SAMPLING DATA

Analytical Results

NET NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

COMPANY Ecology + Environment
ADDRESS 111 W. Jackson Blvd.
PHONE 312-663-9415 FAX 312-663-1090
PROJECT NAME/LOCATION
PROJECT NUMBER T05-9406-60
PROJECT MANAGER

REPORT TO:
INVOICE TO:
P.O. NO.
NET QUOTE NO.

SAMPLED BY (PRINT NAME) Mike Mangini
SIGNATURE
(PRINT NAME)
SIGNATURE

			# and Type of Containers	ANALYSES: VOA	Semi VOA	Metals	
6/28	0820	Drinking water	5	3	1	1	Send All results to Mary Jane at above Address + Phone. Due date 7-18-94 QA Level IV

CONDITION OF SAMPLE: BOTTLES INTACT? (YES) / NO
FIELD FILTERED? YES / (NO)
COC SEALS PRESENT AND INTACT? YES / NO
VOLATILES FREE OF HEADSPACE? (YES) / NO
TEMPERATURE UPON RECEIPT: 5.6°C
Bottles supplied by NET? YES / (NO)

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS DATE

RELINQUISHED BY	DATE/TIME	RECEIVED BY	RELINQUISHED BY	DATE/TIME	RECEIVED FOR NET BY
	6/29 1900			6/29 19:00	

METHOD OF SHIPMENT: Hand Delivered
REMARKS:

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK

ECOLOGY & ENVIRONMENT, INC.

LABORATORY SERVICES REQUEST

Project Name: CAM-OR

Location (city/county/state): Westville / / IN

Team Leader: MIKE MANDINI | OSC: SIMES

Project TDD/PAN: TO5 - 9406 - 019 | Analytical TDD/PAN: TO5 - 9406 - 601

Date Form Submitted: 6/24/94 | Date Report Due: 7/~~28~~/94

Matrix	Parameter/Method	Sampling Date	Sample Shipment Date	Data Deadline Verbal	Data Deadline Hard Copy	Detection Limit	QA Level	# Samples Collect	MS	MSD	Fld Dup	Blk	Tot. # Sampl
~~Drinking~~ Waters	VOA / 524	6/28/94	6/28/94	7/12/94 (2wk)	7/19/94 3wk		2	1					1
	SVOA / ~~525~~	6/28/94	6/28/94	7/12/94	7/19/94		2	1					1
	Metals / TAL	6/28/94	6/28/94	7/12/94	7/19/94		2	1					1
	Call ① Coast-to-Coast or ② NET Midwest, Bartlett, IL ③ IEA, Schaumburg, IL		Valparaiso, IN. Indianapolis, IN.										
	NO Heritage Labs.												

NATIONAL ENVIRONMENTAL TESTING, INC.

CASE NARRATIVE

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/20/1994

NET Job Number: 94.04975

Project Description: T05-9406-601

Sample Number	Sample Description	Date Taken	Date Received
267075	Drinking Water	06/28/1994	06/29/1994

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms.

The following comments should be noted for the indicated fraction;

Semi-Volatile Organic Analysis

Semi-Volatile Analysis was performed by EPA method 625, per client request; this method applies to wastewater analysis and is not covered under Illinois EPA SDWA certification.

Semi-Volatile compounds Hexachloroethane and 2-Chloronapthalene were within control limits on the Laboratory Control Standard (LCS) but below control limits on the LCS Duplicate. All surrogate recoveries were within control limits and these two compounds were not detected in the sample.

Metals Analysis

Arsenic, GFAA; Lead, GFAA and Selenium, AA were analyzed at an NET approved subcontract laboratory, Daily Laboratories. The Daily QC Deliverables will be forwarded straight to you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your samples were analyzed. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please do not hesitate to call. NET has been pleased to provide these analytical services for you.

Approved By:

Ray Kalicki
Quality Assurance Coordinator

NATIONAL ENVIRONMENTAL TESTING, INC.

[illegible]
[illegible] W. [illegible]
Bartlett, IL 60103
Tel: (708) 289-3[illegible]
Fax: (708) 289-5445

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Enclosed is the Quality Control Data and Analytical Results for the following samples submitted to NET, Inc. Bartlett Division for analysis:

Project Description: T05-9406-601

Sample Number	Sample Description	Date Taken	Date Received
267075	Drinking Water	06/28/1994	06/29/1994

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Approved by: Ray Kalick
QA Coordinator, for:

Jean-Pierre C. Rouanet
Operations Manager

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

CASE NARRATIVE

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/20/1994

NET Job Number: 94.04975

Project Description: T05-9406-601

Sample Number	Sample Description	Date Taken	Date Received
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Approved By:

Ray Kalicki
Quality Assurance Coordinator

OCEAN GROUT

NET NATIONAL ENVIRONMENTAL TESTING, INC.®

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Operations Manager

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Bartlett Division
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Fax: (708) 289-5445

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

Sample No. : 267075

NET Job No.: 94.04975

Sample Description: Drinking Water
T05-9406-601

Date Taken: 06/28/1994
Time Taken: 08:20
IEPA Cert. No. 100221

Date Received: 06/29/1994
Time Received: 19:00
WDNR Cert. No. 999447130

Parameter	Results	Flag	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
METALS								
Arsenic, GFAA	<0.005	O	mg/L	07/15/1994	0.0050	out	Outside	7060(4) 206.2(3)
Barium, ICP	0.045		mg/L	07/15/1994	0.020	mjb	832	6010(4) 200.7(3)
Cadmium, ICP	<0.010		mg/L	07/15/1994	0.010	mjb	804	6010(4) 200.7(3)
Chromium, ICP	<0.040		mg/L	07/15/1994	0.040	mjb	790	6010(1) 200.7(3)
Lead, GFAA	<0.0050	O	mg/L	07/15/1994	0.0050	out	Outside	7421(1) 239.2(3)
Mercury, CVAA	<0.0002		mg/L	07/13/1994	0.0002	mjb	363 355	7471(1) 245.1(3)
Selenium, AA	<0.0050	O	mg/L	07/15/1994	0.0050	out	Outside	7741(1) 31148(4)
Silver, AA	<0.040		mg/L	07/11/1994	0.040	mjb	243	7760(1) 272.1(3)
Metals Prep, Hg Aqueous	Complete			07/13/1994		mjb	363	7471(1) 245.1(3)
PREP, ACID EXT. AQUEOUS	extracted			07/05/1994		las	244	3500 (1)
PREP, BN AQUEOUS	extracted			07/05/1994		las	244	3500 (1)
ACID CMPDS - 625 AQUEOUS								
4-Chloro-3-methylphenol	<10		ug/L	07/08/1994	10	rla	244 528	625 (3)
2-Chlorophenol	<10		ug/L	07/08/1994	10	rla	244 528	625 (3)
2,4-Dichlorophenol	<10		ug/L	07/08/1994	10	rla	244 528	625 (3)
2,4-Dimethylphenol	<10		ug/L	07/08/1994	10	rla	244 528	625 (3)
2,4-Dinitrophenol	<50		ug/L	07/08/1994	50	rla	244 528	625 (3)
2-Methyl-4,6-dinitrophenol	<50		ug/L	07/08/1994	50	rla	244 528	625 (3)
2-Nitrophenol	<10		ug/L	07/08/1994	10	rla	244 528	625 (3)
4-Nitrophenol	<50		ug/L	07/08/1994	50	rla	244 528	625 (3)
Pentachlorophenol	<50		ug/L	07/08/1994	50	rla	244 528	625 (3)
Phenol	<10		ug/L	07/08/1994	10	rla	244 528	625 (3)
2,4,6-Trichlorophenol	<10		ug/L	07/08/1994	10	rla	244 528	625 (3)
Surr: Phenol-d6	24		%	07/08/1994	10-94	rla	244 528	625 (3)
Surr: 2-Fluorophenol	36		%	07/08/1994	21-100	rla	244 528	625 (3)
Surr: 2,4,6-Tribromophenol	84		%	07/08/1994	10-123	rla	244 528	625 (3)

O : Parameter analysis was sub-contracted to an outside lab location.

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ANALYTICAL REPORT

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111 West Jackson Blvd.
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07/19/1994

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Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
BASE/NEUTRALS - 625 AQUEOUS							
Acenaphthene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Acenaphthylene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Anthracene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Benzidine	<50	ug/L	07/08/1994	50	rla	244 528	625 (3)
Benzo(a)anthracene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Benzo(b)fluoranthene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Benzo(k)fluoranthene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Benzo(g,h,i)perylene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Benzo(a)pyrene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Benzyl butyl phthalate	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Bis(2-chloroethoxy)methane	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Bis(2-chloroethyl)ether	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Bis(2-chloroisopropyl)ether	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Bis(2-ethylhexyl)phthalate	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
4-Bromophenyl phenyl ether	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
2-Chloronaphthalene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
4-Chlorophenyl phenyl ether	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Chrysene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Dibenzo(a,h)anthracene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Di-n-butyl phthalate	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
1,2-Dichlorobenzene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
1,3-Dichlorobenzene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
1,4-Dichlorobenzene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
3,3'-Dichlorobenzidine	<20	ug/L	07/08/1994	20	rla	244 528	625 (3)
Diethyl phthalate	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Dimethyl phthalate	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
2,4-Dinitrotoluene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)

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2,6-Dinitrotoluene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Di-n-octyl phthalate	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Fluoranthene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Fluorene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Hexachlorobenzene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Hexachlorobutadiene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Hexachlorocyclopentadiene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Hexachloroethane	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Indeno(1,2,3-cd)pyrene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Isophorone	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Naphthalene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Nitrobenzene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
N-Nitrosodimethylamine	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
N-Nitrosodi-n-propylamine	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
N-Nitrosodiphenylamine	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Phenanthrene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Pyrene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
1,2,4-Trichlorobenzene	<10	ug/L	07/08/1994	10	rla	244 528	625 (3)
Surr: Nitrobenzene-d5	56	%	07/08/1994	35-114	rla	244 528	625 (3)
Surr: 2-Fluorobiphenyl	50	%	07/08/1994	43-116	rla	244 528	625 (3)
Surr: Terphenyl-d14	80	%	07/08/1994	33-141	rla	244 528	625 (3)
SDWA VOLATILE COMPOUNDS 524.2							
Benzene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Vinyl Chloride	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Carbon Tetrachloride	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
1,2-Dichloroethane	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Trichloroethylene	1.0	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
1,1-Dichloroethylene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
1,1,1-Trichloroethane	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)

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p-Dichlorobenzene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Surr: 4-Bromofluorobenzene	96	%	07/06/1994		llj	314	524.2 (6)
Surr: d4-1,2-Dichlorobenzene	84	%	07/06/1994		llj	314	524.2 (6)
Bromobenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
Dichlorobromomethane	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Bromoform	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Bromomethane	<2.0	ug/L	07/06/1994	2.0	llj	314	524.2 (6)
Chlorobenzene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Chlorodibromomethane	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Chloroethane	<2.0	ug/L	07/06/1994	2.0	llj	314	524.2 (6)
Chloroform	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Chloromethane	<2.0	ug/L	07/06/1994	2.0	llj	314	524.2 (6)
o-Chlorotoluene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
p-Chlorotoluene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
Dibromomethane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
m-Dichlorobenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
o-Dichlorobenzene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
1,1-Dichloroethane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
cis-1,2-Dichloroethylene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
trans-1,2-Dichloroethylene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Dichloromethane	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
1,2-Dichloropropane	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
1,3-Dichloropropane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
2,2-Dichloropropane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
1,1-Dichloropropene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
1,3-Dichloropropene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
Ethylbenzene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
Styrene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
1,1,1,2-Tetrachloroethane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
1,1,2,2-tetrachloroethane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)

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Date Received: 06/29/1994
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	Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
	Tetrachloroethylene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
	Toluene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
	1,1,2-Trichloroethane	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
NF R	1,2,3-Trichloropropane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	m&p-Xylene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
	o-Xylene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
NF R	1,2-Dibromo-3-Chloropropane	<10	ug/L	07/06/1994	10	llj	314	524.2 (6)
	Ethylenedibromide (EDB)	<10	ug/L	07/06/1994	10	llj	314	524.2 (6)
	Bromochloromethane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	n-Butylbenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	sec-Butylbenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	tert-Butylbenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	Dichlorodifluoromethane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	Fluorotrichloromethane	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	Hexachlorobutadiene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	Isopropylbenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	p-Isopropyltoluene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	Naphthalene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	n-Propylbenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	1,2,3-Trichlorobenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	1,2,4-Trichlorobenzene	<0.5	ug/L	07/06/1994	0.5	llj	314	524.2 (6)
	1,2,4-Trimethylbenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)
	1,3,5-Trimethylbenzene	<1.0	ug/L	07/06/1994	1.0	llj	314	524.2 (6)

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Run Batch Number	CCV True Conc.	Conc. Found	Percent Recovery
Barium, ICP	832	2.00	2.06	103.0
Cadmium, ICP	804	1.00	1.02	102.0
Chromium, ICP	790	2.00	2.05	102.5
Mercury, CVAA	355	0.0025	0.0024	96.0
Silver, AA	243	0.500	0.517	103.4
ACID CMPDS - 625 AQUEOUS				
4-Chloro-3-methylphenol	528	50.0	40.94	81.9
2,4-Dichlorophenol	528	50.0	43.51	87.0
2-Nitrophenol	528	50.0	48.02	96.0
Pentachlorophenol	528	50.0	42.30	84.6
Phenol	528	50.0	44.74	89.5
2,4,6-Trichlorophenol	528	50.0	43.93	87.9
BASE/NEUTRALS - 625 AQUEOUS				
Acenaphthene	528	50.0	44.08	88.2
Benzo(a)pyrene	528	50.0	45.76	91.5
1,4-Dichlorobenzene	528	50.0	48.30	96.6
Di-n-octyl phthalate	528	50.0	50.85	101.7
Fluoranthene	528	50.0	45.22	90.4
Hexachlorobutadiene	528	50.0	45.68	91.4
SDWA VOLATILE COMPOUNDS 524.2				
Benzene	314	10.0	9.9	99.0
Vinyl Chloride	314	10.0	8.4	84.0
Carbon Tetrachloride	314	10.0	10.1	101.0
1,2-Dichloroethane	314	10.0	10.2	102.0
Trichloroethylene	314	10.0	11.0	110.0
1,1-Dichloroethylene	314	10.0	8.5	85.0
1,1,1-Trichloroethane	314	10.0	9.4	94.0
p-Dichlorobenzene	314	10.0	11.8	118.0

CCV - Continuing Calibration Verification

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Barium, ICP		832	<0.020	mg/L	0.020	6010(4) 200.7(3)
Cadmium, ICP		804	<0.010	mg/L	0.010	6010(4) 200.7(3)
Chromium, ICP		790	<0.040	mg/L	0.040	6010(1) 200.7(3)
Mercury, CVAA	363	355	<0.0002	mg/L	0.0002	7471(1) 245.1(3)
Silver, AA		243	<0.040	mg/L	0.040	7760(1) 272.1(3)
ACID CMPDS - 625 AQUEOUS						625 (3)
4-Chloro-3-methylphenol	244	525	<10	ug/L	10	625 (3)
2-Chlorophenol	244	525	<10	ug/L	10	625 (3)
2,4-Dichlorophenol	244	525	<10	ug/L	10	625 (3)
2,4-Dimethylphenol	244	525	<10	ug/L	10	625 (3)
2,4-Dinitrophenol	244	525	<50	ug/L	50	625 (3)
2-Methyl-4,6-dinitrophenol	244	525	<50	ug/L	50	625 (3)
2-Nitrophenol	244	525	<10	ug/L	10	625 (3)
4-Nitrophenol	244	525	<50	ug/L	50	625 (3)
Pentachlorophenol	244	525	<50	ug/L	50	625 (3)
Phenol	244	525	<10	ug/L	10	625 (3)
2,4,6-Trichlorophenol	244	525	<10	ug/L	10	625 (3)
Surr: Phenol-d6	244	525	33	%	10-94	625 (3)
Surr: 2-Fluorophenol	244	525	53	%	21-100	625 (3)
Surr: 2,4,6-Tribromophenol	244	525	66	%	10-123	625 (3)
BASE/NEUTRALS - 625 AQUEOUS						625 (3)
Benzyl butyl phthalate	244	525	<10	ug/L	10	625 (3)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Bis(2-ethylhexyl)phthalate	244	525	<10	ug/L	10	625 (3)
Di-n-butyl phthalate	244	525	<10	ug/L	10	625 (3)
Diethyl phthalate	244	525	<10	ug/L	10	625 (3)
Dimethyl phthalate	244	525	<10	ug/L	10	625 (3)
Di-n-octyl phthalate	244	525	<10	ug/L	10	625 (3)
Surr: Nitrobenzene-d5	244	525	77	%	35-114	625 (3)
Surr: 2-Fluorobiphenyl	244	525	67	%	43-116	625 (3)
Surr: Terphenyl-d14	244	525	71	%	33-141	625 (3)
SDWA VOLATILE COMPOUNDS 524.2						524.2 (6)
Benzene		314	<0.5	ug/L	0.5	524.2 (6)
Vinyl Chloride		314	<0.5	ug/L	0.5	524.2 (6)
Carbon Tetrachloride		314	<0.5	ug/L	0.5	524.2 (6)
1,2-Dichloroethane		314	<0.5	ug/L	0.5	524.2 (6)
Trichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
1,1-Dichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
1,1,1-Trichloroethane		314	<0.5	ug/L	0.5	524.2 (6)
p-Dichlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
Surr: 4-Bromofluorobenzene		314	96	%		524.2 (6)
Surr: d4-1,2-Dichlorobenzene		314	85	%		524.2 (6)
Bromobenzene		314	<1.0	ug/L	1.0	524.2 (6)
Dichlorobromomethane		314	<0.5	ug/L	0.5	524.2 (6)
Bromoform		314	<0.5	ug/L	0.5	524.2 (6)
Bromomethane		314	<2.0	ug/L	2.0	524.2 (6)
Chlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
Chlorodibromomethane		314	<0.5	ug/L	0.5	524.2 (6)
Chloroethane		314	<2.0	ug/L	2.0	524.2 (6)
Chloroform		314	<0.5	ug/L	0.5	524.2 (6)
Chloromethane		314	<2.0	ug/L	2.0	524.2 (6)
o-Chlorotoluene		314	<1.0	ug/L	1.0	524.2 (6)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

OCEAN GROUP

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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
p-Chlorotoluene		314	<1.0	ug/L	1.0	524.2 (6)
Dibromomethane		314	<1.0	ug/L	1.0	524.2 (6)
m-Dichlorobenzene		314	<1.0	ug/L	1.0	524.2 (6)
o-Dichlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
1,1-Dichloroethane		314	<1.0	ug/L	1.0	524.2 (6)
cis-1,2-Dichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
trans-1,2-Dichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
Dichloromethane		314	<0.5	ug/L	0.5	524.2 (6)
1,2-Dichloropropane		314	<0.5	ug/L	0.5	524.2 (6)
1,3-Dichloropropane		314	<1.0	ug/L	1.0	524.2 (6)
2,2-Dichloropropane		314	<1.0	ug/L	1.0	524.2 (6)
1,1-Dichloropropene		314	<1.0	ug/L	1.0	524.2 (6)
1,3-Dichloropropene		314	<1.0	ug/L	1.0	524.2 (6)
Ethylbenzene		314	<0.5	ug/L	0.5	524.2 (6)
Styrene		314	<0.5	ug/L	0.5	524.2 (6)
1,1,1,2-Tetrachloroethane		314	<1.0	ug/L	1.0	524.2 (6)
1,1,2,2-tetrachloroethane		314	<1.0	ug/L	1.0	524.2 (6)
Tetrachloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
Toluene		314	<0.5	ug/L	0.5	524.2 (6)
1,1,2-Trichloroethane		314	<0.5	ug/L	0.5	524.2 (6)
1,2,3-Trichloropropane		314	<1.0	ug/L	1.0	524.2 (6)
m&p-Xylene		314	<0.5	ug/L	0.5	524.2 (6)
o-Xylene		314	<0.5	ug/L	0.5	524.2 (6)
1,2-Dibromo-3-Chloropropane		314	<10	ug/L	10	524.2 (6)
Ethylenedibromide (EDB)		314	<10	ug/L	10	524.2 (6)
Bromochloromethane		314	<1.0	ug/L	1.0	524.2 (6)
n-Butylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
sec-Butylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
tert-Butylbenzene		314	<1.0	ug/L	1.0	524.2 (6)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

OCEAN GROUP

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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Dichlorodifluoromethane		314	<1.0	ug/L	1.0	524.2 (6)
Fluorotrichloromethane		314	<1.0	ug/L	1.0	524.2 (6)
Hexachlorobutadiene		314	<1.0	ug/L	1.0	524.2 (6)
Isopropylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
p-Isopropyltoluene		314	<1.0	ug/L	1.0	524.2 (6)
Naphthalene		314	<1.0	ug/L	1.0	524.2 (6)
n-Propylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
1,2,3-Trichlorobenzene		314	<1.0	ug/L	1.0	524.2 (6)
1,2,4-Trichlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
1,2,4-Trimethylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
1,3,5-Trimethylbenzene		314	<1.0	ug/L	1.0	524.2 (6)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
ACID CMPDS - 625 AQUEOUS					
4-Chloro-3-methylphenol	244	528	100	87.36	87.4
2-Chlorophenol	244	528	100	63.74	63.7
2,4-Dichlorophenol	244	528	100	69.22	69.2
2,4-Dimethylphenol	244	528	100	56.39	56.4
2,4-Dinitrophenol	244	528	100	111	111.0
2-Methyl-4,6-dinitrophenol	244	528	100	96.46	96.5
2-Nitrophenol	244	528	100	70.16	70.2
4-Nitrophenol	244	528	100	79.34	79.3
Pentachlorophenol	244	528	100	108	108.0
Phenol	244	528	100	53.32	53.3
BASE/NEUTRALS - 625 AQUEOUS					
Acenaphthene	244	528	100	81.53	81.5
Acenaphthylene	244	528	100	84.85	84.8
Anthracene	244	528	100	88.61	88.6
Benzo(a)anthracene	244	528	100	92.63	92.6
Benzo(b)fluoranthene	244	528	100	68.45	68.5
Benzo(k)fluoranthene	244	528	100	23.82	23.8
Benzo(g,h,i)perylene	244	528	100	82.50	82.5
Benzo(a)pyrene	244	528	100	81.49	81.5
Benzyl butyl phthalate	244	528	100	84.02	84.0

Advisory Control Limits - Inorganics - LCS recovery should be 80 - 120%.

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
Bis(2-chloroethoxy)methane	244	528	100	70.53	70.5
Bis(2-chloroethyl)ether	244	528	100	67.42	67.4
Bis(2-chloroisopropyl)ether	244	528	100	69.74	69.7
Bis(2-ethylhexyl)phthalate	244	528	100	79.67	79.7
4-Bromophenyl phenyl ether	244	528	100	92.82	92.8
2-Chloronaphthalene	244	528	100	70.55	70.6
4-Chlorophenyl phenyl ether	244	528	100	87.36	87.4
Chrysene	244	528	100	87.33	87.3
Dibenzo(a,h)anthracene	244	528	100	80.86	80.9
Di-n-butyl phthalate	244	528	100	81.66	81.7
1,2-Dichlorobenzene	244	528	100	54.20	54.2
1,3-Dichlorobenzene	244	528	100	52.41	52.4
1,4-Dichlorobenzene	244	528	100	51.71	51.7
3,3'-Dichlorobenzidine	244	528	100	51.76	51.8
Diethyl phthalate	244	528	100	54.69	54.7
Dimethyl phthalate	244	528	100	35.08	35.1
2,4-Dinitrotoluene	244	528	100	95.98	96.0
2,6-Dinitrotoluene	244	528	100	95.98	96.0
Di-n-octyl phthalate	244	528	100	77.02	77.0
Fluoranthene	244	528	100	89.36	89.4
Hexachlorobenzene	244	528	100	92.46	92.5
Hexachlorobutadiene	244	528	100	63.91	63.9
Hexachloroethane	244	528	100	52.69	52.7
Indeno(1,2,3-cd)pyrene	244	528	100	82.50	82.5
Isophorone	244	528	100	72.39	72.4
Naphthalene	244	528	100	66.11	66.1
Nitrobenzene	244	528	100	65.74	65.7
N-Nitrosodi-n-propylamine	244	528	100	65.40	65.4
Phenanthrene	244	528	100	88.86	88.9
Pyrene	244	528	100	91.40	91.4
1,2,4-Trichlorobenzene	244	528	100	64.61	64.6

Advisory Control Limits - Inorganics - LCS recovery should be 80 - 120%.

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
SDWA VOLATILE COMPOUNDS 524.2					
Benzene		314	5.0	4.9	98.0
Vinyl Chloride		314	5.0	5.0	100.0
Carbon Tetrachloride		314	5.0	4.9	98.0
1,2-Dichloroethane		314	5.0	4.5	90.0
Trichloroethylene		314	5.0	4.9	98.0
1,1-Dichloroethylene		314	5.0	4.5	90.0
1,1,1-Trichloroethane		314	5.0	5.0	100.0
p-Dichlorobenzene		314	5.0	4.7	94.0

Advisory Control Limits - Inorganics - LCS recovery should be 80 - 120%.

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QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD
Barium, ICP		832	1.21	0.316	1.00	mg/L	89.4	1.23	1.00	mg/L	91.4	2.2
Cadmium, ICP		804	0.440	<0.010	0.500	mg/L	88.0	0.500	0.459	mg/L	108.9	21.1
Chromium, ICP		790	0.954	0.042	1.00	mg/L	91.2	0.977	1.00	mg/L	93.5	2.5
Mercury, CVAA	363	355	0.0025	<0.0002	0.0025	mg/L	100.0	0.0025	0.0025	mg/L	100.0	0.0
Silver, AA		243	1.051	<0.040	1.00	mg/L	105.1	1.022	1.00	mg/L	102.2	2.8

NOTE: Matrix Spike Samples may not be samples from this job.

Advisory Control Limits for MS/MSDs:

For Inorganic Parameters and GC Volatiles, the spike recovery should be 75 - 125% if the spike added value was greater than or equal to one fourth of the sample result value. If not, the control limits are not established. The RPD for the MS/MSD pair should be less than 20.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

OCEAN GROUP

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QUALITY CONTROL REPORT

SPIKES

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Mr. Dave Hendron

Analyte	Prep Batch Number	Run Batch Number	Spiked Sample Result	Sample Result	Spike Added	Units	Percent Recovery

NOTE: Spikes and Duplicates may not be samples from this job.

The values reported above are for post digestion/distillation spikes.

Advisory Control Limits for Spikes - Spike recovery should be 75 - 125%.

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QUALITY CONTROL REPORT

DUPLICATES

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Mr. Dave Hendron

Analyte	Prep Batch Number	Run Batch Number	Original Analysis	Duplicate Analysis	Units	RPD
SDWA VOLATILE COMPOUNDS 524.2						
1,2-Dibromo-3-Chloropropane		314	<250	<250	ug/L	
Bromochloromethane		314	<25	<25	ug/L	

NOTE: Spikes and Duplicates may not be samples from this job.

RPD - Relative Percent Difference

Advisory Control Limits for Duplicates - RPD should be less than 20.

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QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Run Batch Number	CCV True Conc.	Conc. Found	Percent Recovery
Barium, ICP	832	2.00	2.06	103.0
Cadmium, ICP	804	1.00	1.02	102.0
Chromium, ICP	790	2.00	2.05	102.5
Mercury, CVAA	355	0.0025	0.0024	96.0
Silver, AA	243	0.500	0.517	103.4
ACID CMPDS - 625 AQUEOUS				
4-Chloro-3-methylphenol	528	50.0	40.94	81.9
2,4-Dichlorophenol	528	50.0	43.51	87.0
2-Nitrophenol	528	50.0	48.02	96.0
Pentachlorophenol	528	50.0	42.30	84.6
Phenol	528	50.0	44.74	89.5
2,4,6-Trichlorophenol	528	50.0	43.93	87.9
BASE/NEUTRALS - 625 AQUEOUS				
Acenaphthene	528	50.0	44.08	88.2
Benzo(a)pyrene	528	50.0	45.76	91.5
1,4-Dichlorobenzene	528	50.0	48.30	96.6
Di-n-octyl phthalate	528	50.0	50.85	101.7
Fluoranthene	528	50.0	45.22	90.4
Hexachlorobutadiene	528	50.0	45.68	91.4
SDWA VOLATILE COMPOUNDS 524.2				
Benzene	314	10.0	9.9	99.0
Vinyl Chloride	314	10.0	8.4	84.0
Carbon Tetrachloride	314	10.0	10.1	101.0
1,2-Dichloroethane	314	10.0	10.2	102.0
Trichloroethylene	314	10.0	11.0	110.0
1,1-Dichloroethylene	314	10.0	8.5	85.0
1,1,1-Trichloroethane	314	10.0	9.4	94.0
p-Dichlorobenzene	314	10.0	11.8	118.0

CCV - Continuing Calibration Verification

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel. (708) 289-3100
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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Barium, ICP		832	<0.020	mg/L	0.020	6010(4) 200.7(3)
Cadmium, ICP		804	<0.010	mg/L	0.010	6010(4) 200.7(3)
Chromium, ICP		790	<0.040	mg/L	0.040	6010(1) 200.7(3)
Mercury, CVAA	363	355	<0.0002	mg/L	0.0002	7471(1) 245.1(3)
Silver, AA		243	<0.040	mg/L	0.040	7760(1) 272.1(3)
ACID CMPDS - 625 AQUEOUS						625 (3)
4-Chloro-3-methylphenol	244	525	<10	ug/L	10	625 (3)
2-Chlorophenol	244	525	<10	ug/L	10	625 (3)
2,4-Dichlorophenol	244	525	<10	ug/L	10	625 (3)
2,4-Dimethylphenol	244	525	<10	ug/L	10	625 (3)
2,4-Dinitrophenol	244	525	<50	ug/L	50	625 (3)
2-Methyl-4,6-dinitrophenol	244	525	<50	ug/L	50	625 (3)
2-Nitrophenol	244	525	<10	ug/L	10	625 (3)
4-Nitrophenol	244	525	<50	ug/L	50	625 (3)
Pentachlorophenol	244	525	<50	ug/L	50	625 (3)
Phenol	244	525	<10	ug/L	10	625 (3)
2,4,6-Trichlorophenol	244	525	<10	ug/L	10	625 (3)
Surr: Phenol-d6	244	525	33	%	10-94	625 (3)
Surr: 2-Fluorophenol	244	525	53	%	21-100	625 (3)
Surr: 2,4,6-Tribromophenol	244	525	66	%	10-123	625 (3)
BASE/NEUTRALS - 625 AQUEOUS						625 (3)
Benzyl butyl phthalate	244	525	<10	ug/L	10	625 (3)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Bis(2-ethylhexyl)phthalate	244	525	<10	ug/L	10	625 (3)
Di-n-butyl phthalate	244	525	<10	ug/L	10	625 (3)
Diethyl phthalate	244	525	<10	ug/L	10	625 (3)
Dimethyl phthalate	244	525	<10	ug/L	10	625 (3)
Di-n-octyl phthalate	244	525	<10	ug/L	10	625 (3)
Surr: Nitrobenzene-d5	244	525	77	%	35-114	625 (3)
Surr: 2-Fluorobiphenyl	244	525	67	%	43-116	625 (3)
Surr: Terphenyl-d14	244	525	71	%	33-141	625 (3)
SDWA VOLATILE COMPOUNDS 524.2						524.2 (6)
Benzene		314	<0.5	ug/L	0.5	524.2 (6)
Vinyl Chloride		314	<0.5	ug/L	0.5	524.2 (6)
Carbon Tetrachloride		314	<0.5	ug/L	0.5	524.2 (6)
1,2-Dichloroethane		314	<0.5	ug/L	0.5	524.2 (6)
Trichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
1,1-Dichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
1,1,1-Trichloroethane		314	<0.5	ug/L	0.5	524.2 (6)
p-Dichlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
Surr: 4-Bromofluorobenzene		314	96	%		524.2 (6)
Surr: d4-1,2-Dichlorobenzene		314	85	%		524.2 (6)
Bromobenzene		314	<1.0	ug/L	1.0	524.2 (6)
Dichlorobromomethane		314	<0.5	ug/L	0.5	524.2 (6)
Bromoform		314	<0.5	ug/L	0.5	524.2 (6)
Bromomethane		314	<2.0	ug/L	2.0	524.2 (6)
Chlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
Chlorodibromomethane		314	<0.5	ug/L	0.5	524.2 (6)
Chloroethane		314	<2.0	ug/L	2.0	524.2 (6)
Chloroform		314	<0.5	ug/L	0.5	524.2 (6)
Chloromethane		314	<2.0	ug/L	2.0	524.2 (6)
o-Chlorotoluene		314	<1.0	ug/L	1.0	524.2 (6)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
p-Chlorotoluene		314	<1.0	ug/L	1.0	524.2 (6)
Dibromomethane		314	<1.0	ug/L	1.0	524.2 (6)
m-Dichlorobenzene		314	<1.0	ug/L	1.0	524.2 (6)
o-Dichlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
1,1-Dichloroethane		314	<1.0	ug/L	1.0	524.2 (6)
cis-1,2-Dichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
trans-1,2-Dichloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
Dichloromethane		314	<0.5	ug/L	0.5	524.2 (6)
1,2-Dichloropropane		314	<0.5	ug/L	0.5	524.2 (6)
1,3-Dichloropropane		314	<1.0	ug/L	1.0	524.2 (6)
2,2-Dichloropropane		314	<1.0	ug/L	1.0	524.2 (6)
1,1-Dichloropropene		314	<1.0	ug/L	1.0	524.2 (6)
1,3-Dichloropropene		314	<1.0	ug/L	1.0	524.2 (6)
Ethylbenzene		314	<0.5	ug/L	0.5	524.2 (6)
Styrene		314	<0.5	ug/L	0.5	524.2 (6)
1,1,1,2-Tetrachloroethane		314	<1.0	ug/L	1.0	524.2 (6)
1,1,2,2-tetrachloroethane		314	<1.0	ug/L	1.0	524.2 (6)
Tetrachloroethylene		314	<0.5	ug/L	0.5	524.2 (6)
Toluene		314	<0.5	ug/L	0.5	524.2 (6)
1,1,2-Trichloroethane		314	<0.5	ug/L	0.5	524.2 (6)
1,2,3-Trichloropropane		314	<1.0	ug/L	1.0	524.2 (6)
m&p-Xylene		314	<0.5	ug/L	0.5	524.2 (6)
o-Xylene		314	<0.5	ug/L	0.5	524.2 (6)
1,2-Dibromo-3-Chloropropane		314	<10	ug/L	10	524.2 (6)
Ethylenedibromide (EDB)		314	<10	ug/L	10	524.2 (6)
Bromochloromethane		314	<1.0	ug/L	1.0	524.2 (6)
n-Butylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
sec-Butylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
tert-Butylbenzene		314	<1.0	ug/L	1.0	524.2 (6)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

OCEAN GROUP

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QUALITY CONTROL REPORT

BLANK ANALYSIS

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Dichlorodifluoromethane		314	<1.0	ug/L	1.0	524.2 (6)
Fluorotrichloromethane		314	<1.0	ug/L	1.0	524.2 (6)
Hexachlorobutadiene		314	<1.0	ug/L	1.0	524.2 (6)
Isopropylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
p-Isopropyltoluene		314	<1.0	ug/L	1.0	524.2 (6)
Naphthalene		314	<1.0	ug/L	1.0	524.2 (6)
n-Propylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
1,2,3-Trichlorobenzene		314	<0.5	ug/L	0.5	524.2 (6)
1,2,4-Trichlorobenzene		314	<1.0	ug/L	1.0	524.2 (6)
1,2,4-Trimethylbenzene		314	<1.0	ug/L	1.0	524.2 (6)
1,3,5-Trimethylbenzene						

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
ACID CMPDS - 625 AQUEOUS					
4-Chloro-3-methylphenol	244	528	100	87.36	87.4
2-Chlorophenol	244	528	100	63.74	63.7
2,4-Dichlorophenol	244	528	100	69.22	69.2
2,4-Dimethylphenol	244	528	100	56.39	56.4
2,4-Dinitrophenol	244	528	100	111	111.0
2-Methyl-4,6-dinitrophenol	244	528	100	96.46	96.5
2-Nitrophenol	244	528	100	70.16	70.2
4-Nitrophenol	244	528	100	79.34	79.3
Pentachlorophenol	244	528	100	108	108.0
Phenol	244	528	100	53.32	53.3
BASE/NEUTRALS - 625 AQUEOUS					
Acenaphthene	244	528	100	81.53	81.5
Acenaphthylene	244	528	100	84.85	84.8
Anthracene	244	528	100	88.61	88.6
Benzo(a)anthracene	244	528	100	92.63	92.6
Benzo(b)fluoranthene	244	528	100	68.45	68.5
Benzo(k)fluoranthene	244	528	100	23.82	23.8
Benzo(g,h,i)perylene	244	528	100	82.50	82.5
Benzo(a)pyrene	244	528	100	81.49	81.5
Benzyl butyl phthalate	244	528	100	84.02	84.0

Advisory Control Limits - Inorganics - LCS recovery should be 80 - 120%.

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NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
Bis(2-chloroethoxy)methane	244	528	100	70.53	70.5
Bis(2-chloroethyl)ether	244	528	100	67.42	67.4
Bis(2-chloroisopropyl)ether	244	528	100	69.74	69.7
Bis(2-ethylhexyl)phthalate	244	528	100	79.67	79.7
4-Bromophenyl phenyl ether	244	528	100	92.82	92.8
2-Chloronaphthalene	244	528	100	70.55	70.6
4-Chlorophenyl phenyl ether	244	528	100	87.36	87.4
Chrysene	244	528	100	87.33	87.3
Dibenzo(a,h)anthracene	244	528	100	80.86	80.9
Di-n-butyl phthalate	244	528	100	81.66	81.7
1,2-Dichlorobenzene	244	528	100	54.20	54.2
1,3-Dichlorobenzene	244	528	100	52.41	52.4
1,4-Dichlorobenzene	244	528	100	51.71	51.7
3,3'-Dichlorobenzidine	244	528	100	51.76	51.8
Diethyl phthalate	244	528	100	54.69	54.7
Dimethyl phthalate	244	528	100	35.08	35.1
2,4-Dinitrotoluene	244	528	100	95.98	96.0
2,6-Dinitrotoluene	244	528	100	95.98	96.0
Di-n-octyl phthalate	244	528	100	77.02	77.0
Fluoranthene	244	528	100	89.36	89.4
Hexachlorobenzene	244	528	100	92.46	92.5
Hexachlorobutadiene	244	528	100	63.91	63.9
Hexachloroethane	244	528	100	52.69	52.7
Indeno(1,2,3-cd)pyrene	244	528	100	82.50	82.5
Isophorone	244	528	100	72.39	72.4
Naphthalene	244	528	100	66.11	66.1
Nitrobenzene	244	528	100	65.74	65.7
N-Nitrosodi-n-propylamine	244	528	100	65.40	65.4
Phenanthrene	244	528	100	88.86	88.9
Pyrene	244	528	100	91.40	91.4
1,2,4-Trichlorobenzene	244	528	100	64.61	64.6

Advisory Control Limits - Inorganics - LCS recovery should be 80 - 120%.

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
SDWA VOLATILE COMPOUNDS 524.2					
Benzene		314	5.0	4.9	98.0
Vinyl Chloride		314	5.0	5.0	100.0
Carbon Tetrachloride		314	5.0	4.9	98.0
1,2-Dichloroethane		314	5.0	4.5	90.0
Trichloroethylene		314	5.0	4.9	98.0
1,1-Dichloroethylene		314	5.0	4.5	90.0
1,1,1-Trichloroethane		314	5.0	5.0	100.0
p-Dichlorobenzene		314	5.0	4.7	94.0

Advisory Control Limits - Inorganics - LCS recovery should be 80 - 120%.

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QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Analyte	Prep Batch Number	Run Batch Number	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD
Barium, ICP		832	1.21	0.316	1.00	mg/L	89.4	1.23	1.00	mg/L	91.4	2.2
Cadmium, ICP		804	0.440	<0.010	0.500	mg/L	88.0	0.500	0.459	mg/L	108.9	21.1
Chromium, ICP		790	0.954	0.042	1.00	mg/L	91.2	0.977	1.00	mg/L	93.5	2.5
Mercury, CVAA	363	355	0.0025	<0.0002	0.0025	mg/L	100.0	0.0025	0.0025	mg/L	100.0	0.0
Silver, AA		243	1.051	<0.040	1.00	mg/L	105.1	1.022	1.00	mg/L	102.2	2.8

NOTE: Matrix Spike Samples may not be samples from this job.

Advisory Control Limits for MS/MSDs:

For Inorganic Parameters and GC Volatiles, the spike recovery should be 75 - 125% if the spike added value was greater than or equal to one fourth of the sample result value. If not, the control limits are not established. The RPD for the MS/MSD pair should be less than 20.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

SPIKES

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Mr. Dave Hendron

Analyte	Prep Batch Number	Run Batch Number	Spiked Sample Result	Sample Result	Spike Added	Units	Percent Recovery

NOTE: Spikes and Duplicates may not be samples from this job.

The values reported above are for post digestion/distillation spikes.

Advisory Control Limits for Spikes - Spike recovery should be 75 - 125%.

OCEAN GROUP

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QUALITY CONTROL REPORT

DUPLICATES

ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/19/1994

NET Job Number: 94.04975

Mr. Dave Hendron

Analyte	Prep Batch Number	Run Batch Number	Original Analysis	Duplicate Analysis	Units	RPD
SDWA VOLATILE COMPOUNDS 524.2						
1,2-Dibromo-3-Chloropropane		314	<250	<250	ug/L	
Bromochloromethane		314	<25	<25	ug/L	

NOTE: Spikes and Duplicates may not be samples from this job.

RPD - Relative Percent Difference

Advisory Control Limits for Duplicates - RPD should be less than 20.

RAW DATA

METALS

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Bartlett Division
850 West Bartlett Road
Bartlett, IL 60103

Tel: (708) 289-3100
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FAX TRANSMISSION NOTICE

Date: 7-20-94

To: Mr. Nabil Fajami

Company: Ecology & Environment FAX NO: 312-663-0791

Sender: Ray Kalicki

You should receive 2 pages, including this notice. If you don't receive all pages, please call the sender immediately. This transmission includes:

_____ letter/memo
_____ other
_____ project notes (Project ID: _____)
_____ analytical report(s):
Sample No(s): _____ _____ _____
_____ _____ _____
_____ _____ _____

Comments: Thank you for the call. Please call again if you have any questions.

NATIONAL ENVIRONMENTAL TESTING, INC.

Barlett Division
550 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-9100
Fax: (708) 289-6446

CASE NARRATIVE

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

07/20/1994

NET Job Number: 94.04975

Project Description: T05-9406-601

Sample Number	Sample Description	Date Taken	Date Received
267075	Drinking Water	06/28/1994	06/29/1994

The following comments should be noted for the indicated fraction;

Volatile Organic Analysis

524.2 analysis requires a duplicate analysis and a Laboratory Fortied Blank (LFB) per sample batch. MS/MSD analysis does not apply.

Metals Analysis

	Initial Calibration Verification Standard % Recovery	Interference Check Standard % Recovery
Barium, ICP	106.2	87.9
Cadmium, ICP	103.5	86.5
Chromium, ICP	108.2	85.1
Mercury, CVAA	118.4*	Not Applicable
Silver, AA	109.9	Not Applicable

*The footnote supplied with the raw data states that the ICV is above control limits. Only results below the reporting limit (<0.002mg/L) were accepted.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your samples were analyzed. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please do not hesitate to call. NET has been pleased to provide these analytical services for you.

Approved By:

Ray Yurlicki
Quality Assurance Coordinator

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

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ICP DATA BOOK COVERSHEET

Explanation of Acronyms

RB = Reagent Blank PB = Procedure Blank
RLVS = Reporting Limit Verification Standard
SRM = Standard Reference Material (from an outside source)
ICS = Interference Check Standard
S2 = Continuing Calibration Standard
PS = Procedure Standard
MS/MSD = Matrix Spike/ Matrix Spike Duplicate

S2, ICS, PS and Spike Concentrations: (Unless otherwise noted)

All values are in mg/L

Element	S2	ICS	PS and MS	Element	S2	ICS	PS and MS
Al	2.00	500 ~~200.250~~	1.00	Mo	1.00	1.00	0.50
As	2.00	2.00	1.00	Ni	1.00	1.00	0.50
Ba	2.00	2.00	1.00	Pb	2.00	2.00	1.00
Be	1.00	1.00	0.50	Sb	2.00	2.00	1.00
Cd	1.00	1.00	0.50	Se	2.00	2.00	1.00
Co	1.00	1.00	0.50	Sr	2.00	2.00	1.00
Cr	2.00	2.00	1.00	Ti	1.00	1.00	0.50
Cu	1.00	1.00	0.50	Tl	2.00	2.00	1.00
Fe	2.00	200 ~~500.100~~	2.00	V	2.00	2.00	1.00
Mn	1.00	1.00	0.50	Zn	2.00	2.00	1.00
Boron	2.00	2.00	0.50				

rec 7-8-94

Sample Calculation 6/30/94.

Conc. x dilution 0.352 x 100/2.08 = 16.9

All sample concentrations are in mg/L unless otherwise noted.

PLASMA 400 Analysis Ver. 3.30 Fri 07/15/94 - 10:39:10

Method File Name: bqgrp Replicates:1 Read Delay: 30
Remarks: analyst mjb Data File:

Mark Bauer

STANDARD #1 1040 7/15/94

tl191	EM	17871	CONC	10.000
se196	EM	16340	CONC	10.000
as197	EM	15203	CONC	10.000
sb207	EM	13502	CONC	10.000
zn214	EM	72637	CONC	10.000
pb220	EM	18418	CONC	10.000
cd228	EM	29645	CONC	5.0000
ni232	EM	18029	CONC	5.000
ba233	EM	19106	CONC	10.000
fe238	EM	19579	CONC	10.000
mn258	EM	19811	CONC	5.000
cr268	EM	16509	CONC	10.000
be313	EM	23721	CONC	5.0000
cu325	EM	16950	CONC	5.0000
al396	EM	16869	CONC	10.000

BLANK 1047 7/15/94

tl191	EM	44	CONC	0.000
se196	EM	-24	CONC	0.000
as197	EM	-29	CONC	0.000
sb207	EM	84	CONC	0.000
zn214	EM	43	CONC	0.000
pb220	EM	1	CONC	0.000
cd228	EM	18	CONC	0.0000
ni232	EM	24	CONC	0.000
ba233	EM	4	CONC	0.000
fe238	EM	11	CONC	0.000
mn258	EM	1	CONC	0.000
cr268	EM	-3	CONC	0.000
be313	EM	13	CONC	0.0000
cu325	EM	22	CONC	0.0000
al396	EM	49	CONC	0.000

SAMPLE #1 1051 7/15/94

RBLK

tl191	0.082	
se196	0.050	peak-noisy
as197	0.038	peak-noisy
sb207	-0.058	
zn214	-0.004	
pb220	0.005	peak-noisy
cd228	-0.0020	
ni232	-0.001	peak-noisy
ba233	0.003	
fe238	-0.001	peak-noisy
mn258	0.000	peak-noisy
cr268	0.007	window-edge
be313	0.0027	window-edge
cu325	-0.0021	peak-noisy

SAMPLE #2 1056 7/15/94

	tl191	0.242	
	se196	0.081	
	as197	0.205	
	sb207	0.445	
	zn214	0.082	
RLVS	pb220	0.113	
	cd228	0.0410	
	ni232	0.043	
	ba233	0.085	
	fe238	0.094	
	mn258	0.044	
	cr268	0.092	
	be313	0.0418	
	cu325	0.0411	
	al396	0.932	

SAMPLE #3 1101 7/15/94

	tl191	0.403	* SEE BELOW
ICV	se196	0.146	0.117
	as197	0.181	* 00C
	sb207	-0.023	— NP
	zn214	0.100	0.104
	pb220	0.212	0.203
	cd228	0.3023	0.292
	ni232	0.124	0.120
	ba233	2.127	2.003
	fe238	0.799	0.791
	mn258	0.108	0.106
	cr268	0.171	0.158
	be313	0.3706	0.371
	cu325	0.2313	0.222
	al396	0.319	0.342

SAMPLE #4 1106 7/15/94

	tl191	0.152	
	se196	0.058	
	as197	0.035	peak-noisy
	sb207	1.016	1.144
	zn214	-0.004	peak-noisy
	pb220	0.020	peak-noisy
	cd228	-0.0019	
	ni232	-0.001	window-edge
	ba233	-0.000	window-edge
	fe238	0.001	peak-noisy
	mn258	0.000	
	cr268	0.003	peak-noisy
	be313	0.0032	window-edge
	cu325	0.0021	
	al396	-0.011	window-edge

SAMPLE #5 1111 7/15/94

	tl191	10.024	10.00
	se196	0.089	peak-noisy
	as197	0.081	
	sb207	-0.017	
	zn214	0.002	peak-noisy
	pb220	0.022	
	cd228	-0.0030	peak-noisy

ba233	-0.000		peak-noisy
fe238	0.005		peak-noisy
mn258	0.000		
cr268	0.006		peak-noisy
be313	0.0032		window-edge
cu325	-0.0003		window-edge
al396	-0.011		peak-noisy

7/14/94

SAMPLE #6 1116 7/15/94

TV 1.00 1.04

T1 ICV 1.00ppm

tl191	1.037	
se196	0.018	
as197	0.047	
sb207	-0.042	
zn214	0.003	
pb220	0.029	
cd228	-0.0008	peak-noisy
ni232	0.001	peak-noisy
ba233	-0.001	peak-noisy
fe238	-0.003	window-edge
mn258	0.000	window-edge
cr268	0.008	window-edge
be313	0.0017	window-edge
cu325	0.0056	
al396	-0.011	peak-noisy

SAMPLE #7 1121 7/15/94

RINSE (MDL or SD ?

tl191	0.294	
[illegible]	[illegible]	
cr268	0.977	
be313	0.4690	
cu325	0.4584	
al396	3.064	peak-noisy

MSD

SAMPLE #13 1150 7/15/94

tl191	0.196	window-edge
se196	0.049	peak-noisy
as197	0.042	
sb207	-0.051	
zn214	0.625	
pb220	3.811	
cd228	-0.0019	peak-noisy
ni232	0.039	
ba233	0.721	
fe238	1.374	
mn258	0.812	
cr268	0.087	
be313	0.0021	window-edge
cu325	0.0127	
al396	2.056	

2674334

SAMPLE #14 1155 7/15/94

tl191	0.068	peak-noisy
se196	0.108	window-edge
as197	0.076	
sb207	-0.025	window-edge
zn214	0.707	
pb220	6.234	
cd228	-0.0019	peak-noisy
ni232	0.024	peak-noisy
ba233	0.923	
fe238	4.297	
mn258	0.836	
cr268	0.197	
be313	0.0023	window-edge
cu325	0.0219	

2674334

zn214	1.992	
pb220	2.035	
cd228	1.0242	
ni232	1.021	
ba233	2.066	
fe238	2.032	
mn258	1.014	
cr268	2.053	
be313	1.0127	
cu325	1.0025	
al396	0.966	

SAMPLE #17 — 1210 7/15/94

tl191	0.092	peak-noisy
se196	0.036	
as197	0.065	peak-noisy
sb207	-0.022	peak-noisy
zn214	0.003	
pb220	0.009	
cd228	-0.0020	peak-noisy
ni232	0.003	peak-noisy
ba233	-0.001	peak-noisy
fe238	0.001	
mn258	0.001	
cr268	0.005	window-edge
be313	0.0021	window-edge
cu325	0.0000	peak-noisy
al396	0.071	

SAMPLE #18 — 1215 7/15/94

tl191	0.012	window-edge
se196	0.106	
as197	0.027	
sb207	-0.043	peak-noisy
zn214	0.113	
pb220	0.024	
cd228	-0.0037	peak-noisy
ni232	0.003	
ba233	4.762	
fe238	1.805	
mn258	0.056	
cr268	0.003	
be313	0.0021	
cu325	0.1607	
al396	1.641	

SAMPLE #19 — 1221 7/15/94

tl191	0.017	window-edge
se196	0.067	peak-noisy
as197	0.109	peak-noisy
sb207	-0.052	window-edge
zn214	0.041	
pb220	0.018	
cd228	-0.0010	
ni232	0.007	peak-noisy
ba233	3.565	
fe238	0.057	
mn258	0.018	
cr268	0.003	window-edge
be313	0.0019	window-edge

	al396	0.447	

SAMPLE #20 1226 7/15/94

tl191	0.048	
se196	0.035	peak-noisy
as197	0.073	peak-noisy
sb207	-0.034	window-edge
zn214	0.284	
pb220	0.029	peak-noisy
cd228	-0.0014	peak-noisy
ni232	0.013	peak-noisy
ba233	0.016	
fe238	1.263	
mn258	0.027	
cr268	0.036	
be313	0.0017	window-edge
cu325	0.0390	
al396	0.609	

SAMPLE #21 1231 7/15/94

tl191	0.021	peak-noisy
se196	0.026	peak-noisy
as197	0.054	
sb207	-0.034	
zn214	0.010	
pb220	0.027	
cd228	-0.0029	peak-noisy
ni232	-0.000	
ba233	2.527	
fe238	0.392	
mn258	0.027	
cr268	0.011	peak-noisy
be313	0.0017	window-edge
cu325	0.0032	
al396	0.353	

SAMPLE #22 1236 7/15/94

tl191	0.083	peak-noisy
se196	0.012	window-edge
as197	0.221	
sb207	0.020	peak-noisy
zn214	0.065	
pb220	0.033	
cd228	-0.0010	peak-noisy
ni232	0.052	
ba233	0.066	
fe238	0.608	
mn258	0.013	
cr268	0.147	
be313	0.0021	
cu325	0.0127	
al396	4.708	

SAMPLE #23 1241 7/15/94

tl191	0.045	peak-noisy
se196	0.067	
as197	0.110	
sb207	-0.033	peak-noisy
zn214	0.156	
pb220	0.031	peak-noisy

268005	ni232	0.006	peak-noisy
	ba233	1.235	
	fe238	0.442	
	mn258	0.029	
RE	cr268	0.008	
	be313	0.0021	window-edge
	cu325	0.0526	
	al396	0.709	peak-noisy

SAMPLE #24 1246 7/15/94

268007	tl191	0.131	
	se196	0.064	peak-noisy
	as197	0.128	
	sb207	-0.025	peak-noisy
	zn214	0.583	
	pb220	0.066	
	cd228	0.0002	
	ni232	0.025	
	ba233	0.499	
	fe238	2.216	
	mn258	0.070	
	cr268	0.028	
	be313	0.0025	window-edge
	cu325	0.1391	
	al396	22.061	

SAMPLE #25 1251 7/15/94

J268012	tl191	0.058	
	se196	0.079	
	as197	0.097	peak-noisy
	sb207	-0.045	
	zn214	0.334	
	pb220	0.061	
	cd228	0.0008	
	ni232	0.005	
	ba233	1.409	
	fe238	1.380	
	mn258	0.195	
	cr268	0.010	peak-noisy
	be313	0.0019	window-edge
	cu325	0.1311	
	al396	0.764	peak-noisy

SAMPLE #26 1257 7/15/94

268166	tl191	0.025	peak-noisy
	se196	0.067	peak-noisy
	as197	0.050	window-edge
	sb207	-0.045	
	zn214	0.010	peak-noisy
	pb220	0.014	
	cd228	-0.0005	peak-noisy
	ni232	0.001	peak-noisy
	ba233	0.231	
	fe238	0.316	
	mn258	0.039	
	cr268	0.007	peak-noisy
	be313	0.0017	window-edge
	cu325	0.0035	
	al396	1.367	

	tl191	0.263	window-edge
	se196	0.049	peak-noisy
	as197	0.204	
268176	sb207	-0.007	window-edge
	zn214	0.361	
	pb220	0.061	window-edge
	cd228	-0.0012	peak-noisy
	ni232	0.077	
	ba233	-0.002	
	fe238	24.137	
	mn258	2.029	
	cr268	0.030	window-edge
	be313	0.0021	window-edge
	cu325	0.0455	
	al396	0.852	

SAMPLE #28 1307 7/15/94

S2

tl191	1.941	
se196	1.966	
as197	2.015	
sb207	2.014	
zn214	2.035	
pb220	2.080	
cd228	1.0254	
ni232	1.001	
ba233	1.996	
fe238	2.017	
mn258	1.013	
cr268	2.051	
be313	0.9813	
cu325	1.0093	
al396	1.003	

SAMPLE #29 1312 7/15/94

RB4K

tl191	0.056	peak-noisy
se196	0.079	
as197	0.051	peak-noisy
sb207	-0.008	
zn214	-0.003	
pb220	0.009	peak-noisy
cd228	-0.0015	peak-noisy
ni232	-0.005	peak-noisy
ba233	-0.000	peak-noisy
fe238	0.007	
mn258	0.001	window-edge
cr268	0.007	peak-noisy
be313	0.0017	window-edge
cu325	0.0012	peak-noisy
al396	0.070	

SAMPLE #30 1317 7/15/94

268814

tl191	0.114	
se196	0.053	window-edge
as197	0.119	peak-noisy
sb207	-0.057	window-edge
zn214	0.418	
pb220	0.043	window-edge
cd228	0.0025	
ni232	0.007	peak-noisy
ba233	0.265	

mn258	1.244	
268814 cr268	0.008	peak-noisy
be313	0.0019	window-edge
cu325	0.0183	
al396	1.552	window-edge

SAMPLE #31 1323 7/15/94

tl191	0.025	peak-noisy
se196	0.079	window-edge
268815 as197	0.081	
sb207	-0.043	peak-noisy
zn214	0.006	
pb220	0.025	peak-noisy
cd228	0.0002	
ni232	-0.001	peak-noisy
ba233	0.054	
fe238	0.228	
mn258	0.187	
cr268	0.006	peak-noisy
be313	0.0019	
cu325	0.0044	
al396	1.021	

SAMPLE #32 1328 7/15/94

tl191	0.054	peak-noisy
268816 se196	0.009	peak-noisy
as197	0.033	peak-noisy
sb207	-0.065	
zn214	0.598	
pb220	0.135	
cd228	0.0076	
ni232	0.076	
ba233	0.280	
fe238	4.750	
mn258	0.969	
cr268	0.012	window-edge
be313	0.0017	
cu325	0.0916	
al396	0.798	

SAMPLE #33 1333 7/15/94

tl191	0.045	window-edge
268817 se196	0.067	peak-noisy
as197	0.046	window-edge
sb207	-0.068	peak-noisy
zn214	0.033	
pb220	0.015	
cd228	-0.0020	peak-noisy
ni232	-0.002	peak-noisy
ba233	0.091	
fe238	0.240	
mn258	0.130	
cr268	0.002	peak-noisy
be313	0.0015	window-edge
cu325	0.0095	
al396	0.310	peak-noisy

SAMPLE #34 1338 7/15/94

tl191	0.056	
268818 se196	0.054	

sb207	-0.052	peak-noisy
zn214	0.012	
pb220	0.013	peak-noisy
cd228	-0.0014	window-edge
ni232	0.008	peak-noisy
ba233	0.173	
fe238	0.088	
mn258	0.022	
cr268	0.009	peak-noisy
be313	0.0015	window-edge
cu325	0.0035	
al396	0.703	peak-noisy

SAMPLE #35 1343 7/15/94

tl191	1.972	
se196	2.158	
as197	2.048	
sb207	2.002	
zn214	2.015	
pb220	1.994	
cd228	1.0101	
ni232	1.014	
ba233	2.005	
fe238	2.004	
mn258	1.003	
cr268	2.029	
be313	0.9891	
cu325	1.0013	
al396	0.955	

SAMPLE #36 1348 7/15/94

tl191	0.016	
se196	0.043	window-edge
as197	0.086	
sb207	-0.019	window-edge
zn214	-0.001	peak-noisy
pb220	0.033	peak-noisy
cd228	-0.0003	window-edge
ni232	-0.003	peak-noisy
ba233	0.003	peak-noisy
fe238	0.005	
mn258	0.001	
cr268	0.006	
be313	0.0013	window-edge
cu325	0.0009	
al396	0.095	

SAMPLE #37 1353 7/15/94

tl191	1.710	
se196	1.769	
as197	1.794	
sb207	1.775	
zn214	1.679	
pb220	2.180	
cd228	0.8654	
ni232	0.794	
ba233	1.758	
fe238	171.622	
mn258	0.869	
cr268	1.702	

ICS	cu325	0.8477	
	al396	438.326	

SAMPLE #38 1358 7/15/94

tl191	-0.006	peak-noisy
se196	0.040	peak-noisy
as197	0.045	peak-noisy
sb207	-0.039	peak-noisy
zn214	-0.006	window-edge
pb220	0.012	
cd228	-0.0019	window-edge
ni232	0.001	peak-noisy
ba233	-0.001	window-edge
fe238	0.007	
mn258	0.000	window-edge
cr268	0.005	
be313	-0.0013	window-edge
cu325	-0.0053	
al396	0.010	peak-noisy

SAMPLE #39 1403 7/15/94

tl191	0.052	peak-noisy
se196	0.028	peak-noisy
as197	0.070	peak-noisy
sb207	-0.057	
zn214	-0.005	peak-noisy
pb220	0.017	peak-noisy
cd228	-0.0012	peak-noisy
ni232	-0.004	
ba233	-0.000	peak-noisy
fe238	0.004	peak-noisy
mn258	-0.000	peak-noisy
cr268	0.007	
be313	-0.0017	window-edge
cu325	-0.0041	peak-noisy
al396	0.006	peak-noisy

SAMPLE #40 1408 7/15/94

tl191	0.051	peak-noisy
se196	0.070	peak-noisy
as197	0.086	peak-noisy
sb207	-0.072	
zn214	-0.005	peak-noisy
pb220	0.011	peak-noisy
cd228	-0.0012	
ni232	-0.006	window-edge

SAMPLE #40 1421 7/15/94

tl191	0.068	
se196	0.072	peak-noisy
as197	0.045	window-edge
sb207	-0.051	peak-noisy
zn214	-0.002	peak-noisy
pb220	0.023	
cd228	-0.0010	window-edge
ni232	-0.004	
ba233	0.003	peak-noisy
fe238	0.004	peak-noisy
mn258	0.000	peak-noisy
cr268	0.004	window-edge

PRO BLANK RERUN

cu325	-0.0009	peak-noisy
al396	0.008	window-edge

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
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AA DATA BOOK COVERSHEET

Explanation of Acronyms

RB = Reagent Blank PB = Procedure Blank
RLVS = Reporting Limit Verification Standard
SRM = Standard Reference Material (from an outside source)
S2 = Continuing Calibration Standard
PS = Procedure Standard
MS/MSD = Matrix Spike/ Matrix Spike Duplicate

Values in the "Abs or Conc" column are concentrations for all parameters except Selenium, and Mercury which are abs. values.

On parameters where results are read out in concentration a three point curve is run to show linearity. The instrument is then calibrated to the high standard, and concentrations are read directly off the instrument.

On Mercury and Selenium, a three point curve is run and the results are obtained as follows:

Conc.= (Abs. of sample - blk) x response factor x dilution

All sample concentrations are in mg/L unless otherwise noted.

ATOMIC ABSORPTION

26

Metal	Spl No.	std abs	conc set	abs or conc	abs-blank	dilution	digestion wt/vol	Result	* mg/L
Na	1.000	0.341		1.000			/		
	0.500			0.506			/		
	0.250			0.250			/		
	RLVS			0.370			/		
	ICV			0.466		100X	/		
	PBLK			0.145			/		
	LCS			0.870			/		
	266126			0.225		10X	/		
	266356			0.463		10X	1.88g / 100	245	mg/g
	266357			0.389		10X	1.37g / 100	284	
	358			0.524		10X	2.00g / 100	262	
	359			0.316		10X	1.51g / 100	209	
	360			0.224		100X	1.55g / 100	145	
	361			0.582		10X	1.63g / 100	357	
	362			0.451		10X	1.43g / 100	315	
	363			0.440		10X	2.07g / 100	216	
	364			0.371		100X	2.00g / 100	1860	
	365			0.366		10X	1.91g / 100	192	mg/g
	0.500			0.509			/		
	BLK			0.000			/		
				7/7/94	Mark Gandy		/		
Ag	BLK			0.000			/		
	2.000			2.020			/		
	1.00			1.031			/		
	0.50			0.517			/		
	RLVS	0.040		0.042			/		
	SRM	13121		0.475	out of control		Rerun 0.422 OK		
	PrepBlk	I.V. = 0.384 C.C. = 0.337-0.431		0.006			/	<0.040	
	Rerun	1.000		1.072			/	7/19/94 106 % (107.2%)	
	267075			0.000			/	<0.040	
MS	267075	1.000		1.091		(105.1%)	/	1.051	

notes Na - ANALYTE > 4X SPIKE CONC.

