741	EWTP-8R 18:32	Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	20	5
		T O C	mg/l	5	2
		pH	units	7.0	---
Method Blank		Oil & Grease	mg/l	BDL	1.0
		T D S	mg/l	BDL	2
		T O C	mg/l	BDL	2

BDL: Below method Detection Limit. MDL: Method Detection Limit.

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

AIHA Accredited
Organic, Metal, Wet Chemical, Biological and Petro Chemical Analyses for Multi-media Environmental and Industrial Hygiene Samples.

Facilities are also available at:
1825 N. Padre Island Dr., Corpus Christi, Texas 78408 (512) 299-9900 FAX (512) 299-1155
16550 Highland Road, Baton Rouge, Louisiana 70810 (504) 752-5100 FAX (504) 753-1782
194 N. Cities Service Hwy., Sulphur, Louisiana 70663 (318) 625-8898 FAX (318) 625-5582

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090
Attn: Mr. Chet Scheibel

Report Date: 8/26/96

CHEMTEX FILE #: P6080738

QUALITY ASSURANCE/QUALITY CONTROL DATA

Contaminant	True Value	Obtained Value
Oil & Grease (mg/l)	10.0	9.2/9.4*
T D S (mg/l)	100	98/100*
T O C (mg/l)	30	29/31*
pH (units)	8.0	8.0/8.0*

* Duplicate Analysis

Contaminant	Method Reference	Date Analyzed/Analysts
Oil & Grease	EPA Method 413.1	8/26/96 LKP/BP/MMP
Solids, Total Dissolved (TDS)	EPA Method 160.1	8/22/96 LKP/BP/MMP
Total Organic Carbon (TOC)	EPA Method 415.1	8/22/96 LKP/BP/MMP
pH	EPA Method 150.1	8/21/96 9:25AM MMP

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Time Collected: 18:10
Collected By: B. Riggs
Date Received: 8/21/96
Time Received: 9:25 AM
Date Analyzed: 8/21-22/96
Analysts: CD/CA
CHEMTEX FILE #: P6080738

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-8C

CHEMTEX #: P6080738

24-HOUR MYSID ACUTE TOXICITY TEST
EPA METHOD 600/4-90/027

MYSIDOPSIS BAHIA SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24 hr	A	100					100
	B	100					100
	C	100					100
	D	100					100
	E	100					100
	MEAN	100					100

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 982-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Time Collected: 18:22
Collected By: B. Riggs
Date Received: 8/21/96
Time Received: 9:25 AM
Date Analyzed: 8/21-22/96
Analysts: CD/CA
CHEMTEX FILE #: P6080738

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-8G

CHEMTEX #: P6080739

24-HOUR MYSID ACUTE TOXICITY TEST
EPA METHOD 600/4-90/027

MYSIDOPSIS BAHIA SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24 hr	A	100					100
	B	100					100
	C	100					100
	D	100					100
	E	100					100
	MEAN	100					100

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

CHEMTEX
Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642
(409) 983-4575 FAX (409) 983-1522

Client: OHM Corporation
225 W. Airtex
Houston, TX 77090

Attn: Mr. Chet Scheibel

Report Date: 8/26/96
Date Collected: 8/20/96
Time Collected: 18:22
Collected By: B. Riggs
Date Received: 8/21/96
Time Received: 9:25 AM
Date Analyzed: 8/21-22/96
Analysts: CD/CA
CHEMTEX FILE #: P6080738

PROJECT: 18464, BAILEY SUPERFUND SITE, 9301 HWY 87, BRIDGE CITY, TX 77611

Sample Identification: EWTP-8GA

CHEMTEX #: P6080740

24-HOUR MYSID ACUTE TOXICITY TEST
EPA METHOD 600/4-90/027

MYSIDOPSIS BAHIA SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24 hr	A	100					100
	B	100					100
	C	100					100
	D	100					100
	E	100					100
	MEAN	100					100

CNReddy

Dr. C. N. Reddy, Ph.D, CIH, ASP
Director

pap/CNR

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0019
Field Technical Services
Rev. 08/89

182128

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE
PROJECT LOCATION: 9701 Hwy 87 BRIDGE CITY, TX 77611
PROJ. NO.: 18464
PROJECT CONTACT: CHET SCHEIBEL
PROJECT TELEPHONE NO.: (713) 775-7629
CLIENT'S REPRESENTATIVE: MARK MURPHY
PROJECT MANAGER/SUPERVISOR: GARY FOSTER / SID RICHARD

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	BNA	O&G	VOA	METALS	TOC	TDS/TSS	ACUTE TOXICITY	REMARKS Chemlab #
1	EWTP-8C	8/20/96	1803	X		COMPOSITE SAMPLE - TREATED WATER	1-l	X							P6080738
2	EWTP-8C	8/20/96	1804	X		"	1-l		X						H_2SO_4
3	EWTP-8C	8/20/96	1800	X		"	2-40ml			X					
4	EWTP-8C	8/20/96	1805	X		"	1-l				X				HNO_3
5	EWTP-8C	8/20/96	1806	X		"	1-40z ~~1-l~~					X			H_2SO_4
6	EWTP-8C	8/20/96	1807	X		"	1-12oz						X		
7	EWTP-8C	8/20/96	1810	X		"	1-GAL							X	
8	EWTP-8G	8/20/96	1816		X	GRAB SAMPLE - TREATED WATER	1-l	X							P6080739
9	EWTP-8G	8/20/96	1817		X	"	1-l		X						H_2SO_4
10	EWTP-8G	8/20/96	1814		X	"	2-40ml			X					

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-10	Blake Rizzo	Ch. Rowell (for Chemlab)	8/21	9.25 AM
2					
3					
4					

REMARKS: SEE ARF
3 DAY TAT
ON ICE

SAMPLER'S SIGNATURE: Blake Rizzo

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0019
Field Technical Services
Rev. 08/89

182129

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE
PROJECT LOCATION: 9301 HWY 87 BRIDGE CITY, TX 77611
PROJ. NO.: 18464
PROJECT CONTACT: CHET SCHEIBEL
PROJECT TELEPHONE NO.: (713) 775-7629
CLIENT'S REPRESENTATIVE: MARK MURPHY
PROJECT MANAGER/SUPERVISOR: GARY FOSTER/SID RICHARD

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	BNA	O&G	VOA	METALS	TOC	TDS/pH	ACUTE TOXICITY	REMARKS Chain #1
1	EWTP-8G	8/20/96	1818		X	GRAB SAMPLE - TREATED WATER	1-l			X					HNO3 P6080739
2	EWTP-8G	8/20/96	1819		X	"	1-4oz				X				H2SO4
3	EWTP-8G	8/20/96	1820		X	"	1-12oz					X			
4	EWTP-8G	8/20/96	1822		X	"	1-GAL						X		
5	EWTP-8GA	8/20/96	1814		X	GRAB SAMPLE - TREATED WATER	1-l	X							P6080740
6	EWTP-8GA	8/20/96	1817		X	"	1-l		X						H2SO4
7	EWTP-8GA	8/20/96	1814		X	"	2-40ml			X					
8	EWTP-8GA	8/20/96	1818		X	"	1-4oz				X				HNO3
9	EWTP-8GA	8/20/96	1819		X	"	1-12oz					X			H2SO4
10	EWTP-8GA	8/20/96	1820		X	"	2-l						X		

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-10	Blake Riggs	Ch. Rosenthal (Gov Chemistry)	8/21	9:25AM
2					
3					
4					

REMARKS: SEE ARF
3 DAY TAT
ON ICE

SAMPLER'S SIGNATURE: Blake Riggs

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0019
Field Technical Services
Rev. 08/89

182130

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAILEY SUPERFUND SITE
PROJECT LOCATION: 9201 HWY 87 BRIDGE CITY TX 77611
PROJ. NO.: 18464
PROJECT CONTACT: CHET SCHEIBEL
PROJECT TELEPHONE NO.: (713) 775-7629
CLIENT'S REPRESENTATIVE: MARK MURPHY
PROJECT MANAGER/SUPERVISOR: GARY FOSTER / SID RICHARD

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	BNA	O&G	VOA	METALS	TOC	TDS/pH	ACUTE TOXICITY	REMARKS Chelex #
1	EWTP-8A	8/20/96	1822		X	GRAB SAMPLE - TREATED WATER	2-1l						X		P60807 40
2	EWTP-8R	8/20/96	1828		X	RINSATE - EQUIPMENT BLANK	1l	X							P60807 41
3	EWTP-8R	8/20/96	1829		X	"	1l		X						H_2SO_4
4	EWTP-8R	8/20/96	1828		X	"	2-40ml			X					
5	EWTP-8R	8/20/96	1831		X	"	1-l				X				HNO_3
6	EWTP-8R	8/20/96	1831 ~~1832~~		X	"	1-4oz					X			H_2SO_4
7	EWTP-8R	8/20/96	1832		X	"	1-12oz						X		
8	TB-					TRIP BLANK	2-40ml			X					P60807 42
9															
10															

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-8	Blake Rizzo	Ch. Rooney (for chemtech)	8/21	9:25 am
2					
3					
4					

REMARKS: SEE ARF
3 DAY TAT
ON ICE

SAMPLER'S SIGNATURE: Blake Rizzo

OHM REMEDIATION SERVICES CORP
SOUTHERN REGION, SOUTHWEST DISTRICT - TECHNICAL SERVICES
LABORATORY SAMPLE RECEPTION CONFIRMATION

Telephone #: 713/775-7629 **FAX #: 713/775-7659**

Send to the Attention of: Chet Scheibel

TO BE COMPLETED BY THE LABORATORY WITHIN 24 HOURS OF SAMPLE RECEPTION

NOTE: A Copy of the COC Must Be Enclosed With This Form

DATE: _____

LABORATORY NAME: CHEMTEX

LABORATORY LOCATION: Port Arthur, TX

PREPARED BY: _____
(PRINT LEGIBLY)

PROJECT NUMBER: 18464 - Bailey

DATE SAMPLES RECEIVED: _____

TOTAL NUMBER OF SAMPLES: 5

SOIL: _____#

WATERS: ✓ #

SOLIDS: _____#

TURN-AROUND-TIME REQ: ~~XXX~~ TSR 24 hr ____ 48 hr ✓ 3 Days ____ 5 Days

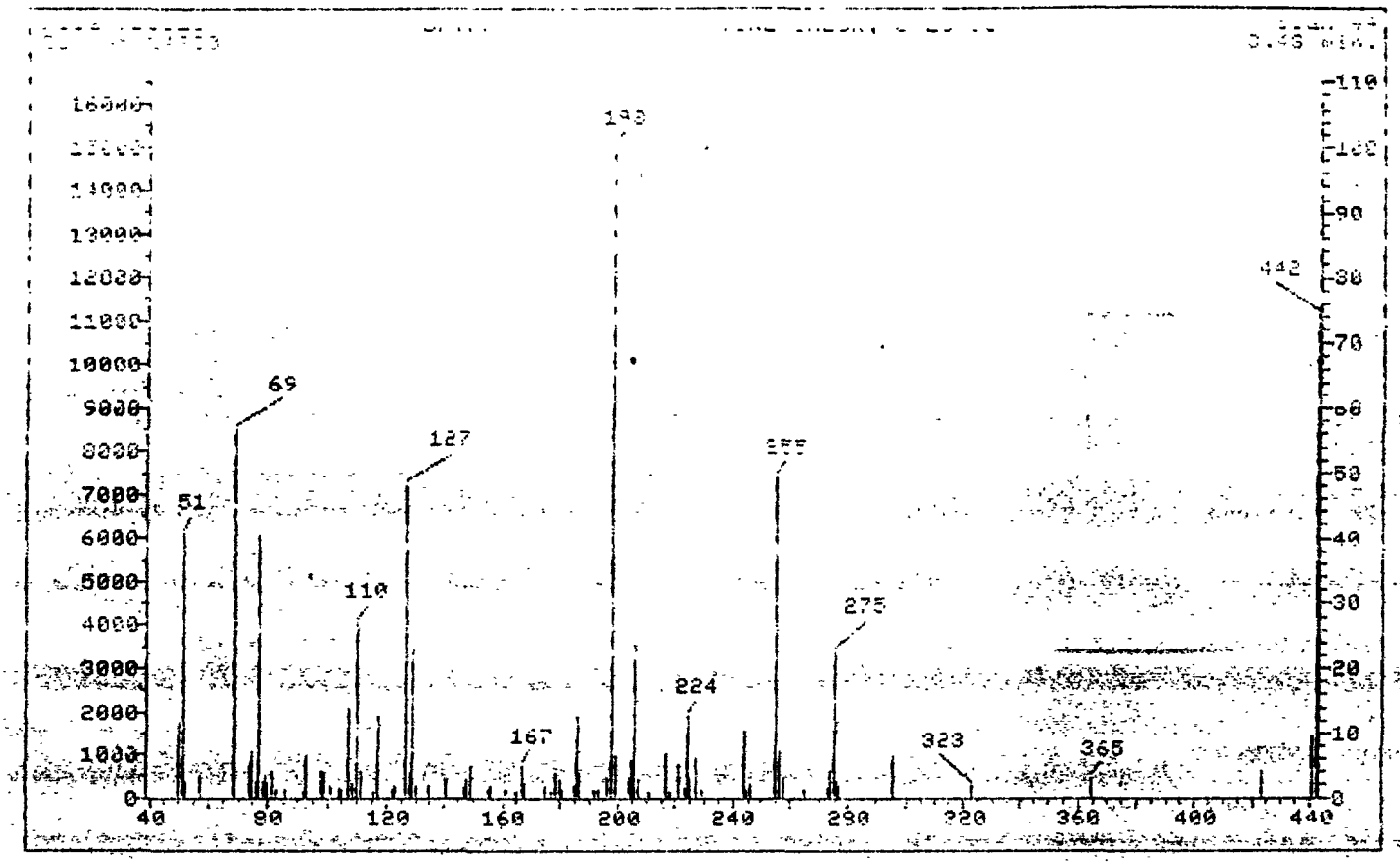
____ 7 Days ____ 14 Days _____ OTHER

TO BE COMPLETED BY OHM TECHNICAL SERVICE DEPARTMENT:

DATE RESULTS RECEIVED BY OHM: Initial (I) 8/27/96 Final (F) 9/13/96

METHOD OF RECEPTION: F Fax F Fed X ____ Mail

ACTUAL TURN-AROUND-TIME: I +1 F #11



GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphosphine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	40.79	40.79	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	55.74	55.74	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	40-60% of mass 198	43.10	43.10	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
[illegible]	[illegible]	[illegible]	[illegible]	Ok
275	10-30% of mass 198	22.50	22.50	Ok
365	Greater than [illegible] of mass [illegible]	[illegible]	2.92	Ok
441	0-100% of mass 443	9.68	70.63	Ok
442	Greater than 40% of mass 443	[illegible]	74.21	Ok
443	17-23% of mass 442	[illegible]	[illegible]	Ok

Injection Date: [illegible]
Injection Time: 03:34
Data File: [illegible]
Scan: [illegible]

Calibrated: 860323 1139

Compound	RF 40.00	RF 80.00	RF 120.00	RF 160.00	RF 200.00	$\overline{RF}$	% RSD	
Pyridine	.49564	.57528	.61151	.56273	.57165	.57602	9.347	
2-Fluorophenol (S)	.87249	.88506	.89616	.81990	.85893	.82451	9.637	(Conc=200.0,200.0,200.0,200.0,200.0)
Phenol-d6 (S)	1.25281	1.24148	1.23021	1.23857	1.21591	1.19540	8.321	(Conc=200.0,200.0,200.0,200.0,200.0)
Phenol	1.32233	1.33672	1.29271	1.27178	1.12667	1.27091	6.672	
bis(2-Chloroethyl)ether	1.11636	1.06521	1.05939	1.02586	1.04190	1.06518	3.373	
2-Chlorophenol	1.16244	.92756	.76668	1.13393	.93742	.98961	17.080	
Benzyl alcohol	.67558	.68137	.46285	.70730	.71233	.64788	15.157	
1,3-Dichlorobenzene	1.32391	1.28681	1.24298	1.17833	1.04132	1.21479	9.136	
1,4-Dichlorobenzene	1.30317	1.28722	1.26691	1.23334	1.07516	1.23316	7.468	
1,2-Dichlorobenzene	1.27355	1.25631	1.23510	1.18137	1.16844	1.21557	3.174	
2-Methylphenol	.99350	.87636	.93629	.91068	.80524	.90481	7.765	
2,2'-oxybis(1-Chloropropane)	.77404	.86962	.92250	.76404	.83815	.83367	7.959	
4-Methylphenol	1.04836	1.01457	.99812	.97535	.87727	.97728	6.273	
N-Nitroso-di-n-propylamine	.88301	.72665	.57739	.86326	.76970	.76414	16.082	
Hexachloroethane	.52204	.52438	.51742	.50064	.50066	.51303	2.256	
Nitrobenzene-d5 (S)	.36085	.35855	.36236	.34338	.39415	.36486	4.731	(Conc=100.0,100.0,100.0,100.0,100.0)
Nitrobenzene	.48507	.47572	.49126	.42503	.48827	.47367	5.809	
Isophorone	.49158	.43459	.45458	.66654	.56158	.52219	18.206	
2-Nitrophenol	.20186	.19727	.20747	.20439	.23289	.20877	6.771	
2,4-Dimethylphenol	.37314	.29331	.27367	.35076	.35532	.32924	13.108	
bis(2-Chloroethoxy)methane	.42063	.31264	.29690	.37645	.38078	.35628	14.975	
2,4-Dichlorophenol	.30159	.23913	.21298	.25371	.24107	.24570	13.297	
1,2,4-Trichlorobenzene	.35529	.33611	.33741	.30547	.38911	.37663	5.791	
Naphthalene	.97318	.91201	.91450	.87112	.99310	.93378	5.476	
4-Chloroaniline	.39889	.30476	.40048	.38390	.39570	.37675	10.819	
Hexachlorobutadiene	.21937	.21215	.20366	.19245	.21702	.20994	5.062	
4-Chloro-3-methylphenol	.33629	.22716	.21563	.29196	.30606	.27542	18.885	
2-Methylnaphthalene	.65477	.62583	.65015	.59981	.68908	.61353	5.238	
Hexachlorocyclopentadiene	.29230	.32121	.42743	.39593	.37994	.36158	14.934	
2,4,6-Trichlorophenol	.36971	.29795	.34401	.39099	.38053	.35664	10.422	
2,4,5-Trichlorophenol	.38158	.30603	.35432	.38678	.36477	.35874	8.952	
2-Chloronaphthalene	1.02235	1.01769	1.22311	1.02362	1.02493	1.06[illegible]	8.439	
2-Fluorobiphenyl (S)	1.09255	.86360	1.03361	1.15635	1.00702	1.03065	10.629	(Conc=100.0,100.0,100.0,100.0,100.0)
2-Nitroaniline	.32633	.33282	.42222	.29652	.36872	.34942	13.763	
Dimethylphthalate	1.18639	.85140	1.04276	1.00377	1.24406	1.06567	14.589	
Acenaphthylene	1.32019	1.31294	1.22316	1.23690	1.20292	1.25912	4.271	
2,6-Dinitrotoluene	.28192	.20948	.25192	.25765	.28647	.25389	12.497	
Acenaphthene	1.01858	.95111	1.15392	.88127	.97123	.97742	12.257	
3-Nitroaniline	.29491	.21596	.26447	.24142	.29757	.26288	13.429	
2,4-Dinitrophenol	.14166	.12323	.15692	.13237	.16179	.14717	15.626	
4-Nitrophenol	.22070	.24154	.33329	.22358	.22377	.24950	19.022	

