



# GC/MS Semivolatiles

## SIMPAH

### Case Narrative

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## COGCC

Inspection 697601450

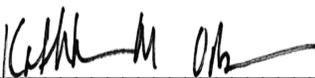
Work Order Number: 2107471

1. This report consists of 2 soil samples. The samples were received cool and intact by ALS on 07/22/21.
2. These samples were prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the soil samples were extracted using soxhlet procedures according to SW-846 Method 3540C, utilizing the current revision of SOP 625.
3. The extracts were analyzed using GC/MS according to the current revision of SOP 506 based on SW-846 Method 8270E. The samples were analyzed using selective ion monitoring (SIM), in order to achieve lower reporting limits. All positive results were quantitated against the initial calibration standards using the internal standard technique. The identification of positive results was achieved by a comparison of the retention time and a limited number of major ions from the mass spectrum of the sample versus the daily calibration standard.
4. All initial calibration criteria were met. If average response factors were used in the initial calibration, %RSD was  $\leq 20\%$ . If linear or higher order regression calibrations were used in the initial calibration, the coefficient of determination ( $r^2$ )  $\geq 0.99$ .
5. All initial calibration standards are verified by comparing a second source standard initial calibration verification (ICV) against the calibration curve. All target compounds in the second source verification had a %D  $\leq 30\%$ .
6. Per the guidance in methods 8000 and 8270, all compounds in each of the daily (continuing) calibration verifications had sufficient response to support accurate quantitation of the data included in this report.
7. All method blank criteria were met.



8. All laboratory control sample and laboratory control sample duplicate recoveries and RPDs were within the acceptance criteria.
9. A matrix spike and matrix spike duplicate were not performed because of insufficient sample. A laboratory control sample and laboratory control sample duplicate were performed instead.
10. The samples were extracted and analyzed within the established holding times.
11. All surrogate recoveries were within acceptance criteria.
12. All internal standard recoveries were within acceptance criteria.
13. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in the current revision of SOP 939.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

  
\_\_\_\_\_  
Organics Final Data Reviewer

9/07/21  
\_\_\_\_\_  
Date

**ALS**  
**Data Qualifier Flags**  
**Organics**

- U or ND:** This flag indicates that the compound was analyzed for but not detected.
- J:** This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.
- B:** This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.
- E:** This flag identifies compounds whose concentration exceeds the upper level of the calibration range.
- A:** This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.
- X:** This flag indicates that the analyte was diluted below an accurate quantitation level.
- \*:** This flag indicates that a spike recovery is equal to or outside the control criteria used.
- +:** This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria.

# ALS -- Fort Collins

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 2107471

**Client Name:** COGCC

**Client Project Name:** Inspection 697601450

**Client Project Number:**

**Client PO Number:** GAE- PHAA 2021\*056

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
118086 #1 0-8"	2107471-1		SOIL	21-Jul-21	8:26
118086 #2 0-8"	2107471-2		SOIL	21-Jul-21	8:39
118086 #1 0-8"	2107471-3		SatExtract	21-Jul-21	8:26
118086 #2 0-8"	2107471-4		SatExtract	21-Jul-21	8:39



# ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524  
 TF: (970) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

# Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.  
 Turnaround time for samples received Saturday will be calculated beginning from the next business day.



PROJECT NAME <b>Inspection 697601450</b>		TURNAROUND TIME 5 business days		SAMPLER		PAG		FRAGE		1 of 1	
PROJECT NO.		SITE ID		COGCC		PARAMETER/METHOD REQUEST FOR ANALYSIS		DISPOSAL		BY LAB or	
COMPANY NAME <b>Colorado Oil &amp; Gas Conservation Commission</b>		PURCHASE ORDER <b>GAE- PHAA 2021*086</b>		BILL TO COMPANY		A		B		C	
SEND REPORT TO <b>Peter Gintautas</b>		INVOICE ATTEND		ADDRESS		B		C		D	
ADDRESS <b>1120 Lincoln St., Suite 801</b>		CITY / STATE / ZIP <b>Denver, CO 80203</b>		PHONE <b>719-679-1328</b>		E		F		G	
FAX		E-MAIL <a href="mailto:peter.gintautas@state.co.us">peter.gintautas@state.co.us</a>		H		I		J		K	
FIELD ID		MATRIX		SAMPLE DATE		SAMPLE TIME		# OF BOTTLES		PRESERVATIVE	
1 118086 #1 0-8"		S		7/21/21		08:26		1		7	
2 118086 #2 0-8"		S		7/21/21		08:39		1		7	
3 118086 #1 0-8"		S		7/21/21		08:26		1		8	
4 118086 #2 0-8"		S		7/21/21		08:39		1		8	
TIME ZONE (Circle): MST		MATRIX: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter		SIGNATURE <i>Peter Gintautas</i>		PRINTED NAME Peter Gintautas		DATE 7/22/21		TIME 1446	
METALS = As, Ba, Cd, Cu, Pb, Ni, Se, Ag, Zn		REPORT LEVEL / QC REQUIRED		RECEIVED BY <i>Chaire Thomas</i>		RECEIVED BY <i>Chaire Thomas</i>		DATE 7/22/21		TIME 1446	
NOTES 1.7		Summary (Standard QC)		RECEIVED BY		RECEIVED BY		DATE		TIME	
		LEVEL II (Standard QC)		RECEIVED BY		RECEIVED BY		DATE		TIME	
		LEVEL III (Std QC + forms)		RECEIVED BY		RECEIVED BY		DATE		TIME	
		LEVEL IV (Std QC + forms + raw data)		RECEIVED BY		RECEIVED BY		DATE		TIME	
PRESERVATION KEY		1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other		RECEIVED BY		RECEIVED BY		DATE		TIME	



**ALS Environmental - Fort Collins**  
**CONDITION OF SAMPLE UPON RECEIPT FORM**

Client: COGCC 3 Workorder No: 2107471  
 Project Manager: KMO Initials: CXT Date: 07/22/21

		N/A	YES	NO
1.	Are airbills / shipping documents present and/or removable?	X		
	Tracking number:			
2.	Are custody seals on shipping containers intact?	X		
3.	Are custody seals on sample containers intact?	X		
4.	Is there a COC (chain-of-custody) present?		X	
5.	Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		X	
6.	Are short-hold samples present?			X
7.	Are all samples within holding times for the requested analyses?		X	
8.	Were all sample containers received intact? (not broken or leaking)		X	
9.	Is there sufficient sample for the requested analyses?		X	
10.	Are samples in proper containers for requested analyses? (form 250, <i>Sample Handling Guidelines</i> )		X	
11.	Are all aqueous samples preserved correctly, if required? (excluding volatiles)	X		
12.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm (1/4 inch) diameter? (i.e. size of green pea)	X		
13.	Were the samples shipped on ice?		X	
14.	Were cooler temperatures measured at 0.1-6.0°C?	IR gun used*: #5	RAD ONLY	X
Cooler #: <u>1</u> <u>2</u> <u>3</u> _____ Temperature (°C): <u>1.7</u> <u>1.7</u> <u>-</u> _____ # of custody seals on cooler: <u>0</u> <u>0</u> <u>0</u> _____ External µR/hr reading: <u>NA</u> <u>NA</u> <u>NA</u> _____ Background µR/hr reading: <u>11</u> <u>11</u> <u>11</u> _____ Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES				

\* Please provide details here for NO responses to boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

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Were unpreserved bottles pH checked? N/A      All client bottle ID's vs ALS lab ID's double-checked by CT

If applicable, was the client contacted? NA Contact: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager Signature / Date: [Signature]      8/01/21

# GC/MS Semi-volatiles

Method SW8270SIME

Method Blank

Lab Name: ALS -- Fort Collins

Work Order Number: 2107471

Client Name: COGCC

ClientProject ID: Inspection 697601450

Lab ID: EX210804-2MB

Sample Matrix: SOIL

% Moisture: N/A

Date Collected: N/A

Date Extracted: 04-Aug-21

Date Analyzed: 25-Aug-21

Prep Batch: EX210804-2

QC Batch ID: EX210804-2-1

Run ID: SV210825-44

Cleanup: NONE

Basis: N/A

File Name: SV8506

Sample Aliquot: 15 g

Final Volume: 1 ml

Result Units: UG/KG

Clean DF: 1

CASNO	Target Analyte	DF	Result	Result Qualifier	Reporting Limit	MDL
91-20-3	NAPHTHALENE	1	10	U	10	4.2
91-57-6	2-METHYLNAPHTHALENE	1	6.7	U	6.7	3.2
90-12-0	1-METHYLNAPHTHALENE	1	6.7	U	6.7	3.2
208-96-8	ACENAPHTHYLENE	1	10	U	10	4
83-32-9	ACENAPHTHENE	1	10	U	10	3.6
86-73-7	FLUORENE	1	6.7	U	6.7	3.4
85-01-8	PHENANTHRENE	1	10	U	10	3.8
120-12-7	ANTHRACENE	1	10	U	10	4.6
206-44-0	FLUORANTHENE	1	10	U	10	4
129-00-0	PYRENE	1	13	U	13	6
56-55-3	BENZO(A)ANTHRACENE	1	10	U	10	5.4
218-01-9	CHRYSENE	1	10	U	10	5.2
205-99-2	BENZO(B)FLUORANTHENE	1	10	U	10	4.8
207-08-9	BENZO(K)FLUORANTHENE	1	10	U	10	4.8
50-32-8	BENZO(A)PYRENE	1	10	U	10	5.2
193-39-5	INDENO(1,2,3-CD)PYRENE	1	10	U	10	4.8
53-70-3	DIBENZO(A,H)ANTHRACENE	1	13	U	13	7.2
191-24-2	BENZO(G,H,I)PERYLENE	1	10	U	10	4.8

## Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
321-60-8	2-FLUOROBIPHENYL	525		667	79	24 - 120
4165-60-0	NITROBENZENE-D5	536		667	80	13 - 120
1718-51-0	TERPHENYL-D14	658		667	99	30 - 125

Data Package ID: SV2107471-1

# GC/MS Semi-volatiles

## Method SW8270SIMC

### Sample Results

Lab Name: ALS -- Fort Collins

Work Order Number: 2107471

Client Name: COGCC

ClientProject ID: Inspection 697601450

Field ID: 118086 #1 0-8"

Lab ID: 2107471-1

Sample Matrix: SOIL

% Moisture: 2.9

Date Collected: 21-Jul-21

Date Extracted: 04-Aug-21

Date Analyzed: 26-Aug-21

Prep Method: SW3546

Prep Batch: EX210804-2

QC Batch ID: EX210804-2-1

Run ID: SV210825-4

Cleanup: NONE

Basis: Dry Weight

File Name: SV8523

Analyst: Tyler Knaebel

Sample Aliquot: 15.1 g

Final Volume: 1 ml

Result Units: UG/KG

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Result Qualifier	Reporting Limit	MDL
91-20-3	NAPHTHALENE	1	10	U	10	4.3
91-57-6	2-METHYLNAPHTHALENE	1	6.8	U	6.8	3.3
90-12-0	1-METHYLNAPHTHALENE	1	6.8	U	6.8	3.3
208-96-8	ACENAPHTHYLENE	1	10	U	10	4.1
83-32-9	ACENAPHTHENE	1	10	U	10	3.7
86-73-7	FLUORENE	1	6.8	U	6.8	3.5
85-01-8	PHENANTHRENE	1	10	U	10	3.9
120-12-7	ANTHRACENE	1	10	U	10	4.7
206-44-0	FLUORANTHENE	1	6.3	J	10	4.1
129-00-0	PYRENE	1	8.3	J	14	6.1
56-55-3	BENZO(A)ANTHRACENE	1	10	U	10	5.5
218-01-9	CHRYSENE	1	6.1	J	10	5.3
205-99-2	BENZO(B)FLUORANTHENE	1	8.4	J	10	4.9
207-08-9	BENZO(K)FLUORANTHENE	1	10	U	10	4.9
50-32-8	BENZO(A)PYRENE	1	6.4	J	10	5.3
193-39-5	INDENO(1,2,3-CD)PYRENE	1	6.5	J	10	4.9
53-70-3	DIBENZO(A,H)ANTHRACENE	1	14	U	14	7.4
191-24-2	BENZO(G,H,I)PERYLENE	1	5.6	J	10	4.9

Data Package ID: SV2107471-1

Date Printed: Tuesday, September 07, 2021

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# GC/MS Semi-volatiles

## Method SW8270SIMC

### Sample Results

Lab Name: ALS -- Fort Collins

Work Order Number: 2107471

Client Name: COGCC

ClientProject ID: Inspection 697601450

Field ID: 118086 #1 0-8"

Lab ID: 2107471-1

Sample Matrix: SOIL

% Moisture: 2.9

Date Collected: 21-Jul-21

Date Extracted: 04-Aug-21

Date Analyzed: 26-Aug-21

Prep Method: SW3546

Prep Batch: EX210804-2

QCBatchID: EX210804-2-1

Run ID: SV210825-4

Cleanup: NONE

Basis: Dry Weight

File Name: SV8523

Analyst: Tyler Knaebel

Sample Aliquot: 15.1 g

Final Volume: 1 ml

Result Units: UG/KG

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Result Qualifier	Reporting Limit	MDL
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### Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
321-60-8	2-FLUOROBIPHENYL	35.7		68.2	52	24 - 120
4165-60-0	NITROBENZENE-D5	38		68.2	56	13 - 120
1718-51-0	TERPHENYL-D14	38.4		68.2	56	30 - 125

Data Package ID: SV2107471-1

Date Printed: Tuesday, September 07, 2021

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LIMS Version: 7.020

# GC/MS Semi-volatiles

Method SW8270SIMC

## Sample Results

Lab Name: ALS -- Fort Collins

Work Order Number: 2107471

Client Name: COGCC

ClientProject ID: Inspection 697601450

Field ID: 118086 #2 0-8"

Lab ID: 2107471-2

Sample Matrix: SOIL

% Moisture: 5.3

Date Collected: 21-Jul-21

Date Extracted: 04-Aug-21

Date Analyzed: 25-Aug-21

Prep Method: SW3546

Prep Batch: EX210804-2

QC Batch ID: EX210804-2-1

Run ID: SV210825-4

Cleanup: NONE

Basis: Dry Weight

File Name: SV8520

Analyst: Tyler Knaebel

Sample Aliquot: 15.11 g

Final Volume: 1 ml

Result Units: UG/KG

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Result Qualifier	Reporting Limit	MDL
91-20-3	NAPHTHALENE	1	10	U	10	4.4
91-57-6	2-METHYLNAPHTHALENE	1	7	U	7	3.4
90-12-0	1-METHYLNAPHTHALENE	1	7	U	7	3.4
208-96-8	ACENAPHTHYLENE	1	10	U	10	4.2
83-32-9	ACENAPHTHENE	1	10	U	10	3.8
86-73-7	FLUORENE	1	7	U	7	3.6
85-01-8	PHENANTHRENE	1	10	U	10	4
120-12-7	ANTHRACENE	1	10	U	10	4.8
206-44-0	FLUORANTHENE	1	4.5	J	10	4.2
129-00-0	PYRENE	1	6.6	J	14	6.3
56-55-3	BENZO(A)ANTHRACENE	1	10	U	10	5.7
218-01-9	CHRYSENE	1	10	U	10	5.5
205-99-2	BENZO(B)FLUORANTHENE	1	7	J	10	5
207-08-9	BENZO(K)FLUORANTHENE	1	10	U	10	5
50-32-8	BENZO(A)PYRENE	1	6	J	10	5.5
193-39-5	INDENO(1,2,3-CD)PYRENE	1	5.9	J	10	5
53-70-3	DIBENZO(A,H)ANTHRACENE	1	14	U	14	7.5
191-24-2	BENZO(G,H,I)PERYLENE	1	5.2	J	10	5

