

## **DATA PACKAGE SEMI-VOLATILE ORGANICS**

**PROJECT NAME : FORMER SCHLUMBERGER SITE PRINCETON NJ**

**JACOBS ENGINEERING GROUP, INC.**

**412 Mt. Kemble Ave**

**Downtown Building**

**Morristown, NJ - 07960**

**Phone No: 9732670555**

**ORDER ID : P3671**

**ATTENTION : Mary I. Murphy**



**Laboratory Certification ID # 20012**



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## Cover Page

**Order ID :** P3671

**Project ID :** Former Schlumberger Site Princeton NJ

**Client :** JACOBS Engineering Group, Inc.

### Lab Sample Number

P3671-01  
P3671-02  
P3671-03  
P3671-04  
P3671-05  
P3671-06  
P3671-07  
P3671-08  
P3671-09  
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P3671-15

### Client Sample Number

S-904-J-SO-0-0.5-081924  
S-904-J-SO-0.5-1.0-081924  
S-911-K1-SO-0-0.5-081924  
S-911-K1-SO-0.5-1-081924  
S-911-K1-SO-0-0.5-081924-FD  
S-905-J-SO-0-0.5-081924  
S-905-J-SO-0-0.5-081924-FD  
S-905-J-SO-0.5-1.0-081924  
S-928-K1-SO-0-0.5-081924  
S-928-K1-SO-0.5-1-081924  
S-903-J-SO-0-0.5-081924  
S-903-J-SO-0.5-1.0-081924  
S-912-J-SO-0-0.5-081924  
S-912-J-SO-0.5-1-081924  
TB-01-081924

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 2:14 pm, Jun 03, 2025*

Date: 6/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



## **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.**

**Project Name: Former Schlumberger Site Princeton NJ**

**Project # N/A**

**Order ID # P3671**

**Test Name: SVOCMS Group3**

### **A. Number of Samples and Date of Receipt:**

14 Solid samples were received on 08/19/2024.

1 Water sample was received on 08/19/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOCMS Group3, SVOCMS Group5, TOC, VOCMS Group 4, VOCMS Group3, VOCMS Group5 and VOCMS Group6. This data package contains results for SVOCMS Group3.

### **C. Analytical Techniques:**

The samples were analyzed on instrument BNA\_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOCMS Group3 was based on method 8270-Modified and extraction was done based on method 3541.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for  
S-905-J-SO-0-0.5-081924 [Fluoranthene-d10 - 28%, Terphenyl-d14 - 22%],  
S-905-J-SO-0-0.5-081924DL [Fluoranthene-d10 - 26%, Terphenyl-d14 - 23%],  
S-905-J-SO-0-0.5-081924-FD [Terphenyl-d14 - 24%],  
S-905-J-SO-0-0.5-081924-FDDL [Terphenyl-d14 - 28%],  
S-912-J-SO-0-0.5-081924 [Terphenyl-d14 - 24%], these compounds did not meet the NJDKQP criteria but met the in-house criteria, while  
S-912-J-SO-0.5-1-081924 [Fluoranthene-d10 - 24%, this compound did not meet the NJDKQP criteria but met the in-house criteria but [Terphenyl-d14 - 20%], this compound did not meet the NJDKQP criteria and in-house criteria and as per method one surrogate is allowed to failed therefore no corrective action was taken.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples .  
The Blank analysis did not indicate the presence of lab contamination.  
The Initial Calibration met the requirements .  
The Continuous Calibration met the requirements .  
The Tuning criteria met requirements.

Samples S-905-J-SO-0-0.5-081924, S-905-J-SO-0-0.5-081924-FD and S-903-J-SO-0.5-1.0-081924 were diluted due to high concentrations.

**E. Additional Comments:**

This Data Package has been revised due to Client ID Change for some sample as per Client Request.

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The soil samples results are based on a dry weight basis.

Samples S-904-J-SO-0-0.5-081924, S-904-J-SO-0.5-1.0-081924, S-905-J-SO-0.5-1.0-081924, S-903-J-SO-0-0.5-081924, were not analyzed in SIM due to high concentration of the target compound in Total scan analysis.

For sample # S-912-J-SO-0.5-1-081924 some compounds below Method detection limits, therefore it is not reported as Hit in Form-1.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

**F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 2:14 pm, Jun 03, 2025*

## DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Value     | If the result is a value greater than or equal to the detection limit, report the value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>U</b>  | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.                                                                                                                                                                                                                                                                                      |
| <b>ND</b> | Indicates the analyte was analyzed for, but not detected                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>J</b>  | Indicates an estimated value. This flag is used: <ul style="list-style-type: none"> <li>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)</li> <li>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.</li> </ul> |
| <b>B</b>  | Indicates the analyte was found in the blank as well as the sample report as “12 B”.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>E</b>  | Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>D</b>  | This flag identifies all compounds identified in an analysis at a secondary dilution factor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>P</b>  | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.                                                                                                                                                                                                                                                                                                                                                                             |
| <b>N</b>  | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.                                                                                                                                                                                                                                                                       |
| <b>A</b>  | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Q</b>  | Indicates the LCS did not meet the control limits requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY**

ORDER ID: P3671

MATRIX: Solid

METHOD: 8270-Modified/3541

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NA | NO | YES |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|
| 1. | Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |    | ✓   |
| 2. | GC/MS Tuning Specifications. DFTPP Meet Criteria.<br>(NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP,<br>CLP AND NJ)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |    | ✓   |
| 3. | GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for<br>8000 Series.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |    | ✓   |
| 4. | GC/MS Calibration - Initial Calibration performed within 30 days before sample<br>analysis and continuing calibration performed within 24 hours of sample analysis for<br>600 series and 12 hours for 8000 series.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |    | ✓   |
| 5. | GC/MS Calibration Requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |    | ✓   |
|    | The Initial Calibration met the requirements .<br>The Continuous Calibration met the requirements .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |    |     |
| 6. | Blank Contamination - If yes, list compounds and concentrations in each blank:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    | ✓  |     |
| 7. | Surrogate Recoveries Meet Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    | ✓  |     |
|    | If not met, list those compounds and their recoveries which fall outside the acceptable<br>ranges.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |    |     |
|    | The Surrogate recoveries met the acceptable criteria except for<br>S-905-J-SO-0-0.5-081924 [Fluoranthene-d10 - 28%, Terphenyl-d14 - 22%],<br>S-905-J-SO-0-0.5-081924DL [Fluoranthene-d10 - 26%, Terphenyl-d14 - 23%],<br>S-905-J-SO-0-0.5-081924-FD [Terphenyl-d14 - 24%],<br>S-905-J-SO-0-0.5-081924-FDDL [Terphenyl-d14 - 28%],<br>S-912-J-SO-0-0.5-081924 [Terphenyl-d14 - 24%], these compounds did not meet the<br>NJDKQP criteria but met the in-house criteria, while<br>S-912-J-SO-0.5-1-081924 [Fluoranthene-d10 - 24%, this compound did not meet the<br>NJDKQP criteria but met the in-house criteria but Terphenyl-d14 - 20%], this<br>compound did not meet the NJDKQP criteria and in-house criteria and as per method<br>one surrogate is allowed to failed therefore no corrective action was taken. |    |    |     |

**GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY**

**(CONTINUED)**

|     |                                                                                                | NA | NO | YES |
|-----|------------------------------------------------------------------------------------------------|----|----|-----|
| 8.  | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria                                   |    |    | ✓   |
|     | If not met, list those compounds and their recoveries which fall outside the acceptable range. |    |    |     |
|     | The Blank Spike met requirements for all samples .                                             |    |    |     |
| 9.  | Internal Standard Area/Retention Time Shift Meet Criteria                                      |    |    | ✓   |
|     | Comments:                                                                                      |    |    |     |
| 10. | Extraction Holding Time Met                                                                    |    |    | ✓   |
|     | If not met, list number of days exceeded for each sample:                                      |    |    |     |
| 11. | Analysis Holding Time Met                                                                      |    |    | ✓   |
|     | If not met, list number of days exceeded for each sample:                                      |    |    |     |

**ADDITIONAL COMMENTS:**

Samples S-905-J-SO-0-0.5-081924, S-905-J-SO-0-0.5-081924-FD and S-903-J-SO-0.5-1.0-081924 were diluted due to high concentrations.

This Data Package has been Revised due to Client ID Change for some sample as per Client Request.

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The soil samples results are based on a dry weight basis.

Samples S-904-J-SO-0-0.5-081924, S-904-J-SO-0.5-1.0-081924, S-905-J-SO-0.5-1.0-081924, S-903-J-SO-0-0.5-081924, were not analyzed in SIM due to high concentration of the target compound in Total scan analysis.

For sample # S-912-J-SO-0.5-1-081924 some compounds below Method detection limits, therefore it is not reported as Hit in Form-1.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added

**ALLIANCE** 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

**GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY**

**(CONTINUED)**

NA NO YES

and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

**REVIEWED**

QA REVIEW

By Sohil Jodhani, QA/QC Director at 12:04 pm, Jun 03, 2025

APPENDIX A

**QA REVIEW GENERAL DOCUMENTATION**

Project #: P3671

Completed

For thorough review, the report must have the following:

**GENERAL:**

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

**COVER PAGE:**

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

**CHAIN OF CUSTODY:**

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

**ANALYTICAL:**

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 06/03/2025

## LAB CHRONICLE

|                 |                                |                   |                                        |
|-----------------|--------------------------------|-------------------|----------------------------------------|
| <b>OrderID:</b> | P3671                          | <b>OrderDate:</b> | 8/20/2024 10:36:00 AM                  |
| <b>Client:</b>  | JACOBS Engineering Group, Inc. | <b>Project:</b>   | Former Schlumberger Site Princeton NJ  |
| <b>Contact:</b> | Mary I. Murphy                 | <b>Location:</b>  | G11,VOA Ref. #2 Soil,VOA Ref. #3 Water |

| LabID             | ClientID                                | Matrix      | Test          | Method        | Sample Date     | Prep Date | Anal Date | Received        |
|-------------------|-----------------------------------------|-------------|---------------|---------------|-----------------|-----------|-----------|-----------------|
| <b>P3671-01</b>   | <b>S-904-J-SO-0-0.5-081<br/>924</b>     | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |
|                   |                                         |             | SVOCMS Group5 | 8270E         |                 | 08/21/24  | 08/22/24  |                 |
| <b>P3671-01DL</b> | <b>S-904-J-SO-0-0.5-081<br/>924DL</b>   | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |
|                   |                                         |             | SVOCMS Group5 | 8270E         |                 | 08/21/24  | 08/26/24  |                 |
| <b>P3671-02</b>   | <b>S-904-J-SO-0.5-1.0-0<br/>81924</b>   | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |
|                   |                                         |             | SVOCMS Group5 | 8270E         |                 | 08/21/24  | 08/22/24  |                 |
| <b>P3671-03</b>   | <b>S-911-K1-SO-0-0.5-08<br/>1924</b>    | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |
|                   |                                         |             | SVOCMS Group3 | 8270-Modified |                 | 08/21/24  | 08/23/24  |                 |
|                   |                                         |             | SVOCMS Group5 | 8270E         |                 | 08/21/24  | 08/22/24  |                 |
| <b>P3671-04</b>   | <b>S-911-K1-SO-0.5-1-08<br/>1924</b>    | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |
|                   |                                         |             | SVOCMS Group3 | 8270-Modified |                 | 08/21/24  | 08/23/24  |                 |
|                   |                                         |             | SVOCMS Group5 | 8270E         |                 | 08/21/24  | 08/22/24  |                 |
| <b>P3671-05</b>   | <b>S-911-K1-SO-0-0.5-08<br/>1924-FD</b> | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |
|                   |                                         |             | SVOCMS Group3 | 8270-Modified |                 | 08/21/24  | 08/23/24  |                 |
|                   |                                         |             | SVOCMS Group5 | 8270E         |                 | 08/21/24  | 08/22/24  |                 |
| <b>P3671-06</b>   | <b>S-905-J-SO-0-0.5-081<br/>924</b>     | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |
|                   |                                         |             | SVOCMS Group3 | 8270-Modified |                 | 08/21/24  | 08/23/24  |                 |
|                   |                                         |             | SVOCMS Group5 | 8270E         |                 | 08/21/24  | 08/22/24  |                 |
| <b>P3671-06DL</b> | <b>S-905-J-SO-0-0.5-081<br/>924DL</b>   | <b>SOIL</b> |               |               | <b>08/19/24</b> |           |           | <b>08/19/24</b> |



### LAB CHRONICLE

|                   |                                          |             |               |               |                 |          |  |                 |
|-------------------|------------------------------------------|-------------|---------------|---------------|-----------------|----------|--|-----------------|
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/23/24 |  |                 |
| <b>P3671-07</b>   | <b>S-905-J-SO-0-0.5-081<br/>924-FD</b>   | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/23/24 |  |                 |
|                   |                                          |             | SVOCMS Group5 | 8270E         | 08/21/24        | 08/22/24 |  |                 |
| <b>P3671-07DL</b> | <b>S-905-J-SO-0-0.5-081<br/>924-FDDL</b> | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/24/24 |  |                 |
| <b>P3671-08</b>   | <b>S-905-J-SO-0.5-1.0-0<br/>81924</b>    | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group5 | 8270E         | 08/21/24        | 08/22/24 |  |                 |
| <b>P3671-09</b>   | <b>S-928-K1-SO-0-0.5-08<br/>1924</b>     | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/23/24 |  |                 |
|                   |                                          |             | SVOCMS Group5 | 8270E         | 08/21/24        | 08/22/24 |  |                 |
| <b>P3671-10</b>   | <b>S-928-K1-SO-0.5-1-08<br/>1924</b>     | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/23/24 |  |                 |
|                   |                                          |             | SVOCMS Group5 | 8270E         | 08/21/24        | 08/22/24 |  |                 |
| <b>P3671-11</b>   | <b>S-903-J-SO-0-0.5-081<br/>924</b>      | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group5 | 8270E         | 08/21/24        | 08/22/24 |  |                 |
| <b>P3671-12</b>   | <b>S-903-J-SO-0.5-1.0-0<br/>81924</b>    | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/23/24 |  |                 |
|                   |                                          |             | SVOCMS Group5 | 8270E         | 08/21/24        | 08/22/24 |  |                 |
| <b>P3671-12DL</b> | <b>S-903-J-SO-0.5-1.0-0<br/>81924DL</b>  | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/24/24 |  |                 |
| <b>P3671-13</b>   | <b>S-912-J-SO-0-0.5-081<br/>924</b>      | <b>SOIL</b> |               |               | <b>08/19/24</b> |          |  | <b>08/19/24</b> |
|                   |                                          |             | SVOCMS Group3 | 8270-Modified | 08/21/24        | 08/23/24 |  |                 |
|                   |                                          |             | SVOCMS Group5 | 8270E         | 08/21/24        | 08/22/24 |  |                 |

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| P3671-14 | S-912-J-SO-0.5-1-081<br>924 | SOIL | 08/19/24      |               | 08/19/24 |          |
|----------|-----------------------------|------|---------------|---------------|----------|----------|
|          |                             |      | SVOCMS Group3 | 8270-Modified | 08/21/24 | 08/22/24 |
|          |                             |      | SVOCMS Group5 | 8270E         | 08/21/24 | 08/22/24 |

### Hit Summary Sheet SW-846

SDG No.: P3671

Client: JACOBS Engineering Group, Inc.

| Sample ID                                   | Client ID              | Matrix | Parameter              | Concentration | C | MDL | RDL | Units |
|---------------------------------------------|------------------------|--------|------------------------|---------------|---|-----|-----|-------|
| <b>Client ID : S-911-K1-SO-0-0.5-081924</b> |                        |        |                        |               |   |     |     |       |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Naphthalene            | 2.300         | J | 1.5 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | 2-Methylnaphthalene    | 2.700         | J | 1.7 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Acenaphthylene         | 2.700         | J | 1.3 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Acenaphthene           | 1.600         | J | 1.2 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Fluorene               | 4.300         | J | 1.3 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Phenanthrene           | 23.500        |   | 1.3 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Anthracene             | 4.200         | J | 1.7 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Fluoranthene           | 53.100        |   | 1.4 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Pyrene                 | 37.400        |   | 2   | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Benzo(a)anthracene     | 21.600        |   | 1.6 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Chrysene               | 29.100        |   | 1.8 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Benzo(b)fluoranthene   | 36.100        |   | 2.5 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Benzo(k)fluoranthene   | 13.800        |   | 2.1 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Benzo(a)pyrene         | 27.400        |   | 3.5 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Indeno(1,2,3-cd)pyrene | 16.700        |   | 2.7 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Dibenzo(a,h)anthracene | 4.800         | J | 2.5 | 7   | ug/Kg |
| P3671-03                                    | S-911-K1-SO-0-0.5-0819 | SOIL   | Benzo(g,h,i)perylene   | 19.800        |   | 2.4 | 7   | ug/Kg |

**Total Svoc :**

**301.10**

**Total Concentration:**

**301.10**

**Client ID : S-911-K1-SO-0.5-1-081924**

|          |                        |      |                        |         |  |      |     |       |
|----------|------------------------|------|------------------------|---------|--|------|-----|-------|
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Naphthalene            | 8.400   |  | 1.2  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | 2-Methylnaphthalene    | 8.600   |  | 1.4  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Acenaphthylene         | 17.400  |  | 1.1  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Acenaphthene           | 6.700   |  | 0.98 | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Fluorene               | 7.700   |  | 1.1  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Phenanthrene           | 110.000 |  | 1.1  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Anthracene             | 20.000  |  | 1.4  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Fluoranthene           | 250.000 |  | 1.2  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Pyrene                 | 190.000 |  | 1.7  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Benzo(a)anthracene     | 110.000 |  | 1.4  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Chrysene               | 140.000 |  | 1.5  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Benzo(b)fluoranthene   | 180.000 |  | 2.1  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Benzo(k)fluoranthene   | 60.700  |  | 1.7  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Benzo(a)pyrene         | 130.000 |  | 3    | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Indeno(1,2,3-cd)pyrene | 80.600  |  | 2.2  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Dibenzo(a,h)anthracene | 22.900  |  | 2.1  | 5.9 | ug/Kg |
| P3671-04 | S-911-K1-SO-0.5-1-0819 | SOIL | Benzo(g,h,i)perylene   | 94.000  |  | 2    | 5.9 | ug/Kg |

### Hit Summary Sheet SW-846

**SDG No.:** P3671  
**Client:** JACOBS Engineering Group, Inc.

| Sample ID            | Client ID                   | Matrix | Parameter              | Concentration | C   | MDL  | RDL | Units |
|----------------------|-----------------------------|--------|------------------------|---------------|-----|------|-----|-------|
| Total Svoc :         |                             |        |                        | 1,437.00      |     |      |     |       |
| Total Concentration: |                             |        |                        | 1,437.00      |     |      |     |       |
| Client ID :          | S-911-K1-SO-0-0.5-081924-FD |        |                        |               |     |      |     |       |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Naphthalene            | 16.400        | 2   |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | 2-Methylnaphthalene    | 19.500        | 2.3 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Acenaphthylene         | 32.700        | 1.8 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Acenaphthene           | 10.700        | 1.6 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Fluorene               | 14.200        | 1.7 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Phenanthrene           | 190.000       | 1.8 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Anthracene             | 34.300        | 2.3 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Fluoranthene           | 440.000       | 1.9 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Pyrene                 | 320.000       | 2.7 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Benzo(a)anthracene     | 190.000       | 2.2 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Chrysene               | 230.000       | 2.5 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Benzo(b)fluoranthene   | 290.000       | 3.4 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Benzo(k)fluoranthene   | 100.000       | 2.8 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Benzo(a)pyrene         | 220.000       | 4.7 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Indeno(1,2,3-cd)pyrene | 130.000       | 3.6 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Dibenzo(a,h)anthracene | 38.300        | 3.3 |      | 9.4 | ug/Kg |
| P3671-05             | S-911-K1-SO-0-0.5-0819      | SOIL   | Benzo(g,h,i)perylene   | 160.000       | 3.3 |      | 9.4 | ug/Kg |
| Total Svoc :         |                             |        |                        | 2,436.10      |     |      |     |       |
| Total Concentration: |                             |        |                        | 2,436.10      |     |      |     |       |
| Client ID :          | S-905-J-SO-0-0.5-081924     |        |                        |               |     |      |     |       |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Naphthalene            | 2.000         | J   | 0.88 | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | 2-Methylnaphthalene    | 1.600         | J   | 1    | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Acenaphthylene         | 2.400         | J   | 0.8  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Acenaphthene           | 18.000        |     | 0.7  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Fluorene               | 15.500        |     | 0.77 | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Phenanthrene           | 210.000       |     | 0.8  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Anthracene             | 45.800        |     | 1    | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Fluoranthene           | 380.000       | E   | 0.85 | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Pyrene                 | 270.000       | E   | 1.2  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Benzo(a)anthracene     | 190.000       |     | 0.97 | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Chrysene               | 190.000       |     | 1.1  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Benzo(b)fluoranthene   | 250.000       | E   | 1.5  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Benzo(k)fluoranthene   | 91.700        |     | 1.3  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Benzo(a)pyrene         | 210.000       |     | 2.1  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Indeno(1,2,3-cd)pyrene | 110.000       |     | 1.6  | 4.2 | ug/Kg |
| P3671-06             | S-905-J-SO-0-0.5-081924     | SOIL   | Dibenzo(a,h)anthracene | 31.500        |     | 1.5  | 4.2 | ug/Kg |

### Hit Summary Sheet SW-846

**SDG No.:** P3671  
**Client:** JACOBS Engineering Group, Inc.

| Sample ID                              | Client ID               | Matrix | Parameter              | Concentration | C  | MDL  | RDL  | Units |
|----------------------------------------|-------------------------|--------|------------------------|---------------|----|------|------|-------|
| P3671-06                               | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(g,h,i)perylene   | 120.000       |    | 1.5  | 4.2  | ug/Kg |
| Total Svoc :                           |                         |        |                        | 2,138.50      |    |      |      |       |
| Total Concentration:                   |                         |        |                        | 2,138.50      |    |      |      |       |
| Client ID : S-905-J-SO-0-0.5-081924DL  |                         |        |                        |               |    |      |      |       |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Acenaphthene           | 15.900        | JD | 3.5  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Fluorene               | 13.600        | JD | 3.8  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Phenanthrene           | 180.000       | D  | 4    | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Anthracene             | 38.900        | D  | 5    | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Fluoranthene           | 340.000       | D  | 4.3  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Pyrene                 | 240.000       | D  | 6.1  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(a)anthracene     | 180.000       | D  | 4.8  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Chrysene               | 160.000       | D  | 5.5  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(b)fluoranthene   | 210.000       | D  | 7.6  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(k)fluoranthene   | 82.100        | D  | 6.3  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(a)pyrene         | 180.000       | D  | 10.6 | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Indeno(1,2,3-cd)pyrene | 93.100        | D  | 8    | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Dibenzo(a,h)anthracene | 28.100        | D  | 7.5  | 21.1 | ug/Kg |
| P3671-06DL                             | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(g,h,i)perylene   | 110.000       | D  | 7.3  | 21.1 | ug/Kg |
| Total Svoc :                           |                         |        |                        | 1,871.70      |    |      |      |       |
| Total Concentration:                   |                         |        |                        | 1,871.70      |    |      |      |       |
| Client ID : S-905-J-SO-0-0.5-081924-FD |                         |        |                        |               |    |      |      |       |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Naphthalene            | 2.100         | J  | 0.9  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | 2-Methylnaphthalene    | 1.500         | J  | 1    | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Acenaphthylene         | 3.200         | J  | 0.82 | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Acenaphthene           | 24.900        |    | 0.72 | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Fluorene               | 22.400        |    | 0.78 | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Phenanthrene           | 400.000       | E  | 0.82 | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Anthracene             | 130.000       |    | 1    | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Fluoranthene           | 1,300.000     | E  | 0.87 | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Pyrene                 | 710.000       | E  | 1.2  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(a)anthracene     | 710.000       | E  | 0.99 | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Chrysene               | 630.000       | E  | 1.1  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(b)fluoranthene   | 750.000       | E  | 1.6  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(k)fluoranthene   | 280.000       | E  | 1.3  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(a)pyrene         | 650.000       | E  | 2.2  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Indeno(1,2,3-cd)pyrene | 280.000       | E  | 1.6  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Dibenzo(a,h)anthracene | 90.500        |    | 1.5  | 4.3  | ug/Kg |
| P3671-07                               | S-905-J-SO-0-0.5-081924 | SOIL   | Benzo(g,h,i)perylene   | 290.000       | E  | 1.5  | 4.3  | ug/Kg |
| Total Svoc :                           |                         |        |                        | 6,274.60      |    |      |      |       |

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** P3671  
**Client:** JACOBS Engineering Group, Inc.

| Sample ID            | Client ID                    | Matrix | Parameter              | Concentration | C  | MDL  | RDL  | Units |
|----------------------|------------------------------|--------|------------------------|---------------|----|------|------|-------|
| Total Concentration: |                              |        |                        | 6,274.60      |    |      |      |       |
| Client ID :          | S-905-J-SO-0-0.5-081924-FDDL |        |                        |               |    |      |      |       |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Acenaphthene           | 23.500        | JD | 7.2  | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Fluorene               | 20.900        | JD | 7.8  | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Phenanthrene           | 370.000       | D  | 8.2  | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Anthracene             | 110.000       | D  | 10.3 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Fluoranthene           | 1,200.000     | D  | 8.7  | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Pyrene                 | 810.000       | D  | 12.4 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Benzo(a)anthracene     | 760.000       | D  | 9.9  | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Chrysene               | 650.000       | D  | 11.2 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Benzo(b)fluoranthene   | 800.000       | D  | 15.5 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Benzo(k)fluoranthene   | 270.000       | D  | 12.8 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Benzo(a)pyrene         | 660.000       | D  | 21.7 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Indeno(1,2,3-cd)pyrene | 280.000       | D  | 16.4 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Dibenzo(a,h)anthracene | 93.100        | D  | 15.3 | 43.1 | ug/Kg |
| P3671-07DL           | S-905-J-SO-0-0.5-081924 SOIL |        | Benzo(g,h,i)perylene   | 290.000       | D  | 14.9 | 43.1 | ug/Kg |
| Total Svoc :         |                              |        |                        | 6,337.50      |    |      |      |       |
| Total Concentration: |                              |        |                        | 6,337.50      |    |      |      |       |
| Client ID :          | S-928-K1-SO-0-0.5-081924     |        |                        |               |    |      |      |       |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Acenaphthylene         | 2.000         | J  | 1.3  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Phenanthrene           | 13.000        |    | 1.3  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Anthracene             | 2.200         | J  | 1.6  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Fluoranthene           | 28.700        |    | 1.4  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Pyrene                 | 23.000        |    | 2    | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Benzo(a)anthracene     | 12.900        |    | 1.6  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Chrysene               | 17.100        |    | 1.8  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Benzo(b)fluoranthene   | 21.000        |    | 2.5  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Benzo(k)fluoranthene   | 8.000         |    | 2    | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Benzo(a)pyrene         | 15.700        |    | 3.4  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Indeno(1,2,3-cd)pyrene | 9.400         |    | 2.6  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Dibenzo(a,h)anthracene | 2.700         | J  | 2.4  | 6.9  | ug/Kg |
| P3671-09             | S-928-K1-SO-0-0.5-0819 SOIL  |        | Benzo(g,h,i)perylene   | 11.300        |    | 2.4  | 6.9  | ug/Kg |
| Total Svoc :         |                              |        |                        | 167.00        |    |      |      |       |
| Total Concentration: |                              |        |                        | 167.00        |    |      |      |       |
| Client ID :          | S-928-K1-SO-0.5-1-081924     |        |                        |               |    |      |      |       |
| P3671-10             | S-928-K1-SO-0.5-1-0819 SOIL  |        | Acenaphthylene         | 3.100         | J  | 1.1  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819 SOIL  |        | Fluorene               | 1.400         | J  | 1    | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819 SOIL  |        | Phenanthrene           | 12.500        |    | 1.1  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819 SOIL  |        | Anthracene             | 2.000         | J  | 1.4  | 5.8  | ug/Kg |

### Hit Summary Sheet SW-846

**SDG No.:** P3671  
**Client:** JACOBS Engineering Group, Inc.

| Sample ID            | Client ID                   | Matrix | Parameter              | Concentration | C  | MDL  | RDL  | Units |
|----------------------|-----------------------------|--------|------------------------|---------------|----|------|------|-------|
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Fluoranthene           | 26.800        |    | 1.2  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Pyrene                 | 20.000        |    | 1.7  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Benzo(a)anthracene     | 9.800         |    | 1.3  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Chrysene               | 15.800        |    | 1.5  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Benzo(b)fluoranthene   | 20.900        |    | 2.1  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Benzo(k)fluoranthene   | 8.000         |    | 1.7  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Benzo(a)pyrene         | 14.000        |    | 2.9  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Indeno(1,2,3-cd)pyrene | 9.600         |    | 2.2  | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Dibenzo(a,h)anthracene | 2.600         | J  | 2    | 5.8  | ug/Kg |
| P3671-10             | S-928-K1-SO-0.5-1-0819      | SOIL   | Benzo(g,h,i)perylene   | 11.800        |    | 2    | 5.8  | ug/Kg |
| Total Svoc :         |                             |        |                        | 158.30        |    |      |      |       |
| Total Concentration: |                             |        |                        | 158.30        |    |      |      |       |
|                      |                             |        |                        |               |    |      |      |       |
| Client ID :          | S-903-J-SO-0.5-1.0-081924   |        |                        |               |    |      |      |       |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Naphthalene            | 3.600         | J  | 0.8  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | 2-Methylnaphthalene    | 2.700         | J  | 0.93 | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Acenaphthylene         | 6.300         |    | 0.73 | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Acenaphthene           | 25.800        |    | 0.64 | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Fluorene               | 26.600        |    | 0.7  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Phenanthrene           | 440.000       | E  | 0.73 | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Anthracene             | 85.300        |    | 0.92 | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Fluoranthene           | 860.000       | E  | 0.78 | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Pyrene                 | 480.000       | E  | 1.1  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Benzo(a)anthracene     | 310.000       | E  | 0.88 | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Chrysene               | 330.000       | E  | 1    | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Benzo(b)fluoranthene   | 420.000       | E  | 1.4  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Benzo(k)fluoranthene   | 140.000       |    | 1.1  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Benzo(a)pyrene         | 340.000       | E  | 1.9  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Indeno(1,2,3-cd)pyrene | 180.000       |    | 1.5  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Dibenzo(a,h)anthracene | 51.700        |    | 1.4  | 3.8  | ug/Kg |
| P3671-12             | S-903-J-SO-0.5-1.0-0819     | SOIL   | Benzo(g,h,i)perylene   | 210.000       | E  | 1.3  | 3.8  | ug/Kg |
| Total Svoc :         |                             |        |                        | 3,912.00      |    |      |      |       |
| Total Concentration: |                             |        |                        | 3,912.00      |    |      |      |       |
|                      |                             |        |                        |               |    |      |      |       |
| Client ID :          | S-903-J-SO-0.5-1.0-081924DL |        |                        |               |    |      |      |       |
| P3671-12DL           | S-903-J-SO-0.5-1.0-0819     | SOIL   | Acenaphthene           | 28.300        | JD | 6.4  | 38.4 | ug/Kg |
| P3671-12DL           | S-903-J-SO-0.5-1.0-0819     | SOIL   | Fluorene               | 27.500        | JD | 7    | 38.4 | ug/Kg |
| P3671-12DL           | S-903-J-SO-0.5-1.0-0819     | SOIL   | Phenanthrene           | 450.000       | D  | 7.3  | 38.4 | ug/Kg |
| P3671-12DL           | S-903-J-SO-0.5-1.0-0819     | SOIL   | Anthracene             | 79.800        | D  | 9.2  | 38.4 | ug/Kg |
| P3671-12DL           | S-903-J-SO-0.5-1.0-0819     | SOIL   | Fluoranthene           | 850.000       | D  | 7.8  | 38.4 | ug/Kg |
| P3671-12DL           | S-903-J-SO-0.5-1.0-0819     | SOIL   | Pyrene                 | 570.000       | D  | 11   | 38.4 | ug/Kg |



### Hit Summary Sheet SW-846

**SDG No.:** P3671  
**Client:** JACOBS Engineering Group, Inc.

| Sample ID                   | Client ID               | Matrix | Parameter              | Concentration   | C | MDL  | RDL  | Units |
|-----------------------------|-------------------------|--------|------------------------|-----------------|---|------|------|-------|
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Benzo(a)anthracene     | 340.000         | D | 8.8  | 38.4 | ug/Kg |
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Chrysene               | 370.000         | D | 10   | 38.4 | ug/Kg |
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Benzo(b)fluoranthene   | 460.000         | D | 13.8 | 38.4 | ug/Kg |
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Benzo(k)fluoranthene   | 150.000         | D | 11.4 | 38.4 | ug/Kg |
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Benzo(a)pyrene         | 370.000         | D | 19.3 | 38.4 | ug/Kg |
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Indeno(1,2,3-cd)pyrene | 200.000         | D | 14.6 | 38.4 | ug/Kg |
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Dibenzo(a,h)anthracene | 58.100          | D | 13.6 | 38.4 | ug/Kg |
| P3671-12DL                  | S-903-J-SO-0.5-1.0-0819 | SOIL   | Benzo(g,h,i)perylene   | 230.000         | D | 13.3 | 38.4 | ug/Kg |
| <b>Total Svoc :</b>         |                         |        |                        | <b>4,183.70</b> |   |      |      |       |
| <b>Total Concentration:</b> |                         |        |                        | <b>4,183.70</b> |   |      |      |       |

**Client ID : S-912-J-SO-0.5-081924**

|                             |                       |      |                        |                 |   |     |      |       |
|-----------------------------|-----------------------|------|------------------------|-----------------|---|-----|------|-------|
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Naphthalene            | 13.200          |   | 2.2 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | 2-Methylnaphthalene    | 12.700          |   | 2.6 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Acenaphthylene         | 11.300          |   | 2.1 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Acenaphthene           | 5.900           | J | 1.8 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Fluorene               | 6.800           | J | 2   | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Phenanthrene           | 100.000         |   | 2.1 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Anthracene             | 19.000          |   | 2.6 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Fluoranthene           | 220.000         |   | 2.2 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Pyrene                 | 140.000         |   | 3.1 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Benzo(a)anthracene     | 83.800          |   | 2.5 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Chrysene               | 100.000         |   | 2.8 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Benzo(b)fluoranthene   | 130.000         |   | 3.9 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Benzo(k)fluoranthene   | 44.000          |   | 3.2 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Benzo(a)pyrene         | 96.100          |   | 5.4 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Indeno(1,2,3-cd)pyrene | 53.900          |   | 4.1 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Dibenzo(a,h)anthracene | 16.000          |   | 3.8 | 10.8 | ug/Kg |
| P3671-13                    | S-912-J-SO-0.5-081924 | SOIL | Benzo(g,h,i)perylene   | 62.700          |   | 3.7 | 10.8 | ug/Kg |
| <b>Total Svoc :</b>         |                       |      |                        | <b>1,115.40</b> |   |     |      |       |
| <b>Total Concentration:</b> |                       |      |                        | <b>1,115.40</b> |   |     |      |       |

**Client ID : S-912-J-SO-0.5-1-081924**

|                             |                         |      |                      |              |   |     |     |       |
|-----------------------------|-------------------------|------|----------------------|--------------|---|-----|-----|-------|
| P3671-14                    | S-912-J-SO-0.5-1-081924 | SOIL | Phenanthrene         | 2.300        | J | 1.2 | 6.4 | ug/Kg |
| P3671-14                    | S-912-J-SO-0.5-1-081924 | SOIL | Fluoranthene         | 4.400        | J | 1.3 | 6.4 | ug/Kg |
| P3671-14                    | S-912-J-SO-0.5-1-081924 | SOIL | Pyrene               | 3.400        | J | 1.8 | 6.4 | ug/Kg |
| P3671-14                    | S-912-J-SO-0.5-1-081924 | SOIL | Benzo(a)anthracene   | 2.200        | J | 1.5 | 6.4 | ug/Kg |
| P3671-14                    | S-912-J-SO-0.5-1-081924 | SOIL | Chrysene             | 2.700        | J | 1.7 | 6.4 | ug/Kg |
| P3671-14                    | S-912-J-SO-0.5-1-081924 | SOIL | Benzo(b)fluoranthene | 3.400        | J | 2.3 | 6.4 | ug/Kg |
| <b>Total Svoc :</b>         |                         |      |                      | <b>18.40</b> |   |     |     |       |
| <b>Total Concentration:</b> |                         |      |                      | <b>18.40</b> |   |     |     |       |



**Hit Summary Sheet**  
**SW-846**

**SDG No.:** P3671  
**Client:** JACOBS Engineering Group, Inc.

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | RDL | Units |
|-----------|-----------|--------|-----------|---------------|---|-----|-----|-------|
|-----------|-----------|--------|-----------|---------------|---|-----|-----|-------|



# QC SUMMARY

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### Surrogate Summary

SW-846

SDG No.: P3671

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified

| Lab Sample ID | Client ID                    | Parameter               | Spike (PPM) | Result (PPM) | Recovery (%) | Qual | Limits (%) |           |
|---------------|------------------------------|-------------------------|-------------|--------------|--------------|------|------------|-----------|
|               |                              |                         |             |              |              |      | Low        | High      |
| P3671-03      | S-911-K1-SO-0-0.5-081924     | 2-Methylnaphthalene-d10 | 0.4         | 0.21         | 53           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.18         | 44           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.29         | 73           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.21         | 52           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.14         | 36           |      | 30 (21)    | 130 (130) |
| P3671-04      | S-911-K1-SO-0.5-1-081924     | 2-Methylnaphthalene-d10 | 0.4         | 0.18         | 45           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.15         | 37           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.25         | 62           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.17         | 43           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.14         | 36           |      | 30 (21)    | 130 (130) |
| P3671-05      | S-911-K1-SO-0-0.5-081924-FD  | 2-Methylnaphthalene-d10 | 0.4         | 0.41         | 103          |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.39         | 98           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.47         | 116          |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.37         | 93           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.36         | 90           |      | 30 (21)    | 130 (130) |
| P3671-06      | S-905-J-SO-0-0.5-081924      | 2-Methylnaphthalene-d10 | 0.4         | 0.16         | 40           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.11         | 28           | *    | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.19         | 47           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.15         | 38           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.089        | 22           | *    | 30 (21)    | 130 (130) |
| P3671-06DL    | S-905-J-SO-0-0.5-081924DL    | 2-Methylnaphthalene-d10 | 0.4         | 0.14         | 35           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.11         | 26           | *    | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.18         | 45           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.14         | 34           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.090        | 23           | *    | 30 (21)    | 130 (130) |
| P3671-07      | S-905-J-SO-0-0.5-081924-FD   | 2-Methylnaphthalene-d10 | 0.4         | 0.17         | 43           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.14         | 34           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.24         | 60           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.16         | 41           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.096        | 24           | *    | 30 (21)    | 130 (130) |
| P3671-07DL    | S-905-J-SO-0-0.5-081924-FDDL | 2-Methylnaphthalene-d10 | 0.4         | 0.16         | 40           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.12         | 30           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.25         | 63           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.15         | 38           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.11         | 28           | *    | 30 (21)    | 130 (130) |
| P3671-09      | S-928-K1-SO-0-0.5-081924     | 2-Methylnaphthalene-d10 | 0.4         | 0.15         | 37           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.13         | 32           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.20         | 49           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.15         | 37           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.12         | 31           |      | 30 (21)    | 130 (130) |
| P3671-10      | S-928-K1-SO-0.5-1-081924     | 2-Methylnaphthalene-d10 | 0.4         | 0.24         | 59           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.19         | 47           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.34         | 84           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.24         | 59           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.17         | 43           |      | 30 (21)    | 130 (130) |
| P3671-10MS    | S-928-K1-SO-0.5-1-081924MS   | 2-Methylnaphthalene-d10 | 0.4         | 0.35         | 87           |      | 30 (17)    | 150 (161) |
|               |                              | Fluoranthene-d10        | 0.4         | 0.19         | 47           |      | 30 (23)    | 150 (138) |
|               |                              | Nitrobenzene-d5         | 0.4         | 0.31         | 77           |      | 30 (33)    | 130 (121) |
|               |                              | 2-Fluorobiphenyl        | 0.4         | 0.22         | 56           |      | 30 (32)    | 130 (121) |
|               |                              | Terphenyl-d14           | 0.4         | 0.16         | 41           |      | 30 (21)    | 130 (130) |
| P3671-10MSD   | S-928-K1-SO-0.5-1-081924MSD  | 2-Methylnaphthalene-d10 | 0.4         | 0.36         | 91           |      | 30 (17)    | 150 (161) |

( ) = LABORATORY INHOUSE LIMIT

### Surrogate Summary

SW-846

SDG No.: P3671

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified

| Lab Sample ID | Client ID                   | Parameter               | Spike (PPM) | Result (PPM) | Recovery (%) | Qual | Limits (%) |           |
|---------------|-----------------------------|-------------------------|-------------|--------------|--------------|------|------------|-----------|
|               |                             |                         |             |              |              |      | Low        | High      |
| P3671-10MSD   | S-928-K1-SO-0.5-1-081924MSD | Fluoranthene-d10        | 0.4         | 0.20         | 49           |      | 30 (23)    | 150 (138) |
|               |                             | Nitrobenzene-d5         | 0.4         | 0.33         | 81           |      | 30 (33)    | 130 (121) |
|               |                             | 2-Fluorobiphenyl        | 0.4         | 0.23         | 58           |      | 30 (32)    | 130 (121) |
|               |                             | Terphenyl-d14           | 0.4         | 0.17         | 43           |      | 30 (21)    | 130 (130) |
| P3671-12      | S-903-J-SO-0.5-1.0-081924   | 2-Methylnaphthalene-d10 | 0.4         | 0.17         | 41           |      | 30 (17)    | 150 (161) |
|               |                             | Fluoranthene-d10        | 0.4         | 0.16         | 41           |      | 30 (23)    | 150 (138) |
|               |                             | Nitrobenzene-d5         | 0.4         | 0.19         | 48           |      | 30 (33)    | 130 (121) |
|               |                             | 2-Fluorobiphenyl        | 0.4         | 0.15         | 38           |      | 30 (32)    | 130 (121) |
| P3671-12DL    | S-903-J-SO-0.5-1.0-081924DL | Terphenyl-d14           | 0.4         | 0.12         | 31           |      | 30 (21)    | 130 (130) |
|               |                             | 2-Methylnaphthalene-d10 | 0.4         | 0.17         | 43           |      | 30 (17)    | 150 (161) |
|               |                             | Fluoranthene-d10        | 0.4         | 0.17         | 43           |      | 30 (23)    | 150 (138) |
|               |                             | Nitrobenzene-d5         | 0.4         | 0.21         | 52           |      | 30 (33)    | 130 (121) |
| P3671-13      | S-912-J-SO-0-0.5-081924     | 2-Fluorobiphenyl        | 0.4         | 0.17         | 43           |      | 30 (32)    | 130 (121) |
|               |                             | Terphenyl-d14           | 0.4         | 0.15         | 38           |      | 30 (21)    | 130 (130) |
|               |                             | 2-Methylnaphthalene-d10 | 0.4         | 0.19         | 47           |      | 30 (17)    | 150 (161) |
|               |                             | Fluoranthene-d10        | 0.4         | 0.13         | 32           |      | 30 (23)    | 150 (138) |
| P3671-14      | S-912-J-SO-0.5-1-081924     | Nitrobenzene-d5         | 0.4         | 0.27         | 68           |      | 30 (33)    | 130 (121) |
|               |                             | 2-Fluorobiphenyl        | 0.4         | 0.17         | 43           |      | 30 (32)    | 130 (121) |
|               |                             | Terphenyl-d14           | 0.4         | 0.097        | 24           | *    | 30 (21)    | 130 (130) |
|               |                             | 2-Methylnaphthalene-d10 | 0.4         | 0.13         | 32           |      | 30 (17)    | 150 (161) |
| PB162880BL    | PB162880BL                  | Fluoranthene-d10        | 0.4         | 0.095        | 24           | *    | 30 (23)    | 150 (138) |
|               |                             | Nitrobenzene-d5         | 0.4         | 0.17         | 41           |      | 30 (33)    | 130 (121) |
|               |                             | 2-Fluorobiphenyl        | 0.4         | 0.13         | 33           |      | 30 (32)    | 130 (121) |
|               |                             | Terphenyl-d14           | 0.4         | 0.081        | 20           | *    | 30 (21)    | 130 (130) |
| PB162880BS    | PB162880BS                  | 2-Methylnaphthalene-d10 | 0.4         | 0.36         | 90           |      | 30 (17)    | 150 (161) |
|               |                             | Fluoranthene-d10        | 0.4         | 0.40         | 100          |      | 30 (23)    | 150 (138) |
|               |                             | Nitrobenzene-d5         | 0.4         | 0.38         | 96           |      | 30 (33)    | 130 (121) |
|               |                             | 2-Fluorobiphenyl        | 0.4         | 0.40         | 100          |      | 30 (32)    | 130 (121) |
|               |                             | Terphenyl-d14           | 0.4         | 0.37         | 91           |      | 30 (21)    | 130 (130) |
|               |                             | 2-Methylnaphthalene-d10 | 0.4         | 0.37         | 93           |      | 30 (17)    | 150 (161) |
|               |                             | Fluoranthene-d10        | 0.4         | 0.36         | 89           |      | 30 (23)    | 150 (138) |
|               |                             | Nitrobenzene-d5         | 0.4         | 0.36         | 90           |      | 30 (33)    | 130 (121) |
|               |                             | 2-Fluorobiphenyl        | 0.4         | 0.39         | 97           |      | 30 (32)    | 130 (121) |
|               |                             | Terphenyl-d14           | 0.4         | 0.32         | 80           |      | 30 (21)    | 130 (130) |

( ) = LABORATORY INHOUSE LIMIT

### Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P3671

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8270-Modified

| Parameter                 | Spike | Sample<br>Result                             | Result | Units                | Rec | Rec<br>Qual | RPD | RPD<br>Qual | Low     | Limits<br>High | RPD |
|---------------------------|-------|----------------------------------------------|--------|----------------------|-----|-------------|-----|-------------|---------|----------------|-----|
| Lab Sample ID: P3671-10MS |       | Client Sample ID: S-928-K1-SO-0.5-1-081924MS |        | DataFile: BN033571.D |     |             |     |             |         |                |     |
| Naphthalene               | 23.3  | 0                                            | 23.8   | ug/Kg                | 102 |             |     |             | 70 (37) | 130 (129)      |     |
| 2-Methylnaphthalene       | 23.3  | 0                                            | 23.2   | ug/Kg                | 100 |             |     |             | 70 (37) | 130 (139)      |     |
| Acenaphthylene            | 23.3  | 3.10                                         | 26.7   | ug/Kg                | 101 |             |     |             | 70 (21) | 130 (147)      |     |
| Acenaphthene              | 23.3  | 0                                            | 22.9   | ug/Kg                | 98  |             |     |             | 70 (19) | 130 (141)      |     |
| Fluorene                  | 23.3  | 1.40                                         | 22.5   | ug/Kg                | 91  |             |     |             | 70 (10) | 130 (167)      |     |
| Phenanthrene              | 23.3  | 12.5                                         | 35.4   | ug/Kg                | 98  |             |     |             | 70 (27) | 130 (146)      |     |
| Anthracene                | 23.3  | 2.00                                         | 26.7   | ug/Kg                | 106 |             |     |             | 70 (12) | 130 (166)      |     |
| Fluoranthene              | 23.3  | 26.8                                         | 51.0   | ug/Kg                | 104 |             |     |             | 70 (20) | 130 (150)      |     |
| Pyrene                    | 23.3  | 20.0                                         | 39.6   | ug/Kg                | 84  |             |     |             | 70 (10) | 130 (163)      |     |
| Benzo(a)anthracene        | 23.3  | 9.80                                         | 33.8   | ug/Kg                | 103 |             |     |             | 70 (10) | 130 (175)      |     |
| Chrysene                  | 23.3  | 15.8                                         | 38.8   | ug/Kg                | 99  |             |     |             | 70 (32) | 130 (143)      |     |
| Benzo(b)fluoranthene      | 23.3  | 20.9                                         | 40.7   | ug/Kg                | 85  |             |     |             | 70 (10) | 130 (188)      |     |
| Benzo(k)fluoranthene      | 23.3  | 8.00                                         | 32.7   | ug/Kg                | 106 |             |     |             | 70 (42) | 130 (122)      |     |
| Benzo(a)pyrene            | 23.3  | 14.0                                         | 38.7   | ug/Kg                | 106 |             |     |             | 70 (10) | 130 (175)      |     |
| Indeno(1,2,3-cd)pyrene    | 23.3  | 9.60                                         | 32.7   | ug/Kg                | 99  |             |     |             | 70 (10) | 130 (175)      |     |
| Dibenz(a,h)anthracene     | 23.3  | 2.60                                         | 25.2   | ug/Kg                | 97  |             |     |             | 70 (10) | 130 (170)      |     |
| Benzo(g,h,i)perylene      | 23.3  | 11.8                                         | 32.5   | ug/Kg                | 89  |             |     |             | 70 (10) | 130 (168)      |     |
| 1,4-Dioxane               | 23.3  | 0                                            | 19.8   | ug/Kg                | 85  |             |     |             | 20 (70) | 160 (130)      |     |

() = LABORATORY INHOUSE LIMIT

**Matrix Spike/Matrix Spike Duplicate Summary**

**SW-846**

**SDG No.:** P3671

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8270-Modified

| Parameter                         | Spike | Sample Result                                        | Result | Units                       | Rec | Rec Qual | RPD | RPD Qual | Low     | Limits High | RPD     |
|-----------------------------------|-------|------------------------------------------------------|--------|-----------------------------|-----|----------|-----|----------|---------|-------------|---------|
| <b>Lab Sample ID: P3671-10MSD</b> |       | <b>Client Sample ID: S-928-K1-SO-0.5-1-081924MSD</b> |        | <b>DataFile: BN033572.D</b> |     |          |     |          |         |             |         |
| Naphthalene                       | 23.3  | 0                                                    | 24.5   | ug/Kg                       | 105 | 3        |     |          | 70 (37) | 130 (129)   | 30 (20) |
| 2-Methylnaphthalene               | 23.3  | 0                                                    | 24.1   | ug/Kg                       | 103 | 3        |     |          | 70 (37) | 130 (139)   | 30 (20) |
| Acenaphthylene                    | 23.3  | 3.10                                                 | 27.9   | ug/Kg                       | 106 | 5        |     |          | 70 (21) | 130 (147)   | 30 (20) |
| Acenaphthene                      | 23.3  | 0                                                    | 23.7   | ug/Kg                       | 102 | 4        |     |          | 70 (19) | 130 (141)   | 30 (20) |
| Fluorene                          | 23.3  | 1.40                                                 | 23.4   | ug/Kg                       | 94  | 3        |     |          | 70 (10) | 130 (167)   | 30 (20) |
| Phenanthrene                      | 23.3  | 12.5                                                 | 37.4   | ug/Kg                       | 107 | 9        |     |          | 70 (27) | 130 (146)   | 30 (20) |
| Anthracene                        | 23.3  | 2.00                                                 | 28.2   | ug/Kg                       | 112 | 6        |     |          | 70 (12) | 130 (166)   | 30 (20) |
| Fluoranthene                      | 23.3  | 26.8                                                 | 52.2   | ug/Kg                       | 109 | 5        |     |          | 70 (20) | 130 (150)   | 30 (20) |
| Pyrene                            | 23.3  | 20.0                                                 | 41.3   | ug/Kg                       | 91  | 8        |     |          | 70 (10) | 130 (163)   | 30 (20) |
| Benzo(a)anthracene                | 23.3  | 9.80                                                 | 35.0   | ug/Kg                       | 108 | 5        |     |          | 70 (10) | 130 (175)   | 30 (20) |
| Chrysene                          | 23.3  | 15.8                                                 | 40.8   | ug/Kg                       | 107 | 8        |     |          | 70 (32) | 130 (143)   | 30 (20) |
| Benzo(b)fluoranthene              | 23.3  | 20.9                                                 | 42.6   | ug/Kg                       | 93  | 9        |     |          | 70 (10) | 130 (188)   | 30 (20) |
| Benzo(k)fluoranthene              | 23.3  | 8.00                                                 | 32.3   | ug/Kg                       | 104 | 2        |     |          | 70 (42) | 130 (122)   | 30 (20) |
| Benzo(a)pyrene                    | 23.3  | 14.0                                                 | 39.7   | ug/Kg                       | 110 | 4        |     |          | 70 (10) | 130 (175)   | 30 (20) |
| Indeno(1,2,3-cd)pyrene            | 23.3  | 9.60                                                 | 33.3   | ug/Kg                       | 102 | 3        |     |          | 70 (10) | 130 (175)   | 30 (20) |
| Dibenz(a,h)anthracene             | 23.3  | 2.60                                                 | 25.7   | ug/Kg                       | 99  | 2        |     |          | 70 (10) | 130 (170)   | 30 (20) |
| Benzo(g,h,i)perylene              | 23.3  | 11.8                                                 | 33.3   | ug/Kg                       | 92  | 3        |     |          | 70 (10) | 130 (168)   | 30 (20) |
| 1,4-Dioxane                       | 23.3  | 0                                                    | 20.1   | ug/Kg                       | 86  | 1        |     |          | 20 (70) | 160 (130)   | 30 (20) |

( ) = LABORATORY INHOUSE LIMIT

## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3671

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified

DataFile: BN033565.D

| Lab Sample ID | Parameter              | Spike | Result | Unit  | Rec | RPD | Qual | RPD  |         | Limits    |  | RPD |
|---------------|------------------------|-------|--------|-------|-----|-----|------|------|---------|-----------|--|-----|
|               |                        |       |        |       |     |     |      | Qual | Low     | High      |  |     |
| PB162880BS    | Naphthalene            | 13.3  | 12.0   | ug/Kg | 90  |     |      |      | 70 (63) | 130 (120) |  |     |
|               | 2-Methylnaphthalene    | 13.3  | 11.5   | ug/Kg | 86  |     |      |      | 70 (54) | 130 (111) |  |     |
|               | Acenaphthylene         | 13.3  | 12.2   | ug/Kg | 92  |     |      |      | 70 (61) | 130 (110) |  |     |
|               | Acenaphthene           | 13.3  | 11.8   | ug/Kg | 89  |     |      |      | 70 (65) | 130 (112) |  |     |
|               | Fluorene               | 13.3  | 11.0   | ug/Kg | 83  |     |      |      | 70 (61) | 130 (115) |  |     |
|               | Phenanthrene           | 13.3  | 12.5   | ug/Kg | 94  |     |      |      | 70 (61) | 130 (120) |  |     |
|               | Anthracene             | 13.3  | 12.4   | ug/Kg | 93  |     |      |      | 70 (60) | 130 (115) |  |     |
|               | Fluoranthene           | 13.3  | 11.9   | ug/Kg | 89  |     |      |      | 70 (56) | 130 (124) |  |     |
|               | Pyrene                 | 13.3  | 10.7   | ug/Kg | 80  |     |      |      | 70 (58) | 130 (125) |  |     |
|               | Benzo(a)anthracene     | 13.3  | 12.1   | ug/Kg | 91  |     |      |      | 70 (45) | 130 (129) |  |     |
|               | Chrysene               | 13.3  | 12.7   | ug/Kg | 95  |     |      |      | 70 (62) | 130 (123) |  |     |
|               | Benzo(b)fluoranthene   | 13.3  | 11.8   | ug/Kg | 89  |     |      |      | 70 (47) | 130 (123) |  |     |
|               | Benzo(k)fluoranthene   | 13.3  | 12.0   | ug/Kg | 90  |     |      |      | 70 (69) | 130 (123) |  |     |
|               | Benzo(a)pyrene         | 13.3  | 13.1   | ug/Kg | 98  |     |      |      | 70 (53) | 130 (123) |  |     |
|               | Indeno(1,2,3-cd)pyrene | 13.3  | 13.0   | ug/Kg | 98  |     |      |      | 70 (62) | 130 (131) |  |     |
|               | Dibenz(a,h)anthracene  | 13.3  | 12.8   | ug/Kg | 96  |     |      |      | 70 (57) | 130 (120) |  |     |
|               | Benzo(g,h,i)perylene   | 13.3  | 12.1   | ug/Kg | 91  |     |      |      | 70 (66) | 130 (121) |  |     |
|               | 1,4-Dioxane            | 13.3  | 9.90   | ug/Kg | 74  |     |      |      | 20 (70) | 160 (130) |  |     |

() = LABORATORY INHOUSE LIMIT

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB162880BL

Lab Name: CHEMTECH

Contract: JAC005

Lab Code: CHEM Case No.: P3671

SAS No.: P3671 SDG NO.: P3671

Lab File ID: BN033564.D

Lab Sample ID: PB162880BL

Instrument ID: BNA\_N

Date Extracted: 08/21/2024

Matrix: (soil/water) SOIL

Date Analyzed: 08/22/2024

Level: (low/med) LOW

Time Analyzed: 22:39

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

| EPA<br>SAMPLE NO.           | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED |
|-----------------------------|------------------|----------------|------------------|
| PB162880BS                  | PB162880BS       | BN033565.D     | 08/22/2024       |
| S-912-J-SO-0.5-1-081924     | P3671-14         | BN033566.D     | 08/22/2024       |
| S-928-K1-SO-0.5-1-081924MSD | P3671-10MSD      | BN033572.D     | 08/23/2024       |
| S-912-J-SO-0-0.5-081924     | P3671-13         | BN033573.D     | 08/23/2024       |
| S-903-J-SO-0.5-1.0-081924   | P3671-12         | BN033575.D     | 08/23/2024       |
| S-911-K1-SO-0-0.5-081924-FD | P3671-05         | BN033591.D     | 08/23/2024       |
| S-911-K1-SO-0.5-1-081924    | P3671-04         | BN033592.D     | 08/23/2024       |
| S-911-K1-SO-0-0.5-081924    | P3671-03         | BN033567.D     | 08/23/2024       |
| S-905-J-SO-0-0.5-081924     | P3671-06         | BN033568.D     | 08/23/2024       |
| S-928-K1-SO-0-0.5-081924    | P3671-09         | BN033569.D     | 08/23/2024       |
| S-928-K1-SO-0.5-1-081924    | P3671-10         | BN033570.D     | 08/23/2024       |
| S-928-K1-SO-0.5-1-081924MS  | P3671-10MS       | BN033571.D     | 08/23/2024       |
| S-905-J-SO-0-0.5-081924-FD  | P3671-07         | BN033574.D     | 08/23/2024       |

COMMENTS: \_\_\_\_\_





284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
Fax : 908 789 8922

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: JAC005Lab Code: CHEMSAS No.: P3671 SDG NO.: P3671Lab File ID: BN033478.DDFTPP Injection Date: 08/19/2024Instrument ID: BNA\_NDFTPP Injection Time: 15:37

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 10.0 - 80.0% of mass 198           | 36.6                 |
| 68  | Less than 2.0% of mass 69          | 0.6 ( 1.6 ) 1        |
| 69  | Mass 69 relative abundance         | 37.9                 |
| 70  | Less than 2.0% of mass 69          | 0.2 ( 0.4 ) 1        |
| 127 | 10.0 - 80.0% of mass 198           | 49.1                 |
| 197 | Less than 2.0% of mass 198         | 0.5                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 7                    |
| 275 | 10.0 - 60.0% of mass 198           | 27                   |
| 365 | Greater than 1% of mass 198        | 3.5                  |
| 441 | Present, but less than mass 443    | 11.2                 |
| 442 | Greater than 50% of mass 198       | 100                  |
| 443 | 15.0 - 24.0% of mass 442           | 13.8 ( 20 ) 2        |

1-Value is % mass 69

2-Value is % mass 442

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| SSTDICC0.1        | SSTDICC0.1       | BN033479.D     | 08/19/2024       | 16:16            |
| SSTDICC0.2        | SSTDICC0.2       | BN033480.D     | 08/19/2024       | 16:52            |
| SSTDICCC0.4       | SSTDICCC0.4      | BN033481.D     | 08/19/2024       | 17:28            |
| SSTDICC0.8        | SSTDICC0.8       | BN033482.D     | 08/19/2024       | 18:05            |
| SSTDICC1.6        | SSTDICC1.6       | BN033483.D     | 08/19/2024       | 18:41            |
| SSTDICC3.2        | SSTDICC3.2       | BN033484.D     | 08/19/2024       | 19:17            |
| SSTDICC5.0        | SSTDICC5.0       | BN033485.D     | 08/19/2024       | 19:53            |



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Fax : 908 789 8922

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: JAC005Lab Code: CHEMSAS No.: P3671 SDG NO.: P3671Lab File ID: BN033562.DDFTPP Injection Date: 08/22/2024Instrument ID: BNA\_NDFTPP Injection Time: 21:24

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 10.0 - 80.0% of mass 198           | 37.9                 |
| 68  | Less than 2.0% of mass 69          | 0.7 ( 1.8 ) 1        |
| 69  | Mass 69 relative abundance         | 40                   |
| 70  | Less than 2.0% of mass 69          | 0.2 ( 0.5 ) 1        |
| 127 | 10.0 - 80.0% of mass 198           | 49.7                 |
| 197 | Less than 2.0% of mass 198         | 0.3                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 6.8                  |
| 275 | 10.0 - 60.0% of mass 198           | 27                   |
| 365 | Greater than 1% of mass 198        | 3.6                  |
| 441 | Present, but less than mass 443    | 10.6                 |
| 442 | Greater than 50% of mass 198       | 100                  |
| 443 | 15.0 - 24.0% of mass 442           | 13.4 (18.4) 2        |

1-Value is % mass 69

2-Value is % mass 442

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

| EPA<br>SAMPLE NO.           | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-----------------------------|------------------|----------------|------------------|------------------|
| SSTDCCC0.4                  | SSTDCCC0.4       | BN033563.D     | 08/22/2024       | 22:03            |
| PB162880BL                  | PB162880BL       | BN033564.D     | 08/22/2024       | 22:39            |
| PB162880BS                  | PB162880BS       | BN033565.D     | 08/22/2024       | 23:16            |
| S-912-J-SO-0.5-1-081924     | P3671-14         | BN033566.D     | 08/22/2024       | 23:52            |
| S-911-K1-SO-0-0.5-081924    | P3671-03         | BN033567.D     | 08/23/2024       | 00:28            |
| S-905-J-SO-0-0.5-081924     | P3671-06         | BN033568.D     | 08/23/2024       | 01:05            |
| S-928-K1-SO-0-0.5-081924    | P3671-09         | BN033569.D     | 08/23/2024       | 01:41            |
| S-928-K1-SO-0.5-1-081924    | P3671-10         | BN033570.D     | 08/23/2024       | 02:17            |
| S-928-K1-SO-0.5-1-081924MS  | P3671-10MS       | BN033571.D     | 08/23/2024       | 02:53            |
| S-928-K1-SO-0.5-1-081924MSD | P3671-10MSD      | BN033572.D     | 08/23/2024       | 03:30            |
| S-912-J-SO-0-0.5-081924     | P3671-13         | BN033573.D     | 08/23/2024       | 04:06            |
| S-905-J-SO-0-0.5-081924-FD  | P3671-07         | BN033574.D     | 08/23/2024       | 04:42            |
| S-903-J-SO-0.5-1.0-081924   | P3671-12         | BN033575.D     | 08/23/2024       | 05:18            |



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: JACO05Lab Code: CHEMSAS No.: P3671 SDG NO.: P3671Lab File ID: BN033581.DDFTPP Injection Date: 08/23/2024Instrument ID: BNA\_NDFTPP Injection Time: 09:06

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 10.0 - 80.0% of mass 198           | 34                   |
| 68  | Less than 2.0% of mass 69          | 0.6 ( 1.6 ) 1        |
| 69  | Mass 69 relative abundance         | 36.7                 |
| 70  | Less than 2.0% of mass 69          | 0.2 ( 0.4 ) 1        |
| 127 | 10.0 - 80.0% of mass 198           | 47.5                 |
| 197 | Less than 2.0% of mass 198         | 0.2                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 6.8                  |
| 275 | 10.0 - 60.0% of mass 198           | 28.7                 |
| 365 | Greater than 1% of mass 198        | 4                    |
| 441 | Present, but less than mass 443    | 13.3                 |
| 442 | Greater than 50% of mass 198       | 100                  |
| 443 | 15.0 - 24.0% of mass 442           | 16.5 (18.7) 2        |

1-Value is % mass 69

2-Value is % mass 442

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

| EPA<br>SAMPLE NO.           | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-----------------------------|------------------|----------------|------------------|------------------|
| SSTDCCC0.4                  | SSTDCCC0.4       | BN033582.D     | 08/23/2024       | 09:48            |
| S-911-K1-SO-0-0.5-081924-FD | P3671-05         | BN033591.D     | 08/23/2024       | 15:59            |
| S-911-K1-SO-0.5-1-081924    | P3671-04         | BN033592.D     | 08/23/2024       | 16:35            |
| S-905-J-SO-0-0.5-081924DL   | P3671-06DL       | BN033595.D     | 08/23/2024       | 18:23            |



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: JACO05Lab Code: CHEMSAS No.: P3671      SDG NO.: P3671Lab File ID: BN033598.DDFTPP Injection Date: 08/23/2024Instrument ID: BNA\_NDFTPP Injection Time: 20:51

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 10.0 - 80.0% of mass 198           | 35.1                 |
| 68  | Less than 2.0% of mass 69          | 0.6 ( 1.7 ) 1        |
| 69  | Mass 69 relative abundance         | 37.6                 |
| 70  | Less than 2.0% of mass 69          | 0.2 ( 0.6 ) 1        |
| 127 | 10.0 - 80.0% of mass 198           | 47.9                 |
| 197 | Less than 2.0% of mass 198         | 0.6                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 6.8                  |
| 275 | 10.0 - 60.0% of mass 198           | 27                   |
| 365 | Greater than 1% of mass 198        | 3.8                  |
| 441 | Present, but less than mass 443    | 12.3                 |
| 442 | Greater than 50% of mass 198       | 100                  |
| 443 | 15.0 - 24.0% of mass 442           | 15.1 (18.9) 2        |

1-Value is % mass 69

2-Value is % mass 442

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

| EPA<br>SAMPLE NO.            | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|------------------------------|------------------|----------------|------------------|------------------|
| SSTDCCC0.4                   | SSTDCCC0.4       | BN033599.D     | 08/23/2024       | 21:30            |
| S-903-J-SO-0.5-1.0-081924DL  | P3671-12DL       | BN033610.D     | 08/24/2024       | 04:08            |
| S-905-J-SO-0-0.5-081924-FDDL | P3671-07DL       | BN033613.D     | 08/24/2024       | 05:57            |

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG NO.: P3671

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 08/22/2024

Lab File ID: BN033563.D Time Analyzed: 22:03

Instrument ID: BNA\_N GC Column: ZB-GR ID: 0.25 (mm)

|                                | IS1 (DCB)<br>AREA # | RT #  | IS2 (NPT)<br>AREA # | RT #   | IS3 (ANT)<br>AREA # | RT #   |
|--------------------------------|---------------------|-------|---------------------|--------|---------------------|--------|
| 12 HOUR STD                    | 8400                | 7.545 | 22013               | 10.30  | 10449               | 14.18  |
| UPPER LIMIT                    | 16800               | 8.045 | 44026               | 10.804 | 20898               | 14.678 |
| LOWER LIMIT                    | 4200                | 7.045 | 11006.5             | 9.804  | 5224.5              | 13.678 |
| EPA SAMPLE NO.                 |                     |       |                     |        |                     |        |
| 01 S-911-K1-SO-0-0.5-081924    | 7027                | 7.55  | 17952               | 10.30  | 8336                | 14.18  |
| 02 S-905-J-SO-0-0.5-081924     | 7735                | 7.55  | 20459               | 10.30  | 9843                | 14.18  |
| 03 S-905-J-SO-0-0.5-081924-FD  | 8063                | 7.55  | 20827               | 10.30  | 10022               | 14.18  |
| 04 S-928-K1-SO-0-0.5-081924    | 8106                | 7.55  | 21263               | 10.30  | 10490               | 14.18  |
| 05 S-928-K1-SO-0.5-1-081924    | 7220                | 7.55  | 18938               | 10.30  | 9199                | 14.18  |
| 06 S-928-K1-SO-0.5-1-081924MS  | 7489                | 7.55  | 19600               | 10.30  | 9306                | 14.18  |
| 07 S-928-K1-SO-0.5-1-081924MSD | 7606                | 7.55  | 20104               | 10.30  | 9559                | 14.18  |
| 08 S-903-J-SO-0.5-1.0-081924   | 8161                | 7.55  | 20804               | 10.30  | 10684               | 14.18  |
| 09 S-912-J-SO-0-0.5-081924     | 7667                | 7.55  | 19731               | 10.30  | 9704                | 14.18  |
| 10 S-912-J-SO-0.5-1-081924     | 7004                | 7.55  | 17932               | 10.30  | 8339                | 14.18  |
| 11 PB162880BL                  | 6432                | 7.55  | 16127               | 10.30  | 7236                | 14.18  |
| 12 PB162880BS                  | 7155                | 7.55  | 18004               | 10.30  | 7779                | 14.18  |

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG NO.: P3671

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 08/22/2024

Lab File ID: BN033563.D Time Analyzed: 22:03

Instrument ID: BNA\_N GC Column: ZB-GR ID: 0.25 (mm)

|                                | IS4 (PHN)<br>AREA # | RT #   | IS5 (CRY)<br>AREA # | RT #   | IS6 (PRY)<br>AREA # | RT #   |
|--------------------------------|---------------------|--------|---------------------|--------|---------------------|--------|
| 12 HOUR STD                    | 19500               | 16.929 | 13945               | 21.139 | 14856               | 23.303 |
| UPPER LIMIT                    | 39000               | 17.429 | 27890               | 21.639 | 29712               | 23.803 |
| LOWER LIMIT                    | 9750                | 16.429 | 6972.5              | 20.639 | 7428                | 22.803 |
| EPA SAMPLE NO.                 |                     |        |                     |        |                     |        |
| 01 S-911-K1-SO-0-0.5-081924    | 17399               | 16.93  | 14980               | 21.14  | 17231               | 23.30  |
| 02 S-905-J-SO-0-0.5-081924     | 18367               | 16.93  | 15413               | 21.14  | 16704               | 23.30  |
| 03 S-905-J-SO-0-0.5-081924-FD  | 20045               | 16.93  | 22012               | 21.14  | 22949               | 23.30  |
| 04 S-928-K1-SO-0-0.5-081924    | 20512               | 16.93  | 15408               | 21.14  | 17341               | 23.30  |
| 05 S-928-K1-SO-0.5-1-081924    | 18224               | 16.93  | 14086               | 21.14  | 15519               | 23.30  |
| 06 S-928-K1-SO-0.5-1-081924MS  | 18439               | 16.93  | 15566               | 21.13  | 17073               | 23.30  |
| 07 S-928-K1-SO-0.5-1-081924MSI | 18339               | 16.93  | 15128               | 21.14  | 16860               | 23.30  |
| 08 S-903-J-SO-0.5-1.0-081924   | 19994               | 16.93  | 20246               | 21.14  | 21193               | 23.30  |
| 09 S-912-J-SO-0-0.5-081924     | 20199               | 16.93  | 18846               | 21.14  | 20277               | 23.30  |
| 10 S-912-J-SO-0.5-1-081924     | 15941               | 16.93  | 12739               | 21.14  | 14091               | 23.30  |
| 11 PB162880BL                  | 13552               | 16.93  | 11004               | 21.14  | 11993               | 23.31  |
| 12 PB162880BS                  | 14031               | 16.93  | 11303               | 21.14  | 12304               | 23.31  |

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG NO.: P3671

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 08/23/2024

Lab File ID: BN033582.D Time Analyzed: 09:48

Instrument ID: BNA\_N GC Column: ZB-GR ID: 0.25 (mm)

|                                | IS1 (DCB)<br>AREA # | RT #  | IS2 (NPT)<br>AREA # | RT #   | IS3 (ANT)<br>AREA # | RT #   |
|--------------------------------|---------------------|-------|---------------------|--------|---------------------|--------|
| 12 HOUR STD                    | 7007                | 7.545 | 18519               | 10.30  | 9756                | 14.18  |
| UPPER LIMIT                    | 14014               | 8.045 | 37038               | 10.804 | 19512               | 14.678 |
| LOWER LIMIT                    | 3503.5              | 7.045 | 9259.5              | 9.804  | 4878                | 13.678 |
| EPA SAMPLE NO.                 |                     |       |                     |        |                     |        |
| 01 S-911-K1-SO-0.5-1-081924    | 6858                | 7.55  | 18127               | 10.30  | 8708                | 14.18  |
| 02 S-911-K1-SO-0-0.5-081924-FD | 6471                | 7.55  | 18310               | 10.30  | 9783                | 14.18  |
| 03 S-905-J-SO-0-0.5-081924DL   | 8740                | 7.55  | 22823               | 10.30  | 10830               | 14.18  |

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG NO.: P3671

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 08/23/2024

Lab File ID: BN033582.D Time Analyzed: 09:48

Instrument ID: BNA\_N GC Column: ZB-GR ID: 0.25 (mm)

|                                | IS4 (PHN)<br>AREA # | RT #   | IS5 (CRY)<br>AREA # | RT #   | IS6 (PRY)<br>AREA # | RT #   |
|--------------------------------|---------------------|--------|---------------------|--------|---------------------|--------|
| 12 HOUR STD                    | 21233               | 16.929 | 19542               | 21.139 | 22177               | 23.306 |
| UPPER LIMIT                    | 42466               | 17.429 | 39084               | 21.639 | 44354               | 23.806 |
| LOWER LIMIT                    | 10616.5             | 16.429 | 9771                | 20.639 | 11088.5             | 22.806 |
| EPA SAMPLE NO.                 |                     |        |                     |        |                     |        |
| 01 S-911-K1-SO-0.5-1-081924    | 17176               | 16.93  | 13469               | 21.14  | 15412               | 23.31  |
| 02 S-911-K1-SO-0-0.5-081924-FI | 20641               | 16.93  | 16828               | 21.14  | 18757               | 23.31  |
| 03 S-905-J-SO-0-0.5-081924DL   | 20585               | 16.93  | 17216               | 21.14  | 19106               | 23.31  |

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG NO.: P3671

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 08/23/2024

Lab File ID: BN033599.D Time Analyzed: 21:30

Instrument ID: BNA\_N GC Column: ZB-GR ID: 0.25 (mm)

|                                 | IS1 (DCB)<br>AREA # | RT #  | IS2 (NPT)<br>AREA # | RT #   | IS3 (ANT)<br>AREA # | RT #   |
|---------------------------------|---------------------|-------|---------------------|--------|---------------------|--------|
| 12 HOUR STD                     | 8463                | 7.545 | 21893               | 10.30  | 10120               | 14.18  |
| UPPER LIMIT                     | 16926               | 8.045 | 43786               | 10.803 | 20240               | 14.678 |
| LOWER LIMIT                     | 4231.5              | 7.045 | 10946.5             | 9.803  | 5060                | 13.678 |
| EPA SAMPLE NO.                  |                     |       |                     |        |                     |        |
| 01 S-905-J-SO-0-0.5-081924-FDDL | 9368                | 7.55  | 22518               | 10.30  | 10375               | 14.18  |
| 02 S-903-J-SO-0.5-1.0-081924DL  | 7890                | 7.55  | 20855               | 10.30  | 10027               | 14.18  |

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG NO.: P3671

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 08/23/2024

Lab File ID: BN033599.D Time Analyzed: 21:30

Instrument ID: BNA\_N GC Column: ZB-GR ID: 0.25 (mm)

|                                | IS4 (PHN)<br>AREA # | RT #   | IS5 (CRY)<br>AREA # | RT #   | IS6 (PRY)<br>AREA # | RT #   |
|--------------------------------|---------------------|--------|---------------------|--------|---------------------|--------|
| 12 HOUR STD                    | 19008               | 16.929 | 15095               | 21.139 | 17412               | 23.305 |
| UPPER LIMIT                    | 38016               | 17.429 | 30190               | 21.639 | 34824               | 23.805 |
| LOWER LIMIT                    | 9504                | 16.429 | 7547.5              | 20.639 | 8706                | 22.805 |
| EPA SAMPLE NO.                 |                     |        |                     |        |                     |        |
| 01 S-905-J-SO-0-0.5-081924-FDI | 19734               | 16.93  | 16882               | 21.13  | 18150               | 23.30  |
| 02 S-903-J-SO-0.5-1.0-081924DI | 19250               | 16.93  | 16100               | 21.14  | 17643               | 23.30  |

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



# SAMPLE DATA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-911-K1-SO-0-0.5-081924              | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-03                              | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 46.9                 |
| Sample Wt/Vol:     | 30.07      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033567.D        | 1         | 08/21/24 09:38 | 08/23/24 00:28 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 2.30  | J         | 1.50                | 7.00       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 2.70  | J         | 1.70                | 7.00       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 2.70  | J         | 1.30                | 7.00       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 1.60  | J         | 1.20                | 7.00       | ug/Kg             |
| 86-73-7                   | Fluorene                | 4.30  | J         | 1.30                | 7.00       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 23.5  |           | 1.30                | 7.00       | ug/Kg             |
| 120-12-7                  | Anthracene              | 4.20  | J         | 1.70                | 7.00       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 53.1  |           | 1.40                | 7.00       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 37.4  |           | 2.00                | 7.00       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 21.6  |           | 1.60                | 7.00       | ug/Kg             |
| 218-01-9                  | Chrysene                | 29.1  |           | 1.80                | 7.00       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 36.1  |           | 2.50                | 7.00       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 13.8  |           | 2.10                | 7.00       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 27.4  |           | 3.50                | 7.00       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 16.7  |           | 2.70                | 7.00       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 4.80  | J         | 2.50                | 7.00       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 19.8  |           | 2.40                | 7.00       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 4.70  | U         | 4.70                | 14.0       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.21  |           | 30 (17) - 150 (161) | 53%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.18  |           | 30 (23) - 150 (138) | 44%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.29  |           | 30 (33) - 130 (121) | 73%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.21  |           | 30 (32) - 130 (121) | 52%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.14  |           | 30 (21) - 130 (130) | 36%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7030  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 18000 |           | 10.303              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 8340  |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 17400 |           | 16.929              |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-911-K1-SO-0-0.5-081924              | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-03                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 46.9                         |
| Sample Wt/Vol:     | 30.07      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033567.D        | 1         | 08/21/24 09:38 | 08/23/24 00:28 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 15000 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 17200 | 23.303    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033567.D  
Acq On : 23 Aug 2024 00:28  
Operator : MA/JU  
Sample : P3671-03  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924

Quant Time: Aug 23 01:36:03 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7027     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.303 | 136  | 17952    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 8336     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 17399    | 0.400 | ng    | # 0.00   |
| 29) Chrysene-d12              | 21.139 | 240  | 14980    | 0.400 | ng    | # 0.00   |
| 35) Perylene-d12              | 23.303 | 264  | 17231    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 4606     | 0.206 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.729  | 99   | 5376     | 0.202 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 4363     | 0.293 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 5407     | 0.211 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 882      | 0.197 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 7139     | 0.210 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 7439     | 0.178 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 4915     | 0.144 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 9) Naphthalene                | 10.357 | 128  | 1549     | 0.032 | ng    | # 81     |
| 12) 2-Methylnaphthalene       | 11.979 | 142  | 1168     | 0.038 | ng    | # 91     |
| 16) Acenaphthylene            | 13.900 | 152  | 1378     | 0.038 | ng    | 95       |
| 17) Acenaphthene              | 14.242 | 154  | 587      | 0.023 | ng    | # 91     |
| 18) Fluorene                  | 15.236 | 166  | 1963     | 0.061 | ng    | # 40     |
| 25) Phenanthrene              | 16.966 | 178  | 16053m   | 0.332 | ng    |          |
| 26) Anthracene                | 17.066 | 178  | 2508     | 0.059 | ng    | # 87     |
| 28) Fluoranthene              | 19.003 | 202  | 40078    | 0.749 | ng    | 100      |
| 30) Pyrene                    | 19.365 | 202  | 35327    | 0.528 | ng    | # 95     |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 16542    | 0.305 | ng    | 95       |
| 33) Chrysene                  | 21.175 | 228  | 22138    | 0.411 | ng    | 97       |
| 34) Bis(2-ethylhexyl)phtha... | 21.085 | 149  | 2547m    | 0.074 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.449 | 276  | 16797    | 0.235 | ng    | 97       |
| 37) Benzo(b)fluoranthene      | 22.662 | 252  | 32758    | 0.509 | ng    | 95       |
| 38) Benzo(k)fluoranthene      | 22.697 | 252  | 12346m   | 0.195 | ng    |          |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 20599    | 0.387 | ng    | 96       |
| 40) Dibenzo(a,h)anthracene    | 25.460 | 278  | 3867     | 0.068 | ng    | # 56     |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 17089    | 0.279 | ng    | 95       |

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

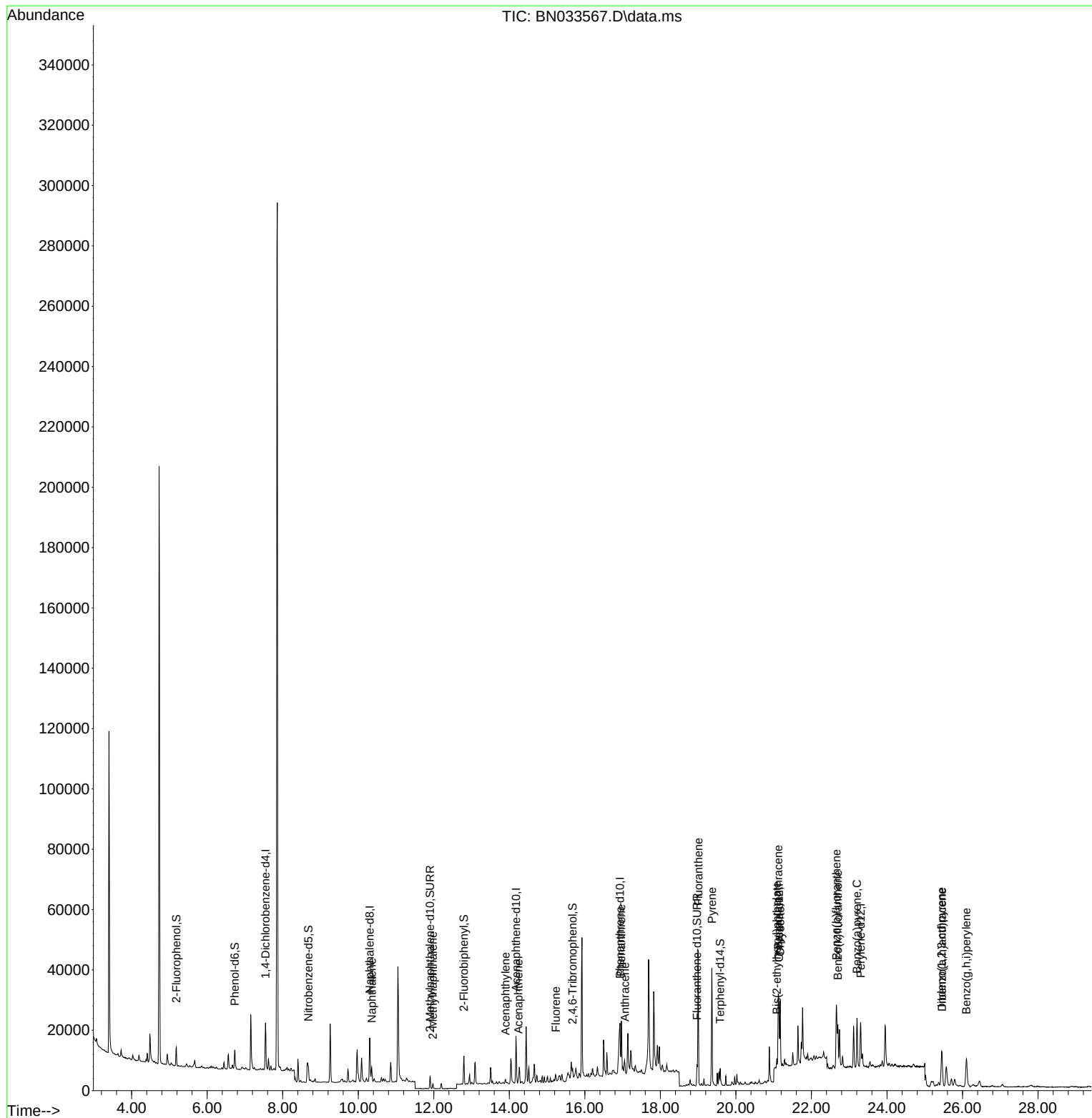
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Data File : BN033567.D  
Acq On : 23 Aug 2024 00:28  
Operator : MA/JU  
Sample : P3671-03  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

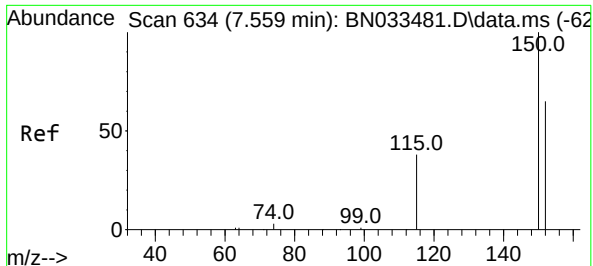
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

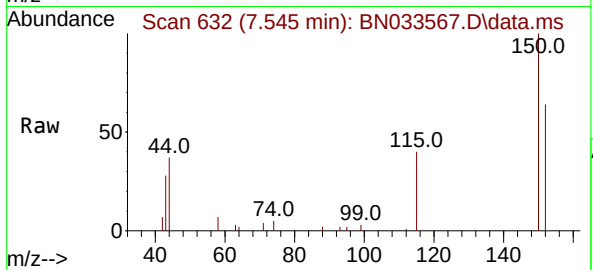
Quant Time: Aug 23 01:36:03 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

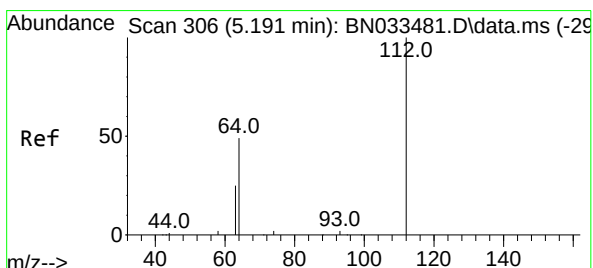
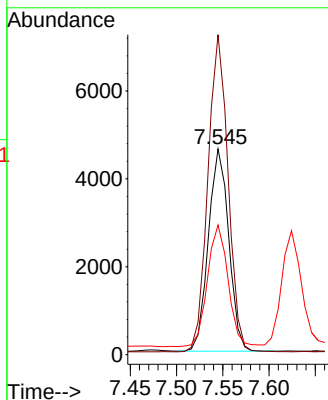
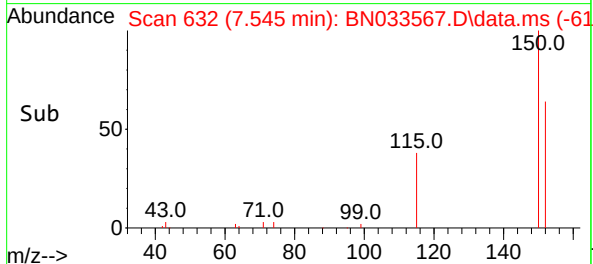
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:152 Resp: 702  
Ion Ratio Lower Upper  
152 100  
150 155.6 122.2 183.2  
115 63.0 47.2 70.8

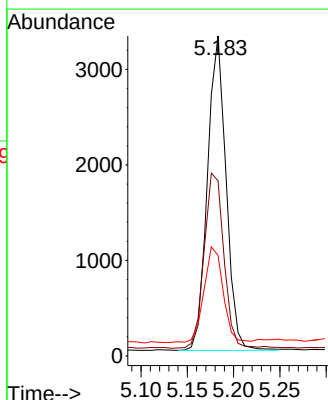
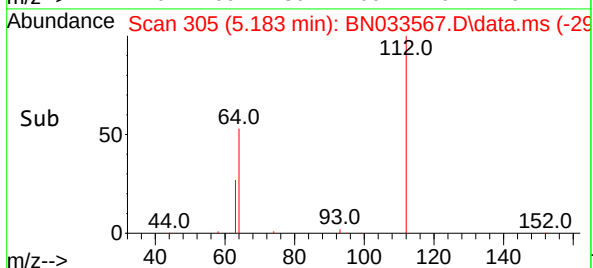
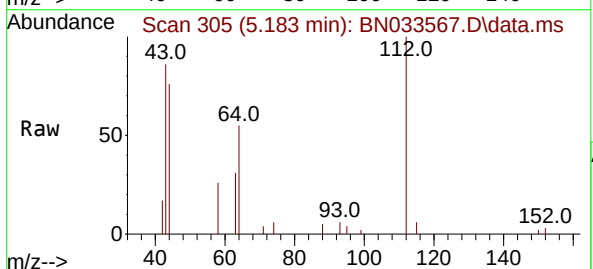
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

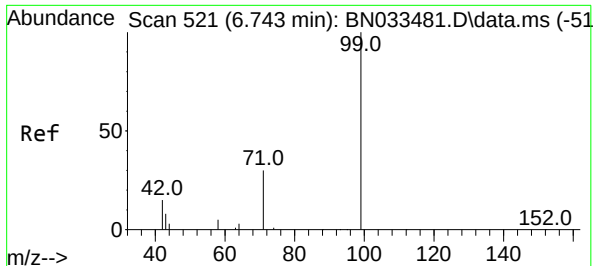


#4  
2-Fluorophenol  
Concen: 0.206 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

Tgt Ion:112 Resp: 4606  
Ion Ratio Lower Upper  
112 100  
64 59.2 47.1 70.7  
63 31.3 24.9 37.3

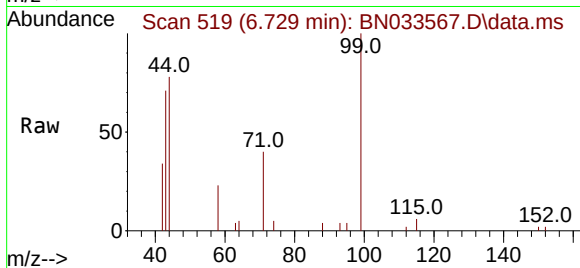






#5  
Phenol-d6  
Concen: 0.202 ng  
RT: 6.729 min Scan# 519  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

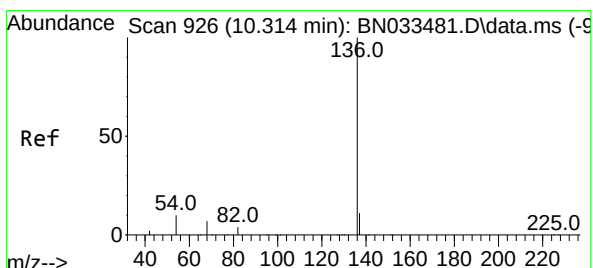
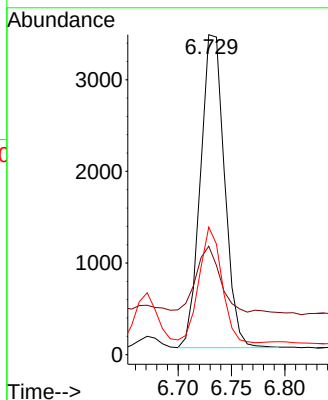
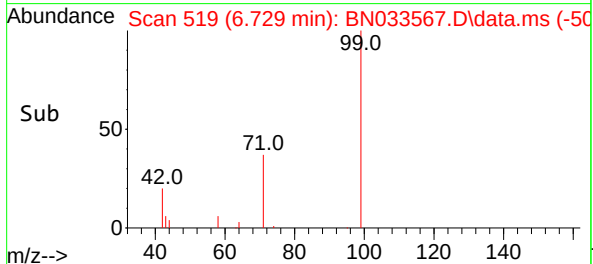
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion: 99 Resp: 5370  
Ion Ratio Lower Upper  
99 100  
42 22.1 16.6 24.8  
71 35.0 26.2 39.4

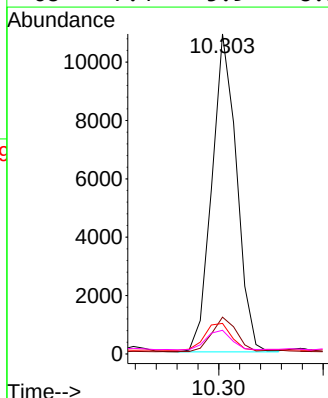
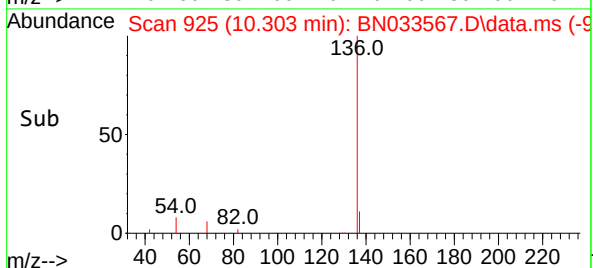
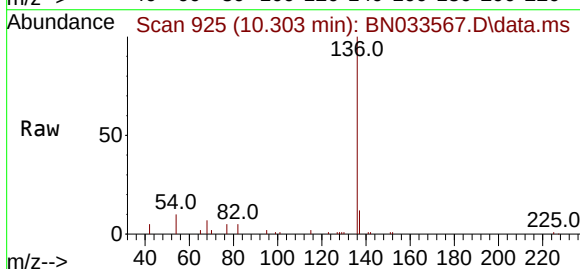
Manual Integrations  
**APPROVED**

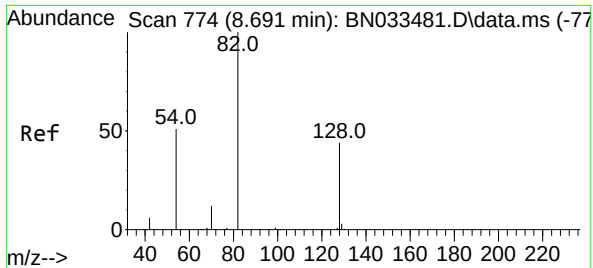
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.303 min Scan# 925  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

Tgt Ion:136 Resp: 17952  
Ion Ratio Lower Upper  
136 100  
137 11.5 9.0 13.6  
54 9.5 8.3 12.5  
68 7.4 5.9 8.9





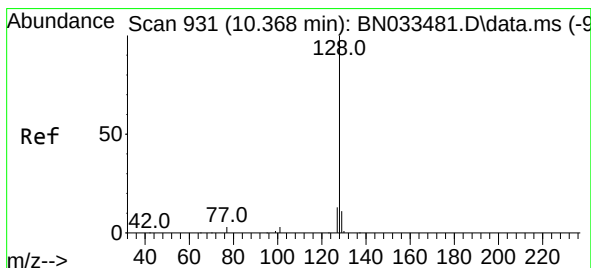
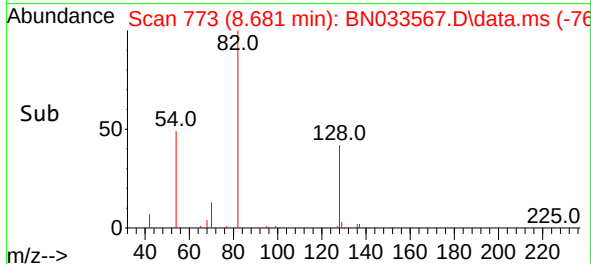
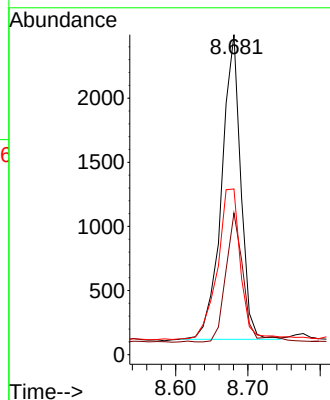
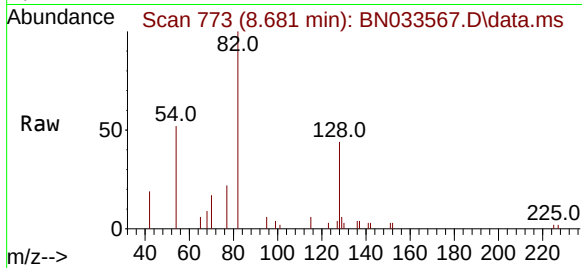
#8  
Nitrobenzene-d5  
Concen: 0.293 ng  
RT: 8.681 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924

Tgt Ion: 82 Resp: 436  
Ion Ratio Lower Upper  
82 100  
128 44.2 36.0 54.0  
54 51.8 42.0 63.0

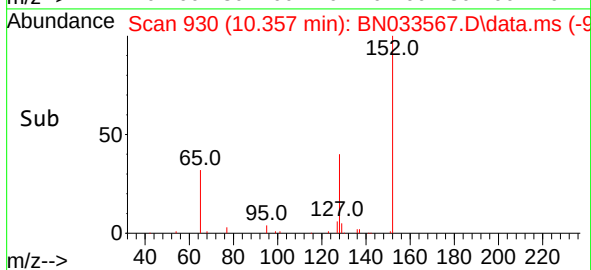
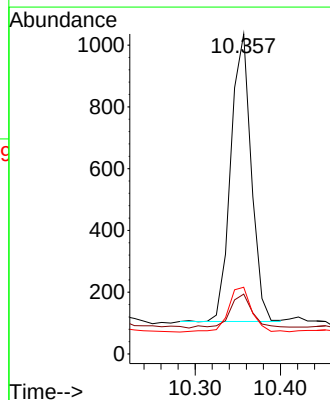
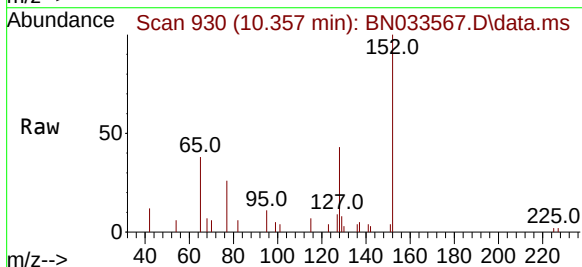
Manual Integrations  
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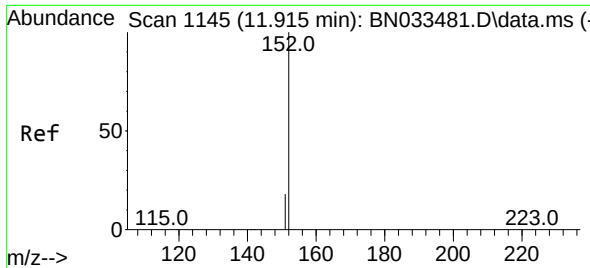
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#9  
Naphthalene  
Concen: 0.032 ng  
RT: 10.357 min Scan# 930  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

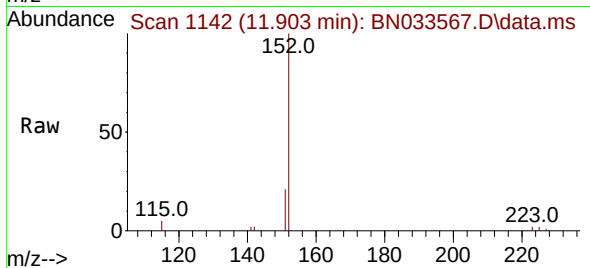
Tgt Ion:128 Resp: 1549  
Ion Ratio Lower Upper  
128 100  
129 18.7 9.1 13.7#  
127 20.8 10.7 16.1#





#11  
2-Methylnaphthalene-d10  
Concen: 0.211 ng  
RT: 11.903 min Scan# 1145  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

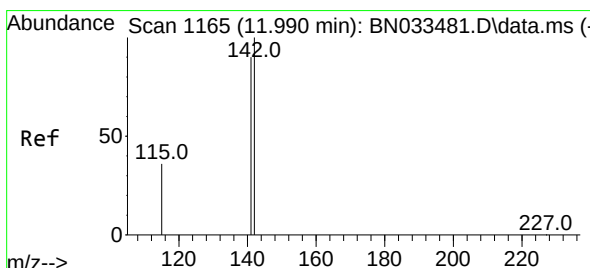
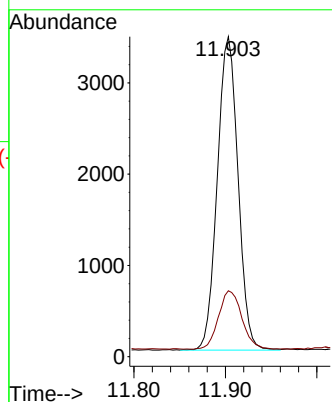
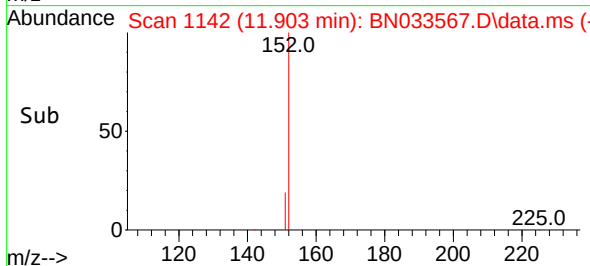
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:152 Resp: 540  
Ion Ratio Lower Upper  
152 100  
151 20.9 16.6 25.0

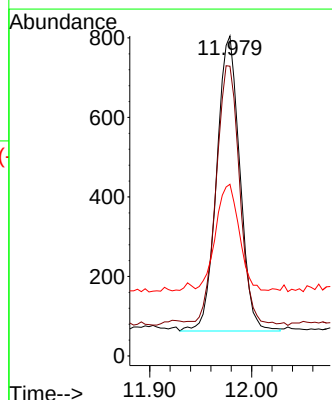
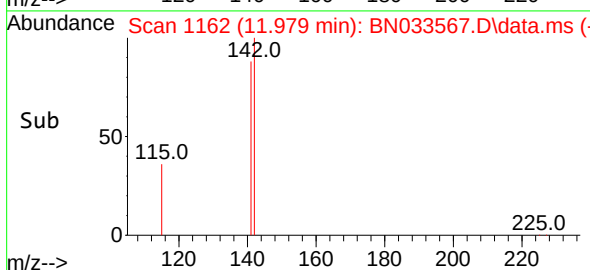
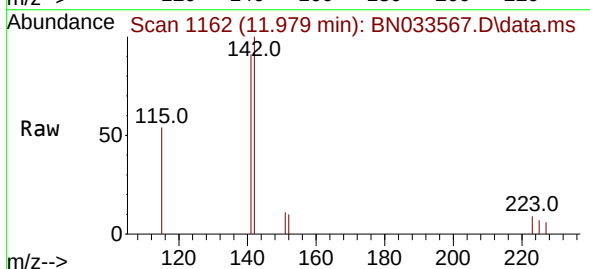
Manual Integrations  
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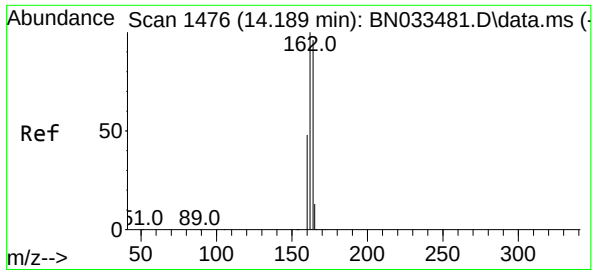
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.038 ng  
RT: 11.979 min Scan# 1162  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

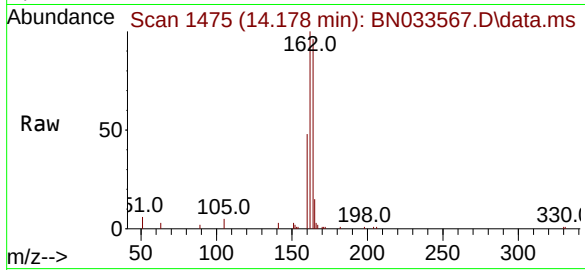
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Ion Ratio Lower Upper  
142 100  
141 90.6 71.7 107.5  
115 53.7 29.4 44.2#





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

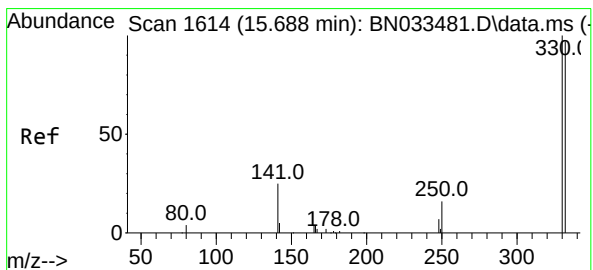
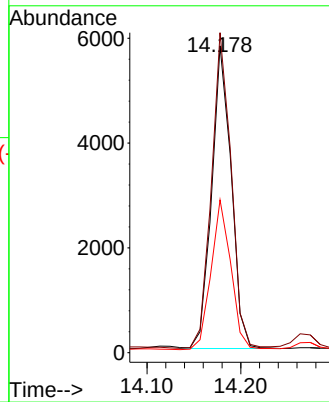
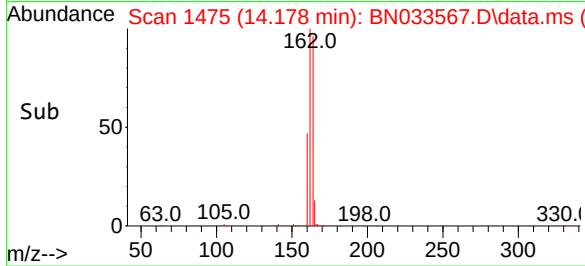
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



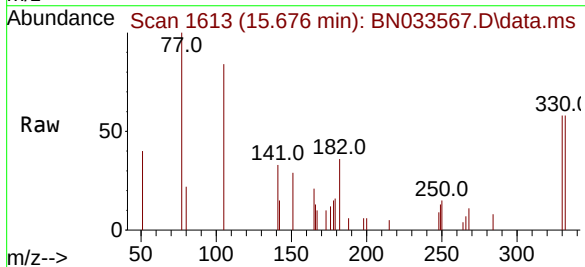
Tgt Ion:164 Resp: 8330  
Ion Ratio Lower Upper  
164 100  
162 104.3 83.5 125.3  
160 49.8 40.2 60.4

Manual Integrations  
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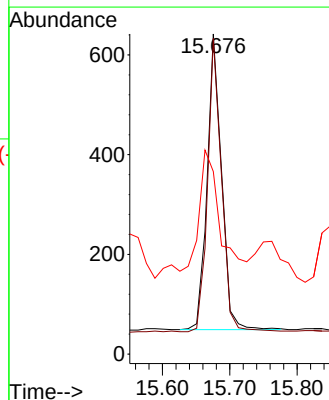
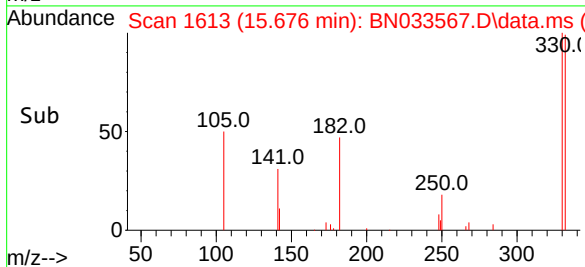
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

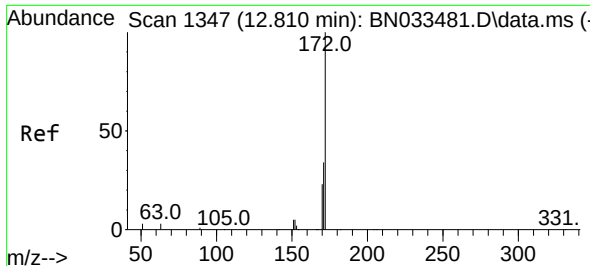


#14  
2,4,6-Tribromophenol  
Concen: 0.197 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28



Tgt Ion:330 Resp: 882  
Ion Ratio Lower Upper  
330 100  
332 95.6 77.5 116.3  
141 51.5 33.9 50.9#





#15

2-Fluorobiphenyl

Concen: 0.210 ng

RT: 12.799 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN033567.D

Acq: 23 Aug 2024 00:28

Instrument :

BNA\_N

ClientSampleId :

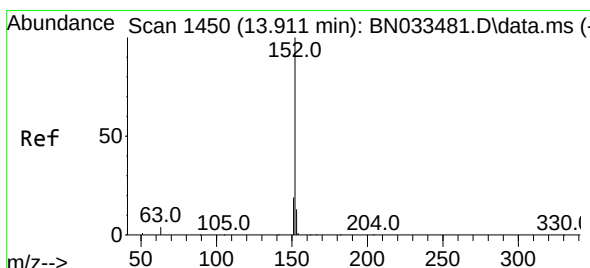
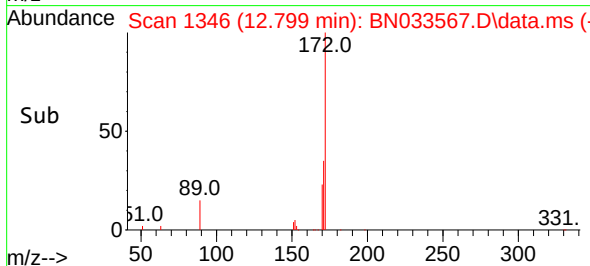
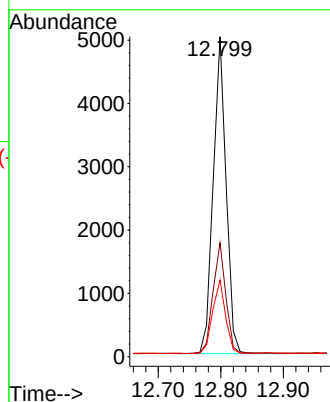
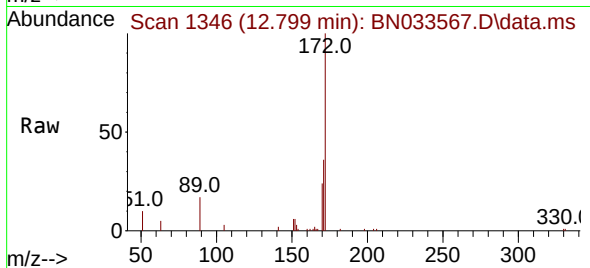
S-911-K1-SO-0-0.5-081924

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 172   | Resp: | 7139  |
| Ion      | Ratio | Lower | Upper |
| 172      | 100   |       |       |
| 171      | 35.6  | 27.7  | 41.5  |
| 170      | 24.0  | 18.3  | 27.5  |

Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#16

Acenaphthylene

Concen: 0.038 ng

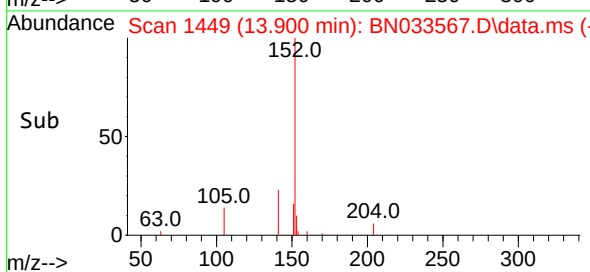
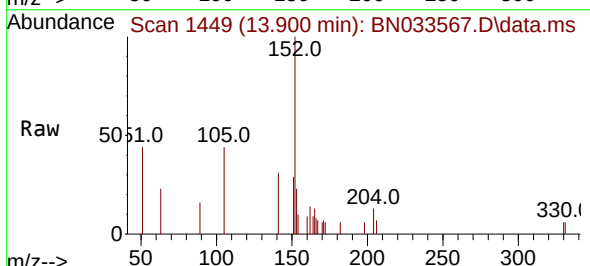
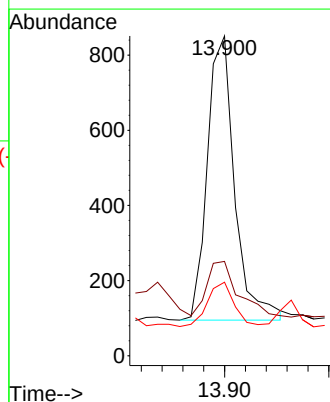
RT: 13.900 min Scan# 1449

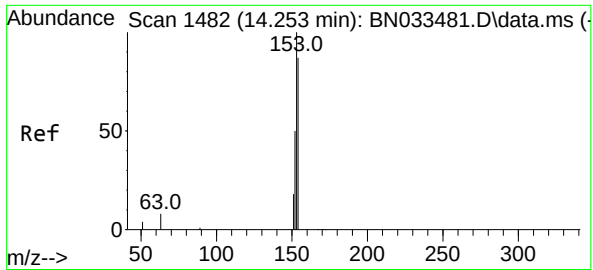
Delta R.T. -0.000 min

Lab File: BN033567.D

Acq: 23 Aug 2024 00:28

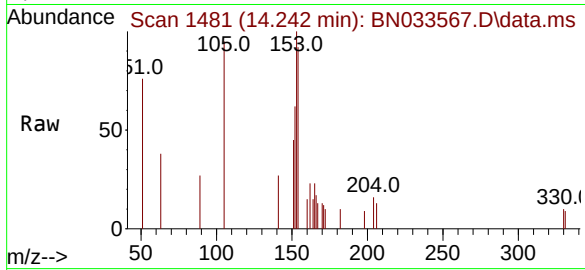
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 1378  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 21.3  | 15.7  | 23.5  |
| 153      | 15.2  | 10.3  | 15.5  |





#17  
Acenaphthene  
Concen: 0.023 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

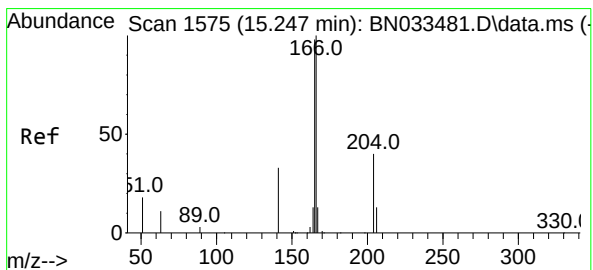
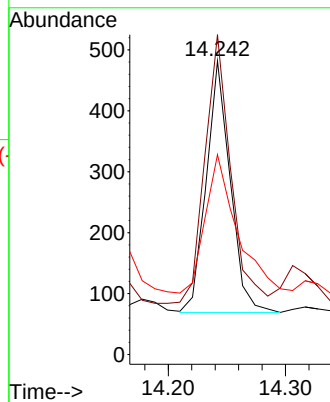
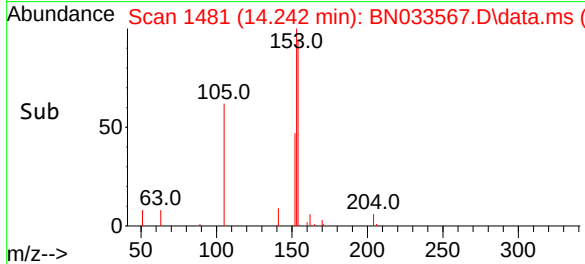
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:154 Resp: 58  
Ion Ratio Lower Upper  
154 100  
153 114.1 89.0 133.6  
152 72.4 45.2 67.8

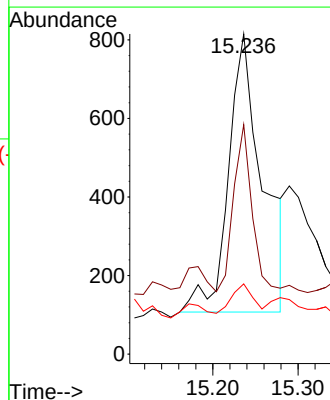
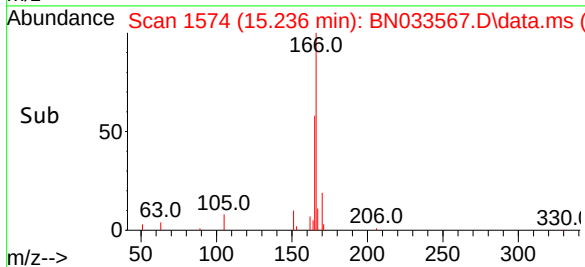
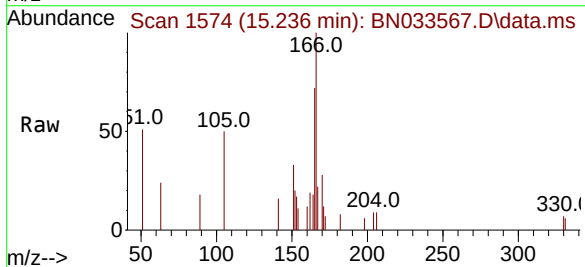
Manual Integrations  
APPROVED

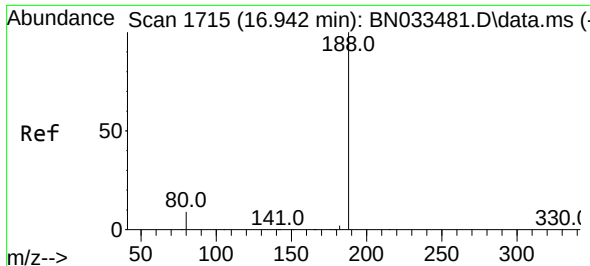
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#18  
Fluorene  
Concen: 0.061 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

Tgt Ion:166 Resp: 1963  
Ion Ratio Lower Upper  
166 100  
165 32.3 78.2 117.4#  
167 6.4 10.6 16.0#





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.929 min Scan# 1715

Delta R.T. -0.000 min

Lab File: BN033567.D

Acq: 23 Aug 2024 00:28

Instrument :

BNA\_N

ClientSampleId :

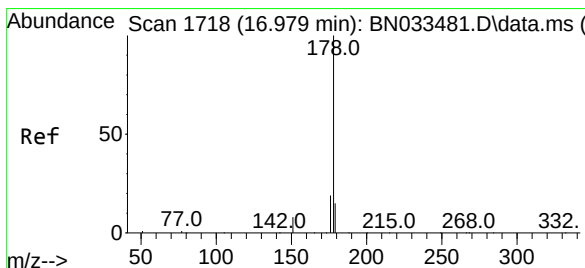
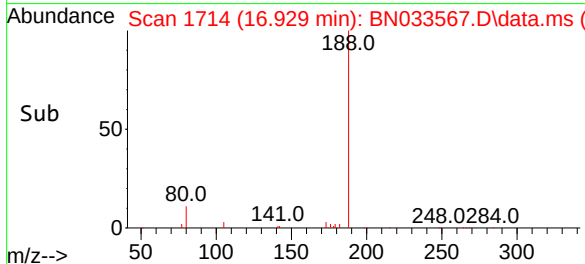
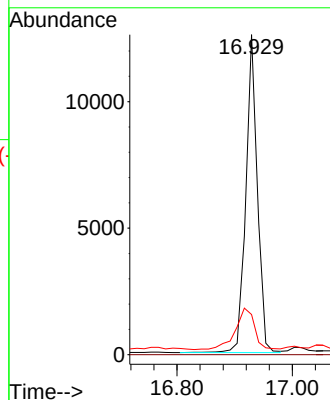
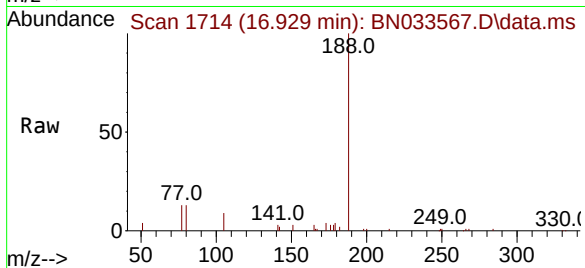
S-911-K1-SO-0-0.5-081924

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 12.5  | 7.8   | 11.8  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#25

Phenanthrene

Concen: 0.332 ng m

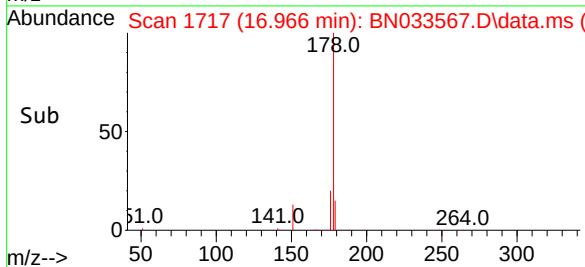
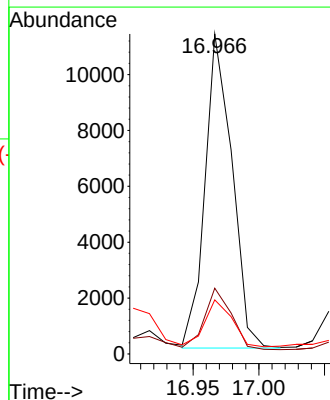
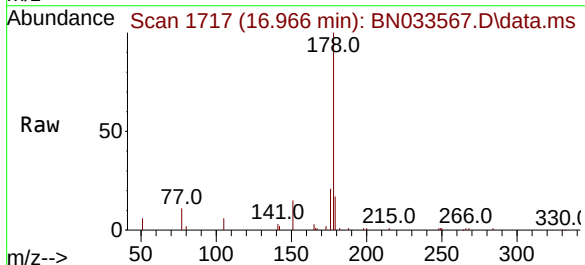
RT: 16.966 min Scan# 1717

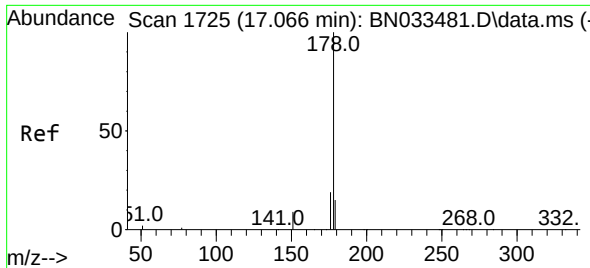
Delta R.T. -0.000 min

Lab File: BN033567.D

Acq: 23 Aug 2024 00:28

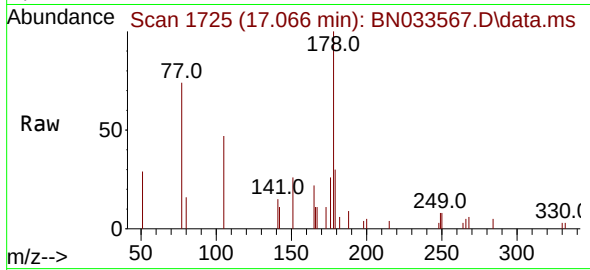
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.4  | 15.3  | 22.9  |
| 179     | 14.9  | 12.3  | 18.5  |





#26  
Anthracene  
Concen: 0.059 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

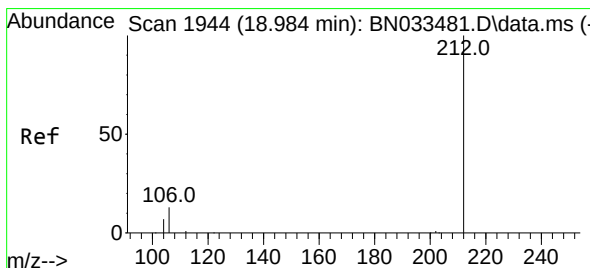
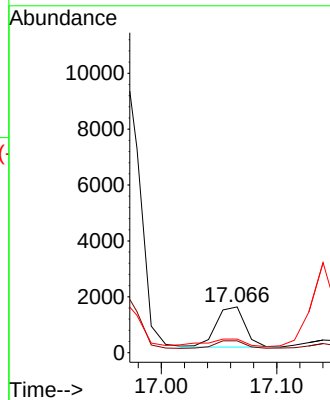
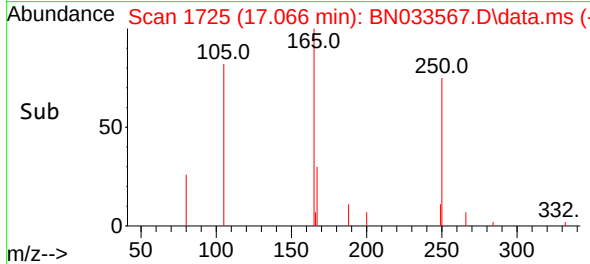
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:178 Resp: 2500  
Ion Ratio Lower Upper  
178 100  
176 19.7 15.0 22.6  
179 26.8 12.4 18.6

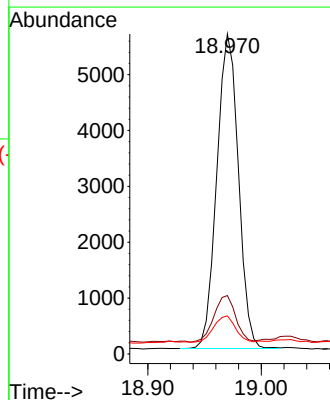
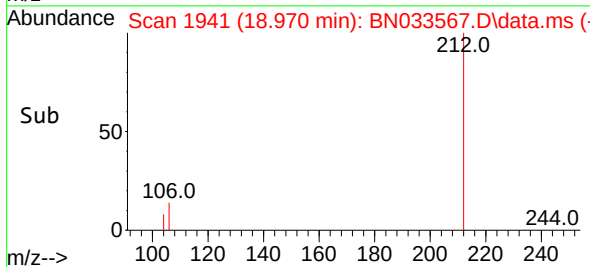
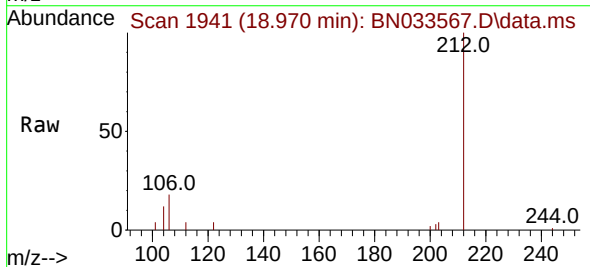
Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

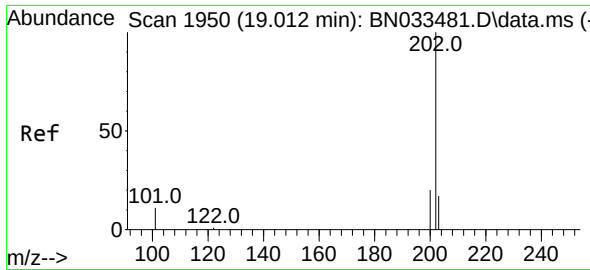


#27  
Fluoranthene-d10  
Concen: 0.178 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

Tgt Ion:212 Resp: 7439  
Ion Ratio Lower Upper  
212 100  
106 14.9 12.3 18.5  
104 8.8 7.0 10.4

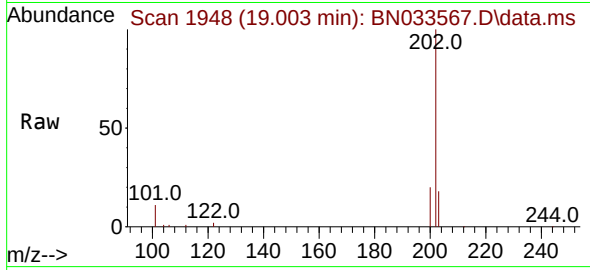






#28  
Fluoranthene  
Concen: 0.749 ng  
RT: 19.003 min Scan# 1950  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

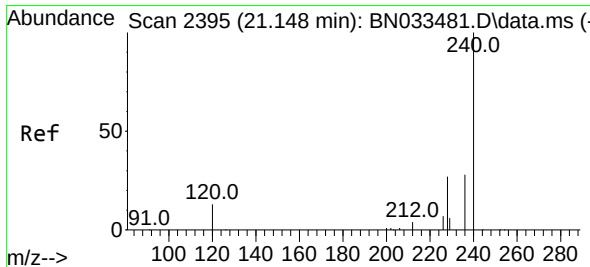
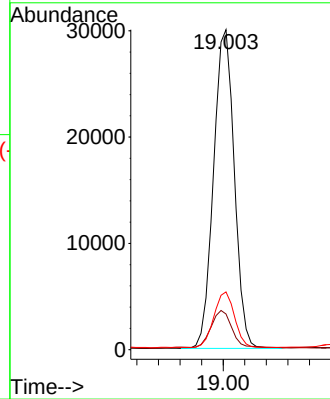
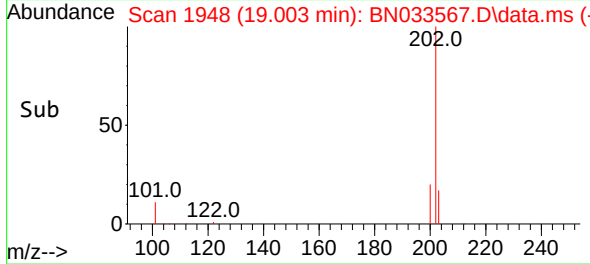
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:202 Resp: 40078  
Ion Ratio Lower Upper  
202 100  
101 12.0 9.5 14.3  
203 17.3 13.8 20.6

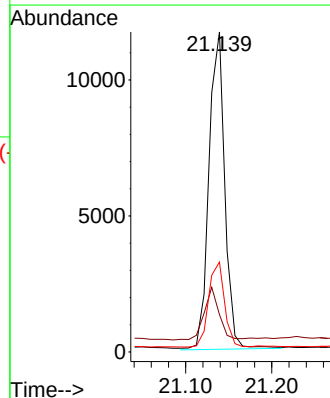
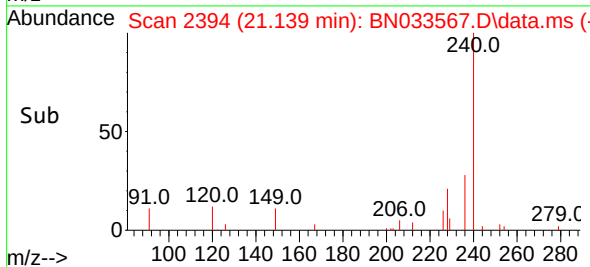
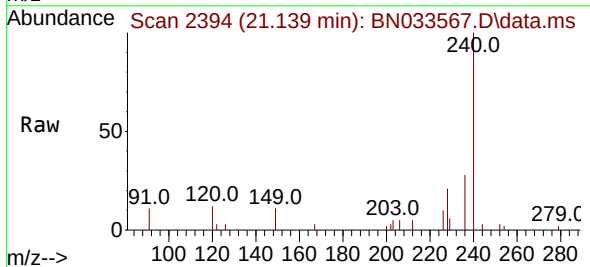
Manual Integrations  
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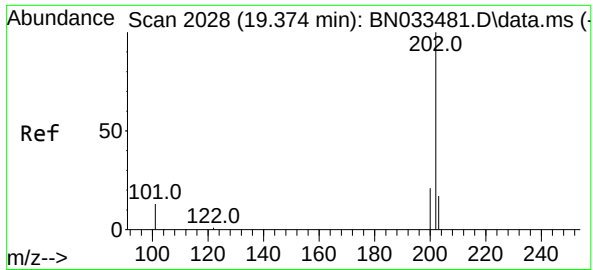
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

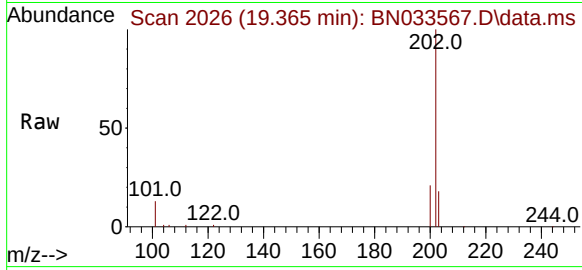
Tgt Ion:240 Resp: 14980  
Ion Ratio Lower Upper  
240 100  
120 11.7 12.4 18.6#  
236 28.1 23.0 34.6





#30  
Pyrene  
Concen: 0.528 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

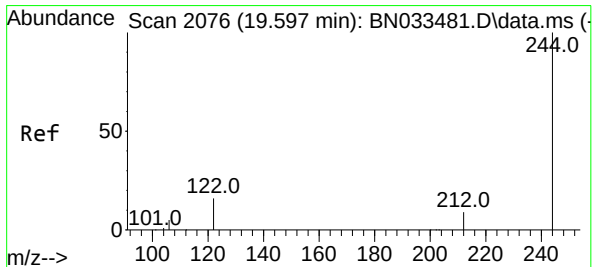
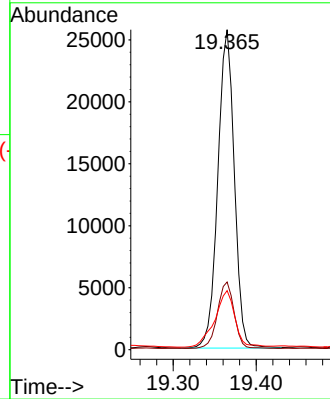
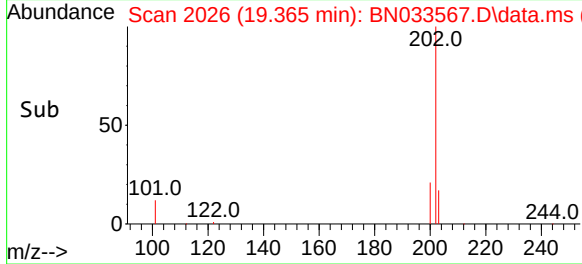
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:202 Resp: 3532  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.6 24.8  
203 21.8 14.2 21.4

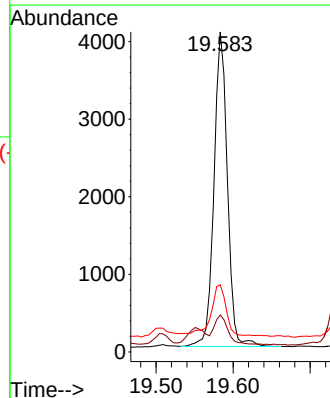
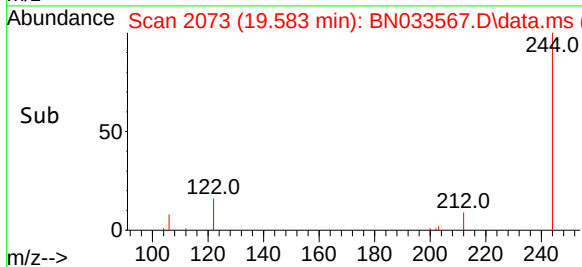
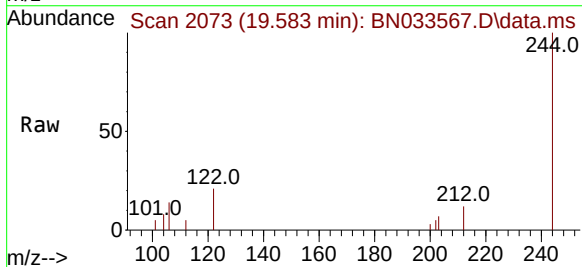
Manual Integrations  
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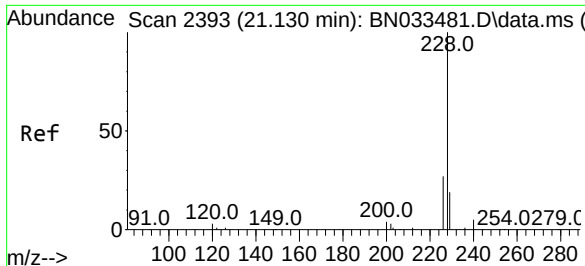
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#31  
Terphenyl-d14  
Concen: 0.144 ng  
RT: 19.583 min Scan# 2073  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

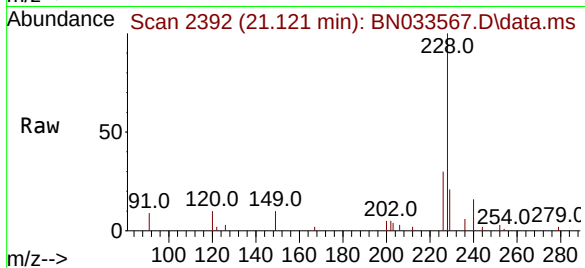
Tgt Ion:244 Resp: 4915  
Ion Ratio Lower Upper  
244 100  
212 11.5 7.8 11.6  
122 21.0 13.3 19.9





#32  
Benzo(a)anthracene  
Concen: 0.305 ng  
RT: 21.121 min Scan# 21121  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

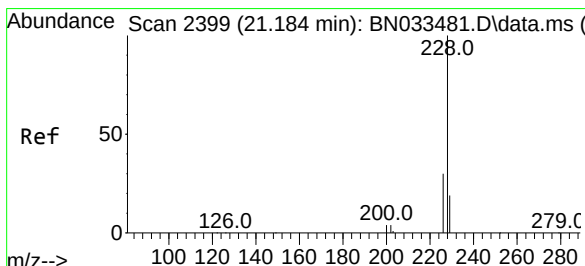
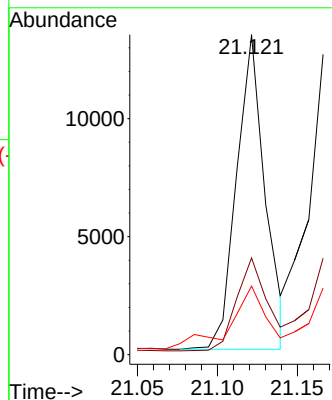
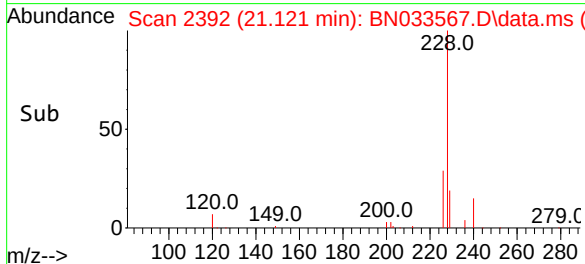
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:228 Resp: 1654  
Ion Ratio Lower Upper  
228 100  
226 30.3 21.8 32.6  
229 21.5 15.8 23.6

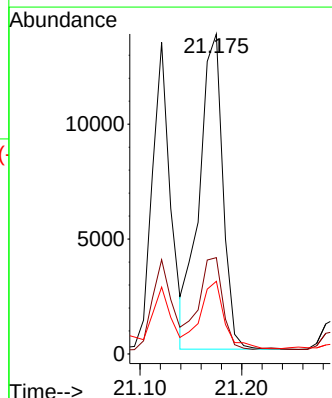
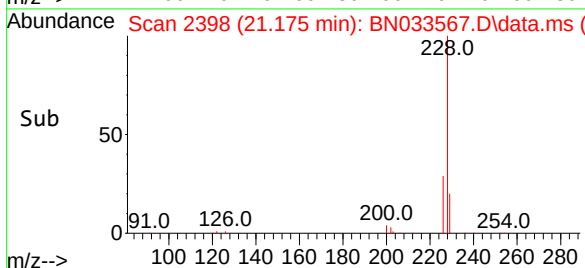
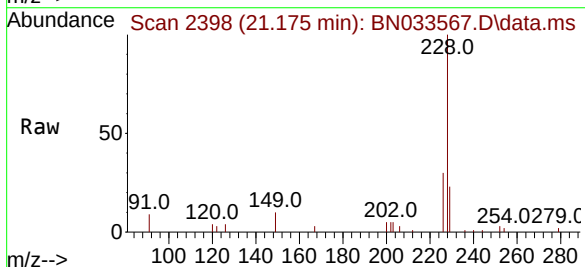
Manual Integrations  
APPROVED

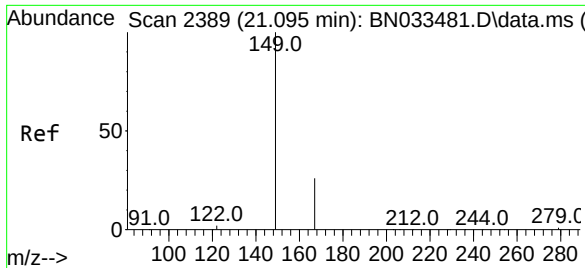
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#33  
Chrysene  
Concen: 0.411 ng  
RT: 21.175 min Scan# 2398  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

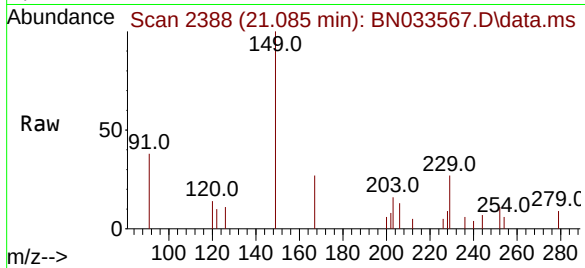
Tgt Ion:228 Resp: 22138  
Ion Ratio Lower Upper  
228 100  
226 30.1 23.8 35.8  
229 22.7 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.074 ng m  
RT: 21.085 min Scan# 21085  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

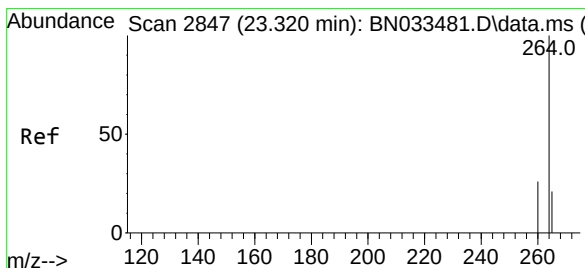
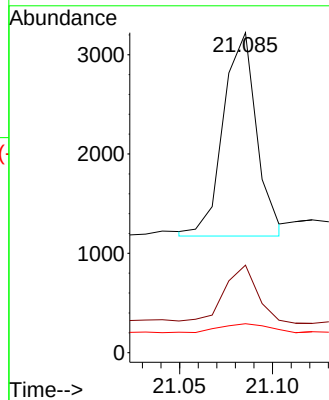
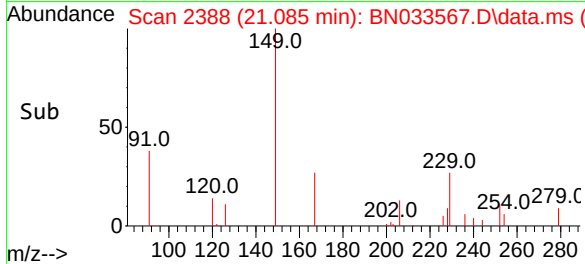
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion:149 Resp: 254  
Ion Ratio Lower Upper  
149 100  
167 115.3 21.5 32.3  
279 15.5 2.2 3.2

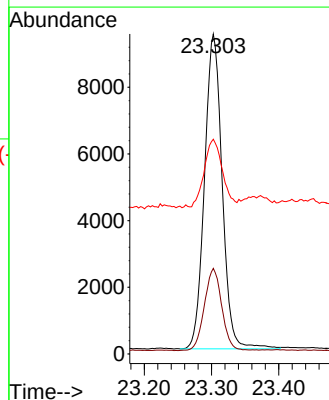
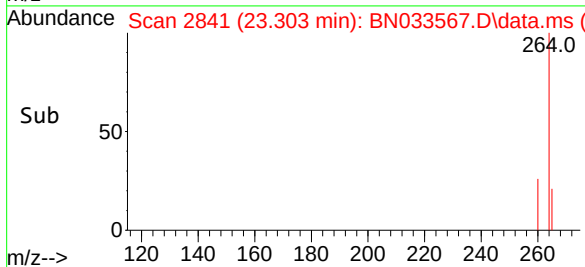
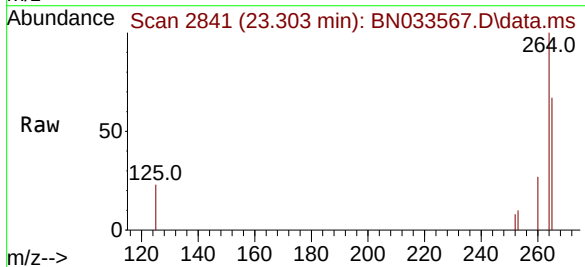
Manual Integrations  
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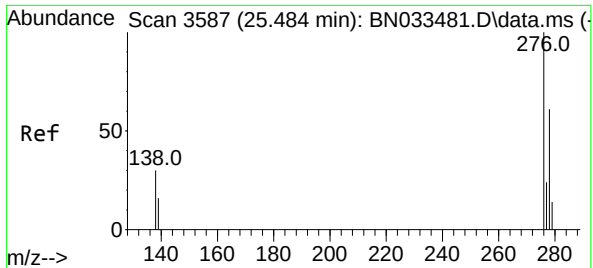
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.303 min Scan# 2841  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

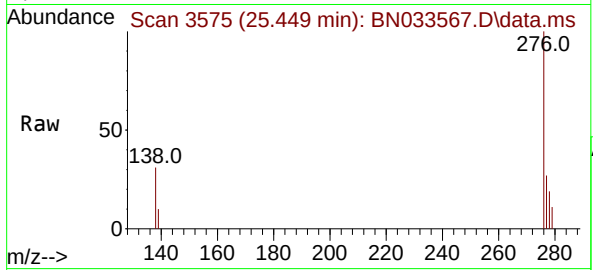
Tgt Ion:264 Resp: 17231  
Ion Ratio Lower Upper  
264 100  
260 26.8 20.8 31.2  
265 67.1 52.2 78.2





#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.235 ng  
RT: 25.449 min Scan# 3575  
Delta R.T. -0.000 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

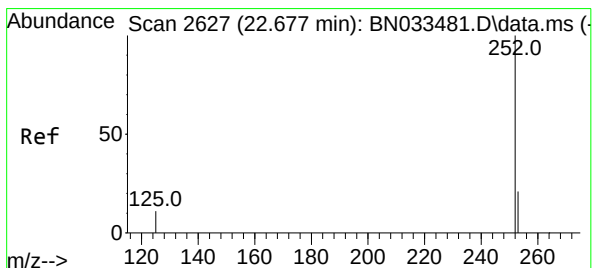
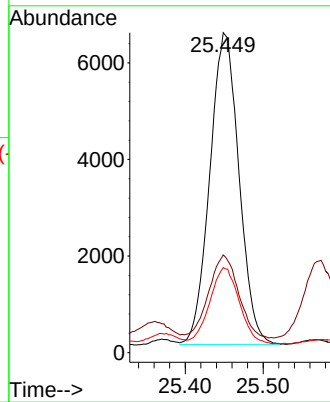
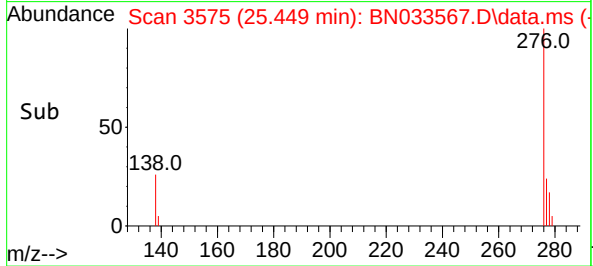
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924



Tgt Ion: 276 Resp: 1679  
Ion Ratio Lower Upper  
276 100  
138 27.1 24.4 36.6  
277 24.7 19.8 29.6

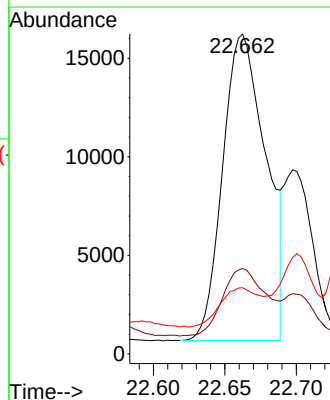
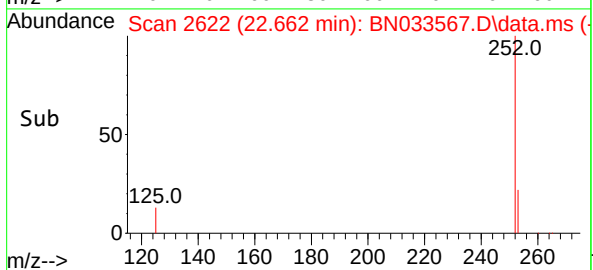
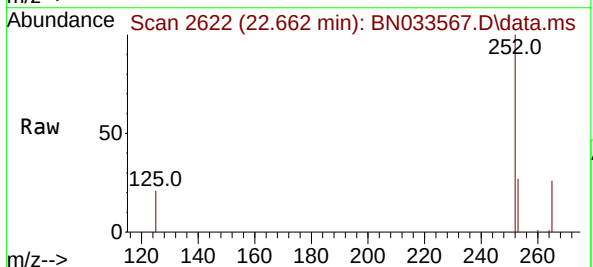
Manual Integrations  
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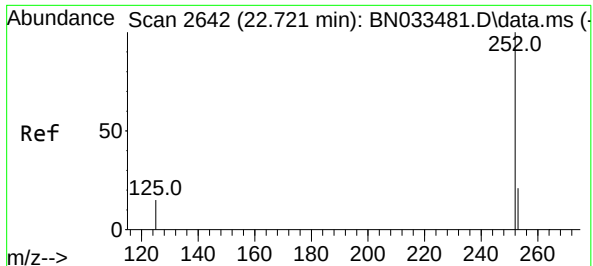
Reviewed By : Yogesh Patel 08/23/2024  
Supervised By : mohammad ahmed 08/24/2024



#37  
Benzo(b)fluoranthene  
Concen: 0.509 ng  
RT: 22.662 min Scan# 2622  
Delta R.T. 0.003 min  
Lab File: BN033567.D  
Acq: 23 Aug 2024 00:28

Tgt Ion: 252 Resp: 32758  
Ion Ratio Lower Upper  
252 100  
253 26.7 19.8 29.8  
125 20.7 13.9 20.9





#38

Benzo(k)fluoranthene

Concen: 0.195 ng m

RT: 22.697 min Scan# 20

Delta R.T. -0.006 min

Lab File: BN033567.D

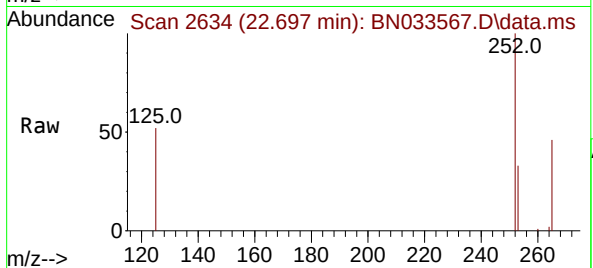
Acq: 23 Aug 2024 00:28

Instrument :

BNA\_N

ClientSampleId :

S-911-K1-SO-0-0.5-081924



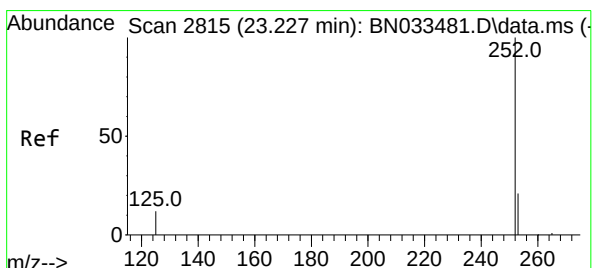
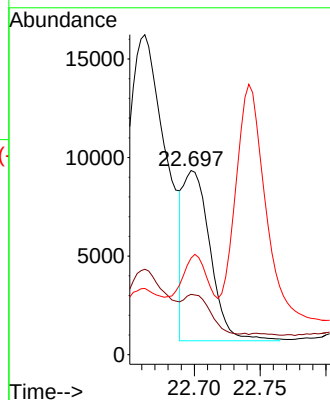
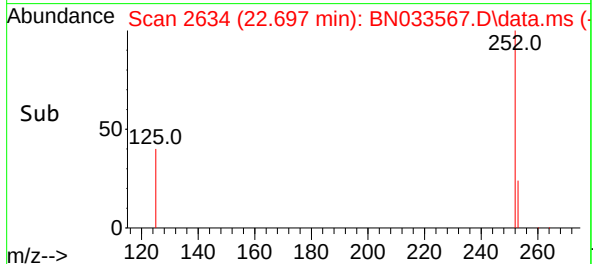
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 32.8  | 19.8  | 29.8  |
| 125     | 52.5  | 15.8  | 23.8  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#39

Benzo(a)pyrene

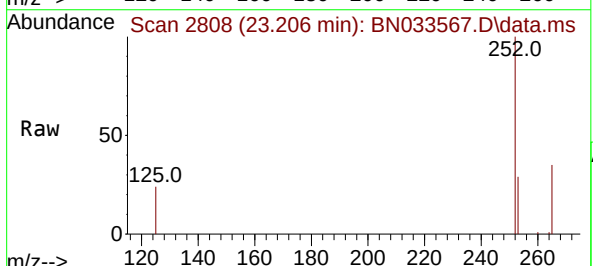
Concen: 0.387 ng

RT: 23.206 min Scan# 2808

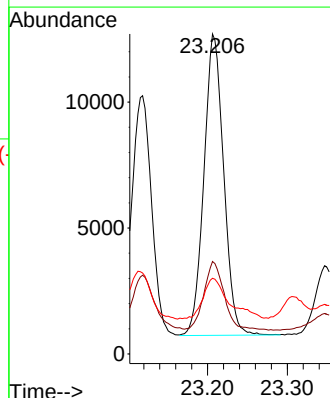
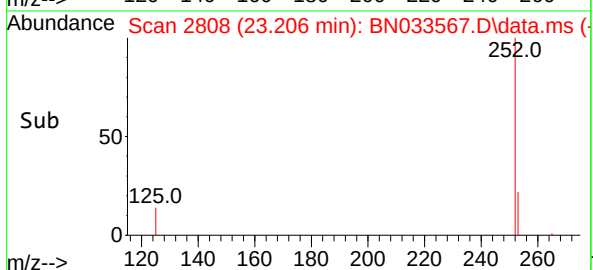
Delta R.T. -0.003 min

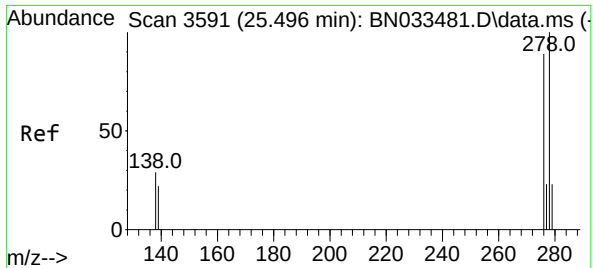
Lab File: BN033567.D

Acq: 23 Aug 2024 00:28



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 28.9  | 21.5  | 32.3  |
| 125     | 23.6  | 17.0  | 25.4  |





#40

Dibenzo(a,h)anthracene

Concen: 0.068 ng

RT: 25.460 min Scan# 31

Delta R.T. -0.009 min

Lab File: BN033567.D

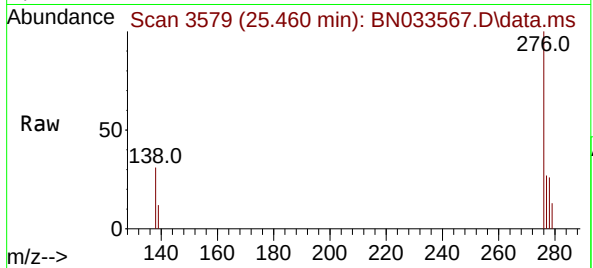
Acq: 23 Aug 2024 00:28

Instrument :

BNA\_N

ClientSampleId :

S-911-K1-SO-0-0.5-081924



Tgt Ion:278 Resp: 386

Ion Ratio Lower Upper

278 100

139 44.4 19.1 28.7

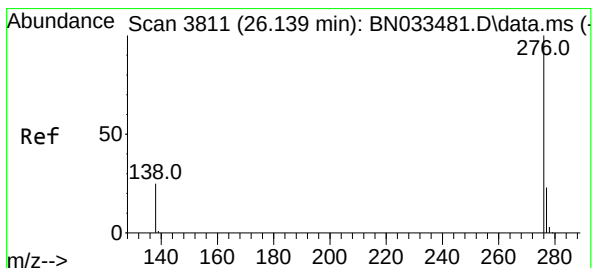
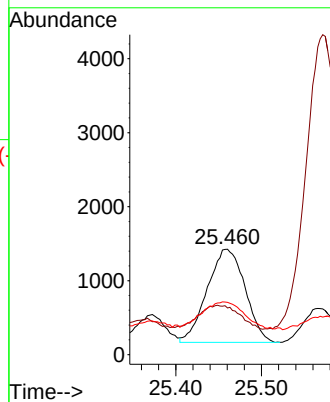
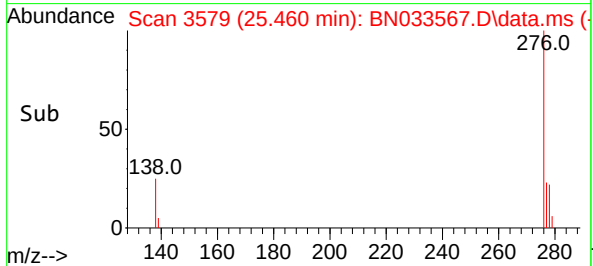
279 49.6 21.0 31.4

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#41

Benzo(g,h,i)perylene

Concen: 0.279 ng

RT: 26.104 min Scan# 3799

Delta R.T. -0.000 min

Lab File: BN033567.D

Acq: 23 Aug 2024 00:28

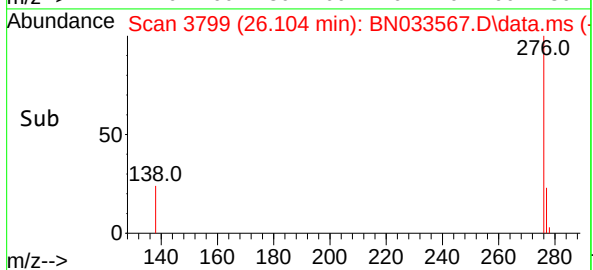
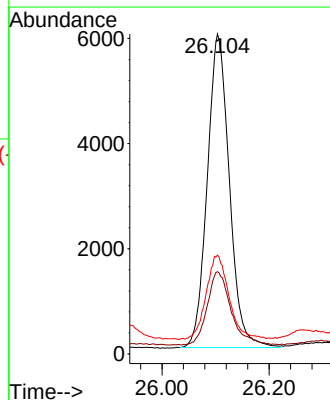
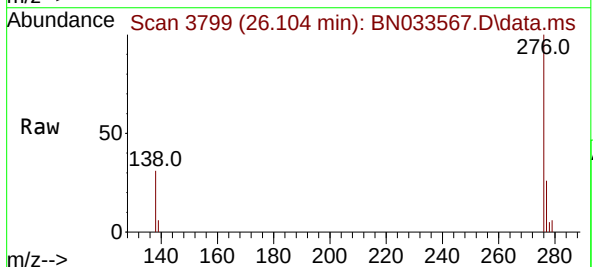
Tgt Ion:276 Resp: 17089

Ion Ratio Lower Upper

276 100

277 25.7 19.7 29.5

138 30.9 21.8 32.6



## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-911-K1-SO-0.5-1-081924              | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-04                              | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 56                   |
| Sample Wt/Vol:     | 30.02      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033592.D        | 1         | 08/21/24 09:38 | 08/23/24 16:35 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 8.40  |           | 1.20                | 5.90       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 8.60  |           | 1.40                | 5.90       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 17.4  |           | 1.10                | 5.90       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 6.70  |           | 0.98                | 5.90       | ug/Kg             |
| 86-73-7                   | Fluorene                | 7.70  |           | 1.10                | 5.90       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 110   |           | 1.10                | 5.90       | ug/Kg             |
| 120-12-7                  | Anthracene              | 20.0  |           | 1.40                | 5.90       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 250   |           | 1.20                | 5.90       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 190   |           | 1.70                | 5.90       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 110   |           | 1.40                | 5.90       | ug/Kg             |
| 218-01-9                  | Chrysene                | 140   |           | 1.50                | 5.90       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 180   |           | 2.10                | 5.90       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 60.7  |           | 1.70                | 5.90       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 130   |           | 3.00                | 5.90       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 80.6  |           | 2.20                | 5.90       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 22.9  |           | 2.10                | 5.90       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 94.0  |           | 2.00                | 5.90       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 4.00  | U         | 4.00                | 11.8       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.18  |           | 30 (17) - 150 (161) | 45%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.15  |           | 30 (23) - 150 (138) | 37%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.25  |           | 30 (33) - 130 (121) | 62%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.17  |           | 30 (32) - 130 (121) | 43%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.14  |           | 30 (21) - 130 (130) | 36%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 6860  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 18100 |           | 10.304              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 8710  |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 17200 |           | 16.929              |            |                   |



## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-911-K1-SO-0.5-1-081924              | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-04                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 56                           |
| Sample Wt/Vol:     | 30.02      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033592.D        | 1         | 08/21/24 09:38 | 08/23/24 16:35 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 13500 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 15400 | 23.309    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033592.D  
 Acq On : 23 Aug 2024 16:35  
 Operator : MA/JU  
 Sample : P3671-04  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-911-K1-SO-0.5-1-081924

Quant Time: Aug 23 17:00:23 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 6858     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.304 | 136  | 18127    | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.178 | 164  | 8708     | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.929 | 188  | 17176    | 0.400 | ng    | # 0.00    |
| 29) Chrysene-d12              | 21.139 | 240  | 13469m   | 0.400 | ng    | 0.00      |
| 35) Perylene-d12              | 23.309 | 264  | 15412    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.183  | 112  | 3826     | 0.176 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.736  | 99   | 4789     | 0.185 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 3749     | 0.249 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 4676     | 0.180 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 945      | 0.202 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 6114     | 0.172 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.970 | 212  | 6117     | 0.148 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.588 | 244  | 4375     | 0.143 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 9) Naphthalene                | 10.357 | 128  | 6814     | 0.141 | ng    | Qvalue 95 |
| 12) 2-Methylnaphthalene       | 11.979 | 142  | 4430     | 0.144 | ng    | 97        |
| 16) Acenaphthylene            | 13.900 | 152  | 11201    | 0.293 | ng    | 98        |
| 17) Acenaphthene              | 14.242 | 154  | 3043     | 0.113 | ng    | 95        |
| 18) Fluorene                  | 15.236 | 166  | 4381     | 0.129 | ng    | 89        |
| 25) Phenanthrene              | 16.967 | 178  | 90177    | 1.887 | ng    | 100       |
| 26) Anthracene                | 17.066 | 178  | 14247    | 0.337 | ng    | # 93      |
| 28) Fluoranthene              | 19.003 | 202  | 226121   | 4.282 | ng    | 100       |
| 30) Pyrene                    | 19.365 | 202  | 196785   | 3.273 | ng    | # 95      |
| 32) Benzo(a)anthracene        | 21.122 | 228  | 94067    | 1.932 | ng    | 96        |
| 33) Chrysene                  | 21.175 | 228  | 110803   | 2.289 | ng    | 97        |
| 34) Bis(2-ethylhexyl)phtha... | 21.086 | 149  | 13515m   | 0.438 | ng    |           |
| 36) Indeno(1,2,3-cd)pyrene    | 25.461 | 276  | 86711    | 1.355 | ng    | # 93      |
| 37) Benzo(b)fluoranthene      | 22.666 | 252  | 170173   | 2.957 | ng    | 97        |
| 38) Benzo(k)fluoranthene      | 22.707 | 252  | 57866m   | 1.021 | ng    |           |
| 39) Benzo(a)pyrene            | 23.215 | 252  | 105296   | 2.211 | ng    | 93        |
| 40) Dibenzo(a,h)anthracene    | 25.469 | 278  | 19717    | 0.385 | ng    | # 83      |
| 41) Benzo(g,h,i)perylene      | 26.116 | 276  | 86506    | 1.581 | ng    | 99        |

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

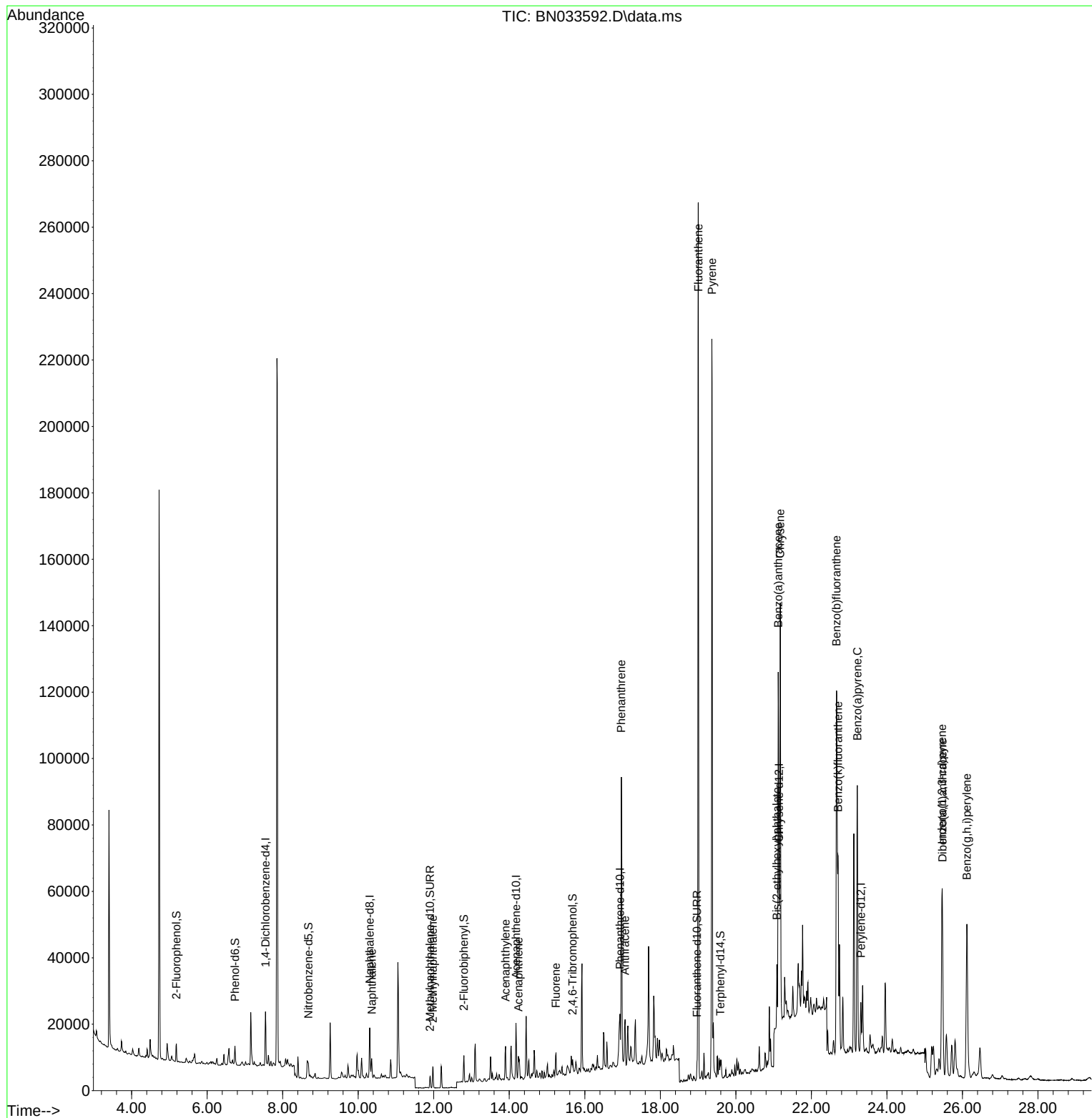
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033592.D  
 Acq On : 23 Aug 2024 16:35  
 Operator : MA/JU  
 Sample : P3671-04  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

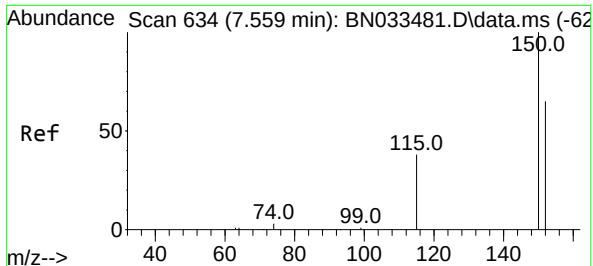
Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-911-K1-SO-0.5-1-081924

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024

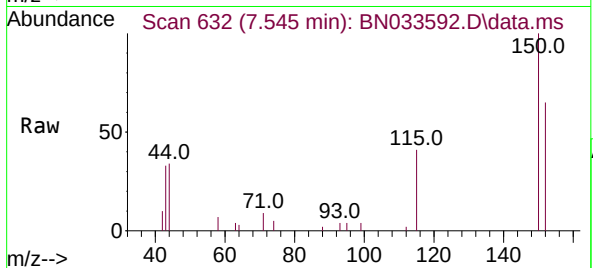
Quant Time: Aug 23 17:00:23 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

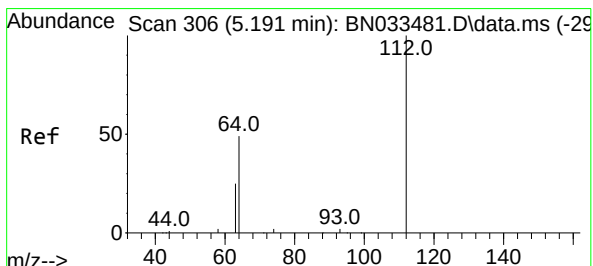
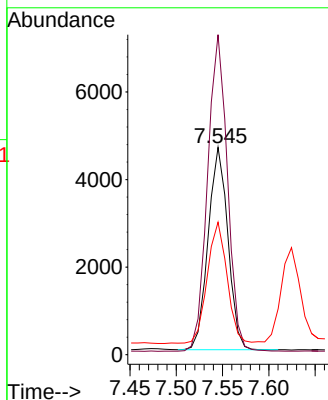
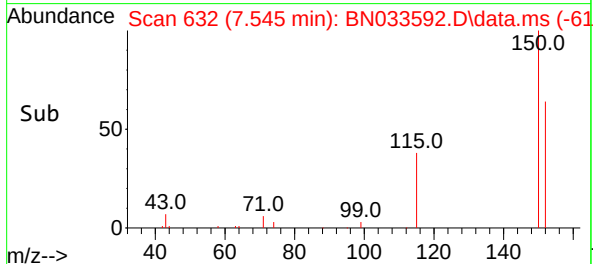
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:152 Resp: 685  
Ion Ratio Lower Upper  
152 100  
150 154.4 122.2 183.2  
115 63.9 47.2 70.8

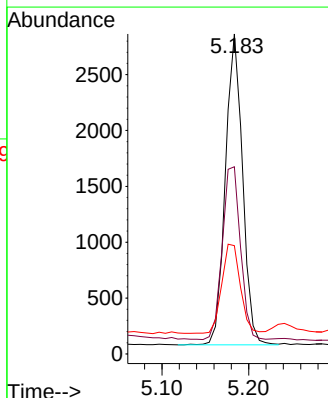
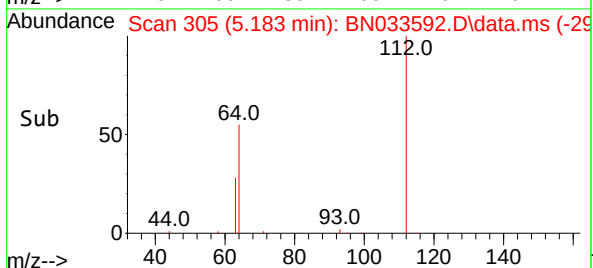
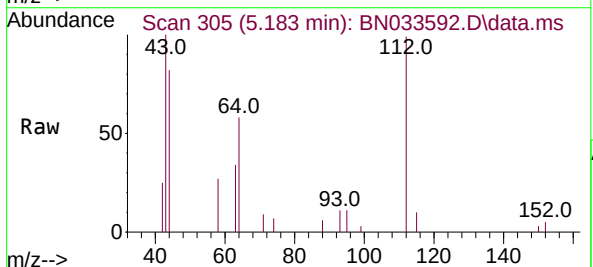
Manual Integrations  
APPROVED

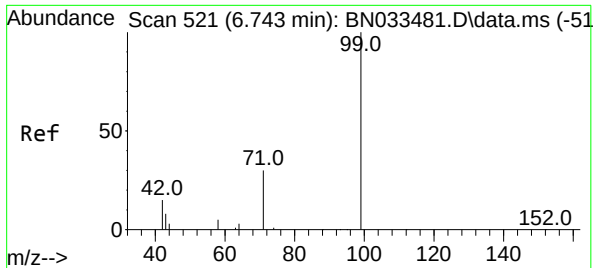
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#4  
2-Fluorophenol  
Concen: 0.176 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

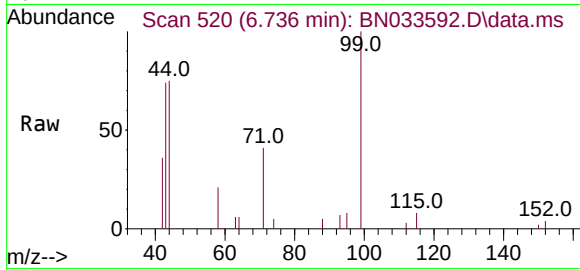
Tgt Ion:112 Resp: 3826  
Ion Ratio Lower Upper  
112 100  
64 58.4 47.1 70.7  
63 30.8 24.9 37.3





#5  
Phenol-d6  
Concen: 0.185 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

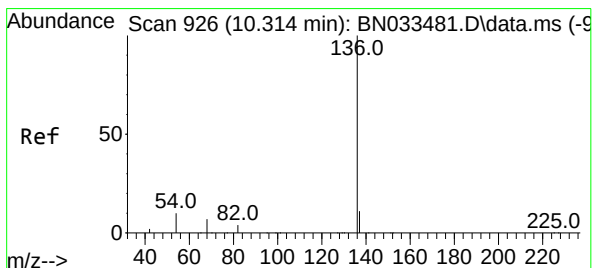
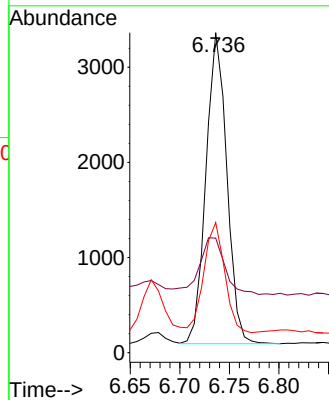
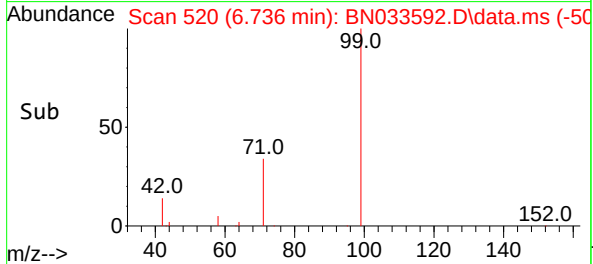
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion: 99 Resp: 4789  
Ion Ratio Lower Upper  
99 100  
42 22.2 16.6 24.8  
71 35.3 26.2 39.4

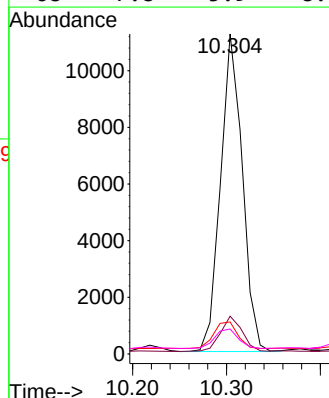
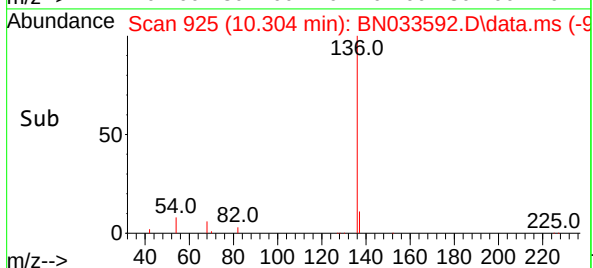
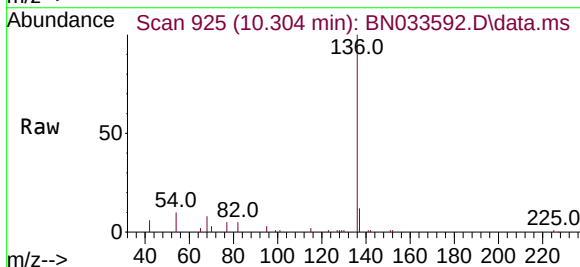
Manual Integrations  
**APPROVED**

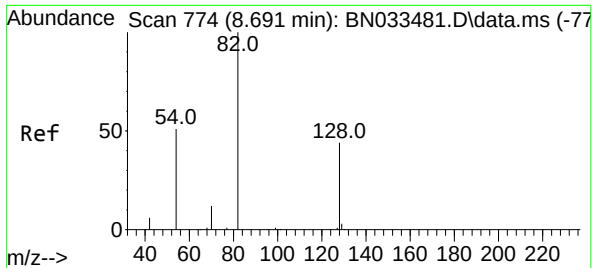
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

Tgt Ion:136 Resp: 18127  
Ion Ratio Lower Upper  
136 100  
137 11.8 9.0 13.6  
54 10.0 8.3 12.5  
68 7.8 5.9 8.9





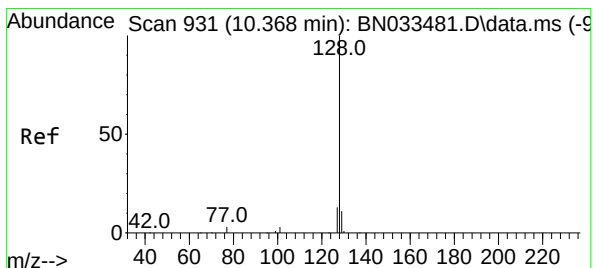
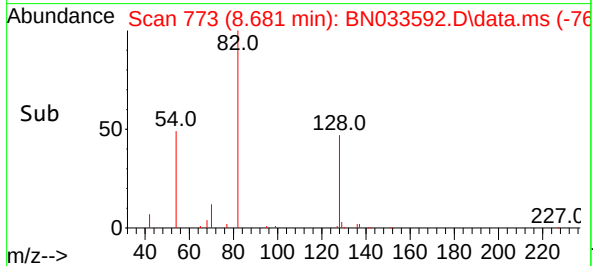
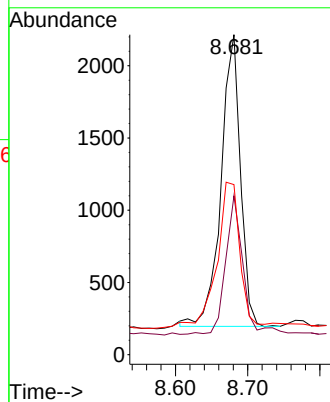
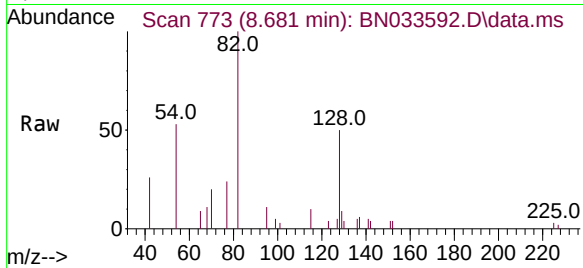
#8  
Nitrobenzene-d5  
Concen: 0.249 ng  
RT: 8.681 min Scan# 71  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924

Tgt Ion: 82 Resp: 3749  
Ion Ratio Lower Upper  
82 100  
128 49.7 36.0 54.0  
54 53.1 42.0 63.0

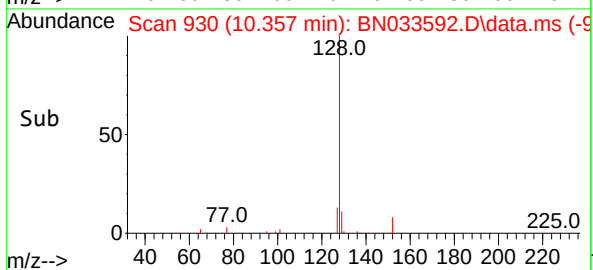
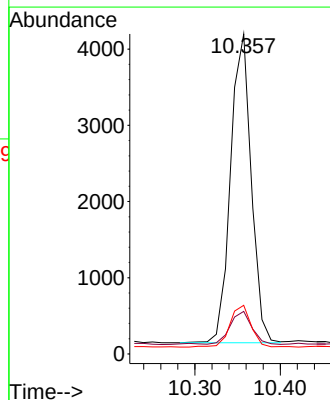
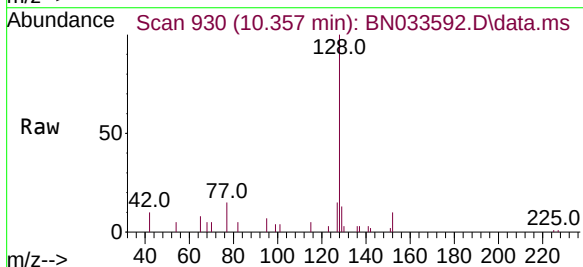
Manual Integrations  
APPROVED

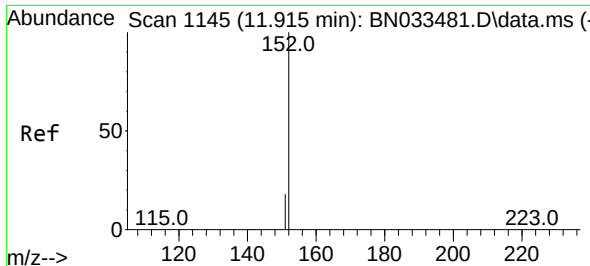
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#9  
Naphthalene  
Concen: 0.141 ng  
RT: 10.357 min Scan# 930  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

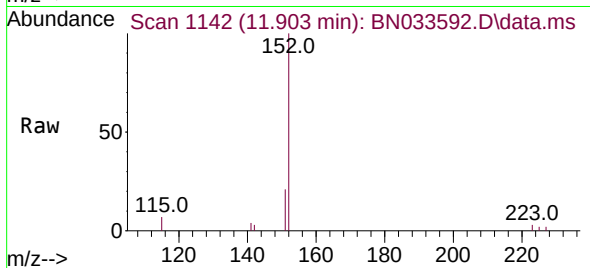
Tgt Ion:128 Resp: 6814  
Ion Ratio Lower Upper  
128 100  
129 13.3 9.1 13.7  
127 15.2 10.7 16.1





#11  
2-Methylnaphthalene-d10  
Concen: 0.180 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

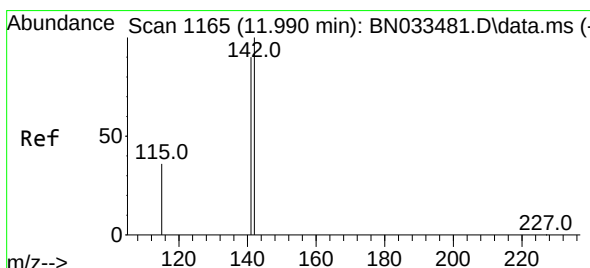
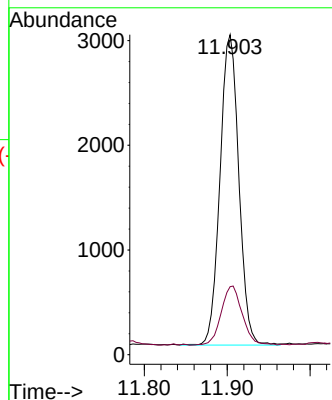
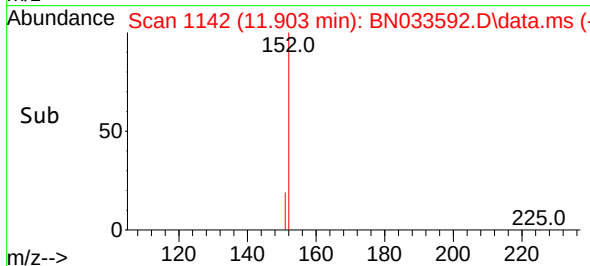
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:152 Resp: 4670  
Ion Ratio Lower Upper  
152 100  
151 21.5 16.6 25.0

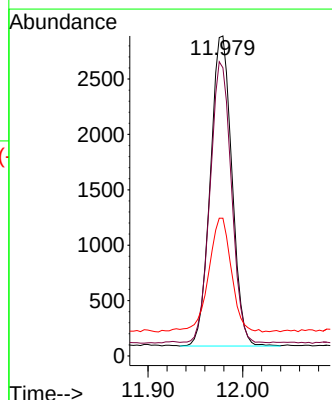
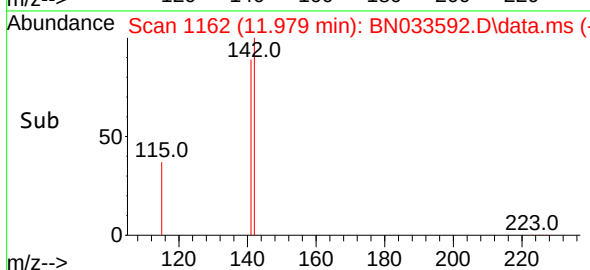
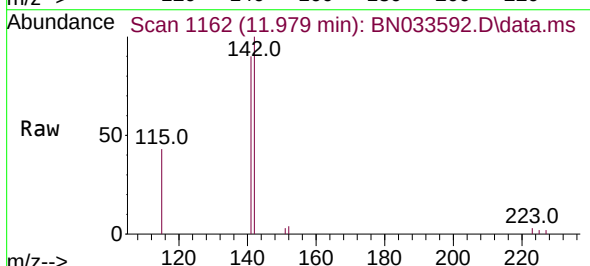
Manual Integrations  
APPROVED

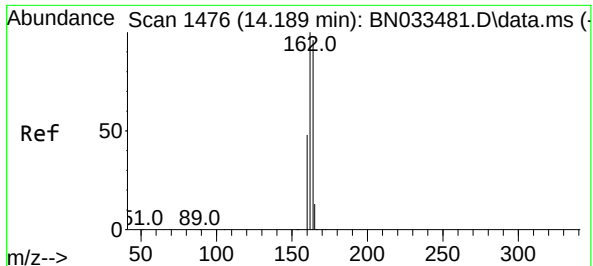
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#12  
2-Methylnaphthalene  
Concen: 0.144 ng  
RT: 11.979 min Scan# 1162  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

Tgt Ion:142 Resp: 4430  
Ion Ratio Lower Upper  
142 100  
141 90.1 71.7 107.5  
115 43.1 29.4 44.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.178 min Scan# 14

Delta R.T. 0.000 min

Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

Instrument :

BNA\_N

ClientSampleId :

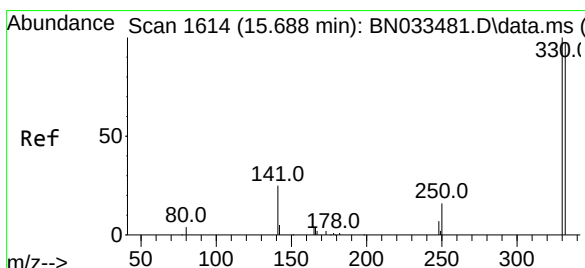
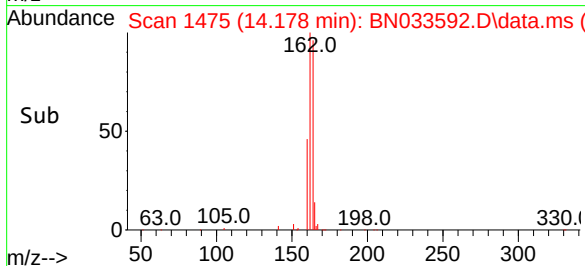
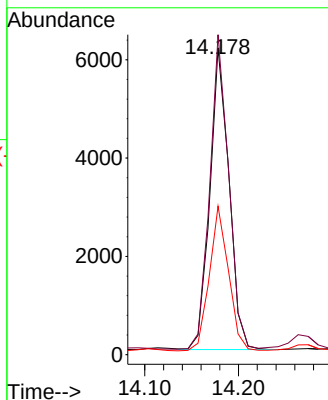
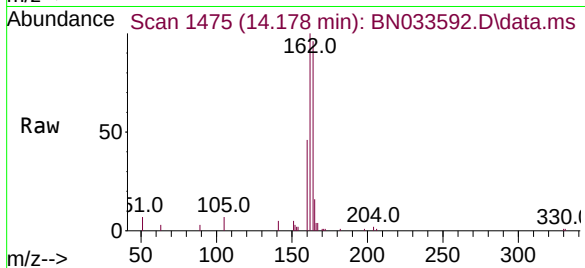
S-911-K1-SO-0.5-1-081924

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 164   | Resp: | 870   |
| Ion Ratio | Lower | Upper |       |
| 164       | 100   |       |       |
| 162       | 104.3 | 83.5  | 125.3 |
| 160       | 48.4  | 40.2  | 60.4  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#14

2,4,6-Tribromophenol

Concen: 0.202 ng

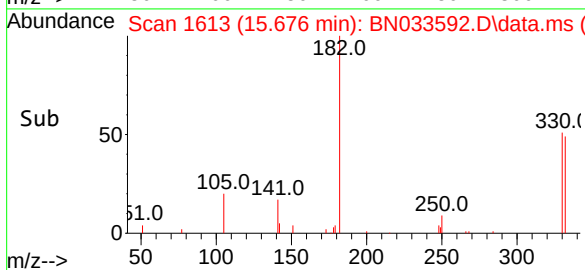
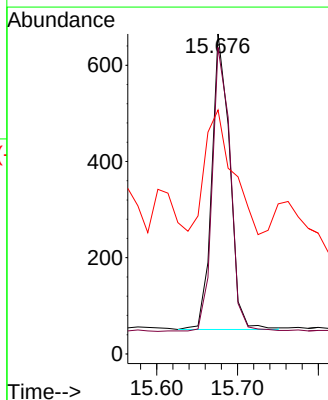
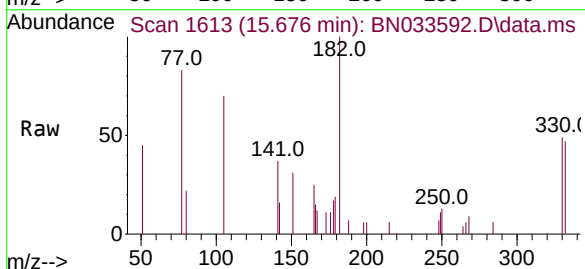
RT: 15.676 min Scan# 1613

Delta R.T. 0.000 min

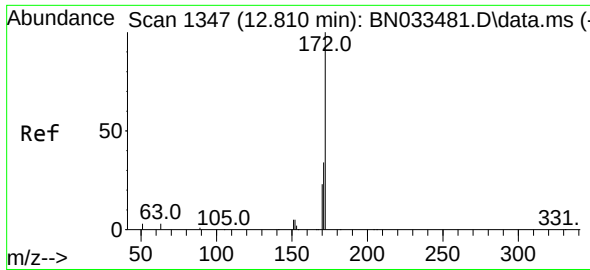
Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 330   | Resp: | 945   |
| Ion Ratio | Lower | Upper |       |
| 330       | 100   |       |       |
| 332       | 97.4  | 77.5  | 116.3 |
| 141       | 65.1  | 33.9  | 50.9  |

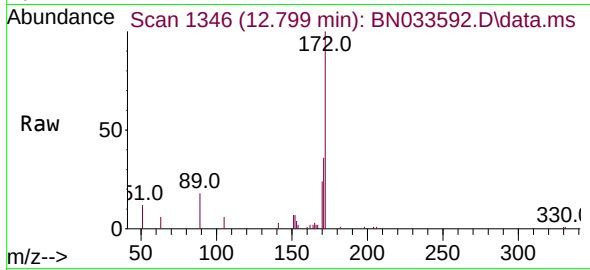






#15  
2-Fluorobiphenyl  
Concen: 0.172 ng  
RT: 12.799 min Scan# 1114  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

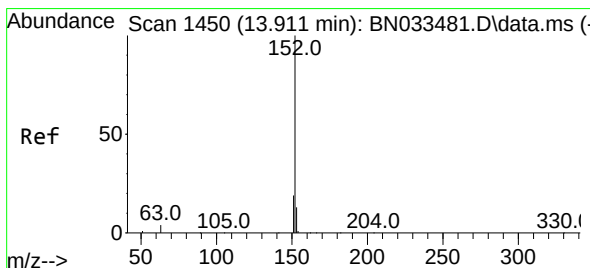
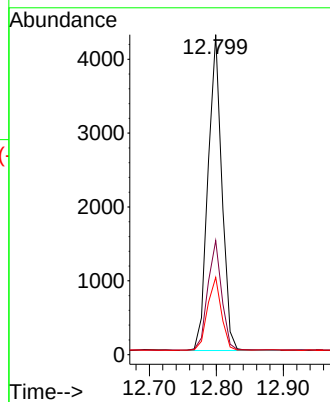
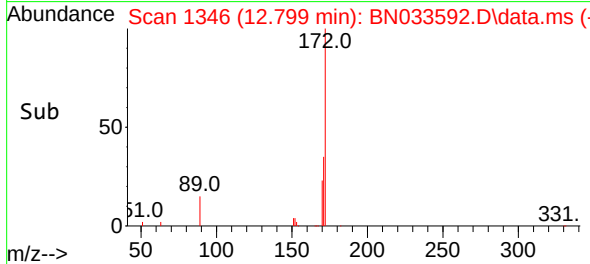
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:172 Resp: 6114  
Ion Ratio Lower Upper  
172 100  
171 35.7 27.7 41.5  
170 24.1 18.3 27.5

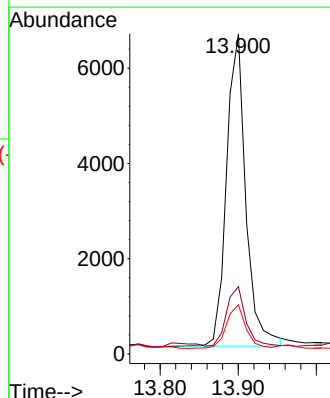
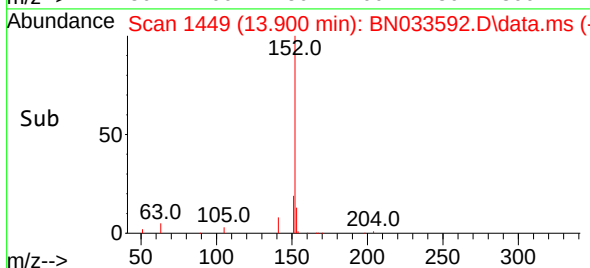
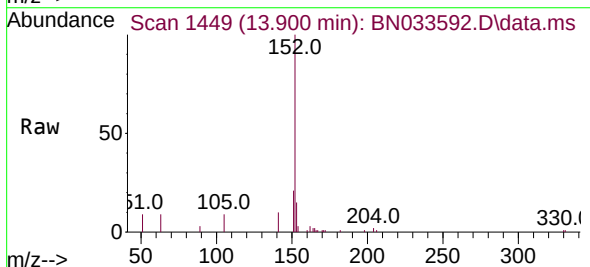
Manual Integrations  
APPROVED

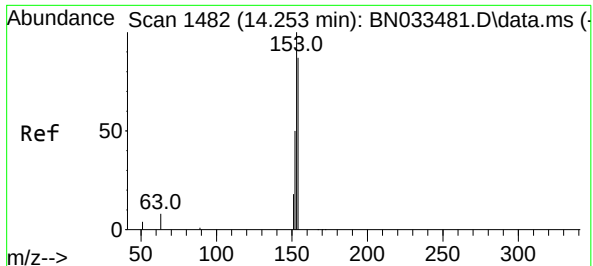
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#16  
Acenaphthylene  
Concen: 0.293 ng  
RT: 13.900 min Scan# 1449  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

Tgt Ion:152 Resp: 11201  
Ion Ratio Lower Upper  
152 100  
151 18.8 15.7 23.5  
153 14.1 10.3 15.5





#17

Acenaphthene

Concen: 0.113 ng

RT: 14.242 min Scan# 1481

Delta R.T. 0.000 min

Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

Instrument :

BNA\_N

ClientSampleId :

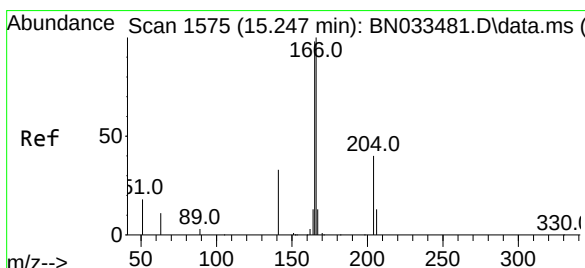
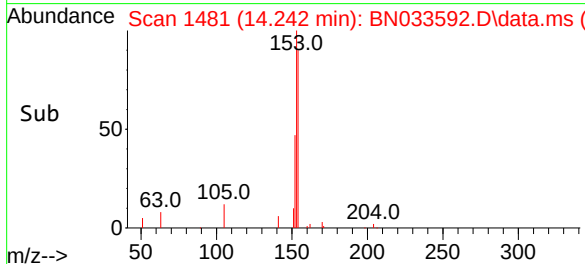
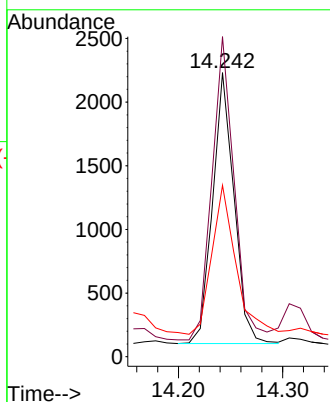
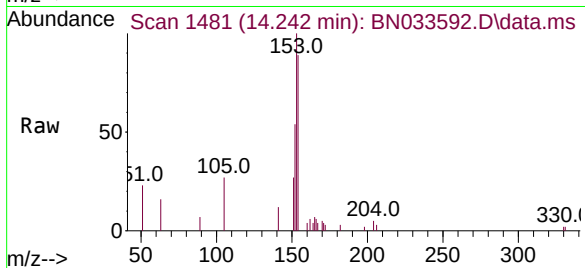
S-911-K1-SO-0.5-1-081924

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 154   | Resp: | 304   |
| Ion Ratio | Lower | Upper |       |
| 154       | 100   |       |       |
| 153       | 115.1 | 89.0  | 133.6 |
| 152       | 61.5  | 45.2  | 67.8  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#18

Fluorene

Concen: 0.129 ng

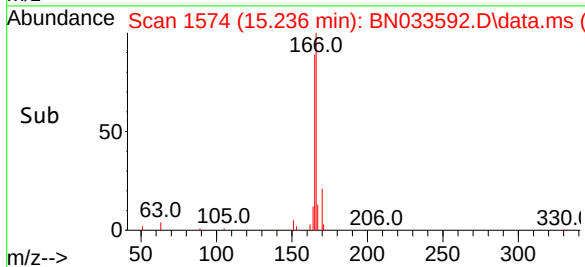
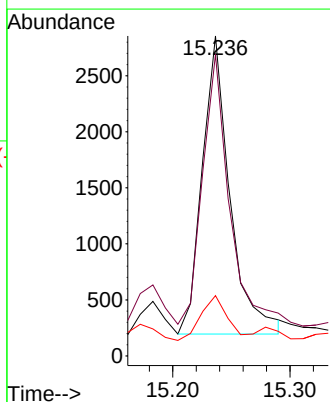
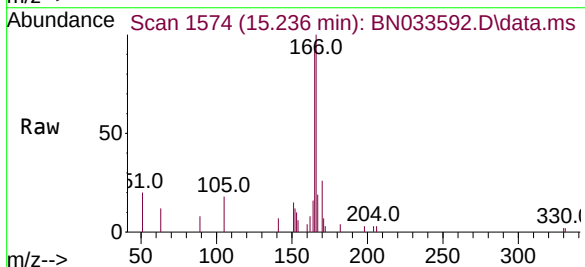
RT: 15.236 min Scan# 1574

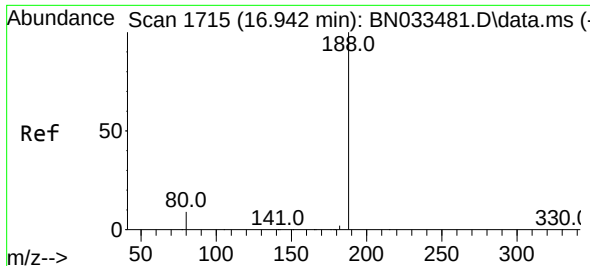
Delta R.T. 0.000 min

Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

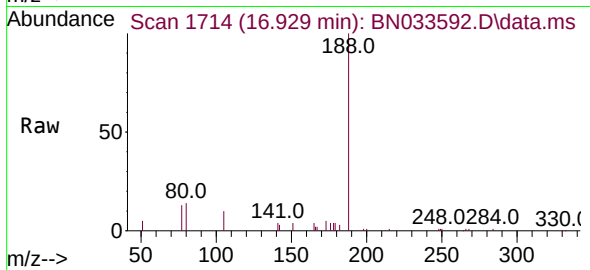
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 4381  |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 86.0  | 78.2  | 117.4 |
| 167       | 15.1  | 10.6  | 16.0  |





#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1714  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

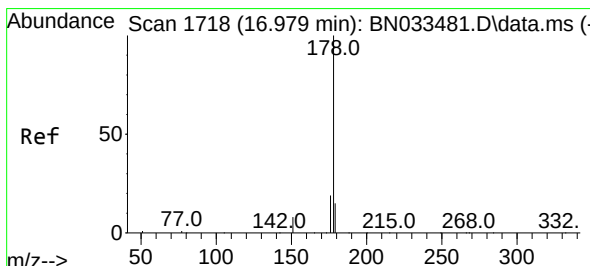
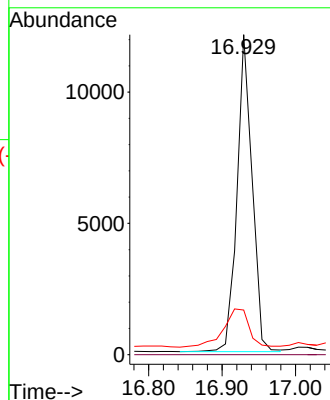
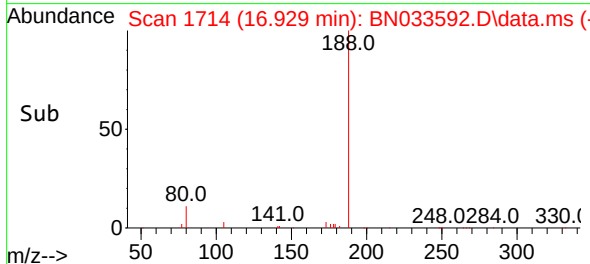
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:188 Resp: 17170  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 14.0 7.8 11.8

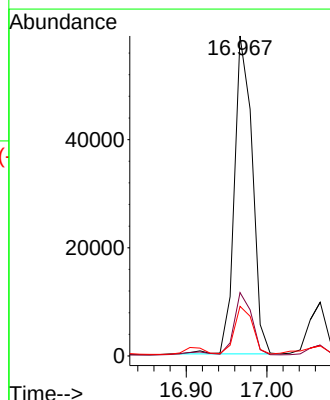
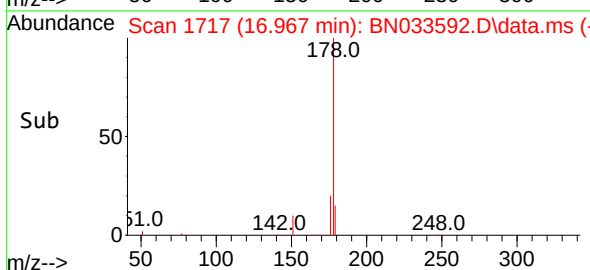
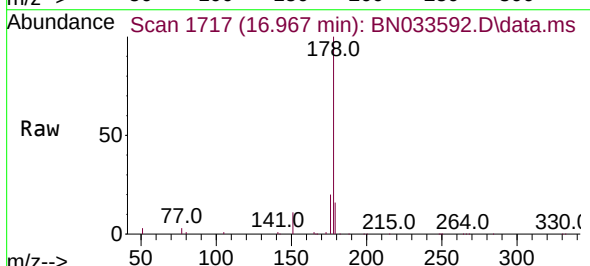
Manual Integrations  
APPROVED

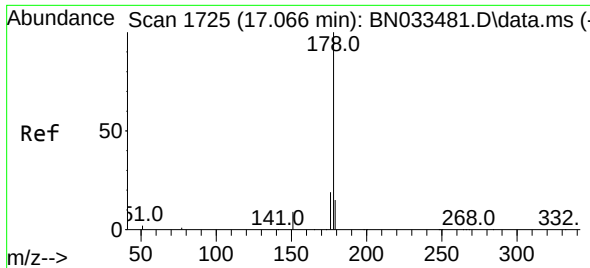
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#25  
Phenanthrene  
Concen: 1.887 ng  
RT: 16.967 min Scan# 1717  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

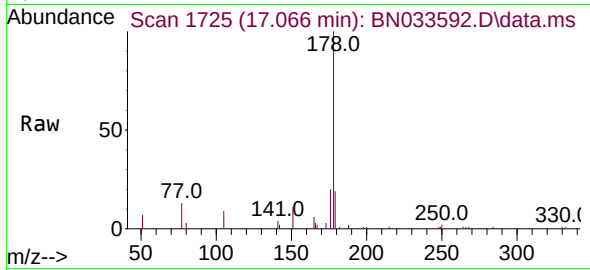
Tgt Ion:178 Resp: 90177  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.3 22.9  
179 15.0 12.3 18.5





#26  
Anthracene  
Concen: 0.337 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

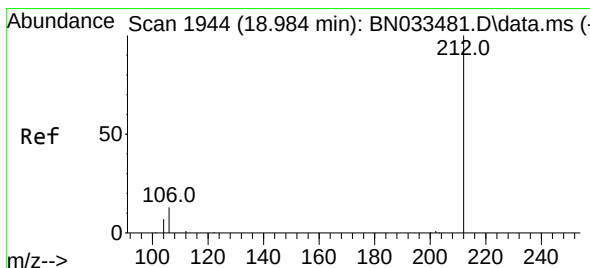
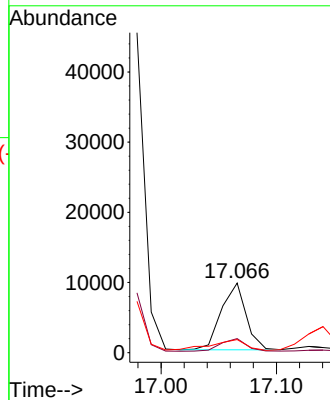
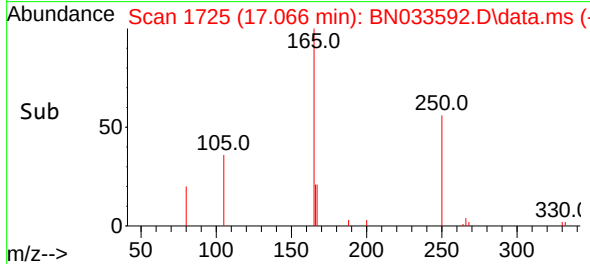
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:178 Resp: 1424  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.0 22.6  
179 21.2 12.4 18.6

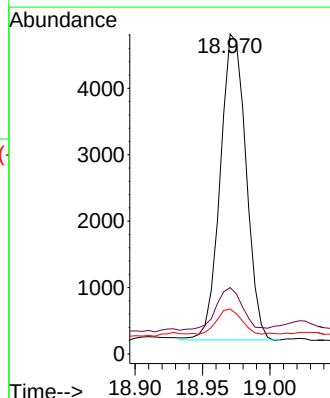
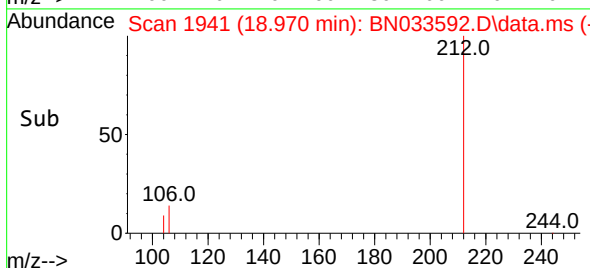
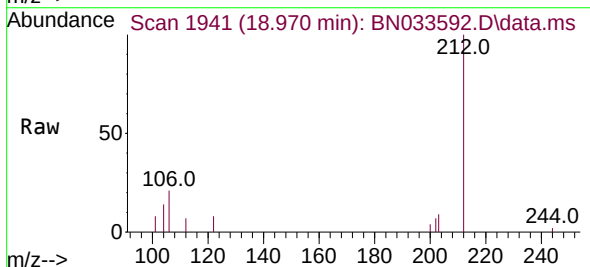
Manual Integrations  
APPROVED

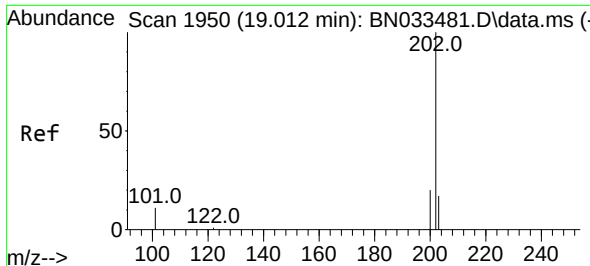
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#27  
Fluoranthene-d10  
Concen: 0.148 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

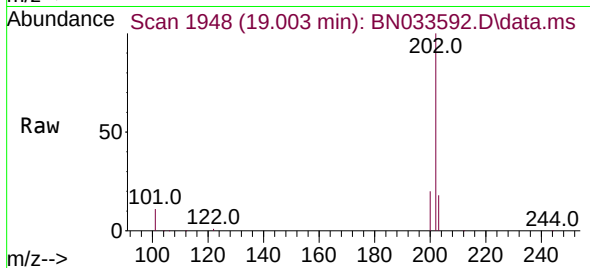
Tgt Ion:212 Resp: 6117  
Ion Ratio Lower Upper  
212 100  
106 14.6 12.3 18.5  
104 8.4 7.0 10.4





#28  
Fluoranthene  
Concen: 4.282 ng  
RT: 19.003 min Scan# 1950  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

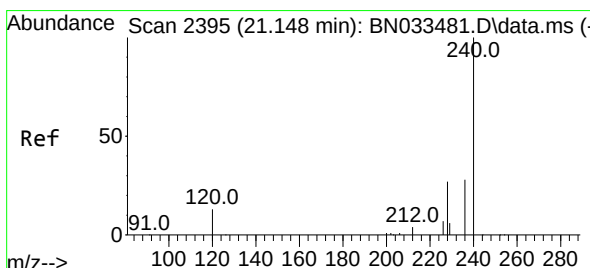
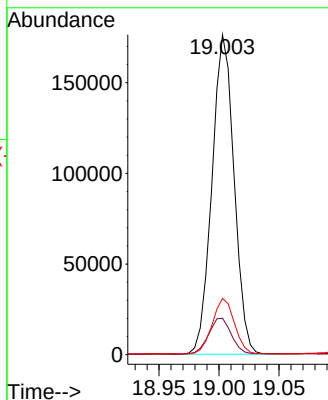
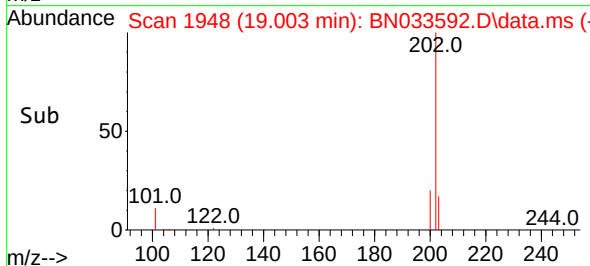
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:202 Resp: 22612  
Ion Ratio Lower Upper  
202 100  
101 11.7 9.5 14.3  
203 17.3 13.8 20.6

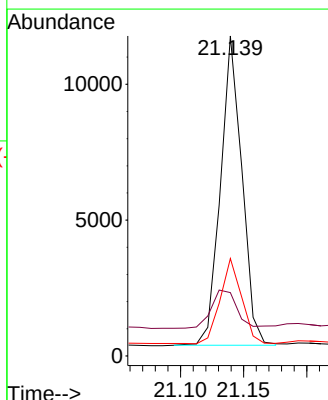
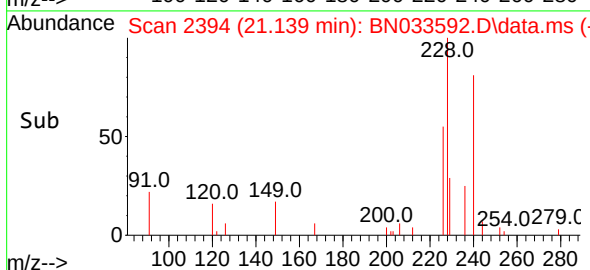
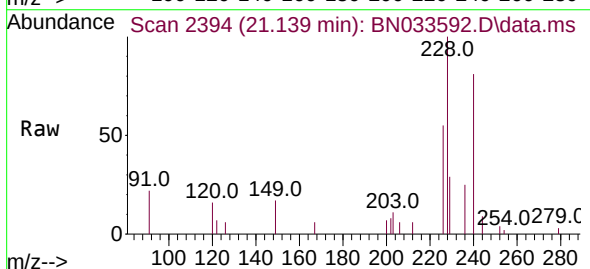
Manual Integrations  
APPROVED

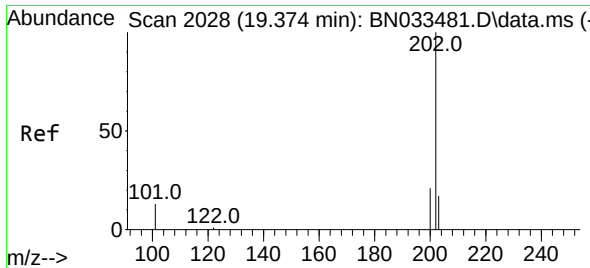
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#29  
Chrysene-d12  
Concen: 0.400 ng m  
RT: 21.139 min Scan# 2394  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

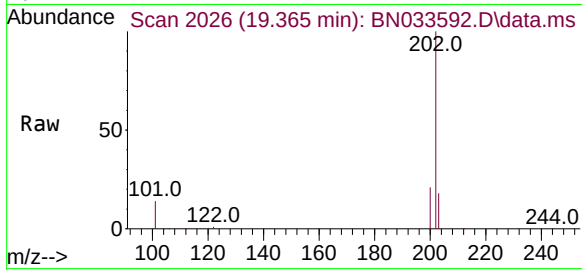
Tgt Ion:240 Resp: 13469  
Ion Ratio Lower Upper  
240 100  
120 19.8 12.4 18.6#  
236 30.4 23.0 34.6





#30  
Pyrene  
Concen: 3.273 ng  
RT: 19.365 min Scan# 2028  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

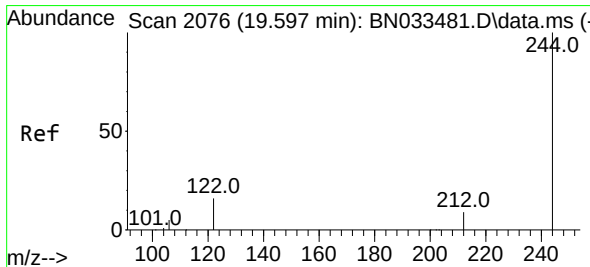
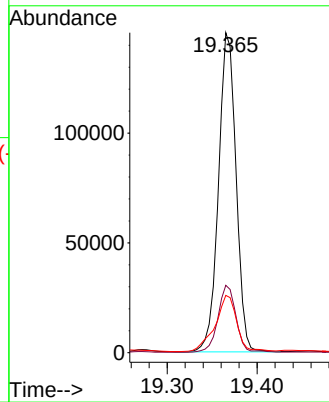
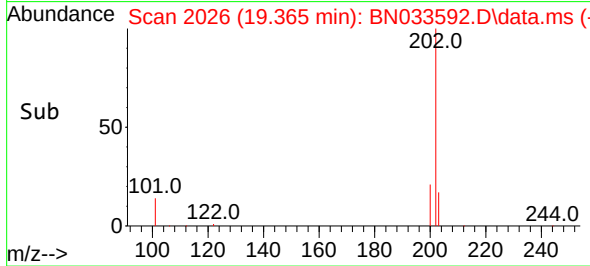
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:202 Resp: 196785  
Ion Ratio Lower Upper  
202 100  
200 21.4 16.6 24.8  
203 21.6 14.2 21.4

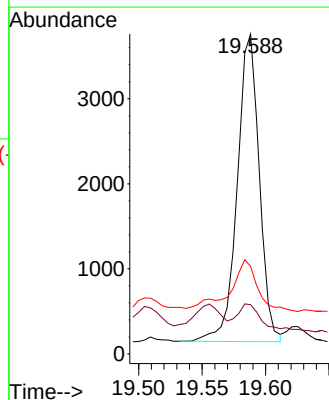
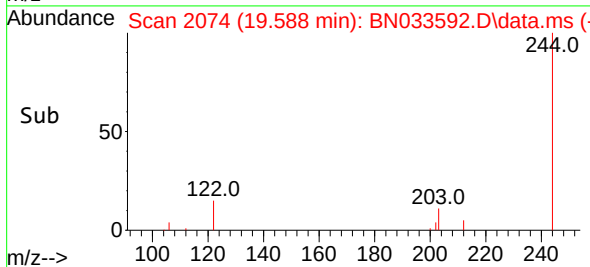
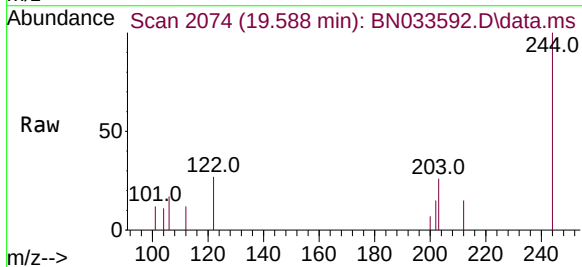
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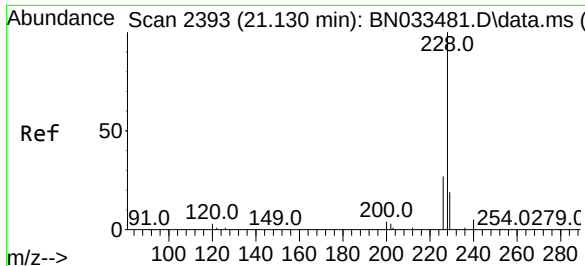
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#31  
Terphenyl-d14  
Concen: 0.143 ng  
RT: 19.588 min Scan# 2074  
Delta R.T. 0.005 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

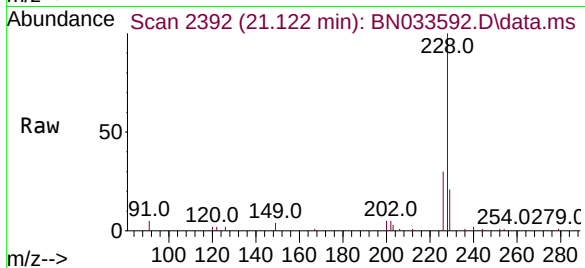
Tgt Ion:244 Resp: 4375  
Ion Ratio Lower Upper  
244 100  
212 15.4 7.8 11.6#  
122 27.4 13.3 19.9#





#32  
Benzo(a)anthracene  
Concen: 1.932 ng  
RT: 21.122 min Scan# 21122  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

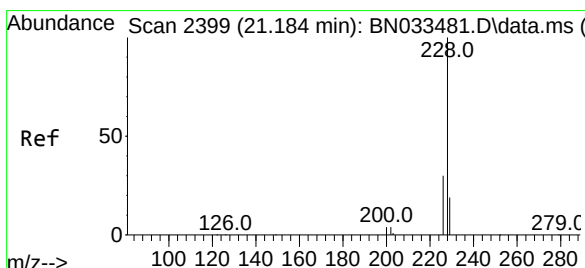
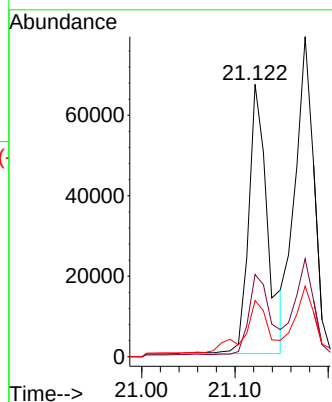
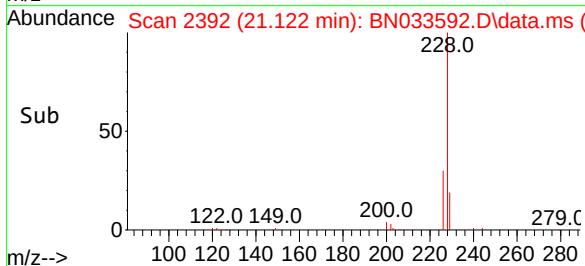
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:228 Resp: 9406  
Ion Ratio Lower Upper  
228 100  
226 30.2 21.8 32.6  
229 20.6 15.8 23.6

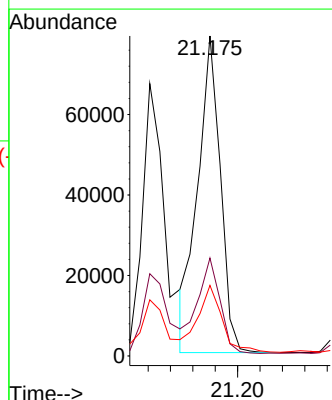
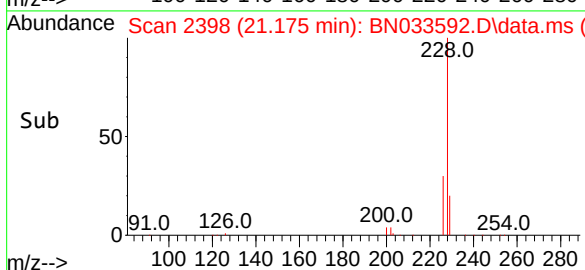
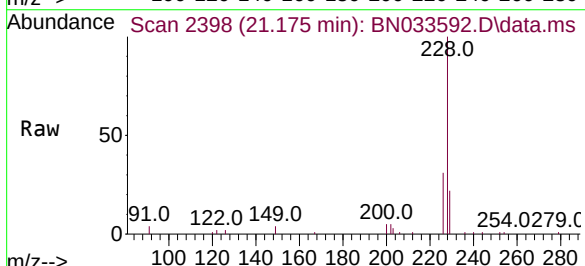
Manual Integrations  
APPROVED

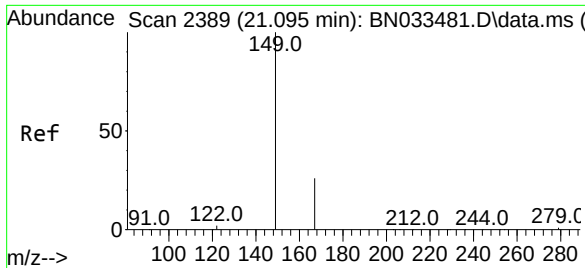
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#33  
Chrysene  
Concen: 2.289 ng  
RT: 21.175 min Scan# 2398  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

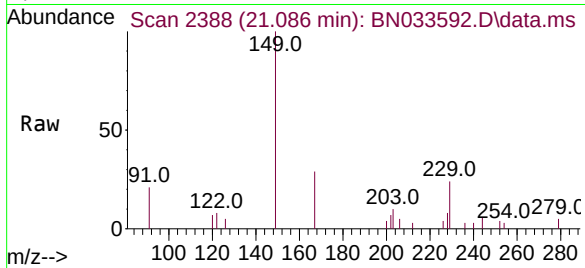
Tgt Ion:228 Resp: 110803  
Ion Ratio Lower Upper  
228 100  
226 30.6 23.8 35.8  
229 22.1 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.438 ng m  
RT: 21.086 min Scan# 2108  
Delta R.T. 0.000 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

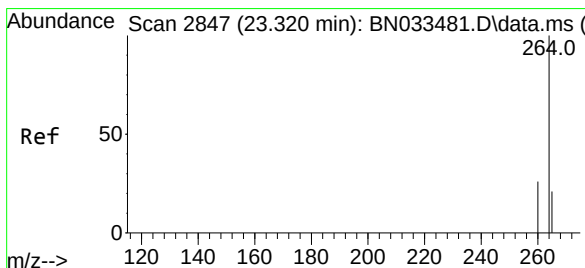
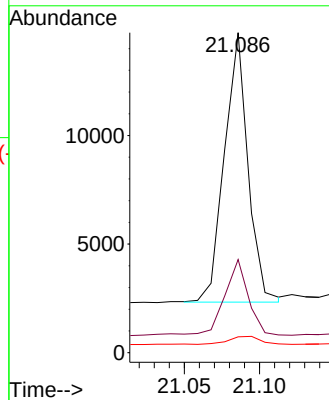
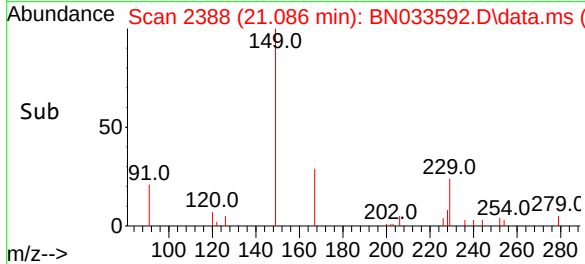
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0.5-1-081924



Tgt Ion:149 Resp: 1351  
Ion Ratio Lower Upper  
149 100  
167 70.5 21.5 32.3  
279 24.3 2.2 3.2

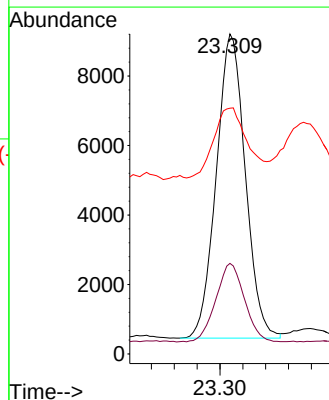
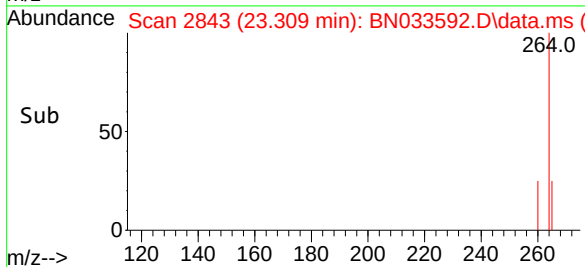
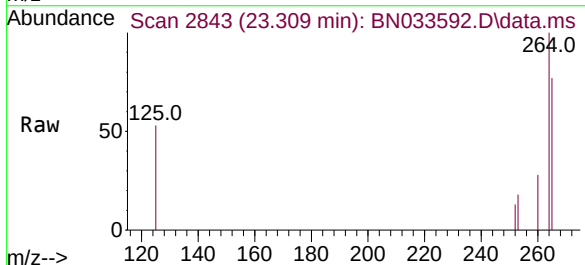
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

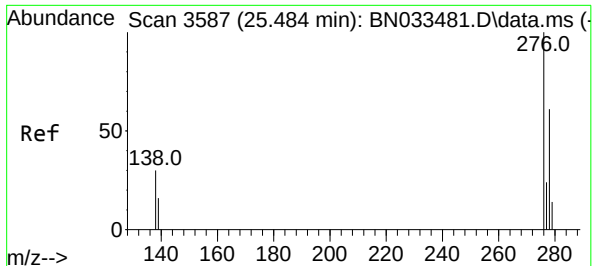


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.309 min Scan# 2843  
Delta R.T. 0.006 min  
Lab File: BN033592.D  
Acq: 23 Aug 2024 16:35

Tgt Ion:264 Resp: 15412  
Ion Ratio Lower Upper  
264 100  
260 28.3 20.8 31.2  
265 76.8 52.2 78.2







#36

Indeno(1,2,3-cd)pyrene

Concen: 1.355 ng

RT: 25.461 min Scan# 3579

Delta R.T. 0.012 min

Lab File: BN033592.D

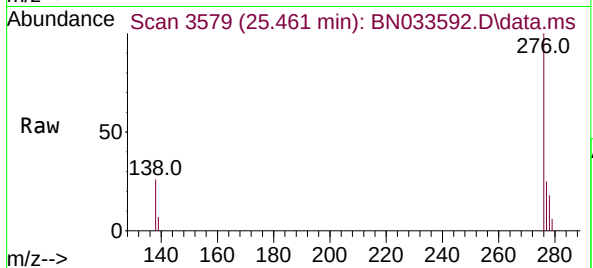
Acq: 23 Aug 2024 16:35

Instrument :

BNA\_N

ClientSampleId :

S-911-K1-SO-0.5-1-081924



Tgt Ion:276 Resp: 8671

Ion Ratio Lower Upper

276 100

138 23.4 24.4 36.6

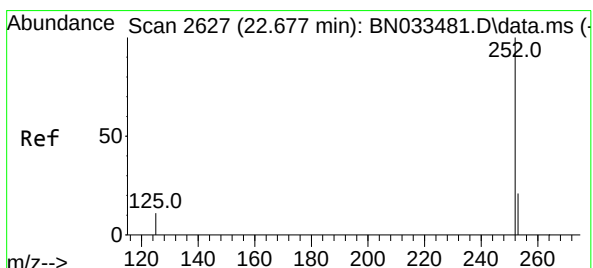
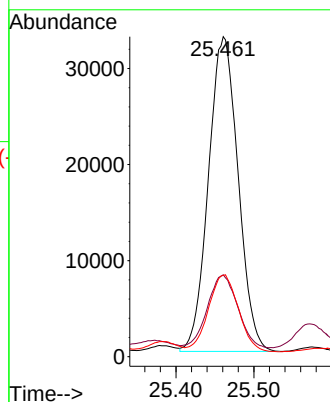
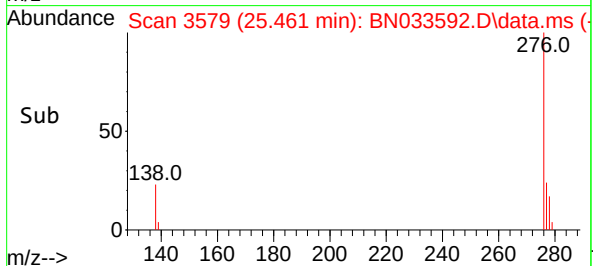
277 24.7 19.8 29.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#37

Benzo(b)fluoranthene

Concen: 2.957 ng

RT: 22.666 min Scan# 2623

Delta R.T. 0.006 min

Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

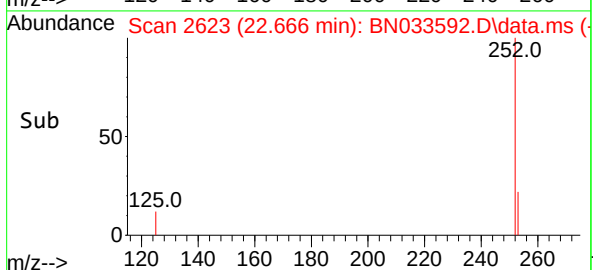
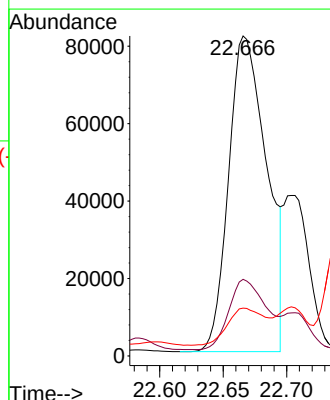
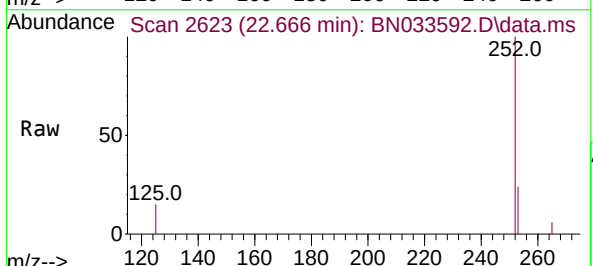
Tgt Ion:252 Resp: 170173

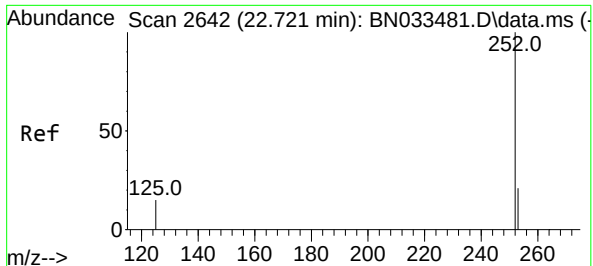
Ion Ratio Lower Upper

252 100

253 23.9 19.8 29.8

125 14.9 13.9 20.9





#38

Benzo(k)fluoranthene

Concen: 1.021 ng m

RT: 22.707 min Scan# 20

Delta R.T. 0.003 min

Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

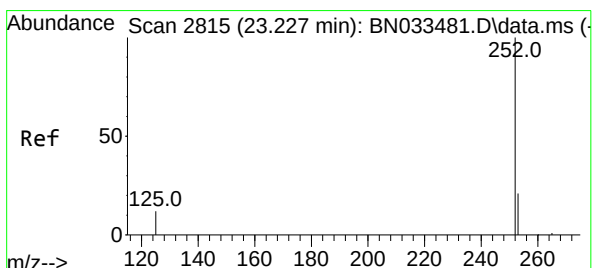
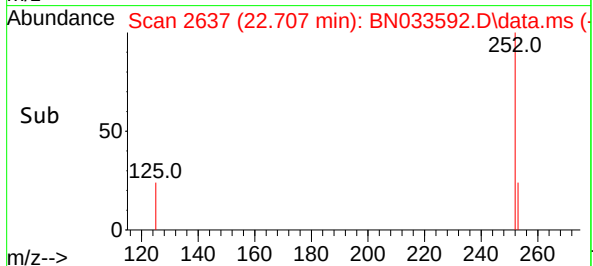
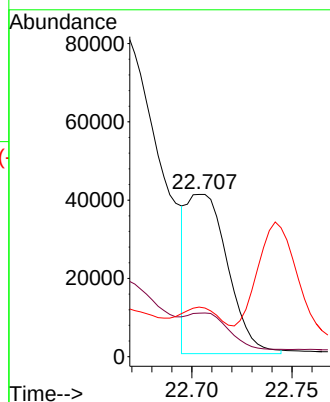
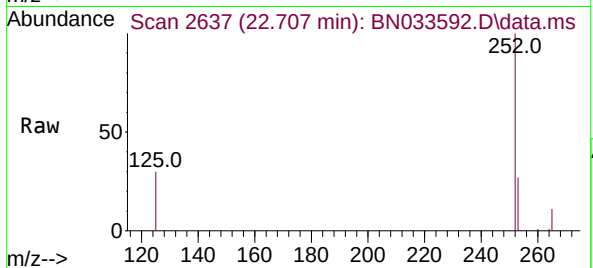
Instrument :

BNA\_N

ClientSampleId :

S-911-K1-SO-0.5-1-081924

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 5786      |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 26.9  | 19.8 29.8 |
| 125         | 30.0  | 15.8 23.8 |

Manual Integrations  
APPROVEDReviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

#39

Benzo(a)pyrene

Concen: 2.211 ng

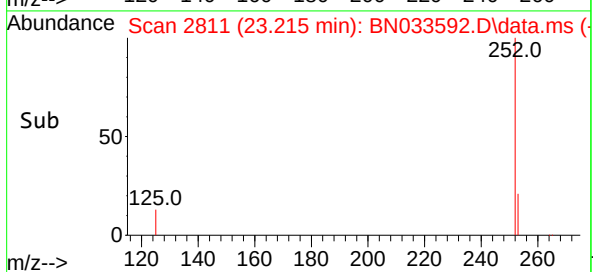
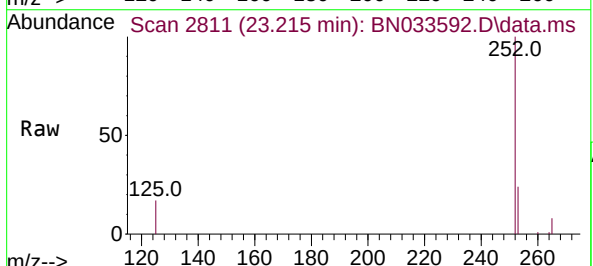
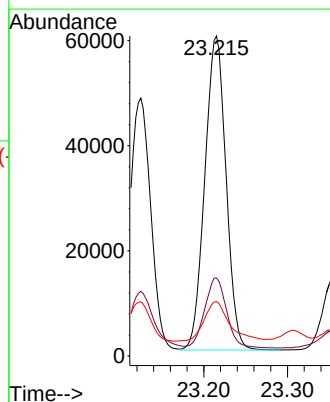
RT: 23.215 min Scan# 2811

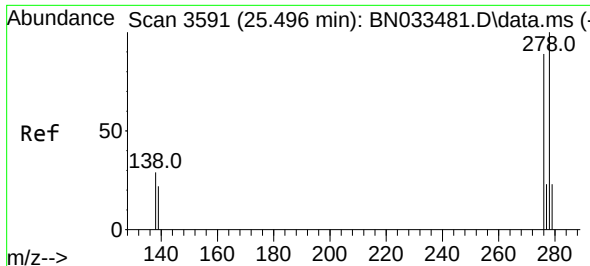
Delta R.T. 0.006 min

Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 105296    |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 24.4  | 21.5 32.3 |
| 125         | 17.0  | 17.0 25.4 |





#40

Dibenzo(a,h)anthracene

Concen: 0.385 ng

RT: 25.469 min Scan# 31

Delta R.T. 0.000 min

Lab File: BN033592.D

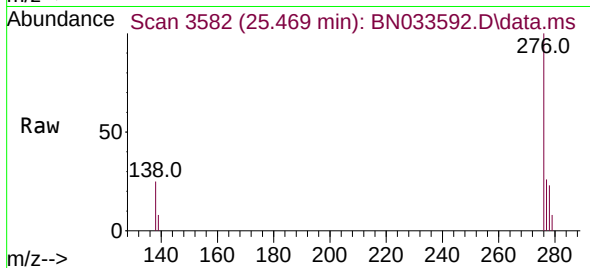
Acq: 23 Aug 2024 16:35

Instrument :

BNA\_N

ClientSampleId :

S-911-K1-SO-0.5-1-081924



Tgt Ion:278 Resp: 1971

Ion Ratio Lower Upper

278 100

139 34.0 19.1 28.7

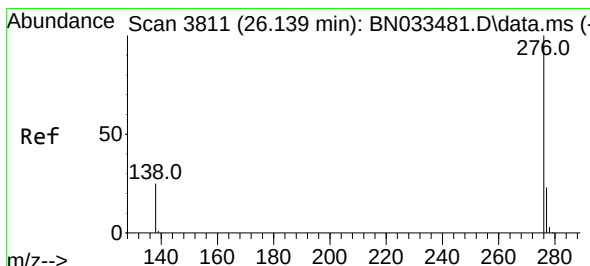
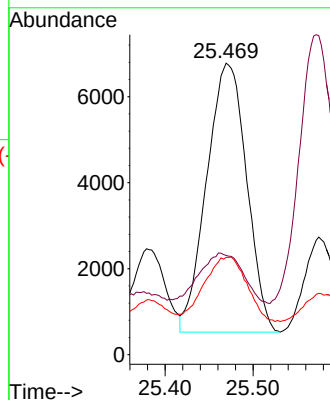
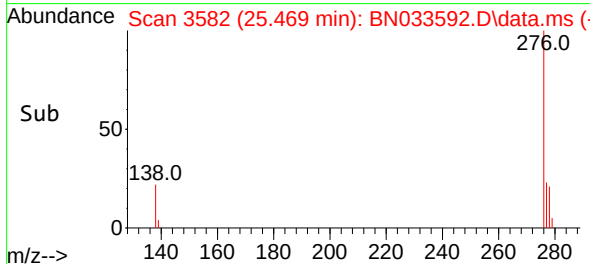
279 33.4 21.0 31.4

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#41

Benzo(g,h,i)perylene

Concen: 1.581 ng

RT: 26.116 min Scan# 3803

Delta R.T. 0.012 min

Lab File: BN033592.D

Acq: 23 Aug 2024 16:35

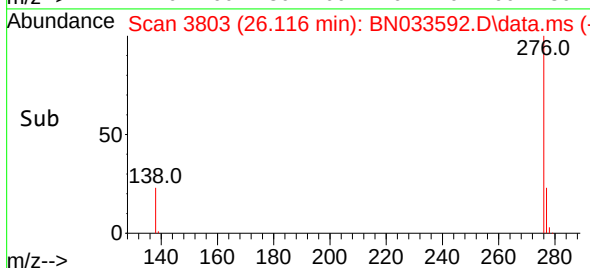
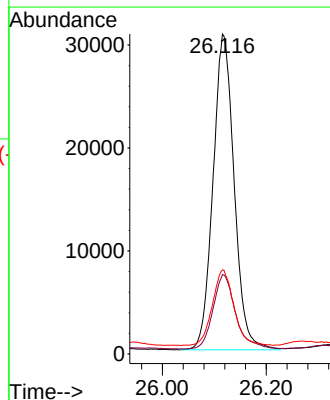
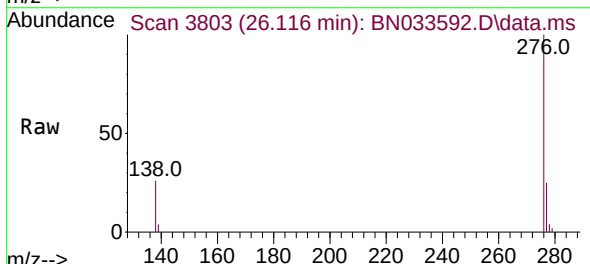
Tgt Ion:276 Resp: 86506

Ion Ratio Lower Upper

276 100

277 24.8 19.7 29.5

138 26.2 21.8 32.6



### Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24      |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24      |
| Client Sample ID:  | S-911-K1-SO-0-0.5-081924-FD           | SDG No.:        | P3671         |
| Lab Sample ID:     | P3671-05                              | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 35            |
| Sample Wt/Vol:     | 30.05 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033591.D        | 1         | 08/21/24 09:38 | 08/23/24 15:59 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 16.4  |           | 2.00                | 9.40       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 19.5  |           | 2.30                | 9.40       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 32.7  |           | 1.80                | 9.40       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 10.7  |           | 1.60                | 9.40       | ug/Kg             |
| 86-73-7                   | Fluorene                | 14.2  |           | 1.70                | 9.40       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 190   |           | 1.80                | 9.40       | ug/Kg             |
| 120-12-7                  | Anthracene              | 34.3  |           | 2.30                | 9.40       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 440   |           | 1.90                | 9.40       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 320   |           | 2.70                | 9.40       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 190   |           | 2.20                | 9.40       | ug/Kg             |
| 218-01-9                  | Chrysene                | 230   |           | 2.50                | 9.40       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 290   |           | 3.40                | 9.40       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 100   |           | 2.80                | 9.40       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 220   |           | 4.70                | 9.40       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 130   |           | 3.60                | 9.40       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 38.3  |           | 3.30                | 9.40       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 160   |           | 3.30                | 9.40       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 6.30  | U         | 6.30                | 18.8       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.41  |           | 30 (17) - 150 (161) | 103%       | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.39  |           | 30 (23) - 150 (138) | 98%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.47  |           | 30 (33) - 130 (121) | 116%       | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.37  |           | 30 (32) - 130 (121) | 93%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.36  |           | 30 (21) - 130 (130) | 90%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 6470  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 18300 |           | 10.304              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 9780  |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 20600 |           | 16.929              |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-911-K1-SO-0-0.5-081924-FD           | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-05                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 35                           |
| Sample Wt/Vol:     | 30.05      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033591.D        | 1         | 08/21/24 09:38 | 08/23/24 15:59 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 16800 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 18800 | 23.309    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033591.D  
Acq On : 23 Aug 2024 15:59  
Operator : MA/JU  
Sample : P3671-05  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD

Quant Time: Aug 23 16:53:16 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 6471     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.304 | 136  | 18310    | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.178 | 164  | 9783     | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.929 | 188  | 20641    | 0.400 | ng    | # 0.00    |
| 29) Chrysene-d12              | 21.139 | 240  | 16828    | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.309 | 264  | 18757    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.183  | 112  | 7252     | 0.353 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.736  | 99   | 9414     | 0.385 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 7067     | 0.465 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 10856    | 0.414 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 2643     | 0.503 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 14785    | 0.370 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.975 | 212  | 19419    | 0.391 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.584 | 244  | 13742    | 0.359 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 9) Naphthalene                | 10.357 | 128  | 8486     | 0.173 | ng    | Qvalue 96 |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 6355     | 0.205 | ng    | 98        |
| 16) Acenaphthylene            | 13.900 | 152  | 14776    | 0.344 | ng    | 97        |
| 17) Acenaphthene              | 14.242 | 154  | 3411     | 0.113 | ng    | 95        |
| 18) Fluorene                  | 15.236 | 166  | 5677     | 0.149 | ng    | # 87      |
| 25) Phenanthrene              | 16.967 | 178  | 114072   | 1.987 | ng    | 99        |
| 26) Anthracene                | 17.066 | 178  | 18335    | 0.361 | ng    | # 93      |
| 28) Fluoranthene              | 19.003 | 202  | 293678   | 4.628 | ng    | 100       |
| 30) Pyrene                    | 19.365 | 202  | 255373   | 3.400 | ng    | # 96      |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 119594   | 1.966 | ng    | 95        |
| 33) Chrysene                  | 21.175 | 228  | 143608   | 2.375 | ng    | 97        |
| 34) Bis(2-ethylhexyl)phtha... | 21.086 | 149  | 15136m   | 0.393 | ng    |           |
| 36) Indeno(1,2,3-cd)pyrene    | 25.461 | 276  | 110265   | 1.416 | ng    | # 93      |
| 37) Benzo(b)fluoranthene      | 22.668 | 252  | 214874   | 3.068 | ng    | 96        |
| 38) Benzo(k)fluoranthene      | 22.706 | 252  | 72890m   | 1.057 | ng    |           |
| 39) Benzo(a)pyrene            | 23.212 | 252  | 134904m  | 2.328 | ng    |           |
| 40) Dibenzo(a,h)anthracene    | 25.475 | 278  | 25089    | 0.403 | ng    | # 86      |
| 41) Benzo(g,h,i)perylene      | 26.118 | 276  | 110193   | 1.655 | ng    | 99        |

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

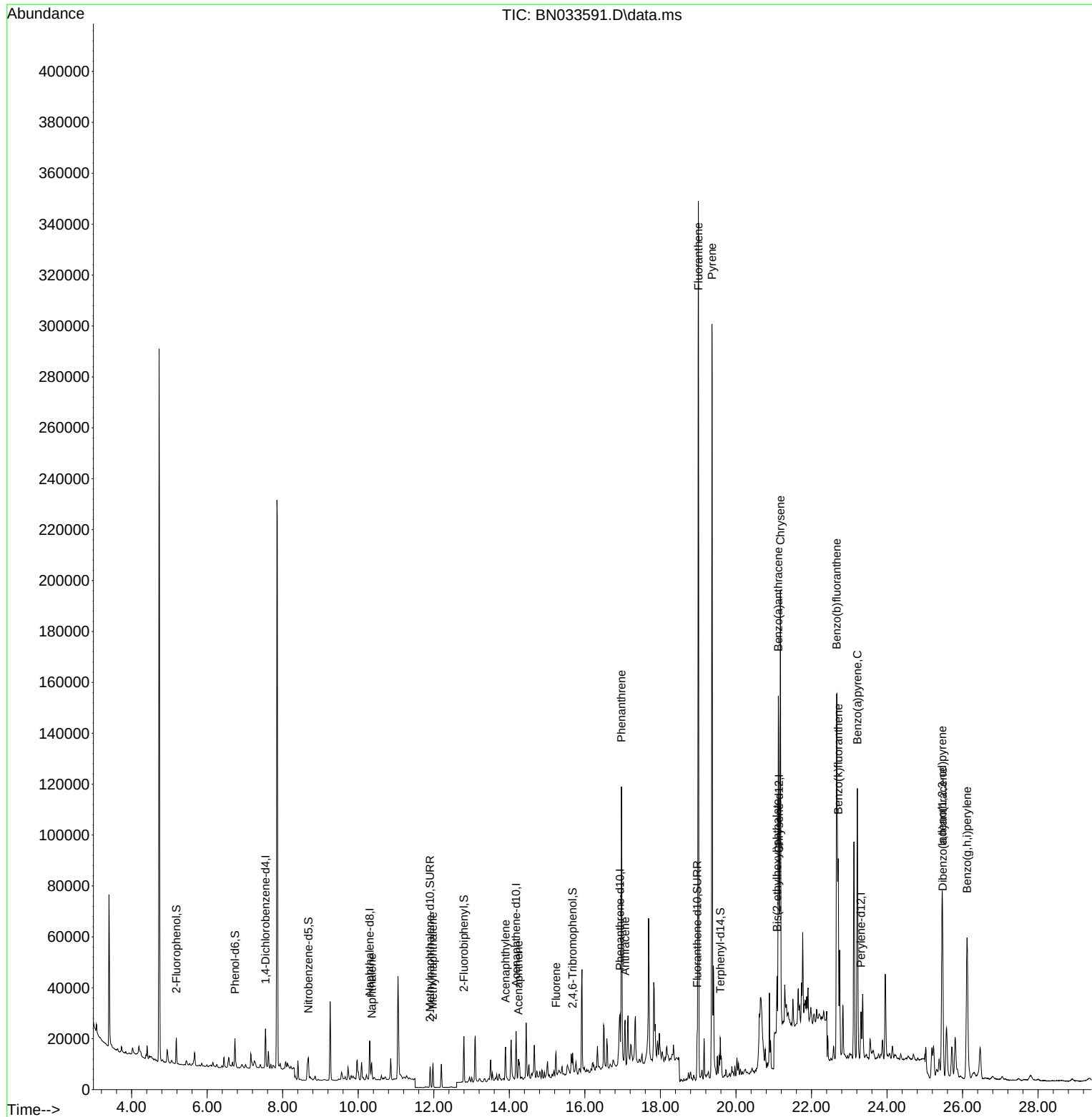
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Data File : BN033591.D  
Acq On : 23 Aug 2024 15:59  
Operator : MA/JU  
Sample : P3671-05  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

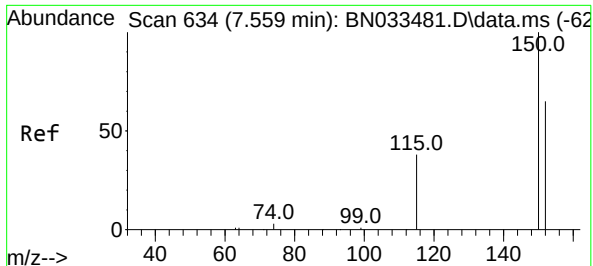
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD

Quant Time: Aug 23 16:53:16 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

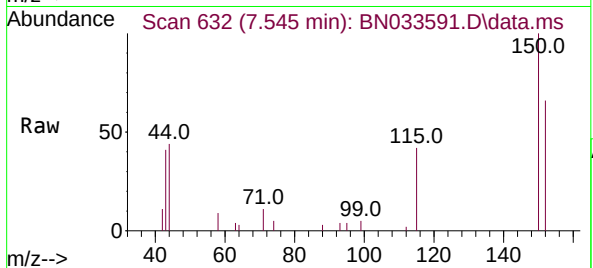
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

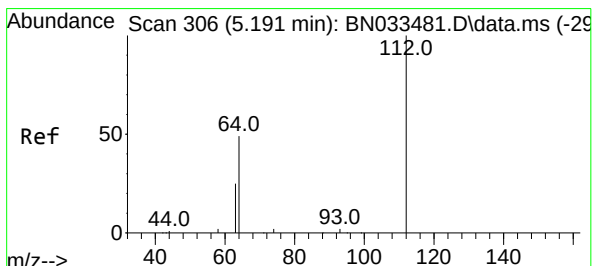
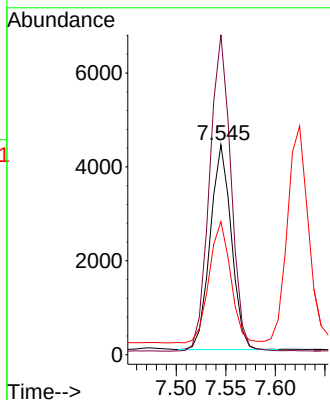
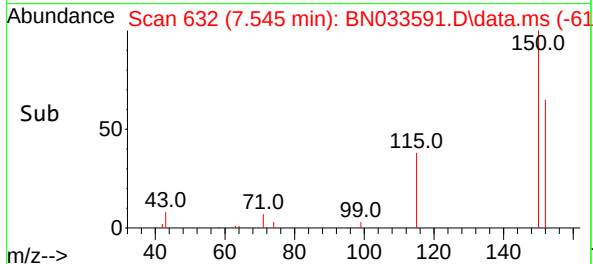
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:152 Resp: 647  
Ion Ratio Lower Upper  
152 100  
150 152.5 122.2 183.2  
115 63.4 47.2 70.8

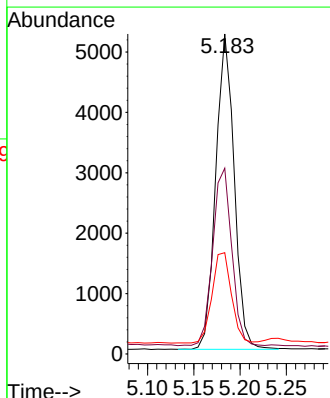
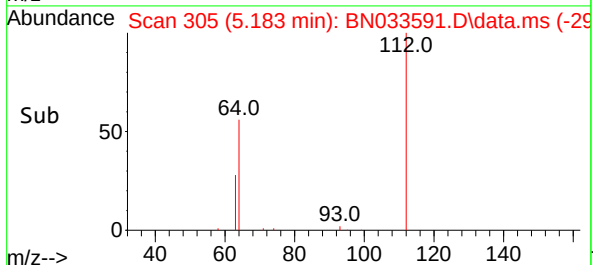
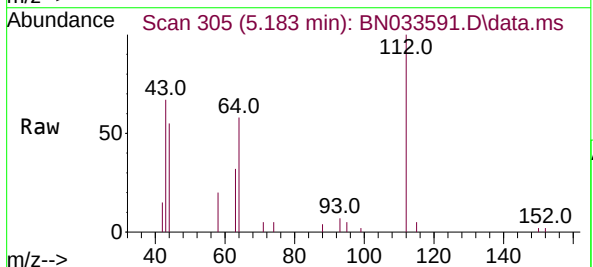
Manual Integrations  
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Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

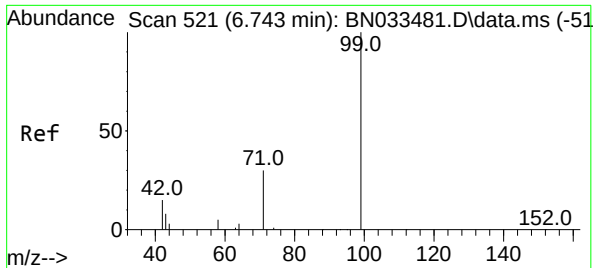


#4  
2-Fluorophenol  
Concen: 0.353 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

Tgt Ion:112 Resp: 7252  
Ion Ratio Lower Upper  
112 100  
64 57.8 47.1 70.7  
63 30.0 24.9 37.3

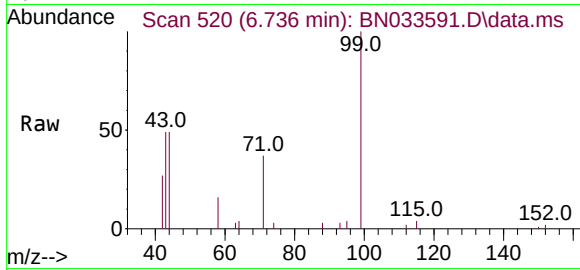






#5  
Phenol-d6  
Concen: 0.385 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

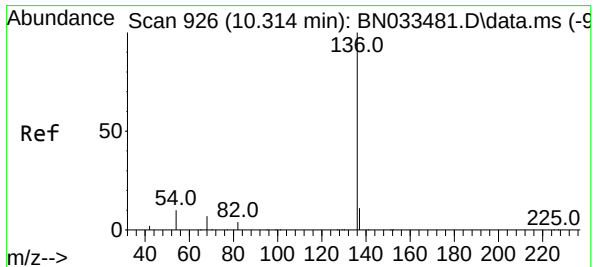
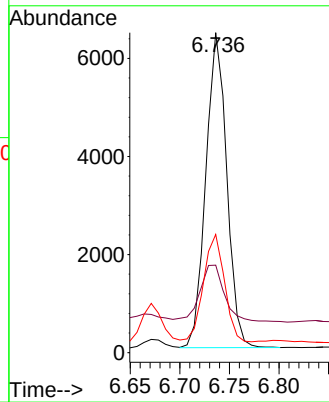
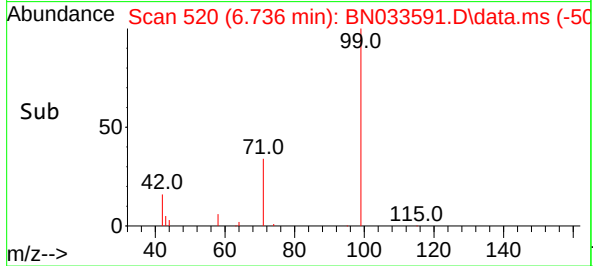
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion: 99 Resp: 9414  
Ion Ratio Lower Upper  
99 100  
42 20.9 16.6 24.8  
71 34.3 26.2 39.4

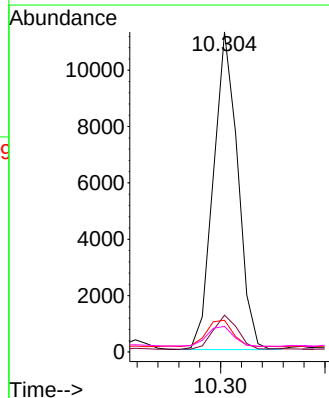
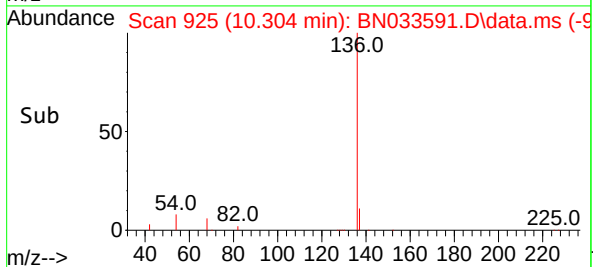
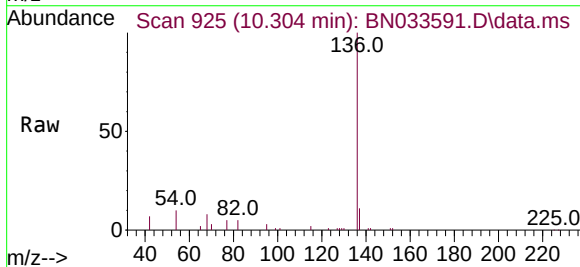
Manual Integrations  
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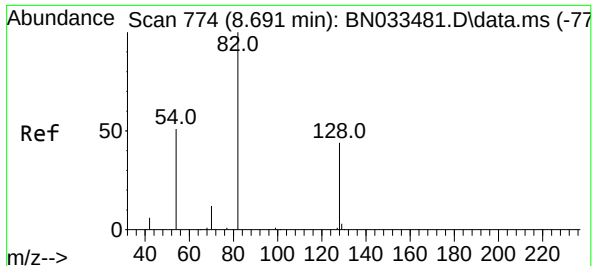
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

Tgt Ion:136 Resp: 18310  
Ion Ratio Lower Upper  
136 100  
137 11.5 9.0 13.6  
54 9.9 8.3 12.5  
68 8.0 5.9 8.9





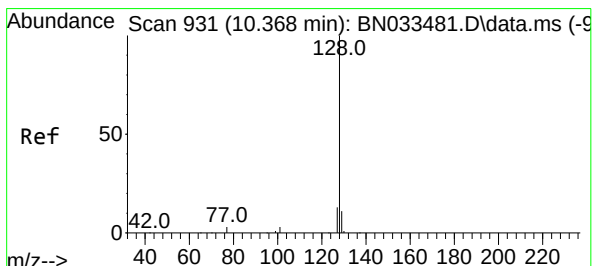
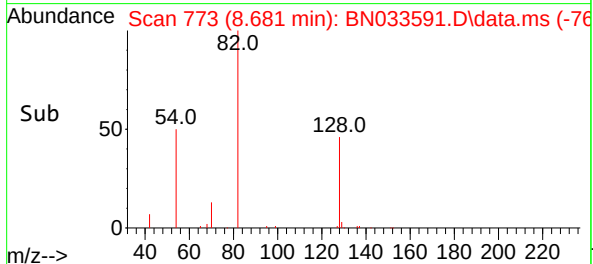
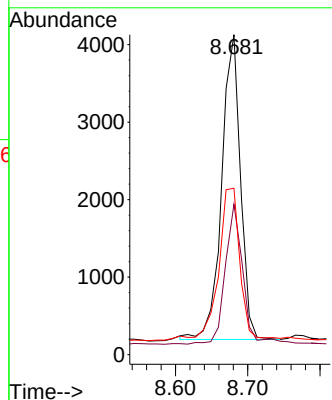
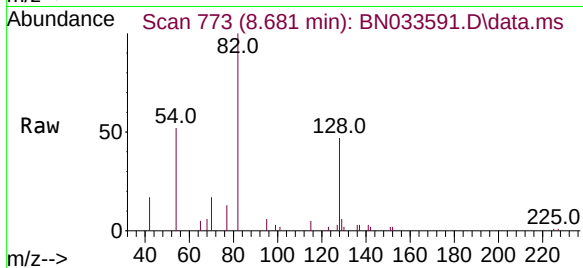
#8  
Nitrobenzene-d5  
Concen: 0.465 ng  
RT: 8.681 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD

Tgt Ion: 82 Resp: 706  
Ion Ratio Lower Upper  
82 100  
128 47.0 36.0 54.0  
54 52.0 42.0 63.0

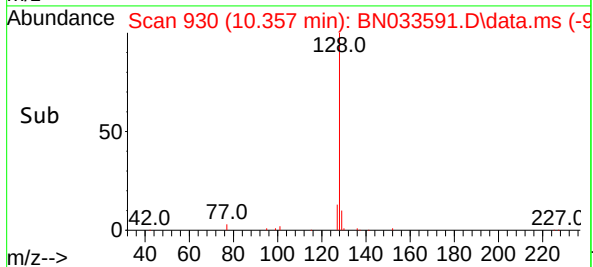
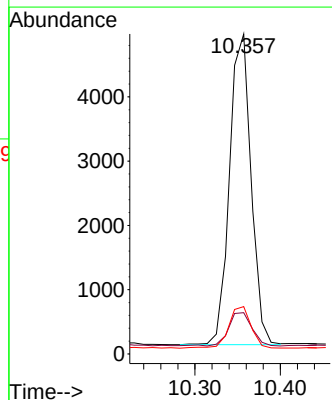
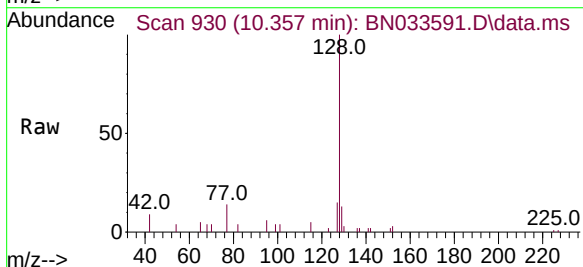
Manual Integrations  
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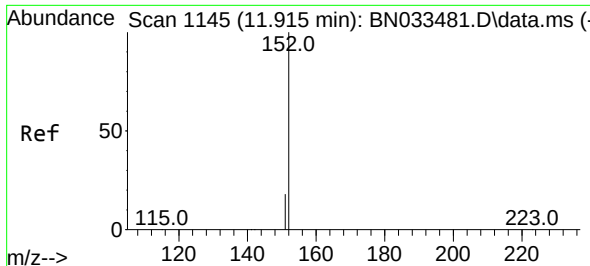
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#9  
Naphthalene  
Concen: 0.173 ng  
RT: 10.357 min Scan# 930  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

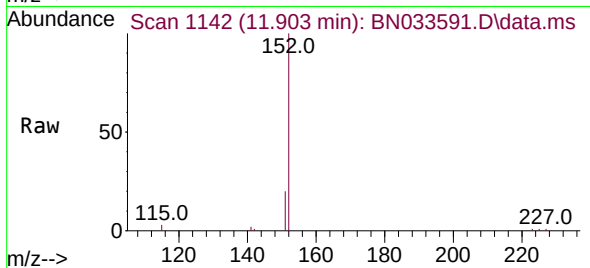
Tgt Ion:128 Resp: 8486  
Ion Ratio Lower Upper  
128 100  
129 12.9 9.1 13.7  
127 14.8 10.7 16.1





#11  
2-Methylnaphthalene-d10  
Concen: 0.414 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

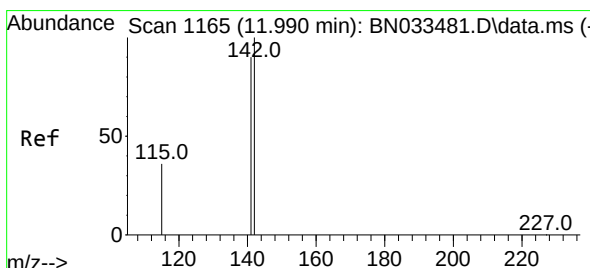
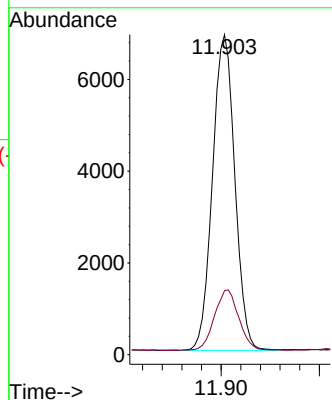
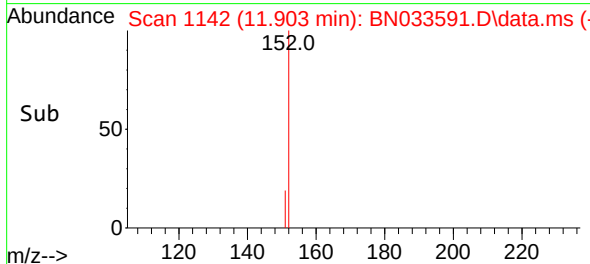
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:152 Resp: 10850  
Ion Ratio Lower Upper  
152 100  
151 21.0 16.6 25.0

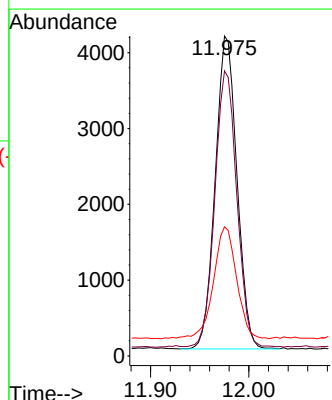
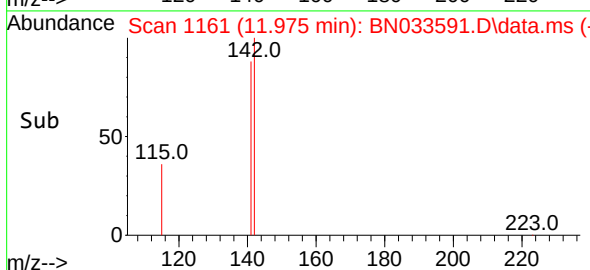
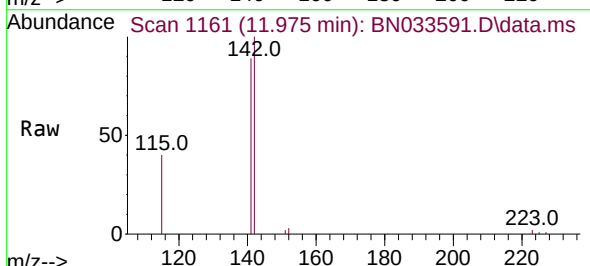
Manual Integrations  
APPROVED

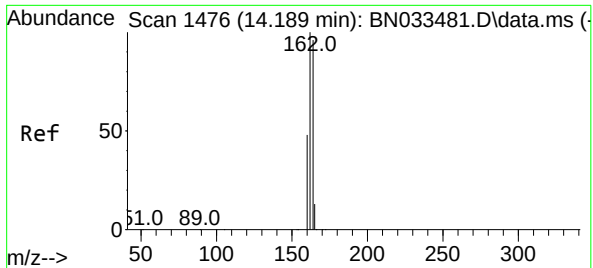
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#12  
2-Methylnaphthalene  
Concen: 0.205 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

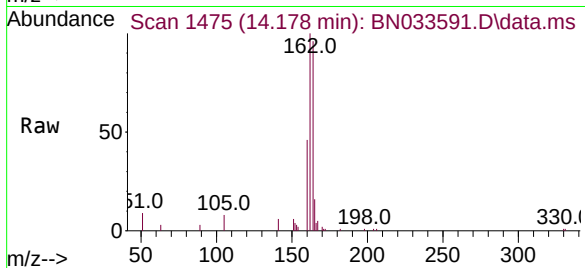
Tgt Ion:142 Resp: 6355  
Ion Ratio Lower Upper  
142 100  
141 89.1 71.7 107.5  
115 40.3 29.4 44.2





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1476  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

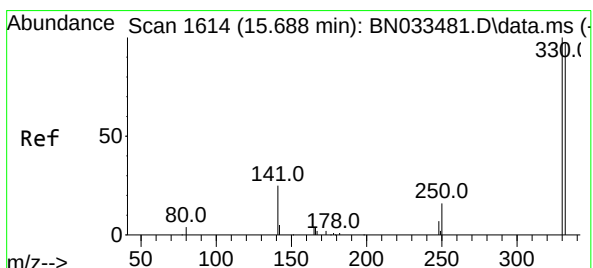
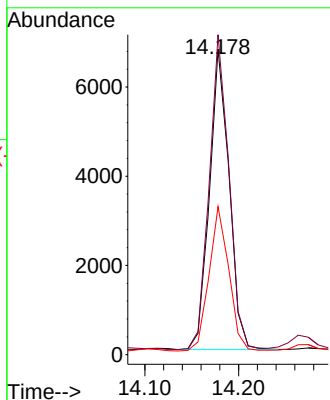
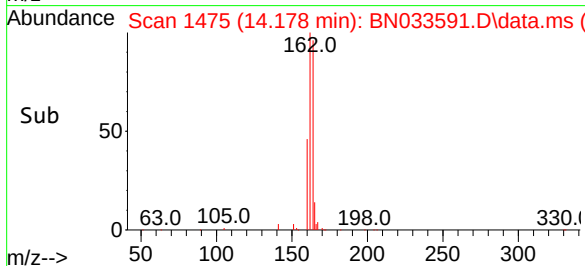
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



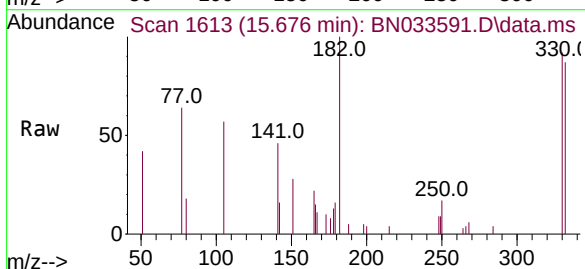
Tgt Ion:164 Resp: 978  
Ion Ratio Lower Upper  
164 100  
162 104.7 83.5 125.3  
160 48.5 40.2 60.4

Manual Integrations  
APPROVED

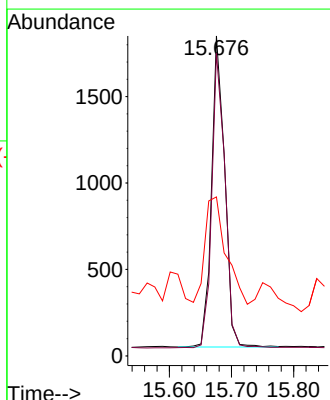
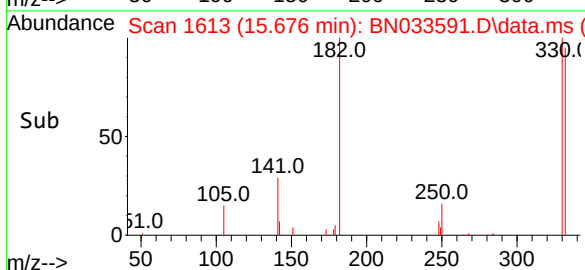
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

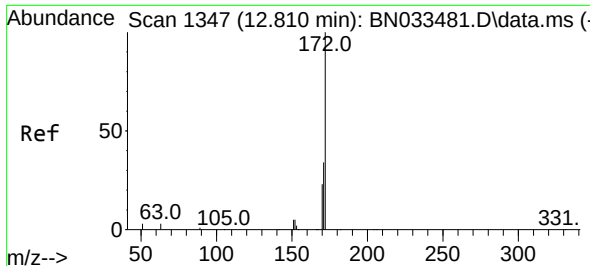


#14  
2,4,6-Tribromophenol  
Concen: 0.503 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59



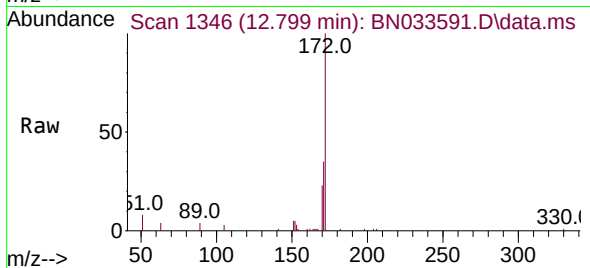
Tgt Ion:330 Resp: 2643  
Ion Ratio Lower Upper  
330 100  
332 95.6 77.5 116.3  
141 55.1 33.9 50.9#





#15  
2-Fluorobiphenyl  
Concen: 0.370 ng  
RT: 12.799 min Scan# 1478  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

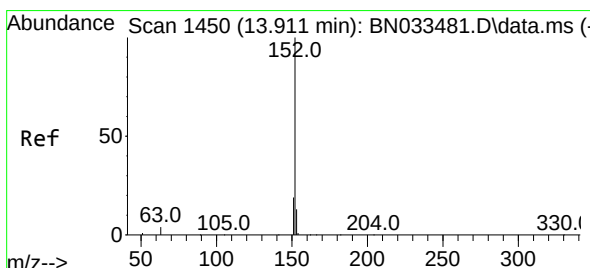
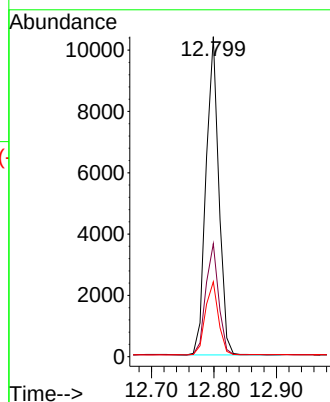
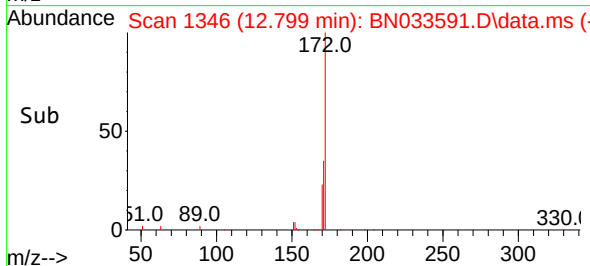
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:172 Resp: 14785  
Ion Ratio Lower Upper  
172 100  
171 35.3 27.7 41.5  
170 23.4 18.3 27.5

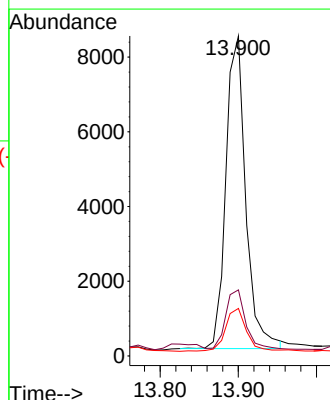
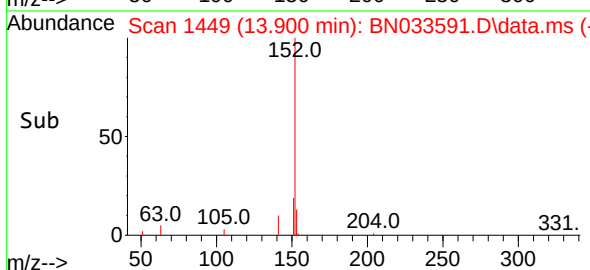
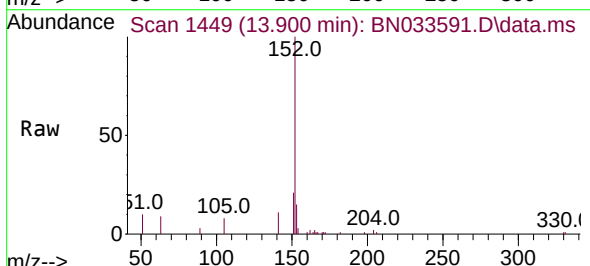
Manual Integrations  
APPROVED

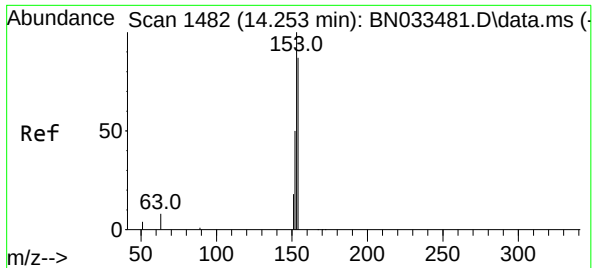
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#16  
Acenaphthylene  
Concen: 0.344 ng  
RT: 13.900 min Scan# 1449  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

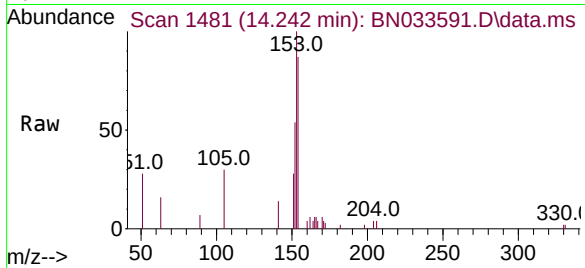
Tgt Ion:152 Resp: 14776  
Ion Ratio Lower Upper  
152 100  
151 18.3 15.7 23.5  
153 14.6 10.3 15.5





#17  
Acenaphthene  
Concen: 0.113 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

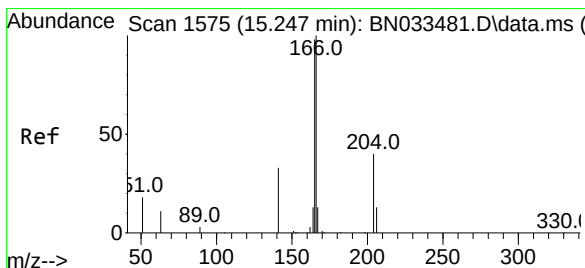
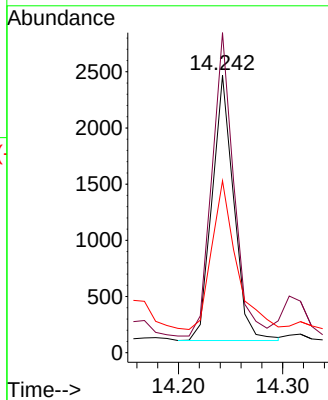
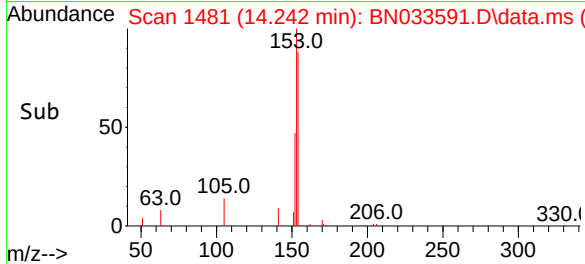
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:154 Resp: 341  
Ion Ratio Lower Upper  
154 100  
153 115.1 89.0 133.6  
152 63.3 45.2 67.8

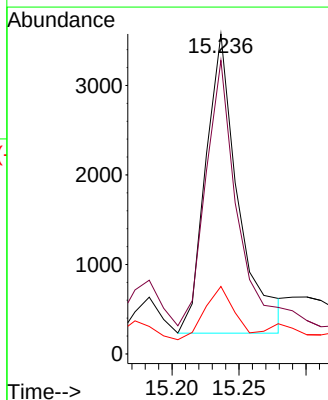
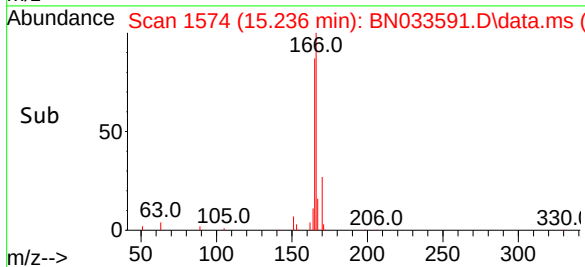
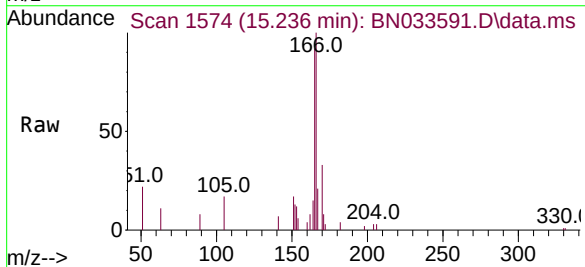
Manual Integrations  
APPROVED

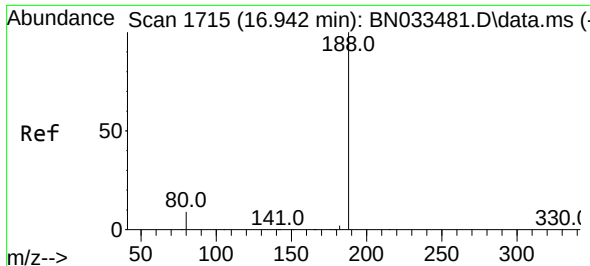
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#18  
Fluorene  
Concen: 0.149 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

Tgt Ion:166 Resp: 5677  
Ion Ratio Lower Upper  
166 100  
165 84.4 78.2 117.4  
167 17.2 10.6 16.0#





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.929 min Scan# 1714

Delta R.T. -0.000 min

Lab File: BN033591.D

Acq: 23 Aug 2024 15:59

Instrument :

BNA\_N

ClientSampleId :

S-911-K1-SO-0-0.5-081924-FD

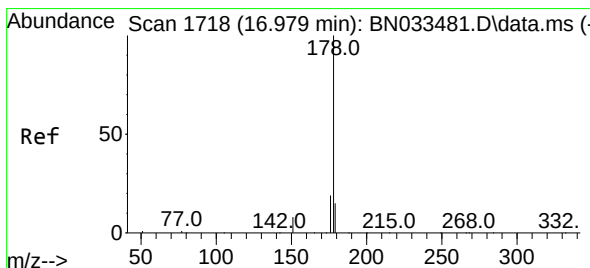
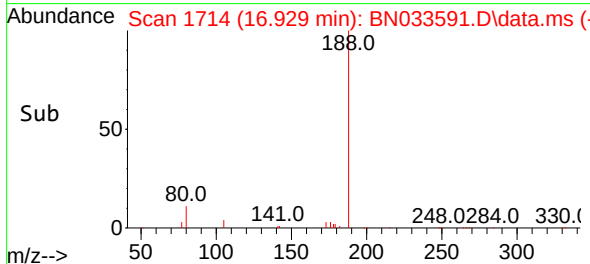
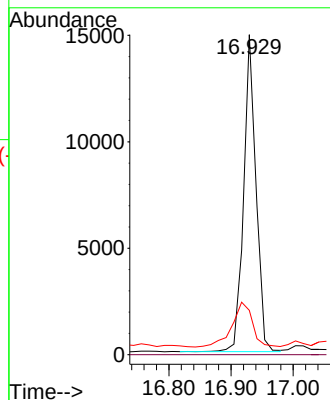
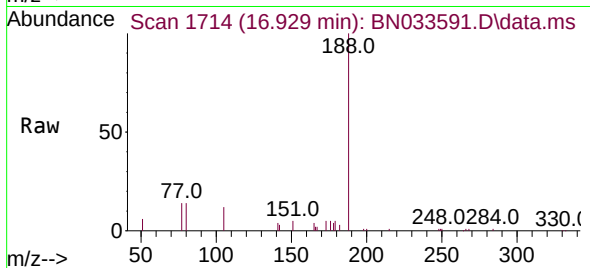
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 13.8  | 7.8   | 11.8  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#25

Phenanthrene

Concen: 1.987 ng

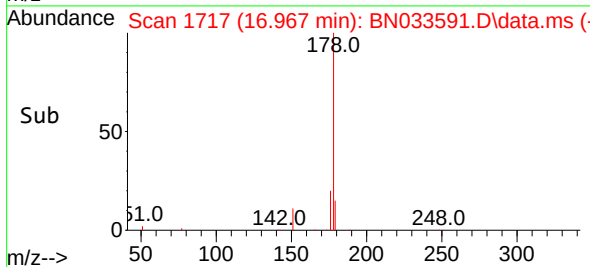
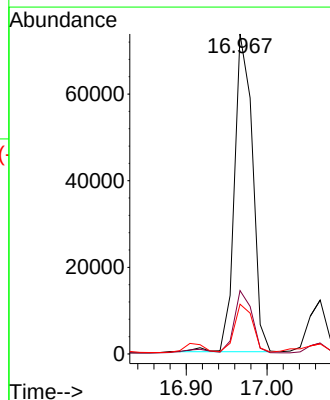
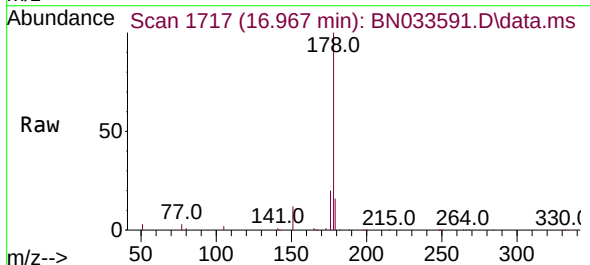
RT: 16.967 min Scan# 1717

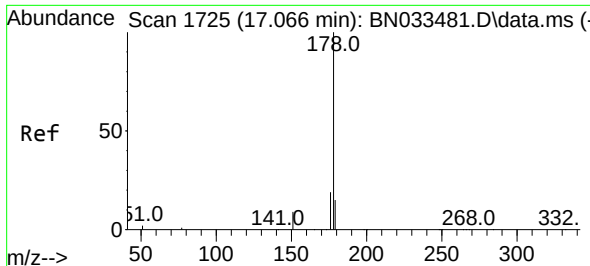
Delta R.T. -0.000 min

Lab File: BN033591.D

Acq: 23 Aug 2024 15:59

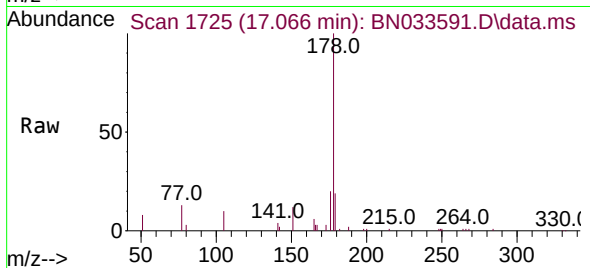
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.0  | 15.3  | 22.9  |
| 179     | 14.9  | 12.3  | 18.5  |





#26  
Anthracene  
Concen: 0.361 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

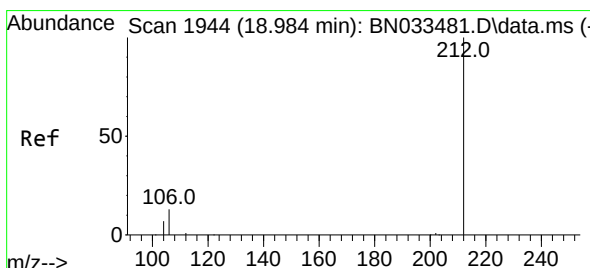
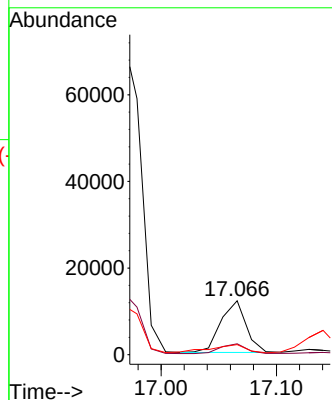
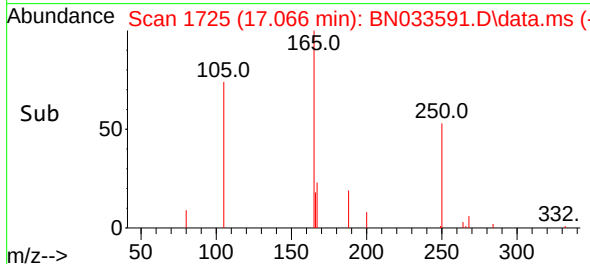
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:178 Resp: 18335  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.0 22.6  
179 21.4 12.4 18.6

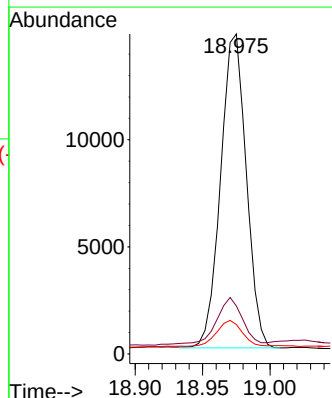
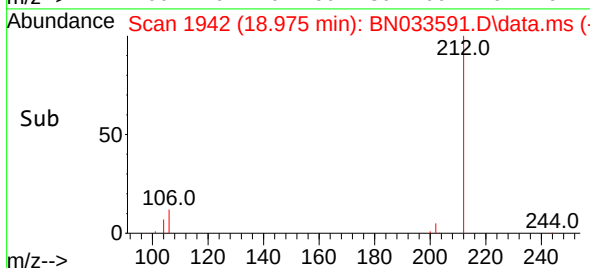
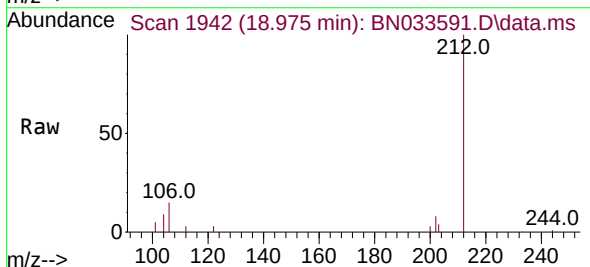
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

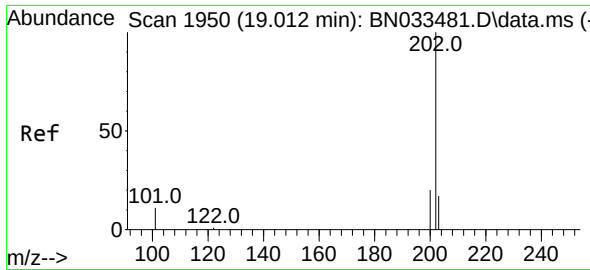


#27  
Fluoranthene-d10  
Concen: 0.391 ng  
RT: 18.975 min Scan# 1942  
Delta R.T. 0.005 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

Tgt Ion:212 Resp: 19419  
Ion Ratio Lower Upper  
212 100  
106 15.8 12.3 18.5  
104 9.1 7.0 10.4

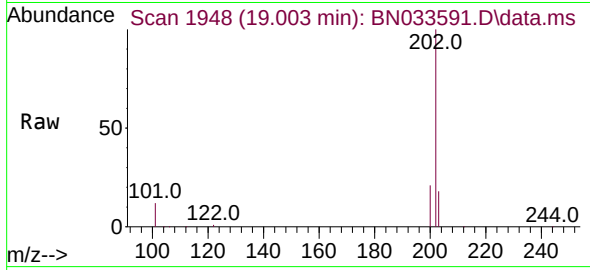






#28  
Fluoranthene  
Concen: 4.628 ng  
RT: 19.003 min Scan# 1950  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

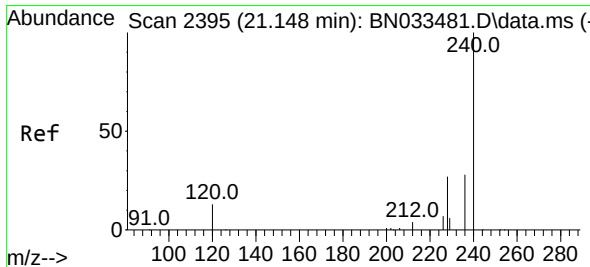
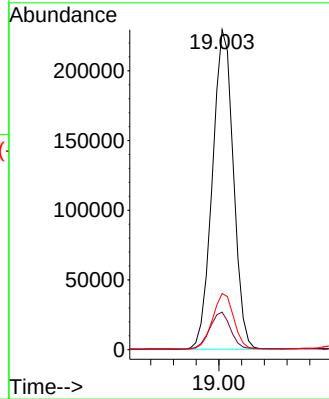
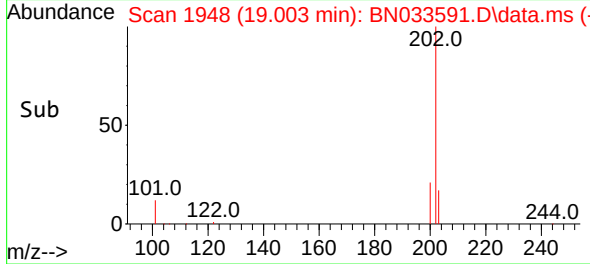
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:202 Resp: 293678  
Ion Ratio Lower Upper  
202 100  
101 11.8 9.5 14.3  
203 17.4 13.8 20.6

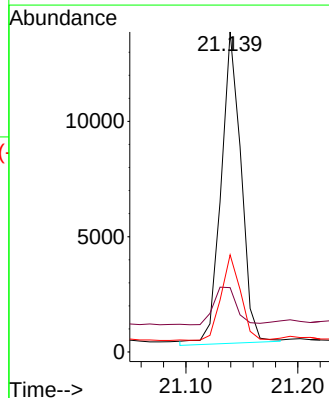
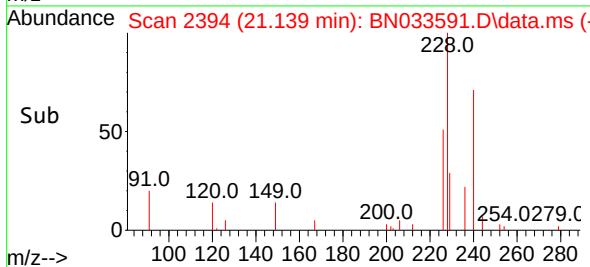
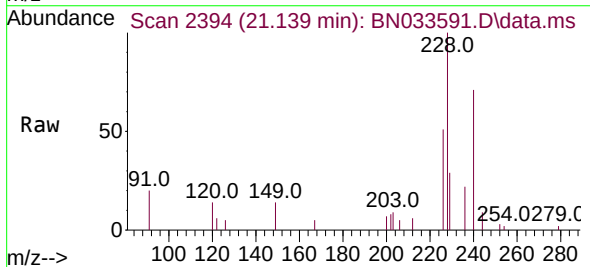
Manual Integrations  
APPROVED

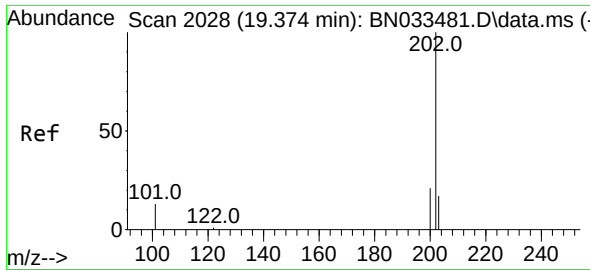
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

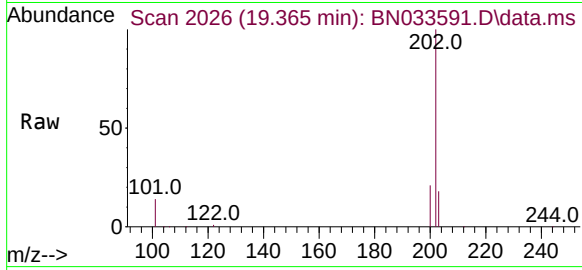
Tgt Ion:240 Resp: 16828  
Ion Ratio Lower Upper  
240 100  
120 20.1 12.4 18.6#  
236 30.4 23.0 34.6





#30  
Pyrene  
Concen: 3.400 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

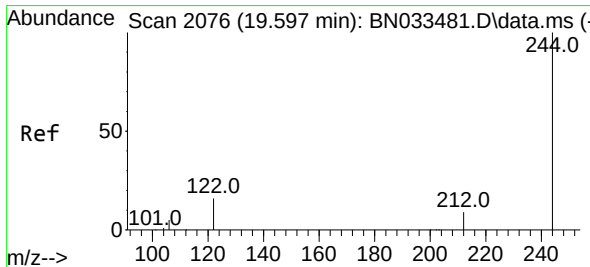
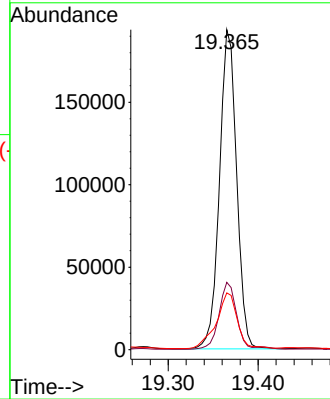
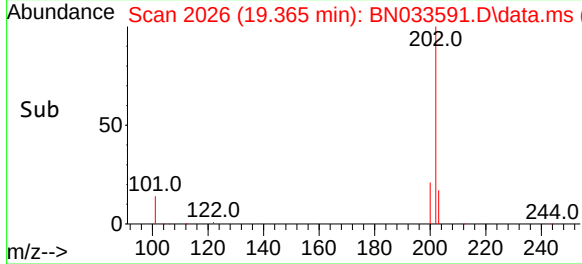
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:202 Resp: 25537  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.6 24.8  
203 21.4 14.2 21.4

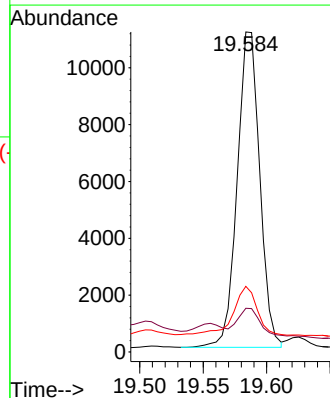
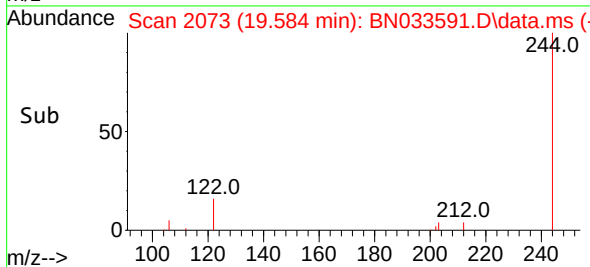
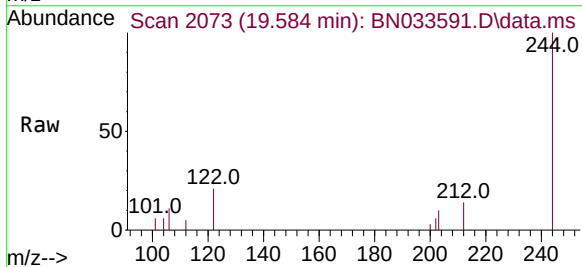
Manual Integrations  
APPROVED

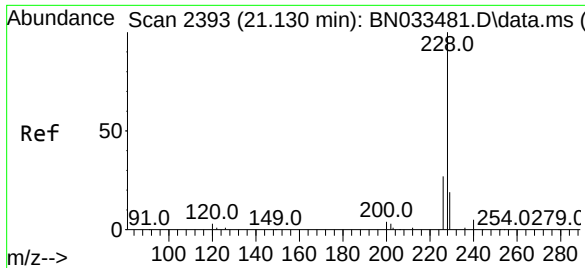
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#31  
Terphenyl-d14  
Concen: 0.359 ng  
RT: 19.584 min Scan# 2073  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

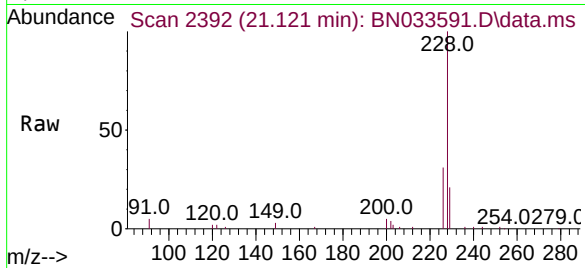
Tgt Ion:244 Resp: 13742  
Ion Ratio Lower Upper  
244 100  
212 13.7 7.8 11.6#  
122 20.5 13.3 19.9#





#32  
Benzo(a)anthracene  
Concen: 1.966 ng  
RT: 21.121 min Scan# 211959  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

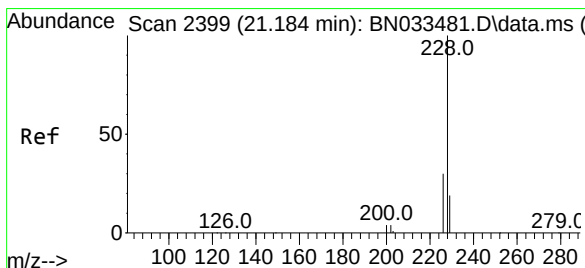
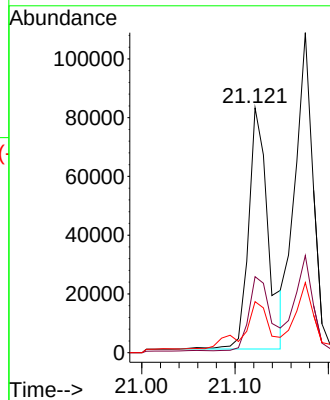
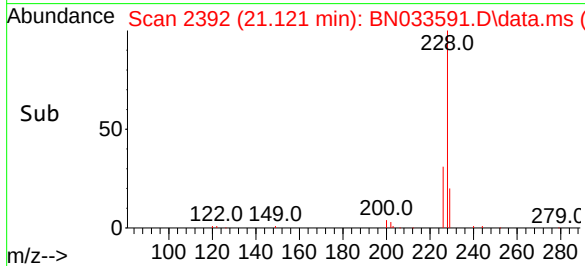
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:228 Resp: 119594  
Ion Ratio Lower Upper  
228 100  
226 31.0 21.8 32.6  
229 20.8 15.8 23.6

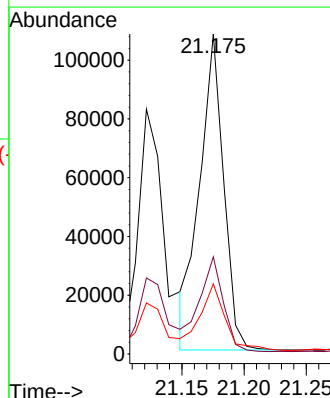
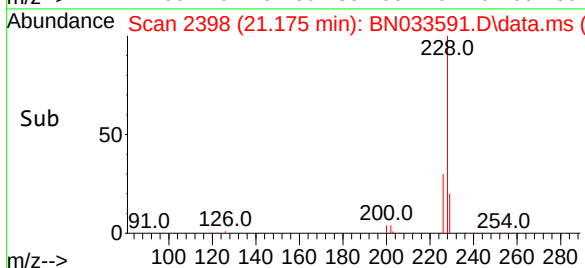
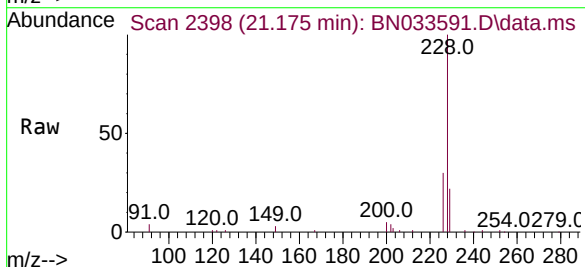
Manual Integrations  
APPROVED

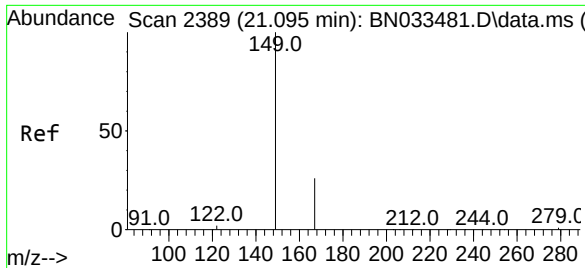
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#33  
Chrysene  
Concen: 2.375 ng  
RT: 21.175 min Scan# 2398  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