RF - Response Factor (Subscript is amount in ng/[illegible])

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

Compound	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$\overline{RF}$	%RSD	
Dibenzofuran	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
2,4-Dinitrotoluene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
Diethylphthalate	1.39557	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
4-Chlorophenyl-phenylether	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.644	
Fluorene	1.17845	.91425	1.08215	1.31716	1.13177	1.16479	9.653	
4-Nitroaniline	.29476	.26369	.32561	.24134	.29746	.28457	11.467	
4,6-Dinitro-2-methylphenol	.17157	[illegible]	.17747	.17600	.15237	.16394	6.826	
N-Nitrosodiphenylamine	.47800	.44702	.47399	.48387	.47375	[illegible]	[illegible]	
2,4,6-Tribromophenol (S)	.12351	.16146	.13037	.13429	.14005	.13810	10.498	(Conc=200.0,200.0,200.0,200.0,200.0)
4-Bromophenyl-phenylether	.23793	.24551	.25016	.26619	.24804	.24957	4.053	
Hexachlorobenzene	.28205	.27599	.28167	.29168	.28521	.28533	2.391	
Pentachlorophenol	.13184	.15264	.15279	.16562	.16321	.15322	8.703	
Phenanthrene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
Anthracene	.99954	.96276	.96175	.92159	.93421	.95604	3.156	
Carbazole	.83476	.79076	.77995	.79949	.84176	.80936	3.394	
Di-n-butylphthalate	.34105	.51183	.51134	.38232	.45911	.44113	17.[illegible]	
Fluoranthene	.88617	.85626	.89273	.80445	.89578	.86708	4.424	
Pyrene	1.85713	1.32139	1.05167	1.49379	1.35785	1.41637	20.756	
Terphenyl-d14 (S)	1.19076	.94315	.75584	1.01342	.95865	.97277	15.947	(Conc=100.0,100.0,100.0,100.0,100.0)
Butylbenzylphthalate	.74553	.76250	.69674	.70455	.70181	.72223	4.122	
3,3'-Dichlorobenzidine	.73935	.59274	.52337	.24379	.27914	.44724	46.777	
Benzo(a)anthracene	1.08103	.99339	1.01761	1.04189	1.03772	1.04452	3.797	
Chrysene	1.08103	.99339	1.01761	1.04189	1.03772	1.04452	3.797	
Bis(2-Ethylhexyl)phthalate	.87359	1.10318	1.03017	.87317	.76339	.77782	10.105	
Di-n-octylphthalate	1.90710	2.01321	1.73047	1.74646	1.64339	1.84923	8.330	
Benzo(b)fluoranthene	1.42334	1.50635	1.49270	1.44677	1.77340	1.52345	9.224	
Benzo(k)fluoranthene	1.48334	1.28678	1.06784	1.29995	1.77340	1.38226	19.071	
Benzo(a)pyrene	1.22393	1.21282	1.18461	1.17517	1.20117	1.19954	1.662	
Indeno(1,2,3-cd)pyrene	1.26913	1.71133	1.83170	1.59457	1.39568	1.56049	14.638	
Dibenz(a,h)anthracene	1.25296	1.57692	1.50423	1.46655	1.30114	1.48036	8.403	
Benzo(g,h,i)perylene	1.32778	1.71956	1.77193	1.48887	1.61748	1.58517	11.347	

RF - Response Factor (Subscript is amount in ng)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

Calibration Check Report

[illegible]

Calibration [illegible]

Check Standard Date File [illegible]

Injection Time [illegible]

Compound	$\overline{RF}$	RF	%Diff	Calibration	
Pyridine	.57602	.47026	19.90	Average	
2-Fluorophenol (S)	.82451	.77772	5.85	Average	(Conc=200.00)
Phenol-d6 (S)	1.17640	1.21724	-1.74	Average	(Conc=200.00)
Phenol	1.27091	1.24635	1.93	Average	
bis(2-Chloroethyl)ether	1.06562	1.03615	2.77	Average	
2-Chlorophenol	.98961	1.12057	13.23	Average	
Benzyl alcohol	.44783	.4[illegible]	6.34	Average	
1,3-Dichlorobenzene	1.21479	1.23801	1.91	Average	
1,4-Dichlorobenzene	1.23316	1.21729	2.77	Average	
1,2-Dichlorobenzene	1.21555	1.22278	.56	Average	
2-Methylphenol	.90481	.82867	8.42	Average	
2,2'-oxybis(1-Chloropropane)	.83367	.7[illegible]	12.[illegible]	Average	
4-Methylphenol	.97926	.99239	1.34	Average	
N-Nitroso-di-n-propylamine	.76414	.80974	5.97	Average	
Hexachloroethane	.51303	.52243	1.83	Average	
Nitrobenzene-d5 (S)	.36486	.36967	1.32	Average	(Conc=100.00)
Nitrobenzene	.47307	.47437	.28	Average	
Isophorone	.52218	.67021	28.35	Average	
2-Nitrophenol	.20877	.19917	4.59	Average	
2,4-Dimethylphenol	.32924	.35664	8.32	Average	
bis(2-Chloroethoxy)methane	.35628	.37210	4.44	Average	
2,4-Dichlorophenol	.24670	.28166	14.17	Average	
1,2,4-Trichlorobenzene	.33666	.34013	1.03	Average	
Naphthalene	.93378	.89181	4.49	Average	
4-Chloroaniline	.37675	.39716	5.41	Average	
Hexachlorobutadiene	.20994	.20895	.47	Average	
4-Chloro-3-methylphenol	.27542	.28739	4.34	Average	
2-Methylnaphthalene	.64353	.59468	7.59	Average	
Hexachlorocyclopentadiene	.36158	.38589	6.72	Average	
2,4,6-Trichlorophenol	.35564	.40439	13.39	Average	
2,4,5-Trichlorophenol	.35874	.40439	12.73	Average	
2-Chloronaphthalene	1.06214	1.11594	5.07	Average	
2-Fluorobiphenyl (S)	1.03068	1.25252	21.50	Average	(Conc=100.00)
2-Nitroaniline	.34942	.27502	21.29	Average	
Dimethylphthalate	1.05567	.90508	15.07	Average	
Acenaphthylene	1.25922	1.30992	4.03	Average	
2,6-Dinitrotoluene	.25353	.20444	19.43	Average	
Acenaphthene	.97542	.91673	6.01	Average	
3-Nitroaniline	.26268	.18899	28.05	Average	
2,4-Dinitrophenol	[illegible]	[illegible]	[illegible]	Average	

RF - Response Factor from daily standard file at 80.00 ug/l

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

%Diff - % Difference from original average or curve

[illegible]

[illegible] Standard

[illegible]

Check Standard Date Filed: [illegible]

Injection [illegible]

Compound	$\overline{RF}$	RF	%Diff	Calib Meth
4-Nitrophenol	.24958	.19644	21.29	Average
[illegible]	[illegible]	[illegible]	[illegible]	Average
2,4-Di[illegible]toluene	[illegible]	.74792	2.74	Average
Diethylphthalate	1.16495	.89067	23.54	Average
4-Chlorophenyl-phenylether	.52697	.52200	.94	Average
Fluorene	1.06479	.98693	7.31	Average
4-Nitroaniline	.28457	.21395	24.82	Average
4,6-Dinitro-2-methylphenol	.18394	.22148	20.41	Average
N-Nitrosodiphenylamine	.46724	.47219	1.06	Average
2,4,6-Tribromophenol (S)	.13810	.14774	[illegible]	Average (Limit=200.00)
4-Bromophenyl-phenylether	.24957	.29177	16.91	Average
Hexachlorobenzene	.28593	.32525	13.75	Average
Pentachlorophenol	.15322	.17217	9.82	Average
Phenanthrene	1.10157	1.03736	5.83	Average
Anthracene	.95604	.93946	1.73	Average
Carbazole	.80936	.73303	9.43	Average
Di-n-butylphthalate	.44113	.31120	29.46	Average
Fluoranthene	.85709	.77516	10.49	Average
Pyrene	1.41637	1.01816	28.37	Average
Terphenyl-d14 (S)	[illegible]	[illegible]	[illegible]	Average (Limit=100.00)
Butylbenzylphthalate	.72223	.73797	2.18	Average
3,3'-Dichlorobenzidine	.44734	.49174	12.37	Average
Benzo(a)anthracene	1.04452	1.03406	1.00	Average
Chrysene	1.04452	1.03406	1.00	Average
Bis(2-Ethylhexyl)phthalate	.97782	.79716	18.48	Average
Di-n-octylphthalate	1.84823	2.36455	27.94	Average
Benzo(b)fluoranthene	1.52845	1.75086	14.55	Average
Benzo(k)fluoranthene	1.38226	1.72827	25.03	Average
Benzo(a)pyrene	1.19954	1.36085	13.45	Average
Indeno(1,2,3-cd)pyrene	1.56048	1.55451	.38	Average
Dibenz(a,h)anthracene	1.[illegible]6036	1.19062	13.47	Average
Benzo(g,h,i)perylene	1.58517	1.15896	26.89	Average

RF - Response Factor from daily standard file at [illegible]

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

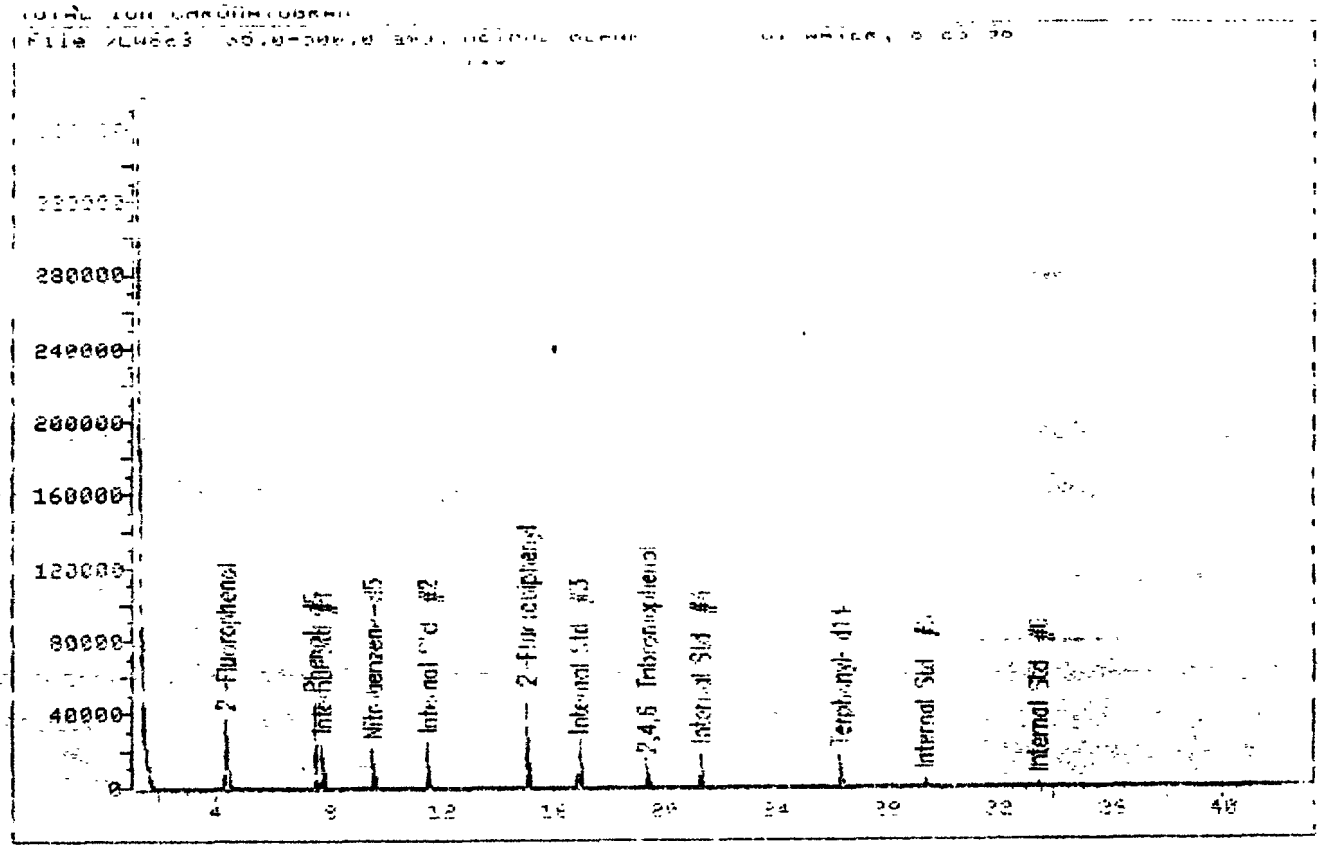
%Diff - % Difference from original average or curve

[illegible]

[illegible]

ID File: IC_MKS::MS
Title: 5 - POINT CALIBRATION ENR LTD
Last Calibration: [illegible] Last Run Time: 960823 09:31

	Compound	RT	[illegible]	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.75	152.0	10219	40.00	mg/l	95
3)	2-Fluorophenol (S)	4.35	112.0	32991	30.99	mg/l	97
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.77	mg/l	[illegible]
17)	*Naphthalene-d8	11.55	136.0	29069	40.00	mg/l	93
19)	Nitrobenzene-d5 (S)	9.57	82.0	17379	25.88	mg/l	97
31)	*Acenaphthene-d10	16.00	164.0	14083	40.00	mg/l	93
36)	2-Fluorobiphenyl (S)	15.06	172.0	39169	35.53	mg/l	96
51)	*Phenanthrene-d10	21.31	188.0	17999	40.00	mg/l	91
54)	2,4,6-Tribromophenol (S)	19.31	330.0	5622M	16.71	mg/l	
63)	*Chrysene-d12	29.37	240.0	6383M	40.00	mg/l	
65)	Terphenyl-d14 (S)	26.42	244.0	19359	40.22	mg/l	84
71)	*Perylene-d12	33.60	264.0	1430M	40.00	mg/l	



Data File: 9LW023:DD
Name: METHOD BLANK
Misc: DI WATER, 0.2379g

Id File: ID_MKS::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960823 11:46