*mg/L unless otherwise noted

NET Analyst: M Ness Date: 7/19/94

ATOMIC ABSORPTION

17

Metal	Spl No.	std abs	conc set	abs or conc	abs-blank	dilution	digestion wt/vol	Result	mg/L*
MSD	267075	1.000		1.022		(102.2%)	/	1.022	
	~~267145~~ M.R. 7/11/94						/		
	266594			0.000			/	<0.040	
	266994			0.000			/	~~<0.040~~ M.R. 7/18 <0.04	
	267132			0.290		10x	/	Reanalyze straight ↓	
	267133			1.311		1000x	/		
	267146			0.009			/	<0.040	
	267663			0.011			/	<0.040	
	267147			0.007			/	<0.040	
	267150			0.004			94 /	<0.040	
	267283			0.008		Ag 7/18	/	<0.040	
				M - Rinse 7/11/94			/		
Ag	BLK			0.000			/		
	2.000			2.050			/	2.050	
	1.000			1.028			/	1.028	
	0.50			0.513			/	0.513	
	SRM	13121		0.404	T.V. = 0.384		/	0.404	
	ProBlK			0.011			/	<0.040	
	Pro Std	1.000		1.108	(~~100.7%~~) M.R. 7/11/94		/	~~1.097~~ M.R. 7/18 (110.8%)	
	267239			0.023			100ml/2.07g	<2.0	
MS	267239			1.185			100ml/2.09g	~~56.7~~	55.6
MSD	267239			1.153			100ml/2.69g	42.0	
	267323			0.050			100ml/2.71g	<2.0	
	267252			0.042			100ml/2.10g	2.0	
	267240			0.028			100ml/2.48g	~~1.1~~ M.R. 7/11 <2.0	
	267243			0.018			100ml/2.58g	<2.0	
	267242			0.000			100ml/2.49g	<2.0	
	267241			0.016			100ml/2.21g	<2.0	
	~~0.50~~ 1.000 CCV			0.940		(94.0%)	" / "	0.940	
	BLK			0.000			" / "	<2.0	
	267280			0.029			100ml/2.11g	<2.0	
	267324			0.035			100ml/2.67g	<2.0	

notes

*mg/L unless otherwise noted

NET Analyst: M. Rose Date: 7/19/94

ATOMIC ABSORPTION

28

Metal	Spl No.	std abs	conc set	abs or conc	abs-blank	dilution	digestion wt/vol	Result	mg/L
Ag	267132			0.293		10X	1/1	2.93	
	267133			1.869		1000X	1/1	1870	
	1.000	CCV		0.940		(94.0%)	1/1	0.940	
	blk			0.000			1/1	<2.0	
				M. Kiss 7/11/94			/		
Hg	BLK			0.001			1/1		
	0.0010			0.016	Rf = 0.05381		1/1		
	0.0025			0.042	CC = 0.99965		1/1		
	0.0050			0.090			1/1		
	RLVS			0.007			1/1		
	ICV			0.029	T.V. = 0.002	2X	1/1		
	267239			0.007			100ml/3.55g	<0.02	
MS	267239			0.050	Rerun MS/MSD out		100ml/3.67g		
MSD	267239			0.025	*		100ml/3.95g		
	267240			0.015	+ Rerun		100ml/2.22g	0.04	
	267241			0.002			100ml/1.73g	<0.02	
	267041			0.001		2X	1/1	<0.0004	
	267042			0.002		2X	1/1	<0.0004	
	267243			0.012	+ Rerun		100ml/2.54g	0.02	
	267323			0.003			100ml/3.27g	<0.02	
TCLP	266994			0.001			1/1	<0.0004	
	267252			0.005			100ml/2.18g	<0.2	<0.02
	267324			0.002			100ml/3.01g	<0.2	<0.02
	267242			0.004			100ml/2.49g	<0.2	<0.02
	267043			0.001			1/1	<0.0002	
	267796			# over curve			100ml/2.22g		
	267280			0.022	* Rerun		100ml/1.96g	0.06	
	0.0025			0.051		(108%)	1/1	0.0027	
	blk			0.001			1/1	<0.0002	
					M. Kiss 7/11/94		/		
		* - Because SRM is out of Control the results							
		Cannot be reported.					/		

notes

*mg/L unless otherwise noted

NET Analyst: M. Kiss Date: 7/19/94

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

METALS PREP COVER PAGE

Methods used for preps:

Total Metals aqueous - SW846 method #3010

Total Metals non-aqueous - SW846 method #3050

Silver aqueous - SW846 #3010 (modified to included the addition of NH4OH to basify samples)

Silver non-aqueous - SW846 #3050 (modified to include the addition of NH4OH to basify samples)

GFAA aqueous - SW846 method #3020

Mercurys - SW846 method ~~#7470~~ Rec 7471 6-30-94

* All prep batches include a prepped blank and standard.

NET DIGESTION LOG

DIGESTION TYPE: Hg DATE PREPPED: 7/13/94

Analyst Initials: RR Prep Batch # 363

	SAMPLE #	INT. VOL.	FIN. VOL.	SPK	COMMENTS
	268166	100ml	100ml		
	267530	↓	↓		
	267716	↓	↓		
	267796	1.04g	100ml		
	267520	100ml	100ml		
	267754				
MSD	267075				
	267753				
MS	267075				
	267075	↓			
T	267741	2	1		
	267881	100ml	100ml		
T	267739	1	2		
T	267740	1	2		
T	267737	1	2		
T	267738	1	2		
T	267736	1	2		
	0.0025	100ml	100ml		
	0.0025	↓	↓		
	PrepBlk	↓	↓		
	PrepBlk	↓	↓		

ATOMIC ABSORPTION

Metal	Spl No.	std abs	conc set	abs or conc	abs-blank	dilution	digestion wt/vol	Result	mg/L
Ag	267143			0.000			/	<0.040	
	144			0.000			/	<0.040	
	145			0.000			/	<0.040	
	146			0.000			/	<0.040	
	147	0.171		0.000	0.000		/	<0.040	
	148	150	MS	7/13/94	0.000		/		
	267157			0.000			/	<0.040	
	158			0.013			/	<0.040	
	267881F			0.000			/	<0.040	
	MS			1.020			/		
	MSD	0.171		1.100	0.000		/		
				Mark Busby 7/13/94			/		
Hg	PrepBlk			0.001			1/1		
	0.0010			0.020	Rf = 0.04944		1/1		
	0.0025			0.051	cc = 0.99996		1/1		
	0.0050			0.101			1/1		
	RLVS			0.010			1/1		
	SRM1549			0.119	T.V. = ~~0.4880~~ 0.0049		1/1	0.0058	99% C.I.
	267143			0.001	c.c. = 0.0639 − 0.0057 M.R. 7/14/94		1/1	<0.0002	
	267140			0.001			1/1	<0.0002	
	267144			0.001			1/1	<0.0002	
MS	267144	0.0025		0.050			1/1	0.0024	(96%)
MSD	267144	0.0025		0.051			1/1	0.0025	(100%)
	267142			0.002			1/1	<0.0002	
	267139			0.002			1/1	<0.0002	
	267141			0.001			1/1	<0.0002	
F	267147			0.001			1/1	<0.0002	
	267152			0.001			1/1	<0.0002	
	267151			0.001			1/1	<0.0002	
	267283			0.001			1/1	<0.0002	
F	267150			0.001			1/1	<0.0002	
F	267881			0.001			1/1	<0.0002	

notes Hg SRM WITHIN 99% CONFIDENCE LIMITS Mark Busby

ICV is 0.1 mg/L above the control limit all samples < R.L. all samples above will be reanalyzed.

Approved: 7-19-94

*mg/L unless otherwise noted

NET Analyst: M. Nunn Date: 7/19/94

ATOMIC ABSORPTION

Metal	Spl No.	std abs	conc set	abs or conc	abs-blank	dilution	digestion wt/vol	Result	* mg/L
E	267146			0.001			1 / 1	<0.0002	
	267138			0.001			1 / 1	<0.0002	
F	267145			0.000			1 / 1	<0.0002	
	0.0025	CCV		0.048			1 / 1	0.0023	(92%)
	PrepBlk			0.001			1 / 1	<0.0002	
	267075			0.001			1 / 1	<0.0002	
MS	267075	0.0025		0.051			1 / 1	0.0025	(100%)
MSD	267075	0.0025		0.052			1 / 1	0.0025	(100%)
TCLP	267741			0.001			2 / 1	<0.0004	
	267753			0.001			1 / 1	<0.0002	
	267530			0.002			1 / 1	<0.0002	
	268166			0.001			1 / 1	<0.0002	
*	267796			0.001			100ml / 1.04g		Add 1.0 ml to 100.0 ml
:	267716			0.002			1 / 1	<0.0002	
TCLP	267737			0.001			2 / 1	<0.0004	
	0.0025	CCV		0.049			1 / 1	0.0024	(96%)
	PrepBlk			0.001			1 / 1	<0.0002	
TCLP	267738			0.001			2 / 1	<0.0004	
TCLP	267739			0.001			2 / 1	<0.0004	
TCLP	267740			0.001			2 / 1	<0.0004	
TCLP	267736			0.001			2 / 1	<0.0004	
*	267520			0.013			1 / 1	0.0006	✓
	267754			0.001			1 / 1	<0.0002	
	267881			0.001			1 / 1	<0.0002	
	0.0025	CCV		0.049			1 / 1	0.0024	(96%)
	PrepBlk			0.001			1 / 1	<0.0002	
* - Above R.L. (Rerun)				M Rien 7/13/94			/		
							/		
							/		
							/		
							/		
							/		

notes

*mg/L unless otherwise noted

NET. Analyst: M. Rien Date: 7/19/94

SAMPLE
PREPARATION LOG

Sim. - VOAs

1

INSTRUMENT
INJECTION LOG

Semi-VOAs

Inst "D"

NET-BARTLETT DIVISION : SAMPLE PREP LOG

n QA	Spike I.D.	Spike Amt.	Batch QA	Spike I.D.	Spike Amt.
BLK TCP	21695	1ml	LCSD	71725	1ml
LCS/~~LCSD~~ TCP	21609	1ml			
	21695	1m			

21695 1ml

Batch #: 244

Date Started: 7/5/94 BNA SEP

Analyst:

Sample #	Date Extracted	Blank	Surrogate I.D.	Surrogate Amount	Sample Amount	Final Volume	Adjusted Final Vol.	Date Conc./Analyst	Cleanup Procedure	Comments
266777	7/5/94		21697	1ml	1000ml	1ml				witness C. Stecker TCP
267075	↓		↓	↓	↓	↓				
267162			21742	1ml	800ml					
267189					1000ml					
267190					800ml					
267191										
267192										
267193										
267194							5ml	LQS 7-6-94		
267195										
267196	↓		↓	↓	↓	↓				
266994	7-7-94	7-7-94	21742	1ml	~~1000~~ 150ml	1ml				witness C. Stecker
267283					800ml					↓
267284	↓		↓	↓	↓	↓				
267736	7-11-94	7-11-94	21742	1ml	150ml					witness C. Stecker 7-11-94
267737										
267738										
267739										
267740										
267741	↓		↓	↓	↓	↓				

Reviewed by: _____

2 Acetonaphthalene
Hexachloroethane

NET **HP 5970** INSTRUMENT ID: 700 2D

Bartlett Division

GC/MS INJECTION LOG

ANALYST: RLM

DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
-24-94	D8111		265287	ok	08270			Sep 6-22-94 fV=1.0
↓	D8112		265287MS	ok	↓	↓		↓ ↓ ↓
	D8113		265287MSD	ok				
	D8114		265691	Not Run				
	D8115		265693	ok		↓		
	D8116		265287DL	ok		5X		↓ ↓ fV=5.0
	D8117		264206 Re-Ex					Sep 6-14-94 fV=1.0
	D8118		263283					Sox 6-14-94
	D8119		263284			↓		
↓	D8120		263988 ↓		↓	263988		↓ ↓ ↓
-14-94	D8121		↓	M/C				
-27-94	D8122		30P050		DFTPP 30P050	Passed scan# M/G		
↓	D8123		↓		↓	30P050		
	D8124		↓		↓	Passed scan#	Lal 21128	
	D8125		STD050		08270	BNA Std 50ppm	Lal 21169	
	D8126		264457		↓			Sep 6-20-94 fV=1.0
	D8127		30P050		DFTPP	Passed scan#		
	D8128	ok	STD050	CALIBRATION CURVE	08270	BNA Std 50ppm		
	D8129	ok	STD020			↓ 20ppm		
↓	D8130	ok	STD080		↓	80ppm		

Reviewed by:

Page No. 55

NET

Bartlett Division

HP 5970
GC/MS INJECTION LOG

INSTRUMENT ID: 7002D

ANALYST: RLA

DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
6-27-94	08131		ST0120		08270	BNA Std 120ppm		
↓	08132		ST0160		↓	↓ 160ppm		
	08133		ICVS			ICVS		
	08134		BNA Blk					Sox 6-13-94 fv=1.0
	08135		265512					~~Sox~~ Sep 6-20-94 RLA
	08136		265680DL					Sox 6-13-94 fv=5.0
6-28-94	08137		0 DD050		DFTPP	Paned scan # 90	1ul 21128	
	08138		ST0050		08270	BNA Std	1ul 21619	
	08139		264457RE					Sep 6-20-94
	08140		265512RE	s/o				↓ ↓
	08141		BNA Blk	ok		BNA Blk		Sep 6-27-94 fv=1.0
	08142		265857	ok				↓ ↓
	08143		265680	ok				Sox 6-13-94 fv=5.0
	08144		265858	ok				Sep 6-27-94 fv=1.0
	08145		265859	ok				
	08146		265860	R/R @10x				
	08147		265377	ok				
	08148		266017	ok				
	08149		266018	ok				
↓	08150		266021	ok	↓			↓ ↓ ↓

Reviewed by:

NET | **HP 5970** | **INSTRUMENT ID:** 7002D

Bartlett Division | **GC/MS INJECTION LOG** | **ANALYST:** RLA

DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
7-5-94	08191		266496 RE		08270			SOX 6-18-94 fv=1.0
↓	08192		Blk.		↓	Blank		
7-6-94	08193		8DP050		DFTPP	Panelscan# 87	1ul 21128	
	08194		↓	ok	↓	Panelscan#87	↓	
	08195		STP050	ok	08270	BNA std 50ppm	1ul 21619	
	08196		260176RE-Ex.	ok				Sep 5-19-94 fv=1.0
	08197		SVBLK	ok		BNA Blank		Sep 7-5-94 fv=1.0
	08198		BNA LCS	R/R		LCS 100ppm		
	08199		BNA LCSDUP	↓		LCS DUP 100ppm		
	08200		266777	ok				
	08201		267075	R/R I/O		E + E level IV		
	08202		267162	R/RSC ok				
	08203		267189	↓ ok				
	08204		267190	ok				
	08205		267191	ok				
	08206		267192	S/O				
	08207		267193	ok				
	08208		267194	S/O				fv=5.0
	08209		267195	R/R10X				fv=1.0
↓	08210		267196	R/R I/O	↓	↓		↓

Reviewed by:

Page No. 59

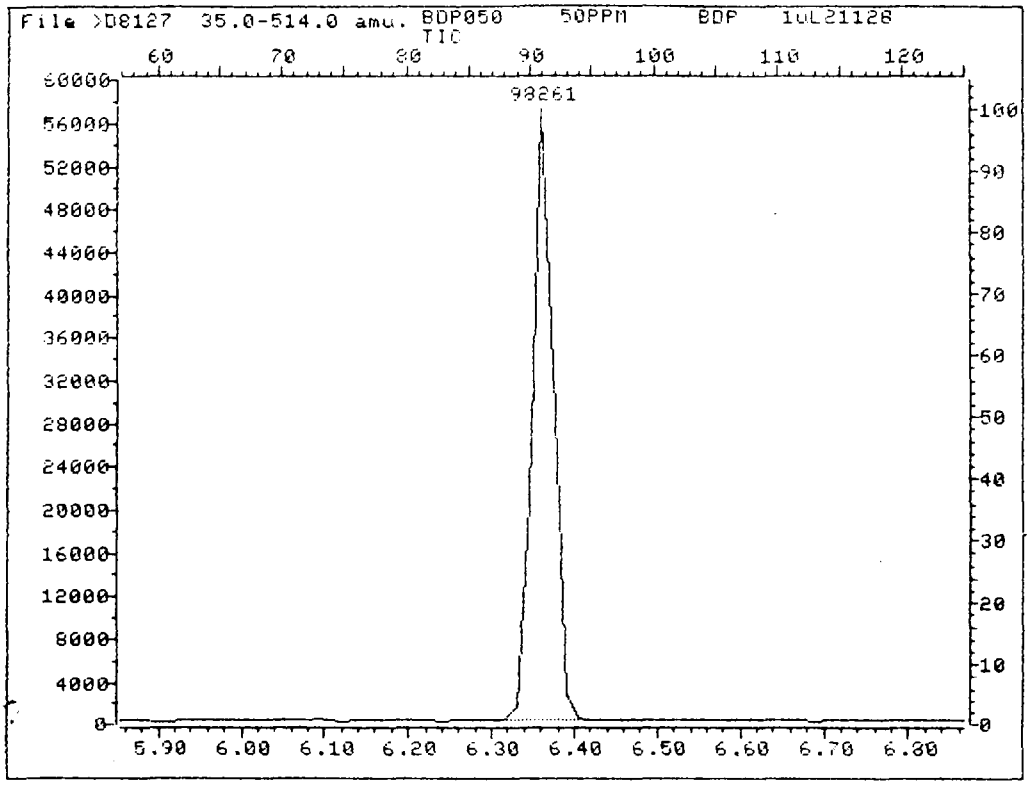
NET | **HP 5970** | **INSTRUMENT ID:** 7002D

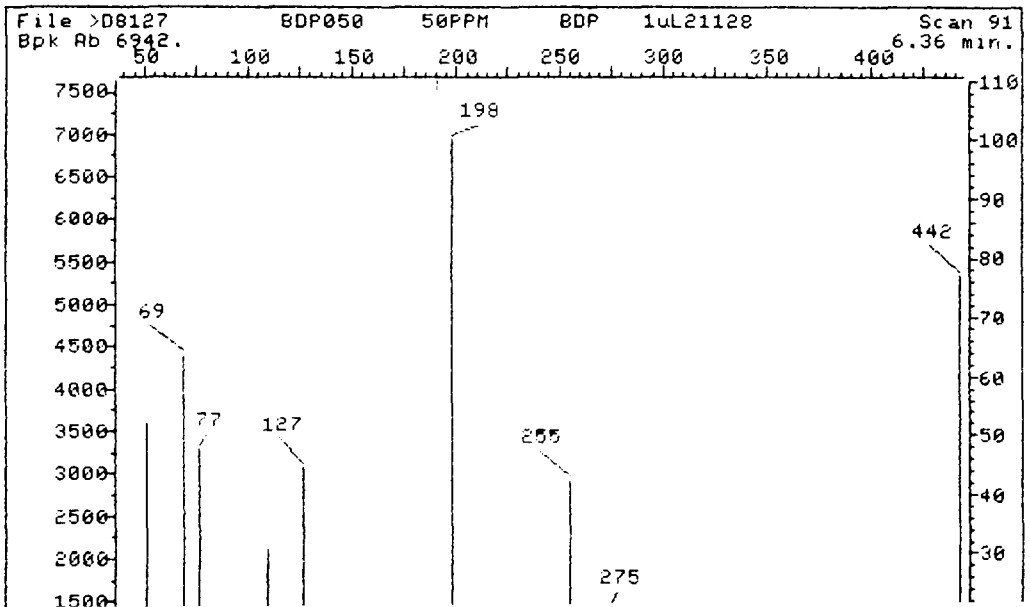
Bartlett Division | **GC/MS INJECTION LOG** | **ANALYST:** RLA

DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
7-7-94	08211		BOP050		OFTPP	SDP		
↓	08212		↓		↓	↓		
	08213		BOP050	ok		Pencil scan # 85	1ul 21178	
	08214		STD050	ok	08270	BNA Std 50ppm	1ul 21419	
	08215		SUBLK	ok		BNA Blank		Sep 7-5-94 fv=1.0
	08216		LCS100	ok		BNA LCS 100ppm		↓ ↓
	08217		LCS100 DUP	N/G		↓ DUP		
	08218		BNA Blk	ok		BNA Blk		Sox 7-6-94
	08219		LCS100	R/R		BNA LCS 100ppm		↓
	08220		267252 DL	use 1X				fv=10
	08221		267280 DL	↓				fv=10
	08222		267323 DL	ok				fv=50
	08223		267324 DL	ok		↓		↓ ↓ fv=100
	08224		267075RE	ok		E+E Level IV		Sep 7-5-94 fv=1.0
	08225		267162 DL	ok		〃		fv=5.0
	08226		267189 DL	ok		5X		↓ ↓ ↓
	08227		267252	ok		1X		Sox 7-6-94 fv=1.0
	08228		267280 RE	ok		1X		↓
	08229		267323	N/G				fv=5.0
↓	08230		267324	N/G	↓	↓		↓ ↓ fv=10

Reviewed by:

nec/mslog.frm


File >D8127 35.0-514.0 amu. BDP050 50PPM BDP 1uL21128
TIC
93261
60000
56000
52000
48000
44000
40000
36000
32000
28000
24000
20000
16000
12000
8000
4000
0
100
90
80
70
60
50
40
30
20
10
0
60 70 80 90 100 110 120
5.90 6.00 6.10 6.20 6.30 6.40 6.50 6.60 6.70 6.80


File >D8127 BDP050 50PPM BDP 1uL21128 Scan 91
Bpk Ab 6942. 6.36 min.
198
442
69
77
127
255
275
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
110
100
90
80
70
60
50
40
30
50 100 150 200 250 300 350 400

>D8127 BDP050 50PPM BDP 1uL21128
91

File: >D8127 Scan #: 91 Retn. time: 6.36

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.00	46.00	99.95	21.00	156.10	98.00	207.20	167.00	276.15	186.00
39.00	370.00	100.95	129.00	157.20	24.00	208.10	45.00	277.15	101.00
41.00	36.00	102.95	38.00	159.00	16.00	211.15	63.00	283.15	17.00
43.90	254.00	104.10	66.00	160.10	43.00	216.15	24.00	285.30	17.00
44.90	22.00	105.10	75.00	161.15	59.00	217.05	343.00	293.15	27.00
49.05	31.00	107.00	788.00	162.05	22.00	218.20	41.00	296.15	340.00
49.95	905.00	108.10	145.00	165.15	46.00	221.20	493.00	297.15	40.00
50.95	3603.00	110.00	2124.00	166.05	39.00	223.20	75.00	303.30	40.00
51.95	178.00	111.00	288.00	167.05	268.00	224.20	717.00	314.15	20.00
52.95	12.00	112.05	39.00	168.05	157.00	225.20	196.00	315.15	34.00
56.00	106.00	116.05	46.00	172.10	27.00	226.10	22.00	316.15	21.00
57.00	285.00	117.05	496.00	173.10	41.00	227.15	271.00	323.20	120.00
61.00	54.00	117.95	41.00	174.10	51.00	228.25	39.00	324.10	20.00
62.05	39.00	122.10	55.00	175.10	88.00	229.15	55.00	327.25	19.00
63.05	146.00	123.00	86.00	177.15	48.00	231.25	30.00	333.15	12.00
65.05	63.00	124.00	38.00	178.25	16.00	234.05	22.00	334.20	69.00
68.95	4397.00	125.00	37.00	179.05	199.00	235.20	24.00	335.20	22.00
73.00	23.00	127.00	3074.00	180.15	128.00	237.20	20.00	346.25	22.00
74.00	303.00	128.15	251.00	181.15	74.00	239.10	11.00	352.20	46.00
75.00	519.00	129.05	1228.00	185.15	95.00	241.20	13.00	354.20	33.00
76.00	177.00	130.05	102.00	186.10	731.00	242.20	40.00	365.15	140.00
77.00	3280.00	134.05	38.00	187.10	219.00	243.25	43.00	366.05	21.00
78.00	235.00	135.05	111.00	188.20	18.00	244.25	644.00	372.20	64.00
79.05	200.00	136.10	33.00	189.10	46.00	245.25	77.00	373.10	15.00
80.05	168.00	137.10	52.00	191.20	29.00	246.15	100.00	383.20	18.00
81.05	243.00	140.00	14.00	192.10	57.00	247.15	23.00	390.10	13.00
82.05	52.00	141.10	137.00	193.10	77.00	249.05	24.00	402.20	26.00
83.05	69.00	142.10	48.00	194.05	14.00	255.20	2926.00	403.20	34.00
85.05	35.00	143.00	28.00	196.15	215.00	256.20	405.00	404.00	17.00
85.95	56.00	146.05	26.00	196.85	36.00	257.20	33.00	421.10	38.00
87.00	27.00	147.15	65.00	198.15	6942.00	258.20	145.00	422.30	42.00
91.00	59.00	148.05	128.00	199.15	465.00	259.20	27.00	423.20	293.00
92.00	49.00	149.05	30.00	201.55	34.00	265.15	52.00	424.25	56.00
93.00	287.00	151.75	18.00	203.20	39.00	266.05	12.00	441.25	758.00
94.00	27.00	153.10	43.00	204.20	161.00	273.20	95.00	442.25	5349.00
98.05	186.00	154.00	34.00	205.20	314.00	274.20	242.00	443.15	1023.00
99.05	209.00	155.10	63.00	206.20	1295.00	275.20	1452.00	444.15	94.00

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 7002D

Contractor: NET-Midwest, INC. Calibration Date: 07/12/94

Contract No: 050031

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>08129	>08128	>08130	>08131	>08132				
	RF	RF	RF	RF	RF	$\overline{RF}$			
Compound	20.00	50.00	80.00	120.00	160.00		% RSD	CCC	SPCC
Pyridine	1.52993	1.79961	1.61404	1.66454	1.60646	1.64292	6.083		
N-nitrosodimethylamine	.72279	.81676	.74299	.75496	.76569	.76144	4.645	*	
2-Fluorophenol	1.36742	1.34986	1.27605	1.24520	1.12456	1.27270	7.610		(Conc=40.0,100.0,160.0,240.0,320.
Phenol-d6	1.77437	1.83577	1.69119	1.57964	1.45114	1.66642	9.233		(Conc=40.0,100.0,160.0,240.0,320.
Phenol	2.10310	2.05879	1.95729	1.75951	1.54481	1.88470	12.286	*	
bis(2-Chloroethyl)ether	1.65773	1.64350	1.57439	1.57257	1.53039	1.59571	3.344	*	
2-Chlorophenol	1.42163	1.48813	1.40912	1.37167	1.35023	1.40815	3.769	*	
1,3-Dichlorobenzene	1.47612	1.48776	1.38457	1.33769	1.30966	1.39916	5.737	*	
1,4-Dichlorobenzene	1.52101	1.48180	1.38500	1.37350	1.31434	1.41513	5.960	*	
Benzyl alcohol	.84729	.89819	.87358	.87564	.85347	.86963	2.320		
1,2-Dichlorobenzene	1.39741	1.41743	1.33623	1.28748	1.25216	1.33814	5.253	*	
2-Methylphenol	1.31099	1.35689	1.27291	1.24456	1.22144	1.28136	4.202	*	
bis(2-chloroisopropyl)ether	2.54379	2.65225	2.36591	2.31083	2.26901	2.42836	6.721	*	
4-Methylphenol	1.38153	1.42787	1.37388	1.32316	1.29728	1.36074	3.774	*	
N-Nitroso-di-n-propylamine	1.03532	1.11546	1.04581	1.05535	1.04081	1.05855	3.085	*	**
Hexachloroethane	.61396	.60653	.59944	.59128	.57501	.59724	2.512	*	
Aniline	2.53784	2.63150	2.51746	2.38333	2.08387	2.43080	8.772	*	
Nitrobenzene-d5	.39050	.40185	.38743	.39273	.38098	.39070	1.956		
Nitrobenzene	.41902	.42507	.40481	.39821	.38697	.40682	3.796	*	
Isophorone	.81519	.83798	.79061	.79516	.78681	.80515	2.653	*	
2-Nitrophenol	.18879	.20454	.19402	.19709	.19706	.19630	2.912	*	
2,4-Dimethylphenol	.35072	.35728	.34078	.33952	.32811	.34324	3.269	*	
Benzoic acid	.08446	.13740	.13372	.15608	.17456	.13724	24.565		
bis(2-Chloroethoxy)methane	.52196	.52001	.50116	.49383	.47145	.50168	4.137	*	
2,4-Dichlorophenol	.26168	.27629	.25685	.26136	.25412	.26206	3.268	*	
1,2,4-Trichlorobenzene	.29263	.29377	.27116	.26997	.25841	.27719	5.573	*	
Naphthalene	1.02752	1.03484	.95985	.93793	.87126	.96628	7.005	*	
4-Chloroaniline	.38082	.38828	.38169	.38740	.37159	.38196	1.748		
Hexachlorobutadiene	.14116	.14443	.13362	.13210	.12757	.13578	5.072	*	
4-Chloro-3-methylphenol	.29623	.31458	.30398	.30110	.29732	.30264	2.428	*	
2-Methylnaphthalene	.60822	.60934	.57676	.56364	.53327	.57828	5.535	*	
Hexachlorocyclopentadiene	.19226	.23830	.25193	.27455	.28251	.24791	14.420	*	**

RF - Response Factor (Subscript is amount in ug/mL)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 700ZU

Contractor: NET-Midwest, INC. Calibration Date: 07/12/94

Contract No: 090031

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>08129	>08128	>08130	>08131	>08132				
	RF	RF	RF	RF	RF				
Compound	20.00	50.00	80.00	120.00	160.00	$\overline{RF}$	% RSD	CCC	SPCC
2,4,6-Trichlorophenol	.32223	.34082	.33492	.33251	.33735	.33557	2.111	*	
2,4,5-Trichlorophenol	.34125	.36252	.35654	.35909	.35998	.35587	2.374	*	
2-Chloronaphthalene	1.05790	1.06826	1.02843	1.02154	1.01380	1.03799	2.250	*	
2-Fluorobiphenyl	1.16936	1.15770	1.09086	1.07346	1.06449	1.11118	4.401		
2-Nitroaniline	.38818	.43652	.43486	.45510	.46823	.43618	6.657	*	
Dimethylphthalate	1.22441	1.26383	1.22406	1.26228	1.25011	1.24494	1.577	*	
Acenaphthylene	1.72233	1.65022	1.69845	1.65581	1.63745	1.68165	1.981	*	
2,6-Dinitrotoluene	.37818	.41720	.42661	.44209	.30691	.39420	13.748	*	
3-Nitroaniline	.31666	.34280	.34261	.35246	.36171	.34325	4.904		
Acenaphthene	1.05616	1.07037	1.02642	1.00734	.96826	1.02971	3.287	*	
2,4-Dinitrophenol	.04043	.10228	.12284	.15252	.18567	.12163	46.103		**
4-Nitrophenol	.09183	.12136	.13017	.14082	.14371	.12658	17.400		**
Dibenzofuran	1.45689	1.46286	1.40397	1.39775	1.35144	1.41458	3.260		
2,4-Dinitrotoluene	.37818	.41720	.42661	.44209	.45121	.42306	6.701	*	
Diethylphthalate	1.20967	1.27603	1.29352	1.28896	1.28597	1.27083	2.737	*	
4-Chlorophenyl-phenylether	.51578	.52350	.49567	.49189	.46176	.49776	4.840	*	
Fluorene	1.10851	1.10339	1.06026	1.00922	.96679	1.04963	5.827	*	
4-Nitroaniline	.34917	.40251	.41146	.43257	.45303	.40975	9.545		
2,4,6-Tribromophenol	.16004	.17537	.16342	.15807	.16031	.16344	4.244		(Conc=40.0,100.0,160.0,240.0,320.
4,6-Dinitro-2-methylphenol	.05087	.13597	.14427	.16046	.17247	.14081	22.226		
Di-phenylhydrazine	1.65311	1.81910	1.70721	1.74015	1.52455	1.69682	6.363		
N-Nitrosodiphenylamine (1)	.56124	.56073	.55591	.53600	.52558	.55189	3.950	*	
4-Bromophenyl-phenylether	.20509	.21140	.20609	.20092	.19421	.20434	3.370	*	
Hexachlorobenzene	.24326	.23799	.22377	.21611	.20983	.22619	6.276	*	
Pentachlorophenol	.07427	.11266	.11191	.12661	.13090	.11127	20.057	*	
Phenanthrene	1.12579	1.10070	1.08668	1.04563	1.00053	1.07191	4.604	*	
Anthracene	1.10654	1.08397	1.07426	1.02208	.99351	1.05647	4.472	*	
Carbazole	1.03910	1.01321	1.00467	.99779	.95753	1.00246	2.953		
Di-n-butylphthalate	1.50000	1.53639	1.51845	1.47162	1.06670	1.41863	13.970	*	
Fluoranthene	1.06131	1.06040	1.05809	1.02435	.94584	1.03000	4.808	*	
Pyrene	1.35406	1.40792	1.38821	1.37117	1.47154	1.39858	3.247	*	
Terphenyl-d14	.97712	.99233	.93157	1.02593	1.03001	.99139	4.056		

RF - Response Factor (Subscript is amount in ug/mL)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

Case No: - Instrument ID: 70020

Contractor: NET-Midwest, Inc. Calibration Date: 07/12/94

Contract No: 050051

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30.0%

Compound	Laboratory ID: >08129 RF 20.00	>08128 RF 50.00	>08130 RF 80.00	>08131 RF 120.00	>08132 RF 160.00	$\overline{RF}$	% RSD	CCC	SPCC
Butylbenzylphthalate	.74149	.81168	.82640	.85648	.87380	.82197	6.227	*	
Benzidine	.04936	.06558	.12611	.12274	.14800	.10236	41.518		
3,3'-Dichlorobenzidine	.33674	.36553	.35864	.37716	.41061	.36973	7.351		
Benzo(a)anthracene	1.15490	1.17168	1.16871	1.16311	1.19582	1.17084	1.312	*	
Chrysene	1.12360	1.12933	1.09565	1.11806	1.15867	1.12510	2.019	*	
bis(2-Ethylhexyl)phthalate	.95458	1.05327	1.11028	1.05876	1.00540	1.03645	5.687		
Di-n-octylphthalate	2.16888	2.44027	2.42290	1.81969	1.52621	2.07559	19.115	*	
Benzo(b)fluoranthene	2.19361	2.30040	1.46094	1.76615	1.05953	1.75612	29.315	*	
Benzo(k)fluoranthene	1.51072	1.44674	1.28886	.88472	1.47501	1.32121	19.551	*	
Benzo(a)pyrene	1.32450	1.34269	1.28848	1.25922	1.24721	1.29242	3.171	*	
Indeno(1,2,3-cd)pyrene	1.33915	1.44979	1.36018	1.37973	1.37559	1.38489	2.897	*	
Dibenz(a,h)anthracene	1.04126	1.12176	1.09112	1.06171	1.06411	1.07599	2.893	*	
Benzo(g,h,i)perylene	1.13675	1.25099	1.20549	1.20140	1.21958	1.20284	3.472	*	

RF - Response Factor (Subscript is amount in ug/mL)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 16:45
Output File: ^D8129::Q0 Injected at: 940627 16:16
Data File: >D8129::02 Dilution Factor: 1.00000
Name: BNA STD. 20PPB Instrument ID: 7002D
Misc: SSTD020 1uL21707 EMV=2200 BTL# 3

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.36	152.0	37654	40.00	ug/mL	94
2)	Pyridine	4.90	79.0	28804M	16.11	ug/mL	84
3)	N-nitrosodimethylamine	4.90	42.0	13608	17.47	ug/mL	95
4)	2-Fluorophenol	6.95	112.0	51489	45.74	ug/mL	79
5)	Phenol-d6	7.98	99.0	66812	48.62	ug/mL	69
6)	Phenol	7.99	94.0	39595	26.00	ug/mL	90
7)	bis(2-Chloroethyl)ether	8.05	93.0	31210	21.54	ug/mL	96
8)	2-Chlorophenol	8.16	128.0	26765	19.44	ug/mL	97
9)	1,3-Dichlorobenzene	8.32	146.0	27791	19.97	ug/mL	88
10)	1,4-Dichlorobenzene	8.39	146.0	28636	20.35	ug/mL	96
11)	Benzyl alcohol	8.59	108.0	15952	19.56	ug/mL	95
12)	1,2-Dichlorobenzene	8.66	146.0	26309	19.70	ug/mL	93
13)	2-Methylphenol	8.77	108.0	24682	21.84	ug/mL	97
14)	bis(2-chloroisopropyl)ether	8.80	45.0	47892	19.71	ug/mL	95
15)	4-Methylphenol	8.97	108.0	26010	21.21	ug/mL	91
16)	N-Nitroso-di-n-propylamine	8.99	70.0	19492	20.95	ug/mL	94
17)	Hexachloroethane	9.11	117.0	11559	21.44	ug/mL	94
18)	Aniline	8.01	93.0	47780	27.16	ug/mL	72
19)	*d8-Naphthalene	10.42	136.0	142370	40.00	ug/mL	96
20)	Nitrobenzene-d5	9.21	82.0	27798	20.84	ug/mL	77
21)	Nitrobenzene	9.24	77.0	29828	21.70	ug/mL	90
22)	Isophorone	9.60	82.0	58029	20.51	ug/mL	95
23)	2-Nitrophenol	9.78	139.0	13439	17.73	ug/mL	85
24)	2,4-Dimethylphenol	9.82	107.0	24966	20.50	ug/mL	95
25)	Benzoic acid	9.96	122.0	6012	11.07	ug/mL	92
26)	bis(2-Chloroethoxy)methane	9.99	93.0	37156	21.19	ug/mL	86
27)	2,4-Dichlorophenol	10.18	162.0	18628	17.15	ug/mL	98
28)	1,2,4-Trichlorobenzene	10.33	180.0	20831	17.53	ug/mL	96
29)	Naphthalene	10.45	128.0	73144	21.67	ug/mL	99
30)	4-Chloroaniline	10.58	127.0	27109	21.38	ug/mL	83
31)	Hexachlorobutadiene	10.78	225.0	10050	15.40	ug/mL	89
32)	4-Chloro-3-methylphenol	11.55	107.0	21087	18.94	ug/mL	87
33)	2-Methylnaphthalene	11.80	142.0	43796	19.49	ug/mL	92
34)	*d10-Acenaphthene	14.12	164.0	76032	40.00	ug/mL	87
35)	Hexachlorocyclopentadiene	12.28	237.0	7309	13.54	ug/mL	94
36)	2,4,6-Trichlorophenol	12.47	196.0	12250	15.37	ug/mL	98
37)	2,4,5-Trichlorophenol	12.56	196.0	12973	15.12	ug/mL	98
38)	2-Chloronaphthalene	12.83	162.0	40217	18.65	ug/mL	97
39)	2-Fluorobiphenyl	12.62	172.0	44455	19.19	ug/mL	97
40)	2-Nitroaniline	13.16	65.0	14757	18.30	ug/mL	87
41)	Dimethylphthalate	13.63	163.0	46547	17.11	ug/mL	94
42)	Acenaphthylene	13.77	152.0	65476	21.62	ug/mL	93
43)	2,6-Dinitrotoluene	14.67	165.0	14377	22.80	ug/mL	81

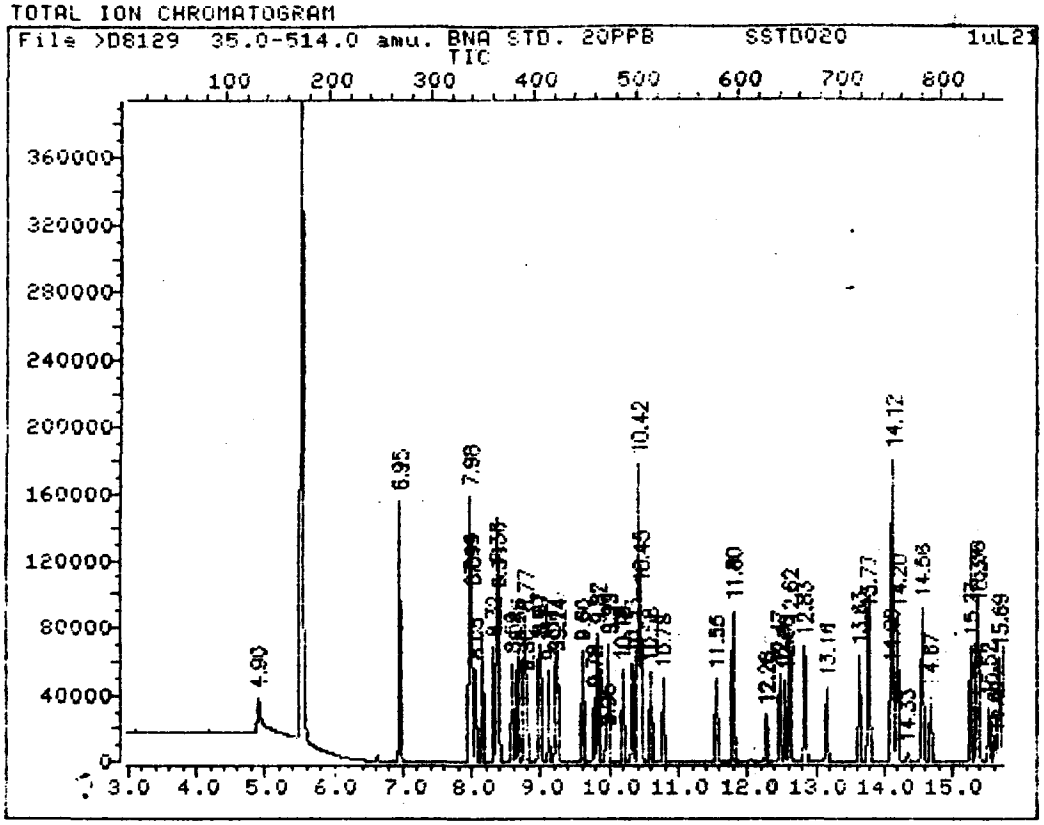
Operator ID: RHMan Quant Rev: 7 Quant Time: 940627 16:45
Output File: >08127::SC Injected at: 940627 16:16
Data File: >08129::D2 Dilution Factor: 1.00000
Name: BNA S/D, 20PPB Instrument ID: 7002D
Misc: SSTD020 1uL21707 SMV=2200 BTL# 3

ID File: Q_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	14.09	138.0	12038	18.16	ug/mL	94
45)	Acenaphthene	14.20	153.0	40151	19.64	ug/mL	92
46)	2,4-Dinitrophenol	14.33	184.0	1537	4.88	ug/mL	93
47)	4-Nitrophenol	14.56	109.0	3491M	14.59	ug/mL	
48)	Dibenzofuran	14.56	168.0	55385	18.79	ug/mL	71
49)	2,4-Dinitrotoluene	14.67	165.0	14377	15.17	ug/mL	
50)	Diethylphthalate	15.27	149.0	45987	17.43	ug/mL	88
51)	4-Chlorophenyl-phenylether	15.37	204.0	19608	18.09	ug/mL	97
52)	Fluorene	15.36	166.0	42141	20.48	ug/mL	98
53)	4-Nitroaniline	15.52	65.0	13274	18.71	ug/mL	87
54)	2,4,6-Tribromophenol	15.97	330.0	12168	24.79	ug/mL	95
55)	*d10-Phenanthrene	17.43	188.0	100960	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.61	198.0	4587	10.95	ug/mL	92
57)	Di-phenylhydrazine	15.75	77.0	85468	23.51	ug/mL	97
58)	N-Nitrosodiphenylamine (1)	15.69	169.0	29341	20.16	ug/mL	97
59)	4-Bromophenyl-phenylether	16.50	248.0	10555	15.78	ug/mL	98
60)	Hexachlorobenzene	16.82	284.0	12280	15.41	ug/mL	93
61)	Pentachlorophenol	17.20	266.0	3749	9.69	ug/mL	91
62)	Phenanthrene	17.47	178.0	56830	20.82	ug/mL	96
63)	Anthracene	17.56	178.0	55959	20.81	ug/mL	93
64)	Carbazole	17.89	167.0	52454	21.78	ug/mL	94
65)	Di-n-butylphthalate	18.60	149.0	75720	21.81	ug/mL	95
66)	Fluoranthene	19.49	202.0	53575	19.09	ug/mL	
67)	*d12-Chrysene	21.50	240.0	82248	40.00	ug/mL	97
68)	Pyrene	19.82	202.0	55685	17.19	ug/mL	97
69)	Terphenyl-d14	20.06	244.0	40183	15.82	ug/mL	91
70)	Butylbenzylphthalate	20.76	149.0	30493	17.48	ug/mL	96
71)	Benzidine	19.70	184.0	2030	7.79	ug/mL	95
72)	3,3'-Dichlorobenzidine	21.46	252.0	13848	15.30	ug/mL	98
73)	Benzo(a)anthracene	21.47	228.0	47494	17.67	ug/mL	94
74)	Chrysene	21.53	228.0	46215	16.89	ug/mL	92
75)	bis(2-Ethylhexyl)phthalate	21.52	149.0	39256	22.11	ug/mL	85
76)	*d12-Perylene	23.34	264.0	58727	40.00	ug/mL	93
77)	Di-n-octylphthalate	22.25	149.0	63686	22.98	ug/mL	98
78)	Benzo(b)fluoranthene	22.85	252.0	64412M	25.71	ug/mL	98
79)	Benzo(k)fluoranthene	22.85	252.0	44360M	27.97	ug/mL	98
80)	Benzo(a)pyrene	23.27	252.0	38892	19.73	ug/mL	92
81)	Indeno(1,2,3-cd)pyrene	25.07	~~25.58~~	(276.0) 33379	~~21.38~~	ug/mL	90
82)	Dibenz(a,h)anthracene	25.07	278.0	30575	21.16	ug/mL	97
83)	Benzo(g,h,i)perylene	25.58	(276.0)	33379	21.38	ug/mL	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

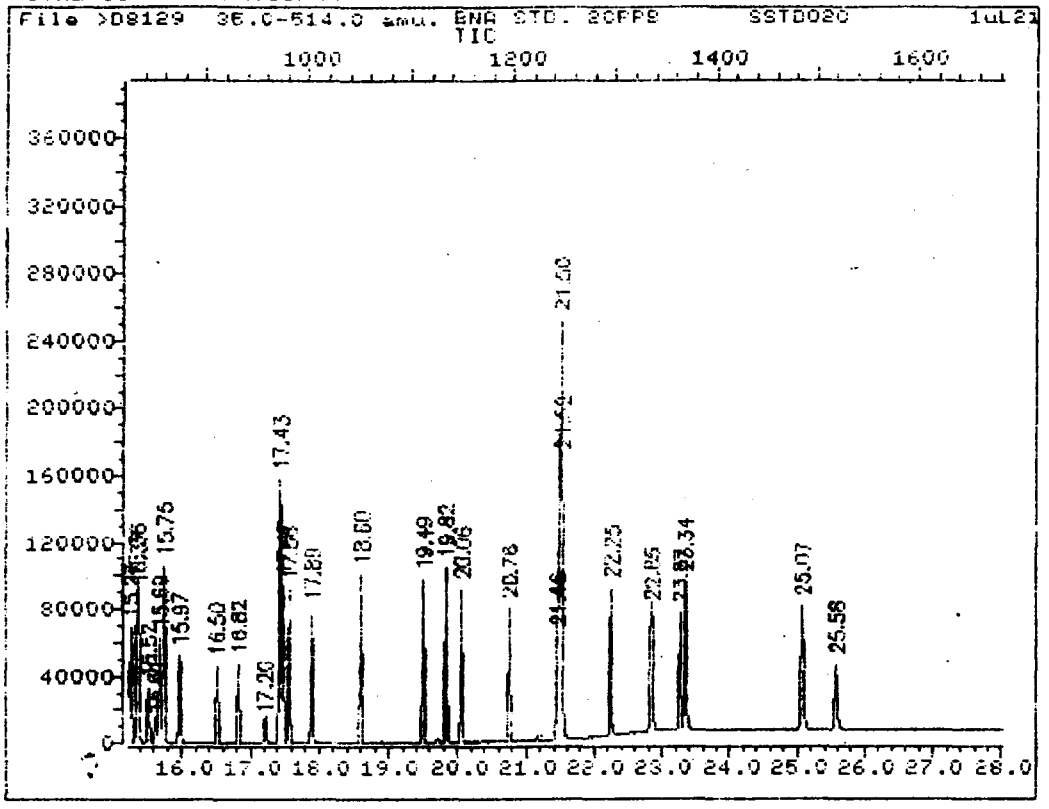


Data File: >D8129::D2 Quant Output File: ^D8129::QD
Name: BNA STD. 20PPB Instrument ID: 7002D
Misc: SSTD020 1uL21707 EMV=2200 BTL# 3

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 16:45
Injected at: 940627 16:16

TOTAL ION CHROMATOGRAM



Data File: >D8129::D2 Quant Output File: ^D8129::QD
Name: BNA STD. 20PPB Instrument ID: 7002D
Misc: SSTD020 1uL21707 EMV=2200 BTL# 3

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 16:45
Injected at: 940627 16:16

Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 14:47
Output File: ^08128::D6 Injected at: 940627 14:18
Data File: ^08128::D3 Dilution Factor: 1.00000
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL21619 BTL# 2

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.36	152.0	34226	40.00	ug/mL	96
2)	Pyridine	4.84	79.0	76992	47.39	ug/mL	87
3)	N-nitrosodimethylamine	4.88	42.0	34943	49.36	ug/mL	92
4)	2-Fluorophenol	6.95	112.0	115501	112.89	ug/mL	83
5)	Phenol-d6	7.98	99.0	157078	125.75	ug/mL	70
6)	Phenol	7.99	94.0	88080	63.63	ug/mL	81
7)	bis(2-Chloroethyl)ether	8.05	93.0	70313	53.38	ug/mL	99
8)	2-Chlorophenol	8.16	128.0	63666	50.88	ug/mL	96
9)	1,3-Dichlorobenzene	8.32	146.0	63650	50.32	ug/mL	90
10)	1,4-Dichlorobenzene	8.39	146.0	63395	49.56	ug/mL	95
11)	Benzyl alcohol	8.59	108.0	38427	51.85	ug/mL	97
12)	1,2-Dichlorobenzene	8.66	146.0	60641	49.96	ug/mL	92
13)	2-Methylphenol	8.77	108.0	58051	56.50	ug/mL	95
14)	bis(2-chloroisopropyl)ether	8.80	45.0	113470	51.38	ug/mL	96
15)	4-Methylphenol	8.97	108.0	61088	54.82	ug/mL	93
16)	N-Nitroso-di-n-propylamine	9.00	70.0	47722	56.43	ug/mL	89
17)	Hexachloroethane	9.11	117.0	25949	52.95	ug/mL	97
18)	Aniline	8.01	93.0	112582	70.41	ug/mL	72
19)	*d8-Naphthalene	10.42	136.0	129703	40.00	ug/mL	95
20)	Nitrobenzene-d5	9.21	82.0	65151	53.61	ug/mL	76
21)	Nitrobenzene	9.24	77.0	68916	55.04	ug/mL	88
22)	Isophorone	9.61	82.0	135860	52.71	ug/mL	93
23)	2-Nitrophenol	9.78	139.0	33162	48.03	ug/mL	86
24)	2,4-Dimethylphenol	9.82	107.0	57926	52.21	ug/mL	95
25)	Benzoic acid	9.99	122.0	22276	45.03	ug/mL	91
26)	bis(2-Chloroethoxy)methane	9.99	93.0	84308	52.79	ug/mL	86
27)	2,4-Dichlorophenol	10.18	162.0	44795	45.27	ug/mL	99
28)	1,2,4-Trichlorobenzene	10.33	180.0	47628	44.00	ug/mL	97
29)	Naphthalene	10.45	128.0	167778	54.57	ug/mL	99
30)	4-Chloroaniline	10.58	127.0	62952	54.49	ug/mL	84
31)	Hexachlorobutadiene	10.78	225.0	23417	39.40	ug/mL	89
32)	4-Chloro-3-methylphenol	11.55	107.0	51002	50.29	ug/mL	88
33)	2-Methylnaphthalene	11.80	142.0	98791	48.81	ug/mL	95
34)	*d10-Acenaphthene	14.13	164.0	69110	40.00	ug/mL	90
35)	Hexachlorocyclopentadiene	12.28	237.0	20586	41.96	ug/mL	96
36)	2,4,6-Trichlorophenol	12.47	196.0	29443	40.65	ug/mL	95
37)	2,4,5-Trichlorophenol	12.56	196.0	31317	40.14	ug/mL	97
38)	2-Chloronaphthalene	12.83	162.0	92284	47.07	ug/mL	99
39)	2-Fluorobiphenyl	12.62	172.0	100011	47.50	ug/mL	97
40)	2-Nitroaniline	13.16	65.0	37710	51.46	ug/mL	87
41)	Dimethylphthalate	13.64	163.0	109179	44.14	ug/mL	94
42)	Acenaphthylene	13.77	152.0	146014	53.05	ug/mL	93
43)	2,6-Dinitrotoluene	14.68	165.0	36041	62.88	ug/mL	80

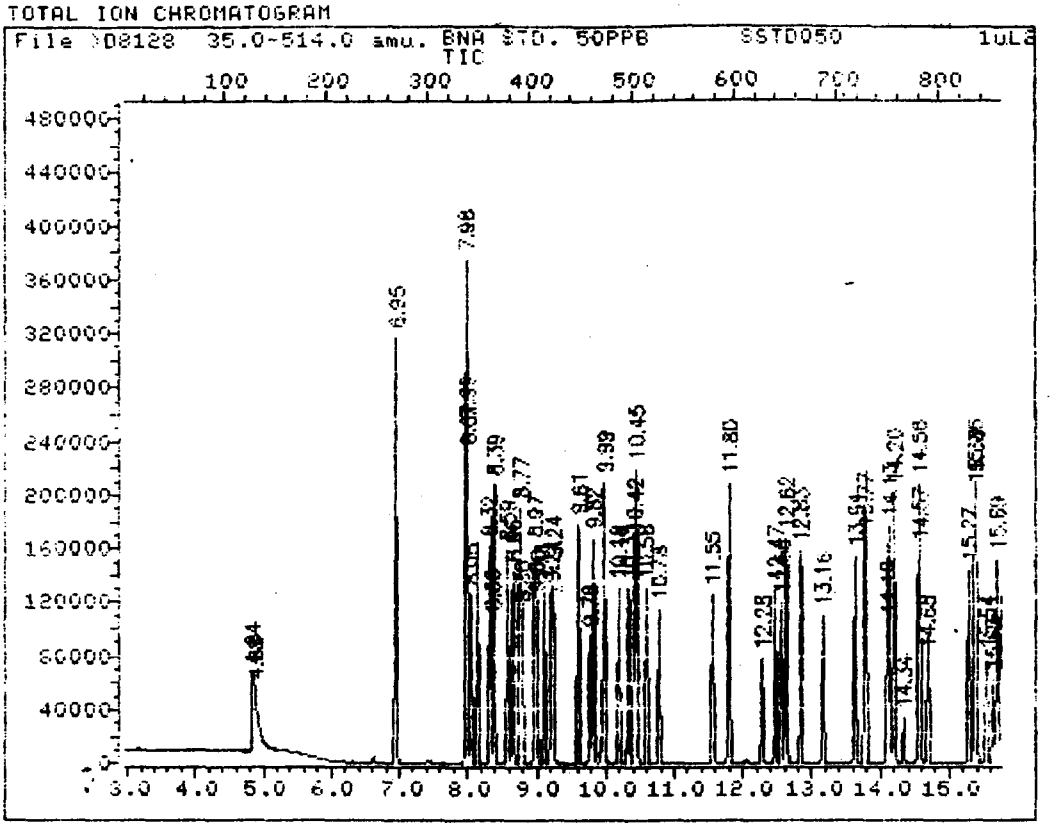
Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 14:47
Output File: ^D8128::QD Injected at: 940627 14:18
Data File: >D8128::D3 Dilution Factor: 1.00000
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL21619 BTL# 2

ID File: D_8270::FI
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	14.10	138.0	29614	49.14	ug/mL	90
45)	Acenaphthene	14.20	153.0	92467	49.76	ug/mL	93
46)	2,4-Dinitrophenol	14.34	184.0	8836	30.86	ug/mL	99
47)	4-Nitrophenol	14.57	109.0	10484	48.21	ug/mL	67
48)	Dibenzofuran	14.56	168.0	126373	47.18	ug/mL	66
49)	2,4-Dinitrotoluene	14.68	165.0	36041	41.85	ug/mL	95
50)	Diethylphthalate	15.27	149.0	110233	45.96	ug/mL	88
51)	4-Chlorophenyl-phenylether	15.38	204.0	45224	45.91	ug/mL	97
52)	Fluorene	15.36	166.0	95319	50.95	ug/mL	97
53)	4-Nitroaniline	15.54	65.0	34772	53.92	ug/mL	90
54)	2,4,6-Tribromophenol	15.97	330.0	30299	67.92	ug/mL	91
55)	*d10-Phenanthrene	17.43	188.0	95589	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.63	198.0	16246	40.95	ug/mL	94
57)	Di-phenylhydrazine	15.75	77.0	217357	63.14	ug/mL	96
58)	N-Nitrosodiphenylamine (1)	15.69	169.0	67000	48.63	ug/mL	91
59)	4-Bromophenyl-phenylether	16.51	248.0	25259	39.87	ug/mL	98
60)	Hexachlorobenzene	16.82	284.0	28436	37.69	ug/mL	92
61)	Pentachlorophenol	17.21	266.0	13461	36.76	ug/mL	93
62)	Phenanthrene	17.48	178.0	131519	50.88	ug/mL	96
63)	Anthracene	17.57	178.0	129519	50.86	ug/mL	92
64)	Carbazole	17.90	167.0	121065	53.08	ug/mL	94
65)	Di-n-butylphthalate	18.61	149.0	183577	55.85	ug/mL	96
66)	Fluoranthene	19.50	202.0	126703	47.68	ug/mL	99
67)	*d12-Chrysene	21.51	240.0	75228	40.00	ug/mL	99
68)	Pyrene	19.83	202.0	132394	44.68	ug/mL	99
69)	Terphenyl-d14	20.07	244.0	93314	40.15	ug/mL	87
70)	Butylbenzylphthalate	20.77	149.0	76326	47.83	ug/mL	92
71)	Benzidine	19.71	184.0	6167	25.88	ug/mL	99
72)	3,3'-Dichlorobenzidine	21.45	252.0	34373	41.51	ug/mL	98
73)	Benzo(a)anthracene	21.48	228.0	110179	44.83	ug/mL	91
74)	Chrysene	21.54	228.0	106197	42.45	ug/mL	90
75)	bis(2-Ethylhexyl)phthalate	21.51	149.0	99044	60.98	ug/mL	90
76)	*d12-Perylene	23.35	264.0	56087	40.00	ug/mL	95
77)	Di-n-octylphthalate	22.24	149.0	171084	64.63	ug/mL	99
78)	Benzo(b)fluoranthene	22.86	252.0	161278M	67.40	ug/mL	98
79)	Benzo(k)fluoranthene	22.86	252.0	101429M	66.97	ug/mL	98
80)	Benzo(a)pyrene	23.28	252.0	94134	50.01	ug/mL	92
81)	Indeno(1,2,3-cd)pyrene 25.09	~~25.59~~	276.0	101443 ~~87705~~	48.17 ~~58.82~~	ug/mL	88
82)	Dibenz(a,h)anthracene	25.09	278.0	78645	56.98	ug/mL	97
83)	Benzo(g,h,i)perylene	25.59	276.0	87705	58.82	ug/mL	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

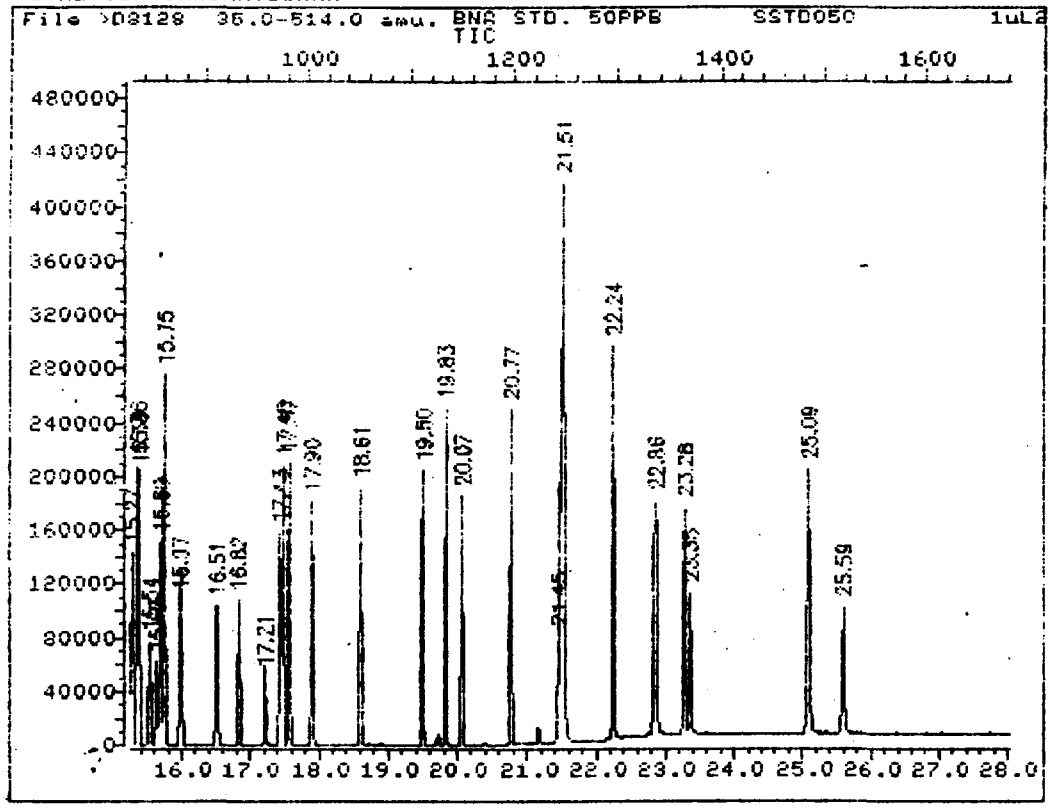


Data File: >D8128::D3 Quant Output File: ^D8128::QD
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL 21619 BTL# 2

Id File: D_8270::FJ
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 14:47
Injected at: 940627 14:18

TOTAL ION CHROMATOGRAM



Data File: >D8128::D3 Quant Output File: ^D8128::QD
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL21619 BTL# 2

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time: 940627 14:47
Injected at: 940627 14:18

Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 17:24
Output File: ^D8130::QC Injected at: 940627 16:55
Data File: >D8130::D2 Dilution Factor: 1.00000
Name: BNA STD. 80PPB Instrument ID: 7002D
Misc: SSTD080 1uL21708 EMV=2200 BTL# 4

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.37	152.0	31617	40.00	ug/mL	95
2)	Pyridine	4.84	79.0	102062	68.00	ug/mL	87
3)	N-nitrosodimethylamine	4.88	42.0	46982	71.85	ug/mL	92
4)	2-Fluorophenol	6.95	112.0	161379	170.75	ug/mL	82
5)	Phenol-d6	7.98	99.0	213882	185.36	ug/mL	71
6)	Phenol	7.99	94.0	123767	96.79	ug/mL	93
7)	bis(2-Chloroethyl)ether	8.05	93.0	99555	81.82	ug/mL	97
8)	2-Chlorophenol	8.16	128.0	89104	77.08	ug/mL	97
9)	1,3-Dichlorobenzene	8.32	146.0	87552	74.93	ug/mL	91
10)	1,4-Dichlorobenzene	8.40	146.0	87579	74.12	ug/mL	96
11)	Benzyl alcohol	8.59	108.0	55240	80.69	ug/mL	95
12)	1,2-Dichlorobenzene	8.66	146.0	84495	75.35	ug/mL	93
13)	2-Methylphenol	8.77	108.0	80491	84.81	ug/mL	96
14)	bis(2-chloroisopropyl)ether	8.78	45.0	149606	73.34	ug/mL	96
15)	4-Methylphenol	8.98	108.0	86876	84.39	ug/mL	92
16)	N-Nitroso-di-n-propylamine	9.01	70.0	66131	84.65	ug/mL	90
17)	Hexachloroethane	9.11	117.0	37905	83.72	ug/mL	95
18)	Aniline	8.01	93.0	159189	107.78	ug/mL	72
19)	*d8-Naphthalene	10.42	136.0	121001	40.00	ug/mL	95
20)	Nitrobenzene-d5	9.21	82.0	93760	82.70	ug/mL	76
21)	Nitrobenzene	9.24	77.0	97966	83.86	ug/mL	88
22)	Isophorone	9.62	82.0	191330	79.57	ug/mL	94
23)	2-Nitrophenol	9.77	139.0	46953	72.89	ug/mL	78
24)	2,4-Dimethylphenol	9.83	107.0	82469	79.68	ug/mL	97
25)	Benzoic acid	10.00	122.0	32360	70.13	ug/mL	95
26)	bis(2-Chloroethoxy)methane	9.99	93.0	121282	81.40	ug/mL	85
27)	2,4-Dichlorophenol	10.18	162.0	62159	67.33	ug/mL	94
28)	1,2,4-Trichlorobenzene	10.33	180.0	65622	64.98	ug/mL	98
29)	Naphthalene	10.45	128.0	232285	80.98	ug/mL	99
30)	4-Chloroaniline	10.59	127.0	92369	85.70	ug/mL	85
31)	Hexachlorobutadiene	10.78	225.0	32337	58.32	ug/mL	92
32)	4-Chloro-3-methylphenol	11.55	107.0	73564	77.75	ug/mL	89
33)	2-Methylnaphthalene	11.81	142.0	139576	73.93	ug/mL	94
34)	*d10-Acenaphthene	14.13	164.0	62539	40.00	ug/mL	90
35)	Hexachlorocyclopentadiene	12.28	237.0	31511	70.97	ug/mL	95
36)	2,4,6-Trichlorophenol	12.48	196.0	41891	63.91	ug/mL	97
37)	2,4,5-Trichlorophenol	12.55	196.0	44595	63.17	ug/mL	98
38)	2-Chloronaphthalene	12.83	162.0	128634	72.51	ug/mL	99
39)	2-Fluorobiphenyl	12.63	172.0	136443	71.61	ug/mL	96
40)	2-Nitroaniline	13.16	65.0	54391	82.02	ug/mL	85
41)	Dimethylphthalate	13.64	163.0	153103	68.41	ug/mL	94
42)	Acenaphthylene	13.77	152.0	212439	85.30	ug/mL	93
43)	2,6-Dinitrotoluene	14.68	165.0	53360	102.88	ug/mL	78

