5-14-86

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD/Central Regional Laboratory
DATA TRACKING FORM FOR CONTRACT SAMPLES

RECEIVED MAY 14 1986

CRL Data Set No. SF 3151 CERCLIS No. —

SMO Case No. — Site Name and Location: Northeast Gravel

Name of Contractor or EPA Laboratory: CRL Data User: FIT

No. of Samples: 4/2 Date Samples or Data Received: 5-9-86

1. Have chain-of-custody records been received? YES ✓ NO___
2. Have Traffic Reports or packing lists been received? YES___ NO___
3. If no, are Traffic Report or packing list numbers written on the chain-of-custody record? YES___ NO___
4. If no, which Traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO___

Number of samples claimed: 4/2 Number of samples received: 4/2

Checked by: Sylvia Griffin Date: 5/12/86

Received by Contract Project Management Section: _____ Date: _____

Review Started: _____ Reviewer Signature: _____

Total time spent on review: _____ Date review completed: _____

Copied (xeroxed) by: _____ Date: _____

Mailed to Data User by: Sylvia Griffin Date: 5/12/86

DATA USERS: 2- CN, Hg 2- ABN

Please fill in the blanks below and return this form to: Sylvia Griffin, Data Management Coordinator, Region V, 5SCRL

Data received by: S. Kozlowski Date: 6-4-86

Q.A. review received by: S Kozlowski Date: 6-4-86

Inorganic Data Complete [✓], Suitable for Intended Purposes [ ] ✓ [ ] if acceptable.
Organic Data Complete [ ], Suitable for Intended Purposes [ ] List problems below.
Dioxin Data Complete [ ], Suitable for Intended Purposes [ ]
SAS Data Complete [ ], Suitable for Intended Purposes [ ]

See Attached "Missing Data Request Form" [ ]
PROBLEMS: Please indicate reasons (if any) why data are not suitable for your uses. Other problems.

Received by Data Management Coordinator, CRL for File: Date: 6/9/86

Signature: [illegible]

21 May 86

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD/Central Regional Laboratory
DATA TRACKING FORM FOR CONTRACT SAMPLES

RECEIVED MAY 21 1986

CRL Data Set No. SF 3151 CERCLIS No. _____

SMO Case No. — Site Name and Location: Northeast Gravel

Name of Contractor or EPA Laboratory: CRL Data User: FIT

No. of Samples: 2 Date Samples or Data Received: 5-20-86

1. Have chain-of-custody records been received? YES ✓ NO ___
2. Have Traffic Reports or packing lists been received? YES ___ NO ___
3. If no, are Traffic Report or packing list numbers written on the chain-of-custody record? YES ___ NO ___
4. If no, which Traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO ___

Number of samples claimed: 2 Number of samples received: 2

Checked by: Sylvia Griffin Date: 5-20-86

Received by Contract Project Management Section: _____ Date: _____

Review Started: _____ Reviewer Signature: _____

Total time spent on review: _____ Date review completed: _____

Copied (xeroxed) by: _____ Date: _____

Mailed to Data User by: Sylvia Griffin Date: 5-20-86

DATA USERS: Metals, PCB/PEST

Please fill in the blanks below and return this form to: Sylvia Griffin, Data Management Coordinator, Region V, 5SCRL

Data received by: Suzanne Kozlowski Date: 6-4-86

Q.A. review received by: Suzanne Kozlowski Date: 6-4-86

Inorganic Data Complete [ ], Suitable for Intended Purposes [ ] ✓ [ ] if acceptable.
Organic Data Complete [ ], Suitable for Intended Purposes [ ] List problems below.
Dioxin Data Complete [ ], Suitable for Intended Purposes [ ]
SAS Data Complete [ ], Suitable for Intended Purposes [ ]

See Attached "Missing Data Request Form" [ ]
PROBLEMS: Please indicate reasons (if any) why data are not suitable for your uses. Other problems.

Received by Data Management Coordinator, CRL for File: Date: 6/9/86

Signature: [illegible]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD/Central Regional Laboratory
DATA TRACKING FORM FOR CONTRACT SAMPLES

CRL Data Set No. SF 3151 CERCLIS No. _____

SMO Case No. — Site Name and Location: NORTHEAST GRAVEL

Name of Contractor or EPA Laboratory: CRL Data User: FIT

No. of Samples: 2 Date Samples or Data Received: 4-28-86

1. Have chain-of-custody records been received? YES ✓ NO ___
2. Have Traffic Reports or packing lists been received? YES ___ NO ___
3. If no, are Traffic Report or packing list numbers written on the chain-of-custody record? YES ___ NO ___
4. If no, which Traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO ___

Number of samples claimed: 2 Number of samples received: 2

Checked by: Sylvia Griffin Date: 4-28-86

Received by Contract Project Management Section: _____ Date: _____

Review Started: _____ Reviewer Signature: _____

Total time spent on review: _____ Date review completed: _____

Copied (xeroxed) by: _____ Date: _____

Mailed to Data User by: Sylvia Griffin Date: 4-28-86

DATA USERS: Metals

Please fill in the blanks below and return this form to: Sylvia Griffin, Data Management Coordinator, Region V, 5SCRL

Data received by: S. Kozlowski Date: 5/8/86

Q.A. review received by: S Kozlowski Date: 5/8/86

Inorganic Data Complete [ ], Suitable for Intended Purposes [✓] ✓ [ ] if acceptable.
Organic Data Complete [ ], Suitable for Intended Purposes [ ] List problems below.
Dioxin Data Complete [ ], Suitable for Intended Purposes [ ]
SAS Data Complete [ ], Suitable for Intended Purposes [ ]

See Attached "Missing Data Request Form" [ ]
PROBLEMS: Please indicate reasons (if any) why data are not suitable for your uses. Other problems.

Received by Data Management Coordinator, CRL for File: Date: 5/16/86

Signature: Nidia Feliciano

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5-9-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTH EAST GRAVEL

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: _____

The Region V Central Regional Laboratory has completed its analyses of 4 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

Griffin
MAY 12 1986

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151

Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD (R')	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
CN	0.5 µg/L	≤15 µg/L	CONTROL STD	91%	85-115%	CONTROL STD
Hg	.03-.06 µg/L	≤0.1 µg/L	"	115-129% *	"	"

COMMENT: * BIASED HIGH BUT NO Hg DETECTED IN SAMPLES
∴ DATA ACCEPTED

QC FLAGS:

5/6/86
ACTIVITY#C48100
OK-PB 5/9/86

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: MINERALS · NUTRIENTS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER PHENOLICS UG PHENOL/L MIN 74818	WATER CYANIDE UG CN/L MIN 74919	WATER GROSS ALPHA P CI/L MIN 75020	WATER CR+6 UG CR+6/L MIN 74616	WATER MERCURY UG HG/L MIN 74717
86FG05S74	5-93902 GRACELAND CHURCH	**	✓ K 8			
86FG05R07	BLANK 5-93911	*	✓ K5			
86FG05S74	5-93903 GRACELAND CHURCH					✓ K0.1
86FG05R07	BLANK 5-93912					✓ K0.1
			A. Qutub			
			4-29-86			P Paiel
						5/1/86
		* Screening by auto flash Distillation MN #335.3				
		** Manual Distillation, Auto spectrophotometric determination MN #74919				

* REGRESSION ANALYSIS * CSC VERSION 2.00 *

NAME OF ANALYST ----: AQ
PARAMETER NAME -----: CN
DATE OF ANALYSIS --: 05-02-1986

DATA SET NUMBER ----: CD03177
DU NUMBER ----------: SF3151

manual Distillation
Autospectrophotometric determin.
74919

DEGREE OF FIT : 1

EQUATION : CONCENTRATION = +4.565558E+00
+2.22677E+00 * SIGNAL

COEFFICIENT OF DETERMINATION : .9931379

T-A-B-L-E O-F S-T-A-N-D-A-R-D-S

STANDARD	SIGNAL	CONCENTRATION	CALCULATED
1	+0.000	+0.000	+4.565
2	+9.700	+25.000	+26.165
3	+18.500	+50.000	+45.760
4	+40.100	+100.000	+93.858
5	+67.400	+150.000	+154.649

T-A-B-L-E O-F S-A-M-P-L-E-S

SAMPLE I.D.	SIGNAL	CONCENTRATION	limit
R	+0.000	+4.565	≤5
CS	+38.800	+90.964	100±15
DISTD STD Tv=100	+45.000	+104.770	100±15
CS Tv=12.5	+4.500	+14.586	
S01 CD03177	+0.500	+5.678	
S74 SF 3151	+0.500	+5.678	
S74SPK (100ug/L)	+46.000	+106.996	100±15%. Rcd 101%.
S74DUP	+0.500	+5.678	Δ≤15ug/L Rcd Δ=0
DITD BLK	+0.250	+5.122	≤8 ug/L
DITD STD	+45.000	+104.770	100±15%
CS	+39.000	+91.409	100±15

* R01-CD03177 K5 (below 5µg/L)

* R07 - SF 3151 K5 (=)

* Reading obtained from screening test 335.3
There were no peaks for R01, R07 while 5 µg/L had measurable peak.

* REGRESSION ANALYSIS * CSC VERSION 2.00 *

NAME OF ANALYST ---: PP
PARAMETER NAME ----: HG
DATE OF ANALYSIS --: 05-01-1986

DATA SET NUMBER ---: SF3151 / CD03177
DU NUMBER --------:

DEGREE OF FIT : 1

EQUATION : CONCENTRATION = +2.52247E-04
+5.61656E-02 * SIGNAL

COEFFICIENT OF DETERMINATION : .9997471

T-A-B-L-E O-F S-T-A-N-D-A-R-D-S

STANDARD	SIGNAL	CONCENTRATION	CALCULATED
1	+0.000	+0.000	+0.000
2	+9.000	+0.500	+0.505
3	+17.500	+1.000	+0.983
4	+27.000	+1.500	+1.516
5	+35.500	+2.000	+1.994

T-A-B-L-E O-F S-A-M-P-L-E-S

SAMPLE I.D.	SIGNAL	CONCENTRATION µg/L	
BLK	+0.000	+0.000	Limit ≤0.1
CS1	+28.500	+1.600	Limit = 1.5 ±0.2
CS2	+27.000	+1.516	" = 1.5 ±0.2
86FG05R07 } SF3151	+0.000	+0.000	
S74	+0.000	+0.000	
86CZ03R01 } CD03177	+0.000	+0.000	
S01	+1.000	+0.056	
S02	+1.000	+0.056	
S74DUP	+0.000	+0.000	Δ ≤0.1
CS1	+29.000	+1.629	
CS2	+28.000	+1.572	
S01SPK (+1.0)	+23.000 % rec=129%	+1.292	Limit = 100 ±15
1.0STD	+18.500	+1.039	
S74SPK (+1.0)	+20.500 % rec=115	+1.151	Limit = 100 ±15%

NOTE: In spike rec. for Am. cyanamide sample #S01 was higher than expected so run another spike sample from Northeast gravel # S74. Its within the limit but on high side. As there is nothing in the sample so do not see any reason to reject any data

Pauli

ACTIVITY#C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: MINERALS - NUTRIENTS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER PHENOLICS UG PHENOL/L MIN 74818	WATER CYANIDE UG CN/L MIN 74919	WATER GROSS ALPHA P CI/L MIN 75020	WATER CR+6 UG CR+6/L MIN 74616	WATER MERCURY UG HG/L MIN 74717
86F605S74	GRACELAND CHURCH 5-93902		✓			
86F605R07	BLANK 5-93911		✓			
86F605S74	GRACELAND CHURCH 5-93903					✓
86F605R07	BLANK 5-93912					✓

ACTIVITY# C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	TOTAL METALS WATER TOTAL ICAP UG/L MET111	TOTAL METALS WATER AS UG/L MET161	TOTAL METALS WATER PB UG/L MET1191	TOTAL METALS WATER SB UG/L MET1201	TOTAL METALS WATER SE UG/L MET1211	TOTAL METALS WATER TL UG/L MET1221
86FG05S74	5-93901 GRACELAND CHURCH	✓	✓	✓	✓	✓	
86FG05R07	BLANK 5-93910	✓	✓	✓	✓	✓	

ACTIVITY # C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: PESTICIDES AND PCB'S

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER TRIHALOMETHANES UG/L PES17414	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES 17134	WATER HERBICIDES UG/L PES 17424	WATER OIL AND GREASE MG/L PES 17439
86FG05S74	5-54343-44-45 GRACELAND CHURCH		✓	✓		
86FG05R07	BLANK 5-93906		✓	? ✓		

ACTIVITY#C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER VOLATILE ORGANICS SCAN UG/L TOX 17564	WATER ABN ORGANICS SCAN UG/L TOX 17574	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
86FG05S74	5-54349-5015-93904-05 GRACELAND CHURCH	✓			
86FG05R07	BLANK 5-93908-09	✓			
86FG05S74	5-54346-47-48 GRACELAND CHURCH		✓		
86FG05R07	BLANK 5-93907		✓		

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: R05-8504-12
PROJECT NAME: NE Gravel
SAMPLERS: (Signature) Suzanne Kozlowski

Superfund 3151

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	80 oz						REMARKS SMO #
RW1	4/16/86	0835		X	Graceland Church	6	6						86 FG 05 S74
													Lot numbers
													80 oz A6023102

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Suzanne Kozlowski	4-16-86 1700	William Sargent 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) William Sargent Jr	Date / Time 4/17/86 11:00AM	Remarks Shipped via Federal Express to: CRL 536 S. Clark 10th floor Chicago IL 60605 Airbill 859 192390 Custody Seals 38224, 38225	

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

5-19270

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: R05-8504-12
PROJECT NAME: NE Gravel
SAMPLERS: (Signature) Suzanne Kozlowski

Superfund 3151

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	80 oz	40 mL	250 mL	1 liter			REMARKS SMO
RW1	4/16/86	0835		X	Graceland Church	7		4	1	2			86 FG 05 S74
FB1	4/16/86	0835		X	Blank	7	2	2	1	2			86 FG 05 R07

Lot numbers
80 oz A6023102
VOA 25261482
1 liter C6034032

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Suzanne Kozlowski	4/16-86 1700	William Sargent			
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) William Sargent	Date / Time 4/17/86 11:00AM	Remarks Shipped via Federal Express to: CRL 536 S. Clark Chicago IL 60605 Airbill 859192390 Custody Seals 38222, 38223	

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

5-19004

ACTIVITY#C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: MINERALS - NUTRIENTS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER PHENOLICS UG PHENOL/L MIN 74818	WATER CYANIDE UG CN/L MIN 74919	WATER GROSS ALPHA P CI/L MIN 75020	WATER CR+6 UG CR+6/L MIN 74616	WATER MERCURY UG HG/L MIN 74717
86FG05S74	5-93902 GRACELAND CHURCH		✓			
86FG05R07	BLANK 5-93911		✓			
86FG05S74	5-93903 GRACELAND CHURCH					✓
86FG05R07	BLANK 5-93912					✓

ACTIVITY# C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	TOTAL METALS WATER TOTAL ICAP UG/L MET111	TOTAL METALS WATER AS UG/L MET161	TOTAL METALS WATER PB UG/L MET1191	TOTAL METALS WATER SB UG/L MET1201	TOTAL METALS WATER SE UG/L MET1211	TOTAL METALS WATER TL UG/L MET1221
86FG05S74	5-93901 GRACELAND CHURCH	✓	✓	✓	✓	✓	
86FG05R07	BLANK 5-93910	✓	✓	✓	✓	✓	

ACTIVITY # C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: PESTICIDES AND PCB'S

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/14/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER TRIHALOMETHANES UG/L PES17414	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES 17134	WATER HERBICIDES UG/L PES 17424	WATER OIL AND GREASE MG/L PES 17439
86FG05S74	5-54343-44-45 GRACELAND CHURCH		✓	✓		
86FG05R07	BLANK 5-93906		✓	✓		

ACTIVITY#C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER VOLATILE ORGANICS SCAN UG/L TOX 17564	WATER ABN ORGANICS SCAN UG/L TOX 17574	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
86FG05S74	5-54349-50/5-93904-05 GRACELAND CHURCH	✓			
86FG05R07	BLANK 5-93908-09	✓			
86FG05S74	5-54346-47-48 GRACELAND CHURCH		✓		
86FG05R07	BLANK 5-93907		✓		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 4-25-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: _____

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

TRANSMITTED BY
Griffin
APR 28 1986
U.S. EPA CENTRAL REGIONAL LAB
CLARK STREET

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151 Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
As	0.7 µg/L	≤ 2 µg/L	CONTROL STANDARD	92-95%	90-110%	CONTROL STANDARD
Pb	0.4 µg/L	"	"	105-106%	90-110%	"
Sb	0.5 µg/L	"	"	99-104%	"	"
Se	0.6 µg/L	"	"	91-97%	"	"
~~Tl~~						

COMMENT:

QC FLAGS:

4/21/86 ACTIVITY# C48122 GTFA05WUZZ

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	TOTAL METALS WATER TOTAL ICAP UG/L MET111	TOTAL METALS WATER AS UG/L MET161	TOTAL METALS WATER PB UG/L MET1191	TOTAL METALS WATER SB UG/L MET1201	TOTAL METALS WATER SE UG/L MET1211	TOTAL METALS WATER TL UG/L MET1221
86FG05S74	5-93901 GRACELAND CHURCH	✓	✓ <2	✓ 2.7	✓ <2	✓ <2	
86FG05R07	BLANK 5-93910	✓	✓ <2.	✓ <2	✓ <2	✓ <2	
			I.L	I.L	I.L	I.L	
			4.18.86.	4.18.86.	4.18.86	4.18.86.	

JVM
21 Apr 86

---

* FLAMELESS * CSC VERSION 1.00 *

NAME OF ANALYST ---: I.L
DATE OF ANALYSIS --: 04-18-1986
PARAMETER NAME ----: AS
DATA SET # --------: SF3151

SAMPLE NO.	CONC.	R VALUE	SLOPE	
R.BL	-.3044468	.999947	.01281	
AQC 23.5	21.60968	.9997811	.01404	% Dev = 8.1
FG05S74	-.224184	.9999548	.01472	
FG05R07	-.1874266	.9999409	.01654	
AQC 23.5	22.3772	.9998532	.01527	% Dev -4.7

R.BL

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	-.003	-3.899963E-03	-8.999633E-04	23.0762 %
10	.124	.1242001	2.000481E-04	.1610693 %
20	.25	.2523001	2.300054E-03	.9116343 %
30	.382	.3804001	-1.599938E-03	-.4205935 %

AQC 23.5

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.307	.3033999	-3.600121E-03	-1.186593 %
10	.439	.4437999	4.799903E-03	1.081547 %
20	.583	.5841999	1.199901E-03	.2053922 %
30	.727	.7246	-2.400041E-03	-.3312228 %

FG05S74

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	-.002	-3.299988E-03	-1.299988E-03	39.39371 %
10	.143	.1439	9.000003E-04	.6254345 %
20	.289	.2911	2.099991E-03	.7213985 %
30	.44	.4383	-1.700014E-03	-.3878654 %

FG05R07

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	-.001	-3.100037E-03	-2.100037E-03	67.74231 %
10	.16	.1623	2.299965E-03	1.417107 %
20	.326	.3277	1.699954E-03	.5187533 %
30	.495	.4931	-1.900047E-03	-.385327 %

AQC 23.5

SPIKE	MEASURED	CALC.	ERROR	PER CENT

0	.344	.3417	-2.300054E-03	-.673121 %
10	.493	.4944	1.399994E-03	.2831703 %
20	.643	.6471001	4.100025E-03	.6335998 %
30	.803	.7998001	-3.199935E-03	-.4000919 %

JVM
21 Apr 84

As/4.1786/I.L

	-0.009	
	0.000	AZ
1	-0.003	
2	0.124	
3	0.250	
4	0.382	
5	0.307	
6	0.439	
7	0.583	
8	0.727	
9	-0.002	
10	0.143	
11	0.289	
12	0.440	
13	-0.001	
14	0.160	
15	0.326	
16	0.495	
17	0.344	
18	0.493	
19	0.643	
20	0.803	

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* FLAMELESS * CSC VERSION 1.00 *

JVM 21 Apr 86

NAME OF ANALYST ---: I.L
DATE OF ANALYSIS --: 04-18-1986
PARAMETER NAME ----: PB
DATA SET # --------: SF3151

SAMPLE NO.	CONC.	R VALUE	SLOPE	
R.BL	.1494574	.9999963	.00736	
AQC 21.75	22.74928	.9999631	7.020001E-03	%Dev -4.6
FG05S74	2.678875	.9999806	6.009999E-03	
FG05R07	.7713507	.9999773	7.260001E-03	
AQC 21.75	23.11709	.999947	7.089996E-03	%Dev - 6.3

R.BL

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.001	1.100006E-03	1.00006E-04	9.091404 %
10	.075	.0747	-3.000051E-04	-.4016132 %
20	.148	.1483	2.999902E-04	.202286 %
30	.222	.2219	-1.000166E-04	-4.507283E-02 %

AQC 21.75

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.16	.1597	-3.000498E-04	-.1878835 %
10	.229	.2299	8.999407E-04	.3914489 %
20	.301	.3001	-9.000301E-04	-.2999101 %
30	.37	.3703	2.999604E-04	.0810047 %

FG05S74

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.016	1.610004E-02	1.000352E-04	.6213354 %
10	.076	7.620002E-02	2.000183E-04	.2624911 %
20	.137	.1363	-6.99997E-04	-.5135708 %
30	.196	.1964	3.999919E-04	.2036619 %

FG05R07

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.005	5.600007E-03	6.000065E-04	10.71439 %
10	7.900001E-02	7.820001E-02	-7.999912E-04	-1.023006 %
20	.151	.1508	-1.999736E-04	-.1326085 %
30	.223	.2234	4.000068E-04	.1790541 %

AQC 21.75

SPIKE	MEASURED	CALC.	ERROR	PER CENT

0	.164	.1639001	-9.992719E-05	-6.096836E-02 %
10	.234	.2348001	8.000434E-04	.3407339 %
20	.307	.3057	-1.300007E-03	-.4252559 %
30	.376	.3766	5.999804E-04	.159315 %

JVM
21 Apr 86

Pb/4.17.86/I.L

	-0.006	
	0.000	AZ
1	0.001	
2	0.075	
3	0.148	
4	0.222	
5	0.160	
6	0.229	
7	0.301	
8	0.370	
9	0.016	
10	0.078	
11	0.137	
12	0.196	
13	0.005	
14	0.079	
15	0.151	
16	0.223	
17	0.164	
18	0.234	
19	0.307	
20	0.376	

JVM
21 Apr 86

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* FLAMELESS * CSC VERSION 1.00 *

NAME OF ANALYST ---: I.L
DATE OF ANALYSIS --: 04-18-1986
PARAMETER NAME ----: SB
DATA SET # --------: SF3116 SF3151

SAMPLE NO.	CONC.	R VALUE	SLOPE	
R.BL	-.2640525	.9989556	.01174	
AQC 10.15	10.08362	.9999499	.01196	% Dev -0.7
FC05S49	.1760564	.9994798	.0142	
FC05R04	-6.573442E-02	.9993909	.01217	
FG05R07	-.6340331	.9989697	.01246	
FG05S74	-.3924393	.9988549	.01376	
FC05S49DUP	-.1694915	.9996899	.01475	
AQC 10.15	10.53853	.9998747	.01207	% Dev - 3.8.

R.BL

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.001	-3.099976E-03	-4.099976E-03	132.2583 %
10	.105	.1143	9.300023E-03	8.136503 %
20	.238	.2317	-6.299988E-03	-2.719028 %
30	.348	.3491	1.100034E-03	.3151055 %

AQC 10.15

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.12	.1206	6.0004E-04	.4975454 %
10	.24	.2402	2.000332E-04	8.327776E-02 %
20	.362	.3598	-2.199978E-03	-.6114446 %
30	.478	.4794	1.400024E-03	.2920367 %

FC05S49

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	8.000001E-03	.0025	-5.500001E-03	-220 %
10	.138	.1445	6.499961E-03	4.498245 %
20	.283	.2864999	3.499925E-03	1.221615 %
30	.433	.4284999	-4.500121E-03	-1.050204 %

FC05R04

SPIKE	MEASURED	CALC.	ERROR	PER CENT

0	.004	-7.999878E-04	-4.799988E-03	600.0077 %
10	.116	.1209	4.900016E-03	4.052949 %
20	.238	.2426	4.600019E-03	1.896133 %
30	.369	.3643	-4.699976E-03	-1.290139 %

Jun 21 Apr 81

FG05R07

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	-.001	-7.900055E-03	-6.900055E-03	87.34186 %
10	.108	.1167	8.699969E-03	7.454988 %
20	.238	.2413	3.299981E-03	1.367585 %
30	.371	.3659	-5.099982E-03	-1.393819 %

FG05S74

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.001	-5.399964E-03	-6.399964E-03	118.5187 %
10	.12	.1322	1.220001E-02	9.228445 %
20	.275	.2698	-5.200029E-03	-1.927364 %
30	.408	.4073999	-6.000698E-04	-.1472926 %

FC05S49DUP

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.002	-.0025	-.0045	180 %
10	.139	.145	6.000012E-03	4.137939 %
20	.291	.2925	1.500011E-03	.5128241 %
30	.443	.44	-2.999991E-03	-.6818162 %

AQC 10.15

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.126	.1272001	1.200065E-03	.9434468 %
10	.248	.2479	-9.997189E-05	-4.032751E-02 %
20	.372	.3686	-3.400028E-03	-.9224167 %
30	.487	.4892999	2.299935E-03	.470046 %

Sb / 4.16.86 / I.L

		-0.021
		0.000 AZ
RBL	1	0.001
	2	0.105
	3	0.238
	4	0.348
HQC	5	0.120
	6	0.240
	7	0.362
	8	0.478
COSMA	9	0.008
	10	0.138
	11	0.283
	12	0.433
COSMA	13	0.004
	14	0.116
	15	0.238
	16	0.369
605	17	-0.001
ROT	18	0.108
	19	0.238
	20	0.371
605	21	0.001
574	22	0.120
	23	0.275
	24	0.408
Dup	25	0.002
COS	26	0.139
49	27	0.291
	28	0.443
HQC	29	0.126
	30	0.248
	31	0.372
	32	0.497

JVM
21 Apr 86

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* FLAMELESS * CSC VERSION 1.00 *

NAME OF ANALYST ---: I.L
DATE OF ANALYSIS --: 04-18-1986
PARAMETER NAME ----: SE
DATA SET # --------: SF3151

SAMPLE NO.	CONC.	R VALUE	SLOPE	
R.BL	-.7325388	.9989047	.01174	
NBS 9.7	8.820559	.9996149	.01187	%Dev - 9.1
FG05S74	-.1531043	.9999824	.01241	
FG05R07	-.3636363	.999696	.01375	
NBS 9.7	9.417552	.9999341	.01116	%Dev - 2.9

R.BL

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	-.002	-8.600006E-03	-6.600006E-03	76.7442 %
10	.101	.1088	7.799991E-03	7.169109 %
20	.222	.2262	4.199982E-03	1.856756 %
30	.349	.3436	-5.400032E-03	-1.571604 %

NBS 9.7

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	.105	.1047	-2.999827E-04	-.2865164 %
10	.22	.2234	3.399998E-03	1.521933 %
20	.348	.3421	-5.900026E-03	-1.72465 %
30	.458	.4608	2.799988E-03	.6076362 %

FG05S74

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	-.001	-1.900024E-03	-9.000243E-04	47.3691 %
10	.121	.1222	1.199976E-03	.981977 %
20	.246	.2463	2.999753E-04	.1217927 %
30	.371	.3704	-6.000102E-04	-.1619898 %

FG05R07

SPIKE	MEASURED	CALC.	ERROR	PER CENT
0	-.001	-.005	-.004	80 %
10	.128	.1325	4.500017E-03	3.396238 %
20	.267	.2700001	3.000051E-03	1.11113 %
30	.411	.4075001	-3.499955E-03	-.8588845 %

NBS 9.7

SPIKE	MEASURED	CALC.	ERROR	PER CENT

0	.104	.1050999	1.099914E-03	1.046542 %
10	.219	.2167	-2.300039E-03	-1.061393 %
20	.327	.3283	1.300007E-03	.3959815 %
30	.44	.4399001	-9.995699E-05	-2.272266E-02 %

JVR
21 Apr 81

Se/4.18.86/I.L

Jim 21 Apr 86

		-0.001
		0.000 AZ
R	1	-0.002
	2	0.101
	3	0.222
	4	0.349
NBS	5	0.097
	6	0.221
	7	0.352
	8	0.456
NBS	5	0.105
	6	0.220
	7	0.348
	8	0.458
FG05 S74	9	-0.001
	10	0.121
	11	0.246
	12	0.371
FG05 R07	13	-0.001
	14	0.128
	15	0.267
	16	0.411
NBS	17	0.104
	18	0.219
	19	0.327
	20	0.440

extra copy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 4-25-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: _____

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

TRANSMITTED BY
Griffin
APR 28 1986
U.S. EPA CENTRAL REGIONAL LAB
536 S. CLARK STREET
CHICAGO ILLINOIS 60605

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151 Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R*	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
As	0.7µg/L	≤ 2µg/L	CONTROL STANDARD	92-95%	90-110%	CONTROL STANDARD
Pb	0.4µg/L	"	"	105-106%	90-110%	"
Sb	0.5µg/L	"	"	99-104%	"	"
Se	0.6µg/L	"	"	91-97%	"	"
~~Tl~~						

COMMENT:

QC FLAGS:

4/21/86

ACTIVITY# C4817

6TFA05WUZZ

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	TOTAL METALS WATER TOTAL ICAP UG/L MET111	TOTAL METALS WATER AS UG/L MET161	TOTAL METALS WATER PB UG/L MET1191	TOTAL METALS WATER SB UG/L MET1201	TOTAL METALS WATER SE UG/L MET1211	TOTAL METALS WATER TL UG/L MET1221
86FG05S74	5-93901 GRACELAND CHURCH	✓	✓ <2	✓ 2.7	✓ <2	✓ <2	
86FG05R07	BLANK 5-93910	✓	✓ <2.	✓ <2	✓ <2	✓ <2	
			I.L	I.L	I.L	I.L	
			4.18.86.	4.18.86.	4.18.86	4.18.86.	
			C				

5/19/86

NORTH EAST GRAVEL
C48122 GTFADT WD ZZ
SF3151 JR 5-7-86

19 May

DATA SET : SF3151

ELEMENT		FG05R07		FG05S74
AG	ug/L	< 3.00	<	3.00
AL		< 80.0	<	80.0
B		< 80.0	<	80.0
BA		< 5.0		13.7
BE		< 1.00	<	1.00
CD		< 2.00	<	2.00
CO		< 6.00	<	6.00
CR		< 8.00	<	8.00
CU		< 6.0		36.2
FE		< 80.		135.
LI		< 10.0	<	10.0
MN		< 5.00	<	5.00
MO		< 10.0	<	10.0
NI		< 15.0	<	15.0
SN		< 40.0	<	40.0
SR		< 10.0		41.8
TI		< 25.0	<	25.0
V		< 5.00	<	5.00
Y		< 5.00	<	5.00
ZN		< 40.		343.
CA	mg/L	< 0.5		56.6
K		< ~~0.01~~ HMR	< 0.2	0.84 HMR
MG		< 0.1		20.2
NA		< 1.00		1.71

TRANSMITTED BY
MAY 20 1986
U.S. EPA CENTRAL REGIONAL LAB

POTASSIUM DATA IS FROM STD CURVE FLAME AA
5-20-86

* REGRESSION ANALYSIS * CSC VERSION 2.00 *

NAME OF ANALYST ---: HNR
PARAMETER NAME ----: K
DATE OF ANALYSIS --: 05-16-1986

DATA SET NUMBER ---: SF 3138
DU NUMBER ---------: Y905

Jm 19May86

DEGREE OF FIT : 1

EQUATION : CONCENTRATION = -5.78916E-02
+7.47099E+00 * SIGNAL

COEFFICIENT OF DETERMINATION : .9996182

T-A-B-L-E O-F S-T-A-N-D-A-R-D-S

STANDARD	SIGNAL	CONCENTRATION	CALCULATED
1	+0.006	+0.000	-0.014
2	+0.075	+0.500	+0.502
3	+0.144	+1.000	+1.017
4	+0.210	+1.500	+1.511
5	+0.273	+2.000	+1.981

T-A-B-L-E O-F S-A-M-P-L-E-S

SAMPLE I.D.	SIGNAL	CONCENTRATION
1 0I 11503	+0.151	+1.070 x10
2 DUP	+0.152	+1.077 x10
3 SPK	+0.147	+1.040 x10
4 0I 11502	+0.179	+1.279 x20
5 DUP	+0.181	+1.294 x20
6 SPK	+0.287	+2.086 x20
7 0I 11501	+0.012	+0.031 x20
8 MUN. DIG.	+0.066	+0.435 x10
9 Prep. BK	+0.009	+0.009 x10
19 FG05574	+0.019	+0.084 x10
20 R07	+0.008	+0.001 x10
CHECK STD	+0.119	+0.831
21 RI02 S65	+0.041	+0.248 x10
22 S66	+0.040	+0.240 x10
23 S67	+0.042	+0.255 x10
24 DUP 67	+0.043	+0.263 x10
25 S68	+0.052	+0.330 x10
26 S69	+0.042	+0.255 x10
27 S70	+0.038	+0.226 x10
28 R71	+0.009	+0.009 x10
29 Prep BK	+0.009	+0.009 x10
30 DUP S74	+0.015	+0.054 x10
31 SPK S65	+0.298	+2.168 x10
31 SPK S65	+0.162	+1.152 x20
CHECK STD	+0.117	+0.816

JVM 19 May 84

CHECK std

True value = 0.79

Measured = 0.831, 0.816 WITHIN ±10%

$\% \text{ dev} = \frac{M - T}{T}$ $\frac{0.831 - 0.79}{0.79} \times 100 = 5.2\%$

$\frac{0.816 - 0.79}{0.79} = 3.3\%$

Duplicates:

SO3	10.70
SO3	10.77

$100 \times \frac{|-.07|}{21.4} = 0.3\%$

SO2	25.88
SO2	41.72

$100 \times \frac{|15.84|}{67.6} = 23\%$

S74	0.84
S74	0.54

$100 \times \frac{|0.3|}{1.38} = 22\%$

Spikes:

Spk SO2	41.72
SO2	25.58
Spk SO3	10.40
SO3	10.70

No Spike for K^+

Spk S65	23.04
S65	2.48

$\% \text{ rec} = \left(\frac{23.04 - 2.48}{20}\right) = 103\%$

Within normal limits

DJ

1-5/4

JM 19 May 86

	0.000	
	0.000	
	0.000	
	0.000	AV
	0.000	AV
	0.000	
	0.000	
	0.000	
	0.000	
	0.006	
	0.006	AV
	0.005	
	0.006	
	0.006	
0	0.006	
	0.006	
	0.006	AV
.006	0.005	
	0.006	
	0.006	
	0.007	
	0.005	
	0.006	AV
	0.076	
	0.074	
	0.075	
	0.075	
	0.075	
	0.075	AV
	0.077	
	0.074	
	0.075	
	0.077	
	0.077	
0.5	0.076	AV
	0.074	
.075	0.075	
	0.075	
	0.074	
	0.075	
	0.075	AV
	0.145	
	0.144	
	0.144	
	0.143	
	0.142	
	0.144	AV
	0.145	
	0.145	
	0.145	
	0.144	
1.0	0.142	
	0.144	AV
.144	0.145	
	0.143	
	0.143	
	0.145	
	0.143	

	0.210	
	0.210	
	0.214	
	0.209	
	0.209	
	0.210	AV
	0.206	
	0.211	
	0.211	
	0.208	
	0.209	
1.5	0.209	AV
	0.214	
.210	0.212	
	0.209	
	0.207	
	0.209	
	0.210	AV
	0.270	
	0.272	
	0.270	
	0.271	
	0.278	
	0.272	AV
	0.275	
	0.275	
	0.275	
2.0	0.269	
	0.273	
	0.273	AV
.273	0.271	
	0.276	
	0.271	
	0.275	
	0.274	
	0.273	AV
	0.152	
	0.155	
	0.152	
	0.152	
	0.151	
	0.153	AV
	0.150	
	0.152	
1	0.151	
	0.148	
	0.152	
	0.151	AV
.151	0.152	
	0.150	
	0.148	
	0.151	
	0.150	
	0.150	AV

	0.154	
	0.152	
	0.153	
	0.152	
	0.151	
	0.152	AV
	0.152	
	0.153	
	0.164	
	0.152	
	0.149	
2	0.154	AV
	0.149	
	0.151	
.152	0.151	
	0.153	
	0.154	
	0.152	AV
	0.145	
	0.144	
	0.148	
	0.145	
	0.145	
	0.145	AV
3	0.147	
	0.146	
	0.146	
.147	0.147	
	0.149	
	0.147	AV
	0.148	
	0.147	
	0.149	
	0.146	
	0.148	
	0.148	AV
	0.179	
	0.179	
	0.181	
	0.179	
	0.179	
	0.180	AV
	0.183	
	0.178	
4	0.180	
	0.176	
	0.177	
.179	0.179	AV
	0.181	
	0.179	
	0.178	
	0.178	
times 20	0.180	
	0.179	AV

	0.181	
	0.185	
	0.183	
	0.184	
	0.181	
	0.183	AV
	0.181	
	0.183	
5	0.178	
	0.178	
	0.177	
.181	0.179	AV
	0.178	
	0.184	
	0.180	
times 20	0.181	
	0.181	
	0.181	AV

	0.284	
	0.288	
	0.286	
	0.285	
	0.287	
	0.286	AV
*	0.289	
	0.286	
6	0.288	
	0.289	
	0.281	
.287	0.286	AV
	0.293	
	0.284	
Spk SO2	0.291	
	0.288	
	0.286	
	0.288	AV

	0.012	
	0.013	
	0.012	
	0.012	
	0.011	
	0.012	AV
	0.012	
7	0.013	
	0.012	
	0.012	
.012	0.013	
	0.012	AV
	0.013	
times 20	0.012	
	0.013	
	0.012	
	0.012	
	0.013	AV

	0.066	
	0.066	
	0.066	
	0.066	
	0.066	
	0.066	AV
	0.067	
	0.067	
	0.066	
8	0.066	
	0.066	
.066	0.066	AV
	0.065	
	0.064	
	0.066	
	0.065	
	0.065	
	0.065	AV

	0.009	
	0.009	
	0.008	
	0.008	
	0.008	
	0.008	AV
	0.010	
	0.008	
9	0.008	
	0.009	
	0.009	
.009	0.009	AV
	0.008	
	0.009	
	0.009	
	0.010	
	0.009	
	0.009	AV

	0.019	
	0.019	
	0.019	
	0.019	
	0.018	
	0.019	AV
	0.017	
	0.019	
19	0.018	
	0.019	
	0.018	
.019	0.018	AV
	0.018	
	0.018	
	0.020	
	0.019	
	0.018	
	0.019	AV

	0.008	
	0.007	
	0.007	
	0.007	
	0.008	
	0.007	AV
	0.007	
	0.009	
	0.008	
20	0.008	
	0.008	
.008	0.008	AV
	0.007	
	0.008	
	0.008	
	0.008	
	0.009	
	0.009	AV

	0.121	
	0.118	
	0.118	
	0.119	
0.19	0.120	
	0.119	AV
	0.117	
	0.116	
check std	0.118	
	0.118	
	0.119	
.119	0.118	AV
	0.120	
	0.118	
	0.119	
	0.118	
	0.119	
	0.119	AV

	0.039	
	0.039	
	0.039	
	0.041	
	0.041	
	0.040	AV
	0.041	
	0.041	
21	0.040	
	0.041	
.041	0.040	
	0.041	AV
	0.040	
	0.041	
	0.041	
	0.041	
	0.040	
	0.041	AV

jvm 19 May 88

Jm 19 May 86

22

	0.040	
	0.039	
	0.040	
	0.039	
	0.039	
	0.040	AV
	0.040	
	0.040	
	0.041	
	0.040	
	0.039	
.040	0.040	AV
	0.040	
	0.039	
	0.039	
	0.040	
	0.040	
	0.040	AV

23

	0.042	
	0.042	
	0.043	
	0.042	
	0.041	
	0.042	AV
	0.042	
	0.042	
	0.044	
	0.042	
	0.043	
.042	0.042	AV
	0.043	
	0.042	
	0.042	
	0.042	
	0.042	
	0.042	AV

24

	0.043	
	0.043	
	0.043	
	0.044	
	0.043	
	0.043	AV
	0.043	
	0.043	
	0.043	
	0.043	
	0.044	
.043	0.043	AV
	0.043	
	0.044	
	0.043	
	0.043	
	0.044	
	0.043	AV

25

	0.052	
	0.052	
	0.051	
	0.052	
	0.052	
	0.052	AV
	0.052	
	0.053	
	0.053	
	0.052	
	0.053	
.052	0.052	AV
	0.053	
	0.052	
	0.053	
	0.053	
	0.052	
	0.053	AV

26

	0.043	
	0.042	
	0.043	
	0.043	
	0.043	
	0.043	AV
	0.042	
	0.042	
	0.042	
	0.042	
	0.042	
.042	0.042	AV
	0.042	
	0.044	
	0.043	
	0.042	
	0.044	
	0.043	AV

27

	0.038	
	0.039	
	0.038	
	0.038	
	0.038	
	0.038	AV
	0.038	
	0.039	
	0.039	
	0.038	
	0.038	
.038	0.038	AV
	0.038	
	0.038	
	0.037	
	0.039	
	0.037	
	0.038	AV

28

	0.008	
	0.008	
	0.009	
	0.009	
	0.010	
	0.009	AV
	0.009	
	0.008	
	0.008	
	0.009	
	0.009	
.009	0.009	AV
	0.009	
	0.009	
	0.008	
	0.009	
	0.008	
	0.008	AV

29

	0.009	
	0.009	
	0.008	
	0.008	
	0.009	
	0.009	AV
	0.008	
	0.009	
	0.009	
	0.009	
	0.009	
.009	0.009	AV
	0.009	
	0.008	
	0.009	
	0.008	
	0.009	
	0.009	AV

30

	0.015	
	0.015	
	0.015	
	0.016	
	0.015	
	0.015	AV
	0.014	
	0.015	
	0.016	
	0.015	
	0.015	
.015	0.015	AV
	0.016	
	0.015	
	0.016	
	0.015	
	0.016	
	0.016	AV

JVM
17 May 86

	0.300	
	0.306	
	0.292	
	0.292	
	0.295	
	0.297	AV
	0.305	
	0.296	
31	0.297	
	0.303	
	0.298	
298	0.300	AV
	0.291	
	0.299	
	0.299	
	0.297	
	0.298	
	0.297	AV
(31) diluted	0.163	
	0.164	
	0.160	
5 in 100	0.166	
	0.161	
	0.163	AV
	0.163	
	0.163	
	0.160	
Spk 501	0.160	
	0.160	
162	0.161	AV
	0.165	
dilu 20	0.164	
	0.161	
	0.162	
	0.161	
	0.163	AV
	0.117	
	0.114	
	0.117	
	0.115	
	0.118	
	0.116	AV
	0.118	
	0.117	
check std	0.117	
	0.119	
	0.118	
.117	0.118	AV
	0.118	
	0.116	
	0.118	
	0.117	
	0.118	
	0.118	AV