Operator ID: CHEMTEX
Quant Time : 960824 17:13

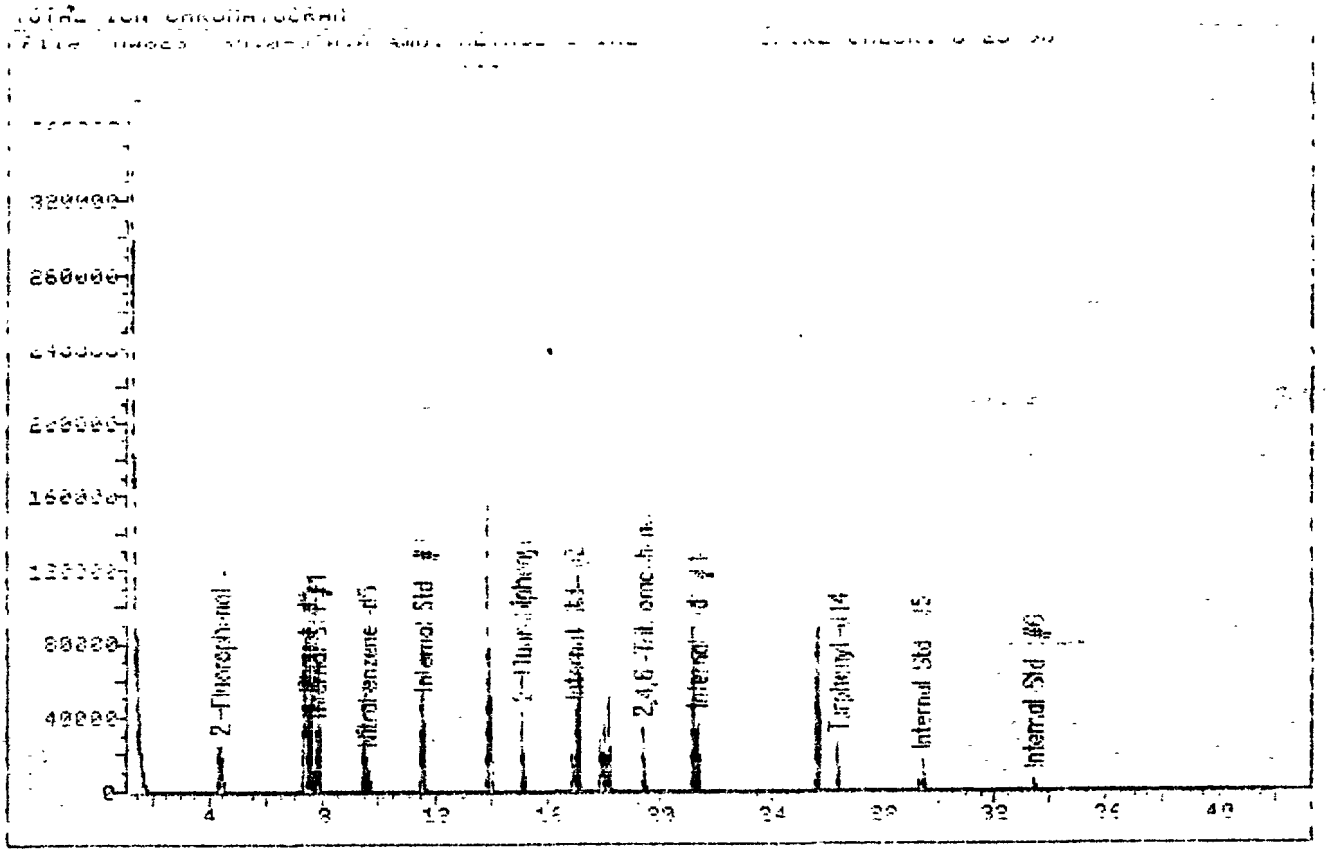
Page 1

Data File: AMS[illegible]:MT — Date: [illegible] Time: 960224 [illegible]
Data Dir: [illegible] — Injection Date: 960227 [illegible]
Name: [illegible] — Factor: 1.00000
Misc: SPIKE CHECK, [illegible] — ID: BTI
BTI # 2

ID File: ID_MKB::ME
Title: [illegible]
Last Calibration: [illegible] — Last Qual Time: 960227 [illegible]

	Compound	R.T	Q Ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.75	152.0	15759	40.00	mg/l	92
3)	2-Fluorophenol (S)	4.37	112.0	26720	15.43	mg/l	[illegible]
4)	Phenol-d6 (S)	7.44	99.0	39075	16.30	mg/l	96
5)	Phenol	7.49	94.0	85339	86.90	mg/l	86
7)	2-Chlorophenol	7.32	128.0	72660	82.32	mg/l	97
9)	1,3-Dichlorobenzene	7.79	146.0	42184	43.24	mg/l	97
10)	1,4-Dichlorobenzene	7.79	146.0	42184	42.24	mg/l	97
15)	N-Nitroso-di-n-propylamine	9.39	70.0	26932	42.23	mg/l	95
17)	*Naphthalene-d8	11.56	136.0	47648	40.00	mg/l	93
18)	Nitrobenzene-d5 (S)	9.56	82.0	14802	13.45	mg/l	[illegible]
20)	1,2,4-Trichlorobenzene	[illegible]	[illegible]	[illegible]261	39.81	mg/l	93
29)	4-Chloro-3-methylphenol	13.[illegible]	[illegible]	[illegible]636	81.48	mg/l	[illegible]
31)	*Acenaphthene-d10	[illegible]	[illegible]	[illegible]775	40.00	mg/l	97
36)	2-Fluorobiphenyl (S)	13.[illegible]	[illegible]	[illegible]598	18.21	mg/l	[illegible]
39)	Acenaphthylene	[illegible]	152.0	30967M	17.94	mg/l	
40)	2,6-Dinitrotoluene	16.90	165.0	2394M	9.62	mg/l	
41)	Acenaphthene	17.00	153.0	37205	55.59	mg/l	96
44)	4-Nitrophenol	18.07	65.0	22354M	86.29	mg/l	
46)	2,4-Dinitrotoluene	17.89	165.0	14774M	32.20	mg/l	
51)	*Phenanthrene-d10	21.31	188.0	35723	40.00	mg/l	91
54)	2,4,6-Tribromophenol (S)	[illegible]	[illegible]	[illegible]413	[illegible]	mg/l	[illegible]
57)	Pentachlorophenol	[illegible]	[illegible]	[illegible]937	[illegible]	mg/l	[illegible]
63)	*Chrysene-d12	29.37	240.0	17869	40.00	mg/l	97
64)	Pyrene	25.[illegible]	202.0	98876	60.87	mg/l	93
65)	Terphenyl-d14 (S)	26.42	244.0	29745	21.33	mg/l	[illegible]
71)	*Perylene-d12	37.39	264.0	9589M	40.00	mg/l	

* Compound is ISTD



Data File: [illegible]
Name: [illegible]
[illegible]

Quant Method File: [illegible]
Instrument ID: [illegible]

Id File: ID_MKE::ME
Title: 8 - POINT CALIBRATION BNA STD
Last Calibration: 960823 11:46 Last Qual Time: 960823 09:31

Operator ID: CHEMTEX
Quant Time : 960824 [illegible]
Injected at: [illegible]

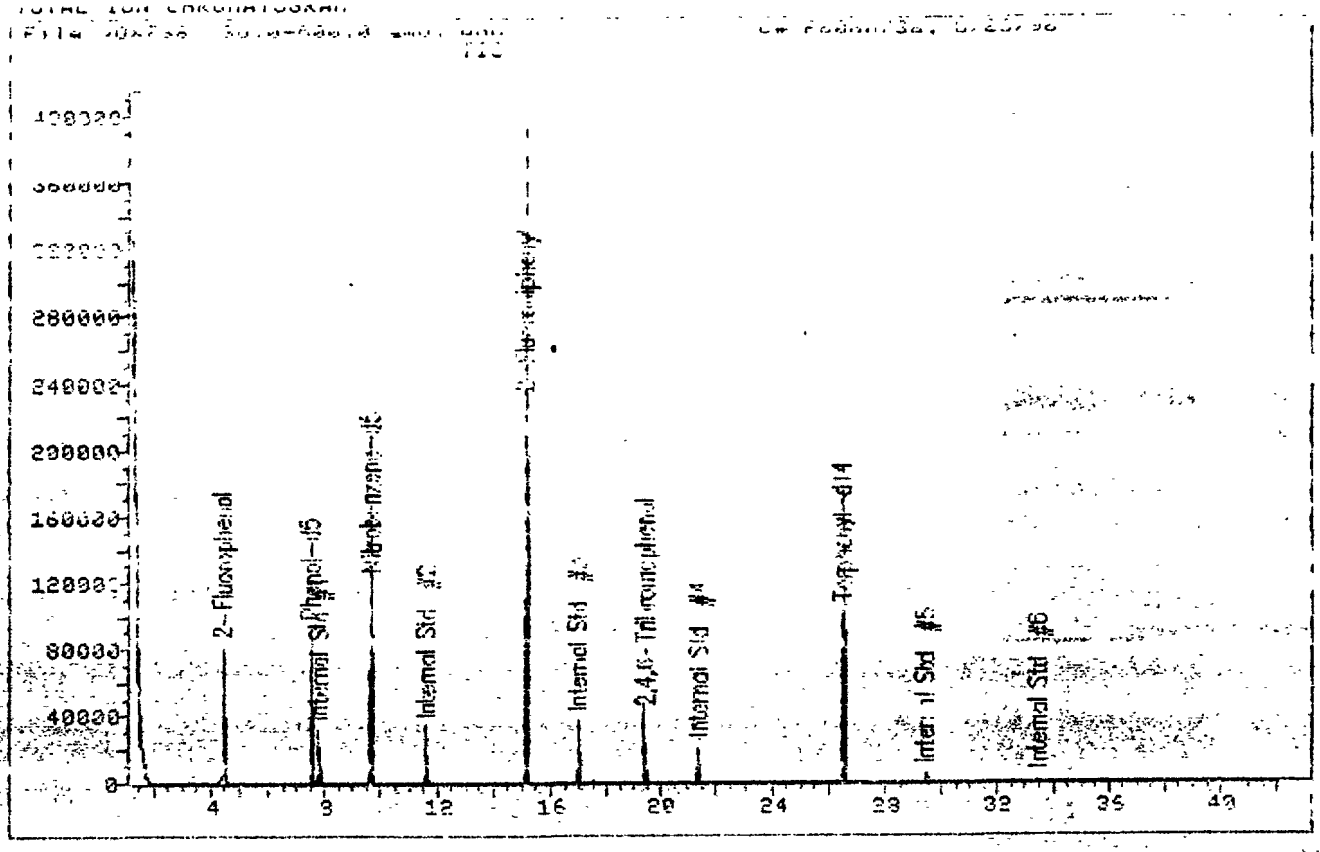
Operator ID: [illegible]
Output File: [illegible]:ME
Number: [illegible]
Misc: C# P6080738, 8/23/96

Date Time: 960827 19:49
Acquisition Date: 960823 03:23
Instrument: [illegible]
Inst ID: BN9
BTL# 3

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960827 11:45
Last Qcal Time: 960823 09:31

	Compound	R.T	Q Ion	Area	Conc	Units	%
1)	*1,4-Dichlorobenzene-d4	7.75	152.0	12699	40.00	mg/l	97
3)	2-Fluorophenol (S)	4.35	112.0	53620	45.66	mg/l	92
4)	Phenol-d6 (S)	7.46	99.0	74474	38.54	mg/l	97
17)	*Naphthalene-d8	11.55	136.0	37562	40.00	mg/l	94
18)	Nitrobenzene-d5 (S)	9.60	82.0	69107M	79.63	mg/l	87
31)	*Acenaphthene-d10	16.91	164.0	18533	40.00	mg/l	96
36)	2-Fluorobiphenyl (S)	15.08	172.0	132141M	91.10	mg/l	93
51)	*Phenanthrene-d10	21.31	188.0	21520	40.00	mg/l	90
54)	2,4,6-Tribromophenol (S)	19.37	330.0	12488	31.42	mg/l	65
63)	*Chrysene-d12	29.37	240.0	7102M	40.00	mg/l	
65)	Terphenyl-d14 (S)	26.44	244.0	61555M	114.95	mg/l	83
71)	*Perylene-d12	37.41	264.0	2417M	40.00	mg/l	

* Compound is ISTD



Data File: >DX738::D2 Quant Output File: ^DX738::ME
Name: [illegible] Instrument ID: [illegible]
Misc: C# 960[illegible]738, 8/23/96 BTL# 3

Id File: ID_MK6::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960823 11:46 Last Qcal Time: 960823 09:31

Operator ID: CHEMTEX
Quant Time : 960823 19:49
Injected at: 960823 [illegible]

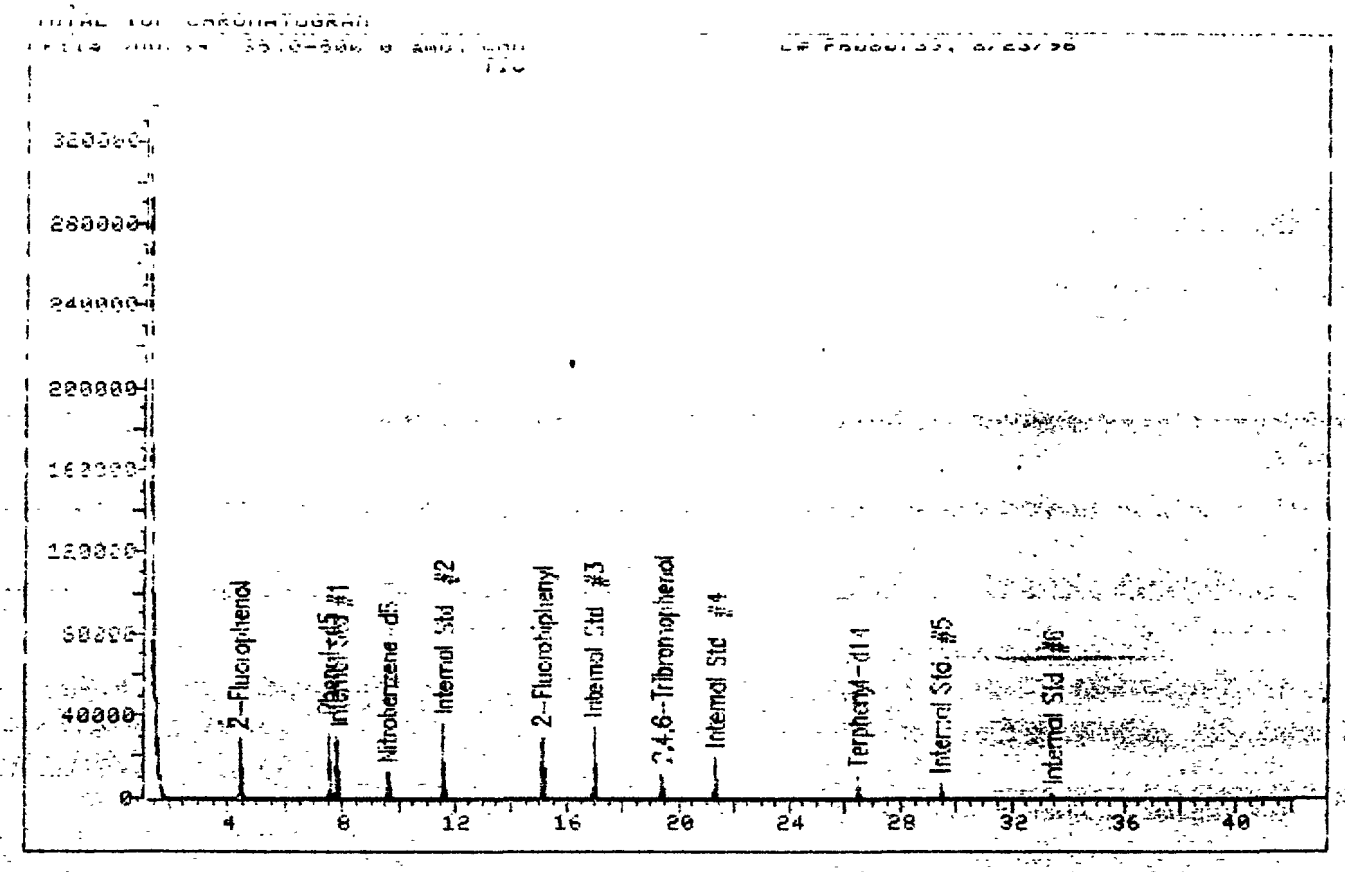
Operator ID: CHEMTOX Quant Method: 7 Quant Time: 960825 11:24
Data File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: [illegible]

Name: OHM Instrument ID: [illegible]
Misc: C# P6080739, 8/23/96 BTL# 4

ID File: ID_MKB::MS
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960823 11:46 Last Qnt Time: [illegible]

Compound	RT	Q Ion	Area	Conc	Units	%
1) *1,4-Dichlorobenzene-d4	7.74	152.0	13317	40.00	mg/l	95
3) 2-Fluorophenol (S)	4.36	112.0	29676	20.31	mg/l	92
4) Phenol-d6 (S)	7.45	99.0	34697	17.12	mg/l	92
17) *Naphthalene-d8	11.53	136.0	37029	40.00	mg/l	95
18) Nitrobenzene-d5 (S)	9.57	82.0	11383	13.31	mg/l	83
31) *Acenaphthene-d10	16.90	164.0	19487	40.00	mg/l	95
36) 2-Fluor biphenyl (S)	15.05	172.0	29301	19.25	mg/l	94
51) *Phenanthrene-d10	21.30	188.0	21536M	40.00	mg/l	
54) 2,4,6-Tribromophenol (S)	19.37	330.0	4403	11.28	mg/l	98
63) *Chrysene-d12	29.37	240.0	8752M	40.00	mg/l	
65) Terphenyl-d14 (S)	26.42	244.0	14944	22.64	mg/l	82
71) *Perylene-d12	33.40	264.0	4139M	40.00	mg/l	

* Compound is ISTD



Data File: >OW739::D2 Quant Output File: ^OW739::ME
Name: SUM Instrument ID: BNA
Misc: C# 96000739, 8/23/96 BTL# 4

Id File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960823 11:46 Last Qcal Time: 960823 09:31