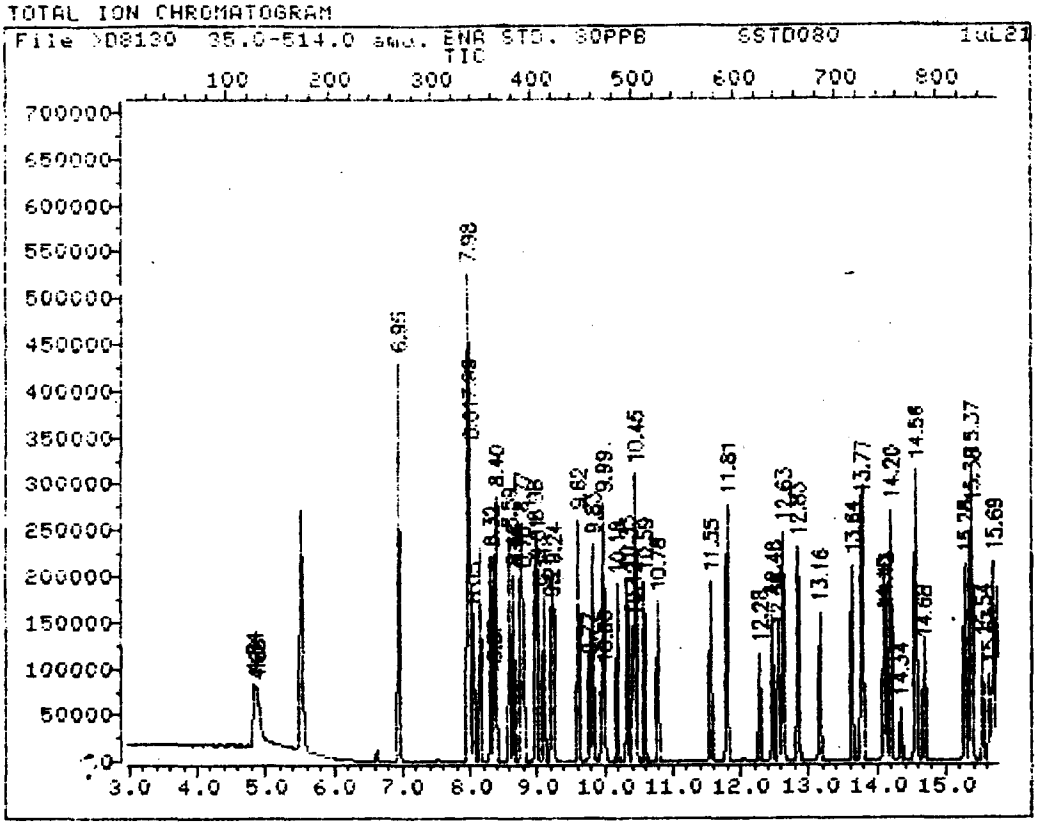
Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 17:24
Output File: ^D8130::Q0 Injected at: 940627 16:55
Data File: >D8130::D2 Dilution Factor: 1.00000
Name: BNA STD. 80PPB Instrument ID: 7002D
Misc: SSTD080 IuL21708 EMV=2200 BTL# 4

ID File: Q_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	14.10	138.0	42853	78.58	ug/mL	91
45)	Acenaphthene	14.20	153.0	128382	76.35	ug/mL	93
46)	2,4-Dinitrophenol	14.34	184.0	15364	59.29	ug/mL	96
47)	4-Nitrophenol	14.56	109.0	16282M	82.73	ug/mL	
48)	Dibenzofuran	14.56	168.0	175606	72.45	ug/mL	61
49)	2,4-Dinitrotoluene	14.68	165.0	53360	68.47	ug/mL	[illegible]
50)	Diethylphthalate	15.28	149.0	161791	74.54	ug/mL	[illegible]
51)	4-Chlorophenyl-phenylether	15.38	204.0	62023	69.58	ug/mL	96
52)	Fluorene	15.37	166.0	132615	78.34	ug/mL	99
53)	4-Nitroaniline	15.54	65.0	51465	88.20	ug/mL	86
54)	2,4,6-Tribromophenol	15.98	330.0	40880	101.27	ug/mL	93
55)	*d10-Phenanthrene	17.44	188.0	86663	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.63	198.0	25006	69.53	ug/mL	94
57)	Di-phenylhydrazine	15.75	77.0	295904	94.82	ug/mL	97
58)	N-Nitrosodiphenylamine (1)	15.69	169.0	96354	77.14	ug/mL	92
59)	4-Bromophenyl-phenylether	16.51	248.0	35720	62.19	ug/mL	94
60)	Hexachlorobenzene	16.83	284.0	38785	56.71	ug/mL	93
61)	Pentachlorophenol	17.21	266.0	19397	58.42	ug/mL	92
62)	Phenanthrene	17.48	178.0	188384	80.38	ug/mL	96
63)	Anthracene	17.57	178.0	186197	80.65	ug/mL	92
64)	Carbazole	17.90	167.0	174135	84.21	ug/mL	95
65)	Di-n-butylphthalate	18.60	149.0	263187	88.31	ug/mL	97
66)	Fluoranthene	19.49	202.0	183395	76.13	ug/mL	[illegible]
67)	*d12-Chrysene	21.50	240.0	69870	40.00	ug/mL	99
68)	Pyrene	19.83	202.0	193988	70.49	ug/mL	98
69)	Terphenyl-d14	20.06	244.0	130177	60.31	ug/mL	99
70)	Butylbenzylphthalate	20.77	149.0	115481	77.92	ug/mL	89
71)	Benzidine	19.71	184.0	17623	79.62	ug/mL	97
72)	3,3'-Dichlorobenzidine	21.46	252.0	50116	65.17	ug/mL	99
73)	Benzo(a)anthracene	21.49	228.0	163315	71.54	ug/mL	89
74)	Chrysene	21.55	228.0	153106	65.89	ug/mL	88
75)	bis(2-Ethylhexyl)phthalate	21.52	149.0	155150	102.85	ug/mL	85
76)	*d12-Perylene	23.35	264.0	55535	40.00	ug/mL	96
77)	Di-n-octylphthalate	22.25	149.0	269111	102.67	ug/mL	98
78)	Benzo(b)fluoranthene	22.83	252.0	162267M	68.48	ug/mL	97
79)	Benzo(k)fluoranthene	22.86	252.0	143154M	95.47	ug/mL	97
80)	Benzo(a)pyrene	23.28	252.0	143111	76.79	ug/mL	92
81)	Indeno(1,2,3-cd)pyrene 25.09	~~25.60~~	276.0	~~133894~~ 121191	~~90.69~~ 88.69	ug/mL	89
82)	Dibenz(a,h)anthracene	25.09	278.0	121191	88.69	ug/mL	97
83)	Benzo(g,h,i)perylene	25.60	276.0	133894	90.69	ug/mL	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

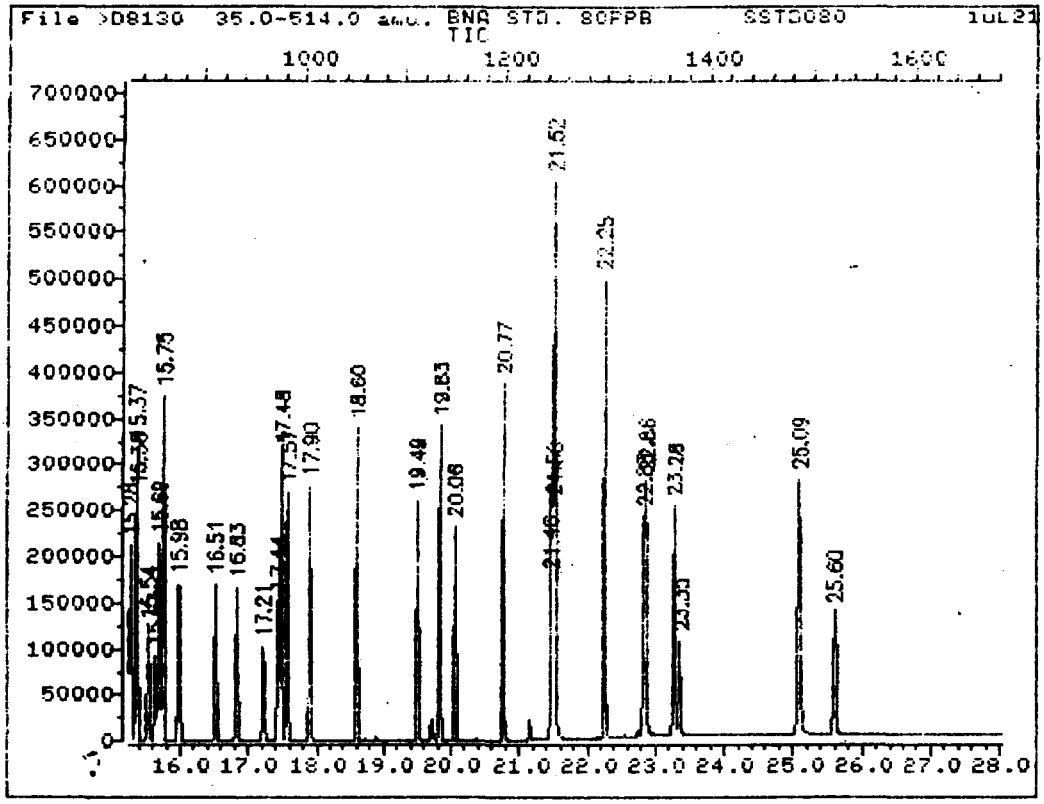


Data File: >D8130::D2 Quant Output File: ^D8130::QD
Name: BNA STD. 80PPB Instrument ID: 7002D
Misc: SSTD080 1uL2-1708 EMV=2200 BTL# 4

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve. HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 17:24
Injected at: 940627 16:55

TOTAL ION CHROMATOGRAM



Data File: >D8130::D2 Quant Output File: ^D8130::QD
Name: BNA STD. 80PPB Instrument ID: 7002D
Misc: SSTD080 1uL21708 EMV=2200 BTL# 4

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 17:24
Injected at: 940627 16:55

Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 18:03
Output File: ^D8131::Q0 Injected at: 940627 17:34
Data File: >D8131::D2 Dilution Factor: 1.00000
Name: BNA STD, 120PPB Instrument ID: 7002D
Misc: SSTD120 1uL21706 EMV=2200 BTL# 5

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.37	152.0	35632	40.00	ug/mL	98
2)	Pyridine	4.82	79.0	177933	105.19	ug/mL	90
3)	N-nitrosodimethylamine	4.89	42.0	80702	109.51	ug/mL	94
4)	2-Fluorophenol	6.95	112.0	266213	249.93	ug/mL	74
5)	Phenol-d6	7.97	99.0	337714	259.69	ug/mL	66
6)	Phenol	7.99	94.0	188085	130.51	ug/mL	84
7)	bis(2-Chloroethyl)ether	8.06	93.0	168101	122.59	ug/mL	96
8)	2-Chlorophenol	8.15	128.0	146626	112.55	ug/mL	96
9)	1,3-Dichlorobenzene	8.33	146.0	142994	108.59	ug/mL	92
10)	1,4-Dichlorobenzene	8.39	146.0	146822	110.26	ug/mL	95
11)	Benzyl alcohol	8.58	108.0	93602	121.31	ug/mL	85
12)	1,2-Dichlorobenzene	8.66	146.0	137626	108.90	ug/mL	95
13)	2-Methylphenol	8.76	108.0	133039	124.38	ug/mL	95
14)	bis(2-chloroisopropyl)ether	8.79	45.0	247018	107.45	ug/mL	98
15)	4-Methylphenol	8.97	108.0	141440	121.91	ug/mL	92
16)	N-Nitroso-di-n-propylamine	9.02	70.0	112813	128.13	ug/mL	91
17)	Hexachloroethane	9.10	117.0	63205	123.87	ug/mL	95
18)	Aniline	8.00	93.0	254768	153.06	ug/mL	72
19)	*d8-Naphthalene	10.42	136.0	134919	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.22	82.0	158959	125.75	ug/mL	80
21)	Nitrobenzene	9.25	77.0	161180	123.74	ug/mL	91
22)	Isophorone	9.63	82.0	321847	120.04	ug/mL	95
23)	2-Nitrophenol	9.78	139.0	79774	111.07	ug/mL	82
24)	2,4-Dimethylphenol	9.83	107.0	137341	119.00	ug/mL	98
25)	Benzoic acid	10.04	122.0	63175	122.78	ug/mL	96
26)	bis(2-Chloroethoxy)methane	10.00	93.0	199881	120.31	ug/mL	88
27)	2,4-Dichlorophenol	10.19	162.0	105788	102.77	ug/mL	92
28)	1,2,4-Trichlorobenzene	10.34	180.0	109272	97.04	ug/mL	98
29)	Naphthalene	10.46	128.0	379634	118.70	ug/mL	99
30)	4-Chloroaniline	10.60	127.0	156801	130.47	ug/mL	87
31)	Hexachlorobutadiene	10.77	225.0	53467	86.48	ug/mL	91
32)	4-Chloro-3-methylphenol	11.56	107.0	121874	115.52	ug/mL	93
33)	2-Methylnaphthalene	11.80	142.0	228218	108.41	ug/mL	93
34)	*d10-Acenaphthene	14.13	164.0	69154	40.00	ug/mL	91
35)	Hexachlorocyclopentadiene	12.28	237.0	56958	116.02	ug/mL	95
36)	2,4,6-Trichlorophenol	12.47	196.0	68983	95.18	ug/mL	99
37)	2,4,5-Trichlorophenol	12.56	196.0	74497	95.43	ug/mL	96
38)	2-Chloronaphthalene	12.95	162.0	211931	108.03	ug/mL	98
39)	2-Fluorobiphenyl	12.64	172.0	222702	105.70	ug/mL	96
40)	2-Nitroaniline	13.17	65.0	94000	128.18	ug/mL	87
41)	Dimethylphthalate	13.65	163.0	261876	105.82	ug/mL	93
42)	Acenaphthylene	13.78	152.0	344348	125.04	ug/mL	93
43)	2,6-Dinitrotoluene	14.69	165.0	91716	159.91	ug/mL	79

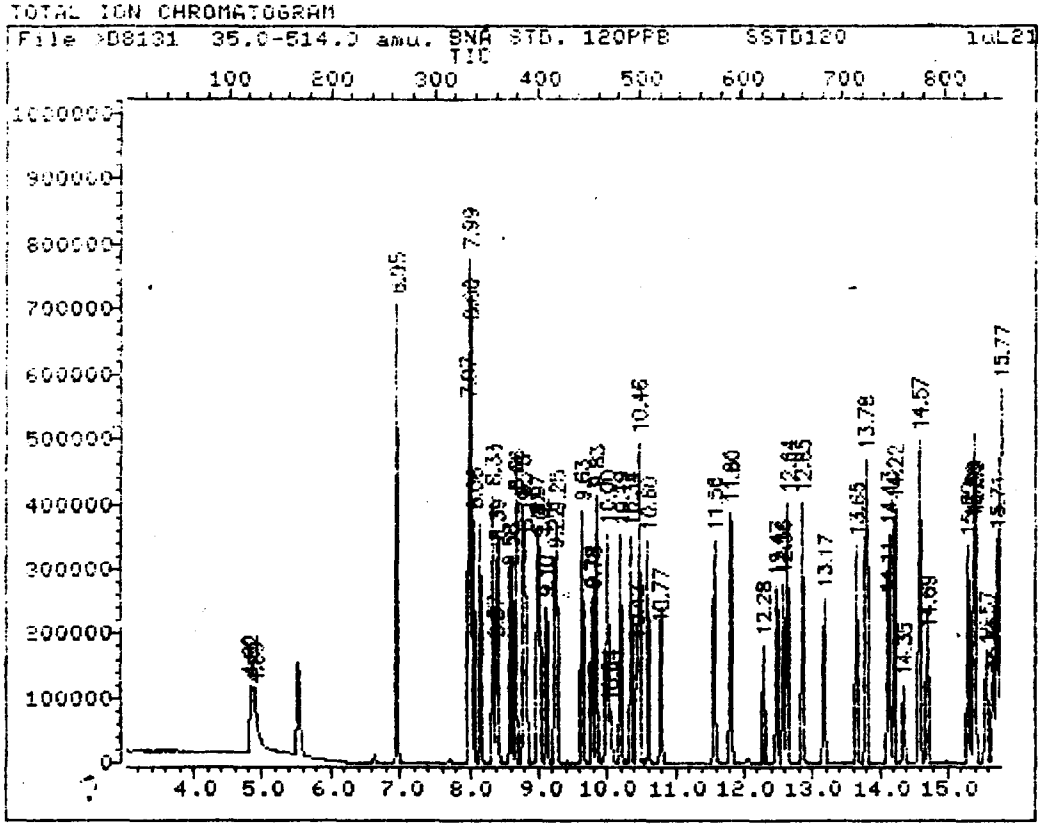
Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 18:03
Output File: ^D8131::Q0 Injected at: 940627 17:34
Data File: >D8131::D2 Dilution Factor: 1.00000
Name: BNA STD. 120PPB Instrument ID: 7002D
Misc: SSTD120 1uL21706 EMV=2200 BTL# 5

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	14.11	138.0	73123	121.26	ug/mL	91
45)	Acenaphthene	14.22	153.0	208984	112.39	ug/mL	93
46)	2,4-Dinitrophenol	14.35	184.0	31726	110.72	ug/mL	92
47)	4-Nitrophenol	14.57	109.0	29215M	134.24	ug/mL	
48)	Dibenzofuran	14.57	168.0	289979	108.19	ug/mL	59
49)	2,4-Dinitrotoluene	14.69	165.0	91716	106.43	ug/mL	
50)	Diethylphthalate	15.29	149.0	267411	111.41	ug/mL	88
51)	4-Chlorophenyl-phenylether	15.39	204.0	102048	103.53	ug/mL	93
52)	Fluorene	15.36	166.0	209374	111.85	ug/mL	99
53)	4-Nitroaniline	15.57	65.0	89742	139.08	ug/mL	91
54)	2,4,6-Tribromophenol	15.99	330.0	65588	146.94	ug/mL	96
55)	*d10-Phenanthrene	17.44	188.0	97922	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.65	198.0	47137	115.99	ug/mL	99
57)	Di-phenylhydrazine	15.77	77.0	511197	144.97	ug/mL	97
58)	N-Nitrosodiphenylamine (1)	15.71	169.0	157459	111.56	ug/mL	92
59)	4-Bromophenyl-phenylether	16.53	248.0	59022	90.95	ug/mL	87
60)	Hexachlorobenzene	16.84	284.0	63485	82.15	ug/mL	92
61)	Pentachlorophenol	17.23	266.0	37194	99.14	ug/mL	93
62)	Phenanthrene	17.50	178.0	307170	116.00	ug/mL	95
63)	Anthracene	17.57	178.0	300253	115.11	ug/mL	93
64)	Carbazole	17.91	167.0	293116	125.46	ug/mL	97
65)	Di-n-butylphthalate	18.61	149.0	432312	128.39	ug/mL	98
66)	Fluoranthene	19.50	202.0	300920	110.55	ug/mL	
67)	*d12-Chrysene	21.52	240.0	73143	40.00	ug/mL	98
68)	Pyrene	19.83	202.0	300874	104.44	ug/mL	98
69)	Terphenyl-d14	20.07	244.0	225119	99.63	ug/mL	91
70)	Butylbenzylphthalate	20.77	149.0	187937	121.13	ug/mL	92
71)	Benzidine	19.71	184.0	26932	116.23	ug/mL	97
72)	3,3'-Dichlorobenzidine	21.46	252.0	82759	102.80	ug/mL	96
73)	Benzo(a)anthracene	21.49	228.0	255220	106.80	ug/mL	93
74)	Chrysene	21.55	228.0	245334	100.88	ug/mL	95
75)	bis(2-Ethylhexyl)phthalate	21.52	149.0	232322	147.11	ug/mL	87
76)	*d12-Perylene	23.36	264.0	62293	40.00	ug/mL	96
77)	Di-n-octylphthalate	22.25	149.0	340062	115.66	ug/mL	91
78)	Benzo(b)fluoranthene	22.85	252.0	330056	124.18	ug/mL	98
79)	Benzo(k)fluoranthene	22.88	252.0	165335	98.30	ug/mL	97
80)	Benzo(a)pyrene	23.28	252.0	235321	112.57	ug/mL	93
81)	Indeno(1,2,3-cd)pyrene	25.10 ~~25.63~~	276.0	~~224517~~ 155	~~135.58~~	ug/mL	90
82)	Dibenz(a,h)anthracene	25.10	278.0	198411	129.44	ug/mL	95
83)	Benzo(g,h,i)perylene	25.63	276.0	224517	135.58	ug/mL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

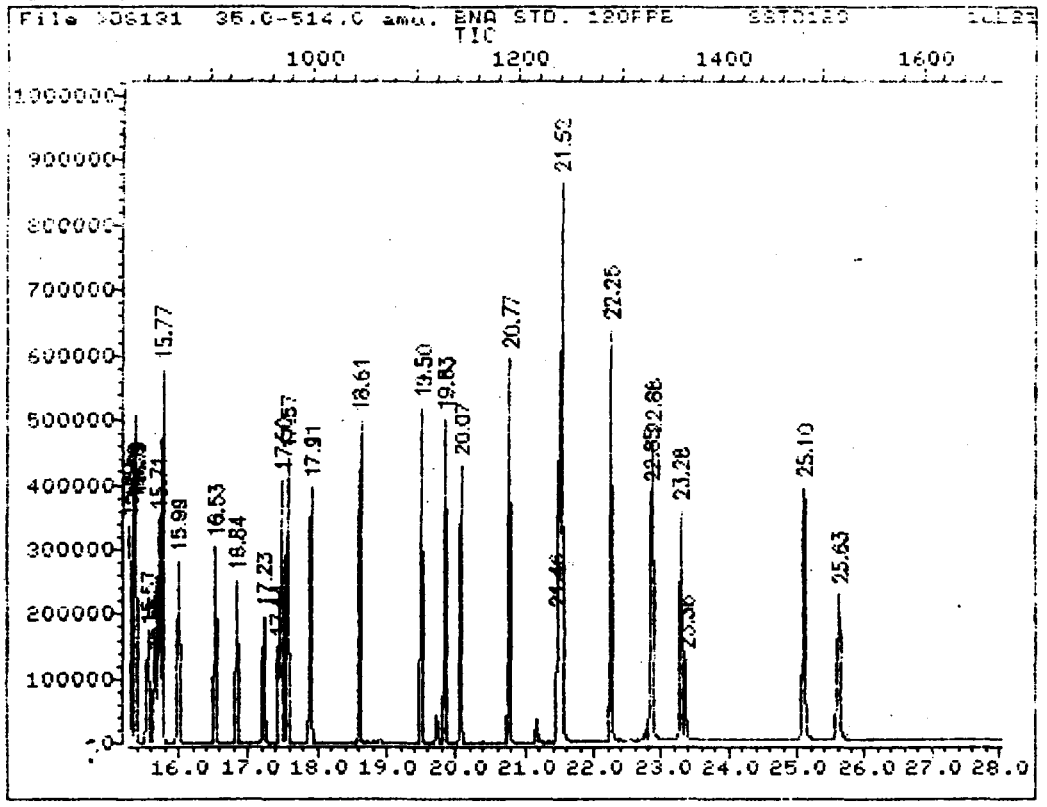


Data File: >D8131::D2 Quant Output File: ^D8131::Q0
Name: BNA STD. 120PPB Instrument ID: 7002D
Misc: SSTD120 1uL21706 EMV=2200 BTL# 5

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 18:03
Injected at: 940627 17:34

TOTAL ION CHROMATOGRAM



Data File: >D8131::D2 Quant Output File: ^D8131::Q0
Name: BNA STD. 120PPB Instrument ID: 7002D
Misc: SSTD120 1uL 1706 EMV=2200 BTL# 5

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 18:03
Injected at: 940627 17:34

Operator ID: RAMON Quant Rev: 7 Quant Time: 940627 18:42
Output File: ^D8132::Q6 Injected at: 940627 18:13
Data File: >D8132::D2 Dilution Factor: 1.00000
Name: BNA STD. 160PPB Instrument ID: 7002D
Misc: SSTD160 luL21710 EMV=2200 BTL# 6

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.38	152.0	37490	40.00	ug/mL	98
2)	Pyridine	4.82	79.0	240907	135.37	ug/mL	89
3)	N-nitrosodimethylamine	4.88	42.0	115422	148.86	ug/mL	92
4)	2-Fluorophenol	6.95	112.0	337397	301.07	ug/mL	85
5)	Phenol-d6	7.98	99.0	435516	318.16	ug/mL	70
6)	Phenol	7.99	94.0	231660	152.78	ug/mL	96
7)	bis(2-Chloroethyl)ether	8.07	93.0	229497	159.06	ug/mL	96
8)	2-Chlorophenol	8.16	128.0	202480	147.72	ug/mL	97
9)	1,3-Dichlorobenzene	8.32	146.0	196396	141.75	ug/mL	89
10)	1,4-Dichlorobenzene	8.40	146.0	197098	140.68	ug/mL	96
11)	Benzyl alcohol	8.59	108.0	127986	157.66	ug/mL	90
12)	1,2-Dichlorobenzene	8.66	146.0	187774	141.22	ug/mL	93
13)	2-Methylphenol	8.77	108.0	183167	162.75	ug/mL	96
14)	bis(2-chloroisopropyl)ether	8.80	45.0	340260	140.67	ug/mL	99
15)	4-Methylphenol	8.98	108.0	194540	159.37	ug/mL	92
16)	N-Nitroso-di-n-propylamine	9.02	70.0	156080	168.49	ug/mL	91
17)	Hexachloroethane	9.11	117.0	86229	160.62	ug/mL	96
18)	Aniline	8.01	93.0	312497	178.44	ug/mL	71
19)	*d8-Naphthalene	10.42	136.0	145113	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.23	82.0	221141	162.65	ug/mL	80
21)	Nitrobenzene	9.26	77.0	224619	160.33	ug/mL	93
22)	Isophorone	9.63	82.0	456707	158.37	ug/mL	96
23)	2-Nitrophenol	9.78	139.0	114382	148.06	ug/mL	85
24)	2,4-Dimethylphenol	9.84	107.0	190451	153.43	ug/mL	98
25)	Benzoic acid	10.08	122.0	101324	183.09	ug/mL	96
26)	bis(2-Chloroethoxy)methane	9.99	93.0	273653	153.14	ug/mL	82
27)	2,4-Dichlorophenol	10.20	162.0	147504	133.22	ug/mL	88
28)	1,2,4-Trichlorobenzene	10.35	180.0	149994	123.84	ug/mL	98
29)	Naphthalene	10.45	128.0	505726	147.02	ug/mL	98
30)	4-Chloroaniline	10.60	127.0	215692	166.87	ug/mL	89
31)	Hexachlorobutadiene	10.78	225.0	74047	111.35	ug/mL	91
32)	4-Chloro-3-methylphenol	11.57	107.0	172580	152.09	ug/mL	95
33)	2-Methylnaphthalene	11.81	142.0	309535	136.71	ug/mL	94
34)	*d10-Acenaphthene	14.14	164.0	72264	40.00	ug/mL	90
35)	Hexachlorocyclopentadiene	12.29	237.0	81660	159.18	ug/mL	96
36)	2,4,6-Trichlorophenol	12.48	196.0	97513	128.75	ug/mL	96
37)	2,4,5-Trichlorophenol	12.57	196.0	104053	127.56	ug/mL	98
38)	2-Chloronaphthalene	12.85	162.0	293045	142.95	ug/mL	96
39)	2-Fluorobiphenyl	12.65	172.0	307698	139.75	ug/mL	96
40)	2-Nitroaniline	13.18	65.0	135346	176.62	ug/mL	82
41)	Dimethylphthalate	13.66	163.0	361351	139.73	ug/mL	93
42)	Acenaphthylene	13.78	152.0	473316	164.47	ug/mL	93
43)	2,6-Dinitrotoluene	13.81	165.0	88714	148.02	ug/mL	73

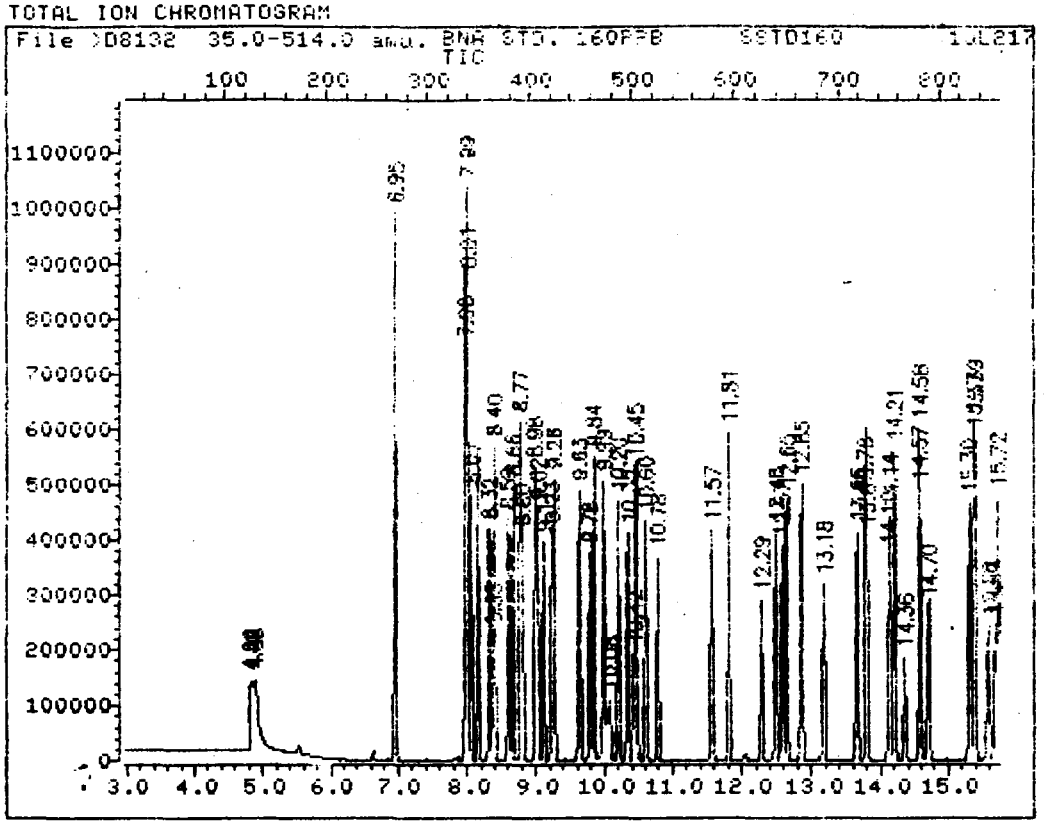
Operator ID: RAMUR Quant Rev: 7 Quant Time: 940627 18:42
Output File: ^D8132::QD Injected at: 940627 18:13
Data File: >D8132::D2 Dilution Factor: 1.00000
Name: BNA STD. 160PPB Instrument ID: 7002D
Misc: SSTD160 1uL21710 EMV=2200 BTL# 6

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	14.12	138.0	104554	165.91	ug/mL	92
45)	Acenaphthene	14.21	153.0	285663	147.02	ug/mL	93
46)	2,4-Dinitrophenol	14.36	184.0	54824	183.09	ug/mL	91
47)	4-Nitrophenol	14.58	109.0	42986M	189.02	ug/mL	
48)	Dibenzofuran	14.57	168.0	390641	139.48	ug/mL	74
49)	2,4-Dinitrotoluene	14.70	165.0	130424	144.84	ug/mL	9
50)	Diethylphthalate	15.30	149.0	371718	148.20	ug/mL	8
51)	4-Chlorophenyl-phenylether	15.39	204.0	133475	129.59	ug/mL	98
52)	Fluorene	15.37	166.0	279456	142.87	ug/mL	98
53)	4-Nitroaniline	15.58	65.0	130950	194.21	ug/mL	86
54)	2,4,6-Tribromophenol	16.00	330.0	92675	198.69	ug/mL	92
55)	*d10-Phenanthrene	17.45	188.0	102548	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.67	198.0	70744	166.23	ug/mL	91
57)	Di-phenylhydrazine	15.78	77.0	625357	169.34	ug/mL	92
58)	N-Nitrosodiphenylamine (1)	15.72	169.0	215589	145.86	ug/mL	93
59)	4-Bromophenyl-phenylether	16.52	248.0	79665	117.22	ug/mL	95
60)	Hexachlorobenzene	16.84	284.0	86069	106.35	ug/mL	92
61)	Pentachlorophenol	17.22	266.0	53695	136.67	ug/mL	92
62)	Phenanthrene	17.49	178.0	410410	148.00	ug/mL	96
63)	Anthracene	17.58	178.0	407531	149.18	ug/mL	92
64)	Carbazole	17.91	167.0	392770	160.52	ug/mL	94
65)	Di-n-butylphthalate	18.61	149.0	437551	124.08	ug/mL	88
66)	Fluoranthene	19.50	202.0	387975	136.10	ug/mL	9
67)	*d12-Chrysene	21.52	240.0	70525	40.00	ug/mL	99
68)	Pyrene	19.85	202.0	415122	149.44	ug/mL	99
69)	Terphenyl-d14	20.07	244.0	290567	133.37	ug/mL	97
70)	Butylbenzylphthalate	20.77	149.0	246499	164.77	ug/mL	93
71)	Benzidine	19.71	184.0	41752	186.88	ug/mL	96
72)	3,3'-Dichlorobenzidine	21.47	252.0	115832	149.22	ug/mL	98
73)	Benzo(a)anthracene	21.49	228.0	337341	146.40	ug/mL	95
74)	Chrysene	21.55	228.0	326861	139.35	ug/mL	94
75)	bis(2-Ethylhexyl)phthalate	21.52	149.0	283622	186.26	ug/mL	89
76)	*d12-Perylene	23.36	264.0	65110	40.00	ug/mL	98
77)	Di-n-octylphthalate	22.25	149.0	397485	129.34	ug/mL	85
78)	Benzo(b)fluoranthene	22.88	252.0	275943M	99.33	ug/mL	98
79)	Benzo(k)fluoranthene	22.85	252.0	384152M	218.51	ug/mL	98
80)	Benzo(a)pyrene	23.30	252.0	324823	148.66	ug/mL	93
81)	Indeno(1,2,3-cd)pyrene	~~25.64~~ 25.11	276.0	~~317628~~ 335854	~~183.51~~ 106	ug/mL	89
82)	Dibenz(a,h)anthracene	25.12	278.0	277136	172.98	ug/mL	96
83)	Benzo(g,h,i)perylene	25.64	276.0	317628	183.51	ug/mL	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

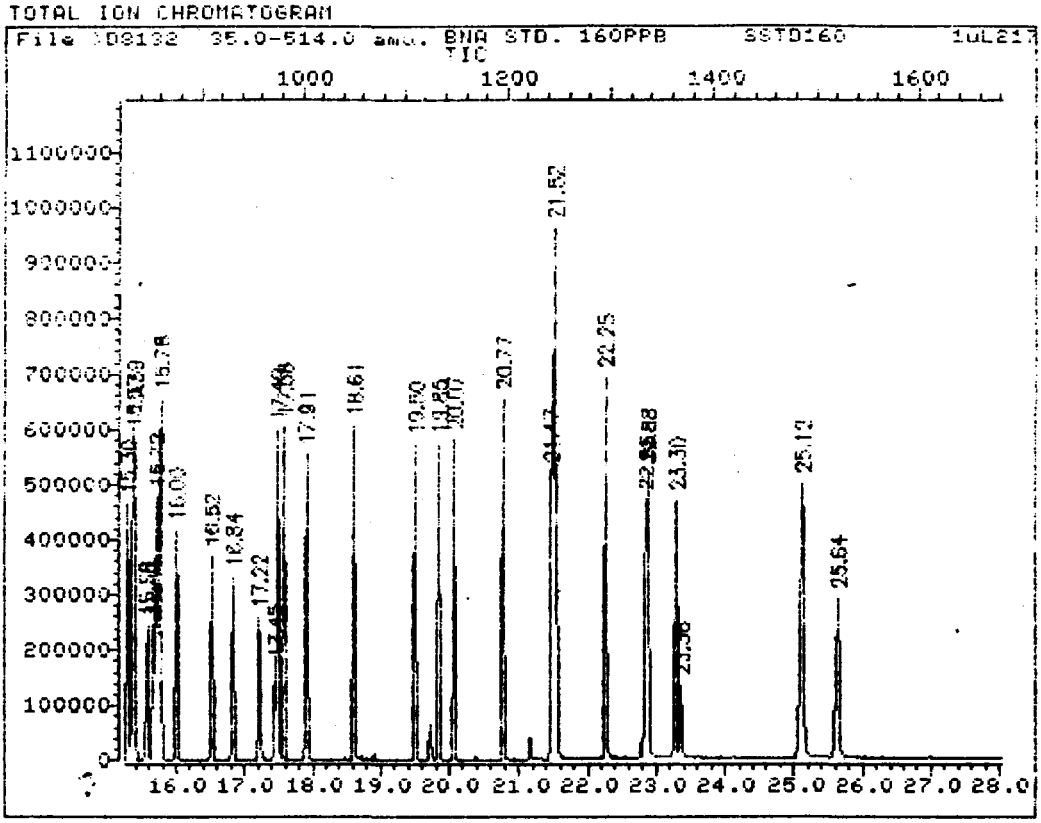


Data File: >D8132::D2 Quant Output File: ^D8132::QO
Name: BNA STD. 160PPB Instrument ID: 7002D
Misc: SSTD160 1uL21710 EMV=2200 BTL# 6

Id File: D_8270::F1
Title: EPA Method 8270. Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 18:42
Injected at: 940627 18:13

TOTAL ION CHROMATOGRAM



Data File: >D8132::D2 Quant Output File: ^D8132::QO
Name: BNA STD. 160PPB Instrument ID: 7002D
Misc: SSTD160 1uL21710 EMV=2200 BTL# 6

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940623 17:07 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940627 18:42
Injected at: 940627 18:13

Operator ID: RAMON Quant Rev: 7 Quant Time: 940628 15:52
Output File: ^D8133::QO Injected at: 940627 18:52
Data File: >D8133::D2 Dilution Factor: 1.00000
Name: ICVS SUPELCO Instrument ID: 7002D
Misc: ICVS050 50PPM 1uL EMV=2200 BTL# 7

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

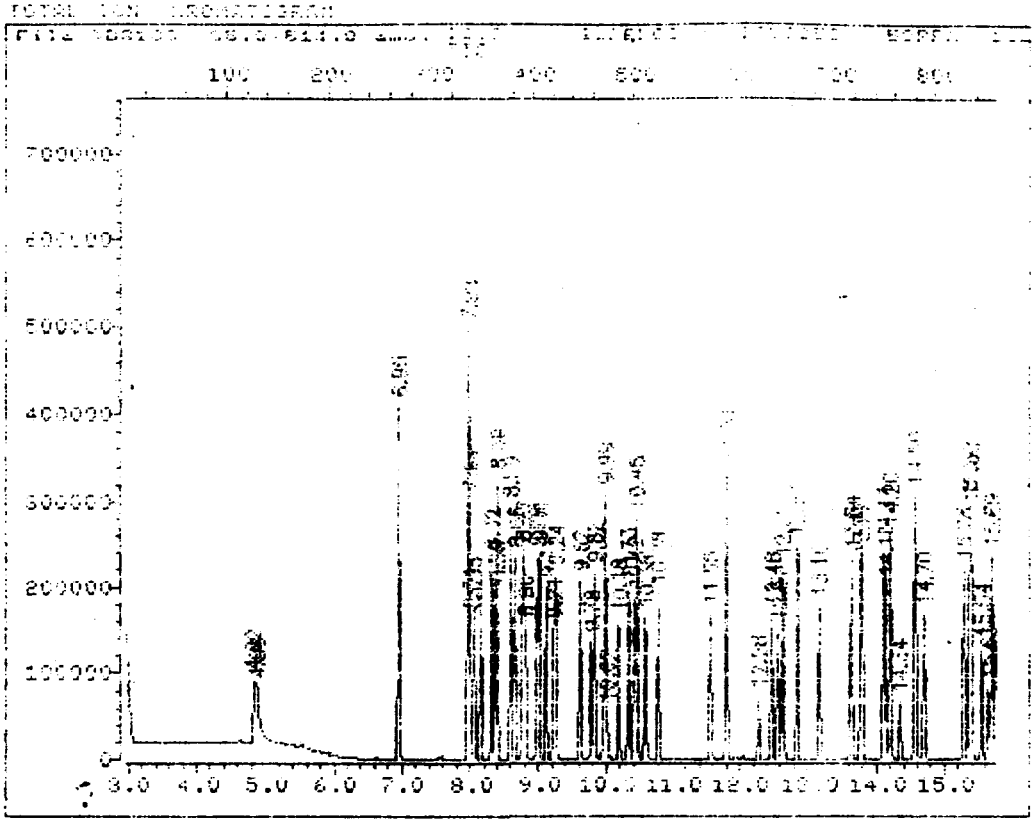
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.38	152.0	38038	40.00	ug/mL	98
2)	Pyridine	4.82	79.0	102604	65.67	ug/mL	88
3)	N-nitrosodimethylamine	4.88	42.0	53189	73.46	ug/mL	93
4)	2-Fluorophenol	6.95	112.0	151605	125.27	ug/mL	83
5)	Phenol-d6	7.98	99.0	206735	130.45	ug/mL	71
6)	Phenol	7.99	94.0	113480	63.32	ug/mL	91
7)	bis(2-Chloroethyl)ether	8.05	93.0	114253	75.29	ug/mL	96
8)	2-Chlorophenol	8.16	128.0	81785	61.08	ug/mL	97
9)	1,3-Dichlorobenzene	8.32	146.0	98410	73.96	ug/mL	90
10)	1,4-Dichlorobenzene	8.39	146.0	98752	73.38	ug/mL	95
11)	Benzyl alcohol	8.59	108.0	64316	77.77	ug/mL	93
12)	1,2-Dichlorobenzene	8.66	146.0	94525	74.28	ug/mL	92
13)	2-Methylphenol	8.77	108.0	76274	62.60	ug/mL	98
14)	bis(2-chloroisopropyl)ether	8.80	45.0	162673	70.44	ug/mL	98
15)	4-Methylphenol	8.98	108.0	78767	60.87	ug/mL	92
16)	N-Nitroso-di-n-propylamine	9.01	70.0	75759	75.26	ug/mL	92
17)	Hexachloroethane	9.11	117.0	42355	74.58	ug/mL	96
18)	Aniline	8.01	93.0	76617	33.15	ug/mL	73
19)	*d8-Naphthalene	10.42	136.0	145177	40.00	ug/mL	95
20)	Nitrobenzene-d5	9.21	82.0	90794	64.03	ug/mL	75
21)	Nitrobenzene	9.24	77.0	110817	75.05	ug/mL	87
22)	Isophorone	9.62	82.0	146240	50.04	ug/mL	94
23)	2-Nitrophenol	9.78	139.0	45541	63.92	ug/mL	89
24)	2,4-Dimethylphenol	9.82	107.0	77875	62.51	ug/mL	97
25)	Benzoic acid	10.02	122.0	35493	71.26	ug/mL	99
26)	bis(2-Chloroethoxy)methane	9.99	93.0	135258	74.28	ug/mL	85
27)	2,4-Dichlorophenol	10.18	162.0	57978	60.96	ug/mL	98
28)	1,2,4-Trichlorobenzene	10.33	180.0	73672	73.23	ug/mL	98
29)	Naphthalene	10.45	128.0	217242	61.94	ug/mL	99
30)	4-Chloroaniline	10.58	127.0	80315	57.94	ug/mL	83
31)	Hexachlorobutadiene	10.78	225.0	36707	74.49	ug/mL	91
32)	4-Chloro-3-methylphenol	11.55	107.0	68109	62.01	ug/mL	89
33)	2-Methylnaphthalene	11.81	142.0	162583	77.46	ug/mL	94
34)	*d10-Acenaphthene	14.13	164.0	72898	40.00	ug/mL	91
35)	Hexachlorocyclopentadiene	12.28	237.0	18634	41.24	ug/mL	97
36)	2,4,6-Trichlorophenol	12.48	196.0	38591	63.48	ug/mL	98
37)	2,4,5-Trichlorophenol	12.57	196.0	40297	62.13	ug/mL	99
38)	2-Chloronaphthalene	12.83	162.0	152209	80.46	ug/mL	99
39)	2-Fluorobiphenyl	12.62	172.0	133835	66.09	ug/mL	96
40)	2-Nitroaniline	13.16	65.0	61950	77.93	ug/mL	88
41)	Dimethylphthalate	13.64	163.0	175996	77.57	ug/mL	94
42)	Acenaphthylene	13.77	152.0	195385	63.75	ug/mL	93
43)	2,6-Dinitrotoluene	14.70	165.0	59943	83.44	ug/mL	67

Operator ID: RAMON Quant Rev: 7 Quant Time: 940628 15:52
Output File: ^D8133::QO Injected at: 940627 18:52
Data File: >D8133::D2 Dilution Factor: 1.00000
Name: ICVS SUPELCO Instrument ID: 7002D
Misc: ICVS050 50PPM 1uL EMV=2200 BTL# 7

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	14.11	138.0	48952	78.25	ug/mL	92
45)	Acenaphthene	14.20	153.0	118377	63.08	ug/mL	92
46)	2,4-Dinitrophenol	14.34	184.0	17346	78.25	ug/mL	97
48)	Dibenzofuran	14.56	168.0	196686	76.29	ug/mL	69
49)	2,4-Dinitrotoluene	14.70	165.0	59943	77.75	ug/mL	75
50)	Diethylphthalate	15.28	149.0	188729	81.49	ug/mL	97
51)	4-Chlorophenyl-phenylether	15.38	204.0	70584	77.81	ug/mL	88
52)	Fluorene	15.37	166.0	121867	63.71	ug/mL	97
53)	4-Nitroaniline	15.54	65.0	59317	79.43	ug/mL	83
54)	2,4,6-Tribromophenol	15.98	330.0	37400	125.56	ug/mL	94
55)	*d10-Phenanthrene	17.44	188.0	99753	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.63	198.0	24000	68.35	ug/mL	96
57)	Di-phenylhydrazine	15.75	77.0	218418	51.62	ug/mL	97
58)	N-Nitrosodiphenylamine (1)	15.69	169.0	105017	76.30	ug/mL	93
59)	4-Bromophenyl-phenylether	16.51	248.0	38504	75.56	ug/mL	95
60)	Hexachlorobenzene	16.83	284.0	41927	74.33	ug/mL	93
61)	Pentachlorophenol	17.21	266.0	18076	65.14	ug/mL	94
62)	Phenanthrene	17.48	178.0	171167	64.03	ug/mL	96
63)	Anthracene	17.57	178.0	177741	67.46	ug/mL	92
64)	Carbazole	17.90	167.0	198360	79.35	ug/mL	94
65)	Di-n-butylphthalate	18.60	149.0	295213	83.44	ug/mL	97
66)	Fluoranthene	19.49	202.0	164033	63.86	ug/mL	99
67)	*d12-Chrysene	21.50	240.0	74528	40.00	ug/mL	98
68)	Pyrene	19.83	202.0	170032	65.25	ug/mL	99
69)	Terphenyl-d14	20.06	244.0	116762	63.21	ug/mL	99
70)	Butylbenzylphthalate	20.77	149.0	127215	83.07	ug/mL	89
71)	Benzidine	19.71	184.0	1137	5.96	ug/mL	89
72)	3,3'-Dichlorobenzidine	21.46	252.0	54575	79.22	ug/mL	99
73)	Benzo(a)anthracene	21.49	228.0	139082	63.75	ug/mL	90
74)	Chrysene	21.55	228.0	131809	62.88	ug/mL	89
75)	bis(2-Ethylhexyl)phthalate	21.52	149.0	161020	83.38	ug/mL	88
76)	*d12-Perylene	23.35	264.0	58739	40.00	ug/mL	97
77)	Di-n-octylphthalate	22.25	149.0	284098	93.21	ug/mL	99
78)	Benzo(b)fluoranthene	22.86	252.0	256556	99.49	ug/mL	98
79)	Benzo(k)fluoranthene	22.86	252.0	256556	132.23	ug/mL	98
80)	Benzo(a)pyrene	23.28	252.0	120470	63.48	ug/mL	92
81)	Indeno(1,2,3-cd)pyrene	~~25.61~~	276.0	~~111873~~	~~63.34~~	ug/mL	89
82)	Dibenz(a,h)anthracene	25.08	278.0	101597	64.30	ug/mL	96
83)	Benzo(g,h,i)perylene	25.61	276.0	111873	63.34	ug/mL	96

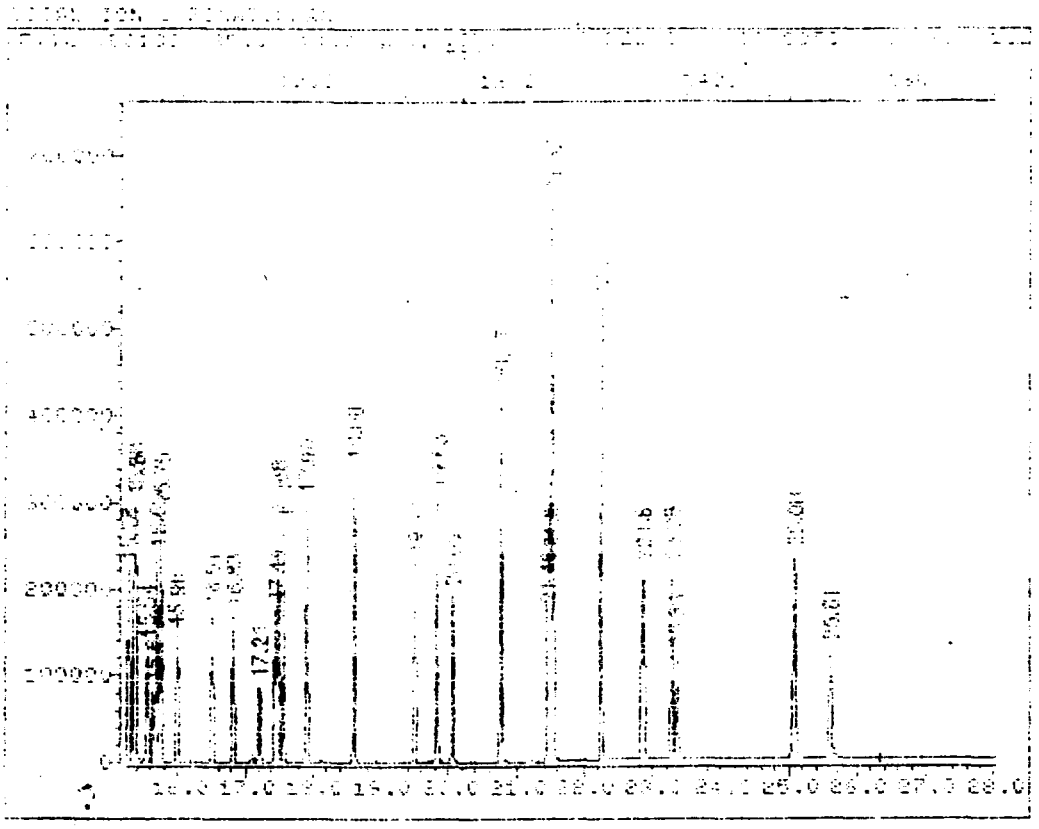
* Compound is ISTD



Data File: >D8133::D2 Quant Output File: ^D8133::QO
Name: ICVS SUPELCO Instrument ID: 7002D
Misc: ICVS050 50PPM 1uL EMV=2200 BTL# 7

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940628 15:52
Injected at: 940627 18:52



Data File: >D8133::D2 Quant Output File: ^D8133::QO
Name: ICVS SUPELCO Instrument ID: 7002D
Misc: ICVS050 50PPM 1uL EMV=2200 BTL# 7

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940628 15:52
Injected at: 940627 18:52

QC REPORT

MS SEMI-VOLATILES

Inst "D"

7-6-94

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Lab File ID: >D8194 DFTPP Injection Date: 7/06/94

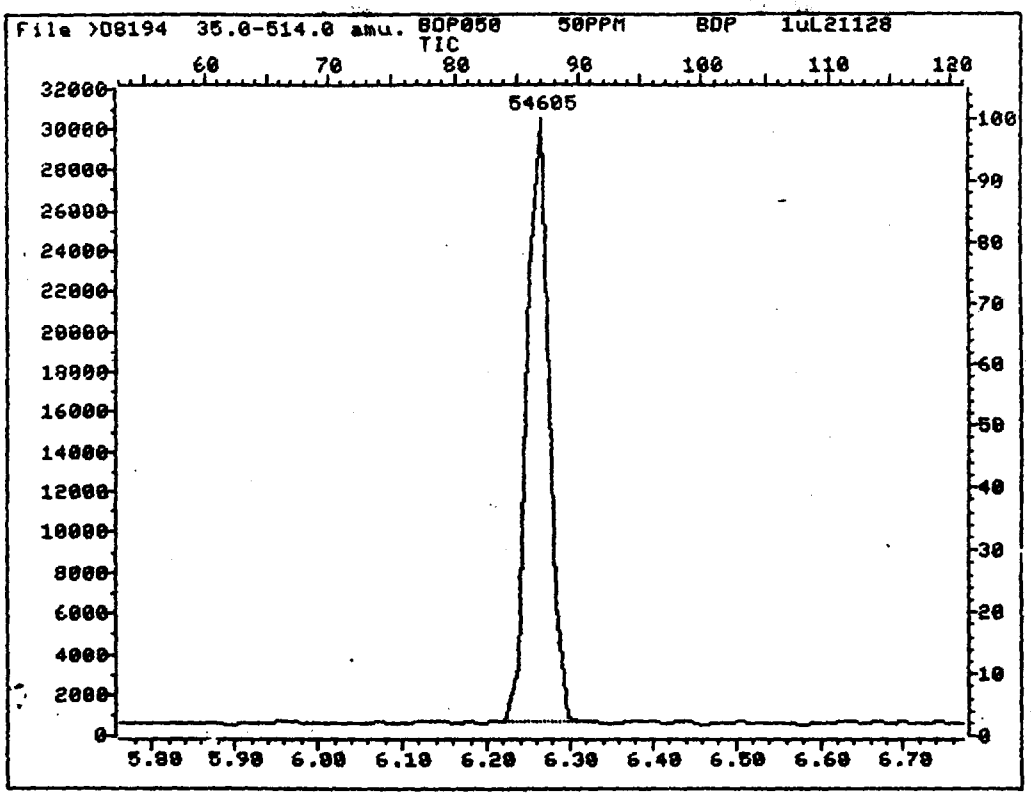
Instrument ID: DFTPP Injection Time: 10:44 11hr = 21:44

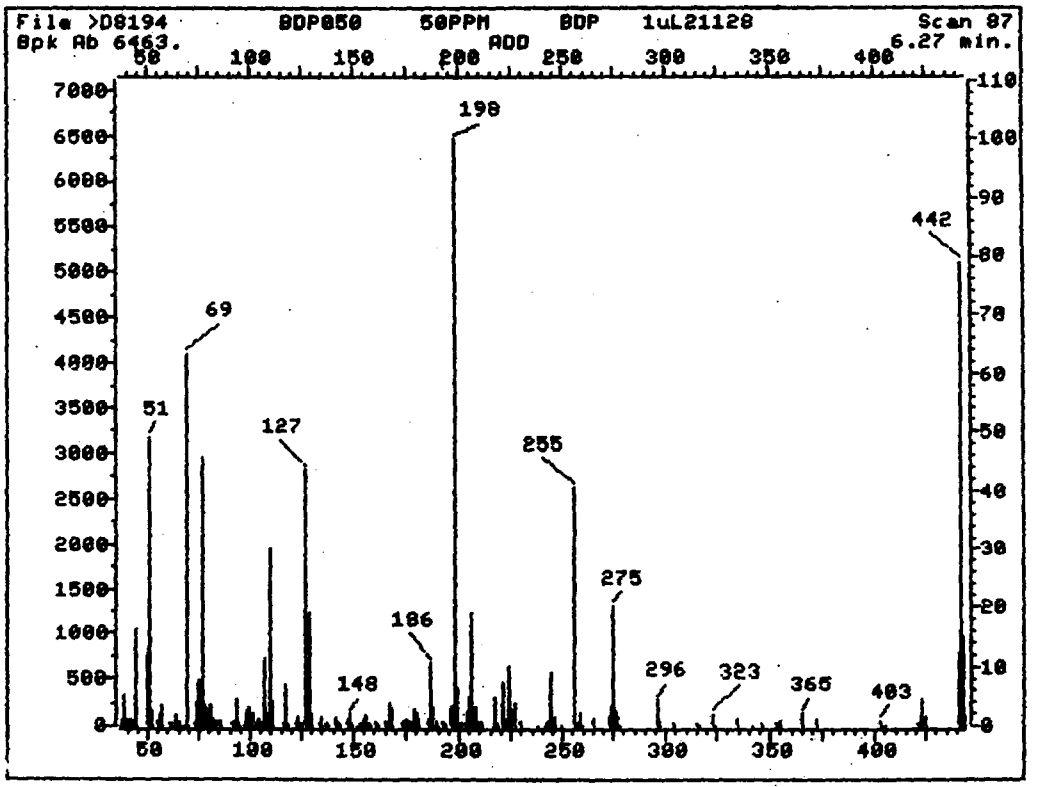
m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	49.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.4
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	43.6
197	Less than 1.0% of mass 198	.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.5
275	10.0 - 30.0% of mass 198	20.1
365	Greater than 1.00% of mass 198	2.1
441	Present, but less than mass 443	12.1
442	Greater than 40.0% of mass 198	78.8
443	17.0 - 23.0% of mass 442	14.9 (18.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNA STD. 5	SSTD050	>D8195	07/06/94	11:09
02	BT#260176	P CK	>D8196	07/06/94	11:51
03	BNA BLANK	SVBLK	>D8197	07/06/94	12:36
04	BNA LCS	LCS100	>D8198	07/06/94	13:15
05	BNA LCSDUP	LCS100	>D8199	07/06/94	13:54
06	BT#266777		>D8200	07/06/94	14:33
07	BT#267075	E&E	>D8201	07/06/94	15:13
08	BT#267162	NE ILF	>D8202	07/06/94	15:53
09	BT#267189	NE ID	>D8203	07/06/94	16:33
10	BT#267190	NE ID	>D8204	07/06/94	17:13
11	BT#267191	NE ID	>D8205	07/06/94	17:52
12	BT#267192	NE ID	>D8206	07/06/94	18:31
13	BT#267193	N ND	>D8207	07/06/94	19:11
14	BT#267194	N ND	>D8208	07/06/94	19:51
15	BT#267195	N ND	>D8209	07/06/94	20:30
16	BT#267196	N ND	>D8210	07/06/94	21:09
17					
18					
19					
20					
21					
22					


File >D8194 35.0-514.0 amu. BDP050 50PPM BDP 1uL21128
TIC
54605


File >D8194 BDP050 50PPM BDP 1uL21128 Scan 87
Bpk Ab 6463. ADD 6.27 min.
198
69
51
127
255
275
186
148
296
323
365
403
442

>D8194 BDP050 50PPM BDP 1uL21128
87 ADD

File: >D8194 Scan #: 87 Retn. time: 6.27

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.85	15.00	91.00	38.00	143.10	21.00	199.05	420.00	265.15	62.00
38.00	69.00	92.00	60.00	147.15	62.00	200.15	34.00	273.20	83.00
39.00	340.00	93.00	298.00	148.15	127.00	201.35	25.00	274.10	209.00
39.90	76.00	94.00	24.00	149.05	22.00	203.10	31.00	275.20	1299.00
41.00	65.00	95.95	11.00	151.35	11.00	204.20	167.00	276.25	157.00
42.00	16.00	98.05	168.00	153.10	24.00	205.20	306.00	277.25	96.00
43.00	47.00	99.05	210.00	154.00	25.00	206.10	1238.00	278.05	13.00
43.90	1051.00	100.95	126.00	155.20	68.00	207.20	193.00	296.25	288.00
50.05	780.00	102.95	25.00	156.10	109.00	208.10	39.00	297.15	44.00
50.95	3181.00	104.00	67.00	157.00	16.00	210.25	27.00	303.20	22.00
52.05	169.00	105.10	35.00	158.10	17.00	210.55	15.00	315.05	36.00
55.10	51.00	106.20	22.00	160.10	46.00	210.95	48.00	316.15	11.00
56.00	113.00	107.00	727.00	161.05	37.00	216.05	15.00	323.20	116.00
57.00	217.00	108.00	130.00	165.05	45.00	217.05	305.00	324.10	13.00
61.00	28.00	109.00	16.00	166.25	17.00	217.95	37.00	334.20	75.00
62.05	29.00	110.00	1953.00	167.15	246.00	221.10	459.00	341.20	12.00
63.05	122.00	111.00	268.00	168.05	183.00	223.10	78.00	346.15	30.00
64.05	14.00	116.05	30.00	173.20	33.00	224.20	648.00	352.20	21.00
65.05	56.00	117.05	447.00	174.10	57.00	225.10	172.00	353.30	17.00
67.05	14.00	118.05	26.00	175.10	80.00	227.15	235.00	354.20	41.00
68.95	4100.00	122.00	27.00	176.10	37.00	229.25	50.00	365.15	135.00
73.10	27.00	123.00	85.00	177.00	56.00	237.10	13.00	372.30	68.00
74.00	257.00	124.00	28.00	179.15	178.00	241.10	12.00	402.20	36.00
75.00	490.00	125.10	24.00	180.15	126.00	242.20	26.00	403.10	50.00
76.10	158.00	127.00	2819.00	181.05	65.00	243.25	50.00	404.20	11.00
77.00	2958.00	128.05	208.00	185.15	71.00	244.25	578.00	421.20	31.00
78.00	218.00	129.05	1230.00	186.20	679.00	245.15	75.00	422.10	37.00
78.95	190.00	130.05	112.00	187.20	202.00	246.15	87.00	423.20	297.00
79.95	140.00	134.05	22.00	189.10	41.00	249.05	15.00	424.25	82.00
81.05	222.00	135.05	91.00	192.10	52.00	255.20	2623.00	441.25	785.00
81.95	62.00	136.10	24.00	193.10	36.00	256.10	363.00	442.15	5094.00
82.95	52.00	137.10	21.00	196.15	198.00	257.10	33.00	443.15	960.00
84.95	41.00	141.00	100.00	197.05	17.00	258.20	133.00	444.25	94.00
86.05	41.00	142.10	40.00	198.05	6463.00	259.20	15.00		

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 ( ) #	TOT OUT	
01	BT#260176	42	37 *	66	25	40	63		1	✓
02	BNA BLANK	61	50	80	50	51	66		0	
03	BNA LCS	66	58	80	56	61	77		0	
04	BNA LCSDUP	67	58	79	55	59	78		0	I/o
05	BT#266777	63	49	78	47	49	63		0	
06	BT#267075	68	56	80	24	40	63		0	I/o
07	BT#267162	71	53	66	32	48	70		0	
08	BT#267189	48	44	48	36	53	84		0	
09	BT#267190	61	59	51	49	63	86		0	
10	BT#267191	76	58	60	36	53	66		0	
11	BT#267192	45	39 *	30 *	33	44	61		2	✓
12	BT#267193	66	54	53	43	61	82		0	
13	BT#267194	25 *	13 *	10 *	9 *	10 *	15		5	✓
14	BT#267195	69	68	64	3 *	11 *	34		2	✓
15	BT#267196	59	50	53	40	56	80		0	I/o
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d6	(10- 94)
S5 (2FP) = 2-Fluorophenol	(21-100)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

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

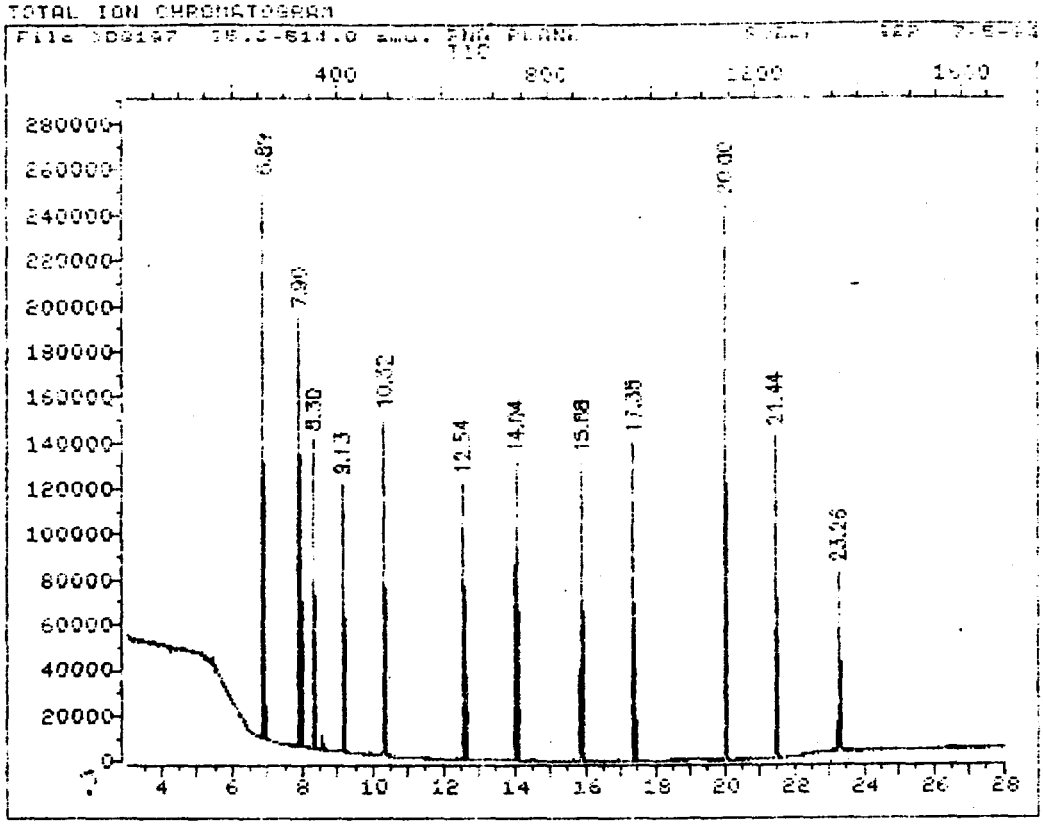
Operator ID: KPMSN Quant Ref: 7 Quant Time: 940706 15:05
Output File: D0619?::Q injected at: 940706 12:36
Data File: >D81?7::?? Dilution Factor: 1.00000
Name: BNA BLANK Instrument ID: 7002D
Misc: SUBLK SEP 7-5-94 FW=1.0 BTL# 4