Jun 19 May 88

Run No. 524

Prep. by JR Date 5-5-88 Anal. by JR Date

Beaker No.	Data Set	Sample	Notes	Beaker No.	Data Set	Sample	Notes
1	3166	860I11S03	ILD 100ml → 10ml	26	SF3138	S69	S02
2		DUP S03		27		S70	
3		SPK S03		28		R71	
4		860I11S02	1.023g → 100ml	29		Prep BK	
5		DUP S02	1.050g	30		DUP S74	
6		SPK S02	1.162g	31		SPK S65	
7		860I11S01		32	SF3166	Prep BK	sediment.
8		1565 4174 MUN-DIG SLUDGE	0.510g → 100ml	33			
9		Prep BK		34			
10		S03	AA FURNACE	35			
11		DUP S03		36			
12		SPK S03		37			
13		S02	1.150g	38			
14		DUP S02	1.010g	39			
15		SPK S02	1.040g	40			
16		MUN-DIG SLUDGE	500g → 100ml	41			
17		S01		42			
18		Prep BK		43			
19	SF3157	86FG05S74	S02ml → 50ml	44			
20		R07		45			
21	SF3138	86RI02S65		46			
22		S66		47			
23		S67		48			
24		D67		49			
25		S68		50			

```
BYE

>RUN BRNEDT

INPUT FILE NAME ? RUN524

     TYPES OF VIEW


     FULL  VIEW  --  [FU]
     BRIEF VIEW  --  [BR]
     NONE        --  [NO]

ENTER THE TYPE OF VIEW [FU|BR|NO] : FU

     TEXT STRING                    BLOCK NO.      ERROR

 METALS1/AQC.005/C                   2
 METALS2/AQC.005/C                   4
 SF3151/FG05S74/S                   6
 SF3151/FG05R07/S                   8
 SF3151/FG05R07/L                  10          YES
 SF3151/FG05R07/U                  12          YES
 @SEEC              14             YES
 SF3151/FG05R07/U                  16          YES
 SF3138/RI02S65/S                  18
 SF3138/RI02S66/S                  20
 SF3138/RI02S67/S                  22
 SF3138/RI02D67/S                  24
 SF3138/RI02S68/S                  26
 SF3138/RI02S69/S                  28
 SF3138/RI02S70/S                  30
 SF3138/RI02R71/S                  32
 SF3138/RI02R71/U                  34          YES
 METALS1/BLANKS1/B                   36
 SF3151/FG05S74/D                  38
 SF3151/FG05S74/L                  40          YES
 SF3138/RI02S65/P                  42
 SF3138/RI02S65/L                  44          YES
 METALS2/AQC.005/C                   46
 METALS3/AQC.005/C                   48
 METALS4/AQC.005/C                   50


     STRING [IN]=STRING


     STRING [IN]     : String to be changed
              =      : Must be part of INPUT to delimit the string
     STRING          : Data set [*]/Sample ID [*]/QC ID [*]
                /'s  Must appear on right of '=' sign
                *'s  Apply only if /'s appear in STRING [IN]
     '.' [Period]    : To terminate Text Editing Session


TX>.
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JM 19 May 86

NUMBER OF BLANK(s) TO BE REPORTED : 1

DL1:[001,054]RUN524.BRN 07-MAY-86 14:12:37 PAGE 1

DATA SET : METALS1

ELEMENT	DET LIM	BLANKS1
AG	3.000	0.206
AL	80.0	24.3
B	80.0	20.8
BA	5.00	1.21
BE	1.000	0.130
CD	2.000	0.717
CO	6.000	-0.235
CR	8.000	-0.405
CU	6.00	1.85
FE	80.0	42.8
LI	10.000	-0.317
MN	5.000	0.466
MO	10.000	-0.117
NI	15.000	-0.588
~~P~~	~~1.0~~	~~23.9~~
PB	70.00	6.09
SN	40.000	-0.984
SR	10.000	0.477
TI	25.00	8.32
~~TL~~	~~1.00~~	~~5.59~~
V	5.000	-0.287
Y	5.000	0.037
ZN	40.00	4.97
~~BA~~	~~0.500~~	~~0.065~~
CA	0.500	0.075
~~K~~	~~2.00~~	~~7.38~~
MG	0.100	0.025
NA	1.000	0.293
~~AL~~	~~20.000~~	0.004
FE	~~20.000~~	0.050
~~ZN~~	~~20.000~~	~~-0.034~~

Not reported

reported elements are all in control

RT

JM

JM 19May86

DL1:[001,054]RUN524.BRN 07-MAY-86 14:14:48 PAGE 1

DATA SET : METALS1 SAMPLE ID : AQC.005

ELEMENT	TRUE	MEASURED	% DEV
AG	120.00	118.00	-1.51
AL	4100.00	4320.00	5.30
B	306.000	304.000	-0.519
BA	186.000	187.000	0.658
BE	216.00	214.00	-1.09
CD	220.00	213.00	-2.80
CO	176.000	177.000	0.526
CR	705.00	728.00	3.36
CU	690.000	690.000	-0.045
FE	13700.000	13800.000	0.686
LI	132.00	131.00	-1.31
MN	363.000	364.000	0.361
MO	232.000	232.000	-0.074
NI	1180.00	1160.00	-1.63
~~P~~	~~3560.000~~	~~3520.000~~	~~0.985~~
PB	425.00	438.00	2.84
SN	211.00	219.00	4.01
SR	157.00	154.00	-1.34
TI	234.000	235.000	0.432
~~TL~~	~~1.~~	~~20.~~	~~1850.~~
V	265.00	269.00	1.55
Y	1180.000	1190.000	0.065
ZN	2630.000	2650.000	0.866
~~CA~~	~~85.0~~	~~103.0~~	~~21.2~~
CA	71.700	72.100	0.553
~~[illegible]~~	~~6.8~~	~~8.4~~	~~22.1~~
MG	5.37	5.52	2.83
NA	17.70	17.50	-1.12
~~AL~~	~~4.06~~	~~4.14~~	~~1.95~~
~~FE~~	~~14.00~~	~~13.80~~	~~-1.62~~
~~ZN~~	~~2.65~~	~~2.51~~	~~-5.13~~

printed out by mistake

maintenance on channel

to be redone: Not reported by ICP

JR
JM 19 May 86

DATA SET : METALS2 SAMPLE ID : AQC.005

ELEMENT	TRUE	MEASURED	% DEV
AG	120.000	120.000	0.008
AL	4100.00	4340.00	5.70
B	306.000	304.000	-0.594
BA	186.000	188.000	0.850
BE	216.000	215.000	-0.569
CD	220.00	214.00	-2.41
CO	176.000	178.000	0.885
CR	705.00	724.00	2.79
CU	690.000	693.000	0.416
FE	13700.00	13800.00	1.07
LI	132.000	131.000	-0.941
MN	363.000	366.000	0.770
MO	232.00	237.00	1.88
NI	1180.000	1170.000	-0.881
~~P~~	~~3560.000~~	~~3560.000~~	~~0.055~~
PB	425.000	425.000	-0.145
SN	211.00	223.00	5.89
SR	157.000	155.000	-0.893
TI	234.000	236.000	0.911
~~[illegible]~~	~~1.~~	~~30.~~	~~2870.~~
V	265.00	272.00	2.63
Y	1180.000	1190.000	0.497
ZN	2630.00	2670.00	1.30
~~CA~~	~~85.0~~	~~103.0~~	~~21.2~~
CA	71.700	72.300	0.909
~~[illegible]~~	~~6.8~~	~~9.4~~	~~37.3~~
MG	5.37	5.54	3.17
NA	17.700	17.600	-0.797
~~AL~~	~~4.06~~	~~4.16~~	~~2.35~~
~~FE~~	~~14.00~~	~~13.80~~	~~-1.46~~
~~ZN~~	~~2.65~~	~~2.52~~	~~-4.99~~

JD
JM 19May86

DATA SET : METALS2 SAMPLE ID : AQC.005

ELEMENT	TRUE	MEASURED	% DEV
AG	120.000	120.000	0.248
AL	4100.00	4280.00	4.21
B	306.000	306.000	-0.092
BA	186.00	190.00	2.33
BE	216.000	214.000	-0.793
CD	220.000	219.000	-0.287
CO	176.000	176.000	-0.106
CR	705.00	727.00	3.18
CU	690.000	684.000	-0.942
FE	13700.000	13800.000	0.631
LI	132.000	134.000	0.933
MN	363.000	362.000	-0.187
MO	232.00	236.00	1.70
NI	1180.00	1160.00	-1.23
~~P~~	~~3560.000~~	~~3560.000~~	~~0.124~~
PB	425.00	450.00	5.88
SN	211.0	238.0	13.0
SR	157.00	154.00	-1.53
TI	234.000	236.000	0.744
~~TL~~	~~1.~~	~~72.~~	~~7050.~~
V	265.00	269.00	1.57
Y	1180.000	1180.000	-0.609
ZN	2630.00	2680.00	1.84
~~GA~~	~~85.0~~	~~103.0~~	~~21.2~~
CA	71.700	72.300	0.821
~~K~~	~~7.~~	~~16.~~	~~135.~~
MG	5.37	5.48	1.98
NA	17.70	17.50	-1.55
~~AL~~	~~4.06~~	~~4.16~~	~~2.37~~
~~FE~~	~~14.000~~	~~14.000~~	~~-0.605~~
~~ZN~~	~~2.65~~	~~2.82~~	~~6.20~~

JN
JKM 19May86

DATA SET : METALS3 SAMPLE ID : AQC.005

ELEMENT	TRUE	MEASURED	% DEV
AG	120.000	120.000	0.091
AL	4100.00	4300.00	4.77
B	306.00	312.00	2.02
BA	186.00	191.00	2.66
BE	216.000	216.000	-0.225
CD	220.000	219.000	-0.425
CO	176.000	177.000	0.599
CR	705.00	730.00	3.63
CU	690.000	690.000	0.016
FE	13700.00	13800.00	1.31
LI	132.00	135.00	1.81
MN	363.000	365.000	0.472
MO	232.00	238.00	2.53
NI	1180.000	1170.000	-0.731
~~P~~	~~3560.00~~	~~3610.00~~	~~1.35~~
PB	425.00	446.00	4.94
SN	211.0	247.0	17.3
SR	157.00	155.00	-1.07
TI	234.00	237.00	1.26
~~TL~~	~~1.~~	~~69.~~	~~6820.~~
V	265.00	269.00	1.45
Y	1180.000	1180.000	-0.146
ZN	2630.00	2700.00	2.57
~~CA~~	~~85.0~~	~~103.0~~	~~21.2~~
CA	71.70	72.70	1.35
~~K~~	~~6.8~~	~~10.5~~	~~52.7~~
MG	5.37	5.50	2.47
NA	17.70	17.50	-1.12
~~AL~~	~~4.06~~	~~4.18~~	~~2.80~~
~~FE~~	~~14.000~~	~~14.000~~	~~-0.356~~
~~ZN~~	~~2.65~~	~~2.83~~	~~6.91~~

DATA SET : METALS4 SAMPLE ID : AQC.005

ELEMENT	TRUE	MEASURED	% DEV
AG	120.000	119.000	-0.619
AL	4100.00	4280.00	4.38
B	306.00	310.00	1.39
BA	186.00	191.00	2.83
BE	216.000	216.000	-0.112
CD	220.000	218.000	-0.528
CO	176.000	177.000	0.300
CR	705.00	719.00	2.08
CU	690.000	689.000	-0.154
FE	13700.00	13900.00	1.38
LI	132.00	134.00	1.28
MN	363.000	365.000	0.538
MO	232.000	233.000	0.508
NI	1180.000	1170.000	-0.860
~~P~~	~~3560.00~~	~~3630.00~~	~~2.05~~
PB	425.00	451.00	6.01
SN	211.00	221.00	5.01
SR	157.00	155.00	-1.10
TI	234.00	237.00	1.23
~~TL~~	~~1.~~	~~20.~~	~~1930.~~
V	265.00	269.00	1.45
Y	1180.000	1180.000	-0.121
ZN	2630.00	2700.00	2.54
~~CA~~	~~85.0~~	~~103.0~~	~~21.2~~
CA	71.70	72.70	1.36
~~K~~	~~6.8~~	~~10.6~~	~~54.7~~
MG	5.37	5.50	2.43
NA	17.70	17.60	-1.03
~~AL~~	~~4.06~~	~~4.18~~	~~2.87~~
~~FE~~	~~14.000~~	~~14.000~~	~~-0.057~~
~~ZN~~	~~2.65~~	~~2.83~~	~~6.76~~

JR
JM 19 May 86

DATA SET : SF3151 SAMPLE ID : FG05S74

ELEMENT	SAMPLE	DUPLICATE	AVERAGE	R P D
AG	-1.2	-1.7	-1.5	-31.7 ✓
AL	-32.0	-25.0	-28.5	-24.9 ✓
B	38.2	51.8	45.0	30.3
BA	13.7	16.0	14.8	15.5 ✱
BE	0.06	0.05	0.06	8.62
CD	1.	0.	0.	140.
CO	-0.	-2.	-1.	-173.
CR	-0.8	-1.4	-1.1	-52.1
CU	36.20	34.20	35.20	5.85
FE	135.0	51.9	93.4	88.9
LI	5.35	5.51	5.43	2.96
MN	1.8	1.5	1.7	19.7
MO	-3.	-0.	-2.	-150.
NI	-0.	-4.	-2.	-164.
SN	24.400	24.200	24.300	0.572
SR	41.80	40.90	41.40	2.18
TI	7.3	8.3	7.8	12.0
V	1.2	0.8	1.0	43.8
Y	0.	-1.	-0.	-2780.
ZN	343.00	320.00	332.00	6.91
~~BA~~	~~76.30~~	~~72.80~~	~~74.60~~	~~4.62~~
CA	56.60	55.20	55.90	2.53
~~K~~	~~3.25~~	~~3.11~~	~~3.18~~	~~4.32~~
MG	20.20	19.50	19.80	3.44
NA	1.710	1.710	1.710	0.130

RECNM= 23

SET PAPER AT TOP OF FORM AND

JM
JVM
19May86

DL1:[001,054]RUN524.BRN 07-MAY-86 14:42:09 PAGE 1

DATA SET : SF3138 SAMPLE ID : RI02S65

ELEMENT	SAMPLE	SPIKE	SPIKE ADDED	% RECOVERY
AG	-0.9	47.3	50.0	96.4
AL	-43.6	722.0	800.0	95.7
B	184.0	941.0	800.0	94.6
BA	355.0	551.0	200.0	97.8
BE	-0.1	9.3	10.0	94.0
CD	-0.2	22.3	25.0	89.7
CO	-1.5	95.4	100.0	96.8
CR	-1.4	95.1	100.0	96.5
CU	3.0	51.2	50.0	96.3
FE	1630.0	2390.0	800.0	96.0
LI	14.	71.	54.	106.
MN	30.8	78.9	50.0	96.2
MO	4.3	103.0	100.0	98.9
NI	0.8	147.0	150.0	97.6
SN	9.2	381.0	400.0	93.0
SR	968.0	1940.0	1000.0	97.5
TL	7.2	106.0	100.0	98.5
V	0.0	48.3	50.0	96.6
Y	0.0	47.9	50.0	95.7
ZN	256.0	652.0	400.0	98.8
~~CA~~	~~103.000~~	~~103.000~~	~~50.000~~	~~0.000~~
CA	86.1	135.0	50.0	97.8
~~K~~	~~4.~~	~~26.~~	~~20.~~	~~110.~~
MG	34.7	55.1	25.0	81.8
NA	8.	59.	50.	101.

extra copy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 4-25-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: _____

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

TRANSMITTED BY

APR 28 1986

U S EPA, CENTRAL REGIONAL LAB
536 S. CLARK STREET
CHICAGO ILLINOIS 60605

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151 Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
VOA	NOT AVAILABLE *	≤ 22%	DUPLICATE MATRIX SPIKES	83-102%	77-133%	MATRIX SPIKES

COMMENT: * EQUIPMENT FAILURE - SURROGATES - 5% RPD

QC FLAGS:

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05#74

Data Set #: SF-3151
Matrix : WATER

	CAS #	Compounds	Concentration (PPB)	
1.	74-87-3	Chloromethane	10	U
2.	74-83-9	Bromomethane	10	U
3.	75-01-4	Vinyl Chloride	10	U
4.	75-00-3	Chloroethane	1.5	U
5.	75-09-2	Methylene Chloride	1.0	U
6.	107-02-8	Acrolein	100	U
7.	67-64-1	Acetone	75	U
8.	107-37-1	Acrylonitrile	50	U
9.	75-15-0	Carbon Disulfide	3.0	U
10.	75-35-4	1,1-Dichloroethene	1.5	U
11.	75-35-3	1,1-Dichloroethane	1.5	U
12.	156-60-5	trans-1,2-Dichloroethene	1.5	U
13.	67-66-3	Chloroform	1.5	U
14.	78-93-3	2-Butanone	50	U
15.	107-06-2	1,2-Dichloroethane	1.5	U
16.	71-55-6	1,1,1-Trichloroethane	1.5	U
17.	56-23-5	Carbon Tetrachloride	1.5	U
18.	108-05-4	Vinyl Acetate	15	U
19.	75-27-4	Bromodichloromethane	1.5	U
20.	78-87-5	1,2-Dichloropropane	1.5	U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0	U
22.	79-01-6	Trichloroethene	1.5	U
23.	71-43-2	Benzene	1.5	U
24.	124-48-1	Dibromochloromethane	1.5	U
25.	79-00-5	1,1,2-Trichloroethane	1.5	U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0	U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5	U
28.	75-25-2	Bromoform	1.5	U
29.	108-10-1	4-Methyl-2-pentanone	2.5	U
30.	519-78-6	2-Hexanone	3.6	U
31.	127-18-4	Tetrachloroethene	1.5	U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5	U
33.	108-88-3	Toluene	1.5	U
34.	108-90-7	Chlorobenzene	1.5	U
35.	100-41-4	Ethylbenzene	1.5	U
36.	100-42-5	Styrene	1.0	U
37.	108-38-3	m-Xylene	2.0	U
38.		o/p-Xylene (total)	2.5	U

Data Qualifiers:

U -Compound was analyzed for but not detected. The value reported is the method detection limit for reagent water.

SLC -Suspected Laboratory Contaminant.

SFC -Suspected Field Contaminant.

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05R07

Data Set #: SF-3151
Matrix : WATER

	CAS #	Compounds	Concentration (PPB)
1.	74-87-3	Chloromethane	10 U
2.	74-83-9	Bromomethane	10 U
3.	75-01-4	Vinyl Chloride	10 U
4.	75-00-3	Chloroethane	1.5 U
5.	75-09-2	Methylene Chloride	1.0 U
6.	107-02-8	Acrolein	100 U
7.	67-64-1	Acetone	75 U
8.	107-37-1	Acrylonitrile	50 U
9.	75-15-0	Carbon Disulfide	3.0 U
10.	75-35-4	1,1-Dichloroethene	1.5 U
11.	75-35-3	1,1-Dichloroethane	1.5 U
12.	156-60-5	trans-1,2-Dichloroethene	1.5 U
13.	67-66-3	Chloroform	1.5 U
14.	78-93-3	2-Butanone	50 U
15.	107-06-2	1,2-Dichloroethane	1.5 U
16.	71-55-6	1,1,1-Trichloroethane	1.5 U
17.	56-23-5	Carbon Tetrachloride	1.5 U
18.	108-05-4	Vinyl Acetate	15 U
19.	75-27-4	Bromodichloromethane	1.5 U
20.	78-87-5	1,2-Dichloropropane	1.5 U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0 U
22.	79-01-6	Trichloroethene	1.5 U
23.	71-43-2	Benzene	1.5 U
24.	124-48-1	Dibromochloromethane	1.5 U
25.	79-00-5	1,1,2-Trichloroethane	1.5 U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0 U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5 U
28.	75-25-2	Bromoform	1.5 U
29.	108-10-1	4-Methyl-2-pentanone	2.5 U
30.	519-78-6	2-Hexanone	3.6 U
31.	127-18-4	Tetrachloroethene	1.5 U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5 U
33.	108-88-3	Toluene	1.5 U
34.	108-90-7	Chlorobenzene	1.5 U
35.	100-41-4	Ethylbenzene	1.5 U
36.	100-42-5	Styrene	1.0 U
37.	108-38-3	m-Xylene	2.0 U
38.		o/p-Xylene (total)	2.5 U

Data Qualifiers:

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SFC -Suspected Field Contaminant.

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05R07

Data Set #: SF-3151
Matrix : WATER

TENTATIVELY IDENTIFIED COMPOUNDS	ESTIMATED CONC.(PPB)
UNKNOWN#1	7.9

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 4-25-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: _____

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Attachment

TRANSMITTED BY

APR 28 1986

U S EPA CENTRAL REGIONAL LAB
536 S CLARK STREET
CHICAGO ILLINOIS 60605

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151

Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
VOA	NOT AVAILABLE *	≤ 22%	DUPLICATE MATRIX SPIKES	83-102%	77-133%	MATRIX SPIKES

COMMENT: * EQUIPMENT FAILURE - SURROGATES - 5% RPD

QC FLAGS:

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05R07

Data Set #: SF-3151
Matrix : WATER

	CAS #	Compounds	Concentration (PPB)	
1.	74-87-3	Chloromethane	10	U
2.	74-83-9	Bromomethane	10	U
3.	75-01-4	Vinyl Chloride	10	U
4.	75-00-3	Chloroethane	1.5	U
5.	75-09-2	Methylene Chloride	1.0	U
6.	107-02-8	Acrolein	100	U
7.	67-64-1	Acetone	75	U
8.	107-37-1	Acrylonitrile	50	U
9.	75-15-0	Carbon Disulfide	3.0	U
10.	75-35-4	1,1-Dichloroethene	1.5	U
11.	75-35-3	1,1-Dichloroethane	1.5	U
12.	156-60-5	trans-1,2-Dichloroethene	1.5	U
13.	67-66-3	Chloroform	1.5	U
14.	78-93-3	2-Butanone	50	U
15.	107-06-2	1,2-Dichloroethane	1.5	U
16.	71-55-6	1,1,1-Trichloroethane	1.5	U
17.	56-23-5	Carbon Tetrachloride	1.5	U
18.	108-05-4	Vinyl Acetate	15	U
19.	75-27-4	Bromodichloromethane	1.5	U
20.	78-87-5	1,2-Dichloropropane	1.5	U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0	U
22.	79-01-6	Trichloroethene	1.5	U
23.	71-43-2	Benzene	1.5	U
24.	124-48-1	Dibromochloromethane	1.5	U
25.	79-00-5	1,1,2-Trichloroethane	1.5	U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0	U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5	U
28.	75-25-2	Bromoform	1.5	U
29.	108-10-1	4-Methyl-2-pentanone	2.5	U
30.	519-78-6	2-Hexanone	3.6	U
31.	127-18-4	Tetrachloroethene	1.5	U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5	U
33.	108-88-3	Toluene	1.5	U
34.	108-90-7	Chlorobenzene	1.5	U
35.	100-41-4	Ethylbenzene	1.5	U
36.	100-42-5	Styrene	1.0	U
37.	108-38-3	m-Xylene	2.0	U
38.		o/p-Xylene (total)	2.5	U

Data Qualifiers:

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SFC -Suspected Field Contaminant.

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : B6FG05R07

Data Set #: SF-3151
Matrix : WATER

TENTATIVELY IDENTIFIED COMPOUNDS	ESTIMATED CONC.(PPB)
UNKNOWN#1	7.9

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05#74

Data Set #: SF-3151
Matrix : WATER

	CAS #	Compounds	Concentration (PPB)	
1.	74-87-3	Chloromethane	10	U
2.	74-83-9	Bromomethane	10	U
3.	75-01-4	Vinyl Chloride	10	U
4.	75-00-3	Chloroethane	1.5	U
5.	75-09-2	Methylene Chloride	1.0	U
6.	107-02-8	Acrolein	100	U
7.	67-64-1	Acetone	75	U
8.	107-37-1	Acrylonitrile	50	U
9.	75-15-0	Carbon Disulfide	3.0	U
10.	75-35-4	1,1-Dichloroethene	1.5	U
11.	75-35-3	1,1-Dichloroethane	1.5	U
12.	156-60-5	trans-1,2-Dichloroethene	1.5	U
13.	67-66-3	Chloroform	1.5	U
14.	78-93-3	2-Butanone	50	U
15.	107-06-2	1,2-Dichloroethane	1.5	U
16.	71-55-6	1,1,1-Trichloroethane	1.5	U
17.	56-23-5	Carbon Tetrachloride	1.5	U
18.	108-05-4	Vinyl Acetate	15	U
19.	75-27-4	Bromodichloromethane	1.5	U
20.	78-87-5	1,2-Dichloropropane	1.5	U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0	U
22.	79-01-6	Trichloroethene	1.5	U
23.	71-43-2	Benzene	1.5	U
24.	124-48-1	Dibromochloromethane	1.5	U
25.	79-00-5	1,1,2-Trichloroethane	1.5	U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0	U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5	U
28.	75-25-2	Bromoform	1.5	U
29.	108-10-1	4-Methyl-2-pentanone	2.5	U
30.	519-78-6	2-Hexanone	3.6	U
31.	127-18-4	Tetrachloroethene	1.5	U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5	U
33.	108-88-3	Toluene	1.5	U
34.	108-90-7	Chlorobenzene	1.5	U
35.	100-41-4	Ethylbenzene	1.5	U
36.	100-42-5	Styrene	1.0	U
37.	108-38-3	m-Xylene	2.0	U
38.		o/p-Xylene (total)	2.5	U

Data Qualifiers:

U -Compound was analyzed for but not detected. The value reported is the method detection limit for reagent water.

SLC -Suspected Laboratory Contaminant.

SFC -Suspected Field Contaminant.

ACTIVITY #C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER VOLATILE ORGANICS SCAN UG/L TOX 17664	WATER ABN ORGANICS SCAN UG/L TOX 17674	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
86FG05S74	5-54349-5015-93904-05 GRACELAND CHURCH	✓			
86FG05R07	BLANK 5-93908-09	✓			
86FG05S74	5-54346-47-48 GRACELAND CHURCH		✓		
86FG05R07	BLANK 5-93907		✓		
		K Bolger 4/18/86			
		Received by [illegible]			
		4/22/86			
		[illegible] 4/22/86			
		[illegible] 4-25-86			

QUALITY CONTROL SHEET
TOXIC ORGANICS SECTION: VOLATILES

STUDY NAME Northeast Gravel
STUDY NUMBER SF-3151

DATE 4/18/86

ACTIVITY NUMBER C48100
ANALYST K Bolger

FRN	SAMPLE NUMBER	MATRIX	AMOUNT PURGED	DILUTIONS	FINAL VOL (AFT.DILU)	INTERNAL STD (CONC. 13.4 ppb) BCM BP AREA	BCP BP AREA	DCB BP AREA	SURROGATES RECOVERY % D4-1,2-DCE	D6-Benzene	D8-Toluene
11247	LABBLANK	WATER	15mL	NONE	15mL	11222	18518	13788	99	102	102
11248	86FG05R07	↓	↓	↓	↓	11185	18260	13274	98	102	103
11249	VOLSTD	↓	↓	↓	↓	11754	19158	13673	—	—	—
11250	86FG05$74	↓	↓	↓	↓	10266	16873	12249	99	103	104
11251	86FG05$74MS*	↓	↓	↓	↓	11493	18705	12938	100	101	103

* MATRIX SPIKE + MS DUPLICATE WERE RUN BUT LATTER JUMPED TO BAKE DURING PURGE CYCLE. CONSEQUENTIALLY THERE IS ONLY DATA FOR MS RUN; NO RPD IS CALCULATED