Operator ID: CHEMTEX
Quant Time : 960825 11:24
Injected at: 960823 21:24

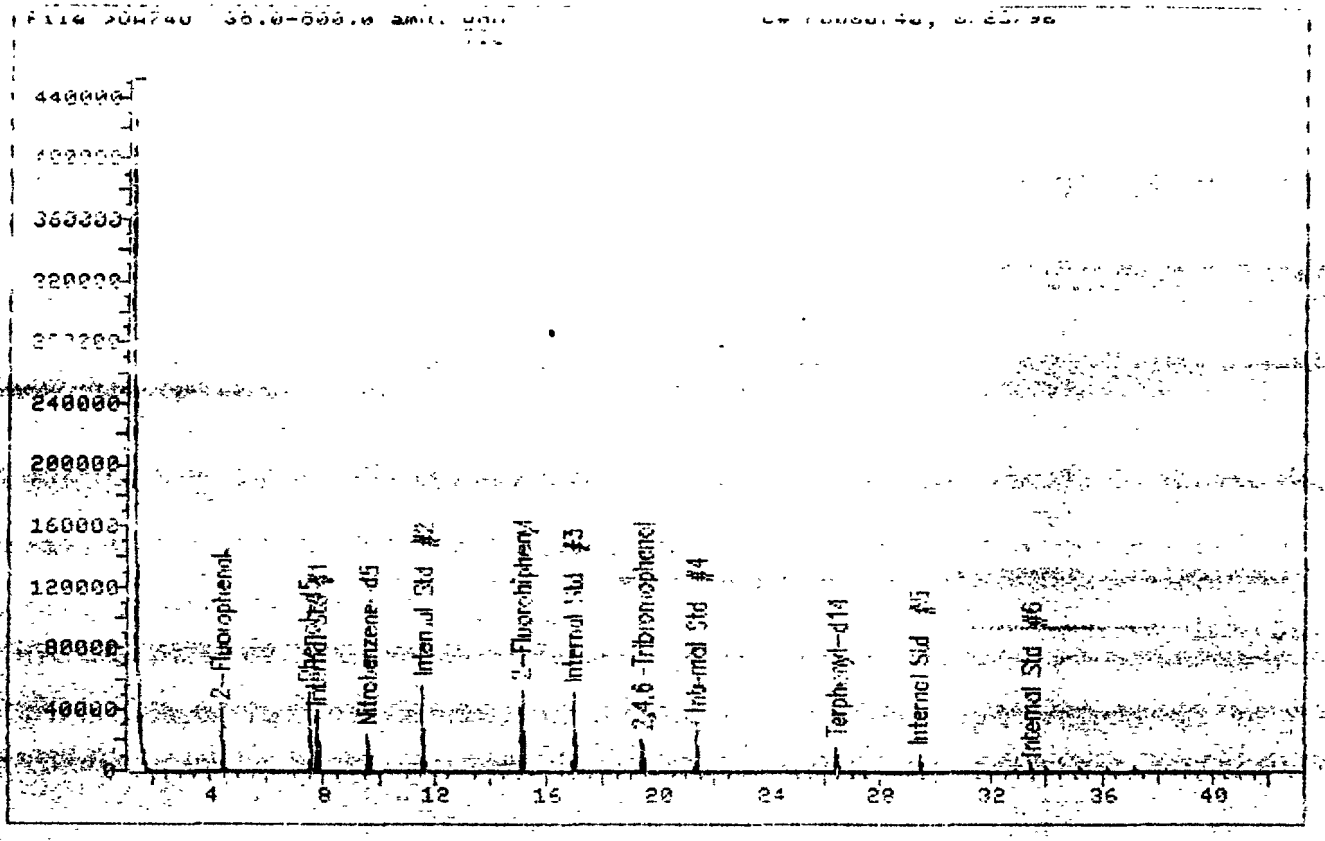
Operator ID: CHEMTEX Quant Pass: 2 Quant Time: 960825 11:24
Output File: ^OW740::ME Injected at: 960823 22:25
Data File: >OW740::D2 Dilution Factor: 1.00000
Name: CHM Instrument ID: BNA
Misc: C# P6080740, 8/23/96 BTL# 5

ID File: ID_MKB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960823 11:44 Last Cal Time: 960823 09:31

Compound	R.T.	Conc	Area	Conc	Units	Q
1) *1,4-Dichlorobenzene-d4	7.74	152.0	17217	40.00	mg/l	94
3) 2-Fluorophenol (S)	4.37	112.0	36650	19.40	mg/l	94
4) Phenol-d6 (S)	7.45	99.0	44638	17.04	mg/l	77
17) *Naphthalene-d8	11.55	136.0	51144	40.00	mg/l	93
18) Nitrobenzene-d5 (S)	9.57	82.0	18317	15.50	mg/l	81
31) *Acenaphthene-d10	16.90	164.0	28115	40.00	mg/l	92
36) 2-Fluorobiphenyl (S)	15.06	172.0	43259	19.66	mg/l	93
51) *Phenanthrene-d10	21.30	188.0	31930	40.00	mg/l	92
54) 2,4,6-Tribromophenol (S)	19.37	330.0	7658	12.99	mg/l	93
63) *Chrysene-d12	29.37	240.0	13712M	40.00	mg/l	
65) Terphenyl-d14 (S)	26.42	244.0	19440	18.80	mg/l	83
71) *Perylene-d12	33.39	264.0	7099M	40.00	mg/l	

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: 0W740::D2 Quant Output File: 0W740::MS
Name: OHM Instrument ID: BNA
Misc: C# P6080740, 8/23/96 BTL# 5

Id File: ID_MKB::ME
Title: 5 -- POINT CALIBRATION BNA STD
Last Calibration: 960823 11:46 Cal Time: 960823 09:31

Operator ID: CHEMTEX
Quant Time : 960825 11:26
Injected at: 960823 22:25

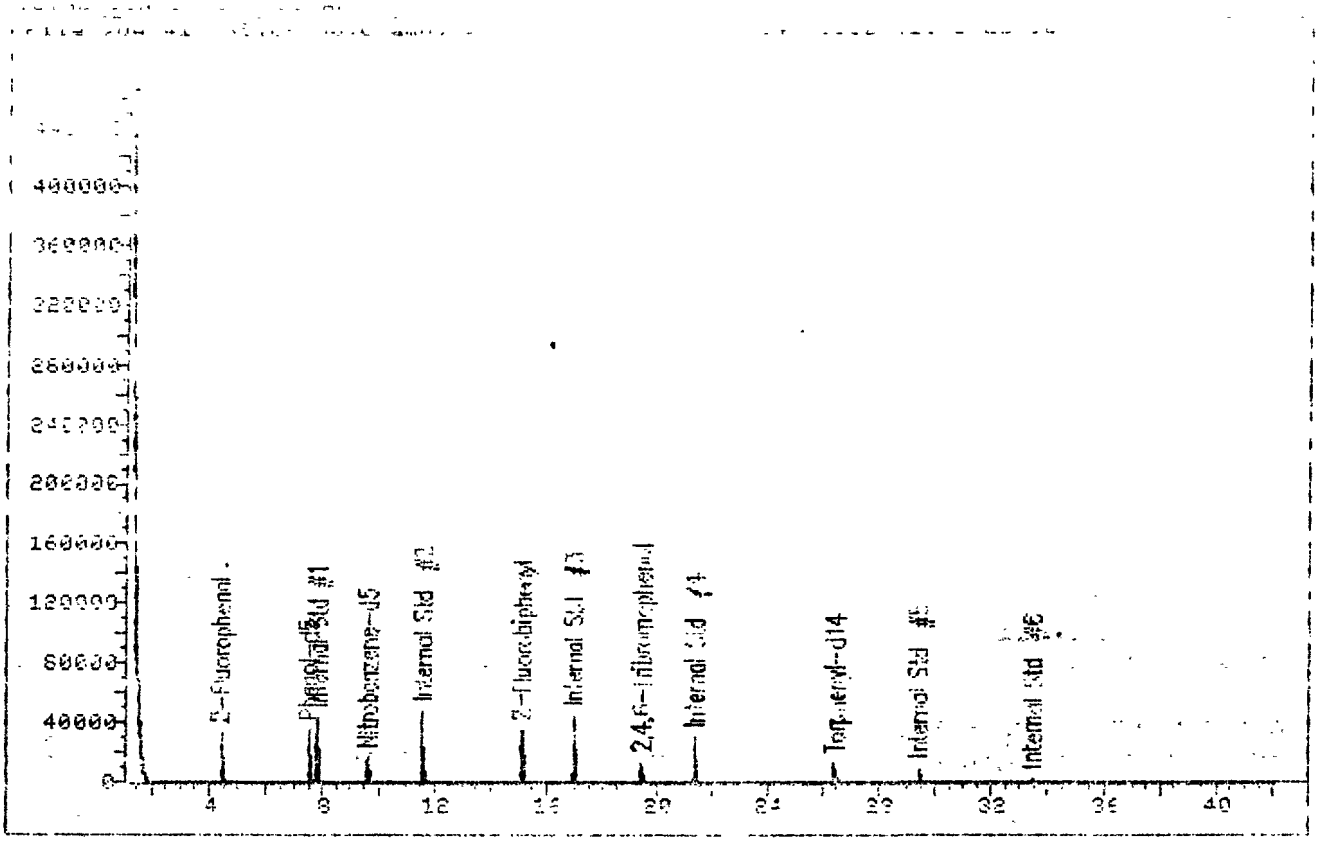
[illegible] Time: [illegible] 11:20
[illegible] Injected at: 960823 23:25
[illegible] 1.00000

Name: DHM
[illegible] Lab [illegible] ID: BNA
[illegible] 96080741, [illegible] BTU # 4

ID File: ID_MKE.MS
Title: 5 POINT CALIBRATION BNA STD
Last Calibration: [illegible] 11:43 Base Cal Time: 960823 09:31

	Compound	RT	Rtor	Area	Conc	Units	%
1)	*1,4-Dichlorobenzene-d4	7.75	150.0	13508	40.00	mg/l	95
3)	2-Fluorophenol (S)	4.38	112.0	29859	16.49	mg/l	90
4)	Phenol-d6 (S)	7.45	99.0	33129	13.19	mg/l	96
17)	*Naphthalene-d8	11.55	136.0	47760	40.00	mg/l	94
18)	Nitrobenzene-d5 (S)	9.59	82.0	12694	11.50	mg/l	89
31)	*Acenaphthene-d10	16.90	164.0	24290	40.00	mg/l	97
34)	2-Fluorobiphenyl (S)	15.05	172.0	33796	17.78	mg/l	94
51)	*Phenanthrene-d10	21.30	188.0	28697	40.00	mg/l	90
54)	2,4,6-Tribromophenol (S)	19.37	330.0	4828	9.11	mg/l	96
63)	*Chrysene-d12	22.37	240.0	10835M	40.00	mg/l	
65)	Terphenyl-d14 (S)	26.42	244.0	16522	20.22	mg/l	82
71)	*Perylene-d12	27.40	264.0	3405M	40.00	mg/l	

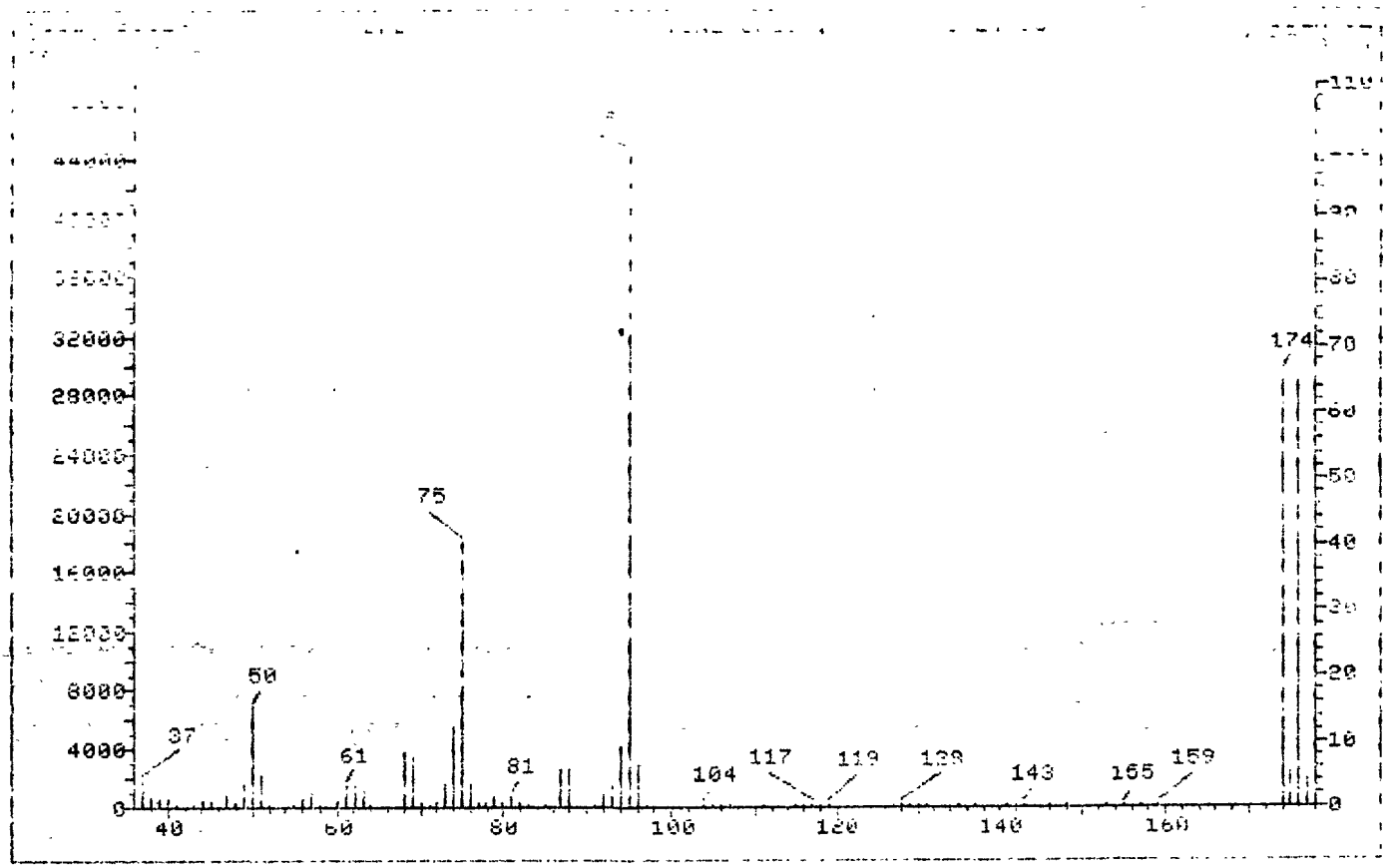
* Compound is ISTD



Data File: >OW741::D2 Quant Output File: ^OW741::MS
Name: OWN Last Line ID: BNS
Misc: CH 760W741, 8/23/96 DTLL

Id File: TD_MXB::ME
Title: 5 - POINT CALIBRATION BNA STD
Last Calibration: 960823 11:46 Last Qual Time: 960823 09:31

Operator ID: CHEMTEX
Quant Time : 960825 11:29
Injected at: 960823 23:27



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
[illegible]	[illegible] of mass 95	15.45	15.45	[illegible]
75	30-60% of mass 95	40.37	40.37	[illegible]
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	[illegible]	[illegible]	[illegible]
173	Less than 2% of mass 174	[illegible]	[illegible]	[illegible]
174	Greater than 50% of mass 95	66.02	66.02	OK
175	5-9% of mass 174	5.36	7.65	[illegible]
176	95-101% of mass 174	45.55	99.29	OK
177	5-9% of mass 176	[illegible]	6.10	[illegible]

[illegible]

[illegible]

Calibration [illegible]

Minimum $\overline{RF}$ for [illegible]

Compound	RF 25.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RF}$	% RSD	CCC	SPCC
Chloroethane	[illegible]	.07369	.05137	.05751	.06773	.05127	19.570		**
Bromomethane	.68516	.65974	.65785	.61289	.86414	.74186	12.251		
Vinyl Chloride	1.16701	1.27879	1.21[illegible]	[illegible]	[illegible]	1.[illegible]	[illegible]	*	
Chloroethane	.81392	.75915	.70256	.78450	.74274	.86511	9.972		
Methylene Chloride	2.66464	1.90049	2.19598	2.07194	1.90312	2.12065	15.460		
Acetone	.54759	.45925	.43148	.45553	[illegible]	.52129	21.6.2		
Carbon Disulfide	4.83043	5.12427	5.07076	5.06594	4.90357	5.00252	2.560		
1,1-Dichloroethene	1.63144	1.72470	1.69731	1.[illegible]	1.62710	1.67562	2.419	*	
1,1-Dichloroethane	2.74825	2.80968	2.92853	2.87213	3.31419	2.93435	[illegible]		**
trans-1,2-Dichloroethene	1.74451	1.81726	1.90581	1.80644	1.99684	1.85219	5.114		
cis-1,2-Dichloroethene	1.80265	1.91403	1.97960	1.86192	2.13399	1.93844	6.567		
Chloroform	2.76793	2.95521	3.06599	3.33477	3.33078	3.07092	[illegible]	*	
1,2-Dichloroethane-d4 (S)	1.11987	1.23914	1.29436	1.35589	1.42567	1.27450	8.781		
1,2-Dichloroethane	1.67528	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
2-Butanone	.89055	.91977	.90766	.87364	.86022	.87974	3.994		
1,1,1-Trichloroethane	2.80670	2.71130	2.71957	2.71[illegible]	2.[illegible]	2.74810	[illegible]		
Carbon Tetrachloride	1.35165	1.41746	1.37133	1.[illegible]	1.[illegible]	1.51[illegible]	12.[illegible]		
Vinyl Acetate	.84231	.88026	.87081	.93129	.83395	.88369	3.690		
Bromodichloromethane	2.83709	2.94993	3.14007	3.17083	3.50574	3.06113	7.656		
1,2-Dichloropropane	.39004	.36965	.33925	.38457	.42974	.39442	6.759	*	
cis-1,3-Dichloropropene	.17674	.14943	.24539	.26934	.28959	.29613	41.759		(Conc=81.0,162.0,243.0,326.0)
Trichloroethene	.42923	.44777	.41155	.46117	.47935	.43867	5.911		
Dibromochloromethane	.49357	.51747	.57340	.57159	.49157	.55714	9.479		
1,1,2-Trichloroethane	.33955	.33232	.37671	.38073	.41[illegible]	.37473	[illegible]		
Benzene	1.14434	1.30140	1.17.59	1.14037	1.26214	1.15321	5.786		
trans-1,3-Dichloropropene	.30722	.33115	.32330	.35[illegible]	.37671	.31936	25.955		(Conc=15.0,30.0,57.0,75.0,)
2-Chloroethylvinylether	.09205	.09291	.09580	.10775	.09373	.08557	5.574		
Bromoform	.32135	.31697	.38252	.38864	.43933	.36980	13.853		**
2-Hexanone	1.71[illegible]	1.50716	1.74737	1.72001	1.99[illegible]	1.79586	9.342		
4-Methyl 2-Pentanone	.43023	.41161	.4371	.4317	.45721	.43779	[illegible]		
Tetrachloroethene	.51267	.50269	.52439	.50021	.57717	.50969	7.12[illegible]		
1,1,2,2-Tetrachloroethane	1.03756	.97937	1.0[illegible]	1.05167	1.13952	1.03076	9.161		