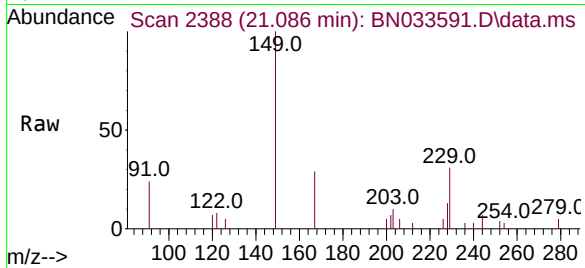
Tgt Ion:228 Resp: 143608  
Ion Ratio Lower Upper  
228 100  
226 30.3 23.8 35.8  
229 21.9 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.393 ng m  
RT: 21.086 min Scan# 2108  
Delta R.T. -0.000 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

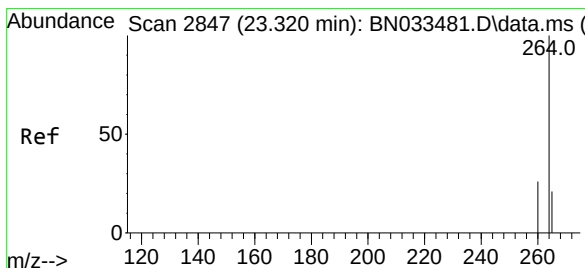
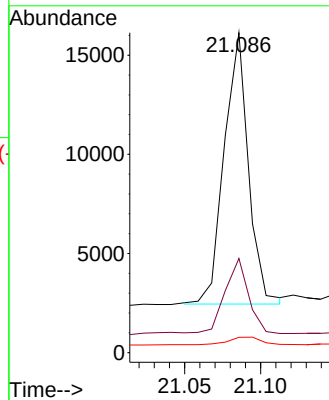
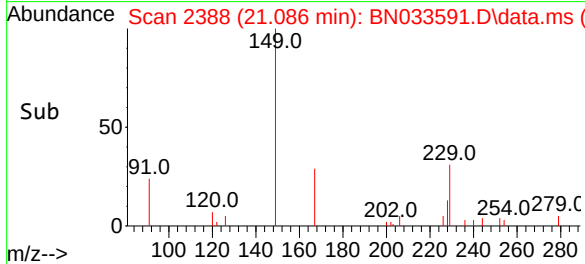
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:149 Resp: 15130  
Ion Ratio Lower Upper  
149 100  
167 72.4 21.5 32.3  
279 24.2 2.2 3.2

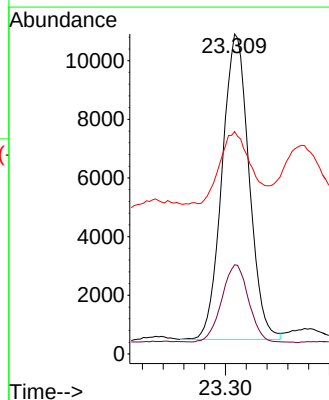
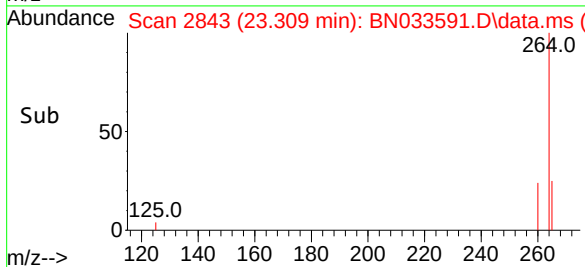
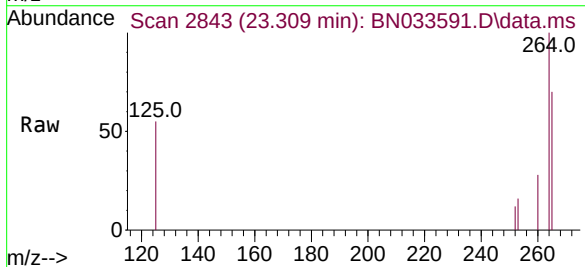
Manual Integrations  
APPROVED

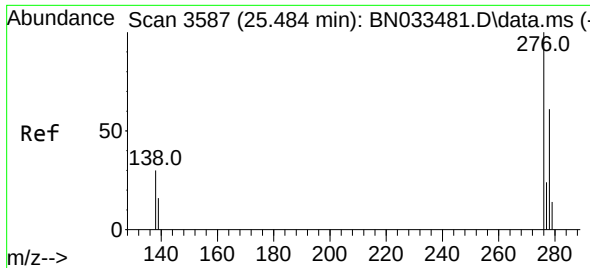
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.309 min Scan# 2843  
Delta R.T. 0.006 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

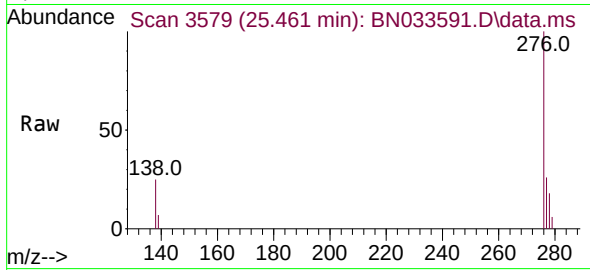
Tgt Ion:264 Resp: 18757  
Ion Ratio Lower Upper  
264 100  
260 27.8 20.8 31.2  
265 69.5 52.2 78.2





#36  
Indeno(1,2,3-cd)pyrene  
Concen: 1.416 ng  
RT: 25.461 min Scan# 3579  
Delta R.T. 0.012 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

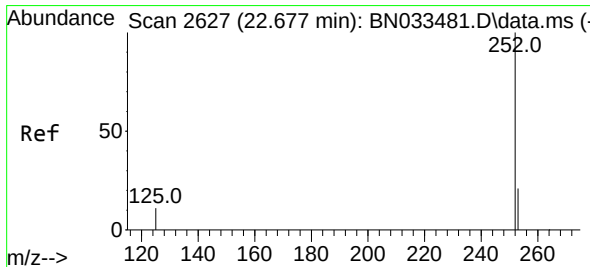
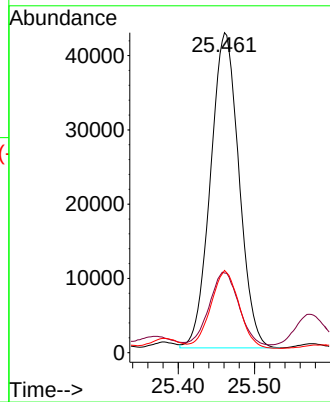
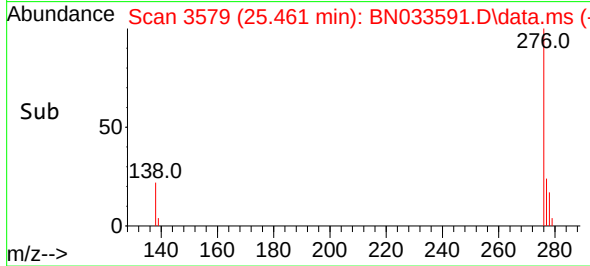
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion: 276 Resp: 11026  
Ion Ratio Lower Upper  
276 100  
138 23.6 24.4 36.6  
277 24.6 19.8 29.6

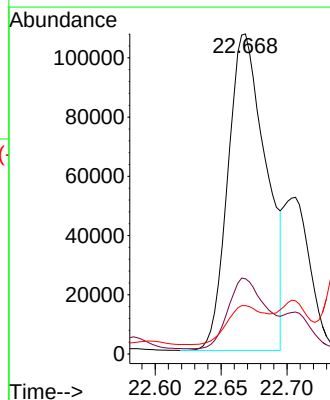
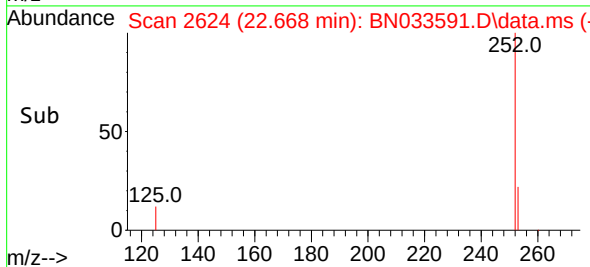
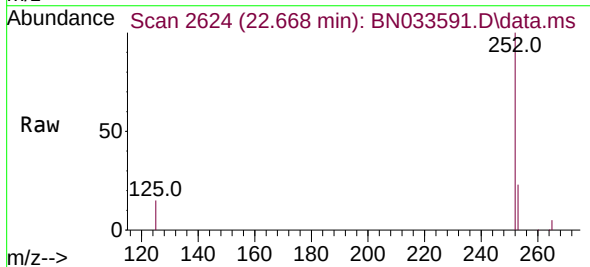
Manual Integrations  
APPROVED

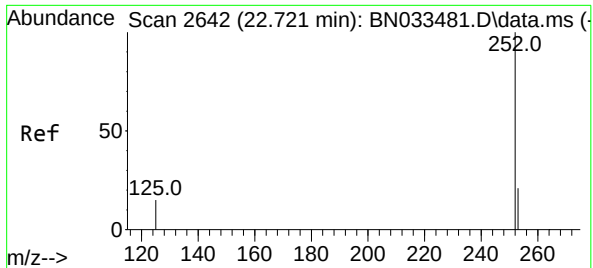
Reviewed By : Yogesh Patel 08/24/2024  
Supervised By : mohammad ahmed 08/29/2024



#37  
Benzo(b)fluoranthene  
Concen: 3.068 ng  
RT: 22.668 min Scan# 2624  
Delta R.T. 0.009 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

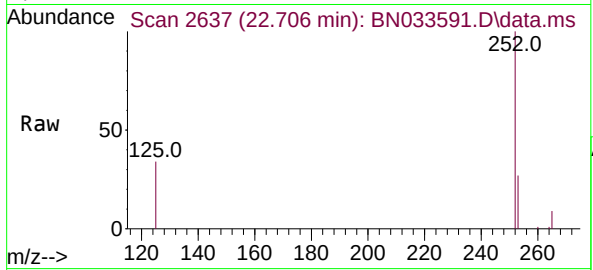
Tgt Ion: 252 Resp: 214874  
Ion Ratio Lower Upper  
252 100  
253 23.5 19.8 29.8  
125 15.1 13.9 20.9





#38  
Benzo(k)fluoranthene  
Concen: 1.057 ng m  
RT: 22.706 min Scan# 2637  
Delta R.T. 0.003 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

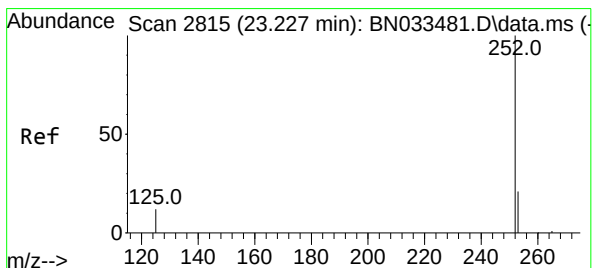
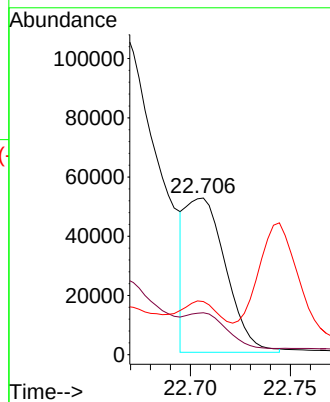
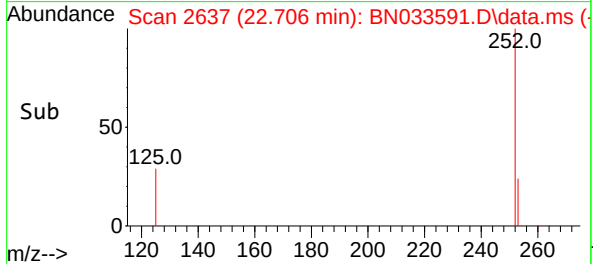
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:252 Resp: 72890  
Ion Ratio Lower Upper  
252 100  
253 26.8 19.8 29.8  
125 33.9 15.8 23.8

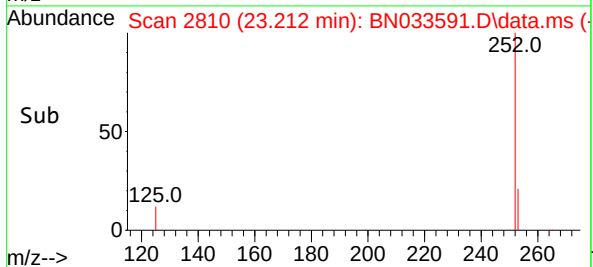
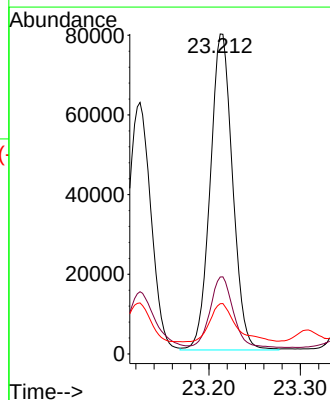
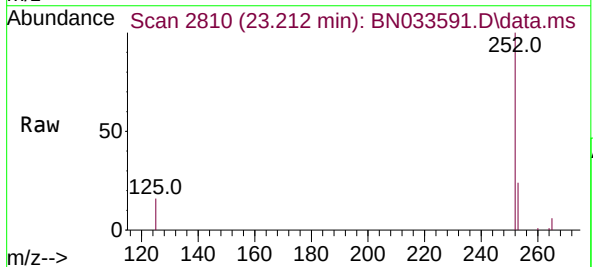
Manual Integrations  
APPROVED

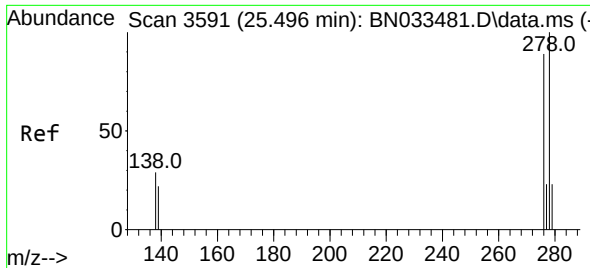
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#39  
Benzo(a)pyrene  
Concen: 2.328 ng m  
RT: 23.212 min Scan# 2810  
Delta R.T. 0.003 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

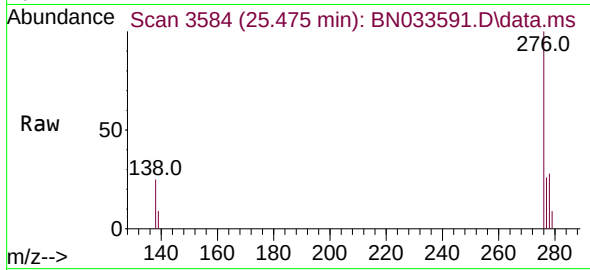
Tgt Ion:252 Resp: 134904  
Ion Ratio Lower Upper  
252 100  
253 24.0 21.5 32.3  
125 15.7 17.0 25.4





#40  
Dibenzo(a,h)anthracene  
Concen: 0.403 ng  
RT: 25.475 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

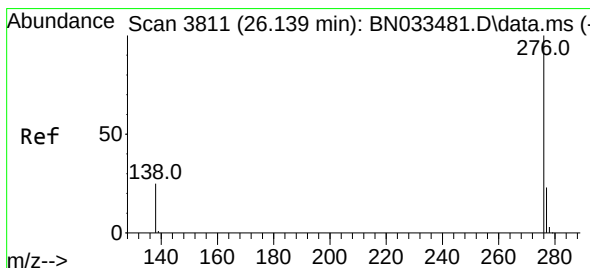
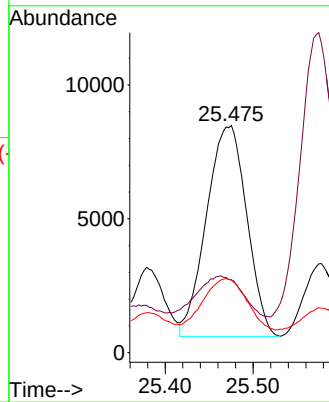
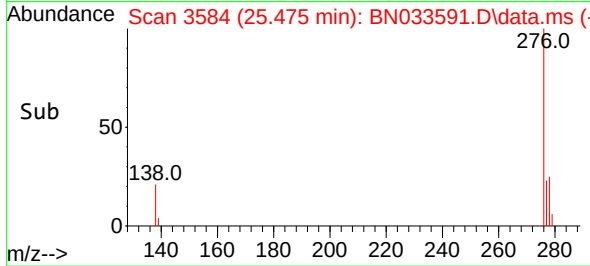
Instrument :  
BNA\_N  
ClientSampleId :  
S-911-K1-SO-0-0.5-081924-FD



Tgt Ion:278 Resp: 25089  
Ion Ratio Lower Upper  
278 100  
139 32.0 19.1 28.7  
279 32.1 21.0 31.4

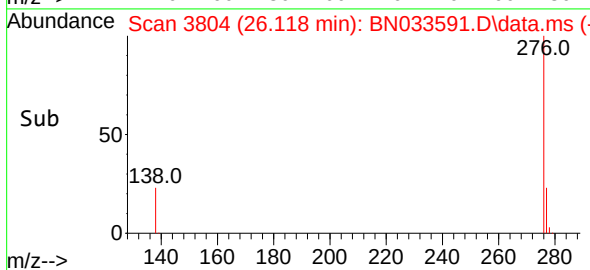
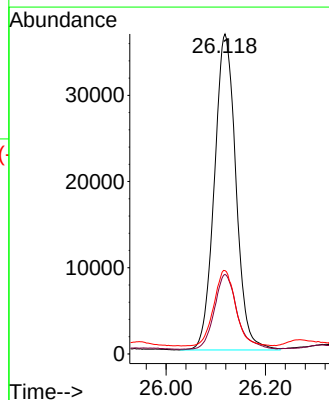
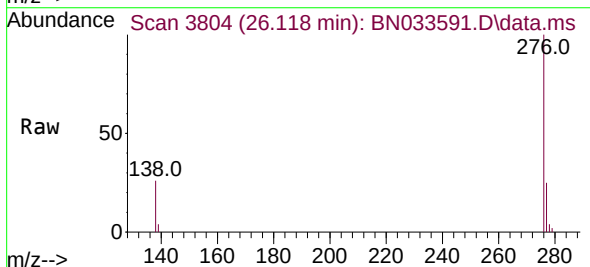
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#41  
Benzo(g,h,i)perylene  
Concen: 1.655 ng  
RT: 26.118 min Scan# 3804  
Delta R.T. 0.015 min  
Lab File: BN033591.D  
Acq: 23 Aug 2024 15:59

Tgt Ion:276 Resp: 110193  
Ion Ratio Lower Upper  
276 100  
277 24.8 19.7 29.5  
138 26.0 21.8 32.6



## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924               | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-06                              | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 78.2                 |
| Sample Wt/Vol:     | 30.07      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033568.D        | 1         | 08/21/24 09:38 | 08/23/24 01:05 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 2.00  | J         | 0.88                | 4.20       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 1.60  | J         | 1.00                | 4.20       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 2.40  | J         | 0.80                | 4.20       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 18.0  |           | 0.70                | 4.20       | ug/Kg             |
| 86-73-7                   | Fluorene                | 15.5  |           | 0.77                | 4.20       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 210   |           | 0.80                | 4.20       | ug/Kg             |
| 120-12-7                  | Anthracene              | 45.8  |           | 1.00                | 4.20       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 380   | E         | 0.85                | 4.20       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 270   | E         | 1.20                | 4.20       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 190   |           | 0.97                | 4.20       | ug/Kg             |
| 218-01-9                  | Chrysene                | 190   |           | 1.10                | 4.20       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 250   | E         | 1.50                | 4.20       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 91.7  |           | 1.30                | 4.20       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 210   |           | 2.10                | 4.20       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 110   |           | 1.60                | 4.20       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 31.5  |           | 1.50                | 4.20       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 120   |           | 1.50                | 4.20       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 2.80  | U         | 2.80                | 8.40       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.16  |           | 30 (17) - 150 (161) | 40%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.11  | *         | 30 (23) - 150 (138) | 28%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.19  |           | 30 (33) - 130 (121) | 47%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.15  |           | 30 (32) - 130 (121) | 38%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.089 | *         | 30 (21) - 130 (130) | 22%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7740  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 20500 |           | 10.304              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 9840  |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 18400 |           | 16.929              |            |                   |



## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924               | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-06                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 78.2                         |
| Sample Wt/Vol:     | 30.07      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033568.D        | 1         | 08/21/24 09:38 | 08/23/24 01:05 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 15400 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 16700 | 23.303    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033568.D  
 Acq On : 23 Aug 2024 01:05  
 Operator : MA/JU  
 Sample : P3671-06  
 Misc :  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-905-J-SO-0-0.5-081924

Quant Time: Aug 23 01:36:17 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
 Supervised By :mohammad ahmed 08/24/2024

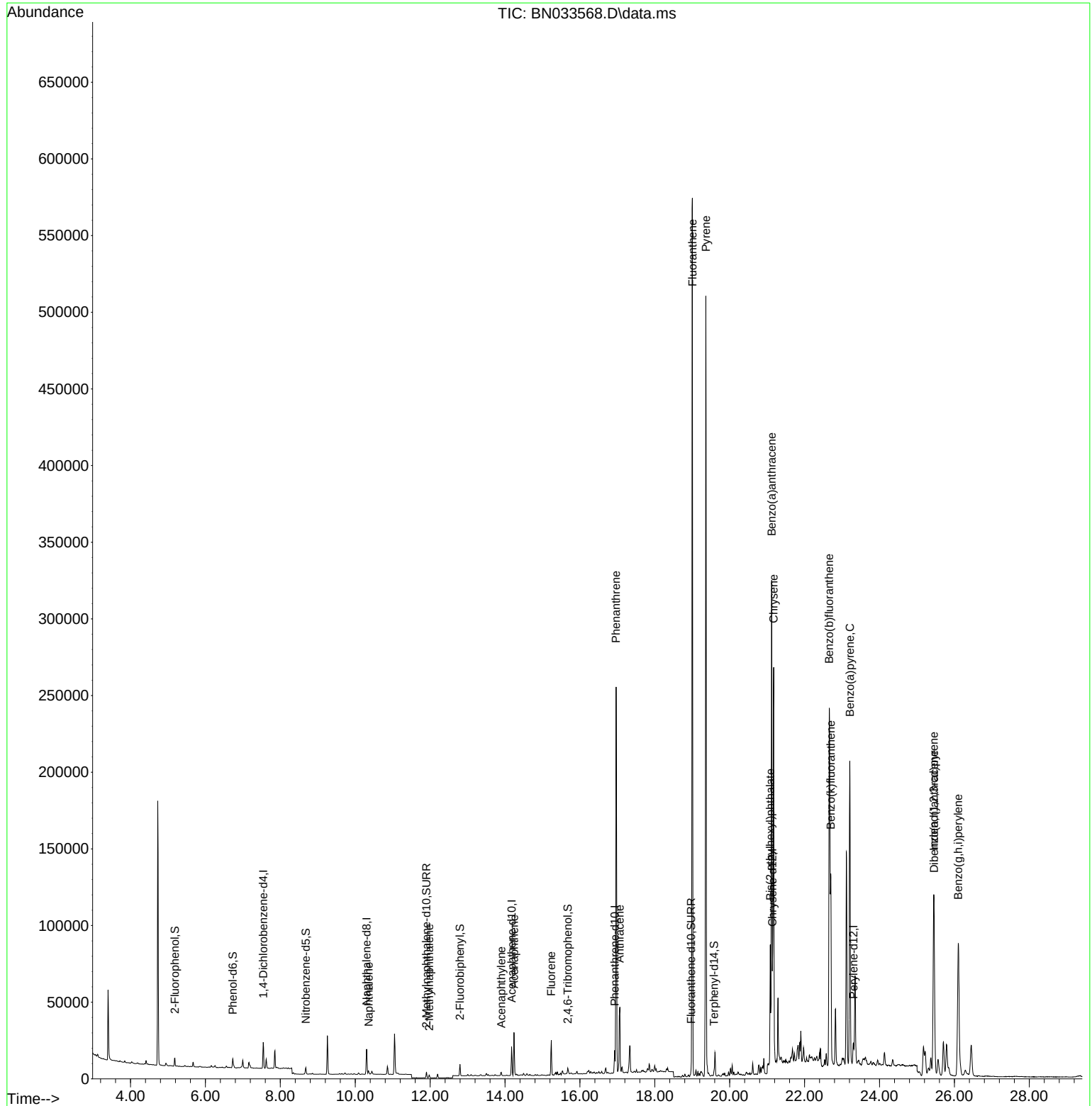
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)    |
|-------------------------------|--------|------|----------|-------|-------|-------------|
| Internal Standards            |        |      |          |       |       |             |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7735     | 0.400 | ng    | 0.00        |
| 7) Naphthalene-d8             | 10.304 | 136  | 20459    | 0.400 | ng    | 0.00        |
| 13) Acenaphthene-d10          | 14.178 | 164  | 9843     | 0.400 | ng    | 0.00        |
| 19) Phenanthrene-d10          | 16.929 | 188  | 18367    | 0.400 | ng    | 0.00        |
| 29) Chrysene-d12              | 21.139 | 240  | 15413    | 0.400 | ng    | 0.00        |
| 35) Perylene-d12              | 23.303 | 264  | 16704    | 0.400 | ng    | 0.00        |
| System Monitoring Compounds   |        |      |          |       |       |             |
| 4) 2-Fluorophenol             | 5.183  | 112  | 3935     | 0.160 | ng    | 0.00        |
| 5) Phenol-d6                  | 6.729  | 99   | 4875     | 0.167 | ng    | 0.00        |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 3190     | 0.188 | ng    | 0.00        |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 4662     | 0.159 | ng    | 0.00        |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 780      | 0.147 | ng    | 0.00        |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 6144     | 0.153 | ng    | 0.00        |
| 27) Fluoranthene-d10          | 18.970 | 212  | 5035     | 0.114 | ng    | 0.00        |
| 31) Terphenyl-d14             | 19.583 | 244  | 3133     | 0.089 | ng    | 0.00        |
| Target Compounds              |        |      |          |       |       |             |
| 9) Naphthalene                | 10.357 | 128  | 2589     | 0.047 | ng    | Qvalue # 90 |
| 12) 2-Methylnaphthalene       | 11.979 | 142  | 1314     | 0.038 | ng    | # 92        |
| 16) Acenaphthylene            | 13.900 | 152  | 2481     | 0.057 | ng    | 97          |
| 17) Acenaphthene              | 14.242 | 154  | 12835    | 0.423 | ng    | 98          |
| 18) Fluorene                  | 15.236 | 166  | 13939    | 0.364 | ng    | 98          |
| 25) Phenanthrene              | 16.967 | 178  | 255438   | 4.999 | ng    | 100         |
| 26) Anthracene                | 17.066 | 178  | 48729    | 1.078 | ng    | # 96        |
| 28) Fluoranthene              | 19.003 | 202  | 508617   | 9.008 | ng    | 100         |
| 30) Pyrene                    | 19.365 | 202  | 439507   | 6.389 | ng    | # 95        |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 253086   | 4.542 | ng    | 99          |
| 33) Chrysene                  | 21.175 | 228  | 245143   | 4.426 | ng    | 97          |
| 34) Bis(2-ethylhexyl)phtha... | 21.086 | 149  | 60608    | 1.718 | ng    | 97          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.452 | 276  | 172583   | 2.489 | ng    | 95          |
| 37) Benzo(b)fluoranthene      | 22.660 | 252  | 362431   | 5.810 | ng    | # 94        |
| 38) Benzo(k)fluoranthene      | 22.701 | 252  | 132444m  | 2.157 | ng    |             |
| 39) Benzo(a)pyrene            | 23.209 | 252  | 256698m  | 4.973 | ng    |             |
| 40) Dibenzo(a,h)anthracene    | 25.460 | 278  | 41081    | 0.741 | ng    | 97          |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 169795   | 2.863 | ng    | 98          |

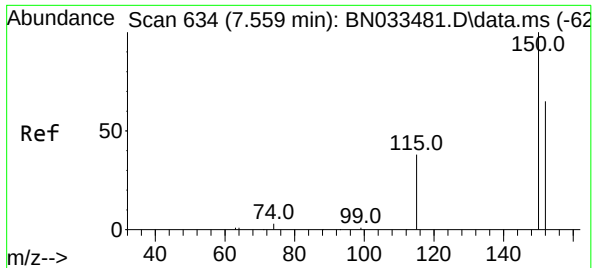
(#) = qualifier out of range (m) = manual integration (+) = signals summed

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
S-905-J-SO-0-0.5-081924

## Manual Integrations APPROVED

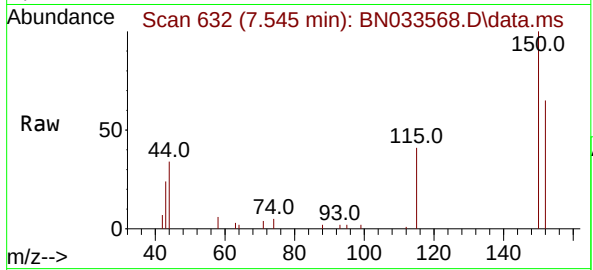
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

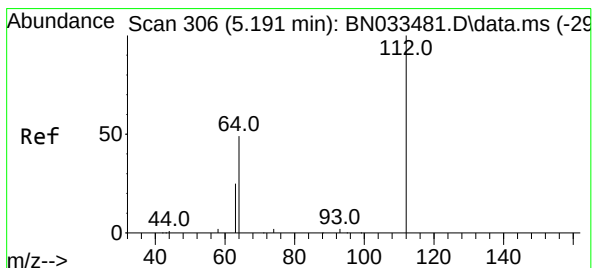
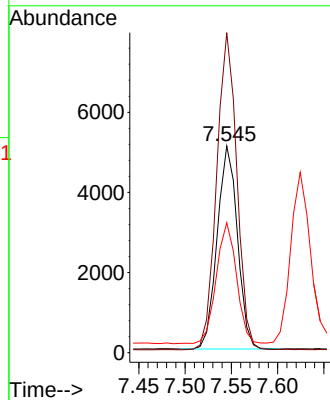
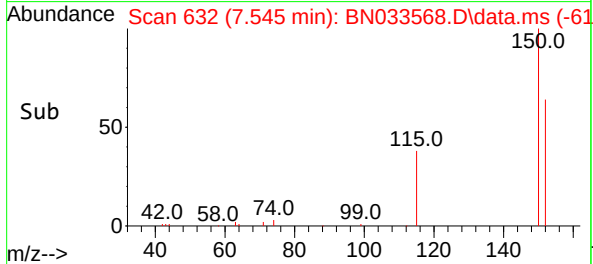
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:152 Resp: 773  
Ion Ratio Lower Upper  
152 100  
150 154.8 122.2 183.2  
115 62.9 47.2 70.8

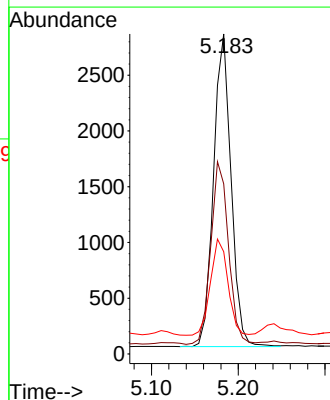
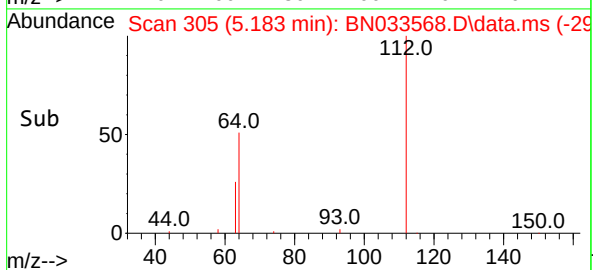
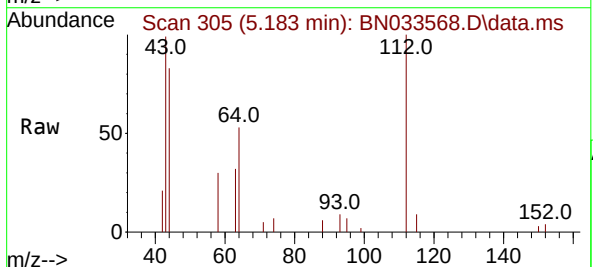
Manual Integrations  
APPROVED

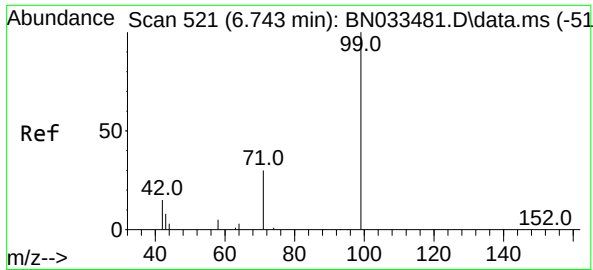
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.160 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

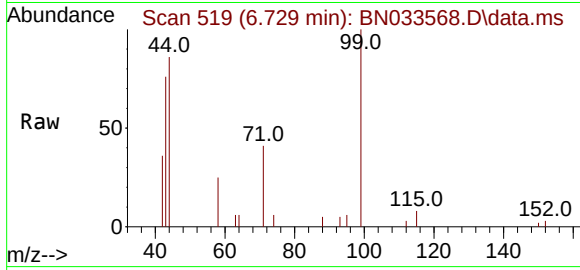
Tgt Ion:112 Resp: 3935  
Ion Ratio Lower Upper  
112 100  
64 59.2 47.1 70.7  
63 30.6 24.9 37.3





#5  
Phenol-d6  
Concen: 0.167 ng  
RT: 6.729 min Scan# 519  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

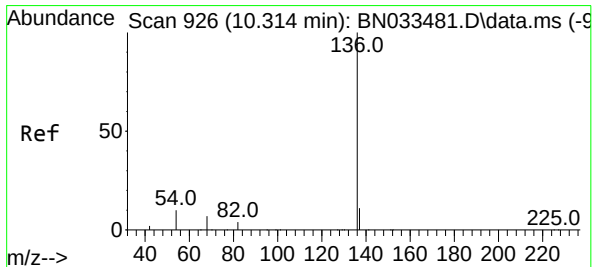
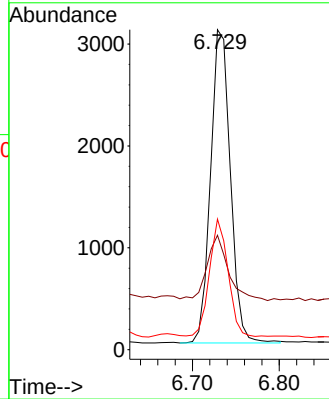
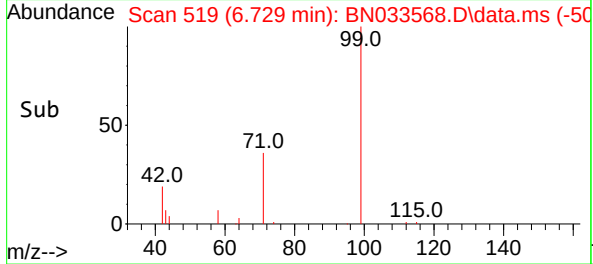
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion: 99 Resp: 4879  
Ion Ratio Lower Upper  
99 100  
42 22.7 16.6 24.8  
71 35.2 26.2 39.4

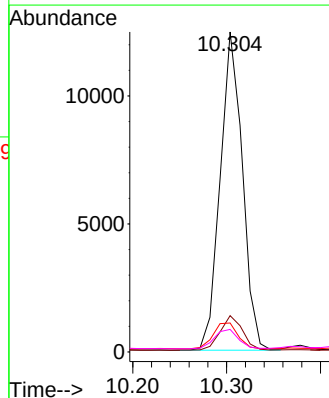
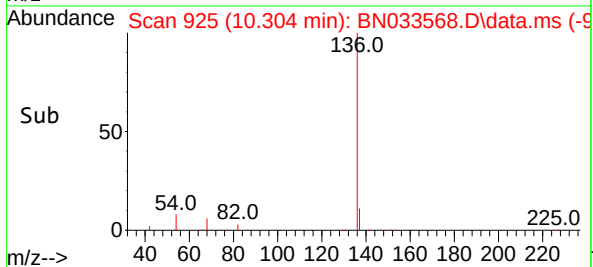
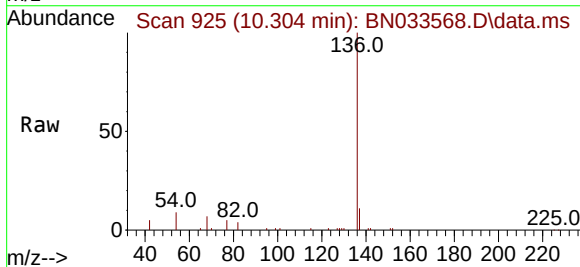
Manual Integrations  
**APPROVED**

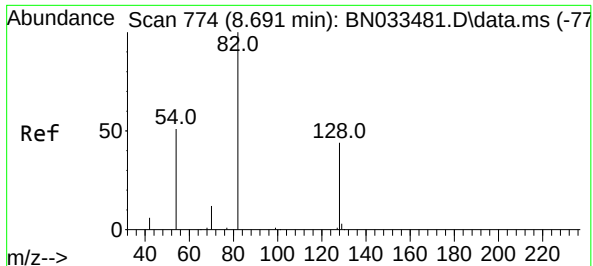
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

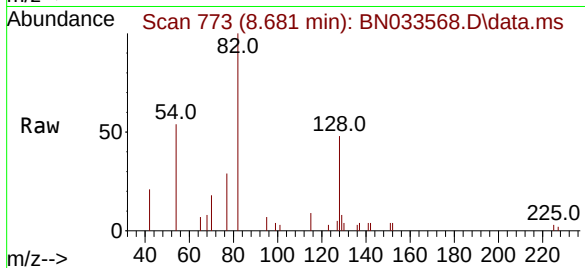
Tgt Ion:136 Resp: 20459  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 9.1 8.3 12.5  
68 7.1 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.188 ng  
RT: 8.681 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

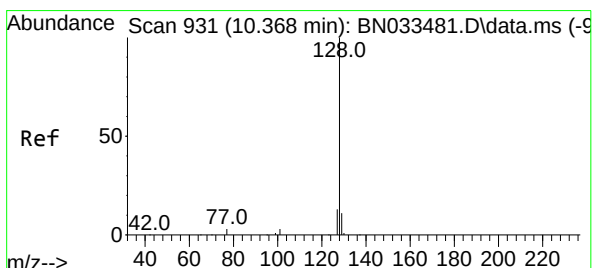
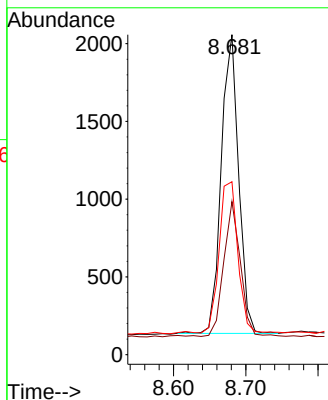
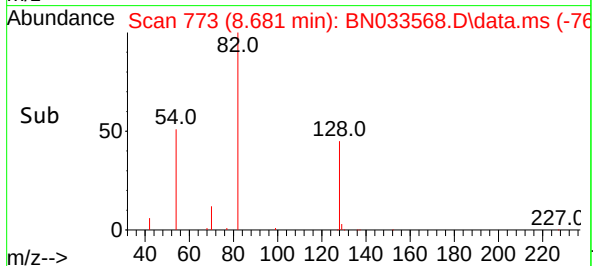
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion: 82 Resp: 3190  
Ion Ratio Lower Upper  
82 100  
128 47.9 36.0 54.0  
54 54.0 42.0 63.0

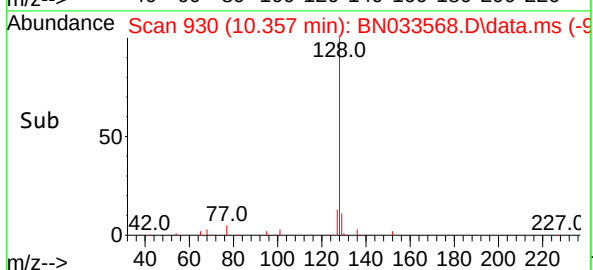
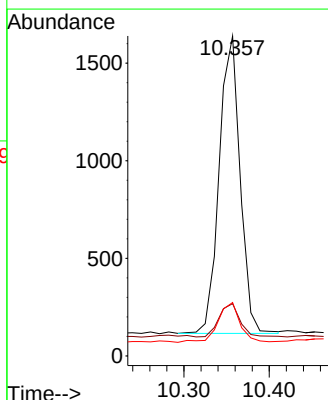
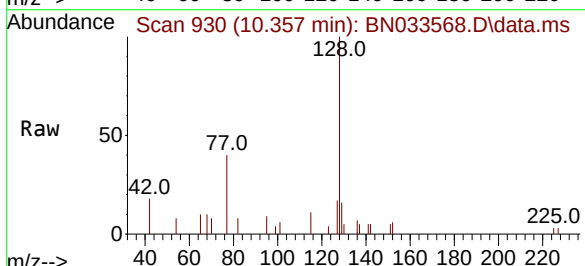
Manual Integrations  
**APPROVED**

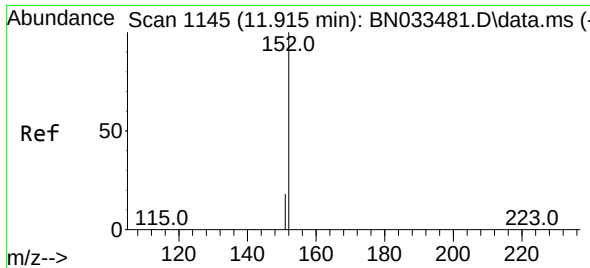
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#9  
Naphthalene  
Concen: 0.047 ng  
RT: 10.357 min Scan# 930  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

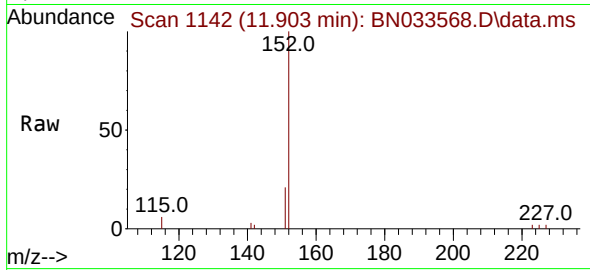
Tgt Ion:128 Resp: 2589  
Ion Ratio Lower Upper  
128 100  
129 16.4 9.1 13.7#  
127 16.7 10.7 16.1#





#11  
2-Methylnaphthalene-d10  
Concen: 0.159 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

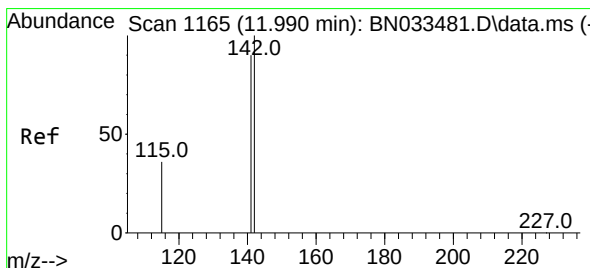
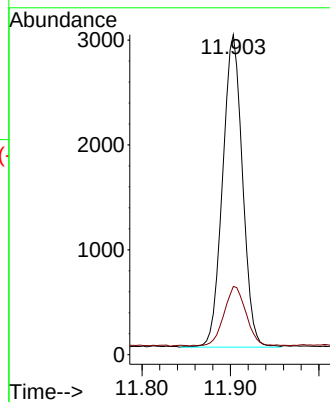
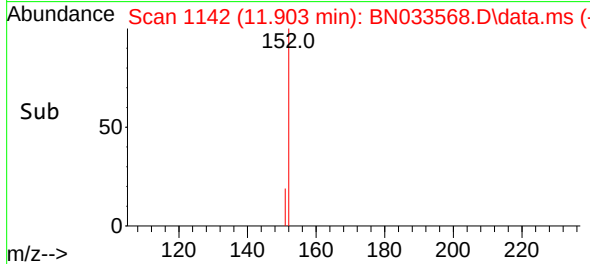
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:152 Resp: 4662  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.6 25.0

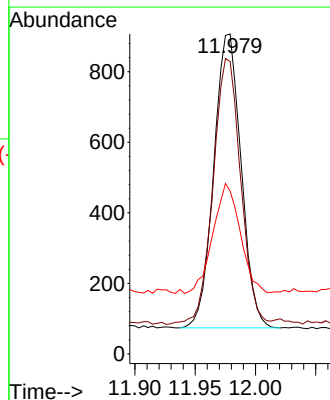
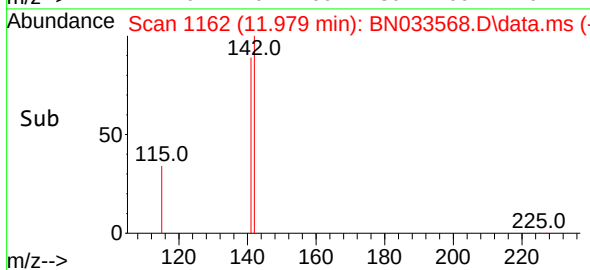
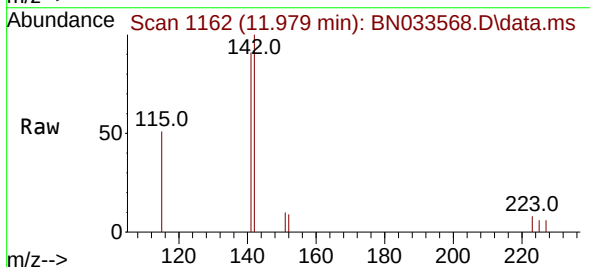
Manual Integrations  
APPROVED

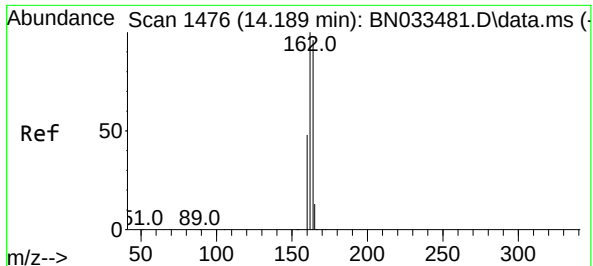
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.038 ng  
RT: 11.979 min Scan# 1162  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

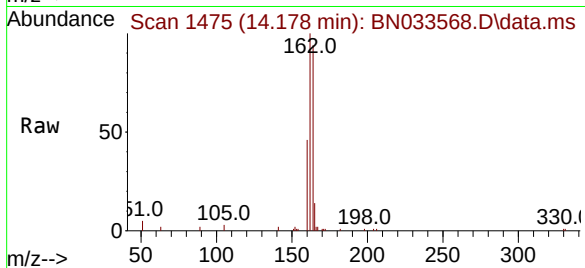
Tgt Ion:142 Resp: 1314  
Ion Ratio Lower Upper  
142 100  
141 91.4 71.7 107.5  
115 50.9 29.4 44.2#





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

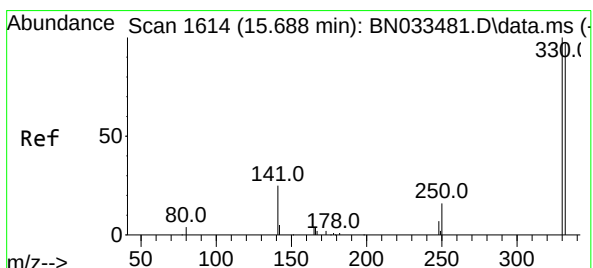
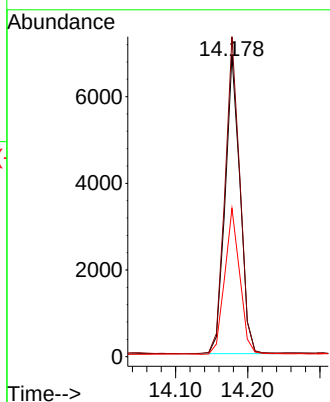
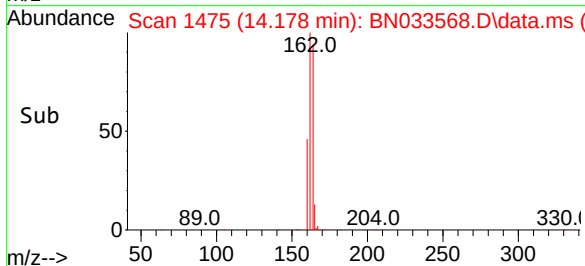
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:164 Resp: 984  
Ion Ratio Lower Upper  
164 100  
162 106.3 83.5 125.3  
160 49.3 40.2 60.4

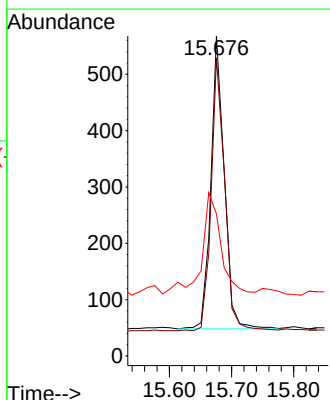
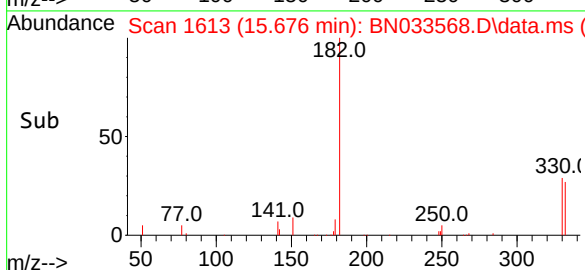
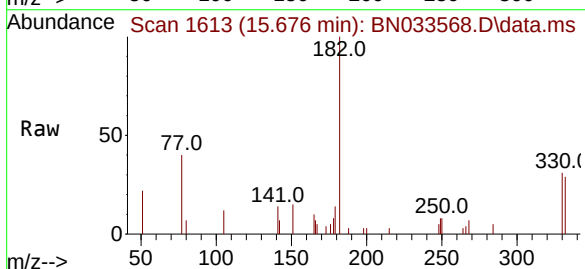
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

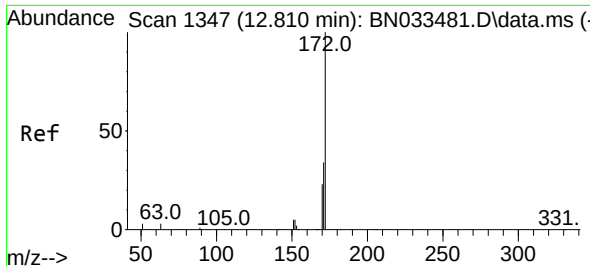


#14  
2,4,6-Tribromophenol  
Concen: 0.147 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

Tgt Ion:330 Resp: 780  
Ion Ratio Lower Upper  
330 100  
332 93.6 77.5 116.3  
141 44.9 33.9 50.9







#15

2-Fluorobiphenyl

Concen: 0.153 ng

RT: 12.799 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN033568.D

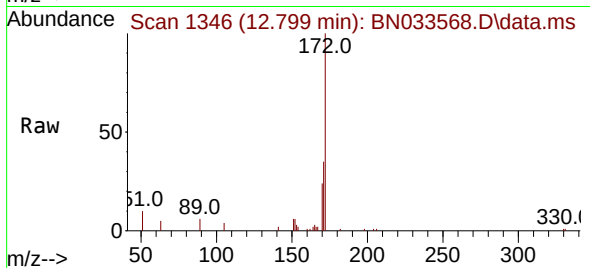
Acq: 23 Aug 2024 01:05

Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924

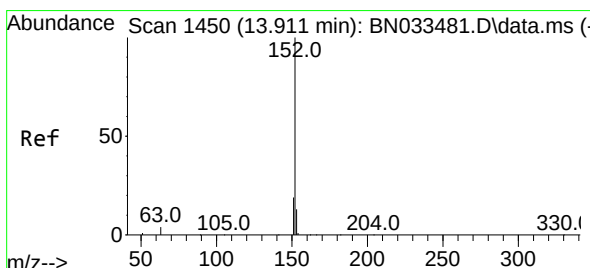
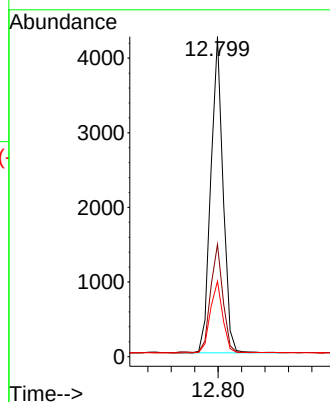
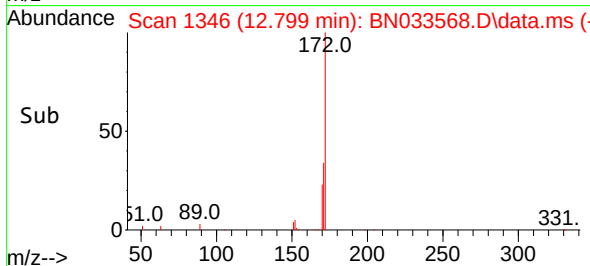


|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 172   | Resp: | 614   |
| Ion      | Ratio | Lower | Upper |
| 172      | 100   |       |       |
| 171      | 35.1  | 27.7  | 41.5  |
| 170      | 23.5  | 18.3  | 27.5  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#16

Acenaphthylene

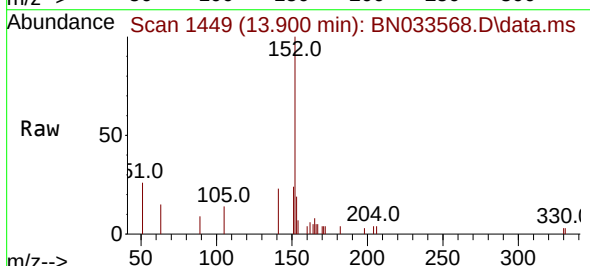
Concen: 0.057 ng

RT: 13.900 min Scan# 1449

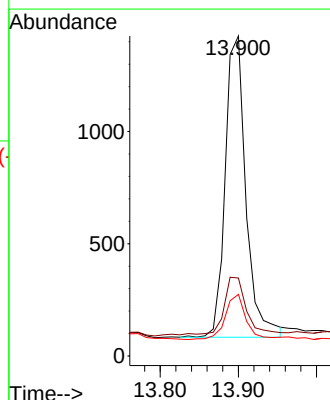
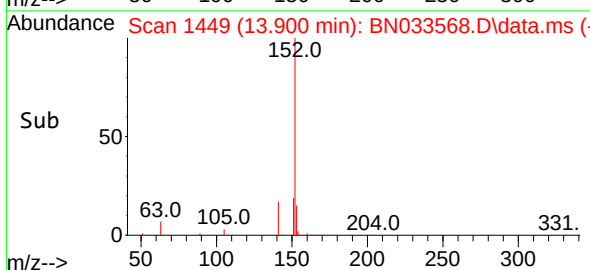
Delta R.T. -0.000 min

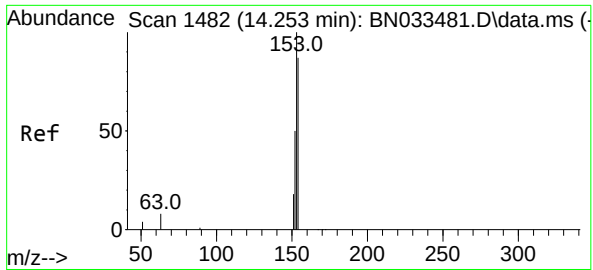
Lab File: BN033568.D

Acq: 23 Aug 2024 01:05



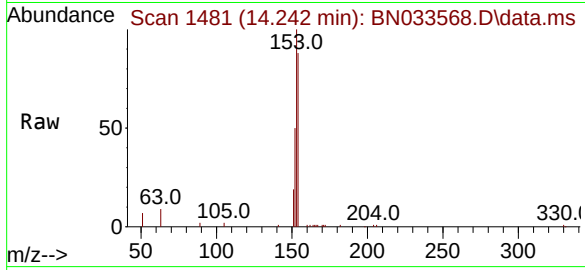
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 2481  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 20.4  | 15.7  | 23.5  |
| 153      | 14.9  | 10.3  | 15.5  |





#17  
Acenaphthene  
Concen: 0.423 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

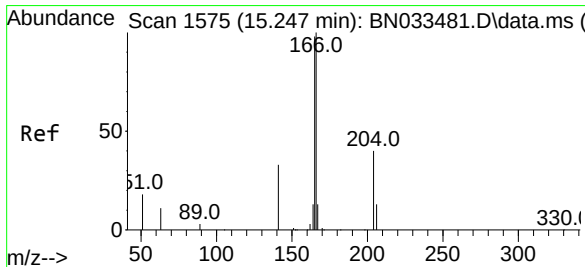
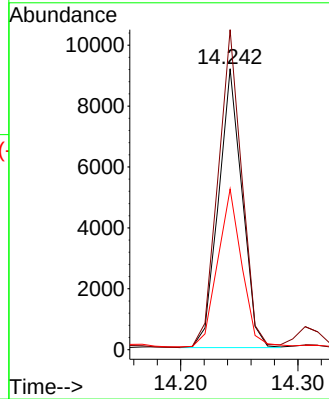
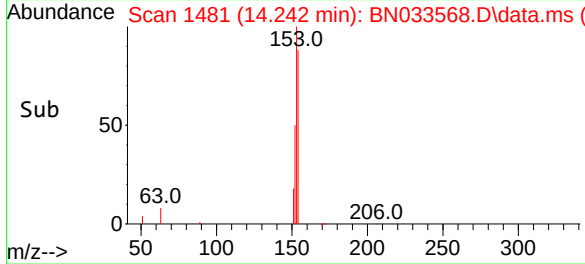
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



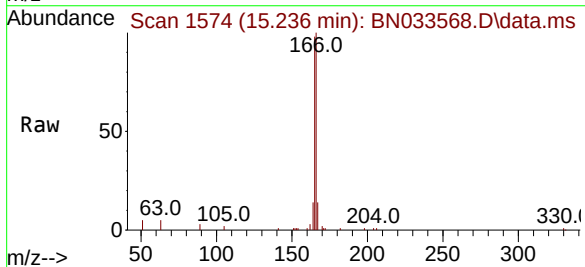
Tgt Ion:154 Resp: 12835  
Ion Ratio Lower Upper  
154 100  
153 114.3 89.0 133.6  
152 57.6 45.2 67.8

Manual Integrations  
APPROVED

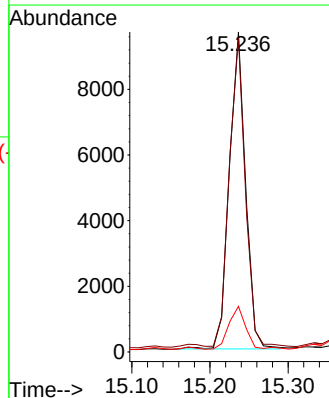
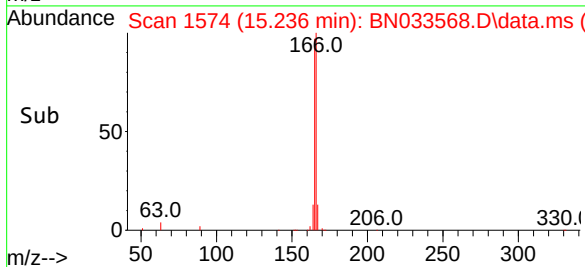
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

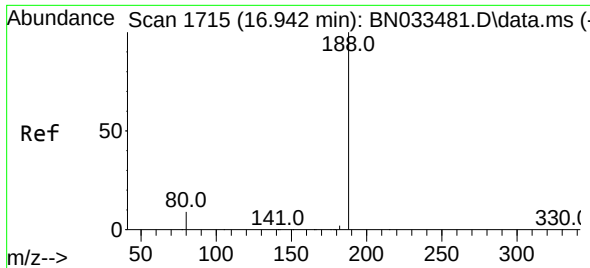


#18  
Fluorene  
Concen: 0.364 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05



Tgt Ion:166 Resp: 13939  
Ion Ratio Lower Upper  
166 100  
165 95.8 78.2 117.4  
167 14.4 10.6 16.0





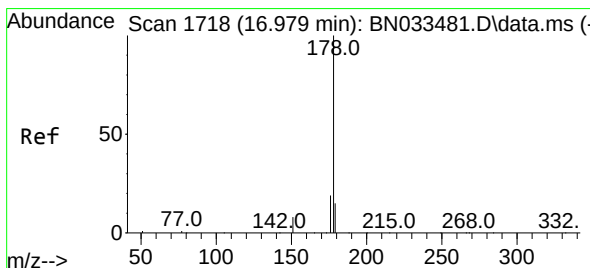
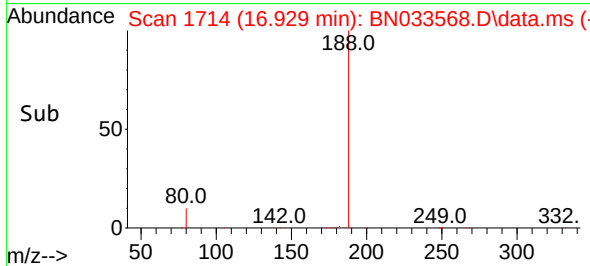
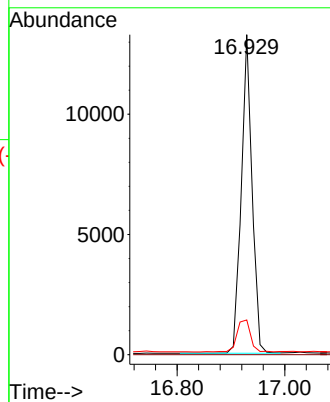
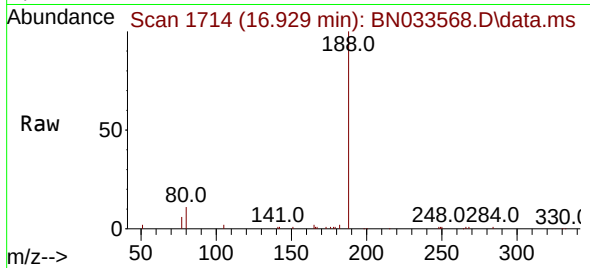
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1715  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924

Tgt Ion:188 Resp: 1836  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 10.8 7.8 11.8

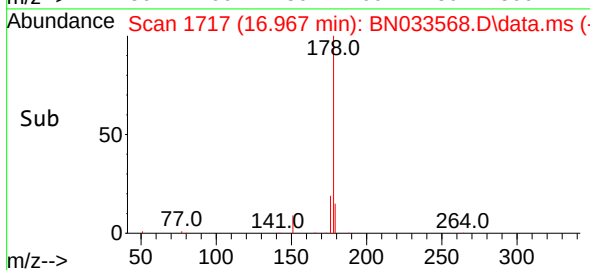
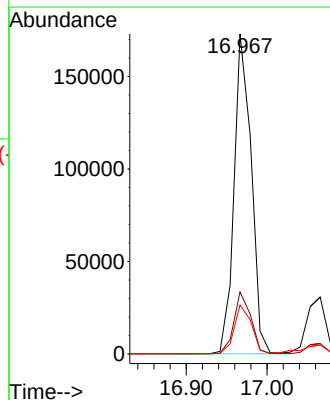
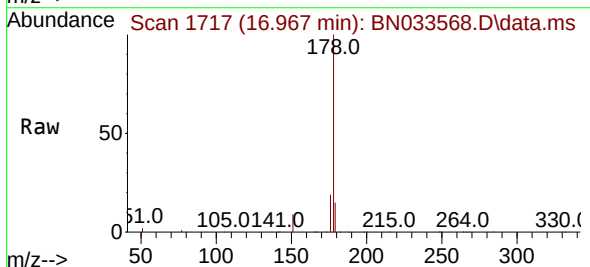
Manual Integrations  
**APPROVED**

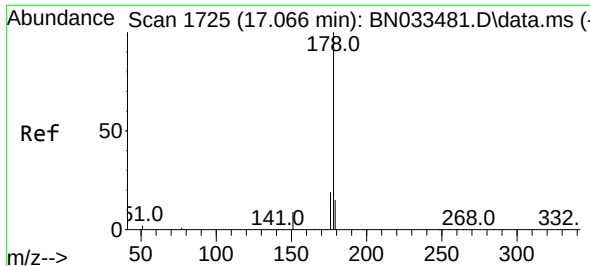
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#25  
Phenanthrene  
Concen: 4.999 ng  
RT: 16.967 min Scan# 1717  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

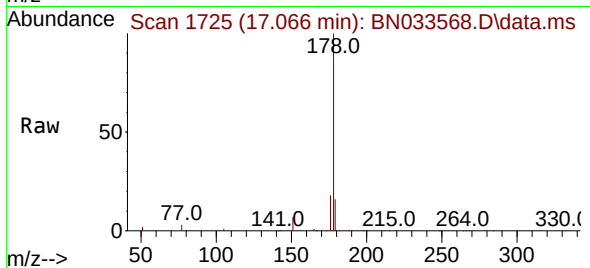
Tgt Ion:178 Resp: 255438  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.3 22.9  
179 15.3 12.3 18.5





#26  
Anthracene  
Concen: 1.078 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

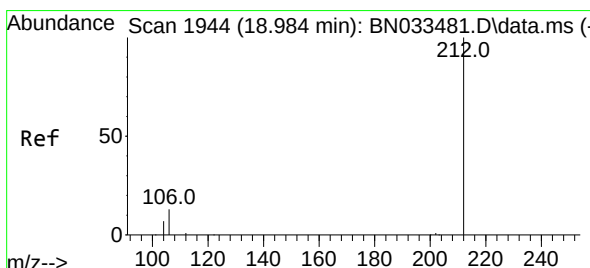
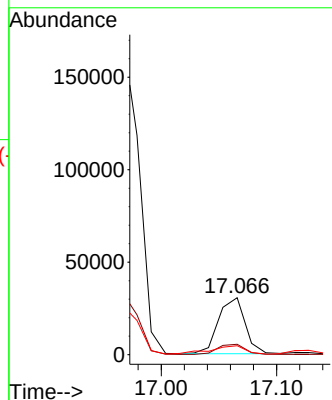
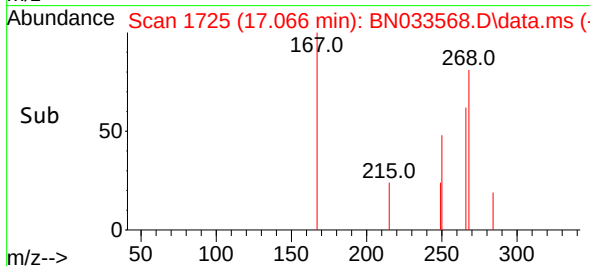
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:178 Resp: 48729  
Ion Ratio Lower Upper  
178 100  
176 18.9 15.0 22.6  
179 19.5 12.4 18.6

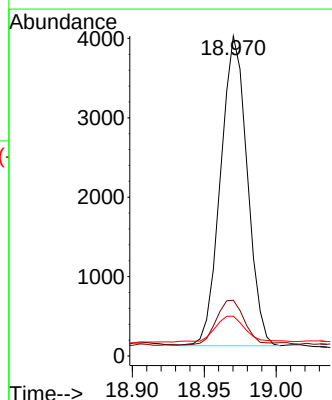
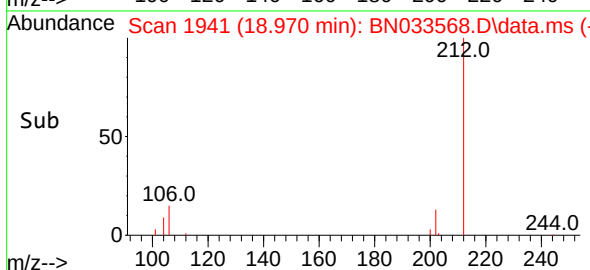
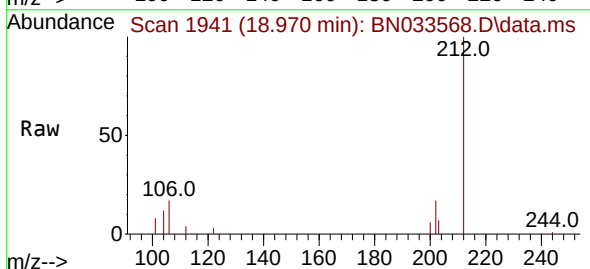
Manual Integrations  
APPROVED

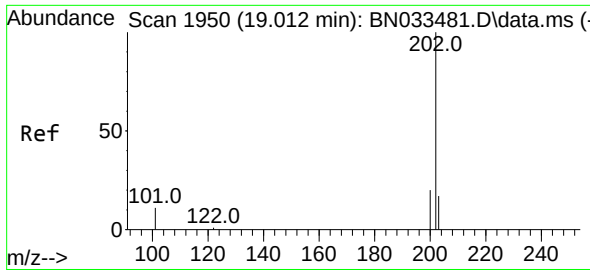
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#27  
Fluoranthene-d10  
Concen: 0.114 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

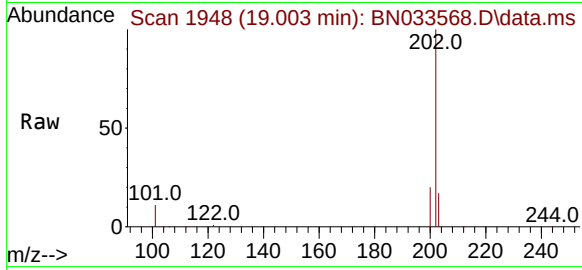
Tgt Ion:212 Resp: 5035  
Ion Ratio Lower Upper  
212 100  
106 16.0 12.3 18.5  
104 10.8 7.0 10.4





#28  
Fluoranthene  
Concen: 9.008 ng  
RT: 19.003 min Scan# 19003  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

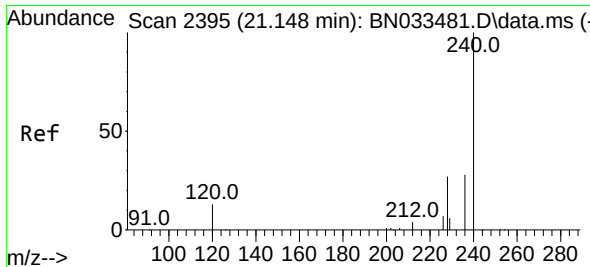
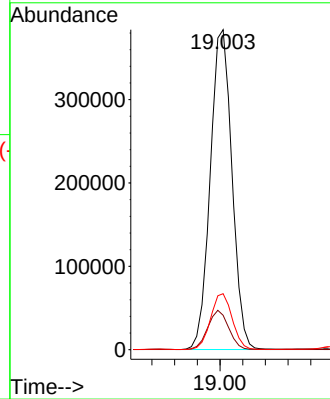
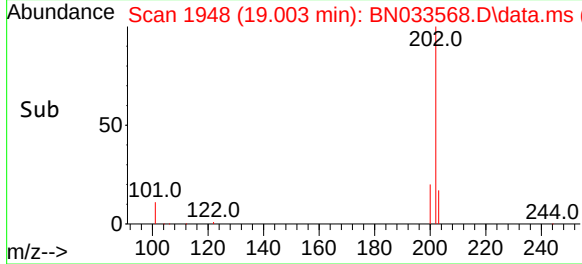
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:202 Resp: 50861  
Ion Ratio Lower Upper  
202 100  
101 11.8 9.5 14.3  
203 17.3 13.8 20.6

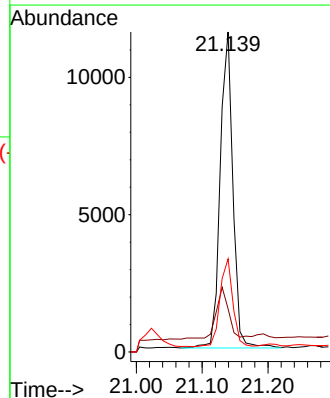
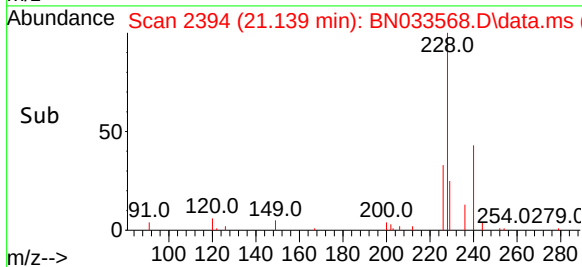
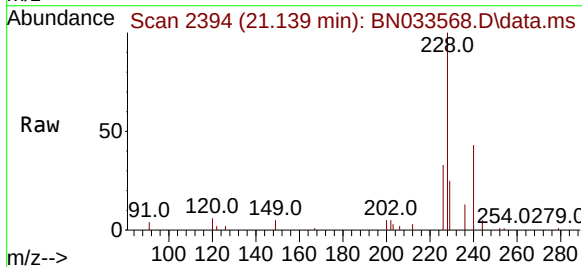
Manual Integrations  
APPROVED

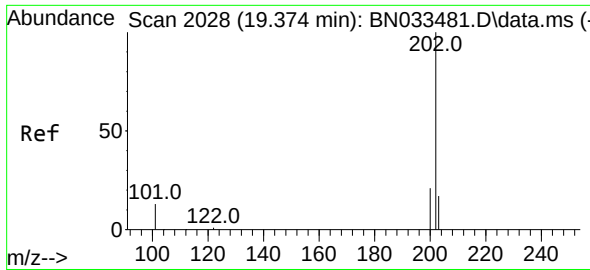
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

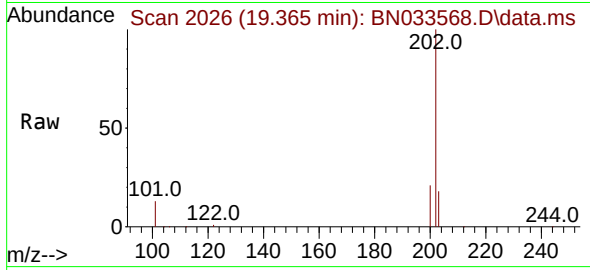
Tgt Ion:240 Resp: 15413  
Ion Ratio Lower Upper  
240 100  
120 13.5 12.4 18.6  
236 29.1 23.0 34.6





#30  
Pyrene  
Concen: 6.389 ng  
RT: 19.365 min Scan# 2028  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

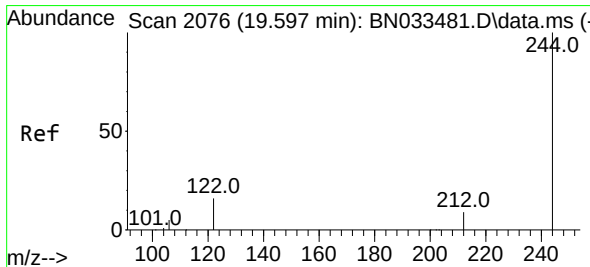
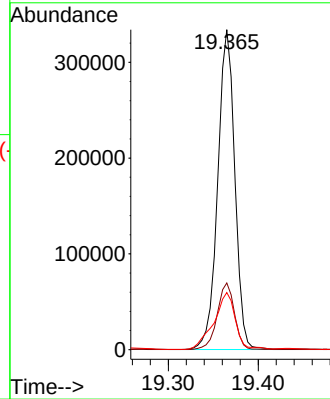
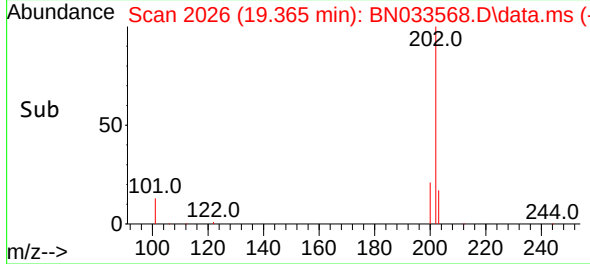
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:202 Resp: 43950  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.6 24.8  
203 22.3 14.2 21.4

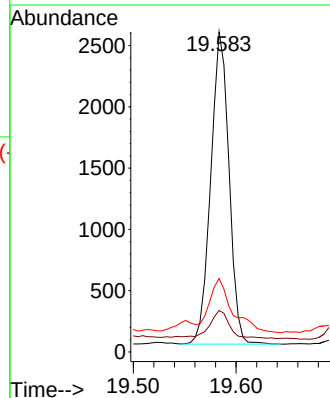
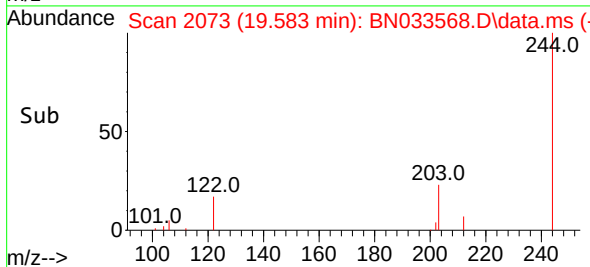
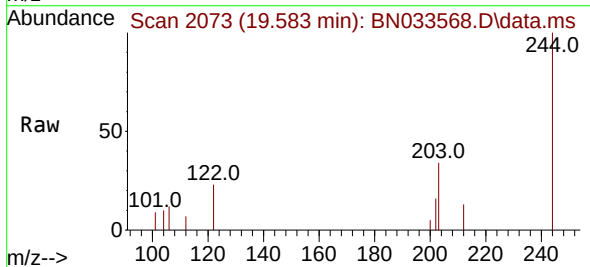
Manual Integrations  
APPROVED

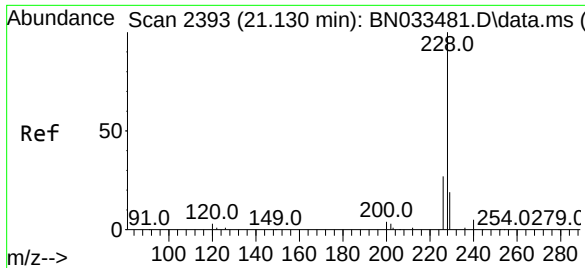
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#31  
Terphenyl-d14  
Concen: 0.089 ng  
RT: 19.583 min Scan# 2073  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

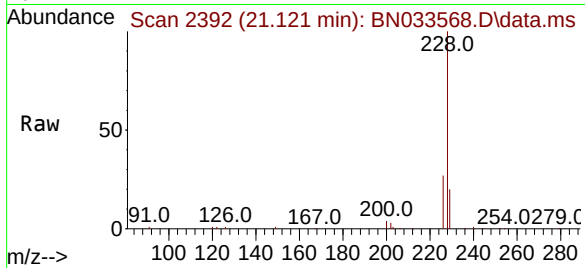
Tgt Ion:244 Resp: 3133  
Ion Ratio Lower Upper  
244 100  
212 12.9 7.8 11.6#  
122 23.0 13.3 19.9#





#32  
Benzo(a)anthracene  
Concen: 4.542 ng  
RT: 21.121 min Scan# 2115  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

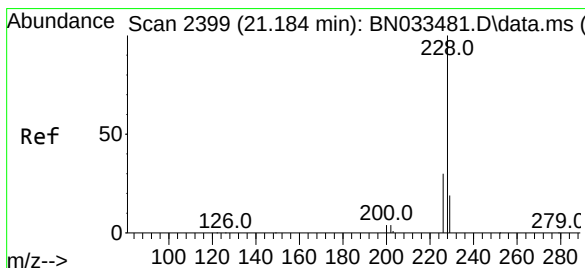
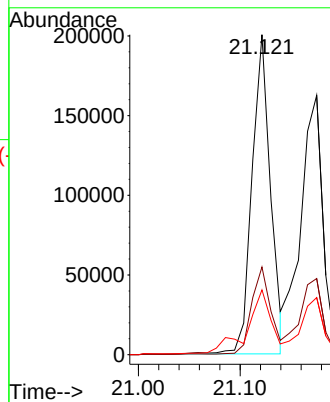
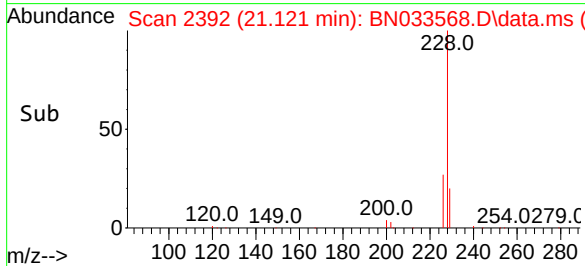
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:228 Resp: 253080  
Ion Ratio Lower Upper  
228 100  
226 27.4 21.8 32.6  
229 20.2 15.8 23.6

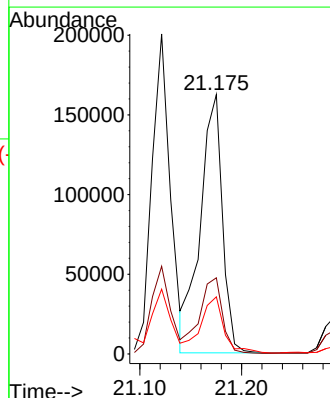
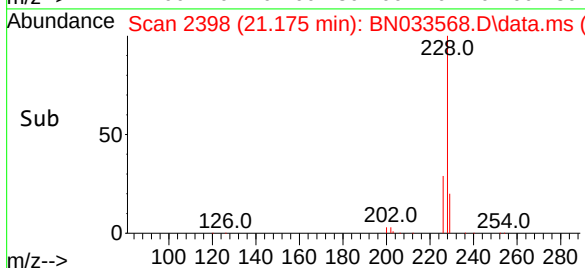
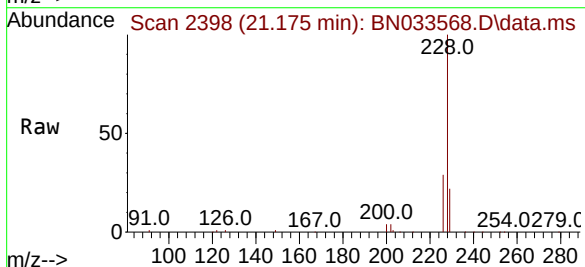
Manual Integrations  
**APPROVED**

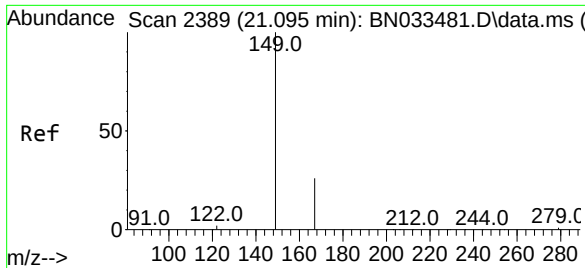
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#33  
Chrysene  
Concen: 4.426 ng  
RT: 21.175 min Scan# 2398  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

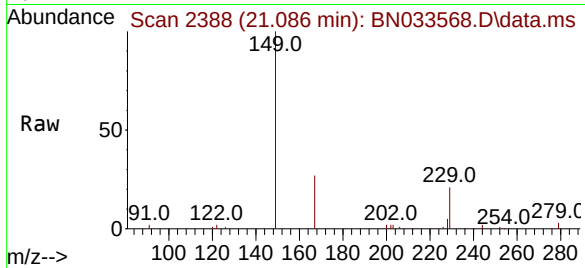
Tgt Ion:228 Resp: 245143  
Ion Ratio Lower Upper  
228 100  
226 29.4 23.8 35.8  
229 22.0 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 1.718 ng  
RT: 21.086 min Scan# 2108  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

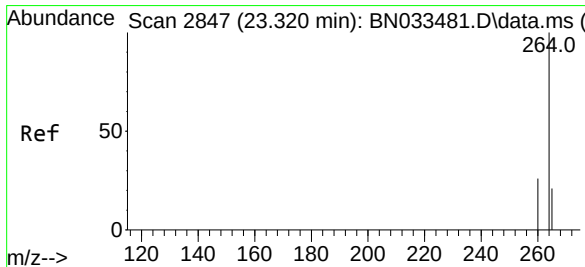
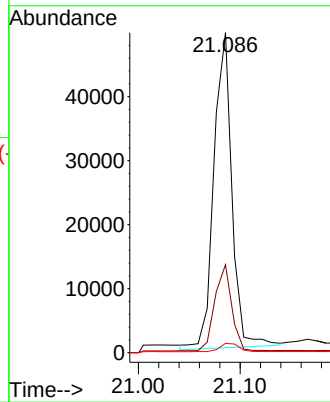
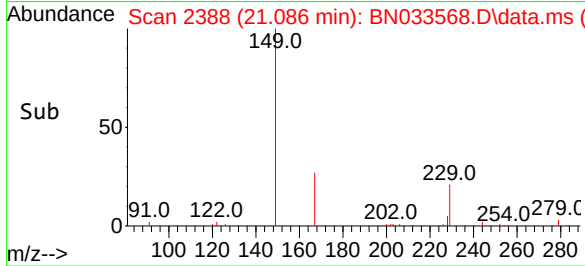
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:149 Resp: 60608  
Ion Ratio Lower Upper  
149 100  
167 28.3 21.5 32.3  
279 3.1 2.2 3.2

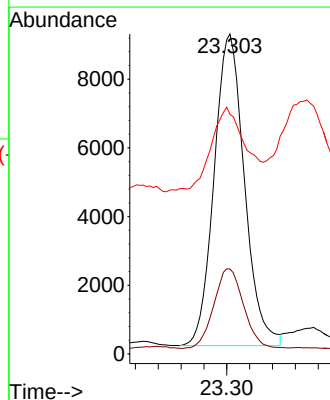
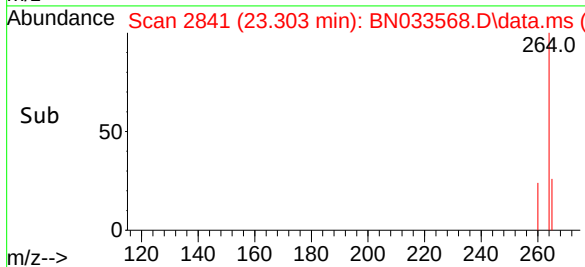
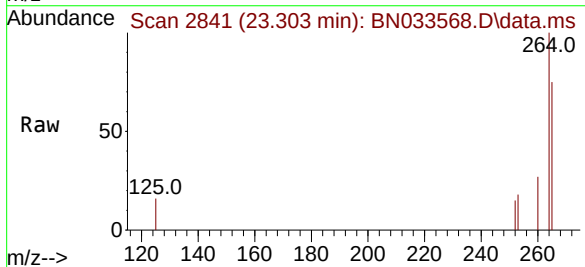
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

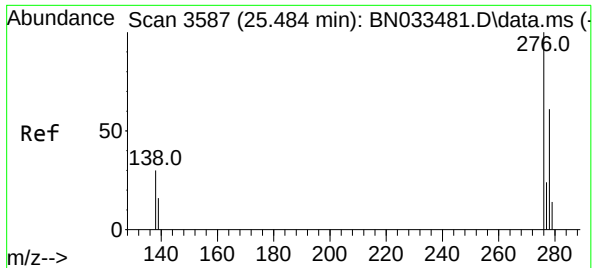


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.303 min Scan# 2841  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

Tgt Ion:264 Resp: 16704  
Ion Ratio Lower Upper  
264 100  
260 26.6 20.8 31.2  
265 74.8 52.2 78.2

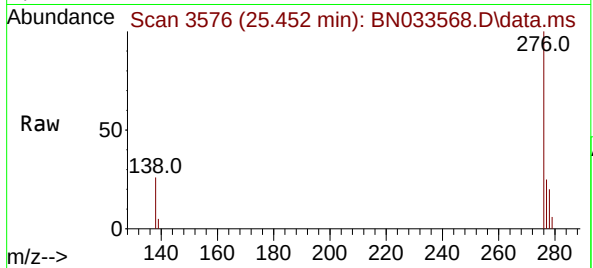






#36  
Indeno(1,2,3-cd)pyrene  
Concen: 2.489 ng  
RT: 25.452 min Scan# 3576  
Delta R.T. 0.003 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

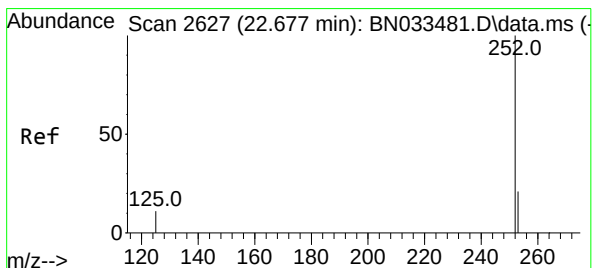
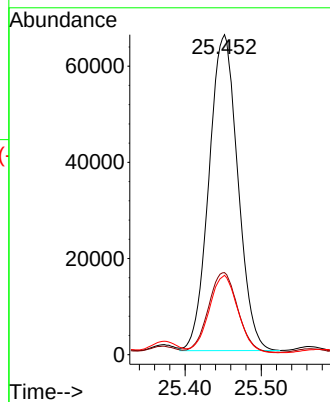
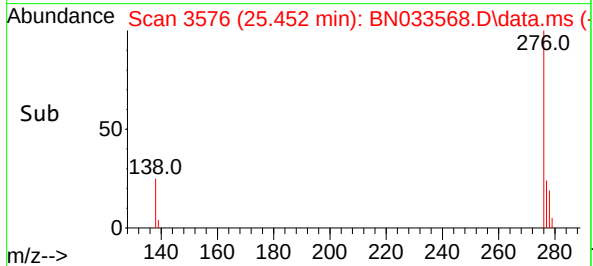
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:276 Resp: 17258  
Ion Ratio Lower Upper  
276 100  
138 25.7 24.4 36.6  
277 24.5 19.8 29.6

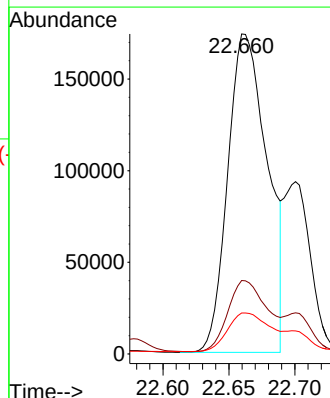
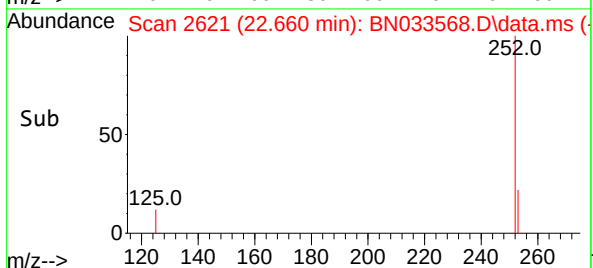
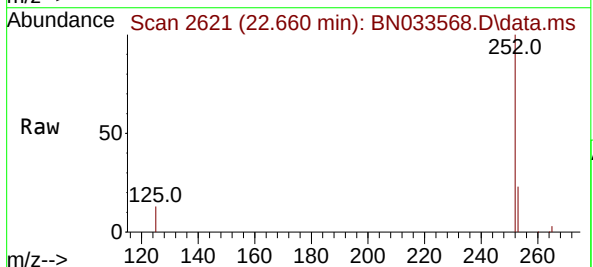
Manual Integrations  
APPROVED

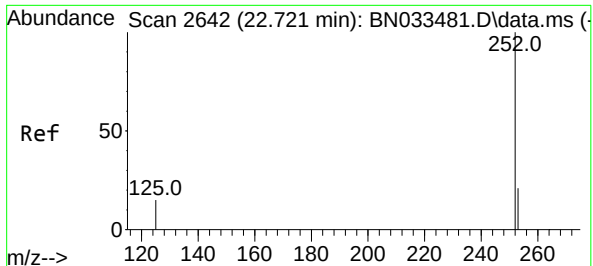
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#37  
Benzo(b)fluoranthene  
Concen: 5.810 ng  
RT: 22.660 min Scan# 2621  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

Tgt Ion:252 Resp: 362431  
Ion Ratio Lower Upper  
252 100  
253 23.0 19.8 29.8  
125 12.8 13.9 20.9#





#38

Benzo(k)fluoranthene

Concen: 2.157 ng m

RT: 22.701 min Scan# 20

Delta R.T. -0.003 min

Lab File: BN033568.D

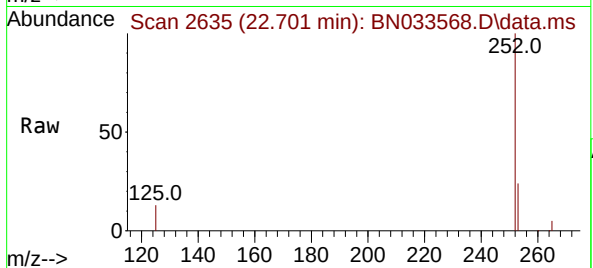
Acq: 23 Aug 2024 01:05

Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924



Tgt Ion:252 Resp: 132444

Ion Ratio Lower Upper

252 100

253 23.8 19.8 29.8

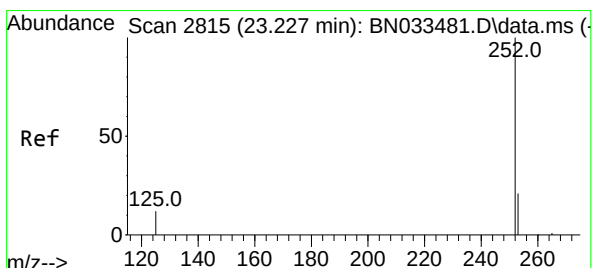
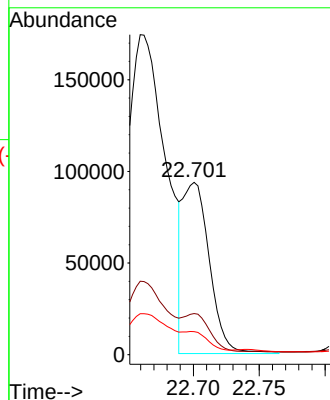
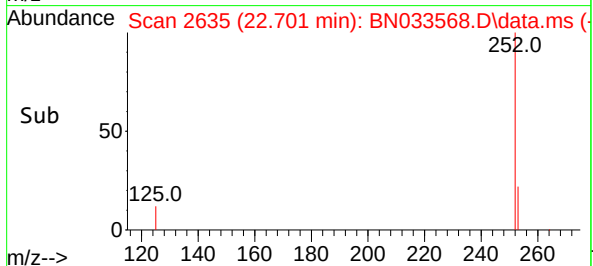
125 13.4 15.8 23.8

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#39

Benzo(a)pyrene

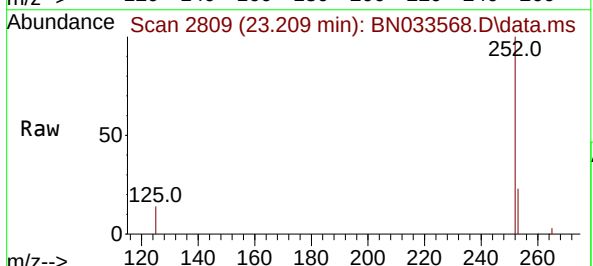
Concen: 4.973 ng m

RT: 23.209 min Scan# 2809

Delta R.T. -0.000 min

Lab File: BN033568.D

Acq: 23 Aug 2024 01:05



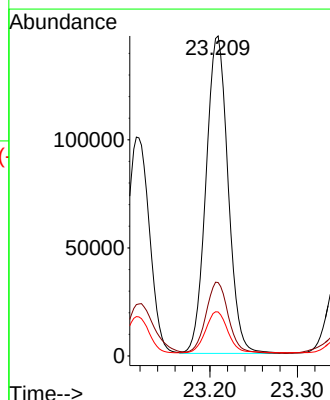
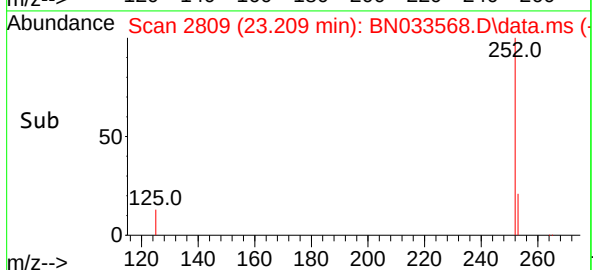
Tgt Ion:252 Resp: 256698

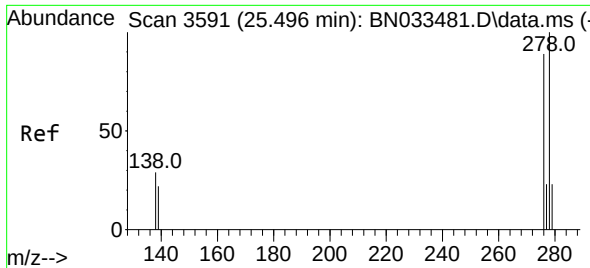
Ion Ratio Lower Upper

252 100

253 22.9 21.5 32.3

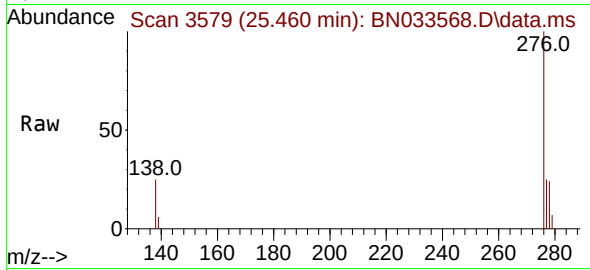
125 13.7 17.0 25.4#





#40  
Dibenzo(a,h)anthracene  
Concen: 0.741 ng  
RT: 25.460 min Scan# 31  
Delta R.T. -0.009 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

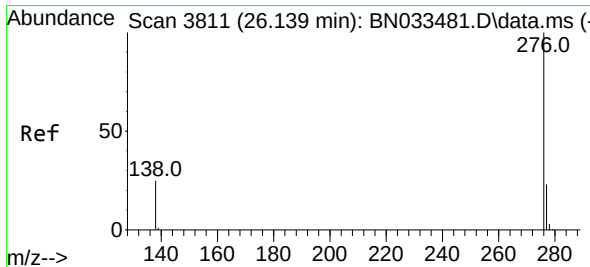
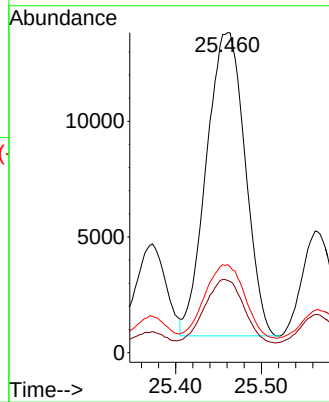
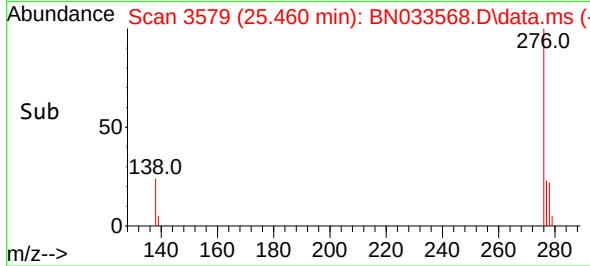
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924



Tgt Ion:278 Resp: 4108  
Ion Ratio Lower Upper  
278 100  
139 22.5 19.1 28.7  
279 27.5 21.0 31.4

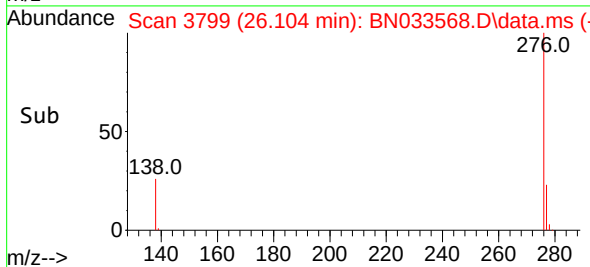
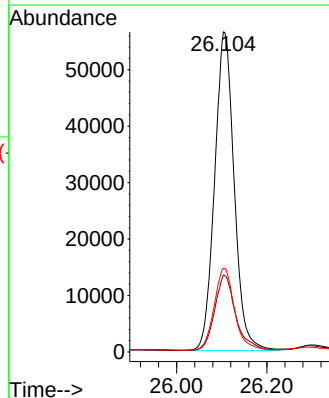
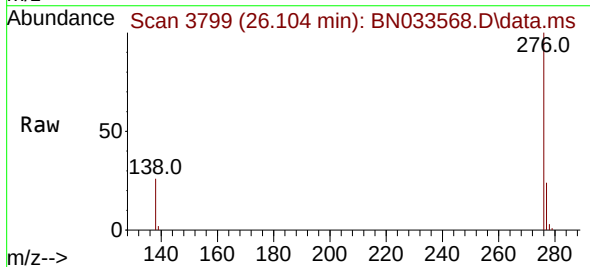
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#41  
Benzo(g,h,i)perylene  
Concen: 2.863 ng  
RT: 26.104 min Scan# 3799  
Delta R.T. -0.000 min  
Lab File: BN033568.D  
Acq: 23 Aug 2024 01:05

Tgt Ion:276 Resp: 169795  
Ion Ratio Lower Upper  
276 100  
277 24.0 19.7 29.5  
138 26.1 21.8 32.6



## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924DL             | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-06DL                            | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 78.2                 |
| Sample Wt/Vol:     | 30.07      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033595.D        | 5         | 08/21/24 09:38 | 08/23/24 18:23 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 4.40  | UD        | 4.40                | 21.1       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 5.10  | UD        | 5.10                | 21.1       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 4.00  | UD        | 4.00                | 21.1       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 15.9  | JD        | 3.50                | 21.1       | ug/Kg             |
| 86-73-7                   | Fluorene                | 13.6  | JD        | 3.80                | 21.1       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 180   | D         | 4.00                | 21.1       | ug/Kg             |
| 120-12-7                  | Anthracene              | 38.9  | D         | 5.00                | 21.1       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 340   | D         | 4.30                | 21.1       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 240   | D         | 6.10                | 21.1       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 180   | D         | 4.80                | 21.1       | ug/Kg             |
| 218-01-9                  | Chrysene                | 160   | D         | 5.50                | 21.1       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 210   | D         | 7.60                | 21.1       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 82.1  | D         | 6.30                | 21.1       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 180   | D         | 10.6                | 21.1       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 93.1  | D         | 8.00                | 21.1       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 28.1  | D         | 7.50                | 21.1       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 110   | D         | 7.30                | 21.1       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 14.2  | UD        | 14.2                | 42.1       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.14  |           | 30 (17) - 150 (161) | 35%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.11  | *         | 30 (23) - 150 (138) | 26%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.18  |           | 30 (33) - 130 (121) | 45%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.14  |           | 30 (32) - 130 (121) | 34%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.090 | *         | 30 (21) - 130 (130) | 23%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 8740  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 22800 | 10.304    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 10800 | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 20600 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924DL             | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-06DL                            | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 78.2                         |
| Sample Wt/Vol:     | 30.07      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033595.D        | 5         | 08/21/24 09:38 | 08/23/24 18:23 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 17200 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 19100 | 23.306    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033595.D  
 Acq On : 23 Aug 2024 18:23  
 Operator : MA/JU  
 Sample : P3671-06DL 5X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-905-J-SO-0-0.5-081924DL

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024

Quant Time: Aug 24 02:18:07 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 8740     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.304 | 136  | 22823    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10830    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 20585    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 17216    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.306 | 264  | 19106    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 804      | 0.029 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.736  | 99   | 958      | 0.029 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 673      | 0.036 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 920      | 0.028 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 191      | 0.033 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 1201     | 0.027 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.975 | 212  | 1056     | 0.021 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.584 | 244  | 698      | 0.018 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 17) Acenaphthene              | 14.242 | 154  | 2510     | 0.075 | ng    | 98       |
| 18) Fluorene                  | 15.236 | 166  | 2709     | 0.064 | ng    | 98       |
| 25) Phenanthrene              | 16.967 | 178  | 48921    | 0.854 | ng    | 100      |
| 26) Anthracene                | 17.066 | 178  | 9296     | 0.183 | ng    | # 95     |
| 28) Fluoranthene              | 19.003 | 202  | 101100   | 1.598 | ng    | 99       |
| 30) Pyrene                    | 19.365 | 202  | 86720    | 1.129 | ng    | # 95     |
| 32) Benzo(a)anthracene        | 21.122 | 228  | 53076    | 0.853 | ng    | 98       |
| 33) Chrysene                  | 21.175 | 228  | 45494    | 0.735 | ng    | 97       |
| 34) Bis(2-ethylhexyl)phtha... | 21.086 | 149  | 15195m   | 0.386 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.455 | 276  | 34740    | 0.438 | ng    | # 93     |
| 37) Benzo(b)fluoranthene      | 22.666 | 252  | 71247    | 0.999 | ng    | 98       |
| 38) Benzo(k)fluoranthene      | 22.704 | 252  | 27080m   | 0.386 | ng    |          |
| 39) Benzo(a)pyrene            | 23.212 | 252  | 50880    | 0.862 | ng    | 95       |
| 40) Dibenzo(a,h)anthracene    | 25.464 | 278  | 8366     | 0.132 | ng    | # 72     |
| 41) Benzo(g,h,i)perylene      | 26.113 | 276  | 33549    | 0.495 | ng    | 99       |

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

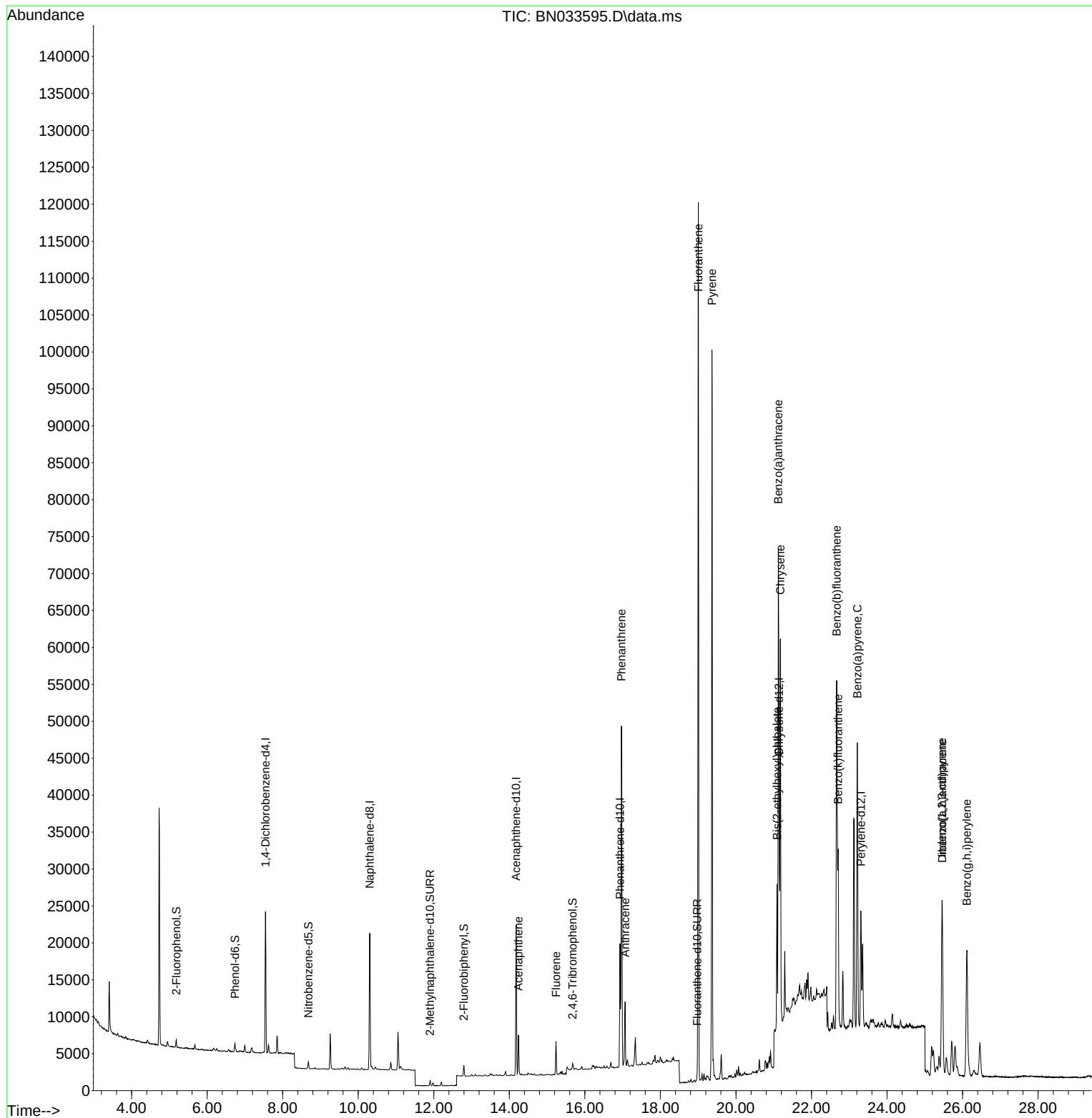
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Data File : BN033595.D  
Acq On : 23 Aug 2024 18:23  
Operator : MA/JU  
Sample : P3671-06DL 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

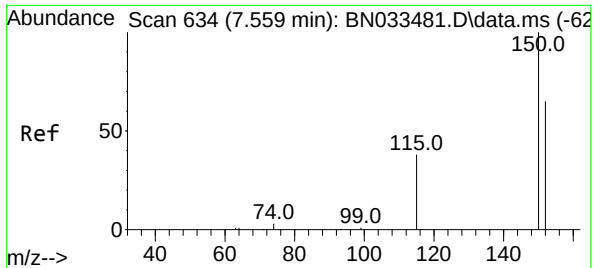
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BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL

Quant Time: Aug 24 02:18:07 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

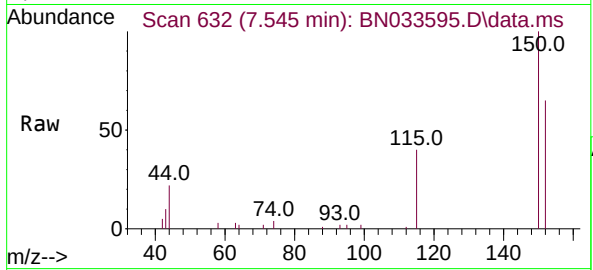
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

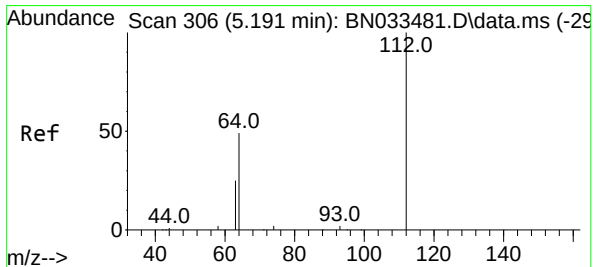
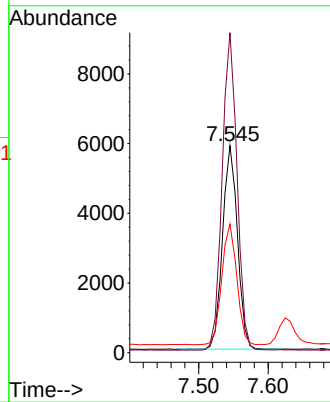
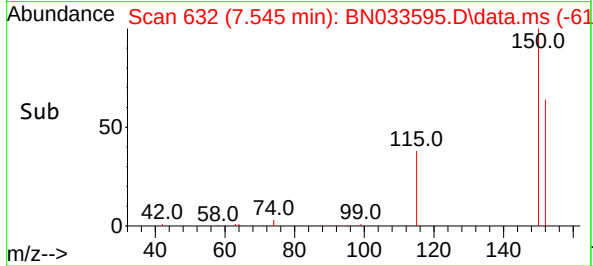
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:152 Resp: 8740  
Ion Ratio Lower Upper  
152 100  
150 154.6 122.2 183.2  
115 62.1 47.2 70.8

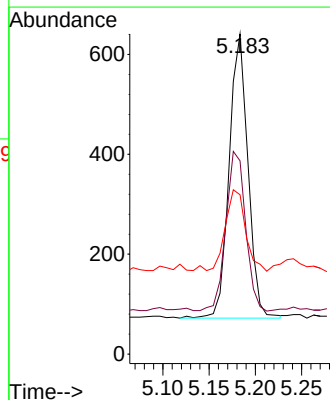
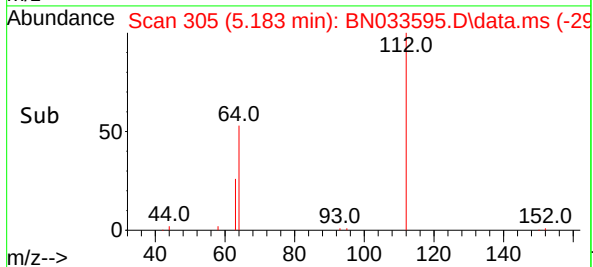
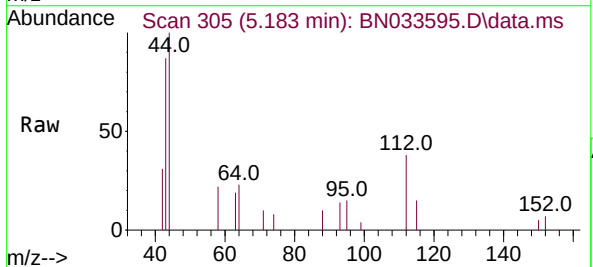
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

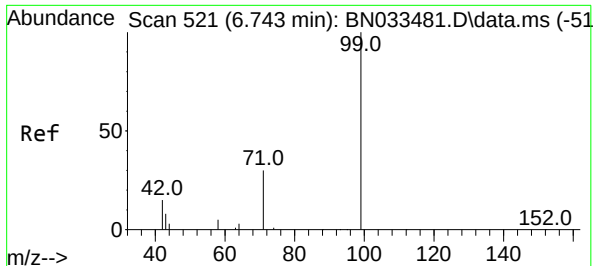


#4  
2-Fluorophenol  
Concen: 0.029 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

Tgt Ion:112 Resp: 804  
Ion Ratio Lower Upper  
112 100  
64 58.3 47.1 70.7  
63 31.0 24.9 37.3

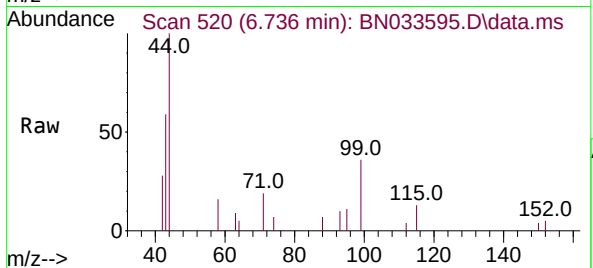






#5  
Phenol-d6  
Concen: 0.029 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

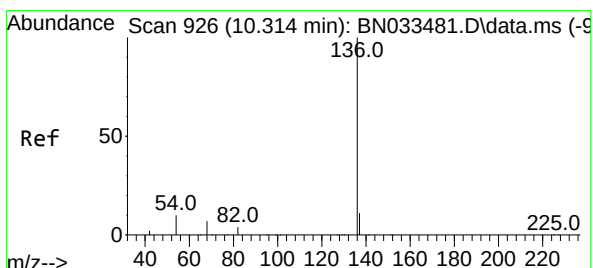
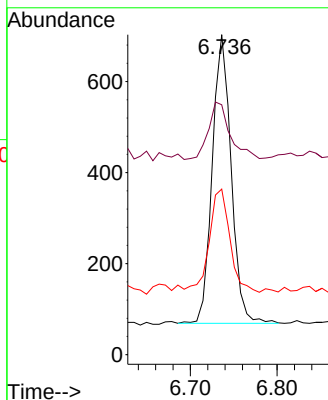
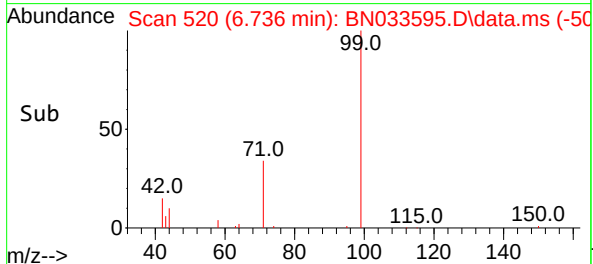
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion: 99 Resp: 95  
Ion Ratio Lower Upper  
99 100  
42 23.4 16.6 24.8  
71 39.9 26.2 39.4

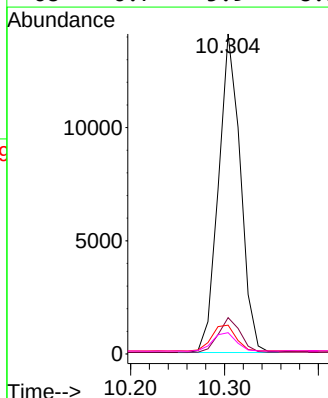
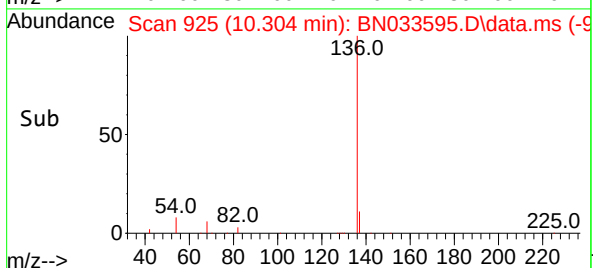
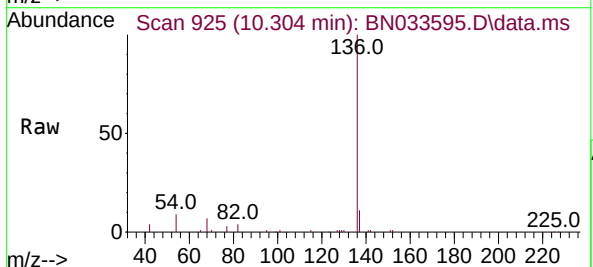
Manual Integrations  
**APPROVED**

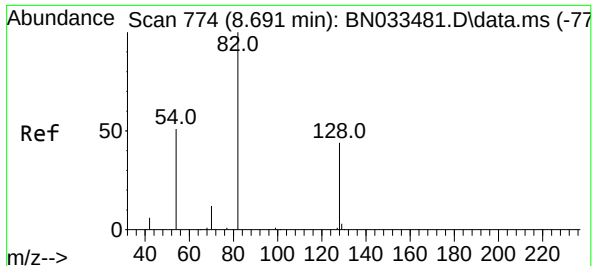
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

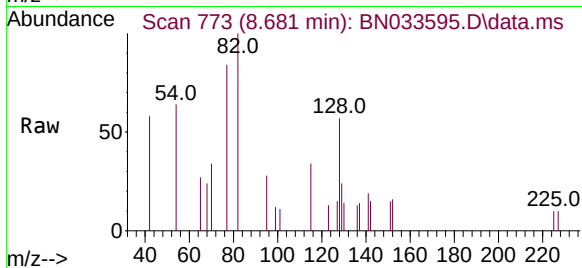
Tgt Ion:136 Resp: 22823  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 9.0 8.3 12.5  
68 6.7 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.036 ng  
RT: 8.681 min Scan# 71  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

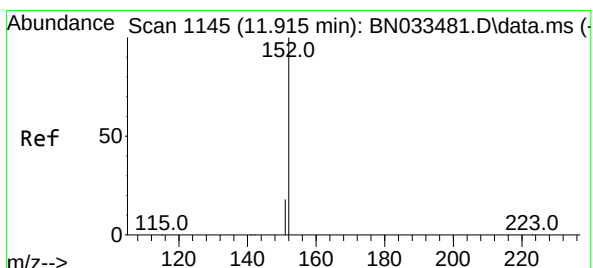
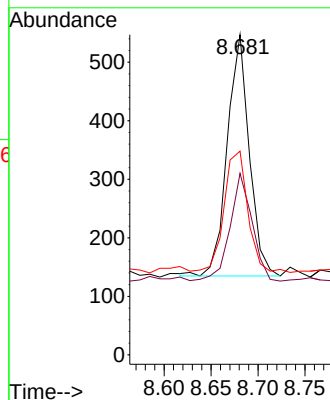
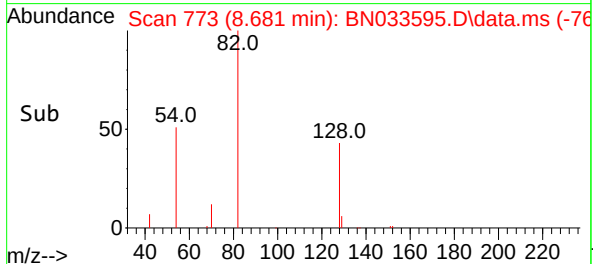
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion: 82 Resp: 67  
Ion Ratio Lower Upper  
82 100  
128 56.7 36.0 54.0  
54 63.6 42.0 63.0

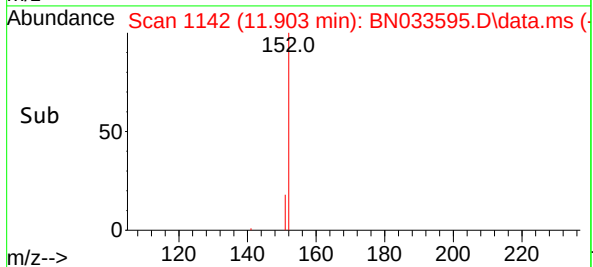
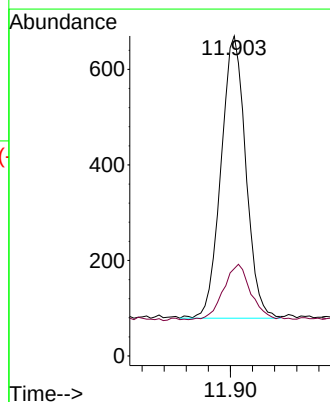
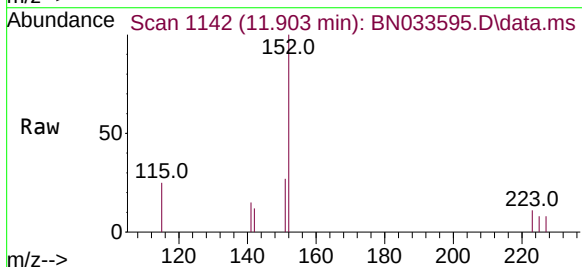
Manual Integrations  
APPROVED

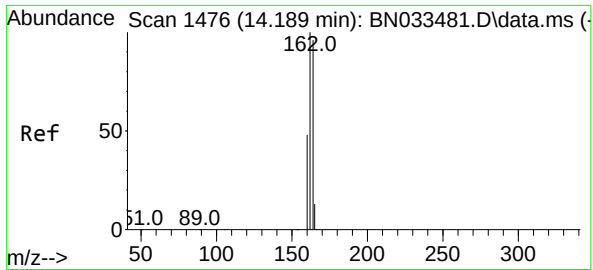
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#11  
2-Methylnaphthalene-d10  
Concen: 0.028 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

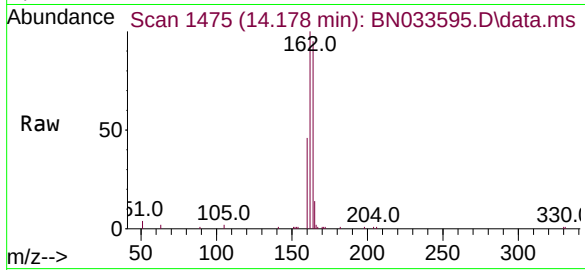
Tgt Ion:152 Resp: 920  
Ion Ratio Lower Upper  
152 100  
151 22.1 16.6 25.0





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1476  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

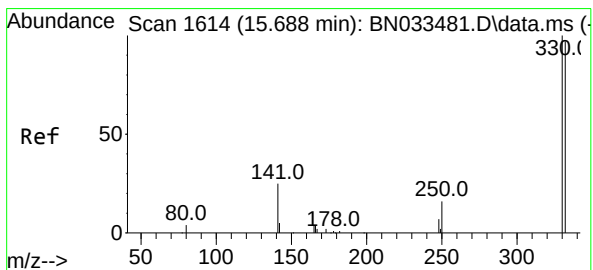
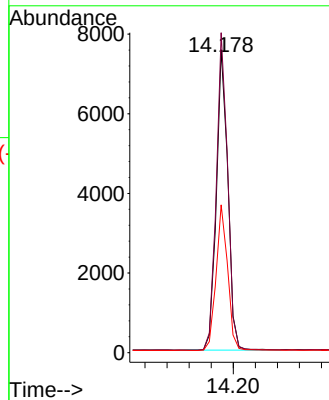
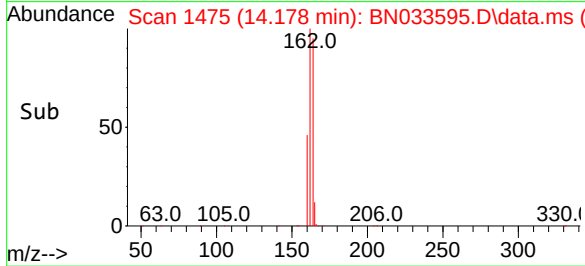
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:164 Resp: 10830  
Ion Ratio Lower Upper  
164 100  
162 105.6 83.5 125.3  
160 48.8 40.2 60.4

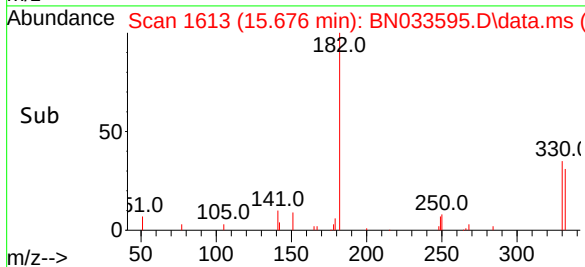
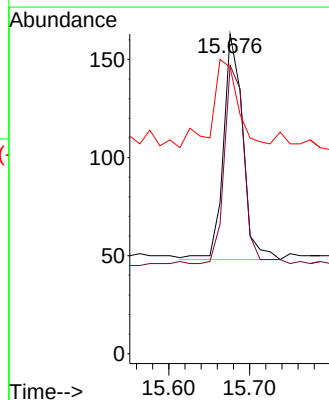
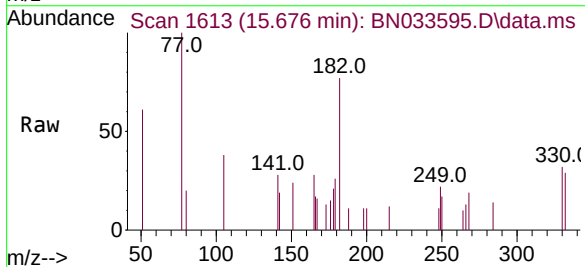
Manual Integrations  
APPROVED

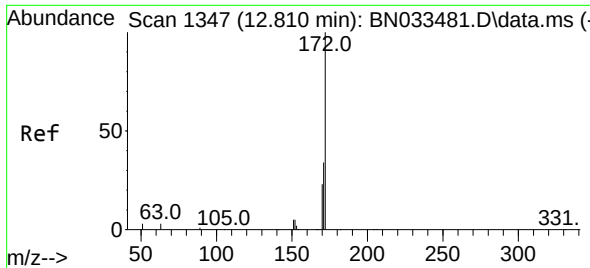
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#14  
2,4,6-Tribromophenol  
Concen: 0.033 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

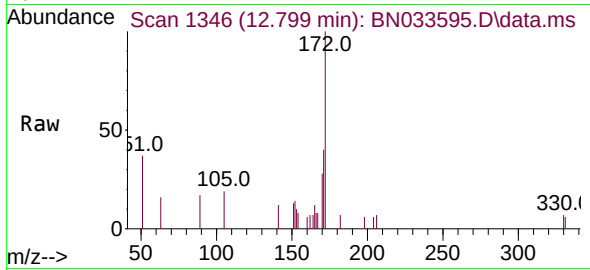
Tgt Ion:330 Resp: 191  
Ion Ratio Lower Upper  
330 100  
332 90.6 77.5 116.3  
141 52.4 33.9 50.9#





#15  
2-Fluorobiphenyl  
Concen: 0.027 ng  
RT: 12.799 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

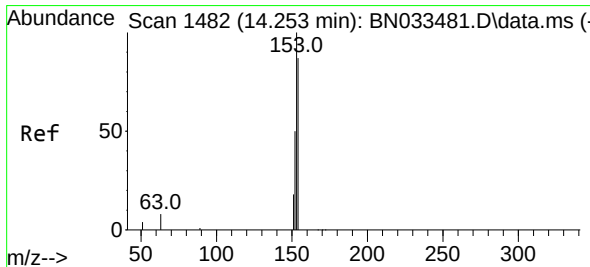
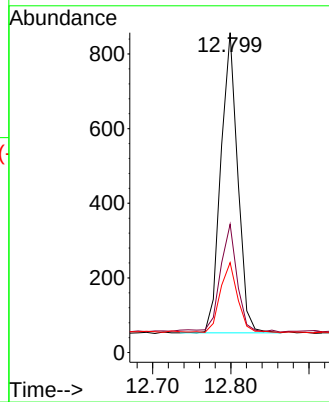
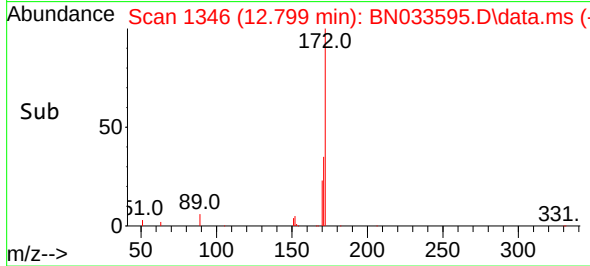
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BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:172 Resp: 120  
Ion Ratio Lower Upper  
172 100  
171 40.1 27.7 41.5  
170 28.1 18.3 27.5

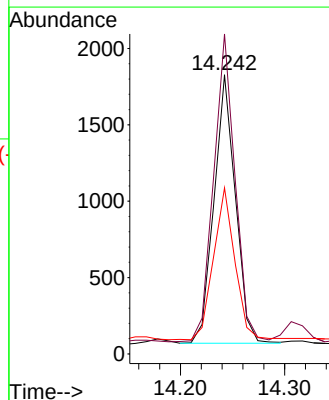
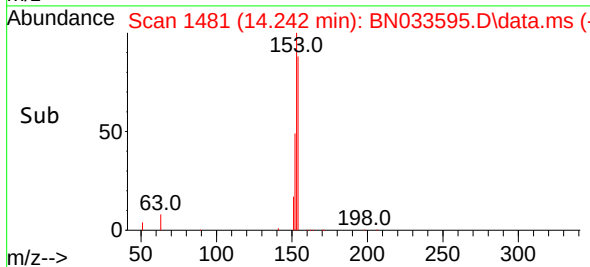
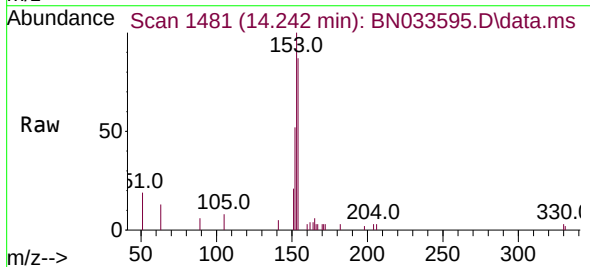
Manual Integrations  
APPROVED

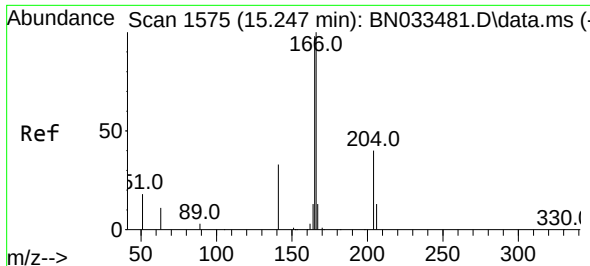
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#17  
Acenaphthene  
Concen: 0.075 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

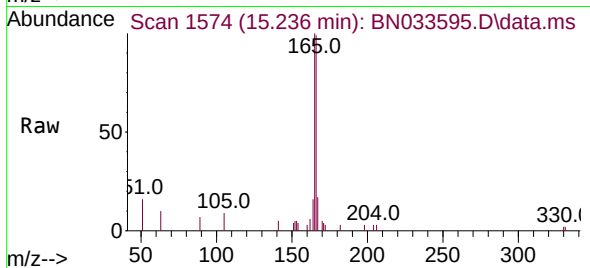
Tgt Ion:154 Resp: 2510  
Ion Ratio Lower Upper  
154 100  
153 114.5 89.0 133.6  
152 56.3 45.2 67.8





#18  
Fluorene  
Concen: 0.064 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

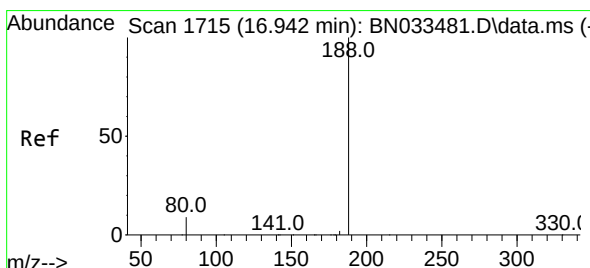
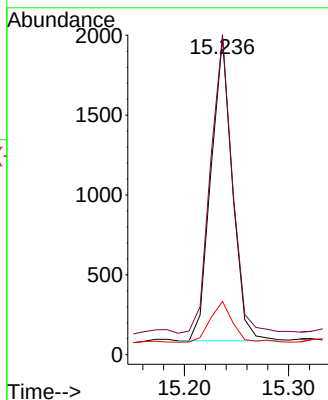
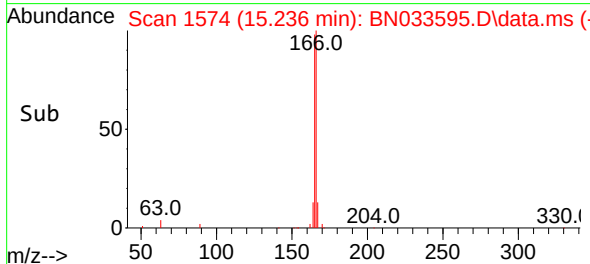
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:166 Resp: 2709  
Ion Ratio Lower Upper  
166 100  
165 99.9 78.2 117.4  
167 14.2 10.6 16.0

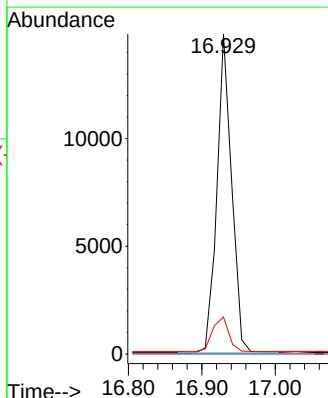
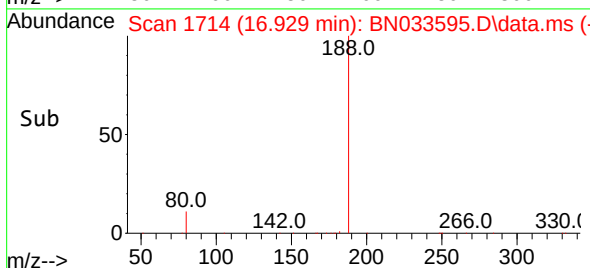
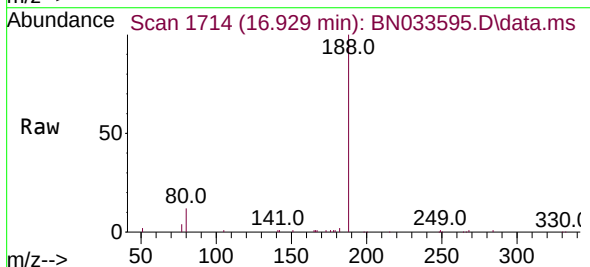
Manual Integrations  
APPROVED

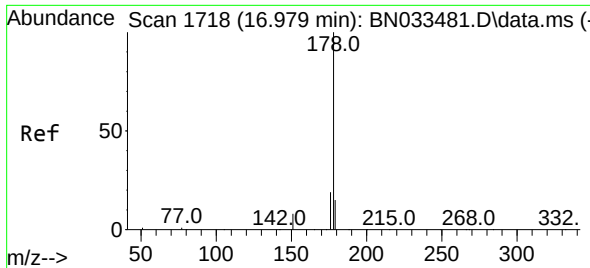
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1714  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

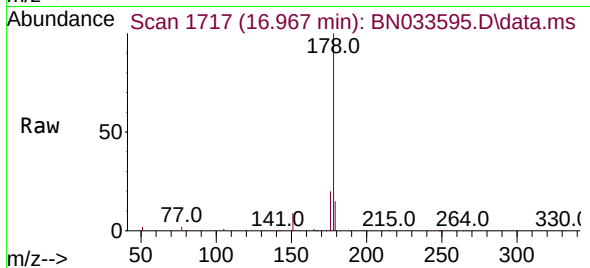
Tgt Ion:188 Resp: 20585  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.6 7.8 11.8





#25  
Phenanthrene  
Concen: 0.854 ng  
RT: 16.967 min Scan# 1717  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

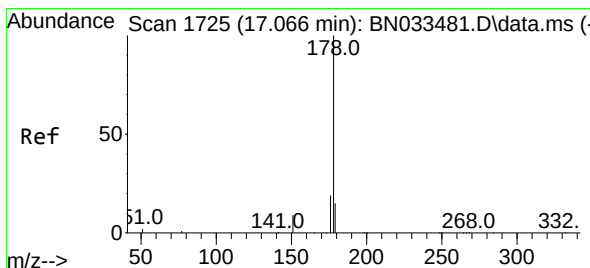
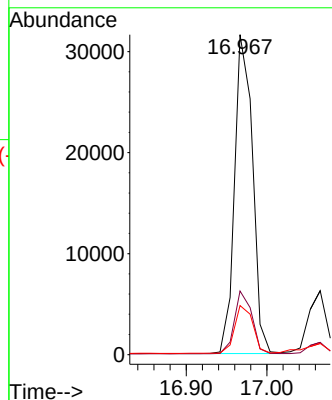
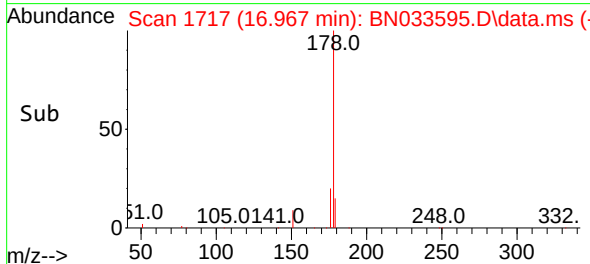
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:178 Resp: 4892  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.3 22.9  
179 15.3 12.3 18.5

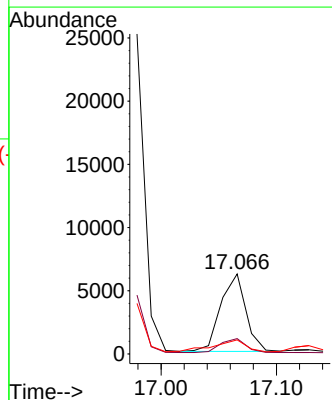
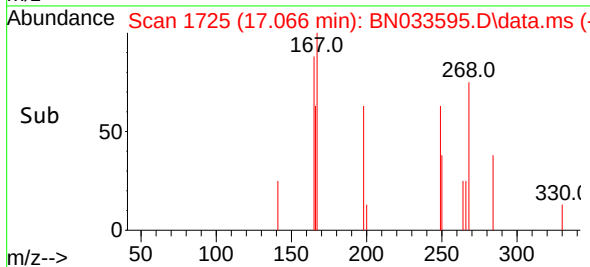
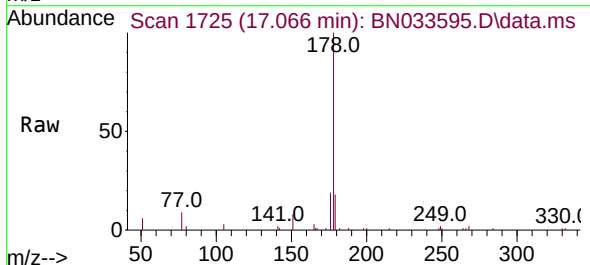
Manual Integrations  
APPROVED

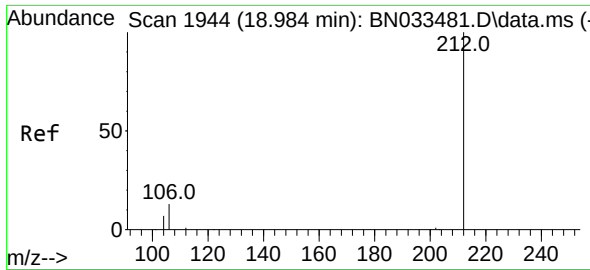
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#26  
Anthracene  
Concen: 0.183 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

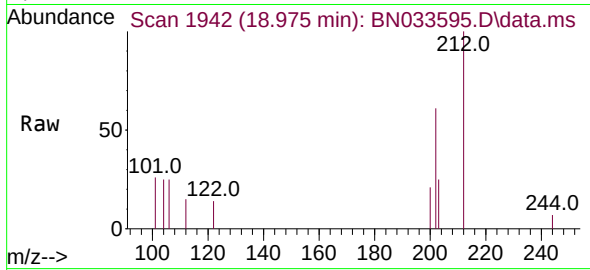
Tgt Ion:178 Resp: 9296  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.0 22.6  
179 19.6 12.4 18.6#





#27  
Fluoranthene-d10  
Concen: 0.021 ng  
RT: 18.975 min Scan# 1942  
Delta R.T. 0.005 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

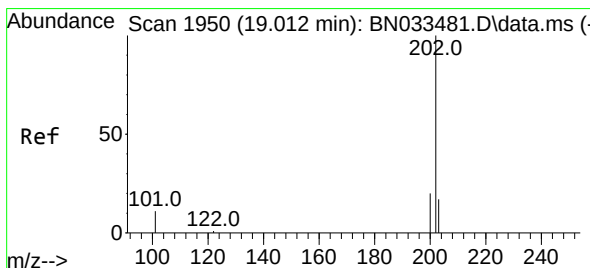
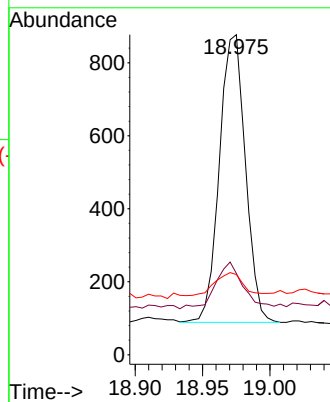
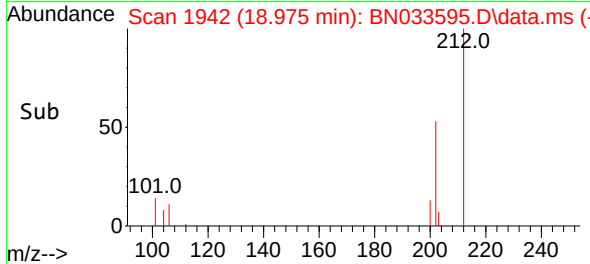
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion: 212 Resp: 1050  
Ion Ratio Lower Upper  
212 100  
106 17.2 12.3 18.5  
104 8.8 7.0 10.4

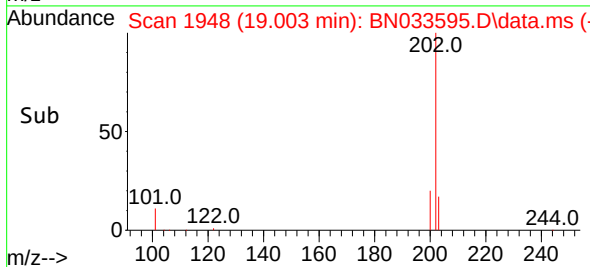
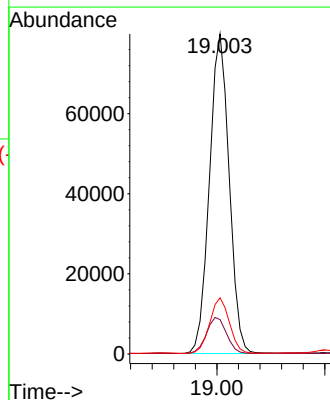
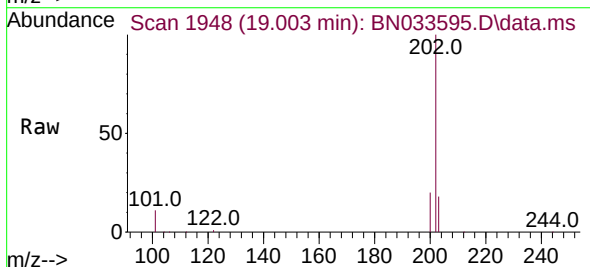
Manual Integrations  
APPROVED

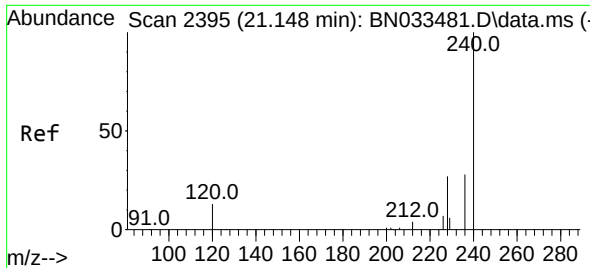
Reviewed By : Yogesh Patel 08/24/2024  
Supervised By : mohammad ahmed 08/29/2024



#28  
Fluoranthene  
Concen: 1.598 ng  
RT: 19.003 min Scan# 1948  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

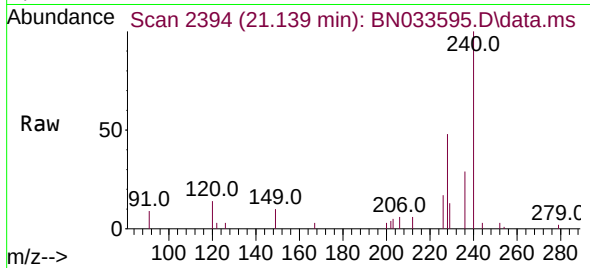
Tgt Ion: 202 Resp: 101100  
Ion Ratio Lower Upper  
202 100  
101 11.5 9.5 14.3  
203 17.3 13.8 20.6





#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2119  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

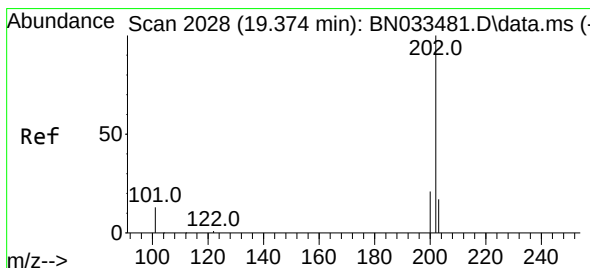
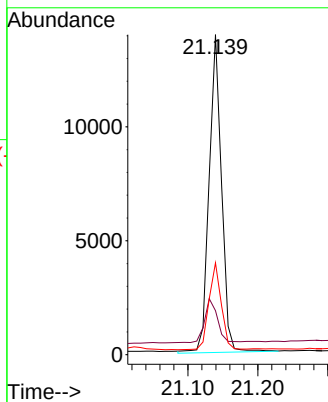
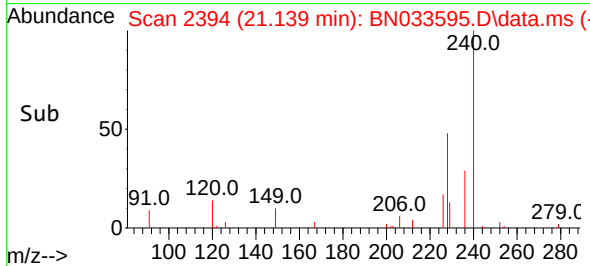
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:240 Resp: 17210  
Ion Ratio Lower Upper  
240 100  
120 13.8 12.4 18.6  
236 28.7 23.0 34.6

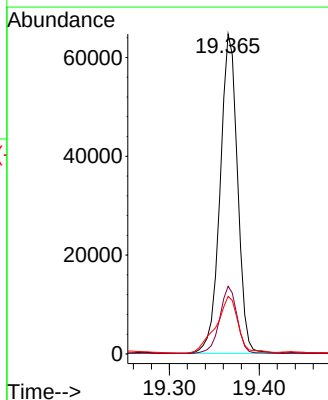
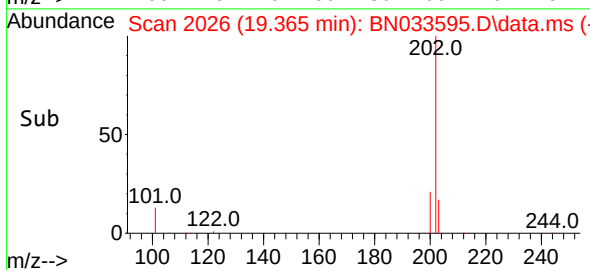
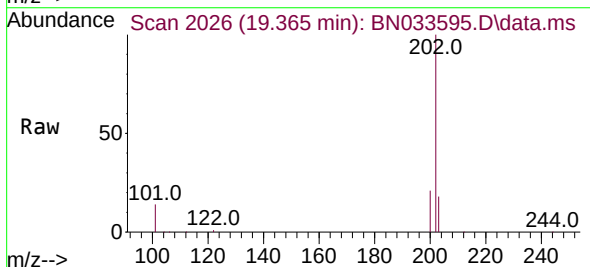
Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

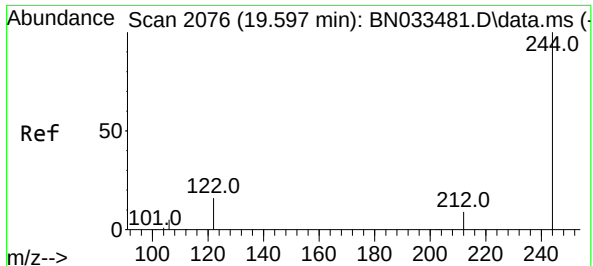


#30  
Pyrene  
Concen: 1.129 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

Tgt Ion:202 Resp: 86720  
Ion Ratio Lower Upper  
202 100  
200 21.2 16.6 24.8  
203 22.5 14.2 21.4#

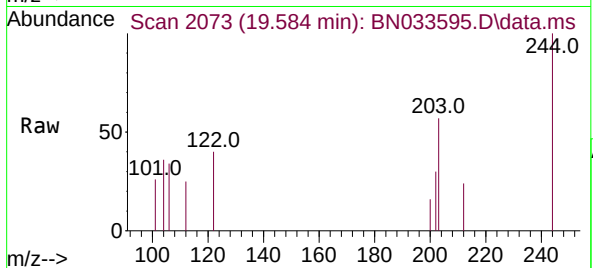






#31  
Terphenyl-d14  
Concen: 0.018 ng  
RT: 19.584 min Scan# 2073  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

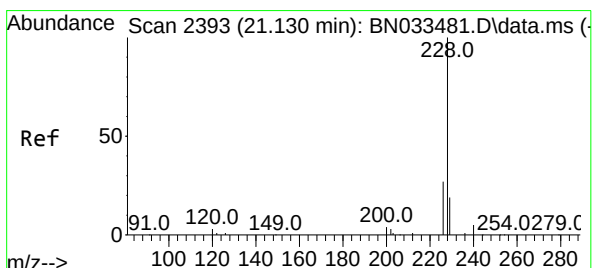
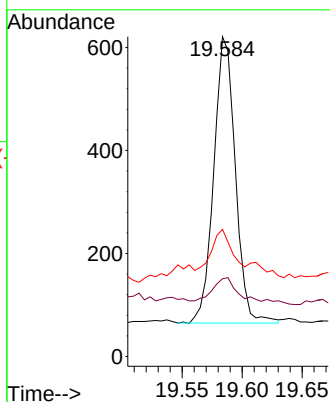
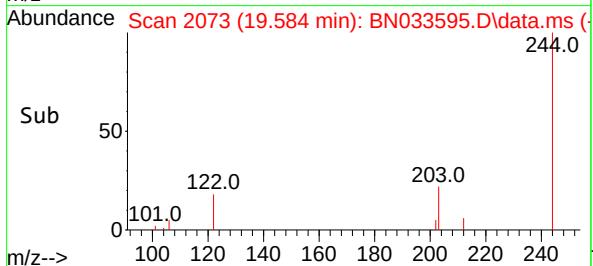
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:244 Resp: 698  
Ion Ratio Lower Upper  
244 100  
212 24.3 7.8 11.6  
122 39.8 13.3 19.9

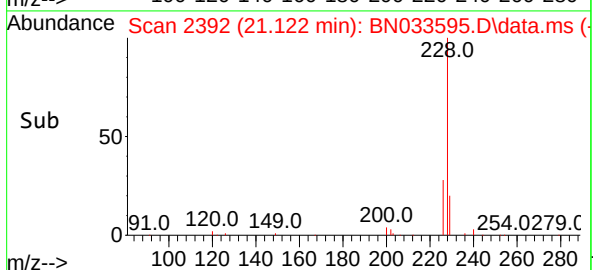
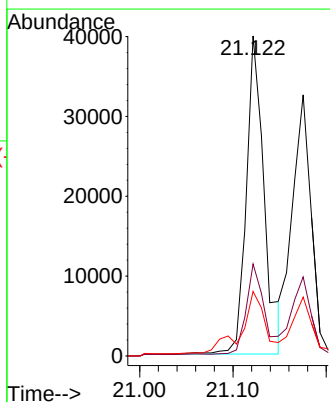
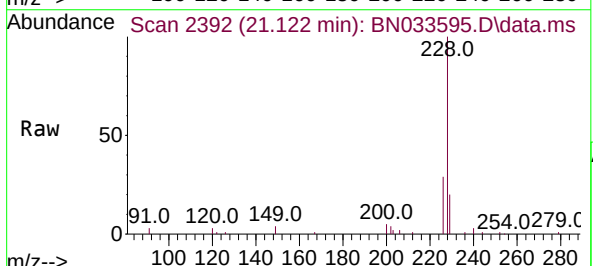
Manual Integrations  
APPROVED

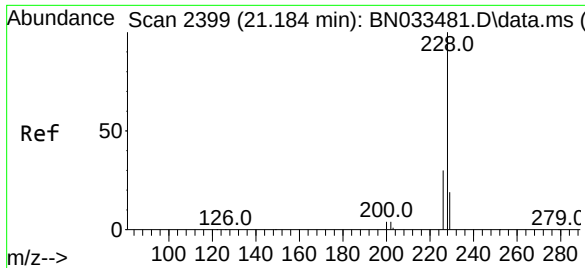
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#32  
Benzo(a)anthracene  
Concen: 0.853 ng  
RT: 21.122 min Scan# 2392  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

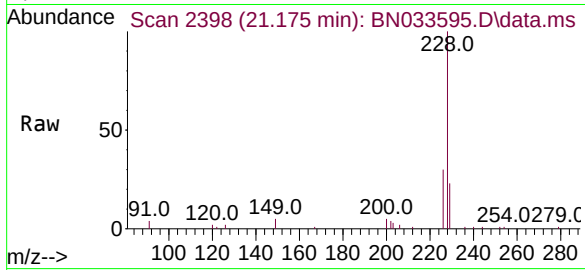
Tgt Ion:228 Resp: 53076  
Ion Ratio Lower Upper  
228 100  
226 28.7 21.8 32.6  
229 20.2 15.8 23.6





#33  
Chrysene  
Concen: 0.735 ng  
RT: 21.175 min Scan# 2117  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

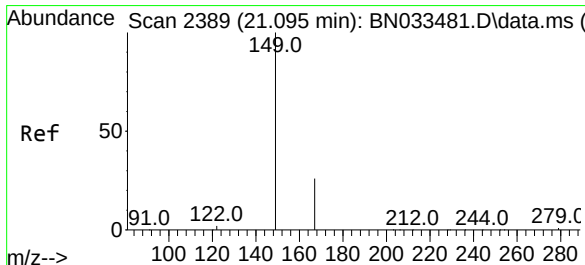
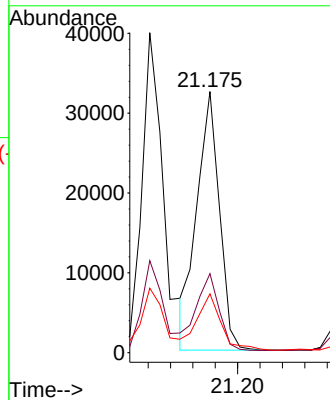
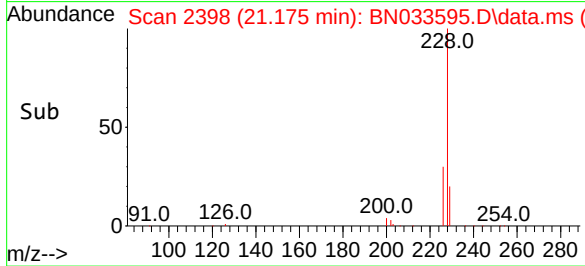
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:228 Resp: 45494  
Ion Ratio Lower Upper  
228 100  
226 30.3 23.8 35.8  
229 22.5 15.6 23.4

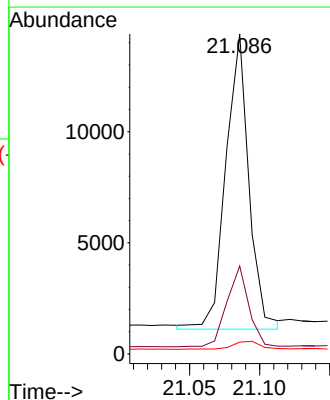
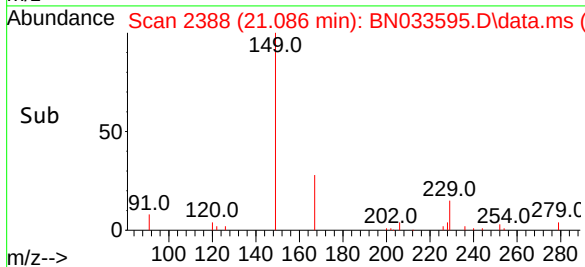
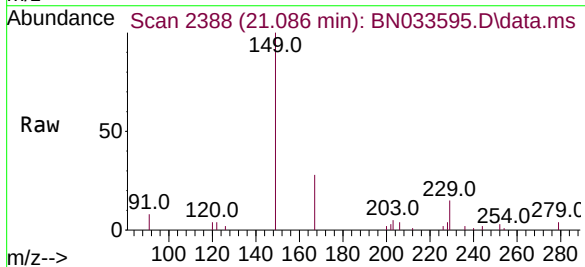
Manual Integrations  
APPROVED

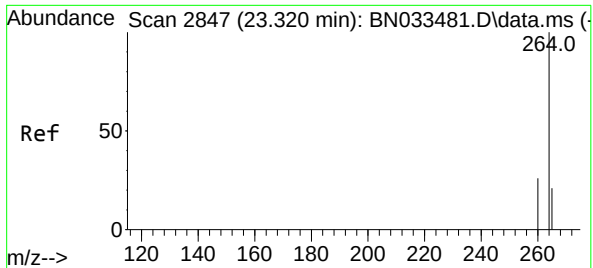
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.386 ng m  
RT: 21.086 min Scan# 2388  
Delta R.T. 0.000 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

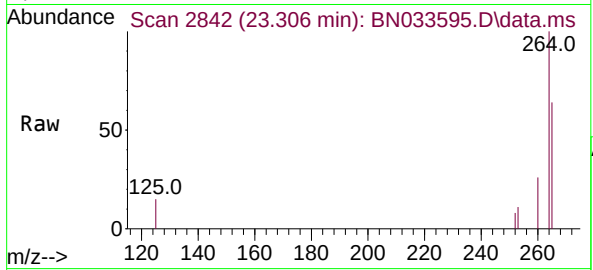
Tgt Ion:149 Resp: 15195  
Ion Ratio Lower Upper  
149 100  
167 29.2 21.5 32.3  
279 4.3 2.2 3.2#





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.306 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

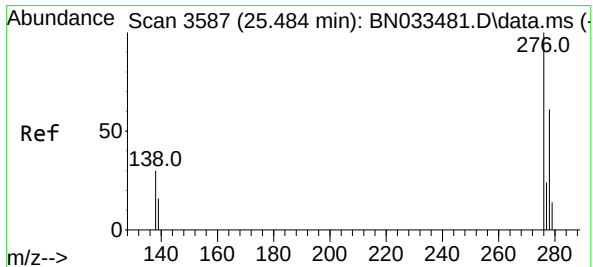
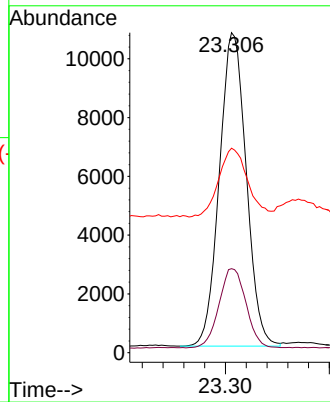
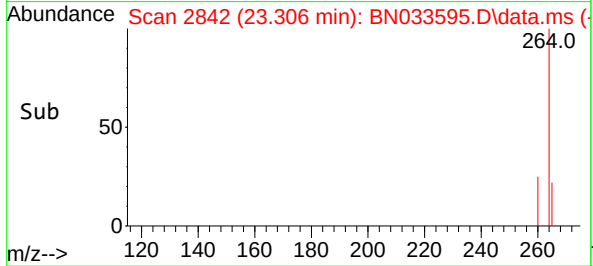
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924DL



Tgt Ion:264 Resp: 19100  
Ion Ratio Lower Upper  
264 100  
260 26.3 20.8 31.2  
265 63.9 52.2 78.2

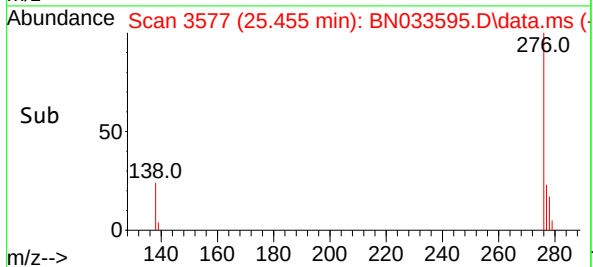
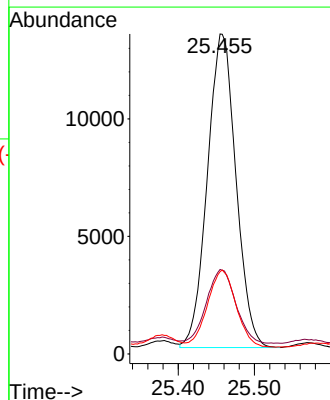
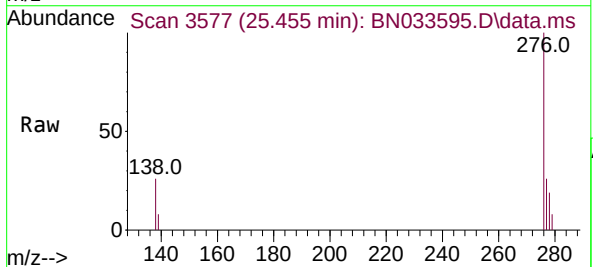
Manual Integrations  
APPROVED

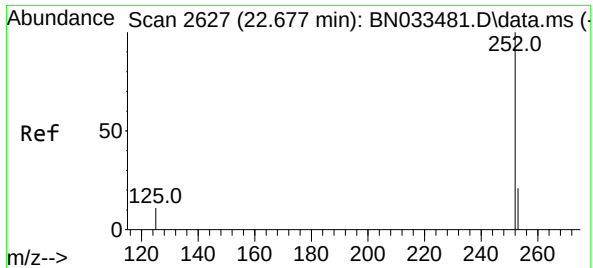
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.438 ng  
RT: 25.455 min Scan# 3577  
Delta R.T. 0.006 min  
Lab File: BN033595.D  
Acq: 23 Aug 2024 18:23

Tgt Ion:276 Resp: 34740  
Ion Ratio Lower Upper  
276 100  
138 23.9 24.4 36.6#  
277 24.7 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.999 ng

RT: 22.666 min Scan# 2623

Delta R.T. 0.006 min

Lab File: BN033595.D

Acq: 23 Aug 2024 18:23

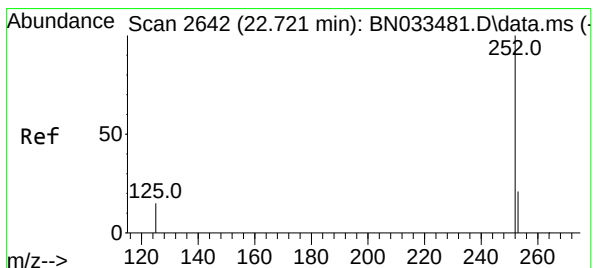
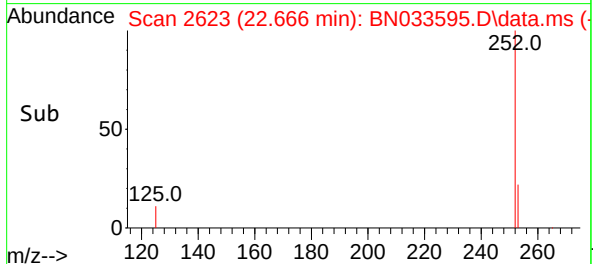
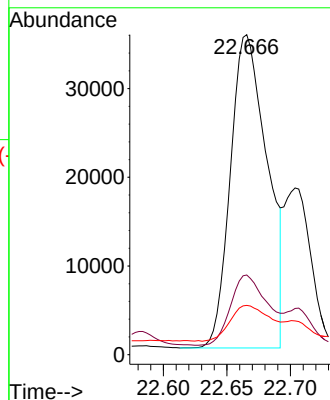
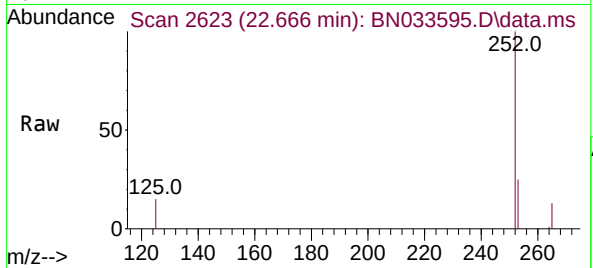
Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924DL

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 7124 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 24.9  | 19.8  | 29.8 |
| 125       | 15.4  | 13.9  | 20.9 |

Manual Integrations  
**APPROVED**Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

#38

Benzo(k)fluoranthene

Concen: 0.386 ng m

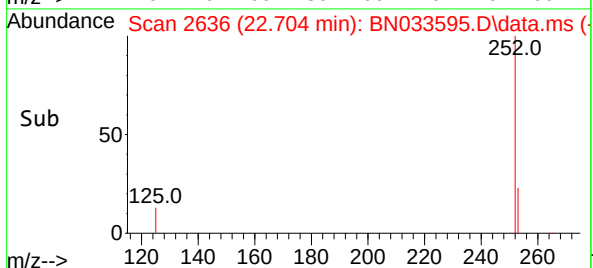
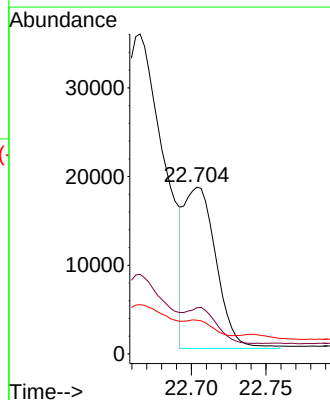
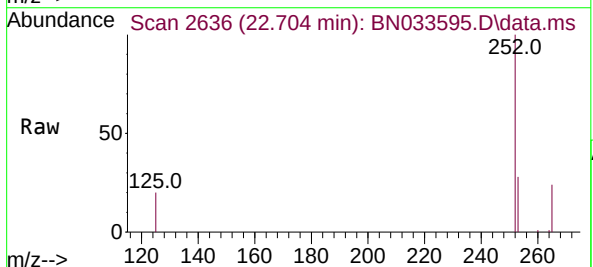
RT: 22.704 min Scan# 2636

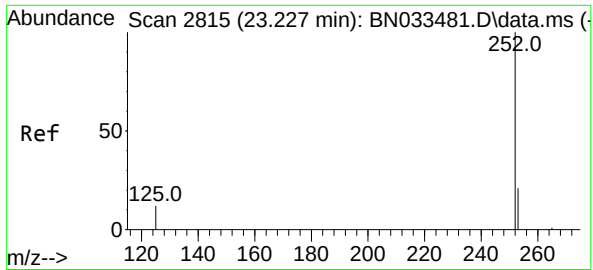
Delta R.T. 0.000 min

Lab File: BN033595.D

Acq: 23 Aug 2024 18:23

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 27080 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 27.8  | 19.8  | 29.8  |
| 125       | 20.2  | 15.8  | 23.8  |





#39

Benzo(a)pyrene

Concen: 0.862 ng

RT: 23.212 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN033595.D

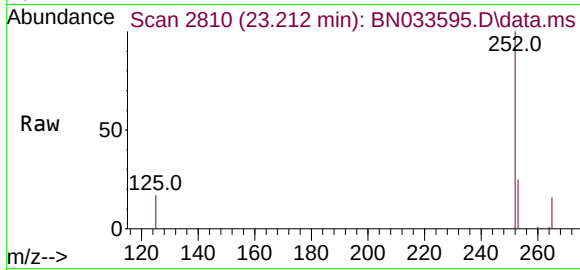
Acq: 23 Aug 2024 18:23

Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924DL



Tgt Ion:252 Resp: 50880

Ion Ratio Lower Upper

252 100

253 25.4 21.5 32.3

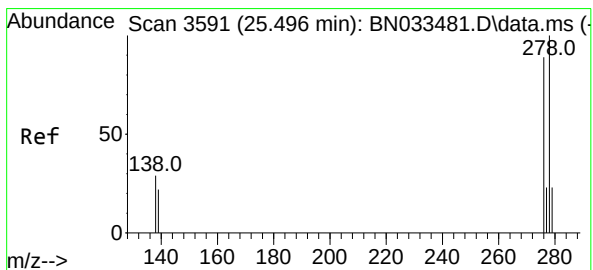
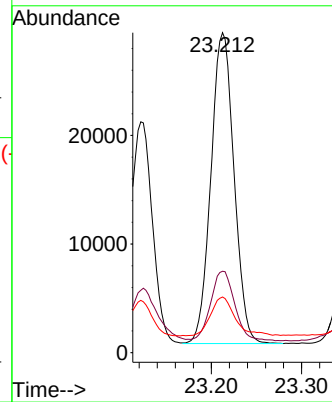
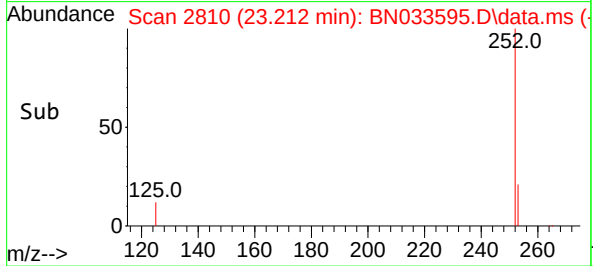
125 17.4 17.0 25.4

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#40

Dibenzo(a,h)anthracene

Concen: 0.132 ng

RT: 25.464 min Scan# 3580

Delta R.T. -0.006 min

Lab File: BN033595.D

Acq: 23 Aug 2024 18:23

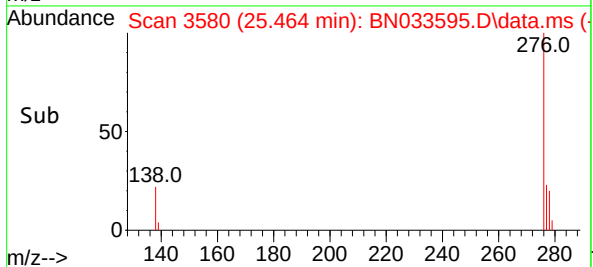
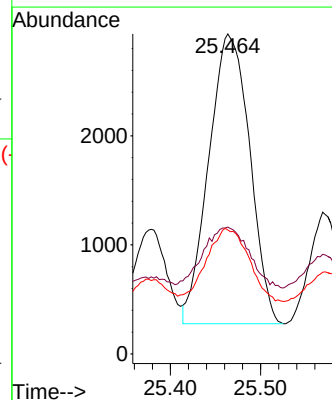
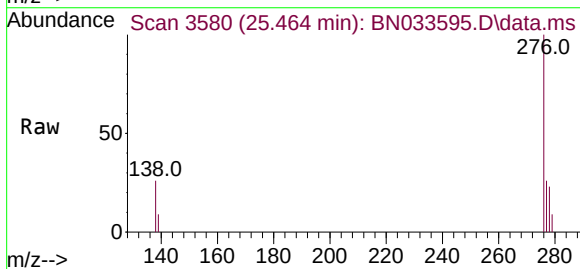
Tgt Ion:278 Resp: 8366

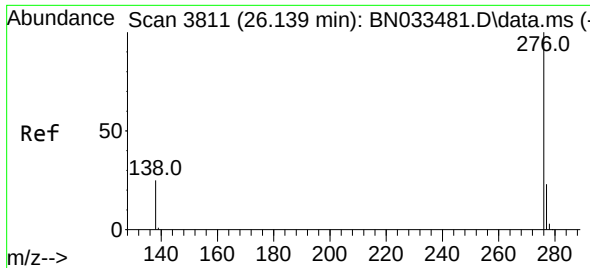
Ion Ratio Lower Upper

278 100

139 39.6 19.1 28.7#

279 38.8 21.0 31.4#





#41

Benzo(g,h,i)perylene

Concen: 0.495 ng

RT: 26.113 min Scan# 3811

Delta R.T. 0.009 min

Lab File: BN033595.D

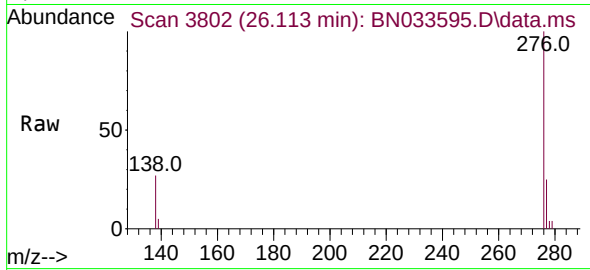
Acq: 23 Aug 2024 18:23

Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924DL



Tgt Ion:276 Resp: 33549

Ion Ratio Lower Upper

276 100

277 25.4 19.7 29.5

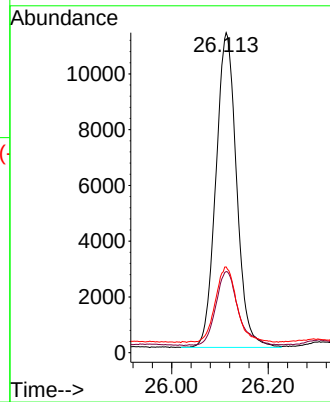
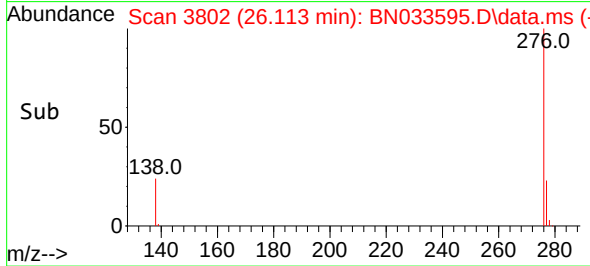
138 26.8 21.8 32.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



## Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24      |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24      |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924-FD            | SDG No.:        | P3671         |
| Lab Sample ID:     | P3671-07                              | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 76.6          |
| Sample Wt/Vol:     | 30.01 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033574.D        | 1         | 08/21/24 09:38 | 08/23/24 04:42 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 2.10  | J         | 0.90                | 4.30       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 1.50  | J         | 1.00                | 4.30       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 3.20  | J         | 0.82                | 4.30       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 24.9  |           | 0.72                | 4.30       | ug/Kg             |
| 86-73-7                   | Fluorene                | 22.4  |           | 0.78                | 4.30       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 400   | E         | 0.82                | 4.30       | ug/Kg             |
| 120-12-7                  | Anthracene              | 130   |           | 1.00                | 4.30       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 1300  | E         | 0.87                | 4.30       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 710   | E         | 1.20                | 4.30       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 710   | E         | 0.99                | 4.30       | ug/Kg             |
| 218-01-9                  | Chrysene                | 630   | E         | 1.10                | 4.30       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 750   | E         | 1.60                | 4.30       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 280   | E         | 1.30                | 4.30       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 650   | E         | 2.20                | 4.30       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 280   | E         | 1.60                | 4.30       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 90.5  |           | 1.50                | 4.30       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 290   | E         | 1.50                | 4.30       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 2.90  | U         | 2.90                | 8.60       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.17  |           | 30 (17) - 150 (161) | 43%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.14  |           | 30 (23) - 150 (138) | 34%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.24  |           | 30 (33) - 130 (121) | 60%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.16  |           | 30 (32) - 130 (121) | 41%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.096 | *         | 30 (21) - 130 (130) | 24%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 8060  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 20800 |           | 10.304              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 10000 |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 20000 |           | 16.929              |            |                   |

## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924-FD            | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-07                              | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 76.6                 |
| Sample Wt/Vol:     | 30.01      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033574.D        | 1         | 08/21/24 09:38 | 08/23/24 04:42 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 22000 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 22900 | 23.303    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033574.D  
Acq On : 23 Aug 2024 04:42  
Operator : MA/JU  
Sample : P3671-07  
Misc :  
ALS Vial : 31 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD

Quant Time: Aug 23 05:11:51 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min)    |
|-------------------------------|--------|------|----------|--------|-------|-------------|
| Internal Standards            |        |      |          |        |       |             |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 8063     | 0.400  | ng    | 0.00        |
| 7) Naphthalene-d8             | 10.304 | 136  | 20827    | 0.400  | ng    | 0.00        |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10022    | 0.400  | ng    | 0.00        |
| 19) Phenanthrene-d10          | 16.929 | 188  | 20045    | 0.400  | ng    | 0.00        |
| 29) Chrysene-d12              | 21.139 | 240  | 22012    | 0.400  | ng    | 0.00        |
| 35) Perylene-d12              | 23.303 | 264  | 22949    | 0.400  | ng    | 0.00        |
| System Monitoring Compounds   |        |      |          |        |       |             |
| 4) 2-Fluorophenol             | 5.183  | 112  | 6327     | 0.247  | ng    | 0.00        |
| 5) Phenol-d6                  | 6.729  | 99   | 7016     | 0.230  | ng    | 0.00        |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 4180     | 0.242  | ng    | 0.00        |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 5182     | 0.174  | ng    | 0.00        |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 1087     | 0.202  | ng    | 0.00        |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 6614     | 0.162  | ng    | 0.00        |
| 27) Fluoranthene-d10          | 18.970 | 212  | 6634     | 0.138  | ng    | 0.00        |
| 31) Terphenyl-d14             | 19.583 | 244  | 4810     | 0.096  | ng    | 0.00        |
| Target Compounds              |        |      |          |        |       |             |
| 9) Naphthalene                | 10.357 | 128  | 2666     | 0.048  | ng    | Qvalue # 90 |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 1226     | 0.035  | ng    | # 91        |
| 16) Acenaphthylene            | 13.900 | 152  | 3215     | 0.073  | ng    | 98          |
| 17) Acenaphthene              | 14.242 | 154  | 17697    | 0.572  | ng    | 98          |
| 18) Fluorene                  | 15.236 | 166  | 20096    | 0.516  | ng    | 99          |
| 25) Phenanthrene              | 16.966 | 178  | 518372   | 9.296  | ng    | 100         |
| 26) Anthracene                | 17.066 | 178  | 151975   | 3.080  | ng    | 98          |
| 28) Fluoranthene              | 19.003 | 202  | 1801050  | 29.226 | ng    | 100         |
| 30) Pyrene                    | 19.365 | 202  | 1607538  | 16.363 | ng    | # 93        |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 1300011  | 16.336 | ng    | 98          |
| 33) Chrysene                  | 21.175 | 228  | 1136784m | 14.371 | ng    |             |
| 34) Bis(2-ethylhexyl)phtha... | 21.077 | 149  | 8993m    | 0.179  | ng    |             |
| 36) Indeno(1,2,3-cd)pyrene    | 25.446 | 276  | 602379   | 6.323  | ng    | 95          |
| 37) Benzo(b)fluoranthene      | 22.662 | 252  | 1485702  | 17.336 | ng    | # 93        |
| 38) Benzo(k)fluoranthene      | 22.698 | 252  | 538286m  | 6.381  | ng    |             |
| 39) Benzo(a)pyrene            | 23.209 | 252  | 1065507m | 15.026 | ng    |             |
| 40) Dibenzo(a,h)anthracene    | 25.460 | 278  | 158541   | 2.081  | ng    | 97          |
| 41) Benzo(g,h,i)perylene      | 26.109 | 276  | 543217   | 6.668  | ng    | 98          |

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

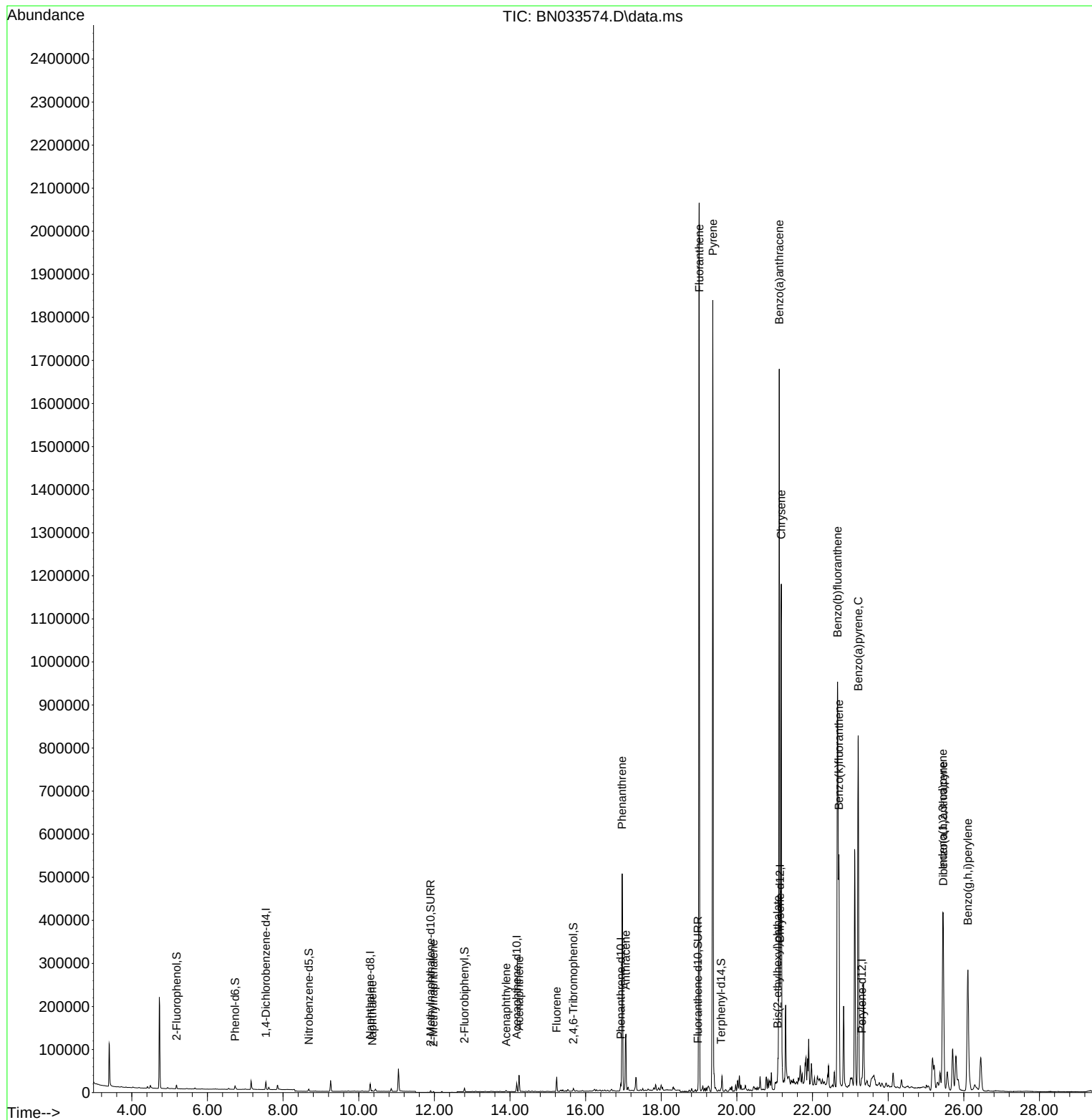
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Data File : BN033574.D  
Acq On : 23 Aug 2024 04:42  
Operator : MA/JU  
Sample : P3671-07  
Misc :  
ALS Vial : 31 Sample Multiplier: 1

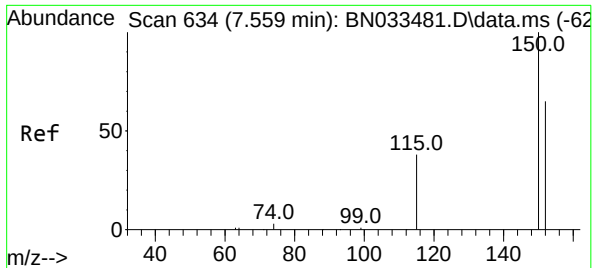
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

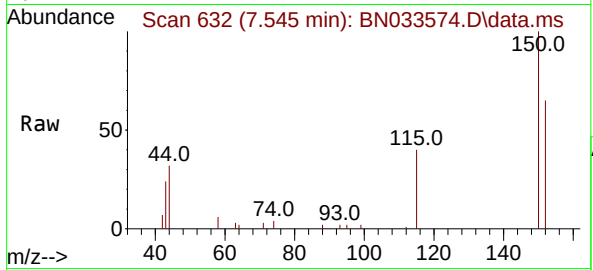
Quant Time: Aug 23 05:11:51 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

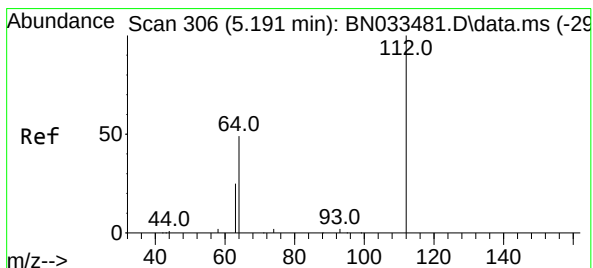
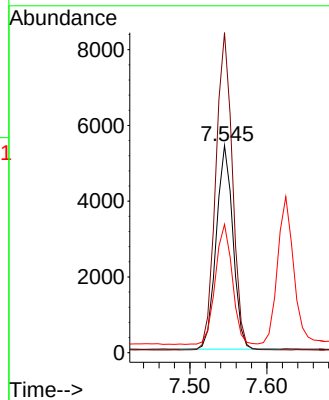
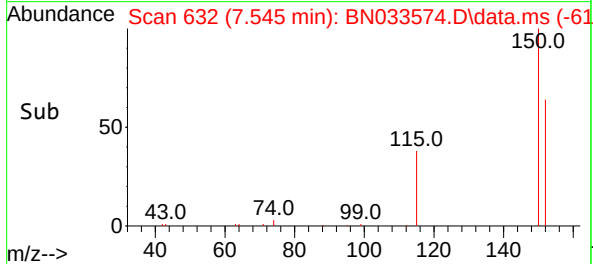
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:152 Resp: 806  
Ion Ratio Lower Upper  
152 100  
150 154.4 122.2 183.2  
115 61.9 47.2 70.8

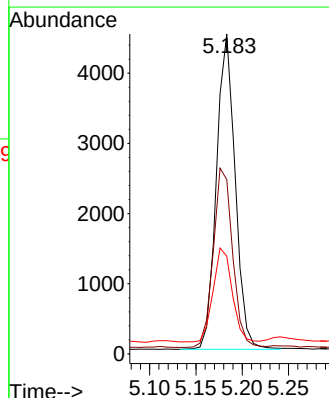
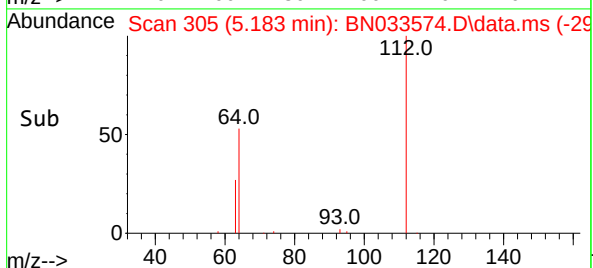
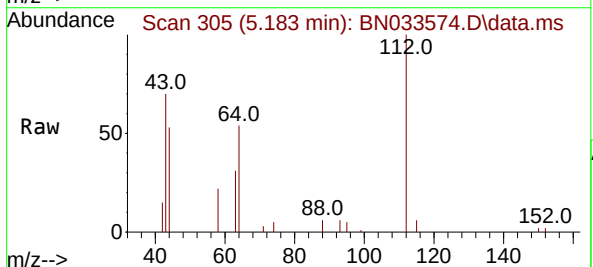
Manual Integrations  
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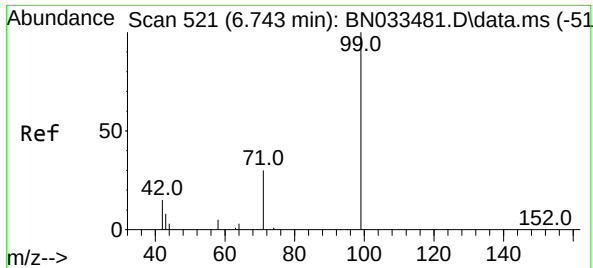
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.247 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

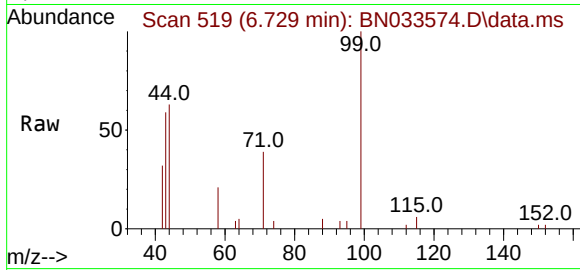
Tgt Ion:112 Resp: 6327  
Ion Ratio Lower Upper  
112 100  
64 58.6 47.1 70.7  
63 30.3 24.9 37.3





#5  
Phenol-d6  
Concen: 0.230 ng  
RT: 6.729 min Scan# 519  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

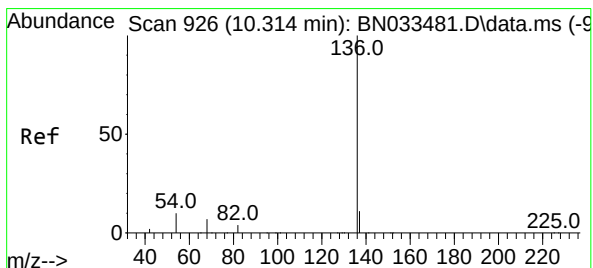
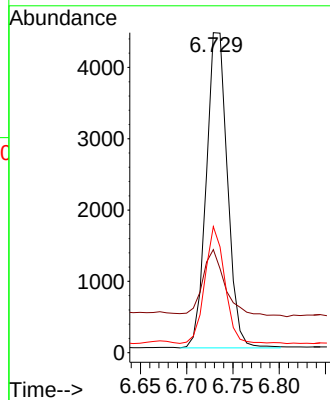
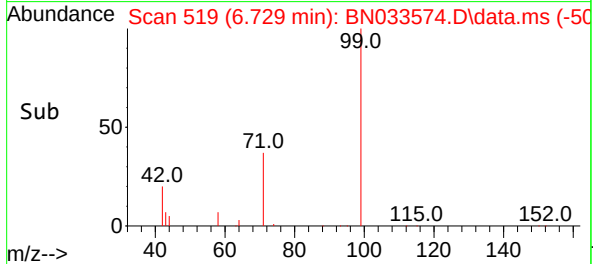
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion: 99 Resp: 7010  
Ion Ratio Lower Upper  
99 100  
42 21.6 16.6 24.8  
71 34.9 26.2 39.4

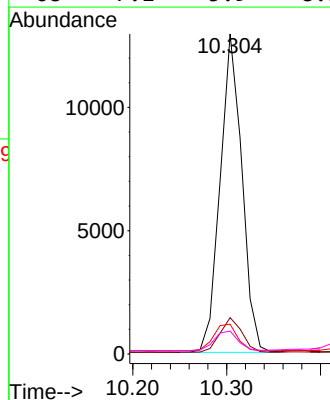
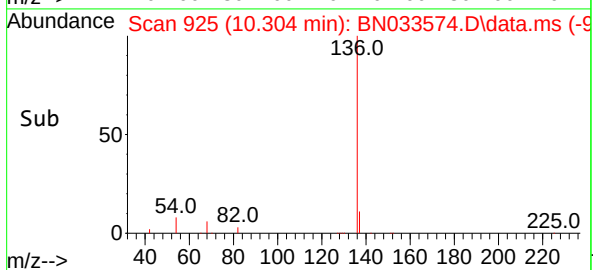
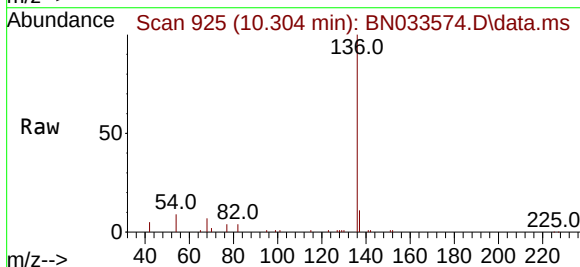
Manual Integrations  
APPROVED

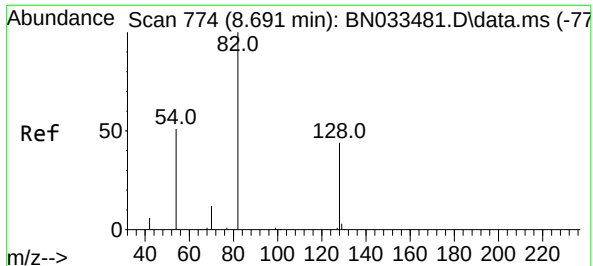
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

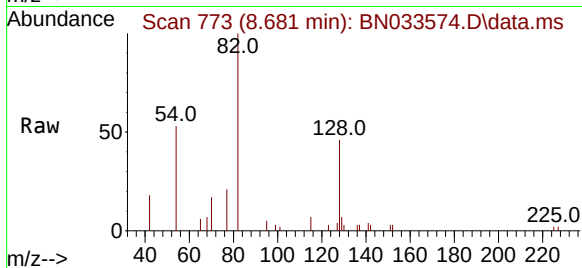
Tgt Ion:136 Resp: 20827  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 9.3 8.3 12.5  
68 7.1 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.242 ng  
RT: 8.681 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

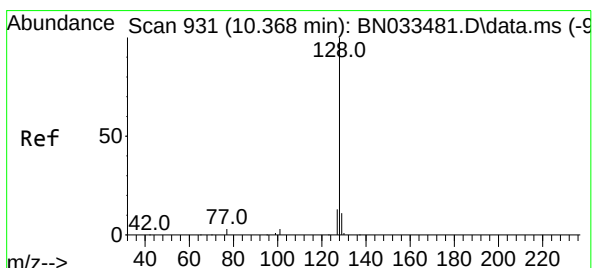
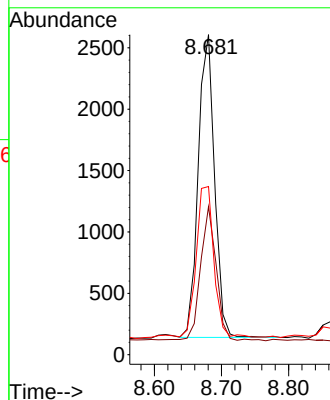
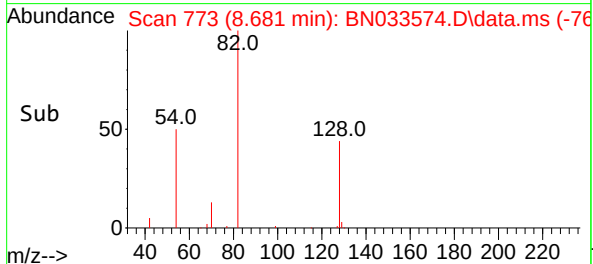
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion: 82 Resp: 4180  
Ion Ratio Lower Upper  
82 100  
128 46.3 36.0 54.0  
54 52.6 42.0 63.0

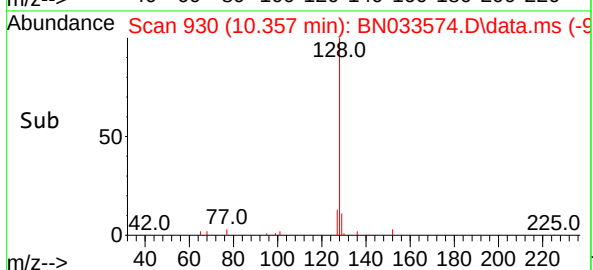
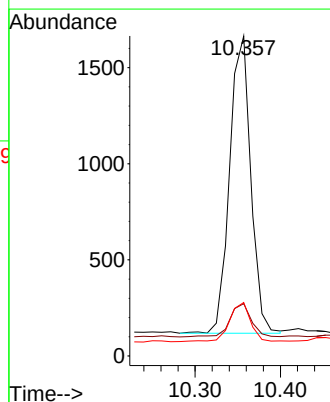
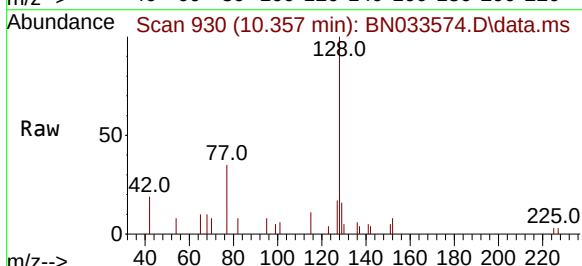
Manual Integrations  
APPROVED

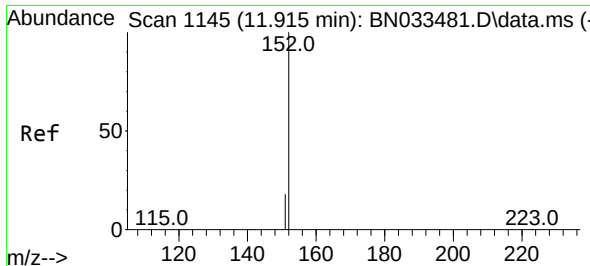
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#9  
Naphthalene  
Concen: 0.048 ng  
RT: 10.357 min Scan# 930  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

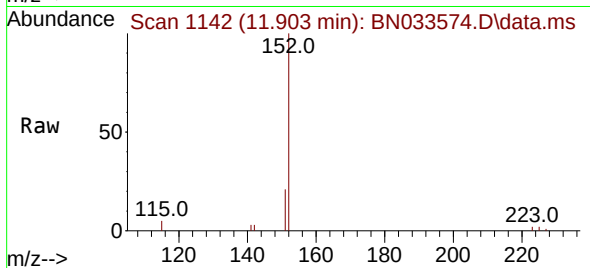
Tgt Ion:128 Resp: 2666  
Ion Ratio Lower Upper  
128 100  
129 16.3 9.1 13.7#  
127 16.7 10.7 16.1#





#11  
2-Methylnaphthalene-d10  
Concen: 0.174 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

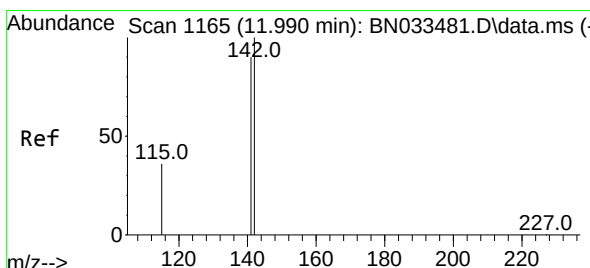
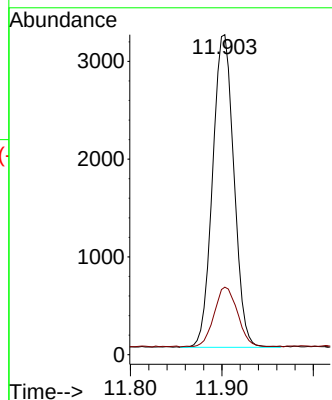
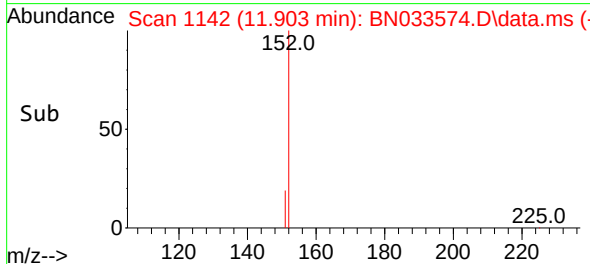
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:152 Resp: 518  
Ion Ratio Lower Upper  
152 100  
151 21.0 16.6 25.0

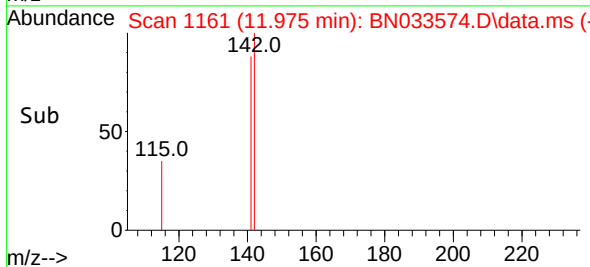
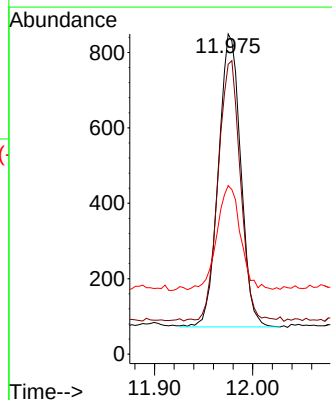
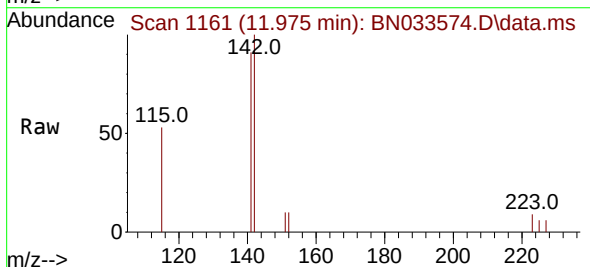
Manual Integrations  
APPROVED

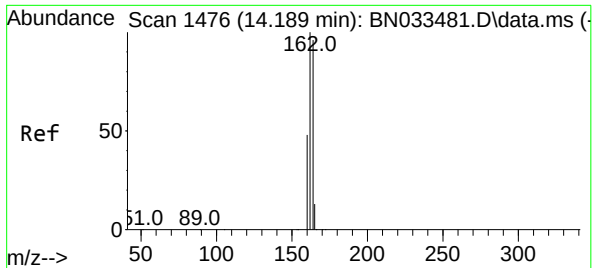
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.035 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

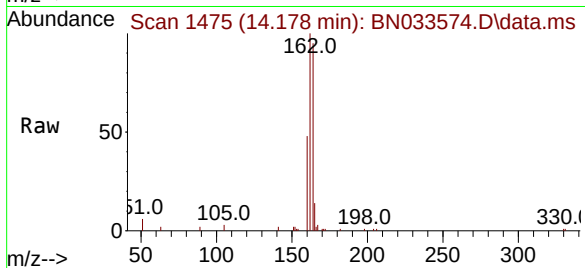
Tgt Ion:142 Resp: 1226  
Ion Ratio Lower Upper  
142 100  
141 90.6 71.7 107.5  
115 52.7 29.4 44.2#





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 14  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

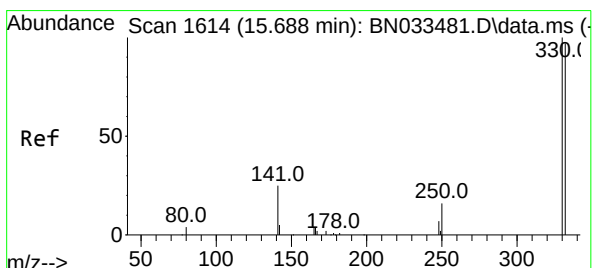
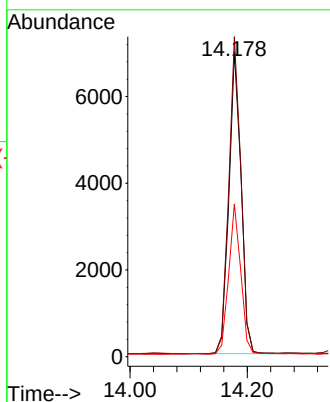
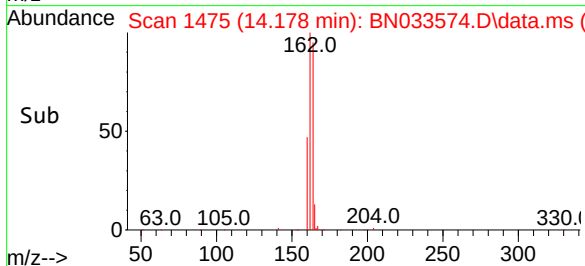
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



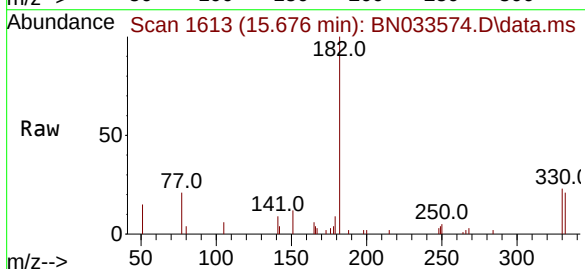
Tgt Ion:164 Resp: 1002  
Ion Ratio Lower Upper  
164 100  
162 104.9 83.5 125.3  
160 50.1 40.2 60.4

Manual Integrations  
APPROVED

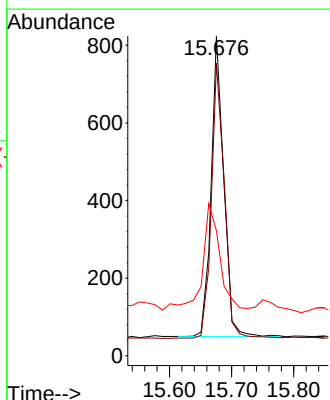
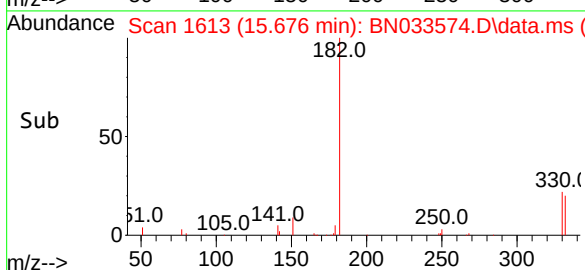
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

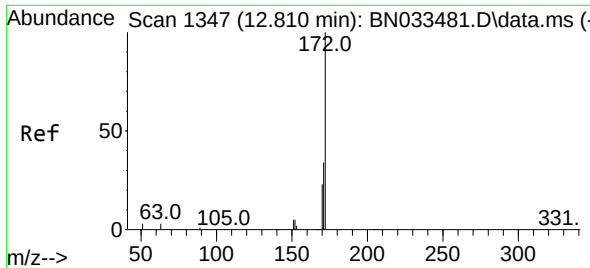


#14  
2,4,6-Tribromophenol  
Concen: 0.202 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42



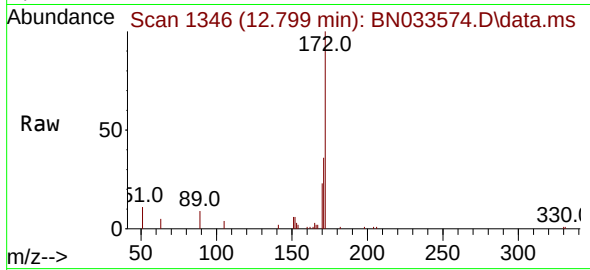
Tgt Ion:330 Resp: 1087  
Ion Ratio Lower Upper  
330 100  
332 94.8 77.5 116.3  
141 44.2 33.9 50.9





#15  
2-Fluorobiphenyl  
Concen: 0.162 ng  
RT: 12.799 min Scan# 1448  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

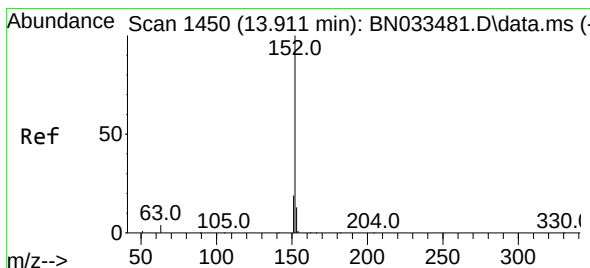
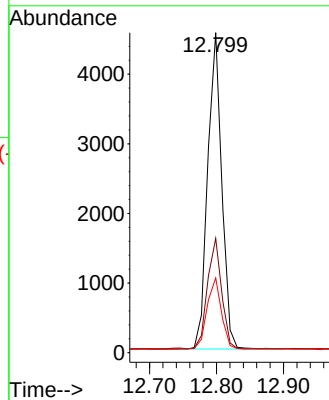
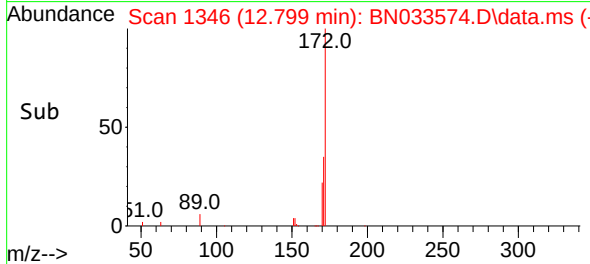
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:172 Resp: 6614  
Ion Ratio Lower Upper  
172 100  
171 35.7 27.7 41.5  
170 23.4 18.3 27.5

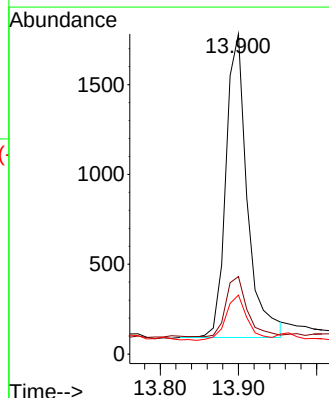
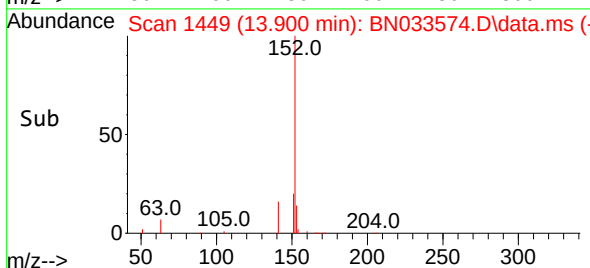
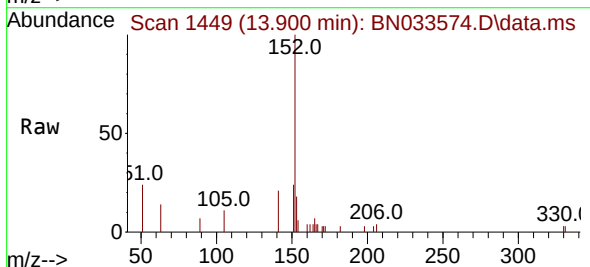
Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

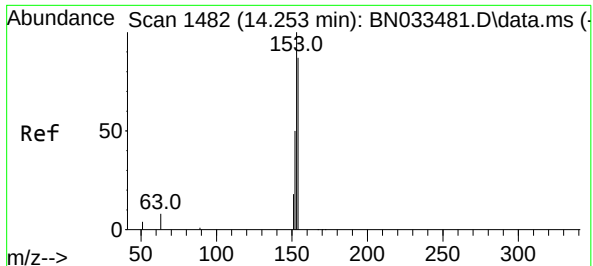


#16  
Acenaphthylene  
Concen: 0.073 ng  
RT: 13.900 min Scan# 1449  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

Tgt Ion:152 Resp: 3215  
Ion Ratio Lower Upper  
152 100  
151 19.7 15.7 23.5  
153 15.1 10.3 15.5







#17

Acenaphthene

Concen: 0.572 ng

RT: 14.242 min Scan# 1481

Delta R.T. -0.000 min

Lab File: BN033574.D

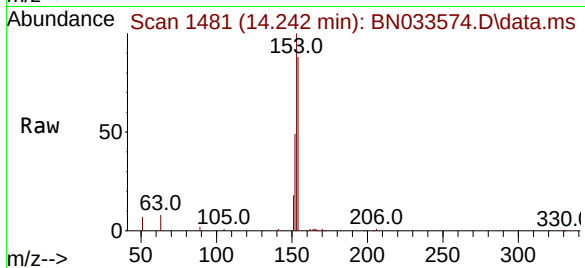
Acq: 23 Aug 2024 04:42

Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924-FD

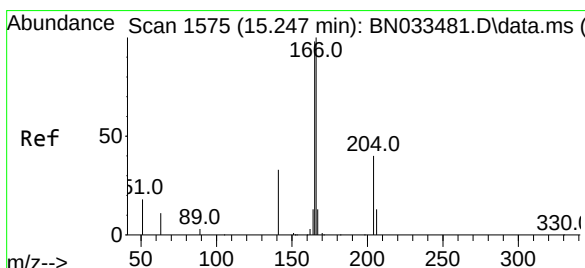
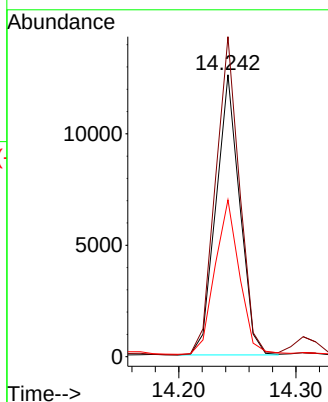
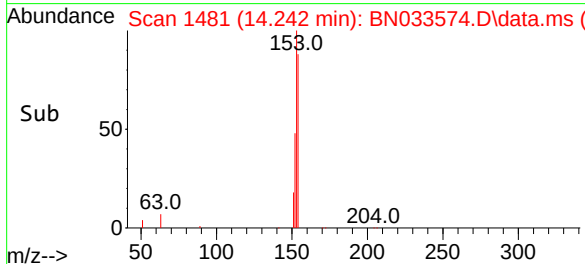


| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 114.6 | 89.0  | 133.6 |
| 152     | 57.0  | 45.2  | 67.8  |

Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#18

Fluorene

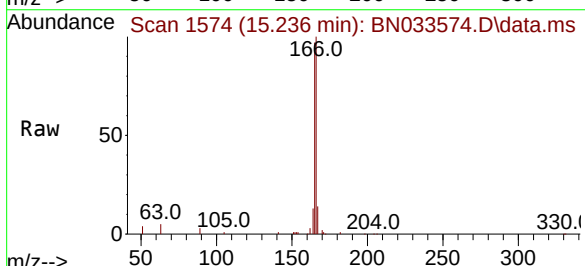
Concen: 0.516 ng

RT: 15.236 min Scan# 1574

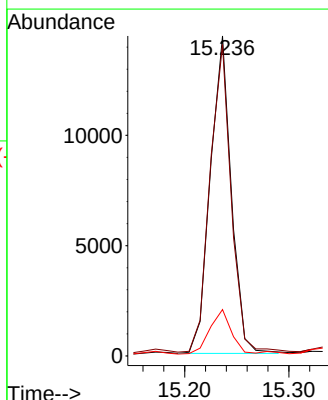
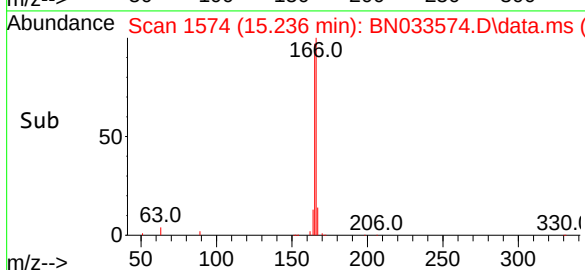
Delta R.T. -0.000 min

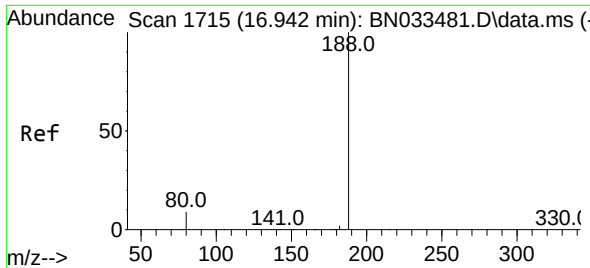
Lab File: BN033574.D

Acq: 23 Aug 2024 04:42



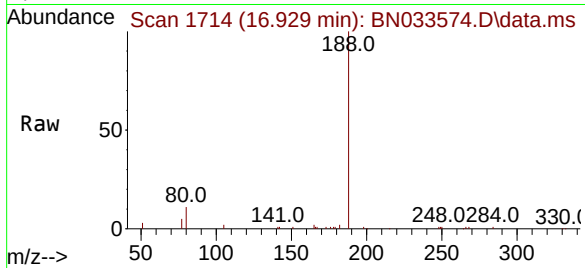
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 97.5  | 78.2  | 117.4 |
| 167     | 14.4  | 10.6  | 16.0  |





#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1715  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

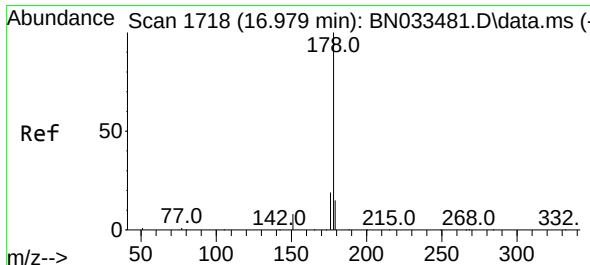
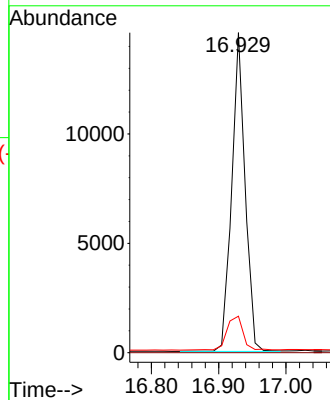
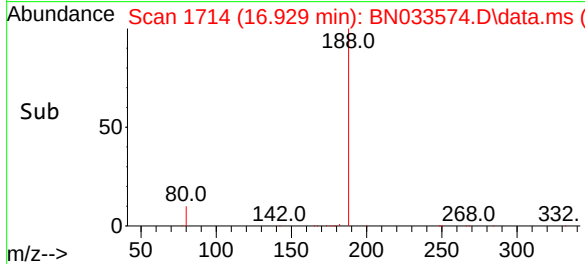
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:188 Resp: 20045  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.4 7.8 11.8

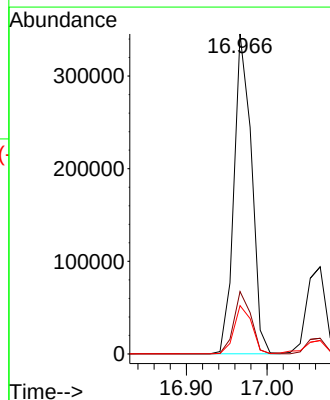
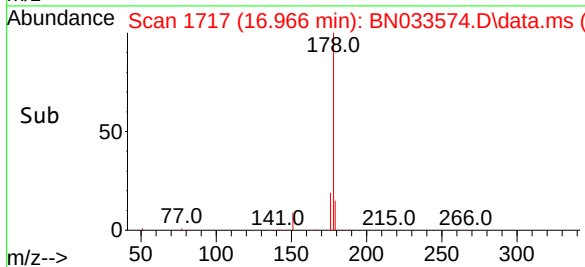
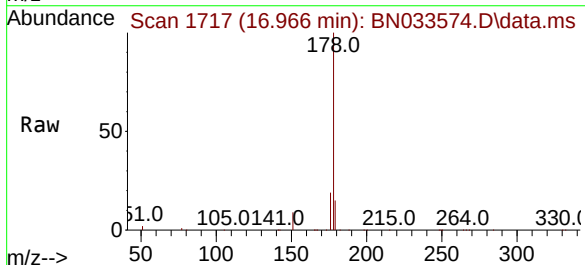
Manual Integrations  
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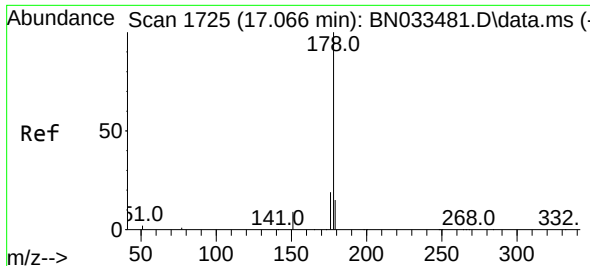
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#25  
Phenanthrene  
Concen: 9.296 ng  
RT: 16.966 min Scan# 1717  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

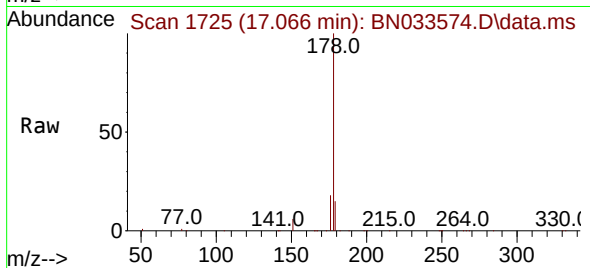
Tgt Ion:178 Resp: 518372  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.3 22.9  
179 15.2 12.3 18.5





#26  
Anthracene  
Concen: 3.080 ng  
RT: 17.066 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

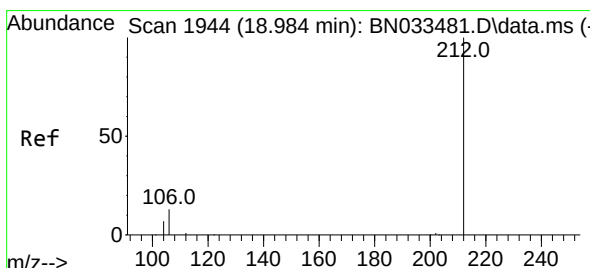
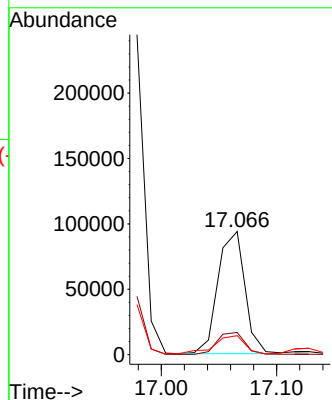
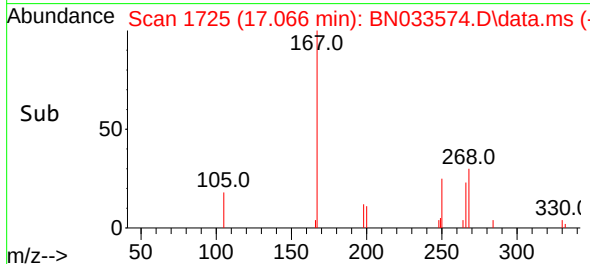
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:178 Resp: 15197  
Ion Ratio Lower Upper  
178 100  
176 18.7 15.0 22.6  
179 17.3 12.4 18.6

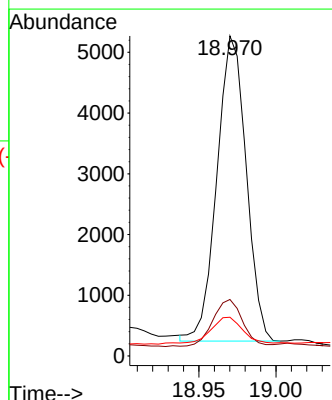
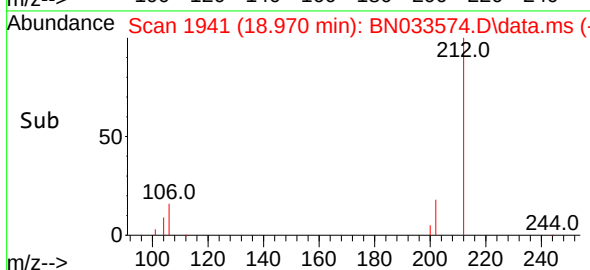
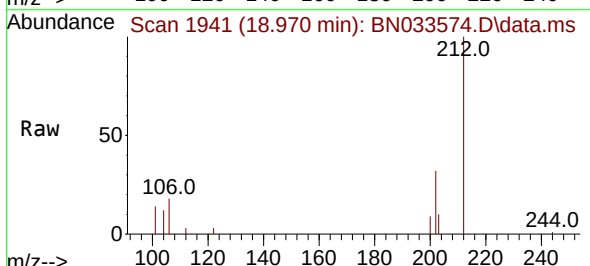
Manual Integrations  
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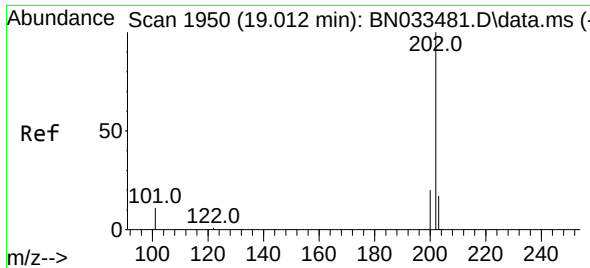
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#27  
Fluoranthene-d10  
Concen: 0.138 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

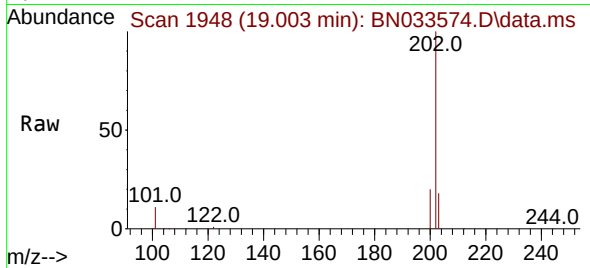
Tgt Ion:212 Resp: 6634  
Ion Ratio Lower Upper  
212 100  
106 15.8 12.3 18.5  
104 10.1 7.0 10.4





#28  
Fluoranthene  
Concen: 29.226 ng  
RT: 19.003 min Scan# 1948  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

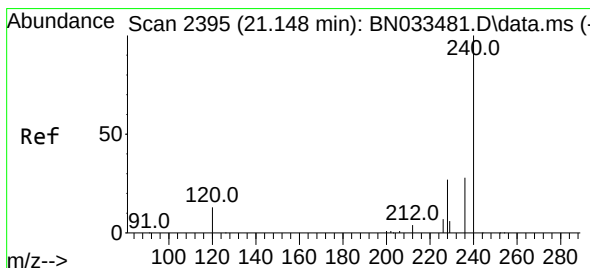
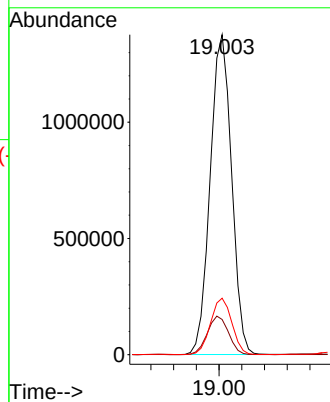
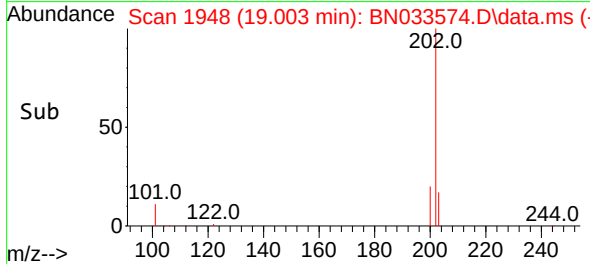
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:202 Resp: 1801050  
Ion Ratio Lower Upper  
202 100  
101 11.9 9.5 14.3  
203 17.5 13.8 20.6

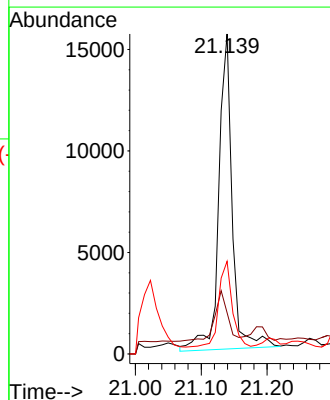
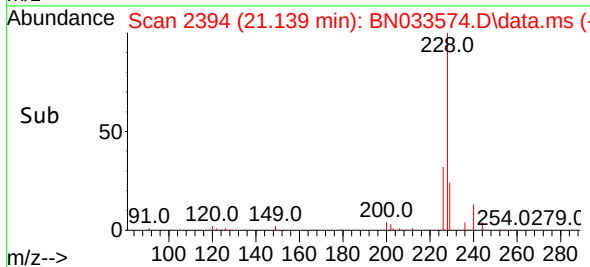
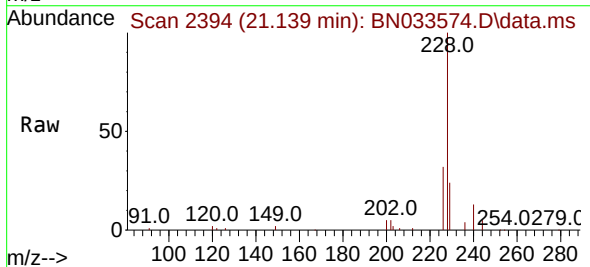
Manual Integrations  
APPROVED

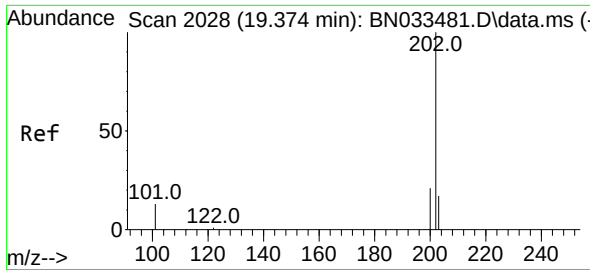
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

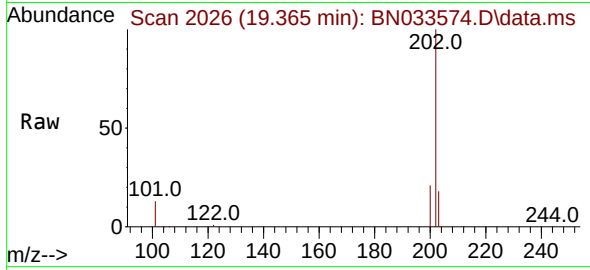
Tgt Ion:240 Resp: 22012  
Ion Ratio Lower Upper  
240 100  
120 12.9 12.4 18.6  
236 28.9 23.0 34.6





#30  
Pyrene  
Concen: 16.363 ng  
RT: 19.365 min Scan# 2028  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

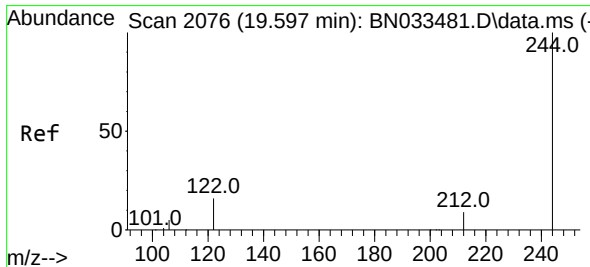
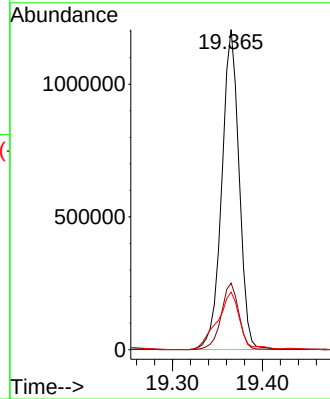
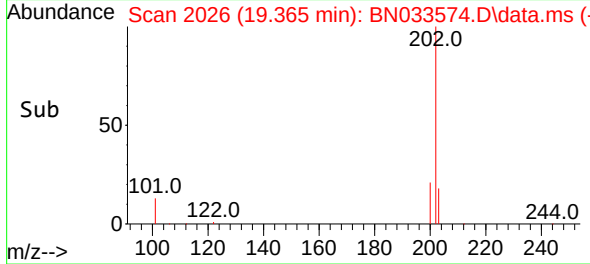
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:202 Resp: 1607538  
Ion Ratio Lower Upper  
202 100  
200 21.3 16.6 24.8  
203 23.4 14.2 21.4

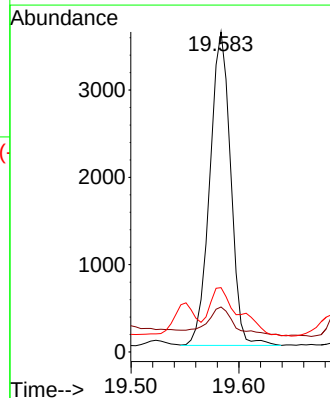
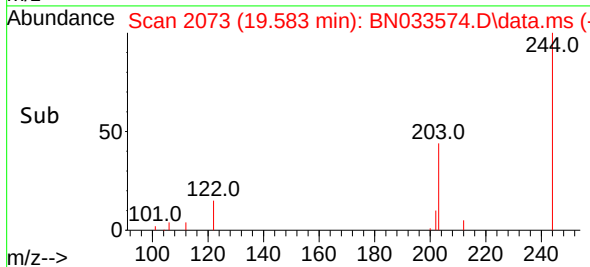
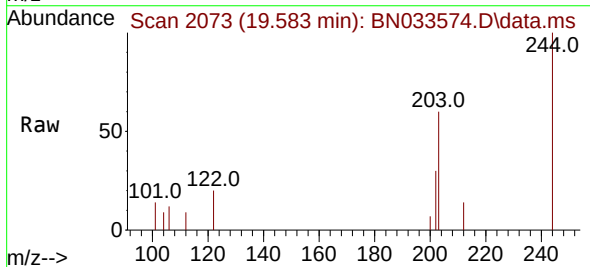
Manual Integrations  
APPROVED

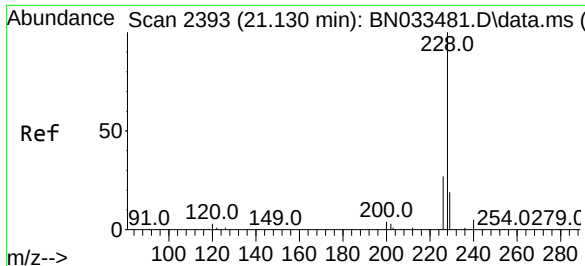
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#31  
Terphenyl-d14  
Concen: 0.096 ng  
RT: 19.583 min Scan# 2073  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

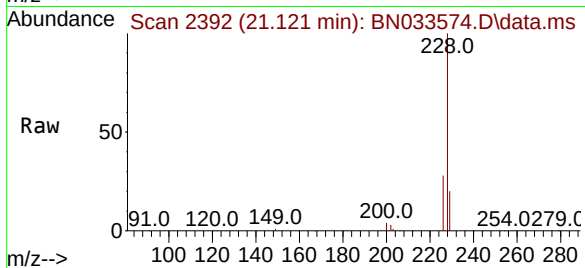
Tgt Ion:244 Resp: 4810  
Ion Ratio Lower Upper  
244 100  
212 14.1 7.8 11.6#  
122 20.1 13.3 19.9#





#32  
Benzo(a)anthracene  
Concen: 16.336 ng  
RT: 21.121 min Scan# 2112  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

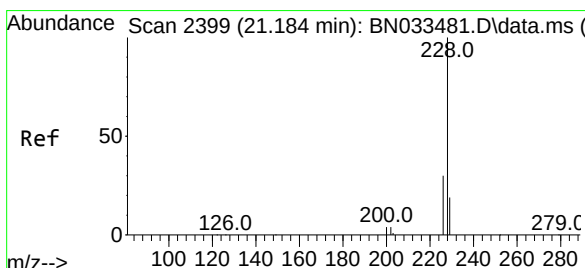
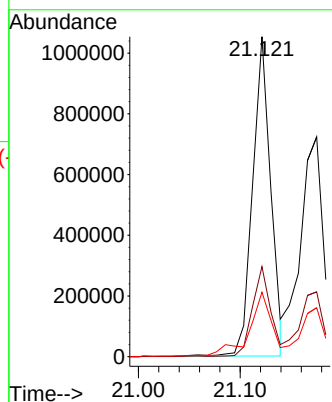
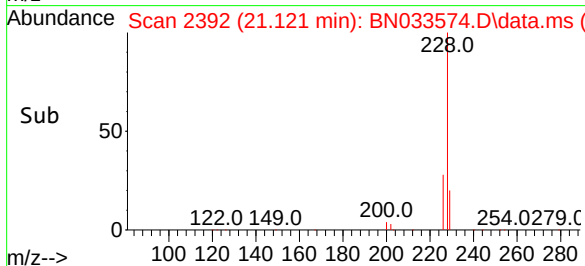
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:228 Resp: 130001  
Ion Ratio Lower Upper  
228 100  
226 28.2 21.8 32.6  
229 20.2 15.8 23.6

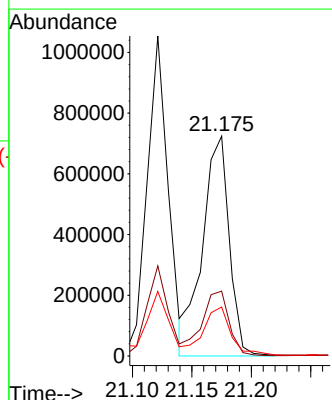
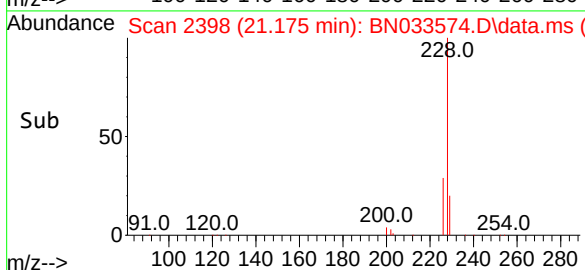
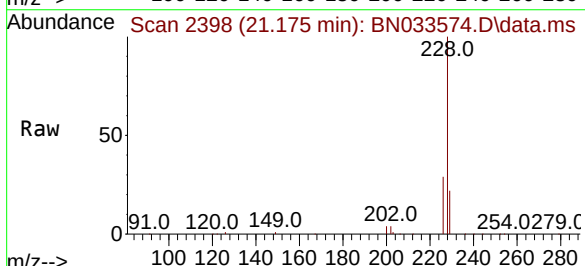
Manual Integrations  
APPROVED

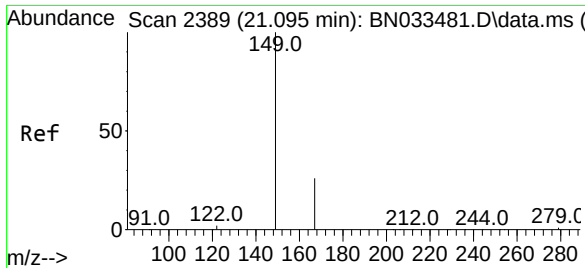
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#33  
Chrysene  
Concen: 14.371 ng m  
RT: 21.175 min Scan# 2398  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

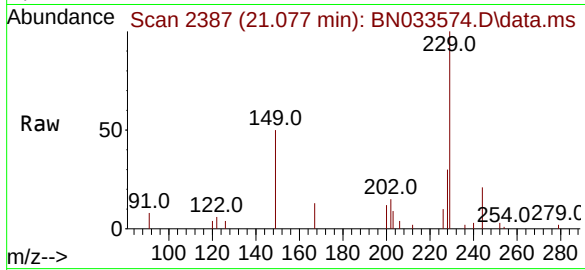
Tgt Ion:228 Resp: 1136784  
Ion Ratio Lower Upper  
228 100  
226 29.5 23.8 35.8  
229 22.3 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.179 ng m  
RT: 21.077 min Scan# 2107  
Delta R.T. -0.009 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

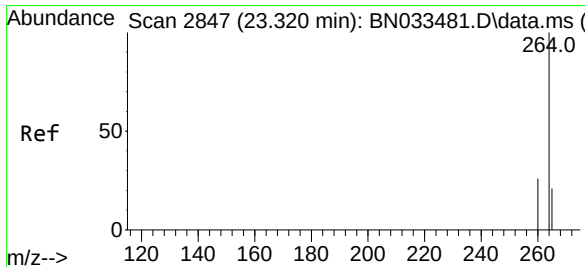
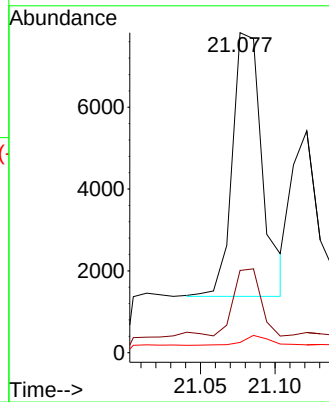
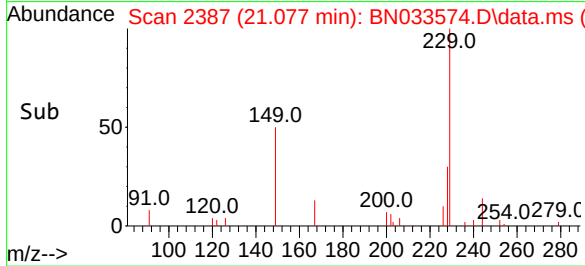
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:149 Resp: 899  
Ion Ratio Lower Upper  
149 100  
167 53.2 21.5 32.3  
279 4.8 2.2 3.2

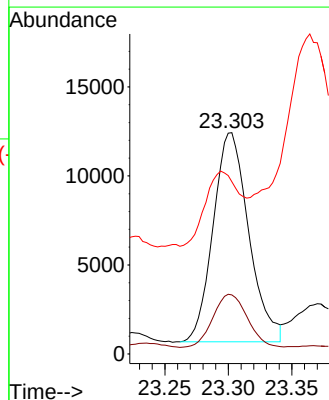
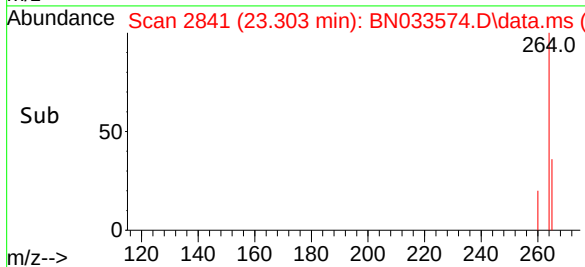
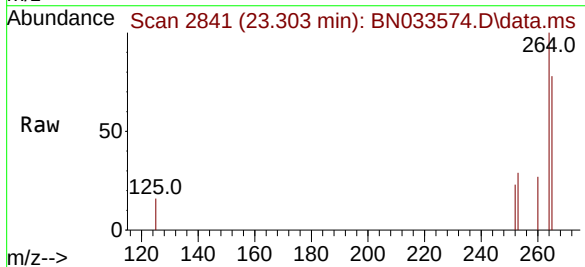
Manual Integrations  
APPROVED

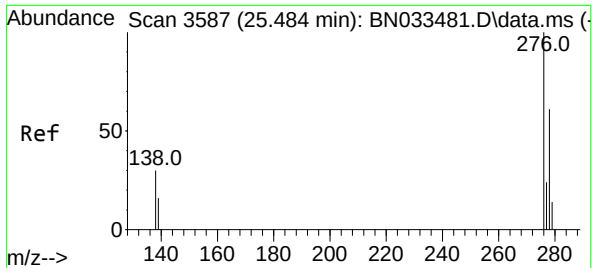
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.303 min Scan# 2841  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

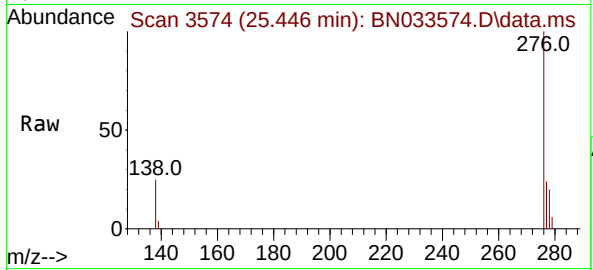
Tgt Ion:264 Resp: 22949  
Ion Ratio Lower Upper  
264 100  
260 26.7 20.8 31.2  
265 77.8 52.2 78.2





#36  
Indeno(1,2,3-cd)pyrene  
Concen: 6.323 ng  
RT: 25.446 min Scan# 3587  
Delta R.T. -0.003 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

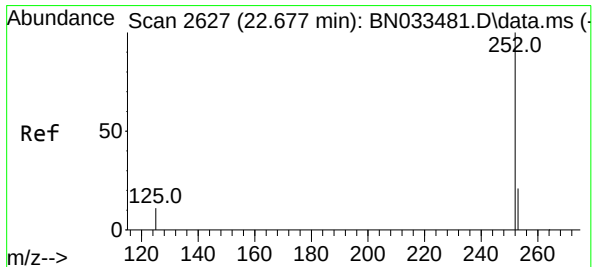
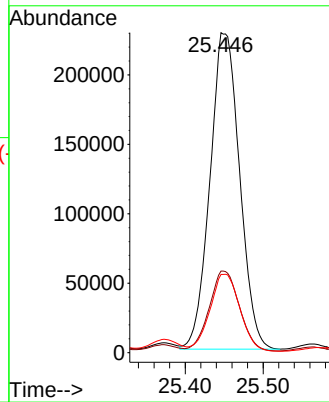
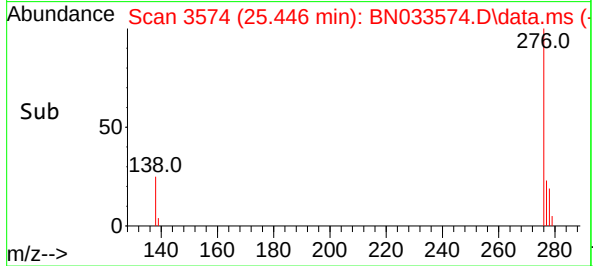
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:276 Resp: 602379  
Ion Ratio Lower Upper  
276 100  
138 25.6 24.4 36.6  
277 24.5 19.8 29.6

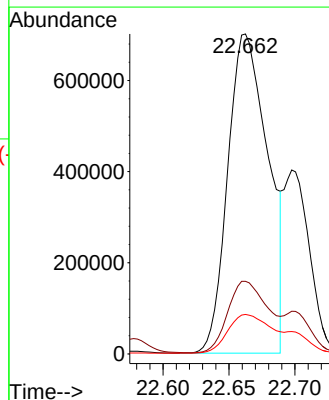
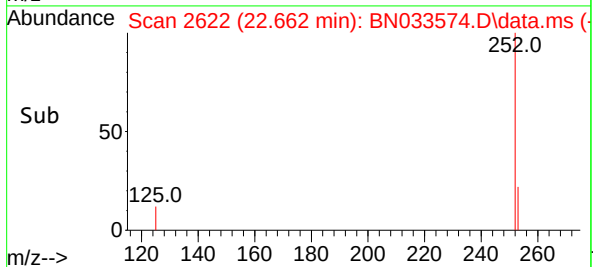
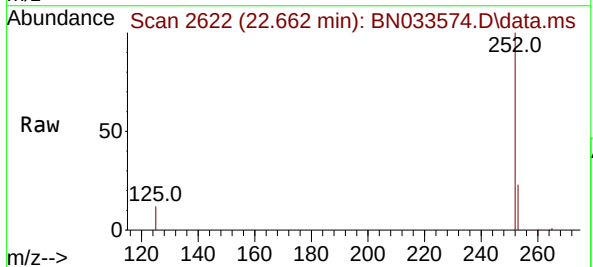
Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

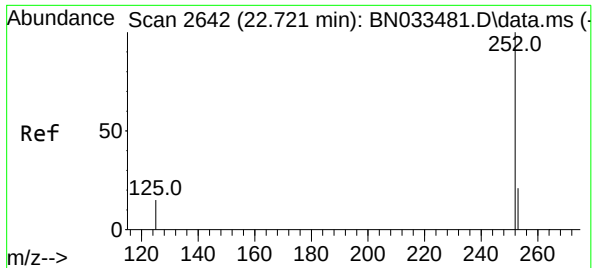


#37  
Benzo(b)fluoranthene  
Concen: 17.336 ng  
RT: 22.662 min Scan# 2622  
Delta R.T. 0.003 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

Tgt Ion:252 Resp: 1485702  
Ion Ratio Lower Upper  
252 100  
253 22.7 19.8 29.8  
125 12.4 13.9 20.9#

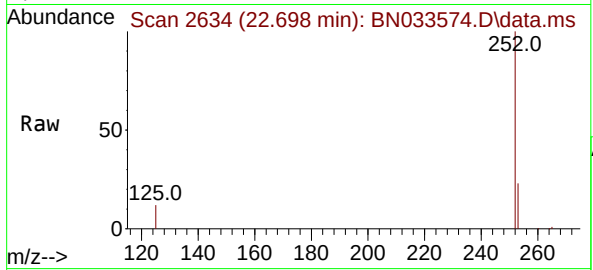






#38  
Benzo(k)fluoranthene  
Concen: 6.381 ng m  
RT: 22.698 min Scan# 20  
Delta R.T. -0.006 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

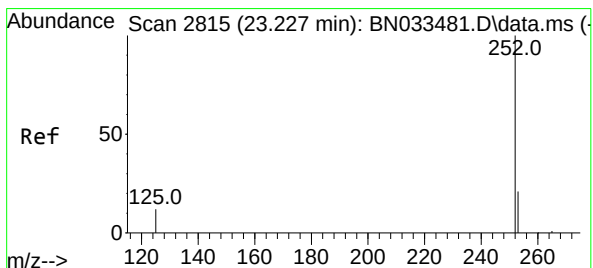
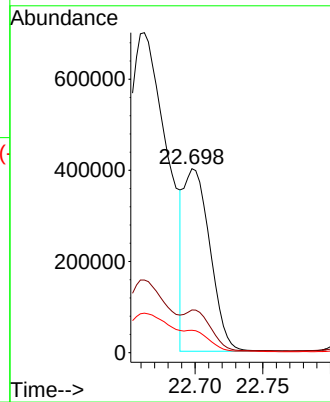
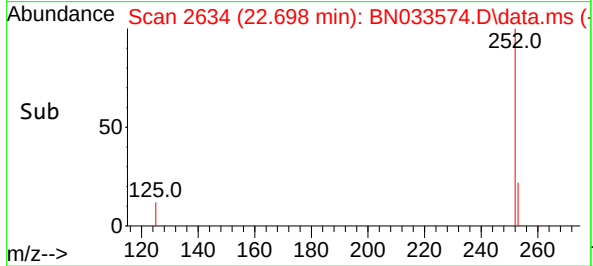
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FD



Tgt Ion:252 Resp: 538280  
Ion Ratio Lower Upper  
252 100  
253 23.2 19.8 29.8  
125 12.2 15.8 23.8

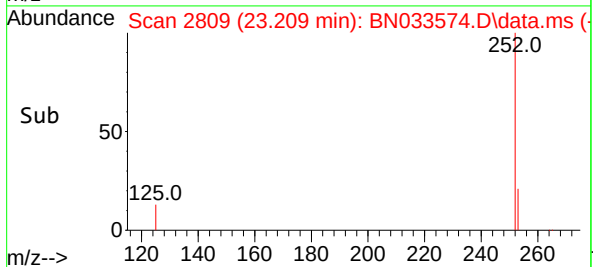
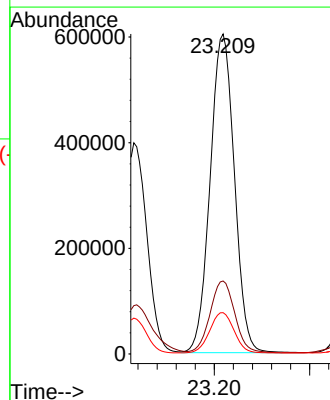
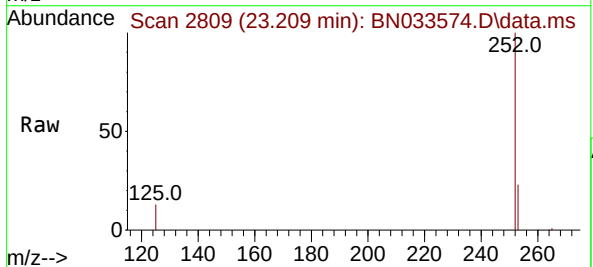
Manual Integrations  
APPROVED

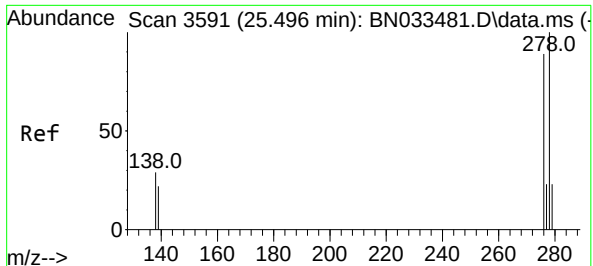
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#39  
Benzo(a)pyrene  
Concen: 15.026 ng m  
RT: 23.209 min Scan# 2809  
Delta R.T. -0.000 min  
Lab File: BN033574.D  
Acq: 23 Aug 2024 04:42

Tgt Ion:252 Resp: 1065507  
Ion Ratio Lower Upper  
252 100  
253 22.8 21.5 32.3  
125 12.9 17.0 25.4





#40

Dibenzo(a,h)anthracene

Concen: 2.081 ng

RT: 25.460 min Scan# 31

Delta R.T. -0.009 min

Lab File: BN033574.D

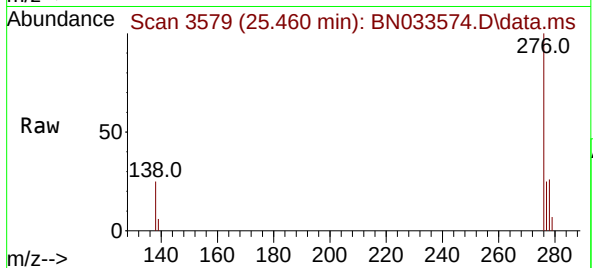
Acq: 23 Aug 2024 04:42

Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924-FD



Tgt Ion:278 Resp: 15854

Ion Ratio Lower Upper

278 100

139 21.0 19.1 28.7

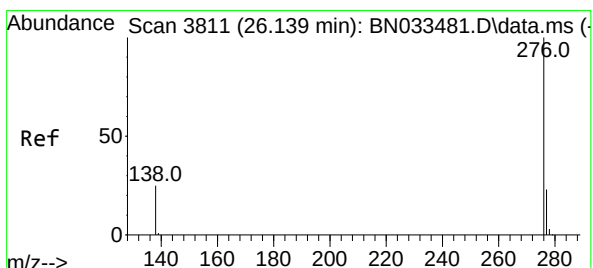
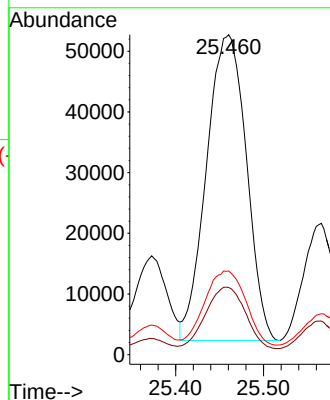
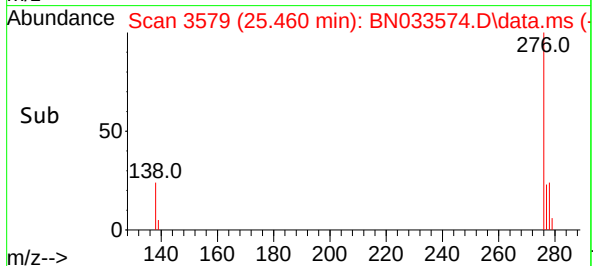
279 26.1 21.0 31.4

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#41

Benzo(g,h,i)perylene

Concen: 6.668 ng

RT: 26.109 min Scan# 3801

Delta R.T. 0.006 min

Lab File: BN033574.D

Acq: 23 Aug 2024 04:42

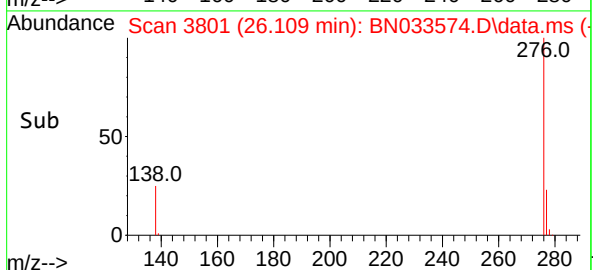
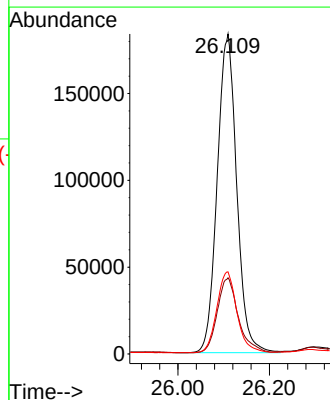
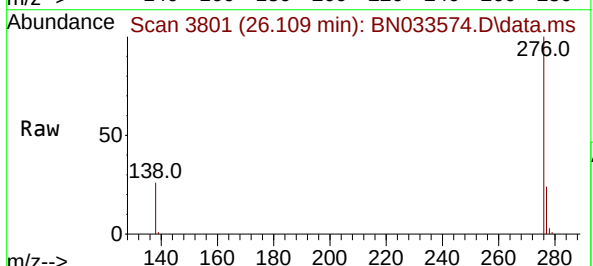
Tgt Ion:276 Resp: 543217

Ion Ratio Lower Upper

276 100

277 23.8 19.7 29.5

138 25.6 21.8 32.6



## Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24      |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24      |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924-FDDL          | SDG No.:        | P3671         |
| Lab Sample ID:     | P3671-07DL                            | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 76.6          |
| Sample Wt/Vol:     | 30.01 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033613.D        | 10        | 08/21/24 09:38 | 08/24/24 05:57 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 9.00  | UD        | 9.00                | 43.1       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 10.4  | UD        | 10.4                | 43.1       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 8.20  | UD        | 8.20                | 43.1       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 23.5  | JD        | 7.20                | 43.1       | ug/Kg             |
| 86-73-7                   | Fluorene                | 20.9  | JD        | 7.80                | 43.1       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 370   | D         | 8.20                | 43.1       | ug/Kg             |
| 120-12-7                  | Anthracene              | 110   | D         | 10.3                | 43.1       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 1200  | D         | 8.70                | 43.1       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 810   | D         | 12.4                | 43.1       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 760   | D         | 9.90                | 43.1       | ug/Kg             |
| 218-01-9                  | Chrysene                | 650   | D         | 11.2                | 43.1       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 800   | D         | 15.5                | 43.1       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 270   | D         | 12.8                | 43.1       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 660   | D         | 21.7                | 43.1       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 280   | D         | 16.4                | 43.1       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 93.1  | D         | 15.3                | 43.1       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 290   | D         | 14.9                | 43.1       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 29.0  | UD        | 29.0                | 86.1       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.16  |           | 30 (17) - 150 (161) | 40%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.12  |           | 30 (23) - 150 (138) | 30%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.25  |           | 30 (33) - 130 (121) | 63%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.15  |           | 30 (32) - 130 (121) | 38%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.11  | *         | 30 (21) - 130 (130) | 28%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 9370  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 22500 | 10.304    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 10400 | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 19700 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-905-J-SO-0-0.5-081924-FDDL          | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-07DL                            | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 76.6                         |
| Sample Wt/Vol:     | 30.01      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033613.D        | 10        | 08/21/24 09:38 | 08/24/24 05:57 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 16900 | 21.13     |     |            |       |
| 1520-96-3  | Perylene-d12 | 18200 | 23.297    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033613.D  
Acq On : 24 Aug 2024 05:57  
Operator : MA/JU  
Sample : P3671-07DL 10X  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL

Quant Time: Aug 24 06:23:48 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 9368     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.304 | 136  | 22518    | 0.400 | ng    | # 0.00    |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10375    | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.929 | 188  | 19734    | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.130 | 240  | 16882    | 0.400 | ng    | 0.00      |
| 35) Perylene-d12              | 23.297 | 264  | 18150    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.176  | 112  | 621      | 0.021 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.736  | 99   | 676      | 0.019 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.670  | 82   | 461      | 0.025 | ng    | -0.01     |
| 11) 2-Methylnaphthalene-d10   | 11.900 | 152  | 518      | 0.016 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 110      | 0.020 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 654      | 0.015 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.970 | 212  | 588      | 0.012 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.583 | 244  | 431      | 0.011 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 17) Acenaphthene              | 14.242 | 154  | 1716     | 0.054 | ng    | Qvalue 97 |
| 18) Fluorene                  | 15.236 | 166  | 1952     | 0.048 | ng    | 99        |
| 25) Phenanthrene              | 16.967 | 178  | 46598    | 0.849 | ng    | 100       |
| 26) Anthracene                | 17.053 | 178  | 12522    | 0.258 | ng    | 97        |
| 28) Fluoranthene              | 18.998 | 202  | 161055   | 2.655 | ng    | 99        |
| 30) Pyrene                    | 19.360 | 202  | 140751   | 1.868 | ng    | # 94      |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 106829   | 1.750 | ng    | 99        |
| 33) Chrysene                  | 21.166 | 228  | 91115    | 1.502 | ng    | 97        |
| 34) Bis(2-ethylhexyl)phtha... | 21.077 | 149  | 1317m    | 0.034 | ng    |           |
| 36) Indeno(1,2,3-cd)pyrene    | 25.443 | 276  | 48539    | 0.644 | ng    | # 94      |
| 37) Benzo(b)fluoranthene      | 22.657 | 252  | 125342   | 1.849 | ng    | # 96      |
| 38) Benzo(k)fluoranthene      | 22.695 | 252  | 41286m   | 0.619 | ng    |           |
| 39) Benzo(a)pyrene            | 23.203 | 252  | 85496m   | 1.524 | ng    |           |
| 40) Dibenzo(a,h)anthracene    | 25.452 | 278  | 12902    | 0.214 | ng    | # 90      |
| 41) Benzo(g,h,i)perylene      | 26.098 | 276  | 43198    | 0.670 | ng    | 99        |

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033613.D  
Acq On : 24 Aug 2024 05:57  
Operator : MA/JU  
Sample : P3671-07DL 10X  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

## Instrument :

BNA\_N

## ClientSampleId :

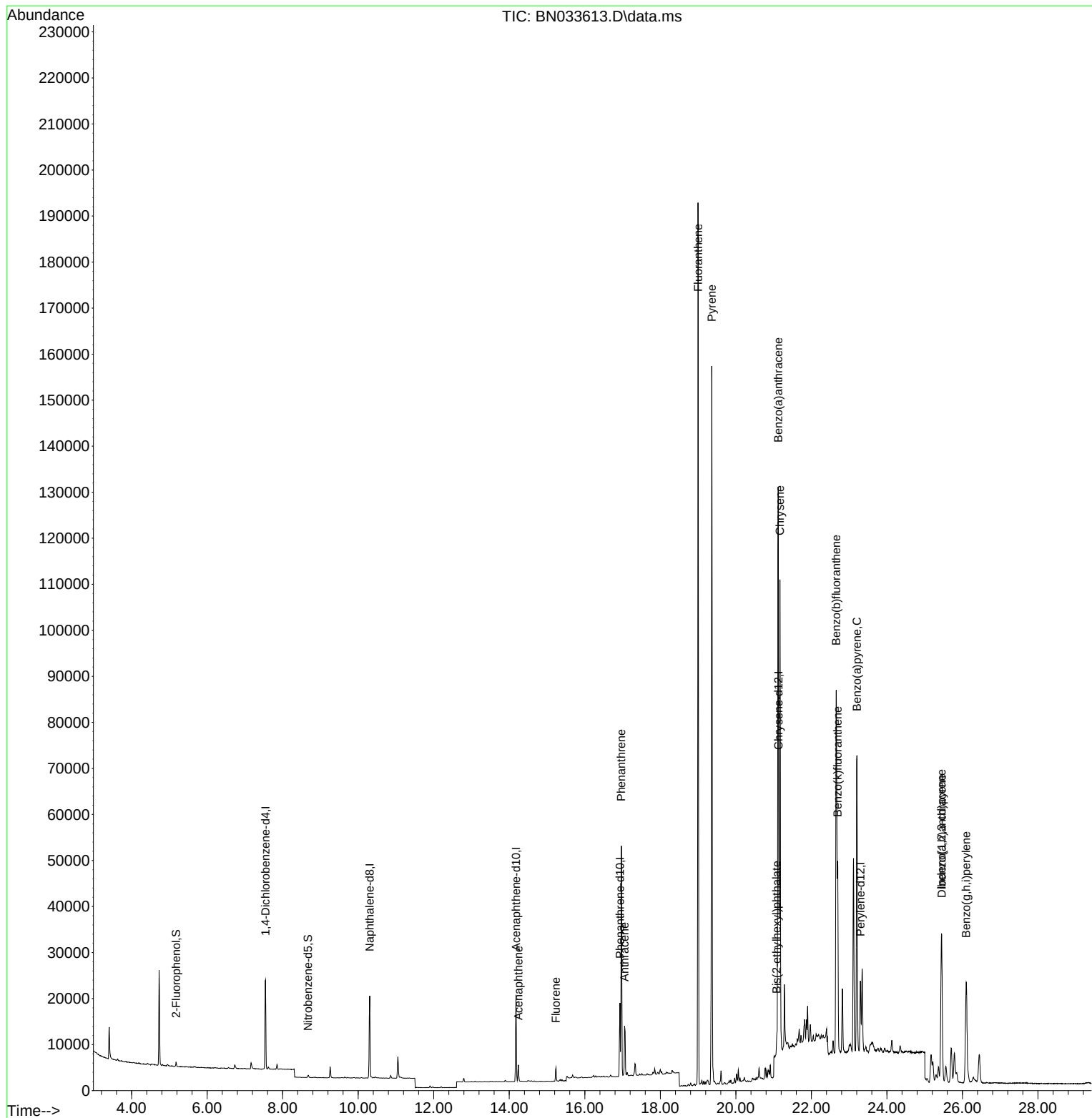
S-905-J-SO-0-0.5-081924-FDDL

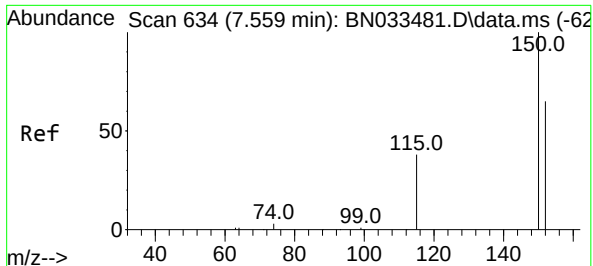
## Manual Integrations

## APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

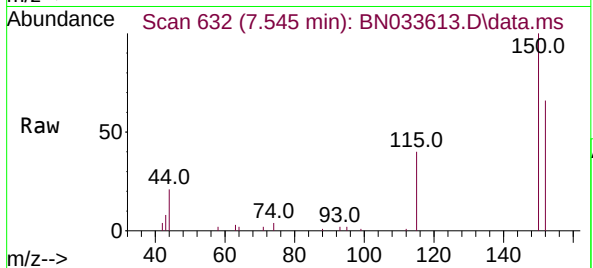
Quant Time: Aug 24 06:23:48 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

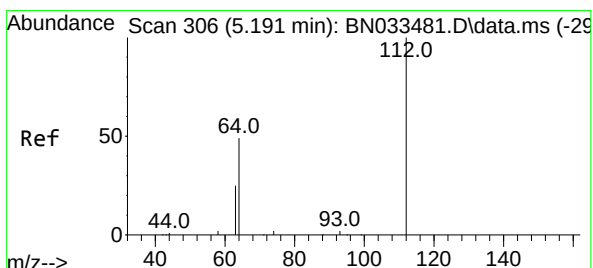
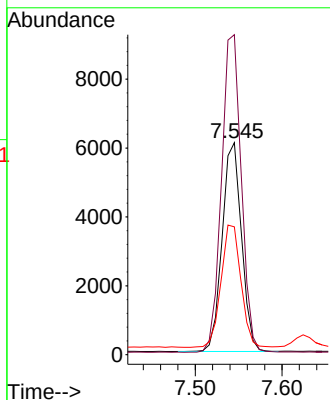
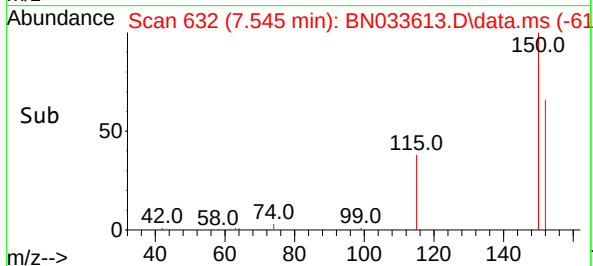
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:152 Resp: 936  
Ion Ratio Lower Upper  
152 100  
150 150.9 122.2 183.2  
115 60.3 47.2 70.8

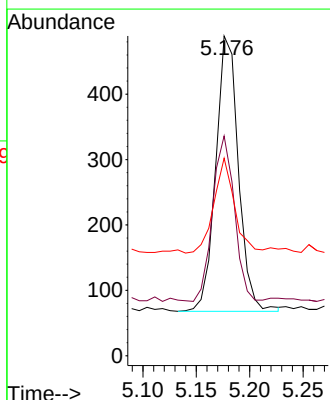
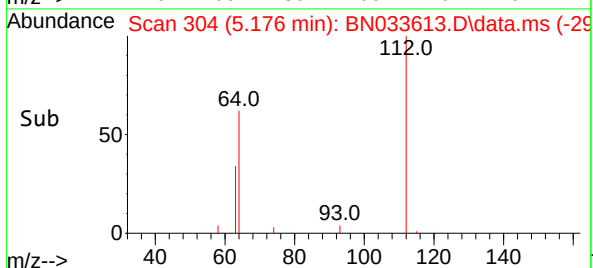
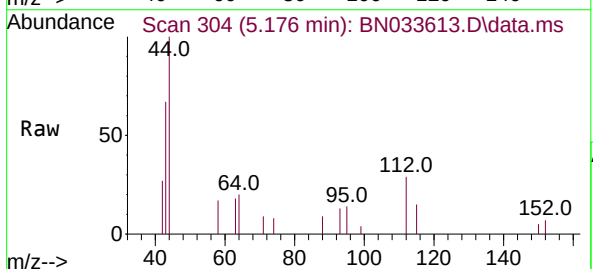
Manual Integrations  
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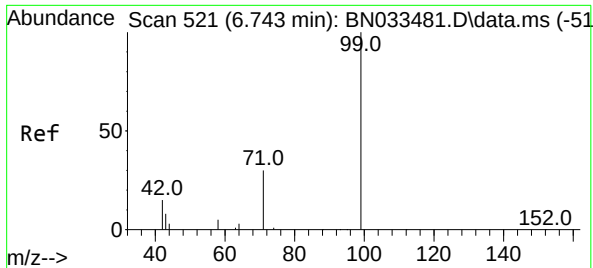
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#4  
2-Fluorophenol  
Concen: 0.021 ng  
RT: 5.176 min Scan# 304  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

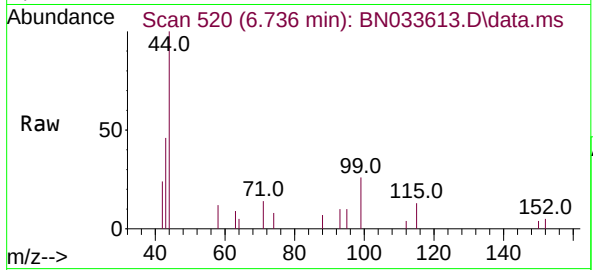
Tgt Ion:112 Resp: 621  
Ion Ratio Lower Upper  
112 100  
64 57.0 47.1 70.7  
63 31.2 24.9 37.3





#5  
Phenol-d6  
Concen: 0.019 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

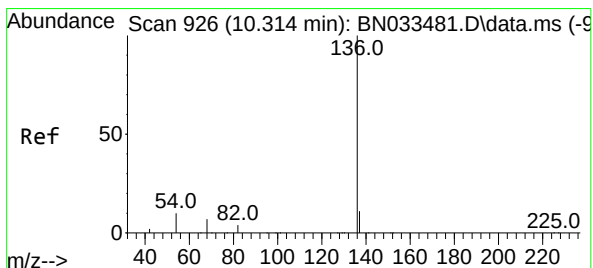
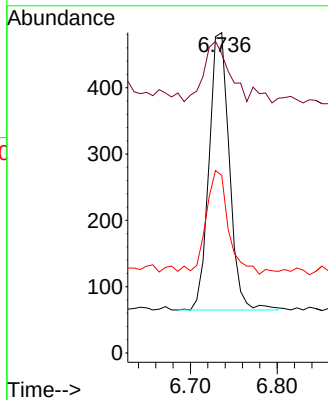
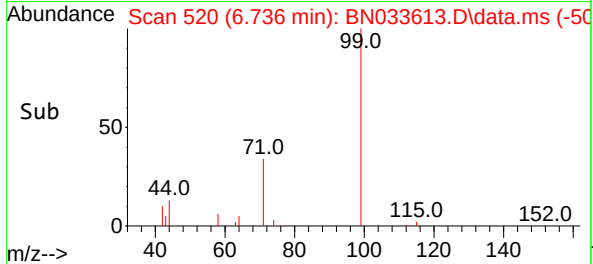
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion: 99 Resp: 670  
Ion Ratio Lower Upper  
99 100  
42 26.3 16.6 24.8  
71 41.6 26.2 39.4

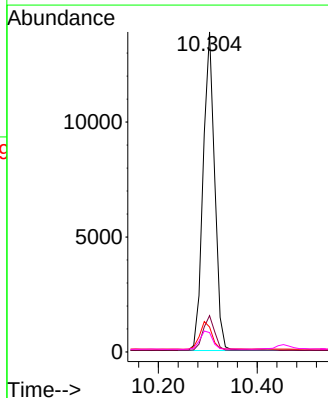
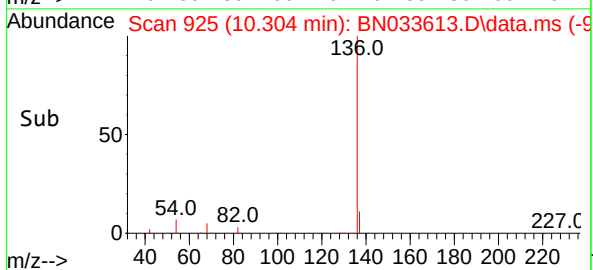
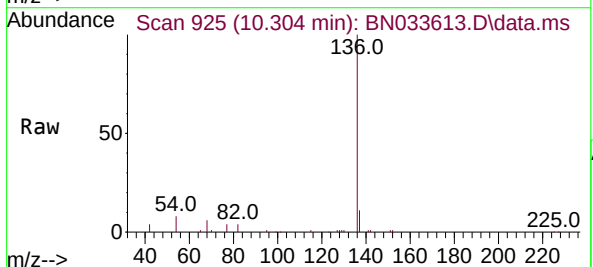
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Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

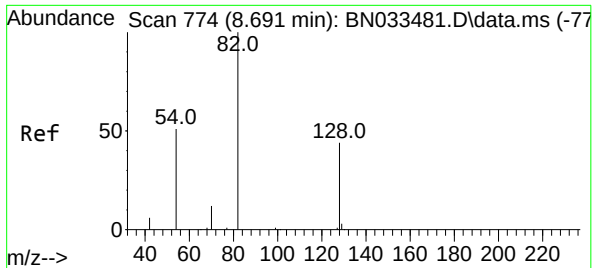


#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

Tgt Ion:136 Resp: 22518  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 7.8 8.3 12.5  
68 6.0 5.9 8.9

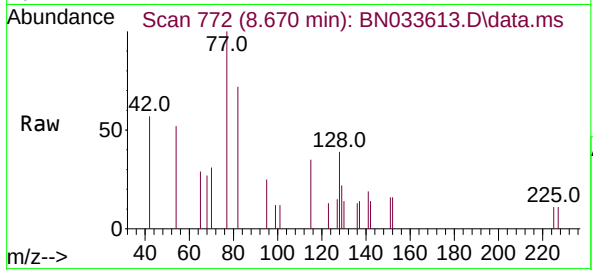






#8  
Nitrobenzene-d5  
Concen: 0.025 ng  
RT: 8.670 min Scan# 71  
Delta R.T. -0.011 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

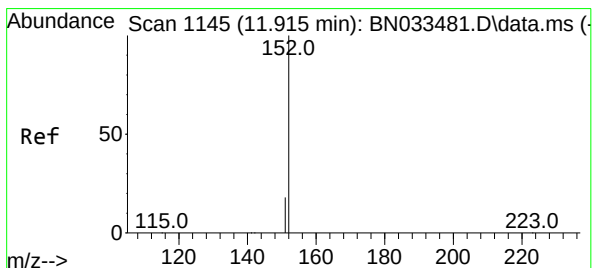
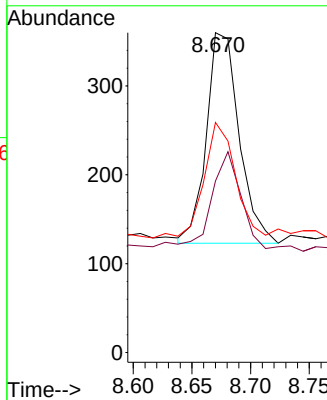
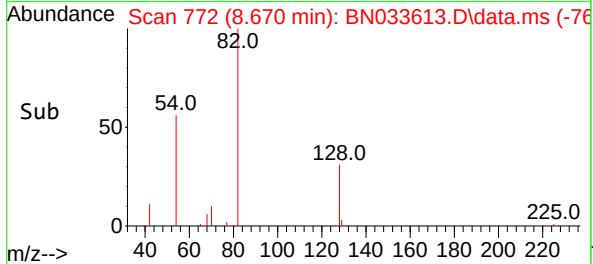
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



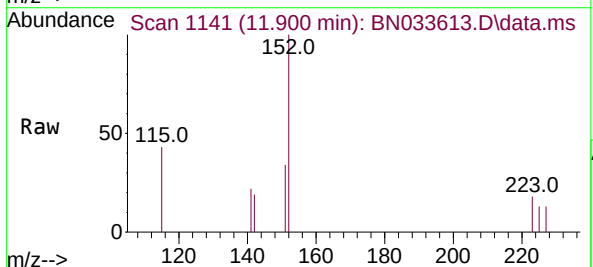
Tgt Ion: 82 Resp: 46  
Ion Ratio Lower Upper  
82 100  
128 53.6 36.0 54.0  
54 71.9 42.0 63.0

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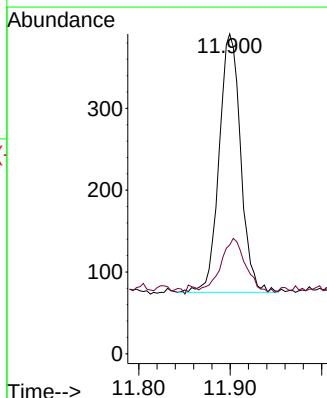
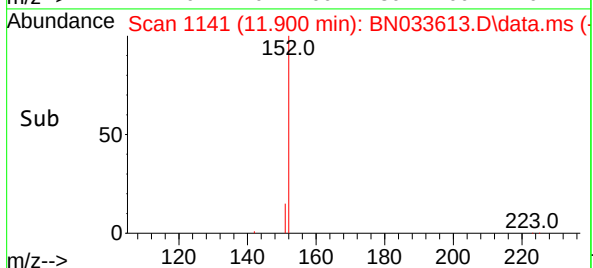
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

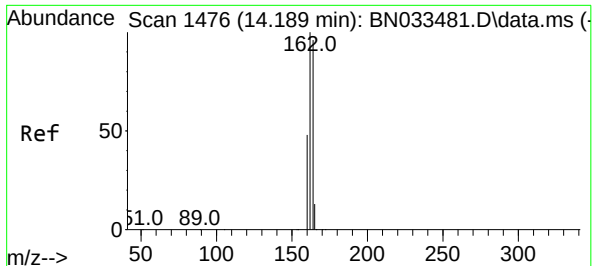


#11  
2-Methylnaphthalene-d10  
Concen: 0.016 ng  
RT: 11.900 min Scan# 1141  
Delta R.T. -0.004 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57



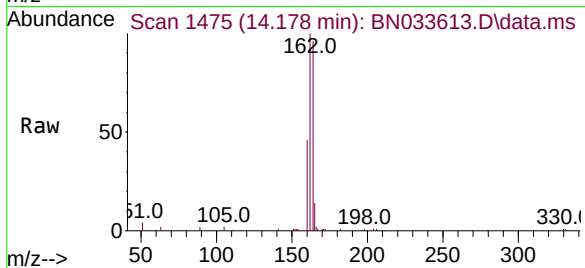
Tgt Ion:152 Resp: 518  
Ion Ratio Lower Upper  
152 100  
151 23.9 16.6 25.0





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1476  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

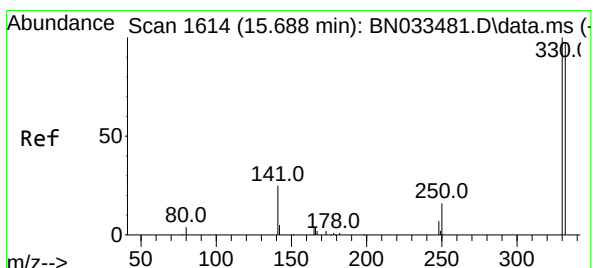
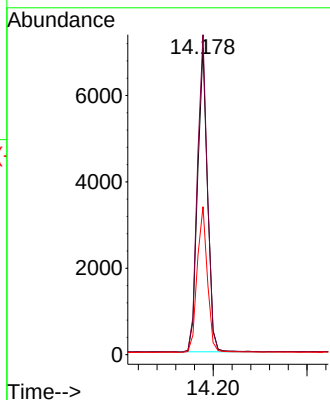
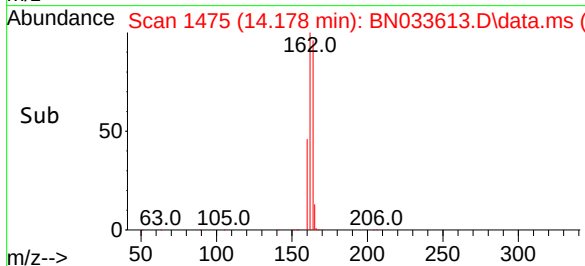
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:164 Resp: 10375  
Ion Ratio Lower Upper  
164 100  
162 104.3 83.5 125.3  
160 48.2 40.2 60.4

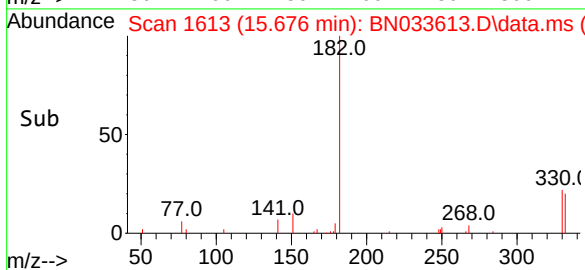
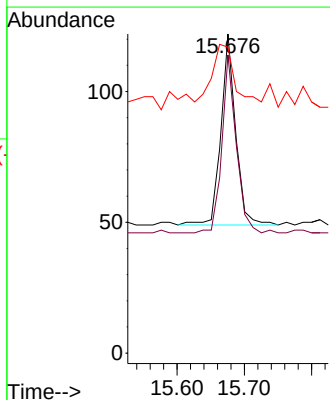
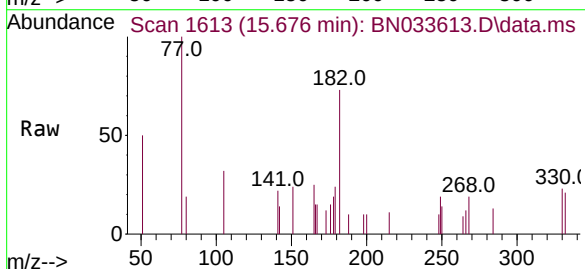
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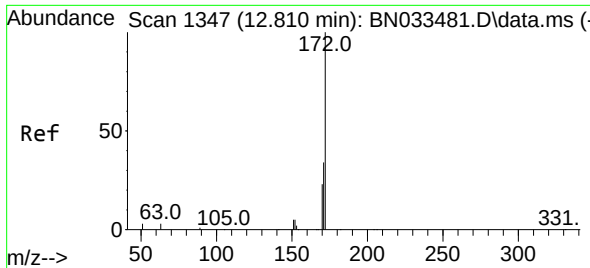
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#14  
2,4,6-Tribromophenol  
Concen: 0.020 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

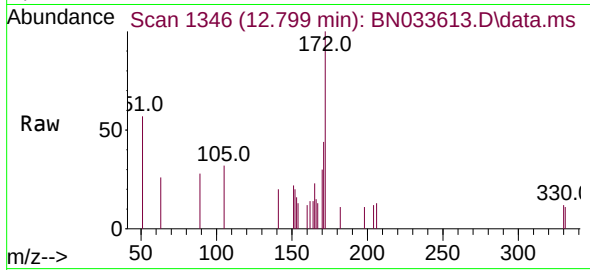
Tgt Ion:330 Resp: 110  
Ion Ratio Lower Upper  
330 100  
332 90.9 77.5 116.3  
141 48.2 33.9 50.9





#15  
2-Fluorobiphenyl  
Concen: 0.015 ng  
RT: 12.799 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

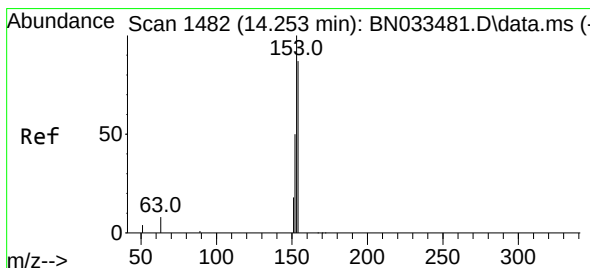
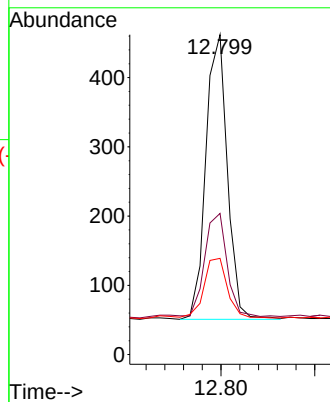
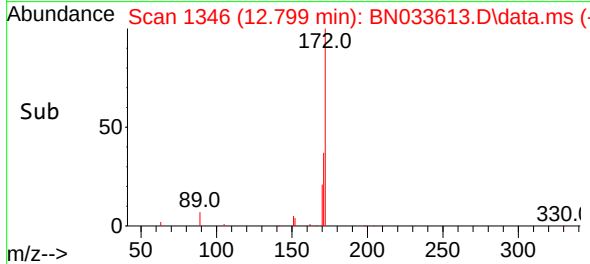
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:172 Resp: 654  
Ion Ratio Lower Upper  
172 100  
171 44.2 27.7 41.5  
170 30.1 18.3 27.5

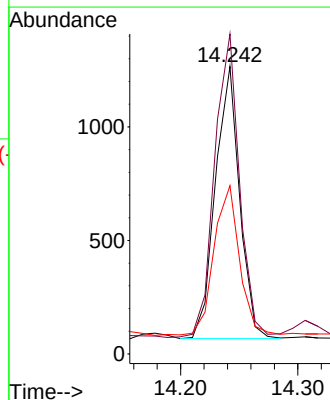
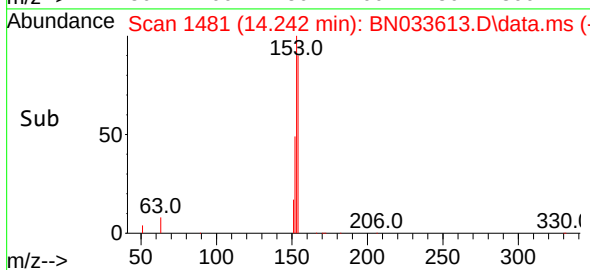
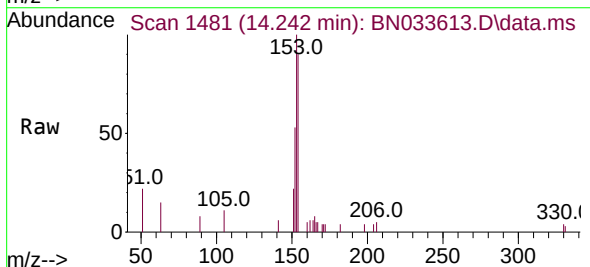
Manual Integrations  
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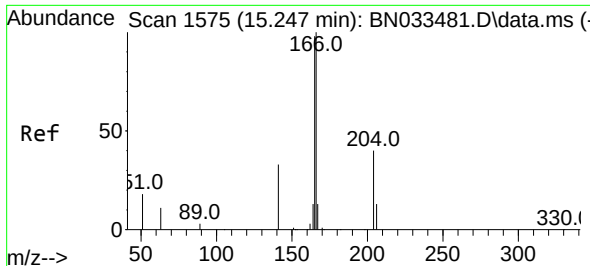
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#17  
Acenaphthene  
Concen: 0.054 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

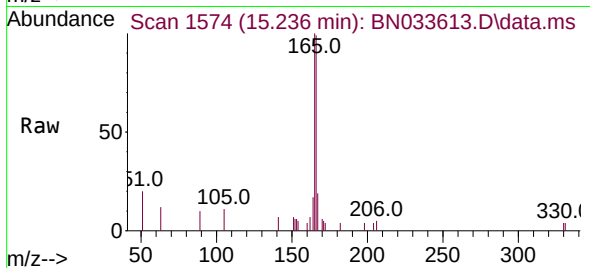
Tgt Ion:154 Resp: 1716  
Ion Ratio Lower Upper  
154 100  
153 114.5 89.0 133.6  
152 58.3 45.2 67.8





#18  
Fluorene  
Concen: 0.048 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

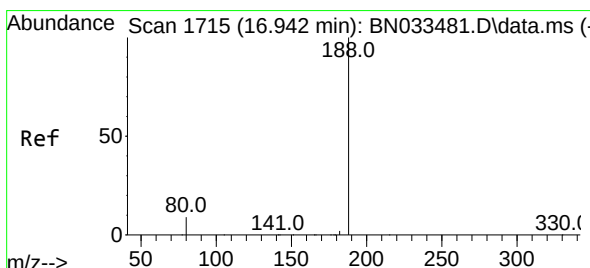
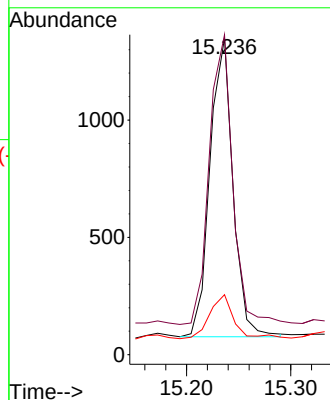
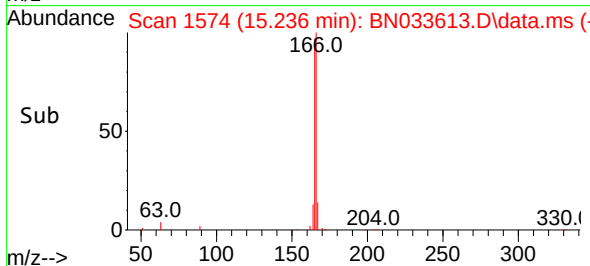
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:166 Resp: 1952  
Ion Ratio Lower Upper  
166 100  
165 98.0 78.2 117.4  
167 15.7 10.6 16.0

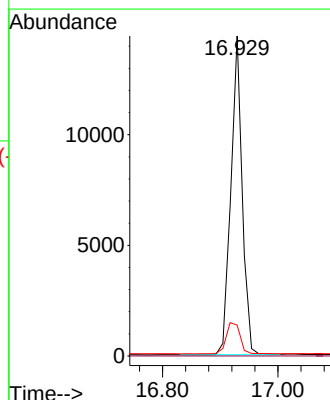
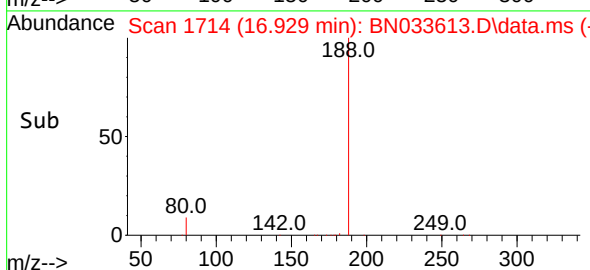
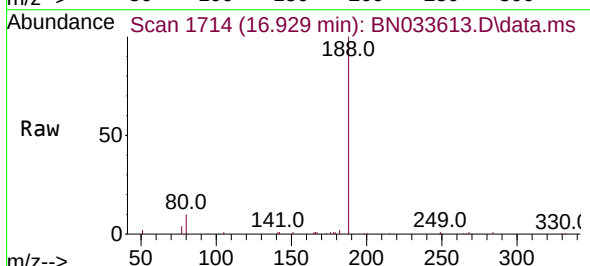
Manual Integrations  
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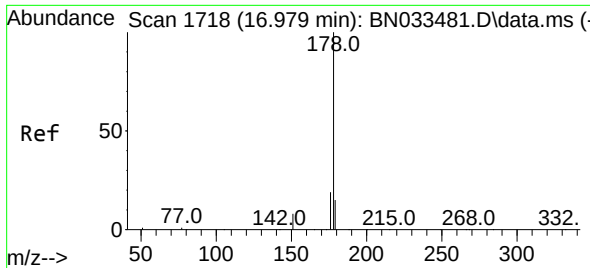
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1714  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

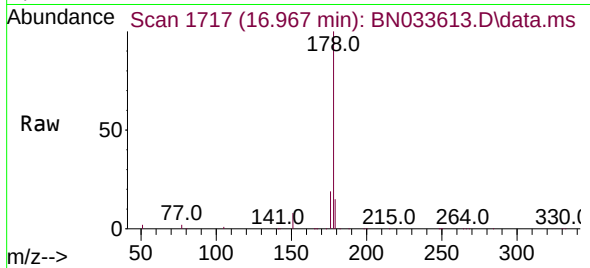
Tgt Ion:188 Resp: 19734  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 9.7 7.8 11.8





#25  
Phenanthrene  
Concen: 0.849 ng  
RT: 16.967 min Scan# 1717  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

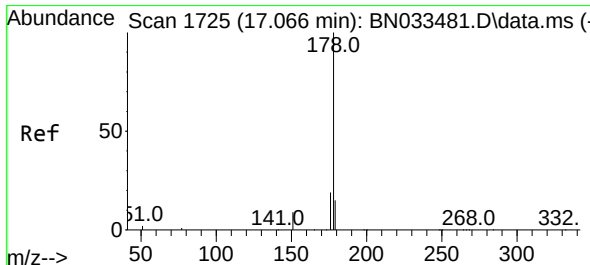
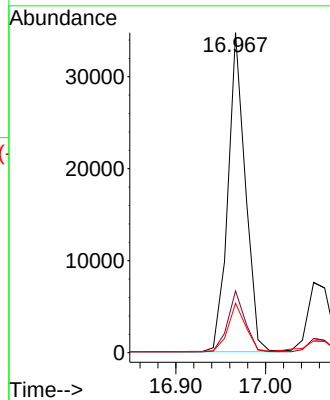
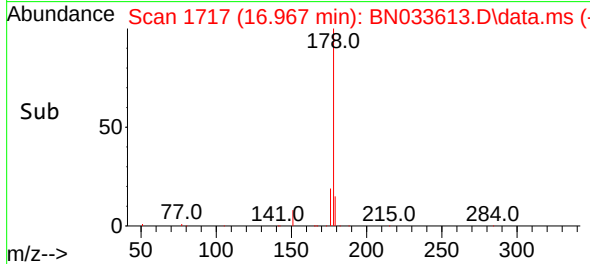
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:178 Resp: 46598  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.3 22.9  
179 15.3 12.3 18.5

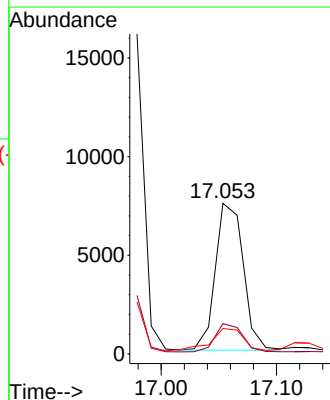
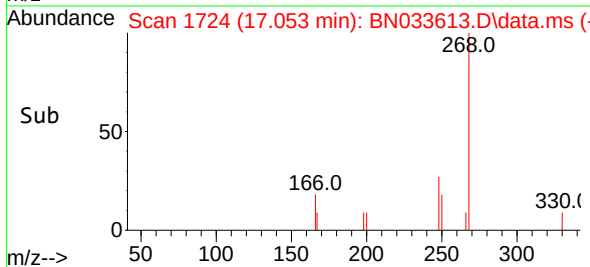
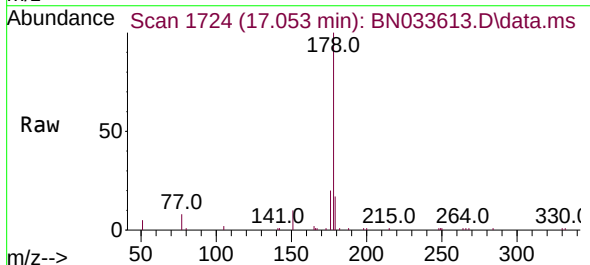
Manual Integrations  
APPROVED

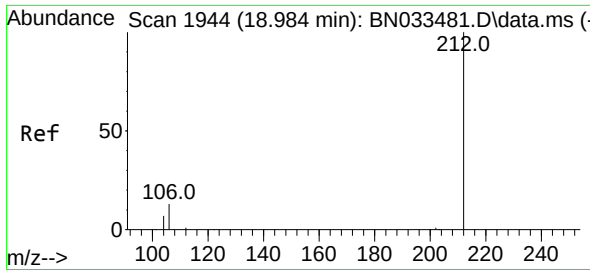
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#26  
Anthracene  
Concen: 0.258 ng  
RT: 17.053 min Scan# 1724  
Delta R.T. -0.012 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

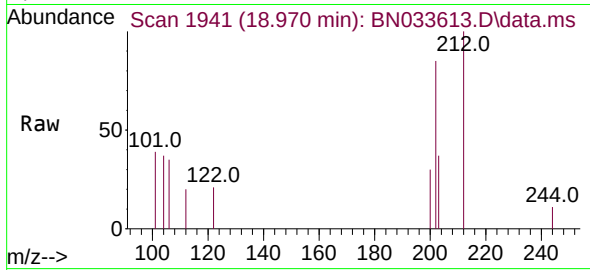
Tgt Ion:178 Resp: 12522  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.0 22.6  
179 17.6 12.4 18.6





#27  
Fluoranthene-d10  
Concen: 0.012 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

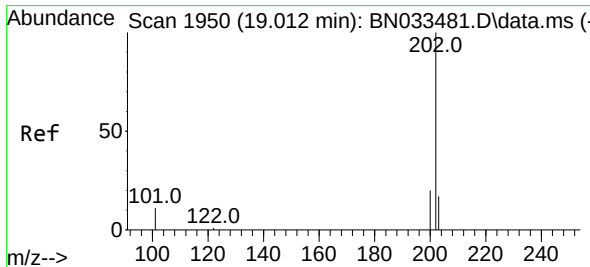
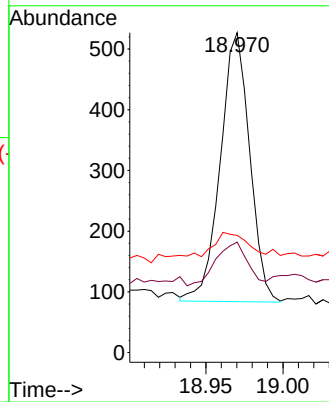
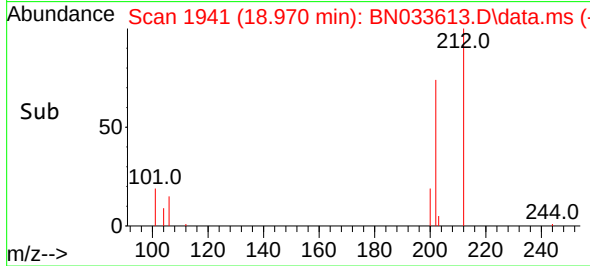
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:212 Resp: 588  
Ion Ratio Lower Upper  
212 100  
106 17.3 12.3 18.5  
104 10.0 7.0 10.4

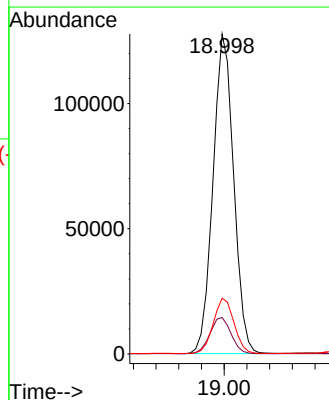
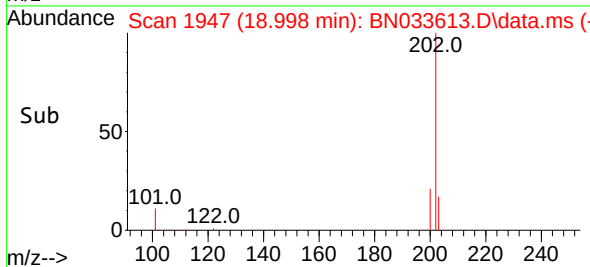
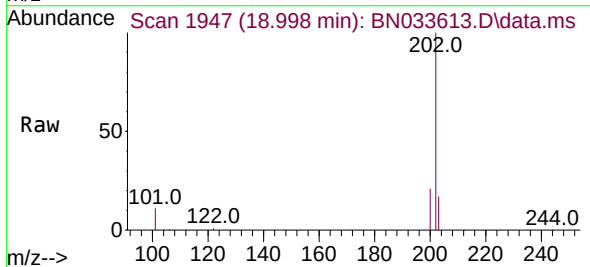
Manual Integrations  
APPROVED

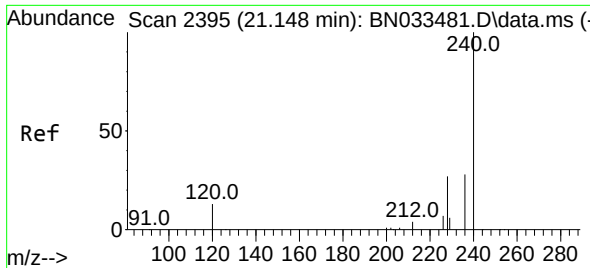
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#28  
Fluoranthene  
Concen: 2.655 ng  
RT: 18.998 min Scan# 1947  
Delta R.T. -0.005 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

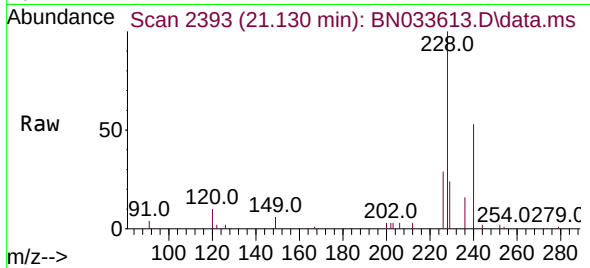
Tgt Ion:202 Resp: 161055  
Ion Ratio Lower Upper  
202 100  
101 11.6 9.5 14.3  
203 17.3 13.8 20.6





#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.130 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