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

___ Graph

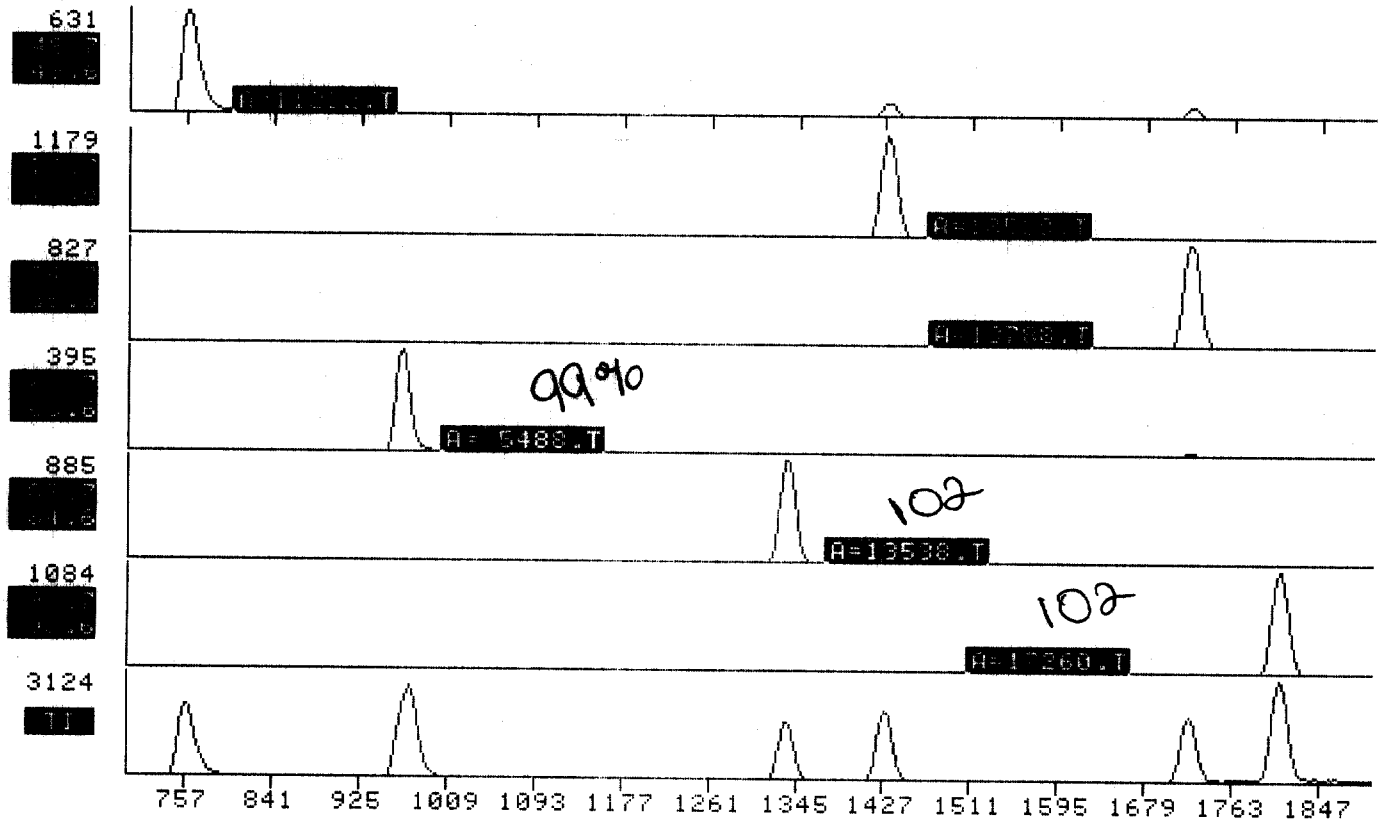
___ Mail receipts

___ Sample tags

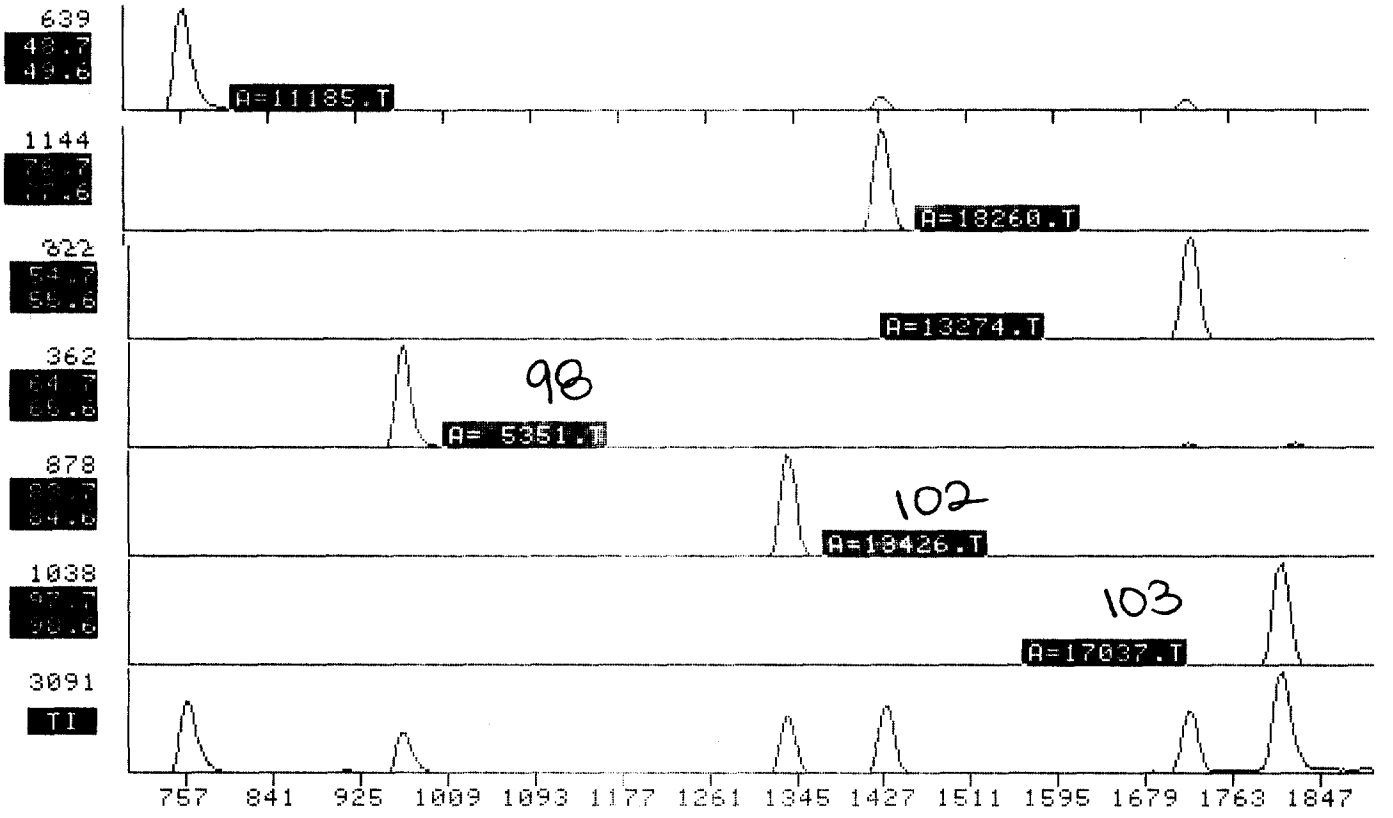
II. Image Quality (Pages follow / No. of pages 4)

X Resolution / Contrast

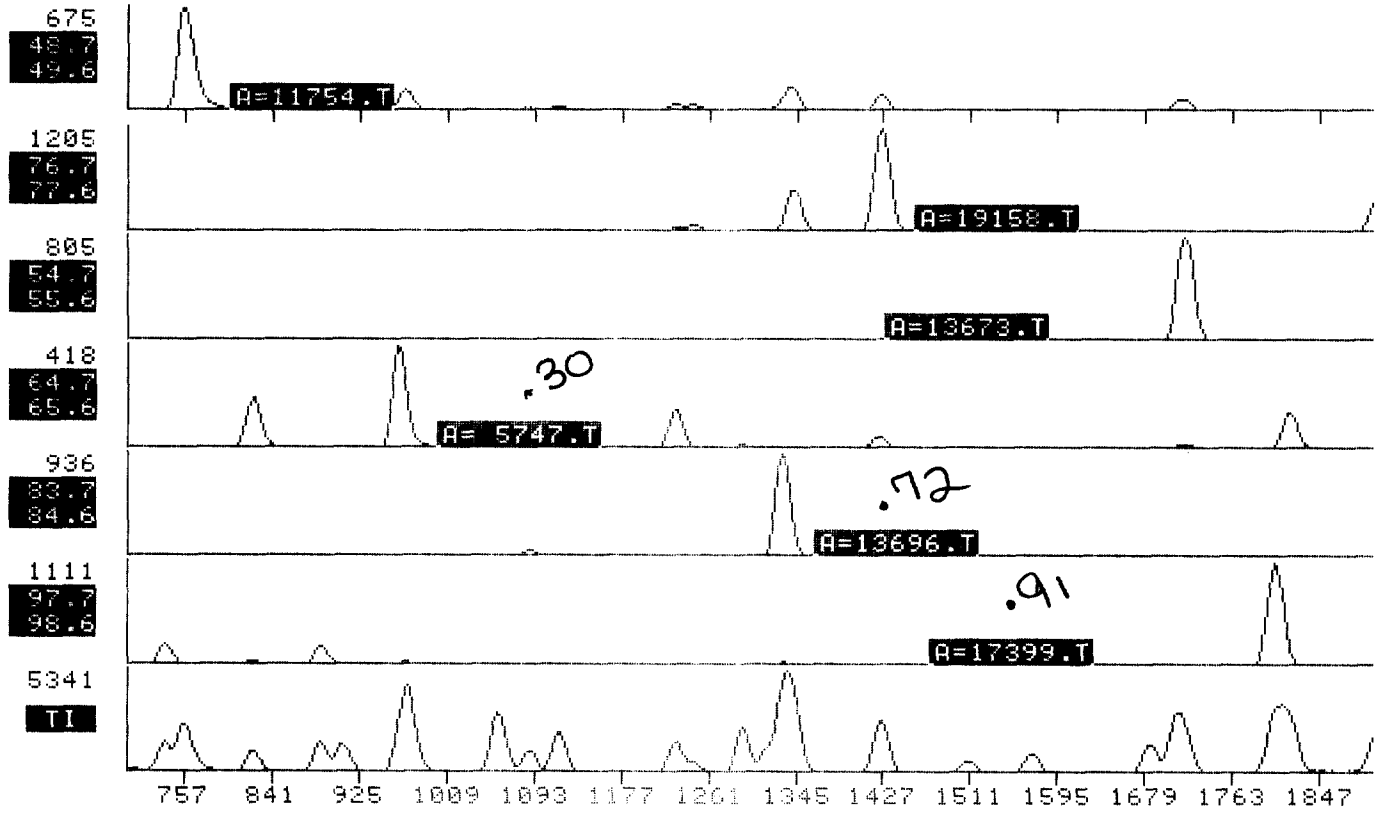
[redacted] LABBLANK
[redacted] 4-18-86 BTL#2 D11247 [redacted] 11247



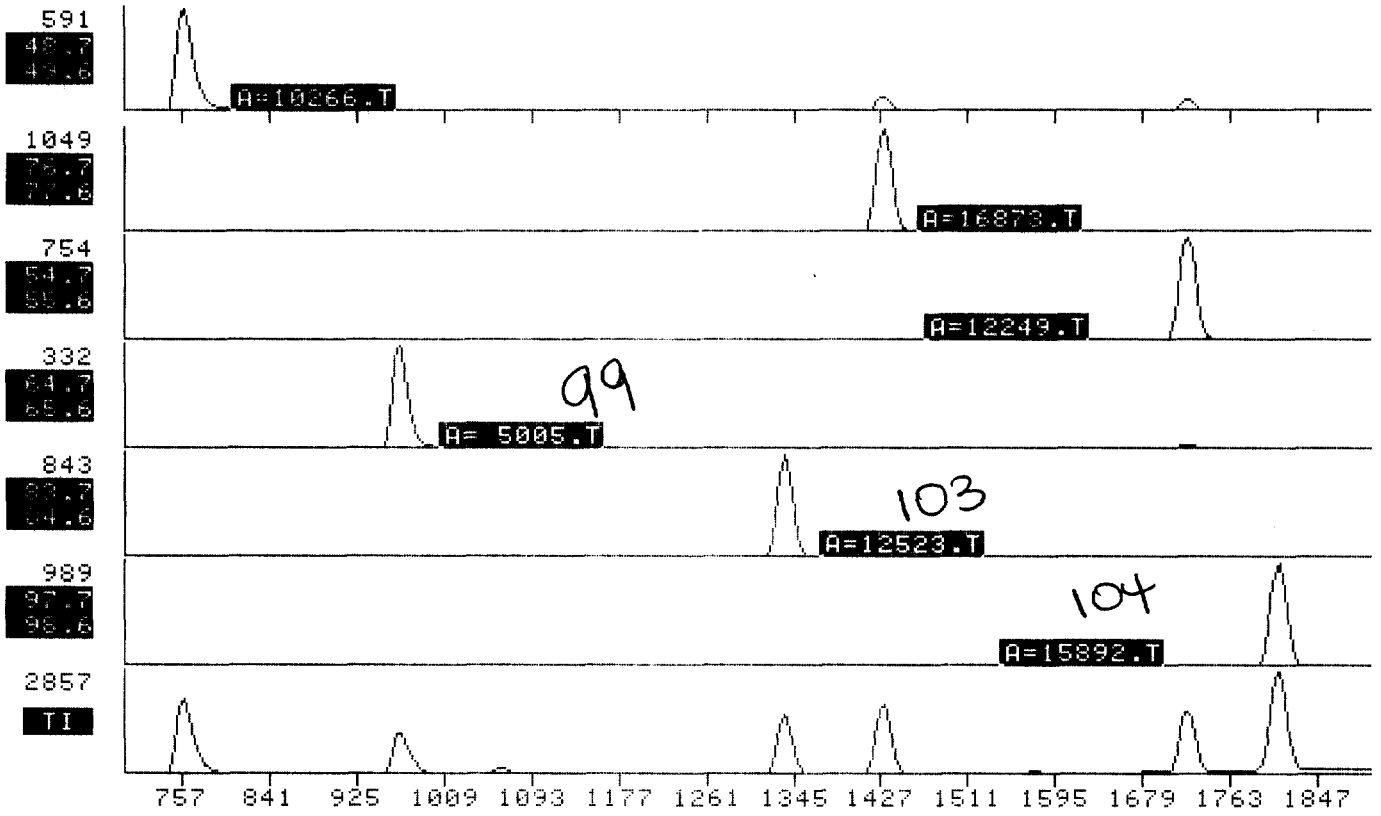
NAME SF-3151 N.E. GRAVEL 86FG05R07 FRN 11248
MISC 4-18-86 BTL#3 D11248



NAME VOLSTD BATCH FRN 11249
MISC 4-18-86 BTL#4 D11249



NAME SF-3151 86FG05$74 FRN 11250
MISC 4-18-86 BTL#5 D11250



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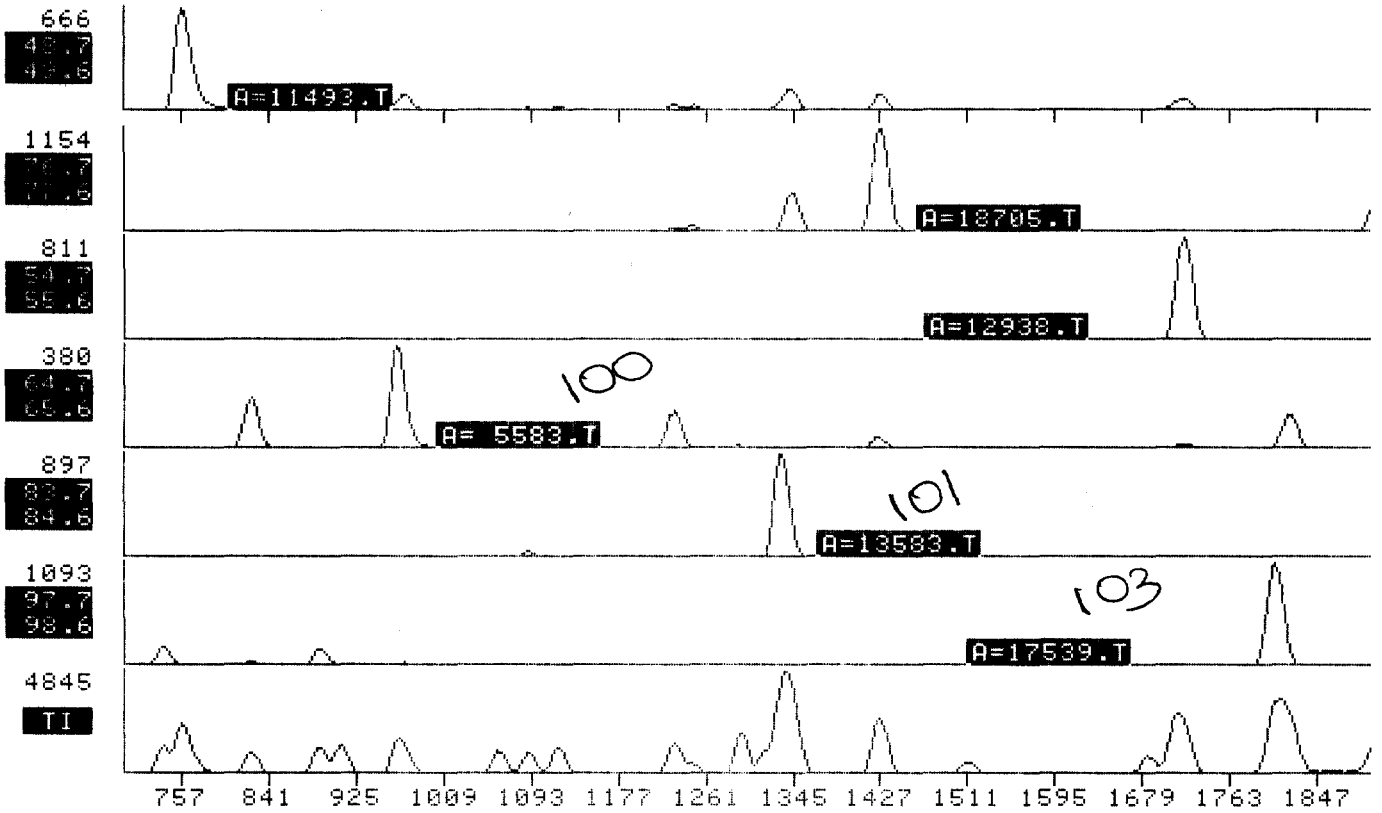
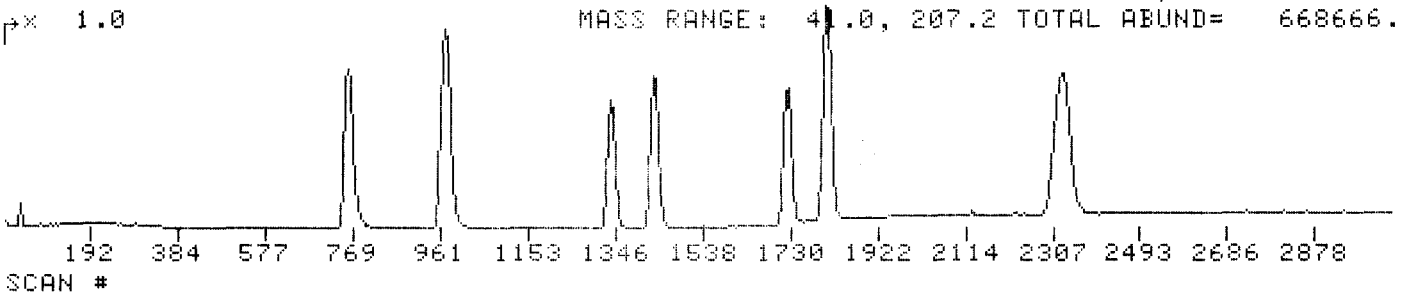
MISC 4-18-86 BTL#6 D11251 FRN 11251

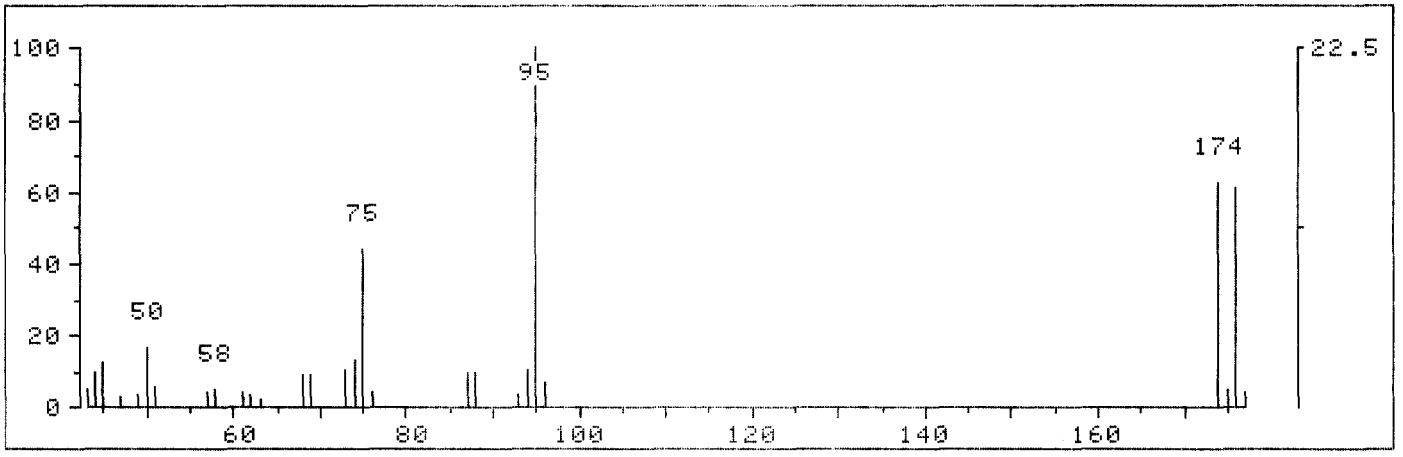


BFB TUNING CRITERIA RUN

LABBLANK
4-18-86 BTL#2 D11247 3048 SCANS (3048 SCANS, 43.72 MINS) FRN 11247, CRN 17
↱× 1.0 MASS RANGE: 41.0, 207.2 TOTAL ABUND= 668666.



#2323 RET. TIME: 34.58 TOT ABUND= 2186. BASE PK/ABUND: 95.1/ 492.



FRN 11247, SPECTRUM # 2323 RET.TIME: 34.58, 28 PEAKS

M/Z	REL ABUND	M/Z	REL ABUND	M/Z	REL ABUND	M/Z	REL ABUND
43	5.3	57	4.7	73	10.4	94	10.8
44	10.2	58	4.9	74	13.4	95	100.0✓
45	12.6	61	4.3	75	44.3✓	96	7.5✓
47	3.0	62	4.1	76	4.5	174	62.8✓
49	3.7	63	2.4	87	10.2	175	4.9✓
50	17.1✓	68	9.1	88	10.2	176	61.4✓
51	5.9	69	8.9	93	3.5	177	4.5✓

>PAUSE

QUALITY CONTROL SHEET
TOXIC ORGANIC SECTION: VOLATILES

STUDY NAME Northeast Gravel ACTIVITY NUMBER C48100 ANALYST K Bolger

STUDY NUMBER SF-3151

SUMMARY: BLANKS DATA

#	FRN	DATE	BLANK TYPE	COMPOUNDS DETECTED	ESTIMATED CONCENTRATION (PPB)	STD USED
1.	11247	4/18/86	LABBLANK	2-Butanone *	72 SLC	BCP
2.	11248	4/18/86	FIELD (86FG05R07)	UNKNOWN #1	7.9	BCP
3.						
4.				* NOT OBSERVED IN REAL SAMPLES. HPLC WATER APPEARS CONTAMINATED. STOCK CHANGED. CONTAMINATION NOT OBSERVED IN BLANKS RUN WITH DIFFERENT STOCK		

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

___ Graph

___ Mail receipts

___ Sample tags

II. Image Quality (Pages follow / No. of pages 4)

X Resolution / Contrast

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4-18-86 BTL#4 D11249 FRN 11249

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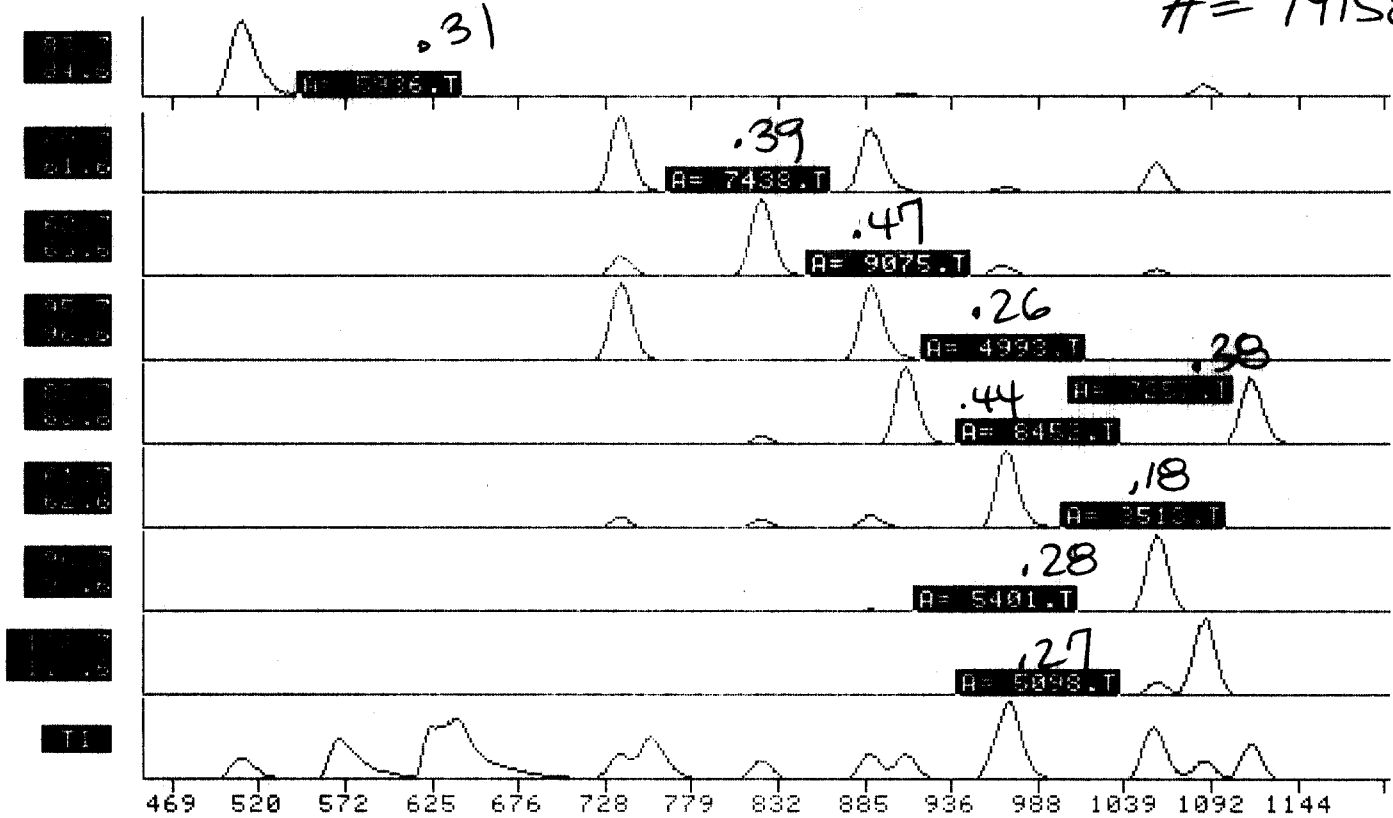

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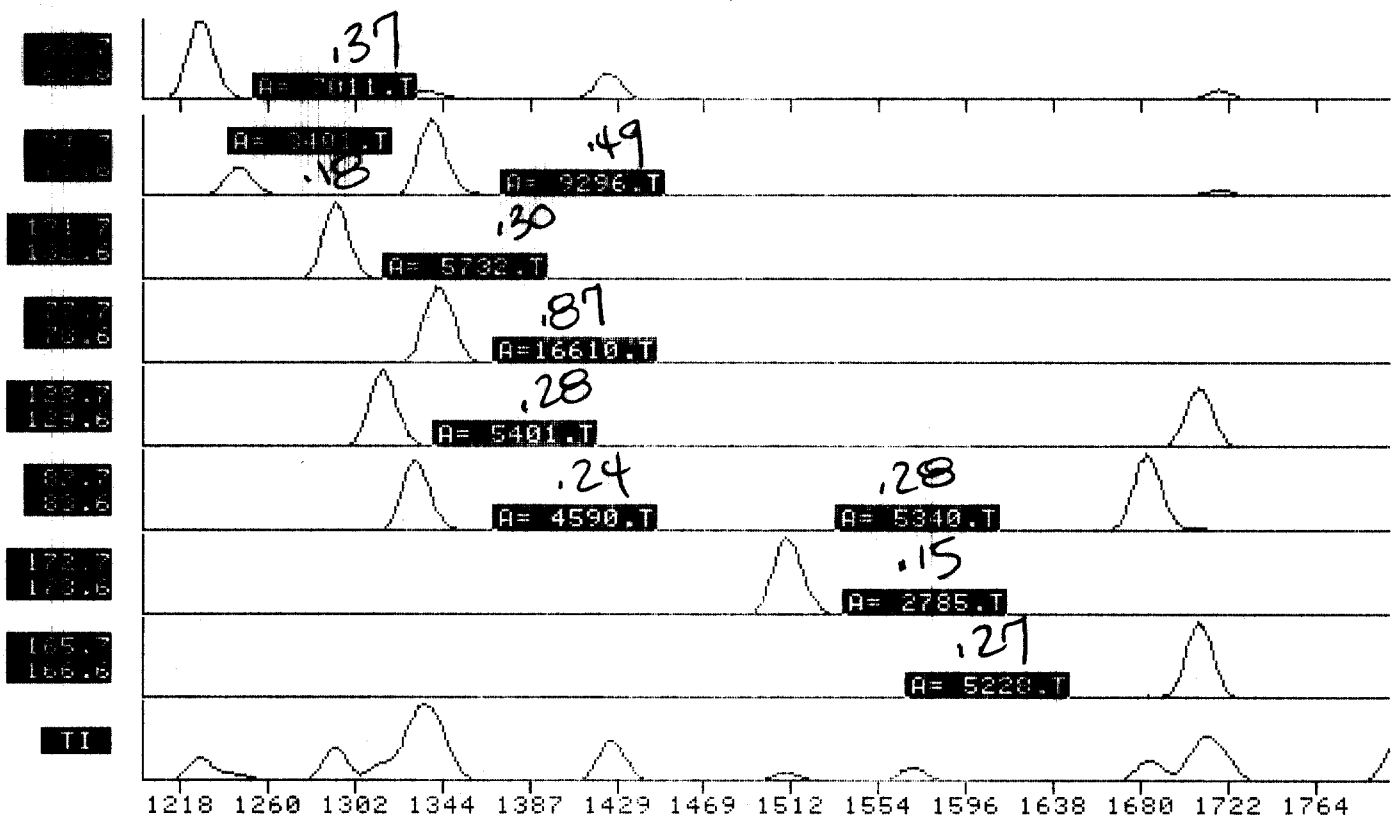
4-18-86 BTL#4 D11249 FRN 11249



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DATE 4-18-86 BTL#4 D11249 FRN 11249

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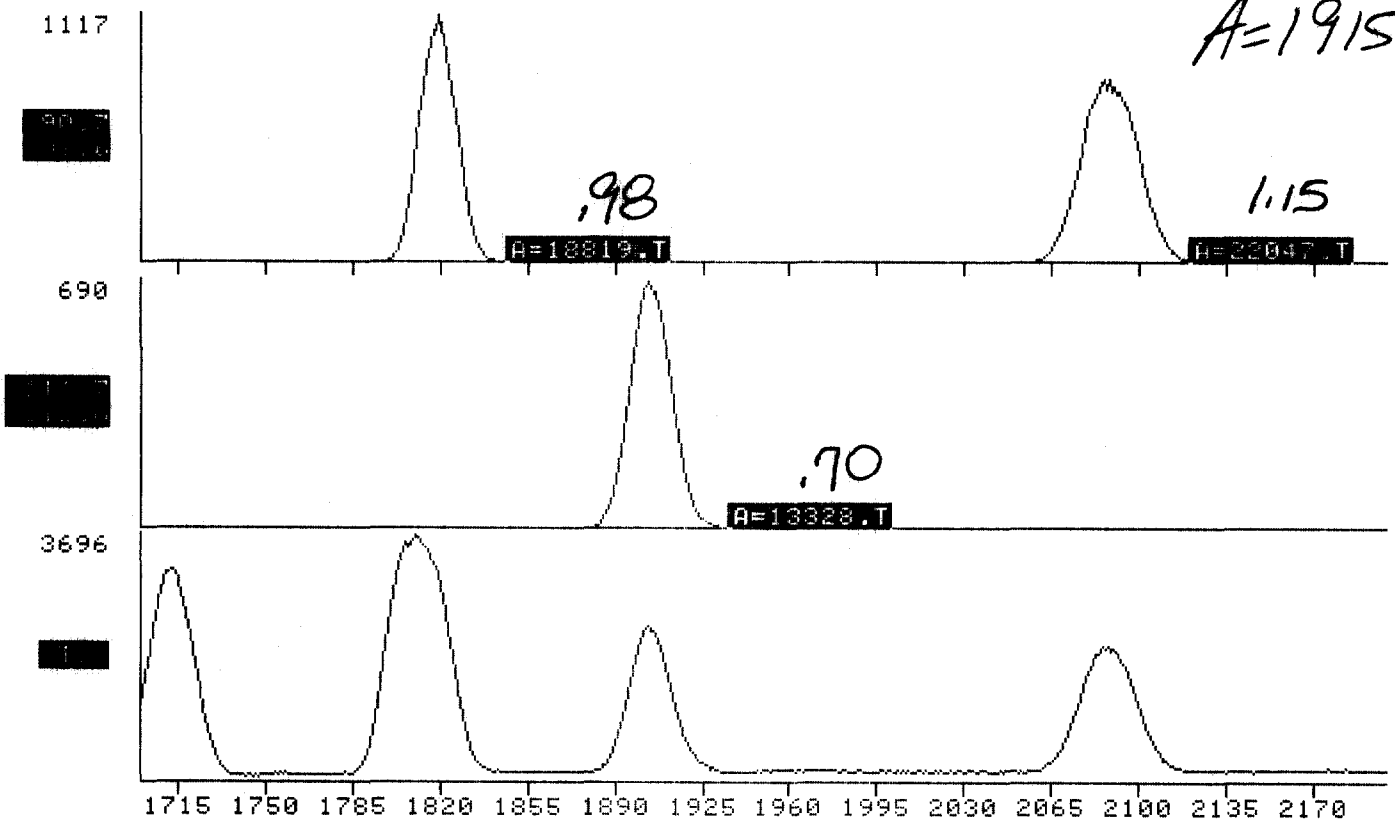

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4-18-86 BTL#6 D11251 FRN 11251

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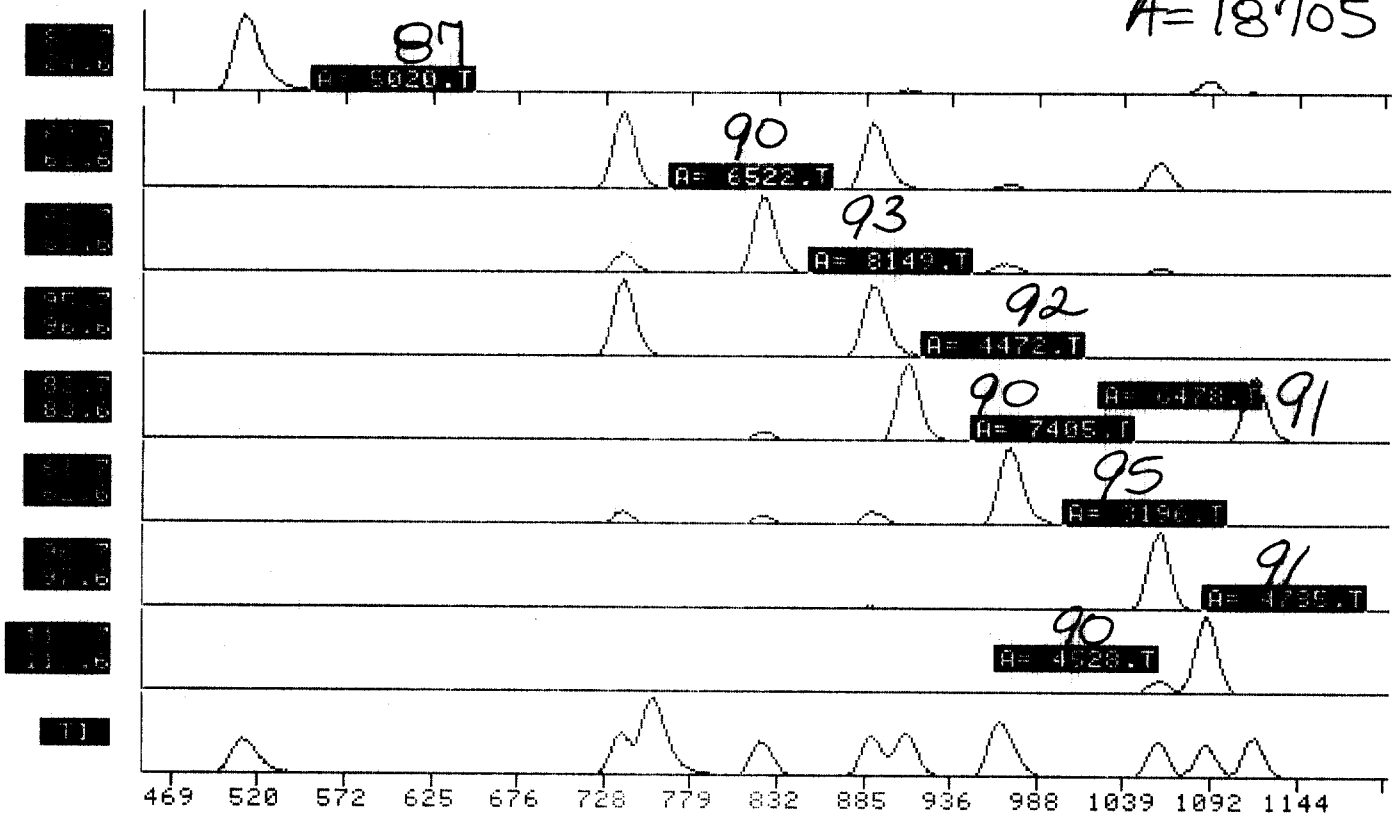

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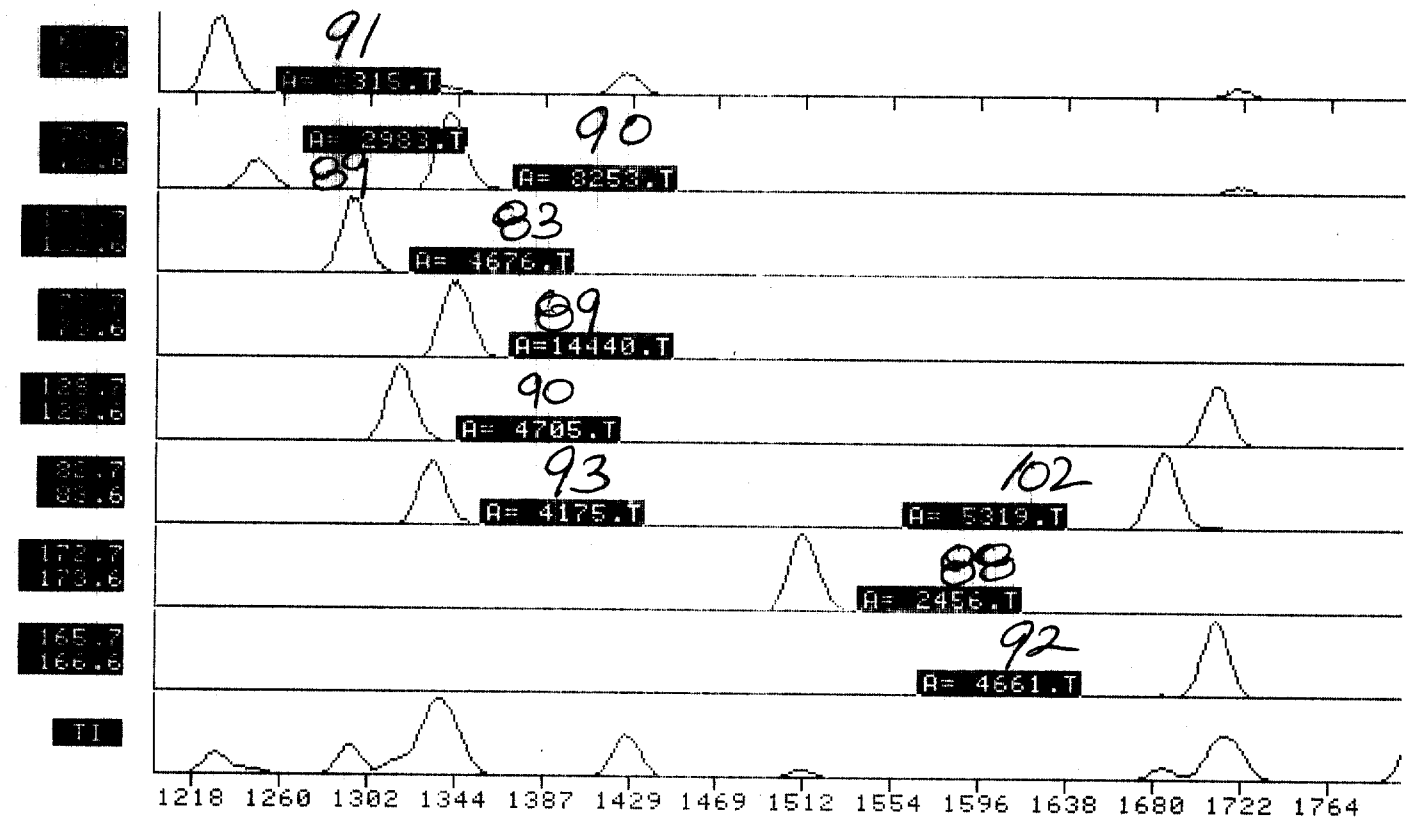

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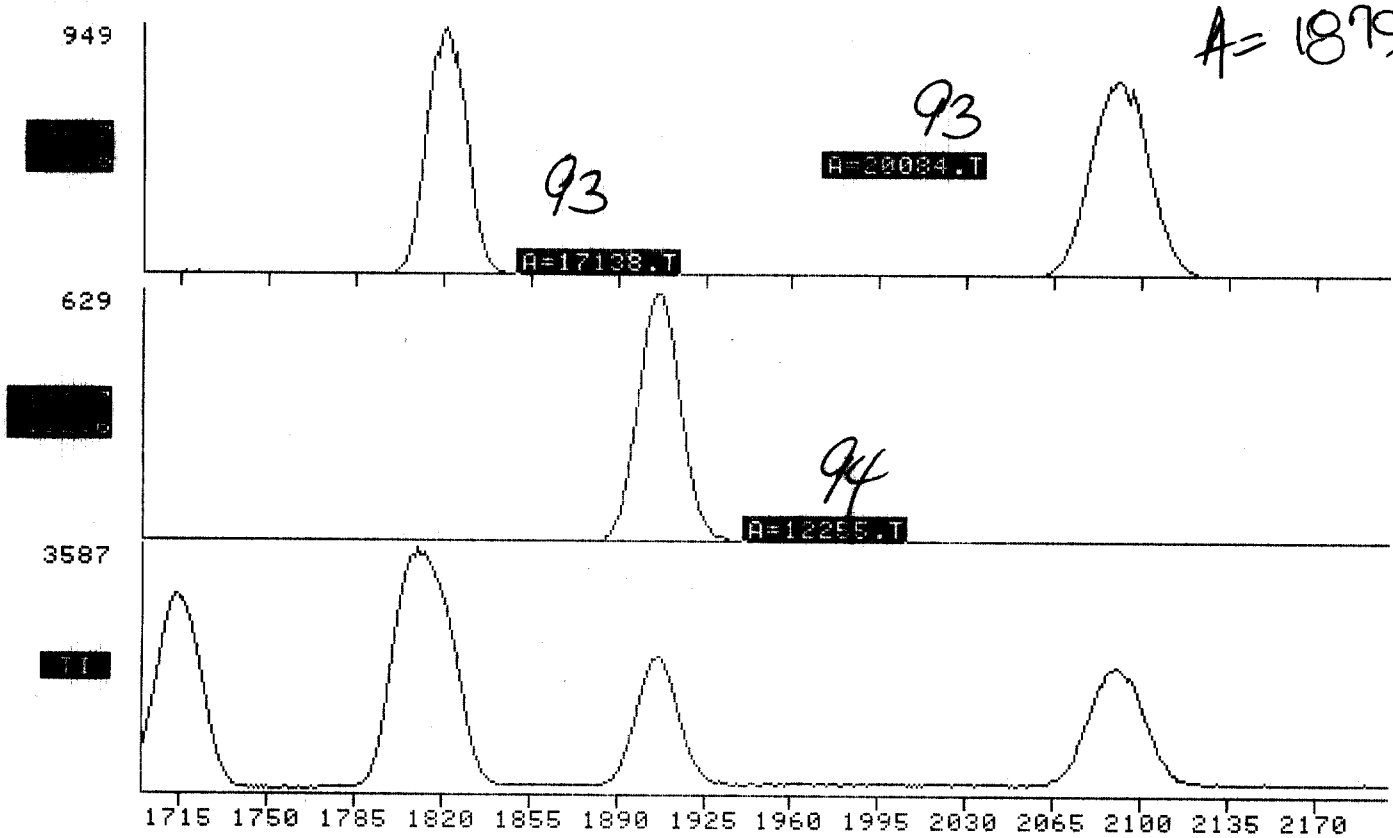

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4-18-86 BTL#2 D11247

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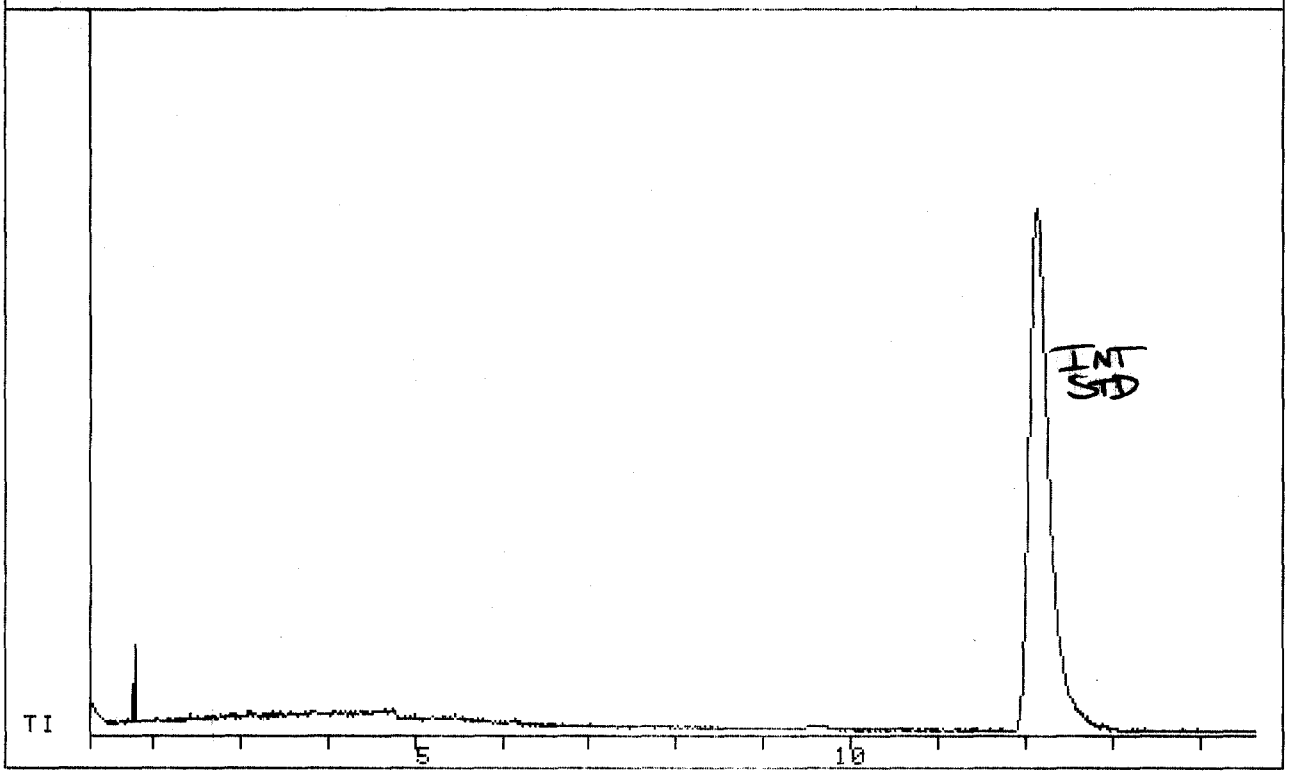

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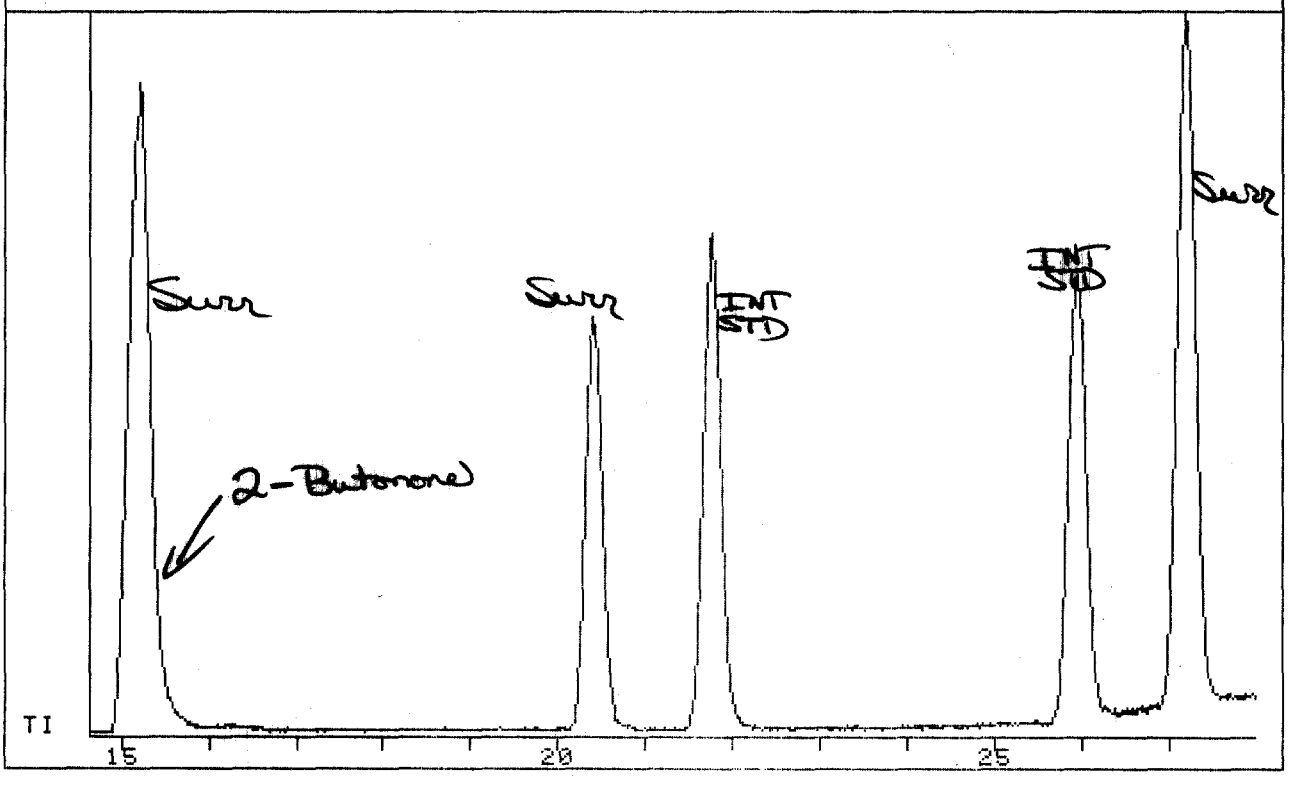

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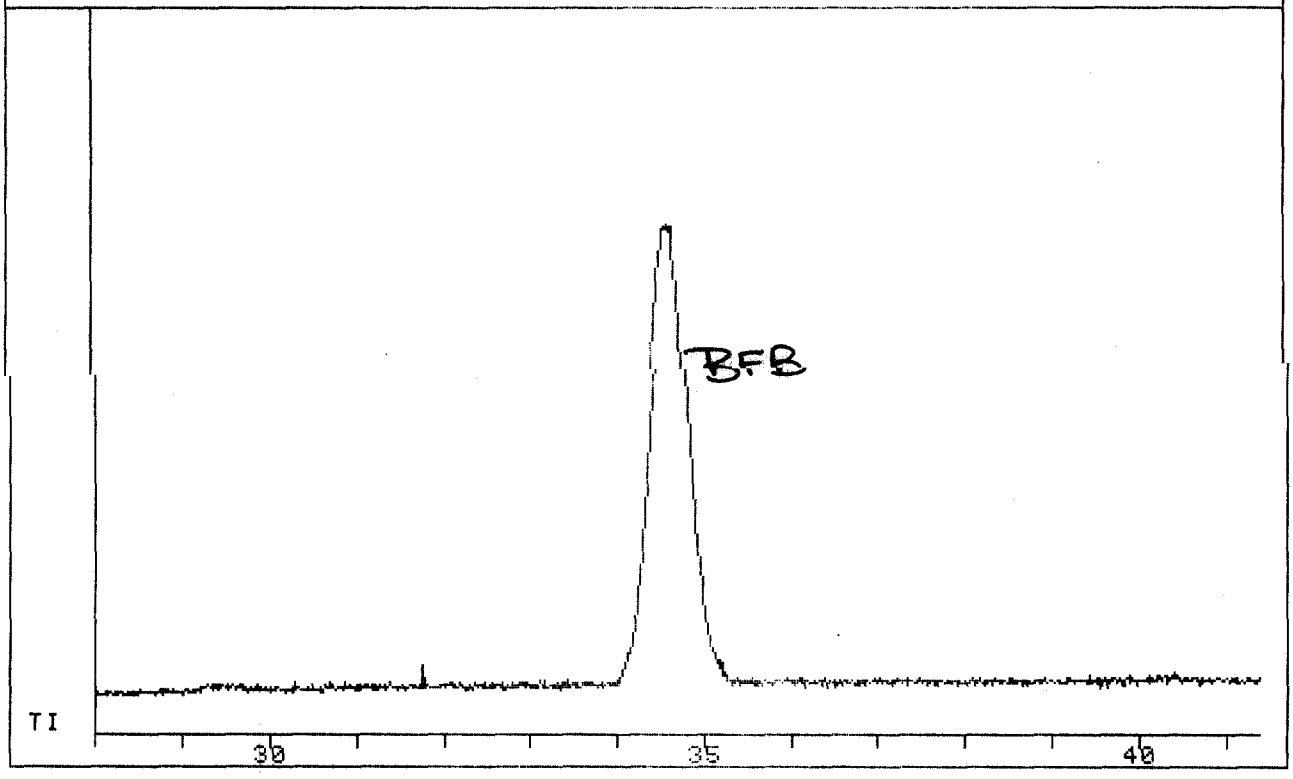

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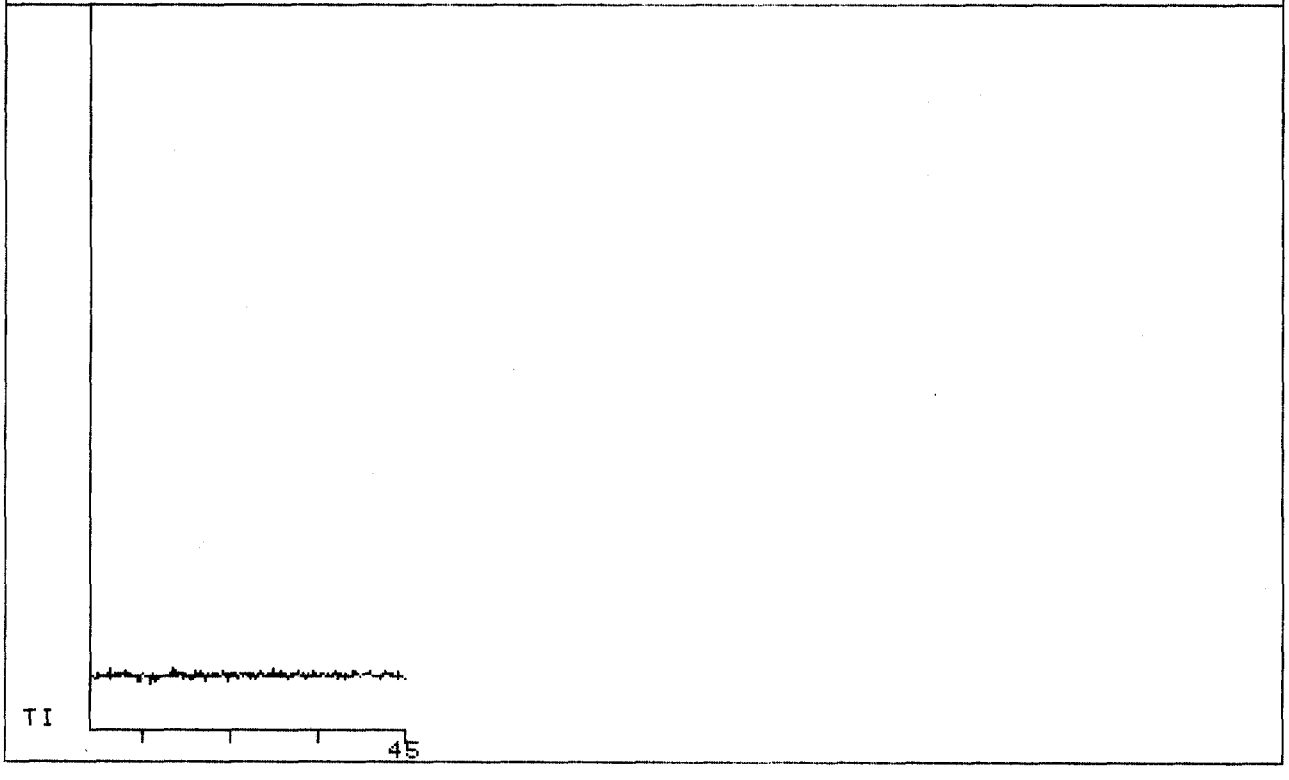

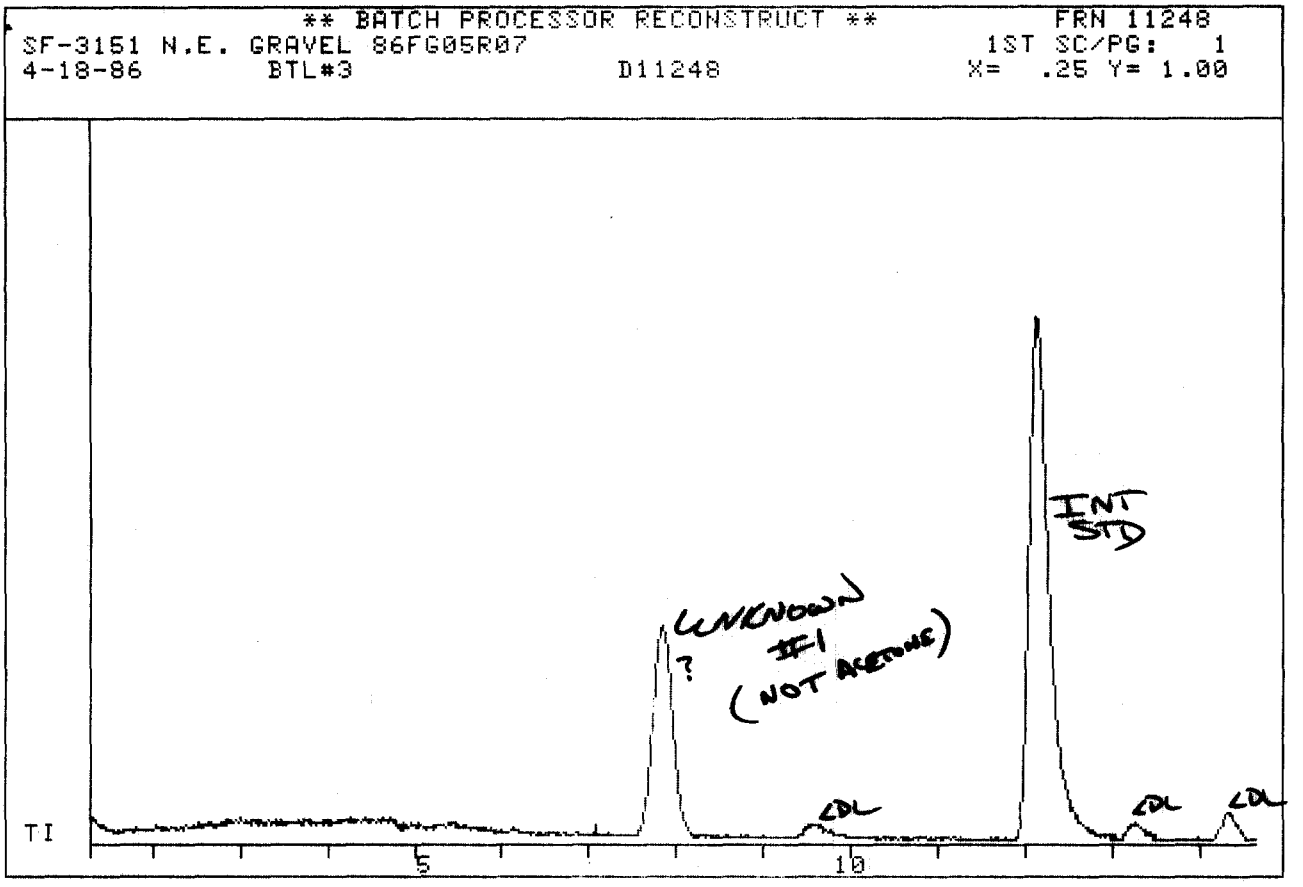
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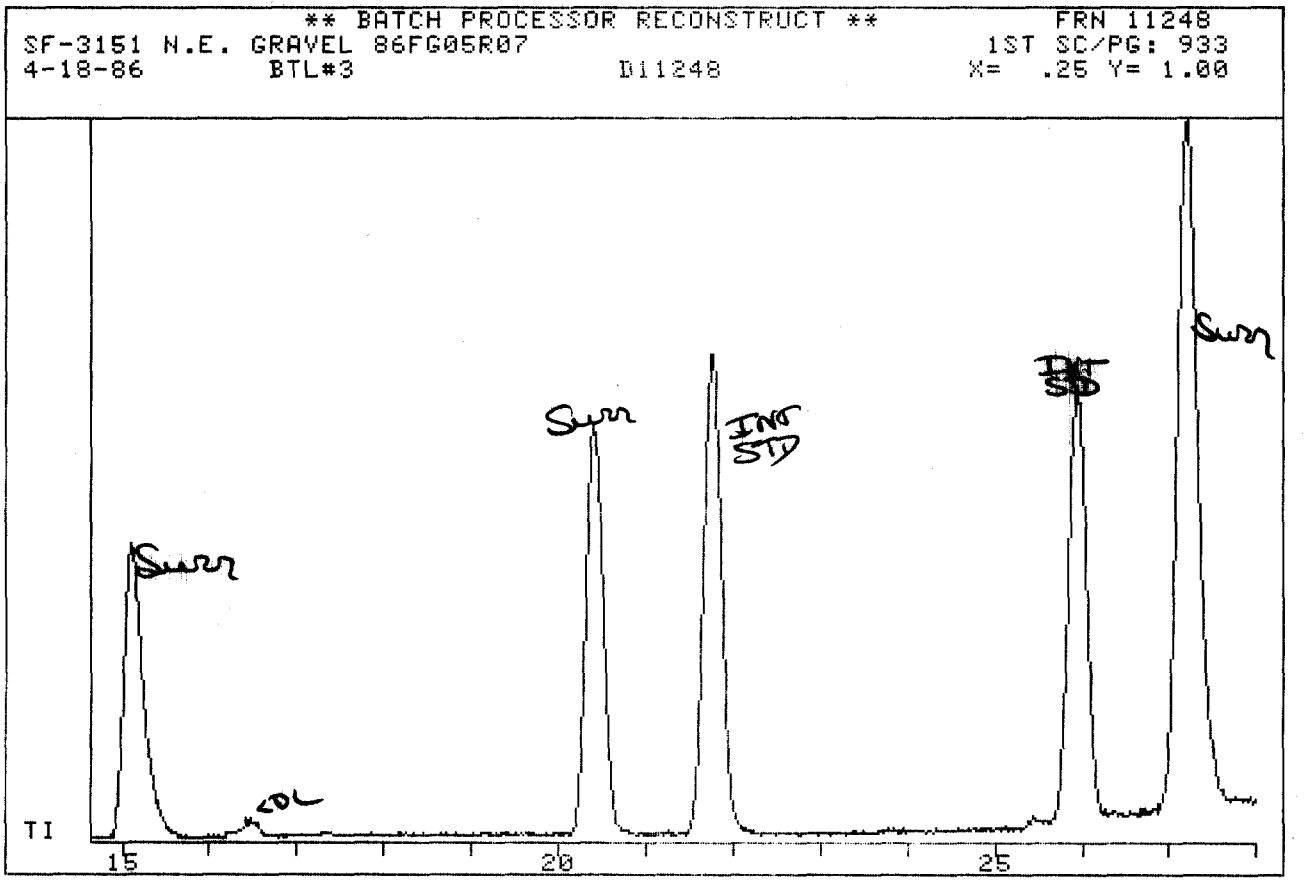
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1ST SC/PG: 933
4-18-86
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D11248
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Surr
INT STD
Surr
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TI
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20
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** BATCH PROCESSOR RECONSTRUCT ** FRN 11248
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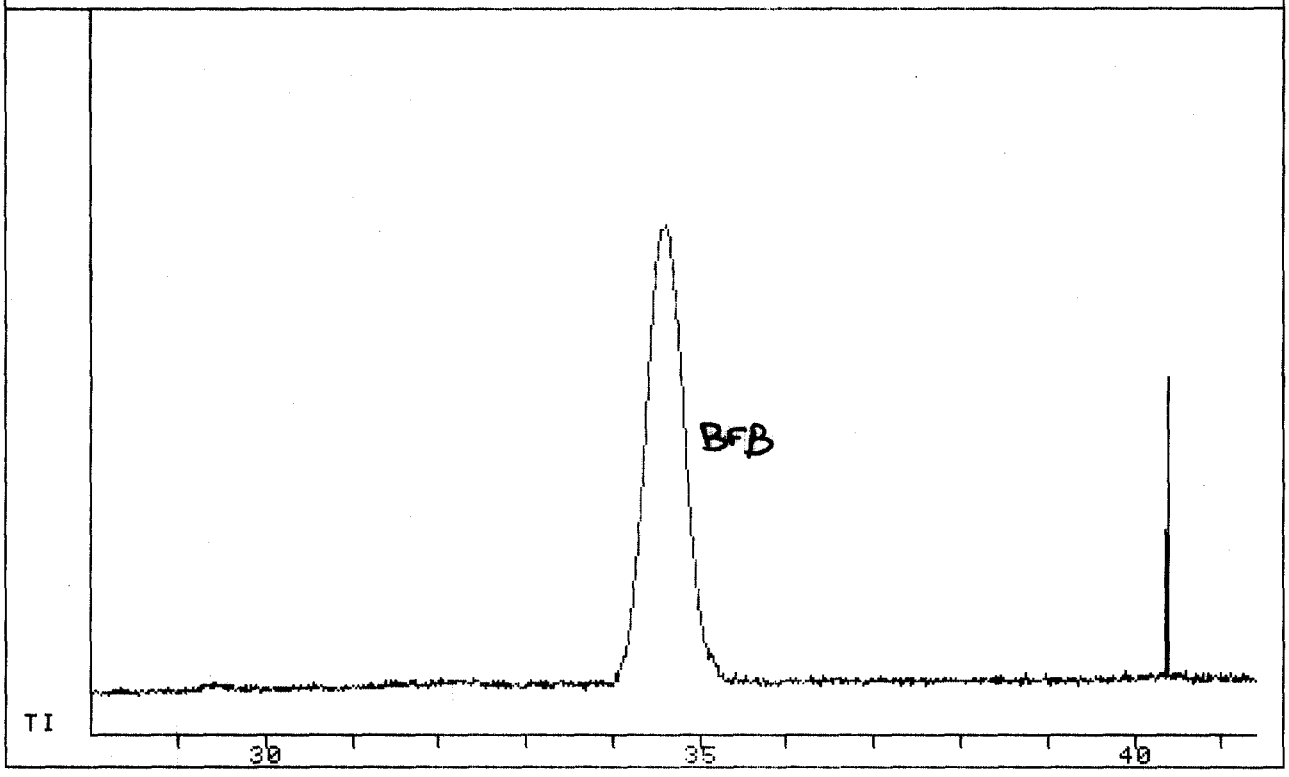

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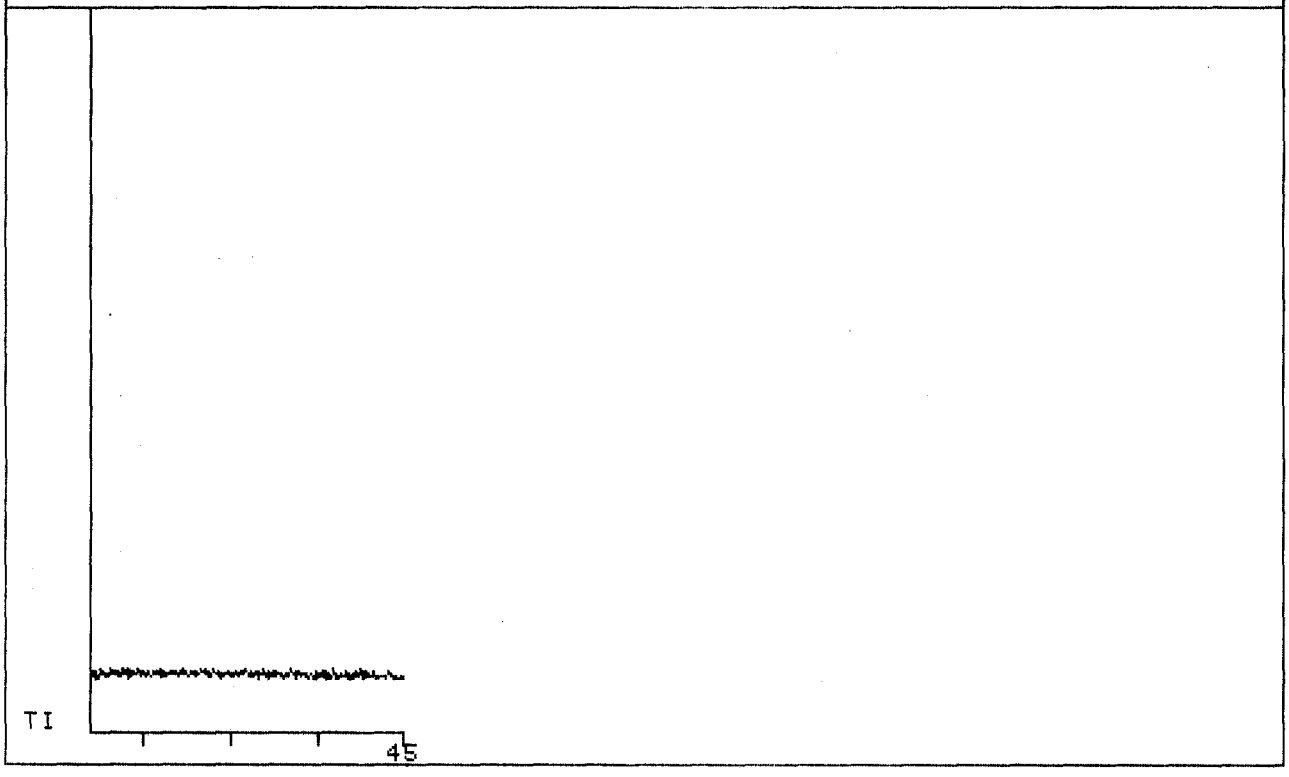

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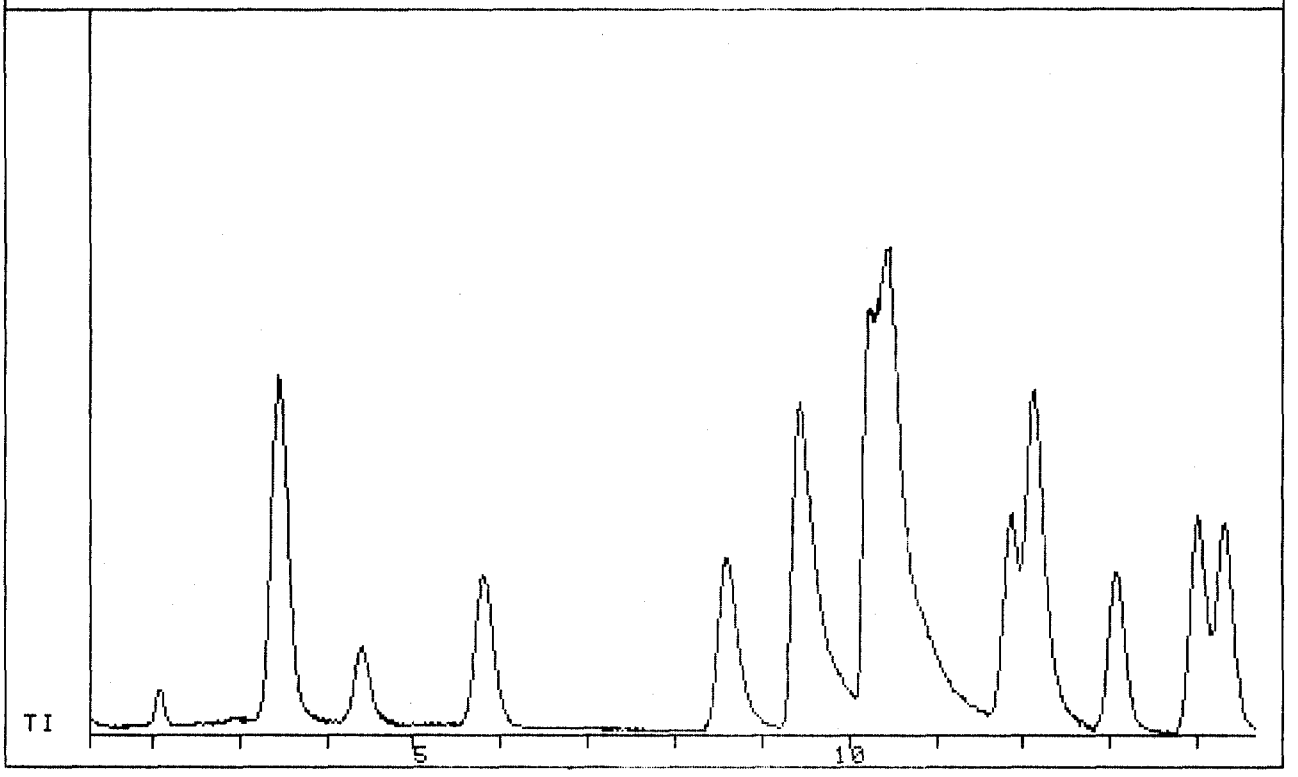

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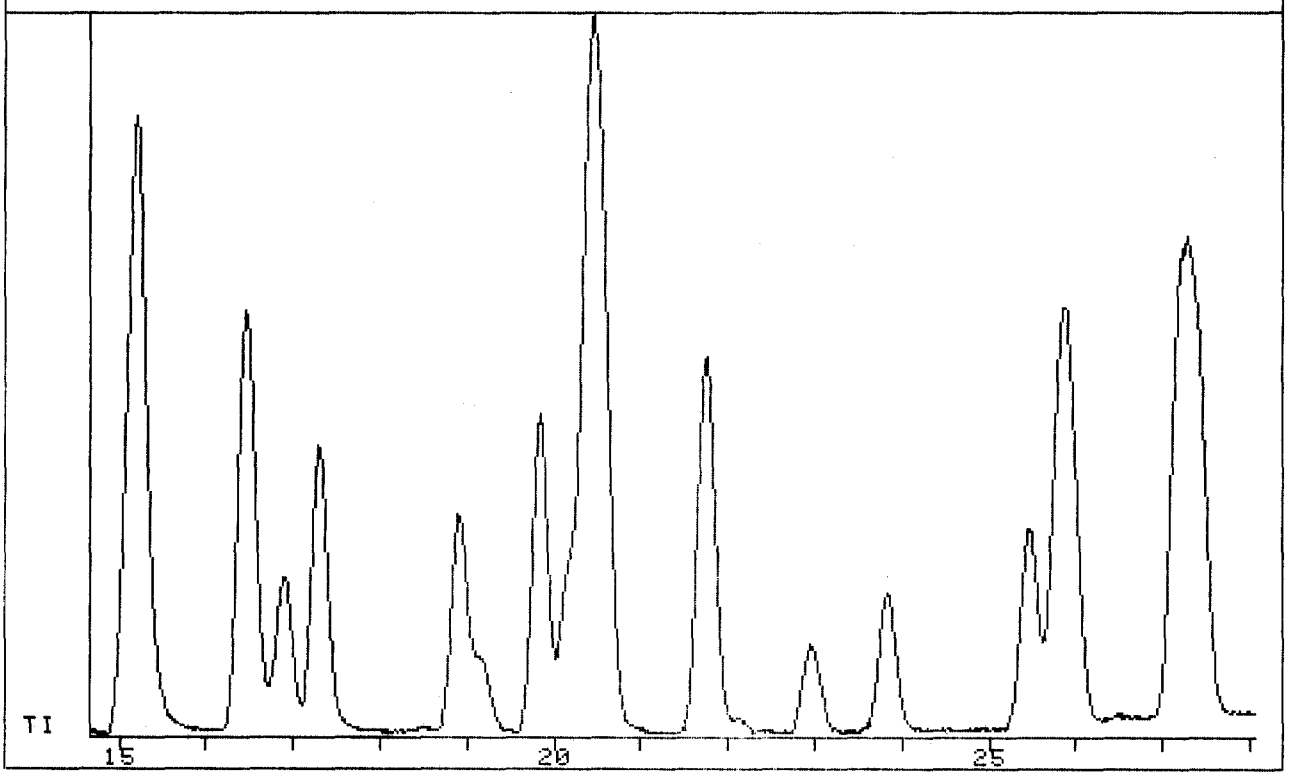

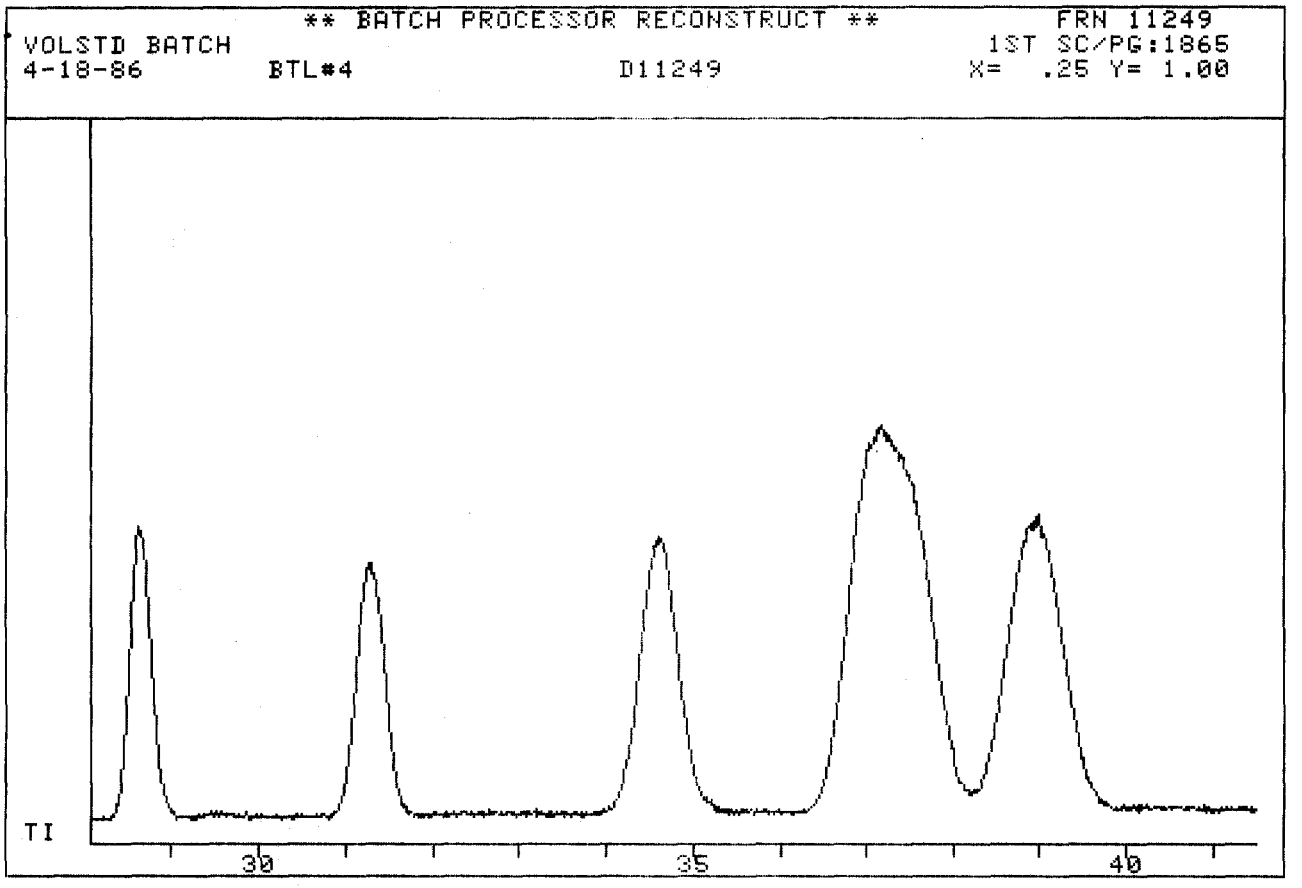
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FRN 11249
VOLSTD BATCH
1ST SC/PG:1865
4-18-86
BTL#4
D11249
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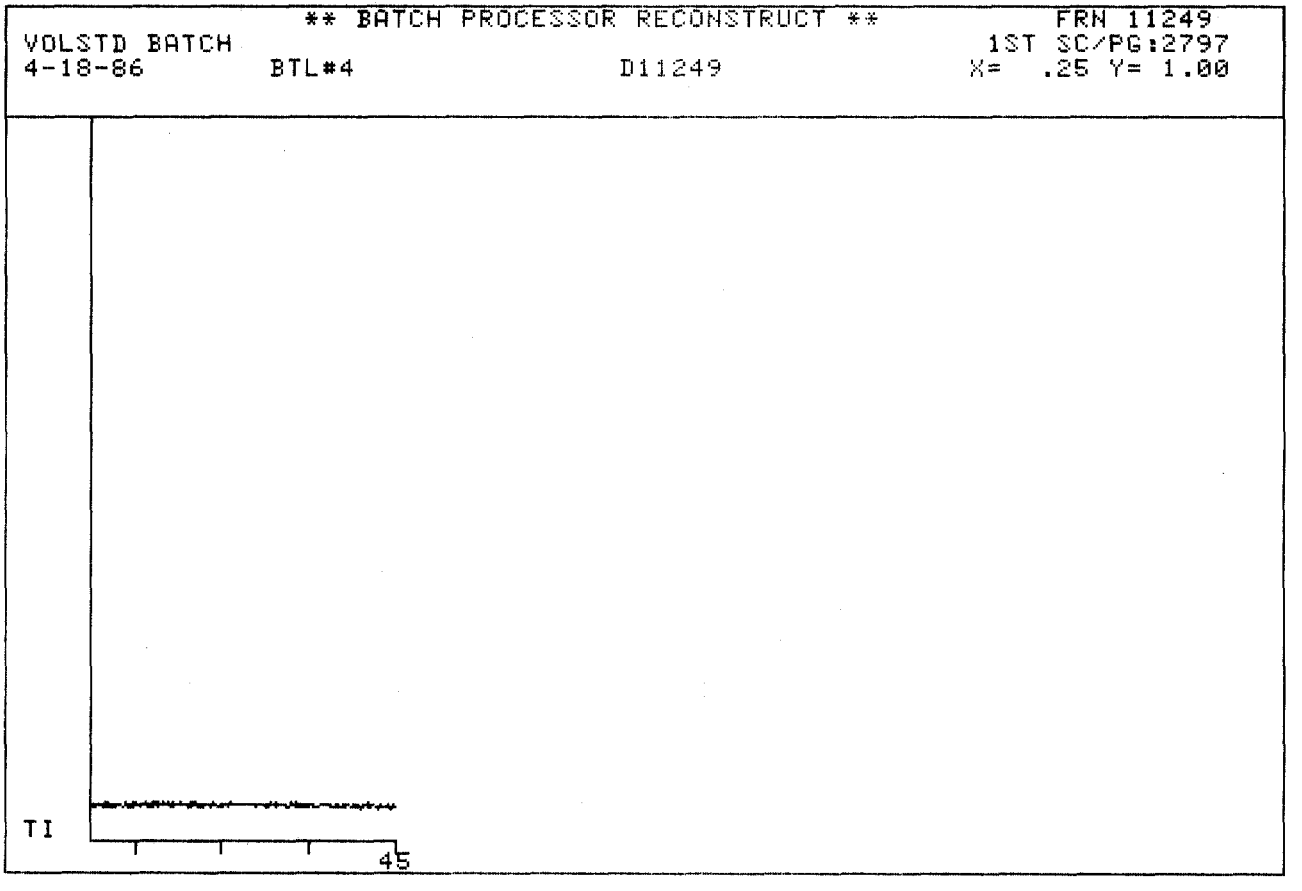
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4-18-86
BTL#4
D11249
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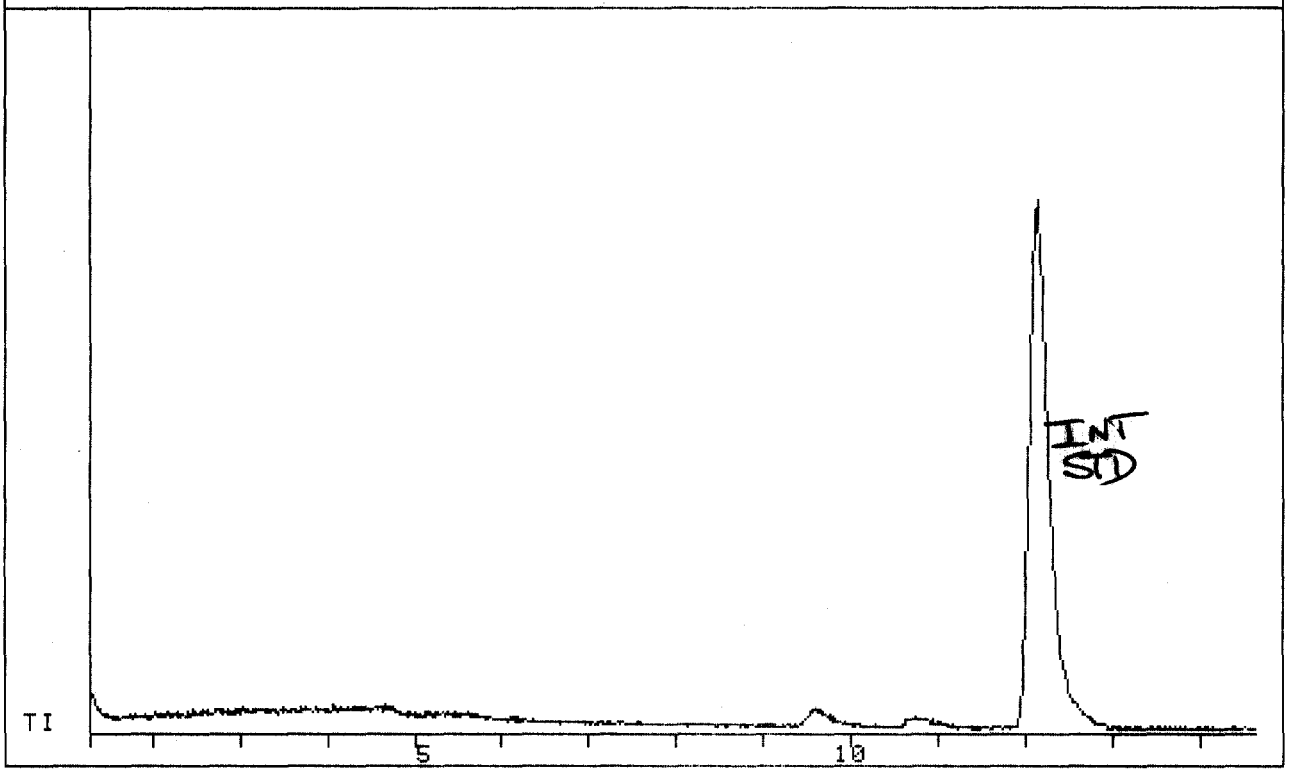

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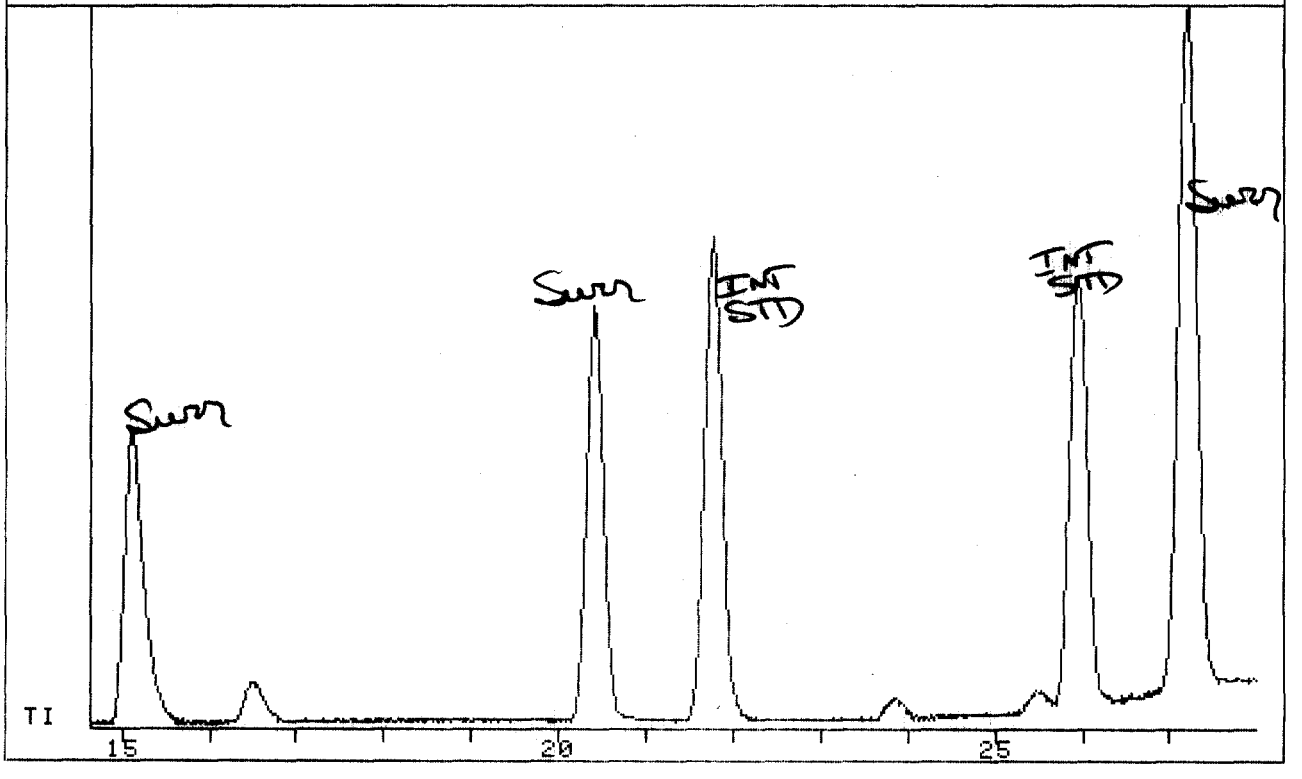

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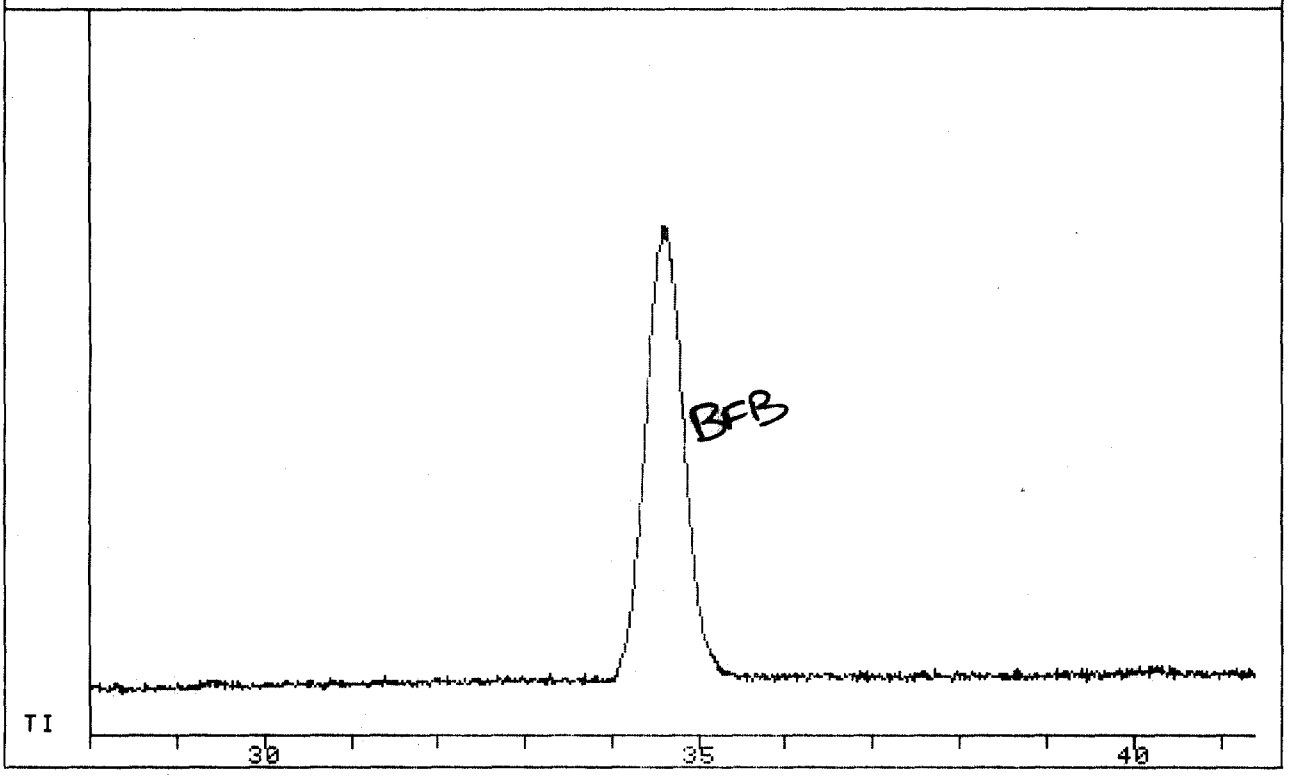

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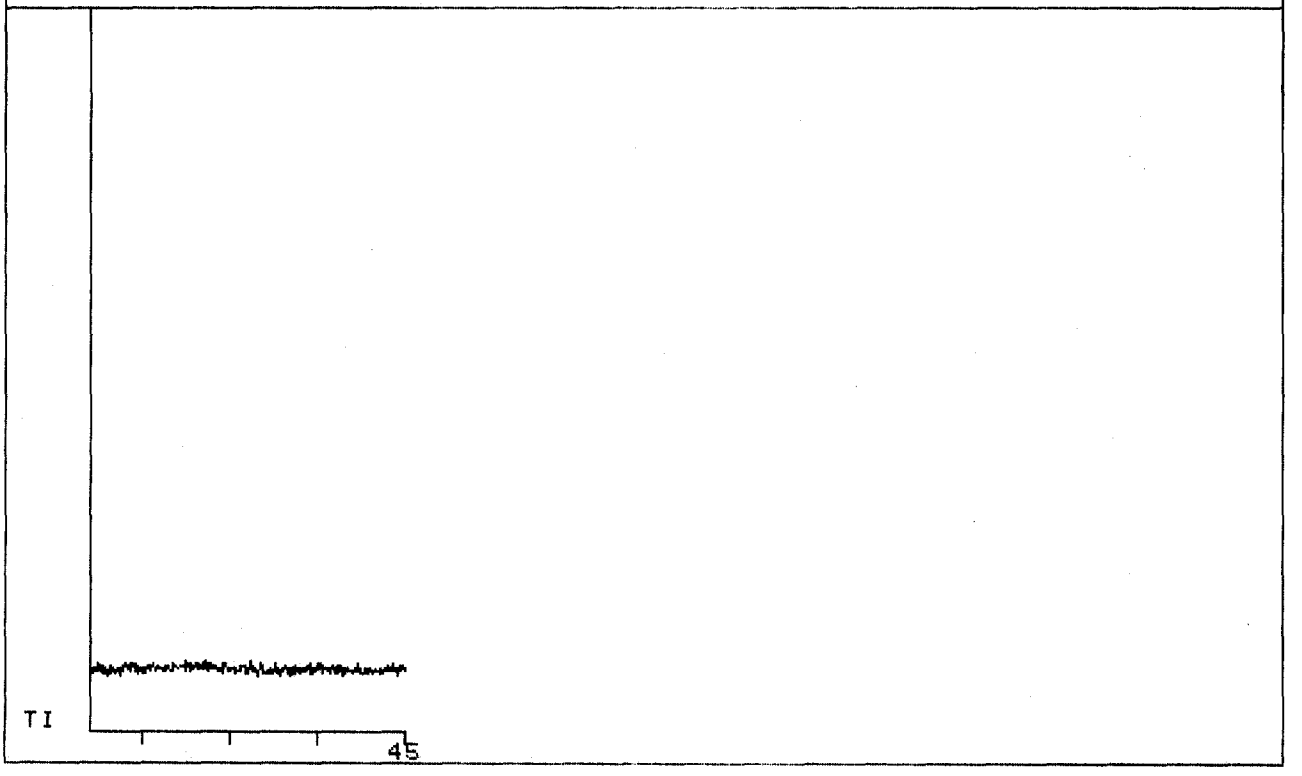

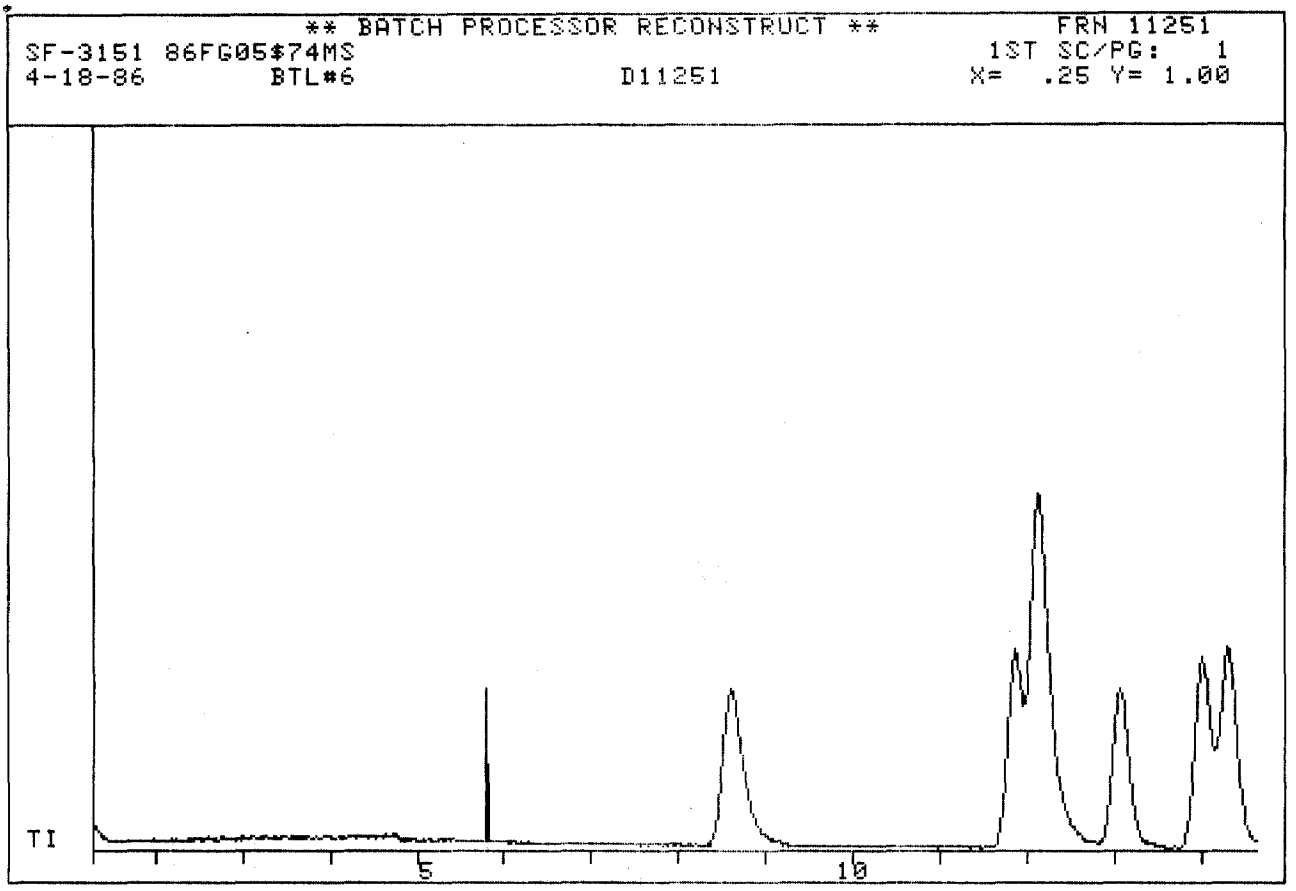
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FRN 11251
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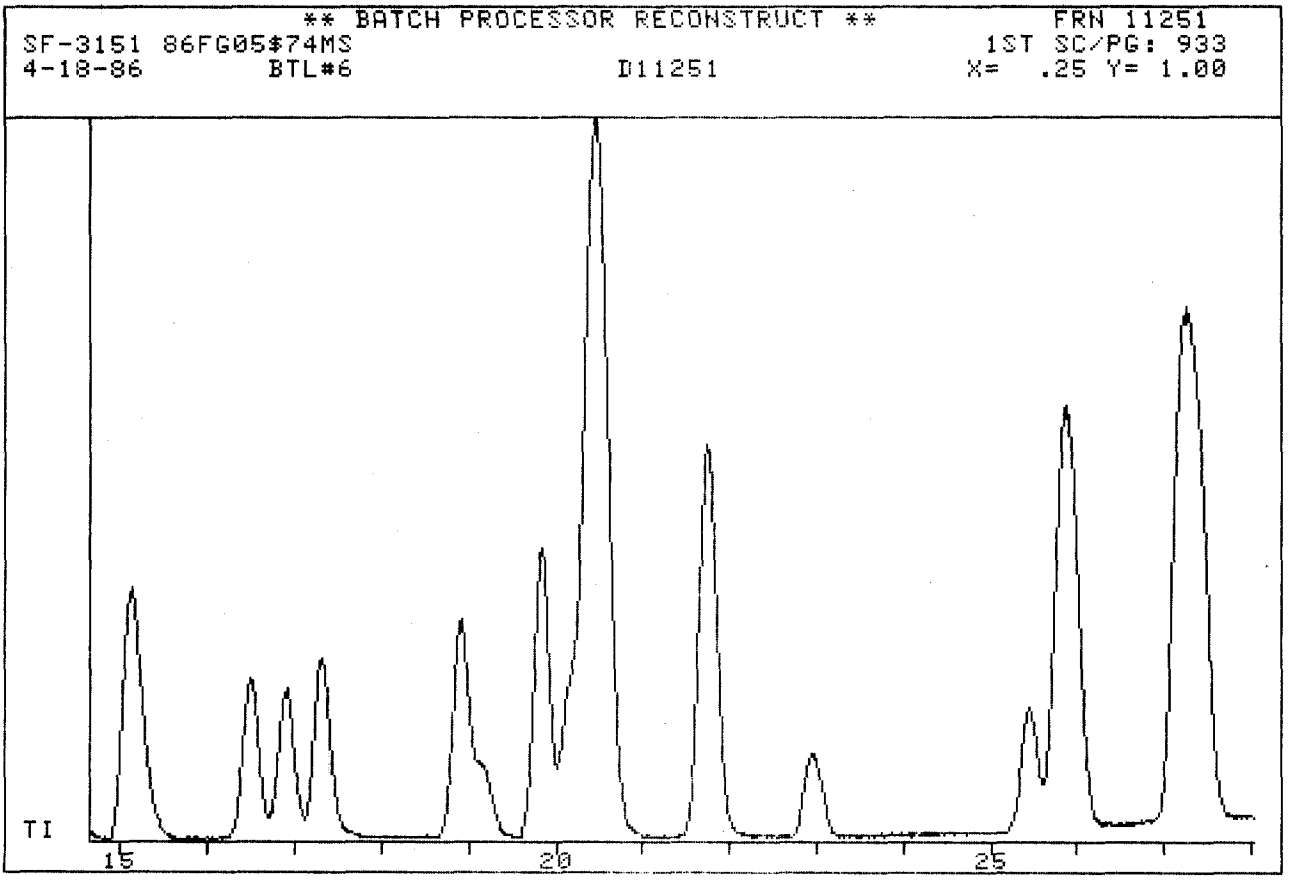
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SF-3151 86FG05$74MS
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4-18-86 BTL#6
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TI
15
20
25

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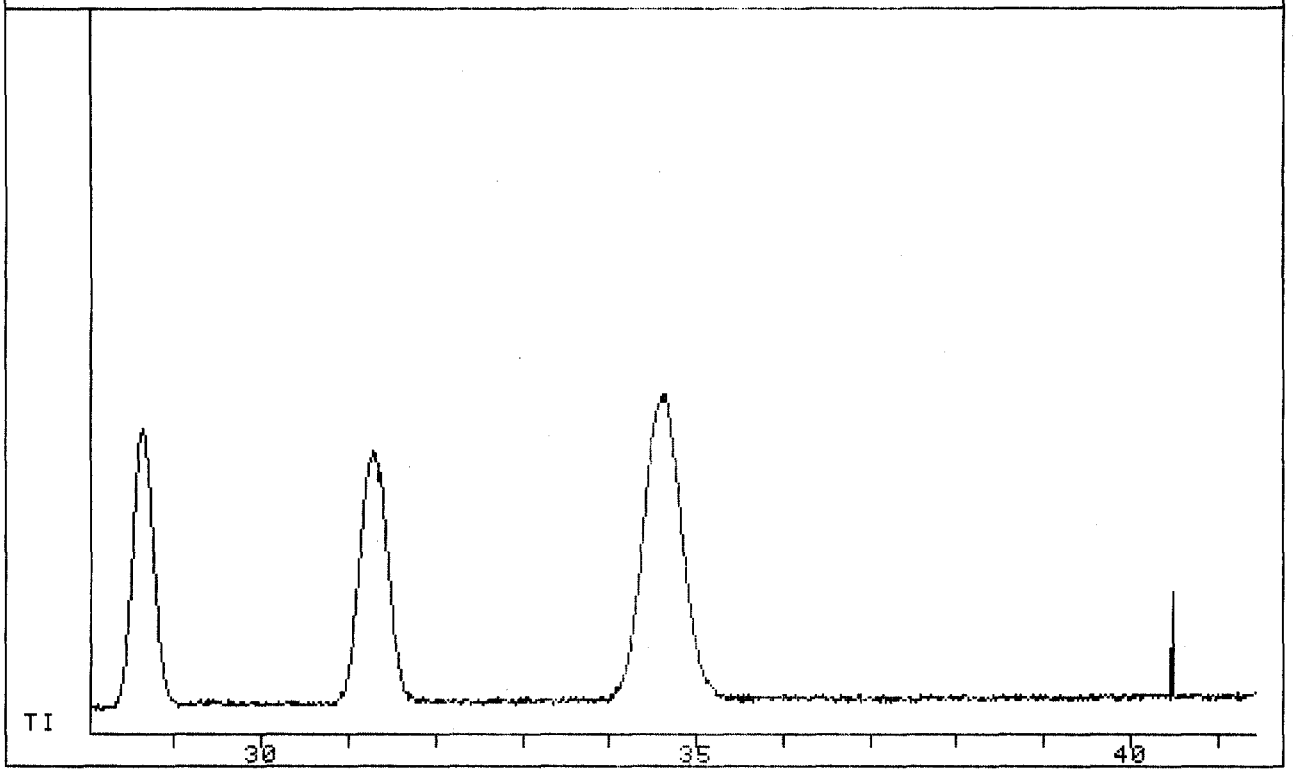

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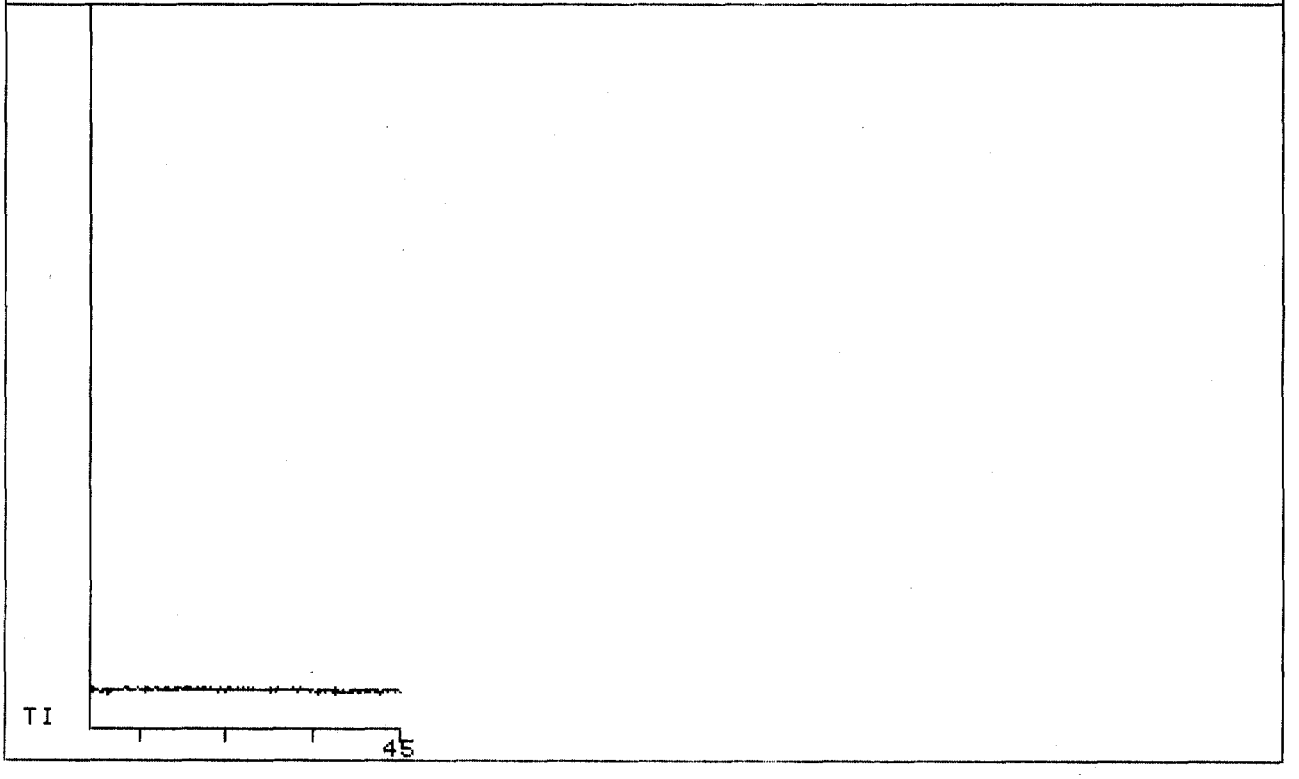
4-18-86 BTL#6 D11251 X= .25 Y= 1.00



Mass spectra of HSL VOA'S

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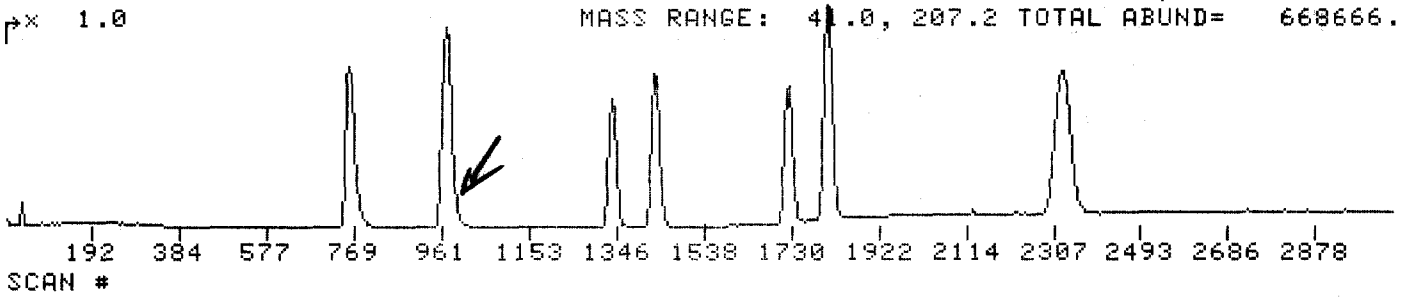
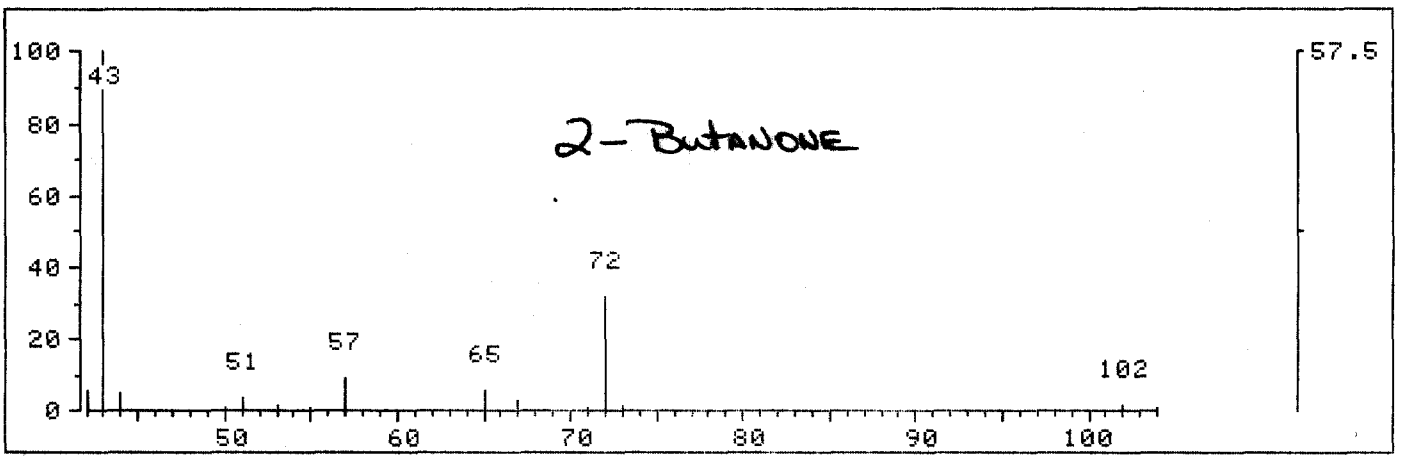
4-18-86 BTL#2 D11247 3048 SCANS (3048 SCANS, 43.72 MINS)
FRN 11247, [redacted] 17
×1.0 MASS RANGE: 41.0, 207.2 TOTAL ABUND= 668666.



978 RET. TIME: 15.28 TOT ABUND= 2037. BASE PK/ABUND: 43.1/ 1172.



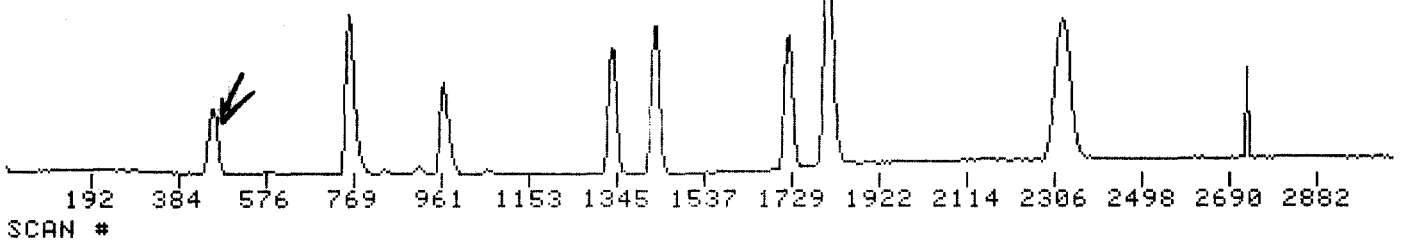
FRN 11247, SPECTRUM # 978 RET.TIME: 15.28, 15 PEAKS

M/Z	REL ABUND	M/Z	REL ABUND	M/Z	REL ABUND	M/Z	REL ABUND
42	5.9	51	3.8	65	5.5	73	1.5
43	100.0	53	1.9	67	3.3	102	1.8
44	5.0	55	1.0	71	1.4	104	1.3
50	1.1	57	9.0	72	31.7		

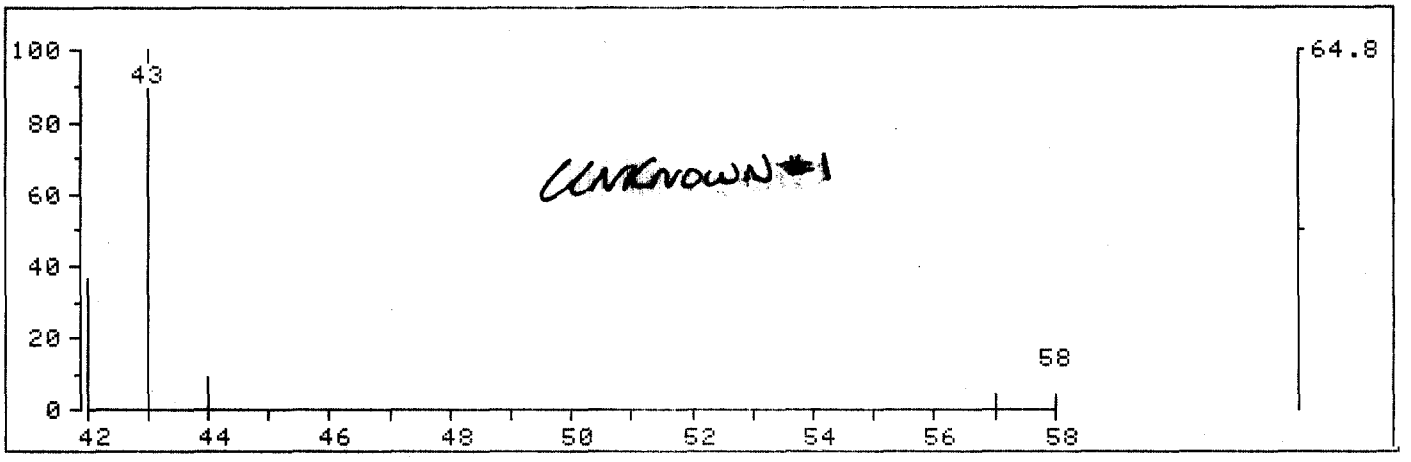
>PAUSE

MASS SPECTRA OF TENT. ID VOA'S

SF-3151 N.E. GRAVEL 86FG05R07 FRN 11248, [redacted] 17
4-18-86 BTL#3 D11248 3047 SCANS (3047 SCANS, 43.72 MINS)
↱× 1.0 MASS RANGE: 41.0, 207.2 TOTAL ABUND= 667979.



456 RET. TIME: 7.82 TOT ABUND= 909. BASE PK/ABUND: 43.1/ 589.



FRN 11248, SPECTRUM # 456 RET.TIME: 7.82, 5 PEAKS

M/Z	REL ABUND	M/Z	REL ABUND	M/Z	REL ABUND	M/Z	REL ABUND
42	36.3	44	9.3	58	4.6		
43	100.0	57	4.2				

>PAUSE

NO REASONABLE LIBRARY MATCH.

SIMILIAR TO ACETONE BUT RETENTION TIME + REL. ABUNDANCES INCORRECT.

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

CONCENTRATION OF STANDARDS USED IN VOLSTD MIX

	CAS #	Compounds	Concentration (PPB)
1.	74-87-3	Chloromethane	13.4
2.	74-83-9	Bromomethane	13.4
3.	75-01-4	Vinyl Chloride	13.4
4.	75-00-3	Chloroethane	13.4
5.	75-09-2	Methylene Chloride	6.7
6.	107-02-8	Acrolein	300
7.	67-64-1	Acetone	300
8.	107-37-1	Acrylonitrile	300
9.	75-15-0	Carbon Disulfide	~~10~~ 20
10.	75-35-4	1,1-Dichloroethene	6.7
11.	75-35-3	1,1-Dichloroethane	6.7
12.	156-60-5	trans-1,2-Dichloroethene	6.7
13.	67-66-3	Chloroform	6.7
14.	78-93-3	2-Butanone	100
15.	107-06-2	1,2-Dichloroethane	6.7
16.	71-55-6	1,1,1-Trichloroethane	6.7
17.	56-23-5	Carbon Tetrachloride	6.7
18.	108-05-4	Vinyl Acetate	~~15~~ 20
19.	75-27-4	Bromodichloromethane	6.7
20.	78-87-5	1,2-Dichloropropane	6.7
21.	10061-02-6	trans-1,3-Dichloropropene	3.0
22.	79-01-6	Trichloroethene	6.7
23.	71-43-2	Benzene	6.7
24.	124-48-1	Dibromochloromethane	6.7
25.	79-00-5	1,1,2-Trichloroethane	6.7
26.	10061-01-5	cis-1,3-Dichloropropene	10.4
27.	110-75-8	2-Chloroethyl Vinyl Ether	6.7
28.	75-25-2	Bromoform	6.7
29.	108-10-1	4-Methyl-2-pentanone	20
30.	519-78-6	2-Hexanone	~~150~~ ~~100~~ 20
31.	127-18-4	Tetrachloroethene	6.7
32.	79-34-5	1,1,2,2-Tetrachloroethane	6.7
33.	108-88-3	Toluene	6.7
34.	108-90-7	Chlorobenzene	6.7
35.	100-41-4	Ethylbenzene	6.7
36.	100-42-5	Styrene	~~10~~ 20
37.	108-38-3	m-Xylene	13.4
38.		o/p-Xylene (total)	16.8

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

___ Graph

___ Mail receipts

___ Sample tags

II. Image Quality (Pages follow / No. of pages 2)

X Resolution / Contrast

Manual Calculations

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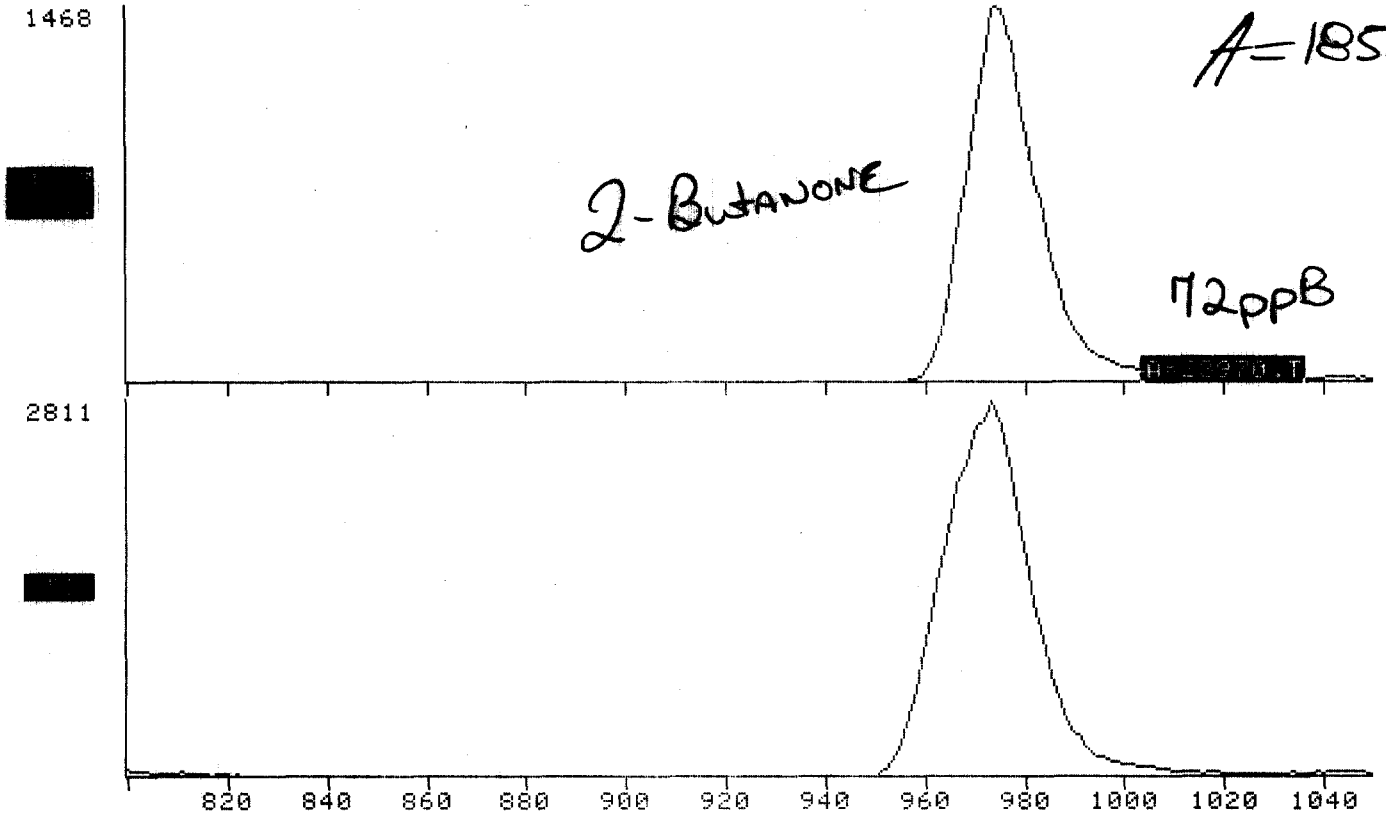
MI 4-18-86 BTL#2 D11247 FRN 11247



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2-Butanone

72ppB

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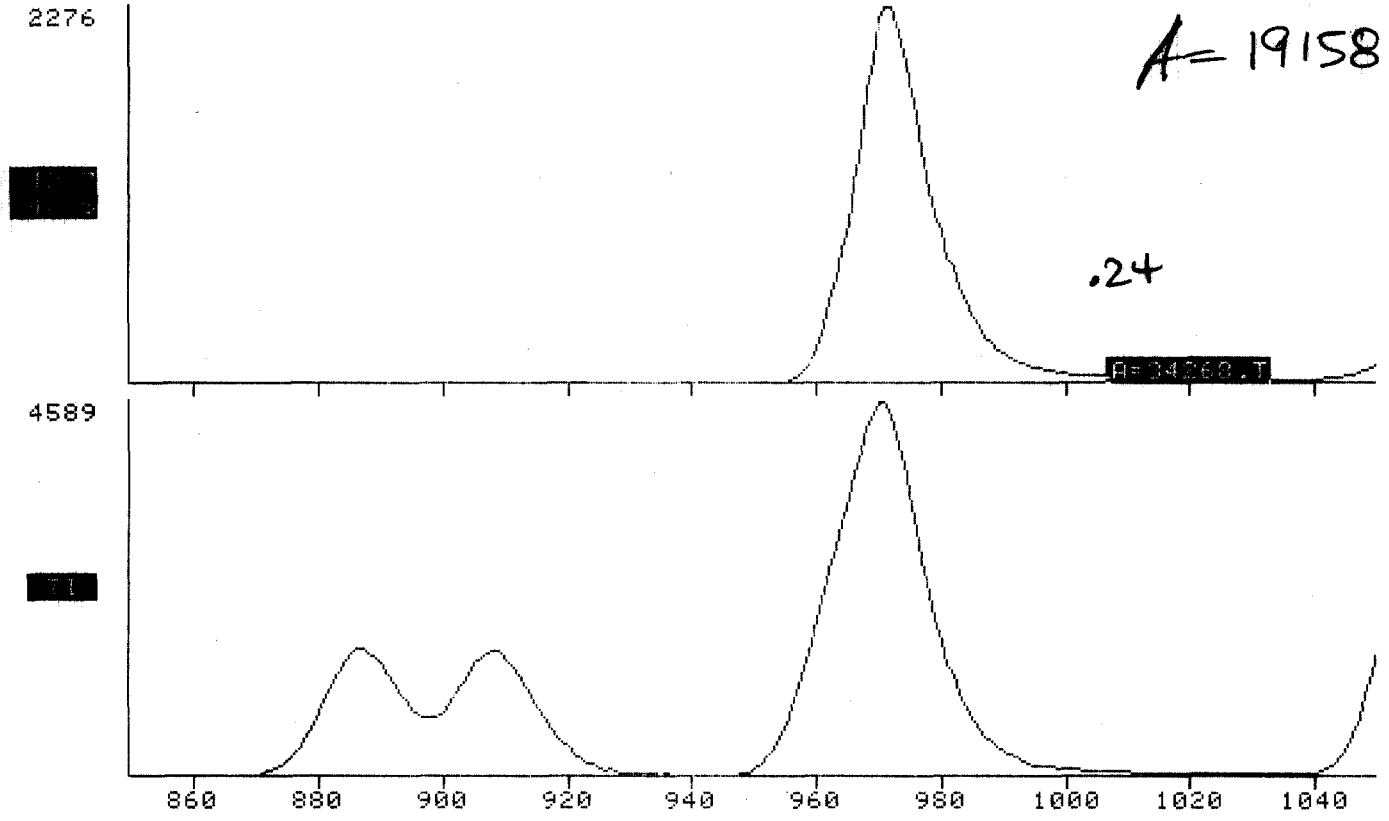
MI 4-18-86 BTL#4 D11249 FRN 11249



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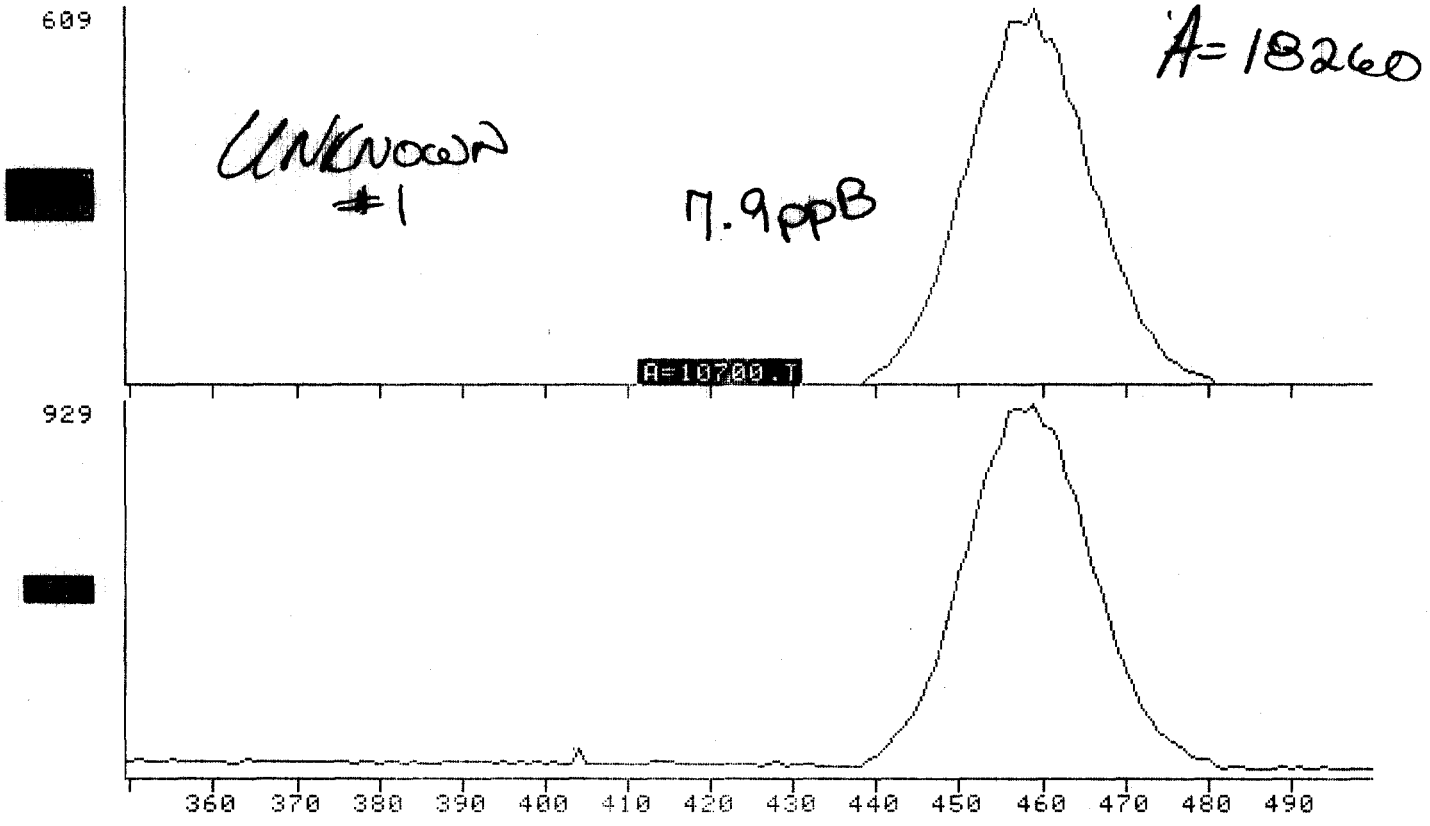
MI..E 4-18-86 BTL#3 D11248



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5-9-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRADE C

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: _____

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

TRANSMITTED BY
Griffin
MAY 12 1986

U.S. EPA CENTRAL REGIONAL LAB
536 S. CLARK STREET
CHICAGO ILLINOIS 60605

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151

Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
ABN ACID FRACTION	12-28%	≤ 36%	SURROGATE MATRIX SPIKES	27-79%	10-107%	SURROGATE SPIKES
ABN BASE/NEUTRAL	4-16%	≤ 36%	"	59-116%	25-133%	"

COMMENT:

QC FLAGS:

ACTIVITY #C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER VOLATILE ORGANICS SCAN UG/L TOX 17564	WATER ABN ORGANICS SCAN UG/L TOX 17574	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
86FG05S74	5-54349-5015-93904-05 GRACELAND CHURCH	✓			
86FG05R07	BLANK 5-93908-09	✓			
86FG05S74	5-54346-47-48 GRACELAND CHURCH		✓		
86FG05R07	BLANK 5-93907		✓		
			5/4/86		
			SK 5/5/86		
			UF 5/6/86		
			5/9/86		

RECEIVED BY
Griffin
MAY 12 1986
U.S. EPA CENTRAL REGIONAL LAB
CHICAGO ILLINOIS 60605

SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05R07

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
1.	62-53-3	ANILINE	1.5	U
2.	111-44-4	BIS(2-CHLOROETHYL)ETHER	1.5	U
3.	108-95-2	PHENOL	2.0	U
4.	95-57-8	2-CHLOROPHENOL	2.0	U
5.	541-73-1	1,3-DICHLOROBENZENE	2.0	U
6.	106-46-7	1,4-DICHLOROBENZENE	2.0	U
7.	95-50-1	1,2-DICHLOROBENZENE	2.5	U
8.	100-51-6	BENZYL ALCOHOL	2.0	U
9.	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	2.5	U
10.	95-48-7	2-METHYLPHENOL	1.0	U
11.	67-72-1	HEXACHLOROETHANE	2.0	U
12.	621-64-7	N-NITROSODIPROPYLAMINE	1.5	U
13.	98-95-3	NITROBENZENE	2.5	U
14.	106-44-5	4-METHYLPHENOL	1.0	U
15.	78-59-1	ISOPHORONE	2.5	U
16.	88-75-5	2-NITROPHENOL	2.0	U
17.	105-67-9	2,4-DIMETHYLPHENOL	2.0	U
18.	111-91-1	BIS(2-CHLOROETHOXY)METHANE	2.5	U
19.	120-83-2	2,4-DICHLOROPHENOL	2.0	U
20.	120-82-1	1,2,4-TRICHLOROBENZENE	2.0	U
21.	91-20-3	NAPHTHALENE	2.0	U
22.	106-47-8	4-CHLOROANILINE	2.0	U
23.	87-68-3	HEXACHLOROBUTADIENE	2.5	U
24.	65-85-0	BENZOIC ACID	(30)	U
25.	91-57-6	2-METHYLNAPHTHALENE	2.0	U
26.	59-50-7	4-CHLORO-3-CRESOL	1.5	U
27.	77-47-4	HEXACHLOROCYCLOPENTADIENE	2.0	U
28.	88-06-2	2,4,6-TRICHLOROPHENOL	1.5	U
29.	95-95-4	2,4,5-TRICHLOROPHENOL	1.5	U
30.	91-58-7	2-CHLORONAPHTHALENE	1.5	U
31.	208-96-8	ACENAPHTHYLENE	1.5	U
32.	131-11-3	DIMETHYL PHTHALATE	1.5	U
33.	606-20-2	2,6-DINITROTOLUENE	1.0	U
34.	83-32-9	ACENAPHTHENE	1.5	U
35.	99-09-2	3-NITROANILINE	2.5	U
36.	132-64-9	DIBENZOFURAN	1.0	U

STUDY NAME: NORTHEAST GRAVEL STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05R07 ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
37.	51-28-5	2,4-DINITROPHENOL	(15)	U
38.	121-14-2	2,4-DINITROTOLUENE	1.0	U
39.	86-73-7	FLUORENE	1.0	U
40.	100-02-7	4-NITROPHENOL	1.5	U
41.	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	1.0	U
42.	84-66-2	DIETHYL PHTHALATE	1.0	U
43.	534-52-1	4,6-DINITRO-2-METHYLPHENOL	(15)	U
44.	122-66-7	1,2-DIPHENYLHYDRAZINE	1.0	U
45.	86-30-6	N-NITROSODIPHENYLAMINE *	1.5	U
	122-39-4	DIPHENYLAMINE *		
46.	100-01-6	4-NITROANILINE	3.0	U
47.	101-55-3	4-BROMOPHENYLPHENYL ETHER	1.5	U
48.	118-74-1	HEXACHLOROBENZENE	1.5	U
49.	87-86-5	PENTACHLOROPHENOL	2.0	U
50.	85-01-8	PHENANTHRENE	1.0	U
51.	120-12-7	ANTHRACENE	2.5	U
52.	84-74-2	DI-N-BUTYL PHTHALATE	2.0	U
53.	206-44-0	FLUORANTHENE	1.5	U
54.	129-00-0	PYRENE	1.5	U
55.	85-68-7	BUTYLBENZYL PHTHALATE	3.5	U
56.	218-01-9	CHRYSENE **	1.5	U
57.	56-55-3	BENZO(A)ANTHRACENE **		
58.	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE		1.8
59.	117-84-0	DI-N-OCTYL PHTHALATE	1.5	U
60.	205-99-2	BENZO(B)FLUORANTHENE ***	1.5	U
61.	207-08-9	BENZO(K)FLUORANTHENE ***		
62.	50-32-8	BENZO(A)PYRENE	2.0	U
63.	193-39-5	INDENO(1,2,3-CD)PYRENE	3.5	U
64.	53-70-3	DIBENZO(A,H)ANTHRACENE	2.5	U
65.	191-24-2	BENZO(GHI)PERYLENE	4.0	U
66.	88-74-4	2-NITROANILINE	1.0	U

CODES: U --- COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED. THE VALUE REPORTED IS THE METHOD DETECTION LIMIT FOR REAGENT WATER.
SLC - SUSPECTED LABORATORY CONTAMINANT
SFC - SUSPECTED FIELD CONTAMINANT

* THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
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VALUES IN PARENTHESES ARE ESTIMATES. ACTUAL VALUES ARE BEING DETERMINED AT THIS TIME.

SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05S74

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
1.	62-53-3	ANILINE	1.5	U
2.	111-44-4	BIS(2-CHLOROETHYL)ETHER	1.5	U
3.	108-95-2	PHENOL	2.0	U
4.	95-57-8	2-CHLOROPHENOL	2.0	U
5.	541-73-1	1,3-DICHLOROBENZENE	2.0	U
6.	106-46-7	1,4-DICHLOROBENZENE	2.0	U
7.	95-50-1	1,2-DICHLOROBENZENE	2.5	U
8.	100-51-6	BENZYL ALCOHOL	2.0	U
9.	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	2.5	U
10.	95-48-7	2-METHYLPHENOL	1.0	U
11.	67-72-1	HEXACHLOROETHANE	2.0	U
12.	621-64-7	N-NITROSODIPROPYLAMINE	1.5	U
13.	98-95-3	NITROBENZENE	2.5	U
14.	106-44-5	4-METHYLPHENOL	1.0	U
15.	78-59-1	ISOPHORONE	2.5	U
16.	88-75-5	2-NITROPHENOL	2.0	U
17.	105-67-9	2,4-DIMETHYLPHENOL	2.0	U
18.	111-91-1	BIS(2-CHLOROETHOXY)METHANE	2.5	U
19.	120-83-2	2,4-DICHLOROPHENOL	2.0	U
20.	120-82-1	1,2,4-TRICHLOROBENZENE	2.0	U
21.	91-20-3	NAPHTHALENE	2.0	U
22.	106-47-8	4-CHLOROANILINE	2.0	U
23.	87-68-3	HEXACHLOROBUTADIENE	2.5	U
24.	65-85-0	BENZOIC ACID	(30)	U
25.	91-57-6	2-METHYLNAPHTHALENE	2.0	U
26.	59-50-7	4-CHLORO-3-CRESOL	1.5	U
27.	77-47-4	HEXACHLOROCYCLOPENTADIENE	2.0	U
28.	88-06-2	2,4,6-TRICHLOROPHENOL	1.5	U
29.	95-95-4	2,4,5-TRICHLOROPHENOL	1.5	U
30.	91-58-7	2-CHLORONAPHTHALENE	1.5	U
31.	208-96-8	ACENAPHTHYLENE	1.5	U
32.	131-11-3	DIMETHYL PHTHALATE	1.5	U
33.	606-20-2	2,6-DINITROTOLUENE	1.0	U
34.	83-32-9	ACENAPHTHENE	1.5	U
35.	99-09-2	3-NITROANILINE	2.5	U
36.	132-64-9	DIBENZOFURAN	1.0	U

STUDY NAME: NORTHEAST GRAVEL STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05S74 ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
37.	51-28-5	2,4-DINITROPHENOL	(15)	U
38.	121-14-2	2,4-DINITROTOLUENE	1.0	U
39.	86-73-7	FLUORENE	1.0	U
40.	100-02-7	4-NITROPHENOL	1.5	U
41.	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	1.0	U
42.	84-66-2	DIETHYL PHTHALATE	1.0	U
43.	534-52-1	4,6-DINITRO-2-METHYLPHENOL	(15)	U
44.	122-66-7	1,2-DIPHENYLHYDRAZINE	1.0	U
45.	86-30-6	N-NITROSODIPHENYLAMINE *	1.5	U
	122-39-4	DIPHENYLAMINE *		
46.	100-01-6	4-NITROANILINE	3.0	U
47.	101-55-3	4-BROMOPHENYLPHENYL ETHER	1.5	U
48.	118-74-1	HEXACHLOROBENZENE	1.5	U
49.	87-86-5	PENTACHLOROPHENOL	2.0	U
50.	85-01-8	PHENANTHRENE	1.0	U
51.	120-12-7	ANTHRACENE	2.5	U
52.	84-74-2	DI-N-BUTYL PHTHALATE	2.0	U
53.	206-44-0	FLUORANTHENE	1.5	U
54.	129-00-0	PYRENE	1.5	U
55.	85-68-7	BUTYLBENZYL PHTHALATE	3.5	U
56.	218-01-9	CHRYSENE **	1.5	U
57.	56-55-3	BENZO(A)ANTHRACENE **		
58.	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	1.0	U
59.	117-84-0	DI-N-OCTYL PHTHALATE	1.5	U
60.	205-99-2	BENZO(B)FLUORANTHENE ***	1.5	U
61.	207-08-9	BENZO(K)FLUORANTHENE ***		
62.	50-32-8	BENZO(A)PYRENE	2.0	U
63.	193-39-5	INDENO(1,2,3-CD)PYRENE	3.5	U
64.	53-70-3	DIBENZO(A,H)ANTHRACENE	2.5	U
65.	191-24-2	BENZO(GHI)PERYLENE	4.0	U
66.	88-74-4	2-NITROANILINE	1.0	U

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SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: LAB BLANK

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
1.	62-53-3	ANILINE	1.5	U
2.	111-44-4	BIS(2-CHLOROETHYL)ETHER	1.5	U
3.	108-95-2	PHENOL	2.0	U
4.	95-57-8	2-CHLOROPHENOL	2.0	U
5.	541-73-1	1,3-DICHLOROBENZENE	2.0	U
6.	106-46-7	1,4-DICHLOROBENZENE	2.0	U
7.	95-50-1	1,2-DICHLOROBENZENE	2.5	U
8.	100-51-6	BENZYL ALCOHOL	2.0	U
9.	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	2.5	U
10.	95-48-7	2-METHYLPHENOL	1.0	U
11.	67-72-1	HEXACHLOROETHANE	2.0	U
12.	621-64-7	N-NITROSODIPROPYLAMINE	1.5	U
13.	98-95-3	NITROBENZENE	2.5	U
14.	106-44-5	4-METHYLPHENOL	1.0	U
15.	78-59-1	ISOPHORONE	2.5	U
16.	88-75-5	2-NITROPHENOL	2.0	U
17.	105-67-9	2,4-DIMETHYLPHENOL	2.0	U
18.	111-91-1	BIS(2-CHLOROETHOXY)METHANE	2.5	U
19.	120-83-2	2,4-DICHLOROPHENOL	2.0	U
20.	120-82-1	1,2,4-TRICHLOROBENZENE	2.0	U
21.	91-20-3	NAPHTHALENE	2.0	U
22.	106-47-8	4-CHLOROANILINE	2.0	U
23.	87-68-3	HEXACHLOROBUTADIENE	2.5	U
24.	65-85-0	BENZOIC ACID	(30)	U
25.	91-57-6	2-METHYLNAPHTHALENE	2.0	U
26.	59-50-7	4-CHLORO-3-CRESOL	1.5	U
27.	77-47-4	HEXACHLOROCYCLOPENTADIENE	2.0	U
28.	88-06-2	2,4,6-TRICHLOROPHENOL	1.5	U
29.	95-95-4	2,4,5-TRICHLOROPHENOL	1.5	U
30.	91-58-7	2-CHLORONAPHTHALENE	1.5	U
31.	208-96-8	ACENAPHTHYLENE	1.5	U
32.	131-11-3	DIMETHYL PHTHALATE	1.5	U
33.	606-20-2	2,6-DINITROTOLUENE	1.0	U
34.	83-32-9	ACENAPHTHENE	1.5	U
35.	99-09-2	3-NITROANILINE	2.5	U
36.	132-64-9	DIBENZOFURAN	1.0	U

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: LAB BLANK

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
37.	51-28-5	2,4-DINITROPHENOL	(15)	U
38.	121-14-2	2,4-DINITROTOLUENE	1.0	U
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42.	84-66-2	DIETHYL PHTHALATE	1.0	U
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48.	118-74-1	HEXACHLOROBENZENE	1.5	U
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52.	84-74-2	DI-N-BUTYL PHTHALATE	2.0	U
53.	206-44-0	FLUORANTHENE	1.5	U
54.	129-00-0	PYRENE	1.5	U
55.	85-68-7	BUTYLBENZYL PHTHALATE	3.5	U
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60.	205-99-2	BENZO(B)FLUORANTHENE ***	1.5	U
61.	207-08-9	BENZO(K)FLUORANTHENE ***		
62.	50-32-8	BENZO(A)PYRENE	2.0	U
63.	193-39-5	INDENO(1,2,3-CD)PYRENE	3.5	U
64.	53-70-3	DIBENZO(A,H)ANTHRACENE	2.5	U
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GC/MS TUNING AND MASS CALIBRATION

Decafluorotriphenylphosphine (DFTPP)

Case No. SK-1234 Contractor EPA REG. 5 CRL Contract No. 12-23-34

Instrument ID #1 Date / Time 4/28/86 16:10

Lab ID >LS190::D5 Data Release Authorized By: S.K._____.

m/z	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.76 OK