RF - Response Factor (Substitute [illegible] for [illegible])

$\overline{RF}$ - Average Response Factor

SPCC - Percent Relative Standard Deviation

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

Contractor: [illegible]

Calibration Date: [illegible]

Contract No.:

Minimum $\overline{RF}$ for SPCC = [illegible] %RSD for SPCC is 25 %

Calibration Curve [illegible]

Compound	RF 25.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RF}$	% RSD	CCC	SPCC
Toluene	1.31047	1.21[illegible]	1.27242	1.33040	1.91273	1.27267	4.517	*	
Toluene-d8 (S)	1.34365	1.29905	1.37113	1.36327	1.51358	1.37016	5.060		
Chlorobenzene	1.11355	1.06771	1.15126	1.[illegible]140	1.27079	1.14874	6.[illegible]		**
Ethylbenzene	.49325	.44673	.43571	.49316	.55339	.47547	8.075	*	
Styrene	1.25000	1.25320	1.35205	1.32559	1.47619	1.33761	7.[illegible]		
Xylene (total)	1.37331	1.25839	1.31314	1.24356	1.31953	1.30155	3.957		
Bromofluorobenzene (S)	.75970	.74339	.80022	.79847	.68691	.75774	6.968		

RF - Response Factor (Subscript [illegible] ng/L)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

[illegible]

[illegible]

Contract [illegible]

[illegible]

[illegible]

Compound	$\overline{RF}$	SD	%RSD	QCC	Comments
Chloromethane	.05711	.04152	7.72	**	
Bromomethane	[illegible]	[illegible]	10.34		
Vinyl Chloride	1.19722	[illegible]	[illegible]	*	
Chloroethane	.91064	1.00449	10.30		
Methylene Chloride	[illegible]	[illegible]	16.49		
Acetone	.52128	.50296	3.51		
Carbon Disulfide	5.00252	5.2[illegible]23	4.67		
1,1-Dichloroethene	1.67542	1.81642	8.42	*	
1,1-Dichloroethane	2.93435	3.12727	6.57	**	
trans-1,2-Dichloroethene	1.85219	1.96434	6.05		
cis-1,2-Dichloroethene	1.93844	1.96789	1.52		
Chloroform	[illegible]	[illegible]	[illegible]		
1,2-Dichloroethane-d4 (S)	[illegible]	[illegible]	[illegible]		(Conc=50.00)
1,2-Dichloroethane	[illegible]	[illegible]	[illegible]		
2-Butanone	[illegible]	[illegible]	[illegible]		
1,1,1-Trichloroethane	[illegible]	[illegible]	[illegible]		
Carbon Tetrachloride	1.51346	1.50737	.54		
Vinyl Acetate	[illegible]	[illegible]	[illegible]		
Bromodichloromethane	3.06117	3.21069	4.20		
1,2-Dichloropropane	.39442	.39831	.99	*	
cis-1,3-Dichloropropene	.29410	[illegible]	[illegible]		(Conc=21.00)
Trichloroethene	[illegible]	[illegible]	3.35		
Dibromochloromethane	[illegible]	[illegible]	9.35		
1,1,2-Trichloroethane	[illegible]	[illegible]	[illegible]		
Benzene	[illegible]	[illegible]	[illegible]		
trans-1,3-Dichloropropene	.70034	1.23232	76.04		(Conc=19.00)
2-Chloroethylvinylether	.08557	.09350	9.26		
Bromoform	[illegible]	[illegible]	11.06	**	
2-Hexanone	[illegible]	[illegible]	8.05		
4-Methyl-2-Pentanone	[illegible]	[illegible]	8.71		
Tetrachloroethene	.52869	.66995	11.30		
1,1,2,2-Tetrachloroethane	[illegible]	[illegible]	[illegible]		

SD = Standard Deviation of the Response Factors for the Calibration Curve

$\overline{RF}$ = Average Response Factor from Initial Calibration Curve

%RSD = [illegible]

QCC = [illegible]

Date: [illegible]

Contractor: CHEMTEX

Time: 16:49

Contract No:

Laboratory ID: [illegible]

Instrument ID:

Initial Calibration Date: 09/26/96

Minimum $\overline{RF}$ for SPCC is .3

Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene	1.79207	1.[illegible]	[illegible]	*		
Toluene-d8 (S)	1.37816	1.28623	6.67			(Conc=50.00)
Chlorobenzene	1.14874	1.06813	7.02		**	
Ethylbenzene	.49549	.45005	9.17	*		
Styrene	1.33541	1.20935	9.44			
Xylene (total)	1.[illegible]	1.[illegible]	[illegible]			
Bromofluorobenzene (S)	.79774	.71897	9.87			(Conc=50.00)

RF - Response Factor from daily standard (Mid-level 50.00 ug/ml)

$\overline{RF}$ - Average Response Factor from Initial Calibration Data (I)

%Diff - % Difference from original average or curve

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

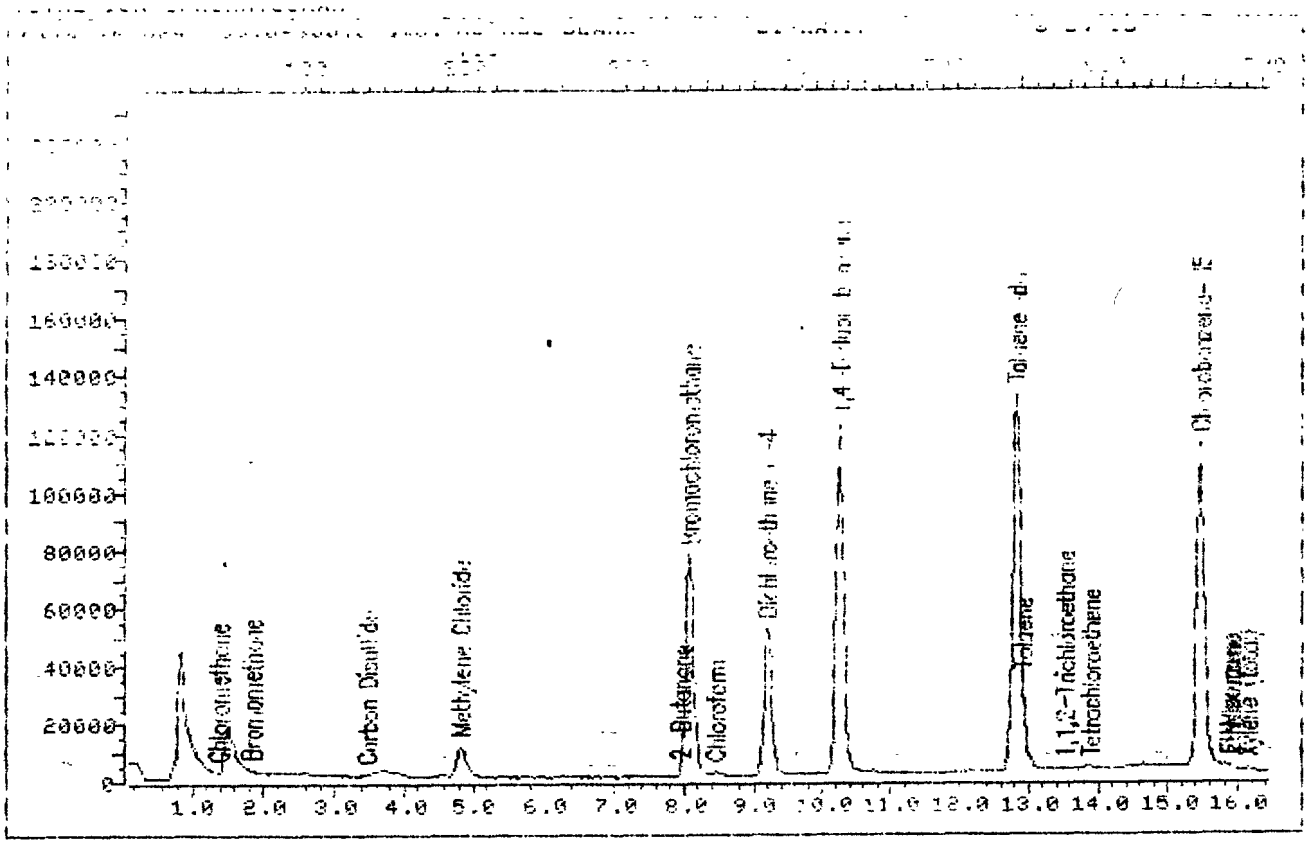
Output File: [illegible]MS

MIX: DI-WATER 8/24/96

Calibration Curve Rev. E

	Compound	RT	Qion	Area	Conc	Units	%
1)	*Bromochloromethane	8.07	128.0	57526	50.00	ug/L	5[illegible]
2)	Chloromethane	[illegible]	50.0	26	[illegible]	ug/L	[illegible]
3)	Bromomethane	1.64	94.0	17	.0121	ug/L	77
4)	Methylene Chloride	4.83	84.0	28019	7.41	ug/L	95
8)	Carbon Disulfide	3.47	76.0	3979	.486	ug/L	100
13)	Chloroform	8.46	83.0	3230	.645	ug/L	95
14)	1,2-Dichloroethane-d4 (S)	9.19	65.0	111767M	51.69	ug/L	
16)	2-Butanone	7.95	43.0	2518	1.67	ug/L	70
21)	*1,4-Difluorobenzene	10.25	114.0	402477	50.00	ug/L	95
24)	1,1,2-Trichloroethane	13.51	97.0	173	.0684	ug/L	[illegible]
30)	Bromoform	17.24	173.0	815	.358	ug/L	79
31)	*Chlorobenzene-d5	15.47	[illegible]	[illegible]	50.00	ug/L	[illegible]
32)	2-Hexanone	15.88	91.0	1538	.193	ug/L	95
34)	Tetrachloroethene	17.88	[illegible]	426	[illegible]	ug/L	[illegible]
35)	1,1,2,2-Tetrachloroethane	15.44	83.0	9330	2.21	ug/L	91
36)	Toluene	12.82	91.0	5201	.429	ug/L	89
37)	Toluene-d8 (S)	12.82	98.0	335151M	53.66	ug/L	80
39)	Ethylbenzene	15.98	106.0	478	.201	ug/L	50
40)	Styrene	16.98	104.0	839	.137	ug/L	89
41)	Xylene (Total)	16.13	106.0	1730	.238	ug/L	96
42)	Bromofluorobenzene (S)	18.04	95.0	204247M	55.51	ug/L	85

* Compound is ISTD

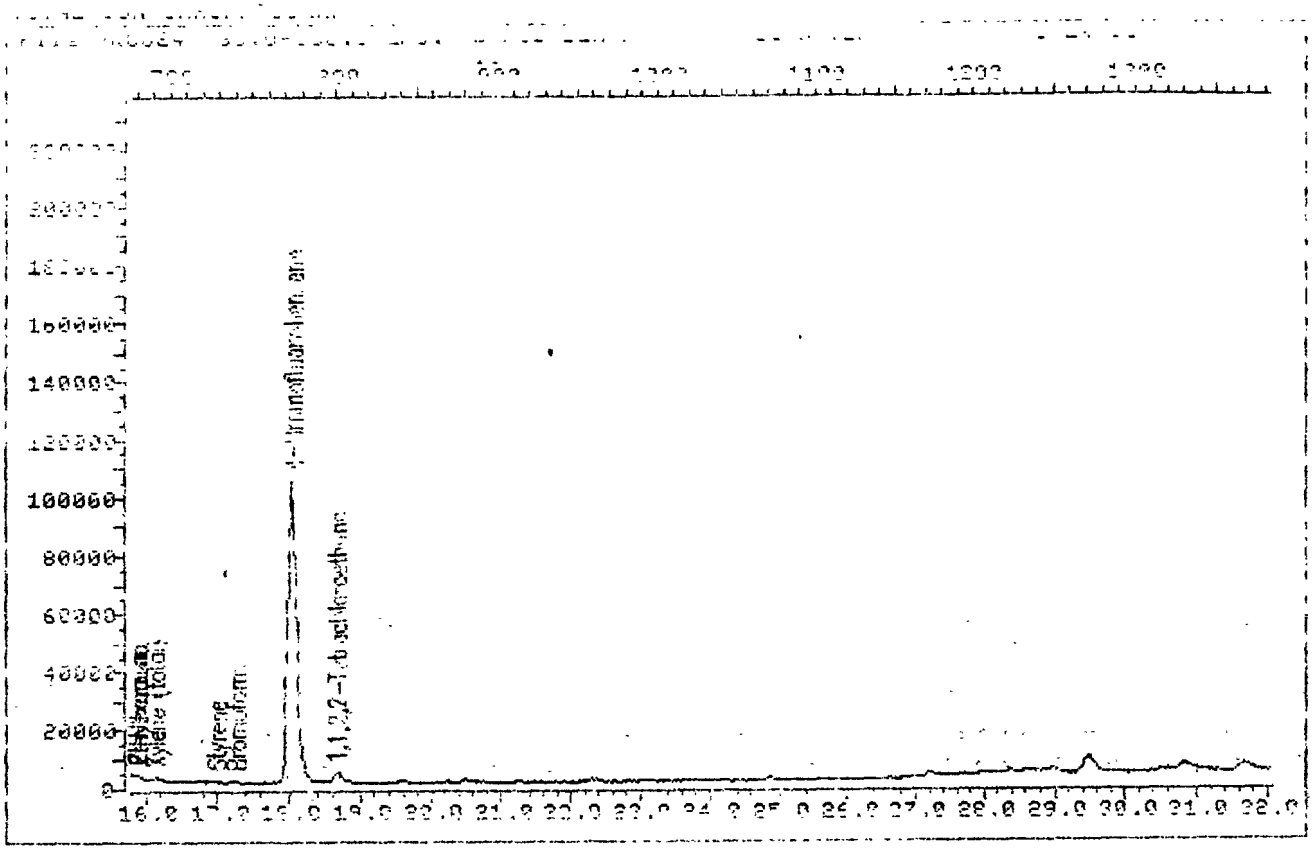


Data File: >KC824::D1 Quant Output File: ^KC824::MF
Name: METHOD BLANK Internal Std ID: VOA
Misc: DI-WATER 8/24/96

Id File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Cal Time: 960825 01:01

Operator ID: MSB
Quant Time : 960824 16:41
Injected at: 960824 15:57

Page 1 of 2



Data File: ^KC824::D1 Quant Output File: ^KC824::ME
Name: METHOD BLANK ID: VOA
Misc: DI-WATER

Id File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Qual Time: 960825 01:01

Operator ID: MSR
Quant Time: 960824 [illegible]
Injected at: 960824 15:57

[illegible]

[illegible]

Misc: MS CHLORINE, [illegible]

ID File: 10_[illegible]

[illegible] Rev. E

Test Calibration: [illegible]

	Compound	R.T.	Q Ion	Area	Conc	Units	%
1)	*[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2)	Chloromethane	1.45	50.0	34M	.399	ug/L	100
6)	Methylene Chloride	[illegible]	[illegible]	[illegible]199	7.94	ug/L	[illegible]
8)	Carbon Disulfide	3.50	76.0	5939	.707	ug/L	100
9)	1,1-Dichloroethene	3.41	96.0	73254	26.41	ug/L	[illegible]
13)	Chloroform	8.48	83.0	2932	.571	ug/L	9[illegible]
14)	1,2-Dichloroethane-d4 (S)	9.22	65.[illegible]	113673M	51.29	ug/L	
21)	*1,4-Difluorobenzene	10.27	114.0	422260	50.00	ug/L	[illegible]
24)	Trichloroethene	10.55	130.0	84586	25.84	ug/L	9[illegible]
27)	Benzene	9.19	78.0	230976	26.49	ug/L	9[illegible]
31)	*Chlorobenzene-d5	15.47	117.0	289786	50.00	ug/L	9[illegible]
32)	2-Hexanone	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
33)	4-Methyl-2-Pentanone	19.01	43.0	313	.153	ug/L	7[illegible]
36)	Toluene	[illegible]	[illegible]	218902	24.99	ug/L	9[illegible]
37)	Toluene-d8 (S)	[illegible]	98.0	[illegible]	55.23	ug/L	[illegible]
38)	Chlorobenzene	15.51	112.0	140123	24.90	ug/L	94
39)	Ethylbenzene	15.47	106.0	17	.00676	ug/L	9[illegible]
40)	Styrene	17.03	104.0	135	.0209	ug/L	84
42)	Bromofluorobenzene (S)	18.04	95.0	214632M	55.04	ug/L	89

* Compound is ISTD

[illegible]

[illegible]

[illegible]

Misc: [illegible]