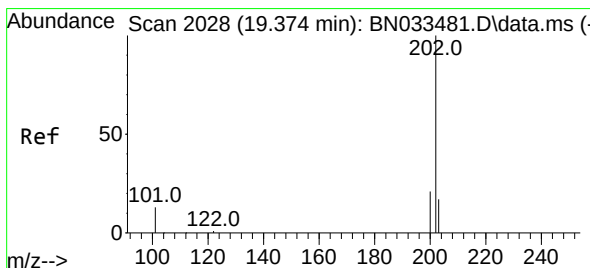
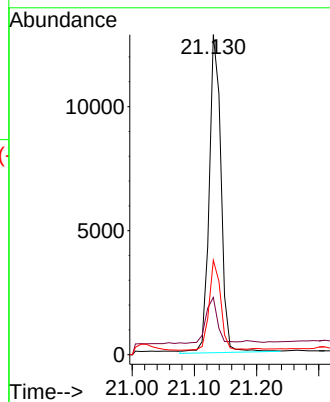
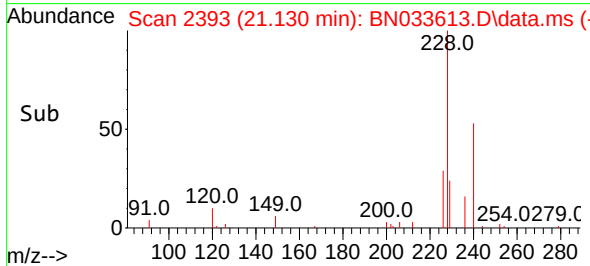
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:240 Resp: 1688  
Ion Ratio Lower Upper  
240 100  
120 17.9 12.4 18.6  
236 29.5 23.0 34.6

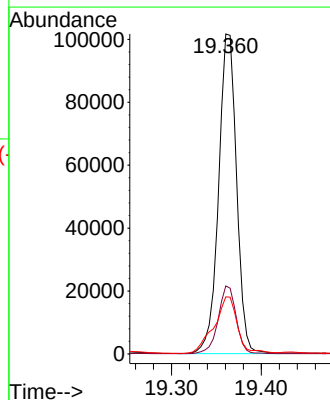
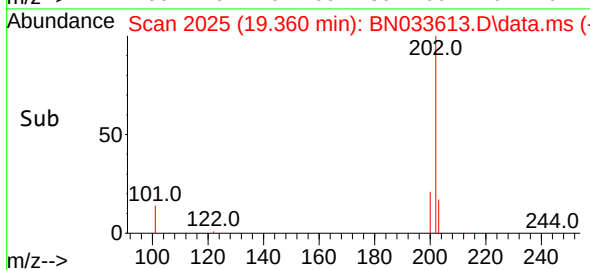
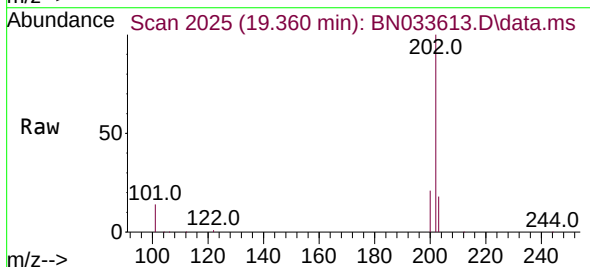
Manual Integrations  
APPROVED

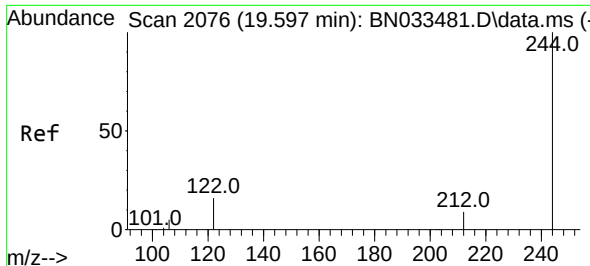
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#30  
Pyrene  
Concen: 1.868 ng  
RT: 19.360 min Scan# 2025  
Delta R.T. -0.005 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

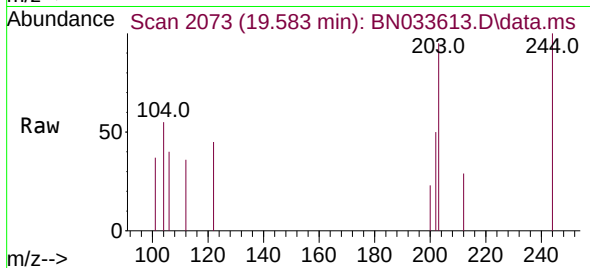
Tgt Ion:202 Resp: 140751  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.6 24.8  
203 22.7 14.2 21.4#





#31  
Terphenyl-d14  
Concen: 0.011 ng  
RT: 19.583 min Scan# 2073  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

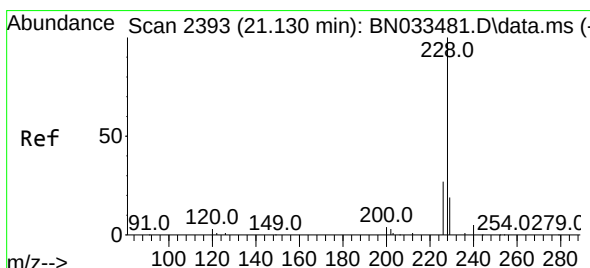
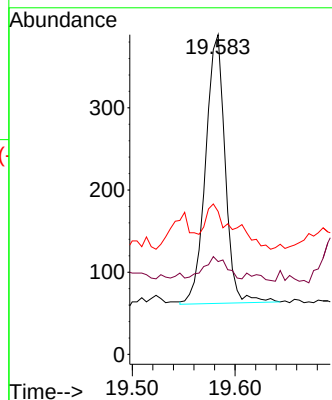
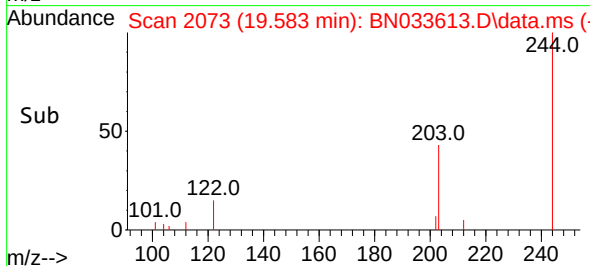
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:244 Resp: 43  
Ion Ratio Lower Upper  
244 100  
212 29.0 7.8 11.6  
122 44.7 13.3 19.9

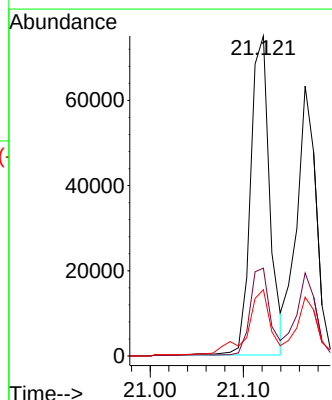
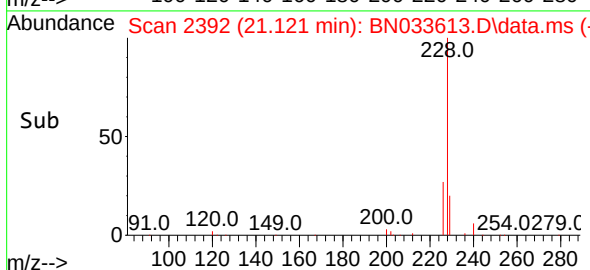
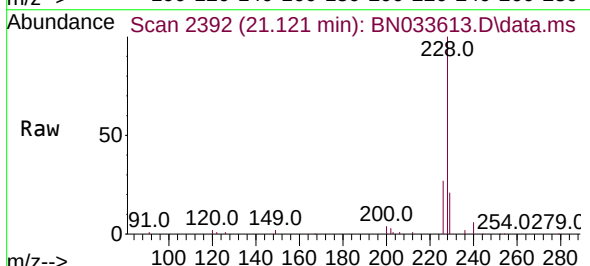
Manual Integrations  
APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

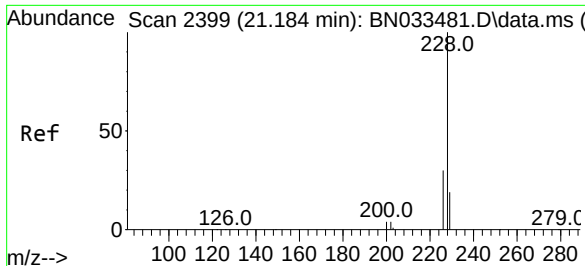


#32  
Benzo(a)anthracene  
Concen: 1.750 ng  
RT: 21.121 min Scan# 2392  
Delta R.T. -0.000 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

Tgt Ion:228 Resp: 106829  
Ion Ratio Lower Upper  
228 100  
226 27.5 21.8 32.6  
229 20.7 15.8 23.6

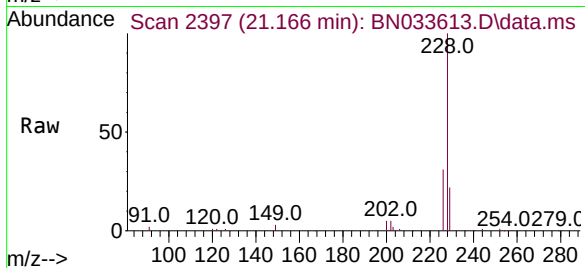






#33  
Chrysene  
Concen: 1.502 ng  
RT: 21.166 min Scan# 2111  
Delta R.T. -0.009 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

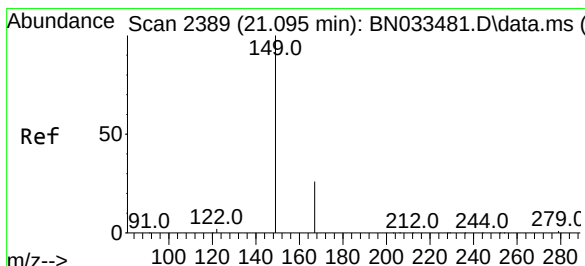
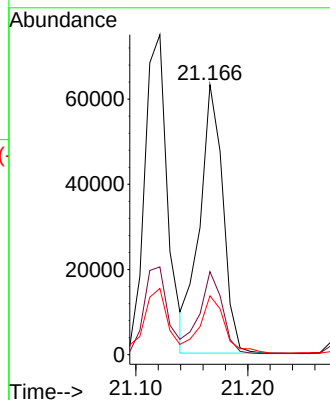
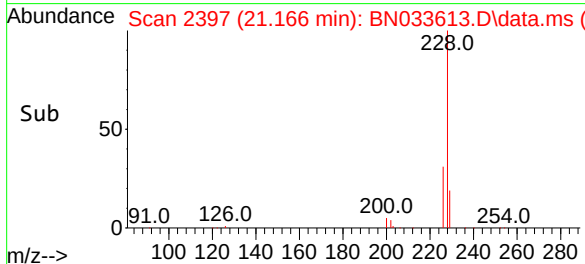
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion: 228 Resp: 9111  
Ion Ratio Lower Upper  
228 100  
226 30.7 23.8 35.8  
229 21.8 15.6 23.4

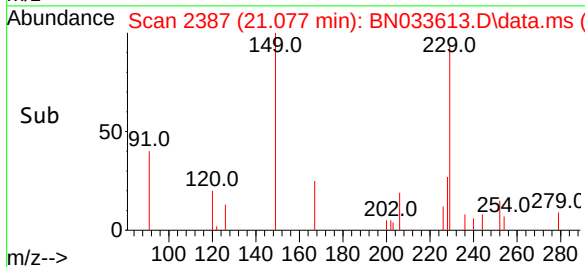
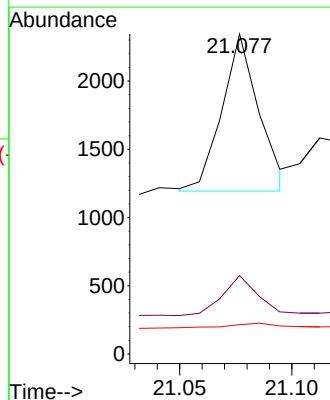
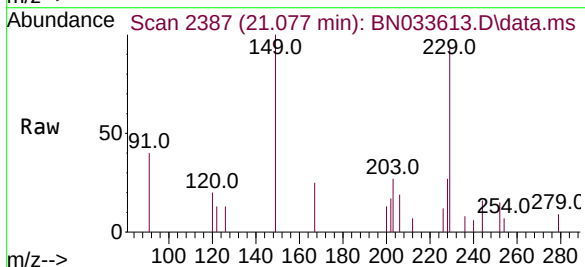
Manual Integrations  
**APPROVED**

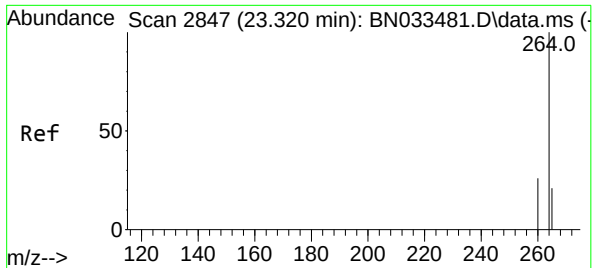
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.034 ng m  
RT: 21.077 min Scan# 2387  
Delta R.T. -0.009 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

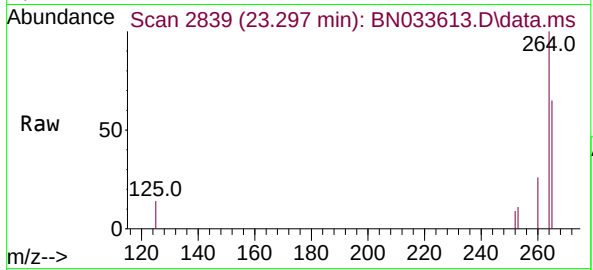
Tgt Ion: 149 Resp: 1317  
Ion Ratio Lower Upper  
149 100  
167 150.3 21.5 32.3#  
279 97.4 2.2 3.2#





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.297 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

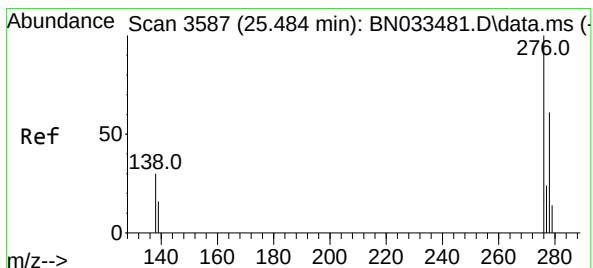
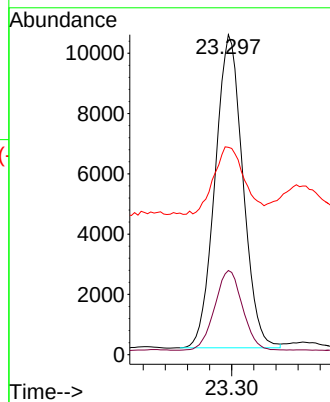
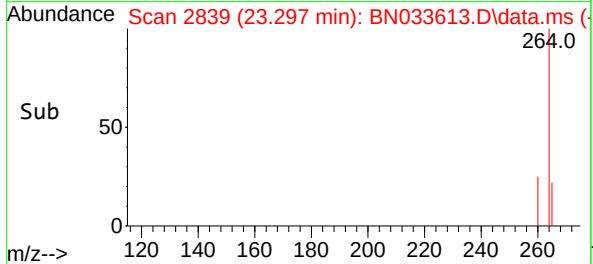
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:264 Resp: 18150  
Ion Ratio Lower Upper  
264 100  
260 26.3 20.8 31.2  
265 64.8 52.2 78.2

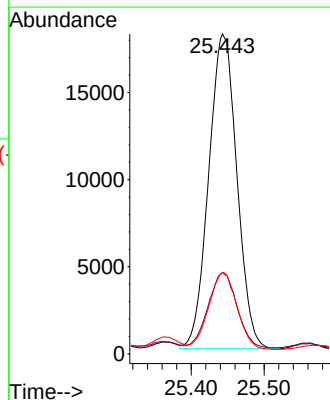
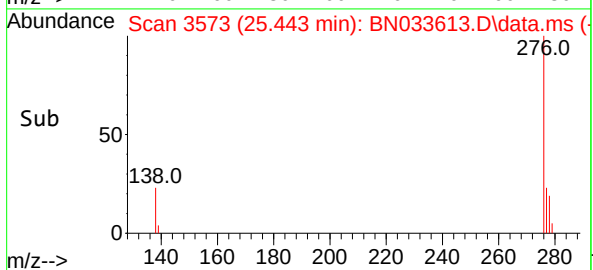
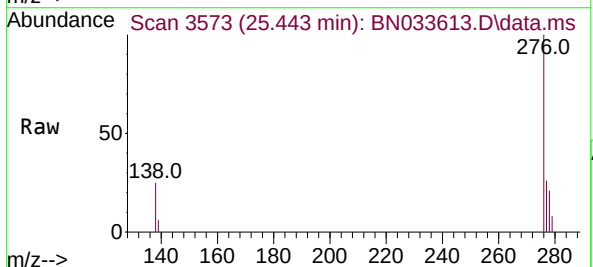
Manual Integrations  
**APPROVED**

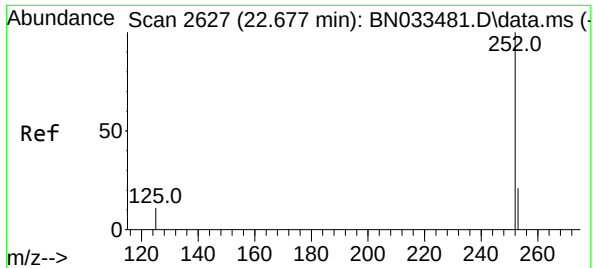
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.644 ng  
RT: 25.443 min Scan# 3573  
Delta R.T. -0.006 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

Tgt Ion:276 Resp: 48539  
Ion Ratio Lower Upper  
276 100  
138 24.4 24.4 36.6#  
277 24.6 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 1.849 ng

RT: 22.657 min Scan# 2620

Delta R.T. -0.003 min

Lab File: BN033613.D

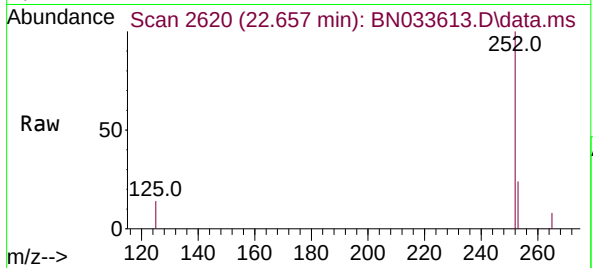
Acq: 24 Aug 2024 05:57

Instrument :

BNA\_N

ClientSampleId :

S-905-J-SO-0-0.5-081924-FDDL

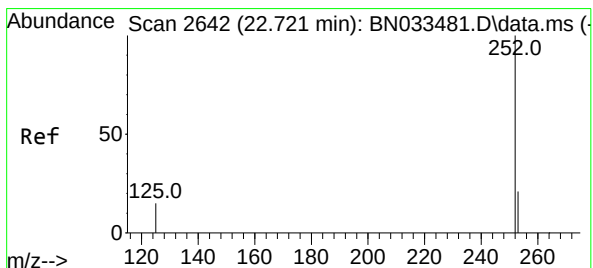
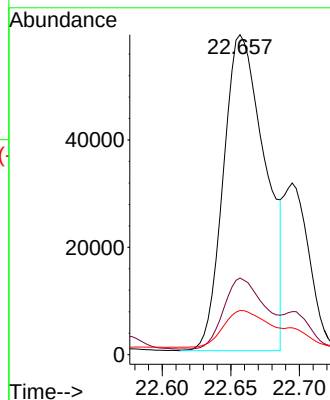


| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.0  | 19.8  | 29.8  |
| 125     | 13.8  | 13.9  | 20.9  |

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#38

Benzo(k)fluoranthene

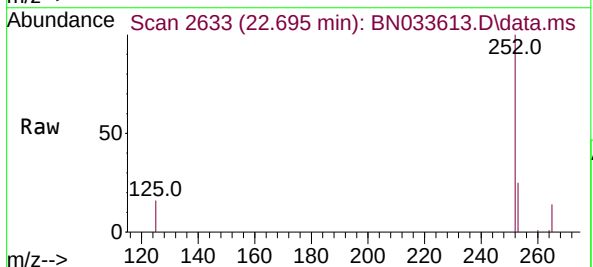
Concen: 0.619 ng m

RT: 22.695 min Scan# 2633

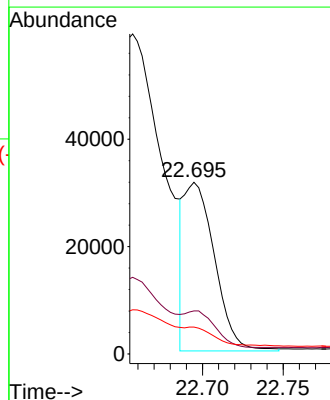
Delta R.T. -0.009 min

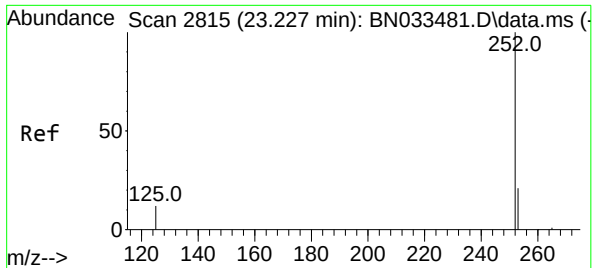
Lab File: BN033613.D

Acq: 24 Aug 2024 05:57



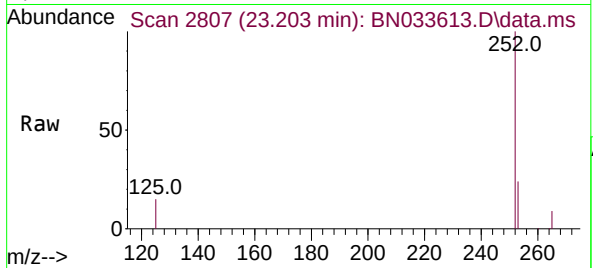
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.0  | 19.8  | 29.8  |
| 125     | 15.6  | 15.8  | 23.8  |





#39  
Benzo(a)pyrene  
Concen: 1.524 ng m  
RT: 23.203 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

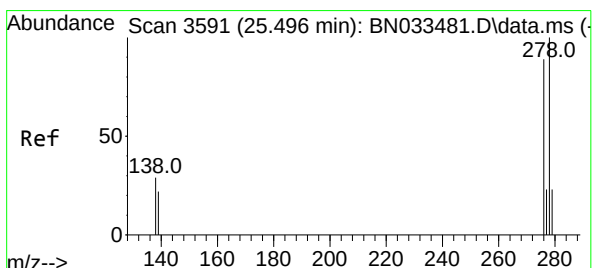
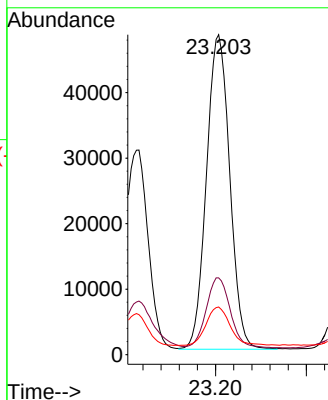
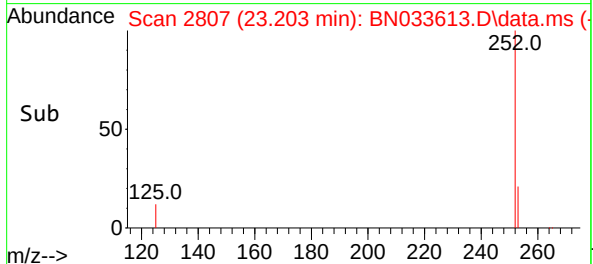
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:252 Resp: 85490  
Ion Ratio Lower Upper  
252 100  
253 24.0 21.5 32.3  
125 14.9 17.0 25.4

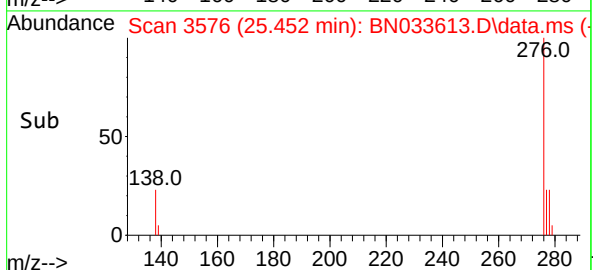
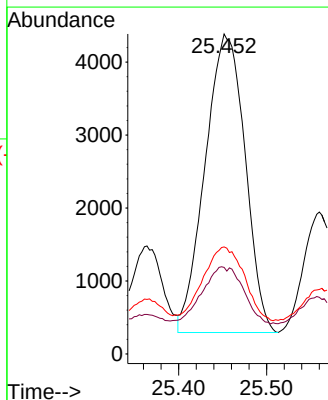
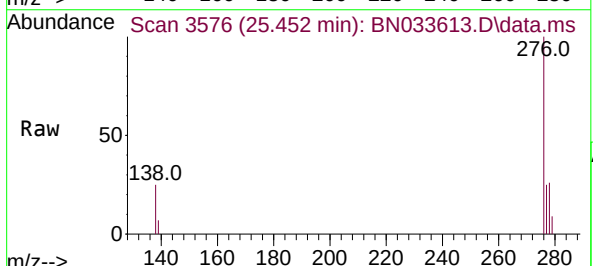
Manual Integrations  
APPROVED

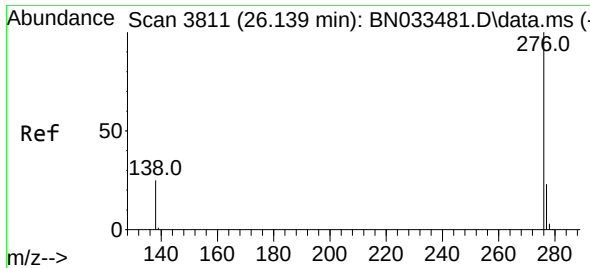
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#40  
Dibenzo(a,h)anthracene  
Concen: 0.214 ng  
RT: 25.452 min Scan# 3576  
Delta R.T. -0.018 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

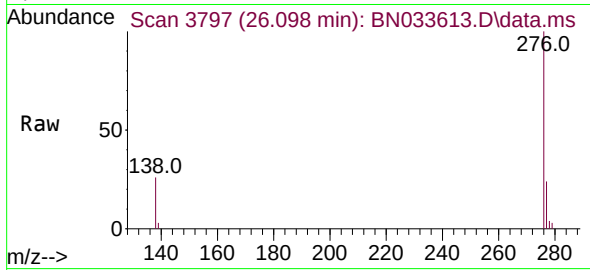
Tgt Ion:278 Resp: 12902  
Ion Ratio Lower Upper  
278 100  
139 27.1 19.1 28.7  
279 33.4 21.0 31.4





#41  
Benzo(g,h,i)perylene  
Concen: 0.670 ng  
RT: 26.098 min Scan# 31  
Delta R.T. -0.006 min  
Lab File: BN033613.D  
Acq: 24 Aug 2024 05:57

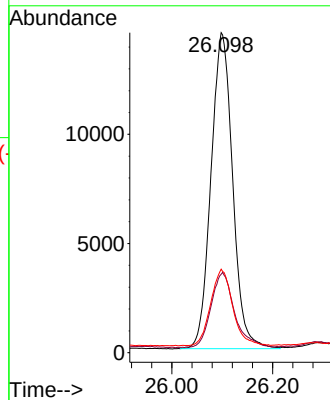
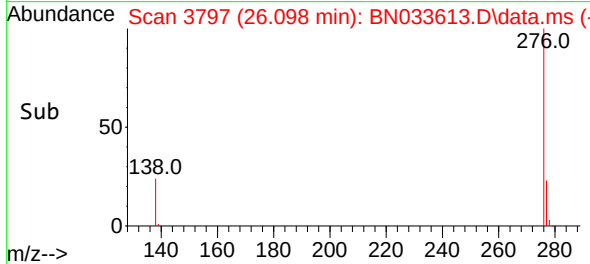
Instrument :  
BNA\_N  
ClientSampleId :  
S-905-J-SO-0-0.5-081924-FDDL



Tgt Ion:276 Resp: 43198  
Ion Ratio Lower Upper  
276 100  
277 24.5 19.7 29.5  
138 26.1 21.8 32.6

Manual Integrations  
APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-928-K1-SO-0-0.5-081924              | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-09                              | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 48                   |
| Sample Wt/Vol:     | 30.09      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033569.D        | 1         | 08/21/24 09:38 | 08/23/24 01:41 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 1.40  | U         | 1.40                | 6.90       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 1.70  | U         | 1.70                | 6.90       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 2.00  | J         | 1.30                | 6.90       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 1.10  | U         | 1.10                | 6.90       | ug/Kg             |
| 86-73-7                   | Fluorene                | 1.20  | U         | 1.20                | 6.90       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 13.0  |           | 1.30                | 6.90       | ug/Kg             |
| 120-12-7                  | Anthracene              | 2.20  | J         | 1.60                | 6.90       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 28.7  |           | 1.40                | 6.90       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 23.0  |           | 2.00                | 6.90       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 12.9  |           | 1.60                | 6.90       | ug/Kg             |
| 218-01-9                  | Chrysene                | 17.1  |           | 1.80                | 6.90       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 21.0  |           | 2.50                | 6.90       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 8.00  |           | 2.00                | 6.90       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 15.7  |           | 3.40                | 6.90       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 9.40  |           | 2.60                | 6.90       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 2.70  | J         | 2.40                | 6.90       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 11.3  |           | 2.40                | 6.90       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 4.60  | U         | 4.60                | 13.7       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.15  |           | 30 (17) - 150 (161) | 37%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.13  |           | 30 (23) - 150 (138) | 32%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.20  |           | 30 (33) - 130 (121) | 49%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.15  |           | 30 (32) - 130 (121) | 37%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.12  |           | 30 (21) - 130 (130) | 31%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 8110  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 21300 |           | 10.304              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 10500 |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 20500 |           | 16.929              |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-928-K1-SO-0-0.5-081924              | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-09                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 48                           |
| Sample Wt/Vol:     | 30.09      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :    N                       | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033569.D        | 1         | 08/21/24 09:38 | 08/23/24 01:41 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 15400 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 17300 | 23.3      |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033569.D  
Acq On : 23 Aug 2024 01:41  
Operator : MA/JU  
Sample : P3671-09  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924

Quant Time: Aug 23 02:37:20 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 8106     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.304 | 136  | 21263    | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10490    | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.929 | 188  | 20512    | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.139 | 240  | 15408    | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.300 | 264  | 17341    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.183  | 112  | 4125     | 0.160 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.729  | 99   | 5024     | 0.164 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 3434     | 0.195 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 4545     | 0.149 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 810      | 0.144 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 6379     | 0.149 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.970 | 212  | 6326     | 0.128 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.584 | 244  | 4283     | 0.122 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 16) Acenaphthylene            | 13.900 | 152  | 1331     | 0.029 | ng    | Qvalue 98 |
| 25) Phenanthrene              | 16.967 | 178  | 10734m   | 0.188 | ng    |           |
| 26) Anthracene                | 17.066 | 178  | 1598     | 0.032 | ng    | # 91      |
| 28) Fluoranthene              | 19.003 | 202  | 26129    | 0.414 | ng    | 99        |
| 30) Pyrene                    | 19.365 | 202  | 22828    | 0.332 | ng    | # 95      |
| 32) Benzo(a)anthracene        | 21.122 | 228  | 10402    | 0.187 | ng    | 93        |
| 33) Chrysene                  | 21.175 | 228  | 13676    | 0.247 | ng    | 96        |
| 34) Bis(2-ethylhexyl)phtha... | 21.077 | 149  | 2334m    | 0.066 | ng    |           |
| 36) Indeno(1,2,3-cd)pyrene    | 25.446 | 276  | 9755     | 0.136 | ng    | 95        |
| 37) Benzo(b)fluoranthene      | 22.657 | 252  | 19653    | 0.303 | ng    | # 89      |
| 38) Benzo(k)fluoranthene      | 22.698 | 252  | 7351m    | 0.115 | ng    |           |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 12177    | 0.227 | ng    | # 87      |
| 40) Dibenzo(a,h)anthracene    | 25.461 | 278  | 2251     | 0.039 | ng    | # 41      |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 10031    | 0.163 | ng    | 92        |

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



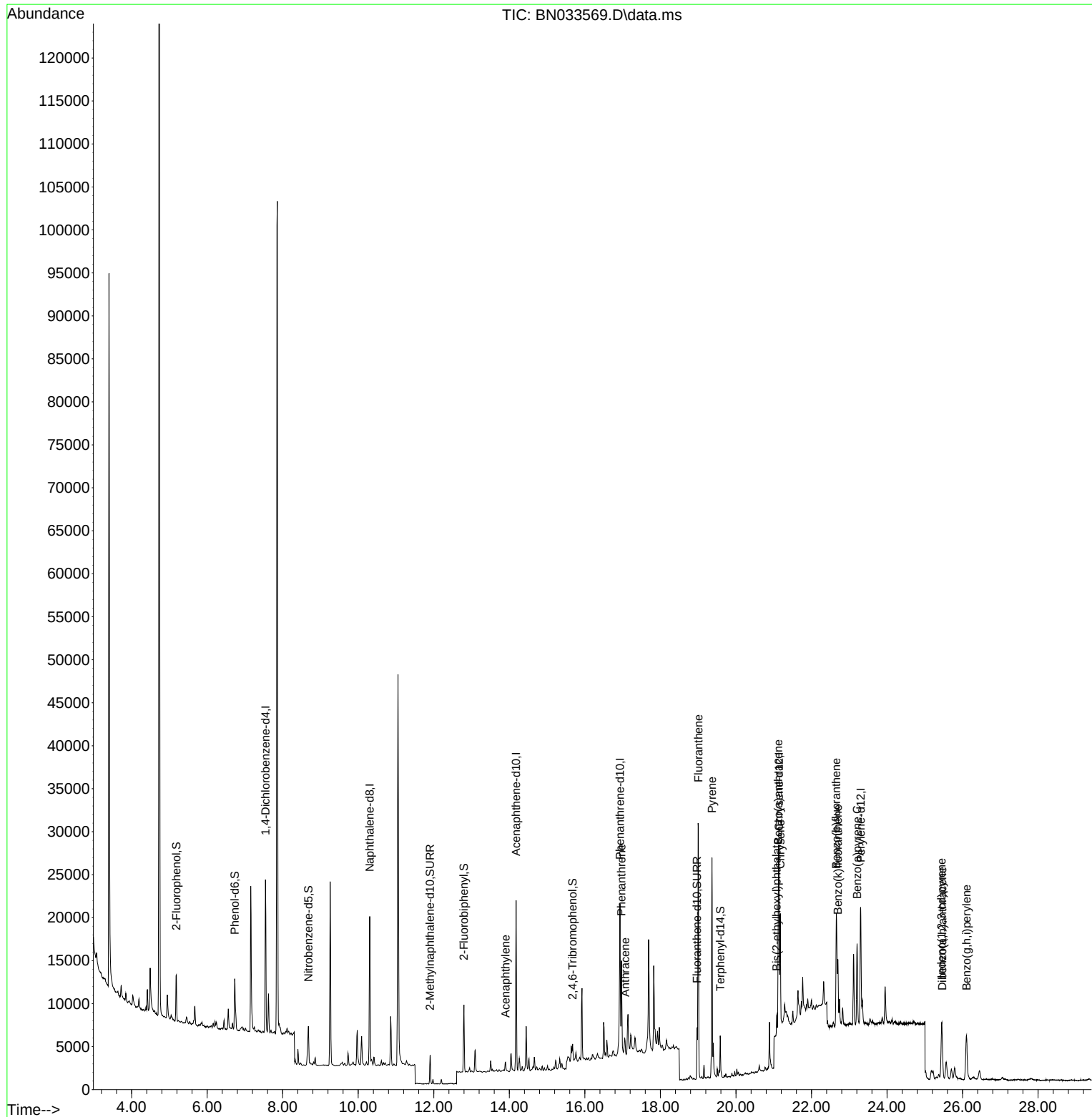
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Data File : BN033569.D  
Acq On : 23 Aug 2024 01:41  
Operator : MA/JU  
Sample : P3671-09  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

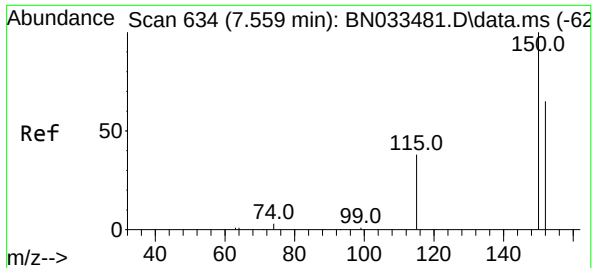
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BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924

Quant Time: Aug 23 02:37:20 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

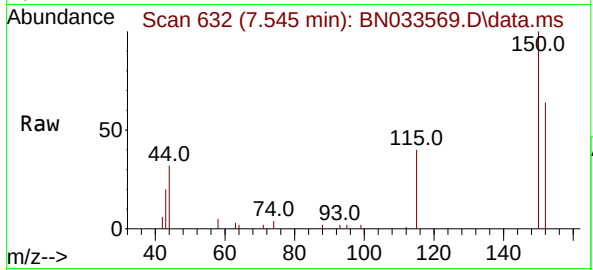
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

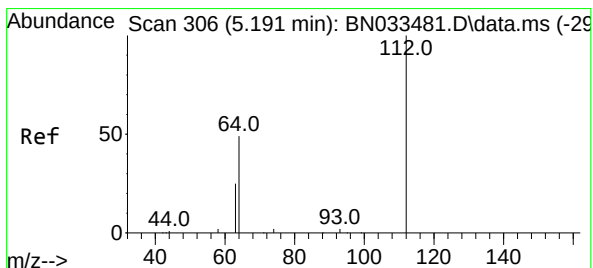
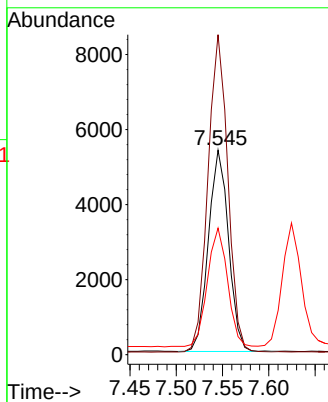
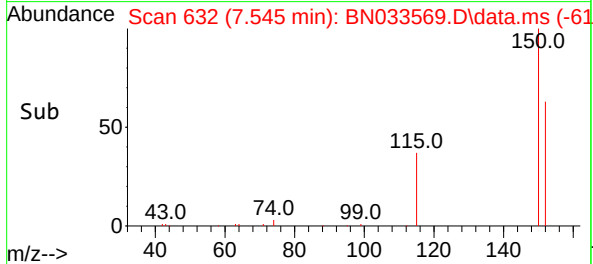
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion:152 Resp: 8100  
Ion Ratio Lower Upper  
152 100  
150 156.4 122.2 183.2  
115 61.9 47.2 70.8

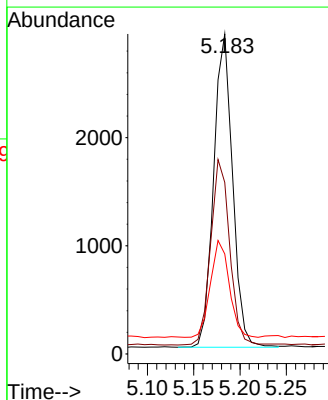
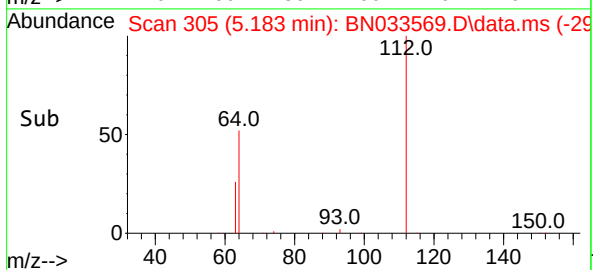
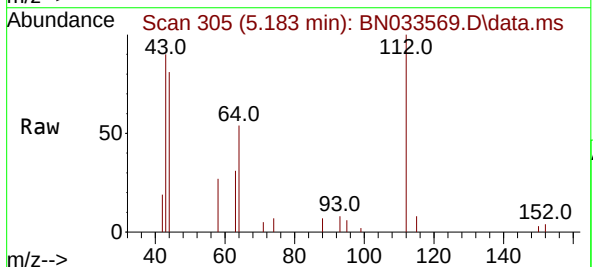
Manual Integrations  
**APPROVED**

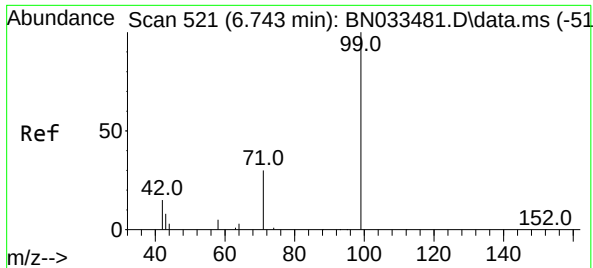
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.160 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

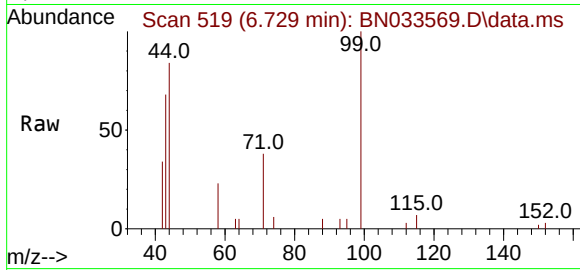
Tgt Ion:112 Resp: 4125  
Ion Ratio Lower Upper  
112 100  
64 59.8 47.1 70.7  
63 30.6 24.9 37.3





#5  
Phenol-d6  
Concen: 0.164 ng  
RT: 6.729 min Scan# 519  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

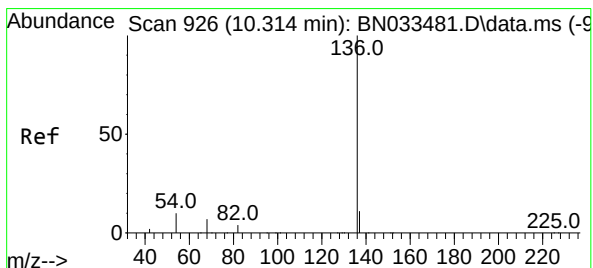
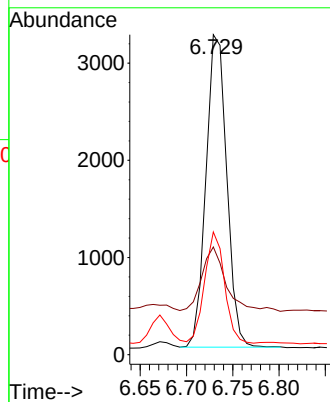
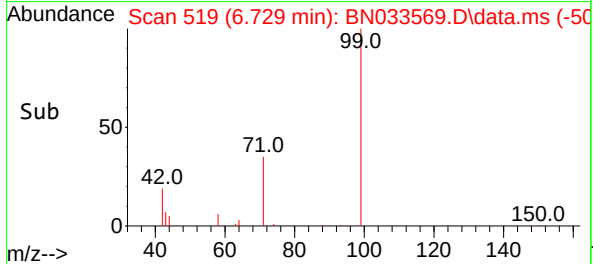
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion: 99 Resp: 5024  
Ion Ratio Lower Upper  
99 100  
42 23.9 16.6 24.8  
71 33.9 26.2 39.4

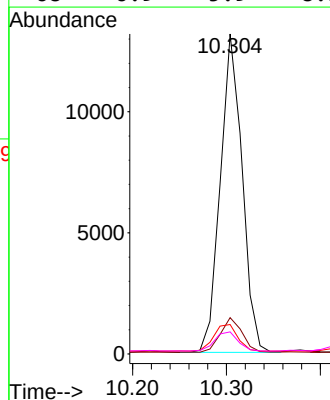
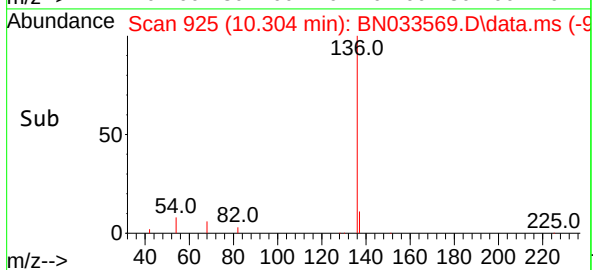
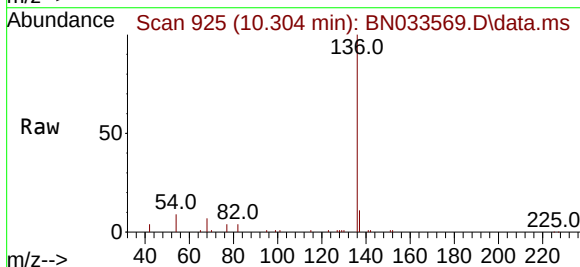
Manual Integrations  
APPROVED

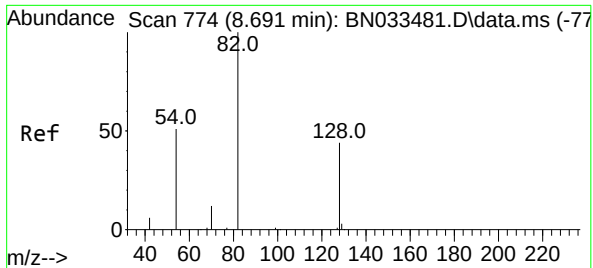
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

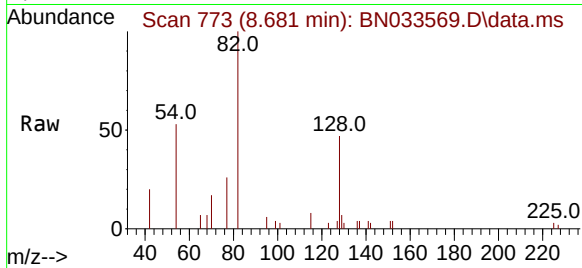
Tgt Ion:136 Resp: 21263  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 9.2 8.3 12.5  
68 6.9 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.195 ng  
RT: 8.681 min Scan# 71  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

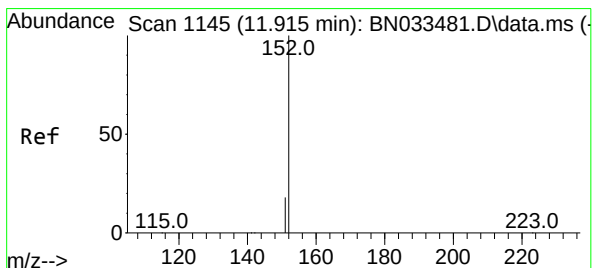
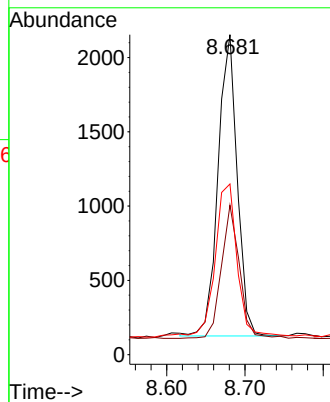
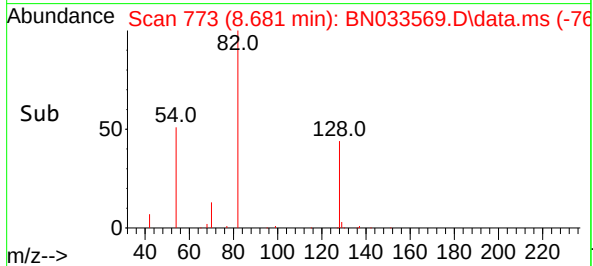
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion: 82 Resp: 3434  
Ion Ratio Lower Upper  
82 100  
128 46.7 36.0 54.0  
54 53.3 42.0 63.0

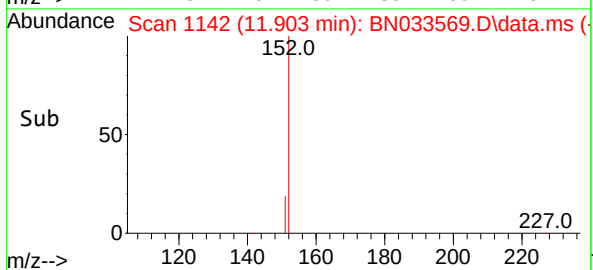
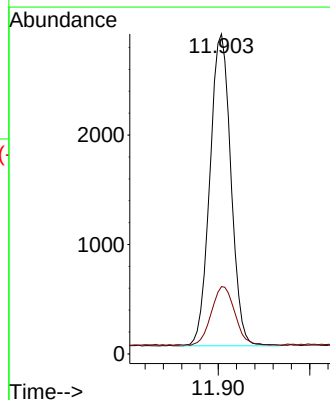
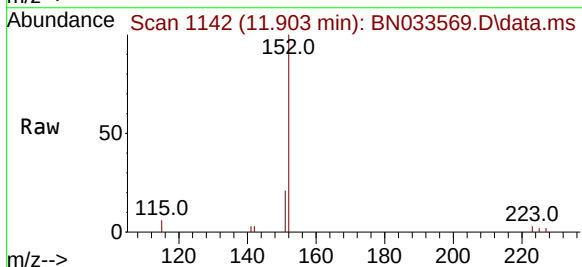
Manual Integrations  
APPROVED

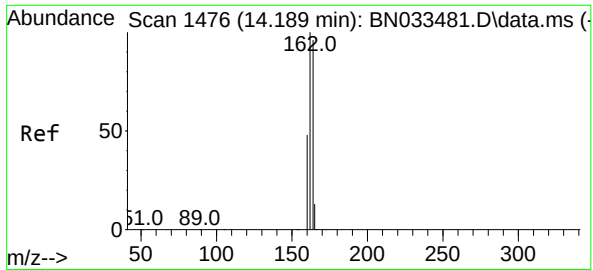
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#11  
2-Methylnaphthalene-d10  
Concen: 0.149 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

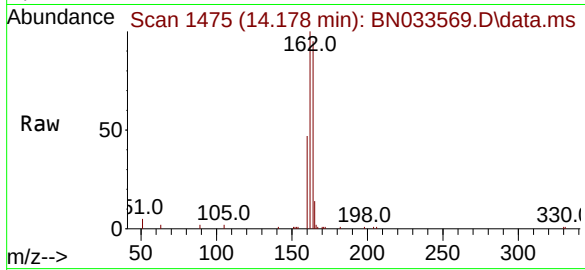
Tgt Ion:152 Resp: 4545  
Ion Ratio Lower Upper  
152 100  
151 21.3 16.6 25.0





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

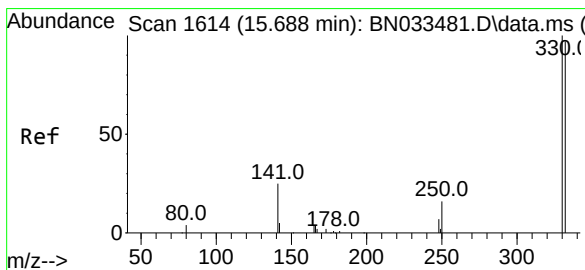
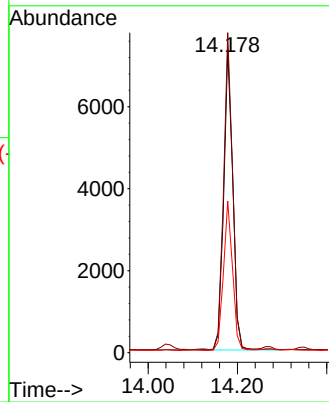
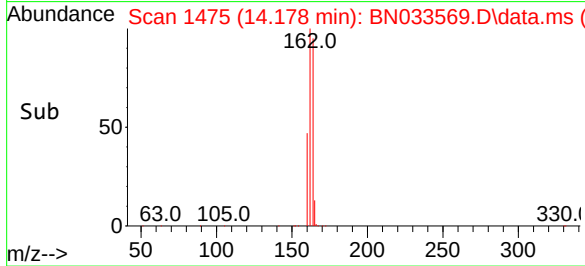
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



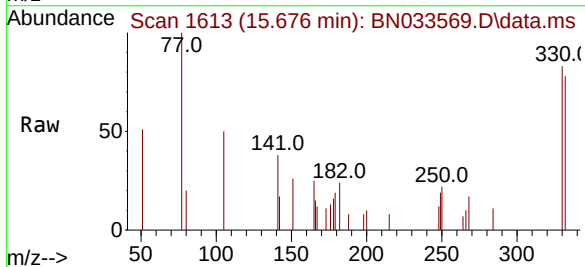
Tgt Ion:164 Resp: 10490  
Ion Ratio Lower Upper  
164 100  
162 105.6 83.5 125.3  
160 50.1 40.2 60.4

Manual Integrations  
APPROVED

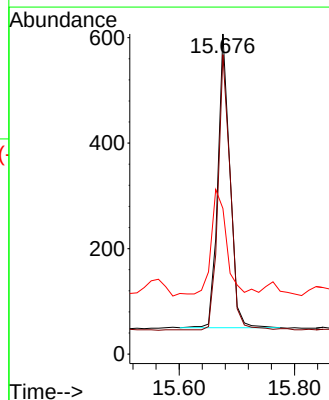
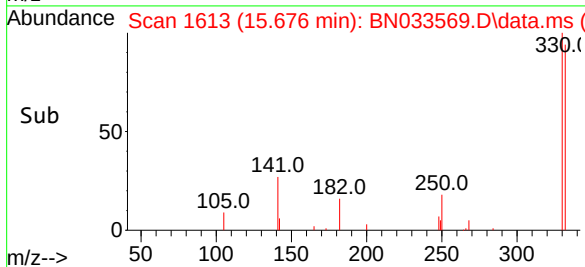
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

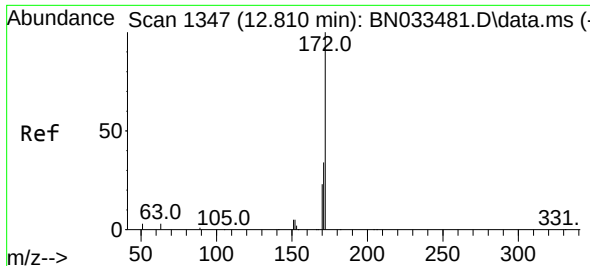


#14  
2,4,6-Tribromophenol  
Concen: 0.144 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41



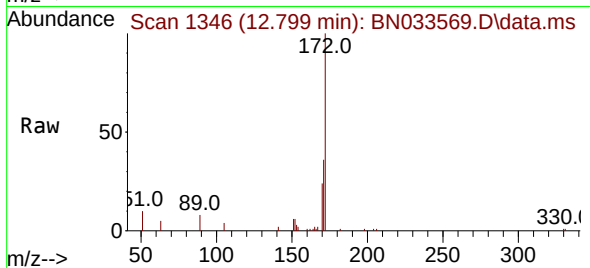
Tgt Ion:330 Resp: 810  
Ion Ratio Lower Upper  
330 100  
332 94.6 77.5 116.3  
141 44.2 33.9 50.9





#15  
2-Fluorobiphenyl  
Concen: 0.149 ng  
RT: 12.799 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

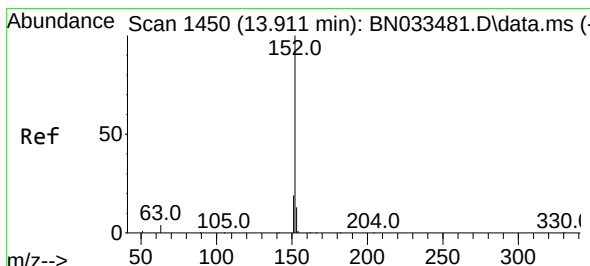
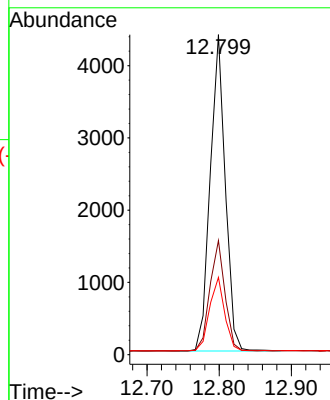
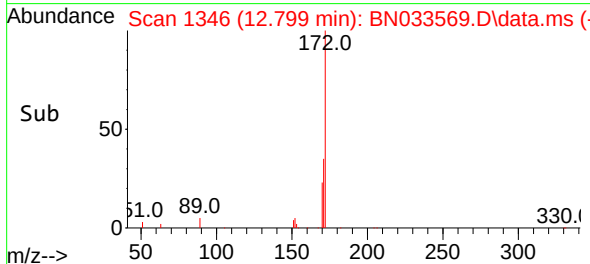
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion:172 Resp: 6379  
Ion Ratio Lower Upper  
172 100  
171 35.7 27.7 41.5  
170 24.2 18.3 27.5

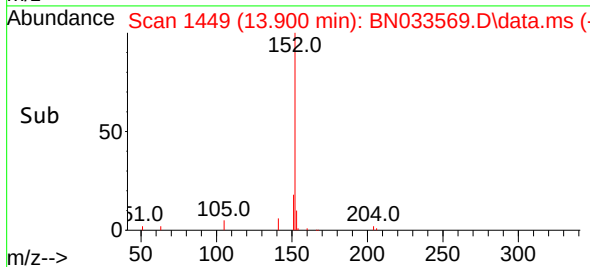
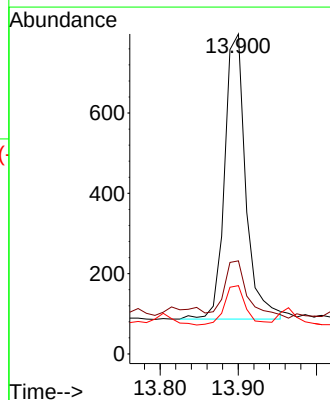
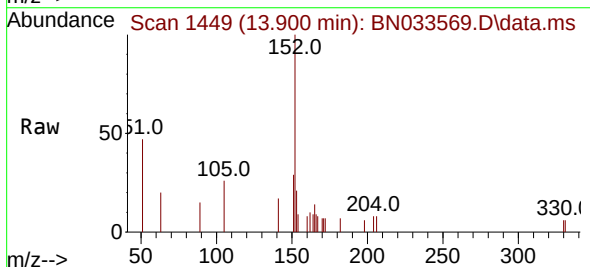
Manual Integrations  
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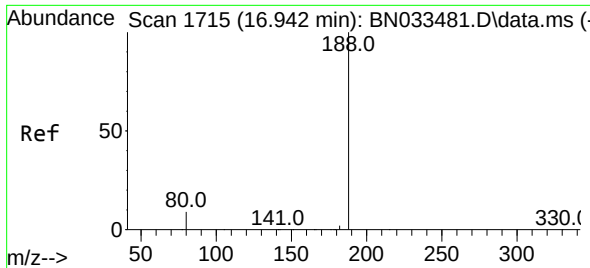
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#16  
Acenaphthylene  
Concen: 0.029 ng  
RT: 13.900 min Scan# 1449  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

Tgt Ion:152 Resp: 1331  
Ion Ratio Lower Upper  
152 100  
151 18.8 15.7 23.5  
153 14.2 10.3 15.5





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.929 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN033569.D

Acq: 23 Aug 2024 01:41

Instrument :

BNA\_N

ClientSampleId :

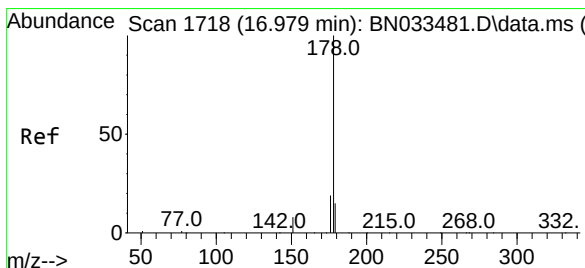
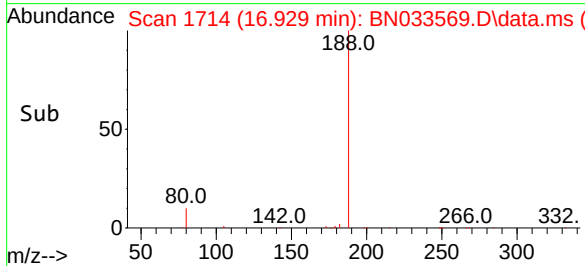
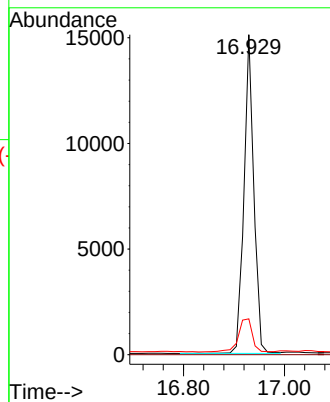
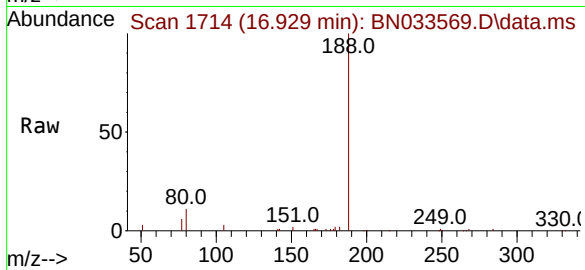
S-928-K1-SO-0-0.5-081924

|             |       |       |
|-------------|-------|-------|
| Tgt Ion:188 | Resp: | 2051  |
| Ion Ratio   | Lower | Upper |
| 188         | 100   |       |
| 94          | 0.0   | 0.0   |
| 80          | 11.2  | 7.8   |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#25

Phenanthrene

Concen: 0.188 ng m

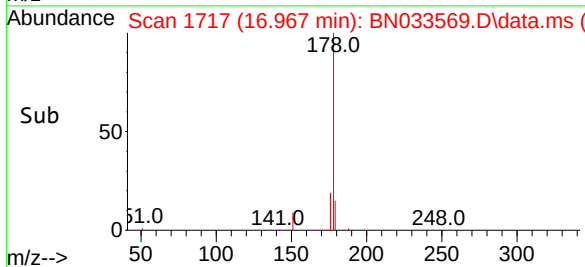
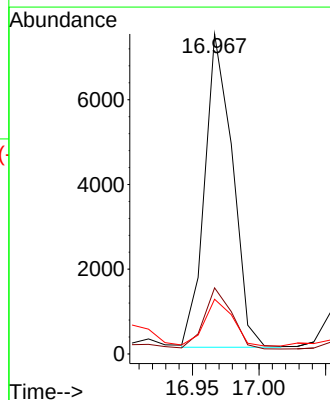
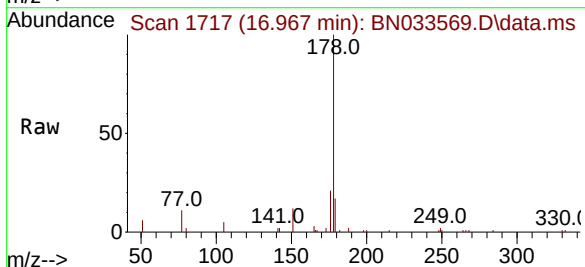
RT: 16.967 min Scan# 1717

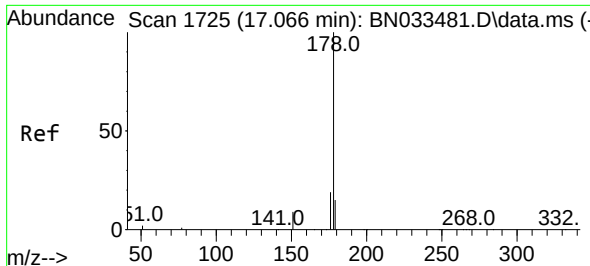
Delta R.T. 0.000 min

Lab File: BN033569.D

Acq: 23 Aug 2024 01:41

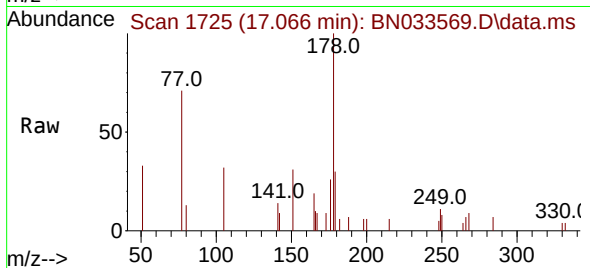
|             |       |       |
|-------------|-------|-------|
| Tgt Ion:178 | Resp: | 10734 |
| Ion Ratio   | Lower | Upper |
| 178         | 100   |       |
| 176         | 19.5  | 15.3  |
| 179         | 15.0  | 12.3  |





#26  
 Anthracene  
 Concen: 0.032 ng  
 RT: 17.066 min Scan# 11  
 Delta R.T. 0.000 min  
 Lab File: BN033569.D  
 Acq: 23 Aug 2024 01:41

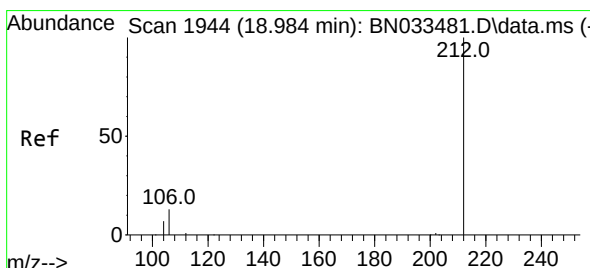
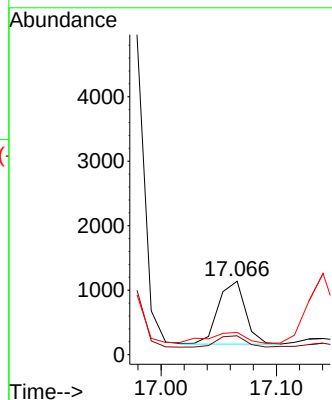
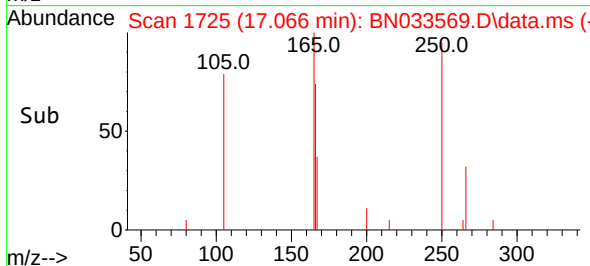
Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-928-K1-SO-0-0.5-081924



Tgt Ion:178 Resp: 1598  
 Ion Ratio Lower Upper  
 178 100  
 176 19.1 15.0 22.6  
 179 23.8 12.4 18.6

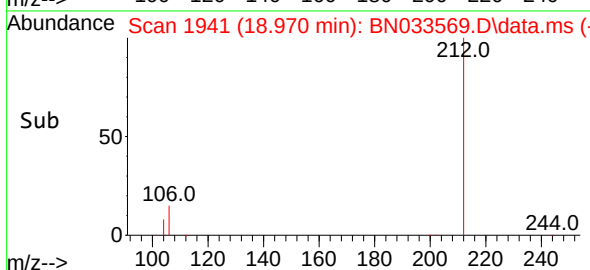
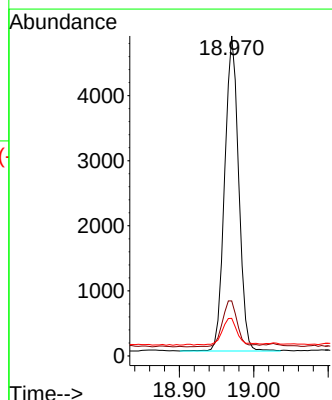
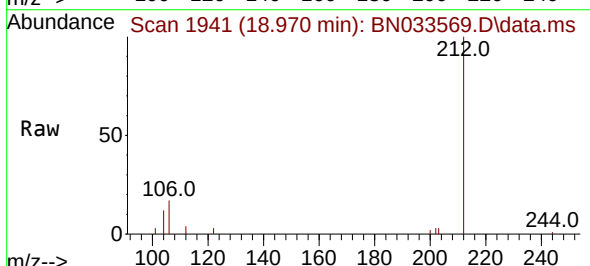
Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024  
 Supervised By :mohammad ahmed 08/24/2024

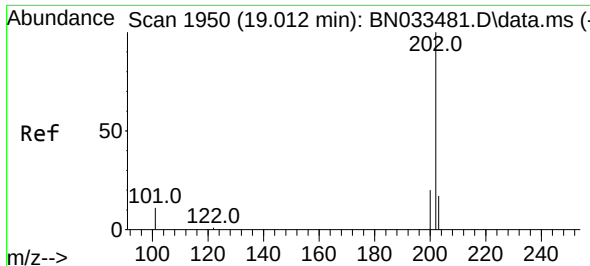


#27  
 Fluoranthene-d10  
 Concen: 0.128 ng  
 RT: 18.970 min Scan# 1941  
 Delta R.T. 0.000 min  
 Lab File: BN033569.D  
 Acq: 23 Aug 2024 01:41

Tgt Ion:212 Resp: 6326  
 Ion Ratio Lower Upper  
 212 100  
 106 15.9 12.3 18.5  
 104 9.4 7.0 10.4

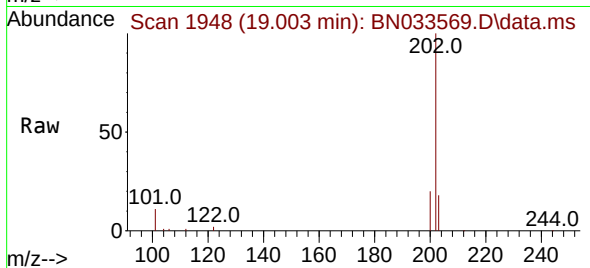






#28  
Fluoranthene  
Concen: 0.414 ng  
RT: 19.003 min Scan# 1950  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

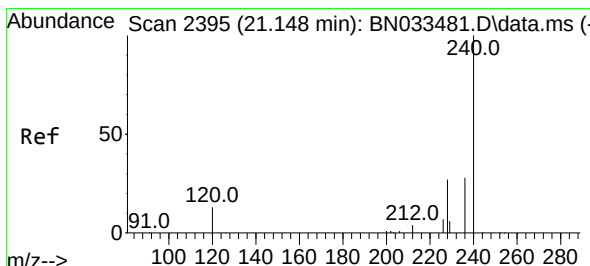
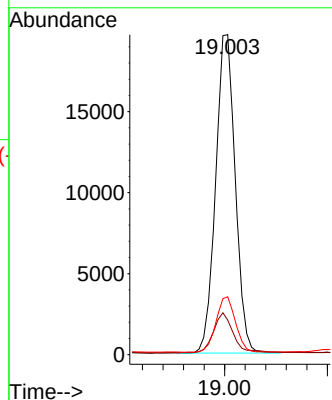
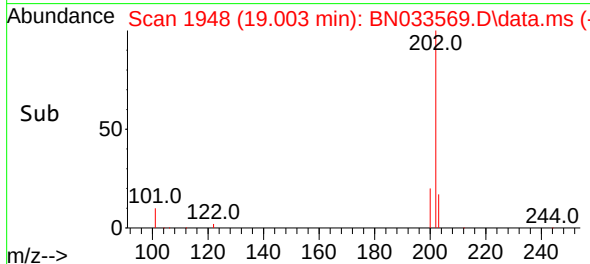
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion:202 Resp: 26129  
Ion Ratio Lower Upper  
202 100  
101 13.0 9.5 14.3  
203 17.3 13.8 20.6

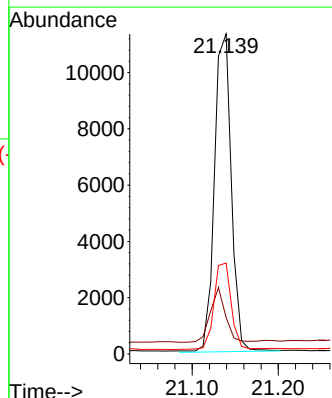
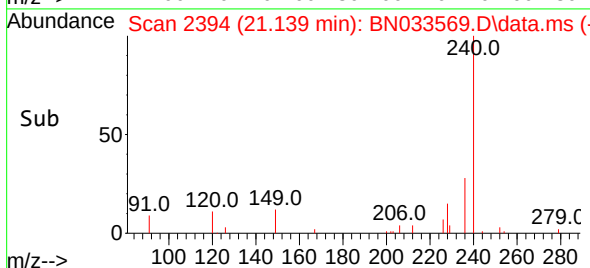
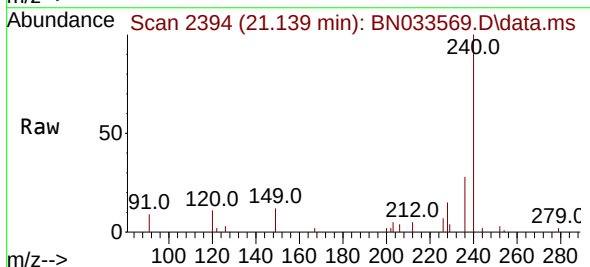
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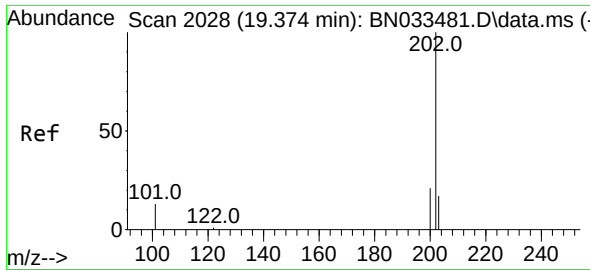
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

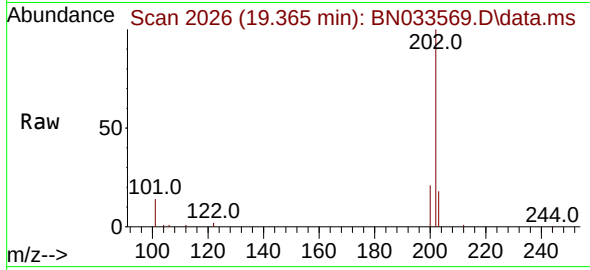
Tgt Ion:240 Resp: 15408  
Ion Ratio Lower Upper  
240 100  
120 11.4 12.4 18.6#  
236 28.4 23.0 34.6





#30  
Pyrene  
Concen: 0.332 ng  
RT: 19.365 min Scan# 2028  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

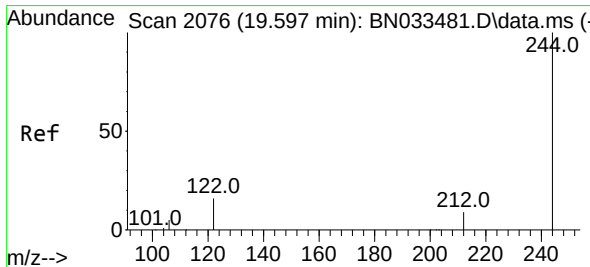
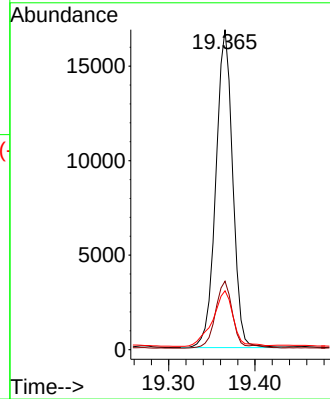
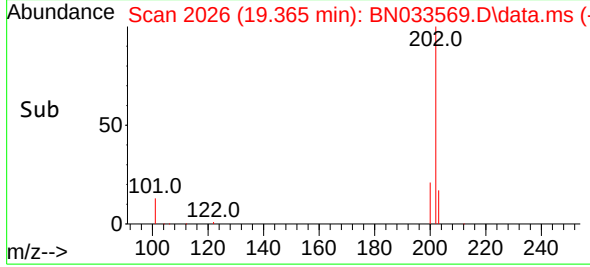
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion:202 Resp: 2282  
Ion Ratio Lower Upper  
202 100  
200 21.6 16.6 24.8  
203 21.4 14.2 21.4

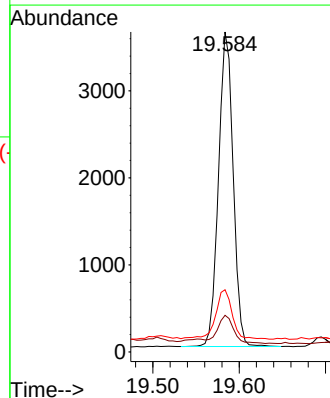
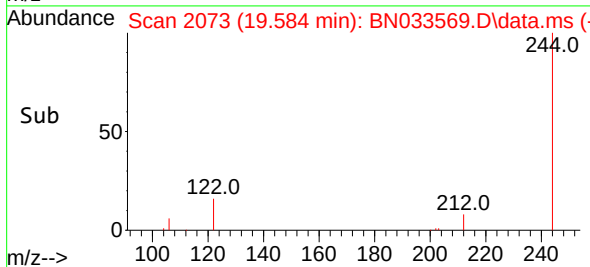
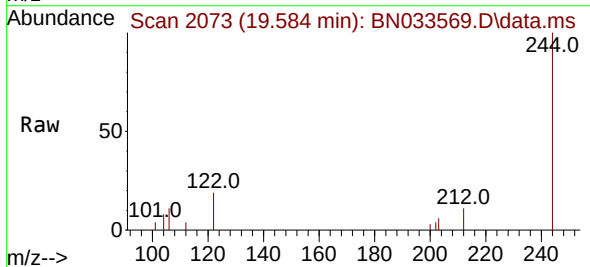
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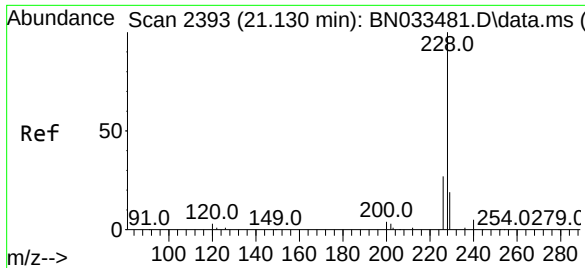
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#31  
Terphenyl-d14  
Concen: 0.122 ng  
RT: 19.584 min Scan# 2073  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

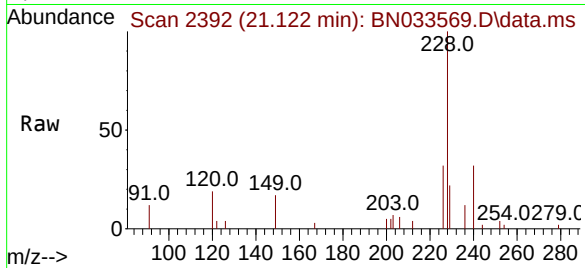
Tgt Ion:244 Resp: 4283  
Ion Ratio Lower Upper  
244 100  
212 11.5 7.8 11.6  
122 19.4 13.3 19.9





#32  
Benzo(a)anthracene  
Concen: 0.187 ng  
RT: 21.122 min Scan# 21122  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

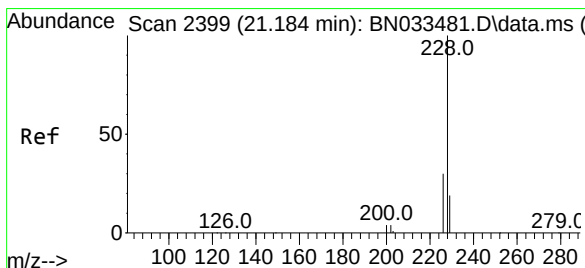
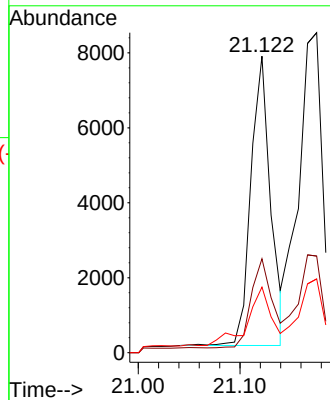
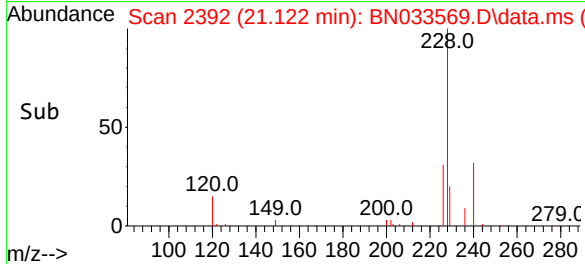
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion:228 Resp: 1040  
Ion Ratio Lower Upper  
228 100  
226 31.7 21.8 32.6  
229 22.1 15.8 23.6

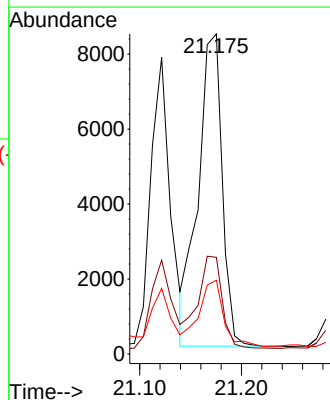
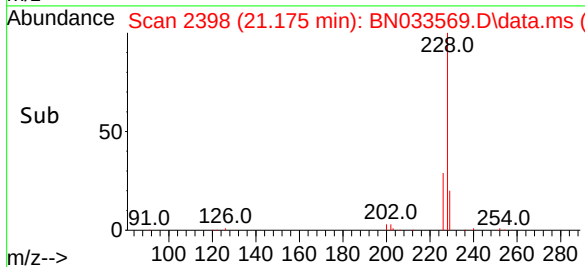
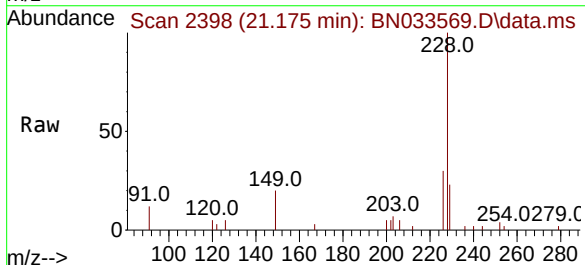
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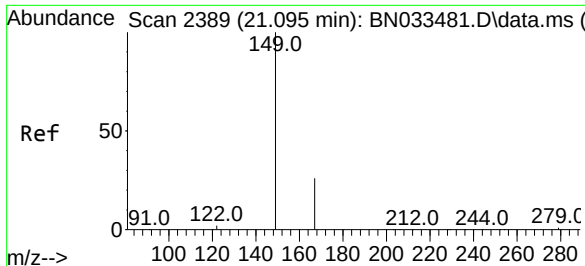
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#33  
Chrysene  
Concen: 0.247 ng  
RT: 21.175 min Scan# 2398  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

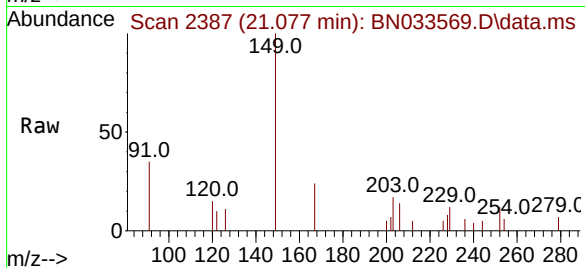
Tgt Ion:228 Resp: 13676  
Ion Ratio Lower Upper  
228 100  
226 30.2 23.8 35.8  
229 23.0 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.066 ng m  
RT: 21.077 min Scan# 2107  
Delta R.T. -0.009 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

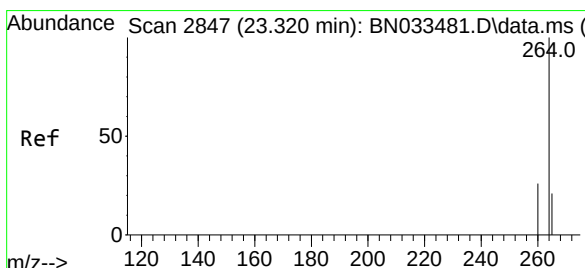
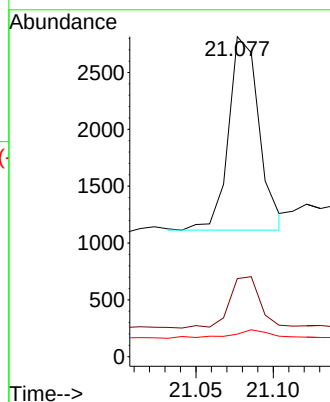
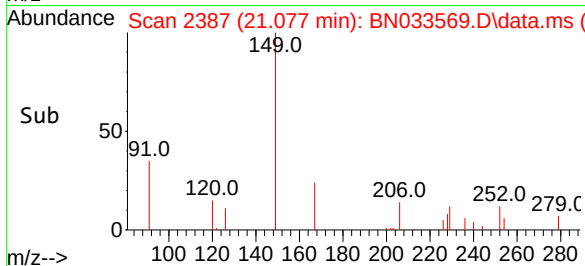
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion:149 Resp: 2334  
Ion Ratio Lower Upper  
149 100  
167 35.2 21.5 32.3  
279 60.5 2.2 3.2

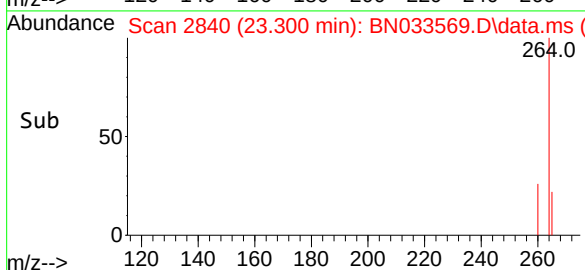
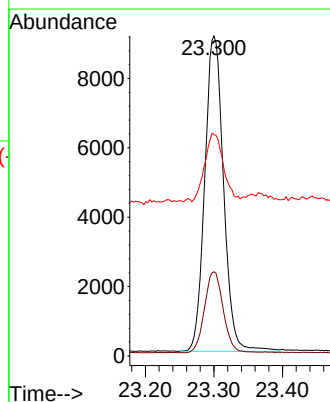
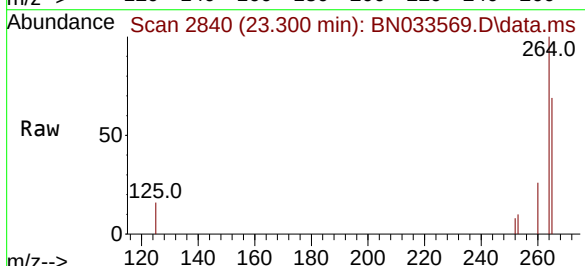
Manual Integrations  
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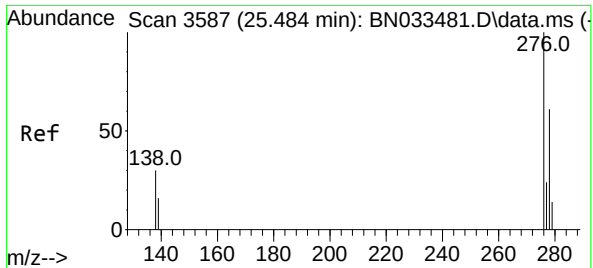
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.300 min Scan# 2840  
Delta R.T. -0.003 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

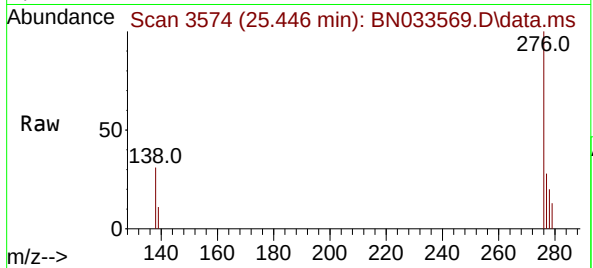
Tgt Ion:264 Resp: 17341  
Ion Ratio Lower Upper  
264 100  
260 26.3 20.8 31.2  
265 69.3 52.2 78.2





#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.136 ng  
RT: 25.446 min Scan# 3574  
Delta R.T. -0.003 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

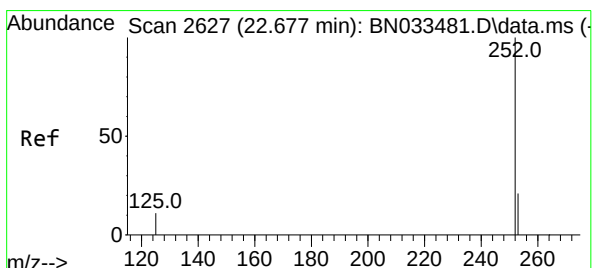
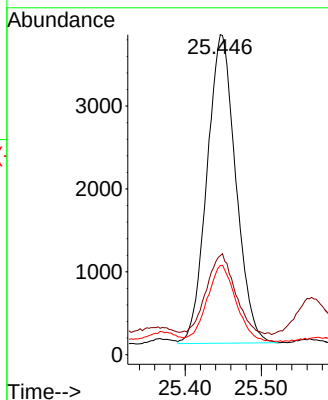
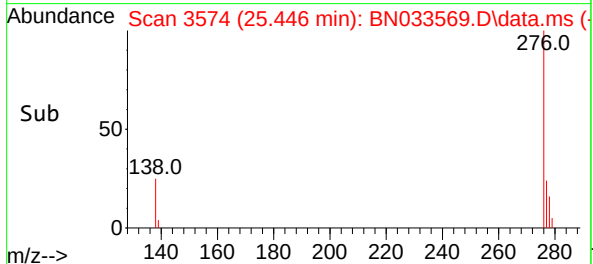
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion: 276 Resp: 975  
Ion Ratio Lower Upper  
276 100  
138 25.7 24.4 36.6  
277 24.7 19.8 29.6

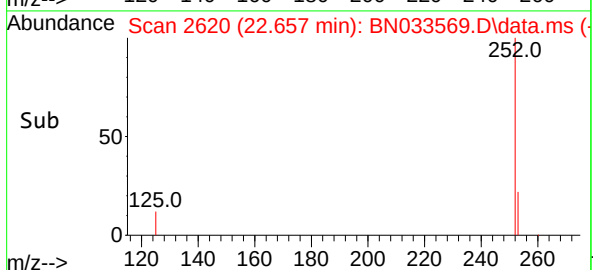
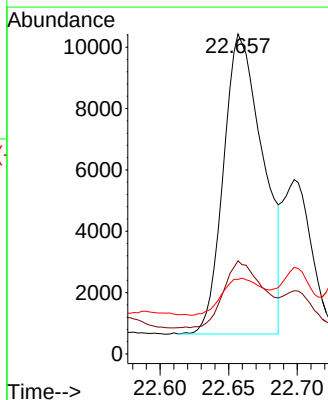
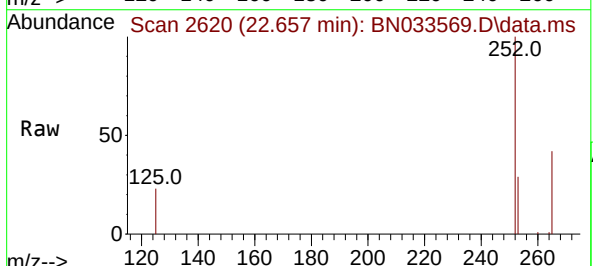
Manual Integrations  
APPROVED

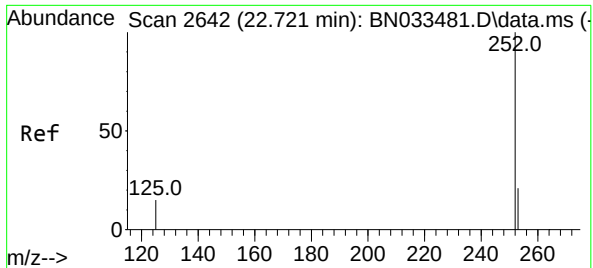
Reviewed By : Yogesh Patel 08/23/2024  
Supervised By : mohammad ahmed 08/24/2024



#37  
Benzo(b)fluoranthene  
Concen: 0.303 ng  
RT: 22.657 min Scan# 2620  
Delta R.T. -0.003 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

Tgt Ion: 252 Resp: 19653  
Ion Ratio Lower Upper  
252 100  
253 29.1 19.8 29.8  
125 23.3 13.9 20.9#





#38

Benzo(k)fluoranthene

Concen: 0.115 ng m

RT: 22.698 min Scan# 20

Delta R.T. -0.006 min

Lab File: BN033569.D

Acq: 23 Aug 2024 01:41

Instrument :

BNA\_N

ClientSampleId :

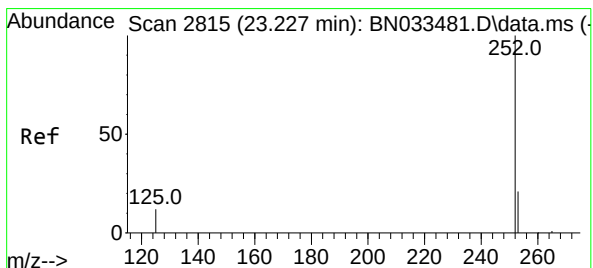
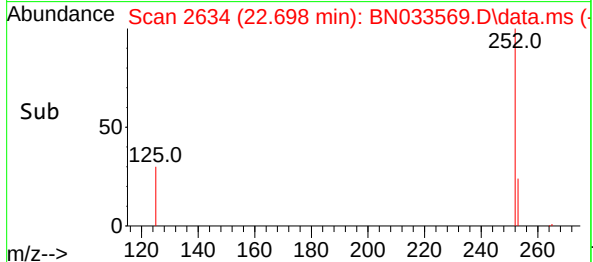
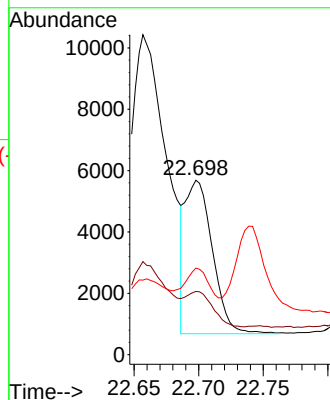
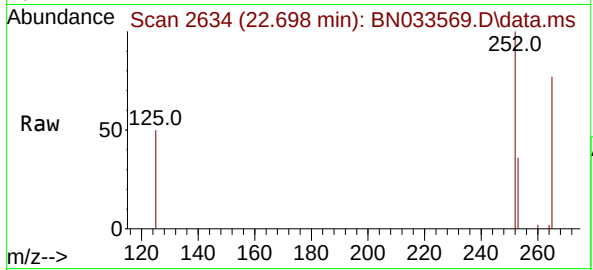
S-928-K1-SO-0-0.5-081924

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 735  |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 36.3  | 19.8  | 29.8 |
| 125       | 49.6  | 15.8  | 23.8 |

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#39

Benzo(a)pyrene

Concen: 0.227 ng

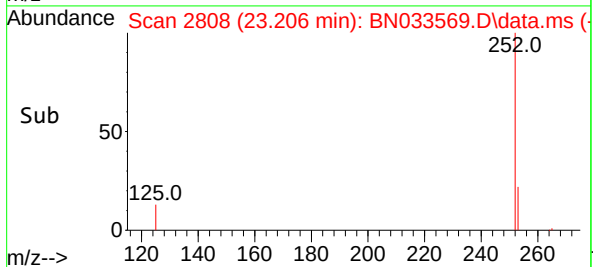
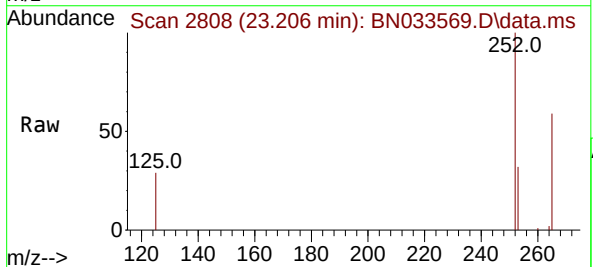
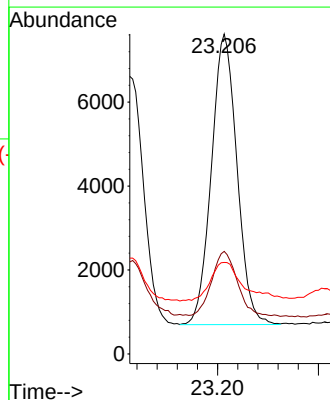
RT: 23.206 min Scan# 2808

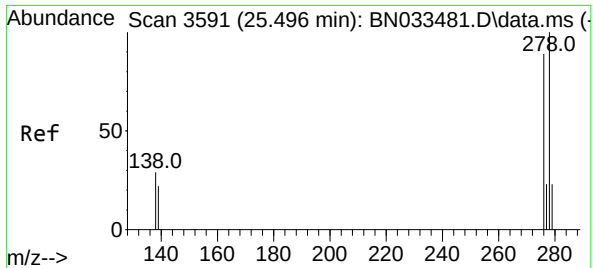
Delta R.T. -0.003 min

Lab File: BN033569.D

Acq: 23 Aug 2024 01:41

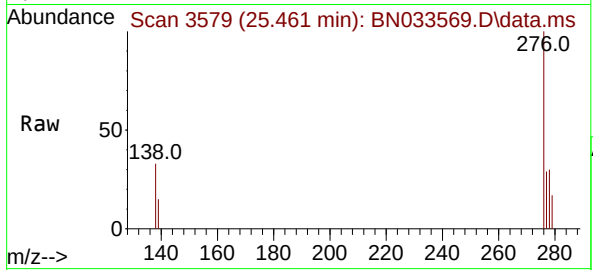
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 12177 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 32.1  | 21.5  | 32.3  |
| 125       | 28.6  | 17.0  | 25.4  |





#40  
Dibenzo(a,h)anthracene  
Concen: 0.039 ng  
RT: 25.461 min Scan# 31  
Delta R.T. -0.009 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

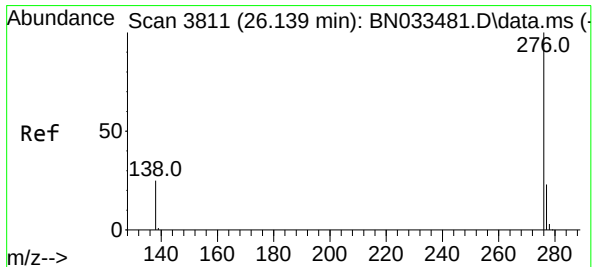
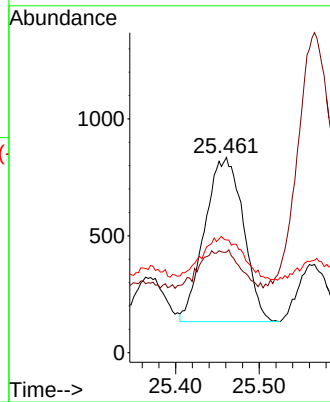
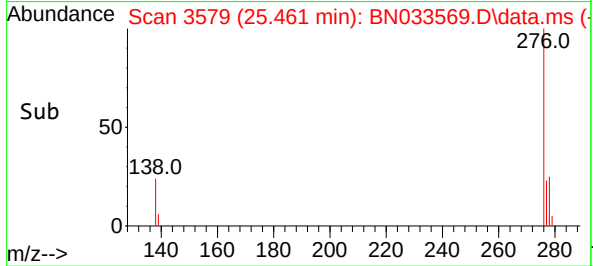
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0-0.5-081924



Tgt Ion: 278 Resp: 225  
Ion Ratio Lower Upper  
278 100  
139 51.5 19.1 28.7  
279 57.7 21.0 31.4

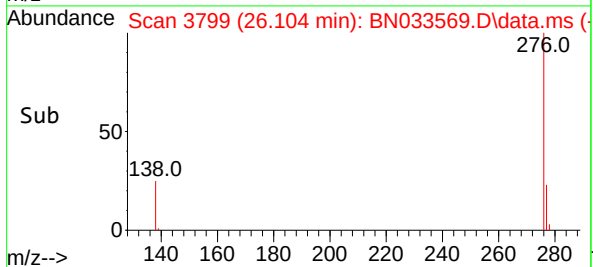
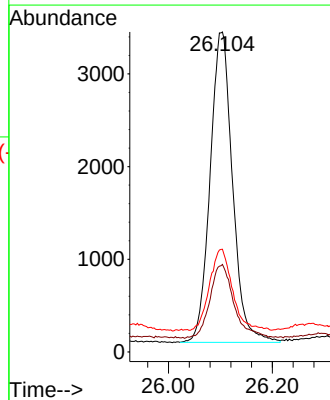
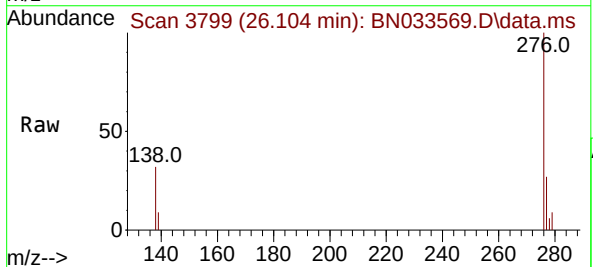
Manual Integrations  
APPROVED

Reviewed By : Yogesh Patel 08/23/2024  
Supervised By : mohammad ahmed 08/24/2024



#41  
Benzo(g,h,i)perylene  
Concen: 0.163 ng  
RT: 26.104 min Scan# 3799  
Delta R.T. 0.000 min  
Lab File: BN033569.D  
Acq: 23 Aug 2024 01:41

Tgt Ion: 276 Resp: 10031  
Ion Ratio Lower Upper  
276 100  
277 27.4 19.7 29.5  
138 32.1 21.8 32.6



## Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24      |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24      |
| Client Sample ID:  | S-928-K1-SO-0.5-1-081924              | SDG No.:        | P3671         |
| Lab Sample ID:     | P3671-10                              | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 57.2          |
| Sample Wt/Vol:     | 30.05 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033570.D        | 1         | 08/21/24 09:38 | 08/23/24 02:17 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 1.20  | U         | 1.20                | 5.80       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 1.40  | U         | 1.40                | 5.80       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 3.10  | J         | 1.10                | 5.80       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 0.96  | U         | 0.96                | 5.80       | ug/Kg             |
| 86-73-7                   | Fluorene                | 1.40  | J         | 1.00                | 5.80       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 12.5  |           | 1.10                | 5.80       | ug/Kg             |
| 120-12-7                  | Anthracene              | 2.00  | J         | 1.40                | 5.80       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 26.8  |           | 1.20                | 5.80       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 20.0  |           | 1.70                | 5.80       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 9.80  |           | 1.30                | 5.80       | ug/Kg             |
| 218-01-9                  | Chrysene                | 15.8  |           | 1.50                | 5.80       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 20.9  |           | 2.10                | 5.80       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 8.00  |           | 1.70                | 5.80       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 14.0  |           | 2.90                | 5.80       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 9.60  |           | 2.20                | 5.80       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 2.60  | J         | 2.00                | 5.80       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 11.8  |           | 2.00                | 5.80       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 3.90  | U         | 3.90                | 11.5       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.24  |           | 30 (17) - 150 (161) | 59%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.19  |           | 30 (23) - 150 (138) | 47%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.34  |           | 30 (33) - 130 (121) | 84%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.24  |           | 30 (32) - 130 (121) | 59%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.17  |           | 30 (21) - 130 (130) | 43%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7220  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 18900 |           | 10.303              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 9200  |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 18200 |           | 16.929              |            |                   |



## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-928-K1-SO-0.5-1-081924              | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-10                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 57.2                         |
| Sample Wt/Vol:     | 30.05      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033570.D        | 1         | 08/21/24 09:38 | 08/23/24 02:17 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 14100 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 15500 | 23.302    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033570.D  
Acq On : 23 Aug 2024 02:17  
Operator : MA/JU  
Sample : P3671-10  
Misc :  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924

Quant Time: Aug 23 03:03:09 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7220     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.303 | 136  | 18938    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 9199     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 18224    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 14086    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.302 | 264  | 15519    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 6041     | 0.263 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.736  | 99   | 7436     | 0.272 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.680  | 82   | 5274     | 0.336 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 6427     | 0.237 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.675 | 330  | 1120     | 0.226 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.798 | 172  | 8825     | 0.235 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 8205     | 0.187 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 5479     | 0.171 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 16) Acenaphthylene            | 13.900 | 152  | 2139     | 0.053 | ng    | 99       |
| 18) Fluorene                  | 15.236 | 166  | 845m     | 0.024 | ng    |          |
| 25) Phenanthrene              | 16.966 | 178  | 10844m   | 0.214 | ng    |          |
| 26) Anthracene                | 17.065 | 178  | 1521     | 0.034 | ng    | # 84     |
| 28) Fluoranthene              | 19.002 | 202  | 25821    | 0.461 | ng    | 99       |
| 30) Pyrene                    | 19.365 | 202  | 21592    | 0.343 | ng    | 96       |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 8571m    | 0.168 | ng    |          |
| 33) Chrysene                  | 21.175 | 228  | 13750    | 0.272 | ng    | 96       |
| 34) Bis(2-ethylhexyl)phtha... | 21.085 | 149  | 2516m    | 0.078 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.448 | 276  | 10627    | 0.165 | ng    | 96       |
| 37) Benzo(b)fluoranthene      | 22.659 | 252  | 20808    | 0.359 | ng    | # 88     |
| 38) Benzo(k)fluoranthene      | 22.697 | 252  | 7793m    | 0.137 | ng    |          |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 11527    | 0.240 | ng    | # 84     |
| 40) Dibenzo(a,h)anthracene    | 25.457 | 278  | 2278     | 0.044 | ng    | # 37     |
| 41) Benzo(g,h,i)perylene      | 26.100 | 276  | 11177    | 0.203 | ng    | 93       |

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

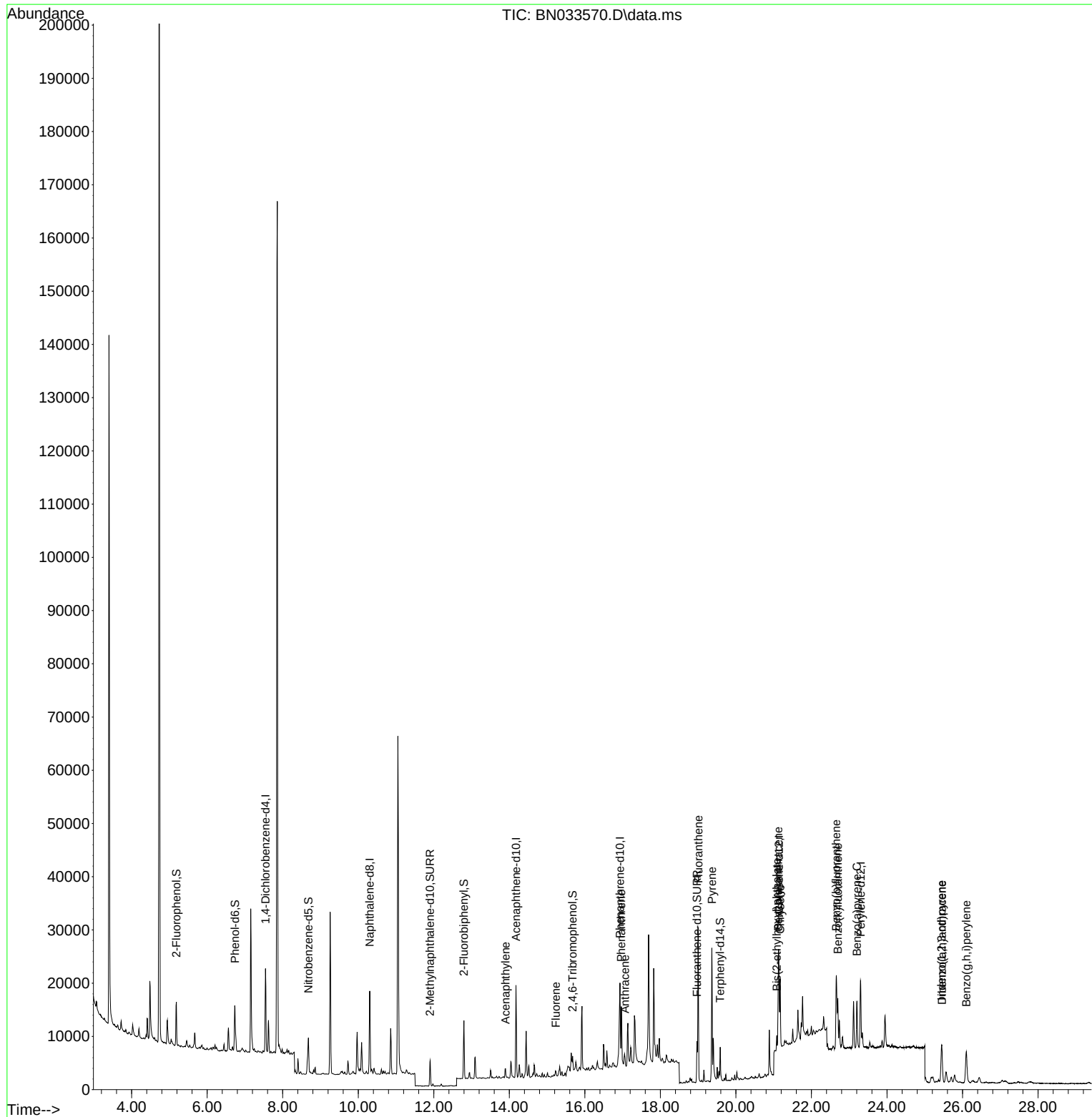
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Data File : BN033570.D  
Acq On : 23 Aug 2024 02:17  
Operator : MA/JU  
Sample : P3671-10  
Misc :  
ALS Vial : 27 Sample Multiplier: 1

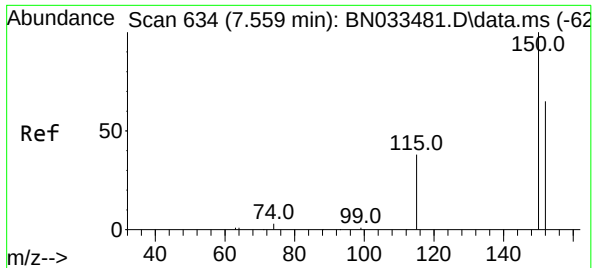
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924

Quant Time: Aug 23 03:03:09 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

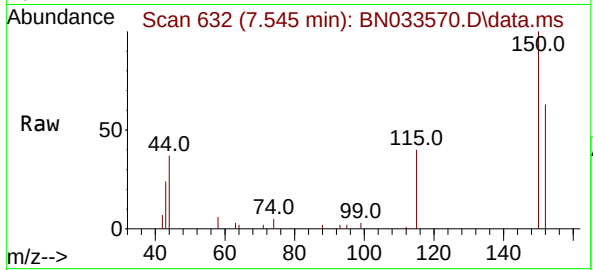
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

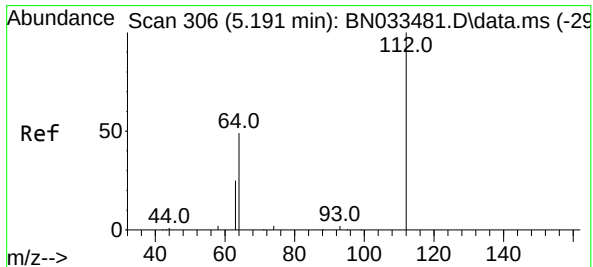
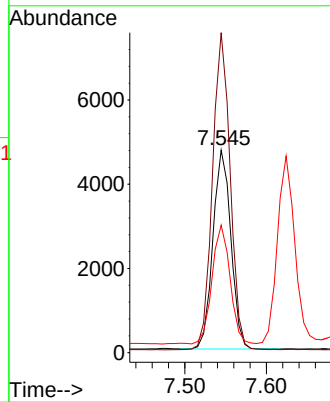
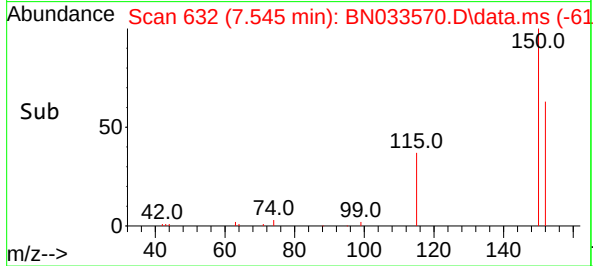
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion:152 Resp: 7220  
Ion Ratio Lower Upper  
152 100  
150 158.0 122.2 183.2  
115 62.9 47.2 70.8

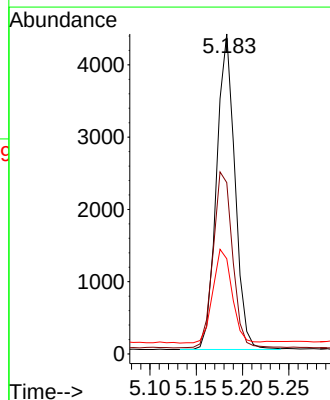
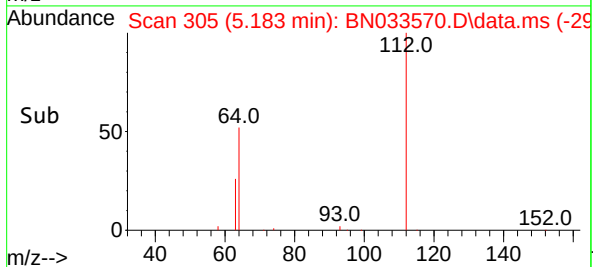
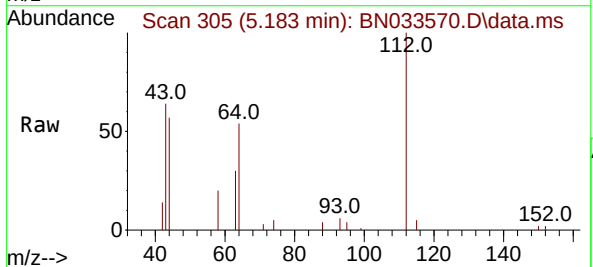
Manual Integrations  
**APPROVED**

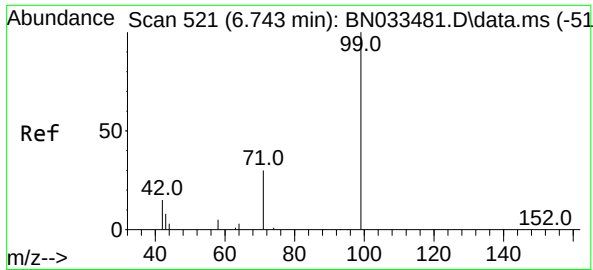
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.263 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

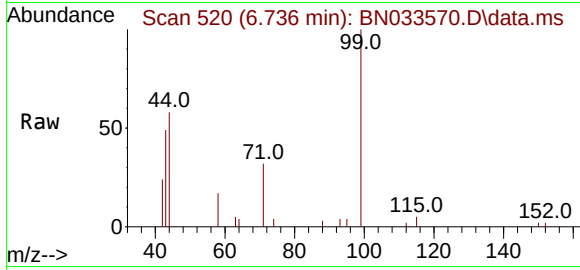
Tgt Ion:112 Resp: 6041  
Ion Ratio Lower Upper  
112 100  
64 58.8 47.1 70.7  
63 31.0 24.9 37.3





#5  
Phenol-d6  
Concen: 0.272 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

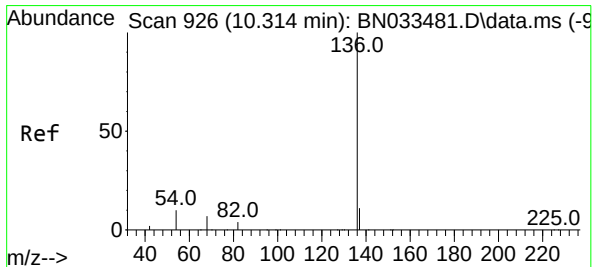
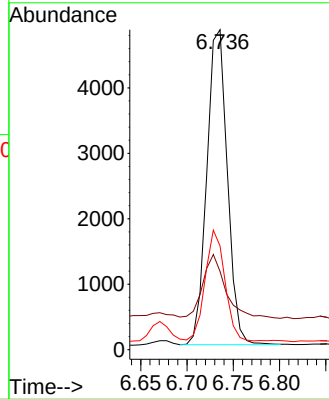
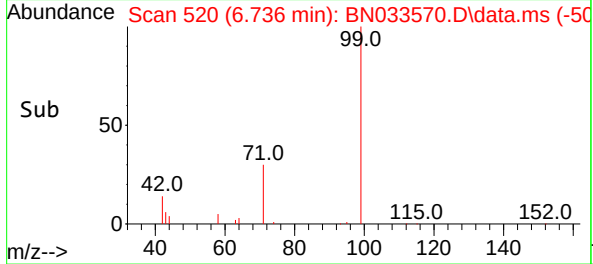
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion: 99 Resp: 7430  
Ion Ratio Lower Upper  
99 100  
42 22.3 16.6 24.8  
71 33.7 26.2 39.4

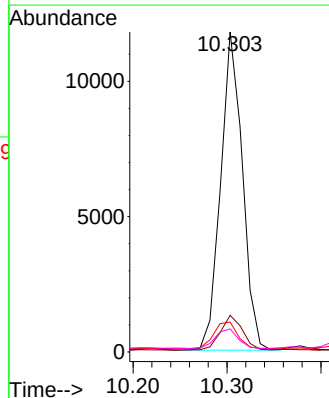
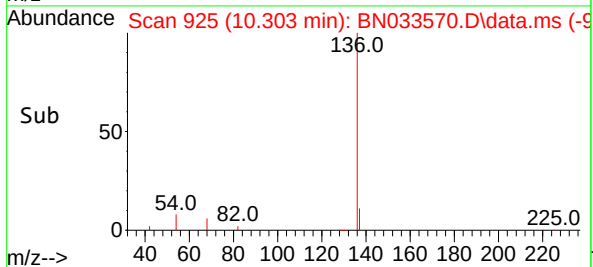
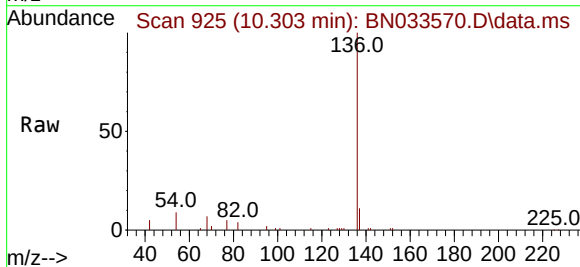
Manual Integrations  
**APPROVED**

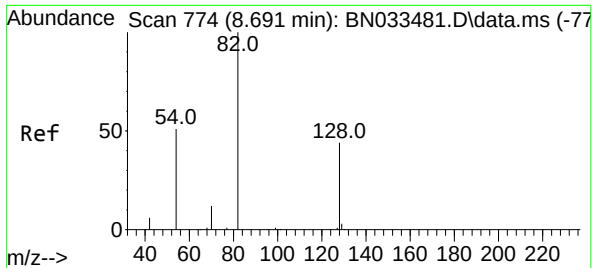
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.303 min Scan# 925  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

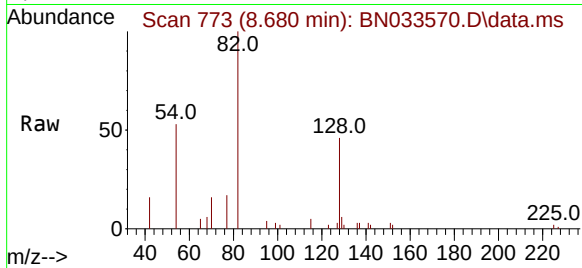
Tgt Ion:136 Resp: 18938  
Ion Ratio Lower Upper  
136 100  
137 11.5 9.0 13.6  
54 9.3 8.3 12.5  
68 7.2 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.336 ng  
RT: 8.680 min Scan# 71  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

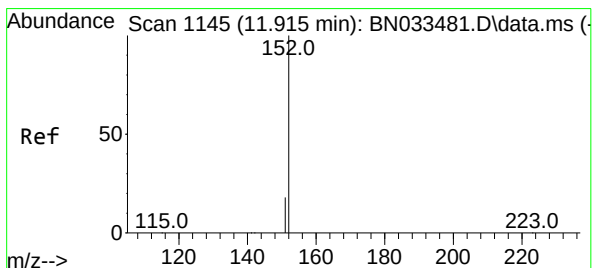
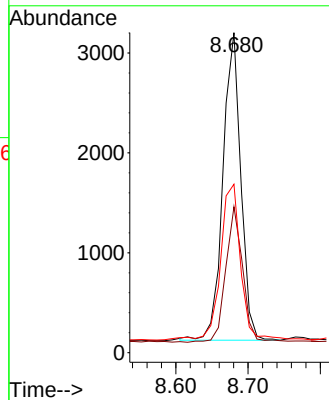
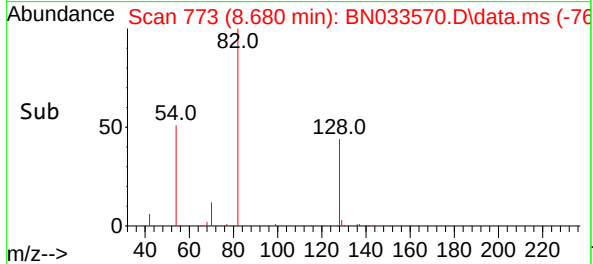
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion: 82 Resp: 5274  
Ion Ratio Lower Upper  
82 100  
128 45.6 36.0 54.0  
54 52.7 42.0 63.0

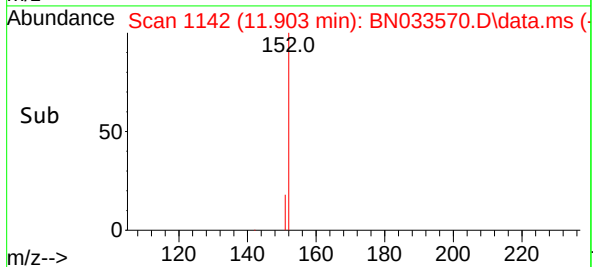
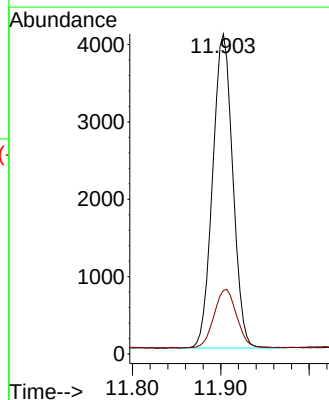
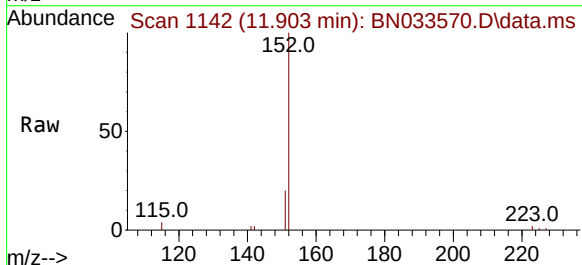
Manual Integrations  
APPROVED

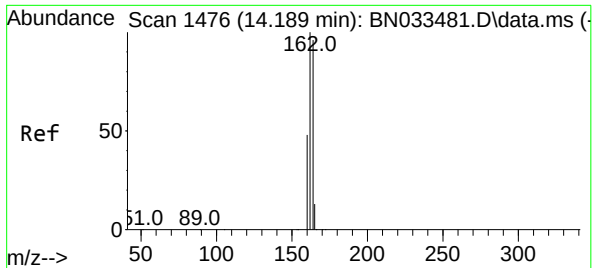
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#11  
2-Methylnaphthalene-d10  
Concen: 0.237 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

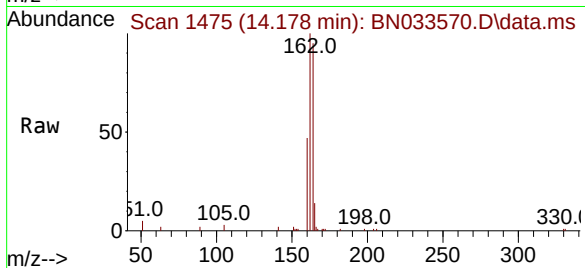
Tgt Ion:152 Resp: 6427  
Ion Ratio Lower Upper  
152 100  
151 21.3 16.6 25.0





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

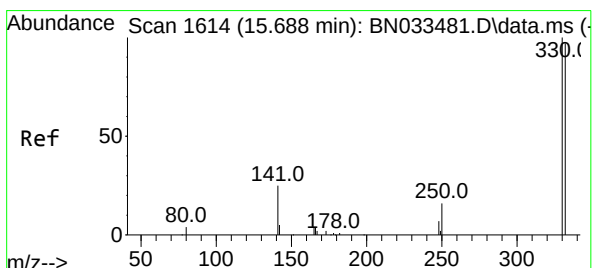
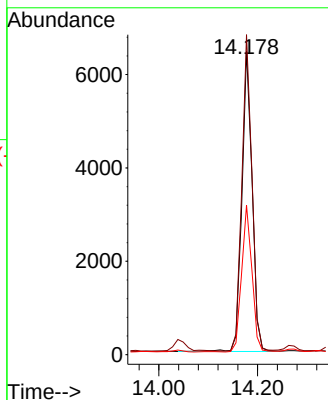
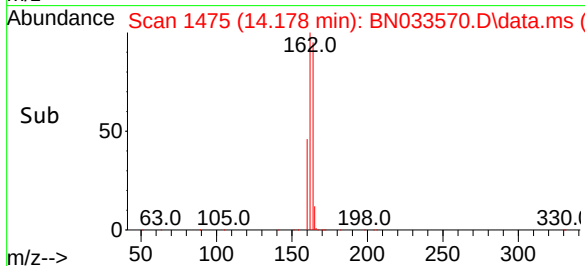
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



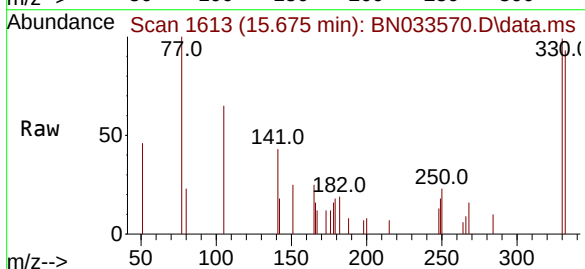
Tgt Ion:164 Resp: 919  
Ion Ratio Lower Upper  
164 100  
162 105.4 83.5 125.3  
160 49.2 40.2 60.4

Manual Integrations  
APPROVED

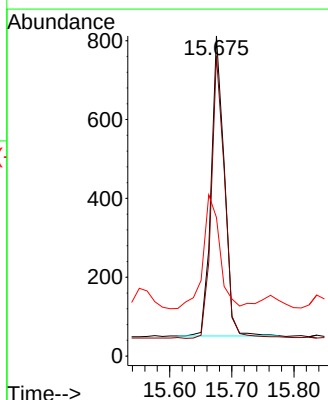
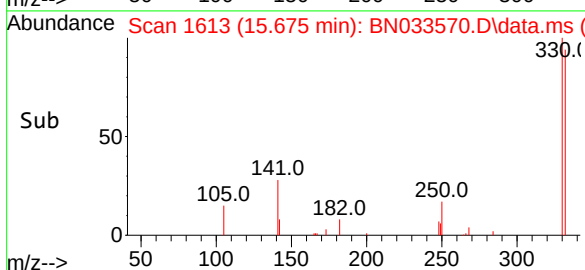
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

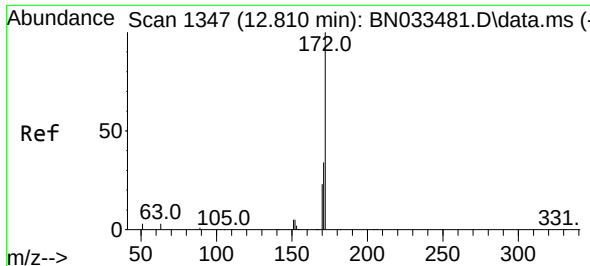


#14  
2,4,6-Tribromophenol  
Concen: 0.226 ng  
RT: 15.675 min Scan# 1613  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17



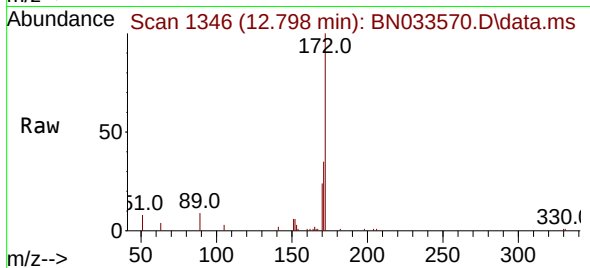
Tgt Ion:330 Resp: 1120  
Ion Ratio Lower Upper  
330 100  
332 95.8 77.5 116.3  
141 48.4 33.9 50.9





#15  
2-Fluorobiphenyl  
Concen: 0.235 ng  
RT: 12.798 min Scan# 11  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

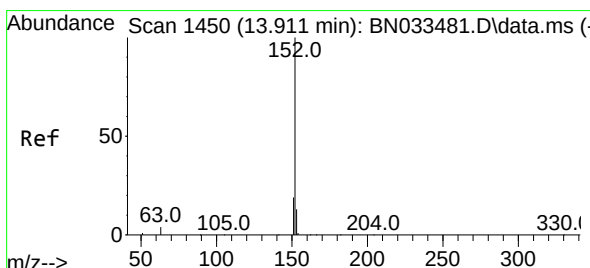
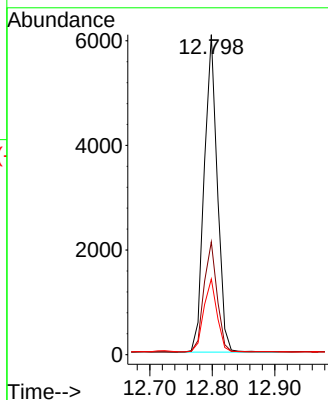
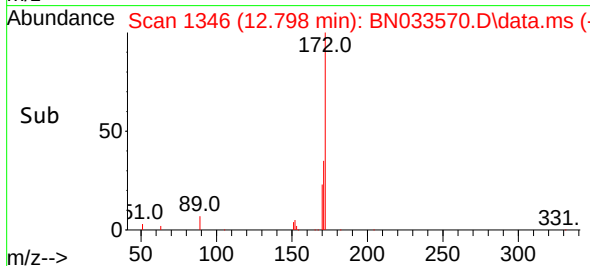
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion:172 Resp: 882  
Ion Ratio Lower Upper  
172 100  
171 35.3 27.7 41.5  
170 23.6 18.3 27.5

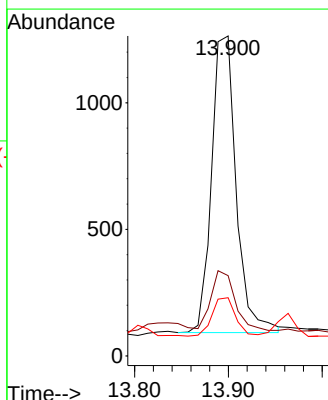
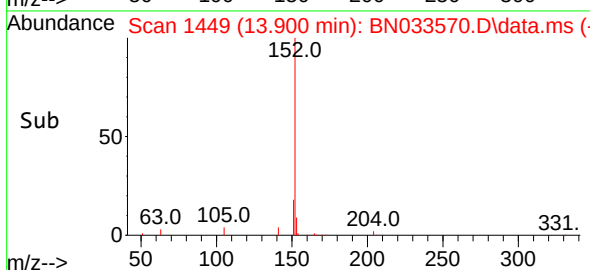
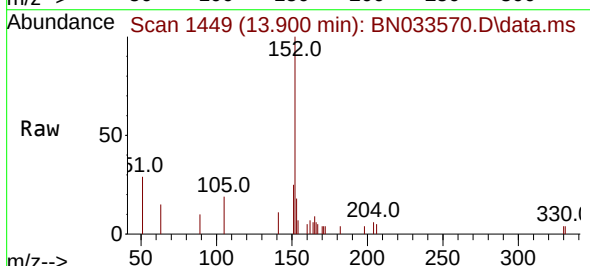
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

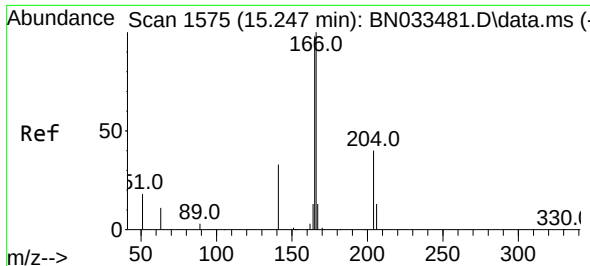


#16  
Acenaphthylene  
Concen: 0.053 ng  
RT: 13.900 min Scan# 1449  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

Tgt Ion:152 Resp: 2139  
Ion Ratio Lower Upper  
152 100  
151 19.4 15.7 23.5  
153 12.4 10.3 15.5

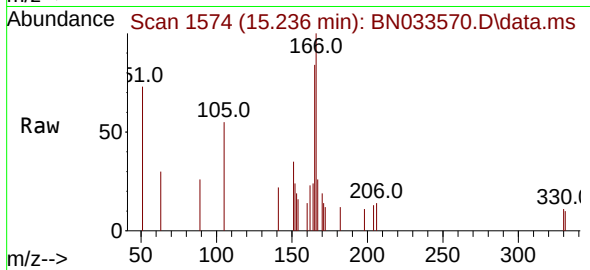






#18  
Fluorene  
Concen: 0.024 ng m  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

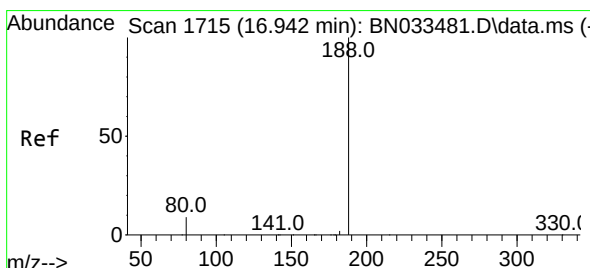
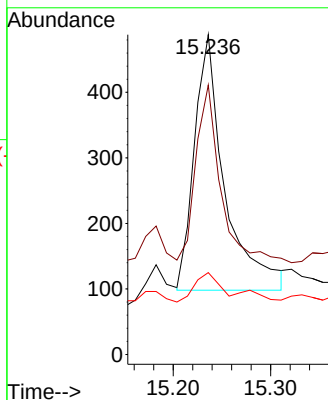
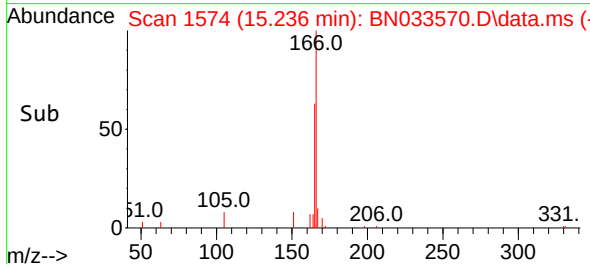
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion:166 Resp: 845  
Ion Ratio Lower Upper  
166 100  
165 51.7 78.2 117.4  
167 10.5 10.6 16.0

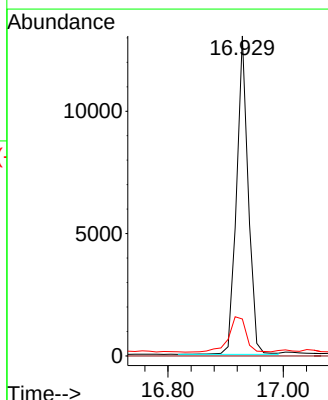
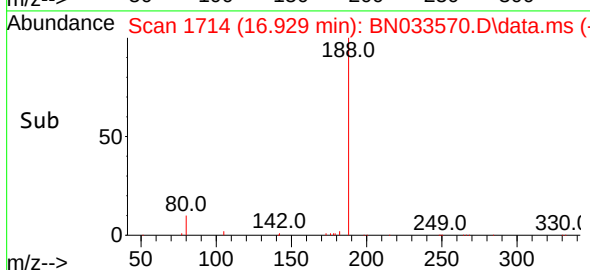
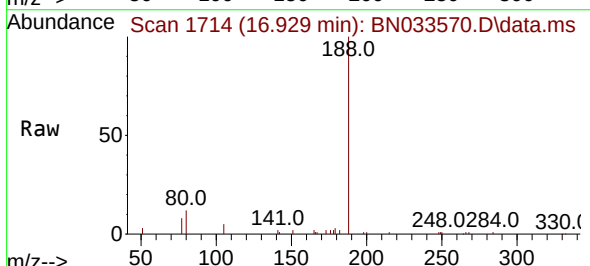
Manual Integrations  
APPROVED

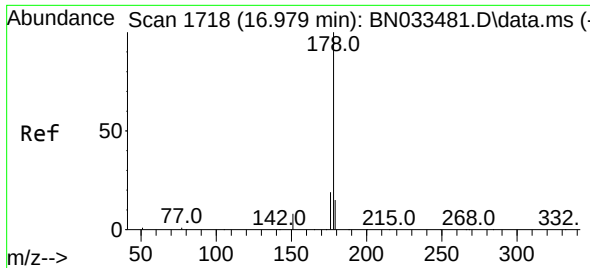
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1714  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

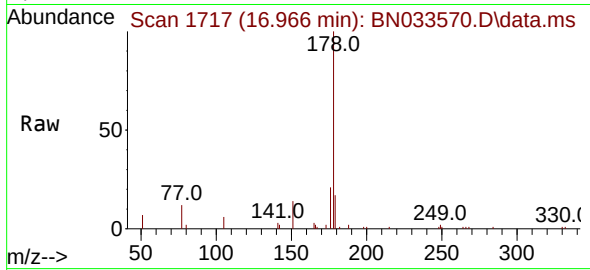
Tgt Ion:188 Resp: 18224  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.6 7.8 11.8





#25  
Phenanthrene  
Concen: 0.214 ng m  
RT: 16.966 min Scan# 1717  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

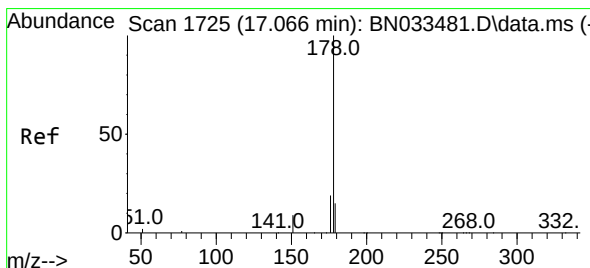
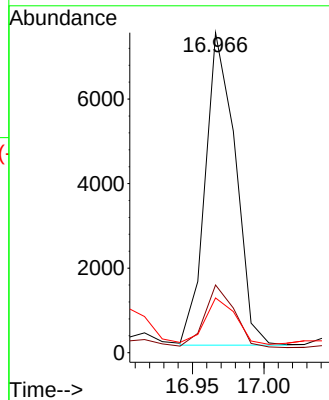
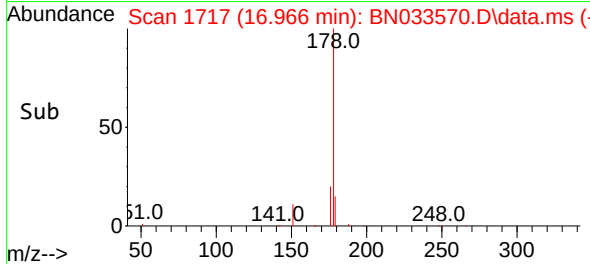
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion:178 Resp: 10844  
Ion Ratio Lower Upper  
178 100  
176 19.7 15.3 22.9  
179 15.1 12.3 18.5

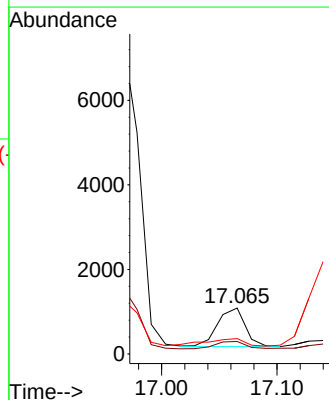
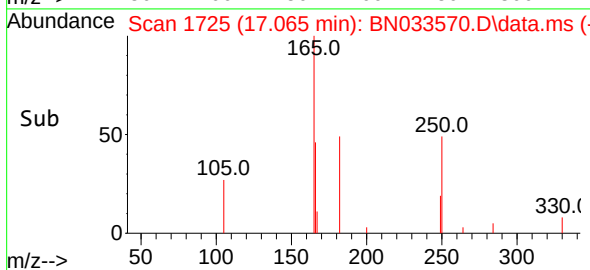
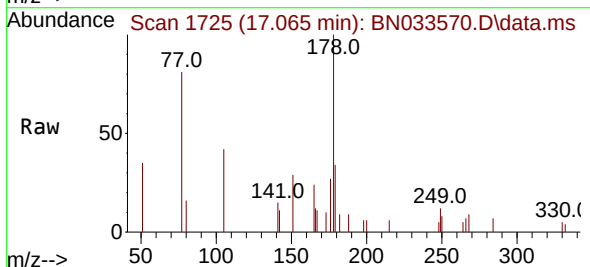
Manual Integrations  
APPROVED

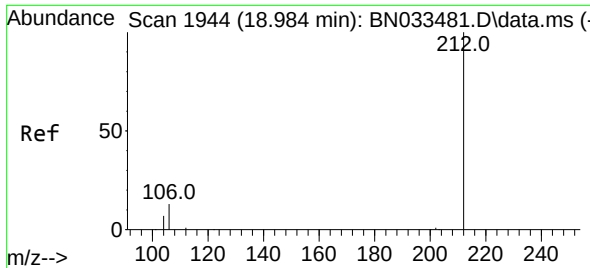
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#26  
Anthracene  
Concen: 0.034 ng  
RT: 17.065 min Scan# 1725  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

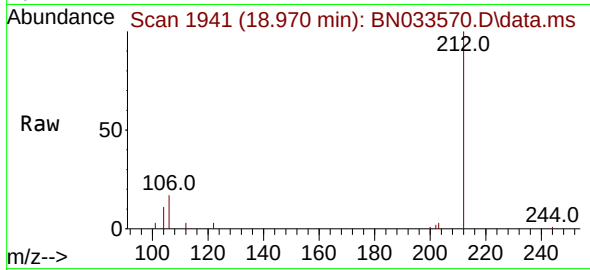
Tgt Ion:178 Resp: 1521  
Ion Ratio Lower Upper  
178 100  
176 21.0 15.0 22.6  
179 27.8 12.4 18.6#





#27  
Fluoranthene-d10  
Concen: 0.187 ng  
RT: 18.970 min Scan# 1940  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

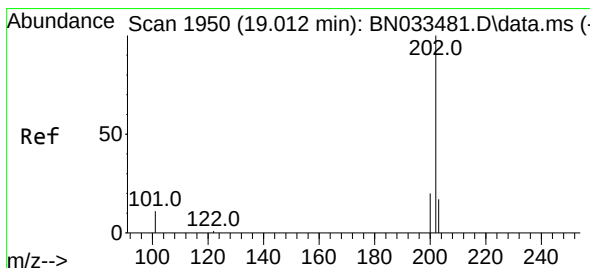
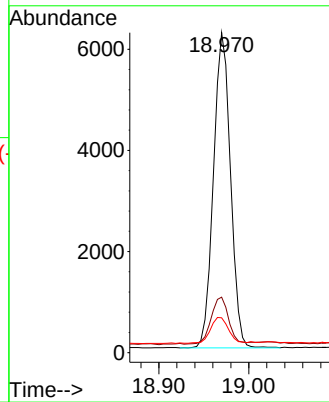
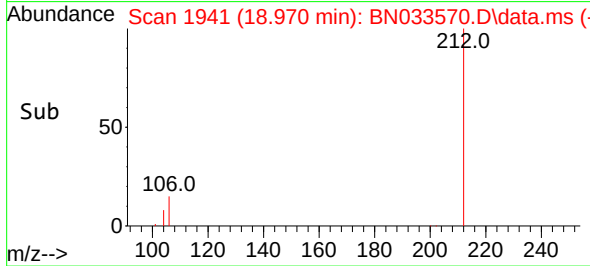
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



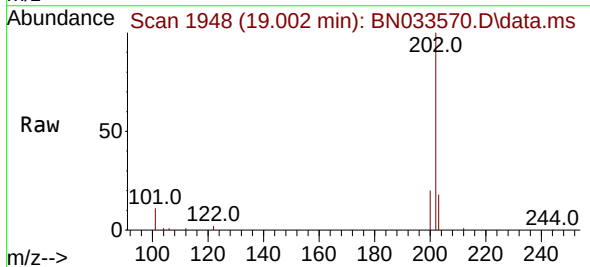
Tgt Ion:212 Resp: 820  
Ion Ratio Lower Upper  
212 100  
106 15.0 12.3 18.5  
104 8.6 7.0 10.4

Manual Integrations  
APPROVED

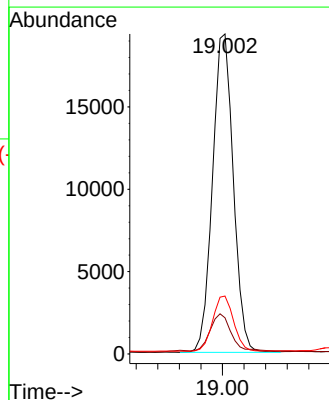
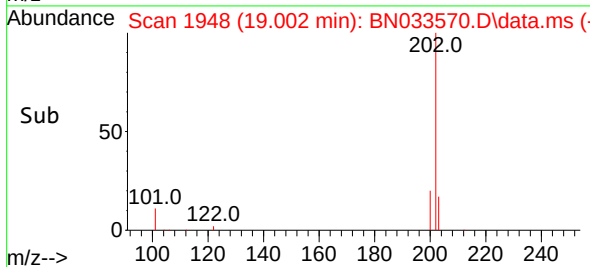
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

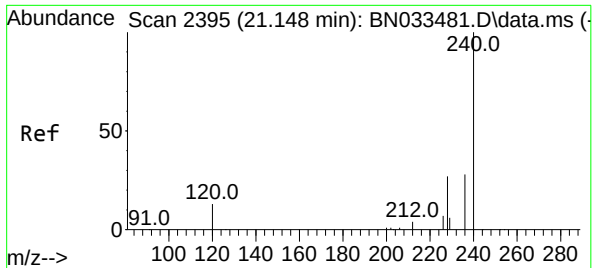


#28  
Fluoranthene  
Concen: 0.461 ng  
RT: 19.002 min Scan# 1948  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17



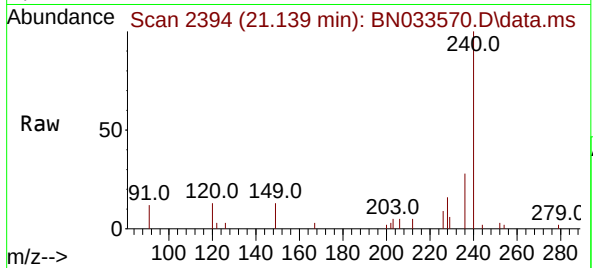
Tgt Ion:202 Resp: 25821  
Ion Ratio Lower Upper  
202 100  
101 12.6 9.5 14.3  
203 17.5 13.8 20.6





#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 211  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

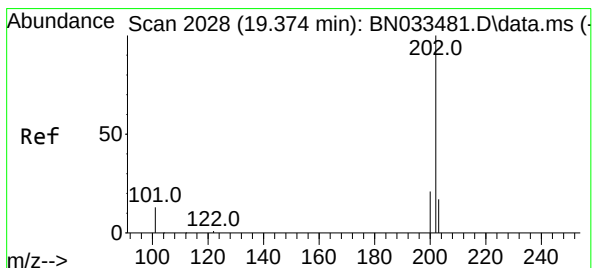
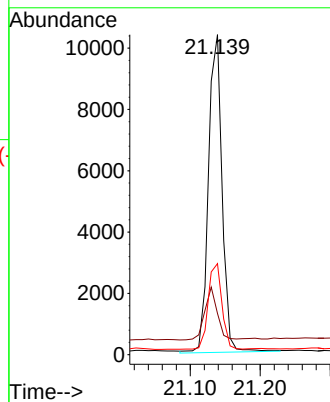
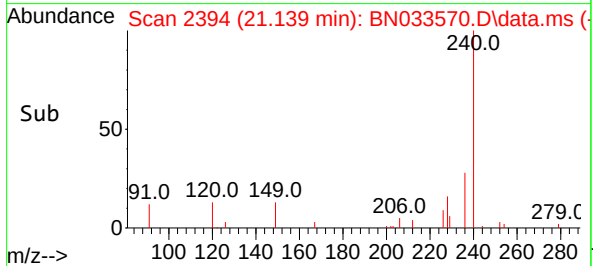
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion:240 Resp: 14080  
Ion Ratio Lower Upper  
240 100  
120 12.9 12.4 18.6  
236 28.4 23.0 34.6

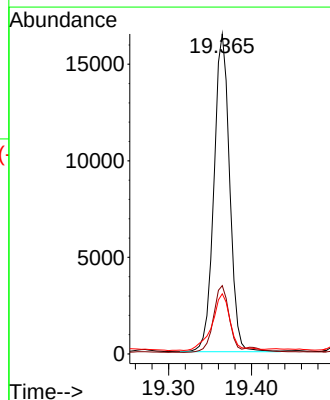
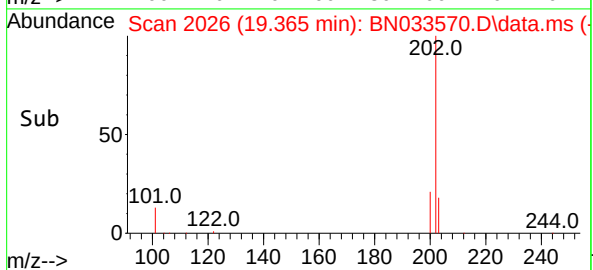
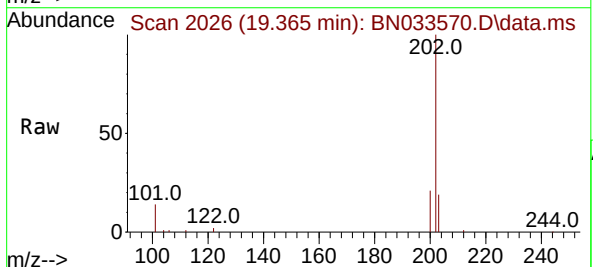
Manual Integrations  
APPROVED

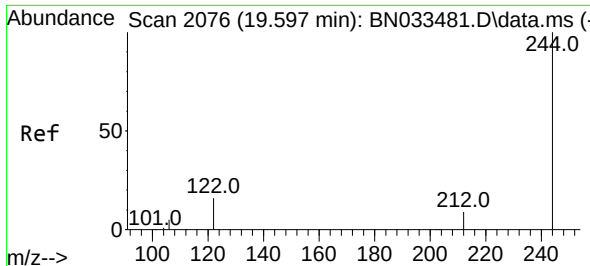
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#30  
Pyrene  
Concen: 0.343 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

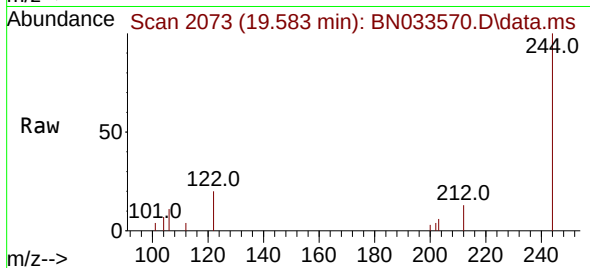
Tgt Ion:202 Resp: 21592  
Ion Ratio Lower Upper  
202 100  
200 21.0 16.6 24.8  
203 20.9 14.2 21.4





#31  
Terphenyl-d14  
Concen: 0.171 ng  
RT: 19.583 min Scan# 2073  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

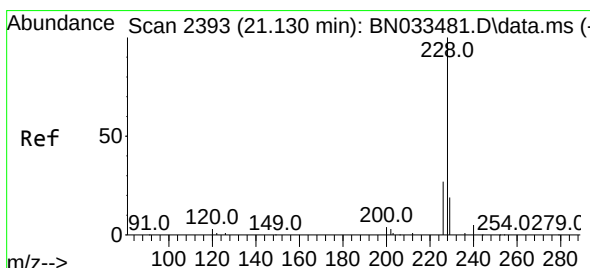
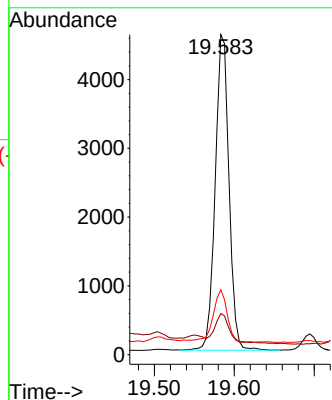
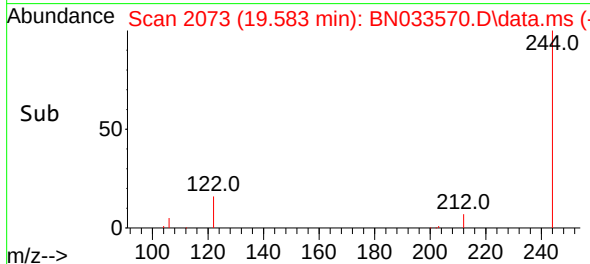
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion:244 Resp: 5479  
Ion Ratio Lower Upper  
244 100  
212 12.8 7.8 11.6  
122 20.3 13.3 19.9

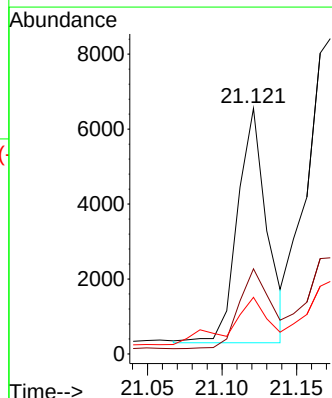
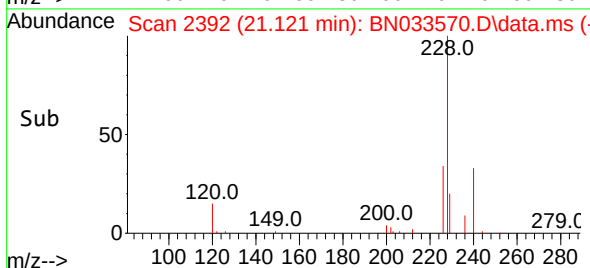
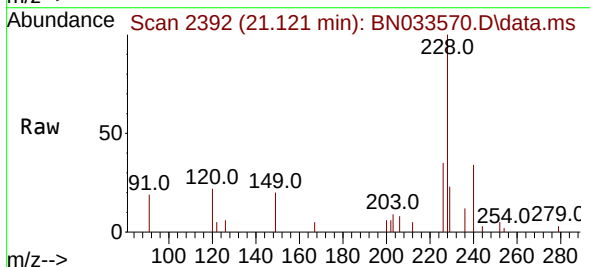
Manual Integrations  
APPROVED

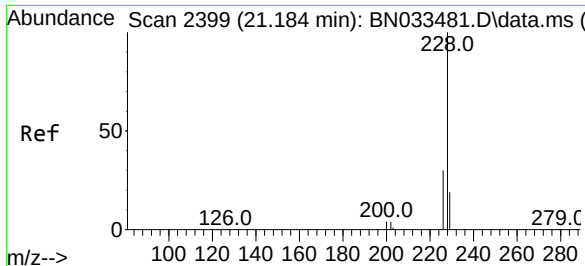
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#32  
Benzo(a)anthracene  
Concen: 0.168 ng m  
RT: 21.121 min Scan# 2392  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

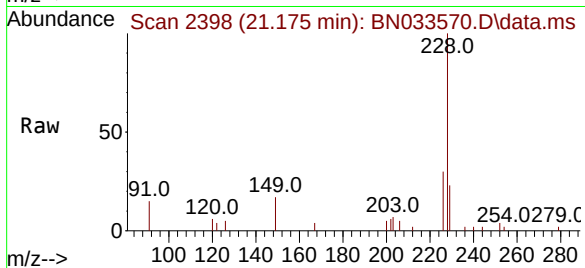
Tgt Ion:228 Resp: 8571  
Ion Ratio Lower Upper  
228 100  
226 34.7 21.8 32.6  
229 23.1 15.8 23.6





#33  
Chrysene  
Concen: 0.272 ng  
RT: 21.175 min Scan# 21175  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

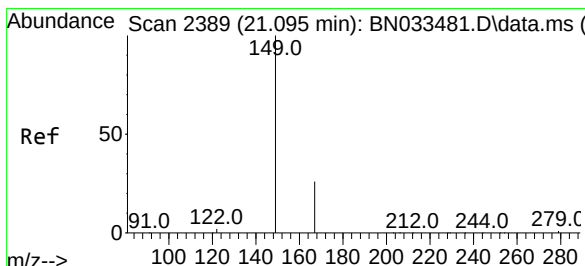
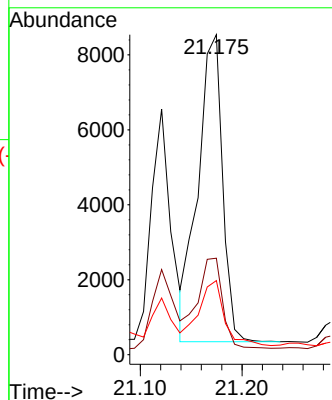
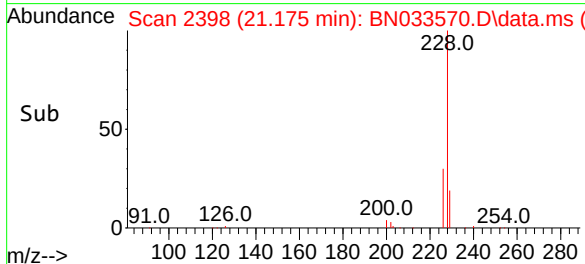
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion: 228 Resp: 13750  
Ion Ratio Lower Upper  
228 100  
226 30.2 23.8 35.8  
229 23.2 15.6 23.4

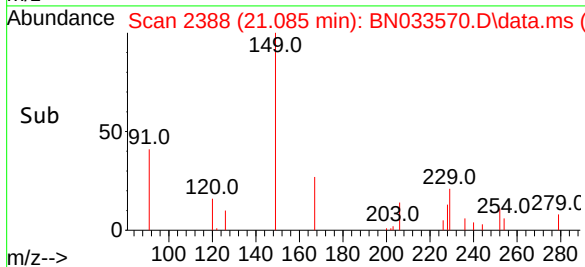
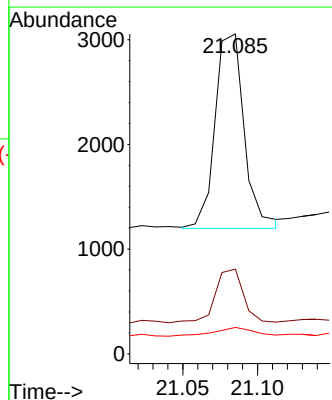
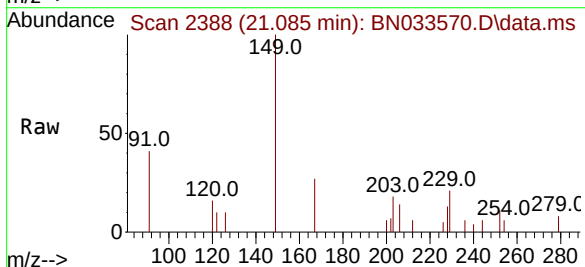
Manual Integrations  
**APPROVED**

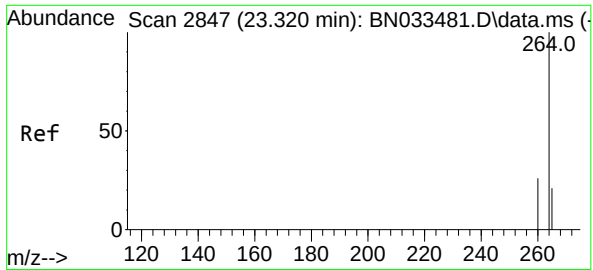
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.078 ng m  
RT: 21.085 min Scan# 2388  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

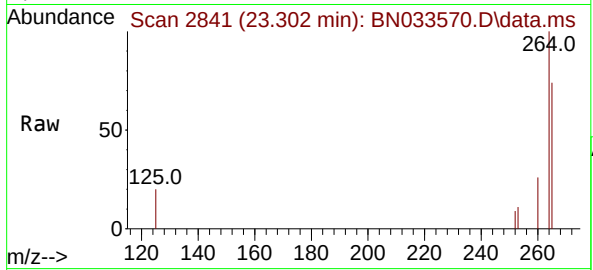
Tgt Ion: 149 Resp: 2516  
Ion Ratio Lower Upper  
149 100  
167 37.5 21.5 32.3#  
279 10.5 2.2 3.2#





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.302 min Scan# 2841  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

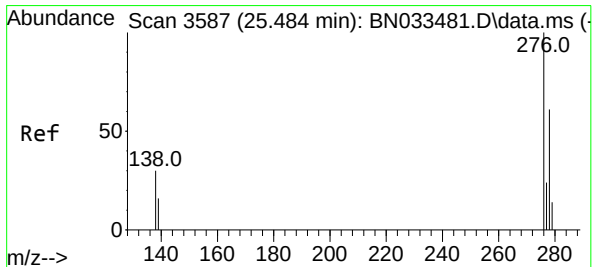
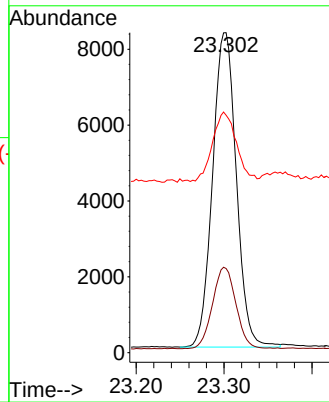
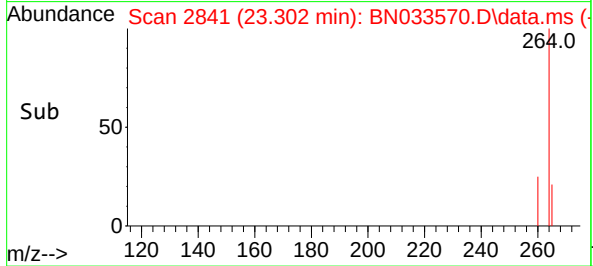
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924



Tgt Ion:264 Resp: 15519  
Ion Ratio Lower Upper  
264 100  
260 26.3 20.8 31.2  
265 74.2 52.2 78.2

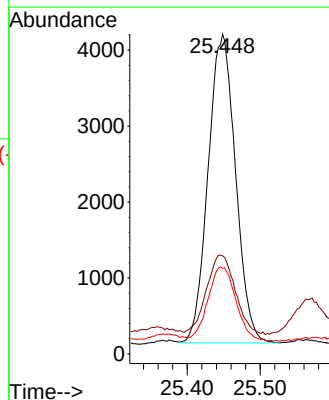
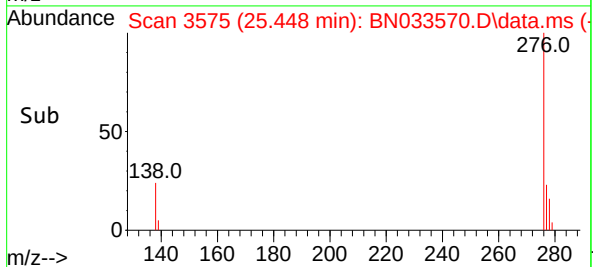
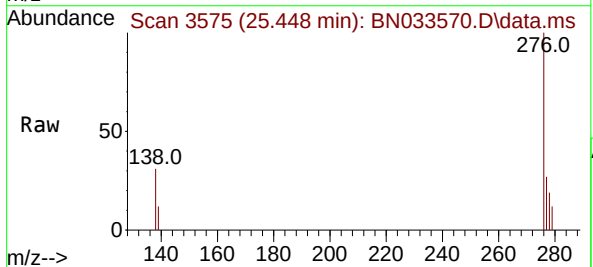
Manual Integrations  
APPROVED

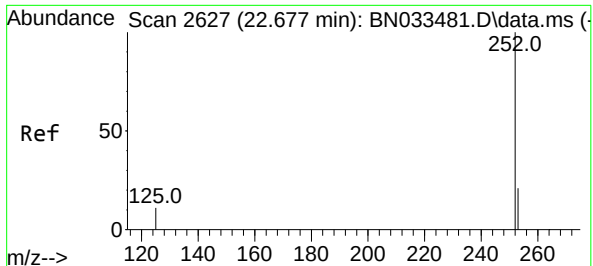
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.165 ng  
RT: 25.448 min Scan# 3575  
Delta R.T. -0.001 min  
Lab File: BN033570.D  
Acq: 23 Aug 2024 02:17

Tgt Ion:276 Resp: 10627  
Ion Ratio Lower Upper  
276 100  
138 26.9 24.4 36.6  
277 24.3 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.359 ng

RT: 22.659 min Scan# 2621

Delta R.T. -0.001 min

Lab File: BN033570.D

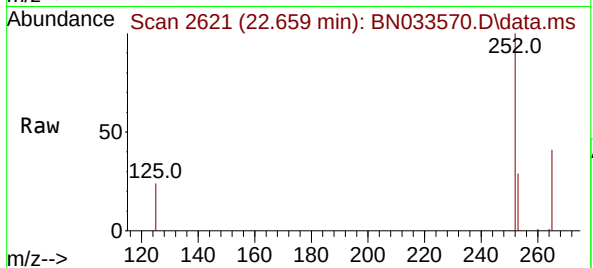
Acq: 23 Aug 2024 02:17

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924



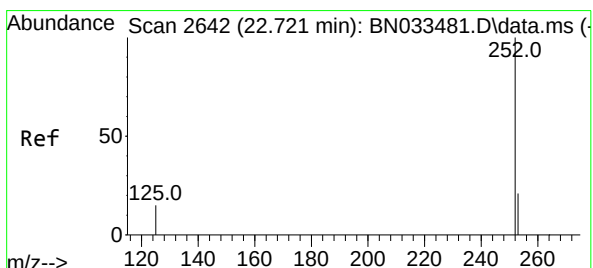
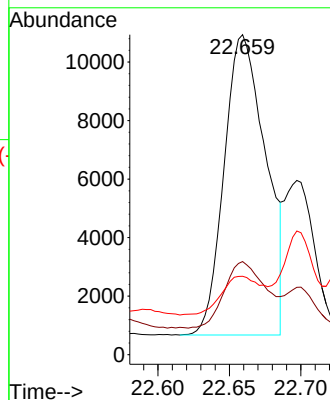
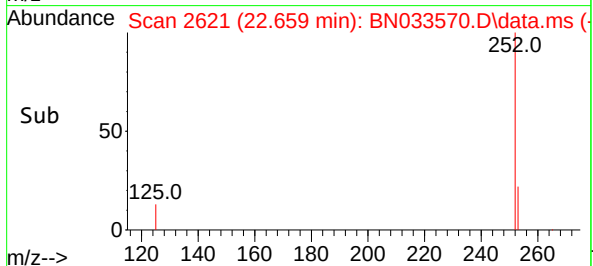
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 2080 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 29.1  | 19.8  | 29.8 |
| 125       | 24.5  | 13.9  | 20.9 |

Manual Integrations

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Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#38

Benzo(k)fluoranthene

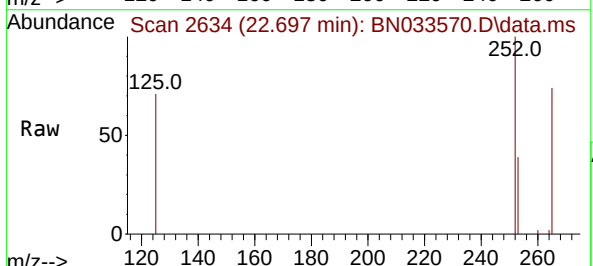
Concen: 0.137 ng m

RT: 22.697 min Scan# 2634

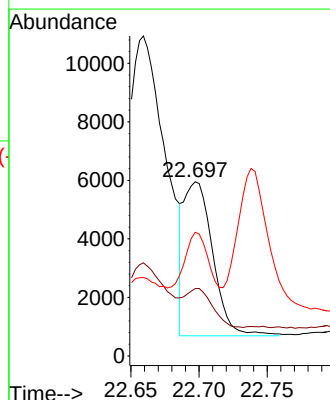
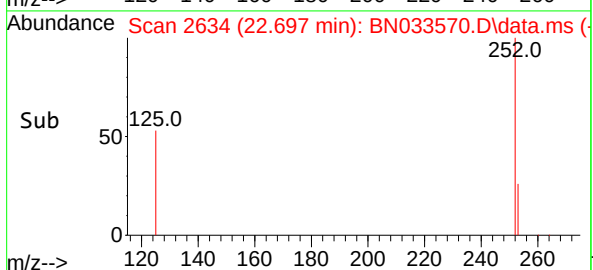
Delta R.T. -0.006 min

Lab File: BN033570.D

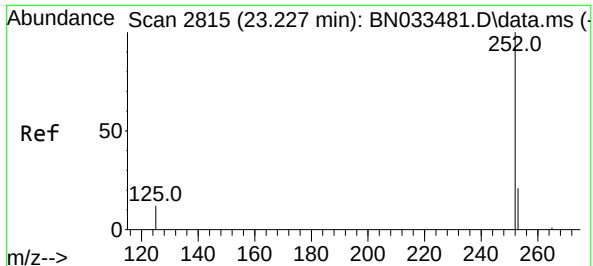
Acq: 23 Aug 2024 02:17



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 7793  |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 38.7  | 19.8  | 29.8# |
| 125       | 71.0  | 15.8  | 23.8# |







#39

Benzo(a)pyrene

Concen: 0.240 ng

RT: 23.206 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN033570.D

Acq: 23 Aug 2024 02:17

Instrument :

BNA\_N

ClientSampleId :

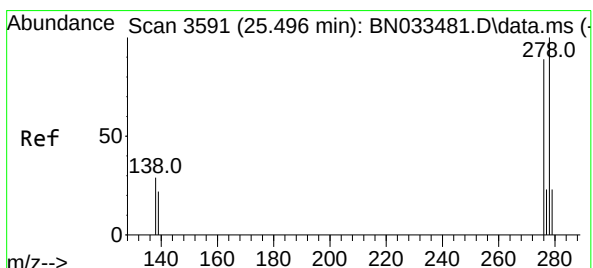
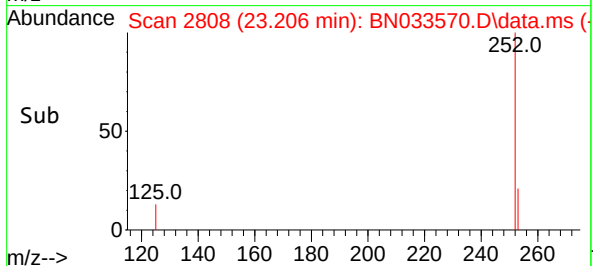
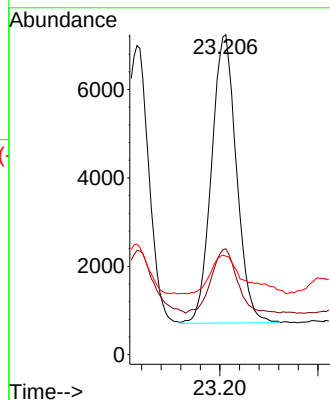
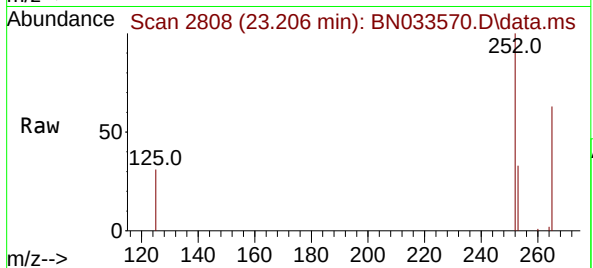
S-928-K1-SO-0.5-1-081924

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 1152  |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 33.1  | 21.5  | 32.3# |
| 125       | 30.8  | 17.0  | 25.4# |

Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#40

Dibenzo(a,h)anthracene

Concen: 0.044 ng

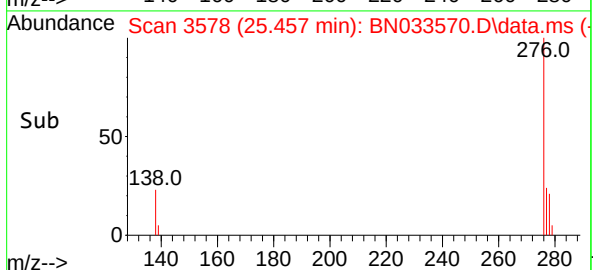
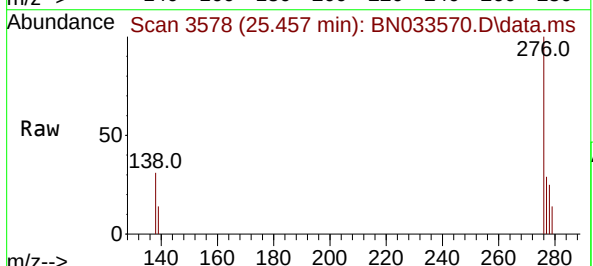
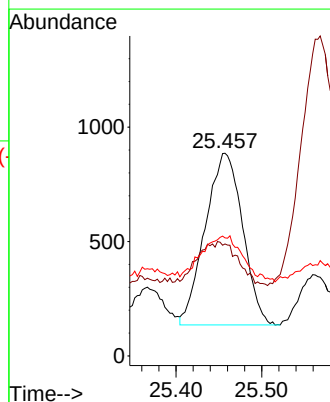
RT: 25.457 min Scan# 3578

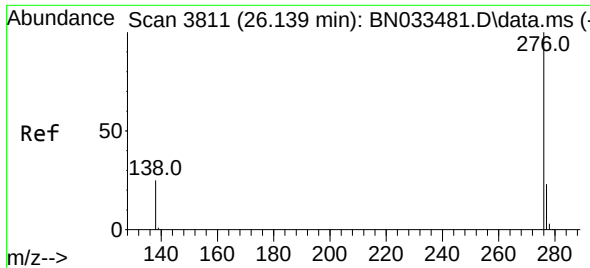
Delta R.T. -0.012 min

Lab File: BN033570.D

Acq: 23 Aug 2024 02:17

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 2278  |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 55.3  | 19.1  | 28.7# |
| 279       | 58.2  | 21.0  | 31.4# |





#41

Benzo(g,h,i)perylene

Concen: 0.203 ng

RT: 26.100 min Scan# 31

Delta R.T. -0.003 min

Lab File: BN033570.D

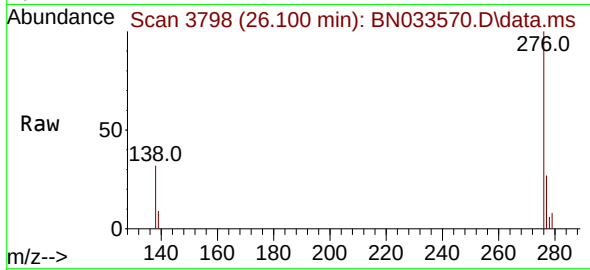
Acq: 23 Aug 2024 02:17

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924



Tgt Ion:276 Resp: 1117

Ion Ratio Lower Upper

276 100

277 26.8 19.7 29.5

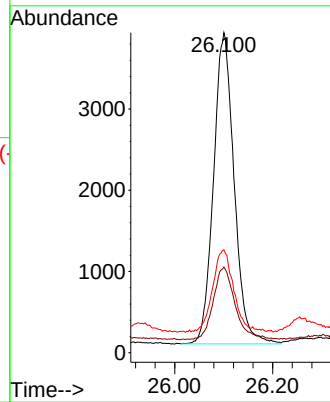
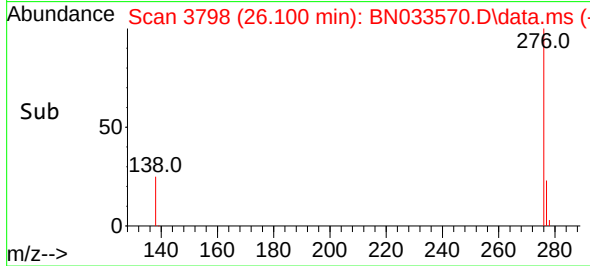
138 32.1 21.8 32.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-903-J-SO-0.5-1.0-081924             | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-12                              | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 85.8                 |
| Sample Wt/Vol:     | 30.08      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033575.D        | 1         | 08/21/24 09:38 | 08/23/24 05:18 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 3.60  | J         | 0.80                | 3.80       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 2.70  | J         | 0.93                | 3.80       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 6.30  |           | 0.73                | 3.80       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 25.8  |           | 0.64                | 3.80       | ug/Kg             |
| 86-73-7                   | Fluorene                | 26.6  |           | 0.70                | 3.80       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 440   | E         | 0.73                | 3.80       | ug/Kg             |
| 120-12-7                  | Anthracene              | 85.3  |           | 0.92                | 3.80       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 860   | E         | 0.78                | 3.80       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 480   | E         | 1.10                | 3.80       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 310   | E         | 0.88                | 3.80       | ug/Kg             |
| 218-01-9                  | Chrysene                | 330   | E         | 1.00                | 3.80       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 420   | E         | 1.40                | 3.80       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 140   |           | 1.10                | 3.80       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 340   | E         | 1.90                | 3.80       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 180   |           | 1.50                | 3.80       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 51.7  |           | 1.40                | 3.80       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 210   | E         | 1.30                | 3.80       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 2.60  | U         | 2.60                | 7.70       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.17  |           | 30 (17) - 150 (161) | 41%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.16  |           | 30 (23) - 150 (138) | 41%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.19  |           | 30 (33) - 130 (121) | 48%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.15  |           | 30 (32) - 130 (121) | 38%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.12  |           | 30 (21) - 130 (130) | 31%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 8160  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 20800 | 10.304    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 10700 | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 20000 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-903-J-SO-0.5-1.0-081924             | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-12                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 85.8                         |
| Sample Wt/Vol:     | 30.08      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :    N                       | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033575.D        | 1         | 08/21/24 09:38 | 08/23/24 05:18 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 20200 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 21200 | 23.3      |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033575.D  
 Acq On : 23 Aug 2024 05:18  
 Operator : MA/JU  
 Sample : P3671-12  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-903-J-SO-0.5-1.0-081924

Quant Time: Aug 23 05:56:20 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
 Supervised By :mohammad ahmed 08/24/2024

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| Internal Standards            |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 8161     | 0.400  | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.304 | 136  | 20804    | 0.400  | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10684    | 0.400  | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 19994    | 0.400  | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 20246    | 0.400  | ng    | # 0.00   |
| 35) Perylene-d12              | 23.300 | 264  | 21193    | 0.400  | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |        |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 4054     | 0.156  | ng    | 0.00     |
| 5) Phenol-d6                  | 6.736  | 99   | 4771     | 0.155  | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 3309     | 0.192  | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.900 | 152  | 4915     | 0.165  | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 930      | 0.162  | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 6630     | 0.152  | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 7798     | 0.162  | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.584 | 244  | 5627     | 0.122  | ng    | 0.00     |
| Target Compounds              |        |      |          |        |       |          |
| 9) Naphthalene                | 10.357 | 128  | 5094     | 0.092  | ng    | # 95     |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 2432     | 0.069  | ng    | # 94     |
| 16) Acenaphthylene            | 13.900 | 152  | 7656     | 0.163  | ng    | 98       |
| 17) Acenaphthene              | 14.242 | 154  | 21932    | 0.665  | ng    | 98       |
| 18) Fluorene                  | 15.236 | 166  | 28501    | 0.686  | ng    | 95       |
| 25) Phenanthrene              | 16.967 | 178  | 637000   | 11.452 | ng    | 100      |
| 26) Anthracene                | 17.066 | 178  | 108356   | 2.202  | ng    | # 95     |
| 28) Fluoranthene              | 19.003 | 202  | 1359855  | 22.123 | ng    | 100      |
| 30) Pyrene                    | 19.365 | 202  | 1125075  | 12.451 | ng    | # 94     |
| 32) Benzo(a)anthracene        | 21.122 | 228  | 585697   | 8.002  | ng    | 98       |
| 33) Chrysene                  | 21.175 | 228  | 628331   | 8.636  | ng    | 97       |
| 34) Bis(2-ethylhexyl)phtha... | 21.086 | 149  | 64308m   | 1.388  | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.449 | 276  | 414919   | 4.716  | ng    | 95       |
| 37) Benzo(b)fluoranthene      | 22.660 | 252  | 851426   | 10.758 | ng    | # 92     |
| 38) Benzo(k)fluoranthene      | 22.698 | 252  | 288714m  | 3.706  | ng    |          |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 574088m  | 8.767  | ng    |          |
| 40) Dibenzo(a,h)anthracene    | 25.458 | 278  | 93909    | 1.335  | ng    | 98       |
| 41) Benzo(g,h,i)perylene      | 26.107 | 276  | 410026   | 5.450  | ng    | 98       |

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

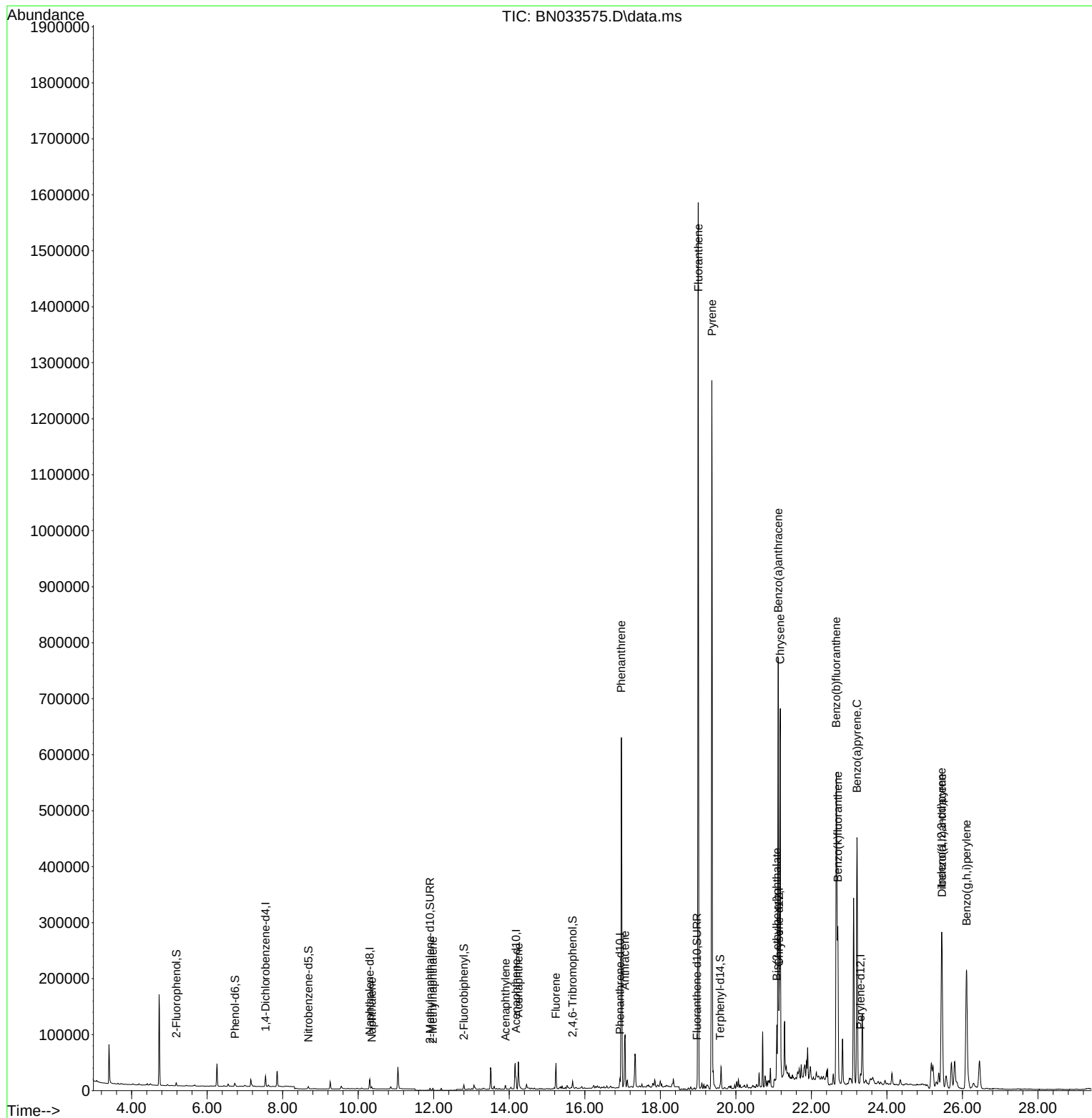
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033575.D  
Acq On : 23 Aug 2024 05:18  
Operator : MA/JU  
Sample : P3671-12  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

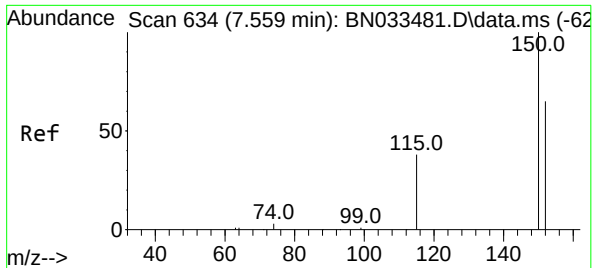
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924

Quant Time: Aug 23 05:56:20 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

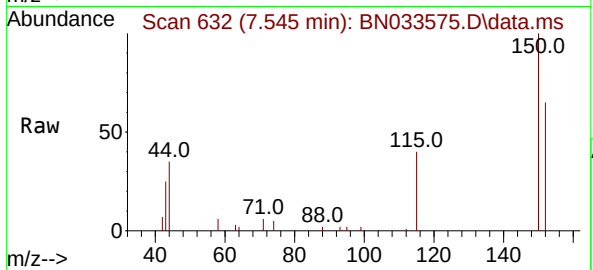
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

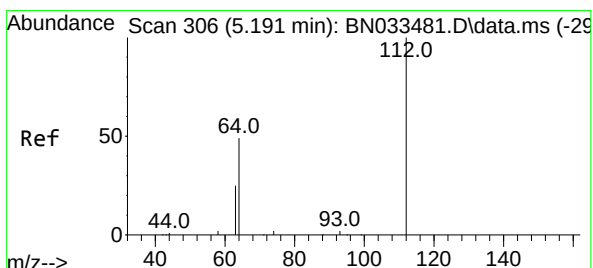
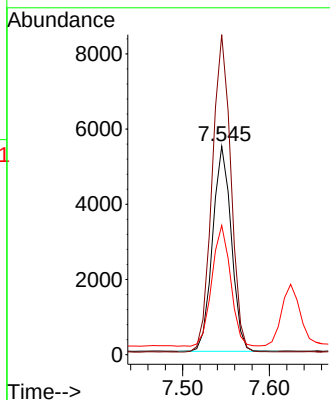
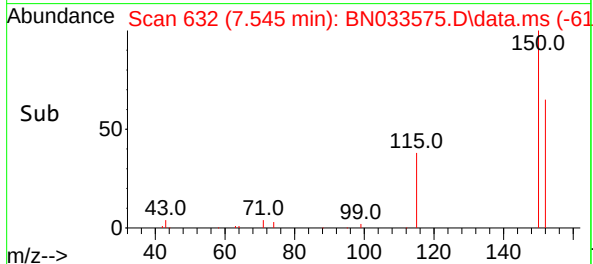
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:152 Resp: 816  
Ion Ratio Lower Upper  
152 100  
150 153.5 122.2 183.2  
115 62.0 47.2 70.8

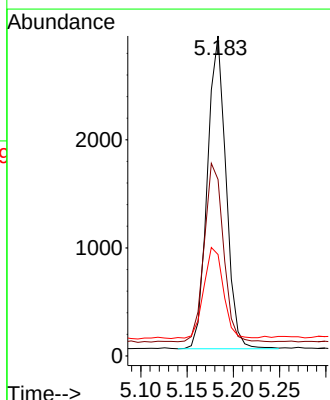
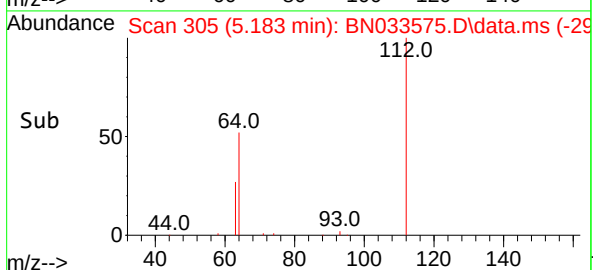
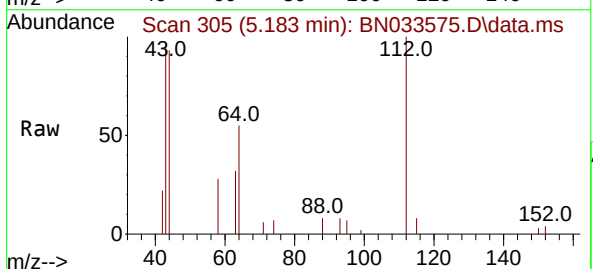
Manual Integrations  
APPROVED

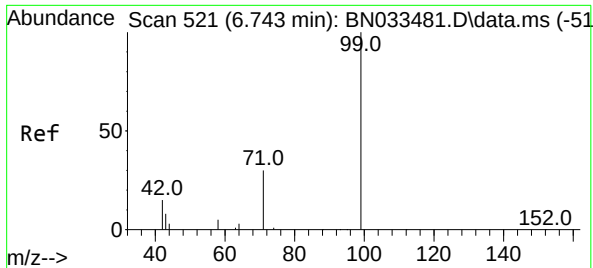
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.156 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

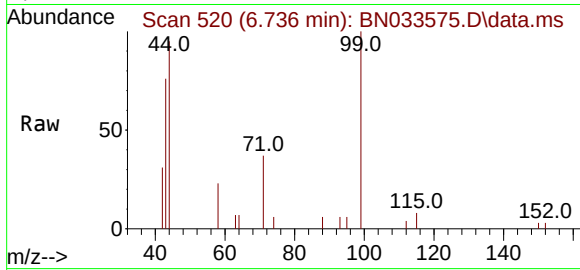
Tgt Ion:112 Resp: 4054  
Ion Ratio Lower Upper  
112 100  
64 58.4 47.1 70.7  
63 30.4 24.9 37.3





#5  
Phenol-d6  
Concen: 0.155 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

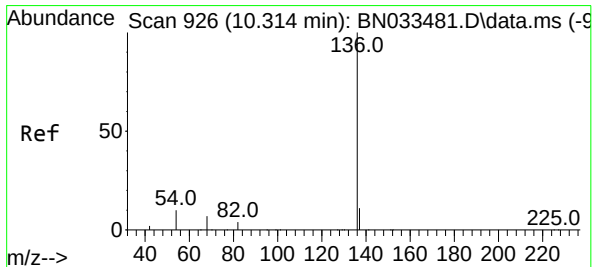
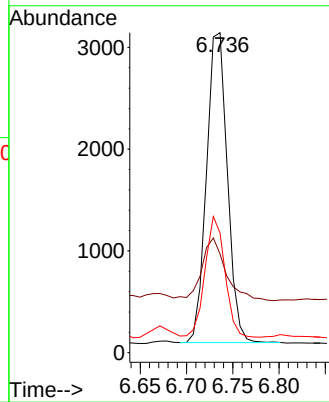
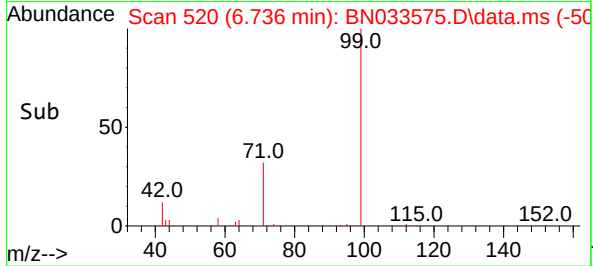
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion: 99 Resp: 477  
Ion Ratio Lower Upper  
99 100  
42 23.5 16.6 24.8  
71 37.3 26.2 39.4

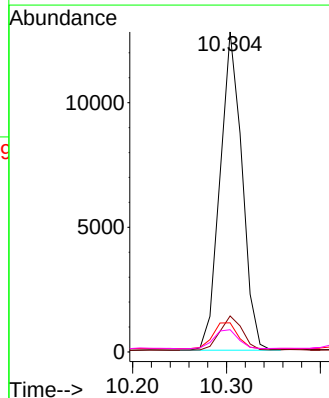
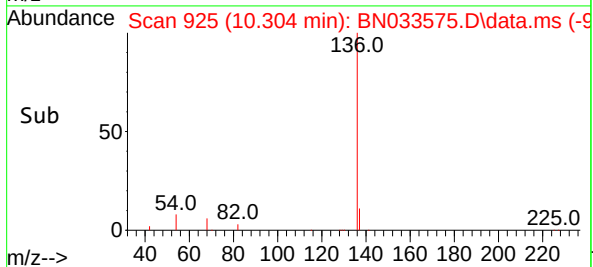
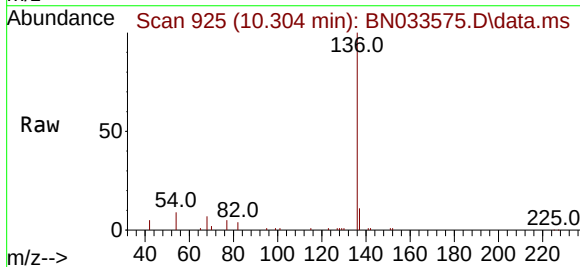
Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

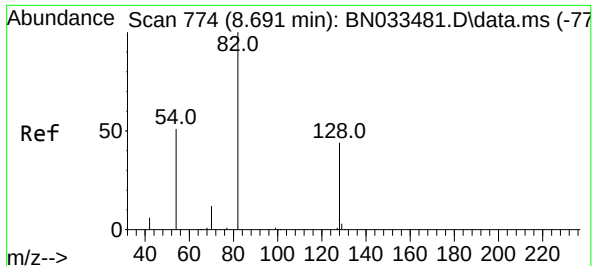


#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

Tgt Ion:136 Resp: 20804  
Ion Ratio Lower Upper  
136 100  
137 11.2 9.0 13.6  
54 9.1 8.3 12.5  
68 7.0 5.9 8.9







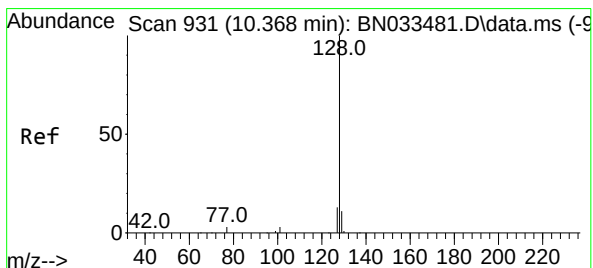
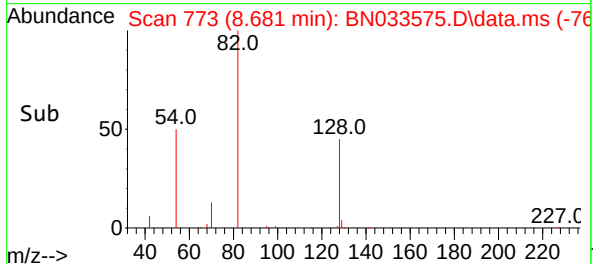
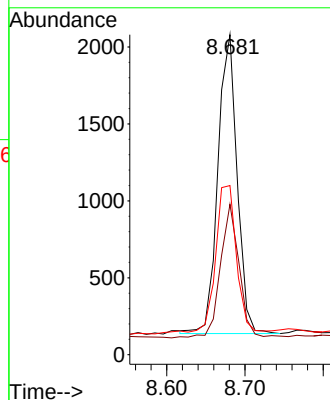
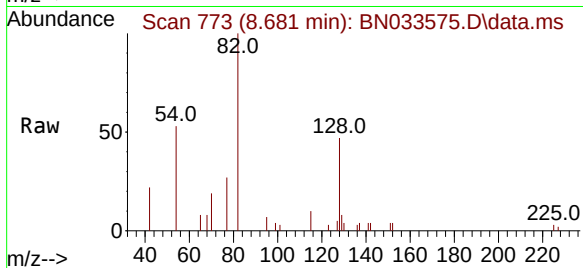
#8  
Nitrobenzene-d5  
Concen: 0.192 ng  
RT: 8.681 min Scan# 71  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924

Tgt Ion: 82 Resp: 3309  
Ion Ratio Lower Upper  
82 100  
128 47.0 36.0 54.0  
54 52.8 42.0 63.0

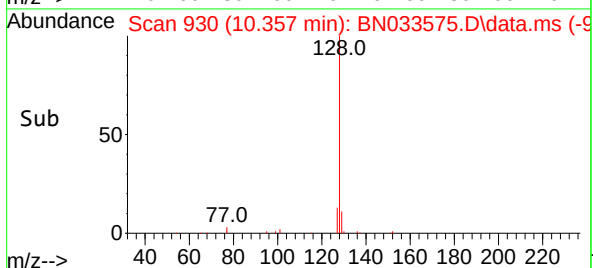
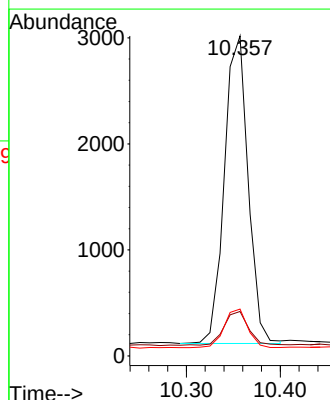
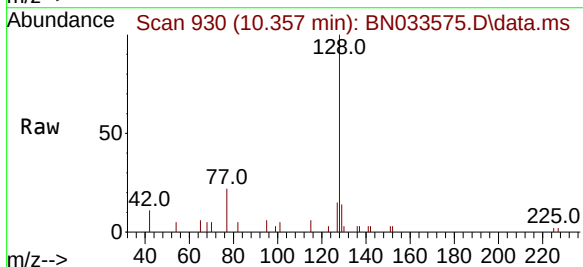
Manual Integrations  
**APPROVED**

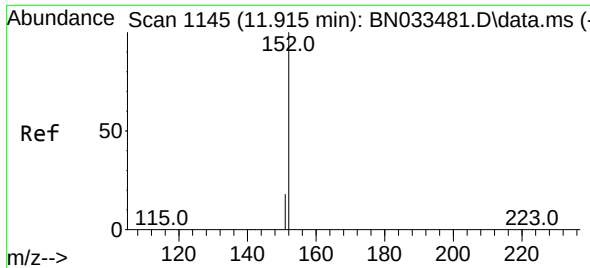
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#9  
Naphthalene  
Concen: 0.092 ng  
RT: 10.357 min Scan# 930  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

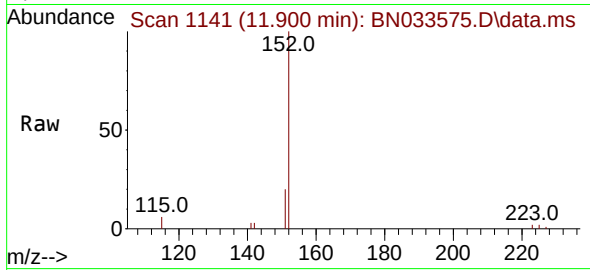
Tgt Ion:128 Resp: 5094  
Ion Ratio Lower Upper  
128 100  
129 13.9 9.1 13.7#  
127 14.6 10.7 16.1





#11  
2-Methylnaphthalene-d10  
Concen: 0.165 ng  
RT: 11.900 min Scan# 1145  
Delta R.T. -0.004 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

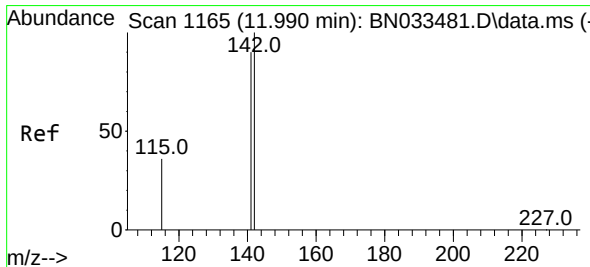
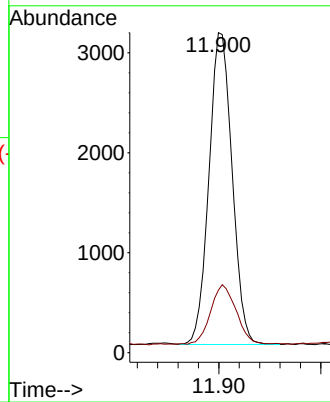
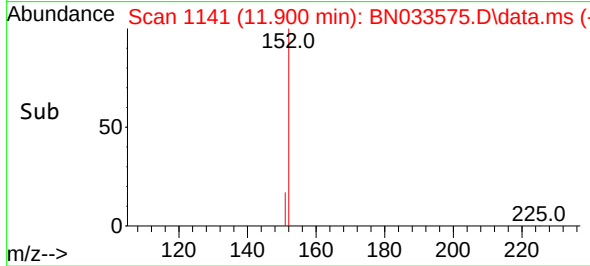
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:152 Resp: 4915  
Ion Ratio Lower Upper  
152 100  
151 20.8 16.6 25.0

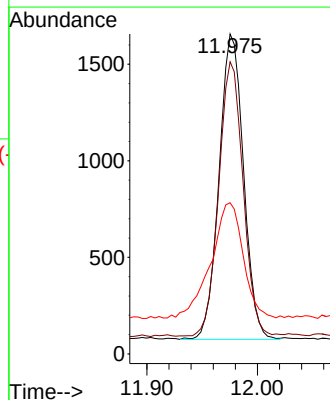
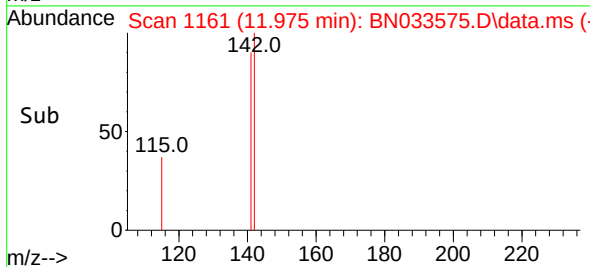
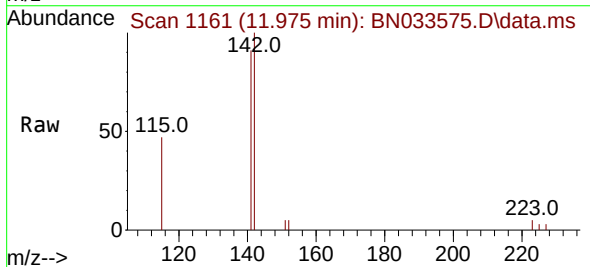
Manual Integrations  
APPROVED

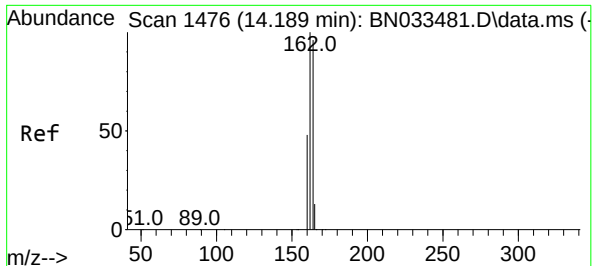
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.069 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

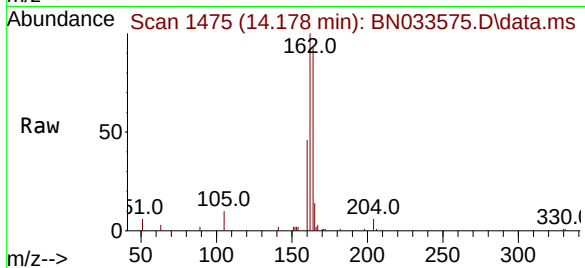
Tgt Ion:142 Resp: 2432  
Ion Ratio Lower Upper  
142 100  
141 91.3 71.7 107.5  
115 47.3 29.4 44.2#





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

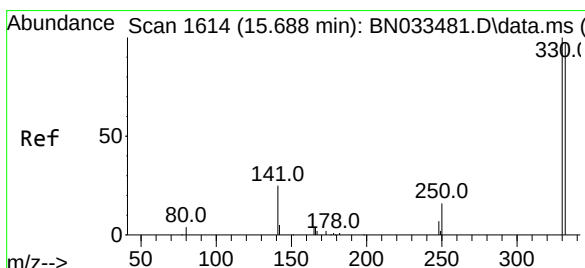
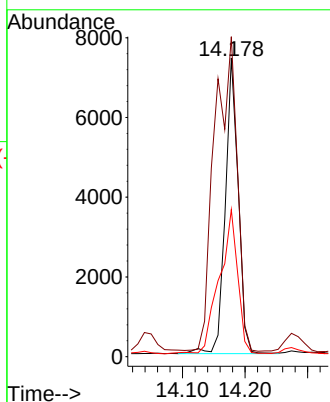
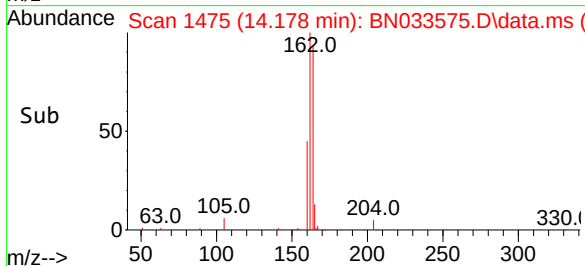
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:164 Resp: 10684  
Ion Ratio Lower Upper  
164 100  
162 107.1 83.5 125.3  
160 49.2 40.2 60.4

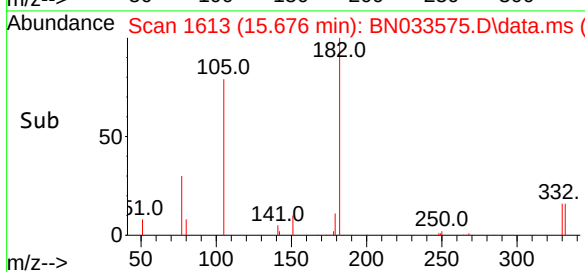
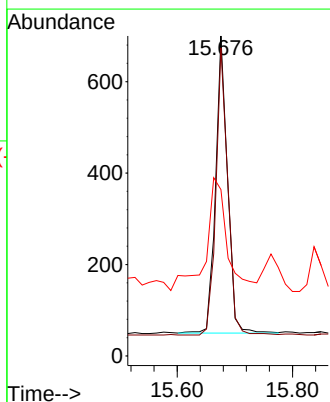
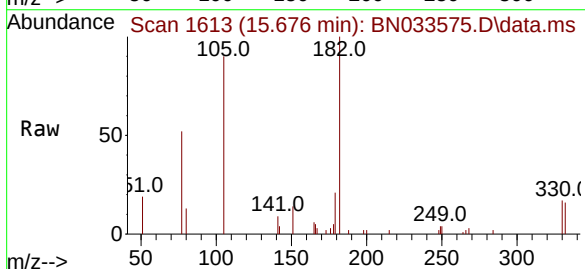
Manual Integrations  
APPROVED

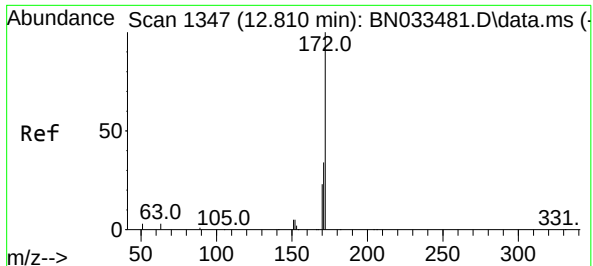
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#14  
2,4,6-Tribromophenol  
Concen: 0.162 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

Tgt Ion:330 Resp: 930  
Ion Ratio Lower Upper  
330 100  
332 96.2 77.5 116.3  
141 48.1 33.9 50.9





#15

2-Fluorobiphenyl

Concen: 0.152 ng

RT: 12.799 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN033575.D

Acq: 23 Aug 2024 05:18

Instrument :

BNA\_N

ClientSampleId :

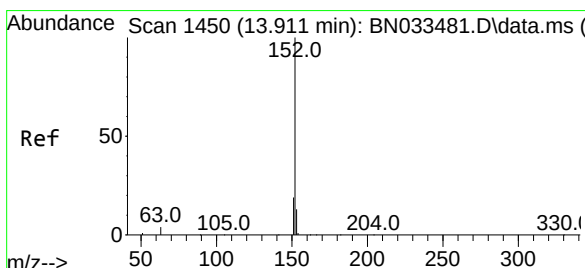
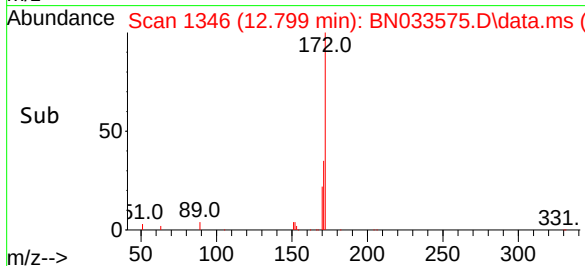
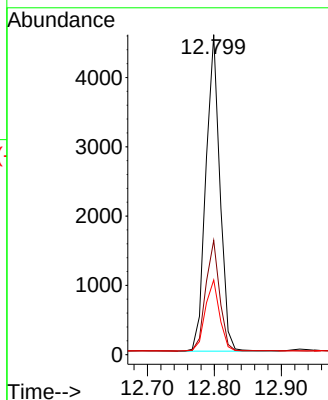
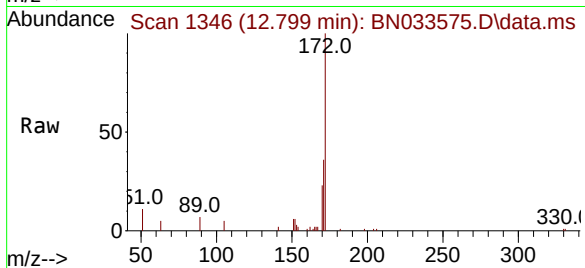
S-903-J-SO-0.5-1.0-081924

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 172   | Resp: | 6630  |
| Ion      | Ratio | Lower | Upper |
| 172      | 100   |       |       |
| 171      | 35.7  | 27.7  | 41.5  |
| 170      | 23.3  | 18.3  | 27.5  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#16

Acenaphthylene

Concen: 0.163 ng

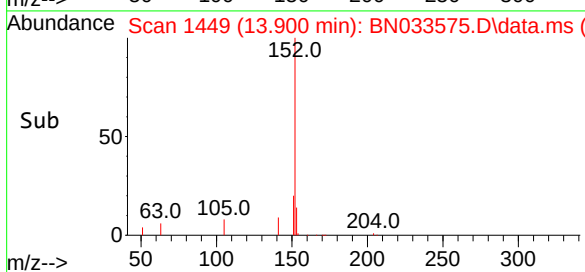
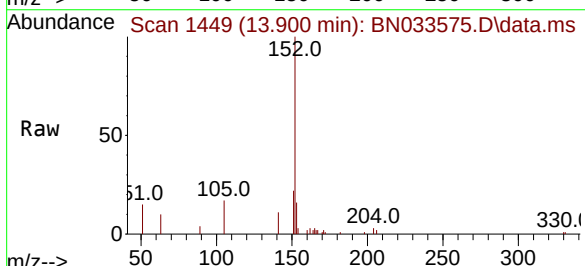
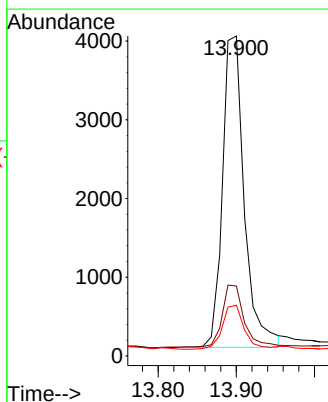
RT: 13.900 min Scan# 1449

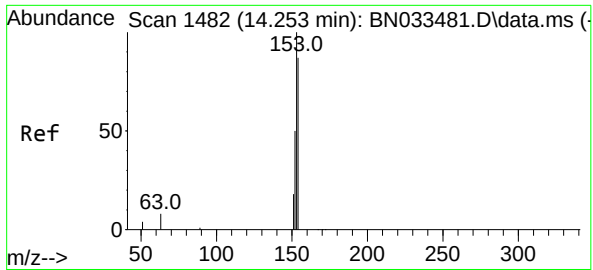
Delta R.T. 0.000 min

Lab File: BN033575.D

Acq: 23 Aug 2024 05:18

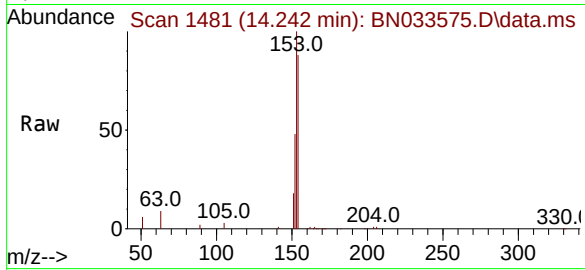
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 7656  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 20.0  | 15.7  | 23.5  |
| 153      | 14.2  | 10.3  | 15.5  |





#17  
Acenaphthene  
Concen: 0.665 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

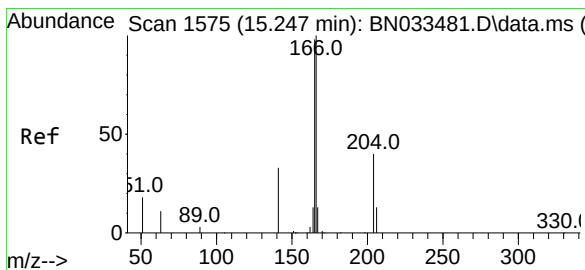
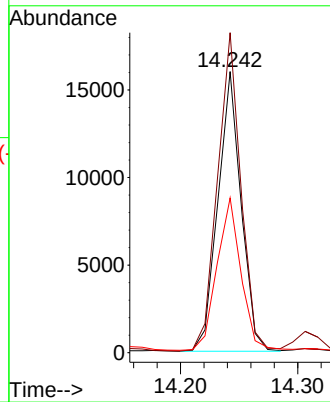
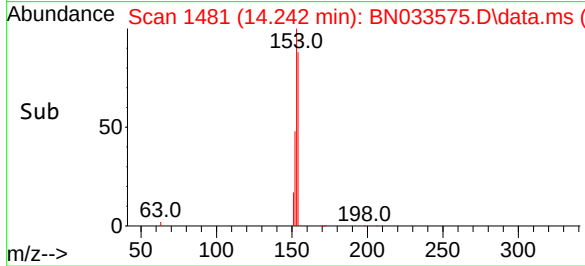
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:154 Resp: 2193  
Ion Ratio Lower Upper  
154 100  
153 114.5 89.0 133.6  
152 56.2 45.2 67.8

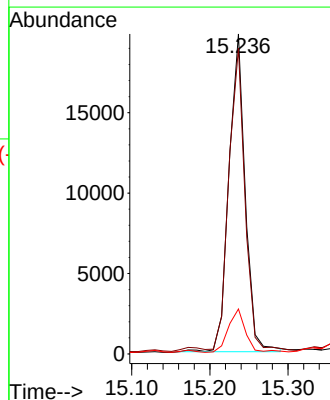
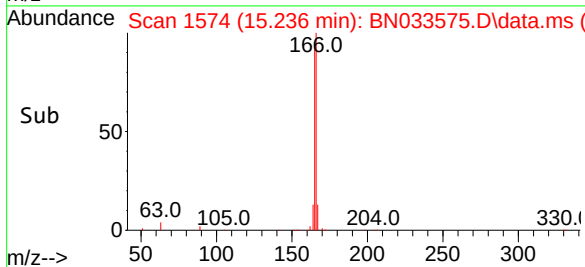
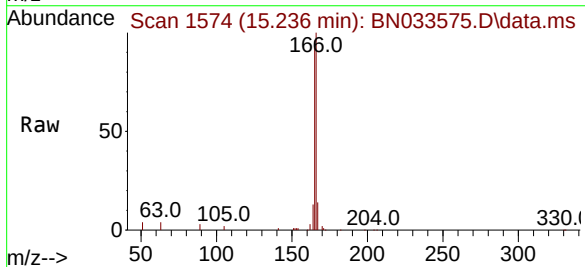
Manual Integrations  
APPROVED

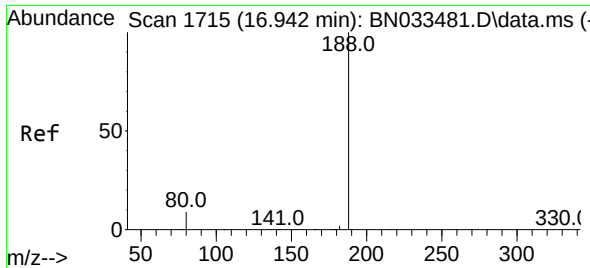
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#18  
Fluorene  
Concen: 0.686 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

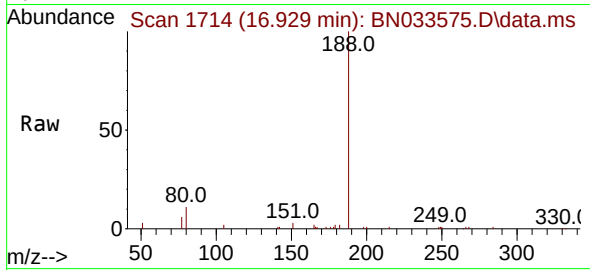
Tgt Ion:166 Resp: 28501  
Ion Ratio Lower Upper  
166 100  
165 92.8 78.2 117.4  
167 14.5 10.6 16.0





#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1714  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

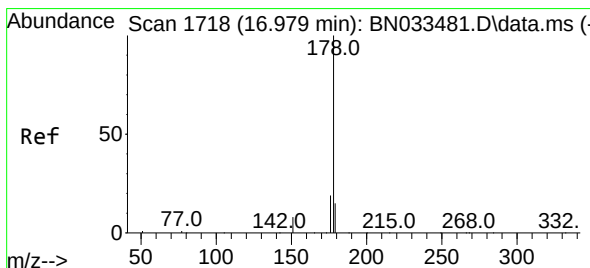
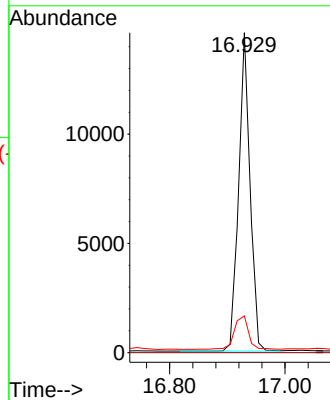
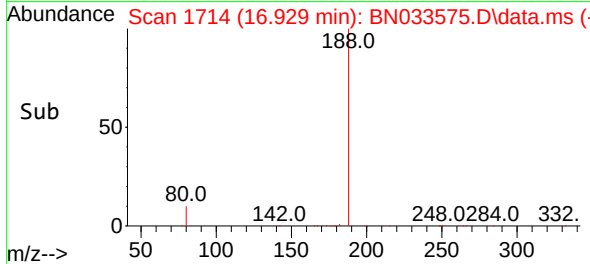
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:188 Resp: 1994  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.5 7.8 11.8

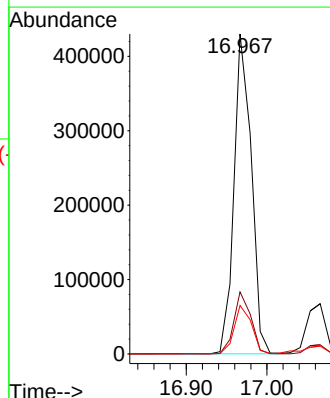
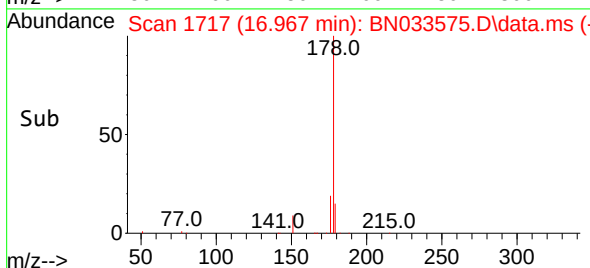
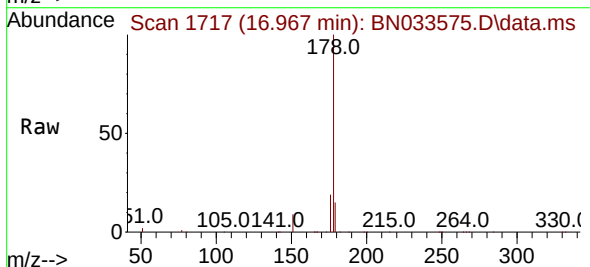
Manual Integrations  
APPROVED

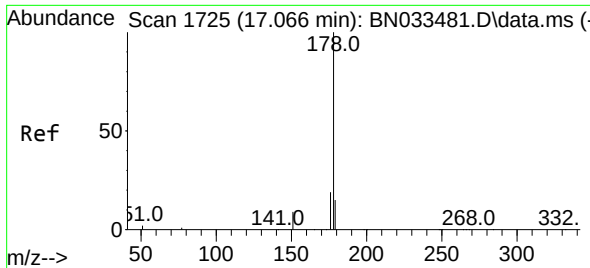
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#25  
Phenanthrene  
Concen: 11.452 ng  
RT: 16.967 min Scan# 1717  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

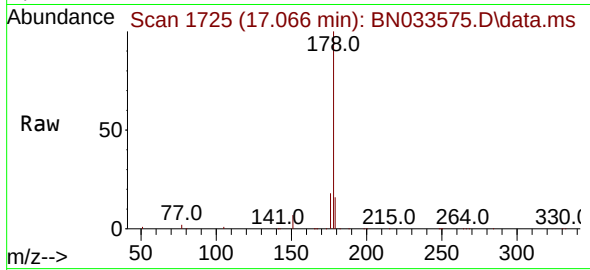
Tgt Ion:178 Resp: 637000  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.3 22.9  
179 15.2 12.3 18.5





#26  
Anthracene  
Concen: 2.202 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

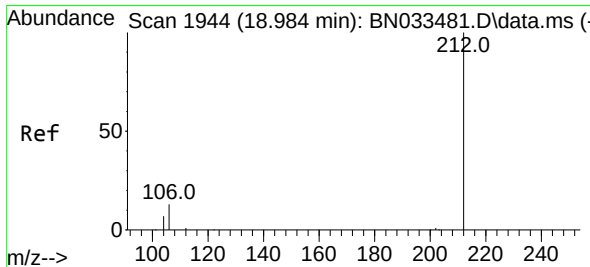
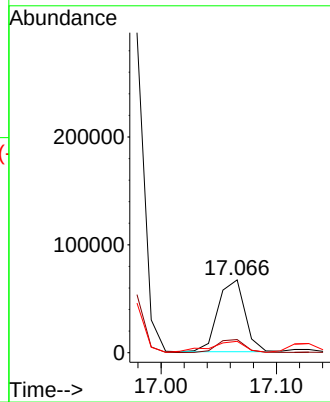
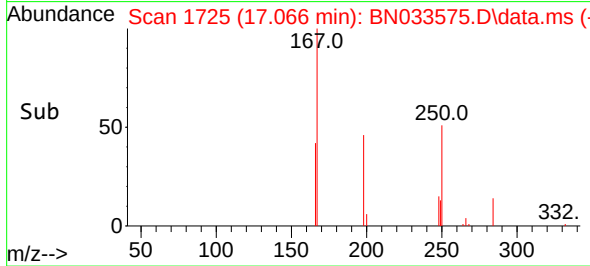
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:178 Resp: 108350  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.0 22.6  
179 19.3 12.4 18.6

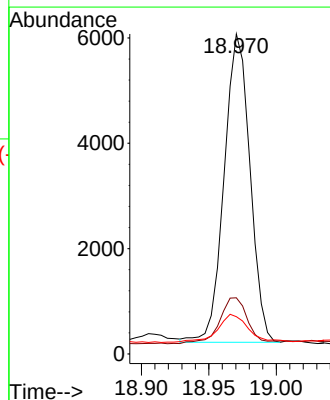
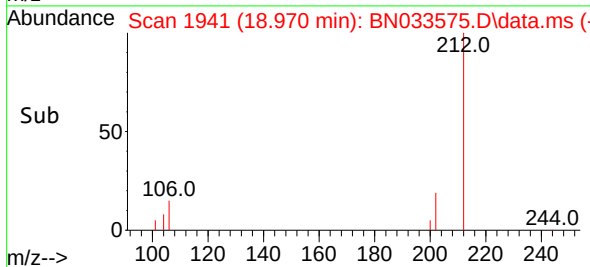
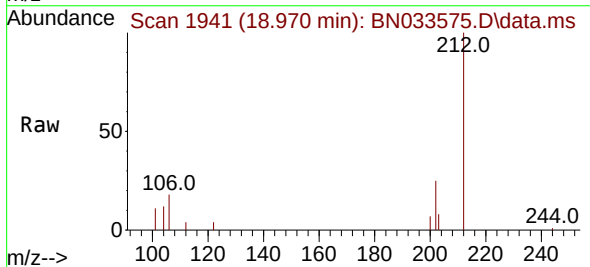
Manual Integrations  
APPROVED

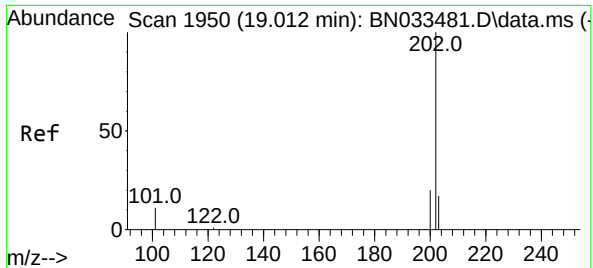
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#27  
Fluoranthene-d10  
Concen: 0.162 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

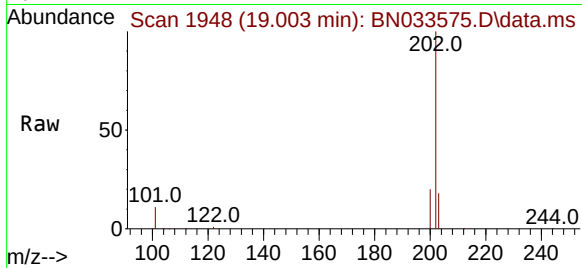
Tgt Ion:212 Resp: 7798  
Ion Ratio Lower Upper  
212 100  
106 16.1 12.3 18.5  
104 11.0 7.0 10.4





#28  
Fluoranthene  
Concen: 22.123 ng  
RT: 19.003 min Scan# 1950  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

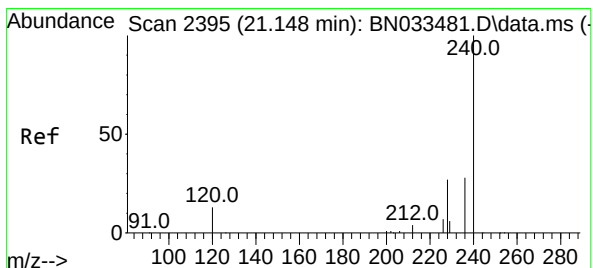
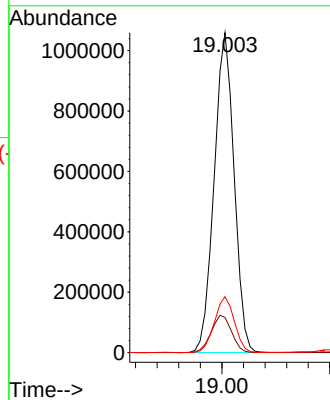
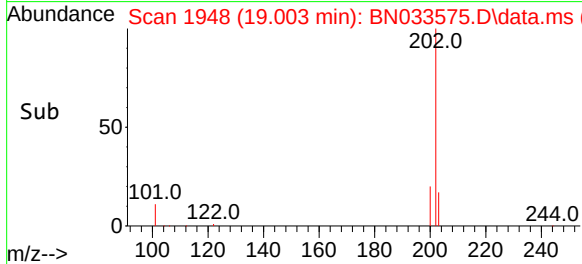
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:202 Resp: 135985  
Ion Ratio Lower Upper  
202 100  
101 11.9 9.5 14.3  
203 17.4 13.8 20.6

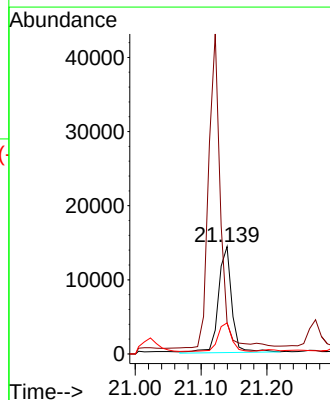
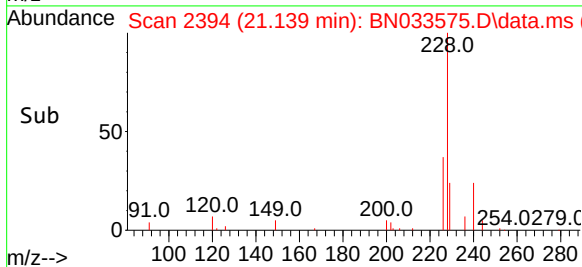
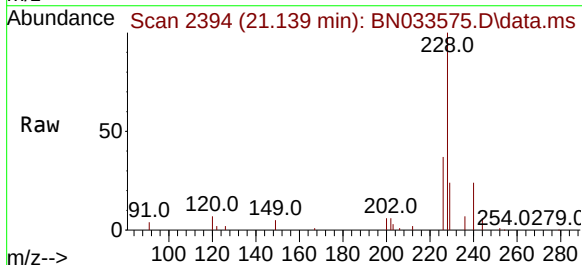
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

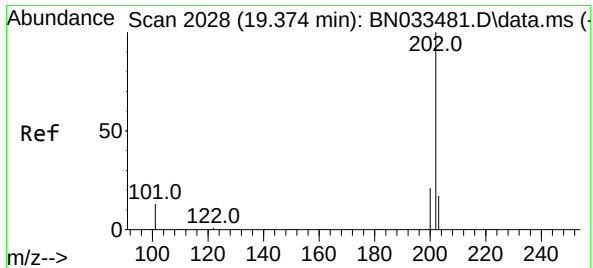


#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

Tgt Ion:240 Resp: 20246  
Ion Ratio Lower Upper  
240 100  
120 28.8 12.4 18.6#  
236 28.8 23.0 34.6

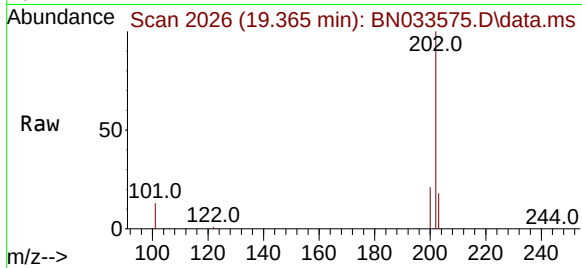






#30  
Pyrene  
Concen: 12.451 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

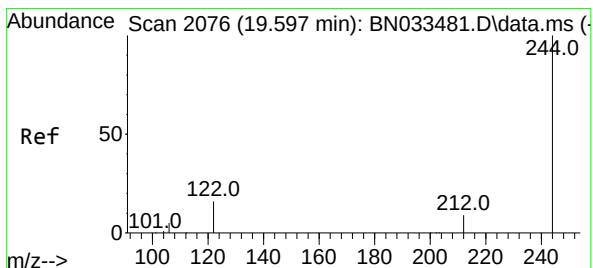
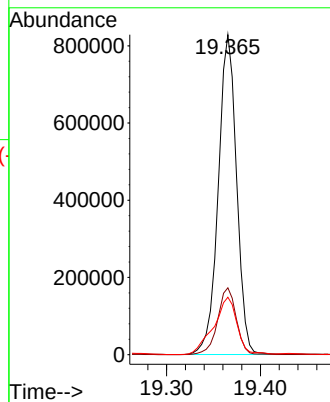
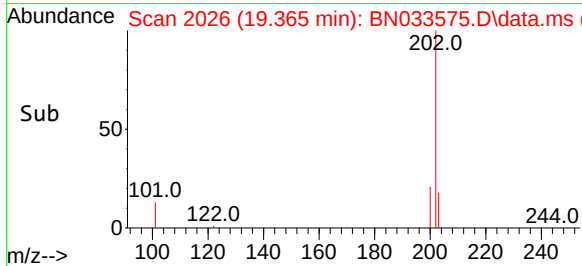
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:202 Resp: 112507  
Ion Ratio Lower Upper  
202 100  
200 21.3 16.6 24.8  
203 22.9 14.2 21.4

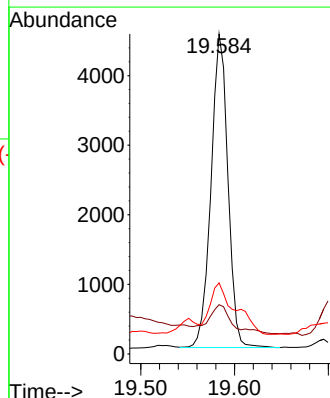
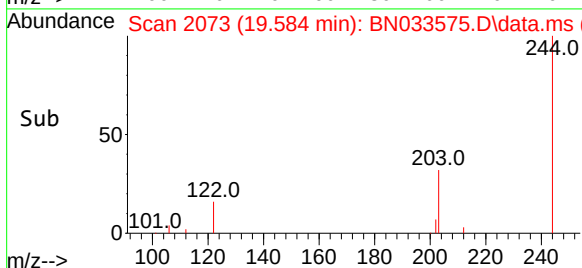
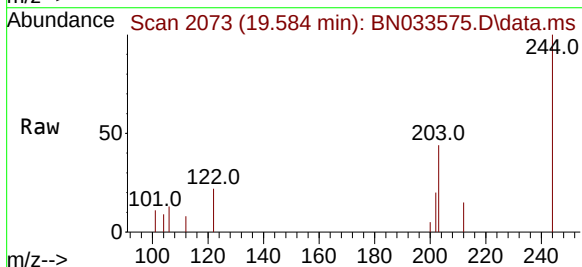
Manual Integrations  
APPROVED

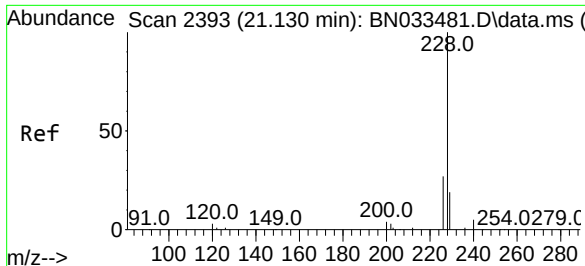
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#31  
Terphenyl-d14  
Concen: 0.122 ng  
RT: 19.584 min Scan# 2073  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

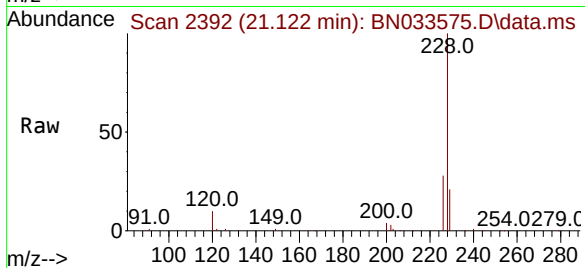
Tgt Ion:244 Resp: 5627  
Ion Ratio Lower Upper  
244 100  
212 15.4 7.8 11.6#  
122 22.2 13.3 19.9#





#32  
Benzo(a)anthracene  
Concen: 8.002 ng  
RT: 21.122 min Scan# 2112  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

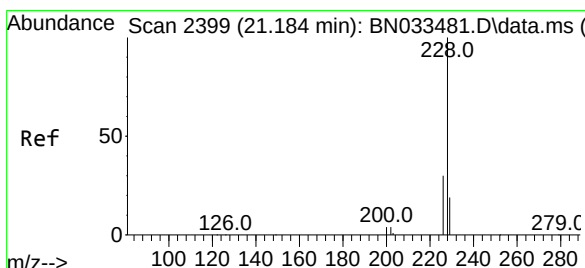
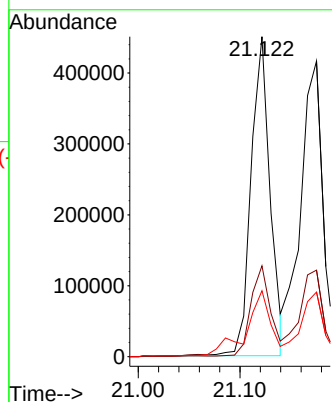
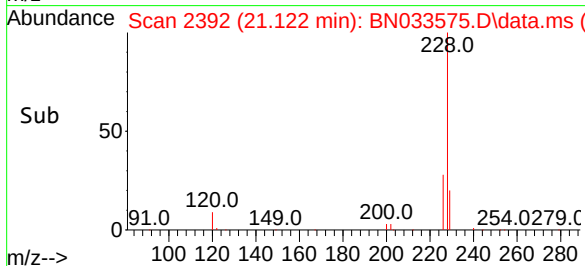
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:228 Resp: 58569  
Ion Ratio Lower Upper  
228 100  
226 28.4 21.8 32.6  
229 20.6 15.8 23.6

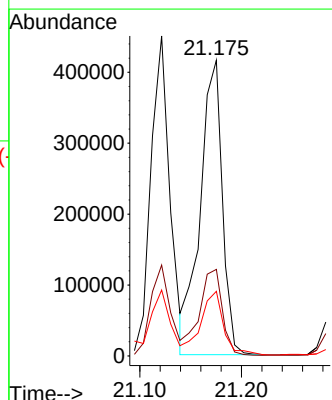
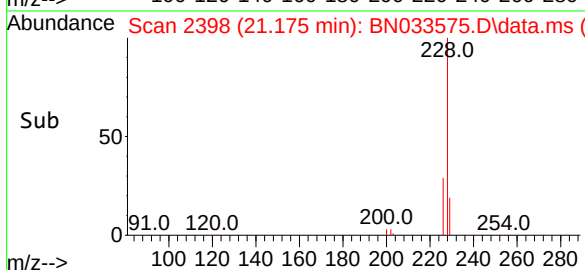
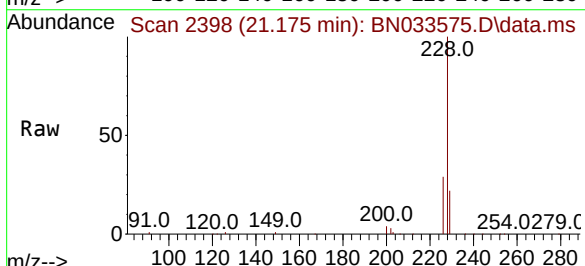
Manual Integrations  
APPROVED

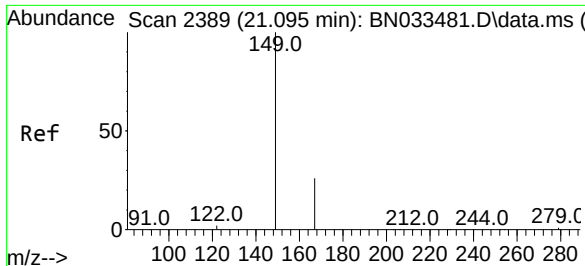
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#33  
Chrysene  
Concen: 8.636 ng  
RT: 21.175 min Scan# 2398  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

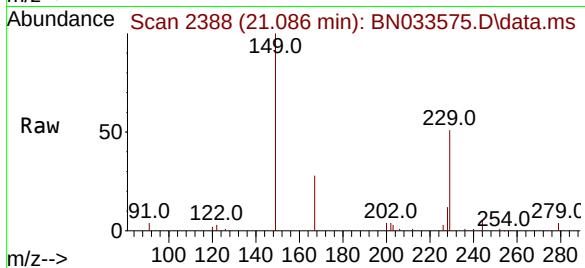
Tgt Ion:228 Resp: 628331  
Ion Ratio Lower Upper  
228 100  
226 29.3 23.8 35.8  
229 21.8 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 1.388 ng m  
RT: 21.086 min Scan# 21086  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

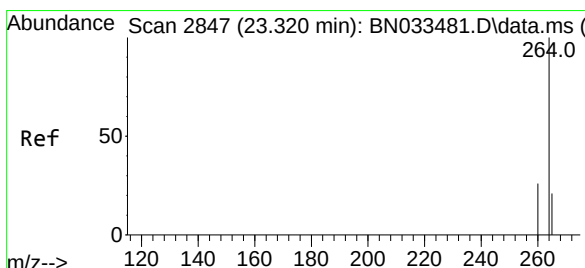
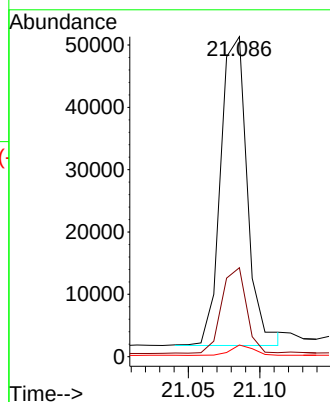
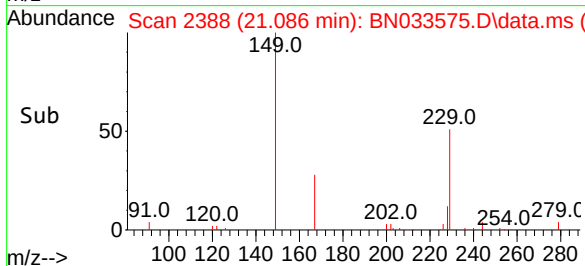
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:149 Resp: 64308  
Ion Ratio Lower Upper  
149 100  
167 32.3 21.5 32.3  
279 3.4 2.2 3.2

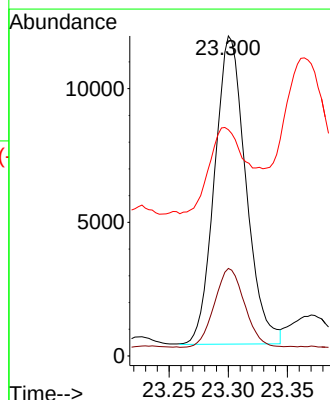
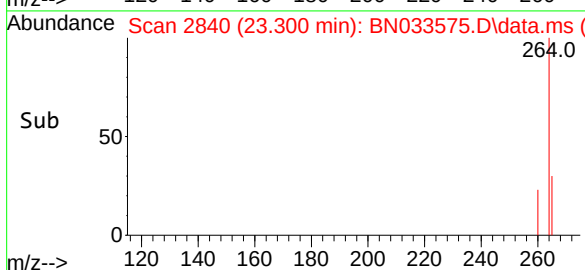
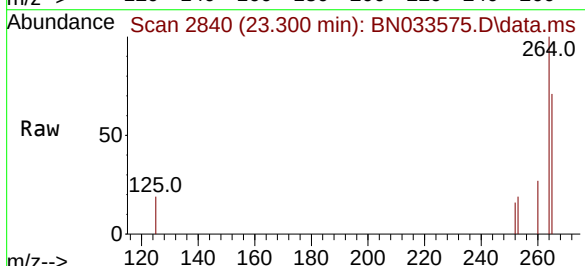
Manual Integrations  
APPROVED

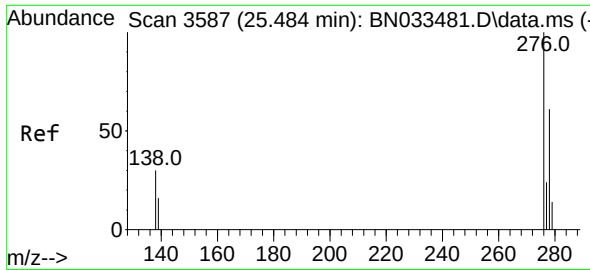
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.300 min Scan# 2840  
Delta R.T. -0.003 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

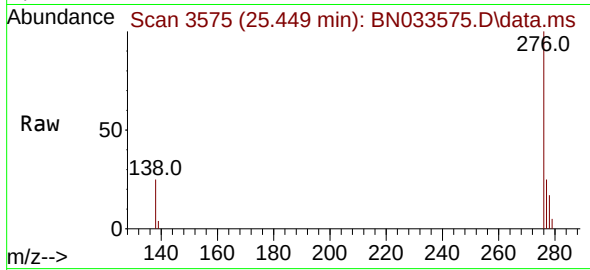
Tgt Ion:264 Resp: 21193  
Ion Ratio Lower Upper  
264 100  
260 27.4 20.8 31.2  
265 70.7 52.2 78.2





#36  
Indeno(1,2,3-cd)pyrene  
Concen: 4.716 ng  
RT: 25.449 min Scan# 3575  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

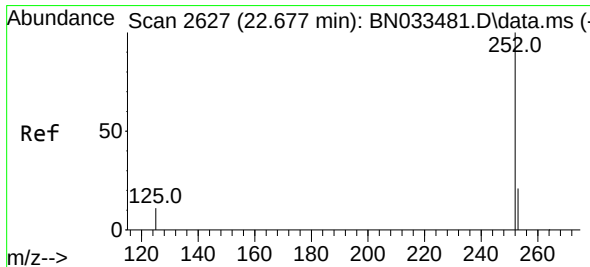
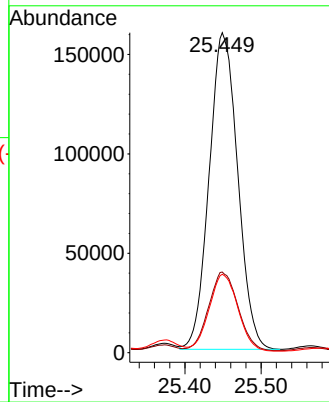
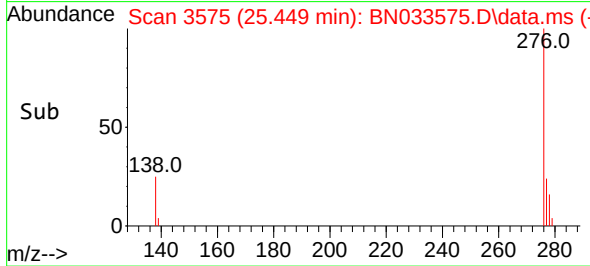
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:276 Resp: 414919  
Ion Ratio Lower Upper  
276 100  
138 25.6 24.4 36.6  
277 24.5 19.8 29.6

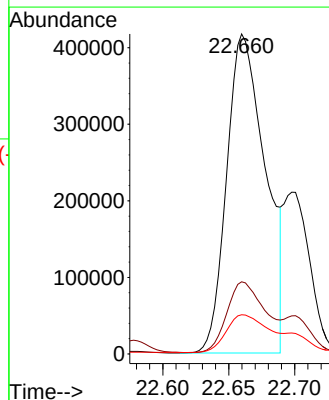
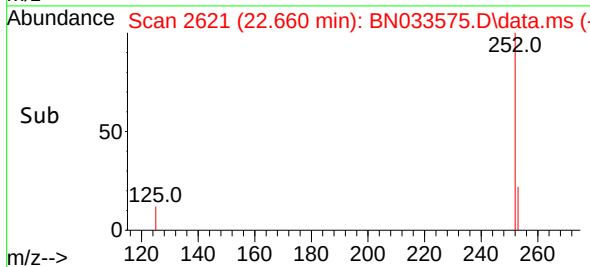
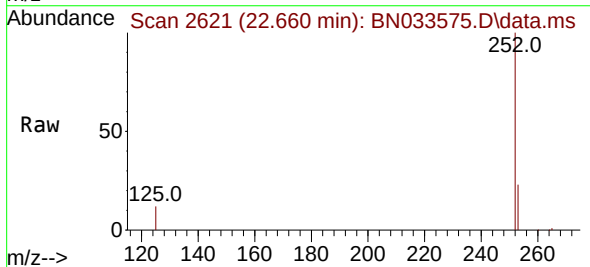
Manual Integrations  
APPROVED

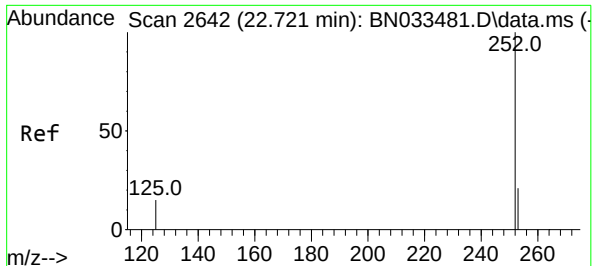
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#37  
Benzo(b)fluoranthene  
Concen: 10.758 ng  
RT: 22.660 min Scan# 2621  
Delta R.T. 0.000 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

Tgt Ion:252 Resp: 851426  
Ion Ratio Lower Upper  
252 100  
253 22.5 19.8 29.8  
125 12.3 13.9 20.9#





#38

Benzo(k)fluoranthene

Concen: 3.706 ng m

RT: 22.698 min Scan# 20

Delta R.T. -0.006 min

Lab File: BN033575.D

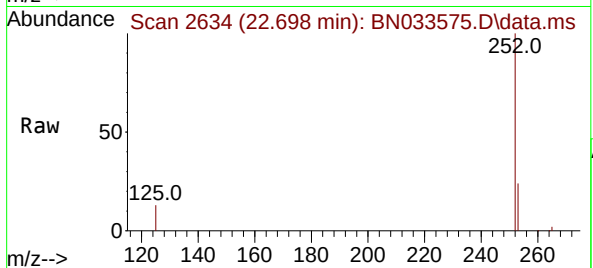
Acq: 23 Aug 2024 05:18

Instrument :

BNA\_N

ClientSampleId :

S-903-J-SO-0.5-1.0-081924



Tgt Ion:252 Resp: 288714

Ion Ratio Lower Upper

252 100

253 23.5 19.8 29.8

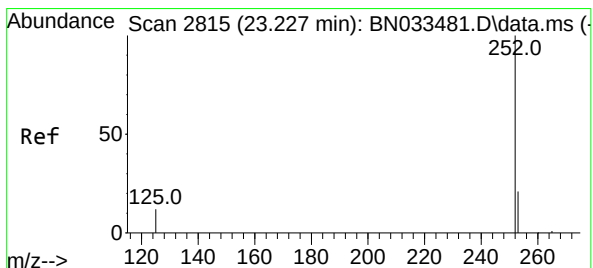
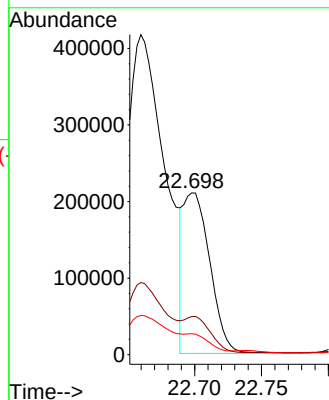
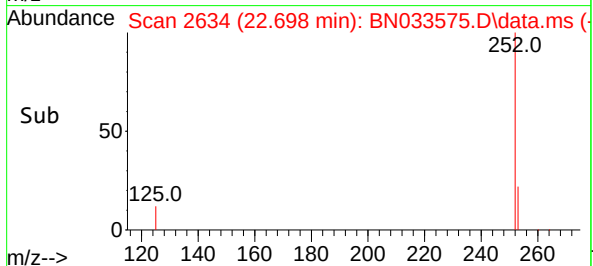
125 12.9 15.8 23.8

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#39

Benzo(a)pyrene

Concen: 8.767 ng m

RT: 23.206 min Scan# 2808

Delta R.T. -0.003 min

Lab File: BN033575.D

Acq: 23 Aug 2024 05:18

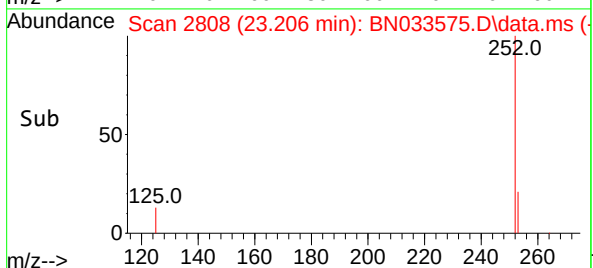
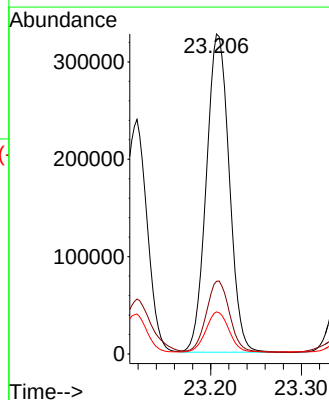
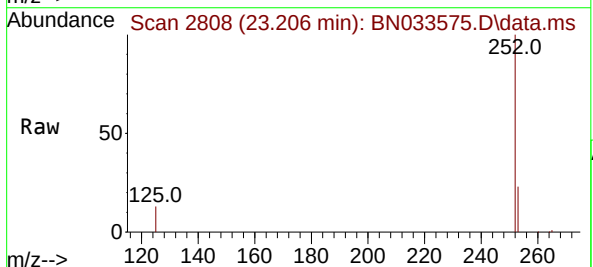
Tgt Ion:252 Resp: 574088

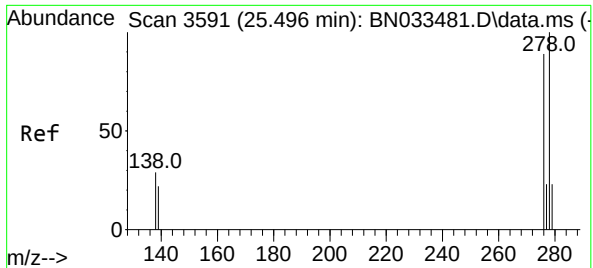
Ion Ratio Lower Upper

252 100

253 22.7 21.5 32.3

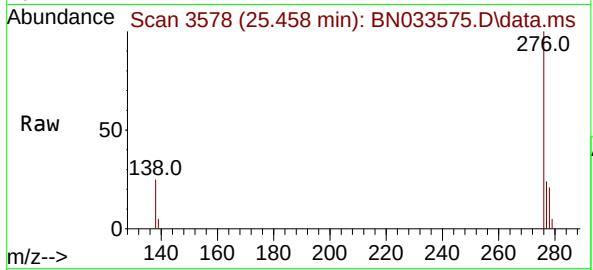
125 13.1 17.0 25.4#





#40  
Dibenzo(a,h)anthracene  
Concen: 1.335 ng  
RT: 25.458 min Scan# 31  
Delta R.T. -0.012 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

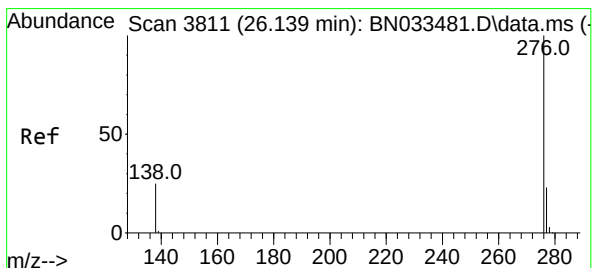
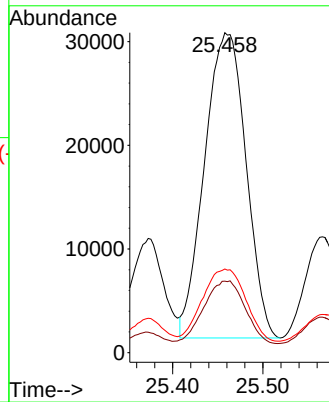
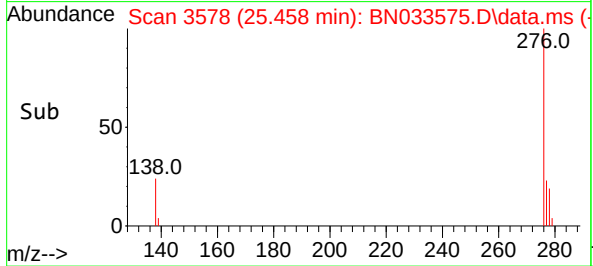
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924



Tgt Ion:278 Resp: 93909  
Ion Ratio Lower Upper  
278 100  
139 22.3 19.1 28.7  
279 26.2 21.0 31.4

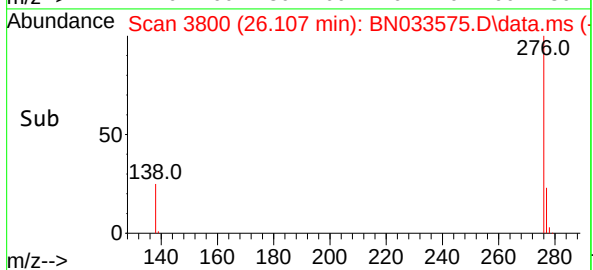
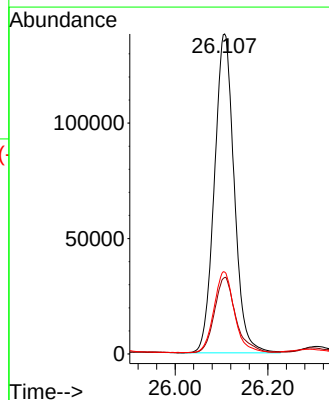
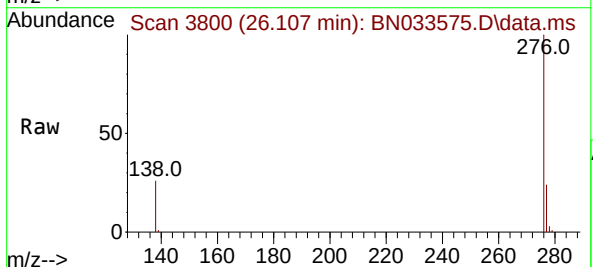
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#41  
Benzo(g,h,i)perylene  
Concen: 5.450 ng  
RT: 26.107 min Scan# 3800  
Delta R.T. 0.003 min  
Lab File: BN033575.D  
Acq: 23 Aug 2024 05:18

Tgt Ion:276 Resp: 410026  
Ion Ratio Lower Upper  
276 100  
277 23.9 19.7 29.5  
138 25.6 21.8 32.6



### Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-903-J-SO-0.5-1.0-081924DL           | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-12DL                            | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 85.8                 |
| Sample Wt/Vol:     | 30.08      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033610.D        | 10        | 08/21/24 09:38 | 08/24/24 04:08 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 8.00  | UD        | 8.00                | 38.4       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 9.30  | UD        | 9.30                | 38.4       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 7.30  | UD        | 7.30                | 38.4       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 28.3  | JD        | 6.40                | 38.4       | ug/Kg             |
| 86-73-7                   | Fluorene                | 27.5  | JD        | 7.00                | 38.4       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 450   | D         | 7.30                | 38.4       | ug/Kg             |
| 120-12-7                  | Anthracene              | 79.8  | D         | 9.20                | 38.4       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 850   | D         | 7.80                | 38.4       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 570   | D         | 11.0                | 38.4       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 340   | D         | 8.80                | 38.4       | ug/Kg             |
| 218-01-9                  | Chrysene                | 370   | D         | 10.0                | 38.4       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 460   | D         | 13.8                | 38.4       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 150   | D         | 11.4                | 38.4       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 370   | D         | 19.3                | 38.4       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 200   | D         | 14.6                | 38.4       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 58.1  | D         | 13.6                | 38.4       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 230   | D         | 13.3                | 38.4       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 25.8  | UD        | 25.8                | 76.7       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.17  |           | 30 (17) - 150 (161) | 43%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.17  |           | 30 (23) - 150 (138) | 43%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.21  |           | 30 (33) - 130 (121) | 52%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.17  |           | 30 (32) - 130 (121) | 43%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.15  |           | 30 (21) - 130 (130) | 38%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7890  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 20900 | 10.304    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 10000 | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 19300 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-903-J-SO-0.5-1.0-081924DL           | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-12DL                            | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 85.8                         |
| Sample Wt/Vol:     | 30.08      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033610.D        | 10        | 08/21/24 09:38 | 08/24/24 04:08 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 16100 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 17600 | 23.3      |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033610.D  
 Acq On : 24 Aug 2024 04:08  
 Operator : MA/JU  
 Sample : P3671-12DL 10X  
 Misc :  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-903-J-SO-0.5-1.0-081924DL

Manual Integrations  
 APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
 Supervised By :mohammad ahmed 08/29/2024

Quant Time: Aug 24 04:40:54 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7890     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.304 | 136  | 20855    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10027    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 19250    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 16100    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.300 | 264  | 17643    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 408      | 0.016 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.736  | 99   | 488      | 0.016 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 360      | 0.021 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 518      | 0.017 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 109      | 0.020 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 699      | 0.017 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 772      | 0.017 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 559      | 0.015 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 17) Acenaphthene              | 14.242 | 154  | 2253     | 0.073 | ng    | 99       |
| 18) Fluorene                  | 15.236 | 166  | 2782     | 0.071 | ng    | 98       |
| 25) Phenanthrene              | 16.967 | 178  | 62320    | 1.164 | ng    | 100      |
| 26) Anthracene                | 17.066 | 178  | 9763     | 0.206 | ng    | # 96     |
| 28) Fluoranthene              | 19.003 | 202  | 130414   | 2.204 | ng    | 100      |
| 30) Pyrene                    | 19.365 | 202  | 105544   | 1.469 | ng    | # 94     |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 51691    | 0.888 | ng    | 98       |
| 33) Chrysene                  | 21.175 | 228  | 55758    | 0.964 | ng    | 97       |
| 34) Bis(2-ethylhexyl)phtha... | 21.077 | 149  | 6941m    | 0.188 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.446 | 276  | 37727    | 0.515 | ng    | 94       |
| 37) Benzo(b)fluoranthene      | 22.660 | 252  | 77954    | 1.183 | ng    | 98       |
| 38) Benzo(k)fluoranthene      | 22.698 | 252  | 25448m   | 0.392 | ng    |          |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 51390    | 0.943 | ng    | 94       |
| 40) Dibenzo(a,h)anthracene    | 25.458 | 278  | 8785     | 0.150 | ng    | # 79     |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 36974    | 0.590 | ng    | 99       |

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

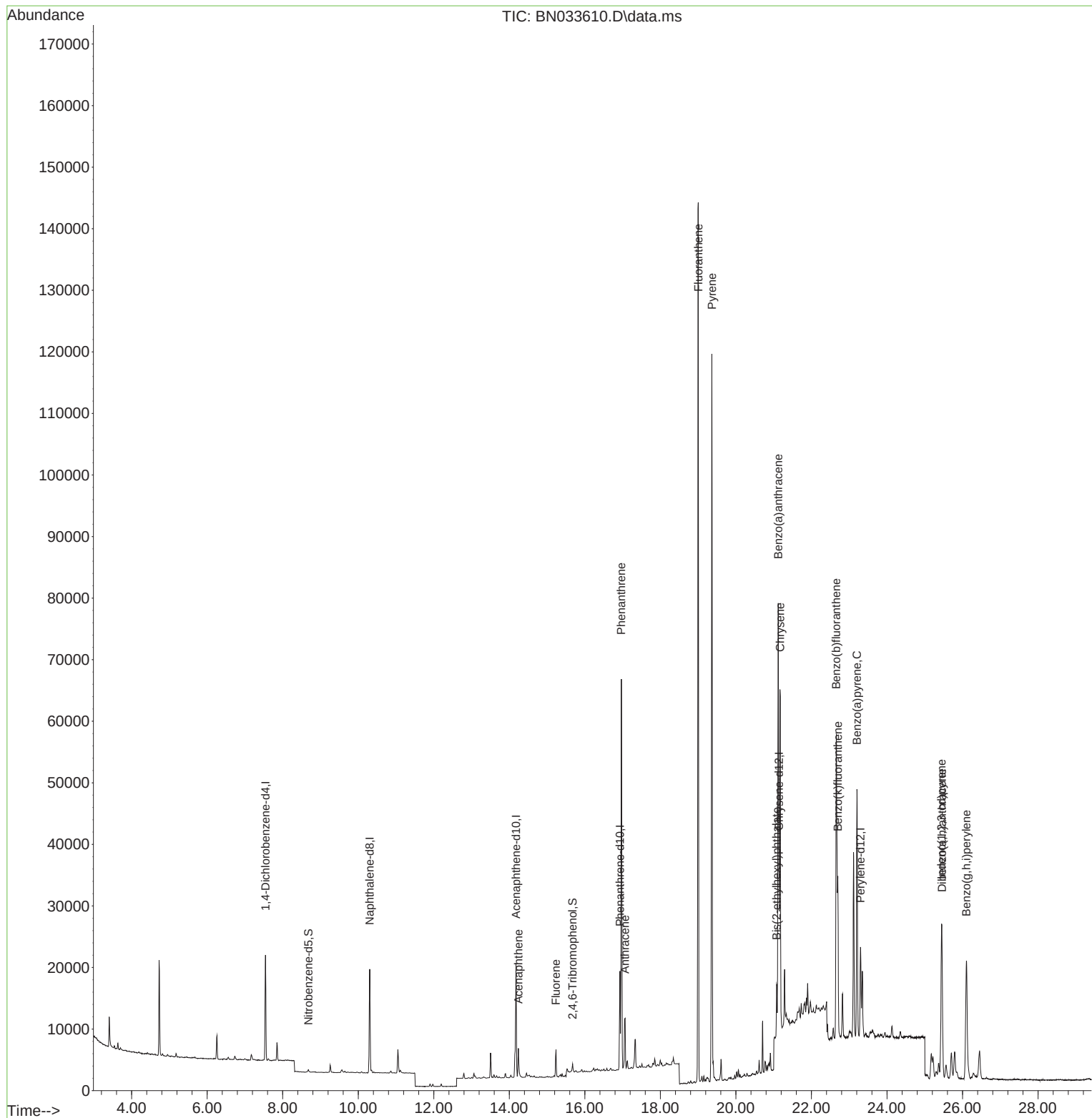
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Data File : BN033610.D  
Acq On : 24 Aug 2024 04:08  
Operator : MA/JU  
Sample : P3671-12DL 10X  
Misc :  
ALS Vial : 29 Sample Multiplier: 1

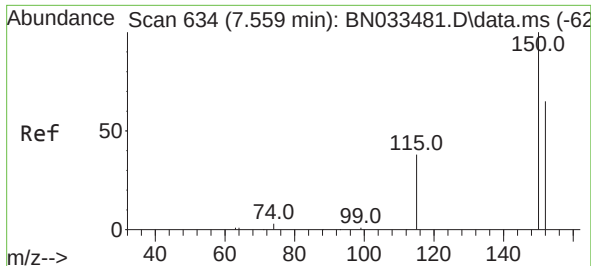
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL

Manual Integrations  
APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

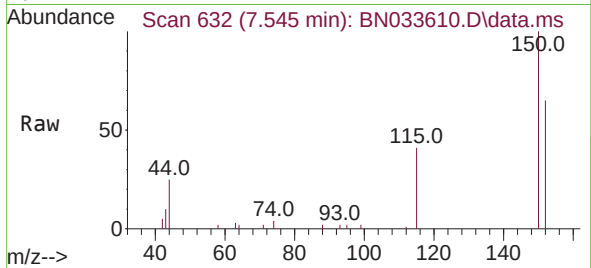
Quant Time: Aug 24 04:40:54 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

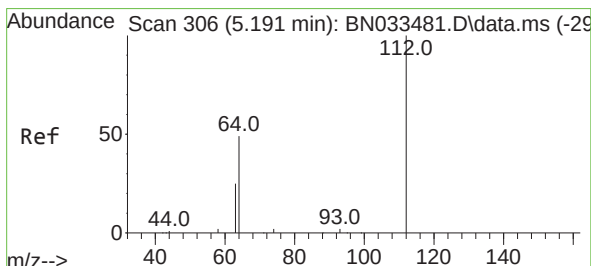
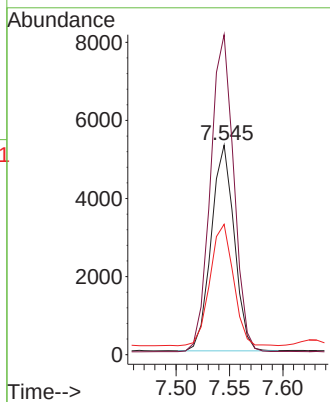
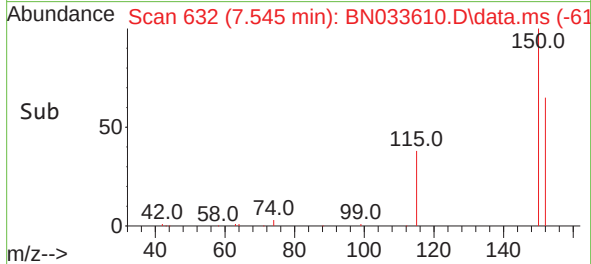
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



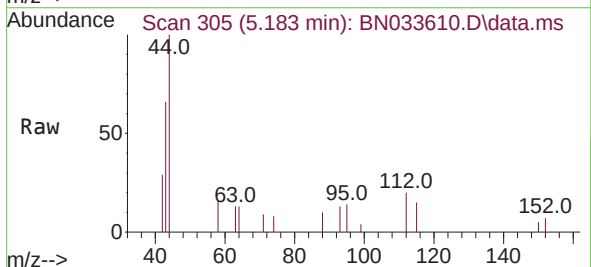
Tgt Ion:152 Resp: 7890  
Ion Ratio Lower Upper  
152 100  
150 152.7 122.2 183.2  
115 62.3 47.2 70.8

Manual Integrations  
APPROVED

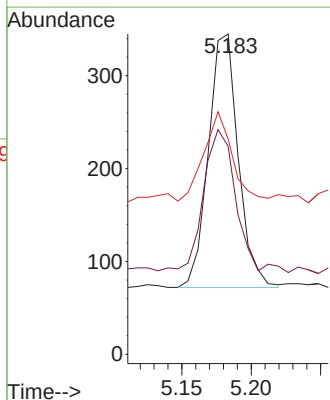
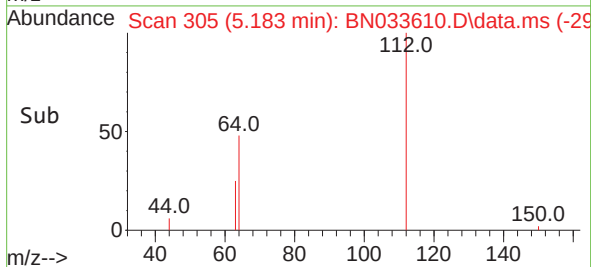
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

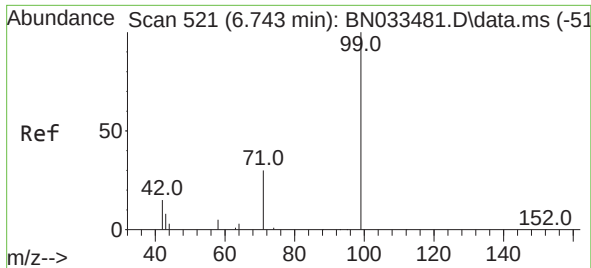


#4  
2-Fluorophenol  
Concen: 0.016 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08



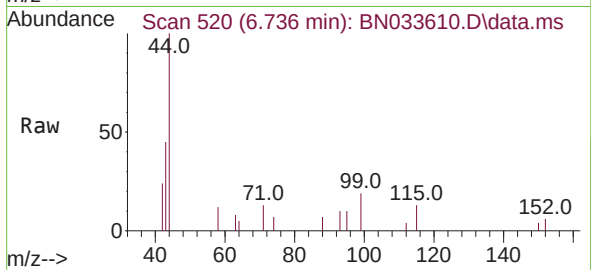
Tgt Ion:112 Resp: 408  
Ion Ratio Lower Upper  
112 100  
64 61.8 47.1 70.7  
63 32.8 24.9 37.3





#5  
Phenol-d6  
Concen: 0.016 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

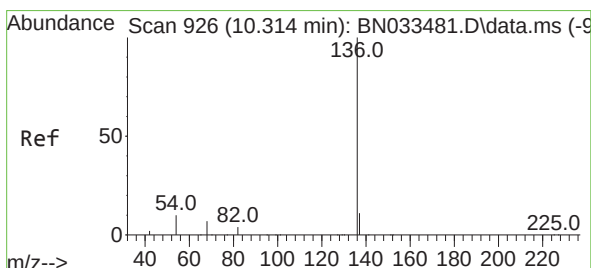
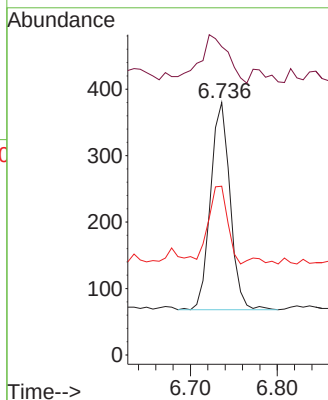
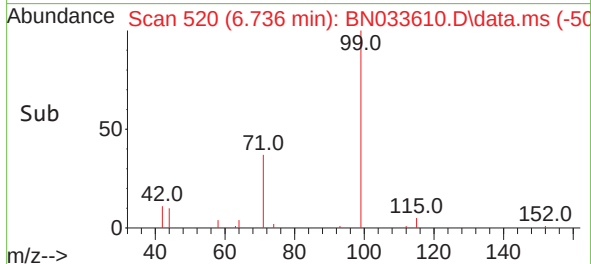
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



Tgt Ion: 99 Resp: 488  
Ion Ratio Lower Upper  
99 100  
42 33.0 16.6 24.8  
71 37.9 26.2 39.4

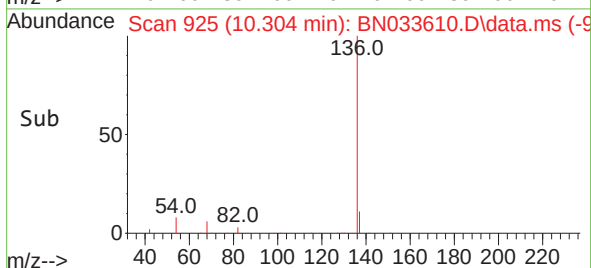
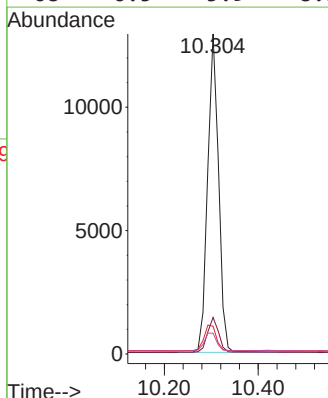
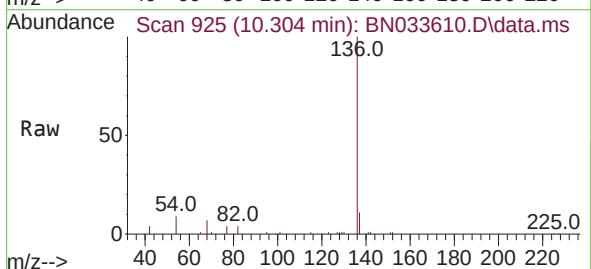
Manual Integrations  
APPROVED

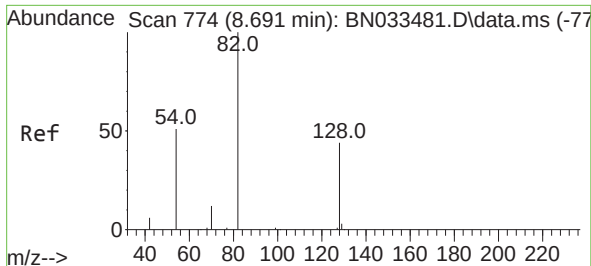
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

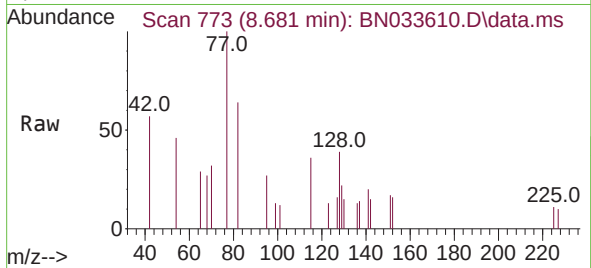
Tgt Ion:136 Resp: 20855  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 8.7 8.3 12.5  
68 6.5 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.021 ng  
RT: 8.681 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

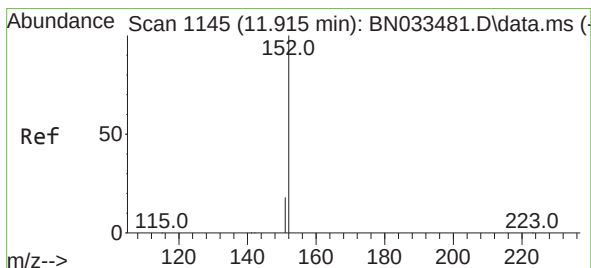
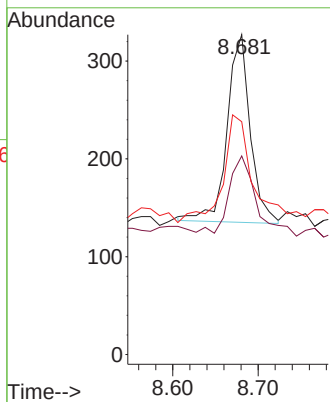
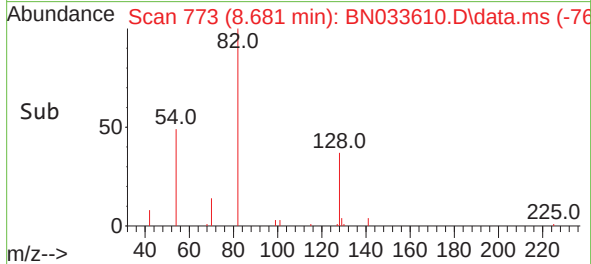
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



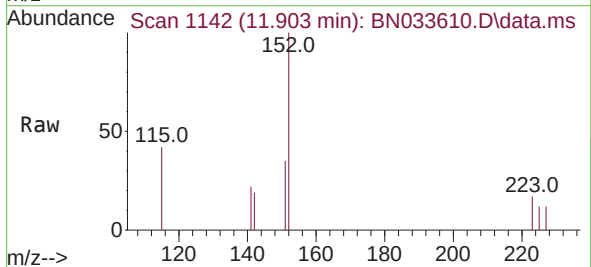
Tgt Ion: 82 Resp: 360  
Ion Ratio Lower Upper  
82 100  
128 62.1 36.0 54.0  
54 72.8 42.0 63.0

Manual Integrations  
APPROVED

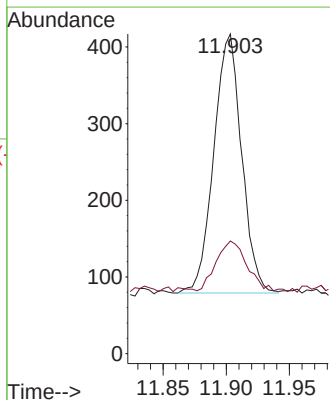
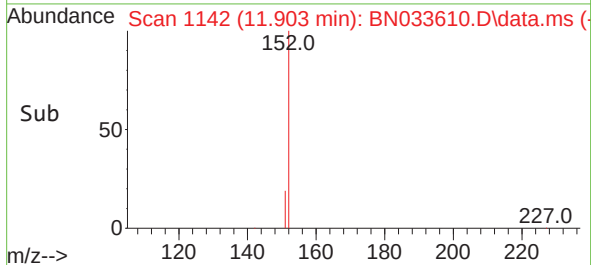
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

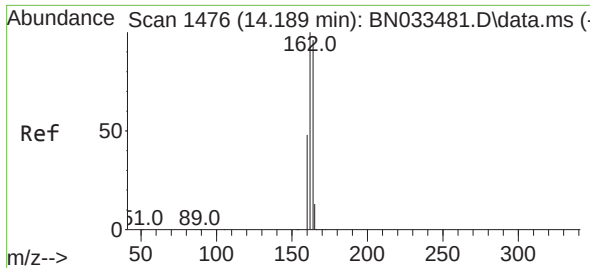


#11  
2-Methylnaphthalene-d10  
Concen: 0.017 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08



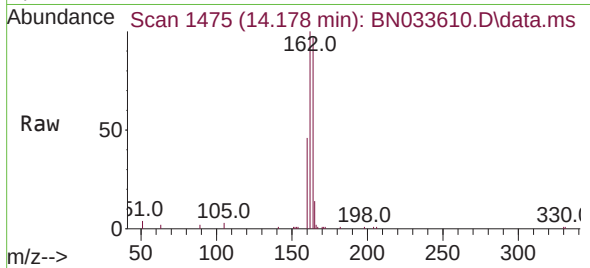
Tgt Ion:152 Resp: 518  
Ion Ratio Lower Upper  
152 100  
151 21.8 16.6 25.0





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1476  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

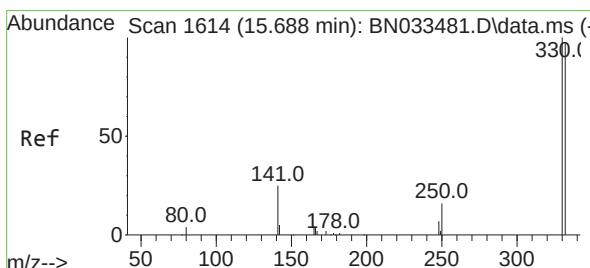
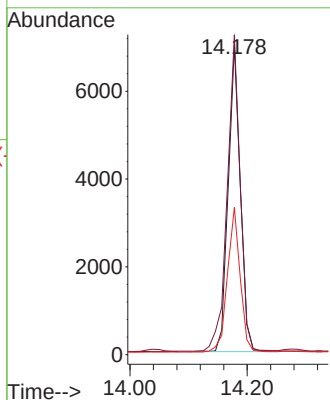
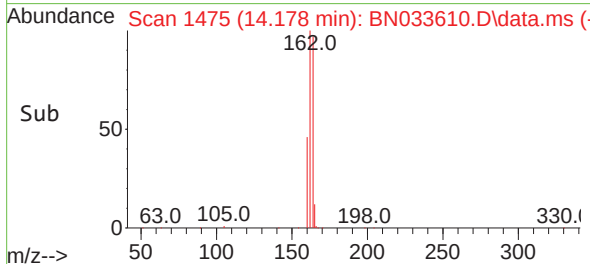
Instrument : BNA\_N  
ClientSampleId : S-903-J-SO-0.5-1.0-081924DL



Tgt Ion:164 Resp: 1002  
Ion Ratio Lower Upper  
164 100  
162 103.5 83.5 125.3  
160 47.6 40.2 60.4

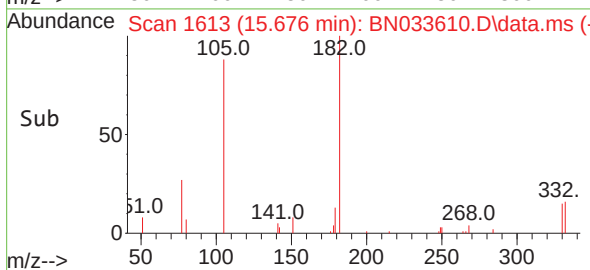
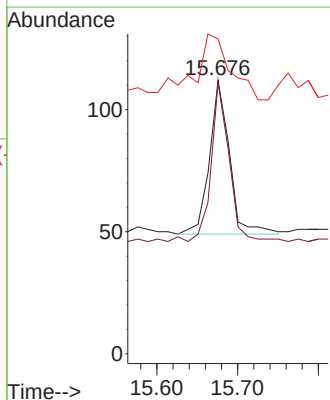
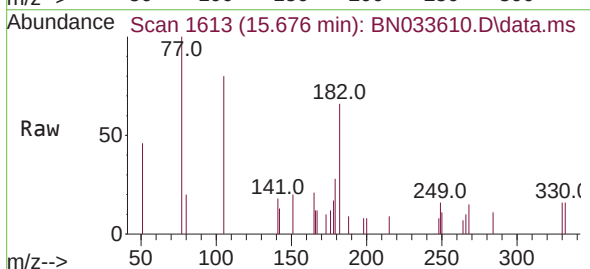
Manual Integrations  
APPROVED

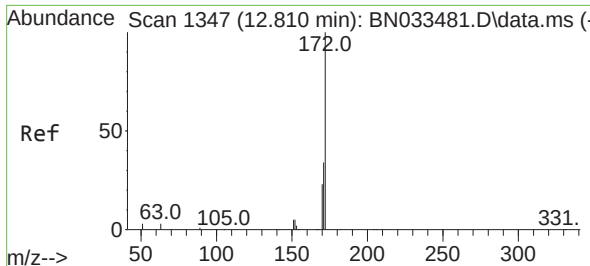
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#14  
2,4,6-Tribromophenol  
Concen: 0.020 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

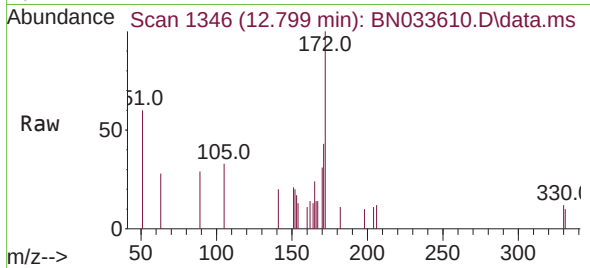
Tgt Ion:330 Resp: 109  
Ion Ratio Lower Upper  
330 100  
332 92.7 77.5 116.3  
141 77.1 33.9 50.9#





#15  
2-Fluorobiphenyl  
Concen: 0.017 ng  
RT: 12.799 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

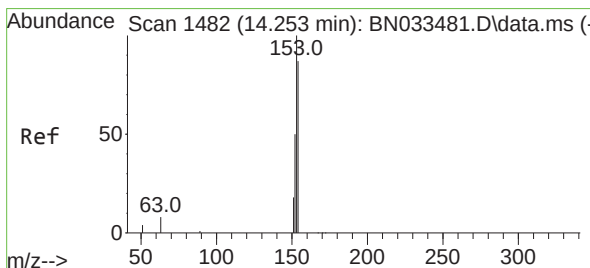
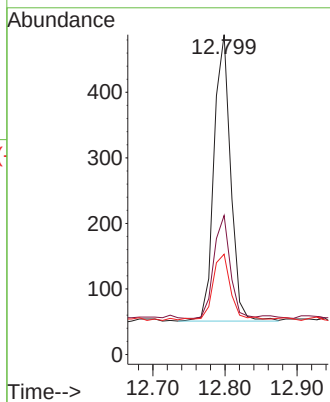
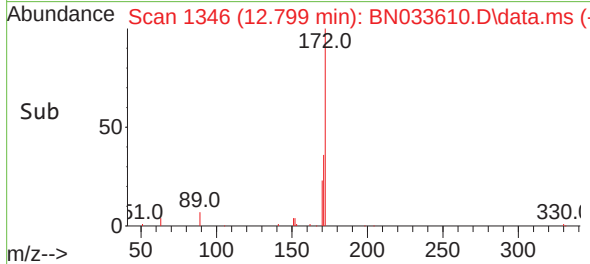
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 172   | Resp: | 699  |
| Ion Ratio | Lower | Upper |      |
| 172       | 100   |       |      |
| 171       | 43.4  | 27.7  | 41.5 |
| 170       | 31.4  | 18.3  | 27.5 |

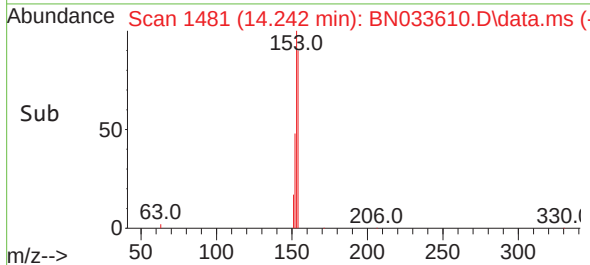
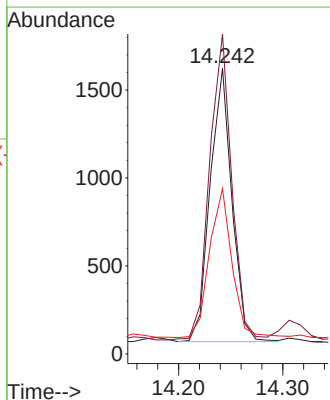
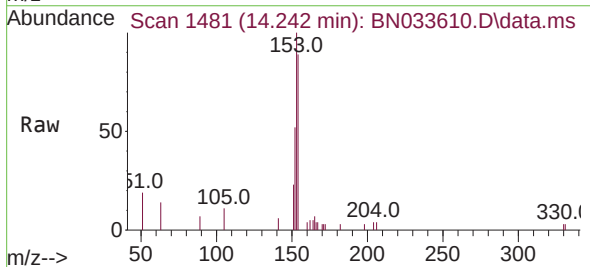
Manual Integrations  
APPROVED

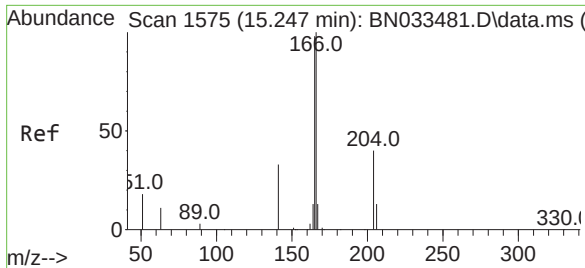
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#17  
Acenaphthene  
Concen: 0.073 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

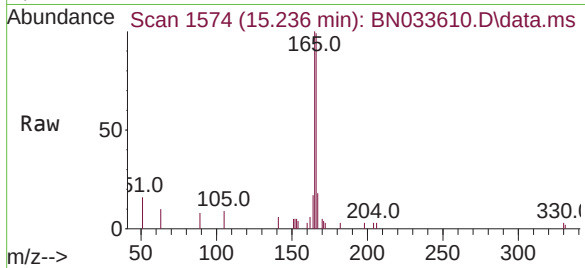
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 154   | Resp: | 2253  |
| Ion Ratio | Lower | Upper |       |
| 154       | 100   |       |       |
| 153       | 113.5 | 89.0  | 133.6 |
| 152       | 56.6  | 45.2  | 67.8  |





#18  
 Fluorene  
 Concen: 0.071 ng  
 RT: 15.236 min Scan# 1574  
 Delta R.T. -0.000 min  
 Lab File: BN033610.D  
 Acq: 24 Aug 2024 04:08

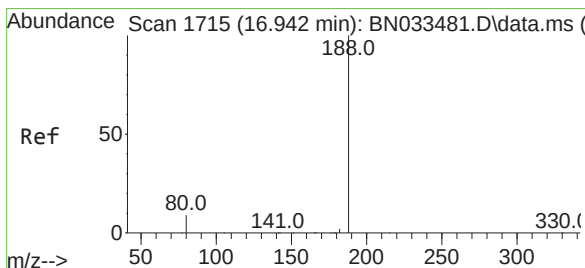
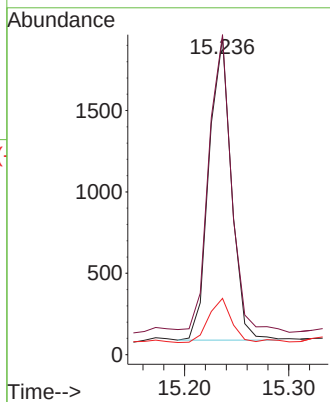
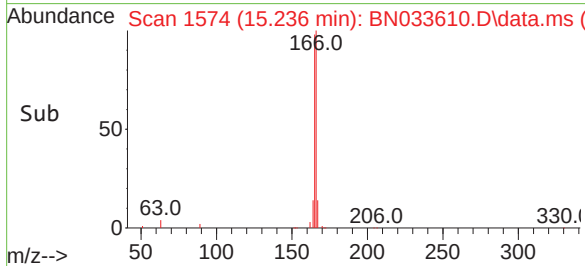
Instrument : BNA\_N  
 ClientSampleId : S-903-J-SO-0.5-1.0-081924DL



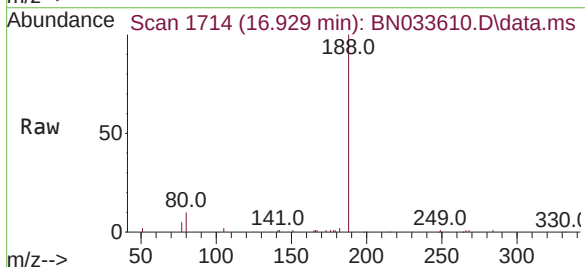
Tgt Ion:166 Resp: 278  
 Ion Ratio Lower Upper  
 166 100  
 165 99.1 78.2 117.4  
 167 14.8 10.6 16.0

Manual Integrations  
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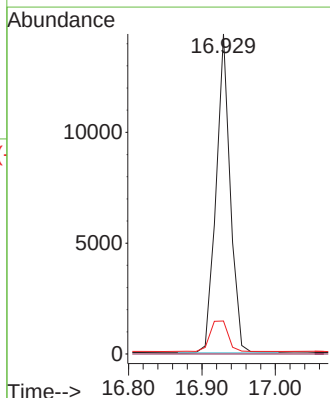
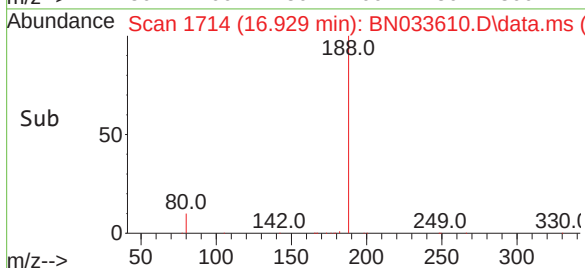
Reviewed By :Jagrut Upadhyay 08/26/2024  
 Supervised By :mohammad ahmed 08/29/2024



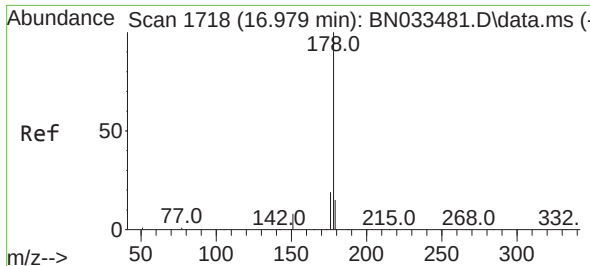
#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.929 min Scan# 1714  
 Delta R.T. -0.000 min  
 Lab File: BN033610.D  
 Acq: 24 Aug 2024 04:08



Tgt Ion:188 Resp: 19250  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 10.3 7.8 11.8

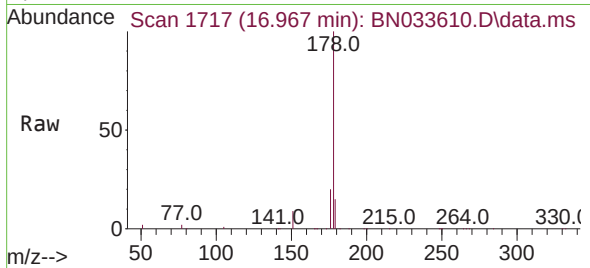






#25  
Phenanthrene  
Concen: 1.164 ng  
RT: 16.967 min Scan# 1717  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

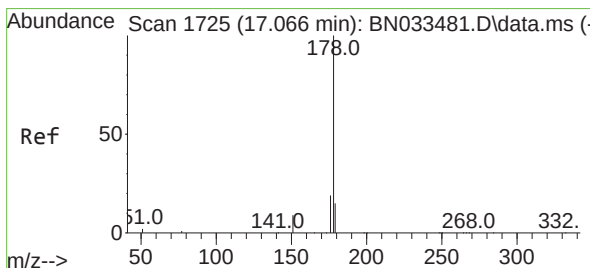
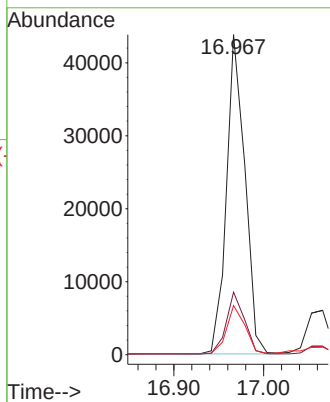
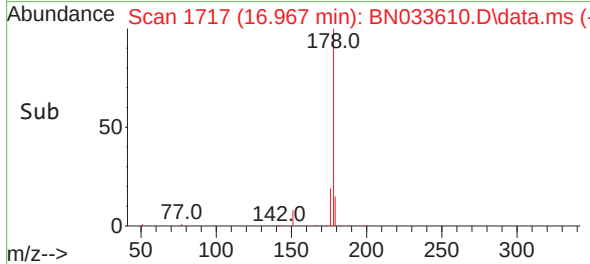
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



Tgt Ion:178 Resp: 62320  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.3 22.9  
179 15.1 12.3 18.5

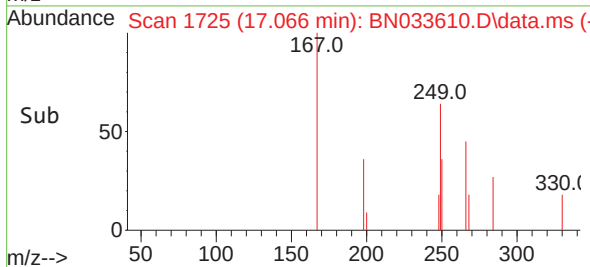
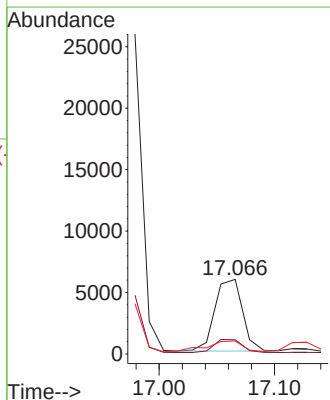
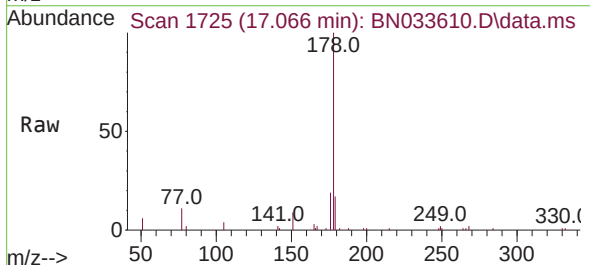
Manual Integrations  
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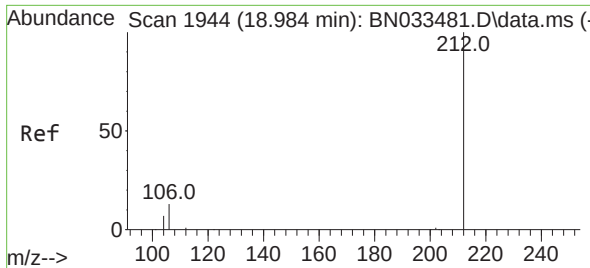
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#26  
Anthracene  
Concen: 0.206 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

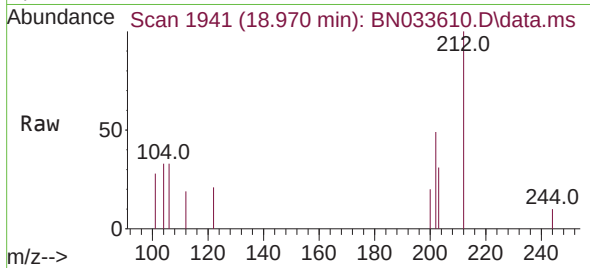
Tgt Ion:178 Resp: 9763  
Ion Ratio Lower Upper  
178 100  
176 18.4 15.0 22.6  
179 19.3 12.4 18.6#





#27  
Fluoranthene-d10  
Concen: 0.017 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

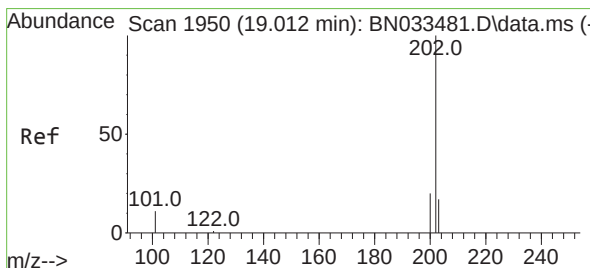
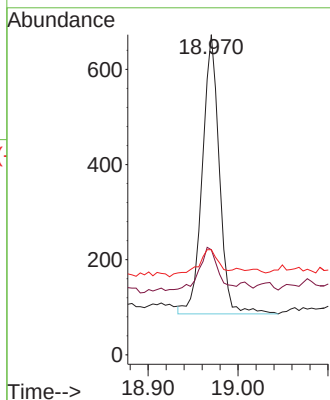
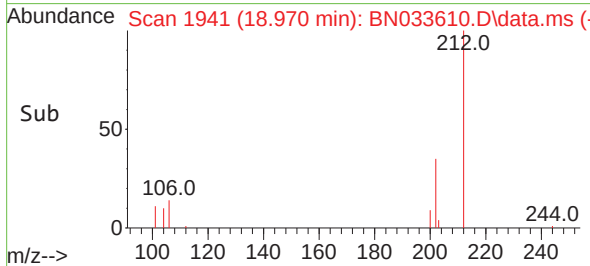
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



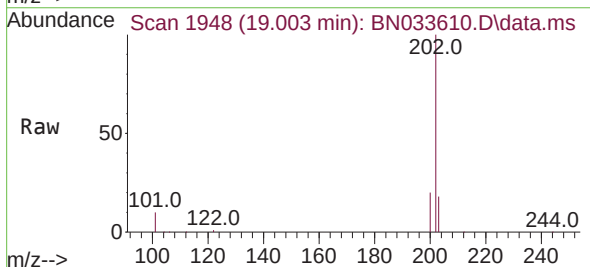
Tgt Ion:212 Resp: 772  
Ion Ratio Lower Upper  
212 100  
106 18.3 12.3 18.5  
104 12.4 7.0 10.4

Manual Integrations  
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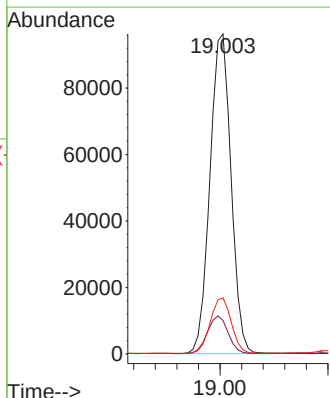
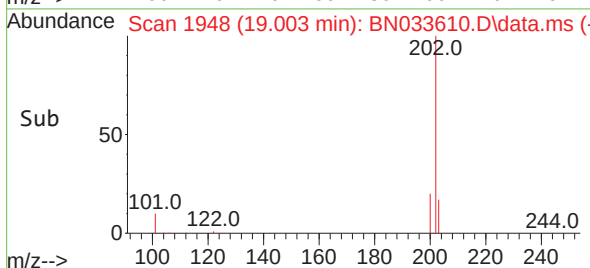
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

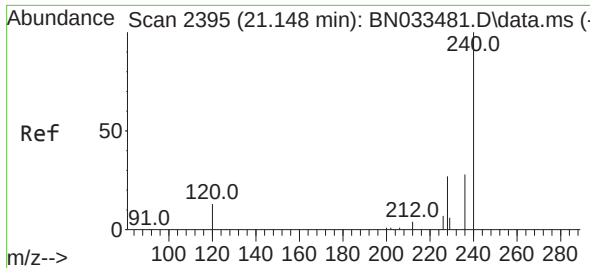


#28  
Fluoranthene  
Concen: 2.204 ng  
RT: 19.003 min Scan# 1948  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08



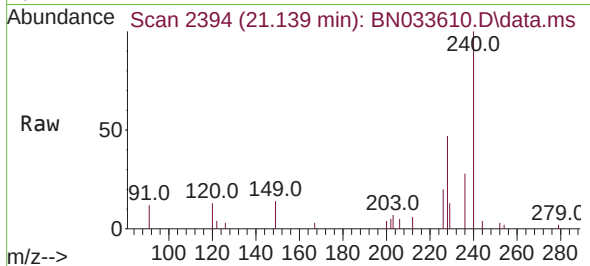
Tgt Ion:202 Resp: 130414  
Ion Ratio Lower Upper  
202 100  
101 11.6 9.5 14.3  
203 17.3 13.8 20.6





#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

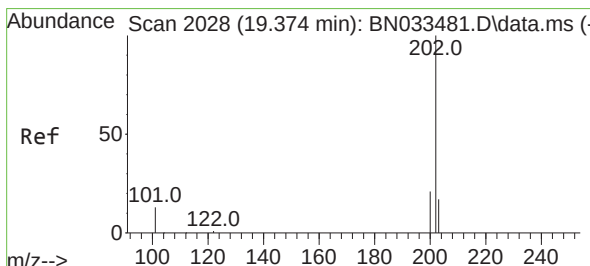
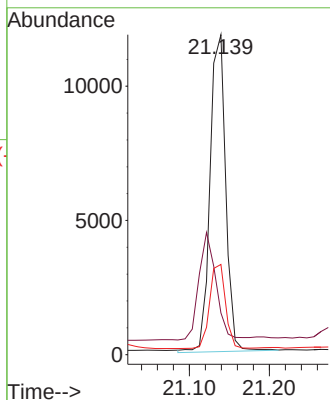
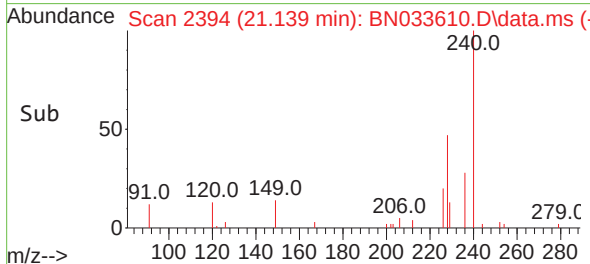
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