68	less than 2.0% of mass 69	0.00 OK (0.00) #1
69	mass 69 relative abundance	48.11
70	less than 2.0% of mass 69	0.00 OK (0.00) #1
127	40.0 - 60.0% of mass 198	41.06 OK
197	less than 1.0% of mass 198	0.00 OK
198	base peak, 100% relative abundance	100.00 OK
199	5.0 - 9.0% of mass 198	6.54 OK
275	10.0 - 30.0% of mass 198	21.95 OK
365	greater than 1.00% of mass 198	1.52 OK
441	present, but less than mass 443	7.89 OK
442	greater than 40.0% of mass 198	56.98 OK
443	17.0 - 23.0% of mass 442	10.51 OK (17.69) #2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

#1 - Value in parenthesis is % mass 69.
#2 - Value in parenthesis is % mass 442.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS

Sequence File: BASSK8::D6

Tune File: APEI01

CR List: D5,D6,D7
CR Cut-off: 3000 blocks.

Number of samples: 10

Samp No.	Data File / Method File	Sample Name / Misc Data	Bottle	Stroke	Quant	Report	Data	Archive	ID	Archive	Output	Quant ID / Quant Output
001)	>LS190	DFTPP	01	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS190::AQ
002)	>LS191	LAB BLANK	02	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^TBINT::AQ
003)	>LS192	TOXSTD 25PPB	03	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS103::AQ
004)	>LS193	TOXSTD 50PPB	04	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS104::AQ
005)	>LS194	TOXSTD 100PPB	05	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS194::AQ
006)	>LS195	SF-3151 86GF05S74 MAT STD	06	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS195::AQ
007)	>LS196	SF-3151 86GF05SR07	07	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS197::AQ
008)	>LS197	SF-3151 86GF05S74MS	08	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS197::AQ
009)	>LS198	SF-3151 86GF05S74MSD	09	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS198::AQ
010)	>LS199	DFTPP	10	3	Y	N	N	N	N			QATB70::D6
	TOXIC1	4-25-86		Dil=1.000								^LS200::AQ

End of sequence file.

:

QUALITY CONTROL SHEET
TOXIC ORGANICS SECTION: BASE/NEUTRAL/ACIDIC

STUDY NAME NORTHEAST GRAVEL

STUDY NUMBER SF-3151

DATE 4-25-86

ACTIVITY NUMBER C48100

ANALYST L.J. SCHMIDT

FRN	SAMPLE NUMBER	MATRIX	AMOUNT (ml)	DILUTIONS	FINAL VOL (AFT.DILU	INTERNAL STDS. (b.p. areas) Conc.: ug/ml		
						D_4-1,4-Dc_8	D_{10}-Phen	D_{12}-Peryl
LS191	LAB BLANK	Water	1000	None	1 ml	44421	100172	8170
LS193	TOXSTD	—	—	—		40881	~~40881~~ 77379	9800
LS195	MATSTD	—	—	—		41512	90902	6627
LS196	86F605 $74	Water	1710	None		38783	85536	4598
LS197	" R07		1720			43715	113683	29343
LS198	" $74MS		1000			40394	77917	6880
LS199	" $74MSD		1000			38996	79495	8829

MS Conditions

Mass Range: 45 to 445

Scan cycle: 1 sec

High Voltage: 2,3 8

Operator: L.J. SCHMIDT

COMMENTS:

>LS191 LAB BLANK 4-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.914	375	380	388	12537	44421	44421	100.00	100.000

Sum of corrected areas: 44421.

>LS191 LAB BLANK 4-25-86
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.795	1487	1492	1506	37240	100172	100172	100.00	100.000

Sum of corrected areas: 100172.

>LS191 LAB BLANK 4-25-86
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.234	2356	2363	2375	1068	8170	8170	99.99	100.000

Sum of corrected areas: 8170.

>LS192 TOXSTD 25PPB 4-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.923	373	378	389	13080	42795	42795	100.00	100.000

Sum of corrected areas: 42795.

>LS192 TOXSTD 25PPB 4-25-86
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.800	1484	1489	1496	28240	78620	78620	100.00	100.000

Sum of corrected areas: 78620.

>LS192 TOXSTD 25PPB 4-25-86
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.270	2353	2362	2374	796	6777	6777	99.99	100.000

Sum of corrected areas: 6777.

>LS193 TOXSTD 50PPB 4-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.919	371	376	385	11909	40881	40881	100.00	100.000

Sum of corrected areas: 40881.

>LS193 TOXSTD 50PPB 4-25-86
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.815	1483	1488	1497	26792	77379	77379	100.00	100.000

Sum of corrected areas: 77379.

>LS193 TOXSTD 50PPB 4-25-86
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.257	2353	2359	2376	1328	9800	9800	100.00	100.000

Sum of corrected areas: 9800.

>LS194 TOXSTD 100PPB 4-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.923	376	381	390	12158	42016	42016	100.00	100.000

Sum of corrected areas: 42016.

>LS194 TOXSTD 100PPB 4-25-86
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.807	1486	1492	1501	25096	77559	77559	100.00	100.000

Sum of corrected areas: 77559.

>LS194 TOXSTD 100PPB 4-25-86
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.237	2354	2362	2376	2965	21725	21725	100.00	100.000

Sum of corrected areas: 21725.

>LS195 ~~SF 3151 860F05374~~ 4-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.904	373	378	385	11969	41512	41512	100.00	100.000

Sum of corrected areas: 41512.

>LS195 ~~SF 3151 860F05374~~ 4-25-86
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.789	1485	1490	1497	35488	90902	90902	100.00	100.000

Sum of corrected areas: 90902.

>LS195 ~~SF 3151 860F05374~~ 4-25-86
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.227	2353	2361	2373	715	6627	6627	99.99	100.000

Sum of corrected areas: 6627.

S74

>LS196 SF-3151 86GF05~~SR07~~ 4-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.904	373	378	387	11283	38783	38783	100.00	100.000

Sum of corrected areas: 38783.

>LS196 ~~SF-3151 86GF05SR07~~ 4-25-86
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.785	1485	1490	1501	33608	85536	85536	100.00	100.000

Sum of corrected areas: 85536.

>LS196 SF-3151~~86GF05SR07~~ 4-25-86
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.223	2353	2361	2368	632	4598	4598	99.99	100.000

Sum of corrected areas: 4598.

R07

>LS197 SF-3151 86GF05S[redacted] 4-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.890	373	377	388	14088	43715	43715	100.00	100.000

Sum of corrected areas: 43715.

>LS197 SF-3151 [redacted] 4-25-86
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.772	1484	1489	1497	39200	113683	113683	100.00	100.000

Sum of corrected areas: 113683.

>LS197 SF-3151 [redacted] 4-25-86
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.211	2350	2360	2383	3839	29343	29343	100.00	100.000

Sum of corrected areas: 29343.

>LS198 SF-3151 86FG05S[redacted]-25-86
151.7| 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.890	372	377	387	11424	40394	40394	100.00	100.000

Sum of corrected areas: 40394.

>LS198 SF-3151 [redacted]
187.7| 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.773	1484	1489	1497	28384	77917	77917	100.00	100.000

Sum of corrected areas: 77917.

>LS198 SF-3151 [redacted]
263.7| 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.198	2351	2359	2370	847	6880	6880	99.99	100.000

Sum of corrected areas: 6880.

SF-3151 - 86FC05 BTMS

>LS199 ~~DFTPP~~ 4-25-86
151.7I 152.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.875	372	376	387	11288	38996	38996	100.00	100.000

Sum of corrected areas: 38996.

>LS199 ~~DFTPP~~ 4-25-86
187.7I 188.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.773	1484	1489	1497	28600	79495	79495	100.00	100.000

Sum of corrected areas: 79495.

>LS199 ~~DFTPP~~ 4-25-86
263.7I 264.7 EIP

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	37.198	2350	2359	2366	1219	8829	8829	99.99	90.018
2	37.312	2366	2367	2370	238	503	503	5.70	5.128
3	37.384	2370	2372	2375	156	476	476	5.39	4.853

Sum of corrected areas: 9808.

Matrix Spike Percent Recovery
BNA Organic Analysis

Study Number SF-3151

Compounds	Sample # 86FG05$74MS	Sample # 86FG05$74MSD	RPD %
Phenol	37	42	13
2-Chlorophenol	81	94	15
Benzyl Alcohol	77	82	6.3
p-chloro-m-cresol	86	81	6.0
4-Nitrophenol	29	23	23
Pentachlorophenol	60	54	11
1,4-Dichlorobenzene	82	94	14
1,2,4-Trichlorobenzene	81	92	13
Acenaphthene	94	85	10
Dibenzofuran	93	81	14
2,4-Dinitrotoluene	97	81	18
Pyrene	116	94	21
4-Chloroaniline	83	83	0
Di-n-butylphthalate	113	96	16
N-Nitrosodipropylamine	95	87	8.8

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS195::AQ
Data File: >LS195::D5
Name: SF-3151 86GF05S74
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 09:37
Injected at: 860428 22:17
Dilution Factor: 1.00

BTL# 6

ID File: QASK12::D6
Title: COPIED FROM QASK4: T2 IS 280
Last Calibration: 860429 09:28

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.79	1490	90902	50.10	% REC.	96
2)	PHENOL	8.13	324	106252	100.00	% REC.	100
3)	2-CHLOROPHENOL	8.32	337	135558	100.00	% REC.	96
4)	1,4-DICHLOROBENZENE	8.96	382	35096	100.00	% REC.	97
5)	BENZYL ALCOHOL	9.63	429	50223	100.00	% REC.	74
6)	N-NITROSODIPROPYL AMINE	10.80	511	41343	100.00	% REC.	94
7)	1,2,4-TRICHLOROBENZENE	13.96	732	31894	100.00	% REC.	96
8)	4-CHLOROANILINE	14.67	782	38464	100.00	% REC.	100
9)	4-CHLORO-3-METHYLPHENOL	17.00	945	41494	100.00	% REC.	96
10)	ACENAPHTHENE	20.73	1206	42420	100.00	% REC.	95
11)	DIBENZOFURAN	21.23	1241	69805	100.00	% REC.	100
12)	2,4-DINITROTOLUENE	21.45	1256	30292	100.00	% REC.	98
13)	4-NITROPHENOL	21.43	1255	57000	100.00	% REC.	79
14)	PENTACHLOROPHENOL	24.52	1471	34585	100.00	% REC.	96
15)	DI-N-BUTYLPHTHALATE	26.67	1622	59358	100.00	% REC.	99
16)	PYRENE	28.53	1752	36167	100.00	% REC.	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS198::AQ
Data File: >LS198::D5
Name: SF-3151 86FG05S~~74MSD~~ STMS
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 09:30
Injected at: 860429 01:57
Dilution Factor: 1.00

BTL# 9

ID File: QASK12::D6
Title: COPIED FROM QASK4: T2 IS 280
Last Calibration: 860429 09:28

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.77	1489	77917	50.10	% REC.	95
2)	PHENOL	8.10	322	33733	37.04	% REC.	100
3)	2-CHLOROPHENOL	8.30	336	93547	80.51	% REC.	95
4)	1,4-DICHLOROBENZENE	8.95	381	24621	81.84	% REC.	98
5)	BENZYL ALCOHOL	9.60	427	33149	77.00	% REC.	79
6)	N-NITROSODIPROPYL AMINE	10.79	510	33835	95.48	% REC.	96
7)	1,2,4-TRICHLOROBENZENE	13.95	731	22018	80.54	% REC.	87
8)	4-CHLOROANILINE	14.66	781	27409	83.13	% REC.	100
9)	4-CHLORO-3-METHYLPHENOL	17.00	945	30537	85.86	% REC.	98
10)	ACENAPHTHENE	20.73	1206	34221	94.12	% REC.	95
11)	DIBENZOFURAN	21.22	1240	55891	93.41	% REC.	100
12)	2,4-DINITROTOLUENE	21.44	1256	25279	97.36	% REC.	96
13)	4-NITROPHENOL	21.39	1252	14332	29.33	% REC.	82
14)	PENTACHLOROPHENOL	24.50	1470	17894	60.36	% REC.	85
15)	DI-N-BUTYLPHTHALATE	26.67	1622	57692	113.39	% REC.	96
16)	PYRENE	28.53	1752	36049	116.28	% REC.	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA Quant Rev: 4 Quant Time: 860429 09:31
Output File: ^LS199::AQ Injected at: 860429 03:11
Data File: >LS199::D5 Dilution Factor: 1.00
Name: ~~DETRA~~ SF-3151 86F605 B74HSD
Misc: 4-25-86 BTL#10

ID File: QASK12::D6
Title: COPIED FROM QASK4: T2 IS 280
Last Calibration: 860429 09:28

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.77	1489	79495	50.10	% REC.	96
2)	PHENOL	8.09	321	39609	42.63	% REC.	100
3)	2-CHLOROPHENOL	8.30	336	111242	93.84	% REC.	98
4)	1,4-DICHLOROBENZENE	8.93	380	28748	93.67	% REC.	99
5)	BENZYL ALCOHOL	9.59	426	36068	82.12	% REC.	76
6)	N-NITROSODIPROPYL AMINE	10.78	509	31625	87.47	% REC.	91
7)	1,2,4-TRICHLOROBENZENE	13.93	730	25735	92.27	% REC.	94
8)	4-CHLOROANILINE	14.65	780	27963	83.13	% REC.	100
9)	4-CHLORO-3-METHYLPHENOL	16.99	944	29318	80.79	% REC.	95
10)	ACENAPHTHENE	20.72	1205	31379	84.59	% REC.	94
11)	DIBENZOFURAN	21.20	1239	49555	81.18	% REC.	100
12)	2,4-DINITROTOLUENE	21.43	1255	21446	80.96	% REC.	92
13)	4-NITROPHENOL	21.39	1252	11676	23.42	% REC.	85
14)	PENTACHLOROPHENOL	24.50	1470	16416	54.28	% REC.	95
15)	DI-N-BUTYLPHTHALATE	26.67	1622	49575	95.50	% REC.	98
16)	PYRENE	28.51	1751	29600	93.59	% REC.	100

* Compound is ISTD

QUALITY CONTROL SHEET
TOXIC ORGANICS SECTION: BASE/NEUTRAL/ACIDIC

STUDY NAME NORTHEAST GRAVEL ACTIVITY NUMBER C48100 DATE 4-25-86

STUDY NUMBER SF-3151 MATRIX WATER ANALYST L.J. SCHMIDT

SURROGATE SPIKE PERCENT RECOVERY

FRN	SAMPLE NUMBER	D5-PHENOL	2-Fluoro-PHENOL	2,4,6-TRIPHENOL	D5-NITRO-BENZENE	2-FLUORO BIPHENYL	D-14-TERPHENY
LS 191	LAB BLANK	27	41	62	62	59	90
LS 193	TOXSTD	100	100	100	100	100	100
196	RFGOS $74	33	47	64	71	62	84
197	" R07	30	43	69	63	63	116
198	" $74MS	31	45	79	72	71	100
199	" $74MSD	36	53	65	80	69	85

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS193::AQ
Data File: >LS193::D5
Name: TOXSTD 50PPB
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 08:50
Injected at: 860428 19:50
Dilution Factor: 1.00
BTL# 4

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.81	1488	77379	50.10	% REC.	98
2)	2-FLUOROPHENOL	5.36	127	173223	100.00	% REC.	100
3)	D5-PHENOL	8.12	320	154665	100.00	% REC.	100
4)	D5-NITROBENZENE	11.16	533	105349	100.00	% REC.	95
5)	2-FLUOROBIPHENYL	18.67	1058	93102	100.00	% REC.	94
6)	2,4,6-TRIBROMOPHENOL	23.04	1364	98999	100.00	% REC.	100
7)	D14-TERPHENYL	29.09	1787	19330	100.00	% REC.	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS191::AQ
Data File: >LS191::D5
Name: LAB BLANK
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 08:52
Injected at: 860428 17:23
Dilution Factor: 1.00
BTL# 2

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.80	1492	100172	50.10	% REC.	97
2)	2-FLUOROPHENOL	5.34	130	92237	41.13	% REC.	100
3)	D5-PHENOL	8.07	321	54820	27.38	% REC.	100
4)	D5-NITROBENZENE	11.14	536	84673	62.09	% REC.	93
5)	2-FLUOROBIPHENYL	18.64	1061	71238	59.11	% REC.	98
6)	2,4,6-TRIBROMOPHENOL	23.00	1366	79390	61.95	% REC.	100
7)	D14-TERPHENYL	29.08	1792	22436	89.66	% REC.	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS192::AQ
Data File: >LS192::D5
Name: TOXSTD 25PPB
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 08:53
Injected at: 860428 18:37
Dilution Factor: 1.00
BTL# 3

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY

Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.80	1489	78620	50.10	% REC.	95
2)	2-FLUOROPHENOL	5.35	128	182194	103.52	% REC.	100
3)	D5-PHENOL	8.11	321	161472	102.75	% REC.	100
4)	D5-NITROBENZENE	11.17	535	117540	109.81	% REC.	91
5)	2-FLUOROBIPHENYL	18.65	1059	96890	102.43	% REC.	95
6)	2,4,6-TRIBROMOPHENOL	23.01	1364	92395	91.86	% REC.	100
7)	D14-TERPHENYL	29.07	1788	19309	98.31	% REC.	100

LS192

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS193::AQ
Data File: >LS193::D5
Name: TOXSTD 50PPB
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 08:53
Injected at: 860428 19:50
Dilution Factor: 1.00

BTL# 4

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.81	1488	77379	50.10	% REC.	98
2)	2-FLUOROPHENOL	5.36	127	173223	100.00	% REC.	100
3)	D5-PHENOL	8.12	320	154665	100.00	% REC.	100
4)	D5-NITROBENZENE	11.16	533	105349	100.00	% REC.	95
5)	2-FLUOROBIPHENYL	18.67	1058	93102	100.00	% REC.	94
6)	2,4,6-TRIBROMOPHENOL	23.04	1364	98999	100.00	% REC.	100
7)	D14-TERPHENYL	29:09	1787	19330	100.00	% REC.	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS194::AQ
Data File: >LS194::D5
Name: TOXSTD 100PPB
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 08:53
Injected at: 860428 21:04
Dilution Factor: 1.00

BTL# 5

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.81	1492	77559	50.10	% REC.	97
2)	2-FLUOROPHENOL	5.35	131	176302	101.54	% REC.	100
3)	D5-PHENOL	8.14	326	163950	105.76	% REC.	100
4)	D5-NITROBENZENE	11.17	538	114997	108.90	% REC.	97
5)	2-FLUOROBIPHENYL	18.66	1062	97822	104.83	% REC.	93
6)	2,4,6-TRIBROMOPHENOL	23.03	1368	93122	93.85	% REC.	100
7)	D14-TERPHENYL	29.08	1791	23853	123.11	% REC.	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS195::AQ
Data File: >LS195::D5
Name: ~~SF-3151 860F05S74~~ MM7STD
Misc: 4-25-86

Quant Rev: 4 Quant Time: 860429 08:54
Injected at: 860428 22:17
Dilution Factor: 1.00

BTL# 6

LS195

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.79	1490	90902	50.10	% REC.	97
2)	2-FLUOROPHENOL	5.33	128	170239	83.66	%=REC. 42	100
3)	D5-PHENOL	8.09	321	159976	88.05	%=REC. 44	100
4)	D5-NITROBENZENE	11.13	534	108037	87.30	%=REC. 44	95
5)	2-FLUOROBIPHENYL	18.63	1059	90313	82.57	%=REC. 41	93
6)	2,4,6-TRIBROMOPHENOL	22.99	1364	105418	90.64	%=REC. 45	100
7)	D14-TERPHENYL	29.06	1789	22960	101.11	%=REC. 60	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS196::AQ
Data File: >LS196::D5
Name: SF-3151 860F05S~~R07~~ S74
Misc: 4-25-86

Quant Rev: 4 Quant Time: 860429 08:54
Injected at: 860428 23:31
Dilution Factor: 1.00

BTL# 7

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.78	1490	85536	50.10	% REC.	98
2)	2-FLUOROPHENOL	5.33	128	179396	93.69	%=REC. 47	100
3)	D5-PHENOL	8.08	320	113157	66.19	%=REC. 33	100
4)	D5-NITROBENZENE	11.15	535	166478	142.96	%=REC. 71	95
5)	2-FLUOROBIPHENYL	18.63	1059	128210	124.58	%=REC. 62	98
6)	2,4,6-TRIBROMOPHENOL	23.00	1365	139677	127.63	%=REC. 64	100
7)	D14-TERPHENYL	29.07	1790	35980	168.39	%=REC. 84	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS197::AQ
Data File: >LS197::D5
Name: SF-3151 860F05S~~74MS~~ S7
Misc: 4-25-86

Quant Rev: 4 Quant Time: 860429 08:54
Injected at: 860429 00:44
Dilution Factor: 1.00

BTL# 8

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

LS191

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.77	1489	113683	50.10	% REC.	96
2)	2-FLUOROPHENOL	5.33	128	216545	85.09	/2=REC.43	100
3)	D5-PHENOL	8.08	320	135387	59.58	/2=REC.30	100
4)	D5-NITROBENZENE	11.15	535	195215	126.13	/2=REC.63	96
5)	2-FLUOROBIPHENYL	18.63	1059	171965	125.72	/2=REC.63	96
6)	2,4,6-TRIBROMOPHENOL	23.00	1365	202105	138.95	/2=REC.69	100
7)	D14-TERPHENYL	29.06	1789	65815	231.75	/2=REC.116	100

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS198::AQ
Data File: >LS198::D5
Name: SF-3151 86FG05S~~74MSD~~ S74MS
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 08:55
Injected at: 860429 01:57
Dilution Factor: 1.00
BTL# 9

ID File: QASK13::D6
Title: SURROGATE SPIKE % RECOVERY
Last Calibration: 860429 08:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D10-PHENANTHRENE	24.77	1489	77917	50.10	% REC.	97
2)	2-FLUOROPHENOL	5.33	128	78721	45.13	% REC.	100
3)	D5-PHENOL	8.06	319	48008	30.83	% REC.	100
4)	D5-NITROBENZENE	11.12	533	75969	71.61	% REC.	95
5)	2-FLUOROBIPHENYL	18.62	1058	66331	70.75	% REC.	94
6)	2,4,6-TRIBROMOPHENOL	22.99	1364	78744	78.99	% REC.	100
7)	D14-TERPHENYL	29.06	1789	19463	99.99	% REC.	100

* Compound is ISTD

>LS199 DFTPP 4-25-86
111.7 112.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	5.319	124	127	143	26776	93791	93791	100.00	100.000

53%

Sum of corrected areas: 93791.

>LS199 DFTPP 4-25-86
98.7 99.7

36%

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.047	314	318	329	15762	56518	56518	100.00	92.767
2	8.304	332	336	344	1158	4407	4407	7.80	7.233

Sum of corrected areas: 60925.

>LS199 DFTPP 4-25-86
81.7 82.7

80%

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	11.104	526	532	541	26120	87026	87026	100.00	84.201
2	14.060	734	739	743	1745	5403	5403	6.21	5.228
3	20.630	1195	1199	1203	4143	10926	10926	12.55	10.571

Sum of corrected areas: 103355.

>LS199 DFTPP 4-25-86
187.7 188.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.773	1484	1489	1497	28600	79495	79495	100.00	100.000