ID File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.30	152.0	25646	40.00	ug/mL	94
4)	2-Fluorophenol	6.89	112.0	73291	102.66	ug/mL	80
5)	Phenol-d6	7.90	99.0	97959	99.43	ug/mL	70
19)	*d8-Naphthalene	10.32	136.0	100766	40.00	ug/mL	96
20)	Nitrobenzene-d5	9.13	82.0	54983	61.39	ug/mL	80
34)	*d10-Acenaphthene	14.04	164.0	51595	40.00	ug/mL	92
39)	2-Fluorobiphenyl	12.54	172.0	62932	49.73	ug/mL	94
54)	2,4,6-Tribromophenol	15.88	330.0	23405	131.02	ug/mL	91
55)	*d10-Phenanthrene	17.35	188.0	72577	40.00	ug/mL	98
67)	*d12-Chrysene	21.44	240.0	59545	40.00	ug/mL	99
69)	Terphenyl-d14	20.09	244.0	96951	80.33	ug/mL	91
76)	*d12-Perylene	23.26	264.0	47660	40.00	ug/mL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: ^D8197::D3 Quant Output File: ^D8197::QU
Name: BNA BLANK Instrument ID: 7002D
Misc: SVBLK SEP 7-5-94 FV=1.0 BTL# 4

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940706 13:05
Injected at: 940706 12:36

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: LCS/LCSDUP SEP 7-5-94 FV=1.0

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Acenaphthene	100	0	82	82	47-145
Acenaphthylene	100	0	77	77	33-145
Anthracene	100	0	89	89	27-133
Benzo(a)anthracene	100	0	90	90	33-143
Benzo(b)fluoranthene	100	0	81	81	24-159
Benzo(k)fluoranthene	100	0	110	112	11-162
Benzo(a)pyrene	100	0	88	88	17-163
Benzo(g,h,i)perylene	100	0	95	95	1-219
Butylbenzylphthalate	100	0	85	85	1-152
bis(2-Chloroethyl)ether	100	0	64	64	12-158
bis(2-Chloroethoxy)meth	100	0	67	67	33-184

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	100	61	61	30	50	47-145
Acenaphthylene	100	59	59	26	50	33-145
Anthracene	100	66	66	30	50	27-133
Benzo(a)anthracene	100	66	66	32	50	33-143
Benzo(b)fluoranthene	100	97	97	18	50	24-159
Benzo(k)fluoranthene	100	130	134	18	50	11-162
Benzo(a)pyrene	100	65	65	31	50	17-163
Benzo(g,h,i)perylene	100	73	73	26	50	1-219
Butylbenzylphthalate	100	56	56	40	50	1-152
bis(2-Chloroethyl)ether	100	48	48	30	50	12-158
bis(2-Chloroethoxy)meth	100	50	50	28	50	33-184

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 5 out of ** outside limits

COMMENTS: 5 Compounds are out between the LCS and LCSDUP. Both the LCS and

3C-2

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
bis(2-chloroisopropyl)e	100	0	59	59		36-166
bis(2-Ethylhexyl)phthal	100	0	90	90		8-158
4-Bromophenyl-phenyleth	100	0	80	80		53-127
2-Chloronaphthalene	100	0	69	69		60-118
4-Chlorophenyl-phenylet	100	0	82	82		25-158
Chrysene	100	0	91	91		17-168
Dibenz(a,h)anthracene	100	0	94	94		1-227
Di-n-butylphthalate	100	0	94	94		1-118
1,2-Dichlorobenzene	100	0	51	51		32-129
1,3-Dichlorobenzene	100	0	51	51		1-172
1,4-Dichlorobenzene	100	0	52	52		20-124

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
bis(2-chloroisopropyl)e	100	43	43		33		50	36-166
bis(2-Ethylhexyl)phthal	100	65	65		32		50	8-158
4-Bromophenyl-phenyleth	100	58	58		31		50	53-127
2-Chloronaphthalene	100	51	51	*	30		50	60-118
4-Chlorophenyl-phenylet	100	59	59		32		50	25-158
Chrysene	100	65	65		33		50	17-168
Dibenz(a,h)anthracene	100	72	72		26		50	1-227
Di-n-butylphthalate	100	68	68		32		50	1-118
1,2-Dichlorobenzene	100	39	39		27		50	32-129
1,3-Dichlorobenzene	100	38	38		29		50	1-172
1,4-Dichlorobenzene	100	38	38		33		50	20-124

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 9 out of ** outside limits

COMMENTS:

3C-3

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
3,3'-Dichlorobenzidine	100	0	39	39		1-262
Diethylphthalate	100	0	54	54		1-114
Dimethylphthalate	100	0	31	31		1-112
2,4-Dinitrotoluene	100	0	88	88		39-139
2,6-Dinitrotoluene	100	0	49	49	*	50-158
Di-n-octylphthalate	100	0	91	91		4-146
Fluoranthene	100	0	95	95		59-121
Hexachlorobenzene	100	0	83	83		1-152
Hexachlorobutadiene	100	0	53	53		24-116
Hexachloroethane	100	0	55	55		40-113
Indeno(1,2,3-cd)pyrene	100	0	95	95		1-171

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
3,3'-Dichlorobenzidine	100	20	20		64	*	50	1-262
Diethylphthalate	100	30	30		56	*	50	1-114
Dimethylphthalate	100	11	11		97	*	50	1-112
2,4-Dinitrotoluene	100	64	64		32		50	39-139
2,6-Dinitrotoluene	100	50	50	*	1		50	50-158
Di-n-octylphthalate	100	66	66		32		50	4-146
Fluoranthene	100	74	74		25		50	59-121
Hexachlorobenzene	100	63	63		27		50	1-152
Hexachlorobutadiene	100	38	38		33		50	24-116
Hexachloroethane	100	39	39	*	32		50	40-113
Indeno(1,2,3-cd)pyrene	100	73	73		26		50	1-171

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 13 out of ** outside limits

COMMENTS:

3C-4

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Isophorone	100	0	71	71	21-196
Naphthalene	100	0	62	62	21-133
Nitrobenzene	100	0	69	69	35-180
N-Nitroso-di-n-propylam	100	0	62	62	1-230
Phenanthrene	100	0	90	90	54-120
Pyrene	100	0	92	92	52-115
1,2,4-Trichlorobenzene	100	0	55	55	44-142
4-Chloro-3-methylphenol	100	0	74	74	22-147
2-Chlorophenol	100	0	59	59	23-134
2,4-Dichlorophenol	100	0	59	59	39-135
2,4-Dimethylphenol	100	0	57	57	32-119

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Isophorone	100	53	53	29	50	21-196
Naphthalene	100	46	46	30	50	21-133
Nitrobenzene	100	51	51	30	50	35-180
N-Nitroso-di-n-propylam	100	46	46	30	50	1-230
Phenanthrene	100	68	68	27	50	54-120
Pyrene	100	65	65	35	50	52-115
1,2,4-Trichlorobenzene	100	39	39 *	33	50	44-142
4-Chloro-3-methylphenol	100	76	76	3	50	22-147
2-Chlorophenol	100	57	57	4	50	23-134
2,4-Dichlorophenol	100	57	57	2	50	39-135
2,4-Dimethylphenol	100	55	55	5	50	32-119

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 17 out of ** outside limits

COMMENTS:

3C-5

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
2,4-Dinitrophenol	100	0	92	92		1-191
4,6-Dinitro-2-methylphe	100	0	80	80		1-132
2-Nitrophenol	100	0	55	55		29-182
4-Nitrophenol	100	0	110	110		1-132
Pentachlorophenol	100	0	81	81		14-176
Phenol	100	0	55	55		5-112
2,4,6-Trichlorophenol	100	0	67	67		37-144

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
2,4-Dinitrophenol	100	91	91		1		50	1-191
4,6-Dinitro-2-methylphe	100	82	82		2		50	1-132
2-Nitrophenol	100	54	54		2		50	29-182
4-Nitrophenol	100	110	114		3		50	1-132
Pentachlorophenol	100	85	85		5		50	14-176
Phenol	100	55	55		1		50	5-112
2,4,6-Trichlorophenol	100	68	68		0		50	37-144

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 21 out of ** outside limits

COMMENTS: _____

_____

Operator ID: RAMON Quant Rev: 7 Quant Time: 940707 16:31
Output File: ^D8198::QO Injected at: 940706 13:15
Data File: >D8198::D3 Dilution Factor: 1.00000
Name: BNA LCS 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 5

ID File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

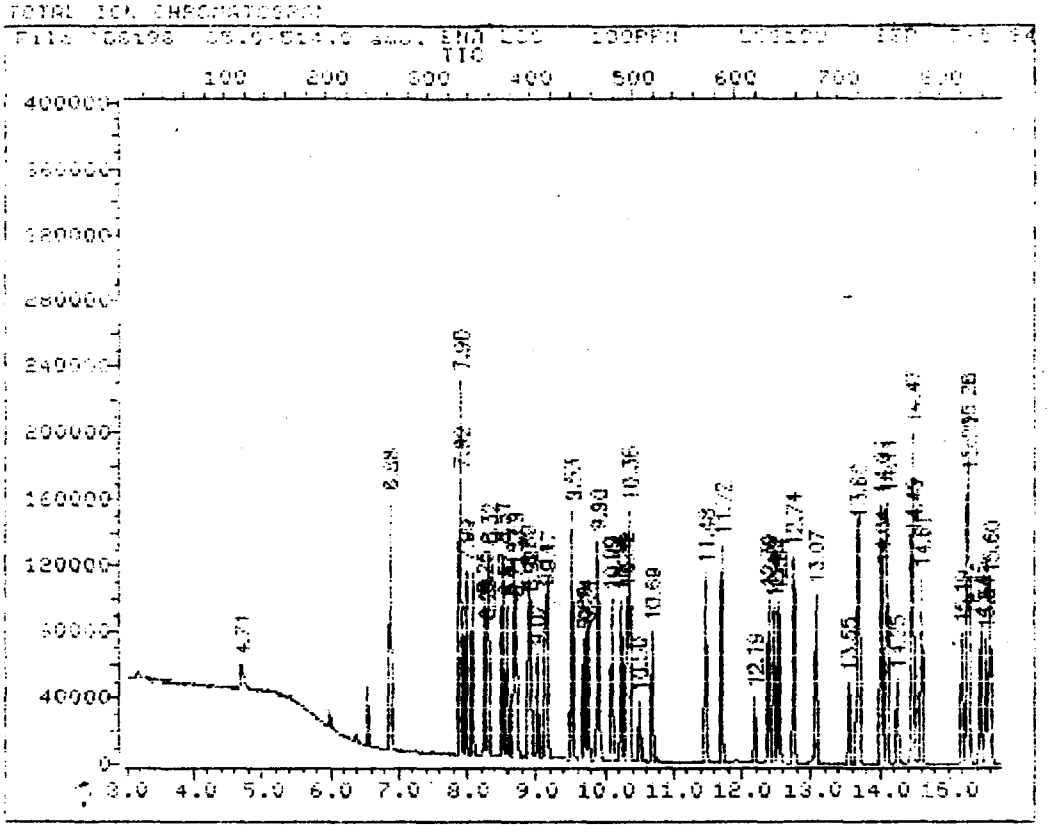
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.29	152.0	19320	40.00	ug/mL	98
3)	N-nitrosodimethylamine	4.71	42.0	19027	61.32	ug/mL	87
4)	2-Fluorophenol	6.88	112.0	65683	122.13	ug/mL	66
5)	Phenol-d6	7.90	99.0	83676	112.74	ug/mL	76
6)	Phenol	7.92	94.0	46633	55.30	ug/mL	85
7)	bis(2-Chloroethyl)ether	7.99	93.0	46395	64.38	ug/mL	96
8)	2-Chlorophenol	8.08	128.0	35835	59.38	ug/mL	95
9)	1,3-Dichlorobenzene	8.25	146.0	32014	50.79	ug/mL	91
10)	1,4-Dichlorobenzene	8.32	146.0	33519	52.14	ug/mL	92
11)	Benzyl alcohol	8.51	108.0	24685	63.49	ug/mL	94
12)	1,2-Dichlorobenzene	8.57	146.0	31084	50.82	ug/mL	94
13)	2-Methylphenol	8.69	108.0	33580	59.84	ug/mL	97
14)	bis(2-chloroisopropyl)ether	8.71	45.0	56931	59.40	ug/mL	85
15)	4-Methylphenol	8.89	108.0	35014	59.31	ug/mL	92
16)	N-Nitroso-di-n-propylamine	8.92	70.0	29234	62.00	ug/mL	96
17)	Hexachloroethane	9.02	117.0	15841	54.74	ug/mL	95
19)	*d8-Naphthalene	10.32	136.0	76983	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.14	82.0	45265	66.15	ug/mL	86
21)	Nitrobenzene	9.17	77.0	49411	69.26	ug/mL	91
22)	Isophorone	9.53	82.0	95079	70.59	ug/mL	92
23)	2-Nitrophenol	9.69	139.0	18184	54.57	ug/mL	91
24)	2,4-Dimethylphenol	9.74	107.0	33598	57.17	ug/mL	95
26)	bis(2-Chloroethoxy)methane	9.90	93.0	56527	66.87	ug/mL	82
27)	2,4-Dichlorophenol	10.09	162.0	25490	58.66	ug/mL	85
28)	1,2,4-Trichlorobenzene	10.24	180.0	26288	54.78	ug/mL	94
29)	Naphthalene	10.36	128.0	103794	62.32	ug/mL	99
30)	4-Chloroaniline	10.50	127.0	15930	25.90	ug/mL	87
31)	Hexachlorobutadiene	10.69	225.0	12460	52.96	ug/mL	92
32)	4-Chloro-3-methylphenol	11.48	107.0	38293	73.87	ug/mL	96
33)	2-Methylnaphthalene	11.72	142.0	64529	62.36	ug/mL	98
34)	*d10-Acenaphthene	14.04	164.0	38364	40.00	ug/mL	93
35)	Hexachlorocyclopentadiene	12.19	237.0	9190	42.20	ug/mL	95
36)	2,4,6-Trichlorophenol	12.39	196.0	18068	67.32	ug/mL	97
37)	2,4,5-Trichlorophenol	12.48	196.0	19755	70.48	ug/mL	98
38)	2-Chloronaphthalene	12.74	162.0	62302	69.05	ug/mL	94
39)	2-Fluorobiphenyl	12.54	172.0	54581	58.01	ug/mL	96
40)	2-Nitroaniline	13.07	65.0	34925	94.99	ug/mL	85
41)	Dimethylphthalate	13.55	163.0	32963	31.06	ug/mL	94
42)	Acenaphthylene	13.68	152.0	107914	77.36	ug/mL	94
43)	2,6-Dinitrotoluene	14.61	165.0	32447M	88.37	ug/mL	
44)	3-Nitroaniline	14.02	138.0	23657	84.45	ug/mL	89
45)	Acenaphthene	14.11	153.0	72087	82.05	ug/mL	93
46)	2,4-Dinitrophenol	14.25	184.0	10564	91.76	ug/mL	74

Operator ID: RAMON Quant Rev: 7 Quant Time: 940707 16:31
Output File: ^D8198::QO Injected at: 940706 13:15
Data File: >D8198::D3 Dilution Factor: 1.00000
Name: BNA LCS 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 5

ID File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
47)	4-Nitrophenol	14.49	109.0	13334	109.96	ug/mL	79
48)	Dibenzofuran	14.47	168.0	99110	79.58	ug/mL	50
50)	Diethylphthalate	15.19	149.0	60205	53.98	ug/mL	85
51)	4-Chlorophenyl-phenylether	15.29	204.0	34824	81.69	ug/mL	83
52)	Fluorene	15.28	166.0	81497	87.30	ug/mL	98
53)	4-Nitroaniline	15.45	65.0	32264	98.00	ug/mL	
54)	2,4,6-Tribromophenol	15.89	330.0	20535	154.60	ug/mL	
55)	*d10-Phenanthrene	17.34	188.0	54135	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.54	198.0	14147	80.34	ug/mL	62
58)	N-Nitrosodiphenylamine (1)	15.60	169.0	44392	67.77	ug/mL	94
59)	4-Bromophenyl-phenylether	16.42	248.0	19217	80.07	ug/mL	80
60)	Hexachlorobenzene	16.73	284.0	21745	82.62	ug/mL	92
61)	Pentachlorophenol	17.14	266.0	10800	80.76	ug/mL	94
62)	Phenanthrene	17.40	178.0	121543	89.67	ug/mL	97
63)	Anthracene	17.48	178.0	115791	89.21	ug/mL	92
64)	Carbazole	17.82	167.0	105668	85.25	ug/mL	97
65)	Di-n-butylphthalate	18.53	149.0	176275	93.66	ug/mL	96
66)	Fluoranthene	19.43	202.0	121199	95.35	ug/mL	99
67)	*d12-Chrysene	21.44	240.0	46109	40.00	ug/mL	98
68)	Pyrene	19.75	202.0	122163	92.02	ug/mL	98
69)	Terphenyl-d14	19.99	244.0	74523	79.74	ug/mL	96
70)	Butylbenzylphthalate	20.71	149.0	69840	85.02	ug/mL	87
72)	3,3'-Dichlorobenzidine	21.39	252.0	11469	38.98	ug/mL	
73)	Benzo(a)anthracene	21.42	228.0	108488	90.43	ug/mL	85
74)	Chrysene	21.47	228.0	97931	90.55	ug/mL	94
75)	bis(2-Ethylhexyl)phthalate	21.45	149.0	99176	90.37	ug/mL	86
76)	*d12-Perylene	23.27	264.0	36866	40.00	ug/mL	96
77)	Di-n-octylphthalate	22.20	149.0	168462	90.70	ug/mL	98
78)	Benzo(b)fluoranthene	22.76	252.0	132513	81.12	ug/mL	96
79)	Benzo(k)fluoranthene	22.79	252.0	75705M	64.21	ug/mL	96
80)	Benzo(a)pyrene	23.20	252.0	91862	88.22	ug/mL	92
81)	Indeno(1,2,3-cd)pyrene	25.48	276.0	101502	95.36	ug/mL	90
82)	Dibenz(a,h)anthracene	24.97	278.0	91025	93.62	ug/mL	97
83)	Benzo(g,h,i)perylene	25.48	276.0	101502	95.36	ug/mL	96

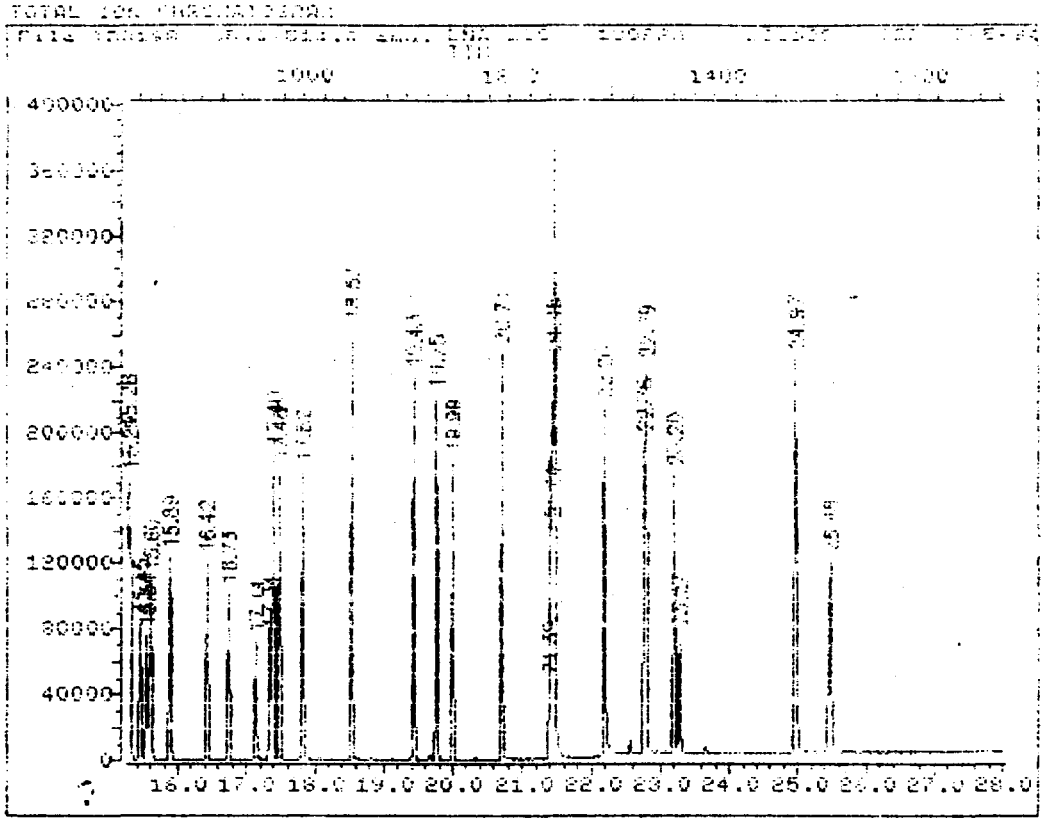
* Compound is ISTD



Data File: >D8198::D3 Quant Output File: ^D8198::QO
Name: BNA LCS 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 5

Id File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940707 16:31
Injected at: 940706 13:15



Data File: >D8198::D3 Quant Output File: ^D8198::QO
Name: BNA LCS 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 5

Id File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940707 16:31
Injected at: 940706 13:15

Operator ID: RAMON Quant Rev: 7 Quant Time: 940707 16:34
Output File: ^D8199::QO Injected at: 940706 13:54
Data File: >D8199::D3 Dilution Factor: 1.00000
Name: BNA LCSDUP 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 6

ID File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

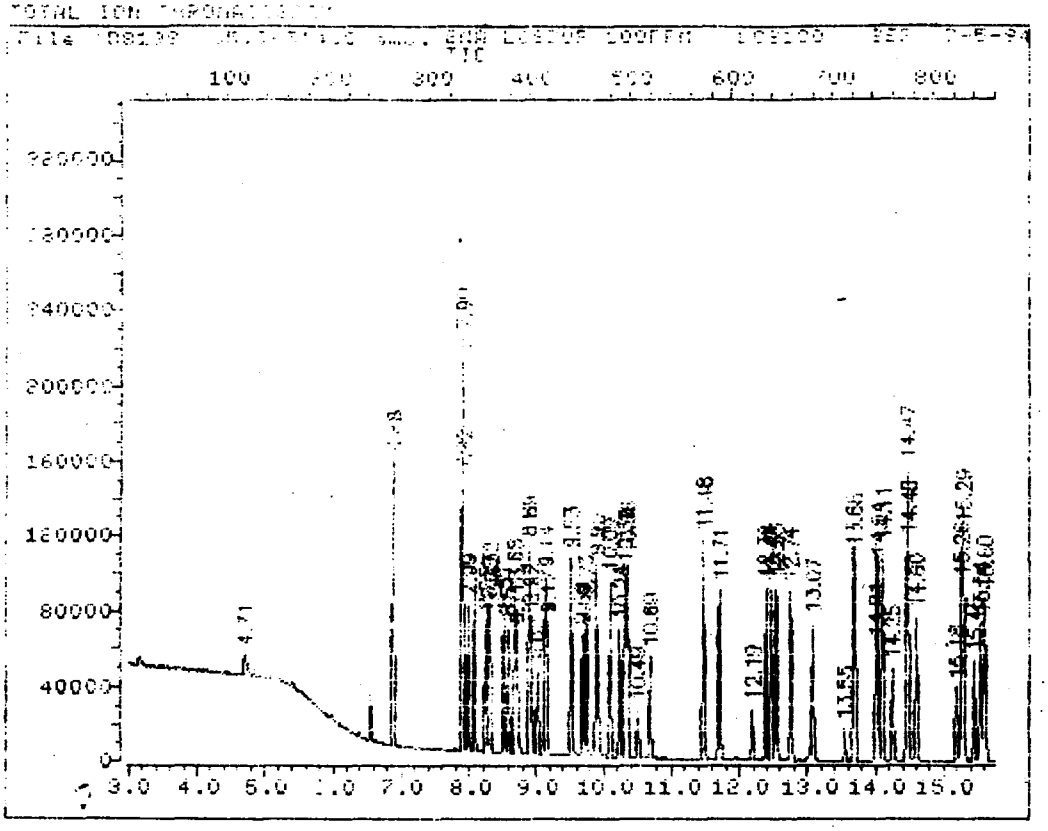
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.29	152.0	18599	40.00	ug/mL	97
3)	N-nitrosodimethylamine	4.71	42.0	13675	45.78	ug/mL	85
4)	2-Fluorophenol	6.88	112.0	61447	118.69	ug/mL	67
5)	Phenol-d6	7.90	99.0	78948	110.49	ug/mL	77
6)	Phenol	7.92	94.0	44312	54.58	ug/mL	84
7)	bis(2-Chloroethyl)ether	7.99	93.0	32964	47.52	ug/mL	97
8)	2-Chlorophenol	8.08	128.0	33050	56.89	ug/mL	96
9)	1,3-Dichlorobenzene	8.25	146.0	23008	37.92	ug/mL	91
10)	1,4-Dichlorobenzene	8.32	146.0	23245	37.56	ug/mL	92
11)	Benzyl alcohol	8.51	108.0	16442	43.93	ug/mL	93
12)	1,2-Dichlorobenzene	8.57	146.0	22707	38.57	ug/mL	94
13)	2-Methylphenol	8.68	108.0	31134	57.63	ug/mL	97
14)	bis(2-chloroisopropyl)ether	8.71	45.0	39386	42.69	ug/mL	83
15)	4-Methylphenol	8.89	108.0	32759	57.64	ug/mL	91
16)	N-Nitroso-di-n-propylamine	8.92	70.0	20888	46.02	ug/mL	96
17)	Hexachloroethane	9.02	117.0	11002	39.49	ug/mL	96
19)	*d8-Naphthalene	10.32	136.0	73624	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.14	82.0	44032	67.28	ug/mL	85
21)	Nitrobenzene	9.17	77.0	34999	51.30	ug/mL	91
22)	Isophorone	9.53	82.0	68043	52.82	ug/mL	92
23)	2-Nitrophenol	9.69	139.0	17130	53.75	ug/mL	92
24)	2,4-Dimethylphenol	9.73	107.0	30704	54.63	ug/mL	95
26)	bis(2-Chloroethoxy)methane	9.90	93.0	40730	50.38	ug/mL	84
27)	2,4-Dichlorophenol	10.09	162.0	23826	57.34	ug/mL	82
28)	1,2,4-Trichlorobenzene	10.24	180.0	18024	39.27	ug/mL	97
29)	Naphthalene	10.36	128.0	73458	46.12	ug/mL	99
30)	4-Chloroaniline	10.49	127.0	11369	19.33	ug/mL	87
31)	Hexachlorobutadiene	10.69	225.0	8510	37.82	ug/mL	91
32)	4-Chloro-3-methylphenol	11.48	107.0	37729	76.10	ug/mL	98
33)	2-Methylnaphthalene	11.71	142.0	44882	45.35	ug/mL	96
34)	*d10-Acenaphthene	14.04	164.0	36577	40.00	ug/mL	95
35)	Hexachlorocyclopentadiene	12.19	237.0	5883	28.34	ug/mL	97
36)	2,4,6-Trichlorophenol	12.38	196.0	17307	67.63	ug/mL	98
37)	2,4,5-Trichlorophenol	12.47	196.0	19112	71.51	ug/mL	99
38)	2-Chloronaphthalene	12.74	162.0	43842	50.97	ug/mL	95
39)	2-Fluorobiphenyl	12.53	172.0	52253	58.24	ug/mL	95
40)	2-Nitroaniline	13.07	65.0	24011	68.49	ug/mL	86
41)	Dimethylphthalate	13.55	163.0	10831	10.70	ug/mL	93
42)	Acenaphthylene	13.68	152.0	78940	59.36	ug/mL	93
43)	2,6-Dinitrotoluene	14.60	165.0	22315M	63.74	ug/mL	
44)	3-Nitroaniline	14.01	138.0	15736	58.92	ug/mL	93
45)	Acenaphthene	14.11	153.0	50958	60.84	ug/mL	94
46)	2,4-Dinitrophenol	14.25	184.0	9945	90.60	ug/mL	73

Operator ID: RAMON Quant Rev: 7 Quant Time: 940707 16:34
Output File: ^D8199::QO Injected at: 940706 13:54
Data File: >D8199::D3 Dilution Factor: 1.00000
Name: BNA LCSDUP 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 6

ID File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
47)	4-Nitrophenol	14.48	109.0	13158	113.81	ug/mL	88
48)	Dibenzofuran	14.47	168.0	69407	58.45	ug/mL	37
50)	Diethylphthalate	15.18	149.0	32414	30.49	ug/mL	85
51)	4-Chlorophenyl-phenylether	15.29	204.0	24149	59.41	ug/mL	79
52)	Fluorene	15.26	166.0	56930	63.97	ug/mL	99
53)	4-Nitroaniline	15.45	65.0	21911	69.80	ug/mL	94
54)	2,4,6-Tribromophenol	15.88	330.0	19751	155.96	ug/mL	
55)	*d10-Phenanthrene	17.36	188.0	50020	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.54	198.0	13303	81.76	ug/mL	64
58)	N-Nitrosodiphenylamine (1)	15.60	169.0	31335	51.78	ug/mL	97
59)	4-Bromophenyl-phenylether	16.42	248.0	12960	58.44	ug/mL	79
60)	Hexachlorobenzene	16.73	284.0	15358	63.16	ug/mL	93
61)	Pentachlorophenol	17.13	266.0	10489	84.89	ug/mL	93
62)	Phenanthrene	17.40	178.0	85442	68.23	ug/mL	97
63)	Anthracene	17.48	178.0	79362	66.17	ug/mL	92
64)	Carbazole	17.82	167.0	74979	65.47	ug/mL	96
65)	Di-n-butylphthalate	18.53	149.0	117772	67.72	ug/mL	97
66)	Fluoranthene	19.43	202.0	87037	74.11	ug/mL	99
67)	*d12-Chrysene	21.43	240.0	46990	40.00	ug/mL	99
68)	Pyrene	19.75	202.0	87649	64.79	ug/mL	96
69)	Terphenyl-d14	19.99	244.0	74869	78.61	ug/mL	96
70)	Butylbenzylphthalate	20.70	149.0	47232	56.42	ug/mL	88
72)	3,3'-Dichlorobenzidine	21.39	252.0	6014	20.06	ug/mL	
73)	Benzo(a)anthracene	21.42	228.0	80377	65.74	ug/mL	8
74)	Chrysene	21.46	228.0	71331	64.71	ug/mL	94
75)	bis(2-Ethylhexyl)phthalate	21.46	149.0	73120	65.37	ug/mL	79
76)	*d12-Perylene	23.27	264.0	35638	40.00	ug/mL	97
77)	Di-n-octylphthalate	22.19	149.0	118242	65.85	ug/mL	98
78)	Benzo(b)fluoranthene	22.76	252.0	106435M	67.40	ug/mL	96
79)	Benzo(k)fluoranthene	22.79	252.0	47452M	41.63	ug/mL	96
80)	Benzo(a)pyrene	23.20	252.0	64963	64.54	ug/mL	91
81)	Indeno(1,2,3-cd)pyrene	25.46	276.0	75541	73.41	ug/mL	88
82)	Dibenz(a,h)anthracene	24.97	278.0	67416	71.73	ug/mL	97
83)	Benzo(g,h,i)perylene	25.46	276.0	75541	73.41	ug/mL	95

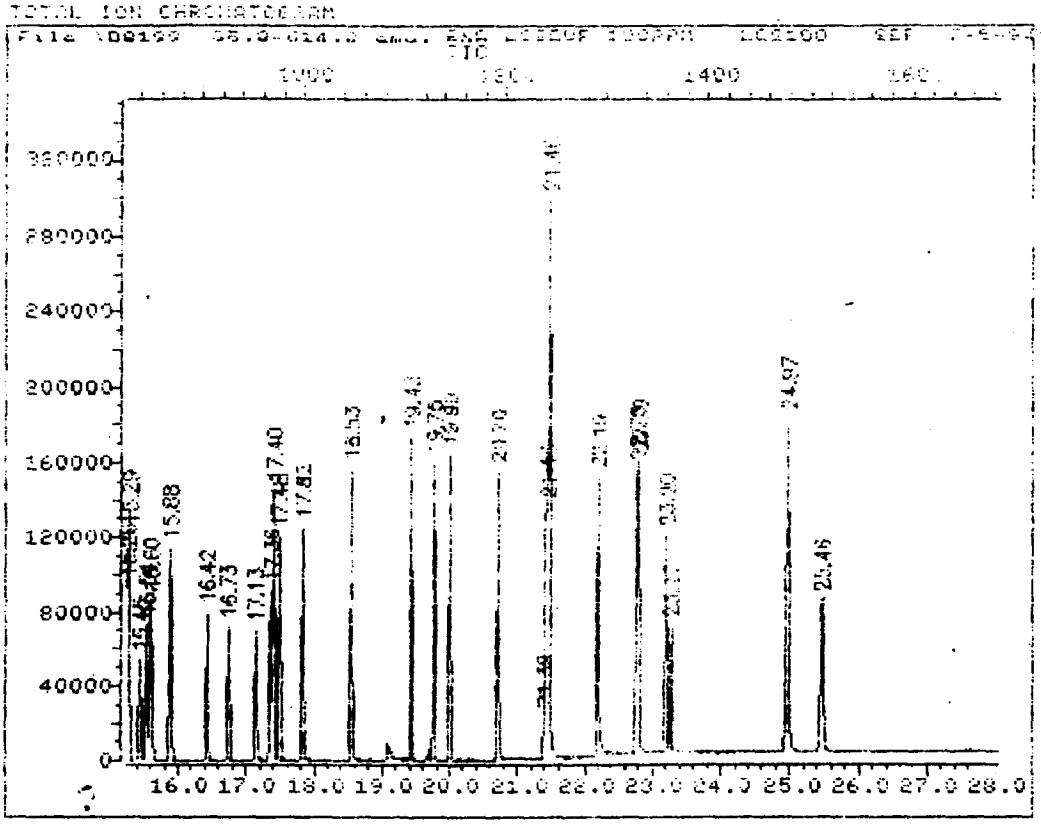
* Compound is ISTD



Data File: >D8199::D3 Quant Output File: ^D8199::QO
Name: BNA LCSDUP 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 6

Id File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940707 16:34
Injected at: 940706 13:54



Data File: >D8199::D3 Quant Output File: ^D8199::QO
Name: BNA LCSDUP 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-5-94 FV=1.0 BTL# 6

Id File: D28270::SC
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940707 16:34
Injected at: 940706 13:54

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/06/94

Contractor: NET-Midwest, INC. Time: 11:09

Contract No: 090031 Laboratory ID:)00195

Instrument ID: 70020 Initial Calibration Date: 06/28/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Pyridine	1.64292	.82737	49.64			
N-nitrosodimethylamine	.76144	.64243	15.63	*		
2-fluorophenol	1.27270	1.11346	12.51			(Conc=100.00)
Phenol-d6	1.66648	1.53669	7.79			(Conc=100.00)
Phenol	1.88478	1.74593	7.36	*		
bis(2-Chloroethyl)ether	1.59571	1.49198	6.50	*		
2-Chlorophenol	1.40815	1.24938	11.28	*		
1,3-Dichlorobenzene	1.39916	1.30508	6.72	*		
1,4-Dichlorobenzene	1.41513	1.33087	5.95	*		
Benzyl alcohol	.86963	.80497	7.44			
1,2-Dichlorobenzene	1.33814	1.26625	5.37	*		
2-Methylphenol	1.28136	1.16182	9.33	*		
bis(2-chloroisopropyl)ether	2.42836	1.98441	18.28	*		
4-Methylphenol	1.36074	1.22227	10.18	*		
N-Nitroso-di-n-propylamine	1.05855	.97622	7.78	*	**	
Hexachloroethane	.59724	.59910	.31	*		
Aniline	2.43080	2.06107	15.21	*		
Nitrobenzene-d5	.39070	.35555	9.00			
Nitrobenzene	.40682	.37067	8.89	*		
Isophorone	.80515	.69904	13.08	*		
2-Nitrophenol	.19630	.17313	11.80	*		
2,4-Dimethylphenol	.34324	.30535	11.04	*		
Benzoic acid	.13724	.12663	7.73			
bis(2-Chloroethoxy)methane	.50168	.43921	12.45	*		
2,4-Dichlorophenol	.26206	.22577	13.85	*		
1,2,4-Trichlorobenzene	.27719	.24934	10.05	*		
Naphthalene	.96628	.86539	10.44	*		
4-Chloroaniline	.38196	.31960	16.33			
Hexachlorobutadiene	.13578	.12224	9.98	*		
4-Chloro-3-methylphenol	.30264	.26935	11.00	*		
2-Methylnaphthalene	.57828	.53765	7.03	*		
Hexachlorocyclopentadiene	.24791	.22703	8.42	*	**	

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/06/94

Contractor: NET-Midwest, INC. Time: 11:09

Contract No: 090031 Laboratory ID: X08195

Instrument ID: 70020 Initial Calibration Date: 06/28/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2,4,6-Trichlorophenol	.33357	.27984	16.11	*		
2,4,5-Trichlorophenol	.35587	.29226	17.87	*		
2-Chloronaphthalene	1.03799	.94073	9.37	*		
2-Fluorobiphenyl	1.11118	.98109	11.71			
2-Nitroaniline	.43618	.38336	12.11	*		
Dimethylphthalate	1.24494	1.10657	11.11	*		
Acenaphthylene	1.68165	1.45437	13.52	*		
2,6-Dinitrotoluene	.39420	.38284	2.88	*		
3-Nitroaniline	.34325	.29209	14.91			
Acenaphthene	1.02971	.91602	11.04	*		
2,4-Dinitrophenol	.12163	.12004	1.30		**	
4-Nitrophenol	.12658	.12643	.12		**	
Dibenzofuran	1.41458	1.29857	8.20			
2,4-Dinitrotoluene	.42306	.38311	9.44	*		
Diethylphthalate	1.27083	1.16278	8.50	*		
4-Chlorophenyl-phenylether	.49776	.44450	10.70	*		
Fluorene	1.04963	.97330	7.27	*		
4-Nitroaniline	.40975	.34327	16.23			
2,4,6-Tribromophenol	.16344	.13849	15.26			(Conc=100.00)
4,6-Dinitro-2-methylphenol	.14081	.13011	7.59			
Di-phenylhydrazine	1.69682	1.67351	1.37			
N-Nitrosodiphenylamine (1)	.55189	.48398	12.31	*		
4-Bromophenyl-phenylether	.20434	.17734	13.21	*		
Hexachlorobenzene	.22619	.19446	14.03	*		
Pentachlorophenol	.11127	.09881	11.20	*		
Phenanthrene	1.07191	1.00148	6.57	*		
Anthracene	1.05647	.95911	9.22	*		
Carbazole	1.00246	.91589	8.64			
Di-n-butylphthalate	1.41863	1.39069	1.97	*		
Fluoranthene	1.03000	.93920	8.82	*		
Pyrene	1.39858	1.15165	17.66	*		
Terphenyl-d14	.99139	.81076	18.22			

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/06/94

Contractor: NET-Midwest, INC. Time: 11:09

Contract No: 090031 Laboratory ID: >08195

Instrument ID: 70020 Initial Calibration Date: 06/28/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Butylbenzylphthalate	.82197	.71263	13.30	*	
Benzidine	.10236	.00871	91.49		
3,3'-Dichlorobenzidine	.36973	.25526	30.96		
Benzo(a)anthracene	1.17084	1.04071	11.11	*	
Chrysene	1.12510	.93827	16.61	*	
bis(2-Ethylhexyl)phthalate	1.03645	.95210	8.14		
Di-n-octylphthalate	2.07559	2.01527	2.91	*	
Benzo(b)fluoranthene	1.75612	1.77241	.93	*	
Benzo(k)fluoranthene	1.32121	1.27923	3.18	*	
Benzo(a)pyrene	1.29242	1.12977	12.58	*	
Indeno(1,2,3-cd)pyrene	1.20284	1.15492	3.98	*	
Dibenz(a,h)anthracene	1.07599	1.05490	1.96	*	
Benzo(g,h,i)perylene	1.20284	1.15492	3.98	*	

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

$\overline{RF}$ - 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: RAMON Quant Rev: 7 Quant Time: 940706 11:38
Output File: ^D8195::QO Injected at: 940706 11:09
Data File: >D8195::D3 Dilution Factor: 1.00000
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL21619 BTL# 2

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

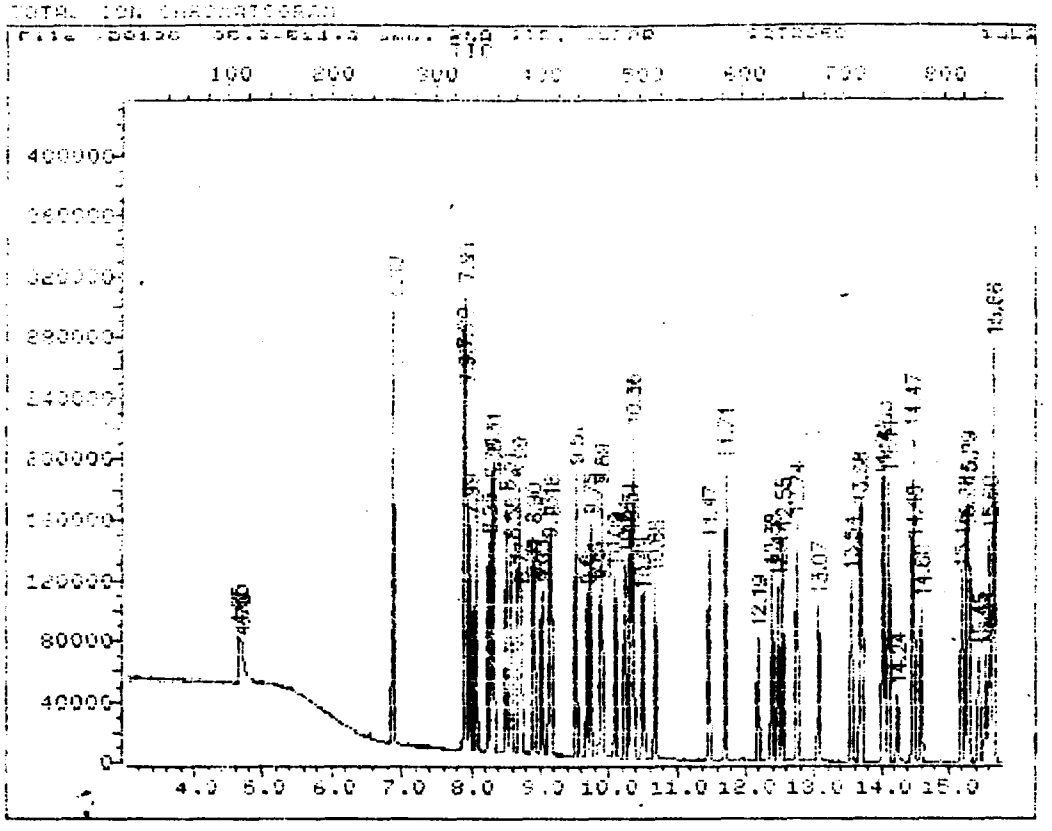
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.30	152.0	34143	40.00	ug/mL	97
2)	Pyridine	4.65	79.0	35311	25.18	ug/mL	83
3)	N-nitrosodimethylamine	4.70	42.0	27418M	42.19	ug/mL	84
4)	2-Fluorophenol	6.89	112.0	95042	87.49	ug/mL	82
5)	Phenol-d6	7.90	99.0	131168	92.21	ug/mL	68
6)	Phenol	7.91	94.0	74514	46.32	ug/mL	80
7)	bis(2-Chloroethyl)ether	7.99	93.0	63676	46.75	ug/mL	[illegible]
8)	2-Chlorophenol	8.08	128.0	53322	44.36	ug/mL	[illegible]
9)	1,3-Dichlorobenzene	8.25	146.0	55699	46.64	ug/mL	95
10)	1,4-Dichlorobenzene	8.31	146.0	56800	47.02	ug/mL	96
11)	Benzyl alcohol	8.51	108.0	34355	46.28	ug/mL	93
12)	1,2-Dichlorobenzene	8.58	146.0	54042	47.31	ug/mL	93
13)	2-Methylphenol	8.69	108.0	49585	45.34	ug/mL	98
14)	bis(2-chloroisopropyl)ether	8.72	45.0	84692	40.86	ug/mL	94
15)	4-Methylphenol	8.90	108.0	52165	44.91	ug/mL	91
16)	N-Nitroso-di-n-propylamine	8.91	70.0	41664	46.11	ug/mL	92
17)	Hexachloroethane	9.03	117.0	25569	50.16	ug/mL	96
18)	Aniline	7.93	93.0	87964	42.39	ug/mL	73
19)	*d8-Naphthalene	10.31	136.0	138427	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.13	82.0	61523	45.50	ug/mL	80
21)	Nitrobenzene	9.16	77.0	64138	45.56	ug/mL	92
22)	Isophorone	9.52	82.0	121096	43.46	ug/mL	97
23)	2-Nitrophenol	9.69	139.0	29958	44.10	ug/mL	90
24)	2,4-Dimethylphenol	9.75	107.0	52835	44.48	ug/mL	9[illegible]
25)	Benzoic acid	9.91	122.0	21911	46.13	ug/mL	95
26)	bis(2-Chloroethoxy)methane	9.89	93.0	75999	43.77	ug/mL	82
27)	2,4-Dichlorophenol	10.09	162.0	39066	43.08	ug/mL	96
28)	1,2,4-Trichlorobenzene	10.24	180.0	43144	44.98	ug/mL	97
29)	Naphthalene	10.36	128.0	149742	44.78	ug/mL	99
30)	4-Chloroaniline	10.49	127.0	55301	41.84	ug/mL	83
31)	Hexachlorobutadiene	10.68	225.0	21151	45.01	ug/mL	90
32)	4-Chloro-3-methylphenol	11.47	107.0	46607	44.50	ug/mL	95
33)	2-Methylnaphthalene	11.71	142.0	93031	46.49	ug/mL	96
34)	*d10-Acenaphthene	14.03	164.0	72888	40.00	ug/mL	91
35)	Hexachlorocyclopentadiene	12.19	237.0	20685	45.79	ug/mL	95
36)	2,4,6-Trichlorophenol	12.38	196.0	25496	41.95	ug/mL	97
37)	2,4,5-Trichlorophenol	12.47	196.0	26628	41.06	ug/mL	97
38)	2-Chloronaphthalene	12.74	162.0	85710	45.32	ug/mL	98
39)	2-Fluorobiphenyl	12.55	172.0	89387	44.15	ug/mL	97
40)	2-Nitroaniline	13.07	65.0	34928	43.95	ug/mL	88
41)	Dimethylphthalate	13.54	163.0	100820	44.44	ug/mL	94
42)	Acenaphthylene	13.68	152.0	132508	43.24	ug/mL	94
43)	2,6-Dinitrotoluene	14.60	165.0	34881M	48.56	ug/mL	46

Operator ID: RAMON Quant Rev: 7 Quant Time: 940706 11:38
Output File: ^D8195::QO Injected at: 940706 11:09
Data File: >D8195::D3 Dilution Factor: 1.00000
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL21619 BTL# 2

ID File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	14.02	138.0	26612	42.55	ug/mL	91
45)	Acenaphthene	14.11	153.0	83459	44.48	ug/mL	93
46)	2,4-Dinitrophenol	14.24	184.0	10937	49.35	ug/mL	91
47)	4-Nitrophenol	14.48	109.0	11519	49.94	ug/mL	74
48)	Dibenzofuran	14.47	168.0	118313	45.90	ug/mL	63
49)	2,4-Dinitrotoluene	14.60	165.0	34905	45.28	ug/mL	63
50)	Diethylphthalate	15.18	149.0	105941	45.75	ug/mL	88
51)	4-Chlorophenyl-phenylether	15.29	204.0	40498	44.65	ug/mL	92
52)	Fluorene	15.26	166.0	88677	46.36	ug/mL	98
53)	4-Nitroaniline	15.45	65.0	31275	41.89	ug/mL	94
54)	2,4,6-Tribromophenol	15.88	330.0	25236	84.74	ug/mL	93
55)	*d10-Phenanthrene	17.35	188.0	100762	40.00	ug/mL	98
56)	4,6-Dinitro-2-methylphenol	15.54	198.0	16388	46.20	ug/mL	88
57)	Di-phenylhydrazine	15.66	77.0	210783	49.31	ug/mL	97
58)	N-Nitrosodiphenylamine (1)	15.60	169.0	60958	43.85	ug/mL	93
59)	4-Bromophenyl-phenylether	16.42	248.0	22337	43.39	ug/mL	92
60)	Hexachlorobenzene	16.73	284.0	24493	42.99	ug/mL	91
61)	Pentachlorophenol	17.13	266.0	12445	44.40	ug/mL	95
62)	Phenanthrene	17.40	178.0	126139	46.71	ug/mL	96
63)	Anthracene	17.47	178.0	120802	45.39	ug/mL	93
64)	Carbazole	17.82	167.0	115359	45.68	ug/mL	94
65)	Di-n-butylphthalate	18.53	149.0	175161	49.02	ug/mL	97
66)	Fluoranthene	19.42	202.0	118294	45.59	ug/mL	99
67)	*d12-Chrysene	21.43	240.0	84384	40.00	ug/mL	99
68)	Pyrene	19.75	202.0	121476	41.17	ug/mL	99
69)	Terphenyl-d14	19.99	244.0	85519	40.89	ug/mL	98
70)	Butylbenzylphthalate	20.70	149.0	75168	43.35	ug/mL	90
71)	Benzidine	19.65	184.0	919	4.26	ug/mL	98
72)	3,3'-Dichlorobenzidine	21.39	252.0	26925	34.52	ug/mL	99
73)	Benzo(a)anthracene	21.42	228.0	109774	44.44	ug/mL	87
74)	Chrysene	21.46	228.0	98969	41.70	ug/mL	93
75)	bis(2-Ethylhexyl)phthalate	21.45	149.0	100427	45.93	ug/mL	89
76)	*d12-Perylene	23.27	264.0	67984	40.00	ug/mL	98
77)	Di-n-octylphthalate	22.19	149.0	171258	48.55	ug/mL	97
78)	Benzo(b)fluoranthene	22.76	252.0	150619M	50.46	ug/mL	97
79)	Benzo(k)fluoranthene	22.76	252.0	108709M	48.41	ug/mL	97
80)	Benzo(a)pyrene	23.18	252.0	96008	43.71	ug/mL	92
81)	Indeno(1,2,3-cd)pyrene	25.47	276.0	98145	48.01	ug/mL	91
82)	Dibenz(a,h)anthracene	24.96	278.0	89645	49.02	ug/mL	96
83)	Benzo(g,h,i)perylene	25.47	276.0	98145	48.01	ug/mL	97

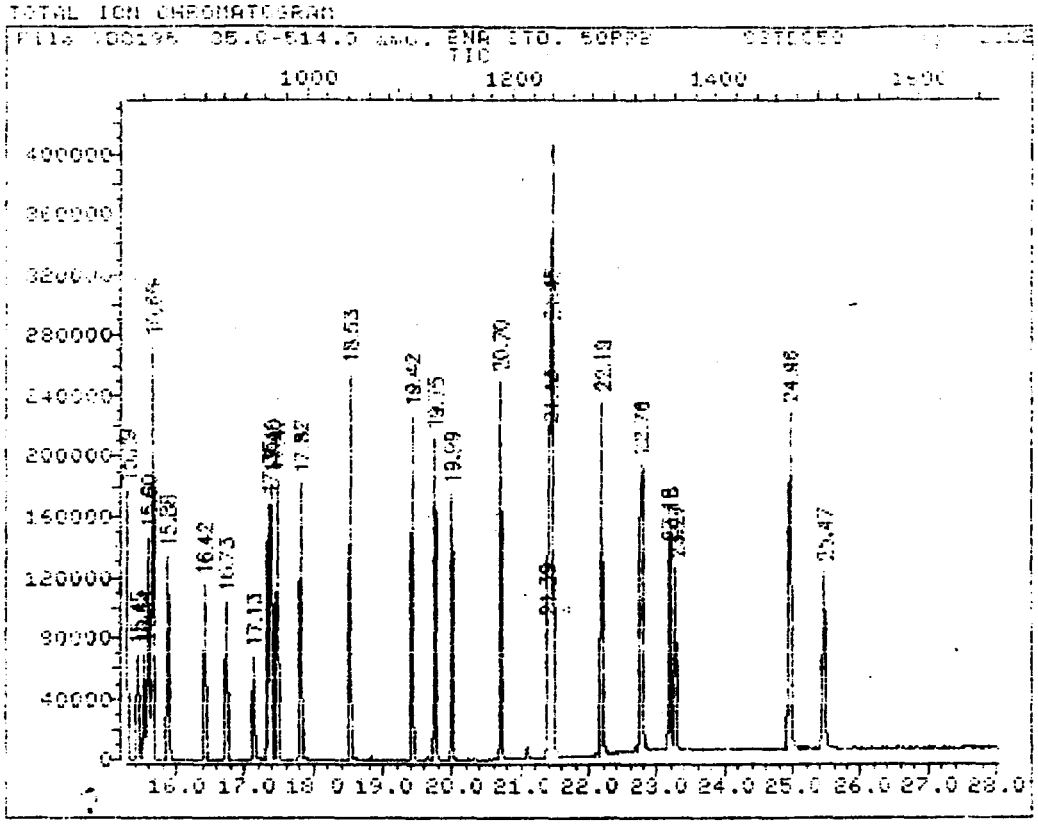
* Compound is ISTD



Data File: >D8195::D3 Quant Output File: ^D8195::QO
Name: BNA STD, 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL21619 BTL# 2

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940706 11:38
Injected at: 940706 11:09



Data File: >D8195::D3 Quant Output File: ^D8195::QO
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 1uL21619 BTL# 2

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940706 11:38
Injected at: 940706 11:09

SEMI-VOLATILE EXTERNAL STANDARD SUMMARY
(Continuing Calibration Verification-Water Matrix)

Date of Analysis: 7/06/94 11:09

Data File Name : >D8195::D3

Instrument ID : 7002D

Acenaphthene	...	44.480	ug/mL
Benzo(a)pyrene	...	43.708	ug/mL
4-Chloro-3-methylphenol	...	44.500	ug/mL
1,4-Dichlorobenzene	...	47.023	ug/mL
2,4-Dichlorophenol	...	43.076	ug/mL
Di-n-octylphthalate	...	48.547	ug/mL
Fluoranthene	...	45.592	ug/mL
Hexachlorobutadiene	...	45.012	ug/mL
4-Nitrophenol	...	49.941	ug/mL
N-Nitrosodiphenylamine (1)	...	43.847	ug/mL
Pentachlorophenol	...	44.400	ug/mL
Phenol	...	46.318	ug/mL
2,4,6-Trichlorophenol	...	41.946	ug/mL

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Lab File ID (Standard): >D8195 Date Analyzed: 07/06/94

Instrument ID: Time Analyzed: 11:09

	IS1(DCB) AREA	#	IS1(DCB) RT	IS2(NAP) AREA	#	IS2(NAP) RT	IS3(ACE) AREA	#	IS3(ACE) RT
12 HOUR STD	34143		8.30	138427		10.31	72888		14.03
UPPER LIMIT	68286		8.80	276854		10.81	145776		14.53
LOWER LIMIT	17071		7.80	69213		9.81	36444		13.53
EPA SAMPLE NO.									
1 BT#260176	25060		8.30	98865		10.32	51681		14.04
2 BNA BLANK	25646		8.30	100766		10.32	51595		14.04
3 BNA LCS	19320		8.29	76983		10.32	38364		14.04
4 BNA LCSDUP	18599		8.29	73624		10.32	36577		14.04
5 BT#266777	19861		8.29	76005		10.31	39171		14.03
6 BT#267075	18938		8.30	73933		10.32	35630	*	14.03
7 BT#267162	19276		8.29	74147		10.33	37206		14.03
8 BT#267189	21595		8.31	96418		10.33	49235		14.03
9 BT#267190	23388		8.30	111204		10.34	55612		14.03
10 BT#267191	20654		8.29	81492		10.33	41680		14.03
11 BT#267192	22189		8.30	86830		10.33	47735		14.03
12 BT#267193	25769		8.29	105087		10.32	59570		14.03
13 BT#267194	27624		8.30	111442		10.33	56909		14.04
14 BT#267195	27378		8.30	110759		10.32	53878		14.03
15 BT#267196	27010		8.30	108084		10.32	57952		14.03
16									
17									
18									
19									
20									
21									
22									

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Lab File ID (Standard): >D8195 Date Analyzed: 07/06/94

Instrument ID: Time Analyzed: 11:09

	IS4(PHN) AREA	#	RT	IS5(CHR) AREA	#	RT	IS6(PER) AREA	#	RT
12 HOUR STD	100762		17.35	84384		21.43	67984		23.27
UPPER LIMIT	201524		17.85	168768		21.93	135968		23.77
LOWER LIMIT	50381		16.85	42192		20.93	33992		23.77
EPA SAMPLE NO.									
1 BT#260176	71463		17.35	59725		21.44	46283		23.26
2 BNA BLANK	72577		17.35	59545		21.44	47660		23.26
3 BNA LCS	54135		17.34	46109		21.44	36866		23.27
4 BNA LCSDUP	50020	*	17.36	46990		21.43	35638		23.27
5 BT#266777	56508		17.34	48839		21.43	39679		23.26
6 BT#267075	52259		17.35	43302		21.44	33971	*	23.27
7 BT#267162	54926		17.35	48760		21.44	38795		23.27
8 BT#267189	78505		17.35	73819		21.44	57333		23.27
9 BT#267190	84698		17.36	75373		21.44	61969		23.26
10 BT#267191	57819		17.35	53663		21.43	45254		23.27
11 BT#267192	72024		17.34	64767		21.44	50305		23.27
12 BT#267193	90862		17.34	84788		21.43	66961		23.26
13 BT#267194	80888		17.35	56820		21.43	23364	*	23.26
14 BT#267195	89917		17.35	84616		21.44	36772		23.26
15 BT#267196	81822		17.35	60807		21.44	29037	*	23.27
16									
17									
18									
19									
20									
21									
22									

IS4 (PHN) = d10-Phenanthrene
IS5 (CHR) = d12-Chrysene
IS6 (PER) = d12-Perylene

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

Column used to flag internal standard area values with an asterisk

page __ of __.