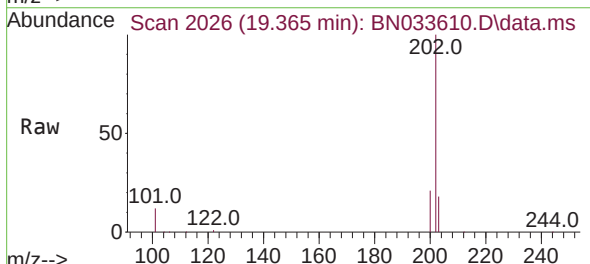
Tgt Ion:240 Resp: 16100  
Ion Ratio Lower Upper  
240 100  
120 13.0 12.4 18.6  
236 28.2 23.0 34.6

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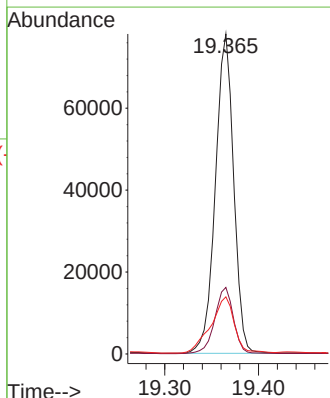
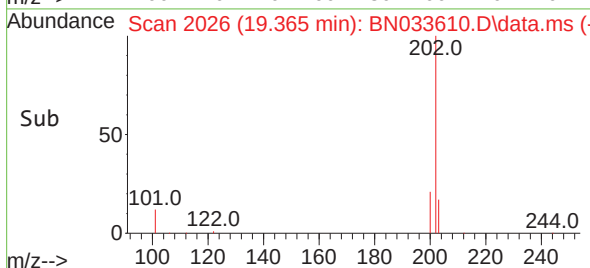
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

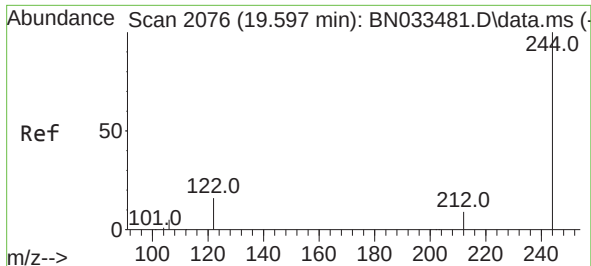


#30  
Pyrene  
Concen: 1.469 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08



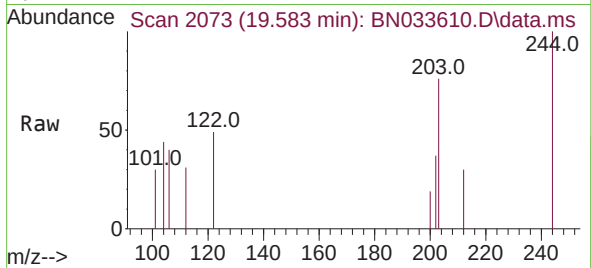
Tgt Ion:202 Resp: 105544  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.6 24.8  
203 22.6 14.2 21.4#





#31  
Terphenyl-d14  
Concen: 0.015 ng  
RT: 19.583 min Scan# 2073  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

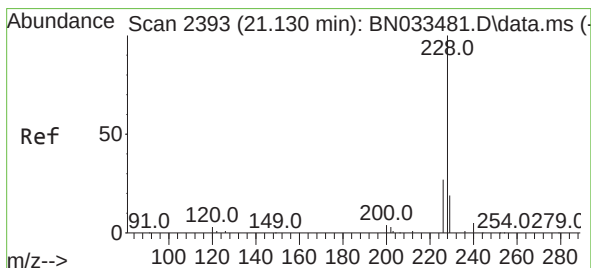
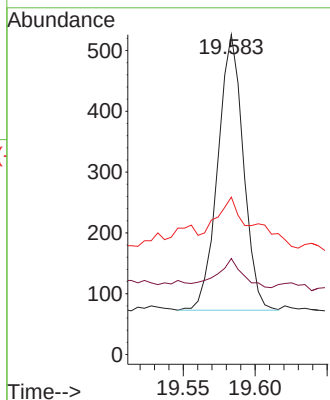
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



Tgt Ion:244 Resp: 559  
Ion Ratio Lower Upper  
244 100  
212 30.0 7.8 11.6  
122 49.2 13.3 19.9

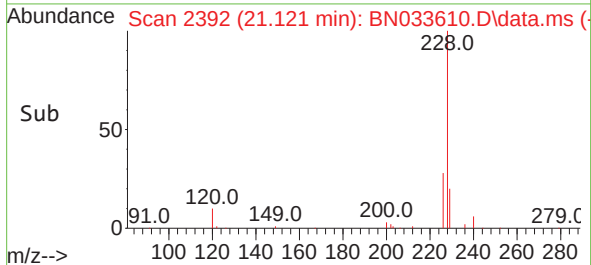
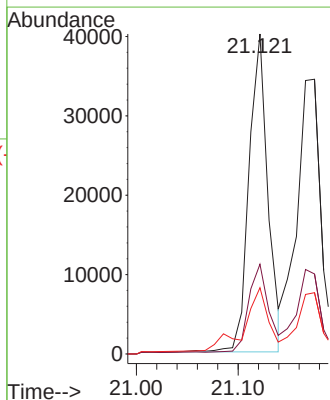
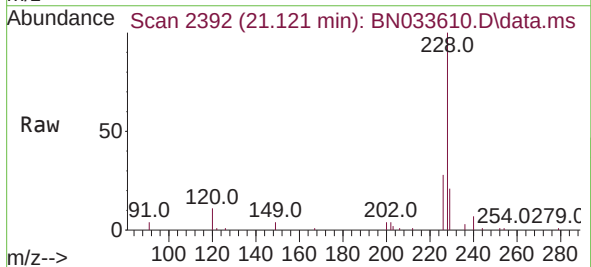
Manual Integrations  
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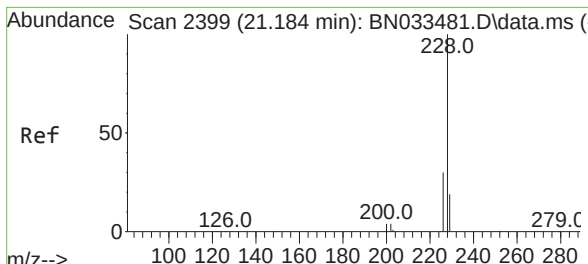
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#32  
Benzo(a)anthracene  
Concen: 0.888 ng  
RT: 21.121 min Scan# 2392  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

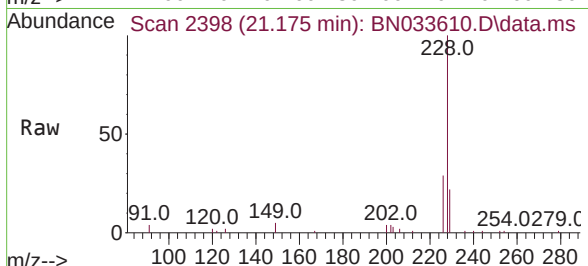
Tgt Ion:228 Resp: 51691  
Ion Ratio Lower Upper  
228 100  
226 28.0 21.8 32.6  
229 20.7 15.8 23.6





#33  
 Chrysene  
 Concen: 0.964 ng  
 RT: 21.175 min Scan# 2111  
 Delta R.T. -0.000 min  
 Lab File: BN033610.D  
 Acq: 24 Aug 2024 04:08

Instrument : BNA\_N  
 ClientSampleId : S-903-J-SO-0.5-1.0-081924DL

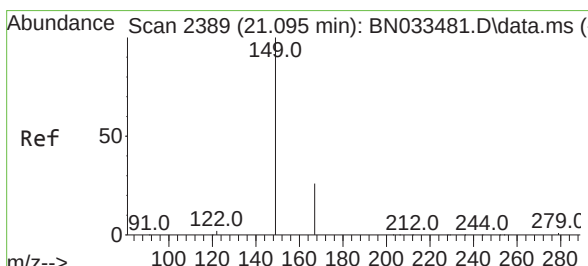
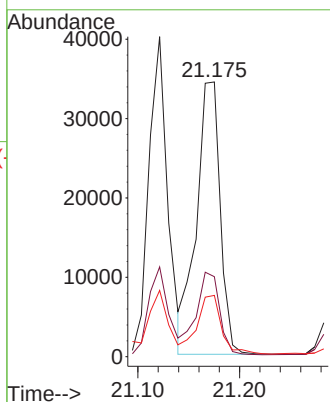
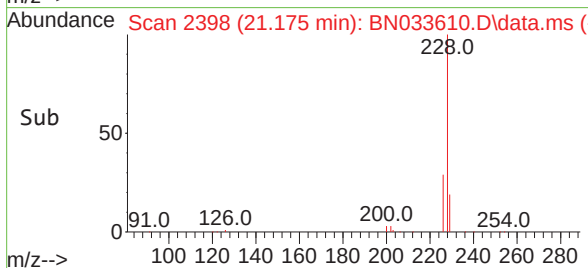


Tgt Ion: 228 Resp: 5575

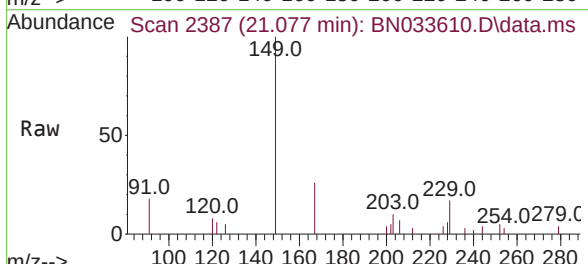
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 29.1  | 23.8  | 35.8  |
| 229 | 22.3  | 15.6  | 23.4  |

Manual Integrations  
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Reviewed By :Jagrut Upadhyay 08/26/2024  
 Supervised By :mohammad ahmed 08/29/2024

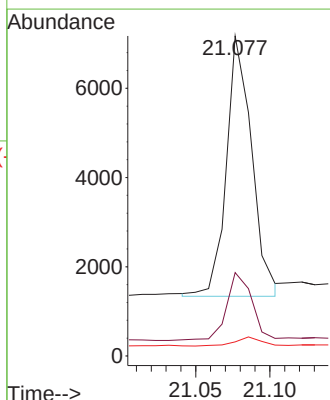
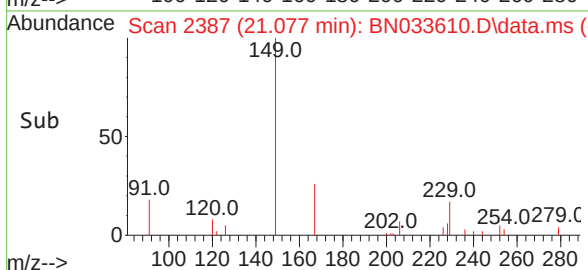


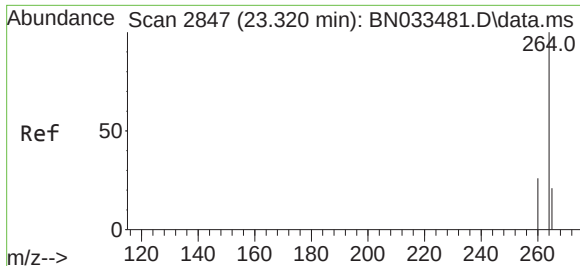
#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.188 ng m  
 RT: 21.077 min Scan# 2387  
 Delta R.T. -0.009 min  
 Lab File: BN033610.D  
 Acq: 24 Aug 2024 04:08



Tgt Ion: 149 Resp: 6941

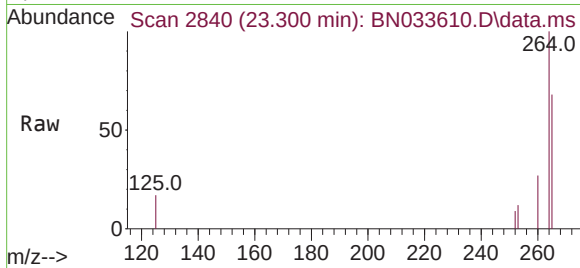
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 149 | 100   |       |       |
| 167 | 33.5  | 21.5  | 32.3# |
| 279 | 5.5   | 2.2   | 3.2#  |





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.300 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

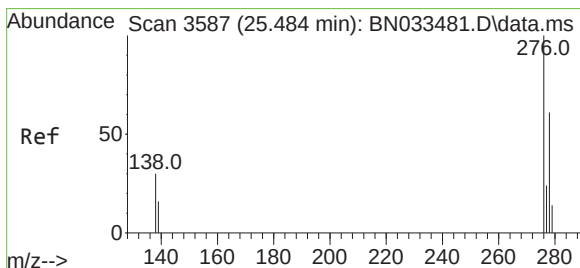
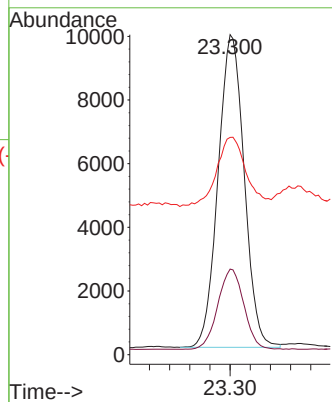
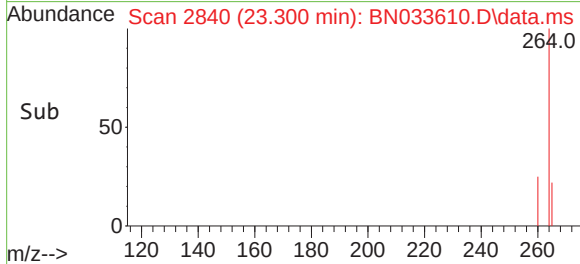
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



Tgt Ion:264 Resp: 1764  
Ion Ratio Lower Upper  
264 100  
260 26.8 20.8 31.2  
265 67.9 52.2 78.2

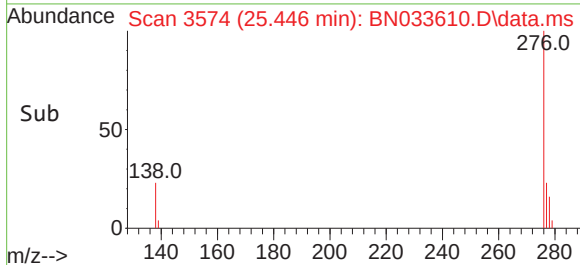
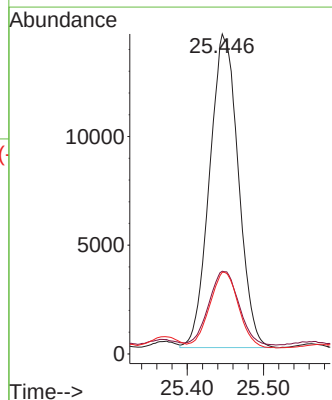
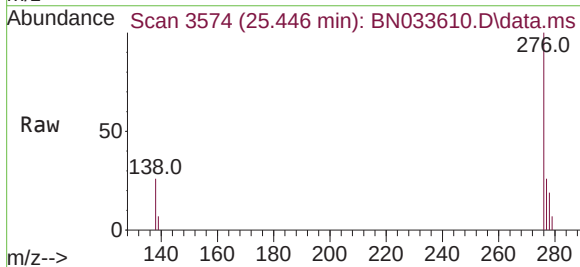
Manual Integrations  
APPROVED

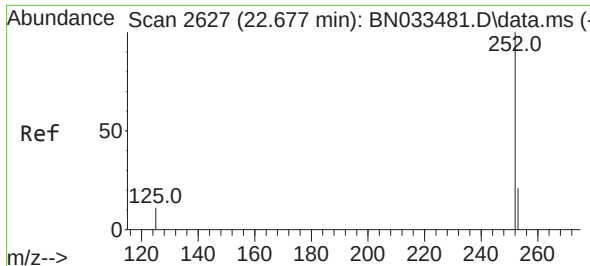
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.515 ng  
RT: 25.446 min Scan# 3574  
Delta R.T. -0.003 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

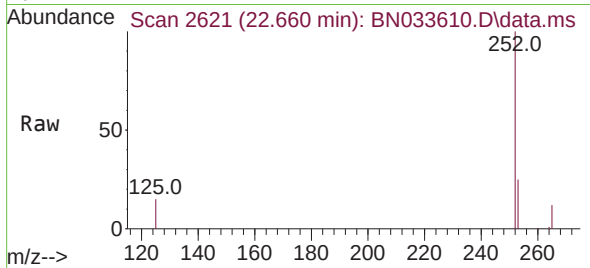
Tgt Ion:276 Resp: 37727  
Ion Ratio Lower Upper  
276 100  
138 24.6 24.4 36.6  
277 24.3 19.8 29.6





#37  
Benzo(b)fluoranthene  
Concen: 1.183 ng  
RT: 22.660 min Scan# 2621  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

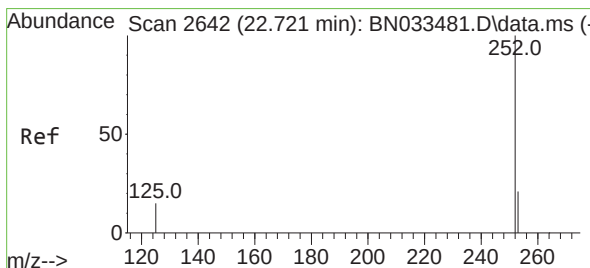
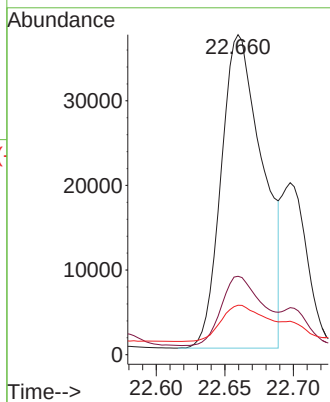
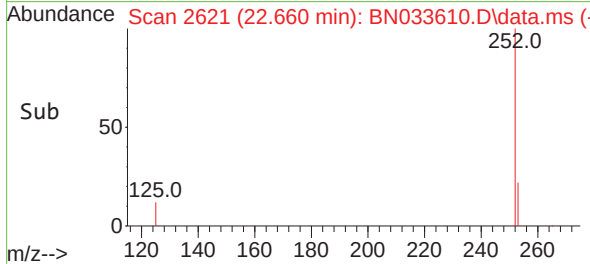
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



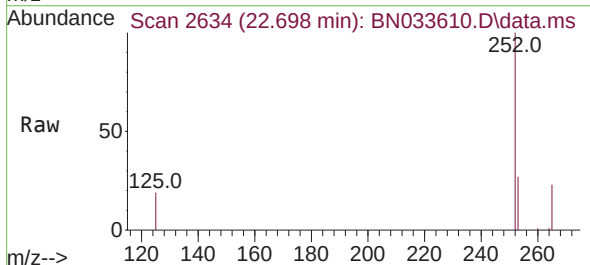
Tgt Ion:252 Resp: 77954  
Ion Ratio Lower Upper  
252 100  
253 24.5 19.8 29.8  
125 15.4 13.9 20.9

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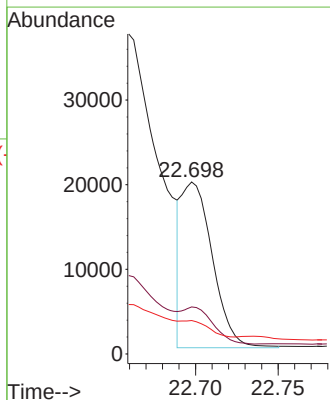
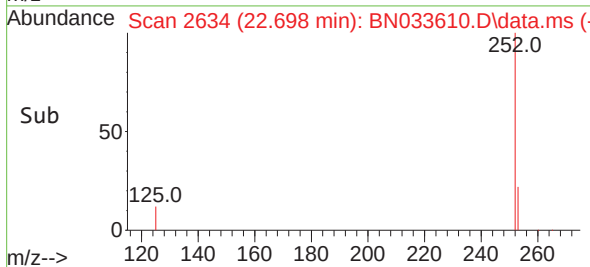
Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

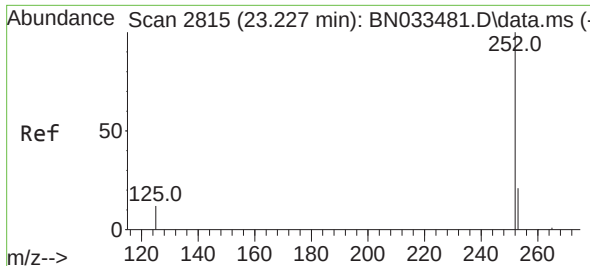


#38  
Benzo(k)fluoranthene  
Concen: 0.392 ng m  
RT: 22.698 min Scan# 2634  
Delta R.T. -0.006 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08



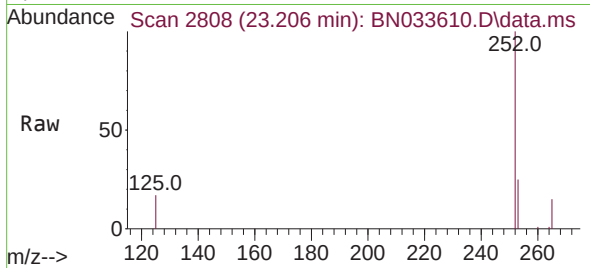
Tgt Ion:252 Resp: 25448  
Ion Ratio Lower Upper  
252 100  
253 27.3 19.8 29.8  
125 19.4 15.8 23.8





#39  
Benzo(a)pyrene  
Concen: 0.943 ng  
RT: 23.206 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

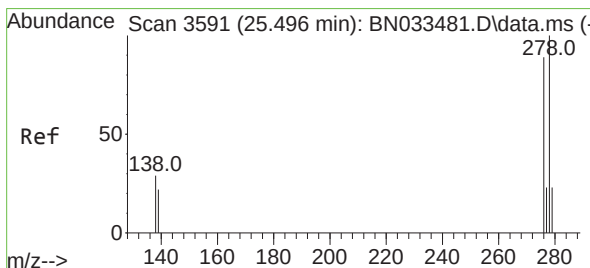
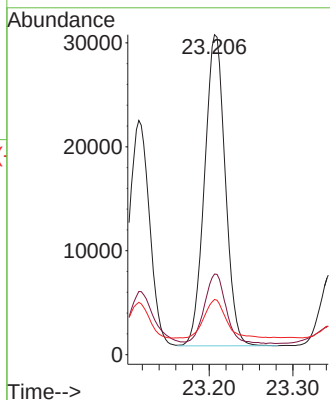
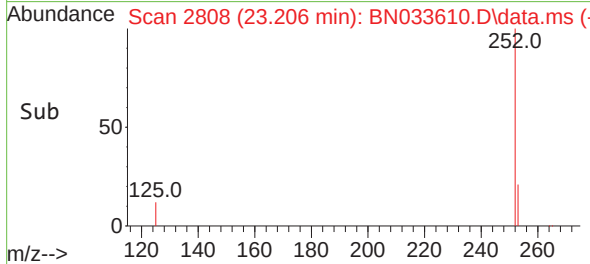
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



Tgt Ion:252 Resp: 51390  
Ion Ratio Lower Upper  
252 100  
253 25.2 21.5 32.3  
125 17.3 17.0 25.4

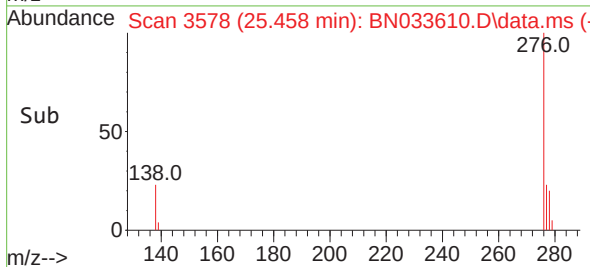
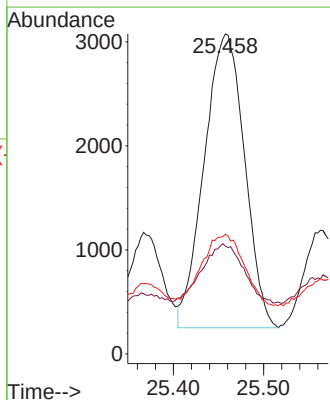
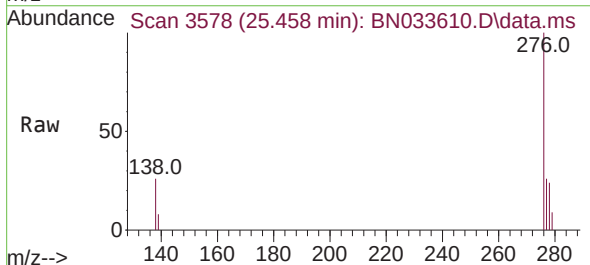
Manual Integrations  
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Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024

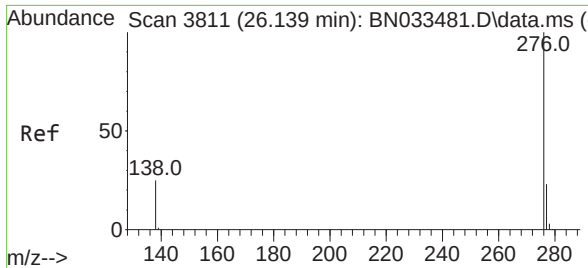


#40  
Dibenzo(a,h)anthracene  
Concen: 0.150 ng  
RT: 25.458 min Scan# 3578  
Delta R.T. -0.012 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

Tgt Ion:278 Resp: 8785  
Ion Ratio Lower Upper  
278 100  
139 33.7 19.1 28.7#  
279 37.4 21.0 31.4#

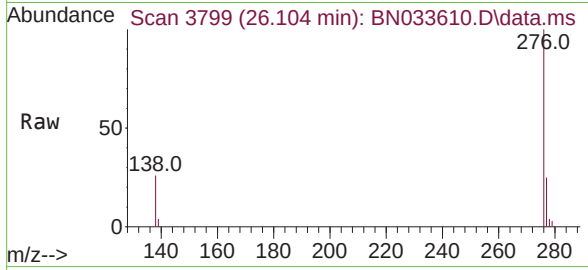






#41  
Benzo(g,h,i)perylene  
Concen: 0.590 ng  
RT: 26.104 min Scan# 31  
Delta R.T. -0.000 min  
Lab File: BN033610.D  
Acq: 24 Aug 2024 04:08

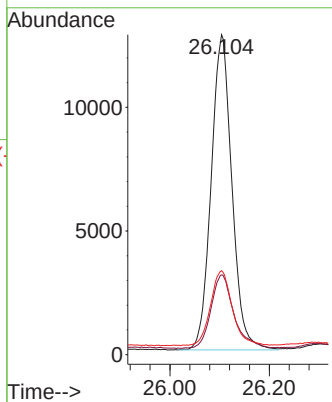
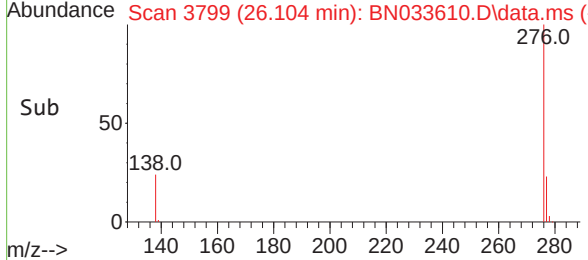
Instrument :  
BNA\_N  
ClientSampleId :  
S-903-J-SO-0.5-1.0-081924DL



Tgt Ion:276 Resp: 36974  
Ion Ratio Lower Upper  
276 100  
277 25.0 19.7 29.5  
138 26.3 21.8 32.6

Manual Integrations  
APPROVED

Reviewed By :Jagrut Upadhyay 08/26/2024  
Supervised By :mohammad ahmed 08/29/2024



## Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24      |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24      |
| Client Sample ID:  | S-912-J-SO-0-0.5-081924               | SDG No.:        | P3671         |
| Lab Sample ID:     | P3671-13                              | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 30.6          |
| Sample Wt/Vol:     | 30.07 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033573.D        | 1         | 08/21/24 09:38 | 08/23/24 04:06 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 13.2  |           | 2.20                | 10.8       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 12.7  |           | 2.60                | 10.8       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 11.3  |           | 2.10                | 10.8       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 5.90  | J         | 1.80                | 10.8       | ug/Kg             |
| 86-73-7                   | Fluorene                | 6.80  | J         | 2.00                | 10.8       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 100   |           | 2.10                | 10.8       | ug/Kg             |
| 120-12-7                  | Anthracene              | 19.0  |           | 2.60                | 10.8       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 220   |           | 2.20                | 10.8       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 140   |           | 3.10                | 10.8       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 83.8  |           | 2.50                | 10.8       | ug/Kg             |
| 218-01-9                  | Chrysene                | 100   |           | 2.80                | 10.8       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 130   |           | 3.90                | 10.8       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 44.0  |           | 3.20                | 10.8       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 96.1  |           | 5.40                | 10.8       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 53.9  |           | 4.10                | 10.8       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 16.0  |           | 3.80                | 10.8       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 62.7  |           | 3.70                | 10.8       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 7.20  | U         | 7.20                | 21.5       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.19  |           | 30 (17) - 150 (161) | 47%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.13  |           | 30 (23) - 150 (138) | 32%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.27  |           | 30 (33) - 130 (121) | 68%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.17  |           | 30 (32) - 130 (121) | 43%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.097 | *         | 30 (21) - 130 (130) | 24%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7670  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 19700 |           | 10.304              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 9700  |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 20200 |           | 16.929              |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-912-J-SO-0-0.5-081924               | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-13                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 30.6                         |
| Sample Wt/Vol:     | 30.07      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033573.D        | 1         | 08/21/24 09:38 | 08/23/24 04:06 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 18800 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 20300 | 23.3      |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033573.D  
Acq On : 23 Aug 2024 04:06  
Operator : MA/JU  
Sample : P3671-13  
Misc :  
ALS Vial : 30 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924

Quant Time: Aug 23 04:30:39 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7667     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.304 | 136  | 19731    | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.178 | 164  | 9704     | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.929 | 188  | 20199    | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.139 | 240  | 18846    | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.300 | 264  | 20277    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.183  | 112  | 4771     | 0.196 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.729  | 99   | 5767     | 0.199 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 4486     | 0.274 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 5372     | 0.190 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 1014     | 0.194 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 6808     | 0.172 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.970 | 212  | 6323     | 0.130 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.584 | 244  | 4160     | 0.097 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 9) Naphthalene                | 10.357 | 128  | 6366     | 0.121 | ng    | Qvalue 96 |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 3903     | 0.117 | ng    | 98        |
| 16) Acenaphthylene            | 13.900 | 152  | 4439     | 0.104 | ng    | 98        |
| 17) Acenaphthene              | 14.242 | 154  | 1614     | 0.054 | ng    | # 90      |
| 18) Fluorene                  | 15.236 | 166  | 2372     | 0.063 | ng    | # 99      |
| 25) Phenanthrene              | 16.967 | 178  | 54015    | 0.961 | ng    | 99        |
| 26) Anthracene                | 17.066 | 178  | 8690     | 0.175 | ng    | # 95      |
| 28) Fluoranthene              | 18.998 | 202  | 125276   | 2.017 | ng    | 100       |
| 30) Pyrene                    | 19.365 | 202  | 110725   | 1.316 | ng    | # 95      |
| 32) Benzo(a)anthracene        | 21.122 | 228  | 52556    | 0.771 | ng    | 96        |
| 33) Chrysene                  | 21.166 | 228  | 64197    | 0.948 | ng    | 97        |
| 34) Bis(2-ethylhexyl)phtha... | 21.077 | 149  | 6610m    | 0.153 | ng    |           |
| 36) Indeno(1,2,3-cd)pyrene    | 25.446 | 276  | 41741    | 0.496 | ng    | 95        |
| 37) Benzo(b)fluoranthene      | 22.660 | 252  | 89415    | 1.181 | ng    | 98        |
| 38) Benzo(k)fluoranthene      | 22.698 | 252  | 30218m   | 0.405 | ng    |           |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 55369    | 0.884 | ng    | 94        |
| 40) Dibenzo(a,h)anthracene    | 25.458 | 278  | 9895     | 0.147 | ng    | # 83      |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 41549    | 0.577 | ng    | 99        |

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

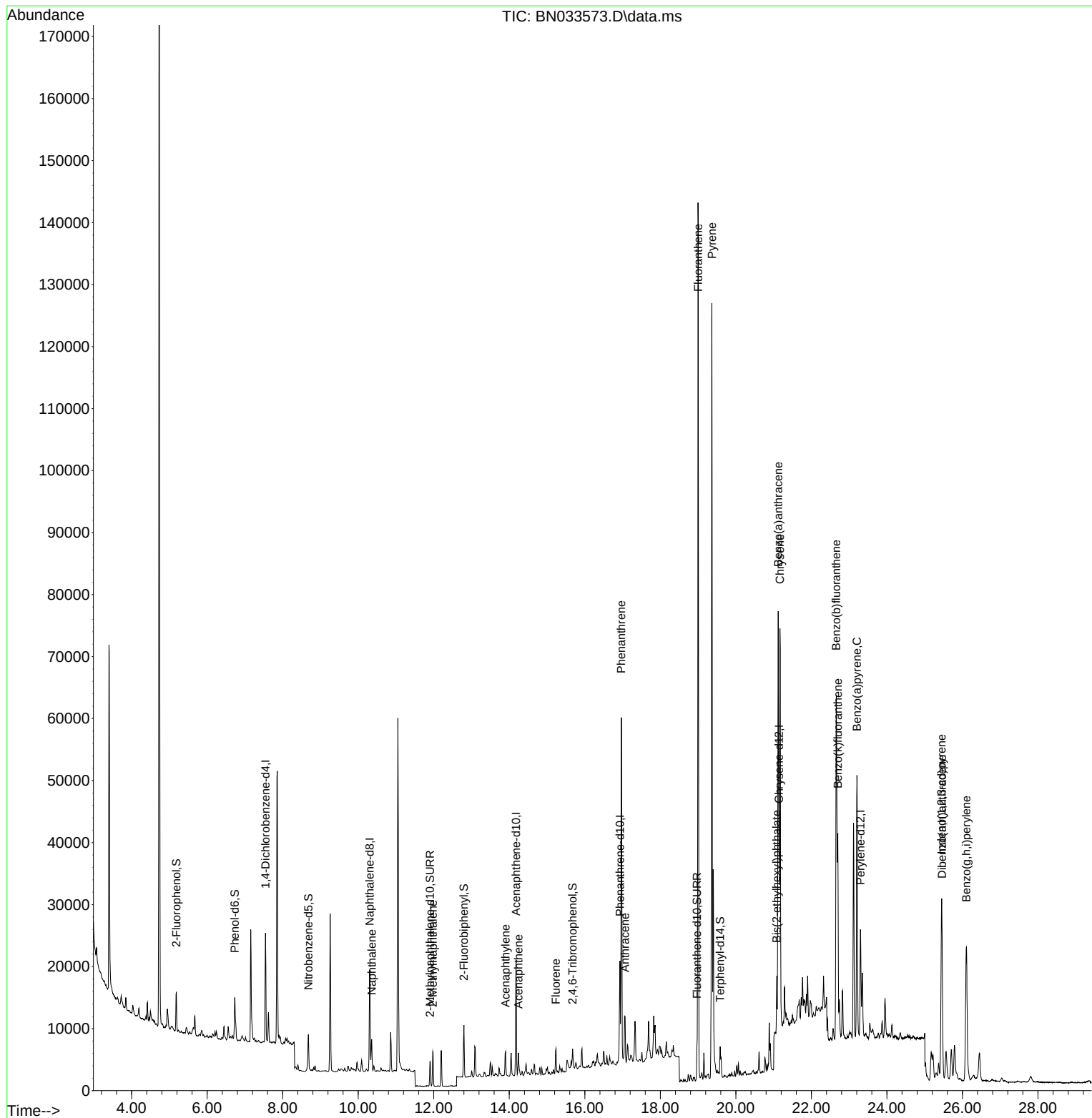
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Data File : BN033573.D  
Acq On : 23 Aug 2024 04:06  
Operator : MA/JU  
Sample : P3671-13  
Misc :  
ALS Vial : 30 Sample Multiplier: 1

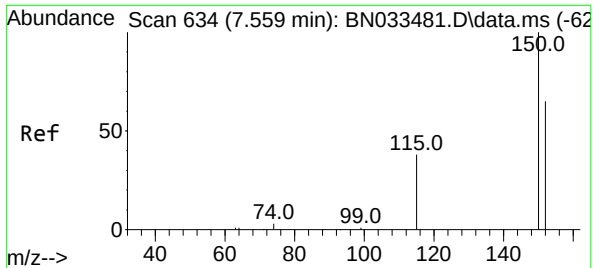
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924

Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

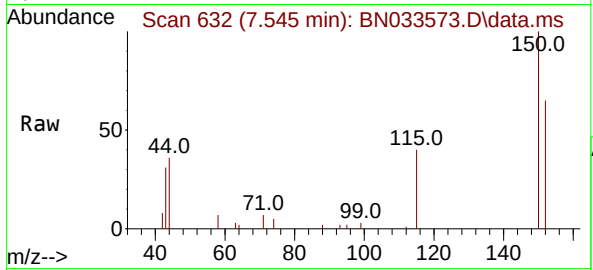
Quant Time: Aug 23 04:30:39 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

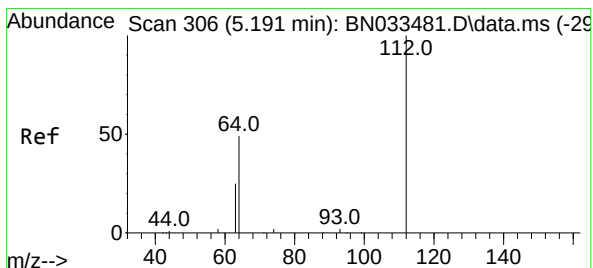
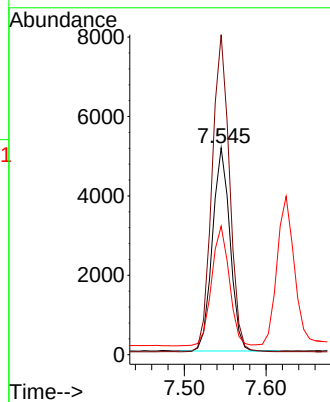
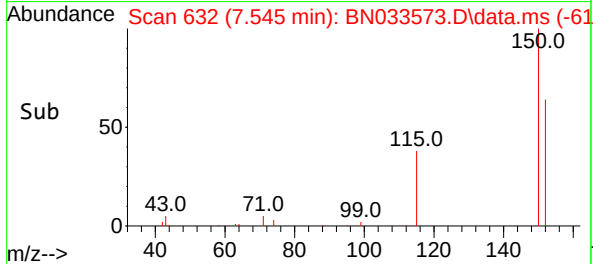
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion:152 Resp: 766  
Ion Ratio Lower Upper  
152 100  
150 154.6 122.2 183.2  
115 62.1 47.2 70.8

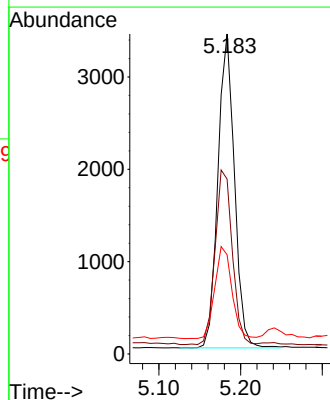
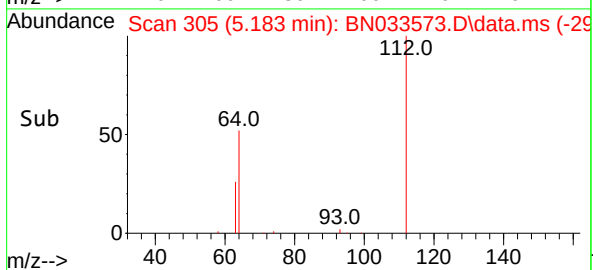
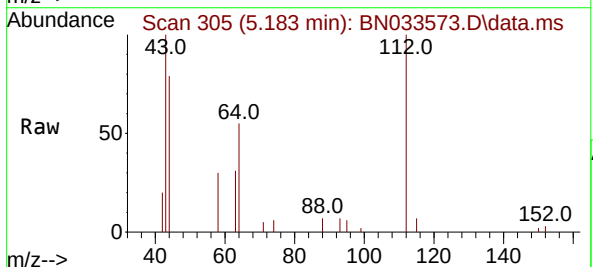
Manual Integrations  
**APPROVED**

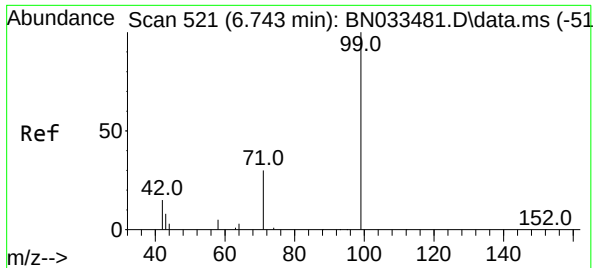
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.196 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

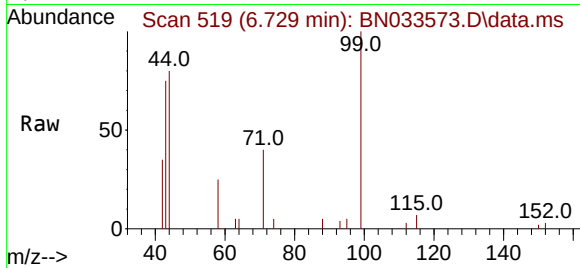
Tgt Ion:112 Resp: 4771  
Ion Ratio Lower Upper  
112 100  
64 57.8 47.1 70.7  
63 30.3 24.9 37.3





#5  
Phenol-d6  
Concen: 0.199 ng  
RT: 6.729 min Scan# 519  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

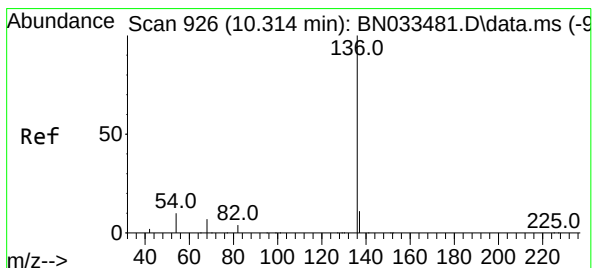
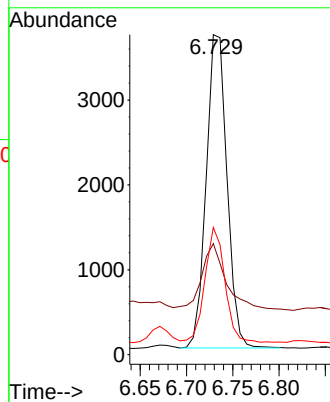
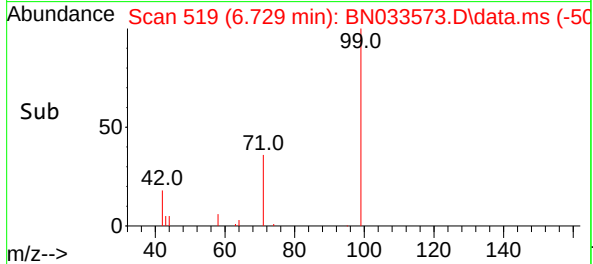
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion: 99 Resp: 576  
Ion Ratio Lower Upper  
99 100  
42 23.7 16.6 24.8  
71 35.2 26.2 39.4

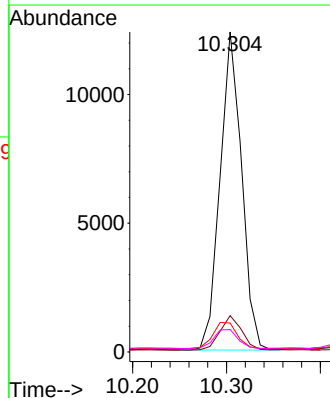
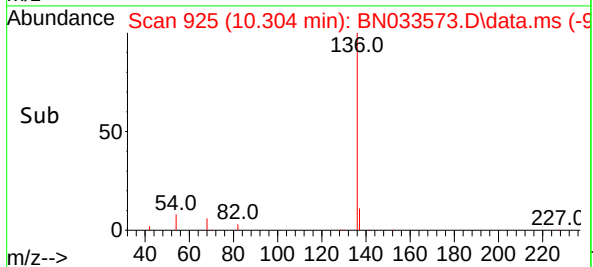
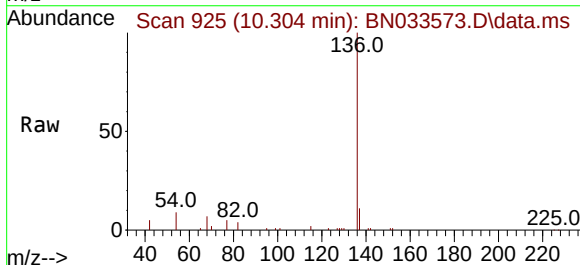
Manual Integrations  
**APPROVED**

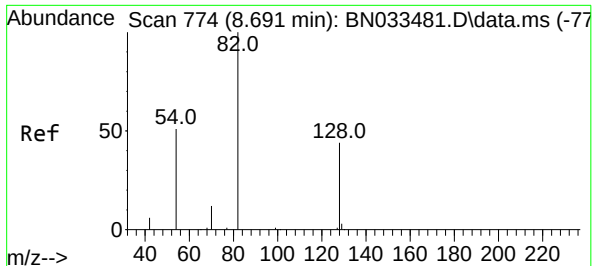
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

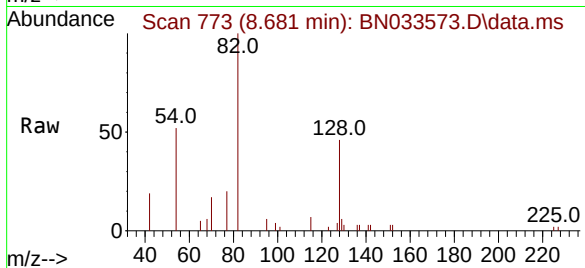
Tgt Ion:136 Resp: 19731  
Ion Ratio Lower Upper  
136 100  
137 11.3 9.0 13.6  
54 9.1 8.3 12.5  
68 7.0 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.274 ng  
RT: 8.681 min Scan# 71  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

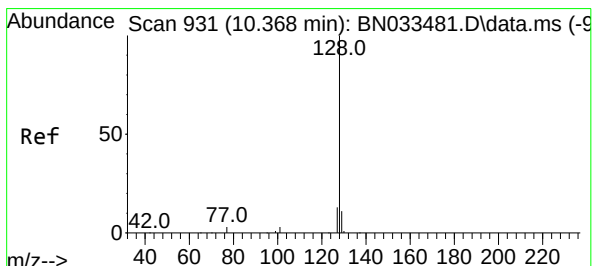
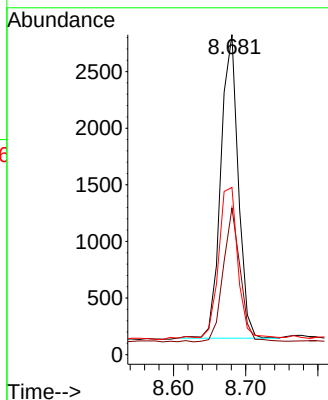
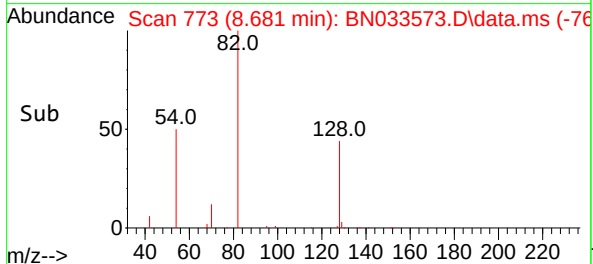
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion: 82 Resp: 4480  
Ion Ratio Lower Upper  
82 100  
128 45.8 36.0 54.0  
54 52.3 42.0 63.0

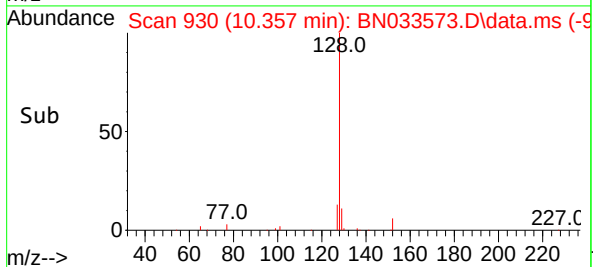
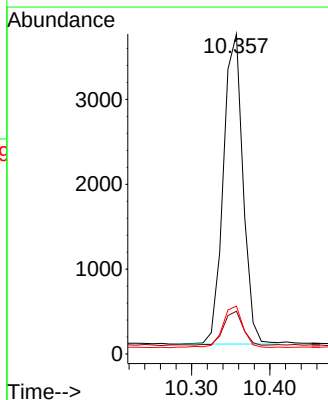
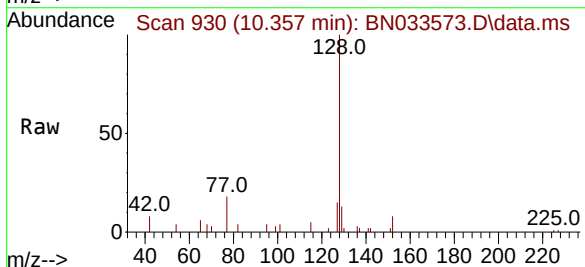
Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

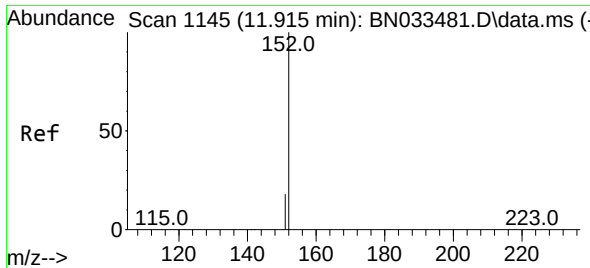


#9  
Naphthalene  
Concen: 0.121 ng  
RT: 10.357 min Scan# 930  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

Tgt Ion:128 Resp: 6366  
Ion Ratio Lower Upper  
128 100  
129 13.4 9.1 13.7  
127 15.0 10.7 16.1

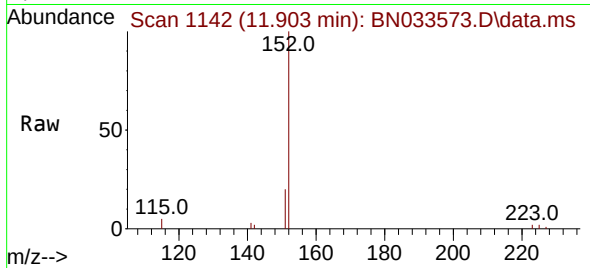






#11  
2-Methylnaphthalene-d10  
Concen: 0.190 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

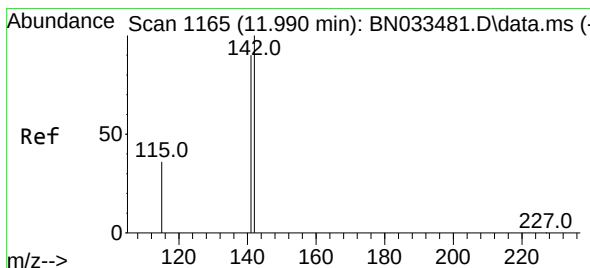
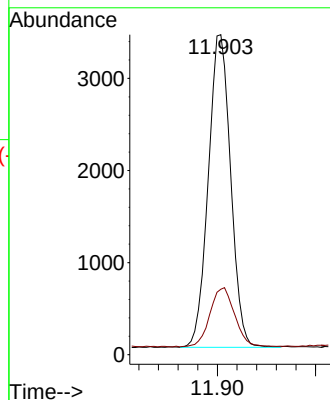
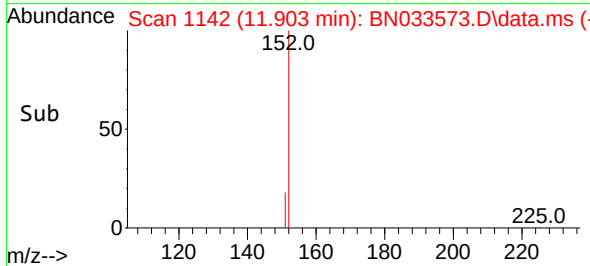
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion:152 Resp: 5372  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.6 25.0

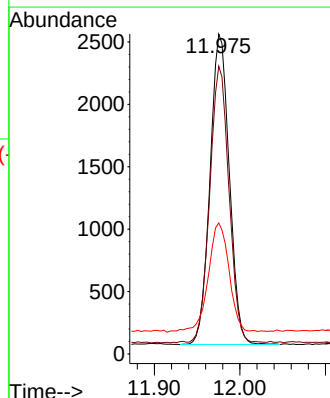
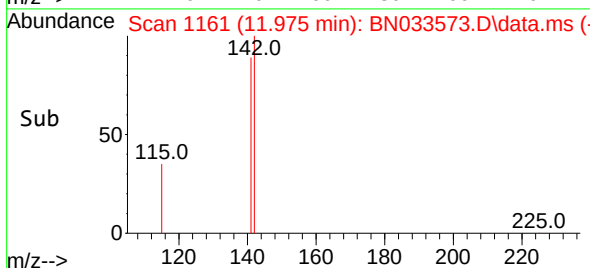
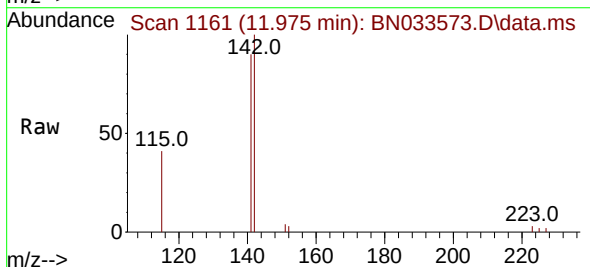
Manual Integrations  
APPROVED

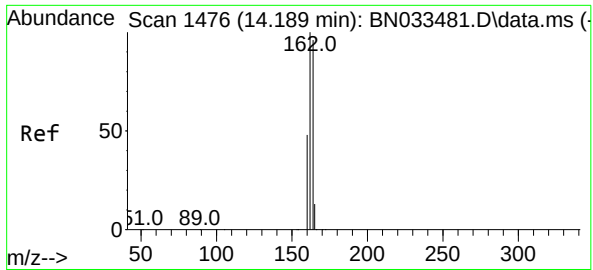
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.117 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

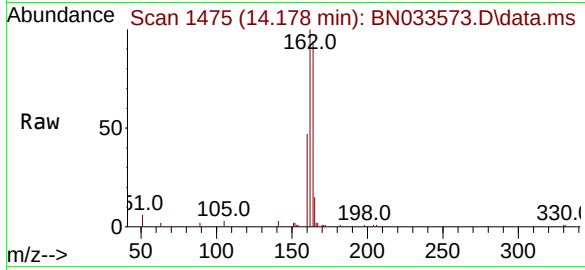
Tgt Ion:142 Resp: 3903  
Ion Ratio Lower Upper  
142 100  
141 89.9 71.7 107.5  
115 41.0 29.4 44.2





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1476  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

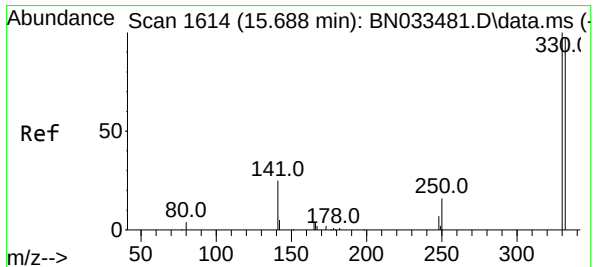
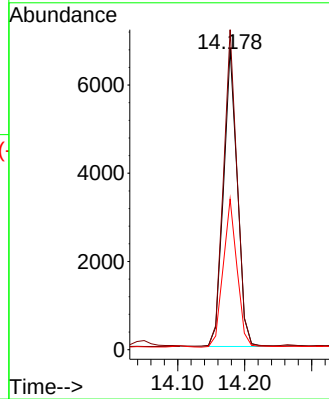
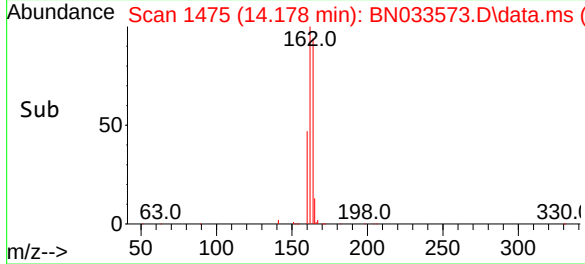
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



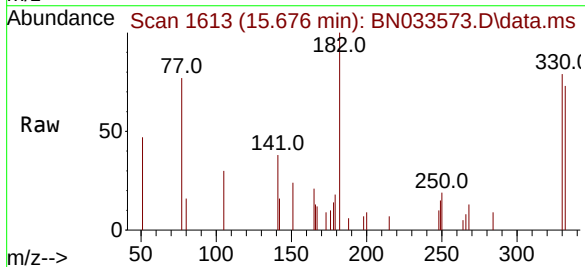
Tgt Ion:164 Resp: 9704  
Ion Ratio Lower Upper  
164 100  
162 106.3 83.5 125.3  
160 50.1 40.2 60.4

Manual Integrations  
**APPROVED**

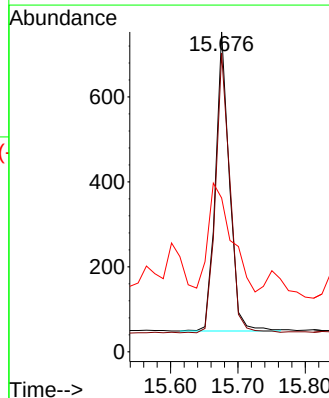
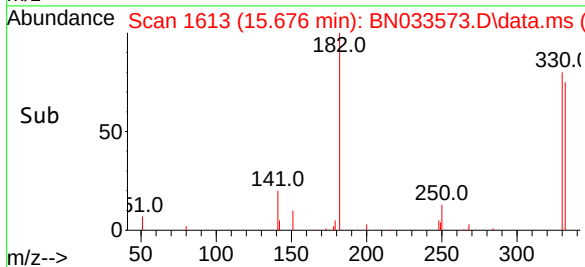
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

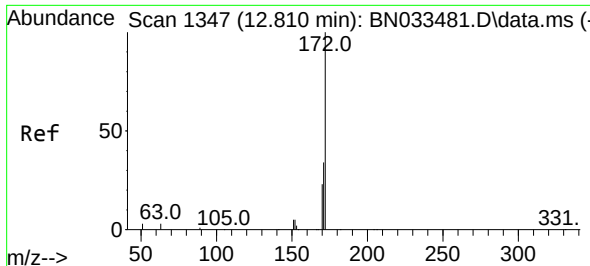


#14  
2,4,6-Tribromophenol  
Concen: 0.194 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06



Tgt Ion:330 Resp: 1014  
Ion Ratio Lower Upper  
330 100  
332 96.5 77.5 116.3  
141 59.5 33.9 50.9#





#15

2-Fluorobiphenyl

Concen: 0.172 ng

RT: 12.799 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN033573.D

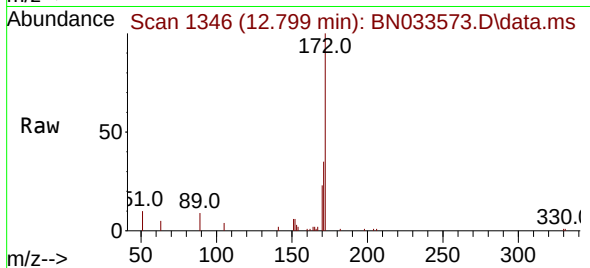
Acq: 23 Aug 2024 04:06

Instrument :

BNA\_N

ClientSampleId :

S-912-J-SO-0-0.5-081924



Tgt Ion:172 Resp: 680

Ion Ratio Lower Upper

172 100

171 35.1 27.7 41.5

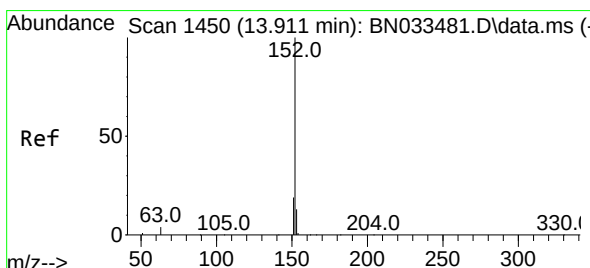
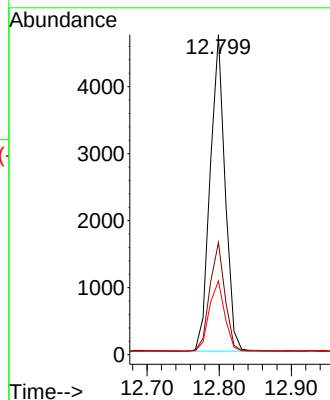
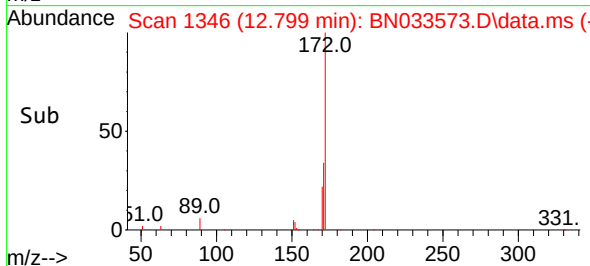
170 23.1 18.3 27.5

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#16

Acenaphthylene

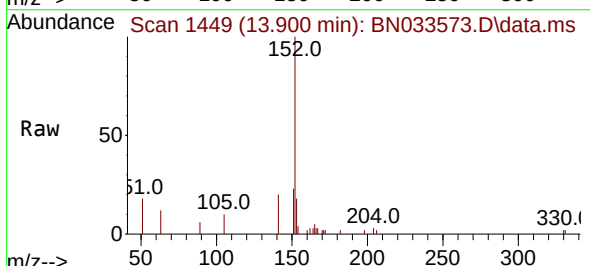
Concen: 0.104 ng

RT: 13.900 min Scan# 1449

Delta R.T. 0.000 min

Lab File: BN033573.D

Acq: 23 Aug 2024 04:06



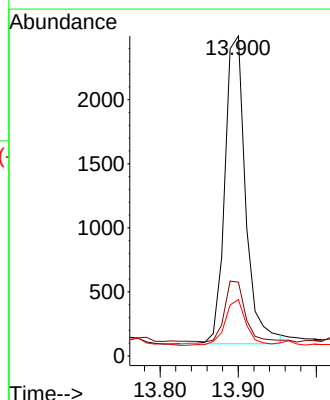
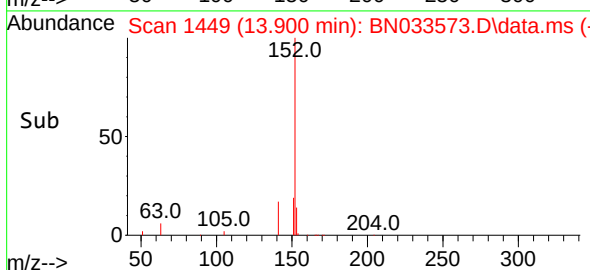
Tgt Ion:152 Resp: 4439

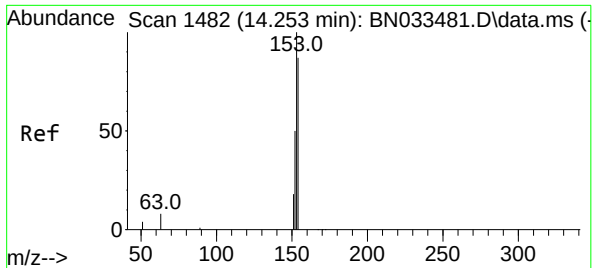
Ion Ratio Lower Upper

152 100

151 19.4 15.7 23.5

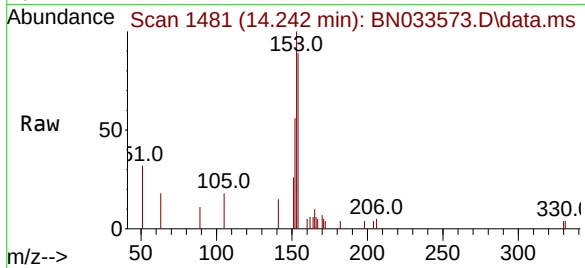
153 15.2 10.3 15.5





#17  
Acenaphthene  
Concen: 0.054 ng  
RT: 14.242 min Scan# 1482  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

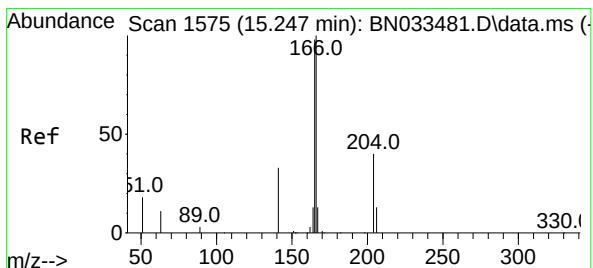
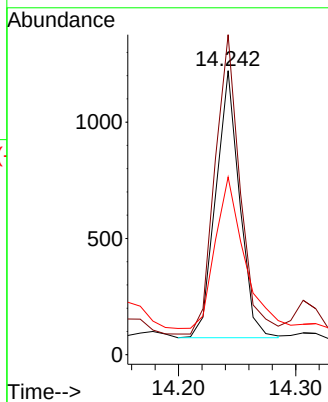
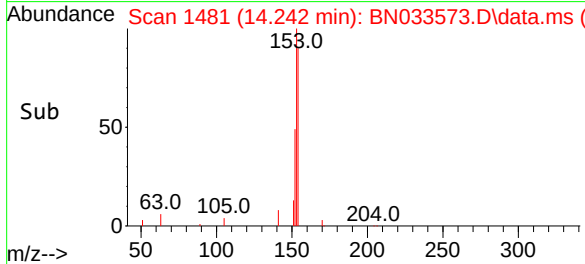
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



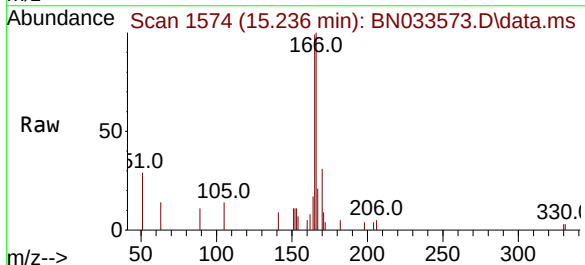
Tgt Ion:154 Resp: 1614  
Ion Ratio Lower Upper  
154 100  
153 118.3 89.0 133.6  
152 69.5 45.2 67.8

Manual Integrations  
APPROVED

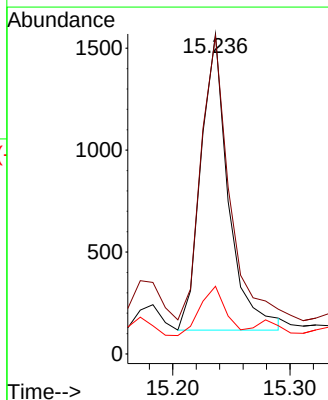
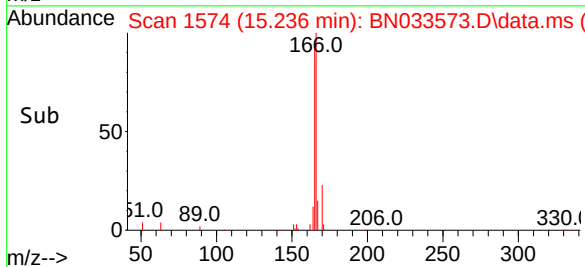
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

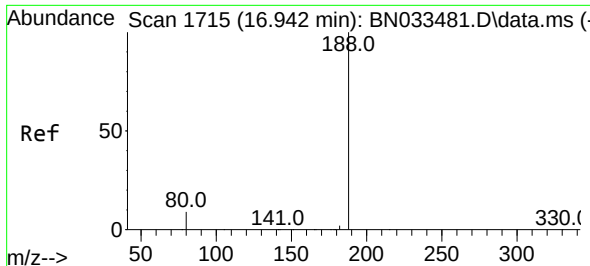


#18  
Fluorene  
Concen: 0.063 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06



Tgt Ion:166 Resp: 2372  
Ion Ratio Lower Upper  
166 100  
165 97.6 78.2 117.4  
167 16.8 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.929 min Scan# 1715

Delta R.T. 0.000 min

Lab File: BN033573.D

Acq: 23 Aug 2024 04:06

Instrument :

BNA\_N

ClientSampleId :

S-912-J-SO-0-0.5-081924

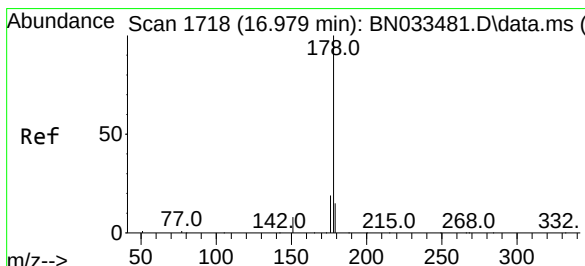
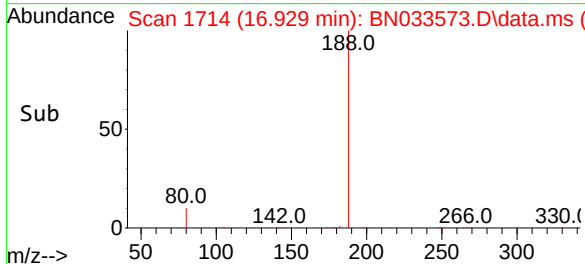
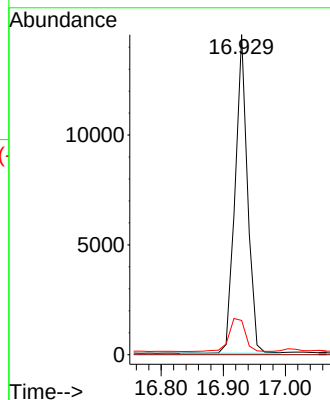
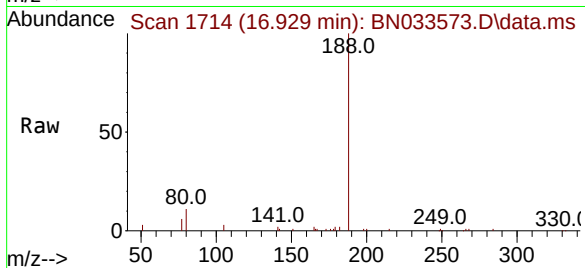
|             |       |       |
|-------------|-------|-------|
| Tgt Ion:188 | Resp: | 2019  |
| Ion Ratio   | Lower | Upper |
| 188         | 100   |       |
| 94          | 0.0   | 0.0   |
| 80          | 10.7  | 7.8   |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#25

Phenanthrene

Concen: 0.961 ng

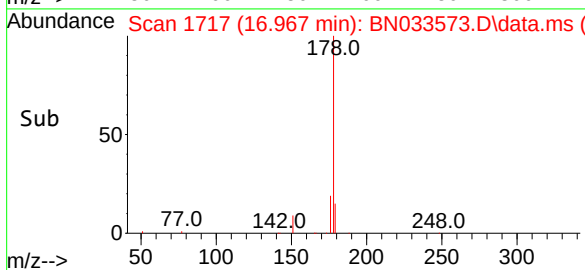
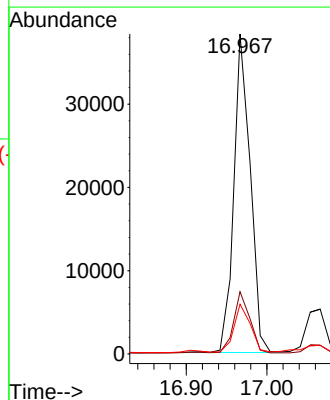
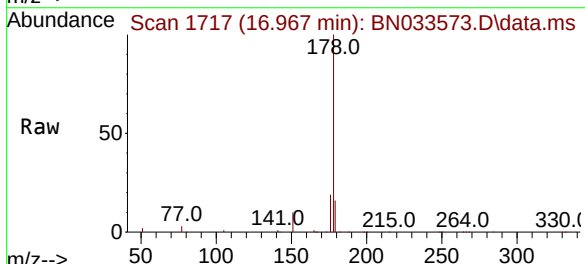
RT: 16.967 min Scan# 1717

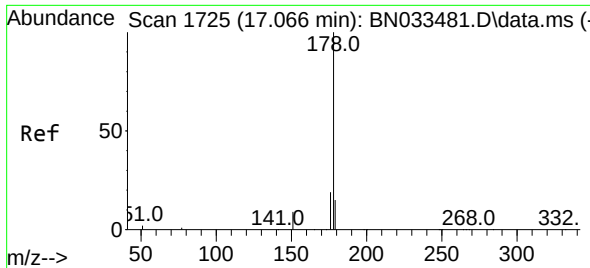
Delta R.T. 0.000 min

Lab File: BN033573.D

Acq: 23 Aug 2024 04:06

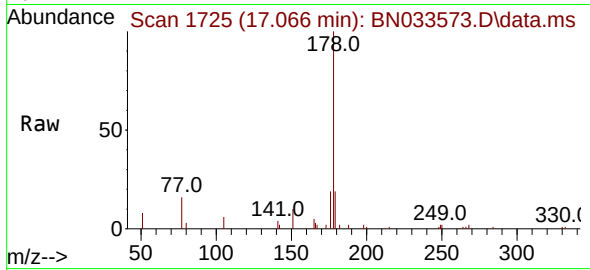
|             |       |       |
|-------------|-------|-------|
| Tgt Ion:178 | Resp: | 54015 |
| Ion Ratio   | Lower | Upper |
| 178         | 100   |       |
| 176         | 19.0  | 15.3  |
| 179         | 14.8  | 12.3  |





#26  
Anthracene  
Concen: 0.175 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

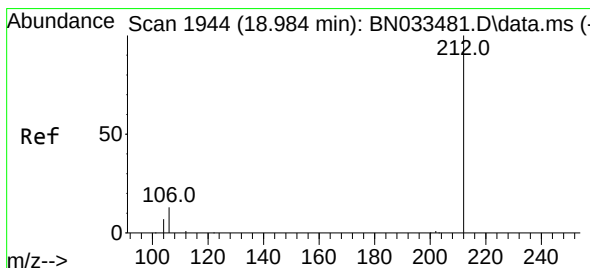
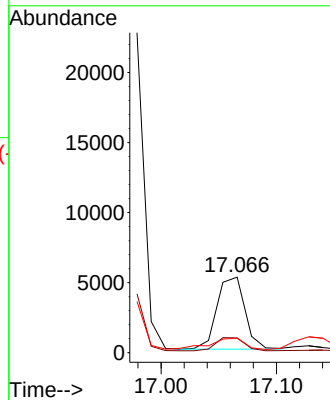
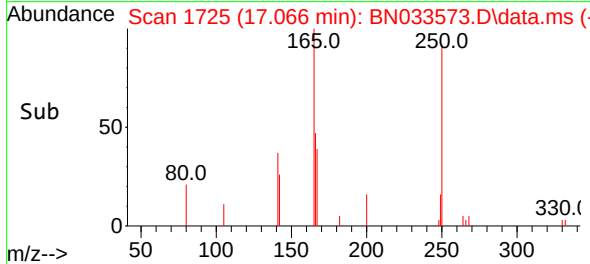
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion:178 Resp: 8690  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.0 22.6  
179 19.7 12.4 18.6

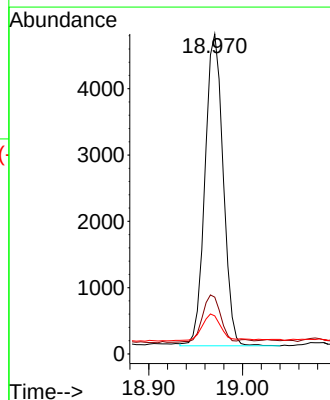
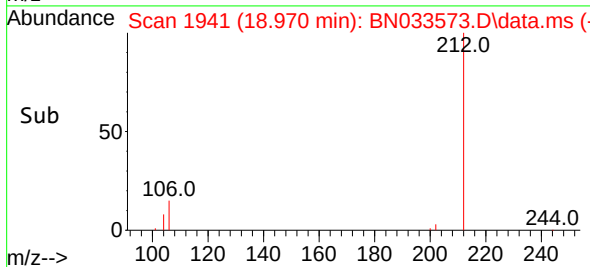
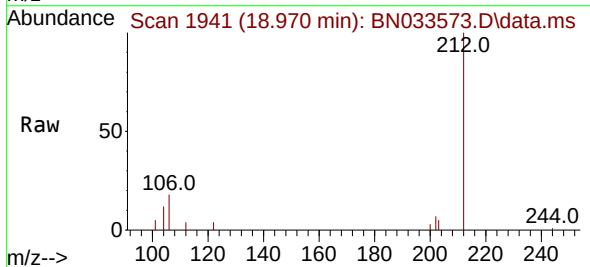
Manual Integrations  
APPROVED

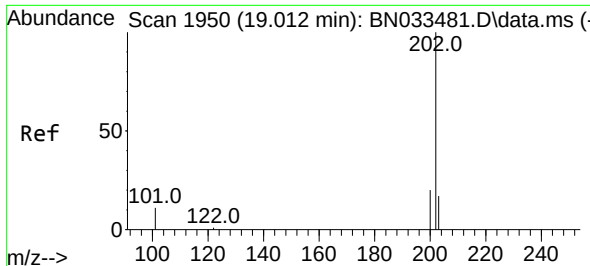
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#27  
Fluoranthene-d10  
Concen: 0.130 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

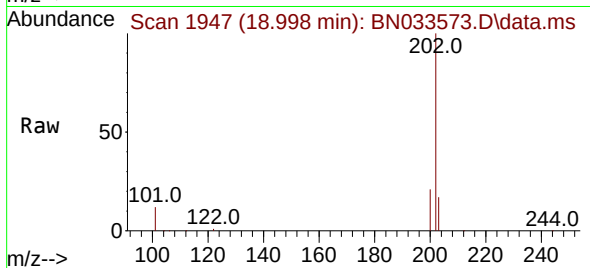
Tgt Ion:212 Resp: 6323  
Ion Ratio Lower Upper  
212 100  
106 15.1 12.3 18.5  
104 9.1 7.0 10.4





#28  
Fluoranthene  
Concen: 2.017 ng  
RT: 18.998 min Scan# 1950  
Delta R.T. -0.005 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

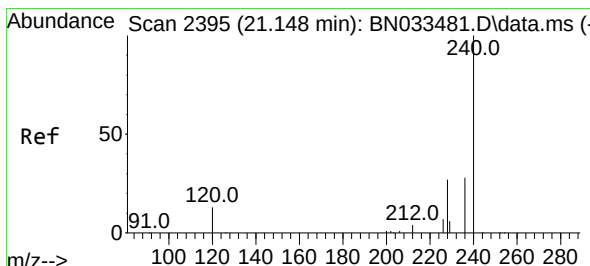
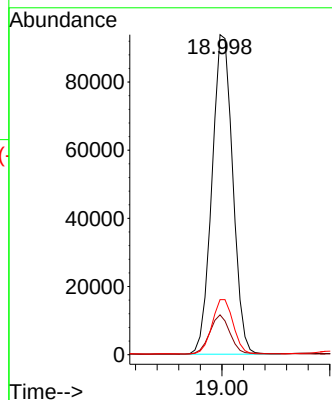
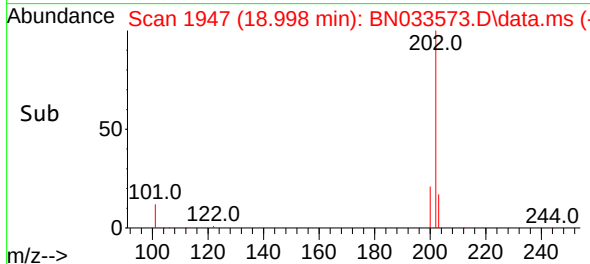
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion:202 Resp: 125270  
Ion Ratio Lower Upper  
202 100  
101 12.2 9.5 14.3  
203 17.3 13.8 20.6

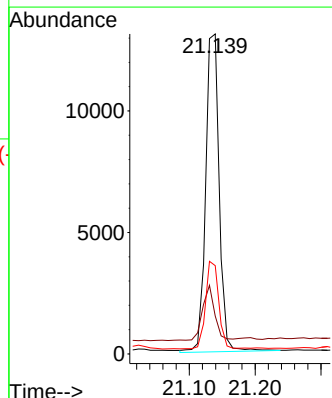
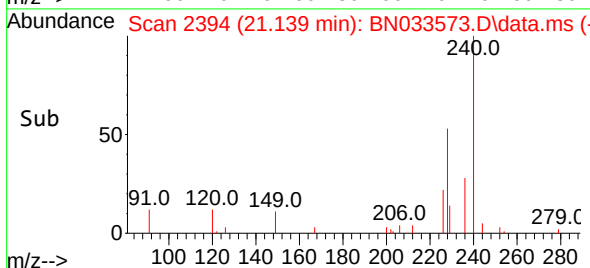
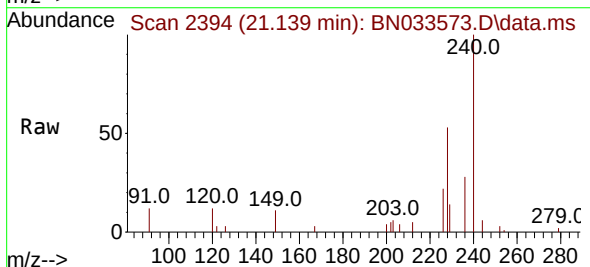
Manual Integrations  
APPROVED

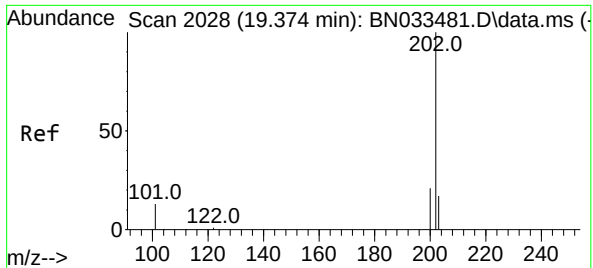
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

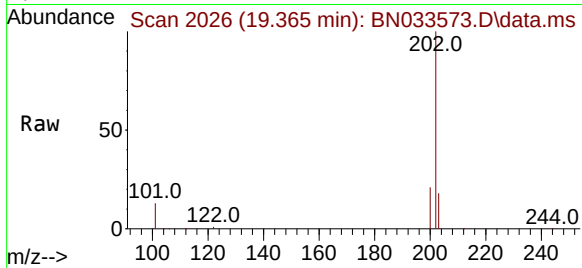
Tgt Ion:240 Resp: 18846  
Ion Ratio Lower Upper  
240 100  
120 11.9 12.4 18.6#  
236 27.6 23.0 34.6





#30  
Pyrene  
Concen: 1.316 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

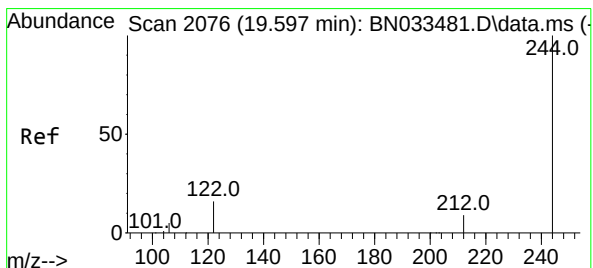
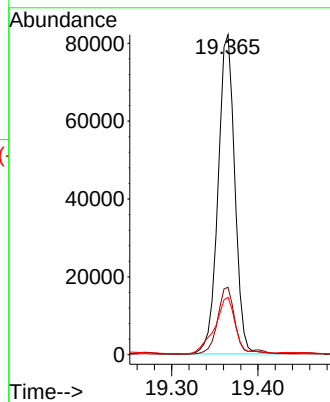
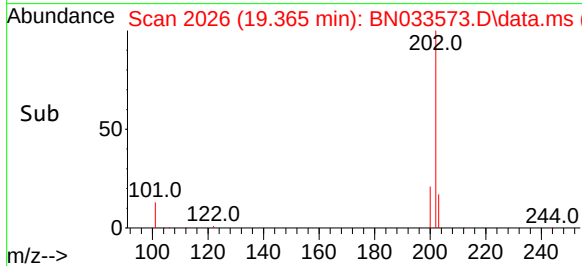
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion:202 Resp: 110725  
Ion Ratio Lower Upper  
202 100  
200 21.2 16.6 24.8  
203 21.7 14.2 21.4

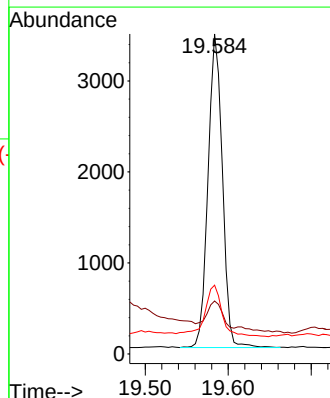
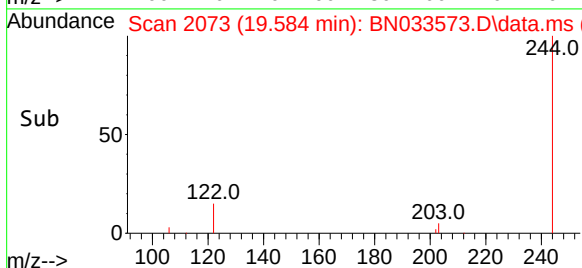
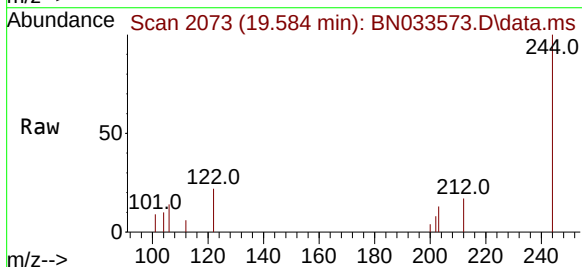
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Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

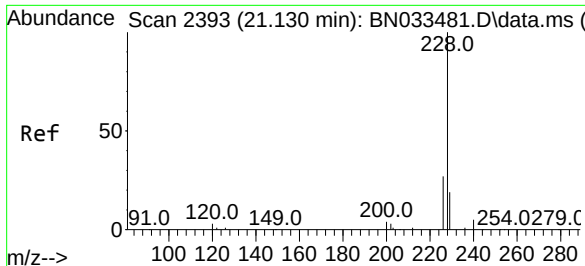


#31  
Terphenyl-d14  
Concen: 0.097 ng  
RT: 19.584 min Scan# 2073  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

Tgt Ion:244 Resp: 4160  
Ion Ratio Lower Upper  
244 100  
212 16.6 7.8 11.6#  
122 21.5 13.3 19.9#

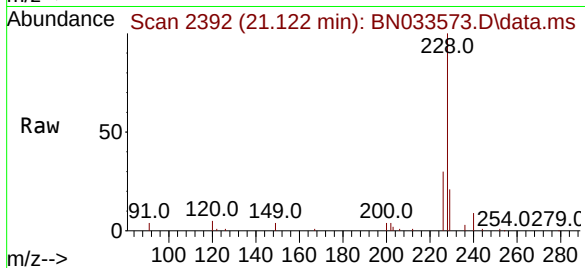






#32  
Benzo(a)anthracene  
Concen: 0.771 ng  
RT: 21.122 min Scan# 2112  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

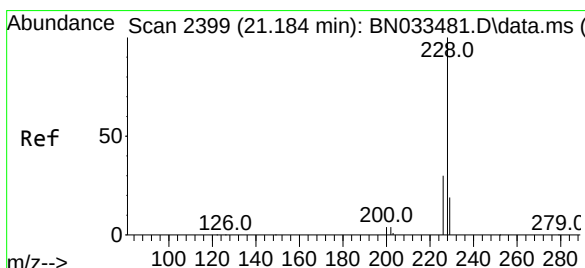
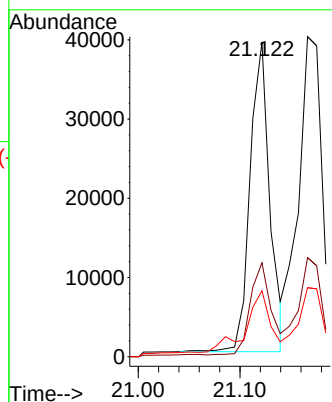
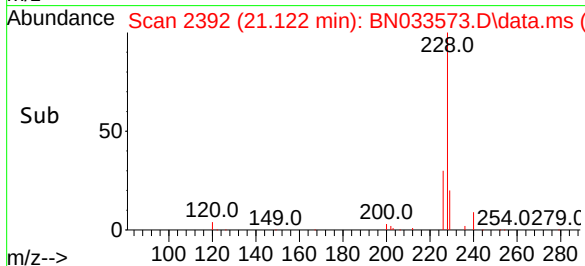
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion:228 Resp: 52550  
Ion Ratio Lower Upper  
228 100  
226 29.8 21.8 32.6  
229 21.0 15.8 23.6

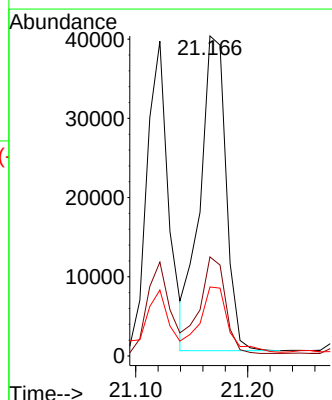
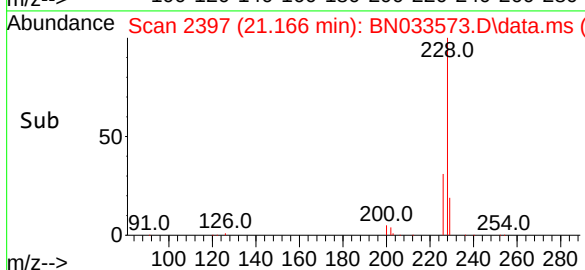
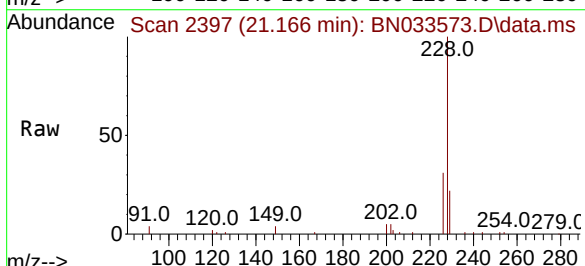
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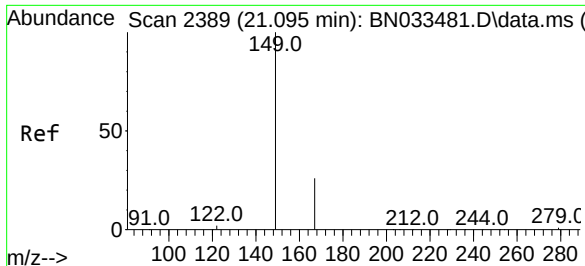
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#33  
Chrysene  
Concen: 0.948 ng  
RT: 21.166 min Scan# 2397  
Delta R.T. -0.009 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

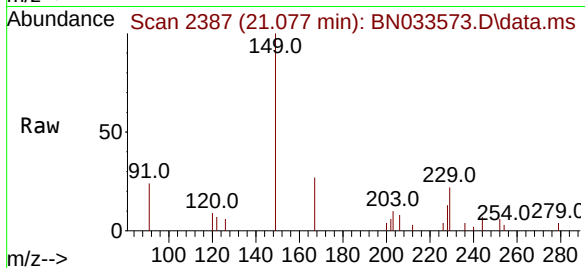
Tgt Ion:228 Resp: 64197  
Ion Ratio Lower Upper  
228 100  
226 31.0 23.8 35.8  
229 21.5 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.153 ng m  
RT: 21.077 min Scan# 2107  
Delta R.T. -0.009 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

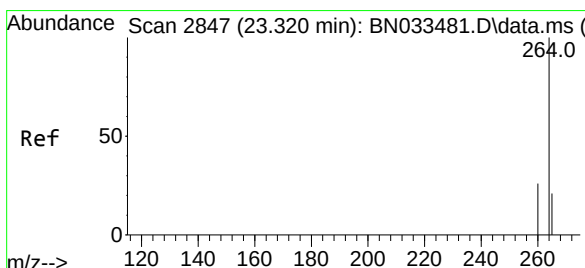
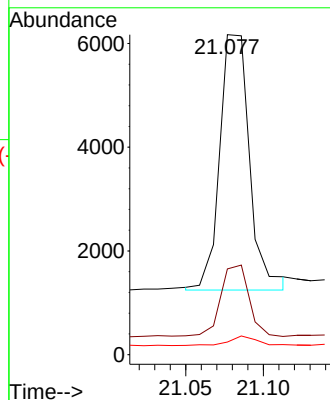
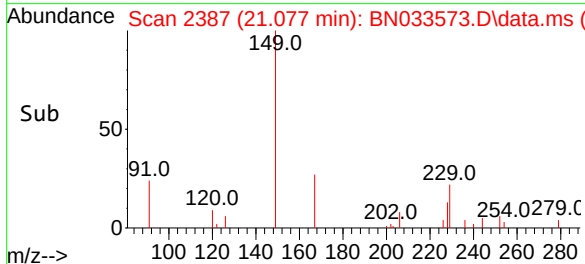
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion:149 Resp: 6610  
Ion Ratio Lower Upper  
149 100  
167 61.3 21.5 32.3  
279 5.4 2.2 3.2

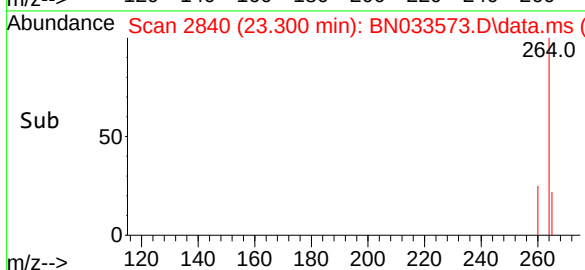
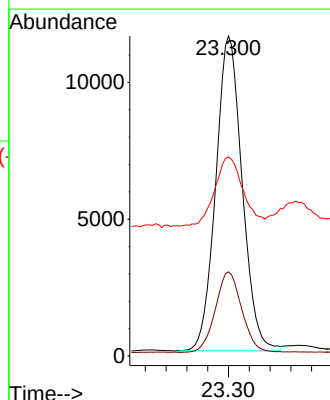
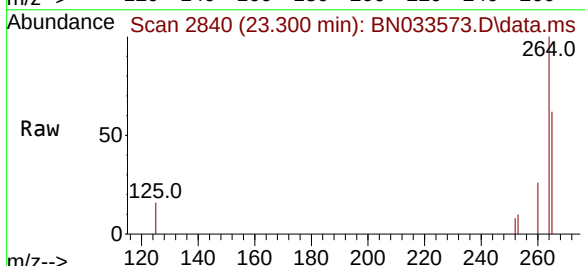
Manual Integrations  
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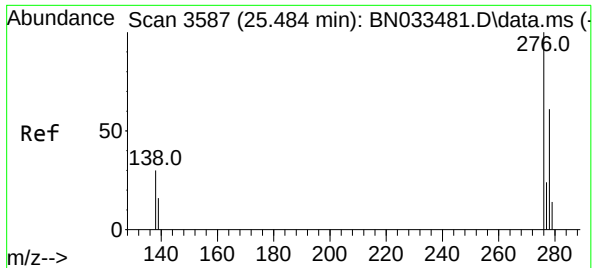
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.300 min Scan# 2840  
Delta R.T. -0.003 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

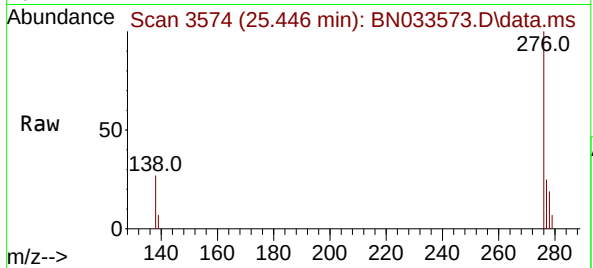
Tgt Ion:264 Resp: 20277  
Ion Ratio Lower Upper  
264 100  
260 26.3 20.8 31.2  
265 62.2 52.2 78.2





#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.496 ng  
RT: 25.446 min Scan# 3574  
Delta R.T. -0.003 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

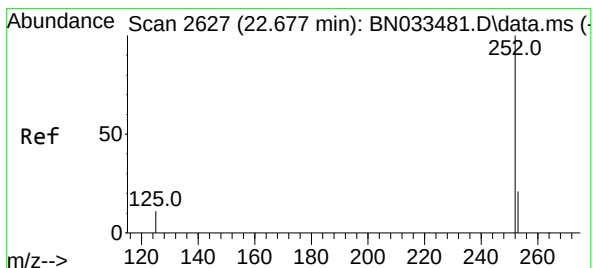
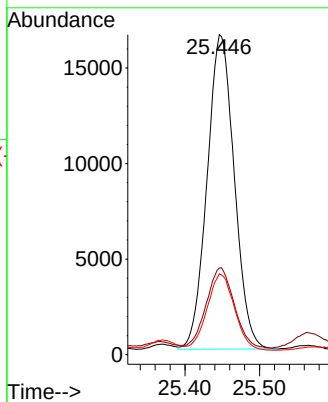
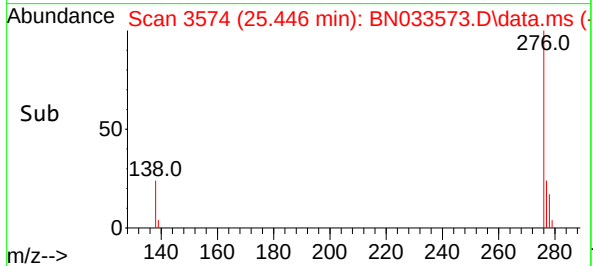
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0-0.5-081924



Tgt Ion: 276 Resp: 4174  
Ion Ratio Lower Upper  
276 100  
138 26.2 24.4 36.6  
277 24.5 19.8 29.6

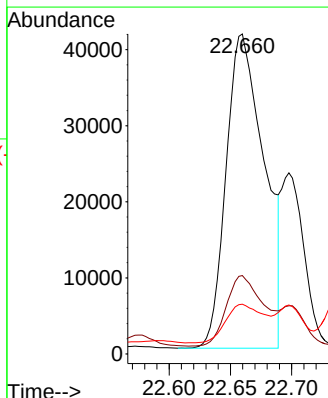
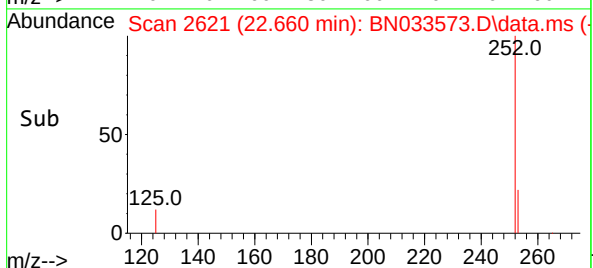
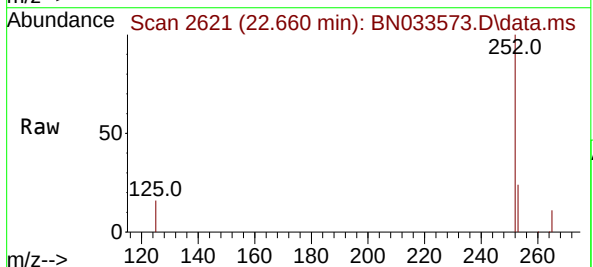
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APPROVED

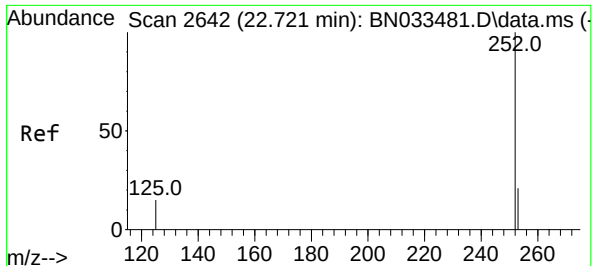
Reviewed By : Yogesh Patel 08/23/2024  
Supervised By : mohammad ahmed 08/24/2024



#37  
Benzo(b)fluoranthene  
Concen: 1.181 ng  
RT: 22.660 min Scan# 2621  
Delta R.T. 0.000 min  
Lab File: BN033573.D  
Acq: 23 Aug 2024 04:06

Tgt Ion: 252 Resp: 89415  
Ion Ratio Lower Upper  
252 100  
253 24.5 19.8 29.8  
125 15.6 13.9 20.9





#38

Benzo(k)fluoranthene

Concen: 0.405 ng m

RT: 22.698 min Scan# 20

Delta R.T. -0.006 min

Lab File: BN033573.D

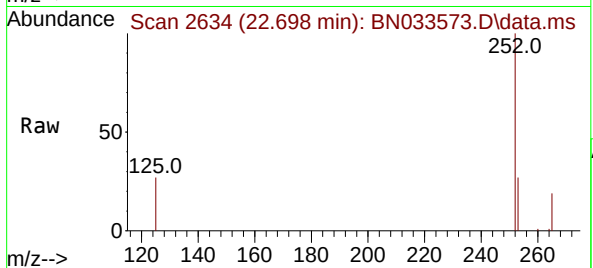
Acq: 23 Aug 2024 04:06

Instrument :

BNA\_N

ClientSampleId :

S-912-J-SO-0-0.5-081924



Tgt Ion:252 Resp: 30218

Ion Ratio Lower Upper

252 100

253 26.6 19.8 29.8

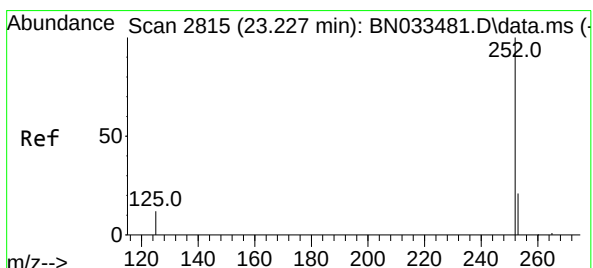
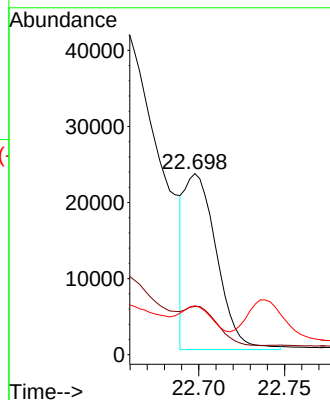
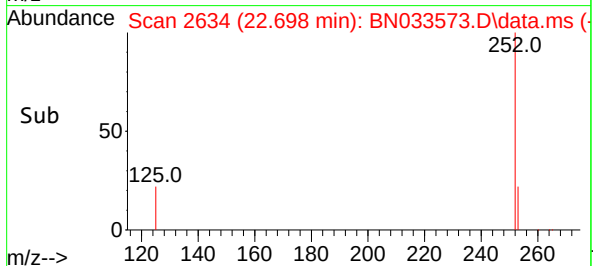
125 27.0 15.8 23.8

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#39

Benzo(a)pyrene

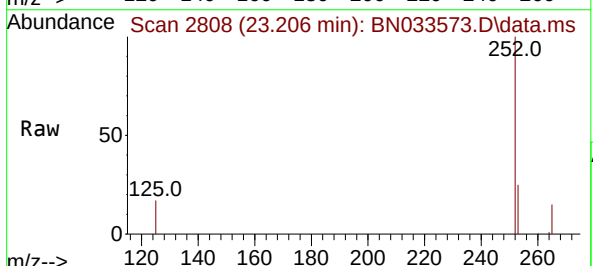
Concen: 0.884 ng

RT: 23.206 min Scan# 2808

Delta R.T. -0.003 min

Lab File: BN033573.D

Acq: 23 Aug 2024 04:06



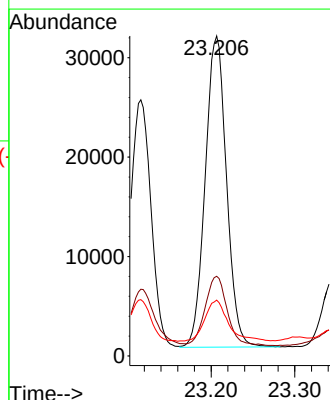
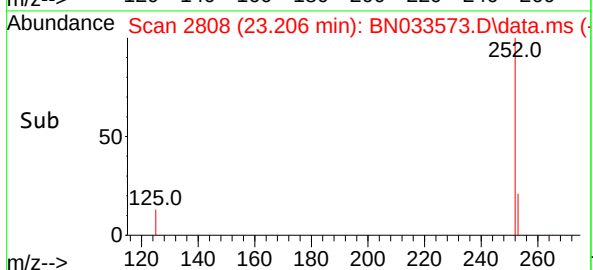
Tgt Ion:252 Resp: 55369

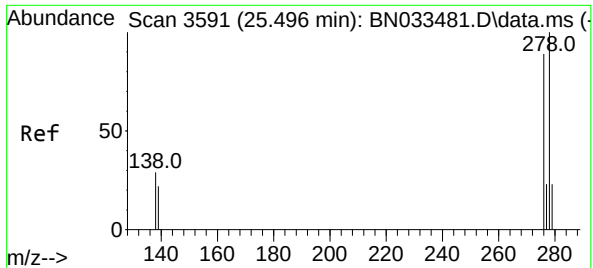
Ion Ratio Lower Upper

252 100

253 24.9 21.5 32.3

125 17.4 17.0 25.4





#40

Dibenzo(a,h)anthracene

Concen: 0.147 ng

RT: 25.458 min Scan# 31

Delta R.T. -0.012 min

Lab File: BN033573.D

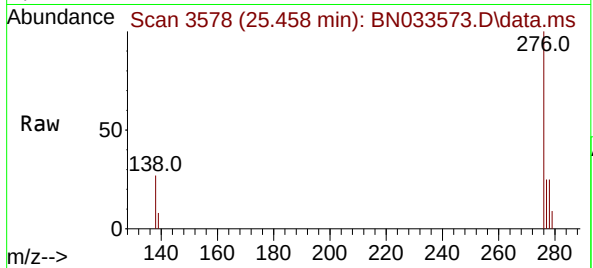
Acq: 23 Aug 2024 04:06

Instrument :

BNA\_N

ClientSampleId :

S-912-J-SO-0-0.5-081924



Tgt Ion:278 Resp: 989

Ion Ratio Lower Upper

278 100

139 31.9 19.1 28.7

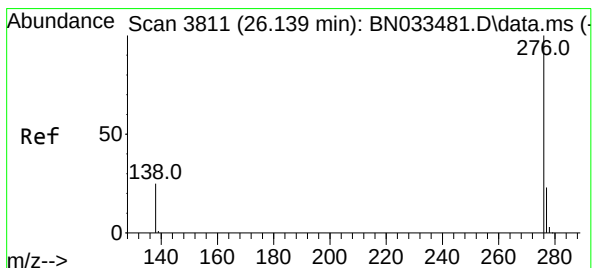
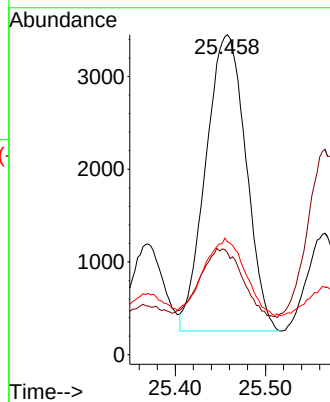
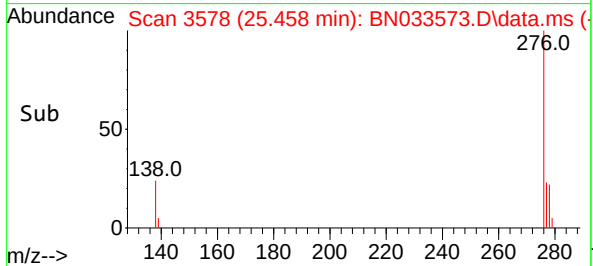
279 35.2 21.0 31.4

Manual Integrations

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Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#41

Benzo(g,h,i)perylene

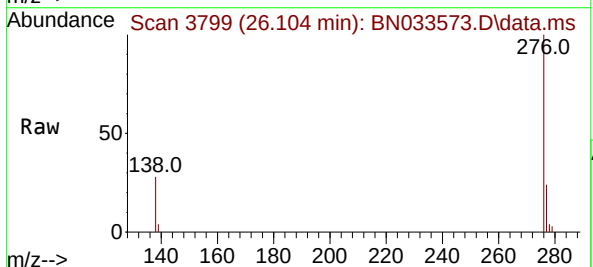
Concen: 0.577 ng

RT: 26.104 min Scan# 3799

Delta R.T. 0.000 min

Lab File: BN033573.D

Acq: 23 Aug 2024 04:06



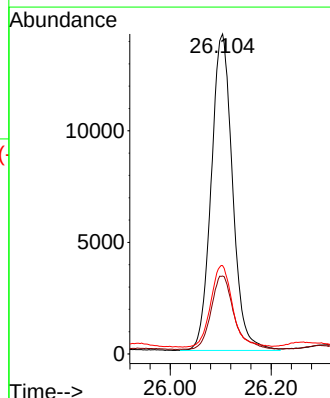
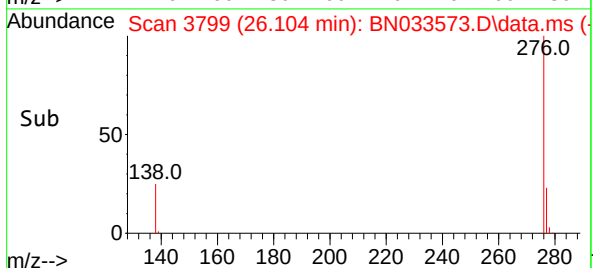
Tgt Ion:276 Resp: 41549

Ion Ratio Lower Upper

276 100

277 24.3 19.7 29.5

138 27.6 21.8 32.6



## Report of Analysis

|                    |                                       |                 |                      |
|--------------------|---------------------------------------|-----------------|----------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24             |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24             |
| Client Sample ID:  | S-912-J-SO-0.5-1-081924               | SDG No.:        | P3671                |
| Lab Sample ID:     | P3671-14                              | Matrix:         | SOIL                 |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 51.5                 |
| Sample Wt/Vol:     | 30.04      Units:    g                | Final Vol:      | 1000              uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3        |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                  |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N              PH :  |
| Prep Method :      | sw3541                                |                 |                      |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033566.D        | 1         | 08/21/24 09:38 | 08/22/24 23:52 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 1.30  | U         | 1.30                | 6.40       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 1.60  | U         | 1.60                | 6.40       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 1.20  | U         | 1.20                | 6.40       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 1.10  | U         | 1.10                | 6.40       | ug/Kg             |
| 86-73-7                   | Fluorene                | 1.20  | U         | 1.20                | 6.40       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 2.30  | J         | 1.20                | 6.40       | ug/Kg             |
| 120-12-7                  | Anthracene              | 1.50  | U         | 1.50                | 6.40       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 4.40  | J         | 1.30                | 6.40       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 3.40  | J         | 1.80                | 6.40       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 2.20  | J         | 1.50                | 6.40       | ug/Kg             |
| 218-01-9                  | Chrysene                | 2.70  | J         | 1.70                | 6.40       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 3.40  | J         | 2.30                | 6.40       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 1.90  | U         | 1.90                | 6.40       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 3.20  | U         | 3.20                | 6.40       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 2.40  | U         | 2.40                | 6.40       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 2.30  | U         | 2.30                | 6.40       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 2.20  | U         | 2.20                | 6.40       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 4.30  | U         | 4.30                | 12.8       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.13  |           | 30 (17) - 150 (161) | 32%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.095 | *         | 30 (23) - 150 (138) | 24%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.17  |           | 30 (33) - 130 (121) | 41%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.13  |           | 30 (32) - 130 (121) | 33%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.081 | *         | 30 (21) - 130 (130) | 20%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7000  |           | 7.545               |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 17900 |           | 10.304              |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 8340  |           | 14.178              |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 15900 |           | 16.929              |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-912-J-SO-0.5-1-081924               | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-14                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 51.5                         |
| Sample Wt/Vol:     | 30.04      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033566.D        | 1         | 08/21/24 09:38 | 08/22/24 23:52 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 12700 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 14100 | 23.303    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033566.D  
Acq On : 22 Aug 2024 23:52  
Operator : MA/JU  
Sample : P3671-14  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

Quant Time: Aug 23 01:35:50 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7004     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.304 | 136  | 17932    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 8339     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 15941    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 12739    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.303 | 264  | 14091    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 2850     | 0.128 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.729  | 99   | 3436     | 0.130 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 2456     | 0.165 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 3335     | 0.130 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 510      | 0.114 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 4495     | 0.132 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 3658     | 0.095 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 2336     | 0.081 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 25) Phenanthrene              | 16.966 | 178  | 1553m    | 0.035 | ng    | Qvalue   |
| 28) Fluoranthene              | 19.003 | 202  | 3312     | 0.068 | ng    | 96       |
| 30) Pyrene                    | 19.365 | 202  | 3002     | 0.053 | ng    | # 94     |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 1564     | 0.034 | ng    | # 86     |
| 33) Chrysene                  | 21.175 | 228  | 1927     | 0.042 | ng    | # 90     |
| 34) Bis(2-ethylhexyl)phtha... | 21.085 | 149  | 1704m    | 0.058 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.449 | 276  | 1204     | 0.021 | ng    | 97       |
| 37) Benzo(b)fluoranthene      | 22.660 | 252  | 2721     | 0.052 | ng    | # 21     |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 1561     | 0.036 | ng    | # 1      |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 1201     | 0.024 | ng    | # 51     |

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



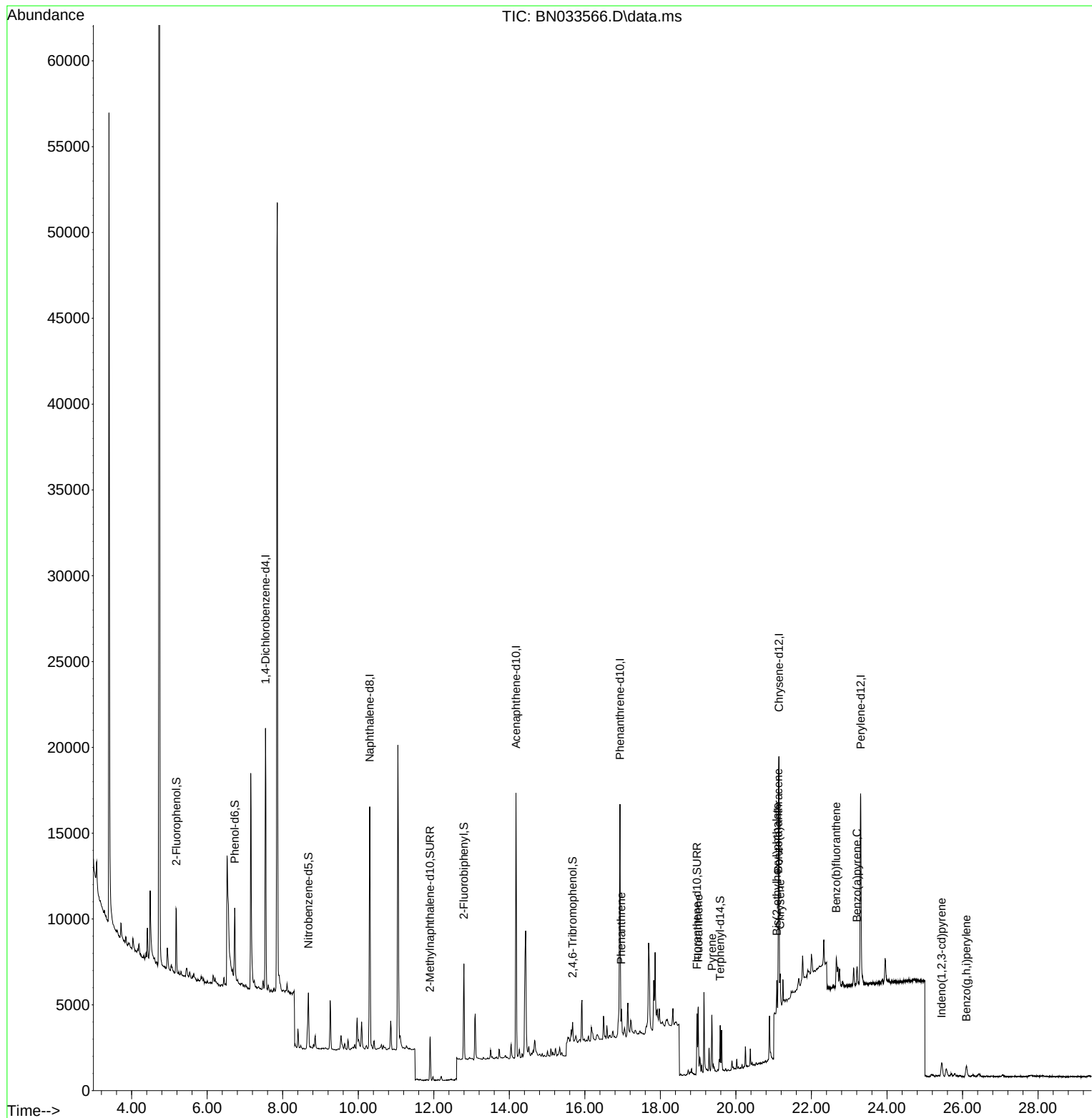
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Data File : BN033566.D  
Acq On : 22 Aug 2024 23:52  
Operator : MA/JU  
Sample : P3671-14  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

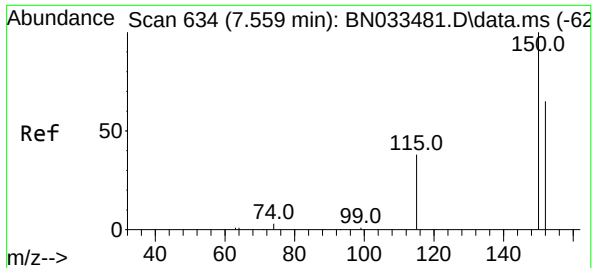
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924

Quant Time: Aug 23 01:35:50 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

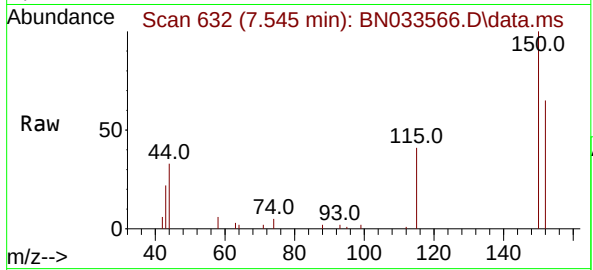
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

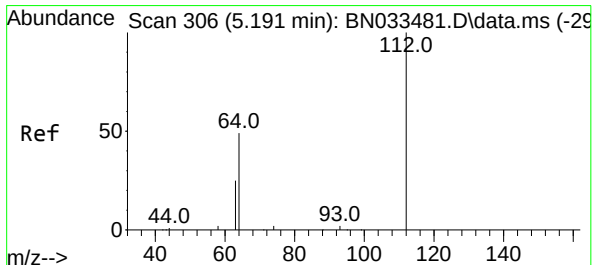
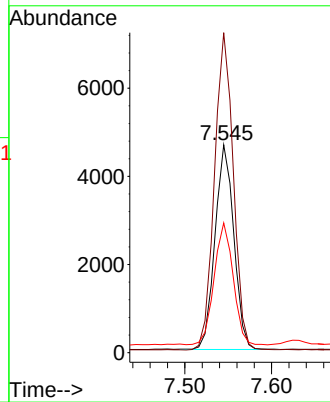
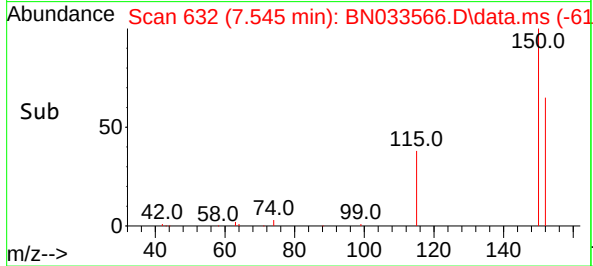
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion:152 Resp: 7004  
Ion Ratio Lower Upper  
152 100  
150 154.0 122.2 183.2  
115 62.5 47.2 70.8

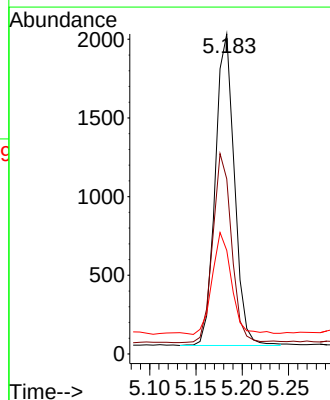
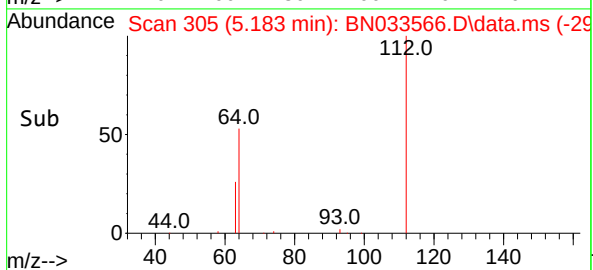
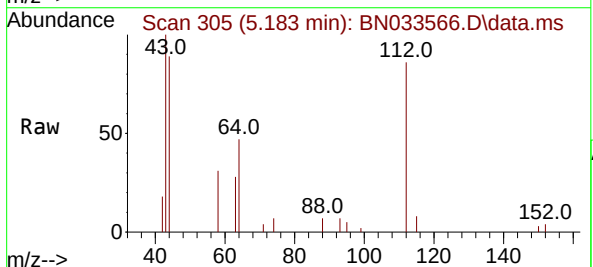
Manual Integrations  
APPROVED

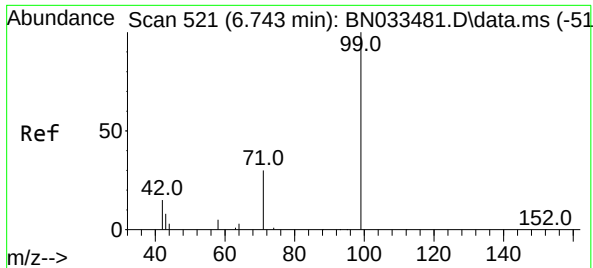
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.128 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

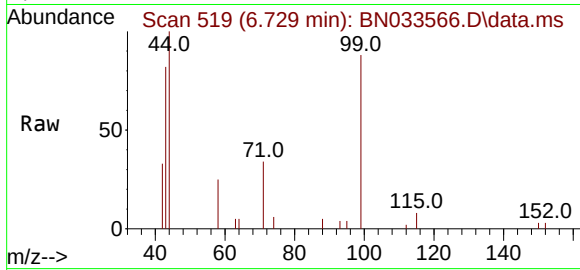
Tgt Ion:112 Resp: 2850  
Ion Ratio Lower Upper  
112 100  
64 59.5 47.1 70.7  
63 33.1 24.9 37.3





#5  
Phenol-d6  
Concen: 0.130 ng  
RT: 6.729 min Scan# 519  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

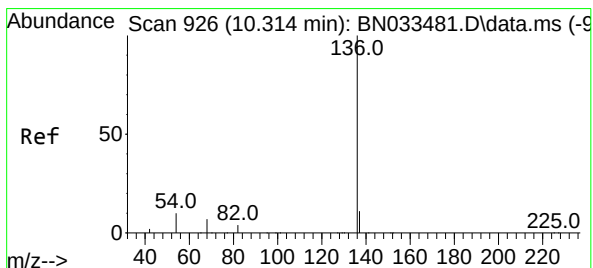
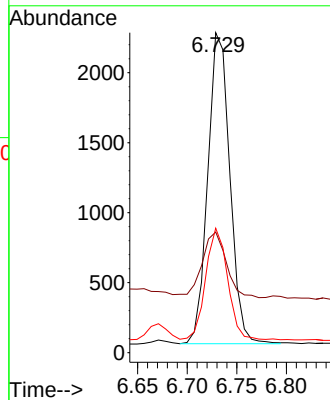
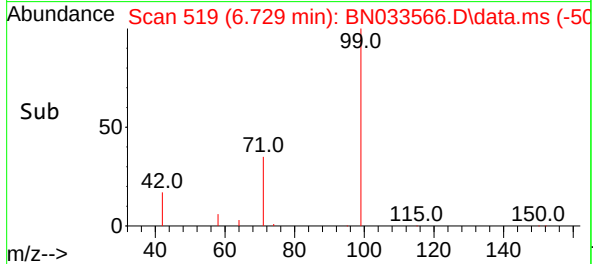
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion: 99 Resp: 3430  
Ion Ratio Lower Upper  
99 100  
42 23.0 16.6 24.8  
71 35.7 26.2 39.4

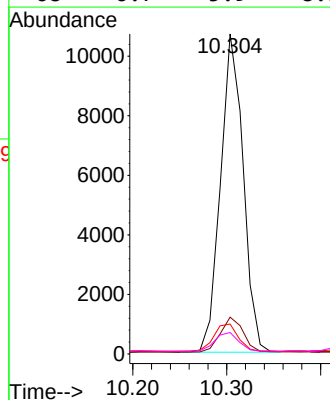
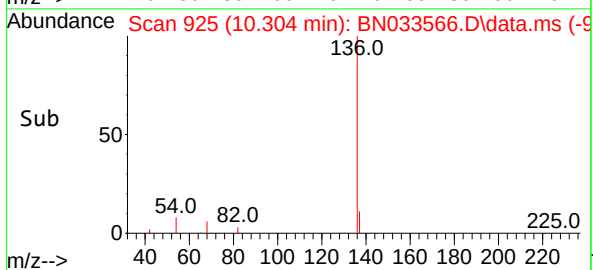
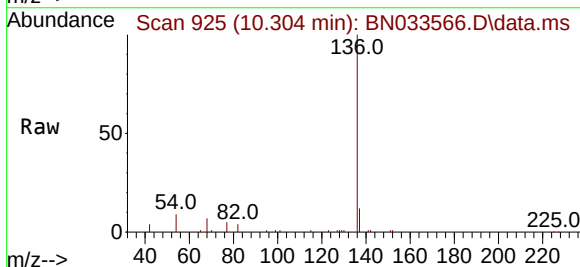
Manual Integrations  
APPROVED

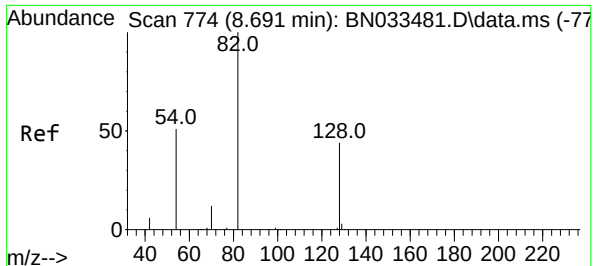
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

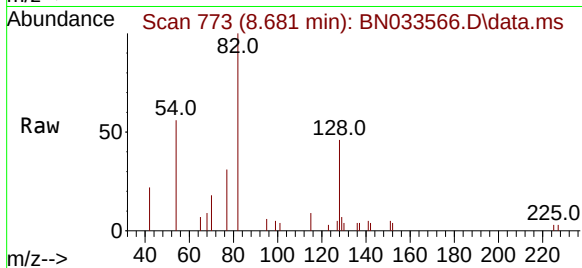
Tgt Ion:136 Resp: 17932  
Ion Ratio Lower Upper  
136 100  
137 11.5 9.0 13.6  
54 9.3 8.3 12.5  
68 6.7 5.9 8.9





#8  
Nitrobenzene-d5  
Concen: 0.165 ng  
RT: 8.681 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

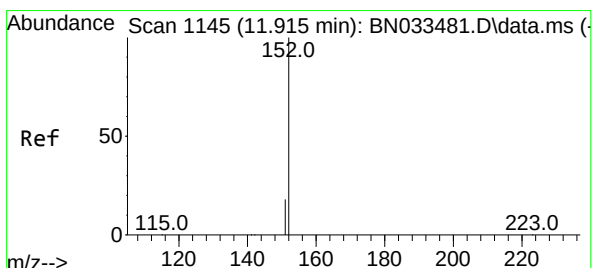
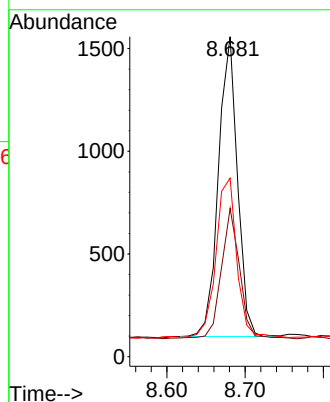
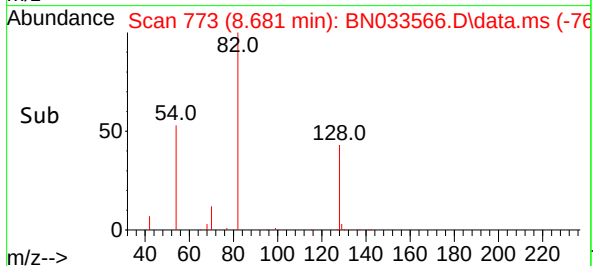
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion: 82 Resp: 2450  
Ion Ratio Lower Upper  
82 100  
128 46.3 36.0 54.0  
54 55.8 42.0 63.0

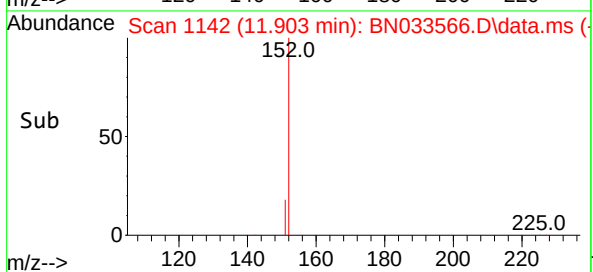
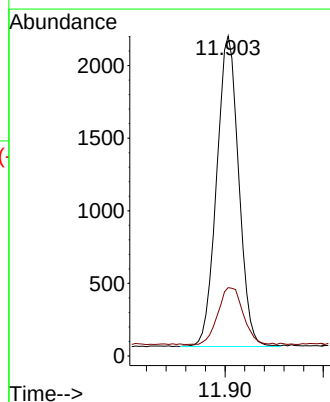
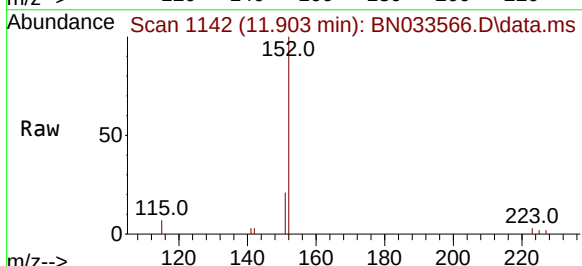
Manual Integrations  
APPROVED

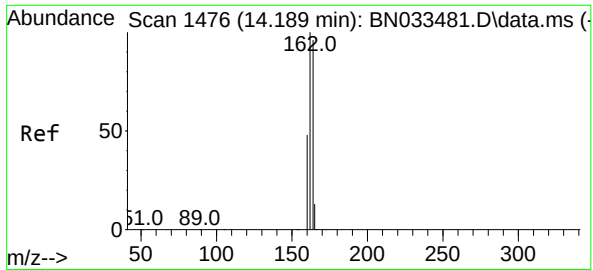
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#11  
2-Methylnaphthalene-d10  
Concen: 0.130 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

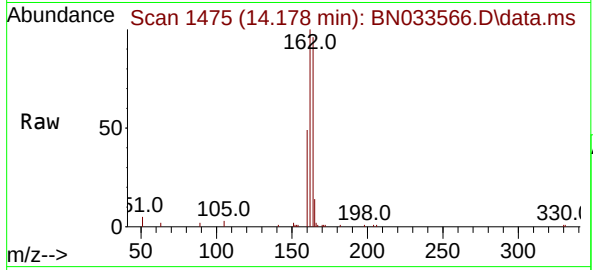
Tgt Ion:152 Resp: 3335  
Ion Ratio Lower Upper  
152 100  
151 20.7 16.6 25.0





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

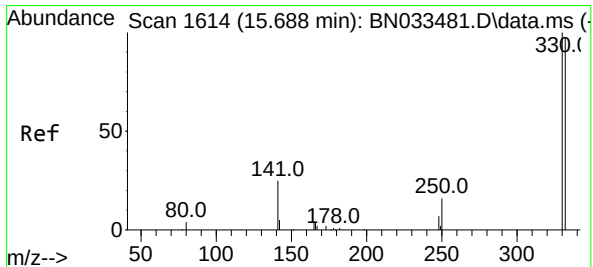
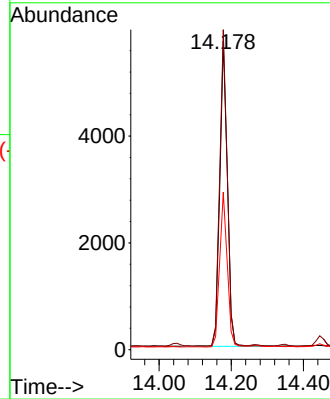
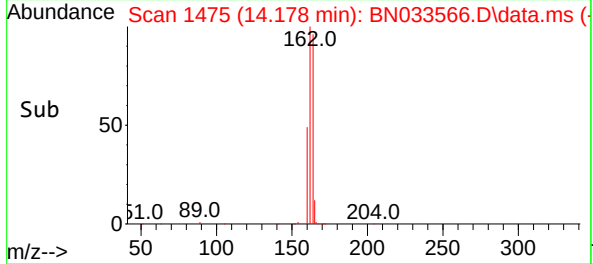
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



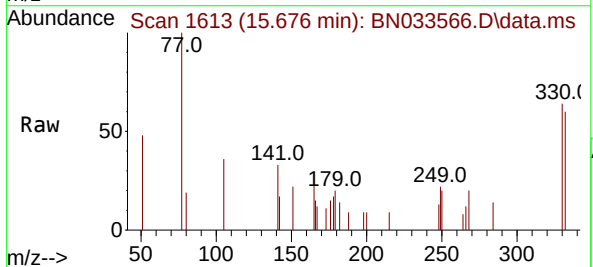
Tgt Ion:164 Resp: 8339  
Ion Ratio Lower Upper  
164 100  
162 103.7 83.5 125.3  
160 51.0 40.2 60.4

Manual Integrations  
**APPROVED**

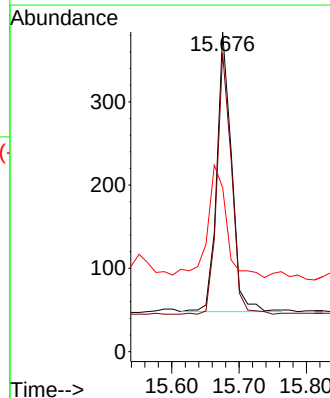
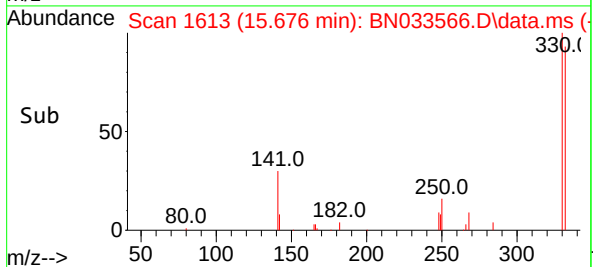
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

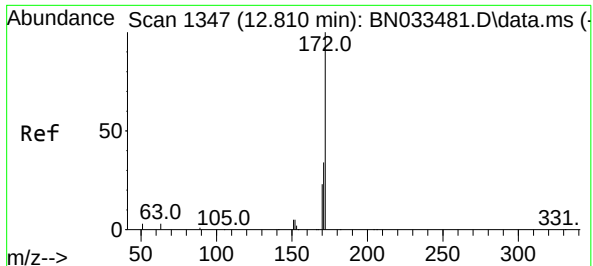


#14  
2,4,6-Tribromophenol  
Concen: 0.114 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52



Tgt Ion:330 Resp: 510  
Ion Ratio Lower Upper  
330 100  
332 92.4 77.5 116.3  
141 52.2 33.9 50.9#





#15

2-Fluorobiphenyl

Concen: 0.132 ng

RT: 12.799 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN033566.D

Acq: 22 Aug 2024 23:52

Instrument :

BNA\_N

ClientSampleId :

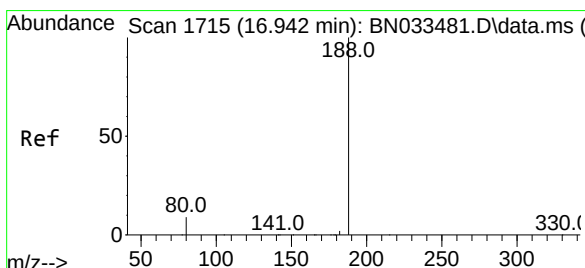
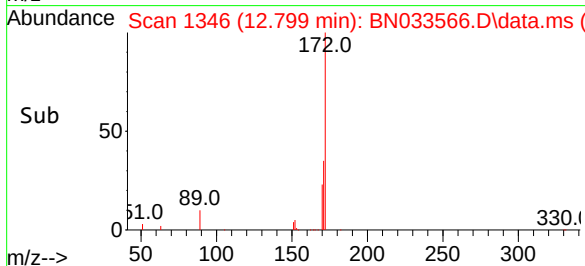
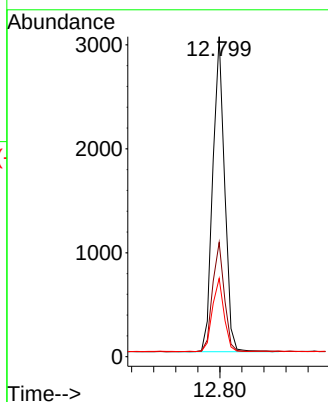
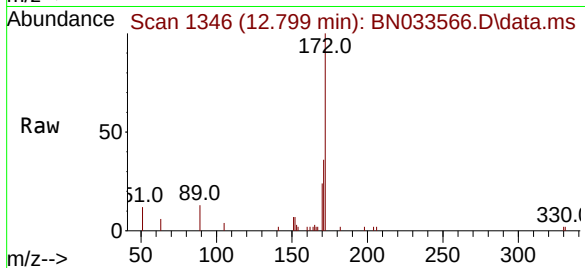
S-912-J-SO-0.5-1-081924

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 172   | Resp: | 449   |
| Ion      | Ratio | Lower | Upper |
| 172      | 100   |       |       |
| 171      | 35.7  | 27.7  | 41.5  |
| 170      | 24.5  | 18.3  | 27.5  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#19

Phenanthrene-d10

Concen: 0.400 ng

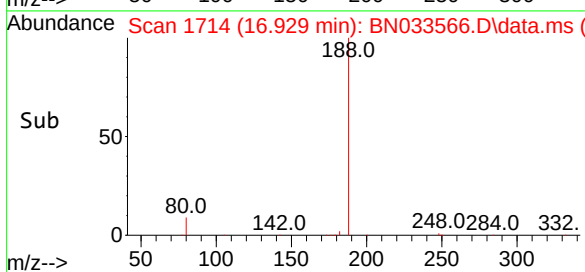
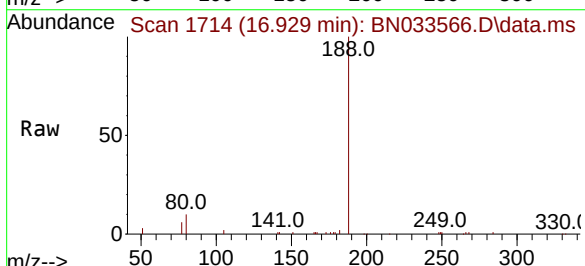
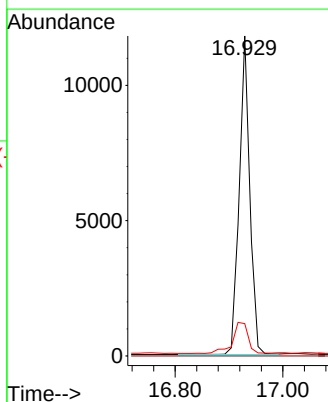
RT: 16.929 min Scan# 1714

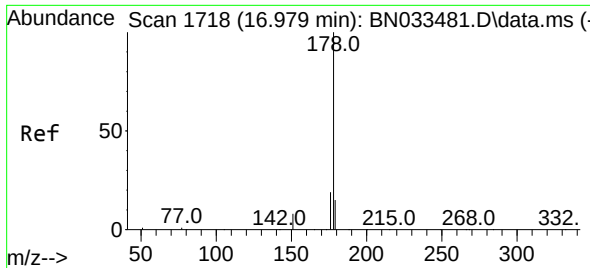
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Lab File: BN033566.D

Acq: 22 Aug 2024 23:52

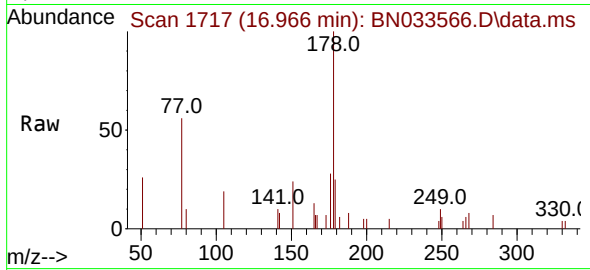
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 188   | Resp: | 15941 |
| Ion      | Ratio | Lower | Upper |
| 188      | 100   |       |       |
| 94       | 0.0   | 0.0   | 0.0   |
| 80       | 10.1  | 7.8   | 11.8  |





#25  
Phenanthrene  
Concen: 0.035 ng m  
RT: 16.966 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

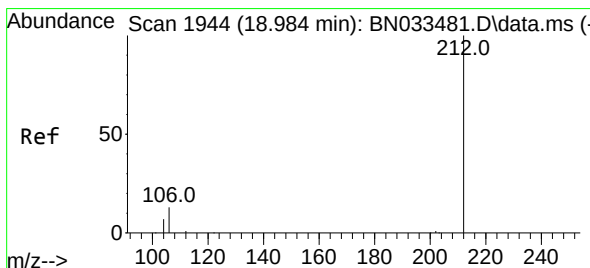
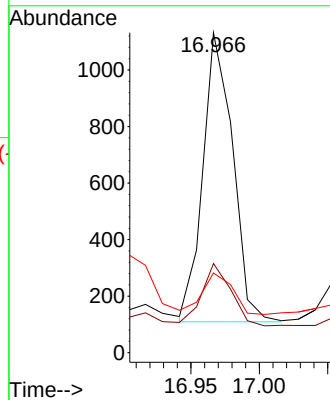
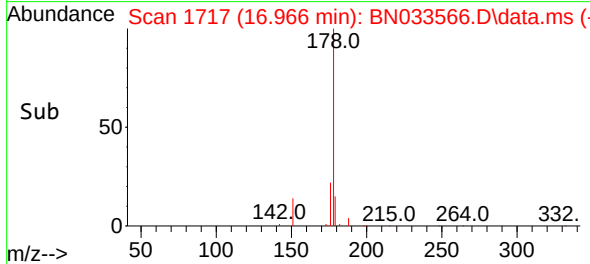
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion:178 Resp: 155  
Ion Ratio Lower Upper  
178 100  
176 20.9 15.3 22.9  
179 14.4 12.3 18.5

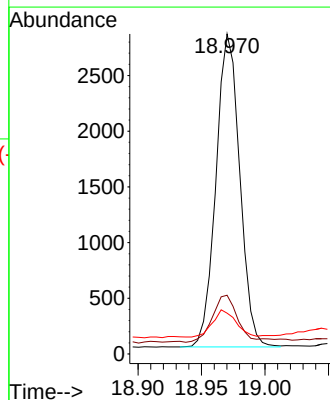
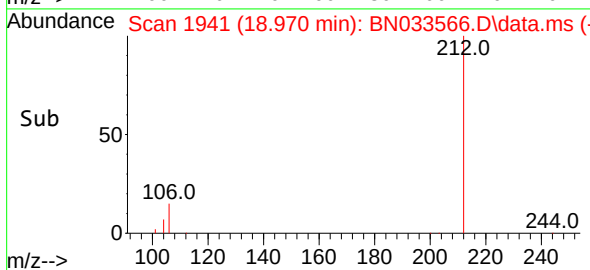
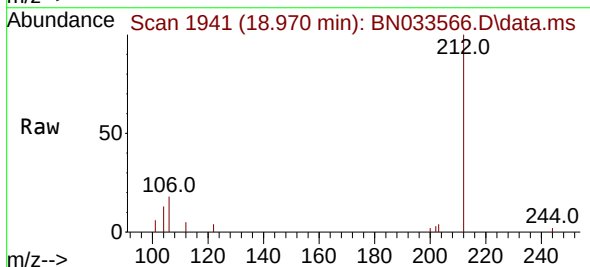
Manual Integrations  
APPROVED

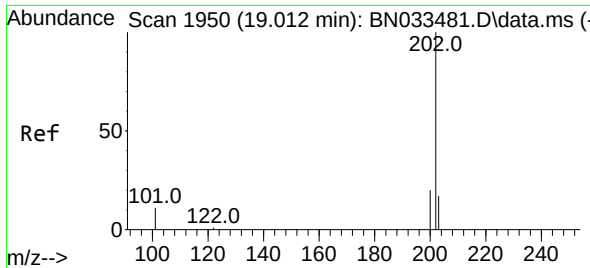
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#27  
Fluoranthene-d10  
Concen: 0.095 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

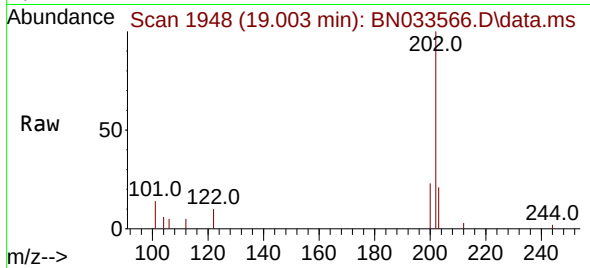
Tgt Ion:212 Resp: 3658  
Ion Ratio Lower Upper  
212 100  
106 16.9 12.3 18.5  
104 8.5 7.0 10.4





#28  
Fluoranthene  
Concen: 0.068 ng  
RT: 19.003 min Scan# 1950  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

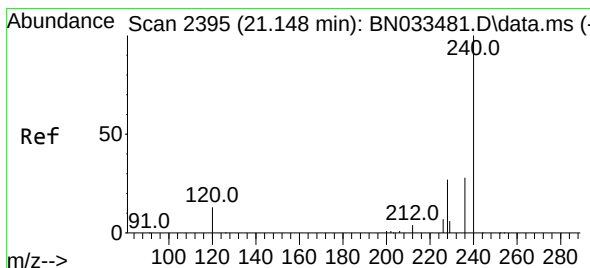
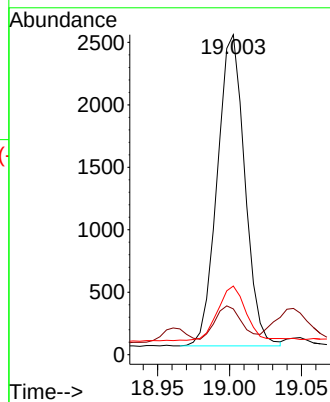
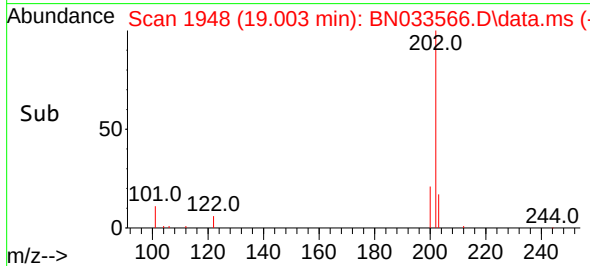
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion:202 Resp: 331  
Ion Ratio Lower Upper  
202 100  
101 11.0 9.5 14.3  
203 19.2 13.8 20.6

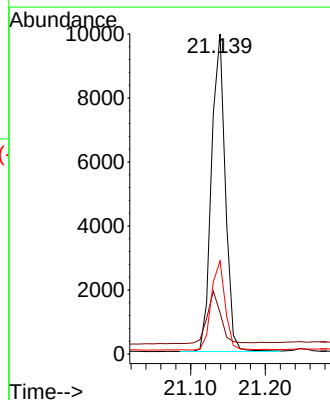
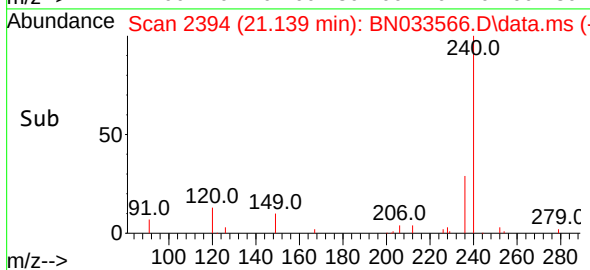
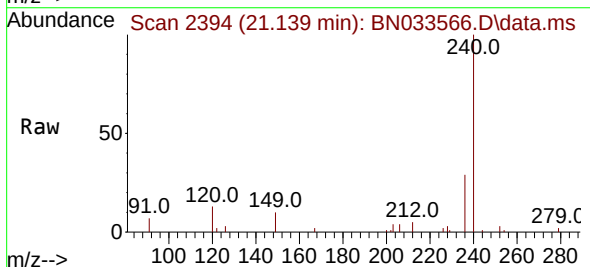
Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

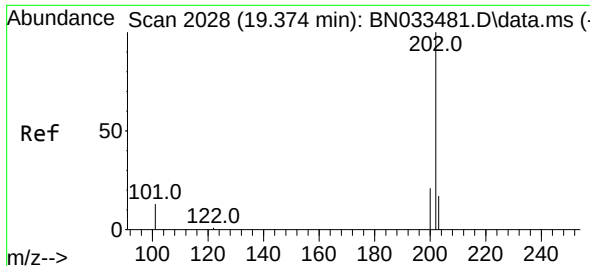


#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

Tgt Ion:240 Resp: 12739  
Ion Ratio Lower Upper  
240 100  
120 12.9 12.4 18.6  
236 29.1 23.0 34.6







#30

Pyrene

Concen: 0.053 ng

RT: 19.365 min Scan# 2026

Delta R.T. -0.000 min

Lab File: BN033566.D

Acq: 22 Aug 2024 23:52

Instrument :

BNA\_N

ClientSampleId :

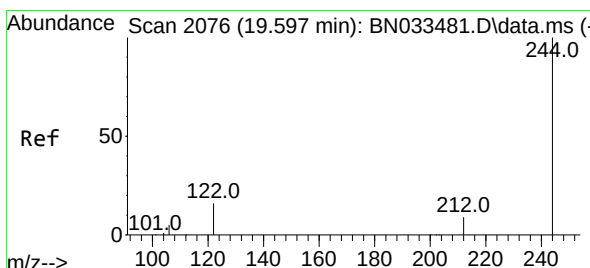
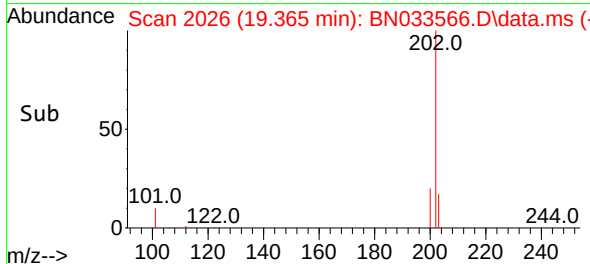
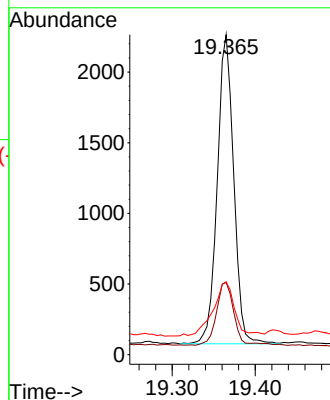
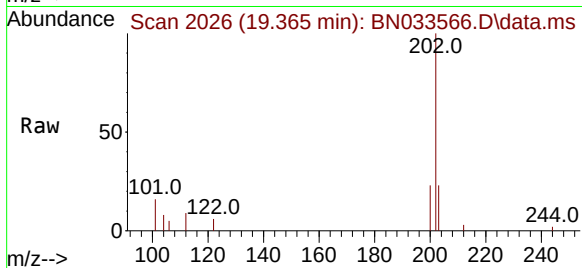
S-912-J-SO-0.5-1-081924

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 202   | Resp: | 300   |
| Ion      | Ratio | Lower | Upper |
| 202      | 100   |       |       |
| 200      | 20.6  | 16.6  | 24.8  |
| 203      | 23.2  | 14.2  | 21.4  |

Manual Integrations  
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Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#31

Terphenyl-d14

Concen: 0.081 ng

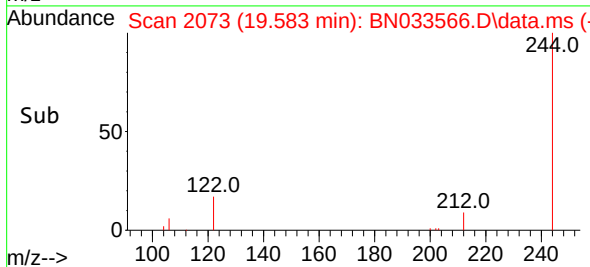
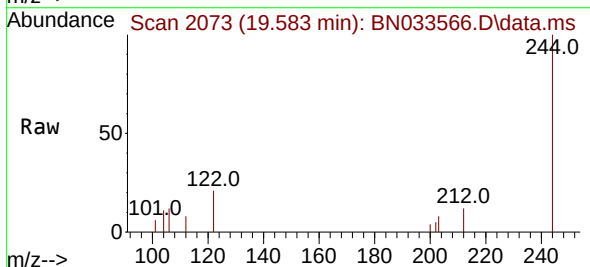
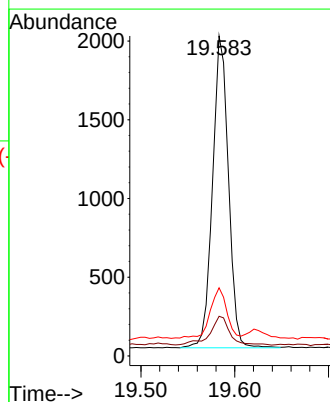
RT: 19.583 min Scan# 2073

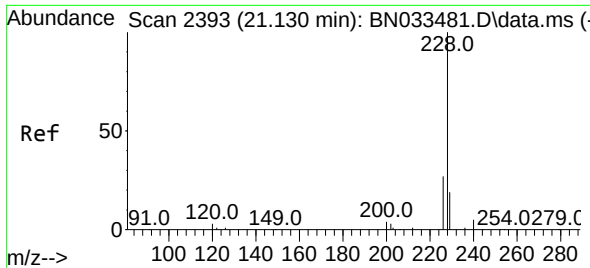
Delta R.T. -0.000 min

Lab File: BN033566.D

Acq: 22 Aug 2024 23:52

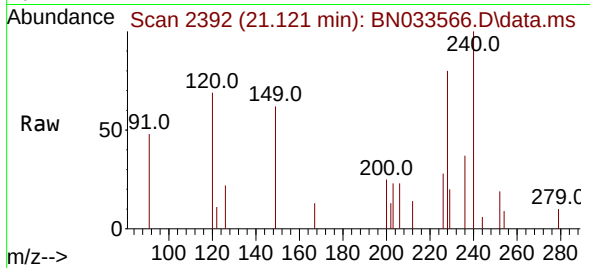
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 244   | Resp: | 2336  |
| Ion      | Ratio | Lower | Upper |
| 244      | 100   |       |       |
| 212      | 12.4  | 7.8   | 11.6  |
| 122      | 21.3  | 13.3  | 19.9  |





#32  
Benzo(a)anthracene  
Concen: 0.034 ng  
RT: 21.121 min Scan# 21121  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

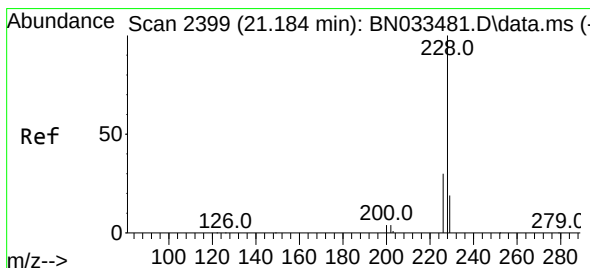
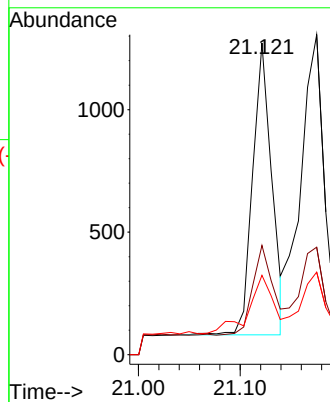
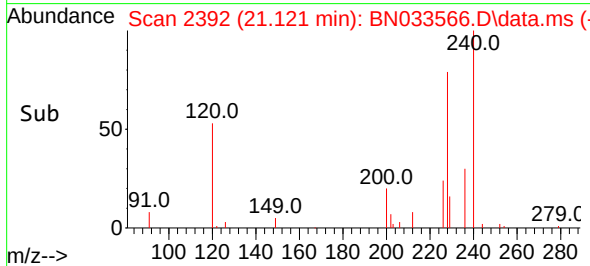
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion:228 Resp: 1564  
Ion Ratio Lower Upper  
228 100  
226 35.1 21.8 32.6  
229 25.5 15.8 23.6

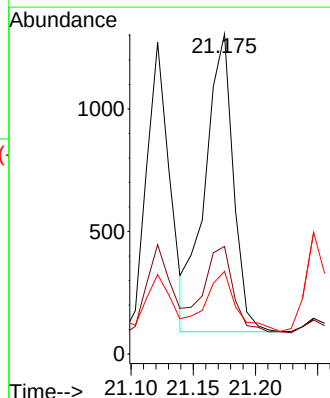
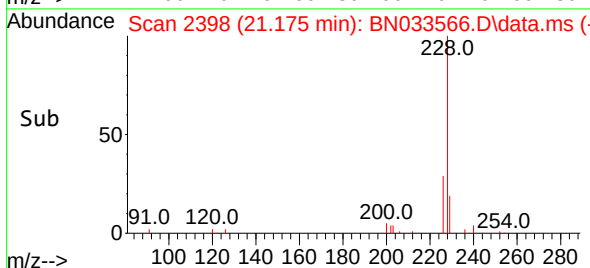
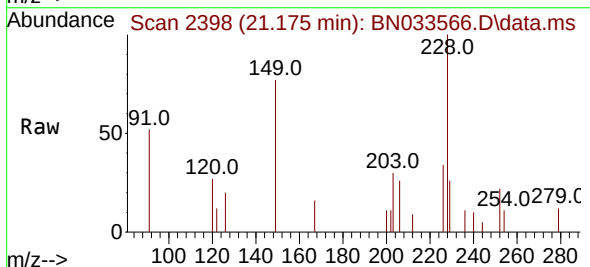
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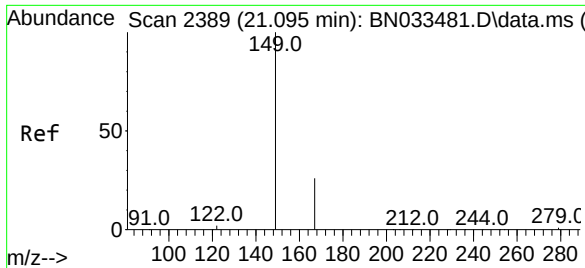
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#33  
Chrysene  
Concen: 0.042 ng  
RT: 21.175 min Scan# 2398  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

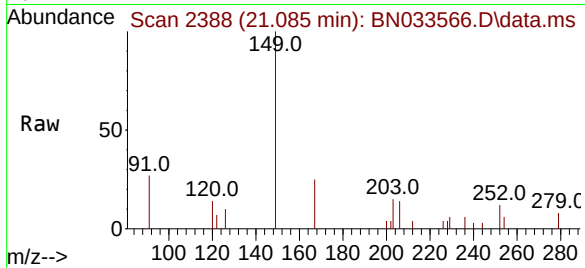
Tgt Ion:228 Resp: 1927  
Ion Ratio Lower Upper  
228 100  
226 33.6 23.8 35.8  
229 25.8 15.6 23.4





#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.058 ng m  
RT: 21.085 min Scan# 2108  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

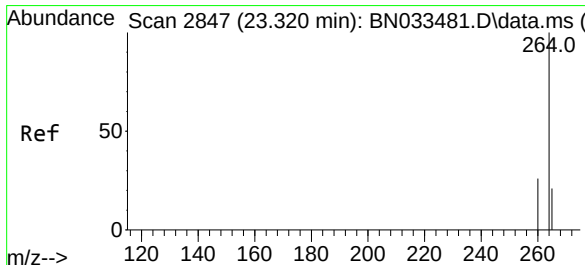
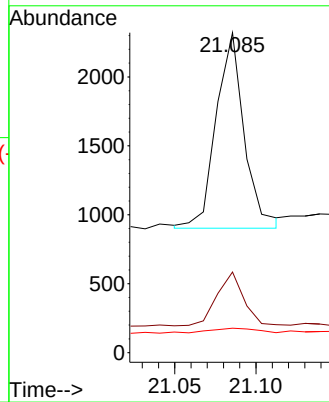
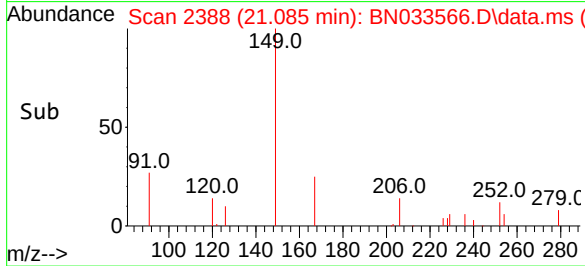
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion:149 Resp: 1704  
Ion Ratio Lower Upper  
149 100  
167 108.2 21.5 32.3  
279 60.2 2.2 3.2

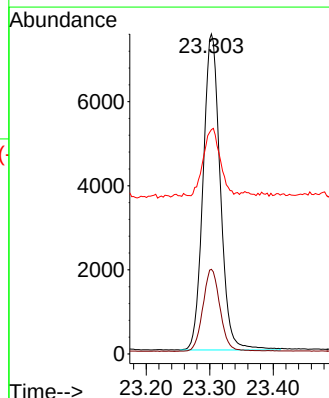
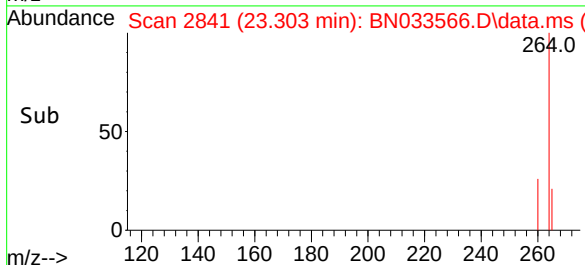
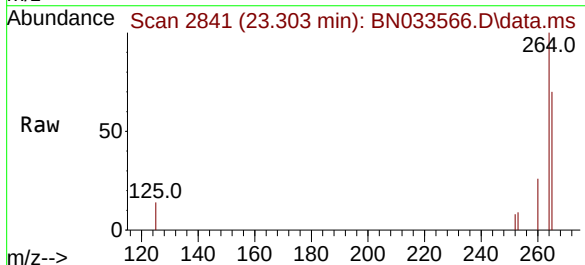
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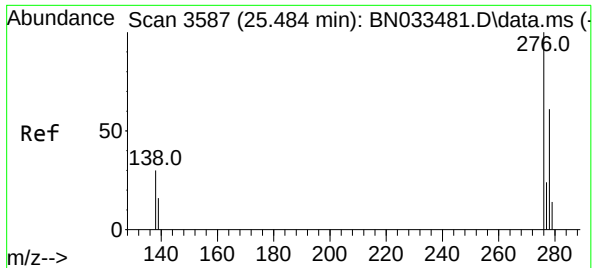
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.303 min Scan# 2841  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

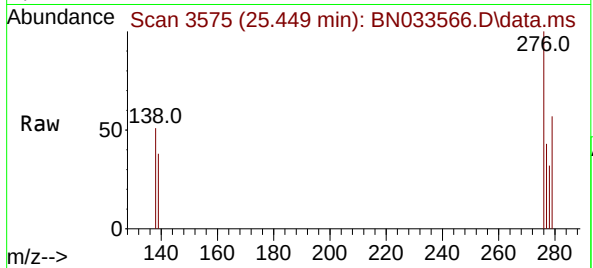
Tgt Ion:264 Resp: 14091  
Ion Ratio Lower Upper  
264 100  
260 26.4 20.8 31.2  
265 70.1 52.2 78.2





#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.021 ng  
RT: 25.449 min Scan# 3587  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

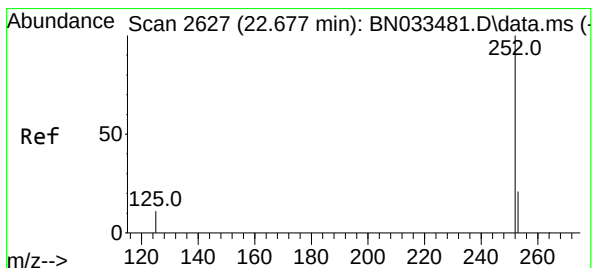
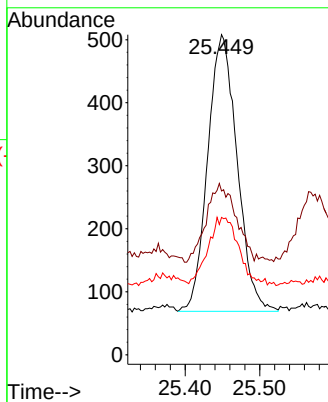
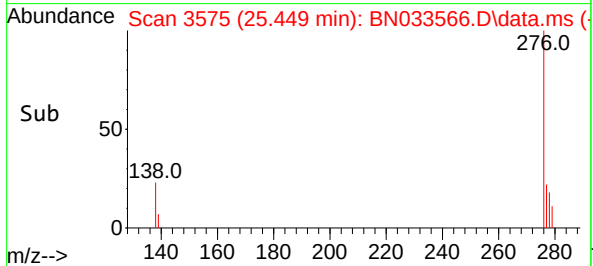
Instrument :  
BNA\_N  
ClientSampleId :  
S-912-J-SO-0.5-1-081924



Tgt Ion: 276 Resp: 1204  
Ion Ratio Lower Upper  
276 100  
138 28.7 24.4 36.6  
277 25.9 19.8 29.6

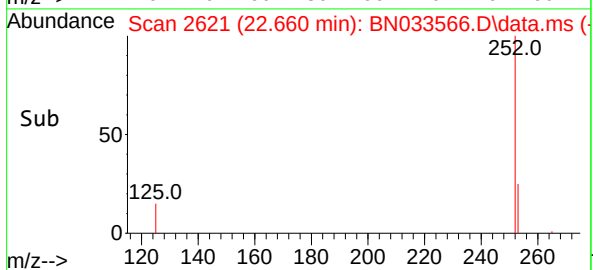
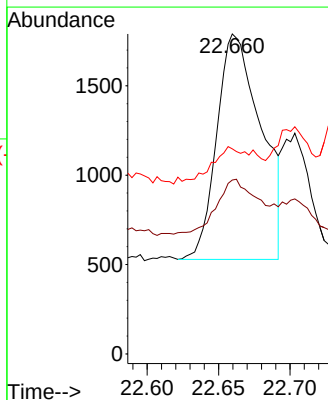
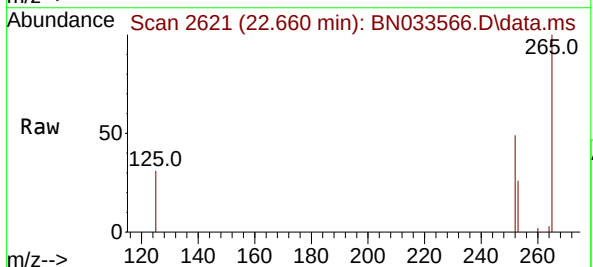
Manual Integrations  
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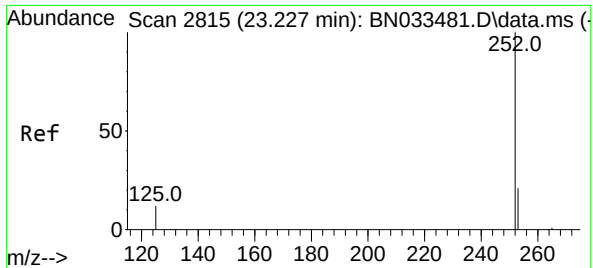
Reviewed By : Yogesh Patel 08/23/2024  
Supervised By : mohammad ahmed 08/24/2024



#37  
Benzo(b)fluoranthene  
Concen: 0.052 ng  
RT: 22.660 min Scan# 2621  
Delta R.T. -0.000 min  
Lab File: BN033566.D  
Acq: 22 Aug 2024 23:52

Tgt Ion: 252 Resp: 2721  
Ion Ratio Lower Upper  
252 100  
253 54.4 19.8 29.8#  
125 64.1 13.9 20.9#





#39

Benzo(a)pyrene

Concen: 0.036 ng

RT: 23.206 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN033566.D

Acq: 22 Aug 2024 23:52

Instrument :

BNA\_N

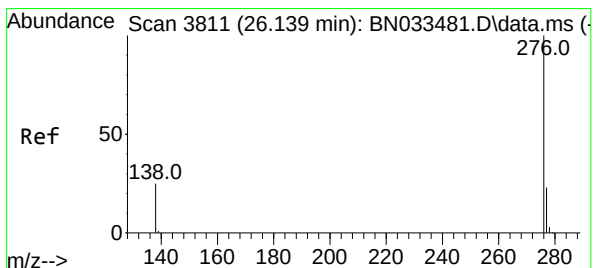
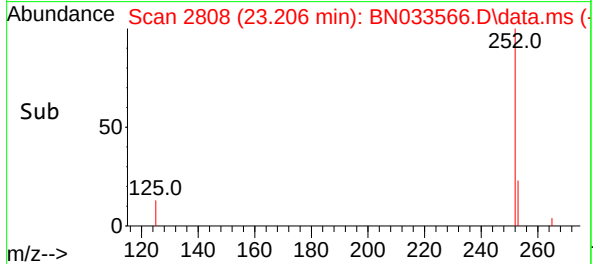
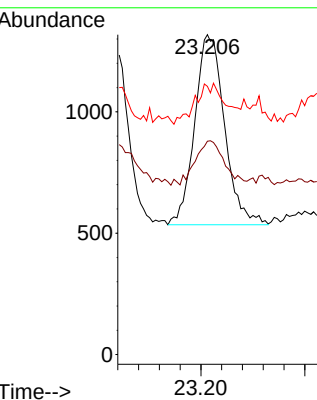
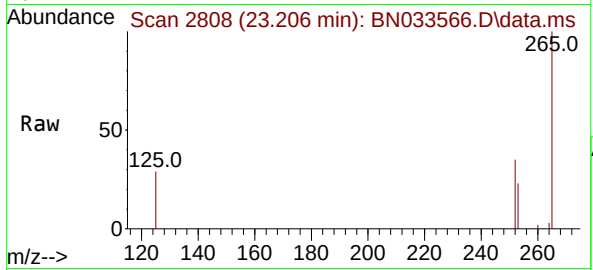
ClientSampleId :

S-912-J-SO-0.5-1-081924

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 156  |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 66.7  | 21.5  | 32.3 |
| 125       | 83.8  | 17.0  | 25.4 |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#41

Benzo(g,h,i)perylene

Concen: 0.024 ng

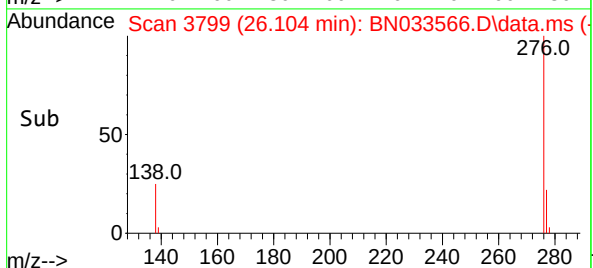
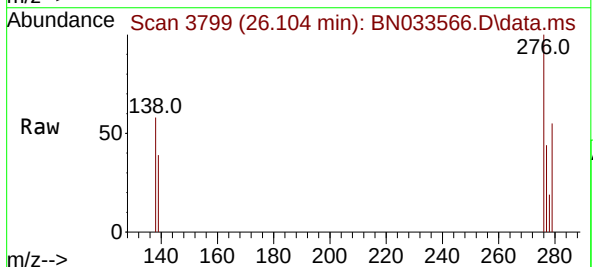
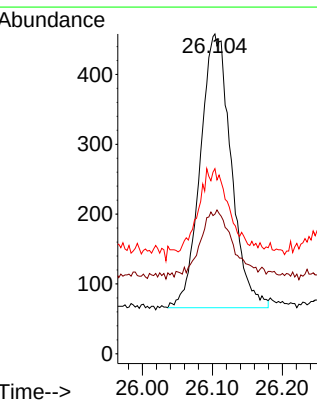
RT: 26.104 min Scan# 3799

Delta R.T. -0.000 min

Lab File: BN033566.D

Acq: 22 Aug 2024 23:52

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 276   | Resp: | 1201 |
| Ion Ratio | Lower | Upper |      |
| 276       | 100   |       |      |
| 277       | 43.7  | 19.7  | 29.5 |
| 138       | 57.9  | 21.8  | 32.6 |





# CALIBRATION SUMMARY

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- 18

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
Method File : 8270-SIM-BN081924.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Mon Aug 19 23:32:18 2024  
Response Via : Initial Calibration

## Calibration Files

0.1 =BN033479.D 0.2 =BN033480.D 0.4 =BN033481.D 0.8 =BN033482.D 1.6 =BN033483.D 3.2 =BN033484.D 5.0 =BN033485.D

|           | Compound              | 0.1            | 0.2   | 0.4   | 0.8   | 1.6   | 3.2   | 5.0   | Avg   | %RSD  |
|-----------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I      | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2)        | 1,4-Dioxane           | 0.523          | 0.513 | 0.329 | 0.524 | 0.488 | 0.452 | 0.393 | 0.460 | 16.21 |
| 3)        | n-Nitrosodimet...     | 0.545          | 0.550 | 0.456 | 0.615 | 0.575 | 0.521 | 0.485 | 0.535 | 10.02 |
| 4) S      | 2-Fluorophenol        | 1.276          | 1.281 | 1.267 | 1.350 | 1.327 | 1.196 | 1.202 | 1.271 | 4.52  |
| 5) S      | Phenol-d6             | 1.555          | 1.576 | 1.360 | 1.677 | 1.598 | 1.464 | 1.357 | 1.512 | 8.10  |
| 6)        | bis(2-Chloroet...     | 1.170          | 1.144 | 0.753 | 1.227 | 1.166 | 1.067 | 0.980 | 1.072 | 15.13 |
| 7) I      | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |
| 8) S      | Nitrobenzene-d5       | 0.341          | 0.324 | 0.303 | 0.352 | 0.345 | 0.322 | 0.334 | 0.332 | 4.96  |
| 9)        | Naphthalene           | 1.082          | 1.068 | 0.947 | 1.155 | 1.127 | 1.042 | 1.062 | 1.069 | 6.23  |
| 10)       | Hexachlorobuta...     | 0.217          | 0.213 | 0.192 | 0.230 | 0.225 | 0.207 | 0.209 | 0.213 | 5.86  |
| 11) SURR2 | Methylnaphth...       | 0.577          | 0.566 | 0.492 | 0.616 | 0.603 | 0.566 | 0.585 | 0.572 | 6.97  |
| 12)       | 2-Methylnaphth...     | 0.665          | 0.667 | 0.586 | 0.732 | 0.716 | 0.678 | 0.693 | 0.677 | 6.98  |
| 13) I     | Acenaphthene-d10      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 14) S     | 2,4,6-Tribromo...     | 0.212          | 0.202 | 0.185 | 0.220 | 0.226 | 0.223 | 0.237 | 0.215 | 8.02  |
| 15) S     | 2-Fluorobiphenyl      | 1.627          | 1.601 | 1.487 | 1.761 | 1.731 | 1.609 | 1.621 | 1.634 | 5.52  |
| 16)       | Acenaphthylene        | 1.626          | 1.609 | 1.535 | 1.870 | 1.893 | 1.837 | 1.911 | 1.754 | 9.00  |
| 17)       | Acenaphthene          | 1.185          | 1.177 | 1.104 | 1.325 | 1.322 | 1.249 | 1.277 | 1.234 | 6.67  |
| 18)       | Fluorene              | 1.558          | 1.483 | 1.381 | 1.667 | 1.647 | 1.567 | 1.584 | 1.555 | 6.30  |
| 19) I     | Phenanthrene-d10      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 20)       | 4,6-Dinitro-2-...     | 0.051          | 0.051 | 0.051 | 0.064 | 0.069 | 0.072 | 0.079 | 0.062 | 18.77 |
| 21)       | 4-Bromophenyl-...     | 0.241          | 0.231 | 0.222 | 0.255 | 0.255 | 0.246 | 0.250 | 0.243 | 5.16  |
| 22)       | Hexachlorobenzene     | 0.271          | 0.260 | 0.249 | 0.281 | 0.280 | 0.266 | 0.271 | 0.268 | 4.22  |
| 23)       | Atrazine              | 0.188          | 0.184 | 0.173 | 0.201 | 0.203 | 0.198 | 0.210 | 0.194 | 6.52  |
| 24)       | Pentachlorophenol     | 0.114          | 0.098 | 0.097 | 0.118 | 0.122 | 0.128 | 0.137 | 0.116 | 12.80 |
| 25)       | Phenanthrene          | 1.093          | 1.067 | 1.033 | 1.177 | 1.168 | 1.113 | 1.139 | 1.113 | 4.73  |
| 26)       | Anthracene            | 0.931          | 0.912 | 0.876 | 1.035 | 1.046 | 1.035 | 1.057 | 0.985 | 7.65  |
| 27) SURR  | Fluoranthene-d10      | 0.947          | 0.919 | 0.870 | 1.011 | 1.015 | 0.968 | 1.000 | 0.961 | 5.55  |
| 28)       | Fluoranthene          | 1.178          | 1.153 | 1.106 | 1.303 | 1.313 | 1.266 | 1.288 | 1.230 | 6.71  |
| 29) I     | Chrysene-d12          | -----ISTD----- |       |       |       |       |       |       |       |       |
| 30)       | Pyrene                | 1.756          | 1.763 | 1.704 | 1.901 | 1.855 | 1.751 | 1.767 | 1.785 | 3.82  |
| 31) S     | Terphenyl-d14         | 0.907          | 0.896 | 0.862 | 0.966 | 0.943 | 0.890 | 0.900 | 0.909 | 3.80  |
| 32)       | Benzo(a)anthra...     | 1.485          | 1.369 | 1.317 | 1.525 | 1.529 | 1.426 | 1.472 | 1.446 | 5.53  |
| 33)       | Chrysene              | 1.435          | 1.392 | 1.331 | 1.557 | 1.514 | 1.403 | 1.430 | 1.437 | 5.30  |
| 34)       | Bis(2-ethylhex...     | 1.206          | 0.914 | 0.814 | 0.870 | 0.869 | 0.845 | 0.889 | 0.915 | 14.43 |
| 35) I     | Perylene-d12          | -----ISTD----- |       |       |       |       |       |       |       |       |

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\

Method File : 8270-SIM-BN081924.M

|       |                   |       |       |       |       |       |       |       |       |      |
|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 36)   | Indeno(1,2,3-c... | 1.616 | 1.580 | 1.535 | 1.779 | 1.759 | 1.661 | 1.694 | 1.661 | 5.45 |
| 37)   | Benzo(b)fluora... | 1.524 | 1.432 | 1.336 | 1.578 | 1.573 | 1.480 | 1.533 | 1.494 | 5.78 |
| 38)   | Benzo(k)fluora... | 1.439 | 1.393 | 1.324 | 1.556 | 1.576 | 1.492 | 1.512 | 1.470 | 6.14 |
| 39) C | Benzo(a)pyrene    | 1.228 | 1.162 | 1.096 | 1.309 | 1.317 | 1.251 | 1.290 | 1.236 | 6.63 |
| 40)   | Dibenzo(a,h)an... | 1.283 | 1.264 | 1.231 | 1.426 | 1.410 | 1.329 | 1.352 | 1.328 | 5.56 |
| 41)   | Benzo(g,h,i)pe... | 1.399 | 1.372 | 1.296 | 1.518 | 1.506 | 1.413 | 1.436 | 1.420 | 5.42 |

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(#) = Out of Range



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033479.D  
 Acq On : 19 Aug 2024 16:16  
 Operator : MA/JU  
 Sample : SSTDICC0.1  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.1

Quant Time: Aug 19 23:22:00 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 19 23:20:26 2024  
 Response via : Initial Calibration

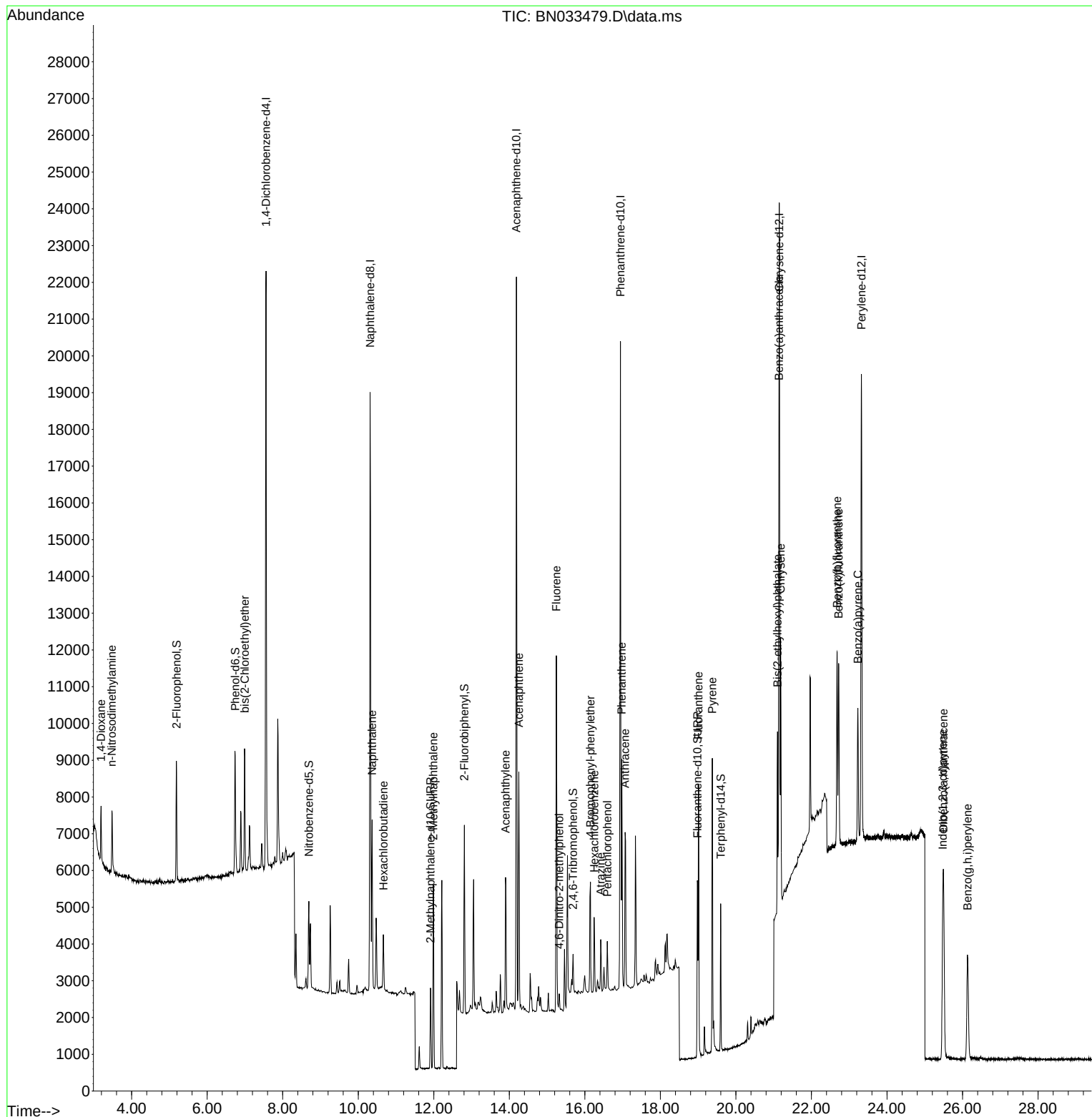
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.559  | 152  | 7803     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.314 | 136  | 20827    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.189 | 164  | 10562    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.942 | 188  | 22120    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.148 | 240  | 15512    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.323 | 264  | 15840    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.190  | 112  | 2489     | 0.113 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.743  | 99   | 3034     | 0.106 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.691  | 82   | 1778     | 0.113 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 3002     | 0.096 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 561      | 0.104 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.809 | 172  | 4295     | 0.100 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.984 | 212  | 5237     | 0.090 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.597 | 244  | 3516     | 0.118 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.190  | 88   | 1020     | 0.121 | ng    | # 89     |
| 3) n-Nitrosodimethylamine     | 3.479  | 42   | 1063     | 0.098 | ng    | # 97     |
| 6) bis(2-Chloroethyl)ether    | 6.996  | 93   | 2282     | 0.102 | ng    | 99       |
| 9) Naphthalene                | 10.368 | 128  | 5632     | 0.100 | ng    | 97       |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 1131     | 0.104 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 11.990 | 142  | 3460     | 0.091 | ng    | 97       |
| 16) Acenaphthylene            | 13.900 | 152  | 4294     | 0.088 | ng    | 100      |
| 17) Acenaphthene              | 14.253 | 154  | 3128     | 0.094 | ng    | 99       |
| 18) Fluorene                  | 15.247 | 166  | 4115     | 0.094 | ng    | 97       |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 282      | 0.102 | ng    | # 1      |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 1335     | 0.101 | ng    | 96       |
| 22) Hexachlorobenzene         | 16.247 | 284  | 1497     | 0.102 | ng    | 100      |
| 23) Atrazine                  | 16.420 | 200  | 1042     | 0.099 | ng    | 95       |
| 24) Pentachlorophenol         | 16.594 | 266  | 633      | 0.105 | ng    | 94       |
| 25) Phenanthrene              | 16.979 | 178  | 6046     | 0.096 | ng    | 99       |
| 26) Anthracene                | 17.066 | 178  | 5150     | 0.092 | ng    | 100      |
| 28) Fluoranthene              | 19.012 | 202  | 6515     | 0.085 | ng    | 97       |
| 30) Pyrene                    | 19.374 | 202  | 6809     | 0.109 | ng    | 98       |
| 32) Benzo(a)anthracene        | 21.139 | 228  | 5757     | 0.100 | ng    | 98       |
| 33) Chrysene                  | 21.184 | 228  | 5565     | 0.097 | ng    | 97       |
| 34) Bis(2-ethylhexyl)phtha... | 21.103 | 149  | 4678     | 0.170 | ng    | 97       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.478 | 276  | 6399     | 0.097 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.680 | 252  | 6036     | 0.102 | ng    | # 69     |
| 38) Benzo(k)fluoranthene      | 22.721 | 252  | 5699     | 0.095 | ng    | # 70     |
| 39) Benzo(a)pyrene            | 23.230 | 252  | 4861     | 0.097 | ng    | # 66     |
| 40) Dibenzo(a,h)anthracene    | 25.498 | 278  | 5079     | 0.098 | ng    | # 85     |
| 41) Benzo(g,h,i)perylene      | 26.133 | 276  | 5542     | 0.097 | ng    | # 88     |

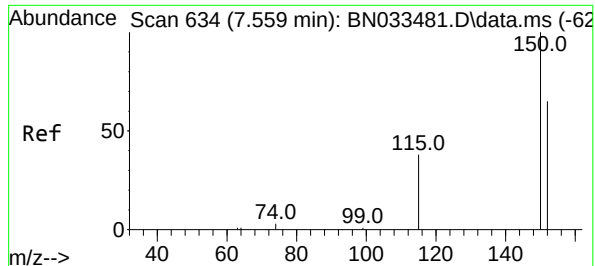
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Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033479.D  
Acq On : 19 Aug 2024 16:16  
Operator : MA/JU  
Sample : SSTDICC0.1  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

Quant Time: Aug 19 23:22:00 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:20:26 2024  
Response via : Initial Calibration

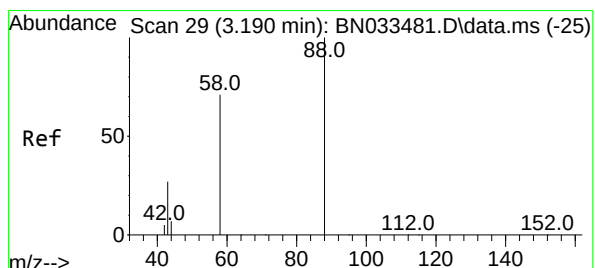
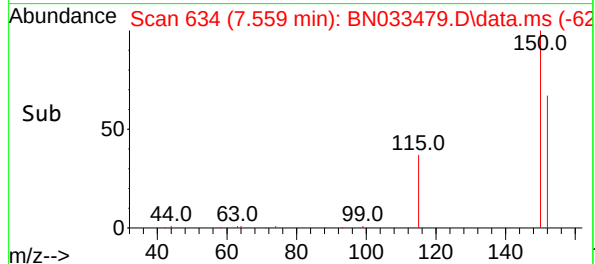
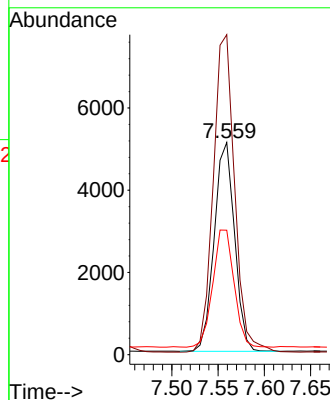
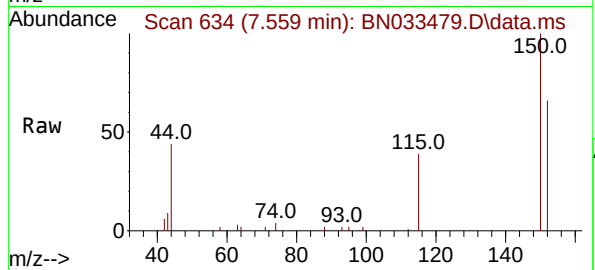




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.559 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

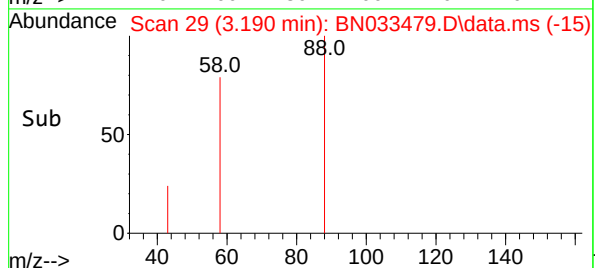
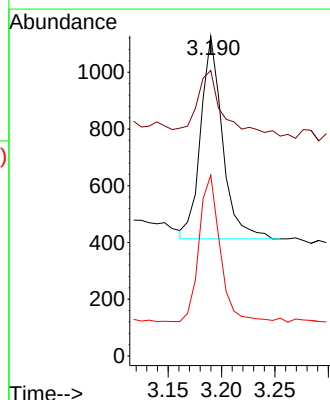
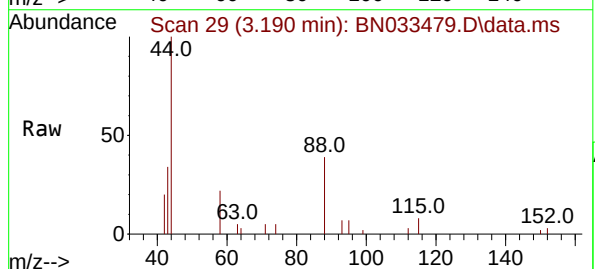
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

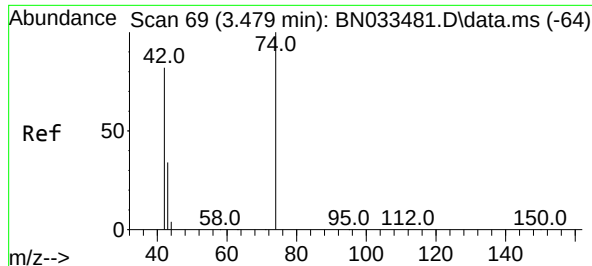
Tgt Ion:152 Resp: 7803  
Ion Ratio Lower Upper  
152 100  
150 150.8 122.2 183.2  
115 58.6 47.2 70.8



#2  
1,4-Dioxane  
Concen: 0.121 ng  
RT: 3.190 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

Tgt Ion: 88 Resp: 1020  
Ion Ratio Lower Upper  
88 100  
43 38.9 25.0 37.4#  
58 69.0 62.5 93.7

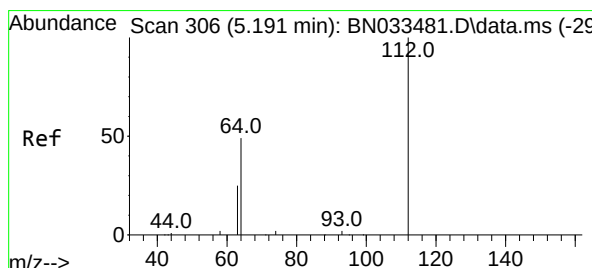
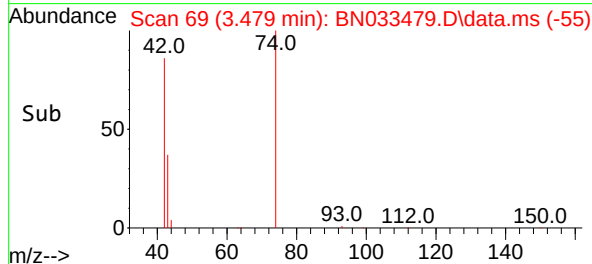
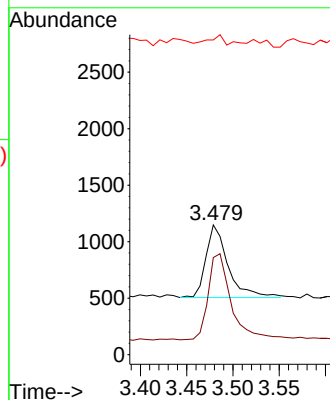
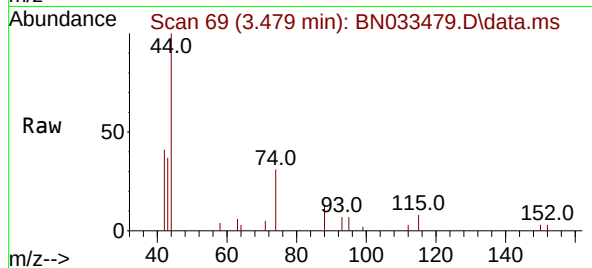




#3  
n-Nitrosodimethylamine  
Concen: 0.098 ng  
RT: 3.479 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

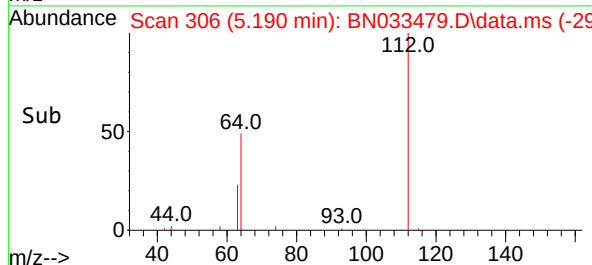
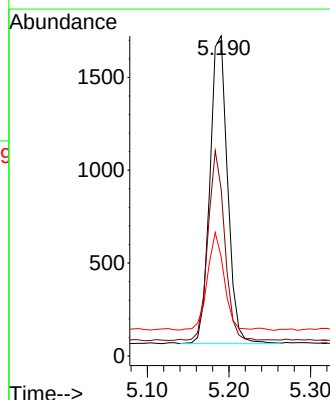
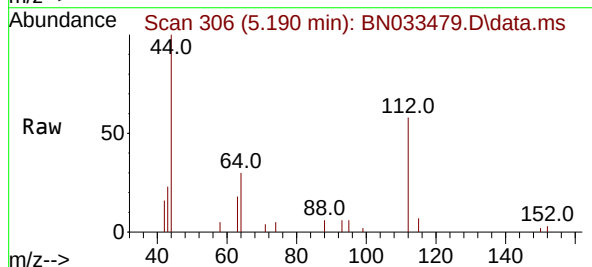
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

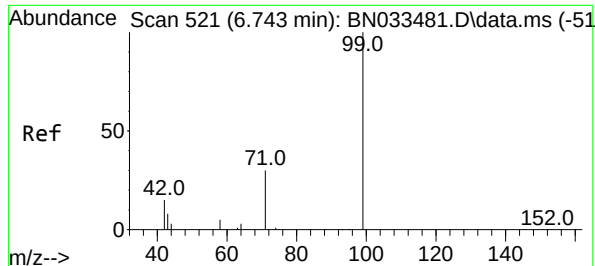
Tgt Ion: 42 Resp: 1063  
Ion Ratio Lower Upper  
42 100  
74 123.1 100.2 150.2  
44 14.2 5.3 7.9#



#4  
2-Fluorophenol  
Concen: 0.113 ng  
RT: 5.190 min Scan# 306  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

Tgt Ion: 112 Resp: 2489  
Ion Ratio Lower Upper  
112 100  
64 58.5 47.1 70.7  
63 29.9 24.9 37.3

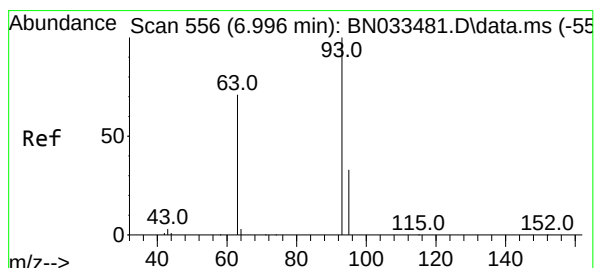
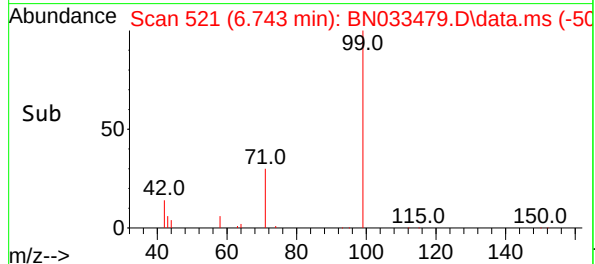
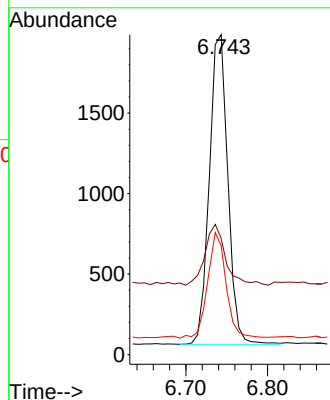
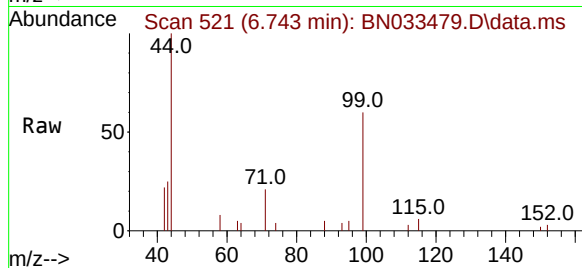




#5  
Phenol-d6  
Concen: 0.106 ng  
RT: 6.743 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

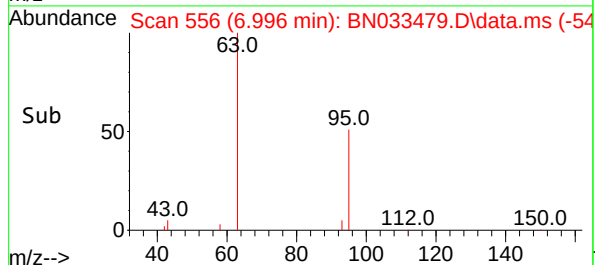
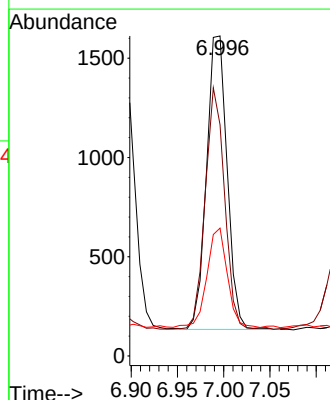
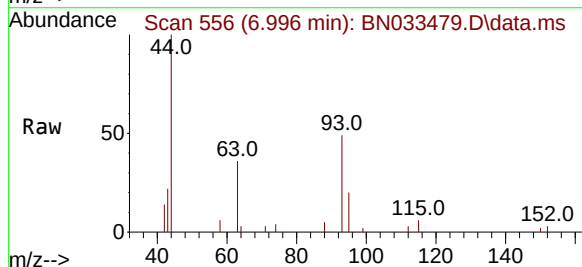
Instrument :  
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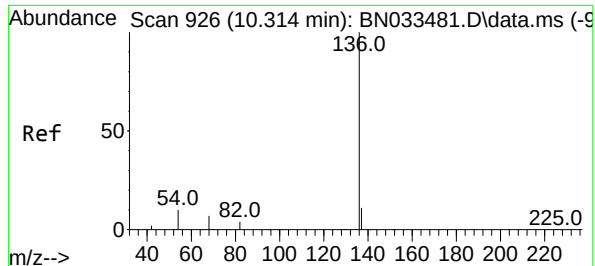
Tgt Ion: 99 Resp: 3034  
Ion Ratio Lower Upper  
99 100  
42 21.8 16.6 24.8  
71 34.0 26.2 39.4



#6  
bis(2-Chloroethyl)ether  
Concen: 0.102 ng  
RT: 6.996 min Scan# 556  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

Tgt Ion: 93 Resp: 2282  
Ion Ratio Lower Upper  
93 100  
63 78.0 63.0 94.4  
95 33.4 26.0 39.0

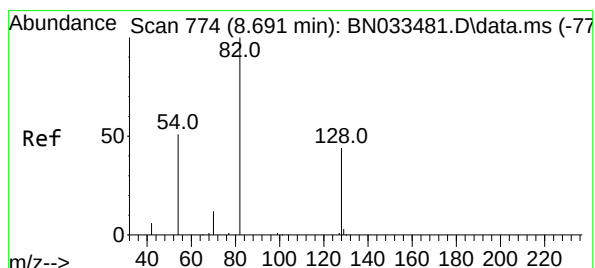
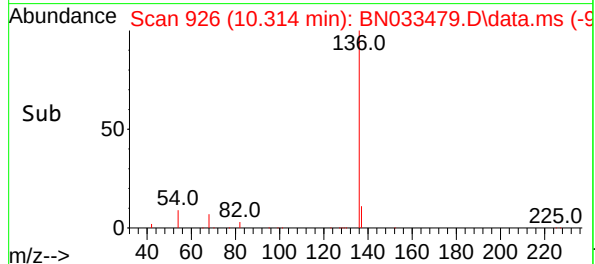
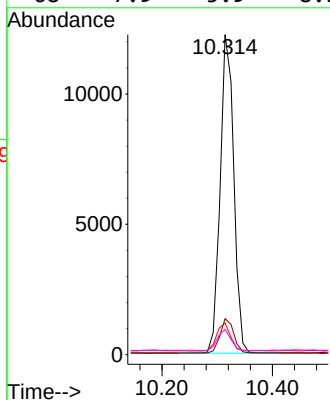
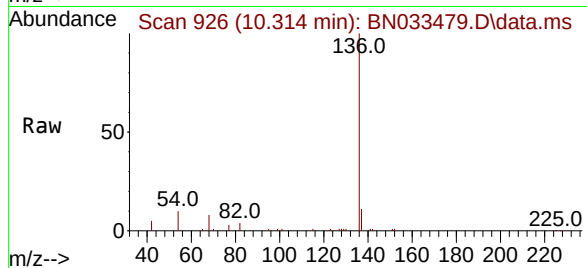




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

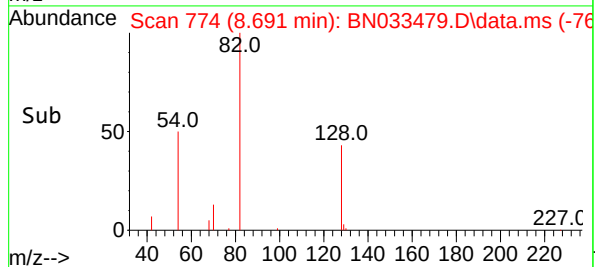
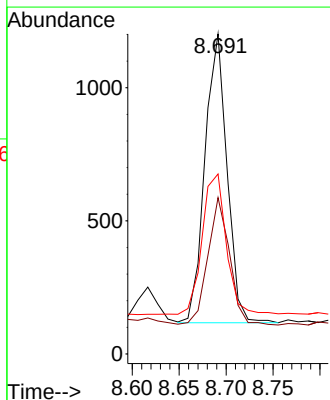
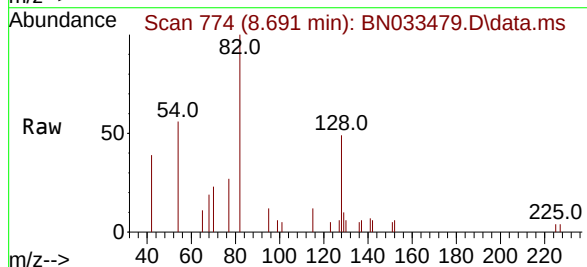
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

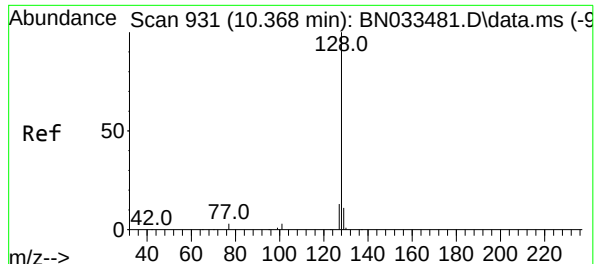
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 20827 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.3  | 9.0   | 13.6  |
| 54       | 10.0  | 8.3   | 12.5  |
| 68       | 7.9   | 5.9   | 8.9   |



#8  
Nitrobenzene-d5  
Concen: 0.113 ng  
RT: 8.691 min Scan# 774  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1778  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 48.8  | 36.0  | 54.0  |
| 54       | 56.2  | 42.0  | 63.0  |

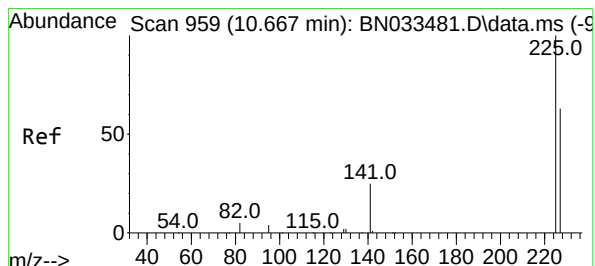
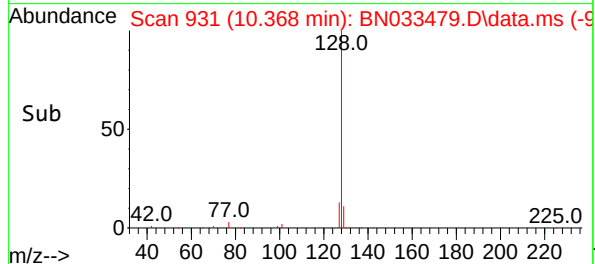
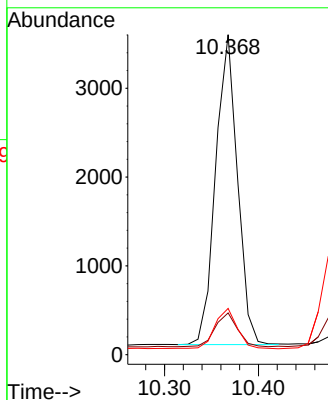
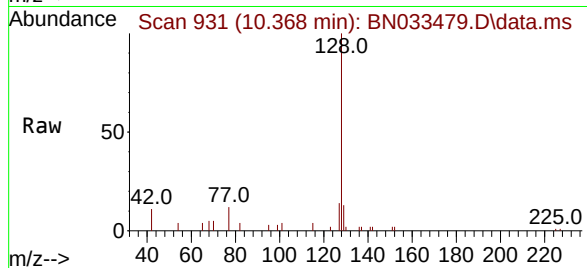




#9  
Naphthalene  
Concen: 0.100 ng  
RT: 10.368 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

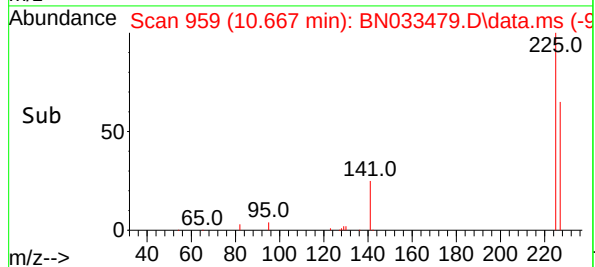
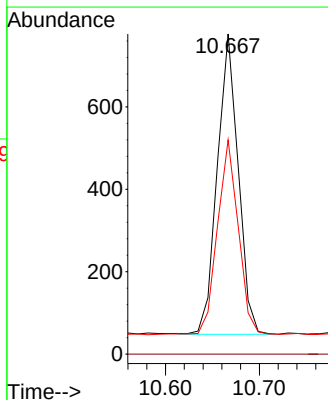
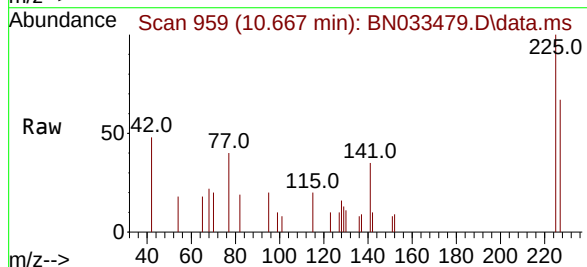
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

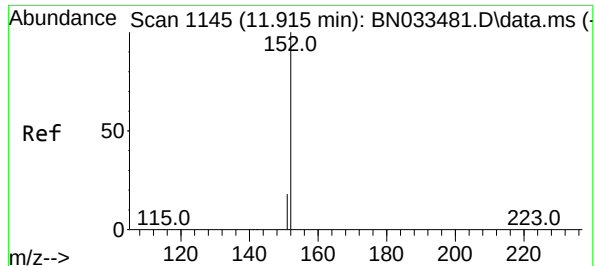
| Tgt Ion | 128  | 129  | 127  |
|---------|------|------|------|
| Resp:   | 5632 |      |      |
| Ratio   | 100  | 13.1 | 14.5 |
| Lower   |      | 9.1  | 10.7 |
| Upper   |      | 13.7 | 16.1 |



#10  
Hexachlorobutadiene  
Concen: 0.104 ng  
RT: 10.667 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

| Tgt Ion | 225  | 223 | 227  |
|---------|------|-----|------|
| Resp:   | 1131 |     |      |
| Ratio   | 100  | 0.0 | 64.1 |
| Lower   |      | 0.0 | 51.2 |
| Upper   |      | 0.0 | 76.8 |

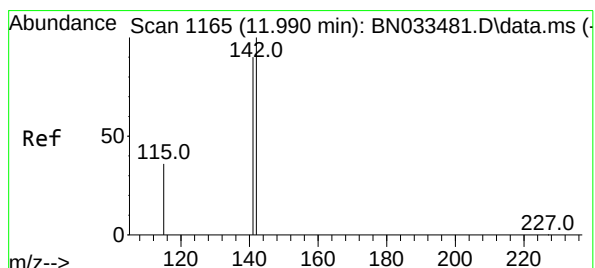
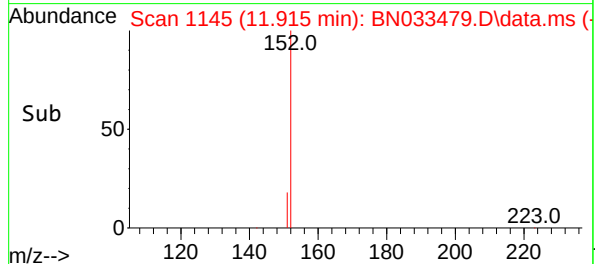
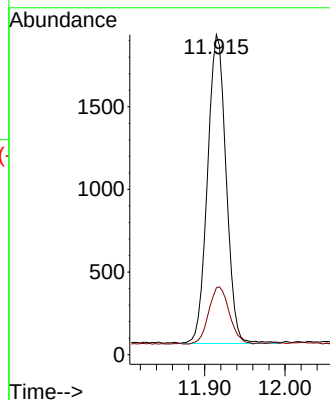
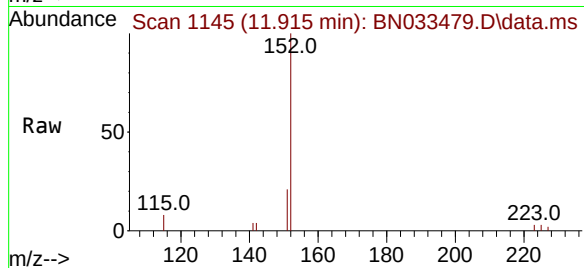




#11  
2-Methylnaphthalene-d10  
Concen: 0.096 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

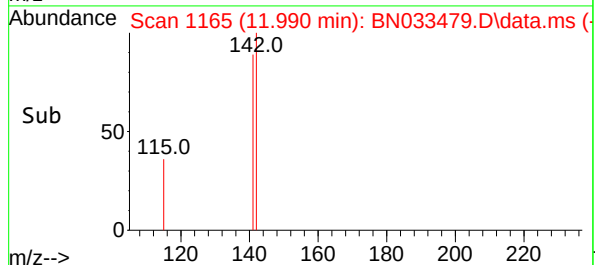
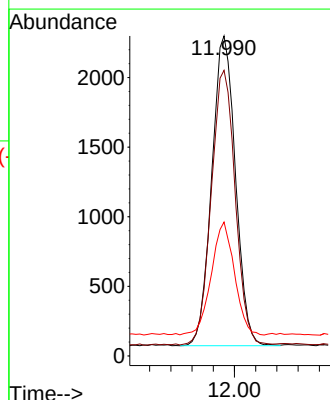
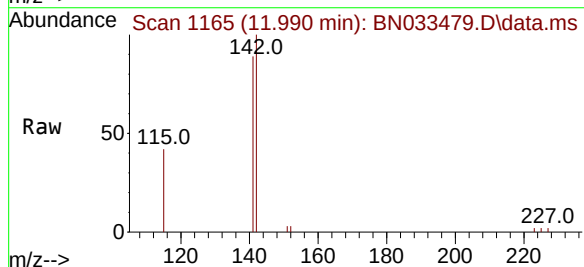
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

Tgt Ion:152 Resp: 3002  
Ion Ratio Lower Upper  
152 100  
151 20.6 16.6 25.0

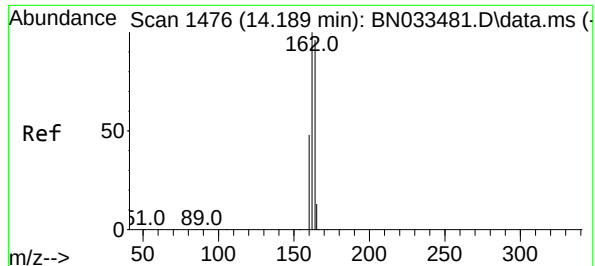


#12  
2-Methylnaphthalene  
Concen: 0.091 ng  
RT: 11.990 min Scan# 1165  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

Tgt Ion:142 Resp: 3460  
Ion Ratio Lower Upper  
142 100  
141 89.3 71.7 107.5  
115 41.8 29.4 44.2



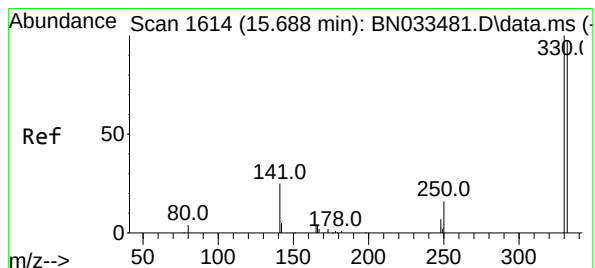
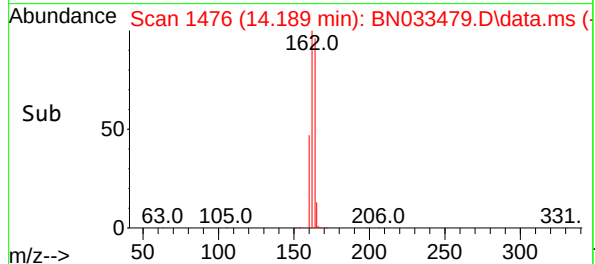
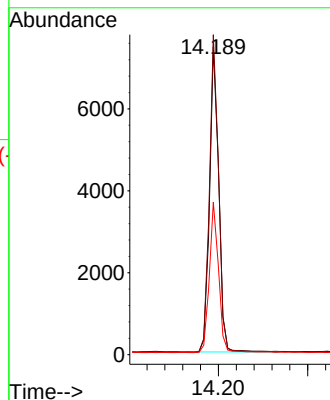
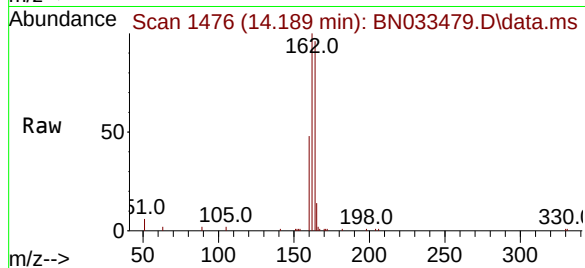




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.189 min Scan# 1476  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

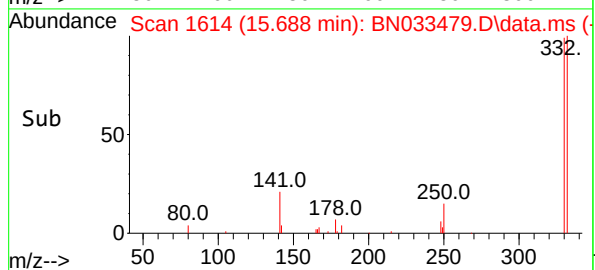
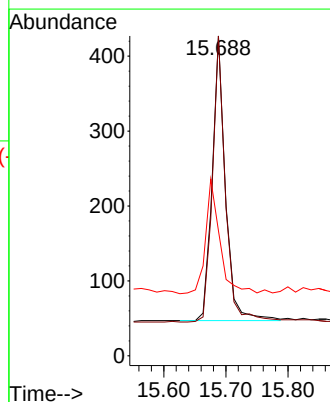
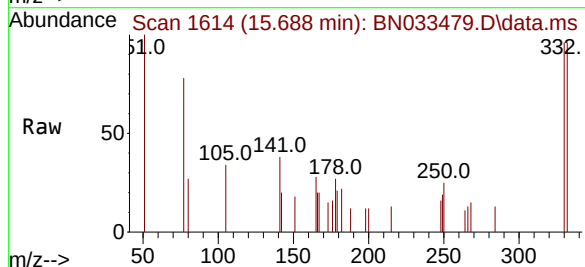
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

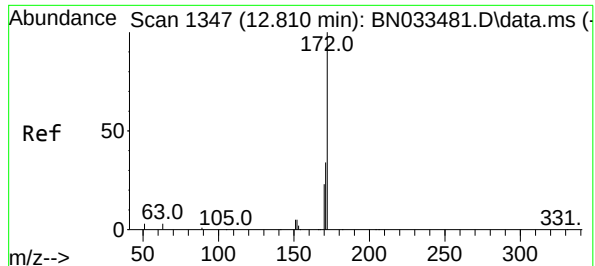
Tgt Ion:164 Resp: 10562  
Ion Ratio Lower Upper  
164 100  
162 103.9 83.5 125.3  
160 49.6 40.2 60.4



#14  
2,4,6-Tribromophenol  
Concen: 0.104 ng  
RT: 15.688 min Scan# 1614  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

Tgt Ion:330 Resp: 561  
Ion Ratio Lower Upper  
330 100  
332 99.1 77.5 116.3  
141 43.9 33.9 50.9





#15

2-Fluorobiphenyl

Concen: 0.100 ng

RT: 12.809 min Scan# 1448

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

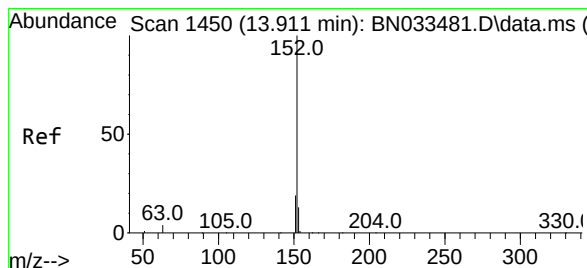
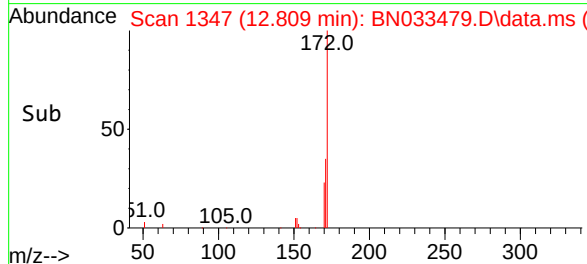
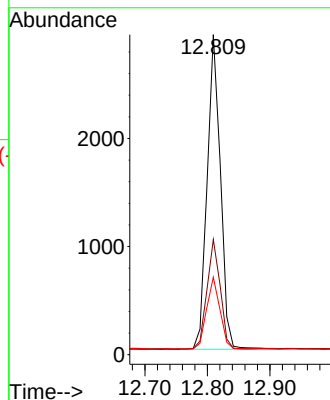
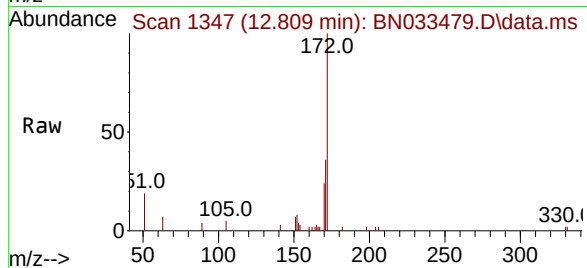
Tgt Ion:172 Resp: 4295

Ion Ratio Lower Upper

172 100

171 36.0 27.7 41.5

170 24.2 18.3 27.5



#16

Acenaphthylene

Concen: 0.088 ng

RT: 13.900 min Scan# 1449

Delta R.T. -0.011 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

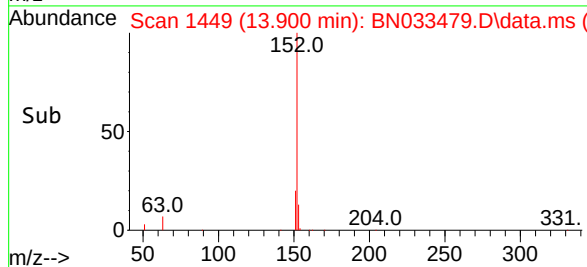
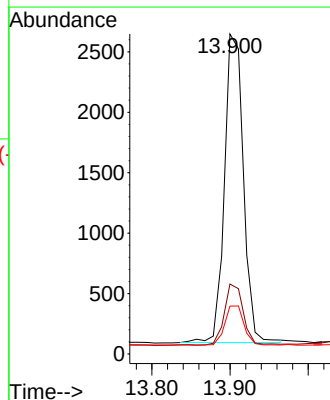
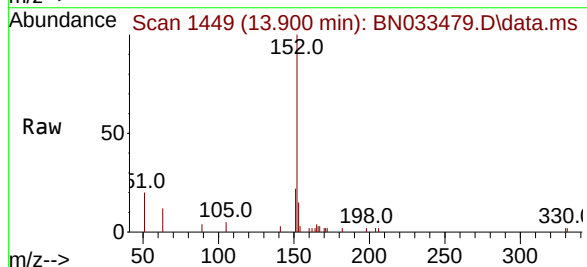
Tgt Ion:152 Resp: 4294

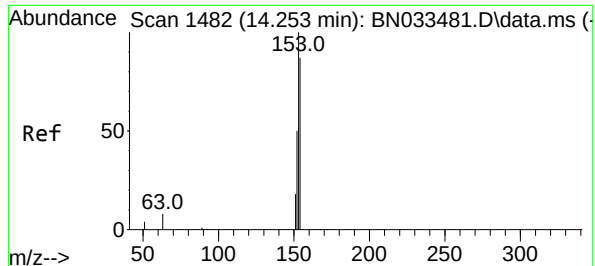
Ion Ratio Lower Upper

152 100

151 19.9 15.7 23.5

153 12.8 10.3 15.5





#17

Acenaphthene

Concen: 0.094 ng

RT: 14.253 min Scan# 1482

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

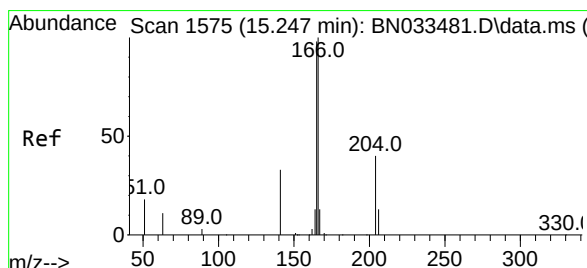
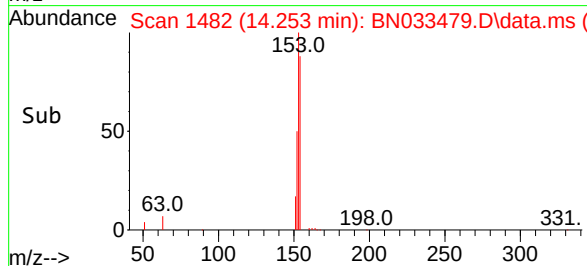
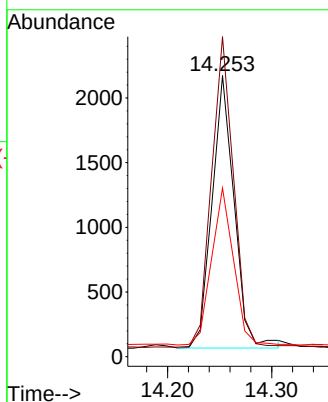
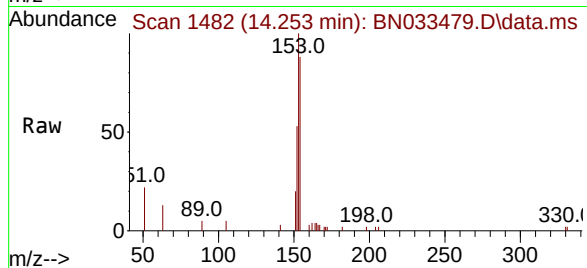
Tgt Ion:154 Resp: 3128

Ion Ratio Lower Upper

154 100

153 113.0 89.0 133.6

152 56.8 45.2 67.8



#18

Fluorene

Concen: 0.094 ng

RT: 15.247 min Scan# 1575

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

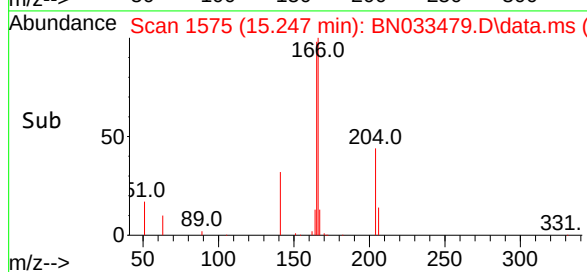
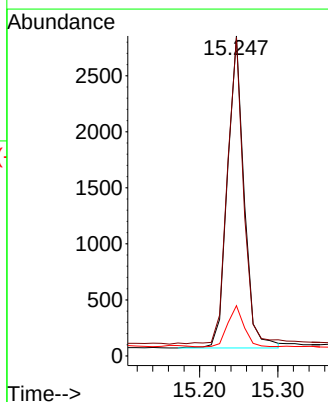
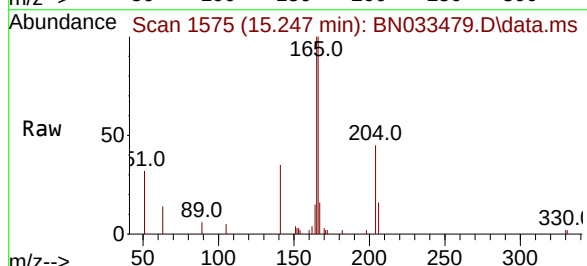
Tgt Ion:166 Resp: 4115

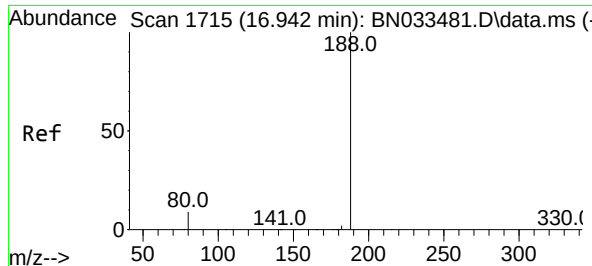
Ion Ratio Lower Upper

166 100

165 94.1 78.2 117.4

167 12.9 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.942 min Scan# 1715

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1

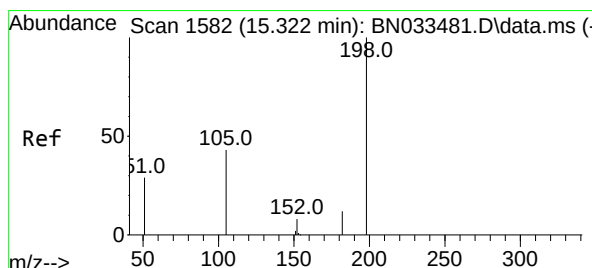
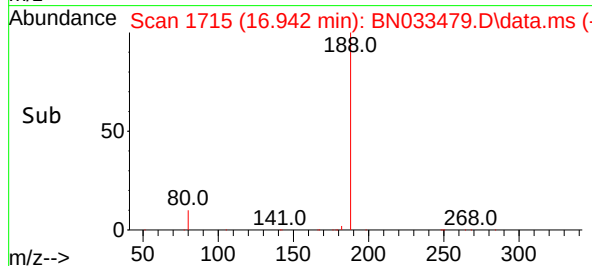
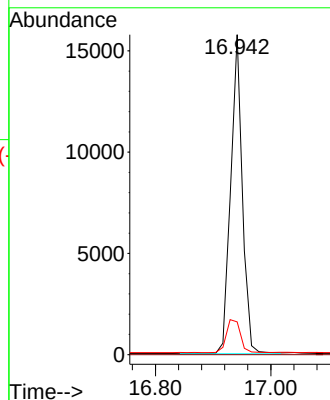
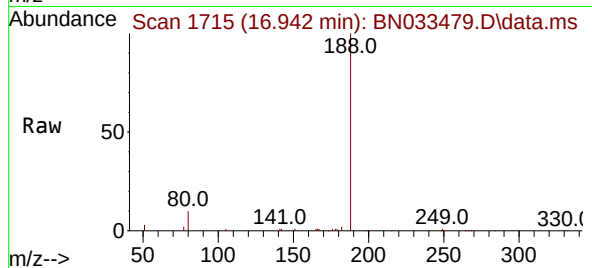
Tgt Ion:188 Resp: 22120

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.2 7.8 11.8



#20

4,6-Dinitro-2-methylphenol

Concen: 0.102 ng

RT: 15.322 min Scan# 1582

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

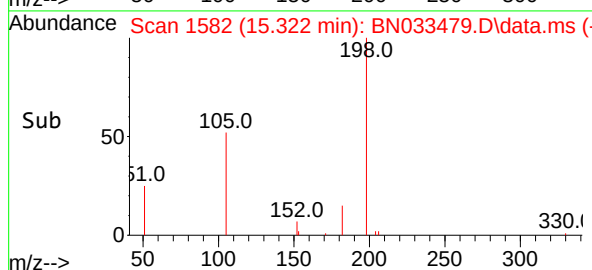
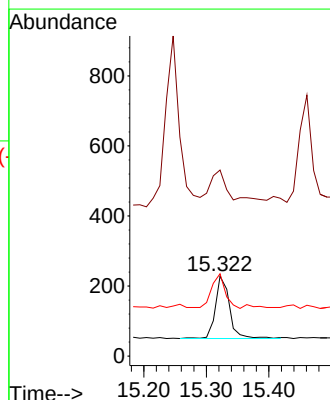
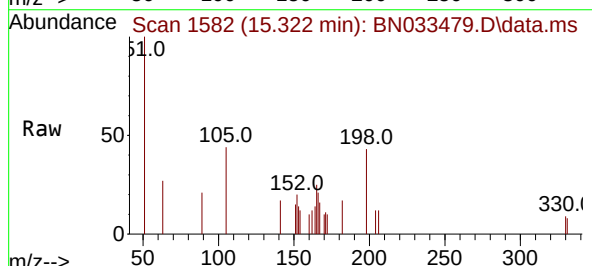
Tgt Ion:198 Resp: 282

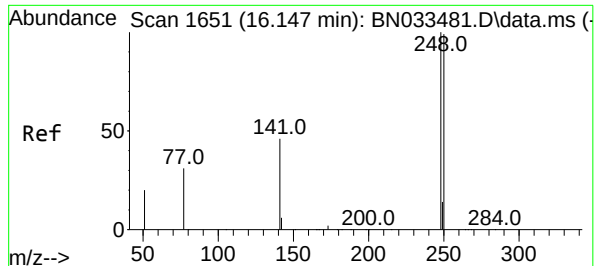
Ion Ratio Lower Upper

198 100

51 232.9 65.1 97.7#

105 103.1 44.8 67.2#

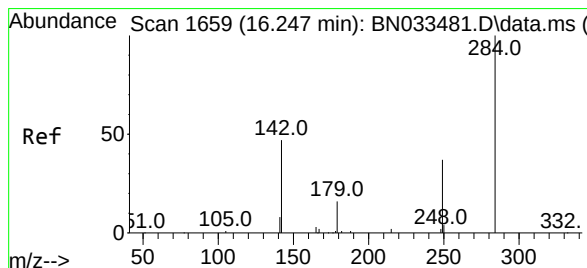
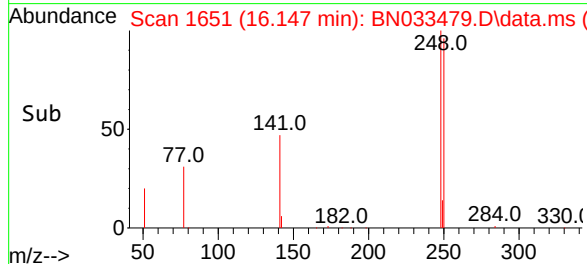
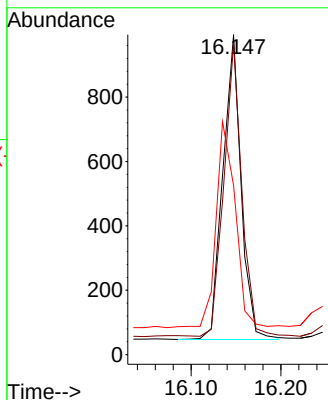
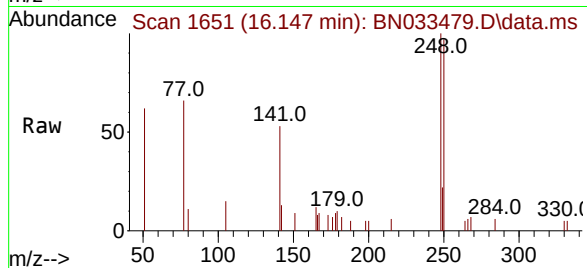




#21  
4-Bromophenyl-phenylether  
Concen: 0.101 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

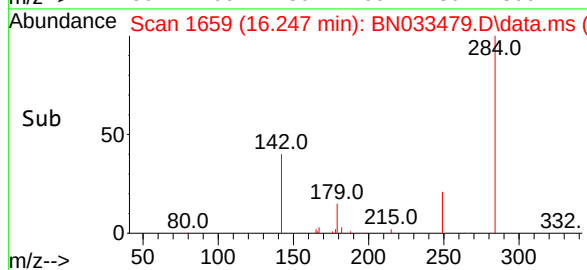
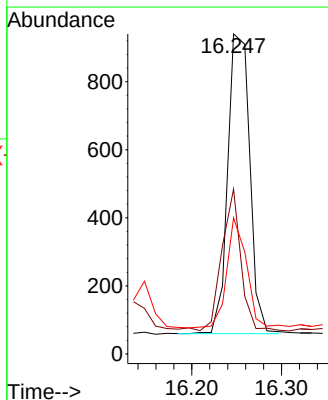
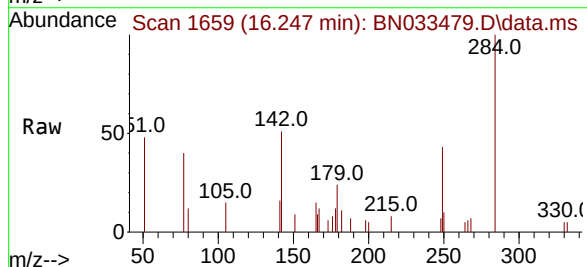
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

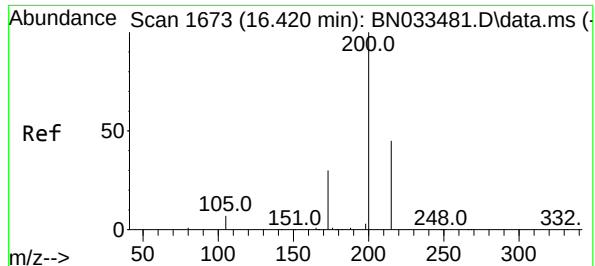
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 97.4  | 79.2  | 118.8 |
| 141     | 52.9  | 37.9  | 56.9  |



#22  
Hexachlorobenzene  
Concen: 0.102 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 40.0  | 31.8  | 47.6  |
| 249     | 32.6  | 26.0  | 39.0  |

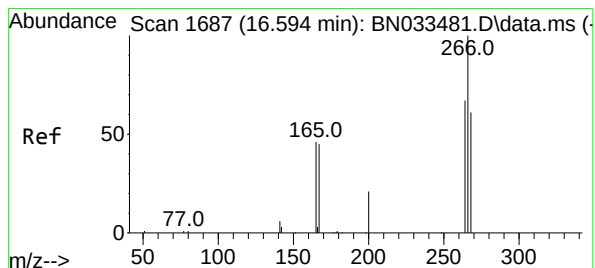
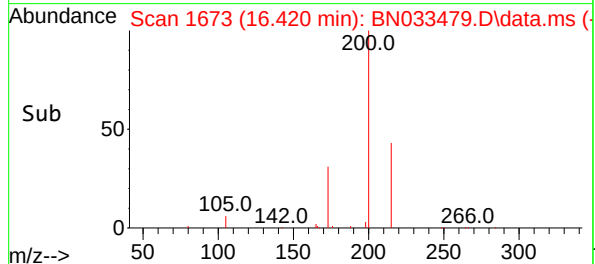
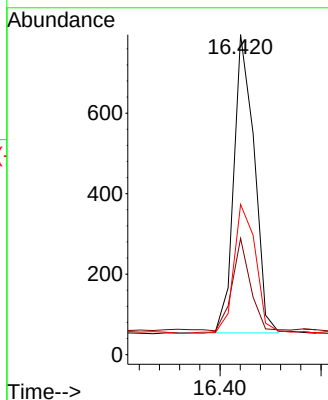
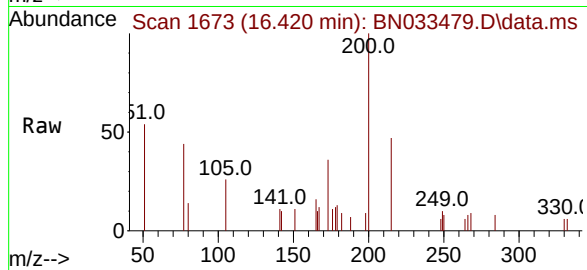




#23  
Atrazine  
Concen: 0.099 ng  
RT: 16.420 min Scan# 1673  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

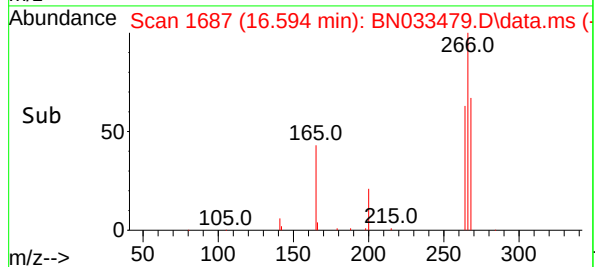
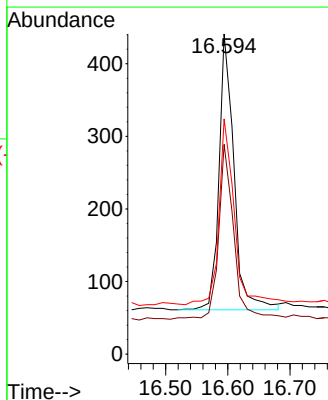
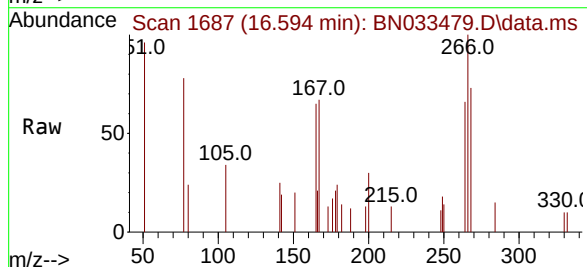
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

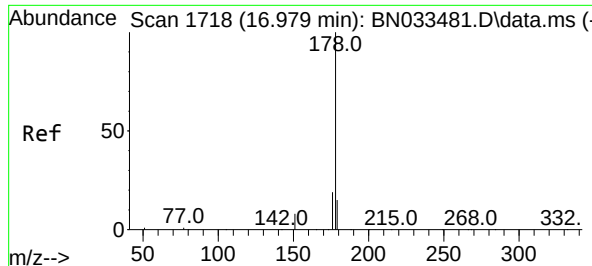
Tgt Ion:200 Resp: 1042  
Ion Ratio Lower Upper  
200 100  
173 36.4 25.3 37.9  
215 46.9 36.6 54.8



#24  
Pentachlorophenol  
Concen: 0.105 ng  
RT: 16.594 min Scan# 1687  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

Tgt Ion:266 Resp: 633  
Ion Ratio Lower Upper  
266 100  
264 61.3 51.9 77.9  
268 69.5 51.0 76.4

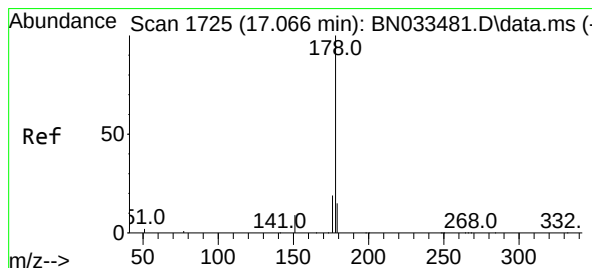
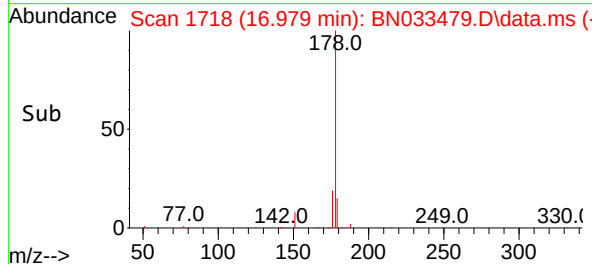
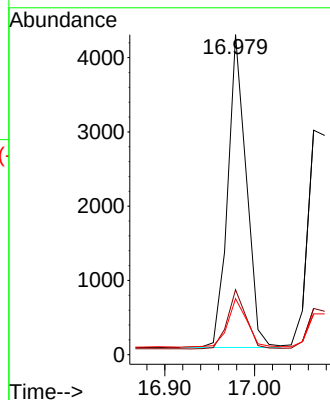
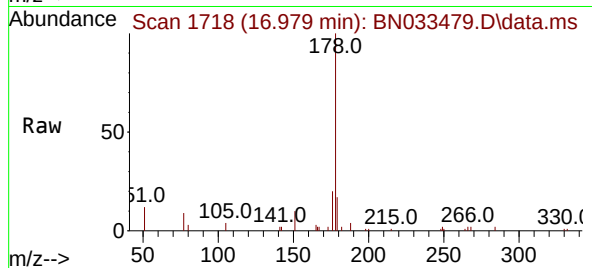




#25  
Phenanthrene  
Concen: 0.096 ng  
RT: 16.979 min Scan# 1718  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

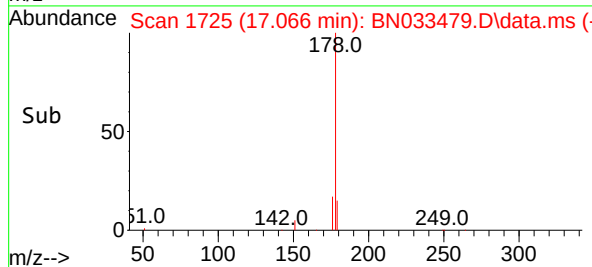
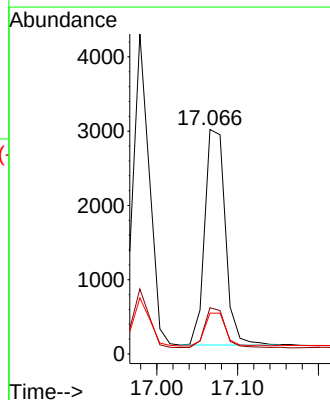
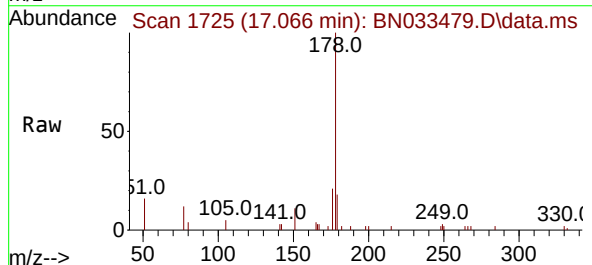
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

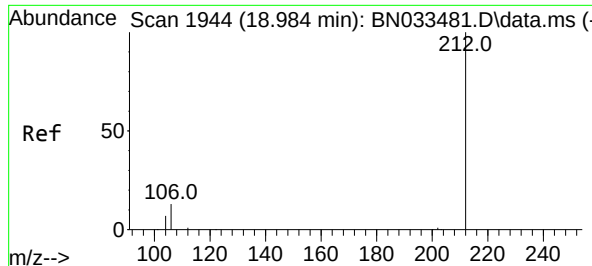
Tgt Ion:178 Resp: 6046  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.3 22.9  
179 16.1 12.3 18.5



#26  
Anthracene  
Concen: 0.092 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

Tgt Ion:178 Resp: 5150  
Ion Ratio Lower Upper  
178 100  
176 18.9 15.0 22.6  
179 15.4 12.4 18.6





#27

Fluoranthene-d10

Concen: 0.090 ng

RT: 18.984 min Scan# 1944

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

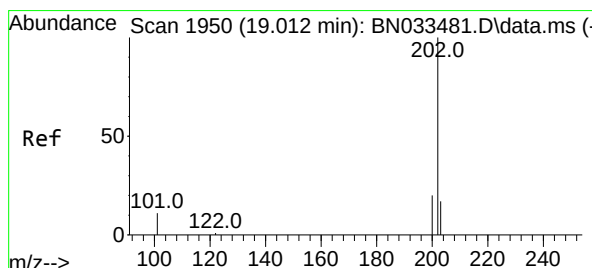
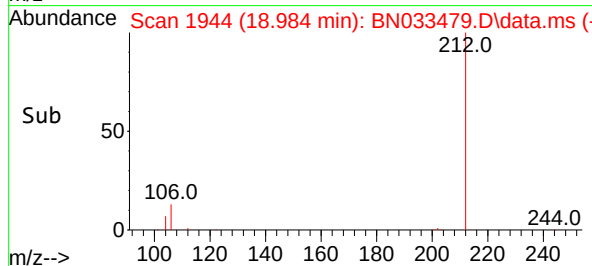
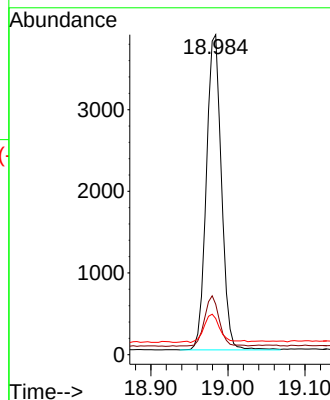
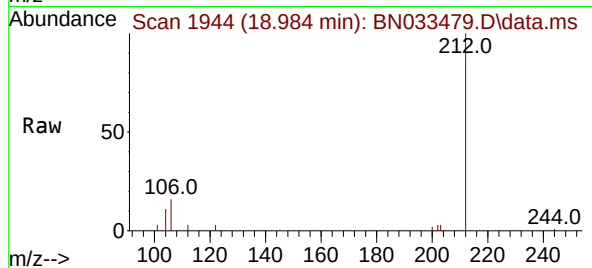
Tgt Ion:212 Resp: 5237

Ion Ratio Lower Upper

212 100

106 15.6 12.3 18.5

104 9.8 7.0 10.4



#28

Fluoranthene

Concen: 0.085 ng

RT: 19.012 min Scan# 1950

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

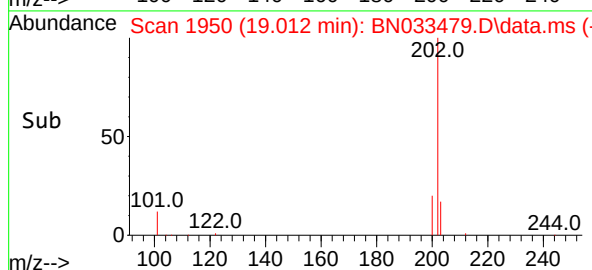
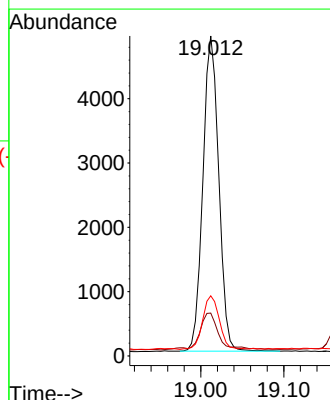
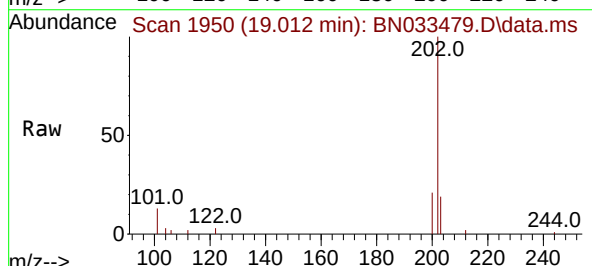
Tgt Ion:202 Resp: 6515

Ion Ratio Lower Upper

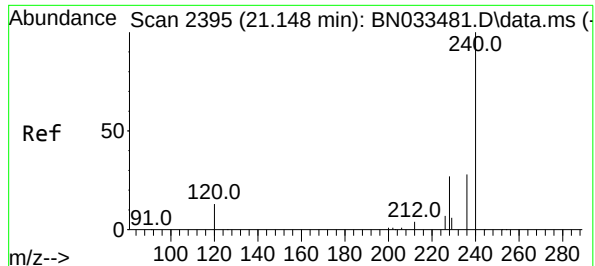
202 100

101 14.2 9.5 14.3

203 17.8 13.8 20.6







#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

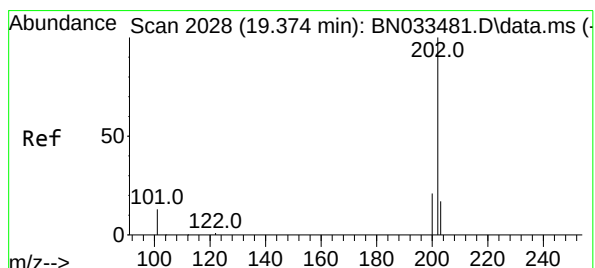
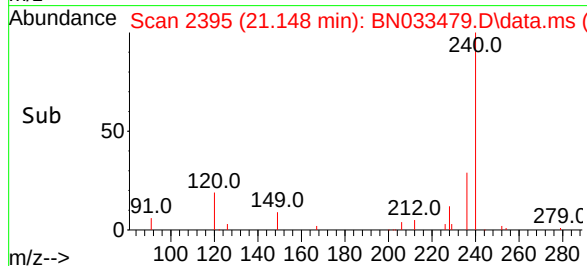
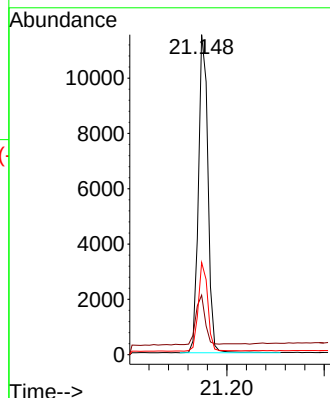
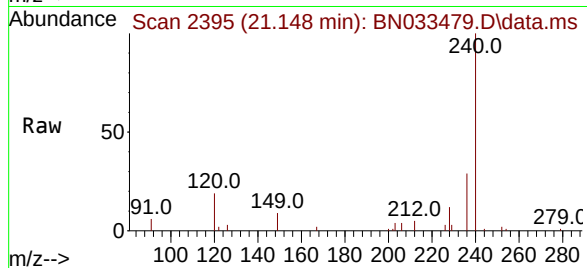
Tgt Ion:240 Resp: 15512

Ion Ratio Lower Upper

240 100

120 18.6 12.4 18.6

236 28.8 23.0 34.6



#30

Pyrene

Concen: 0.109 ng

RT: 19.374 min Scan# 2028

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

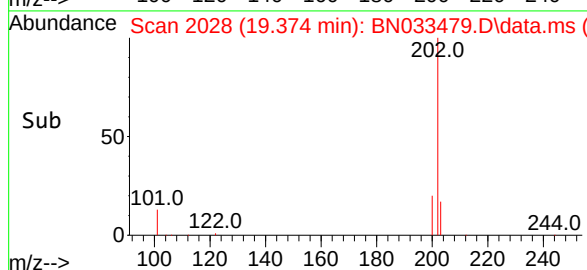
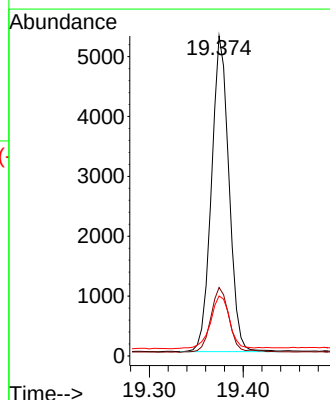
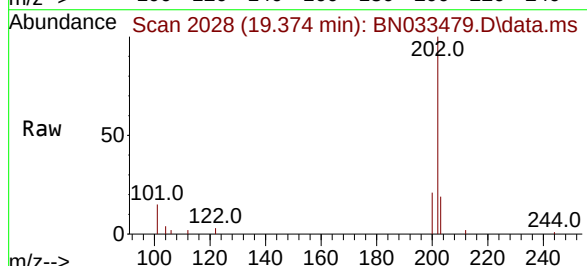
Tgt Ion:202 Resp: 6809

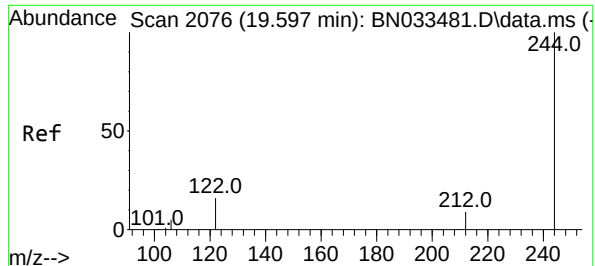
Ion Ratio Lower Upper

202 100

200 21.6 16.6 24.8

203 18.4 14.2 21.4

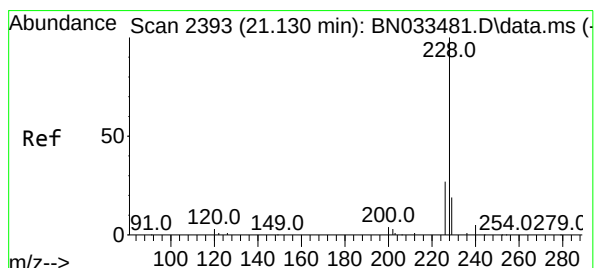
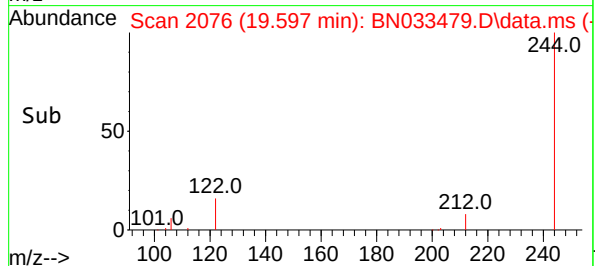
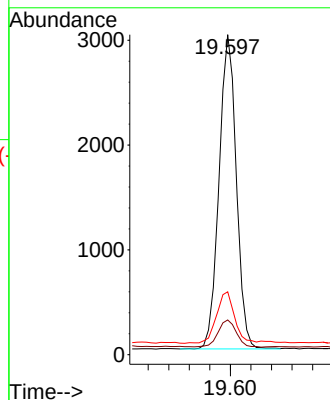
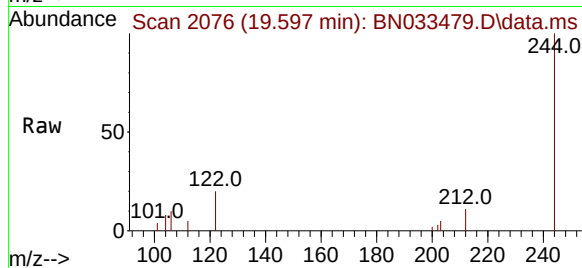




#31  
Terphenyl-d14  
Concen: 0.118 ng  
RT: 19.597 min Scan# 2076  
Delta R.T. -0.000 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

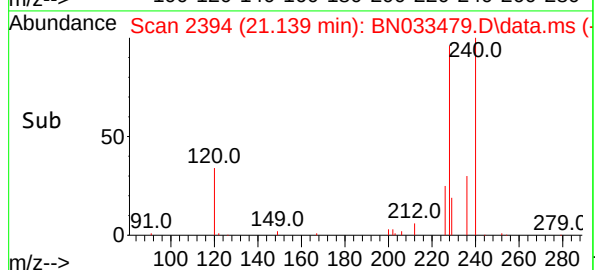
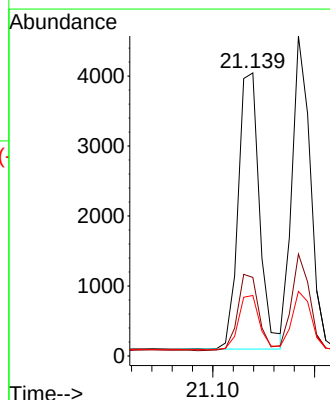
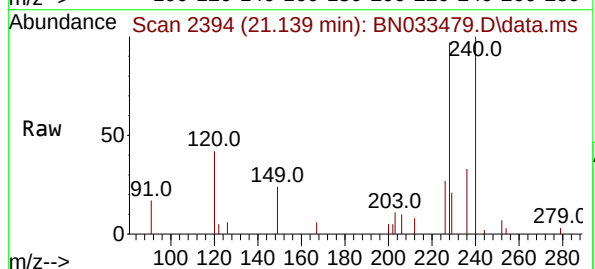
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

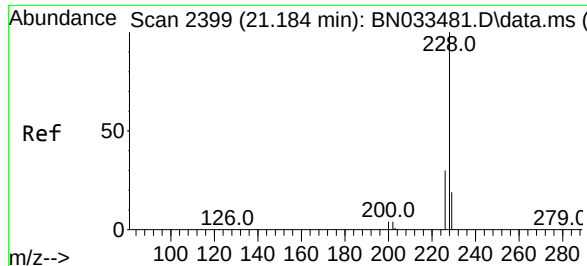
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 10.8  | 7.8   | 11.6  |
| 122     | 19.7  | 13.3  | 19.9  |



#32  
Benzo(a)anthracene  
Concen: 0.100 ng  
RT: 21.139 min Scan# 2394  
Delta R.T. 0.009 min  
Lab File: BN033479.D  
Acq: 19 Aug 2024 16:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.8  | 21.8  | 32.6  |
| 229     | 21.4  | 15.8  | 23.6  |





#33

Chrysene

Concen: 0.097 ng

RT: 21.184 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1

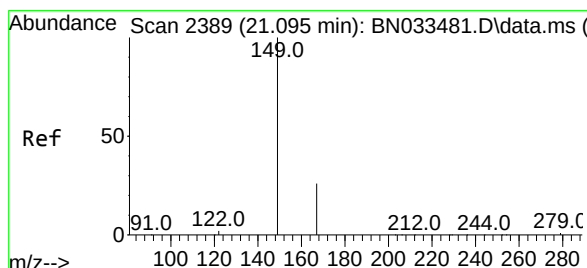
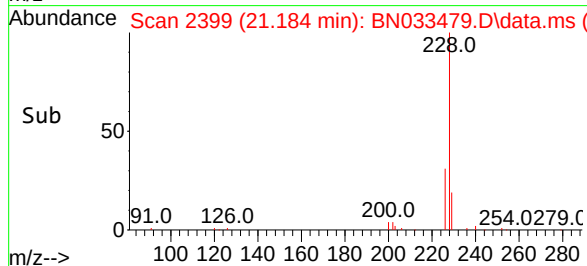
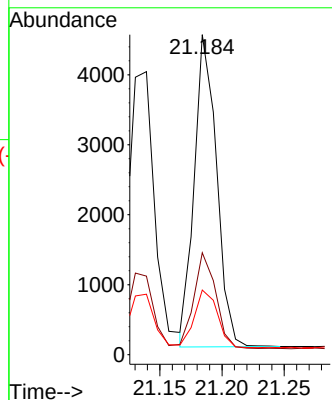
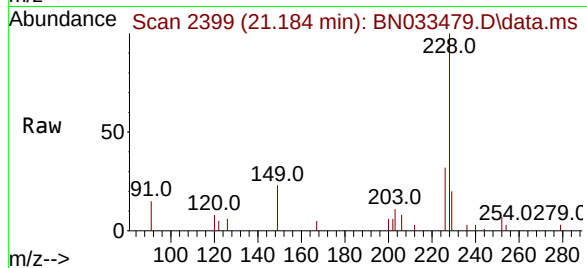
Tgt Ion:228 Resp: 5565

Ion Ratio Lower Upper

228 100

226 31.9 23.8 35.8

229 20.2 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.170 ng

RT: 21.103 min Scan# 2390

Delta R.T. 0.009 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

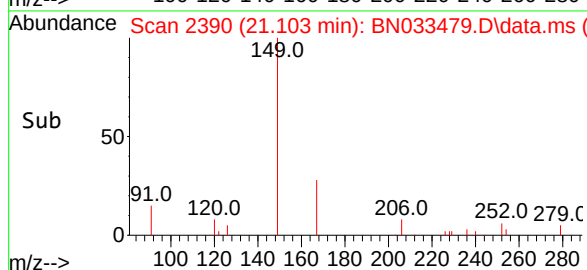
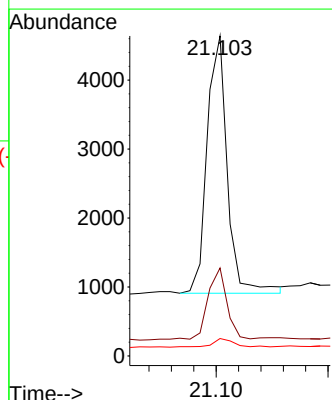
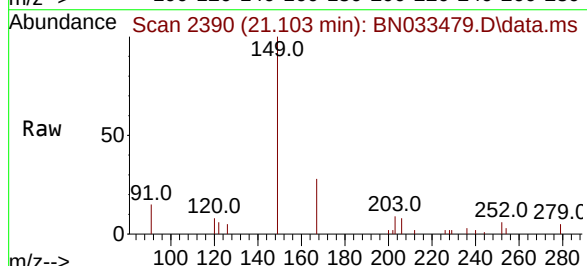
Tgt Ion:149 Resp: 4678

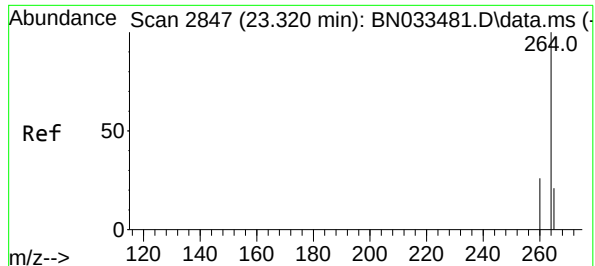
Ion Ratio Lower Upper

149 100

167 25.4 21.5 32.3

279 3.1 2.2 3.2





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.323 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN033479.D

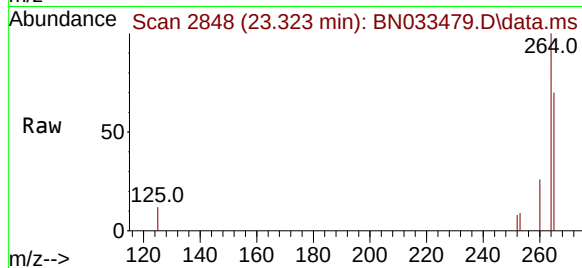
Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1



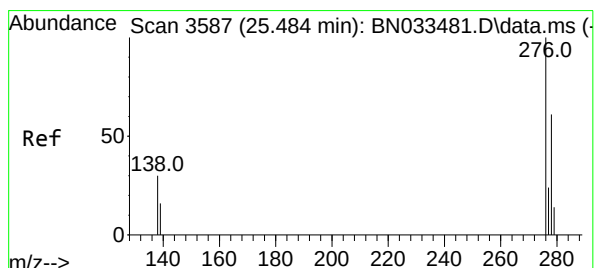
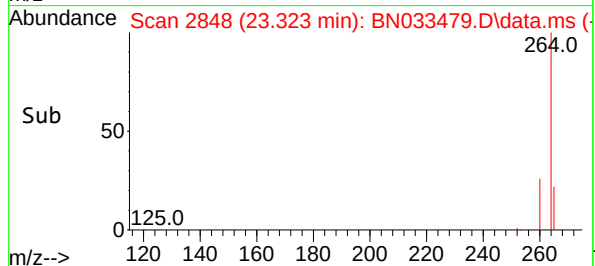
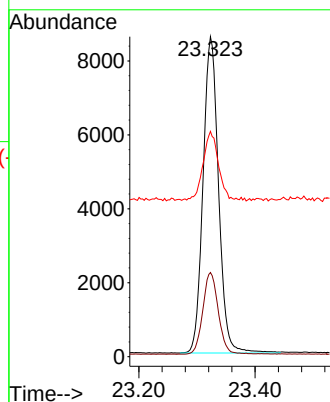
Tgt Ion:264 Resp: 15840

Ion Ratio Lower Upper

264 100

260 26.3 20.8 31.2

265 70.4 52.2 78.2



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.097 ng

RT: 25.478 min Scan# 3585

Delta R.T. -0.006 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

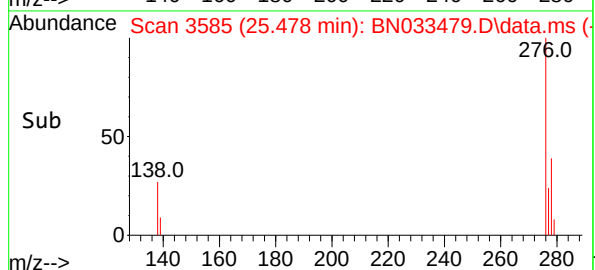
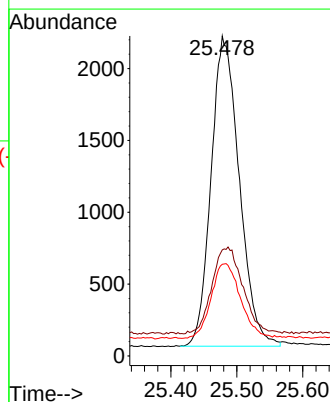
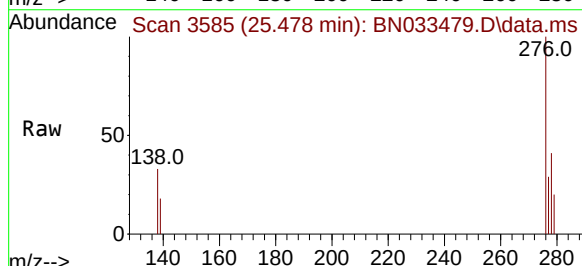
Tgt Ion:276 Resp: 6399

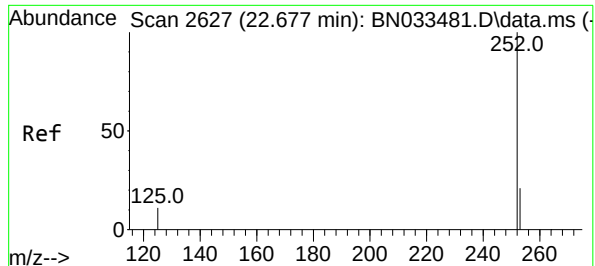
Ion Ratio Lower Upper

276 100

138 30.6 24.4 36.6

277 25.2 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.102 ng

RT: 22.680 min Scan# 2628

Delta R.T. 0.003 min

Lab File: BN033479.D

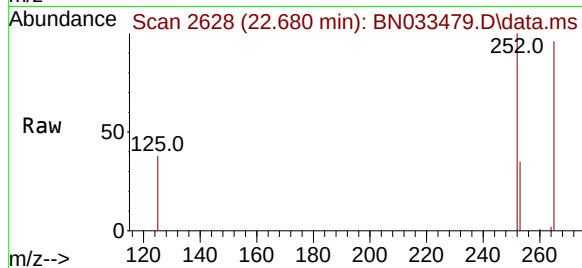
Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1



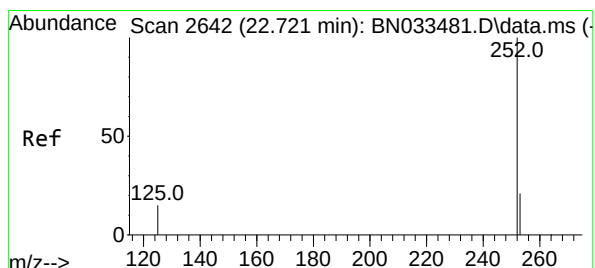
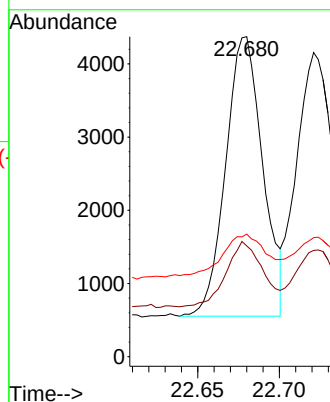
Tgt Ion:252 Resp: 6036

Ion Ratio Lower Upper

252 100

253 34.6 19.8 29.8#

125 38.3 13.9 20.9#



#38

Benzo(k)fluoranthene

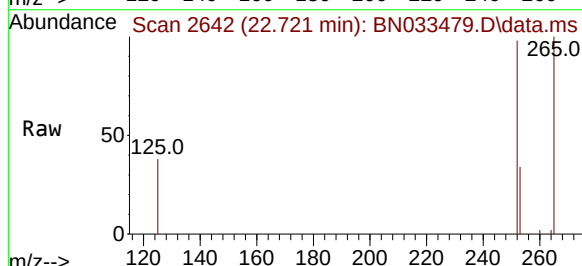
Concen: 0.095 ng

RT: 22.721 min Scan# 2642

Delta R.T. -0.000 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16



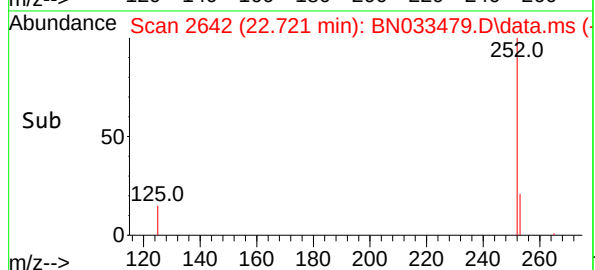
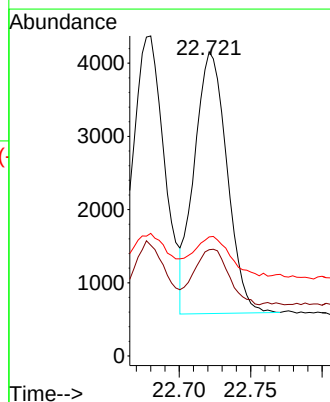
Tgt Ion:252 Resp: 5699

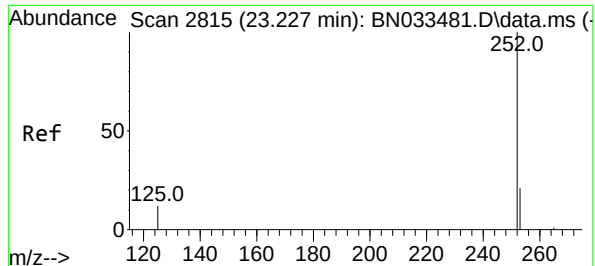
Ion Ratio Lower Upper

252 100

253 34.9 19.8 29.8#

125 39.1 15.8 23.8#





#39

Benzo(a)pyrene

Concen: 0.097 ng

RT: 23.230 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

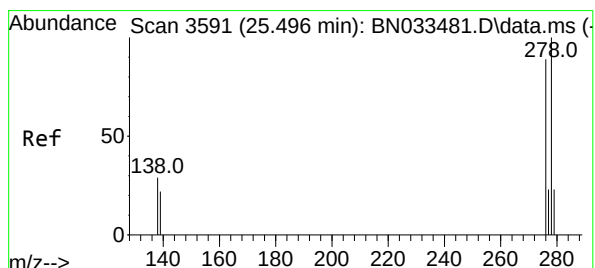
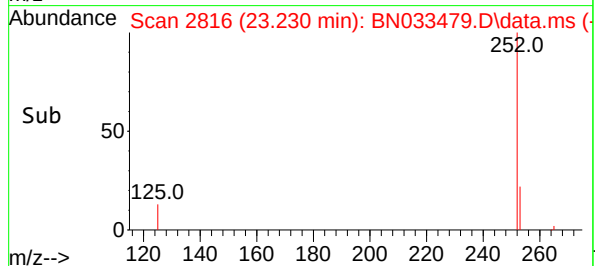
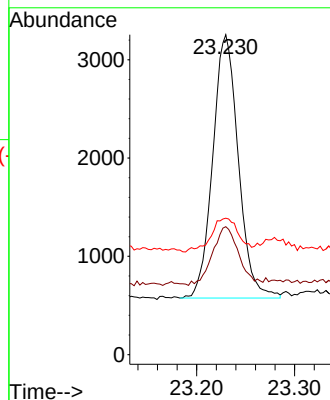
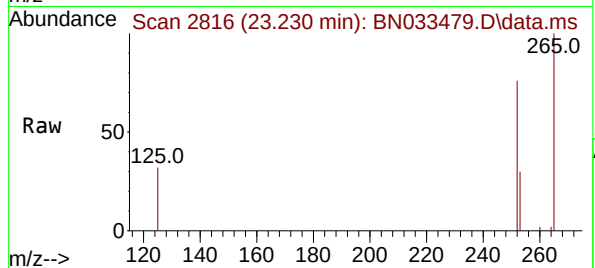
Tgt Ion:252 Resp: 4861

Ion Ratio Lower Upper

252 100

253 40.0 21.5 32.3#

125 42.6 17.0 25.4#



#40

Dibenzo(a,h)anthracene

Concen: 0.098 ng

RT: 25.498 min Scan# 3592

Delta R.T. 0.003 min

Lab File: BN033479.D

Acq: 19 Aug 2024 16:16

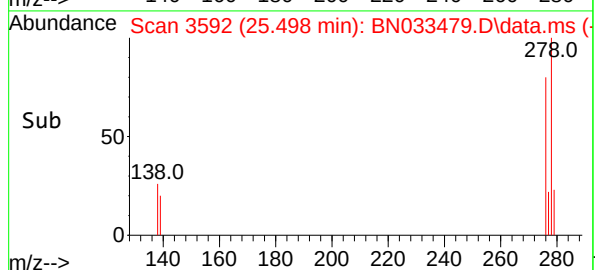
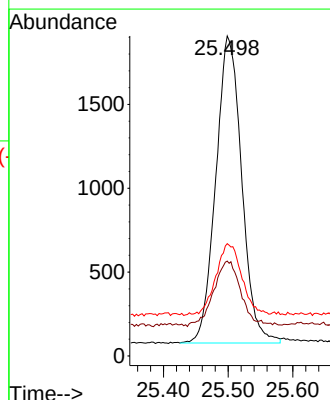
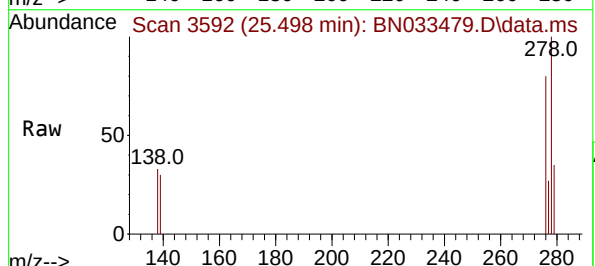
Tgt Ion:278 Resp: 5079

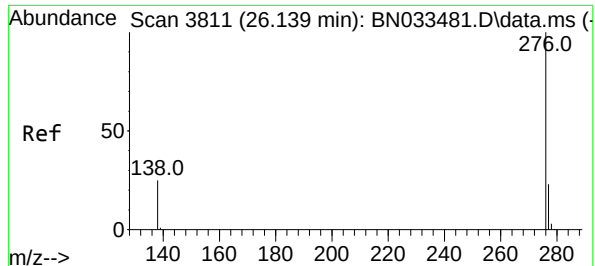
Ion Ratio Lower Upper

278 100

139 29.7 19.1 28.7#

279 35.1 21.0 31.4#





#41

Benzo(g,h,i)perylene

Concen: 0.097 ng

RT: 26.133 min Scan# 3809

Delta R.T. -0.006 min

Lab File: BN033479.D

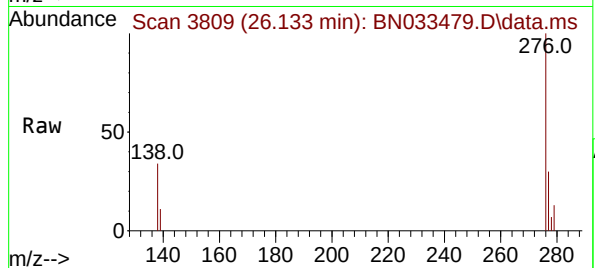
Acq: 19 Aug 2024 16:16

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1



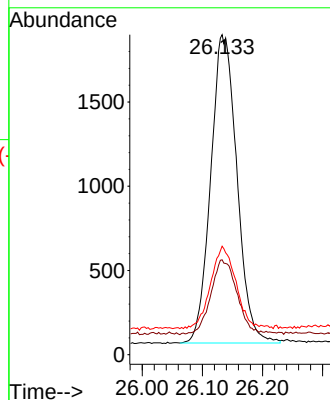
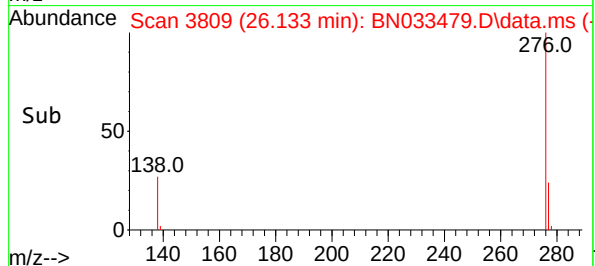
Tgt Ion:276 Resp: 5542

Ion Ratio Lower Upper

276 100

277 29.6 19.7 29.5#

138 33.9 21.8 32.6#



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033480.D  
 Acq On : 19 Aug 2024 16:52  
 Operator : MA/JU  
 Sample : SSTDICC0.2  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

## Instrument :

BNA\_N

## ClientSampleId :

SSTDICC0.2

## Manual Integrations

## APPROVED

Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024

Quant Time: Aug 19 23:22:19 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Mon Aug 19 23:20:26 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.560  | 152  | 7894     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.314 | 136  | 21153    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.189 | 164  | 11095    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.942 | 188  | 23305    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.148 | 240  | 15592    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.323 | 264  | 15116    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.191  | 112  | 5055     | 0.228 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.743  | 99   | 6221     | 0.214 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.692  | 82   | 3428     | 0.214 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 5985     | 0.188 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 1123     | 0.198 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.810 | 172  | 8881     | 0.198 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.980 | 212  | 10713    | 0.175 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.598 | 244  | 6989     | 0.233 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.190  | 88   | 2026     | 0.238 | ng    | 95       |
| 3) n-Nitrosodimethylamine     | 3.479  | 42   | 2169     | 0.197 | ng    | # 99     |
| 6) bis(2-Chloroethyl)ether    | 6.996  | 93   | 4514     | 0.200 | ng    | 99       |
| 9) Naphthalene                | 10.368 | 128  | 11298    | 0.197 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 2251     | 0.204 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 11.990 | 142  | 7058     | 0.184 | ng    | 99       |
| 16) Acenaphthylene            | 13.911 | 152  | 8927     | 0.175 | ng    | 100      |
| 17) Acenaphthene              | 14.253 | 154  | 6529     | 0.186 | ng    | 100      |
| 18) Fluorene                  | 15.247 | 166  | 8225     | 0.179 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 589      | 0.203 | ng    | # 58     |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 2696     | 0.194 | ng    | 97       |
| 22) Hexachlorobenzene         | 16.247 | 284  | 3027     | 0.195 | ng    | 100      |
| 23) Atrazine                  | 16.421 | 200  | 2139     | 0.193 | ng    | 98       |
| 24) Pentachlorophenol         | 16.594 | 266  | 1137     | 0.179 | ng    | 97       |
| 25) Phenanthrene              | 16.979 | 178  | 12438    | 0.187 | ng    | 100      |
| 26) Anthracene                | 17.078 | 178  | 10626    | 0.180 | ng    | 100      |
| 28) Fluoranthene              | 19.012 | 202  | 13434    | 0.166 | ng    | 99       |
| 30) Pyrene                    | 19.375 | 202  | 13742    | 0.219 | ng    | 99       |
| 32) Benzo(a)anthracene        | 21.131 | 228  | 10672    | 0.184 | ng    | 99       |
| 33) Chrysene                  | 21.184 | 228  | 10851    | 0.188 | ng    | 98       |
| 34) Bis(2-ethylhexyl)phtha... | 21.104 | 149  | 7125     | 0.257 | ng    | 99       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.481 | 276  | 11942    | 0.191 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.677 | 252  | 10821    | 0.192 | ng    | # 90     |
| 38) Benzo(k)fluoranthene      | 22.721 | 252  | 10527m   | 0.184 | ng    |          |
| 39) Benzo(a)pyrene            | 23.227 | 252  | 8779     | 0.184 | ng    | # 87     |
| 40) Dibenzo(a,h)anthracene    | 25.496 | 278  | 9553     | 0.193 | ng    | 95       |
| 41) Benzo(g,h,i)perylene      | 26.136 | 276  | 10368    | 0.190 | ng    | 97       |

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



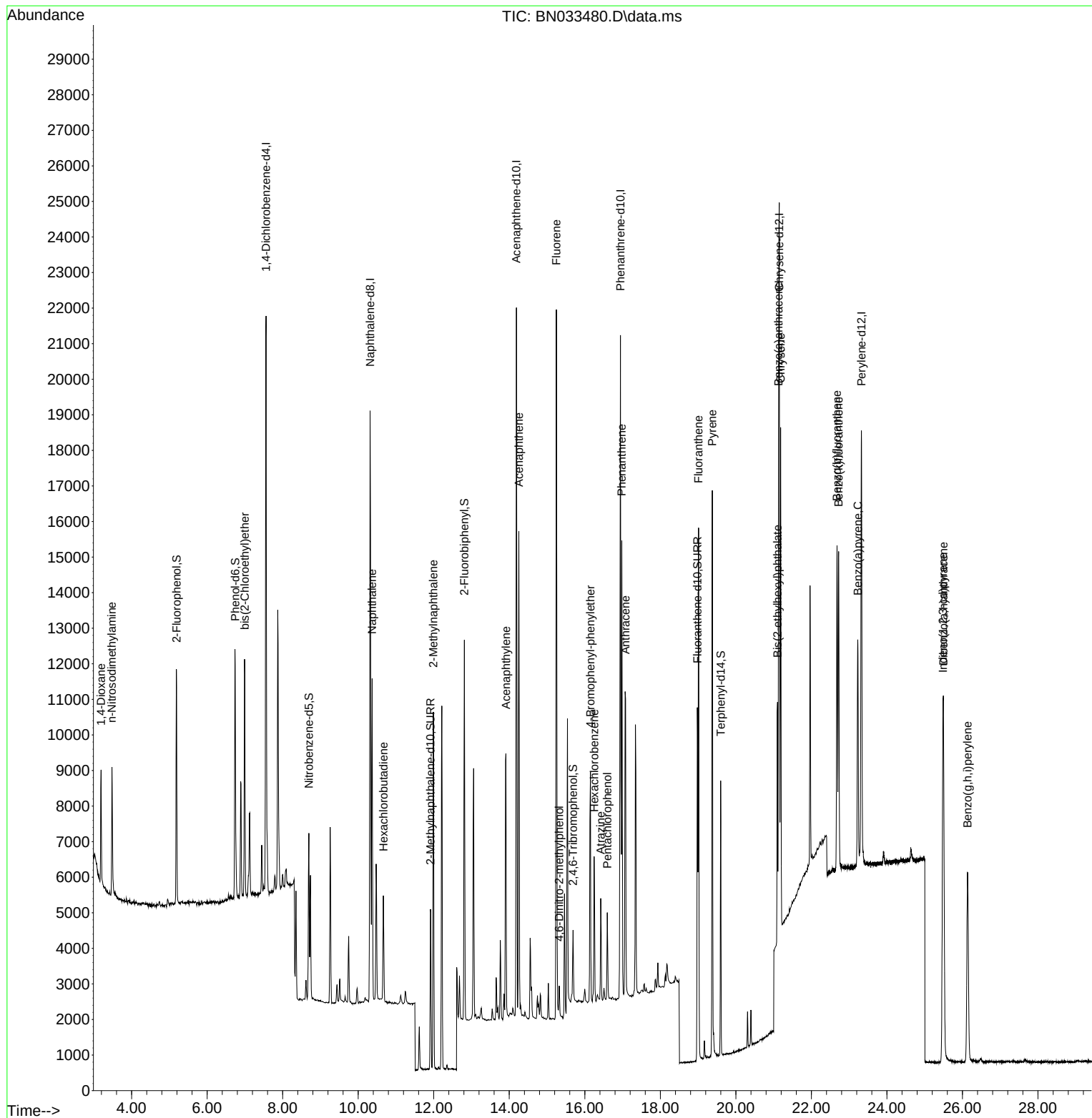
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033480.D  
Acq On : 19 Aug 2024 16:52  
Operator : MA/JU  
Sample : SSTDICC0.2  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

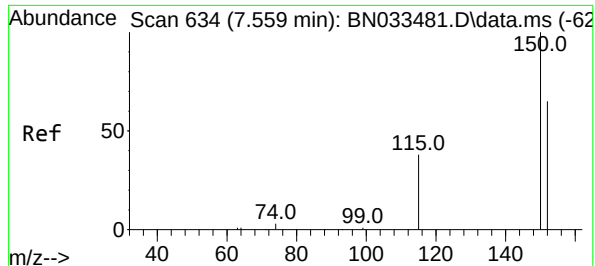
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

Quant Time: Aug 19 23:22:19 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:20:26 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

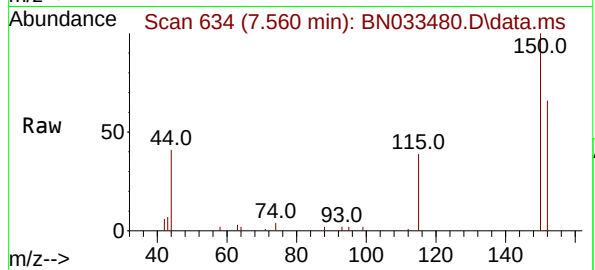
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.560 min Scan# 61  
Delta R.T. 0.001 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

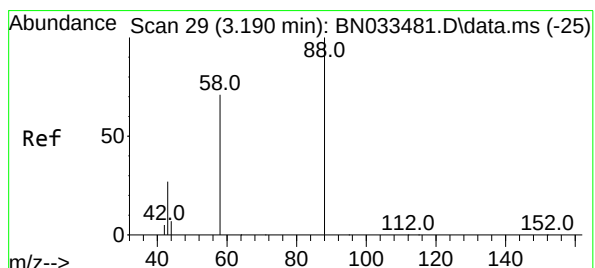
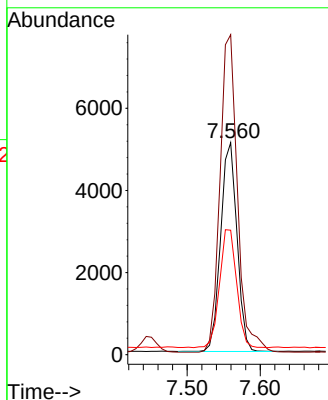
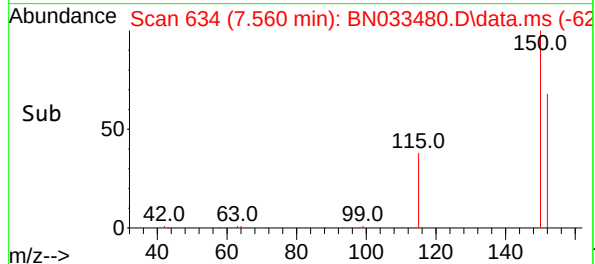
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion: 152 Resp: 7894  
Ion Ratio Lower Upper  
152 100  
150 150.9 122.2 183.2  
115 58.7 47.2 70.8

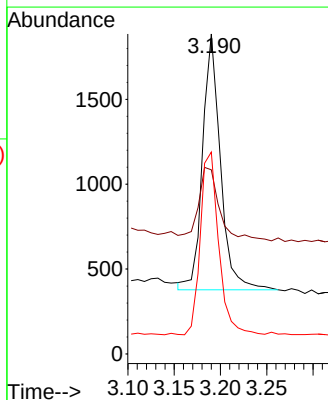
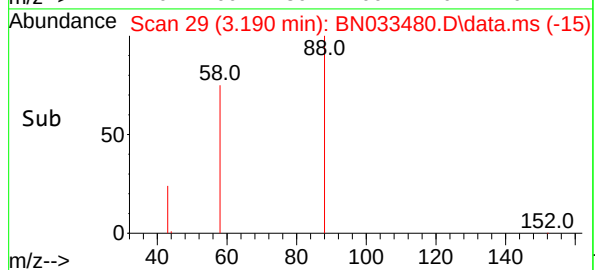
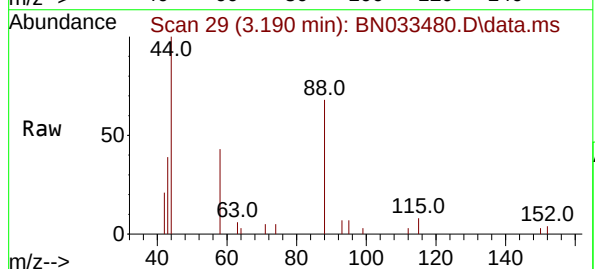
Manual Integrations  
APPROVED

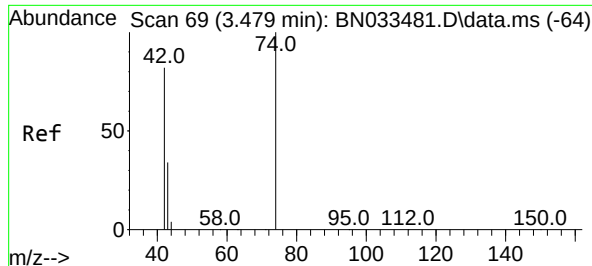
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#2  
1,4-Dioxane  
Concen: 0.238 ng  
RT: 3.190 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Tgt Ion: 88 Resp: 2026  
Ion Ratio Lower Upper  
88 100  
43 34.3 25.0 37.4  
58 73.6 62.5 93.7





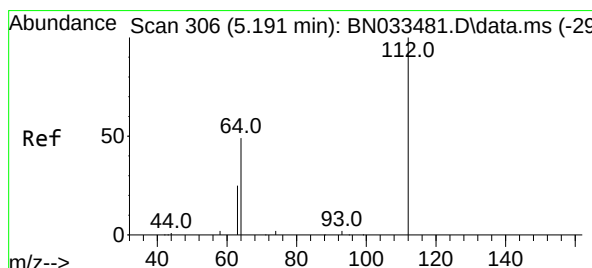
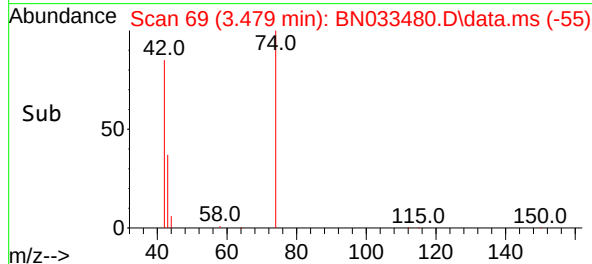
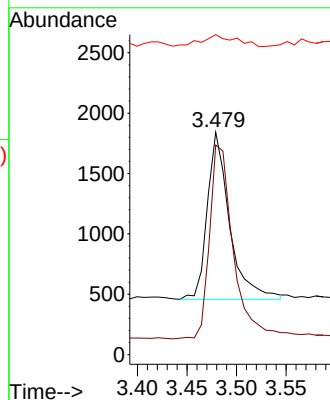
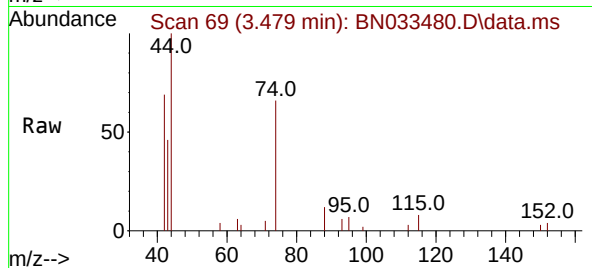
#3  
n-Nitrosodimethylamine  
Concen: 0.197 ng  
RT: 3.479 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

Tgt Ion: 42 Resp: 2169  
Ion Ratio Lower Upper  
42 100  
74 124.3 100.2 150.2  
44 10.2 5.3 7.9

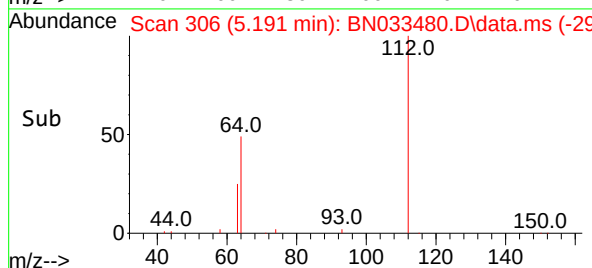
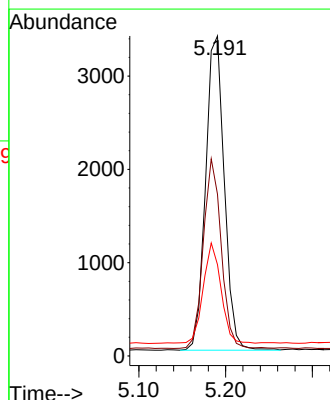
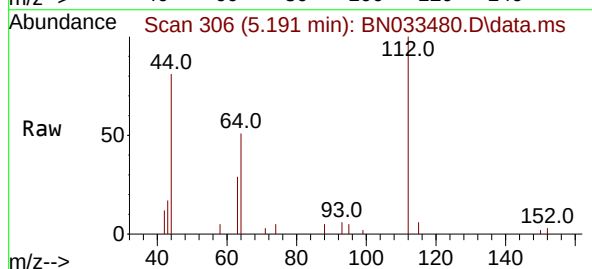
Manual Integrations  
APPROVED

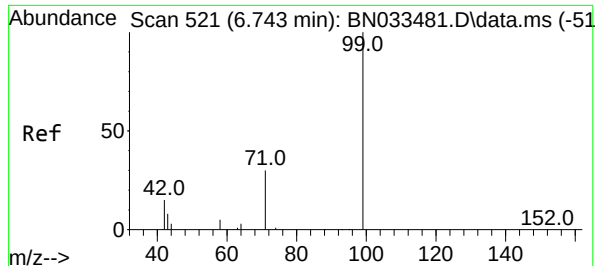
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#4  
2-Fluorophenol  
Concen: 0.228 ng  
RT: 5.191 min Scan# 306  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Tgt Ion:112 Resp: 5055  
Ion Ratio Lower Upper  
112 100  
64 57.6 47.1 70.7  
63 30.5 24.9 37.3





#5

Phenol-d6

Concen: 0.214 ng

RT: 6.743 min Scan# 51

Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

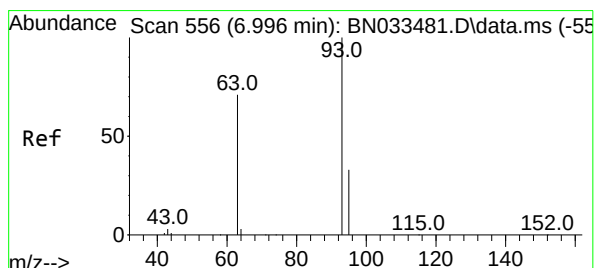
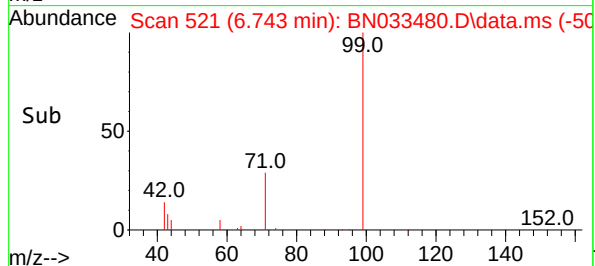
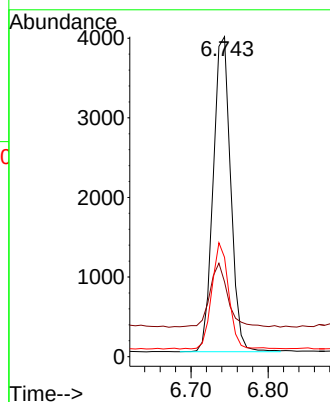
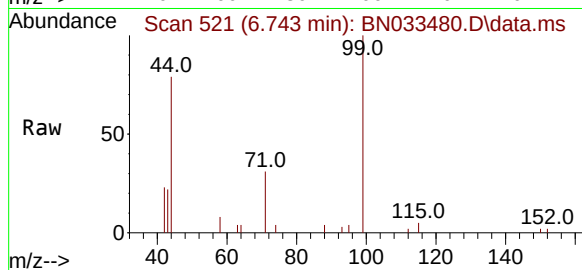
ClientSampleId :

SSTDICC0.2

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 99    | Resp: | 622   |
| Ion      | Ratio | Lower | Upper |
| 99       | 100   |       |       |
| 42       | 21.1  | 16.6  | 24.8  |
| 71       | 32.5  | 26.2  | 39.4  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#6

bis(2-Chloroethyl)ether

Concen: 0.200 ng

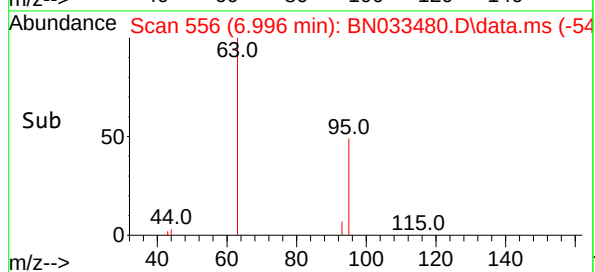
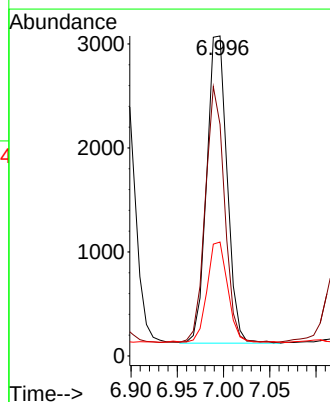
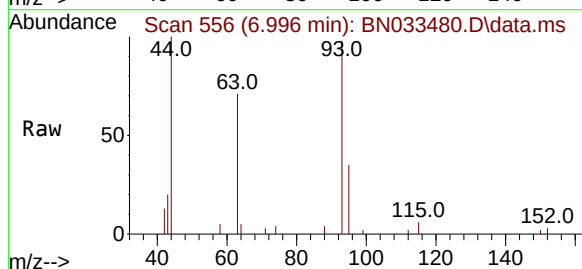
RT: 6.996 min Scan# 556

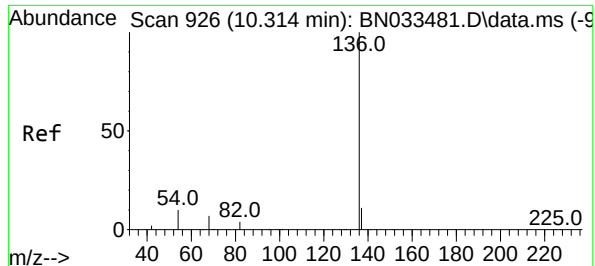
Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 93    | Resp: | 4514  |
| Ion      | Ratio | Lower | Upper |
| 93       | 100   |       |       |
| 63       | 79.2  | 63.0  | 94.4  |
| 95       | 32.9  | 26.0  | 39.0  |





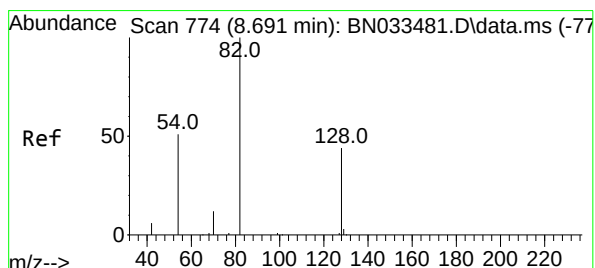
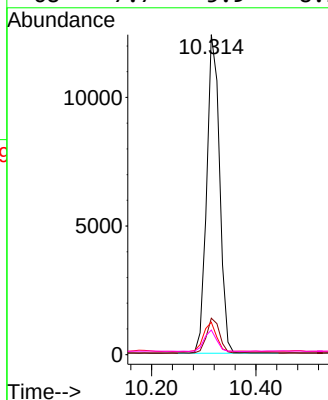
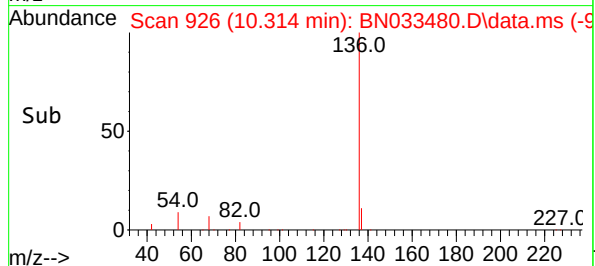
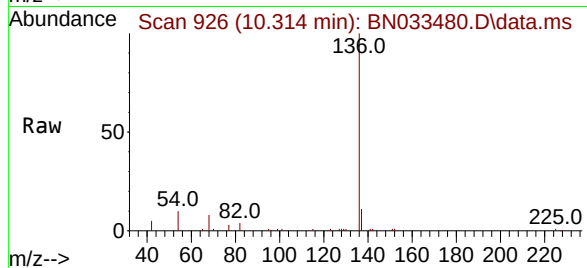
#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 2115  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.4  | 9.0   | 13.6  |
| 54       | 10.1  | 8.3   | 12.5  |
| 68       | 7.7   | 5.9   | 8.9   |