Sum of corrected areas: 79495.

>LS199 DFTPP 4-25-86
171.7| 172.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	18.602	1053	1057	1063	26784	66037	66037	100.00	95.099
2	22.973	1359	1363	1368	1215	3403	3403	5.15	4.901

Sum of corrected areas: 69440.

>LS199 DFTPP 4-25-86
329.7| 330.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	22.973	1358	1363	1368	23144	66022	66022	100.00	100.000

Sum of corrected areas: 66022.

>LS199 DFTPP 4-25-86
243.7| 244.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	29.043	1784	1788	1795	5655	16805	16805	100.00	100.000

Sum of corrected areas: 16805.

>LS199 DFTPP 4-25-86
187.7| 188.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.773	1484	1489	1497	28600	79495	79495	100.00	100.000

Sum of corrected areas: 79495.

>LS193 TOXSTD 50PPB 4-25-86
111.7| 112.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	5.361	122	127	152	46784	173223	173223	100.00	100.000

Sum of corrected areas: 173223.

>LS193 TOXSTD 50PPB 4-25-86
98.7| 99.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	8.119	313	320	331	35320	154665	154665	100.00	100.000

Sum of corrected areas: 154665.

>LS193 TOXSTD 50PPB 4-25-86
81.7| 82.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	11.163	526	533	539	25408	105349	105349	78.49	39.274
2	12.293	606	612	624	35768	134212	134212	100.00	50.035
3	22.269	1305	1310	1317	10198	28677	28677	21.37	10.691

Sum of corrected areas: 268238.

>LS193 TOXSTD 50PPB 4-25-86
187.7| 188.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	15.223	812	817	821	2638	7292	7292	9.42	8.612
2	24.815	1483	1488	1497	26792	77379	77379	100.00	91.388

Sum of corrected areas: 84671.

>LS193 TOXSTD 50PPB 4-25-86
171.7| 172.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	18.667	1053	1058	1062	37968	93102	93102	100.00	100.000

1.20

Sum of corrected areas: 93102.

>LS193 TOXSTD 50PPB 4-25-86
329.7| 330.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	23.042	1358	1364	1370	33992	98999	98999	100.00	100.000

1.24

Sum of corrected areas: 98999.

>LS193 TOXSTD 50PPB 4-25-86
243.7| 244.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	29.086	1783	1787	1793	7110	19330	19330	100.00	100.000

.29

Sum of corrected areas: 19330.

>LS193 TOXSTD 50PPB 4-25-86
187.7| 188.7

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	15.223	812	817	821	2638	7292	7292	9.42	8.612
2	24.815	1483	1488	1497	26792	77379	77379	100.00	91.388

Sum of corrected areas: 84671.

QUALITY CONTROL SHEET
TOXIC ORGANIC SECTION: BASE/NEUTRAL/ACIDIC

STUDY NAME NORTHEAST GRAVEL ACTIVITY NUMBER C48100 ANALYST L.J. SCHMIDT

STUDY NUMBER SF-3151

SUMMARY: BLANKS DATA

#	FRN	DATE	BLANK TYPE	COMPOUNDS DETECTED	ESTIMATED CONCENTRATION (PPB)	STD USED
1.	LS191	4-25-86	LAB	None Found	N/A	Dia-Phenanthrene
2.	LS197	4-25-86	86GF05R07			
3.						
4.						

Form # 4

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

Group #: _____ Data Set: SF 3151 Sample Type: WATER

ISTD-Conc.:

Sample #	Sample Amount	Final Volume	Solvent Extract. CH_2Cl_2	Dilution with Hexane 1 st.	2 nd.	3 rd.	Vol. Conc. Extr.	Volume to Pest.	Toxic
86FG05 #74	1,710ml		12X60				1ml	—	1ml
86FG05 R07	1,720ml		↓				↓	—	↓
86FG05 #74 MAT SPK	1,000ml		6X60				↓	—	↓
86FG05 #74 MAT SPK DUP	1,000ml		↓				↓	—	↓
METHOD Blank 3151	1,000ml		↓				↓	—	↓

Date Extracted: 4/22/86 Chemist: K Gunter Toxic Ext. Received by

DATE EVAPORATED: 4/23/86 Gen. Org. Ext. " "

Analytical Condition:

GC Conditions: 1.95%

Column 1) 3%-2100 on Supercoport 10 x 1/8"

2) 1.5% SP-2250/ SP-2401 "

T1 _____ Hold _____ Min.

T2 _____ _____ Min.

Rate: _____ C

Carrier Gas: _____; Flow rate: _____

GC Operator & Date: _____

MS Conditions:

Mass Range: _____ to _____

Scan Cycle: _____

High Voltage: _____

Confirmation: _____

Operator & Date: _____

Sample Clean-up and Remarks:

LS surrogates ABN 2/13/86 50ml added to MAT SPK, MAT SPK Dup + Method Blank 100ml Added to #74 + R07

Acid Working Matrix Spike 7/22/85 .5ml added to MS + MSD

B/N Matrix Spiking Soln. 10/1/85 .5ml added to MS + MSD

Printing Report.

Calibration Check Report

Title: COPY FROM QASK2: T2 IS 280
Calibrated: 860505 15:00

Check Standard Data File: >LS193
Injection Time: 860428 19:50

Compound	$\overline{RF}$	RF	%Diff	Calib Meth
ANILINE	2.10620	2.05918	2.23	Average
PHENOL	2.49655	2.54992	2.14	Average
BIS(2-CHLOROETHYL)ETHER	2.10620	2.05918	2.23	Average
2-CHLOROPHENOL	.53146	.52762	.72	Average
1,3-DICHLOROBENZENE	1.64258	1.62238	1.23	Average
1,4-DICHLOROBENZENE	1.64258	1.62238	1.23	Average
1,2-DICHLOROBENZENE	1.54410	1.48370	3.91	Average
BENZYL ALCOHOL	1.04497	1.03297	1.15	Average
2-METHYLPHENOL	1.63859	1.59552	2.63	Average
BIS(2-CHLOROISOPROPYL)ETHER	.42475	.41902	1.35	Average
HEXACHLOROETHANE	.69599	.68707	1.28	Average
4-METHYL PHENOL	2.01815	1.97093	2.34	Average
N-NITROSODIPROPYL AMINE	1.16933	1.16494	.38	Average
NITROBENZENE	.81673	.78137	4.33	Average
ISOPHORONE	1.51379	1.73794	14.81	Average
2-NITROPHENOL	.44971	.42577	5.32	Average
2,4-DIMETHYL PHENOL	.55666	.56918	2.25	Average
BIS(2-CHLOROETHOXY)METHANE	1.19079	1.11247	6.58	Average
2,4-DICHLOROPHENOL	.62705	.60161	4.06	Average
BENZOIC ACID	.00609	.00334	45.17	Average *
1,2,4-TRICHLOROBENZENE	.64573	.61697	4.45	Average
NAPHTHALANE	2.29556	2.17287	5.34	Average
4-CHLOROANILINE	.51054	.51494	.86	Average
HEXACHLOROBUTADIENE	.34991	.32843	6.14	Average
4-CHLORO-3-METHYLPHENOL	.62627	.63809	1.89	Average
2-METHYLNAPHTHALENE	1.40728	1.33575	5.08	Average
HEXACHLOROCYCLOPENTADIENE	.34206	.32490	5.02	Average
2,4,6-TRICHLOROPHENOL	.41882	.42602	1.72	Average
2,4,5-TRICHLOROPHENOL	.41882	.42602	1.72	Average
2-CHLORONAPHTHALENE	1.20397	1.21827	1.19	Average
2-NITROANILINE	.40622	.43366	6.75	Average
ACENAPHTHYLENE	1.71958	1.77543	3.25	Average
DIMETHYLPHTHALATE	1.20904	1.28050	5.91	Average
2,6-DINITROTOLUENE	.29483	.30840	4.60	Average
ACENAPHTHENE	1.19380	1.25693	5.29	Average
3-NITROANILINE	.28431	.30892	8.66	Average
2,4-DINITROPHENOL	.07235	.07263	.39	Average
DIBENZOFURAN	1.52552	1.57798	3.44	Average
2,4-DINITROTOLUENE	.30251	.30560	1.02	Average
4-NITROPHENOL	.13402	.13871	3.50	Average
FLUORENE	1.18198	1.27396	7.78	Average
DIETHYLPHTHALATE	1.08542	1.12921	4.03	Average
4-NITROANILINE	.16238	.17068	5.11	Average
2-METHYL-4,6-DINITROPHENOL	.10843	.11748	8.35	Average

RF - Response Factor from daily standard file at 50.00 PPB

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

%Diff - % Difference from original average or curve

Calibration Check Report

Title: COPY FROM QASK2: T2 IS 280
Calibrated: 860505 15:00

Check Standard Data File: >LS193
Injection Time: 860428 19:50

Compound	$\overline{RF}$	RF	%Diff	Calib Meth
4-CHLOROPHENYL PHENYL ETHER	.63527	.67515	6.28	Average
DIPHENYLAMINE	1.12401	1.10427	1.76	Average
1,2-DIPHENYLHYDRAZINE	3.04541	3.17317	4.20	Average
4-BROMOPHENYLPHENYL ETHER	.33841	.35517	4.95	Average
HEXACHLOROBENZENE	.40491	.41532	2.57	Average
PENTACHLOROPHENOL	.15408	.16383	6.33	Average
PHENANTHRENE	1.19404	1.19120	.24	Average
ANTHRACENE	1.19404	1.19120	.24	Average
DI-N-BUTYLPHTHALATE	1.12947	1.08950	3.54	Average
FLUORANTHENE	.80684	.76628	5.03	Average
PYRENE	.80684	.76628	5.03	Average
BUTYL BENZYL PHTHALATE	1.47195	1.54507	4.97	Average
BENZO(A)ANTHRACENE	2.62700	2.65116	.92	Average
CHRYSENE	2.62700	2.65116	.92	Average
BIS(2-ETHYLHEXYL)PHTHALATE	1.58185	1.62059	2.45	Average
DI-N-OCTYLPHTHALATE	1.64247	1.84829	12.53	Average
BENZO(B)FLUORANTHENE	1.60097	1.66599	4.06	Average
BENZO(K)FLUORANTHENE	1.60097	1.66599	4.06	Average
BENZO(A)PYRENE	1.16971	1.49604	27.90	Average
INDENO[1,2,3-CD]PYRENE	.83996	1.03244	22.92	Average
DIBENZO(A,H)ANTHRACENE	.68874	.49716	27.82	Average
BENZO(GHI)PERYLENE	.82172	.48189	41.36	Average *

* Out of range but these compounds were not detected from the samples.

RF - Response Factor from daily standard file at 50.00 PPB

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

%Diff - % Difference from original average or curve

Done.

GC/MS Top Level. Select softkey...

System Status	Tuning & Diag	Data Acquire	Data Process	AQUARIUS BatchQNT	CLP Forms	Utility Programs	Log Off

LAB BLANK 4-25-86
TIC

GENIE INTEGRATOR REPORT

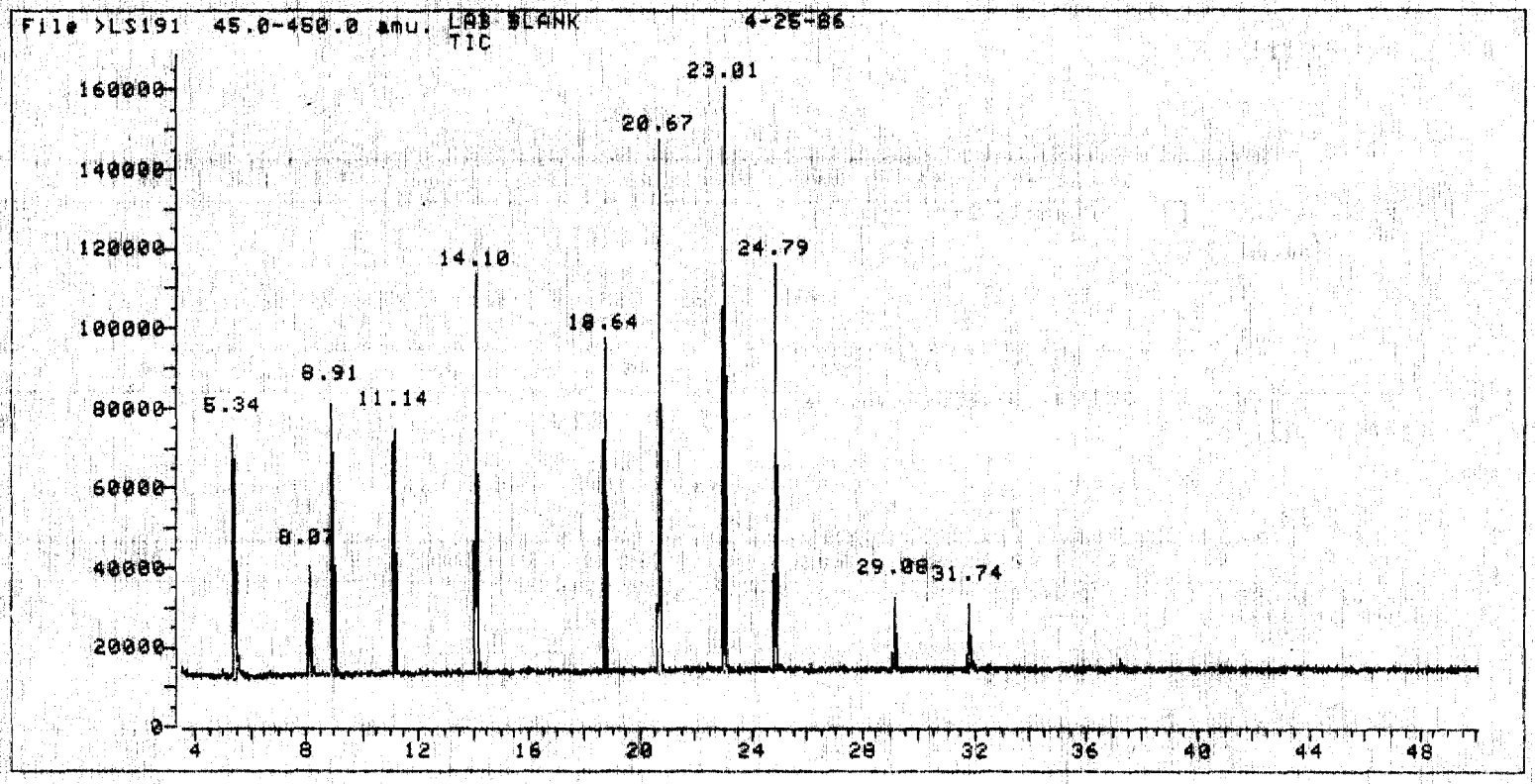
DATA FILE : >LS191
Mass Range : 45.0 - 450.0
Noise Threshold : 1000.0
Peak Width Threshold : 0.1000
Peak Area Threshold : 5.0%
Maximum Number of Peaks : 200

Peaks reported : 11

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	5.343	125	130	142	59974	241084	246570	54.09	9.73
2	8.071	317	321	330	27303	99586	99202	21.76	3.91
3	8.914	374	380	390	67372	244206	241941	53.08	9.55
4	11.142	529	536	543	61600	219286	212925	46.71	8.40
5	14.098	736	743	750	101524	340712	340680	74.74	13.44
6	18.639	1057	1061	1070	81357	200782	200913	44.08	7.93
7	20.667	1198	1203	1207	130659	351526	355678	78.03	14.04
8	23.010	1361	1367	1376	150483	448837	455819	100.00	17.99
9	24.795	1484	1492	1497	100726	276587	274312	60.18	10.82
10	29.079	1788	1792	1797	17572	49023	47847	10.50	1.89
11	31.735	1973	1978	1982	16943	56163	58249	12.78	2.30

Sum of corrected areas : 2534136

CAUTION
Last scan (3260) not on baseline


File >LS191 45.0-450.0 amu. LAB BLANK 4-25-86
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120000
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80000
60000
40000
20000
0
5.34
8.07
8.91
11.14
14.10
18.64
20.67
23.01
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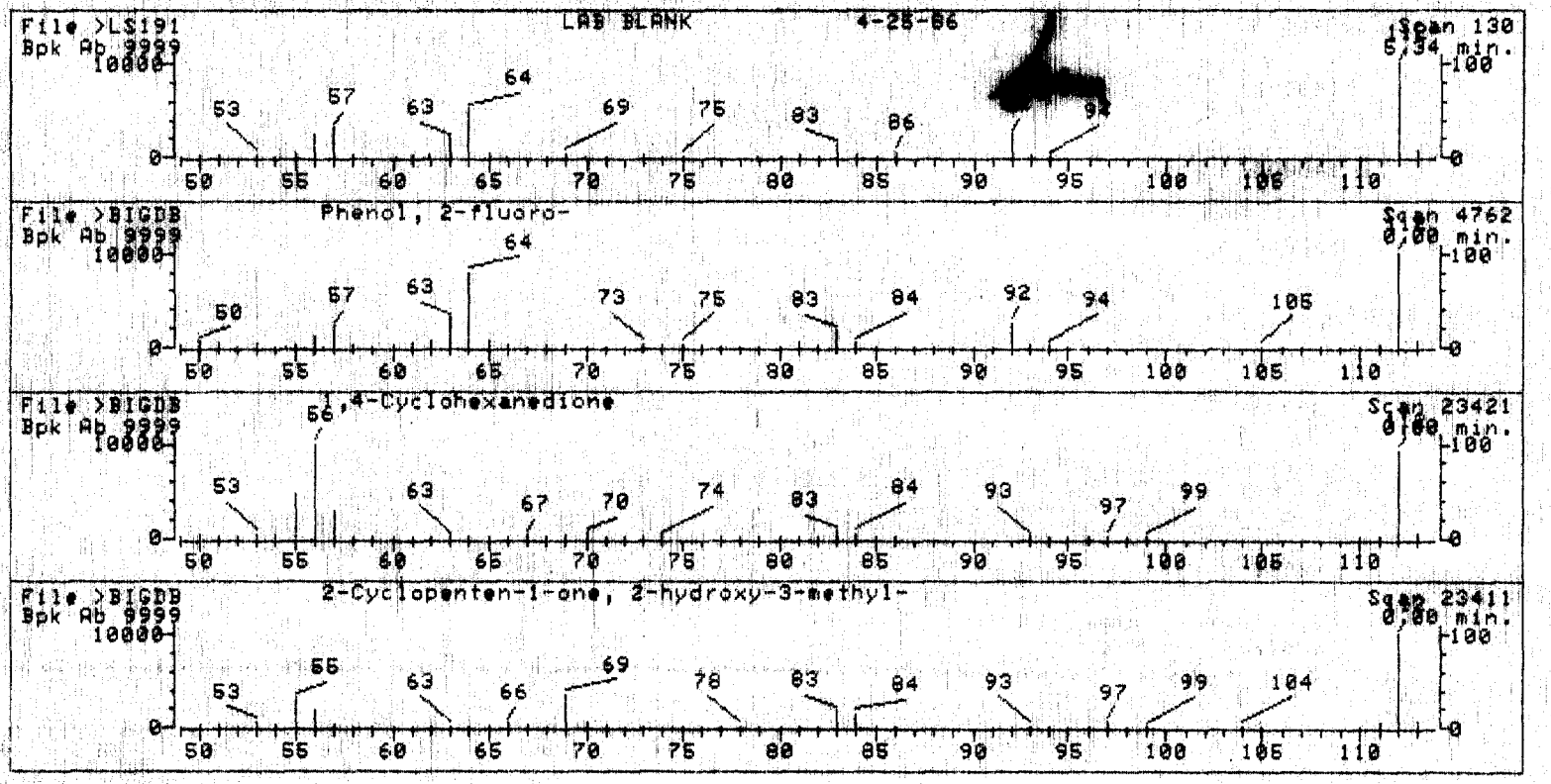
29.08
31.74
4
8
12
16
20
24
28
32
36
40
44
48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Bpk Ab 9999
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LAB BLANK
4-25-86
Scan 130
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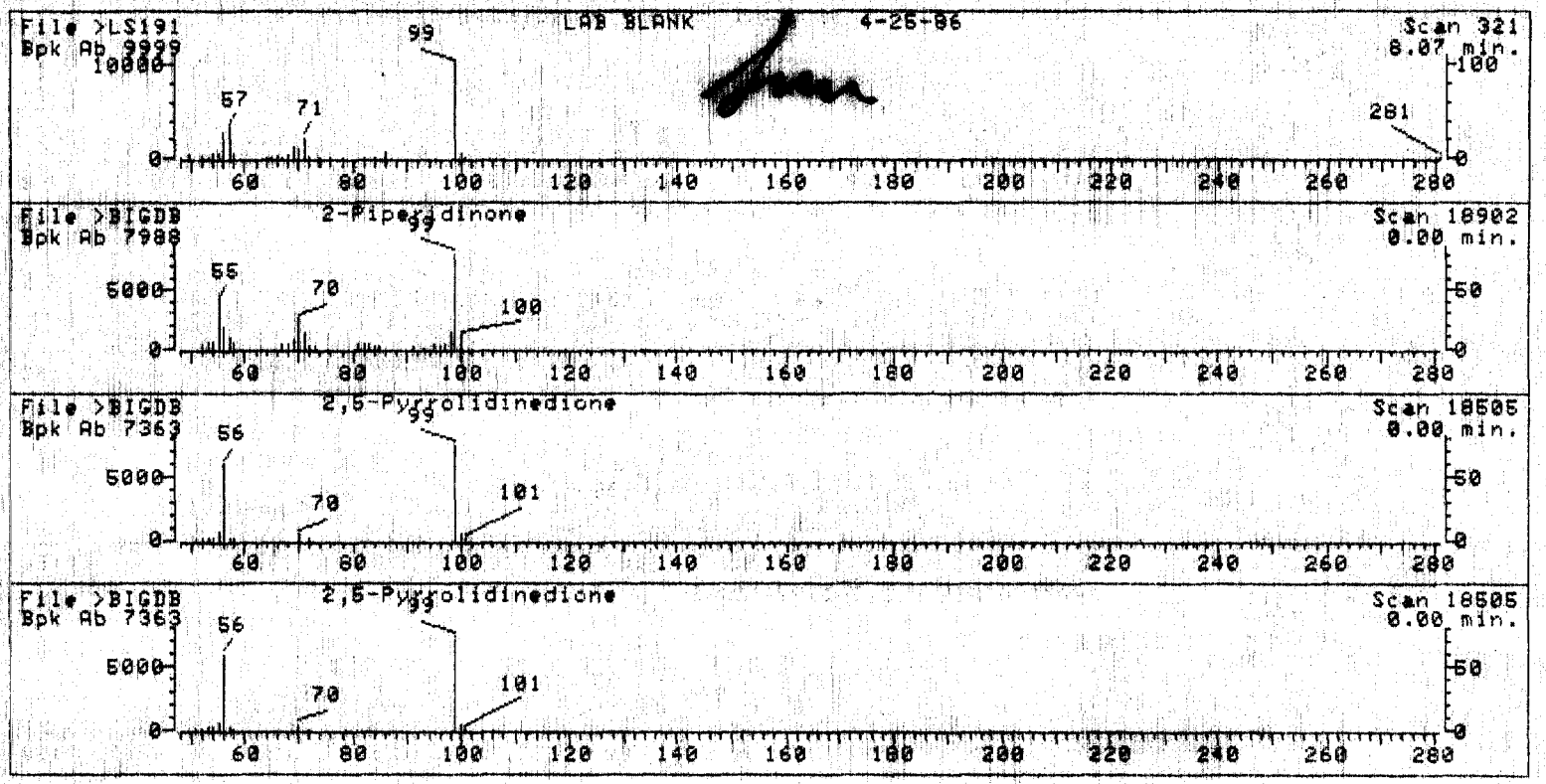
53
57
63
64
69
75
83
86
92
94
50 55 60 65 70 75 80 85 90 95 100 105 110
File >BIGDB
Bpk Ab 9999
10000
Phenol, 2-fluoro-
Scan 4762
0.00 min.
100
0
50
57
63
64
73
75
83
84
92
94
105
50 55 60 65 70 75 80 85 90 95 100 105 110
File >BIGDB
Bpk Ab 9999
10000
1,4-Cyclohexanedione
Scan 23421
0.00 min.
100
0
56
53
63
67
70
74
83
84
93
97
99
50 55 60 65 70 75 80 85 90 95 100 105 110
File >BIGDB
Bpk Ab 9999
10000
2-Cyclopenten-1-one, 2-hydroxy-3-methyl-
Scan 23411
0.00 min.
100
0
53
55
63
66
69
78
83
84
93
97
99
104
50 55 60 65 70 75 80 85 90 95 100 105 110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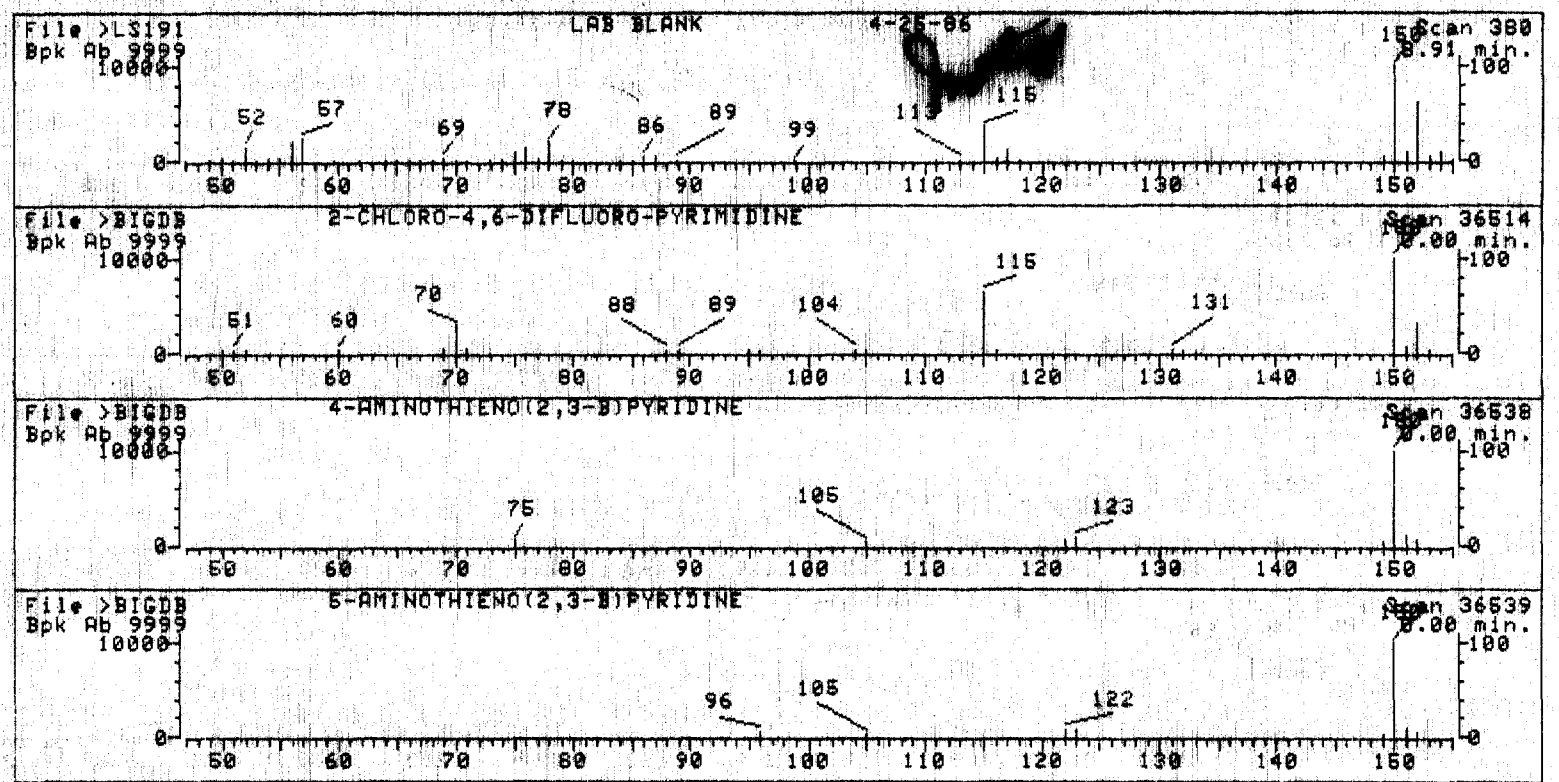
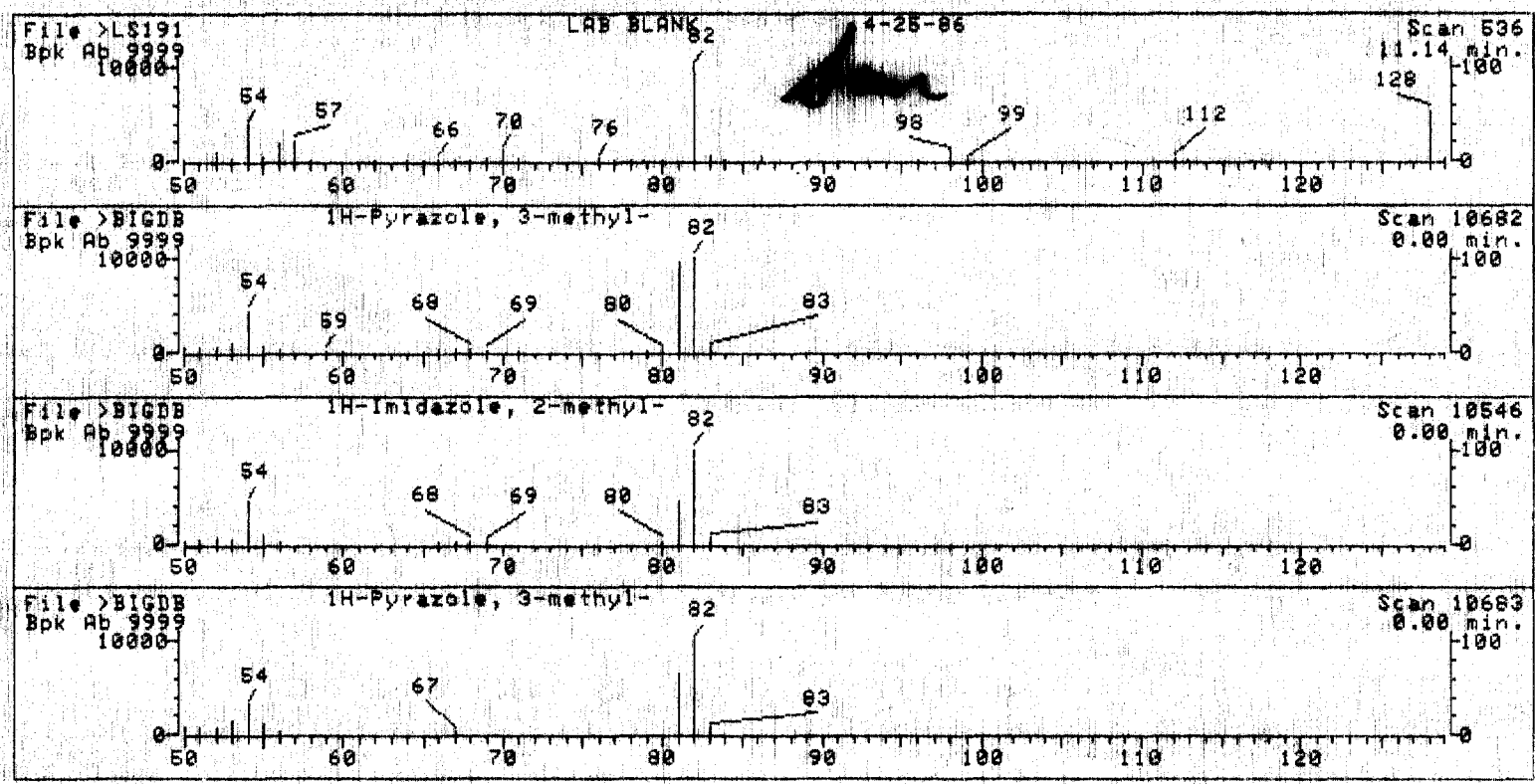
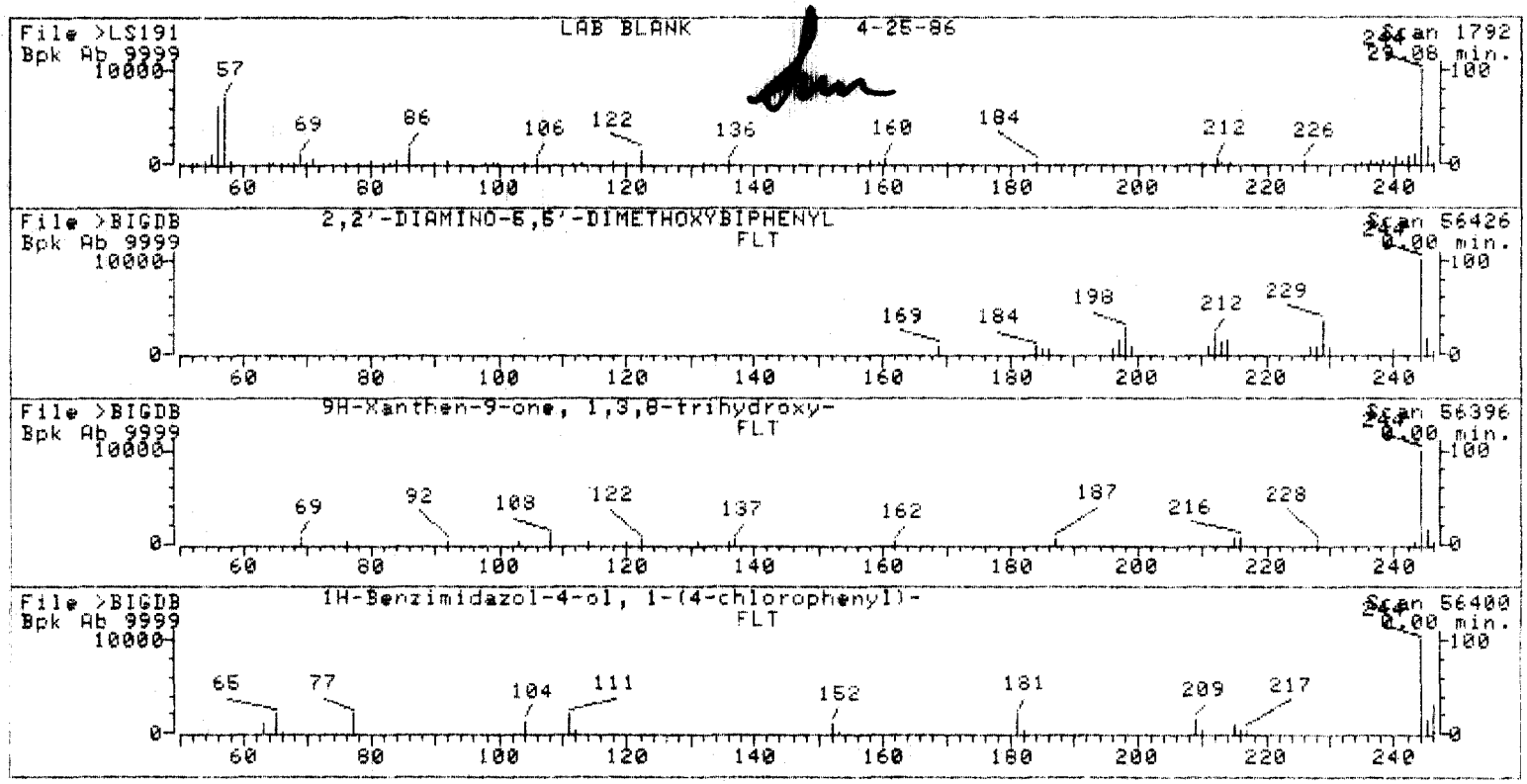
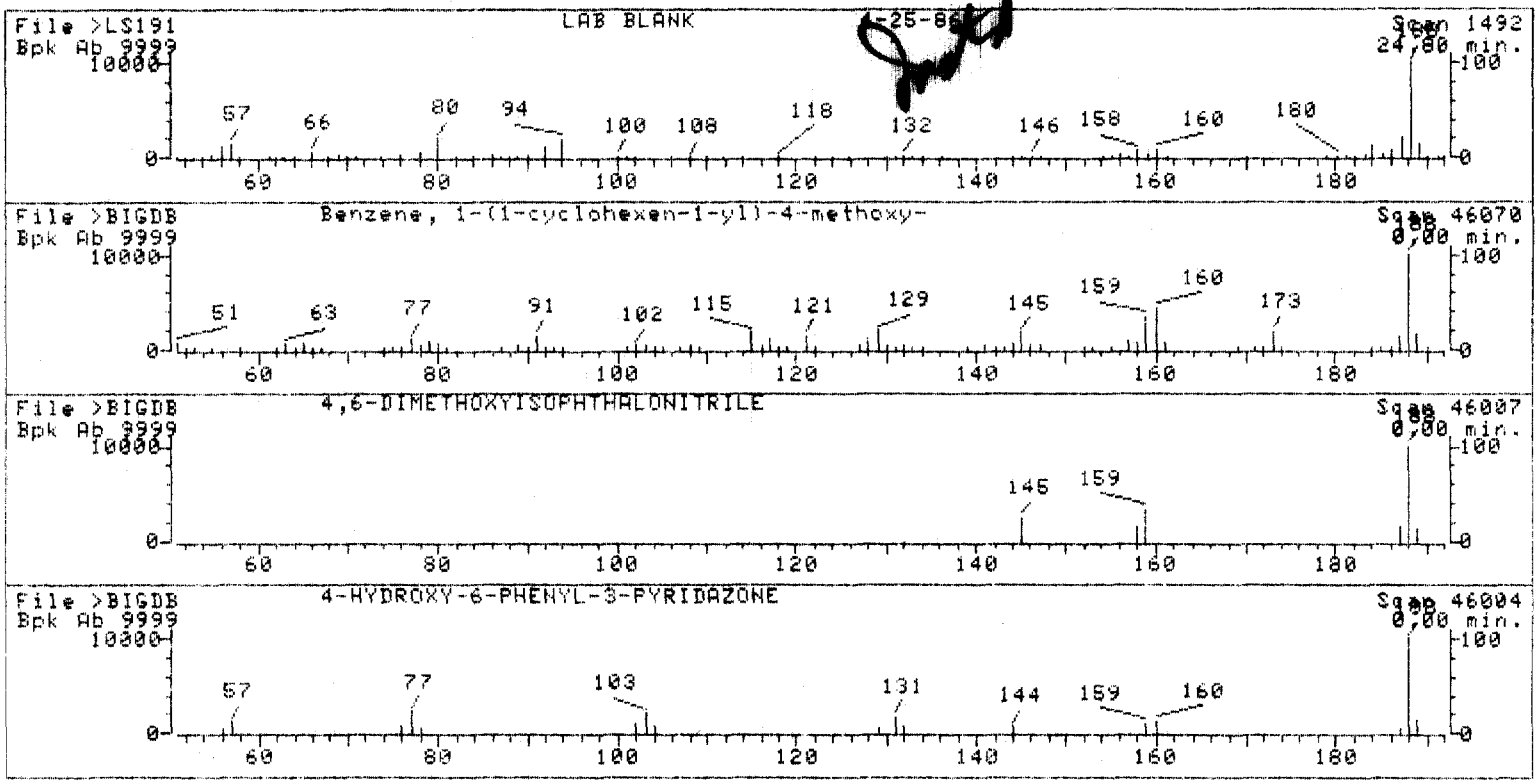
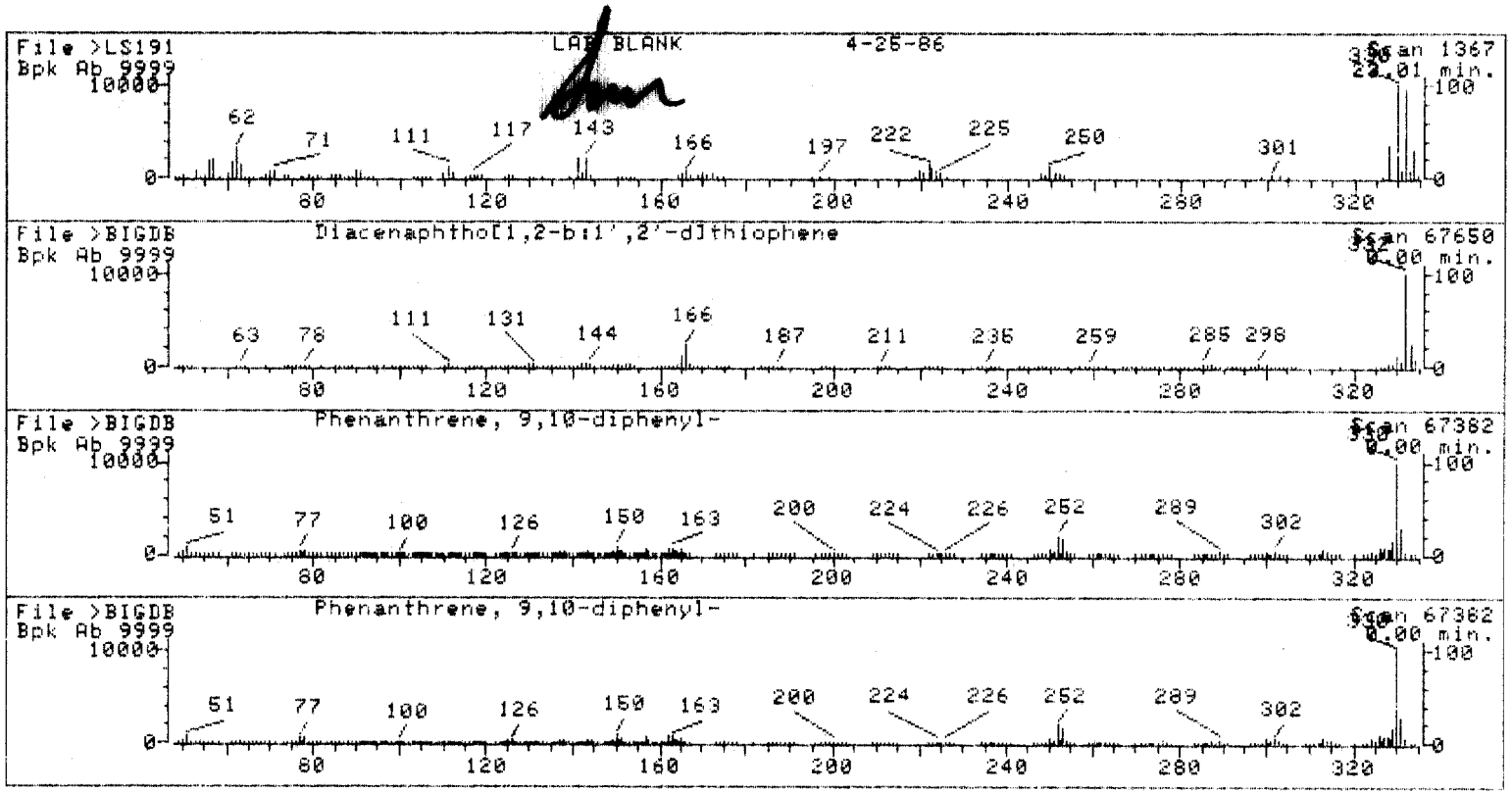
Bpk Ab 9999
LAB BLANK
4-26-96
Scan 321
8.07 min.
99
57
71
281
File >BIGDB
Bpk Ab 7988
2-Piperidinone
Scan 18902
0.00 min.
55
70
99
100
File >BIGDB
Bpk Ab 7363
2,5-Pyrrolidinedione
Scan 18505
0.00 min.
56
70
99
101
File >BIGDB
Bpk Ab 7363
2,5-Pyrrolidinedione
Scan 18505
0.00 min.
56
70
99
101

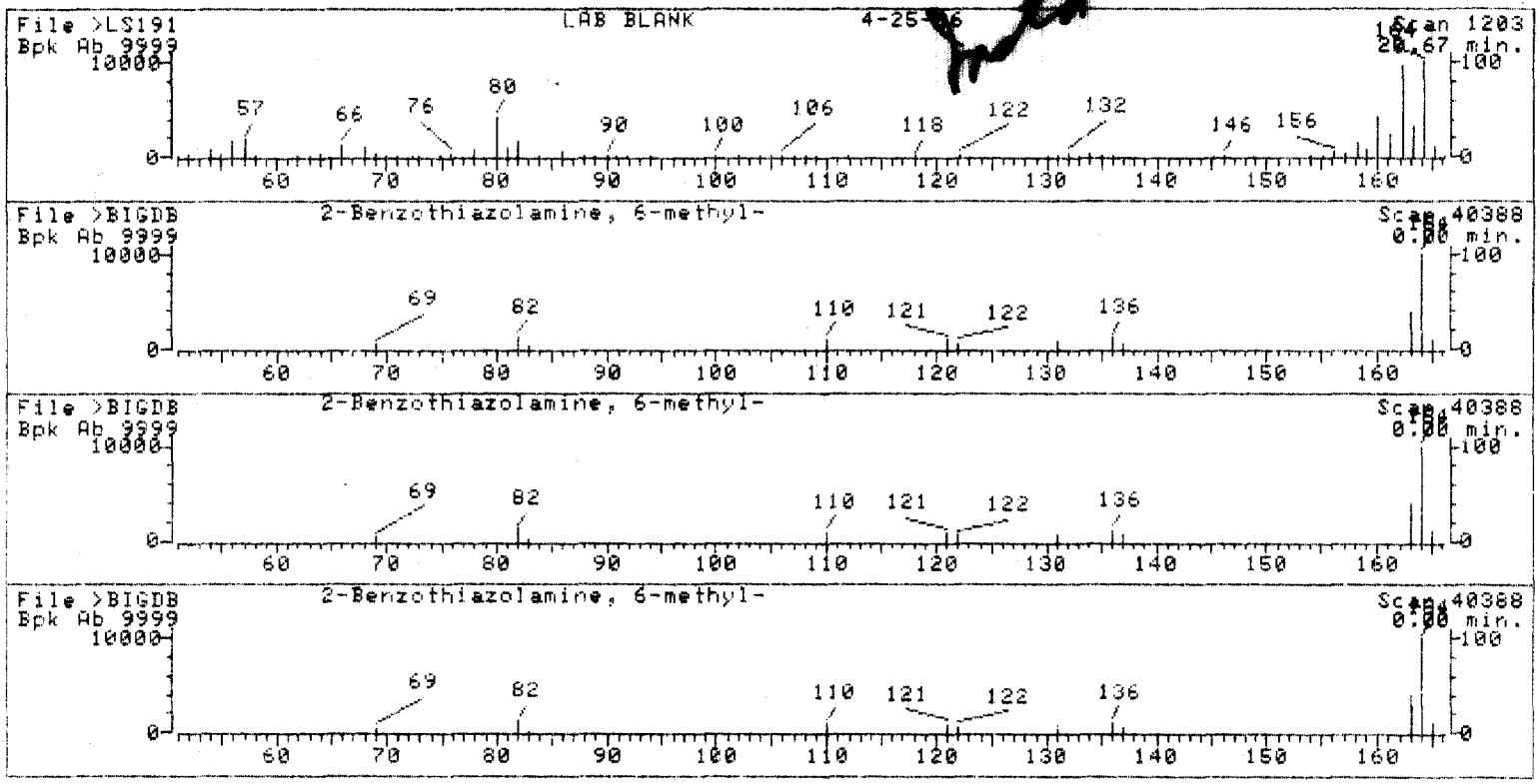

File >LS191
Bpk Ab 9999
10000
LAB BLANK
4-25-86
Scan 380
8.91 min.
52
57
69
78
86
89
99
115
2-CHLORO-4,6-DIFLUORO-PYRIMIDINE
Scan 36514
51
60
70
88
89
104
115
131
4-AMINOTHIENO(2,3-B)PYRIDINE
Scan 36538
75
105
123
5-AMINOTHIENO(2,3-B)PYRIDINE
Scan 36539
96
105
122
50
60
70
80
90
100
110
120
130
140
150
0
100

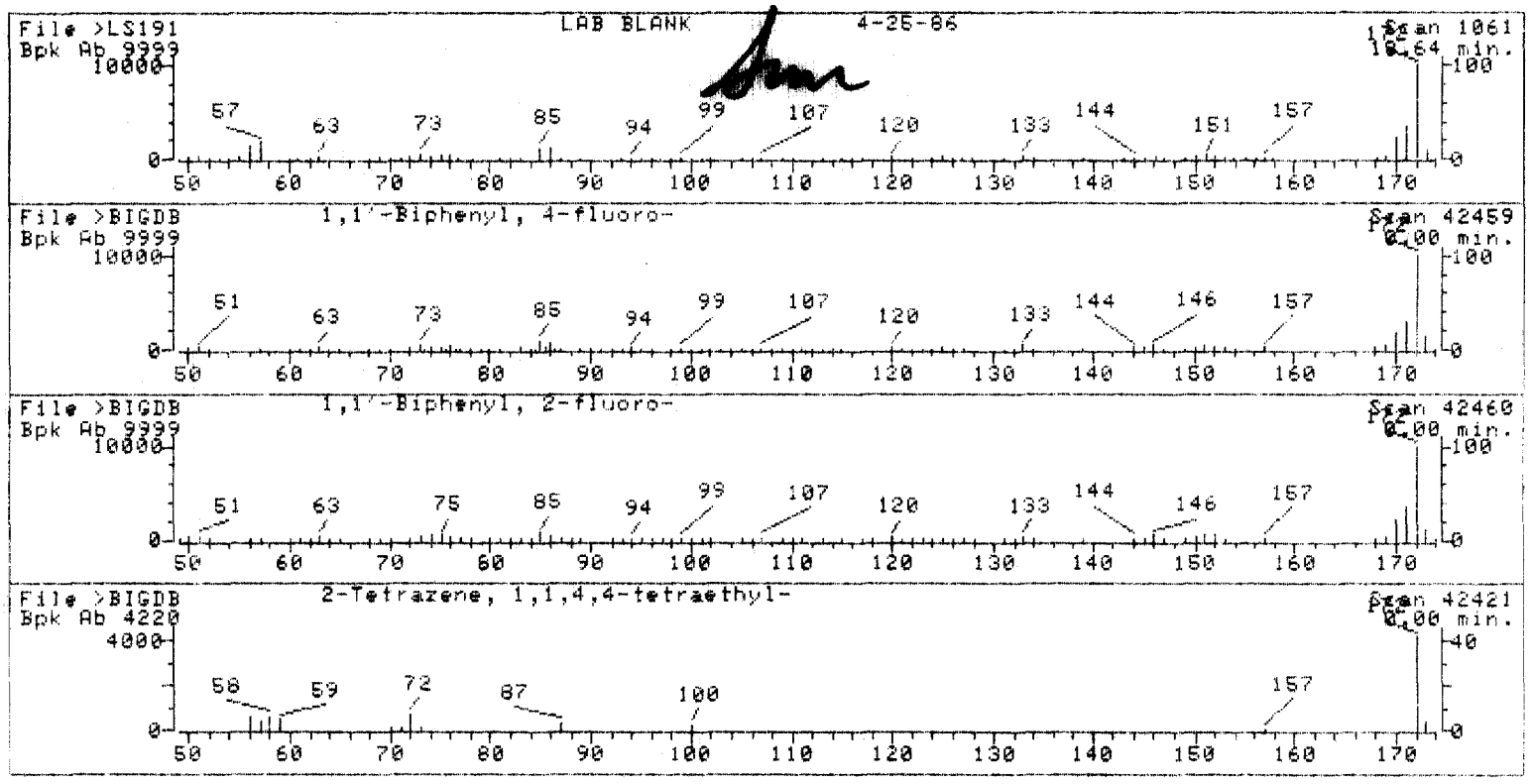

File >LS191
Bpk Ab 9999
10000
LAB BLANK
4-25-86
Scan 536
11.14 min.
54
57
66
70
76
82
98
99
112
128
File >BIGDB
Bpk Ab 9999
10000
1H-Pyrazole, 3-methyl-
Scan 10682
0.00 min.
54
59
68
69
80
82
83
File >BIGDB
Bpk Ab 9999
10000
1H-Imidazole, 2-methyl-
Scan 10546
0.00 min.
54
68
69
80
82
83
File >BIGDB
Bpk Ab 9999
10000
1H-Pyrazole, 3-methyl-
Scan 10683
0.00 min.
54
67
82
83
0
50
60
70
80
90
100
110
120
100

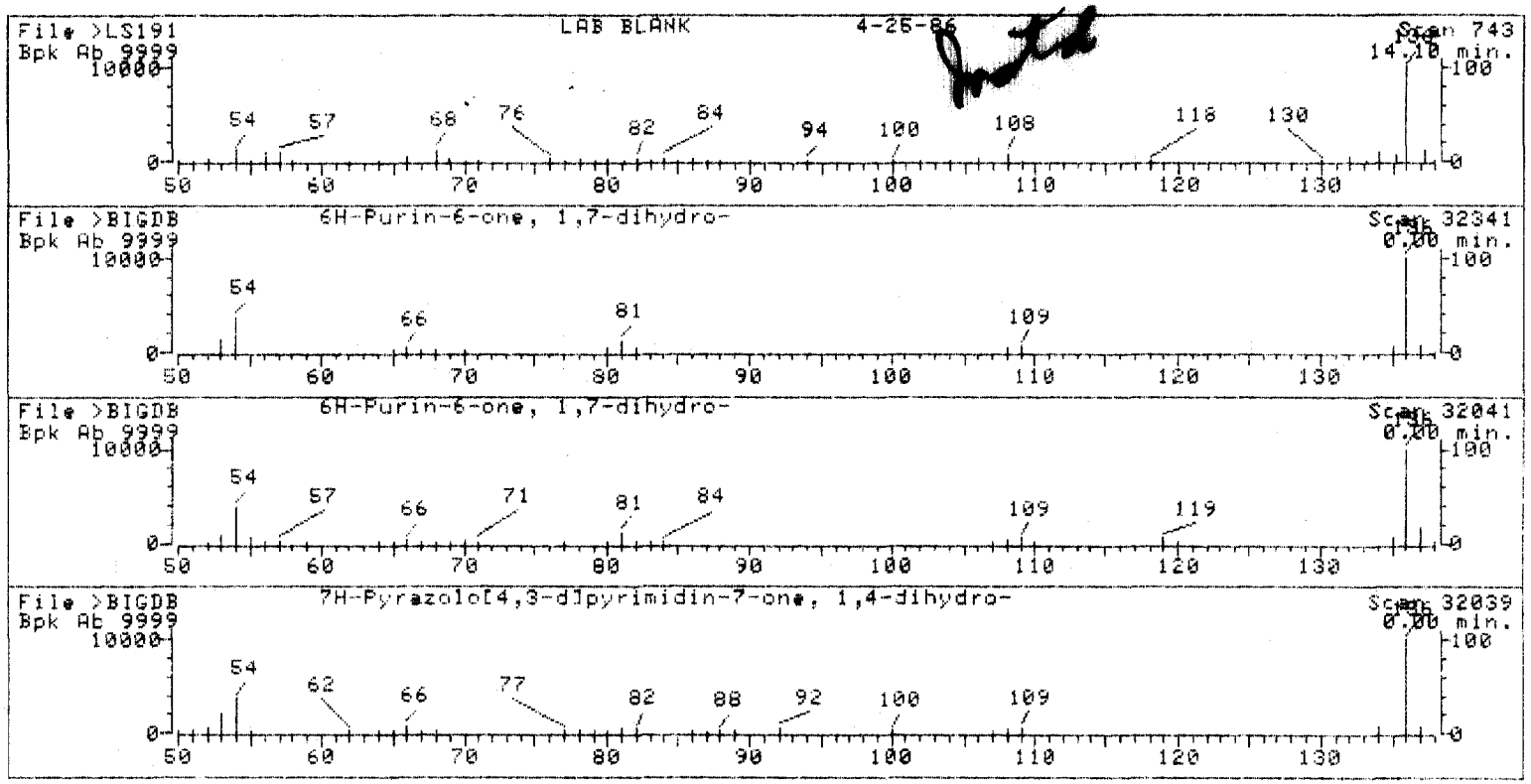

File >LS191
Bpk Ab 9999
LAB BLANK
4-25-86
Scan 1792
29.08 min.
57
69
86
106
122
136
160
184
212
226
File >BIGDB
Bpk Ab 9999
2,2'-DIAMINO-6,6'-DIMETHOXYBIPHENYL
FLT
Scan 56426
0.00 min.
169
184
198
212
229
File >BIGDB
Bpk Ab 9999
9H-Xanthen-9-one, 1,3,8-trihydroxy-
FLT
Scan 56396
0.00 min.
69
92
108
122
137
162
187
216
228
File >BIGDB
Bpk Ab 9999
1H-Benzimidazol-4-ol, 1-(4-chlorophenyl)-
FLT
Scan 56400
0.00 min.
65
77
104
111
152
181
209
217

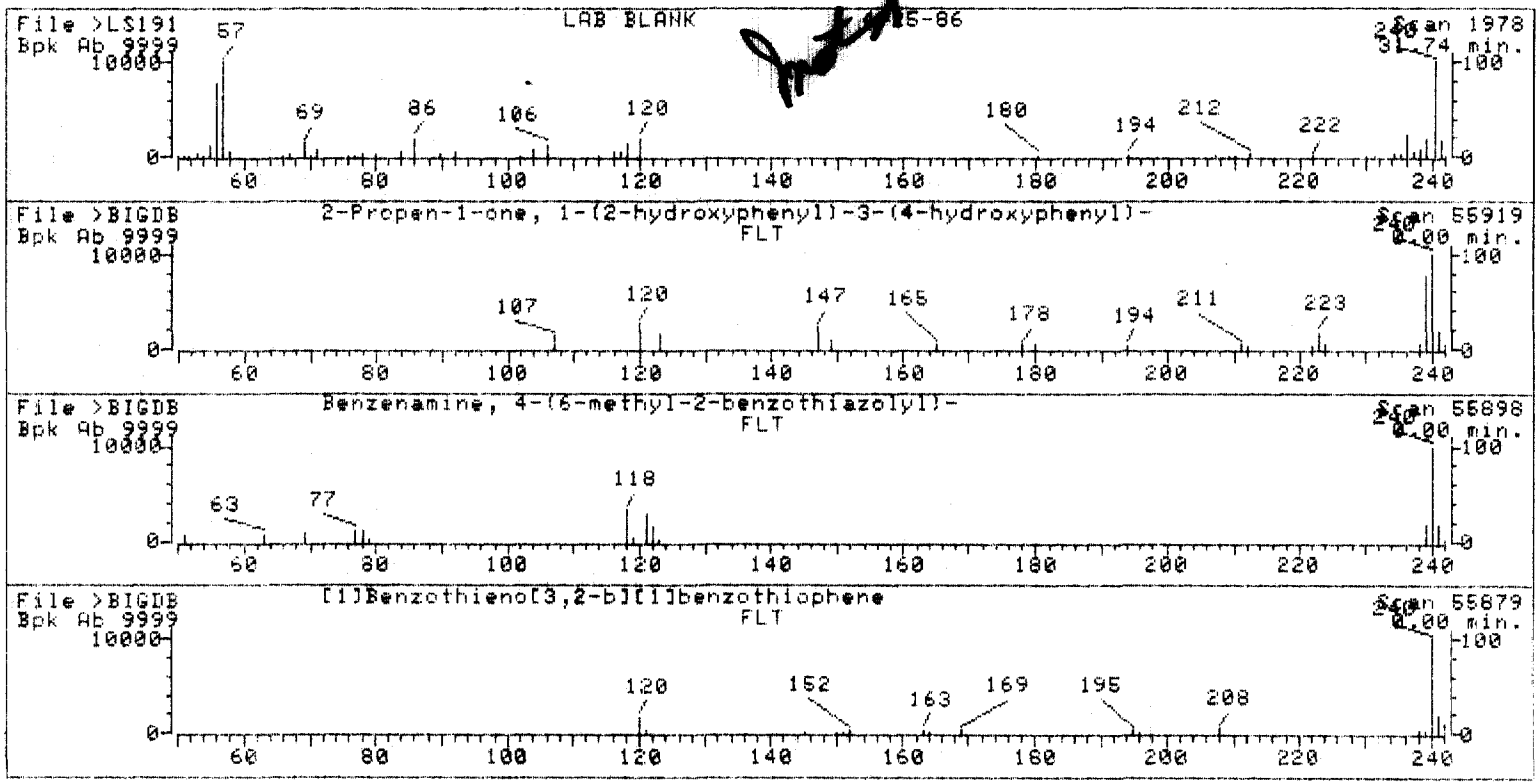

File >LS191
Bpk Ab 9999
LAB BLANK
Scan 1492
24.80 min.
57 66 80 94 100 108 118 132 146 158 160 180
File >BIGDB
Bpk Ab 9999
Benzene, 1-(1-cyclohexen-1-yl)-4-methoxy-
Scan 46070
0.00 min.
51 63 77 91 102 115 121 129 145 159 160 173
File >BIGDB
Bpk Ab 9999
4,6-DIMETHOXYISOPHTHALONITRILE
Scan 46007
0.00 min.
145 159
File >BIGDB
Bpk Ab 9999
4-HYDROXY-6-PHENYL-3-PYRIDAZONE
Scan 46004
0.00 min.
57 77 103 131 144 159 160


File >LS191
Bpk Ab 9999
10000
LAB BLANK
4-25-86
Scan 1367
22.01 min.
100
0
62
71
111
117
143
166
197
222
225
250
301
80
120
160
200
240
280
320
File >BIGDB
Bpk Ab 9999
10000
Diacenaphtho[1,2-b:1',2'-d]thiophene
Scan 67650
0.00 min.
100
0
63
78
111
131
144
166
187
211
236
259
285
298
80
120
160
200
240
280
320
File >BIGDB
Bpk Ab 9999
10000
Phenanthrene, 9,10-diphenyl-
Scan 67362
0.00 min.
100
0
51
77
100
126
150
163
200
224
226
252
289
302
80
120
160
200
240
280
320
File >BIGDB
Bpk Ab 9999
10000
Phenanthrene, 9,10-diphenyl-
Scan 67362
0.00 min.
100
0
51
77
100
126
150
163
200
224
226
252
289
302
80
120
160
200
240
280
320


File >LS191
Bpk Ab 9999
10000
LAB BLANK
4-25-96
Scan 1203
20.67 min.
57
66
76
80
90
100
106
118
122
132
146
156
File >BIGDB
Bpk Ab 9999
10000
2-Benzothiazolamine, 6-methyl-
Scan 40388
0.00 min.
69
82
110
121
122
136
File >BIGDB
Bpk Ab 9999
10000
2-Benzothiazolamine, 6-methyl-
Scan 40388
0.00 min.
69
82
110
121
122
136
File >BIGDB
Bpk Ab 9999
10000
2-Benzothiazolamine, 6-methyl-
Scan 40388
0.00 min.
69
82
110
121
122
136
0
100
60
70
80
90
100
110
120
130
140
150
160


File >LS191
Bpk Ab 9999
LAB BLANK
4-25-86
Scan 1061
10.64 min.
1,1'-Biphenyl, 4-fluoro-
Scan 42459
File >BIGDB
Bpk Ab 9999
1,1'-Biphenyl, 2-fluoro-
Scan 42460
File >BIGDB
Bpk Ab 4220
2-Tetrazene, 1,1,4,4-tetraethyl-
Scan 42421


File >LS191
LAB BLANK
4-25-86
Scan 743
14.10 min.
Bpk Ab 9999
10000
54 57 68 76 82 84 94 100 108 118 130
File >BIGDB
6H-Purin-6-one, 1,7-dihydro-
Scan 32341
0.00 min.
54 66 81 109
File >BIGDB
6H-Purin-6-one, 1,7-dihydro-
Scan 32041
0.00 min.
54 57 66 71 81 84 109 119
File >BIGDB
7H-Pyrazolo[4,3-d]pyrimidin-7-one, 1,4-dihydro-
Scan 32039
0.00 min.
54 62 66 77 82 88 92 100 109
50 60 70 80 90 100 110 120 130


File >LS191
Bpk Ab 9999
LAB BLANK
Scan 1978
31.74 min.
57
69
86
106
120
180
194
212
222
File >BIGDB
Bpk Ab 9999
2-Propen-1-one, 1-(2-hydroxyphenyl)-3-(4-hydroxyphenyl)-
FLT
Scan 55919
107
120
147
165
178
194
211
223
File >BIGDB
Bpk Ab 9999
Benzenamine, 4-(6-methyl-2-benzothiazolyl)-
FLT
Scan 55898
63
77
118
File >BIGDB
Bpk Ab 9999
[1]Benzothieno[3,2-b][1]benzothiophene
FLT
Scan 55879
120
152
163
169
195
208

SF-3151 86~~0~~A05S~~R07~~ 4-25-86
TIC

GENIE INTEGRATOR REPORT

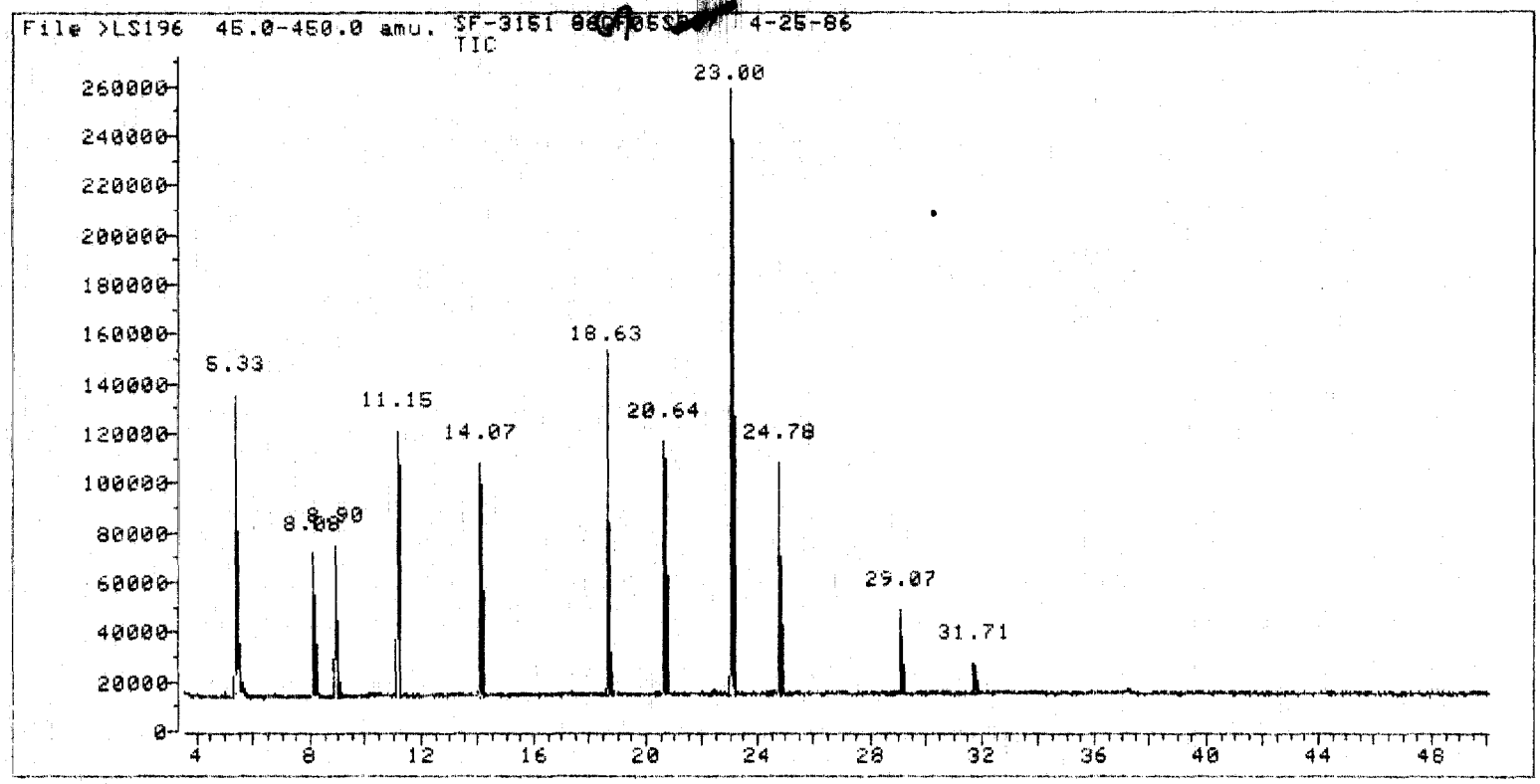
DATA FILE : >LS196
Mass Range : 45.0 - 450.0
Noise Threshold : 1000.0
Peak Width Threshold : 0.1000
Peak Area Threshold : 5.0%
Maximum Number of Peaks : 200

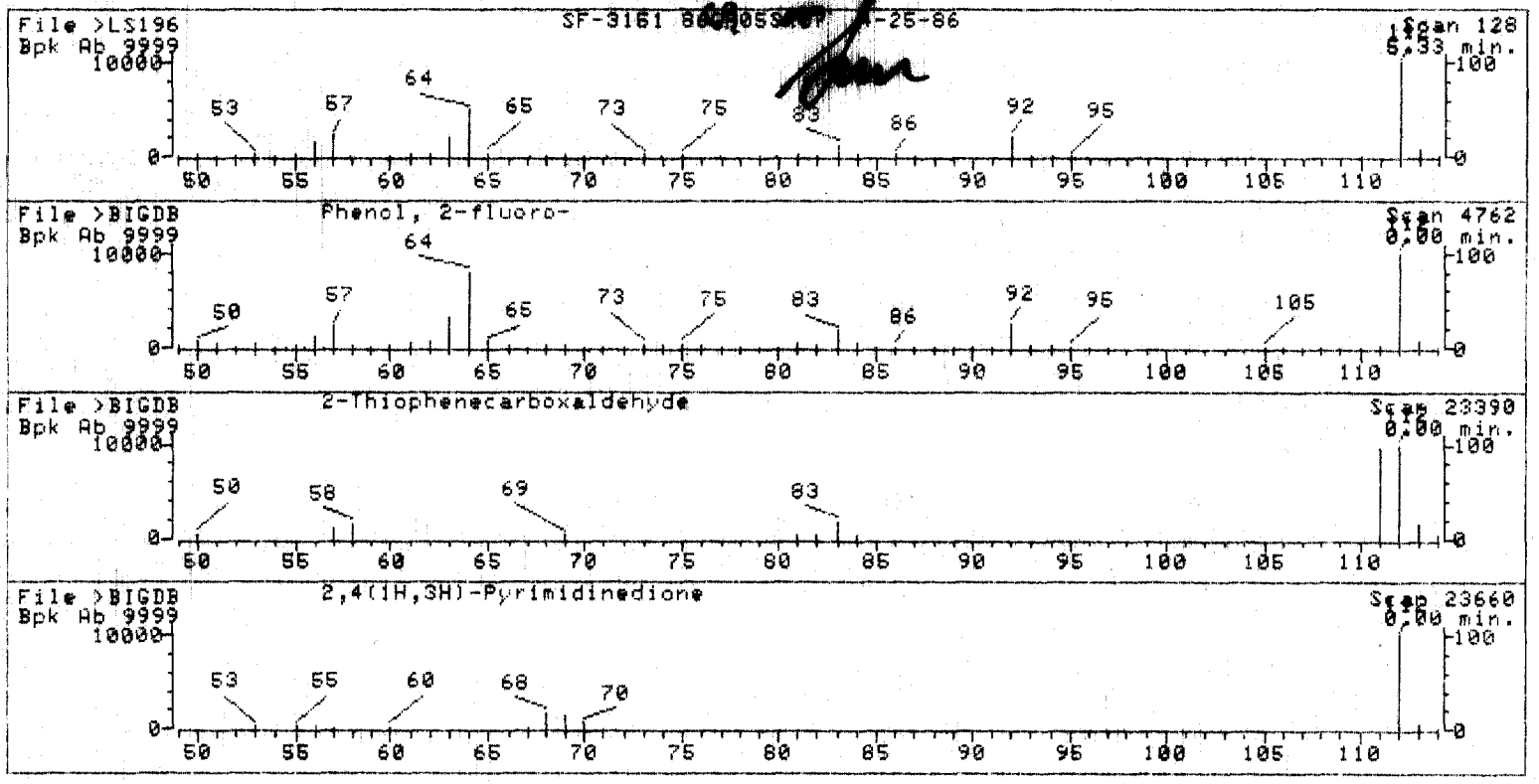
Peaks reported : 11

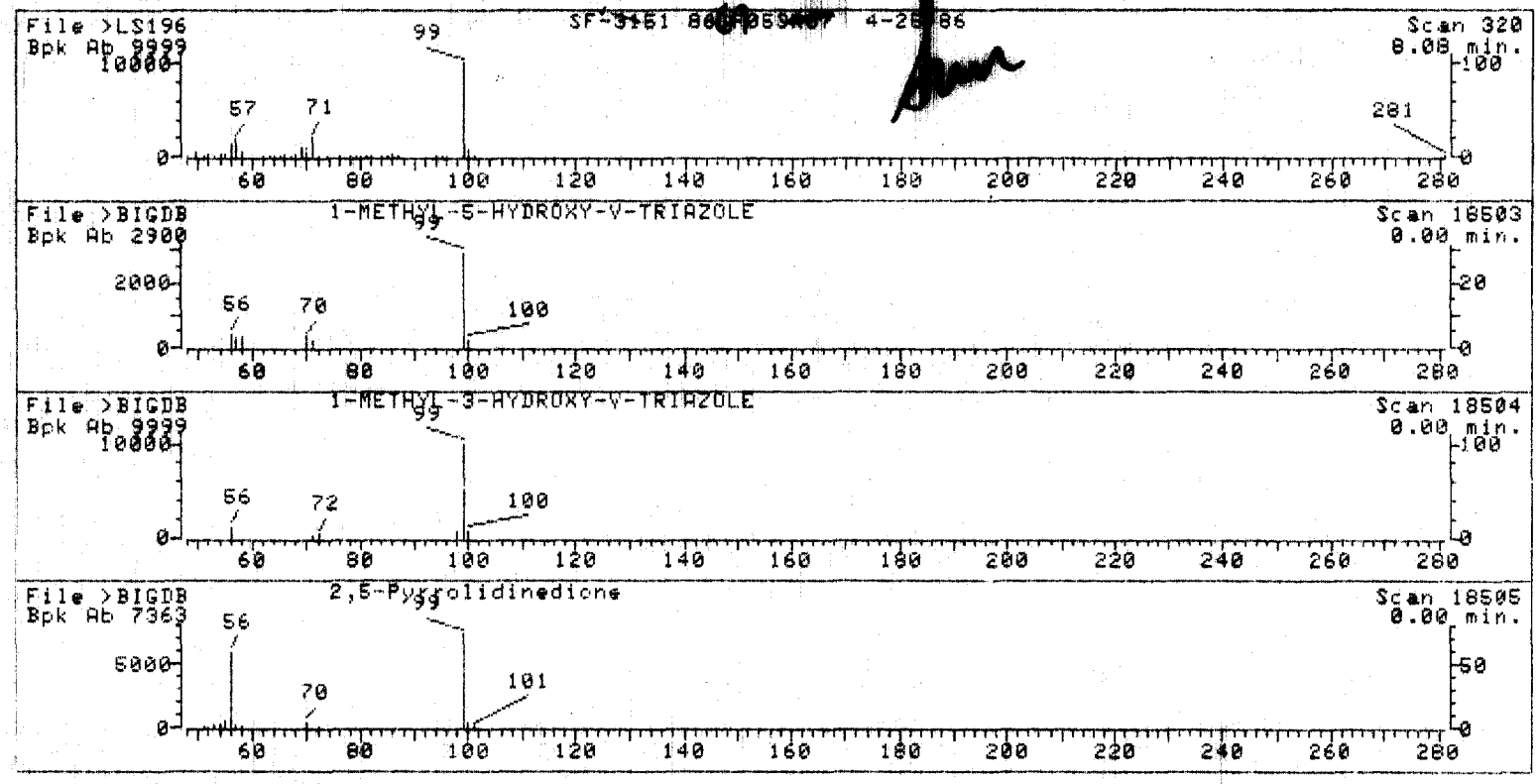
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	5.333	122	128	140	120187	467683	449549	56.97	13.19
2	8.075	313	320	326	55974	202300	192391	24.38	5.65
3	8.904	371	378	385	60143	201761	211475	26.80	6.21
4	11.146	527	535	541	107072	422662	427401	54.16	12.54
5	14.074	733	740	747	94308	306428	311239	39.44	9.13
6	18.629	1053	1059	1063	139017	362845	365234	46.28	10.72
7	20.643	1194	1200	1206	101483	283784	285652	36.20	8.38
8	22.999	1358	1365	1376	244635	787126	789156	100.00	23.16
9	24.785	1484	1490	1498	93228	239389	244335	30.96	7.17
10	29.069	1785	1790	1794	32962	87107	85547	10.84	2.51
11	31.711	1971	1975	1980	12116	44966	45403	5.75	1.33

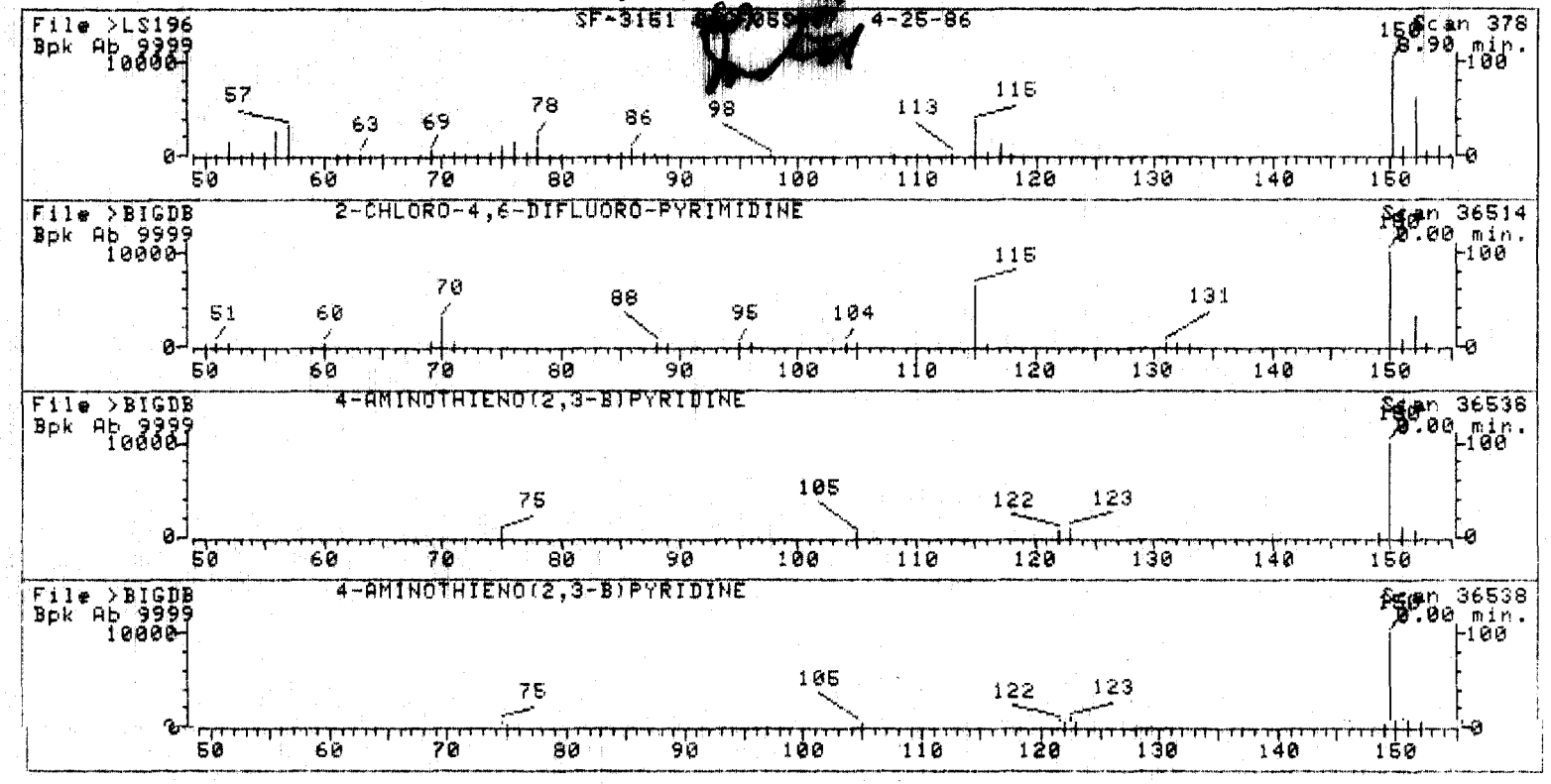
Sum of corrected areas : 3407381

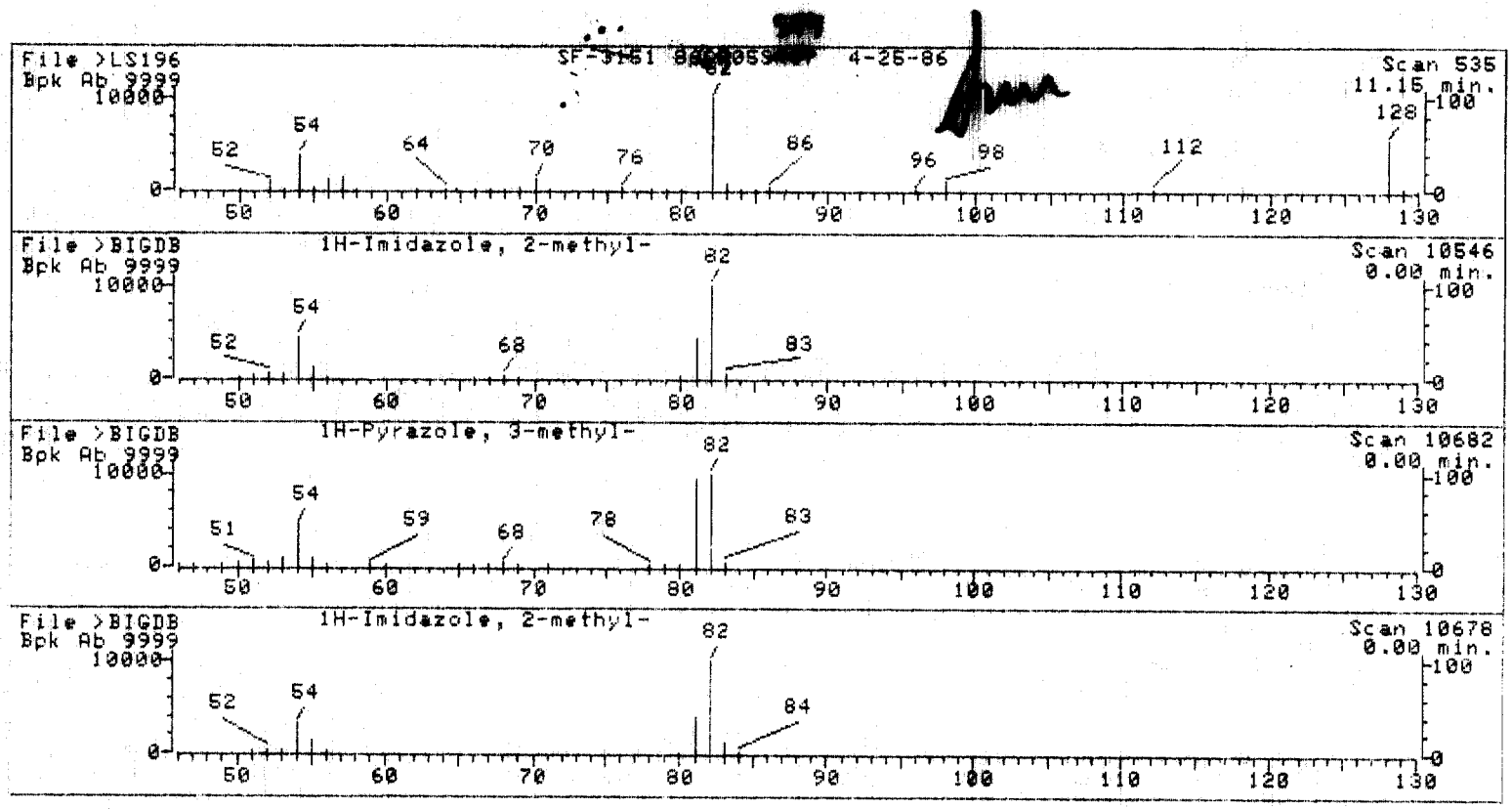
CAUTION
Last scan (3257) not on baseline

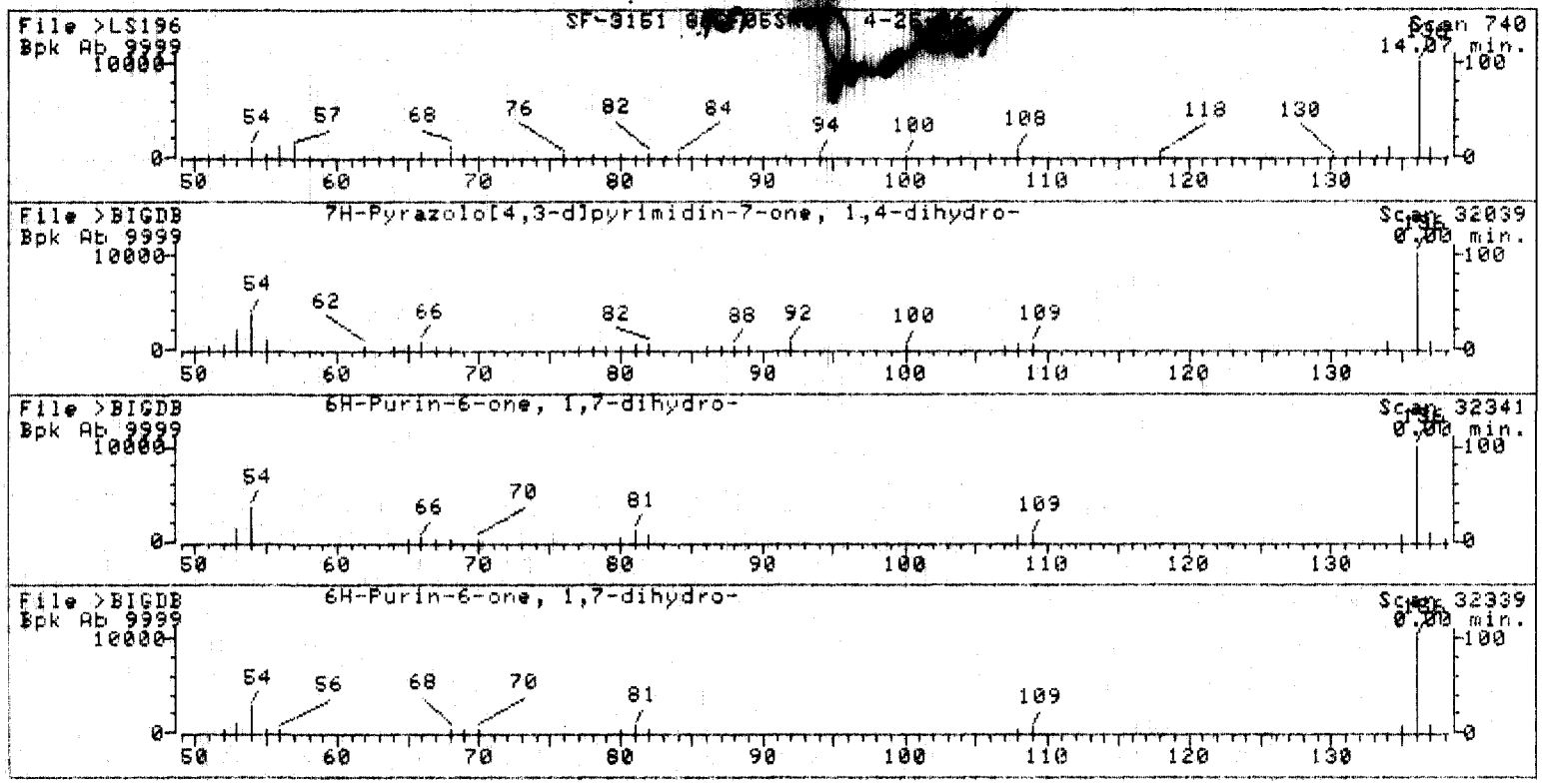

File >LS196 45.0-450.0 amu. SF-3151 4-25-86
TIC
260000
240000
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
5.33
8.00
8.90
11.15
14.07
18.63
20.64
23.00
24.78
29.07
31.71
4
8
12
16
20
24
28
32
36
40
44
48

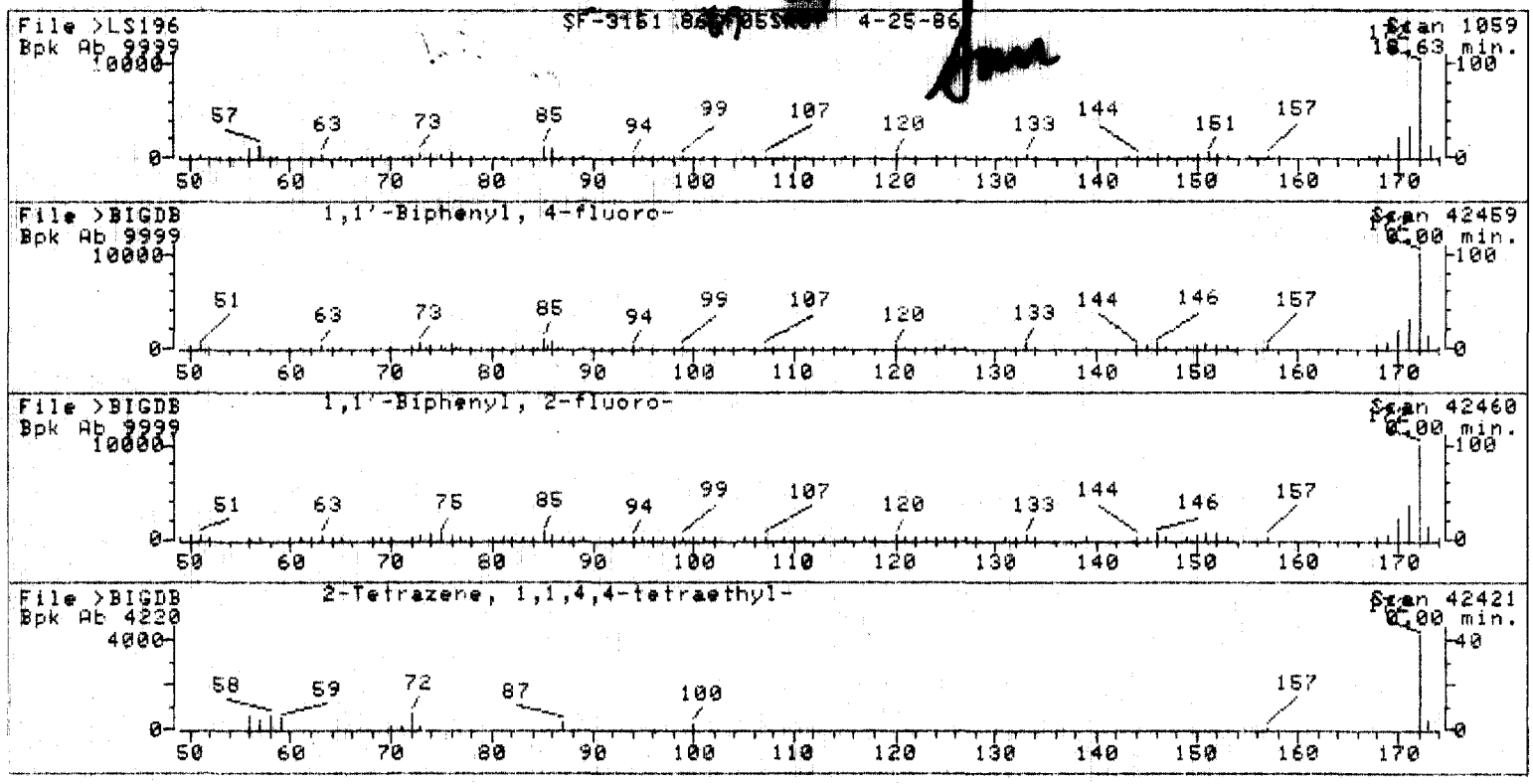

File >LS196
Bpk Ab 9999
10000
SF-3161
-25-86
Scan 128
5.33 min.
53 57 64 65 73 75 83 86 92 95
File >BIGDB
Bpk Ab 9999
10000
Phenol, 2-fluoro-
Scan 4762
0.00 min.
50 57 64 65 73 75 83 86 92 95 105
File >BIGDB
Bpk Ab 9999
10000
2-Thiophenecarboxaldehyde
Scan 23390
0.00 min.
50 58 69 83
File >BIGDB
Bpk Ab 9999
10000
2,4(1H,3H)-Pyrimidinedione
Scan 23660
0.00 min.
53 55 60 68 70
0
100
50 55 60 65 70 75 80 85 90 95 100 105 110

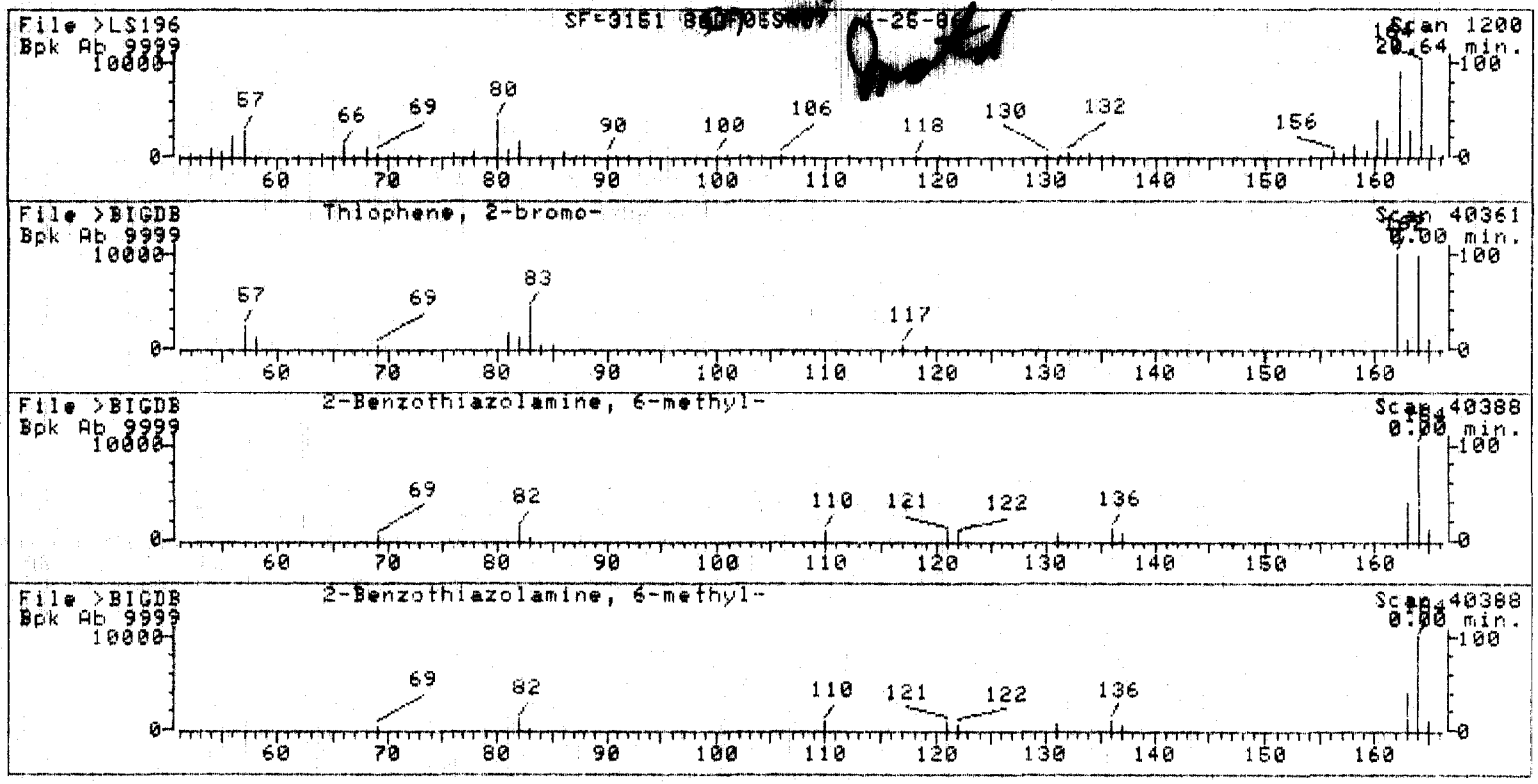

File >LS196
Bpk Ab 9999
Scan 320
8.08 min.
99
57
71
281
File >BIGDB
Bpk Ab 2900
1-METHYL-5-HYDROXY-V-TRIAZOLE
Scan 18503
0.00 min.
99
56
70
100
File >BIGDB
Bpk Ab 9999
1-METHYL-3-HYDROXY-V-TRIAZOLE
Scan 18504
0.00 min.
99
56
72
100
File >BIGDB
Bpk Ab 7363
2,5-Pyrrolidinedione
Scan 18505
0.00 min.
99
56
70
101

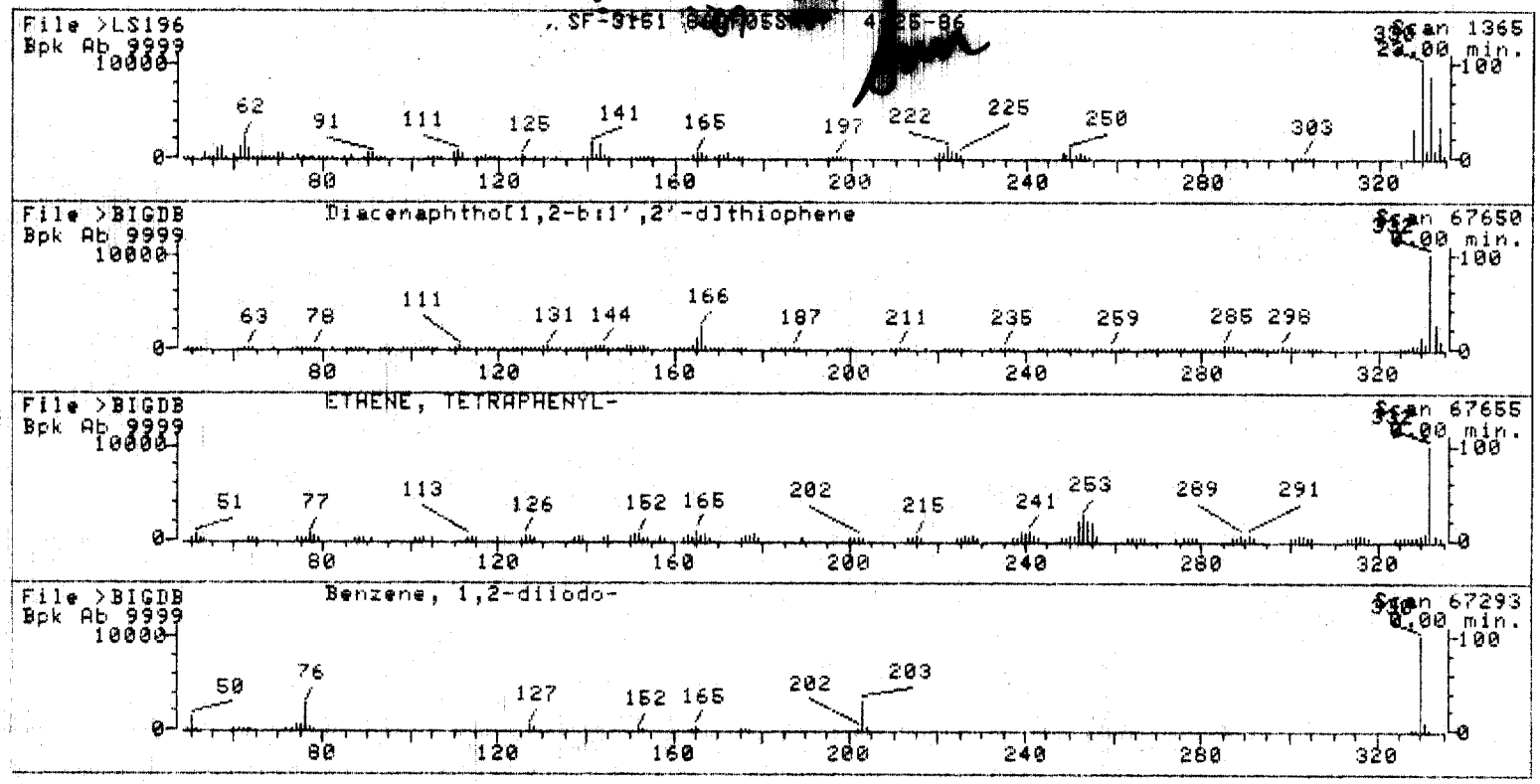

File >LS196
Bpk Ab 9999
10000
SF-3161
4-25-86
Scan 378
8.90 min.
57
63
69
78
86
98
113
115
File >BIGDB
Bpk Ab 9999
10000
2-CHLORO-4,6-DIFLUORO-PYRIMIDINE
Scan 36514
51
60
70
88
95
104
115
131
File >BIGDB
Bpk Ab 9999
10000
4-AMINOTHIENO(2,3-B)PYRIDINE
Scan 36538
75
105
122
123
File >BIGDB
Bpk Ab 9999
10000
4-AMINOTHIENO(2,3-B)PYRIDINE
Scan 36538
75
105
122
123
50
60
70
80
90
100
110
120
130
140
150

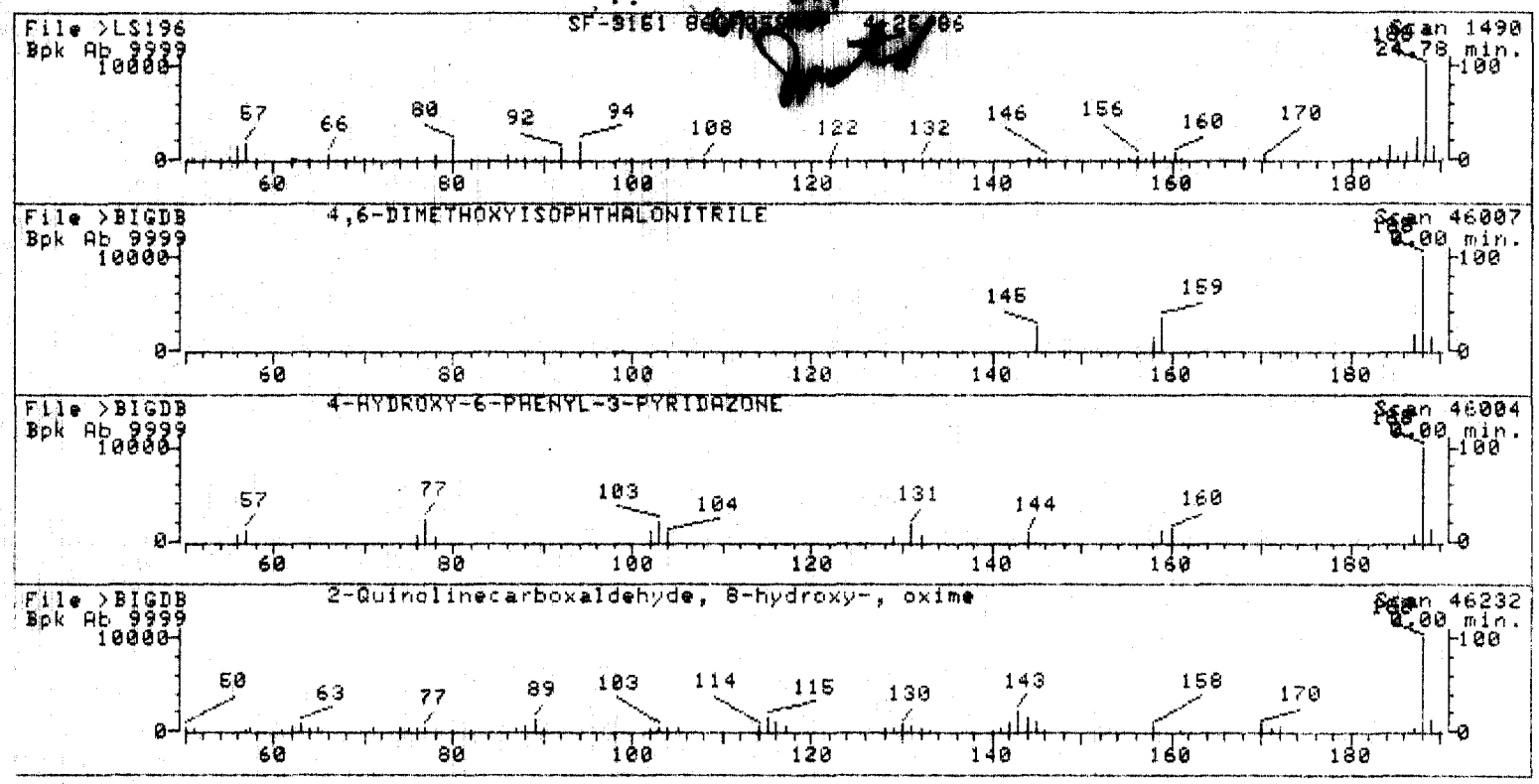

File >LS196
Bpk Ab 9999
10000
SF-3151 [illegible] 4-26-86
Scan 535
11.15 min.
52 54 64 70 76 82 86 96 98 112 128
File >BIGDB
Bpk Ab 9999
10000
1H-Imidazole, 2-methyl-
Scan 10546
0.00 min.
52 54 68 82 83
File >BIGDB
Bpk Ab 9999
10000
1H-Pyrazole, 3-methyl-
Scan 10682
0.00 min.
51 54 59 68 78 82 83
File >BIGDB
Bpk Ab 9999
10000
1H-Imidazole, 2-methyl-
Scan 10678
0.00 min.
52 54 82 84
0 50 60 70 80 90 100 110 120 130
100

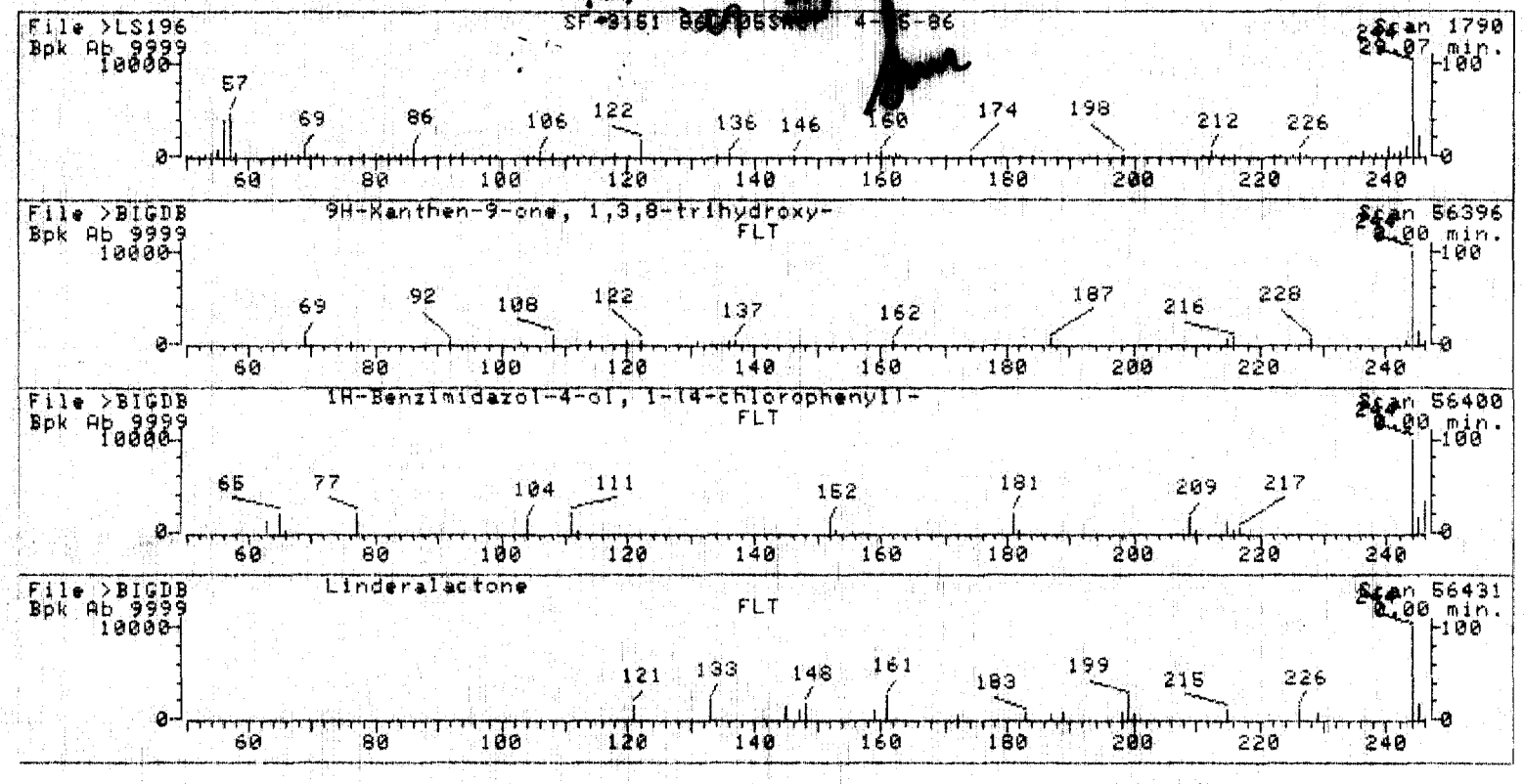

File >LS196
Bpk Ab 9999
10000
0
54 57 68 76 82 84 94 100 108 118 130
Scan 740
14.07 min.
100
0
50 60 70 80 90 100 110 120 130
File >BIGDB
Bpk Ab 9999
10000
0
7H-Pyrazolo[4,3-d]pyrimidin-7-one, 1,4-dihydro-
54 62 66 82 88 92 100 109
Scan 32039
0.00 min.
100
0
50 60 70 80 90 100 110 120 130
File >BIGDB
Bpk Ab 9999
10000
0
6H-Purin-6-one, 1,7-dihydro-
54 66 70 81 109
Scan 32341
0.00 min.
100
0
50 60 70 80 90 100 110 120 130
File >BIGDB
Bpk Ab 9999
10000
0
6H-Purin-6-one, 1,7-dihydro-
54 56 68 70 81 109
Scan 32339
0.00 min.
100
0
50 60 70 80 90 100 110 120 130

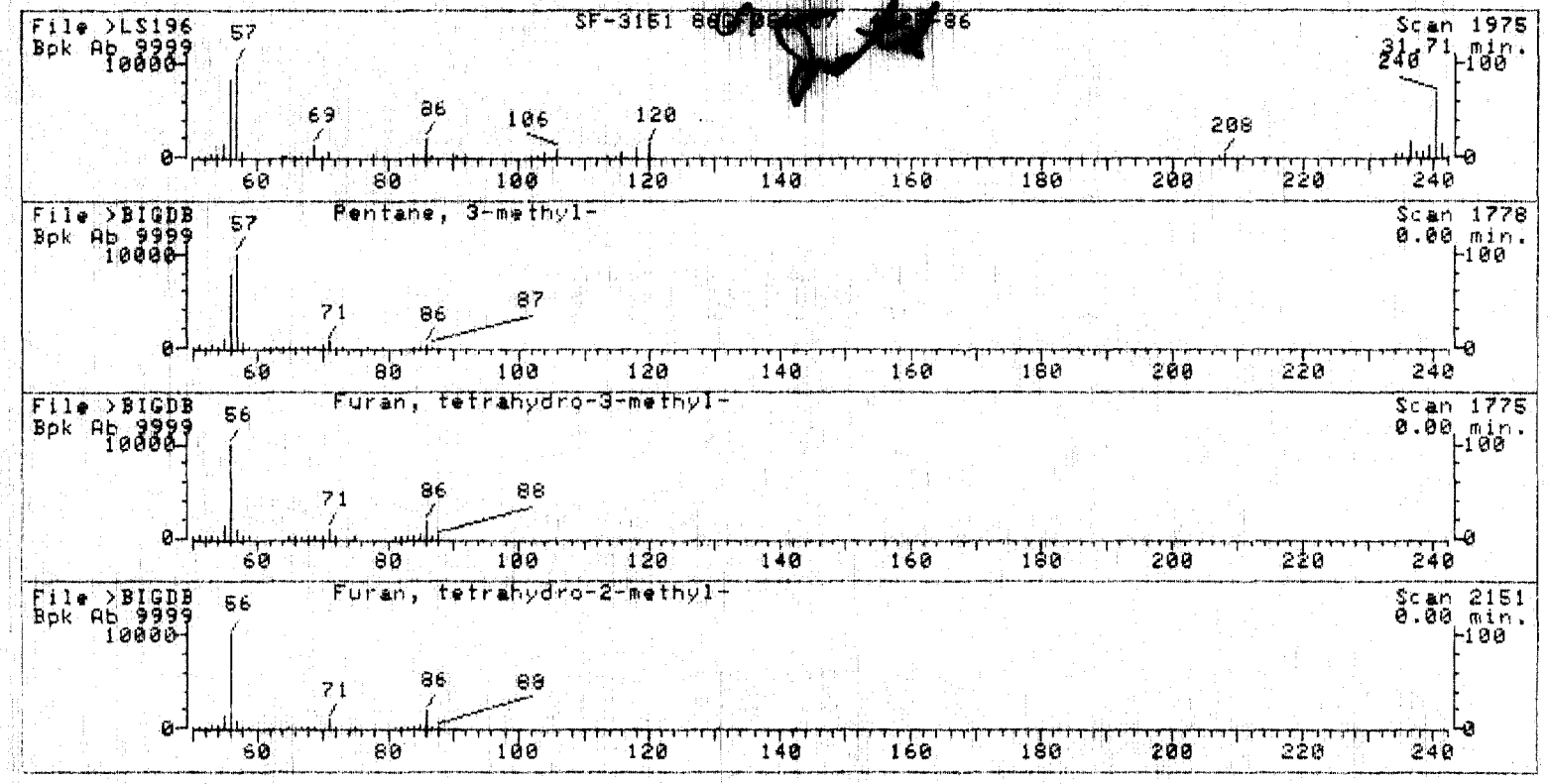

File >LS196
Bpk Ab 9999
10000
0
57 63 73 85 94 99 107 120 133 144 151 157
Scan 1059
16.63 min.
100
0
50 60 70 80 90 100 110 120 130 140 150 160 170
File >BIGDB
Bpk Ab 9999
10000
0
1,1'-Biphenyl, 4-fluoro-
51 63 73 85 94 99 107 120 133 144 146 157
Scan 42459
100
0