QC REPORT

MS SEMI-VOLATILES

Inst. "D"

7-7-94

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Lab File ID: >D8213 DFTPP Injection Date: 7/07/94

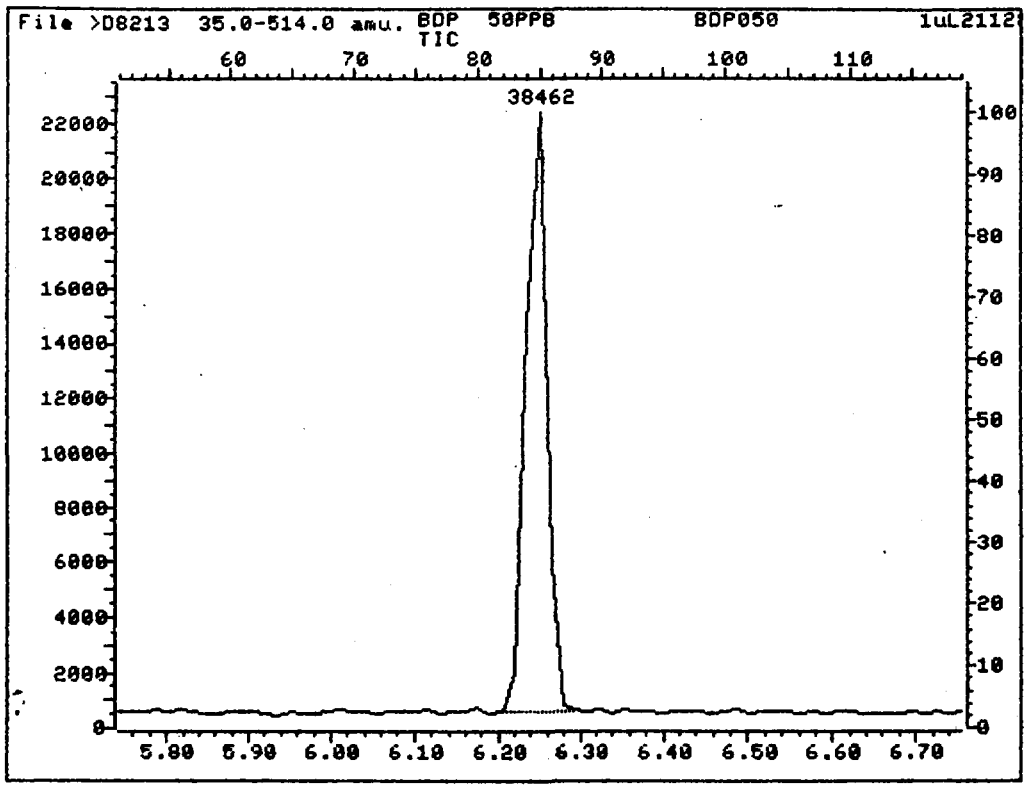
Instrument ID: DFTPP Injection Time: 10:38 then 12:38

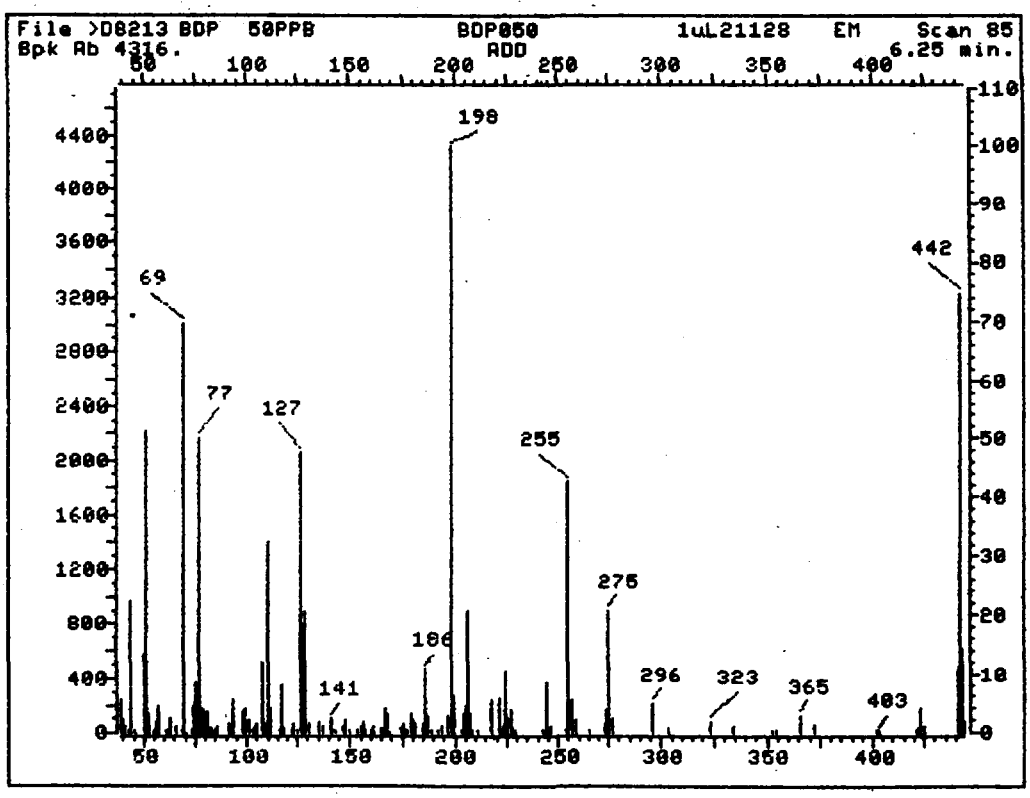
m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.3
68	Less than 2.0% of mass 69	.6 (.8)1
69	Mass 69 relative abundance	69.7
70	Less then 2.0% of mass 69	.2 (.3)1
127	40.0 - 60.0% of mass 198	47.6
197	Less than 1.0% of mass 198	.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.2
275	10.0 - 30.0% of mass 198	20.8
365	Greater than 1.00% of mass 198	2.8
441	Present, but less than mass 443	11.4
442	Greater than 40.0% of mass 198	74.8
443	17.0 - 23.0% of mass 442	14.4 (19.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNA STD. 5	SSTD050	>D8214	07/07/94	11:03
02	BNA BLANK	SVBLK	>D8215	07/07/94	11:46
03	BNA LCS	LCS100	>D8216	07/07/94	12:26
04	BNA LCSDUP	LCS100	>D8217	07/07/94	13:05
05	BNA BLANK	SVBLK	>D8218	07/07/94	13:45
06	BNA LCS	LCS100	>D8219	07/07/94	14:24
07	BT#267252D		>D8220	07/07/94	15:04
08	BT#267280D		>D8221	07/07/94	15:43
09	BT#267323D	"	>D8222	07/07/94	16:22
10	BT#267324D	"	>D8223	07/07/94	17:02
11	BT#267075R	E&E	>D8224	07/07/94	17:42
12	BT#267162D	NE F	>D8225	07/07/94	18:21
13	BT#267189D	N ...of	>D8226	07/07/94	19:01
14	BT#267252R	C	>D8227	07/07/94	19:40
15	BT#267280R	C	>D8228	07/07/94	20:20
16	BT#267323R	C	>D8229	07/07/94	21:00
17	BT#267324R	C	>D8230	07/07/94	21:39
18					
19					
20					
21					
22					


File >D8213 35.0-514.0 amu. BDP 50PPB BDP050 1uL2112
TIC
38462


File >D8213 BDP 50PPB BDP050 1uL21128 EM Scan 85
Bpk Rb 4316. ADD 6.25 min.
198
69
77
127
255
442
275
106
141
296
323
365
403

>D8213 BDP 50PPB BDP050 1uL21128 EMV=2300
85 ADD

File: >D8213 Scan #: 85 Retn. time: 6.25

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
39.00	238.00	81.95	29.00	137.20	42.00	193.20	47.00	255.20	1834.00
39.90	85.00	83.05	30.00	141.10	103.00	196.15	126.00	256.20	235.00
40.90	51.00	85.05	23.00	143.10	17.00	196.75	18.00	258.10	92.00
43.00	17.00	85.95	41.00	147.15	47.00	198.15	4316.00	265.15	25.00
44.00	973.00	91.10	58.00	148.15	96.00	199.15	268.00	273.20	62.00
45.00	22.00	92.00	46.00	149.15	21.00	203.10	19.00	274.10	160.00
50.05	579.00	93.00	230.00	153.20	21.00	204.20	132.00	275.20	897.00
50.95	2214.00	98.05	150.00	155.10	52.00	205.20	194.00	276.25	100.00
51.95	131.00	99.05	173.00	156.20	76.00	206.20	886.00	277.15	76.00
54.00	10.00	101.05	90.00	157.10	13.00	207.20	137.00	296.15	212.00
55.00	21.00	102.95	20.00	160.00	16.00	208.20	17.00	303.10	29.00
56.00	78.00	104.00	44.00	161.05	53.00	210.65	13.00	323.30	80.00
57.00	187.00	105.10	55.00	165.15	38.00	211.15	21.00	334.30	47.00
61.00	19.00	107.10	513.00	166.15	19.00	217.15	239.00	352.20	15.00
61.90	19.00	108.10	57.00	167.15	178.00	221.10	255.00	354.20	17.00
63.05	101.00	109.00	15.00	168.05	142.00	222.20	23.00	365.15	123.00
65.05	51.00	110.00	1402.00	169.10	11.00	223.10	47.00	372.30	50.00
67.95	24.00	111.00	186.00	174.20	36.00	224.20	450.00	402.30	15.00
68.95	3010.00	116.15	20.00	175.20	65.00	225.20	112.00	403.20	18.00
70.05	10.00	117.05	347.00	176.20	17.00	227.25	162.00	421.10	14.00
73.00	16.00	118.05	38.00	177.00	24.00	228.25	17.00	422.00	13.00
74.10	189.00	122.00	23.00	179.15	139.00	229.15	23.00	422.40	28.00
75.00	369.00	123.00	55.00	180.15	96.00	242.20	16.00	423.10	175.00
76.00	132.00	125.10	18.00	181.25	56.00	243.15	10.00	424.35	44.00
77.00	2169.00	127.10	2055.00	185.15	62.00	244.25	365.00	441.25	490.00
78.10	174.00	128.05	145.00	186.20	465.00	245.15	22.00	442.25	3228.00
79.05	159.00	129.05	890.00	187.20	122.00	246.25	42.00	443.25	621.00
80.05	132.00	130.05	69.00	189.10	17.00	254.10	12.00	444.25	71.00
80.95	156.00	135.15	73.00	192.10	24.00				

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Level:(low/med)

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 ( ) #	TOT OUT
01	~~BNA BLANK~~	~~56~~	~~60~~	~~77~~	~~48~~	~~47~~	~~75~~		0
02	~~BNA LCS~~	~~65~~	~~62~~	~~84~~	~~56~~	~~55~~	~~95~~		0
03	~~BNA LCSDUP~~	~~61~~	~~58~~	~~85~~	~~52~~	~~51~~	~~91~~		0
04	BNA BLANK	47	48	58	49	42	77		0
05	BNA LCS	50	56	58	50	44	79		0
06	BT#267252DL	8 *	11 *	11 *	10 *	8 *	14 *		6
07	BT#267280DL	7 *	11 *	13 *	10 *	8 *	15 *		6
08	BT#267323DL	2 *	3 *	3 *	2 *	2 *	3 *	D	6
09	BT#267324DL	1 *	1 *	0	1 *	1 *	1 *	D	5
10	~~BT#267075RE~~	~~56~~	~~60~~	~~80~~	~~24~~	~~36~~	~~84~~		0
11	~~BT#267162DL~~	~~16 *~~	~~17 *~~	~~23~~	~~10 *~~	~~12 *~~	~~26~~		4
12	~~BT#267189DL~~	~~14 *~~	~~14 *~~	~~16 *~~	~~10 *~~	~~13 *~~	~~35~~		5
13	BT#267252RE	42 *	47	48	47	40	72		0
14	BT#267280RE	36	42	50	40	38	72		0
15	BT#267323RE	28	27 *	32	24	23 *	34		2
16	BT#267324RE	11 *	12 *	14 *	12 *	11 *	14 *		6
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(23-120)
S2 (FBP) = 2-Fluorobiphenyl	(30-115)
S3 (TPH) = Terphenyl-d14	(18-137)
S4 (PHL) = Phenol-d6	(24-113)
S5 (2FP) = 2-Fluorophenol	(25-121)
S6 (TBP) = 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 ( ) #	TOT OUT
01	BNA BLANK	56	50	77	48	47	75		0
02	BNA LCS	65	62	84	56	55	95		0
03	BNA LCSDUP	61	58	85	52	51	91		0
04	~~BNA BLANK~~	~~47~~	~~48~~	~~58~~	~~49~~	~~42~~	~~77~~		0
05	~~BNA LCS~~	~~50~~	~~56~~	~~58~~	~~50~~	~~44~~	~~79~~		0
06	~~BT#267262DL~~	~~8 *~~	~~11 *~~	~~11 *~~	~~10~~	~~8 *~~	~~14~~		4
07	~~BT#267280DL~~	~~7 *~~	~~11 *~~	~~13 *~~	~~10 *~~	~~8 *~~	~~15~~		5
08	~~BT#267323DL~~	~~2 *~~	~~3 *~~	~~3 *~~	~~2 *~~	~~2 *~~	~~3 *~~		6
09	~~BT#267324DL~~	~~1 *~~	~~1 *~~	~~0~~	~~1 *~~	~~1 *~~	~~1 *~~		5
10	BT#267075RE	56	50	80	24	36	84		0
11	BT#267162DL	16 *	17 *	23 *	10 *	12 *	26	Ø	5
12	BT#267189DL	14 *	14 *	16 *	10 *	13 *	35	Ø	5
13	~~BT#267262RE~~	~~42~~	~~47~~	~~48~~	~~47~~	~~40~~	~~72~~		0
14	~~BT#267280RE~~	~~36~~	~~42 *~~	~~50~~	~~40~~	~~38~~	~~72~~		1
15	~~BT#267323RE~~	~~20 *~~	~~27 *~~	~~32 *~~	~~24~~	~~23~~	~~34~~		3
16	~~BT#267324RE~~	~~11 *~~	~~12 *~~	~~14 *~~	~~12~~	~~11 *~~	~~14~~		4
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d6	(10- 94)
S5 (2FP) = 2-Fluorophenol	(21-100)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: LCS/LCSDUP SEP 7-5-94

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
Acenaphthene	100	0	82	82		47-145
Acenaphthylene	100	0	85	85		33-145
Anthracene	100	0	89	89		27-133
Benzo(a)anthracene	100	0	93	93		33-143
Benzo(b)fluoranthene	100	0	120	124		24-159
Benzo(k)fluoranthene	100	0	150	145		11-162
Benzo(a)pyrene	100	0	81	81		17-163
Benzo(g,h,i)perylene	100	0	82	82		1-219
Butylbenzylphthalate	100	0	84	84		1-152
bis(2-Chloroethyl)ether	100	0	67	67		12-158
bis(2-Chloroethoxy)meth	100	0	71	71		33-184

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	REC.
Acenaphthene	100	57	57		36		50	47-145
Acenaphthylene	100	60	60		34		50	33-145
Anthracene	100	64	64		32		50	27-133
Benzo(a)anthracene	100	65	65		35		50	33-143
Benzo(b)fluoranthene	100	95	95		27		50	24-159
Benzo(k)fluoranthene	100	110	111		27		50	11-162
Benzo(a)pyrene	100	60	60		30		50	17-163
Benzo(g,h,i)perylene	100	60	60		31		50	1-219
Butylbenzylphthalate	100	58	58		36		50	1-152
bis(2-Chloroethyl)ether	100	46	46		37		50	12-158
bis(2-Chloroethoxy)meth	100	50	50		34		50	33-184

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 2 out of ** outside limits

COMMENTS: 2 Compounds out on LCSD, however all compounds are OK in the lcs. The batch is acceptable. RLA

3C-2

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
bis(2-chloroisopropyl)e	100	0	70	70		36-166
bis(2-Ethylhexyl)phthal	100		80	80		8-158
4-Bromophenyl-phenyleth	100	0	93	93		53-127
2-Chloronaphthalene	100	0	71	71		60-118
4-Chlorophenyl-phenylet	100	0	87	87		25-158
Chrysene	100	0	87	87		17-168
Dibenz(a,h)anthracene	100	0	81	81		1-227
Di-n-butylphthalate	100		82	81		1-118
1,2-Dichlorobenzene	100	0	54	54		32-129
1,3-Dichlorobenzene	100	0	52	52		1-172
1,4-Dichlorobenzene	100	0	52	52		20-124

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	REC.
bis(2-chloroisopropyl)e	100	49	49		35		50	36-166
bis(2-Ethylhexyl)phthal	100	62	62		26		50	8-158
4-Bromophenyl-phenyleth	100	69	69		30		50	53-127
2-Chloronaphthalene	100	50	50	*	35		50	60-118
4-Chlorophenyl-phenylet	100	61	61		35		50	25-158
Chrysene	100	62	62		33		50	17-168
Dibenz(a,h)anthracene	100	60	60		30		50	1-227
Di-n-butylphthalate	100	61	60		30		50	1-118
1,2-Dichlorobenzene	100	39	39		33		50	32-129
1,3-Dichlorobenzene	100	36	36		37		50	1-172
1,4-Dichlorobenzene	100	37	37		33		50	20-124

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 4 out of ** outside limits

COMMENTS: _____

3C-3

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
3,3'-Dichlorobenzidine	100	0	52	52	1-262
Diethylphthalate	100	0	55	55	1-114
Dimethylphthalate	100	0	35	35	1-112
2,4-Dinitrotoluene	100	0	96	96	39-139
2,6-Dinitrotoluene	100	0	96	96	50-158
Di-n-octylphthalate	100	0	77	77	4-146
Fluoranthene	100	0	89	89	59-121
Hexachlorobenzene	100	0	92	92	1-152
Hexachlorobutadiene	100	0	64	64	24-116
Hexachloroethane	100	0	53	53	40-113
Indeno(1,2,3-cd)pyrene	100	0	82	82	1-171

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
3,3'-Dichlorobenzidine	100	27	27	62 *	50	1-262
Diethylphthalate	100	30	30	59 *	50	1-114
Dimethylphthalate	100	12	12	99 *	50	1-112
2,4-Dinitrotoluene	100	65	65	39	50	39-139
2,6-Dinitrotoluene	100	65	65	39	50	50-158
Di-n-octylphthalate	100	60	60	24	50	4-146
Fluoranthene	100	68	68	27	50	59-121
Hexachlorobenzene	100	69	69	29	50	1-152
Hexachlorobutadiene	100	45	45	34	50	24-116
Hexachloroethane	100	35	35 *	41	50	40-113
Indeno(1,2,3-cd)pyrene	100	60	60	31	50	1-171

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 6 out of ** outside limits

COMMENTS: _____

3C-4

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Isophorone	100	0	73	73	21-196
Naphthalene	100	0	66	66	21-133
Nitrobenzene	100	0	66	66	35-180
N-Nitroso-di-n-propylam	100	0	70	70	1-230
Phenanthrene	100	0	89	89	54-120
Pyrene	100	0	91	91	52-115
1,2,4-Trichlorobenzene	100	0	65	65	44-142
4-Chloro-3-methylphenol	100	0	82	82	22-147
2-Chlorophenol	100	0	64	64	23-134
2,4-Dichlorophenol	100	0	69	69	39-135
2,4-Dimethylphenol	100	0	56	56	32-119

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Isophorone	100	53	53	33	50	21-196
Naphthalene	100	48	48	32	50	21-133
Nitrobenzene	100	46	46	35	50	35-180
N-Nitroso-di-n-propylam	100	50	50	34	50	1-230
Phenanthrene	100	64	64	33	50	54-120
Pyrene	100	65	65	34	50	52-115
1,2,4-Trichlorobenzene	100	45	45	35	50	44-142
4-Chloro-3-methylphenol	100	80	80	3	50	22-147
2-Chlorophenol	100	57	57	11	50	23-134
2,4-Dichlorophenol	100	64	64	8	50	39-135
2,4-Dimethylphenol	100	51	51	10	50	32-119

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 8 out of ** outside limits

COMMENTS: _____

3C-5

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract:

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

Matrix Spike - EPA Sample No.: BNA BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
2,4-Dinitrophenol	100	0	110	111		1-191
4,6-Dinitro-2-methylphe	100	0	96	96		1-132
2-Nitrophenol	100	0	70	70		29-182
4-Nitrophenol	100	0	79	79		1-132
Pentachlorophenol	100	0	108	108		14-176
Phenol	100	0	53	53		5-112
2,4,6-Trichlorophenol	100	0	80	80		37-144

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
2,4-Dinitrophenol	100	105	105		6		50	1-191
4,6-Dinitro-2-methylphe	100	95	95		2		50	1-132
2-Nitrophenol	100	63	63		11		50	29-182
4-Nitrophenol	100	74	74		7		50	1-132
Pentachlorophenol	100	103	103		4		50	14-176
Phenol	100	52	52		3		50	5-112
2,4,6-Trichlorophenol	100	74	74		8		50	37-144

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

* Values outside of QC limits

RPD: 3 out of 51 outside limits

Spike Recovery: 10 out of ** outside limits

COMMENTS: _____

_____

Operator ID: RAMON Quant Rev: 7 Quant Time: 940707 12:55
Output File: ^D0216:Q0 Injected at: 940707 12:26
Data File: >D0216:D2 Dilution Factor: 1.00000
Name: BNA LCS 100PPM Instrument ID: 70020
Misc: LCS100 SEP 7-[illegible]-94 FV=1.0 BTL# 4

ID File: D18270:FI
Title: EPA Method 8270, Calibration Curve, HP5970, 70020
Last Calibration: 940525 15:26 Last Qcal Time: 940707 11:03

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.28	152.0	42911	40.00	ug/mL	98
3)	N-nitrosodimethylamine	4.63	42.0	50319	69.63	ug/mL	98
4)	2-Fluorophenol	6.87	112.0	139446	109.20	ug/mL	77
5)	Phenol-d6	7.89	99.0	176244	111.07	ug/mL	71
6)	Phenol	7.91	94.0	96454	53.32	ug/mL	76
7)	bis(2-Chloroethyl)ether	7.97	93.0	98064	67.42	ug/mL	
8)	2-Chlorophenol	8.06	128.0	83324	63.74	ug/mL	
9)	1,3-Dichlorobenzene	8.22	146.0	75261	52.41	ug/mL	87
10)	1,4-Dichlorobenzene	8.30	146.0	75837	51.71	ug/mL	96
11)	Benzyl alcohol	8.49	108.0	60079	74.29	ug/mL	90
12)	1,2-Dichlorobenzene	8.55	146.0	72791	54.20	ug/mL	98
13)	2-Methylphenol	8.67	108.0	74571	63.18	ug/mL	97
14)	bis(2-chloroisopropyl)ether	8.68	45.0	141372	69.74	ug/mL	95
15)	4-Methylphenol	8.88	108.0	81288	63.76	ug/mL	93
16)	N-Nitroso-di-n-propylamine	8.91	70.0	64174	70.49	ug/mL	90
17)	Hexachloroethane	9.00	117.0	30746	52.69	ug/mL	93
18)	Aniline	7.97	93.0	98084	52.86	ug/mL	91
19)	*d8-Naphthalene	10.29	136.0	159099	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.11	82.0	83047	64.51	ug/mL	83
21)	Nitrobenzene	9.14	77.0	91583	65.74	ug/mL	94
22)	Isophorone	9.50	82.0	191306	73.39	ug/mL	98
23)	2-Nitrophenol	9.65	139.0	45959	70.16	ug/mL	76
24)	2,4-Dimethylphenol	9.73	107.0	65994	56.39	ug/mL	
25)	Benzoic acid	9.92	122.0	44395	91.85	ug/mL	92
26)	bis(2-Chloroethoxy)methane	9.88	93.0	117354	70.53	ug/mL	83
27)	2,4-Dichlorophenol	10.07	162.0	62787	69.22	ug/mL	98
28)	1,2,4-Trichlorobenzene	10.22	180.0	65008	64.61	ug/mL	98
29)	Naphthalene	10.34	128.0	227266	66.11	ug/mL	99
30)	4-Chloroaniline	10.47	127.0	33041	26.85	ug/mL	85
31)	Hexachlorobutadiene	10.67	225.0	31535	63.91	ug/mL	90
32)	4-Chloro-3-methylphenol	11.46	107.0	81256	82.44	ug/mL	93
33)	2-Methylnaphthalene	11.58	142.0	140137	68.11	ug/mL	94
34)	*d10-Acenaphthene	14.01	164.0	84543	40.00	ug/mL	91
35)	Hexachlorocyclopentadiene	12.16	237.0	22974	48.50	ug/mL	97
36)	2,4,6-Trichlorophenol	12.35	196.0	49462	79.86	ug/mL	98
37)	2,4,5-Trichlorophenol	12.44	196.0	55161	84.03	ug/mL	97
38)	2-Chloronaphthalene	12.71	162.0	145933	70.55	ug/mL	98
39)	2-Fluorobiphenyl	12.52	172.0	133241	62.23	ug/mL	96
40)	2-Nitroaniline	13.05	65.0	69856	97.50	ug/mL	86
41)	Dimethylphthalate	13.51	163.0	80326	35.08	ug/mL	95
42)	Acenaphthylene	13.65	152.0	238292	84.85	ug/mL	93
43)	2,6-Dinitrotoluene	14.57	165.0	73360	95.98	ug/mL	78
44)	3-Nitroaniline	13.99	138.0	54942	92.94	ug/mL	97

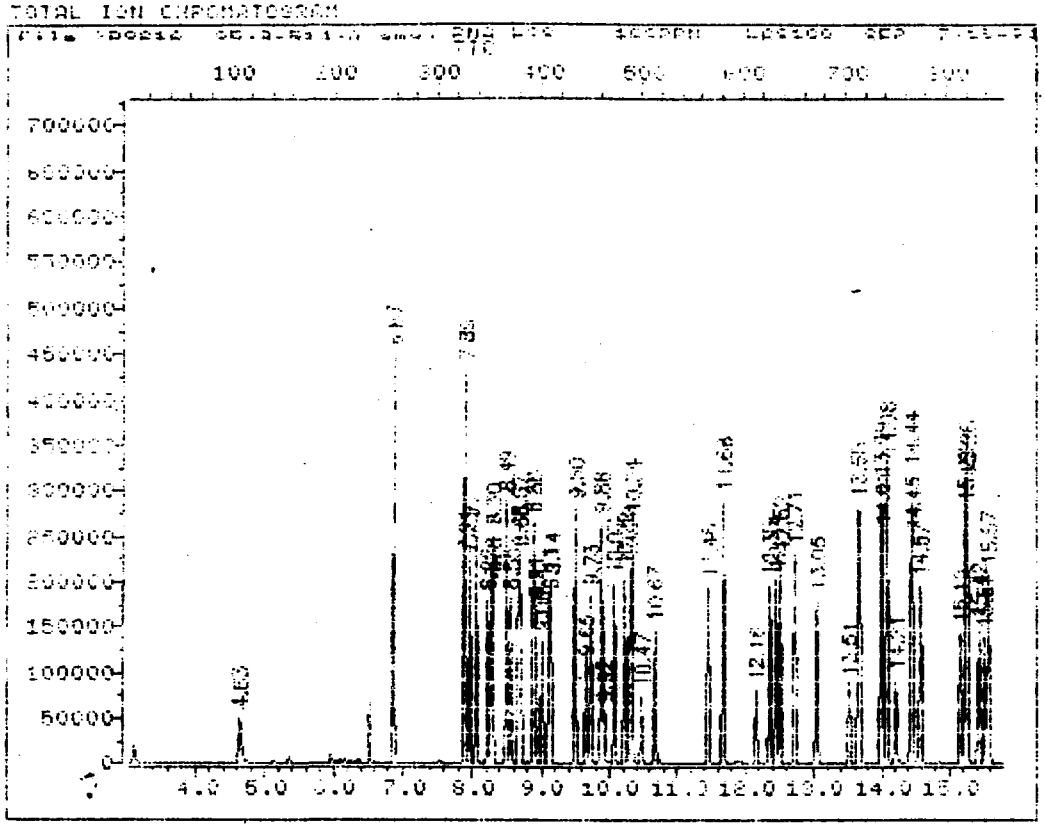
Operator ID: RAMON Quant Rev: 7 Quant Time: 940707 12:55
Output File: ^D8216::Q6 Injected at: 940707 12:26
Data File: >D8216::D7 Dilution Factor: 1.00000
Name: BNA LCS 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-15-94 FV=1.0 BTL# 4

ID File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940707 11:03

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Acenaphthene	14.08	153.0	156447	81.53	ug/mL	94
46)	2,4-Dinitrophenol	14.21	184.0	25669	111.24	ug/mL	95
47)	4-Nitrophenol	14.45	109.0	20388	79.34	ug/mL	65
48)	Dibenzofuran	14.44	168.0	221484	80.97	ug/mL	82
49)	2,4-Dinitrotoluene	14.57	165.0	73360	95.98	ug/mL	86
50)	Diethylphthalate	15.15	149.0	123872	54.69	ug/mL	91
51)	4-Chlorophenyl-phenylether	15.26	204.0	84049	87.36	ug/mL	98
52)	Fluorene	15.23	166.0	175575	88.15	ug/mL	98
53)	4-Nitroaniline	15.42	65.0	66183	96.56	ug/mL	79
54)	2,4,6-Tribromophenol	15.86	330.0	55192	190.02	ug/mL	92
55)	*d10-Phenanthrene	17.33	188.0	119272	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.51	198.0	38326	96.46	ug/mL	98
58)	N-Nitrosodiphenylamine (1)	15.57	169.0	96746	65.40	ug/mL	93
59)	4-Bromophenyl-phenylether	16.39	248.0	50549	92.82	ug/mL	95
60)	Hexachlorobenzene	16.71	284.0	56569	92.45	ug/mL	92
61)	Pentachlorophenol	17.11	266.0	30314	107.98	ug/mL	94
62)	Phenanthrene	17.38	178.0	260035	88.86	ug/mL	96
63)	Anthracene	17.45	178.0	247983	88.61	ug/mL	93
64)	Carbazole	17.80	167.0	229705	81.78	ug/mL	93
65)	Di-n-butylphthalate	18.51	149.0	334507	81.66	ug/mL	97
66)	Fluoranthene	19.40	202.0	249261	89.37	ug/mL	99
67)	*d12-Chrysene	21.42	240.0	98877	40.00	ug/mL	99
68)	Pyrene	19.73	202.0	264061	91.40	ug/mL	98
69)	Terphenyl-d14	19.97	244.0	173115	84.46	ug/mL	97
70)	Butylbenzylphthalate	20.69	149.0	138300	84.02	ug/mL	94
72)	3,3'-Dichlorobenzidine	21.37	252.0	36902	51.76	ug/mL	98
73)	Benzo(a)anthracene	21.40	228.0	219820	92.63	ug/mL	88
74)	Chrysene	21.45	228.0	207097	87.33	ug/mL	92
75)	bis(2-Ethylhexyl)phthalate	21.43	149.0	179832	79.67	ug/mL	92
76)	*d12-Perylene	23.25	264.0	80014	40.00	ug/mL	97
77)	Di-n-octylphthalate	22.17	149.0	325223	77.02	ug/mL	99
78)	Benzo(b)fluoranthene	22.74	252.0	233702M	68.05	ug/mL	98
79)	Benzo(k)fluoranthene	22.77	252.0	69723M	23.80	ug/mL	98
80)	Benzo(a)pyrene	23.17	252.0	192815	81.49	ug/mL	93
81)	Indeno(1,2,3-cd)pyrene	24.94	276.0	239947M	94.52	ug/mL	89
82)	Dibenz(a,h)anthracene	24.94	278.0	186691	80.86	ug/mL	96
83)	Benzo(g,h,i)perylene	25.44	276.0	209419	82.50	ug/mL	96

* Compound is ISTD

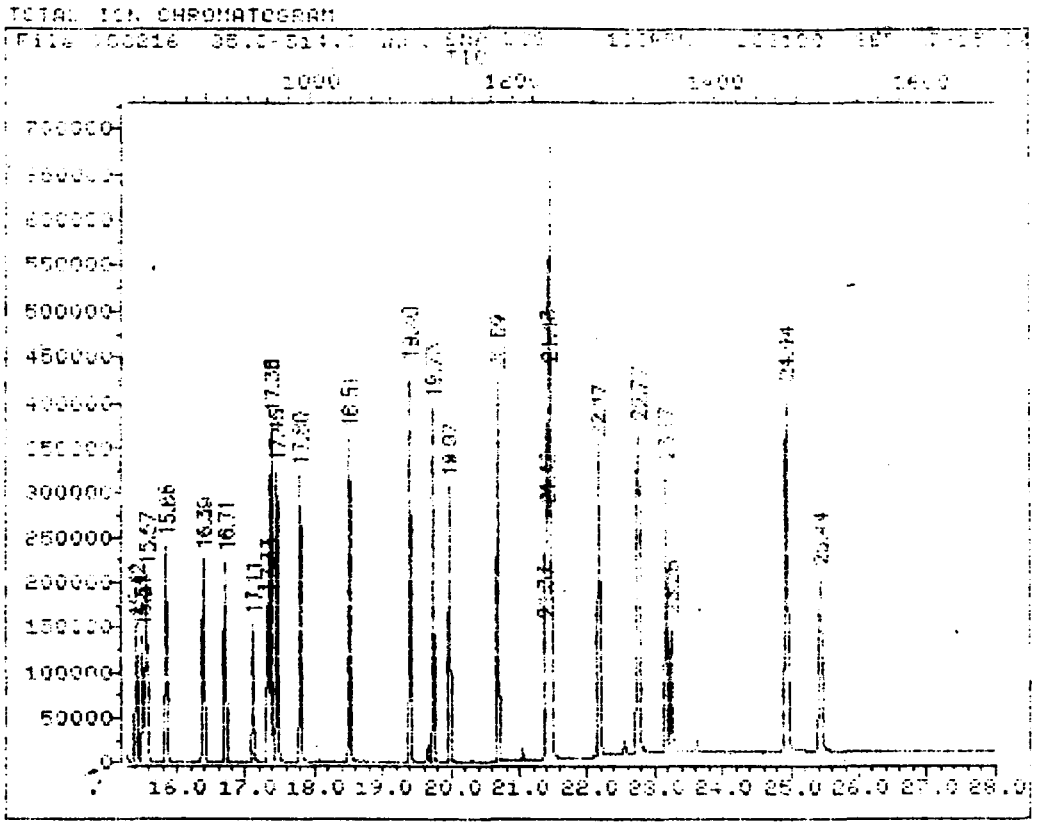
TOTAL ION CHROMATOGRAM



Data File: >D8216::D2 Quant Output File: ^D8216::QO
Name: BNA LCS 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-15-94 FV=1.0 BTL# 4

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940707 11:03

Operator ID: RAMON
Quant Time : 940707 12:55
Injected at: 940707 12:26



Data File: >D8216::D2 Quant Output File: ^D8216::QO
Name: BNA LCS 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-15-94 FV=1.0 BTL# 4

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940707 11:03

Operator ID: RAMON
Quant Time : 940707 12:55
Injected at: 940707 12:26

Operator ID: RAMON Quant Rev: 7 Quant Time: 940707 13:34
Output File: ^D8217::Q5 Injected at: 940707 13:05
Data File: >D8217::D2 Dilution Factor: 1.00000
Name: SNA .CSDUP 100PPM Instrument ID: 7002D
Misc: LCS;0C SEP 7-14-94 CV=1.0 BTL# 5

ID File: 818270::F1
Title: SP4 Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qual Time: 940707 11:03

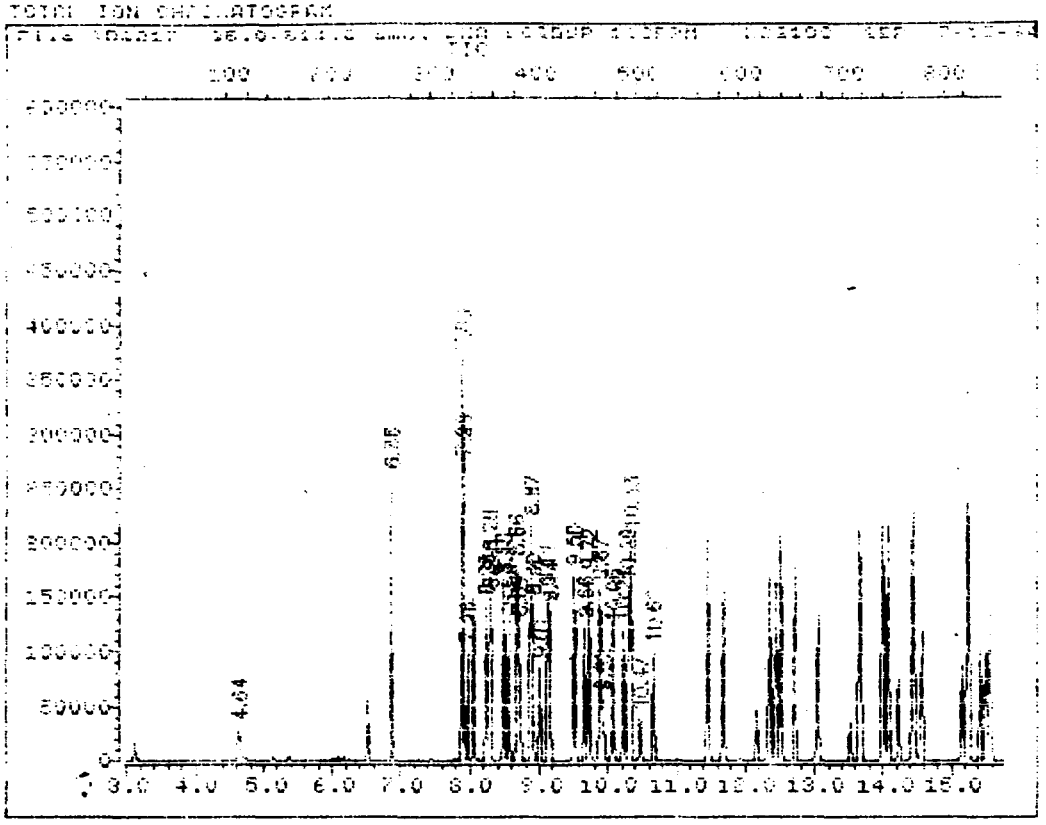
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.23	152.0	38933	40.00	ug/mL	96
2)	N-nitrosodimethylamine	4.64	42.0	30660	47.88	ug/mL	88
4)	2-Fluorophenol	6.86	112.0	115800	102.34	ug/mL	68
5)	Phenol-d6	7.89	99.0	146536	104.22	ug/mL	68
6)	Phenol	7.90	94.0	82990	51.77	ug/mL	73
7)	bis(2-Chloroethyl)ether	7.96	93.0	59758	46.36	ug/mL	
8)	2-Chlorophenol	8.05	128.0	66307	57.24	ug/mL	96
9)	1,3-Dichlorobenzene	8.23	146.0	45971	36.13	ug/mL	92
10)	1,4-Dichlorobenzene	8.29	146.0	48296	37.17	ug/mL	96
11)	Benzyl alcohol	8.49	108.0	36312	50.68	ug/mL	86
12)	1,2-Dichlorobenzene	8.56	146.0	46146	38.77	ug/mL	94
13)	2-Methylphenol	8.66	108.0	61100	58.42	ug/mL	94
14)	bis(2-chloroisopropyl)ether	8.69	45.0	88075	49.03	ug/mL	98
15)	4-Methylphenol	8.87	108.0	64246	56.87	ug/mL	93
16)	N-Nitroso-di-n-propylamine	8.90	70.0	40534	50.25	ug/mL	91
17)	Hexachloroethane	9.01	117.0	17954	34.72	ug/mL	95
18)	Aniline	7.96	93.0	59759	36.35	ug/mL	49
19)	*d8-Naphthalene	10.29	136.0	141040	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.11	82.0	69560	60.95	ug/mL	77
21)	Nitrobenzene	9.14	77.0	57061	46.20	ug/mL	91
22)	Isophorone	9.50	82.0	121619	52.63	ug/mL	97
23)	2-Nitrophenol	9.66	139.0	36647	63.11	ug/mL	90
24)	2,4-Dimethylphenol	9.72	107.0	52709	50.80	ug/mL	
25)	Benzoic acid	9.92	122.0	40785	95.19	ug/mL	95
26)	bis(2-Chloroethoxy)methane	9.97	93.0	74051	50.20	ug/mL	83
27)	2,4-Dichlorophenol	10.06	162.0	51377	63.89	ug/mL	93
28)	1,2,4-Trichlorobenzene	10.21	180.0	40298	45.18	ug/mL	99
29)	Naphthalene	10.33	128.0	146045	47.92	ug/mL	99
30)	4-Chloroaniline	10.47	127.0	20196	18.51	ug/mL	87
31)	Hexachlorobutadiene	10.66	225.0	19742	45.13	ug/mL	90
32)	4-Chloro-3-methylphenol	11.48	107.0	70092	80.22	ug/mL	90
33)	2-Methylnaphthalene	11.69	142.0	89127	48.87	ug/mL	94
34)	*d10-Acenaphthene	14.00	164.0	77579	40.00	ug/mL	89
35)	Hexachlorocyclopentadiene	12.17	237.0	12598	29.00	ug/mL	97
36)	2,4,6-Trichlorophenol	12.36	196.0	41956	73.87	ug/mL	98
37)	2,4,5-Trichlorophenol	12.45	196.0	47370	78.69	ug/mL	98
38)	2-Chloronaphthalene	12.72	162.0	94014	49.56	ug/mL	98
39)	2-Fluorobiphenyl	12.51	172.0	114628	58.38	ug/mL	97
40)	2-Nitroaniline	13.05	65.0	43009	65.46	ug/mL	91
41)	Dimethylphthalate	13.52	163.0	24868	11.84	ug/mL	93
42)	Acenaphthylene	13.66	152.0	155591	60.41	ug/mL	93
43)	2,6-Dinitrotoluene	14.57	165.0	45450	64.84	ug/mL	81
44)	3-Nitroaniline	13.98	138.0	32775	60.46	ug/mL	91

Operator ID: RAMON Quant Rec: 7 Quant Time: 940707 13:34
Output File: ^D821?::GC Injected at: 940707 13:05
Data File: >D821?::D2 Dilution Factor: 1.00000
Name: BNA LCSDUP 100PPM Instrument ID: 7002D
Misc: LLS100 SEP 7-15-94 FV=1 0 Bil# 5

ID File: D:8270::FI
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940707 11:03

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Acenaphthene	14.07	153.0	100200	56.94	ug/mL	94
46)	2,4-Dinitrophenol	14.22	184.0	24724	104.62	ug/mL	96
47)	4-Nitrophenol	14.46	109.0	17371	73.71	ug/mL	92
48)	Dibenzofuran	14.43	168.0	147056	58.62	ug/mL	88
49)	2,4-Dinitrotoluene	14.57	165.0	45450	64.84	ug/mL	95
50)	Diethylphthalate	15.16	149.0	61904	29.80	ug/mL	88
51)	4-Chlorophenyl-phenylether	15.25	204.0	54193	61.43	ug/mL	94
52)	Fluorene	15.24	166.0	113543	62.16	ug/mL	99
53)	4-Nitroaniline	15.42	65.0	40342	64.18	ug/mL	80
54)	2,4,6-Tribromophenol	15.85	330.0	48356	181.55	ug/mL	93
55)	*d10-Phenanthrene	17.33	188.0	105944	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.51	198.0	33519	94.97	ug/mL	98
58)	N-Nitrosodiphenylamine (1)	15.57	169.0	62461	47.54	ug/mL	93
59)	4-Bromophenyl-phenylether	16.39	248.0	33325	68.89	ug/mL	97
60)	Hexachlorobenzene	16.71	284.0	37633	69.24	ug/mL	93
61)	Pentachlorophenol	17.10	266.0	25795	103.44	ug/mL	94
62)	Phenanthrene	17.37	178.0	165127	63.52	ug/mL	96
63)	Anthracene	17.46	178.0	160000	64.37	ug/mL	93
64)	Carbazole	17.80	167.0	151125	60.57	ug/mL	96
65)	Di-n-butylphthalate	18.52	149.0	220154	60.51	ug/mL	96
66)	Fluoranthene	19.40	202.0	167948	68.06	ug/mL	99
67)	*d12-Chrysene	21.43	240.0	92456	40.00	ug/mL	98
68)	Pyrene	19.74	202.0	174944	64.76	ug/mL	99
69)	Terphenyl-d14	19.98	244.0	163039	85.07	ug/mL	97
70)	Butylbenzylphthalate	20.69	149.0	89964	58.45	ug/mL	89
72)	3,3'-Dichlorobenzidine	21.38	252.0	18100	27.15	ug/mL	97
73)	Benzo(a)anthracene	21.40	228.0	143879	64.84	ug/mL	94
74)	Chrysene	21.46	228.0	138546	62.48	ug/mL	94
75)	bis(2-Ethylhexyl)phthalate	21.44	149.0	130084	61.64	ug/mL	89
76)	*d12-Perylene	23.24	264.0	71328	40.00	ug/mL	95
77)	Di-n-octylphthalate	22.17	149.0	227620	60.47	ug/mL	98
78)	Benzo(b)fluoranthene	22.74	252.0	196785M	64.65	ug/mL	97
79)	Benzo(k)fluoranthene	22.77	252.0	92997M	35.61	ug/mL	92
80)	Benzo(a)pyrene	23.16	252.0	126838	60.14	ug/mL	93
81)	Indeno(1,2,3-cd)pyrene	24.93	276.0	155030M	68.51	ug/mL	88
82)	Dibenz(a,h)anthracene	24.93	278.0	123429	59.97	ug/mL	97
83)	Benzo(g,h,i)perylene	25.43	276.0	136449	60.30	ug/mL	95

* Compound is ISTD



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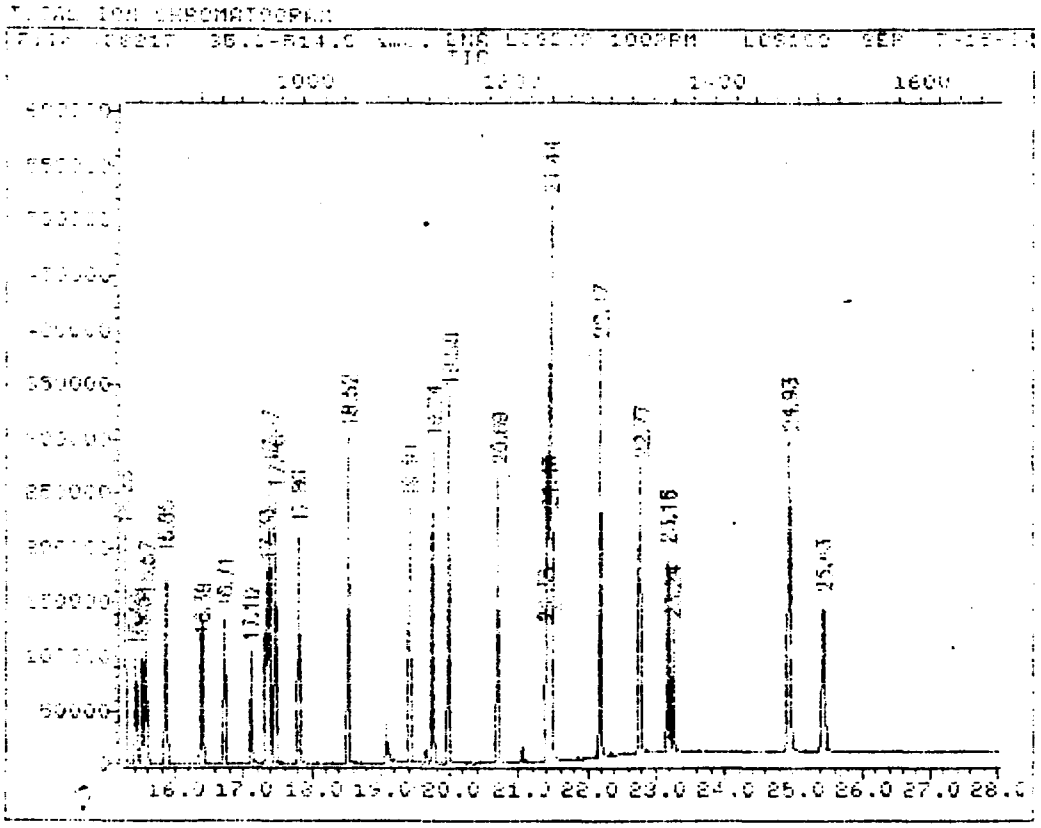
Name: BNA LCSDUP 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-15-94 FV=1.0 BTL# 5

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940707 11:03

Operator ID: RAMON
Quant Time : 940707 13:34
Injected at: 940707 13:05



Data File: >D8217::D2 Quant Output File: ^D8217::QO
Name: BNA LCSDUP 100PPM Instrument ID: 7002D
Misc: LCS100 SEP 7-15-94 FV=1.0 BTL# 5

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940707 11:03

Operator ID: RAMON
Quant Time : 940707 13:34
Injected at: 940707 13:05

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/07/94

Contractor: NET-Midwest, INC. Time: 11:03

Contract No: 890831 Laboratory ID: >08214

Instrument ID: 70020 Initial Calibration Date: 06/28/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Pyridine	1.64292	1.48297	9.74			
N-nitrosodimethylamine	.76144	.67363	11.53	*		
2-fluorophenol	1.27270	1.19836	6.47			(Conc=100.00)
Phenol-d6	1.66698	1.47919	11.24			(Conc=100.00)
Phenol	1.00170	1.68638	10.53	*		
bis(2-Chloroethyl)ether	1.59571	1.35608	15.02	*		
2-Chlorophenol	1.40815	1.21854	13.47	*		
1,3-Dichlorobenzene	1.39916	1.33854	4.33	*		
1,4-Dichlorobenzene	1.41513	1.36701	3.40	*		
Benzyl alcohol	.86963	.75388	13.32			
1,2-Dichlorobenzene	1.39814	1.25201	6.44	*		
2-Methylphenol	1.28136	1.10028	14.13	*		
bis(2-chloroisopropyl)ether	2.42836	1.88968	22.18	*		
4-Methylphenol	1.36874	1.18839	12.67	*		
N-Nitroso-di-n-propylamine	1.05855	.84867	19.83	*	**	
Hexachloroethane	.59724	.54395	8.92	*		
Aniline	2.43888	1.72968	28.84	*	✓	4/7
Nitrobenzene-d5	.39878	.32368	17.15			
Nitrobenzene	.40682	.35026	13.90	*		
Isophorone	.80515	.65538	18.60	*		
2-Nitrophenol	.19638	.16468	16.11	*		
2,4-Dimethylphenol	.34324	.29424	14.28	*		
Benzoic acid	.13724	.12152	11.46			
bis(2-Chloroethoxy)methane	.50168	.41835	16.61	*		
2,4-Dichlorophenol	.26286	.22807	12.97	*		
1,2,4-Trichlorobenzene	.27719	.25297	8.74	*		
Naphthalene	.96628	.86427	10.56	*		
4-Chloroaniline	.38196	.30943	18.99			
Hexachlorobutadiene	.13578	.12406	8.63	*		
4-Chloro-3-methylphenol	.38264	.24701	18.12	*		
2-Methylnaphthalene	.57828	.51726	10.55	*		
Hexachlorocyclopentadiene	.24791	.22412	9.60	*	**	

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/07/94

Contractor: NET-Midwest, INC. Time: 11:03

Contract No: 090031 Laboratory ID: >00214

Instrument ID: 70020 Initial Calibration Date: 06/20/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2,4,6-Trichlorophenol	.33357	.29385	12.15	*		
2,4,5-Trichlorophenol	.35587	.31059	12.72	*		
2-Chloronaphthalene	1.03799	.97870	5.71	*		
2-Fluorobiphenyl	1.11118	1.01298	8.84			
2-Nitroaniline	.43618	.33898	22.28	*		
Dimethylphthalate	1.24494	1.08336	12.98	*		
Acenaphthylene	1.68165	1.32874	20.99	*		
2,6-Dinitrotoluene	.39420	.36162	8.26	*		
3-Nitroaniline	.34325	.27970	18.51			
Acenaphthene	1.02971	.90784	11.84	*		
2,4-Dinitrophenol	.12163	.12193	.25		**	
4-Nitrophenol	.12650	.12158	3.95		**	
Dibenzofuran	1.41458	1.29428	8.51			
2,4-Dinitrotoluene	.42306	.36162	14.52	*		
Diethylphthalate	1.27083	1.07162	15.68	*		
4-Chlorophenyl-phenylether	.49776	.45518	8.55	*		
Fluorene	1.04963	.94239	10.22	*		
4-Nitroaniline	.40975	.32428	20.86			
2,4,6-Tribromophenol	.16344	.13742	15.92			(Conc=100.00)
4,6-Dinitro-2-methylphenol	.14081	.13325	5.36			
Di-phenylhydrazine	1.69682	1.58746	6.44			
N-Nitrosodiphenylamine (1)	.55189	.49610	10.11	*		
4-Bromophenyl-phenylether	.20434	.18263	10.62	*		
Hexachlorobenzene	.22619	.20520	9.28	*		
Pentachlorophenol	.11127	.09415	15.39	*		
Phenanthrene	1.07191	.98145	8.44	*		
Anthracene	1.05647	.93853	11.16	*		
Carbazole	1.00246	.94204	6.03			
Di-n-butylphthalate	1.41063	1.37377	3.16	*		
Fluoranthene	1.03000	.93165	9.55	*		
Pyrene	1.39858	1.16878	16.43	*		
Terphenyl-d14	.99139	.82916	16.36			

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/07/94

Contractor: NET-Midwest, INC. Time: 11:03

Contract No: 090031 Laboratory ID: X08214

Instrument ID: 70820 Initial Calibration Date: 06/28/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Butylbenzylphthalate	.82197	.66592	18.98	*	
Benzidine	.10236	.00910	91.11		
3,3'-Dichlorobenzidine	.36973	.28844	21.99		
Benzo(a)anthracene	1.17084	.96880	18.81	*	
Chrysene	1.12518	.95940	14.73	*	
bis(2-Ethylhexyl)phthalate	1.03645	.91309	11.90		
Di-n-octylphthalate	2.07559	2.11096	1.70	*	
Benzo(b)fluoranthene	1.75612	1.70686	2.81	*	
Benzo(k)fluoranthene	1.32121	1.46440	10.84	*	
Benzo(a)pyrene	1.29242	1.18279	8.48	*	
Indeno(1,2,3-cd)pyrene	1.28284	1.26905	5.50	*	
Dibenz(a,h)anthracene	1.07599	1.15424	7.27	*	
Benzo(g,h,i)perylene	1.28284	1.26905	5.50	*	

RF - Response factor from daily standard file at 50.00 ug/mL

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

%Diff - % Difference from original average or curve

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

Quant Report [illegible] Page 1

Operator ID: RAMON Quant Rev: [illegible] Quant Time: 940707 11:32
Output File: [illegible]0621[illegible] Injected at: 940707 11:05
Data File: >D621[illegible] Dilution Factor: 1.00000
Name: [illegible] STD 50PPB Instrument ID: 70020
Misc: [illegible] [illegible]

IS [illegible] Sample Multiplier [illegible]
Title: EPA Method 8270, Calibration Curve, [illegible], 70020
Last Calibration: 940628 10:34 Last Qcal Time: (none)

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.28	152.0	41420	40.00	ug/mL	93
2)	Pyridine	4.60	79.0	76791	45.13	ug/mL	94
3)	N-nitrosodimethylamine	4.63	42.0	34977	44.23	ug/mL	87
4)	2-Fluorophenol	6.96	112.0	123262	93.53	ug/mL	64
5)	Phenol-d6	7.89	99.0	153170	88.76	ug/mL	68
6)	Phenol	7.90	94.0	87308	44.74	ug/mL	93
7)	bis(2-Chloroethyl)ether	7.96	93.0	70211	42.49	ug/mL	98
8)	2-Chlorophenol	8.05	128.0	63090	43.27	ug/mL	95
9)	1,3-Dichlorobenzene	8.23	146.0	69303	47.83	ug/mL	92
10)	1,4-Dichlorobenzene	8.29	146.0	70777	48.30	ug/mL	97
11)	Benzyl alcohol	8.49	108.0	39028	43.34	ug/mL	87
12)	1,2-Dichlorobenzene	8.56	146.0	64823	46.78	ug/mL	97
13)	2-Methylphenol	8.67	108.0	56967	42.93	ug/mL	94
14)	bis(2-chloroisopropyl)ether	8.70	45.0	97838	38.91	ug/mL	97
15)	4-Methylphenol	8.87	108.0	61529	43.67	ug/mL	93
16)	N-Nitroso-di-n-propylamine	8.90	70.0	43940	40.09	ug/mL	93
17)	Hexachloroethane	9.01	117.0	28163	45.54	ug/mL	94
18)	Aniline	7.92	93.0	89554M	35.58	ug/mL	71
19)	*d8-Naphthalene	10.29	136.0	156344	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.11	82.0	63257	41.42	ug/mL	76
21)	Nitrobenzene	9.14	77.0	63451	43.05	ug/mL	91
22)	Isophorone	9.50	82.0	128080	40.79	ug/mL	98
23)	2-Nitrophenol	9.66	139.0	32134	41.95	ug/mL	86
24)	2,4-Dimethylphenol	9.72	107.0	57504	42.86	ug/mL	99
25)	Benzoic acid	9.90	122.0	23748	44.27	ug/mL	91
26)	bis(2-Chloroethoxy)methane	9.87	93.0	81758	41.69	ug/mL	82
27)	2,4-Dichlorophenol	10.07	162.0	44571	43.51	ug/mL	99
28)	1,2,4-Trichlorobenzene	10.22	180.0	49438	45.63	ug/mL	99
29)	Naphthalene	10.34	128.0	168914	44.71	ug/mL	99
30)	4-Chloroaniline	10.47	127.0	60472	40.51	ug/mL	82
31)	Hexachlorobutadiene	10.66	225.0	24245	45.68	ug/mL	91
32)	4-Chloro-3-methylphenol	11.45	107.0	46429	40.94	ug/mL	94
33)	2-Methylnaphthalene	11.68	142.0	101089	44.72	ug/mL	96
34)	*d10-Acenaphthene	14.00	164.0	77991	40.00	ug/mL	91
35)	Hexachlorocyclopentadiene	12.15	237.0	21849	45.20	ug/mL	95
36)	2,4,6-Trichlorophenol	12.35	196.0	28569	43.93	ug/mL	96
37)	2,4,5-Trichlorophenol	12.44	196.0	30279	43.64	ug/mL	99
38)	2-Chloronaphthalene	12.72	162.0	95412	47.14	ug/mL	97
39)	2-Fluorobiphenyl	12.51	172.0	96754	45.58	ug/mL	97
40)	2-Nitroaniline	13.05	65.0	33047	38.86	ug/mL	83
41)	Dimethylphthalate	13.53	163.0	105615	43.51	ug/mL	93
42)	Acenaphthylene	13.64	152.0	129537	39.51	ug/mL	94
43)	2,6-Dinitrotoluene	14.57	165.0	35254	45.87	ug/mL	69

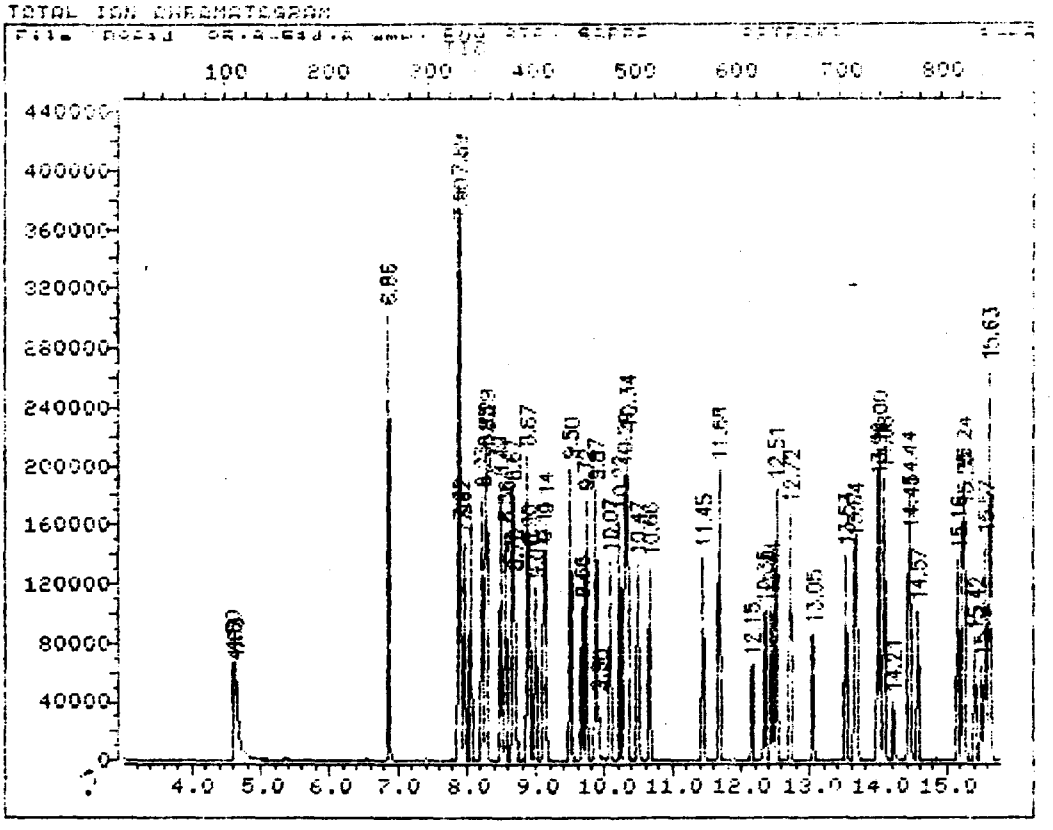
Operator ID: BNA Quant Seq: Quant Time: 940707 11:52
Output File: 940714:00 Injected at: 940707 11:05
Data File: 940714:00 Dilution Factor: 1.00000
Name: BNA std, 50PPB Instrument ID: 7002D
Misc: 55000 :L21619 STL# 2

ID File: @ 940714:FI
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	3-Nitroaniline	13.99	138.0	27268	40.74	ug/mL	94
45)	Acenaphthene	14.08	153.0	88504	44.08	ug/mL	95
46)	2,4-Dinitrophenol	14.21	184.0	11887	50.13	ug/mL	97
47)	4-Nitrophenol	14.45	109.0	11853	48.03	ug/mL	64
48)	Dibenzofuran	14.44	168.0	126170	45.75	ug/mL	81
49)	2,4-Dinitrotoluene	14.57	165.0	35254	42.74	ug/mL	[illegible]
50)	Diethylphthalate	15.16	149.0	104471	42.16	ug/mL	[illegible]
51)	4-Chlorophenyl-phenylether	15.25	204.0	44375	45.72	ug/mL	98
52)	Fluorene	15.24	166.0	91872	44.89	ug/mL	99
53)	4-Nitroaniline	15.42	65.0	31614	39.57	ug/mL	87
54)	2,4,6-Tribromophenol	15.85	330.0	26794	84.08	ug/mL	94
55)	*d10-Phenanthrene	17.33	188.0	102559	40.00	ug/mL	99
56)	4,6-Dinitro-2-methylphenol	15.51	198.0	17083	47.32	ug/mL	94
57)	Di-phenylhydrazine	15.63	77.0	203511	46.78	ug/mL	97
58)	N-Nitrosodiphenylamine (1)	15.57	169.0	63599	44.94	ug/mL	93
59)	4-Bromophenyl-phenylether	16.39	248.0	23413	44.69	ug/mL	91
60)	Hexachlorobenzene	16.70	284.0	26306	45.36	ug/mL	92
61)	Pentachlorophenol	17.10	266.0	12070	42.31	ug/mL	92
62)	Phenanthrene	17.37	178.0	125821	45.78	ug/mL	96
63)	Anthracene	17.46	178.0	120318	44.42	ug/mL	92
64)	Carbazole	17.79	167.0	120768	46.99	ug/mL	91
65)	Di-n-butylphthalate	18.52	149.0	176115	48.42	ug/mL	96
66)	Fluoranthene	19.40	202.0	119437	45.23	ug/mL	[illegible]
67)	*d12-Chrysene	21.42	240.0	86570	40.00	ug/mL	99
68)	Pyrene	19.74	202.0	126477	41.78	ug/mL	98
69)	Terphenyl-d14	19.98	244.0	89726	41.82	ug/mL	92
70)	Butylbenzylphthalate	20.69	149.0	72061	40.51	ug/mL	89
71)	Benzidine	19.62	184.0	985	4.45	ug/mL	95
72)	3,3'-Dichlorobenzidine	21.38	252.0	31213	39.01	ug/mL	97
73)	Benzo(a)anthracene	21.39	228.0	103884	41.00	ug/mL	94
74)	Chrysene	21.45	228.0	103819	42.64	ug/mL	94
75)	bis(2-Ethylhexyl)phthalate	21.44	149.0	98808	44.05	ug/mL	89
76)	*d12-Perylene	23.23	264.0	63485	40.00	ug/mL	96
77)	Di-n-octylphthalate	22.17	149.0	167518	50.85	ug/mL	98
78)	Benzo(b)fluoranthene	22.74	252.0	155450M	48.60	ug/mL	93
79)	Benzo(k)fluoranthene	22.77	252.0	116209M	55.42	ug/mL	98
80)	Benzo(a)pyrene	23.16	252.0	93862	45.76	ug/mL	92
81)	Indeno(1,2,3-cd)pyrene	24.93	276.0	114551M	60.00	ug/mL	89
82)	Dibenz(a,h)anthracene	24.93	278.0	91596	53.64	ug/mL	97
83)	Benzo(g,h,i)perylene	25.42	276.0	100707	52.75	ug/mL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

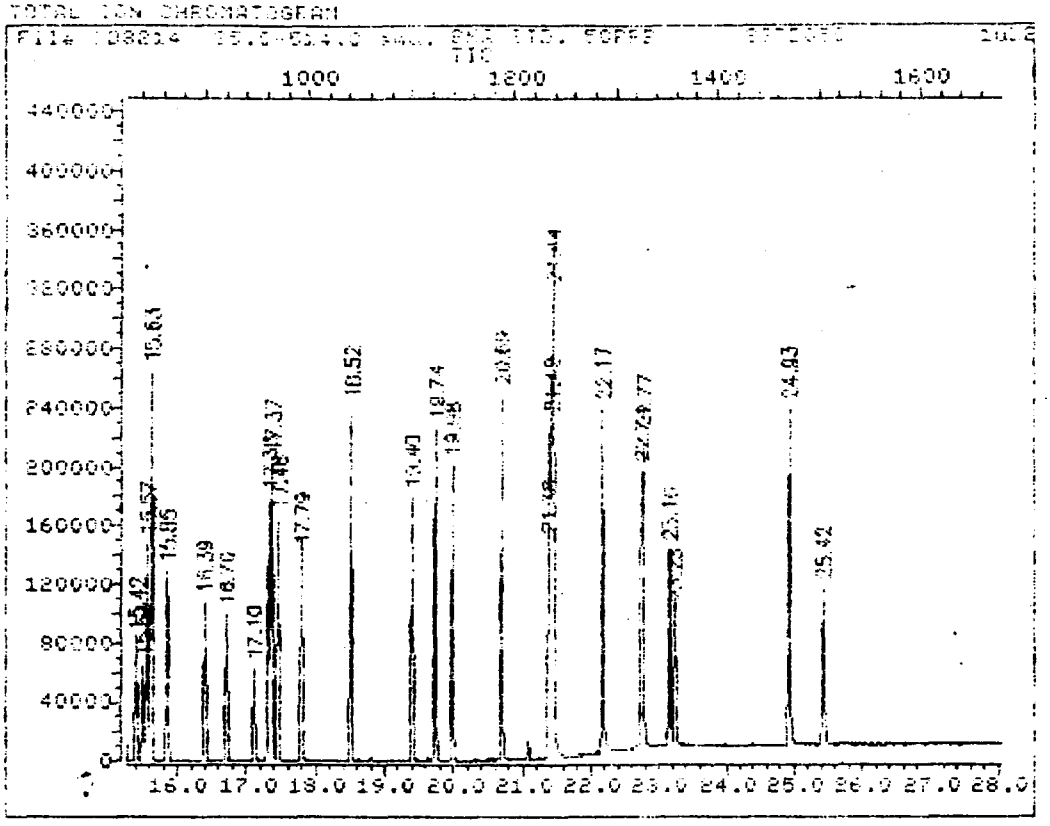


Data File: >D8214::D2 Quant Output File: ^D8214::QO
Name: BNA STD. 50PPB Instrument ID: 7002D
Misc: SSTD050 IuL21619 STL# 2

Id File: D 8270::FI
Title: EPA Method 8270. Calibration Curve, HP5970, 7002D
Last Calibration: 940629 10:34 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940707 11:32
Injected at: 940707 11:03

TOTAL ION CHROMATOGRAM



Data File: >D8214::D2 Quant Output File: ^D8214::Q9
Name: BNA STD, 50PPB Instrument ID: 7002D
Misc: SSTD050 lul21619 BTL# 2

Id File: D_8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940628 10:34 Last Qcal Time: <none>

Operator ID: RAMON
Quant Time : 940707 11:32
Injected at: 940707 11:03

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract:

Lab code: Case No.: SAS No.: SDG No.:

Lab File ID (Standard): >D8214 Date Analyzed: 07/07/94

Instrument ID: Time Analyzed: 11:03

	IS4(PHN) AREA	#	RT	IS5(CHR) AREA	#	RT	IS6(PER) AREA	#	RT
12 HOUR STD	102559		17.33	86570		21.42	63485		23.23
UPPER LIMIT	205118		17.83	173140		21.92	126970		23.73
LOWER LIMIT	51280		16.83	43285		20.92	31743		22.73
EPA SAMPLE NO.									
1 BNA BLANK	99775		17.32	82669		21.42	62678		23.24
2 BNA LCS	119272		17.33	98877		21.42	80014		23.25
3 BNA LCSDUP	105944		17.33	92456		21.43	71328		23.24
4 BNA BLANK	146014		17.33	129267		21.42	96740		23.24
5 BNA LCS	148600		17.32	127473		21.41	100769		23.24
6 BT#267252DL	70200		17.32	60123		21.41	46942		23.24
7 BT#267280DL	71635		17.32	62755		21.41	46611		23.24
8 BT#267323DL	66960		17.33	48338		21.42	45223		23.24
9 BT#267324DL	67296		17.32	56754		21.42	44620		23.24
10 BT#267075RE	105656		17.33	93155		21.42	73797		23.24
11 BT#267162DL	59644		17.33	52503		21.41	39886		23.24
12 BT#267189DL	73494		17.32	64707		21.42	50736		23.24
13 BT#267252RE	146025		17.32	124305		21.42	88657		23.25
14 BT#267280RE	166389		17.32	146453		21.42	105406		23.25
15 BT#267323RE	46244	*	17.34	8162	*	21.46	16213	*	23.30
16 BT#267324RE	50571	*	17.33	20154	*	21.44	16445	*	23.29
17									
18									
19									
20									
21									
22									

IS4 (PHN) = d10-Phenanthrene
IS5 (CHR) = d12-Chrysene
IS6 (PER) = d12-Perylene

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

Column used to flag internal standard area values with an asterisk

RAW DATA
MS SEMI-VOLATILES

Group = BNA
units = ug/L

In RLA 7-11

Page 1

Operator ID: RAMON
Output File: ^D8224::04
Data File: >D8224::B2
Name: BTa2o7075RE
Misc: E&E SEP 7-5-94 FJ=1.0 IV=1000 ml

Quant Rev: Quant Time: 940707 19:27
Injected at: 940707 17:42
Dilution Factor: 1.00000
Instrument ID: 7002D
BTI #12

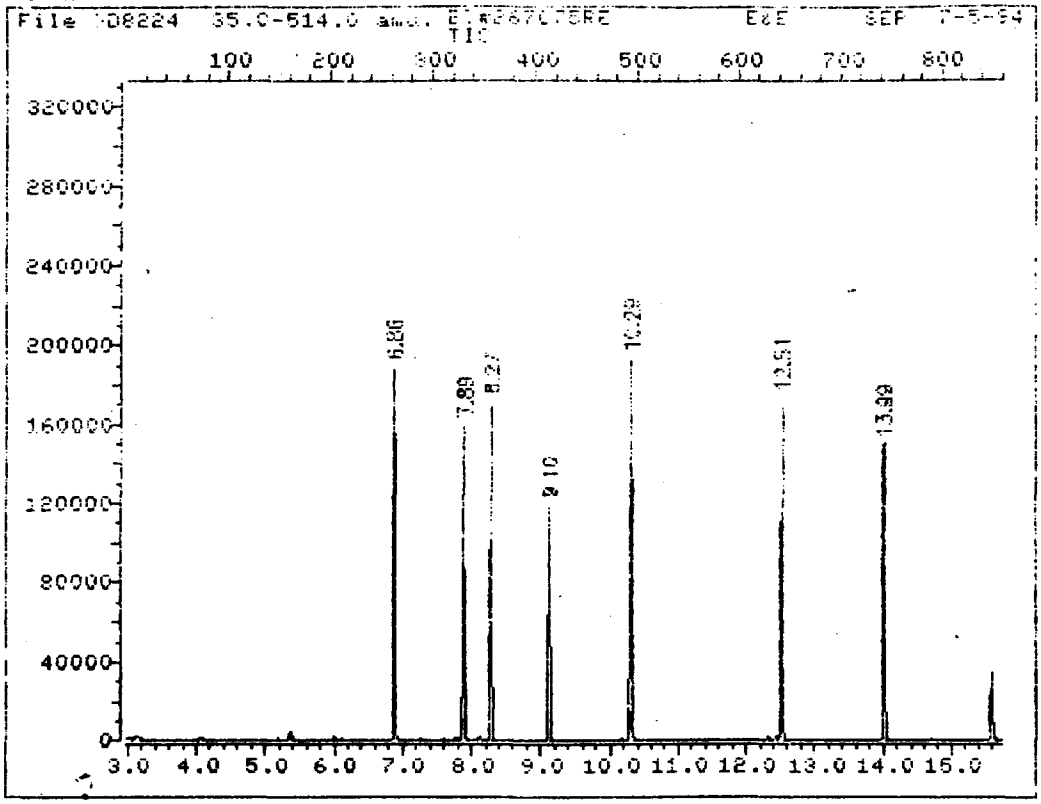
ID File: Di8270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 70020
Last Calibration: 940525 15:26 Last Qual Time: 940706 11:09

LRL clear.