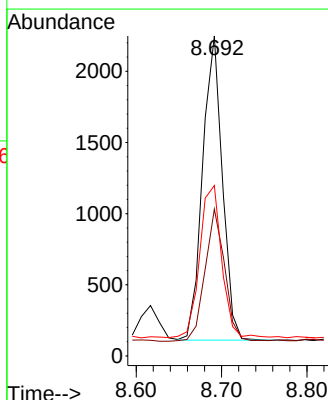
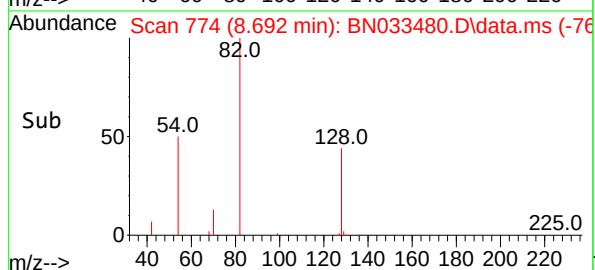
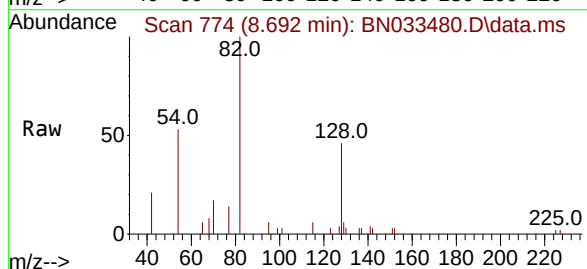
Manual Integrations  
APPROVED

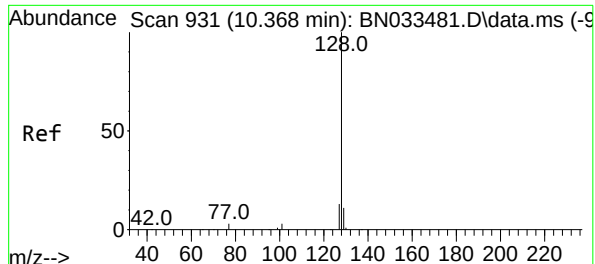
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#8  
Nitrobenzene-d5  
Concen: 0.214 ng  
RT: 8.692 min Scan# 774  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 3428  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 45.9  | 36.0  | 54.0  |
| 54       | 53.2  | 42.0  | 63.0  |





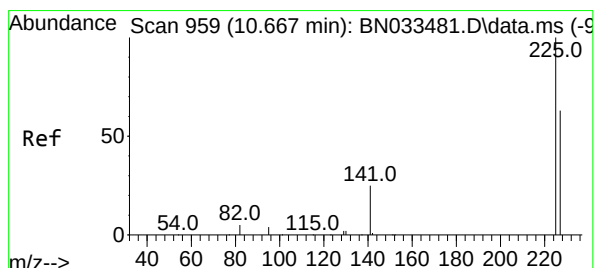
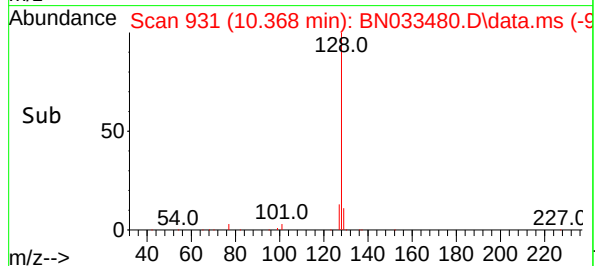
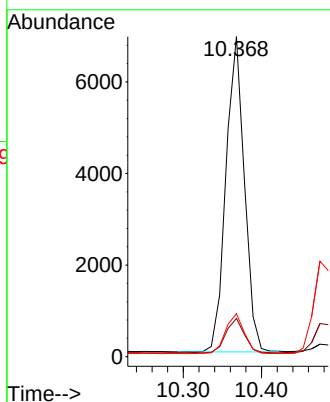
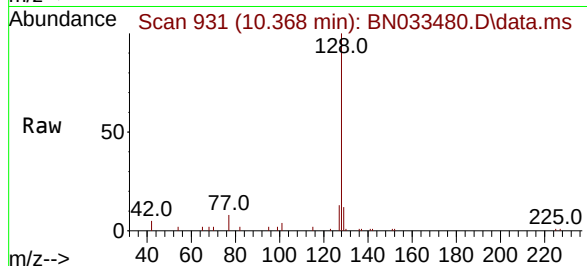
#9  
Naphthalene  
Concen: 0.197 ng  
RT: 10.368 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

Tgt Ion:128 Resp: 11298  
Ion Ratio Lower Upper  
128 100  
129 11.9 9.1 13.7  
127 13.5 10.7 16.1

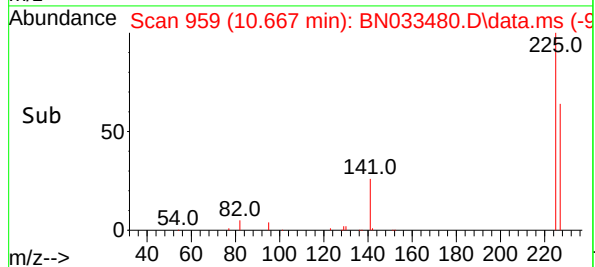
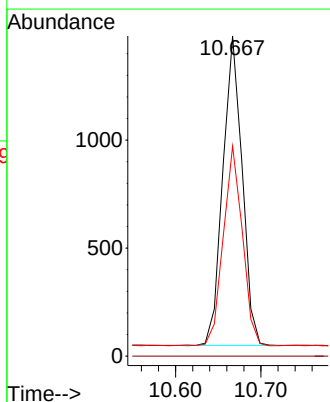
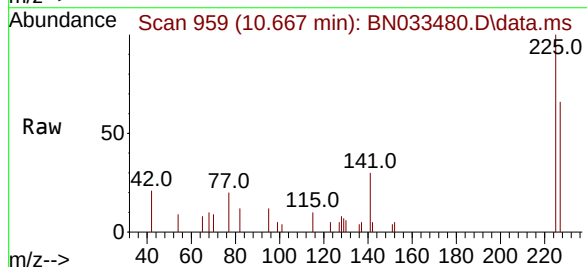
Manual Integrations  
APPROVED

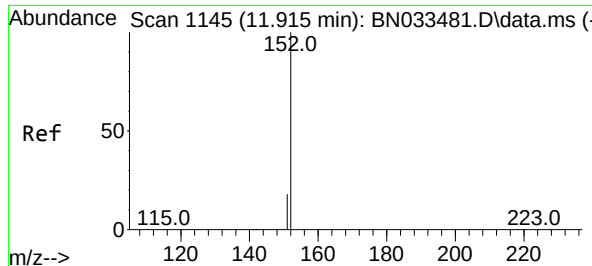
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#10  
Hexachlorobutadiene  
Concen: 0.204 ng  
RT: 10.667 min Scan# 959  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

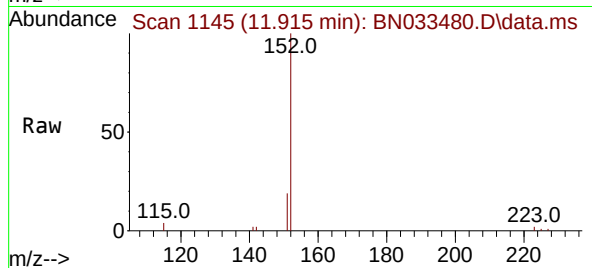
Tgt Ion:225 Resp: 2251  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.2 76.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.188 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

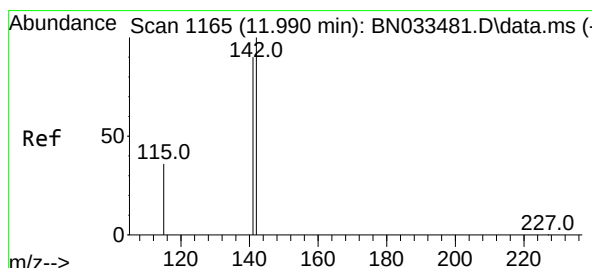
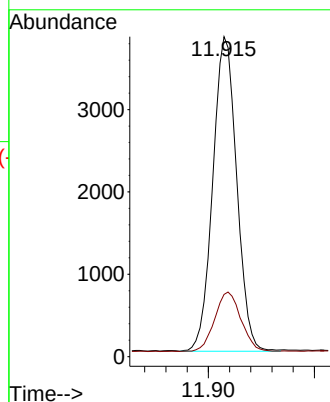
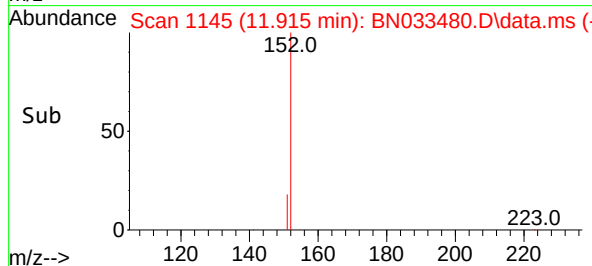
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:152 Resp: 5985  
Ion Ratio Lower Upper  
152 100  
151 20.7 16.6 25.0

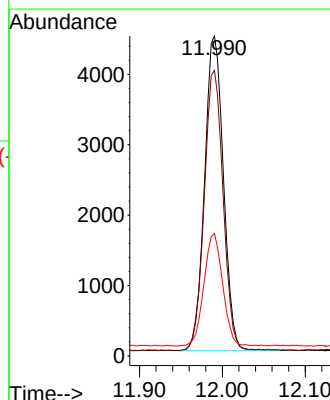
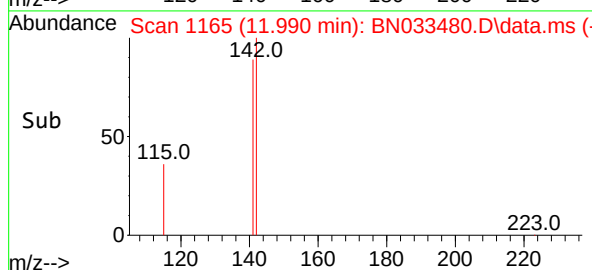
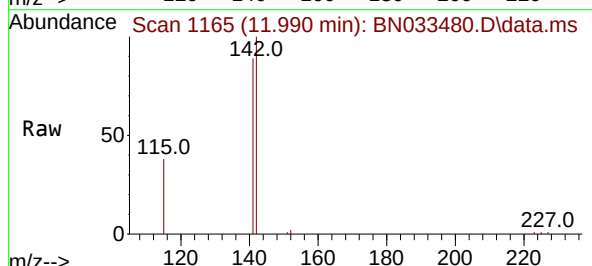
Manual Integrations  
APPROVED

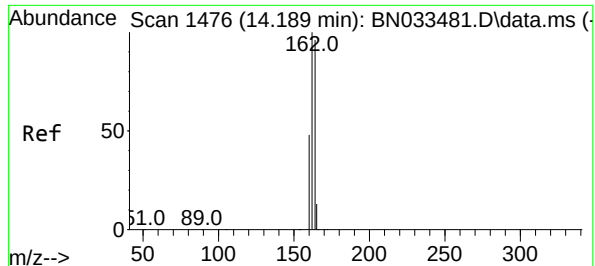
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#12  
2-Methylnaphthalene  
Concen: 0.184 ng  
RT: 11.990 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Tgt Ion:142 Resp: 7058  
Ion Ratio Lower Upper  
142 100  
141 89.3 71.7 107.5  
115 38.3 29.4 44.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.189 min Scan# 1476

Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

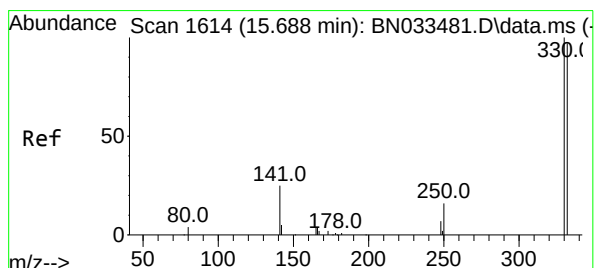
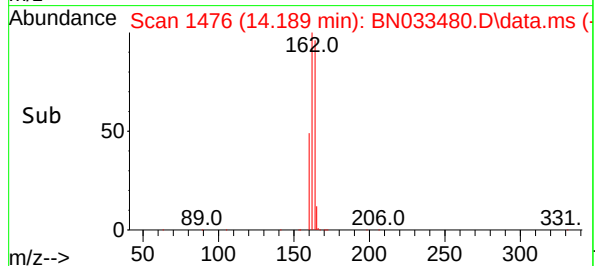
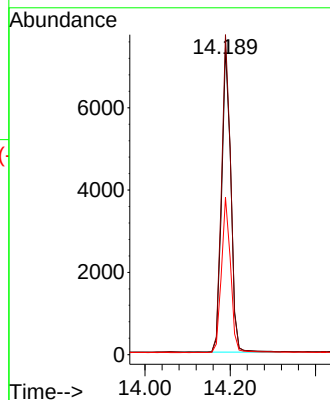
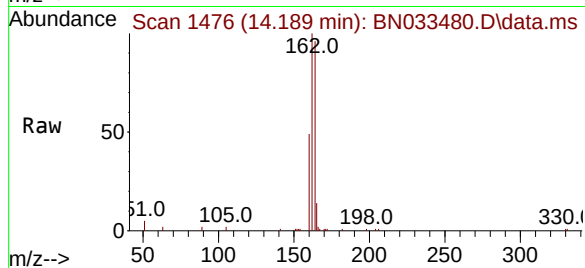
SSTDIC0.2

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 164   | Resp: | 1109  |
| Ion Ratio | Lower | Upper |       |
| 164       | 100   |       |       |
| 162       | 104.3 | 83.5  | 125.3 |
| 160       | 51.3  | 40.2  | 60.4  |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#14

2,4,6-Tribromophenol

Concen: 0.198 ng

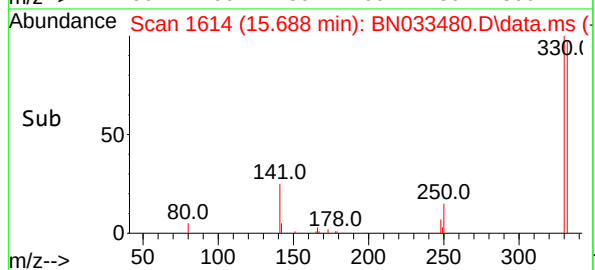
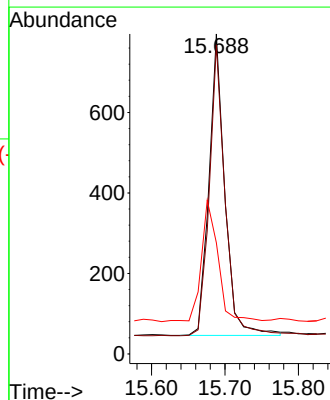
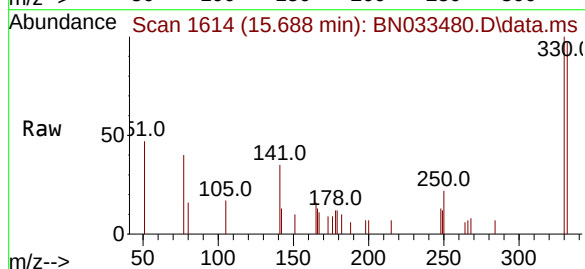
RT: 15.688 min Scan# 1614

Delta R.T. 0.000 min

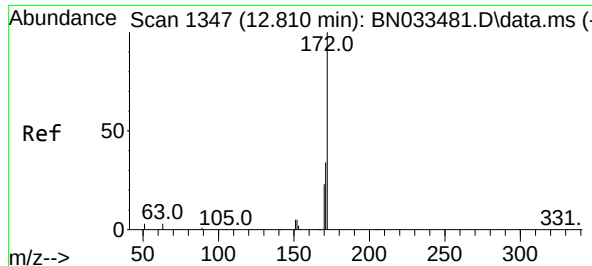
Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 330   | Resp: | 1123  |
| Ion Ratio | Lower | Upper |       |
| 330       | 100   |       |       |
| 332       | 96.5  | 77.5  | 116.3 |
| 141       | 42.3  | 33.9  | 50.9  |

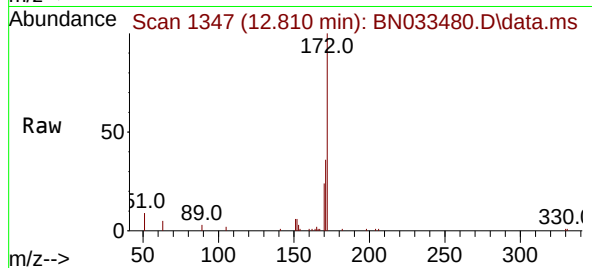






#15  
2-Fluorobiphenyl  
Concen: 0.198 ng  
RT: 12.810 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

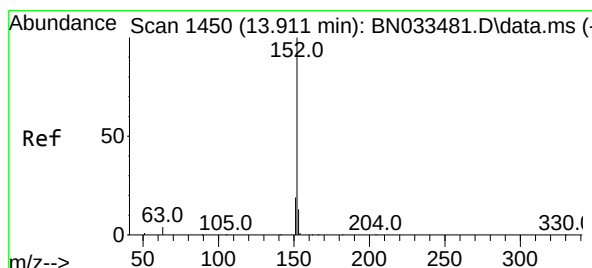
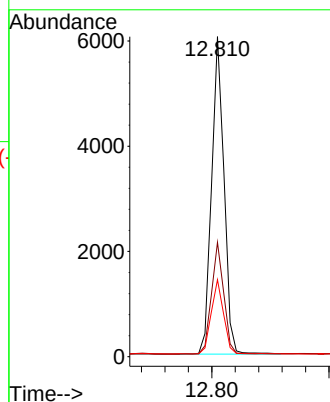
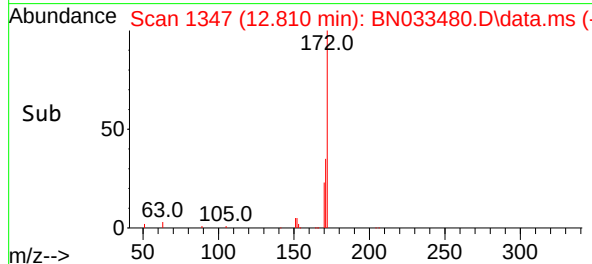
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:172 Resp: 888  
Ion Ratio Lower Upper  
172 100  
171 35.7 27.7 41.5  
170 24.0 18.3 27.5

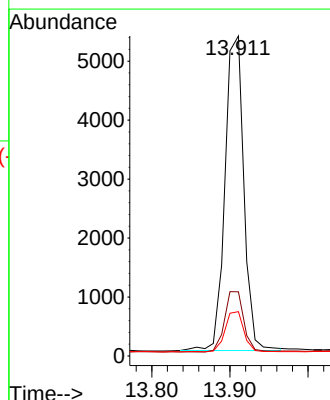
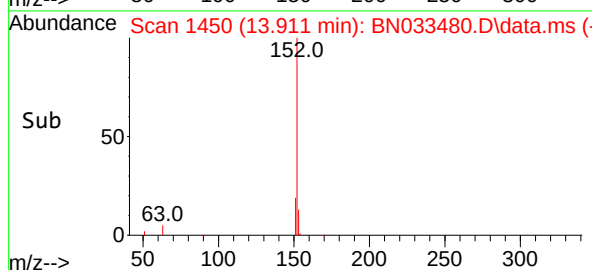
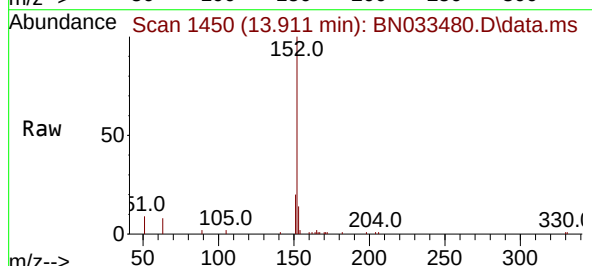
Manual Integrations  
APPROVED

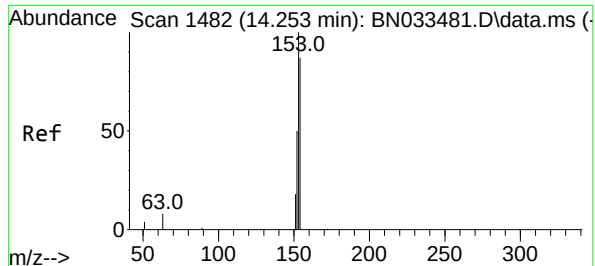
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#16  
Acenaphthylene  
Concen: 0.175 ng  
RT: 13.911 min Scan# 1450  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Tgt Ion:152 Resp: 8927  
Ion Ratio Lower Upper  
152 100  
151 19.5 15.7 23.5  
153 12.7 10.3 15.5





#17

Acenaphthene

Concen: 0.186 ng

RT: 14.253 min Scan# 1482

Delta R.T. 0.000 min

Lab File: BN033480.D

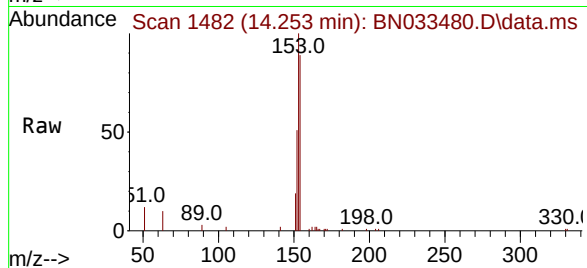
Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

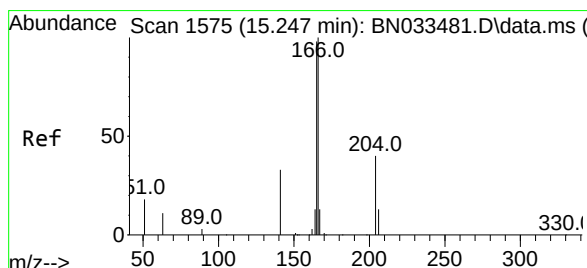
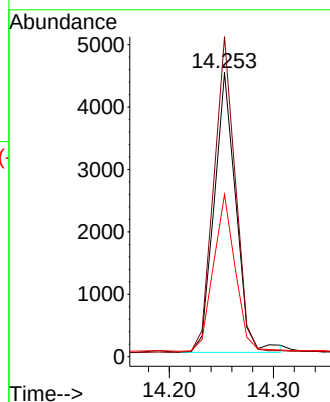
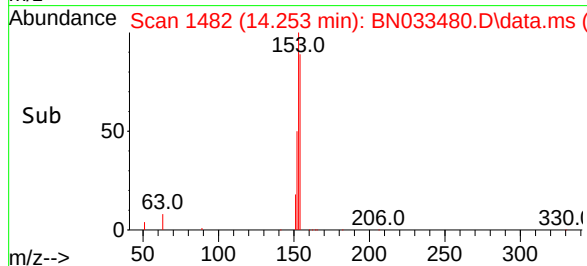


| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 111.0 | 89.0  | 133.6 |
| 152     | 55.9  | 45.2  | 67.8  |

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Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#18

Fluorene

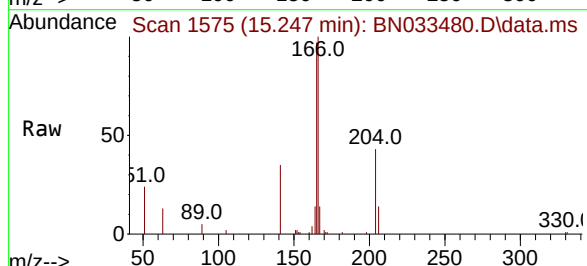
Concen: 0.179 ng

RT: 15.247 min Scan# 1575

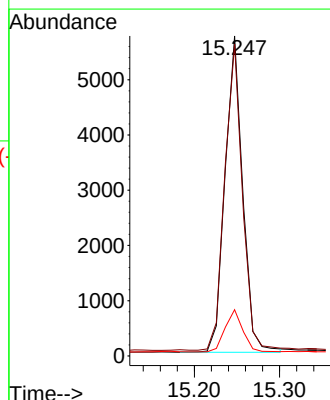
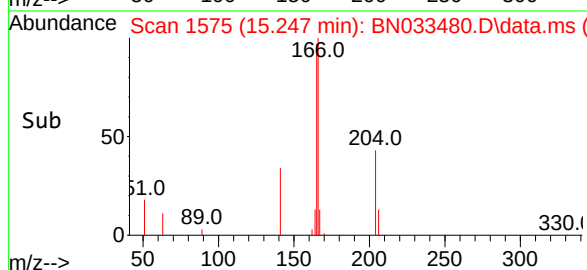
Delta R.T. 0.000 min

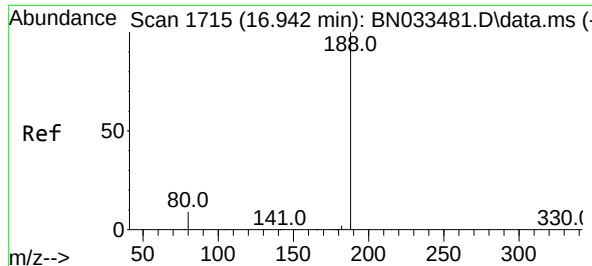
Lab File: BN033480.D

Acq: 19 Aug 2024 16:52



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 96.7  | 78.2  | 117.4 |
| 167     | 13.5  | 10.6  | 16.0  |





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.942 min Scan# 1715

Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

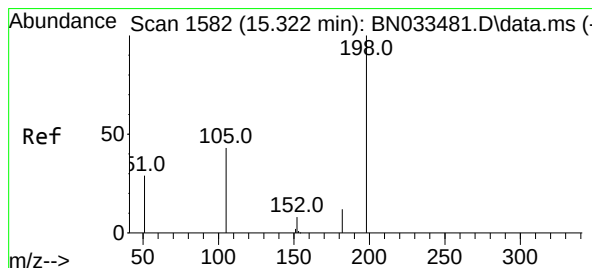
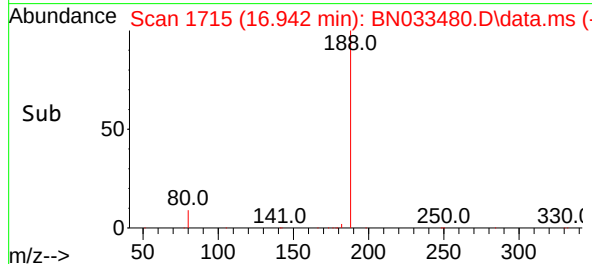
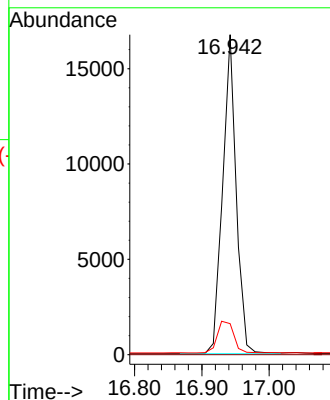
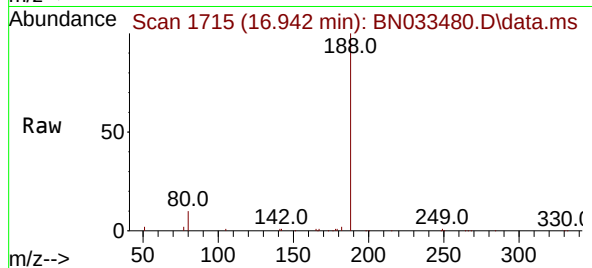
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 188   | Resp: | 2330 |
| Ion Ratio | Lower | Upper |      |
| 188       | 100   |       |      |
| 94        | 0.0   | 0.0   | 0.0  |
| 80        | 9.7   | 7.8   | 11.8 |

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Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#20

4,6-Dinitro-2-methylphenol

Concen: 0.203 ng

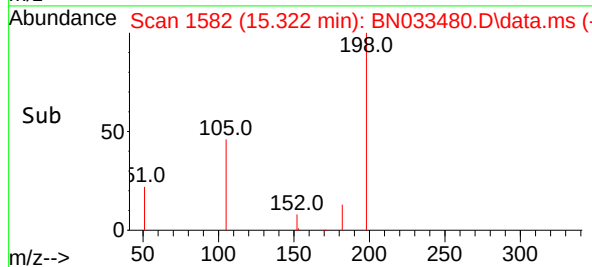
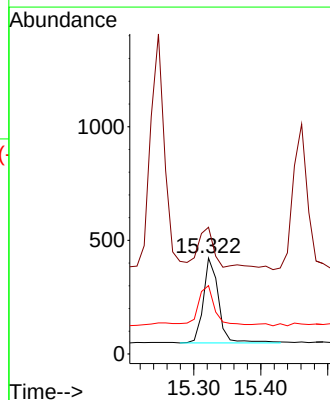
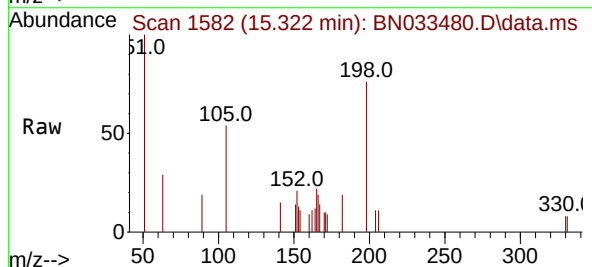
RT: 15.322 min Scan# 1582

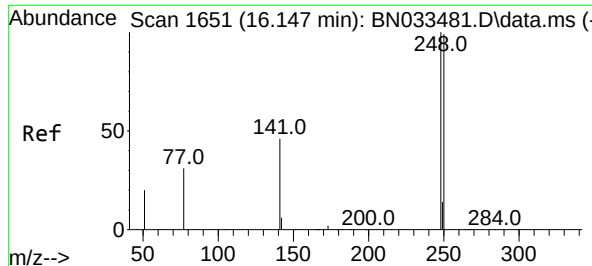
Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 198   | Resp: | 589   |
| Ion Ratio | Lower | Upper |       |
| 198       | 100   |       |       |
| 51        | 132.2 | 65.1  | 97.7# |
| 105       | 71.3  | 44.8  | 67.2# |





#21  
4-Bromophenyl-phenylether  
Concen: 0.194 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

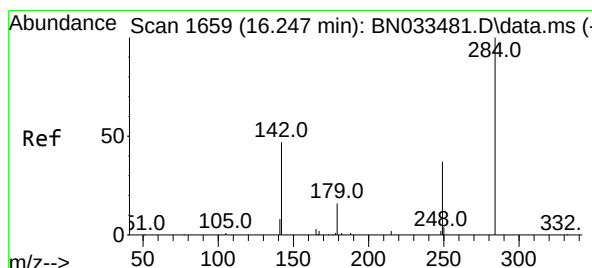
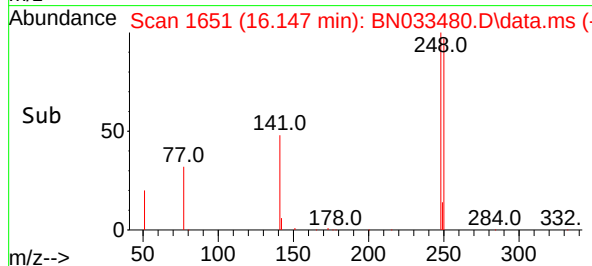
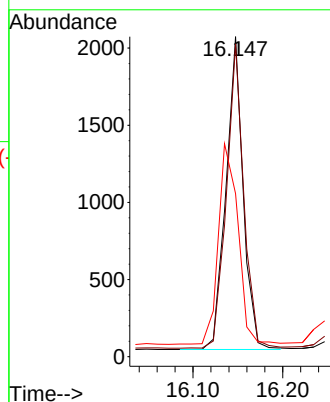
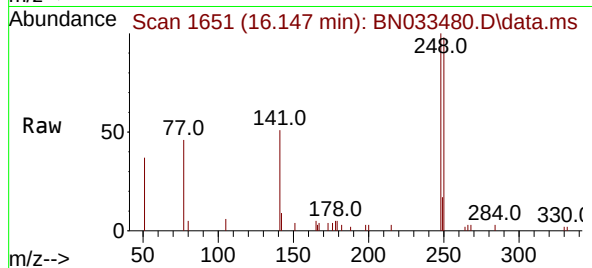
ClientSampleId :

SSTDICC0.2

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 97.7  | 79.2  | 118.8 |
| 141     | 51.0  | 37.9  | 56.9  |

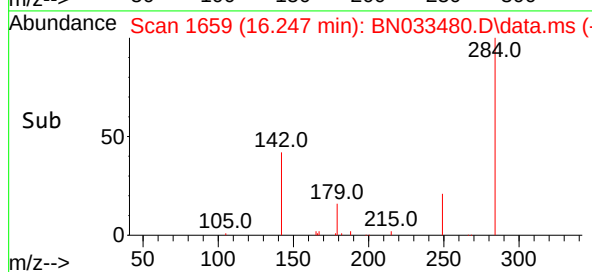
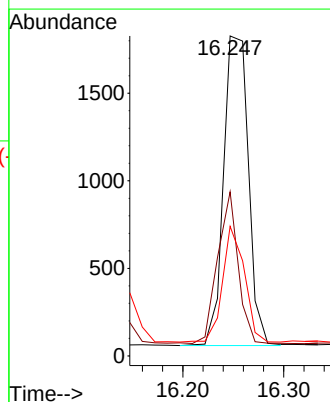
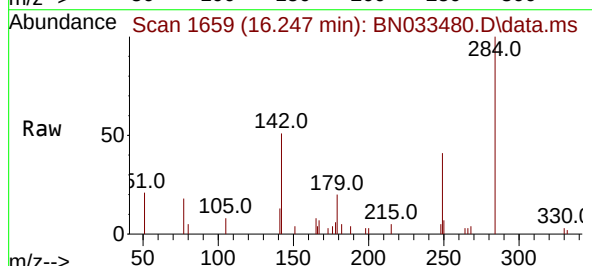
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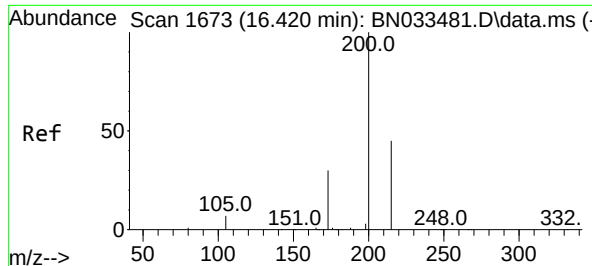
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#22  
Hexachlorobenzene  
Concen: 0.195 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

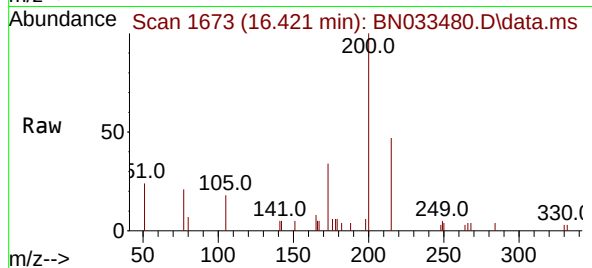
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 40.0  | 31.8  | 47.6  |
| 249     | 32.7  | 26.0  | 39.0  |





#23  
Atrazine  
Concen: 0.193 ng  
RT: 16.421 min Scan# 1673  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

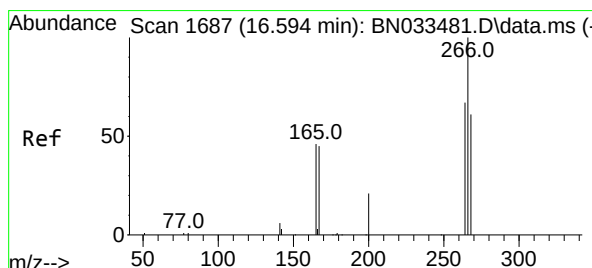
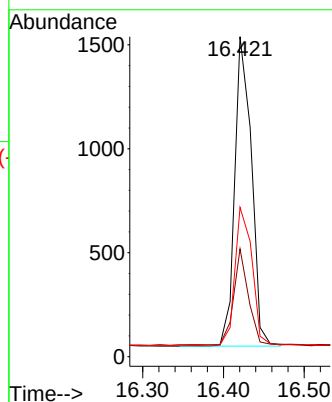
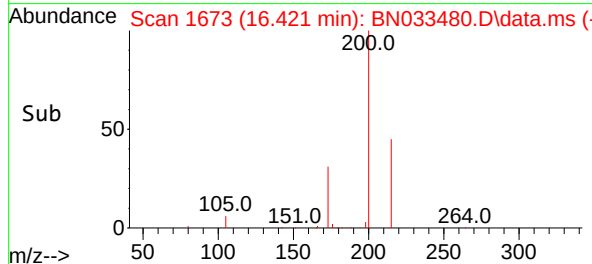
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:200 Resp: 2139  
Ion Ratio Lower Upper  
200 100  
173 33.7 25.3 37.9  
215 46.7 36.6 54.8

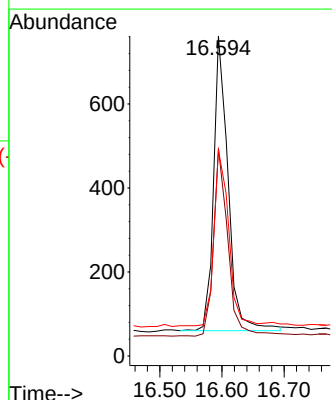
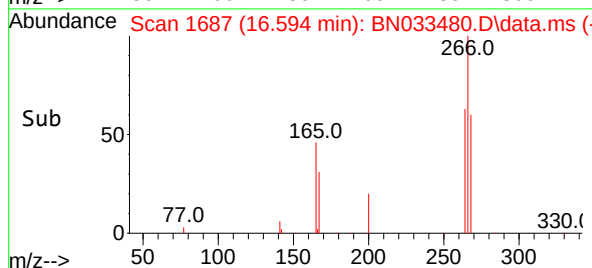
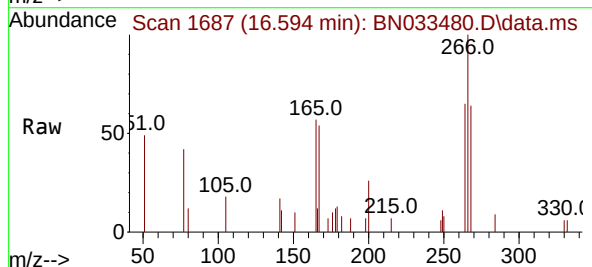
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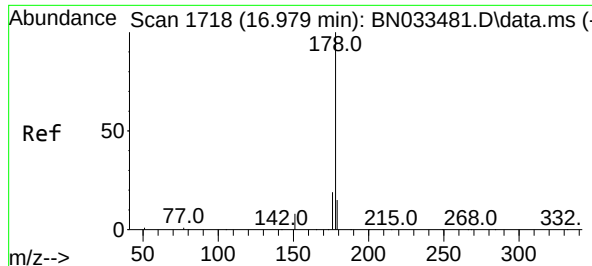
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#24  
Pentachlorophenol  
Concen: 0.179 ng  
RT: 16.594 min Scan# 1687  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

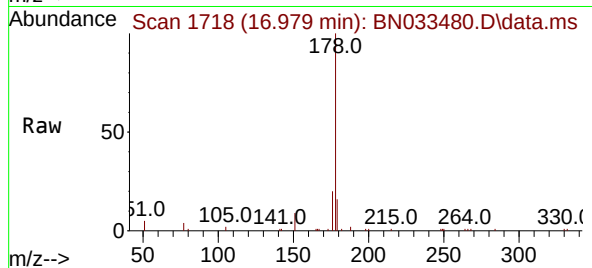
Tgt Ion:266 Resp: 1137  
Ion Ratio Lower Upper  
266 100  
264 63.3 51.9 77.9  
268 61.2 51.0 76.4





#25  
Phenanthrene  
Concen: 0.187 ng  
RT: 16.979 min Scan# 1718  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

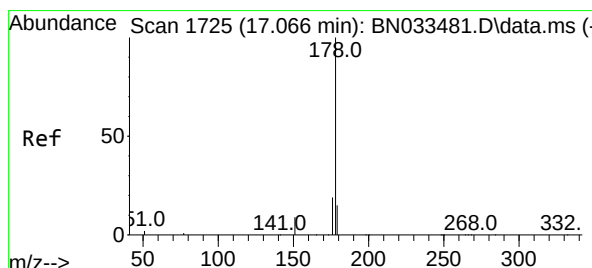
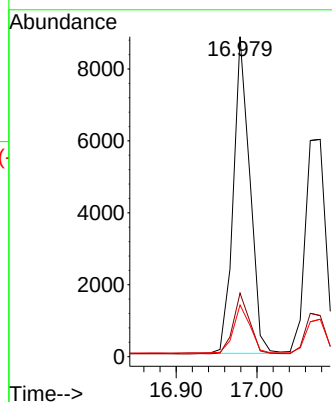
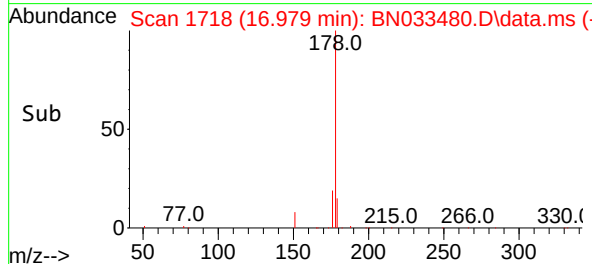
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:178 Resp: 12438  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.3 22.9  
179 15.5 12.3 18.5

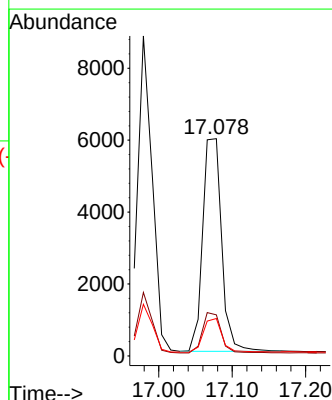
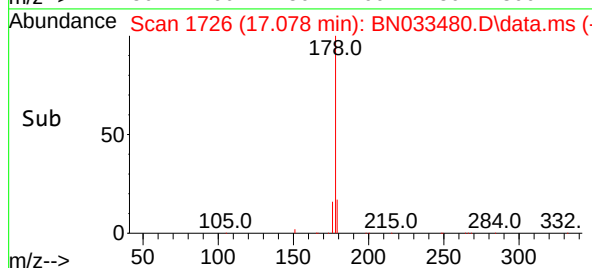
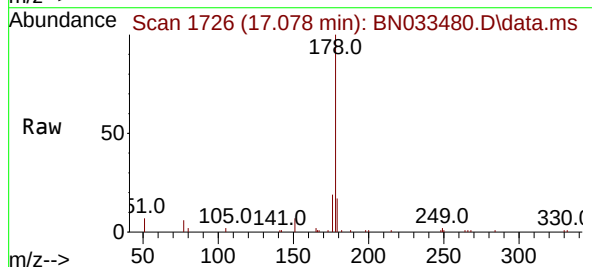
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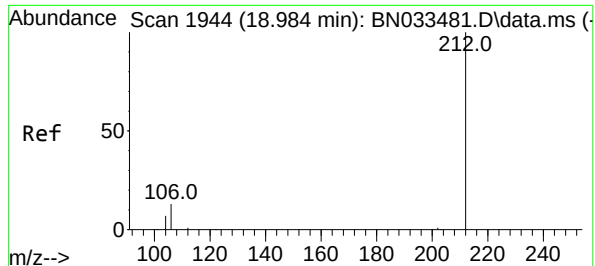
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#26  
Anthracene  
Concen: 0.180 ng  
RT: 17.078 min Scan# 1726  
Delta R.T. 0.013 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Tgt Ion:178 Resp: 10626  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.0 22.6  
179 15.5 12.4 18.6





#27

Fluoranthene-d10

Concen: 0.175 ng

RT: 18.980 min Scan# 1943

Delta R.T. -0.005 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

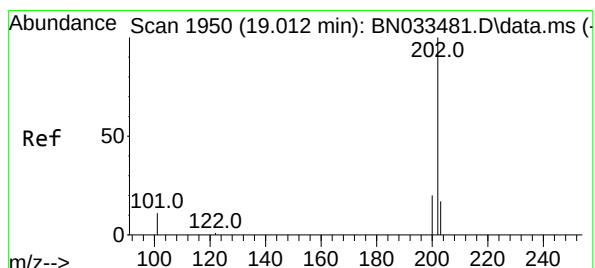
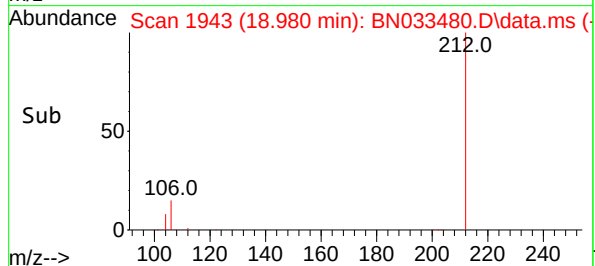
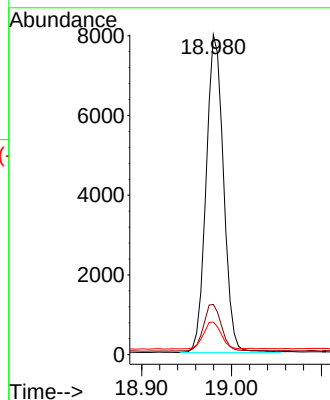
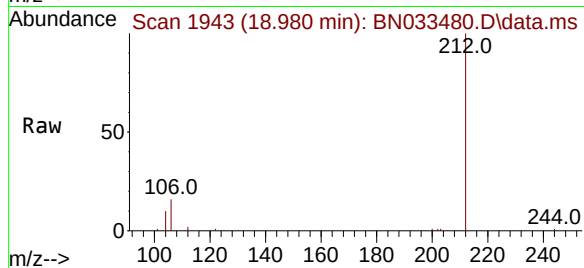
SSTDIC0.2

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 212   | Resp: | 1071 |
| Ion Ratio | Lower | Upper |      |
| 212       | 100   |       |      |
| 106       | 15.0  | 12.3  | 18.5 |
| 104       | 8.7   | 7.0   | 10.4 |

Manual Integrations  
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Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#28

Fluoranthene

Concen: 0.166 ng

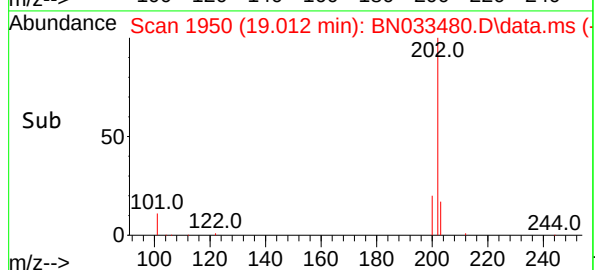
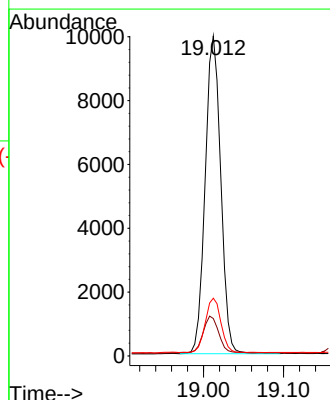
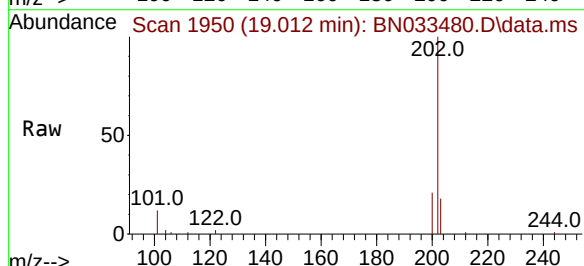
RT: 19.012 min Scan# 1950

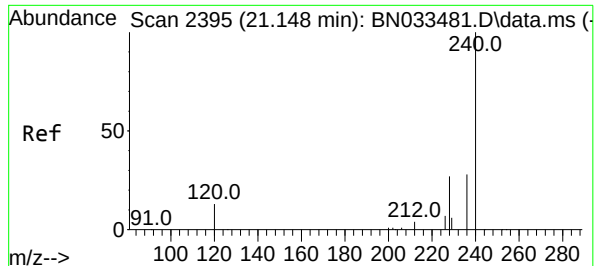
Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 13434 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 12.4  | 9.5   | 14.3  |
| 203       | 17.1  | 13.8  | 20.6  |





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

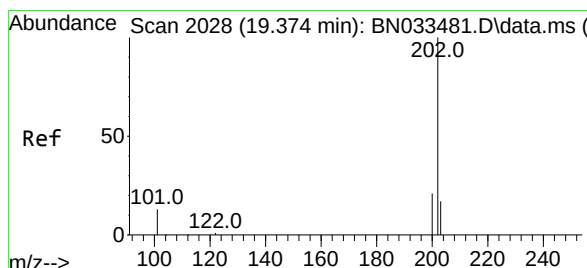
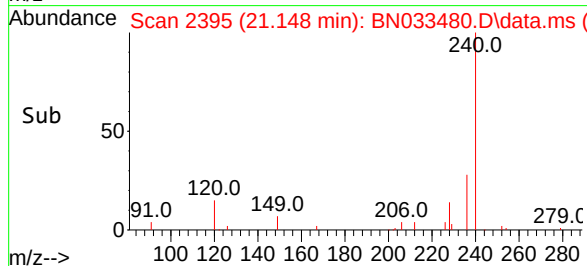
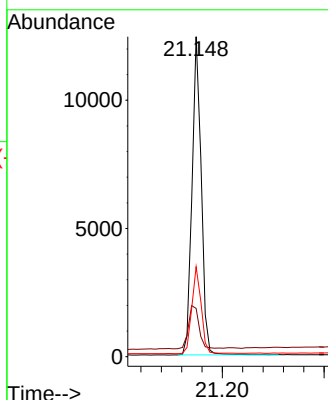
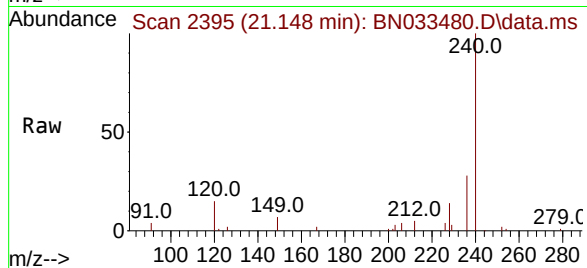
ClientSampleId :

SSTDIC0.2

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 240   | Resp: | 15592 |
| Ion Ratio | Lower | Upper |       |
| 240       | 100   |       |       |
| 120       | 15.1  | 12.4  | 18.6  |
| 236       | 28.1  | 23.0  | 34.6  |

Manual Integrations  
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Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



#30

Pyrene

Concen: 0.219 ng

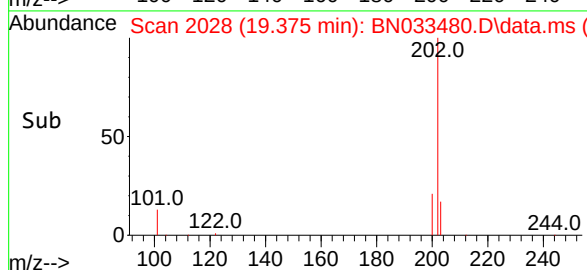
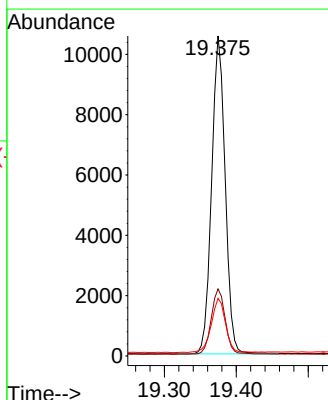
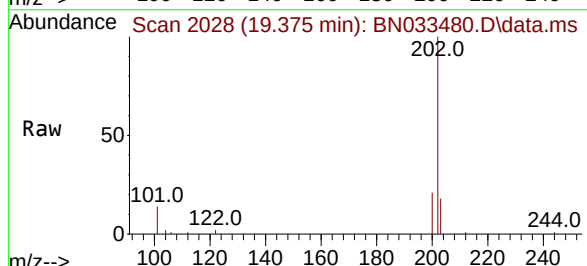
RT: 19.375 min Scan# 2028

Delta R.T. 0.000 min

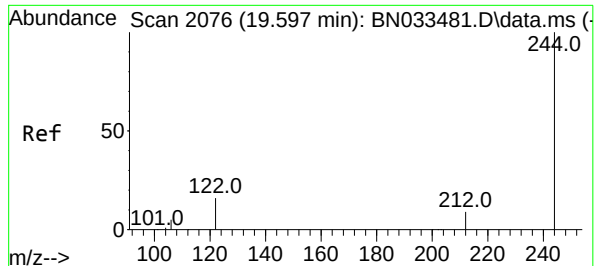
Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 13742 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 200       | 21.2  | 16.6  | 24.8  |
| 203       | 18.0  | 14.2  | 21.4  |







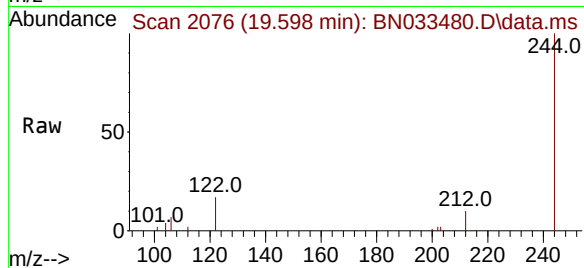
#31  
Terphenyl-d14  
Concen: 0.233 ng  
RT: 19.598 min Scan# 2076  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

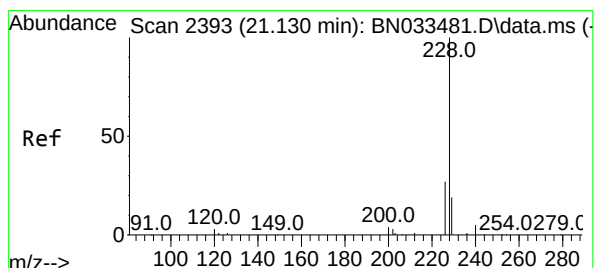
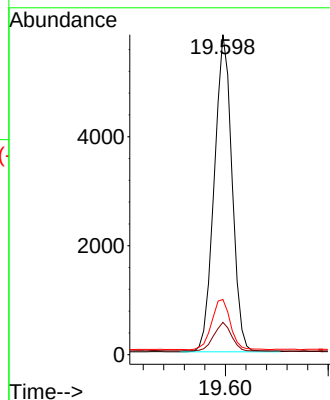
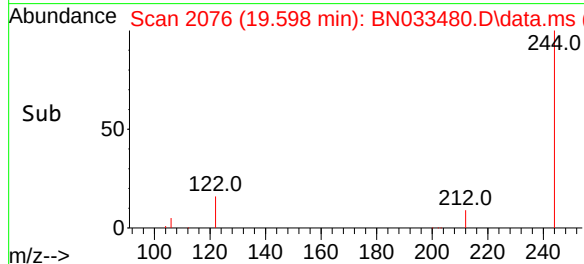
SSTDIC0.2



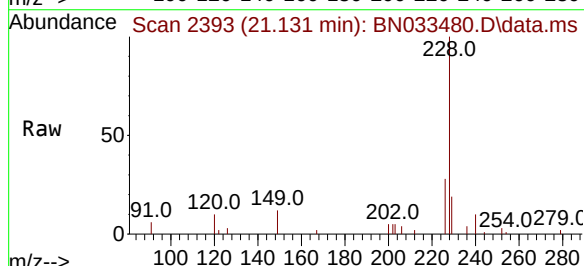
Tgt Ion:244 Resp: 6989  
Ion Ratio Lower Upper  
244 100  
212 10.1 7.8 11.6  
122 17.3 13.3 19.9

Manual Integrations  
APPROVED

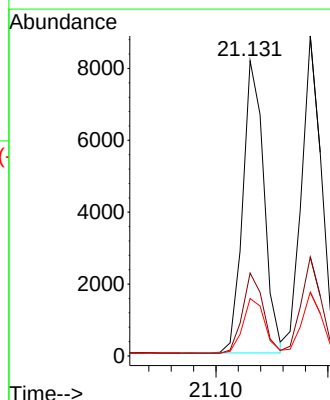
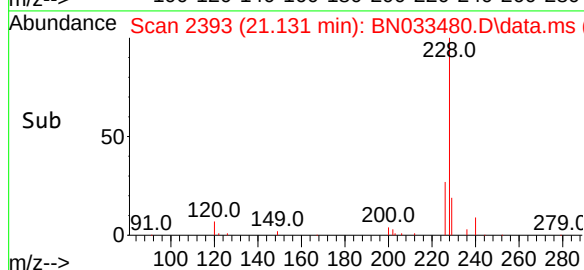
Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024

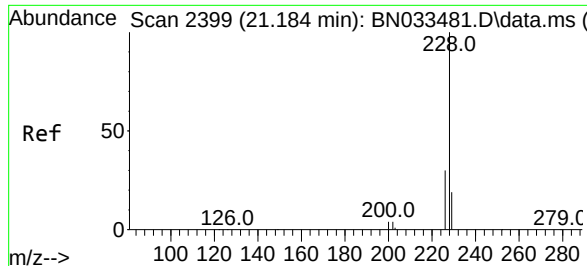


#32  
Benzo(a)anthracene  
Concen: 0.184 ng  
RT: 21.131 min Scan# 2393  
Delta R.T. 0.000 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52



Tgt Ion:228 Resp: 10672  
Ion Ratio Lower Upper  
228 100  
226 28.1 21.8 32.6  
229 19.5 15.8 23.6





#33

Chrysene

Concen: 0.188 ng

RT: 21.184 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

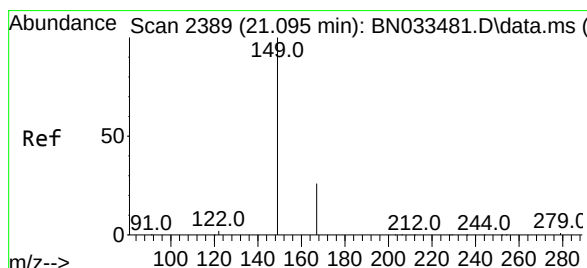
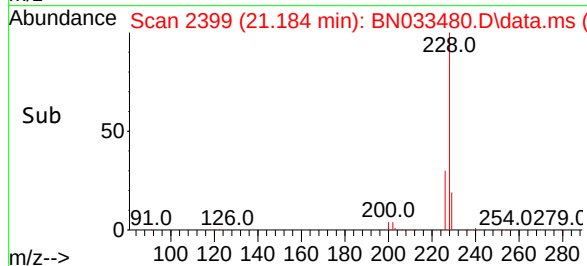
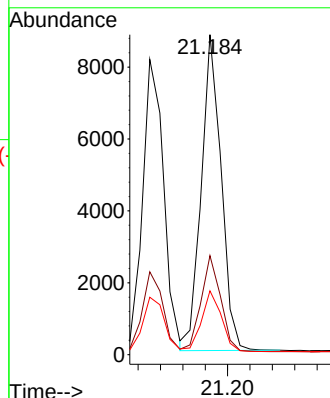
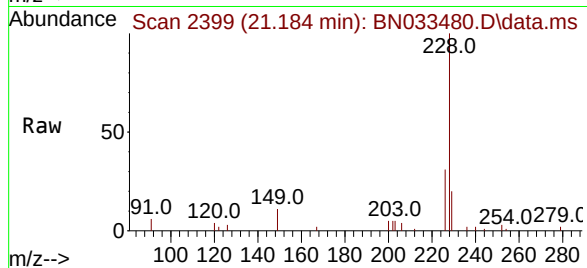
SSTDICC0.2

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 228   | Resp: | 1085 |
| Ion Ratio | Lower | Upper |      |
| 228       | 100   |       |      |
| 226       | 30.9  | 23.8  | 35.8 |
| 229       | 19.9  | 15.6  | 23.4 |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.257 ng

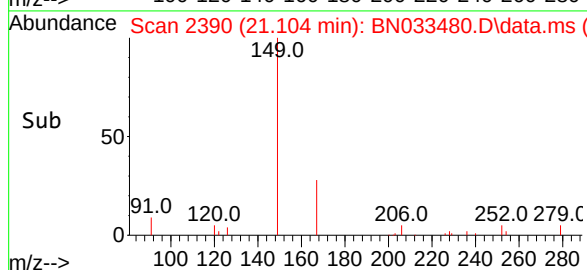
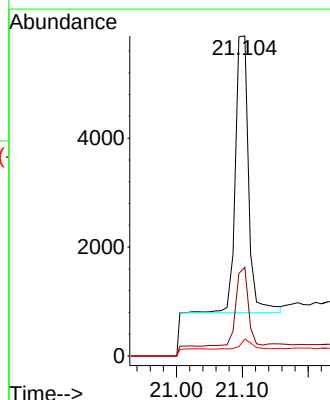
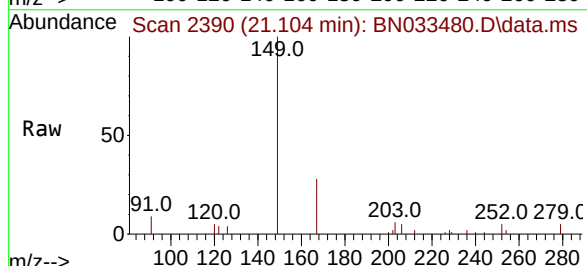
RT: 21.104 min Scan# 2390

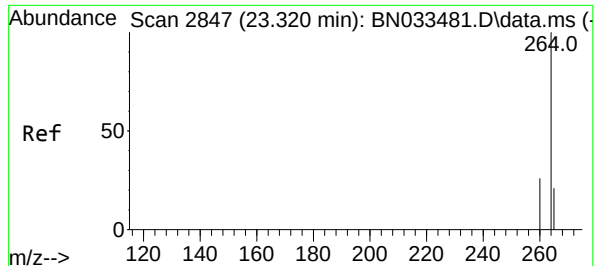
Delta R.T. 0.009 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 149   | Resp: | 7125 |
| Ion Ratio | Lower | Upper |      |
| 149       | 100   |       |      |
| 167       | 26.5  | 21.5  | 32.3 |
| 279       | 2.9   | 2.2   | 3.2  |





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.323 min Scan# 2848

Delta R.T. 0.003 min

Lab File: BN033480.D

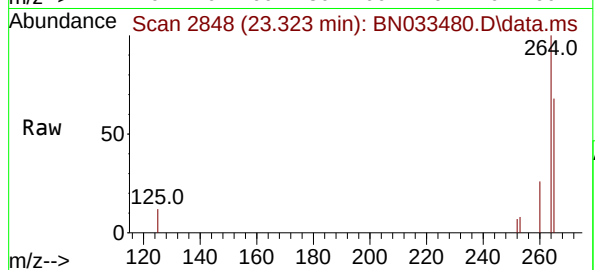
Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.2



Tgt Ion:264 Resp: 15110

Ion Ratio Lower Upper

264 100

260 26.3 20.8 31.2

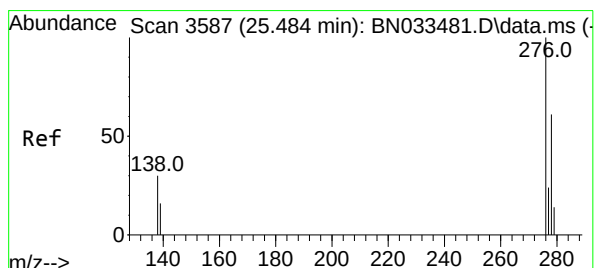
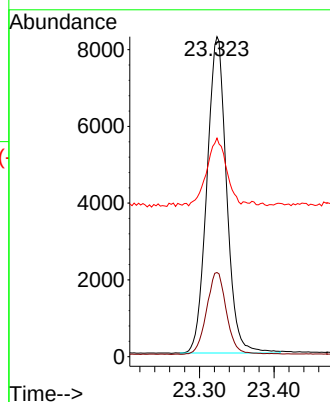
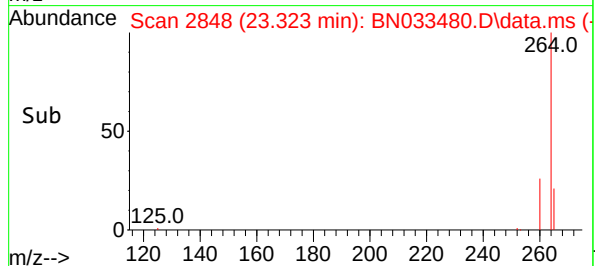
265 68.3 52.2 78.2

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.191 ng

RT: 25.481 min Scan# 3586

Delta R.T. -0.003 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

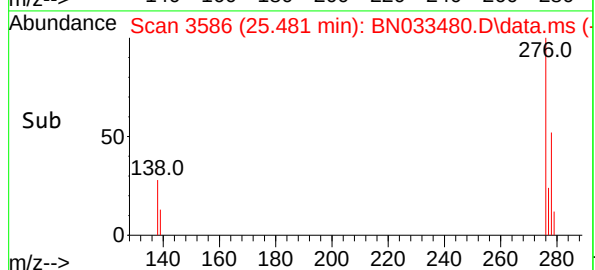
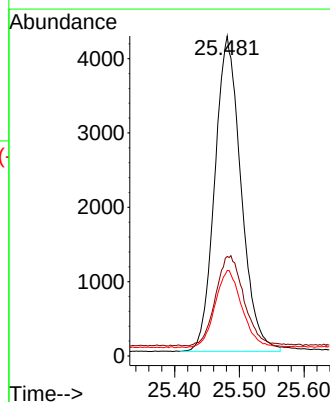
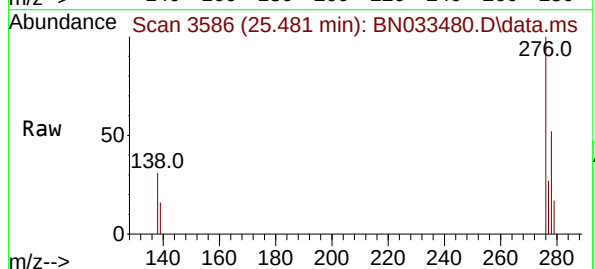
Tgt Ion:276 Resp: 11942

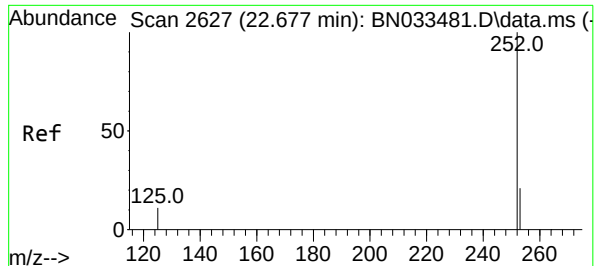
Ion Ratio Lower Upper

276 100

138 30.9 24.4 36.6

277 24.9 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.192 ng

RT: 22.677 min Scan# 2627

Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

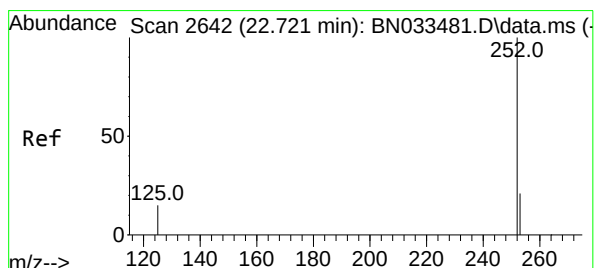
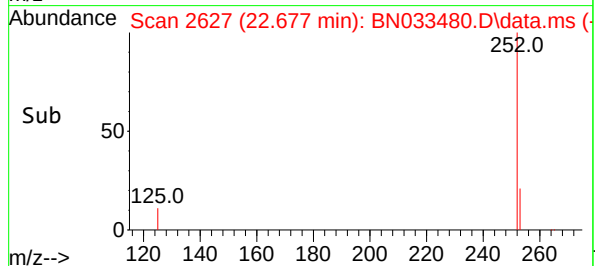
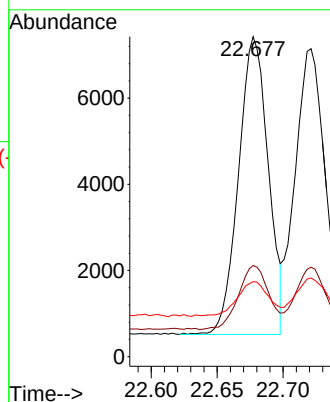
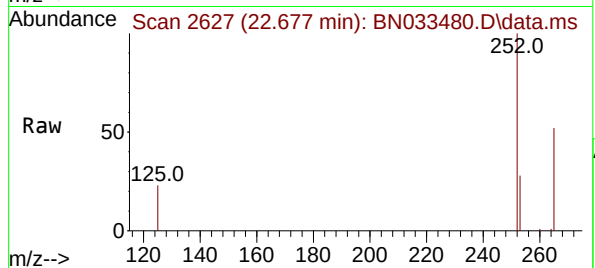
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 1082 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 28.5  | 19.8  | 29.8 |
| 125       | 23.5  | 13.9  | 20.9 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#38

Benzo(k)fluoranthene

Concen: 0.184 ng m

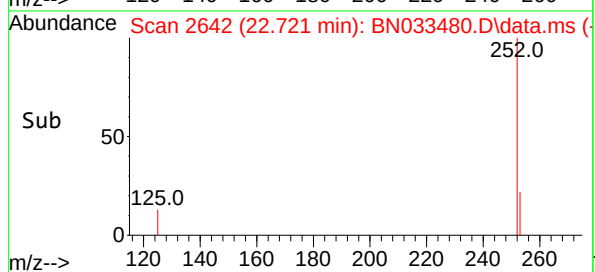
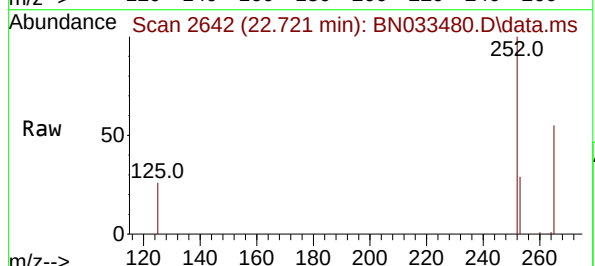
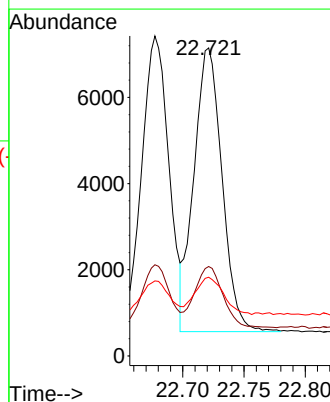
RT: 22.721 min Scan# 2642

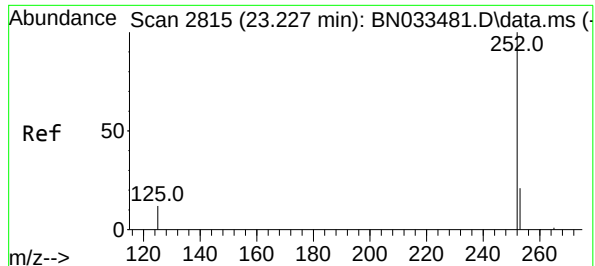
Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 10527 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 29.0  | 19.8  | 29.8  |
| 125       | 25.6  | 15.8  | 23.8  |





#39

Benzo(a)pyrene

Concen: 0.184 ng

RT: 23.227 min Scan# 2815

Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

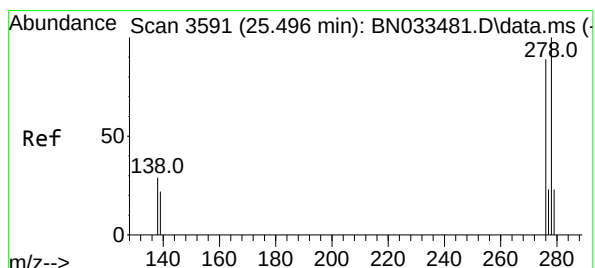
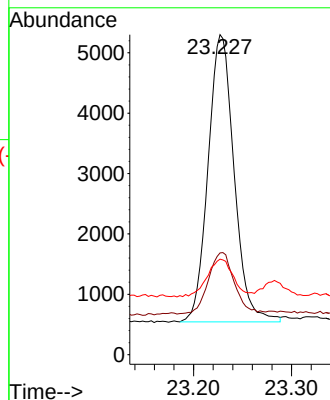
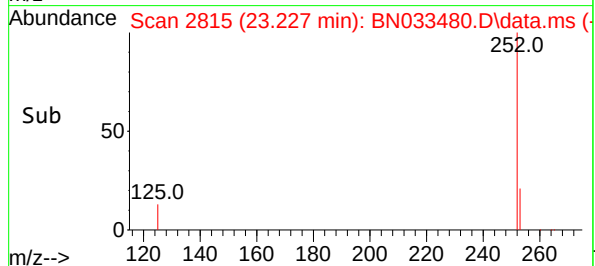
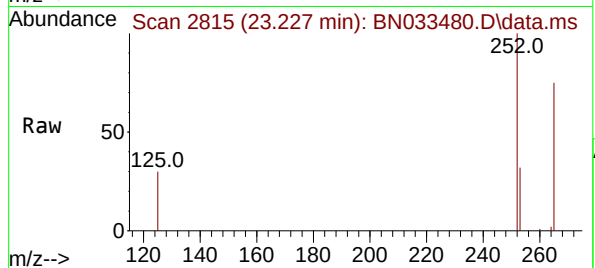
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 8779 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 31.8  | 21.5  | 32.3 |
| 125       | 29.9  | 17.0  | 25.4 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/21/2024

Supervised By :mohammad ahmed 08/22/2024



#40

Dibenzo(a,h)anthracene

Concen: 0.193 ng

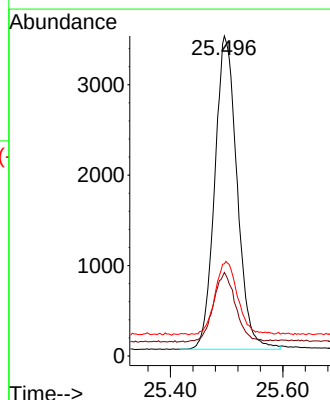
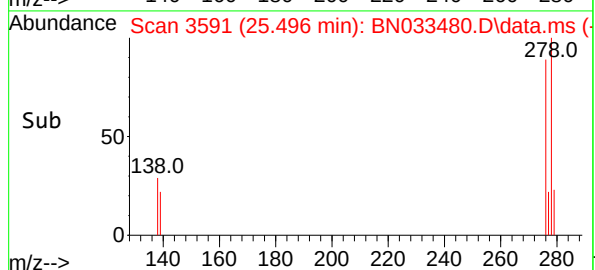
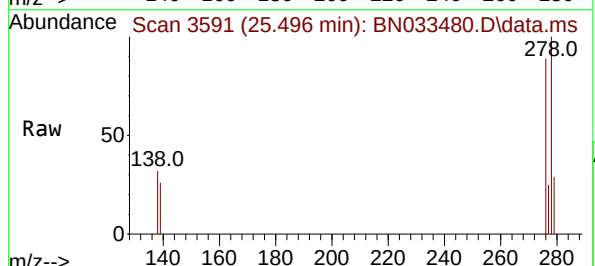
RT: 25.496 min Scan# 3591

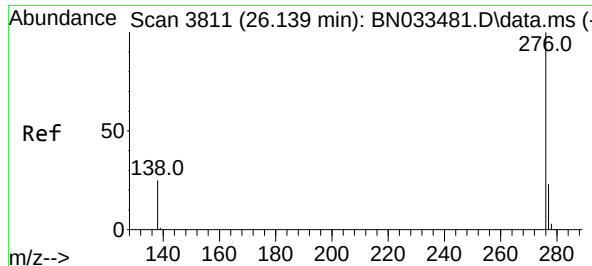
Delta R.T. 0.000 min

Lab File: BN033480.D

Acq: 19 Aug 2024 16:52

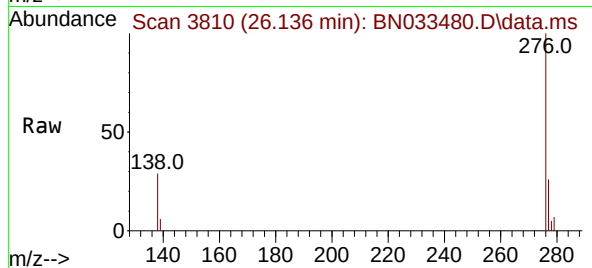
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 278   | Resp: | 9553 |
| Ion Ratio | Lower | Upper |      |
| 278       | 100   |       |      |
| 139       | 26.1  | 19.1  | 28.7 |
| 279       | 28.8  | 21.0  | 31.4 |





#41  
Benzo(g,h,i)perylene  
Concen: 0.190 ng  
RT: 26.136 min Scan# 3811  
Delta R.T. -0.003 min  
Lab File: BN033480.D  
Acq: 19 Aug 2024 16:52

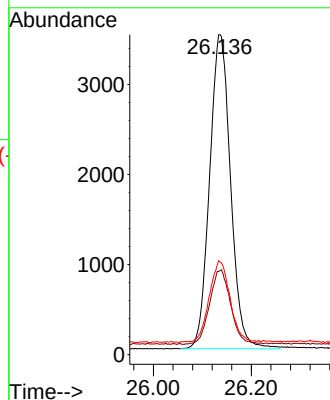
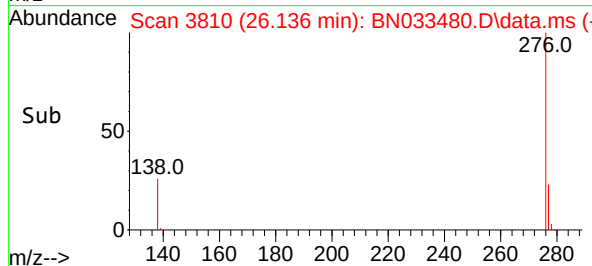
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:276 Resp: 10368  
Ion Ratio Lower Upper  
276 100  
277 26.2 19.7 29.5  
138 29.0 21.8 32.6

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/21/2024  
Supervised By :mohammad ahmed 08/22/2024



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033481.D  
 Acq On : 19 Aug 2024 17:28  
 Operator : MA/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

Quant Time: Aug 19 23:22:39 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 19 23:20:26 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)   |
|-------------------------------|--------|------|----------|-------|-------|------------|
| Internal Standards            |        |      |          |       |       |            |
| 1) 1,4-Dichlorobenzene-d4     | 7.559  | 152  | 12893    | 0.400 | ng    | 0.00       |
| 7) Naphthalene-d8             | 10.314 | 136  | 24390    | 0.400 | ng    | 0.00       |
| 13) Acenaphthene-d10          | 14.189 | 164  | 12011    | 0.400 | ng    | 0.00       |
| 19) Phenanthrene-d10          | 16.942 | 188  | 24497    | 0.400 | ng    | 0.00       |
| 29) Chrysene-d12              | 21.148 | 240  | 16119    | 0.400 | ng    | 0.00       |
| 35) Perylene-d12              | 23.320 | 264  | 15903    | 0.400 | ng    | 0.00       |
| System Monitoring Compounds   |        |      |          |       |       |            |
| 4) 2-Fluorophenol             | 5.191  | 112  | 16332    | 0.450 | ng    | 0.00       |
| 5) Phenol-d6                  | 6.743  | 99   | 17540    | 0.370 | ng    | 0.00       |
| 8) Nitrobenzene-d5            | 8.691  | 82   | 7402     | 0.401 | ng    | 0.00       |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 12006    | 0.327 | ng    | 0.00       |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 2219     | 0.362 | ng    | 0.00       |
| 15) 2-Fluorobiphenyl          | 12.810 | 172  | 17864    | 0.367 | ng    | 0.00       |
| 27) Fluoranthene-d10          | 18.984 | 212  | 21323    | 0.332 | ng    | 0.00       |
| 31) Terphenyl-d14             | 19.597 | 244  | 13894    | 0.447 | ng    | 0.00       |
| Target Compounds              |        |      |          |       |       |            |
| 2) 1,4-Dioxane                | 3.190  | 88   | 4244     | 0.306 | ng    | Qvalue 100 |
| 3) n-Nitrosodimethylamine     | 3.479  | 42   | 5877     | 0.327 | ng    | 100        |
| 6) bis(2-Chloroethyl)ether    | 6.996  | 93   | 9709     | 0.263 | ng    | 100        |
| 9) Naphthalene                | 10.368 | 128  | 23095    | 0.349 | ng    | 100        |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 4688     | 0.369 | ng    | # 100      |
| 12) 2-Methylnaphthalene       | 11.990 | 142  | 14284    | 0.323 | ng    | 100        |
| 16) Acenaphthylene            | 13.911 | 152  | 18435    | 0.334 | ng    | 100        |
| 17) Acenaphthene              | 14.253 | 154  | 13259    | 0.349 | ng    | 100        |
| 18) Fluorene                  | 15.247 | 166  | 16584    | 0.334 | ng    | 100        |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 1253     | 0.410 | ng    | 100        |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 5430     | 0.372 | ng    | 100        |
| 22) Hexachlorobenzene         | 16.247 | 284  | 6099     | 0.374 | ng    | 100        |
| 23) Atrazine                  | 16.420 | 200  | 4249     | 0.365 | ng    | 100        |
| 24) Pentachlorophenol         | 16.594 | 266  | 2368     | 0.354 | ng    | 100        |
| 25) Phenanthrene              | 16.979 | 178  | 25297    | 0.361 | ng    | 100        |
| 26) Anthracene                | 17.066 | 178  | 21458    | 0.347 | ng    | 100        |
| 28) Fluoranthene              | 19.012 | 202  | 27103    | 0.319 | ng    | 100        |
| 30) Pyrene                    | 19.374 | 202  | 27468    | 0.423 | ng    | 100        |
| 32) Benzo(a)anthracene        | 21.130 | 228  | 21232    | 0.355 | ng    | 100        |
| 33) Chrysene                  | 21.184 | 228  | 21457    | 0.360 | ng    | 100        |
| 34) Bis(2-ethylhexyl)phtha... | 21.095 | 149  | 13125    | 0.459 | ng    | 98         |
| 36) Indeno(1,2,3-cd)pyrene    | 25.484 | 276  | 24410    | 0.370 | ng    | 100        |
| 37) Benzo(b)fluoranthene      | 22.677 | 252  | 21250    | 0.358 | ng    | 100        |
| 38) Benzo(k)fluoranthene      | 22.721 | 252  | 21063    | 0.350 | ng    | 100        |
| 39) Benzo(a)pyrene            | 23.227 | 252  | 17428    | 0.348 | ng    | 100        |
| 40) Dibenzo(a,h)anthracene    | 25.496 | 278  | 19569    | 0.375 | ng    | 100        |
| 41) Benzo(g,h,i)perylene      | 26.139 | 276  | 20604    | 0.359 | ng    | 100        |

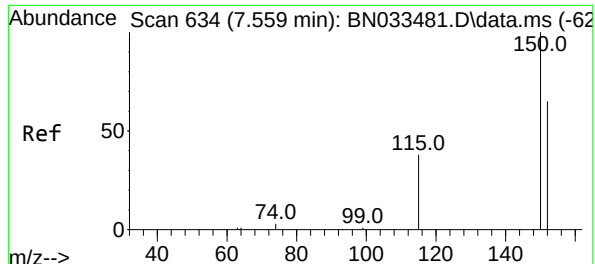
(#) = qualifier out of range (m) = manual integration (+) = signals summed

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
SSTDICCC0.4

- 1
- 2
- 3
- 4
- 5
- 6
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- 9
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- 11
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- 14
- 15
- 16
- 17
- 18



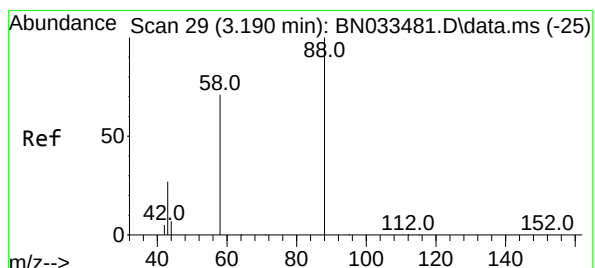
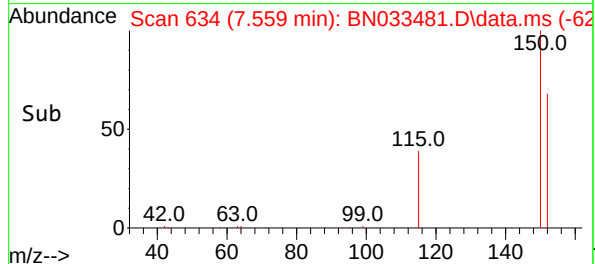
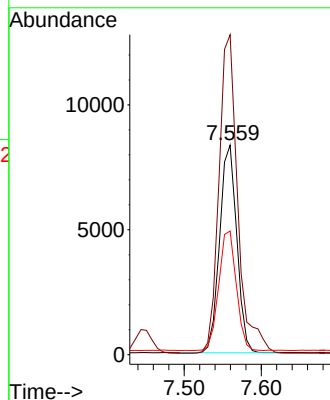
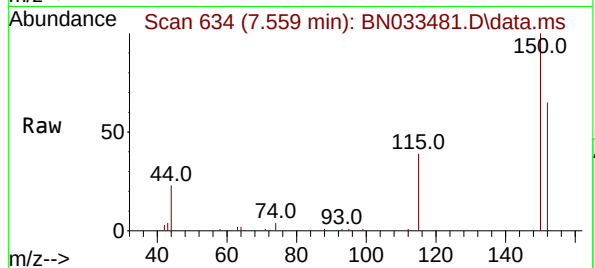




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.559 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

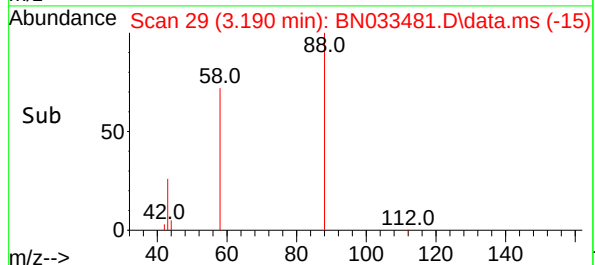
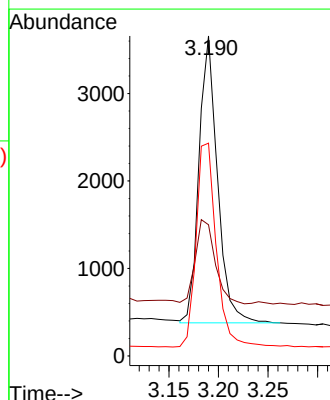
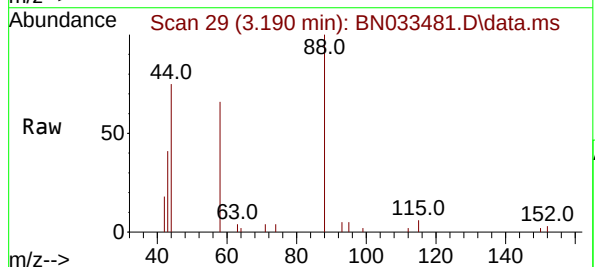
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

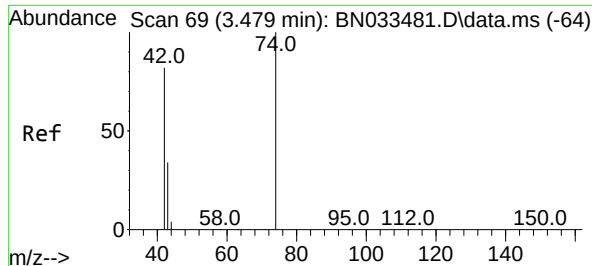
Tgt Ion:152 Resp: 12893  
Ion Ratio Lower Upper  
152 100  
150 152.7 122.2 183.2  
115 59.0 47.2 70.8



#2  
1,4-Dioxane  
Concen: 0.306 ng  
RT: 3.190 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

Tgt Ion: 88 Resp: 4244  
Ion Ratio Lower Upper  
88 100  
43 31.2 25.0 37.4  
58 78.1 62.5 93.7

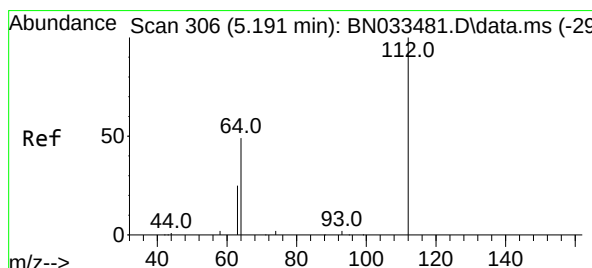
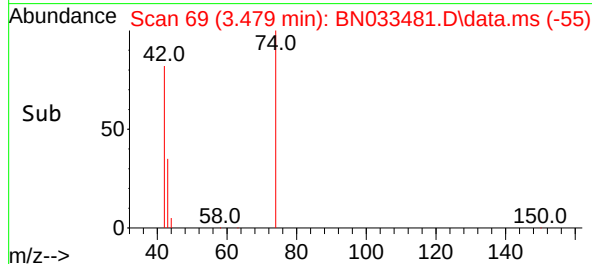
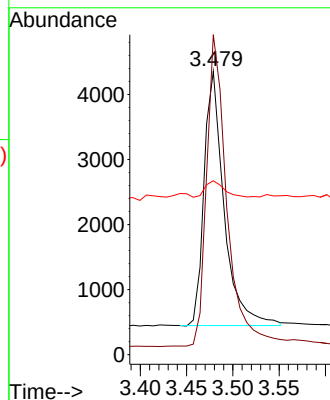
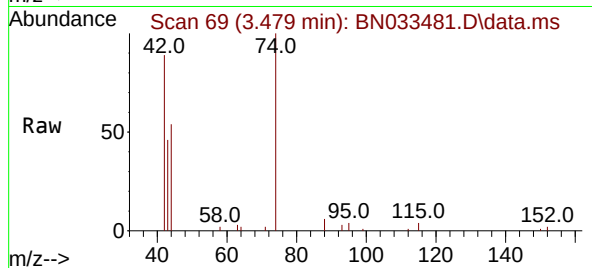




#3  
n-Nitrosodimethylamine  
Concen: 0.327 ng  
RT: 3.479 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

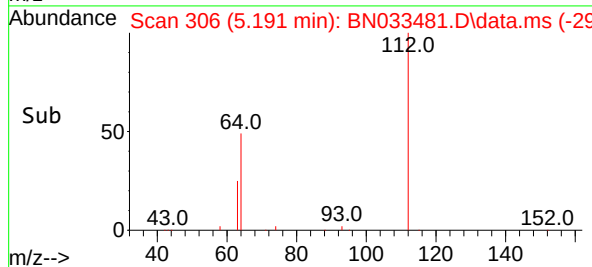
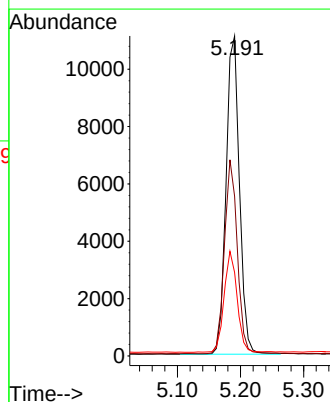
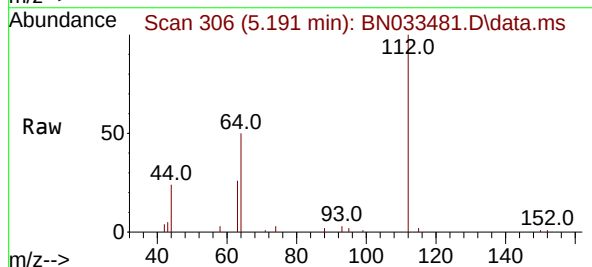
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

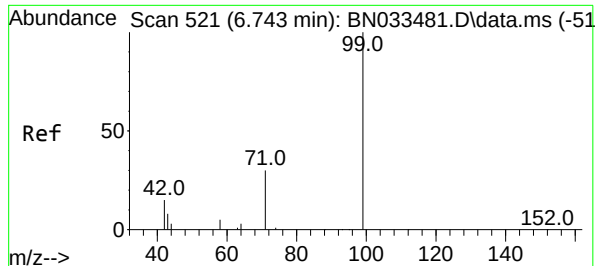
Tgt Ion: 42 Resp: 5877  
Ion Ratio Lower Upper  
42 100  
74 125.2 100.2 150.2  
44 6.6 5.3 7.9



#4  
2-Fluorophenol  
Concen: 0.450 ng  
RT: 5.191 min Scan# 306  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

Tgt Ion: 112 Resp: 16332  
Ion Ratio Lower Upper  
112 100  
64 59.0 47.1 70.7  
63 31.0 24.9 37.3

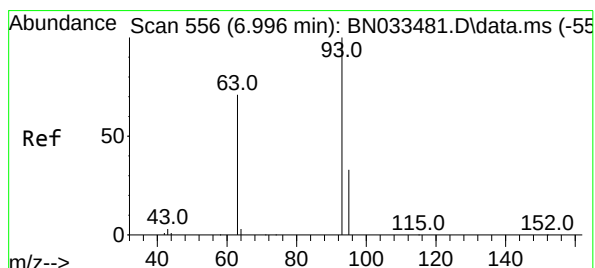
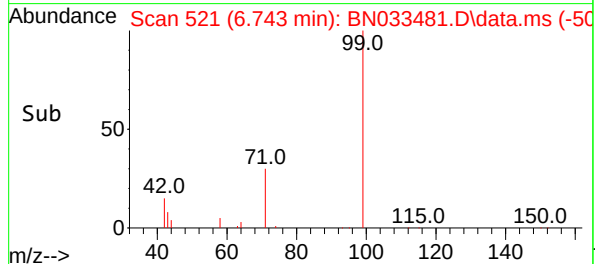
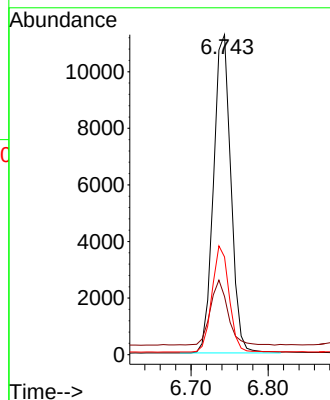
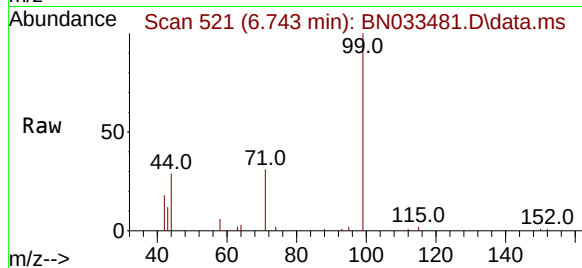




#5  
Phenol-d6  
Concen: 0.370 ng  
RT: 6.743 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

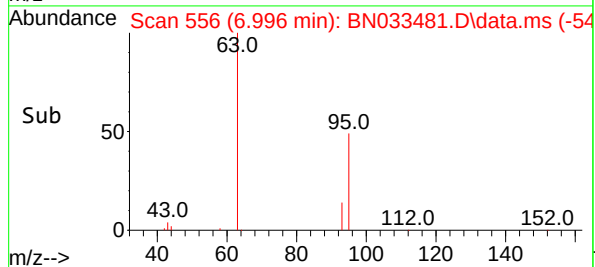
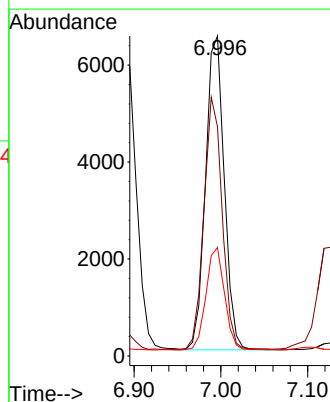
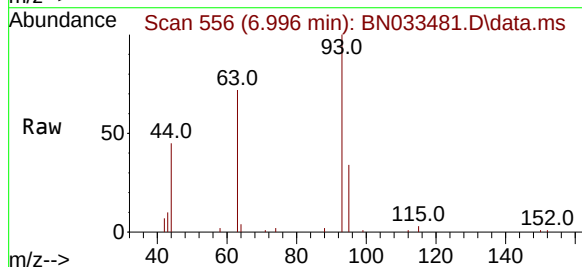
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

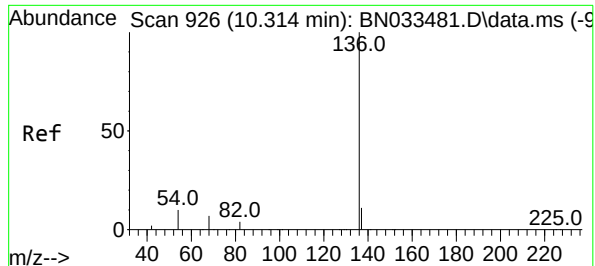
Tgt Ion: 99 Resp: 17540  
Ion Ratio Lower Upper  
99 100  
42 20.7 16.6 24.8  
71 32.9 26.2 39.4



#6  
bis(2-Chloroethyl)ether  
Concen: 0.263 ng  
RT: 6.996 min Scan# 556  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

Tgt Ion: 93 Resp: 9709  
Ion Ratio Lower Upper  
93 100  
63 78.6 63.0 94.4  
95 32.4 26.0 39.0

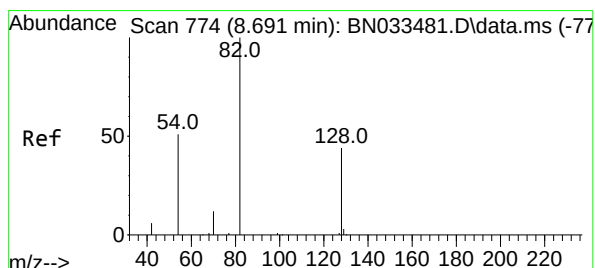
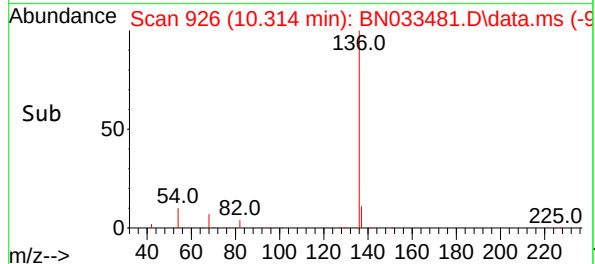
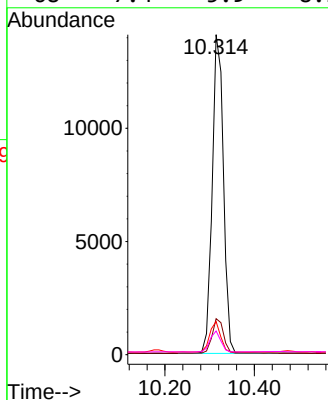
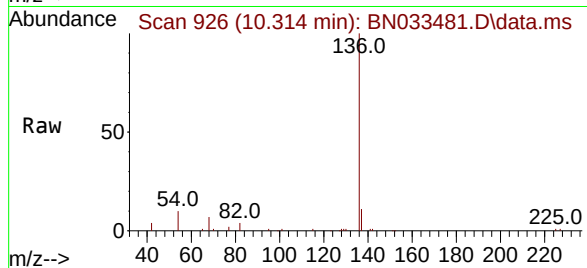




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

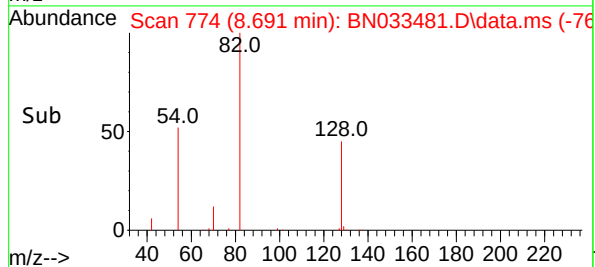
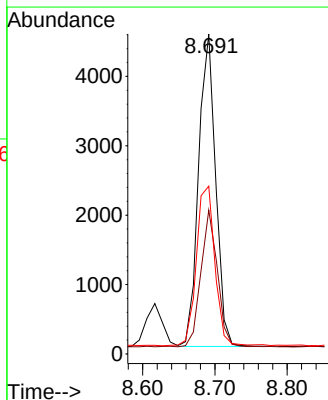
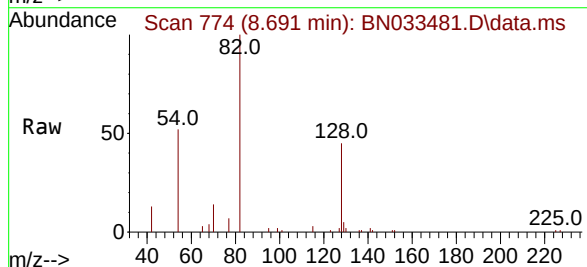
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

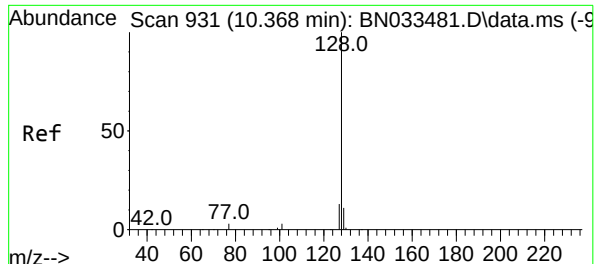
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 24390 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.3  | 9.0   | 13.6  |
| 54       | 10.4  | 8.3   | 12.5  |
| 68       | 7.4   | 5.9   | 8.9   |



#8  
Nitrobenzene-d5  
Concen: 0.401 ng  
RT: 8.691 min Scan# 774  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 7402  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 45.0  | 36.0  | 54.0  |
| 54       | 52.5  | 42.0  | 63.0  |





#9  
Naphthalene

Concen: 0.349 ng

RT: 10.368 min Scan# 91

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

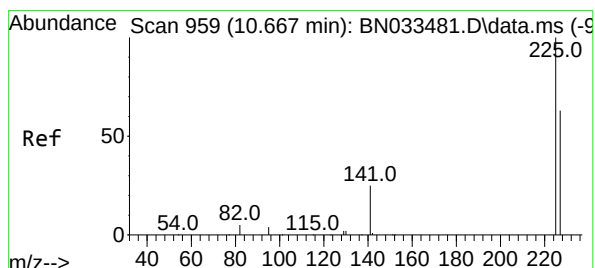
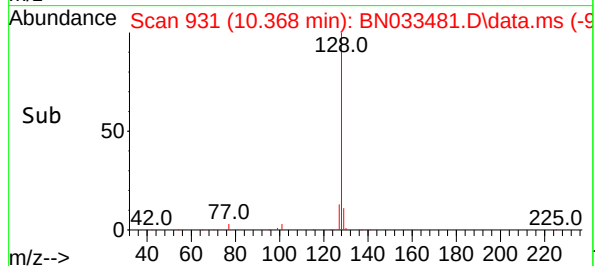
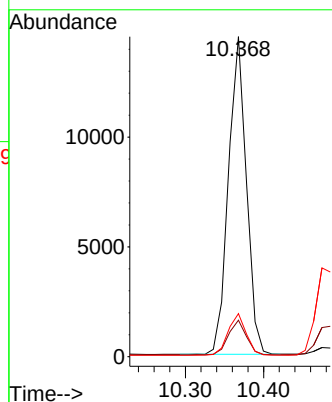
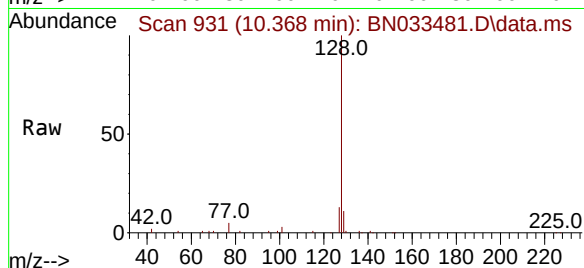
Tgt Ion:128 Resp: 23095

Ion Ratio Lower Upper

128 100

129 11.4 9.1 13.7

127 13.4 10.7 16.1



#10

Hexachlorobutadiene

Concen: 0.369 ng

RT: 10.667 min Scan# 959

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

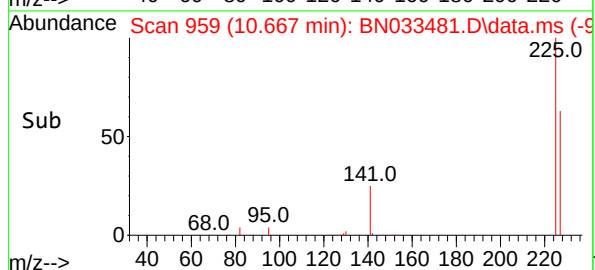
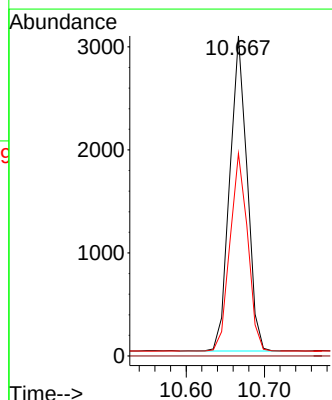
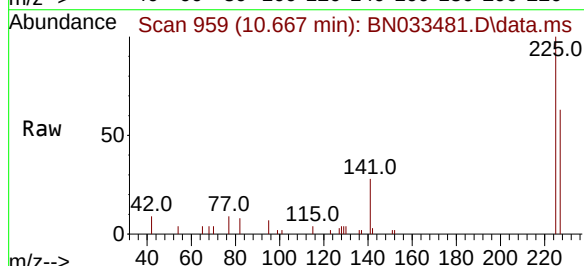
Tgt Ion:225 Resp: 4688

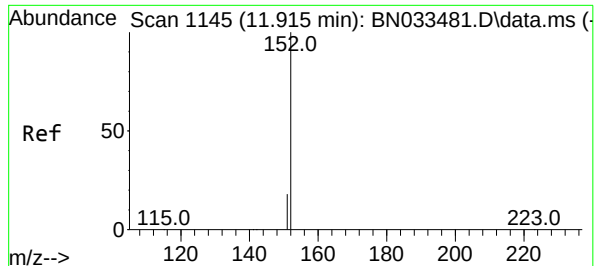
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 64.0 51.2 76.8

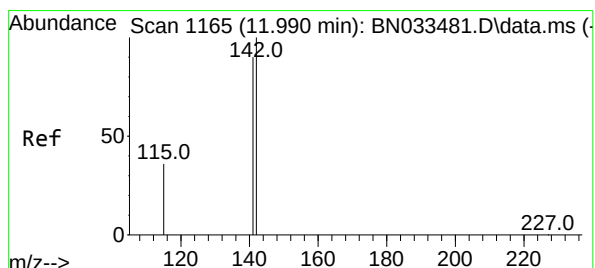
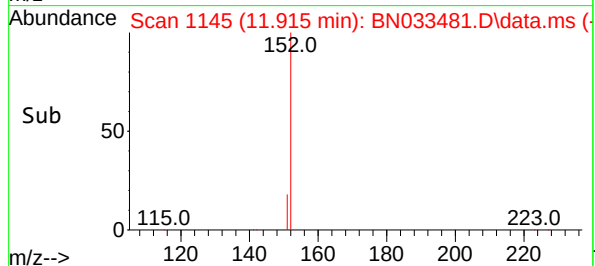
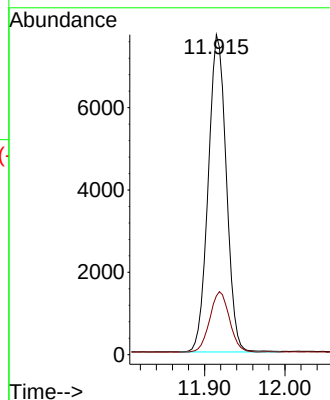
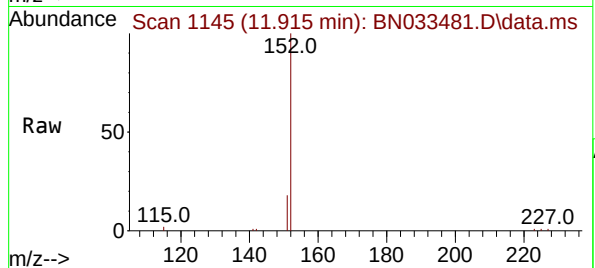




#11  
2-Methylnaphthalene-d10  
Concen: 0.327 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

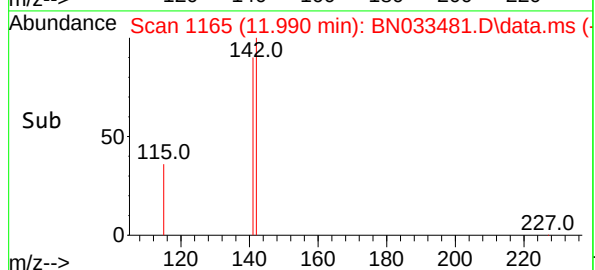
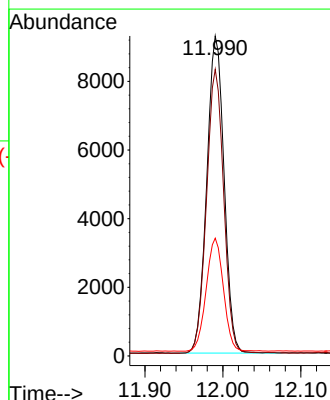
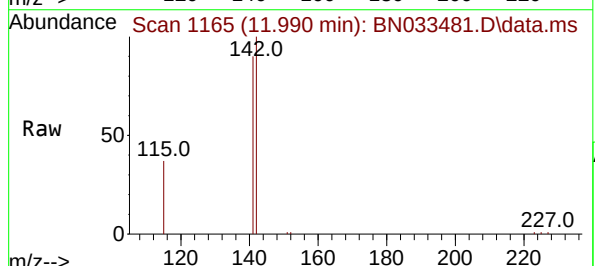
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

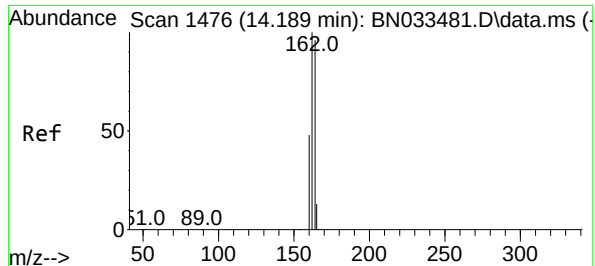
Tgt Ion:152 Resp: 12006  
Ion Ratio Lower Upper  
152 100  
151 20.8 16.6 25.0



#12  
2-Methylnaphthalene  
Concen: 0.323 ng  
RT: 11.990 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

Tgt Ion:142 Resp: 14284  
Ion Ratio Lower Upper  
142 100  
141 89.6 71.7 107.5  
115 36.8 29.4 44.2

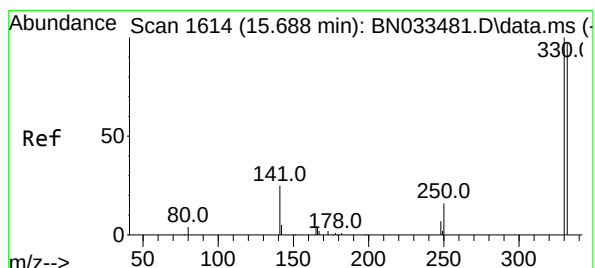
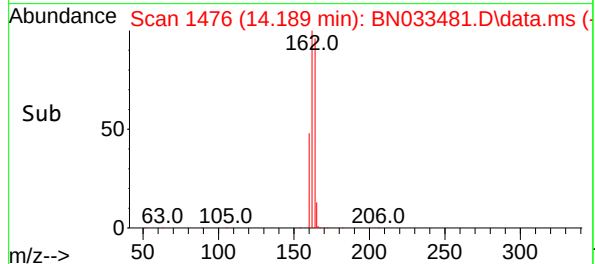
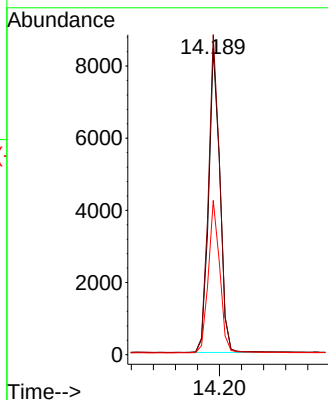
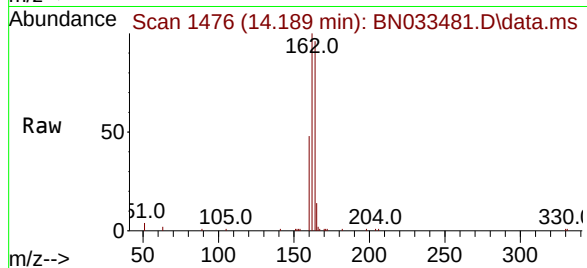




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.189 min Scan# 1476  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

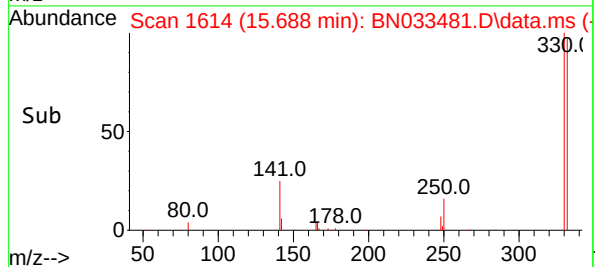
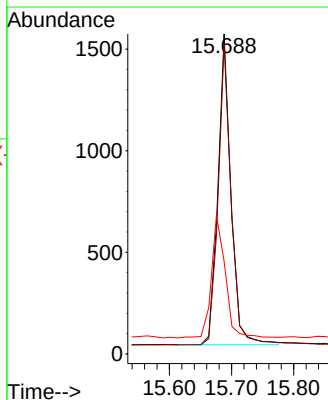
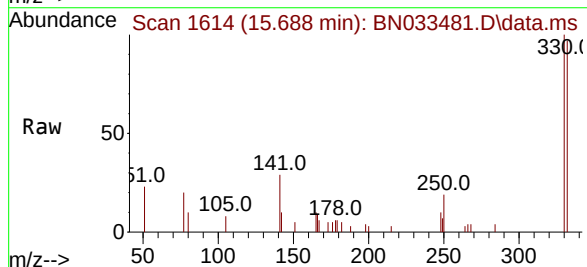
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

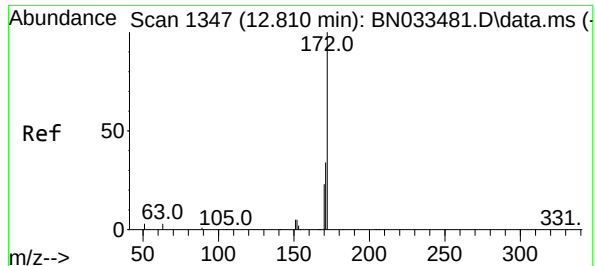
Tgt Ion:164 Resp: 12011  
Ion Ratio Lower Upper  
164 100  
162 104.4 83.5 125.3  
160 50.3 40.2 60.4



#14  
2,4,6-Tribromophenol  
Concen: 0.362 ng  
RT: 15.688 min Scan# 1614  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

Tgt Ion:330 Resp: 2219  
Ion Ratio Lower Upper  
330 100  
332 96.9 77.5 116.3  
141 42.4 33.9 50.9





#15

2-Fluorobiphenyl

Concen: 0.367 ng

RT: 12.810 min Scan# 1347

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

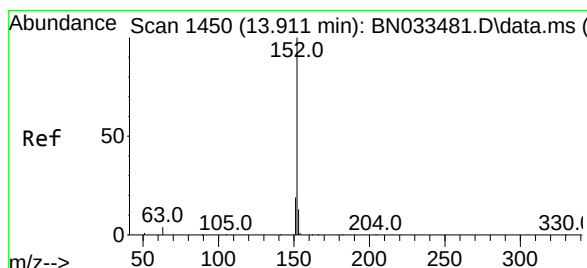
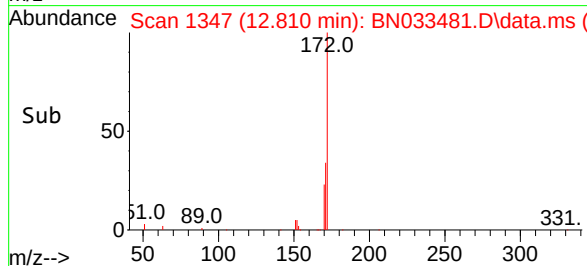
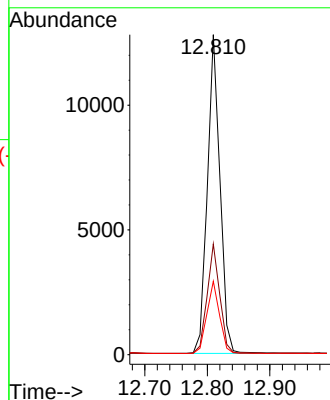
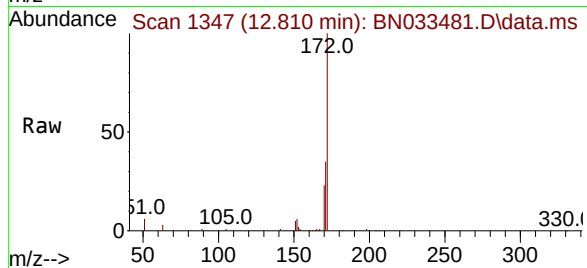
Tgt Ion:172 Resp: 17864

Ion Ratio Lower Upper

172 100

171 34.6 27.7 41.5

170 22.9 18.3 27.5



#16

Acenaphthylene

Concen: 0.334 ng

RT: 13.911 min Scan# 1450

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

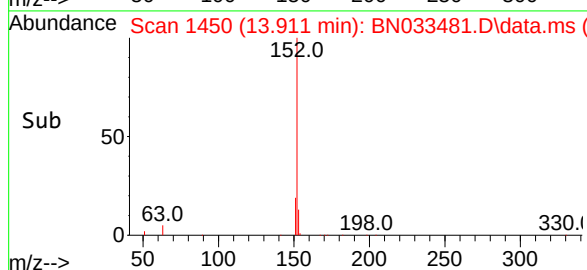
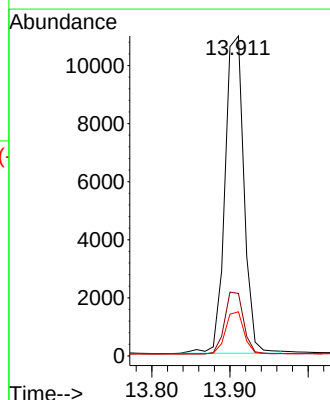
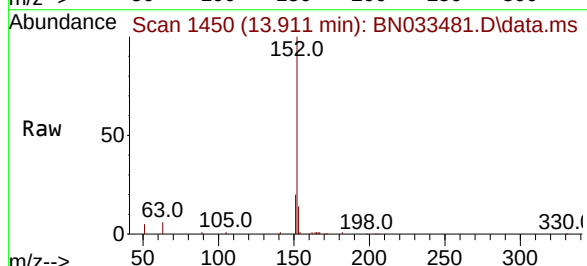
Tgt Ion:152 Resp: 18435

Ion Ratio Lower Upper

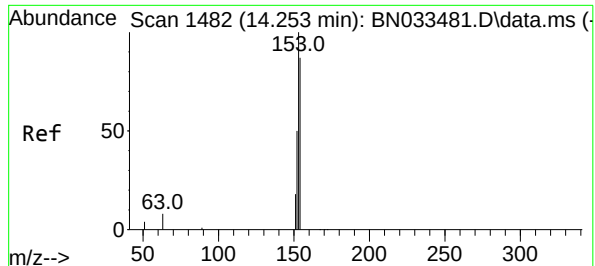
152 100

151 19.6 15.7 23.5

153 12.9 10.3 15.5







#17

Acenaphthene

Concen: 0.349 ng

RT: 14.253 min Scan# 1482

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

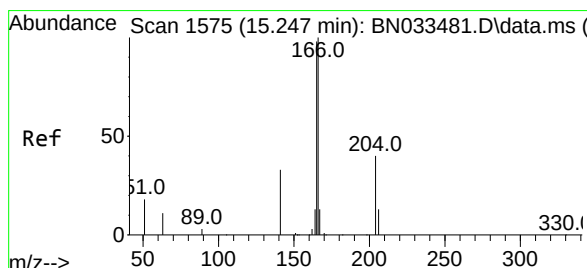
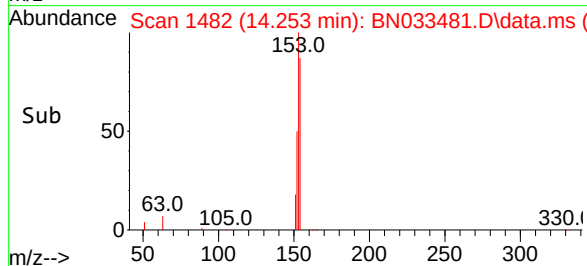
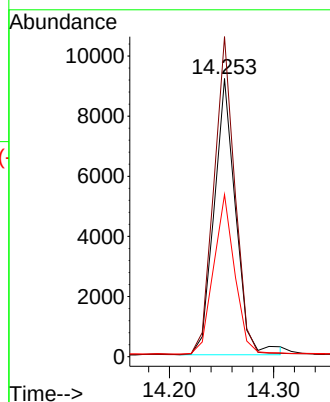
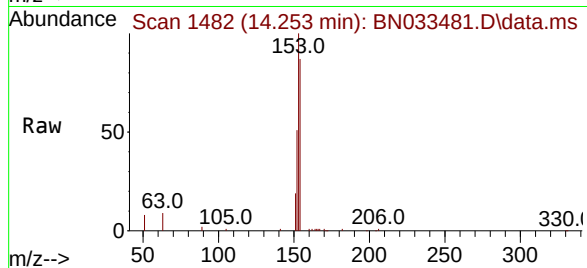
Tgt Ion:154 Resp: 13259

Ion Ratio Lower Upper

154 100

153 111.3 89.0 133.6

152 56.5 45.2 67.8



#18

Fluorene

Concen: 0.334 ng

RT: 15.247 min Scan# 1575

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

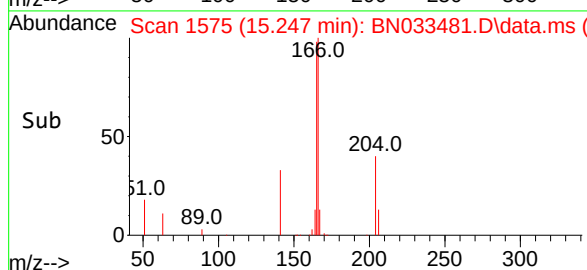
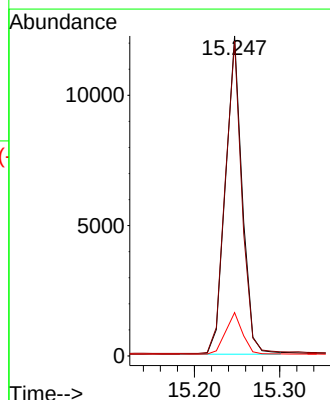
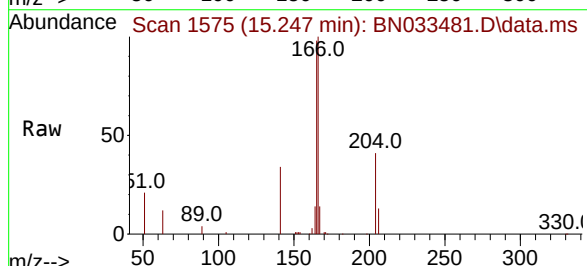
Tgt Ion:166 Resp: 16584

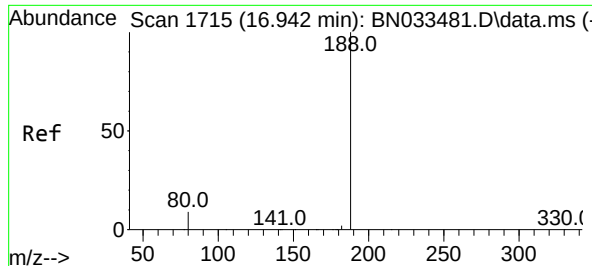
Ion Ratio Lower Upper

166 100

165 97.8 78.2 117.4

167 13.3 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.942 min Scan# 1715

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

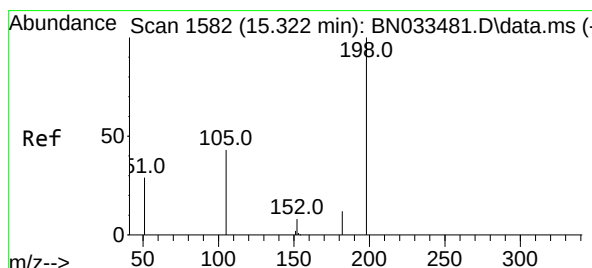
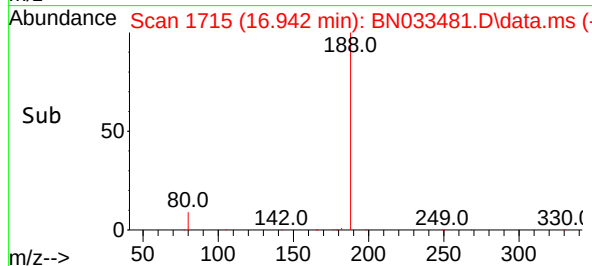
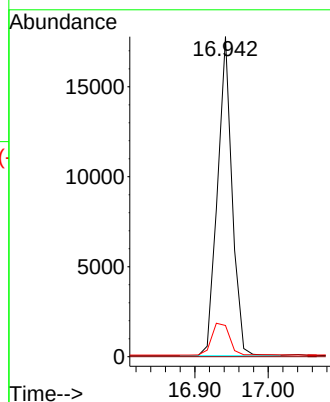
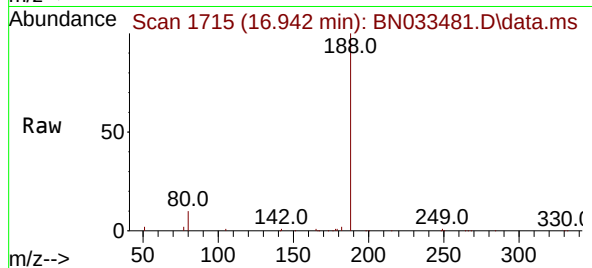
Tgt Ion:188 Resp: 24497

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.8 7.8 11.8



#20

4,6-Dinitro-2-methylphenol

Concen: 0.410 ng

RT: 15.322 min Scan# 1582

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

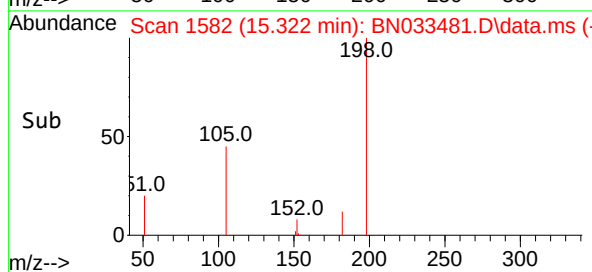
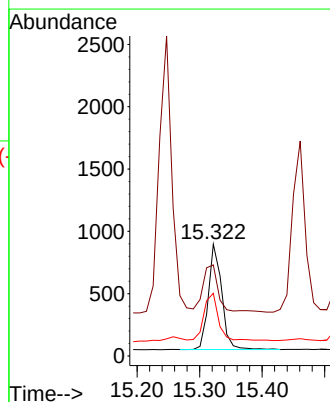
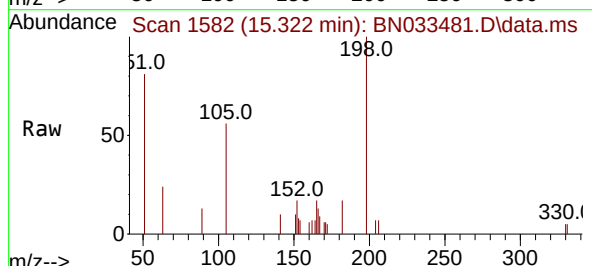
Tgt Ion:198 Resp: 1253

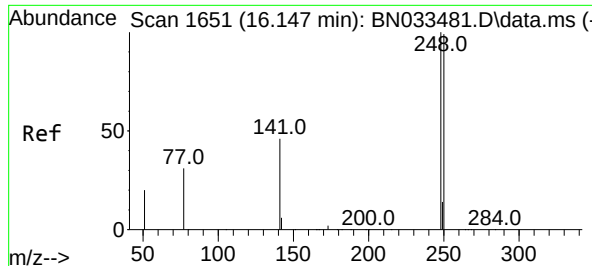
Ion Ratio Lower Upper

198 100

51 81.4 65.1 97.7

105 56.0 44.8 67.2

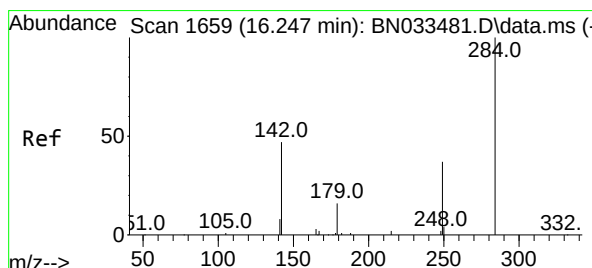
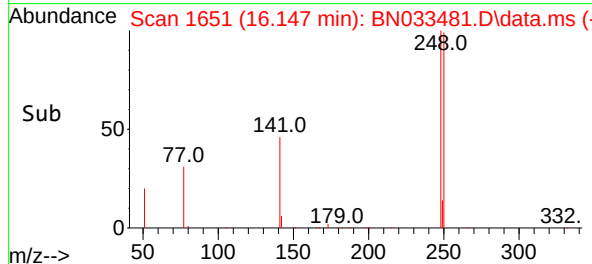
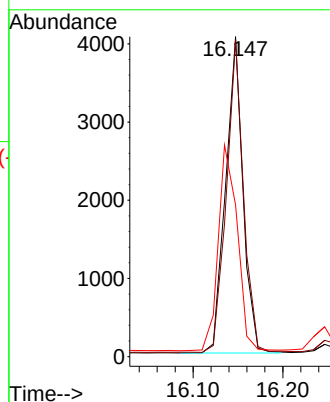
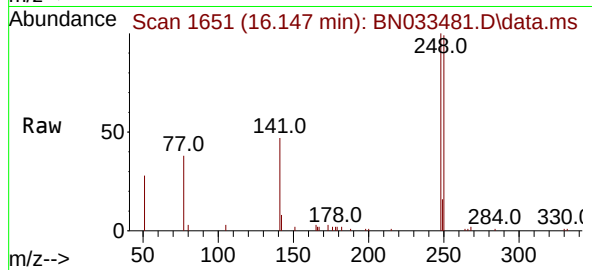




#21  
4-Bromophenyl-phenylether  
Concen: 0.372 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

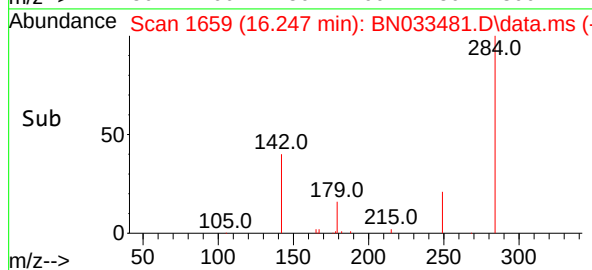
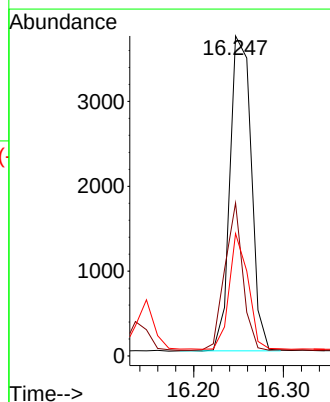
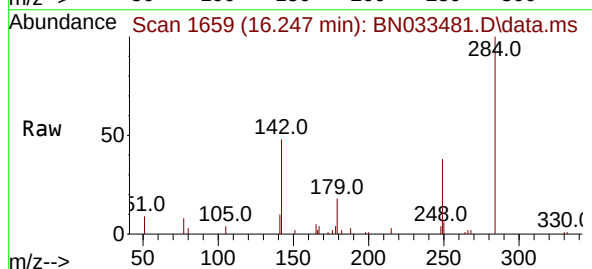
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

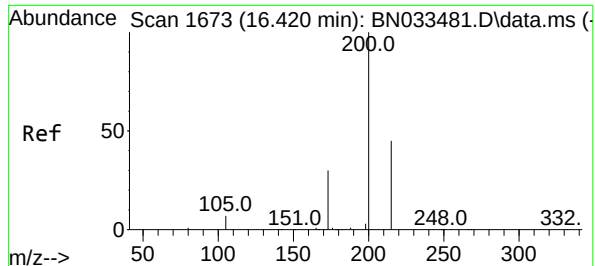
Tgt Ion:248 Resp: 5430  
Ion Ratio Lower Upper  
248 100  
250 99.0 79.2 118.8  
141 47.4 37.9 56.9



#22  
Hexachlorobenzene  
Concen: 0.374 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

Tgt Ion:284 Resp: 6099  
Ion Ratio Lower Upper  
284 100  
142 39.7 31.8 47.6  
249 32.5 26.0 39.0





#23

Atrazine

Concen: 0.365 ng

RT: 16.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

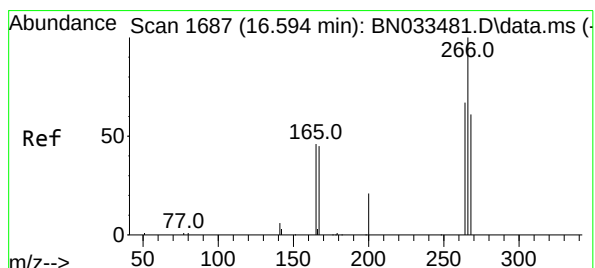
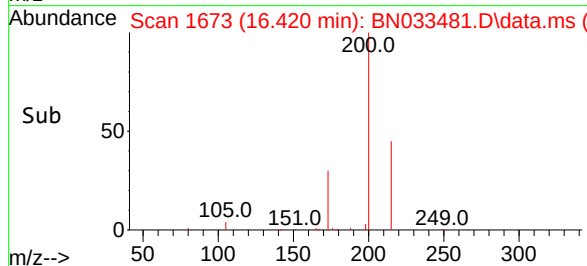
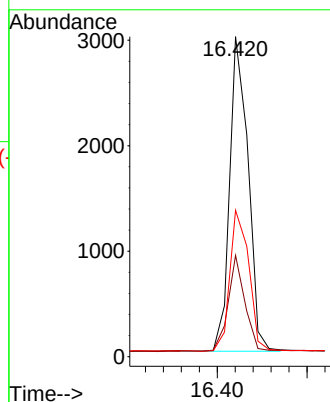
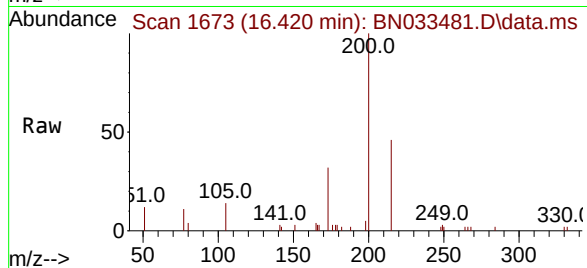
Tgt Ion:200 Resp: 4249

Ion Ratio Lower Upper

200 100

173 31.6 25.3 37.9

215 45.7 36.6 54.8



#24

Pentachlorophenol

Concen: 0.354 ng

RT: 16.594 min Scan# 1687

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

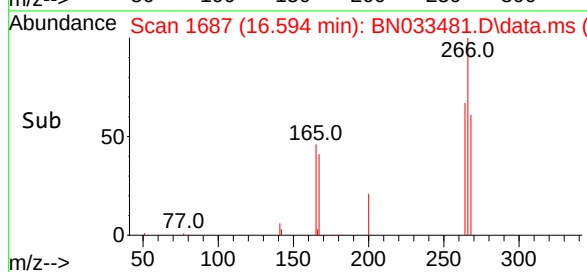
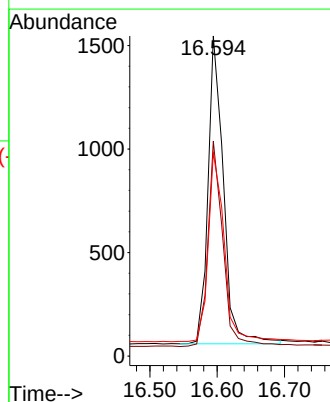
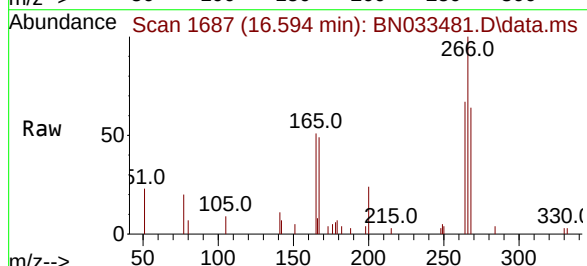
Tgt Ion:266 Resp: 2368

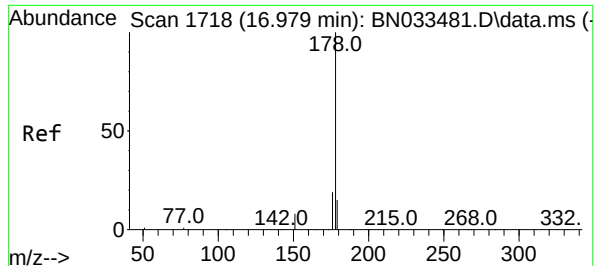
Ion Ratio Lower Upper

266 100

264 64.9 51.9 77.9

268 63.7 51.0 76.4

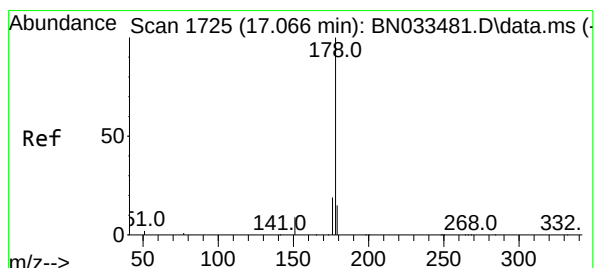
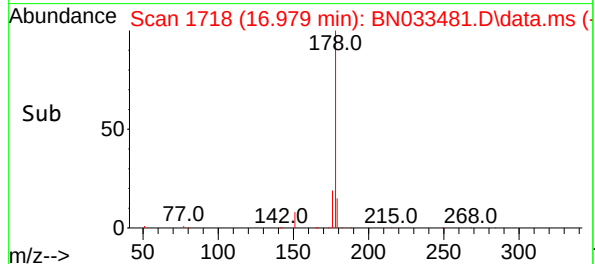
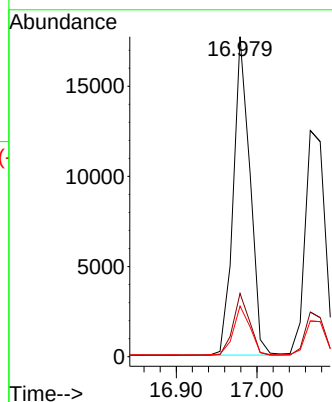
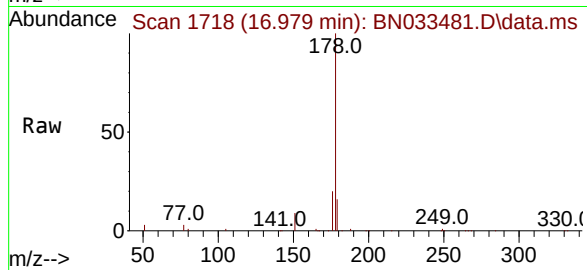




#25  
Phenanthrene  
Concen: 0.361 ng  
RT: 16.979 min Scan# 1718  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

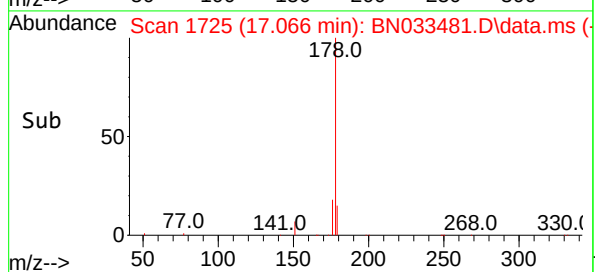
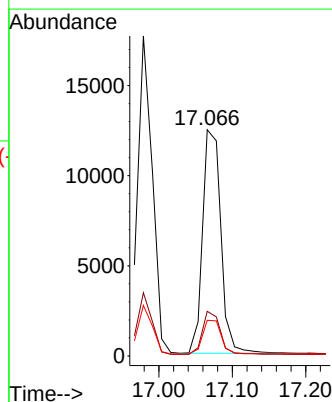
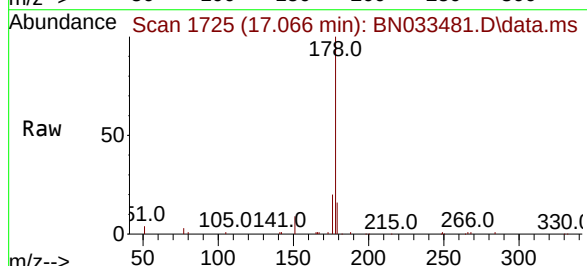
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

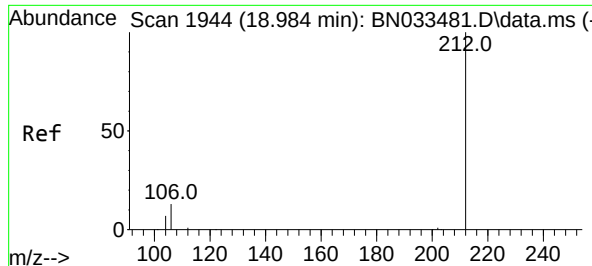
Tgt Ion:178 Resp: 25297  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.3 22.9  
179 15.4 12.3 18.5



#26  
Anthracene  
Concen: 0.347 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

Tgt Ion:178 Resp: 21458  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.0 22.6  
179 15.5 12.4 18.6





#27

Fluoranthene-d10

Concen: 0.332 ng

RT: 18.984 min Scan# 1944

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

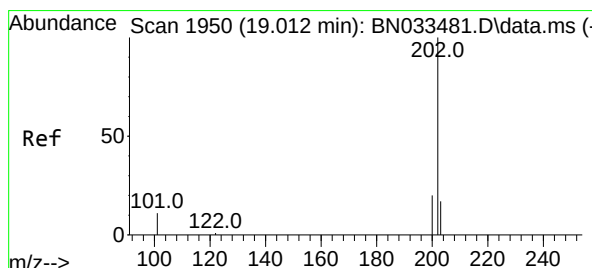
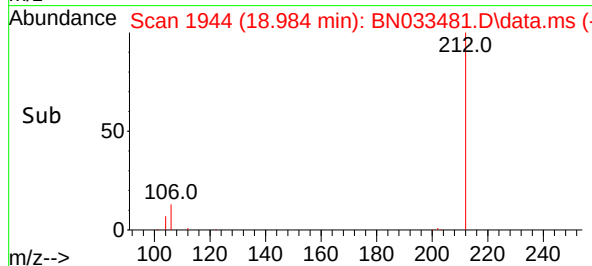
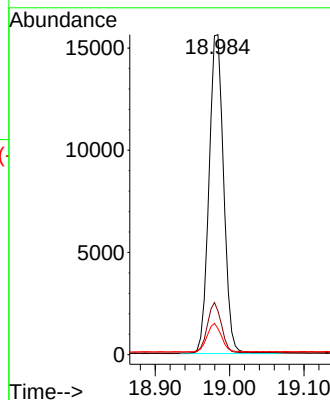
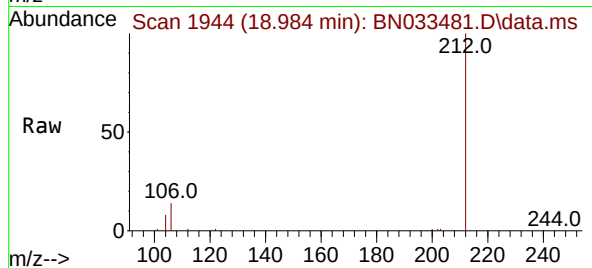
Tgt Ion:212 Resp: 21323

Ion Ratio Lower Upper

212 100

106 15.4 12.3 18.5

104 8.7 7.0 10.4



#28

Fluoranthene

Concen: 0.319 ng

RT: 19.012 min Scan# 1950

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

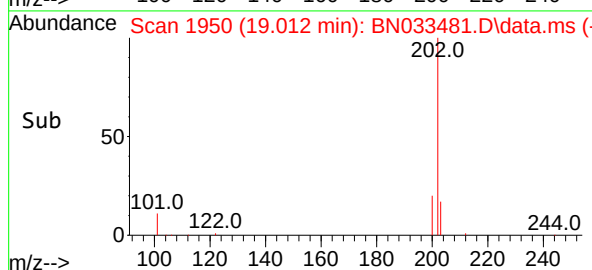
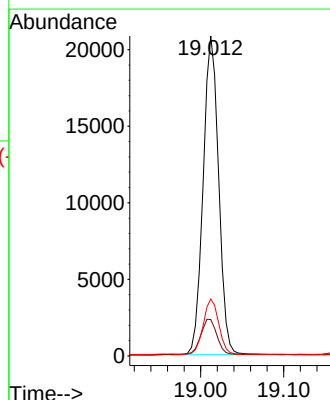
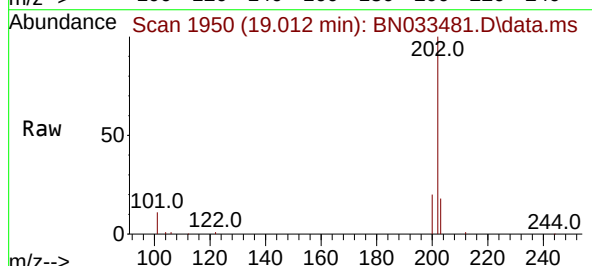
Tgt Ion:202 Resp: 27103

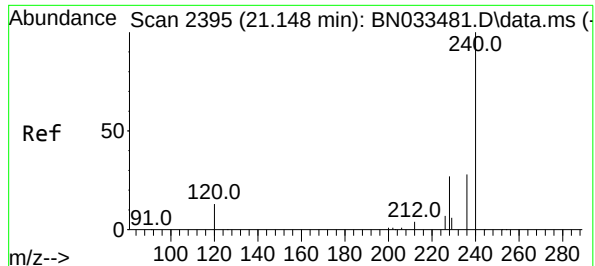
Ion Ratio Lower Upper

202 100

101 11.9 9.5 14.3

203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

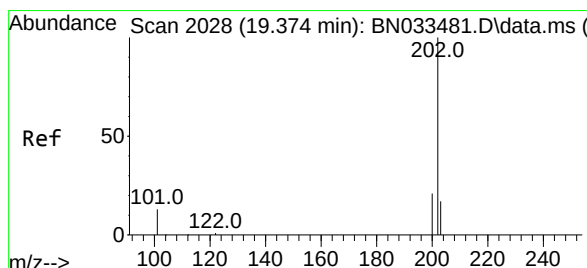
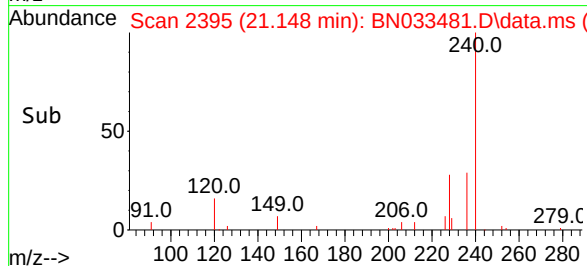
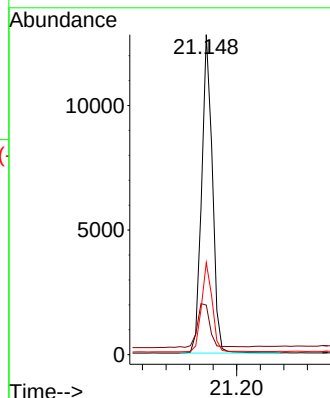
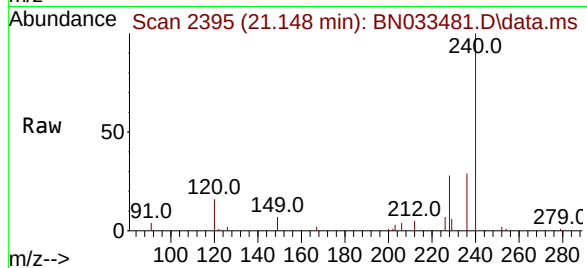
Tgt Ion:240 Resp: 16119

Ion Ratio Lower Upper

240 100

120 15.5 12.4 18.6

236 28.8 23.0 34.6



#30

Pyrene

Concen: 0.423 ng

RT: 19.374 min Scan# 2028

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

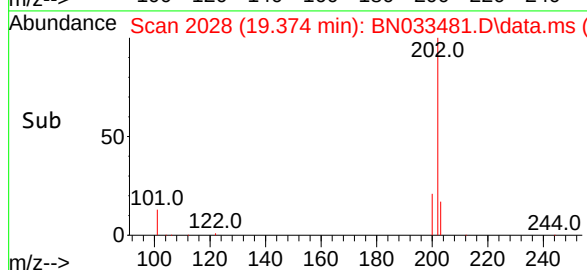
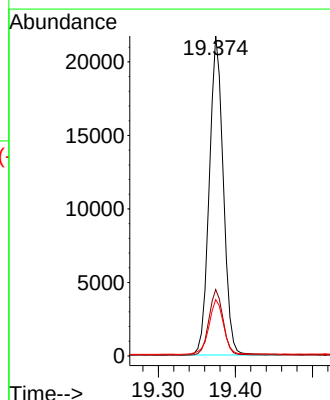
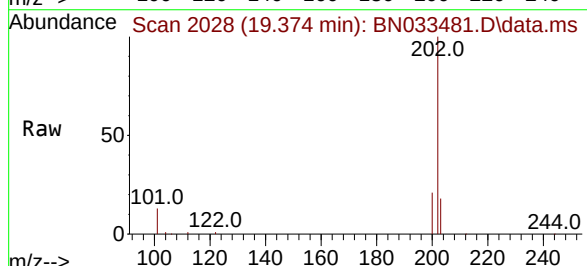
Tgt Ion:202 Resp: 27468

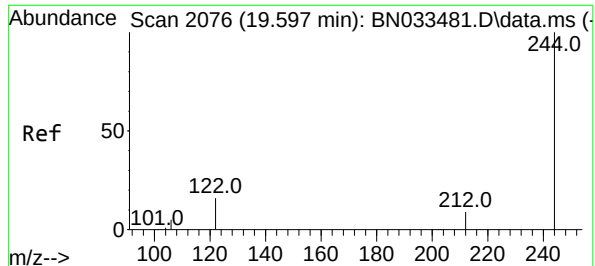
Ion Ratio Lower Upper

202 100

200 20.7 16.6 24.8

203 17.8 14.2 21.4

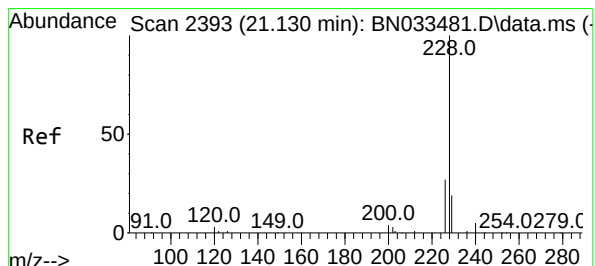
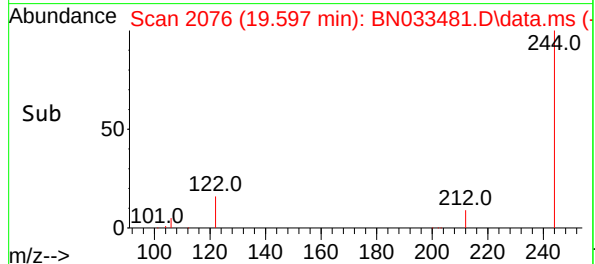
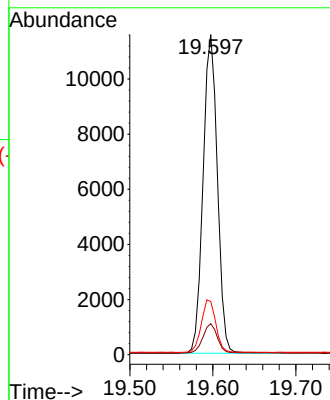
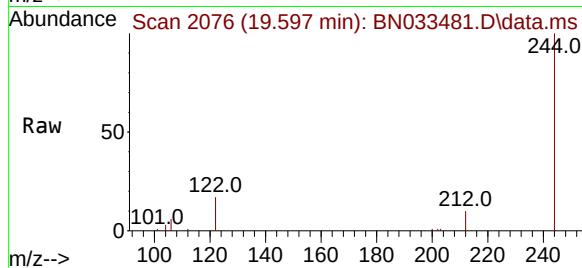




#31  
Terphenyl-d14  
Concen: 0.447 ng  
RT: 19.597 min Scan# 2076  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

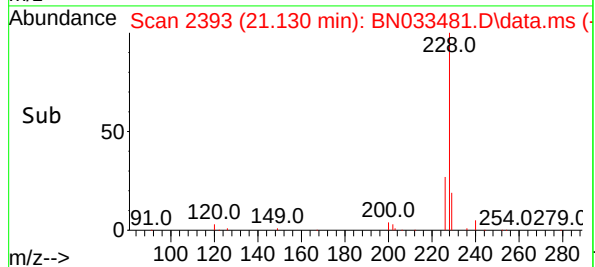
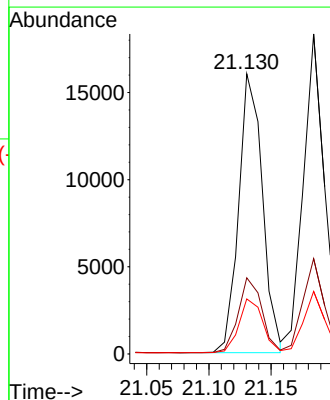
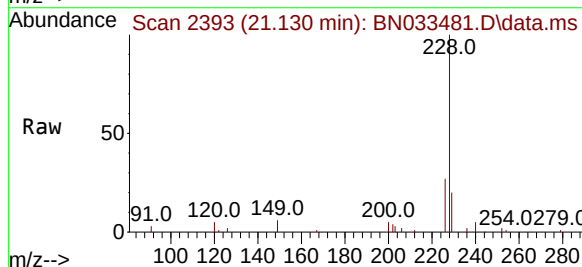
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 9.7   | 7.8   | 11.6  |
| 122     | 16.6  | 13.3  | 19.9  |

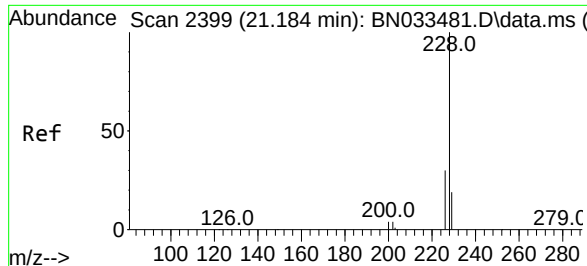


#32  
Benzo(a)anthracene  
Concen: 0.355 ng  
RT: 21.130 min Scan# 2393  
Delta R.T. 0.000 min  
Lab File: BN033481.D  
Acq: 19 Aug 2024 17:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.2  | 21.8  | 32.6  |
| 229     | 19.7  | 15.8  | 23.6  |







#33

Chrysene

Concen: 0.360 ng

RT: 21.184 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

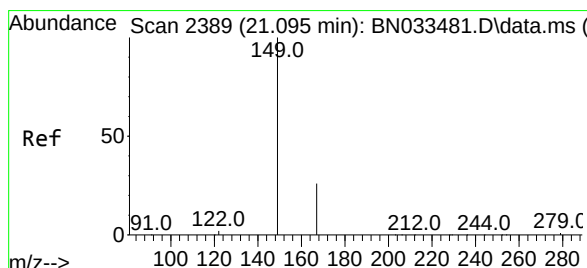
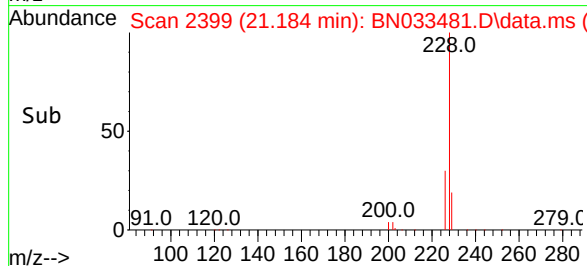
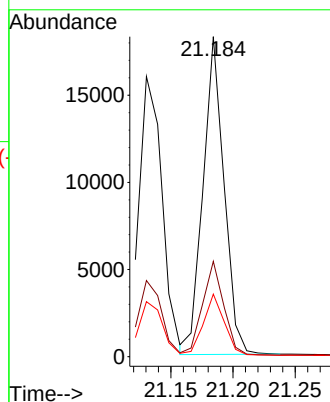
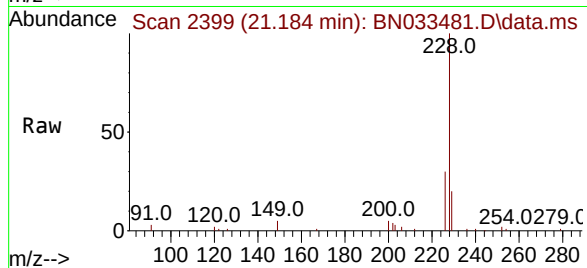
Tgt Ion:228 Resp: 21457

Ion Ratio Lower Upper

228 100

226 29.8 23.8 35.8

229 19.5 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.459 ng

RT: 21.095 min Scan# 2389

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

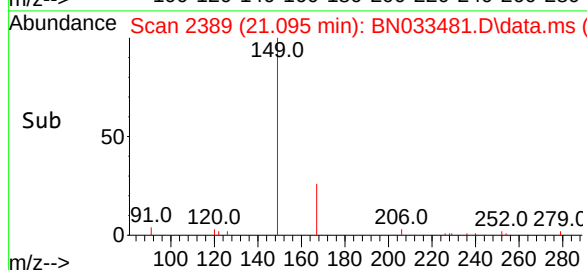
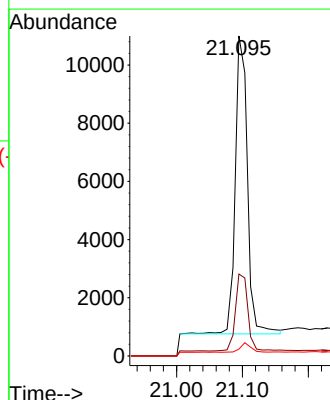
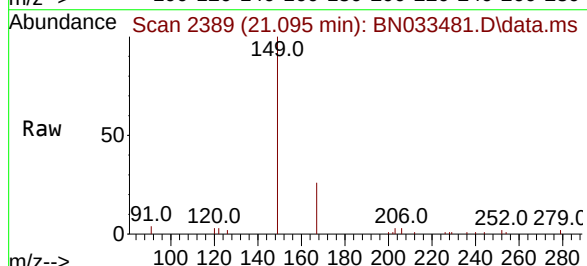
Tgt Ion:149 Resp: 13125

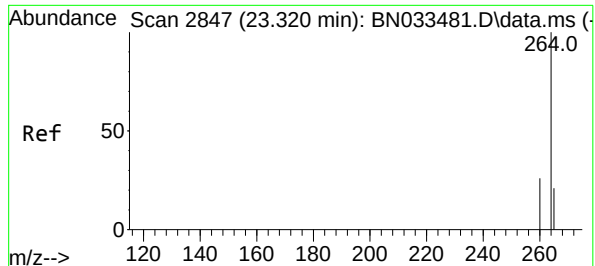
Ion Ratio Lower Upper

149 100

167 25.9 21.5 32.3

279 2.7 2.2 3.2





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.320 min Scan# 2847

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

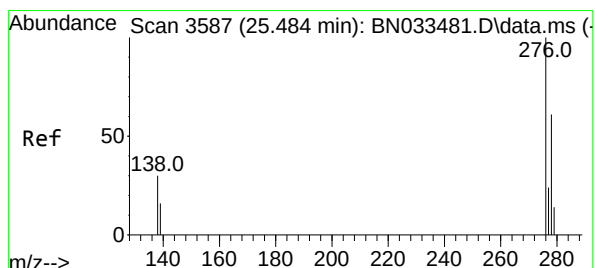
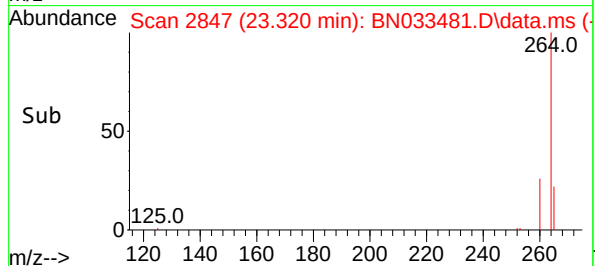
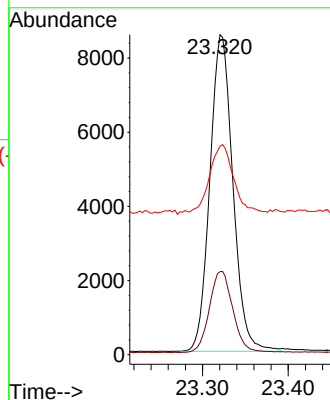
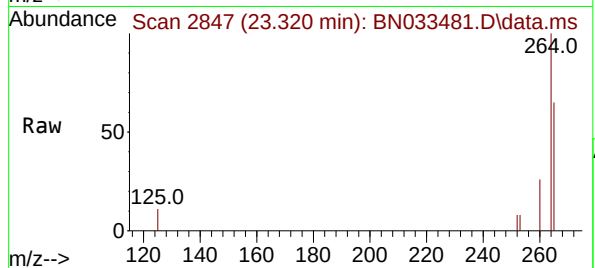
Tgt Ion:264 Resp: 15903

Ion Ratio Lower Upper

264 100

260 26.0 20.8 31.2

265 65.2 52.2 78.2



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.370 ng

RT: 25.484 min Scan# 3587

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

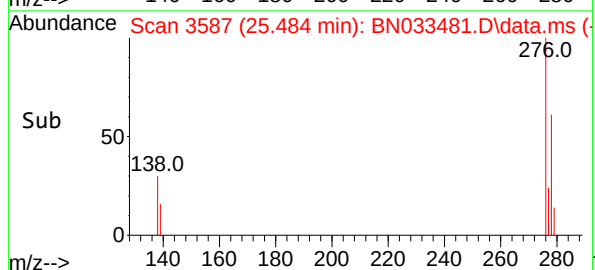
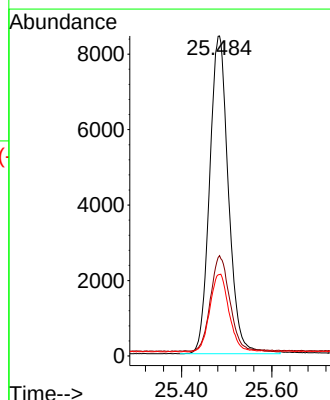
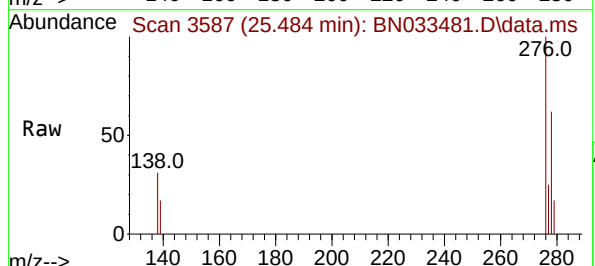
Tgt Ion:276 Resp: 24410

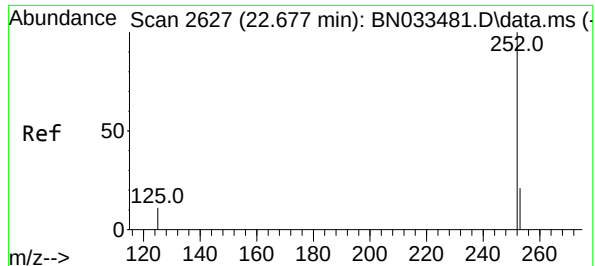
Ion Ratio Lower Upper

276 100

138 30.5 24.4 36.6

277 24.7 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.358 ng

RT: 22.677 min Scan# 2627

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

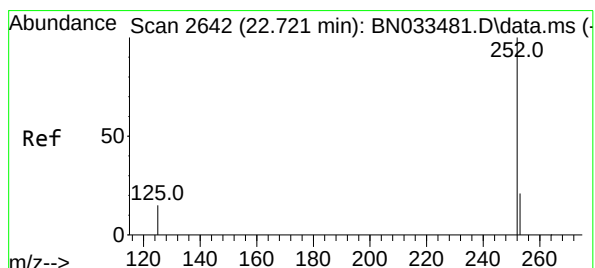
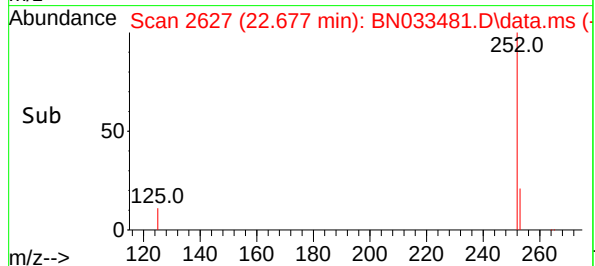
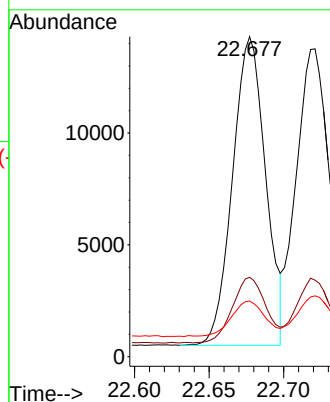
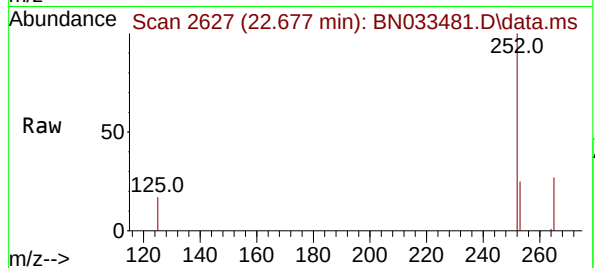
Tgt Ion:252 Resp: 21250

Ion Ratio Lower Upper

252 100

253 24.8 19.8 29.8

125 17.4 13.9 20.9



#38

Benzo(k)fluoranthene

Concen: 0.350 ng

RT: 22.721 min Scan# 2642

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

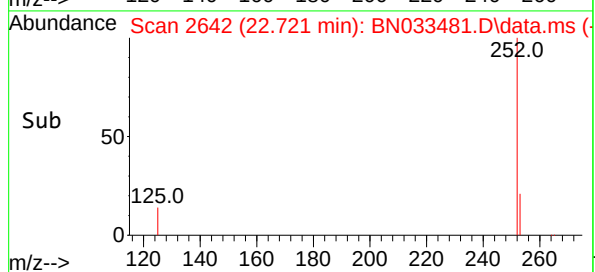
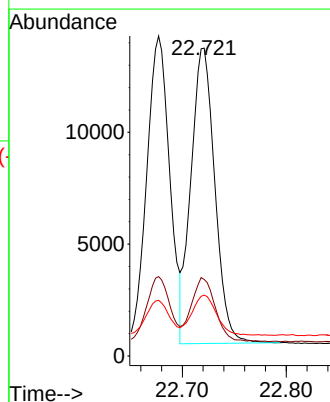
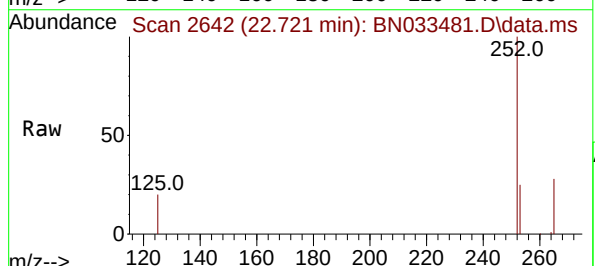
Tgt Ion:252 Resp: 21063

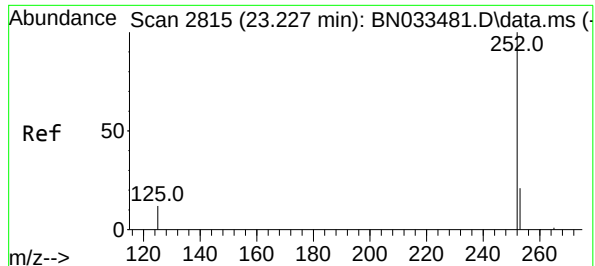
Ion Ratio Lower Upper

252 100

253 24.8 19.8 29.8

125 19.8 15.8 23.8





#39

Benzo(a)pyrene

Concen: 0.348 ng

RT: 23.227 min Scan# 2815

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

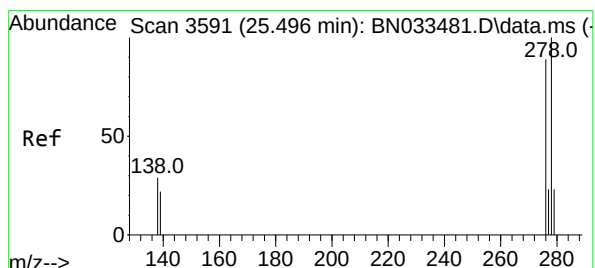
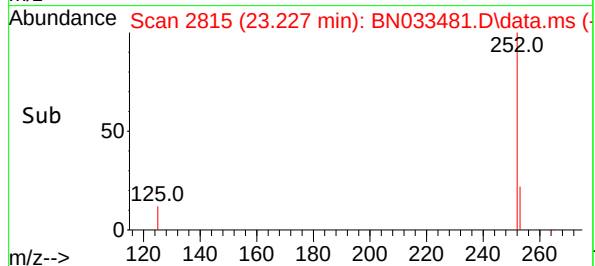
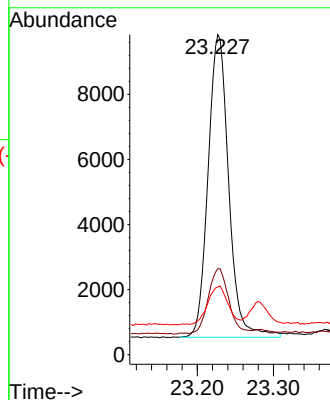
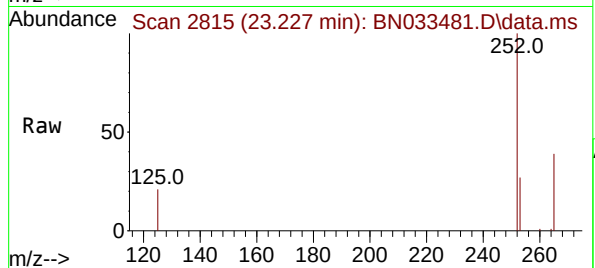
Tgt Ion:252 Resp: 17428

Ion Ratio Lower Upper

252 100

253 26.9 21.5 32.3

125 21.2 17.0 25.4



#40

Dibenzo(a,h)anthracene

Concen: 0.375 ng

RT: 25.496 min Scan# 3591

Delta R.T. 0.000 min

Lab File: BN033481.D

Acq: 19 Aug 2024 17:28

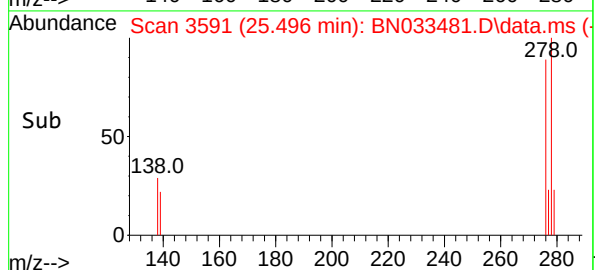
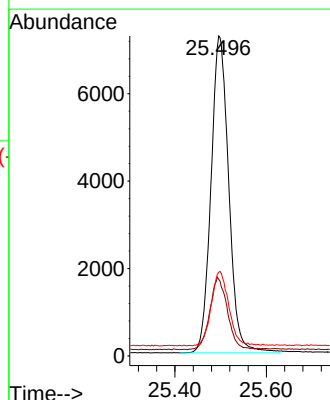
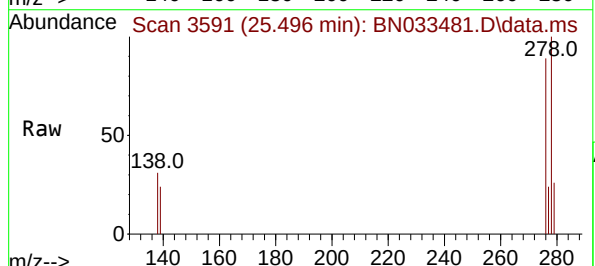
Tgt Ion:278 Resp: 19569

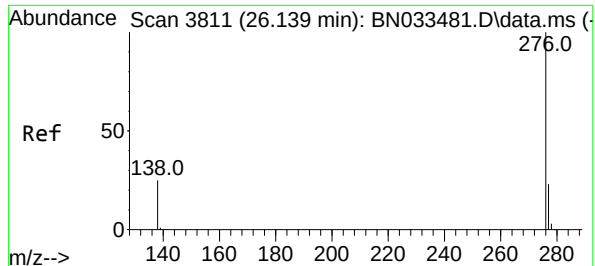
Ion Ratio Lower Upper

278 100

139 23.9 19.1 28.7

279 26.2 21.0 31.4





#41

Benzo(g,h,i)perylene

Concen: 0.359 ng

RT: 26.139 min Scan# 3811

Delta R.T. 0.000 min

Lab File: BN033481.D

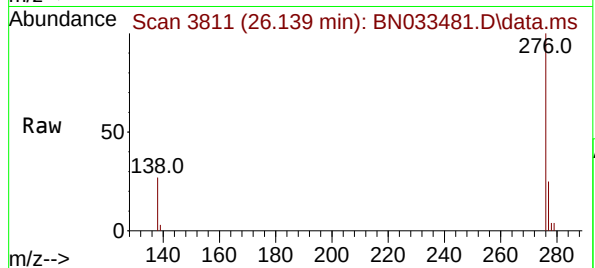
Acq: 19 Aug 2024 17:28

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4



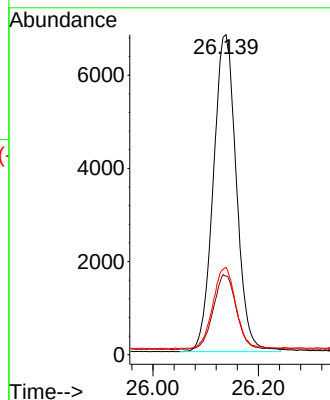
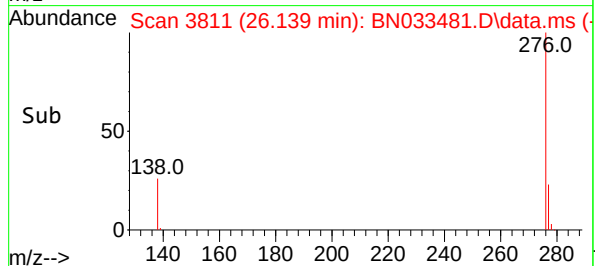
Tgt Ion:276 Resp: 20604

Ion Ratio Lower Upper

276 100

277 24.6 19.7 29.5

138 27.2 21.8 32.6



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033482.D  
Acq On : 19 Aug 2024 18:05  
Operator : MA/JU  
Sample : SSTDICC0.8  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

Quant Time: Aug 19 23:22:59 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:20:26 2024  
Response via : Initial Calibration

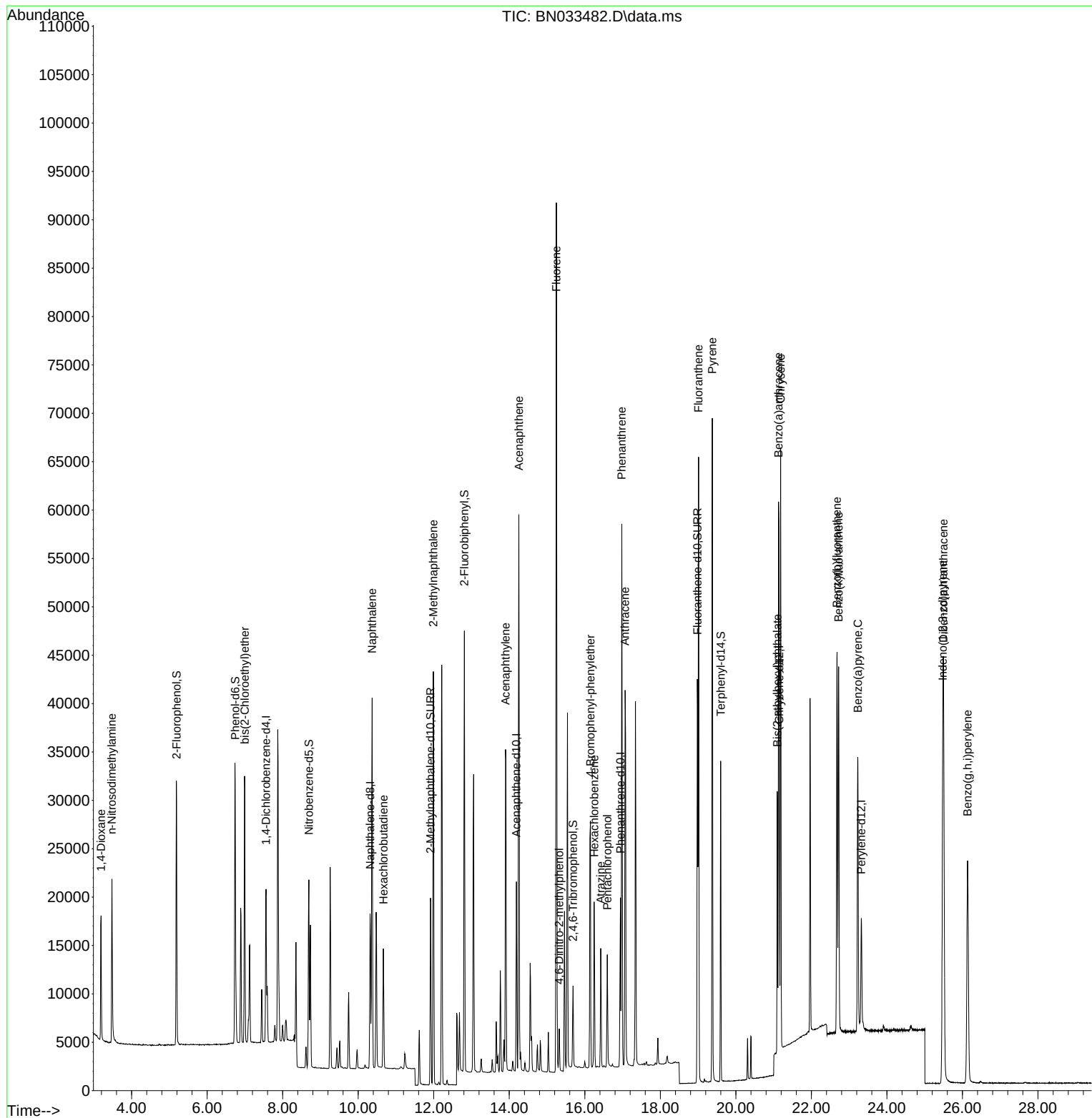
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.559  | 152  | 7632     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.314 | 136  | 20426    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.189 | 164  | 10526    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.942 | 188  | 22134    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.148 | 240  | 15199    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.320 | 264  | 14574    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.191  | 112  | 20603    | 0.960 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.743  | 99   | 25598    | 0.913 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.691  | 82   | 14373    | 0.929 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 25169    | 0.820 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 4621     | 0.860 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.810 | 172  | 37063    | 0.870 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.980 | 212  | 44745    | 0.771 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.597 | 244  | 29355    | 1.002 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
|                               |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.190  | 88   | 8005     | 0.974 | ng    | 99       |
| 3) n-Nitrosodimethylamine     | 3.479  | 42   | 9391     | 0.883 | ng    | 97       |
| 6) bis(2-Chloroethyl)ether    | 6.996  | 93   | 18731    | 0.856 | ng    | 99       |
| 9) Naphthalene                | 10.368 | 128  | 47199    | 0.852 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 9402     | 0.884 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 11.990 | 142  | 29902    | 0.806 | ng    | 98       |
| 16) Acenaphthylene            | 13.900 | 152  | 39367    | 0.814 | ng    | 100      |
| 17) Acenaphthene              | 14.253 | 154  | 27891    | 0.838 | ng    | 99       |
| 18) Fluorene                  | 15.247 | 166  | 35084    | 0.805 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 2836     | 1.027 | ng    | # 78     |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 11281    | 0.854 | ng    | 97       |
| 22) Hexachlorobenzene         | 16.247 | 284  | 12452    | 0.844 | ng    | 99       |
| 23) Atrazine                  | 16.420 | 200  | 8886     | 0.845 | ng    | 99       |
| 24) Pentachlorophenol         | 16.594 | 266  | 5244     | 0.869 | ng    | 98       |
| 25) Phenanthrene              | 16.979 | 178  | 52082    | 0.822 | ng    | 100      |
| 26) Anthracene                | 17.066 | 178  | 45804    | 0.819 | ng    | 99       |
| 28) Fluoranthene              | 19.012 | 202  | 57702    | 0.751 | ng    | 100      |
| 30) Pyrene                    | 19.374 | 202  | 57799    | 0.944 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.130 | 228  | 46368    | 0.822 | ng    | 99       |
| 33) Chrysene                  | 21.184 | 228  | 47324    | 0.841 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.095 | 149  | 26434    | 0.980 | ng    | 99       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.478 | 276  | 51859    | 0.858 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.677 | 252  | 46009    | 0.846 | ng    | 95       |
| 38) Benzo(k)fluoranthene      | 22.721 | 252  | 45348    | 0.822 | ng    | # 94     |
| 39) Benzo(a)pyrene            | 23.227 | 252  | 38156    | 0.831 | ng    | # 93     |
| 40) Dibenzo(a,h)anthracene    | 25.499 | 278  | 41569    | 0.869 | ng    | 96       |
| 41) Benzo(g,h,i)perylene      | 26.136 | 276  | 44249    | 0.842 | ng    | 98       |

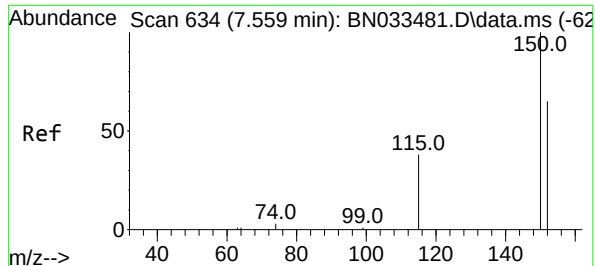
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033482.D  
Acq On : 19 Aug 2024 18:05  
Operator : MA/JU  
Sample : SSTDICC0.8  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

Quant Time: Aug 19 23:22:59 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:20:26 2024  
Response via : Initial Calibration

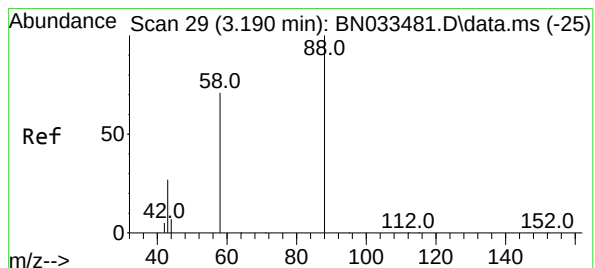
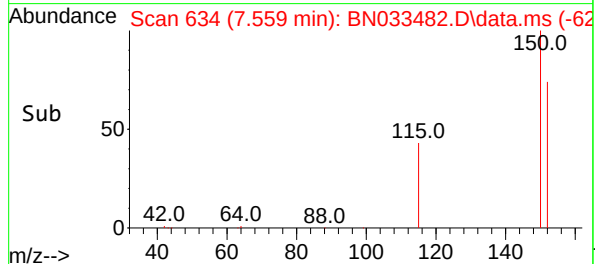
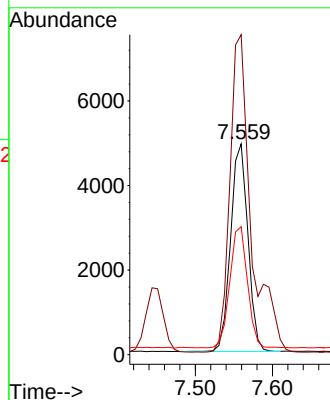
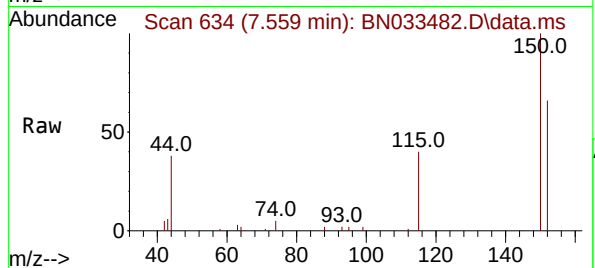




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.559 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

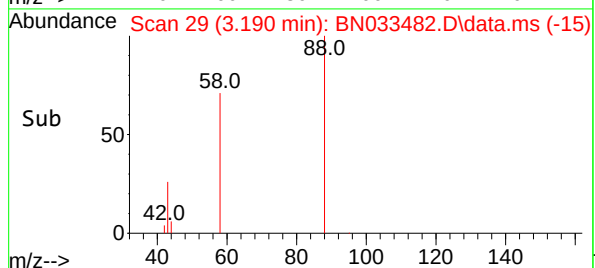
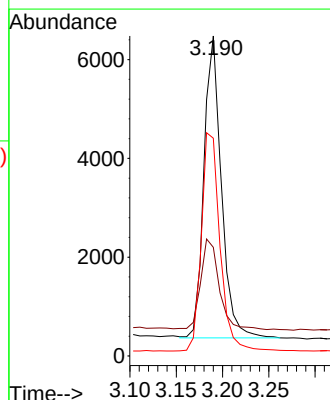
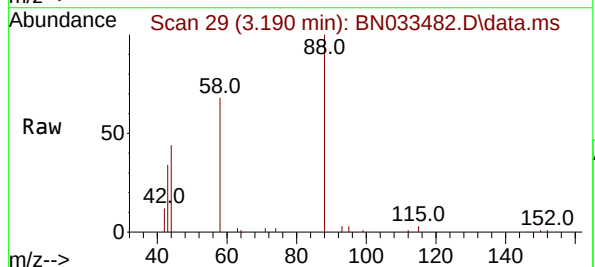
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

Tgt Ion:152 Resp: 7632  
Ion Ratio Lower Upper  
152 100  
150 151.8 122.2 183.2  
115 60.8 47.2 70.8

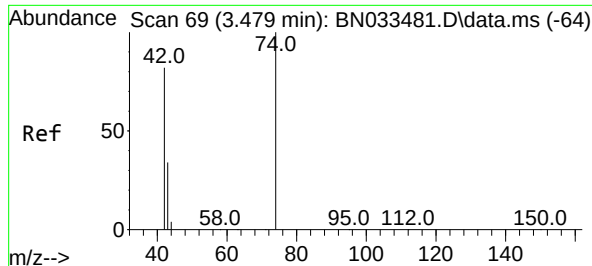


#2  
1,4-Dioxane  
Concen: 0.974 ng  
RT: 3.190 min Scan# 29  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

Tgt Ion: 88 Resp: 8005  
Ion Ratio Lower Upper  
88 100  
43 31.8 25.0 37.4  
58 77.2 62.5 93.7



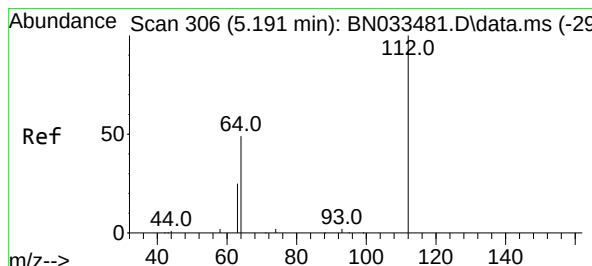
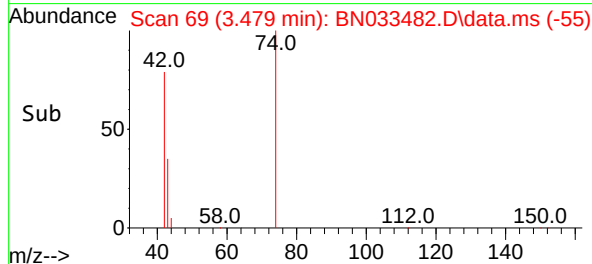
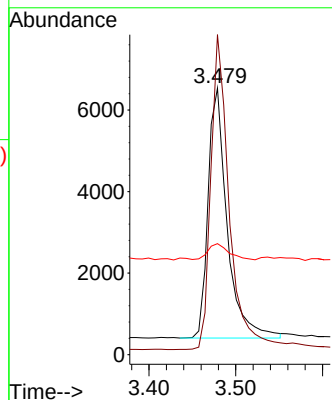
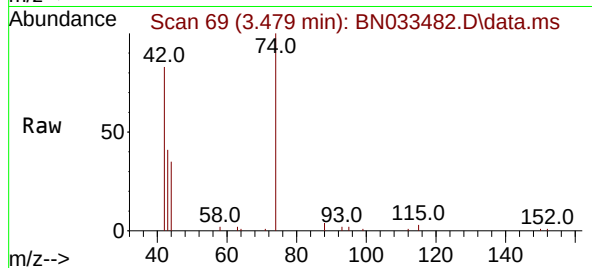




#3  
n-Nitrosodimethylamine  
Concen: 0.883 ng  
RT: 3.479 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

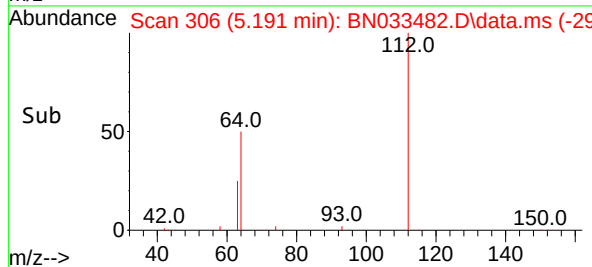
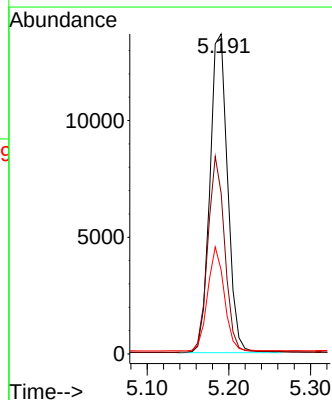
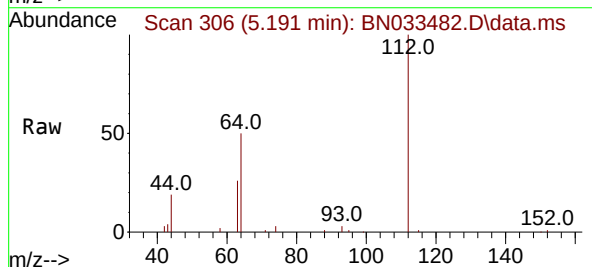
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

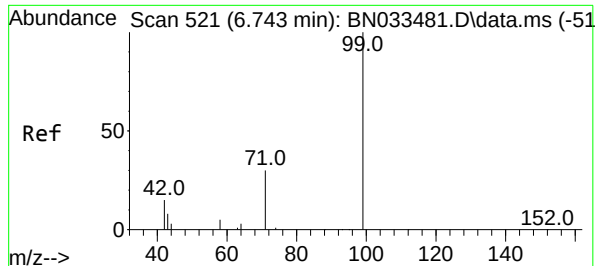
Tgt Ion: 42 Resp: 9391  
Ion Ratio Lower Upper  
42 100  
74 121.6 100.2 150.2  
44 6.9 5.3 7.9



#4  
2-Fluorophenol  
Concen: 0.960 ng  
RT: 5.191 min Scan# 306  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

Tgt Ion: 112 Resp: 20603  
Ion Ratio Lower Upper  
112 100  
64 58.5 47.1 70.7  
63 30.7 24.9 37.3





#5

Phenol-d6

Concen: 0.913 ng

RT: 6.743 min Scan# 51

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

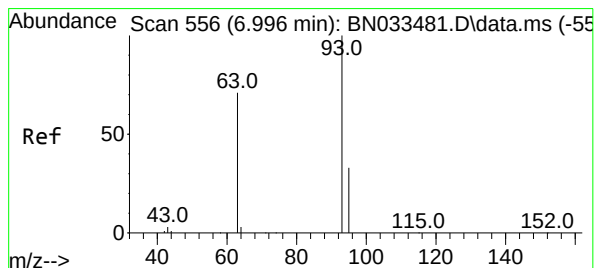
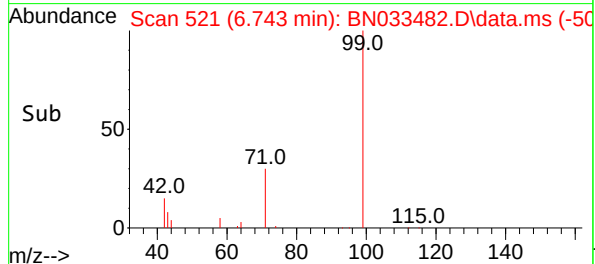
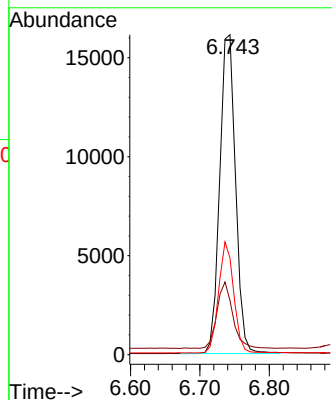
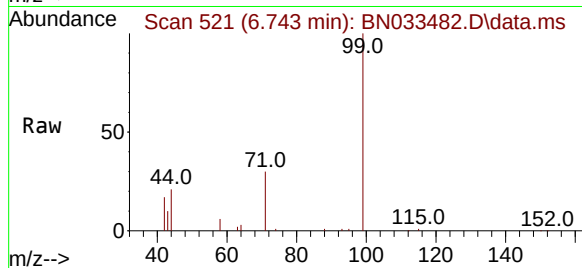
Tgt Ion: 99 Resp: 25598

Ion Ratio Lower Upper

99 100

42 20.7 16.6 24.8

71 33.1 26.2 39.4



#6

bis(2-Chloroethyl)ether

Concen: 0.856 ng

RT: 6.996 min Scan# 556

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

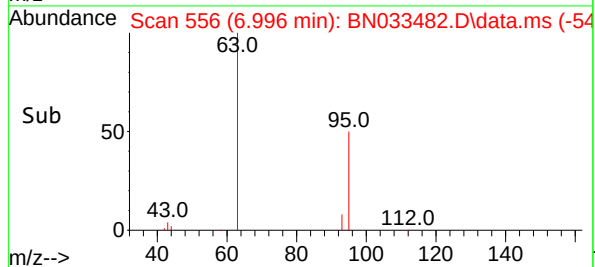
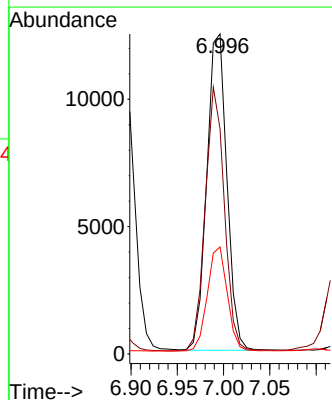
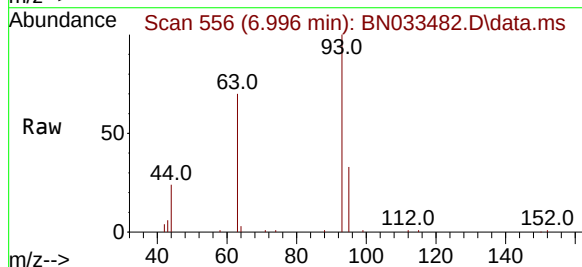
Tgt Ion: 93 Resp: 18731

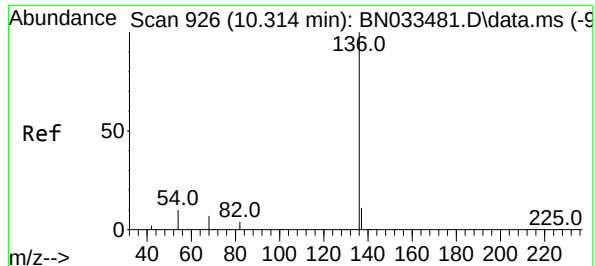
Ion Ratio Lower Upper

93 100

63 79.6 63.0 94.4

95 32.7 26.0 39.0

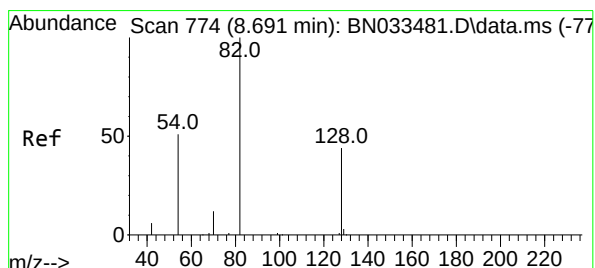
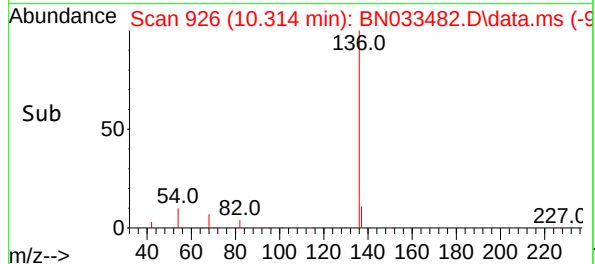
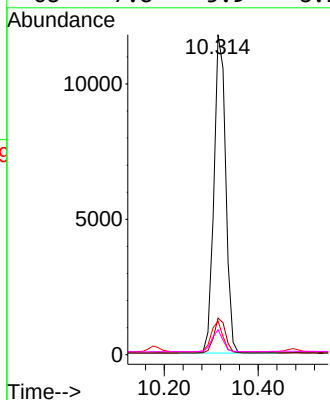
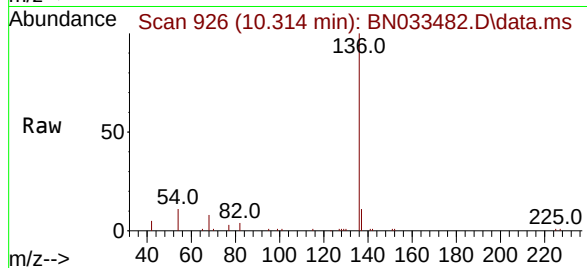




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

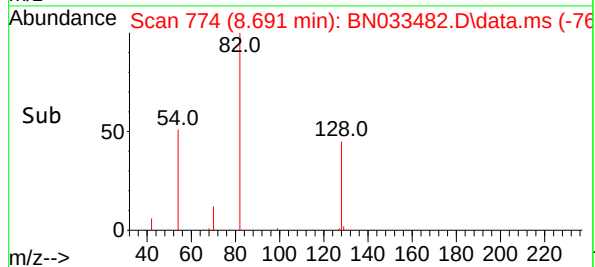
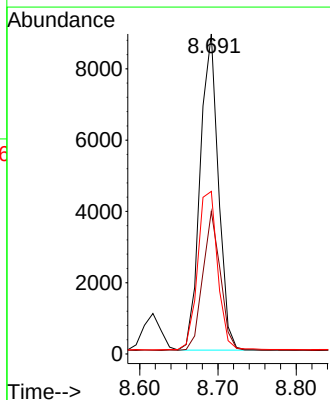
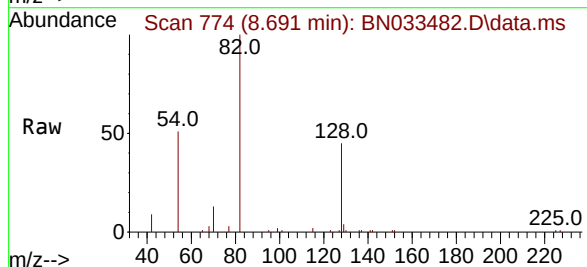
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

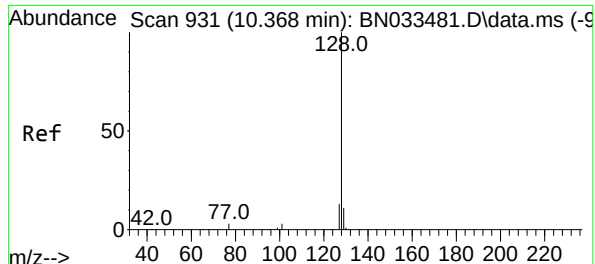
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 20426 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.4  | 9.0   | 13.6  |
| 54       | 10.5  | 8.3   | 12.5  |
| 68       | 7.8   | 5.9   | 8.9   |



#8  
Nitrobenzene-d5  
Concen: 0.929 ng  
RT: 8.691 min Scan# 774  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 14373 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 44.5  | 36.0  | 54.0  |
| 54       | 50.8  | 42.0  | 63.0  |

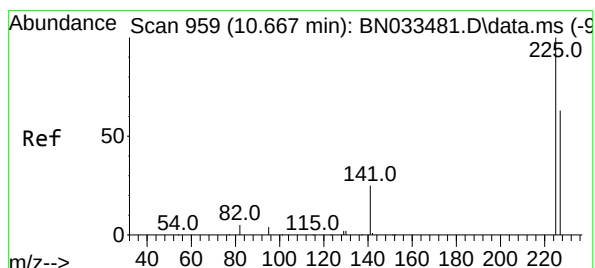
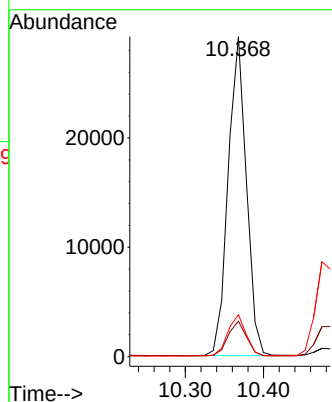
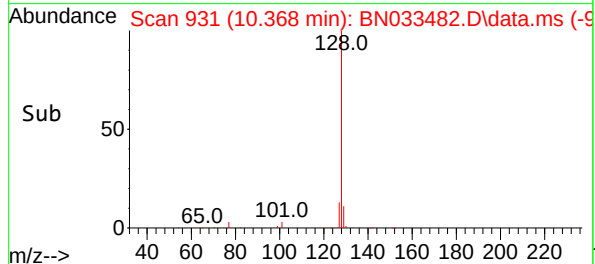
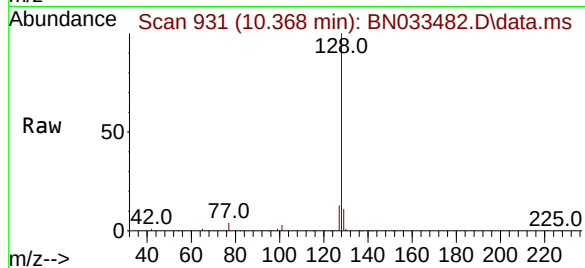




#9  
Naphthalene  
Concen: 0.852 ng  
RT: 10.368 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

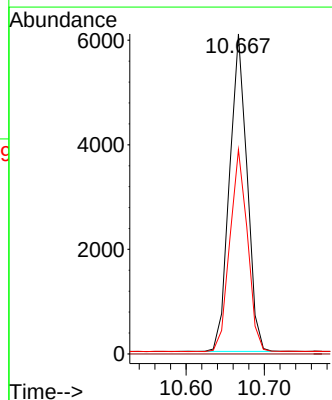
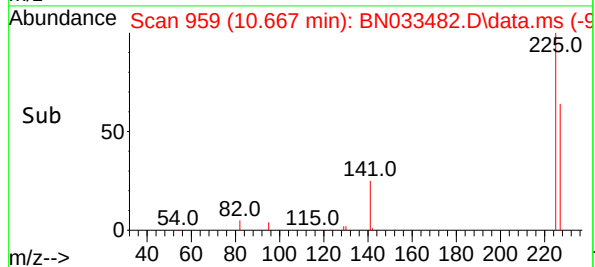
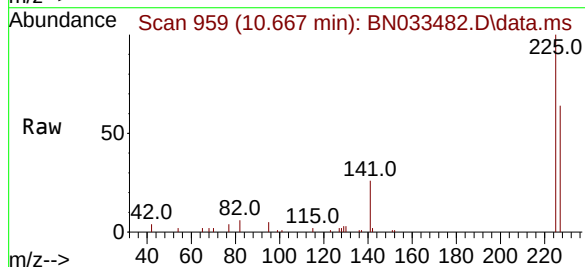
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

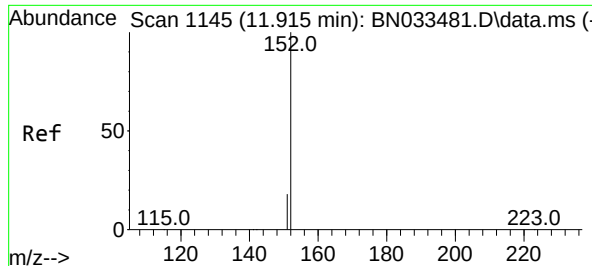
Tgt Ion:128 Resp: 47199  
Ion Ratio Lower Upper  
128 100  
129 11.1 9.1 13.7  
127 13.1 10.7 16.1



#10  
Hexachlorobutadiene  
Concen: 0.884 ng  
RT: 10.667 min Scan# 959  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

Tgt Ion:225 Resp: 9402  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.9 51.2 76.8

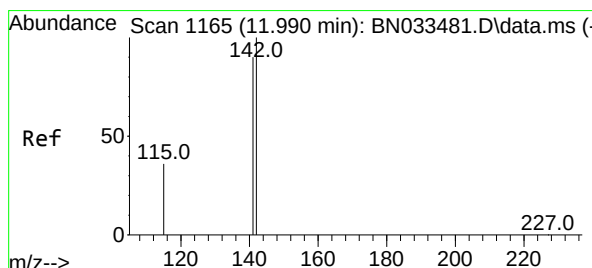
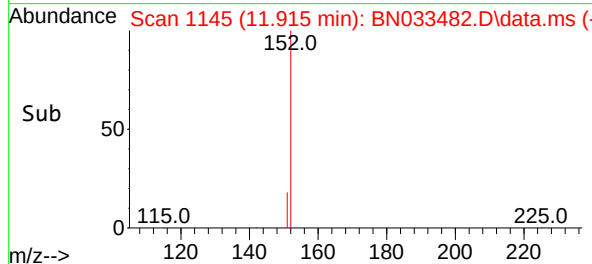
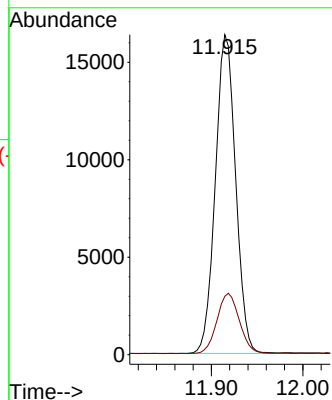
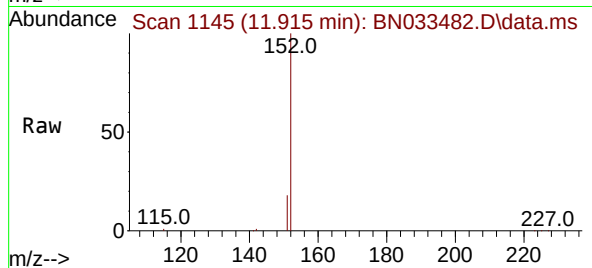




#11  
2-Methylnaphthalene-d10  
Concen: 0.820 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

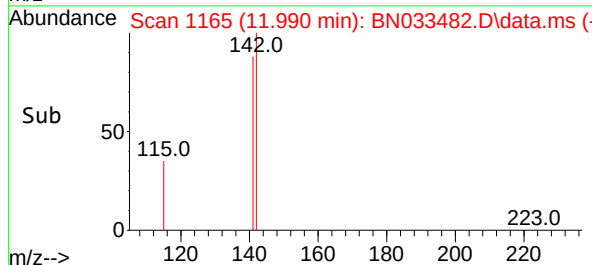
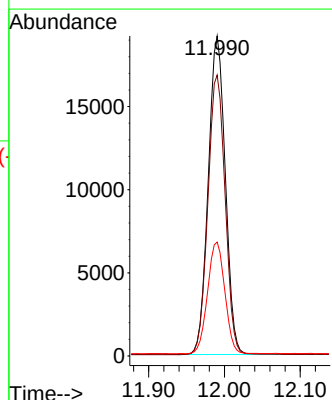
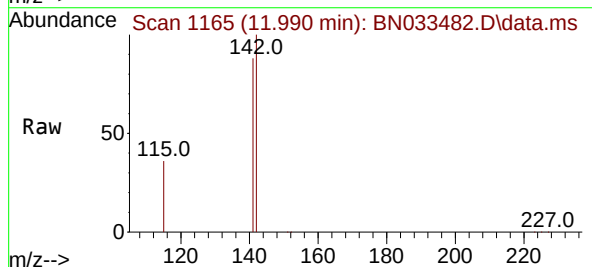
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

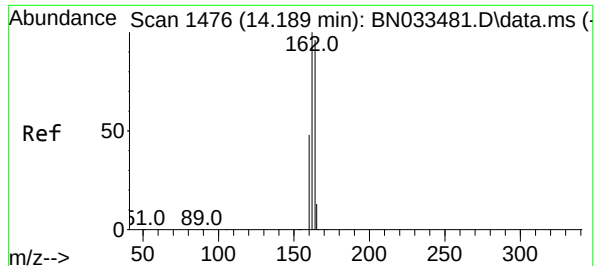
Tgt Ion:152 Resp: 25169  
Ion Ratio Lower Upper  
152 100  
151 20.9 16.6 25.0



#12  
2-Methylnaphthalene  
Concen: 0.806 ng  
RT: 11.990 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

Tgt Ion:142 Resp: 29902  
Ion Ratio Lower Upper  
142 100  
141 87.8 71.7 107.5  
115 35.6 29.4 44.2

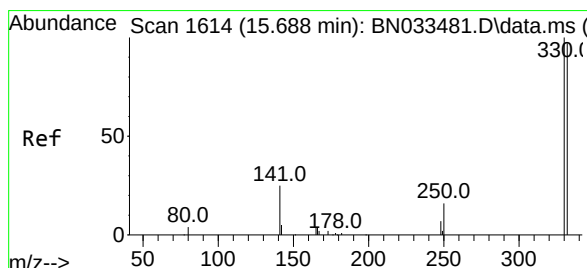
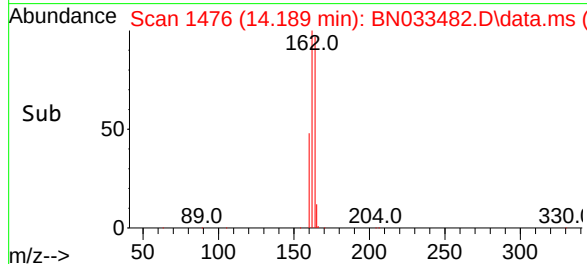
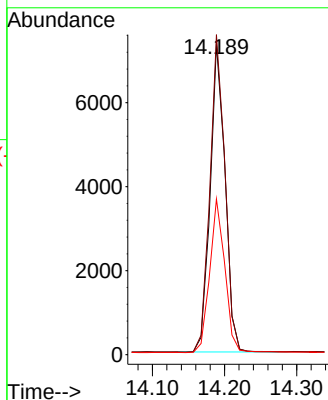
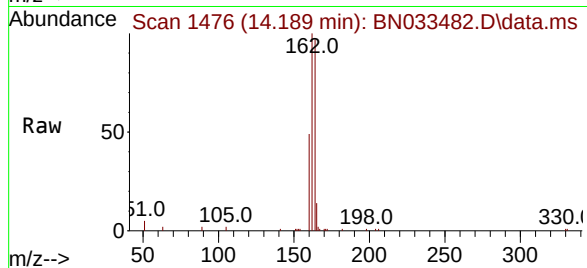




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.189 min Scan# 1476  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

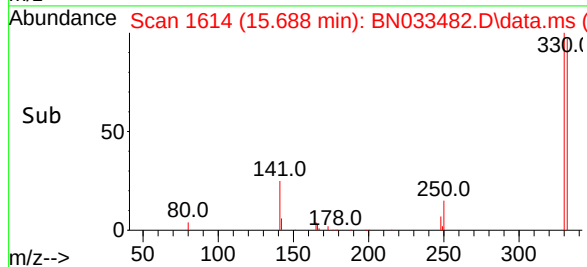
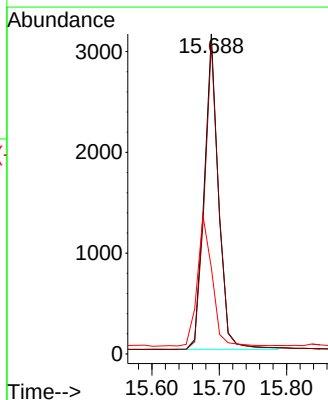
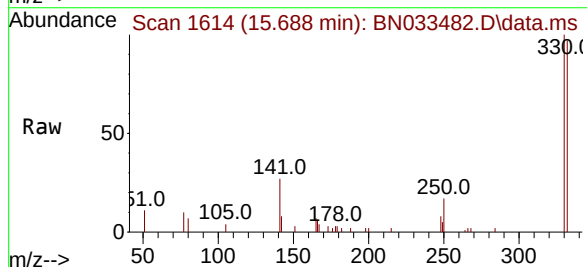
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

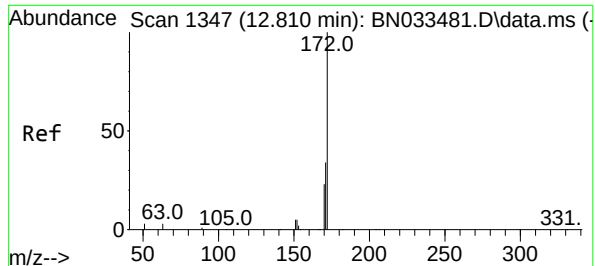
Tgt Ion:164 Resp: 10526  
Ion Ratio Lower Upper  
164 100  
162 103.0 83.5 125.3  
160 50.1 40.2 60.4



#14  
2,4,6-Tribromophenol  
Concen: 0.860 ng  
RT: 15.688 min Scan# 1614  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

Tgt Ion:330 Resp: 4621  
Ion Ratio Lower Upper  
330 100  
332 97.1 77.5 116.3  
141 42.6 33.9 50.9





#15

2-Fluorobiphenyl

Concen: 0.870 ng

RT: 12.810 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

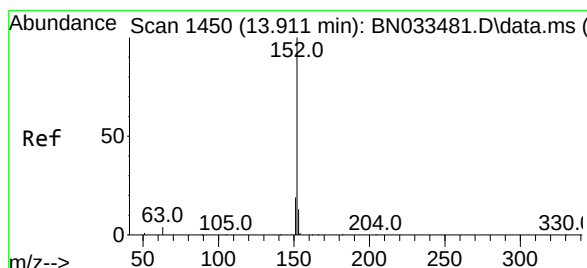
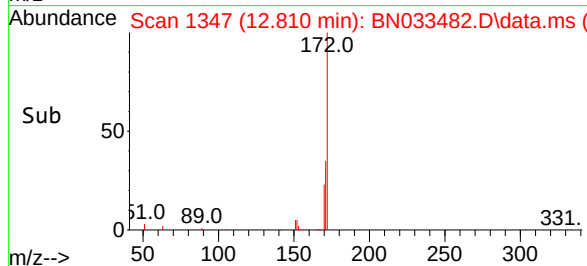
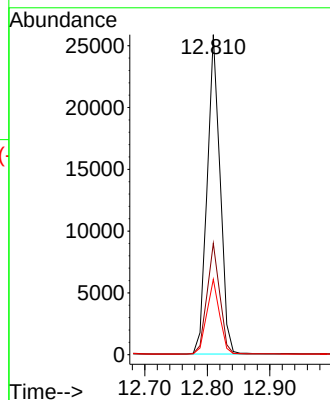
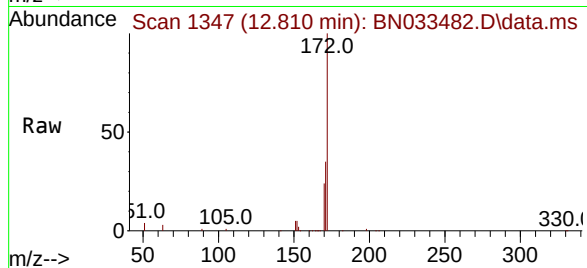
Tgt Ion:172 Resp: 37063

Ion Ratio Lower Upper

172 100

171 34.8 27.7 41.5

170 23.5 18.3 27.5



#16

Acenaphthylene

Concen: 0.814 ng

RT: 13.900 min Scan# 1449

Delta R.T. -0.011 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

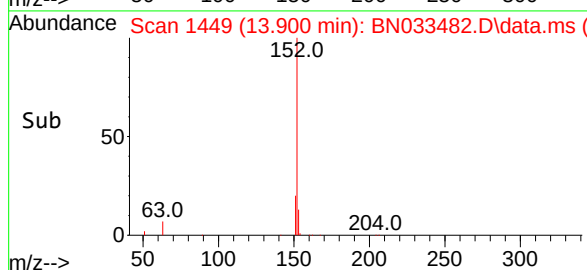
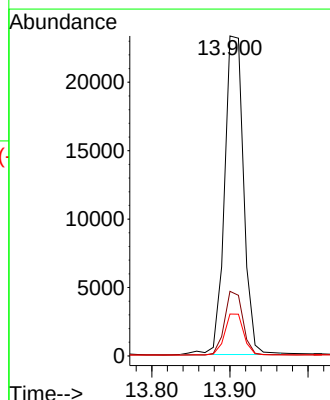
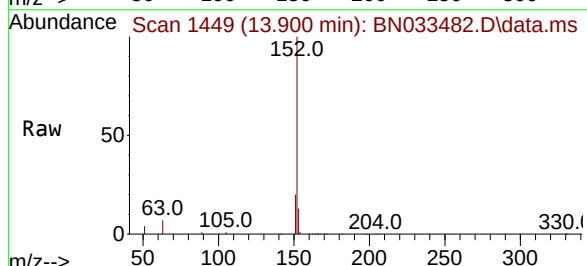
Tgt Ion:152 Resp: 39367

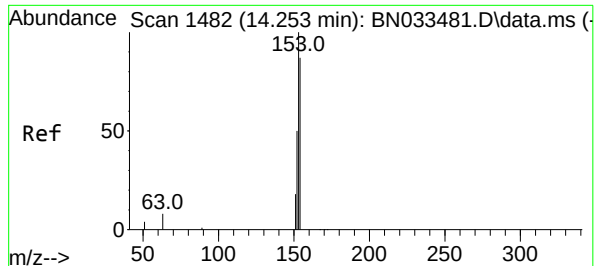
Ion Ratio Lower Upper

152 100

151 19.3 15.7 23.5

153 13.0 10.3 15.5





#17

Acenaphthene

Concen: 0.838 ng

RT: 14.253 min Scan# 1482

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

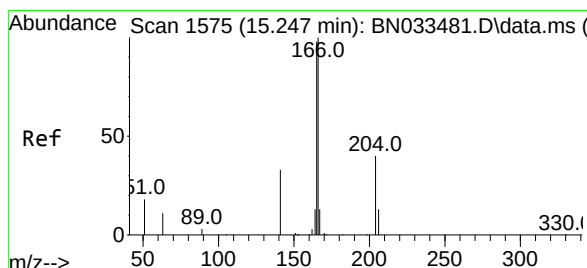
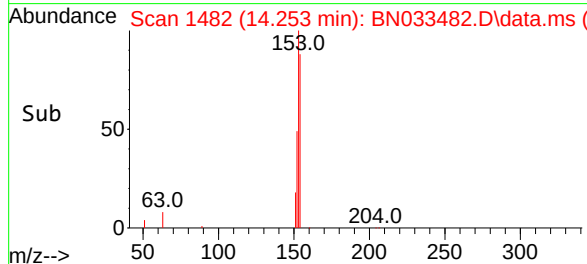
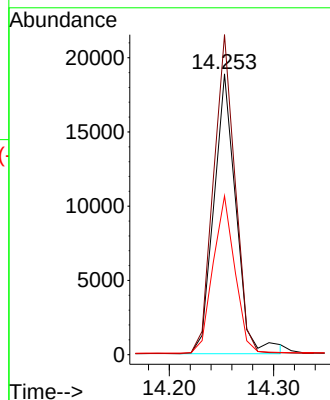
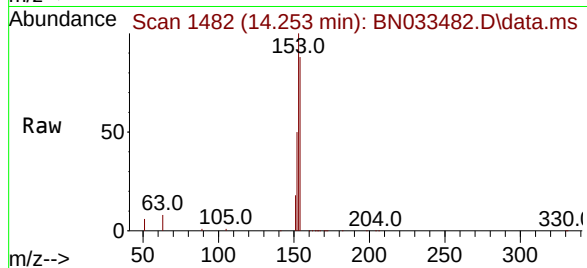
Tgt Ion:154 Resp: 27891

Ion Ratio Lower Upper

154 100

153 110.4 89.0 133.6

152 55.3 45.2 67.8



#18

Fluorene

Concen: 0.805 ng

RT: 15.247 min Scan# 1575

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

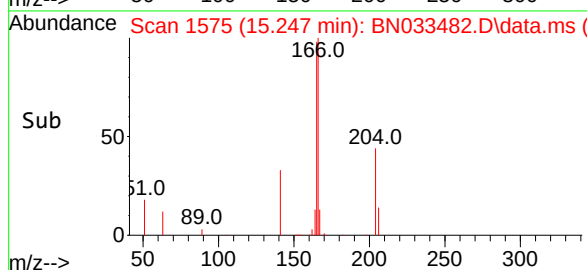
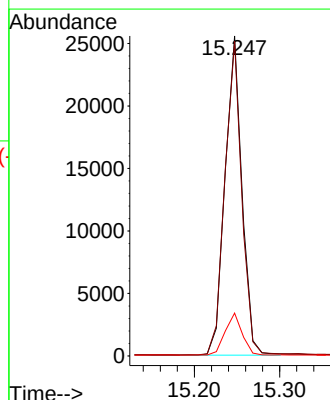
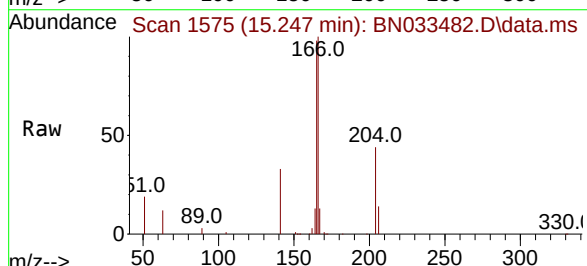
Tgt Ion:166 Resp: 35084

Ion Ratio Lower Upper

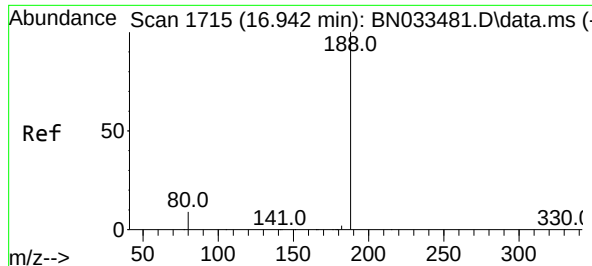
166 100

165 98.0 78.2 117.4

167 13.2 10.6 16.0



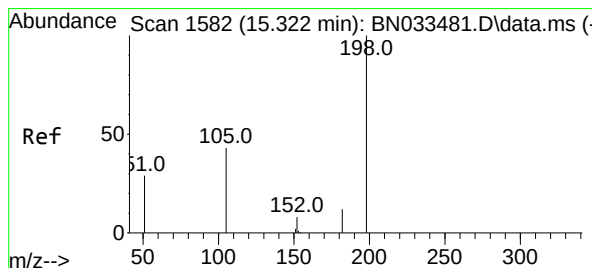
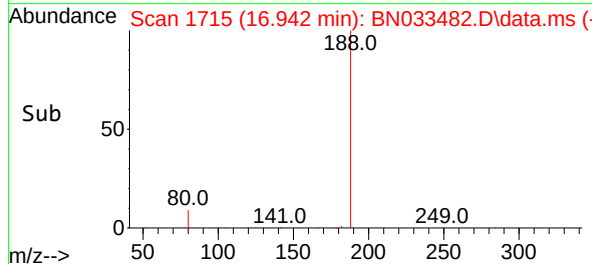
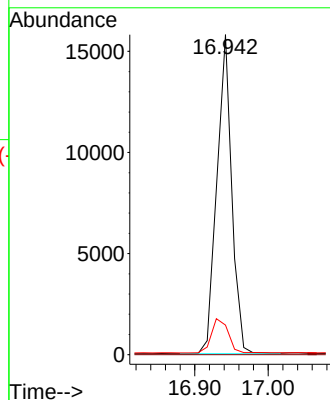
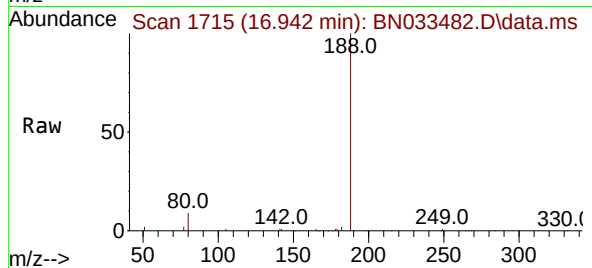




#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.942 min Scan# 1715  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

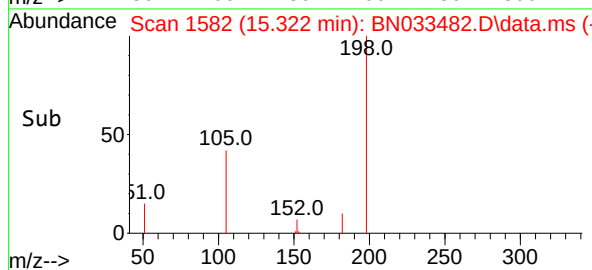
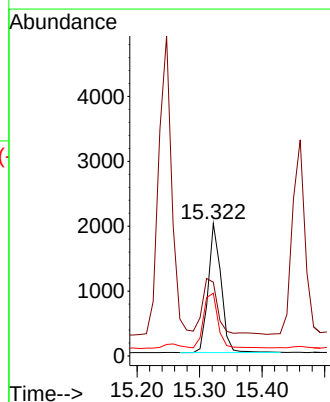
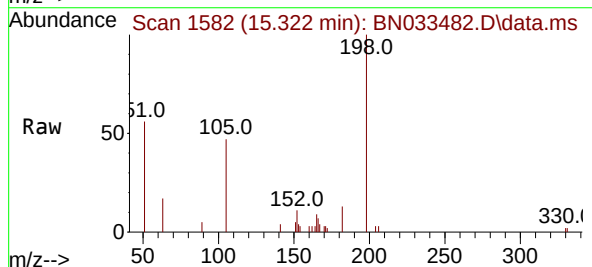
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

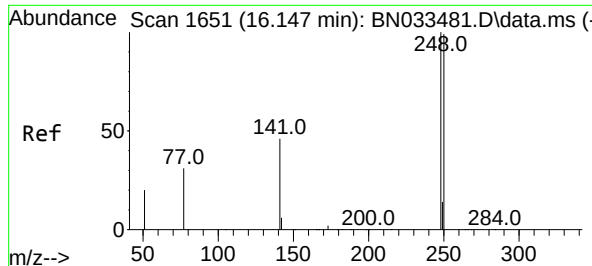
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 9.2   | 7.8   | 11.8  |



#20  
4,6-Dinitro-2-methylphenol  
Concen: 1.027 ng  
RT: 15.322 min Scan# 1582  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 198     | 100   |       |       |
| 51      | 55.6  | 65.1  | 97.7# |
| 105     | 47.3  | 44.8  | 67.2  |

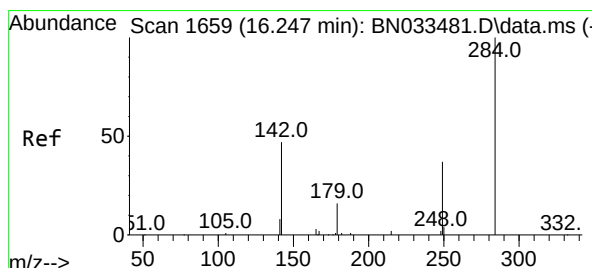
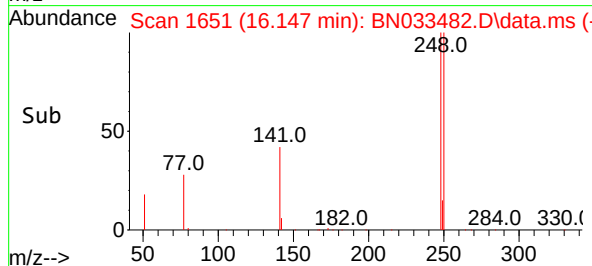
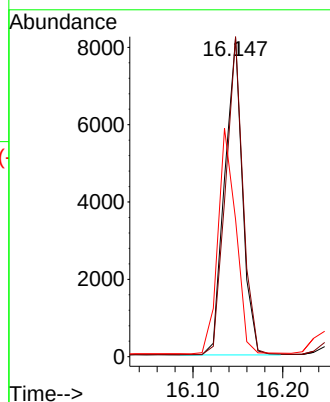
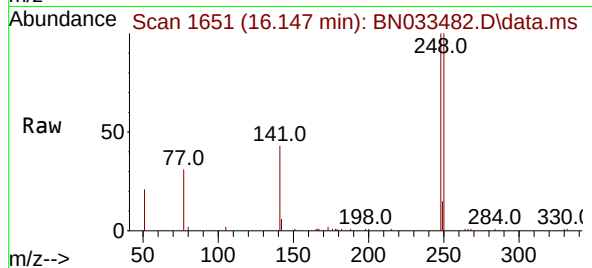




#21  
4-Bromophenyl-phenylether  
Concen: 0.854 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

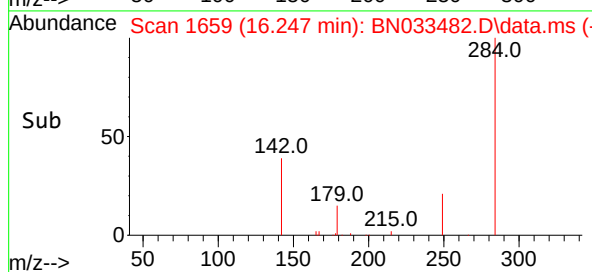
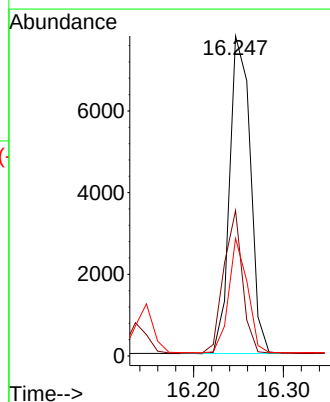
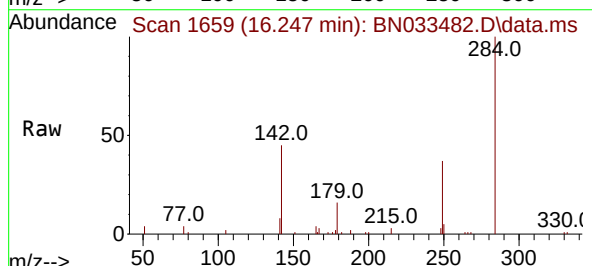
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

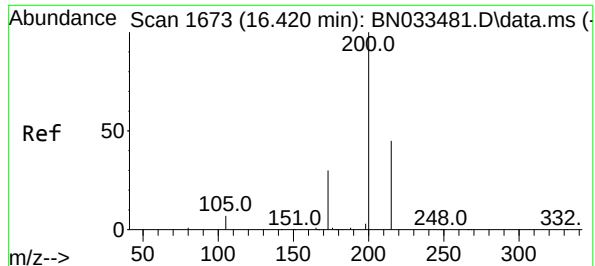
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 100.3 | 79.2  | 118.8 |
| 141     | 43.0  | 37.9  | 56.9  |



#22  
Hexachlorobenzene  
Concen: 0.844 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 40.5  | 31.8  | 47.6  |
| 249     | 32.6  | 26.0  | 39.0  |





#23

Atrazine

Concen: 0.845 ng

RT: 16.420 min Scan# 1673

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

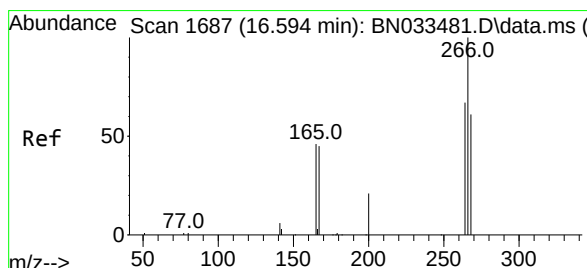
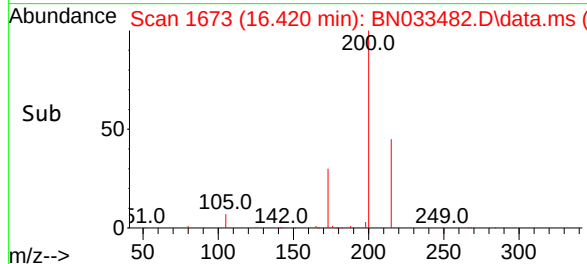
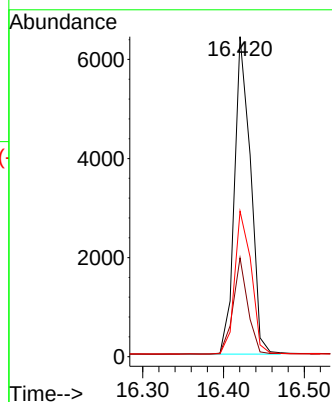
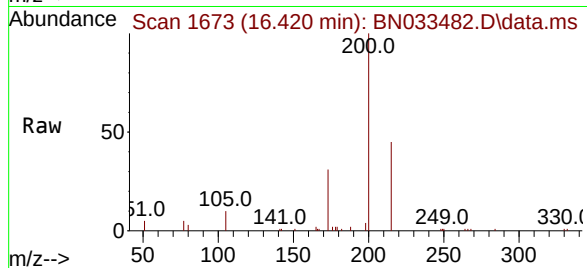
Tgt Ion:200 Resp: 8886

Ion Ratio Lower Upper

200 100

173 30.9 25.3 37.9

215 45.4 36.6 54.8



#24

Pentachlorophenol

Concen: 0.869 ng

RT: 16.594 min Scan# 1687

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

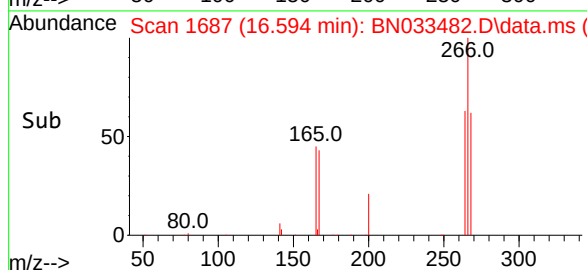
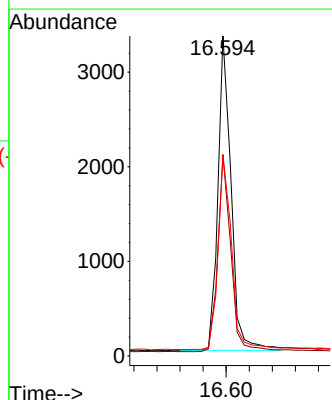
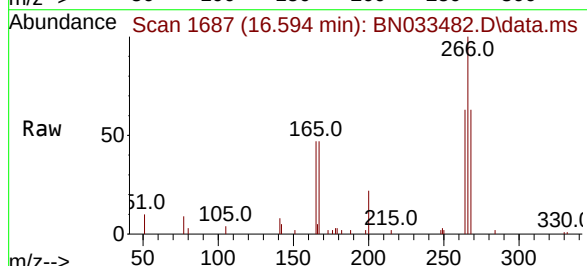
Tgt Ion:266 Resp: 5244

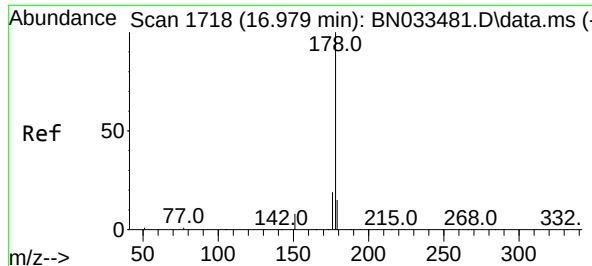
Ion Ratio Lower Upper

266 100

264 62.2 51.9 77.9

268 63.3 51.0 76.4

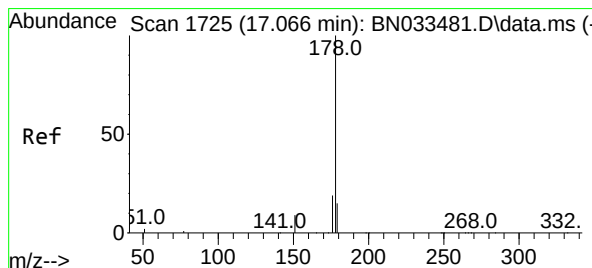
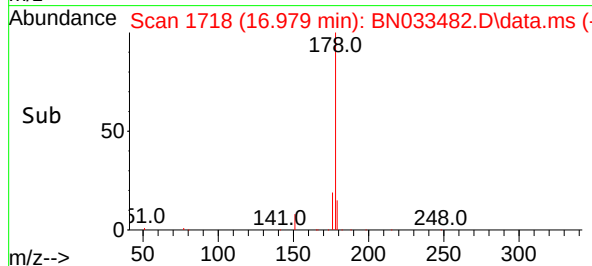
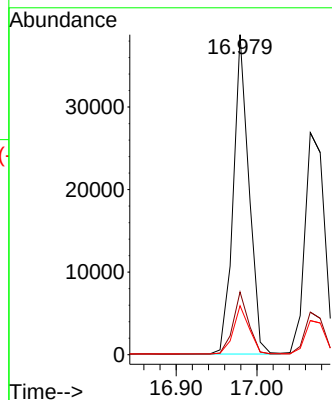
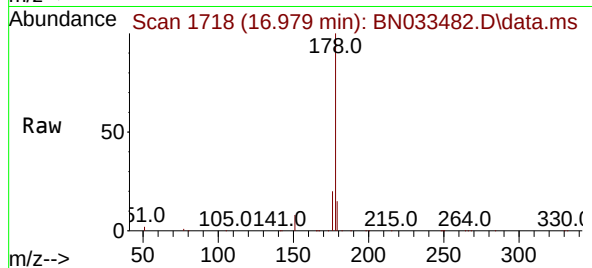




#25  
Phenanthrene  
Concen: 0.822 ng  
RT: 16.979 min Scan# 1718  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

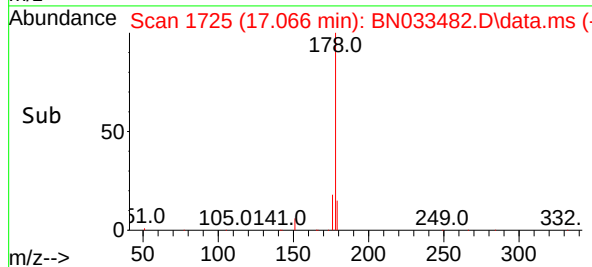
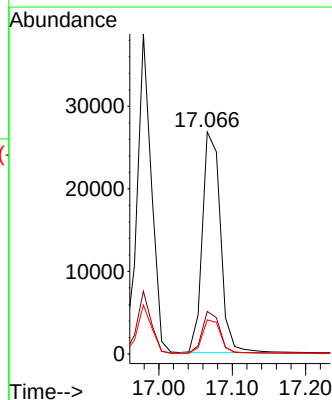
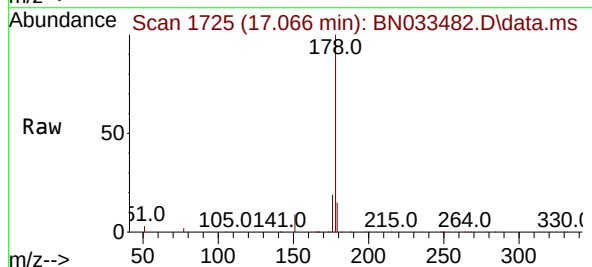
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

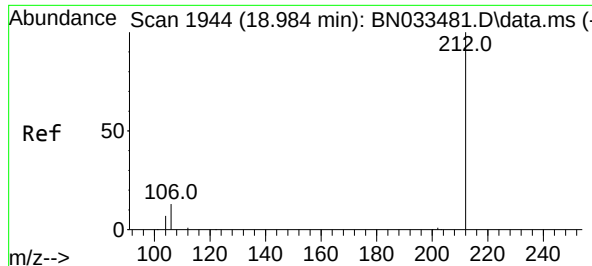
Tgt Ion:178 Resp: 52082  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.3 22.9  
179 15.2 12.3 18.5



#26  
Anthracene  
Concen: 0.819 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

Tgt Ion:178 Resp: 45804  
Ion Ratio Lower Upper  
178 100  
176 18.3 15.0 22.6  
179 15.2 12.4 18.6





#27

Fluoranthene-d10

Concen: 0.771 ng

RT: 18.980 min Scan# 1944

Delta R.T. -0.005 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

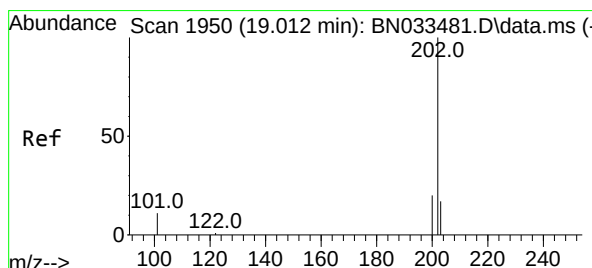
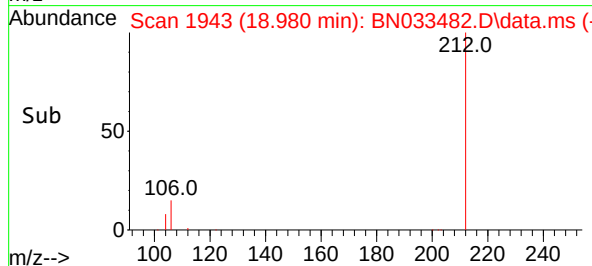
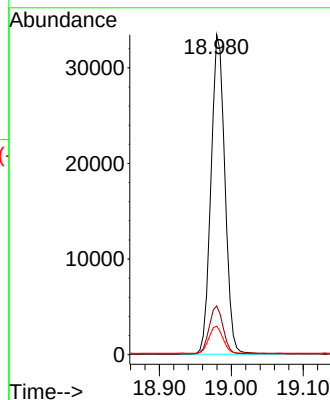
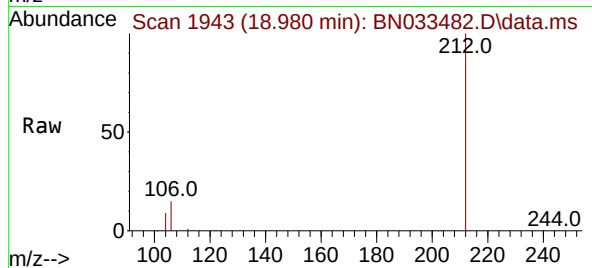
Tgt Ion:212 Resp: 44745

Ion Ratio Lower Upper

212 100

106 15.1 12.3 18.5

104 8.6 7.0 10.4



#28

Fluoranthene

Concen: 0.751 ng

RT: 19.012 min Scan# 1950

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

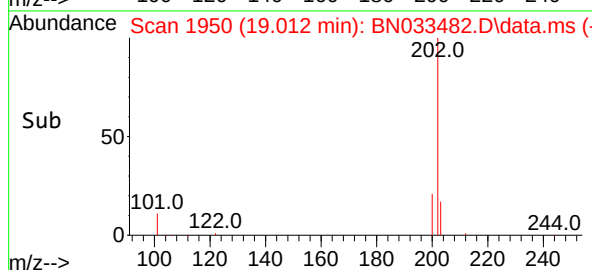
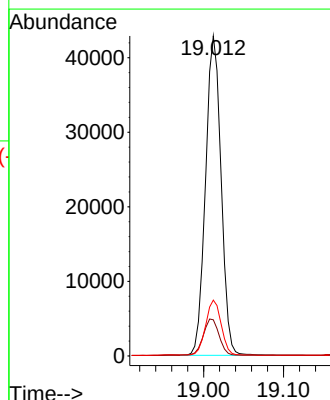
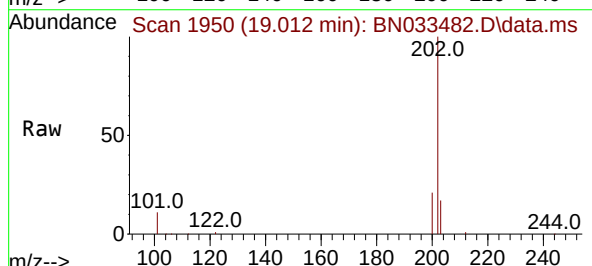
Tgt Ion:202 Resp: 57702

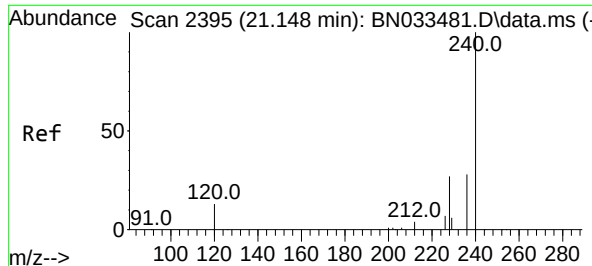
Ion Ratio Lower Upper

202 100

101 11.9 9.5 14.3

203 17.1 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

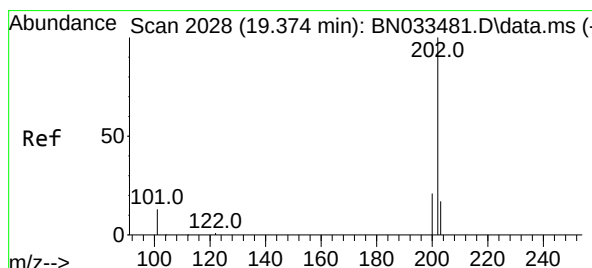
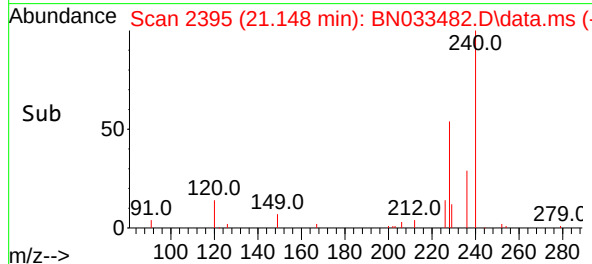
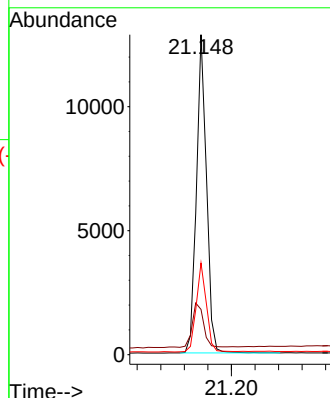
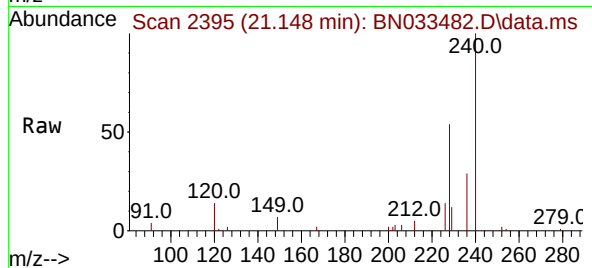
Tgt Ion:240 Resp: 15199

Ion Ratio Lower Upper

240 100

120 14.1 12.4 18.6

236 28.6 23.0 34.6



#30

Pyrene

Concen: 0.944 ng

RT: 19.374 min Scan# 2028

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

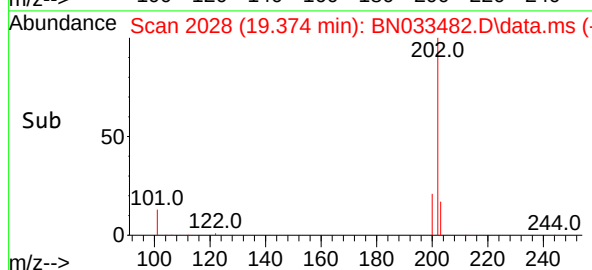
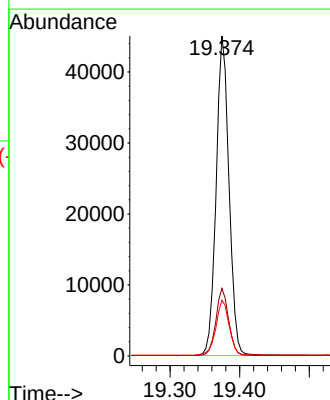
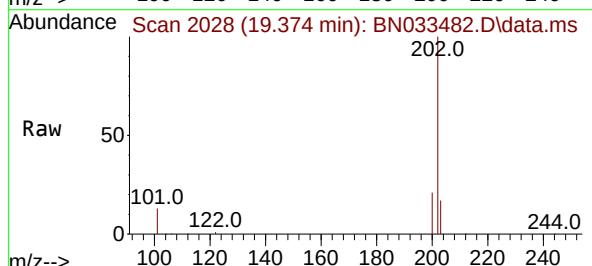
Tgt Ion:202 Resp: 57799

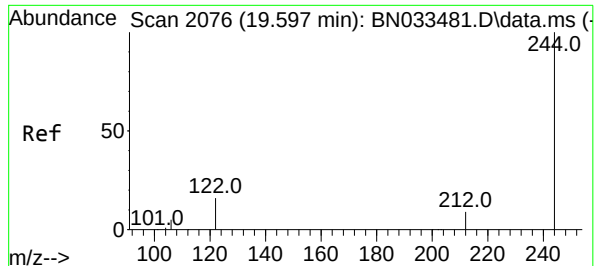
Ion Ratio Lower Upper

202 100

200 20.8 16.6 24.8

203 17.7 14.2 21.4

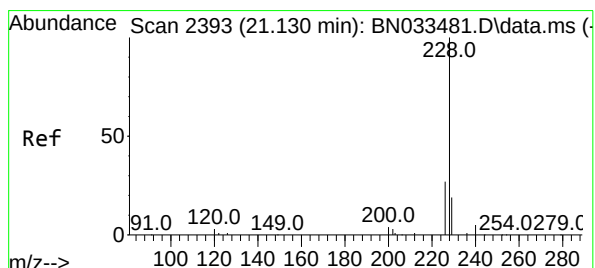
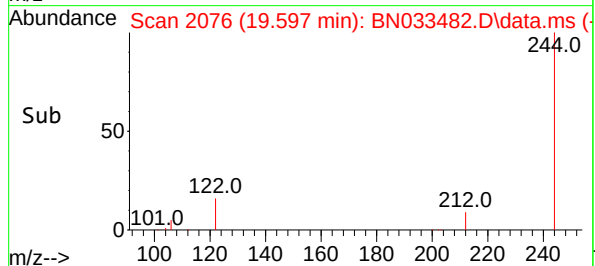
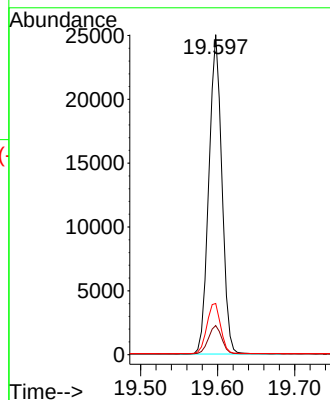
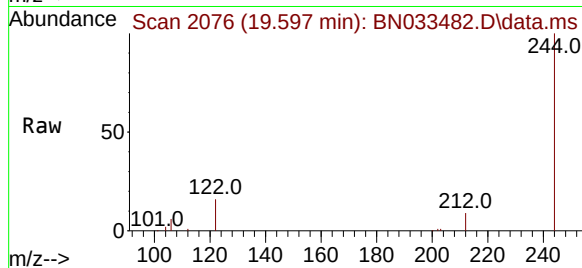




#31  
Terphenyl-d14  
Concen: 1.002 ng  
RT: 19.597 min Scan# 2076  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

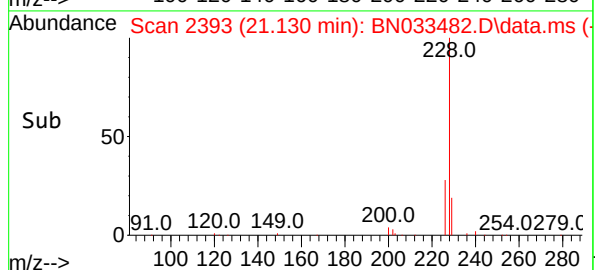
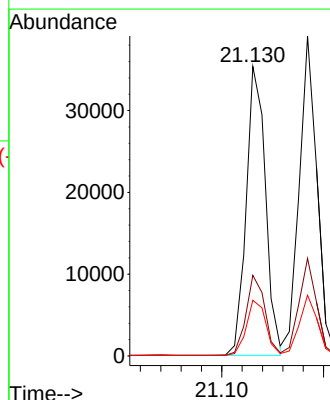
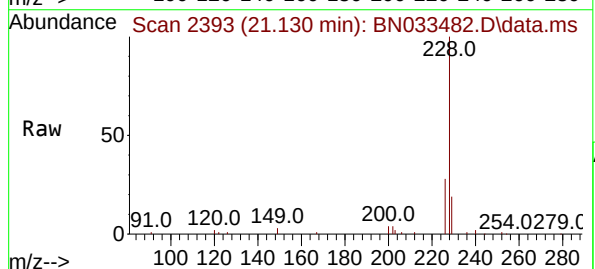
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

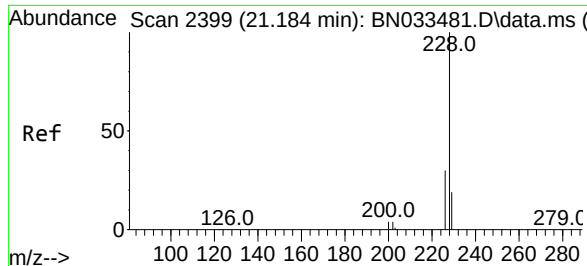
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 9.1   | 7.8   | 11.6  |
| 122     | 16.0  | 13.3  | 19.9  |



#32  
Benzo(a)anthracene  
Concen: 0.822 ng  
RT: 21.130 min Scan# 2393  
Delta R.T. 0.000 min  
Lab File: BN033482.D  
Acq: 19 Aug 2024 18:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.9  | 21.8  | 32.6  |
| 229     | 19.2  | 15.8  | 23.6  |





#33

Chrysene

Concen: 0.841 ng

RT: 21.184 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

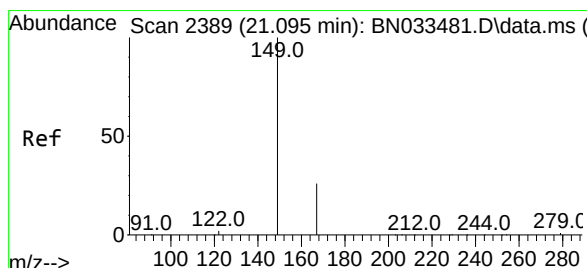
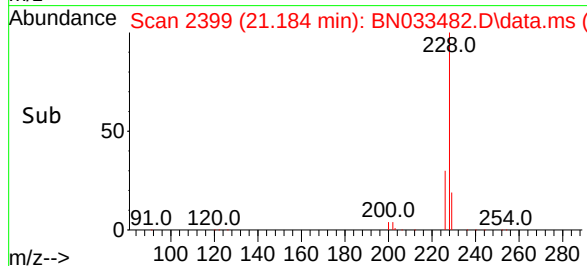
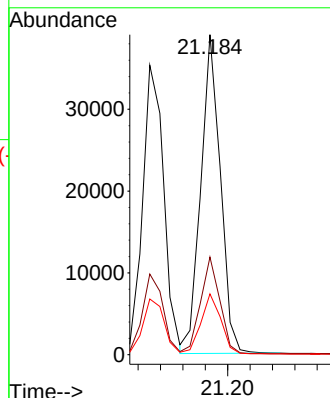
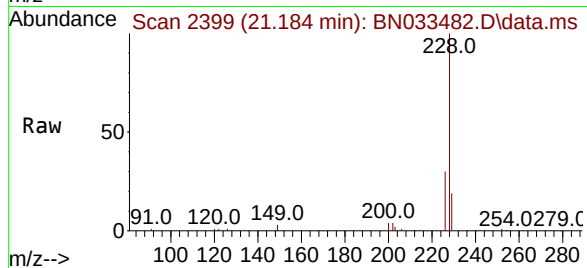
Tgt Ion:228 Resp: 47324

Ion Ratio Lower Upper

228 100

226 30.5 23.8 35.8

229 19.0 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.980 ng

RT: 21.095 min Scan# 2389

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

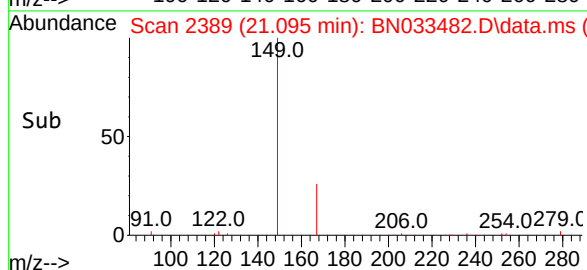
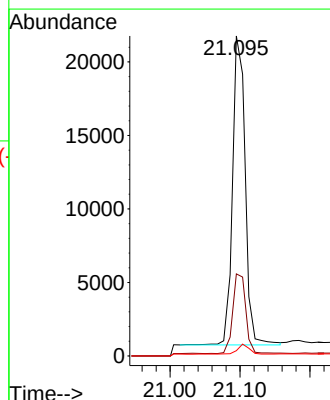
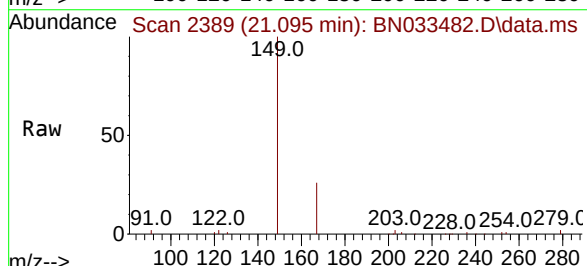
Tgt Ion:149 Resp: 26434

Ion Ratio Lower Upper

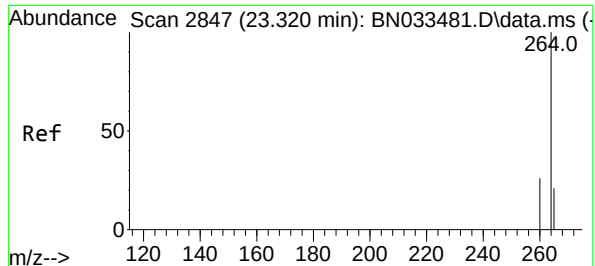
149 100

167 26.4 21.5 32.3

279 2.8 2.2 3.2







#35

Perylene-d12

Concen: 0.400 ng

RT: 23.320 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

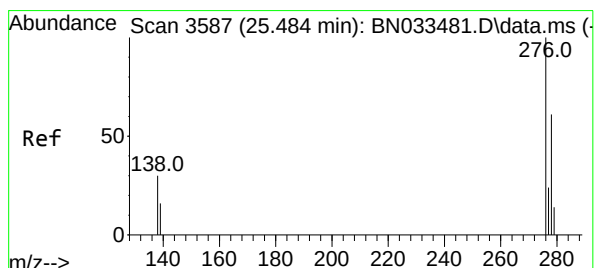
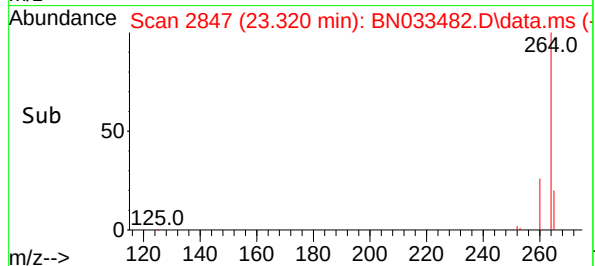
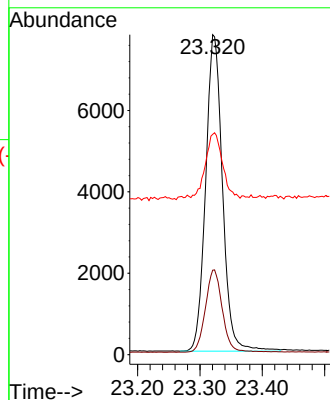
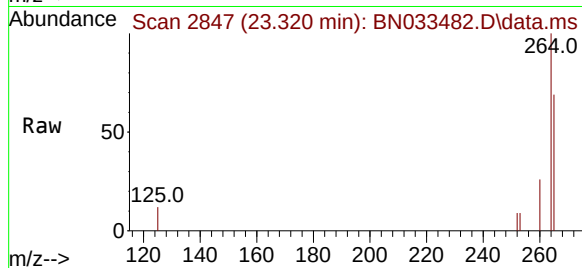
Tgt Ion:264 Resp: 14574

Ion Ratio Lower Upper

264 100

260 26.4 20.8 31.2

265 68.9 52.2 78.2



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.858 ng

RT: 25.478 min Scan# 3585

Delta R.T. -0.006 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

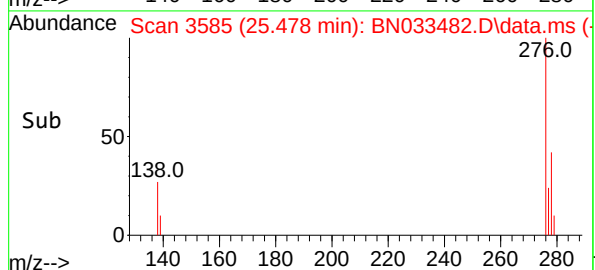
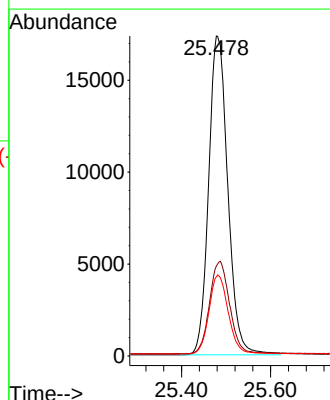
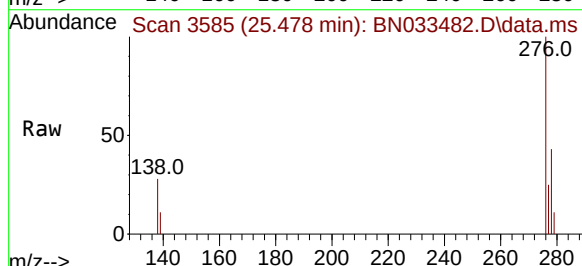
Tgt Ion:276 Resp: 51859

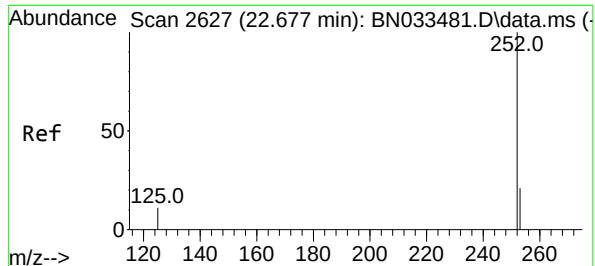
Ion Ratio Lower Upper

276 100

138 30.1 24.4 36.6

277 24.8 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.846 ng

RT: 22.677 min Scan# 2627

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

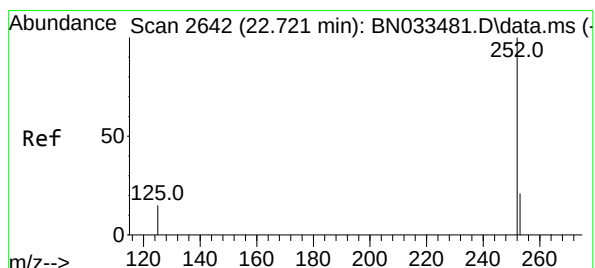
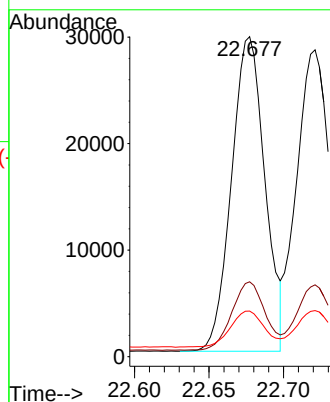
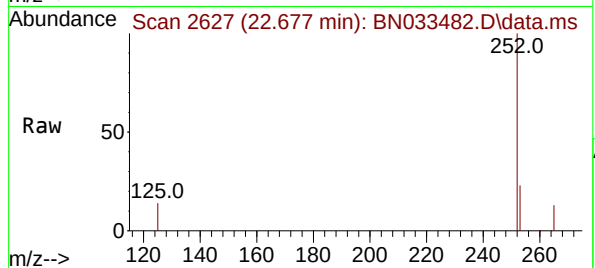
Tgt Ion:252 Resp: 46009

Ion Ratio Lower Upper

252 100

253 23.4 19.8 29.8

125 14.2 13.9 20.9



#38

Benzo(k)fluoranthene

Concen: 0.822 ng

RT: 22.721 min Scan# 2642

Delta R.T. 0.000 min

Lab File: BN033482.D

Acq: 19 Aug 2024 18:05

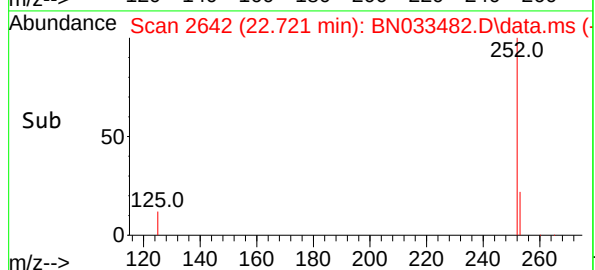
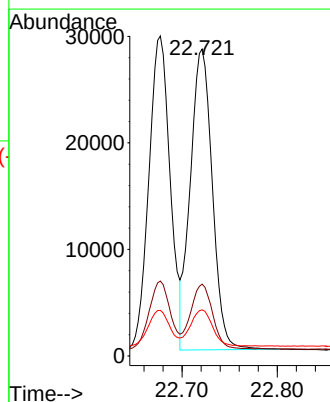
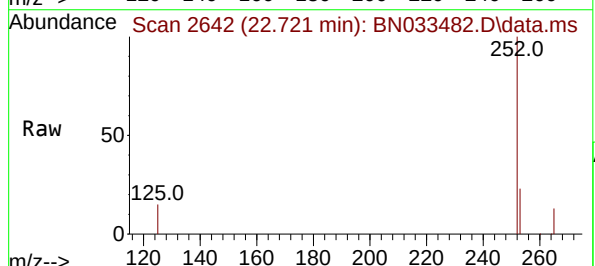
Tgt Ion:252 Resp: 45348

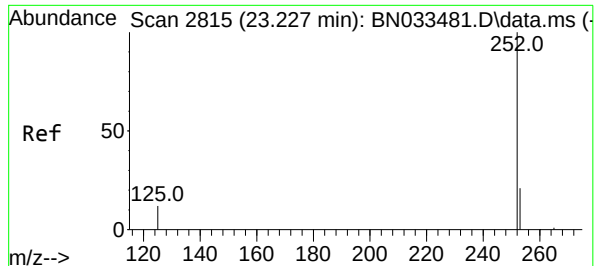
Ion Ratio Lower Upper

252 100

253 23.4 19.8 29.8

125 15.0 15.8 23.8#





#39

Benzo(a)pyrene

Concen: 0.831 ng

RT: 23.227 min Scan# 2815

Delta R.T. 0.000 min

Lab File: BN033482.D

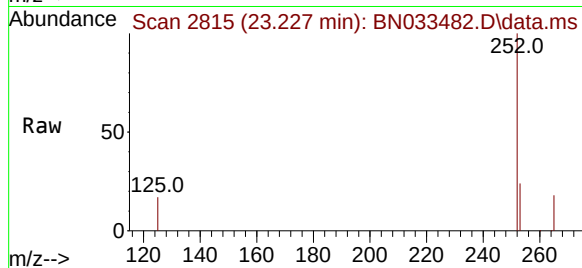
Acq: 19 Aug 2024 18:05

Instrument :

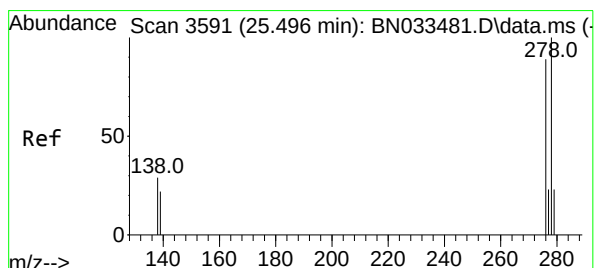
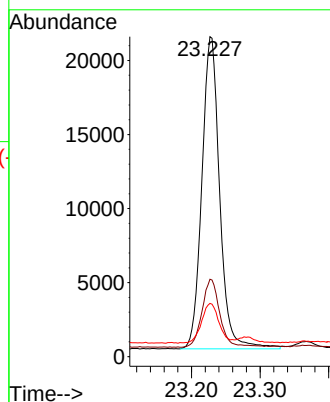
BNA\_N

ClientSampleId :

SSTDICC0.8



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 38156 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 24.2  | 21.5  | 32.3  |
| 125       | 16.7  | 17.0  | 25.4  |



#40

Dibenzo(a,h)anthracene

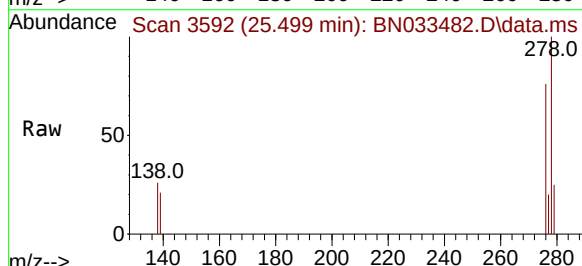
Concen: 0.869 ng

RT: 25.499 min Scan# 3592

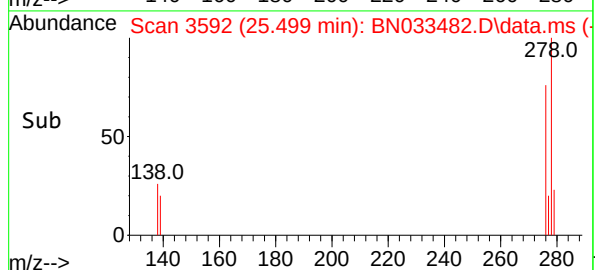
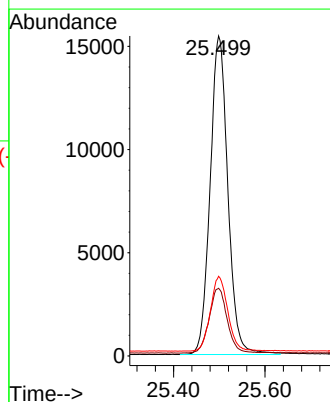
Delta R.T. 0.003 min

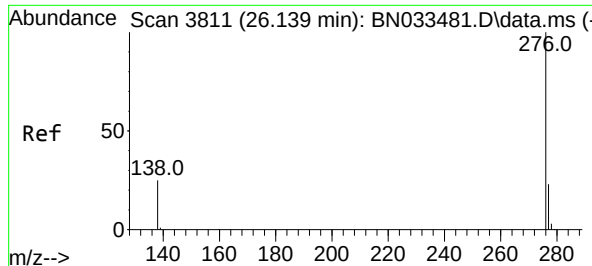
Lab File: BN033482.D

Acq: 19 Aug 2024 18:05



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 41569 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 21.1  | 19.1  | 28.7  |
| 279       | 24.9  | 21.0  | 31.4  |





#41

Benzo(g,h,i)perylene

Concen: 0.842 ng

RT: 26.136 min Scan# 3811

Delta R.T. -0.003 min

Lab File: BN033482.D

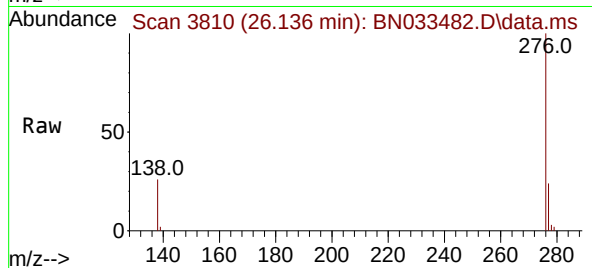
Acq: 19 Aug 2024 18:05

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8



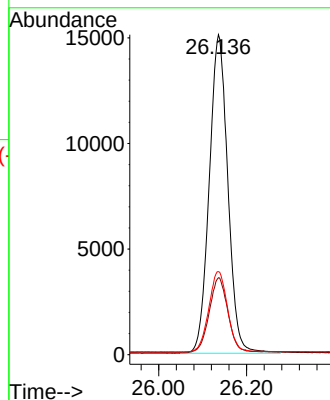
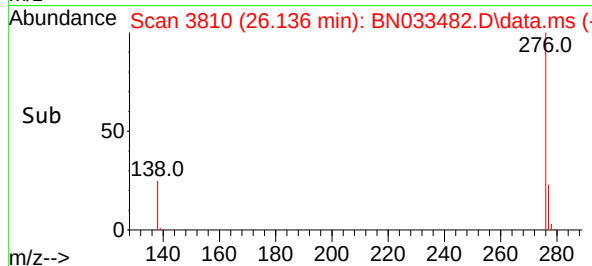
Tgt Ion:276 Resp: 44249

Ion Ratio Lower Upper

276 100

277 24.0 19.7 29.5

138 26.0 21.8 32.6



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033483.D  
 Acq On : 19 Aug 2024 18:41  
 Operator : MA/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Aug 19 23:23:19 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 19 23:20:26 2024  
 Response via : Initial Calibration

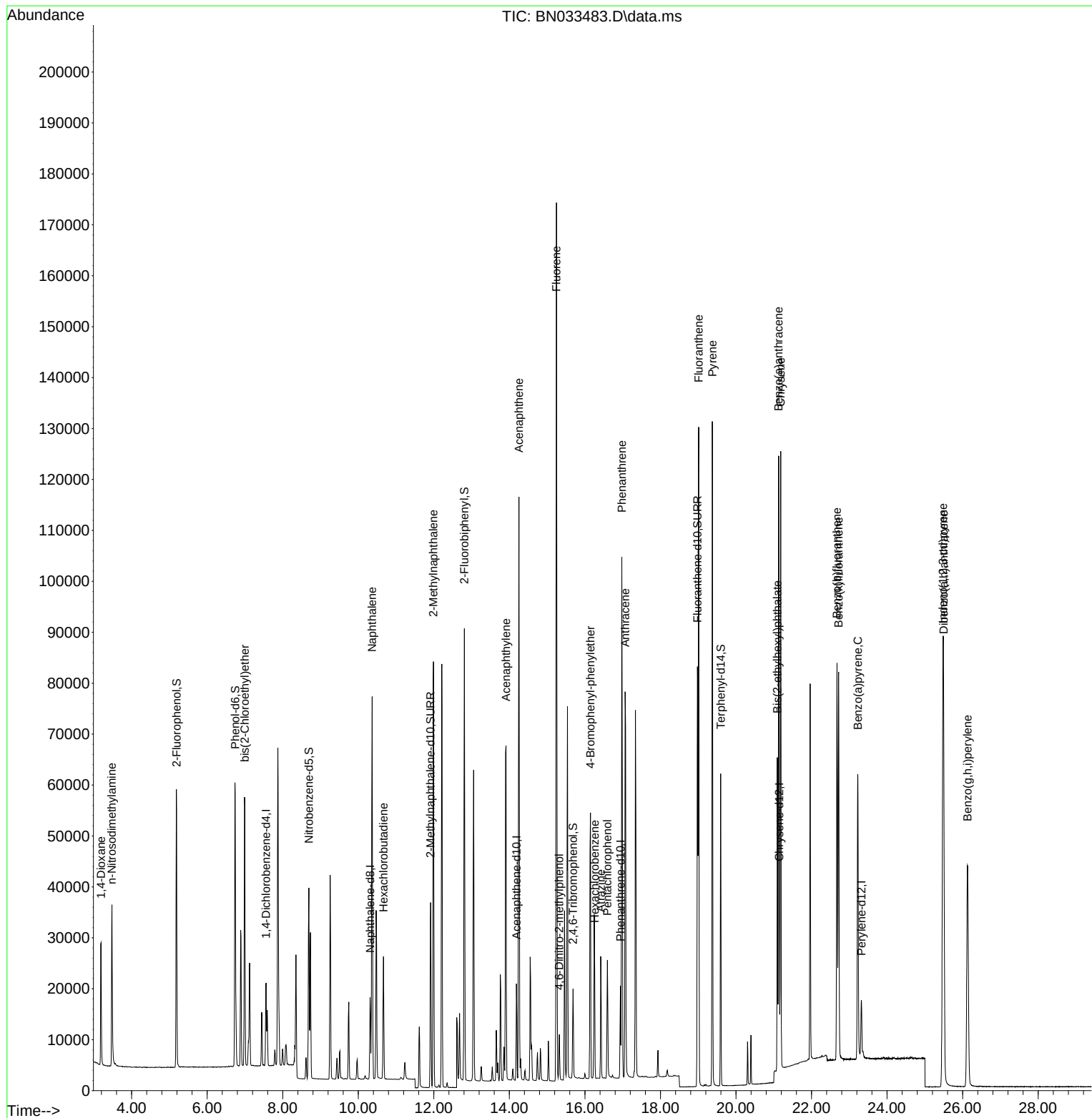
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)   |
|-------------------------------|--------|------|----------|-------|-------|------------|
| Internal Standards            |        |      |          |       |       |            |
| 1) 1,4-Dichlorobenzene-d4     | 7.559  | 152  | 7702     | 0.400 | ng    | 0.00       |
| 7) Naphthalene-d8             | 10.314 | 136  | 20093    | 0.400 | ng    | 0.00       |
| 13) Acenaphthene-d10          | 14.189 | 164  | 10300    | 0.400 | ng    | 0.00       |
| 19) Phenanthrene-d10          | 16.942 | 188  | 21446    | 0.400 | ng    | 0.00       |
| 29) Chrysene-d12              | 21.148 | 240  | 15163    | 0.400 | ng    | 0.00       |
| 35) Perylene-d12              | 23.320 | 264  | 14214    | 0.400 | ng    | 0.00       |
| System Monitoring Compounds   |        |      |          |       |       |            |
| 4) 2-Fluorophenol             | 5.190  | 112  | 40890    | 1.888 | ng    | 0.00       |
| 5) Phenol-d6                  | 6.743  | 99   | 49228    | 1.739 | ng    | 0.00       |
| 8) Nitrobenzene-d5            | 8.691  | 82   | 27737    | 1.822 | ng    | 0.00       |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 48489    | 1.605 | ng    | 0.00       |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 9316     | 1.771 | ng    | 0.00       |
| 15) 2-Fluorobiphenyl          | 12.810 | 172  | 71311    | 1.711 | ng    | 0.00       |
| 27) Fluoranthene-d10          | 18.980 | 212  | 87075    | 1.549 | ng    | 0.00       |
| 31) Terphenyl-d14             | 19.597 | 244  | 57186    | 1.957 | ng    | 0.00       |
| Target Compounds              |        |      |          |       |       |            |
| 2) 1,4-Dioxane                | 3.190  | 88   | 15020    | 1.812 | ng    | Qvalue 100 |
| 3) n-Nitrosodimethylamine     | 3.472  | 42   | 17709    | 1.649 | ng    | 96         |
| 6) bis(2-Chloroethyl)ether    | 6.996  | 93   | 35921    | 1.627 | ng    | 100        |
| 9) Naphthalene                | 10.368 | 128  | 90555    | 1.661 | ng    | 99         |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 18053    | 1.726 | ng    | # 99       |
| 12) 2-Methylnaphthalene       | 11.990 | 142  | 57541    | 1.577 | ng    | 99         |
| 16) Acenaphthylene            | 13.911 | 152  | 78001    | 1.648 | ng    | 100        |
| 17) Acenaphthene              | 14.253 | 154  | 54451    | 1.672 | ng    | 98         |
| 18) Fluorene                  | 15.247 | 166  | 67863    | 1.592 | ng    | 100        |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 5910     | 2.209 | ng    | # 73       |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 21901    | 1.712 | ng    | 98         |
| 22) Hexachlorobenzene         | 16.259 | 284  | 24018    | 1.681 | ng    | 99         |
| 23) Atrazine                  | 16.420 | 200  | 17440    | 1.712 | ng    | 99         |
| 24) Pentachlorophenol         | 16.594 | 266  | 10462    | 1.789 | ng    | 98         |
| 25) Phenanthrene              | 16.979 | 178  | 100158   | 1.632 | ng    | 100        |
| 26) Anthracene                | 17.066 | 178  | 89744    | 1.655 | ng    | 99         |
| 28) Fluoranthene              | 19.012 | 202  | 112640   | 1.513 | ng    | 100        |
| 30) Pyrene                    | 19.374 | 202  | 112513   | 1.842 | ng    | 100        |
| 32) Benzo(a)anthracene        | 21.130 | 228  | 92764    | 1.649 | ng    | 99         |
| 33) Chrysene                  | 21.184 | 228  | 91851    | 1.637 | ng    | 100        |
| 34) Bis(2-ethylhexyl)phtha... | 21.095 | 149  | 52726    | 1.959 | ng    | 99         |
| 36) Indeno(1,2,3-cd)pyrene    | 25.478 | 276  | 99989    | 1.697 | ng    | 99         |
| 37) Benzo(b)fluoranthene      | 22.674 | 252  | 89426    | 1.685 | ng    | # 93       |
| 38) Benzo(k)fluoranthene      | 22.718 | 252  | 89588    | 1.666 | ng    | # 91       |
| 39) Benzo(a)pyrene            | 23.224 | 252  | 74888    | 1.673 | ng    | # 90       |
| 40) Dibenzo(a,h)anthracene    | 25.496 | 278  | 80194    | 1.720 | ng    | 94         |
| 41) Benzo(g,h,i)perylene      | 26.130 | 276  | 85629    | 1.670 | ng    | 98         |

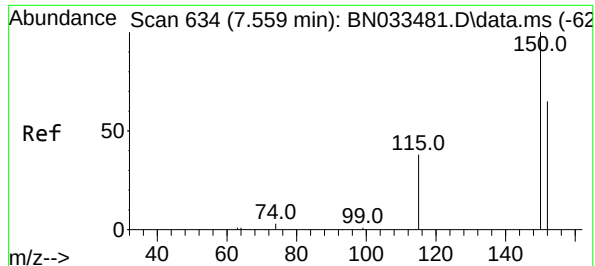
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : BN033483.D  
Acq On : 19 Aug 2024 18:41  
Operator : MA/JU  
Sample : SSTDICC1.6  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

Quant Time: Aug 19 23:23:19 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:20:26 2024  
Response via : Initial Calibration

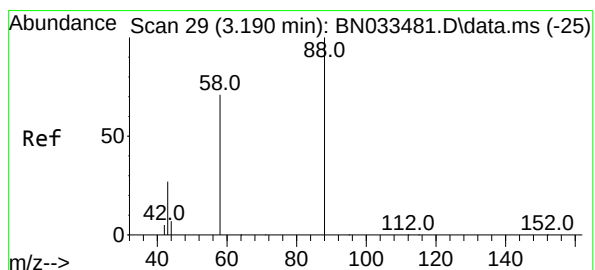
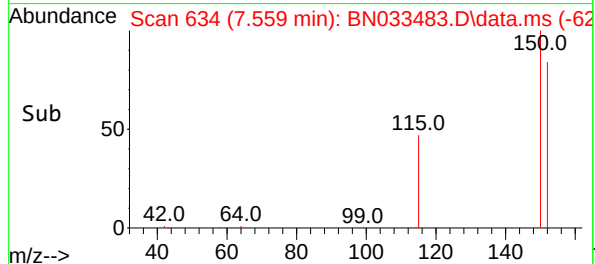
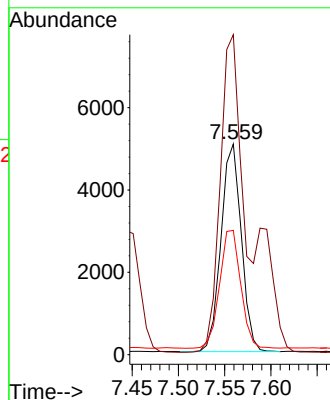
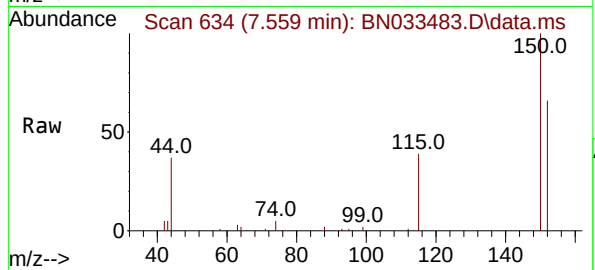




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.559 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

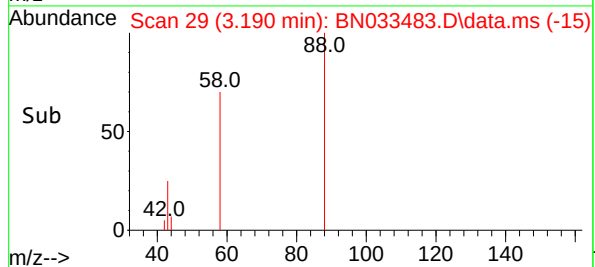
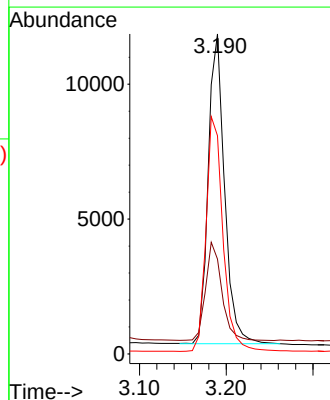
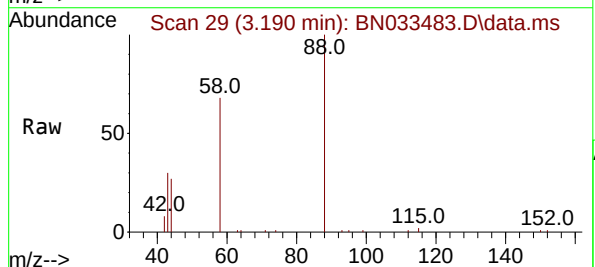
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

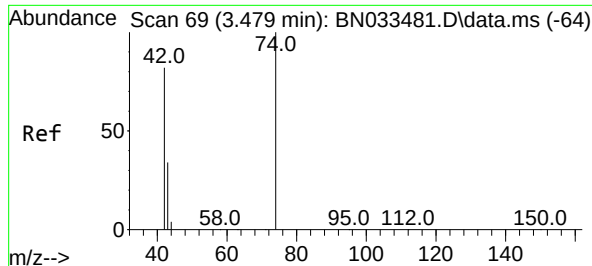
Tgt Ion:152 Resp: 7702  
Ion Ratio Lower Upper  
152 100  
150 151.8 122.2 183.2  
115 59.0 47.2 70.8



#2  
1,4-Dioxane  
Concen: 1.812 ng  
RT: 3.190 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion: 88 Resp: 15020  
Ion Ratio Lower Upper  
88 100  
43 31.3 25.0 37.4  
58 78.6 62.5 93.7

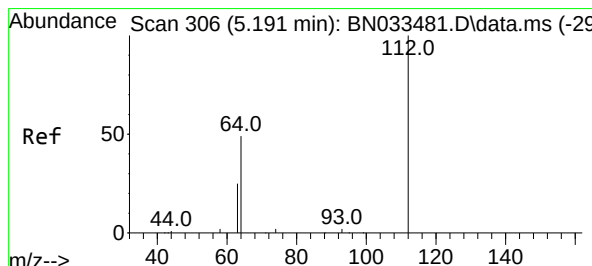
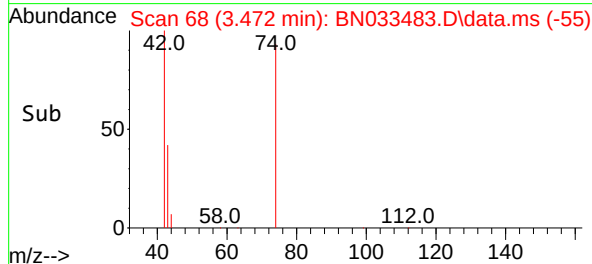
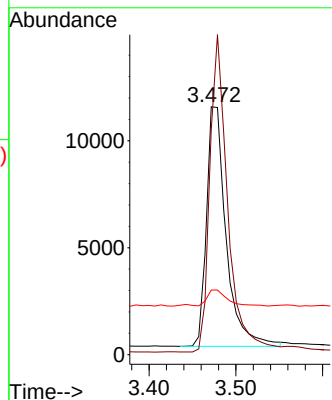
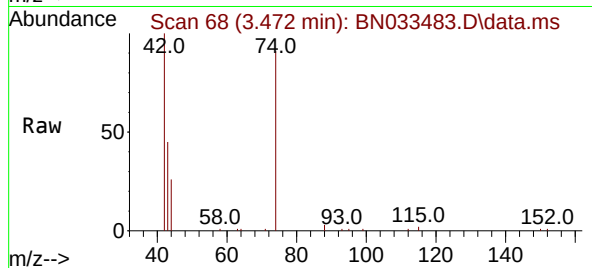




#3  
n-Nitrosodimethylamine  
Concen: 1.649 ng  
RT: 3.472 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

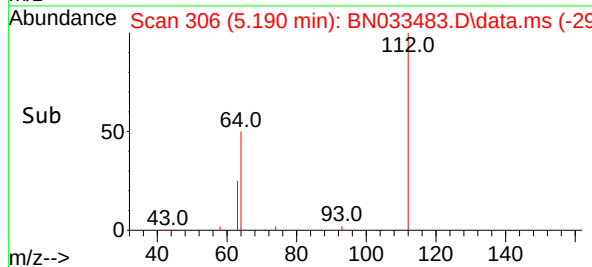
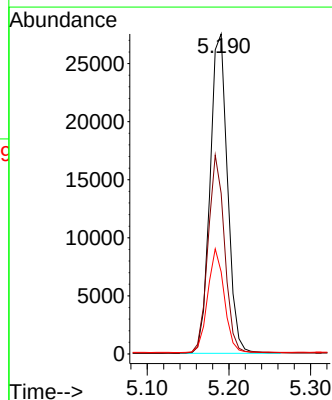
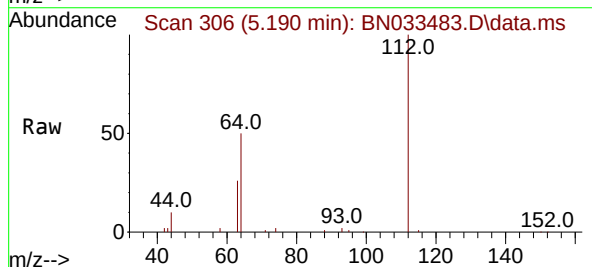
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

Tgt Ion: 42 Resp: 17709  
Ion Ratio Lower Upper  
42 100  
74 120.3 100.2 150.2  
44 7.1 5.3 7.9

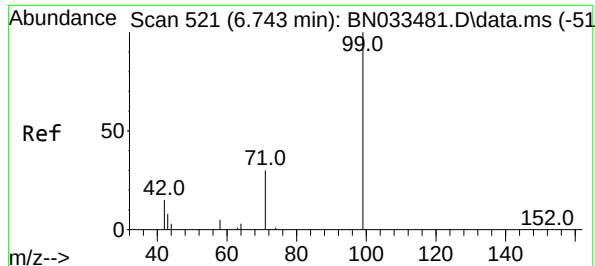


#4  
2-Fluorophenol  
Concen: 1.888 ng  
RT: 5.190 min Scan# 306  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion: 112 Resp: 40890  
Ion Ratio Lower Upper  
112 100  
64 59.0 47.1 70.7  
63 30.8 24.9 37.3



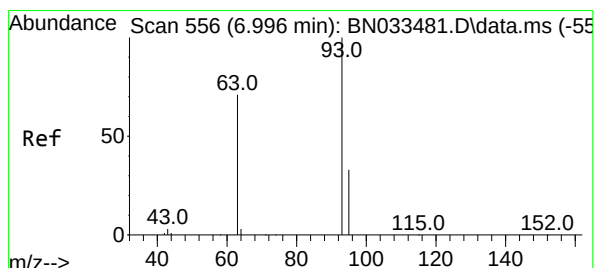
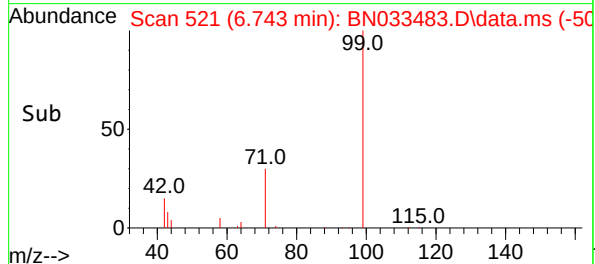
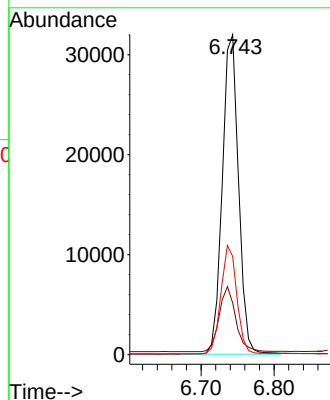
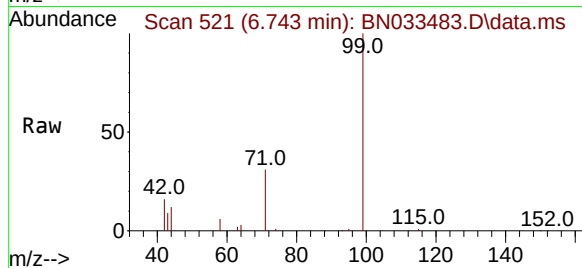




#5  
Phenol-d6  
Concen: 1.739 ng  
RT: 6.743 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

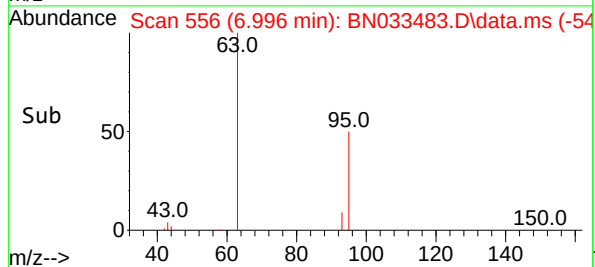
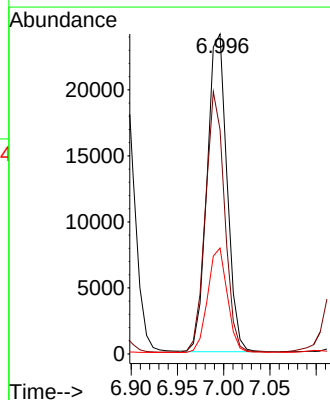
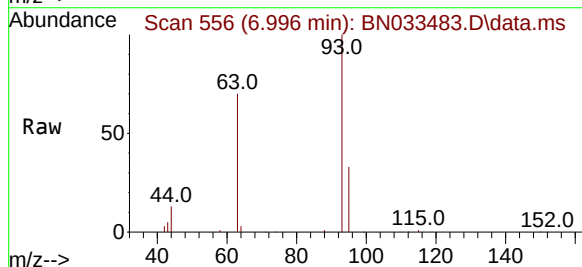
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SSTDICC1.6

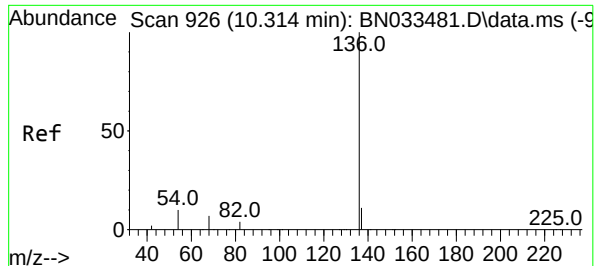
Tgt Ion: 99 Resp: 49228  
Ion Ratio Lower Upper  
99 100  
42 20.8 16.6 24.8  
71 33.3 26.2 39.4



#6  
bis(2-Chloroethyl)ether  
Concen: 1.627 ng  
RT: 6.996 min Scan# 556  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion: 93 Resp: 35921  
Ion Ratio Lower Upper  
93 100  
63 79.1 63.0 94.4  
95 32.6 26.0 39.0

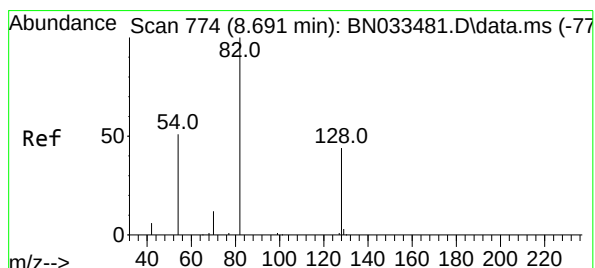
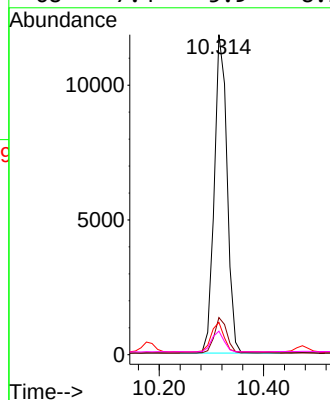
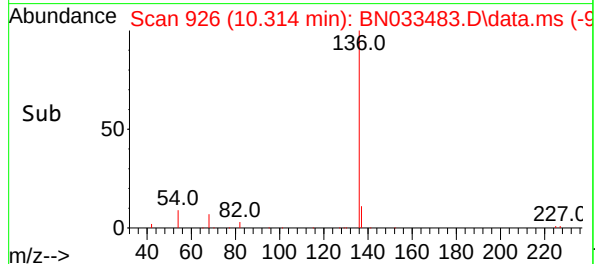
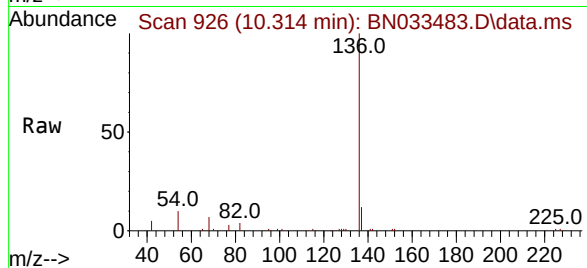




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

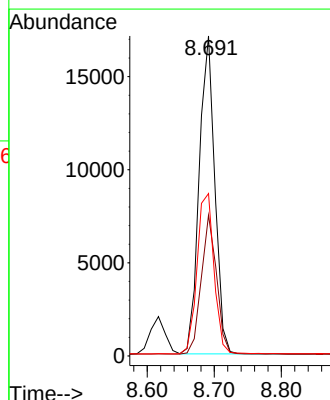
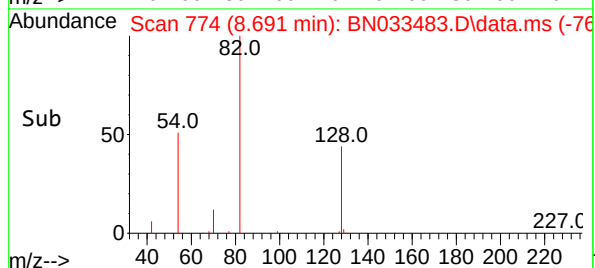
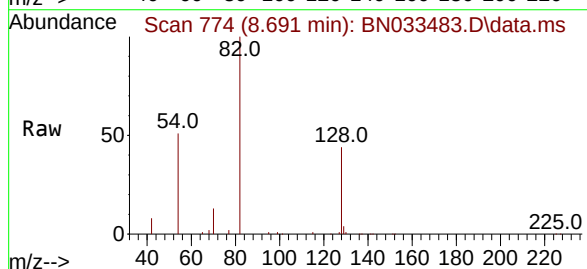
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

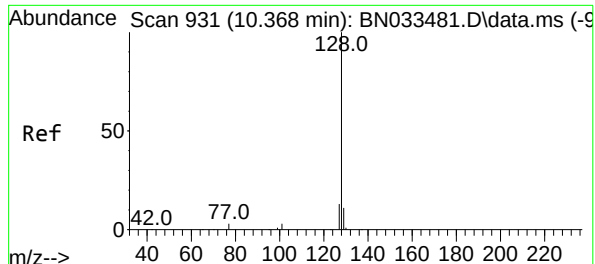
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 20093 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.6  | 9.0   | 13.6  |
| 54       | 10.1  | 8.3   | 12.5  |
| 68       | 7.4   | 5.9   | 8.9   |



#8  
Nitrobenzene-d5  
Concen: 1.822 ng  
RT: 8.691 min Scan# 774  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 27737 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 44.0  | 36.0  | 54.0  |
| 54       | 50.8  | 42.0  | 63.0  |

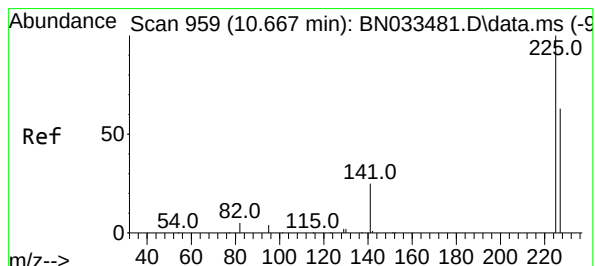
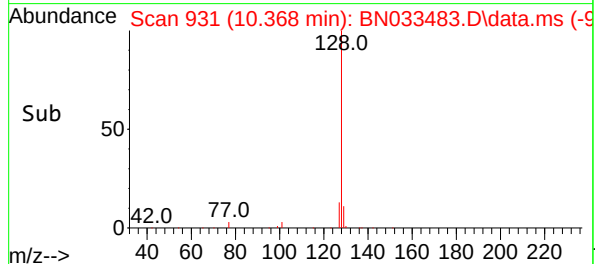
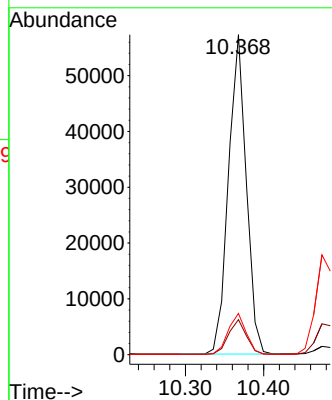
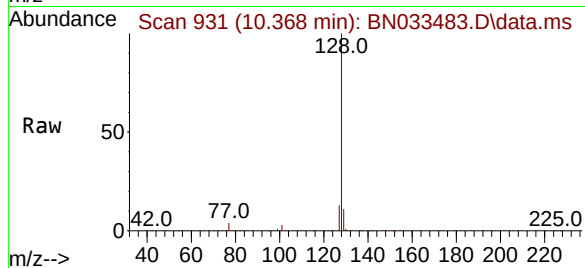