50 60 70 80 90 100 110 120 130 140 150 160 170
File >BIGDB
Bpk Ab 9999
10000
0
1,1'-Biphenyl, 2-fluoro-
51 63 75 85 94 99 107 120 133 144 146 157
Scan 42460
100
0
50 60 70 80 90 100 110 120 130 140 150 160 170
File >BIGDB
Bpk Ab 4220
4000
0
2-Tetrazene, 1,1,4,4-tetraethyl-
58 59 72 87 100 157
Scan 42421
40
0
50 60 70 80 90 100 110 120 130 140 150 160 170


File >LS196
Bpk Ab 9999
10000
0
57
66
69
80
90
100
106
118
130
132
156
Scan 1200
20.64 min.
100
0
60 70 80 90 100 110 120 130 140 150 160
File >BIGDB
Bpk Ab 9999
10000
0
Thiophene, 2-bromo-
57
69
83
117
Scan 40361
0.00 min.
100
0
60 70 80 90 100 110 120 130 140 150 160
File >BIGDB
Bpk Ab 9999
10000
0
2-Benzothiazolamine, 6-methyl-
69
82
110
121
122
136
Scan 40388
0.00 min.
100
0
60 70 80 90 100 110 120 130 140 150 160
File >BIGDB
Bpk Ab 9999
10000
0
2-Benzothiazolamine, 6-methyl-
69
82
110
121
122
136
Scan 40388
0.00 min.
100
0
60 70 80 90 100 110 120 130 140 150 160


File >LS196
Bpk Ab 9999
10000
0
62
91
111
125
141
165
197
222
225
250
303
80
120
160
200
240
280
320
Scan 1365
22.00 min.
100
0
File >BIGDB
Bpk Ab 9999
10000
0
Diacenaphtho[1,2-b:1',2'-d]thiophene
63
78
111
131
144
166
187
211
235
259
285
298
80
120
160
200
240
280
320
Scan 67650
100
0
File >BIGDB
Bpk Ab 9999
10000
0
ETHENE, TETRAPHENYL-
51
77
113
126
152
165
202
215
241
253
289
291
80
120
160
200
240
280
320
Scan 67655
100
0
File >BIGDB
Bpk Ab 9999
10000
0
Benzene, 1,2-diiodo-
50
76
127
152
165
202
203
80
120
160
200
240
280
320
Scan 67293
100
0


File >LS196
Bpk Ab 9999
10000
0
57
66
80
92
94
108
122
132
146
156
160
170
Scan 1490
24.78 min.
100
0
60
80
100
120
140
160
180
File >BIGDB
Bpk Ab 9999
10000
0
4,6-DIMETHOXYISOPHTHALONITRILE
145
159
Scan 46007
0.00 min.
100
0
60
80
100
120
140
160
180
File >BIGDB
Bpk Ab 9999
10000
0
4-HYDROXY-6-PHENYL-3-PYRIDAZONE
57
77
103
104
131
144
160
Scan 46004
0.00 min.
100
0
60
80
100
120
140
160
180
File >BIGDB
Bpk Ab 9999
10000
0
2-Quinolinecarboxaldehyde, 8-hydroxy-, oxime
50
63
77
89
103
114
115
130
143
158
170
Scan 46232
0.00 min.
100
0
60
80
100
120
140
160
180


File >LS196
Bpk Ab 9999
10000
0
57
69
86
106
122
136
146
160
174
198
212
226
Scan 1790
29.07 min.
100
0
60 80 100 120 140 160 180 200 220 240
File >BIGDB
Bpk Ab 9999
10000
0
9H-Xanthen-9-one, 1,3,8-trihydroxy-
FLT
69
92
108
122
137
162
187
216
228
Scan 56396
100
0
60 80 100 120 140 160 180 200 220 240
File >BIGDB
Bpk Ab 9999
10000
0
1H-Benzimidazol-4-ol, 1-(4-chlorophenyl)-
FLT
65
77
104
111
152
181
209
217
Scan 56400
100
0
60 80 100 120 140 160 180 200 220 240
File >BIGDB
Bpk Ab 9999
10000
0
Linderalactone
FLT
121
133
148
161
183
199
215
226
Scan 56431
100
0
60 80 100 120 140 160 180 200 220 240


File >LS196
Bpk Ab 9999
SF-3151
Scan 1975
31.71 min.
57
69
86
106
120
208
240
File >BIGDB
Pentane, 3-methyl-
Scan 1778
0.00 min.
57
71
86
87
File >BIGDB
Furan, tetrahydro-3-methyl-
Scan 1775
0.00 min.
56
71
86
88
File >BIGDB
Furan, tetrahydro-2-methyl-
Scan 2151
0.00 min.
56
71
86
88

SF-3151 86GF05374MS 4-25-86
TIC

GENIE INTEGRATOR REPORT

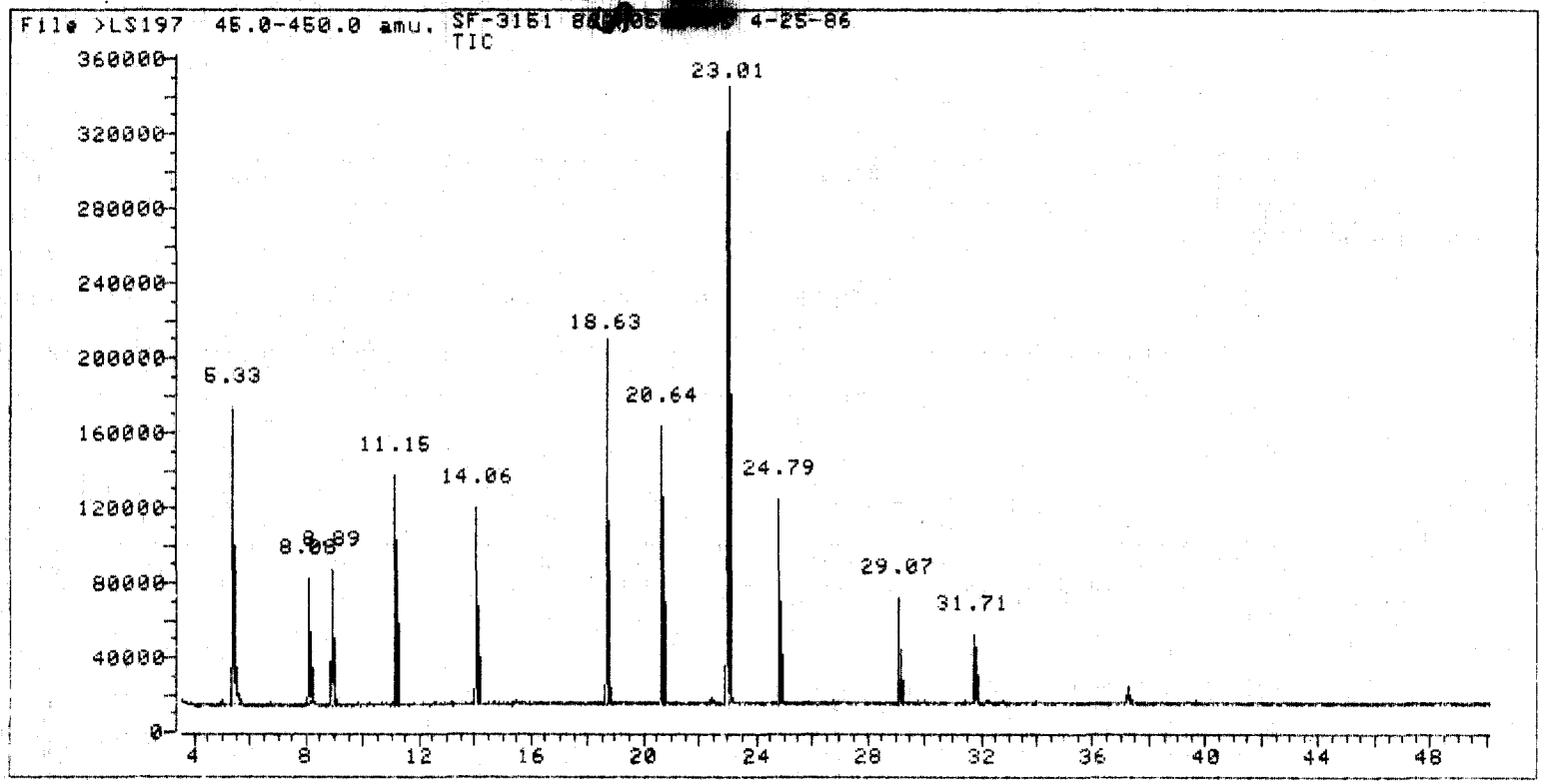
DATA FILE : >LS197
Mass Range : 45.0 - 450.0
Noise Threshold : 1000.0
Peak Width Threshold : 0.1000
Peak Area Threshold : 5.0%
Maximum Number of Peaks : 200

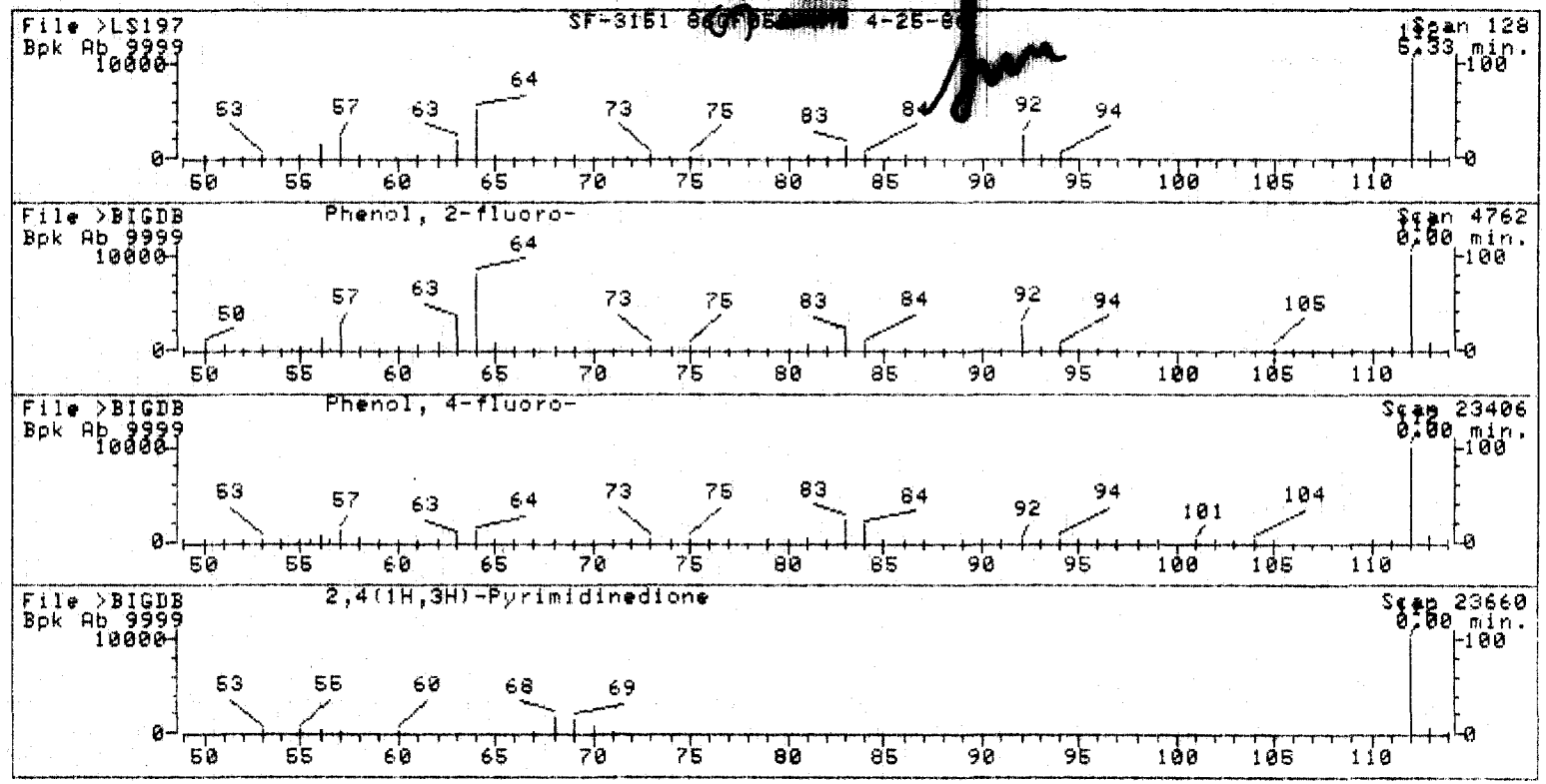
Peaks reported : 11

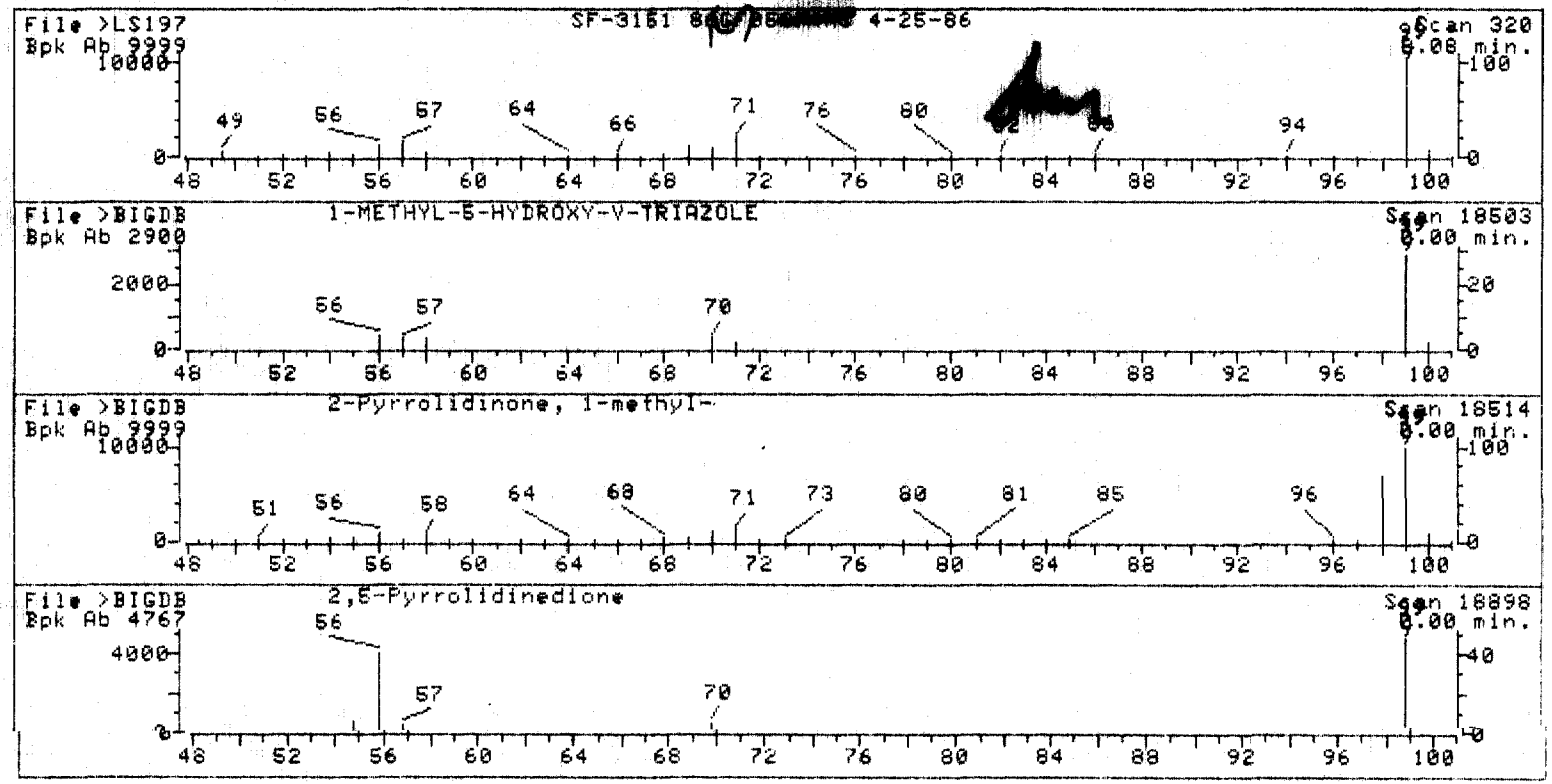
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	5.333	124	128	148	159235	520018	574806	49.43	12.57
2	8.076	312	320	327	67845	245187	245709	21.13	5.37
3	8.890	371	377	388	71589	235298	238545	20.52	5.22
4	11.146	526	535	541	123063	489775	497691	42.80	10.88
5	14.060	731	739	746	105628	346016	342848	29.49	7.50
6	18.630	1052	1059	1064	190976	481930	485844	41.78	10.62
7	20.644	1194	1200	1209	146433	406817	410008	35.26	8.97
8	23.015	1357	1366	1375	335128	1167652	1162754	100.00	25.43
9	24.787	1484	1490	1496	110683	310088	318252	27.37	6.96
10	29.071	1786	1790	1796	57292	156560	162585	13.98	3.56
11	31.713	1967	1975	1985	36629	126767	133783	11.51	2.93

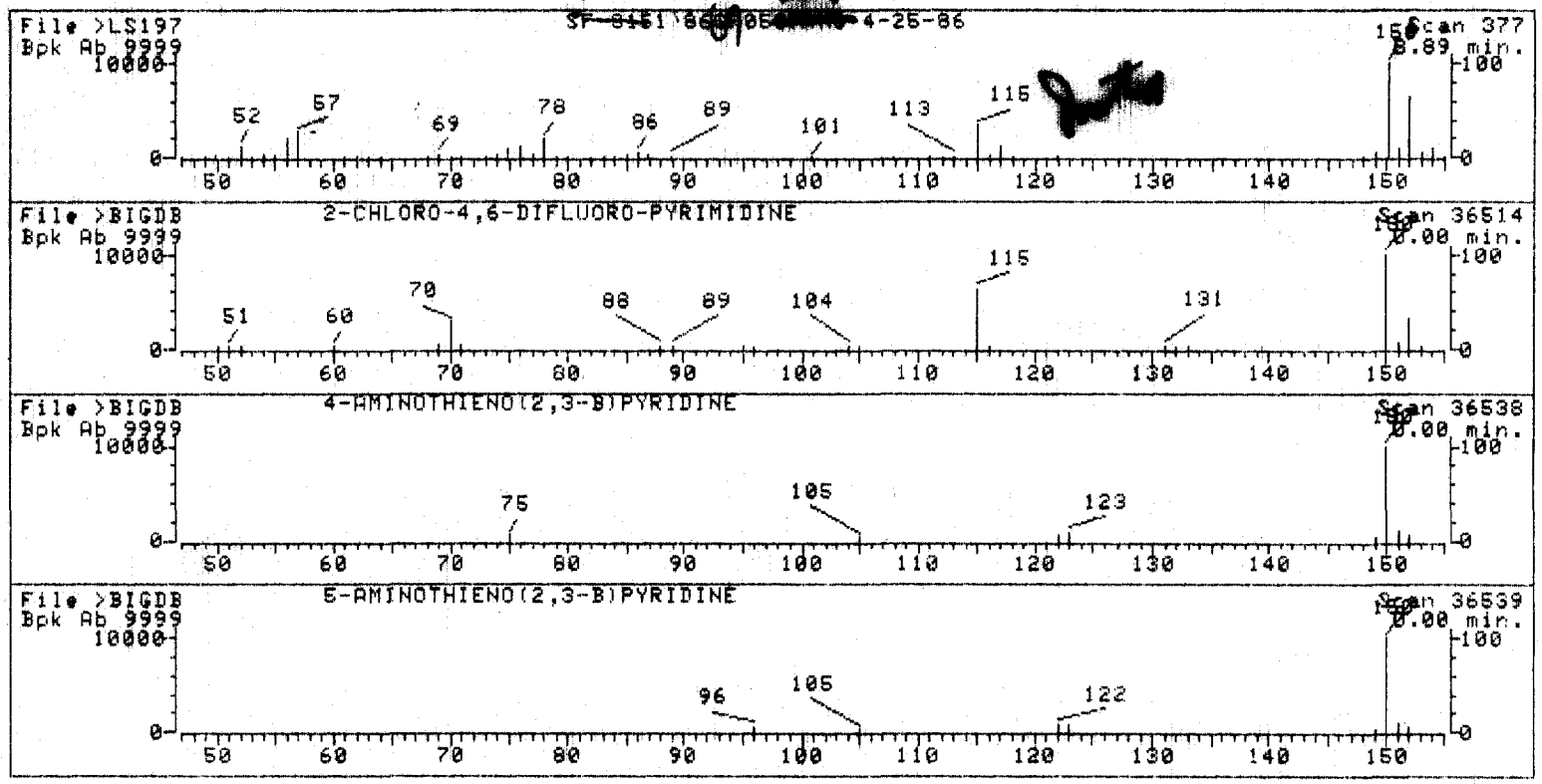
Sum of corrected areas : 4572824

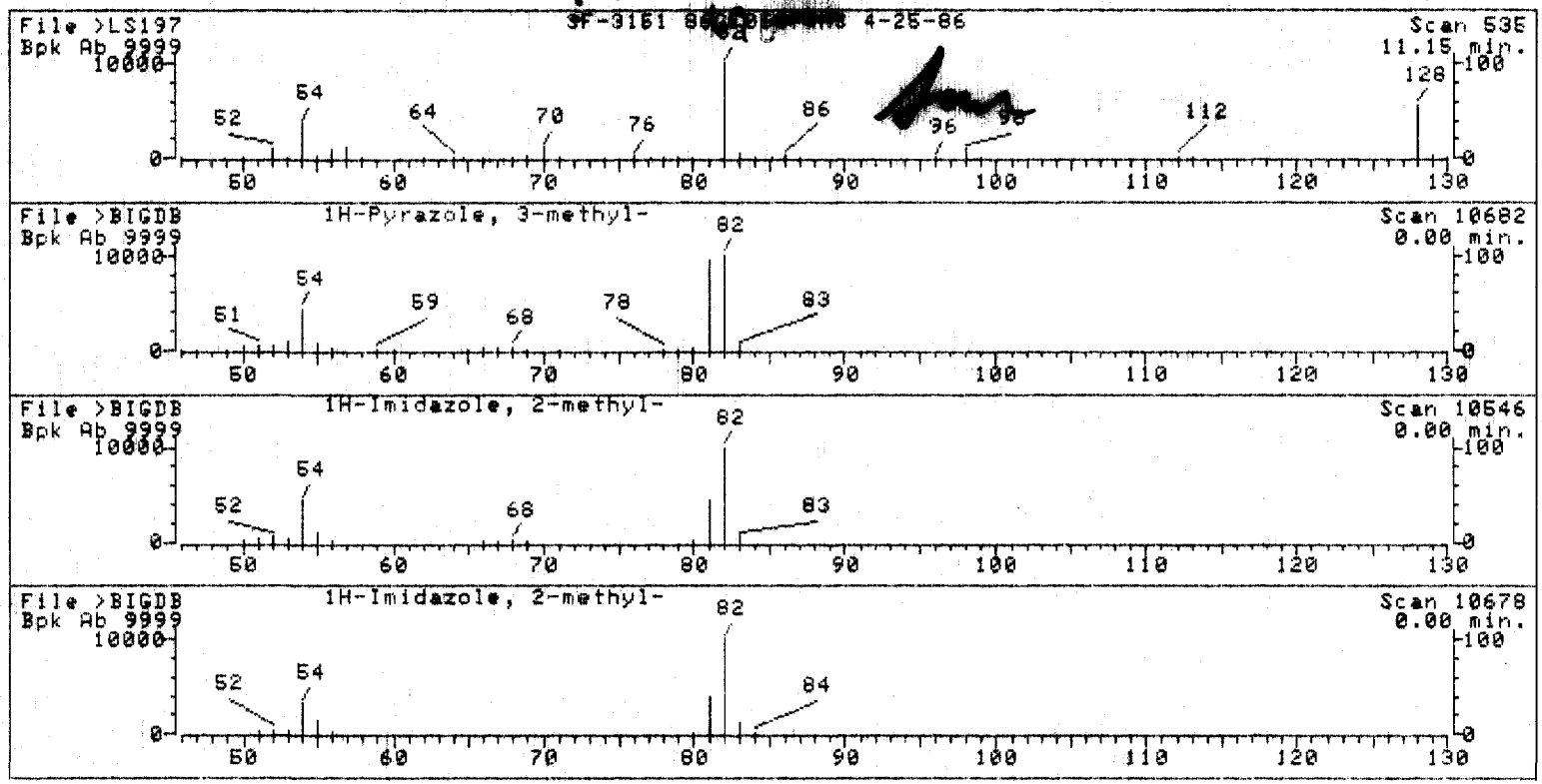
CAUTION
Last scan (3260) not on baseline

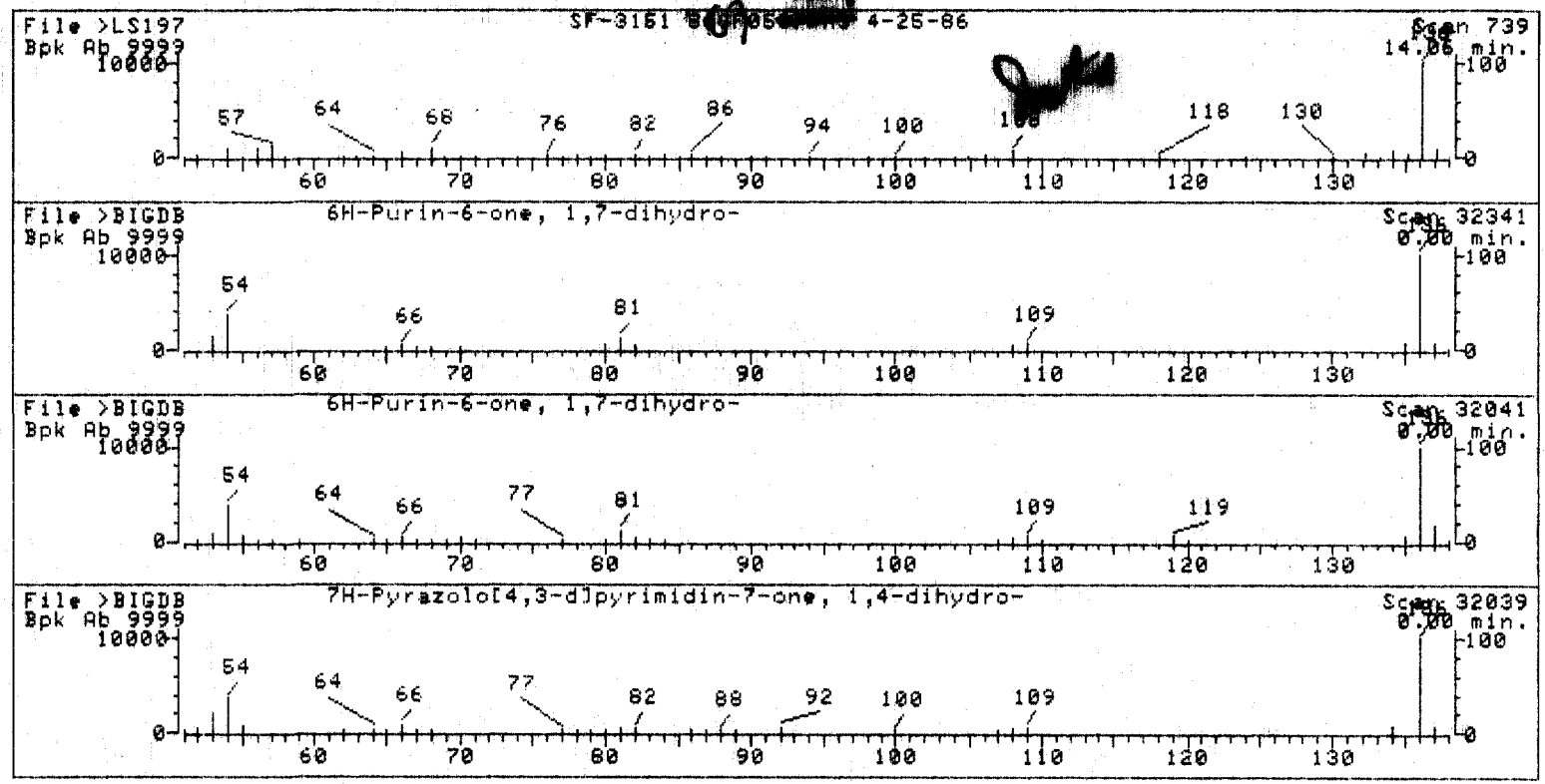

File >LS197 45.0-450.0 amu. SF-3151 [redacted] 4-25-86
TIC
360000
320000
280000
240000
200000
160000
120000
80000
40000
0
5.33
8.08
8.89
11.15
14.06
18.63
20.64
23.01
24.79
29.07
31.71
4
8
12
16
20
24
28
32
36
40
44
48

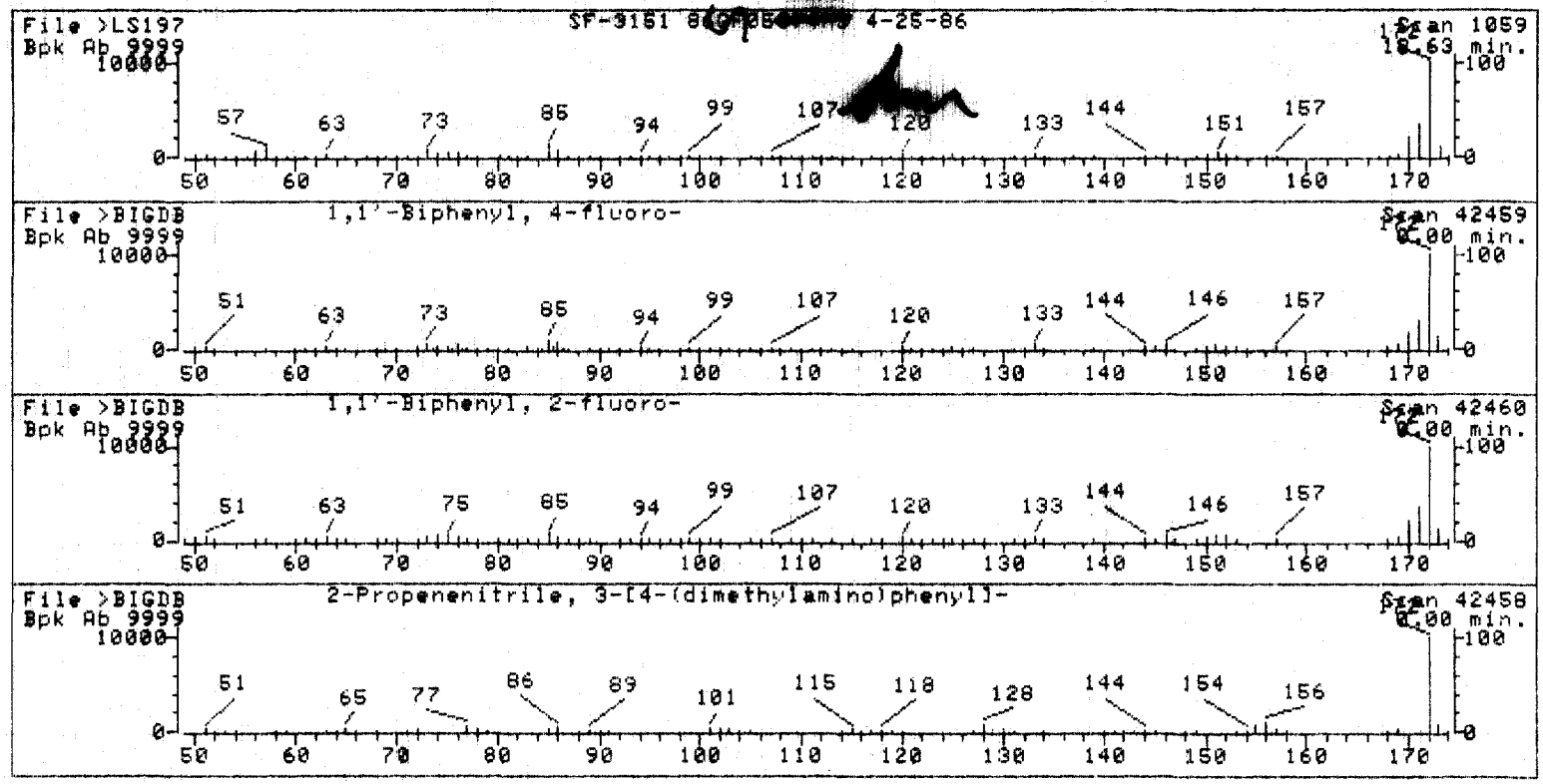

File >LS197
Bpk Ab 9999
10000
SF-3151 [illegible] 4-25-[illegible]
Scan 128
5.33 min.
53 57 63 64 73 75 83 84 92 94
File >BIGDB
Bpk Ab 9999
10000
Phenol, 2-fluoro-
Scan 4762
0.00 min.
50 57 63 64 73 75 83 84 92 94 105
File >BIGDB
Bpk Ab 9999
10000
Phenol, 4-fluoro-
Scan 23406
0.00 min.
53 57 63 64 73 75 83 84 92 94 101 104
File >BIGDB
Bpk Ab 9999
10000
2,4(1H,3H)-Pyrimidinedione
Scan 23660
0.00 min.
53 55 60 68 69
0 50 55 60 65 70 75 80 85 90 95 100 105 110
100

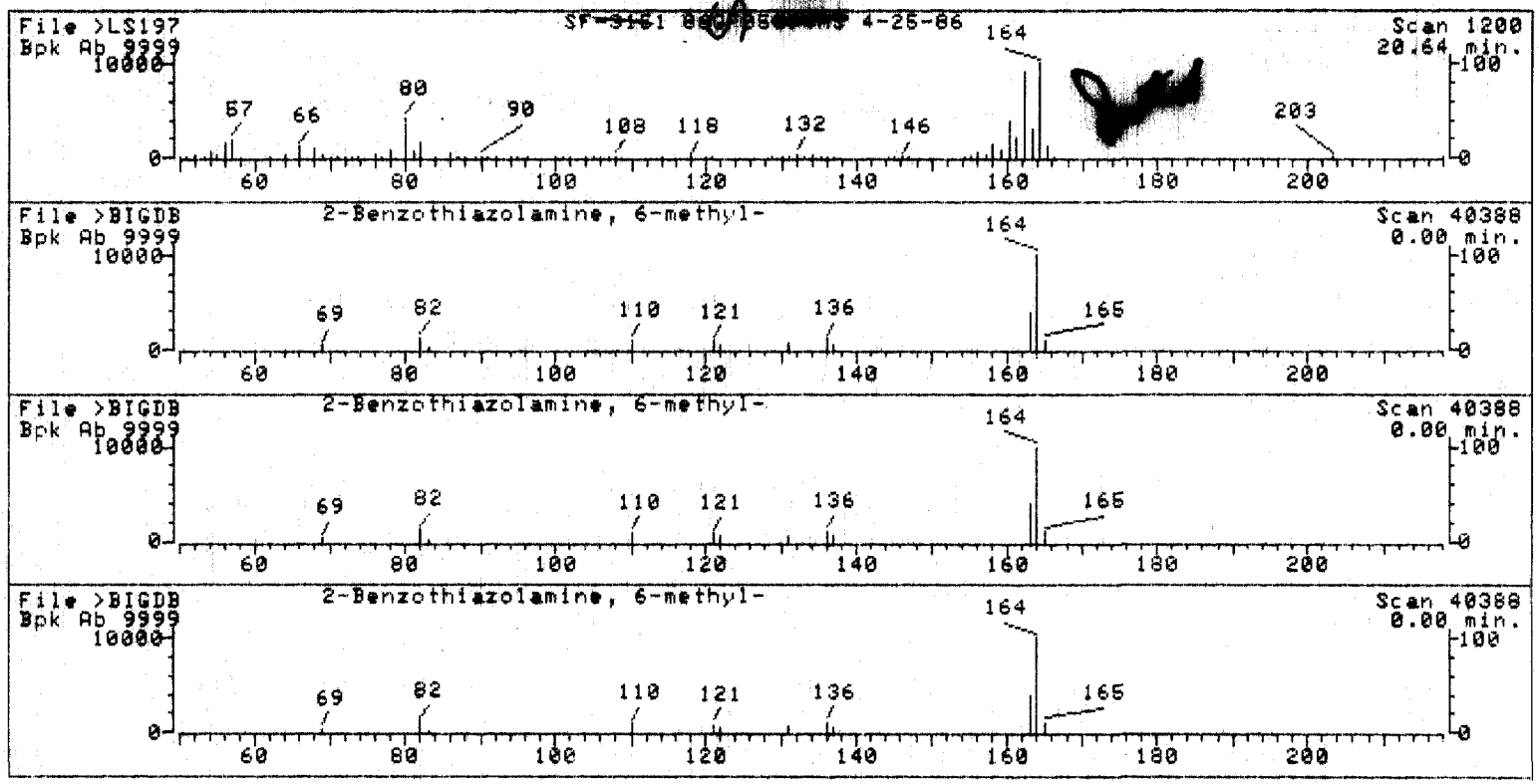

File >LS197
Bpk Ab 9999
SF-3151 4-25-86
Scan 320
8.08 min.
1-METHYL-5-HYDROXY-V-TRIAZOLE
File >BIGDB
Bpk Ab 2900
Scan 18503
0.00 min.
2-Pyrrolidinone, 1-methyl-
File >BIGDB
Bpk Ab 9999
Scan 18514
0.00 min.
2,5-Pyrrolidinedione
File >BIGDB
Bpk Ab 4767
Scan 18898
0.00 min.

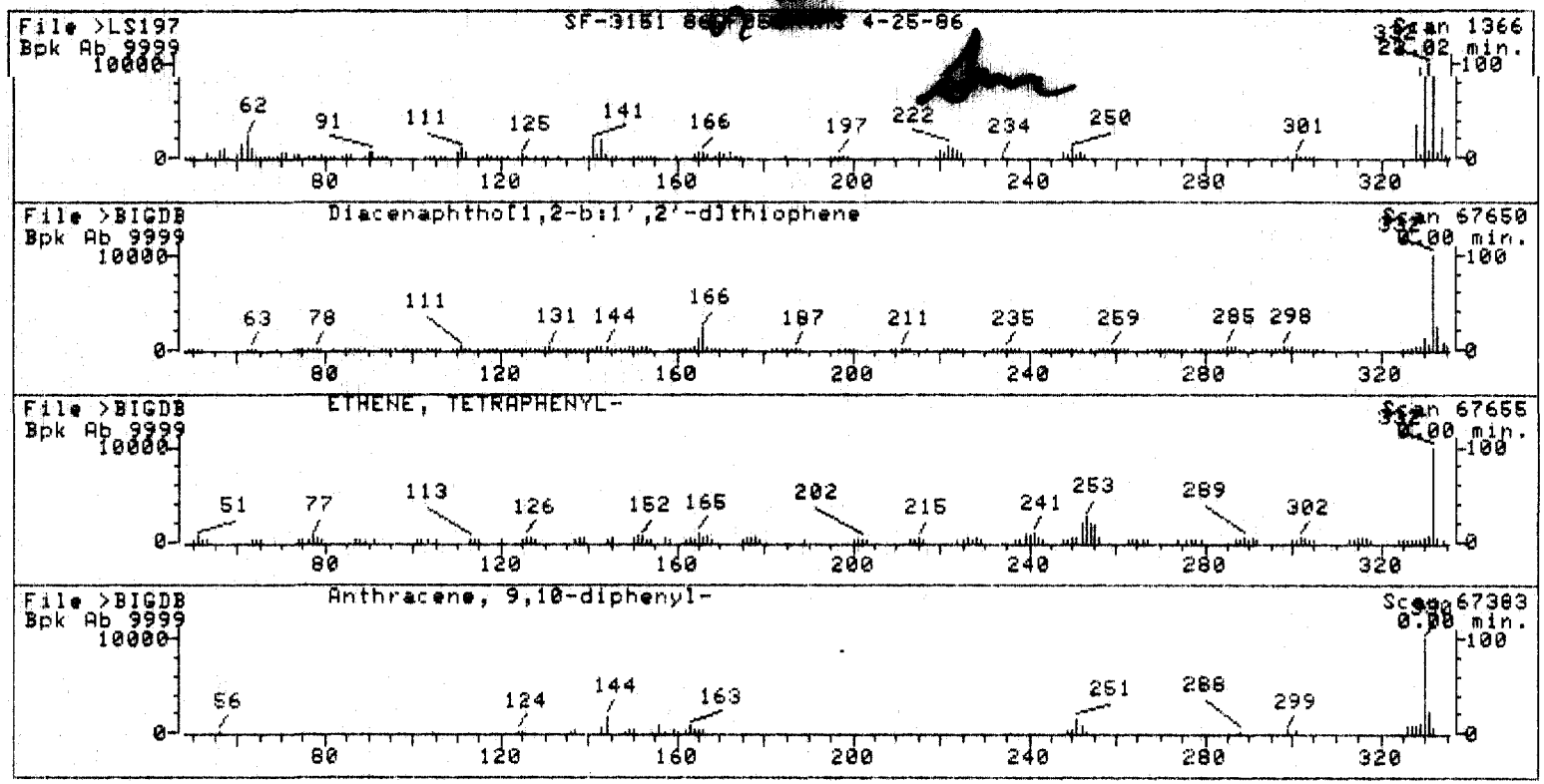

File >LS197
Bpk Ab 9999
10000
0
52
57
69
78
86
89
101
113
115
150
Scan 377
8.89 min.
100
0
50 60 70 80 90 100 110 120 130 140 150
File >BIGDB
Bpk Ab 9999
10000
0
2-CHLORO-4,6-DIFLUORO-PYRIMIDINE
51
60
70
88
89
104
115
131
150
Scan 36514
0.00 min.
100
0
50 60 70 80 90 100 110 120 130 140 150
File >BIGDB
Bpk Ab 9999
10000
0
4-AMINOTHIENO(2,3-B)PYRIDINE
75
105
123
Scan 36538
0.00 min.
100
0
50 60 70 80 90 100 110 120 130 140 150
File >BIGDB
Bpk Ab 9999
10000
0
5-AMINOTHIENO(2,3-B)PYRIDINE
96
105
122
Scan 36539
0.00 min.
100
0
50 60 70 80 90 100 110 120 130 140 150

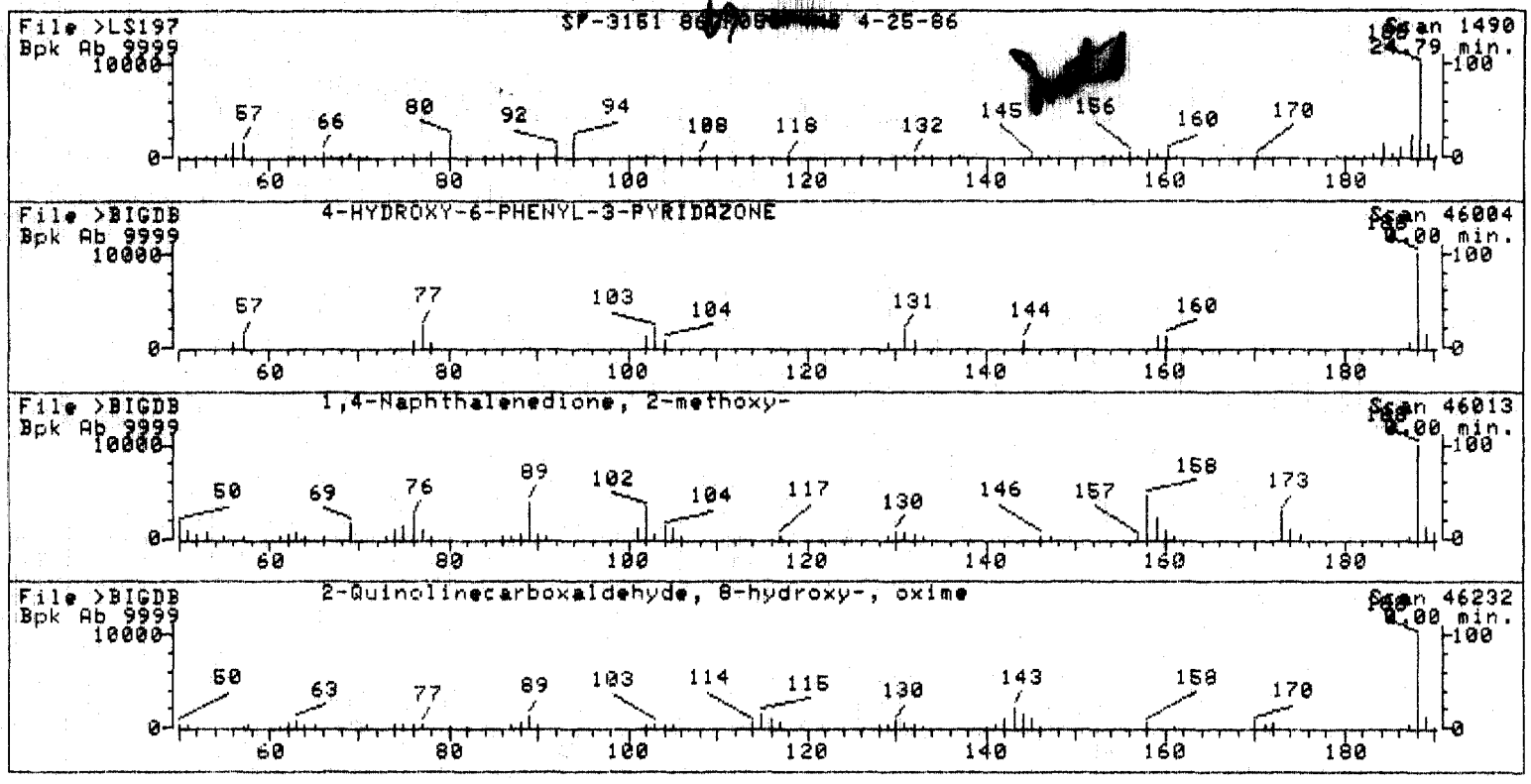

File >LS197
Bpk Ab 9999
10000
0
SF-3161 4-25-86
Scan 535
11.15 min.
100
0
52
54
64
70
76
82
86
96
98
112
128
50
60
70
80
90
100
110
120
130
File >BIGDB
Bpk Ab 9999
10000
0
1H-Pyrazole, 3-methyl-
Scan 10682
0.00 min.
100
0
51
54
59
68
78
82
83
50
60
70
80
90
100
110
120
130
File >BIGDB
Bpk Ab 9999
10000
0
1H-Imidazole, 2-methyl-
Scan 10546
0.00 min.
100
0
52
54
68
82
83
50
60
70
80
90
100
110
120
130
File >BIGDB
Bpk Ab 9999
10000
0
1H-Imidazole, 2-methyl-
Scan 10678
0.00 min.
100
0
52
54
82
84
50
60
70
80
90
100
110
120
130

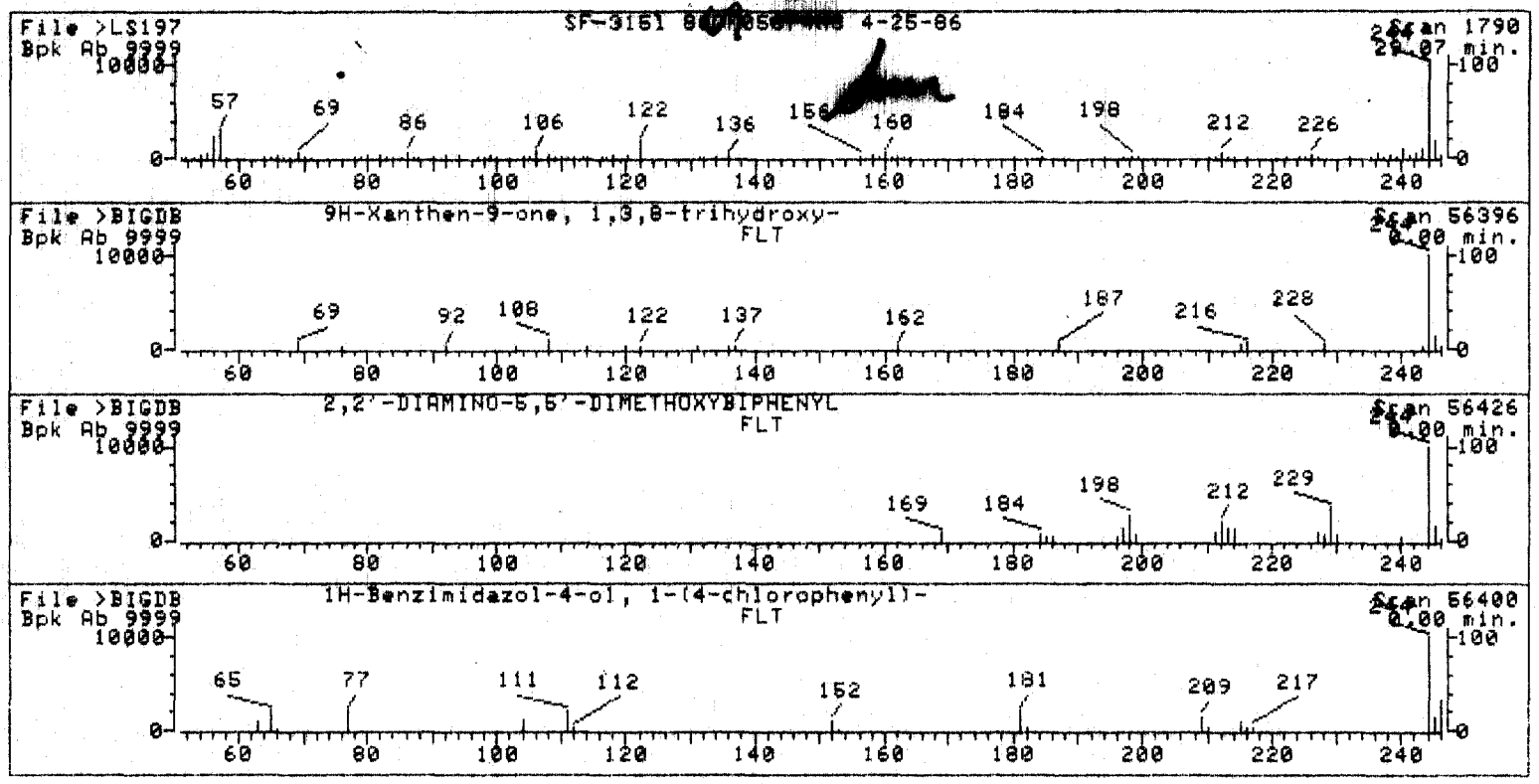

File >LS197
Bpk Ab 9999
10000
0
SF-3151 [redacted] 4-25-86
Scan 739
14.06 min.
100
0
57 64 68 76 82 86 94 100 [redacted] 118 130
60 70 80 90 100 110 120 130
File >BIGDB
Bpk Ab 9999
10000
0
6H-Purin-6-one, 1,7-dihydro-
Scan 32341
0.00 min.
100
0
54 66 81 109
60 70 80 90 100 110 120 130
File >BIGDB
Bpk Ab 9999
10000
0
6H-Purin-6-one, 1,7-dihydro-
Scan 32041
0.00 min.
100
0
54 64 66 77 81 109 119
60 70 80 90 100 110 120 130
File >BIGDB
Bpk Ab 9999
10000
0
7H-Pyrazolo[4,3-d]pyrimidin-7-one, 1,4-dihydro-
Scan 32039
0.00 min.
100
0
54 64 66 77 82 88 92 100 109
60 70 80 90 100 110 120 130

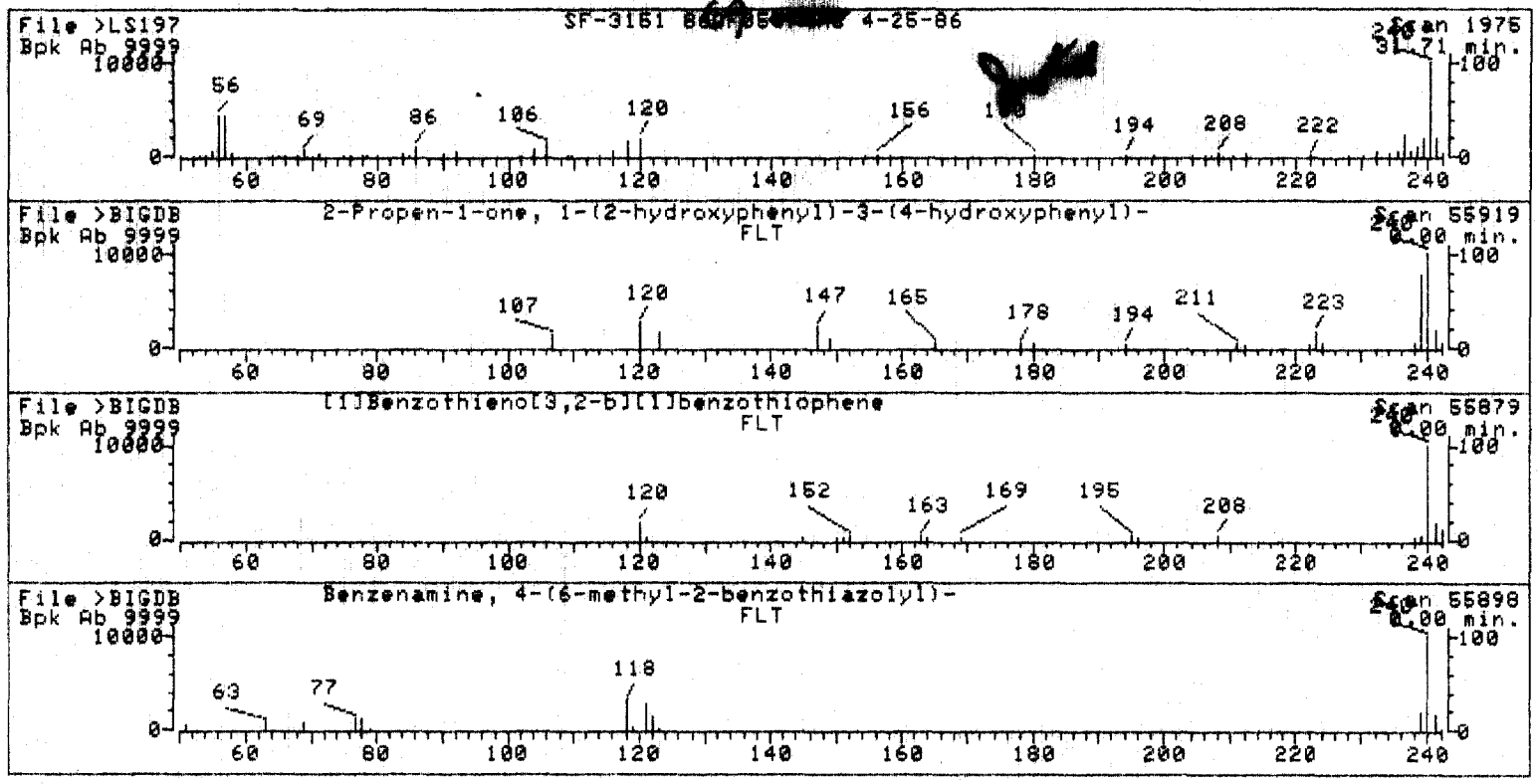

File >LS197
Bpk Ab 9999
10000
SF-3151 [redacted] 4-25-86
Scan 1059
18.63 min.
100
0
57 63 73 85 94 99 107 120 133 144 151 157
50 60 70 80 90 100 110 120 130 140 150 160 170
File >BIGDB
Bpk Ab 9999
10000
1,1'-Biphenyl, 4-fluoro-
Scan 42459
00 min.
100
0
51 63 73 85 94 99 107 120 133 144 146 157
50 60 70 80 90 100 110 120 130 140 150 160 170
File >BIGDB
Bpk Ab 9999
10000
1,1'-Biphenyl, 2-fluoro-
Scan 42460
00 min.
100
0
51 63 75 85 94 99 107 120 133 144 146 157
50 60 70 80 90 100 110 120 130 140 150 160 170
File >BIGDB
Bpk Ab 9999
10000
2-Propenenitrile, 3-[4-(dimethylamino)phenyl]-
Scan 42458
00 min.
100
0
51 65 77 86 89 101 115 118 128 144 154 156
50 60 70 80 90 100 110 120 130 140 150 160 170


File >LS197
Bpk Ab 9999
10000
0
SF-3161 [illegible] 4-25-86
Scan 1200
20.64 min.
100
0
57
66
80
90
108
118
132
146
164
203
60
80
100
120
140
160
180
200
File >BIGDB
Bpk Ab 9999
10000
0
2-Benzothiazolamine, 6-methyl-
Scan 40388
0.00 min.
100
0
69
82
110
121
136
164
165
60
80
100
120
140
160
180
200
File >BIGDB
Bpk Ab 9999
10000
0
2-Benzothiazolamine, 6-methyl-
Scan 40388
0.00 min.
100
0
69
82
110
121
136
164
165
60
80
100
120
140
160
180
200
File >BIGDB
Bpk Ab 9999
10000
0
2-Benzothiazolamine, 6-methyl-
Scan 40388
0.00 min.
100
0
69
82
110
121
136
164
165
60
80
100
120
140
160
180
200


File >LS197
Bpk Ab 9999
10000
SF-3151 [redacted] 4-25-86
Scan 1366
62
91
111
125
141
166
197
222
234
250
301
File >BIGDB
Bpk Ab 9999
10000
Diacenaphtho[1,2-b:1',2'-d]thiophene
Scan 67650
63
78
111
131
144
166
187
211
235
259
285
298
File >BIGDB
Bpk Ab 9999
10000
ETHENE, TETRAPHENYL-
Scan 67655
51
77
113
126
152
165
202
215
241
253
289
302
File >BIGDB
Bpk Ab 9999
10000
Anthracene, 9,10-diphenyl-
Scan 67303
56
124
144
163
251
288
299
0
80
120
160
200
240
280
320
100


File >LS197
Bpk Ab 9999
10000
SP-3161 [redacted] 4-25-86
Scan 1490
24.79 min.
57 66 80 92 94 108 118 132 145 156 160 170
File >BIGDB
Bpk Ab 9999
10000
4-HYDROXY-6-PHENYL-3-PYRIDAZONE
Scan 46004
57 77 103 104 131 144 160
File >BIGDB
Bpk Ab 9999
10000
1,4-Naphthalenedione, 2-methoxy-
Scan 46013
50 69 76 89 102 104 117 130 146 157 158 173
File >BIGDB
Bpk Ab 9999
10000
2-Quinolinecarboxaldehyde, 8-hydroxy-, oxime
Scan 46232
50 63 77 89 103 114 115 130 143 158 170
0
60 80 100 120 140 160 180
100


File >LS197
Bpk Ab 9999
SF-3161 4-25-86
Scan 1790
29.07 min.
57 69 86 106 122 136 156 160 184 198 212 226
File >BIGDB
Bpk Ab 9999
9H-Xanthen-9-one, 1,3,8-trihydroxy-
FLT
Scan 56396
0.00 min.
69 92 108 122 137 162 187 216 228
File >BIGDB
Bpk Ab 9999
2,2'-DIAMINO-5,5'-DIMETHOXYBIPHENYL
FLT
Scan 56426
0.00 min.
169 184 198 212 229
File >BIGDB
Bpk Ab 9999
1H-Benzimidazol-4-ol, 1-(4-chlorophenyl)-
FLT
Scan 56400
0.00 min.
65 77 111 112 152 181 209 217


File >LS197
Bpk Ab 9999
SF-3151 [redacted] 4-25-86
Scan 1975
31.71 min.
56
69
86
106
120
156
194
208
222
File >BIGDB
Bpk Ab 9999
2-Propen-1-one, 1-(2-hydroxyphenyl)-3-(4-hydroxyphenyl)-
FLT
Scan 55919
107
120
147
165
178
194
211
223
File >BIGDB
Bpk Ab 9999
[1]Benzothieno[3,2-b][1]benzothiophene
FLT
Scan 55879
120
152
163
169
195
208
File >BIGDB
Bpk Ab 9999
Benzenamine, 4-(6-methyl-2-benzothiazolyl)-
FLT
Scan 55898
63
77
118

QUANT REPORT

Operator ID: SUKWHA Quant Rev: 4 Quant Time: 860429 09:51
Output File: ^L$193::AQ Injected at: 860428 19:50
Data File: >L$193::D5 Dilution Factor: 1.00
Name: TOXSTD 50PPB
Misc: 4-25-86 BTL # 4

ID File: QASK1::D6
Title: COPY FROM QASK2: T2 IS 280
Last Calibration: 860429 09:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D4-1,4-DICHLOROBENZENE	8.92	376	40881	50.60	PPB	95
2)	ANILINE	8.28	331	83183	50.00	PPB	100
3)	PHENOL	8.16	[illegible]	[illegible]	[illegible]	PPB	82
4)	BIS(2-CHLOROETHYL)ETHER	8.28	331	83183	50.00	PPB	79
5)	2-CHLOROPHENOL	8.33	335	21314	50.00	PPB	94
6)	1,3-DICHLOROBENZENE	8.98	380	65538	50.00	PPB	95
7)	1,4-DICHLOROBENZENE	8.98	380	65538	50.00	PPB	93
8)	1,2-DICHLOROBENZENE	9.63	426	59936	50.00	PPB	92
9)	BENZYL ALCOHOL	9.65	427	41728	50.00	PPB	80
10)	2-METHYLPHENOL	10.92	516	64453	50.00	PPB	76
11)	BIS(2-CHLOROISOPROPYL)ETHER	10.29	472	16927	50.00	PPB	99
12)	HEXACHLOROETHANE	10.82	509	27755	50.00	PPB	91
13)	4-METHYL PHENOL	10.92	516	79618	50.00	PPB	91
14)	N-NITROSODIPROPYL AMINE	10.86	512	47059	50.00	PPB	94
15)	*D10-PHENANTHRENE	24.81	1488	77379	50.10	PPB	97
16)	NITROBENZENE	11.23	538	60341	50.00	PPB	69
17)	ISOPHORONE	12.29	612	134212	50.00	PPB	99
18)	2-NITROPHENOL	12.58	632	32880	50.00	PPB	76
19)	2,4-DIMETHYL PHENOL	13.14	671	43955	50.00	PPB	76
20)	BIS(2-CHLOROETHOXY)METHANE	13.51	697	85910	50.00	PPB	98
21)	2,4-DICHLOROPHENOL	13.72	712	46459	50.00	PPB	94
23)	1,2,4-TRICHLOROBENZENE	13.99	731	47645	50.00	PPB	94
24)	NAPHTHALANE	14.21	746	167799	50.00	PPB	95
25)	4-CHLOROANILINE	14.71	781	39766	50.00	PPB	99
26)	HEXACHLOROBUTADIENE	15.22	817	25363	50.00	PPB	79
27)	4-CHLORO-3-METHYLPHENOL	17.04	944	49276	50.00	PPB	87
28)	2-METHYLNAPHTHALENE	17.15	952	103153	50.00	PPB	90
29)	HEXACHLOROCYCLOPENTADIENE	18.07	1016	25090	50.00	PPB	95
30)	2,4,6-TRICHLOROPHENOL	18.38	1038	32899	50.00	PPB	97
31)	2,4,5-TRICHLOROPHENOL	18.38	1038	32899	50.00	PPB	94
32)	2-CHLORONAPHTHALENE	18.85	1071	94080	50.00	PPB	98
33)	2-NITROANILINE	18.40	1109	33489	50.00	PPB	93
34)	ACENAPHTHYLENE	20.18	1164	137107	50.00	PPB	98
35)	DIMETHYLPHTHALATE	20.22	1167	98886	50.00	PPB	98
36)	2,6-DINITROTOLUENE	20.37	1177	23816	50.00	PPB	86
37)	ACENAPHTHENE	20.78	1206	97066	50.00	PPB	96
38)	3-NITROANILINE	20.71	1201	23856	50.00	PPB	93
39)	2,4-DINITROPHENOL	21.03	1223	5609	50.00	PPB	100
40)	DIBENZOFURAN	21.27	1240	121859	50.00	PPB	97
41)	2,4-DINITROTOLUENE	21.48	1255	23600	50.00	PPB	86
42)	4-NITROPHENOL	21.44	1252	10712	50.00	PPB	98
43)	FLUORENE	22.27	1310	98381	50.00	PPB	95
44)	DIETHYLPHTHALATE	22.37	1317	87203	50.00	PPB	86
45)	4-NITROANILINE	22.54	1329	13181	50.00	PPB	100
46)	2-METHYL-4,6-DINITROPHENOL	22.66	1337	9072	50.00	PPB	84
47)	4-CHLOROPHENYL PHENYL ETHER	22.37	1317	52138	50.00	PPB	97

	Compound	R.T.	Scan#	Area	Conc	Units	q
48)	DIPHENYLAMINE	22.77	1345	85277	50.00	PPB	100
49)	1,2-DIPHENYLHYDRAZINE	22.81	1348	245047	50.00	PPB	95
50)	4-BROMOPHENYLPHENYL ETHER	23.70	1410	27428	50.00	PPB	86
51)	HEXACHLOROBENZENE	24.03	1433	32073	50.00	PPB	91
52)	PENTACHLOROPHENOL	24.56	1470	12652	50.00	PPB	89
53)	PHENANTHRENE	24.87	1492	91990	50.00	PPB	97
54)	ANTHRACENE	24.87	1492	91990	50.00	PPB	94
55)	DI-N-BUTYLPHTHALATE	26.71	1621	84136	50.00	PPB	98

56)	FLUORANTHENE	28.00	1711	59176	50.00	PPB	[illegible]
57)	PYRENE	28.00	1711	59176	50.00	PPB	96
58)	*D12-PERYLENE	37.26	2359	9800	50.90	PPB	96
59)	BUTYL BENZYL PHTHALATE	30.50	1886	14874	50.00	PPB	100
60)	BENZO(A)ANTHRACENE	31.83	1979	25522	50.00	PPB	91
61)	CHRYSENE	31.83	1979	25522	50.00	PPB	98
62)	BIS(2-ETHYLHEXYL)PHTHALATE	32.23	2007	15601	50.00	PPB	92
63)	DI-N-OCTYLPHTHALATE	34.40	2159	17793	50.00	PPB	97
64)	BENZO(B)FLUORANTHENE	35.51	2237	16038	50.00	PPB	95
65)	BENZO(K)FLUORANTHENE	35.51	2237	16038	50.00	PPB	77
66)	BENZO(A)PYRENE	36.97	2339	14402	50.00	PPB	97
67)	INDENO[1,2,3-CD]PYRENE	44.11	2839	9939	50.00	PPB	91
68)	DIBENZO(A,H)ANTHRACENE	44.43	2861	4786	50.00	PPB	100
69)	BENZO(GHI)PERYLENE	46.11	2979	4639	50.00	PPB	87

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA Quant Rev: 4 Quant Time: 860429 09:56
Output File: ^LS191::AQ Injected at: 860428 17:23
Data File: >LS191::D5 Dilution Factor: 1.00
Name: LAB BLANK
Misc: 4-25-86 BTL# 2

ID File: QASK11::D6
Title: COPY FROM QASK2: T2 IS 280
Last Calibration: 860429 09:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D4-1,4-DICHLOROBENZENE	8.91	380	44421	50.60	PPB	94
15)	*D10-PHENANTHRENE	24.80	1492	100172	50.10	PPB	96
~~13)~~	~~FLUORENE~~	~~23.01~~	~~1367~~	~~4070~~	~~1.60~~	~~PPB~~	92
~~49)~~	~~DIPHENYLAMINE~~	~~23.01~~	~~1367~~	~~1373~~	~~.62~~	~~PPB~~	100
58)	*D12-PERYLENE	37.23	2363	8170	50.90	PPB	86

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA Quant Rev: 4 Quant Time: 860429 10:00
Output File: ^LS196::AQ Injected at: 860428 23:31
Data File: >LS196::D5 Dilution Factor: 1.00
Name: SF-3151 86~~GA05SR07~~ GA 574
Misc: 4-25-86 BTL# 7

ID File: QASK11::D6
Title: COPY FROM QASK2: T2 IS 280
Last Calibration: 860429 09:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D4-1,4-DICHLOROBENZENE	8.90	378	38783	50.60	PPB	94
~~2)~~	~~PHENOL~~	~~[illegible]~~	~~322~~	~~[illegible]~~	~~[illegible]~~	~~PPB~~	72
~~14)~~	~~N-NITROSODIPROPYL AMINE~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~PPB~~	62
15)	*D10-PHENANTHRENE	24.78	1490	85536	50.10	PPB	97
~~13)~~	~~FLUORENE~~	~~23.01~~	~~1366~~	~~6092~~	~~3.17~~	~~PPB~~	~~91~~
~~49)~~	~~DIPHENYLAMINE~~	~~23.01~~	~~1366~~	~~2303~~	~~1.27~~	~~PPB~~	~~100~~
58)	*D12-PERYLENE	37.22	2361	4598	50.90	PPB	86

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS197::AQ
Data File: >LS197::D5
Name: SF-3151 86GA05~~S74MS~~ 07
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 10:05
Injected at: 860429 00:44
Dilution Factor: 1.00
BTL# 8

ID File: QASK11::D6
Title: COPY FROM QASK2: T2 IS 280
Last Calibration: 860429 09:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D4-1,4-DICHLOROBENZENE	8.89	377	43715	50.60	PPB	95
~~3)~~	~~PHENOL~~	~~8.10~~	~~322~~	~~3045~~	~~1.75~~	~~PPB~~	97
~~14)~~	~~N-NITROSODIPROPYL AMINE~~	~~11.15~~	~~535~~	~~21010~~	~~21.77~~	~~PPB~~	61
15)	*D10-PHENANTHRENE	24.77	1489	113683	50.10	PPB	95
~~43)~~	~~FLUORENE~~	~~23.02~~	~~1366~~	~~10715~~	~~9.71~~	~~PPB~~	~~95~~
~~48)~~	~~DIPHENYLAMINE~~	~~23.00~~	~~1365~~	~~3713~~	~~1.48~~	~~PPB~~	~~100~~
58)	*D12-PERYLENE	37.21	2360	29343	50.90	PPB	94
62)	BIS(2-ETHYLHEXYL)PHTHALATE	32.17	2007	1697	1.82	PPB	87

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA
Output File: ^LS198::AQ
Data File: >LS198::D5
Name: SF-3151 86FG05~~S74MSD~~ S74MS
Misc: 4-25-86

Quant Rev: 4
Quant Time: 860429 10:10
Injected at: 860429 01:57
Dilution Factor: 1.00
BTL# 9

ID File: QASK11::D6
Title: COPY FROM QASK2: T2 IS 280
Last Calibration: 860429 09:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D4-1,4-DICHLOROBENZENE	8.89	377	40394	50.60	PPB	96
2)	ANILINE	8.30	336	1481	.90	PPB	100
3)	PHENOL	8.10	322	33733	16.57	PPB	96
5)	2-CHLOROPHENOL	8.30	336	29495	70.03	PPB	98
6)	1,3-DICHLOROBENZENE	8.95	381	24621	19.01	PPB	97
7)	1,4-DICHLOROBENZENE	8.95	381	24621	19.01	PPB	98
9)	BENZYL ALCOHOL	9.60	427	33149	40.20	PPB	80
14)	N-NITROSODIPROPYL AMINE	10.79	510	33835	36.38	PPB	95
15)	*D10-PHENANTHRENE	24.77	1489	77917	50.10	PPB	95
23)	1,2,4-TRICHLOROBENZENE	13.95	731	22018	22.95	PPB	97
25)	4-CHLOROANILINE	14.66	781	27409	34.22	PPB	96
27)	4-CHLORO-3-METHYLPHENOL	17.00	945	30537	30.77	PPB	86
37)	ACENAPHTHENE	20.73	1206	34221	17.51	PPB	94
40)	DIBENZOFURAN	21.22	1240	55891	22.77	PPB	99
41)	2,4-DINITROTOLUENE	21.44	1256	25279	53.19	PPB	82
42)	4-NITROPHENOL	21.39	1252	14332	66.44	PPB	93
43)	FLUORENE	22.99	1364	4037	2.04	PPB	84
48)	DIPHENYLAMINE	22.99	1364	1323	.77	PPB	100
52)	PENTACHLOROPHENOL	24.50	1470	17894	70.23	PPB	97

[illegible]	DI-N-BUTYLPHTHALATE	26.67	1622	57692	34.05	PPB	[illegible]
56)	FLUORANTHENE	28.53	1752	36049	30.25	PPB	95
57)	PYRENE	28.53	1752	36049	30.25	PPB	96
58)	*D12-PERYLENE	37.20	2359	6880	50.90	PPB	79

* Compound is ISTD

QUANT REPORT

Operator ID: SUKWHA Quant Rev: 4 Quant Time: 860429 10:16
Output File: ^LS199::AQ Injected at: 860429 03:11
Data File: >LS199::D5 Dilution Factor: 1.00
Name: ~~DFTPP~~ SF-3151 86F605$ 74MSD
Misc: 4-25-86 ETL#10

ID File: QASK11::D6
Title: COPY FROM QASK2: T2 IS 280
Last Calibration: 860429 09:50

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*D4-1,4-DICHLOROBENZENE	8.88	376	38996	50.60	PPB	97
2)	ANILINE	8.30	336	1826	1.15	PPB	100
3)	PHENOL	8.09	321	39609	20.16	PPB	85
5)	2-CHLOROPHENOL	8.30	336	34927	85.90	PPB	99
6)	1,3-DICHLOROBENZENE	8.93	380	28748	22.99	PPB	97
7)	1,4-DICHLOROBENZENE	8.93	380	28748	22.99	PPB	99