Data Package ID: SV2107471-1

# GC/MS Semi-volatiles

## Method SW8270SIMC

### Sample Results

Lab Name: ALS -- Fort Collins

Work Order Number: 2107471

Client Name: COGCC

ClientProject ID: Inspection 697601450

Field ID: 118086 #2 0-8"

Lab ID: 2107471-2

Sample Matrix: SOIL

% Moisture: 5.3

Date Collected: 21-Jul-21

Date Extracted: 04-Aug-21

Date Analyzed: 25-Aug-21

Prep Method: SW3546

Prep Batch: EX210804-2

QCBatchID: EX210804-2-1

Run ID: SV210825-4

Cleanup: NONE

Basis: Dry Weight

File Name: SV8520

Analyst: Tyler Knaebel

Sample Aliquot: 15.11 g

Final Volume: 1 ml

Result Units: UG/KG

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Result Qualifier	Reporting Limit	MDL
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### Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
321-60-8	2-FLUOROBIPHENYL	41.6		69.9	60	24 - 120
4165-60-0	NITROBENZENE-D5	41.3		69.9	59	13 - 120
1718-51-0	TERPHENYL-D14	47.7		69.9	68	30 - 125

Data Package ID: SV2107471-1

Date Printed: Tuesday, September 07, 2021

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# GC/MS Semi-volatiles

## Method SW8270SIME

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS -- Fort Collins

Work Order Number: 2107471

Client Name: COGCC

ClientProject ID: Inspection 697601450

Lab ID: EX210804-2LCS

Sample Matrix: SOIL

% Moisture: N/A

Date Collected: N/A

Date Extracted: 08/04/2021

Date Analyzed: 08/25/2021

Prep Method: SW3546

Prep Batch: EX210804-2

QC Batch ID: EX210804-2-1

Run ID: SV210825-44

Cleanup: NONE

Basis: N/A

File Name: SV8507

Sample Aliquot: 15g

Final Volume: 1 ml

Result Units: UG/KG

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
91-20-3	NAPHTHALENE	133	113	10		85	60 - 120%
91-57-6	2-METHYLNAPHTHALENE	133	118	6.67		89	60 - 120%
90-12-0	1-METHYLNAPHTHALENE	133	111	6.67		83	58 - 120%
208-96-8	ACENAPHTHYLENE	133	114	10		86	66 - 120%
83-32-9	ACENAPHTHENE	133	116	10		87	64 - 120%
86-73-7	FLUORENE	133	118	6.67		89	63 - 120%
85-01-8	PHENANTHRENE	133	119	10		89	69 - 120%
120-12-7	ANTHRACENE	133	117	10		88	55 - 120%
206-44-0	FLUORANTHENE	133	119	10		89	62 - 120%
129-00-0	PYRENE	133	119	13.3		89	53 - 128%
56-55-3	BENZO(A)ANTHRACENE	133	121	10		90	61 - 121%
218-01-9	CHRYSENE	133	120	10		90	62 - 120%
205-99-2	BENZO(B)FLUORANTHENE	133	122	10		92	66 - 120%
207-08-9	BENZO(K)FLUORANTHENE	133	122	10		92	60 - 120%
50-32-8	BENZO(A)PYRENE	133	118	10		88	54 - 120%
193-39-5	INDENO(1,2,3-CD)PYRENE	133	125	10		94	59 - 120%
53-70-3	DIBENZO(A,H)ANTHRACENE	133	135	13.3		101	61 - 120%
191-24-2	BENZO(G,H,I)PERYLENE	133	123	10		92	72 - 120%

Data Package ID: SV2107471-1

Date Printed: Tuesday, September 07, 2021

ALS -- Fort Collins

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LIMS Version: 7.020

# GC/MS Semi-volatiles

## Method SW8270SIME

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS -- Fort Collins

Work Order Number: 2107471

Client Name: COGCC

ClientProject ID: Inspection 697601450

Lab ID: EX210804-2LCSD

Sample Matrix: SOIL

% Moisture: N/A

Date Collected: N/A

Date Extracted: 08/04/2021

Date Analyzed: 08/25/2021

Prep Method: SW3546

Prep Batch: EX210804-2

QC Batch ID: EX210804-2-1

Run ID: SV210825-44

Cleanup: NONE

Basis: N/A

File Name: SV8508

Sample Aliquot: 15 g

Final Volume: 1 ml

Result Units: UG/KG

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
91-20-3	NAPHTHALENE	133	118	10		88	30	4
91-57-6	2-METHYLNAPHTHALENE	133	123	6.67		93	30	4
90-12-0	1-METHYLNAPHTHALENE	133	116	6.67		87	30	5
208-96-8	ACENAPHTHYLENE	133	119	10		89	30	4
83-32-9	ACENAPHTHENE	133	121	10		91	30	5
86-73-7	FLUORENE	133	123	6.67		92	30	4
85-01-8	PHENANTHRENE	133	127	10		95	30	6
120-12-7	ANTHRACENE	133	125	10		94	30	7
206-44-0	FLUORANTHENE	133	128	10		96	30	8
129-00-0	PYRENE	133	127	13.3		96	30	7
56-55-3	BENZO(A)ANTHRACENE	133	130	10		97	30	7
218-01-9	CHRYSENE	133	129	10		97	30	7
205-99-2	BENZO(B)FLUORANTHENE	133	133	10		100	30	8
207-08-9	BENZO(K)FLUORANTHENE	133	131	10		98	30	7
50-32-8	BENZO(A)PYRENE	133	126	10		94	30	6
193-39-5	INDENO(1,2,3-CD)PYRENE	133	133	10		100	30	6
53-70-3	DIBENZO(A,H)ANTHRACENE	133	144	13.3		108	30	6
191-24-2	BENZO(G,H,I)PERYLENE	133	132	10		99	30	7

### Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
321-60-8	2-FLUOROBIPHENYL	667	87		89		24 - 120
4165-60-0	NITROBENZENE-D5	667	90		91		13 - 120
1718-51-0	TERPHENYL-D14	667	98		102		30 - 125

Data Package ID: SV2107471-1

Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8512.D  
 Acq On : 25 Aug 2021 9:18 pm  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : EX210811-1AMB → 04-2 MB  
 Misc : 49761  
 ALS Vial : 12 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration

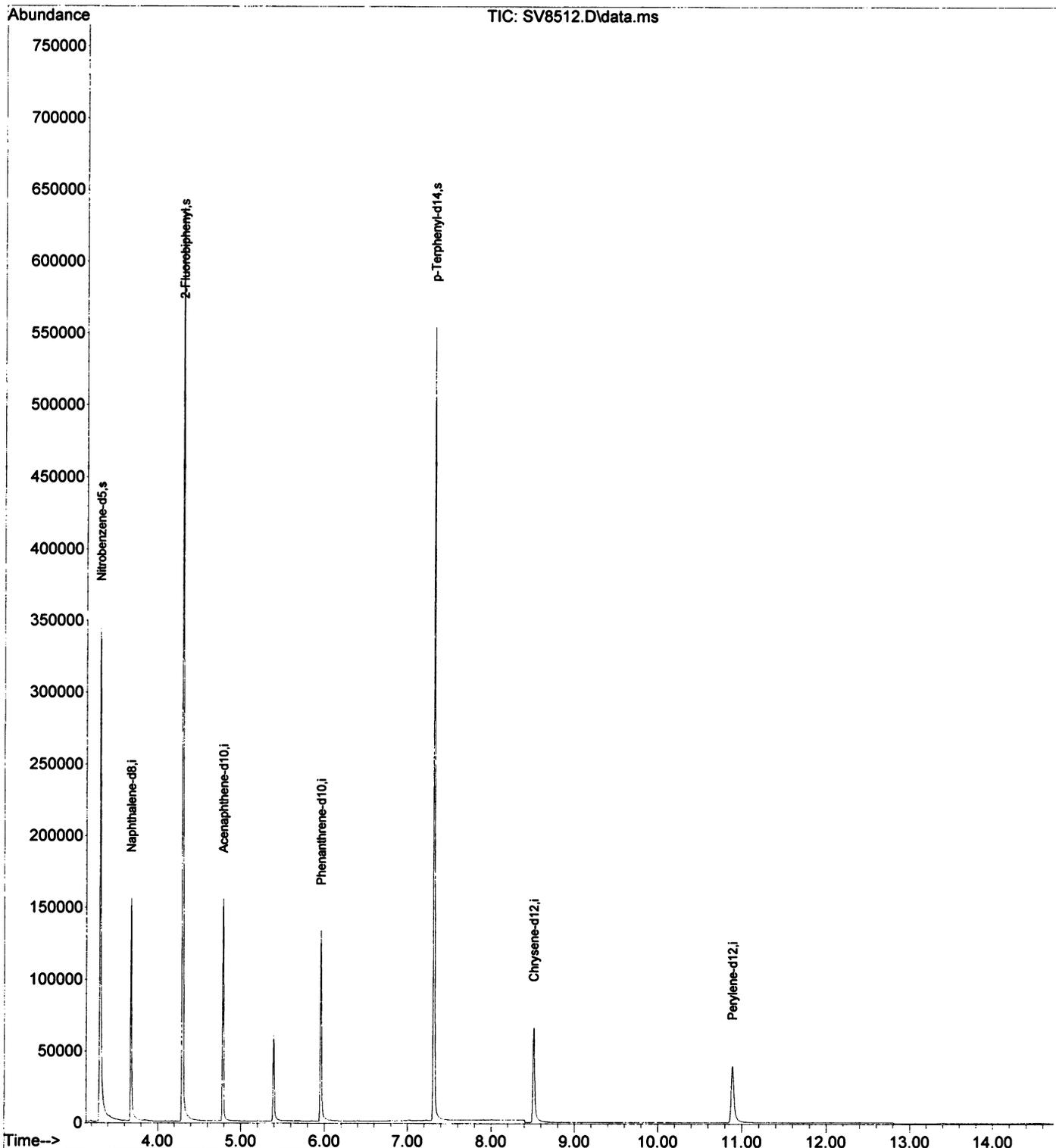
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Naphthalene-d8	3.679	136	127512	2.00	ng/uL	0.00
6) Acenaphthene-d10	4.787	164	66572	2.00	ng/uL	0.00
11) Phenanthrene-d10	5.955	188	118811	2.00	ng/uL	0.00
15) Chrysene-d12	8.510	240	85364	2.00	ng/uL	0.00
20) Perylene-d12	10.888	264	77609	2.00	ng/uL	0.00
<b>System Monitoring Compounds</b>						
2) Nitrobenzene-d5	3.303	82	322628	8.18	ng/uL	0.00
Spiked Amount	10.000	Range	19 - 125	Recovery	=	81.80%
7) 2-Fluorobiphenyl	4.300	172	389089	7.92	ng/uL	0.00
Spiked Amount	10.000	Range	30 - 120	Recovery	=	79.20%
17) p-Terphenyl-d14	7.313	244	420836	9.72	ng/uL	0.00
Spiked Amount	10.000	Range	22 - 138	Recovery	=	97.20%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\2021\082521\  
Data File : SV8512.D  
Acq On : 25 Aug 2021 9:18 pm  
Operator : TK HPSV4 sn #: CV11451177  
Sample : EX210811-1AMB  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
Quant Method : C:\msdchem\1\methods\082521SP.M  
Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
QLast Update : Thu Aug 26 23:51:20 2021  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8520.D  
 Acq On : 25 Aug 2021 11:46 pm  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : 2107471-2  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration

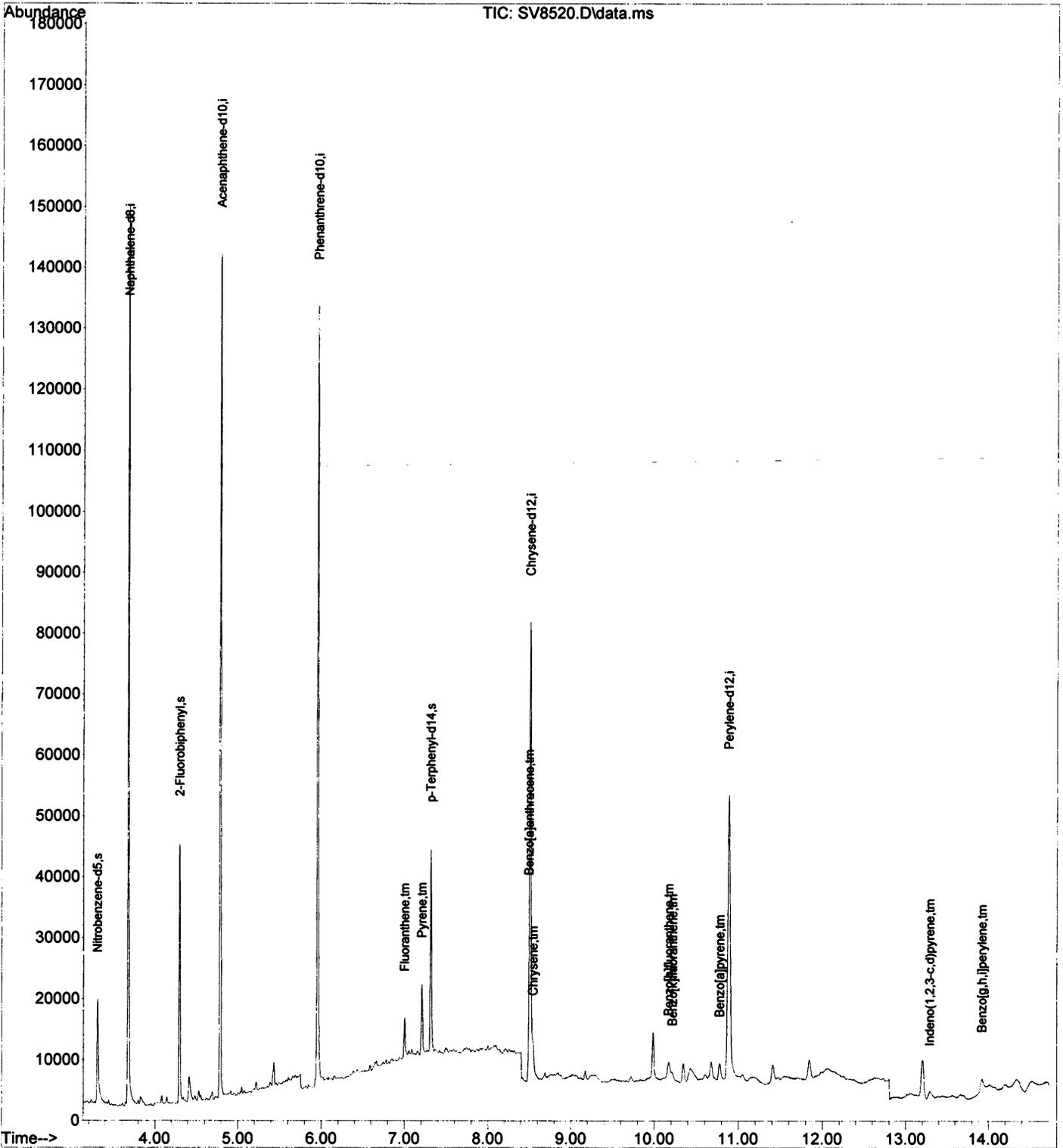
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
-----						
Internal Standards						
1) Naphthalene-d8	3.677	136	108230	2.00	ng/uL	0.00
6) Acenaphthene-d10	4.787	164	59658	2.00	ng/uL	0.00
11) Phenanthrene-d10	5.955	188	106917	2.00	ng/uL	0.00
15) Chrysene-d12	8.506	240	78159	2.00	ng/uL	0.00
20) Perylene-d12	10.884	264	75301	2.00	ng/uL	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	3.308	82	18174	0.59	ng/uL	0.00
Spiked Amount	10.000	Range	19 - 125	Recovery	=	5.90%#
7) 2-Fluorobiphenyl	4.300	172	26224	0.60	ng/uL	0.00
Spiked Amount	10.000	Range	30 - 120	Recovery	=	6.00%#
17) p-Terphenyl-d14	7.313	244	27427	0.68	ng/uL	0.00
Spiked Amount	10.000	Range	22 - 138	Recovery	=	6.80%#
Target Compounds						
						Qvalue
14) Fluoranthene	7.003	202	4537	0.06	ng/uL#	69
16) Pyrene	7.207	202	7266	0.09	ng/uL#	88
18) Benzo[a]anthracene	8.495	228	3207	0.06	ng/uL#	75
19) Chrysene	8.545	228	4811	0.07	ng/uL#	82
21) Benzo[b]fluoranthene	10.172	252	4624	0.10	ng/uL#	1
22) Benzo[k]fluoranthene	10.217	252	1849m	0.05	ng/uL	
23) Benzo[a]pyrene	10.777	252	3663	0.09	ng/uL#	1
24) Indeno(1,2,3-c,d)pyrene	13.291	276	2559	0.08	ng/uL#	8
26) Benzo[g,h,i]perylene	13.921	276	3416	0.07	ng/uL#	1
-----						