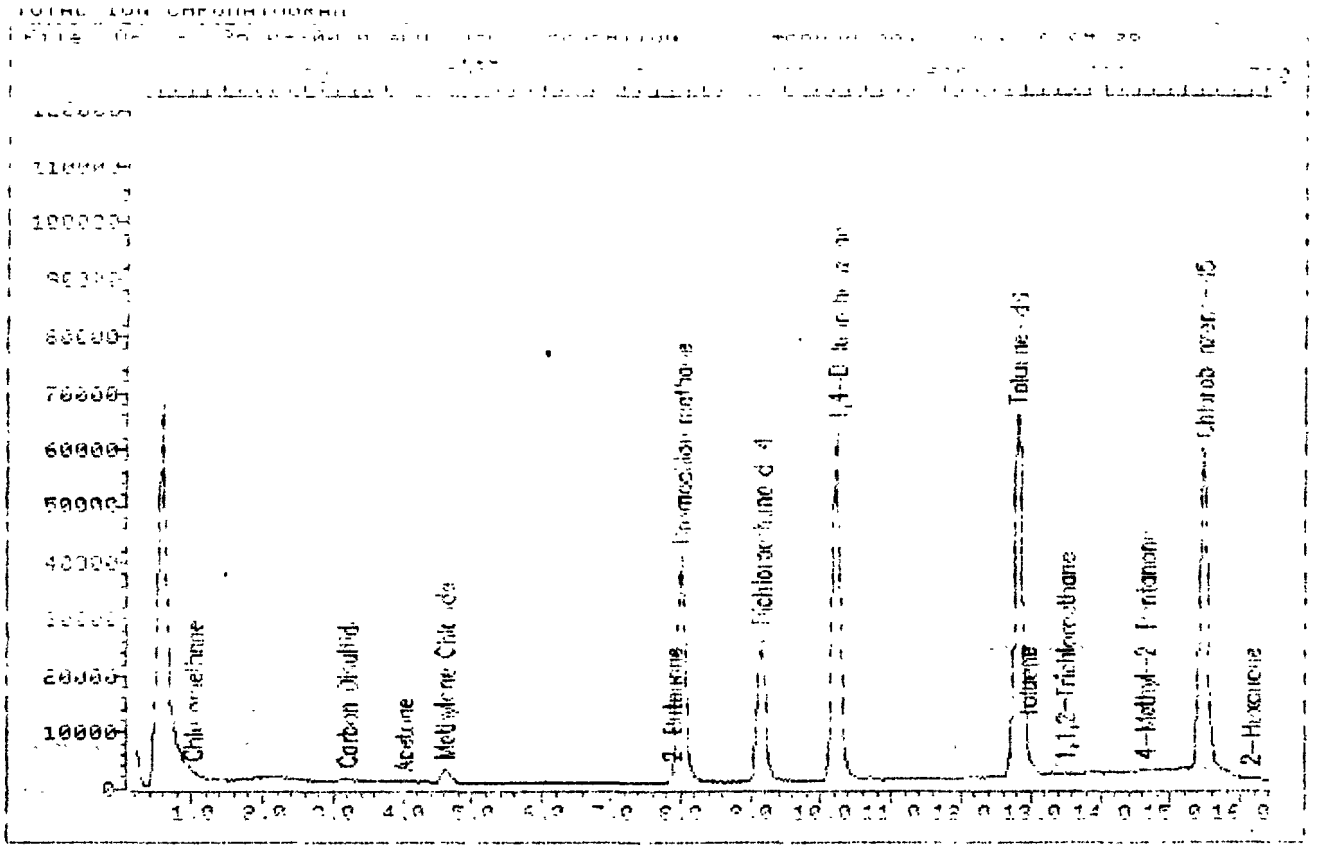
ID File: [illegible]

[illegible] Row: [illegible]

[illegible] 24 [illegible]

	Compound	R.T.	Q Ion	Area	Conc	Units	Q
1)	*Dichlorodifluoromethane	8.33	123.0	[illegible]	[illegible]	[illegible]	[illegible]
2)	Chloromethane	1.92	50.0	23	.517	ug/L	100
6)	Methylene Chloride	4.60	84.0	5699	2.83	ug/L	89
7)	Acetone	4.90	43.0	319	.769	ug/L	[illegible]
8)	Carbon Disulfide	3.20	76.0	3651	.807	ug/L	100
14)	1,2-Dichloroethane-d4 (S)	9.14	65.0	57958M	50.35	ug/L	
16)	2-Butanone	7.89	43.0	2077	2.59	ug/L	90
21)	*1,4-Difluorobenzene	10.22	114.0	209247	50.00	ug/L	91
26)	1,1,2-Trichloroethane	13.48	97.0	70	.0532	ug/L	64
31)	*Chlorobenzene-d5	15.46	117.0	143237	50.00	ug/L	[illegible]
32)	2-Hexanone	11.15	91.0	855	191	ug/L	[illegible]
33)	4-Methyl-2-Pentanone	14.33	43.0	646	.[illegible]	ug/L	[illegible]
36)	Toluene	12.93	91.0	3212	.742	ug/L	9[illegible]
37)	Toluene-d8 (S)	12.80	98.0	193067	55.95	ug/L	[illegible]
40)	Styrene	17.02	104.0	114	.0356	ug/L	76
42)	Bromofluorobenzene (S)	18.03	95.0	109066	56.59	ug/L	88

* Compound is ISTD

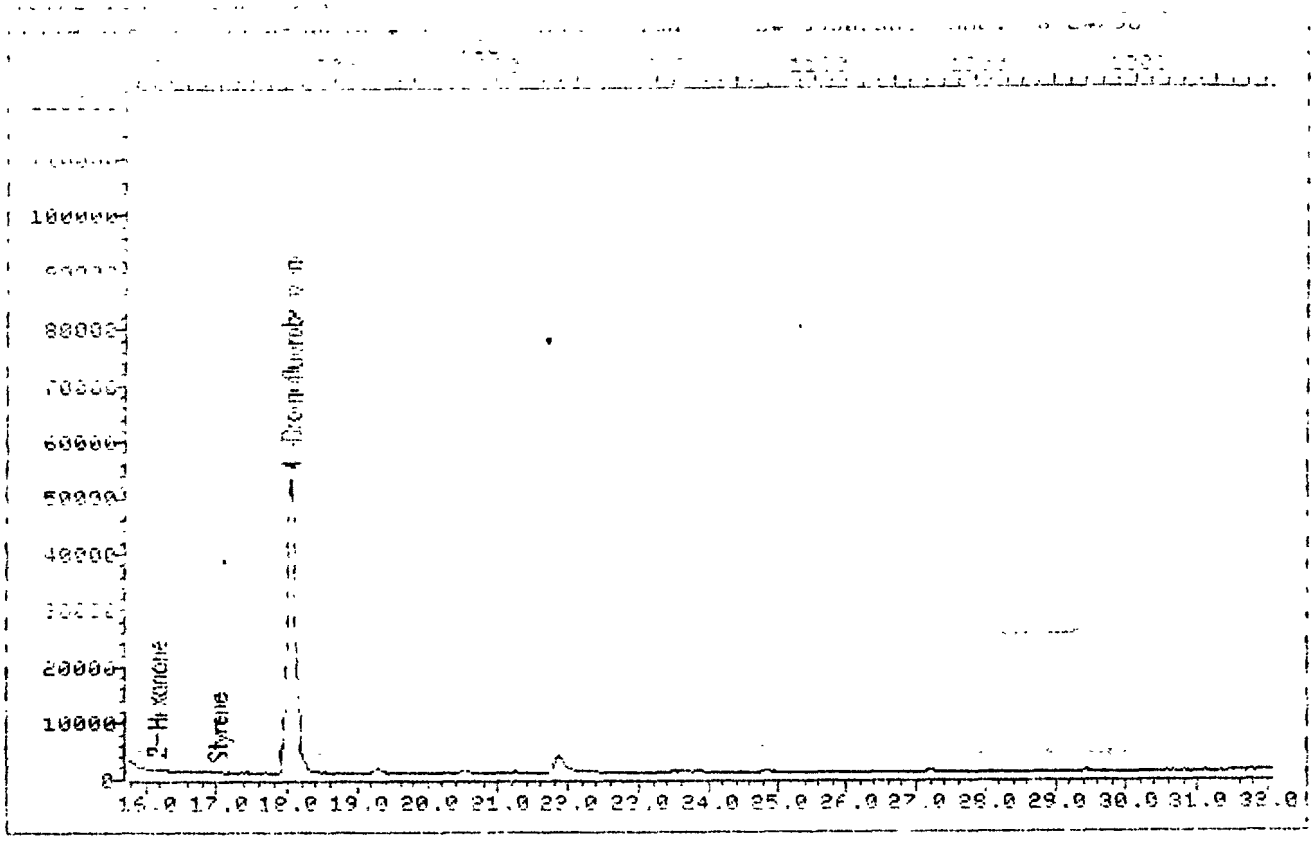


Data File: [illegible] Quant Output File: [illegible]
Name: [illegible] Instrument ID: V03
Misc: D#P6080758, 5mL, 5/24/96

Id File: ID_[illegible]
Title: HP V03 Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Qual Time: 960825 01:01

Operator ID: MSR
Quant Time: [illegible]
Injected at: 960825 00:20

Page 1 of 2



Data File: >0B730::D1 Quant Output File: ^0B730::MS
Name: OHM CORPORATION Instrument ID: VOA
Misc: C#P6080730, 5ML, 8/21/96

TI File: TD VOA::MS
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Qcal Time: 960825 01:01

Operator ID: MSR
Quant Time: 960825 08:51
Injected at: 960825 02:20

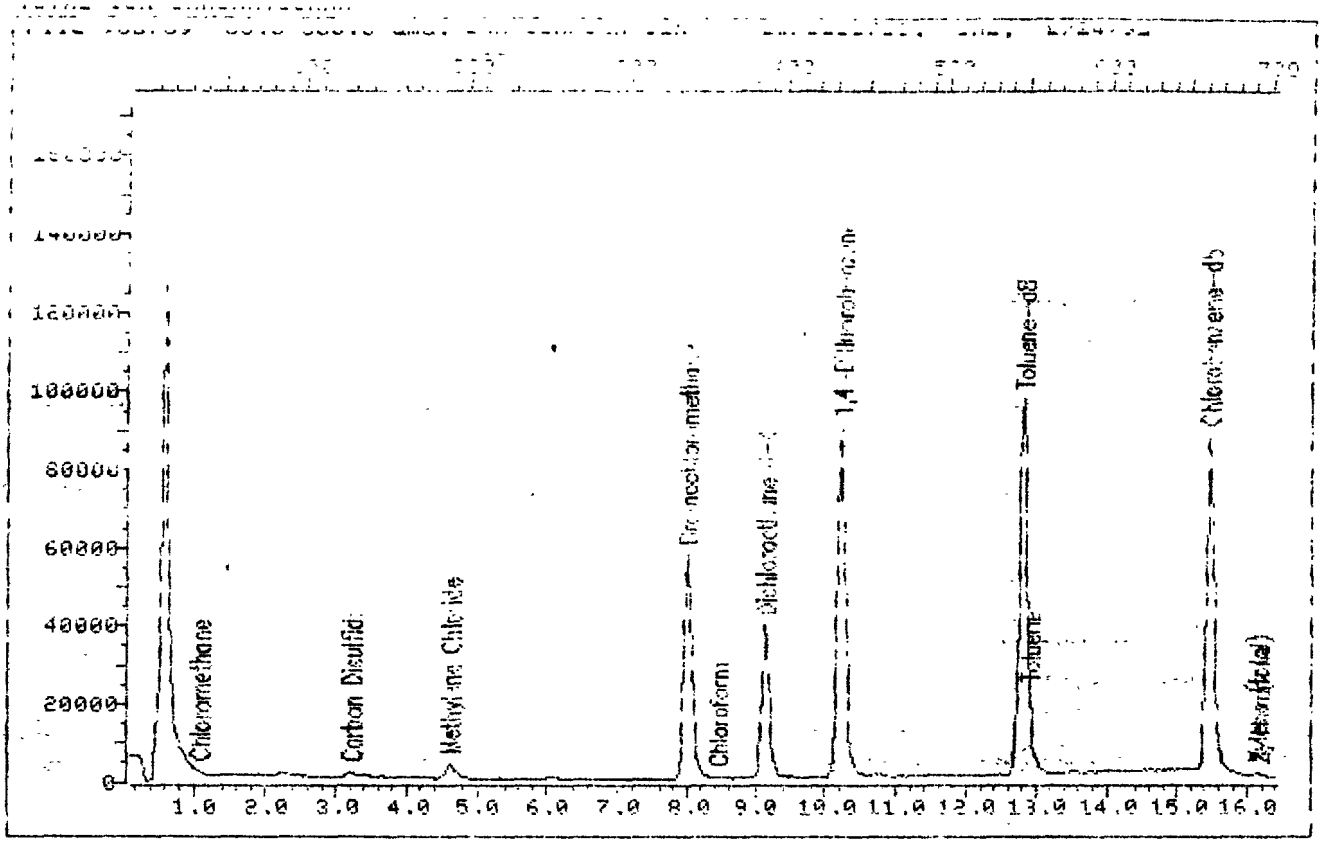
Page 2 of 2

Operator ID: MSB Sample Name: [illegible] Acq. Date & Time: 960825 08:57
Output File: A08739.MF Injected at: 960827 02:59
Data File: A08739.01 Dilution Factor: 1.00000
Method: [illegible] Tune Used: [illegible]
Misc: CUP4080739, 5ML, 8/26/96

ID File: ID_VOC.MF
Title: VF VOC Standards for 5 Point Calibration Curve Rev. C
Last Calibration: 960324 20:20 Last Qual Time: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	Dichlorodifluoromethane	7.08	101.0	44030	56.00	ug/L	80
2)	Chloromethane	1.99	50.0	30	.479	ug/L	100
6)	Methylene Chloride	4.62	84.0	9042	3.17	ug/L	89
8)	Carbon Disulfide	3.22	76.0	7912	1.28	ug/L	100
13)	Chloroform	8.45	83.0	89	.0236	ug/L	90
14)	1,2-Dichloroethane-d4 (S)	9.14	65.0	85750M	52.57	ug/L	
21)	*1,4-Difluorobenzene	10.22	114.0	309886	50.00	ug/L	90
31)	*Chlorobenzene-d5	15.46	117.0	209689	50.00	ug/L	95
32)	2-Hexanone	16.17	91.0	2299	.356	ug/L	82
36)	Toluene	12.91	91.0	7855	1.24	ug/L	92
37)	Toluene-d8 (S)	12.82	98.0	265624	55.46	ug/L	81
41)	Xylene (total)	14.15	106.0	946	.170	ug/L	80
42)	Bromofluorobenzene (S)	18.03	95.0	161075	57.08	ug/L	93

* Compound is ISTD

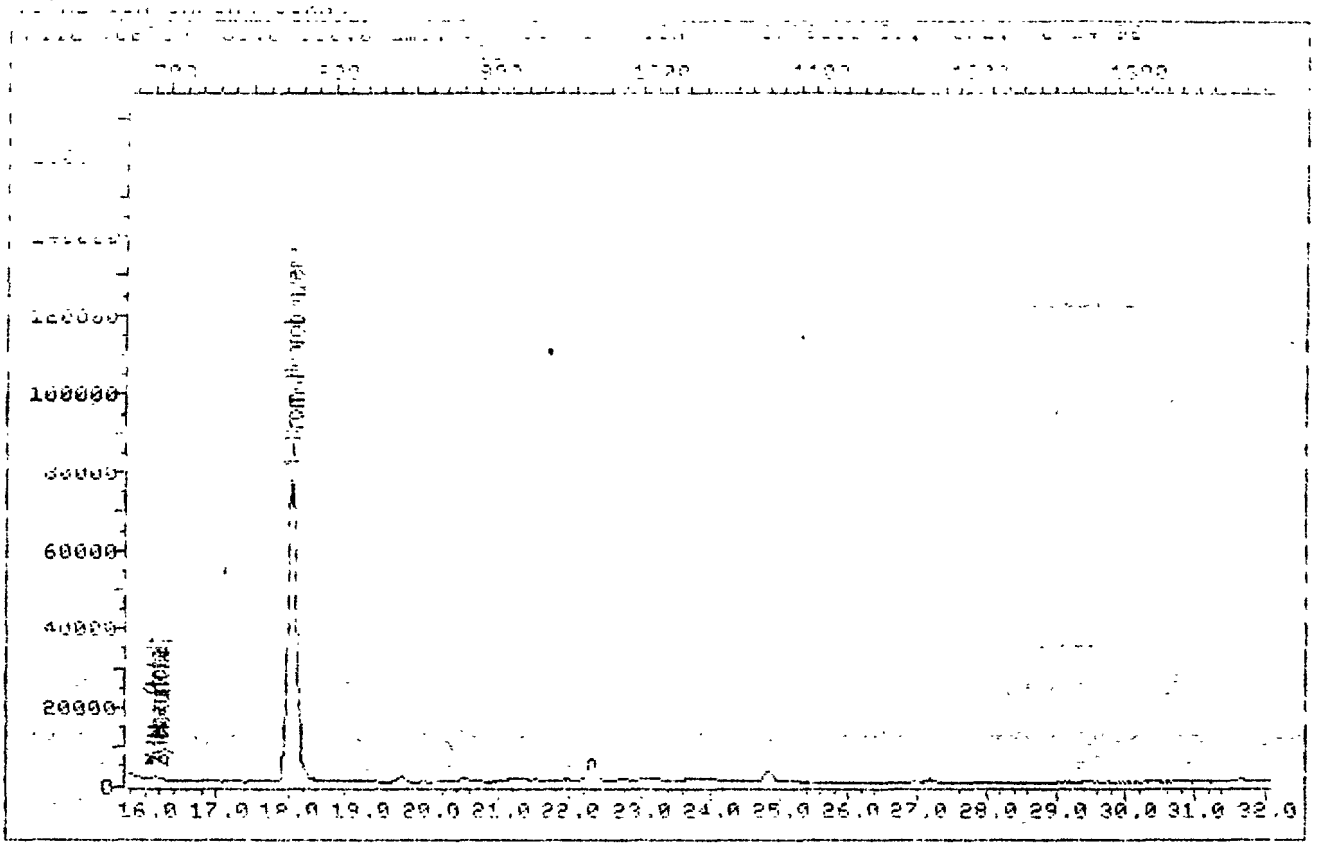


Date File: 08739::D1 Quant Output File: 08739::MC
Name: OHM CORPORATION Instrument ID: V00
Misc: C#960808739, EML, 8/24/96

Id File: ID_V00::ME
Title: HP V00 Standards for 5 Point Calibration Curve Rev E
Last Calibration: 960824 20:20 Last Qual Time: 960825 01:01

Operator ID: MSB
Quant Time : 960825 09:53
Injected at: 960825 02:59

Page 1 of 2



Data File: ^08739::01 Quant Output File: ^08739::MF
Method: RMM DESCRIPTION Instrument ID: VOA
Misc: C#P6080739, 5ML, 8/24/96