#9  
Naphthalene  
Concen: 1.661 ng  
RT: 10.368 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

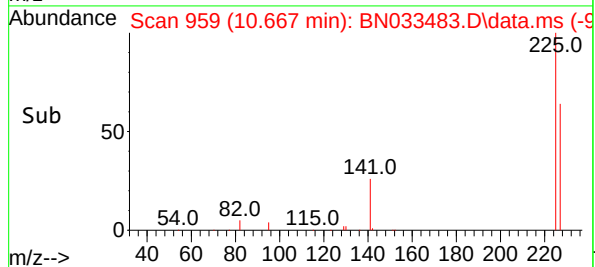
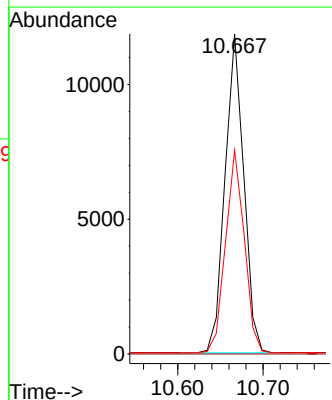
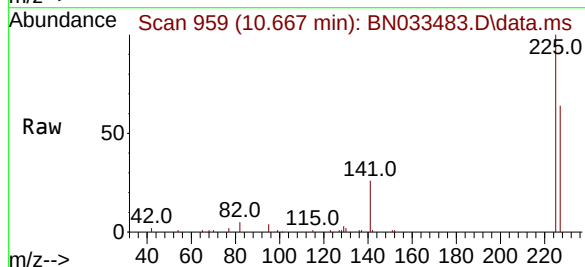
Instrument :  
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ClientSampleId :  
SSTDICC1.6

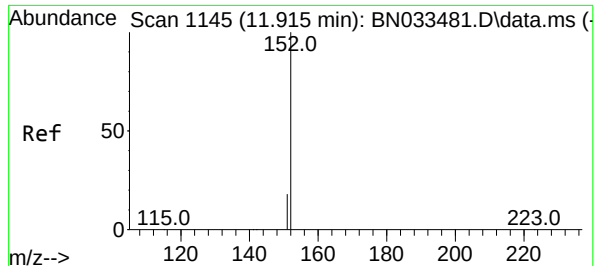
Tgt Ion:128 Resp: 90555  
Ion Ratio Lower Upper  
128 100  
129 11.0 9.1 13.7  
127 12.9 10.7 16.1



#10  
Hexachlorobutadiene  
Concen: 1.726 ng  
RT: 10.667 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion:225 Resp: 18053  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.5 51.2 76.8

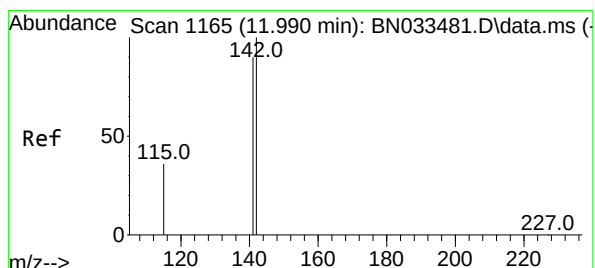
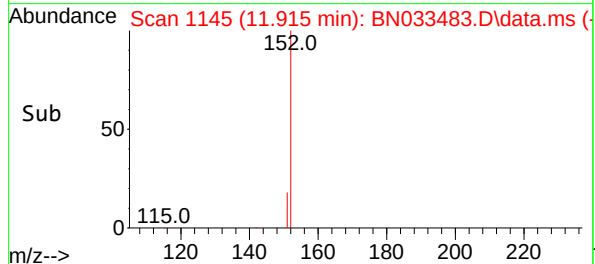
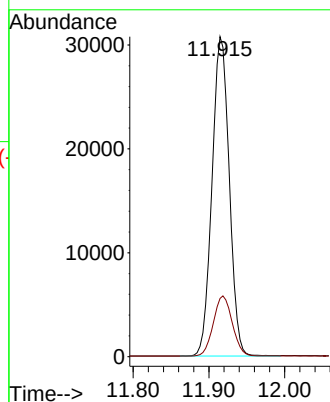
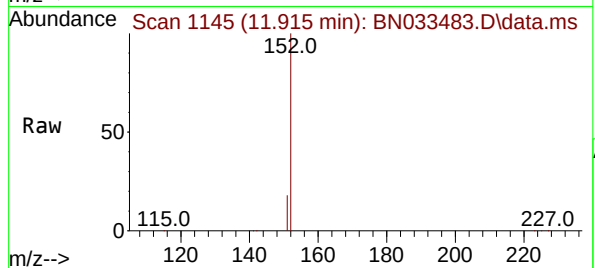




#11  
2-Methylnaphthalene-d10  
Concen: 1.605 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

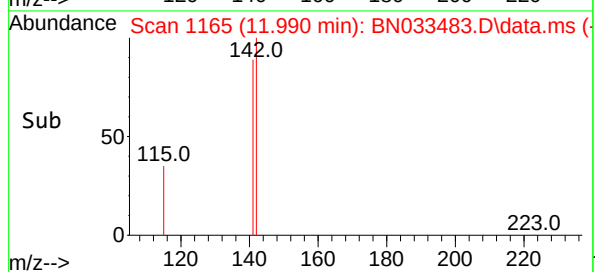
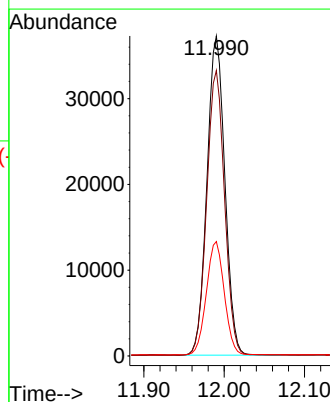
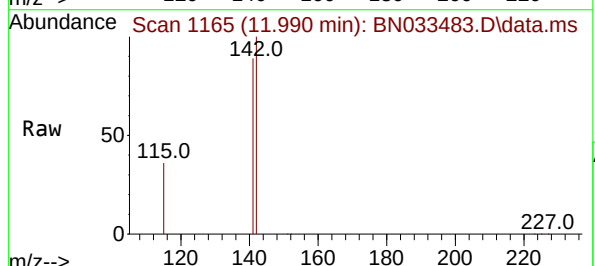
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BNA\_N  
ClientSampleId :  
SSTDICC1.6

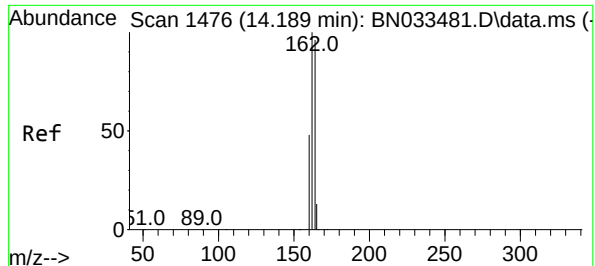
Tgt Ion:152 Resp: 48489  
Ion Ratio Lower Upper  
152 100  
151 20.7 16.6 25.0



#12  
2-Methylnaphthalene  
Concen: 1.577 ng  
RT: 11.990 min Scan# 1165  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion:142 Resp: 57541  
Ion Ratio Lower Upper  
142 100  
141 89.2 71.7 107.5  
115 35.7 29.4 44.2

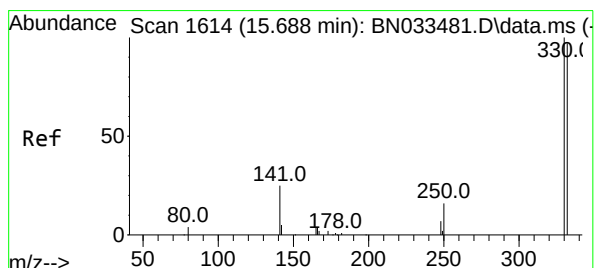
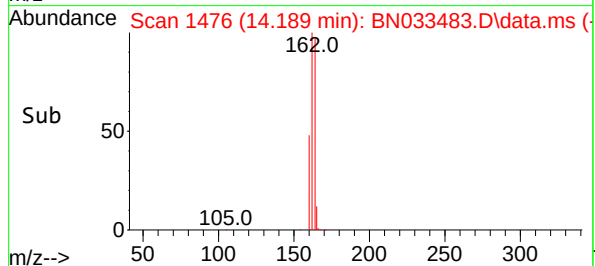
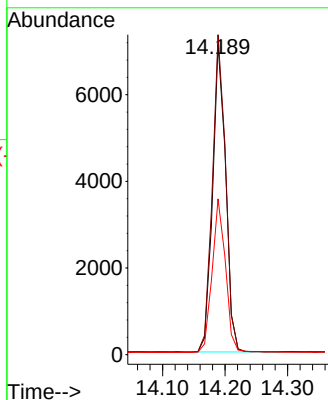
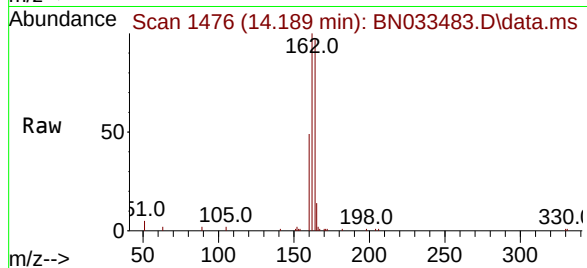




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.189 min Scan# 1476  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

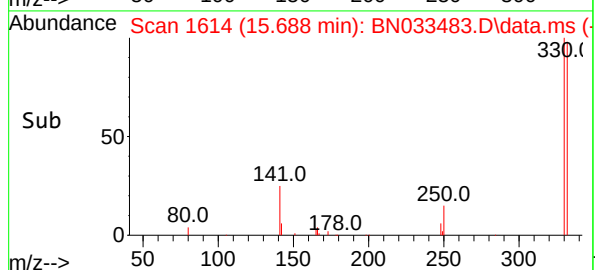
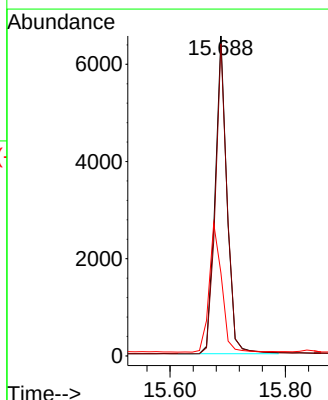
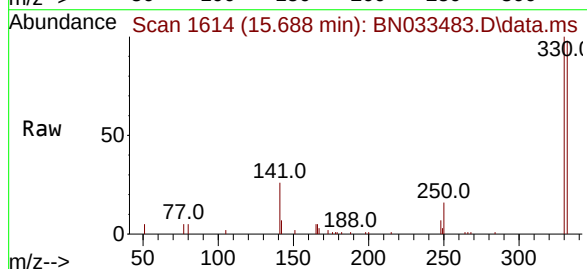
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

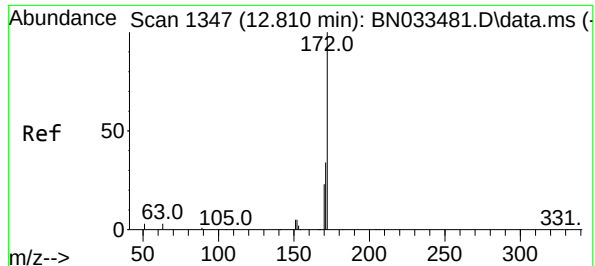
Tgt Ion:164 Resp: 10300  
Ion Ratio Lower Upper  
164 100  
162 103.0 83.5 125.3  
160 50.2 40.2 60.4



#14  
2,4,6-Tribromophenol  
Concen: 1.771 ng  
RT: 15.688 min Scan# 1614  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion:330 Resp: 9316  
Ion Ratio Lower Upper  
330 100  
332 96.7 77.5 116.3  
141 42.8 33.9 50.9





#15

2-Fluorobiphenyl

Concen: 1.711 ng

RT: 12.810 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

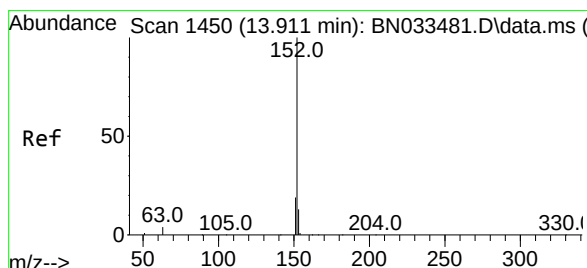
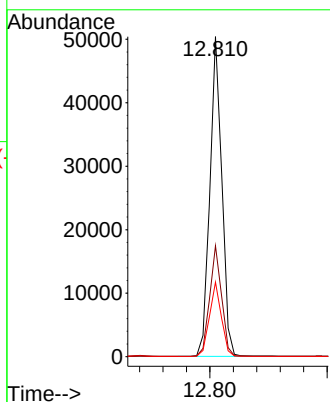
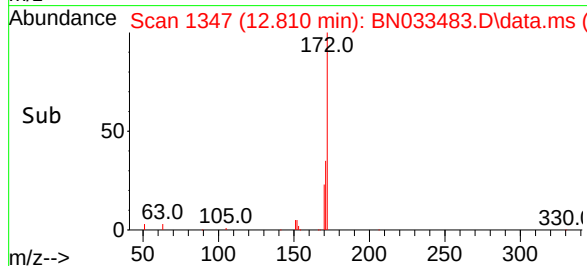
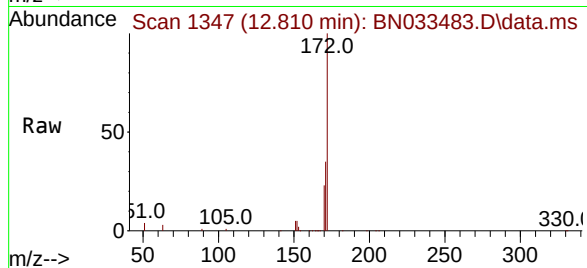
Tgt Ion:172 Resp: 71311

Ion Ratio Lower Upper

172 100

171 34.6 27.7 41.5

170 23.3 18.3 27.5



#16

Acenaphthylene

Concen: 1.648 ng

RT: 13.911 min Scan# 1450

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

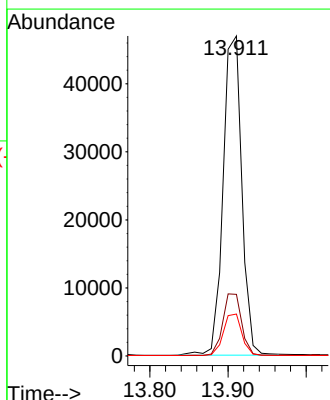
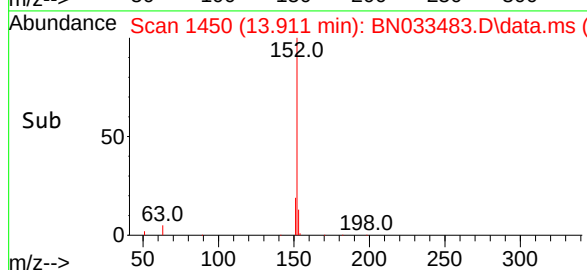
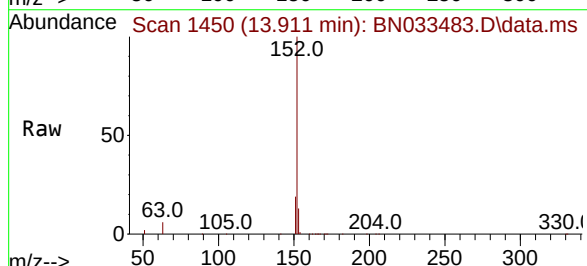
Tgt Ion:152 Resp: 78001

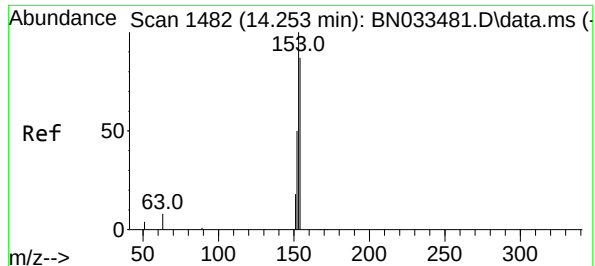
Ion Ratio Lower Upper

152 100

151 19.5 15.7 23.5

153 13.0 10.3 15.5





#17

Acenaphthene

Concen: 1.672 ng

RT: 14.253 min Scan# 1482

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

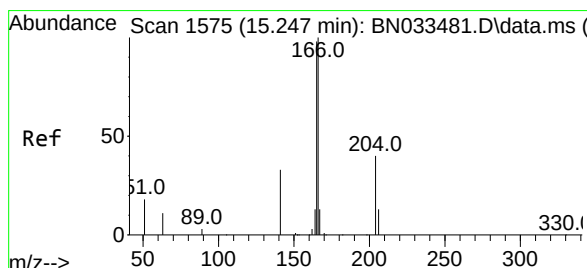
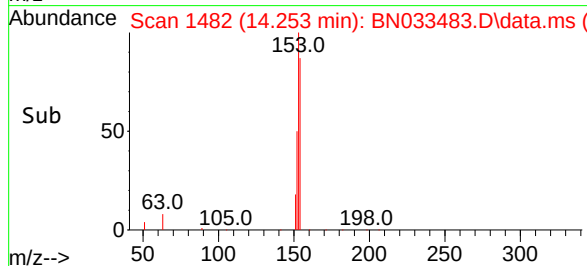
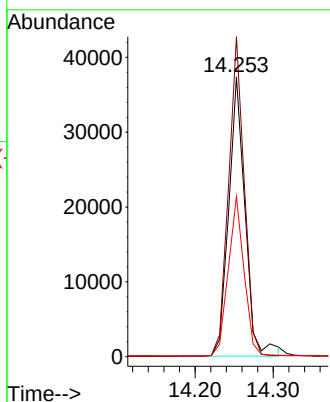
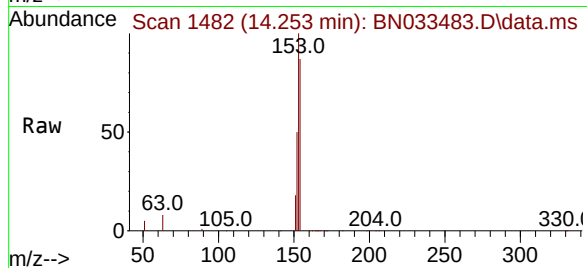
Tgt Ion:154 Resp: 54451

Ion Ratio Lower Upper

154 100

153 109.7 89.0 133.6

152 55.1 45.2 67.8



#18

Fluorene

Concen: 1.592 ng

RT: 15.247 min Scan# 1575

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

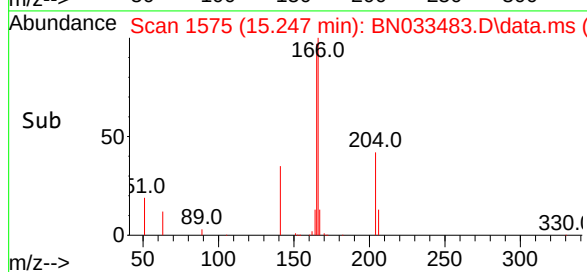
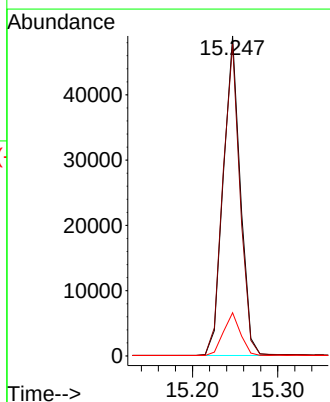
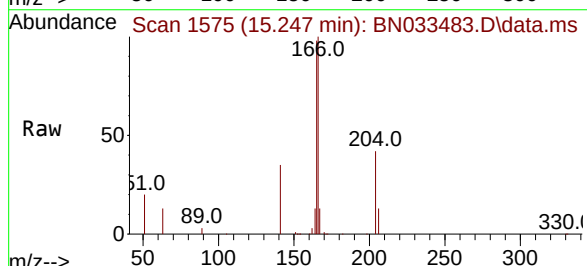
Tgt Ion:166 Resp: 67863

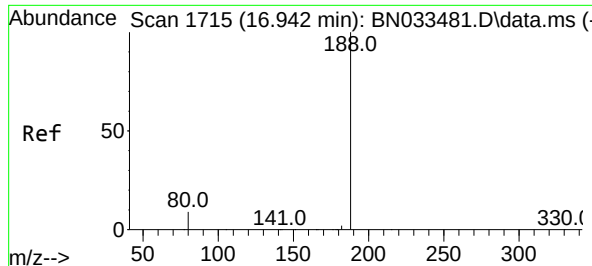
Ion Ratio Lower Upper

166 100

165 97.8 78.2 117.4

167 13.4 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.942 min Scan# 1715

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

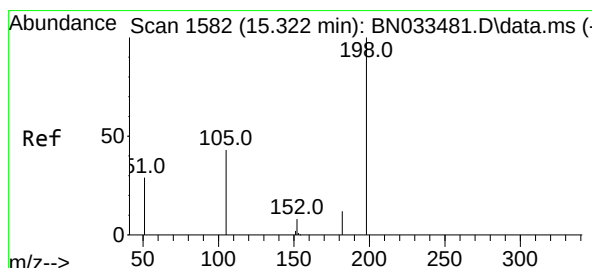
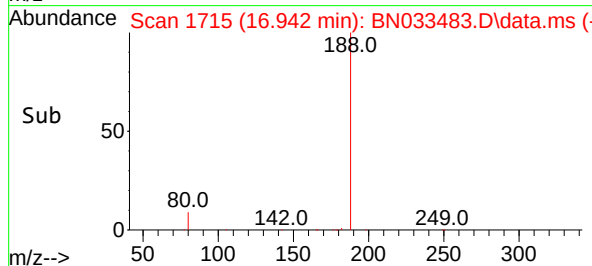
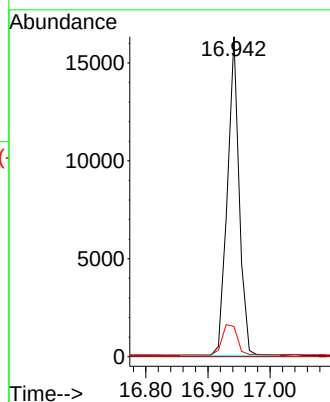
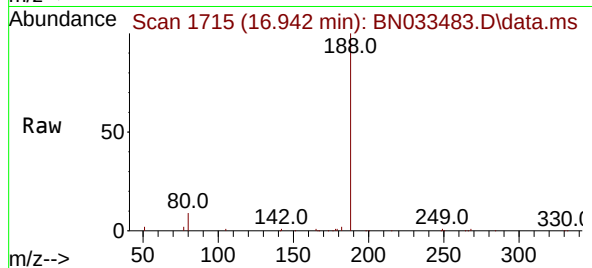
Tgt Ion:188 Resp: 21446

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.5 7.8 11.8



#20

4,6-Dinitro-2-methylphenol

Concen: 2.209 ng

RT: 15.322 min Scan# 1582

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

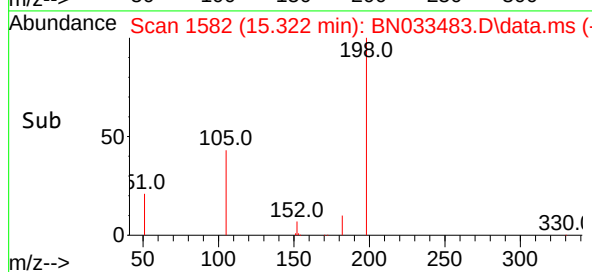
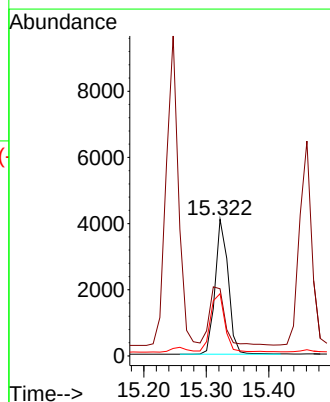
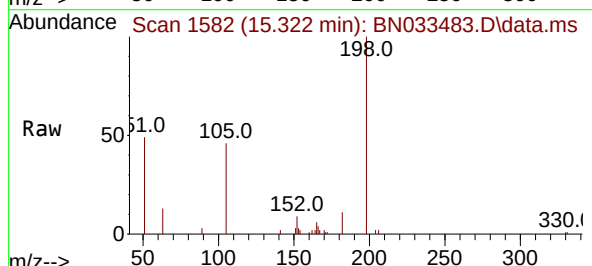
Tgt Ion:198 Resp: 5910

Ion Ratio Lower Upper

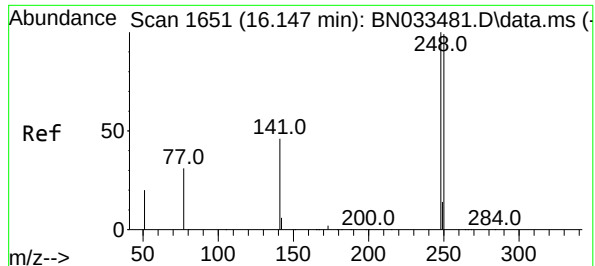
198 100

51 49.1 65.1 97.7#

105 45.6 44.8 67.2



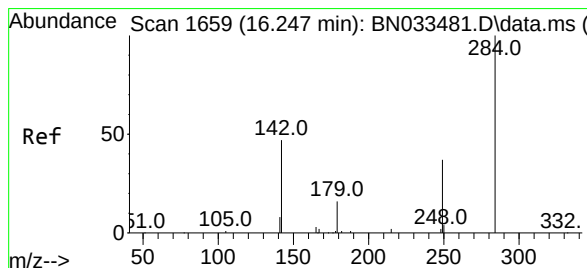
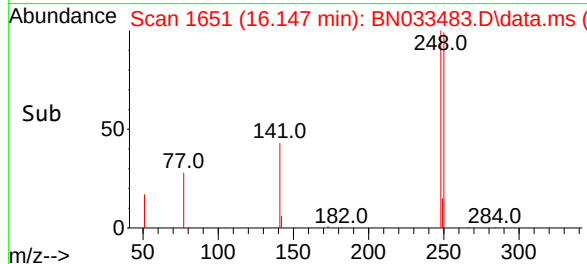
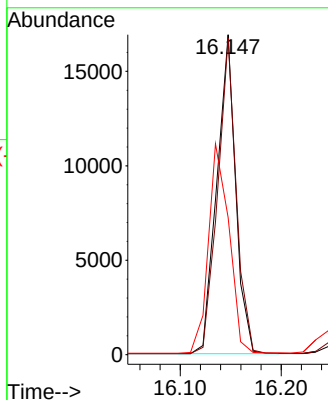
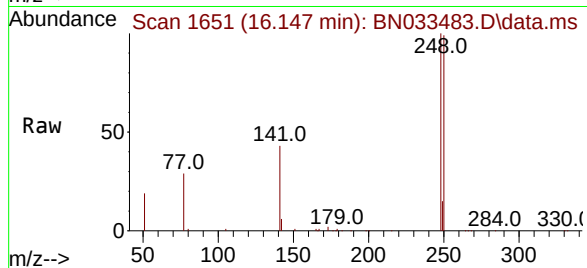




#21  
4-Bromophenyl-phenylether  
Concen: 1.712 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

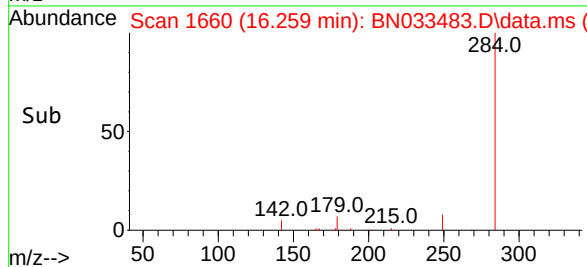
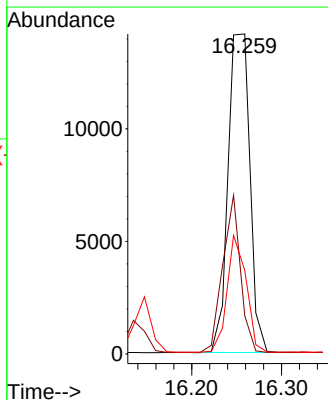
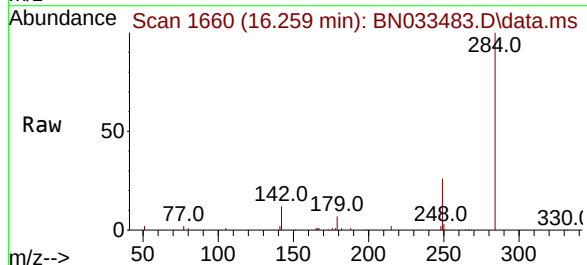
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

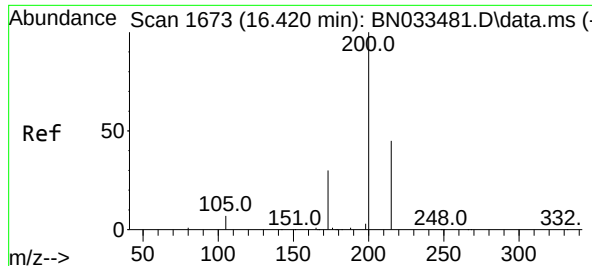
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 98.9  | 79.2  | 118.8 |
| 141     | 42.9  | 37.9  | 56.9  |



#22  
Hexachlorobenzene  
Concen: 1.681 ng  
RT: 16.259 min Scan# 1660  
Delta R.T. 0.012 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 39.9  | 31.8  | 47.6  |
| 249     | 31.8  | 26.0  | 39.0  |

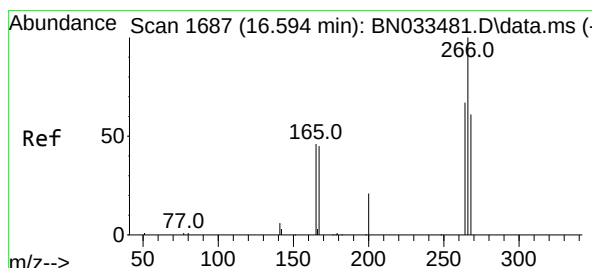
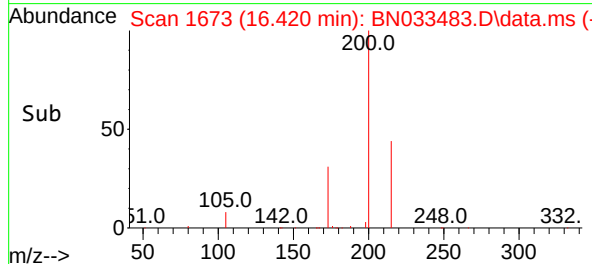
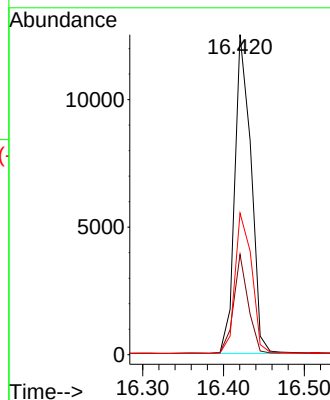
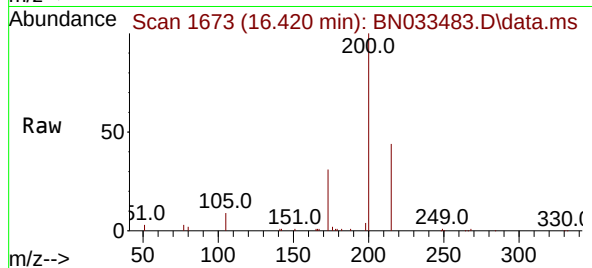




#23  
Atrazine  
Concen: 1.712 ng  
RT: 16.420 min Scan# 1673  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

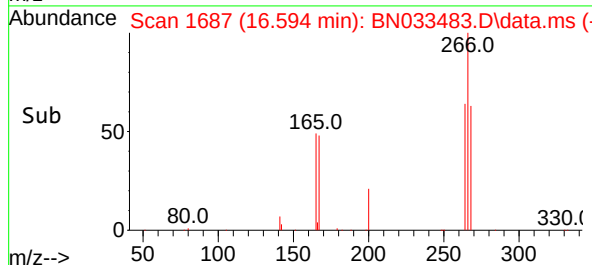
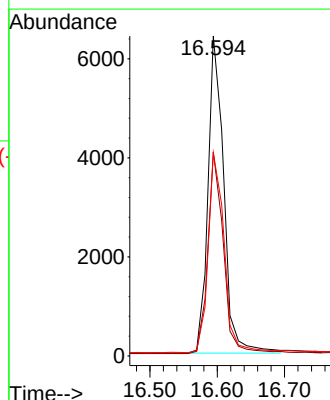
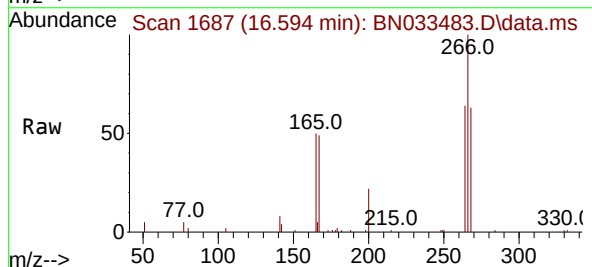
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

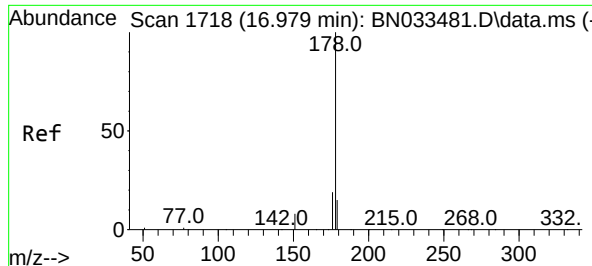
Tgt Ion:200 Resp: 17440  
Ion Ratio Lower Upper  
200 100  
173 31.4 25.3 37.9  
215 44.3 36.6 54.8



#24  
Pentachlorophenol  
Concen: 1.789 ng  
RT: 16.594 min Scan# 1687  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion:266 Resp: 10462  
Ion Ratio Lower Upper  
266 100  
264 62.4 51.9 77.9  
268 63.9 51.0 76.4





#25

Phenanthrene

Concen: 1.632 ng

RT: 16.979 min Scan# 1718

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

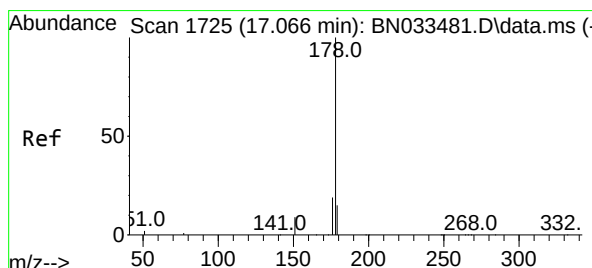
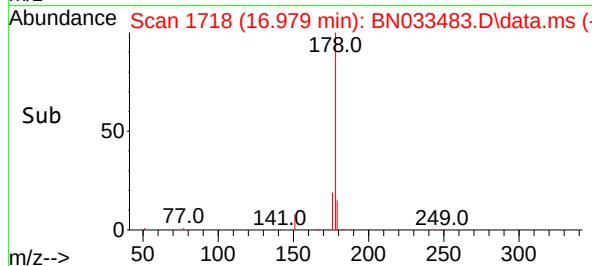
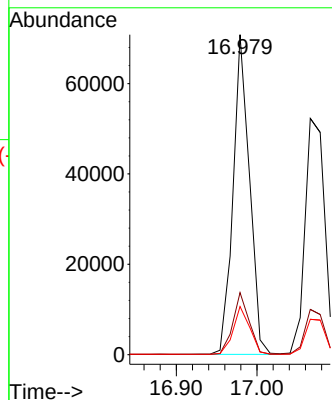
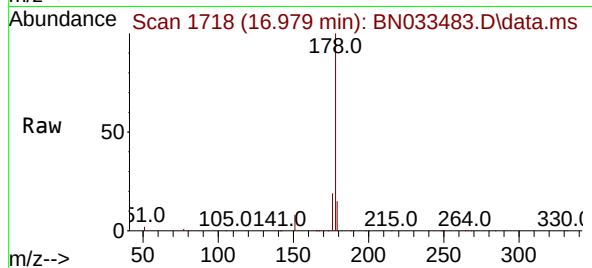
Tgt Ion:178 Resp: 100158

Ion Ratio Lower Upper

178 100

176 19.1 15.3 22.9

179 15.1 12.3 18.5



#26

Anthracene

Concen: 1.655 ng

RT: 17.066 min Scan# 1725

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

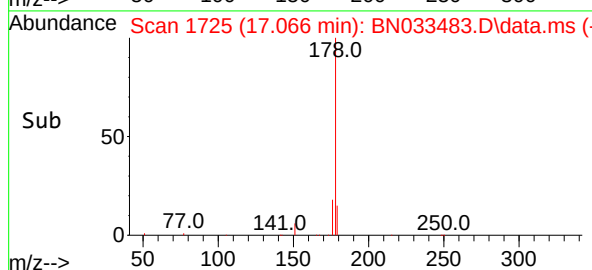
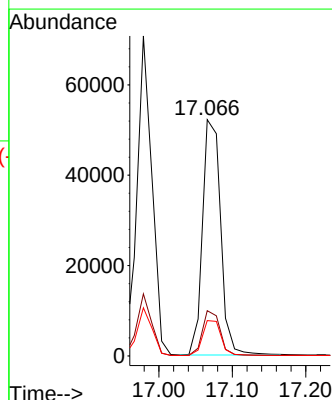
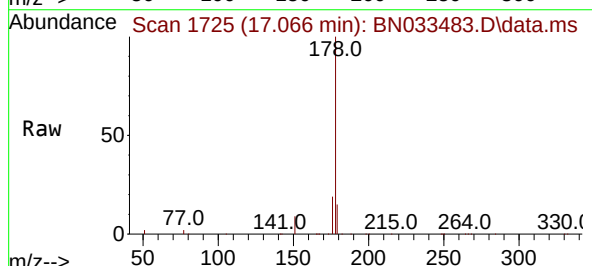
Tgt Ion:178 Resp: 89744

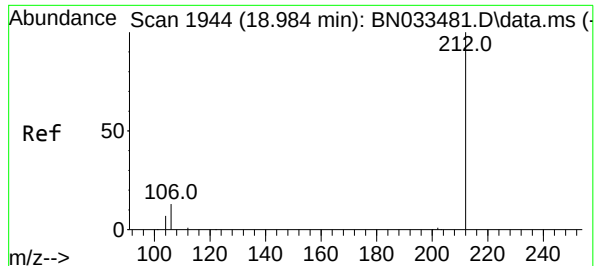
Ion Ratio Lower Upper

178 100

176 18.5 15.0 22.6

179 15.2 12.4 18.6





#27

Fluoranthene-d10

Concen: 1.549 ng

RT: 18.980 min Scan# 1943

Delta R.T. -0.005 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

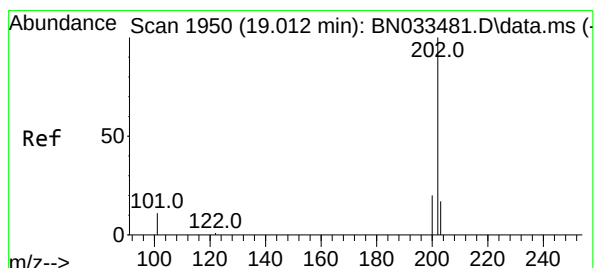
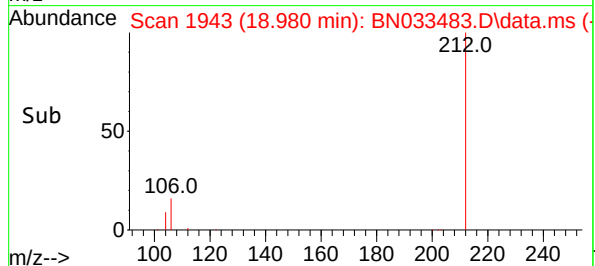
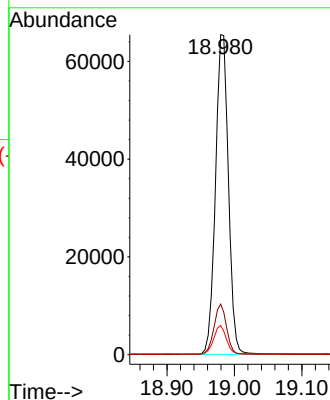
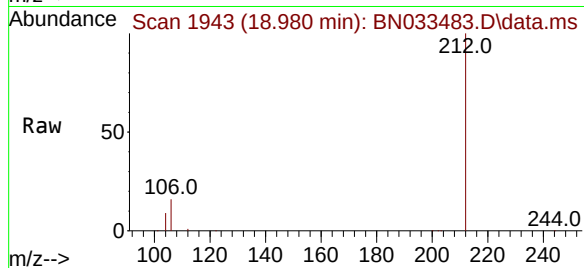
Tgt Ion:212 Resp: 87075

Ion Ratio Lower Upper

212 100

106 15.2 12.3 18.5

104 8.6 7.0 10.4



#28

Fluoranthene

Concen: 1.513 ng

RT: 19.012 min Scan# 1950

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

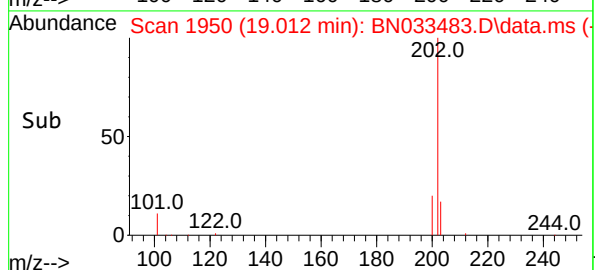
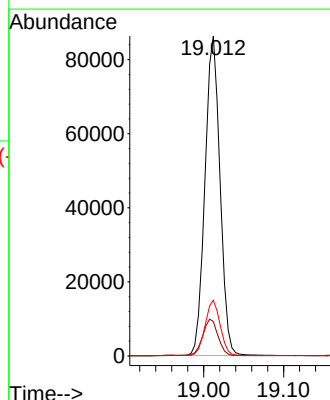
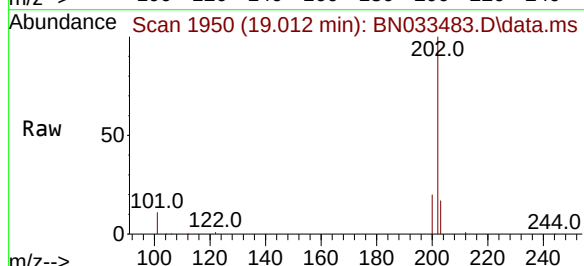
Tgt Ion:202 Resp: 112640

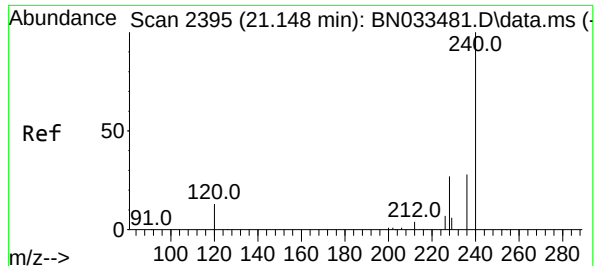
Ion Ratio Lower Upper

202 100

101 11.8 9.5 14.3

203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

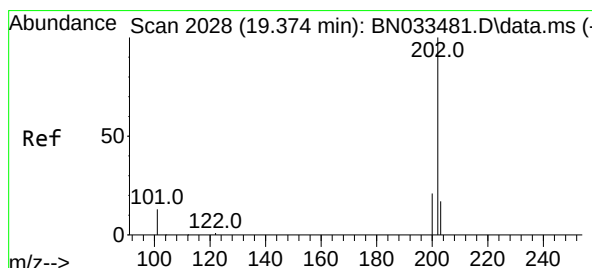
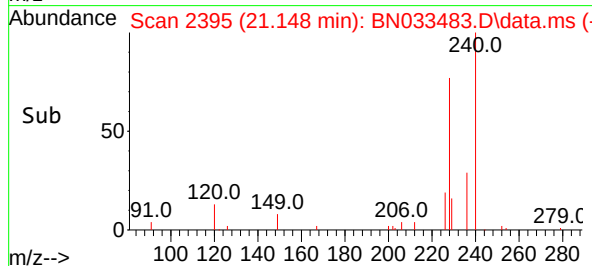
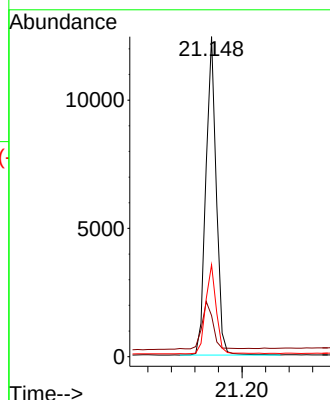
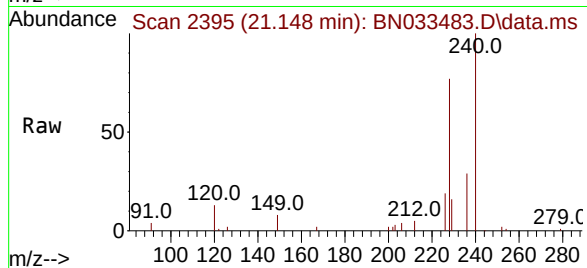
Tgt Ion:240 Resp: 15163

Ion Ratio Lower Upper

240 100

120 12.9 12.4 18.6

236 28.7 23.0 34.6



#30

Pyrene

Concen: 1.842 ng

RT: 19.374 min Scan# 2028

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

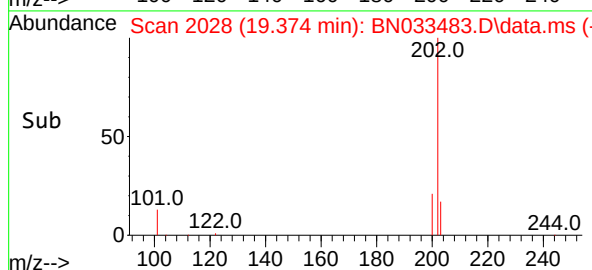
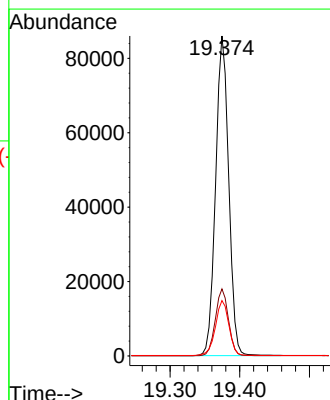
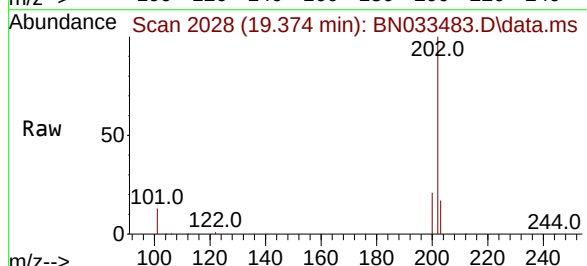
Tgt Ion:202 Resp: 112513

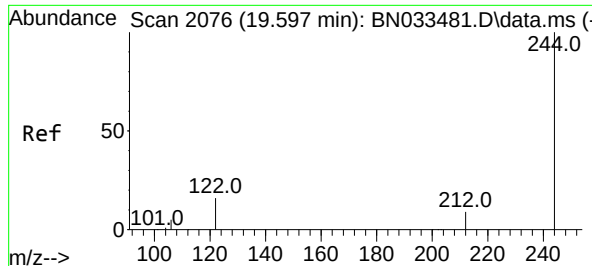
Ion Ratio Lower Upper

202 100

200 20.9 16.6 24.8

203 17.8 14.2 21.4

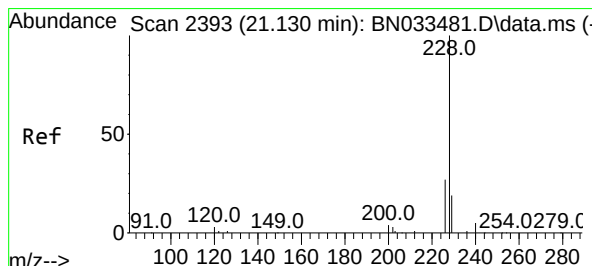
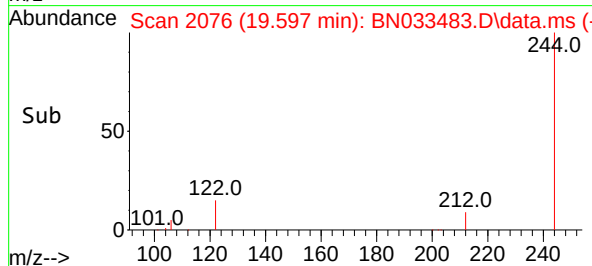
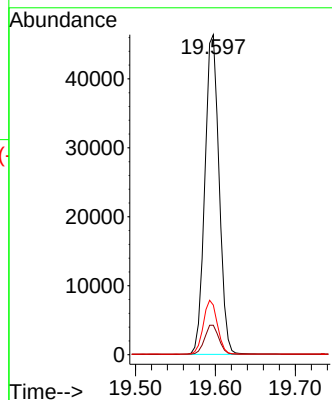
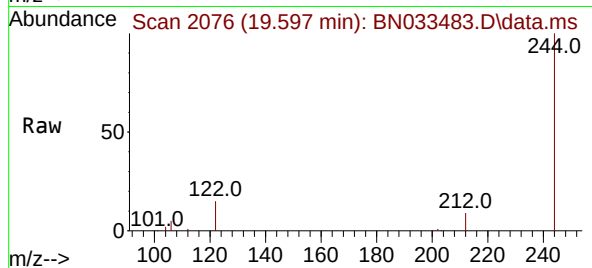




#31  
Terphenyl-d14  
Concen: 1.957 ng  
RT: 19.597 min Scan# 2076  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

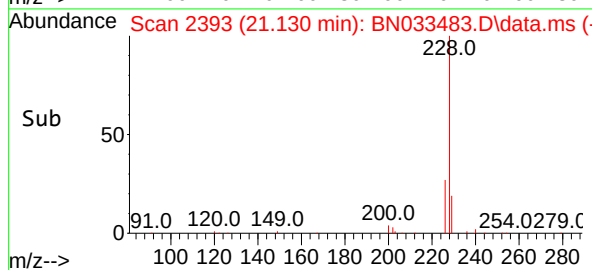
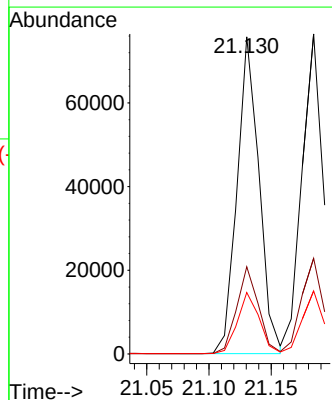
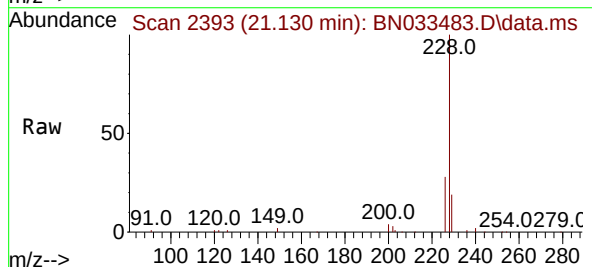
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

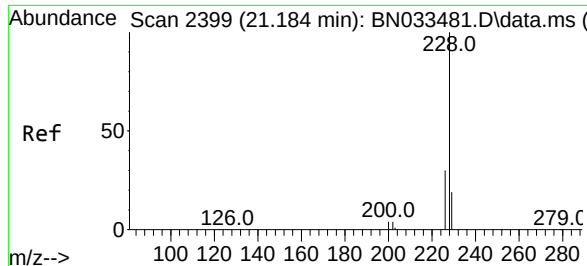
Tgt Ion:244 Resp: 57186  
Ion Ratio Lower Upper  
244 100  
212 9.2 7.8 11.6  
122 15.5 13.3 19.9



#32  
Benzo(a)anthracene  
Concen: 1.649 ng  
RT: 21.130 min Scan# 2393  
Delta R.T. -0.000 min  
Lab File: BN033483.D  
Acq: 19 Aug 2024 18:41

Tgt Ion:228 Resp: 92764  
Ion Ratio Lower Upper  
228 100  
226 27.5 21.8 32.6  
229 19.4 15.8 23.6





#33

Chrysene

Concen: 1.637 ng

RT: 21.184 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

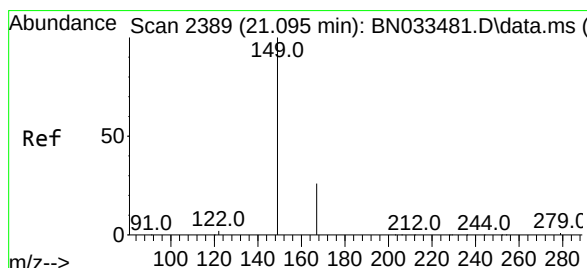
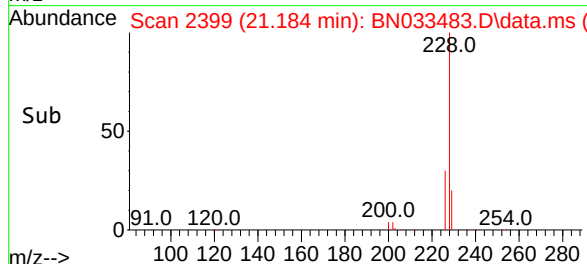
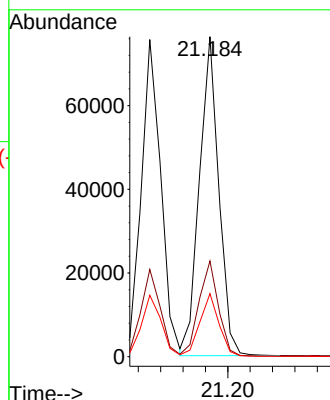
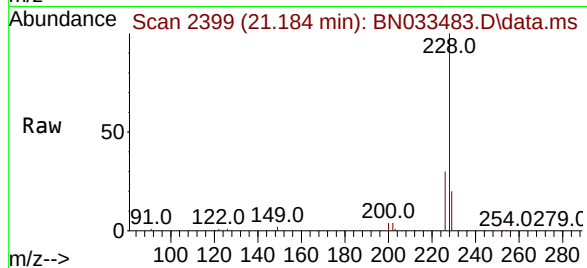
Tgt Ion:228 Resp: 91851

Ion Ratio Lower Upper

228 100

226 29.9 23.8 35.8

229 19.7 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 1.959 ng

RT: 21.095 min Scan# 2389

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

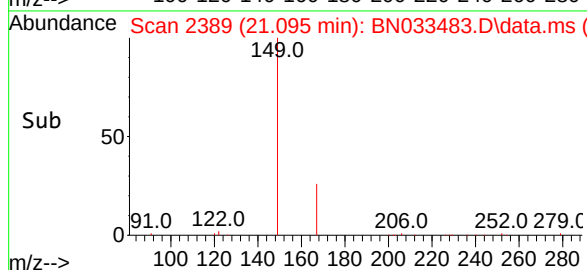
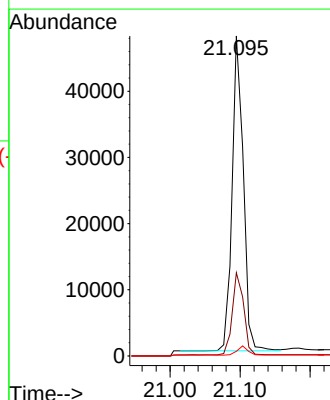
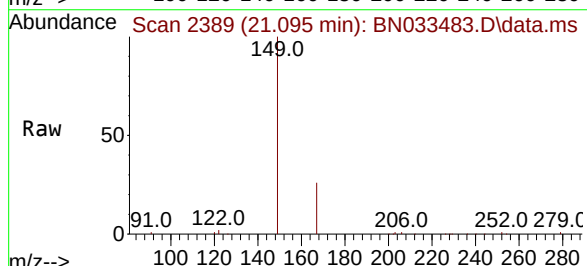
Tgt Ion:149 Resp: 52726

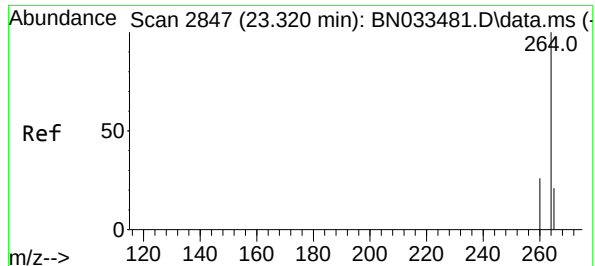
Ion Ratio Lower Upper

149 100

167 26.4 21.5 32.3

279 2.7 2.2 3.2





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.320 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

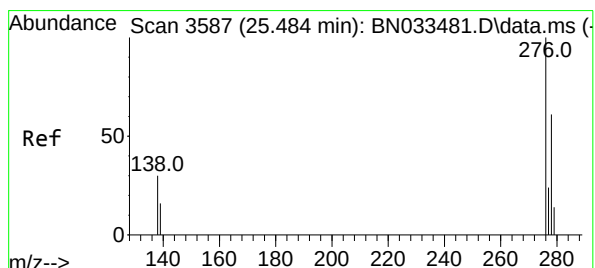
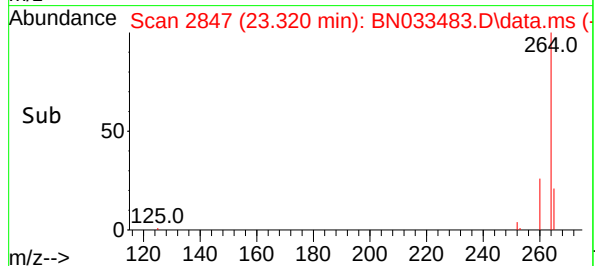
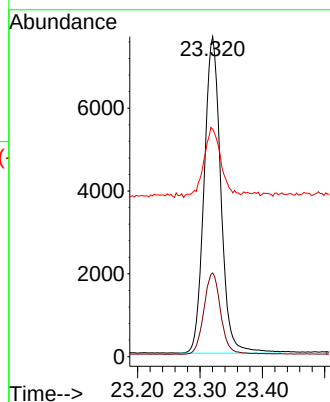
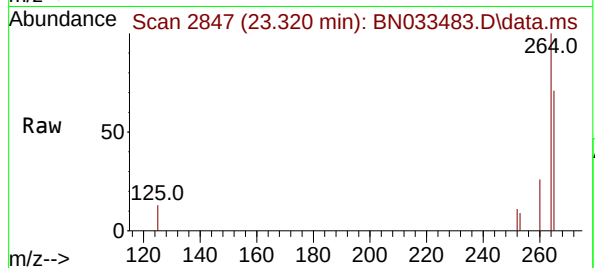
Tgt Ion:264 Resp: 14214

Ion Ratio Lower Upper

264 100

260 26.2 20.8 31.2

265 71.0 52.2 78.2



#36

Indeno(1,2,3-cd)pyrene

Concen: 1.697 ng

RT: 25.478 min Scan# 3585

Delta R.T. -0.006 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

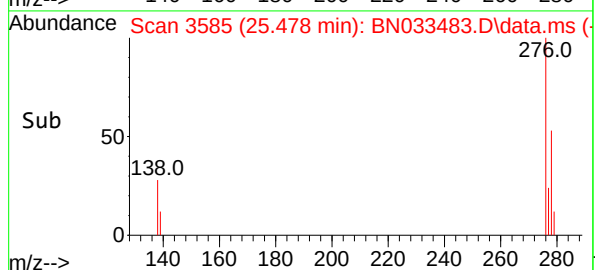
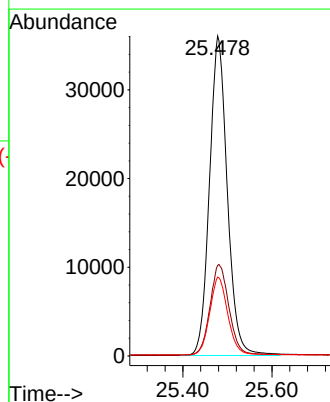
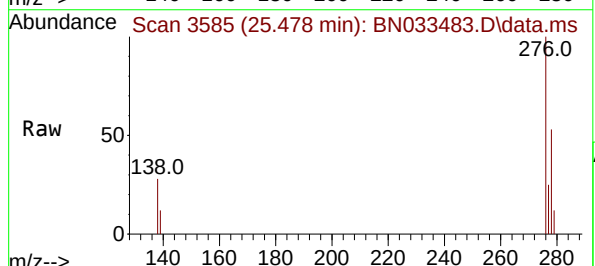
Tgt Ion:276 Resp: 99989

Ion Ratio Lower Upper

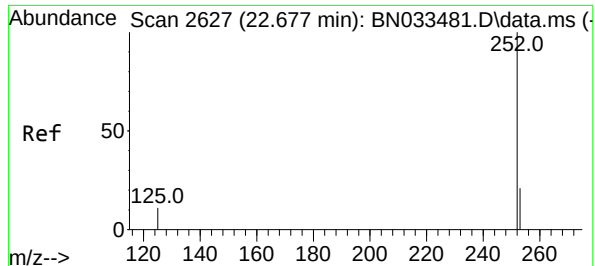
276 100

138 30.0 24.4 36.6

277 24.9 19.8 29.6







#37

Benzo(b)fluoranthene

Concen: 1.685 ng

RT: 22.674 min Scan# 2626

Delta R.T. -0.003 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

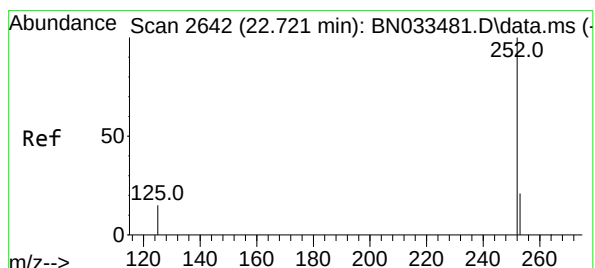
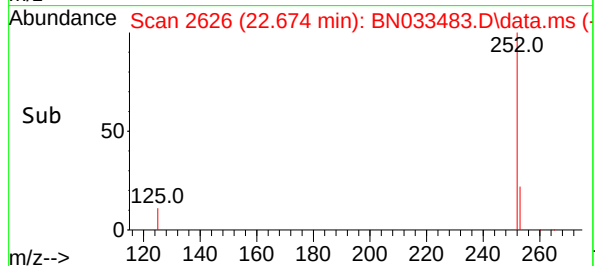
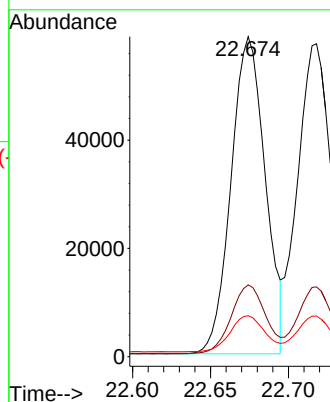
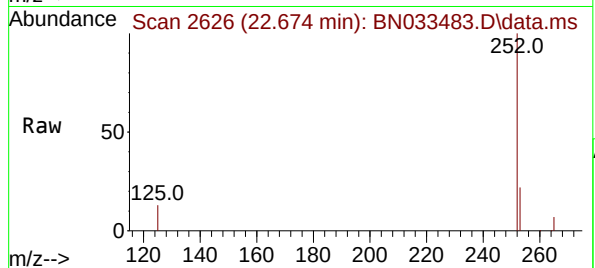
Tgt Ion:252 Resp: 89426

Ion Ratio Lower Upper

252 100

253 22.4 19.8 29.8

125 12.8 13.9 20.9#



#38

Benzo(k)fluoranthene

Concen: 1.666 ng

RT: 22.718 min Scan# 2641

Delta R.T. -0.003 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

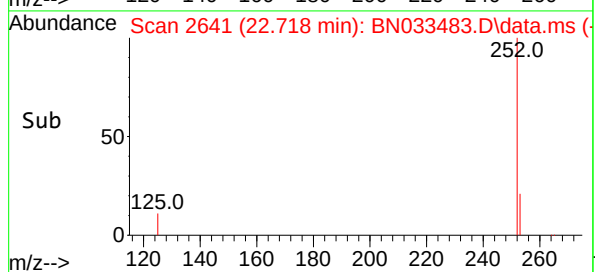
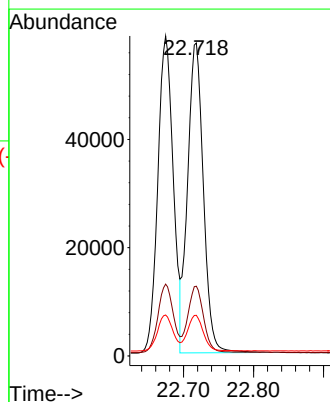
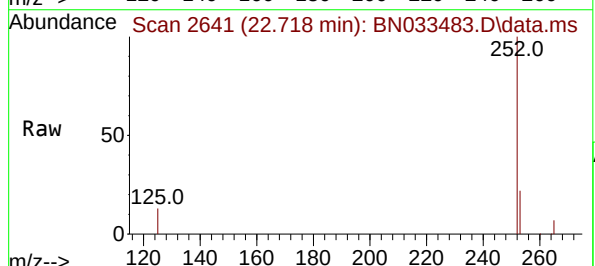
Tgt Ion:252 Resp: 89588

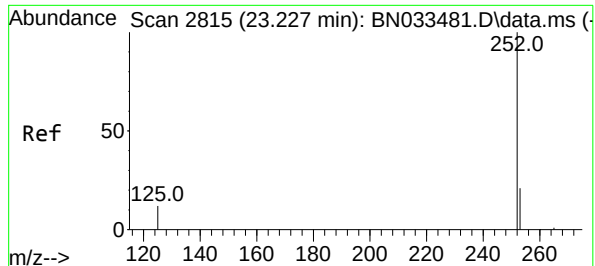
Ion Ratio Lower Upper

252 100

253 22.3 19.8 29.8

125 13.0 15.8 23.8#





#39

Benzo(a)pyrene

Concen: 1.673 ng

RT: 23.224 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN033483.D

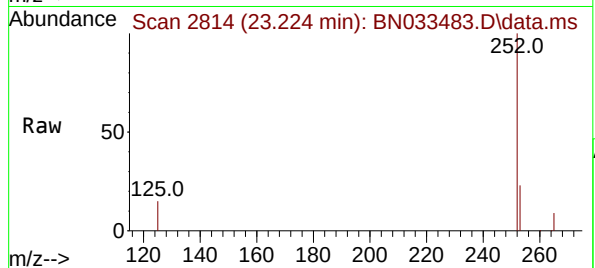
Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6



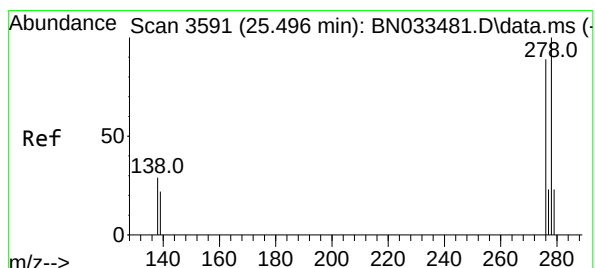
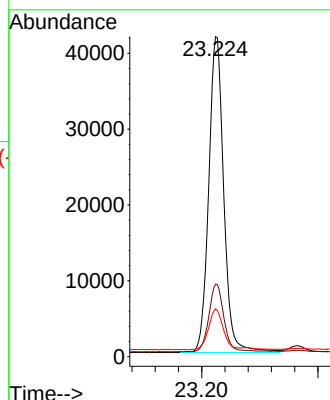
Tgt Ion:252 Resp: 74888

Ion Ratio Lower Upper

252 100

253 22.7 21.5 32.3

125 14.9 17.0 25.4#



#40

Dibenzo(a,h)anthracene

Concen: 1.720 ng

RT: 25.496 min Scan# 3591

Delta R.T. -0.000 min

Lab File: BN033483.D

Acq: 19 Aug 2024 18:41

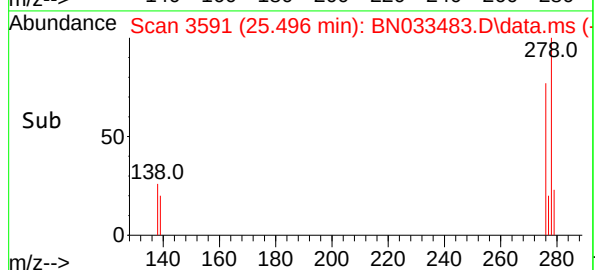
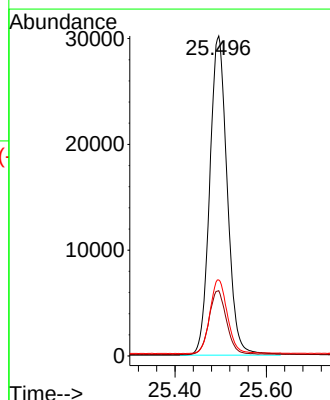
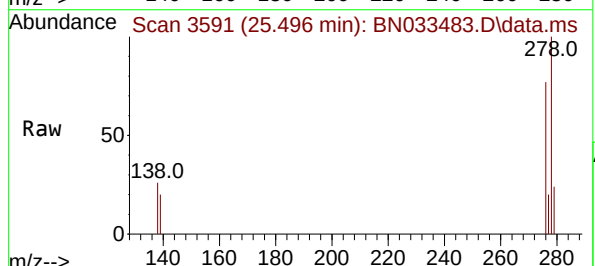
Tgt Ion:278 Resp: 80194

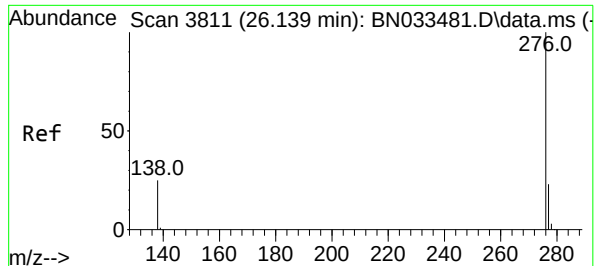
Ion Ratio Lower Upper

278 100

139 20.4 19.1 28.7

279 23.8 21.0 31.4





#41

Benzo(g,h,i)perylene

Concen: 1.670 ng

RT: 26.130 min Scan# 3811

Delta R.T. -0.009 min

Lab File: BN033483.D

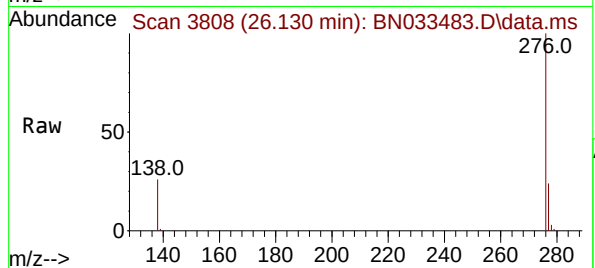
Acq: 19 Aug 2024 18:41

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6



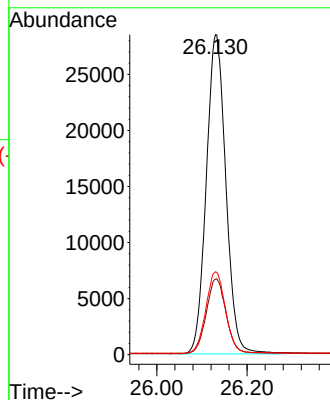
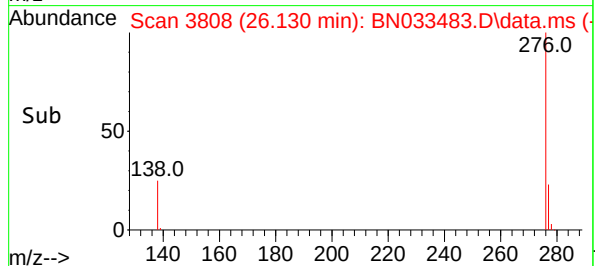
Tgt Ion:276 Resp: 85629

Ion Ratio Lower Upper

276 100

277 23.6 19.7 29.5

138 25.9 21.8 32.6



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033484.D  
 Acq On : 19 Aug 2024 19:17  
 Operator : MA/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

Quant Time: Aug 19 23:23:39 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 19 23:20:26 2024  
 Response via : Initial Calibration

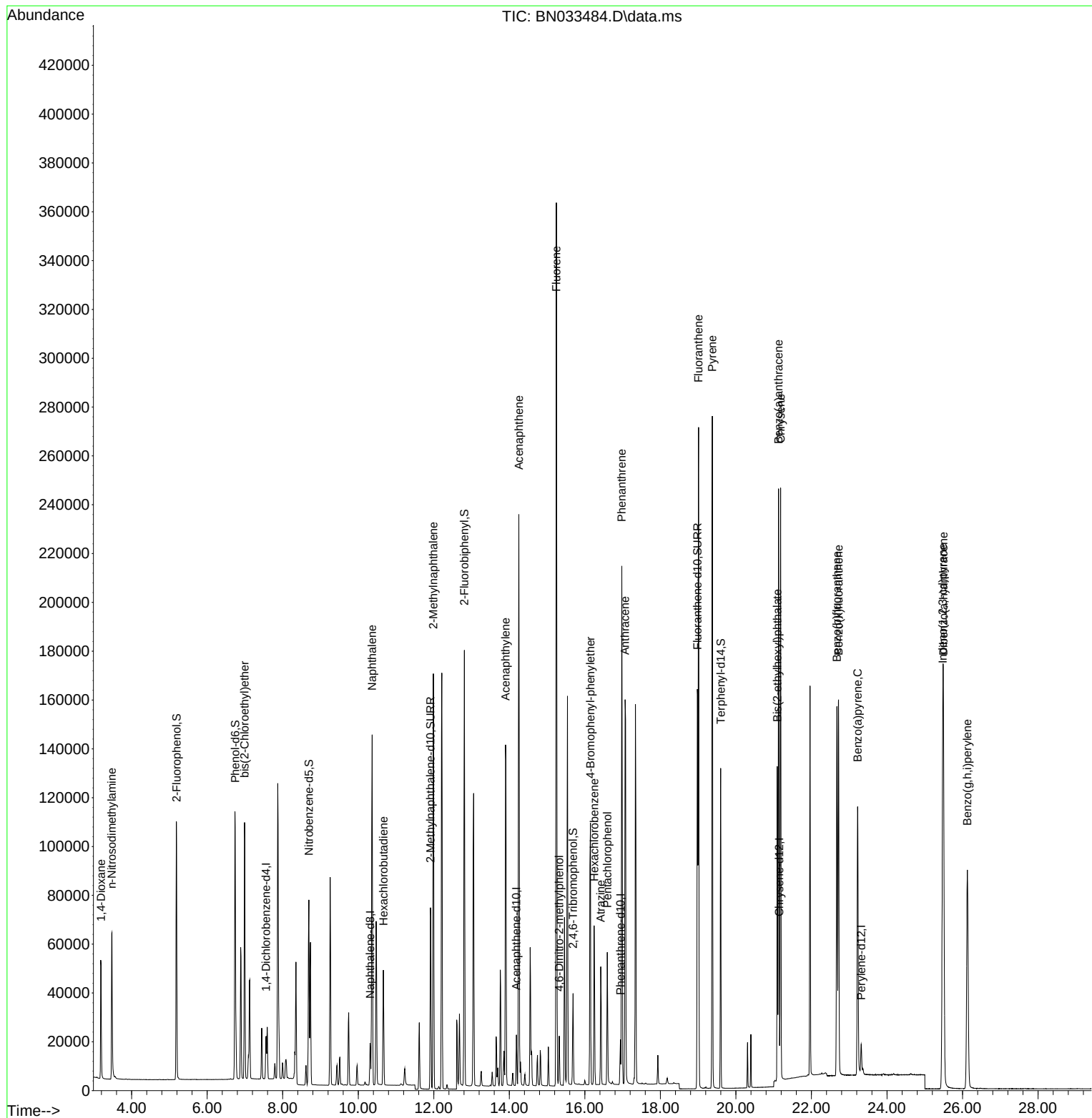
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.559  | 152  | 8220     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.314 | 136  | 21477    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.189 | 164  | 11204    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.942 | 188  | 22761    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.148 | 240  | 16458    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.317 | 264  | 15102    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.191  | 112  | 78672    | 3.403 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.743  | 99   | 96240    | 3.185 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.691  | 82   | 55376    | 3.404 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 97319    | 3.015 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 19950    | 3.487 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.810 | 172  | 144228   | 3.180 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.984 | 212  | 176172   | 2.953 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.597 | 244  | 117216   | 3.696 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.190  | 88   | 29725    | 3.360 | ng    | 100      |
| 3) n-Nitrosodimethylamine     | 3.472  | 42   | 34268    | 2.990 | ng    | 97       |
| 6) bis(2-Chloroethyl)ether    | 6.989  | 93   | 70198    | 2.980 | ng    | 100      |
| 9) Naphthalene                | 10.368 | 128  | 179011   | 3.071 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 35517    | 3.178 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 11.990 | 142  | 116457   | 2.986 | ng    | 99       |
| 16) Acenaphthylene            | 13.900 | 152  | 164622   | 3.197 | ng    | 100      |
| 17) Acenaphthene              | 14.253 | 154  | 111942   | 3.160 | ng    | 98       |
| 18) Fluorene                  | 15.247 | 166  | 140489   | 3.030 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 13180    | 4.642 | ng    | # 67     |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 44804    | 3.300 | ng    | 99       |
| 22) Hexachlorobenzene         | 16.247 | 284  | 48402    | 3.192 | ng    | 99       |
| 23) Atrazine                  | 16.420 | 200  | 36125    | 3.342 | ng    | 98       |
| 24) Pentachlorophenol         | 16.594 | 266  | 23233    | 3.743 | ng    | 98       |
| 25) Phenanthrene              | 16.979 | 178  | 202724   | 3.113 | ng    | 100      |
| 26) Anthracene                | 17.066 | 178  | 188458   | 3.276 | ng    | 99       |
| 28) Fluoranthene              | 19.012 | 202  | 230499   | 2.917 | ng    | 100      |
| 30) Pyrene                    | 19.374 | 202  | 230574   | 3.478 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.130 | 228  | 187742   | 3.074 | ng    | 100      |
| 33) Chrysene                  | 21.184 | 228  | 184734   | 3.033 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.095 | 149  | 111315   | 3.811 | ng    | 100      |
| 36) Indeno(1,2,3-cd)pyrene    | 25.478 | 276  | 200706   | 3.206 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.674 | 252  | 178769   | 3.171 | ng    | # 92     |
| 38) Benzo(k)fluoranthene      | 22.718 | 252  | 180219   | 3.154 | ng    | # 90     |
| 39) Benzo(a)pyrene            | 23.224 | 252  | 151103   | 3.178 | ng    | # 88     |
| 40) Dibenzo(a,h)anthracene    | 25.496 | 278  | 160621   | 3.242 | ng    | 94       |
| 41) Benzo(g,h,i)perylene      | 26.127 | 276  | 170664   | 3.133 | ng    | 98       |

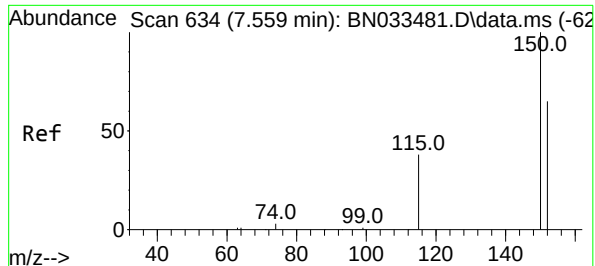
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033484.D  
 Acq On : 19 Aug 2024 19:17  
 Operator : MA/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

Quant Time: Aug 19 23:23:39 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 19 23:20:26 2024  
 Response via : Initial Calibration

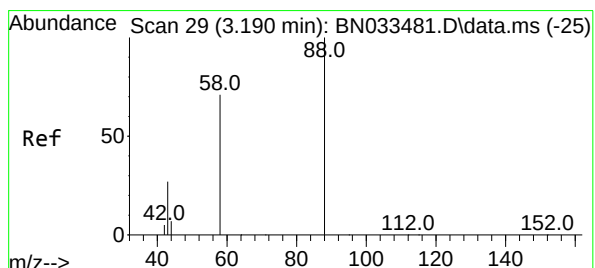
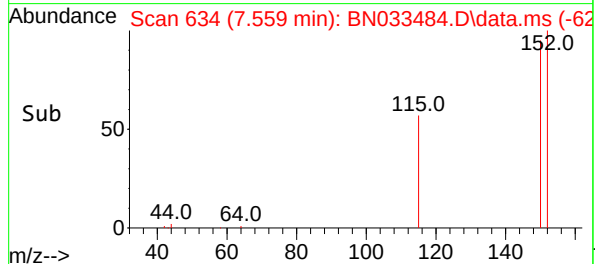
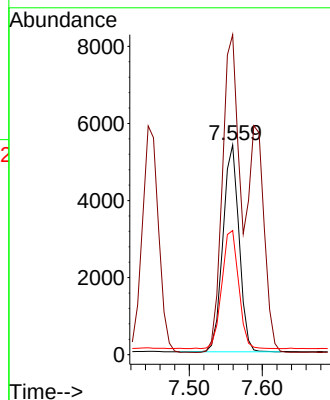
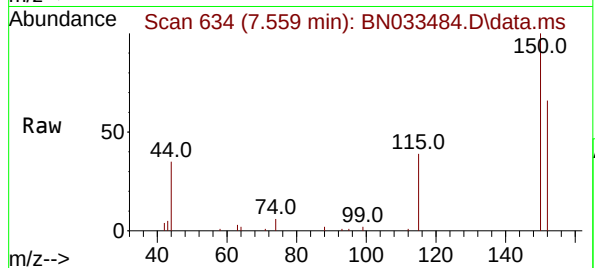




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.559 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

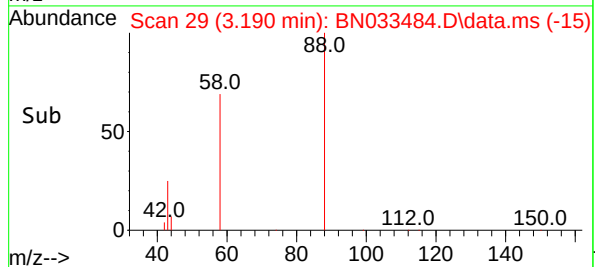
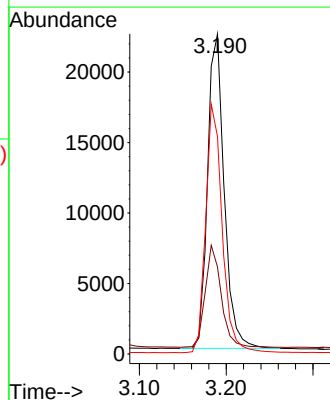
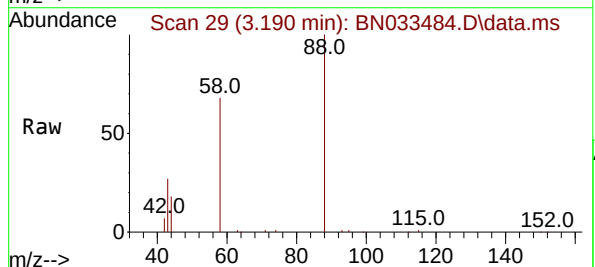
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

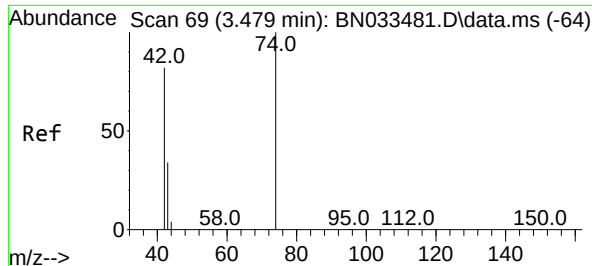
Tgt Ion:152 Resp: 8220  
Ion Ratio Lower Upper  
152 100  
150 152.6 122.2 183.2  
115 59.2 47.2 70.8



#2  
1,4-Dioxane  
Concen: 3.360 ng  
RT: 3.190 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion: 88 Resp: 29725  
Ion Ratio Lower Upper  
88 100  
43 31.2 25.0 37.4  
58 78.5 62.5 93.7

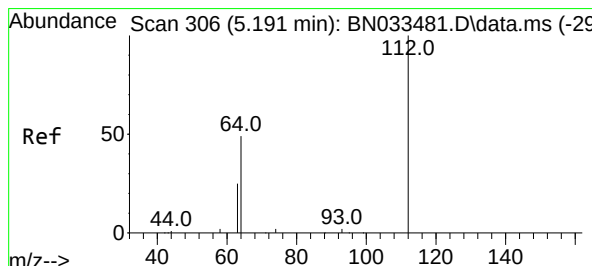
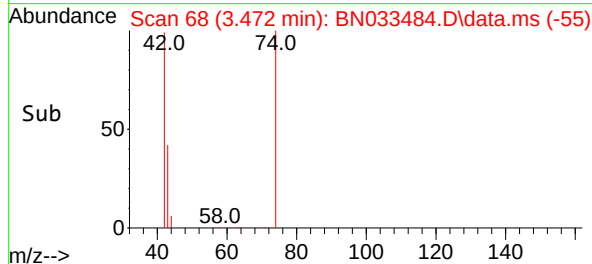
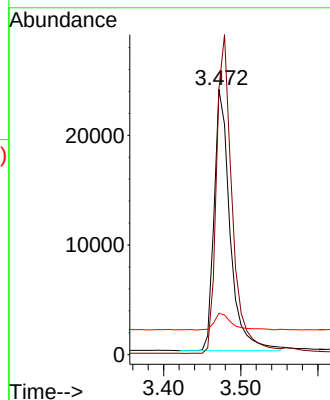
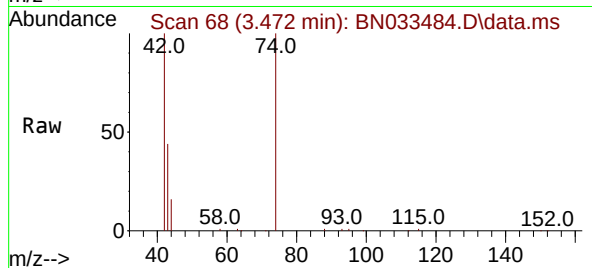




#3  
n-Nitrosodimethylamine  
Concen: 2.990 ng  
RT: 3.472 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

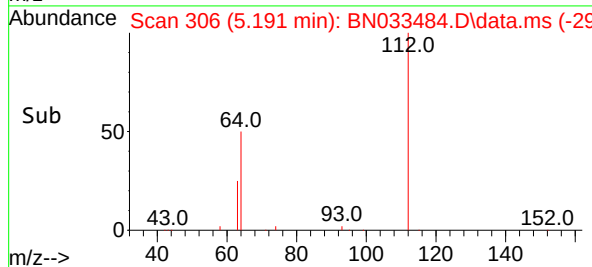
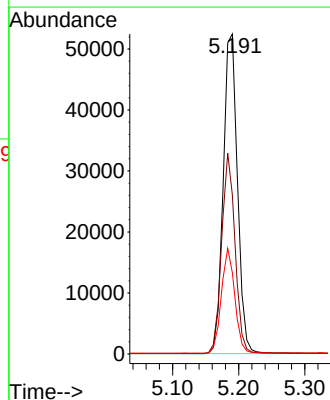
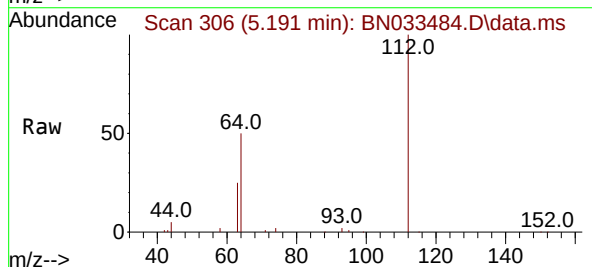
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

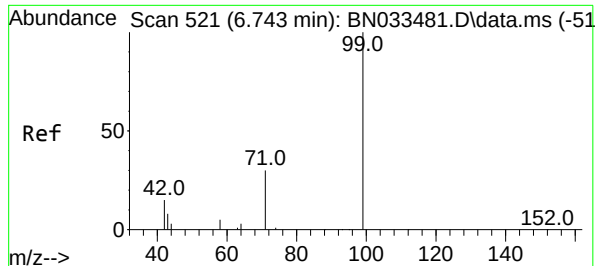
Tgt Ion: 42 Resp: 34268  
Ion Ratio Lower Upper  
42 100  
74 121.2 100.2 150.2  
44 7.0 5.3 7.9



#4  
2-Fluorophenol  
Concen: 3.403 ng  
RT: 5.191 min Scan# 306  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion: 112 Resp: 78672  
Ion Ratio Lower Upper  
112 100  
64 58.9 47.1 70.7  
63 30.8 24.9 37.3

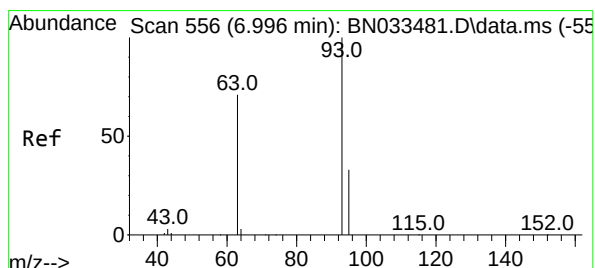
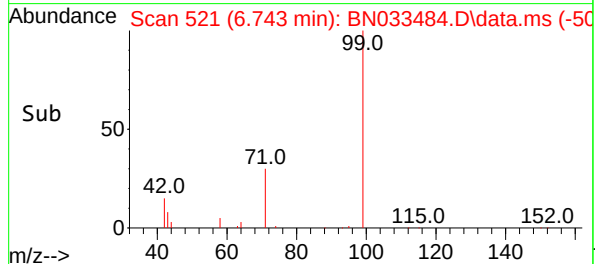
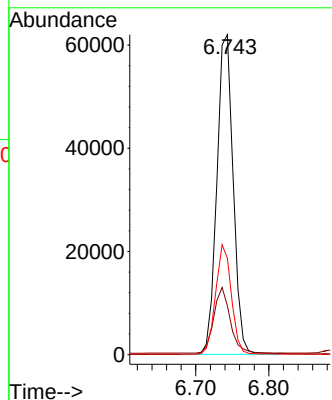
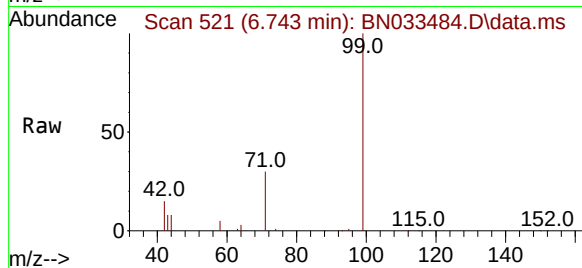




#5  
Phenol-d6  
Concen: 3.185 ng  
RT: 6.743 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

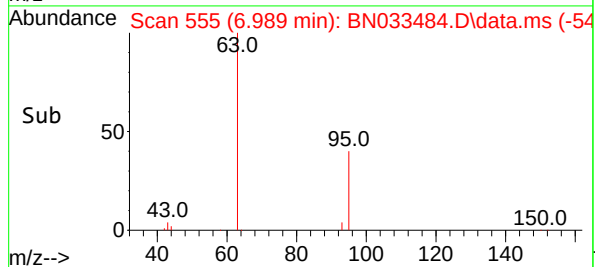
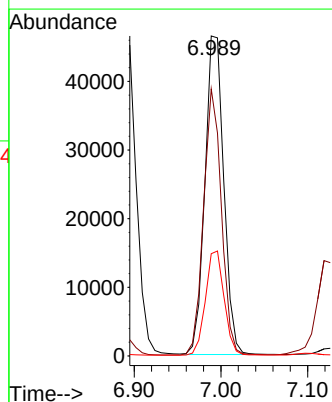
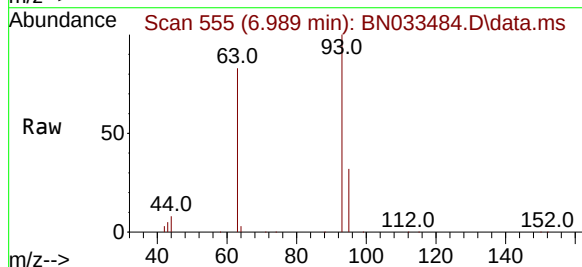
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

Tgt Ion: 99 Resp: 96240  
Ion Ratio Lower Upper  
99 100  
42 20.5 16.6 24.8  
71 33.1 26.2 39.4

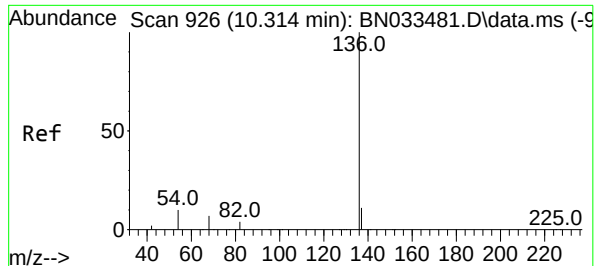


#6  
bis(2-Chloroethyl)ether  
Concen: 2.980 ng  
RT: 6.989 min Scan# 555  
Delta R.T. -0.007 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion: 93 Resp: 70198  
Ion Ratio Lower Upper  
93 100  
63 78.9 63.0 94.4  
95 32.5 26.0 39.0



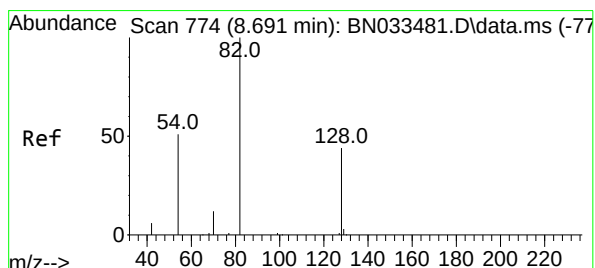
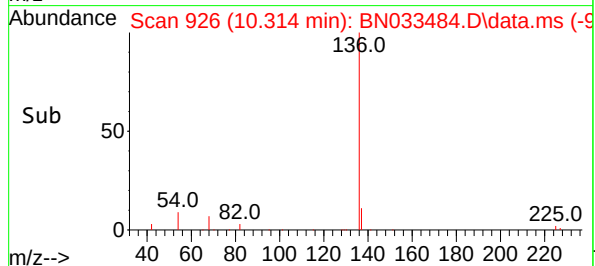
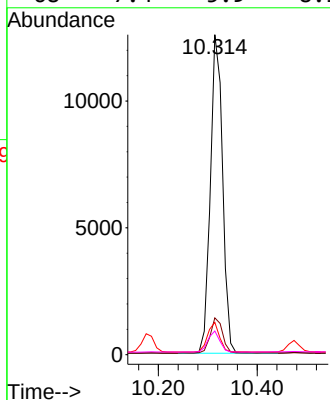
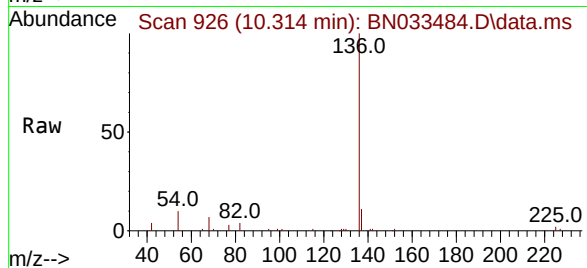




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

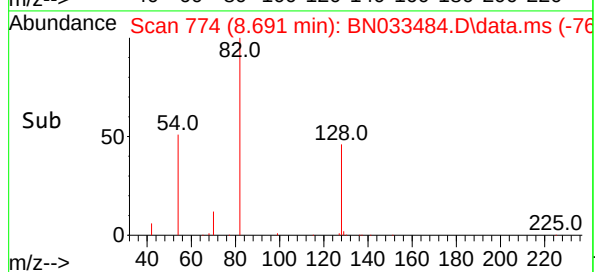
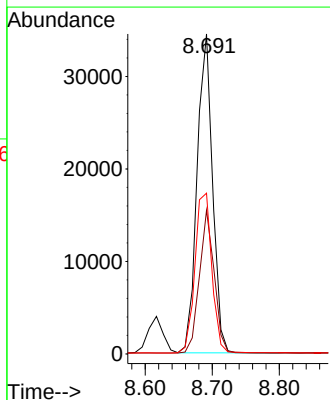
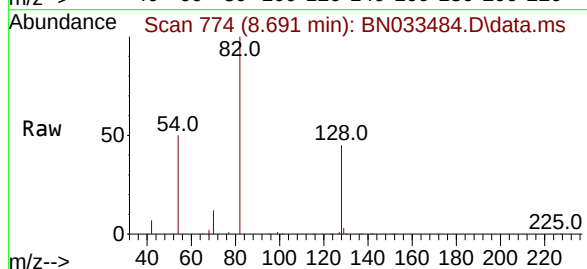
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

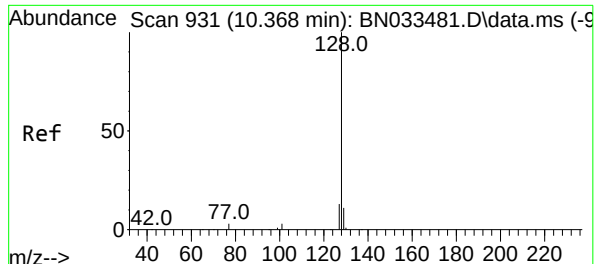
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 21477 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.5  | 9.0   | 13.6  |
| 54       | 10.1  | 8.3   | 12.5  |
| 68       | 7.4   | 5.9   | 8.9   |



#8  
Nitrobenzene-d5  
Concen: 3.404 ng  
RT: 8.691 min Scan# 774  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 55376 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 44.9  | 36.0  | 54.0  |
| 54       | 50.3  | 42.0  | 63.0  |

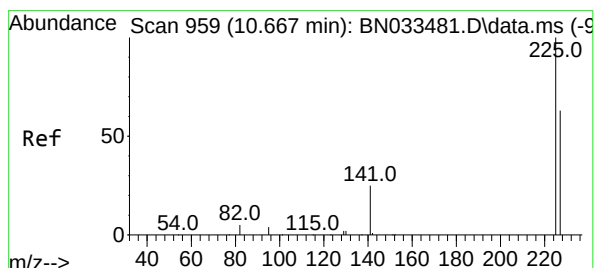
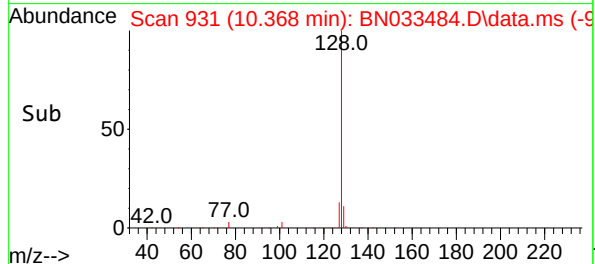
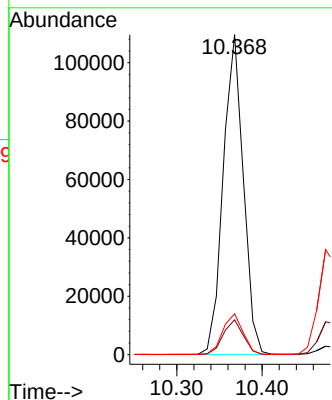
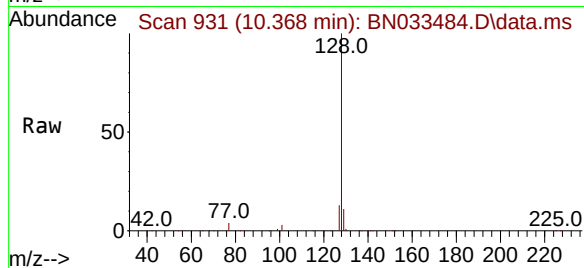




#9  
Naphthalene  
Concen: 3.071 ng  
RT: 10.368 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

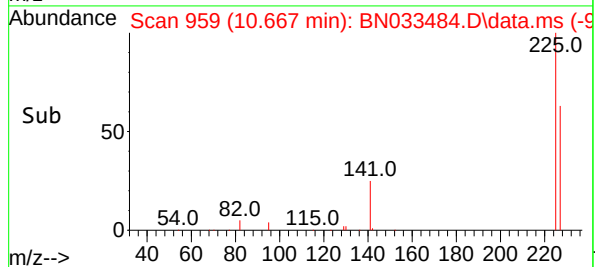
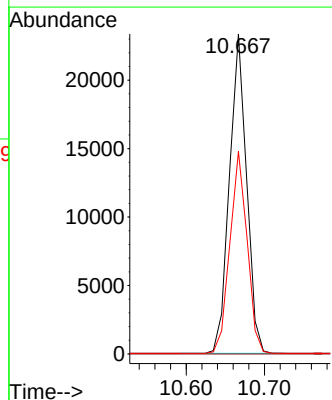
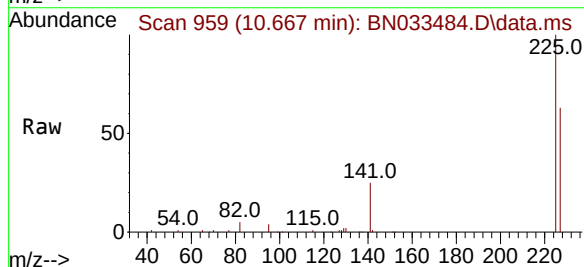
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

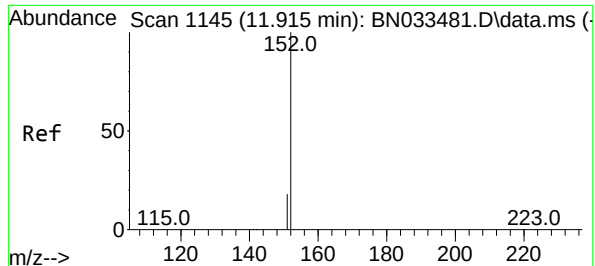
Tgt Ion:128 Resp: 179011  
Ion Ratio Lower Upper  
128 100  
129 10.9 9.1 13.7  
127 12.8 10.7 16.1



#10  
Hexachlorobutadiene  
Concen: 3.178 ng  
RT: 10.667 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion:225 Resp: 35517  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.6 51.2 76.8

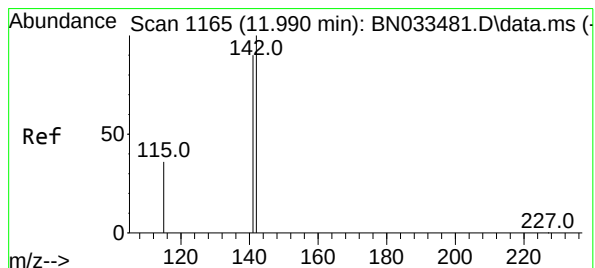
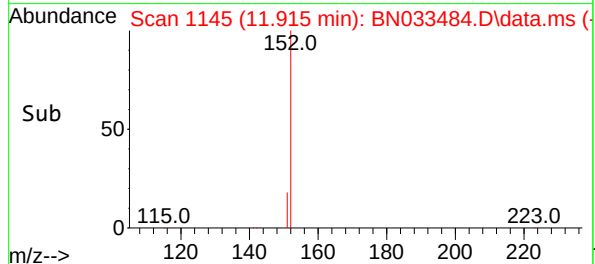
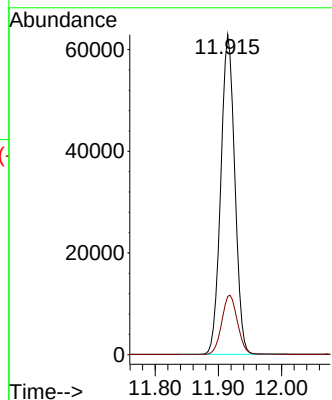
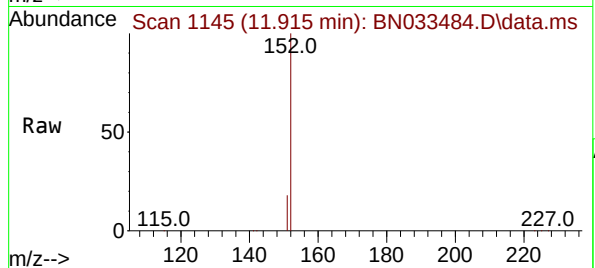




#11  
2-Methylnaphthalene-d10  
Concen: 3.015 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

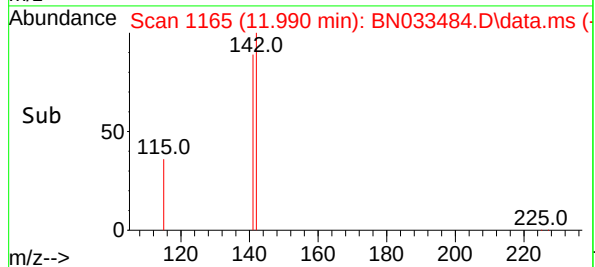
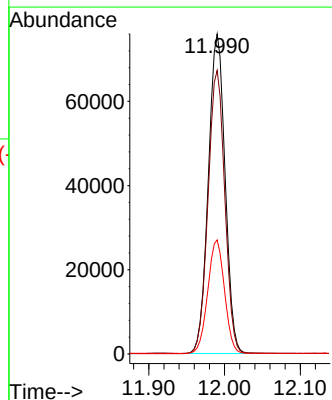
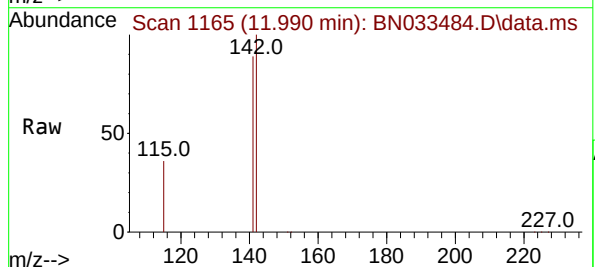
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

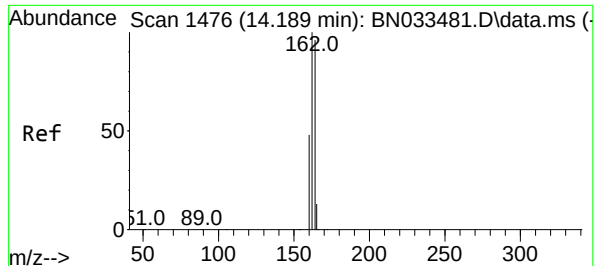
Tgt Ion:152 Resp: 97319  
Ion Ratio Lower Upper  
152 100  
151 20.6 16.6 25.0



#12  
2-Methylnaphthalene  
Concen: 2.986 ng  
RT: 11.990 min Scan# 1165  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion:142 Resp: 116457  
Ion Ratio Lower Upper  
142 100  
141 88.6 71.7 107.5  
115 35.7 29.4 44.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.189 min Scan# 1476

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

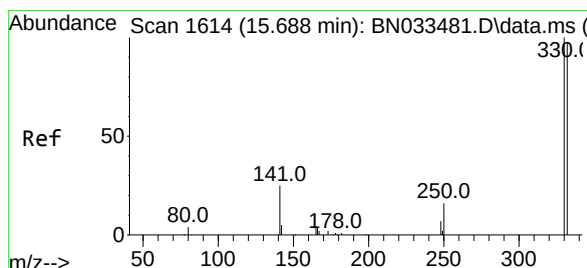
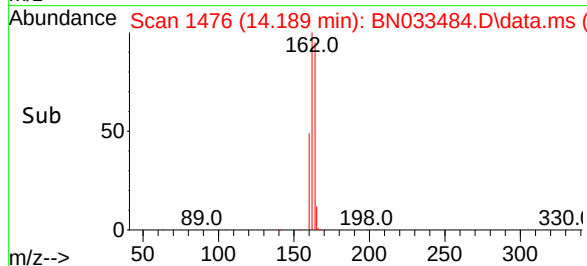
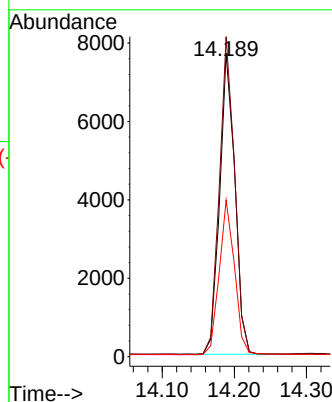
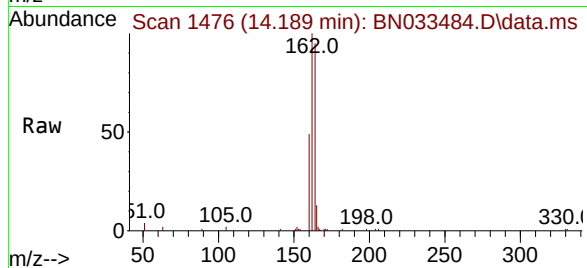
Tgt Ion:164 Resp: 11204

Ion Ratio Lower Upper

164 100

162 105.4 83.5 125.3

160 51.6 40.2 60.4



#14

2,4,6-Tribromophenol

Concen: 3.487 ng

RT: 15.688 min Scan# 1614

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

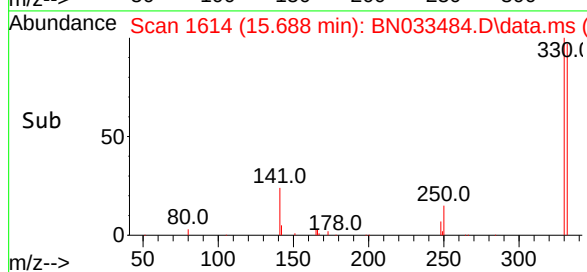
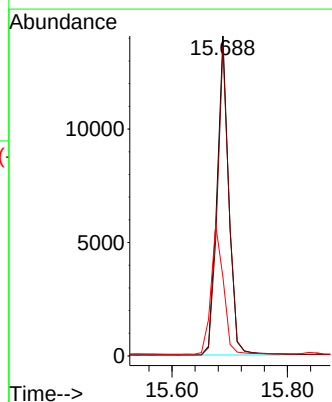
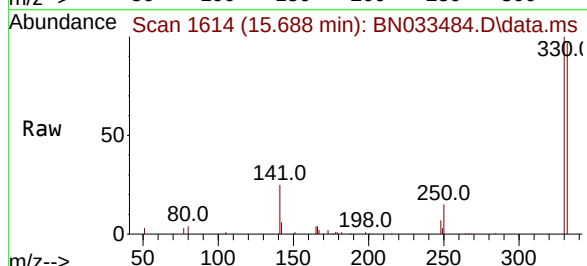
Tgt Ion:330 Resp: 19950

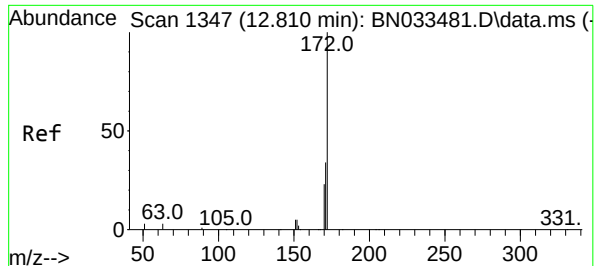
Ion Ratio Lower Upper

330 100

332 96.0 77.5 116.3

141 42.5 33.9 50.9





#15

2-Fluorobiphenyl

Concen: 3.180 ng

RT: 12.810 min Scan# 1448

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

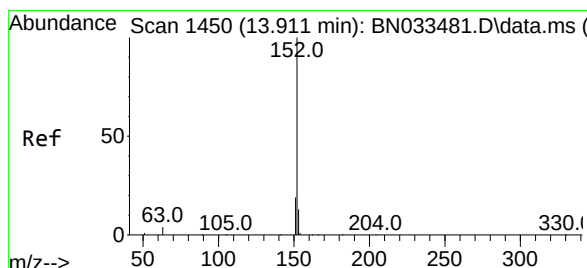
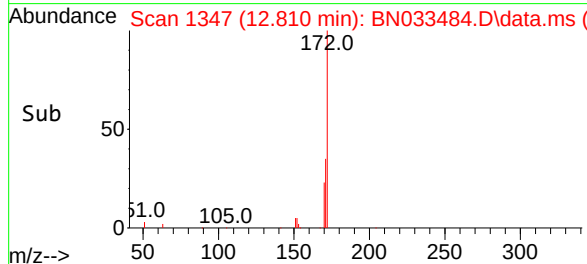
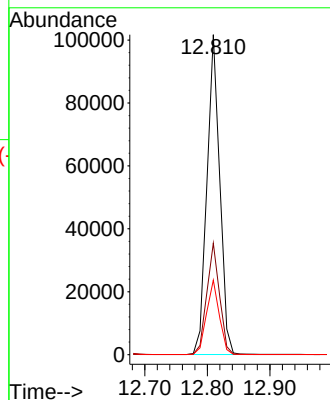
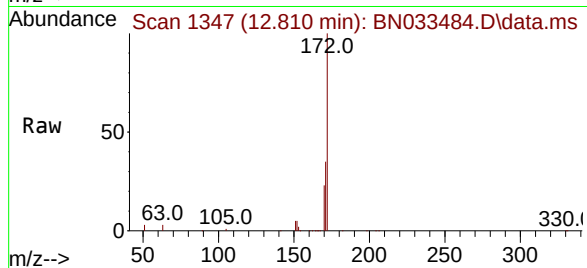
Tgt Ion:172 Resp: 144228

Ion Ratio Lower Upper

172 100

171 34.9 27.7 41.5

170 23.3 18.3 27.5



#16

Acenaphthylene

Concen: 3.197 ng

RT: 13.900 min Scan# 1449

Delta R.T. -0.011 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

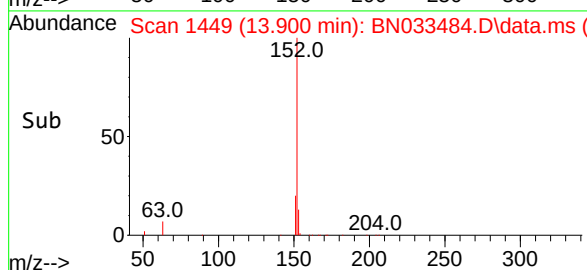
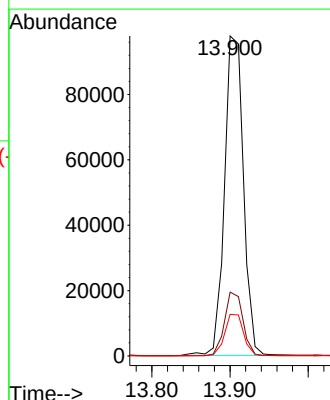
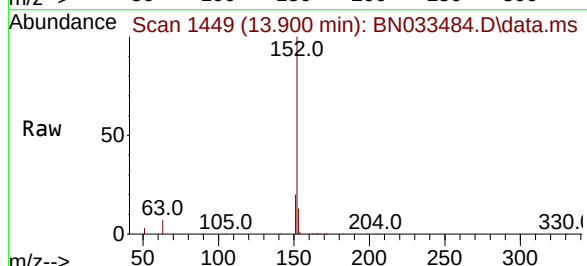
Tgt Ion:152 Resp: 164622

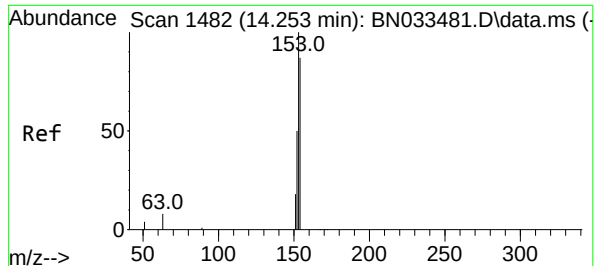
Ion Ratio Lower Upper

152 100

151 19.4 15.7 23.5

153 13.0 10.3 15.5

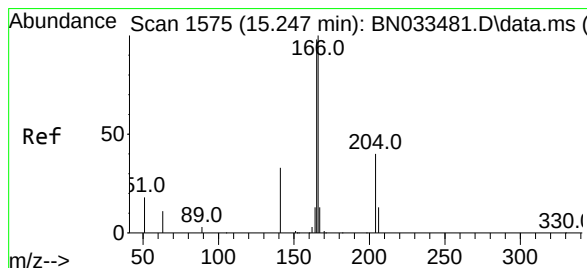
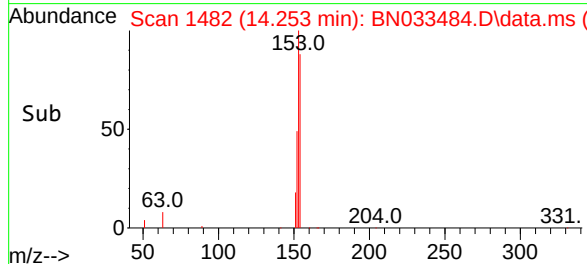
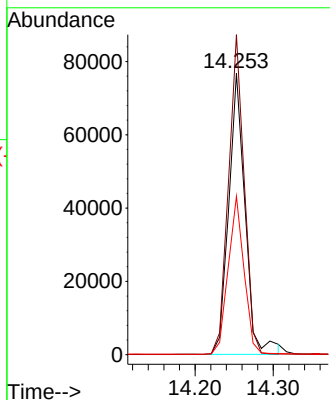
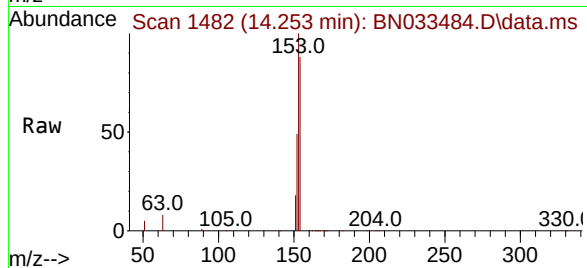




#17  
Acenaphthene  
Concen: 3.160 ng  
RT: 14.253 min Scan# 1482  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

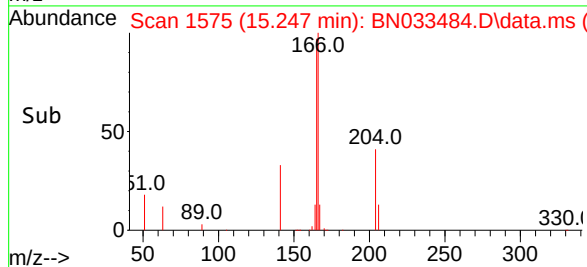
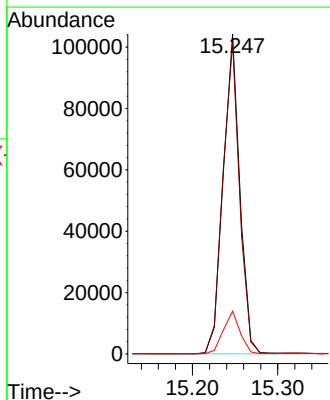
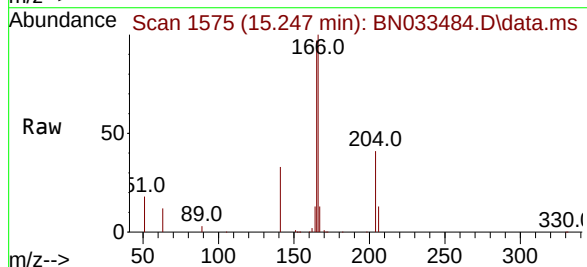
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

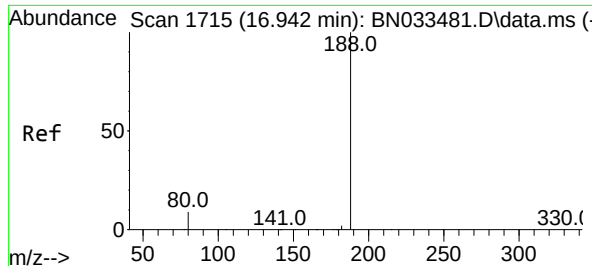
Tgt Ion:154 Resp: 111942  
Ion Ratio Lower Upper  
154 100  
153 108.9 89.0 133.6  
152 54.3 45.2 67.8



#18  
Fluorene  
Concen: 3.030 ng  
RT: 15.247 min Scan# 1575  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion:166 Resp: 140489  
Ion Ratio Lower Upper  
166 100  
165 98.0 78.2 117.4  
167 13.4 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.942 min Scan# 1715

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

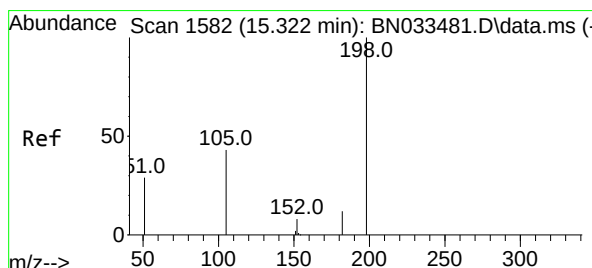
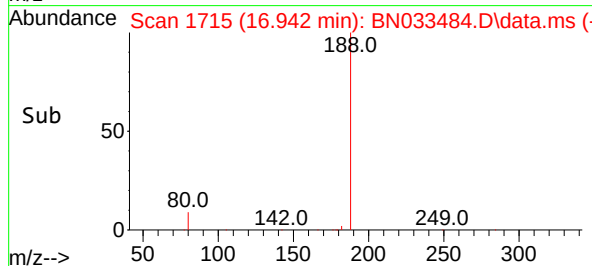
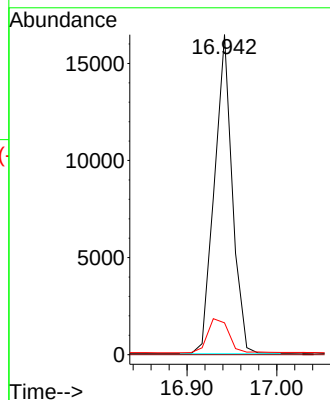
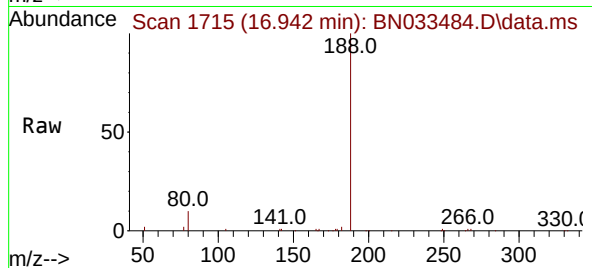
Tgt Ion:188 Resp: 22761

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.0 7.8 11.8



#20

4,6-Dinitro-2-methylphenol

Concen: 4.642 ng

RT: 15.322 min Scan# 1582

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

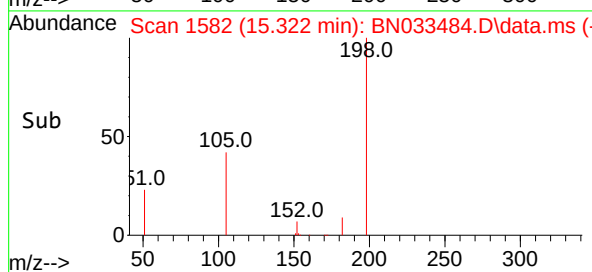
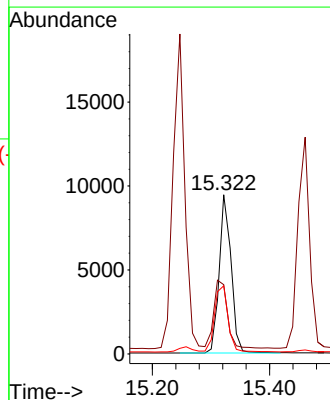
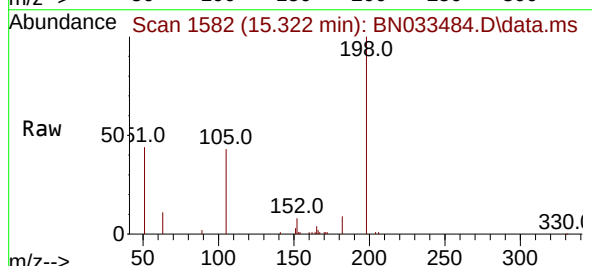
Tgt Ion:198 Resp: 13180

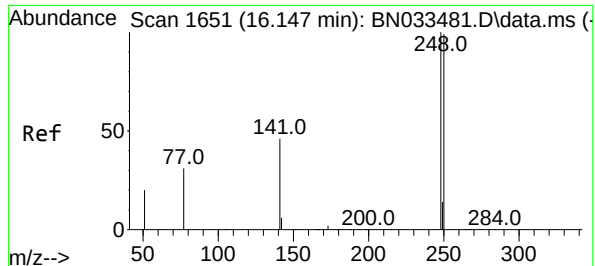
Ion Ratio Lower Upper

198 100

51 43.5 65.1 97.7#

105 42.8 44.8 67.2#

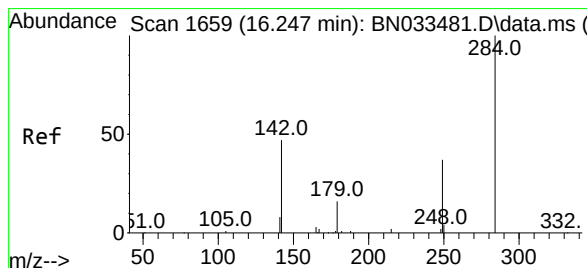
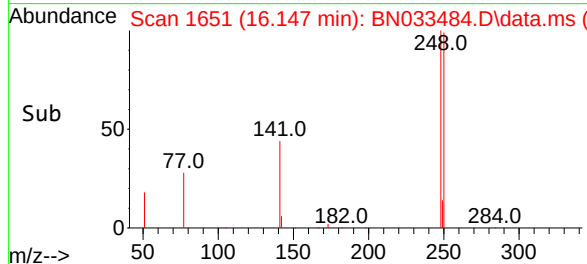
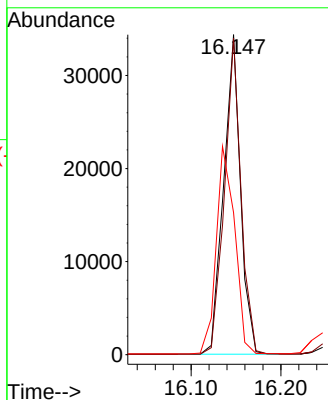
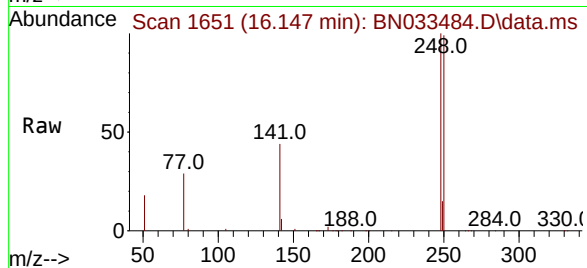




#21  
4-Bromophenyl-phenylether  
Concen: 3.300 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

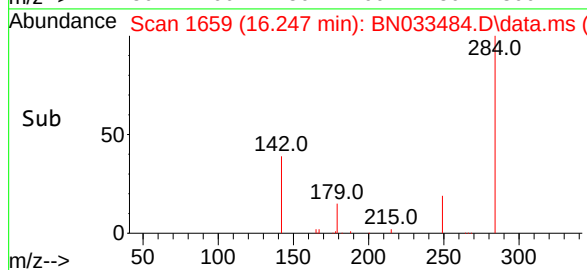
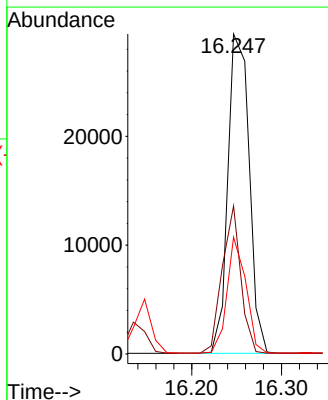
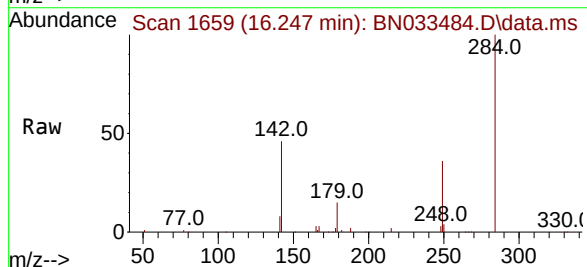
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 99.0  | 79.2  | 118.8 |
| 141     | 44.4  | 37.9  | 56.9  |

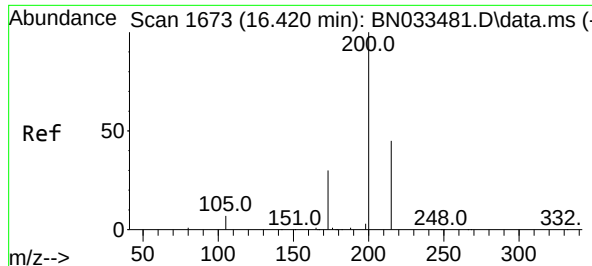


#22  
Hexachlorobenzene  
Concen: 3.192 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 40.0  | 31.8  | 47.6  |
| 249     | 32.1  | 26.0  | 39.0  |



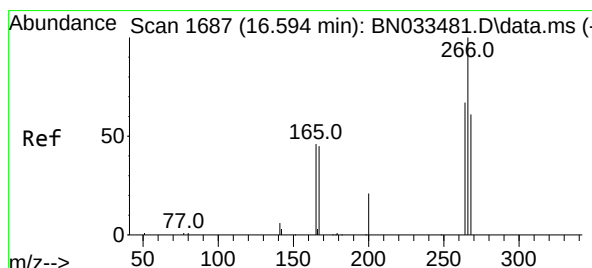
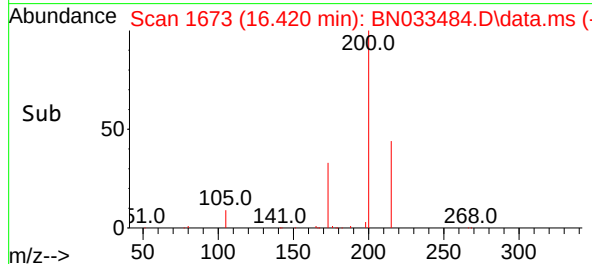
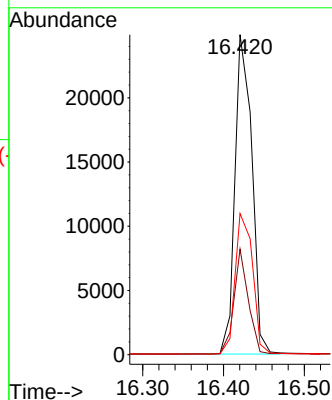
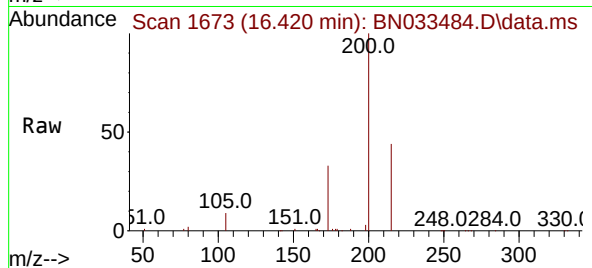




#23  
Atrazine  
Concen: 3.342 ng  
RT: 16.420 min Scan# 1673  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

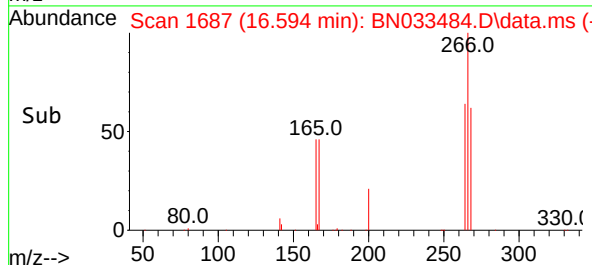
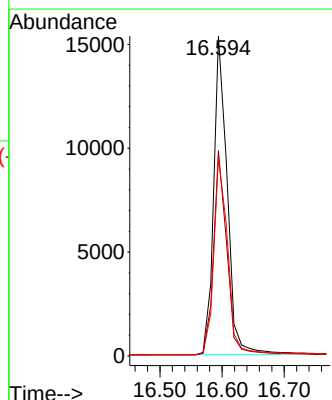
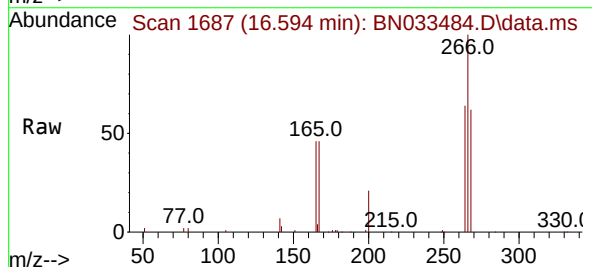
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

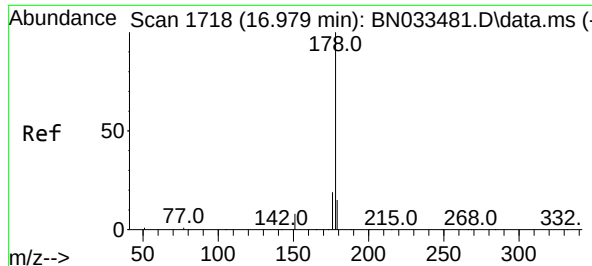
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 200     | 100   |       |       |
| 173     | 33.0  | 25.3  | 37.9  |
| 215     | 44.1  | 36.6  | 54.8  |



#24  
Pentachlorophenol  
Concen: 3.743 ng  
RT: 16.594 min Scan# 1687  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 63.0  | 51.9  | 77.9  |
| 268     | 63.2  | 51.0  | 76.4  |

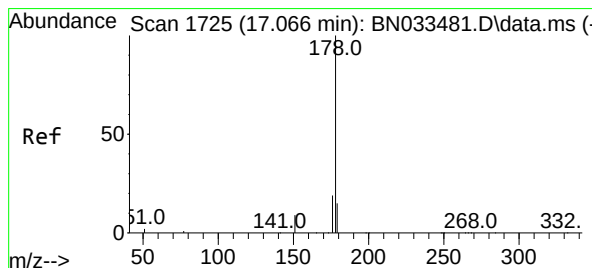
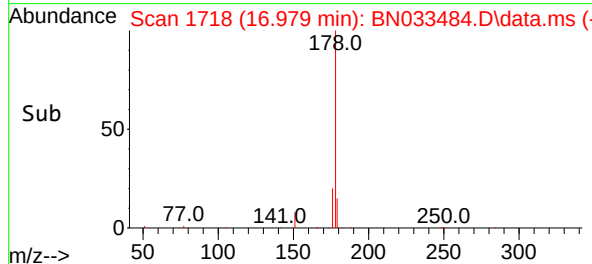
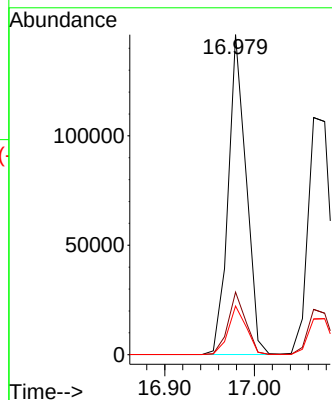
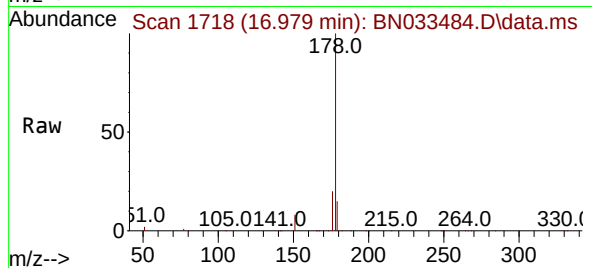




#25  
Phenanthrene  
Concen: 3.113 ng  
RT: 16.979 min Scan# 1718  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

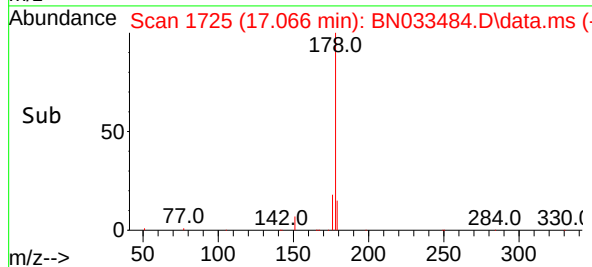
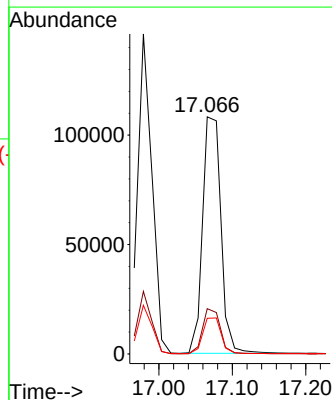
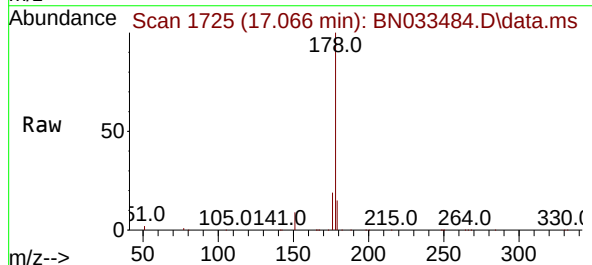
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

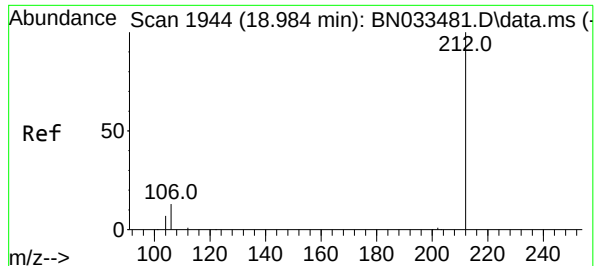
Tgt Ion:178 Resp: 202724  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.3 22.9  
179 15.3 12.3 18.5



#26  
Anthracene  
Concen: 3.276 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion:178 Resp: 188458  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.0 22.6  
179 15.2 12.4 18.6





#27

Fluoranthene-d10

Concen: 2.953 ng

RT: 18.984 min Scan# 1944

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

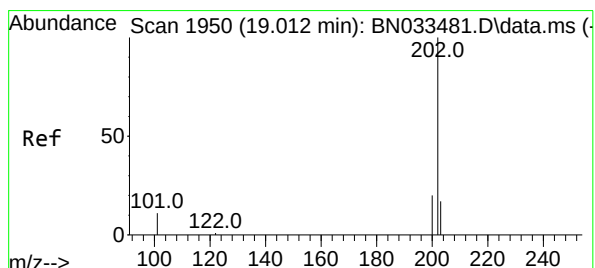
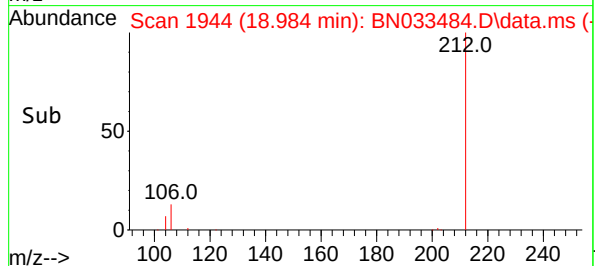
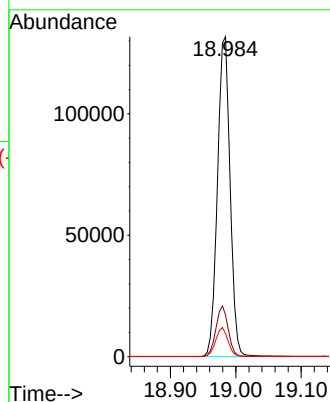
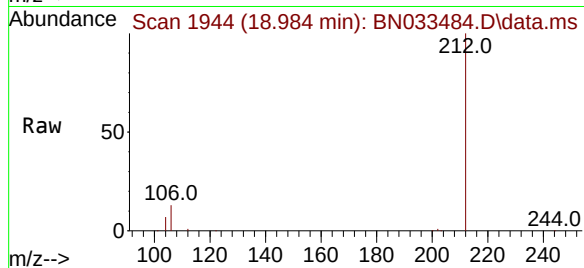
Tgt Ion:212 Resp: 176172

Ion Ratio Lower Upper

212 100

106 15.3 12.3 18.5

104 8.8 7.0 10.4



#28

Fluoranthene

Concen: 2.917 ng

RT: 19.012 min Scan# 1950

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

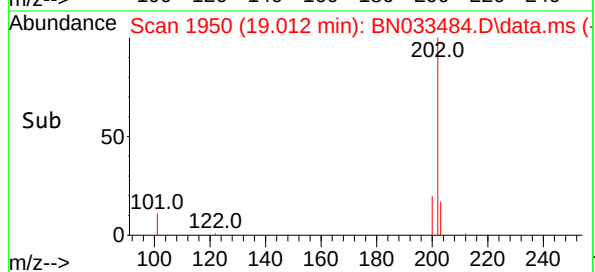
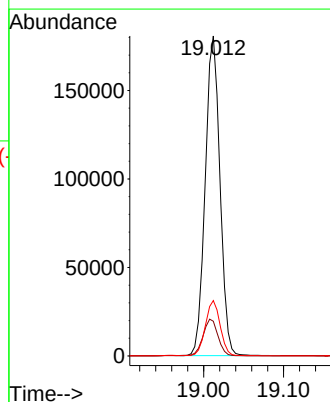
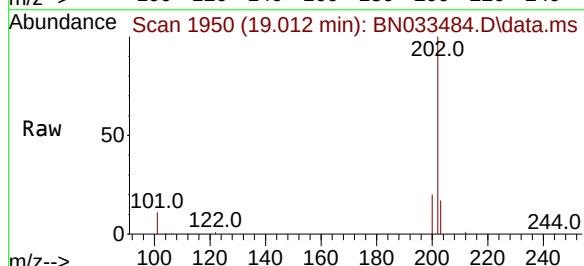
Tgt Ion:202 Resp: 230499

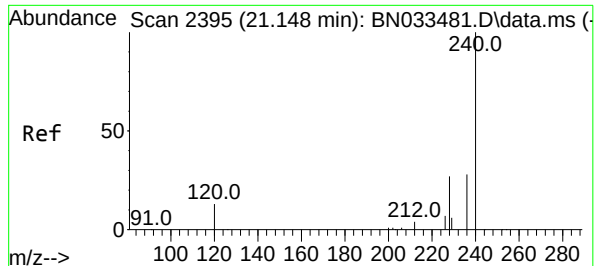
Ion Ratio Lower Upper

202 100

101 11.8 9.5 14.3

203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

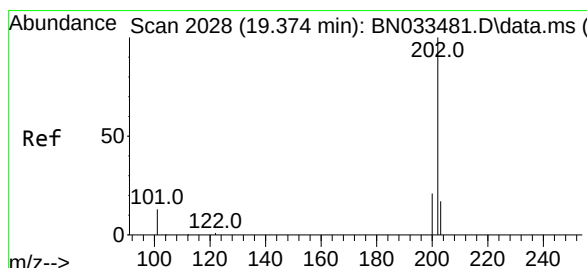
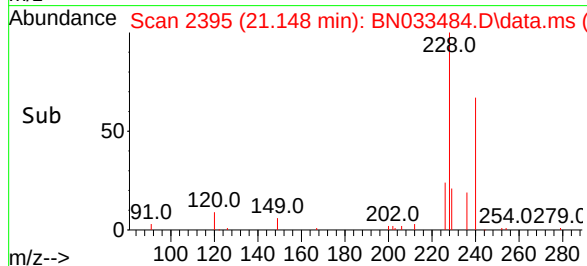
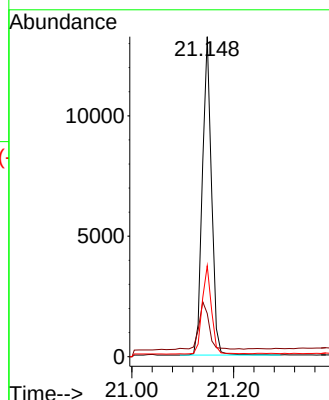
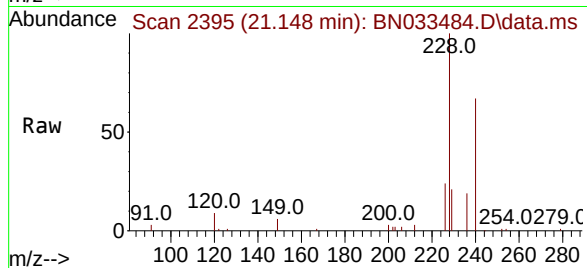
Tgt Ion:240 Resp: 16458

Ion Ratio Lower Upper

240 100

120 13.5 12.4 18.6

236 28.4 23.0 34.6



#30

Pyrene

Concen: 3.478 ng

RT: 19.374 min Scan# 2028

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

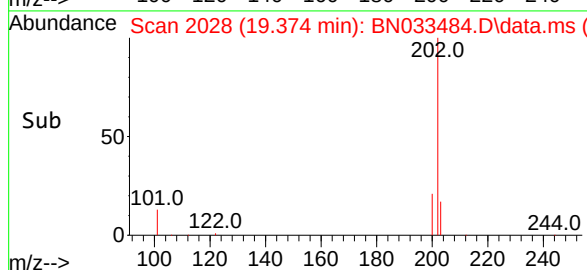
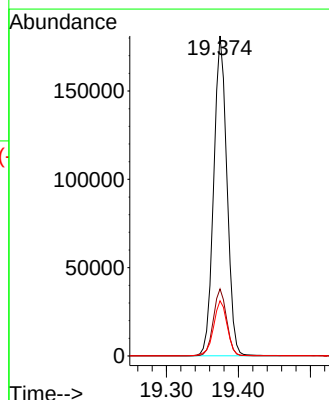
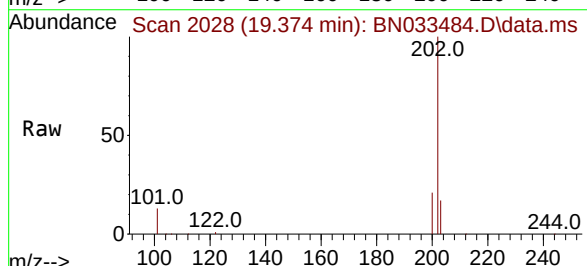
Tgt Ion:202 Resp: 230574

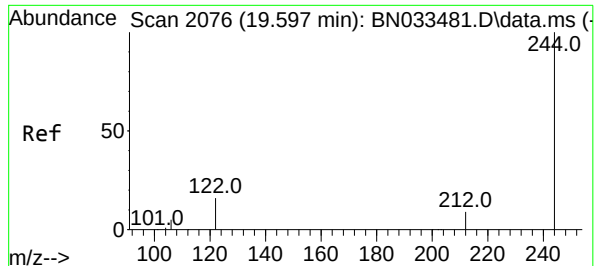
Ion Ratio Lower Upper

202 100

200 20.9 16.6 24.8

203 17.8 14.2 21.4

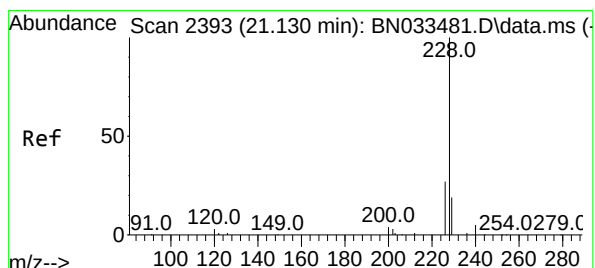
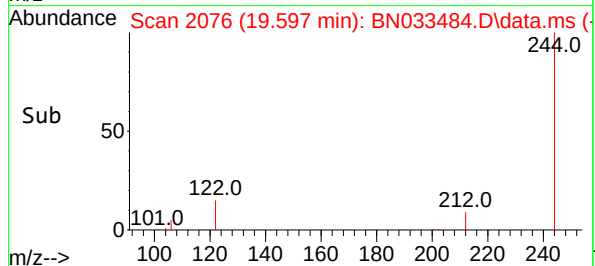
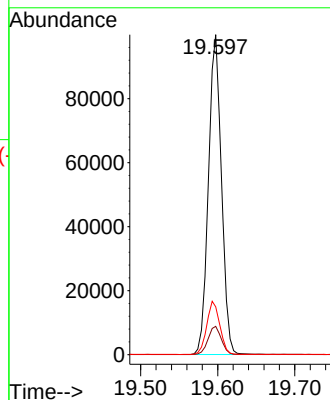
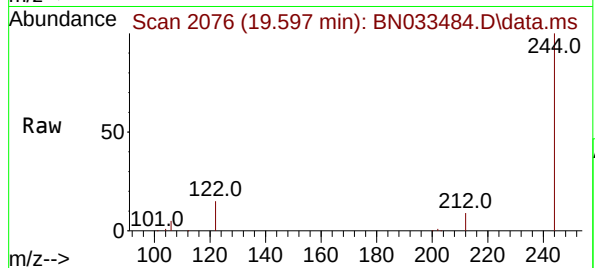




#31  
Terphenyl-d14  
Concen: 3.696 ng  
RT: 19.597 min Scan# 2076  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

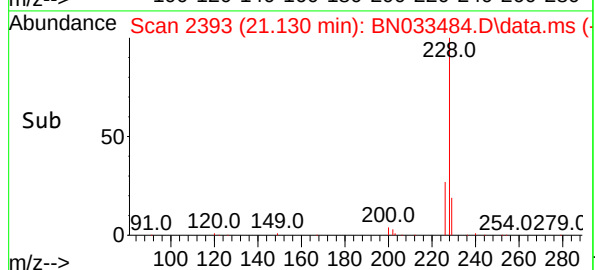
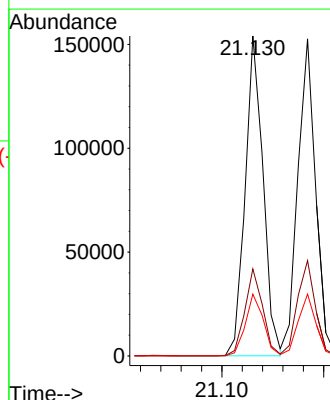
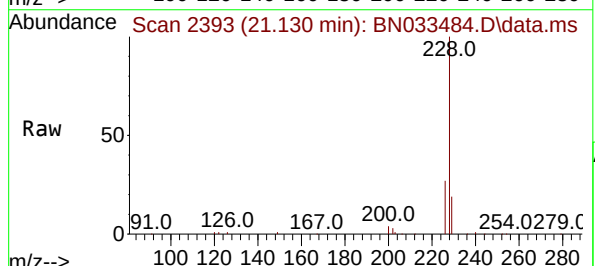
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

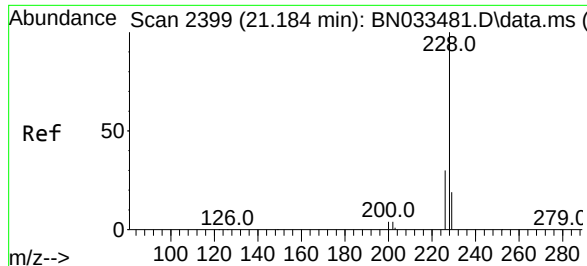
Tgt Ion:244 Resp: 117216  
Ion Ratio Lower Upper  
244 100  
212 8.9 7.8 11.6  
122 15.0 13.3 19.9



#32  
Benzo(a)anthracene  
Concen: 3.074 ng  
RT: 21.130 min Scan# 2393  
Delta R.T. -0.000 min  
Lab File: BN033484.D  
Acq: 19 Aug 2024 19:17

Tgt Ion:228 Resp: 187742  
Ion Ratio Lower Upper  
228 100  
226 27.2 21.8 32.6  
229 19.3 15.8 23.6





#33

Chrysene

Concen: 3.033 ng

RT: 21.184 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

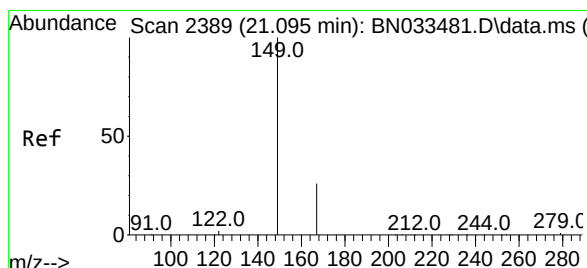
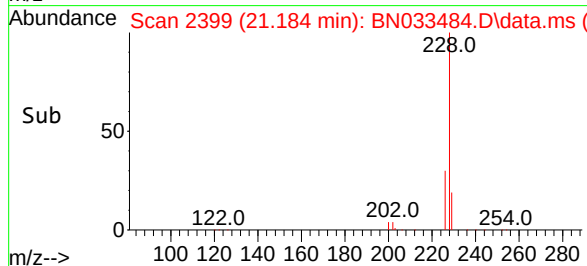
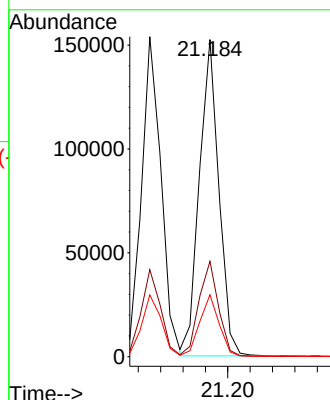
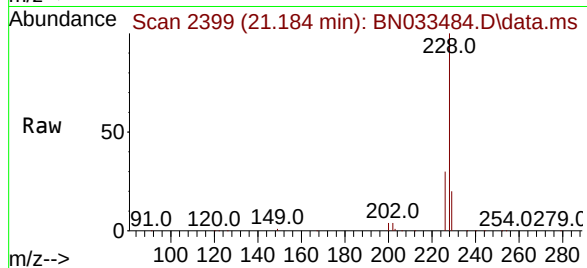
Tgt Ion:228 Resp: 184734

Ion Ratio Lower Upper

228 100

226 30.1 23.8 35.8

229 19.5 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 3.811 ng

RT: 21.095 min Scan# 2389

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

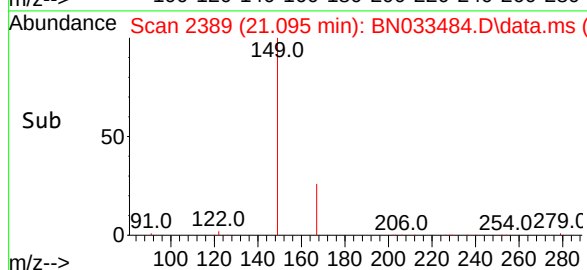
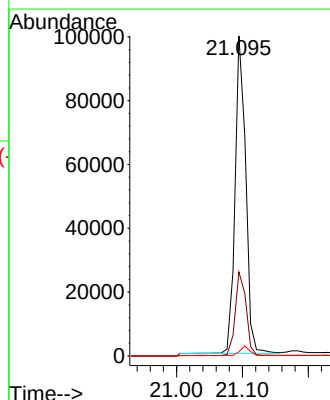
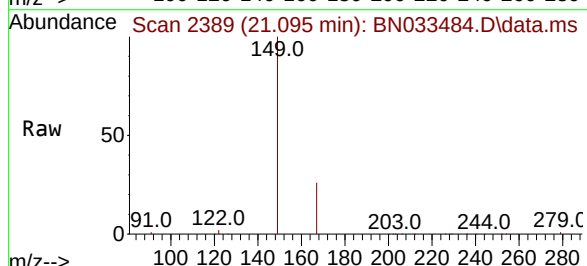
Tgt Ion:149 Resp: 111315

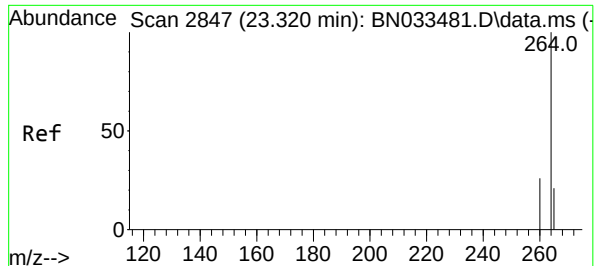
Ion Ratio Lower Upper

149 100

167 26.7 21.5 32.3

279 2.8 2.2 3.2





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.317 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

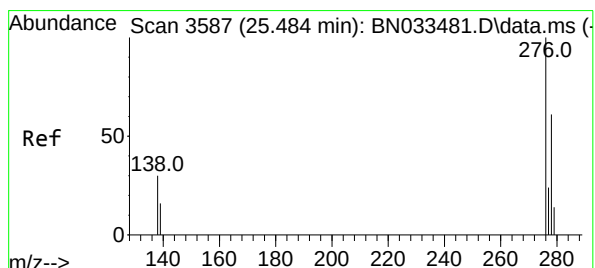
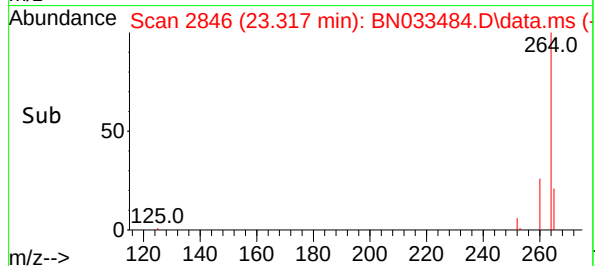
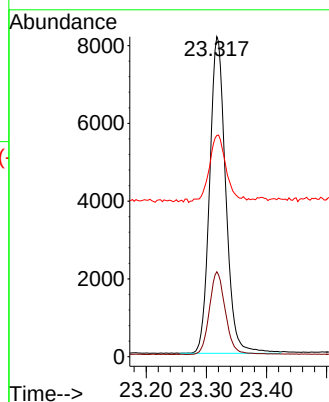
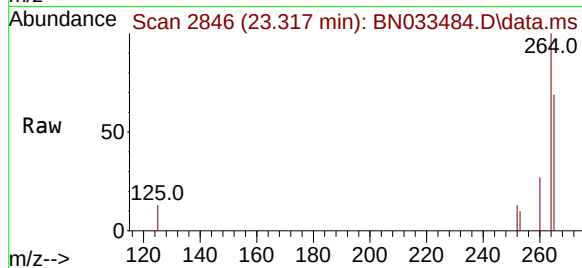
Tgt Ion:264 Resp: 15102

Ion Ratio Lower Upper

264 100

260 26.5 20.8 31.2

265 69.1 52.2 78.2



#36

Indeno(1,2,3-cd)pyrene

Concen: 3.206 ng

RT: 25.478 min Scan# 3585

Delta R.T. -0.006 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

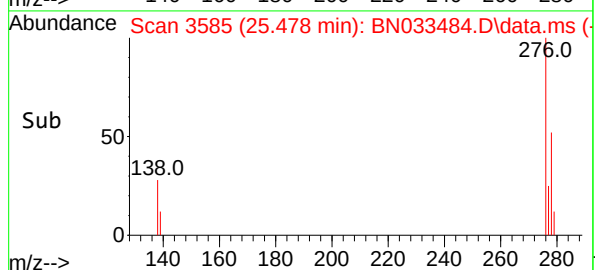
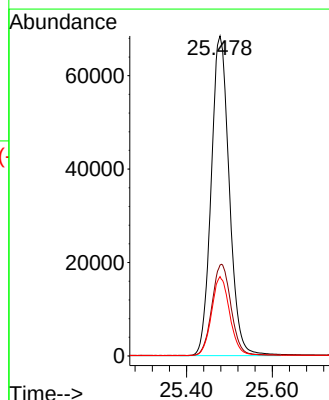
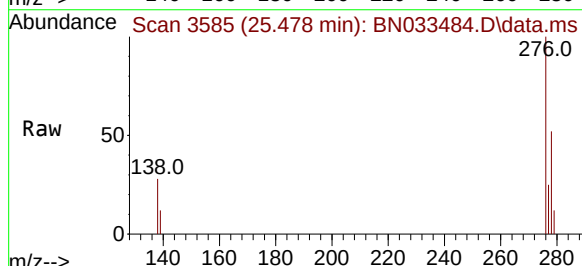
Tgt Ion:276 Resp: 200706

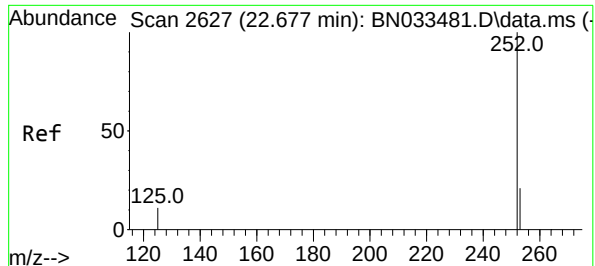
Ion Ratio Lower Upper

276 100

138 30.1 24.4 36.6

277 24.8 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 3.171 ng

RT: 22.674 min Scan# 2626

Delta R.T. -0.003 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

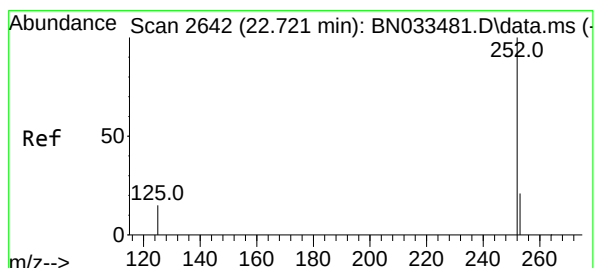
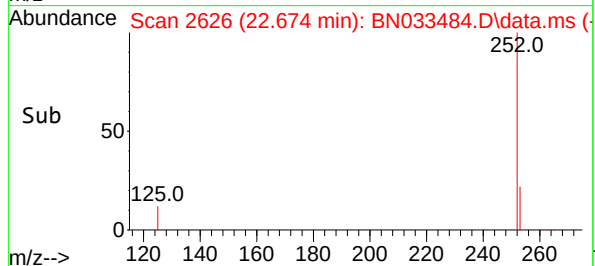
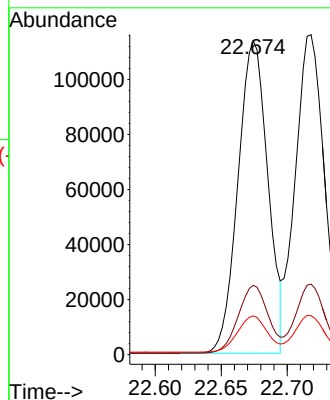
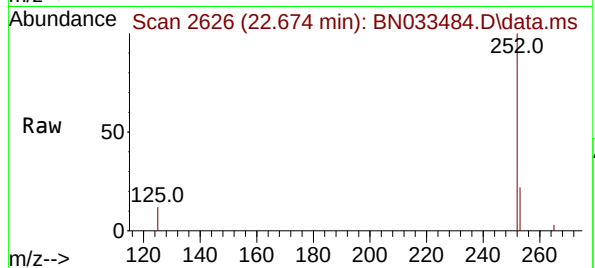
Tgt Ion:252 Resp: 178769

Ion Ratio Lower Upper

252 100

253 22.1 19.8 29.8

125 12.3 13.9 20.9#



#38

Benzo(k)fluoranthene

Concen: 3.154 ng

RT: 22.718 min Scan# 2641

Delta R.T. -0.003 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

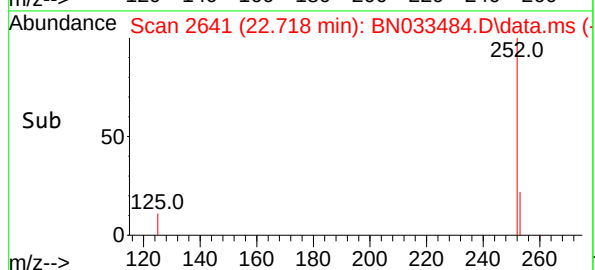
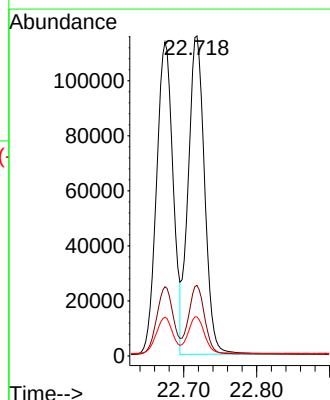
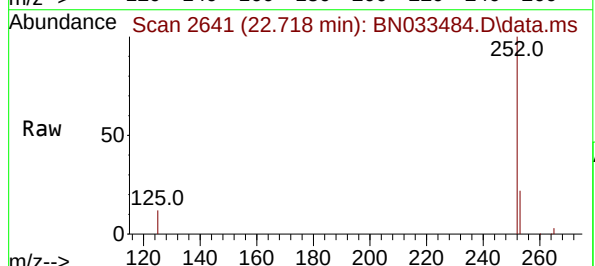
Tgt Ion:252 Resp: 180219

Ion Ratio Lower Upper

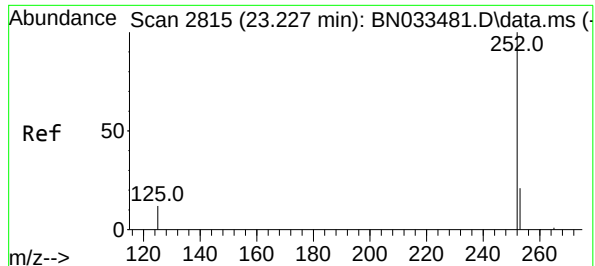
252 100

253 22.1 19.8 29.8

125 12.2 15.8 23.8#







#39

Benzo(a)pyrene

Concen: 3.178 ng

RT: 23.224 min Scan# 2814

Delta R.T. -0.003 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

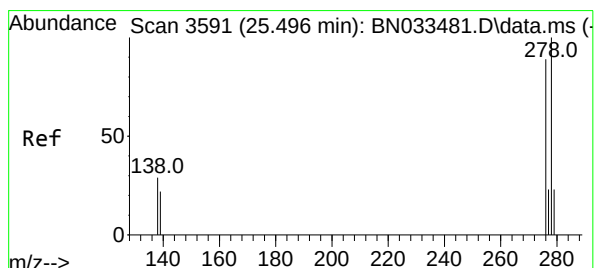
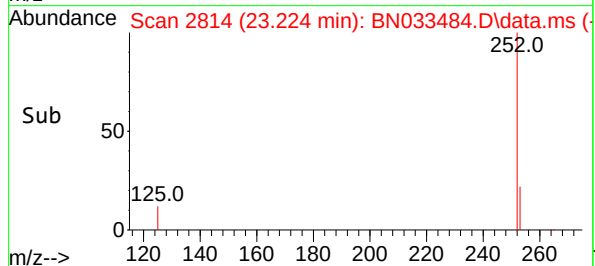
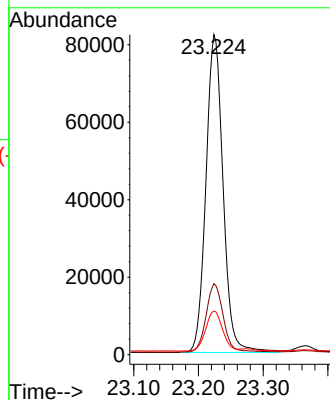
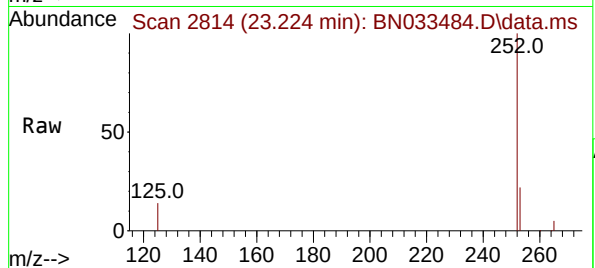
Tgt Ion:252 Resp: 151103

Ion Ratio Lower Upper

252 100

253 22.2 21.5 32.3

125 13.6 17.0 25.4#



#40

Dibenzo(a,h)anthracene

Concen: 3.242 ng

RT: 25.496 min Scan# 3591

Delta R.T. -0.000 min

Lab File: BN033484.D

Acq: 19 Aug 2024 19:17

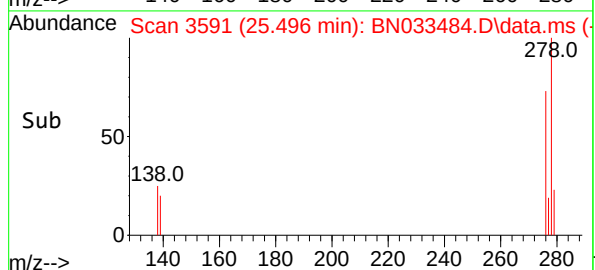
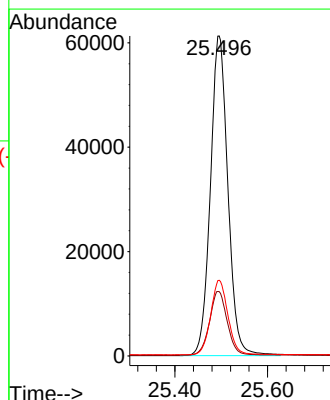
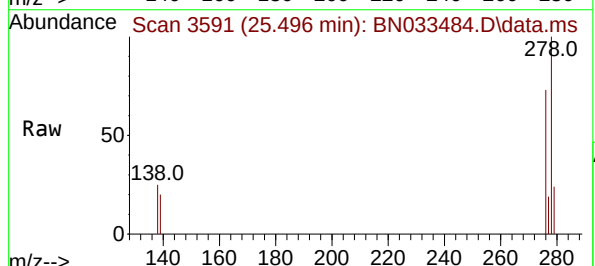
Tgt Ion:278 Resp: 160621

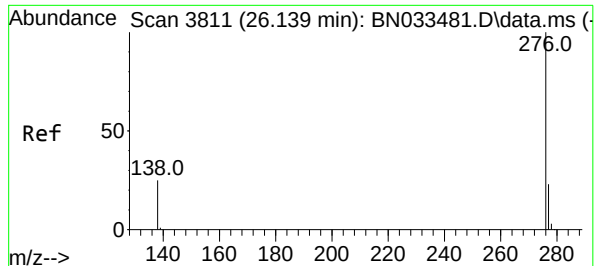
Ion Ratio Lower Upper

278 100

139 20.1 19.1 28.7

279 23.6 21.0 31.4





#41

Benzo(g,h,i)perylene

Concen: 3.133 ng

RT: 26.127 min Scan# 3807

Delta R.T. -0.012 min

Lab File: BN033484.D

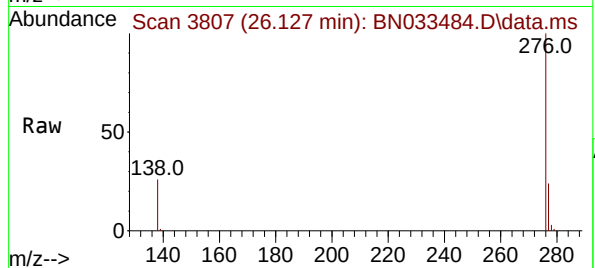
Acq: 19 Aug 2024 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2



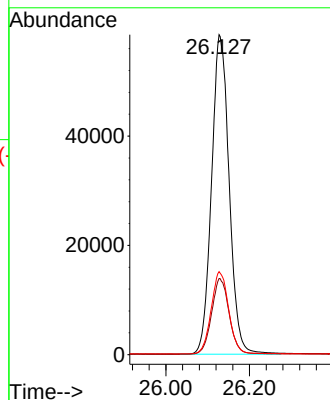
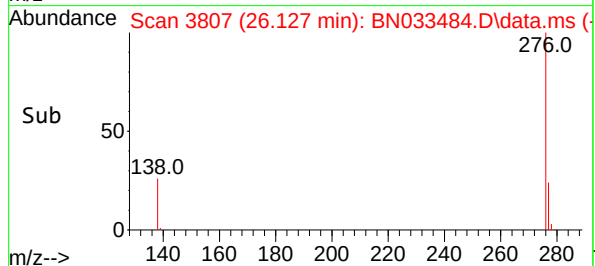
Tgt Ion:276 Resp: 170664

Ion Ratio Lower Upper

276 100

277 23.8 19.7 29.5

138 26.0 21.8 32.6



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033485.D  
 Acq On : 19 Aug 2024 19:53  
 Operator : MA/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Aug 19 23:23:58 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 19 23:20:26 2024  
 Response via : Initial Calibration

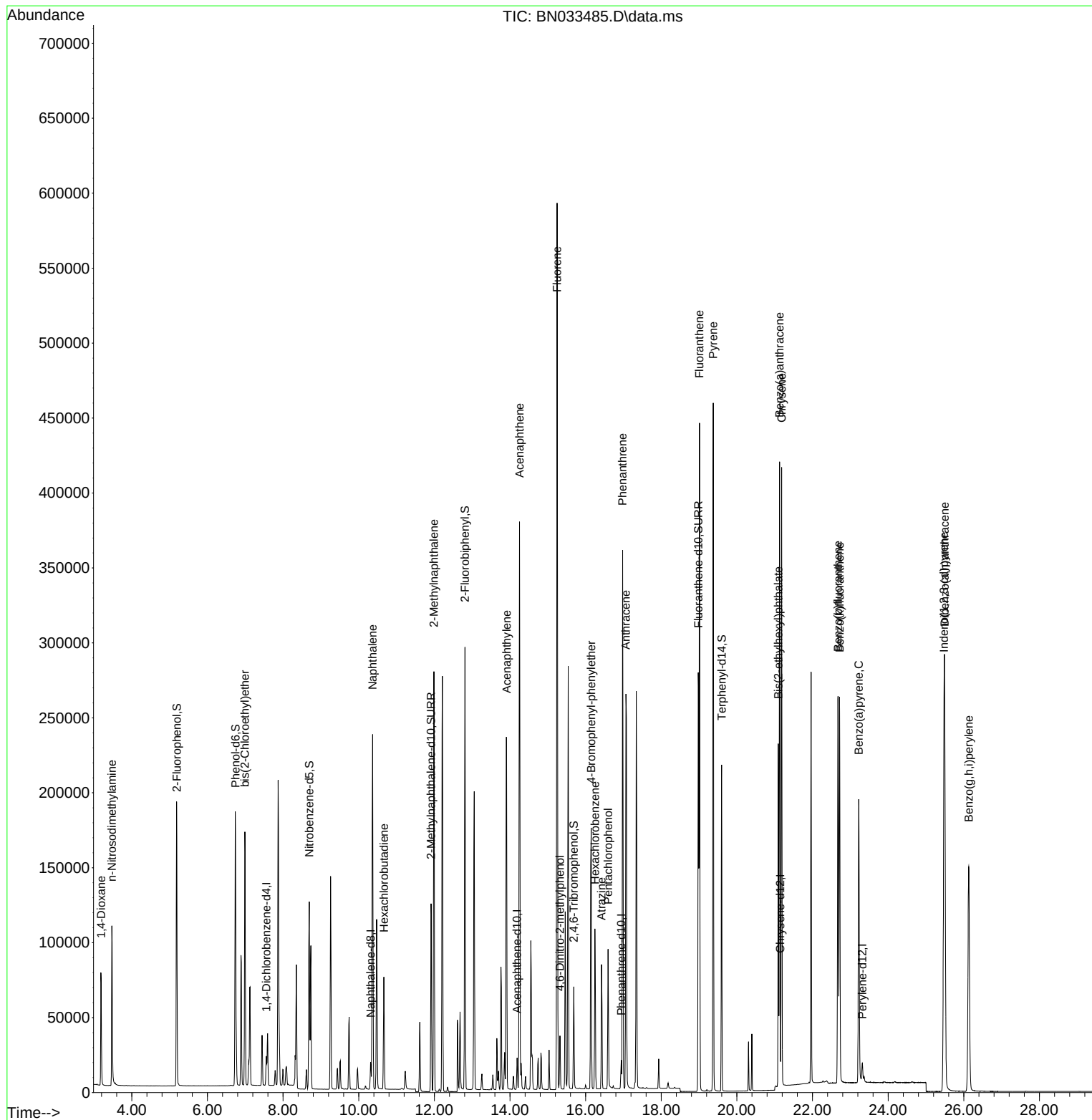
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.559  | 152  | 9269     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.314 | 136  | 21998    | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.189 | 164  | 11634    | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.942 | 188  | 23558    | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.148 | 240  | 17408    | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.317 | 264  | 15627    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.190  | 112  | 139321   | 5.345 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.743  | 99   | 157195   | 4.614 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.691  | 82   | 91772    | 5.507 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 160871   | 4.865 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 34523    | 5.811 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.809 | 172  | 235781   | 5.007 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.979 | 212  | 294565   | 4.770 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.597 | 244  | 195740   | 5.835 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 2) 1,4-Dioxane                | 3.190  | 88   | 45493    | 4.560 | ng    | Qvalue 99 |
| 3) n-Nitrosodimethylamine     | 3.471  | 42   | 56221    | 4.351 | ng    | 98        |
| 6) bis(2-Chloroethyl)ether    | 6.989  | 93   | 113488   | 4.272 | ng    | 100       |
| 9) Naphthalene                | 10.368 | 128  | 291947   | 4.891 | ng    | 99        |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 57398    | 5.014 | ng    | # 100     |
| 12) 2-Methylnaphthalene       | 11.990 | 142  | 190474   | 4.768 | ng    | 98        |
| 16) Acenaphthylene            | 13.911 | 152  | 277888   | 5.198 | ng    | 100       |
| 17) Acenaphthene              | 14.253 | 154  | 185664   | 5.047 | ng    | 97        |
| 18) Fluorene                  | 15.247 | 166  | 230419   | 4.786 | ng    | 100       |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 23328    | 7.938 | ng    | # 69      |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 73606    | 5.238 | ng    | 98        |
| 22) Hexachlorobenzene         | 16.247 | 284  | 79732    | 5.080 | ng    | 99        |
| 23) Atrazine                  | 16.420 | 200  | 61750    | 5.519 | ng    | 98        |
| 24) Pentachlorophenol         | 16.594 | 266  | 40313    | 6.275 | ng    | 99        |
| 25) Phenanthrene              | 16.979 | 178  | 335366   | 4.976 | ng    | 100       |
| 26) Anthracene                | 17.066 | 178  | 311339   | 5.228 | ng    | 99        |
| 28) Fluoranthene              | 19.012 | 202  | 379353   | 4.638 | ng    | 100       |
| 30) Pyrene                    | 19.374 | 202  | 384431   | 5.482 | ng    | 100       |
| 32) Benzo(a)anthracene        | 21.130 | 228  | 320243   | 4.958 | ng    | 100       |
| 33) Chrysene                  | 21.184 | 228  | 311144   | 4.829 | ng    | 100       |
| 34) Bis(2-ethylhexyl)phtha... | 21.094 | 149  | 193548   | 6.264 | ng    | 100       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.478 | 276  | 330983   | 5.109 | ng    | 99        |
| 37) Benzo(b)fluoranthene      | 22.674 | 252  | 299478   | 5.133 | ng    | # 91      |
| 38) Benzo(k)fluoranthene      | 22.715 | 252  | 295429   | 4.997 | ng    | # 89      |
| 39) Benzo(a)pyrene            | 23.224 | 252  | 251984   | 5.121 | ng    | # 87      |
| 40) Dibenzo(a,h)anthracene    | 25.493 | 278  | 264087   | 5.151 | ng    | 93        |
| 41) Benzo(g,h,i)perylene      | 26.133 | 276  | 280592   | 4.978 | ng    | 98        |

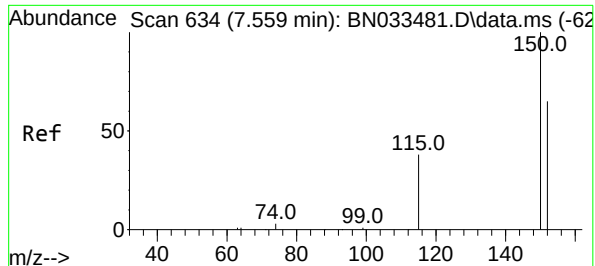
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033485.D  
Acq On : 19 Aug 2024 19:53  
Operator : MA/JU  
Sample : SSTDICC5.0  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Quant Time: Aug 19 23:23:58 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:20:26 2024  
Response via : Initial Calibration

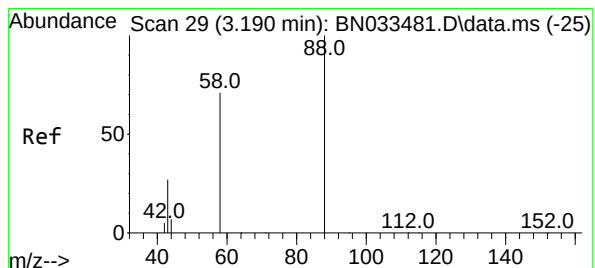
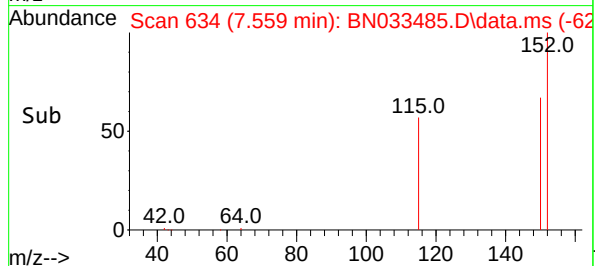
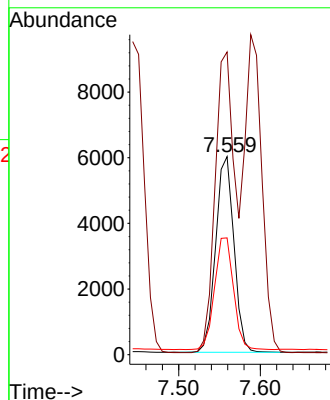
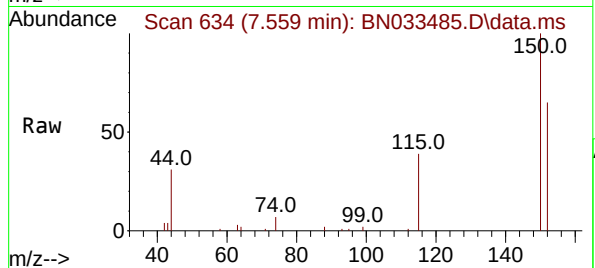




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.559 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

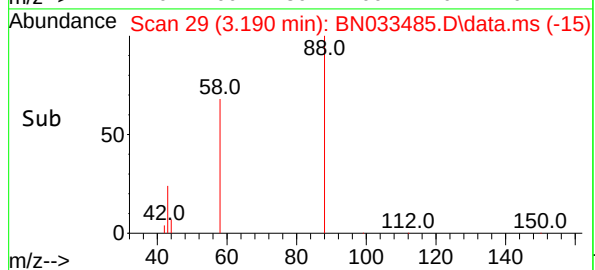
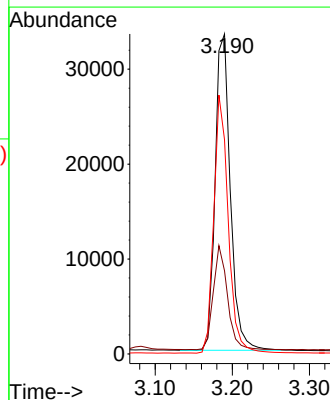
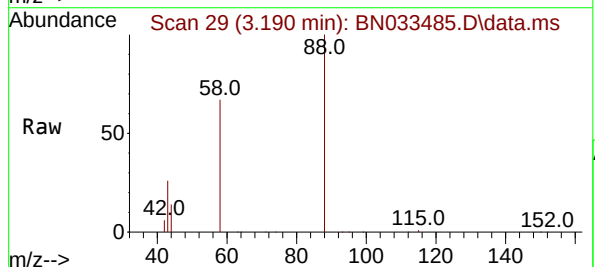
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

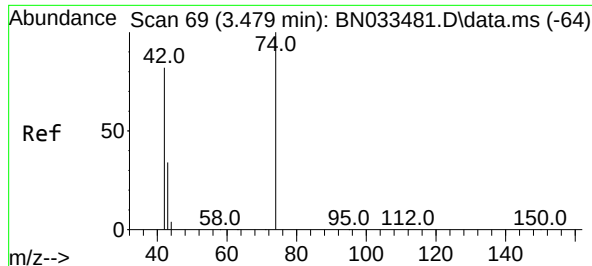
Tgt Ion:152 Resp: 9269  
Ion Ratio Lower Upper  
152 100  
150 152.8 122.2 183.2  
115 58.9 47.2 70.8



#2  
1,4-Dioxane  
Concen: 4.560 ng  
RT: 3.190 min Scan# 29  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion: 88 Resp: 45493  
Ion Ratio Lower Upper  
88 100  
43 30.6 25.0 37.4  
58 77.6 62.5 93.7

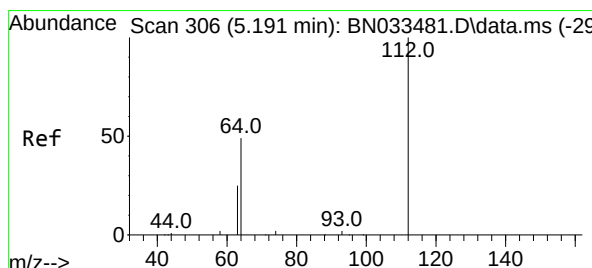
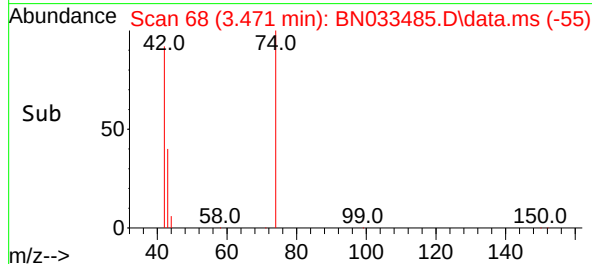
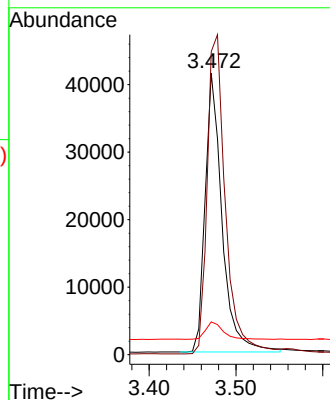
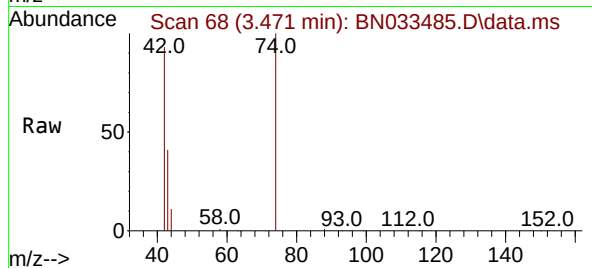




#3  
n-Nitrosodimethylamine  
Concen: 4.351 ng  
RT: 3.471 min Scan# 69  
Delta R.T. -0.007 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

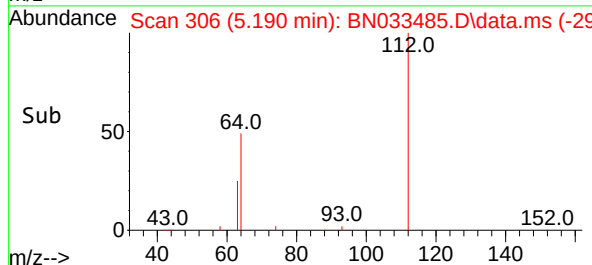
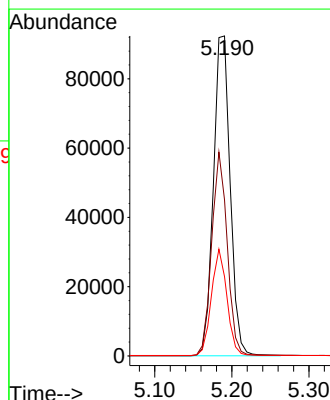
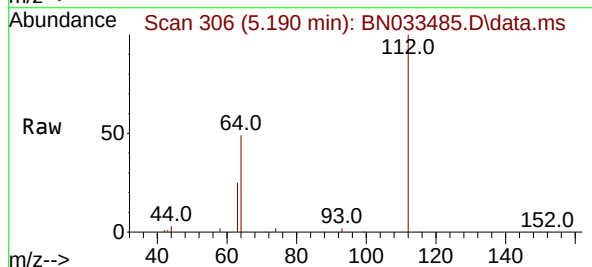
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

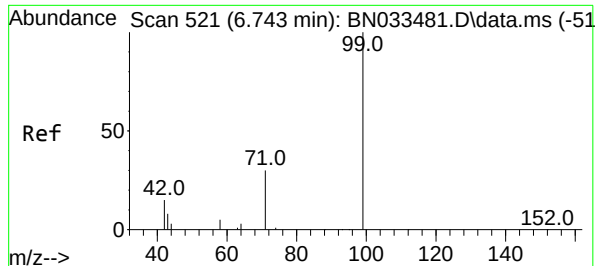
Tgt Ion: 42 Resp: 56221  
Ion Ratio Lower Upper  
42 100  
74 122.7 100.2 150.2  
44 6.4 5.3 7.9



#4  
2-Fluorophenol  
Concen: 5.345 ng  
RT: 5.190 min Scan# 306  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion: 112 Resp: 139321  
Ion Ratio Lower Upper  
112 100  
64 58.9 47.1 70.7  
63 30.7 24.9 37.3

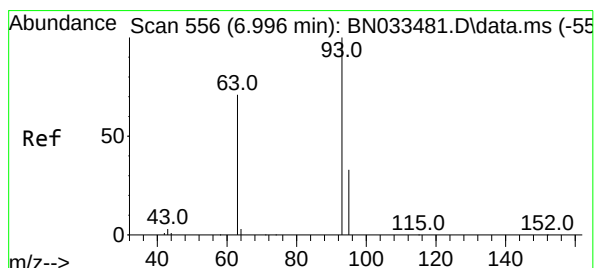
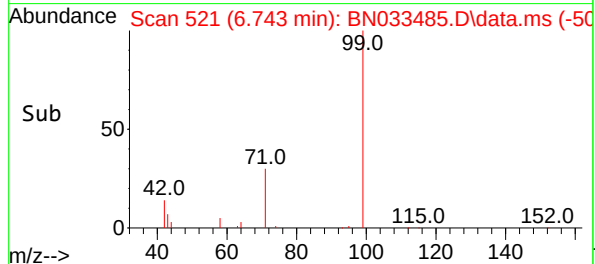
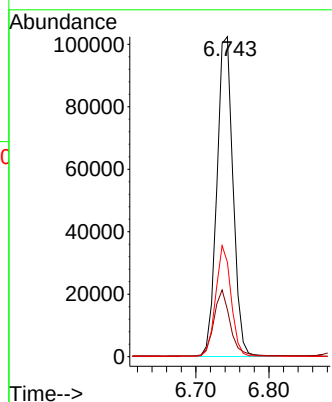
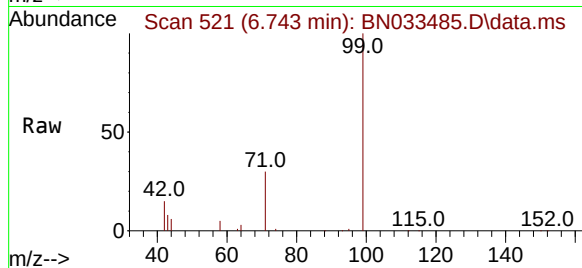




#5  
Phenol-d6  
Concen: 4.614 ng  
RT: 6.743 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

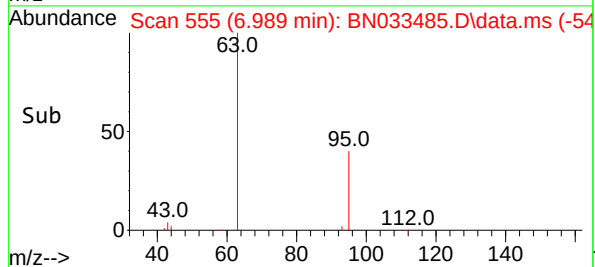
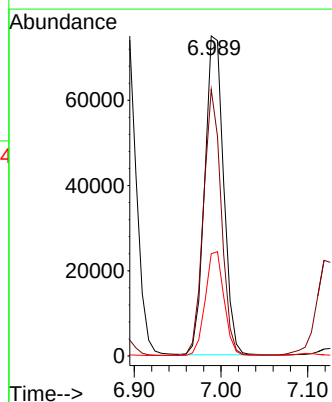
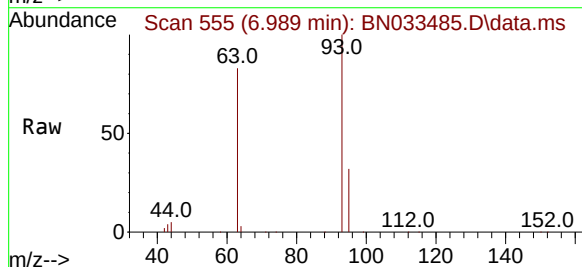
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

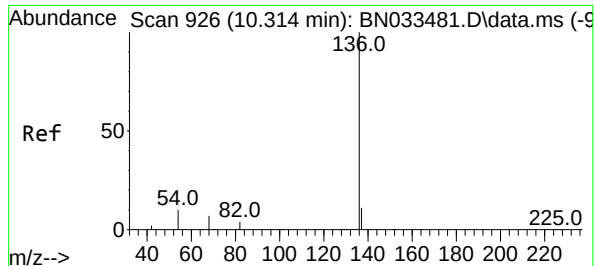
Tgt Ion: 99 Resp: 157195  
Ion Ratio Lower Upper  
99 100  
42 20.4 16.6 24.8  
71 33.0 26.2 39.4



#6  
bis(2-Chloroethyl)ether  
Concen: 4.272 ng  
RT: 6.989 min Scan# 555  
Delta R.T. -0.007 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion: 93 Resp: 113488  
Ion Ratio Lower Upper  
93 100  
63 78.7 63.0 94.4  
95 32.4 26.0 39.0

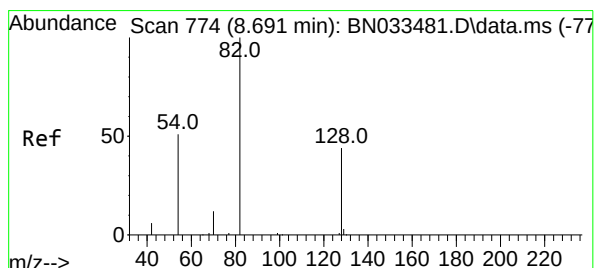
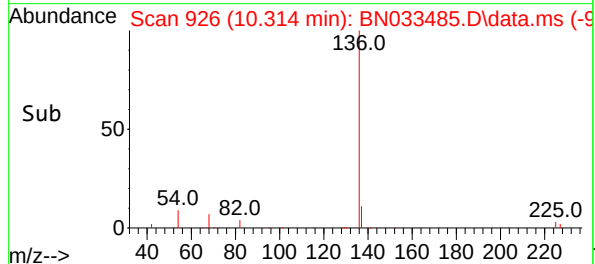
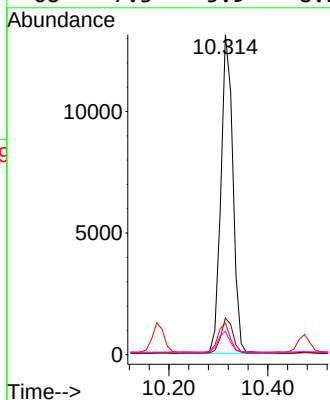
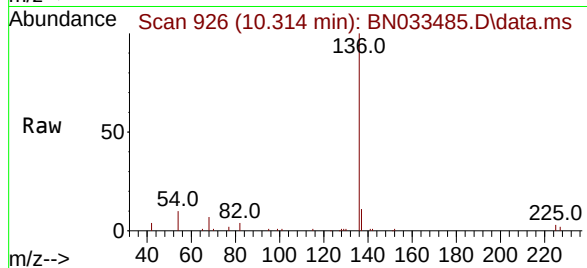




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

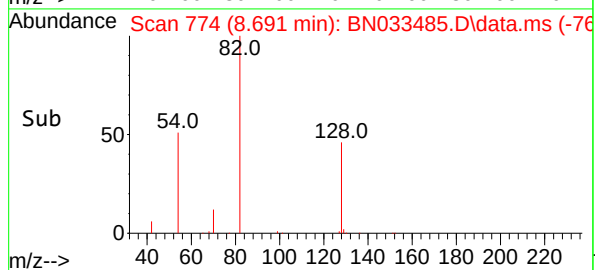
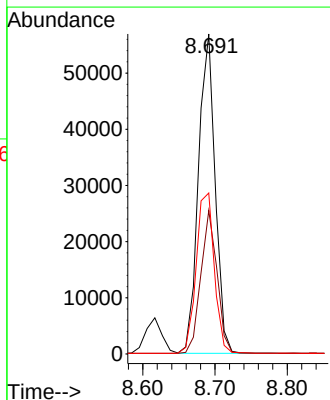
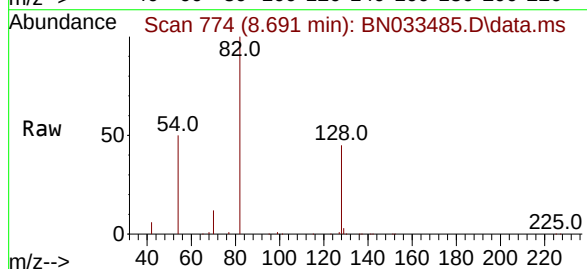
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 21998 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.4  | 9.0   | 13.6  |
| 54       | 9.9   | 8.3   | 12.5  |
| 68       | 7.3   | 5.9   | 8.9   |

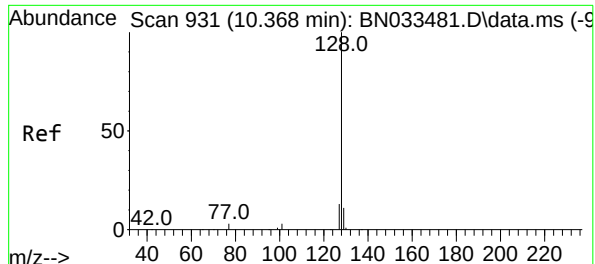


#8  
Nitrobenzene-d5  
Concen: 5.507 ng  
RT: 8.691 min Scan# 774  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 91772 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 44.8  | 36.0  | 54.0  |
| 54       | 50.3  | 42.0  | 63.0  |



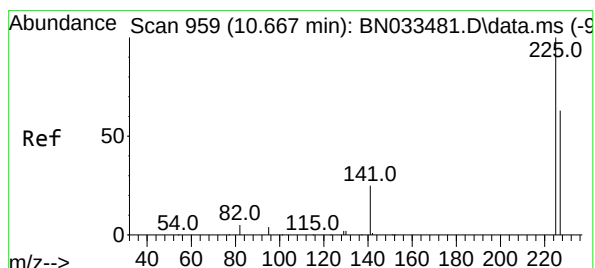
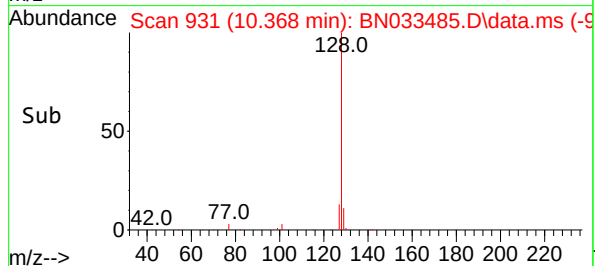
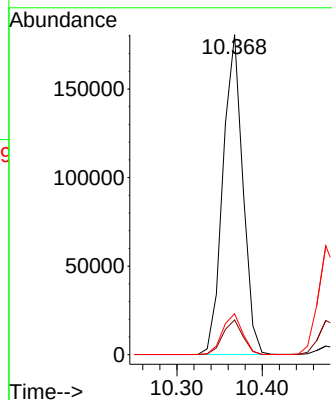
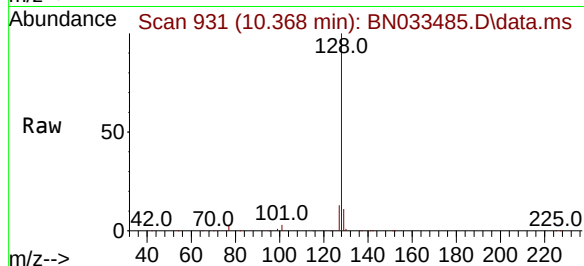




#9  
Naphthalene  
Concen: 4.891 ng  
RT: 10.368 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

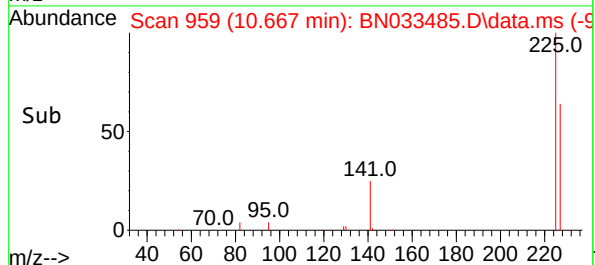
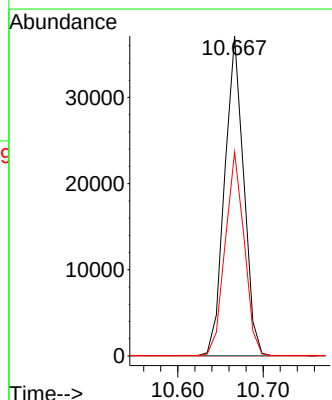
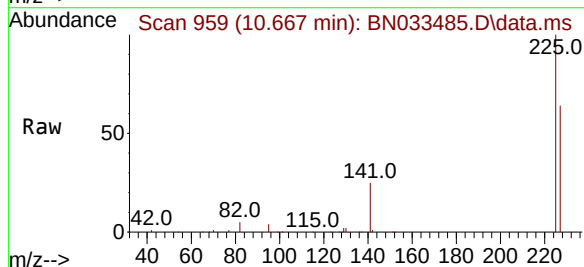
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

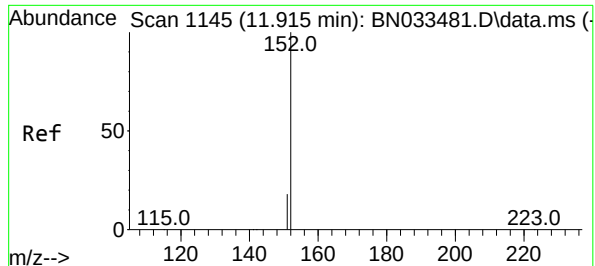
Tgt Ion:128 Resp: 291947  
Ion Ratio Lower Upper  
128 100  
129 10.8 9.1 13.7  
127 12.8 10.7 16.1



#10  
Hexachlorobutadiene  
Concen: 5.014 ng  
RT: 10.667 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion:225 Resp: 57398  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.2 76.8

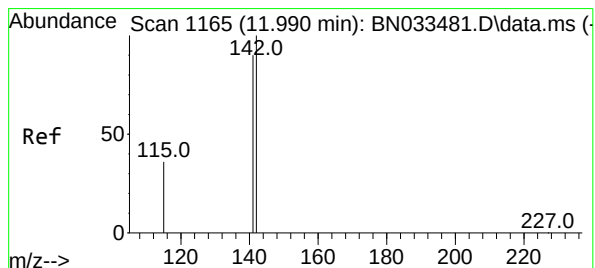
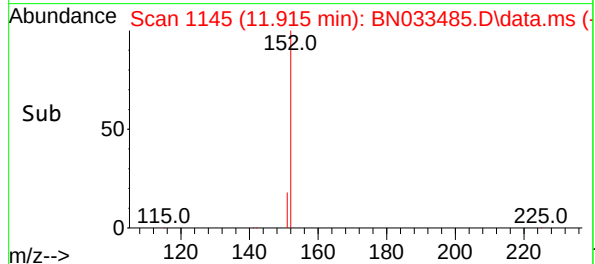
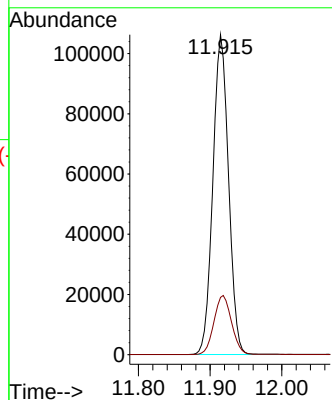
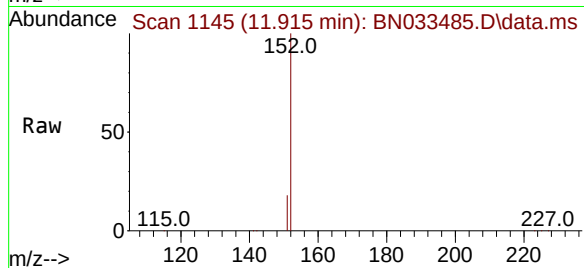




#11  
2-Methylnaphthalene-d10  
Concen: 4.865 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

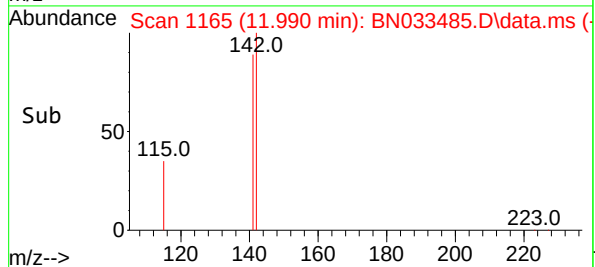
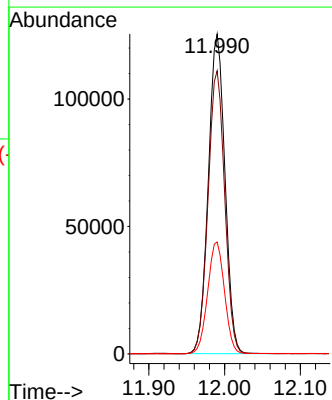
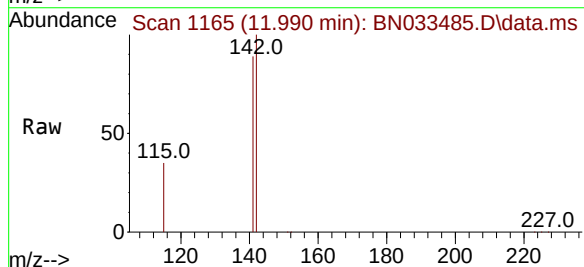
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

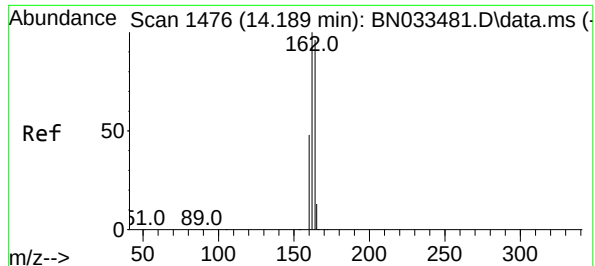
Tgt Ion:152 Resp: 160871  
Ion Ratio Lower Upper  
152 100  
151 20.6 16.6 25.0



#12  
2-Methylnaphthalene  
Concen: 4.768 ng  
RT: 11.990 min Scan# 1165  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion:142 Resp: 190474  
Ion Ratio Lower Upper  
142 100  
141 88.5 71.7 107.5  
115 35.0 29.4 44.2

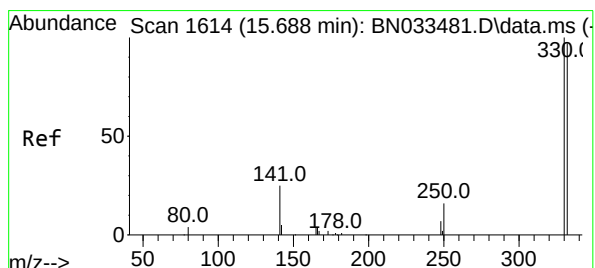
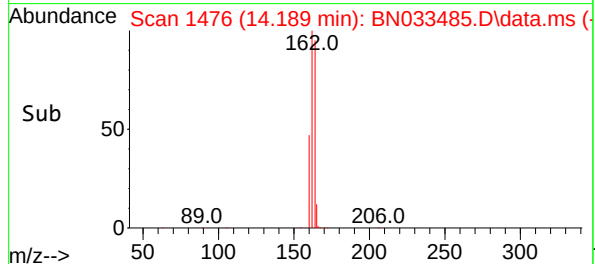
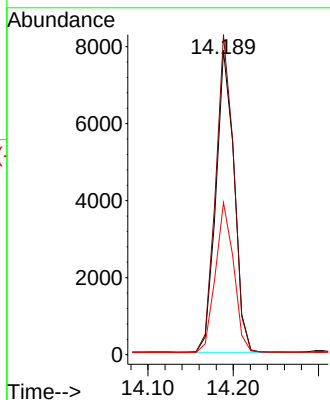
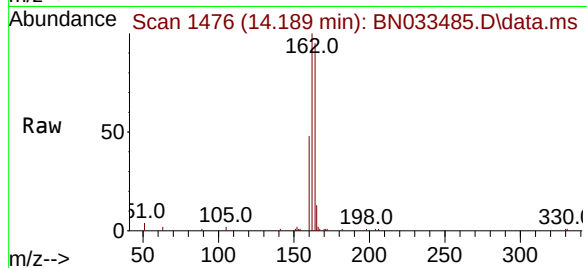




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.189 min Scan# 1476  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

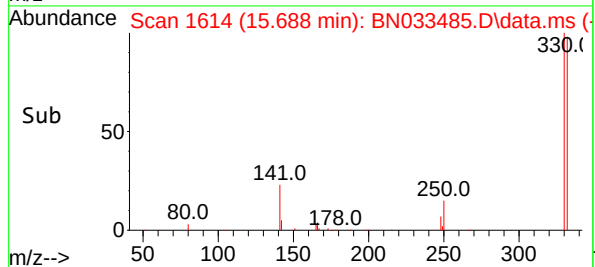
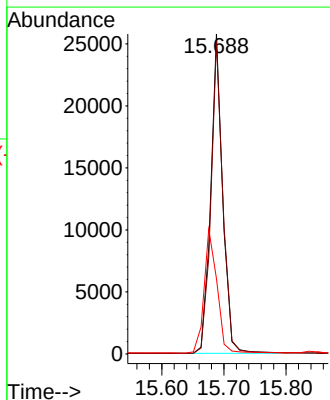
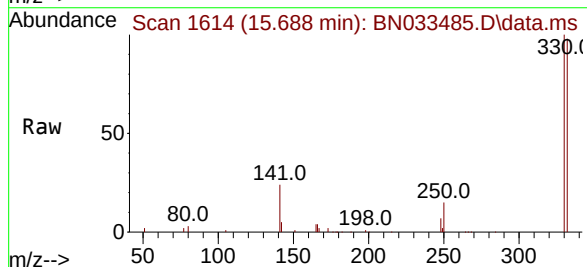
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

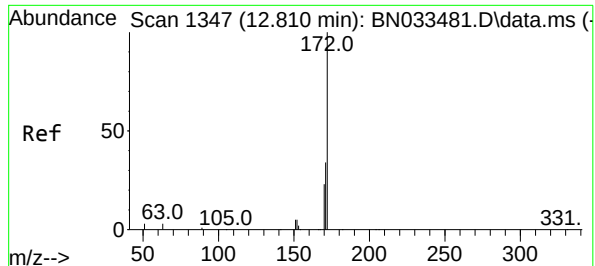
Tgt Ion:164 Resp: 11634  
Ion Ratio Lower Upper  
164 100  
162 105.2 83.5 125.3  
160 50.1 40.2 60.4



#14  
2,4,6-Tribromophenol  
Concen: 5.811 ng  
RT: 15.688 min Scan# 1614  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion:330 Resp: 34523  
Ion Ratio Lower Upper  
330 100  
332 97.5 77.5 116.3  
141 41.7 33.9 50.9





#15

2-Fluorobiphenyl

Concen: 5.007 ng

RT: 12.809 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

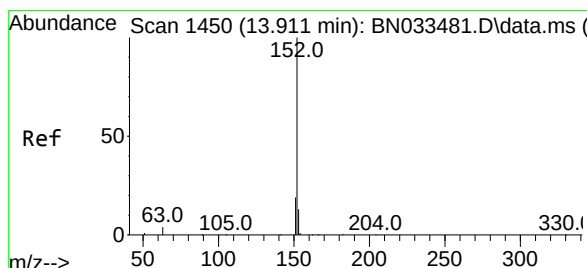
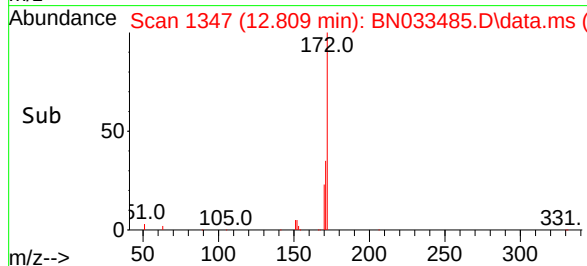
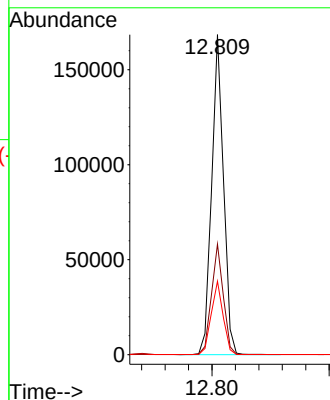
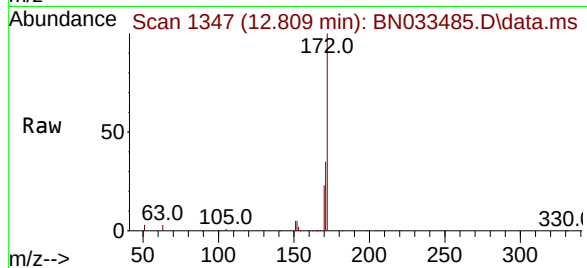
Tgt Ion:172 Resp: 235781

Ion Ratio Lower Upper

172 100

171 34.5 27.7 41.5

170 23.0 18.3 27.5



#16

Acenaphthylene

Concen: 5.198 ng

RT: 13.911 min Scan# 1450

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

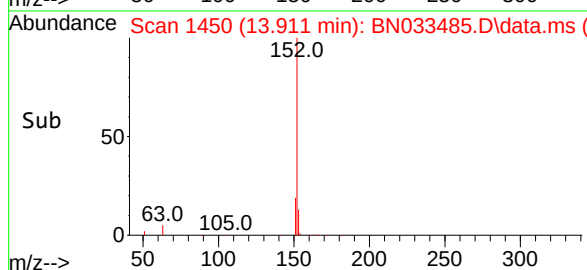
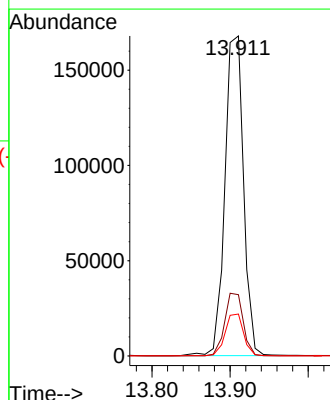
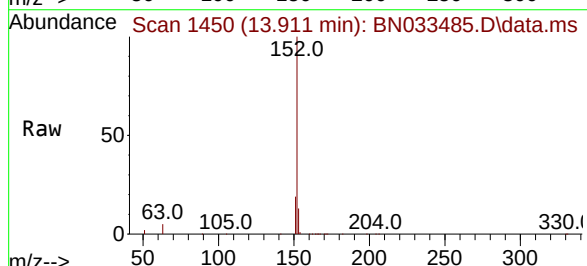
Tgt Ion:152 Resp: 277888

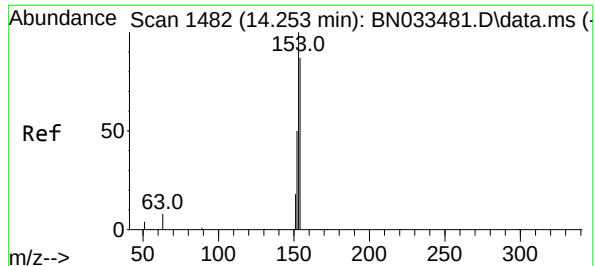
Ion Ratio Lower Upper

152 100

151 19.4 15.7 23.5

153 13.0 10.3 15.5





#17

Acenaphthene

Concen: 5.047 ng

RT: 14.253 min Scan# 1482

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

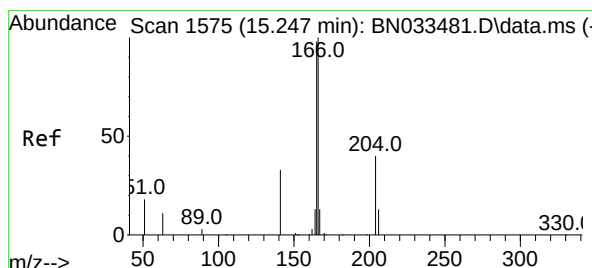
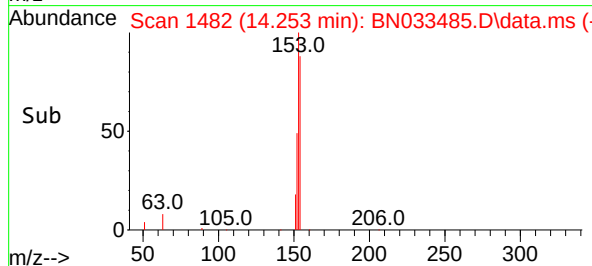
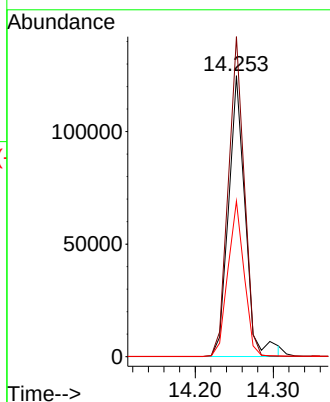
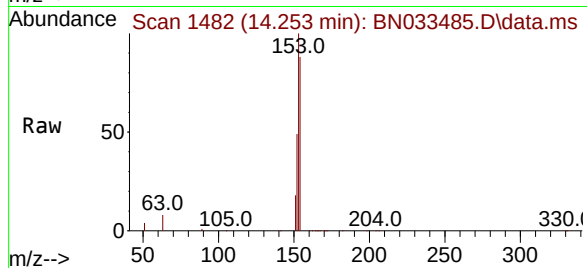
Tgt Ion:154 Resp: 185664

Ion Ratio Lower Upper

154 100

153 108.5 89.0 133.6

152 53.5 45.2 67.8



#18

Fluorene

Concen: 4.786 ng

RT: 15.247 min Scan# 1575

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

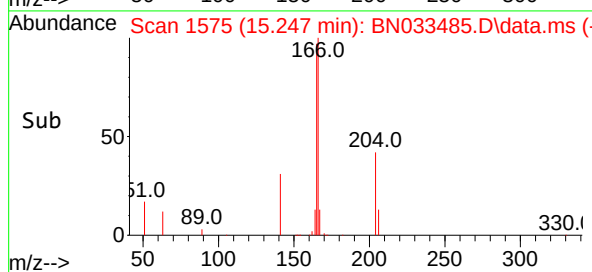
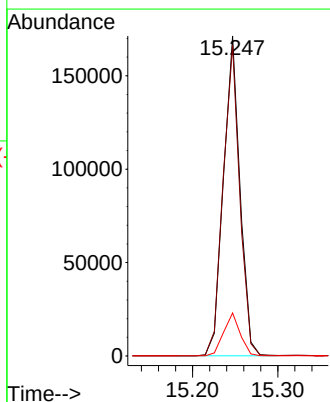
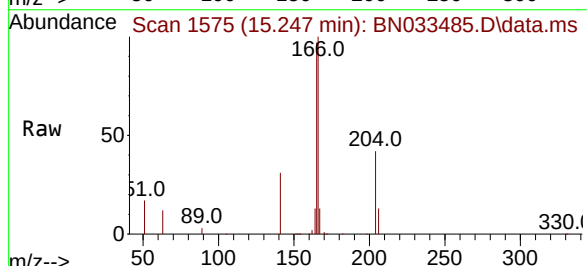
Tgt Ion:166 Resp: 230419

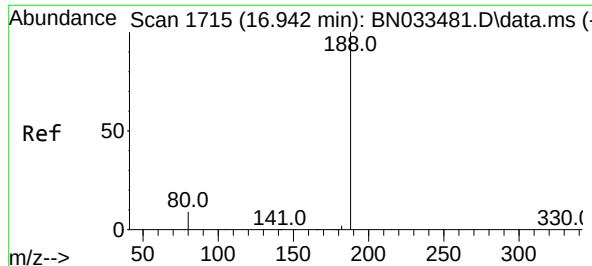
Ion Ratio Lower Upper

166 100

165 97.7 78.2 117.4

167 13.4 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.942 min Scan# 1715

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

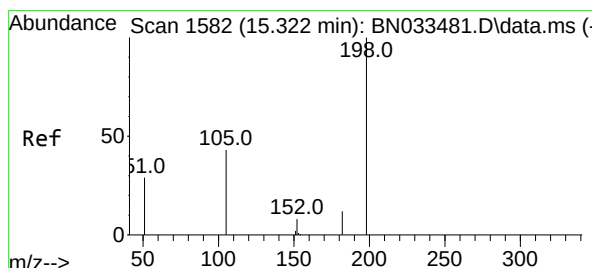
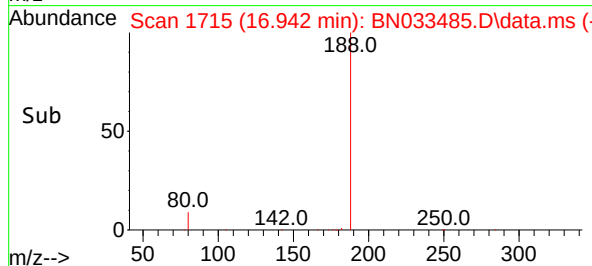
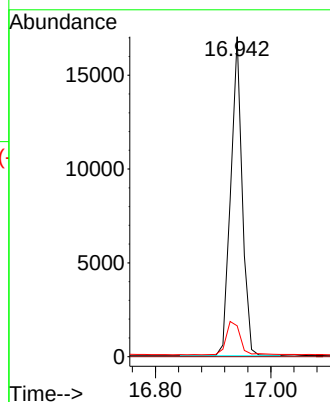
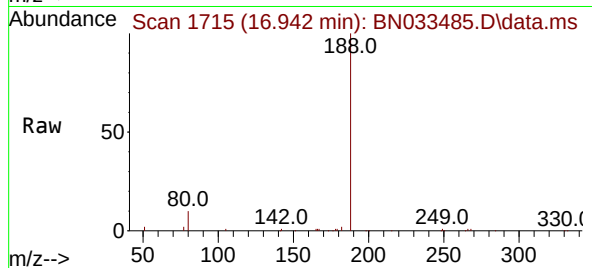
Tgt Ion:188 Resp: 23558

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.6 7.8 11.8



#20

4,6-Dinitro-2-methylphenol

Concen: 7.938 ng

RT: 15.322 min Scan# 1582

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

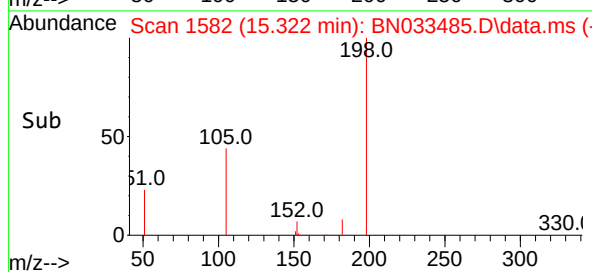
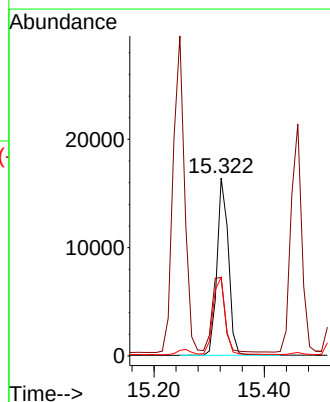
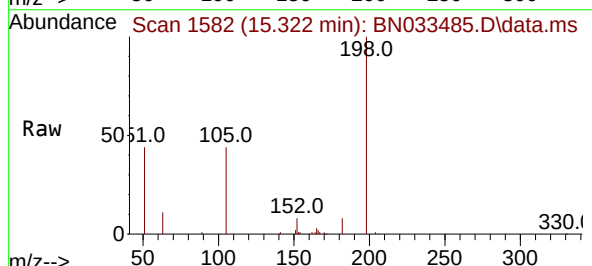
Tgt Ion:198 Resp: 23328

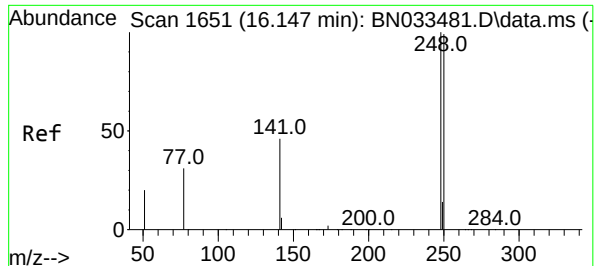
Ion Ratio Lower Upper

198 100

51 44.0 65.1 97.7#

105 44.3 44.8 67.2#

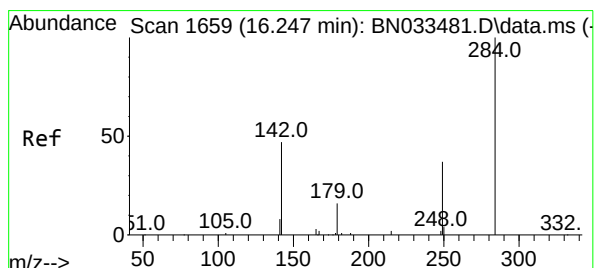
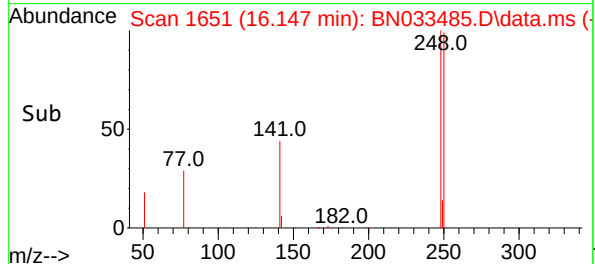
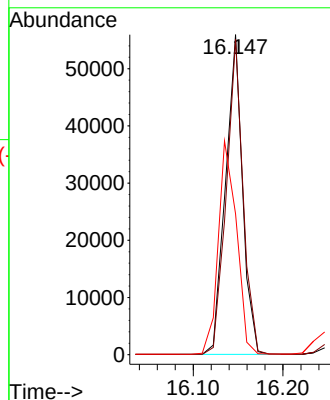
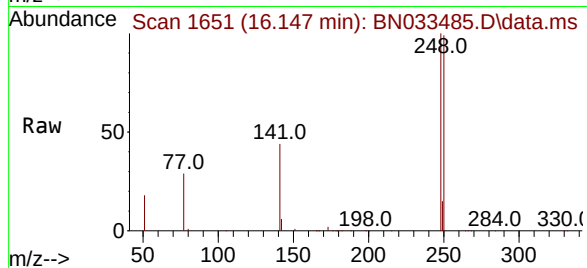




#21  
4-Bromophenyl-phenylether  
Concen: 5.238 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

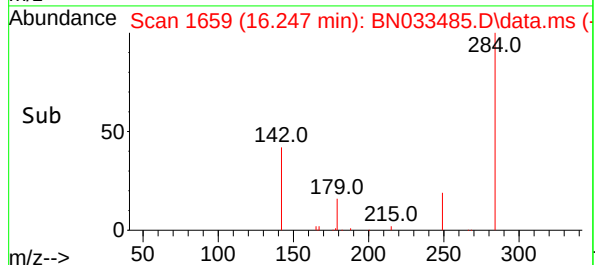
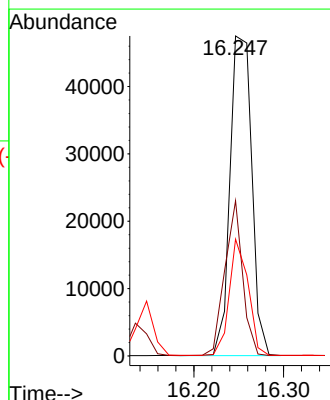
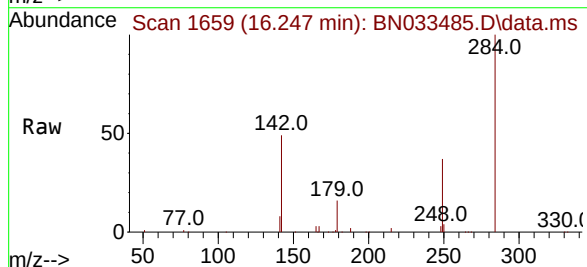
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

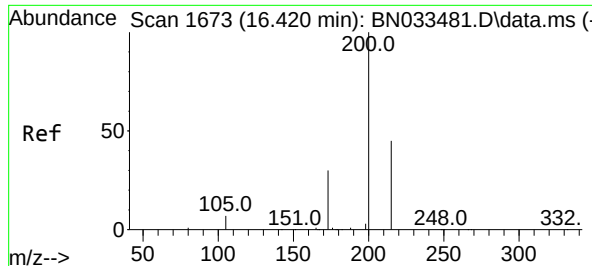
Tgt Ion:248 Resp: 73606  
Ion Ratio Lower Upper  
248 100  
250 98.6 79.2 118.8  
141 44.0 37.9 56.9



#22  
Hexachlorobenzene  
Concen: 5.080 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion:284 Resp: 79732  
Ion Ratio Lower Upper  
284 100  
142 39.6 31.8 47.6  
249 31.6 26.0 39.0

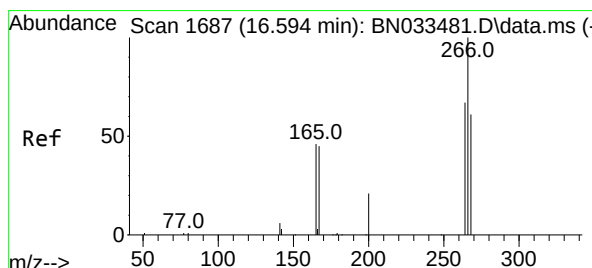
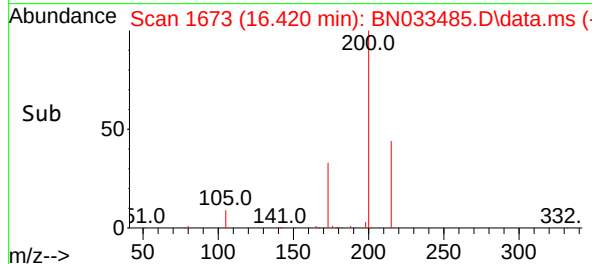
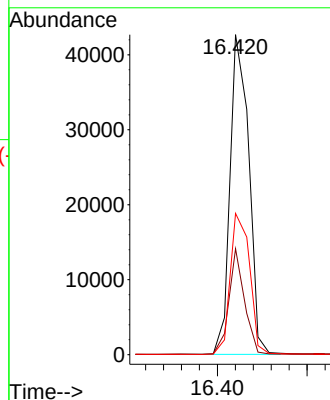
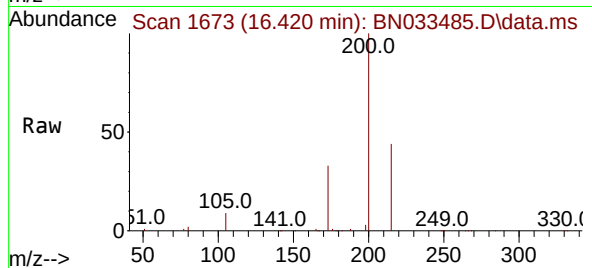




#23  
Atrazine  
Concen: 5.519 ng  
RT: 16.420 min Scan# 1673  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

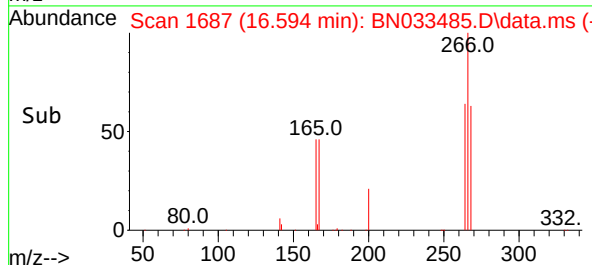
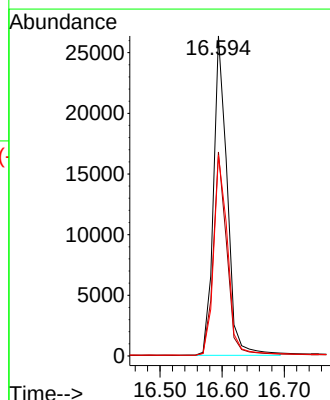
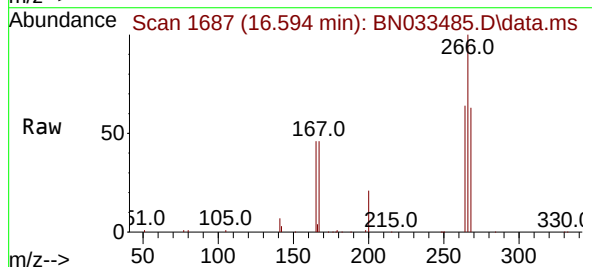
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Tgt Ion:200 Resp: 61750  
Ion Ratio Lower Upper  
200 100  
173 33.1 25.3 37.9  
215 44.2 36.6 54.8

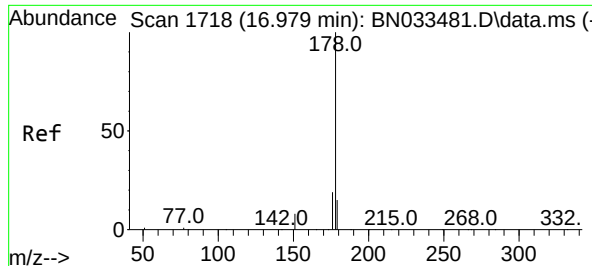


#24  
Pentachlorophenol  
Concen: 6.275 ng  
RT: 16.594 min Scan# 1687  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion:266 Resp: 40313  
Ion Ratio Lower Upper  
266 100  
264 62.7 51.9 77.9  
268 63.8 51.0 76.4



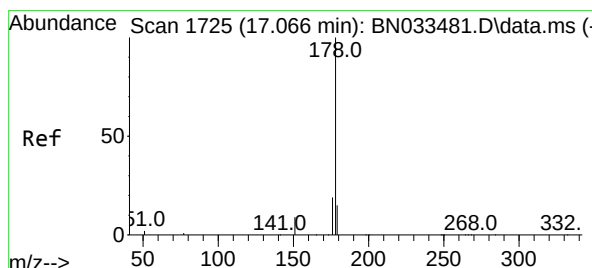
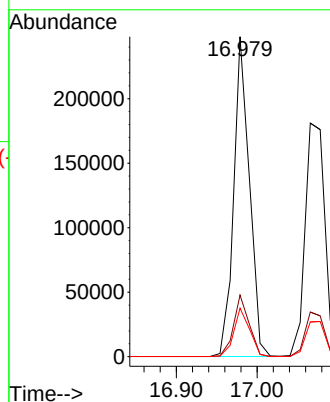
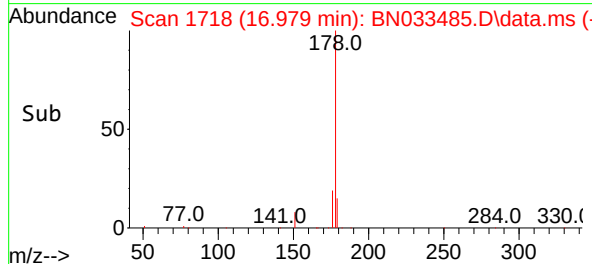
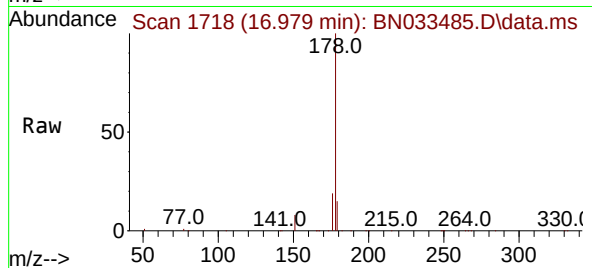




#25  
Phenanthrene  
Concen: 4.976 ng  
RT: 16.979 min Scan# 1718  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

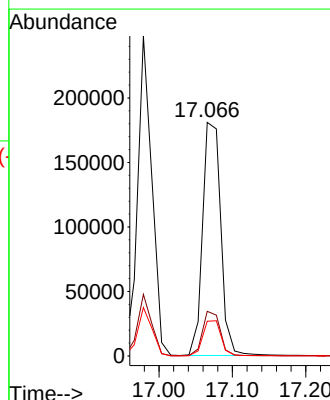
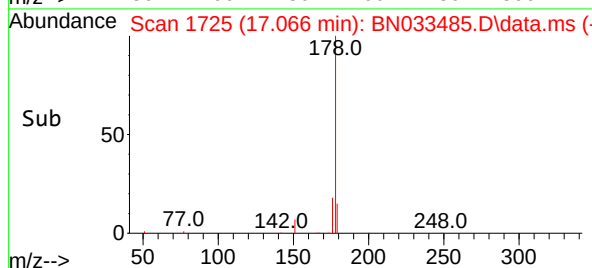
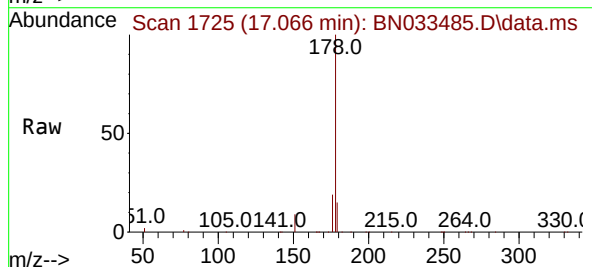
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

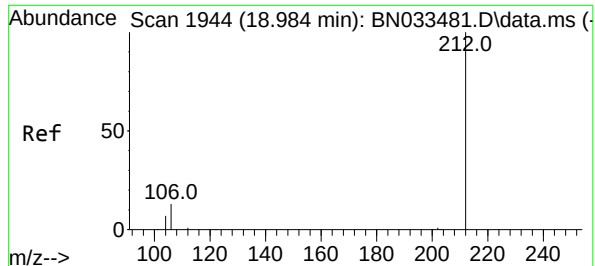
Tgt Ion:178 Resp: 335366  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.3 22.9  
179 15.2 12.3 18.5



#26  
Anthracene  
Concen: 5.228 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion:178 Resp: 311339  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.0 22.6  
179 15.2 12.4 18.6





#27

Fluoranthene-d10

Concen: 4.770 ng

RT: 18.979 min Scan# 1943

Delta R.T. -0.005 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

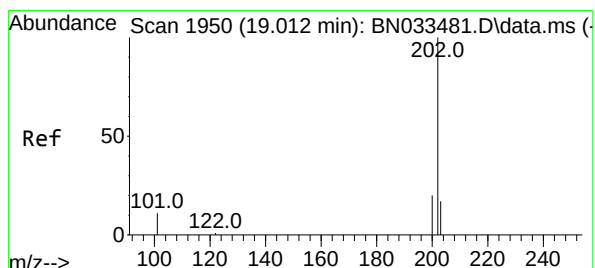
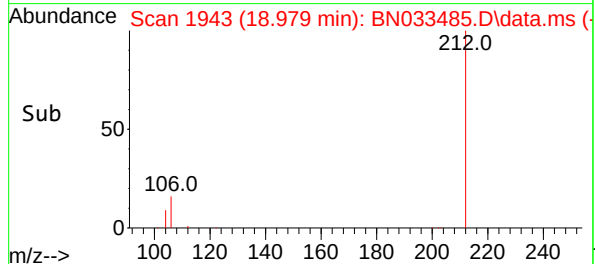
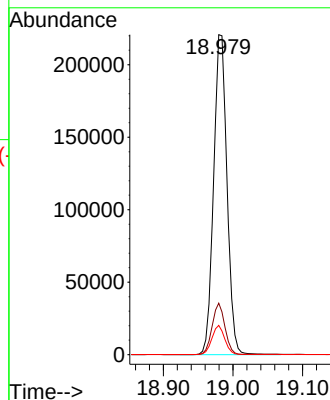
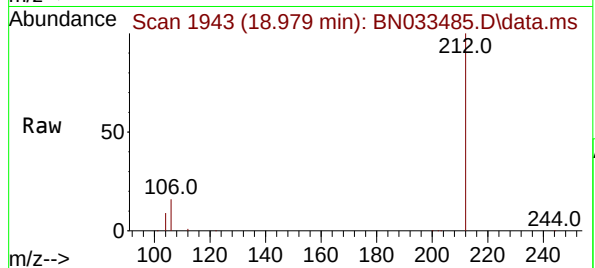
Tgt Ion:212 Resp: 294565

Ion Ratio Lower Upper

212 100

106 15.3 12.3 18.5

104 8.7 7.0 10.4



#28

Fluoranthene

Concen: 4.638 ng

RT: 19.012 min Scan# 1950

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

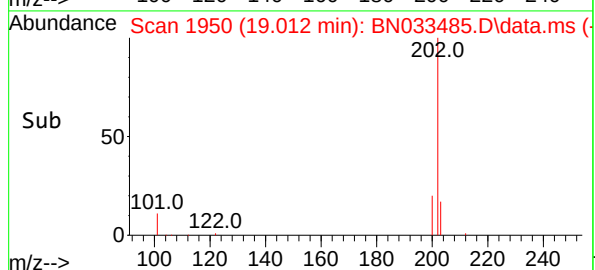
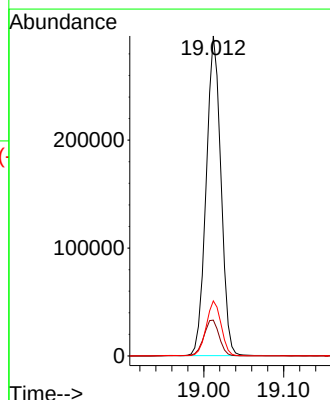
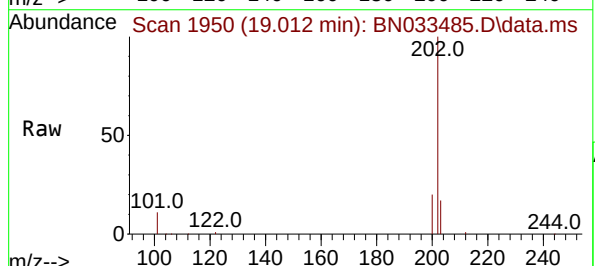
Tgt Ion:202 Resp: 379353

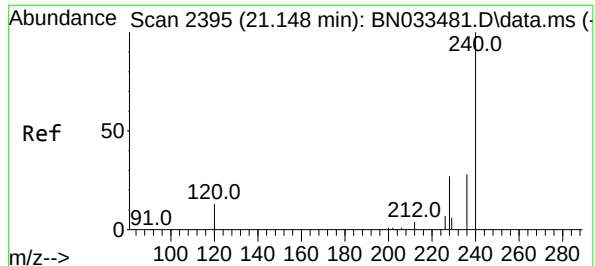
Ion Ratio Lower Upper

202 100

101 11.9 9.5 14.3

203 17.3 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

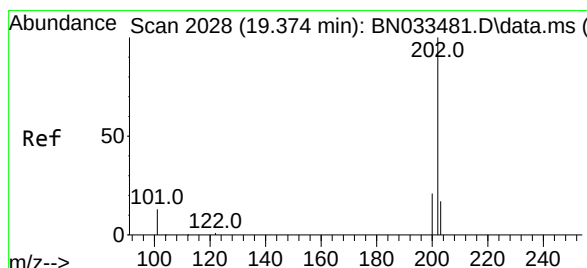
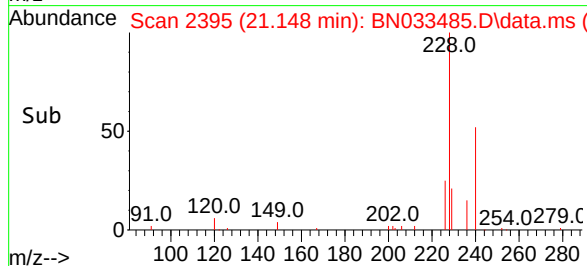
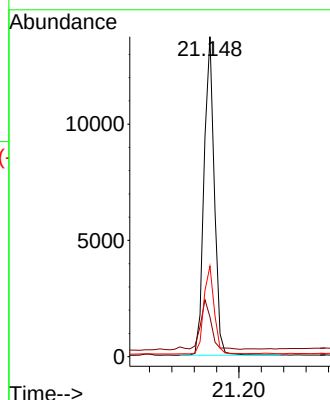
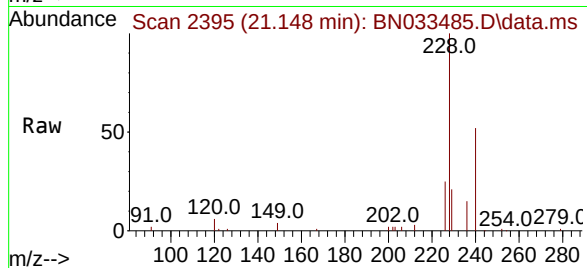
Tgt Ion:240 Resp: 17408

Ion Ratio Lower Upper

240 100

120 12.4 12.4 18.6#

236 28.3 23.0 34.6



#30

Pyrene

Concen: 5.482 ng

RT: 19.374 min Scan# 2028

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

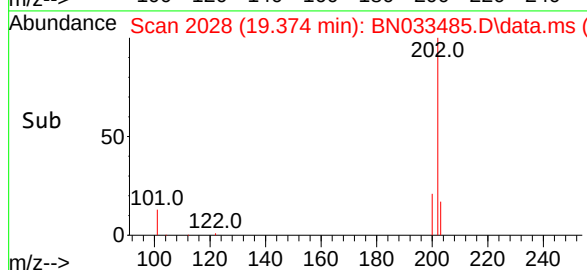
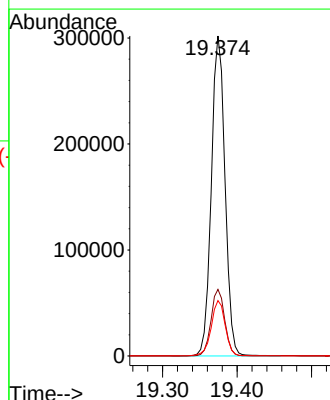
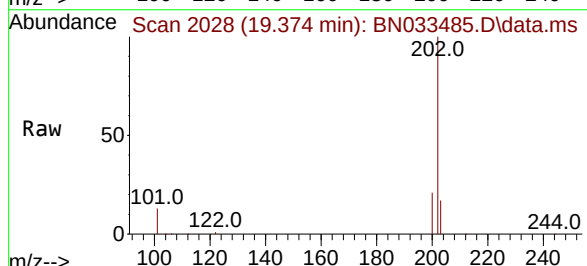
Tgt Ion:202 Resp: 384431

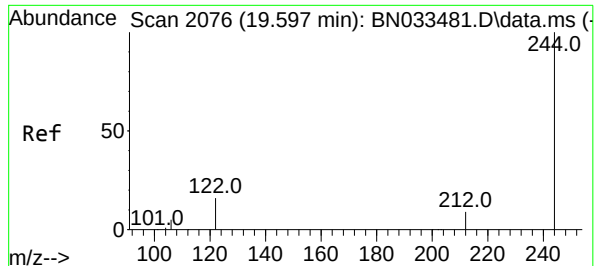
Ion Ratio Lower Upper

202 100

200 20.8 16.6 24.8

203 17.7 14.2 21.4

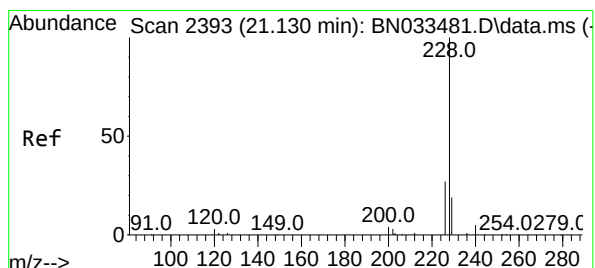
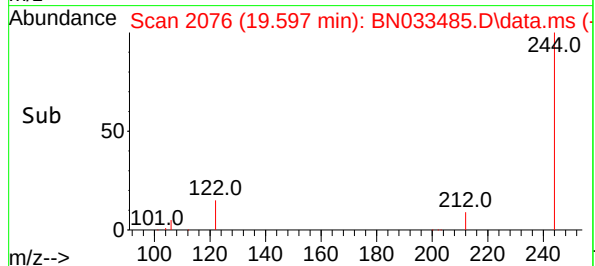
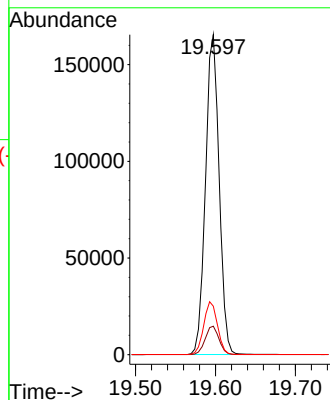
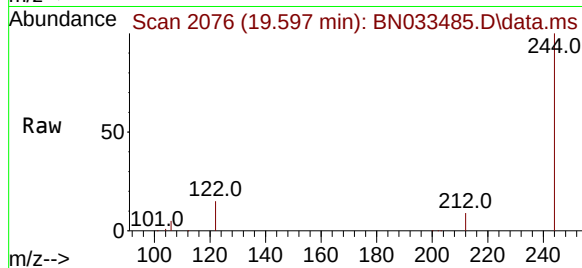




#31  
Terphenyl-d14  
Concen: 5.835 ng  
RT: 19.597 min Scan# 2076  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

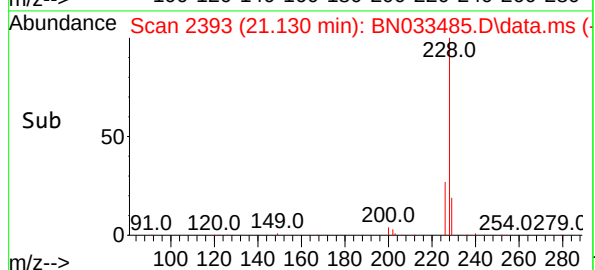
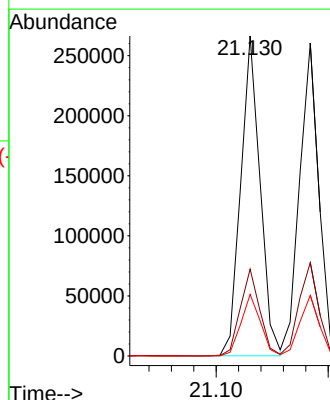
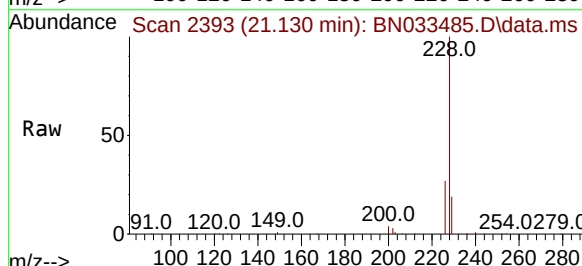
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

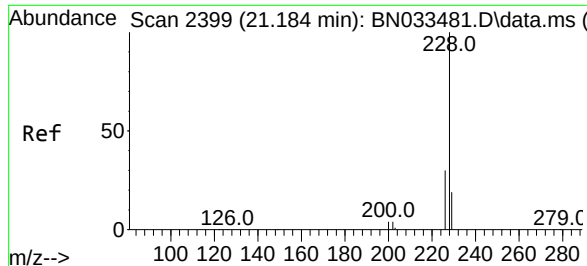
Tgt Ion:244 Resp: 195740  
Ion Ratio Lower Upper  
244 100  
212 8.9 7.8 11.6  
122 15.2 13.3 19.9



#32  
Benzo(a)anthracene  
Concen: 4.958 ng  
RT: 21.130 min Scan# 2393  
Delta R.T. -0.000 min  
Lab File: BN033485.D  
Acq: 19 Aug 2024 19:53

Tgt Ion:228 Resp: 320243  
Ion Ratio Lower Upper  
228 100  
226 27.1 21.8 32.6  
229 19.3 15.8 23.6





#33

Chrysene

Concen: 4.829 ng

RT: 21.184 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

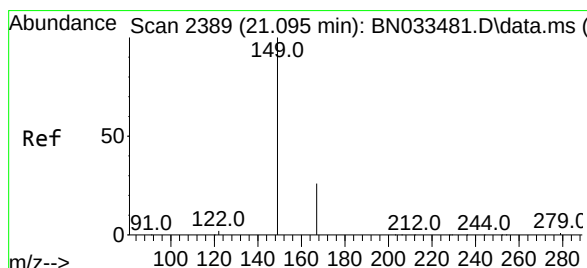
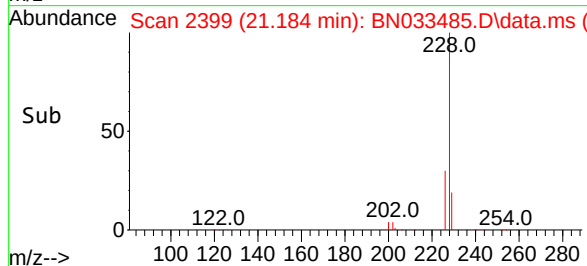
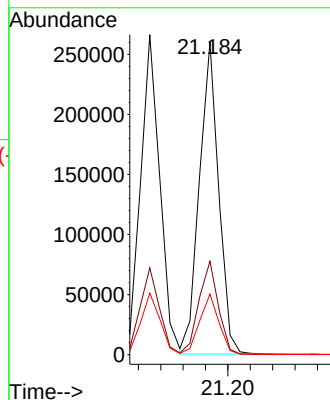
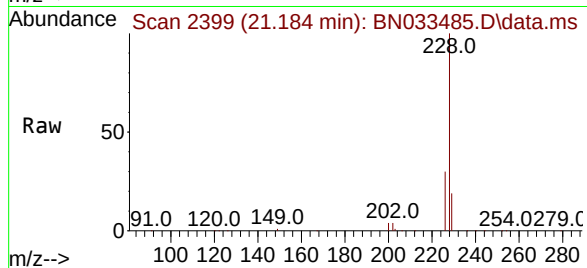
Tgt Ion:228 Resp: 311144

Ion Ratio Lower Upper

228 100

226 29.9 23.8 35.8

229 19.4 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 6.264 ng

RT: 21.094 min Scan# 2389

Delta R.T. -0.000 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

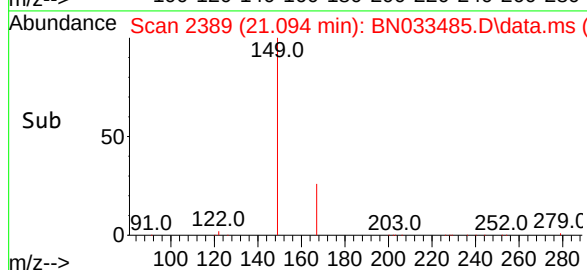
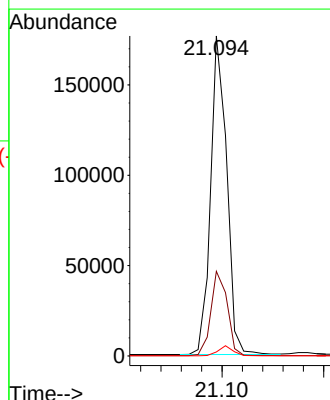
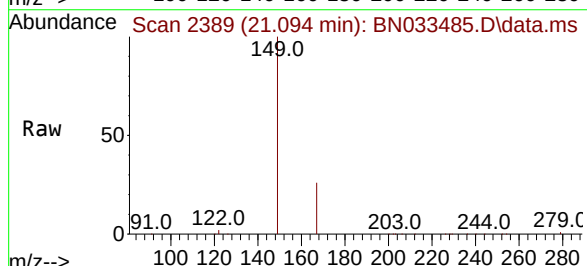
Tgt Ion:149 Resp: 193548

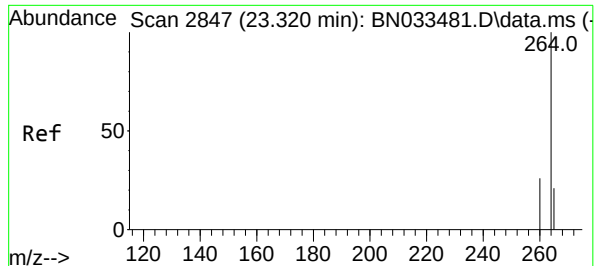
Ion Ratio Lower Upper

149 100

167 26.9 21.5 32.3

279 2.9 2.2 3.2





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.317 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

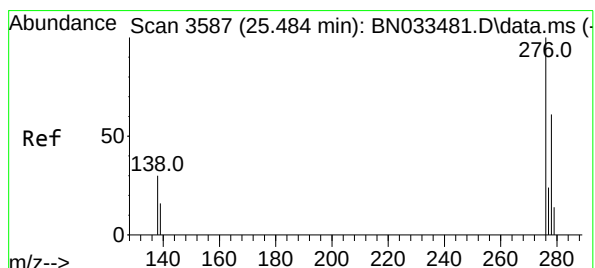
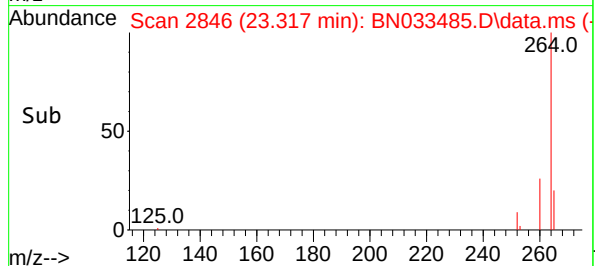
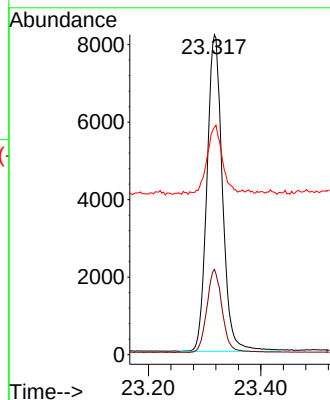
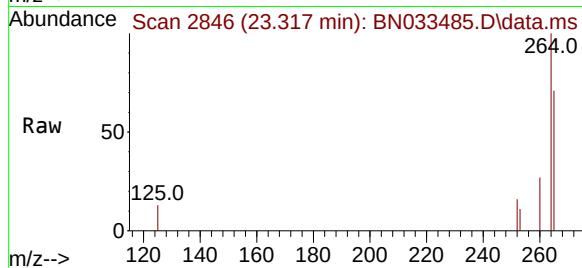
Tgt Ion:264 Resp: 15627

Ion Ratio Lower Upper

264 100

260 26.7 20.8 31.2

265 71.0 52.2 78.2



#36

Indeno(1,2,3-cd)pyrene

Concen: 5.109 ng

RT: 25.478 min Scan# 3585

Delta R.T. -0.006 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

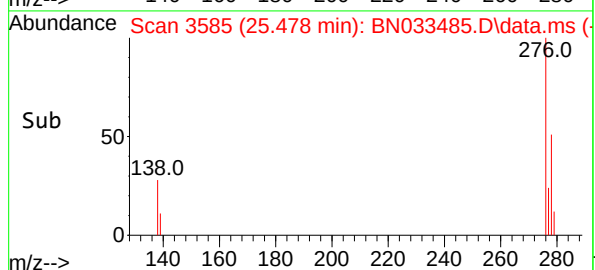
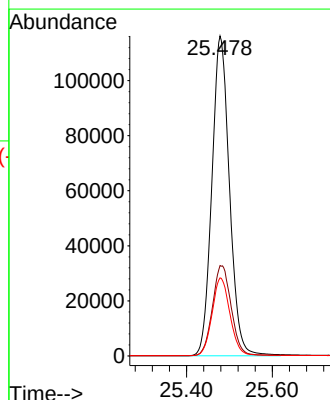
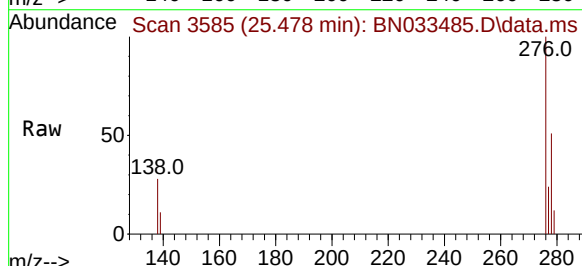
Tgt Ion:276 Resp: 330983

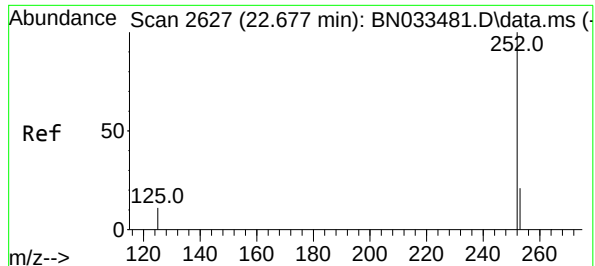
Ion Ratio Lower Upper

276 100

138 30.0 24.4 36.6

277 24.8 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 5.133 ng

RT: 22.674 min Scan# 2627

Delta R.T. -0.003 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

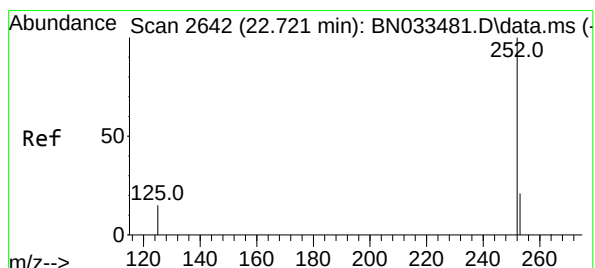
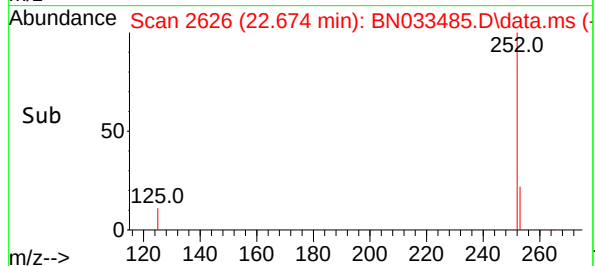
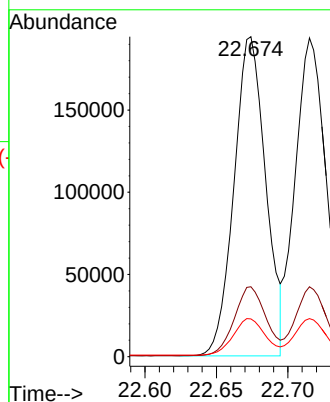
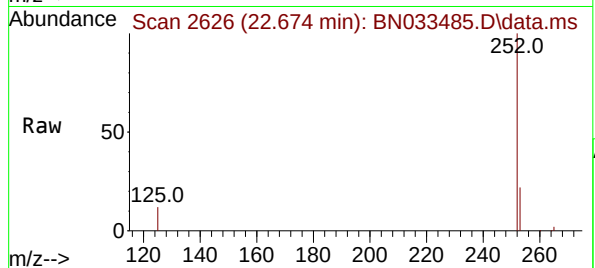
Tgt Ion:252 Resp: 299478

Ion Ratio Lower Upper

252 100

253 21.8 19.8 29.8

125 11.8 13.9 20.9#



#38

Benzo(k)fluoranthene

Concen: 4.997 ng

RT: 22.715 min Scan# 2640

Delta R.T. -0.006 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

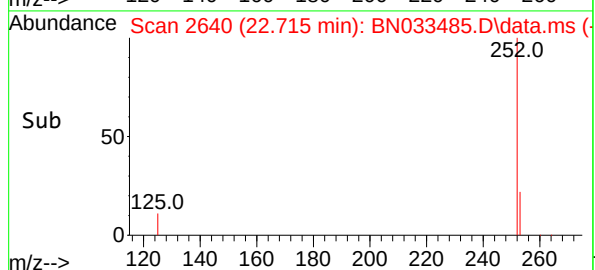
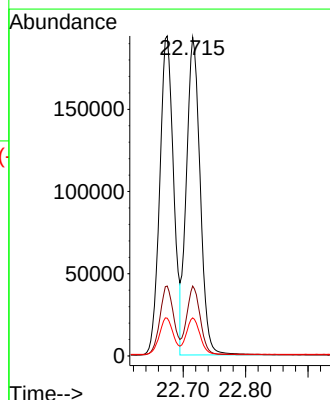
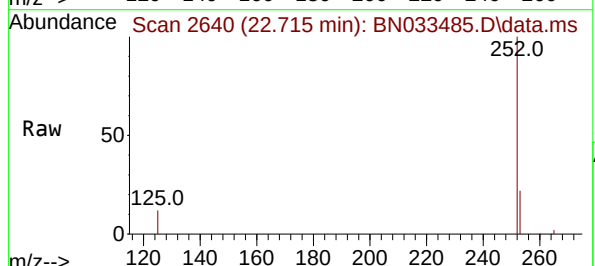
Tgt Ion:252 Resp: 295429

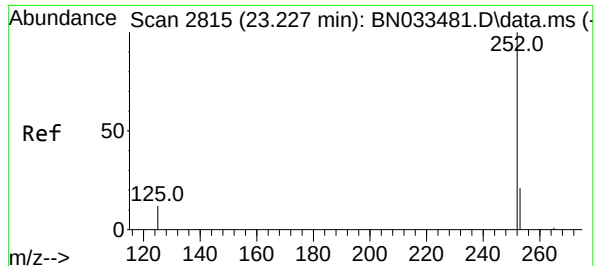
Ion Ratio Lower Upper

252 100

253 22.0 19.8 29.8

125 12.0 15.8 23.8#





#39

Benzo(a)pyrene

Concen: 5.121 ng

RT: 23.224 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN033485.D

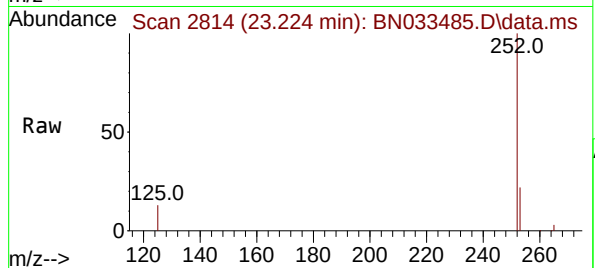
Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0



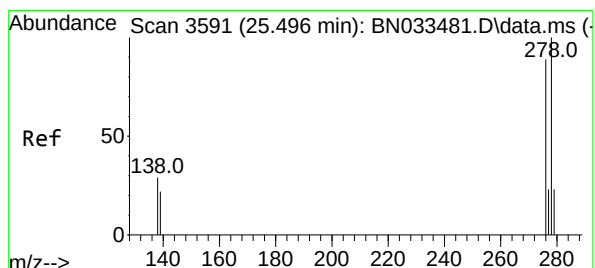
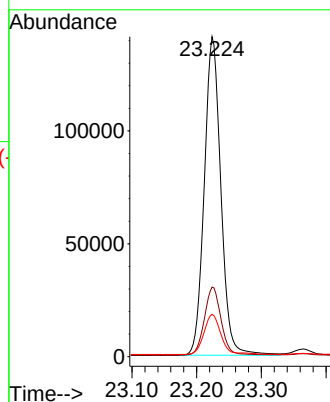
Tgt Ion:252 Resp: 251984

Ion Ratio Lower Upper

252 100

253 21.7 21.5 32.3

125 13.3 17.0 25.4#



#40

Dibenzo(a,h)anthracene

Concen: 5.151 ng

RT: 25.493 min Scan# 3590

Delta R.T. -0.003 min

Lab File: BN033485.D

Acq: 19 Aug 2024 19:53

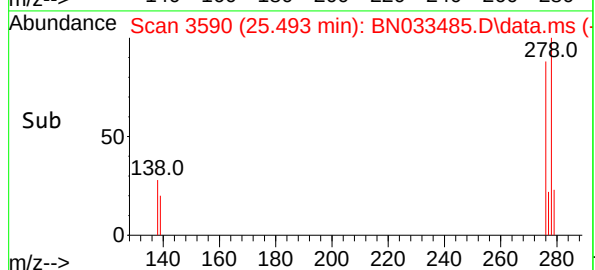
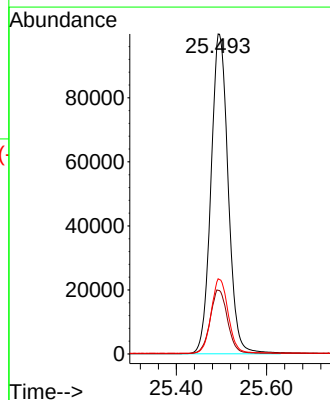
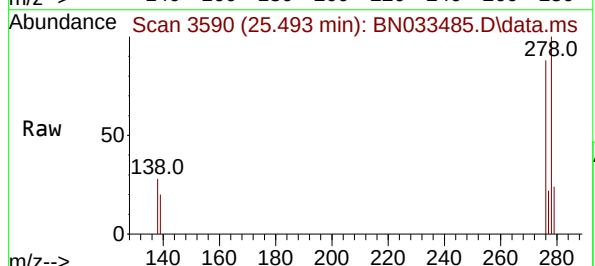
Tgt Ion:278 Resp: 264087

Ion Ratio Lower Upper

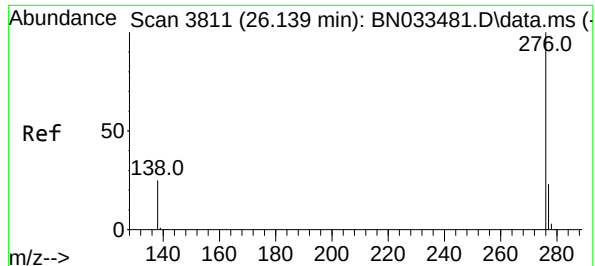
278 100

139 19.9 19.1 28.7

279 23.5 21.0 31.4







#41

Benzo(g,h,i)perylene

Concen: 4.978 ng

RT: 26.133 min Scan# 3809

Delta R.T. -0.006 min

Lab File: BN033485.D

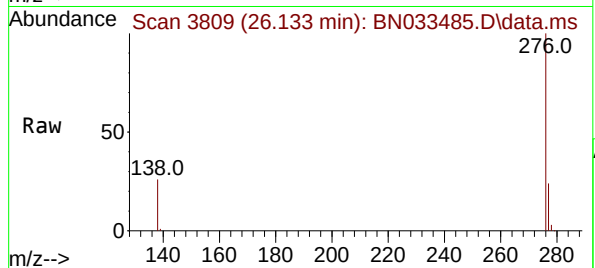
Acq: 19 Aug 2024 19:53

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0



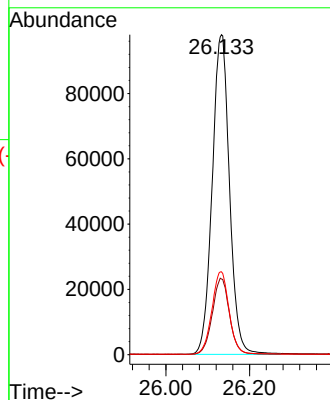
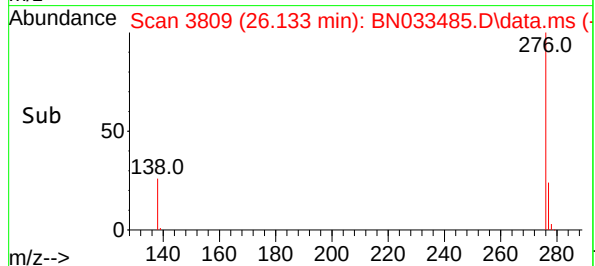
Tgt Ion:276 Resp: 280592

Ion Ratio Lower Upper

276 100

277 23.6 19.7 29.5

138 25.9 21.8 32.6



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
 Data File : BN033486.D  
 Acq On : 20 Aug 2024 01:56  
 Operator : MA/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN081924

Quant Time: Aug 20 02:44:29 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 19 23:32:18 2024  
 Response via : Initial Calibration

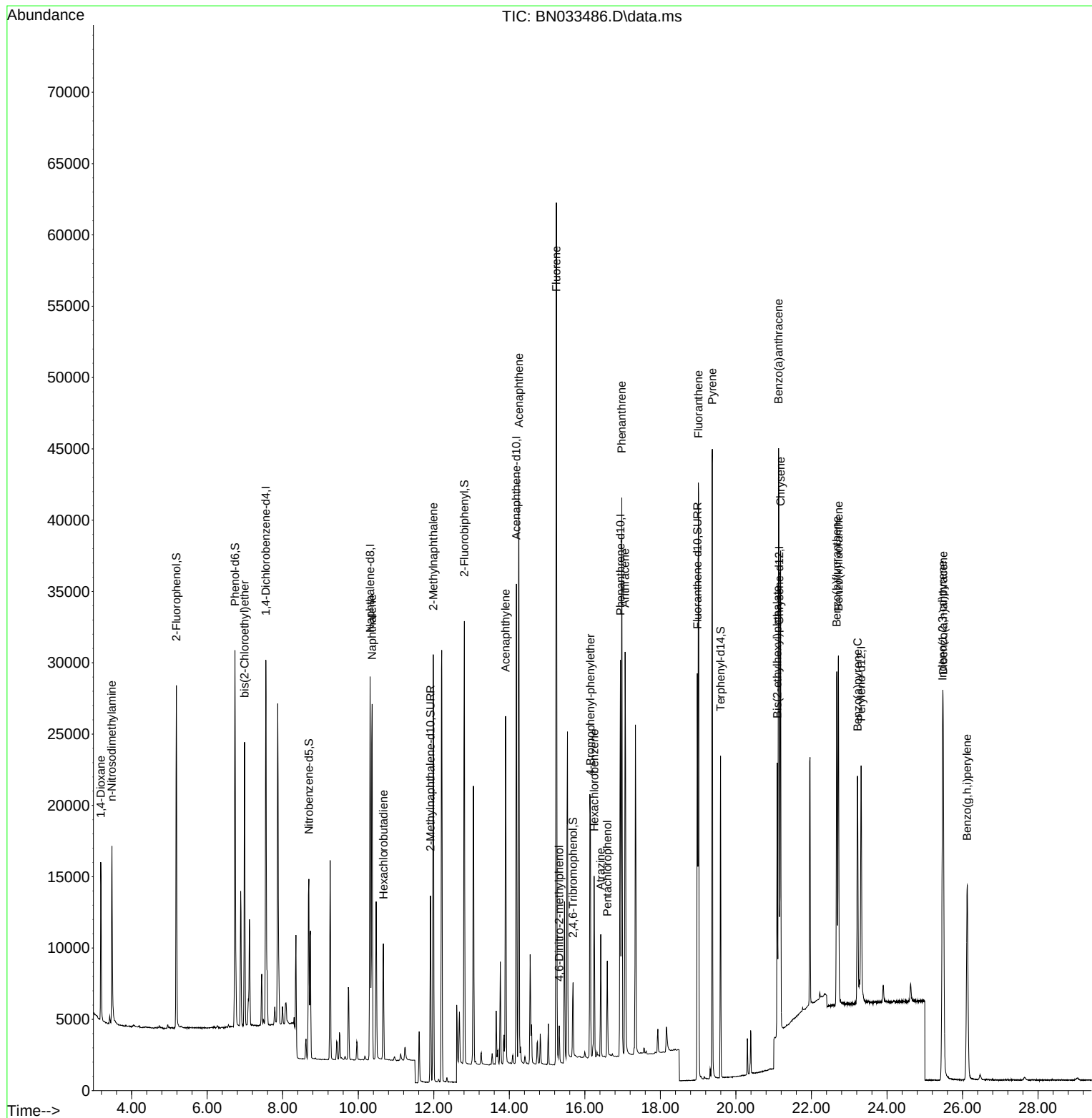
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.552  | 152  | 12026    | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.314 | 136  | 33045    | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.189 | 164  | 17848    | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.942 | 188  | 35827    | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.148 | 240  | 21483    | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.314 | 264  | 20739    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.183  | 112  | 17640    | 0.462 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.736  | 99   | 22583    | 0.497 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.691  | 82   | 9916     | 0.362 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 11.915 | 152  | 17348    | 0.367 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.688 | 330  | 3037     | 0.317 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.810 | 172  | 26095    | 0.358 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.980 | 212  | 29700    | 0.345 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.593 | 244  | 19462    | 0.399 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 2) 1,4-Dioxane                | 3.183  | 88   | 6628     | 0.479 | ng    | Qvalue 99 |
| 3) n-Nitrosodimethylamine     | 3.479  | 42   | 7119     | 0.442 | ng    | 99        |
| 6) bis(2-Chloroethyl)ether    | 6.989  | 93   | 13027    | 0.404 | ng    | 100       |
| 9) Naphthalene                | 10.368 | 128  | 32687    | 0.370 | ng    | 99        |
| 10) Hexachlorobutadiene       | 10.667 | 225  | 6415     | 0.364 | ng    | # 99      |
| 12) 2-Methylnaphthalene       | 11.986 | 142  | 20730    | 0.371 | ng    | 99        |
| 16) Acenaphthylene            | 13.900 | 152  | 26801    | 0.342 | ng    | 100       |
| 17) Acenaphthene              | 14.253 | 154  | 19654    | 0.357 | ng    | 99        |
| 18) Fluorene                  | 15.247 | 166  | 24565    | 0.354 | ng    | 100       |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 1803     | 0.322 | ng    | # 82      |
| 21) 4-Bromophenyl-phenylether | 16.147 | 248  | 7966     | 0.366 | ng    | 94        |
| 22) Hexachlorobenzene         | 16.247 | 284  | 9039     | 0.376 | ng    | 99        |
| 23) Atrazine                  | 16.420 | 200  | 5969     | 0.344 | ng    | 98        |
| 24) Pentachlorophenol         | 16.594 | 266  | 3006     | 0.289 | ng    | 98        |
| 25) Phenanthrene              | 16.979 | 178  | 37016    | 0.371 | ng    | 100       |
| 26) Anthracene                | 17.066 | 178  | 31155    | 0.353 | ng    | 99        |
| 28) Fluoranthene              | 19.007 | 202  | 38365    | 0.348 | ng    | 100       |
| 30) Pyrene                    | 19.374 | 202  | 38735    | 0.404 | ng    | 100       |
| 32) Benzo(a)anthracene        | 21.130 | 228  | 28298    | 0.364 | ng    | 99        |
| 33) Chrysene                  | 21.184 | 228  | 28782    | 0.373 | ng    | 99        |
| 34) Bis(2-ethylhexyl)phtha... | 21.095 | 149  | 15827    | 0.322 | ng    | 99        |
| 36) Indeno(1,2,3-cd)pyrene    | 25.472 | 276  | 31883    | 0.370 | ng    | 99        |
| 37) Benzo(b)fluoranthene      | 22.671 | 252  | 27618    | 0.357 | ng    | 98        |
| 38) Benzo(k)fluoranthene      | 22.715 | 252  | 28035    | 0.368 | ng    | 99        |
| 39) Benzo(a)pyrene            | 23.221 | 252  | 22480    | 0.351 | ng    | 97        |
| 40) Dibenzo(a,h)anthracene    | 25.490 | 278  | 25600    | 0.372 | ng    | 99        |
| 41) Benzo(g,h,i)perylene      | 26.124 | 276  | 26587    | 0.361 | ng    | 100       |

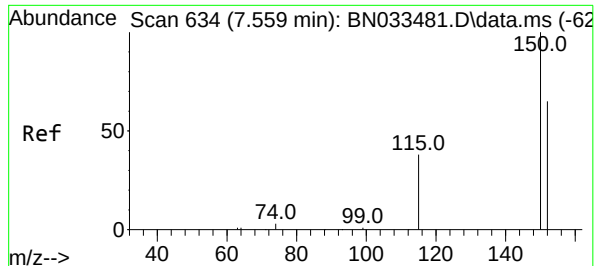
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033486.D  
Acq On : 20 Aug 2024 01:56  
Operator : MA/JU  
Sample : SSTDICV0.4  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

Quant Time: Aug 20 02:44:29 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:32:18 2024  
Response via : Initial Calibration

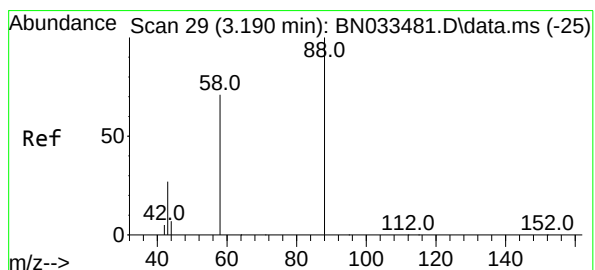
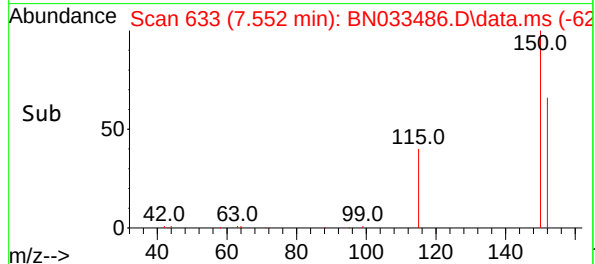
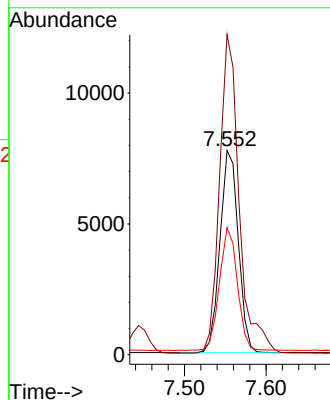
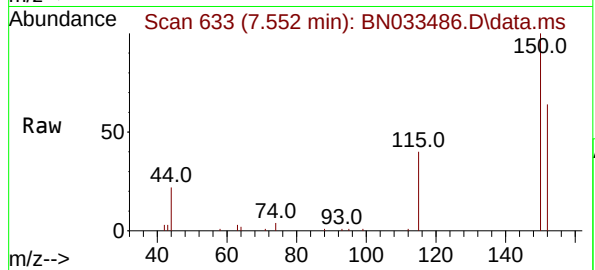




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.552 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

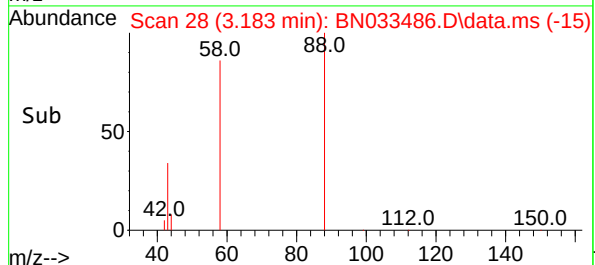
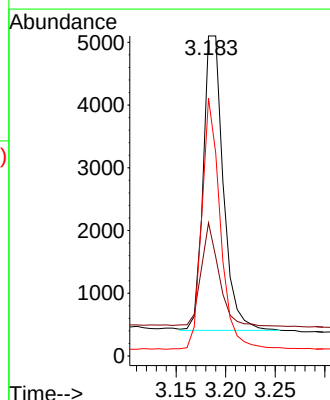
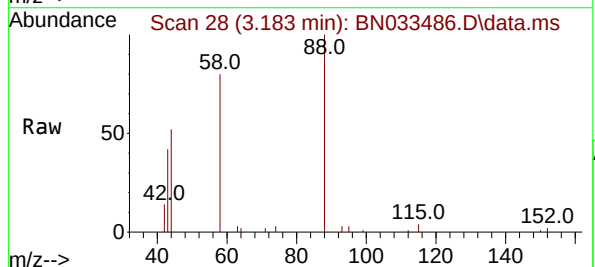
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

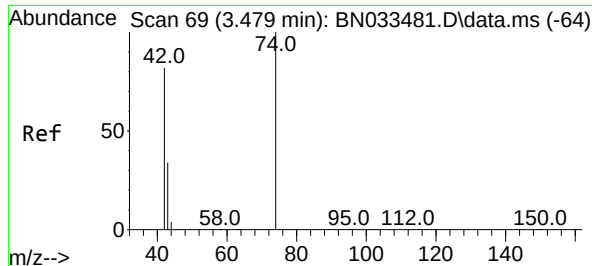
Tgt Ion:152 Resp: 12026  
Ion Ratio Lower Upper  
152 100  
150 156.7 122.2 183.2  
115 62.3 47.2 70.8



#2  
1,4-Dioxane  
Concen: 0.479 ng  
RT: 3.183 min Scan# 28  
Delta R.T. -0.007 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

Tgt Ion: 88 Resp: 6628  
Ion Ratio Lower Upper  
88 100  
43 30.9 25.0 37.4  
58 78.5 62.5 93.7

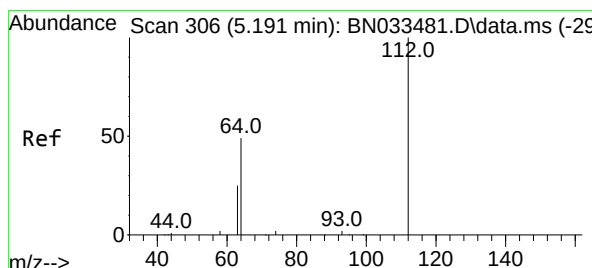
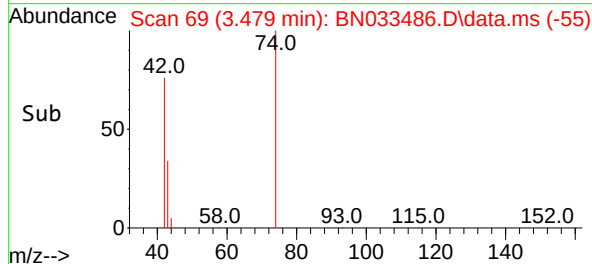
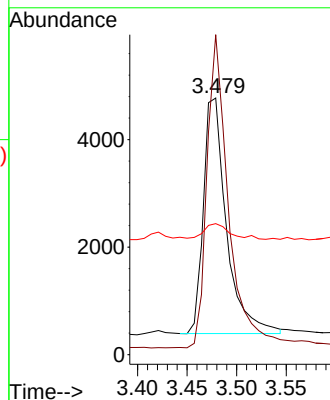
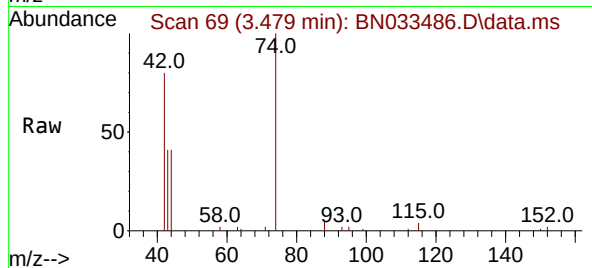




#3  
n-Nitrosodimethylamine  
Concen: 0.442 ng  
RT: 3.479 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

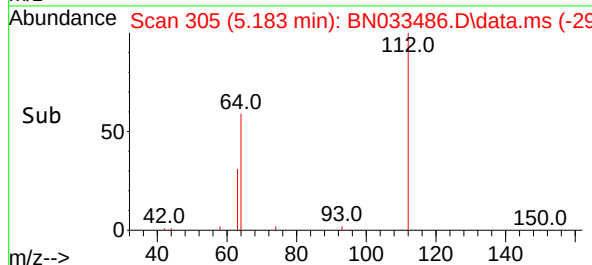
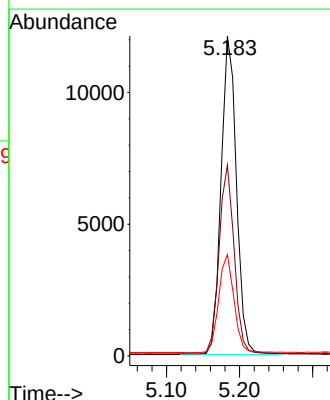
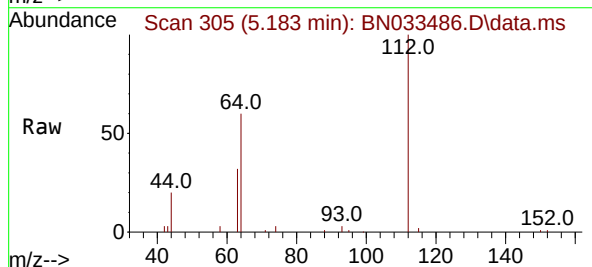
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

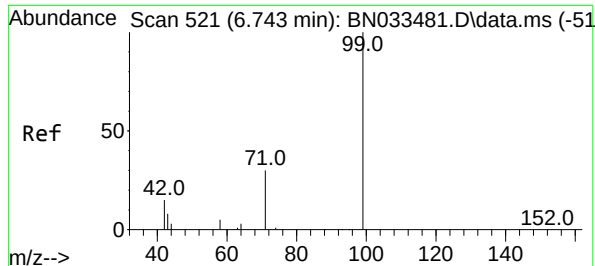
Tgt Ion: 42 Resp: 7119  
Ion Ratio Lower Upper  
42 100  
74 123.8 100.2 150.2  
44 7.5 5.3 7.9



#4  
2-Fluorophenol  
Concen: 0.462 ng  
RT: 5.183 min Scan# 305  
Delta R.T. -0.007 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

Tgt Ion: 112 Resp: 17640  
Ion Ratio Lower Upper  
112 100  
64 58.4 47.1 70.7  
63 30.6 24.9 37.3

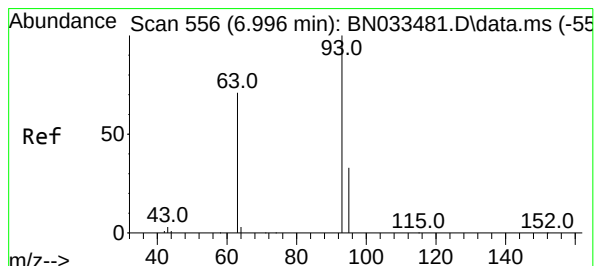
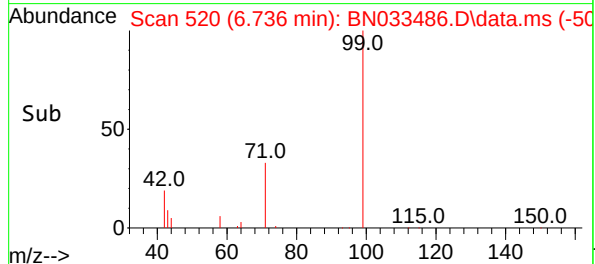
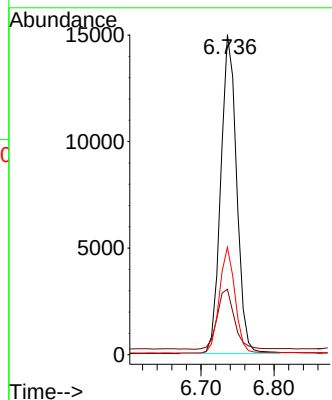
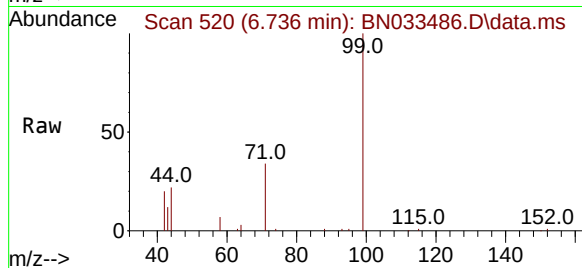




#5  
Phenol-d6  
Concen: 0.497 ng  
RT: 6.736 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

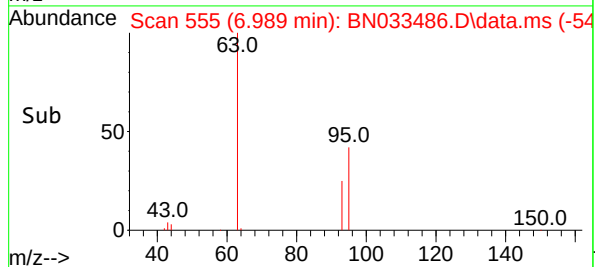
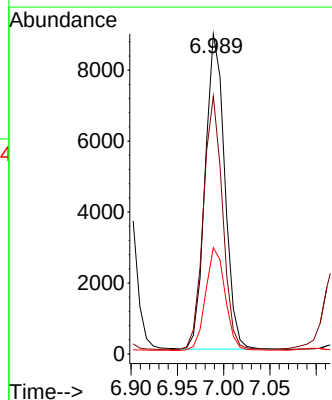
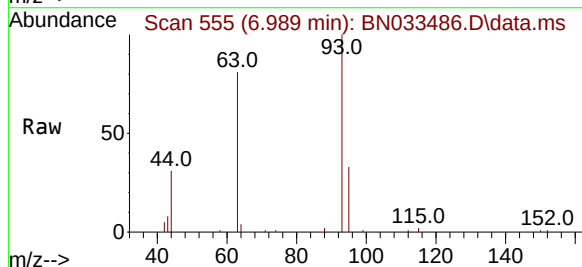
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

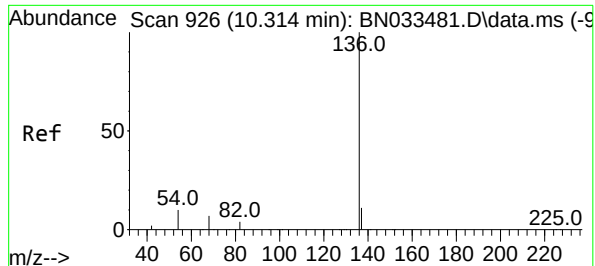
Tgt Ion: 99 Resp: 22583  
Ion Ratio Lower Upper  
99 100  
42 20.4 16.6 24.8  
71 32.6 26.2 39.4



#6  
bis(2-Chloroethyl)ether  
Concen: 0.404 ng  
RT: 6.989 min Scan# 555  
Delta R.T. -0.007 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

Tgt Ion: 93 Resp: 13027  
Ion Ratio Lower Upper  
93 100  
63 78.8 63.0 94.4  
95 32.6 26.0 39.0

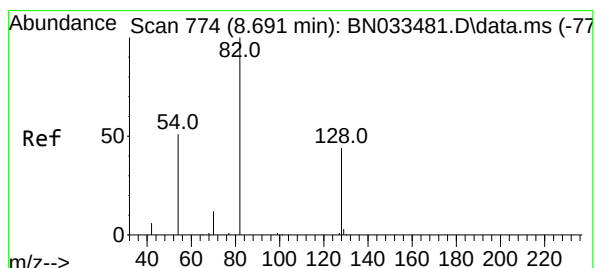
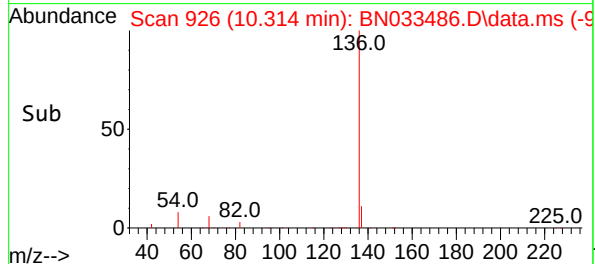
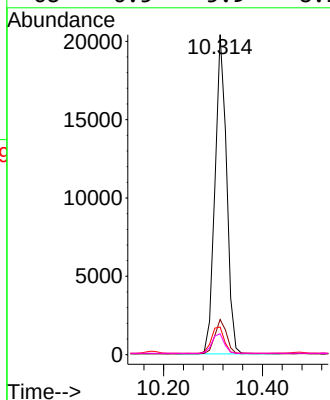
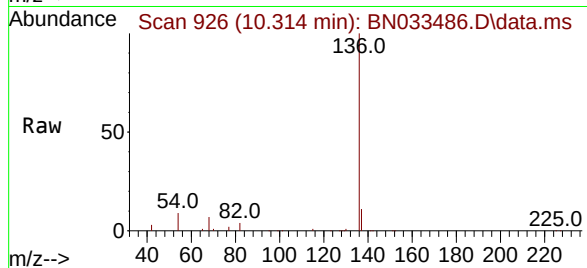




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.314 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

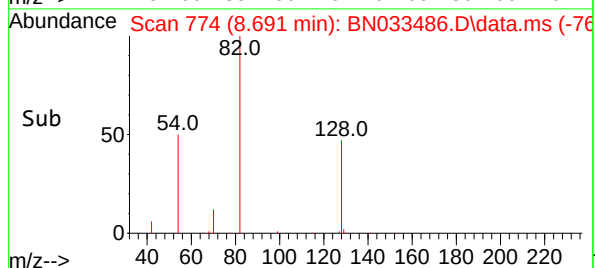
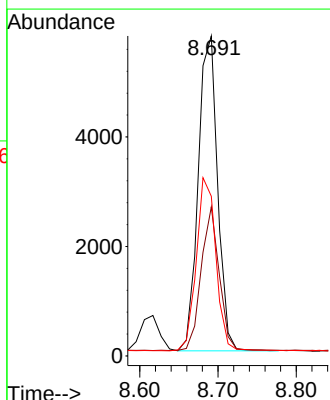
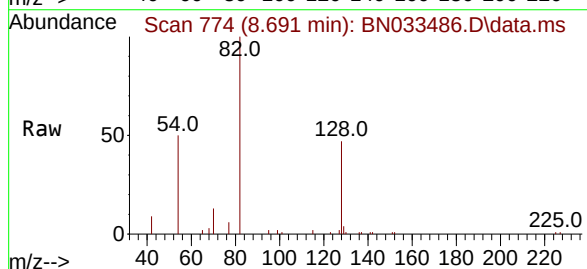
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

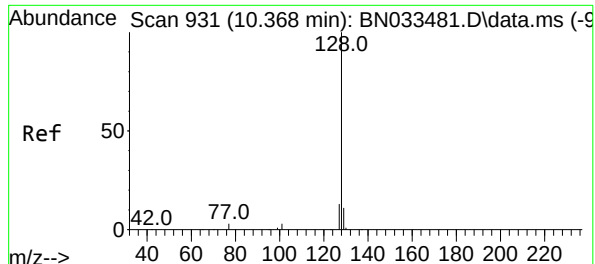
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 33045 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.0  | 9.0   | 13.6  |
| 54       | 8.6   | 8.3   | 12.5  |
| 68       | 6.5   | 5.9   | 8.9   |



#8  
Nitrobenzene-d5  
Concen: 0.362 ng  
RT: 8.691 min Scan# 774  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 9916  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 46.6  | 36.0  | 54.0  |
| 54       | 49.9  | 42.0  | 63.0  |

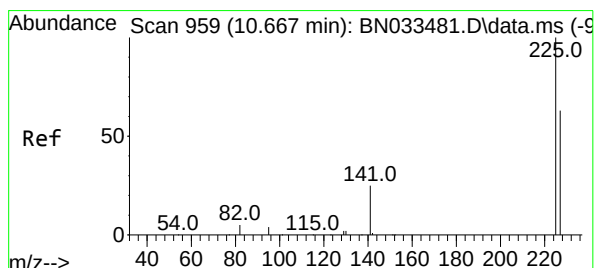
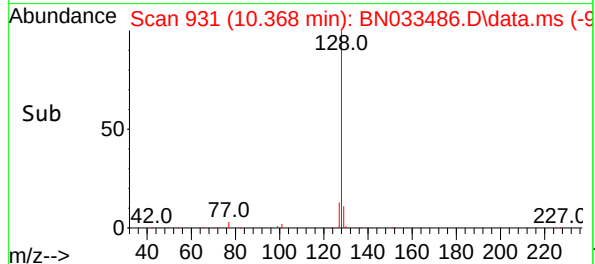
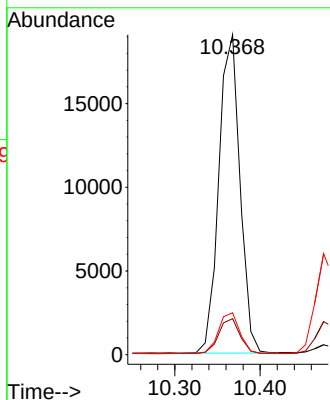
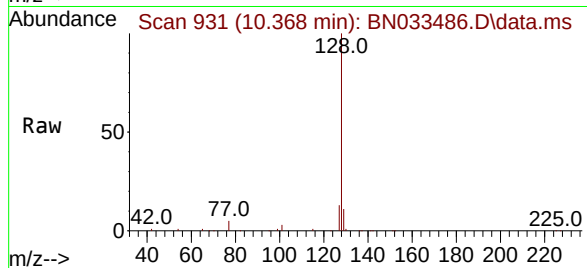




#9  
Naphthalene  
Concen: 0.370 ng  
RT: 10.368 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

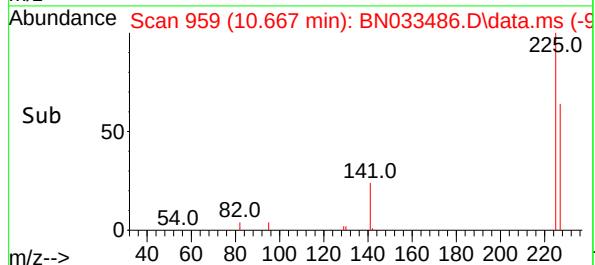
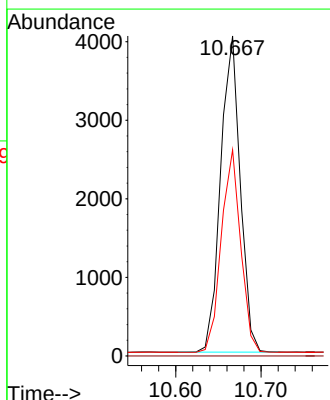
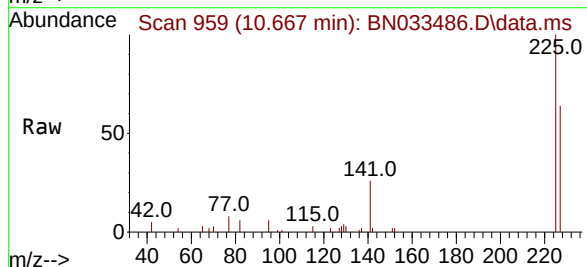
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

Tgt Ion:128 Resp: 32687  
Ion Ratio Lower Upper  
128 100  
129 11.3 9.1 13.7  
127 13.1 10.7 16.1

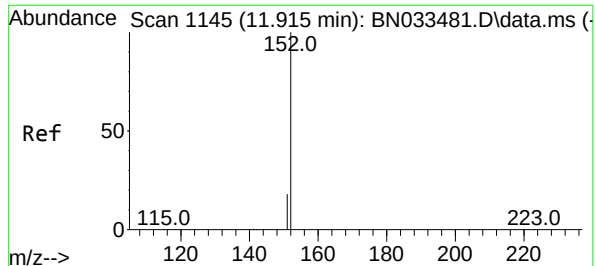


#10  
Hexachlorobutadiene  
Concen: 0.364 ng  
RT: 10.667 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

Tgt Ion:225 Resp: 6415  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.2 51.2 76.8



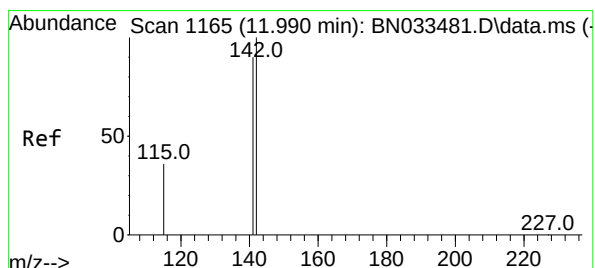
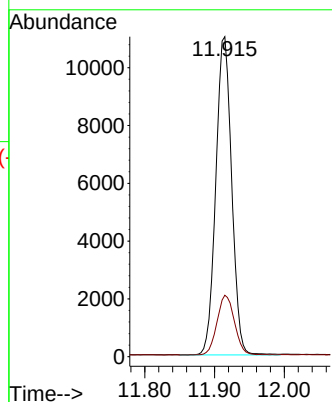
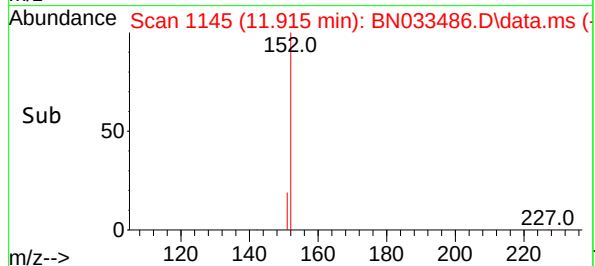
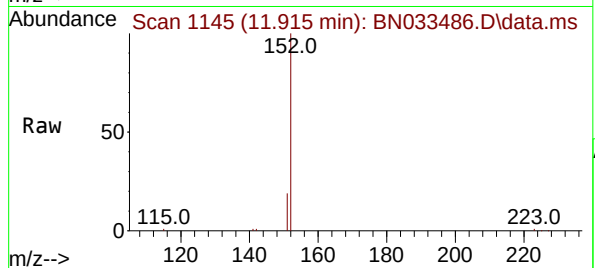