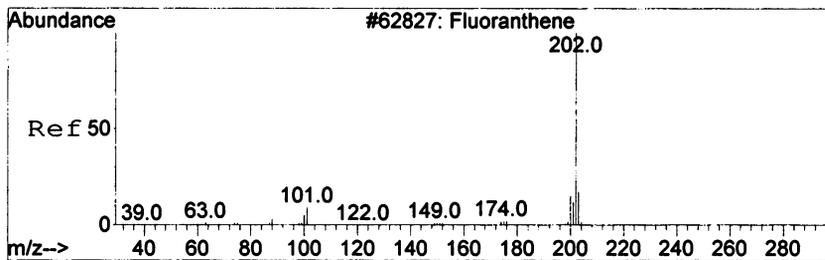
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*u a / r / r 1*

Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8520.D  
 Acq On : 25 Aug 2021 11:46 pm  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : 2107471-2  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

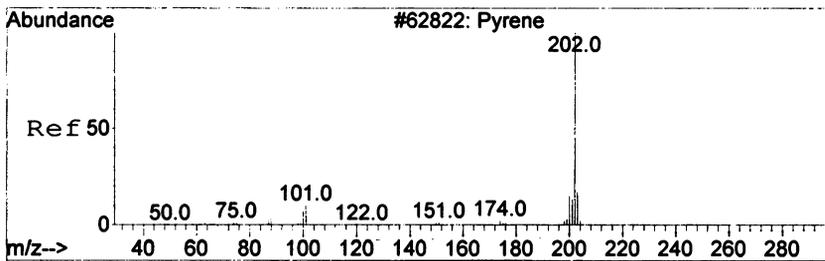
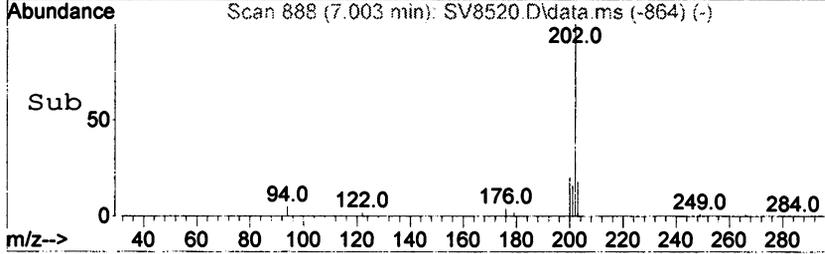
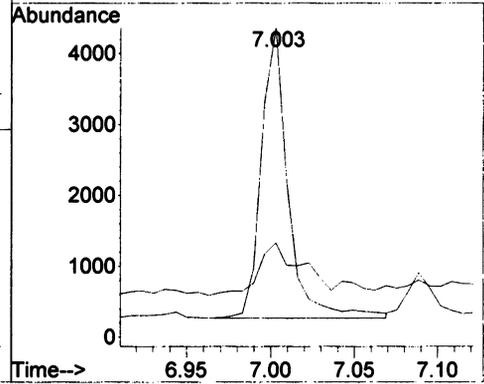
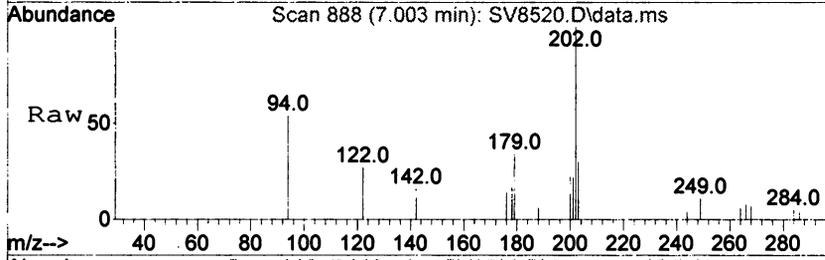
DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration





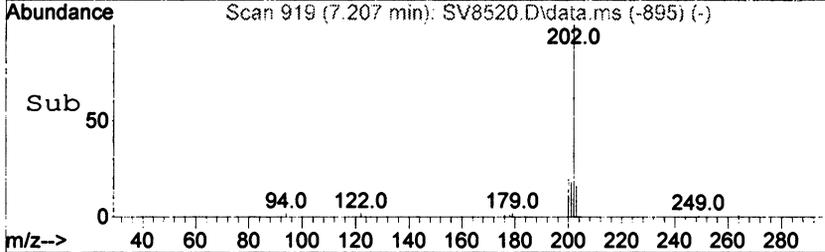
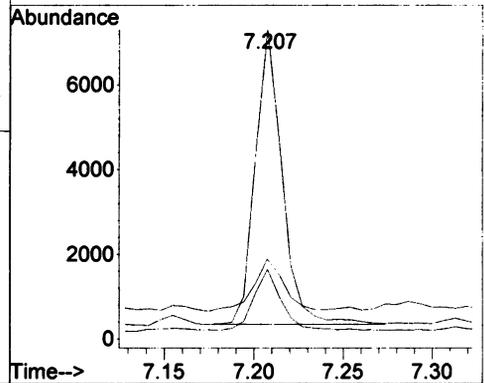
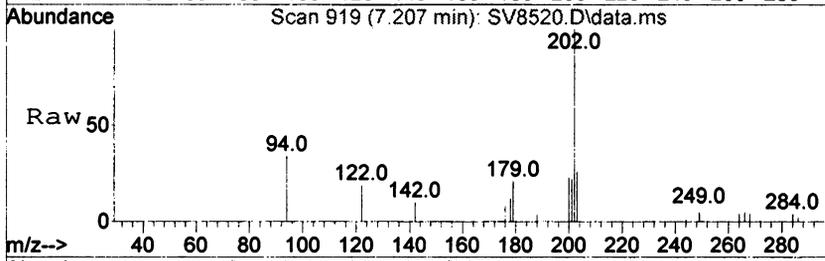
#14  
Fluoranthene  
Concen: 0.06 ng/uL  
RT: 7.003 min Scan# 888  
Delta R.T. 0.007 min  
Lab File: SV8520.D  
Acq: 25 Aug 2021 11:46 pm

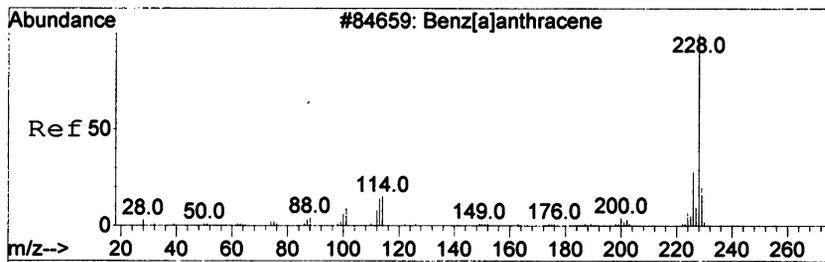
Tgt Ion	Ratio	Lower	Upper
202	100		
203	30.4	13.5	20.3#



#16  
Pyrene  
Concen: 0.09 ng/uL  
RT: 7.207 min Scan# 919  
Delta R.T. 0.006 min  
Lab File: SV8520.D  
Acq: 25 Aug 2021 11:46 pm

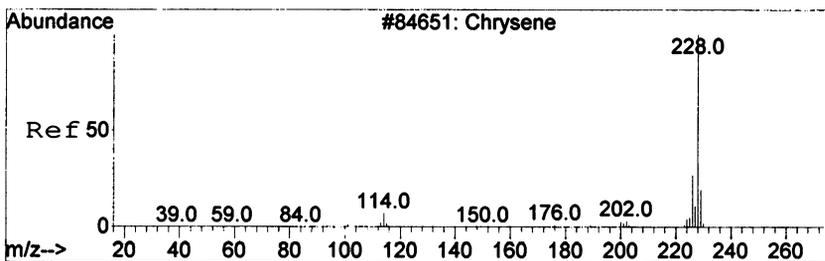
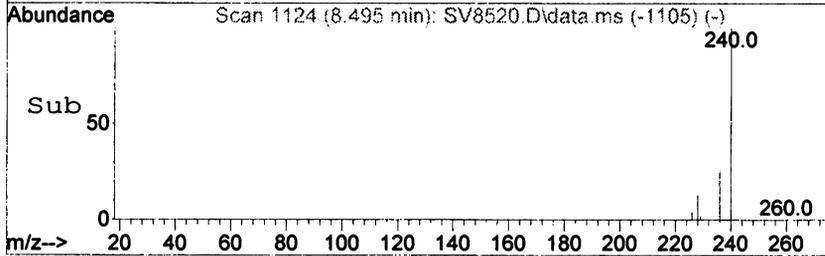
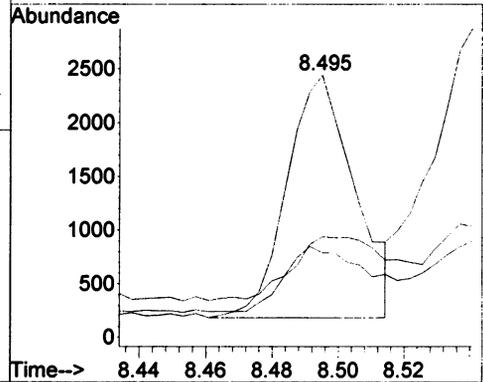
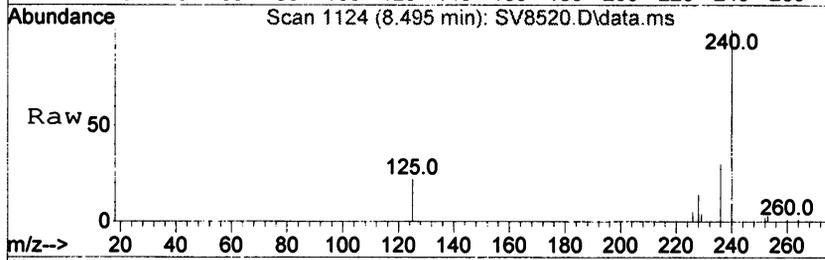
Tgt Ion	Ratio	Lower	Upper
202	100		
200	22.6	14.0	26.0
203	26.0	12.2	22.7#





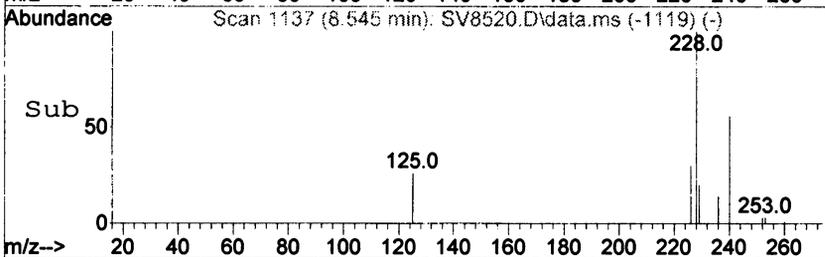
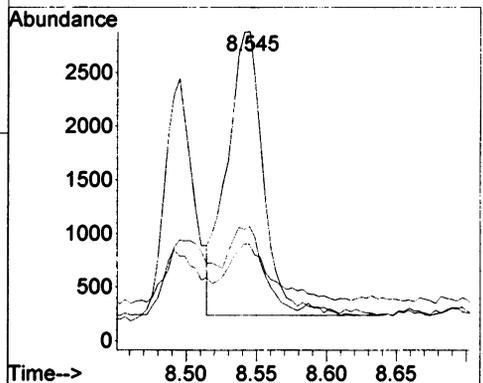
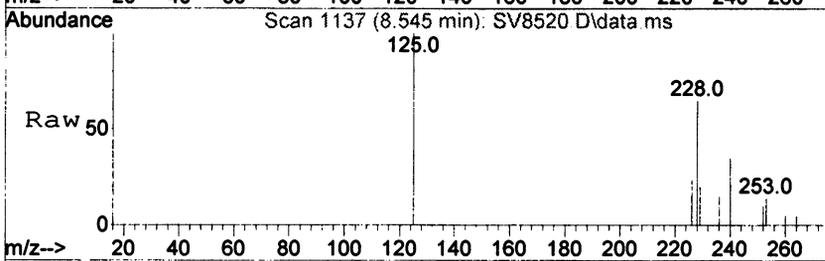
#18  
 Benzo[a]anthracene  
 Concen: 0.06 ng/uL  
 RT: 8.495 min Scan# 1124  
 Delta R.T. 0.004 min  
 Lab File: SV8520.D  
 Acq: 25 Aug 2021 11:46 pm

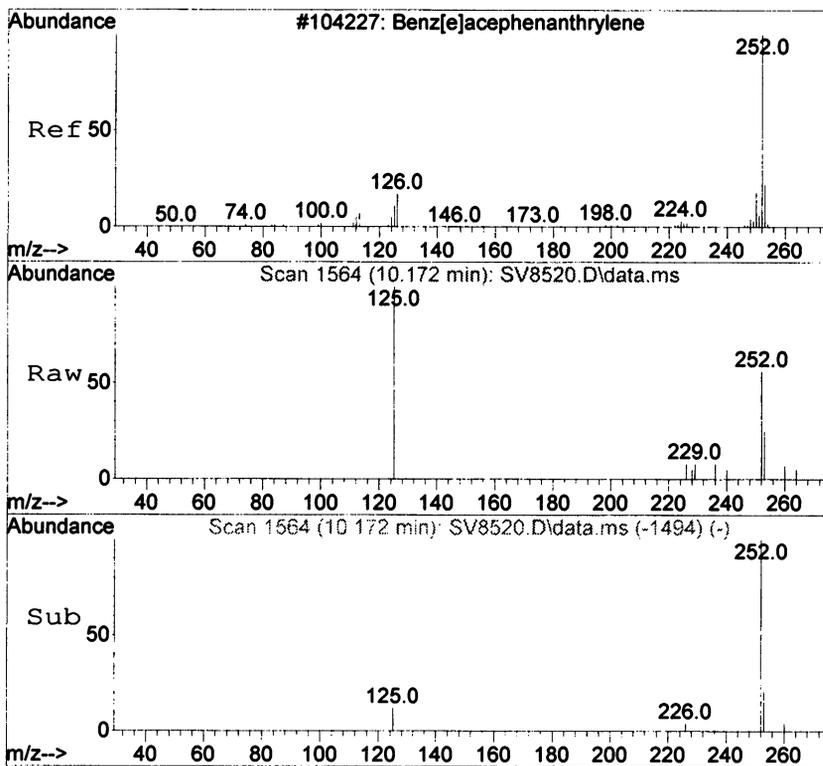
Tgt Ion	Ratio	Resp	Lower	Upper
228	100	3207		
229	32.4	13.6	25.4#	
226	38.5	18.8	35.0#	