Id File: TD_VOA.MT
Title: HP VOA Standards for 5 Point Calibration Curve Rev E
Last Calibration: 960824 20:20 Last Qual Time: 960825 01:01

Operator ID: HSB
Quant Time : 960825 02:53
Injected at: 960825 02:59

Page 2 of 2

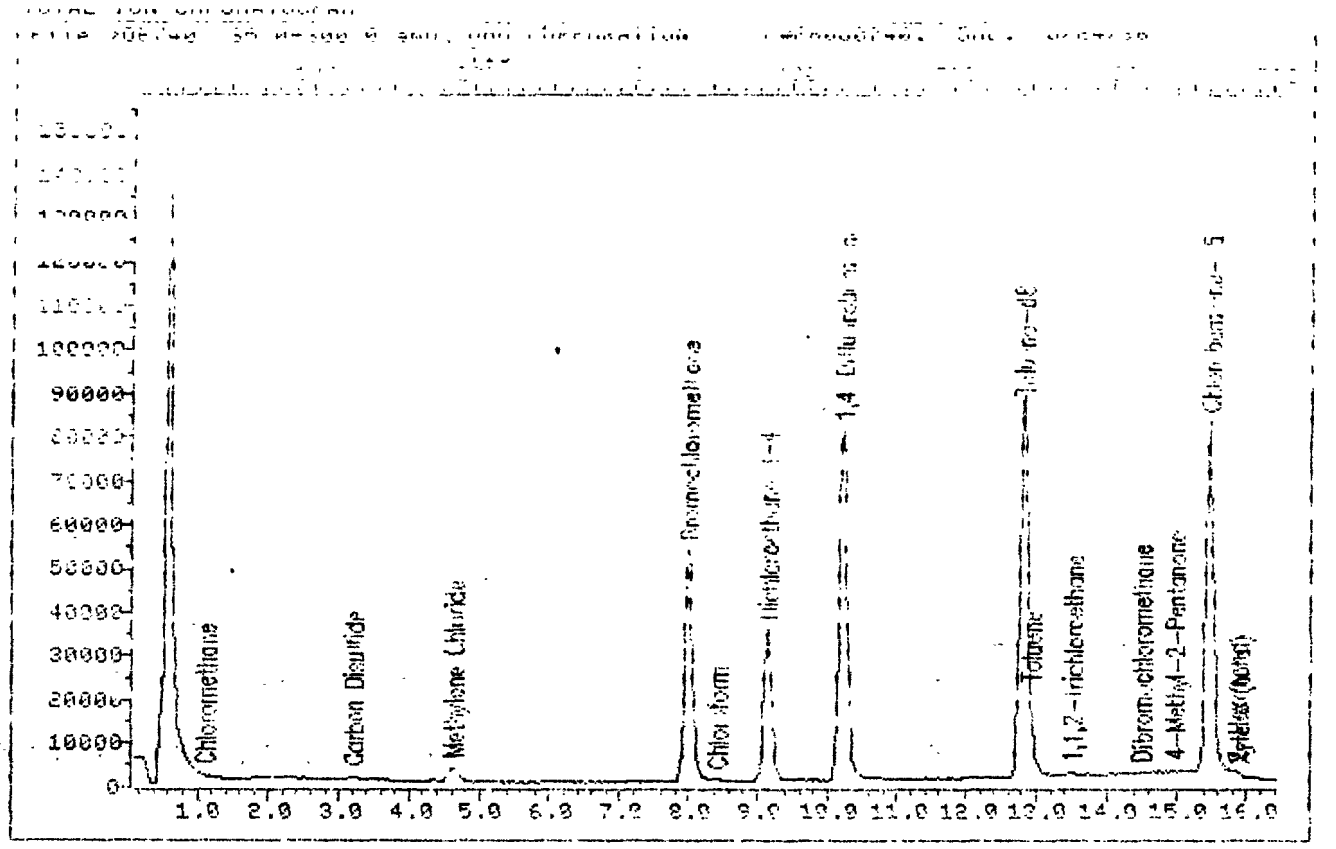
[illegible]

[illegible]

Last Calibration: 960924 20:[illegible] Last Qual Time: 960925 01:0[illegible]

	Compound	R.T.	O.Int	Area	Conc	Units	%
1)	*Dichlorodifluoromethane	7.[illegible]	12[illegible].0	62260	50.00	[illegible]	[illegible]
2)	Chloromethane	1.11	50.0	19	.321	ug/L	100
6)	Methylene Chloride	4.[illegible]	9[illegible].0	8[illegible]5	3.30	ug/L	[illegible]
8)	Carbon Disulfide	7.[illegible]	7[illegible].0	7357	1.26	[illegible]	100
13)	Chloroform	8.43	83.0	212	.0595	[illegible]	[illegible]
14)	1,2-Dichloroethane-d4 (S)	9.14	65.0	78883M	51.29	ug/L	
21)	*1,4-Difluorobenzene	10.22	114.0	283372	50.00	ug/L	[illegible]
25)	Dibromochloromethane	14.49	129.0	48	.0186	ug/L	99
26)	1,1,2-Trichloroethane	13.51	97.0	107	.0101	ug/L	[illegible]
31)	*Chlorobenzene-d5	15.46	117.0	197690	50.00	ug/L	[illegible]
32)	2-Hexanone	15.95	91.0	320	.0530	[illegible]	[illegible]
33)	4-Methyl-2-pentanone	[illegible]	[illegible]	195	.140	ug/L	[illegible]
36)	Toluene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
37)	Toluene-d8 (S)	12.78	98.0	249011	55.14	[illegible]	[illegible]
41)	Xylene (total)	17.93	106.0	774	.0153	ug/L	[illegible]
42)	Bromofluorobenzene (S)	18.05	95.0	139358M	52.38	ug/L	51

* Compound is ISTD

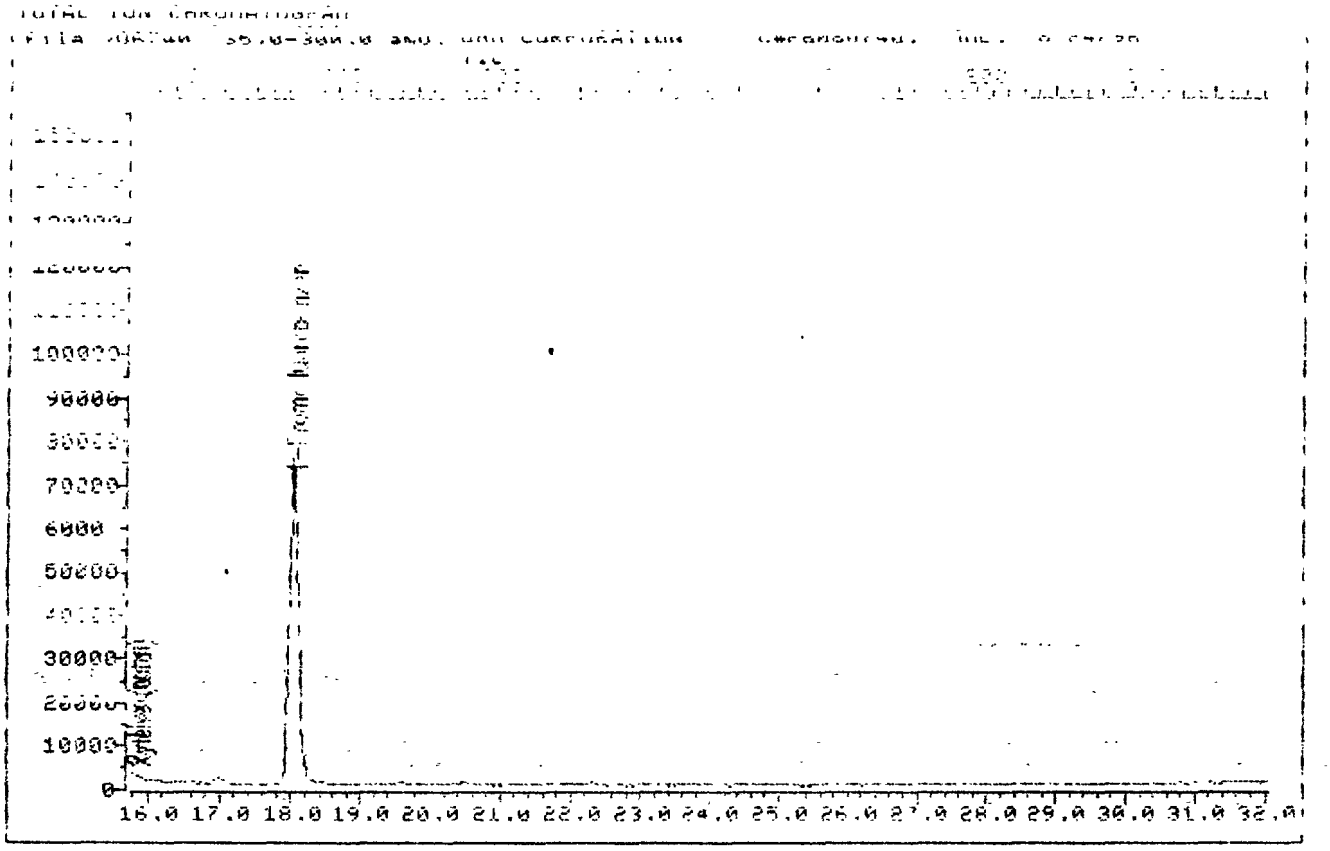


Data File: >OD740::D1 Quant Output File: ^OD740::ME
Name: OHM CORPORATION Instrument ID: VOA
Misc: C#P6080740, 5M_, 5/2a/01

Id File: IC_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. F
Last Calibration: 960824 20:20 Last Qcal Time: 960825 01:01

Operator ID: VOA
Quant Time : 960825 09:54
Injected at: 960825 03:39

Page 1 of 2



Data File: ^DB740::D1 Quant Output File: ^DB740::ME
Instrument ID: V09
Misc: C#960824O, 5ML, 8/24/96

Id File: ID_V09::MS
Title: HP VOA Standards for 5 Point Calibration Curve Rev. F
Last Calibration: 960824 20:20 Last Qual Time: 960825 01:01

Operator ID: MSB
Quant Time : 960825 02:54
Injected at: 960825 03:39

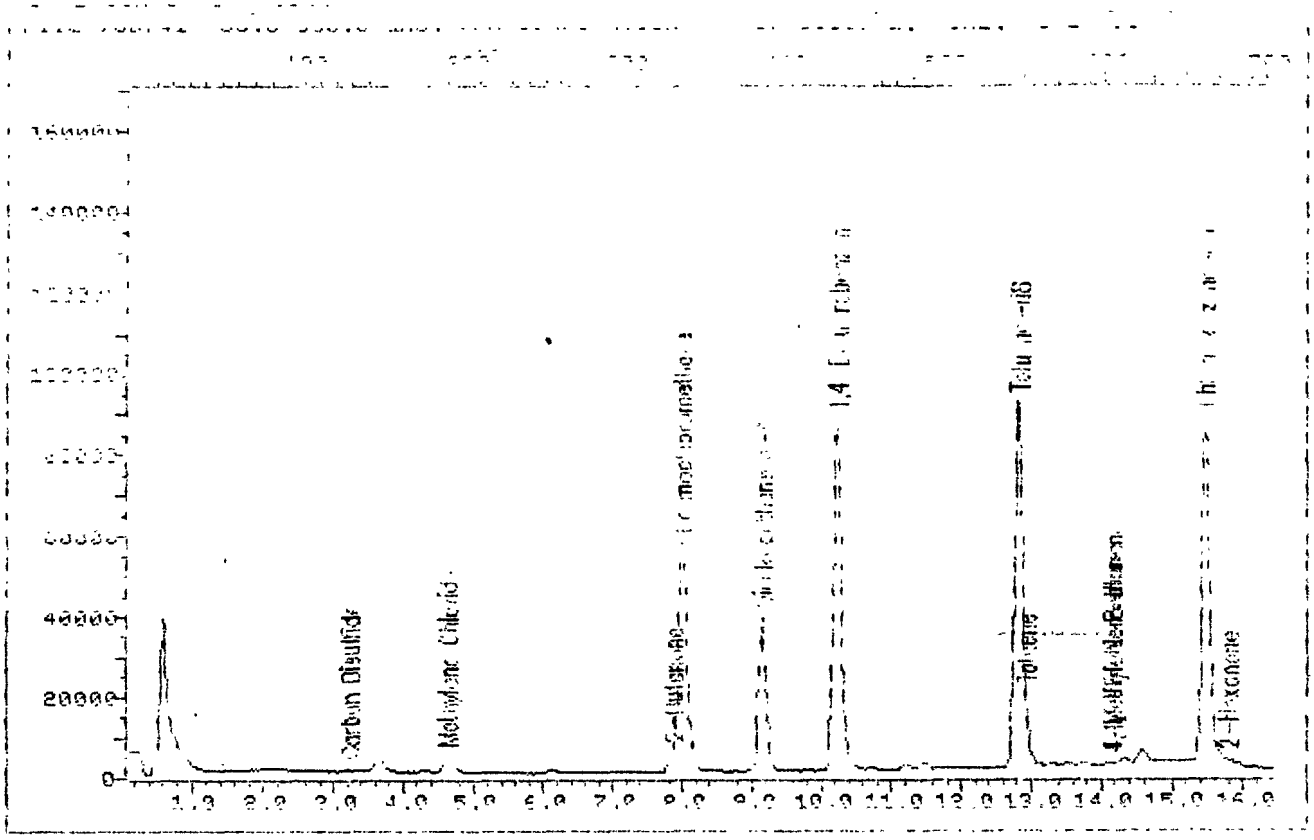
QUANT REPORT

Operator ID: MCP [illegible] Date: 940825 08:55
Data File: A08741::MC Tolerated at: 940825 04:10
Run File: A08741::C1 [illegible] 1.00000
Name: OHM CORPORATION Test Method ID: VOA
MS : OHM/A08741 EMI 8/24/94

ID File: ID_VOA::MC
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibrated 940824 20:00 [illegible] Date: 940825 01:01

	Compound	RT	Resp	Area	Cal	Units	%
1)	*Bromochloromethane	8.00	122.0	64744	50.00	ug/l	97
6)	Methylene Chloride	4.42	34.0	8347	2.00	ug/l	90
8)	Carbon Disulfide	3.22	76.0	5152	.850	ug/L	100
14)	1,2-Dichloroethane-d4 (S)	9.15	65.0	83553M	52.24	ug/l	
16)	2-Butanone	7.86	43.0	24963	22.37	ug/L	77
21)	*1,4-Difluorobenzene	10.23	114.0	297388	50.00	ug/l	89
26)	1,1,2-Trichloroethane	14.15	97.0	96	.0514	ug/l	77
31)	*Chlorobenzene-d5	15.46	117.0	208226	50.00	ug/L	97
32)	2-Hexanone	15.79	91.0	104	.0162	ug/L	61
33)	4-Methyl-2-Pentanone	14.15	43.0	767	.521	ug/l	77
36)	Toluene	12.91	91.0	4437	.737	ug/l	9
37)	Toluene-d8 (S)	12.02	98.0	250138	54.27	ug/l	75
42)	Bromofluorobenzene (S)	18.04	95.0	151591M	56.10	ug/l	90

* Compound is ISTD

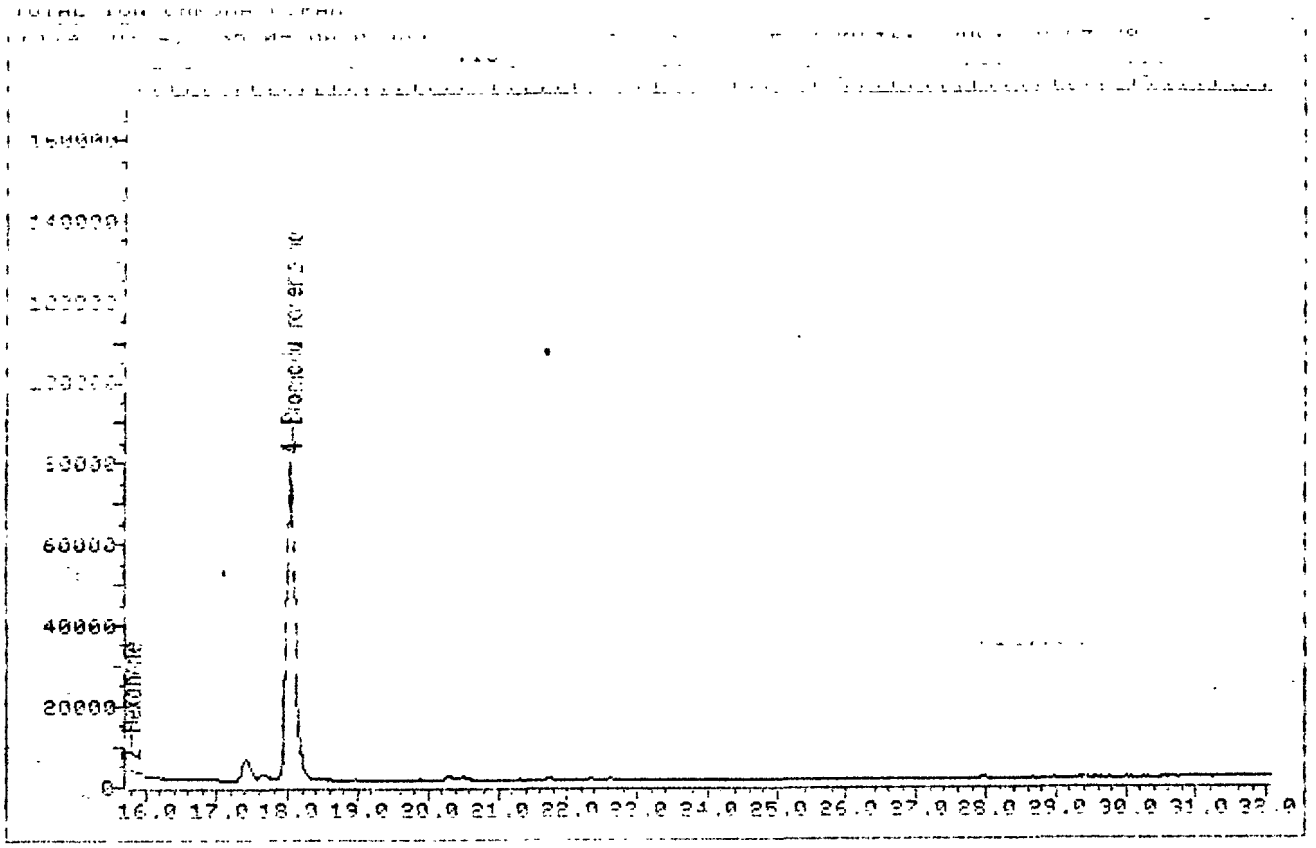


Data File: >08741::D1 Quan. Output File: 08741::MS
Name: OHM CORPORATION Instrument ID: VOA
Misc: CHF6030741, 5ML, 8/24/96