#11  
2-Methylnaphthalene-d10  
Concen: 0.367 ng  
RT: 11.915 min Scan# 1145  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

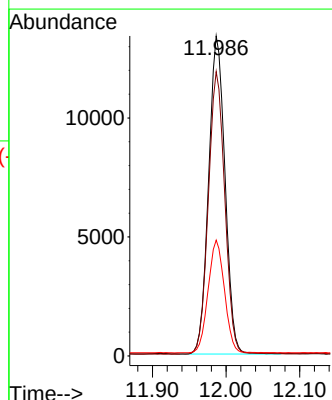
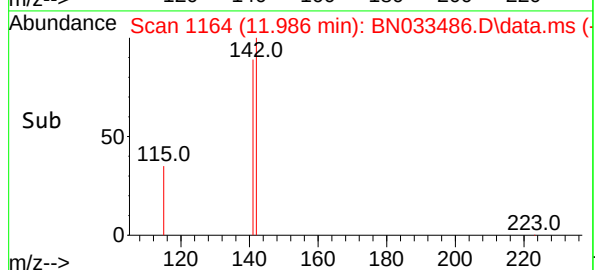
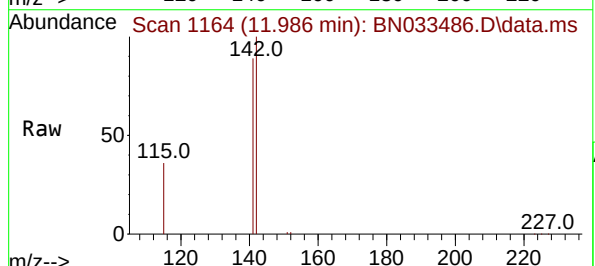
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BNA\_N  
ClientSampleId :  
ICVBN081924

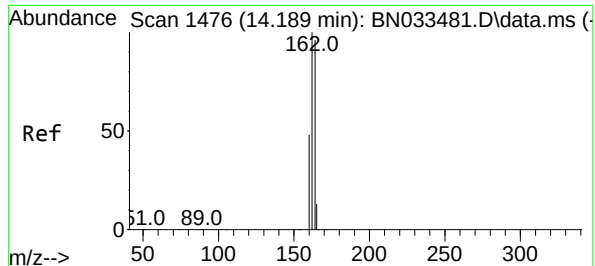
Tgt Ion:152 Resp: 17348  
Ion Ratio Lower Upper  
152 100  
151 20.7 16.6 25.0



#12  
2-Methylnaphthalene  
Concen: 0.371 ng  
RT: 11.986 min Scan# 1164  
Delta R.T. -0.004 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

Tgt Ion:142 Resp: 20730  
Ion Ratio Lower Upper  
142 100  
141 88.9 71.7 107.5  
115 36.2 29.4 44.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.189 min Scan# 1476

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924

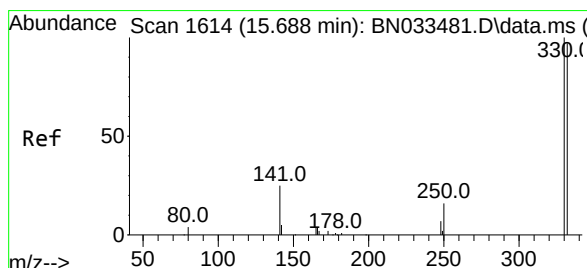
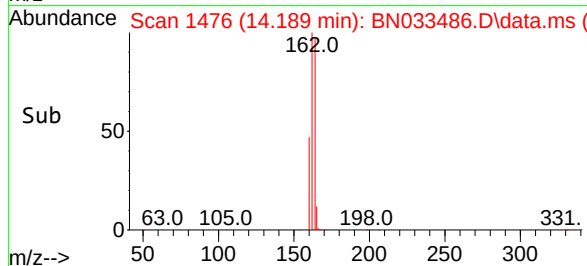
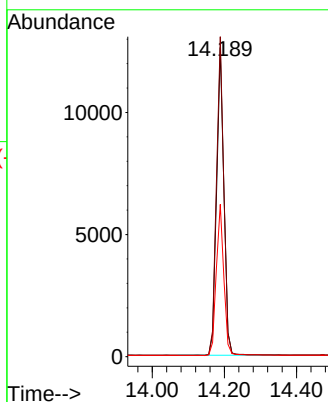
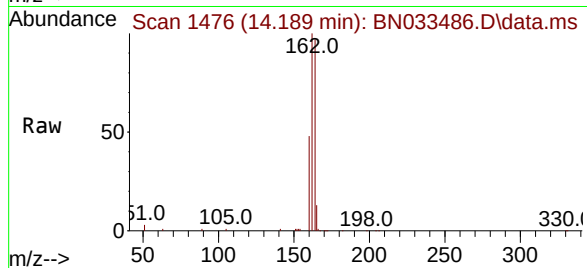
Tgt Ion:164 Resp: 17848

Ion Ratio Lower Upper

164 100

162 103.5 83.5 125.3

160 49.3 40.2 60.4



#14

2,4,6-Tribromophenol

Concen: 0.317 ng

RT: 15.688 min Scan# 1614

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

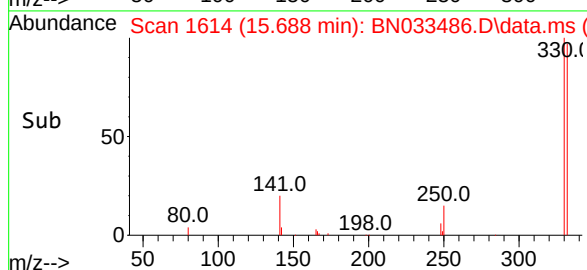
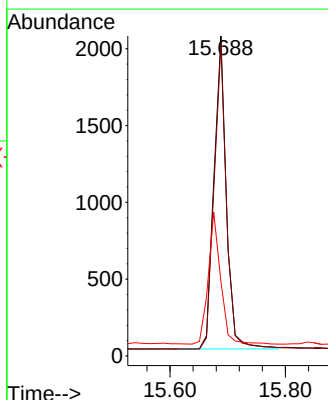
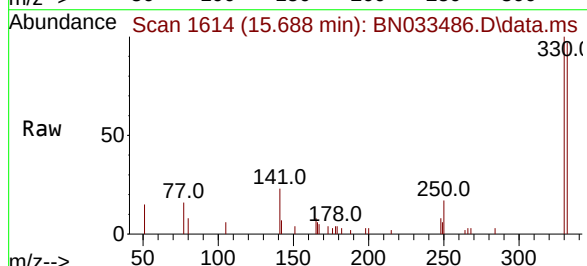
Tgt Ion:330 Resp: 3037

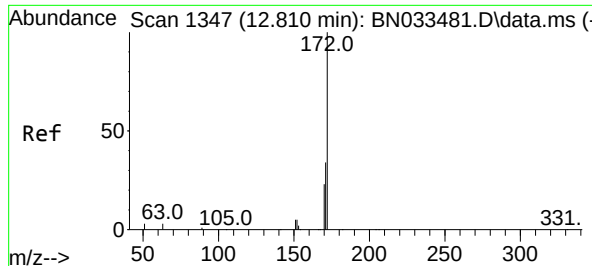
Ion Ratio Lower Upper

330 100

332 96.9 77.5 116.3

141 41.8 33.9 50.9

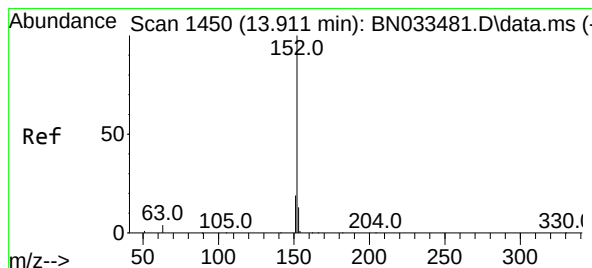
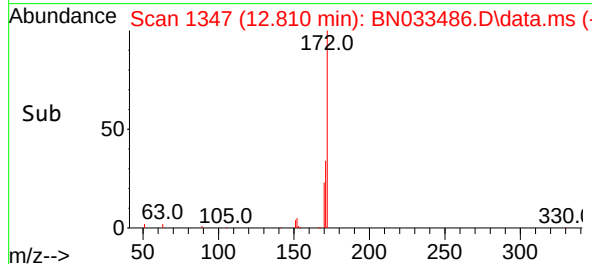
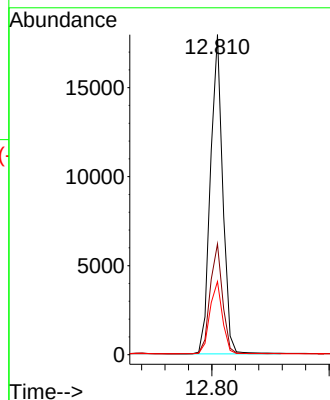
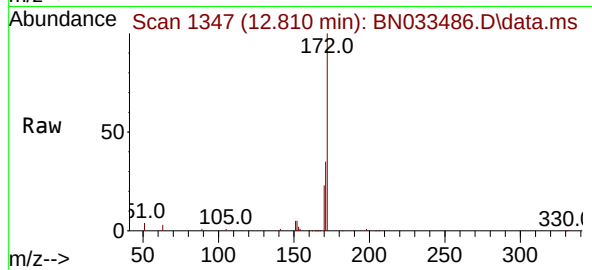




#15  
2-Fluorobiphenyl  
Concen: 0.358 ng  
RT: 12.810 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

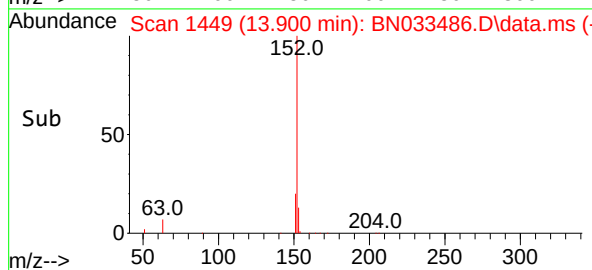
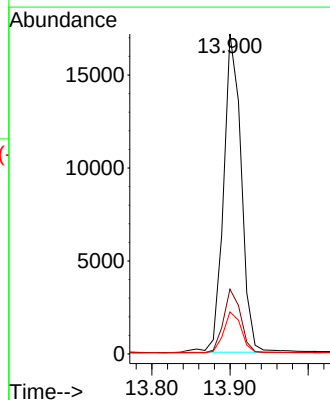
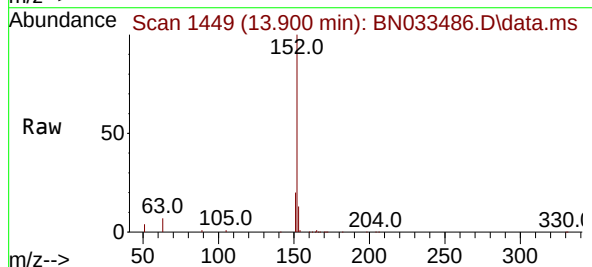
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

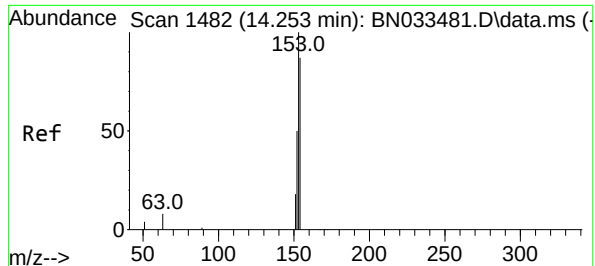
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 172   | Resp: | 26095 |
| Ion Ratio | Lower | Upper |       |
| 172       | 100   |       |       |
| 171       | 34.6  | 27.7  | 41.5  |
| 170       | 22.8  | 18.3  | 27.5  |



#16  
Acenaphthylene  
Concen: 0.342 ng  
RT: 13.900 min Scan# 1449  
Delta R.T. -0.011 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 152   | Resp: | 26801 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 19.5  | 15.7  | 23.5  |
| 153       | 12.8  | 10.3  | 15.5  |

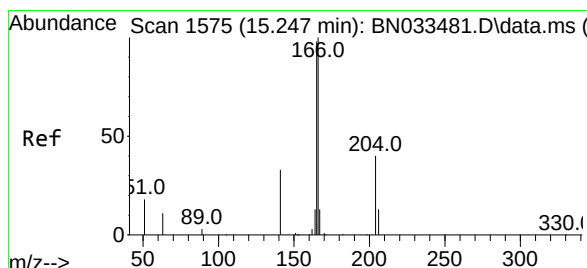
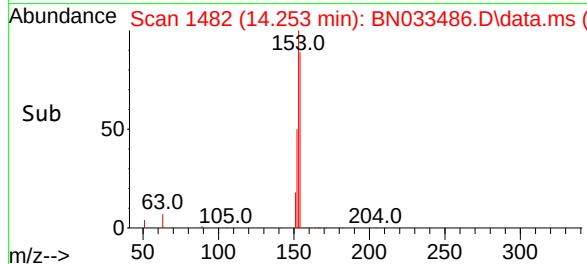
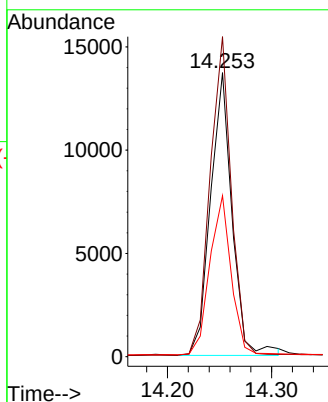
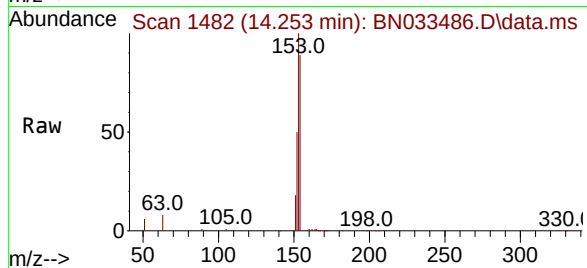




#17  
Acenaphthene  
Concen: 0.357 ng  
RT: 14.253 min Scan# 1482  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

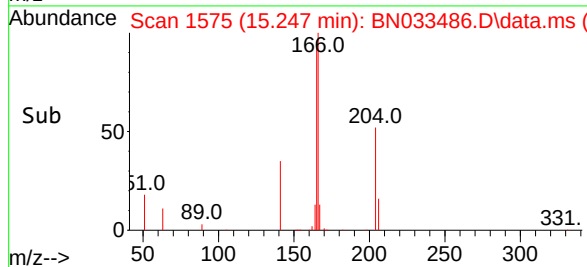
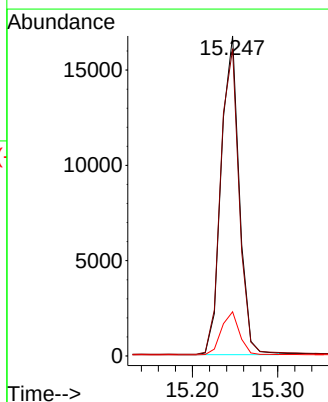
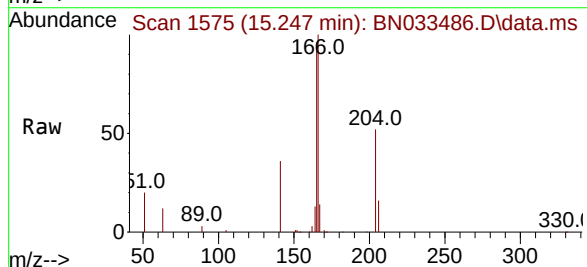
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

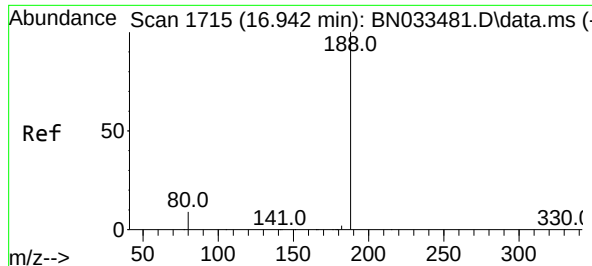
| Tgt Ion   | 154   | Resp  | 19654 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 154       | 100   |       |       |
| 153       | 110.4 | 89.0  | 133.6 |
| 152       | 55.9  | 45.2  | 67.8  |



#18  
Fluorene  
Concen: 0.354 ng  
RT: 15.247 min Scan# 1575  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

| Tgt Ion   | 166   | Resp  | 24565 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 97.9  | 78.2  | 117.4 |
| 167       | 13.5  | 10.6  | 16.0  |

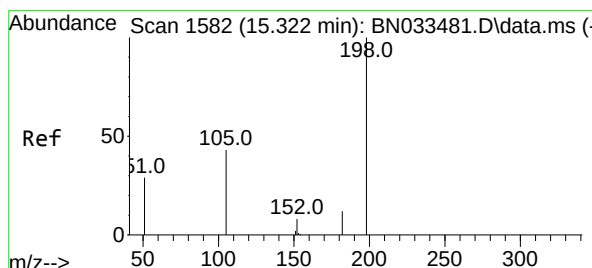
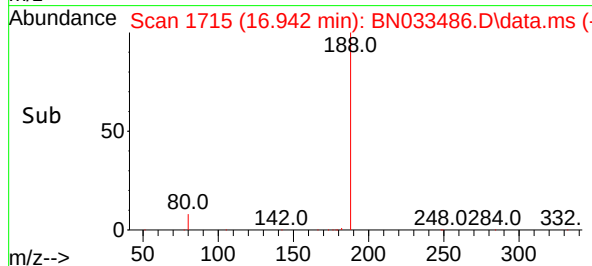
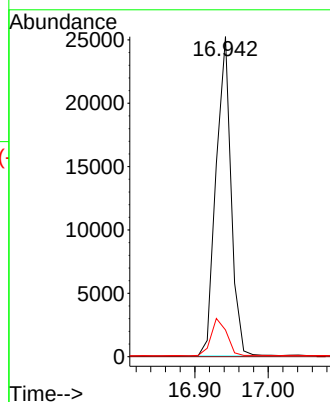
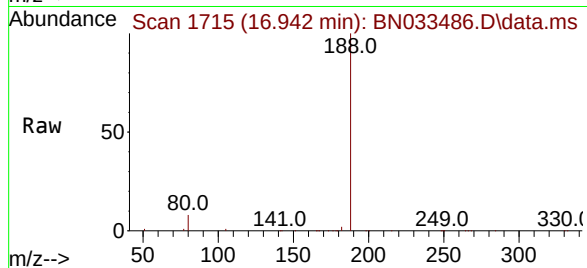




#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.942 min Scan# 1715  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

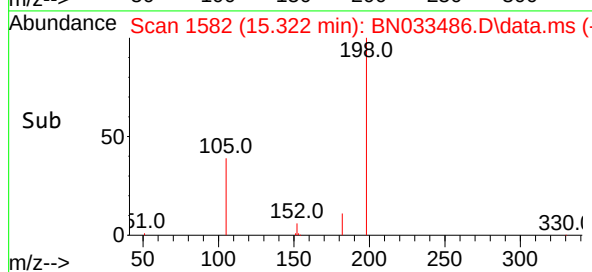
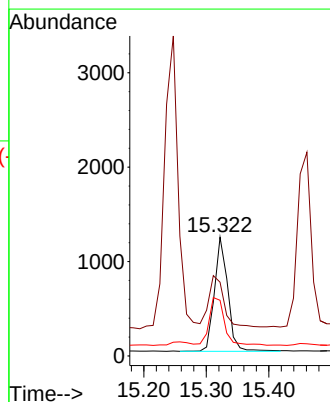
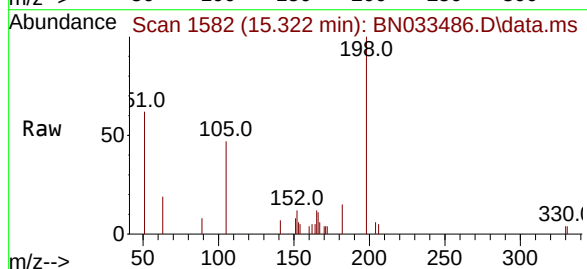
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

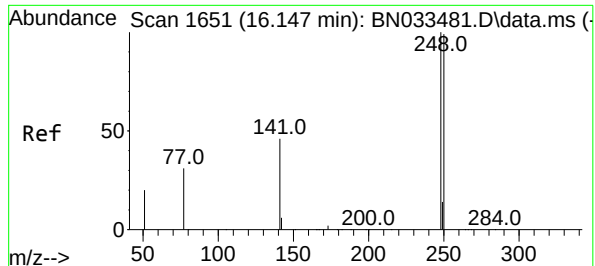
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 8.4   | 7.8   | 11.8  |



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.322 ng  
RT: 15.322 min Scan# 1582  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 198     | 100   |       |       |
| 51      | 62.1  | 65.1  | 97.7# |
| 105     | 46.9  | 44.8  | 67.2  |

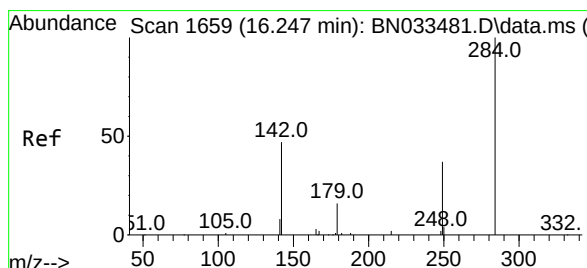
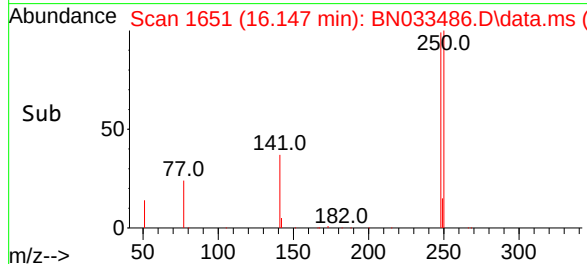
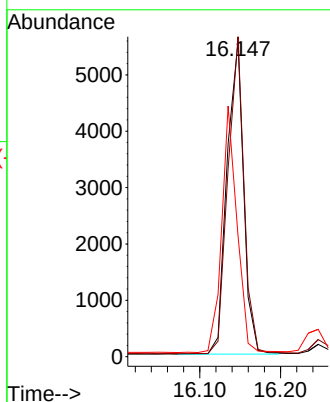
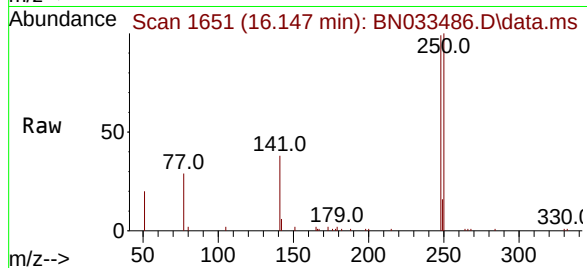




#21  
4-Bromophenyl-phenylether  
Concen: 0.366 ng  
RT: 16.147 min Scan# 1651  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

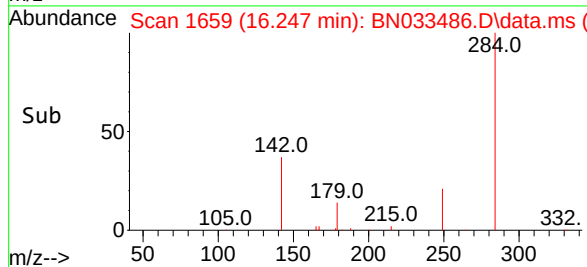
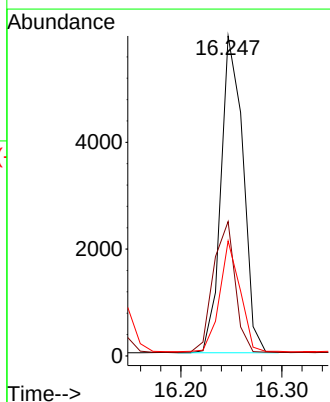
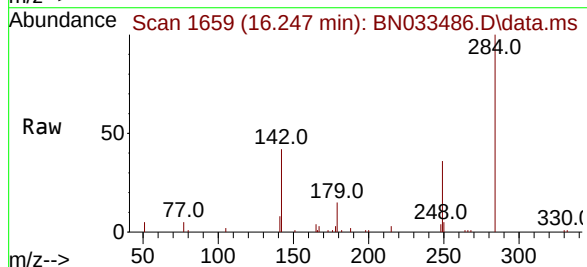
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

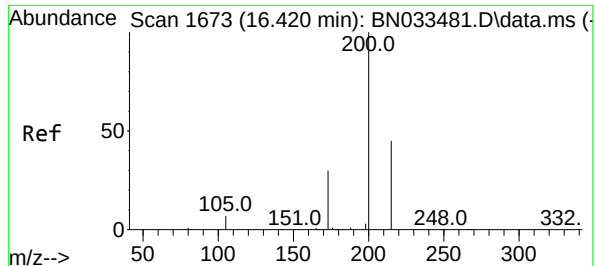
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 101.5 | 79.2  | 118.8 |
| 141     | 38.3  | 37.9  | 56.9  |



#22  
Hexachlorobenzene  
Concen: 0.376 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 40.7  | 31.8  | 47.6  |
| 249     | 32.2  | 26.0  | 39.0  |





#23

Atrazine

Concen: 0.344 ng

RT: 16.420 min Scan# 1673

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924

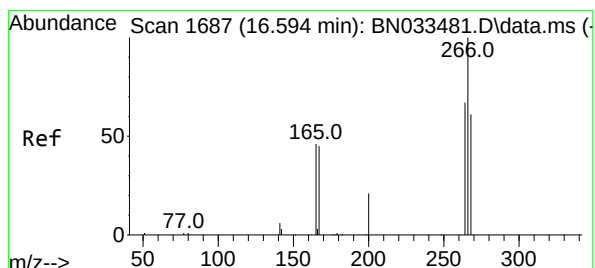
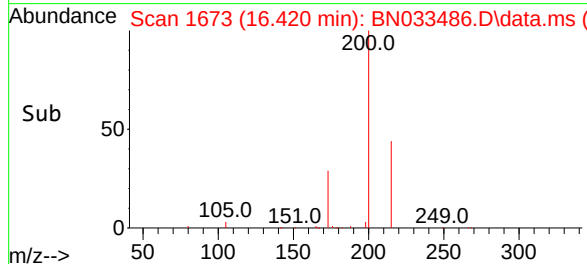
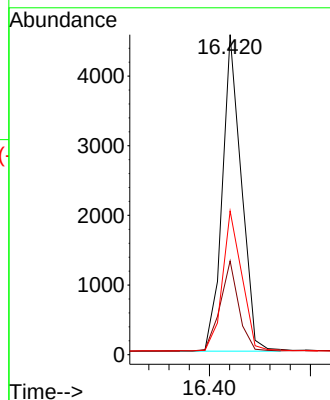
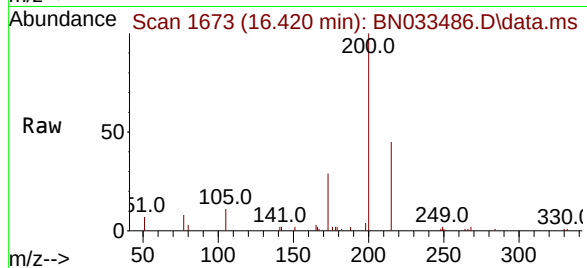
Tgt Ion:200 Resp: 5969

Ion Ratio Lower Upper

200 100

173 29.3 25.3 37.9

215 44.9 36.6 54.8



#24

Pentachlorophenol

Concen: 0.289 ng

RT: 16.594 min Scan# 1687

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

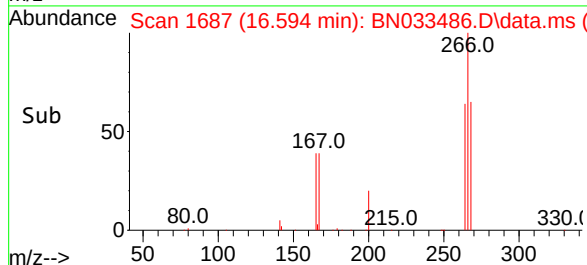
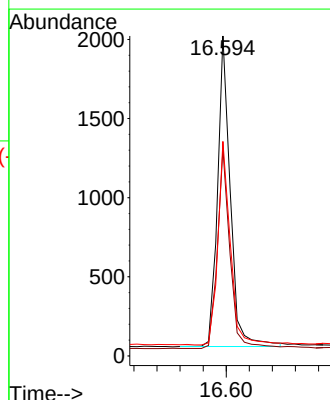
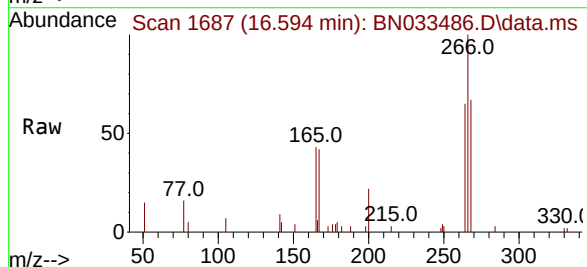
Tgt Ion:266 Resp: 3006

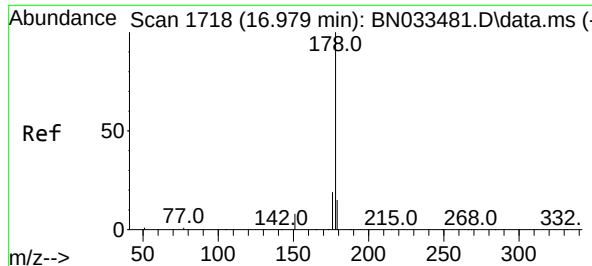
Ion Ratio Lower Upper

266 100

264 63.2 51.9 77.9

268 64.5 51.0 76.4

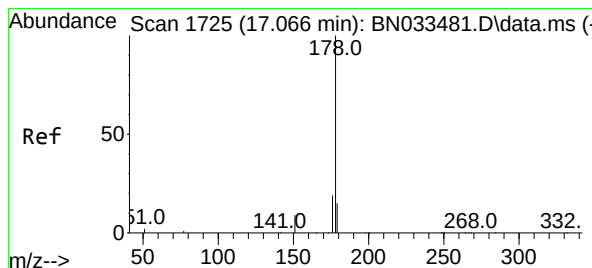
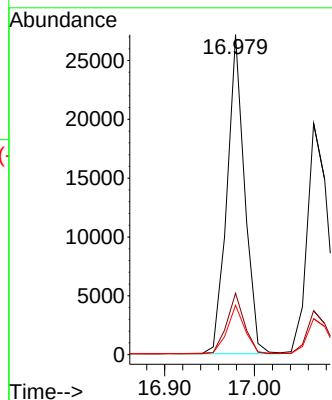
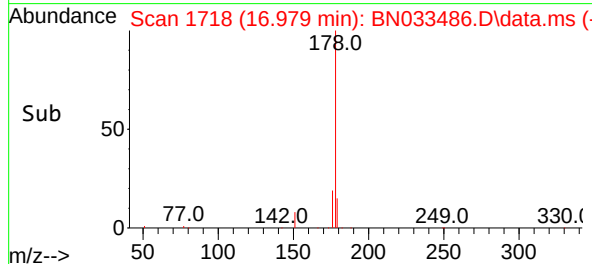
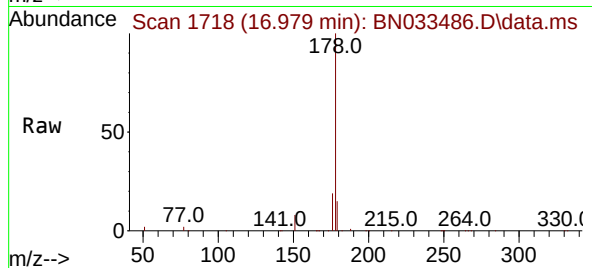




#25  
Phenanthrene  
Concen: 0.371 ng  
RT: 16.979 min Scan# 1718  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

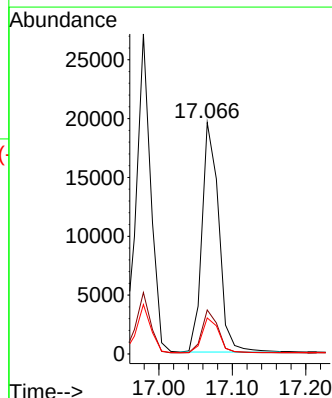
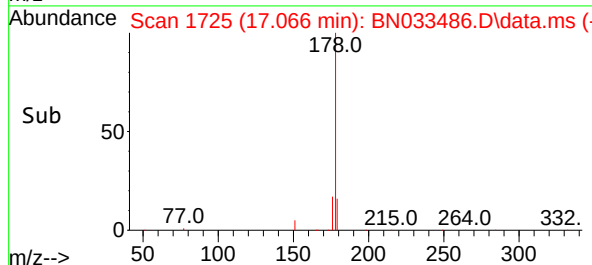
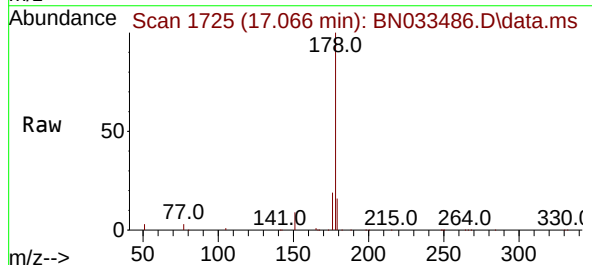
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

Tgt Ion:178 Resp: 37016  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.3 22.9  
179 15.2 12.3 18.5

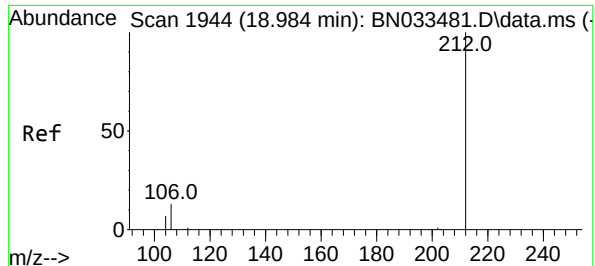


#26  
Anthracene  
Concen: 0.353 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

Tgt Ion:178 Resp: 31155  
Ion Ratio Lower Upper  
178 100  
176 18.3 15.0 22.6  
179 15.2 12.4 18.6







#27

Fluoranthene-d10

Concen: 0.345 ng

RT: 18.980 min Scan# 1943

Delta R.T. -0.005 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924

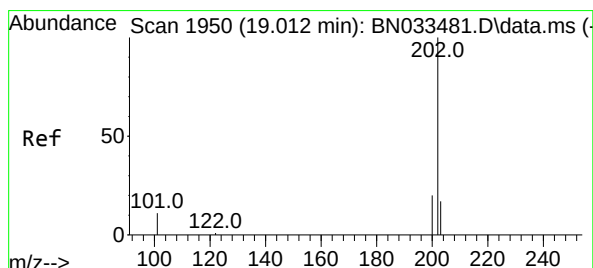
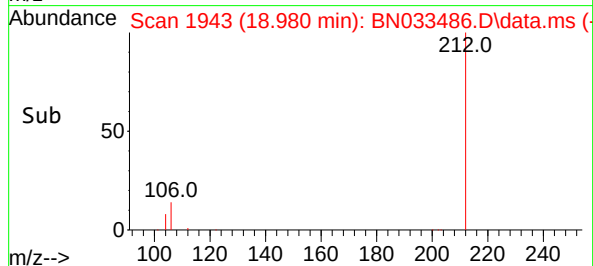
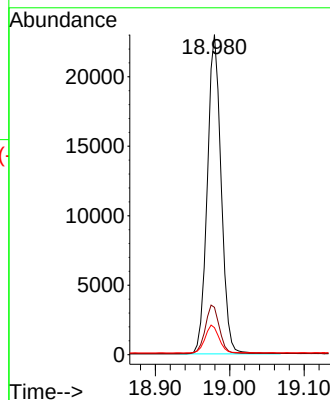
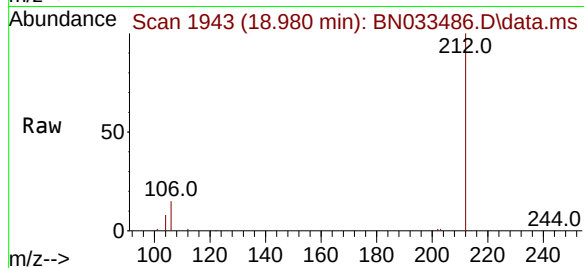
Tgt Ion:212 Resp: 29700

Ion Ratio Lower Upper

212 100

106 15.4 12.3 18.5

104 8.8 7.0 10.4



#28

Fluoranthene

Concen: 0.348 ng

RT: 19.007 min Scan# 1949

Delta R.T. -0.005 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

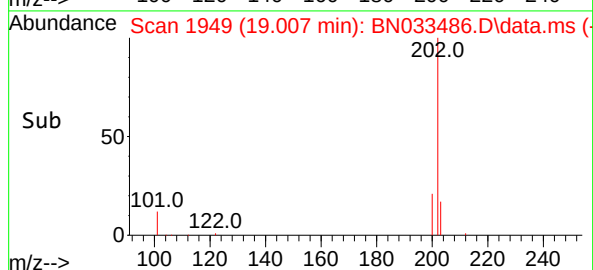
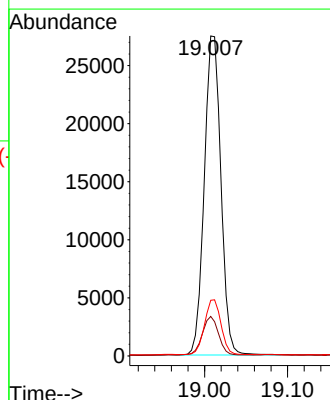
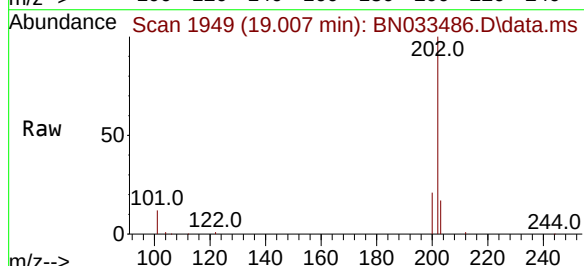
Tgt Ion:202 Resp: 38365

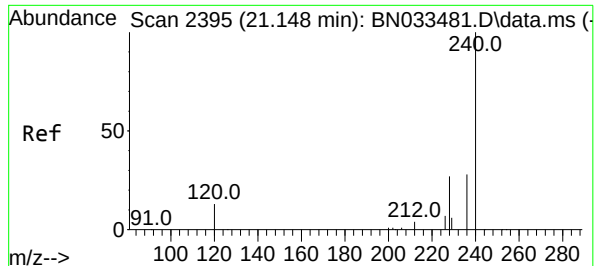
Ion Ratio Lower Upper

202 100

101 12.0 9.5 14.3

203 17.1 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.148 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924

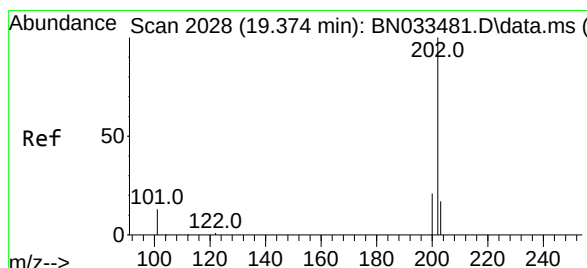
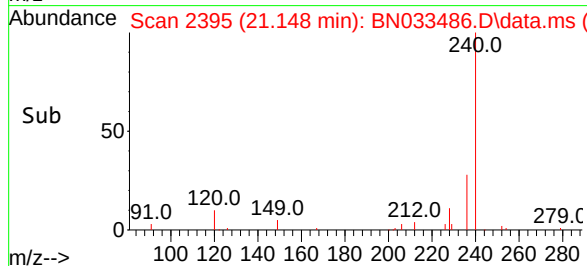
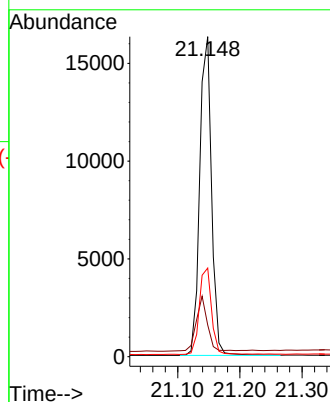
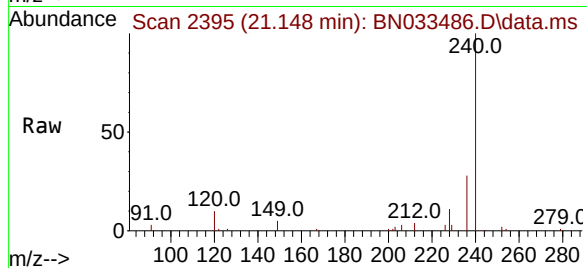
Tgt Ion:240 Resp: 21483

Ion Ratio Lower Upper

240 100

120 9.9 12.4 18.6#

236 27.7 23.0 34.6



#30

Pyrene

Concen: 0.404 ng

RT: 19.374 min Scan# 2028

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

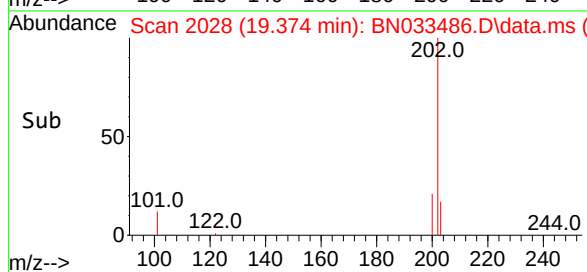
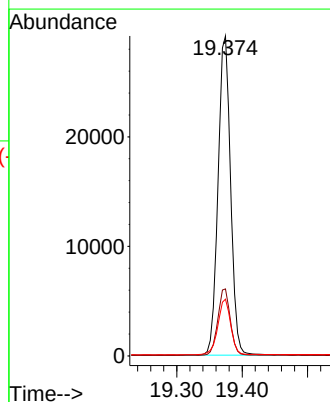
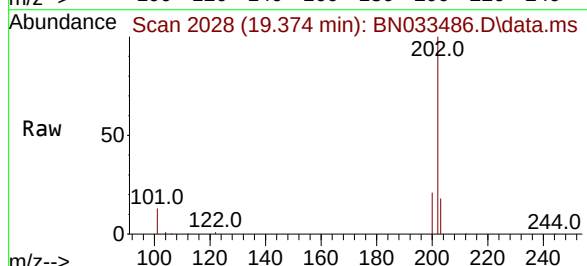
Tgt Ion:202 Resp: 38735

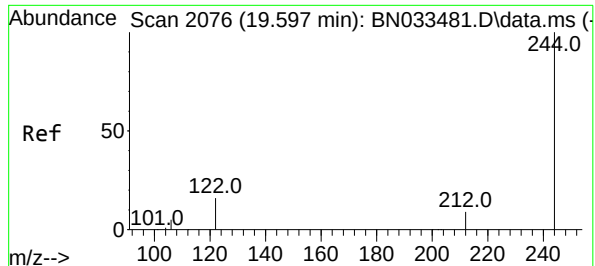
Ion Ratio Lower Upper

202 100

200 20.7 16.6 24.8

203 18.0 14.2 21.4

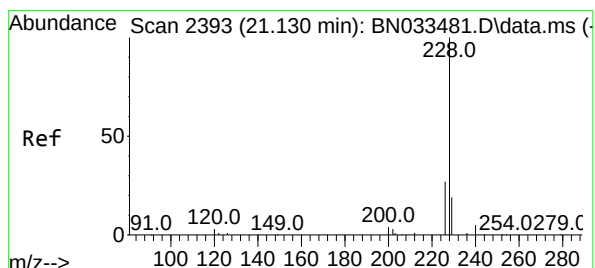
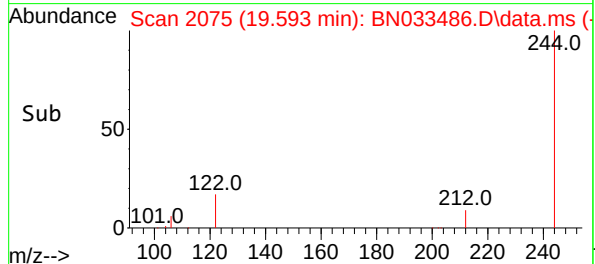
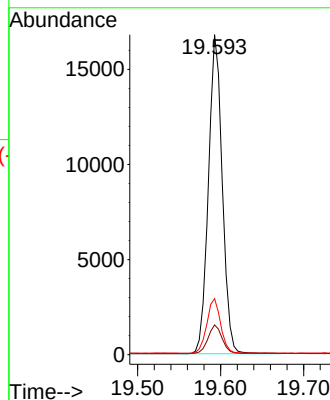
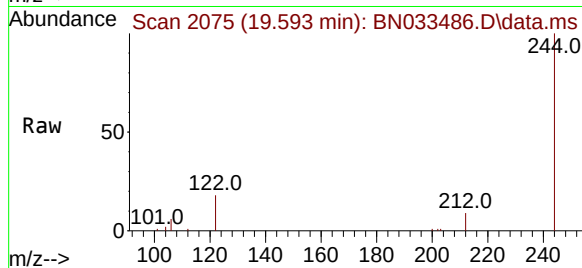




#31  
Terphenyl-d14  
Concen: 0.399 ng  
RT: 19.593 min Scan# 2075  
Delta R.T. -0.005 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

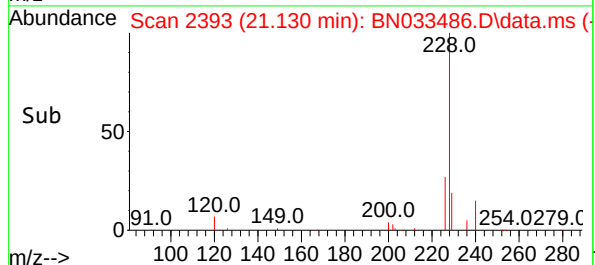
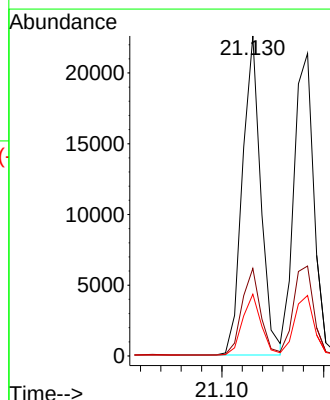
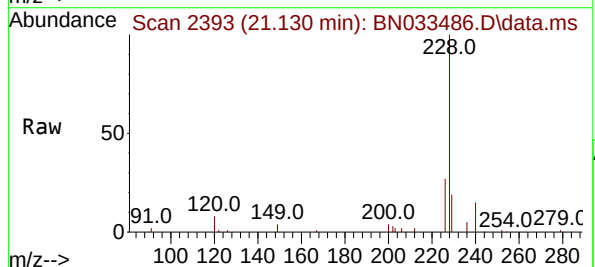
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

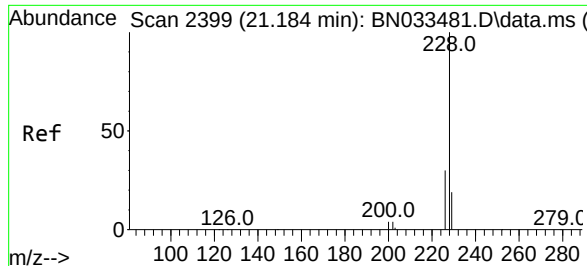
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 9.3   | 7.8   | 11.6  |
| 122     | 17.5  | 13.3  | 19.9  |



#32  
Benzo(a)anthracene  
Concen: 0.364 ng  
RT: 21.130 min Scan# 2393  
Delta R.T. -0.000 min  
Lab File: BN033486.D  
Acq: 20 Aug 2024 01:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.4  | 21.8  | 32.6  |
| 229     | 19.3  | 15.8  | 23.6  |





#33

Chrysene

Concen: 0.373 ng

RT: 21.184 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924

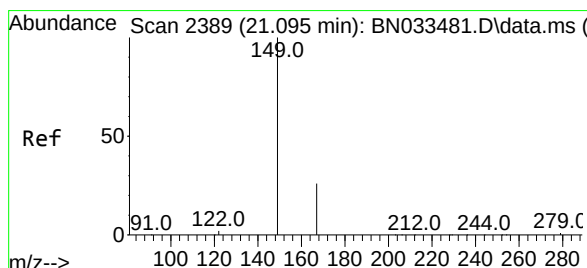
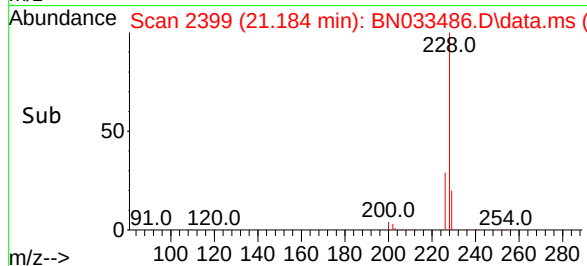
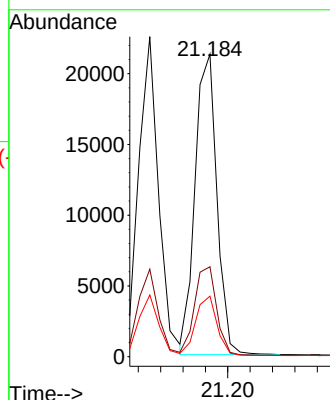
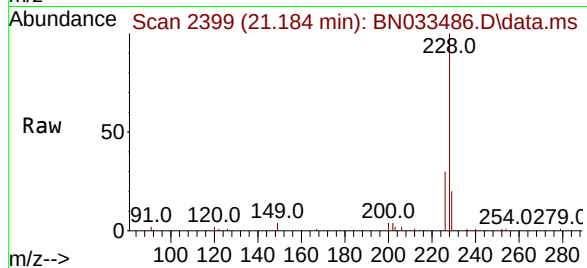
Tgt Ion:228 Resp: 28782

Ion Ratio Lower Upper

228 100

226 29.7 23.8 35.8

229 20.0 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.322 ng

RT: 21.095 min Scan# 2389

Delta R.T. -0.000 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

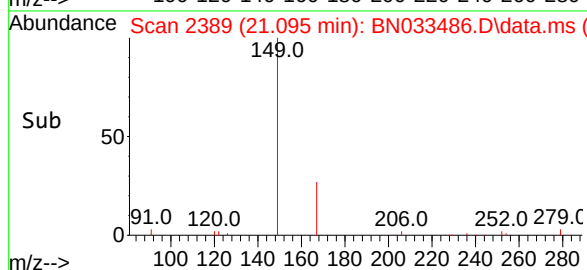
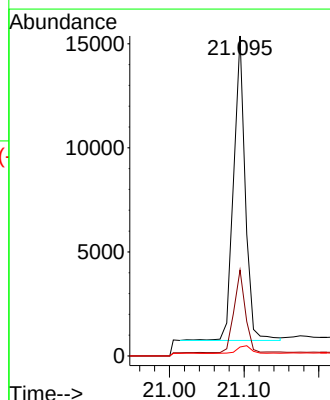
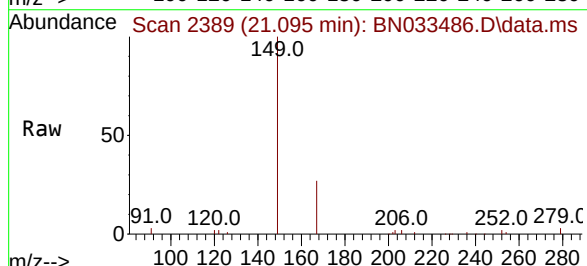
Tgt Ion:149 Resp: 15827

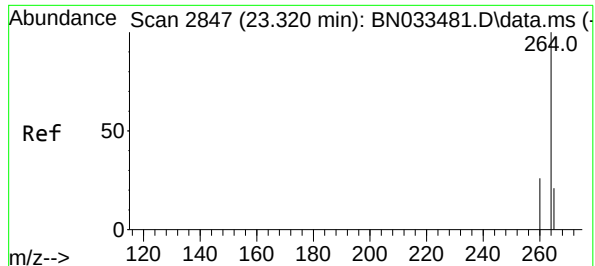
Ion Ratio Lower Upper

149 100

167 26.2 21.5 32.3

279 2.8 2.2 3.2





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.314 min Scan# 21

Delta R.T. -0.006 min

Lab File: BN033486.D

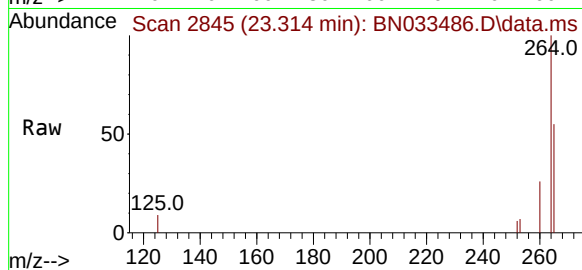
Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924



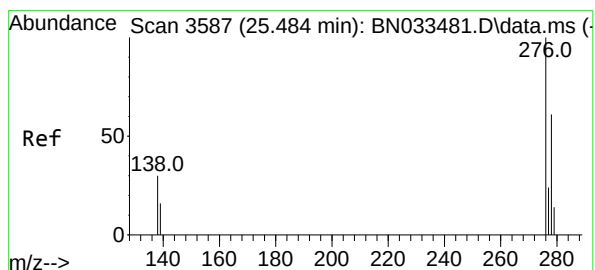
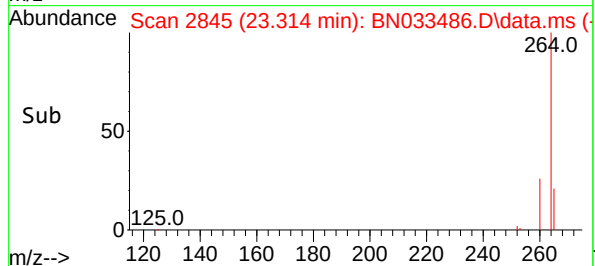
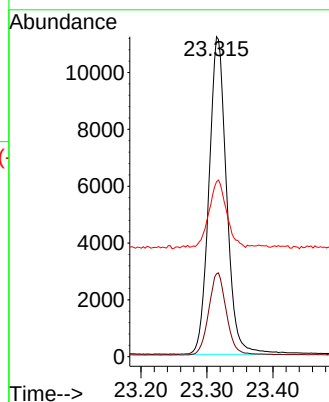
Tgt Ion:264 Resp: 20739

Ion Ratio Lower Upper

264 100

260 25.9 20.8 31.2

265 54.7 52.2 78.2



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.370 ng

RT: 25.472 min Scan# 3583

Delta R.T. -0.012 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

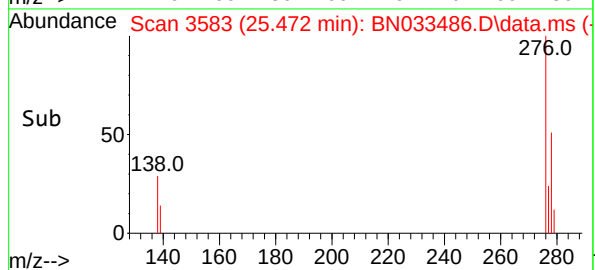
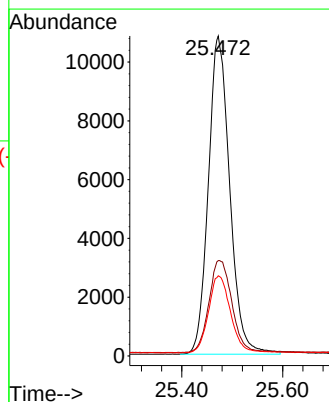
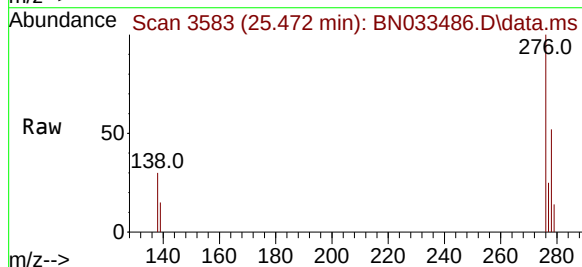
Tgt Ion:276 Resp: 31883

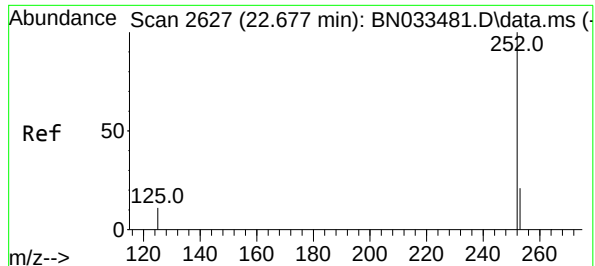
Ion Ratio Lower Upper

276 100

138 31.1 24.4 36.6

277 24.9 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.357 ng

RT: 22.671 min Scan# 2

Delta R.T. -0.006 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924

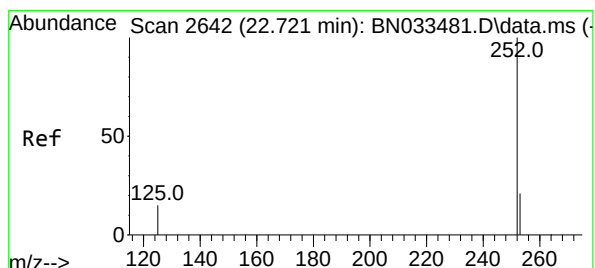
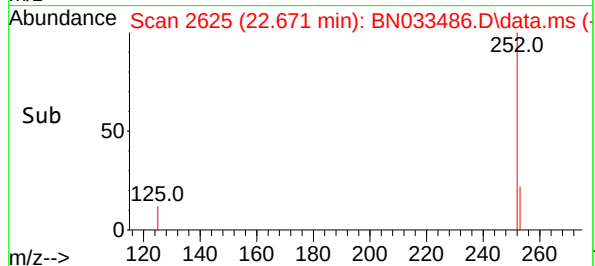
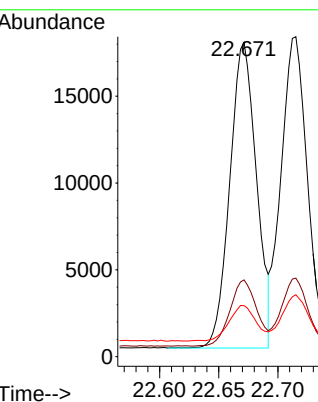
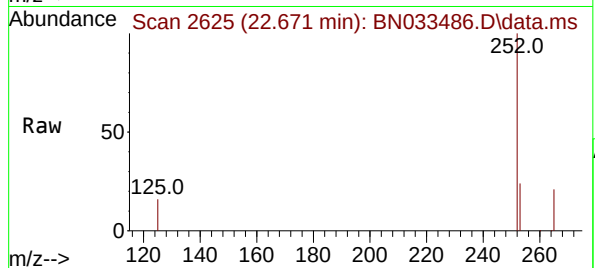
Tgt Ion:252 Resp: 27618

Ion Ratio Lower Upper

252 100

253 24.4 19.8 29.8

125 16.2 13.9 20.9



#38

Benzo(k)fluoranthene

Concen: 0.368 ng

RT: 22.715 min Scan# 2640

Delta R.T. -0.006 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

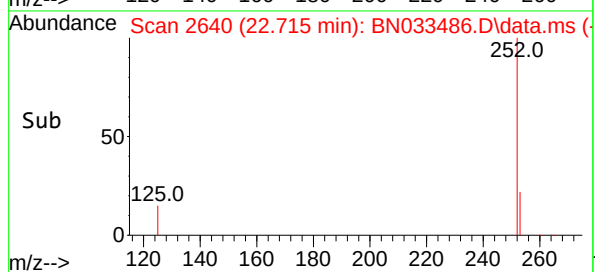
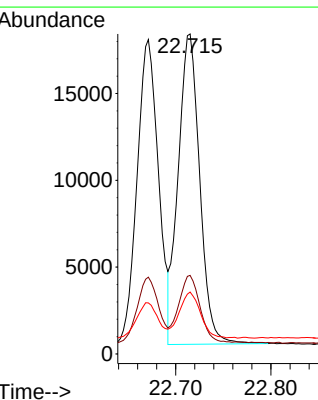
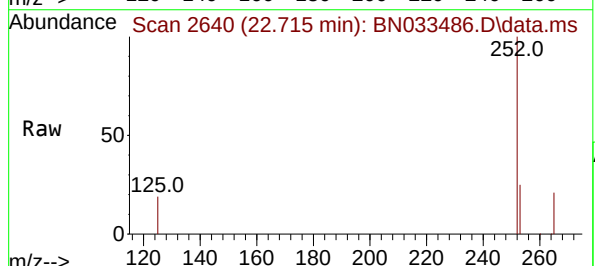
Tgt Ion:252 Resp: 28035

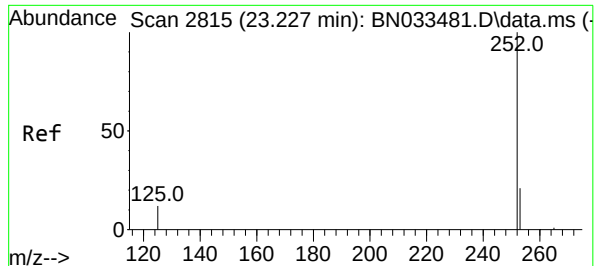
Ion Ratio Lower Upper

252 100

253 24.5 19.8 29.8

125 19.3 15.8 23.8





#39

Benzo(a)pyrene

Concen: 0.351 ng

RT: 23.221 min Scan# 21

Delta R.T. -0.006 min

Lab File: BN033486.D

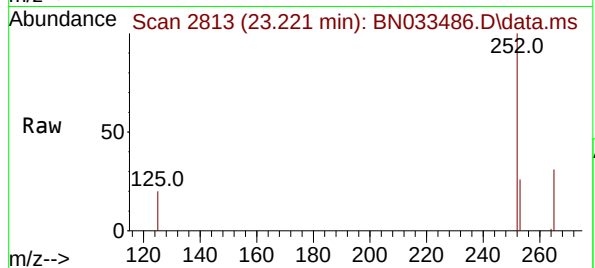
Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924



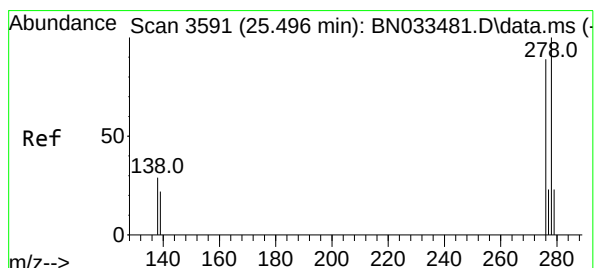
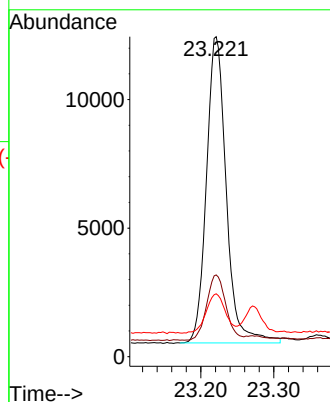
Tgt Ion:252 Resp: 22480

Ion Ratio Lower Upper

252 100

253 25.5 21.5 32.3

125 19.6 17.0 25.4



#40

Dibenzo(a,h)anthracene

Concen: 0.372 ng

RT: 25.490 min Scan# 3589

Delta R.T. -0.006 min

Lab File: BN033486.D

Acq: 20 Aug 2024 01:56

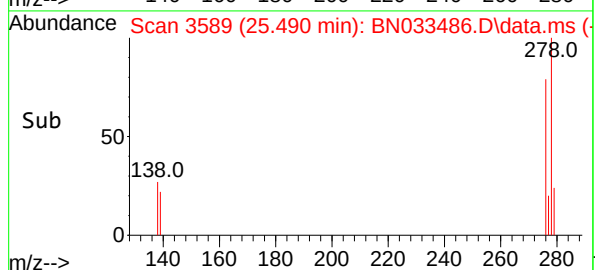
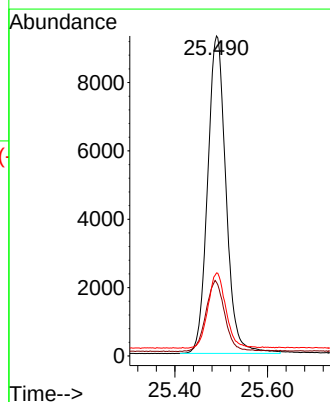
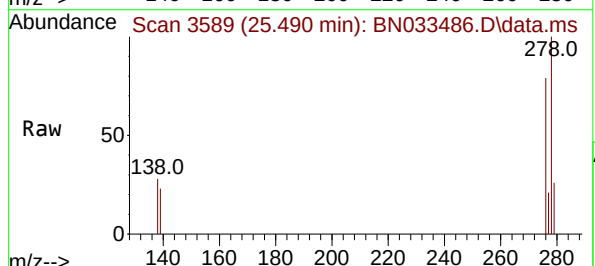
Tgt Ion:278 Resp: 25600

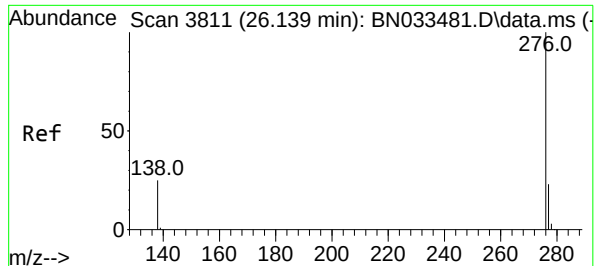
Ion Ratio Lower Upper

278 100

139 23.0 19.1 28.7

279 26.0 21.0 31.4





#41

Benzo(g,h,i)perylene

Concen: 0.361 ng

RT: 26.124 min Scan# 3806

Delta R.T. -0.015 min

Lab File: BN033486.D

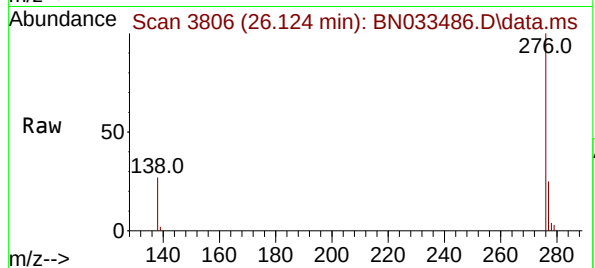
Acq: 20 Aug 2024 01:56

Instrument :

BNA\_N

ClientSampleId :

ICVBN081924



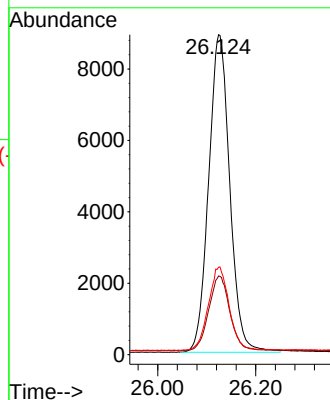
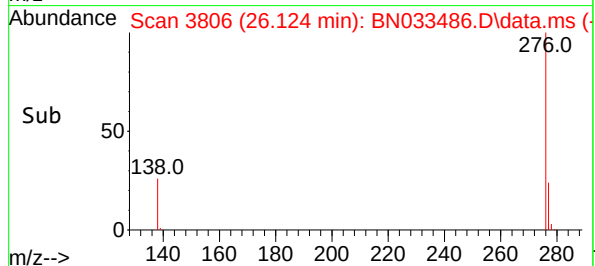
Tgt Ion:276 Resp: 26587

Ion Ratio Lower Upper

276 100

277 24.6 19.7 29.5

138 27.4 21.8 32.6





Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033486.D  
Acq On : 20 Aug 2024 01:56  
Operator : MA/JU  
Sample : SSTDICV0.4  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

Quant Time: Aug 20 02:44:29 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:32:18 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|---------|----------------------------|-------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 1.000 | 1.000 | 0.0   | 93    | 0.00     |
| 2       | 1,4-Dioxane                | 0.460 | 0.551 | -19.8 | 156#  | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.535 | 0.592 | -10.7 | 121   | 0.00     |
| 4 S     | 2-Fluorophenol             | 1.271 | 1.467 | -15.4 | 108   | 0.00     |
| 5 S     | Phenol-d6                  | 1.512 | 1.878 | -24.2 | 129   | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.072 | 1.083 | -1.0  | 134   | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 135   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.332 | 0.300 | 9.6   | 134   | 0.00     |
| 9       | Naphthalene                | 1.069 | 0.989 | 7.5   | 142   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.213 | 0.194 | 8.9   | 137   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.572 | 0.525 | 8.2   | 144   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.677 | 0.627 | 7.4   | 145   | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 149   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.215 | 0.170 | 20.9  | 137   | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 1.634 | 1.462 | 10.5  | 146   | 0.00     |
| 16      | Acenaphthylene             | 1.754 | 1.502 | 14.4  | 145   | -0.01    |
| 17      | Acenaphthene               | 1.234 | 1.101 | 10.8  | 148   | 0.00     |
| 18      | Fluorene                   | 1.555 | 1.376 | 11.5  | 148   | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 146   | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.062 | 0.050 | 19.4  | 144   | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.243 | 0.222 | 8.6   | 147   | 0.00     |
| 22      | Hexachlorobenzene          | 0.268 | 0.252 | 6.0   | 148   | 0.00     |
| 23      | Atrazine                   | 0.194 | 0.167 | 13.9  | 140   | 0.00     |
| 24      | Pentachlorophenol          | 0.116 | 0.084 | 27.6# | 127   | 0.00     |
| 25      | Phenanthrene               | 1.113 | 1.033 | 7.2   | 146   | 0.00     |
| 26      | Anthracene                 | 0.985 | 0.870 | 11.7  | 145   | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.961 | 0.829 | 13.7  | 139   | 0.00     |
| 28      | Fluoranthene               | 1.230 | 1.071 | 12.9  | 142   | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 133   | 0.00     |
| 30      | Pyrene                     | 1.785 | 1.803 | -1.0  | 141   | 0.00     |
| 31 S    | Terphenyl-d14              | 0.909 | 0.906 | 0.3   | 140   | 0.00     |
| 32      | Benzo(a)anthracene         | 1.446 | 1.317 | 8.9   | 133   | 0.00     |
| 33      | Chrysene                   | 1.437 | 1.340 | 6.8   | 134   | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.915 | 0.737 | 19.5  | 121   | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 130   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.661 | 1.537 | 7.5   | 131   | -0.01    |
| 37      | Benzo(b)fluoranthene       | 1.494 | 1.332 | 10.8  | 130   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.470 | 1.352 | 8.0   | 133   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.236 | 1.084 | 12.3  | 129   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.328 | 1.234 | 7.1   | 131   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.420 | 1.282 | 9.7   | 129   | -0.01    |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033486.D  
Acq On : 20 Aug 2024 01:56  
Operator : MA/JU  
Sample : SSTDICV0.4  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN081924

Quant Time: Aug 20 02:44:29 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 19 23:32:18 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | Amount | Calc. | %Dev  | Area% | Dev(min) |
|---------|----------------------------|--------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 0.400  | 0.400 | 0.0   | 93    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.479 | -19.7 | 156   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.442 | -10.5 | 121   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.462 | -15.5 | 108   | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.497 | -24.2 | 129   | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.404 | -1.0  | 134   | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 135   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.362 | 9.5   | 134   | 0.00     |
| 9       | Naphthalene                | 0.400  | 0.370 | 7.5   | 142   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.364 | 9.0   | 137   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.367 | 8.3   | 144   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.371 | 7.3   | 145   | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 149   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.317 | 20.8  | 137   | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.358 | 10.5  | 146   | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.342 | 14.5  | 145   | -0.01    |
| 17      | Acenaphthene               | 0.400  | 0.357 | 10.8  | 148   | 0.00     |
| 18      | Fluorene                   | 0.400  | 0.354 | 11.5  | 148   | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 146   | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.322 | 19.5  | 144   | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.366 | 8.5   | 147   | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.376 | 6.0   | 148   | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.344 | 14.0  | 140   | 0.00     |
| 24      | Pentachlorophenol          | 0.400  | 0.289 | 27.8# | 127   | 0.00     |
| 25      | Phenanthrene               | 0.400  | 0.371 | 7.3   | 146   | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.353 | 11.8  | 145   | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.345 | 13.8  | 139   | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.348 | 13.0  | 142   | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 133   | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.404 | -1.0  | 141   | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.399 | 0.3   | 140   | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.364 | 9.0   | 133   | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.373 | 6.8   | 134   | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.322 | 19.5  | 121   | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 130   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.370 | 7.5   | 131   | -0.01    |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.357 | 10.8  | 130   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.368 | 8.0   | 133   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.351 | 12.3  | 129   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.372 | 7.0   | 131   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.361 | 9.8   | 129   | -0.01    |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
Fax : 908 789 8922

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JAC005

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG No.: P3671

Instrument ID: BNA\_N Calibration Date/Time: 08/22/2024 22:03

Lab File ID: BN033563.D Init. Calib. Date(s): 08/19/2024 08/19/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 16:16 19:53

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND                | RRF   | RRF0.4 | MIN<br>RRF | %D    | MAX%D |
|-------------------------|-------|--------|------------|-------|-------|
| 2-Methylnaphthalene-d10 | 0.572 | 0.518  |            | -9.4  | 20.0  |
| Fluoranthene-d10        | 0.961 | 0.853  |            | -11.2 | 20.0  |
| 2-Fluorophenol          | 1.271 | 1.055  |            | -17.0 | 20.0  |
| Phenol-d6               | 1.512 | 1.314  |            | -13.1 | 20.0  |
| Nitrobenzene-d5         | 0.332 | 0.295  |            | -11.1 | 20.0  |
| Naphthalene             | 1.069 | 0.983  |            | -8.0  | 20.0  |
| 2-Methylnaphthalene     | 0.677 | 0.607  |            | -10.3 | 20.0  |
| 2-Fluorobiphenyl        | 1.634 | 1.564  |            | -4.3  | 20.0  |
| Acenaphthylene          | 1.754 | 1.565  |            | -10.8 | 20.0  |
| Acenaphthene            | 1.234 | 1.089  |            | -11.8 | 20.0  |
| Fluorene                | 1.555 | 1.342  |            | -13.7 | 20.0  |
| 2,4,6-Tribromophenol    | 0.215 | 0.172  |            | -20.0 | 20.0  |
| Phenanthrene            | 1.113 | 1.033  |            | -7.2  | 20.0  |
| Anthracene              | 0.985 | 0.877  |            | -11.0 | 20.0  |
| Fluoranthene            | 1.230 | 1.087  |            | -11.6 | 20.0  |
| Pyrene                  | 1.785 | 1.554  |            | -12.9 | 20.0  |
| Terphenyl-d14           | 0.909 | 0.787  |            | -13.4 | 20.0  |
| Benzo(a)anthracene      | 1.446 | 1.328  |            | -8.2  | 20.0  |
| Chrysene                | 1.437 | 1.346  |            | -6.3  | 20.0  |
| Benzo(b)fluoranthene    | 1.494 | 1.368  |            | -8.4  | 20.0  |
| Benzo(k)fluoranthene    | 1.470 | 1.350  |            | -8.2  | 20.0  |
| Benzo(a)pyrene          | 1.236 | 1.131  |            | -8.5  | 20.0  |
| Indeno(1,2,3-cd)pyrene  | 1.661 | 1.555  |            | -6.4  | 20.0  |
| Dibenzo(a,h)anthracene  | 1.328 | 1.231  |            | -7.3  | 20.0  |
| Benzo(g,h,i)perylene    | 1.420 | 1.328  |            | -6.5  | 20.0  |
| 1,4-Dioxane             | 0.460 | 0.403  |            | -12.4 | 20.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033563.D  
 Acq On : 22 Aug 2024 22:03  
 Operator : MA/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

**Instrument :**

BNA\_N

**ClientSampleId :**

SSTDCCC0.4

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024

Quant Time: Aug 23 00:23:24 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Aug 23 00:22:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 8400     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.304 | 136  | 22013    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10449    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 19500    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 13945    | 0.400 | ng    | # 0.00   |
| 35) Perylene-d12              | 23.303 | 264  | 14856    | 0.400 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.176  | 112  | 8863     | 0.332 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.729  | 99   | 11041    | 0.348 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 6487     | 0.355 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 11397    | 0.362 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 1794     | 0.319 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 16346    | 0.383 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 16632    | 0.355 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.584 | 244  | 10971    | 0.346 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.183  | 88   | 3382     | 0.350 | ng    | 99       |
| 3) n-Nitrosodimethylamine     | 3.479  | 42   | 3913     | 0.348 | ng    | # 96     |
| 6) bis(2-Chloroethyl)ether    | 6.982  | 93   | 8604     | 0.382 | ng    | 100      |
| 9) Naphthalene                | 10.357 | 128  | 21629    | 0.368 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.656 | 225  | 4393     | 0.374 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 11.979 | 142  | 13365    | 0.359 | ng    | 99       |
| 16) Acenaphthylene            | 13.900 | 152  | 16356    | 0.357 | ng    | 99       |
| 17) Acenaphthene              | 14.242 | 154  | 11378    | 0.353 | ng    | 98       |
| 18) Fluorene                  | 15.236 | 166  | 14023    | 0.345 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 646      | 0.212 | ng    | 94       |
| 21) 4-Bromophenyl-phenylether | 16.135 | 248  | 4432     | 0.374 | ng    | # 94     |
| 22) Hexachlorobenzene         | 16.247 | 284  | 5010     | 0.383 | ng    | 99       |
| 23) Atrazine                  | 16.421 | 200  | 3310     | 0.350 | ng    | # 91     |
| 24) Pentachlorophenol         | 16.594 | 266  | 1869     | 0.330 | ng    | 98       |
| 25) Phenanthrene              | 16.967 | 178  | 20144    | 0.371 | ng    | 100      |
| 26) Anthracene                | 17.066 | 178  | 17109    | 0.356 | ng    | 100      |
| 28) Fluoranthene              | 19.003 | 202  | 21191    | 0.353 | ng    | 100      |
| 30) Pyrene                    | 19.365 | 202  | 21665    | 0.348 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.122 | 228  | 18513    | 0.367 | ng    | 100      |
| 33) Chrysene                  | 21.175 | 228  | 18774    | 0.375 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.086 | 149  | 10987m   | 0.344 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.449 | 276  | 23101    | 0.375 | ng    | 100      |
| 37) Benzo(b)fluoranthene      | 22.660 | 252  | 20325    | 0.366 | ng    | 98       |
| 38) Benzo(k)fluoranthene      | 22.704 | 252  | 20060    | 0.367 | ng    | 99       |
| 39) Benzo(a)pyrene            | 23.209 | 252  | 16799    | 0.366 | ng    | 99       |
| 40) Dibenzo(a,h)anthracene    | 25.469 | 278  | 18290    | 0.371 | ng    | 97       |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 19730    | 0.374 | ng    | 100      |

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033563.D  
 Acq On : 22 Aug 2024 22:03  
 Operator : MA/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

## Instrument :

BNA\_N

## ClientSampleId :

SSTDCCC0.4

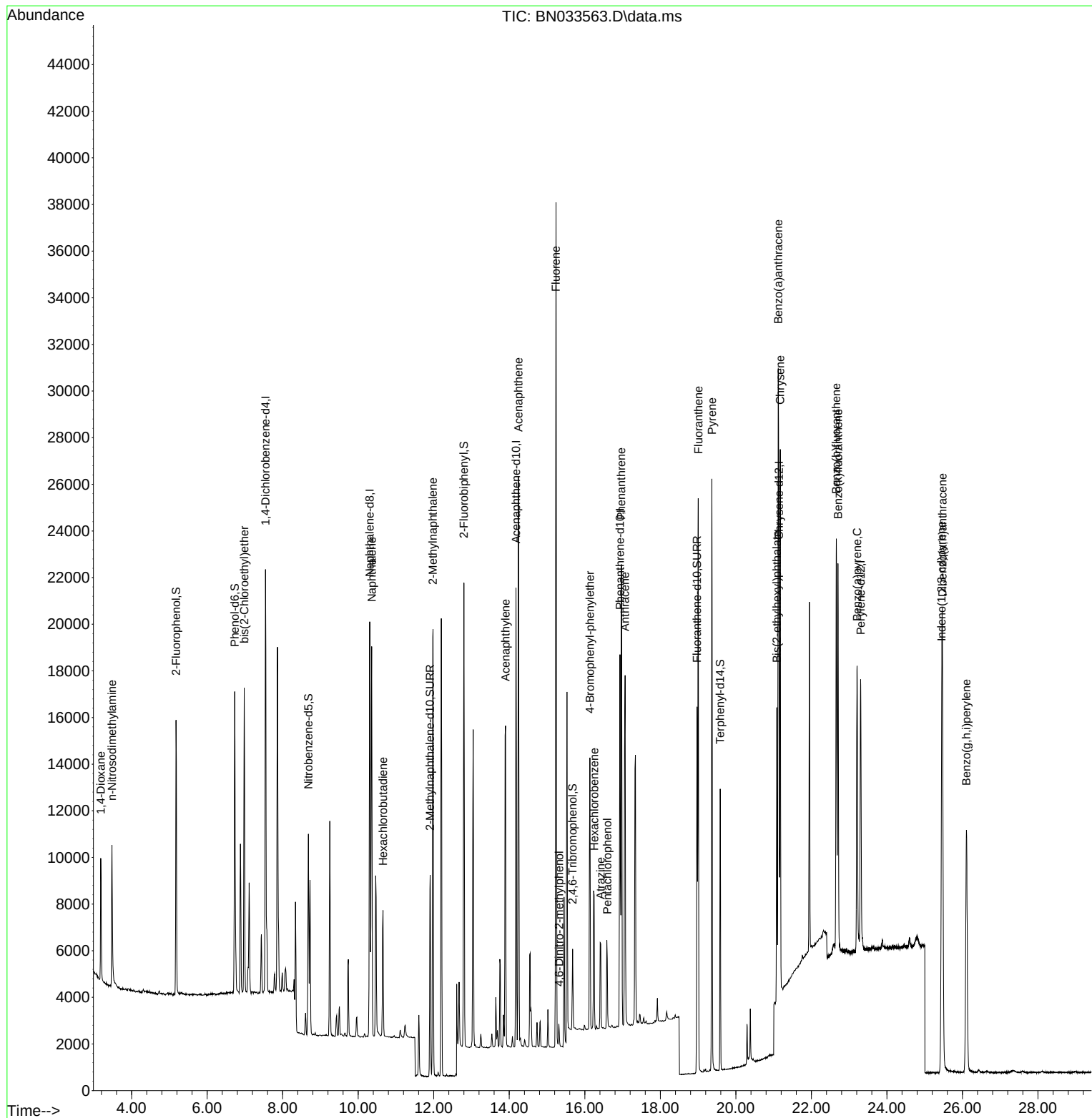
## Manual Integrations

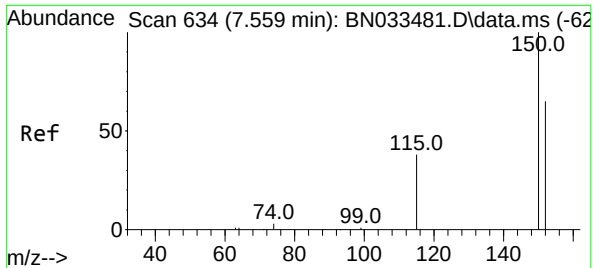
## APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024

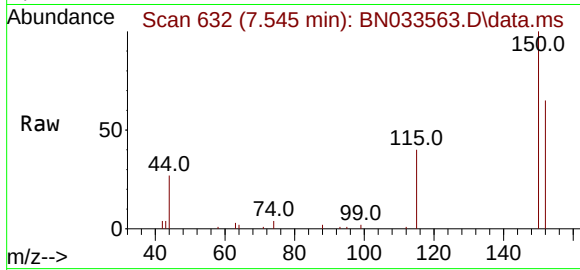
Quant Time: Aug 23 00:23:24 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

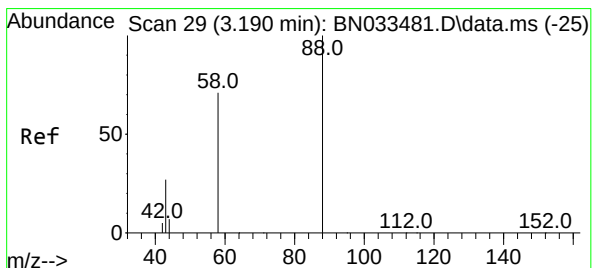
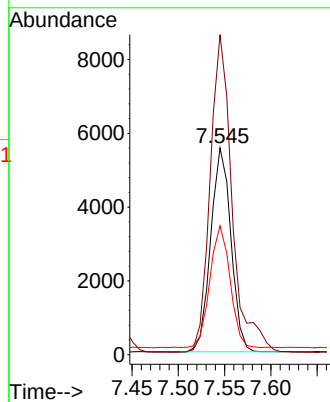
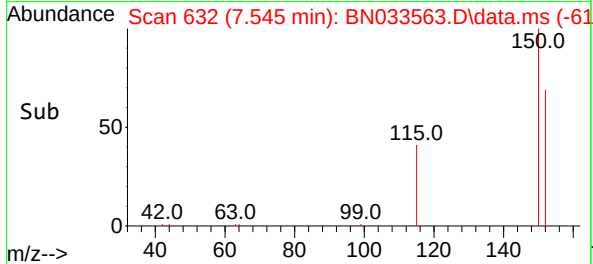
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion: 152 Resp: 8400  
Ion Ratio Lower Upper  
152 100  
150 154.8 122.2 183.2  
115 62.3 47.2 70.8

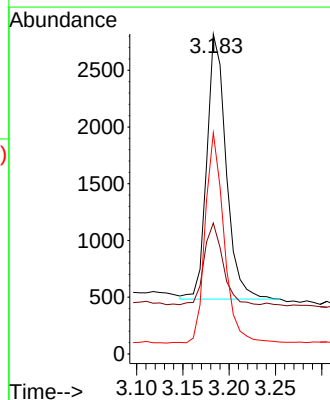
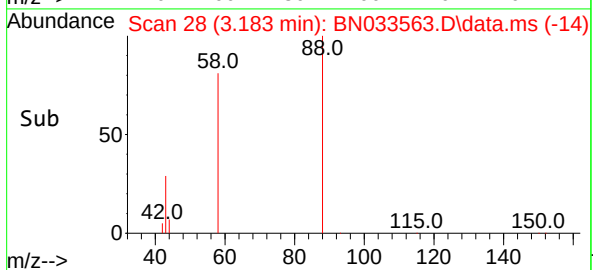
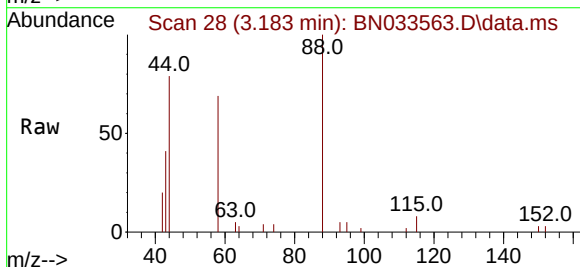
Manual Integrations  
**APPROVED**

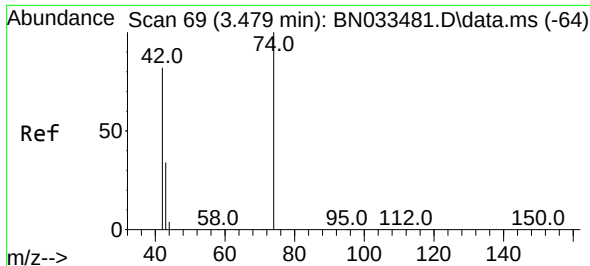
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#2  
1,4-Dioxane  
Concen: 0.350 ng  
RT: 3.183 min Scan# 28  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Tgt Ion: 88 Resp: 3382  
Ion Ratio Lower Upper  
88 100  
43 29.8 25.0 37.4  
58 77.6 62.5 93.7





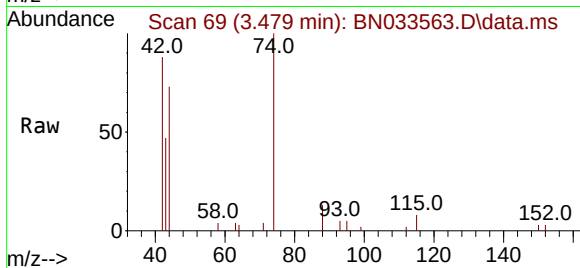
#3  
n-Nitrosodimethylamine  
Concen: 0.348 ng  
RT: 3.479 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

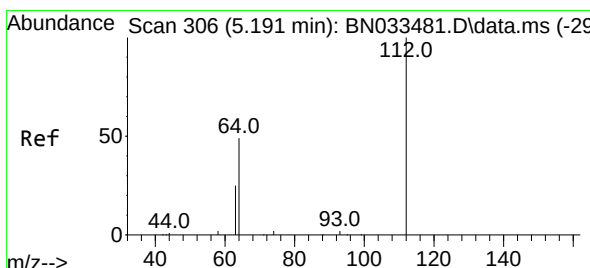
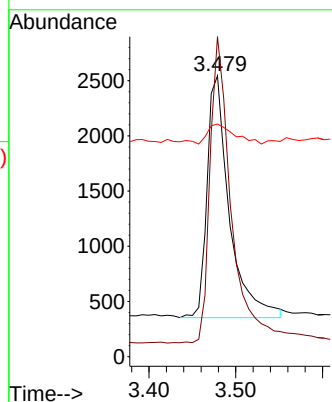
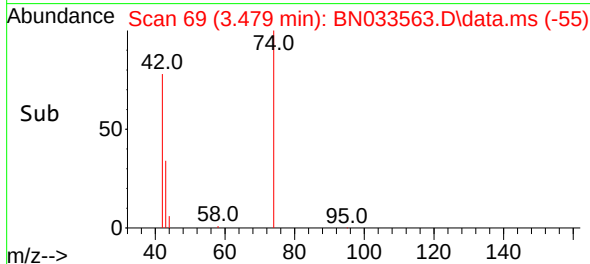
SSTDCCC0.4



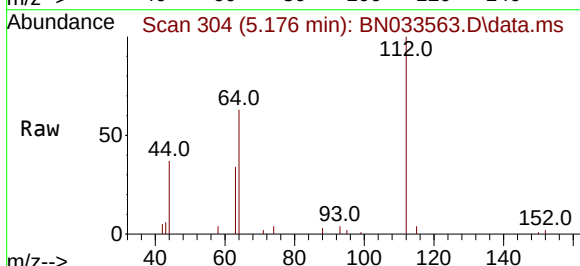
Tgt Ion: 42 Resp: 391  
Ion Ratio Lower Upper  
42 100  
74 120.6 100.2 150.2  
44 9.7 5.3 7.9

Manual Integrations  
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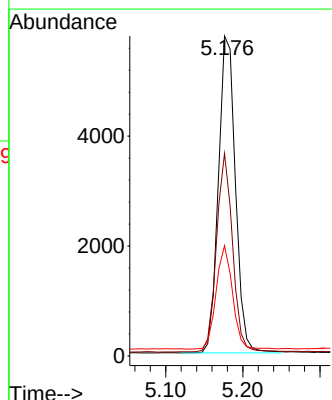
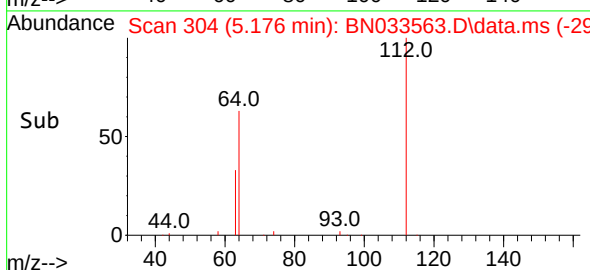
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

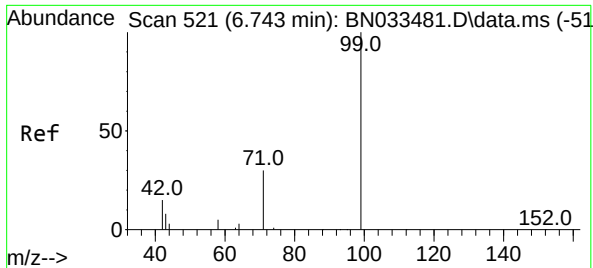


#4  
2-Fluorophenol  
Concen: 0.332 ng  
RT: 5.176 min Scan# 304  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03



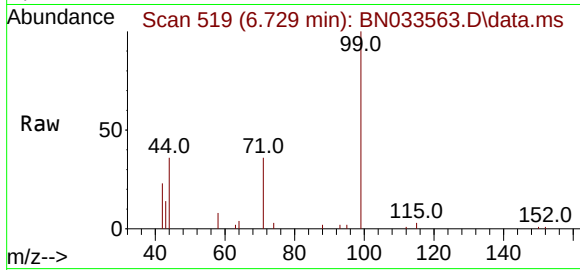
Tgt Ion:112 Resp: 8863  
Ion Ratio Lower Upper  
112 100  
64 59.2 47.1 70.7  
63 31.3 24.9 37.3





#5  
Phenol-d6  
Concen: 0.348 ng  
RT: 6.729 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

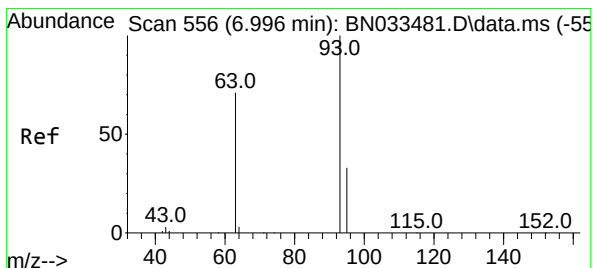
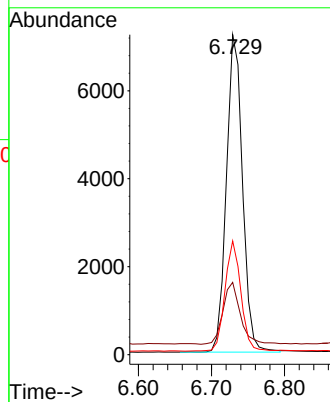
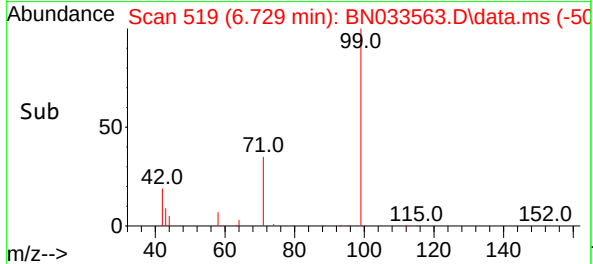
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion: 99 Resp: 1104  
Ion Ratio Lower Upper  
99 100  
42 21.1 16.6 24.8  
71 34.3 26.2 39.4

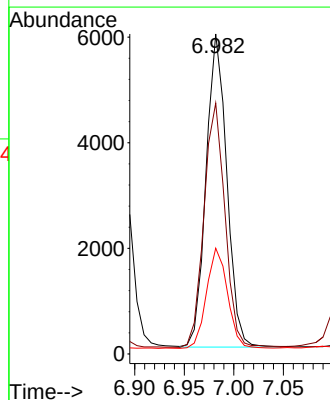
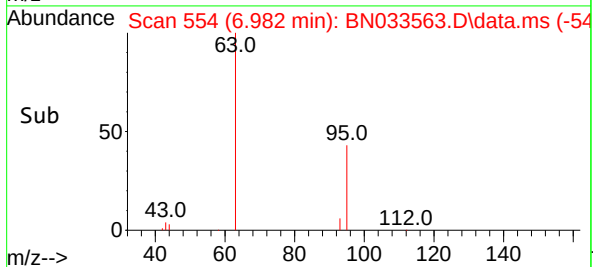
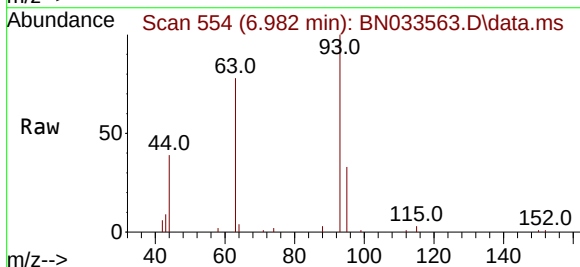
Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

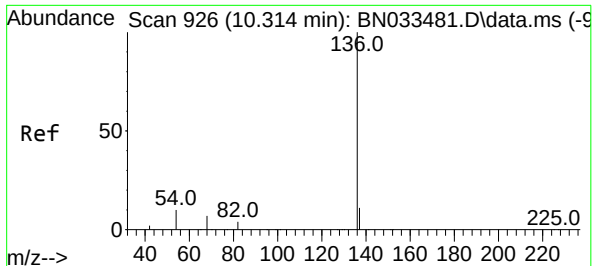


#6  
bis(2-Chloroethyl)ether  
Concen: 0.382 ng  
RT: 6.982 min Scan# 554  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Tgt Ion: 93 Resp: 8604  
Ion Ratio Lower Upper  
93 100  
63 79.2 63.0 94.4  
95 32.6 26.0 39.0

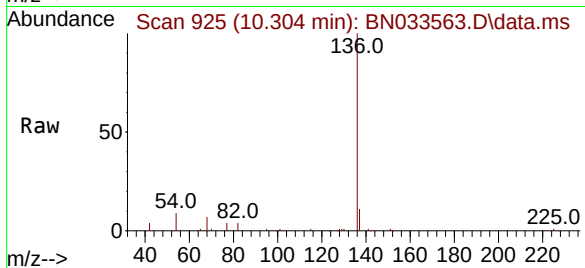






#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

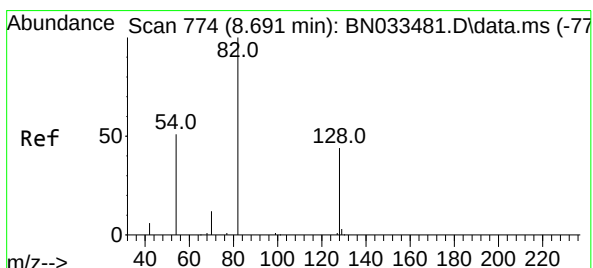
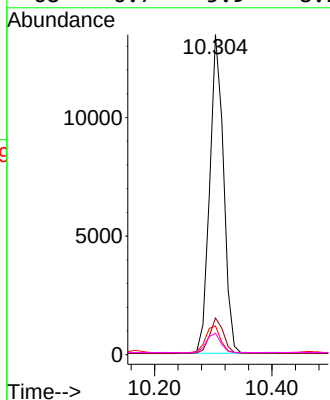
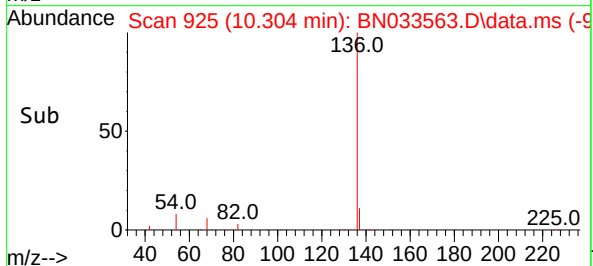
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion: 136 Resp: 2201  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 9.0 8.3 12.5  
68 6.7 5.9 8.9

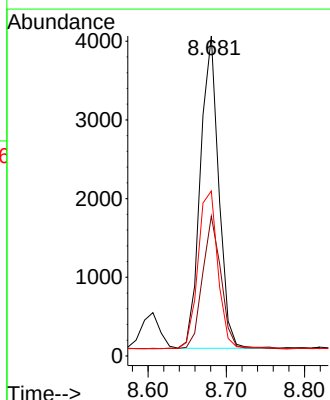
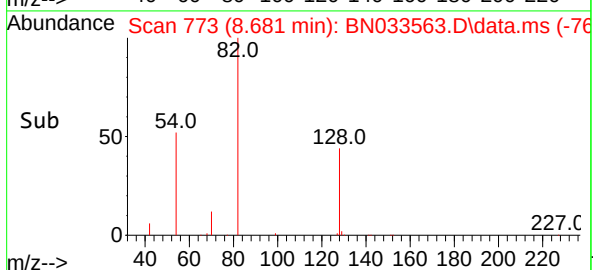
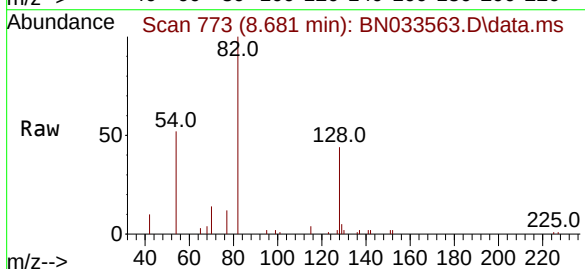
Manual Integrations  
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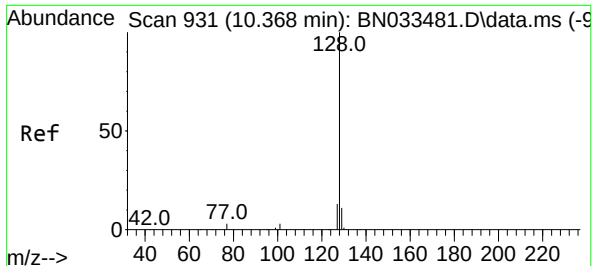
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#8  
Nitrobenzene-d5  
Concen: 0.355 ng  
RT: 8.681 min Scan# 773  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

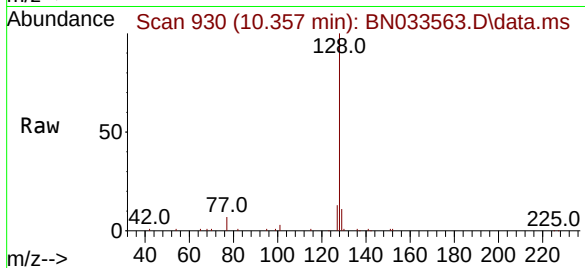
Tgt Ion: 82 Resp: 6487  
Ion Ratio Lower Upper  
82 100  
128 43.7 36.0 54.0  
54 51.5 42.0 63.0





#9  
Naphthalene  
Concen: 0.368 ng  
RT: 10.357 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

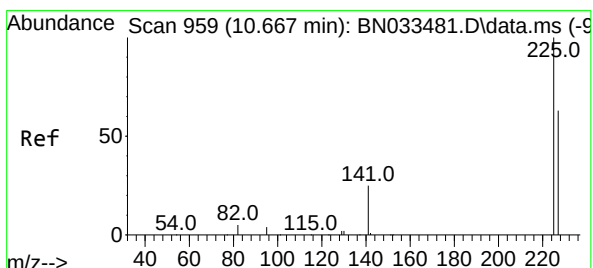
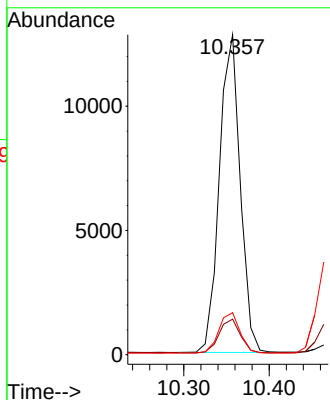
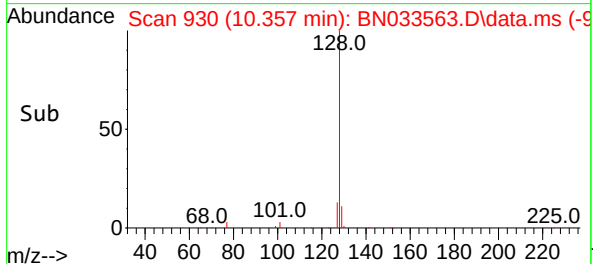
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:128 Resp: 21629  
Ion Ratio Lower Upper  
128 100  
129 11.1 9.1 13.7  
127 13.2 10.7 16.1

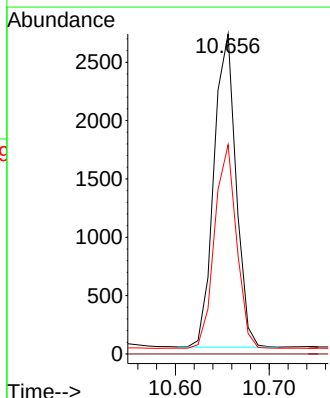
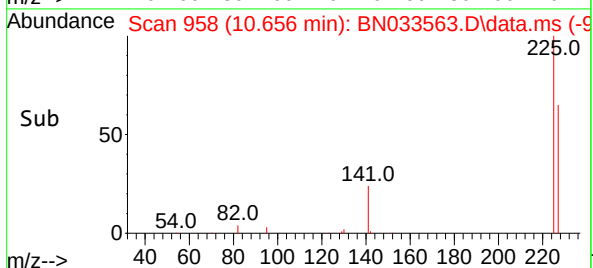
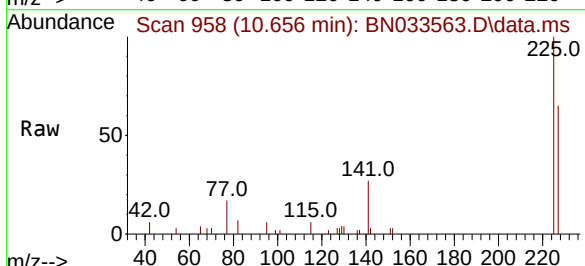
Manual Integrations  
APPROVED

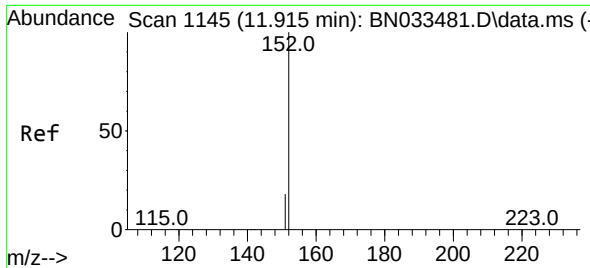
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#10  
Hexachlorobutadiene  
Concen: 0.374 ng  
RT: 10.656 min Scan# 958  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

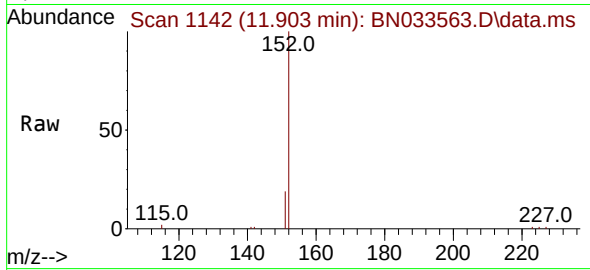
Tgt Ion:225 Resp: 4393  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.4 51.2 76.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.362 ng  
RT: 11.903 min Scan# 1145  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

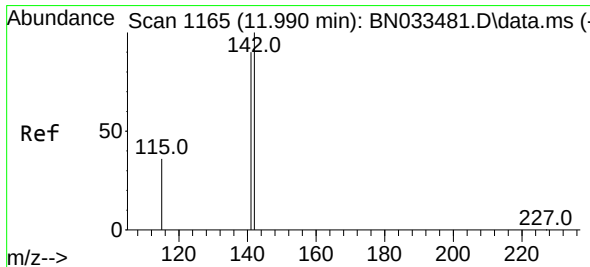
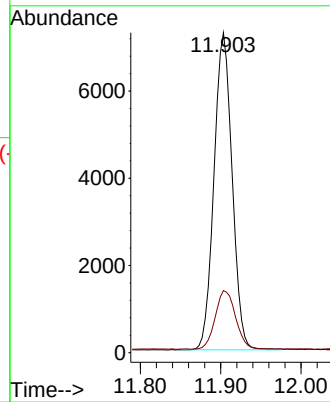
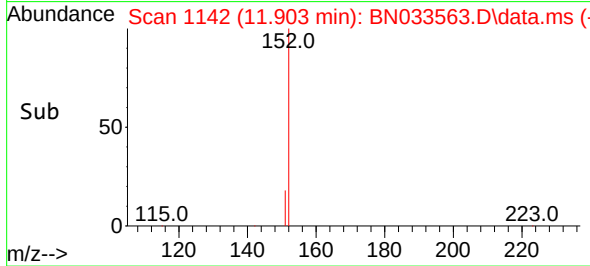
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:152 Resp: 1139  
Ion Ratio Lower Upper  
152 100  
151 20.7 16.6 25.0

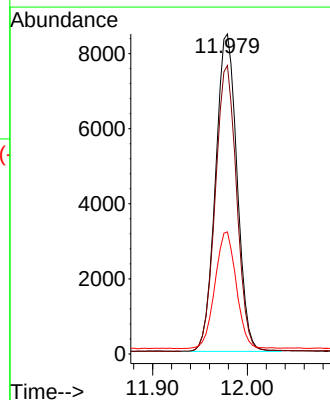
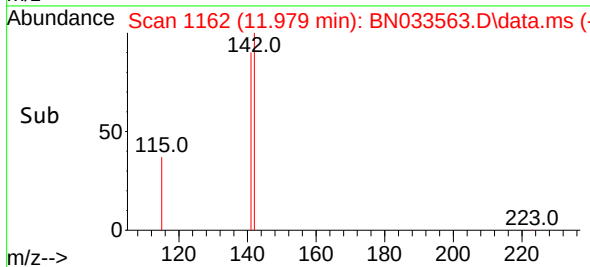
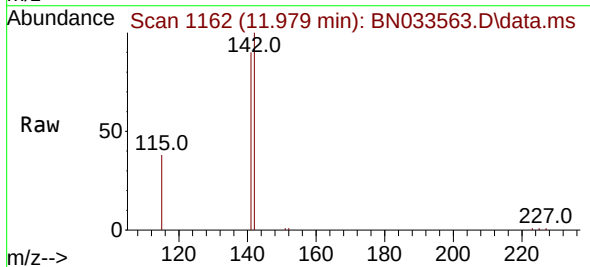
Manual Integrations  
**APPROVED**

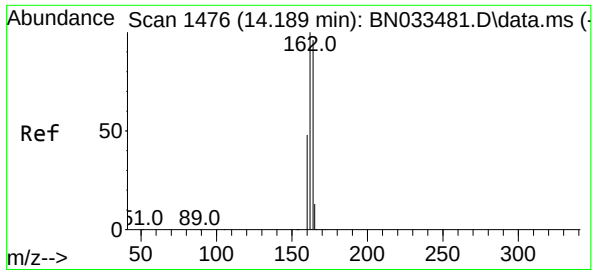
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.359 ng  
RT: 11.979 min Scan# 1162  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

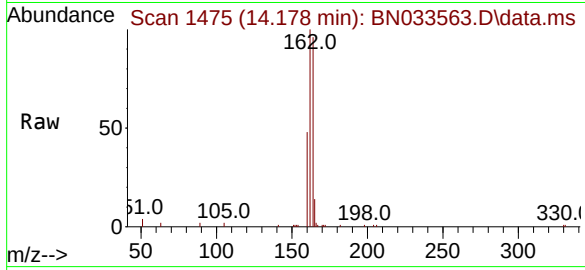
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Ion Ratio Lower Upper  
142 100  
141 90.1 71.7 107.5  
115 38.1 29.4 44.2





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

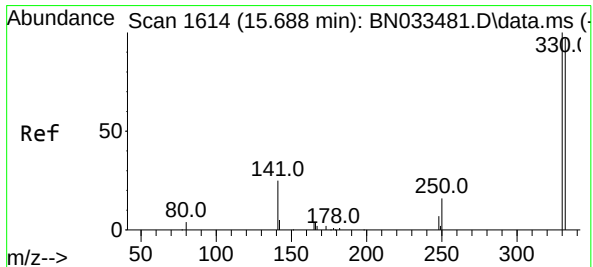
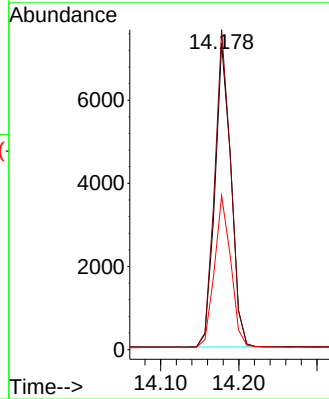
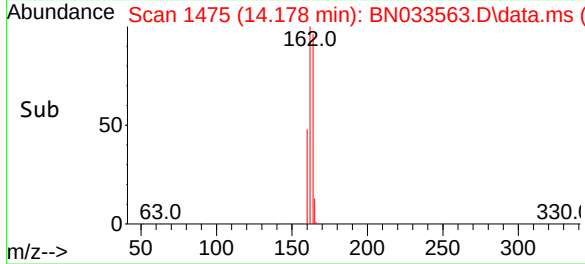
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



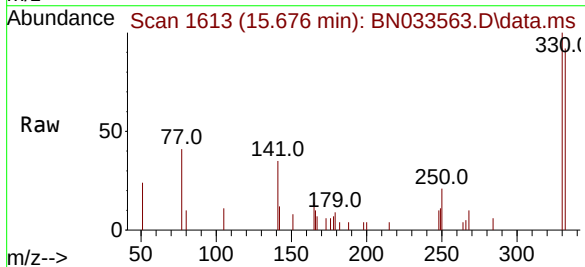
Tgt Ion:164 Resp: 10449  
Ion Ratio Lower Upper  
164 100  
162 104.5 83.5 125.3  
160 50.3 40.2 60.4

Manual Integrations  
**APPROVED**

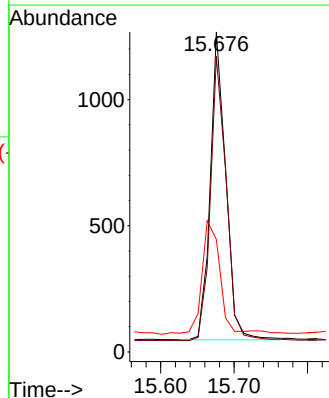
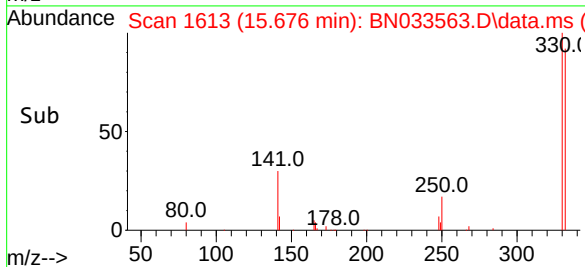
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

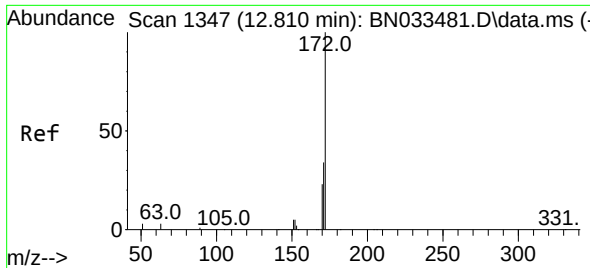


#14  
2,4,6-Tribromophenol  
Concen: 0.319 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03



Tgt Ion:330 Resp: 1794  
Ion Ratio Lower Upper  
330 100  
332 94.4 77.5 116.3  
141 44.1 33.9 50.9





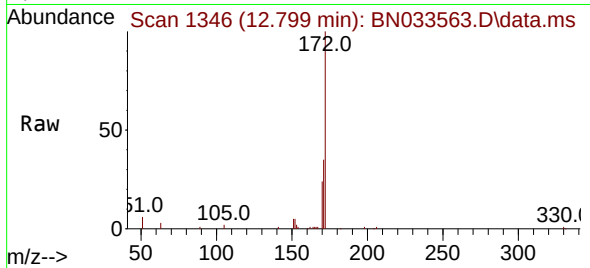
#15  
2-Fluorobiphenyl  
Concen: 0.383 ng  
RT: 12.799 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



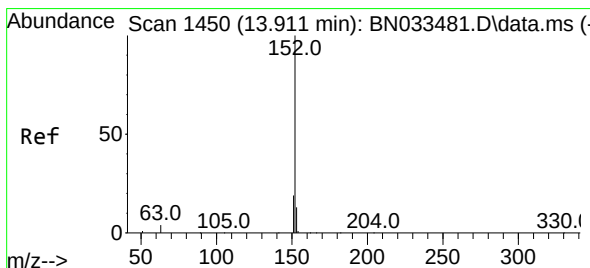
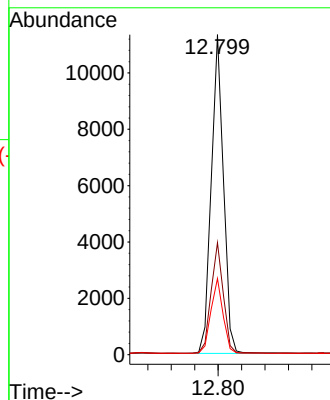
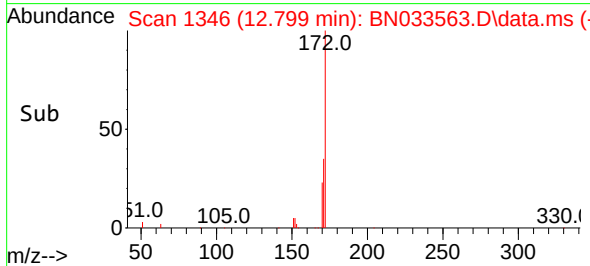
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.0  | 27.7  | 41.5  |
| 170     | 23.8  | 18.3  | 27.5  |

Manual Integrations

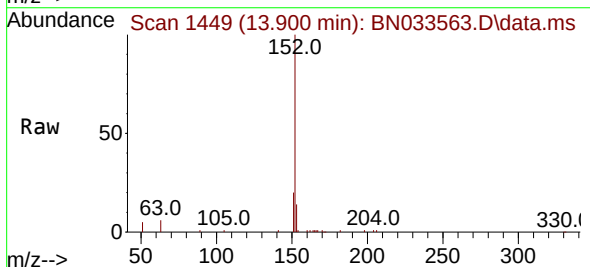
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

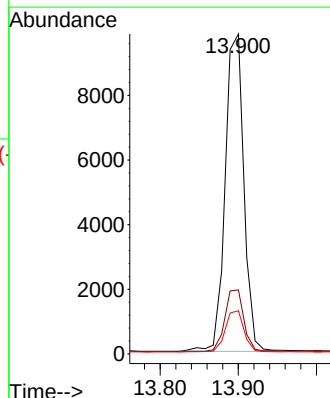
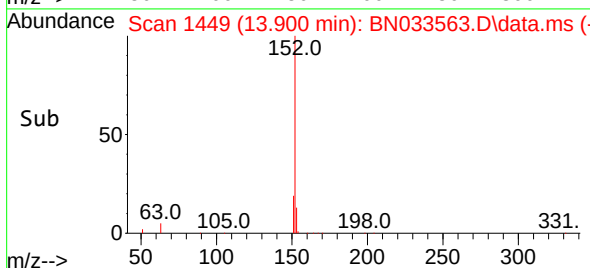
Supervised By :mohammad ahmed 08/24/2024

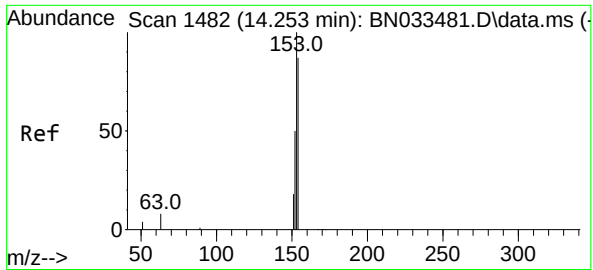


#16  
Acenaphthylene  
Concen: 0.357 ng  
RT: 13.900 min Scan# 1449  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03



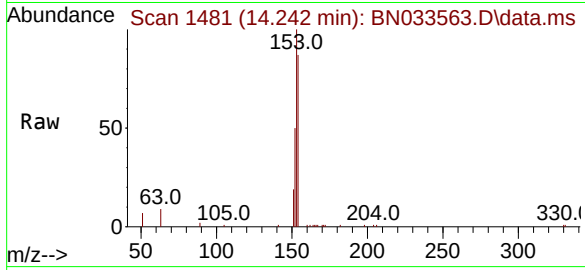
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 19.4  | 15.7  | 23.5  |
| 153     | 13.2  | 10.3  | 15.5  |





#17  
Acenaphthene  
Concen: 0.353 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

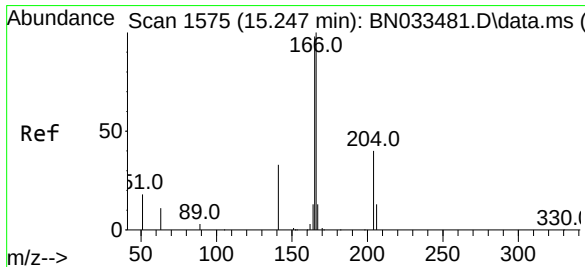
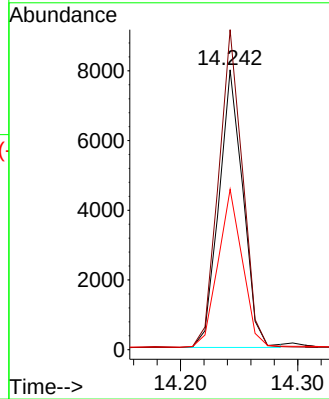
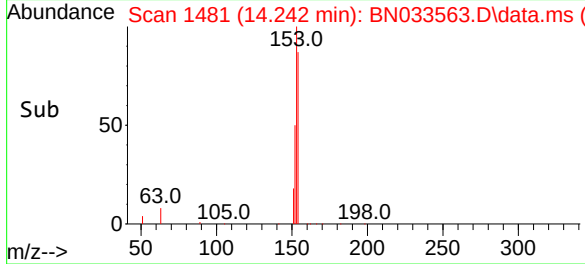
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:154 Resp: 11378  
Ion Ratio Lower Upper  
154 100  
153 113.9 89.0 133.6  
152 57.2 45.2 67.8

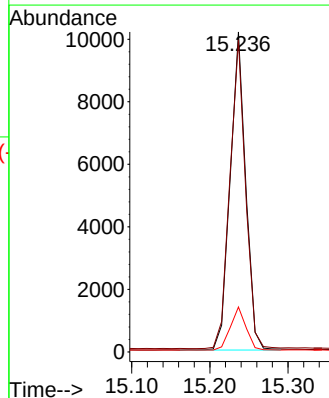
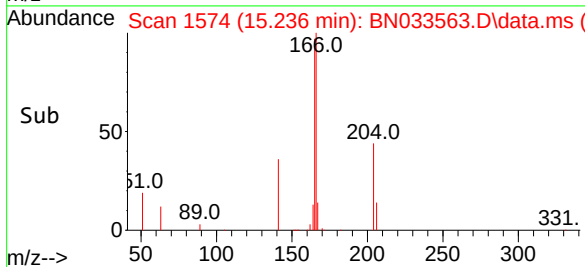
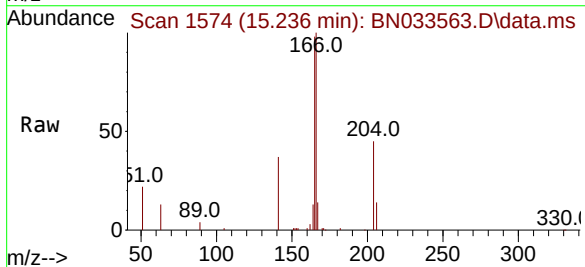
Manual Integrations  
**APPROVED**

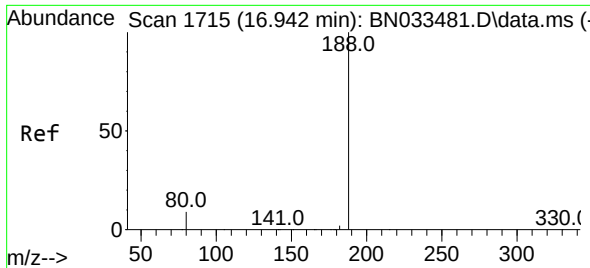
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#18  
Fluorene  
Concen: 0.345 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

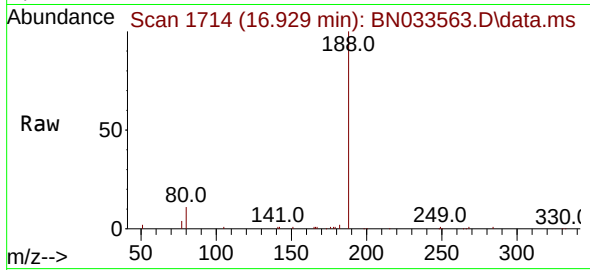
Tgt Ion:166 Resp: 14023  
Ion Ratio Lower Upper  
166 100  
165 98.0 78.2 117.4  
167 13.7 10.6 16.0





#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1714  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

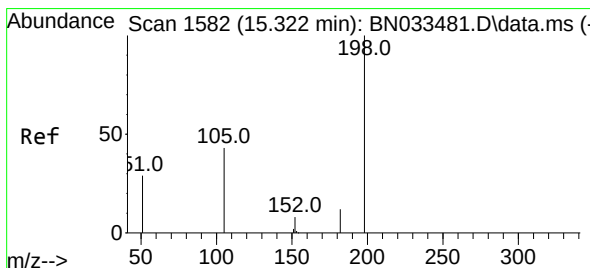
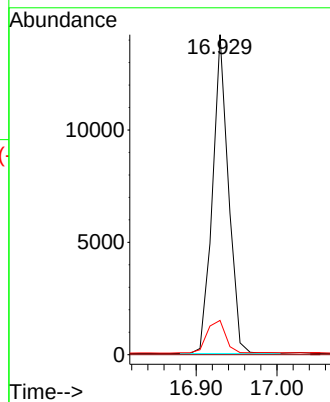
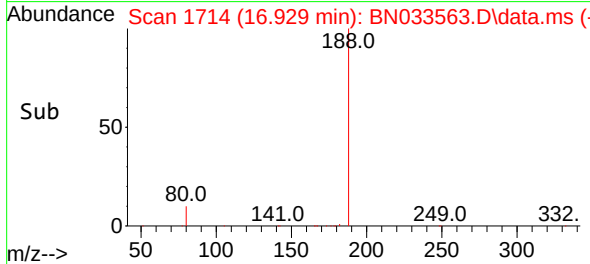
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:188 Resp: 19500  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 10.7 7.8 11.8

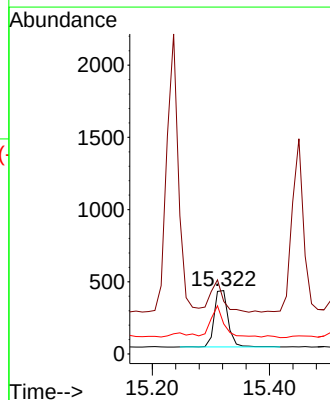
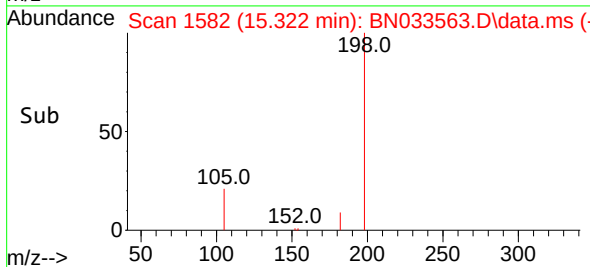
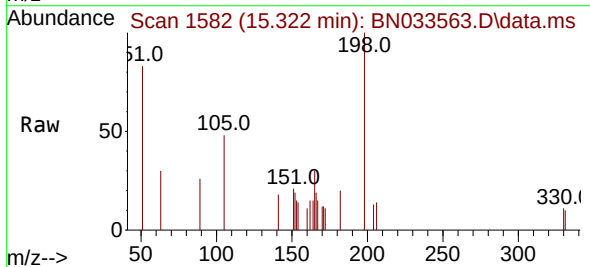
Manual Integrations  
**APPROVED**

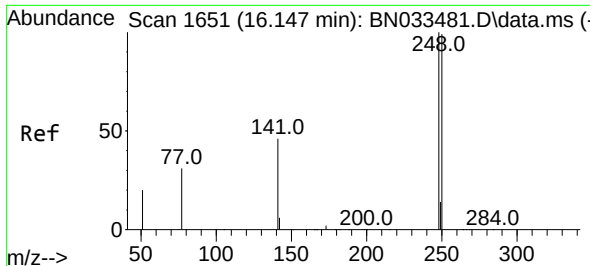
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.212 ng  
RT: 15.322 min Scan# 1582  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Tgt Ion:198 Resp: 646  
Ion Ratio Lower Upper  
198 100  
51 83.1 65.1 97.7  
105 47.6 44.8 67.2





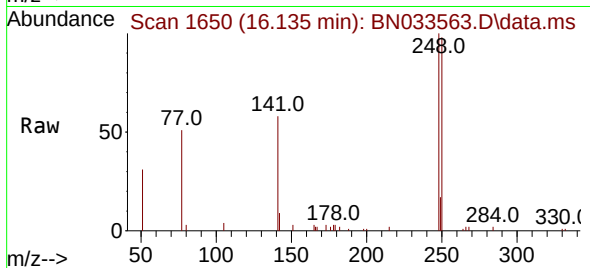
#21  
4-Bromophenyl-phenylether  
Concen: 0.374 ng  
RT: 16.135 min Scan# 1650  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



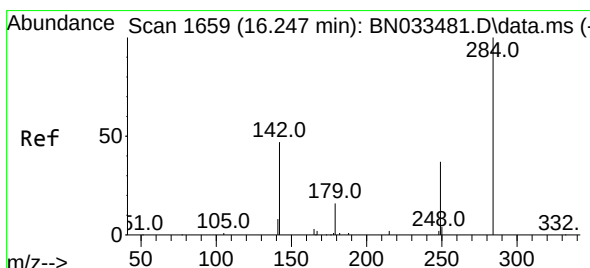
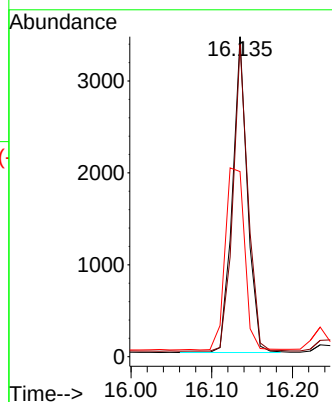
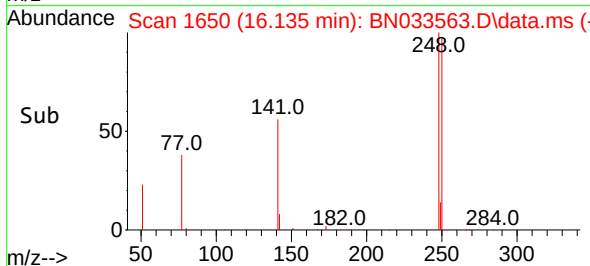
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 97.6  | 79.2  | 118.8 |
| 141     | 57.8  | 37.9  | 56.9  |

Manual Integrations

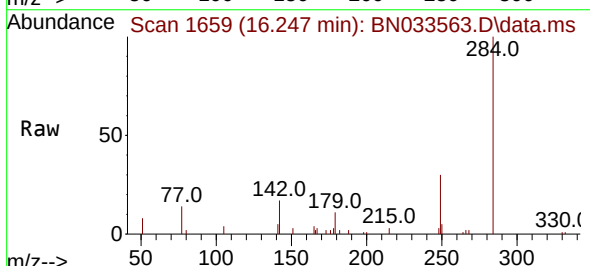
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

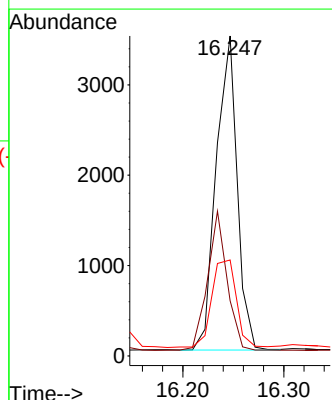
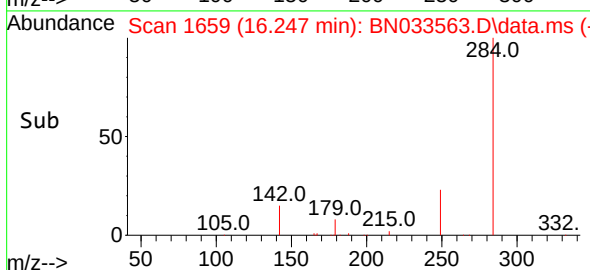
Supervised By :mohammad ahmed 08/24/2024



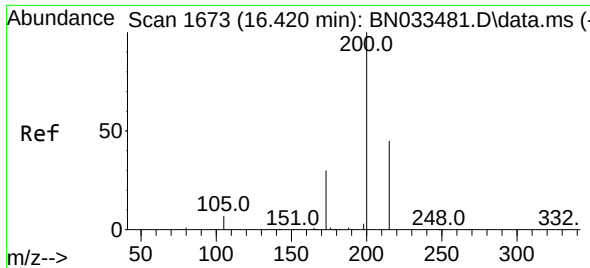
#22  
Hexachlorobenzene  
Concen: 0.383 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 41.1  | 31.8  | 47.6  |
| 249     | 32.7  | 26.0  | 39.0  |

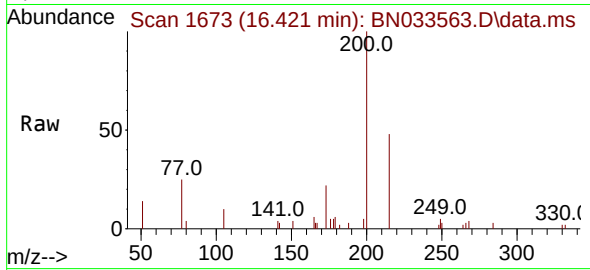






#23  
Atrazine  
Concen: 0.350 ng  
RT: 16.421 min Scan# 1673  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

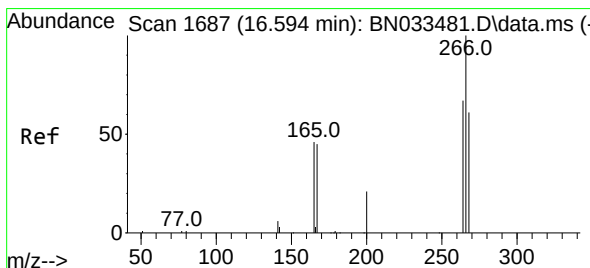
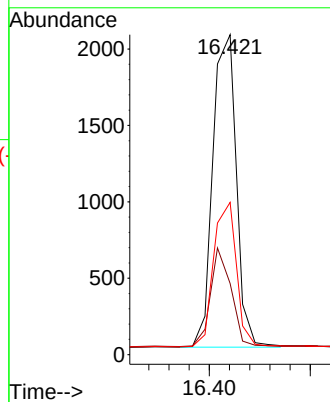
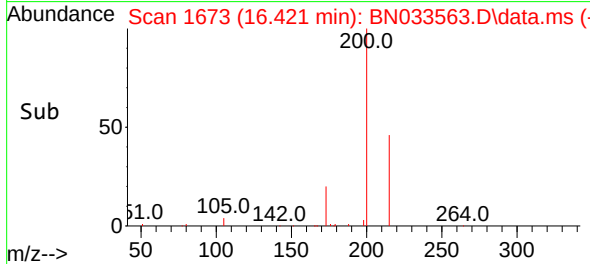
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:200 Resp: 3310  
Ion Ratio Lower Upper  
200 100  
173 22.3 25.3 37.9  
215 47.6 36.6 54.8

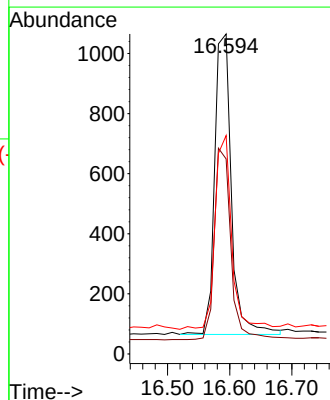
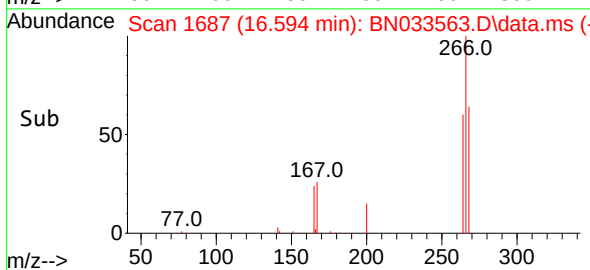
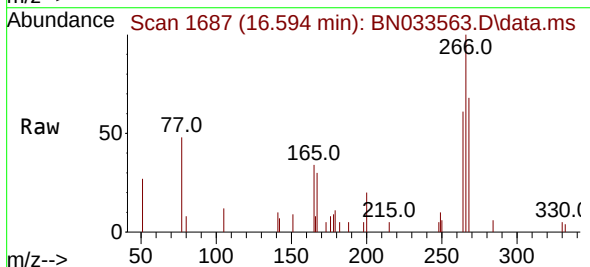
Manual Integrations  
APPROVED

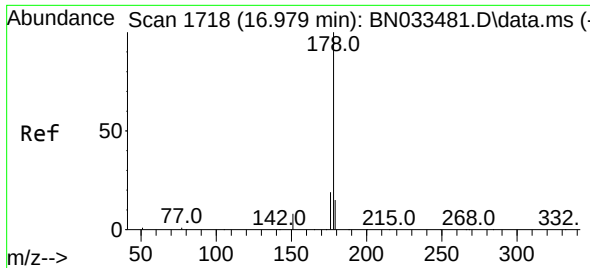
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#24  
Pentachlorophenol  
Concen: 0.330 ng  
RT: 16.594 min Scan# 1687  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

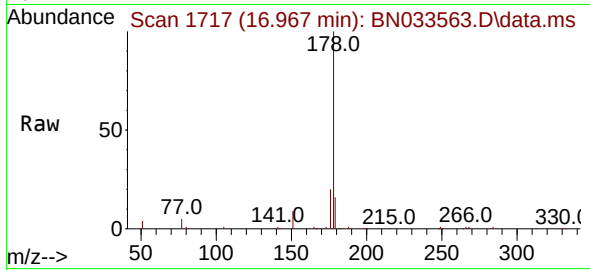
Tgt Ion:266 Resp: 1869  
Ion Ratio Lower Upper  
266 100  
264 62.9 51.9 77.9  
268 64.7 51.0 76.4





#25  
Phenanthrene  
Concen: 0.371 ng  
RT: 16.967 min Scan# 1717  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

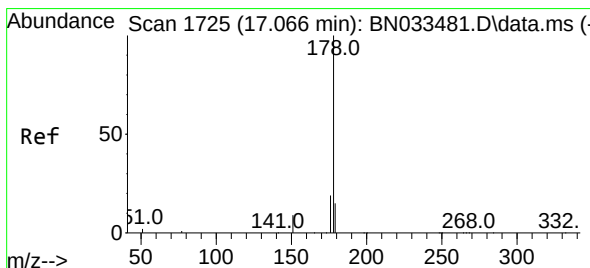
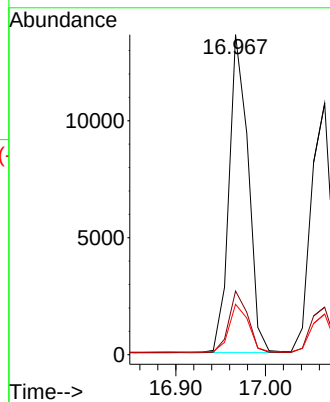
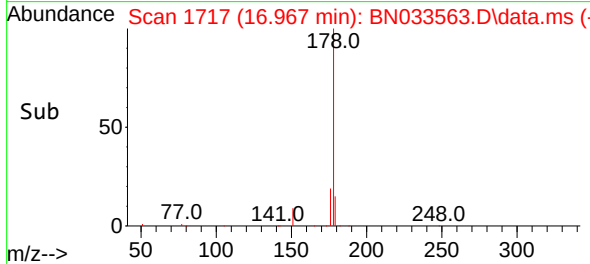
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:178 Resp: 20144  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.3 22.9  
179 15.2 12.3 18.5

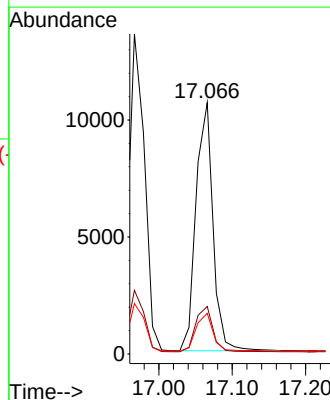
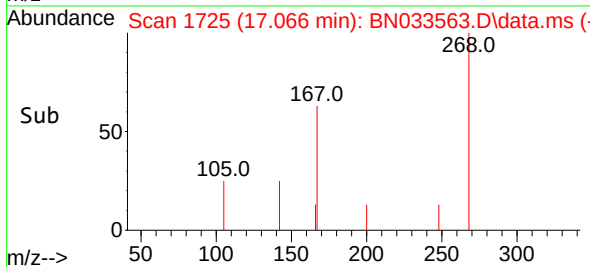
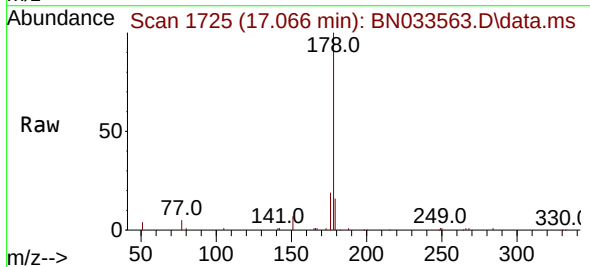
Manual Integrations  
**APPROVED**

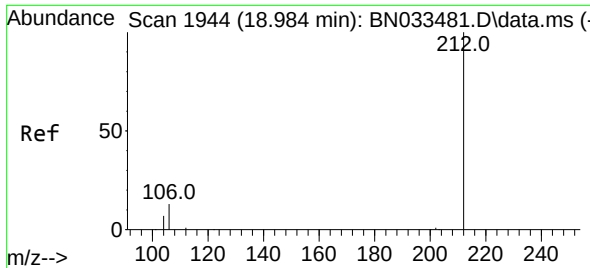
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#26  
Anthracene  
Concen: 0.356 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

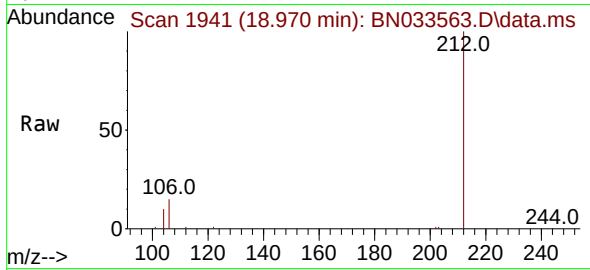
Tgt Ion:178 Resp: 17109  
Ion Ratio Lower Upper  
178 100  
176 18.6 15.0 22.6  
179 15.4 12.4 18.6





#27  
Fluoranthene-d10  
Concen: 0.355 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

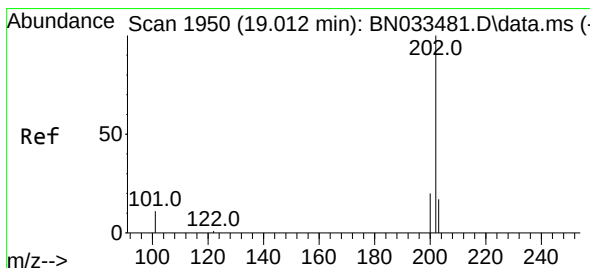
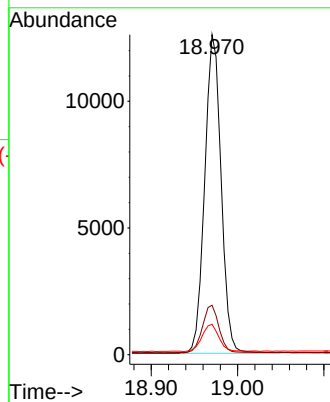
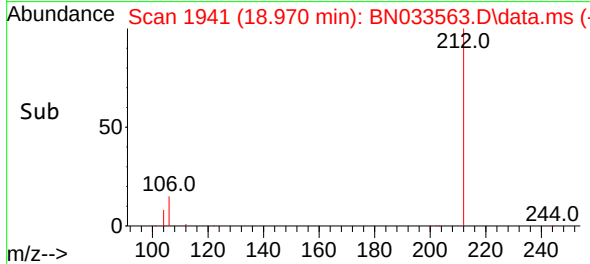
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



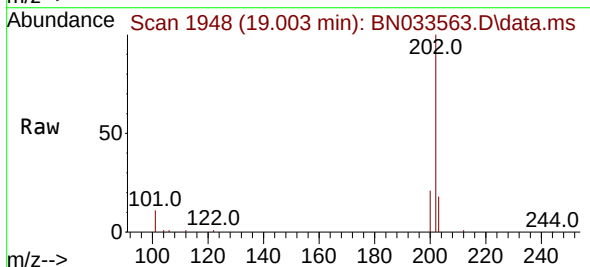
Tgt Ion:212 Resp: 1663  
Ion Ratio Lower Upper  
212 100  
106 15.1 12.3 18.5  
104 8.7 7.0 10.4

Manual Integrations  
APPROVED

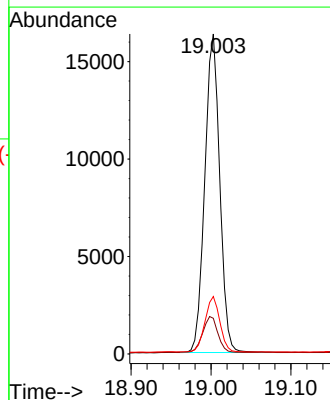
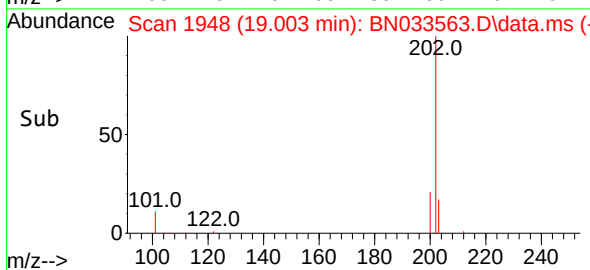
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

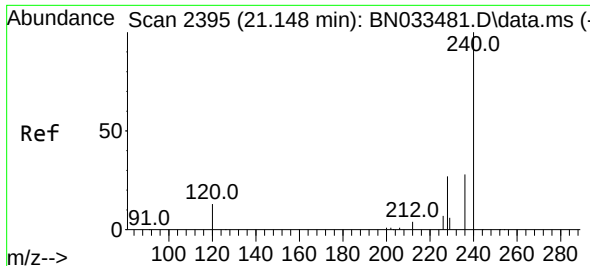


#28  
Fluoranthene  
Concen: 0.353 ng  
RT: 19.003 min Scan# 1948  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03



Tgt Ion:202 Resp: 21191  
Ion Ratio Lower Upper  
202 100  
101 11.8 9.5 14.3  
203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.139 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033563.D

Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

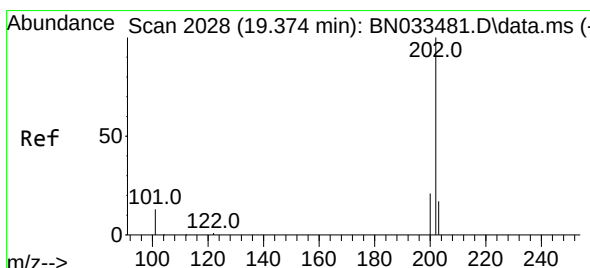
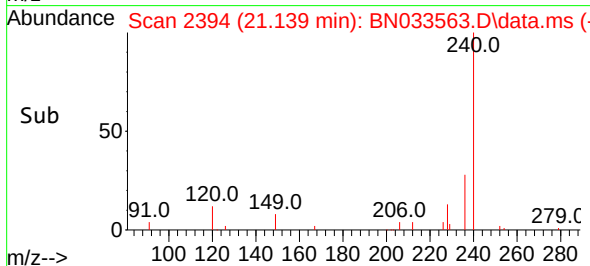
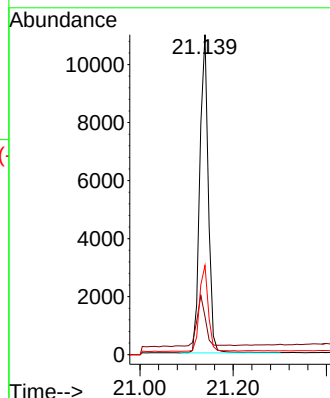
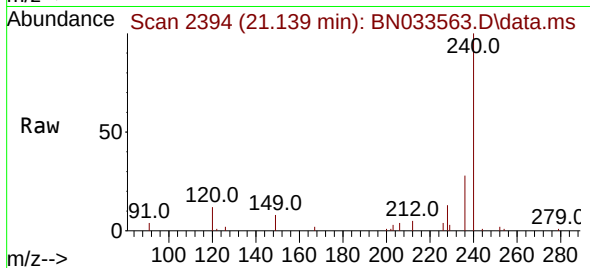
SSTDCCC0.4

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 240   | Resp: | 1394 |
| Ion Ratio | Lower | Upper |      |
| 240       | 100   |       |      |
| 120       | 11.9  | 12.4  | 18.6 |
| 236       | 27.9  | 23.0  | 34.6 |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#30

Pyrene

Concen: 0.348 ng

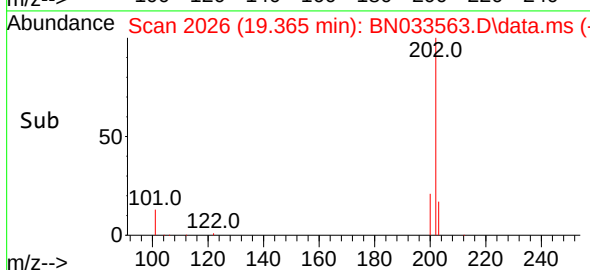
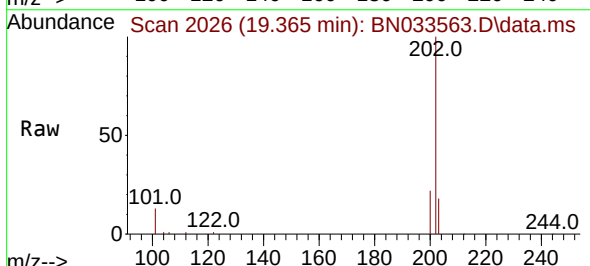
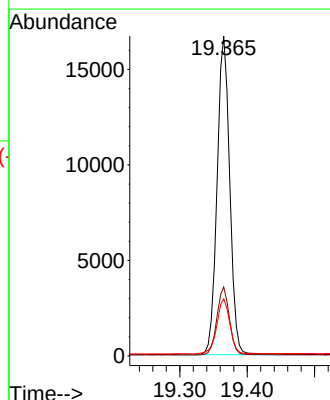
RT: 19.365 min Scan# 2026

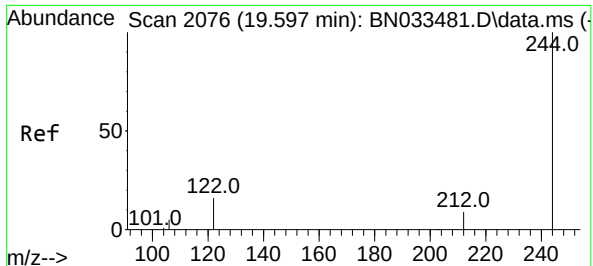
Delta R.T. 0.000 min

Lab File: BN033563.D

Acq: 22 Aug 2024 22:03

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 21665 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 200       | 21.1  | 16.6  | 24.8  |
| 203       | 17.8  | 14.2  | 21.4  |





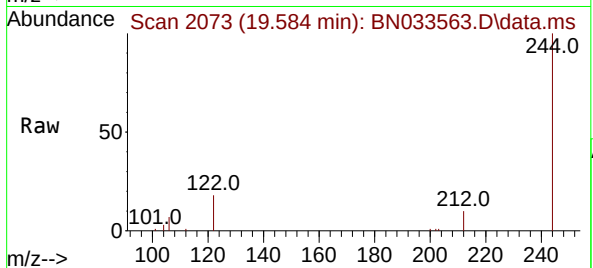
#31  
Terphenyl-d14  
Concen: 0.346 ng  
RT: 19.584 min Scan# 2076  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

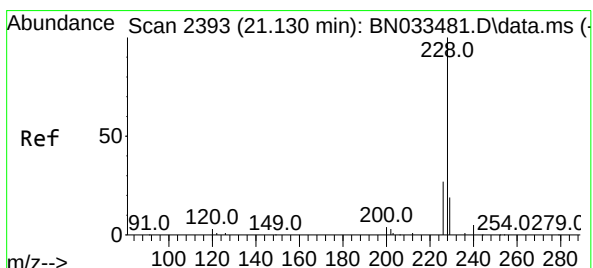
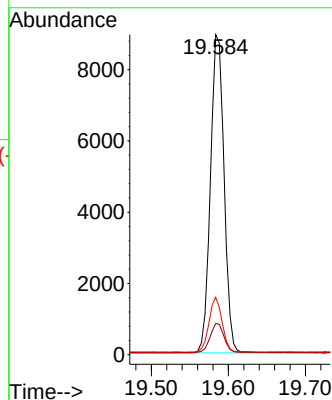
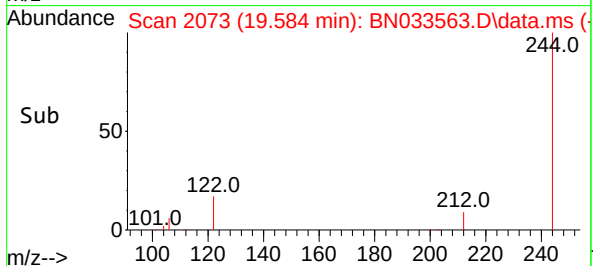


Tgt Ion:244 Resp: 1097  
Ion Ratio Lower Upper  
244 100  
212 9.8 7.8 11.6  
122 17.9 13.3 19.9

Manual Integrations

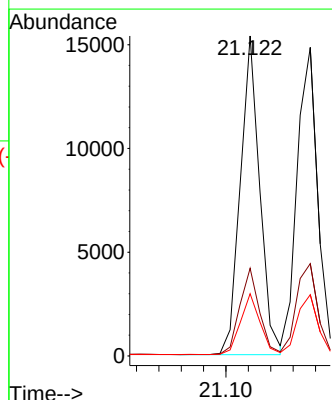
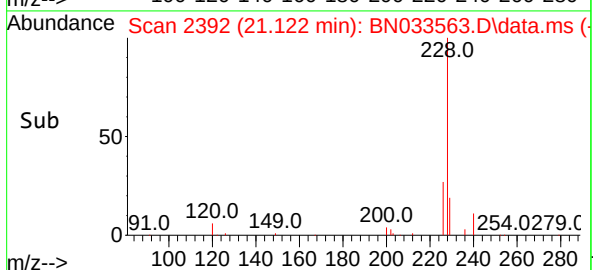
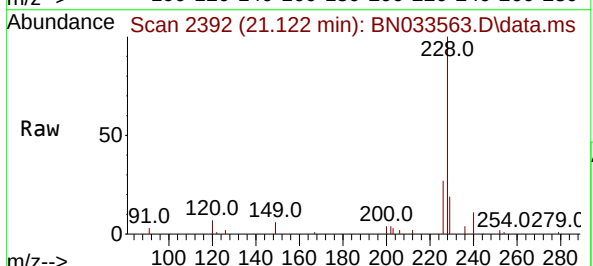
APPROVED

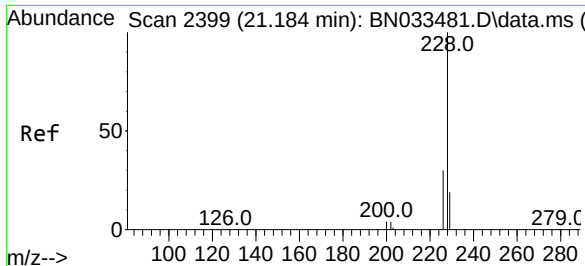
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#32  
Benzo(a)anthracene  
Concen: 0.367 ng  
RT: 21.122 min Scan# 2392  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Tgt Ion:228 Resp: 18513  
Ion Ratio Lower Upper  
228 100  
226 27.4 21.8 32.6  
229 19.5 15.8 23.6





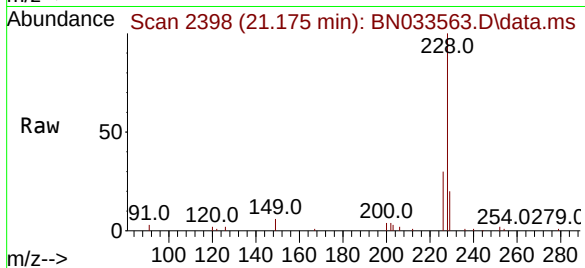
#33  
Chrysene  
Concen: 0.375 ng  
RT: 21.175 min Scan# 2117  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



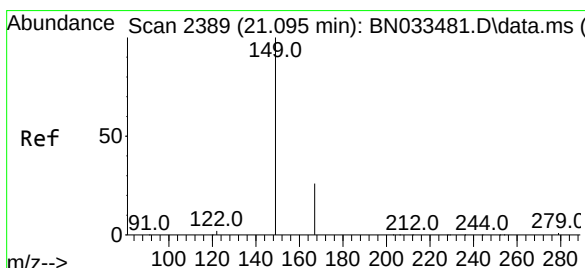
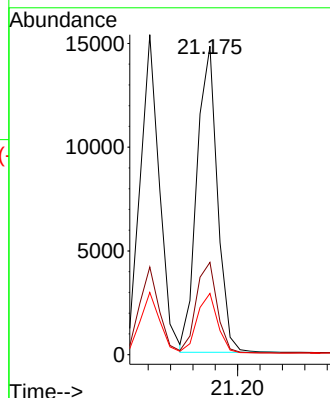
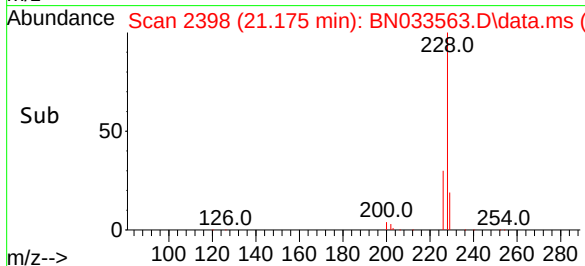
Tgt Ion:228 Resp: 18774  
Ion Ratio Lower Upper  
228 100  
226 29.9 23.8 35.8  
229 19.9 15.6 23.4

Manual Integrations

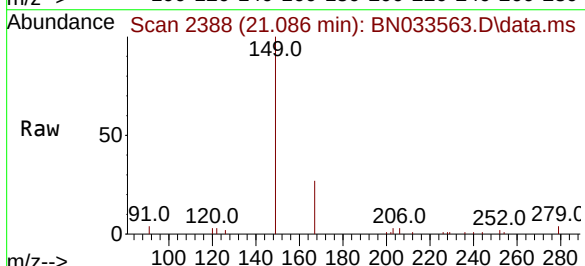
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

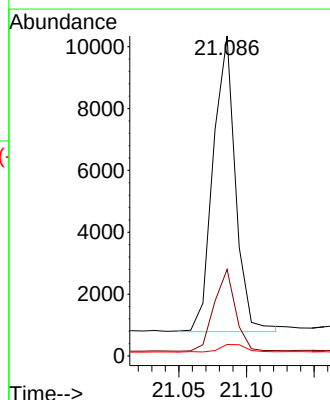
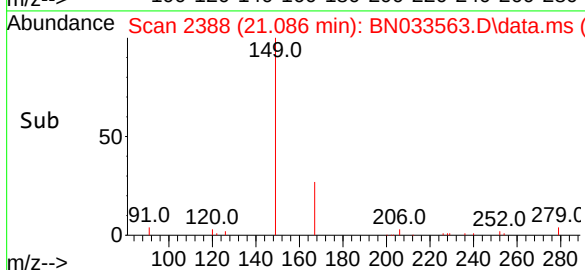
Supervised By :mohammad ahmed 08/24/2024

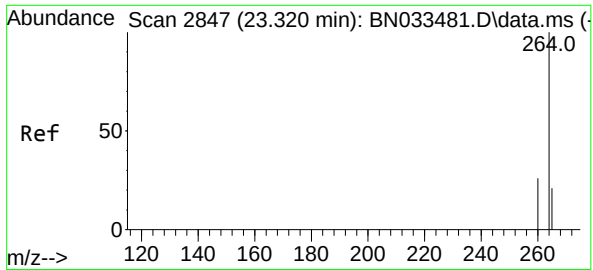


#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.344 ng m  
RT: 21.086 min Scan# 2388  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03



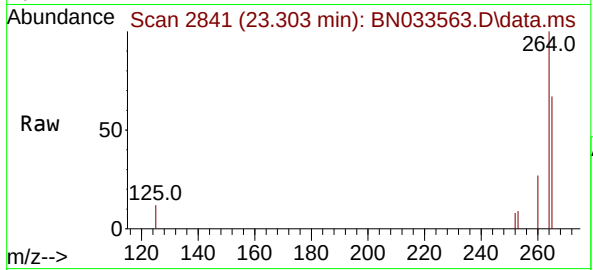
Tgt Ion:149 Resp: 10987  
Ion Ratio Lower Upper  
149 100  
167 28.4 21.5 32.3  
279 13.4 2.2 3.2#





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.303 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

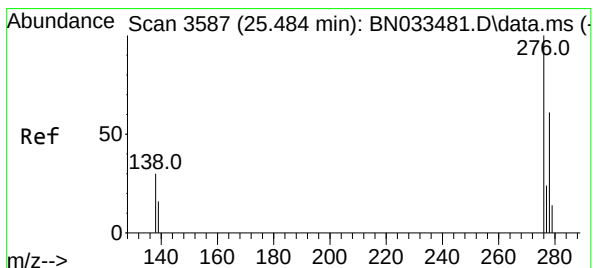
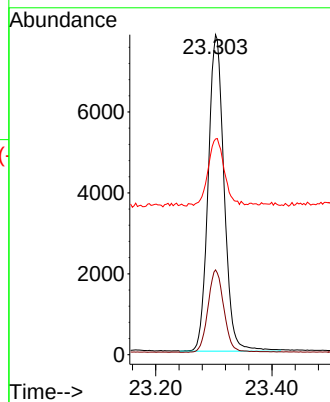
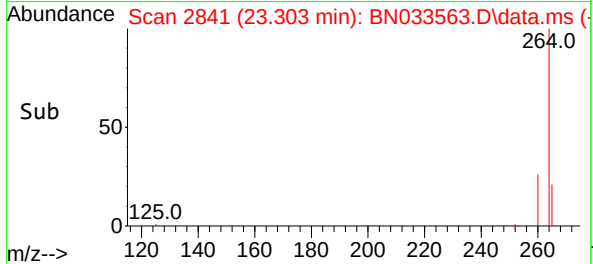
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:264 Resp: 14850  
Ion Ratio Lower Upper  
264 100  
260 26.5 20.8 31.2  
265 67.4 52.2 78.2

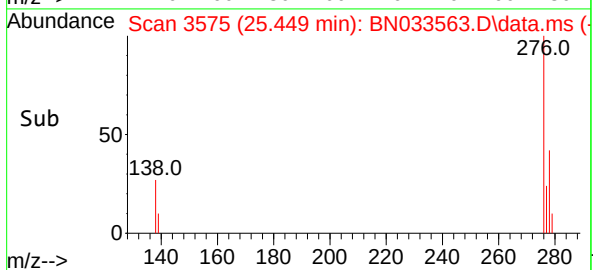
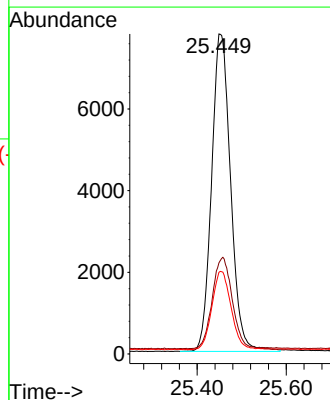
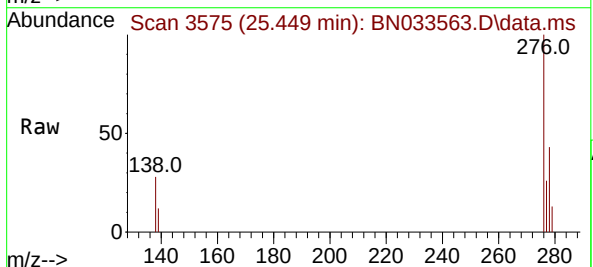
Manual Integrations  
APPROVED

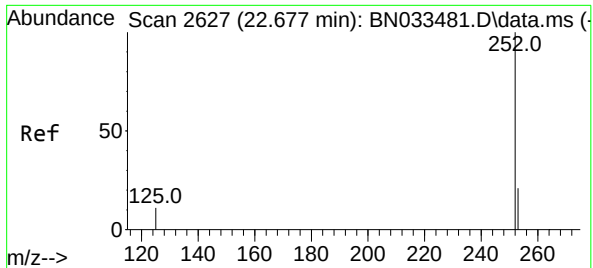
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.375 ng  
RT: 25.449 min Scan# 3575  
Delta R.T. 0.000 min  
Lab File: BN033563.D  
Acq: 22 Aug 2024 22:03

Tgt Ion:276 Resp: 23101  
Ion Ratio Lower Upper  
276 100  
138 30.1 24.4 36.6  
277 24.8 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.366 ng

RT: 22.660 min Scan# 2621

Delta R.T. 0.000 min

Lab File: BN033563.D

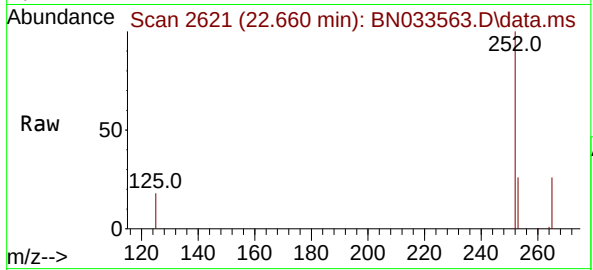
Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



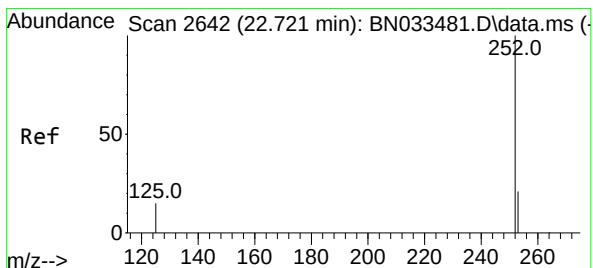
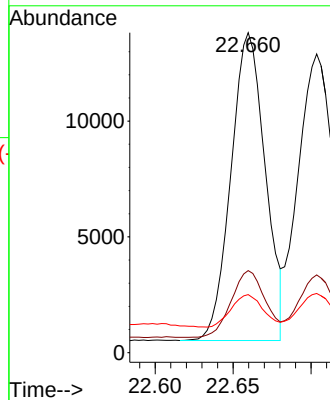
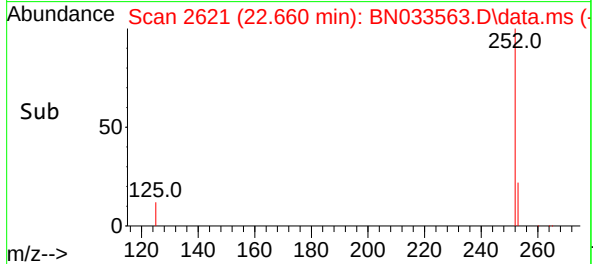
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 2032 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 25.6  | 19.8  | 29.8 |
| 125       | 18.2  | 13.9  | 20.9 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#38

Benzo(k)fluoranthene

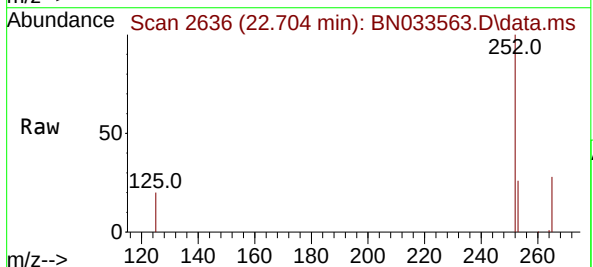
Concen: 0.367 ng

RT: 22.704 min Scan# 2636

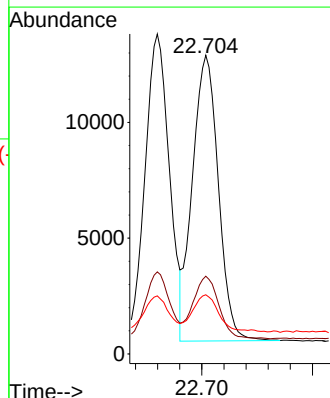
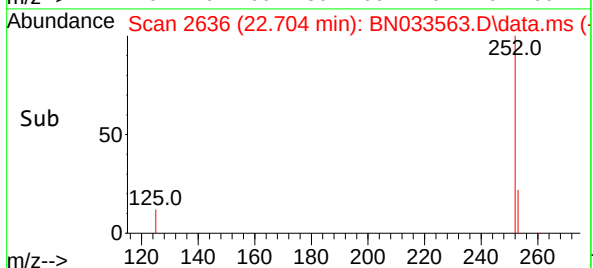
Delta R.T. 0.000 min

Lab File: BN033563.D

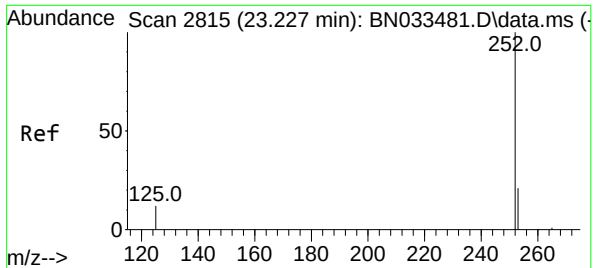
Acq: 22 Aug 2024 22:03



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 20060 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 26.1  | 19.8  | 29.8  |
| 125       | 19.8  | 15.8  | 23.8  |







#39

Benzo(a)pyrene

Concen: 0.366 ng

RT: 23.209 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN033563.D

Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

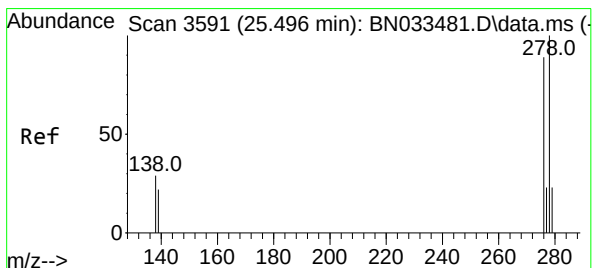
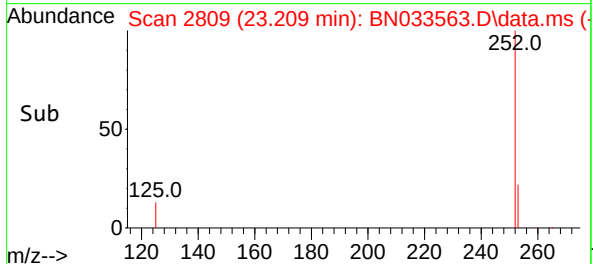
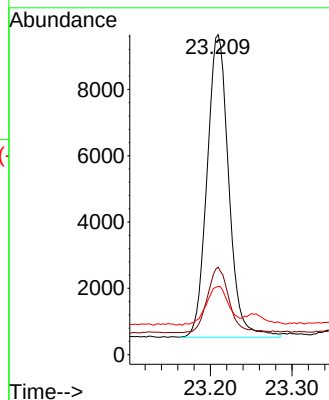
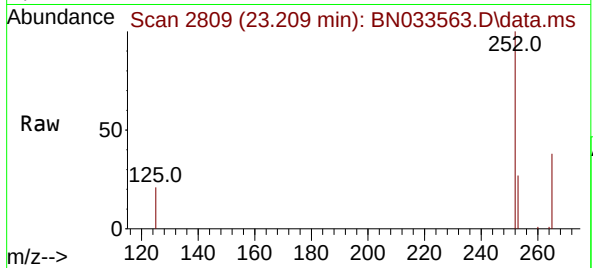
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 1679 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 27.3  | 21.5  | 32.3 |
| 125       | 21.3  | 17.0  | 25.4 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#40

Dibenzo(a,h)anthracene

Concen: 0.371 ng

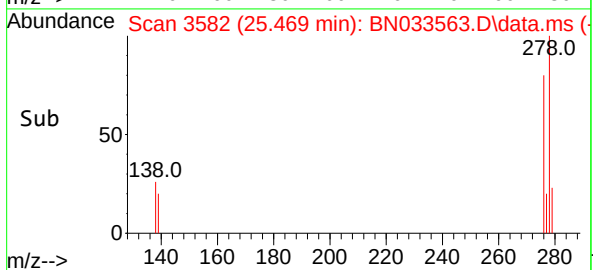
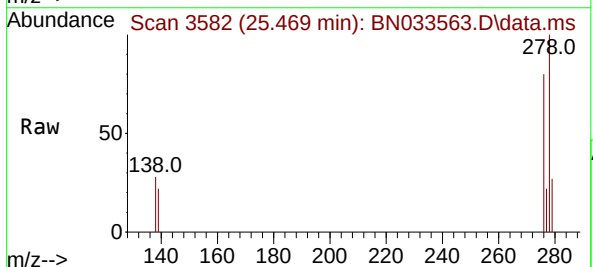
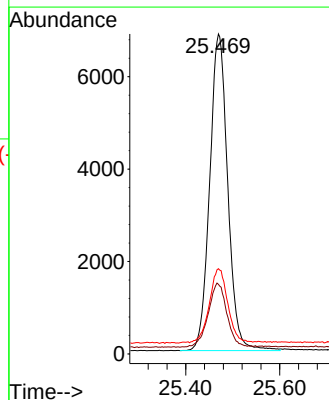
RT: 25.469 min Scan# 3582

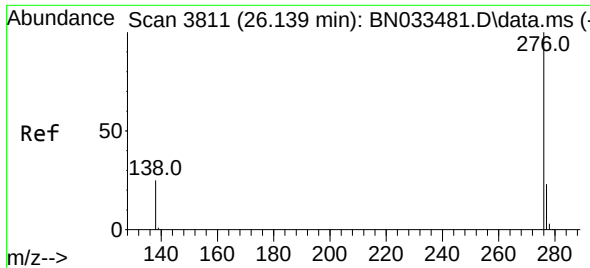
Delta R.T. 0.000 min

Lab File: BN033563.D

Acq: 22 Aug 2024 22:03

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 18290 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 21.7  | 19.1  | 28.7  |
| 279       | 26.7  | 21.0  | 31.4  |





#41

Benzo(g,h,i)perylene

Concen: 0.374 ng

RT: 26.104 min Scan# 31

Delta R.T. 0.000 min

Lab File: BN033563.D

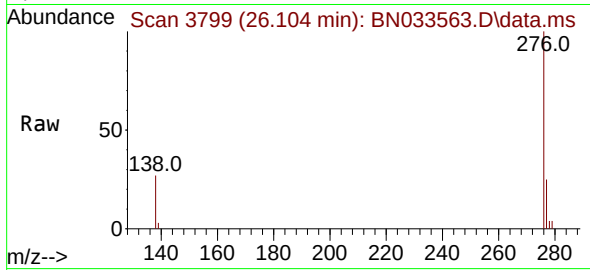
Acq: 22 Aug 2024 22:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



Tgt Ion:276 Resp: 19730

Ion Ratio Lower Upper

276 100

277 24.7 19.7 29.5

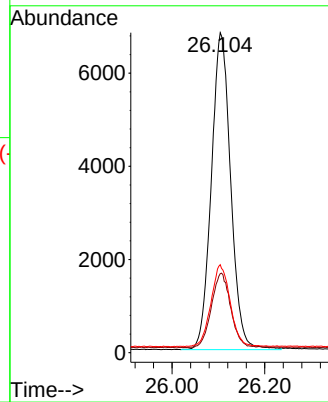
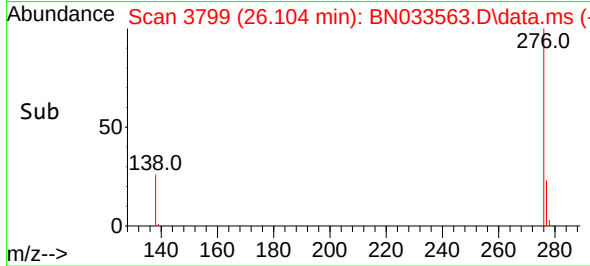
138 27.5 21.8 32.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033563.D  
Acq On : 22 Aug 2024 22:03  
Operator : MA/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_N  
LabSampleId :  
SSTDCCC0.4

Quant Time: Aug 23 00:23:24 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|---------|----------------------------|-------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 1.000 | 1.000 | 0.0   | 65    | 0.00     |
| 2       | 1,4-Dioxane                | 0.460 | 0.403 | 12.4  | 80    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.535 | 0.466 | 12.9  | 67    | 0.00     |
| 4 S     | 2-Fluorophenol             | 1.271 | 1.055 | 17.0  | 54    | 0.00     |
| 5 S     | Phenol-d6                  | 1.512 | 1.314 | 13.1  | 63    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.072 | 1.024 | 4.5   | 89    | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 90    | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.332 | 0.295 | 11.1  | 88    | 0.00     |
| 9       | Naphthalene                | 1.069 | 0.983 | 8.0   | 94    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.213 | 0.200 | 6.1   | 94    | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.572 | 0.518 | 9.4   | 95    | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.677 | 0.607 | 10.3  | 94    | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 87    | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.215 | 0.172 | 20.0  | 81    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 1.634 | 1.564 | 4.3   | 92    | 0.00     |
| 16      | Acenaphthylene             | 1.754 | 1.565 | 10.8  | 89    | 0.00     |
| 17      | Acenaphthene               | 1.234 | 1.089 | 11.8  | 86    | 0.00     |
| 18      | Fluorene                   | 1.555 | 1.342 | 13.7  | 85    | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 80    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.062 | 0.033 | 46.8# | 52    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.243 | 0.227 | 6.6   | 82    | 0.00     |
| 22      | Hexachlorobenzene          | 0.268 | 0.257 | 4.1   | 82    | 0.00     |
| 23      | Atrazine                   | 0.194 | 0.170 | 12.4  | 78    | 0.00     |
| 24      | Pentachlorophenol          | 0.116 | 0.096 | 17.2  | 79    | 0.00     |
| 25      | Phenanthrene               | 1.113 | 1.033 | 7.2   | 80    | 0.00     |
| 26      | Anthracene                 | 0.985 | 0.877 | 11.0  | 80    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.961 | 0.853 | 11.2  | 78    | 0.00     |
| 28      | Fluoranthene               | 1.230 | 1.087 | 11.6  | 78    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 87    | 0.00     |
| 30      | Pyrene                     | 1.785 | 1.554 | 12.9  | 79    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.909 | 0.787 | 13.4  | 79    | 0.00     |
| 32      | Benzo(a)anthracene         | 1.446 | 1.328 | 8.2   | 87    | 0.00     |
| 33      | Chrysene                   | 1.437 | 1.346 | 6.3   | 87    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.915 | 0.788 | 13.9  | 84    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 93    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.661 | 1.555 | 6.4   | 95    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.494 | 1.368 | 8.4   | 96    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.470 | 1.350 | 8.2   | 95    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.236 | 1.131 | 8.5   | 96    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.328 | 1.231 | 7.3   | 93    | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.420 | 1.328 | 6.5   | 96    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033563.D  
Acq On : 22 Aug 2024 22:03  
Operator : MA/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_N  
LabSampleId :  
SSTDCCC0.4

Quant Time: Aug 23 00:23:24 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | Amount | Calc. | %Dev  | Area% | Dev(min) |
|---------|----------------------------|--------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 0.400  | 0.400 | 0.0   | 65    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.350 | 12.5  | 80    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.348 | 13.0  | 67    | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.332 | 17.0  | 54    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.348 | 13.0  | 63    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.382 | 4.5   | 89    | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 90    | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.355 | 11.3  | 88    | 0.00     |
| 9       | Naphthalene                | 0.400  | 0.368 | 8.0   | 94    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.374 | 6.5   | 94    | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.362 | 9.5   | 95    | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.359 | 10.3  | 94    | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 87    | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.319 | 20.3  | 81    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.383 | 4.3   | 92    | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.357 | 10.8  | 89    | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.353 | 11.8  | 86    | 0.00     |
| 18      | Fluorene                   | 0.400  | 0.345 | 13.8  | 85    | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 80    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.212 | 47.0# | 52    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.374 | 6.5   | 82    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.383 | 4.3   | 82    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.350 | 12.5  | 78    | 0.00     |
| 24      | Pentachlorophenol          | 0.400  | 0.330 | 17.5  | 79    | 0.00     |
| 25      | Phenanthrene               | 0.400  | 0.371 | 7.3   | 80    | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.356 | 11.0  | 80    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.355 | 11.3  | 78    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.353 | 11.8  | 78    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 87    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.348 | 13.0  | 79    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.346 | 13.5  | 79    | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.367 | 8.3   | 87    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.375 | 6.3   | 87    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.344 | 14.0  | 84    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 93    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.375 | 6.3   | 95    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.366 | 8.5   | 96    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.367 | 8.3   | 95    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.366 | 8.5   | 96    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.371 | 7.3   | 93    | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.374 | 6.5   | 96    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
Fax : 908 789 8922

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JAC005

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG No.: P3671

Instrument ID: BNA\_N Calibration Date/Time: 08/23/2024 09:48

Lab File ID: BN033582.D Init. Calib. Date(s): 08/19/2024 08/19/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 16:16 19:53

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND                | RRF   | RRF0.4 | MIN<br>RRF | %D    | MAX%D |
|-------------------------|-------|--------|------------|-------|-------|
| 2-Methylnaphthalene-d10 | 0.572 | 0.537  |            | -6.1  | 20.0  |
| Fluoranthene-d10        | 0.961 | 0.996  |            | 3.6   | 20.0  |
| 2-Fluorophenol          | 1.271 | 1.116  |            | -12.2 | 20.0  |
| Phenol-d6               | 1.512 | 1.361  |            | -10.0 | 20.0  |
| Nitrobenzene-d5         | 0.332 | 0.305  |            | -8.1  | 20.0  |
| Naphthalene             | 1.069 | 0.979  |            | -8.4  | 20.0  |
| 2-Methylnaphthalene     | 0.677 | 0.621  |            | -8.3  | 20.0  |
| 2-Fluorobiphenyl        | 1.634 | 1.456  |            | -10.9 | 20.0  |
| Acenaphthylene          | 1.754 | 1.541  |            | -12.1 | 20.0  |
| Acenaphthene            | 1.234 | 1.077  |            | -12.7 | 20.0  |
| Fluorene                | 1.555 | 1.395  |            | -10.3 | 20.0  |
| 2,4,6-Tribromophenol    | 0.215 | 0.215  |            | 0.0   | 20.0  |
| Phenanthrene            | 1.113 | 1.005  |            | -9.7  | 20.0  |
| Anthracene              | 0.985 | 0.894  |            | -9.2  | 20.0  |
| Fluoranthene            | 1.230 | 1.243  |            | 1.1   | 20.0  |
| Pyrene                  | 1.785 | 1.433  |            | -19.7 | 20.0  |
| Terphenyl-d14           | 0.909 | 0.768  |            | -15.5 | 20.0  |
| Benzo(a)anthracene      | 1.446 | 1.377  |            | -4.8  | 20.0  |
| Chrysene                | 1.437 | 1.334  |            | -7.2  | 20.0  |
| Benzo(b)fluoranthene    | 1.494 | 1.327  |            | -11.2 | 20.0  |
| Benzo(k)fluoranthene    | 1.470 | 1.255  |            | -14.6 | 20.0  |
| Benzo(a)pyrene          | 1.236 | 1.116  |            | -9.7  | 20.0  |
| Indeno(1,2,3-cd)pyrene  | 1.661 | 1.484  |            | -10.7 | 20.0  |
| Dibenzo(a,h)anthracene  | 1.328 | 1.183  |            | -10.9 | 20.0  |
| Benzo(g,h,i)perylene    | 1.420 | 1.247  |            | -12.2 | 20.0  |
| 1,4-Dioxane             | 0.460 | 0.443  |            | -3.7  | 20.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033582.D  
 Acq On : 23 Aug 2024 09:48  
 Operator : MA/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024

Quant Time: Aug 23 13:38:16 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7007     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.304 | 136  | 18519    | 0.400 | ng    | # 0.00    |
| 13) Acenaphthene-d10          | 14.178 | 164  | 9756     | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 16.929 | 188  | 21233    | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.139 | 240  | 19542    | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.306 | 264  | 22177    | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.176  | 112  | 7822     | 0.351 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.729  | 99   | 9537     | 0.360 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.670  | 82   | 5644     | 0.367 | ng    | -0.01     |
| 11) 2-Methylnaphthalene-d10   | 11.899 | 152  | 9940     | 0.375 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 2093     | 0.399 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 14208    | 0.357 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 18.970 | 212  | 21144    | 0.414 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.583 | 244  | 15002    | 0.338 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 2) 1,4-Dioxane                | 3.183  | 88   | 3102     | 0.385 | ng    | Qvalue 93 |
| 3) n-Nitrosodimethylamine     | 3.471  | 42   | 3090     | 0.330 | ng    | # 99      |
| 6) bis(2-Chloroethyl)ether    | 6.981  | 93   | 7079     | 0.377 | ng    | 99        |
| 9) Naphthalene                | 10.346 | 128  | 18130    | 0.366 | ng    | 99        |
| 10) Hexachlorobutadiene       | 10.645 | 225  | 3685     | 0.373 | ng    | # 100     |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 11497    | 0.367 | ng    | 99        |
| 16) Acenaphthylene            | 13.889 | 152  | 15033    | 0.351 | ng    | 100       |
| 17) Acenaphthene              | 14.242 | 154  | 10508    | 0.349 | ng    | 98        |
| 18) Fluorene                  | 15.236 | 166  | 13611    | 0.359 | ng    | 99        |
| 20) 4,6-Dinitro-2-methylph... | 15.311 | 198  | 1295     | 0.391 | ng    | 94        |
| 21) 4-Bromophenyl-phenylether | 16.135 | 248  | 4554     | 0.353 | ng    | 98        |
| 22) Hexachlorobenzene         | 16.247 | 284  | 5166     | 0.363 | ng    | 99        |
| 23) Atrazine                  | 16.408 | 200  | 3931     | 0.382 | ng    | 98        |
| 24) Pentachlorophenol         | 16.582 | 266  | 2455     | 0.398 | ng    | 98        |
| 25) Phenanthrene              | 16.966 | 178  | 21333    | 0.361 | ng    | 100       |
| 26) Anthracene                | 17.053 | 178  | 18975    | 0.363 | ng    | 99        |
| 28) Fluoranthene              | 18.998 | 202  | 26399    | 0.404 | ng    | 100       |
| 30) Pyrene                    | 19.365 | 202  | 28003    | 0.321 | ng    | 100       |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 26910    | 0.381 | ng    | 100       |
| 33) Chrysene                  | 21.175 | 228  | 26060    | 0.371 | ng    | 100       |
| 34) Bis(2-ethylhexyl)phtha... | 21.085 | 149  | 19294m   | 0.431 | ng    |           |
| 36) Indeno(1,2,3-cd)pyrene    | 25.454 | 276  | 32901    | 0.357 | ng    | 98        |
| 37) Benzo(b)fluoranthene      | 22.659 | 252  | 29428    | 0.355 | ng    | 99        |
| 38) Benzo(k)fluoranthene      | 22.703 | 252  | 27836    | 0.341 | ng    | 98        |
| 39) Benzo(a)pyrene            | 23.209 | 252  | 24756    | 0.361 | ng    | 97        |
| 40) Dibenzo(a,h)anthracene    | 25.466 | 278  | 26225    | 0.356 | ng    | 97        |
| 41) Benzo(g,h,i)perylene      | 26.106 | 276  | 27657    | 0.351 | ng    | 99        |

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

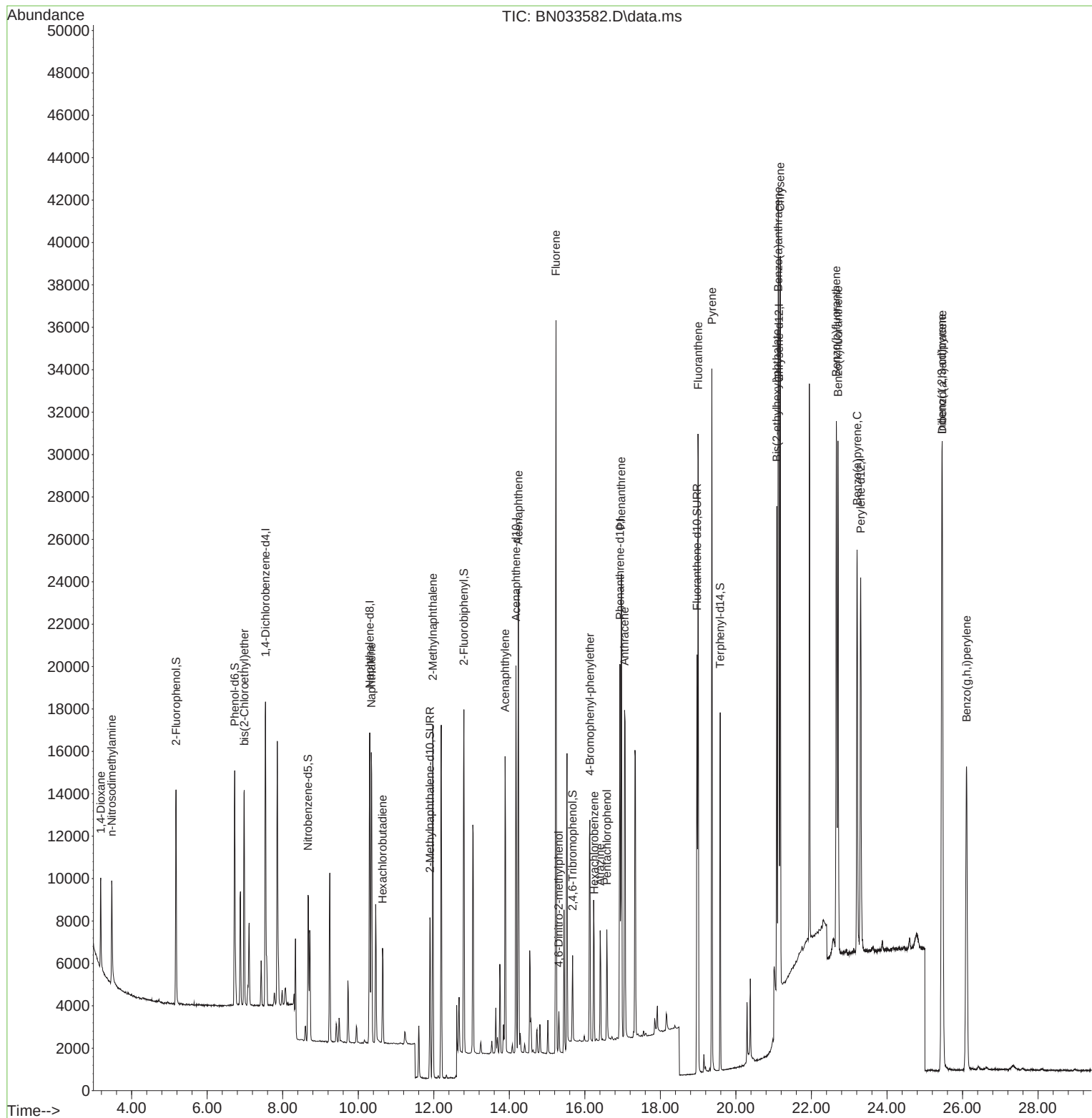
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033582.D  
Acq On : 23 Aug 2024 09:48  
Operator : MA/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

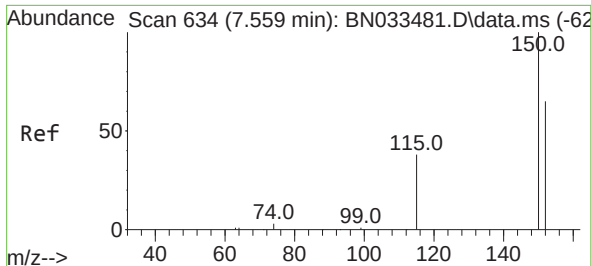
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Quant Time: Aug 23 13:38:16 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024





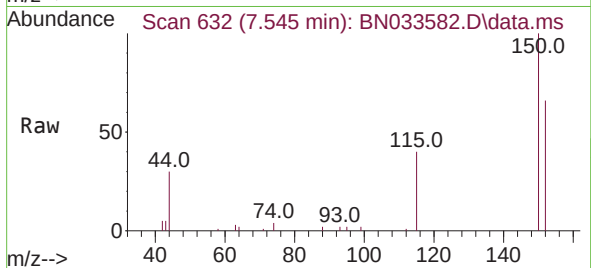
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1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



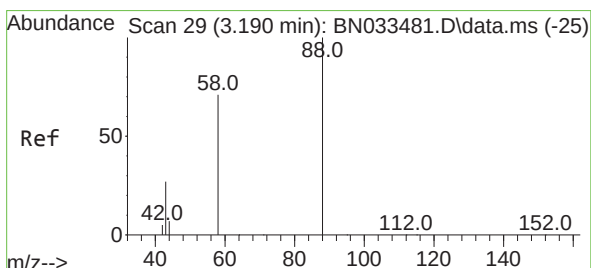
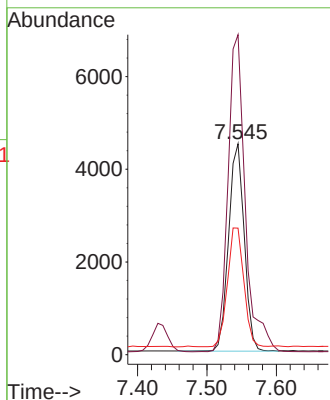
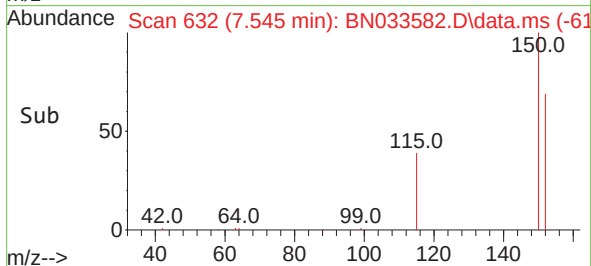
Tgt Ion:152 Resp: 700  
Ion Ratio Lower Upper  
152 100  
150 151.7 122.2 183.2  
115 60.0 47.2 70.8

Manual Integrations

APPROVED

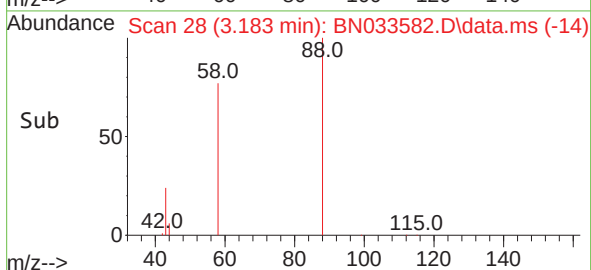
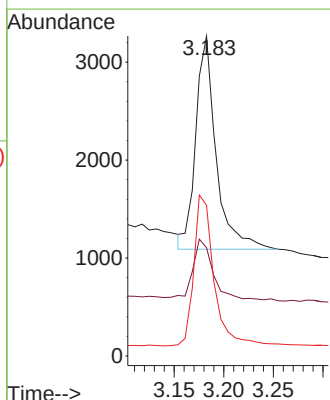
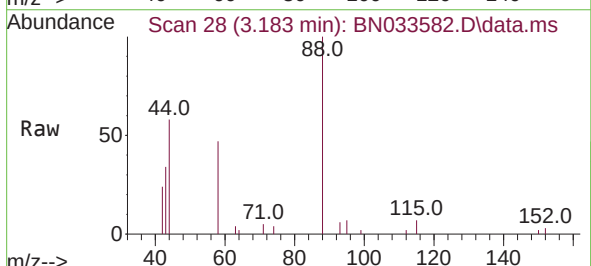
Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024

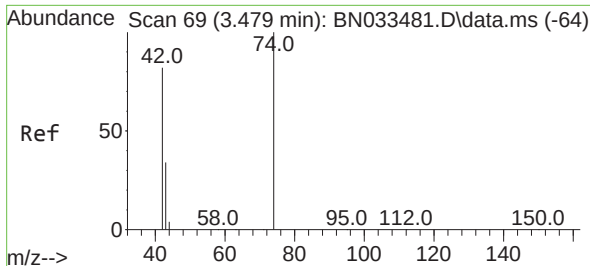


#2  
1,4-Dioxane  
Concen: 0.385 ng  
RT: 3.183 min Scan# 28  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Tgt Ion: 88 Resp: 3102  
Ion Ratio Lower Upper  
88 100  
43 30.6 25.0 37.4  
58 70.4 62.5 93.7







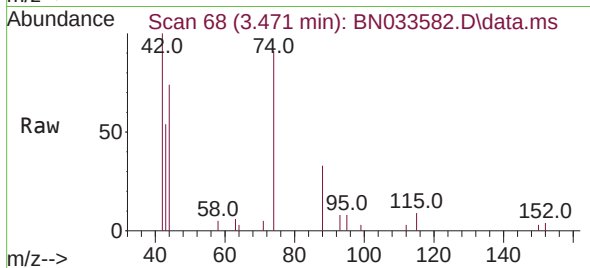
#3  
n-Nitrosodimethylamine  
Concen: 0.330 ng  
RT: 3.471 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

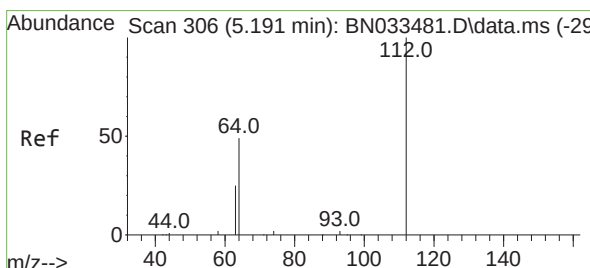
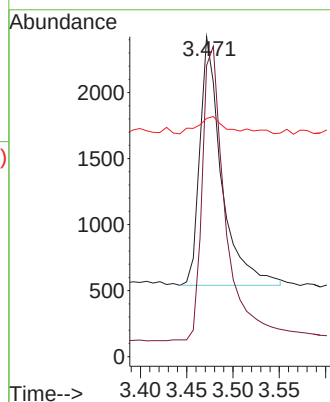
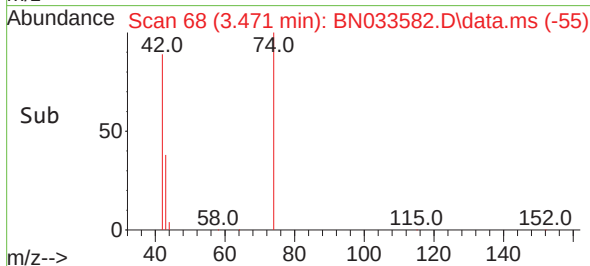
SSTDCCC0.4



Tgt Ion: 42 Resp: 3090  
Ion Ratio Lower Upper  
42 100  
74 126.6 100.2 150.2  
44 8.0 5.3 7.9

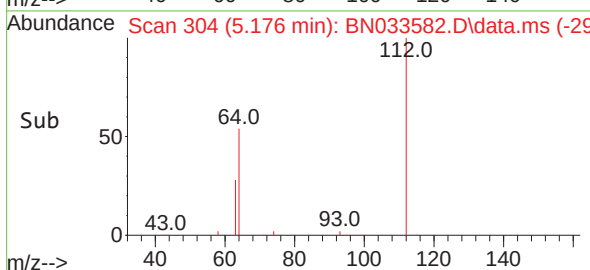
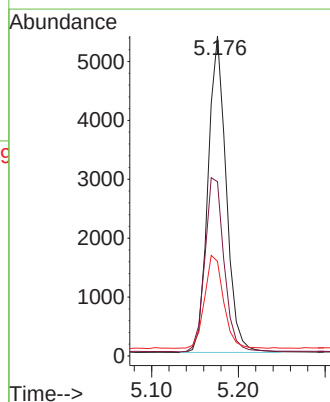
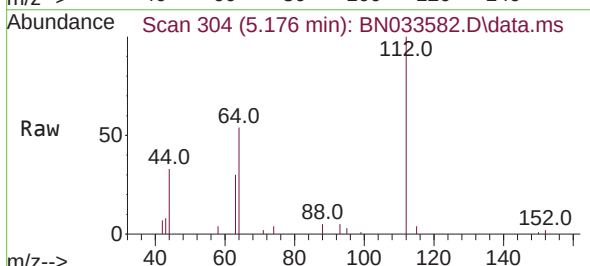
Manual Integrations  
APPROVED

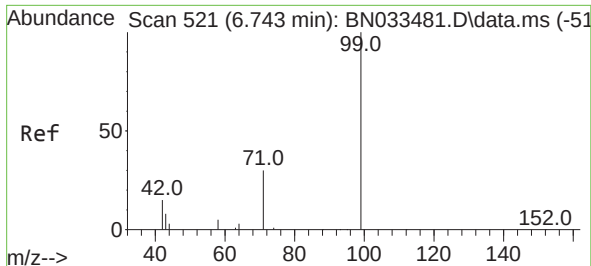
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#4  
2-Fluorophenol  
Concen: 0.351 ng  
RT: 5.176 min Scan# 304  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Tgt Ion:112 Resp: 7822  
Ion Ratio Lower Upper  
112 100  
64 58.4 47.1 70.7  
63 30.6 24.9 37.3





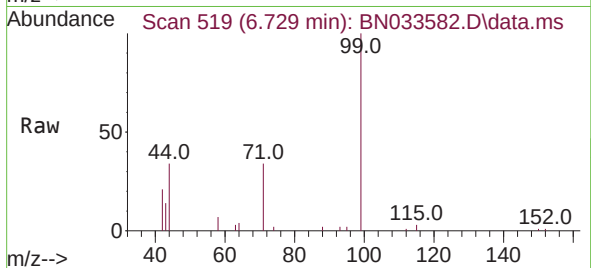
#5  
Phenol-d6  
Concen: 0.360 ng  
RT: 6.729 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

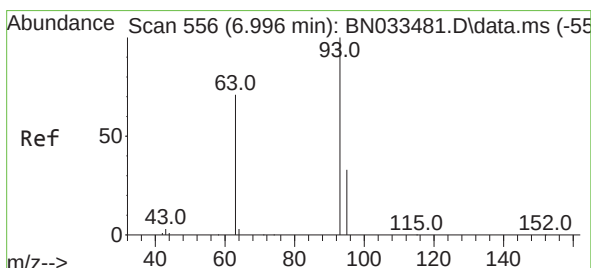
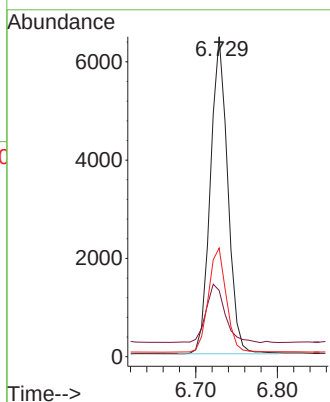
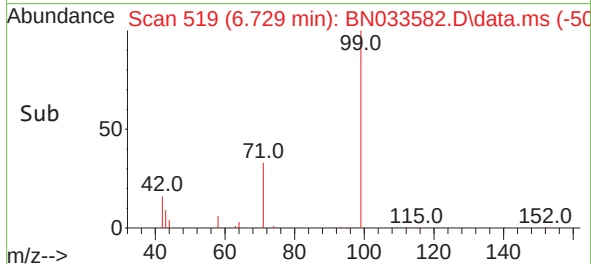
SSTDCCC0.4



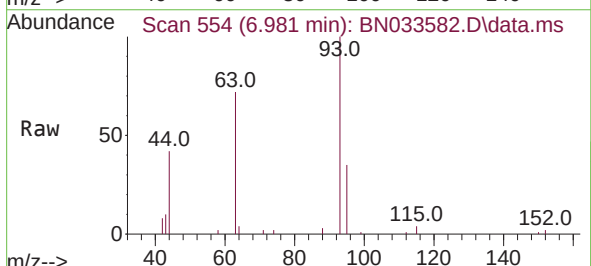
Tgt Ion: 99 Resp: 953  
Ion Ratio Lower Upper  
99 100  
42 20.1 16.6 24.8  
71 34.0 26.2 39.4

Manual Integrations  
APPROVED

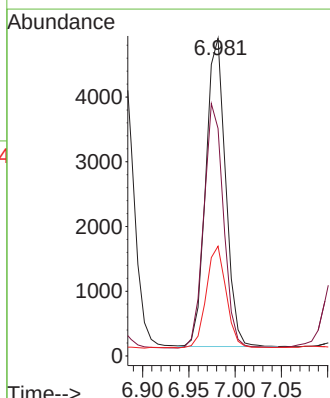
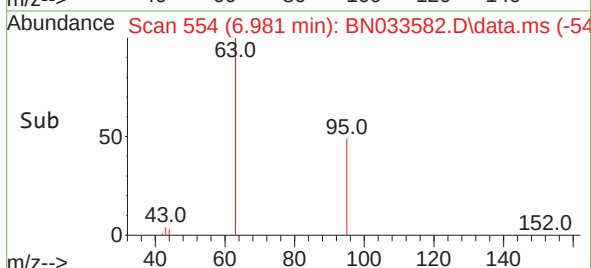
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

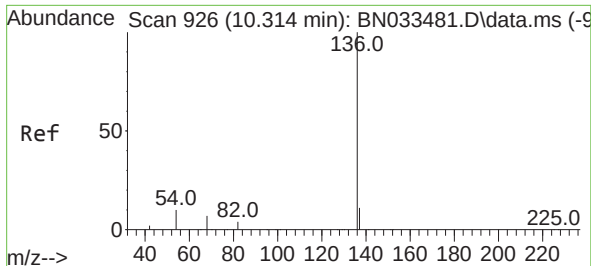


#6  
bis(2-Chloroethyl)ether  
Concen: 0.377 ng  
RT: 6.981 min Scan# 554  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



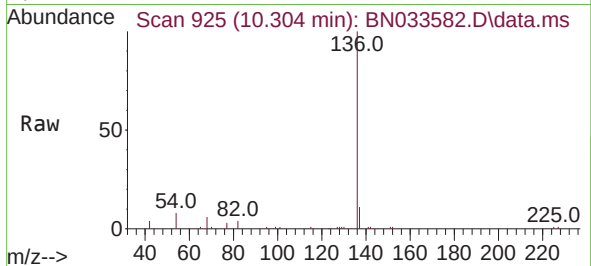
Tgt Ion: 93 Resp: 7079  
Ion Ratio Lower Upper  
93 100  
63 79.1 63.0 94.4  
95 33.2 26.0 39.0





#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

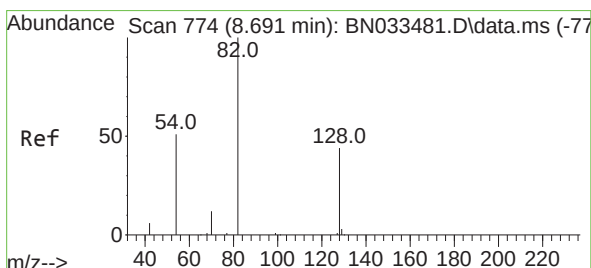
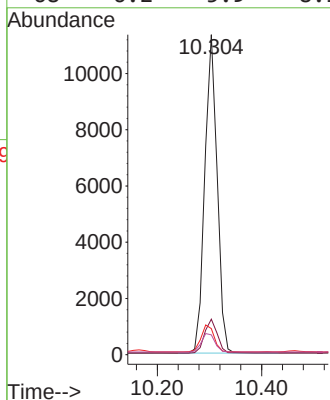
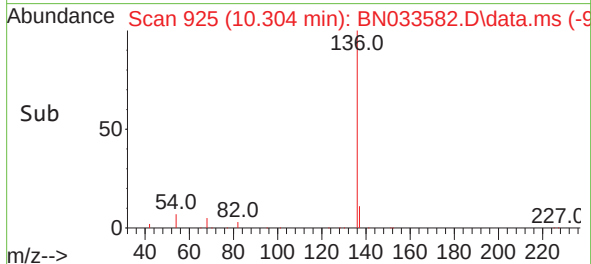
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:136 Resp: 18519  
Ion Ratio Lower Upper  
136 100  
137 11.1 9.0 13.6  
54 8.1 8.3 12.5  
68 6.2 5.9 8.9

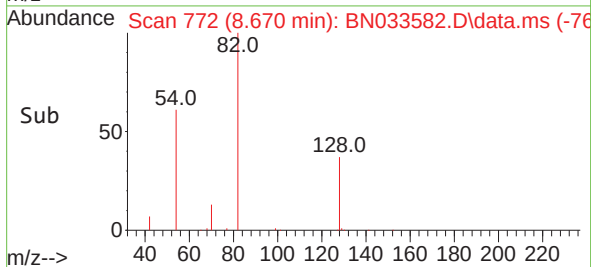
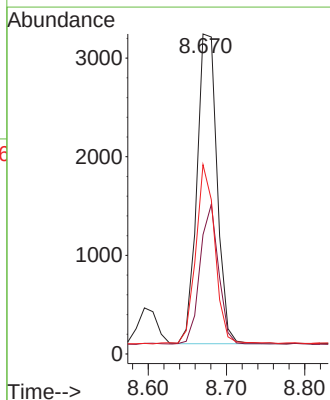
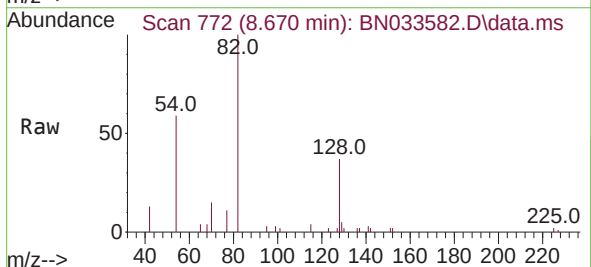
Manual Integrations  
APPROVED

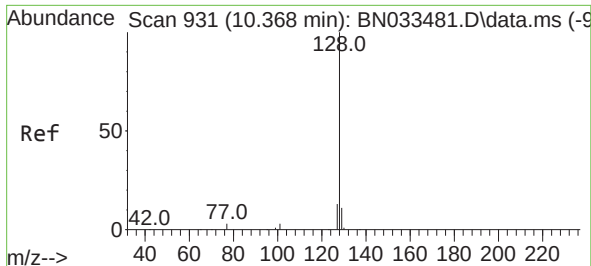
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#8  
Nitrobenzene-d5  
Concen: 0.367 ng  
RT: 8.670 min Scan# 772  
Delta R.T. -0.011 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Tgt Ion: 82 Resp: 5644  
Ion Ratio Lower Upper  
82 100  
128 37.3 36.0 54.0  
54 59.2 42.0 63.0





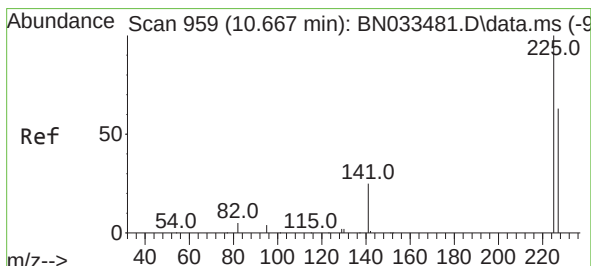
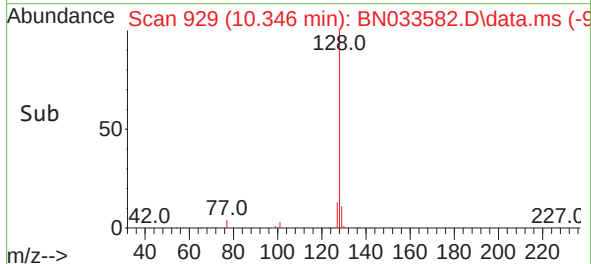
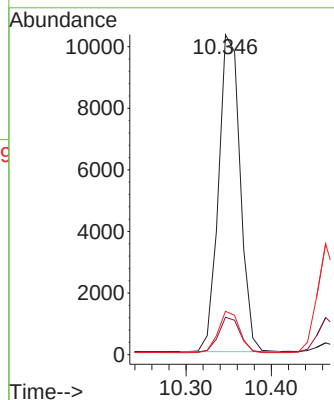
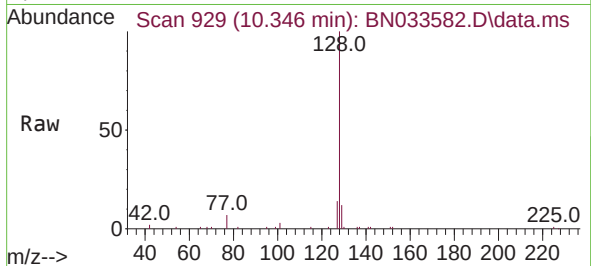
#9  
Naphthalene  
Concen: 0.366 ng  
RT: 10.346 min Scan# 911  
Delta R.T. -0.011 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Tgt Ion:128 Resp: 18130  
Ion Ratio Lower Upper  
128 100  
129 11.7 9.1 13.7  
127 13.5 10.7 16.1

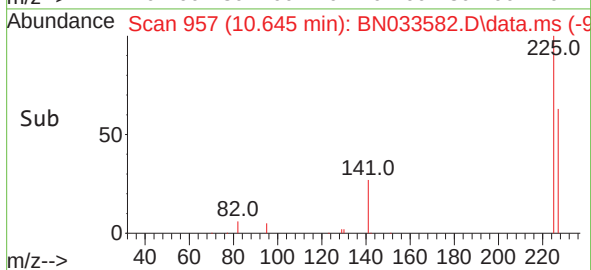
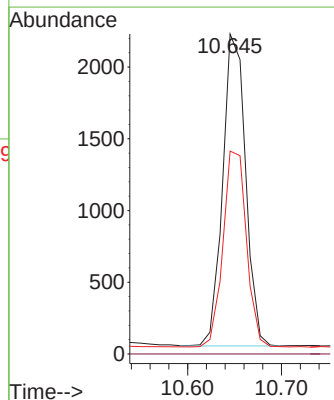
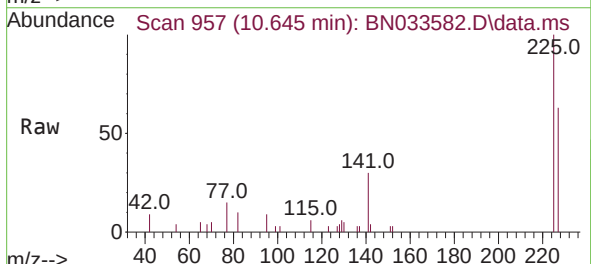
Manual Integrations  
APPROVED

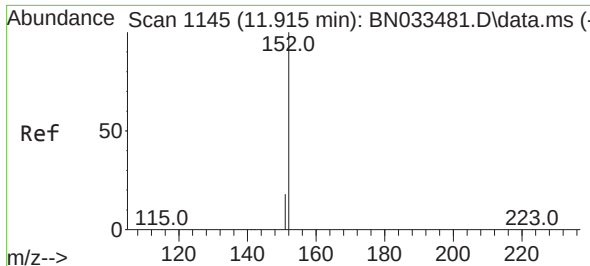
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#10  
Hexachlorobutadiene  
Concen: 0.373 ng  
RT: 10.645 min Scan# 957  
Delta R.T. -0.011 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

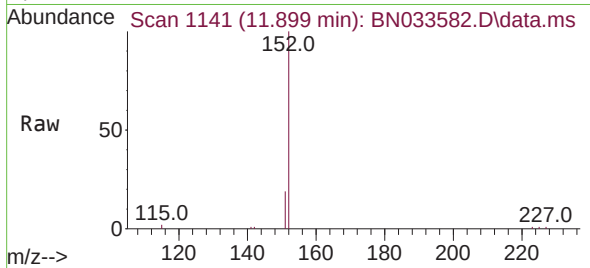
Tgt Ion:225 Resp: 3685  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.2 51.2 76.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.375 ng  
RT: 11.899 min Scan# 1141  
Delta R.T. -0.004 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

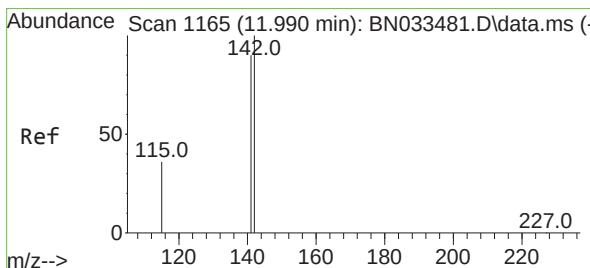
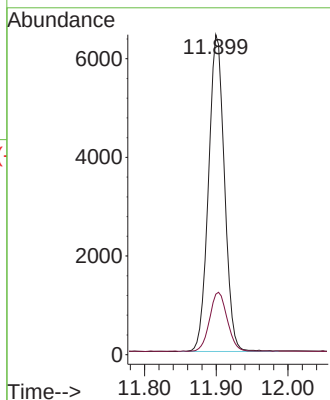
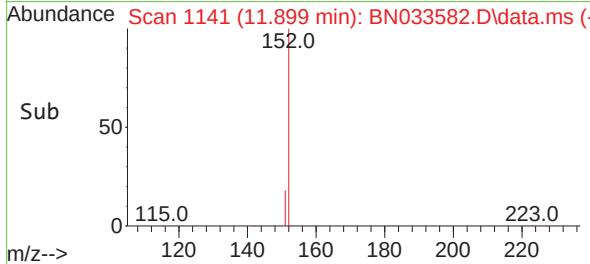
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



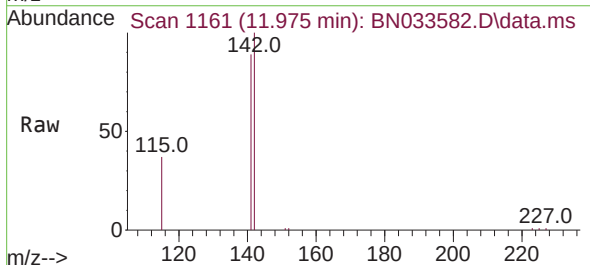
Tgt Ion:152 Resp: 9940  
Ion Ratio Lower Upper  
152 100  
151 20.6 16.6 25.0

Manual Integrations  
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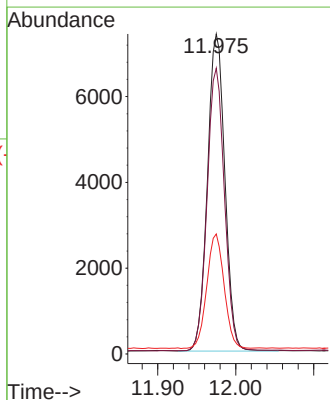
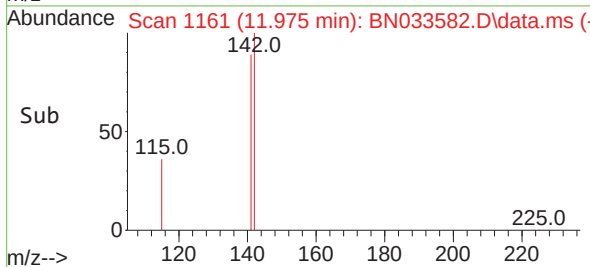
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

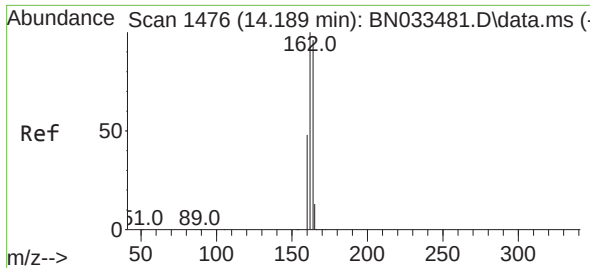


#12  
2-Methylnaphthalene  
Concen: 0.367 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



Tgt Ion:142 Resp: 11497  
Ion Ratio Lower Upper  
142 100  
141 89.3 71.7 107.5  
115 37.5 29.4 44.2





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

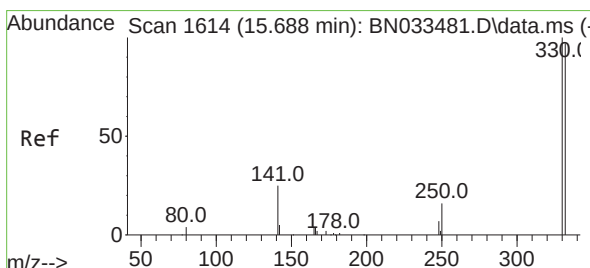
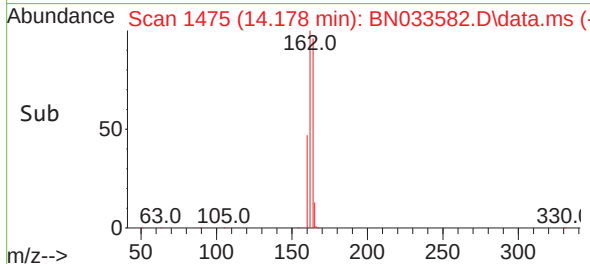
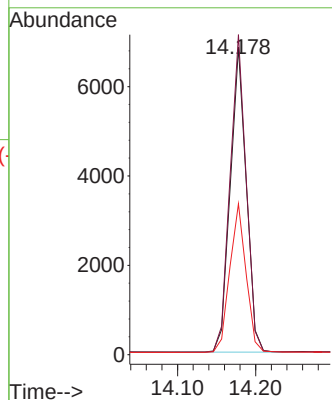
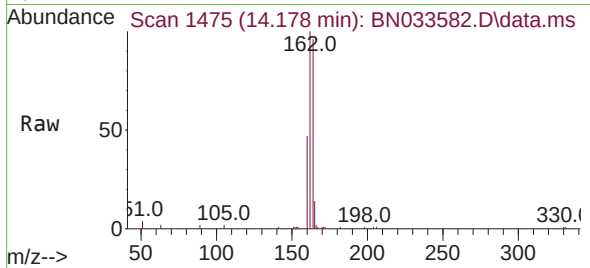
ClientSampleId :

SSTDCCC0.4

Tgt Ion:164 Resp: 9750  
Ion Ratio Lower Upper  
164 100  
162 104.1 83.5 125.3  
160 49.1 40.2 60.4

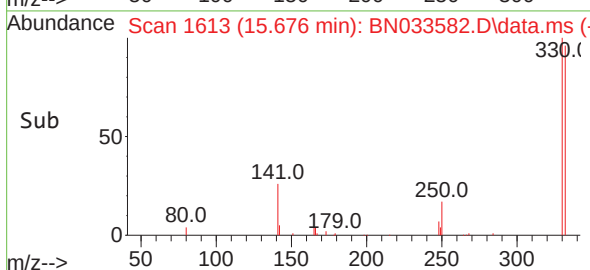
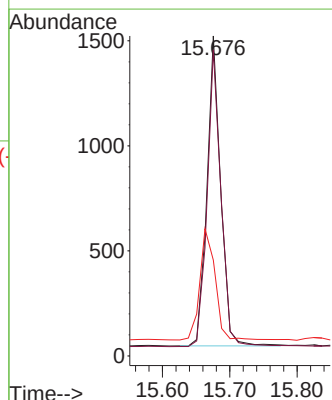
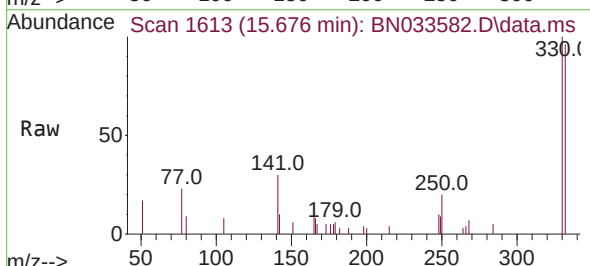
Manual Integrations  
APPROVED

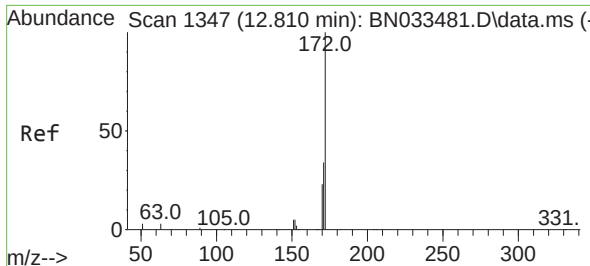
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#14  
2,4,6-Tribromophenol  
Concen: 0.399 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Tgt Ion:330 Resp: 2093  
Ion Ratio Lower Upper  
330 100  
332 96.0 77.5 116.3  
141 39.5 33.9 50.9





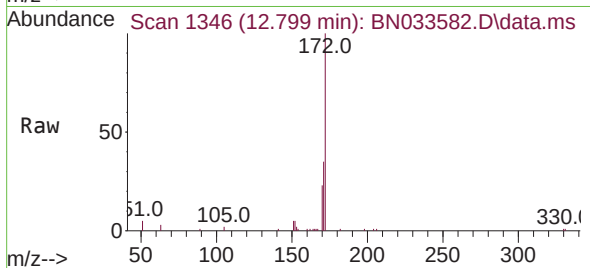
#15  
2-Fluorobiphenyl  
Concen: 0.357 ng  
RT: 12.799 min Scan# 1447  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

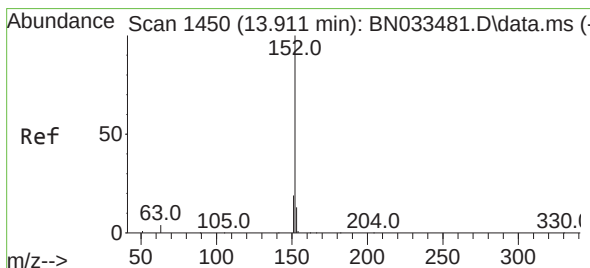
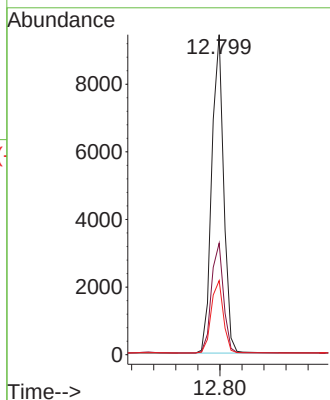
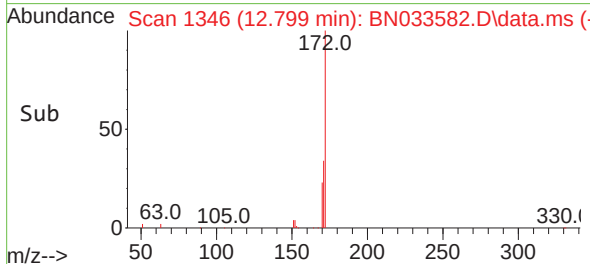
SSTDCCC0.4



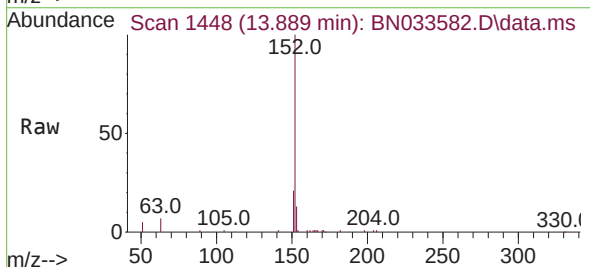
Tgt Ion:172 Resp: 14208  
Ion Ratio Lower Upper  
172 100  
171 34.8 27.7 41.5  
170 23.1 18.3 27.5

Manual Integrations  
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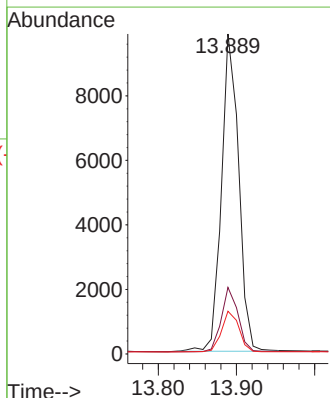
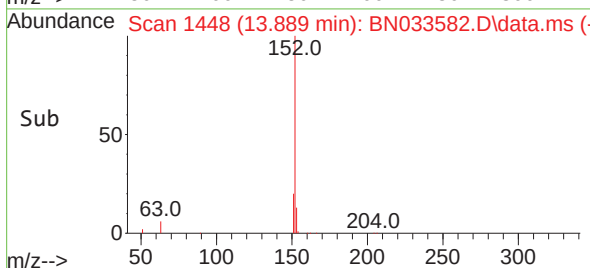
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

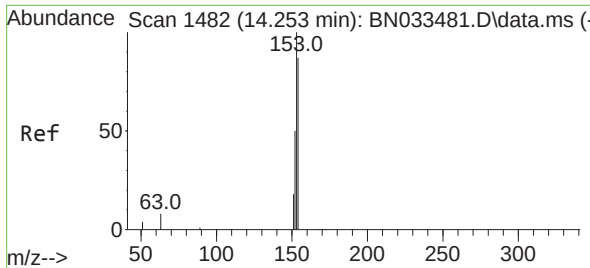


#16  
Acenaphthylene  
Concen: 0.351 ng  
RT: 13.889 min Scan# 1448  
Delta R.T. -0.011 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



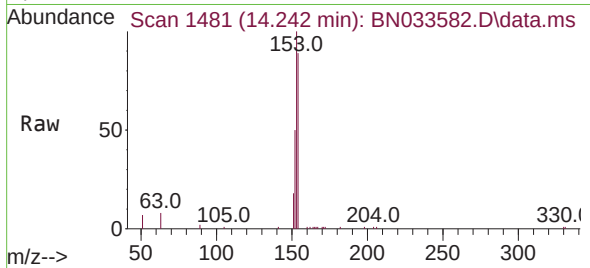
Tgt Ion:152 Resp: 15033  
Ion Ratio Lower Upper  
152 100  
151 19.8 15.7 23.5  
153 12.9 10.3 15.5





#17  
Acenaphthene  
Concen: 0.349 ng  
RT: 14.242 min Scan# 1482  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

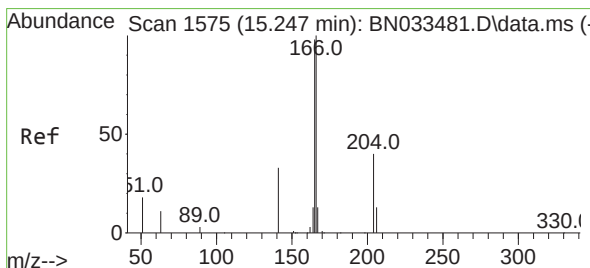
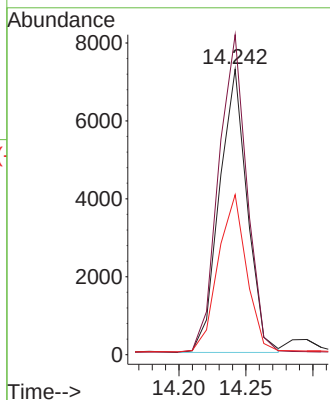
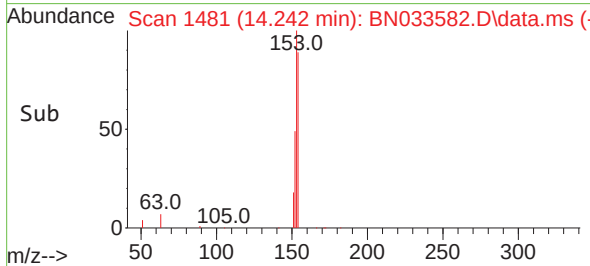
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



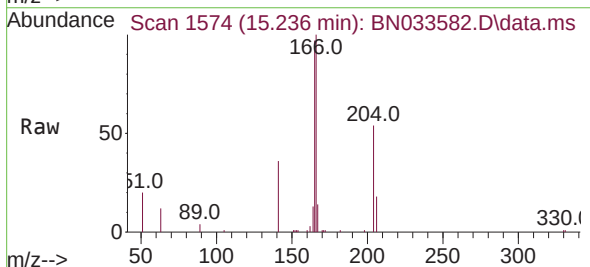
Tgt Ion:154 Resp: 10508  
Ion Ratio Lower Upper  
154 100  
153 113.5 89.0 133.6  
152 56.9 45.2 67.8

Manual Integrations  
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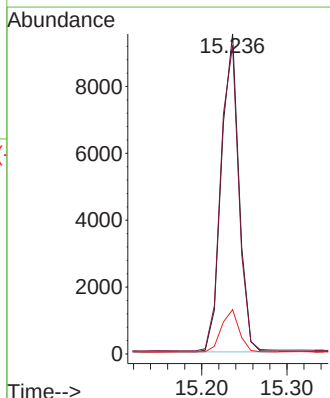
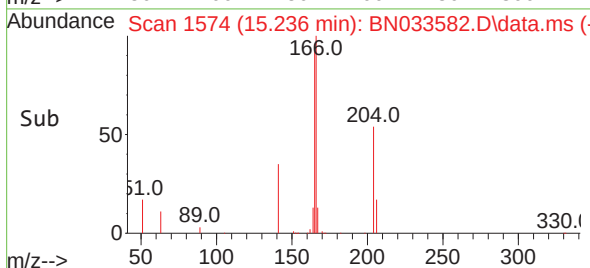
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



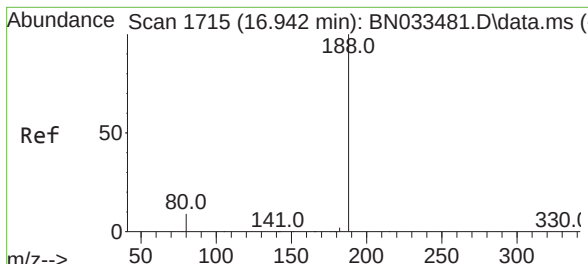
#18  
Fluorene  
Concen: 0.359 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



Tgt Ion:166 Resp: 13611  
Ion Ratio Lower Upper  
166 100  
165 98.4 78.2 117.4  
167 13.4 10.6 16.0







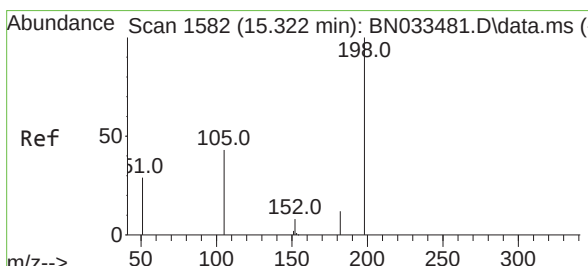
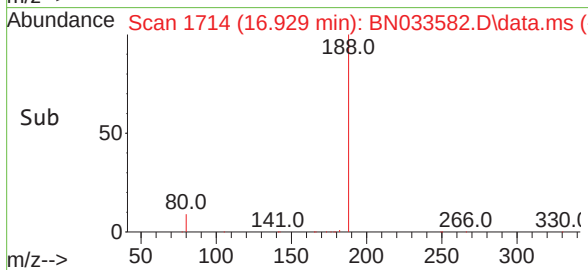
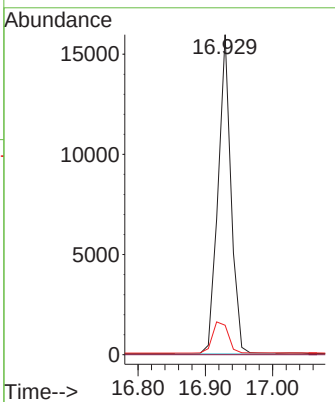
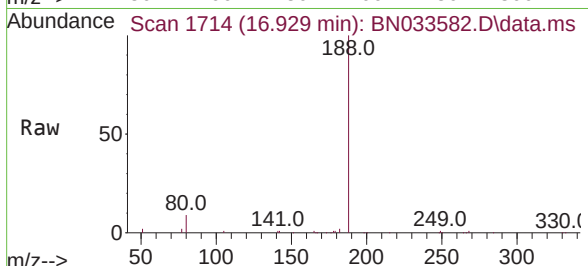
#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.929 min Scan# 1714  
 Delta R.T. -0.000 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

|             |              |
|-------------|--------------|
| Tgt Ion:188 | Resp: 2123   |
| Ion Ratio   | Lower Upper  |
| 188         | 100          |
| 94          | 0.0 0.0 0.0  |
| 80          | 9.2 7.8 11.8 |

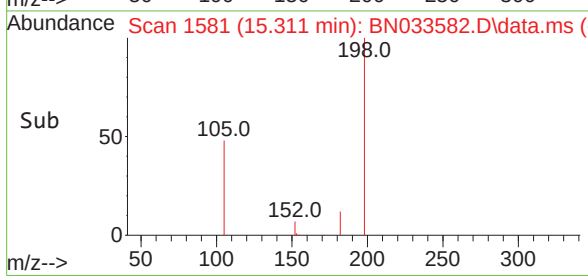
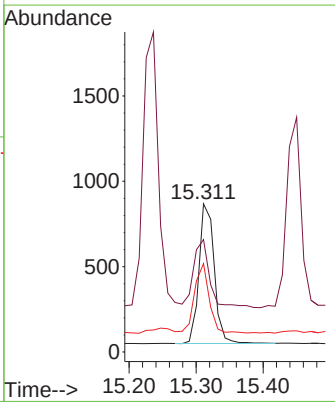
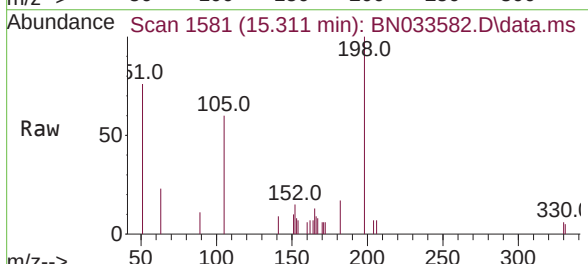
Manual Integrations  
 APPROVED

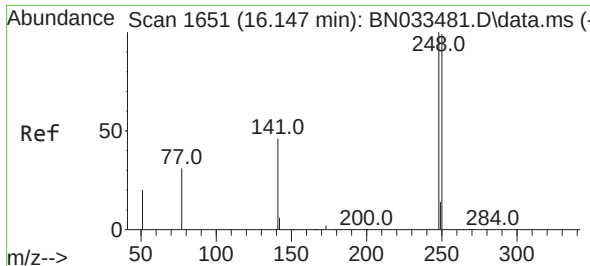
Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.391 ng  
 RT: 15.311 min Scan# 1581  
 Delta R.T. -0.011 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

|             |                |
|-------------|----------------|
| Tgt Ion:198 | Resp: 1295     |
| Ion Ratio   | Lower Upper    |
| 198         | 100            |
| 51          | 75.8 65.1 97.7 |
| 105         | 59.7 44.8 67.2 |





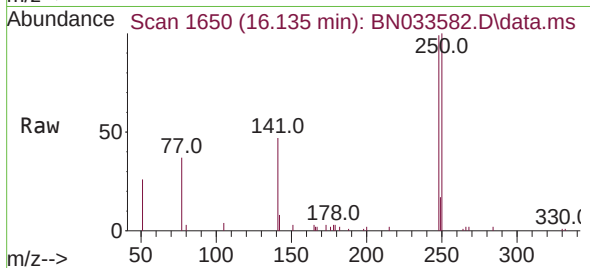
#21  
4-Bromophenyl-phenylether  
Concen: 0.353 ng  
RT: 16.135 min Scan# 1650  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

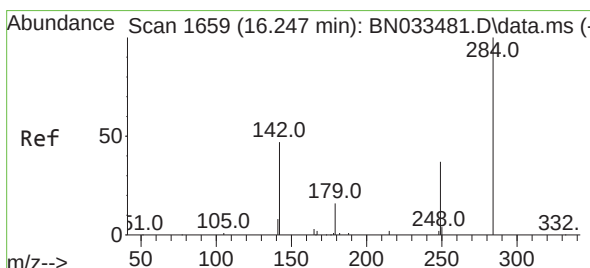
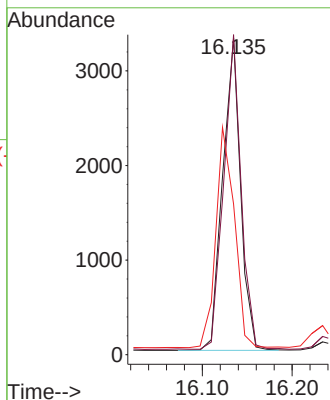
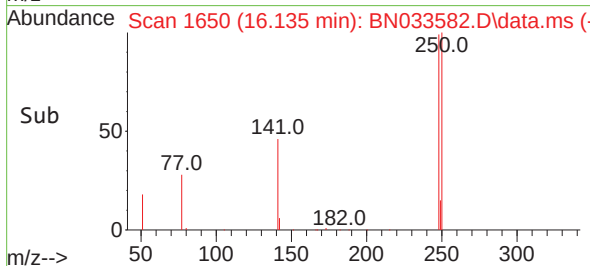
SSTDC0.4



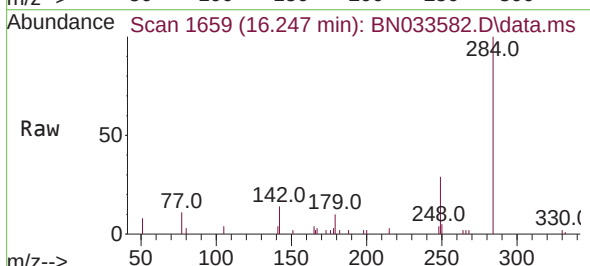
Tgt Ion:248 Resp: 455  
Ion Ratio Lower Upper  
248 100  
250 101.1 79.2 118.8  
141 47.6 37.9 56.9

Manual Integrations  
APPROVED

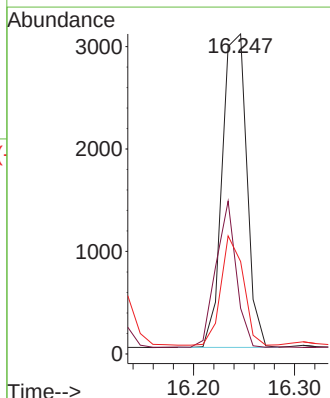
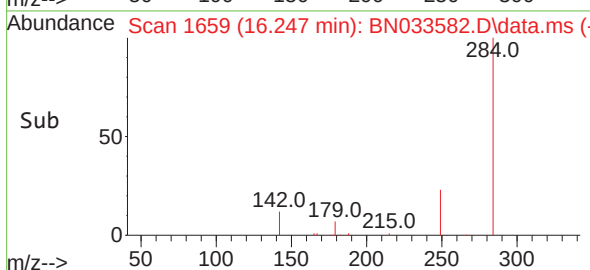
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

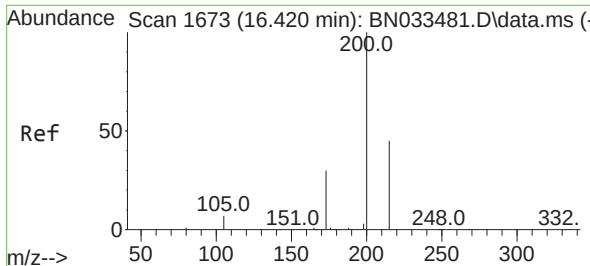


#22  
Hexachlorobenzene  
Concen: 0.363 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



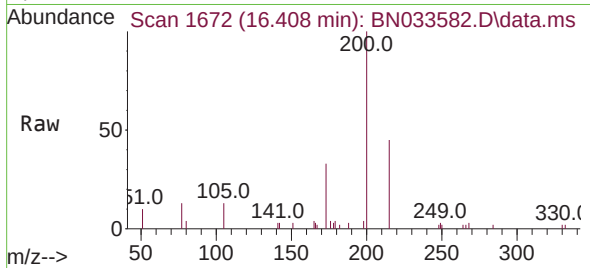
Tgt Ion:284 Resp: 5166  
Ion Ratio Lower Upper  
284 100  
142 38.6 31.8 47.6  
249 31.9 26.0 39.0





#23  
 Atrazine  
 Concen: 0.382 ng  
 RT: 16.408 min Scan# 1672  
 Delta R.T. -0.013 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

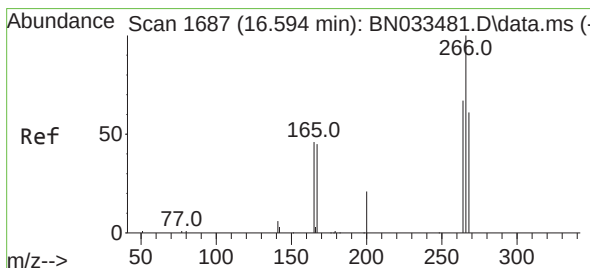
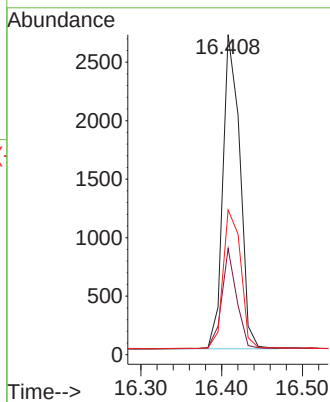
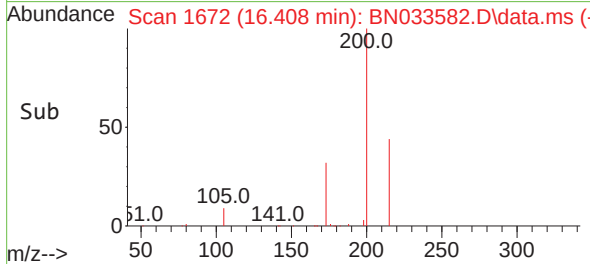
Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4



Tgt Ion:200 Resp: 393  
 Ion Ratio Lower Upper  
 200 100  
 173 33.2 25.3 37.9  
 215 45.3 36.6 54.8

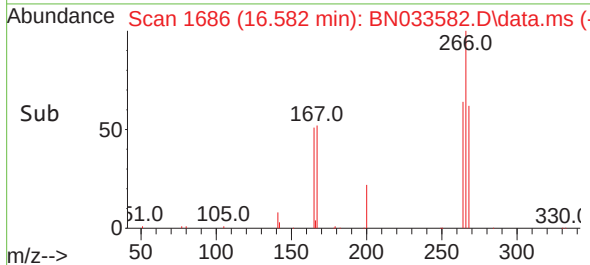
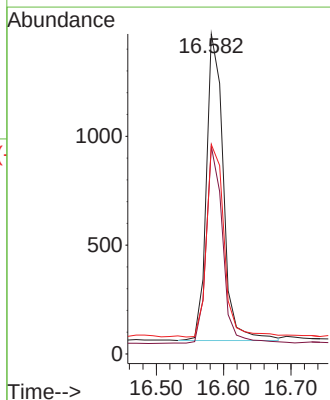
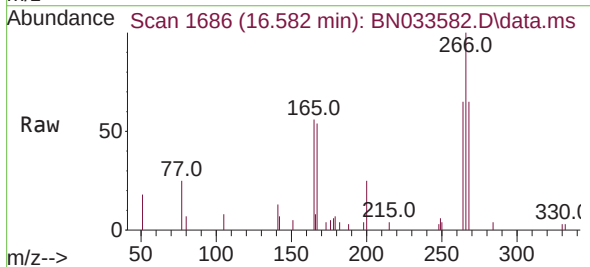
Manual Integrations  
 APPROVED

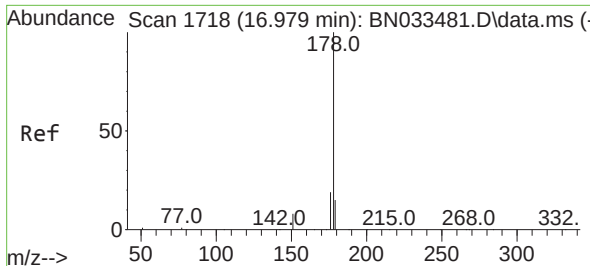
Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024



#24  
 Pentachlorophenol  
 Concen: 0.398 ng  
 RT: 16.582 min Scan# 1686  
 Delta R.T. -0.013 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

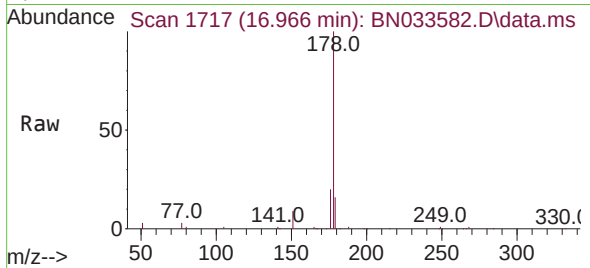
Tgt Ion:266 Resp: 2455  
 Ion Ratio Lower Upper  
 266 100  
 264 62.3 51.9 77.9  
 268 64.6 51.0 76.4





#25  
Phenanthrene  
Concen: 0.361 ng  
RT: 16.966 min Scan# 1717  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

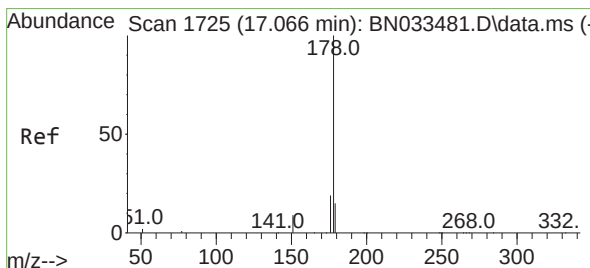
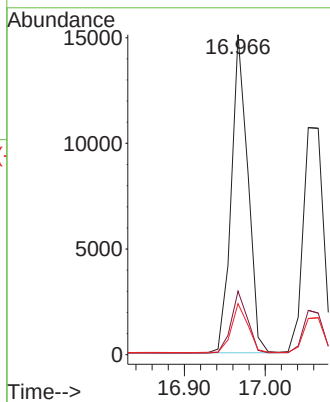
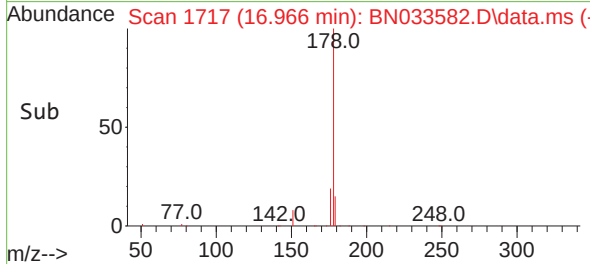
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:178 Resp: 2133  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.3 22.9  
179 15.3 12.3 18.5

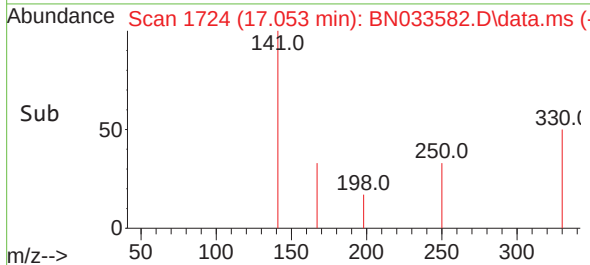
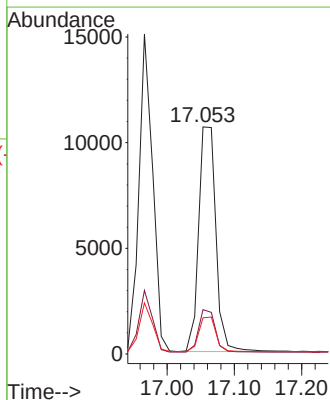
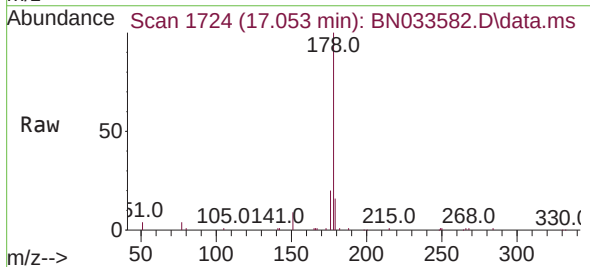
Manual Integrations  
APPROVED

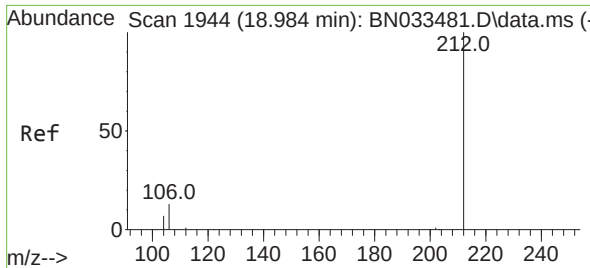
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#26  
Anthracene  
Concen: 0.363 ng  
RT: 17.053 min Scan# 1724  
Delta R.T. -0.013 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Tgt Ion:178 Resp: 18975  
Ion Ratio Lower Upper  
178 100  
176 18.2 15.0 22.6  
179 15.2 12.4 18.6





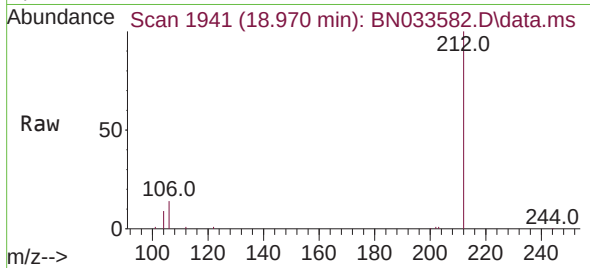
#27  
Fluoranthene-d10  
Concen: 0.414 ng  
RT: 18.970 min Scan# 1944  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

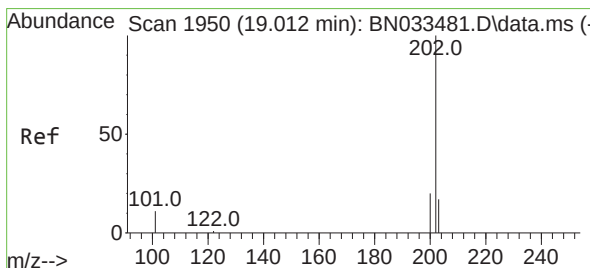
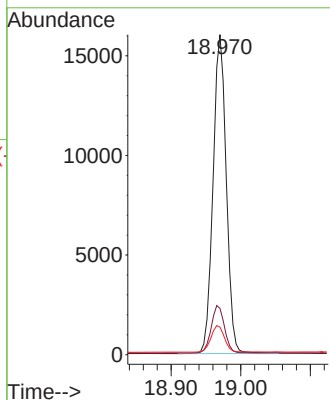
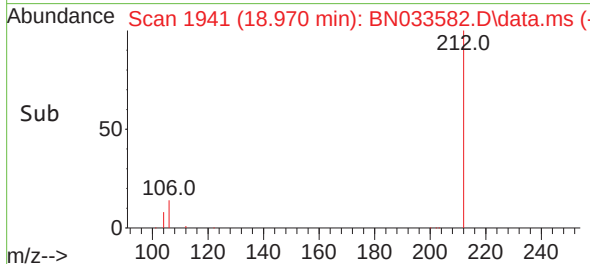
SSTDCCC0.4



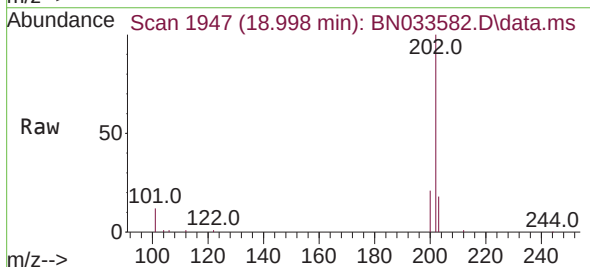
Tgt Ion:212 Resp: 21144  
Ion Ratio Lower Upper  
212 100  
106 14.9 12.3 18.5  
104 8.5 7.0 10.4

Manual Integrations  
APPROVED

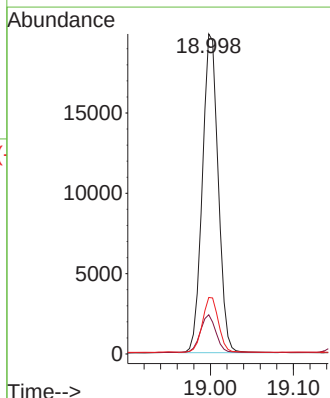
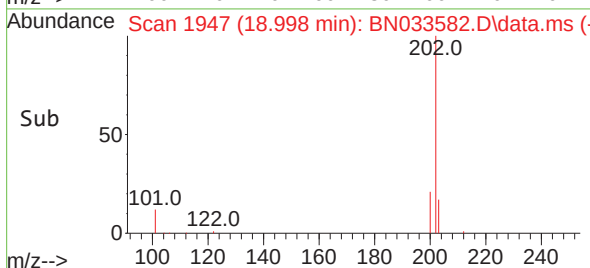
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

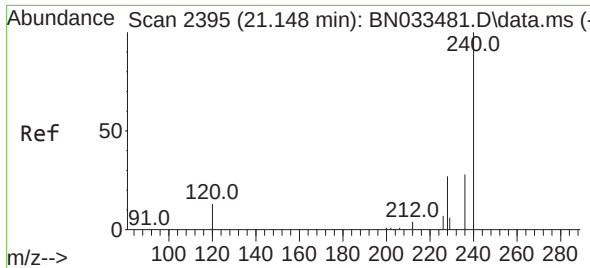


#28  
Fluoranthene  
Concen: 0.404 ng  
RT: 18.998 min Scan# 1947  
Delta R.T. -0.005 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



Tgt Ion:202 Resp: 26399  
Ion Ratio Lower Upper  
202 100  
101 11.9 9.5 14.3  
203 17.3 13.8 20.6





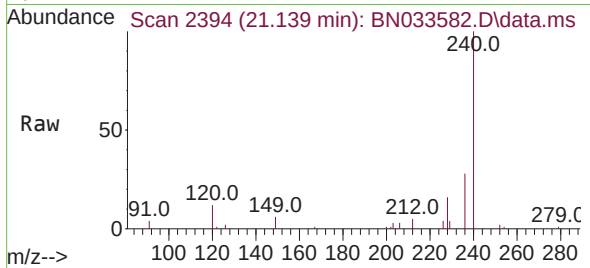
#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



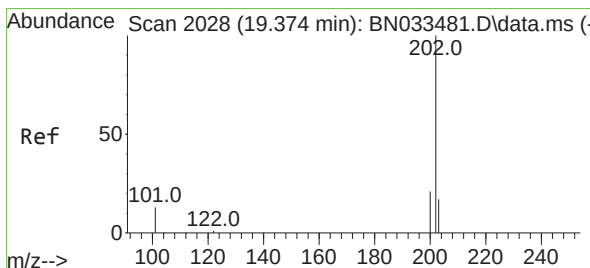
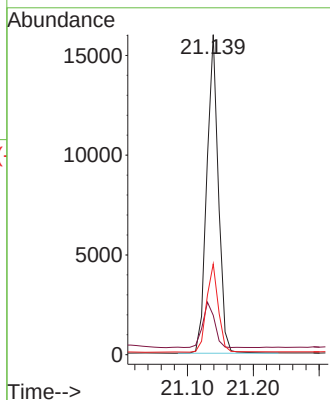
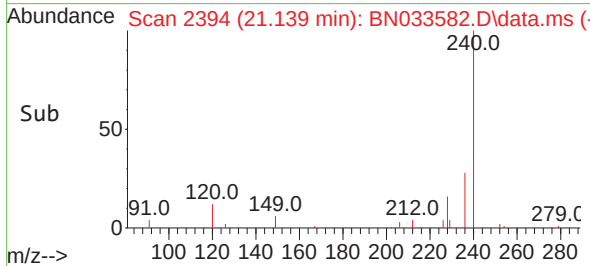
Tgt Ion:240 Resp: 1954  
Ion Ratio Lower Upper  
240 100  
120 12.3 12.4 18.6  
236 28.3 23.0 34.6

Manual Integrations

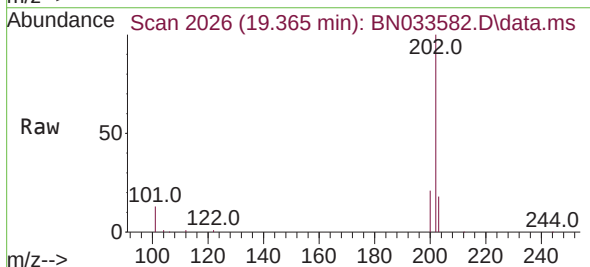
APPROVED

Reviewed By :Yogesh Patel 08/24/2024

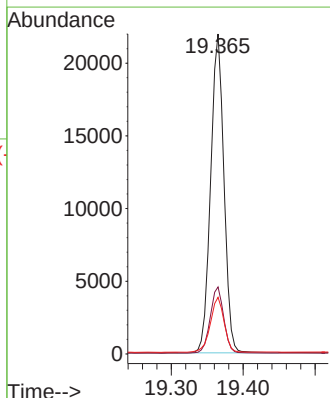
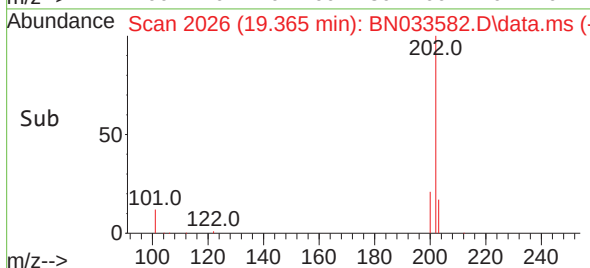
Supervised By :mohammad ahmed 08/29/2024

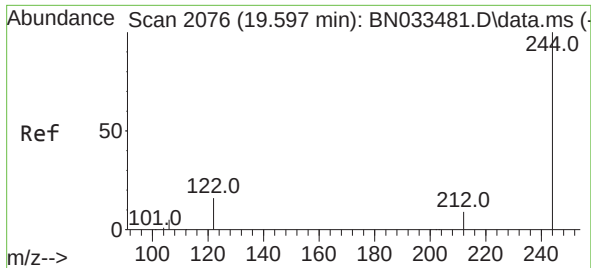


#30  
Pyrene  
Concen: 0.321 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



Tgt Ion:202 Resp: 28003  
Ion Ratio Lower Upper  
202 100  
200 20.9 16.6 24.8  
203 17.8 14.2 21.4





#31  
 Terphenyl-d14  
 Concen: 0.338 ng  
 RT: 19.583 min Scan# 2076  
 Delta R.T. -0.000 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

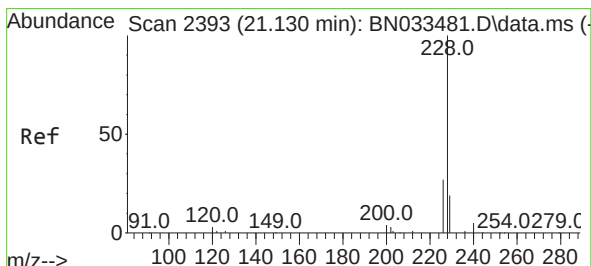
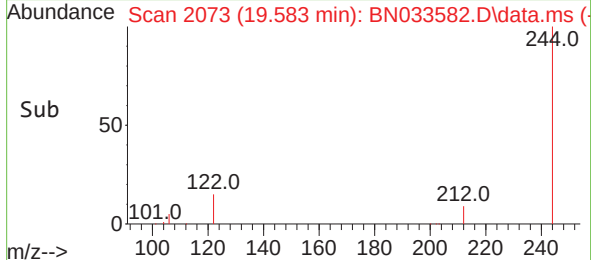
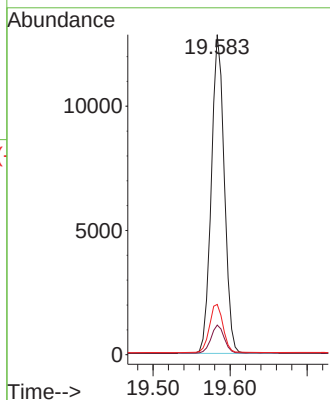
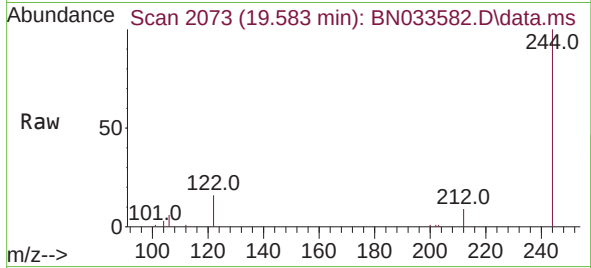
ClientSampleId :

SSTDCCC0.4

Tgt Ion:244 Resp: 1500  
 Ion Ratio Lower Upper  
 244 100  
 212 9.2 7.8 11.6  
 122 15.7 13.3 19.9

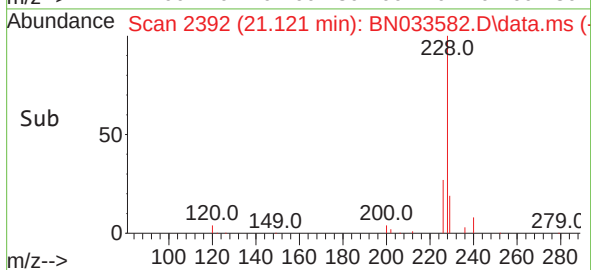
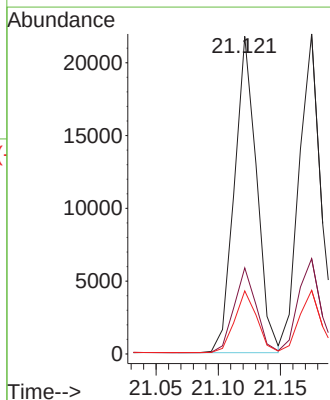
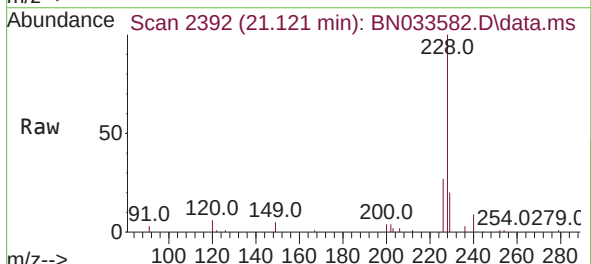
Manual Integrations  
 APPROVED

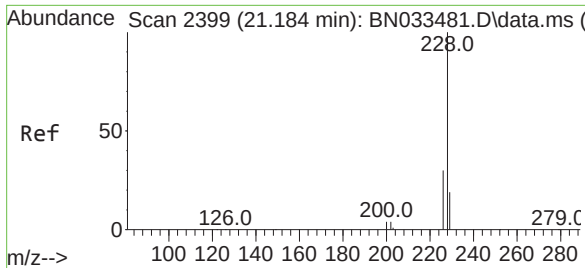
Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024



#32  
 Benzo(a)anthracene  
 Concen: 0.381 ng  
 RT: 21.121 min Scan# 2392  
 Delta R.T. -0.000 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

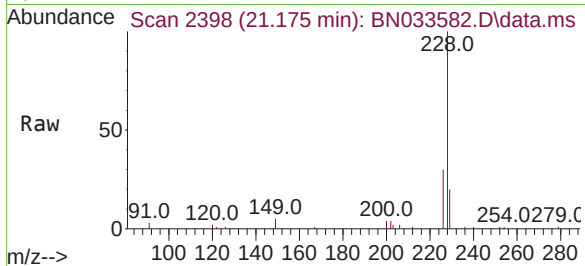
Tgt Ion:228 Resp: 26910  
 Ion Ratio Lower Upper  
 228 100  
 226 27.1 21.8 32.6  
 229 19.8 15.8 23.6





#33  
Chrysene  
Concen: 0.371 ng  
RT: 21.175 min Scan# 2117  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

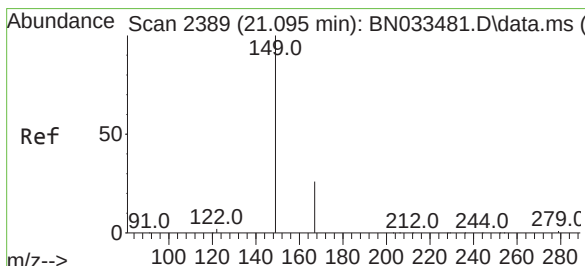
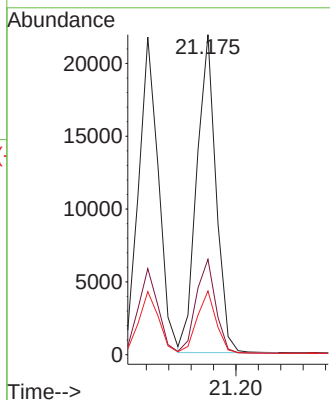
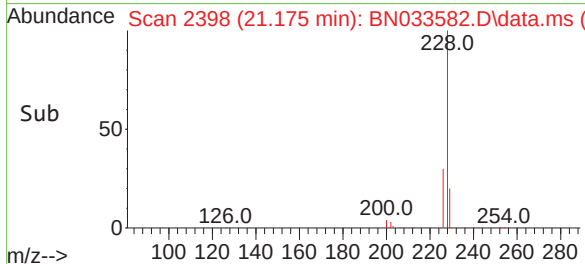
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



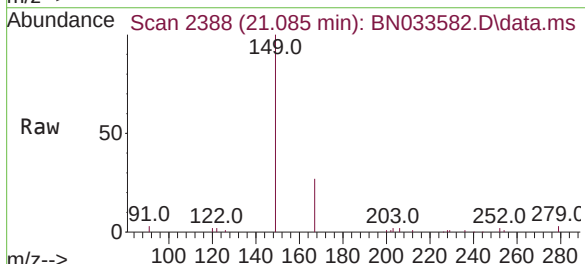
Tgt Ion:228 Resp: 26060  
Ion Ratio Lower Upper  
228 100  
226 29.8 23.8 35.8  
229 19.9 15.6 23.4

Manual Integrations  
APPROVED

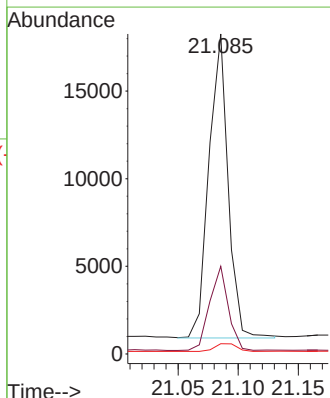
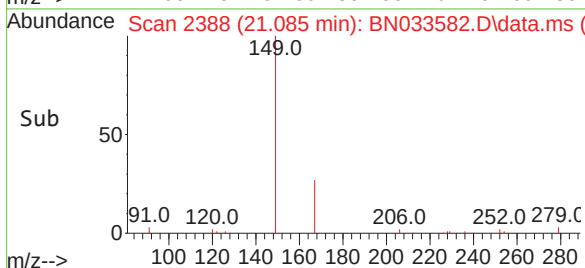
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



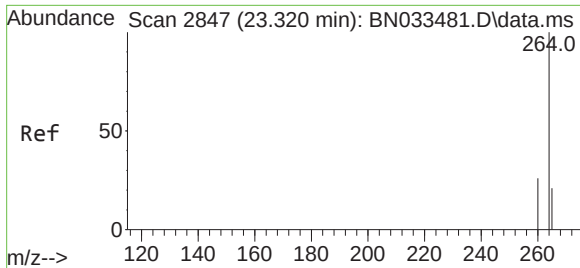
#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.431 ng m  
RT: 21.085 min Scan# 2388  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



Tgt Ion:149 Resp: 19294  
Ion Ratio Lower Upper  
149 100  
167 28.0 21.5 32.3  
279 3.4 2.2 3.2#







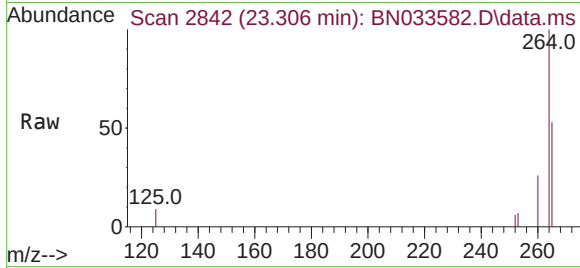
#35  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.306 min Scan# 21  
 Delta R.T. 0.003 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

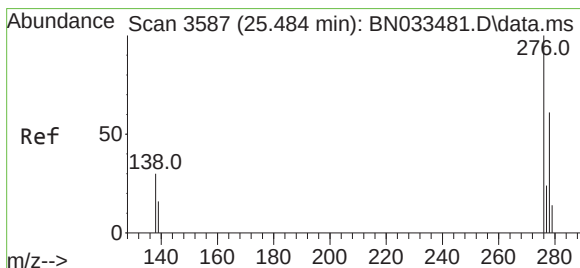
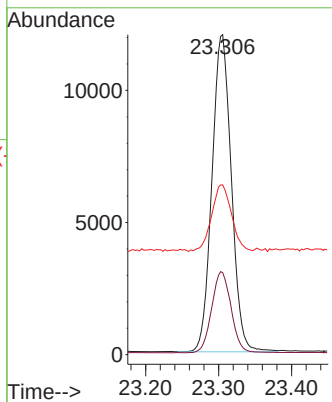
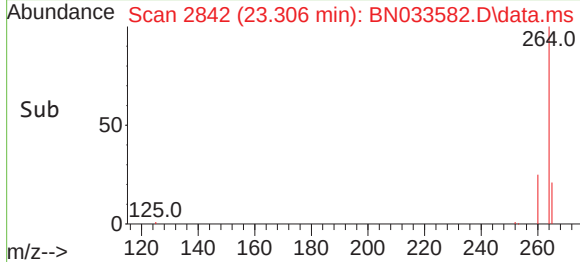
SSTDCCC0.4



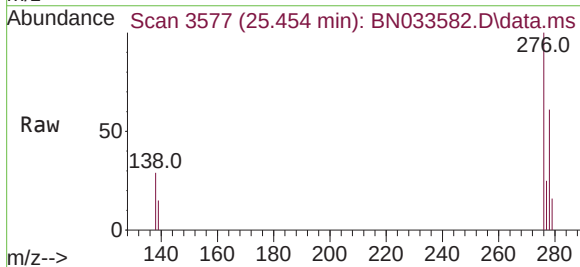
Tgt Ion:264 Resp: 2217  
 Ion Ratio Lower Upper  
 264 100  
 260 25.6 20.8 31.2  
 265 53.1 52.2 78.2

Manual Integrations  
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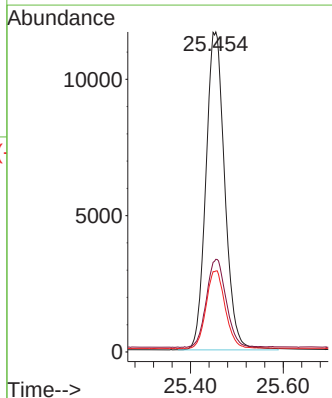
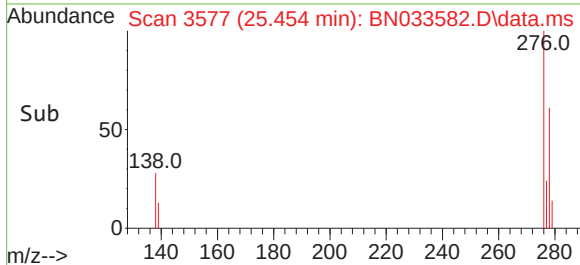
Reviewed By :Yogesh Patel 08/24/2024  
 Supervised By :mohammad ahmed 08/29/2024

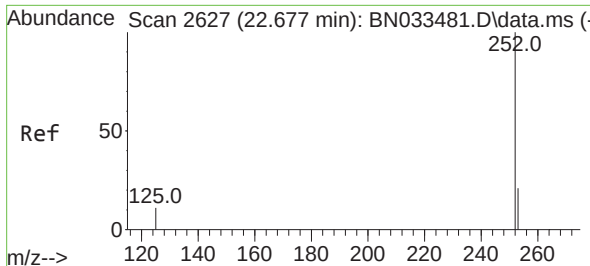


#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.357 ng  
 RT: 25.454 min Scan# 3577  
 Delta R.T. 0.006 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48



Tgt Ion:276 Resp: 32901  
 Ion Ratio Lower Upper  
 276 100  
 138 29.0 24.4 36.6  
 277 24.9 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.355 ng

RT: 22.659 min Scan# 2621

Delta R.T. -0.000 min

Lab File: BN033582.D

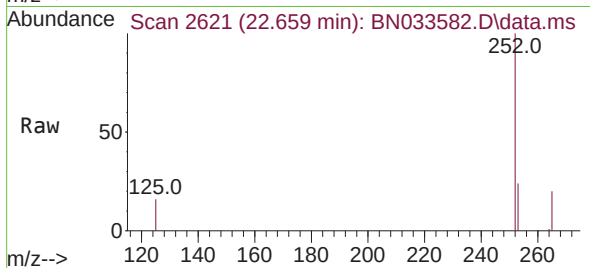
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



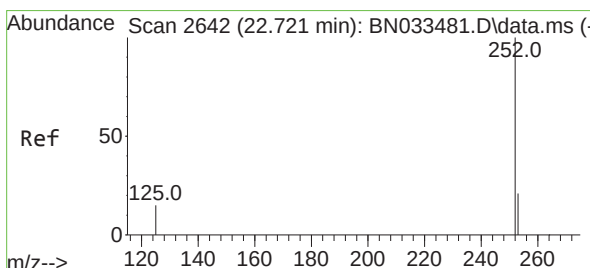
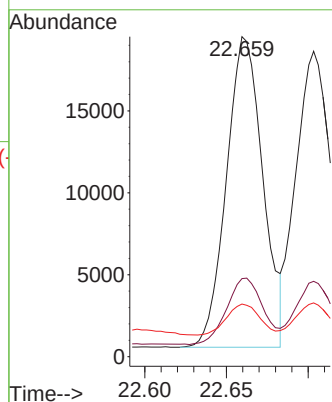
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 19.8  | 29.8  |
| 125     | 16.4  | 13.9  | 20.9  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#38

Benzo(k)fluoranthene

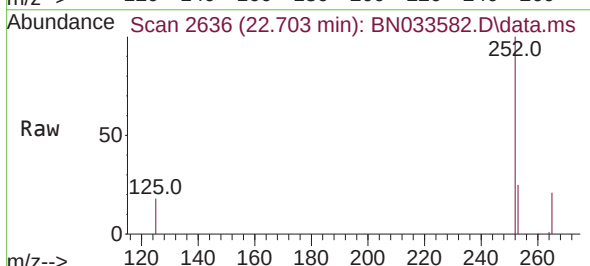
Concen: 0.341 ng

RT: 22.703 min Scan# 2636

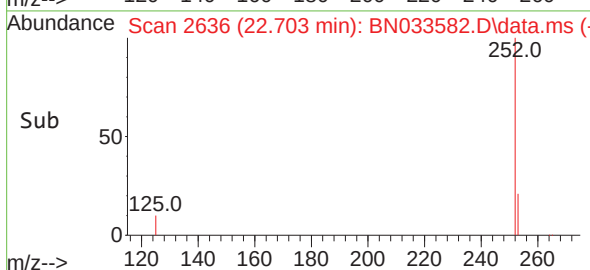
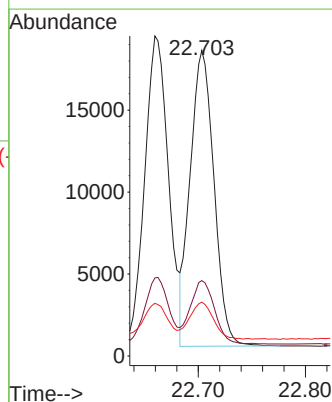
Delta R.T. -0.000 min

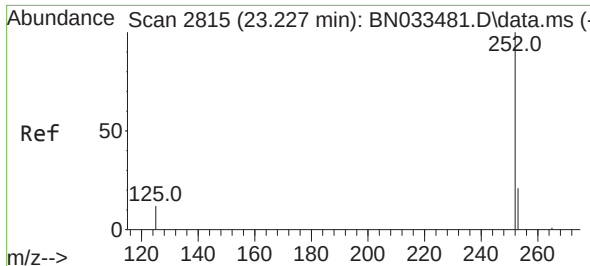
Lab File: BN033582.D

Acq: 23 Aug 2024 09:48



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.7  | 19.8  | 29.8  |
| 125     | 17.6  | 15.8  | 23.8  |





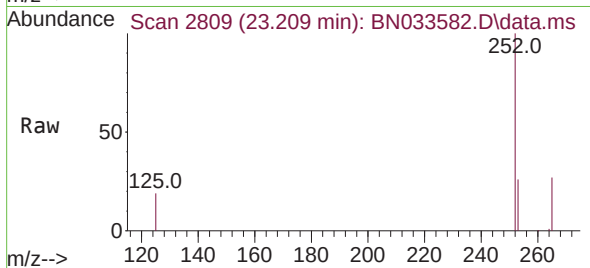
#39  
Benzo(a)pyrene  
Concen: 0.361 ng  
RT: 23.209 min Scan# 2475  
Delta R.T. -0.000 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

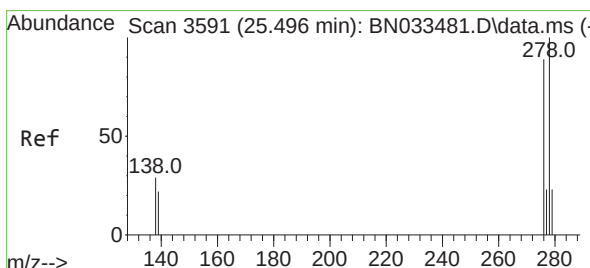
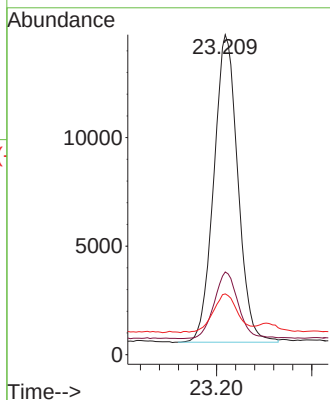
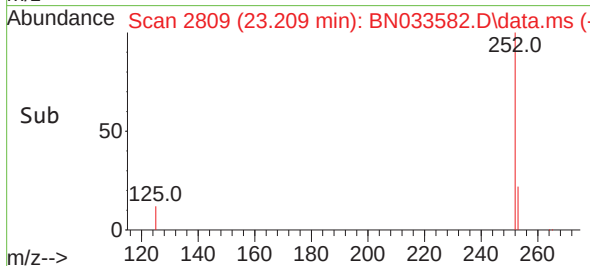
SSTDCCC0.4



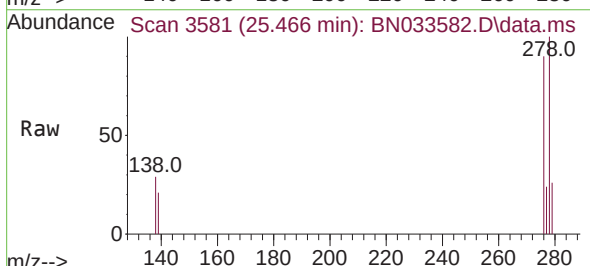
Tgt Ion:252 Resp: 2475  
Ion Ratio Lower Upper  
252 100  
253 25.9 21.5 32.3  
125 19.0 17.0 25.4

Manual Integrations  
APPROVED

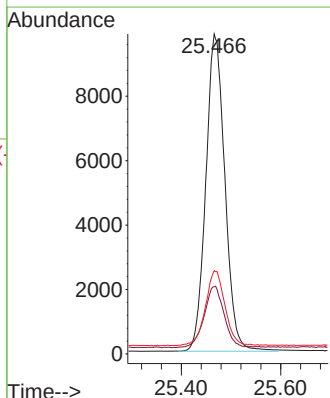
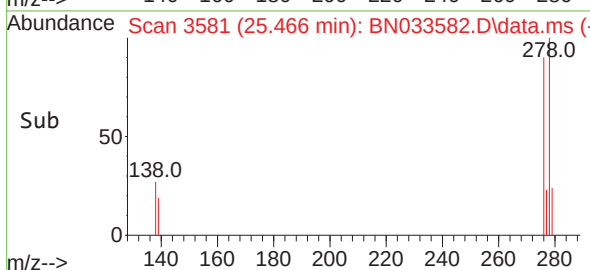
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

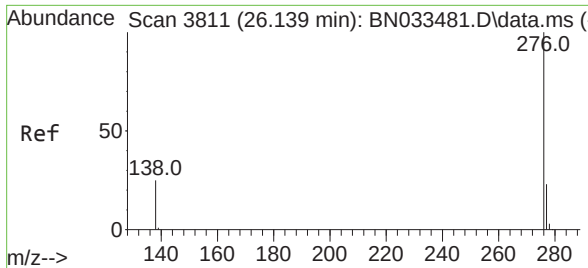


#40  
Dibenzo(a,h)anthracene  
Concen: 0.356 ng  
RT: 25.466 min Scan# 3581  
Delta R.T. -0.003 min  
Lab File: BN033582.D  
Acq: 23 Aug 2024 09:48



Tgt Ion:278 Resp: 26225  
Ion Ratio Lower Upper  
278 100  
139 21.0 19.1 28.7  
279 26.1 21.0 31.4





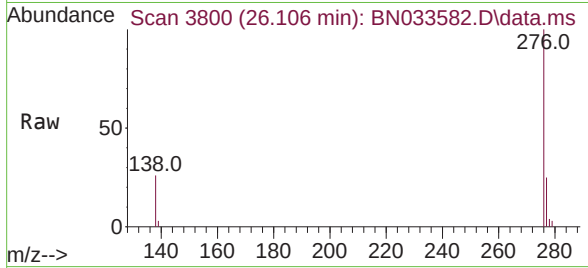
#41  
 Benzo(g,h,i)perylene  
 Concen: 0.351 ng  
 RT: 26.106 min Scan# 3811  
 Delta R.T. 0.003 min  
 Lab File: BN033582.D  
 Acq: 23 Aug 2024 09:48

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



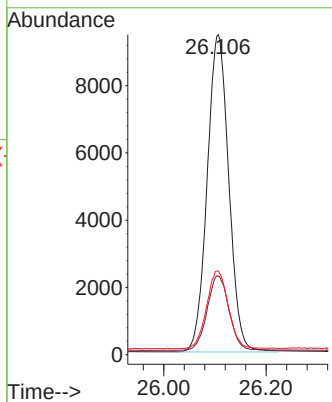
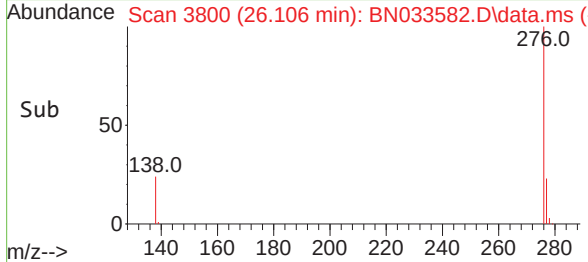
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 276   | Resp: | 2765 |
| Ion Ratio | Lower | Upper |      |
| 276       | 100   |       |      |
| 277       | 24.5  | 19.7  | 29.5 |
| 138       | 26.1  | 21.8  | 32.6 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033582.D  
 Acq On : 23 Aug 2024 09:48  
 Operator : MA/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Aug 23 13:38:16 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|---------|----------------------------|-------|-------|------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 1.000 | 1.000 | 0.0  | 54    | 0.00     |
| 2       | 1,4-Dioxane                | 0.460 | 0.443 | 3.7  | 73    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.535 | 0.441 | 17.6 | 53    | 0.00     |
| 4 S     | 2-Fluorophenol             | 1.271 | 1.116 | 12.2 | 48#   | 0.00     |
| 5 S     | Phenol-d6                  | 1.512 | 1.361 | 10.0 | 54    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.072 | 1.010 | 5.8  | 73    | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0  | 76    | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.332 | 0.305 | 8.1  | 76    | -0.01    |
| 9       | Naphthalene                | 1.069 | 0.979 | 8.4  | 79    | -0.01    |
| 10      | Hexachlorobutadiene        | 0.213 | 0.199 | 6.6  | 79    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.572 | 0.537 | 6.1  | 83    | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.677 | 0.621 | 8.3  | 80    | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0  | 81    | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.215 | 0.215 | 0.0  | 94    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 1.634 | 1.456 | 10.9 | 80    | 0.00     |
| 16      | Acenaphthylene             | 1.754 | 1.541 | 12.1 | 82    | -0.01    |
| 17      | Acenaphthene               | 1.234 | 1.077 | 12.7 | 79    | 0.00     |
| 18      | Fluorene                   | 1.555 | 1.395 | 10.3 | 82    | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0  | 87    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.062 | 0.061 | 1.6  | 103   | -0.01    |
| 21      | 4-Bromophenyl-phenylether  | 0.243 | 0.214 | 11.9 | 84    | 0.00     |
| 22      | Hexachlorobenzene          | 0.268 | 0.243 | 9.3  | 85    | 0.00     |
| 23      | Atrazine                   | 0.194 | 0.185 | 4.6  | 93    | -0.01    |
| 24      | Pentachlorophenol          | 0.116 | 0.116 | 0.0  | 104   | -0.01    |
| 25      | Phenanthrene               | 1.113 | 1.005 | 9.7  | 84    | 0.00     |
| 26      | Anthracene                 | 0.985 | 0.894 | 9.2  | 88    | -0.01    |
| 27 SURR | Fluoranthene-d10           | 0.961 | 0.996 | -3.6 | 99    | 0.00     |
| 28      | Fluoranthene               | 1.230 | 1.243 | -1.1 | 97    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0  | 121   | 0.00     |
| 30      | Pyrene                     | 1.785 | 1.433 | 19.7 | 102   | 0.00     |
| 31 S    | Terphenyl-d14              | 0.909 | 0.768 | 15.5 | 108   | 0.00     |
| 32      | Benzo(a)anthracene         | 1.446 | 1.377 | 4.8  | 127   | 0.00     |
| 33      | Chrysene                   | 1.437 | 1.334 | 7.2  | 121   | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.915 | 0.987 | -7.9 | 147   | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0  | 139   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.661 | 1.484 | 10.7 | 135   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.494 | 1.327 | 11.2 | 138   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.470 | 1.255 | 14.6 | 132   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.236 | 1.116 | 9.7  | 142   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.328 | 1.183 | 10.9 | 134   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.420 | 1.247 | 12.2 | 134   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033582.D  
Acq On : 23 Aug 2024 09:48  
Operator : MA/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
LabSampleId :  
SSTDCCC0.4

Quant Time: Aug 23 13:38:16 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | Amount | Calc. | %Dev | Area% | Dev(min) |
|---------|----------------------------|--------|-------|------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 0.400  | 0.400 | 0.0  | 54    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.385 | 3.8  | 73    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.330 | 17.5 | 53    | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.351 | 12.3 | 48    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.360 | 10.0 | 54    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.377 | 5.8  | 73    | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0  | 76    | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.367 | 8.3  | 76    | -0.01    |
| 9       | Naphthalene                | 0.400  | 0.366 | 8.5  | 79    | -0.01    |
| 10      | Hexachlorobutadiene        | 0.400  | 0.373 | 6.8  | 79    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.375 | 6.3  | 83    | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.367 | 8.3  | 80    | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0  | 81    | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.399 | 0.3  | 94    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.357 | 10.8 | 80    | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.351 | 12.3 | 82    | -0.01    |
| 17      | Acenaphthene               | 0.400  | 0.349 | 12.8 | 79    | 0.00     |
| 18      | Fluorene                   | 0.400  | 0.359 | 10.3 | 82    | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0  | 87    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.391 | 2.3  | 103   | -0.01    |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.353 | 11.8 | 84    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.363 | 9.3  | 85    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.382 | 4.5  | 93    | -0.01    |
| 24      | Pentachlorophenol          | 0.400  | 0.398 | 0.5  | 104   | -0.01    |
| 25      | Phenanthrene               | 0.400  | 0.361 | 9.8  | 84    | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.363 | 9.3  | 88    | -0.01    |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.414 | -3.5 | 99    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.404 | -1.0 | 97    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0  | 121   | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.321 | 19.8 | 102   | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.338 | 15.5 | 108   | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.381 | 4.8  | 127   | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.371 | 7.3  | 121   | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.431 | -7.7 | 147   | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0  | 139   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.357 | 10.8 | 135   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.355 | 11.3 | 138   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.341 | 14.8 | 132   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.361 | 9.8  | 142   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.356 | 11.0 | 134   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.351 | 12.3 | 134   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
Fax : 908 789 8922

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JAC005

Lab Code: CHEM Case No.: P3671 SAS No.: P3671 SDG No.: P3671

Instrument ID: BNA\_N Calibration Date/Time: 08/23/2024 21:30

Lab File ID: BN033599.D Init. Calib. Date(s): 08/19/2024 08/19/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 16:16 19:53

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND                | RRF   | RRF0.4 | MIN<br>RRF | %D    | MAX%D |
|-------------------------|-------|--------|------------|-------|-------|
| 2-Methylnaphthalene-d10 | 0.572 | 0.518  |            | -9.4  | 20.0  |
| Fluoranthene-d10        | 0.961 | 0.910  |            | -5.3  | 20.0  |
| 2-Fluorophenol          | 1.271 | 1.086  |            | -14.6 | 20.0  |
| Phenol-d6               | 1.512 | 1.337  |            | -11.6 | 20.0  |
| Nitrobenzene-d5         | 0.332 | 0.315  |            | -5.1  | 20.0  |
| Naphthalene             | 1.069 | 0.971  |            | -9.2  | 20.0  |
| 2-Methylnaphthalene     | 0.677 | 0.599  |            | -11.5 | 20.0  |
| 2-Fluorobiphenyl        | 1.634 | 1.564  |            | -4.3  | 20.0  |
| Acenaphthylene          | 1.754 | 1.573  |            | -10.3 | 20.0  |
| Acenaphthene            | 1.234 | 1.071  |            | -13.2 | 20.0  |
| Fluorene                | 1.555 | 1.316  |            | -15.4 | 20.0  |
| 2,4,6-Tribromophenol    | 0.215 | 0.200  |            | -7.0  | 20.0  |
| Phenanthrene            | 1.113 | 1.007  |            | -9.5  | 20.0  |
| Anthracene              | 0.985 | 0.891  |            | -9.5  | 20.0  |
| Fluoranthene            | 1.230 | 1.133  |            | -7.9  | 20.0  |
| Pyrene                  | 1.785 | 1.498  |            | -16.1 | 20.0  |
| Terphenyl-d14           | 0.909 | 0.792  |            | -12.9 | 20.0  |
| Benzo(a)anthracene      | 1.446 | 1.396  |            | -3.5  | 20.0  |
| Chrysene                | 1.437 | 1.338  |            | -6.9  | 20.0  |
| Benzo(b)fluoranthene    | 1.494 | 1.296  |            | -13.3 | 20.0  |
| Benzo(k)fluoranthene    | 1.470 | 1.233  |            | -16.1 | 20.0  |
| Benzo(a)pyrene          | 1.236 | 1.129  |            | -8.7  | 20.0  |
| Indeno(1,2,3-cd)pyrene  | 1.661 | 1.494  |            | -10.1 | 20.0  |
| Dibenzo(a,h)anthracene  | 1.328 | 1.193  |            | -10.2 | 20.0  |
| Benzo(g,h,i)perylene    | 1.420 | 1.267  |            | -10.8 | 20.0  |
| 1,4-Dioxane             | 0.460 | 0.371  |            | -19.3 | 20.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033599.D  
 Acq On : 23 Aug 2024 21:30  
 Operator : MA/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

**Instrument :**

BNA\_N

**ClientSampleId :**

SSTDCCC0.4

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024

Quant Time: Aug 24 02:19:01 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Aug 23 00:22:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 8463     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.303 | 136  | 21893    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 10120    | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 19008    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 15095    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.305 | 264  | 17412    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 9194     | 0.342 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.736  | 99   | 11316    | 0.354 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.680  | 82   | 6887     | 0.379 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.899 | 152  | 11350    | 0.362 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.675 | 330  | 2021     | 0.371 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.798 | 172  | 15825    | 0.383 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 17306    | 0.379 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 11954    | 0.348 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
|                               |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.182  | 88   | 3140     | 0.322 | ng    | 98       |
| 3) n-Nitrosodimethylamine     | 3.471  | 42   | 3795     | 0.335 | ng    | # 96     |
| 6) bis(2-Chloroethyl)ether    | 6.981  | 93   | 8655     | 0.381 | ng    | 99       |
| 9) Naphthalene                | 10.357 | 128  | 21253    | 0.363 | ng    | 100      |
| 10) Hexachlorobutadiene       | 10.645 | 225  | 4482     | 0.384 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 13121    | 0.354 | ng    | 99       |
| 16) Acenaphthylene            | 13.889 | 152  | 15919    | 0.359 | ng    | 100      |
| 17) Acenaphthene              | 14.242 | 154  | 10839    | 0.347 | ng    | 98       |
| 18) Fluorene                  | 15.236 | 166  | 13314    | 0.338 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.321 | 198  | 369      | 0.124 | ng    | # 74     |
| 21) 4-Bromophenyl-phenylether | 16.134 | 248  | 4322     | 0.374 | ng    | 98       |
| 22) Hexachlorobenzene         | 16.246 | 284  | 4849     | 0.380 | ng    | 99       |
| 23) Atrazine                  | 16.420 | 200  | 3565     | 0.387 | ng    | # 90     |
| 24) Pentachlorophenol         | 16.594 | 266  | 2109     | 0.382 | ng    | 98       |
| 25) Phenanthrene              | 16.966 | 178  | 19150    | 0.362 | ng    | 100      |
| 26) Anthracene                | 17.065 | 178  | 16935    | 0.362 | ng    | 100      |
| 28) Fluoranthene              | 19.002 | 202  | 21543    | 0.369 | ng    | 100      |
| 30) Pyrene                    | 19.365 | 202  | 22618    | 0.336 | ng    | 99       |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 21080    | 0.386 | ng    | 99       |
| 33) Chrysene                  | 21.175 | 228  | 20201    | 0.372 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.085 | 149  | 17187m   | 0.497 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.454 | 276  | 26015    | 0.360 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.662 | 252  | 22565    | 0.347 | ng    | 97       |
| 38) Benzo(k)fluoranthene      | 22.703 | 252  | 21472    | 0.335 | ng    | 97       |
| 39) Benzo(a)pyrene            | 23.209 | 252  | 19663    | 0.365 | ng    | 99       |
| 40) Dibenzo(a,h)anthracene    | 25.472 | 278  | 20764    | 0.359 | ng    | 98       |
| 41) Benzo(g,h,i)perylene      | 26.106 | 276  | 22053    | 0.357 | ng    | 99       |

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



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
 Data File : BN033599.D  
 Acq On : 23 Aug 2024 21:30  
 Operator : MA/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

**Instrument :**

BNA\_N

**ClientSampleId :**

SSTDCCC0.4

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024

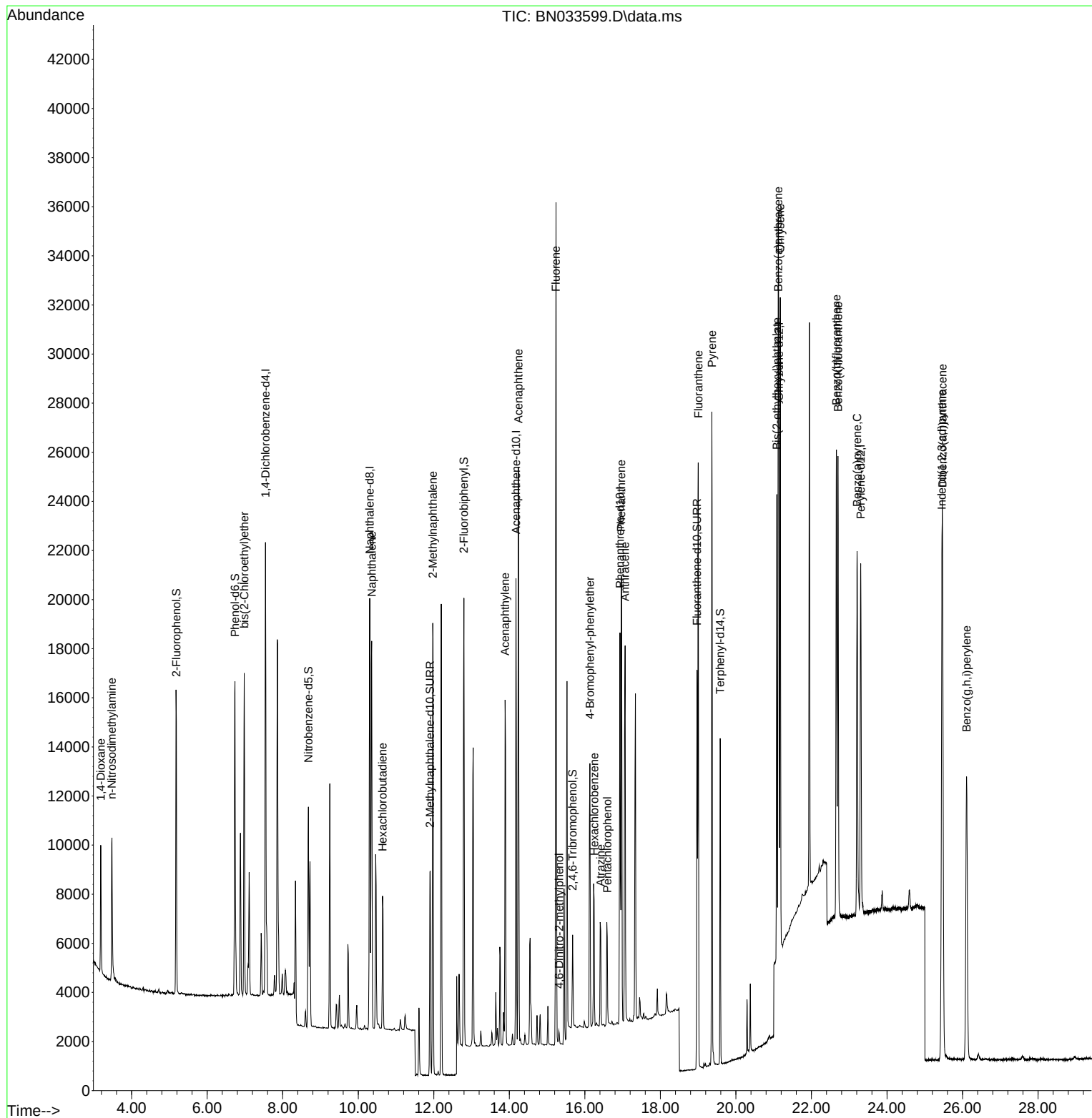
Quant Time: Aug 24 02:19:01 2024

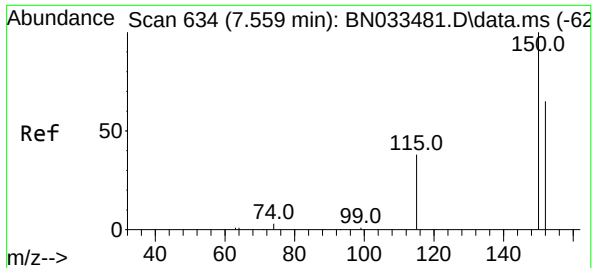
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Aug 23 00:22:18 2024

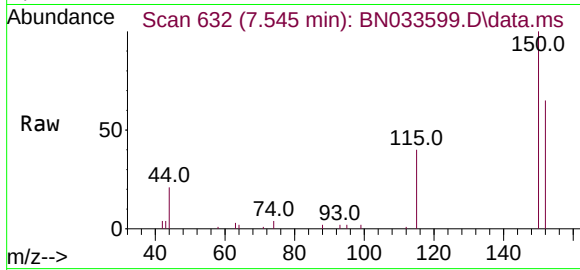
Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