#19  
 Chrysene  
 Concen: 0.07 ng/uL  
 RT: 8.545 min Scan# 1137  
 Delta R.T. 0.008 min  
 Lab File: SV8520.D  
 Acq: 25 Aug 2021 11:46 pm

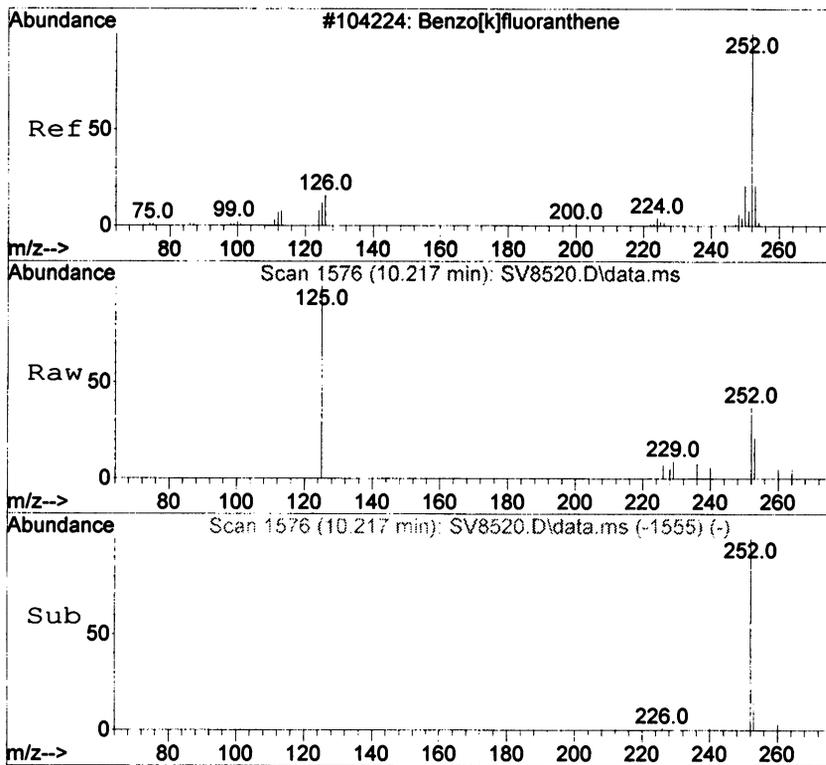
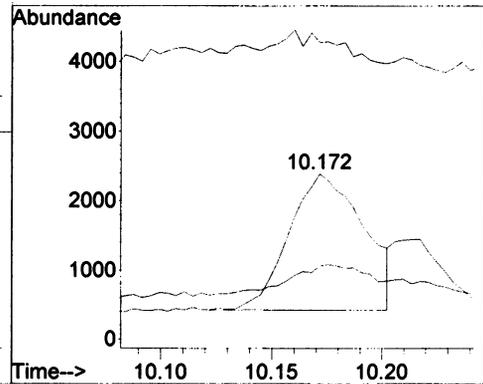
Tgt Ion	Ratio	Resp	Lower	Upper
228	100	4811		
226	37.0	20.8	38.6	
229	31.3	13.6	25.4#	





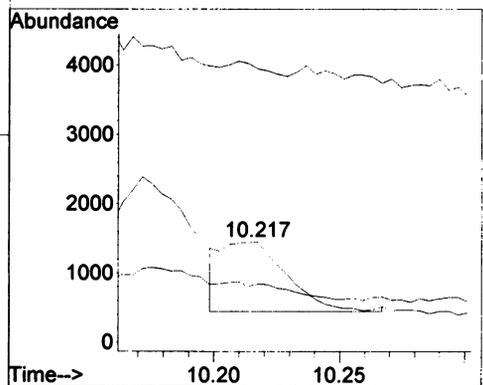
#21  
 Benzo[b]fluoranthene  
 Concen: 0.10 ng/uL  
 RT: 10.172 min Scan# 1564  
 Delta R.T. 0.019 min  
 Lab File: SV8520.D  
 Acq: 25 Aug 2021 11:46 pm

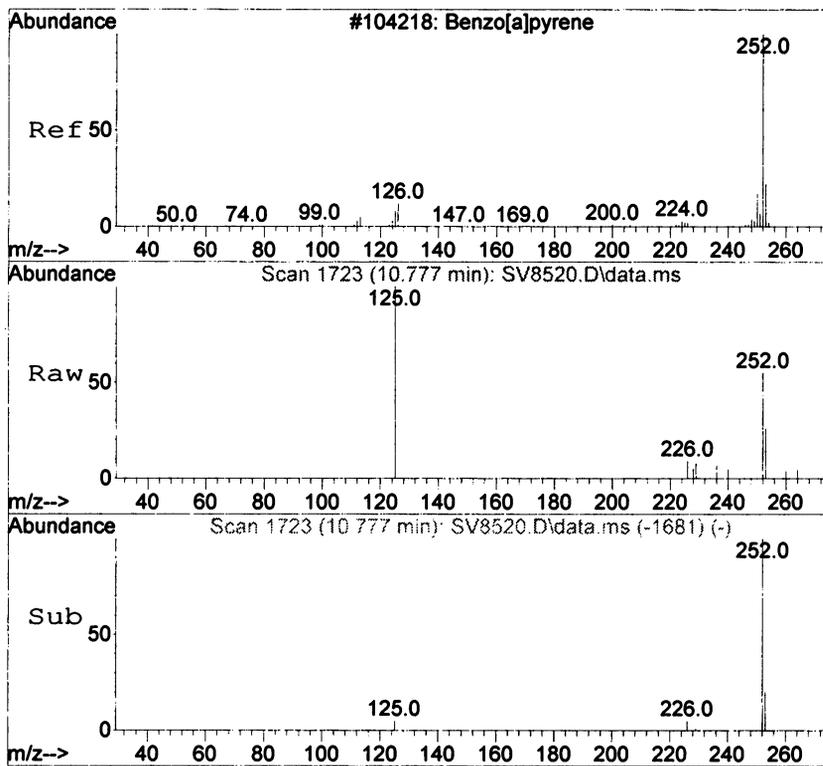
Tgt Ion	252	Resp:	4624
Ion Ratio	100	Lower	Upper
252	100		
253	44.5	15.3	28.5#
125	178.9	7.7	14.3#



#22  
 Benzo[k]fluoranthene  
 Concen: 0.05 ng/uL m  
 RT: 10.217 min Scan# 1576  
 Delta R.T. 0.019 min  
 Lab File: SV8520.D  
 Acq: 25 Aug 2021 11:46 pm

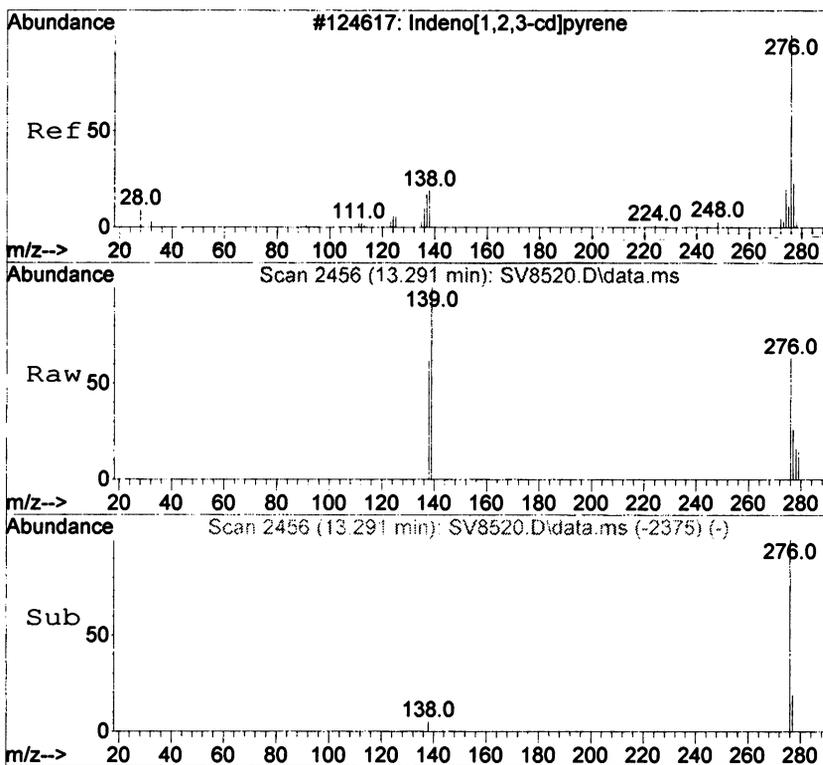
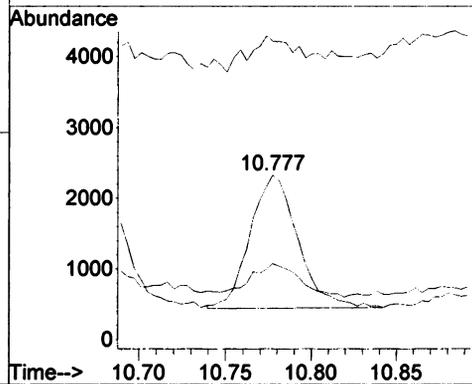
Tgt Ion	252	Resp:	1849
Ion Ratio	100	Lower	Upper
252	100		
253	57.9	15.0	28.0#
125	272.0	7.9	14.7#





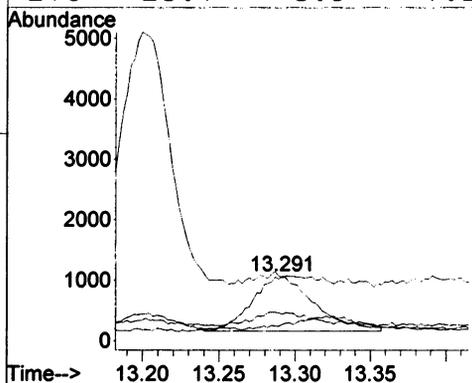
#23  
 Benzo[a]pyrene  
 Concen: 0.09 ng/uL  
 RT: 10.777 min Scan# 1723  
 Delta R.T. 0.011 min  
 Lab File: SV8520.D  
 Acq: 25 Aug 2021 11:46 pm

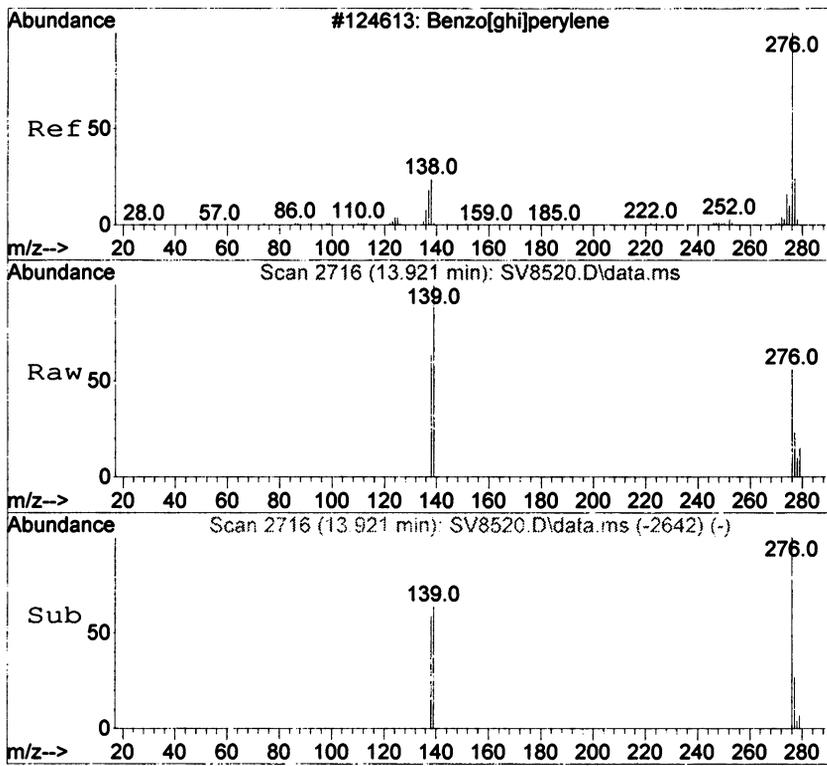
Tgt Ion	Resp	Lower	Upper
252	3663		
253	46.3	15.3	28.3#
125	181.2	8.8	16.4#



#24  
 Indeno(1,2,3-c,d)pyrene  
 Concen: 0.08 ng/uL  
 RT: 13.291 min Scan# 2456  
 Delta R.T. 0.036 min  
 Lab File: SV8520.D  
 Acq: 25 Aug 2021 11:46 pm

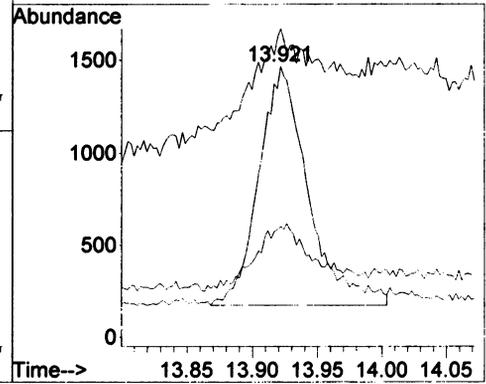
Tgt Ion	Resp	Lower	Upper
276	2559		
277	41.1	16.5	30.7#
138	97.3	14.3	26.5#
278	25.7	3.9	7.2#





#26  
 Benzo[g,h,i]perylene  
 Concen: 0.07 ng/uL  
 RT: 13.921 min Scan# 2716  
 Delta R.T. 0.029 min  
 Lab File: SV8520.D  
 Acq: 25 Aug 2021 11:46 pm