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.27	152.0	36668	40.00	ug/mL	96
4)	2-Fluorophenol	6.66	112.0	79452	72.81	ug/mL	68
5)	Phenol-d6	7.89	99.0	65659	48.42	ug/mL	70
19)	*d8-Naphthalene	10.29	136.0	137293	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.19	82.0	61881	55.70	ug/mL	77
34)	*d10-Acenaphthene	13.99	164.0	75739	40.00	ug/mL	88
39)	2-Fluorobiphenyl	12.51	172.0	95760	49.93	ug/mL	96
54)	2,4,6-Tribromophenol	15.85	330.0	43665	167.81	ug/mL	96
55)	*d10-Phenanthrene	17.33	188.0	105656	40.00	ug/mL	99
67)	*d12-Chrysene	21.42	240.0	93155	40.00	ug/mL	98
69)	Terphenyl-d14	19.97	244.0	154250	79.88	ug/mL	96
76)	*d12-Perylene	23.24	264.0	73797	40.00	ug/mL	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

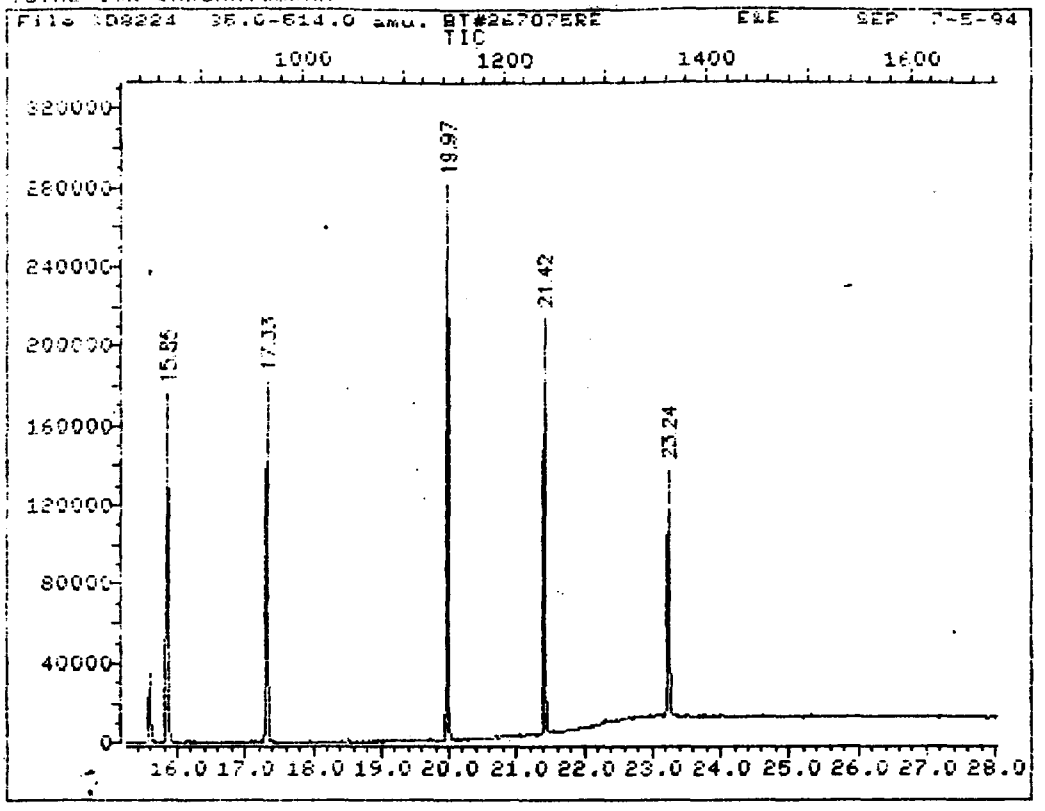


Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940707 19:27
Injected at: 940707 17:42

TOTAL ION CHROMATOGRAM

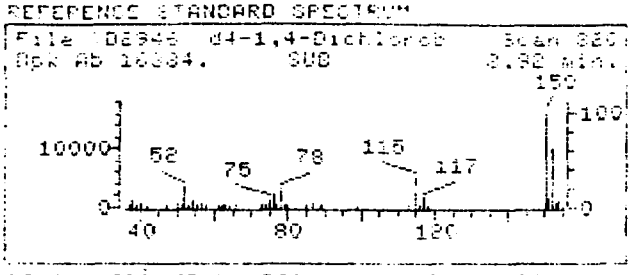


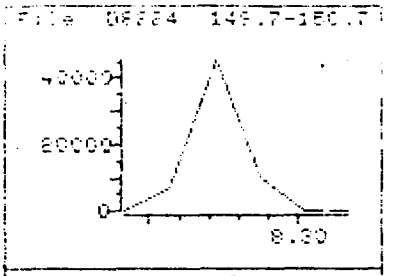
Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

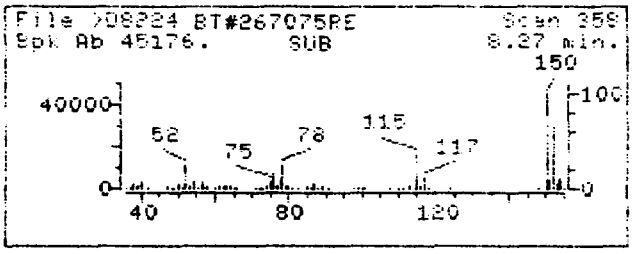
Operator ID: RAMON
Quant Time : 940707 19:27
Injected at: 940707 17:42

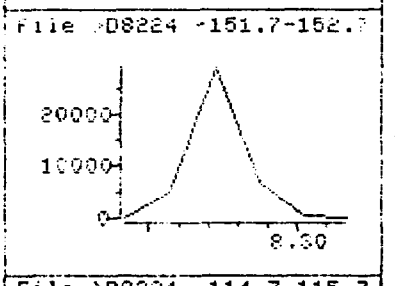
REFERENCE STANDARD SPECTRUM



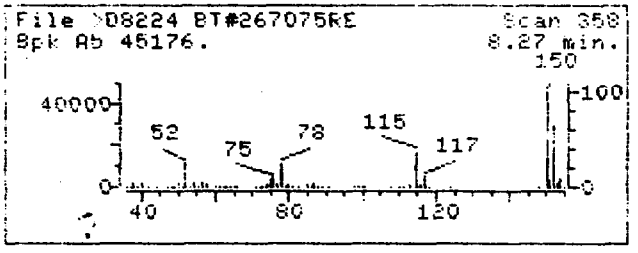


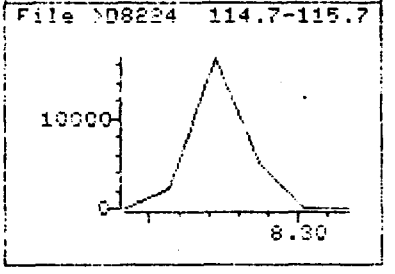
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

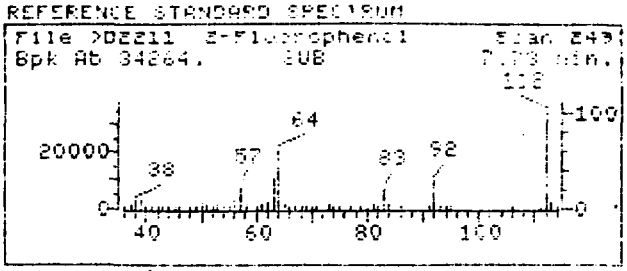


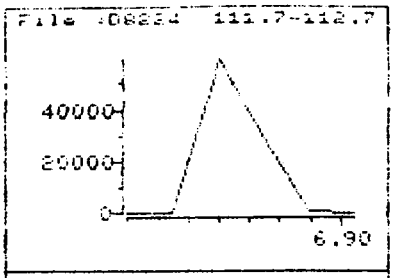


Data File: >D8224::D2 Quant Output File: `D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

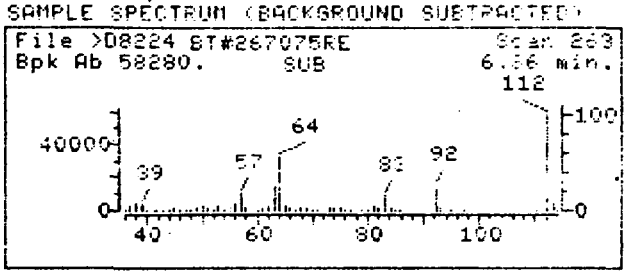
Compound No : 1 (ISTD)
Compound Name : d4-1,4-Dichlorobenzene
Scan Number : 358
Retention Time: 8.27 min.
Quant Ion : 152.0
Area : 36668
Concentration : 40.00 ug/mL
q-value : 96

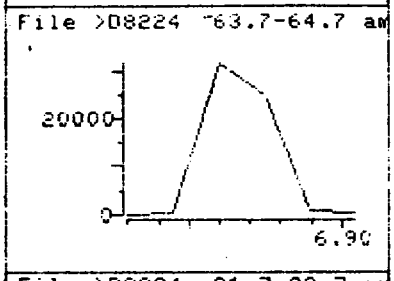
REFERENCE STANDARD SPECTRUM



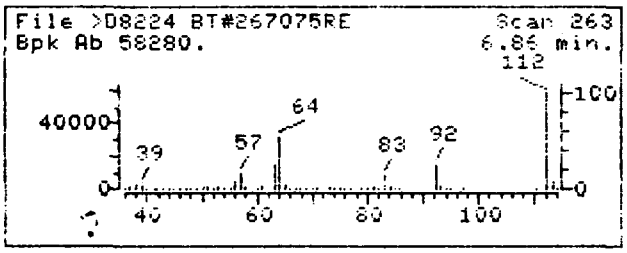


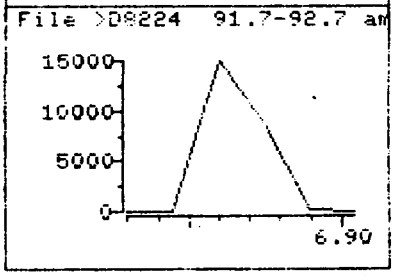
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

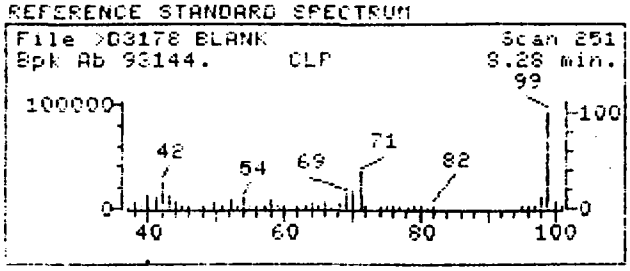




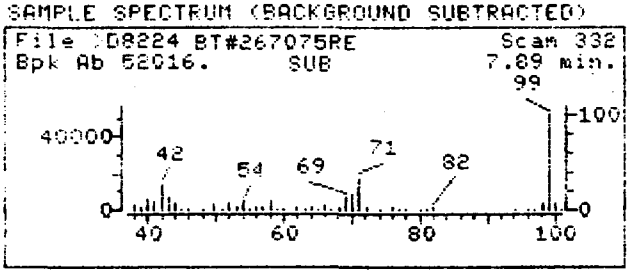
Data File: >D8224::D2 Quant Output File: >D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 4
Compound Name : 2-Fluorophenol
Scan Number : 263
Retention Time: 6.86 min.
Quant Ion : 112.0
Area : 79452
Concentration : 72.81 ug/mL
q-value : 68

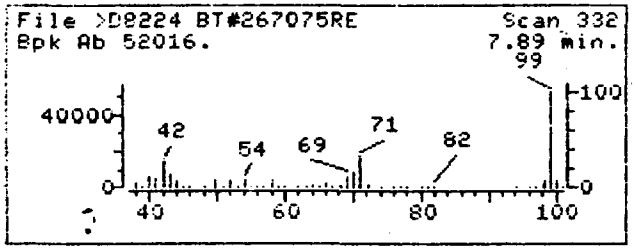
REFERENCE STANDARD SPECTRUM

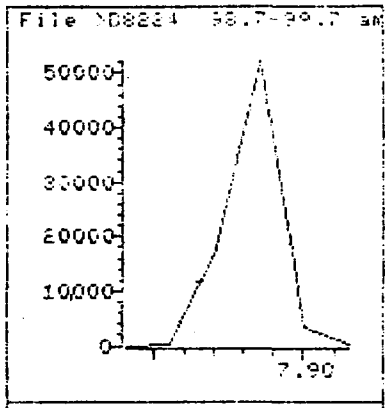


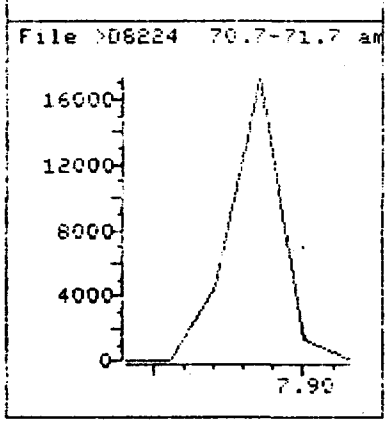
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



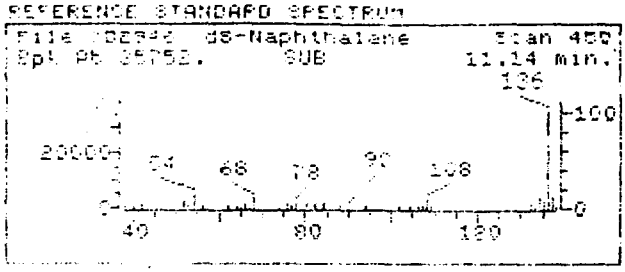




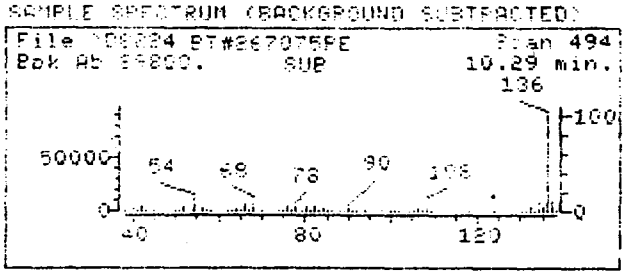
Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 5
Compound Name : Phenol-d6
Scan Number : 332
Retention Time: 7.89 min.
Quant Ion : 99.0
Area : 65659
Concentration : 48.42 ug/mL
q-value : 70

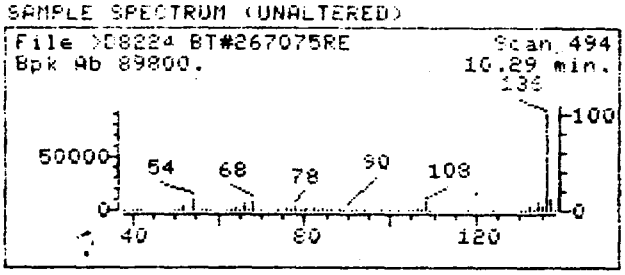
REFERENCE STANDARD SPECTRUM

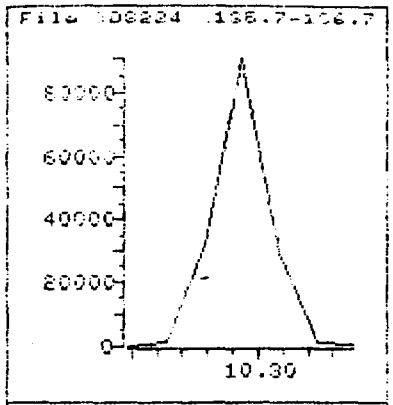


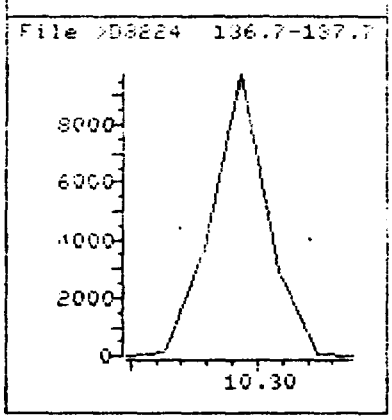
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



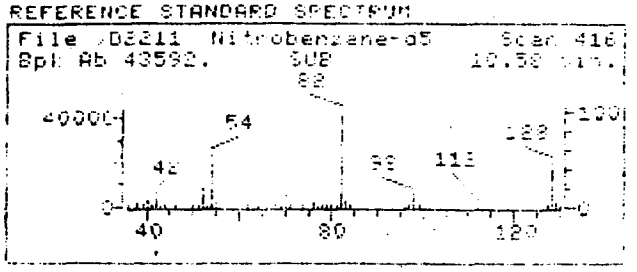




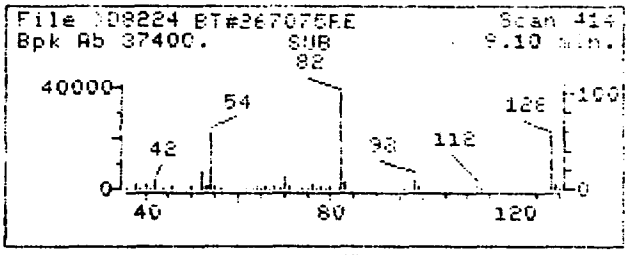
Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 19 (ISTD)
Compound Name : d8-Naphthalene
Scan Number : 494
Retention Time: 10.29 min.
Quant Ion : 136.0
Area : 137293
Concentration : 40.00 ug/mL
a-value : 97

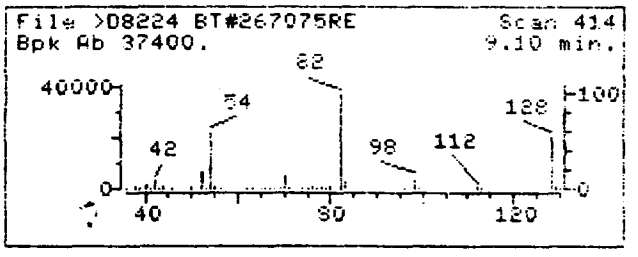
REFERENCE STANDARD SPECTRUM

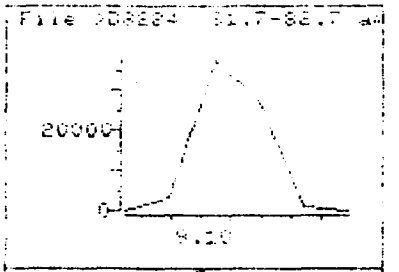


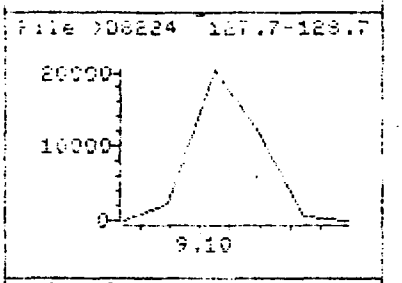
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

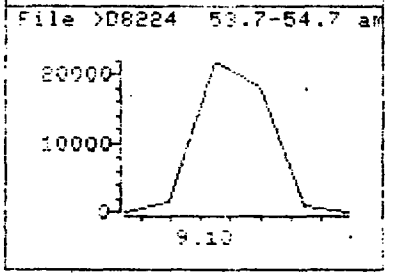


SAMPLE SPECTRUM (UNALTERED)





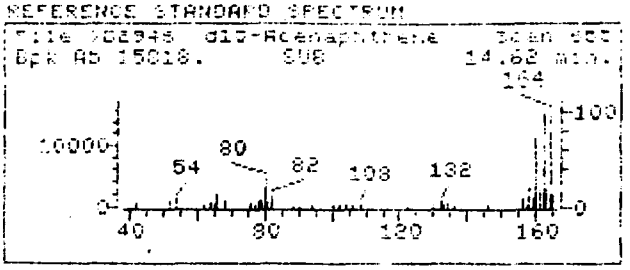


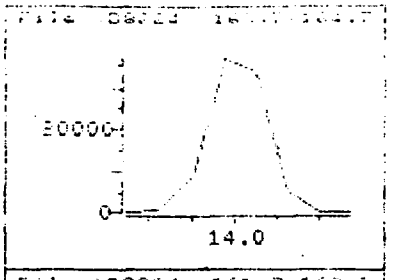


Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

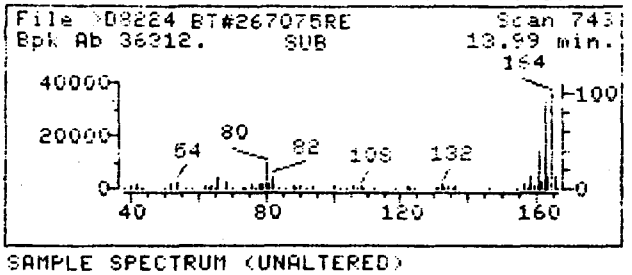
Compound No : 20
Compound Name : Nitrobenzene-d5
Scan Number : 414
Retention Time: 9.10 min.
Quant Ion : 82.0
Area : 61881
Concentration : 55.70 ug/mL
q-value : 77

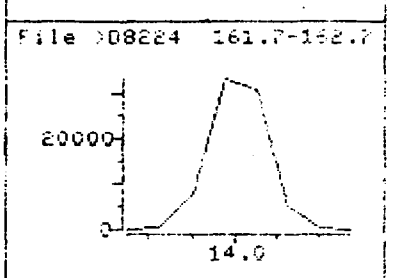
REFERENCE STANDARD SPECTRUM



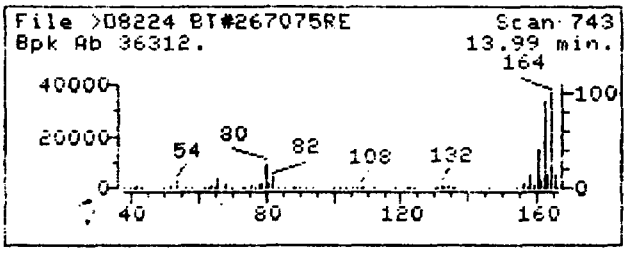


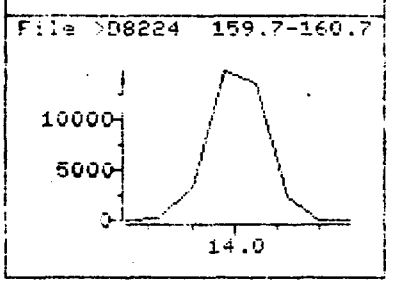
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

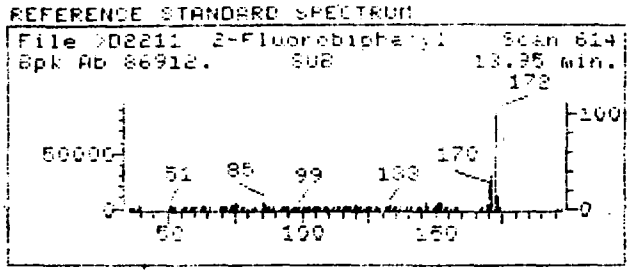


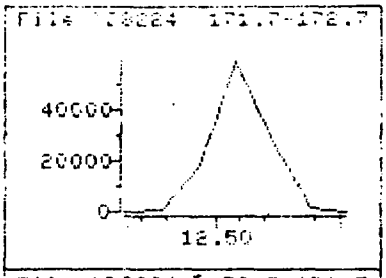


Data File: >08224::02 Quant Output File: ^08224::04
Name: BT#267075RE Instrument ID: 70020
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: 018270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

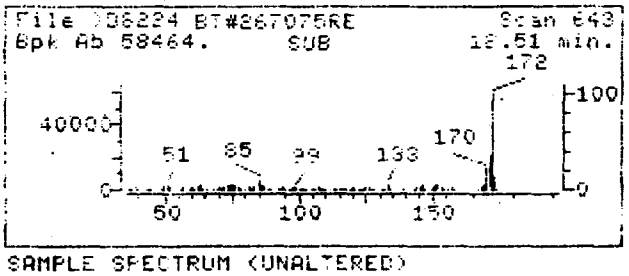
Compound No : 34 (ISTD)
Compound Name : d10-Acenaphthene
Scan Number : 743
Retention Time: 13.99 min.
Quant Ion : 164.0
Area : 75738
Concentration : 40.00 ug/mL
q-value : 88

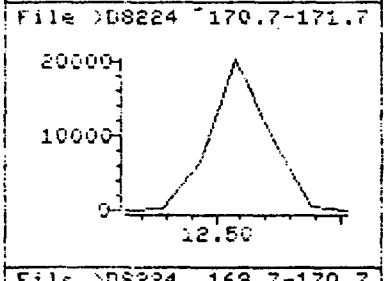
REFERENCE STANDARD SPECTRUM



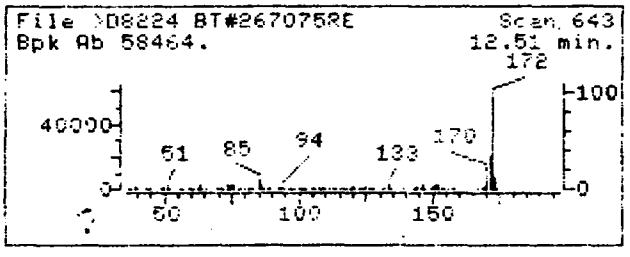


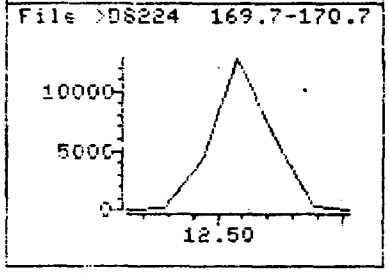
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

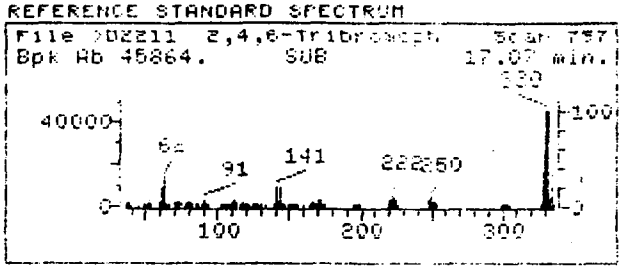


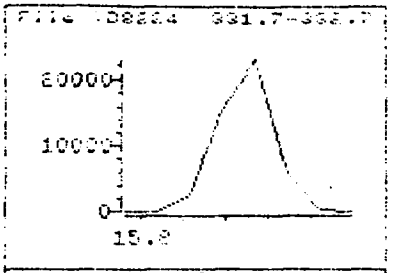


Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

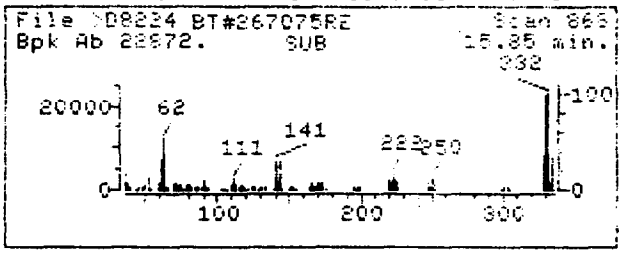
Compound No : 39
Compound Name : 2-Fluorobiphenyl
Scan Number : 643
Retention Time: 12.51 min.
Quant Ion : 172.0
Area : 95760
Concentration : 49.93 ug/mL
q-value : 96

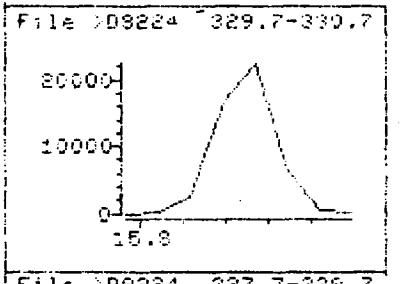
REFERENCE STANDARD SPECTRUM



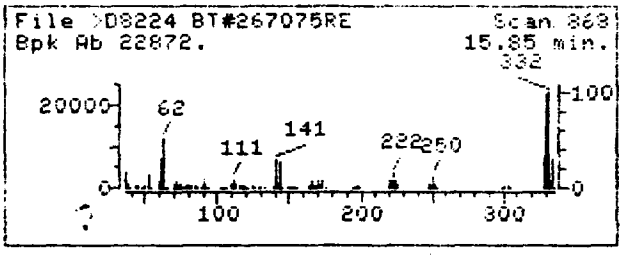


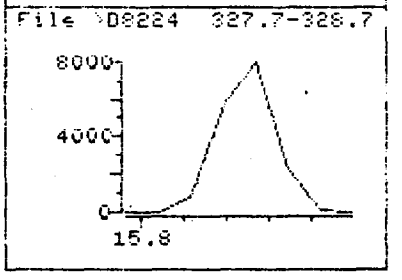
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

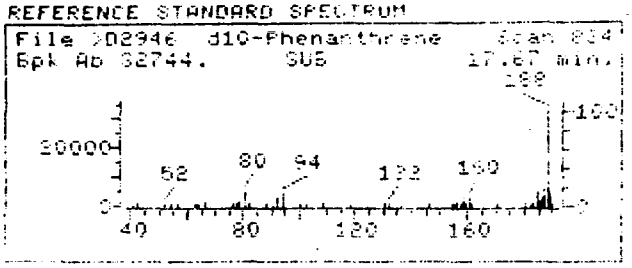




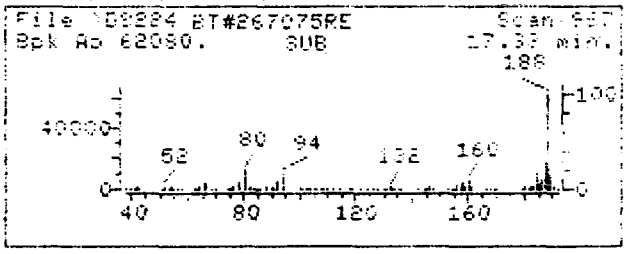
Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 54
Compound Name : 2,4,6-Tribromophenol
Scan Number : 868
Retention Time: 15.85 min.
Quant Ion : 330.0
Area : 43665
Concentration : 167.81 ug/mL
q-value : 9%

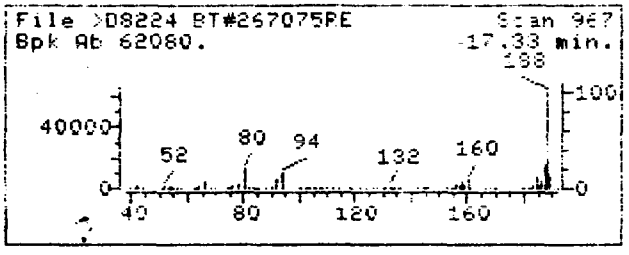
REFERENCE STANDARD SPECTRUM

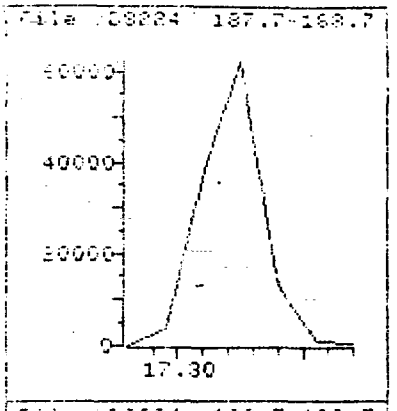


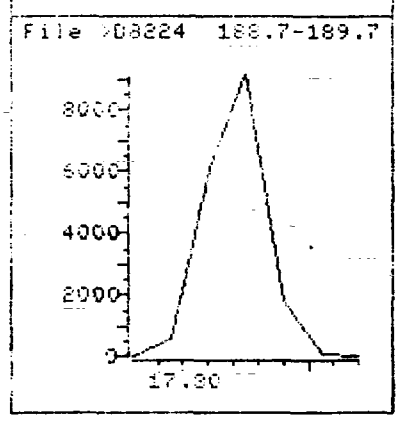
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



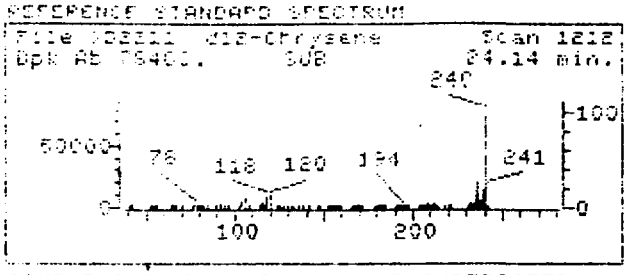




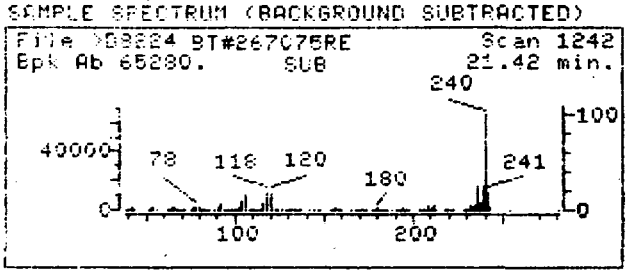
Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 IV= BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 55 (ISTD)
Compound Name : d10-Phenanthrene
Scan Number : 967
Retention Time: 17.53 min.
Quant Ion : 188.0
Area : 105656
Concentration : 40.00 ug/mL
q-value : 99

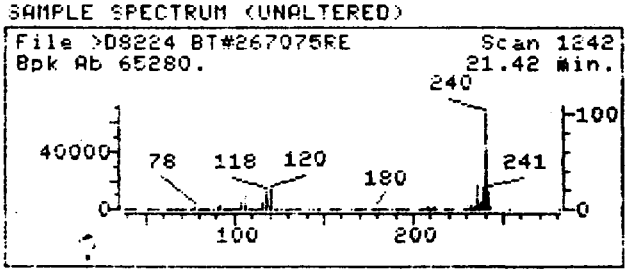
REFERENCE STANDARD SPECTRUM

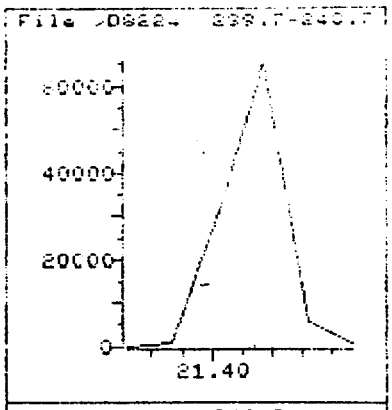


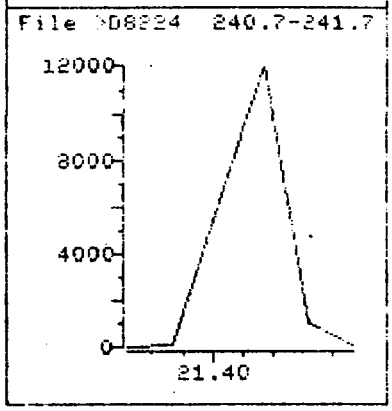
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

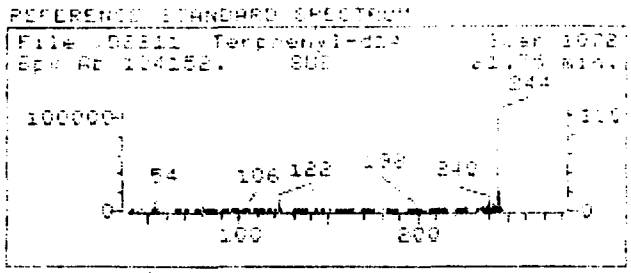


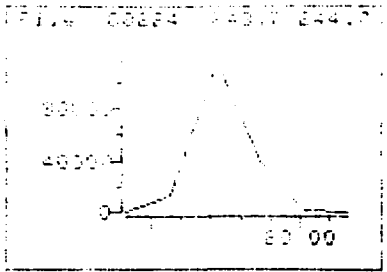


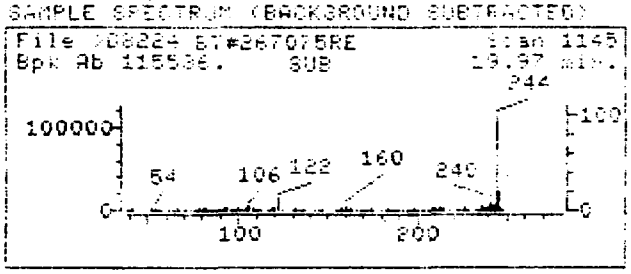


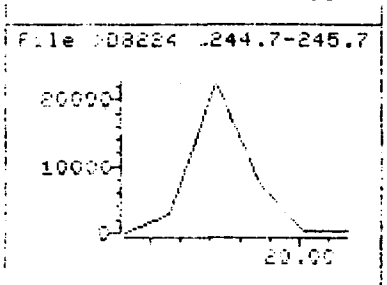
Data File: >D8224::D2 Quant Output File: ^D8224::D4
Name: BT#267075RE Instrument ID: 70020
Misc: E&E SEP 7-5-94 FV=1.0 IV: BTL#12
Quant Time: 940707 19:27 Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

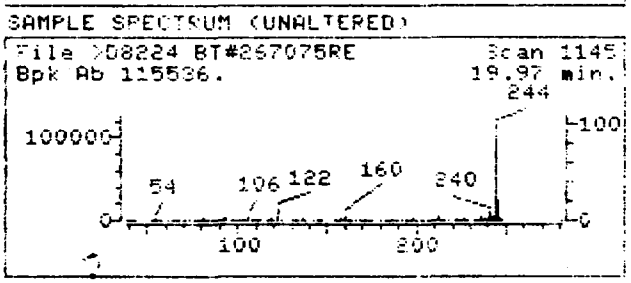
Compound No : 67 (ISTD)
Compound Name : d12-Chrysene
Scan Number : 1242
Retention Time: 21.42 min.
Quant Ion : 240.0
Area : 93155
Concentration : 40.00 ug/mL
q-value : 98

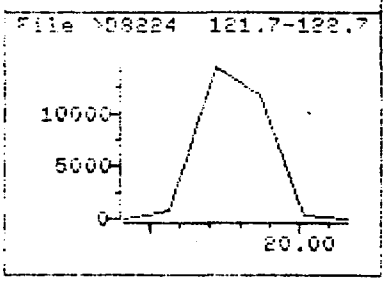








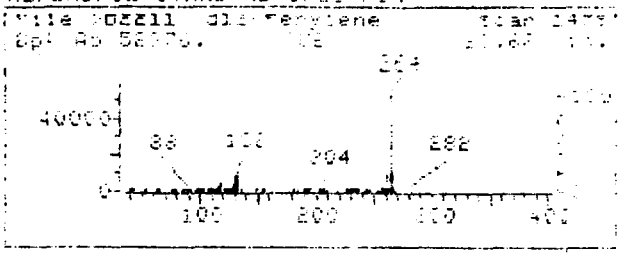




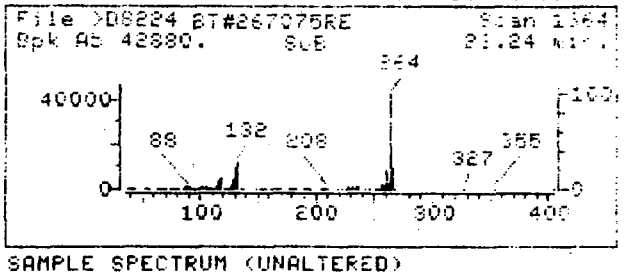
Data File: >08224::02 Quant Output File: ^DS224::D4
Name: BT#267075RE Instrument ID: 70020
Misc: E&E SEP 7-5-94 FU=1.0 Iu= BTL#12
Quant Time: 940707 19:27. Quant ID File: D18270::F1
Injected at: 940707 17:42 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 69
Compound Name : Terphenyl-d14
Scan Number : 1145
Retention Time: 19.97 min.
Quant Ion : 244.0
Area : 154250
Concentration : 79.88 ug/ml
q-value : 96

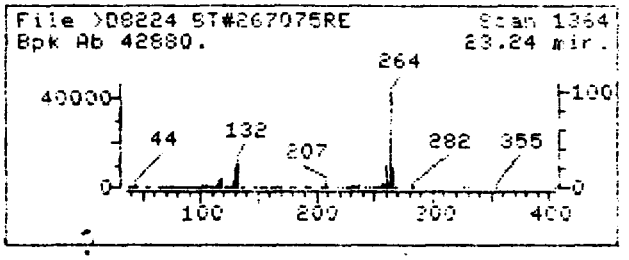
REFERENCE STANDARD SPECTRUM

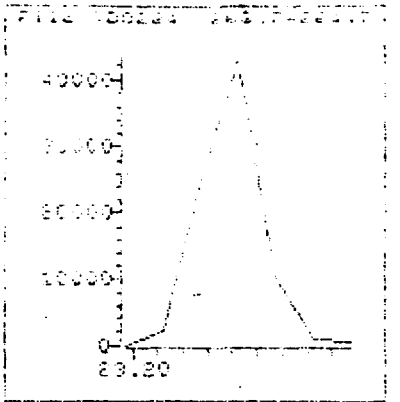


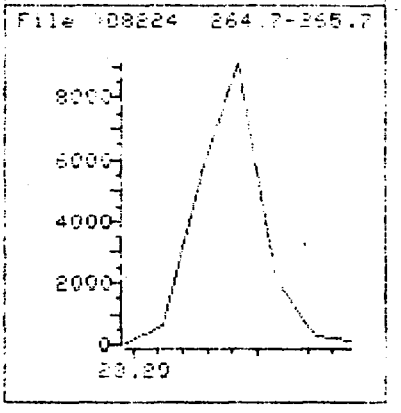
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >D8224::D2
Name: BT#267075RE
Misc: E&E . SEP 7-5-94 FV=1.0
Quant Time: 940707 19:27
Injected at: 940707 17:42
Last Qcal Time: 940706 11:09

Quant Output File: *D8224::D4
Instrument ID: 7002D
IV= BTL#12
Quant ID File: D18270::F1
Last Calibration: 940525 15:26

Compound No . : 76 (ISTD)
Compound Name : d12-Perylene
Scan Number : 1364
Retention Time: 23.24 min.
Quant Ion : 264.0
Area : 73797
Concentration : 40.00 ug/mL
q-value : 97

Operator ID: RAMON Quant Rev: 7 Quant Time: 940706 15:43
Output File: D08201::Q0 Injected at: 940706 15:13
Data File: >D08201::D3 Dilution Factor: 1.00000
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8

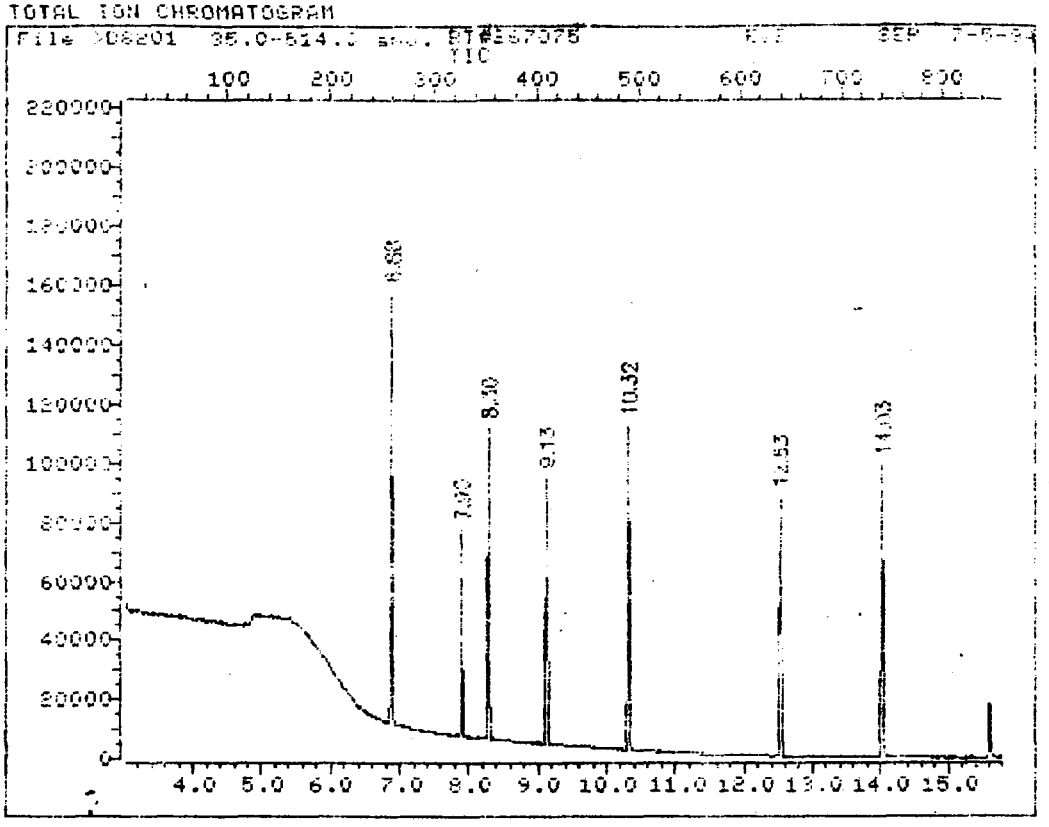
ID File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.30	152.0	18938	40.00	ug/mL	96
4)	2-Fluorophenol	6.88	112.0	42212	80.07	ug/mL	77
5)	Phenol-d6	7.90	99.0	34389	47.27	ug/mL	72
19)	*d8-Naphthalene	10.32	136.0	73933	40.00	ug/mL	97
20)	Nitrobenzene-d5	9.13	82.0	44663	67.96	ug/mL	80
34)	*d10-Acenaphthene	14.03	164.0	35630	40.00	ug/mL	[illegible]
39)	2-Fluorobiphenyl	12.53	172.0	48796	55.64	ug/mL	[illegible]
54)	2,4,6-Tribromophenol	15.88	330.0	15445	125.20	ug/mL	94
59)	*d10-Phenanthrene	17.35	188.0	52259	40.00	ug/mL	98
67)	*d12-Chrysene	21.44	240.0	43302	40.00	ug/mL	99
69)	Terphenyl-d14	20.00	244.0	70631	80.47	ug/mL	92
76)	*d12-Perylene	23.27	264.0	33971	40.00	ug/mL	96

* Compound is ISTD

I/o

TOTAL ION CHROMATOGRAM

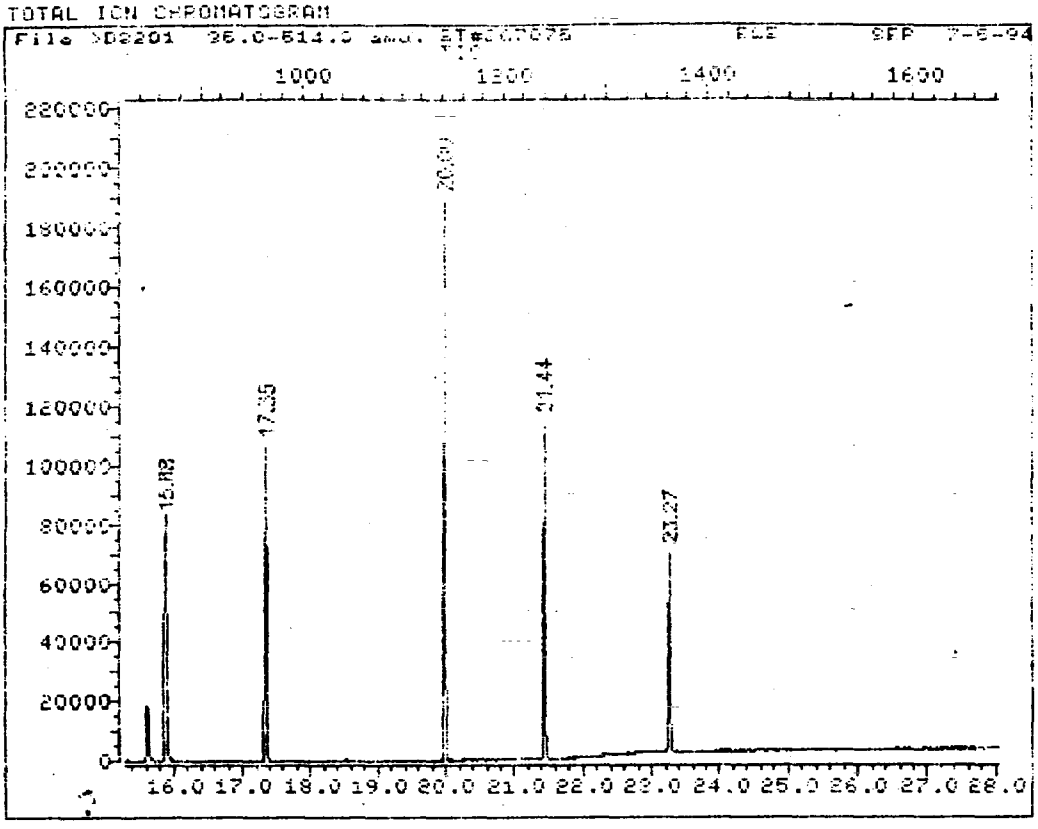


Data File: >D8201::D3 Quant Output File: ^D8201::QD
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8

Id File: D18270::F1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940706 15:43
Injected at: 940706 15:13

TOTAL ION CHROMATOGRAM

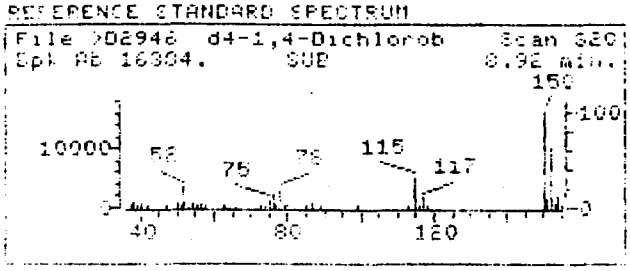


Data File: >D8201::03 Quant Output File: ^D8201::Q0
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8

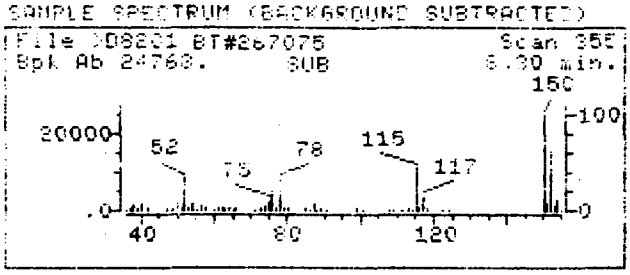
Id File: D18270::1
Title: EPA Method 8270, Calibration Curve, HP5970, 7002D
Last Calibration: 940525 15:26 Last Qcal Time: 940706 11:09

Operator ID: RAMON
Quant Time : 940706 15:43
Injected at: 940706 15:13

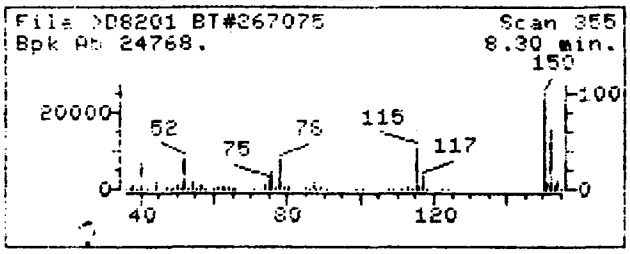
REFERENCE STANDARD SPECTRUM

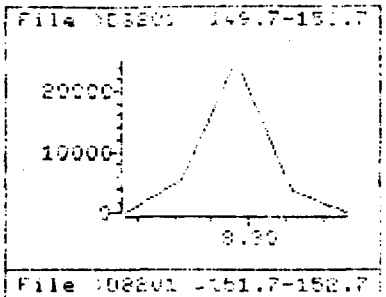


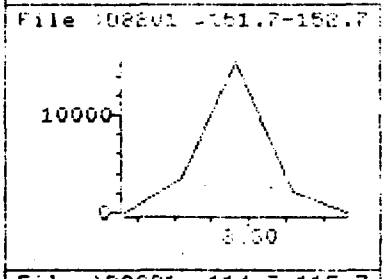
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

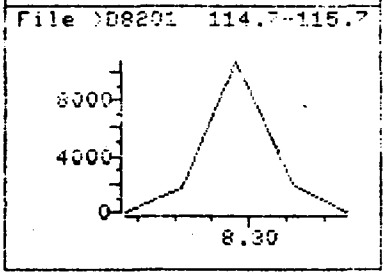


SAMPLE SPECTRUM (UNALTERED)





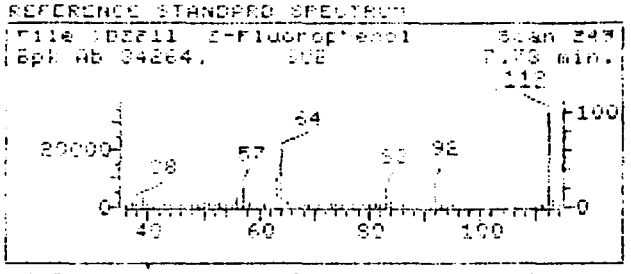


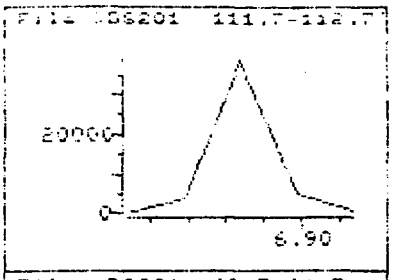


Data File: >D8201::D3 Quant Output File: ^D9201::QO
Name: BT#267075 Instrument ID: 7002C
Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8
Quant Time: 940706 15:43. Quant ID File: D18270::F1
Injected at: 940706 15:13 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

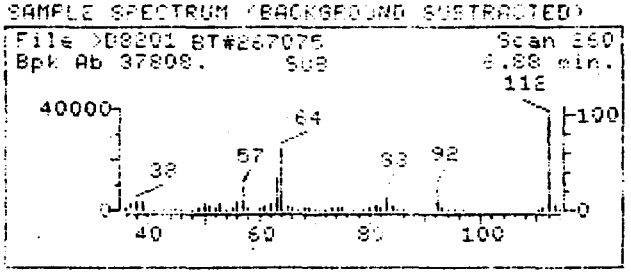
Compound No : 1 (ISTD)
Compound Name : d4-1,4-Dichlorobenzene
Scan Number : 355
Retention Time: 8.30 min.
Quant Ion : 152.0
Area : 18938
Concentration : 40.00 ug/mL
q-value : 96

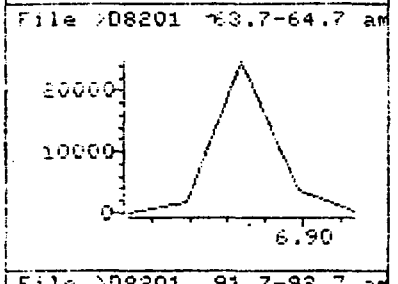
REFERENCE STANDARD SPECTRUM



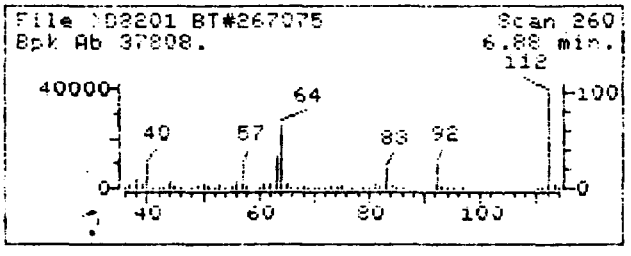


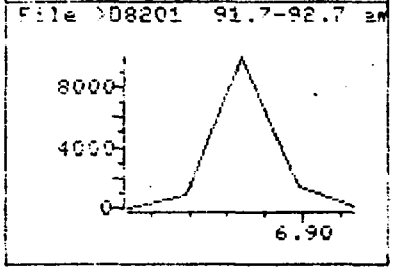
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

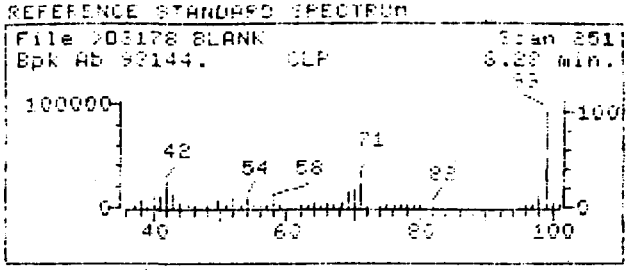




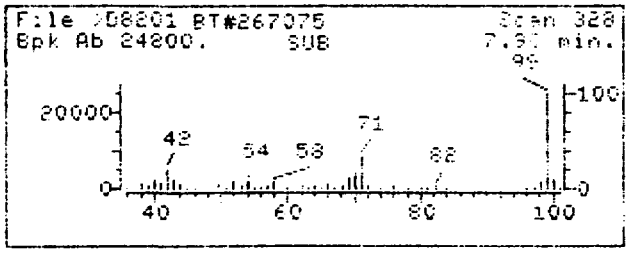
Data File: :D8201::03 Quant Output File: :D8201::Q0
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8
Quant Time: 940706 15:43 Quant ID File: D18270::F1
Injected at: 940706 15:13 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 4
Compound Name : 2-Fluorophenol
Scan Number : 260
Retention Time: 6.88 min.
Quant Ion : 112.0
Area : 42212
Concentration : 80.07 ug/mL
q-value : 77

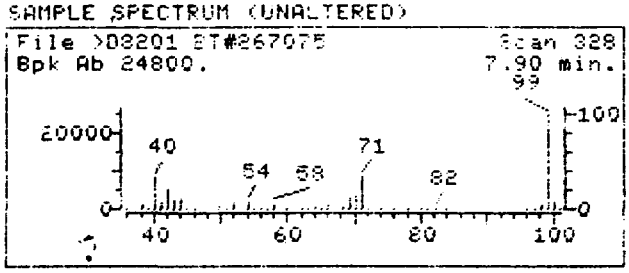
REFERENCE STANDARD SPECTRUM

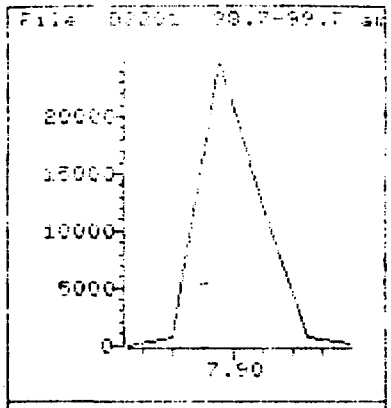


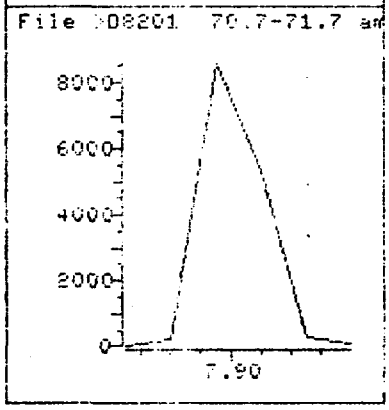
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

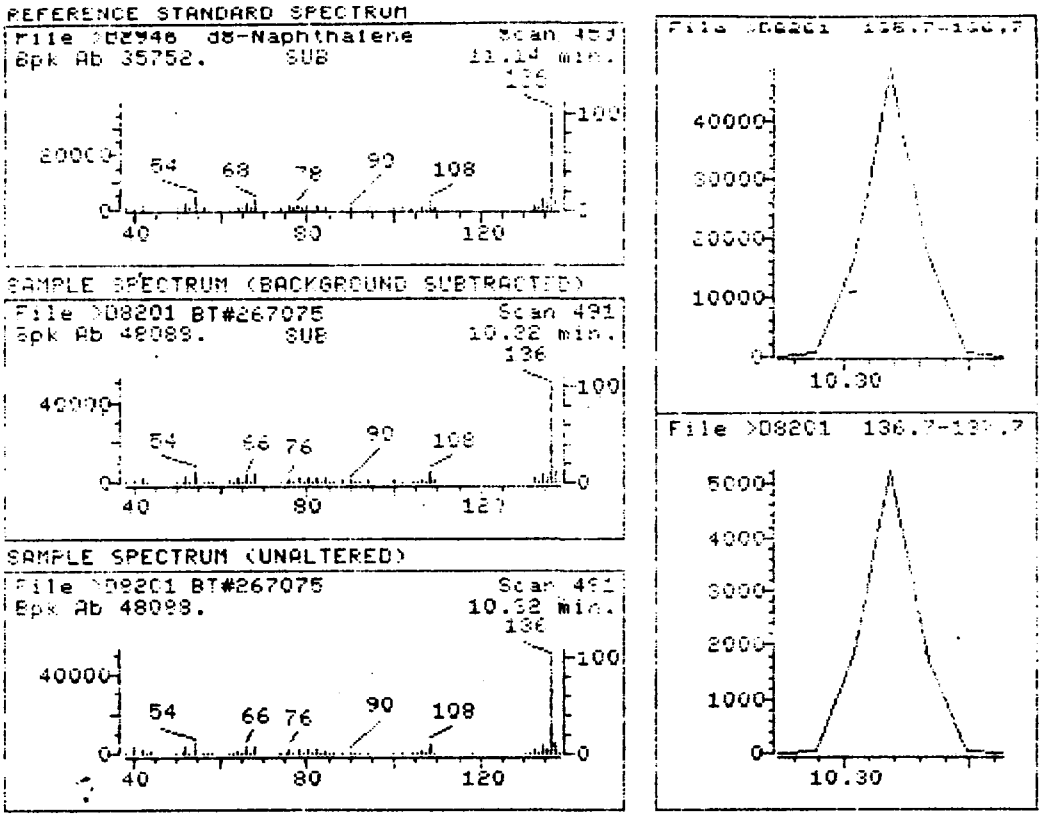






Data File: >D8201::D3 Quant Output File: ^D8201::QO
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FU=1.0 BTL# 8
Quant Time: 940706 15:43 Quant ID File: D18270::F1
Injected at: 940706 15:13 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 5
Compound Name : Phenol-d6
Scan Number : 328
Retention Time: 7.90 min.
Quant Ion : 99.0
Area : 34389
Concentration : 47.27 ug/mL
q-value : 77



Data File: >D8201::D3 Quant Output File: ^D8201::QD

Name: BT#267075 Instrument ID: 7002D

Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8

Quant Time: 940706 15:43 Quant ID File: D18270::F1

Injected at: 940706 15:13 Last Calibration: 940525 15:26

Last Qcal Time: 940706 11:09

Compound No : 19 (ISTD)

Compound Name : d8-Naphthalene

Scan Number : 491

Retention Time: 10.32 min.