Id File: ID_VOA::MS
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Qcal Time: 960825 01:01

Operator ID: MSW
Quant Time: 960825 [illegible]
Injected at: 960825 04:18

Page 1 of 2



Data File: >0B741::D1 Quant Output File: ^0B741::ME
Name: SUM SPECBOTTOM Instrument ID: VOA
Misc: C#P6080741, 5ML, 8/24/96

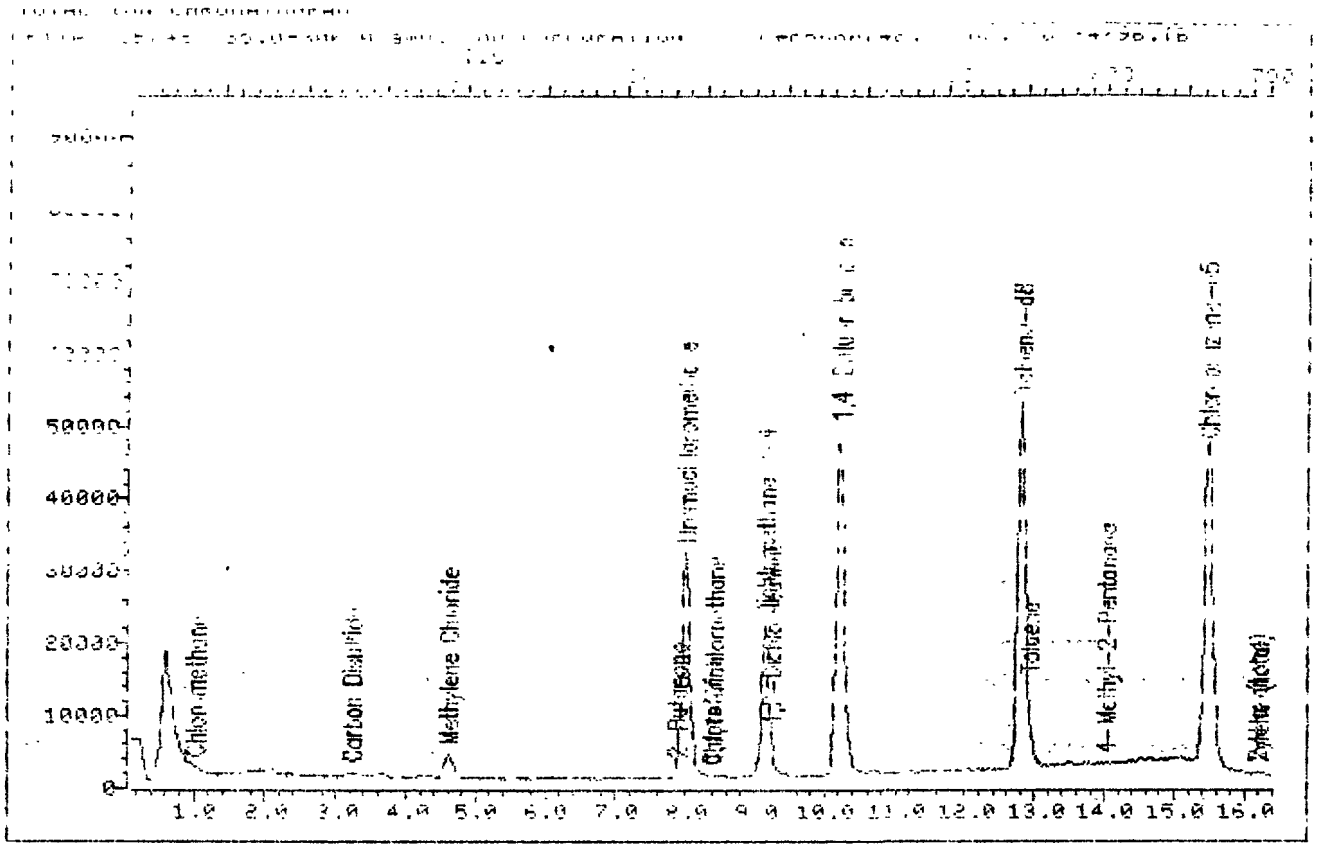
Id File: ID_VOA::ME
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Qual Time: 960925 01:01

Operator ID: MSR
Quant Time: 960925 [illegible]
Injected at: 960825 04:18

Page 2 of 2

1)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2)	Chloromethane	1.[illegible]	50.0	76	.761	[illegible]	[illegible]
6)	Methylene Chloride	4.60	[illegible]	7507	4.83	ug/L	[illegible]
8)	Carbon Disulfide	[illegible]	[illegible]	4220	1.25	ug/L	[illegible]
13)	Chloroform	[illegible]	[illegible]	333	.142	[illegible]	[illegible]
14)	1,2-Dichloroethane-d4 (S)	9.14	65.0	46342M	52.15	ug/L	
15)	1,2-Dichloroethane	9.24	62.0	314	.276	ug/L	[illegible]
16)	2-Butanone	7.85	43.0	1314	2.12	ug/L	[illegible]
17)	1,1,1-Trichloroethane	8.41	97.0	392	.263	ug/L	[illegible]
21)	*1,4-Difluorobenzene	10.22	114.0	162105	50.00	ug/L	[illegible]
31)	*Chlorobenzene-d5	15.46	117.0	120739	50.00	ug/L	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	800	.215	ug/L	[illegible]
33)	4-Methyl-2-Pentanone	14.02	43.0	114	.133	ug/L	[illegible]
36)	Toluene	[illegible]	[illegible]	5896	[illegible]	[illegible]	[illegible]
37)	Toluene-d8 (S)	13.81	98.0	141660	51.36	ug/L	[illegible]
41)	Xylene (total)	[illegible]	106.0	199	.0621	ug/L	[illegible]
42)	Bromofluorobenzene (S)	18.06	95.0	92432	50.09	ug/L	[illegible]

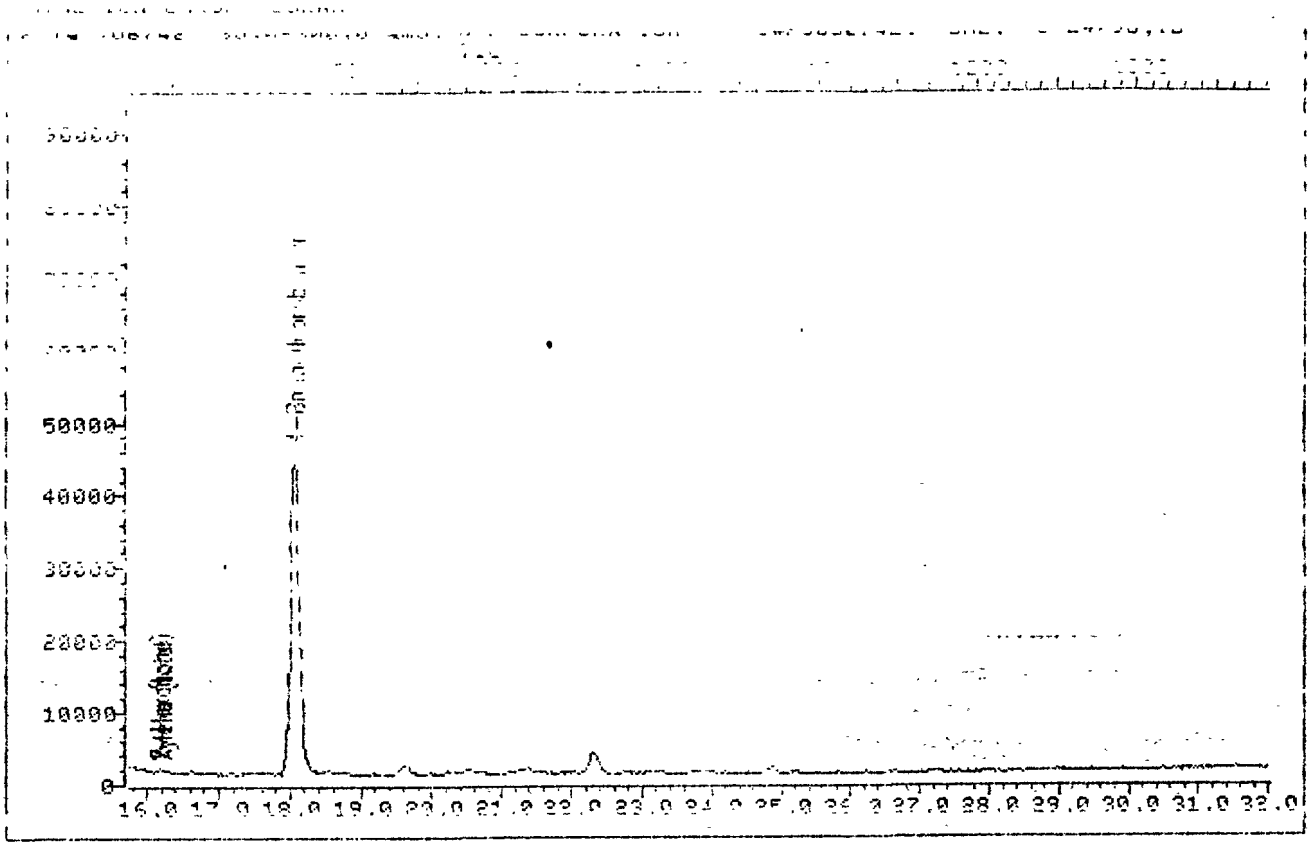
* Compound is ISTD



Data File: ^OB742::D1 Quant Output File: ^OB742::MT
Header SUM CORRECTION Internal Std ID: H20
Misc: CHP6080742, EMI, 8/24/96,TP

Id File: ID_VOA.MS
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Qual Time: 960825 01:01

Operator: TP/ [illegible]
Quant Time: 960825 09:[illegible]
Injected at: 960825 04:50



Data File: >0B742>:D1 Quant Output File: ^0B742>:ME
Name: 2UM CORRECTION Instrument ID: V20
Misc: C#P6080742, 5ML, 8/24/96,

Id File: ID_V0A>:ME
Title: HP V0A Standards for 5 Point Calibration Curve Rev. E
Last Calibration: 960824 20:20 Last Quant Time: 960825 01:01

Operator ID: MSB
Quant Time : 960825 09:56
Injected at: 960825 04:58

Untransformed Data (Detects Only Probability Plot)

OBS	CODE	VALUE	NORMAL
1	N	502.00	1.03643
2	N	474.00	0.52440
3	N	872.00	1.64485
4	N	3.29	-1.28155
5	N	1.68	-1.64485
6	N	440.00	0.38532
7	N	165.00	-0.12566
8	N	238.00	0.12566
9	N	812.00	1.28155
10	N	22.10	-1.03643
11	N	57.60	-0.67449
12	N	45.80	-0.84162
13	N	113.00	-0.25335
14	N	475.00	0.67449
15	N	235.00	-0.00000
16	N	476.00	0.84162
17	N	100.0	-0.45486
18	N	100.00	-0.45486
19	N	420.00	0.25335

Note: "N" indicates a detected value

The correlation coefficient for the line fitted to this data is 0.947009; the critical value at 95% confidence is 0.947. Therefore, it can be concluded that the data are normally distributed under the assumptions for Aitchison's adjustment.

Log-Transformed Data (Censored Probability Plot)

OBS	CODE	VALUE	LOGS	NORMAL
1	N	502.00	6.21860	1.15035
2	N	474.00	6.16121	0.67449
3	N	872.00	6.77079	1.73166
4	N	3.29	1.19089	-1.38299
5	N	1.68	0.51879	-1.73166
6	N	440.00	6.08677	0.54852
7	N	165.00	5.10595	0.10463
8	N	238.00	5.47227	0.31864
9	N	812.00	6.69950	1.38299
10	N	22.10	3.09558	-0.96742
11	N	57.60	4.05352	-0.31864
12	N	45.80	3.82428	-0.81222
13	N	113.00	4.72739	-0.00000
14	N	475.00	6.16331	0.81222
15	N	235.00	5.45959	0.21043
16	N	476.00	6.16542	0.96742
17	N	100.00	4.60517	-0.15753
18	N	100.00	4.60517	-0.15753
19	N	420.00	6.04025	0.43073

Note: "N" indicates a detected value; "LOGS" are the natural logarithms of the values; NORMAL are the normalized logs.

The correlation coefficient for the line fitted to this data is 0.9543 the critical value at 95% confidence is 0.947. Therefore, it can be concluded that the data are lognormally distributed under the assumptions for Cohen's adjustment.

Log-Transformed Data (Detects Only Probability Plot)

OBS	CODE	VALUE	LOGS	NORMAL
1	N	502.00	6.21860	1.03643
2	N	474.00	6.16121	0.52440
3	N	872.00	6.77079	1.64485
4	N	3.29	1.19089	-1.28155
5	N	1.68	0.51879	-1.64485
6	N	440.00	6.08677	0.38532
7	N	165.00	5.10595	-0.12566
8	N	238.00	5.47227	0.12566
9	N	812.00	6.69950	1.28155
10	N	22.10	3.09558	-1.03643
11	N	57.60	4.05352	-0.67449
12	N	45.80	3.82428	-0.84162
13	N	113.00	4.72739	-0.25335
14	N	475.00	6.16331	0.67449
15	N	235.00	5.45959	-0.00000
16	N	476.00	6.16542	0.84162
17	N	100.00	4.60517	-0.45486
18	N	100.00	4.60517	-0.45486
19	N	420.00	6.04025	0.25335

Note: "N" indicates a detected value; "LOGS" are the natural logarithms of the values; NORMAL are the normalized logs.

The correlation coefficient for the line fitted to this data is 0.922; the critical value at 95% confidence is 0.947. Therefore, it can be concluded that the data are not lognormally distributed under the assumptions for Aitchison's adjustment.

The Detects Only Probability Plot for the untransformed data set showed significant linearity such that a conclusion of data normality was reached for the data under the assumptions for Aitchison' adjustment. The log-transformed data were also found to be normally distributed under the assumptions for Cohen's adjustment; however, since Cohen's adjustment requires a non-varying SQL and since the current data set has a variable SQL, it was not applied. Rather, Aitchison's adjustment was applied to the untransformed data set to adjust the mean and variance and a UCL was applied to the data set using the adjusted mean and variance.

UCL Calculation

The UCLs will be calculated based on the untransformed data.

Aitchison's Adjustment

$\bar{x}_d = 292.2353$
$s_d = 266.0161$
$d = 4$
$n = 23$

$$\hat{\mu} = \left(1 - \frac{4}{23}\right)(292.2353) = 241.4117$$

$$\hat{\sigma}^2 = \frac{23-(4+1)}{23-1}(266.0161)^2 + \left(\frac{4}{23}\right)\left(\frac{23-4}{23-1}\right)(292.2353)^2 = 70723.816$$

$$\hat{\sigma} = 265.9394$$

UCL Calculations

$\hat{\mu} = 241.4117$

$\hat{\sigma} = 265.9394$

$n = 23$

$t_{0.05,22} = 1.717$

$$UCL = \hat{\mu} + t_{0.05,22}\frac{\hat{\sigma}}{\sqrt{n}}$$

$$UCL = 241.4117 + 1.717 \times \frac{265.9394}{\sqrt{23}} = 336.623$$

The TCLP value for 1,2-dichloroethane is 500 µg/L. The UCL on the 1,2-dichloroethane data is 336.623.

The UCL for 1,2-dichloroethane is less than the TCLP value; therefore 1,2-dichloroethane is not present at hazardous concentrations in the Pit B waste.

A.4 References

Aitchison, J. 1955. On the distribution of a positive random variable having a discrete probability mass at the origin. *Journal of American Statistical Association* 50: 901-908.

Cohen, A.C., Jr. 1959. Simplified estimators for the normal distribution when samples are single censored or truncated. *Technometrics* 1: 217-237.

Gilbert, 1987. *Statistical Methods For Environmental Pollution Monitoring.* New York, Van Nostrand Reinhold.

Ott, L. 1984. *An Introduction to Statistical Methods and Data Analysis.* Second Edition. Boston, Duxbury Press.

Shapiro, S.S. and Wilk, M.B. 1965. An analysis of variance test for normality (complete samples). *Biometrika* 52: 591-611.

USEPA, 1986 *Test Methods for Evaluating Solid Waste, SW 846, 3rd edition,* November, 1986.

USEPA, 1989. *Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities: Interim Final Guidance*, Office of Solid Waste, Washington, D.C., April, 1989.

USEPA, 1992. *Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities: Addendum to Interim Final Guidance*, Office of Solid Waste, Washington, D.C., June, 1992.

APPENDIX B

ANALYTICAL TESTING RESULTS
[Bound Separately]

APPENDIX C

LABORATORY TESTING RESULTS