Tgt Ion	Resp	Lower	Upper
276	3416		
138	113.9	15.5	28.9#
277	41.1	16.5	30.7#



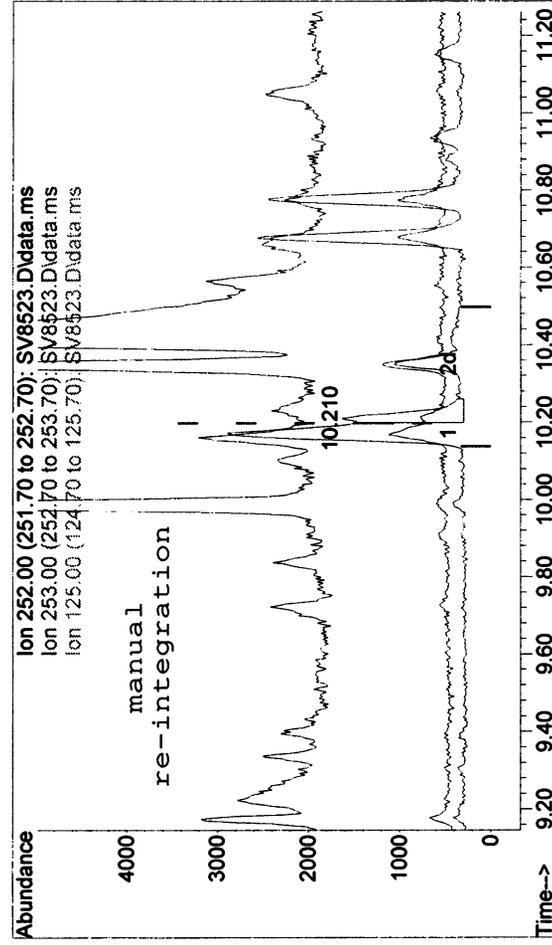
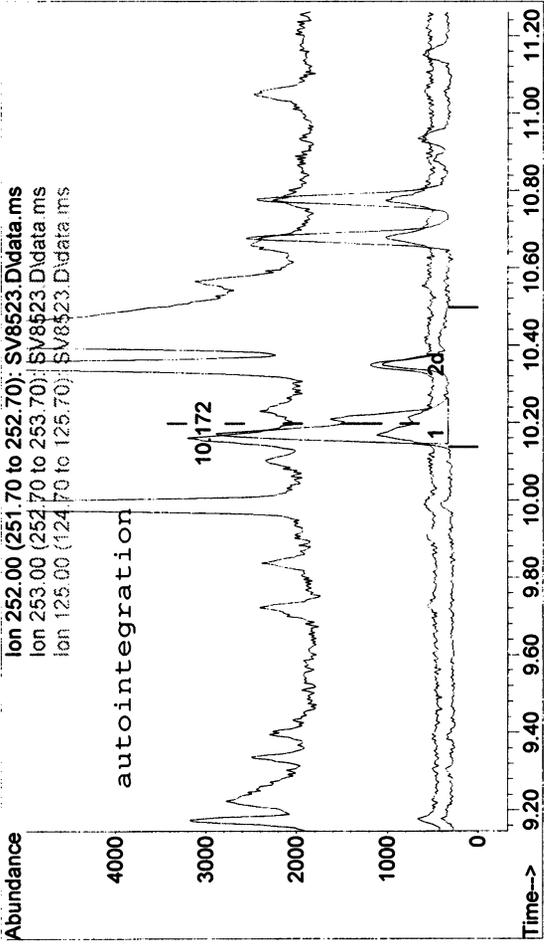
Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8523.D  
 Acq On : 26 Aug 2021 12:41 am  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : 2107471-1  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Naphthalene-d8	3.677	136	108626	2.00	ng/uL	0.00
6) Acenaphthene-d10	4.782	164	59740	2.00	ng/uL	0.00
11) Phenanthrene-d10	5.955	188	108665	2.00	ng/uL	0.00
15) Chrysene-d12	8.507	240	80289	2.00	ng/uL	0.00
20) Perylene-d12	10.880	264	75997	2.00	ng/uL	0.00
<b>System Monitoring Compounds</b>						
2) Nitrobenzene-d5	3.308	82	17147	0.56	ng/uL	0.00
Spiked Amount	10.000	Range	19 - 125	Recovery	=	5.60%#
7) 2-Fluorobiphenyl	4.295	172	23077	0.52	ng/uL	0.00
Spiked Amount	10.000	Range	30 - 120	Recovery	=	5.20%#
17) p-Terphenyl-d14	7.313	244	23325	0.56	ng/uL	0.00
Spiked Amount	10.000	Range	22 - 138	Recovery	=	5.60%#
<b>Target Compounds</b>						
12) Phenanthrene	5.974	178	2154	0.03	ng/uL#	79
14) Fluoranthene	6.996	202	6606	0.09	ng/uL#	86
16) Pyrene	7.207	202	9390	0.12	ng/uL	93
18) Benzo[a]anthracene	8.491	228	3166	0.06	ng/uL#	77
19) Chrysene	8.541	228	6241	0.09	ng/uL#	86
21) Benzo[b]fluoranthene	10.172	252	5873	0.12	ng/uL#	8
22) Benzo[k]fluoranthene	10.210	252	2152m	0.05	ng/uL	
23) Benzo[a]pyrene	10.777	252	4091	0.09	ng/uL#	4
24) Indeno(1,2,3-c,d)pyrene	13.284	276	2986	0.10	ng/uL#	37
25) Dibenzo[a,h]anthracene	13.204	278	1727	0.07	ng/uL#	1
26) Benzo[g,h,i]perylene	13.919	276	3777	0.08	ng/uL#	4

(#) = qualifier out of range (m) = manual integration (+) = signals summed

*u 8/27/21*



TIC: SV8523.D\data.ms

(22) Benzo[k]fluoranthene (tm)  
10.172min (-0.026) 0.15 ng/uL

response	Ion	Exp%	Act%
7647			
252.00	100.00	100.00	100.00
253.00	21.50	37.25#	
125.00	11.30	90.92#	
0.00	0.00	0.00	0.00

Reason for manual re-integration?

- missed peak assignment
- peak saturation (detector shutdown)
- over-integrated peak's area
- under-integrated peak's area
- other ( )

initials: AL date: 9/7/21

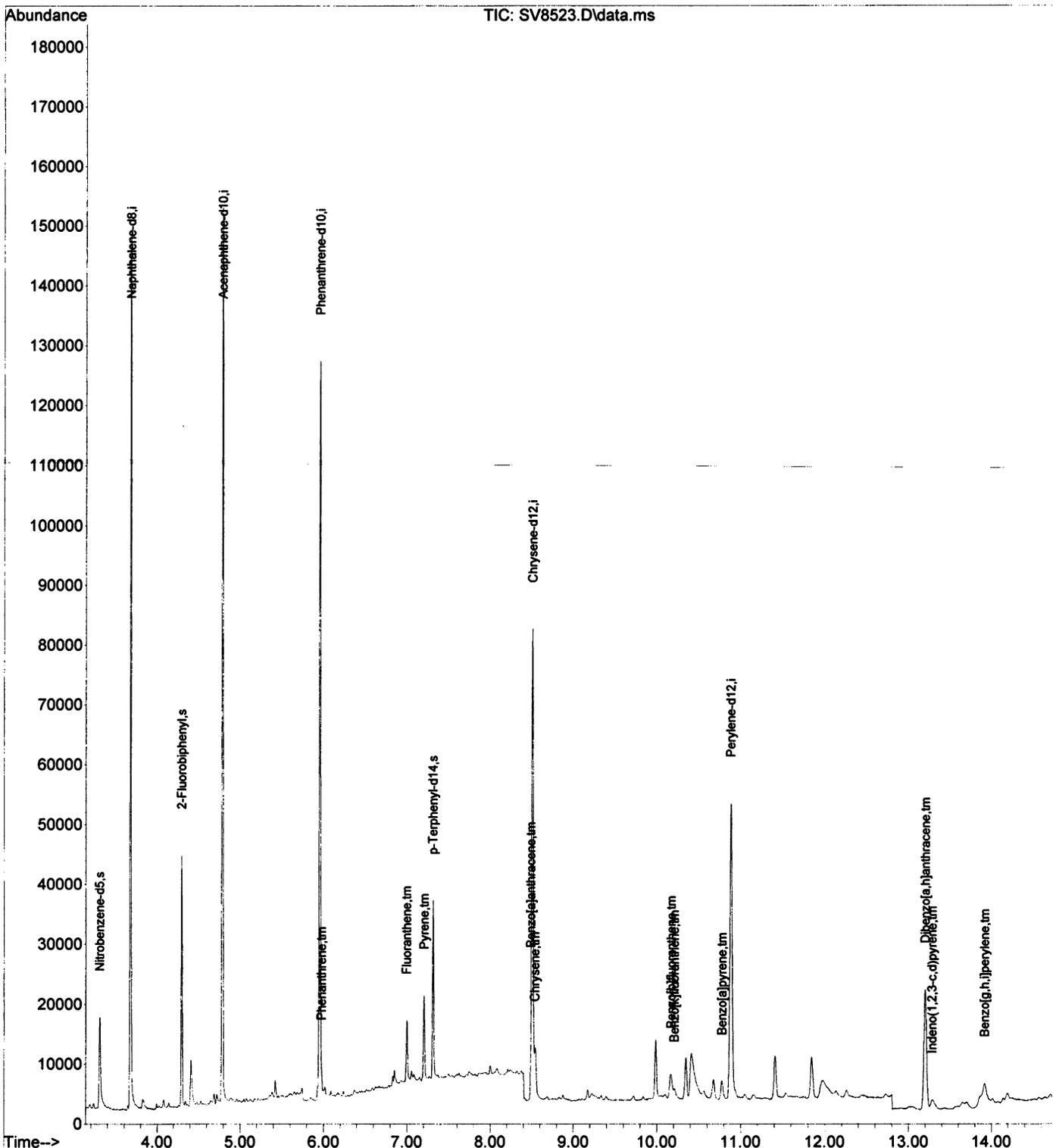
TIC: SV8523.D\data.ms

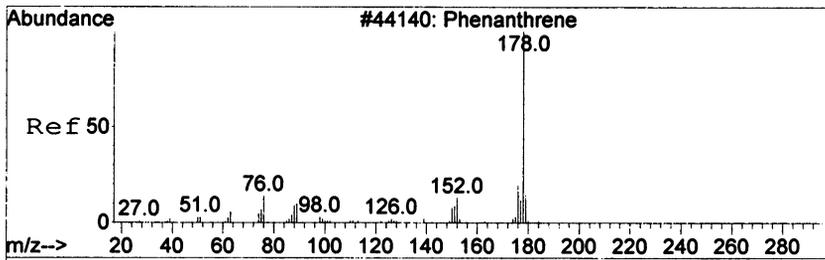
(22) Benzo[k]fluoranthene (tm)  
10.210min (+ 0.012) 0.05 ng/uL m

response	Ion	Exp%	Act%
2152			
252.00	100.00	100.00	100.00
253.00	21.50	46.32#	
125.00	11.30	130.86#	
0.00	0.00	0.00	0.00

Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8523.D  
 Acq On : 26 Aug 2021 12:41 am  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : 2107471-1  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

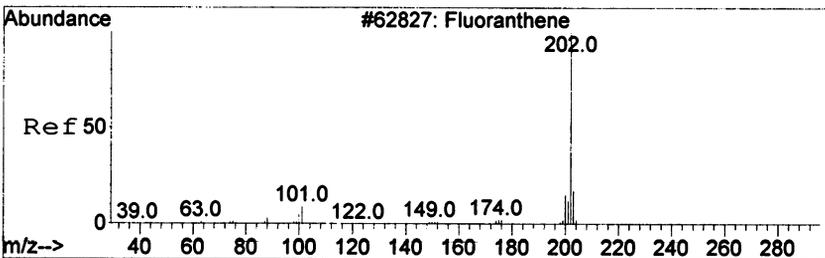
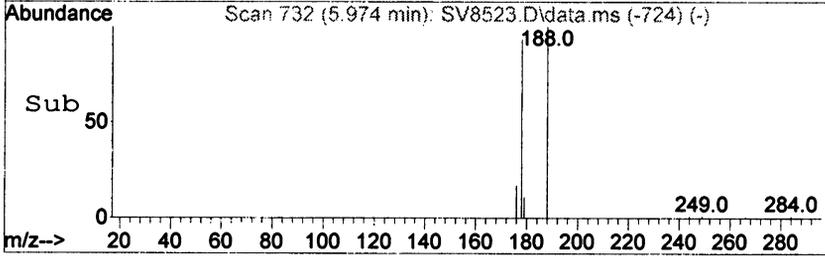
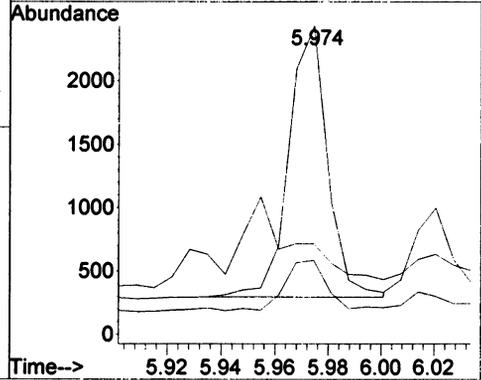
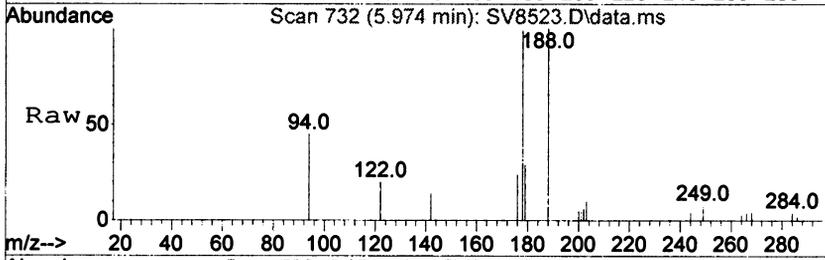
DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration





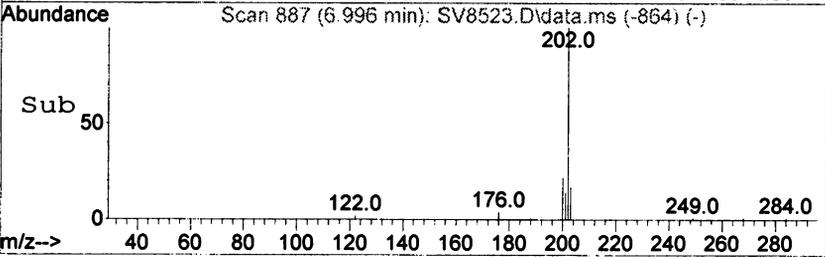
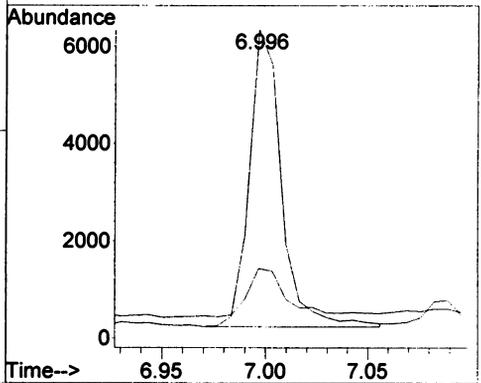
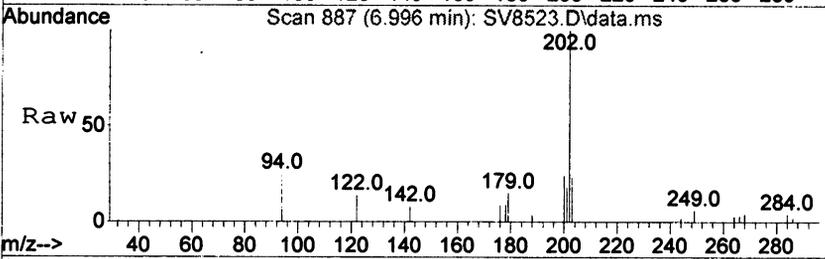
#12  
 Phenanthrene  
 Concen: 0.03 ng/uL  
 RT: 5.974 min Scan# 732  
 Delta R.T. 0.000 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