9)	BENZYL ALCOHOL	9.59	426	36068	45.31	PPB	77
14)	N-NITROSODIPROPYL AMINE	10.78	509	31625	35.23	PPB	92
15)	*D10-PHENANTHRENE	24.77	1489	79495	50.10	PPB	96
23)	1,2,4-TRICHLOROBENZENE	13.93	730	25735	26.29	PPB	94
25)	4-CHLOROANILINE	14.65	780	27963	34.22	PPB	97
27)	4-CHLORO-3-METHYLPHENOL	16.99	944	29318	28.96	PPB	90
37)	ACENAPHTHENE	20.72	1205	31379	15.73	PPB	94
40)	DIBENZOFURAN	21.20	1239	49555	19.79	PPB	97
41)	2,4-DINITROTOLUENE	21.43	1255	21446	44.23	PPB	78
42)	4-NITROPHENOL	21.39	1252	11676	53.05	PPB	95
43)	FLUORENE	22.97	1363	3385	1.67	PPB	74
48)	DIPHENYLAMINE	22.97	1363	1304	.74	PPB	100
52)	PENTACHLOROPHENOL	24.50	1470	16416	63.15	PPB	95
55)	DI-N-BUTYLPHTHALATE	26.67	1622	49575	28.68	PPB	97
56)	FLUORANTHENE	28.51	1751	29600	24.34	PPB	95
57)	PYRENE	28.51	1751	29600	24.34	PPB	97
58)	*D12-PERYLENE	37.20	2359	8829	50.90	PPB	88

* Compound is ISTD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5-20-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker, SP
CRL QC Coordinator

TO: Data User: _____

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

TRANSMITTED BY
Griffin
MAY 20 1986

U.S. EPA CENTRAL
REGIONAL LAB

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151 Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	~~% Recovery~~ % Bias	Limit	Method of Quality Control
PCB	4%	≤ 35%	MATRIX SPIKES	79-82	60-122 ~~62-118~~	DUPLICATE MATRIX SPIKE
LINDANE	10%			84-93	62-118	
HEPTACHLOR	7%			71-76	62-124	
ALDRIN	5%			78-82	50-104	
ENDOSULFAN-1	0%			81-81	65-123	
DIELDRIN	1%			73-74	79-126	
ENDRIN	9%			168-184 *	69-119	
DDT	14%			48-55 *	66-117	
METHOXYCHLOR	14%			52-60 *	71-139	

COMMENT: * MATRIX EFFECT

QC FLAGS: * RESULTS SHOULD BE CONSIDERED BIASED

Superfund TIT

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

DIVISION/BRANCH: ESD Sampling Date: 4/16/86 (Month Day Year) Arrival Date: 4/7/86 (Month Day Year) Analysis Due Date: 5/7/86 (Month Day Year)

D.U. Number: Y905. Group # : ~~SF~~ 3151 ~~SF~~ Activity # ; C48100 Study: North East Gravel

ALL UNITS ARE MICROGRAMS PER LITER OR MILLIGRAMS PER KILOGRAM.

Pesticide / Sample #	Y-BHC	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	Dieldrin	Endrin	Endosulfan II	pp-DDE	Beta-BHC	Delta-BHC	α-BHC	pp-DDD	pp-DDT	Methoxy Chlor	Endosulfan sulfate	Endrin aldehyde	Endrin ketone	Toxaphene	Tech-Chlordane
1 86FG05S74	<.05	<.05	<.05	<.05	<.05	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.5	<.1	<.1	<.1	<.1	<.1	<1.0	<.5	
2 86FG05R07	<.05	<.05	<.05	<.05	<.05	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.5	<.1	<.1	<.1	<.1	<.1	<1.0	<.5	
3																					
4																		AK	5/13/86		
5																		GF	5-14-86		
6																		YF	5-14-86		
7																					
8																					
9																					
10																					
11																					
12																					

Superfund (FIT) ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

Form # 1:

DIVISION/BRANCH: ESD Sampling Date: 4/16/86 (Month Day Year) Arrival Date: 4/17/86 (Month Day Year) Analysis Due Date: 5/7/86 (Month Day Year)

D.U. Number: Y905 Group #: SF3151 Activity #: C48100 Study: North East Gravel

All units are micrograms per liter or milligram per kilograms Sample Type: Water, Sediment, Oil, Sludge

#	Sample #	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor	Aroclor	Aroclor	Dibuthyl phthalate	Diethyl Hexyl phthalate	
1	86FG05S74	<.5	<.5	<1.0	<1.0						
2	86FG05R07	<.5	<.5	<1.0	<1.0						
3										AK 5/13/86	
4										C.F 5-14-86	
5										YF 5-14-86	
6											
7											
8											
9											
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
0											
1											
2											

ACTIVITY # C48100

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: PESTICIDES AND PCB'S

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER TRIHALOMETHANES UG/L PES17414	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES 17134	WATER HERBICIDES UG/L PES 17424	WATER OIL AND GREASE MG/L PES 17439
86FG05S74	5-54343-44-45 GRACELAND CHURCH		✓	✓		
86FG05R07	BLANK 5-93906		✓	✓		

Form # 4

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

Group #: _____ Data Set: SF 3151 Sample Type: WATER

ISTD-Conc.:

Sample #	Sample Amount	Final Volume	Solvent Extract.	Dilution with Hexane 1 st.	2 nd.	3 rd.	Vol. Conc. Extr.	Volume to Pest.	Toxic
86FG05 $74	1,550ml	5ml	6x60	5			5ml	5ml	—
86FG05 R07	1,610ml	5ml	↓	5			↓	↓	—
86FG05 $74 PCB SPK	1,000ml	5ml	3x60	5			↓	↓	—
86FG05 $74 PCBSPK Dup	1,000ml	5ml	↓	5			↓	↓	—
86FG05 $74 PEST SPK	1,000ml	100ml	↓	10	100		↓	↓	—
86FG05 $74 PEST SPK Dup	1,000ml	100ml	↓	10	100		↓	↓	—
METHOD Blank 3151	1,000ml	5ml	↓				↓	↓	—

PH 6 ↓

Date Extracted: 4/21/86 Chemist: K Gunter Toxic Ext. Received by

DATE EVAPORATED 9/23/86 Gen. Org. Ext. " "

Analytical Condition:

GC Conditions: MS Conditions:

Column 1) 3%-2100 on Supercoport 10 x 1/8" /1.95%

2) 1.5% SP-2250/ SP-2401 "

Mass Range: _____ to _____

T1 _____ Hold _____ Min. Scan Cycle: _____

T2 _____ _____ Min. High Voltage: _____

Rate: _____ C Confirmation: _____

Carrier Gas: _____; Flow rate: _____ Operator & Date: _____

GC Operator & Date: _____

Sample Clean-up and Remarks:

Dibutyl chlor. .65 ug/ml 4/10/86 1ml Added to MB, PCBSPK, PCBSPKDup 2ml Added to $74+R07

PEST SPK S2 9/30/85 1ml Added

PCB SPK 1242 2.83 ug/ml 7/15/85 1ml Added

Instd Area

Mirex

7.26 µg/ml

10 µl added to each vial.

AY 9, 1986 14:05
EQUENCE: C42*2
HANNEL 2

UBSEQUENCE 1

METHOD
PESTJ2

DIALG-PRG PARAM-FILE
/N

#WSHS	#PMPS	STOP
5,	5,	1

ISO	POST-BTL#	POST-#WSHS
NO ,	0,	1

SAMPLES

	SAMPLE-NAME	BTL#	PROC-FILE	RAW-FILE	%DIL-F	STD-AMT	SMP-AMT	INSTD AREA CH1	CH2	DIB Recovery µg/l Added	µg/l Found	% Recovery
1	SF 3151 MB ,	1,	C2N01 ,	*RAW02 ,	500.00,	1.0000,	1.0000	89981	-	.65	.677	103
2	86FG05R07 ,	2,	C2N02 ,	*RAW02 ,	500.00,	1.0000,	1.6100	94498	-	.65	.608	
3	DIB STD 65 ,	3,	C2N03 ,	*RAW02 ,	100.00,	1.0000,	1.0000	85203		—	—	—
4	PCB SPK ,	4,	C2N04 ,	*RAW02 ,	500.00,	1.0000,	1.0000	87644	56626	.65	.74	113
5	STD 1242 ,	5,	C2N05 ,	*RAW02 ,	100.00,	1.0000,	1.0000	104461	48227	—	—	—
6	PCB SPK DUP ,	6,	C2N06 ,	*RAW02 ,	500.00,	1.0000,	1.0000	94116	58084	.65	.644	98
7	86FG05S74 ,	7,	C2N07 ,	*RAW02 ,	500.00,	1.0000,	1.5500	69008	40388	.65	1.205	185
8	PEST SPK ,	8,	C2N08 ,	*RAW02 ,	10000.,	1.0000,	1.0000	91132	32332	-	-	-
9	PEST A ,	9,	C2N09 ,	*RAW02 ,	100.00,	1.0000,	1.0000	101315	17366	-	-	-
10	PEST SPK DUP,	10,	C2N10 ,	*RAW02 ,	10000.,	1.0000,	1.0000	84931	33426	-	-	-
11	PEST B ,	11,	C2N11 ,	*RAW02 ,	100.00,	1.0000,	1.0000	96177	43870	-	-	-
12	TOXA 1660 ,	12,	C2N12 ,	*RAW02 ,	100.00,	1.0000,	1.0000	86807	65694	—	—	—
13	CHLOR 500 ,	13,	C2N13 ,	*RAW02 ,	100.00,	1.0000,	1.0000	89045	57904	-	-	-
14	STD 1248 ,	14,	C2N14 ,	*RAW02 ,	100.00,	1.0000,	1.0000	92449	55758	-	-	-
15	STD 1254 ,	15,	C2N15 ,	*RAW02 ,	100.00,	1.0000,	1.0000	98858	66030	-	-	-
16	STD 1260 ,	16,	C2N16 ,	*RAW02 ,	100.00,	1.0000,	1.0000	98858	61036	—	—	-
17	A1254-500 ,	17,	C2N17 ,	*RAW02 ,	100.00,	1.0000,	1.0000					

DATE : 5/13/86
DATA SET : SF 3151

AQC DATA

BLANK DATA

	CONC. OF AROCLOR PPB				CONC. OF PEST. (PPB)
	1242	1248	1254	1260	
Method Blank	<.1	<.1	<.1	<.1	<.1
86FG05 R07	<.1	<.1	<.1	<.1	<.1

SPIKE DATA

		CONC (µg) OF PEST/PCB SPIK ADDED	SPIK Found	SPIK Dup	% OF RECOVERY SPIK	% recovery SPIK Dup
PEST. S2	LINDANE	2.262	1.92	2.05	84	93
	HEPTACHLOR	2.193	1.5	1.6	71	76
	ALDRIN	3.428	2.66	2.8	78	82
	ENDOSULFAN-1	6.21				
	DIELDRIN	6.00	4.9	4.9	81	81
	ENDRIN	8.90	6.6	6.5	74	73
	PP'-DDT	11.74	19.8	21.7	168	184
	PP'-METHOXYCHLOR	17.40	9.1	8.4	55	48
	DIBUTYL CHLORENDATE	6.50	3.90	3.4	60	52
PCB SPK	1242	2.81	2.32	2.24	82	79

The spikes were added to the sample 86FG05 $74 hence there was some matrix effect which effected some recoveries.

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

✓ Graph

___ Mail receipts

___ Sample tags

II. Image Quality (Pages follow / No. of pages ____)

___ Resolution / Contrast

REPORT: 127.01 CHANNEL: 1

SAMPLE: PCB SPK DUP INJECTED AT 23:26:35 ON MAY 9, 1986

ISTD METHOD: TC/421 BTL: 6

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 5.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

READING(S) MISSED

RT	AREA		UG/L	NAME
1.46	593	BB	.032	
1.95	390	BV	.021	
2.23	453	VV	.024	
2.55	989	VV	.053	
2.79	4146	VV	2.223	A42
3.11	497	VB	.026	
3.57	7228	BV	2.311	B42
3.96	4679	VV	2.389	C42
4.67	16493	VV	2.613	D42
4.97	11596	VV	2.550	E42
5.95	9323	VV	1.886	H42
6.59	7035	VV	2.602	G42
7.05	5887	VB	.313	
8.52	11726	BV	2.608	I42
9.48	3399	VB	.181	
12.67	2523	BB	.134	
15.24	1057	BB	.056	
38.23	94116	BV		&MIREX
43.58	42421	VB	2.254	

TOTAL AREA = 224554 TOTAL UG/L = 22.273

PROCESSED DATA FILE: C1N06 RAW DATA FILE: *RAW01

REPORT: 126.01 CHANNEL: 2

SAMPLE: PCB SPK DUP INJECTED AT 23:26:35 ON MAY 9, 1986

ISTD METHOD: TC/422 BTL: 6

ACTUAL RUN TIME: 60.000 MINUTES

ISTD-RATIO: 5.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

READING(S) MISSED

RT	AREA	UG/L	NAME
1.11	94 BV	.008	
1.22	285 VV	.025	
1.38	488 VB	.042	
2.52	140 BB	.012	
2.67	109 BB	.009	
3.07	1881 BB	1.801	A42
4.05	3382 BB	.291	
4.79	1901 BV	2.057	D42
5.06	735 VV	.063	
5.37	7243 VV	1.818	C42
5.91	3056 VV	2.175	E42
6.37	1947 VV	.168	
6.94	4680 VB	2.296	G42
8.29	3784 BV	1.369	H42
8.93	2700 VV	2.342	F42
9.97	1705 VV	.147	
10.61	5237 VB	2.473	J42
12.65	2685 BB	2.405	K42
17.18	665 BB	.057	
45.25	58084 BB		&MIREX
54.88	29329 BB	2.525	

TOTAL AREA = 130132 TOTAL UG/L = 22.083

PROCESSED DATA FILE: C2N06 RAW DATA FILE: *RAW02

REPORT: 127.02 CHANNEL: 1

SAMPLE: PCB SPK DUP INJECTED AT 23:26:35 ON MAY 9, 1986

ISTD METHOD: DIB/1 BTL: 6

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 5.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

READING(S) MISSED

RT	AREA		UG/L	NAME
1.46	593	BB	.032	
1.95	390	BV	.021	
2.23	453	VV	.024	
2.55	989	VV	.053	
2.79	4146	VV	.220	
3.11	497	VB	.026	
3.57	7228	BV	.384	
3.96	4679	VV	.249	
4.67	16493	VV	.876	
4.97	11596	VV	.616	
5.95	9323	VV	.495	
6.59	7035	VV	.374	
7.05	5887	VB	.313	
8.52	11726	BV	.623	
9.48	3399	VB	.181	
12.67	2523	BB	.134	
15.24	1057	BB	.056	
38.23	94116	BV		&MIREX
43.58	42421	VB	.644	DIBUTYL CHLORENDATE

TOTAL AREA = 224554 TOTAL UG/L = 5.320

PROCESSED DATA FILE: C1N06 RAW DATA FILE: *RAW01

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REPORT: 126.02 CHANNEL: 1

SAMPLE: STD 1242 INJECTED AT 22:21:14 ON MAY 9, 1986

ISTD METHOD: TC/421 BTL: 5

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
2.24	502	BB	.005	
2.57	581	BV	.006	
2.80	5175	VV	.500	A42
3.13	508	VB	.005	
3.59	8680	BV	.500	B42
3.98	5435	VV	.500	C42
4.46	3784	VV	.036	
4.70	17512	VV	.500	D42
4.99	12621	VV	.500	E42
5.99	13716	VV	.500	H42
6.62	7503	VV	.500	G42
7.08	6201	VV	.059	
8.56	12477	VV	.500	I42
9.53	3585	VB	.034	
12.73	2632	BB	.025	
15.31	1182	BB	.011	
38.39	104461	BB		&MIREX

TOTAL AREA = 206554 TOTAL UG/L = 4.182

PROCESSED DATA FILE: C1N05 RAW DATA FILE: *RAW01

REPORT: 125.02 CHANNEL: 2

SAMPLE: STD 1242 INJECTED AT 22:21:14 ON MAY 9, 1986

ISTD METHOD: TC/422 BTL: 5

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
2.46	121	BB	.003	
2.70	237	BB	.005	
3.09	2167	BB	.500	A42
3.72	145	BB	.500	B42
4.08	3290	BB	.068	
4.82	1918	BV	.500	D42
5.09	715	VV	.015	
5.41	8270	VV	.500	C42
5.95	2917	VV	.500	E42
6.41	1842	VV	.038	
6.98	4231	VV	.500	G42
8.30	5738	VV	.500	H42
8.98	2393	VB	.500	F42
10.03	1543	BV	.032	
10.67	4395	VB	.500	J42
12.72	2317	BB	.500	K42
45.45	48227	BB		&MIREX

TOTAL AREA = 90467 TOTAL UG/L = 5.161

PROCESSED DATA FILE: C2N05 RAW DATA FILE: *RAW02

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REPORT: 125.01 CHANNEL: 1

SAMPLE: PCB SPK INJECTED AT 21:15:52 ON MAY 9, 1986

ISTD METHOD: TC/421 BTL: 4

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 5.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.46	1334	BB	.076	
1.95	367	BV	.021	
2.23	487	VV	.028	
2.55	937	VV	.053	
2.79	4152	VV	2.391	A42
3.11	481	VB	.027	
3.57	7198	BV	2.471	B42
3.96	4585	VV	2.514	C42
4.44	3415	VV	.195	
4.67	15227	VV	2.591	D42
4.97	11238	VV	2.653	E42
5.95	9168	VV	1.992	H42
6.60	6810	VV	2.704	G42
7.05	5671	VB	.324	
8.52	11252	BV	2.687	I42
9.49	3261	VB	.186	
12.67	2415	BB	.138	
15.25	994	BB	.057	
20.75	1183	BB	.067	
38.32	87644	BV		&MIREX
43.71	45874	VB	2.617	

TOTAL AREA = 223693 TOTAL UG/L = 23.792

PROCESSED DATA FILE: C1N04 RAW DATA FILE: *RAW01

REPORT: 124.01 CHANNEL: 2

SAMPLE: PCB SPK INJECTED AT 21:15:52 ON MAY 9, 1986

ISTD METHOD: TC/422 BTL: 4

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 5.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.11	248	BV	.022	
1.22	687	VV	.061	
1.38	428	VB	.038	
2.52	368	BV	.033	
2.67	302	VB	.027	
3.06	2112	BB	2.075	A42
4.05	3408	BB	.301	
4.78	1960	BV	2.175	D42
5.06	733	VV	.065	
5.37	8997	VV	2.317	C42
5.91	3195	VV	2.333	E42
6.37	1972	VV	.174	
6.94	4770	VB	2.400	G42
8.30	3968	BV	1.473	H42
8.93	2793	VV	2.485	F42
9.98	1766	VV	.156	
10.61	5410	VB	2.621	J42
12.66	2676	BB	2.459	K42
17.18	685	BB	.060	
45.39	56626	BB		&MIREX
55.14	33158	BB	2.928	

TOTAL AREA = 136266 TOTAL UG/L = 24.201

PROCESSED DATA FILE: C2N04 RAW DATA FILE: *RAW02

REPORT: 125.02 CHANNEL: 1

SAMPLE: PCB SPK INJECTED AT 21:15:52 ON MAY 9, 1986

ISTD METHOD: DIB/1 BTL: 4

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 5.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.46	1334	BB	.076	
1.95	367	BV	.021	
2.23	487	VV	.028	
2.55	937	VV	.053	
2.79	4152	VV	.237	
3.11	481	VB	.027	
3.57	7198	BV	.411	
3.96	4585	VV	.262	
4.44	3415	VV	.195	
4.67	15227	VV	.869	
4.97	11238	VV	.641	
5.95	9168	VV	.523	
6.60	6810	VV	.389	
7.05	5671	VB	.324	
8.52	11252	BV	.642	
9.49	3261	VB	.186	
12.67	2415	BB	.138	
15.25	994	BB	.057	
20.75	1183	BB	.067	
38.32	87644	BV		&MIREX
43.71	45874	VB	.748	DIBUTYL CHLORENDATE

TOTAL AREA = 223693 TOTAL UG/L = 5.892

PROCESSED DATA FILE: C1N04 RAW DATA FILE: *RAW01

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REPORT: 124.02 CHANNEL: 1

SAMPLE: DIB 65 STD INJECTED AT 19:48:24 ON MAY 9, 1986

ISTD METHOD: DIB/1 BTL: 3

ACTUAL RUN TIME: 46.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL

RT	AREA	UG/L	NAME
2.48	384 BB	.005	
4.44	3412 BB	.040	
38.58	85203 BV		&MIREX
43.98	19375 VF	.065	DIBUTYL CHLORENDATE

TOTAL AREA = 108375 TOTAL UG/L = .110

PROCESSED DATA FILE: C1N03 RAW DATA FILE: *RAW01

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REPORT: 123.02 CHANNEL: 1

SAMPLE: 86FG05R07 INJECTED AT 18:43:02 ON MAY 9, 1986

ISTD METHOD: TC/421 BTL: 2

ACTUAL RUN TIME: 46.008 MINUTES

ISTD-RATIO: 3.106 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.6100

ENDED NOT ON BL

RT	AREA		UG/L	NAME
1.04	4284	BV	.141	
1.29	6326	VV	.208	
1.49	8512	VV	.280	
1.63	18307	VV	.602	
1.87	2854	VV	.094	
2.05	9184	VV	.302	
2.28	5032	VV	.165	
2.52	40930	VB	1.345	
4.51	2884	BB	.283	D42
6.16	1344	BB	.229	F42
39.02	94498	BV		&MIREX
44.49	64721	VF	2.127	

TOTAL AREA = 258878 TOTAL UG/L = 5.775

PROCESSED DATA FILE: C1N02 RAW DATA FILE: *RAW01

REPORT: 122.02 CHANNEL: 2

SAMPLE: 86FG05R07 INJECTED AT 18:43:01 ON MAY 9, 1986

ISTD METHOD: TC/422 BTL: 2

ACTUAL RUN TIME: 46.008 MINUTES

ENDED NOT ON BL
NO STD PEAK FOUND
NO REF PEAK FOUND

RT	AREA		UG/L	NAME
1.13	618	BV	3.500	
1.25	7431	VV	42.079	
1.42	19625	VV	111.126	
1.71	3642	VV	20.624	
1.79	3656	VV	20.702	
2.27	44645	VV	252.798	
3.13	6739	VB	38.161	
5.67	1944	BB	11.010	

TOTAL AREA = 88302 TOTAL UG/L = 500.000

PROCESSED DATA FILE: C2N02 RAW DATA FILE: *RAW02

REPORT: 123.05 CHANNEL: 1

SAMPLE: 86FG05R01 INJECTED AT 18:43:02 ON MAY 9, 1986

ISTD METHOD: DIB/1 BTL: 2

ACTUAL RUN TIME: 46.008 MINUTES

ISTD-RATIO: 3.106 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.6100

ENDED NOT ON BL

RT	AREA		UG/L	NAME
1.04	4284	BV	.141	
1.29	6326	VV	.208	
1.49	8512	VV	.280	
1.63	18307	VV	.602	
1.87	2854	VV	.094	
2.05	9184	VV	.302	
2.28	5032	VV	.165	
2.52	40930	VB	1.345	
4.51	2884	BB	.095	
6.16	1344	BB	.044	
39.02	94498	BV		&MIREX
44.49	64721	VF	.608	DIBUTYL CHLORENDATE

TOTAL AREA = 258878 TOTAL UG/L = 3.883

PROCESSED DATA FILE: C1N02 RAW DATA FILE: *RAW01

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REPORT: 121.04 CHANNEL: 1

SAMPLE: SF 3151 MB INJECTED AT 15:57:05 ON MAY 9, 1986

ISTD METHOD: PESTA1 BTL: 1

ACTUAL RUN TIME: 46.000 MINUTES

ISTD-RATIO: 5.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

READING(S) MISSED
ENDED NOT ON BL

RT	AREA		NG/L	NAME
1.05	3026	BV	.168	
1.34	78	VV	.004	
1.50	835	VB	.046	
2.02	353	BB	.020	
4.56	3908	BB	.217	
6.17	300	BB	.017	
39.75	89981	BV		&MIREX

TOTAL AREA = 98482 TOTAL NG/L = .472

PROCESSED DATA FILE: C1N01 RAW DATA FILE: *RAW01

REPORT: 121.02 CHANNEL: 1

SAMPLE: SF 3151 MB INJECTED AT 15:57:05 ON MAY 9, 1986

ISTD METHOD: TC/421 BTL: 1

ACTUAL RUN TIME: 46.000 MINUTES

ISTD-RATIO: 5.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

READING(S) MISSED
ENDED NOT ON BL

RT	AREA		UG/L	NAME
1.05	3026	BV	.168	
1.34	78	VV	.004	
1.50	835	VB	.046	
2.02	353	BB	.020	
4.56	3908	BB	.648	D42
6.17	300	BB	.086	F42
39.75	89981	BV		&MIREX

TOTAL AREA = 98482 TOTAL UG/L = .973

PROCESSED DATA FILE: C1N01 RAW DATA FILE: *RAW01

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I. Unscannable item due to format

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___ Mail receipts

___ Sample tags

II. Image Quality (Pages follow / No. of pages ____)

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REPORT: 128.01 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: TC/421 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.130	
5.94	617	BB	.110	H42
38.13	69008	BV		&MIREX
43.46	90165	VB	4.215	

TOTAL AREA = 164828 TOTAL UG/L = 4.560

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

REPORT: 127.01 CHANNEL: 2

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: TC/422 BTL: 7

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.11	316	BV	.025	
1.21	395	VV	.032	
1.38	2091	VV	.167	
1.61	132	VB	.011	
2.21	137	BB	.011	
2.52	324	BB	.026	
3.43	405	BB	.032	
5.53	1752	BB	.408	C42
45.14	40388	BB		&MIREX
54.76	60255	BB	4.813	

TOTAL AREA = 106196 TOTAL UG/L = 5.524

PROCESSED DATA FILE: C2N07 RAW DATA FILE: *RAW02

REPORT: 126.02 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: PESTA1 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		NG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.130	
5.94	617	BB	.029	
38.13	69008	BV		&MIREX
43.46	90165	VB	1231.06	DIB

TOTAL AREA = 164828 TOTAL NG/L = 1231.323

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

REPORT: 127.03 CHANNEL: 2

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: PESTA2 BTL: 7

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 3.226 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		NG/L	NAME
1.11	316	BV	.025	
1.21	395	VV	.032	
1.38	2091	VV	.167	
1.61	132	VB	.011	
2.21	137	BB	.011	
2.52	324	BB	.026	
3.43	405	BB	.032	
5.53	1752	BB	7.455	HEPTACHLOR
45.14	40388	BB		&MIREX