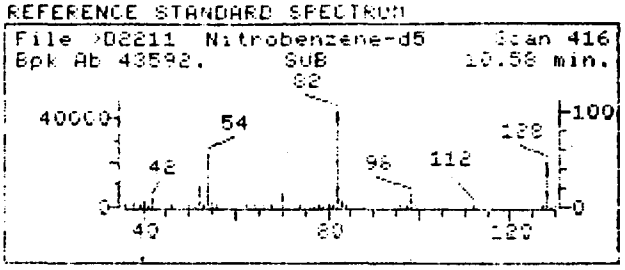
Quant Ion : 136.0

Area : 73933

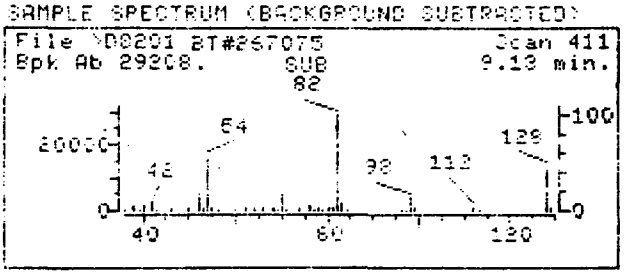
Concentration : 40.00 ug/mL

q-value : 97

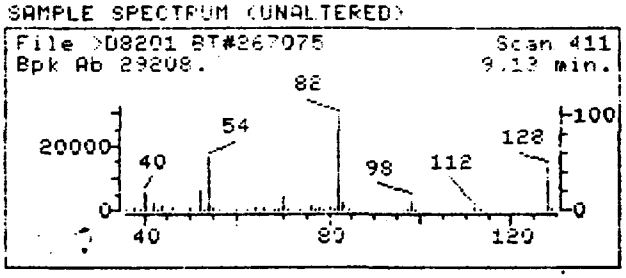
REFERENCE STANDARD SPECTRUM

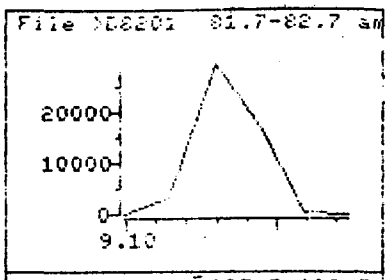


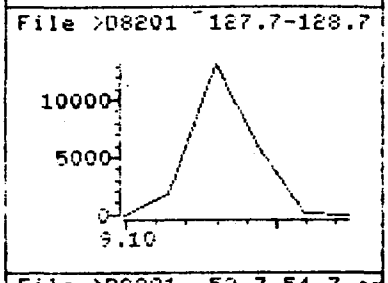
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

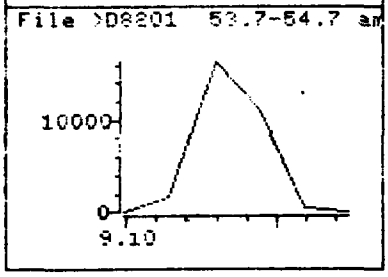


SAMPLE SPECTRUM (UNALTERED)





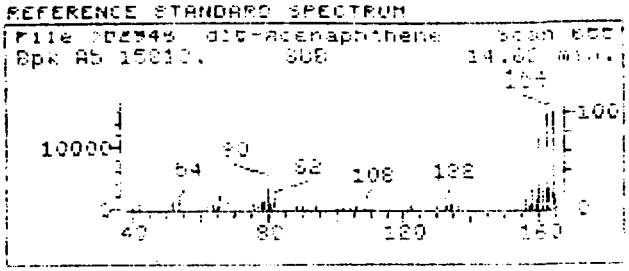


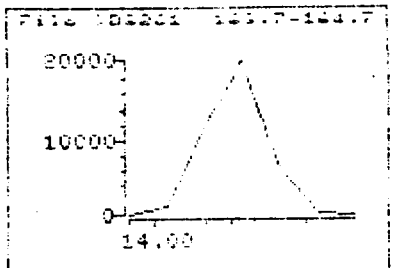


Data File: >D8201::D3 Quant Output File: ^D8201::QO
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-9-94 FV=1.0 BTL# 8
Quant Time: 940706 15:43 Quant ID File: D18270::F1
Injected at: 940706 15:13 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

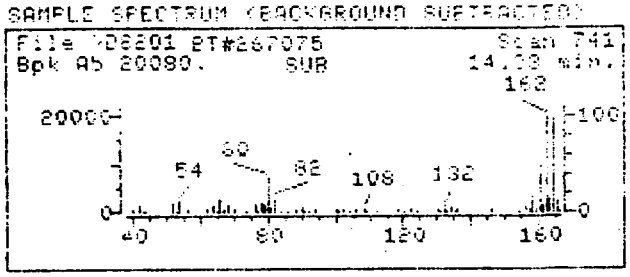
Compound No : 20
Compound Name : Nitrobenzene-d5
Scan Number : 411
Retention Time: 9.13 min.
Quant Ion : 82.0
Area : 44663
Concentration : 67.96 ug/mL
q-value : 90

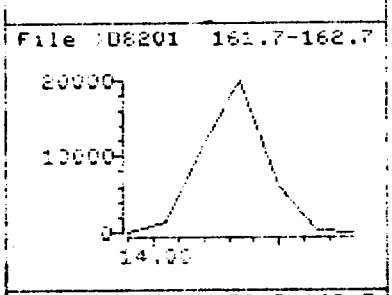
REFERENCE STANDARD SPECTRUM



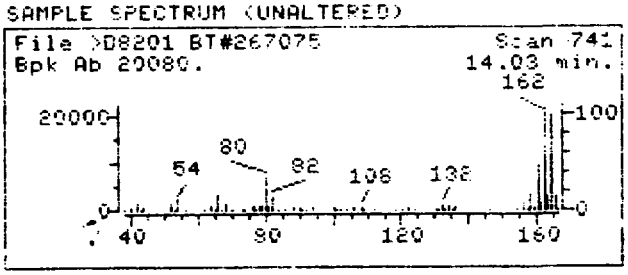


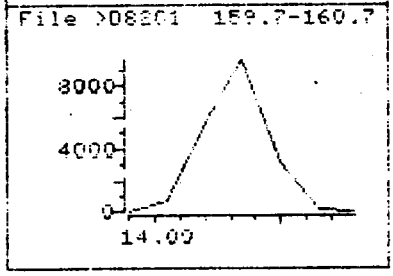
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)

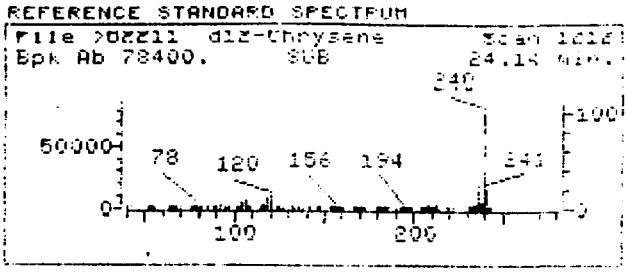


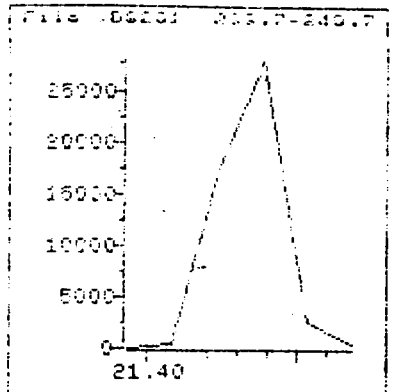


Data File: >D8201::03 Quant Output File: ^D8201::QD
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8
Quant Time: 940706 15:43 Quant ID File: D18270::F1
Injected at: 940706 15:13 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

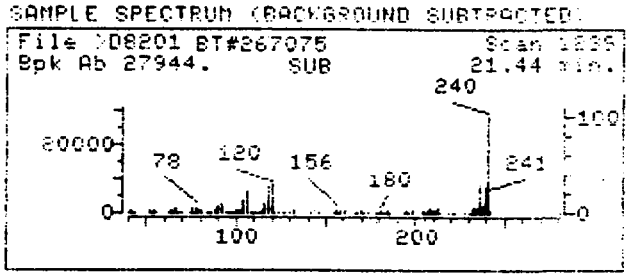
Compound No : 34 (ISTD)
Compound Name : d10-Acenaphthene

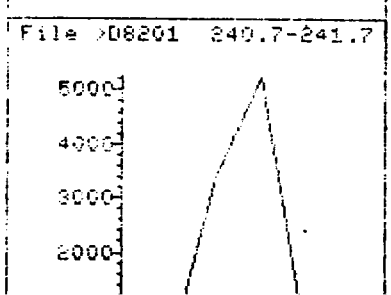
REFERENCE STANDARD SPECTRUM



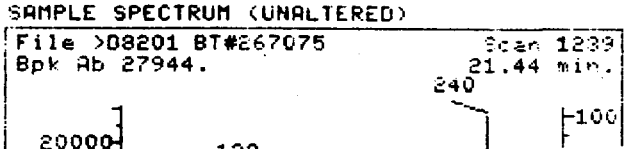


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

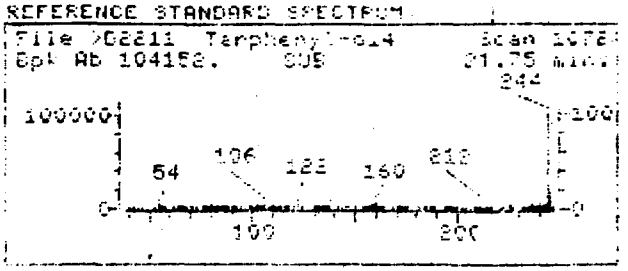


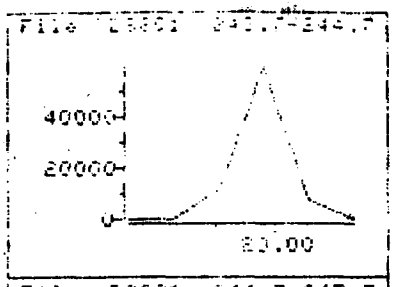


SAMPLE SPECTRUM (UNALTERED)

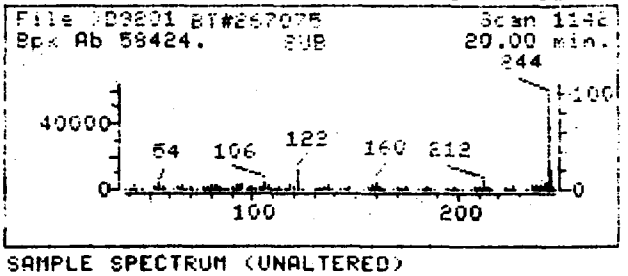


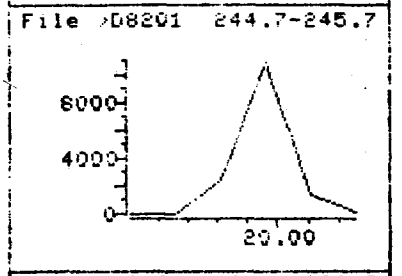
REFERENCE STANDARD SPECTRUM



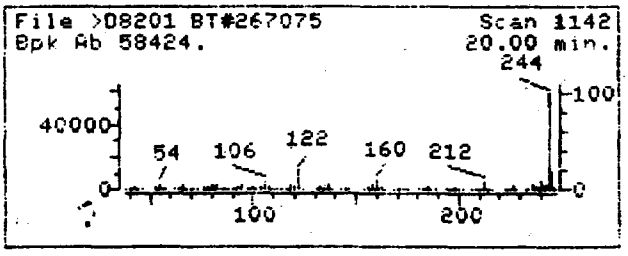


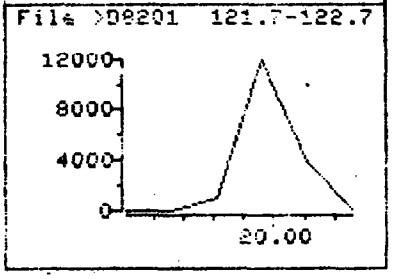
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





Data File: >D8201::D3 Quant Output File: ^D8201::QO
Name: BT#267075 Instrument ID: 7002D
Misc: E&E SEP 7-5-94 FV=1.0 BTL# 8
Quant Time: 940706 15:43 Quant ID File: D18270::F1
Injected at: 940706 15:13 Last Calibration: 940525 15:26
Last Qcal Time: 940706 11:09

Compound No : 69
Compound Name : Terphenyl-d14
Scan Number : 1142
Retention Time: 20.00 min.
Quant Ion : 244.0
Area : 70651
Concentration : 80.47 ug/mL
q-value : 92

NET

Bartlett Division

HP 5970

GC/MS INJECTION LOG

INSTRUMENT ID: 7001A

ANALYST: KJ

DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
5-5-94	A9721	inj	BFB005	vA9721	BFB1	BFB 25ng	scan #164 ~~10ul 21413~~ KJ 5-5-94	0.5ul 20913
	A9722	14	SDWA STD010	NG	A8240	SDWA STD 10ppb	10ul 21413	~~10ml~~ 25ml purged / 10ul #21412
	A9723	15	SDWA LFB	NA		LFB 5ppb		5ul #21412
	A9724	14	SDWA STD 010	NA		STD 10ppb		5ul
	A9725	14	"	NA		"		10ul
	A9726	inj	BFB	NA	BFB1	BFB 25ng	NA	0.5ul 20913
	A9727	inj	"	vA9727	"	"	scan # 170	0.5ul 20913
	A9728	14	SDWA STD010	NG	A8240	SDWA STD 10ppb	10ul 21413	25ml purged / 10ul 21412
5-6-94	A9729	inj	BFB005	vA9729	BFB1	BFB 25ng		0.5ul 20913
	A9730	14	SDWA STD010	NG	A8240	SDWA STD 10ppb	10ul 21413	25ml purged / 10ul 21412
	A9731	14	"	NG	"	"	"	"
	A9732	14	"		"	"	"	"
	A9733	1	VSTD001	OK	A8240	SDWA Std 1ppb	10ul 21413	25ml purge 1ul 21412
	A9734	2	VSTD005	OK		5ppb		5ul 21412
	A9735	3	VSTD030	OK		30ppb		30ul 21412
	A9736	4	VSTD050	OK		50ppb		50ul 21412
	A9737	inj	BFB	vA9737 OK	BFB1	Paired scan #148	0.5ul 20913	Injected
	A9738	14	VSTD010	OK	A8240	SDWA Std 10ppb	10ul 21413	25ml purge 10ul 21412
	A9739	15 ~~14~~	SDWA LFB	KJ 5-6-94		LFB		5ul 21412
	A9740	16 ~~15~~	SDWA Blk	OK		Blk		

KJ 5-6-94

Reviewed by: KKS, 6/20/94

Page No. 7

NET — **HP 5970** — **INSTRUMENT ID:** 7001A

Bartlett Division — **GC/MS INJECTION LOG** — **ANALYST:** LJ

DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
5-6-94	A9741	9	258250	s/o	A8270		10ul 21413	25ml purge
	A9742	10	258250DUP	ok		↓		
	A9743	11	258985	ok				
	A9744	12	258986	ok		v		
	A9745	13	258887	ok				
	A9746	6	258888	ok				
	A9747	7	258888RE	RE		↓	↓	
↓	A9748	8	SRM		↓	SRM # 21433	5ul # 21433	↓ 10ul 21413
5-11-94	A9749	~~16~~	Blank	OK		Blank	10ul 21413	25ml purged
↓	A9750	4	↓	Dirty	↓	↓	↓	↓
5-11-94	A9751	inj	BFB005	VA9751	BFB1	BFB 25ng	Scan # 167	0.5ul 20713
	A9752	~~14~~ 14	VSTD010	NG	A8240	VOA STD 50ppb	10ul 21413	25ml purged / 10ul 21412
	A9753	inj	BFB005	VA9753	BFB1	BFB 25ng	Scan # 168	0.5ul 20713
	A9754	14	VSTD ~~50~~ 010	OK	A8240	VOA STD ~~50ppb~~ 10ppb	10ul 21413	25ml purged / 10ul 21412
	A9755	15	VLFBU ~~20~~ 05	OK NG		LFB 5ppb		5ul 21412
	A9756	16	VBLK	OK				
	A9757 8	9	260223	OK				
	A9758 9	10	260224	OK				
	A9759 60	11	260223DUP	OK				
↓	A9760 61	12	260223DUP	OK	↓	↓	↓	↓

LJ 5-12-94

LJ 5-11-94

Reviewed by: KKS, 6/20/94

Page No. 8

nec/mslog.frm

NET

HP 5970

INSTRUMENT ID: 7001A

Bartlett Division

GC/MS INJECTION LOG

ANALYST: WJ

DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
7-5-94	A0341	8	Blank	OK	A8240	Blank	5ul 21181	5ml purged /
	A0342	inj	BFB010	VA0342	BFB1	BFB 25ng	Scan # 167	0.5ul 21558
	A0343	14	SDWA STD010	NG	A8240	SDWA STD 10ppb	10ul 21675	25mL purged / 10ul 21654
	A0344	15	SDWA LFB 5	NA	"	LFB 5ppb	"	5ul 21654
	A0345	inj	BFB005	VA0345	BFB1	BFB 25ng	Scan # 170	0.5ul 21558
	A0346	14	SDWA STD010	OK	A8240	SDWA STD 10ppb	10ul 21675	25ml purged / 10ul 21654
	A0347	15	SDWA LFB005	NG	"	LFB 5ppb	"	5ul 21654
	A0348	16	Blank	OK		Blank		
	A0349	15	SDWA LFB005	OK		LFB 5ppb		
	A0350	1	265859	foamed				
	A0351	2	265859 Dup					
	A0352	2	265855(10x)					
	A0353	3	265860(10x)					
	A0354	4	265415	NG				
	A0355	5	265415 Re					
	A0356	6	267075			Ecology & Env.		
	A0357	16	Blank	NG		Blank		
7-6-94	A0358	1		RT shifted				
	A0359	1		OK				
	A0360	inj	BFB005	NG	BFB1	BFB 25ng	Scan #	0.5ul 21558

Reviewed by:

Page No. 33

nec/mslog.frm

NET — **HP 5970** — **INSTRUMENT ID:** 7001A

Bartlett Division — **GC/MS INJECTION LOG** — **ANALYST:** UJ

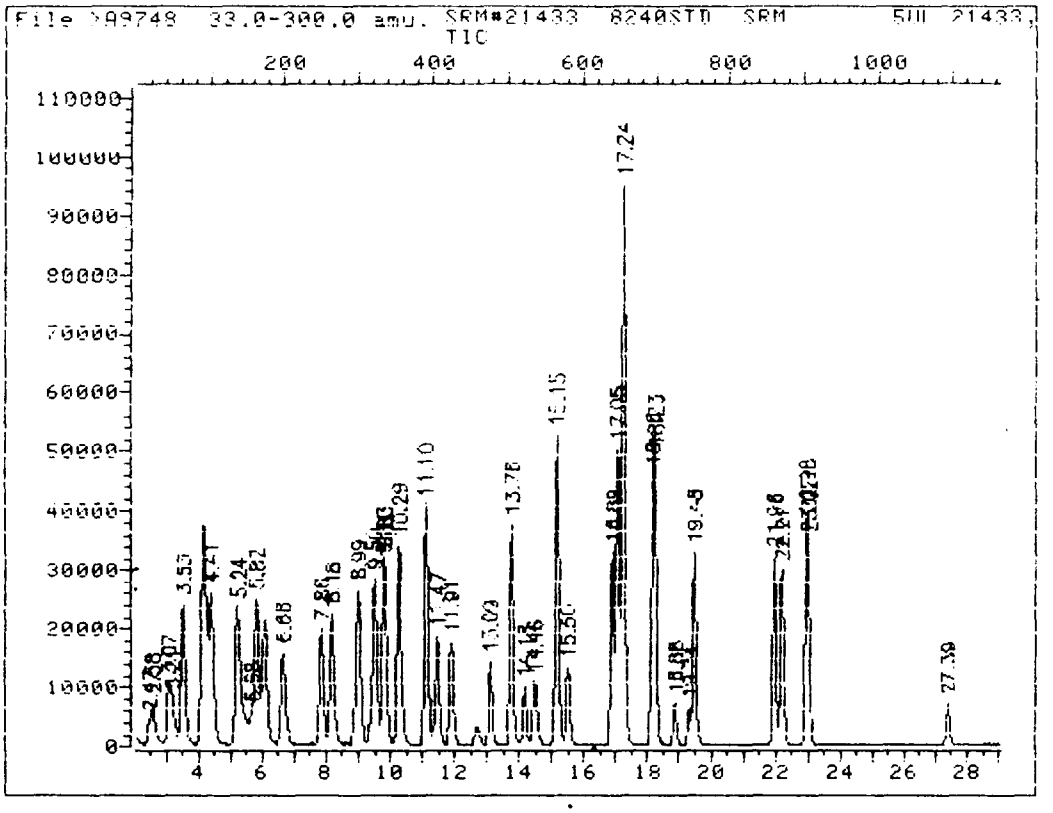
DATE	> FILE	ALS POS#	NET #	FLAGS (pH)	METHOD FILE	SAMPLE DESCRIPTION	Internal Std Surrogate ID	COMMENTS
6-94	AC361	14	VSTD SDWAC10	NA	A8240	SDWA STD 10ppb	10ul 21675	25ml purged / 10ul 21654
	AC362	inj	BFB005	VA0362	BFB1	BFB 25ng	SCan # 202	0.5ul 21558
	AC363	14	SDWA STD010	OK	A8240	SDWA STD 10ppb	10ul 21675	25ml purged / 10ul 21654
	AC364	15	SDWA LFB 5ppb	NG		LFB 5ppb		5ul
	AC365	16	SDWA BLK	OK		Blank		
	AC366	15	SDWA LFB 5ppb	OK		LFB 5ppb		5ul 21654
	AC367	1	265859	25x				1ml sample
	AC368	2	265860	25x				
	AC369	3	266415	OK				
	AC370	4	267075	OK/conc		Ecology + Env.		
	AC371	5	267338	OK				
	AC372	6	267339	OK				
	AC373	7	267340	OK				
	AC374	8	265859 DUP	25x OK				1ml sample
	AC375	9	265860 DUP	25x >8hrs				
7-7-94	AC376	16	Blank	OK		Blank		
	AC377	inj	BFB005	VA0377	BFB1	BFB 25ng	SCAN # 186 & 187	0.5ul 21555
	AC378	14	SDWA STD010	OK	A8240	SDWA STD 10ppb	10 ul 21675	25 ml purged / 10 ul 21654
	AC379	15	LFB005	NG		LFB 5ppb		5ul 21654
	AC380	16	BLK	OK		Blank		

Reviewed by:

Page No. 39

nec/mslog.frm

TOTAL ION CHROMATOGRAM



Data File: >A9748::D4 Quant Output File: ^A9748::QT
Name: SRM#21433 8240STD
Misc: SRM 5UL 21433, 10UL 21415, 25ML PURGED

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940506 14:31

Operator ID: LAN
Quant Time: 940506 21:50
Injected at: 940506 21:20

#314

QUANT REPORT

Operator ID: LAN Quant Meth: A Quant Time: 940706 15:37
Output File: ^A0365::Q Injected at: 940706 15:07
Data File: >A0365::D Dilution Factor: 1.00000
Name: 5ML BLANK
Misc: 5DWABLK 10uL 216/5/25mL PURGED

ID File: A1524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - /001A
Last Calibration: 940706 14:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	[illegible]	96.0	123123	10.00	ug/L	87
42)	BromoFluorobenzene	19.86	174.0	40358	9.63	ug/L	76
56)	1,2-Dichlorobenzene-d4	22.31	150.0	43580	8.91	ug/L	83

* Compound is ISTD

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: NET MIDWEST-BARTLETT Contract: _

Lab code: Case No.: SAS No.: SDG No.:

	EPA SAMPLE NO.	S1 (BFB)#	S2 (DCB)#	S3 ( )#	S4 ( )#	TOT OUT
01	SDWA BLANK	96	85			0
02	SDWA LFB	97	92			0
03	BT#265859	101	91			0
04	BT#265860	96	88			0
05	BT#266415	95	84			0
06	BT#267075	96	84			0
07	BT#267338	95	81			0
08	BT#267339	93	82			0
09	BT#267340	94	82			0
10	BT#265859DP	96	84			0
11	BT#265860DP	92	81			0
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (BFB) = Bromofluorobenzene (80-120)

S2 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

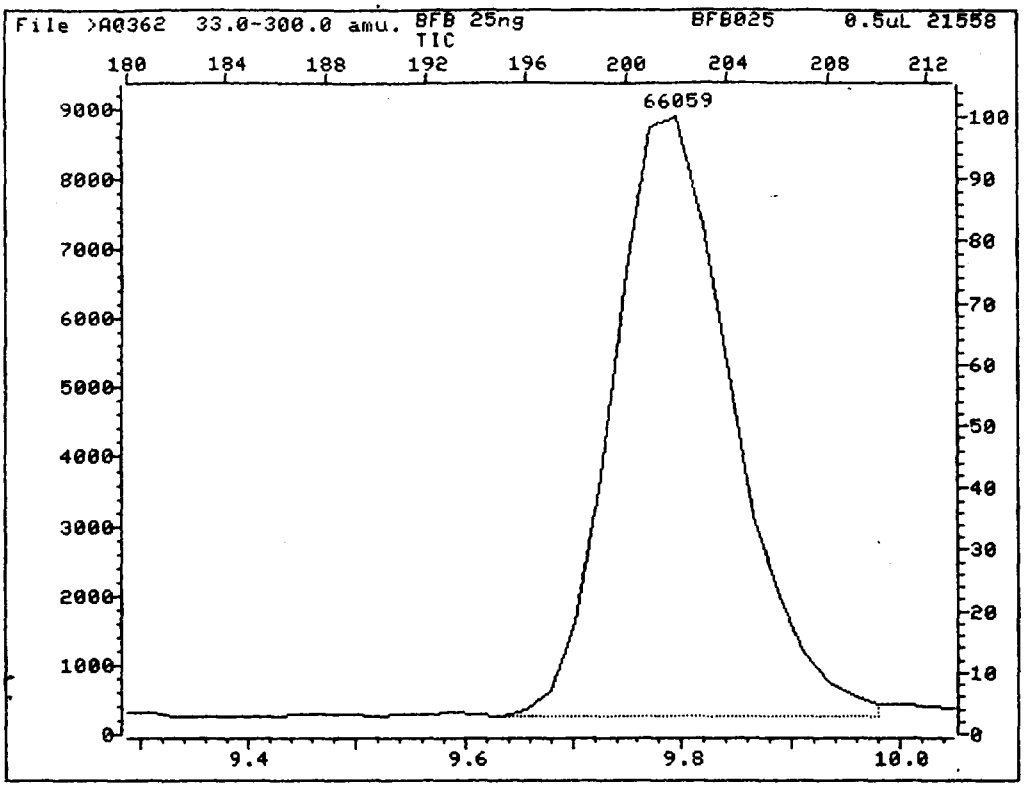
D Surrogates diluted out

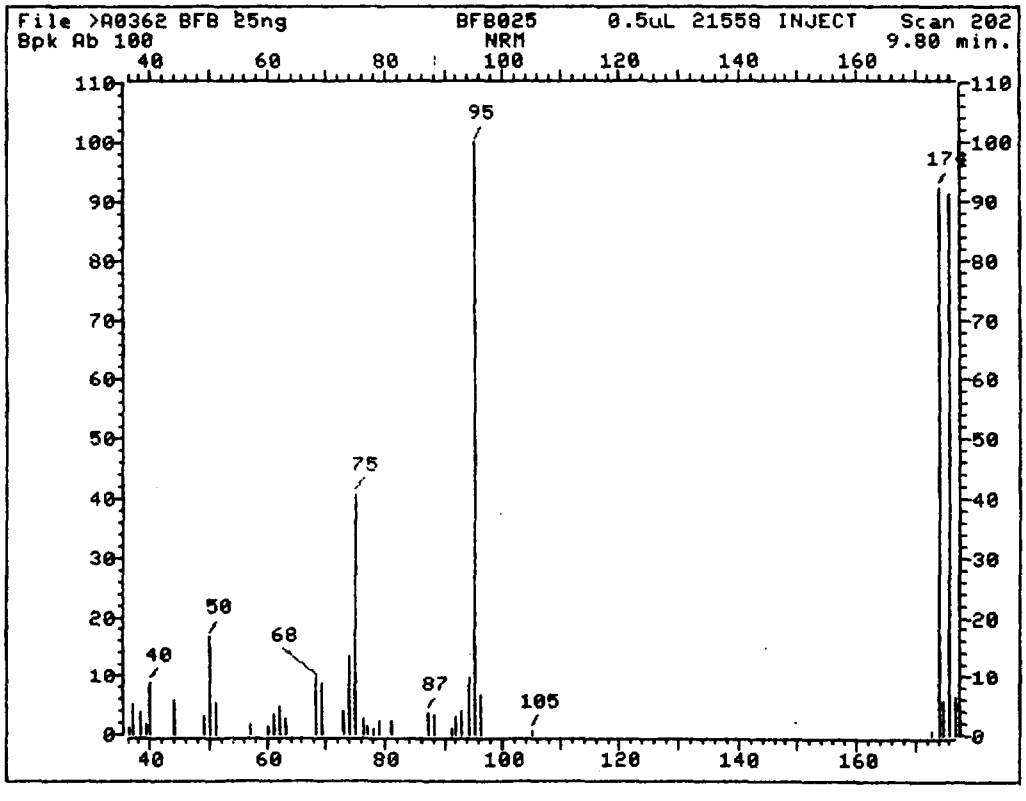
>A0362 BFB 25ng BFB025 0.5uL 21558 INJECTED
202 NRM

File: >A0362 Scan #: 202 Retn. time: 9.80

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	1.028	51.00	5.357	73.10	3.950	87.00	3.734	96.10	6.602
37.00	4.978	57.10	1.840	74.00	13.582	88.00	3.409	105.00	.758
38.10	3.571	60.10	1.299	75.10	40.693	91.10	1.190	172.90	.703
39.10	1.623	61.00	3.301	76.20	2.597	92.00	2.922	174.00	92.370
39.90	8.874	62.10	4.600	77.00	1.515	93.00	4.221	175.00	5.844
44.00	5.682	63.10	2.652	77.90	1.028	94.10	9.794	176.00	91.234
49.00	2.976	68.10	9.632	78.90	2.543	95.10	100.000	176.90	6.385
50.00	16.775	69.10	8.658	80.90	2.381				

FORM V VOA 1/87 Rev.





5A

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

Lab Name: NET MIDWEST-BARTLETT Contract:

Lab code: Case No.: SAS No.: SDG No.:

Lab File ID: >A0362 BFB Injection Date: 7/06/94

Instrument ID: 7001A BFB Injection Time: 12:59

Matrix: (soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 60.0% of mass 95	40.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	.7 (.8)1
174	Greater than 50% of mass 95	92.4
175	5.0 - 9.0% of mass 174	5.8 (6.3)1
176	95.0 - 101.0% of mass 174	91.2 (98.8)1
177	5.0 - 9.0% of mass 176	6.4 (7.0)2

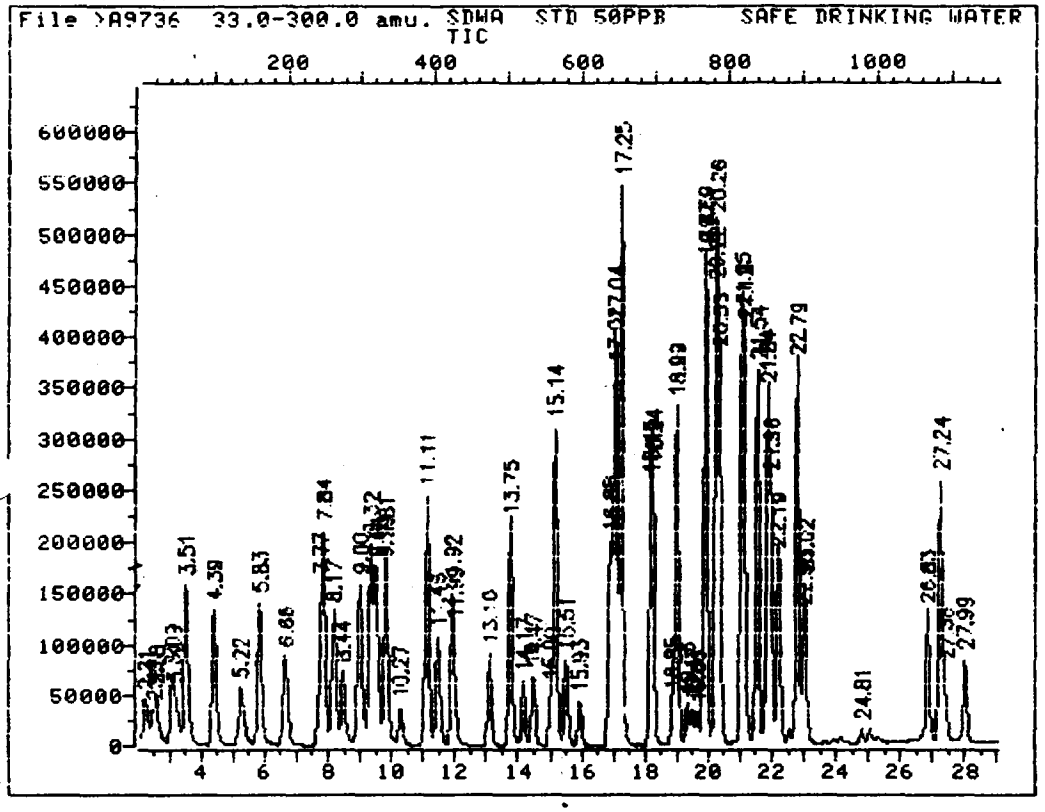
1-Value is % of mass 174 2-Value is % of mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SDWA STAND	SDWA010	>A0363	07/06/94	13:16
02	SDWA BLANK	SDWABLK	>A0365	07/06/94	15:07
03	SDWA LFB	LFB005	>A0366	07/06/94	15:44
04	BT#265859	E 25X	>A0367	07/06/94	16:21
05	BT#265860	[illegible] 25X	>A0368	07/06/94	16:58
06	BT#266415	_ ER	>A0369	07/06/94	17:34
07	BT#267075	ECOLOGY	>A0370	07/06/94	18:10
08	BT#267338	[illegible] 7K	>A0371	07/06/94	18:47
09	BT#267339	[illegible] 8K	>A0372	07/06/94	19:23
10	BT#267340	[illegible] 8K	>A0373	07/06/94	19:58
11	BT#265859D	[illegible] DUP	>A0374	07/06/94	20:34 ✓
12	BT#265860D	[illegible] DUP	>A0375	07/06/94	21:11 > 12hr 8hrs
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

QC REPORT
MS VOLATILES

TOTAL ION CHROMATOGRAM



Data File: >A9736::D4 Quant Output File: ^A9736::WI
Name: SDWA STD 50PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 50UL 21412, 25ML

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

Operator ID: LAN
Quant Time: 940506 12:29
Injected at: 940506 11:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Propylbenzene	19.89	91.0	1284971	51.68	ug/L	89
45)	Bromobenzene	19.87	156.0	204163	53.35	ug/L	97
46)	1,3,5-Trimethylbenzene	20.26	105.0	804829	50.91	ug/L	87
47)	2-Chlorotoluene	20.22	91.0	723870	55.12	ug/L	95
48)	4-Chlorotoluene	20.33	91.0	645926M	46.41	ug/L	98
49)	tert-Butylbenzene	21.05	119.0	889657	52.20	ug/L	78
50)	1,2,4-Trimethylbenzene	21.12	105.0	714569	51.48	ug/L	97
51)	sec-Butylbenzene	21.54	105.0	1273957	51.86	ug/L	96
52)	p-Isopropyltoluene	21.84	119.0	983392	52.32	ug/L	85
53)	1,3-Dichlorobenzene	21.96	146.0	384830	51.44	ug/L	95
54)	1,4-Dichlorobenzene	22.19	146.0	369471	51.37	ug/L	93
55)	n-Butylbenzene	22.79	91.0	1007996	51.26	ug/L	94
56)	1,2-Dichlorobenzene-d4	22.98	150.0	62810M	10.95	ug/L	46
57)	1,2-Dichlorobenzene	23.02	146.0	275964	51.83	ug/L	
58)	1,2-Dibromo-3-chloropropane	24.81	157.0	17191	57.13	ug/L	61
59)	1,2,4-Trichlorobenzene	26.83	180.0	196854	54.51	ug/L	94
60)	Hexachlorobutadiene	27.24	225.0	226643	52.32	ug/L	87
61)	Naphthalene	27.38	128.0	150211	56.54	ug/L	97
62)	1,2,3-Trichlorobenzene	27.99	180.0	121636	51.98	ug/L	88

* Compound is ISTD

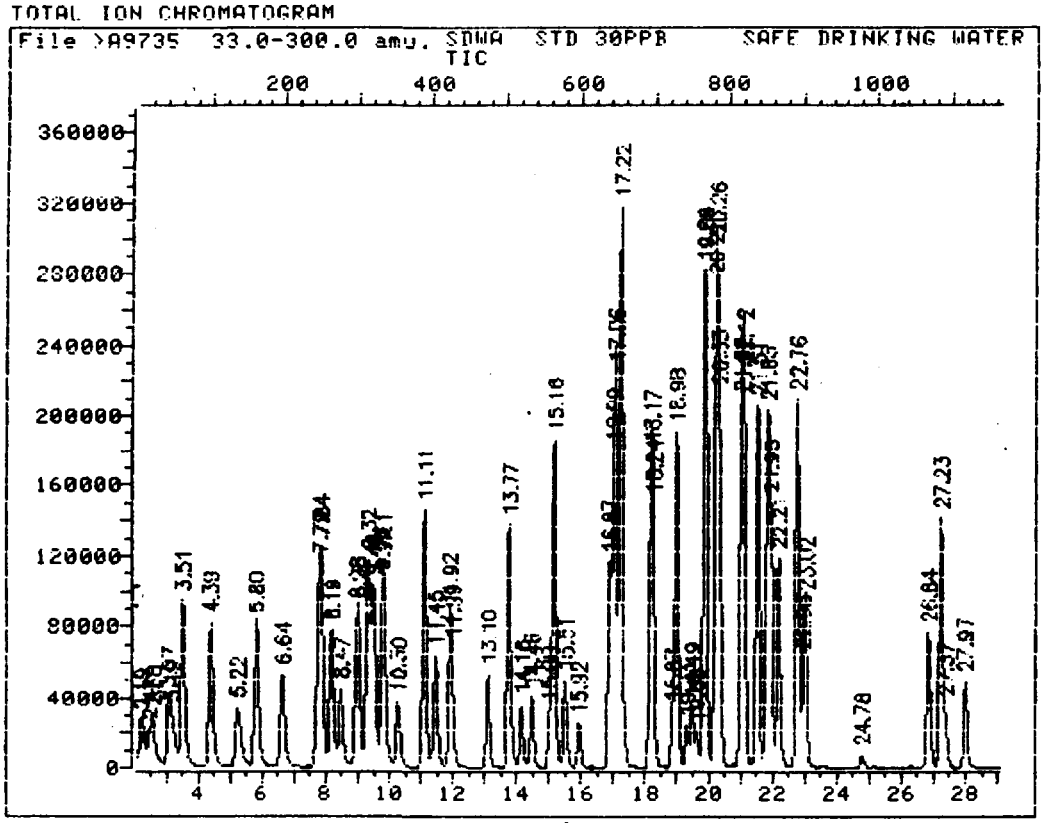
QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940506 12:29
Output File: ^A9736::QT Injected at: 940506 11:59
Data File: >A9736::D4 Dilution Factor: 1.00000
Name: SDWA STD 50PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 50UL 21412, 25ML

ID File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.27	96.0	151098	10.00	ug/L	89
2)	Dichlorodifluoromethane	2.21	85.0	377885M	51.34	ug/L	93
3)	Chloromethane	2.49	50.0	165279M	45.13	ug/L	94
4)	Vinyl chloride	2.58	62.0	197708M	48.42	ug/L	98
5)	Bromomethane	3.09	94.0	264089	50.31	ug/L	91
6)	Chloroethane	3.19	64.0	134337	49.62	ug/L	76
7)	Trichlorofluoromethane	3.51	101.0	619415	51.89	ug/L	98
8)	1,1-Dichloroethene	4.39	96.0	285080	51.05	ug/L	77
9)	Dichloromethane	5.22	84.0	171323	49.58	ug/L	68
10)	1,2-trans-Dichloroethene	5.83	96.0	296343	50.53	ug/L	87
11)	1,1-Dichloroethane	6.66	63.0	432070	51.08	ug/L	92
12)	1,2-cis-Dichloroethene	7.84	96.0	250503	49.95	ug/L	95
13)	2,2-Dichloropropane	7.77	77.0	441107	52.04	ug/L	95
14)	Chloroform	8.17	83.0	488531	51.78	ug/L	93
15)	Bromochloromethane	8.44	130.0	132505	50.71	ug/L	93
16)	1,1,1-Trichloroethane	9.00	97.0	533322	51.53	ug/L	87
17)	1,1-Dichloropropene	9.32	75.0	437215	50.39	ug/L	88
18)	Carbon tetrachloride	9.51	117.0	507414	52.99	ug/L	86
19)	1,2-Dichloroethane	9.79	62.0	141992	52.12	ug/L	92
20)	Benzene	9.81	78.0	630700	49.28	ug/L	98
21)	Trichloroethene	11.11	130.0	383505	51.21	ug/L	82
22)	1,2-Dichloropropane	11.46	63.0	182477	50.23	ug/L	99
23)	Dichlorobromomethane	11.92	83.0	325864	52.88	ug/L	97
24)	Dibromomethane	11.99	174.0	109169	51.93	ug/L	85
25)	1,3-cis-Dichloropropene	13.10	75.0	223043	53.72	ug/L	95
26)	Toluene	13.25	92.0	446766	50.11	ug/L	95
27)	1,3-trans-Dichloropropene	14.17	75.0	146108	55.20	ug/L	95
28)	1,1,2-Trichloroethane	14.47	97.0	92381	53.38	ug/L	94
29)	1,3-Dichloropropane	15.00	76.0	137809	51.98	ug/L	92
30)	Tetrachloroethene	15.14	166.0	443395	51.72	ug/L	93
31)	Chlorodibromomethane	15.51	129.0	203882	54.90	ug/L	93
32)	1,2-Dibromoethane (EDB)	15.93	107.0	131510	54.31	ug/L	97
33)	Chlorobenzene	16.88	112.0	471188	50.36	ug/L	80
34)	1,1,1,2-Tetrachloroethane	17.02	131.0	215091	51.72	ug/L	97
35)	Ethylbenzene	17.04	106.0	263081	50.48	ug/L	92
36)	m&p-Xylene	17.25	106.0	675856	99.10	ug/L	94
37)	o-Xylene	18.15	106.0	283917	51.09	ug/L	90
38)	Styrene	18.24	104.0	415440	52.58	ug/L	85
39)	Bromoform	18.85	173.0	104264	59.33	ug/L	99
40)	1,1,2,2-Tetrachloroethane	19.33	83.0	94685	55.16	ug/L	96
41)	Isopropylbenzene	18.99	105.0	1007977	50.42	ug/L	91

TOTAL ION CHROMATOGRAM



Data File: >A9735::D4 Quant Output File: ^A9735::Q1
Name: SDWA STD 30PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 30UL 21412, 25ML

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

Operator ID: LAN
Quant Time: 940506 11:52
Injected at: 940506 11:22

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Propylbenzene	19.89	91.0	743084	29.41	ug/L	90
45)	Bromobenzene	19.86	156.0	121774	31.32	ug/L	95
46)	1,3,5-Trimethylbenzene	20.26	105.0	476734	29.67	ug/L	97
47)	2-Chlorotoluene	20.21	91.0	362894	27.19	ug/L	95
48)	4-Chlorotoluene	20.33	91.0	426874	30.18	ug/L	94
49)	tert-Butylbenzene	21.02	119.0	498168	28.77	ug/L	76
50)	1,2,4-Trimethylbenzene	21.12	105.0	411778	29.19	ug/L	98
51)	sec-Butylbenzene	21.51	105.0	710500	28.46	ug/L	97
52)	p-Isopropyltoluene	21.83	119.0	556468	29.14	ug/L	86
53)	1,3-Dichlorobenzene	21.95	146.0	227729	29.96	ug/L	93
54)	1,4-Dichlorobenzene	22.21	146.0	220440	30.16	ug/L	95
55)	n-Butylbenzene	22.76	91.0	551400	27.59	ug/L	96
56)	1,2-Dichlorobenzene-d4	22.95	150.0	68685	11.79	ug/L	78
57)	1,2-Dichlorobenzene	23.02	146.0	162604	30.06	ug/L	95
58)	1,2-Dibromo-3-chloropropane	24.78	157.0	99801M	32.64	ug/L	
59)	1,2,4-Trichlorobenzene	26.84	180.0	112123	30.55	ug/L	99
60)	Hexachlorobutadiene	27.23	225.0	117781	26.76	ug/L	95
61)	Naphthalene	27.32	128.0	83678	31.00	ug/L	97
62)	1,2,3-Trichlorobenzene	27.97	180.0	77212	32.47	ug/L	74

* Compound is ISTD

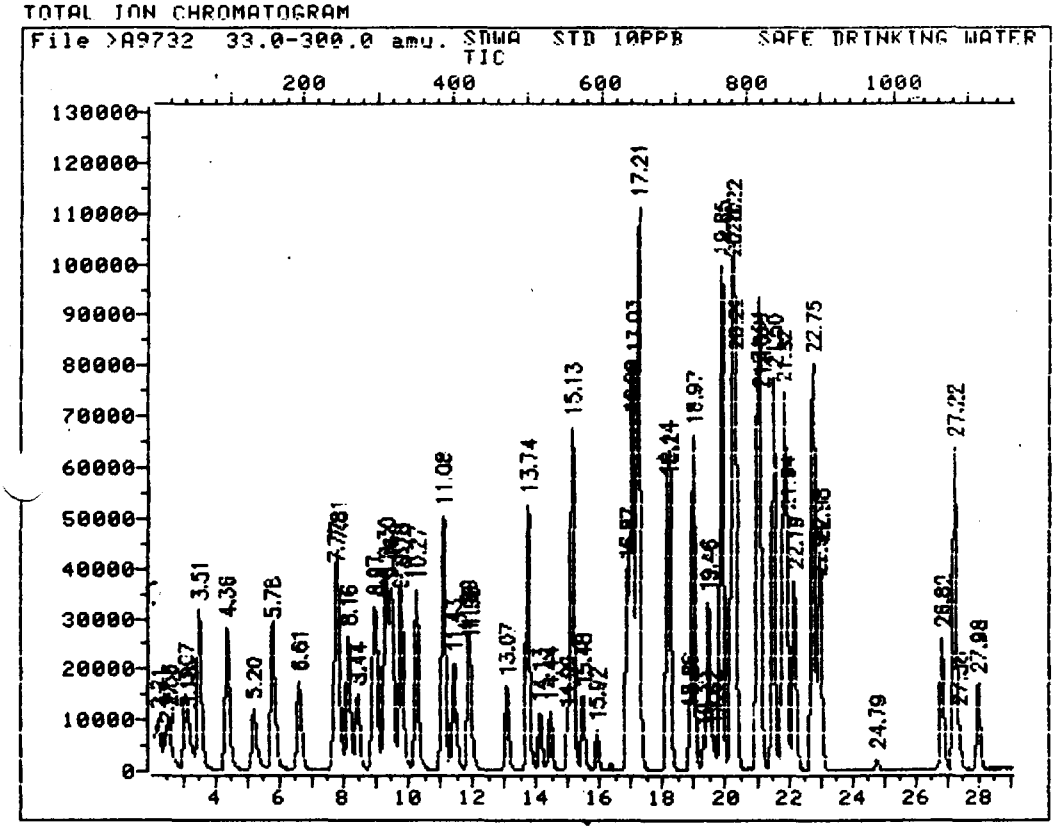
QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940506 11:52
Output File: ^A9735::QT Injected at: 940506 11:22
Data File: >A9735::D4 Dilution Factor: 1.00000
Name: SDWA STD 30PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 30UL 21412, 25ML

ID File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.30	96.0	153537	10.00	ug/L	99
2)	Dichlorodifluoromethane	2.19	85.0	219335M	29.33	ug/L	97
3)	Chloromethane	2.47	50.0	100266M	26.94	ug/L	98
4)	Vinyl chloride	2.58	62.0	113434	27.34	ug/L	96
5)	Bromomethane	3.07	94.0	152781	28.64	ug/L	92
6)	Chloroethane	3.19	64.0	80650	29.32	ug/L	77
7)	Trichlorofluoromethane	3.51	101.0	361380	29.79	ug/L	99
8)	1,1-Dichloroethene	4.39	96.0	165491	29.16	ug/L	76
9)	Dichloromethane	5.22	84.0	99329	28.29	ug/L	68
10)	1,2-trans-Dichloroethene	5.80	96.0	173231	29.07	ug/L	92
11)	1,1-Dichloroethane	6.64	63.0	252256	29.35	ug/L	95
12)	1,2-cis-Dichloroethene	7.84	96.0	151166	29.66	ug/L	93
13)	2,2-Dichloropropane	7.79	77.0	259018	30.07	ug/L	94
14)	Chloroform	8.19	83.0	286836	29.92	ug/L	98
15)	Bromochloromethane	8.47	130.0	78477	29.56	ug/L	97
16)	1,1,1-Trichloroethane	8.98	97.0	309548	29.43	ug/L	88
17)	1,1-Dichloropropene	9.32	75.0	260680	29.57	ug/L	88
18)	Carbon tetrachloride	9.49	117.0	296078	30.43	ug/L	6
19)	1,2-Dichloroethane	9.79	62.0	83387	30.12	ug/L	93
20)	Benzene	9.81	78.0	379002	29.14	ug/L	98
21)	Trichloroethene	11.11	130.0	226152	29.72	ug/L	84
22)	1,2-Dichloropropane	11.45	63.0	106640	28.89	ug/L	98
23)	Dichlorobromomethane	11.92	83.0	192596	30.76	ug/L	97
24)	Dibromomethane	11.99	174.0	67652	31.67	ug/L	92
25)	1,3-cis-Dichloropropene	13.10	75.0	129189	30.62	ug/L	95
26)	Toluene	13.27	92.0	262500	28.98	ug/L	96
27)	1,3-trans-Dichloropropene	14.16	75.0	82287	30.60	ug/L	97
28)	1,1,2-Trichloroethane	14.46	97.0	54114	30.77	ug/L	88
29)	1,3-Dichloropropane	15.00	76.0	81385	30.21	ug/L	97
30)	Tetrachloroethene	15.16	166.0	259816	29.83	ug/L	89
31)	Chlorodibromomethane	15.51	129.0	122025	32.33	ug/L	97
32)	1,2-Dibromoethane (EDB)	15.92	107.0	75685	30.76	ug/L	97
33)	Chlorobenzene	16.87	112.0	273185	28.73	ug/L	84
34)	1,1,1,2-Tetrachloroethane	16.99	131.0	130664	30.92	ug/L	96
35)	Ethylbenzene	17.06	106.0	161622	30.52	ug/L	91
36)	m&p-Xylene	17.22	106.0	409086	59.03	ug/L	98
37)	o-Xylene	18.17	106.0	167923	29.73	ug/L	88
38)	Styrene	18.24	104.0	241793	30.12	ug/L	82
39)	Bromoform	18.87	173.0	57569	32.24	ug/L	95
40)	1,1,2,2-Tetrachloroethane	19.33	83.0	55237	31.67	ug/L	90
41)	Isopropylbenzene	18.98	105.0	585979	28.84	ug/L	92

TOTAL ION CHROMATOGRAM



Data File: >A9732::D3 Quant Output File: ^A9732::QT
Name: SDWA STD 10PPB
Misc: SAFE DRINKING WATER AC1, 10UL 21413, 10UL 21412, 25ML

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

Operator ID: LAN
Quant Time: 940506 10:03
Injected at: 940506 09:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Propylbenzene	19.85	91.0	262648	10.69	ug/L	95
45)	Bromobenzene	19.85	156.0	38719	10.24	ug/L	97
46)	1,3,5-Trimethylbenzene	20.22	105.0	161400	10.33	ug/L	92
47)	2-Chlorotoluene	20.20	91.0	129649	9.99	ug/L	94
48)	4-Chlorotoluene	20.29	91.0	139724	10.16	ug/L	94
49)	tert-Butylbenzene	21.01	119.0	182301	10.82	ug/L	77
50)	1,2,4-Trimethylbenzene	21.10	105.0	144418	10.53	ug/L	99
51)	sec-Butylbenzene	21.50	105.0	259960	10.71	ug/L	99
52)	p-Isopropyltoluene	21.82	119.0	201342	10.84	ug/L	86
53)	1,3-Dichlorobenzene	21.94	146.0	77715	10.51	ug/L	95
54)	1,4-Dichlorobenzene	22.19	146.0	73723	10.37	ug/L	94
55)	n-Butylbenzene	22.75	91.0	213343	10.98	ug/L	96
56)	1,2-Dichlorobenzene-d4	22.94	150.0	51994	9.17	ug/L	1
57)	1,2-Dichlorobenzene	22.98	146.0	53613	10.19	ug/L	94
58)	1,2-Dibromo-3-chloropropane	24.79	157.0	2849M	9.58	ug/L	
59)	1,2,4-Trichlorobenzene	26.82	180.0	38418	10.76	ug/L	85
60)	Hexachlorobutadiene	27.22	225.0	55978	13.08	ug/L	85
61)	Naphthalene	27.38	128.0	25972	9.89	ug/L	97
62)	1,2,3-Trichlorobenzene	27.98	180.0	25681	11.11	ug/L	81

* Compound is ISTD

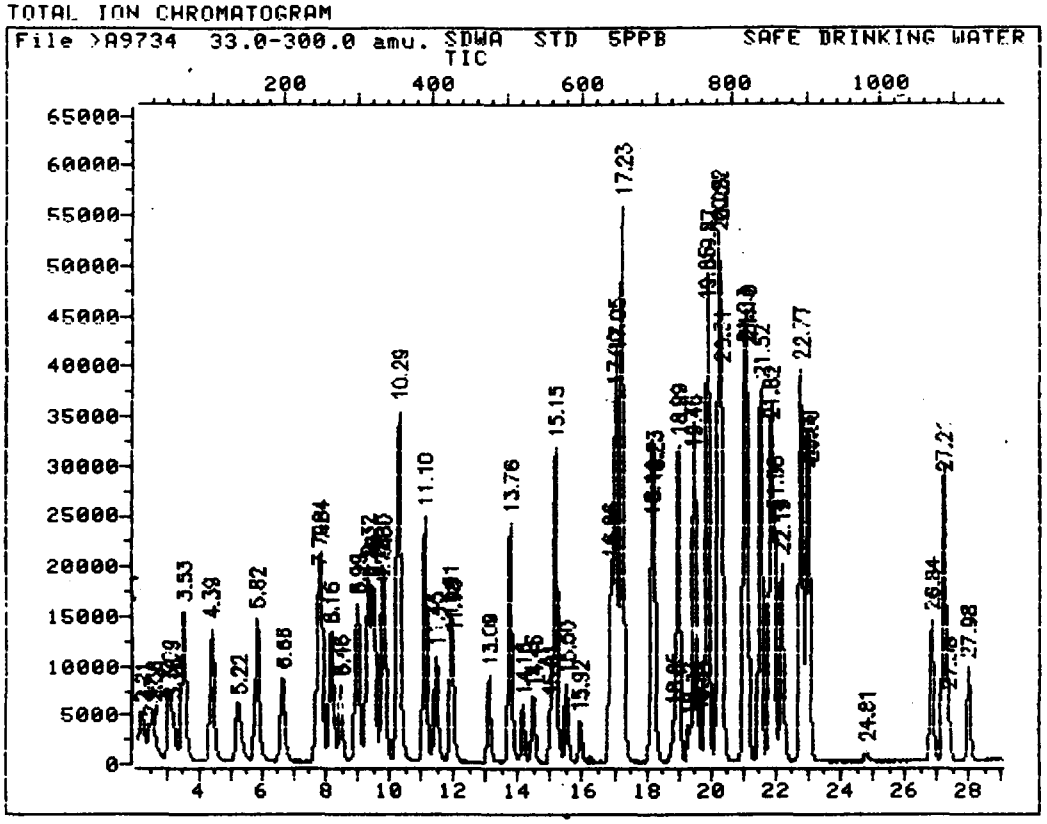
QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940506 10:03
Output File: ^A9732::QT Injected at: 940506 09:25
Data File: >A9732::D3 Dilution Factor: 1.00000
Name: SDWA STD 10PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 10UL 21412, 25ML

ID File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.27	96.0	149330	10.00	ug/L	89
2)	Dichlorodifluoromethane	2.21	85.0	53895M	7.41	ug/L	
3)	Chloromethane	2.47	50.0	34251M	9.46	ug/L	99
4)	Vinyl chloride	2.56	62.0	41458	10.27	ug/L	95
5)	Bromomethane	3.07	94.0	53444	10.30	ug/L	87
6)	Chloroethane	3.18	64.0	26717	9.99	ug/L	74
7)	Trichlorofluoromethane	3.51	101.0	125454	10.63	ug/L	98
8)	1,1-Dichloroethene	4.36	96.0	59659	10.81	ug/L	74
9)	Dichloromethane	5.20	84.0	32771	9.60	ug/L	68
10)	1,2-trans-Dichloroethene	5.78	96.0	61116	10.55	ug/L	79
11)	1,1-Dichloroethane	6.61	63.0	84542	10.11	ug/L	93
12)	1,2-cis-Dichloroethene	7.81	96.0	50350	10.16	ug/L	86
13)	2,2-Dichloropropane	7.77	77.0	93749	11.19	ug/L	95
14)	Chloroform	8.16	83.0	94748	10.16	ug/L	98
15)	Bromochloromethane	8.44	130.0	25525	9.88	ug/L	91
16)	1,1,1-Trichloroethane	8.97	97.0	107822	10.54	ug/L	91
17)	1,1-Dichloropropene	9.30	75.0	90214	10.52	ug/L	83
18)	Carbon tetrachloride	9.46	117.0	104076	11.00	ug/L	79
19)	1,2-Dichloroethane	9.76	62.0	26413	9.81	ug/L	93
20)	Benzene	9.78	78.0	130238	10.30	ug/L	98
21)	Trichloroethene	11.08	130.0	81051	10.95	ug/L	78
22)	1,2-Dichloropropane	11.43	63.0	35657	9.93	ug/L	96
23)	Dichlorobromomethane	11.89	83.0	61041	10.02	ug/L	98
24)	Dibromomethane	11.96	174.0	21454	10.33	ug/L	98
25)	1,3-cis-Dichloropropene	13.07	75.0	40202	9.80	ug/L	94
26)	Toluene	13.74	92.0	104756	11.89	ug/L	97
27)	1,3-trans-Dichloropropene	14.13	75.0	25371	9.70	ug/L	88
28)	1,1,2-Trichloroethane	14.44	97.0	16664	9.74	ug/L	92
29)	1,3-Dichloropropane	14.99	76.0	25657	9.79	ug/L	94
30)	Tetrachloroethene	15.13	166.0	95176	11.23	ug/L	94
31)	Chlorodibromomethane	15.48	129.0	35094	9.56	ug/L	96
32)	1,2-Dibromoethane (EDB)	15.92	107.0	23615	9.87	ug/L	95
33)	Chlorobenzene	16.87	112.0	93350	10.09	ug/L	78
34)	1,1,1,2-Tetrachloroethane	16.98	131.0	41292	10.05	ug/L	95
35)	Ethylbenzene	17.03	106.0	53774	10.44	ug/L	96
36)	m&p-Xylene	17.21	106.0	140644	20.87	ug/L	96
37)	o-Xylene	18.14	106.0	58831	10.71	ug/L	85
38)	Styrene	18.21	104.0	79871	10.23	ug/L	90
39)	Bromoform	18.86	173.0	17193	9.90	ug/L	97
40)	1,1,2,2-Tetrachloroethane	19.30	83.0	15925	9.39	ug/L	90
41)	Isopropylbenzene	18.97	105.0	209490	10.60	ug/L	91

TOTAL ION CHROMATOGRAM



Data File: >A9734::D4 Quant Output File: ^A9734::QT
Name: SDWA STD 5PPB ,
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 5UL 21412, 25ML

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

Operator ID: LAN
Quant Time: 940506 11:16
Injected at: 940506 10:46

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Propylbenzene	19.87	91.0	128236	5.15	ug/L	91
45)	Bromobenzene	19.85	156.0	19947	5.21	ug/L	91
46)	1,3,5-Trimethylbenzene	20.25	105.0	80850	5.11	ug/L	86
47)	2-Chlorotoluene	20.22	91.0	71116	5.41	ug/L	96
48)	4-Chlorotoluene	20.31	91.0	67274	4.83	ug/L	94
49)	tert-Butylbenzene	21.03	119.0	87084	5.10	ug/L	79
50)	1,2,4-Trimethylbenzene	21.10	105.0	72629	5.23	ug/L	95
51)	sec-Butylbenzene	21.52	105.0	127271	5.18	ug/L	96
52)	p-Isopropyltoluene	21.82	119.0	96676	5.14	ug/L	84
53)	1,3-Dichlorobenzene	21.96	146.0	41021	5.48	ug/L	94
54)	1,4-Dichlorobenzene	22.19	146.0	36983	5.14	ug/L	93
55)	n-Butylbenzene	22.77	91.0	100413	5.10	ug/L	94
56)	1,2-Dichlorobenzene-d4	22.93	150.0	51467	8.97	ug/L	83
57)	1,2-Dichlorobenzene	23.00	146.0	28225	5.30	ug/L	92
58)	1,2-Dibromo-3-chloropropane	24.81	157.0	1560M	5.18	ug/L	
59)	1,2,4-Trichlorobenzene	26.84	180.0	20715	5.73	ug/L	94
60)	Hexachlorobutadiene	27.21	225.0	24982	5.76	ug/L	94
61)	Naphthalene	27.38	128.0	14711	5.53	ug/L	94
62)	1,2,3-Trichlorobenzene	27.98	180.0	13560	5.79	ug/L	87

* Compound is ISTD

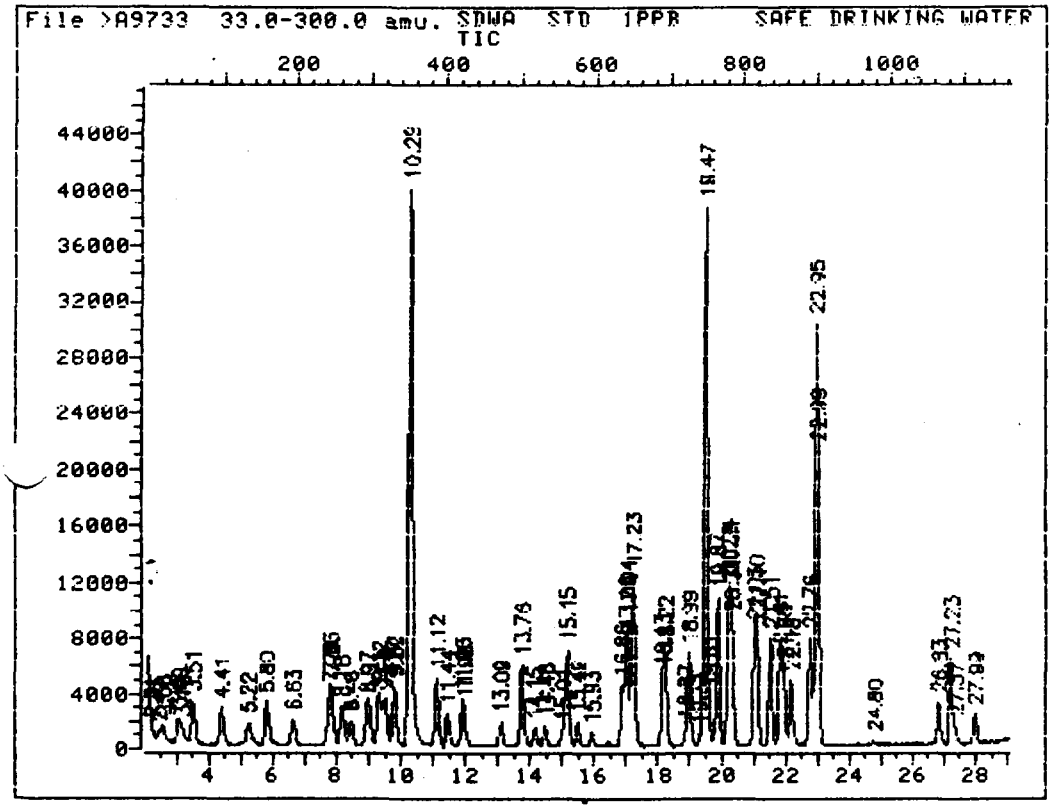
QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940506 11:16
Output File: ^A9734::QT Injected at: 940506 10:46
Data File: >A9734::D4 Dilution Factor: 1.00000
Name: SDWA STD 5PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 5UL 21412, 25ML

ID File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.29	96.0	151237	10.00	ug/L	91
2)	Dichlorodifluoromethane	2.21	85.0	37234M	5.05	ug/L	
3)	Chloromethane	2.47	50.0	16999M	4.64	ug/L	93
4)	Vinyl chloride	2.58	62.0	19944	4.88	ug/L	99
5)	Bromomethane	3.09	94.0	25897	4.93	ug/L	93
6)	Chloroethane	3.18	64.0	13231	4.88	ug/L	81
7)	Trichlorofluoromethane	3.53	101.0	60967	5.10	ug/L	95
8)	1,1-Dichloroethene	4.39	96.0	28539	5.11	ug/L	74
9)	Dichloromethane	5.22	84.0	17410	5.03	ug/L	62
10)	1,2-trans-Dichloroethene	5.82	96.0	29492	5.02	ug/L	96
11)	1,1-Dichloroethane	6.66	63.0	42162	4.98	ug/L	90
12)	1,2-cis-Dichloroethene	7.84	96.0	25760	5.13	ug/L	90
13)	2,2-Dichloropropane	7.79	77.0	42745	5.04	ug/L	97
14)	Chloroform	8.16	83.0	48209	5.11	ug/L	97
15)	Bromochloromethane	8.46	130.0	13424	5.13	ug/L	91
16)	1,1,1-Trichloroethane	8.99	97.0	51494	4.97	ug/L	87
17)	1,1-Dichloropropene	9.32	75.0	45166	5.20	ug/L	88
18)	Carbon tetrachloride	9.48	117.0	49636	5.18	ug/L	97
19)	1,2-Dichloroethane	9.78	62.0	14061	5.16	ug/L	90
20)	Benzene	9.80	78.0	64495	5.03	ug/L	99
21)	Trichloroethene	11.10	130.0	38400	5.12	ug/L	85
22)	1,2-Dichloropropane	11.45	63.0	18118	4.98	ug/L	97
23)	Dichlorobromomethane	11.91	83.0	31044	5.03	ug/L	97
24)	Dibromomethane	11.98	174.0	11234	5.34	ug/L	91
25)	1,3-cis-Dichloropropene	13.09	75.0	20903	5.03	ug/L	96
26)	Toluene	13.26	92.0	45795	5.13	ug/L	98
27)	1,3-trans-Dichloropropene	14.16	75.0	13331	5.03	ug/L	96
28)	1,1,2-Trichloroethane	14.46	97.0	8839	5.10	ug/L	89
29)	1,3-Dichloropropane	15.01	76.0	14035	5.29	ug/L	99
30)	Tetrachloroethene	15.15	166.0	43893	5.12	ug/L	93
31)	Chlorodibromomethane	15.50	129.0	19417	5.22	ug/L	96
32)	1,2-Dibromoethane (EDB)	15.92	107.0	12613	5.20	ug/L	97
33)	Chlorobenzene	16.86	112.0	47556	5.08	ug/L	77
34)	1,1,1,2-Tetrachloroethane	17.00	131.0	21221	5.10	ug/L	98
35)	Ethylbenzene	17.05	106.0	26964	5.17	ug/L	92
36)	m&p-Xylene	17.23	106.0	69851	10.23	ug/L	96
37)	o-Xylene	18.14	106.0	29011	5.22	ug/L	80
38)	Styrene	18.23	104.0	40695	5.15	ug/L	85
39)	Bromoform	18.85	173.0	8966	5.10	ug/L	89
40)	1,1,2,2-Tetrachloroethane	19.32	83.0	8839	5.14	ug/L	95
41)	Isopropylbenzene	18.99	105.0	100153	5.00	ug/L	93