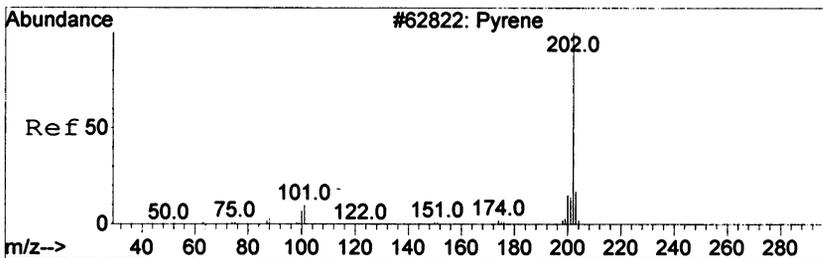
Tgt Ion	Ratio	Resp	Lower	Upper
178	100	2154		
179	29.4	12.3	18.5#	
176	24.1	15.4	23.2#	



#14  
 Fluoranthene  
 Concen: 0.09 ng/uL  
 RT: 6.996 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

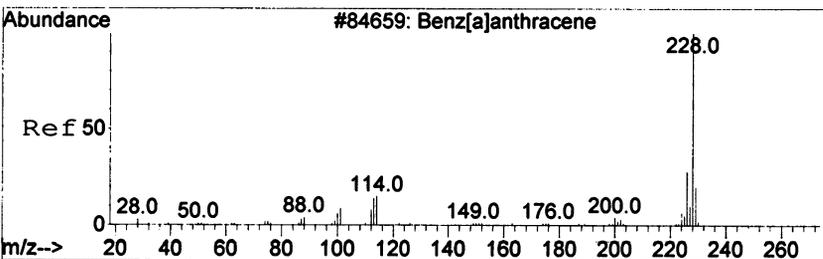
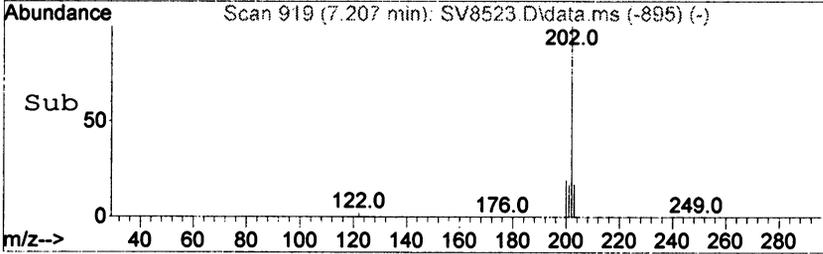
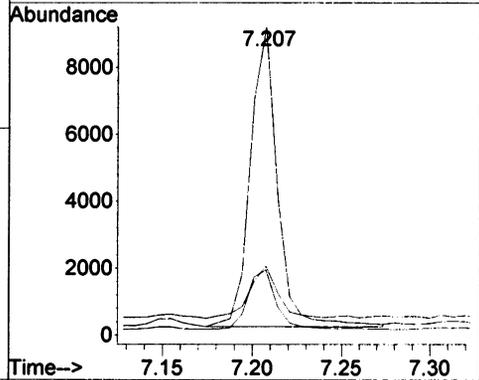
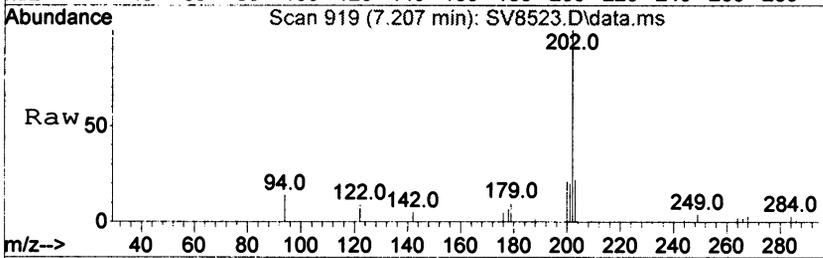
Tgt Ion	Ratio	Resp	Lower	Upper
202	100	6606		
203	22.8	13.5	20.3#	





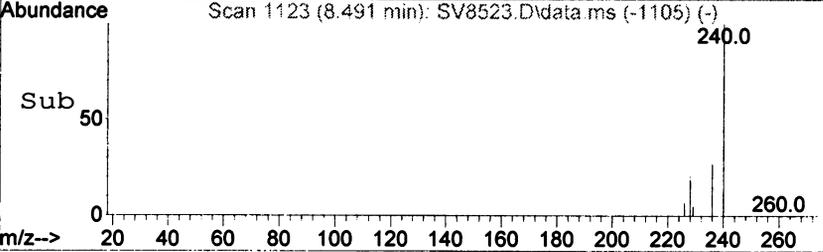
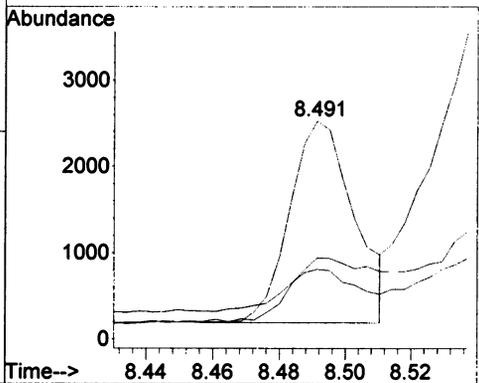
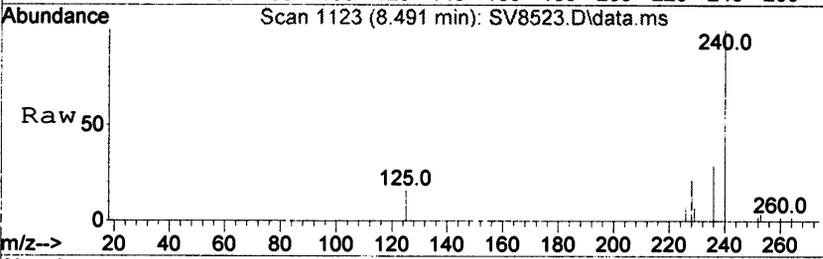
#16  
 Pyrene  
 Concen: 0.12 ng/uL  
 RT: 7.207 min Scan# 919  
 Delta R.T. 0.006 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

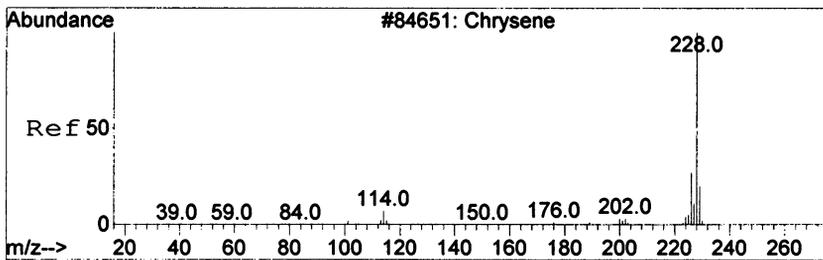
Tgt Ion	Ratio	Resp	Lower	Upper
202	100	9390		
200	21.2	14.0	26.0	
203	22.4	12.2	22.7	



#18  
 Benzo[a]anthracene  
 Concen: 0.06 ng/uL  
 RT: 8.491 min Scan# 1123  
 Delta R.T. 0.000 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

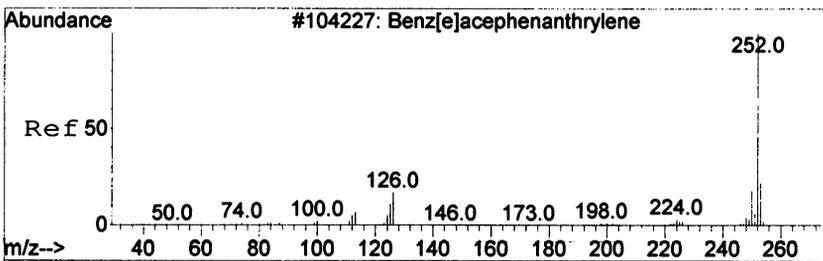
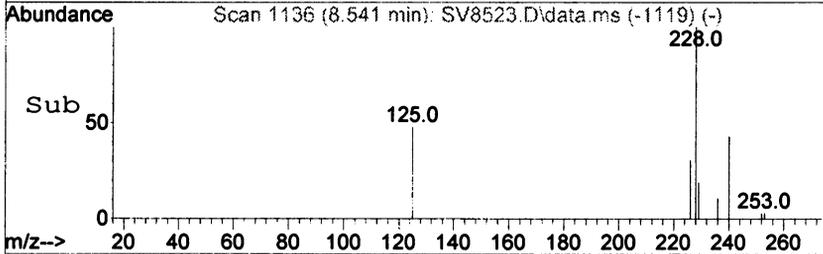
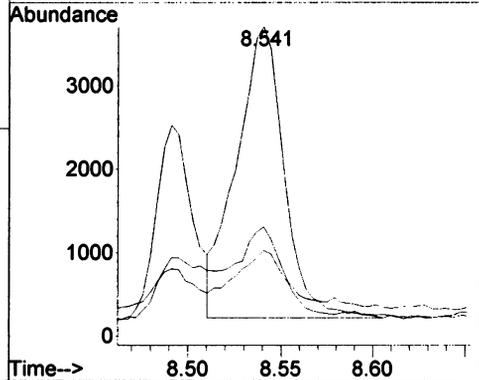
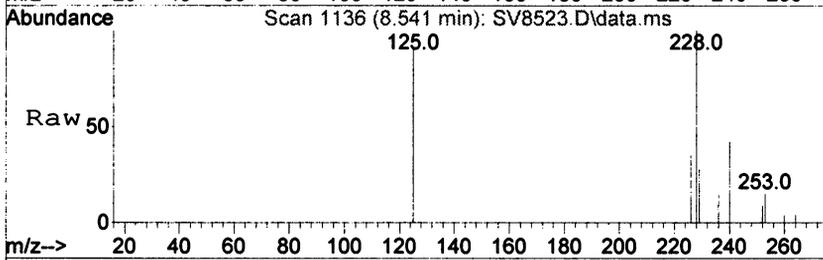
Tgt Ion	Ratio	Resp	Lower	Upper
228	100	3166		
229	32.1	13.6	25.4#	
226	37.3	18.8	35.0#	





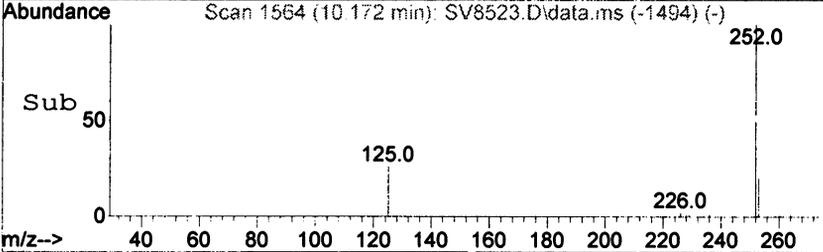
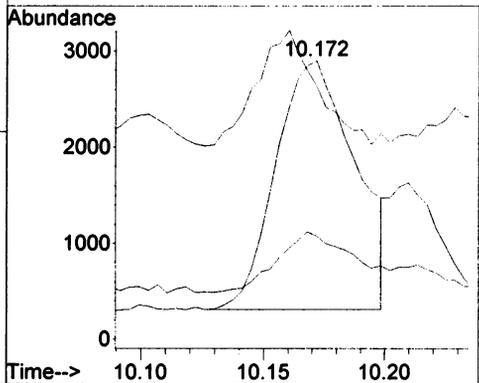
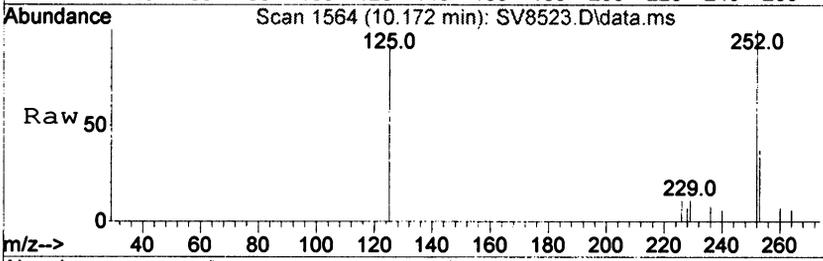
#19  
 Chrysene  
 Concen: 0.09 ng/uL  
 RT: 8.541 min Scan# 1136  
 Delta R.T. 0.004 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

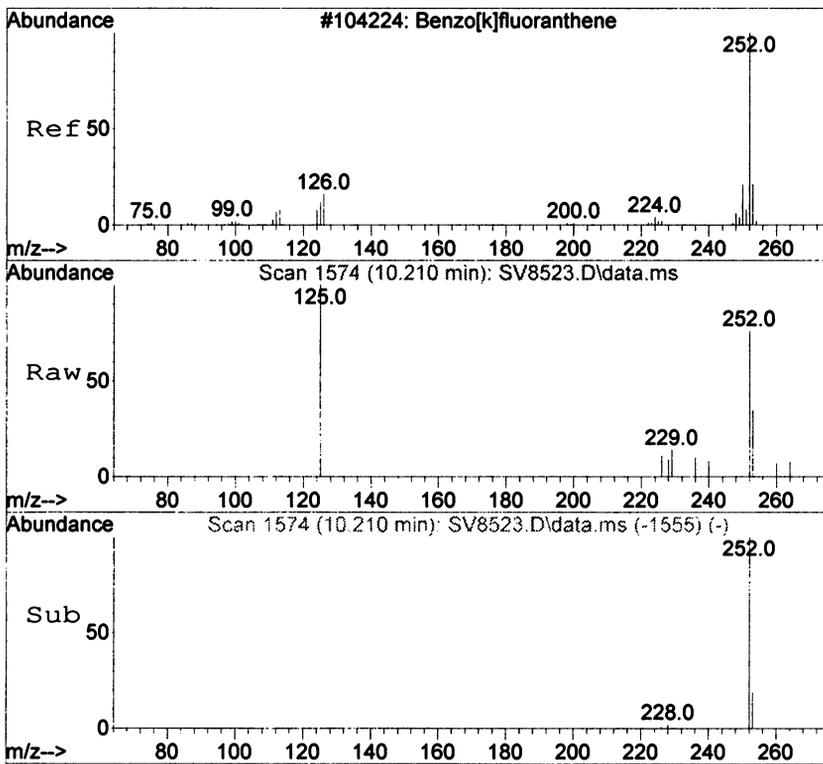
Tgt Ion	228	226	229	Resp	6241	Lower	Upper
Ion Ratio	100	35.4	27.8				
		20.8	13.6				
		38.6	25.4				



#21  
 Benzo[b]fluoranthene  
 Concen: 0.12 ng/uL  
 RT: 10.172 min Scan# 1564  
 Delta R.T. 0.019 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