54.76	60255	BB	553.175	METHOXYCHLOR

TOTAL AREA = 106196 TOTAL NG/L = 560.933

PROCESSED DATA FILE: C2N07 RAW DATA FILE: *RAW02

REPORT: 128.03 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: PESTB1 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.091	DELTA BHC
5.94	617	BB	.029	
38.13	69008	BV		&MIREX
43.46	90165	VB	1.033	DIB

TOTAL AREA = 164828 TOTAL UG/L = 1.258

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

REPORT: 127.05 CHANNEL: 2

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: PESTB2 BTL: 7

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.11	316	BV	.025	
1.21	395	VV	.032	
1.38	2091	VV	.167	
1.61	132	VB	.011	
2.21	137	BB	.011	
2.52	324	BB	.026	
3.43	405	BB	.006	ALPHA BHC
5.53	1752	BB	.140	
45.14	40388	BB		&MIREX
54.76	60255	BB	1.029	DIB+ENDRIN KETONE

TOTAL AREA = 106196 TOTAL UG/L = 1.446

PROCESSED DATA FILE: C2N07 RAW DATA FILE: *RAW02

REPORT: 128.04 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: IC/481 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.130	
5.94	617	BB	.087	C48
38.13	69008	BV		&MIREX
43.46	90165	VB	4.215	

TOTAL AREA = 164828 TOTAL UG/L = 4.538

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

REPORT: 127.07 CHANNEL: 2

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: TC/482 BTL: 7

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.11	316	BV	.025	
1.21	395	VV	.032	
1.38	2091	VV	.167	
1.61	132	VB	.011	
2.21	137	BB	.011	
2.52	324	BB	.026	
3.43	405	BB	.032	
5.53	1752	BB	.660	A48
45.14	40388	BB		&MIREX
54.76	60255	BB	4.813	

TOTAL AREA = 106196 TOTAL UG/L = 5.776

PROCESSED DATA FILE: C2N07 RAW DATA FILE: *RAW02

REPORT: 128.05 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: TC/541 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.130	
5.94	617	BB	.029	
38.13	69008	BV		&MIREX
43.46	90165	VB	4.215	

TOTAL AREA = 164828 TOTAL UG/L = 4.479

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

REPORT: 127.08 CHANNEL: 2

SAMPLE: 86FG05674 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: TC/542 BTL: 7

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.11	316	BV	.025	
1.21	395	VV	.032	
1.38	2091	VV	.167	
1.61	132	VB	.011	
2.21	137	BB	.011	
2.52	324	BB	.026	
3.43	405	BB	.032	
5.53	1752	BB	.140	
46.14	40388	BB		&MIREX
54.76	60255	BB	4.813	

TOTAL AREA = 106196 TOTAL UG/L = 5.256

PROCESSED DATA FILE: C2N07 RAW DATA FILE: *RAW02

REPORT: 127.09 CHANNEL: 2

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: TC/602 BTL: 7

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.11	316	BV	.025	
1.21	395	VV	.032	
1.38	2091	VV	.167	
1.61	132	VB	.011	
2.21	137	BB	.011	
2.52	324	BB	.026	
3.43	405	BB	.032	
5.53	1752	BB	.140	
45.14	40388	BB		&MIREX
54.76	60255	BB	4.813	

TOTAL AREA = 106196 TOTAL UG/L = 5.256

PROCESSED DATA FILE: C2N07 RAW DATA FILE: *RAW02

REPORT: 128.06 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: TC/601 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.130	
5.94	617	BB	.029	
38.13	69008	BV		&MIREX
43.46	90165	VB	4.215	

TOTAL AREA = 164828 TOTAL UG/L = 4.479

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

REPORT: 128.07 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: CHLOR1 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.130	
5.94	617	BB	.029	
38.13	69008	BV		&MIREX
43.46	90165	VB	4.215	

TOTAL AREA = 164828 TOTAL UG/L = 4.479

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

REPORT: 128.09 CHANNEL: 1

SAMPLE: 86FG05S74 INJECTED AT 0:31:57 ON MAY 10, 1986

ISTD METHOD: DIB/1 BTL: 7

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 3.226 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.5500

RT	AREA		UG/L	NAME
1.46	734	BB	.034	
1.95	457	BV	.021	
2.41	1063	VB	.050	
4.40	2782	BB	.130	
5.94	617	BB	.029	
38.13	69088	BV		&MIREX
43.46	90165	VB	1.205	DIBUTYL CHLORENDATE

TOTAL AREA = 164828 TOTAL UG/L = 1.469

PROCESSED DATA FILE: C1N07 RAW DATA FILE: *RAW01

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REPORT: 128.04 CHANNEL: 2

SAMPLE: PEST SPK INJECTED AT 1:37:19 ON MAY 10, 1986

ISTD METHOD: PEST82 BTL: 8

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 100.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL

RT	AREA		NG/L	NAME
4.26	7305	BB	1928.54	LINDANE
5.32	9115	BB	1501.50	HEPTACHLOR
6.52	11308	BB	2661.88	ALDRIN
12.72	21337	BB	4962.16	DIELDRIN
15.79	21848	BB	6661.33	ENDRIN
19.42	26141	BB	7031.05	ENDOSULFAN 2
29.70	32332	BB		&MIREX
45.08	57017	BB	3940.93	DIB
54.61	25642	BB	9115.82	METHOXYCHLOR

TOTAL AREA = 212047 TOTAL NG/L = 37803.211

PROCESSED DATA FILE: C1N08 RAW DATA FILE: *RAW02

REPORT: 129.01 CHANNEL: 1

SAMPLE: PEST SPK INJECTED AT 1:37:19 ON MAY 10, 1986

ISTD METHOD: PESTA1 BTL: 8

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 100.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
3.22	11523	BB	3657.08	LINDANE
5.30	13801	BB	3482.73	HEPTACHLOR
6.62	15945	BB	4819.76	ALDRIN
10.25	31671	BB	7279.00	ENDOSULFAN 1
12.06	32907	BV	10420.1	DIELDRIN
13.48	40820	VV	15843.7	ENDRIN+ENDOSULFAN 2
15.56	5833	VB	6.401	
20.54	46918	BB	22720.8	PP DDT
23.30	2863	BB	3.142	
31.29	38784	BB	28423.9	METHOXYCHLOR
38.07	91132	BV		&MIREX
43.39	33838	VB	10845.2	DIB

TOTAL AREA = 366036 TOTAL NG/L = 107501.873

PROCESSED DATA FILE: C1N08 RAW DATA FILE: *RAW01

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REPORT: 130.02 CHANNEL: 1

SAMPLE: PEST A INJECTED AT 2:42:41 ON MAY 10, 1986

ISTD METHOD: PESTA1 BTL: 9

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
3.21	7426	BB	21.200	LINDANE
4.37	3013	BB	.030	
5.29	8811	BB	20.000	HEPTACHLOR
6.60	11034	BB	30.000	ALDRIN
8.15	16590	BB	40.000	HEPTACHLOR EPOXIDE
10.23	29023	BB	60.000	ENDOSULFAN 1
12.03	26332	BV	75.000	DIELDRIN
13.53	46975	VV	164.000	ENDRIN+ENDOSULFAN 2
15.53	7014	VB	.069	
20.48	27549	BB	120.000	PP DDT
23.26	2443	BB	.024	
31.19	18203	BB	120.000	METHOXYCHLOR
37.99	101315	BV		&MIREX
43.29	26015	VB	75.000	DIB

TOTAL AREA = 331745 TOTAL NG/L = 725.323

PROCESSED DATA FILE: C1N09 RAW DATA FILE: *RAW01

ENDED NOT ON BL

RAW DATA FILE: *RAW02 PARAM FILES= METHOD: SEQ:

REPORT: 129.12 CHANNEL: 2

SAMPLE: PEST A INJECTED AT 2:42:41 ON MAY 10, 1986

ISTD METHOD: PESTA2 BTL: 9

ACTUAL RUN TIME: 60.000 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL

RT	AREA	NG/L	NAME
4.25	4313 BB	21.200	LINDANE
5.32	6521 BB	20.000	HEPTACHLOR
6.51	6845 BB	30.000	ALDRIN
10.00	9319 BB	40.000	HEPTACHLOR EPOXIDE
12.69	17321 BB	75.000	DIELDRIN
15.76	15679 BB	89.000	ENDRIN
19.37	14977 BB	75.000	ENDOSULFAN 2
23.82	13654 BB	120.000	PP DDT
29.63	17366 BB		&MIREX
44.99	58281 BB	75.000	DIB
54.48	18130 BB	120.000	METHOXYCHLOR

TOTAL AREA = 182407 TOTAL NG/L = 665.200

PROCESSED DATA FILE: C2N09 RAW DATA FILE: *RAW02

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REPORT: 130.01 CHANNEL: 2

SAMPLE: PEST SPK DUP INJECTED AT 3:48:03 ON MAY 10, 1986

ISTD METHOD: PESTA2 BTL: 10

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 100.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL

RT	AREA		NG/L	NAME
4.25	8052	BB	2056.10	LINDANE
5.31	10137	BB	1615.22	HEPTACHLOR
6.51	12425	BB	2829.03	ALDRIN
12.68	22069	BB	4964.59	DIELDRIN
15.75	22259	BB	6564.44	ENDRIN
19.35	24965	BB	6494.92	ENDOSULFAN 2
29.60	33426	BB		&MIREX
44.93	51489	BB	3442.37	DIB
54.43	24663	BB	8480.83	METHOXYCHLOR

TOTAL AREA = 209487 TOTAL NG/L = 36447.515

PROCESSED DATA FILE: C2N10 RAW DATA FILE: *RAW02

REPORT: 131.01 CHANNEL: 1

SAMPLE: PEST SPK DUP INJECTED AT 3:48:03 ON MAY 10, 1986

ISTD METHOD: PESTA1 BTL: 10

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 100.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
1.46	103	BB	.121	
3.22	13527	BB	4606.66	LINDANE
5.29	16000	BB	4332.59	HEPTACHLOR
6.60	18153	BB	5887.91	ALDRIN
10.22	33965	BB	8376.31	ENDOSULFAN 1
12.02	34397	BV	11687.2	DIELDRIN
13.44	41152	VV	17138.6	ENDRIN+ENDOSULFAN 2
15.49	7081	VB	8.337	
20.47	48742	BB	25327.3	PP DDT
23.21	3318	BB	3.907	
31.18	39417	BB	30997.4	METHOXYCHLOR
37.95	84931	BV		&MIREX
43.24	33136	VB	11395.6	DIB

TOTAL AREA = 373924 TOTAL NG/L = 119762.014

PROCESSED DATA FILE: C1N10 RAW DATA FILE: *RAW01

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REPORT: ^132.02 CHANNEL: 1

SAMPLE: PEST B INJECTED AT 4:53:25 ON MAY 10, 1986

ISTD METHOD: PESTB1 BTL: 11

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

READING(S) MISSED

RT	AREA		UG/L	NAME
1.47	79	BB	8.2E- 4	
1.71	433	BB	.004	
2.72	11931	BV	.029	ALPHA BHC
2.93	7722	VV	.080	
3.33	10694	VB	.028	BETA BHC
4.38	3836	BB	.028	DELTA BHC
6.60	17937	BB	.043	ALDRIN
12.14	33288	BB	.080	PP DDE
15.38	47293	BV	.140	PP DDD+ENDRIN ALDEHYDE
17.90	16686	VB	.072	ENDOSULFAN SULFATE
23.08	41377	BB	.100	ENDRIN KETONE
37.86	96177	BV		&MIREX
43.15	19626	VB	.050	DIB

TOTAL AREA = 307080 TOTAL UG/L = .656

PROCESSED DATA FILE: C1N11 RAW DATA FILE: *RAW01

LISTING ABORTED

REPORT: 131.02 CHANNEL: 2

SAMPLE: PEST B INJECTED AT 4:53:25 ON MAY 10, 1986

ISTD METHOD: PESTB2 BTL: 11

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

READING(S) MISSED

RT	AREA		UG/L	NAME
1.98	188	BB	.004	
3.28	6527	BB	.029	ALPHA BHC
4.98	3582	BV	.029	BETA BHC
5.51	1949	VV	.044	
5.86	5596	VV	.028	DELTA BHC
6.50	10048	VB	.043	ALDRIN
15.48	17989	BB	.080	PP DDE
24.22	8837	BB	.073	PP DDD
31.03	11905	BB	.067	ENDRIN ALDEHYDE
37.20	10528	BB	.072	ENDOSULFAN SULFATE
44.82	43870	BB		&MIREX
52.50	30778	BB	.150	DIB+ENDRIN KETONE

TOTAL AREA = 151798 TOTAL UG/L = .620

PROCESSED DATA FILE: C2N11 RAW DATA FILE: *RAW02

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REPORT: 133.02 CHANNEL: 1

SAMPLE: TOXA 1660 INJECTED AT 5:58:48 ON MAY 10, 1986

ISTD METHOD: TOX/1 BTL: 12

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
2.71	411	BV	.005	
2.92	288	VB	.003	
3.32	257	BB	.003	
4.37	3383	BB	1.660	A TOXA
6.12	1078	BV	.012	
6.64	343	VB	.004	
7.71	944	BV	.011	
8.41	3992	VV	1.660	B TOXA
9.77	807	VB	.009	
10.51	1200	BV	.014	
11.49	6164	VV	1.660	C TOXA
12.57	1405	VB	.016	
13.15	1404	BV	.016	
14.82	24922	VV	1.660	D TOXA
15.59	9187	VV	1.660	E TOXA
17.12	13437	VV	1.660	G TOXA
19.99	41800	VV	1.660	H TOXA
23.64	33722	VV	1.000	F TOXA
24.97	17865	VV	1.660	I TOXA
28.45	3688	VB	.042	
32.92	6196	BB	1.660	J TOXA
37.83	86807	BB		&MIREX

TOTAL AREA = 259304 TOTAL UG/L = 16.076

PROCESSED DATA FILE: C1N12 RAW DATA FILE: *RAW01

REPORT: 132.02 CHANNEL: 2

SAMPLE: TOXA 1660 INJECTED AT 5:58:48 ON MAY 10, 1986

ISTD METHOD: TOX/2 BTL: 12

ACTUAL RUN TIME: 60.000 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.12	47	BB	7.2E- 4	
2.52	162	BB	.002	
3.26	323	BB	.005	
5.49	1818	BB	1.660	A TOXA
6.48	313	BB	.005	
8.49	1068	BB	.016	
15.76	8257	BV	1.660	B TOXA
17.89	7256	VV	1.660	C TOXA
19.15	6061	VV	1.660	D TOXA
21.04	4782	VV	1.660	E TOXA
22.61	5791	VV	1.660	F TOXA
24.27	15139	VV	1.660	G TOXA
26.99	1439	VB	1.660	H TOXA
29.99	13751	BB	.209	
37.50	3746	BV	.057	
41.37	15215	VV	.232	
44.75	65694	VB		&MIREX
53.58	6938	BB	.106	

TOTAL AREA = 157802 TOTAL UG/L = 13.913

PROCESSED DATA FILE: C2N12 RAW DATA FILE: *RAW02

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REPORT: 134.02 CHANNEL: 1

SAMPLE: CHLOR 500 INJECTED AT 7:04:11 ON MAY 10, 1986

ISTD METHOD: CHLOR1 BTL: 13

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.64	209	BB	.002	
2.45	1806	BB	.020	
3.10	1168	BV	.013	
3.44	1023	VB	.011	
4.35	4548	BV	.051	
4.68	9225	VV	.500	CHLORDANE A
5.27	11599	VV	.500	CHLORDANE B
6.29	11737	VV	.500	CHLORDANE C
7.48	8796	VV	.500	CHLORDANE D
8.78	5987	VV	.067	
9.35	25177	VV	.500	CHLORDANE E
10.41	18262	VV	.500	CHLORDANE F
11.02	15010	VB	.500	CHLORDANE G
16.39	8146	BB	.500	CHLORDANE H
37.85	89045	BB		&MIREX

TOTAL AREA = 211738 TOTAL UG/L = 4.166

PROCESSED DATA FILE: C1N13 RAW DATA FILE: *RAW01

REPORT: 133.02 CHANNEL: 2

SAMPLE: CHLOR 500 INJECTED AT 7:04:10 ON MAY 10, 1986

ISTD METHOD: CHLOR2 BTL: 13

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.12	404	BB	.007	
1.44	62	BB	.001	
2.16	1263	BB	.022	
2.98	436	BV	.008	
3.16	310	VB	.005	
3.98	783	BV	.014	
4.32	468	VV	.008	
4.77	5702	VV	.500	CHLORDANE A
5.29	10542	VV	.500	CHLORDANE B
6.32	970	VV	.017	
7.01	819	VV	.014	
7.58	5442	VV	.500	CHLORDANE C
8.34	2232	VB	.039	
10.02	2830	BV	.049	
10.55	3248	VV	.500	CHLORDANE D
11.27	14776	VV	.500	CHLORDANE E
11.80	6758	VV	.500	CHLORDANE F
12.42	15373	VB	.500	CHLORDANE G
21.33	2410	BB	.042	
23.14	3098	BB	.500	CHLORDANE H
44.80	57904	BB		&MIREX

TOTAL AREA = 135831 TOTAL UG/L = 4.224

PROCESSED DATA FILE: C2N13 RAW DATA FILE: *RAW02

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REPORT: 135.02 CHANNEL: 1

SAMPLE: STD 1248 INJECTED AT 8:09:33 ON MAY 10, 1986

ISTD METHOD: TC/481 BTL: 14

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.45	147	BB	.002	
1.92	578	BB	.006	
2.76	902	BV	.010	
3.09	168	VB	.002	
3.53	3990	BV	.043	
3.92	2283	VV	.025	
4.38	2668	VV	.029	
4.62	10893	VV	.500	A48
4.93	7930	VV	.500	B48
5.82	15281	VV	.500	C48
6.50	10649	VV	.500	D48
6.98	9840	VV	.106	
8.44	24697	VV	.500	F48
9.39	9931	VV	.500	G48
10.13	5269	VB	.500	H48
11.78	4524	BV	.500	I48
12.55	4023	VB	.044	
15.09	4180	BB	.500	J48
17.53	3363	BB	.500	K48
37.87	92449	BB		&MIREX

TOTAL AREA = 213766 TOTAL UG/L = 5.266

PROCESSED DATA FILE: C1N14 RAW DATA FILE: *RAW01

REPORT: 134.02 CHANNEL: 2

SAMPLE: STD 1248 INJECTED AT 8:09:33 ON MAY 10, 1986

ISTD METHOD: TC/482 BTL: 14

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.11	175	BV	.003	
1.20	142	VB	.003	
2.50	380	BB	.007	
3.04	405	BB	.007	
4.01	1605	BB	.029	
4.74	741	BB	.013	
5.32	5911	BV	.500	A48
5.86	1525	VV	.027	
6.30	851	VV	.015	
6.85	7172	VB	.500	B48
8.20	5031	BV	.500	C48
8.84	4090	VV	.500	D48
9.87	2832	VV	.500	E48
10.49	10108	VB	.500	F48
12.51	5391	BB	.500	G48
15.75	3240	BV	.500	H48
16.97	2855	VB	.500	I48
19.58	3571	BB	.500	J48
25.28	1618	BB	.029	
44.83	55758	BB		&MIREX

TOTAL AREA = 113402 TOTAL UG/L = 5.133

PROCESSED DATA FILE: C2N14 RAW DATA FILE: *RAW02

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REPORT: 135.02 CHANNEL: 2

SAMPLE: STD 1254 INJECTED AT 9:14:55 ON MAY 10, 1986

ISTD METHOD: TC/542 BTL: 15

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.12	91	BV	.001	
1.20	105	VB	.002	
5.50	2347	BB	.036	
6.80	3844	BB	.500	A54
8.19	1983	BV	.030	
8.85	797	VB	.012	
10.46	3303	BV	.050	
10.98	3885	VB	.500	B54
12.27	9876	BV	.500	C54
13.33	1607	VB	.024	
14.98	2083	BV	.032	
15.72	5477	VV	.500	D54
16.99	10033	VB	.500	E54
19.63	14065	BV	.500	F54
22.38	8069	VB	.500	G54
25.31	8822	BB	.500	H54
29.06	12248	BB	.500	I54
37.60	1453	BB	.022	
44.94	66110	BB		&MIREX

TOTAL AREA = 156201 TOTAL UG/L = 4.708

PROCESSED DATA FILE: C2N15 RAW DATA FILE: *RAW02

REPORT: 136.02 CHANNEL: 1

SAMPLE: STD 1254 INJECTED AT 9:14:55 ON MAY 10, 1986

ISTD METHOD: TC/541 BTL: 15

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
4.38	3453	BB	.040	
5.76	7308	BV	.085	
6.48	3491	VV	.041	
6.99	1584	VB	.018	
8.54	18217	BV	.500	A54
10.13	23742	VV	.500	B54
11.78	14061	VV	.500	C54
12.58	19806	VV	.500	D54
15.10	24098	VV	.500	E54
17.72	17858	VV	.500	F54
19.38	698	VB	.008	
21.15	15903	BB	.500	G54
24.65	3490	BB	.041	
34.60	1267	BB	.015	
37.97	86158	BB		&MIREX

TOTAL AREA = 241135 TOTAL UG/L = 3.747

PROCESSED DATA FILE: C1N15 RAW DATA FILE: *RAW01

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___ Resolution / Contrast

REPORT: 137.02 CHANNEL: 1

SAMPLE: STD 1260 INJECTED AT 10:20:17 ON MAY 10, 1986

ISTD METHOD: TC/601 BTL: 16

ACTUAL RUN TIME: 60.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
4.39	2054	BB	.021	
8.59	3681	BB	.037	
10.13	5390	BB	.055	
12.43	5261	BB	.053	
14.04	9453	BV	.500	A1260
15.02	15897	VB	.500	B1260
17.98	25731	BV	.500	C1260
19.40	11234	VV	.500	D1260
21.13	22120	VV	.500	E1260
24.45	27353	VV	.500	F1260
28.20	26890	VV	.500	G1260
34.56	37131	VV	.500	H1260
37.94	98858	VV		&MIREX
40.89	14857	VV	.500	I1260
47.02	18941	VB	.500	J1260

TOTAL AREA = 324854 TOTAL UG/L = 5.166

PROCESSED DATA FILE: C1N16 RAW DATA FILE: *RAW01

REPORT: 136.02 CHANNEL: 2

SAMPLE: STD 1260 INJECTED AT 10:20:17 ON MAY 10, 1986

ISTD METHOD: TC/602 BTL: 16

ACTUAL RUN TIME: 60.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL

RT	AREA		UG/L	NAME
5.51	1123	BB	.018	
11.00	1213	BB	.020	
12.25	2280	BB	.037	
17.59	8333	BV	.500	A60
19.56	7609	VV	.500	B60
22.38	13455	VB	.500	C60
25.46	7466	BB	.500	D60
29.00	12049	BV	.500	E60
31.38	12509	VB	.500	F60
38.80	7555	BB	.500	G60
44.93	61036	BB		&MIREX

TOTAL AREA = 134629 TOTAL UG/L = 3.576

PROCESSED DATA FILE: C2N16 RAW DATA FILE: *RAW02

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD/Central Regional Laboratory
DATA TRACKING FORM FOR CONTRACT SAMPLES

CRL Data Set No. SF 3151 CERCLIS No. _____

SMO Case No. _____ Site Name and Location: NORTH EAST GRAVEL

Name of Contractor or EPA Laboratory: CRL Data User: FIT

No. of Samples: 2 Date Samples or Data Received: 4-28-86

1. Have chain-of-custody records been received? YES ✓ NO ____
2. Have Traffic Reports or packing lists been received? YES ____ NO ____
3. If no, are Traffic Report or packing list numbers written on the chain-of-custody record? YES ____ NO ____
4. If no, which Traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO ____

Number of samples claimed: 2 Number of samples received: 2

Checked by: Sylvia Griffin Date: 4-28-86

Received by Contract Project Management Section: _____ Date: _____

Review Started: _____ Reviewer Signature: _____

Total time spent on review: _____ Date review completed: _____

Copied (xeroxed) by: _____ Date: _____

Mailed to Data User by: Sylvia Griffin Date: 4-28-86

DATA USERS: VOA

Please fill in the blanks below and return this form to: Sylvia Griffin, Data Management Coordinator, Region V, 5SCRL

Data received by: S Kozlowski Date: 5/8/86

Q.A. review received by: S Kozlowski Date: 5/8/86

Inorganic Data Complete [ ], Suitable for Intended Purposes [ ] ✓ [ ] if acceptable.
Organic Data Complete [ ], Suitable for Intended Purposes [ ] List problems below.
Dioxin Data Complete [ ], Suitable for Intended Purposes [ ]
SAS Data Complete [ ], Suitable for Intended Purposes [ ]

See Attached "Missing Data Request Form" [✓]
PROBLEMS: Please indicate reasons (if any) why data are not suitable for your uses.
Other problems. VOA TIC Page is Missing

Received by Data Management Coordinator, CRL for File: Date: _____

Signature: _____

Missing Data Request

SF # CRL	Case # CRL	Site Name: NE Gravel	Lab: CRL

SMO #	Organic RAS						Inorganic RAS			TCDD RAS		DIOXIN RAS		SAS			
	VOA ODAS	VOA TIC	SV ODAS	SV TIC	PEST PCB	REVIEW	METALS	CN^-	REVIEW	2,3,7,8 TCDD	Review	Dioxin	Review	NH_4^+ NO_3^-	SO_4^{-2}	Cl^-	other
86FG 05574		✓															

1st request	Date: 5/9/86	Comments:
2nd request	Date:	Comments:
3rd request	Date:	Comments:

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

___ Graph

___ Mail receipts

✓ Sample tags

II. Image Quality (Pages follow / No. of pages ____)

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