TOTAL ION CHROMATOGRAM



Data File: >A9733::D3 Quant Output File: ^A9733::QT
Name: SDWA STD 1PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 1UL 21412, 25ML

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

Operator ID: LAN
Quant Time: 940506 10:39
Injected at: 940506 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Propylbenzene	19.87	91.0	26974	.96	ug/L	91
45)	Bromobenzene	19.87	156.0	4606	1.07	ug/L	99
46)	1,3,5-Trimethylbenzene	20.24	105.0	17839	1.00	ug/L	93
47)	2-Chlorotoluene	20.22	91.0	15177	1.03	ug/L	93
48)	4-Chlorotoluene	20.31	91.0	15000	.96	ug/L	96
49)	tert-Butylbenzene	21.03	119.0	18764	.98	ug/L	73
50)	1,2,4-Trimethylbenzene	21.10	105.0	15974	1.02	ug/L	93
51)	sec-Butylbenzene	21.51	105.0	26418	.96	ug/L	96
52)	p-Isopropyltoluene	21.81	119.0	20409	.97	ug/L	86
53)	1,3-Dichlorobenzene	21.95	146.0	9427	1.12	ug/L	99
54)	1,4-Dichlorobenzene	22.18	146.0	8708	1.08	ug/L	91
55)	n-Butylbenzene	22.76	91.0	21040	.95	ug/L	89
56)	1,2-Dichlorobenzene-d4	22.95	150.0	55142	8.55	ug/L	93
57)	1,2-Dichlorobenzene	22.99	146.0	6838	1.14	ug/L	96
58)	1,2-Dibromo-3-chloropropane	24.80	157.0	396M	1.17	ug/L	
59)	1,2,4-Trichlorobenzene	26.83	180.0	4703	1.16	ug/L	97
60)	Hexachlorobutadiene	27.23	225.0	5392	1.11	ug/L	85
61)	Naphthalene	27.37	128.0	4041	1.35	ug/L	98
62)	1,2,3-Trichlorobenzene	27.99	180.0	3492	1.33	ug/L	80

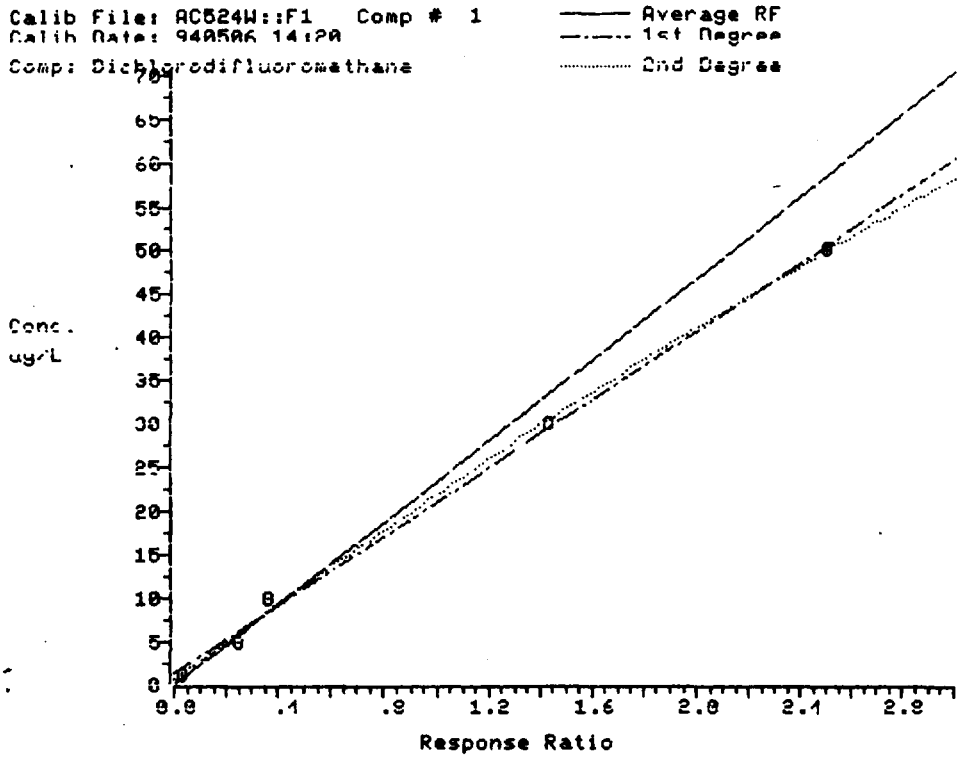
* Compound is ISTD

QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940506 10:39
Output File: ^A9733::QT Injected at: 940506 10:09
Data File: >A9733::D3 Dilution Factor: 1.00000
Name: SDWA STD 1PPB
Misc: SAFE DRINKING WATER ACT, 10UL 21413, 1UL 21412, 25ML

ID File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940419 12:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.29	96.0	169878	10.00	ug/L	89
2)	Dichlorodifluoromethane	2.21	85.0	5214M	.63	ug/L	
3)	Chloromethane	2.47	50.0	3522	.86	ug/L	99
4)	Vinyl chloride	2.58	62.0	3846	.84	ug/L	98
5)	Bromomethane	3.09	94.0	5621	.95	ug/L	82
6)	Chloroethane	3.18	64.0	2661	.87	ug/L	87
7)	Trichlorofluoromethane	3.51	101.0	12224	.91	ug/L	93
8)	1,1-Dichloroethene	4.41	96.0	5729	.91	ug/L	77
9)	Dichloromethane	5.22	84.0	4243M	1.09	ug/L	
10)	1,2-trans-Dichloroethene	5.80	96.0	6260	.95	ug/L	87
11)	1,1-Dichloroethane	6.63	63.0	8750	.92	ug/L	93
12)	1,2-cis-Dichloroethene	7.83	96.0	5496	.97	ug/L	95
13)	2,2-Dichloropropane	7.79	77.0	8760	.92	ug/L	95
14)	Chloroform	8.16	83.0	10716	1.01	ug/L	90
15)	Bromochloromethane	8.46	130.0	2911	.99	ug/L	92
16)	1,1,1-Trichloroethane	8.97	97.0	10455	.90	ug/L	86
17)	1,1-Dichloropropene	9.32	75.0	8952	.92	ug/L	86
18)	Carbon tetrachloride	9.50	117.0	9515	.88	ug/L	82
19)	1,2-Dichloroethane	9.80	62.0	3108	1.01	ug/L	86
20)	Benzene	9.82	78.0	14332	1.00	ug/L	99
21)	Trichloroethene	11.12	130.0	7551	.90	ug/L	88
22)	1,2-Dichloropropane	11.44	63.0	4159M	1.02	ug/L	
23)	Dichlorobromomethane	11.93	83.0	6936	1.00	ug/L	94
24)	Dibromomethane	11.98	174.0	2439	1.03	ug/L	91
25)	1,3-cis-Dichloropropene	13.09	75.0	4273	.92	ug/L	95
26)	Toluene	13.26	92.0	11308	1.13	ug/L	98
27)	1,3-trans-Dichloropropene	14.15	75.0	2920	.98	ug/L	90
28)	1,1,2-Trichloroethane	14.48	97.0	2068	1.06	ug/L	98
29)	1,3-Dichloropropane	15.01	76.0	3181	1.07	ug/L	94
30)	Tetrachloroethene	15.15	166.0	9491	.98	ug/L	92
31)	Chlorodibromomethane	15.49	129.0	4124	.99	ug/L	97
32)	1,2-Dibromoethane (EDB)	15.93	107.0	2907M	1.07	ug/L	
33)	Chlorobenzene	16.86	112.0	10904	1.04	ug/L	76
34)	1,1,1,2-Tetrachloroethane	17.00	131.0	4604	.98	ug/L	94
35)	Ethylbenzene	17.04	106.0	5989	1.02	ug/L	92
36)	m&p-Xylene	17.23	106.0	15502	2.02	ug/L	94
37)	o-Xylene	18.13	106.0	6559	1.02	ug/L	82
38)	Styrene	18.22	104.0	9159	1.03	ug/L	88
39)	Bromoform	18.87	173.0	1989	1.01	ug/L	85
40)	1,1,2,2-Tetrachloroethane	19.31	83.0	1997	1.03	ug/L	89
41)	Isopropylbenzene	18.99	105.0	21281	.95	ug/L	90



Compound # 1 Calib File: AC524W::F1

Compound: Dichlorodifluoromethane
Istd: Fluorobenzene

File:	>A9733	>A9734	>A9732	>A9735	>A9736
Conc:	1.00	5.00	10.00	30.00	50.00
Rf:	.30693	.49239	.36091	.47618	.50019

Average of 5 Rfs: .42732 (20.55 % Rsd) Rx: .0000000 Ry: .0000000
1st Degree Equation: y = .1189578 + 1.971681(x)
1st Degree Corr Coef: .9984369
2nd Degree Equation: y = .0538389 + 2.243674(x) + -.108006(x^2)
2nd Degree Corr Coef: .9989688

In the above equations:

$$y = \frac{\text{Conc Std}}{\text{Conc Istd}} \qquad x = \frac{\text{Area Std}}{\text{Area Istd}}$$

Istd Conc for all calibration points is: 10.00

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/94

Contractor: Time: 21:20

Contract No: Laboratory ID: XA9748

Instrument ID: Initial Calibration Date: 05/06/94

Minimum RF for SPCC is Maximum % Diff for CCC is 30.0%

Compound	RF	RF	%Diff	CCC	SPCC	
1,1,1,2-Tetrachloroethane	.27931	-	-			
Ethylbenzene	.35367	.34259	3.13			
m&p-Xylene	.45608	.40523	11.15			(Conc=20.00)
o-Xylene	.37046	.34190	9.66			
Styrene	.53740	.48208	10.29			
Bromoform	.12276	.10601	13.64			
1,1,2,2-Tetrachloroethane	.11727	.10702	8.74			
Isopropylbenzene	1.31728	-	-			
Bromofluorobenzene	.29076	.29573	1.71			(Conc=10.00)
1,2,3-Trichloropropane	.02755	-	-			
Propylbenzene	1.67132	-	-			
Bromobenzene	.26576	-	-			
1,3,5-Trimethylbenzene	1.06009	-	-			
2-Chlorotoluene	.88961	-	-			
4-Chlorotoluene	.89801	-	-			
tert-Butylbenzene	1.14722	-	-			
1,2,4-Trimethylbenzene	.94154	-	-			
sec-Butylbenzene	1.64156	-	-			
p-Isopropyltoluene	1.26759	-	-			
1,3-Dichlorobenzene	.52434	.43916	16.25			
1,4-Dichlorobenzene	.49268	.39842	19.12			
n-Butylbenzene	1.30529	-	-			
1,2-Dichlorobenzene-d4	.37523	.37360	.43			(Conc=10.00)
1,2-Dichlorobenzene	.37062	.31396	15.29			
1,2-Dibromo-3-chloropropane	.02149	-	-			
1,2,4-Trichlorobenzene	.26241	-	-			
Hexachlorobutadiene	.31567	-	-			
Naphthalene	.19737	.18236	7.60			
1,2,3-Trichlorobenzene	.17710	-	-			
tert-Butyl methyl ether (MTBE)	-	.18906	-			

RF - Response factor from daily standard file at 10.00 ug/L

RF - Average Response factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/94

Contractor: Time: 21:20 SRM

Contract No: Laboratory ID: >A9748

Instrument ID: Initial Calibration Date: 05/06/94

Minimum RF for SPCC is Maximum % Diff for CCC is 30.0%

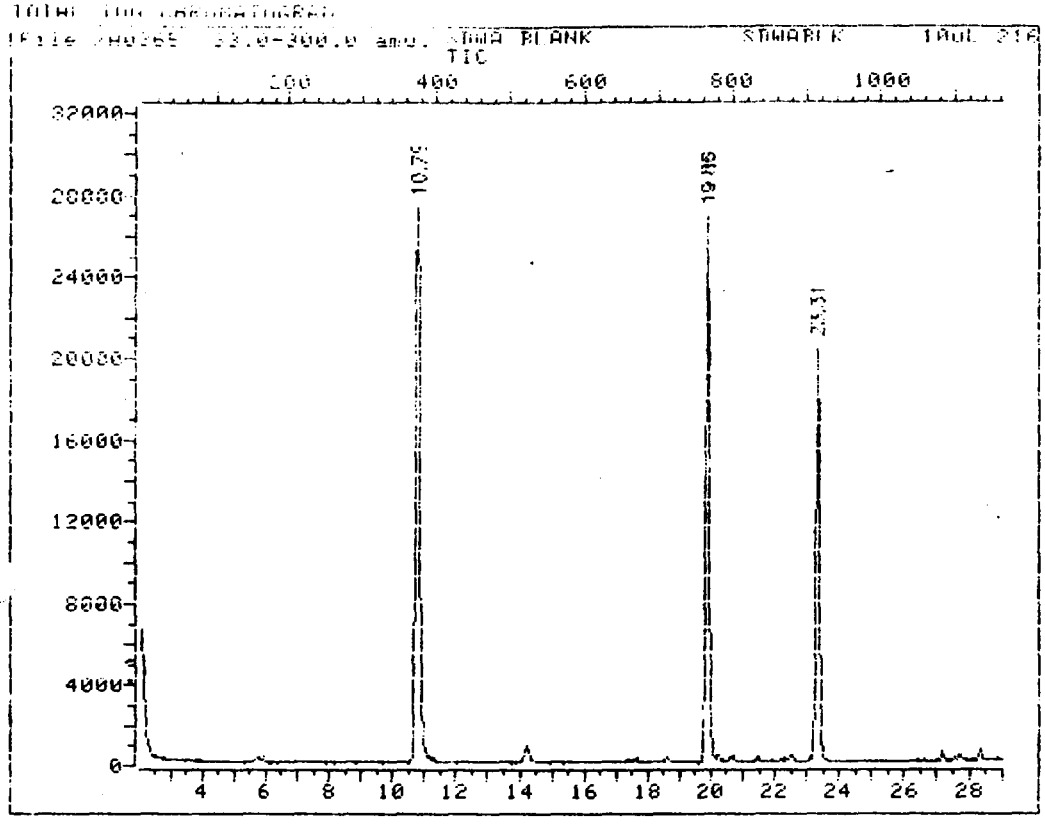
Compound	RF	RF	%Diff	CCC	SPCC
Dichlorodifluoromethane	.42732	-	-		
Chloromethane	.21959	.15995	27.16		
Vinyl chloride	.25515	.21997	13.79		
Bromomethane	.34250	.29310	14.42		
Chloroethane	.17269	.14944	13.46		
Trichlorofluoromethane	.79408	.67797	14.62		
1,1-Dichloroethene	.37016	.34362	7.17		
Dichloromethane	.22837	.20150	11.77		
1,2-trans-Dichloroethene	.38722	.34077	12.00		
1,1-Dichloroethane	.55167	.51650	6.37		
1,2-cis-Dichloroethene	.33222	.29727	10.52		
2,2-Dichloropropane	.57099	-	-		
Chloroform	.63444	.58458	7.86		
Bromochloromethane	.17312	-	-		
1,1,1-Trichloroethane	.67928	.62142	8.52		
1,1-Dichloropropene	.57461	-	-		
Carbon tetrachloride	.64558	.61605	4.57		
1,2-Dichloroethane	.18295	.16548	9.55		
Benzene	.84527	.75743	10.39		
Trichloroethene	.49874	.45821	8.13		
1,2-Dichloropropane	.23925	.22131	7.50		
Dichlorobromomethane	.41541	.36118	13.05		
Dibromomethane	.14544	-	-		
1,3-cis-Dichloropropene	.27458	.24762	9.82		
Toluene	.62680	.53443	14.74		
1,3-trans-Dichloropropene	.17802	.16244	8.75		
1,1,2-Trichloroethane	.11800	.10743	8.95		
1,3-Dichloropropane	.18075	-	-		
Tetrachloroethene	.58549	.52863	9.71		
Chlorodibromomethane	.25387	.22170	12.67		
1,2-Dibromoethane (EDB)	.16689	-	-		
Chlorobenzene	.62253	.57115	8.25		

RF - Response Factor from daily standard file at 10.00 ug/L

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 (**)



Data File: >AU365::D3 . Quant Output File: ^AU365::QT
Name: SDWA BLANK
Misc: SDWABLK 10uL 21675/25mL PURGED

Id File: A1524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940706 14:27

Operator ID: LAN
Quant Time: 940706 19:37
Injected at: 940706 19:07

#384

QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940706 16:15
Output File: ^A0366::Q1 Injected at: 940706 15:44
Data File: >A0366::D3 Dilution Factor: 1.00000
Name: SDWA LFB 5PPB
Misc: LFB005 5UL 21654, 10UL 21675, 25ML PURGED

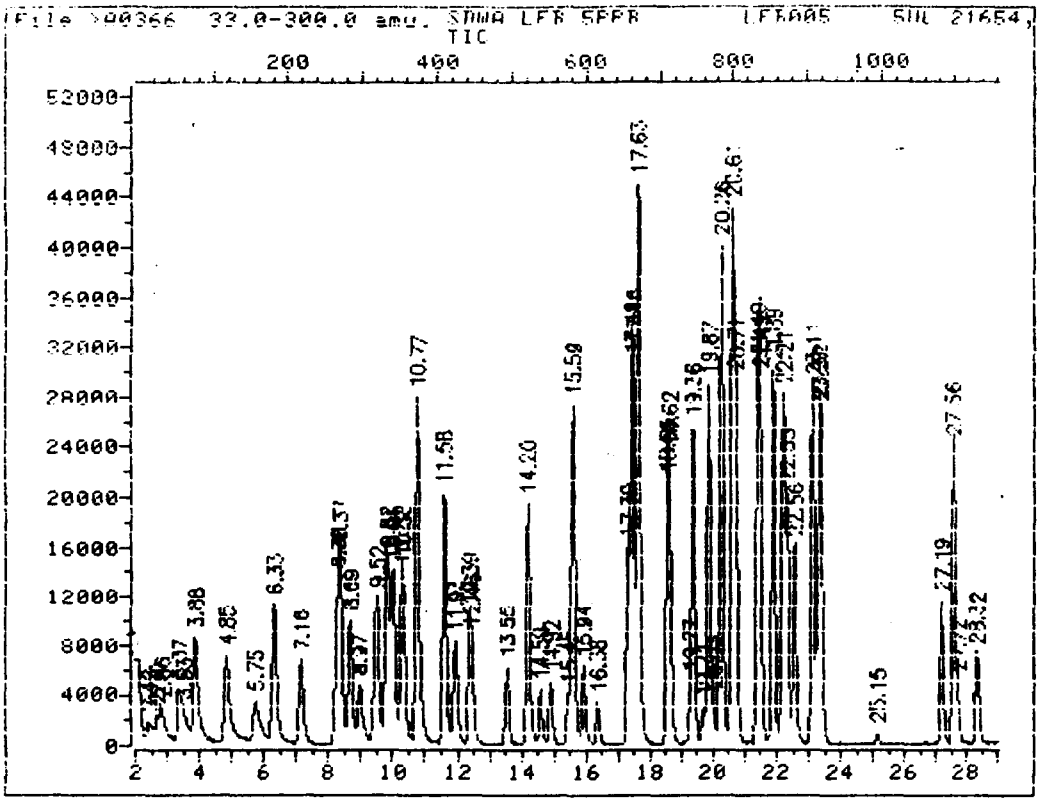
ID File: A1524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940706 14:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.77	96.0	124511	10.00	ug/L	86
2)	Dichlorodifluoromethane	2.42	85.0	19283M	4.81	ug/L	98
3)	Chloromethane	2.70	50.0	9881	4.39	ug/L	97
4)	Vinyl chloride	2.86	62.0	13337	5.02	ug/L	94
5)	Bromomethane	3.37	94.0	18982	5.00	ug/L	85
6)	Chloroethane	3.53	64.0	9582M	4.98	ug/L	80
7)	Trichlorofluoromethane	3.88	101.0	39773	4.95	ug/L	98
8)	1,1-Dichloroethene	4.85	96.0	17831	4.53	ug/L	73
9)	Dichloromethane	5.75	84.0	1458?M	5.26	ug/L	
10)	1,2-trans-Dichloroethene	6.33	96.0	24691	5.22	ug/L	84
11)	1,1-Dichloroethane	7.10	63.0	31659	4.92	ug/L	93
12)	1,2-cis-Dichloroethene	8.37	96.0	20467	4.82	ug/L	84
13)	2,2-Dichloropropane	8.30	77.0	31592	4.90	ug/L	92
14)	Chloroform	8.69	83.0	36804	4.73	ug/L	99
15)	Bromochloromethane	8.97	130.0	10077	4.51	ug/L	85
16)	1,1,1-Trichloroethane	9.52	97.0	39629	4.98	ug/L	87
17)	1,1-Dichloropropene	9.82	75.0	34402	5.04	ug/L	86
18)	Carbon tetrachloride	10.01	117.0	39908	4.92	ug/L	87
19)	1,2-Dichloroethane	10.29	62.0	10425	4.50	ug/L	94
20)	Benzene	10.33	78.0	50806	4.88	ug/L	98
21)	Trichloroethene	11.58	130.0	33247	4.89	ug/L	91
22)	1,2-Dichloropropane	11.93	63.0	13141	4.71	ug/L	94
23)	Dichlorobromomethane	12.39	83.0	24093	4.63	ug/L	98
24)	Dibromomethane	12.46	174.0	9425	4.39	ug/L	93
25)	1,3-cis-Dichloropropene	13.55	75.0	15198	4.51	ug/L	91
26)	Toluene	14.20	92.0	36755	4.87	ug/L	95
27)	1,3-trans-Dichloropropene	14.59	75.0	9017	4.20	ug/L	90
28)	1,1,2-Trichloroethane	14.92	97.0	7081	4.53	ug/L	92
29)	1,3-Dichloropropane	15.45	76.0	10341	4.66	ug/L	97
30)	Tetrachloroethene	15.59	166.0	40230	5.05	ug/L	92
31)	Chlorodibromomethane	15.94	129.0	15497	4.33	ug/L	95
32)	1,2-Dibromoethane (EDB)	16.38	107.0	9756	4.40	ug/L	99
33)	Chlorobenzene	17.30	112.0	40309	4.70	ug/L	71
34)	1,1,1,2-Tetrachloroethane	17.42	131.0	17669	4.62	ug/L	96
35)	Ethylbenzene	17.46	106.0	22560	5.14	ug/L	96
36)	m&p-Xylene	17.63	106.0	58298	9.46	ug/L	97
37)	o-Xylene	18.55	106.0	23591	4.73	ug/L	81
38)	Styrene	18.62	104.0	32629	4.56	ug/L	82
39)	Bromoform	19.2?	173.9	7764	4.47	ug/L	94
40)	1,1,2,2-Tetrachloroethane	19.71	83.0	6968	4.59	ug/L	86
41)	Isopropylbenzene	19.96	105.0	82389	4.99	ug/L	94
42)	Bromofluorobenzene	19.87	174.0	40969	9.67	ug/L	74
43)	1,2,3-Trichloropropane	19.??	110.0	1673	4.32	ug/L	95

	Compound	R.T.	Q Ion	Area	Conc	Units	q
44)	Propylbenzene	20.26	91.0	103448	5.26	ug/L	92
45)	Bromobenzene	20.26	156.0	18353	4.65	ug/L	86
46)	1,3,5-Trimethylbenzene	20.61	105.0	65009	4.89	ug/L	88
47)	2-Chlorotoluene	20.61	91.0	54014	5.24	ug/L	90
48)	4-Chlorotoluene	20.71	91.0	51013	4.18	ug/L	87
49)	tert-Butylbenzene	21.40	119.0	73395	5.01	ug/L	75
50)	1,2,4-Trimethylbenzene	21.49	105.0	59351	5.01	ug/L	94
51)	sec-Butylbenzene	21.89	105.0	103414	5.00	ug/L	98
52)	p-Isopropyltoluene	22.21	119.0	78799	5.02	ug/L	82
53)	1,3-Dichlorobenzene	22.32	146.0	34814	4.69	ug/L	91
54)	1,4-Dichlorobenzene	22.56	146.0	34008	4.72	ug/L	89
55)	n-Butylbenzene	23.11	91.0	79792	5.13	ug/L	94
56)	1,2-Dichlorobenzene-d4	23.32	150.0	47867	9.24	ug/L	81
57)	1,2-Dichlorobenzene	23.37	146.0	24822	4.71	ug/L	91
58)	1,2-Dibromo-3-chloropropane	25.15	157.0	1252M	4.63	ug/L	
59)	1,2,4-Trichlorobenzene	27.14	180.0	17682	4.70	ug/L	99
60)	Hexachlorobutadiene	27.56	225.0	23485	5.10	ug/L	93
61)	Naphthalene	27.72	128.0	10640	4.67	ug/L	96
62)	1,2,3-Trichlorobenzene	28.32	180.0	11844	4.59	ug/L	83

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >A0366::D3 . Quant Output File: ^A0366::QT
Name: SDWA LFB 5PPB
Misc: LFB005 5UL 21654, 10UL 21675, 25ML PURGED

Id File: A1524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940706 14:27

Operator ID: LAN
Quant Time: 940706 16:15
Injected at: 940706 15:44

#314

QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940706 13:46
Output File: ^A0363:01 [illegible]: 940706 13:16
Data File: >A0363:01 Dilution Factor: 1.00000
Name: SCUBA STANDARD [illegible]
Misc: [illegible]

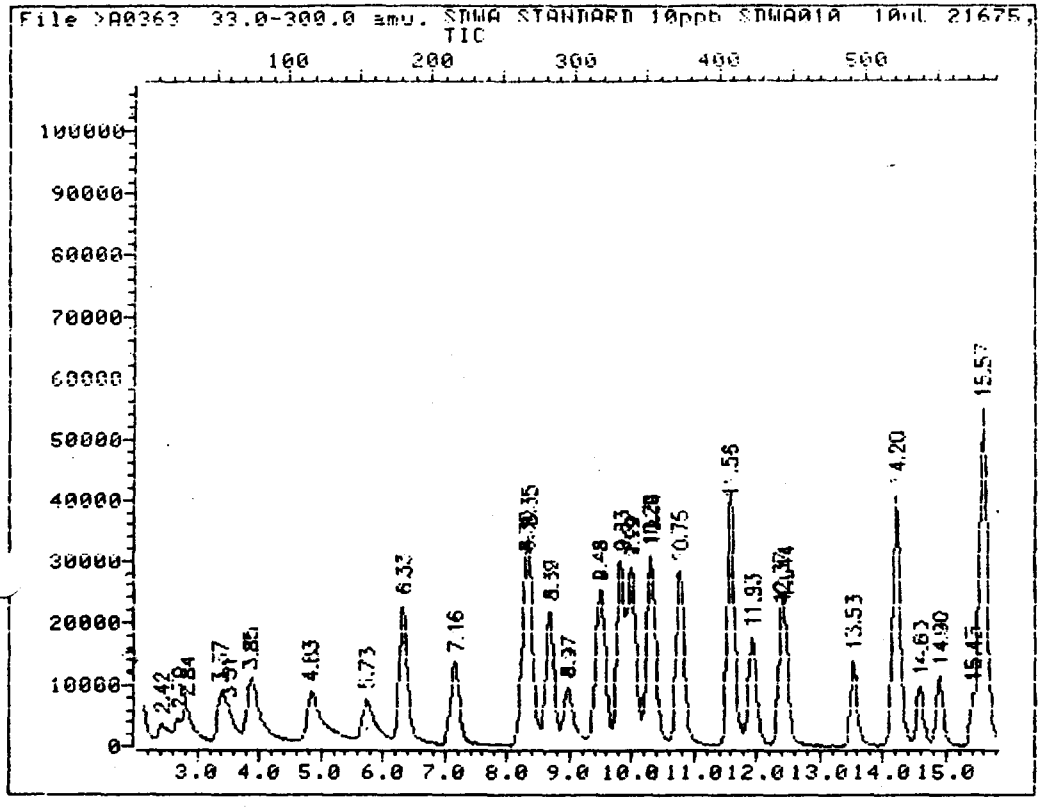
ID [illegible]
Title: [illegible] - METHOD 624.1 - 40ml
Last Calibration: 940706 11:37

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	Fluorobenzene	10.25	96.0	126806	10.00	ug/L	87
2)	Dichlorodifluoromethane	2.42	85.0	40848M	7.65	ug/L	96
3)	Chloromethane	2.70	50.0	22902	8.22	ug/L	94
4)	Vinyl chloride	2.84	62.0	27068	8.37	ug/L	99
5)	Bromomethane	3.37	94.0	38686	8.91	ug/L	88
6)	Chloroethane	3.51	64.0	19599M	8.95	ug/L	71
7)	Trichlorofluoromethane	3.85	101.0	81250M	8.12	ug/L	97
8)	1,1-Dichloroethene	4.83	96.0	40076M	8.54	ug/L	70
9)	Dichloromethane	5.73	84.0	28227	9.75	ug/L	61
10)	1,2-trans-Dichloroethene	6.33	96.0	48138	9.80	ug/L	84
11)	1,1-Dichloroethane	7.16	63.0	65571	9.37	ug/L	94
12)	1,2-cis-Dichloroethene	8.35	96.0	43219	10.26	ug/L	87
13)	2,2-Dichloropropane	8.30	77.0	65649	9.07	ug/L	93
14)	Chloroform	8.69	83.0	79322	9.86	ug/L	99
15)	Bromochloromethane	8.97	130.0	22736	10.36	ug/L	83
16)	1,1,1-Trichloroethane	9.48	97.0	81016	9.41	ug/L	90
17)	1,1-Dichloropropene	9.83	75.0	69455	9.53	ug/L	86
18)	Carbon tetrachloride	9.99	117.0	82606	10.09	ug/L	90
19)	1,2-Dichloroethane	10.29	62.0	23608	10.18	ug/L	92
20)	Benzene	10.51	78.0	105954	9.89	ug/L	98
21)	Trichloroethene	11.56	130.0	69307	10.96	ug/L	76
22)	1,2-Dichloropropane	11.93	63.0	28430	9.37	ug/L	96
23)	Dichlorobromomethane	12.37	83.0	53028	10.07	ug/L	98
24)	Dibromomethane	12.44	174.0	21862	11.85	ug/L	93
25)	1,3-cis-Dichloropropene	13.53	75.0	34353	9.87	ug/L	94
26)	Toluene	14.20	92.0	76839	9.67	ug/L	93
27)	1,3-trans-Dichloropropene	14.60	75.0	21876	9.69	ug/L	94
28)	1,1,2-Trichloroethane	14.90	97.0	15918	10.64	ug/L	98
29)	1,3-Dichloropropane	15.43	76.0	22613	9.87	ug/L	99
30)	Tetrachloroethene	15.57	166.0	81071	10.92	ug/L	94
31)	Chlorodibromomethane	15.92	129.0	36430	11.32	ug/L	98
32)	1,2-Dibromoethane (EDB)	16.36	107.0	22558	10.66	ug/L	97
33)	Chlorobenzene	17.28	112.0	87310	11.06	ug/L	75
34)	1,1,1,2-Tetrachloroethane	17.40	131.0	38964	11.00	ug/L	97
35)	Ethylbenzene	17.44	106.0	44683M	9.96	ug/L	67
36)	m&p-Xylene	17.63	106.0	125586M	21.71	ug/L	
37)	o-Xylene	18.56	106.0	50839	10.59	ug/L	83
38)	Styrene	18.63	104.0	72897	10.70	ug/L	78
39)	Bromoform	19.27	173.0	17691	11.37	ug/L	99
40)	1,1,2,2-Tetrachloroethane	19.69	83.0	15469	10.40	ug/L	92
41)	Isopropylbenzene	19.37	105.0	168231	10.07	ug/L	93
42)	Bromofluorobenzene	19.88	174.0	43135	11.70	ug/L	80
43)	1,2,3-Trichloropropane	20.02	110.0	3945	11.29	ug/L	46

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Propylbenzene	20.25	91.0	200404	9.46	ug/L	99
45)	Bromobenzene	20.25	156.0	40221	11.93	ug/L	75
46)	1,3,5-Trimethylbenzene	20.62	105.0	135527M	10.08	ug/L	95
47)	2-Chlorotoluene	20.62	91.0	104951M	9.30	ug/L	
48)	4-Chlorotoluene	20.69	91.0	124412	10.93	ug/L	88
49)	tert-Butylbenzene	21.41	119.0	149117	10.25	ug/L	75
50)	1,2,4-Trimethylbenzene	21.48	105.0	120724	10.11	ug/L	88
51)	sec-Butylbenzene	21.89	105.0	210695	10.12	ug/L	99
52)	p-Isopropyltoluene	22.19	119.0	159963	9.95	ug/L	82
53)	1,3-Dichlorobenzene	22.33	146.0	75554M	11.36	ug/L	
54)	1,4-Dichlorobenzene	22.56	146.0	73374M	11.75	ug/L	94
55)	n-Butylbenzene	23.12	91.0	198356	9.57	ug/L	93
56)	1,2-Dichlorobenzene-d4	23.33	150.0	52748	11.09	ug/L	78
57)	1,2-Dichlorobenzene	23.38	146.0	53715	11.43	ug/L	94
58)	1,2-Dibromo-3-chloropropane	25.13	157.0	2752M	10.10	ug/L	
59)	1,2,4-Trichlorobenzene	27.19	180.0	38311M	11.51	ug/L	
60)	Hexachlorobutadiene	27.56	225.0	46875	11.71	ug/L	88
61)	Naphthalene	27.73	128.0	23222	9.28	ug/L	97
62)	1,2,3-Trichlorobenzene	28.33	180.0	26253	11.69	ug/L	81

* Compound is ISTD

TOTAL ION CHROMATOGRAM

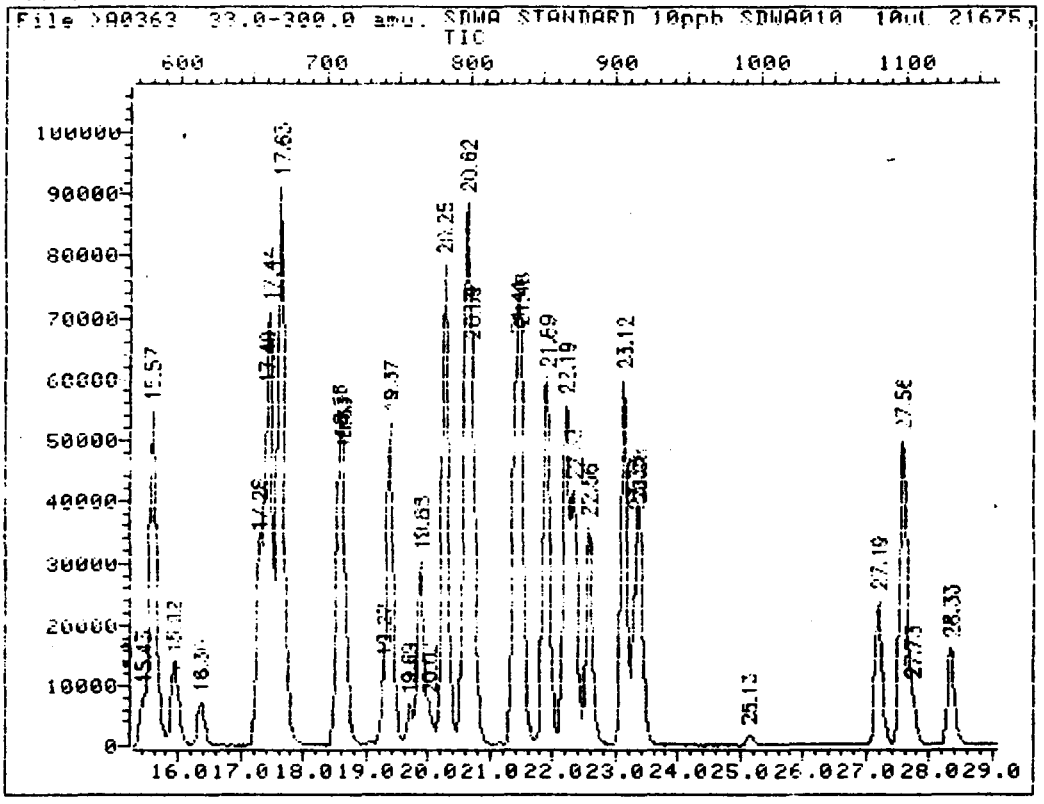


Data File: >A0363::D1 Quant Output File: ^A0363::QT
Name: SDWA STANDARD 10ppb
Misc: SDWA010 10uL 21675,21654/25mL PURGED

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - /0010A
Last Calibration: 940506 14:31

Operator ID: LAN
Quant Time: 940706 13:46
Injected at: 940706 13:16

TOTAL ION CHROMATOGRAM



Data File: >A0363::D1 Quant Output File: ^A0363::QI
Name: SDWA STANDARD 10ppb
Misc: SDWA010 10uL 21675,21654/25mL PURGED

Id File: A_524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940506 14:31

Operator ID: LAN
Quant Time: 940706 13:46
Injected at: 940706 13:16

TIC page 2 of 2

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/06/94

Contractor: Time: 13:16

Contract No: Laboratory ID: >A0363

Instrument ID: Initial Calibration Date: 05/06/94

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is 30.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Dichlorodifluoromethane	.42732	.32213	24.35		
Chloromethane	.21959	.18061	17.75		
Vinyl chloride	.25515	.21346	16.34		
Bromomethane	.34250	.30508	10.93		
Chloroethane	.17269	.15456	10.50		
Trichlorofluoromethane	.79408	.64469	18.81		
1,1-Dichloroethene	.37016	.31604	14.62		
Dichloromethane	.22837	.22260	2.53		
1,2-trans-Dichloroethene	.38722	.37962	1.96		
1,1-Dichloroethane	.55167	.51710	6.27		
1,2-cis-Dichloroethene	.33222	.34083	2.59		
2,2-Dichloropropane	.57099	.51771	9.33		
Chloroform	.63444	.62554	1.40		
Bromochloromethane	.17312	.17930	3.57		
1,1,1-Trichloroethane	.67928	.63890	5.95		
1,1-Dichloropropene	.57461	.54773	4.68		
Carbon tetrachloride	.64558	.65144	.91		
1,2-Dichloroethane	.18295	.18617	1.76		
Benzene	.84527	.83556	1.15		
Trichloroethene	.49874	.54656	9.59		
1,2-Dichloropropane	.23925	.22420	6.29		
Dichlorobromomethane	.41541	.41818	.67		
Dibromomethane	.14544	.17241	18.54		
1,3-cis-Dichloropropene	.27458	.27091	1.34		
Toluene	.62680	.60596	3.33		
1,3-trans-Dichloropropene	.17802	.17252	3.09		
1,1,2-Trichloroethane	.11800	.12553	6.39		
1,3-Dichloropropane	.18075	.17833	1.34		
Tetrachloroethene	.58549	.63933	9.20		
Chlorodibromomethane	.25387	.28729	13.17		
1,2-Dibromoethane (EDB)	.16689	.17789	6.59		
Chlorobenzene	.62253	.68853	10.60		

RF - Response Factor from daily standard file at 10.00 ug/L

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 07/06/94

Contractor: Time: 13:16

Contract No: Laboratory ID: >A0363

Instrument ID: Initial Calibration Date: 05/06/94

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is 30.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
1,1,1,2-Tetrachloroethane	.27931	.30727	10.01			
Ethylbenzene	.35367	.35237	.37			
m&p-Xylene	.45608	.49519	8.57			(Conc=20.00)
o-Xylene	.37846	.40092	5.93			
Styrene	.53740	.57487	6.97			
Bromoform	.12276	.13951	13.65			
1,1,2,2-Tetrachloroethane	.11727	.12199	4.03			
Isopropylbenzene	1.31728	1.32668	.71			
Bromofluorobenzene	.29076	.34017	16.99			(Conc=10.00)
1,2,3-Trichloropropane	.02755	.03111	12.92			
Propylbenzene	1.67132	1.58040	5.44			
Bromobenzene	.26576	.31719	19.35			
1,3,5-Trimethylbenzene	1.06009	1.06877	.82			
2-Chlorotoluene	.88961	.82765	6.97			
4-Chlorotoluene	.89801	.98112	9.26			
tert-Butylbenzene	1.14722	1.17595	2.50			
1,2,4-Trimethylbenzene	.94154	.95204	1.11			
sec-Butylbenzene	1.64156	1.66155	1.22			
p-Isopropyltoluene	1.26759	1.26148	.48			
1,3-Dichlorobenzene	.52434	.59582	13.63			
1,4-Dichlorobenzene	.49260	.57863	17.46			
n-Butylbenzene	1.30529	1.24881	4.33			
1,2-Dichlorobenzene-d4	.37523	.41597	10.86			(Conc=10.00)
1,2-Dichlorobenzene	.37062	.42360	14.29			
1,2-Dibromo-3-chloropropane	.02149	.02170	1.00			
1,2,4-Trichlorobenzene	.26241	.30212	15.13			
Hexachlorobutadiene	.31567	.36966	17.10			
Naphthalene	.19737	.18313	7.21			
1,2,3-Trichlorobenzene	.17710	.20703	16.90			
tert-Butyl methyl ether (MTBE)	-	-	-			

RF - Response Factor from daily standard file at 10.00 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 (**)

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: NET MIDWEST-BARTLETT Contract:

Lab code: Case No.: SAS No.: SDG No.:

Lab File ID (Standard): >A0363 Date Analyzed: 07/06/94

Instrument ID: 7001A Time Analyzed: 13:16

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

	IS1(FB) AREA	#	RT	IS2( ) AREA	#	RT	IS3( ) AREA	#	RT
12 HOUR STD	126806		10.75	0		0.00	0		0.00
UPPER LIMIT	164848		11.25	0		0.00	0		0.00
LOWER LIMIT	88764		10.25	0		0.00	0		0.00
EPA SAMPLE NO.									
1 SDWA BLANK	123173		10.79						
2 SDWA LFB	124511		10.77						
3 BT#265859	122584		10.79						
4 BT#265860	119323		10.79						
5 BT#266415	122585		10.79						
6 BT#267075	119178		10.79						
7 BT#267338	119027		10.79						
8 BT#267339	114603		10.80						
9 BT#267340	128002		10.79						
10 BT#265859DP	124422		10.80						
11 BT#265860DP	122033		10.77						
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (FB) = Fluorobenzene
IS2 ( ) = d12-Perylene
IS3 ( ) = LOWER LIMIT = - 70%

UPPER LIMIT = + 65%
of internal standard area.

of internal standard area.

Column used to flag internal standard area values with an asterisk

RAW DATA
MS VOLATILES

QUANT REPORT

Operator ID: LAN Quant Rev: 6 Quant Time: 940706 18:41
Output File: ^A03/0::QT Injected at: 940706 18:10
Data File: >A03/0::03 Dilution Factor: 1.00000
Name: BT#267075
Misc: ECOLOGY 100UL 216/5, 25ML PURGED

ID File: A1524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - /001A
Last Calibration: 940706 14:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.79	96.0	119178	10.00	ug/L	89
2)	Trichloroethene	11.60	130.0	6710	1.03	ug/L	82
42)	Bromofluorobenzene	19.88	174.0	38814	9.57	ug/L	79
96)	1,2-Dichlorobenzene-d4	23.33	150.0	41568	8.38	ug/L	80

* Compound is ISTD

VOA 8 524.2 AQ
ug/L
— Rerun for Conf. —

#314

QUANT REPORT

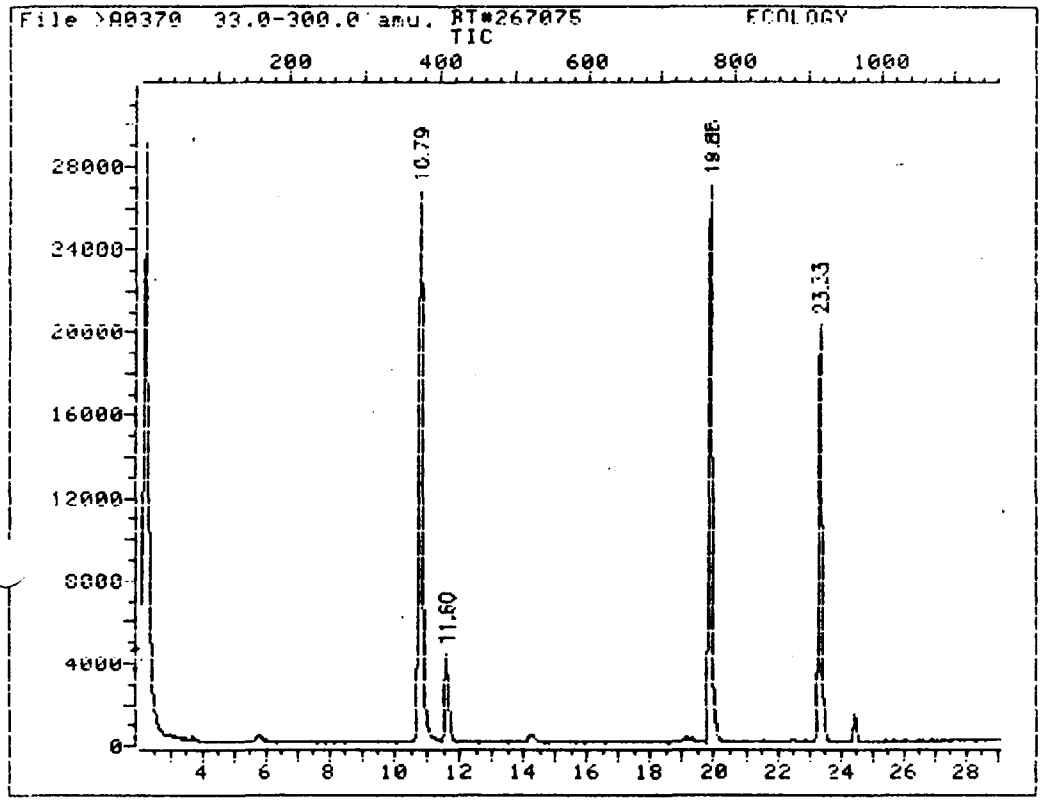
Operator ID: LAN Quant Rev: 6 Quant Time: 940706 18:41
Output File: ^AU370::Q1 Injected at: 940706 18:10
Data File: >AU370::D3 Dilution Factor: 1.00000
Name: BT#267075
Misc: ECOLOGY 10UL 216/5, 25ML PURGED

ID File: A1524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - /001A
Last Calibration: 940706 14:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Fluorobenzene	10.79	96.0	119178	✓10.00	ug/L	89
21)	Trichloroethene	11.60	130.0	6710	1.05	ug/L	1.0 82
42)	Bromofluorobenzene	19.88	174.0	38814	✓9.57	ug/L	79
56)	1,2-Dichlorobenzene-d4	23.33	150.0	41568	✓8.38	ug/L	0

* Compound is ISTD

TOTAL ION CHROMATOGRAM

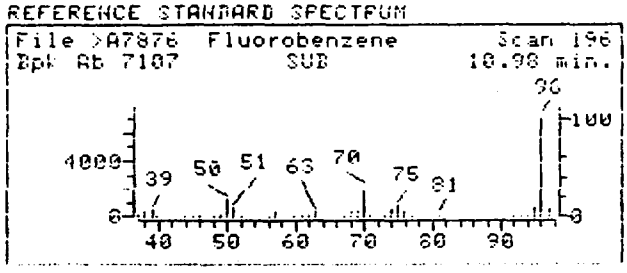


Data File: >A0370::D3 Quant Output File: ^A0370::QT
Name: BT#267075
Misc: ECOLOGY 10UL 21675, 25ML PURGED

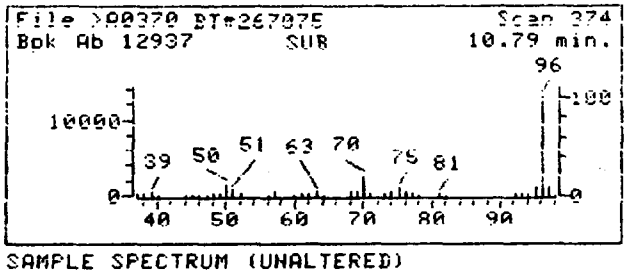
Id File: A1524W::F1
Title: VOLATILE ANALYSIS - METHOD 524.2 - 7001A
Last Calibration: 940706 14:27

Operator ID: LAN
Quant Time: 940706 18:41
Injected at: 940706 18:10

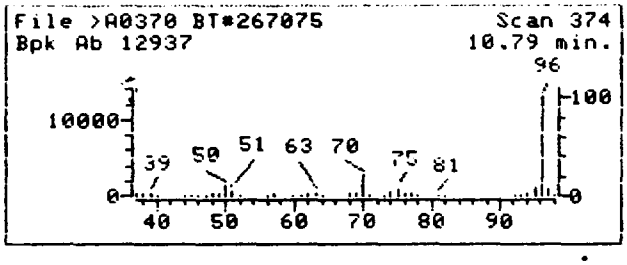
REFERENCE STANDARD SPECTRUM

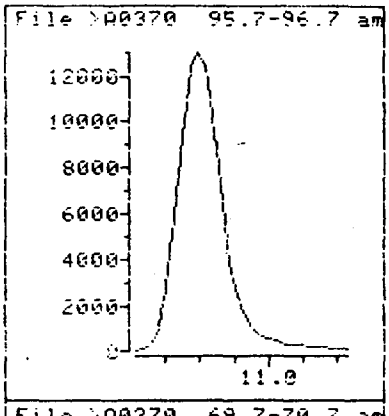


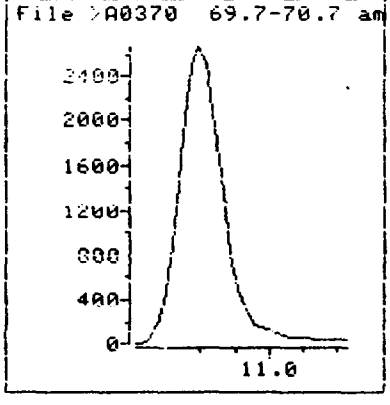
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



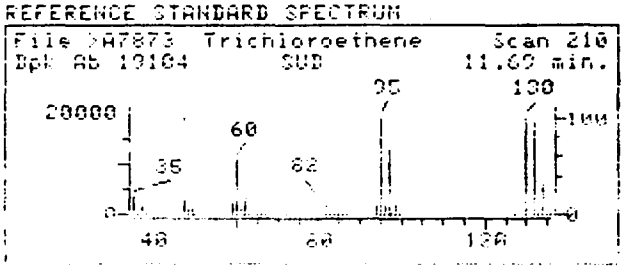


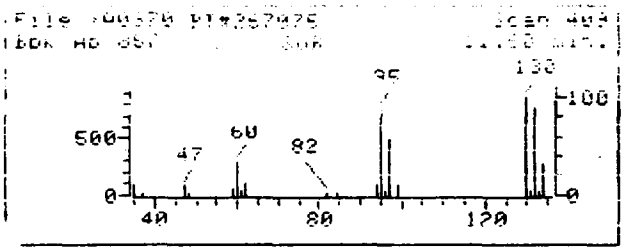


Data File: >A0370::D3 Quant Output File: ^A0370::QT
Name: BT#267075
Misc: ECOLOGY 100UL 21675, 25ML PURGED
Quant Time: 940706 18:41 Quant ID File: A1524W::F1
Injected at: 940706 18:10 Last Calibration: 940706 14:27

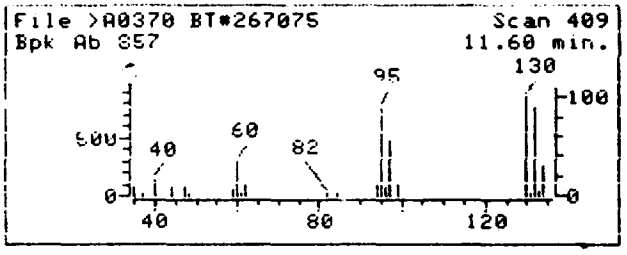
Compound No: 1 (ISTD)
Compound Name: Fluorobenzene
Scan Number: 374
Retention Time: 10.79 min.
Quant Ion: 96.0
Area: 119178
Concentration: 10.00 ug/L
q-value: 89

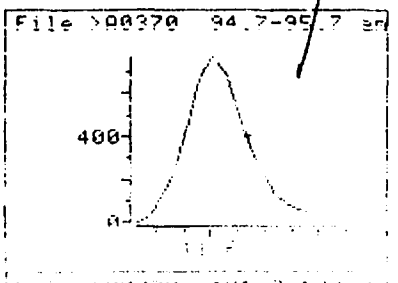
REFERENCE STANDARD SPECTRUM

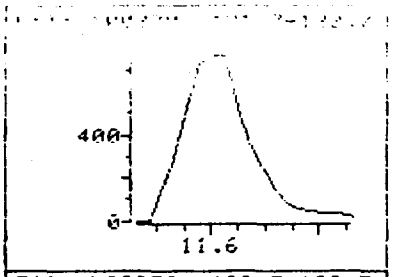


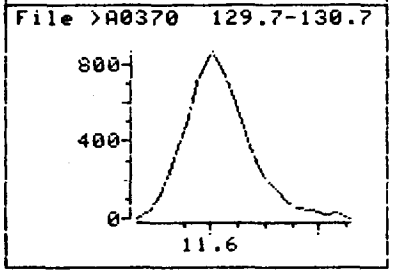


SAMPLE SPECTRUM (UNALTERED)





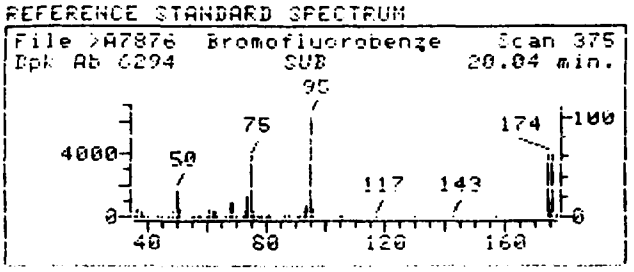




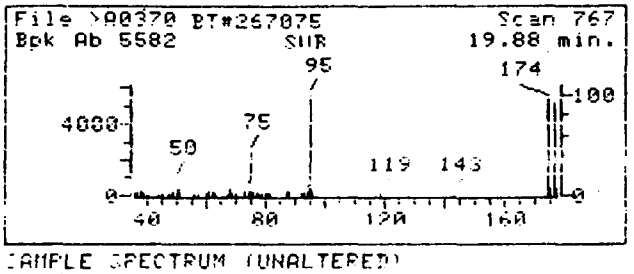
Data File: >A0370::D3 Quant Output File: ^A0370::Q1
Name: BT#267075
Misc: ECOLOGY 100UL 21675, 25ML PURGED
Quant Time: 940706 18:41 Quant ID File: A1524W::F1
Injected at: 940706 18:10 Last Calibration: 940706 14:27

Compound No: 21
Compound Name: Trichloroethene
Scan Number: 409
Retention Time: 11.60 min.
Quant Ion: 130.0
Area: 6710
Concentration: 1.03 ug/L
q-value: 82.

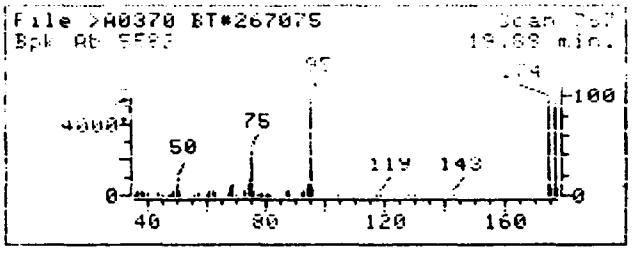
REFERENCE STANDARD SPECTRUM

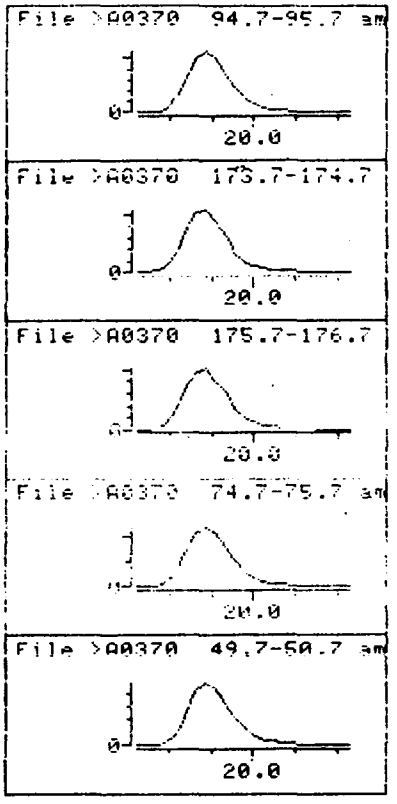


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

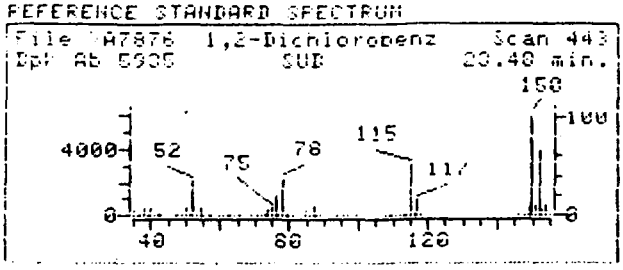




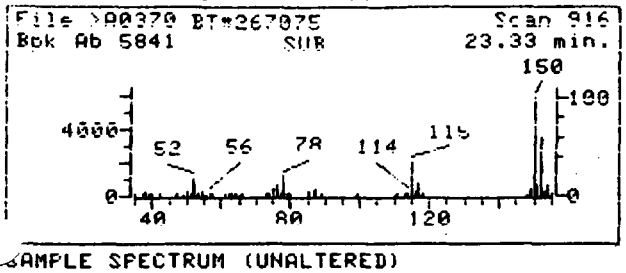
Data File: >A0370::D3 Quant Output File: ^A0370::Q1
Name: BT#267075
Misc: ECOLOGY 10UL 21675, 25ML PURGED
Quant Time: 940706 18:41 Quant ID File: A1524W::F1
Injected at: 940706 18:10 Last Calibration: 940706 14:27

Compound No: 42
Compound Name: Bromofluorobenzene
Scan Number: 767
Retention Time: 19.88 min.
Quant Ion: 174.0
Area: 38814
Concentration: 9.57 ug/L
q-value: 79

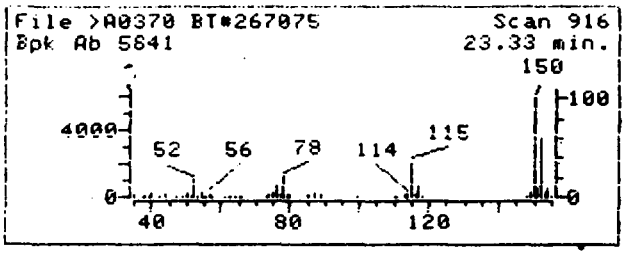
REFERENCE STANDARD SPECTRUM

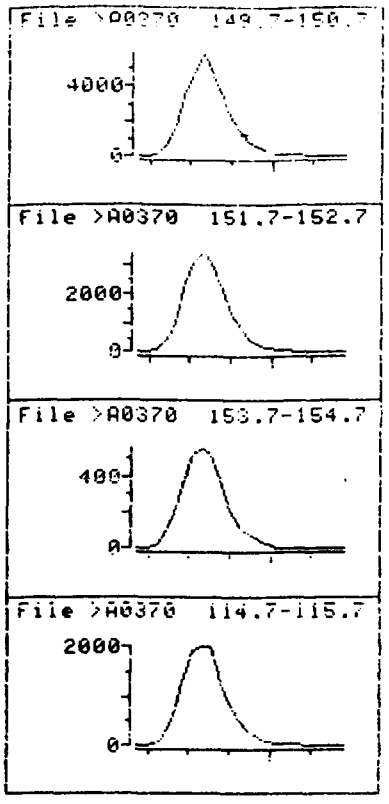


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A0370::D3 Quant Output File: >A0370::Q1
Name: BT#267075
Misc: ECOLOGY 10UL 216/5, 25ML PURGED
Quant Time: 940706 18:41 Quant ID File: A1524W::F1
Injected at: 940706 18:10 Last Calibration: 940706 14:27

Compound No: 56
Compound Name: 1,2-Dichlorobenzene-d4
Scan Number: 916
Retention Time: 23.33 min.
Quant Ion: 150.0
Area: 41568
Concentration: 8.38 ug/L
q-value: 80

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	Activity Code:
[illegible]	TCS-9406-019	

SAMPLERS: (Print Name and Sign) [illegible] Malkin Jane [illegible]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Analyte: VOA						TAG NUMBERS
	[illegible]	1:37		✓	[illegible] Pumping Station	3	✓						Analyze for VOAS
													(drinking water detection
													limit)
													Fax Results to Mike
													Mangini
													(312) 663-1090

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Ship To:
[illegible]	[illegible]/94 2:37	William [illegible]	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	
			ATTN:

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Airbill Number
		William [illegible]	9/30/94 2:40pm	

Chain of Custody Seal Numbers

Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File

Printed on Recycled Paper/Printed with Soy-Based Ink

5-35509

0401841

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION [redacted]
77 West Jackson [redacted]
Chicago, [redacted]

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	Analyte: VOAs	Activity Code:

SAMPLERS: *(Print Name and Sign)*

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Analyte: VOAs	TAG NUMBERS
				✓		3	✓	
				✓		3	✓	

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
	11/19/94 3:20	
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)* / Date / Time

Ship To:

ATTN:

Airbill Number

Chain of Custody Seal Numbers

Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File

Printed on Recycled Paper/Printed with Soy-Based Ink

5-35510

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	Analyze: VOAs	Activity Code:

SAMPLERS: *(Print Name and Sign)*

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Analyze: VOAs	TAG NUMBERS
				✓	Town House	3	✓	For Questions, Call Mike Mangini (312) 663-9415 or (312) 663-1490

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
	4/24/91	Lynette Burnett
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)* / Date / Time

Ship To:

ATTN:

Airbill Number

Chain of Custody Seal Numbers

Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File

5-35511

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	Activity Code:
7	[illegible] M-02	

SAMPLERS: *(Print Name and Sign)* [illegible] [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Analyte: Volatile Organic Analytes Drinking Water Levels						TAG NUMBERS
[illegible]	[illegible]	[illegible]15		4	Municipal Well		X						Please send results to
[illegible]	[illegible]	1245		4	Municipal Well		X						Bob LANCE
													US. EPA
													77 W Jackson
													Chicago IL 60604
													Phone # 886-4745

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Ship To:
[signature]	12/[illegible]/91 3:46	Lynette Burnett	
Relinquished by: *(Signature)*	**Date / Time**	**Received by:** *(Signature)*	ATTN:
Relinquished by: *(Signature)*	**Date / Time**	**Received for Laboratory by:** *(Signature)* / **Date / Time**	**Airbill Number**
		Lynette Burnett 12/[illegible]/91 3:46	**Chain of Custody Seal Numbers**

Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File

Recycled Paper Printed with Soy Based Ink

5-34973

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	Activity Code:
	CAM-Or	TTA301

SAMPLERS: *(Print Name and Sign)*

Superfund 950092

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Analyte: VOA	drinking water Standards					TAG NUMBERS
1	1/31	3:30		4	Municipal Drinking Water Well	4	X						Send results to.
2	1/31	3:35		4	Municipal Drinking Water well	4	X						Jan Pels. (HSE-5J)
													886-3009
													77 W. Jackson Blvd
													Chicago IL 60604

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
	2/2/94 1457	William Sawyer
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)* William Sawyer / Date / Time 2/2/95 15:00

Ship To: Hand Delivered.

ATTN:

Airbill Number N/A

Chain of Custody Seal Numbers

Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File

5-40832

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

CHAIN OF CUSTODY RECORD

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

PROJ. NO.	PROJECT NAME

SAMPLERS: *(Signature)*

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Total Volatile Organics							REMARKS
						4	X							Send results to:
						4	X							Jan Pels (MSE-5J)
														U.S. EPA
														77 W Jackson Blvd.
														Chicago IL 60604
														For questions call:
														Mike Mangin
														(312) 663-9415

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
	3/1/95 0850	William Langer Jr.			
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks	
			3/1/95		

Distribution: White — Accompanies Shipment; Pink — Coordi Field Files; Yellow — Laboratory File

5-10876

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME

SAMPLERS: *(Signature)*

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Total Volatile Petroleum Hydrocarbons							REMARKS
				1	[illegible] well	4	X							Send results to:
				1		4	X							Jan Pels (HSE-5J)
														U.S. EPA
														77 W Jackson Blvd.
														Chicago IL 60604
														For questions call:
														Mike Mangan
														(312) 663-9415

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
	3/1/95 0850	William Sanger			
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks	
			3/1/95		

Distribution: White — Accompanies Shipment; Pink — Coordi[illegible] Field Files; Yellow — Laboratory File

5-10876