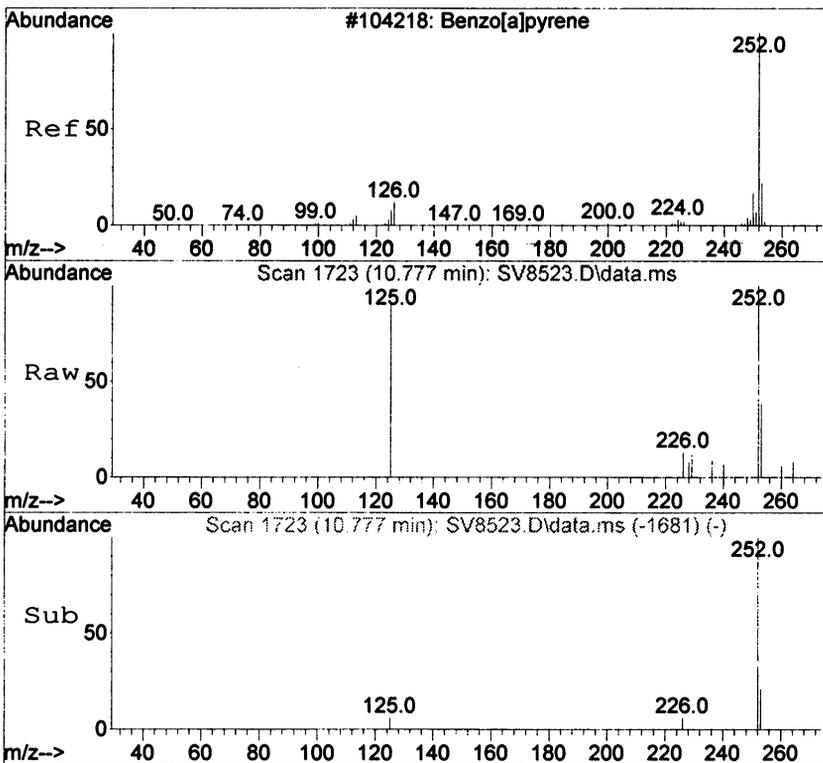
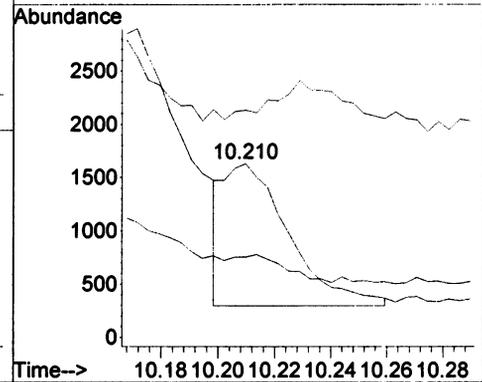
Tgt Ion	252	253	125	Resp	5873	Lower	Upper
Ion Ratio	100	37.2	90.9				
		15.3	7.7				
		28.5	14.3				





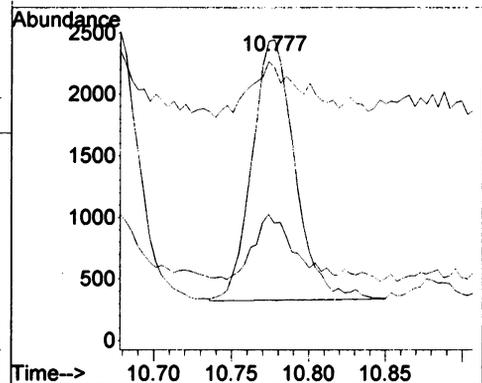
#22  
 Benzo[k]fluoranthene  
 Concen: 0.05 ng/uL m  
 RT: 10.210 min Scan# 1574  
 Delta R.T. 0.012 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

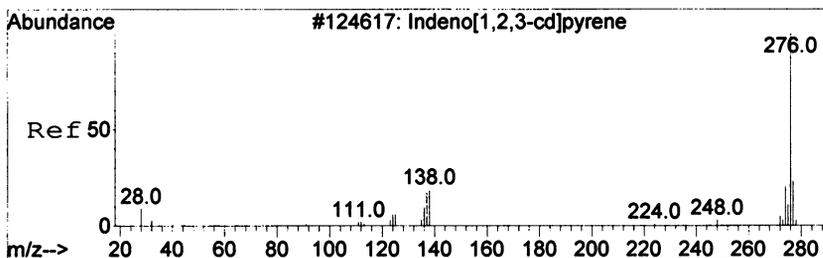
Tgt Ion	252	253	125	Resp	2152	Lower	Upper
Ion Ratio	100	46.3	130.9				
		15.0	7.9		28.0#		14.7#



#23  
 Benzo[a]pyrene  
 Concen: 0.09 ng/uL  
 RT: 10.777 min Scan# 1723  
 Delta R.T. 0.011 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

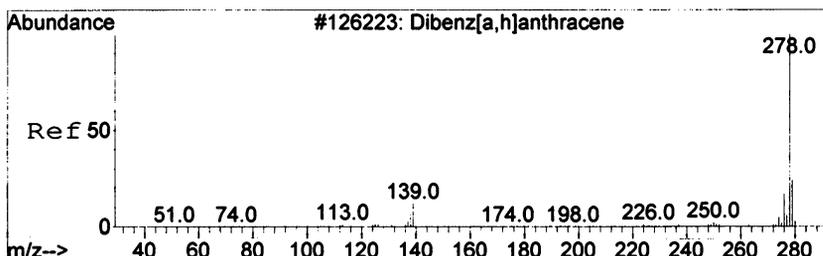
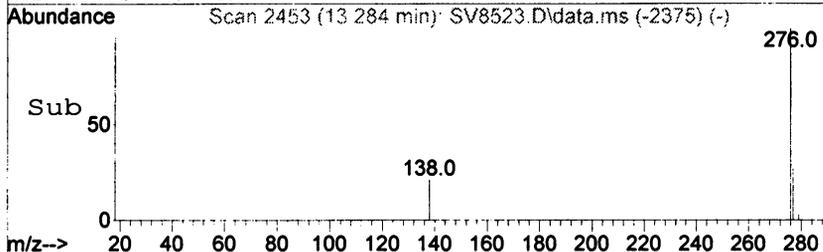
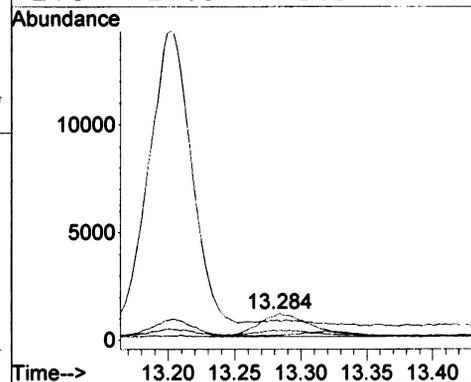
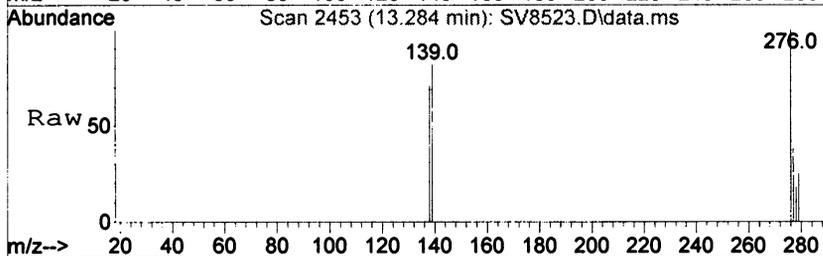
Tgt Ion	252	253	125	Resp	4091	Lower	Upper
Ion Ratio	100	39.1	90.9				
		15.3	8.8		28.3#		16.4#





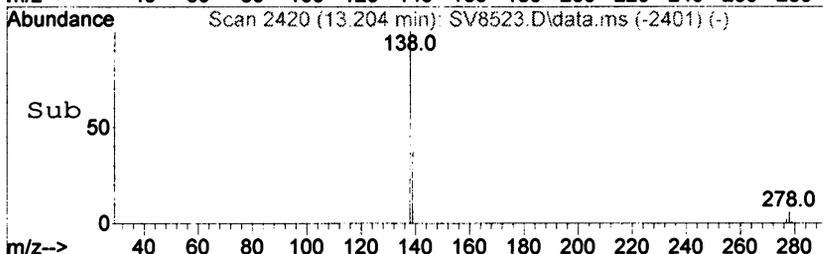
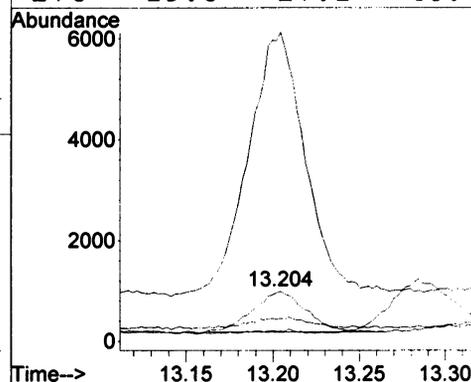
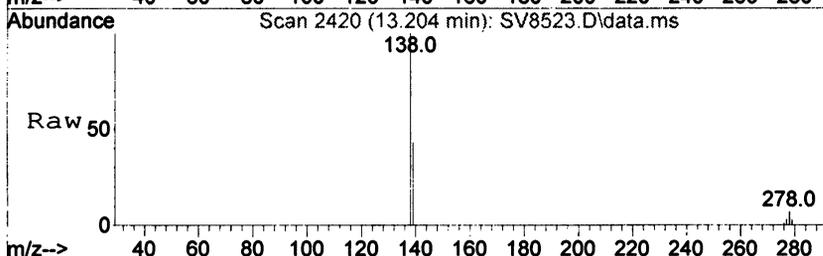
#24  
 Indeno(1,2,3-c,d)pyrene  
 Concen: 0.10 ng/uL  
 RT: 13.284 min Scan# 2453  
 Delta R.T. 0.029 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

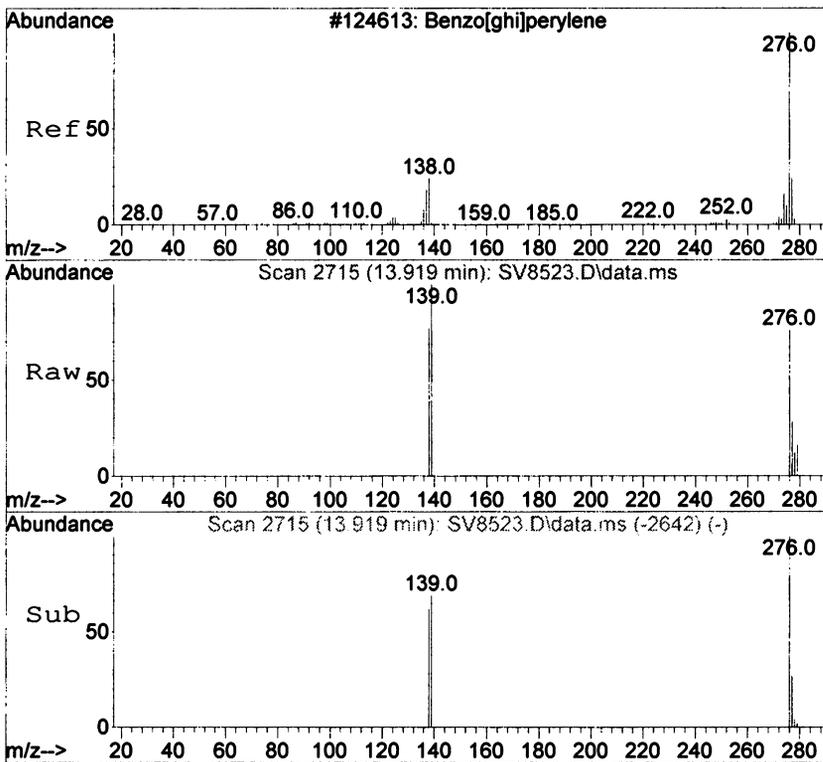
Tgt Ion	Ratio	Resp	Lower	Upper
276	100	2986		
277	37.7	16.5	30.7#	
138	70.9	14.3	26.5#	
278	17.9	3.9	7.2#	



#25  
 Dibenzo[a,h]anthracene *ND*  
 Concen: 0.07 ng/uL  
 RT: 13.204 min Scan# 2420  
 Delta R.T. -0.095 min  
 Lab File: SV8523.D  
 Acq: 26 Aug 2021 12:41 am

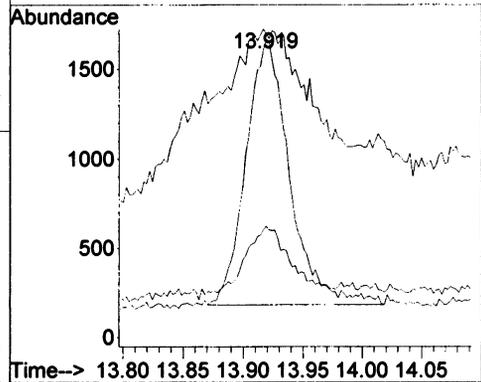
Tgt Ion	Ratio	Resp	Lower	Upper
278	100	1727		
139	618.6	11.8	21.8#	
279	45.4	16.5	30.7#	
276	19.8	27.1	40.7#	





#26  
Benzo[g,h,i]perylene  
Concen: 0.08 ng/uL  
RT: 13.919 min Scan# 2715  
Delta R.T. 0.027 min  
Lab File: SV8523.D  
Acq: 26 Aug 2021 12:41 am

Tgt Ion	Ratio	Resp	Lower	Upper
276	100	3777		
138	102.1	15.5	28.9#	
277	37.5	16.5	30.7#	



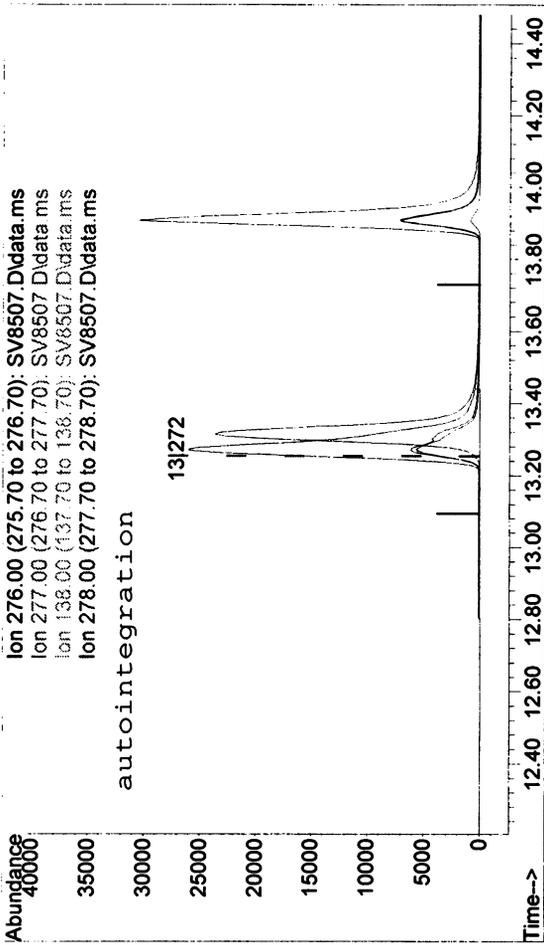
Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8507.D  
 Acq On : 25 Aug 2021 7:45 pm  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : EX210811-1BICS → 04-2LCS  
 Misc : *2/17/21*  
 ALS Vial : 13 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Naphthalene-d8	3.677	136	113197	2.00	ng/uL	0.00
6) Acenaphthene-d10	4.787	164	59364	2.00	ng/uL	0.00
11) Phenanthrene-d10	5.955	188	106943	2.00	ng/uL	0.00
15) Chrysene-d12	8.507	240	80751	2.00	ng/uL	0.00
20) Perylene-d12	10.888	264	71892	2.00	ng/uL	0.00
<b>System Monitoring Compounds</b>						
2) Nitrobenzene-d5	3.303	82	316357	8.98	ng/uL	0.00
Spiked Amount	10.000	Range 19 - 125	Recovery =	89.80%		
7) 2-Fluorobiphenyl	4.300	172	382359	8.73	ng/uL	0.00
Spiked Amount	10.000	Range 30 - 120	Recovery =	87.30%		
17) p-Terphenyl-d14	7.313	244	403284	9.85	ng/uL	0.00
Spiked Amount	10.000	Range 22 - 138	Recovery =	98.50%		
<b>Target Compounds</b>						
						Qvalue
3) Naphthalene	3.689	128	110136	1.70	ng/uL	100
4) 2-Methylnaphthalene	4.082	142	71568	1.77	ng/uL	99
5) 1-Methylnaphthalene	4.144	142	70703	1.66	ng/uL	100
8) Acenaphthylene	4.689	152	105127	1.71	ng/uL	100
9) Acenaphthene	4.808	153	73386	1.74	ng/uL	99
10) Fluorene	5.197	166	77397	1.77	ng/uL	100
12) Phenanthrene	5.975	178	116594	1.78	ng/uL	100
13) Anthracene	6.021	178	114076	1.75	ng/uL	99
14) Fluoranthene	7.003	202	124997	1.78	ng/uL	98
16) Pyrene	7.208	202	126192	1.79	ng/uL	99
18) Benzo[a]anthracene	8.495	228	92348	1.81	ng/uL	100
19) Chrysene	8.541	228	113011	1.80	ng/uL	99
21) Benzo[b]fluoranthene	10.160	252	88493	1.83	ng/uL	99
22) Benzo[k]fluoranthene	10.210	252	102881	1.84	ng/uL	99
23) Benzo[a]pyrene	10.778	252	82872	1.77	ng/uL	99
24) Indeno(1,2,3-c,d)pyrene	13.272	276	68110m	1.88	ng/uL	
25) Dibenzo[a,h]anthracene	13.313	278	79867	2.03	ng/uL#	94
26) Benzo[g,h,i]perylene	13.907	276	84800	1.85	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

*2/17/21*



TIC: SV8507.D\data.ms

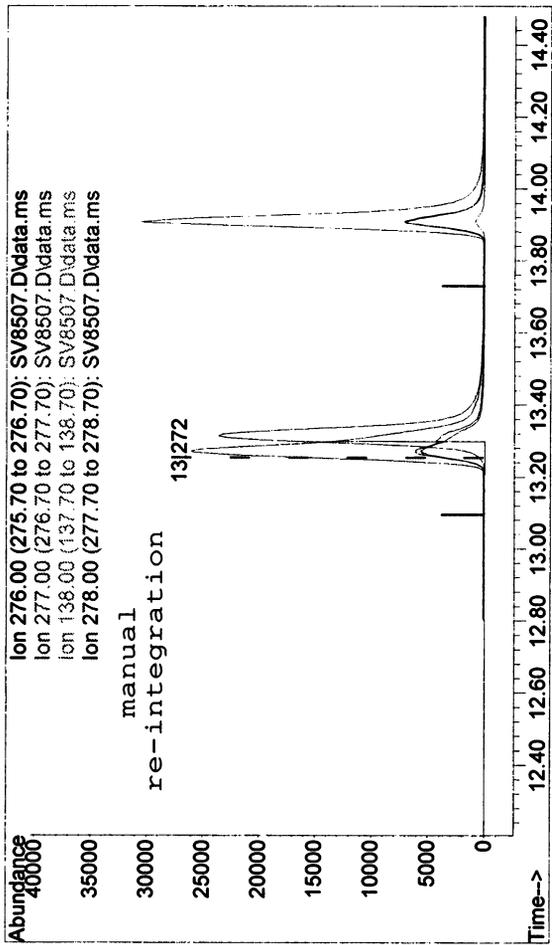
(24) Indeno(1,2,3-c,d)pyrene (tm)  
13.272min (+ 0.017) 2.56 ng/uL

response	94807	
Ion	Exp%	Act%
276.00	100.00	100.00
277.00	23.60	23.31
138.00	20.40	21.94
278.00	5.50	6.83

Reason for manual re-integration?

- missed peak assignment
- peak saturation (detector shutdown)
- over-integrated peak's area
- under-integrated peak's area
- other ( \_\_\_\_\_ )

initials:   u   date:   9/7/21  



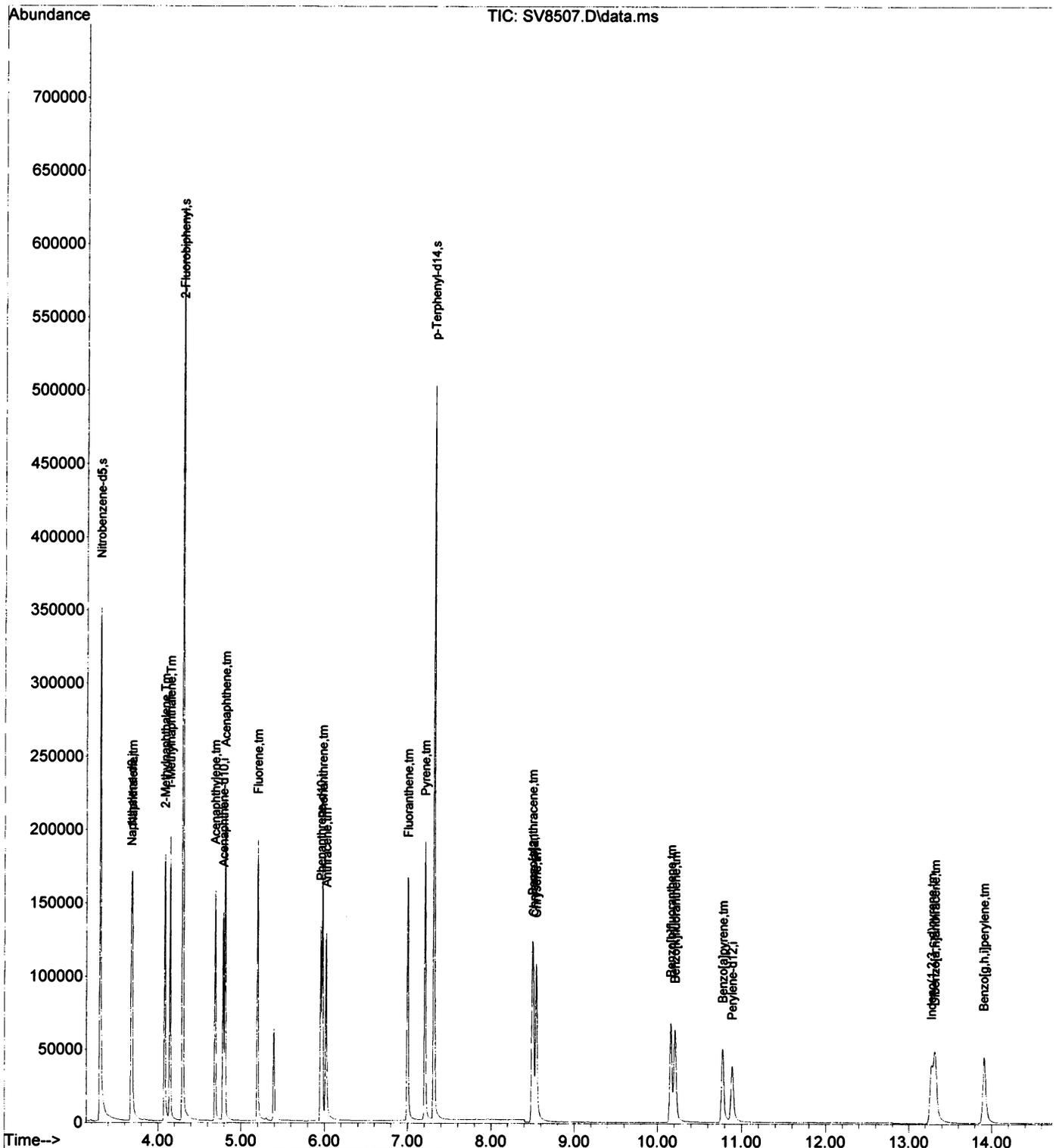
TIC: SV8507.D\data.ms

(24) Indeno(1,2,3-c,d)pyrene (tm)  
13.272min (+ 0.017) 1.88 ng/uL m

response	68110	
Ion	Exp%	Act%
276.00	100.00	100.00
277.00	23.60	23.31
138.00	20.40	21.94
278.00	5.50	6.83

Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8507.D  
 Acq On : 25 Aug 2021 7:45 pm  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : EX210811-1BLCS  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8508.D  
 Acq On : 25 Aug 2021 8:03 pm  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : EX210811-1BLCSB → 04-2LCSB  
 Misc :   
 ALS Vial : 14 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Naphthalene-d8	3.679	136	118963	2.00	ng/uL	0.00
6) Acenaphthene-d10	4.787	164	63002	2.00	ng/uL	0.00
11) Phenanthrene-d10	5.955	188	113113	2.00	ng/uL	0.00
15) Chrysene-d12	8.506	240	85839	2.00	ng/uL	0.00
20) Perylene-d12	10.888	264	75540	2.00	ng/uL	0.00
<b>System Monitoring Compounds</b>						
2) Nitrobenzene-d5	3.303	82	338584	9.13	ng/uL	0.00
Spiked Amount	10.000	Range	19 - 125	Recovery	=	91.30%
7) 2-Fluorobiphenyl	4.300	172	413345	8.89	ng/uL	0.00
Spiked Amount	10.000	Range	30 - 120	Recovery	=	88.90%
17) p-Terphenyl-d14	7.313	244	443303	10.18	ng/uL	0.00
Spiked Amount	10.000	Range	22 - 138	Recovery	=	101.80%
<b>Target Compounds</b>						
						Qvalue
3) Naphthalene	3.691	128	120212	1.77	ng/uL	100
4) 2-Methylnaphthalene	4.082	142	78600	1.85	ng/uL	98
5) 1-Methylnaphthalene	4.144	142	78004	1.75	ng/uL	99
8) Acenaphthylene	4.689	152	116251	1.78	ng/uL	99
9) Acenaphthene	4.808	153	81577	1.82	ng/uL	99
10) Fluorene	5.197	166	85633	1.85	ng/uL	99
12) Phenanthrene	5.974	178	131355	1.90	ng/uL	99
13) Anthracene	6.021	178	128950	1.87	ng/uL	98
14) Fluoranthene	7.003	202	142604	1.92	ng/uL	99
16) Pyrene	7.207	202	143247	1.91	ng/uL	99
18) Benzo[a]anthracene	8.495	228	105910	1.95	ng/uL	100
19) Chrysene	8.541	228	128575	1.93	ng/uL	99
21) Benzo[b]fluoranthene	10.160	252	101479	1.99	ng/uL	99
22) Benzo[k]fluoranthene	10.206	252	116017	1.97	ng/uL	99
23) Benzo[a]pyrene	10.777	252	93008	1.89	ng/uL	100
24) Indeno(1,2,3-c,d)pyrene	13.270	276	76536m	2.00	ng/uL	
25) Dibenzo[a,h]anthracene	13.316	278	89491	2.15	ng/uL	97
26) Benzo[g,h,i]perylene	13.907	276	95795	1.98	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

*a a/2/21*

(24) Indeno (1,2,3-c,d)pyrene (tm)  
13.270min (+ 0.015) 2.74 ng/uL  
response 107020

Ion	Exp%	Act%
276.00	100.00	100.00
277.00	23.60	23.80
138.00	20.40	21.47
278.00	5.50	6.02

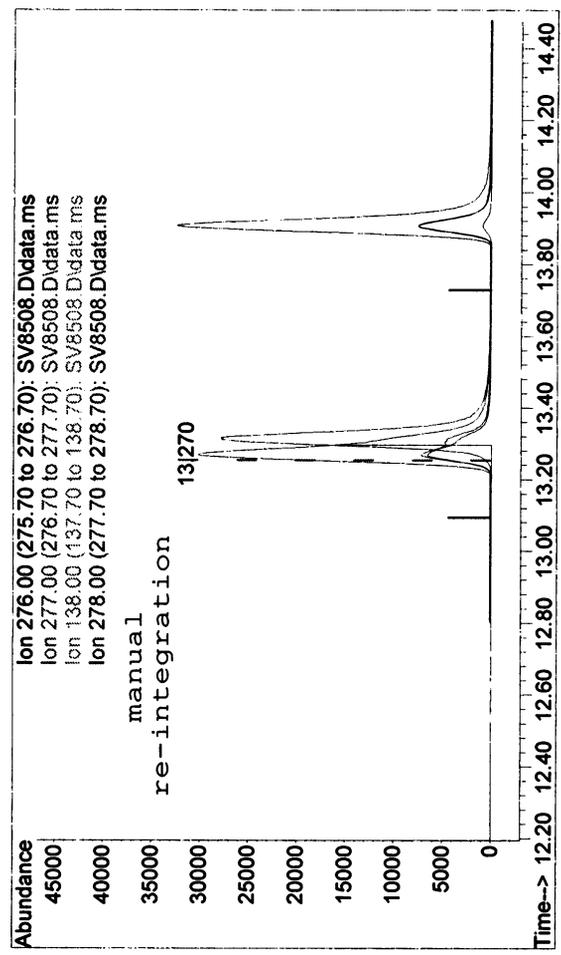
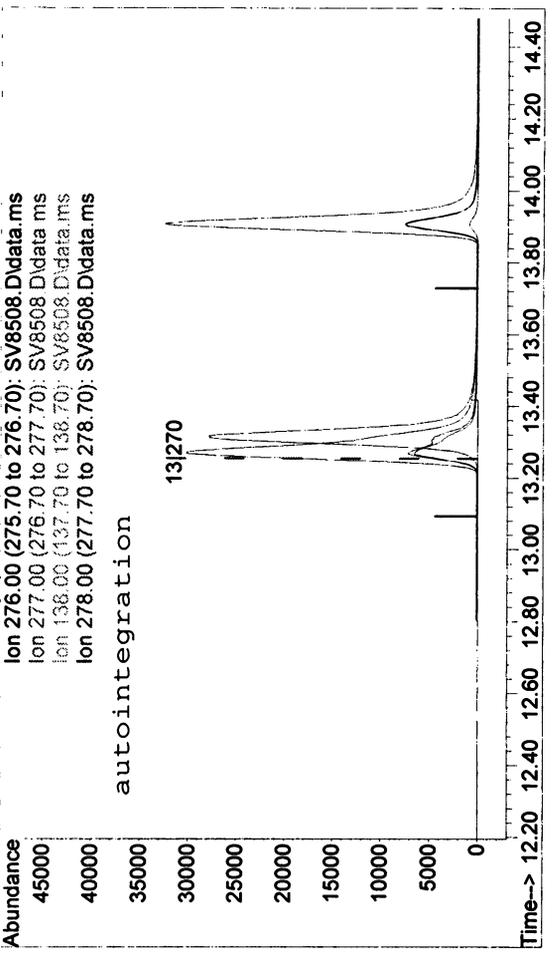
Reason for manual re-integration?

- missed peak assignment
- peak saturation (detector shutdown)
- over-integrated peak's area
- under-integrated peak's area
- other ( \_\_\_\_\_ )

initials:    date:   9 / 7 / 21  

(24) Indeno (1,2,3-c,d)pyrene (tm)  
13.270min (+ 0.015) 2.00 ng/uL m  
response 76536

Ion	Exp%	Act%
276.00	100.00	100.00
277.00	23.60	23.80
138.00	20.40	21.47
278.00	5.50	6.02



Data Path : C:\msdchem\1\data\2021\082521\  
 Data File : SV8508.D  
 Acq On : 25 Aug 2021 8:03 pm  
 Operator : TK HPSV4 sn #: CV11451177  
 Sample : EX210811-1BLCSD  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

DataAcq Meth:082521SP.M  
 Quant Method : C:\msdchem\1\methods\082521SP.M  
 Quant Title : SW8270D Selected Ion Monitoring (SIM PAH)  
 QLast Update : Thu Aug 26 23:51:20 2021  
 Response via : Initial Calibration