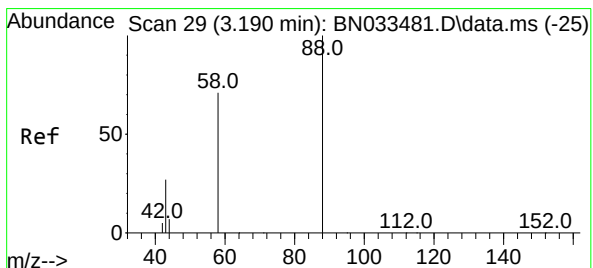
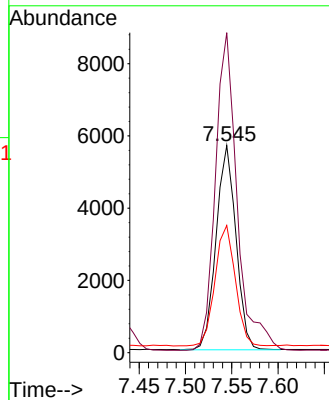
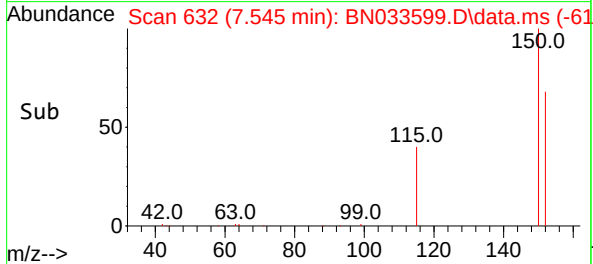
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion: 152 Resp: 846  
Ion Ratio Lower Upper  
152 100  
150 154.5 122.2 183.2  
115 61.4 47.2 70.8

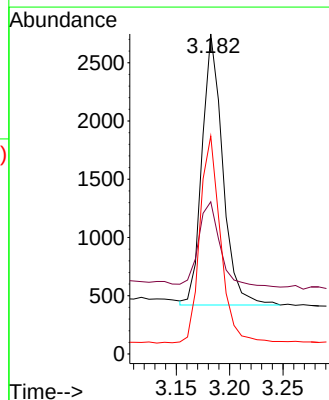
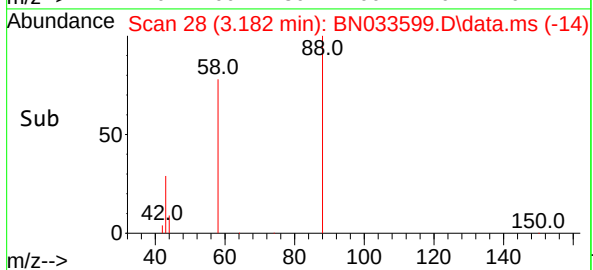
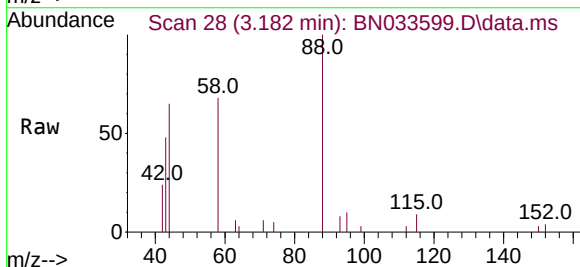
Manual Integrations  
APPROVED

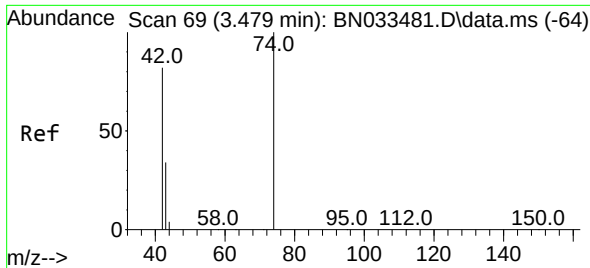
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#2  
1,4-Dioxane  
Concen: 0.322 ng  
RT: 3.182 min Scan# 28  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Tgt Ion: 88 Resp: 3140  
Ion Ratio Lower Upper  
88 100  
43 33.1 25.0 37.4  
58 76.8 62.5 93.7





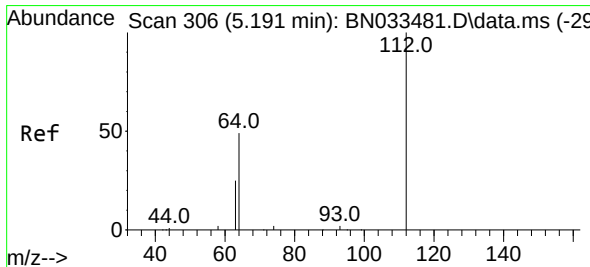
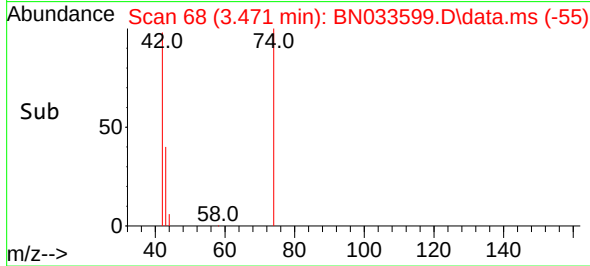
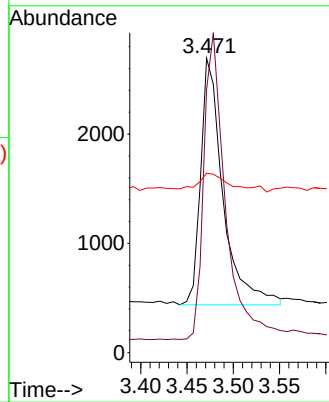
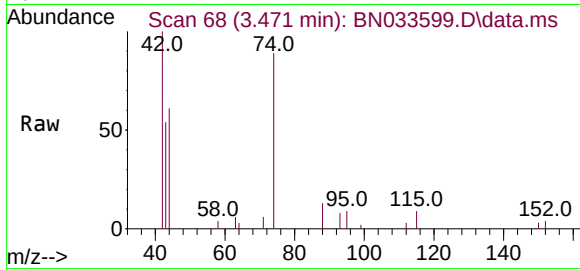
#3  
n-Nitrosodimethylamine  
Concen: 0.335 ng  
RT: 3.471 min Scan# 61  
Delta R.T. -0.008 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Tgt Ion: 42 Resp: 379  
Ion Ratio Lower Upper  
42 100  
74 121.3 100.2 150.2  
44 11.1 5.3 7.9

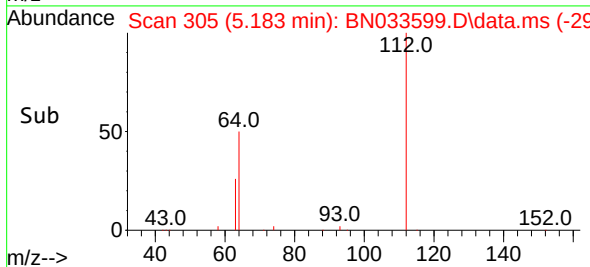
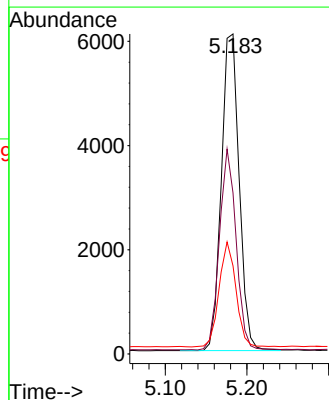
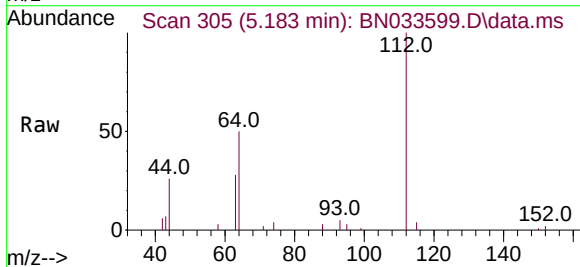
Manual Integrations  
APPROVED

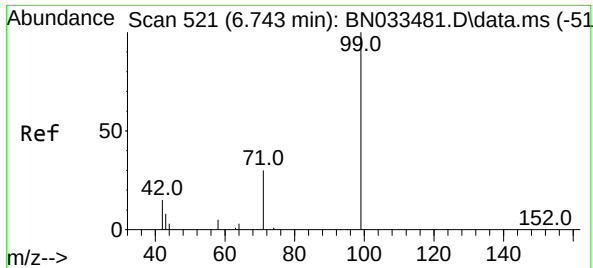
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#4  
2-Fluorophenol  
Concen: 0.342 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Tgt Ion:112 Resp: 9194  
Ion Ratio Lower Upper  
112 100  
64 59.4 47.1 70.7  
63 31.4 24.9 37.3





#5  
Phenol-d6  
Concen: 0.354 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Instrument :

BNA\_N

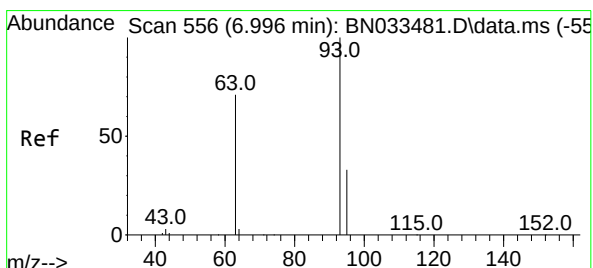
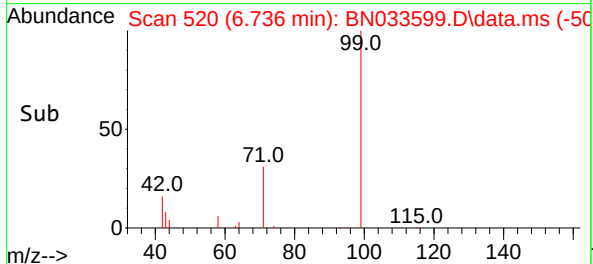
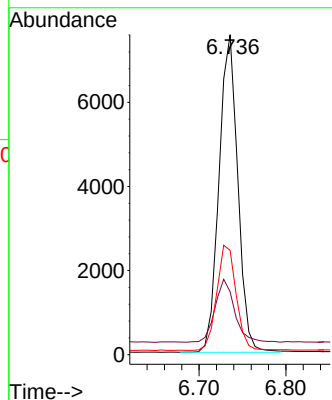
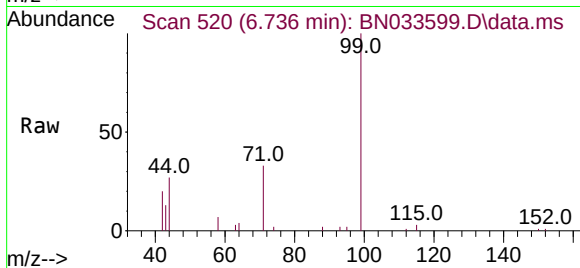
ClientSampleId :

SSTDCCC0.4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 99      | 100   |       |       |
| 42      | 20.6  | 16.6  | 24.8  |
| 71      | 34.3  | 26.2  | 39.4  |

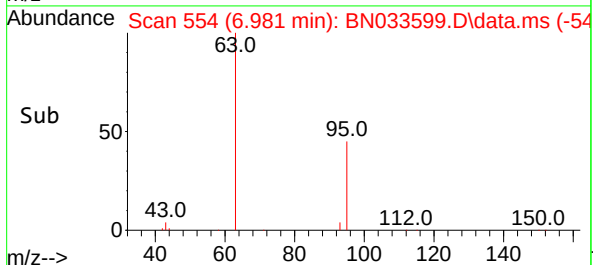
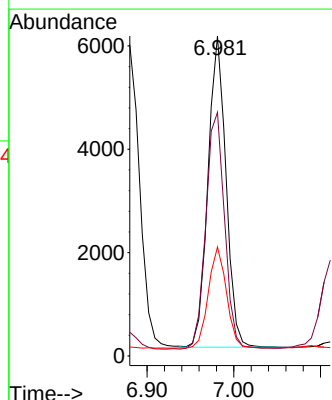
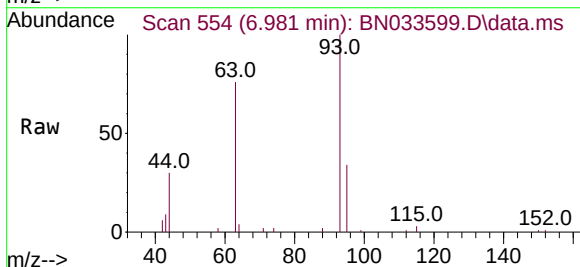
Manual Integrations  
**APPROVED**

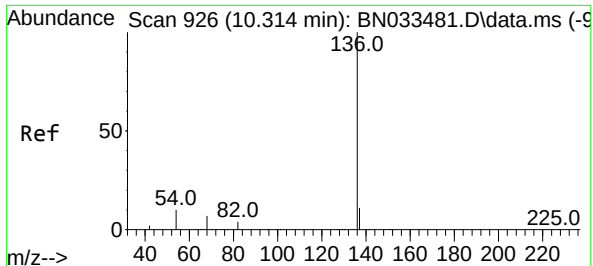
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#6  
bis(2-Chloroethyl)ether  
Concen: 0.381 ng  
RT: 6.981 min Scan# 554  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

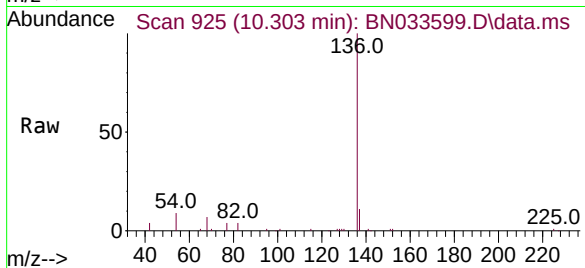
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 93      | 100   |       |       |
| 63      | 79.8  | 63.0  | 94.4  |
| 95      | 32.9  | 26.0  | 39.0  |





#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.303 min Scan# 91  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

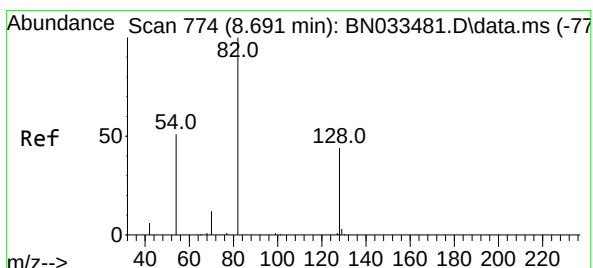
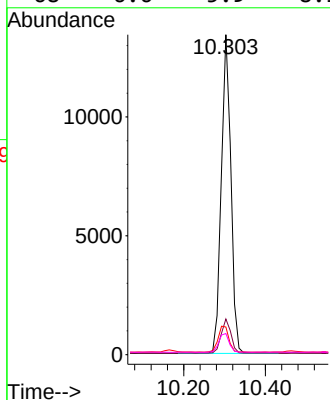
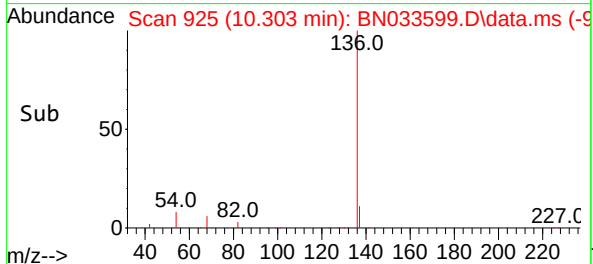
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion: 136 Resp: 2189  
Ion Ratio Lower Upper  
136 100  
137 11.2 9.0 13.6  
54 8.6 8.3 12.5  
68 6.6 5.9 8.9

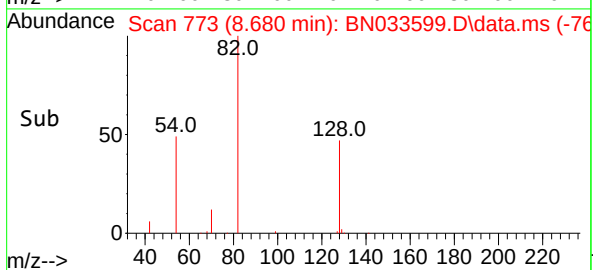
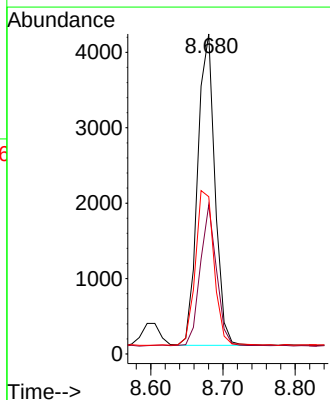
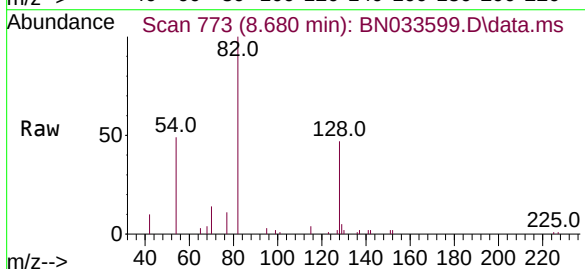
Manual Integrations  
APPROVED

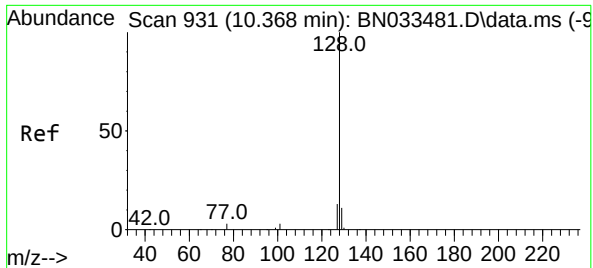
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#8  
Nitrobenzene-d5  
Concen: 0.379 ng  
RT: 8.680 min Scan# 773  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Tgt Ion: 82 Resp: 6887  
Ion Ratio Lower Upper  
82 100  
128 46.6 36.0 54.0  
54 49.2 42.0 63.0





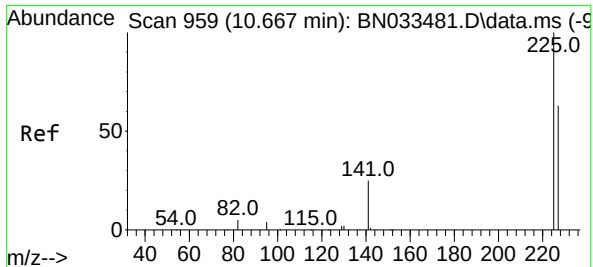
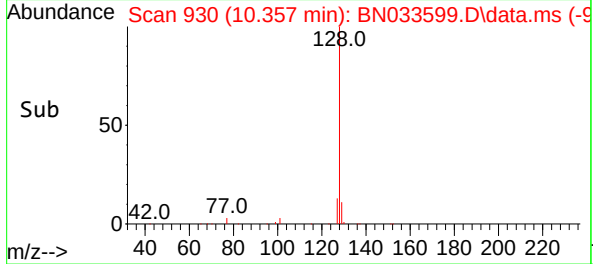
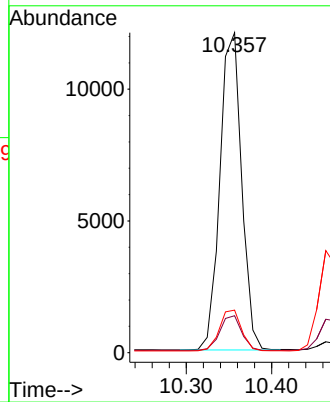
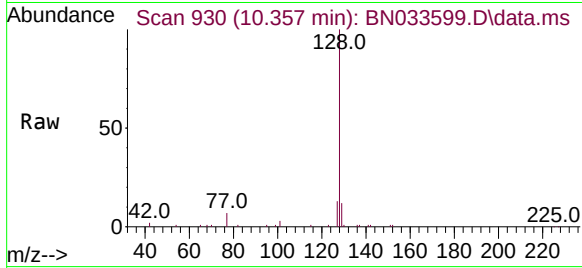
#9  
Naphthalene  
Concen: 0.363 ng  
RT: 10.357 min Scan# 911  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Tgt Ion:128 Resp: 2125  
Ion Ratio Lower Upper  
128 100  
129 11.6 9.1 13.7  
127 13.3 10.7 16.1

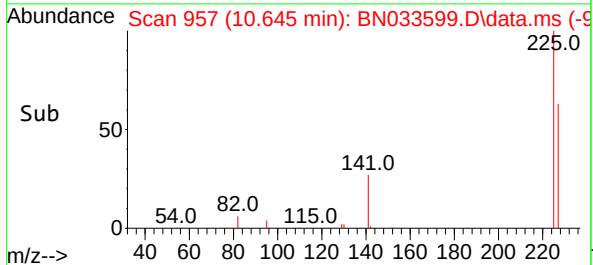
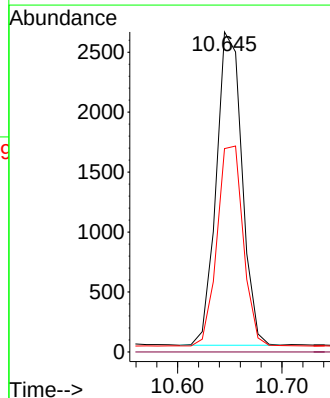
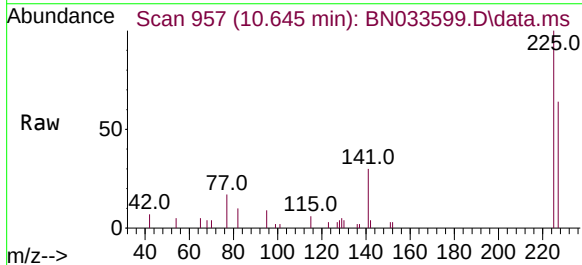
Manual Integrations  
APPROVED

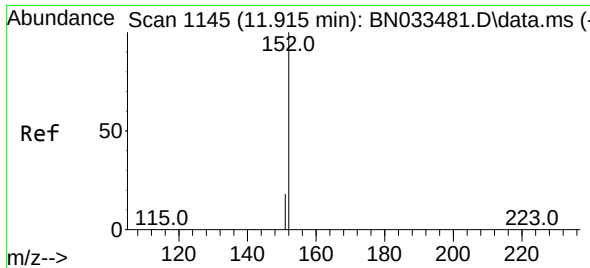
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#10  
Hexachlorobutadiene  
Concen: 0.384 ng  
RT: 10.645 min Scan# 957  
Delta R.T. -0.011 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

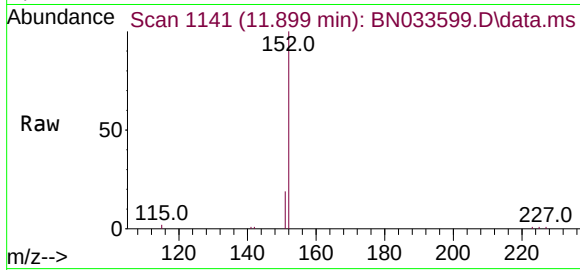
Tgt Ion:225 Resp: 4482  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.1 51.2 76.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.362 ng  
RT: 11.899 min Scan# 1145  
Delta R.T. -0.004 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

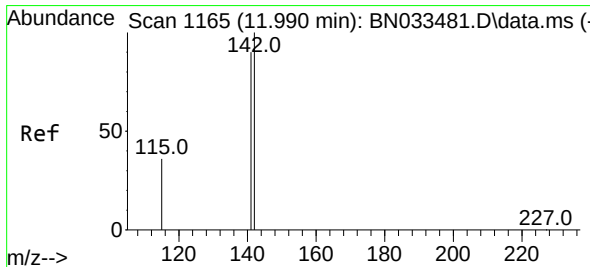
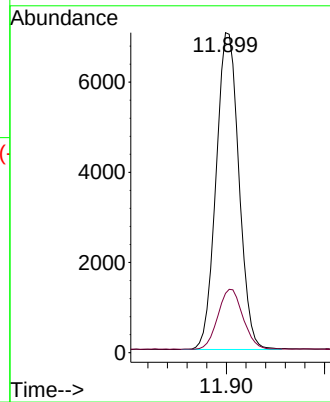
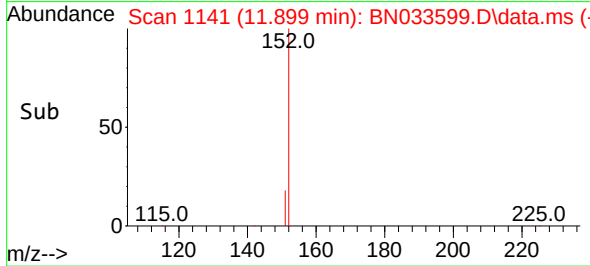
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:152 Resp: 11350  
Ion Ratio Lower Upper  
152 100  
151 20.8 16.6 25.0

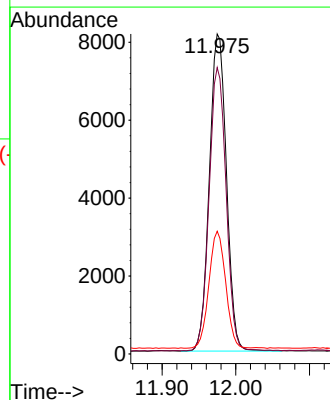
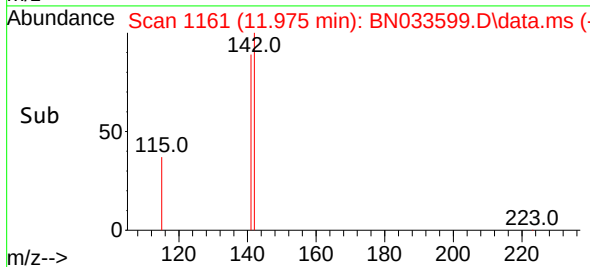
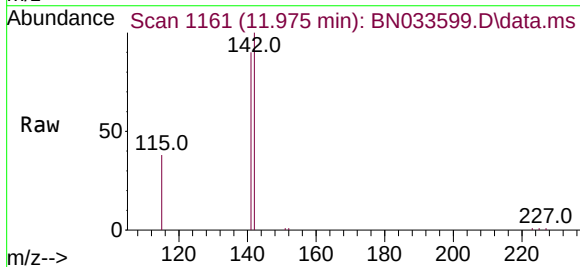
Manual Integrations  
APPROVED

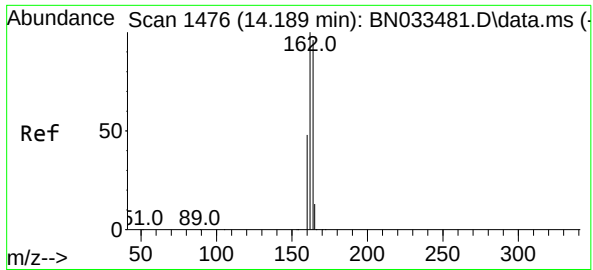
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#12  
2-Methylnaphthalene  
Concen: 0.354 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

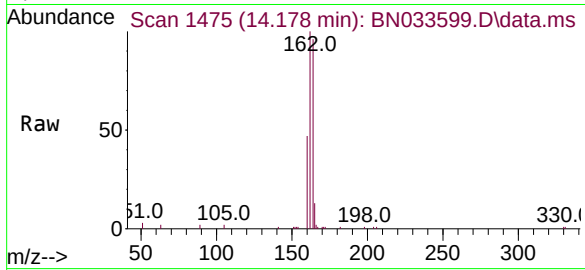
Tgt Ion:142 Resp: 13121  
Ion Ratio Lower Upper  
142 100  
141 89.5 71.7 107.5  
115 38.3 29.4 44.2





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1476  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

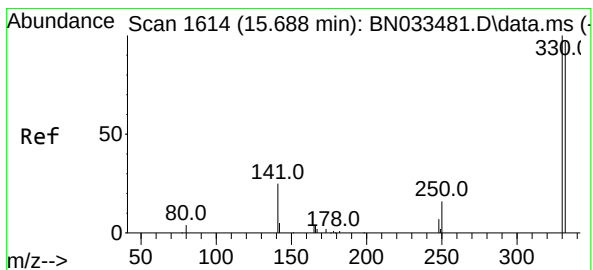
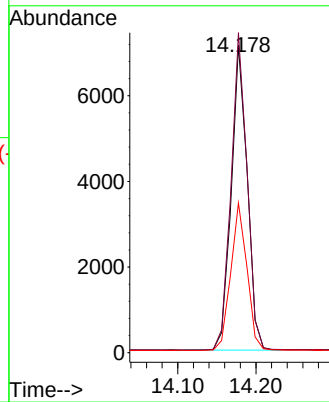
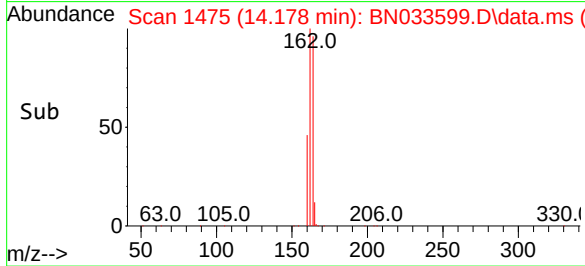
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



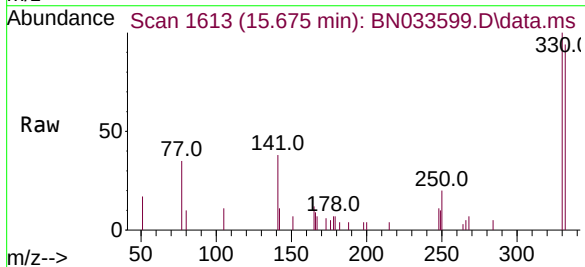
Tgt Ion:164 Resp: 10120  
Ion Ratio Lower Upper  
164 100  
162 104.2 83.5 125.3  
160 48.8 40.2 60.4

Manual Integrations  
APPROVED

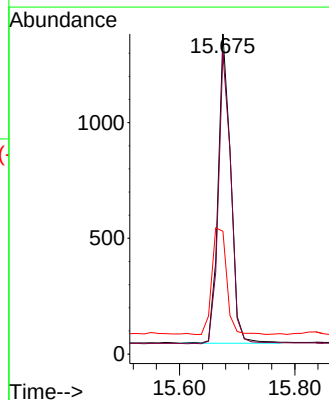
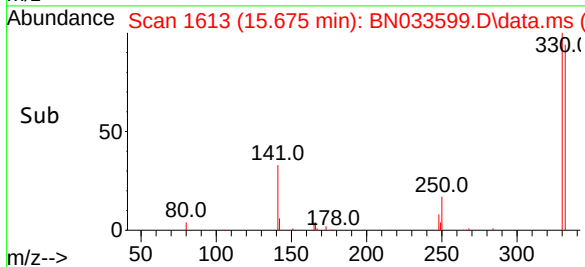
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



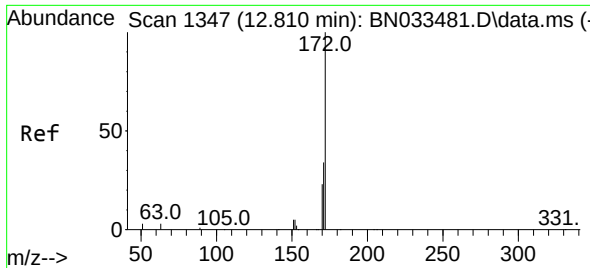
#14  
2,4,6-Tribromophenol  
Concen: 0.371 ng  
RT: 15.675 min Scan# 1613  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30



Tgt Ion:330 Resp: 2021  
Ion Ratio Lower Upper  
330 100  
332 94.7 77.5 116.3  
141 40.3 33.9 50.9

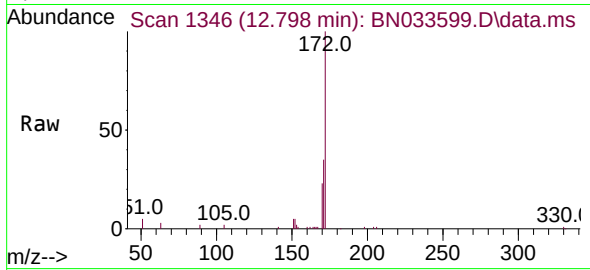






#15  
2-Fluorobiphenyl  
Concen: 0.383 ng  
RT: 12.798 min Scan# 11  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

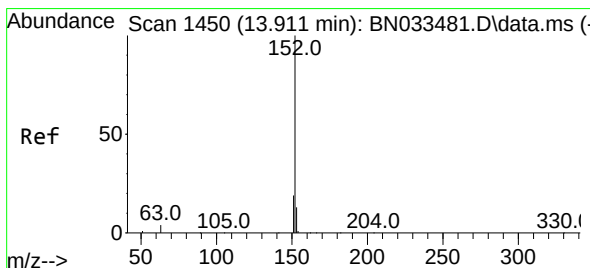
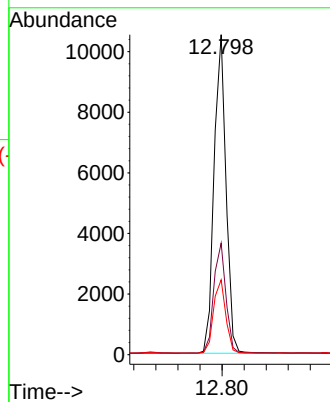
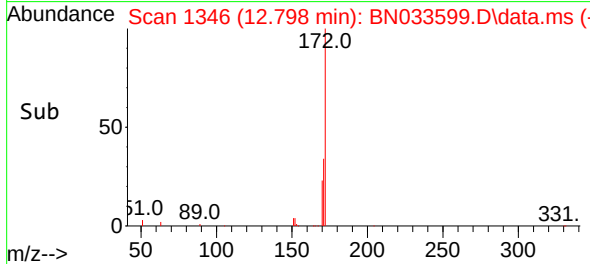
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:172 Resp: 1582  
Ion Ratio Lower Upper  
172 100  
171 34.8 27.7 41.5  
170 23.4 18.3 27.5

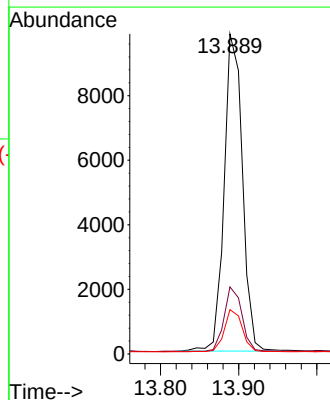
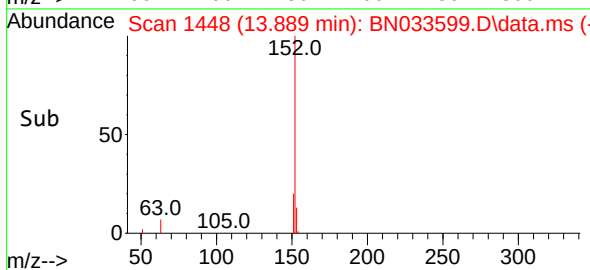
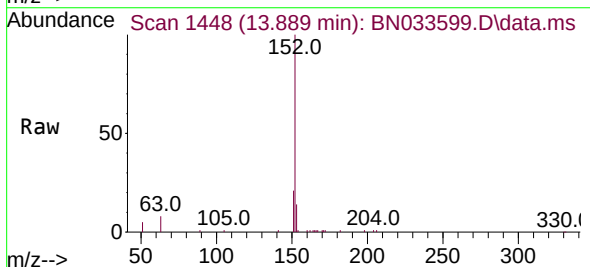
Manual Integrations  
APPROVED

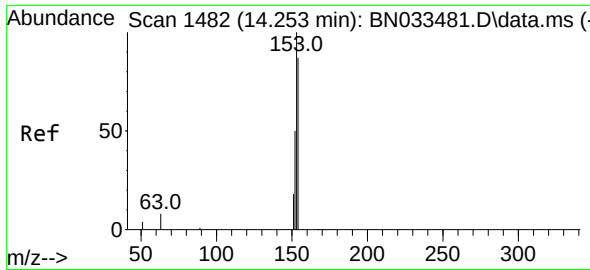
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#16  
Acenaphthylene  
Concen: 0.359 ng  
RT: 13.889 min Scan# 1448  
Delta R.T. -0.011 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

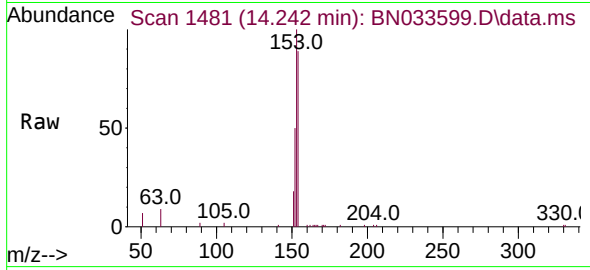
Tgt Ion:152 Resp: 15919  
Ion Ratio Lower Upper  
152 100  
151 19.8 15.7 23.5  
153 13.0 10.3 15.5





#17  
Acenaphthene  
Concen: 0.347 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

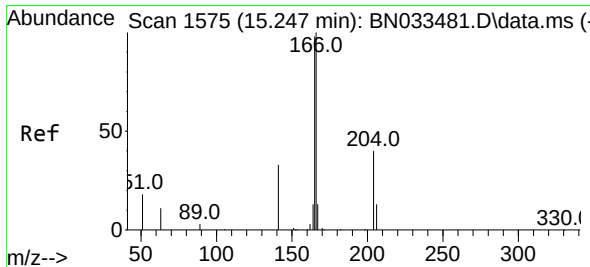
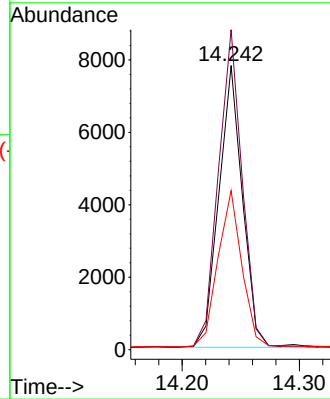
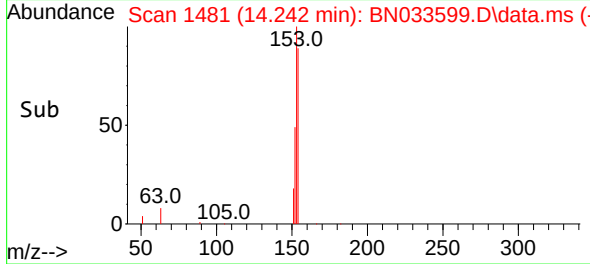
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:154 Resp: 10839  
Ion Ratio Lower Upper  
154 100  
153 113.7 89.0 133.6  
152 56.4 45.2 67.8

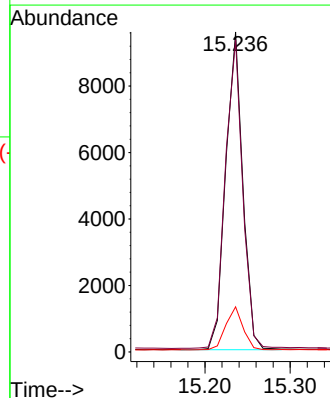
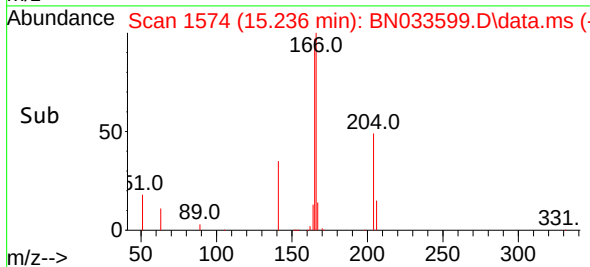
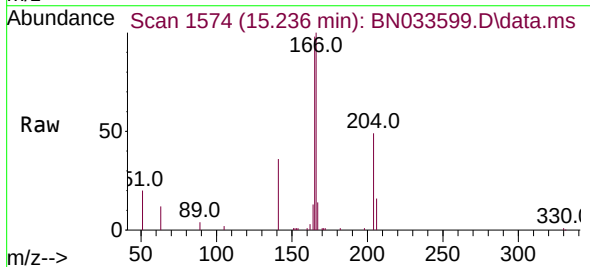
Manual Integrations  
**APPROVED**

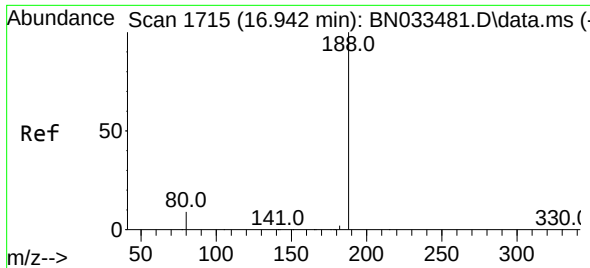
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#18  
Fluorene  
Concen: 0.338 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Tgt Ion:166 Resp: 13314  
Ion Ratio Lower Upper  
166 100  
165 98.3 78.2 117.4  
167 13.6 10.6 16.0





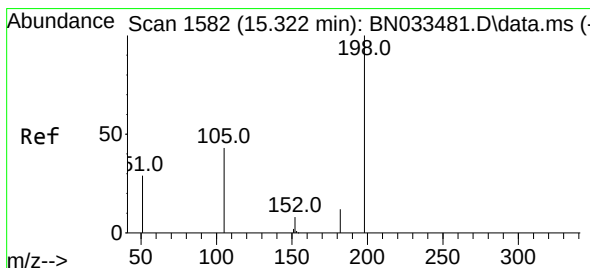
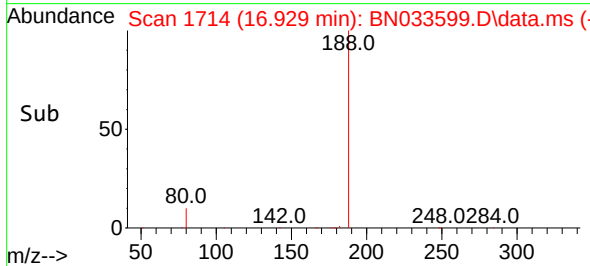
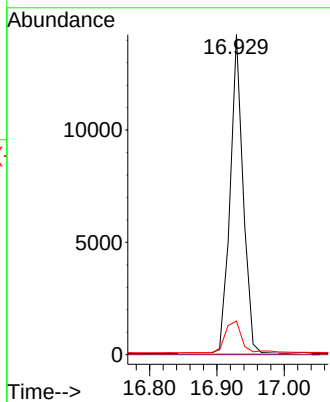
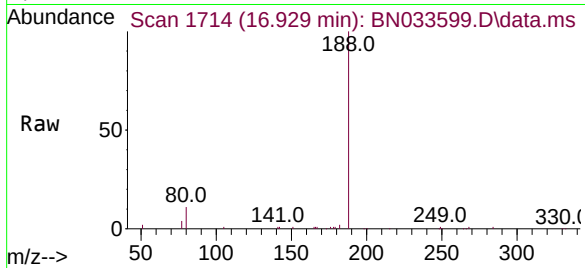
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1715  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Tgt Ion:188 Resp: 19008  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 10.5 7.8 11.8

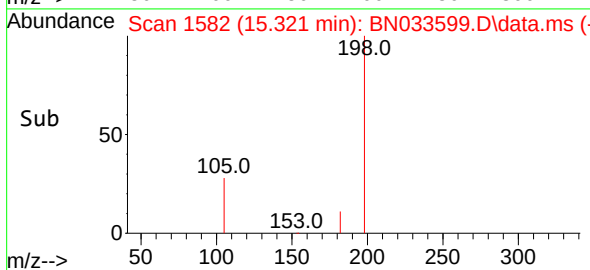
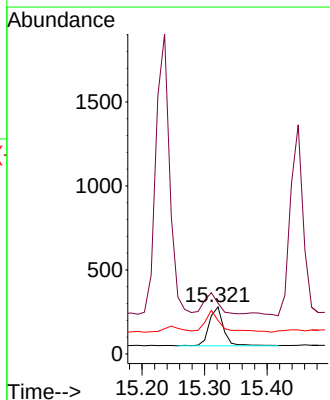
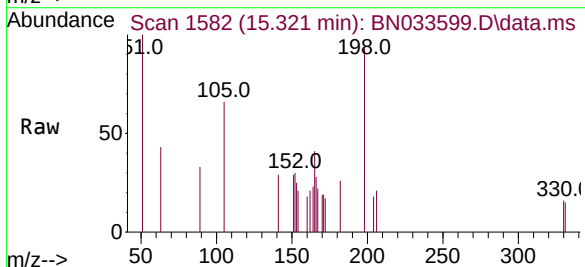
Manual Integrations  
**APPROVED**

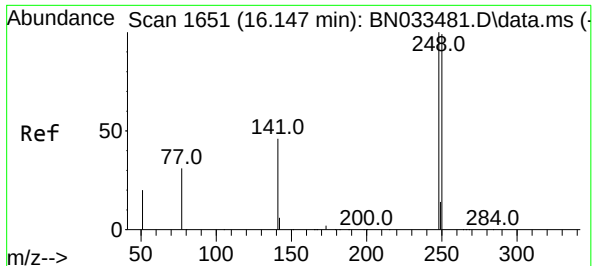
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.124 ng  
RT: 15.321 min Scan# 1582  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

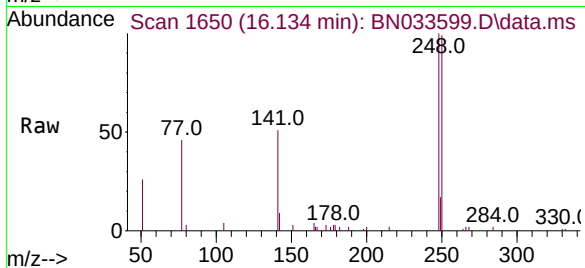
Tgt Ion:198 Resp: 369  
Ion Ratio Lower Upper  
198 100  
51 107.9 65.1 97.7#  
105 71.1 44.8 67.2#





#21  
4-Bromophenyl-phenylether  
Concen: 0.374 ng  
RT: 16.134 min Scan# 1650  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

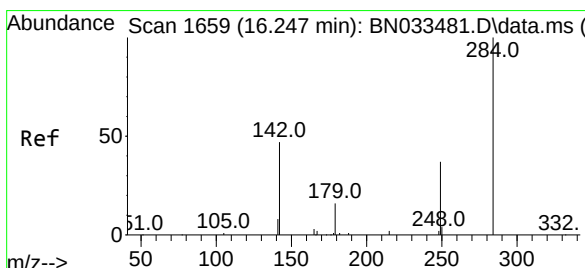
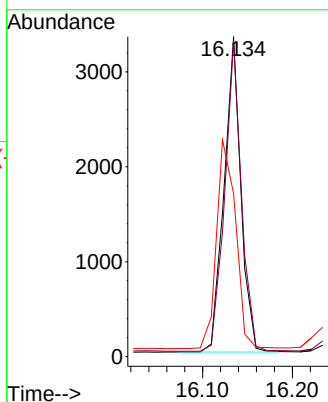
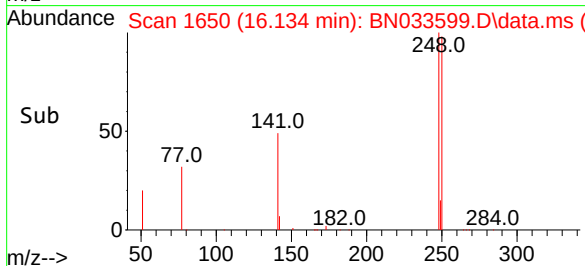
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:248 Resp: 432  
Ion Ratio Lower Upper  
248 100  
250 98.7 79.2 118.8  
141 51.0 37.9 56.9

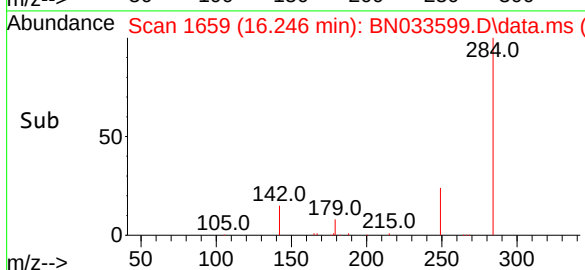
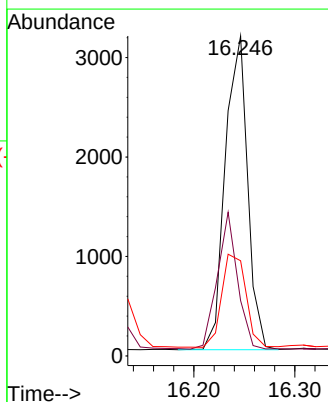
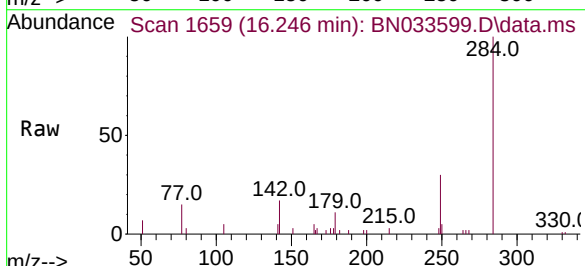
Manual Integrations  
APPROVED

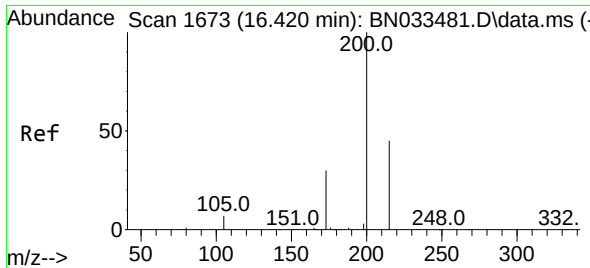
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#22  
Hexachlorobenzene  
Concen: 0.380 ng  
RT: 16.246 min Scan# 1659  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

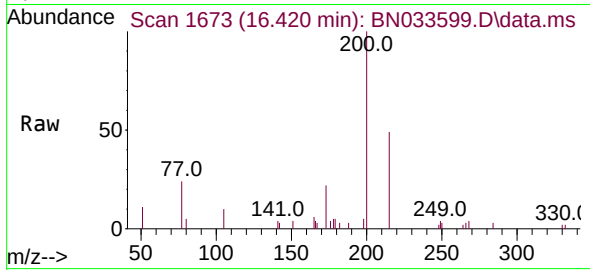
Tgt Ion:284 Resp: 4849  
Ion Ratio Lower Upper  
284 100  
142 39.0 31.8 47.6  
249 32.0 26.0 39.0





#23  
Atrazine  
Concen: 0.387 ng  
RT: 16.420 min Scan# 1673  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

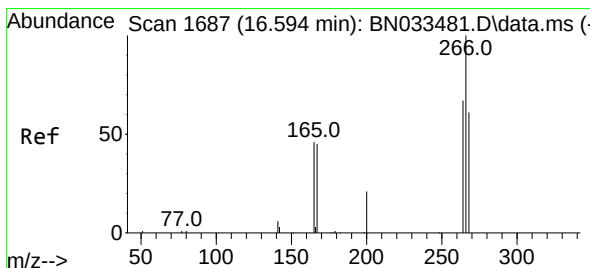
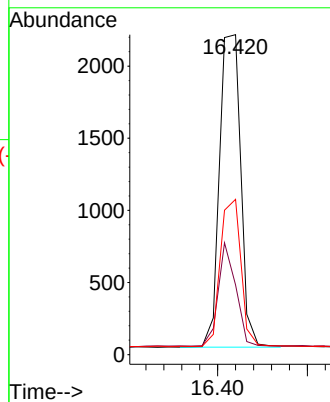
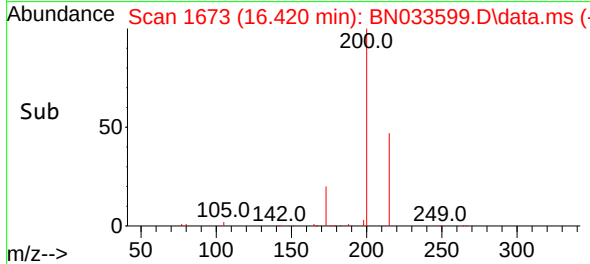
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:200 Resp: 356  
Ion Ratio Lower Upper  
200 100  
173 21.8 25.3 37.9  
215 48.6 36.6 54.8

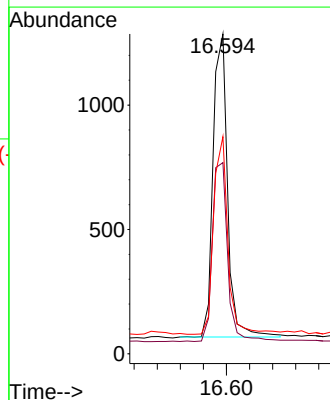
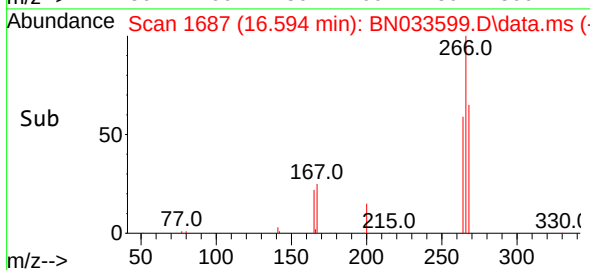
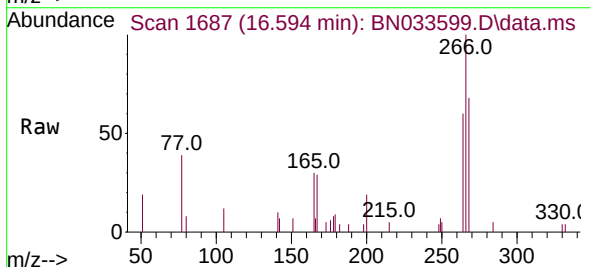
Manual Integrations  
APPROVED

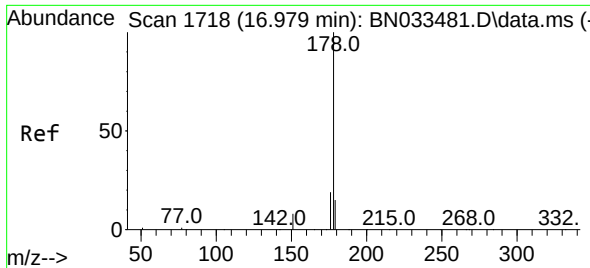
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#24  
Pentachlorophenol  
Concen: 0.382 ng  
RT: 16.594 min Scan# 1687  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

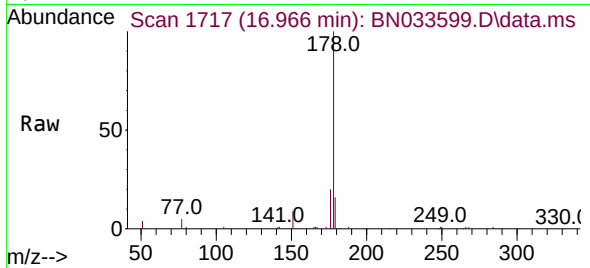
Tgt Ion:266 Resp: 2109  
Ion Ratio Lower Upper  
266 100  
264 62.4 51.9 77.9  
268 64.6 51.0 76.4





#25  
Phenanthrene  
Concen: 0.362 ng  
RT: 16.966 min Scan# 1718  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

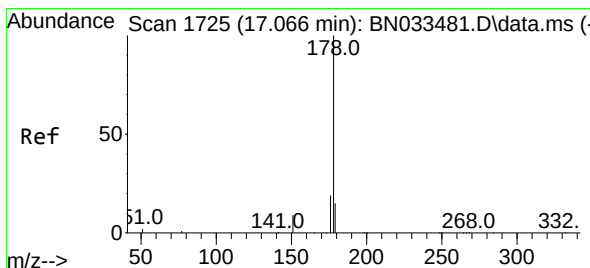
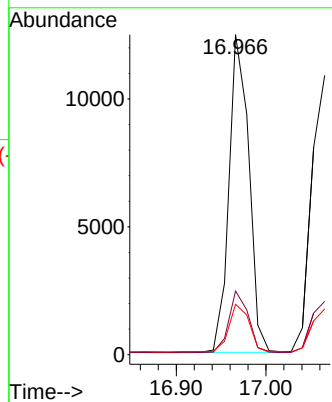
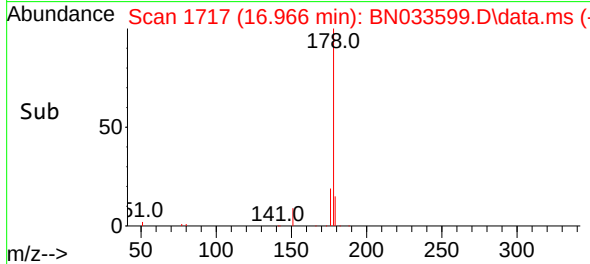
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:178 Resp: 19150  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.3 22.9  
179 15.4 12.3 18.5

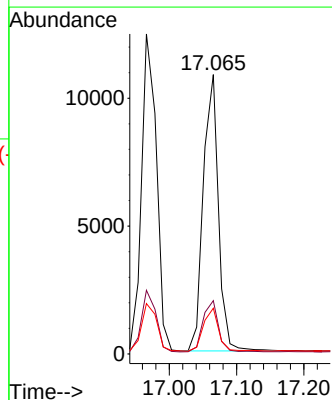
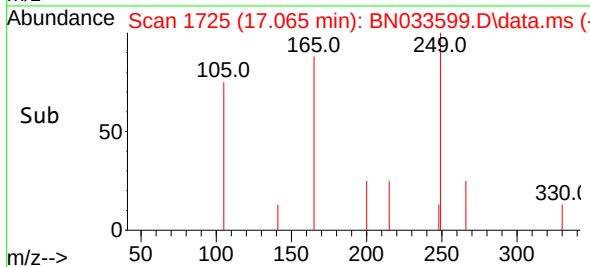
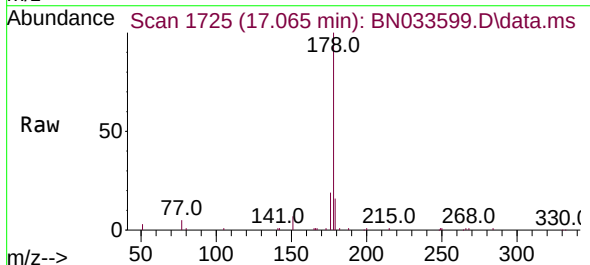
Manual Integrations  
APPROVED

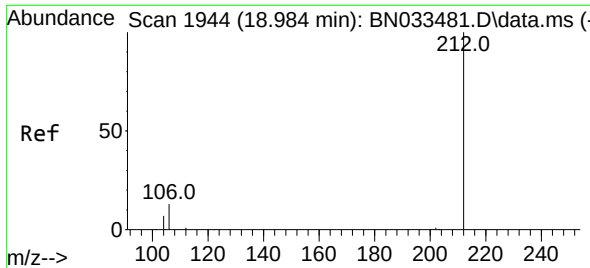
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#26  
Anthracene  
Concen: 0.362 ng  
RT: 17.065 min Scan# 1725  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

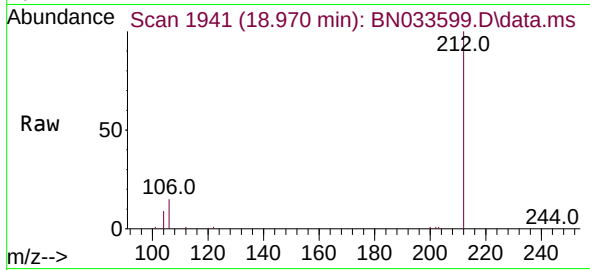
Tgt Ion:178 Resp: 16935  
Ion Ratio Lower Upper  
178 100  
176 18.9 15.0 22.6  
179 15.6 12.4 18.6





#27  
Fluoranthene-d10  
Concen: 0.379 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

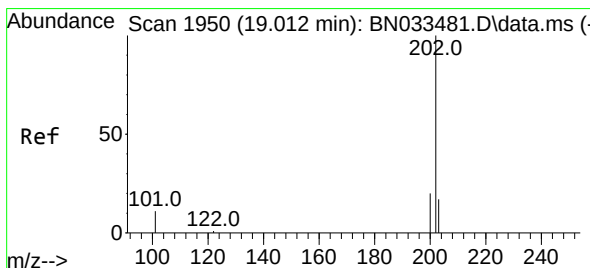
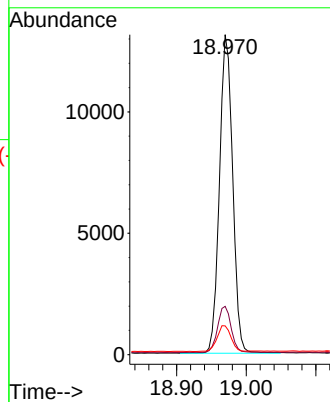
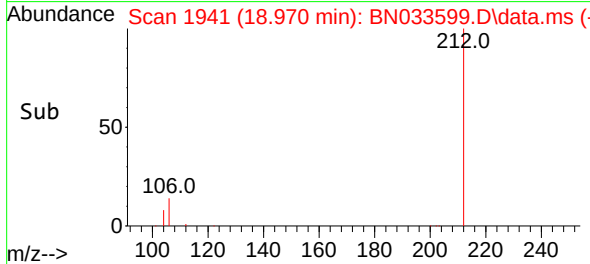
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:212 Resp: 17300  
Ion Ratio Lower Upper  
212 100  
106 14.8 12.3 18.5  
104 8.5 7.0 10.4

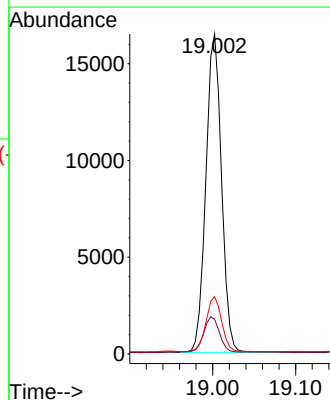
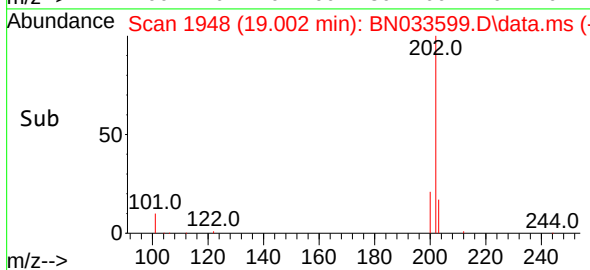
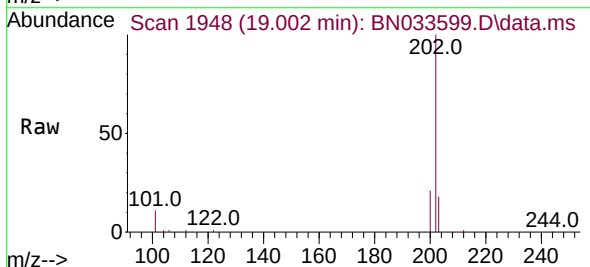
Manual Integrations  
**APPROVED**

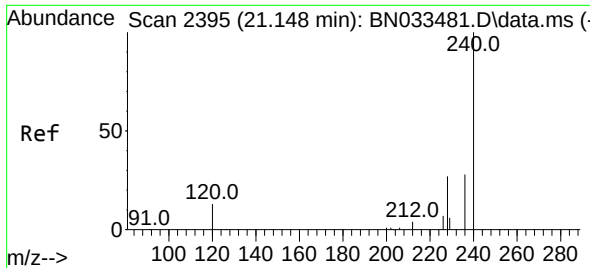
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#28  
Fluoranthene  
Concen: 0.369 ng  
RT: 19.002 min Scan# 1948  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

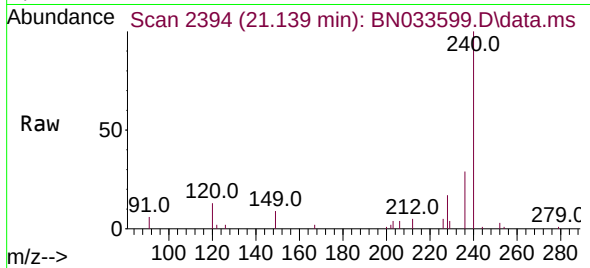
Tgt Ion:202 Resp: 21543  
Ion Ratio Lower Upper  
202 100  
101 11.7 9.5 14.3  
203 17.3 13.8 20.6





#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 21  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

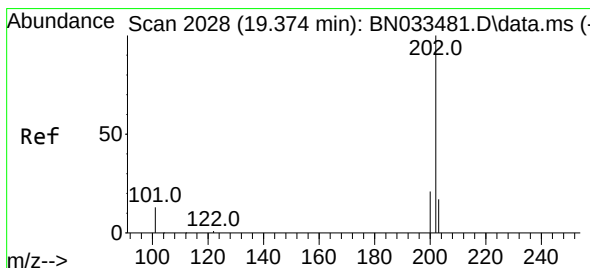
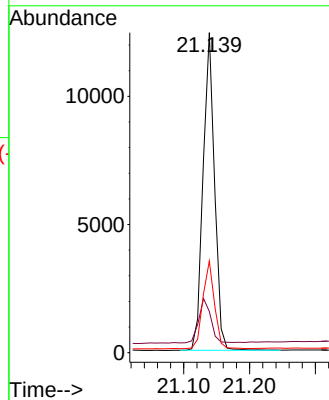
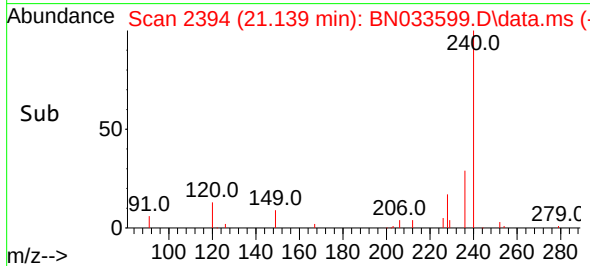
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:240 Resp: 1509  
Ion Ratio Lower Upper  
240 100  
120 12.9 12.4 18.6  
236 28.6 23.0 34.6

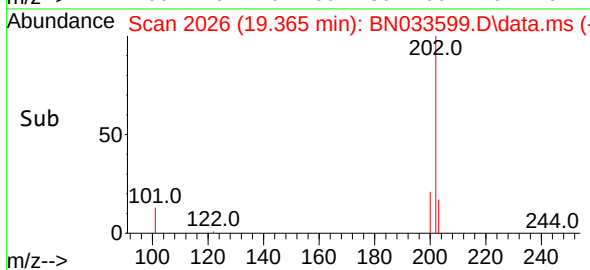
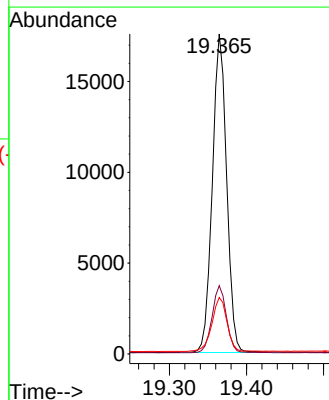
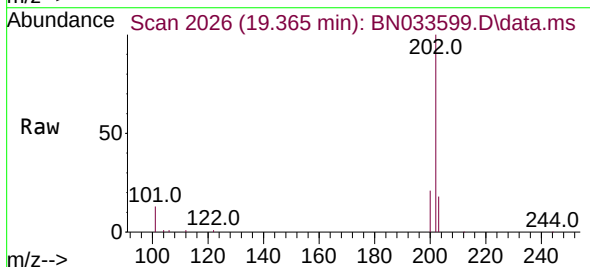
Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

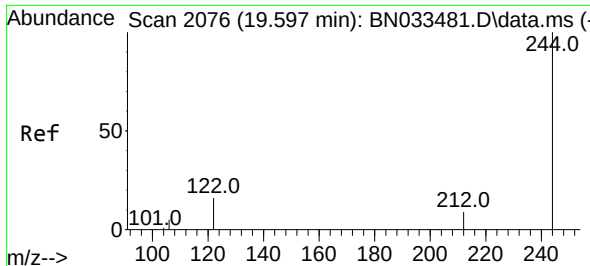


#30  
Pyrene  
Concen: 0.336 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Tgt Ion:202 Resp: 22618  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.6 24.8  
203 17.9 14.2 21.4







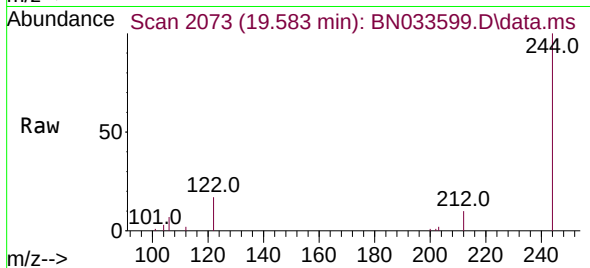
#31  
Terphenyl-d14  
Concen: 0.348 ng  
RT: 19.583 min Scan# 2076  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Instrument :

BNA\_N

ClientSampleId :

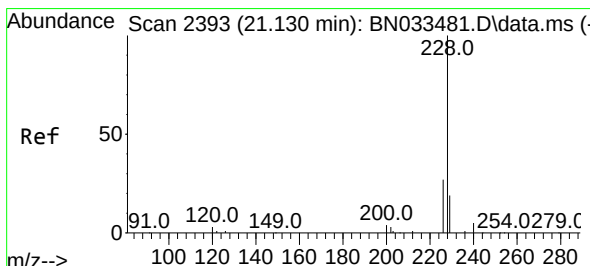
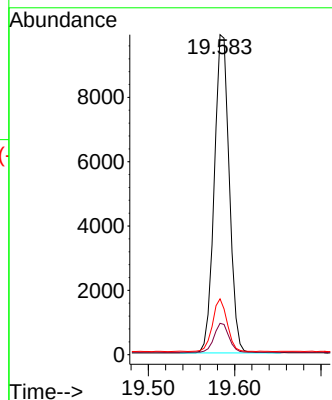
SSTDCCC0.4



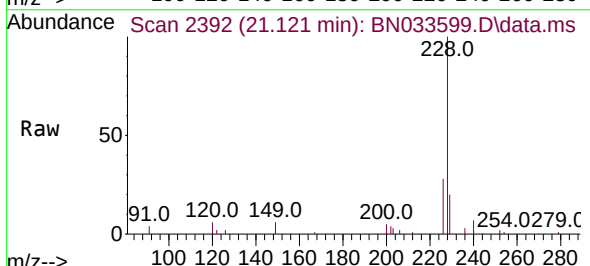
Tgt Ion:244 Resp: 11954  
Ion Ratio Lower Upper  
244 100  
212 9.8 7.8 11.6  
122 17.4 13.3 19.9

Manual Integrations  
APPROVED

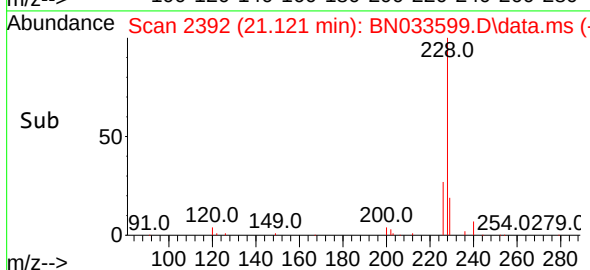
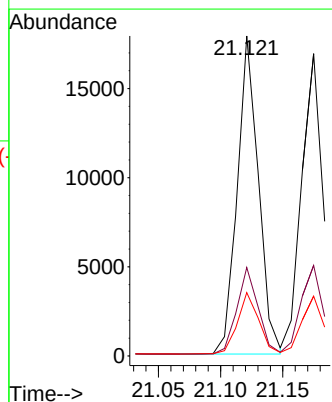
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

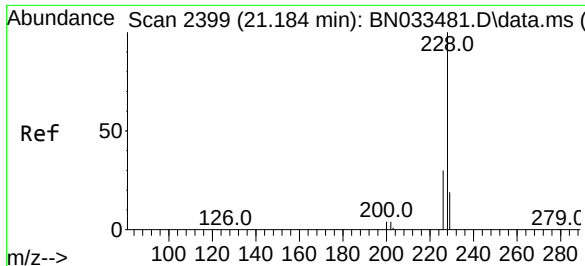


#32  
Benzo(a)anthracene  
Concen: 0.386 ng  
RT: 21.121 min Scan# 2392  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30



Tgt Ion:228 Resp: 21080  
Ion Ratio Lower Upper  
228 100  
226 27.6 21.8 32.6  
229 19.8 15.8 23.6





#33

Chrysene

Concen: 0.372 ng

RT: 21.175 min Scan# 21

Delta R.T. -0.001 min

Lab File: BN033599.D

Acq: 23 Aug 2024 21:30

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion:228 Resp: 2020

Ion Ratio Lower Upper

228 100

226 30.0 23.8 35.8

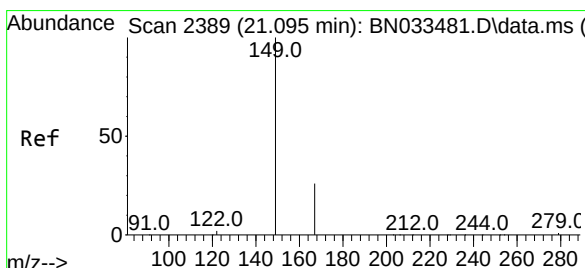
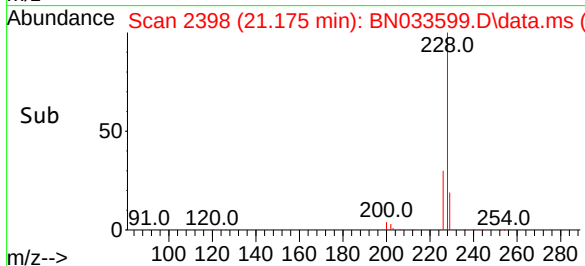
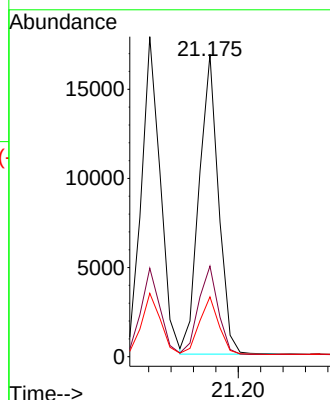
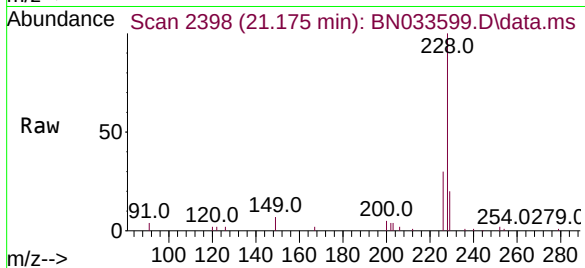
229 19.8 15.6 23.4

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/24/2024

Supervised By :mohammad ahmed 08/29/2024



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.497 ng m

RT: 21.085 min Scan# 2388

Delta R.T. -0.001 min

Lab File: BN033599.D

Acq: 23 Aug 2024 21:30

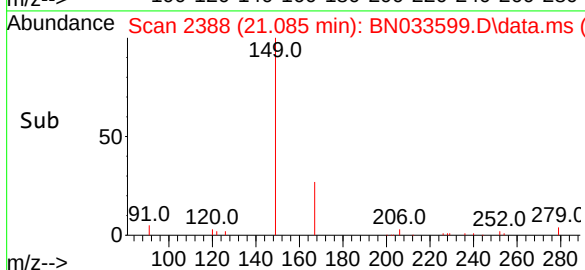
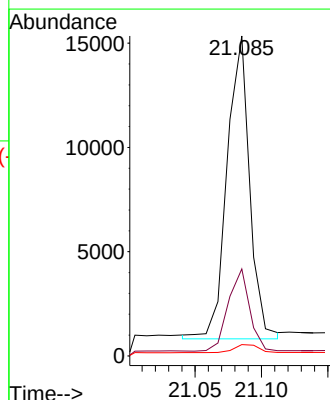
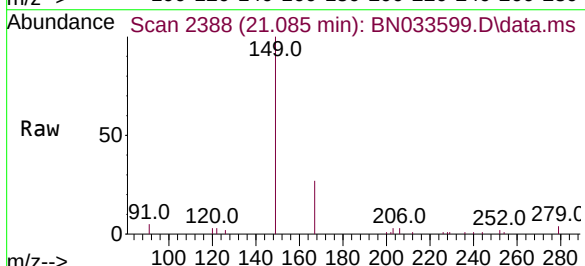
Tgt Ion:149 Resp: 17187

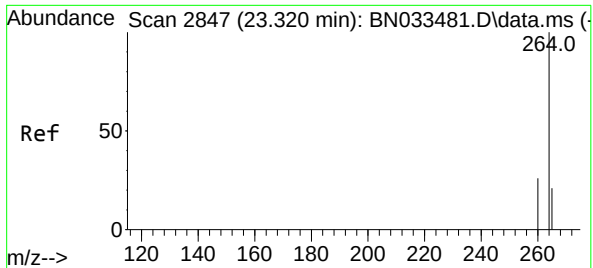
Ion Ratio Lower Upper

149 100

167 27.3 21.5 32.3

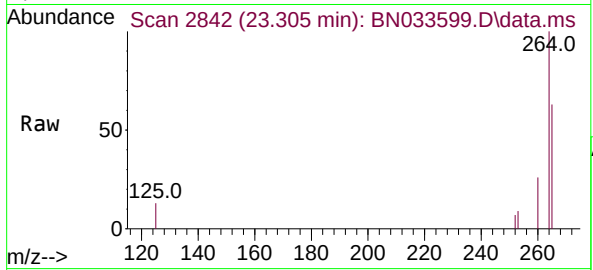
279 9.5 2.2 3.2#





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.305 min Scan# 21  
Delta R.T. 0.002 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

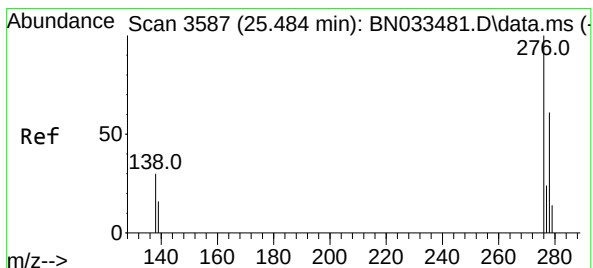
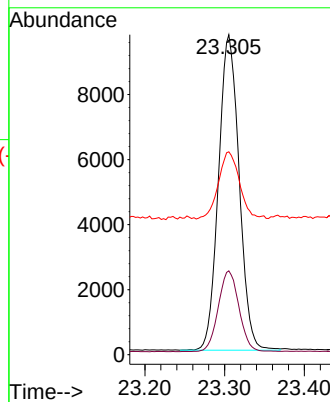
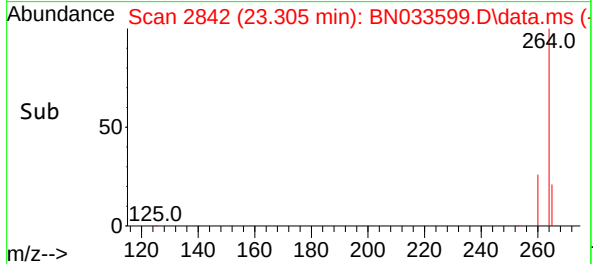
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:264 Resp: 1741  
Ion Ratio Lower Upper  
264 100  
260 26.2 20.8 31.2  
265 63.4 52.2 78.2

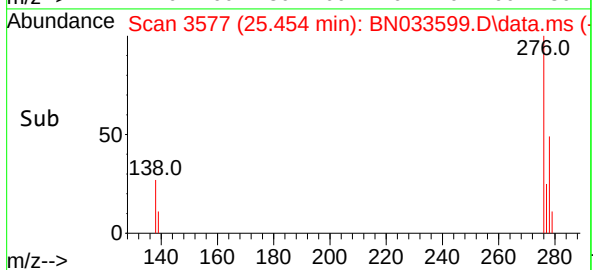
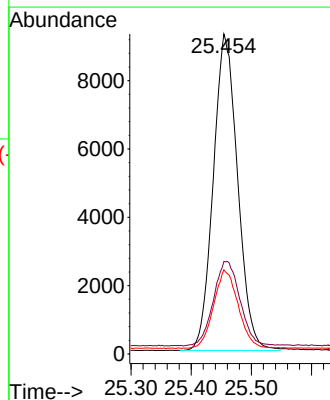
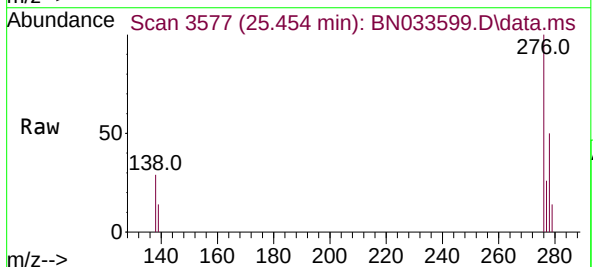
Manual Integrations  
APPROVED

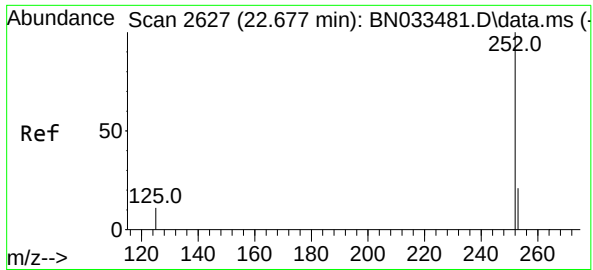
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.360 ng  
RT: 25.454 min Scan# 3577  
Delta R.T. 0.005 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

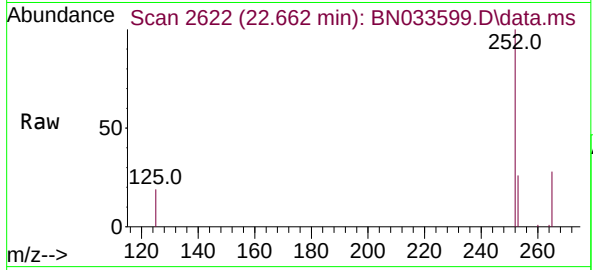
Tgt Ion:276 Resp: 26015  
Ion Ratio Lower Upper  
276 100  
138 29.2 24.4 36.6  
277 25.0 19.8 29.6





#37  
Benzo(b)fluoranthene  
Concen: 0.347 ng  
RT: 22.662 min Scan# 2622  
Delta R.T. 0.002 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

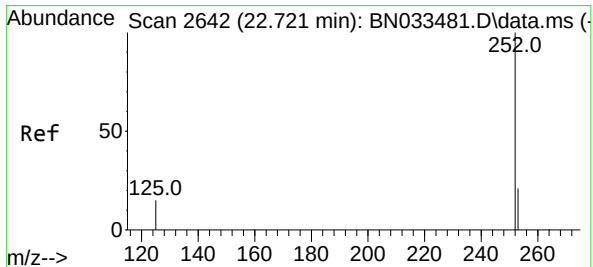
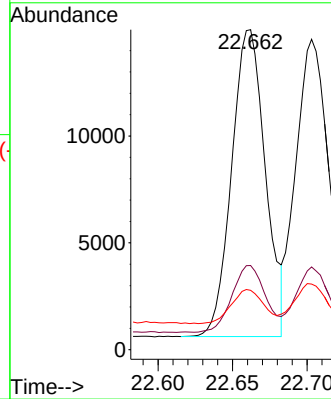
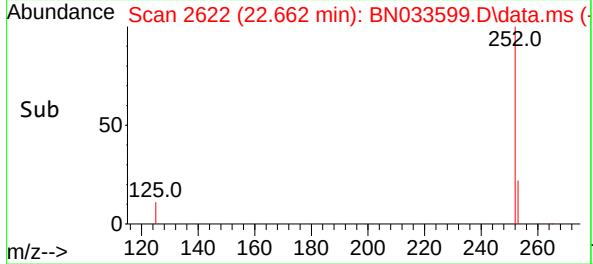
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:252 Resp: 2256  
Ion Ratio Lower Upper  
252 100  
253 26.3 19.8 29.8  
125 18.5 13.9 20.9

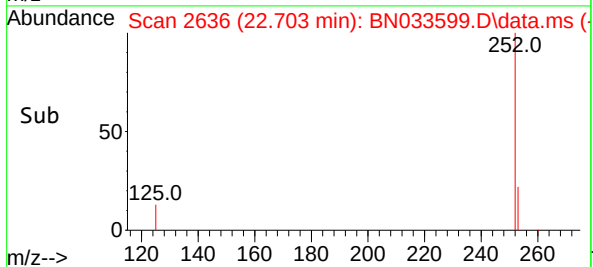
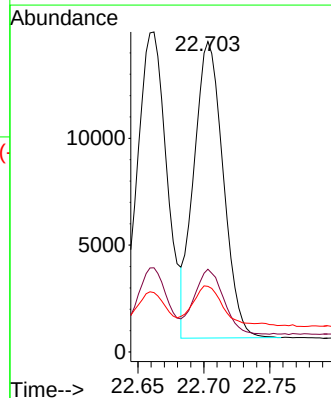
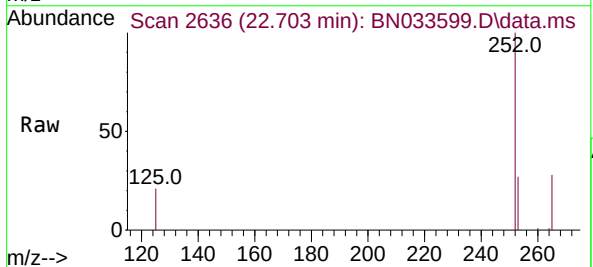
Manual Integrations  
**APPROVED**

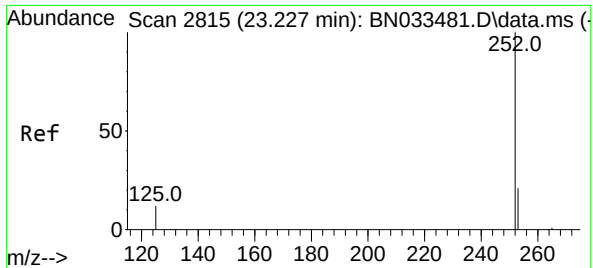
Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024



#38  
Benzo(k)fluoranthene  
Concen: 0.335 ng  
RT: 22.703 min Scan# 2636  
Delta R.T. -0.001 min  
Lab File: BN033599.D  
Acq: 23 Aug 2024 21:30

Tgt Ion:252 Resp: 21472  
Ion Ratio Lower Upper  
252 100  
253 26.7 19.8 29.8  
125 21.1 15.8 23.8





#39

Benzo(a)pyrene

Concen: 0.365 ng

RT: 23.209 min Scan# 21

Delta R.T. -0.001 min

Lab File: BN033599.D

Acq: 23 Aug 2024 21:30

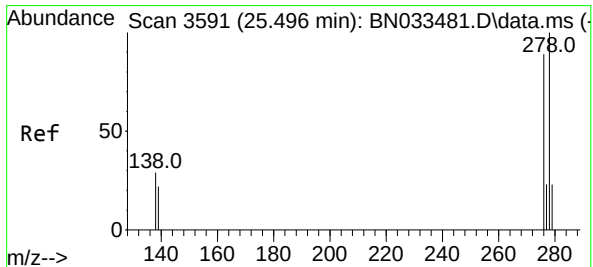
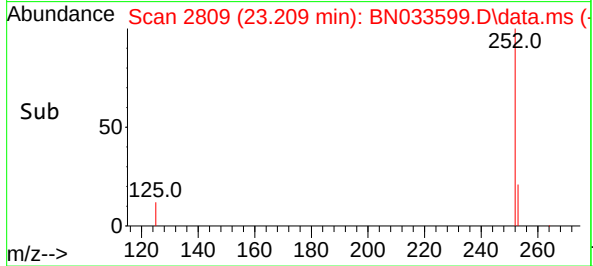
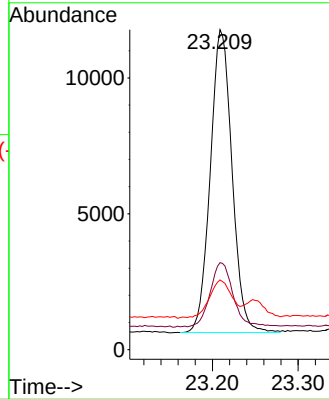
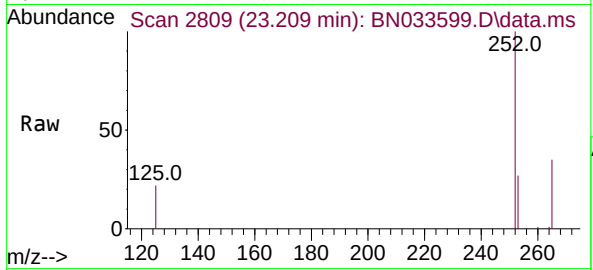
Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 1966 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 27.2  | 21.5  | 32.3 |
| 125       | 21.8  | 17.0  | 25.4 |

Manual Integrations  
**APPROVED**Reviewed By :Yogesh Patel 08/24/2024  
Supervised By :mohammad ahmed 08/29/2024

#40

Dibenzo(a,h)anthracene

Concen: 0.359 ng

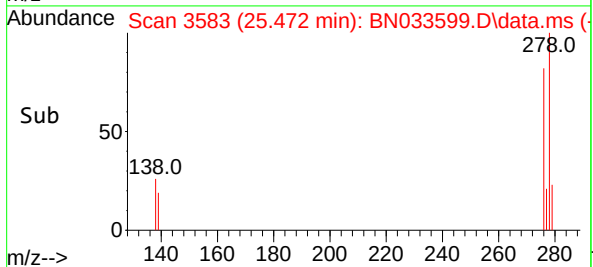
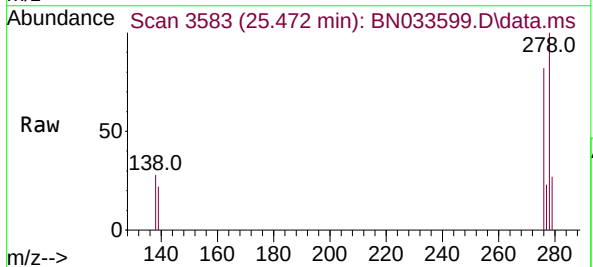
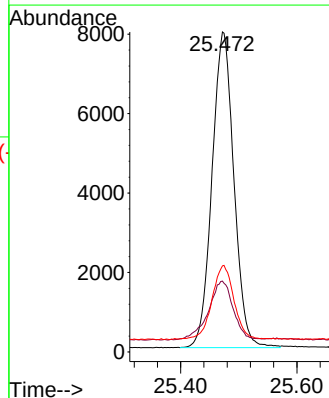
RT: 25.472 min Scan# 3583

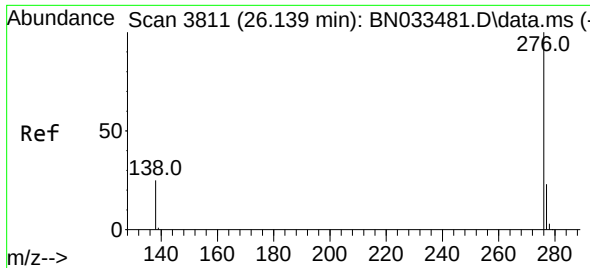
Delta R.T. 0.002 min

Lab File: BN033599.D

Acq: 23 Aug 2024 21:30

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 20764 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 22.1  | 19.1  | 28.7  |
| 279       | 26.9  | 21.0  | 31.4  |





#41

Benzo(g,h,i)perylene

Concen: 0.357 ng

RT: 26.106 min Scan# 3811

Delta R.T. 0.002 min

Lab File: BN033599.D

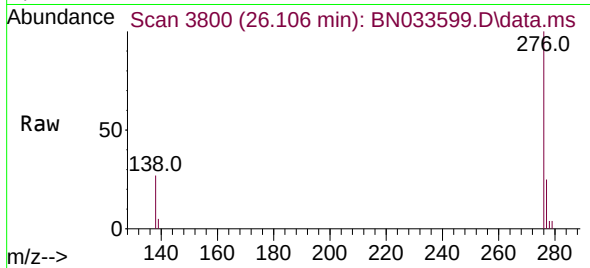
Acq: 23 Aug 2024 21:30

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



Tgt Ion: 276 Resp: 2205

Ion Ratio Lower Upper

276 100

277 25.2 19.7 29.5

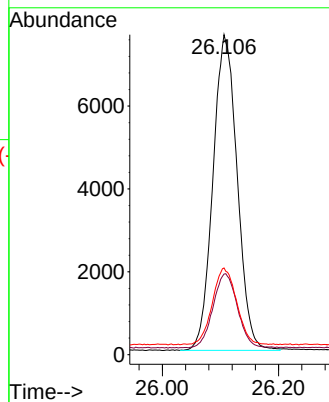
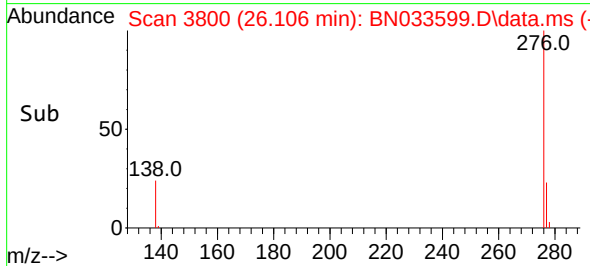
138 27.1 21.8 32.6

Manual Integrations

APPROVED

Reviewed By : Yogesh Patel 08/24/2024

Supervised By : mohammad ahmed 08/29/2024



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033599.D  
Acq On : 23 Aug 2024 21:30  
Operator : MA/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
BNA\_N  
LabSampleId :  
SSTDCCC0.4

Quant Time: Aug 24 02:19:01 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|---------|----------------------------|-------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 1.000 | 1.000 | 0.0   | 66    | 0.00     |
| 2       | 1,4-Dioxane                | 0.460 | 0.371 | 19.3  | 74    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.535 | 0.448 | 16.3  | 65    | 0.00     |
| 4 S     | 2-Fluorophenol             | 1.271 | 1.086 | 14.6  | 56    | 0.00     |
| 5 S     | Phenol-d6                  | 1.512 | 1.337 | 11.6  | 65    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.072 | 1.023 | 4.6   | 89    | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 90    | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.332 | 0.315 | 5.1   | 93    | 0.00     |
| 9       | Naphthalene                | 1.069 | 0.971 | 9.2   | 92    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.213 | 0.205 | 3.8   | 96    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.572 | 0.518 | 9.4   | 95    | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.677 | 0.599 | 11.5  | 92    | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 84    | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.215 | 0.200 | 7.0   | 91    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 1.634 | 1.564 | 4.3   | 89    | 0.00     |
| 16      | Acenaphthylene             | 1.754 | 1.573 | 10.3  | 86    | -0.01    |
| 17      | Acenaphthene               | 1.234 | 1.071 | 13.2  | 82    | 0.00     |
| 18      | Fluorene                   | 1.555 | 1.316 | 15.4  | 80    | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 78    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.062 | 0.019 | 69.4# | 29#   | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.243 | 0.227 | 6.6   | 80    | 0.00     |
| 22      | Hexachlorobenzene          | 0.268 | 0.255 | 4.9   | 80    | 0.00     |
| 23      | Atrazine                   | 0.194 | 0.188 | 3.1   | 84    | 0.00     |
| 24      | Pentachlorophenol          | 0.116 | 0.111 | 4.3   | 89    | 0.00     |
| 25      | Phenanthrene               | 1.113 | 1.007 | 9.5   | 76    | 0.00     |
| 26      | Anthracene                 | 0.985 | 0.891 | 9.5   | 79    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.961 | 0.910 | 5.3   | 81    | 0.00     |
| 28      | Fluoranthene               | 1.230 | 1.133 | 7.9   | 79    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 94    | 0.00     |
| 30      | Pyrene                     | 1.785 | 1.498 | 16.1  | 82    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.909 | 0.792 | 12.9  | 86    | 0.00     |
| 32      | Benzo(a)anthracene         | 1.446 | 1.396 | 3.5   | 99    | 0.00     |
| 33      | Chrysene                   | 1.437 | 1.338 | 6.9   | 94    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.915 | 1.139 | -24.5 | 131   | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 109   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.661 | 1.494 | 10.1  | 107   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.494 | 1.296 | 13.3  | 106   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.470 | 1.233 | 16.1  | 102   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.236 | 1.129 | 8.7   | 113   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.328 | 1.193 | 10.2  | 106   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.420 | 1.267 | 10.8  | 107   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033599.D  
Acq On : 23 Aug 2024 21:30  
Operator : MA/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
BNA\_N  
LabSampleId :  
SSTDCCC0.4

Quant Time: Aug 24 02:19:01 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | Amount | Calc. | %Dev  | Area% | Dev(min) |
|---------|----------------------------|--------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 0.400  | 0.400 | 0.0   | 66    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.322 | 19.5  | 74    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.335 | 16.3  | 65    | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.342 | 14.5  | 56    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.354 | 11.5  | 65    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.381 | 4.8   | 89    | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 90    | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.379 | 5.3   | 93    | 0.00     |
| 9       | Naphthalene                | 0.400  | 0.363 | 9.3   | 92    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.384 | 4.0   | 96    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.362 | 9.5   | 95    | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.354 | 11.5  | 92    | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 84    | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.371 | 7.3   | 91    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.383 | 4.3   | 89    | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.359 | 10.3  | 86    | -0.01    |
| 17      | Acenaphthene               | 0.400  | 0.347 | 13.3  | 82    | 0.00     |
| 18      | Fluorene                   | 0.400  | 0.338 | 15.5  | 80    | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 78    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.124 | 69.0# | 29    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.374 | 6.5   | 80    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.380 | 5.0   | 80    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.387 | 3.3   | 84    | 0.00     |
| 24      | Pentachlorophenol          | 0.400  | 0.382 | 4.5   | 89    | 0.00     |
| 25      | Phenanthrene               | 0.400  | 0.362 | 9.5   | 76    | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.362 | 9.5   | 79    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.379 | 5.3   | 81    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.369 | 7.8   | 79    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 94    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.336 | 16.0  | 82    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.348 | 13.0  | 86    | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.386 | 3.5   | 99    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.372 | 7.0   | 94    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.497 | -24.2 | 131   | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 109   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.360 | 10.0  | 107   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.347 | 13.3  | 106   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.335 | 16.3  | 102   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.365 | 8.8   | 113   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.359 | 10.3  | 106   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.357 | 10.8  | 107   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0





# QC SAMPLE DATA

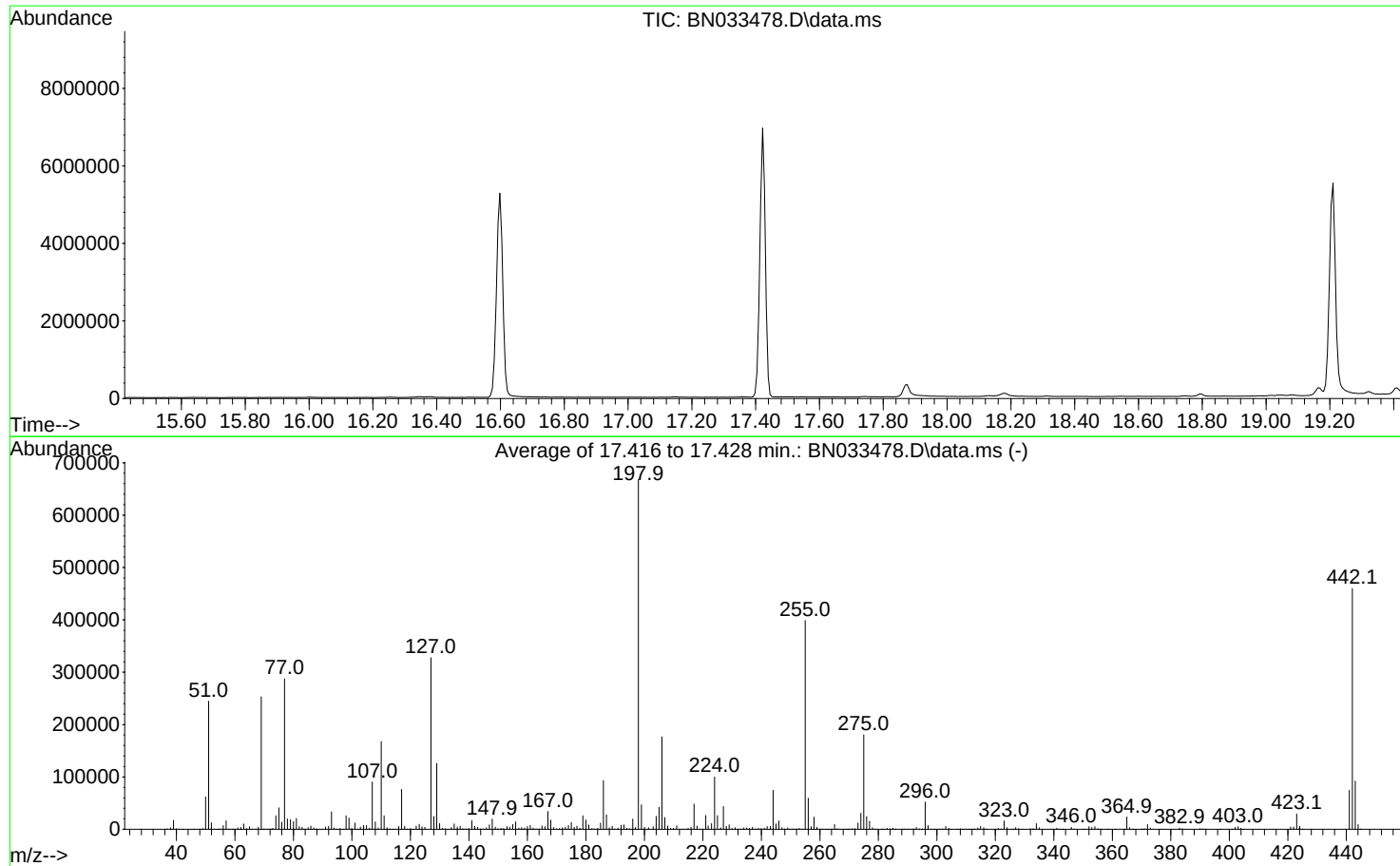
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- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033478.D  
Acq On : 19 Aug 2024 15:37  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Mon Aug 19 23:32:18 2024



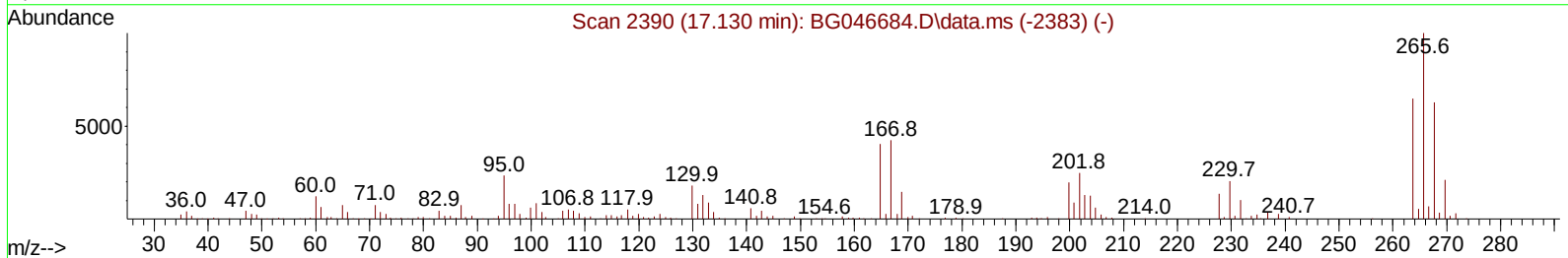
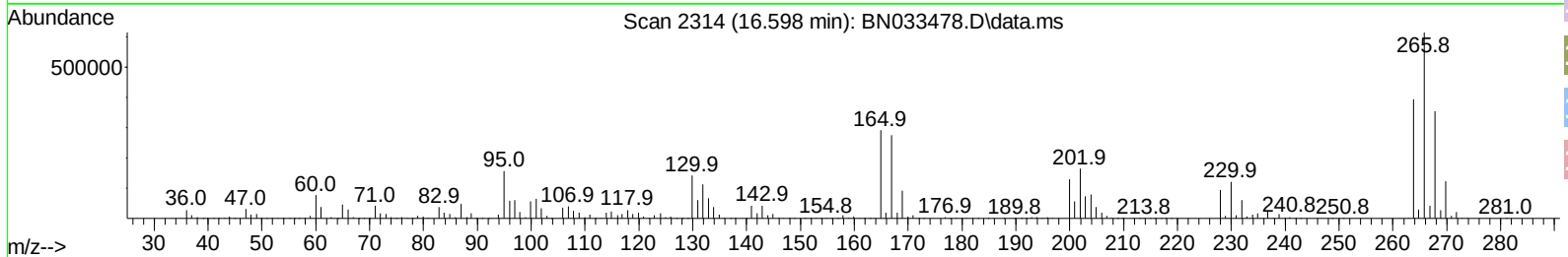
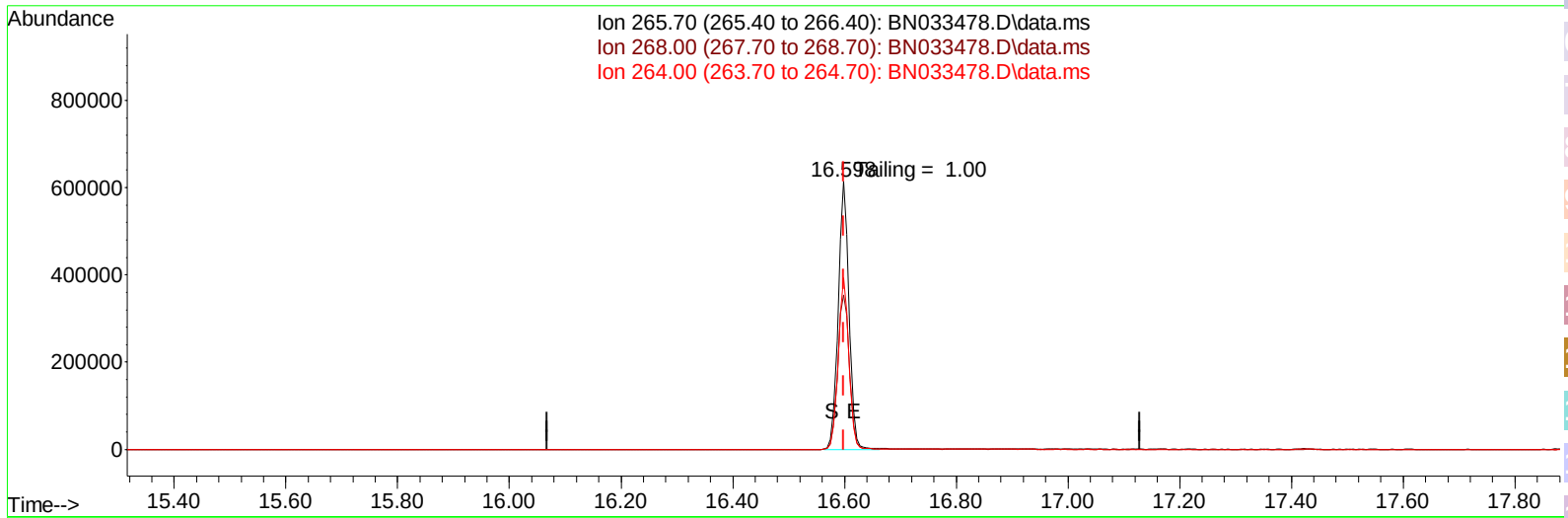
AutoFind: Scans 2453, 2454, 2455; Background Corrected with Scan 2446

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 51             | 198             | 10              | 80              | 36.6         | 244669     | PASS                |
| 68             | 69              | 0.00            | 2               | 1.6          | 3975       | PASS                |
| 69             | 198             | 0.00            | 100             | 37.9         | 253111     | PASS                |
| 70             | 69              | 0.00            | 2               | 0.4          | 1124       | PASS                |
| 127            | 198             | 10              | 80              | 49.1         | 327765     | PASS                |
| 197            | 198             | 0.00            | 2               | 0.5          | 3324       | PASS                |
| 198            | 198             | 100             | 100             | 100.0        | 667925     | PASS                |
| 199            | 198             | 5               | 9               | 7.0          | 46784      | PASS                |
| 275            | 198             | 10              | 60              | 27.0         | 180331     | PASS                |
| 365            | 198             | 1               | 100             | 3.5          | 23424      | PASS                |
| 441            | 198             | 0.01            | 100             | 11.2         | 74525      | PASS                |
| 442            | 442             | 50              | 100             | 100.0        | 459861     | PASS                |
| 443            | 442             | 15              | 24              | 20.0         | 92101      | PASS                |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033478.D  
Acq On : 19 Aug 2024 15:37  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 20 04:50:59 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Aug 20 04:49:48 2024  
Response via : Initial Calibration



TIC: BN033478.D\data.ms

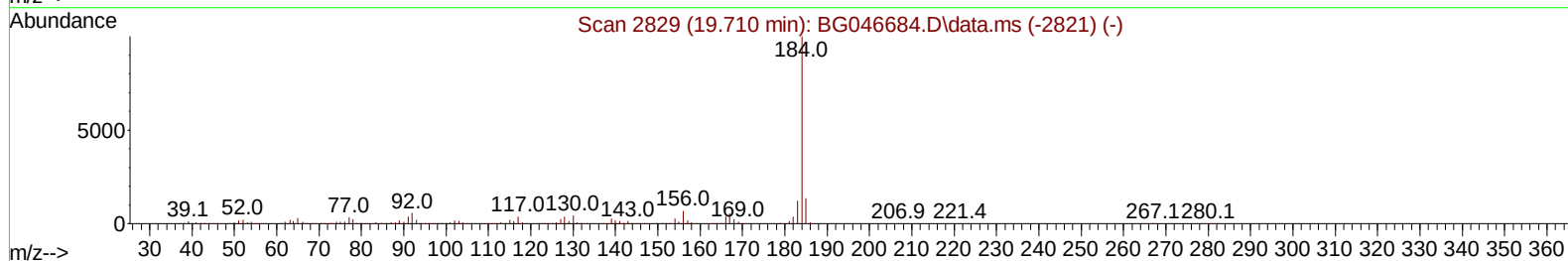
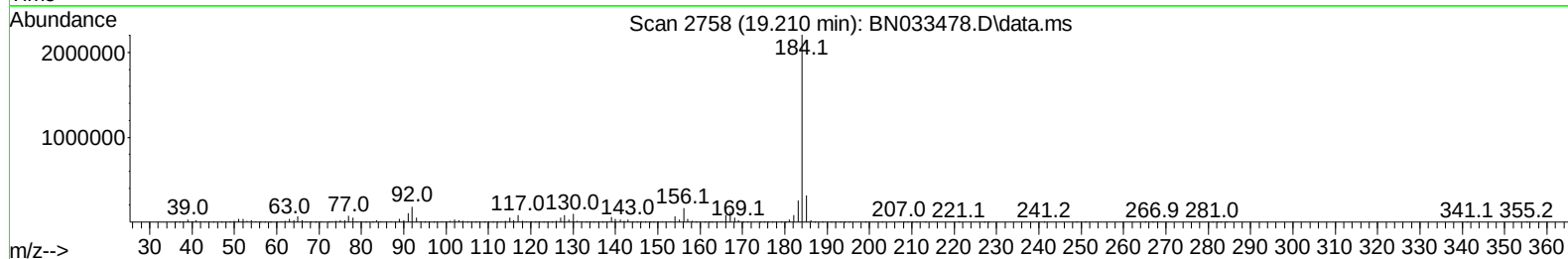
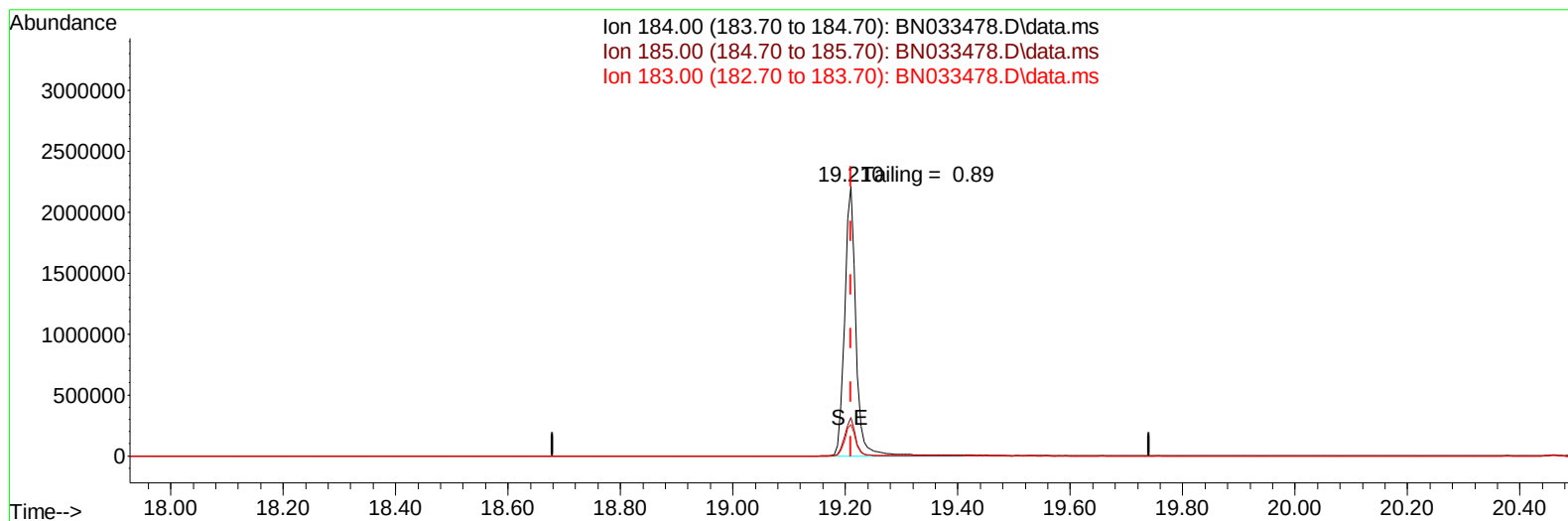
**(70) Pentachlorophenol (C)****16.598min (-0.000) 25243.84 ng****response 836211**

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 57.76  |
| 264.00 | 61.60  | 64.04  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN081924\  
Data File : BN033478.D  
Acq On : 19 Aug 2024 15:37  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 20 04:50:59 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Aug 20 04:49:48 2024  
Response via : Initial Calibration



TIC: BN033478.D\data.ms

**(77) Benzidine**

**19.210min (-0.000) 1831888.84 ng**

**response 3105776**

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 14.31  |
| 183.00 | 13.20  | 11.63  |
| 0.00   | 0.00   | 0.00   |

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

DDT Breakdown

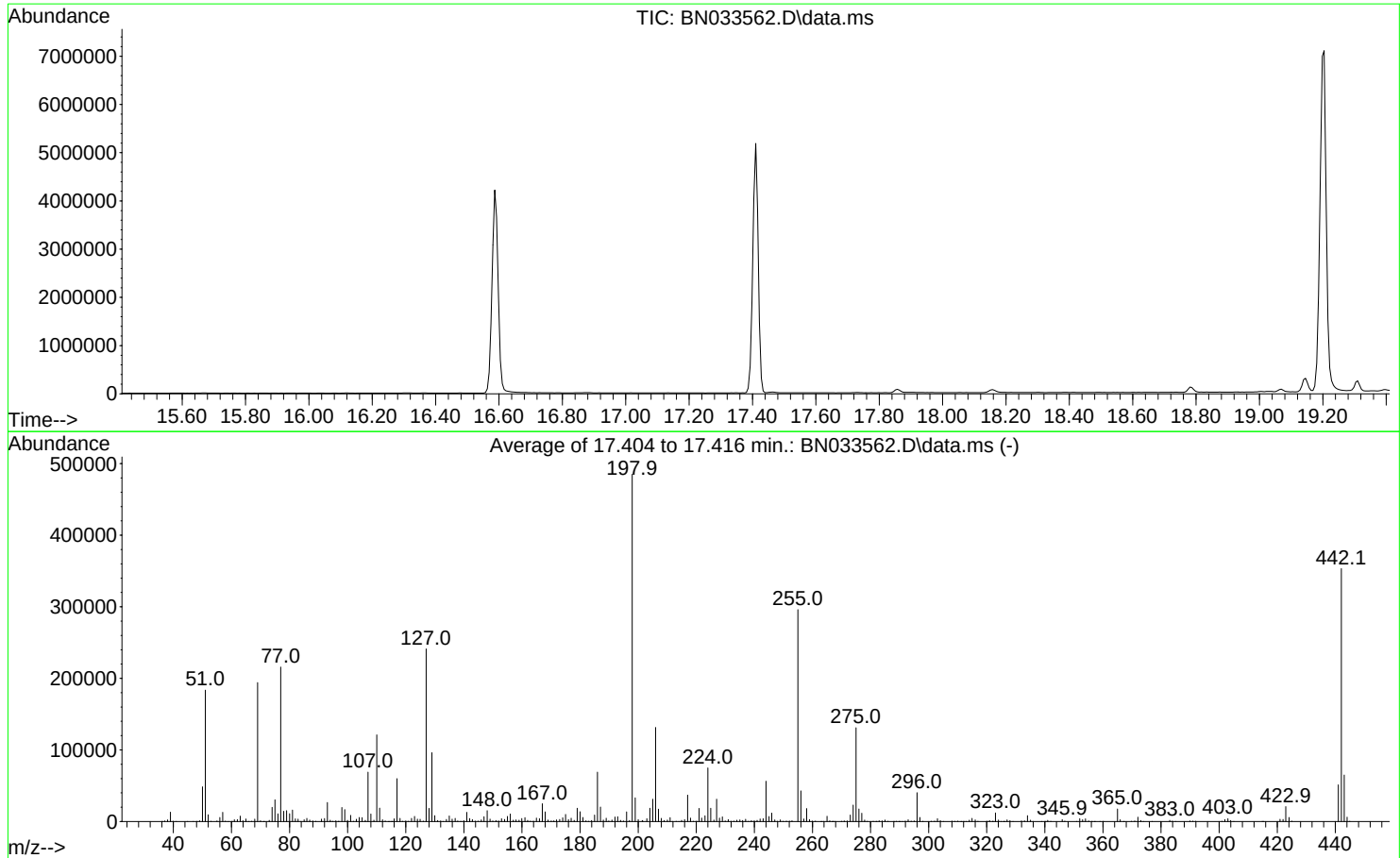
| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 8/19/2024     | BNA_N            | <u>BN033478.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 2164760          | 20.463             |
| DDD           | 37665            | 20.016             |
| DDE           | 773              | 19.51              |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 38438         | 2203198          | 1.74               |
|               |                  |                    |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033562.D  
Acq On : 22 Aug 2024 21:24  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Fri Aug 23 00:22:18 2024



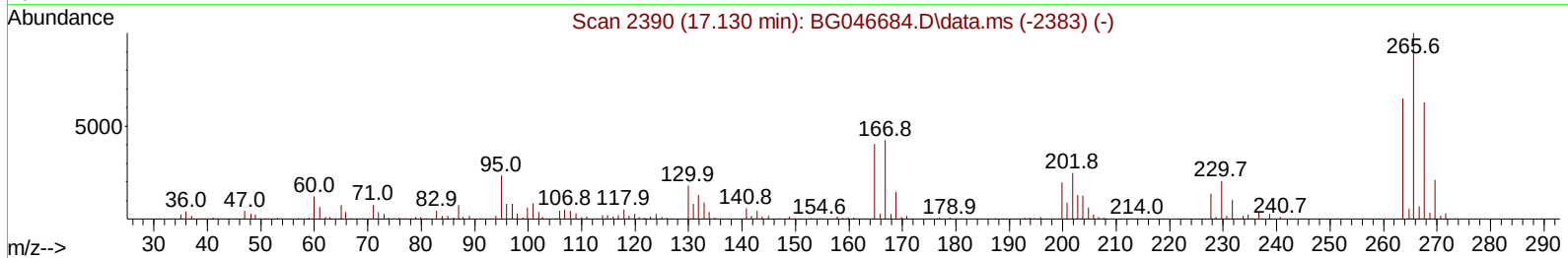
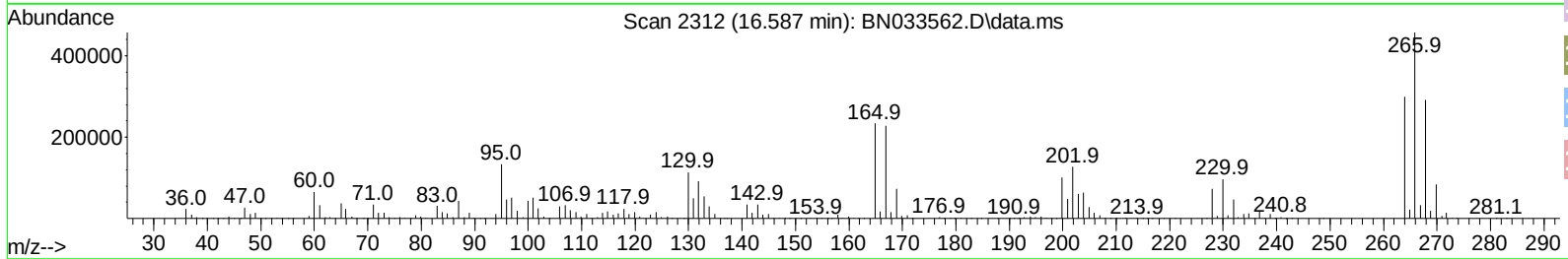
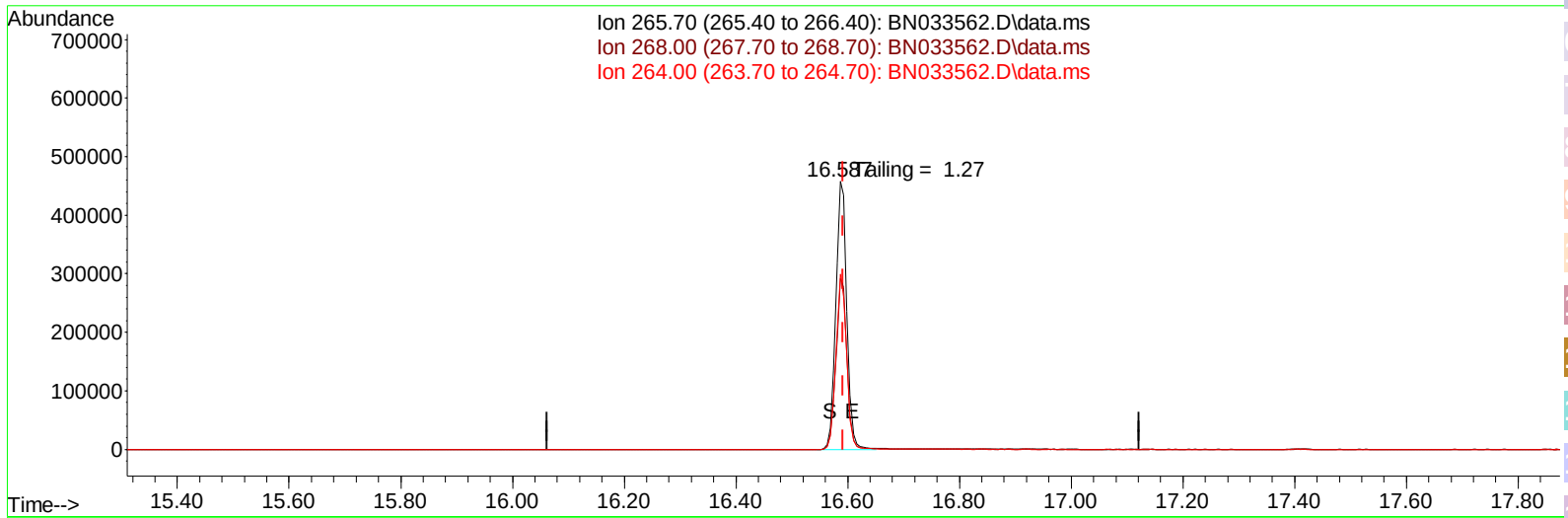
AutoFind: Scans 2451, 2452, 2453; Background Corrected with Scan 2444

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 51             | 198             | 10              | 80              | 37.9         | 183614     | PASS                |
| 68             | 69              | 0.00            | 2               | 1.8          | 3432       | PASS                |
| 69             | 198             | 0.00            | 100             | 40.0         | 194197     | PASS                |
| 70             | 69              | 0.00            | 2               | 0.5          | 1014       | PASS                |
| 127            | 198             | 10              | 80              | 49.7         | 241152     | PASS                |
| 197            | 198             | 0.00            | 2               | 0.3          | 1497       | PASS                |
| 198            | 198             | 100             | 100             | 100.0        | 485077     | PASS                |
| 199            | 198             | 5               | 9               | 6.8          | 33064      | PASS                |
| 275            | 198             | 10              | 60              | 27.0         | 131016     | PASS                |
| 365            | 198             | 1               | 100             | 3.6          | 17521      | PASS                |
| 441            | 198             | 0.01            | 100             | 10.6         | 51227      | PASS                |
| 442            | 442             | 50              | 100             | 100.0        | 353387     | PASS                |
| 443            | 442             | 15              | 24              | 18.4         | 65013      | PASS                |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033562.D  
Acq On : 22 Aug 2024 21:24  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 23 07:44:10 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 07:42:58 2024  
Response via : Initial Calibration



TIC: BN033562.D\data.ms

**(70) Pentachlorophenol (C)**

**16.587min (-0.006) 266711.29 ng**

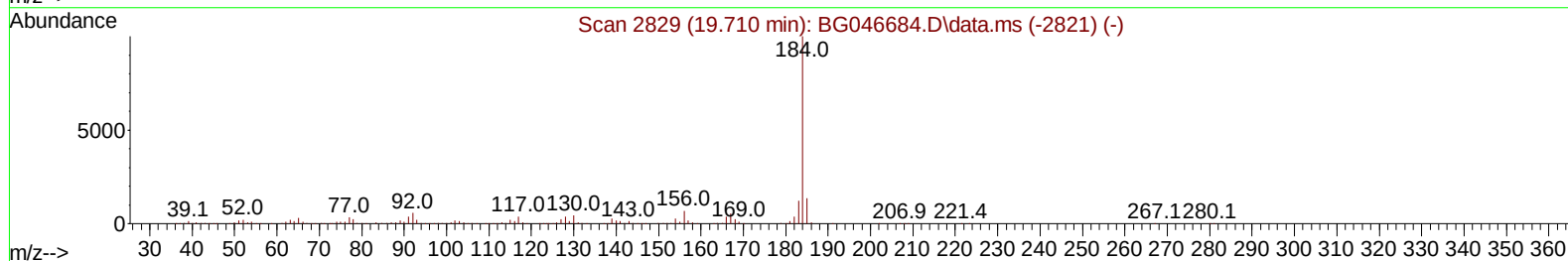
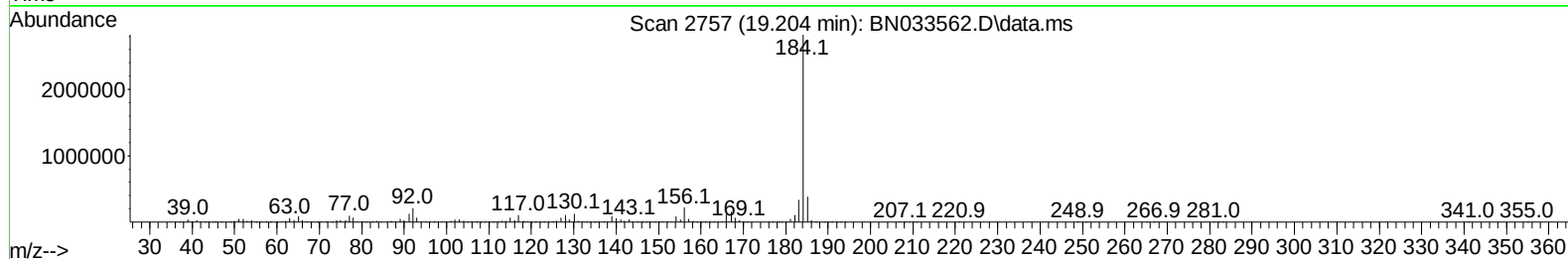
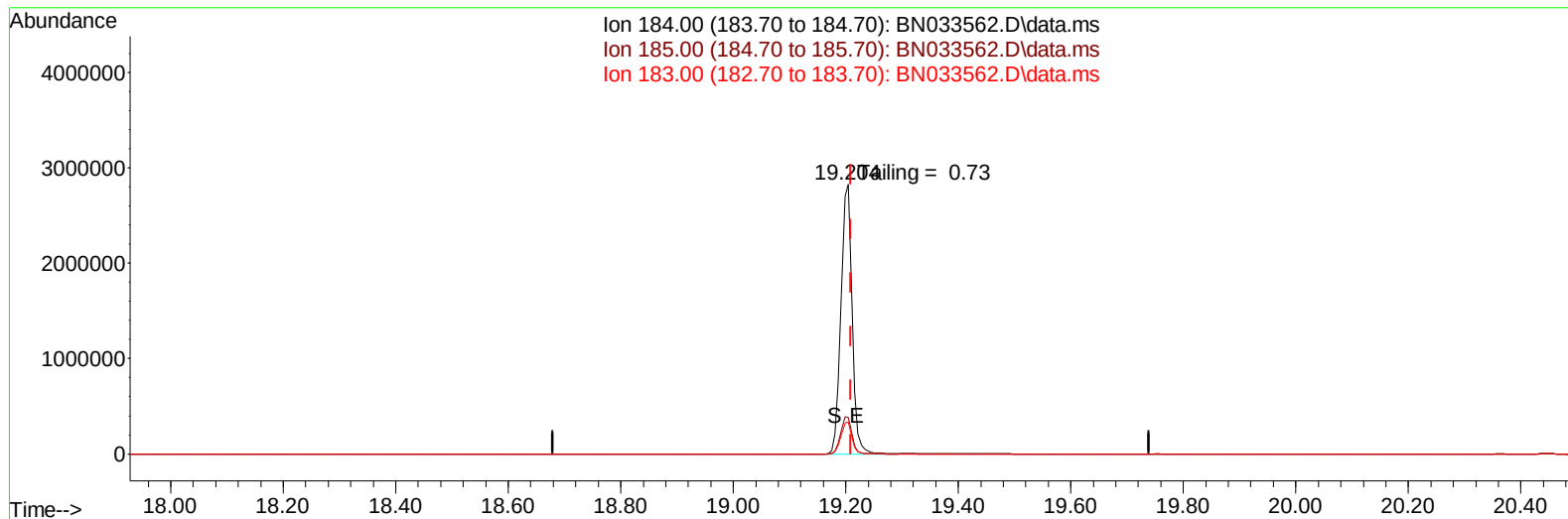
**response 630018**

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 63.86  |
| 264.00 | 61.60  | 65.33  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033562.D  
Acq On : 22 Aug 2024 21:24  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 23 07:44:10 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 07:42:58 2024  
Response via : Initial Calibration



TIC: BN033562.D\data.ms

**(77) Benzidine**

**19.204min (-0.006) 5344.12 ng**

**response 3912941**

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 13.57  |
| 183.00 | 13.20  | 12.02  |
| 0.00   | 0.00   | 0.00   |



Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

DDT Breakdown

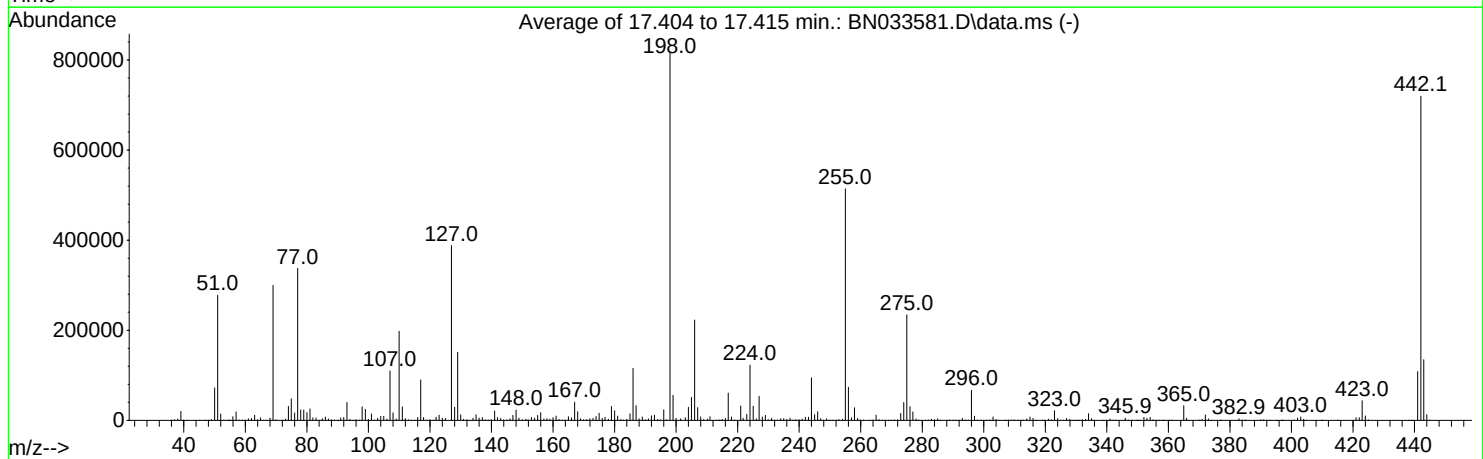
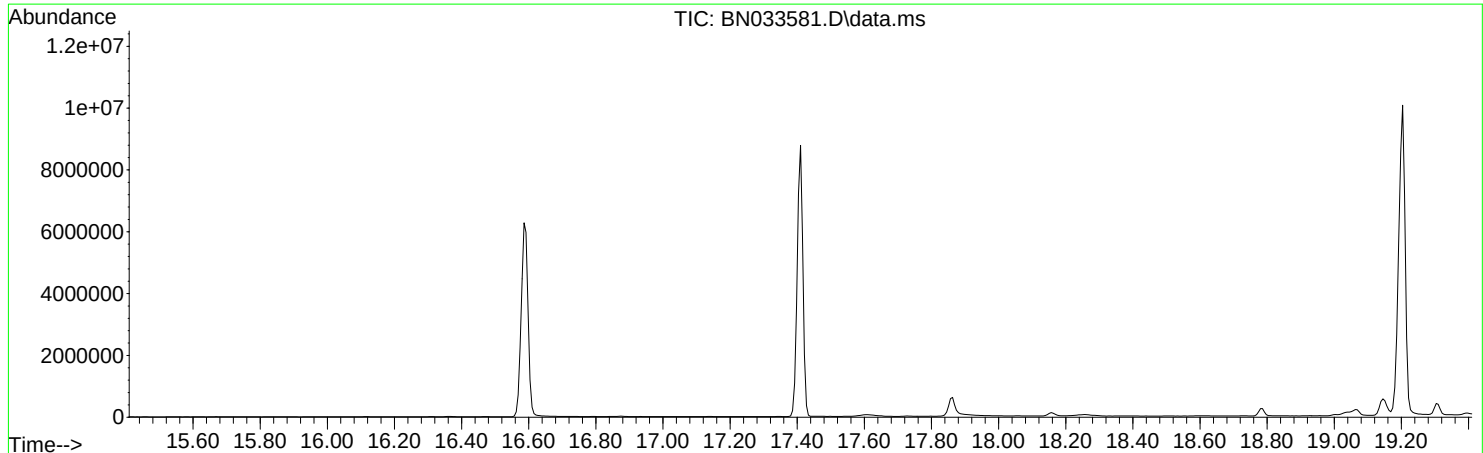
| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 8/22/2024     | BNA_N            | <u>BN033562.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 1657614          | 20.445             |
| DDD           | 210956           | 20.004             |
| DDE           | 1311             | 19.492             |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 212267        | 1869881          | 11.35              |
|               |                  |                    |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033581.D  
Acq On : 23 Aug 2024 09:06  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Fri Aug 23 00:22:18 2024



AutoFind: Scans 2451, 2452, 2453; Background Corrected with Scan 2443

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 51             | 198             | 10              | 80              | 34.0         | 277730     | PASS                |
| 68             | 69              | 0.00            | 2               | 1.6          | 4842       | PASS                |
| 69             | 198             | 0.00            | 100             | 36.7         | 299688     | PASS                |
| 70             | 69              | 0.00            | 2               | 0.4          | 1334       | PASS                |
| 127            | 198             | 10              | 80              | 47.5         | 387861     | PASS                |
| 197            | 198             | 0.00            | 2               | 0.2          | 1293       | PASS                |
| 198            | 198             | 100             | 100             | 100.0        | 816640     | PASS                |
| 199            | 198             | 5               | 9               | 6.8          | 55896      | PASS                |
| 275            | 198             | 10              | 60              | 28.7         | 234197     | PASS                |
| 365            | 198             | 1               | 100             | 4.0          | 32875      | PASS                |
| 441            | 198             | 0.01            | 100             | 13.3         | 108448     | PASS                |
| 442            | 442             | 50              | 100             | 100.0        | 719509     | PASS                |
| 443            | 442             | 15              | 24              | 18.7         | 134733     | PASS                |

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

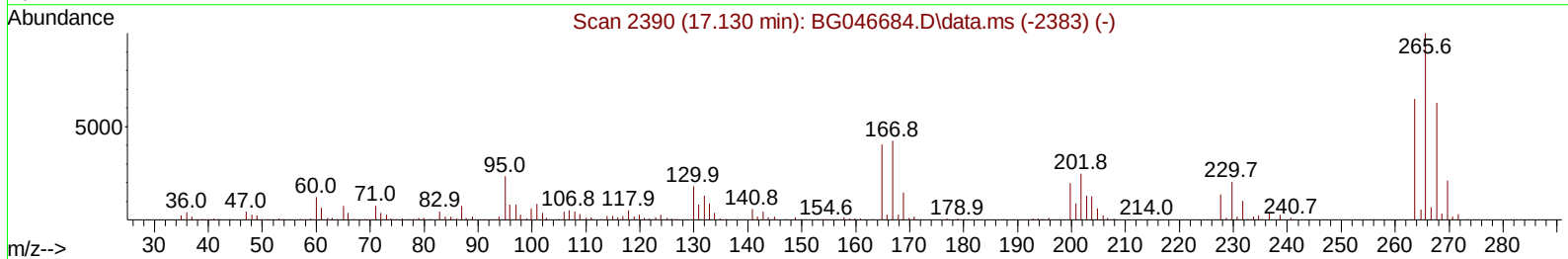
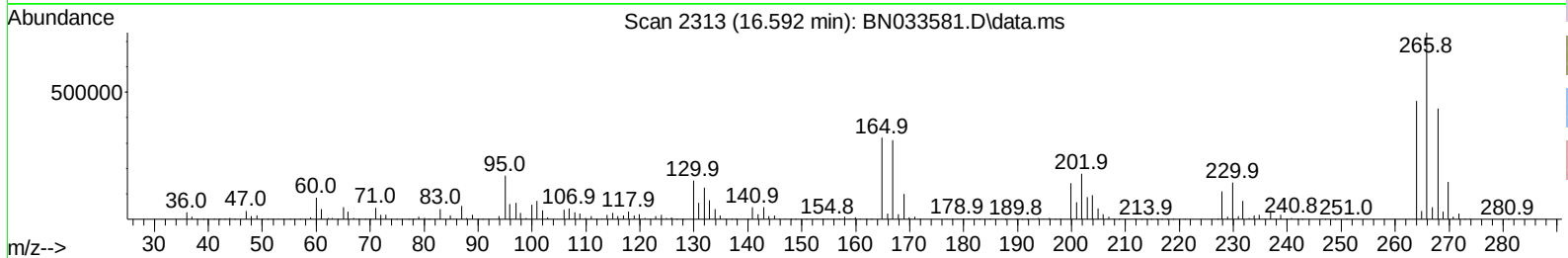
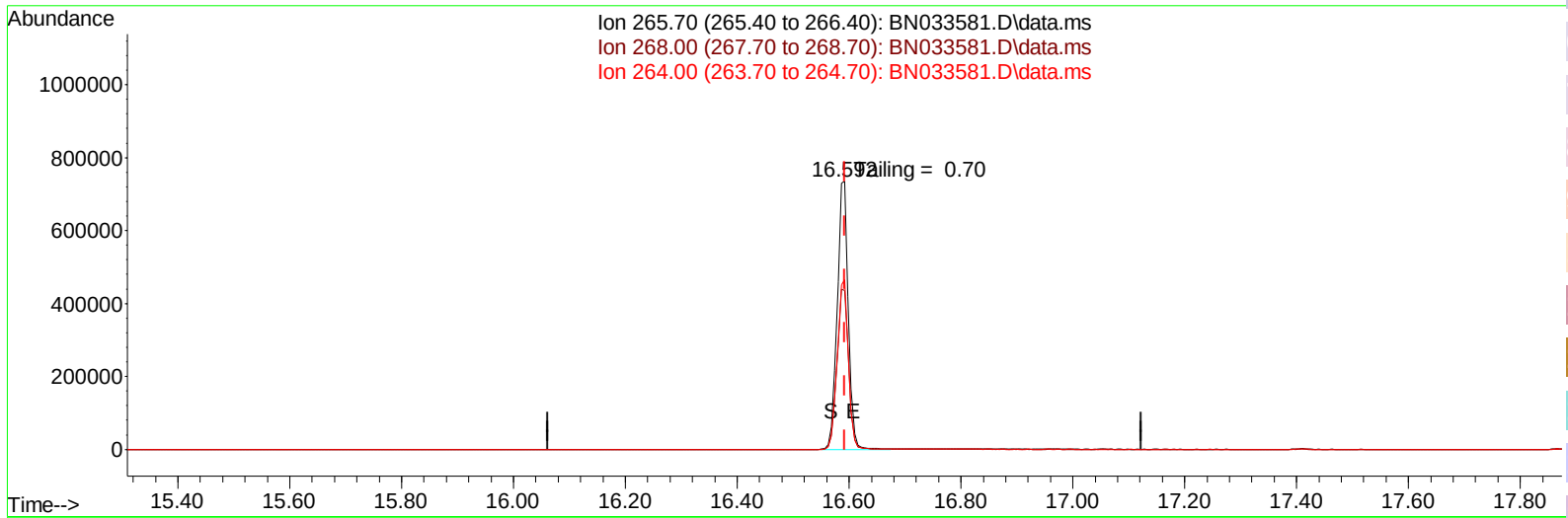
DDT Breakdown

| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 8/23/2024     | BNA_N            | <u>BN033581.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 2823987          | 20.451             |
| DDD           | 38911            | 20.057             |
| DDE           | 349              | 19.492             |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 39260         | 2863247          | 1.37               |
|               |                  |                    |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033581.D  
Acq On : 23 Aug 2024 09:06  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 24 06:44:41 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Aug 24 06:44:36 2024  
Response via : Initial Calibration



TIC: BN033581.D\data.ms

**(70) Pentachlorophenol (C)**

**16.592min ( 0.000) 248809.79 ng**

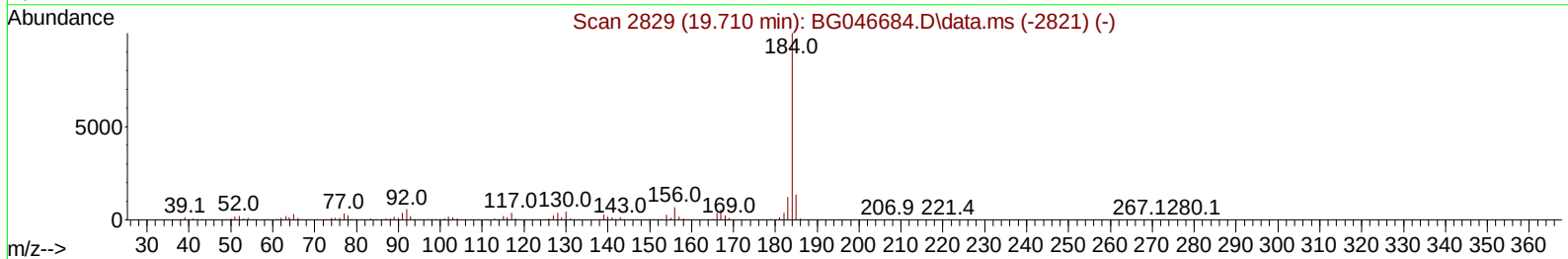
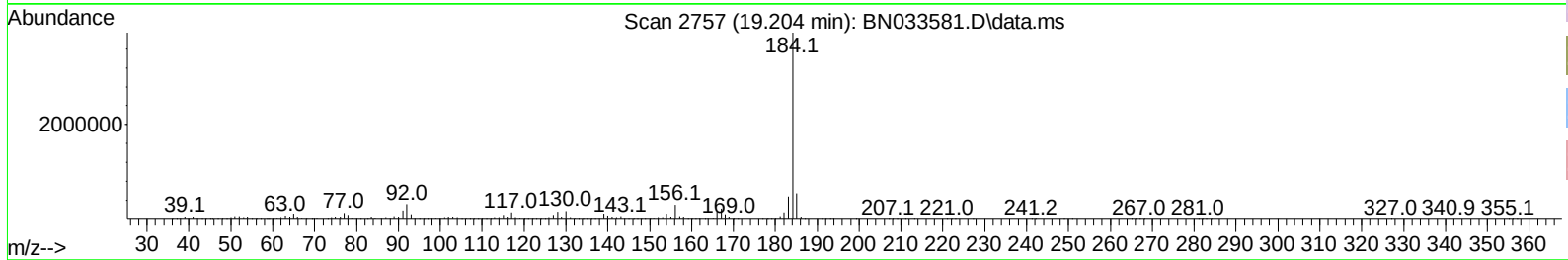
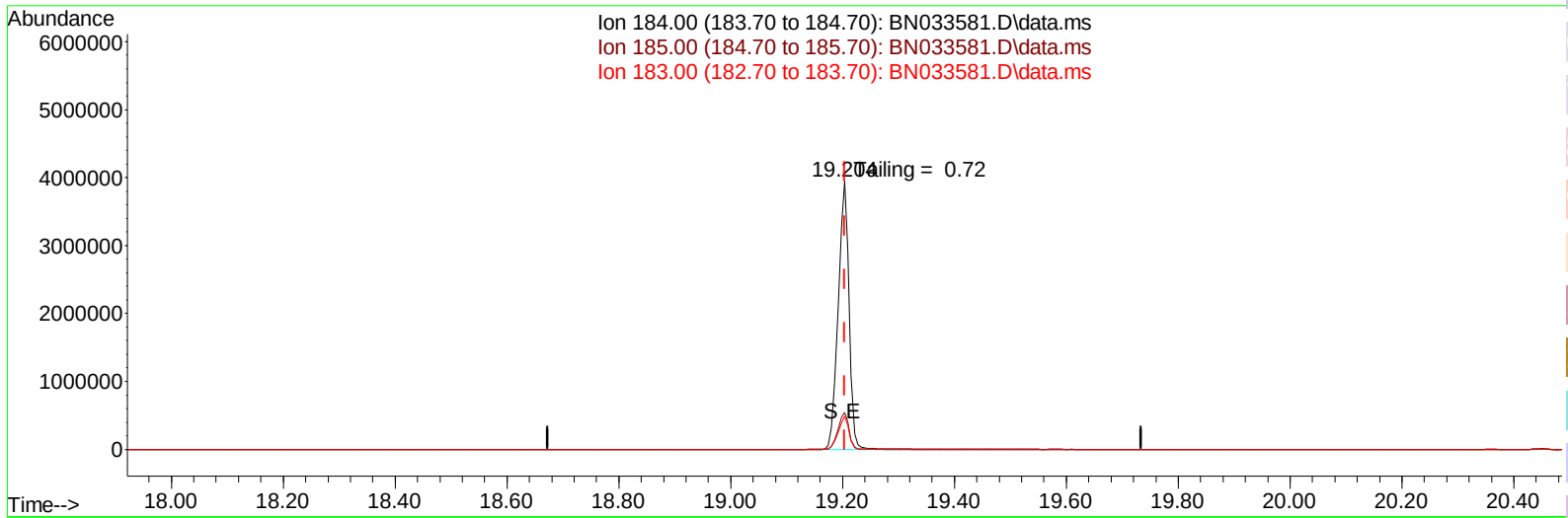
**response 1021208**

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 59.36  |
| 264.00 | 61.60  | 63.30  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033581.D  
Acq On : 23 Aug 2024 09:06  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 24 06:44:41 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Aug 24 06:44:36 2024  
Response via : Initial Calibration



TIC: BN033581.D\data.ms

**(77) Benzidine**

**19.204min ( 0.000) 4281.63 ng**

**response 5372497**

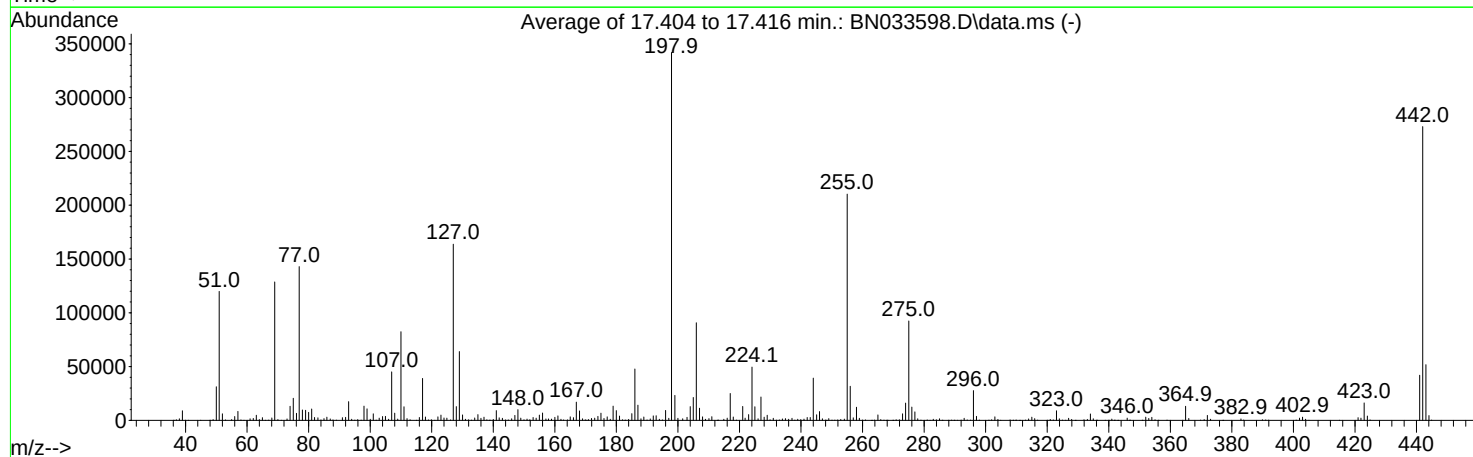
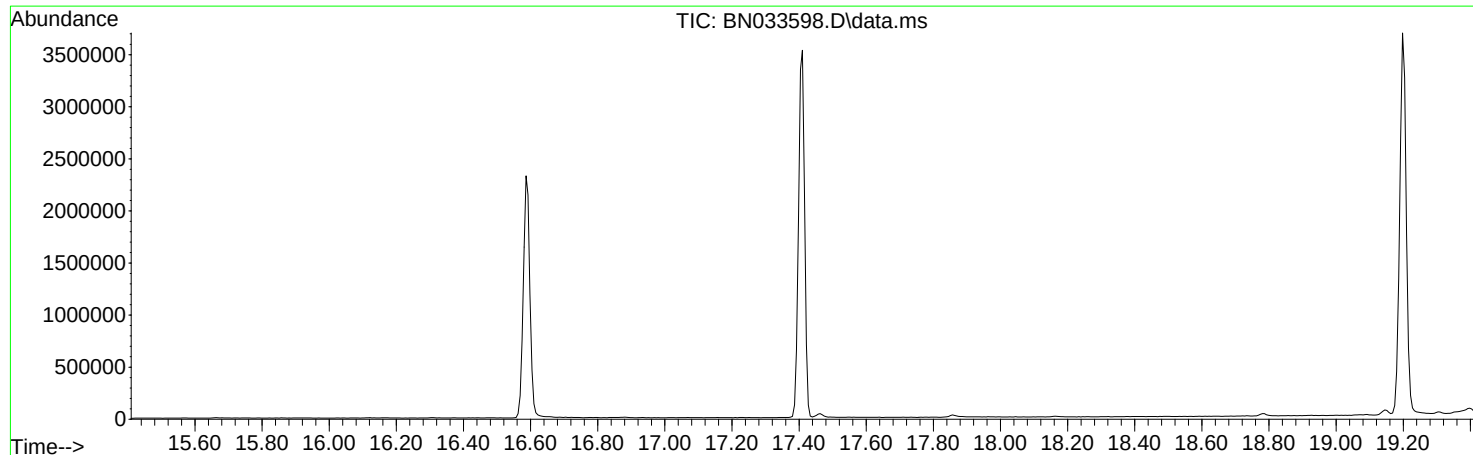
| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 13.90  |
| 183.00 | 13.20  | 12.29  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033598.D  
Acq On : 23 Aug 2024 20:51  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Fri Aug 23 00:22:18 2024



AutoFind: Scans 2451, 2452, 2453; Background Corrected with Scan 2444

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 51     | 198     | 10     | 80     | 35.1  | 119878 | PASS      |
| 68     | 69      | 0.00   | 2      | 1.7   | 2196   | PASS      |
| 69     | 198     | 0.00   | 100    | 37.6  | 128634 | PASS      |
| 70     | 69      | 0.00   | 2      | 0.6   | 771    | PASS      |
| 127    | 198     | 10     | 80     | 47.9  | 163808 | PASS      |
| 197    | 198     | 0.00   | 2      | 0.6   | 1988   | PASS      |
| 198    | 198     | 100    | 100    | 100.0 | 341952 | PASS      |
| 199    | 198     | 5      | 9      | 6.8   | 23268  | PASS      |
| 275    | 198     | 10     | 60     | 27.0  | 92328  | PASS      |
| 365    | 198     | 1      | 100    | 3.8   | 13090  | PASS      |
| 441    | 198     | 0.01   | 100    | 12.3  | 41963  | PASS      |
| 442    | 442     | 50     | 100    | 100.0 | 273045 | PASS      |
| 443    | 442     | 15     | 24     | 18.9  | 51704  | PASS      |

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

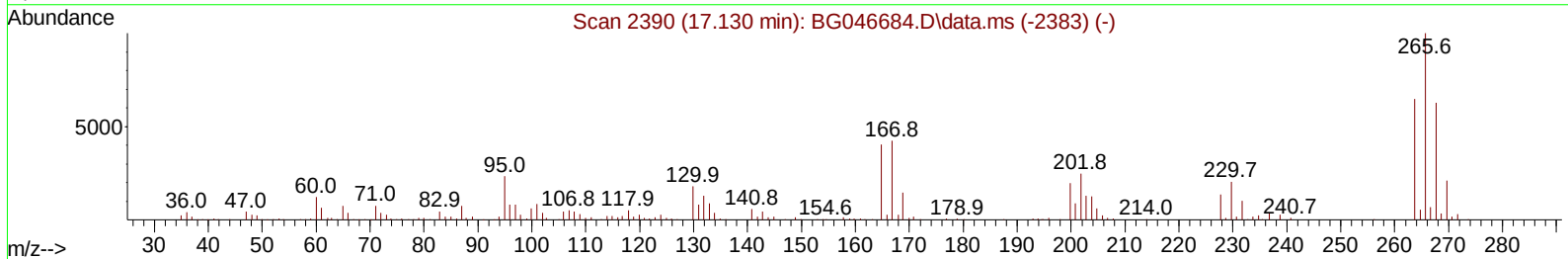
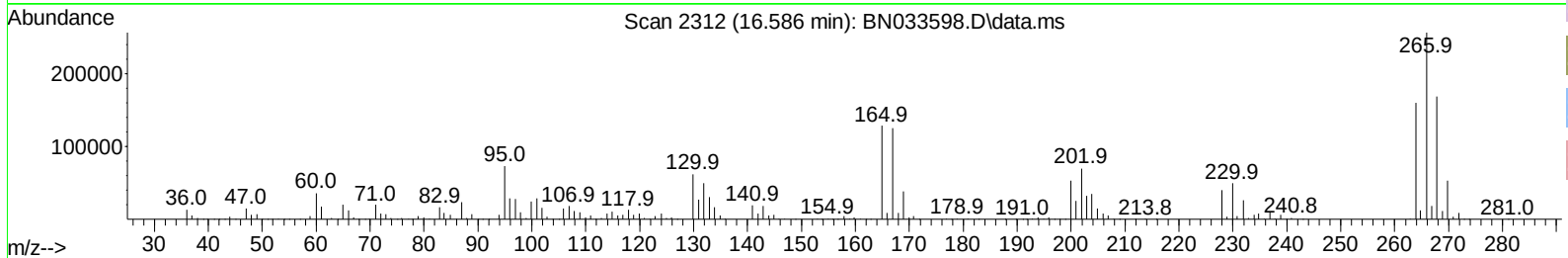
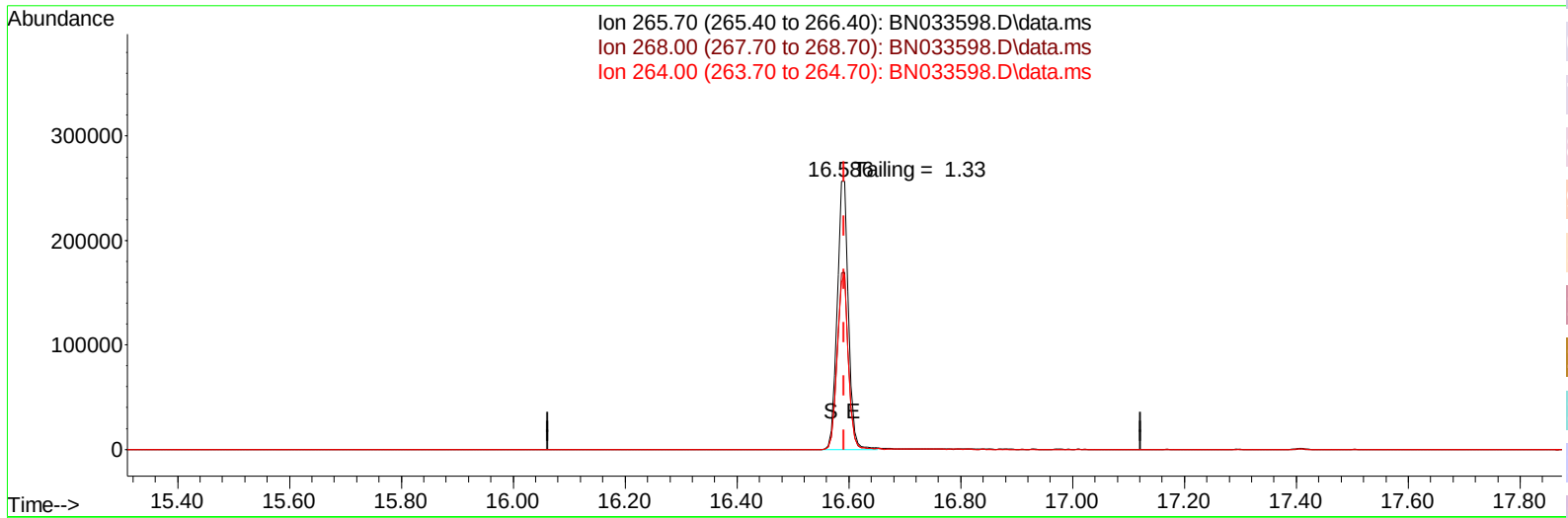
DDT Breakdown

| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 8/23/2024     | BNA_N            | <u>BN033598.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 316046           | 20.445             |
| DDD           | 482833           | 20.004             |
| DDE           | 703              | 19.492             |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 483536        | 799582           | 60.47              |
|               |                  |                    |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033598.D  
Acq On : 23 Aug 2024 20:51  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 24 06:45:58 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Aug 24 06:44:36 2024  
Response via : Initial Calibration



TIC: BN033598.D\data.ms

**(70) Pentachlorophenol (C)**

**16.586min (-0.006) 229085.58 ng**

**response 361359**

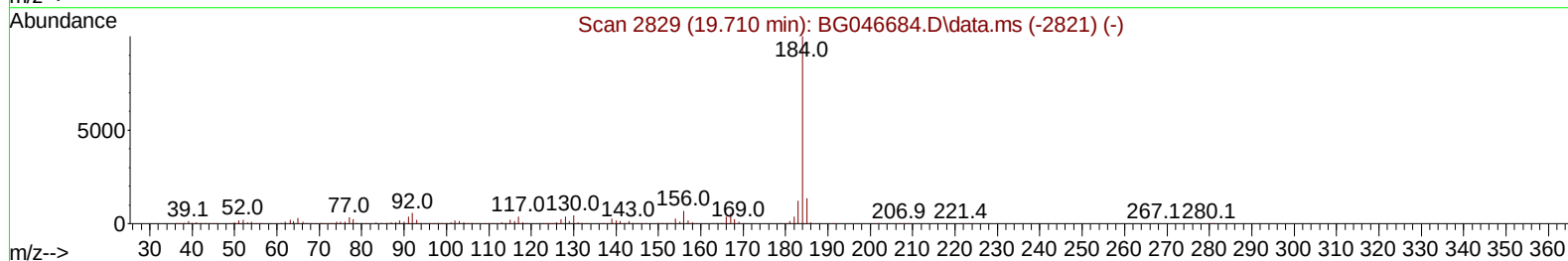
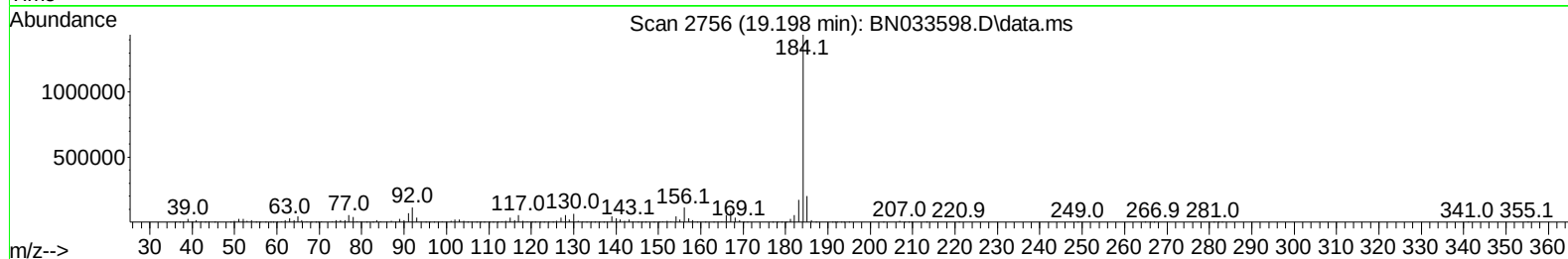
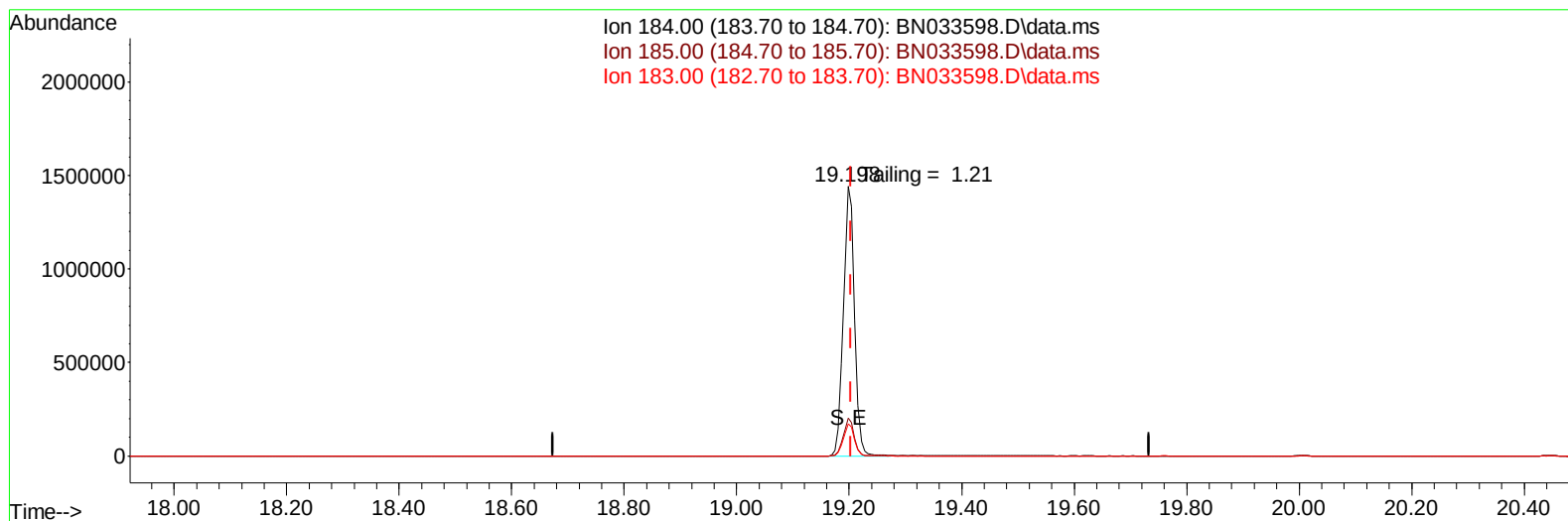
| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 65.92  |
| 264.00 | 61.60  | 62.48  |
| 0.00   | 0.00   | 0.00   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082324\  
Data File : BN033598.D  
Acq On : 23 Aug 2024 20:51  
Operator : MA/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 24 06:45:58 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Aug 24 06:44:36 2024  
Response via : Initial Calibration



TIC: BN033598.D\data.ms

**(77) Benzidine****19.198min (-0.006) 14681.39 ng****response 1986736**

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 13.97  |
| 183.00 | 13.20  | 11.90  |
| 0.00   | 0.00   | 0.00   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: |                              |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  |                              |
| Client Sample ID:  | PB162880BL                            | SDG No.:        | P3671                        |
| Lab Sample ID:     | PB162880BL                            | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 100                          |
| Sample Wt/Vol:     | 30.02      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033564.D        | 1         | 08/21/24 09:38 | 08/22/24 22:39 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 0.69  | U         | 0.69                | 3.30       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 0.80  | U         | 0.80                | 3.30       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 0.63  | U         | 0.63                | 3.30       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 0.55  | U         | 0.55                | 3.30       | ug/Kg             |
| 86-73-7                   | Fluorene                | 0.60  | U         | 0.60                | 3.30       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 0.63  | U         | 0.63                | 3.30       | ug/Kg             |
| 120-12-7                  | Anthracene              | 0.79  | U         | 0.79                | 3.30       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 0.67  | U         | 0.67                | 3.30       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 0.95  | U         | 0.95                | 3.30       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 0.76  | U         | 0.76                | 3.30       | ug/Kg             |
| 218-01-9                  | Chrysene                | 0.86  | U         | 0.86                | 3.30       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 1.20  | U         | 1.20                | 3.30       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 0.98  | U         | 0.98                | 3.30       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 1.70  | U         | 1.70                | 3.30       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 1.30  | U         | 1.30                | 3.30       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 1.20  | U         | 1.20                | 3.30       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 1.10  | U         | 1.10                | 3.30       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 2.20  | U         | 2.20                | 6.60       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.36  |           | 30 (17) - 150 (161) | 90%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.40  |           | 30 (23) - 150 (138) | 100%       | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.38  |           | 30 (33) - 130 (121) | 96%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.40  |           | 30 (32) - 130 (121) | 100%       | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.37  |           | 30 (21) - 130 (130) | 91%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 6430  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 16100 | 10.304    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 7240  | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 13600 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: |                              |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  |                              |
| Client Sample ID:  | PB162880BL                            | SDG No.:        | P3671                        |
| Lab Sample ID:     | PB162880BL                            | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 100                          |
| Sample Wt/Vol:     | 30.02      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033564.D        | 1         | 08/21/24 09:38 | 08/22/24 22:39 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 11000 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 12000 | 23.306    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033564.D  
Acq On : 22 Aug 2024 22:39  
Operator : MA/JU  
Sample : PB162880BL  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BL

Quant Time: Aug 23 01:35:24 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.545  | 152  | 6432     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8           | 10.304 | 136  | 16127    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10        | 14.178 | 164  | 7236     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10        | 16.929 | 188  | 13552    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12            | 21.139 | 240  | 11004    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12            | 23.306 | 264  | 11993    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds |        |      |          |       |       |          |
| 4) 2-Fluorophenol           | 5.183  | 112  | 6230     | 0.305 | ng    | 0.00     |
| 5) Phenol-d6                | 6.729  | 99   | 7324     | 0.301 | ng    | 0.00     |
| 8) Nitrobenzene-d5          | 8.681  | 82   | 5137     | 0.384 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10 | 11.903 | 152  | 8327     | 0.361 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol    | 15.676 | 330  | 979      | 0.252 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl        | 12.799 | 172  | 11783    | 0.399 | ng    | 0.00     |
| 27) Fluoranthene-d10        | 18.970 | 212  | 13025    | 0.400 | ng    | 0.00     |
| 31) Terphenyl-d14           | 19.584 | 244  | 9117     | 0.365 | ng    | 0.00     |

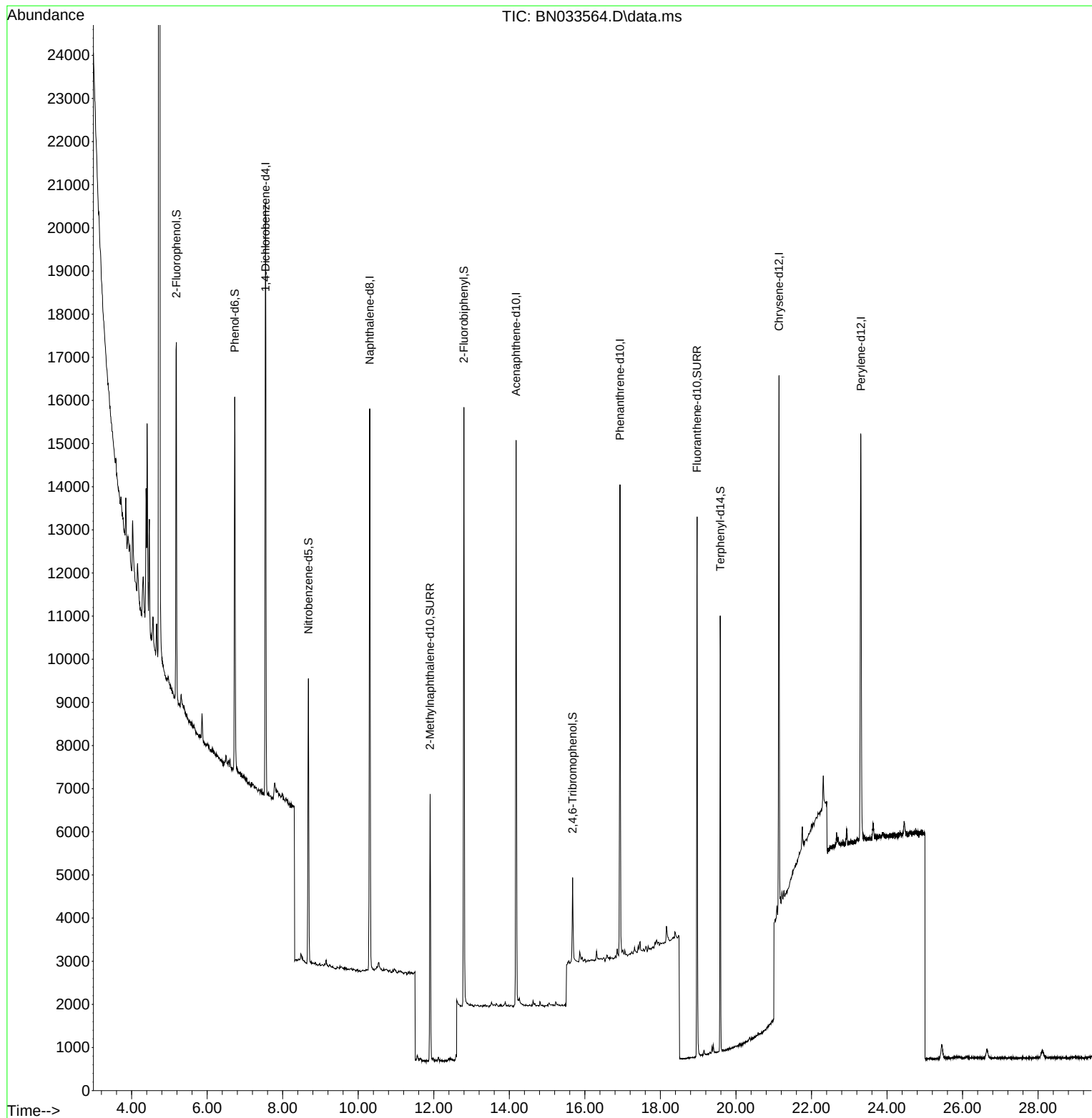
| Target Compounds | Qvalue |
|------------------|--------|
|------------------|--------|

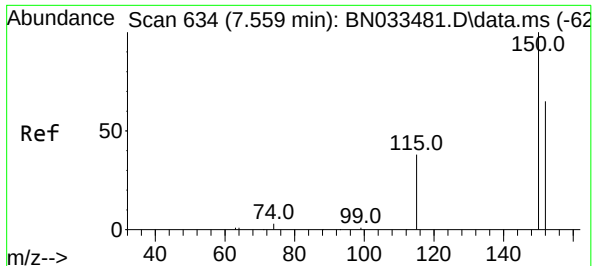
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
Data File : BN033564.D  
Acq On : 22 Aug 2024 22:39  
Operator : MA/JU  
Sample : PB162880BL  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BL

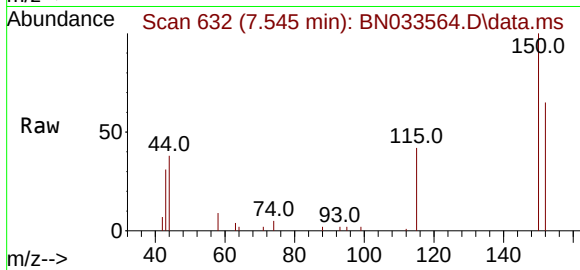
Quant Time: Aug 23 01:35:24 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 00:22:18 2024  
Response via : Initial Calibration



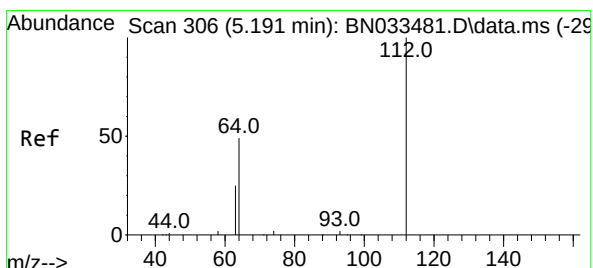
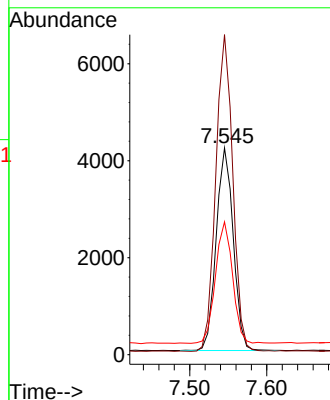
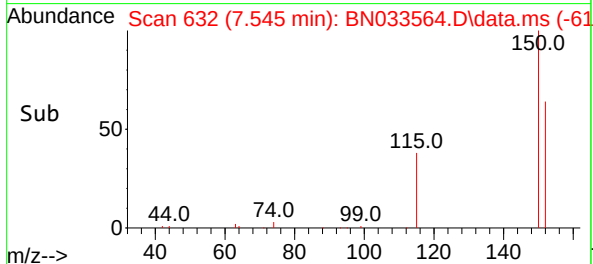


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BL

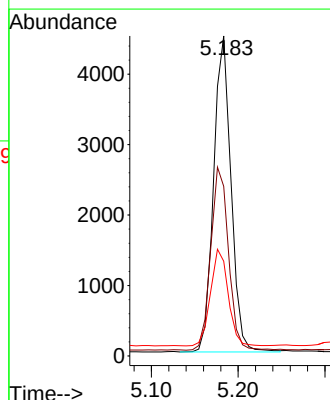
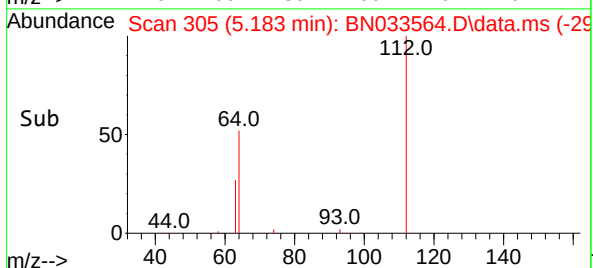
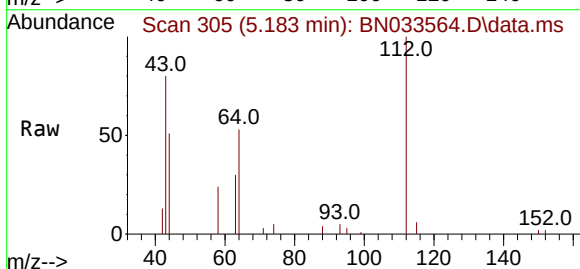


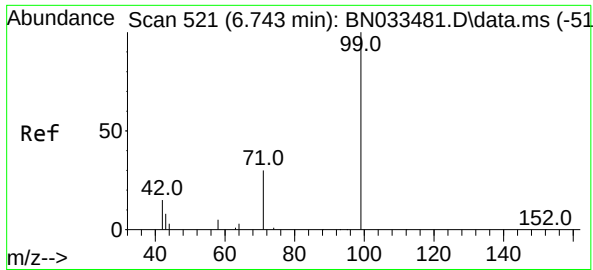
Tgt Ion:152 Resp: 6432  
Ion Ratio Lower Upper  
152 100  
150 154.8 122.2 183.2  
115 64.2 47.2 70.8



#4  
2-Fluorophenol  
Concen: 0.305 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

Tgt Ion:112 Resp: 6230  
Ion Ratio Lower Upper  
112 100  
64 59.1 47.1 70.7  
63 31.1 24.9 37.3

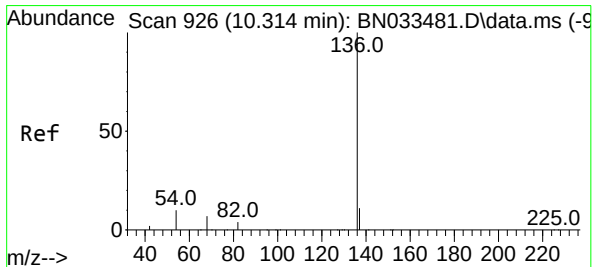
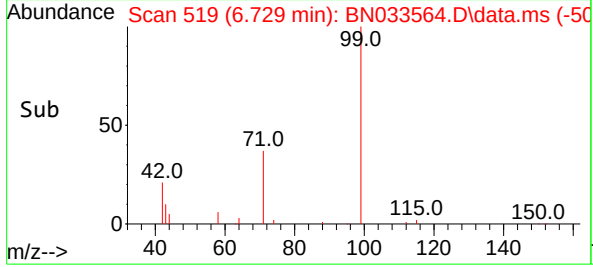
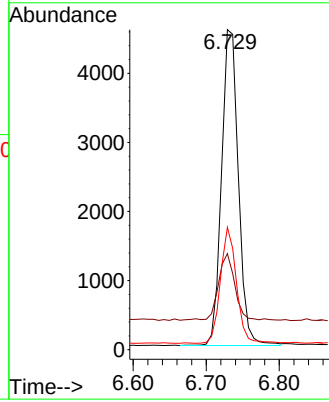
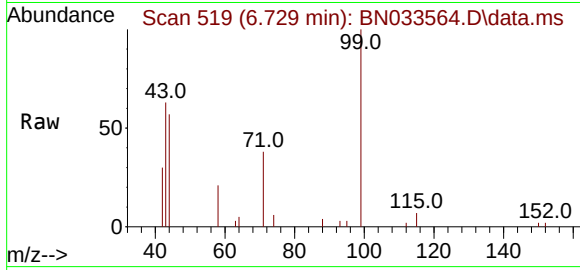




#5  
Phenol-d6  
Concen: 0.301 ng  
RT: 6.729 min Scan# 519  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

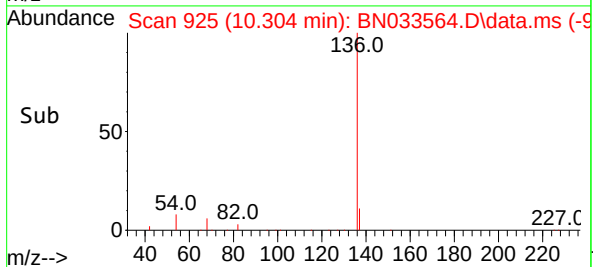
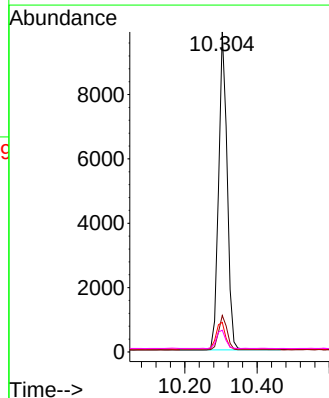
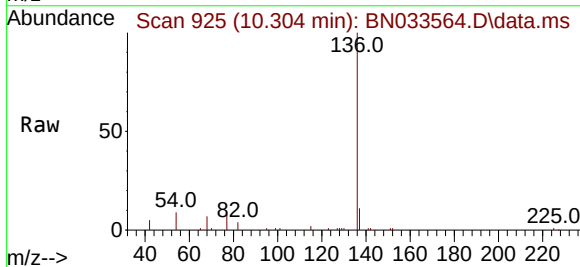
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BL

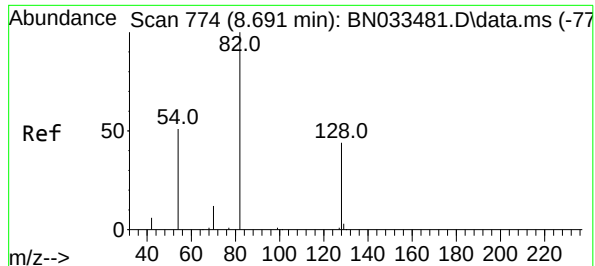
Tgt Ion: 99 Resp: 7324  
Ion Ratio Lower Upper  
99 100  
42 20.3 16.6 24.8  
71 34.8 26.2 39.4



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 925  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

Tgt Ion: 136 Resp: 16127  
Ion Ratio Lower Upper  
136 100  
137 11.4 9.0 13.6  
54 9.2 8.3 12.5  
68 6.8 5.9 8.9

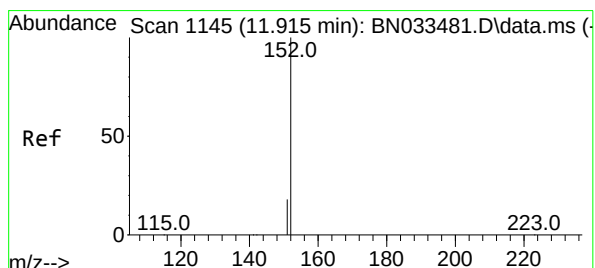
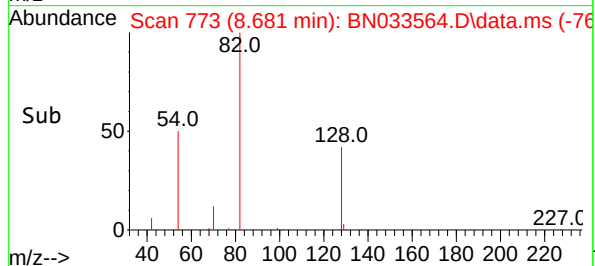
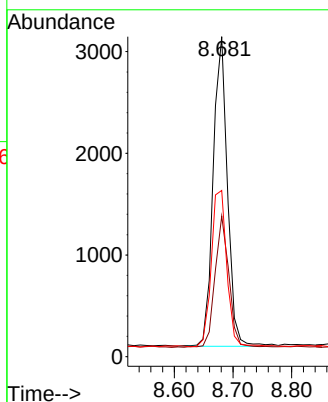
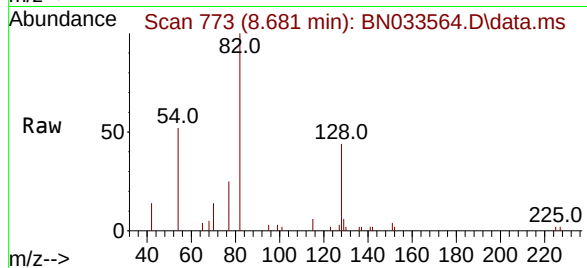




#8  
 Nitrobenzene-d5  
 Concen: 0.384 ng  
 RT: 8.681 min Scan# 71  
 Delta R.T. 0.000 min  
 Lab File: BN033564.D  
 Acq: 22 Aug 2024 22:39

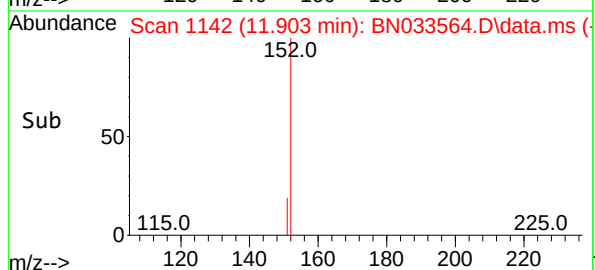
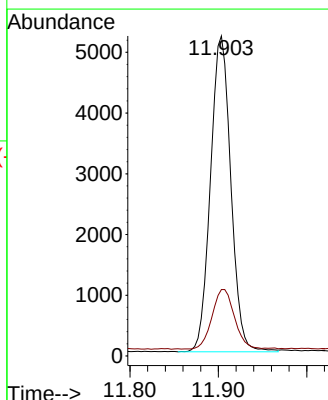
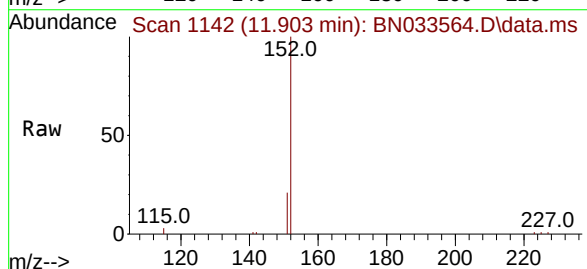
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB162880BL

Tgt Ion: 82 Resp: 5137  
 Ion Ratio Lower Upper  
 82 100  
 128 43.9 36.0 54.0  
 54 52.0 42.0 63.0

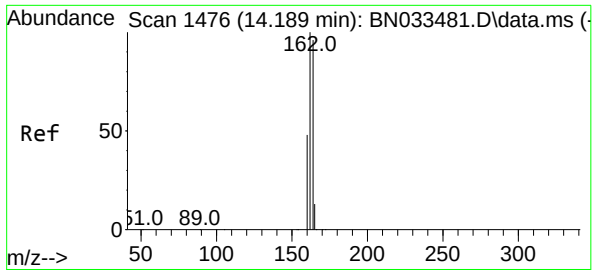


#11  
 2-Methylnaphthalene-d10  
 Concen: 0.361 ng  
 RT: 11.903 min Scan# 1142  
 Delta R.T. 0.000 min  
 Lab File: BN033564.D  
 Acq: 22 Aug 2024 22:39

Tgt Ion: 152 Resp: 8327  
 Ion Ratio Lower Upper  
 152 100  
 151 20.9 16.6 25.0



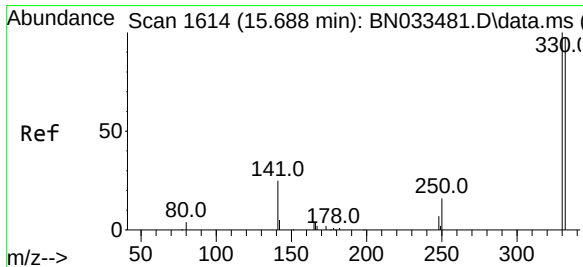
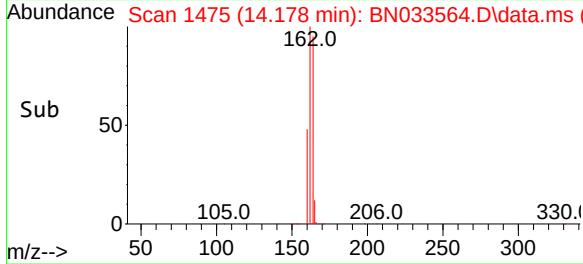
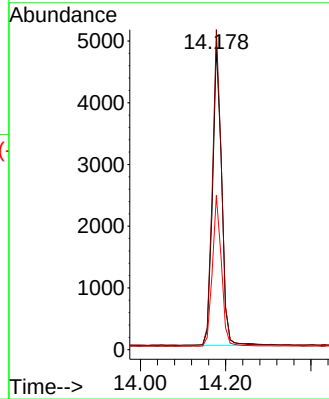
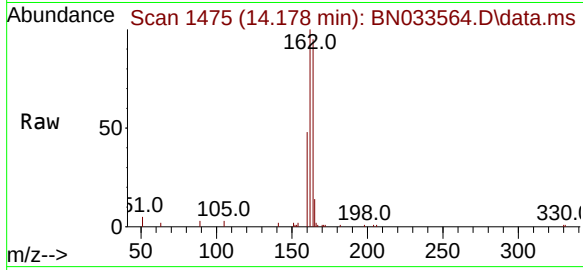




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 14  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

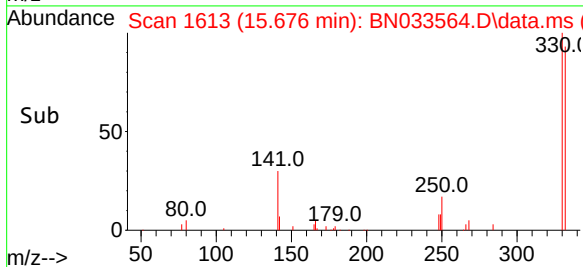
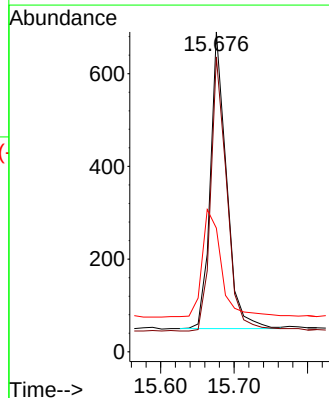
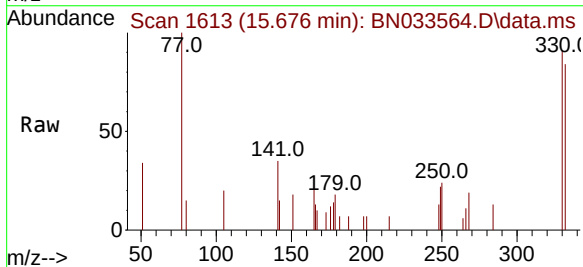
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BL

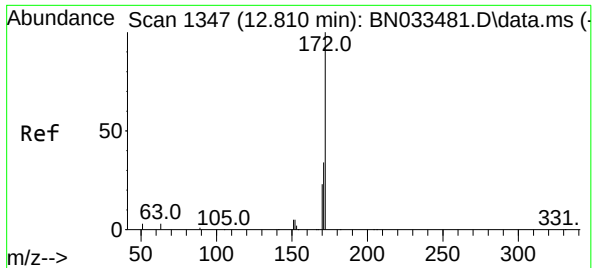
Tgt Ion:164 Resp: 7236  
Ion Ratio Lower Upper  
164 100  
162 105.4 83.5 125.3  
160 50.8 40.2 60.4



#14  
2,4,6-Tribromophenol  
Concen: 0.252 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

Tgt Ion:330 Resp: 979  
Ion Ratio Lower Upper  
330 100  
332 92.3 77.5 116.3  
141 43.4 33.9 50.9

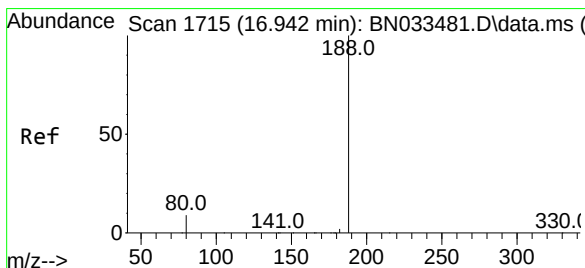
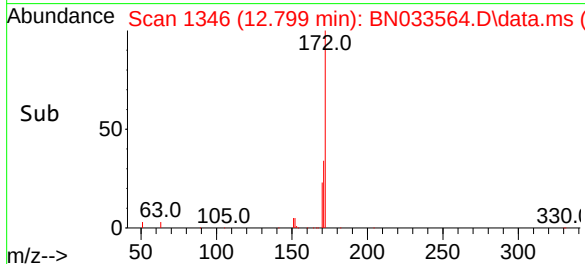
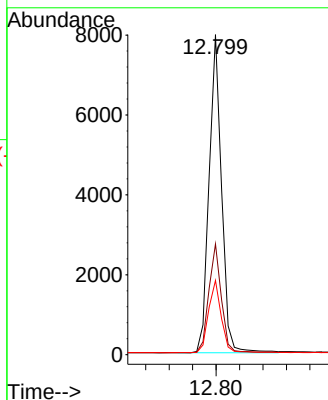
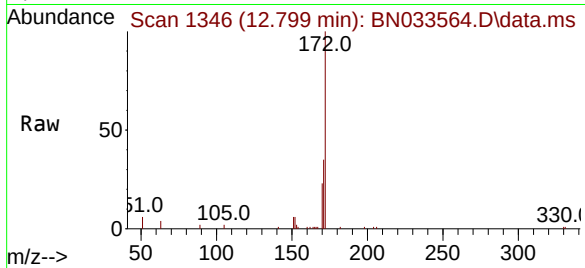




#15  
2-Fluorobiphenyl  
Concen: 0.399 ng  
RT: 12.799 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

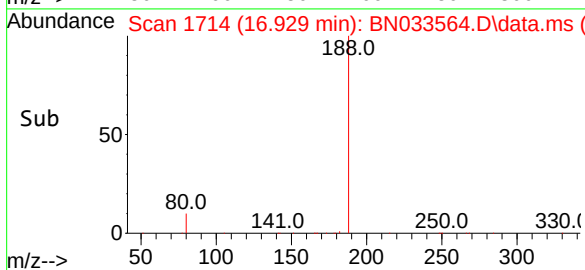
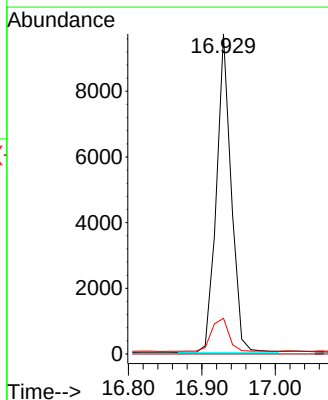
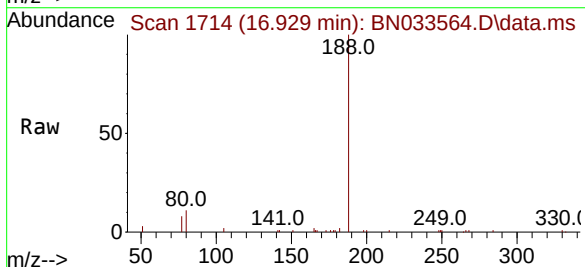
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BL

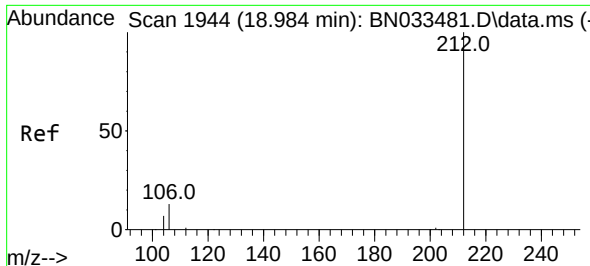
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.6  | 27.7  | 41.5  |
| 170     | 23.2  | 18.3  | 27.5  |



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1714  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 11.2  | 7.8   | 11.8  |





#27

Fluoranthene-d10

Concen: 0.400 ng

RT: 18.970 min Scan# 1941

Delta R.T. 0.000 min

Lab File: BN033564.D

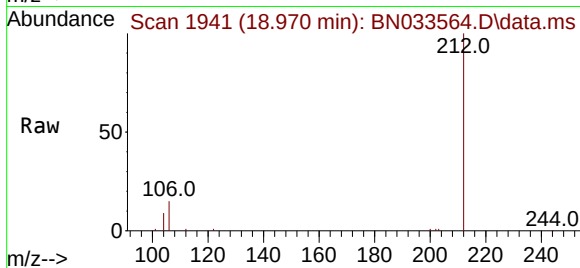
Acq: 22 Aug 2024 22:39

Instrument :

BNA\_N

ClientSampleId :

PB162880BL



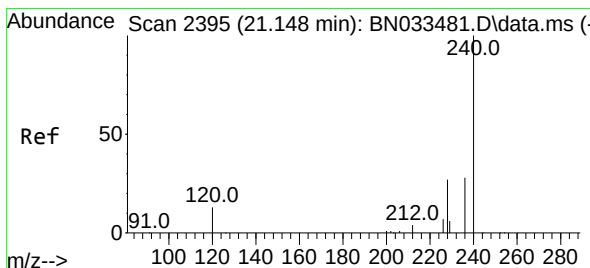
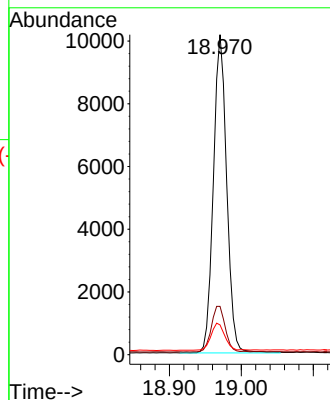
Tgt Ion:212 Resp: 13025

Ion Ratio Lower Upper

212 100

106 14.9 12.3 18.5

104 9.0 7.0 10.4



#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.139 min Scan# 2394

Delta R.T. 0.000 min

Lab File: BN033564.D

Acq: 22 Aug 2024 22:39

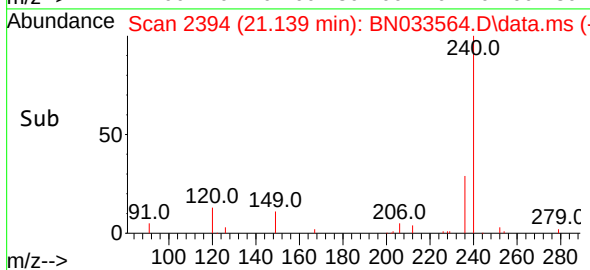
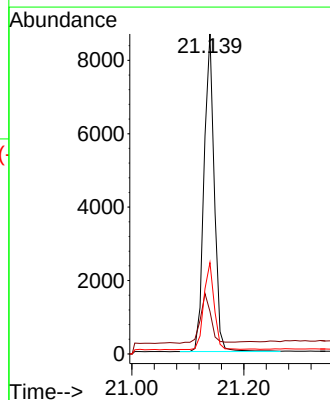
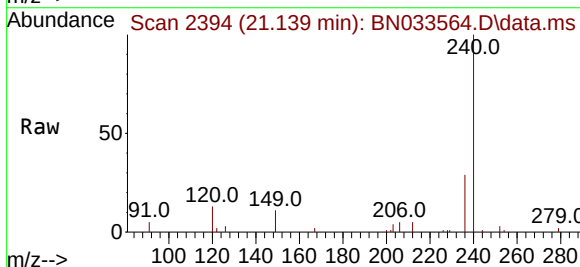
Tgt Ion:240 Resp: 11004

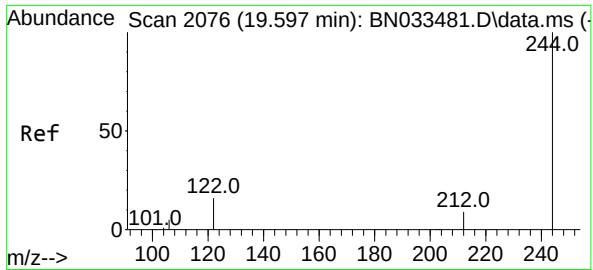
Ion Ratio Lower Upper

240 100

120 13.3 12.4 18.6

236 28.5 23.0 34.6

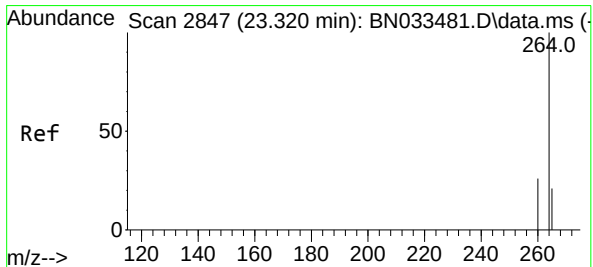
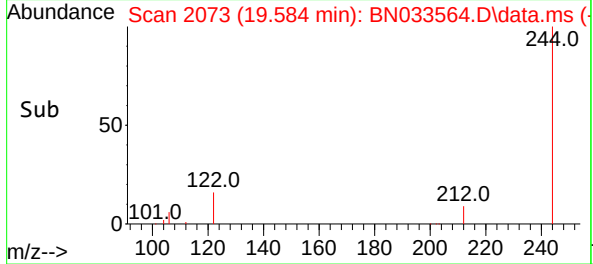
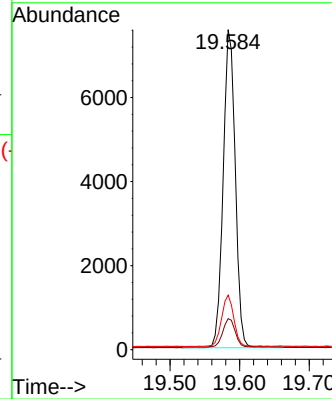
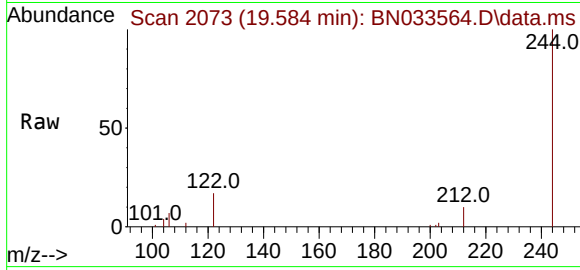




#31  
Terphenyl-d14  
Concen: 0.365 ng  
RT: 19.584 min Scan# 2076  
Delta R.T. 0.000 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

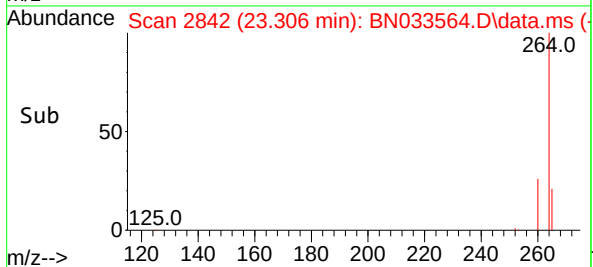
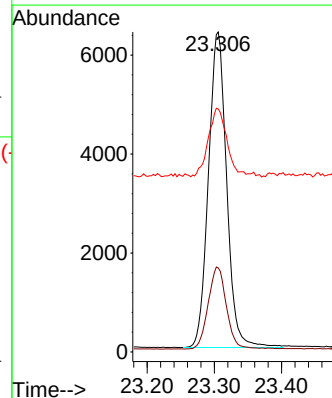
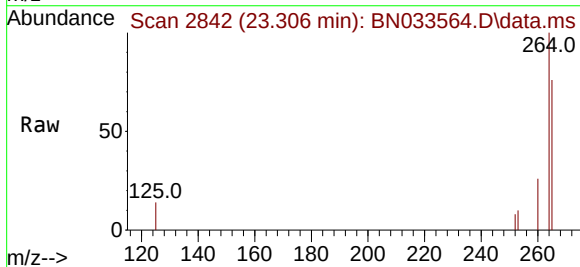
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 9.7   | 7.8   | 11.6  |
| 122     | 17.0  | 13.3  | 19.9  |



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.306 min Scan# 2842  
Delta R.T. 0.003 min  
Lab File: BN033564.D  
Acq: 22 Aug 2024 22:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 26.3  | 20.8  | 31.2  |
| 265     | 75.9  | 52.2  | 78.2  |



## Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: |               |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  |               |
| Client Sample ID:  | PB162880BS                            | SDG No.:        | P3671         |
| Lab Sample ID:     | PB162880BS                            | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 100           |
| Sample Wt/Vol:     | 30.01 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033565.D        | 1         | 08/21/24 09:38 | 08/22/24 23:16 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 12.0  |           | 0.69                | 3.30       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 11.5  |           | 0.80                | 3.30       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 12.2  |           | 0.63                | 3.30       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 11.8  |           | 0.55                | 3.30       | ug/Kg             |
| 86-73-7                   | Fluorene                | 11.0  |           | 0.60                | 3.30       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 12.5  |           | 0.63                | 3.30       | ug/Kg             |
| 120-12-7                  | Anthracene              | 12.4  |           | 0.79                | 3.30       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 11.9  |           | 0.67                | 3.30       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 10.7  |           | 0.95                | 3.30       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 12.1  |           | 0.76                | 3.30       | ug/Kg             |
| 218-01-9                  | Chrysene                | 12.7  |           | 0.86                | 3.30       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 11.8  |           | 1.20                | 3.30       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 12.0  |           | 0.98                | 3.30       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 13.1  |           | 1.70                | 3.30       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 13.0  |           | 1.30                | 3.30       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 12.8  |           | 1.20                | 3.30       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 12.1  |           | 1.10                | 3.30       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 9.90  |           | 2.20                | 6.60       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.37  |           | 30 (17) - 150 (161) | 93%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.36  |           | 30 (23) - 150 (138) | 89%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.36  |           | 30 (33) - 130 (121) | 90%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.39  |           | 30 (32) - 130 (121) | 97%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.32  |           | 30 (21) - 130 (130) | 80%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7160  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 18000 | 10.304    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 7780  | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 14000 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: |                              |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  |                              |
| Client Sample ID:  | PB162880BS                            | SDG No.:        | P3671                        |
| Lab Sample ID:     | PB162880BS                            | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 100                          |
| Sample Wt/Vol:     | 30.01      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :    N                       | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033565.D        | 1         | 08/21/24 09:38 | 08/22/24 23:16 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 11300 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 12300 | 23.306    |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033565.D  
 Acq On : 22 Aug 2024 23:16  
 Operator : MA/JU  
 Sample : PB162880BS  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

**Instrument :**

BNA\_N

**ClientSampleId :**

PB162880BS

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024

Quant Time: Aug 23 01:35:34 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Aug 23 00:22:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7155     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.304 | 136  | 18004    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 7779     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 14031    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 11303    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.306 | 264  | 12304    | 0.400 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 6507     | 0.286 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.729  | 99   | 7506     | 0.277 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 5348     | 0.358 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 9553     | 0.371 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 994      | 0.238 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 12251    | 0.386 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 11978    | 0.355 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 8223     | 0.320 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.183  | 88   | 2449     | 0.297 | ng    | # 33     |
| 3) n-Nitrosodimethylamine     | 3.472  | 42   | 3380     | 0.353 | ng    | 96       |
| 6) bis(2-Chloroethyl)ether    | 6.982  | 93   | 7270     | 0.379 | ng    | 99       |
| 9) Naphthalene                | 10.357 | 128  | 17274    | 0.359 | ng    | 100      |
| 10) Hexachlorobutadiene       | 10.656 | 225  | 3481     | 0.363 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 10529    | 0.346 | ng    | 99       |
| 16) Acenaphthylene            | 13.889 | 152  | 12488    | 0.366 | ng    | 100      |
| 17) Acenaphthene              | 14.242 | 154  | 8510     | 0.355 | ng    | 98       |
| 18) Fluorene                  | 15.236 | 166  | 9948     | 0.329 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.322 | 198  | 441      | 0.201 | ng    | 92       |
| 21) 4-Bromophenyl-phenylether | 16.135 | 248  | 3018     | 0.354 | ng    | # 94     |
| 22) Hexachlorobenzene         | 16.247 | 284  | 3380     | 0.359 | ng    | 97       |
| 23) Atrazine                  | 16.408 | 200  | 2329     | 0.342 | ng    | 96       |
| 24) Pentachlorophenol         | 16.582 | 266  | 2405     | 0.590 | ng    | 98       |
| 25) Phenanthrene              | 16.967 | 178  | 14592    | 0.374 | ng    | 100      |
| 26) Anthracene                | 17.066 | 178  | 12872    | 0.373 | ng    | 100      |
| 28) Fluoranthene              | 19.003 | 202  | 15390    | 0.357 | ng    | 99       |
| 30) Pyrene                    | 19.365 | 202  | 16143    | 0.320 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 14824    | 0.363 | ng    | 99       |
| 33) Chrysene                  | 21.175 | 228  | 15485    | 0.381 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.086 | 149  | 7460m    | 0.288 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.455 | 276  | 19993    | 0.391 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.663 | 252  | 16288    | 0.354 | ng    | 99       |
| 38) Benzo(k)fluoranthene      | 22.706 | 252  | 16223    | 0.359 | ng    | 97       |
| 39) Benzo(a)pyrene            | 23.212 | 252  | 14972    | 0.394 | ng    | 99       |
| 40) Dibenzo(a,h)anthracene    | 25.475 | 278  | 15651    | 0.383 | ng    | 97       |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 15878    | 0.364 | ng    | 99       |

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033565.D  
 Acq On : 22 Aug 2024 23:16  
 Operator : MA/JU  
 Sample : PB162880BS  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

## Instrument :

BNA\_N

## ClientSampleId :

PB162880BS

## Manual Integrations

## APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024

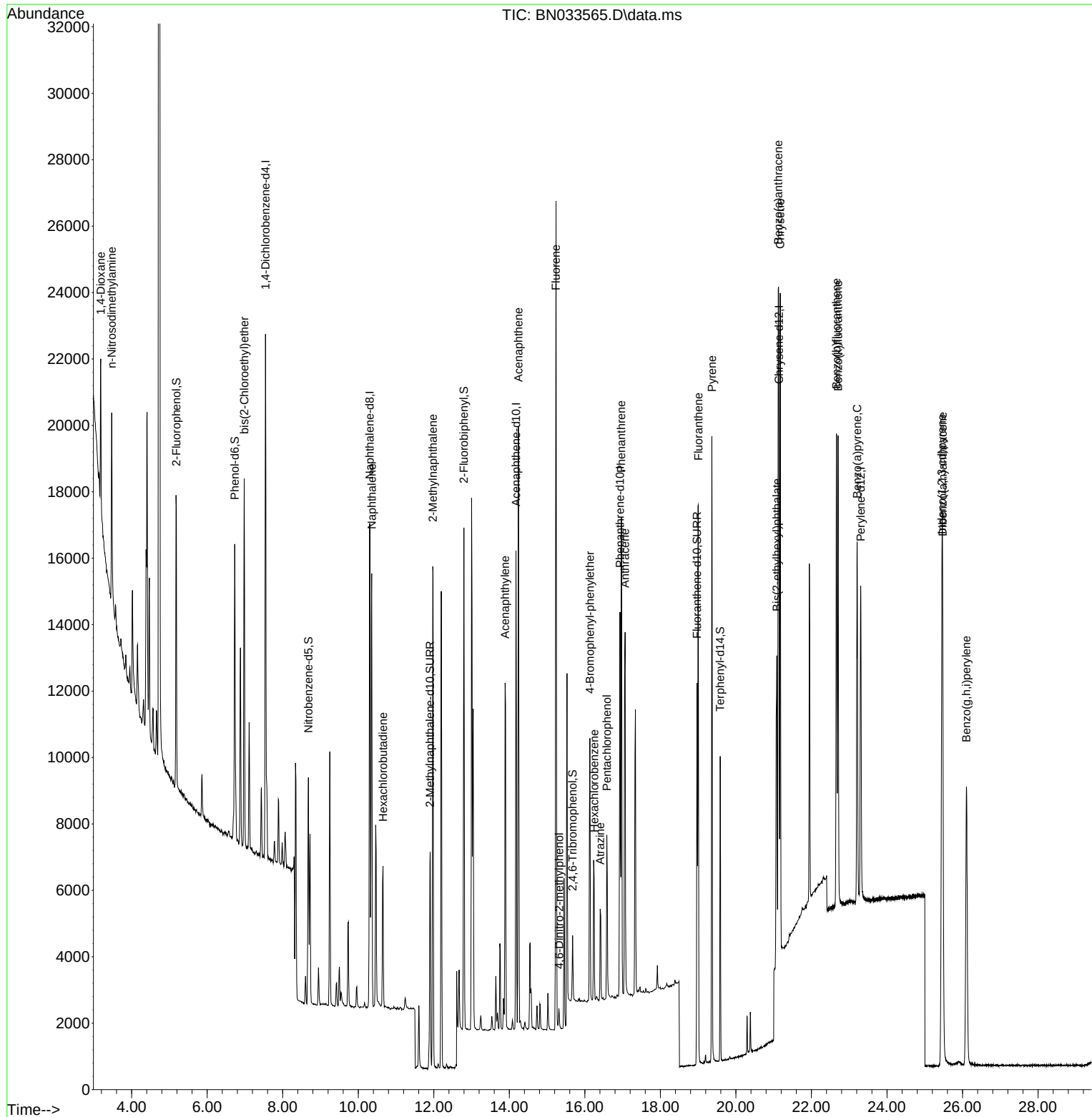
Quant Time: Aug 23 01:35:34 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M

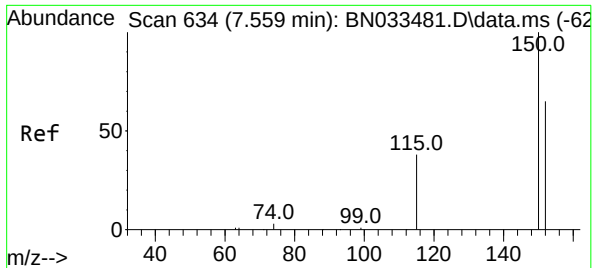
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Aug 23 00:22:18 2024

Response via : Initial Calibration

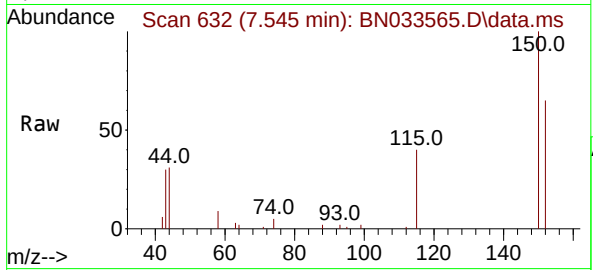






#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

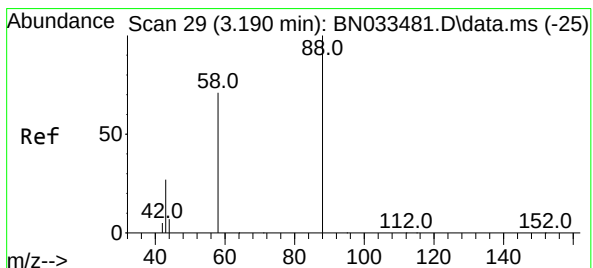
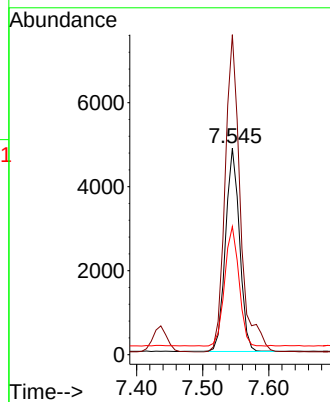
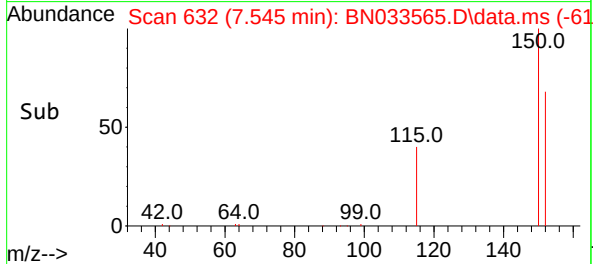
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion: 152 Resp: 715  
Ion Ratio Lower Upper  
152 100  
150 155.0 122.2 183.2  
115 62.1 47.2 70.8

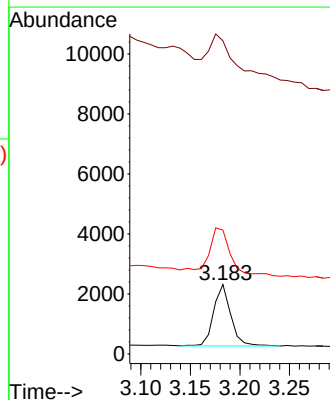
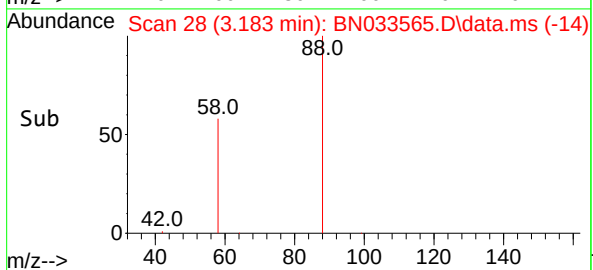
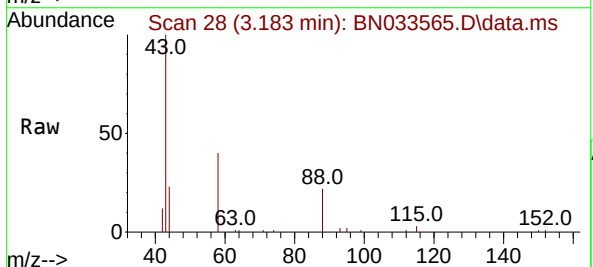
Manual Integrations  
APPROVED

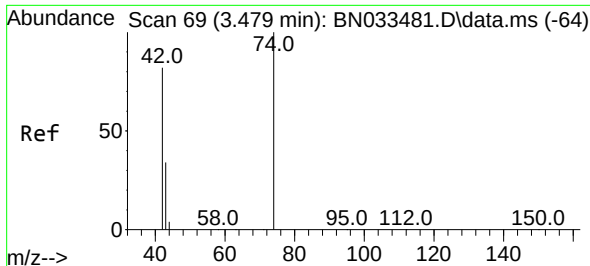
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#2  
1,4-Dioxane  
Concen: 0.297 ng  
RT: 3.183 min Scan# 28  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Tgt Ion: 88 Resp: 2449  
Ion Ratio Lower Upper  
88 100  
43 123.8 25.0 37.4#  
58 100.9 62.5 93.7#





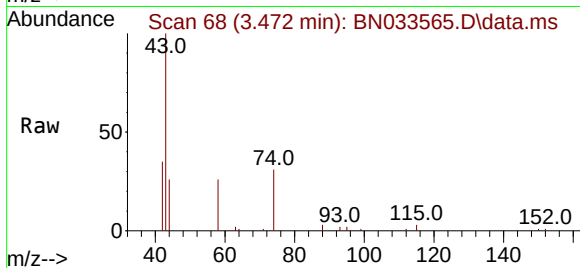
#3  
n-Nitrosodimethylamine  
Concen: 0.353 ng  
RT: 3.472 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

ClientSampleId :

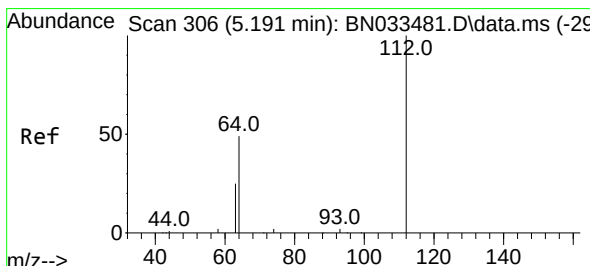
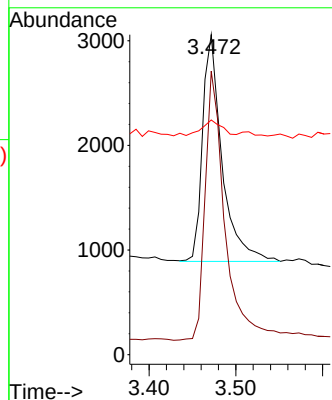
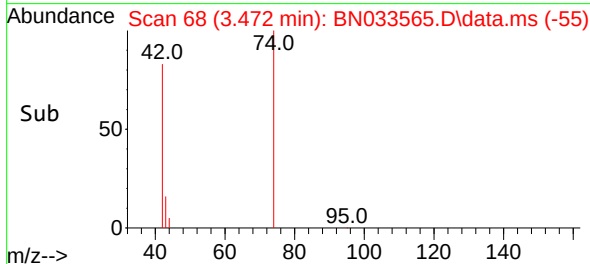
PB162880BS



Tgt Ion: 42 Resp: 3380  
Ion Ratio Lower Upper  
42 100  
74 120.7 100.2 150.2  
44 7.4 5.3 7.9

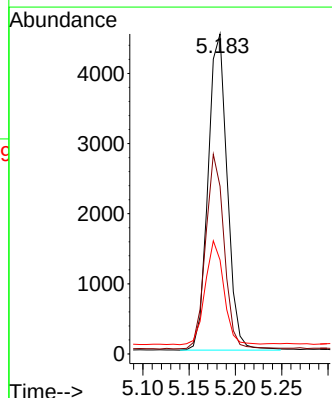
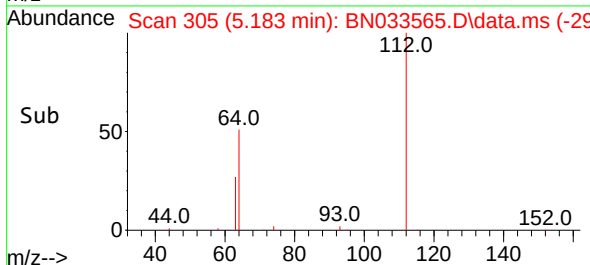
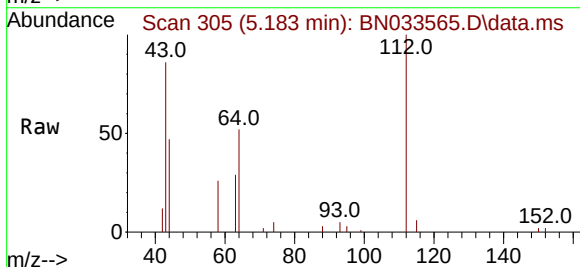
Manual Integrations  
APPROVED

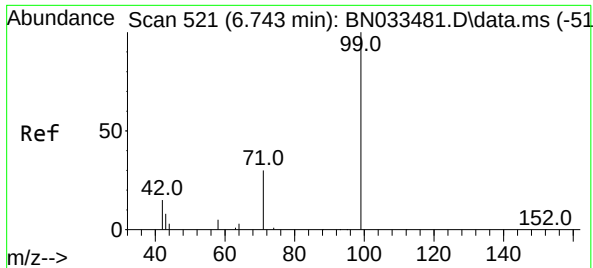
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.286 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

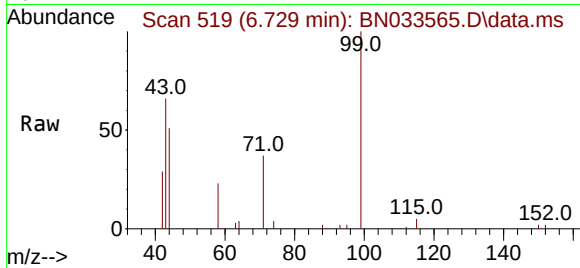
Tgt Ion:112 Resp: 6507  
Ion Ratio Lower Upper  
112 100  
64 59.7 47.1 70.7  
63 31.6 24.9 37.3





#5  
Phenol-d6  
Concen: 0.277 ng  
RT: 6.729 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

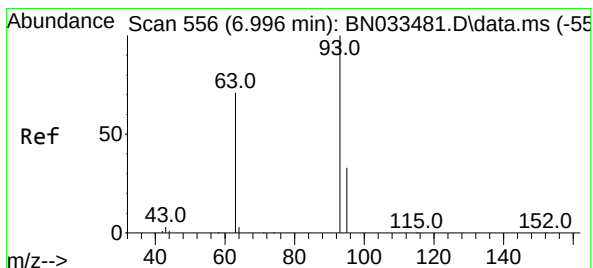
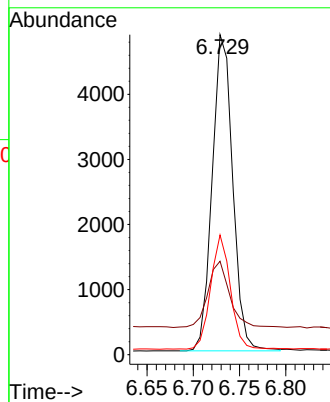
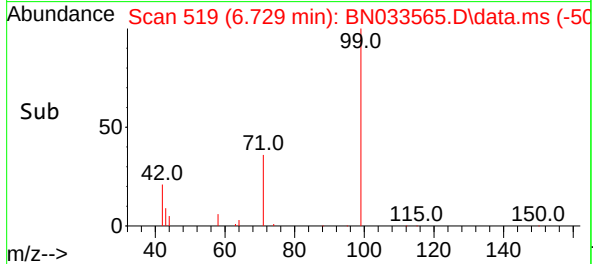
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion: 99 Resp: 7500  
Ion Ratio Lower Upper  
99 100  
42 22.3 16.6 24.8  
71 34.7 26.2 39.4

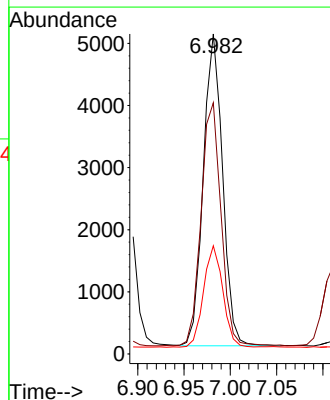
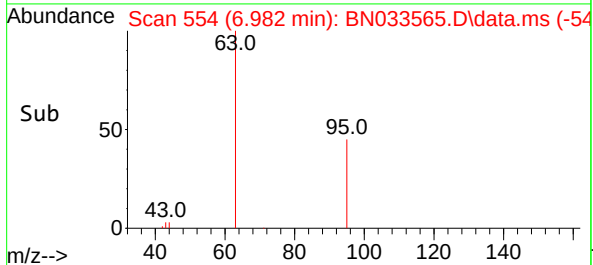
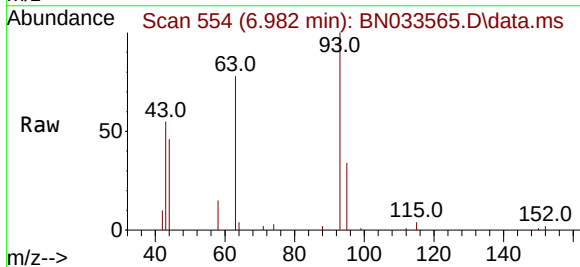
Manual Integrations  
**APPROVED**

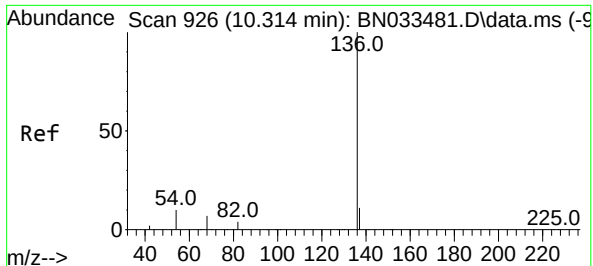
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#6  
bis(2-Chloroethyl)ether  
Concen: 0.379 ng  
RT: 6.982 min Scan# 554  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

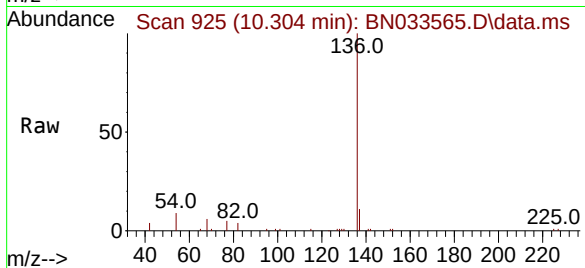
Tgt Ion: 93 Resp: 7270  
Ion Ratio Lower Upper  
93 100  
63 80.1 63.0 94.4  
95 32.4 26.0 39.0





#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

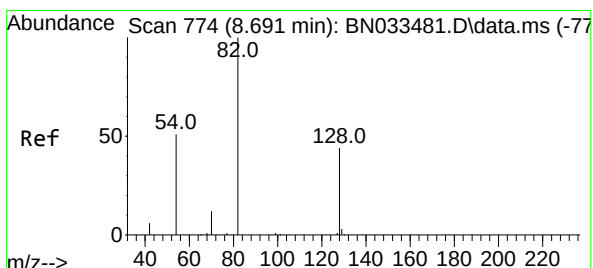
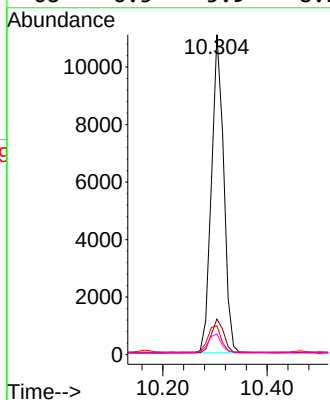
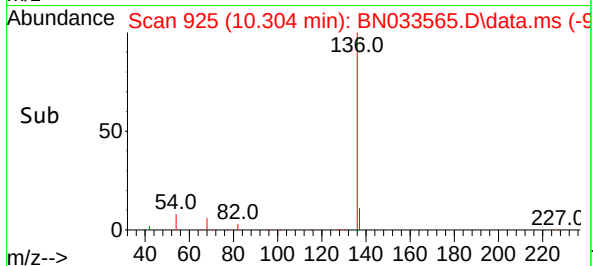
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion: 136 Resp: 18004  
Ion Ratio Lower Upper  
136 100  
137 11.2 9.0 13.6  
54 9.0 8.3 12.5  
68 6.5 5.9 8.9

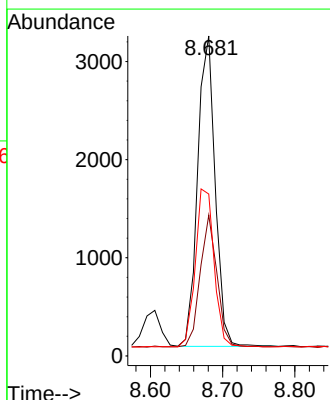
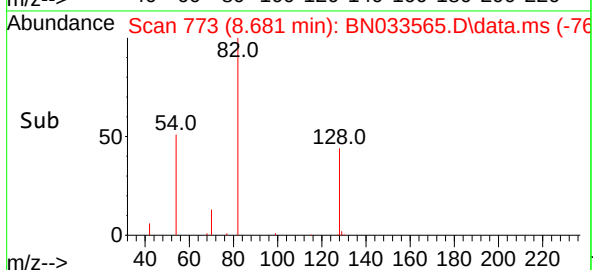
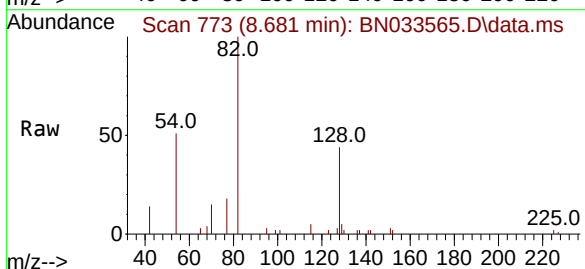
Manual Integrations  
APPROVED

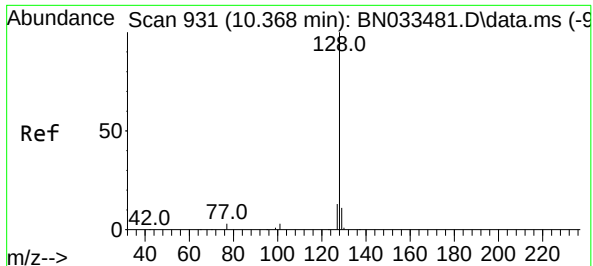
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#8  
Nitrobenzene-d5  
Concen: 0.358 ng  
RT: 8.681 min Scan# 773  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Tgt Ion: 82 Resp: 5348  
Ion Ratio Lower Upper  
82 100  
128 44.0 36.0 54.0  
54 50.6 42.0 63.0





#9  
Naphthalene  
Concen: 0.359 ng  
RT: 10.357 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

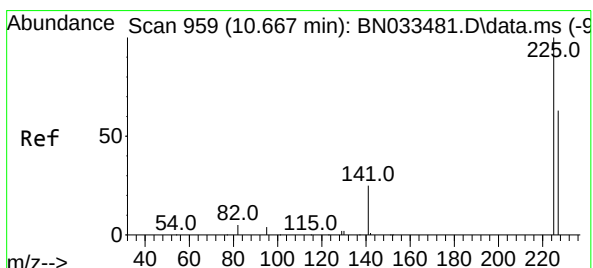
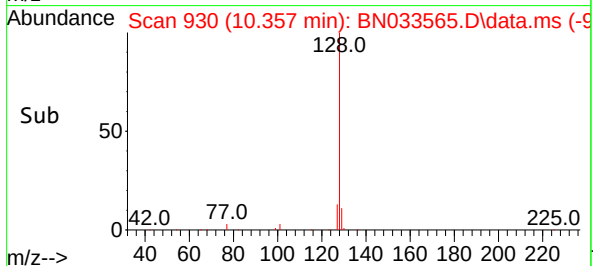
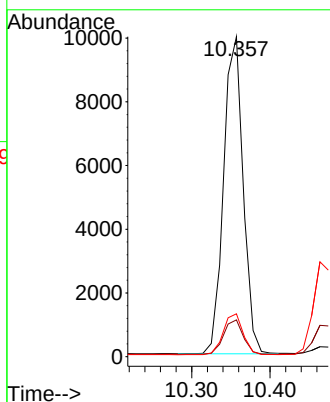
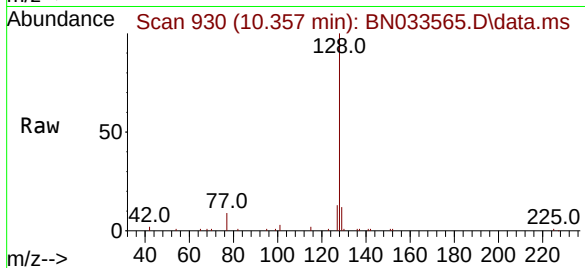
ClientSampleId :

PB162880BS

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.5  | 9.1   | 13.7  |
| 127     | 13.4  | 10.7  | 16.1  |

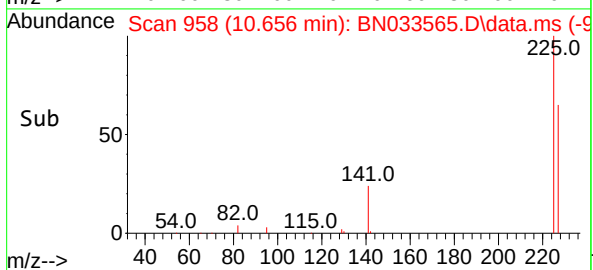
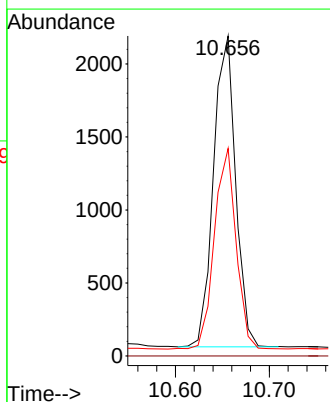
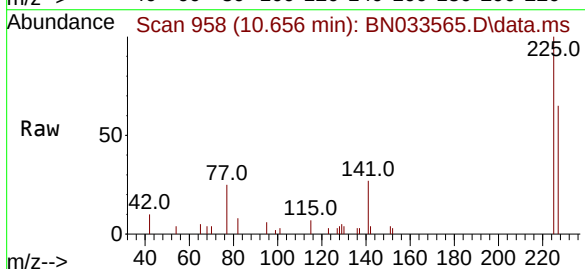
Manual Integrations  
APPROVED

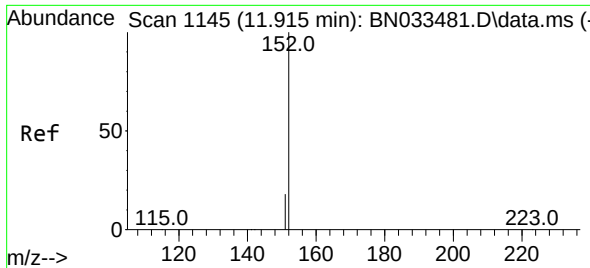
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#10  
Hexachlorobutadiene  
Concen: 0.363 ng  
RT: 10.656 min Scan# 958  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

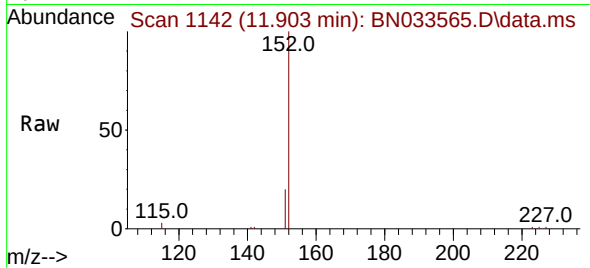
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 0.0   | 0.0   | 0.0   |
| 227     | 63.5  | 51.2  | 76.8  |





#11  
2-Methylnaphthalene-d10  
Concen: 0.371 ng  
RT: 11.903 min Scan# 1142  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

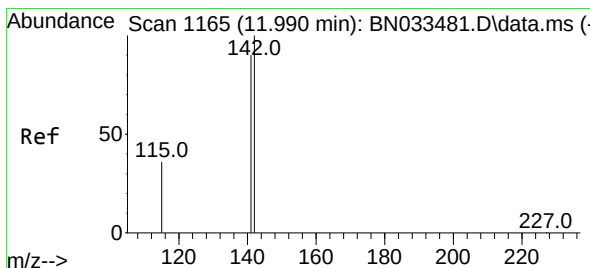
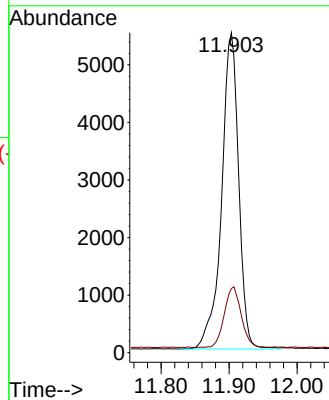
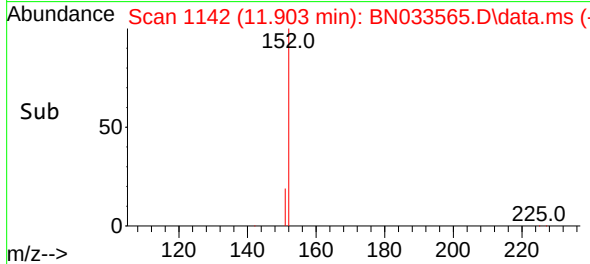
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion:152 Resp: 955  
Ion Ratio Lower Upper  
152 100  
151 19.1 16.6 25.0

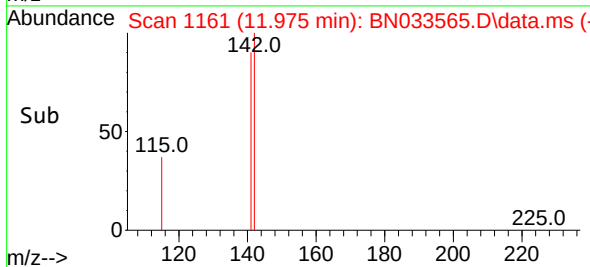
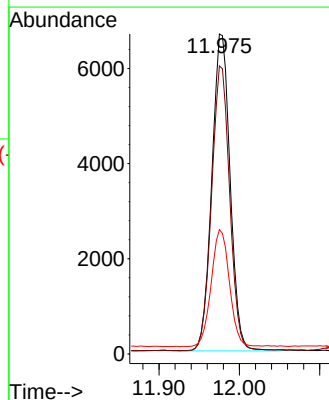
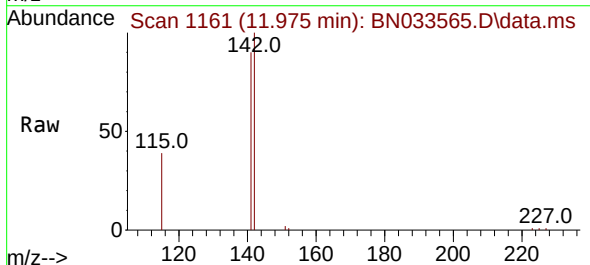
Manual Integrations  
**APPROVED**

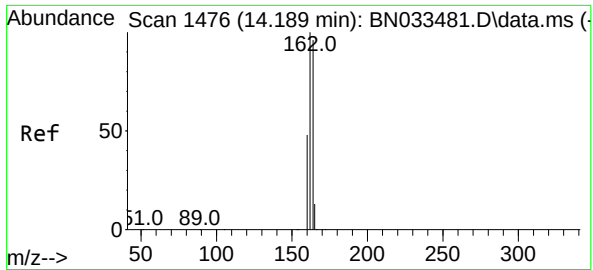
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.346 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

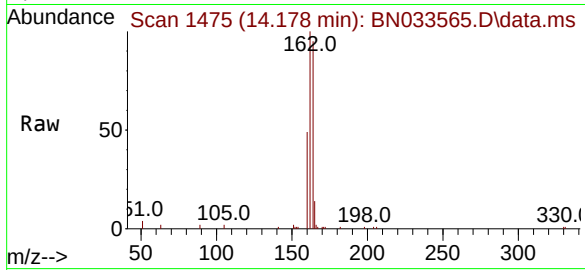
Tgt Ion:142 Resp: 10529  
Ion Ratio Lower Upper  
142 100  
141 90.0 71.7 107.5  
115 38.9 29.4 44.2





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

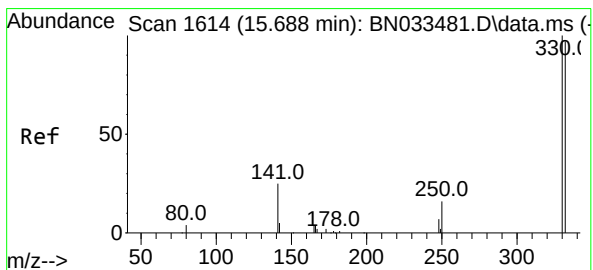
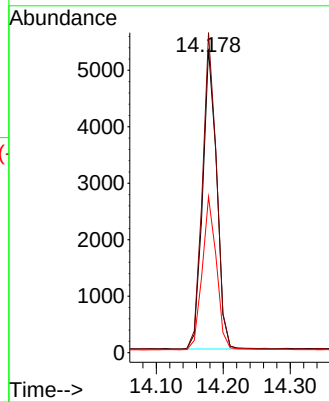
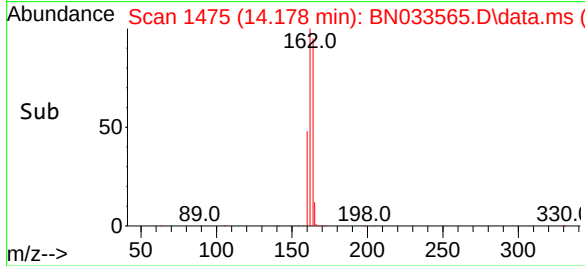
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



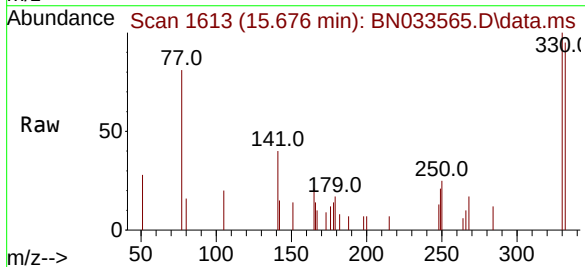
Tgt Ion:164 Resp: 7779  
Ion Ratio Lower Upper  
164 100  
162 105.3 83.5 125.3  
160 51.3 40.2 60.4

Manual Integrations  
**APPROVED**

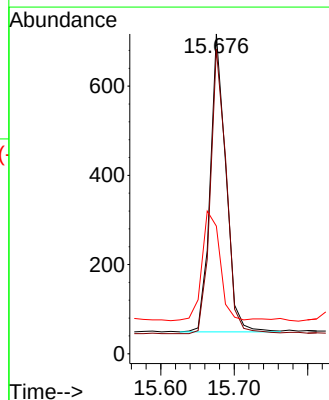
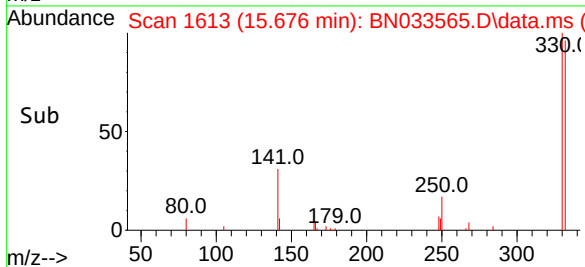
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

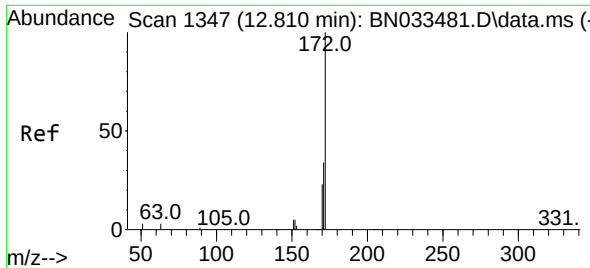


#14  
2,4,6-Tribromophenol  
Concen: 0.238 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16



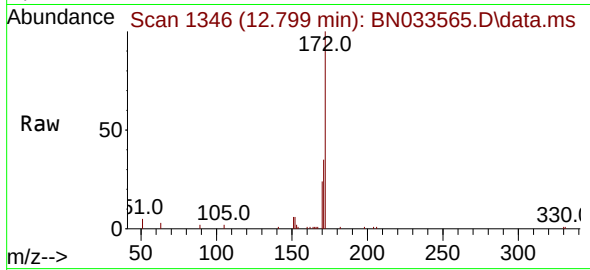
Tgt Ion:330 Resp: 994  
Ion Ratio Lower Upper  
330 100  
332 96.8 77.5 116.3  
141 42.3 33.9 50.9





#15  
2-Fluorobiphenyl  
Concen: 0.386 ng  
RT: 12.799 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

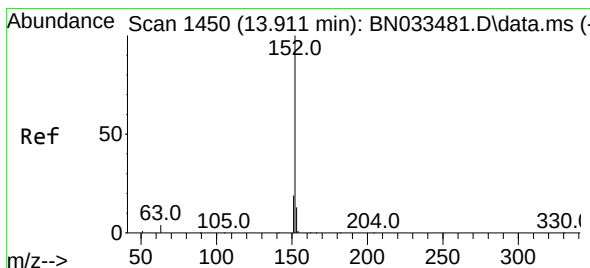
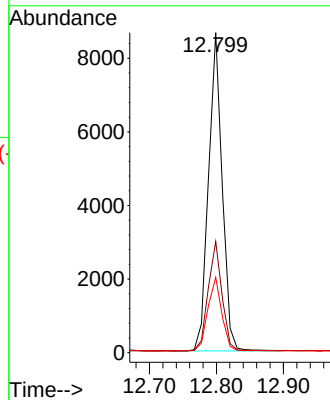
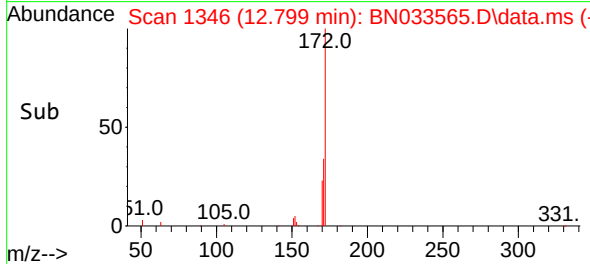
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



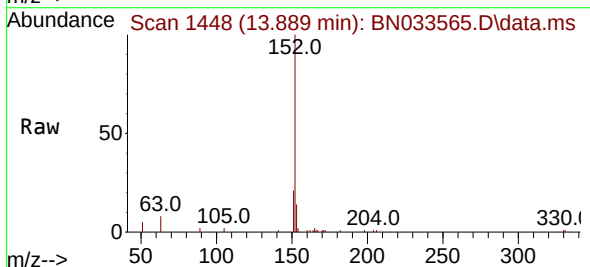
Tgt Ion:172 Resp: 1225  
Ion Ratio Lower Upper  
172 100  
171 34.8 27.7 41.5  
170 23.5 18.3 27.5

Manual Integrations  
APPROVED

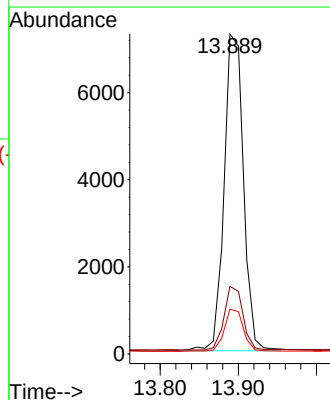
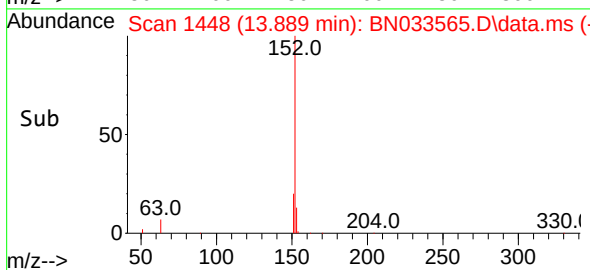
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



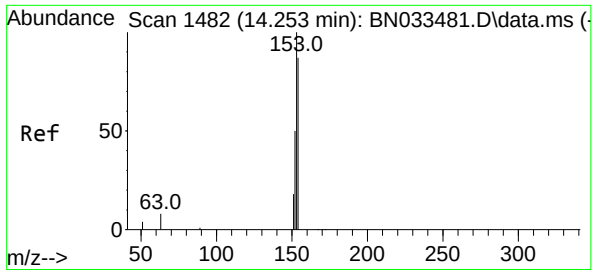
#16  
Acenaphthylene  
Concen: 0.366 ng  
RT: 13.889 min Scan# 1448  
Delta R.T. -0.011 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16



Tgt Ion:152 Resp: 12488  
Ion Ratio Lower Upper  
152 100  
151 19.4 15.7 23.5  
153 13.2 10.3 15.5

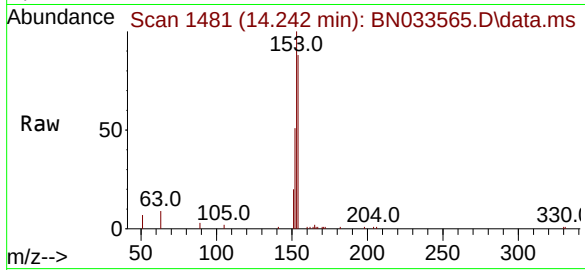






#17  
Acenaphthene  
Concen: 0.355 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

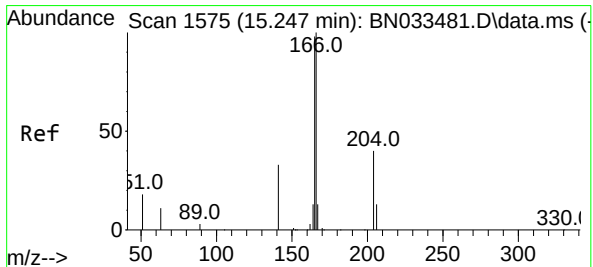
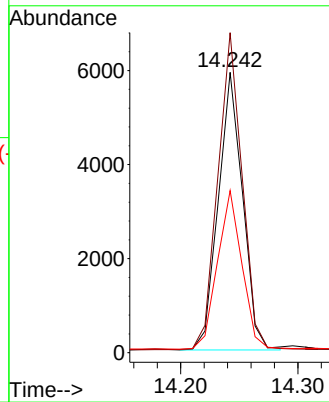
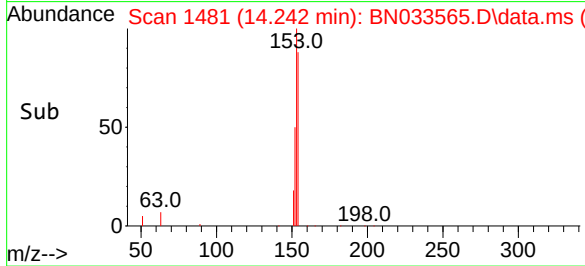
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion:154 Resp: 8510  
Ion Ratio Lower Upper  
154 100  
153 113.9 89.0 133.6  
152 57.4 45.2 67.8

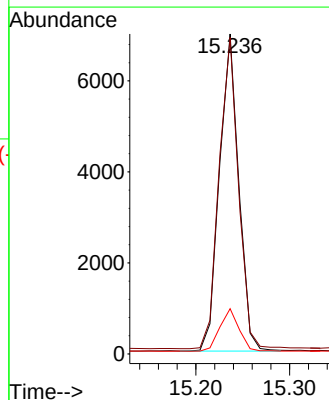
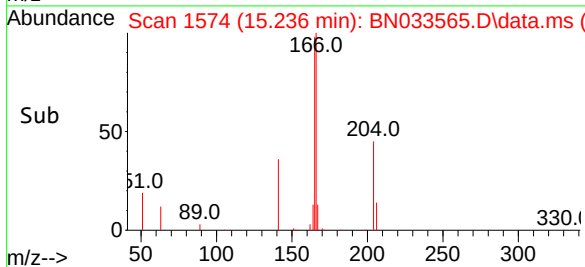
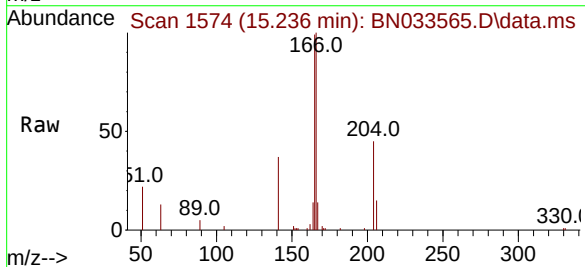
Manual Integrations  
APPROVED

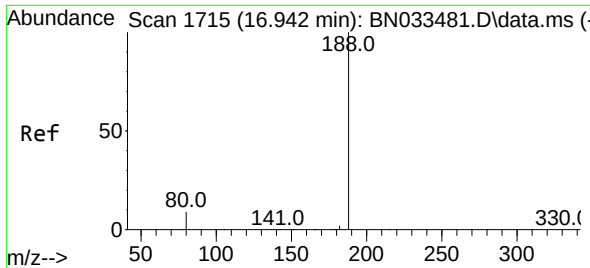
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#18  
Fluorene  
Concen: 0.329 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Tgt Ion:166 Resp: 9948  
Ion Ratio Lower Upper  
166 100  
165 98.4 78.2 117.4  
167 13.4 10.6 16.0





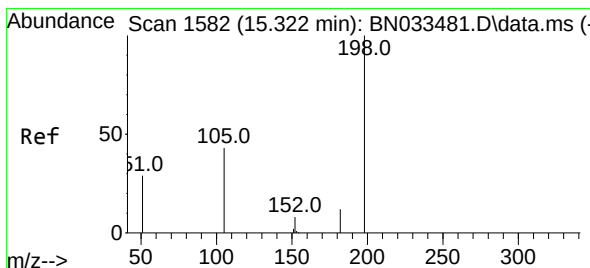
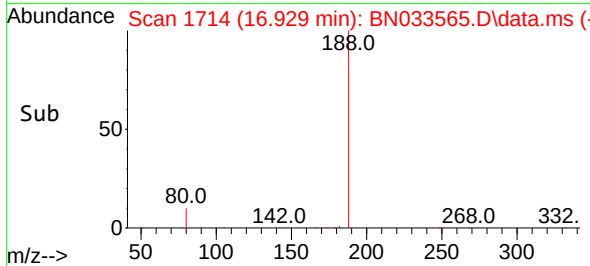
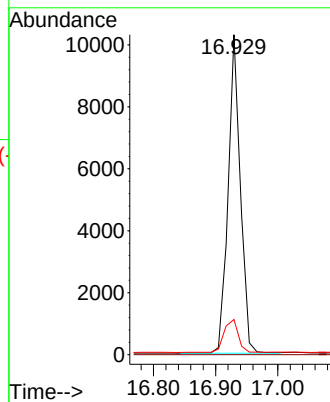
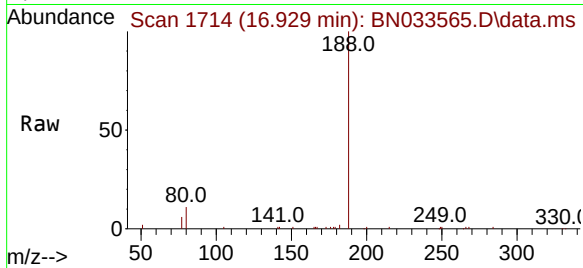
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1715  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS

Tgt Ion:188 Resp: 1403  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.0 7.8 11.8

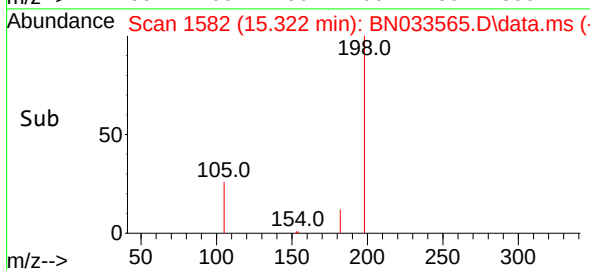
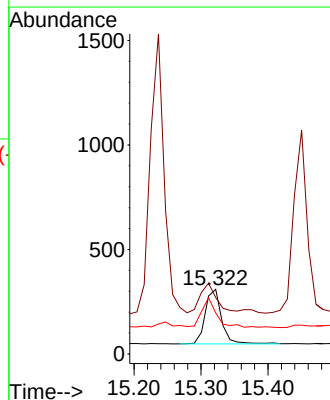
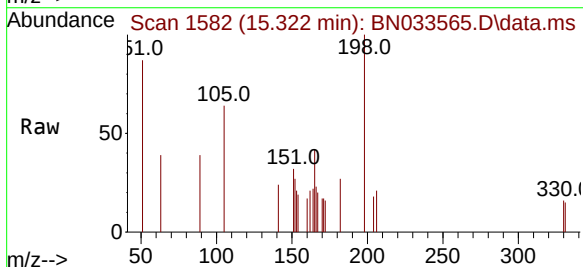
Manual Integrations  
APPROVED

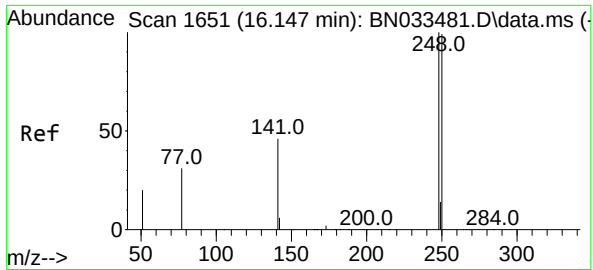
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.201 ng  
RT: 15.322 min Scan# 1582  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Tgt Ion:198 Resp: 441  
Ion Ratio Lower Upper  
198 100  
51 87.4 65.1 97.7  
105 63.8 44.8 67.2





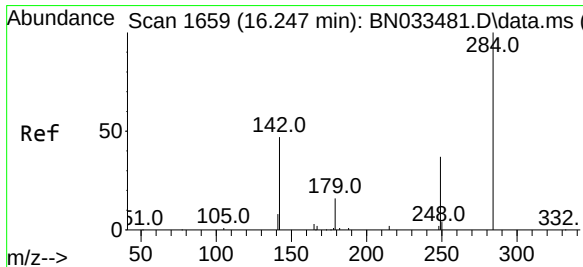
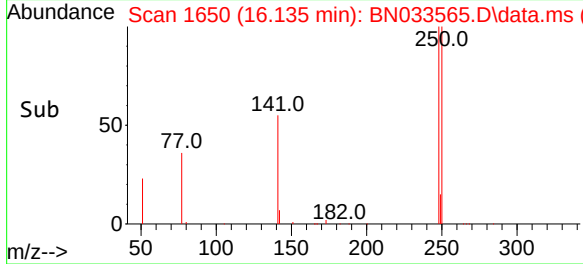
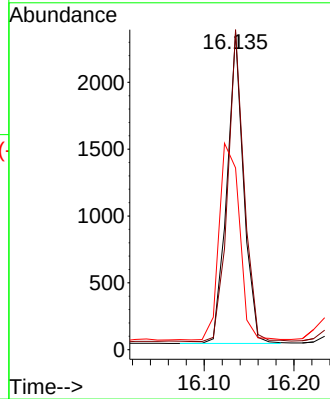
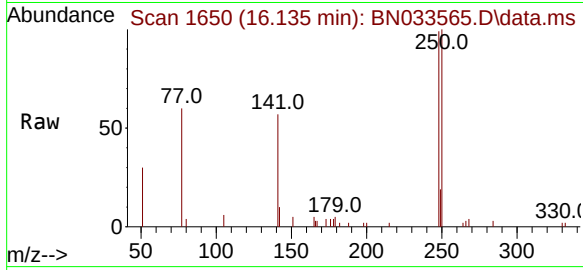
#21  
4-Bromophenyl-phenylether  
Concen: 0.354 ng  
RT: 16.135 min Scan# 1650  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS

Tgt Ion:248 Resp: 3018  
Ion Ratio Lower Upper  
248 100  
250 100.9 79.2 118.8  
141 57.3 37.9 56.9

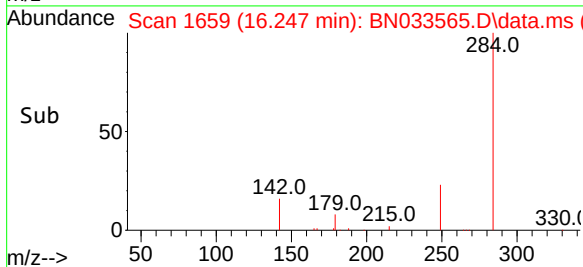
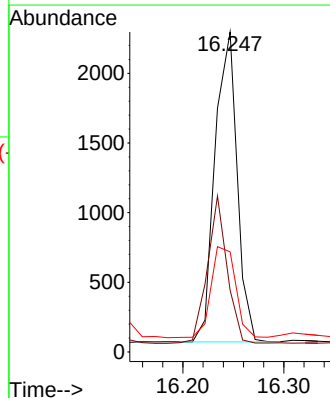
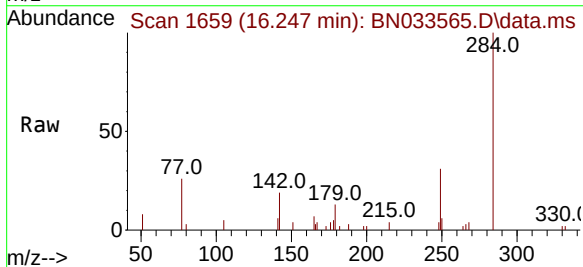
Manual Integrations  
APPROVED

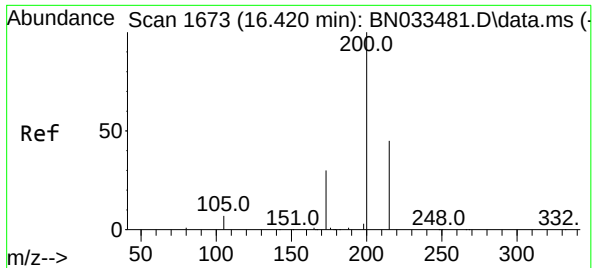
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#22  
Hexachlorobenzene  
Concen: 0.359 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

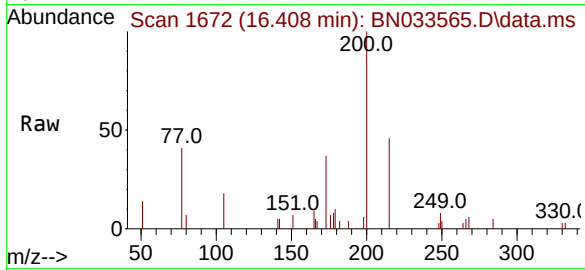
Tgt Ion:284 Resp: 3380  
Ion Ratio Lower Upper  
284 100  
142 42.3 31.8 47.6  
249 32.8 26.0 39.0





#23  
Atrazine  
Concen: 0.342 ng  
RT: 16.408 min Scan# 1672  
Delta R.T. -0.012 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

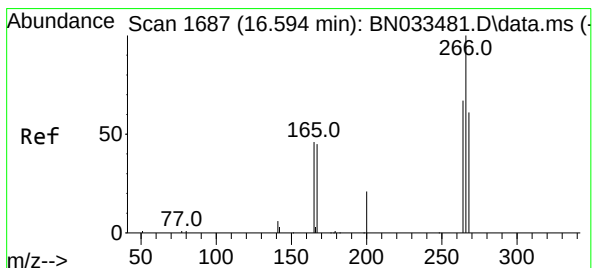
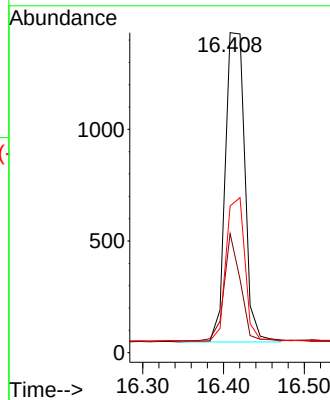
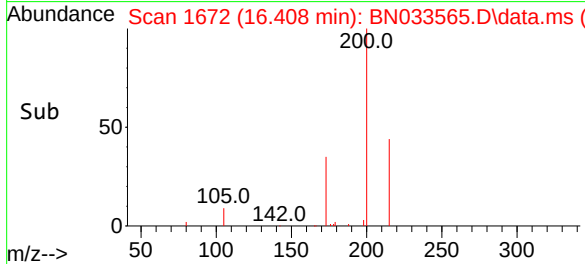
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion:200 Resp: 2329  
Ion Ratio Lower Upper  
200 100  
173 37.2 25.3 37.9  
215 45.8 36.6 54.8

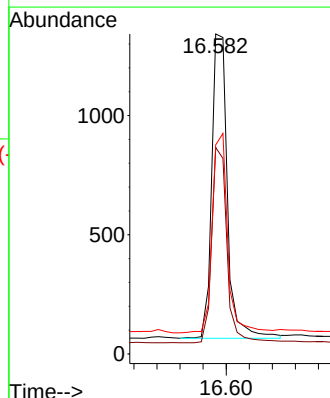
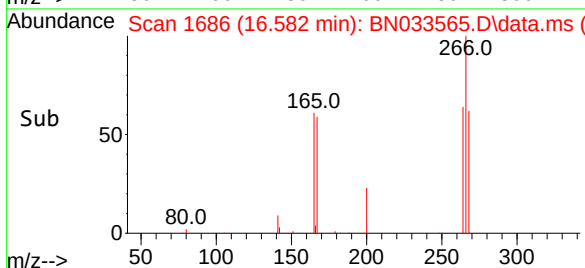
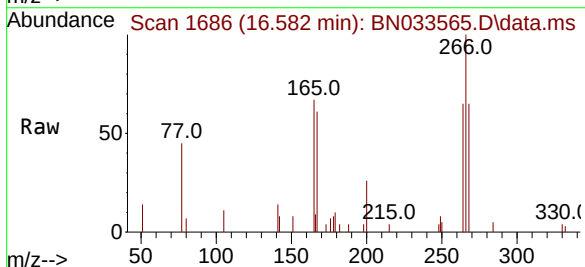
Manual Integrations  
APPROVED

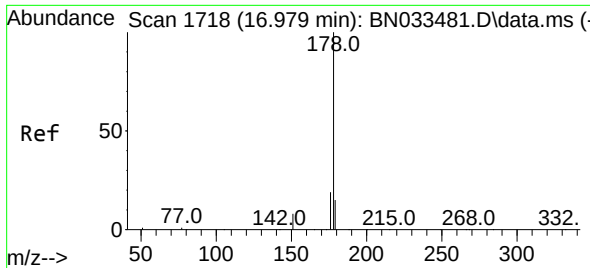
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#24  
Pentachlorophenol  
Concen: 0.590 ng  
RT: 16.582 min Scan# 1686  
Delta R.T. -0.012 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

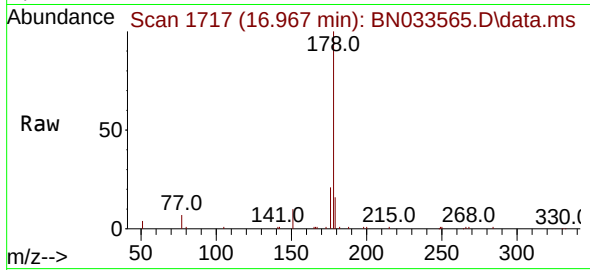
Tgt Ion:266 Resp: 2405  
Ion Ratio Lower Upper  
266 100  
264 62.2 51.9 77.9  
268 64.1 51.0 76.4





#25  
Phenanthrene  
Concen: 0.374 ng  
RT: 16.967 min Scan# 1718  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

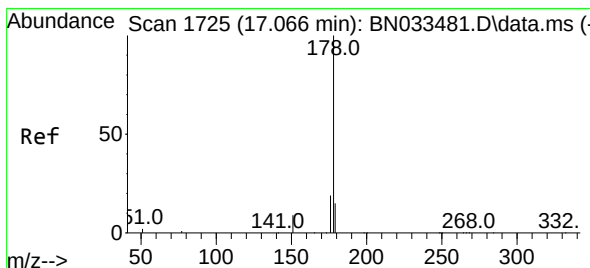
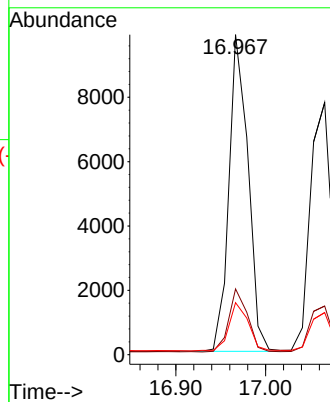
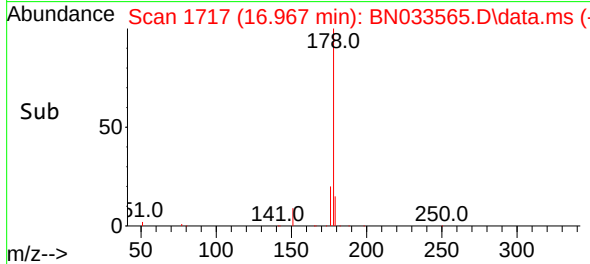
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion:178 Resp: 14592  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.3 22.9  
179 15.4 12.3 18.5

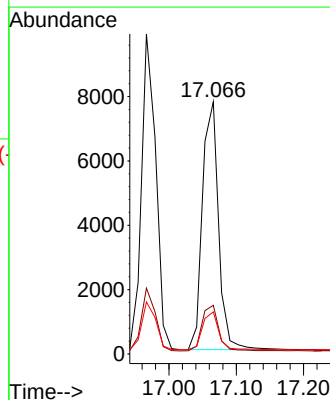
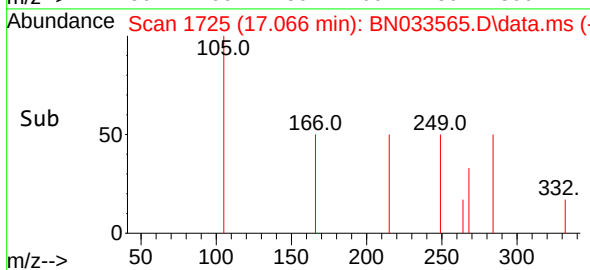
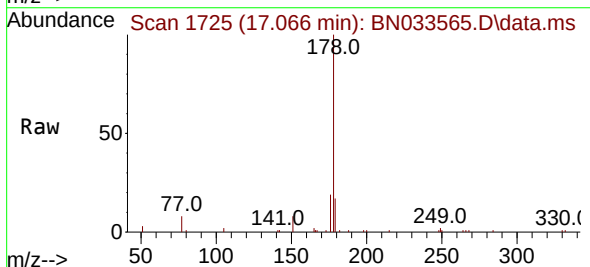
Manual Integrations  
**APPROVED**

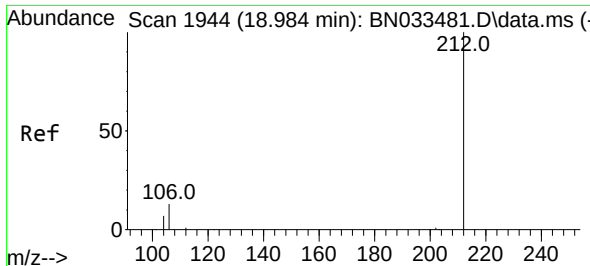
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#26  
Anthracene  
Concen: 0.373 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Tgt Ion:178 Resp: 12872  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.0 22.6  
179 15.4 12.4 18.6





#27

Fluoranthene-d10

Concen: 0.355 ng

RT: 18.970 min Scan# 1941

Delta R.T. -0.000 min

Lab File: BN033565.D

Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

ClientSampleId :

PB162880BS

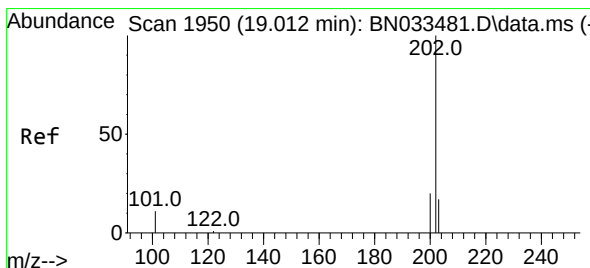
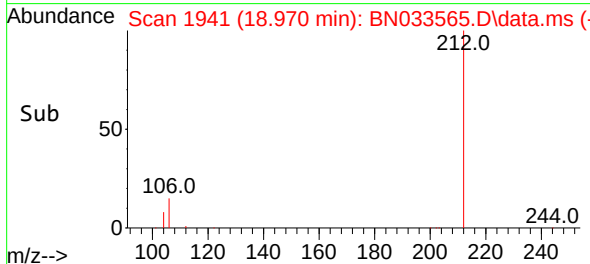
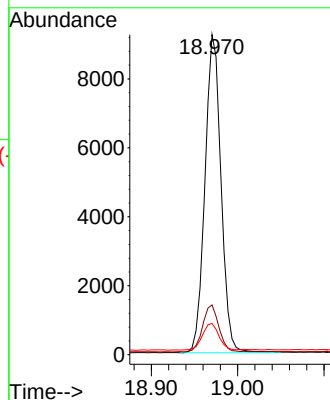
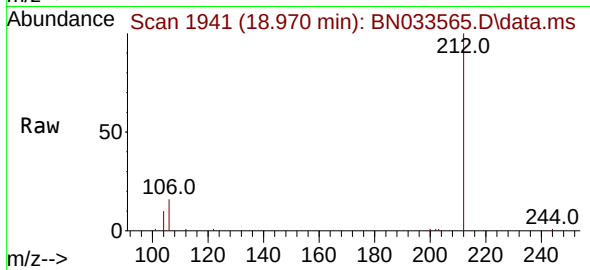
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 212   | Resp: | 11978 |
| Ion Ratio | Lower | Upper |       |
| 212       | 100   |       |       |
| 106       | 15.1  | 12.3  | 18.5  |
| 104       | 8.4   | 7.0   | 10.4  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#28

Fluoranthene

Concen: 0.357 ng

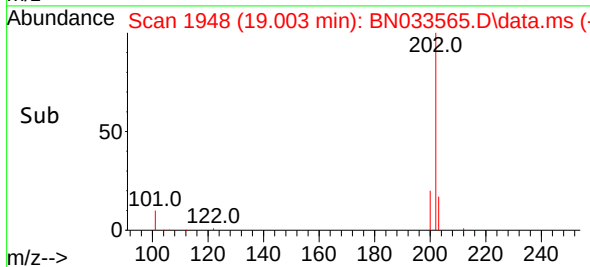
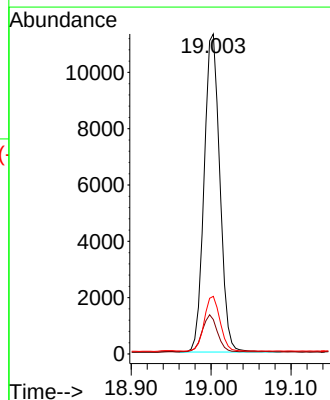
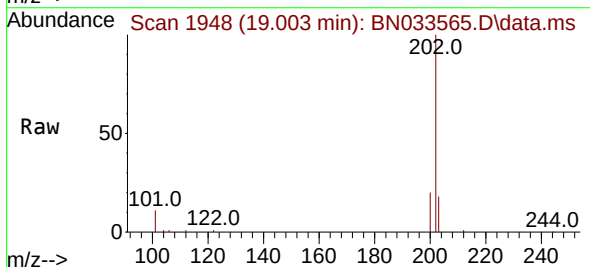
RT: 19.003 min Scan# 1948

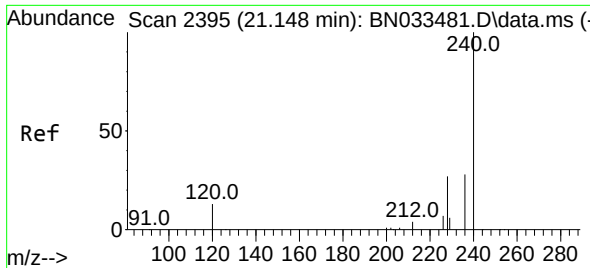
Delta R.T. -0.000 min

Lab File: BN033565.D

Acq: 22 Aug 2024 23:16

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 15390 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 11.6  | 9.5   | 14.3  |
| 203       | 17.3  | 13.8  | 20.6  |





#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 21130  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

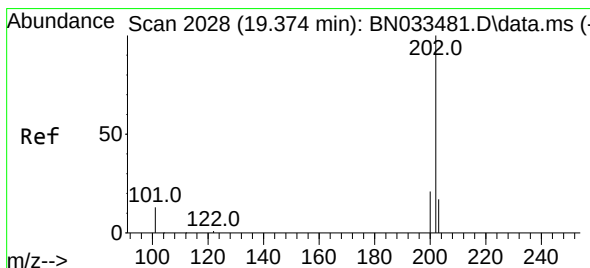
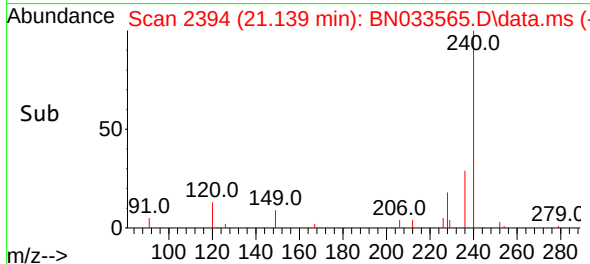
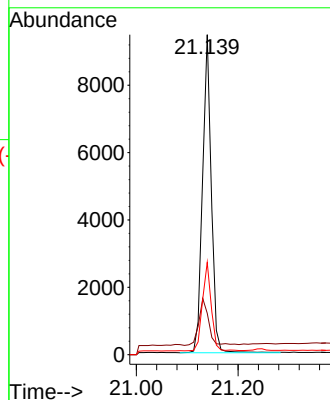
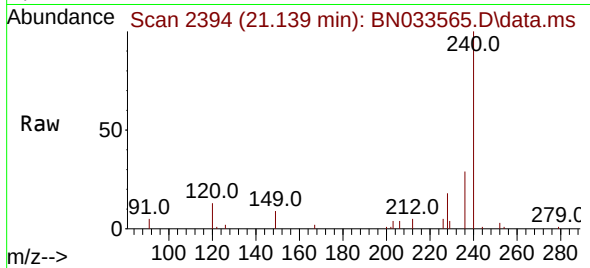
ClientSampleId :

PB162880BS

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 12.9  | 12.4  | 18.6  |
| 236     | 28.8  | 23.0  | 34.6  |

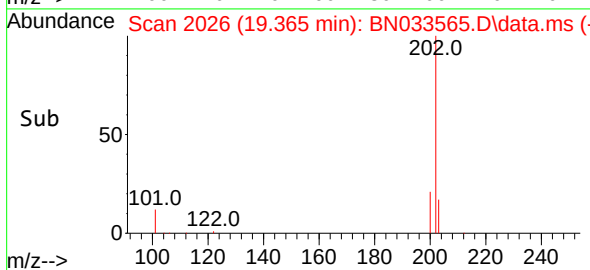
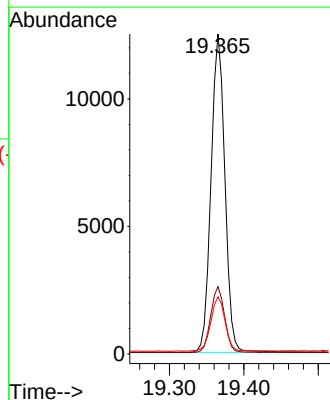
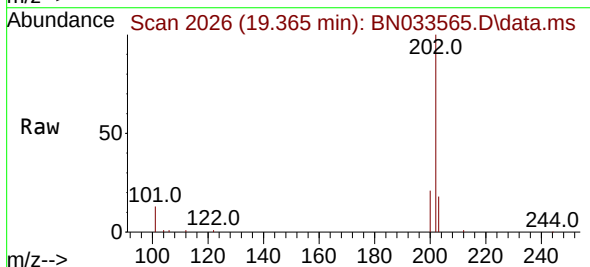
Manual Integrations  
**APPROVED**

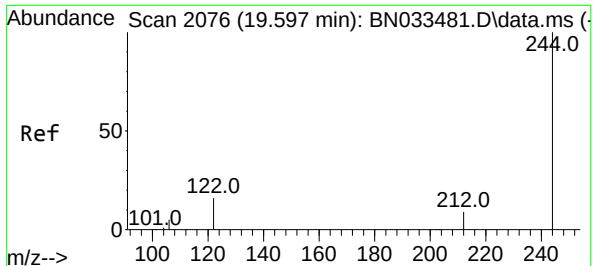
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#30  
Pyrene  
Concen: 0.320 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.9  | 16.6  | 24.8  |
| 203     | 17.6  | 14.2  | 21.4  |





#31  
Terphenyl-d14  
Concen: 0.320 ng  
RT: 19.583 min Scan# 2076  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

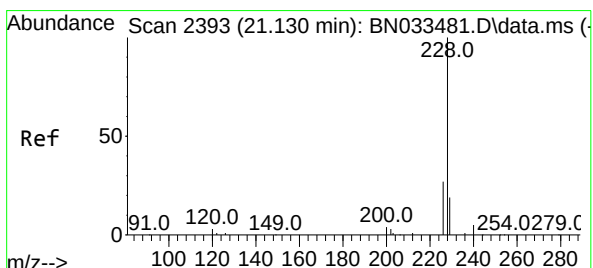
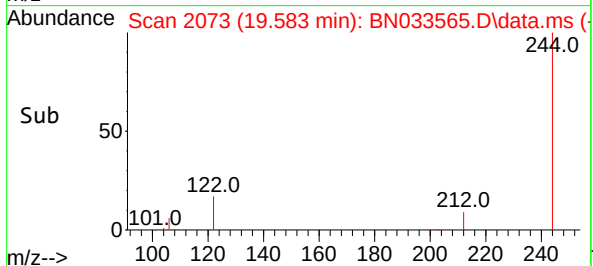
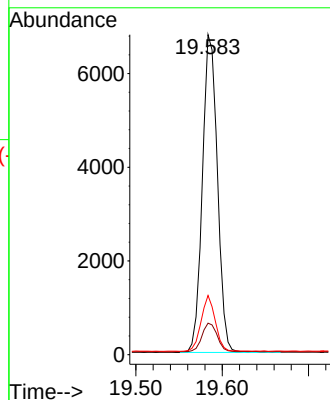
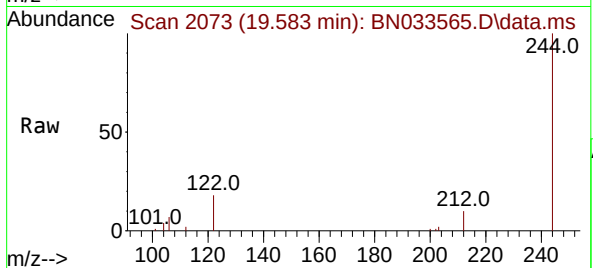
ClientSampleId :

PB162880BS

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 9.9   | 7.8   | 11.6  |
| 122     | 18.5  | 13.3  | 19.9  |

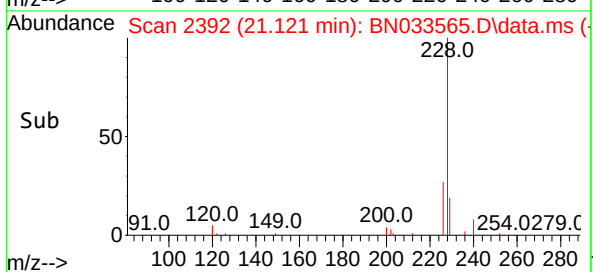
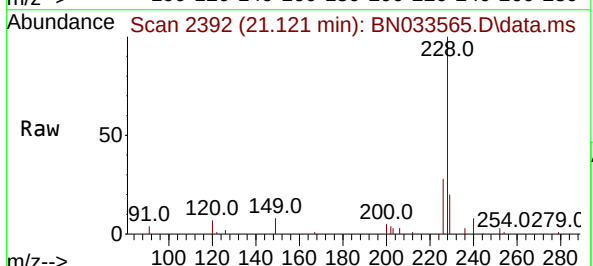
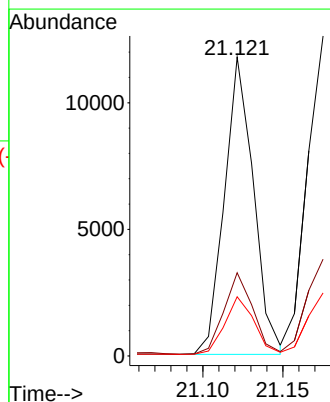
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

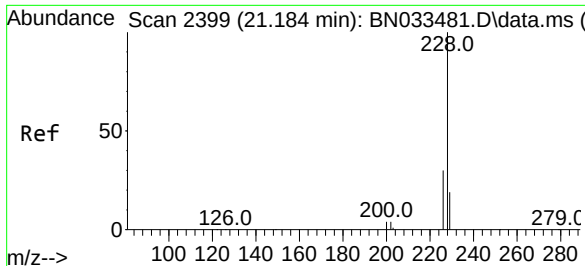


#32  
Benzo(a)anthracene  
Concen: 0.363 ng  
RT: 21.121 min Scan# 2392  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.8  | 21.8  | 32.6  |
| 229     | 19.8  | 15.8  | 23.6  |







#33

Chrysene

Concen: 0.381 ng

RT: 21.175 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN033565.D

Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

ClientSampleId :

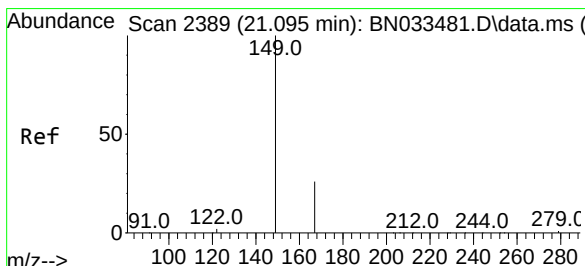
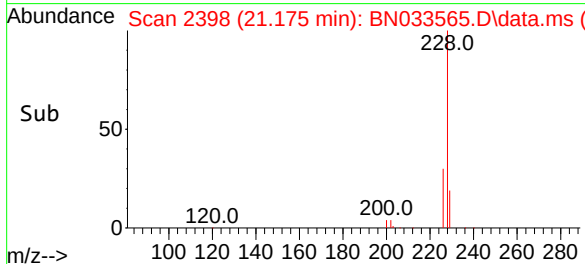
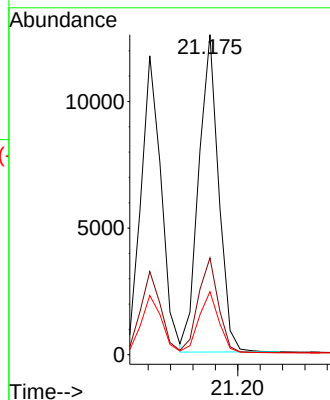
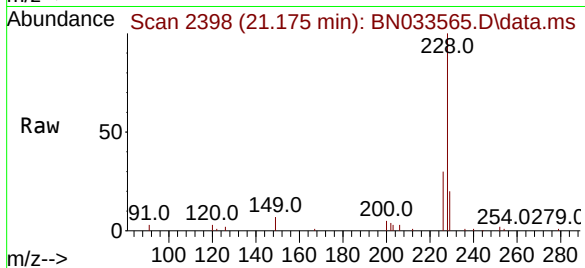
PB162880BS

| Tgt Ion | 228 | 226  | 229  |
|---------|-----|------|------|
| Ratio   | 100 | 30.2 | 19.7 |
| Lower   |     | 23.8 | 15.6 |
| Upper   |     | 35.8 | 23.4 |

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.288 ng m

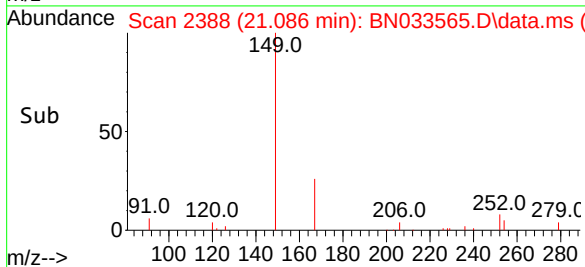
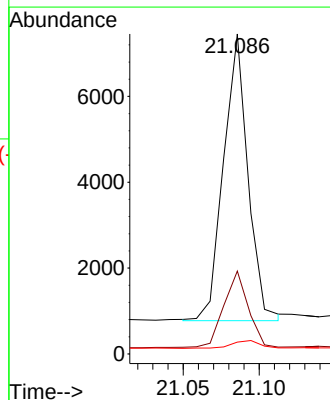
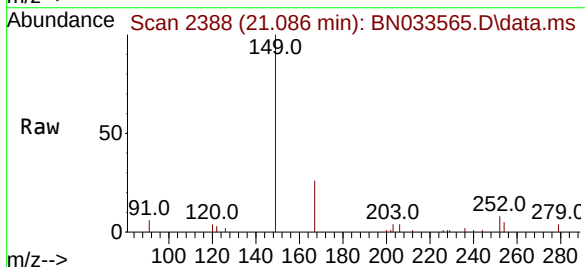
RT: 21.086 min Scan# 2388

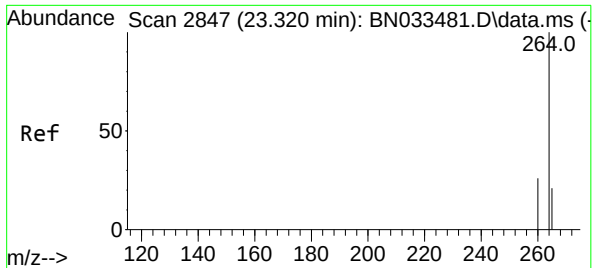
Delta R.T. -0.000 min

Lab File: BN033565.D

Acq: 22 Aug 2024 23:16

| Tgt Ion | 149 | 167   | 279  |
|---------|-----|-------|------|
| Ratio   | 100 | 40.3  | 4.1  |
| Lower   |     | 21.5  | 2.2  |
| Upper   |     | 32.3# | 3.2# |





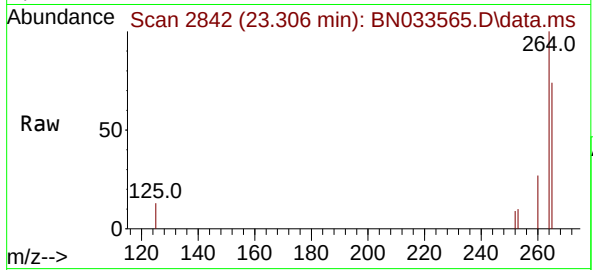
#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.306 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

ClientSampleId :

PB162880BS



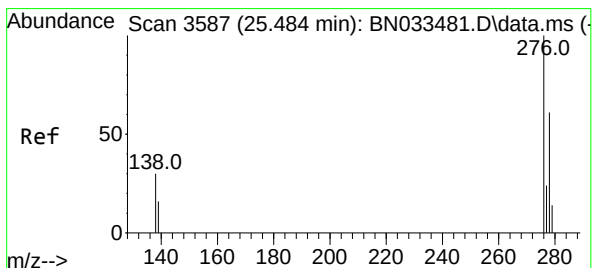
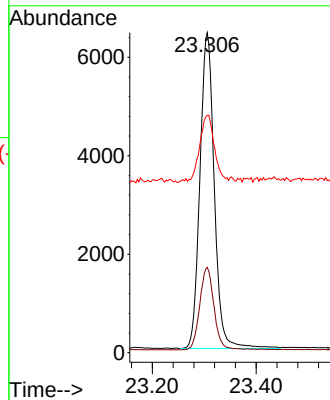
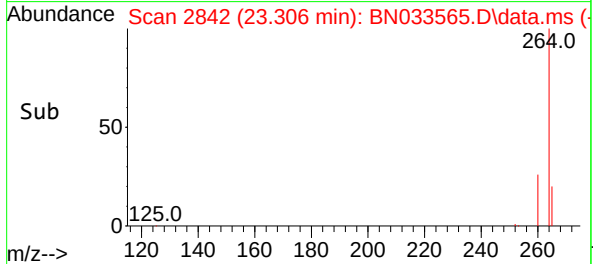
Tgt Ion:264 Resp: 12304  
Ion Ratio Lower Upper  
264 100  
260 26.6 20.8 31.2  
265 74.2 52.2 78.2

Manual Integrations

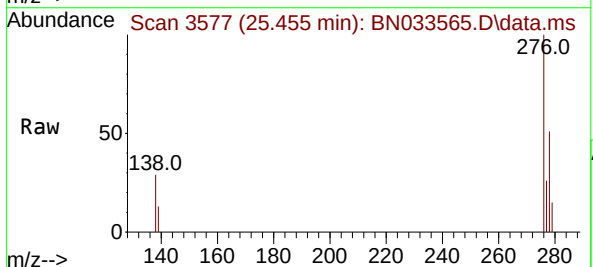
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

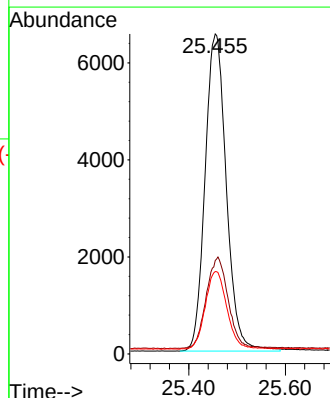
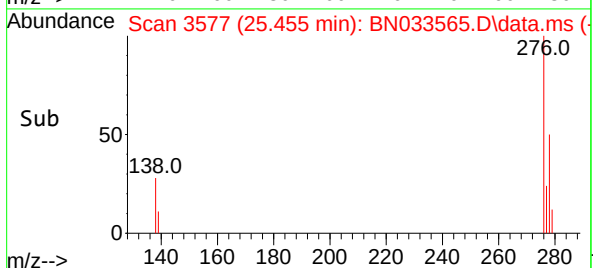
Supervised By :mohammad ahmed 08/24/2024

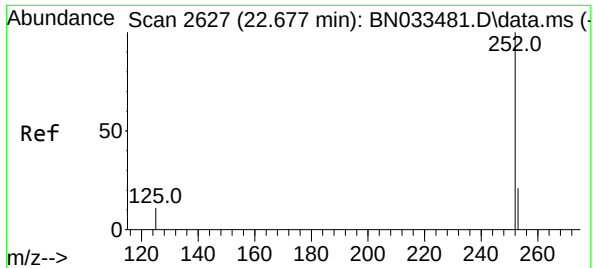


#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.391 ng  
RT: 25.455 min Scan# 3577  
Delta R.T. 0.006 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16



Tgt Ion:276 Resp: 19993  
Ion Ratio Lower Upper  
276 100  
138 29.4 24.4 36.6  
277 24.9 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.354 ng

RT: 22.663 min Scan# 2622

Delta R.T. 0.003 min

Lab File: BN033565.D

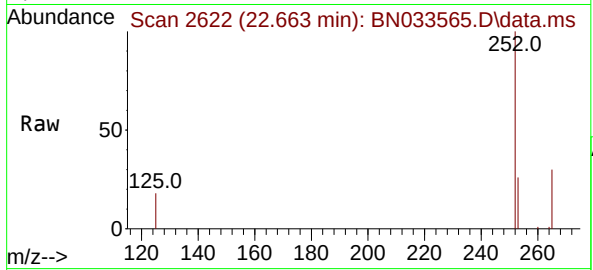
Acq: 22 Aug 2024 23:16

Instrument :

BNA\_N

ClientSampleId :

PB162880BS



Tgt Ion:252 Resp: 16288

Ion Ratio Lower Upper

252 100

253 25.8 19.8 29.8

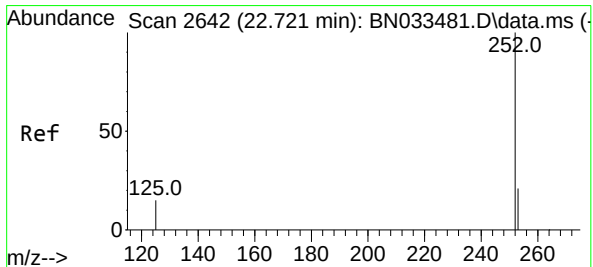
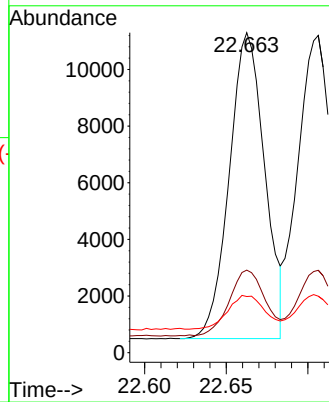
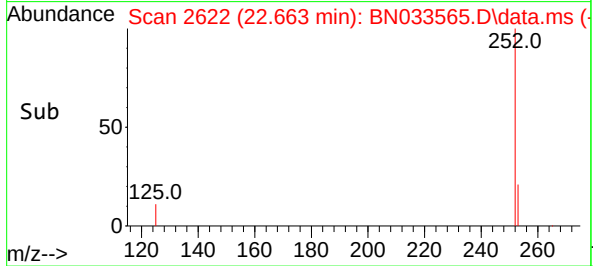
125 17.6 13.9 20.9

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#38

Benzo(k)fluoranthene

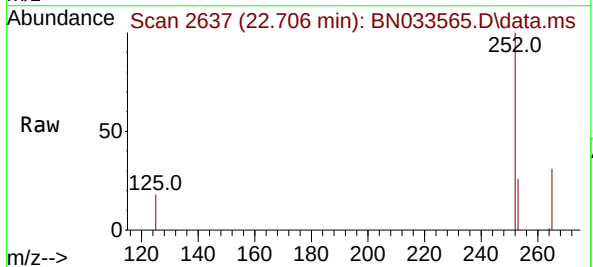
Concen: 0.359 ng

RT: 22.706 min Scan# 2637

Delta R.T. 0.003 min

Lab File: BN033565.D

Acq: 22 Aug 2024 23:16



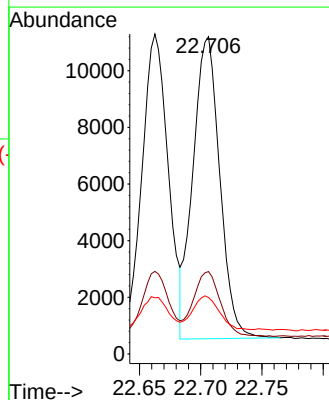
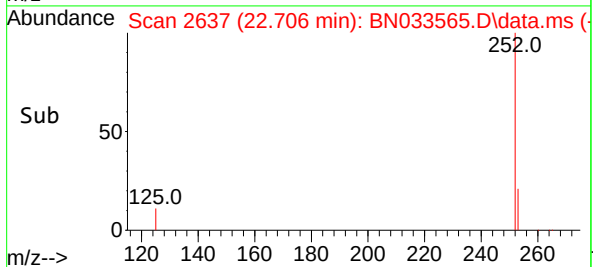
Tgt Ion:252 Resp: 16223

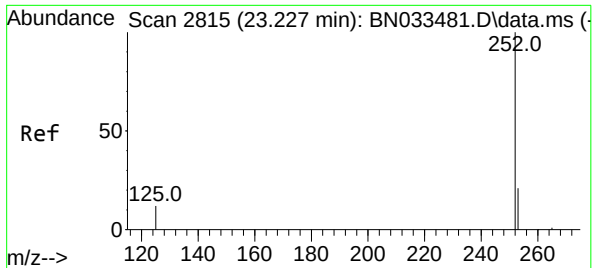
Ion Ratio Lower Upper

252 100

253 26.0 19.8 29.8

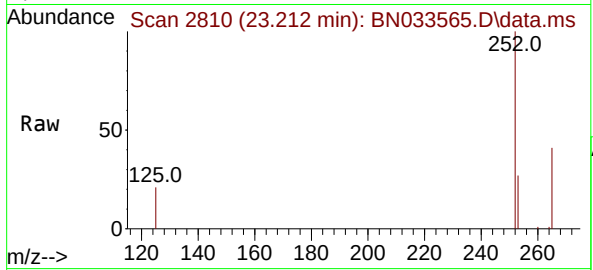
125 17.8 15.8 23.8





#39  
Benzo(a)pyrene  
Concen: 0.394 ng  
RT: 23.212 min Scan# 2810  
Delta R.T. 0.003 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

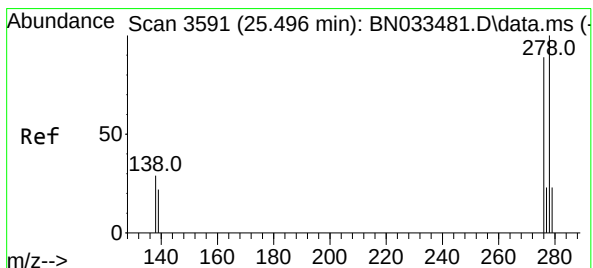
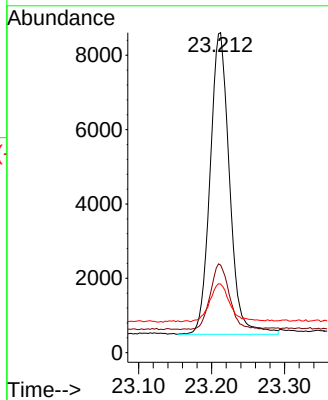
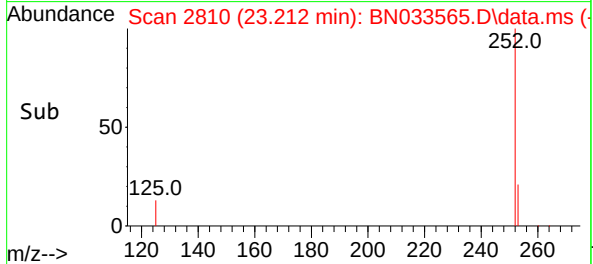
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



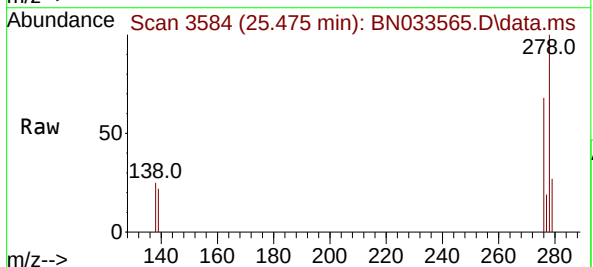
Tgt Ion:252 Resp: 14972  
Ion Ratio Lower Upper  
252 100  
253 27.4 21.5 32.3  
125 21.4 17.0 25.4

Manual Integrations  
APPROVED

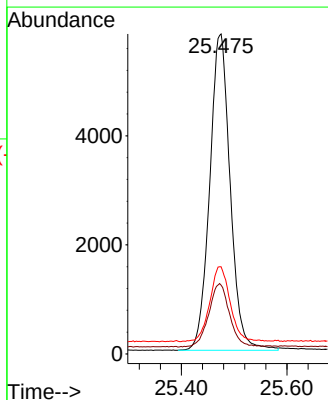
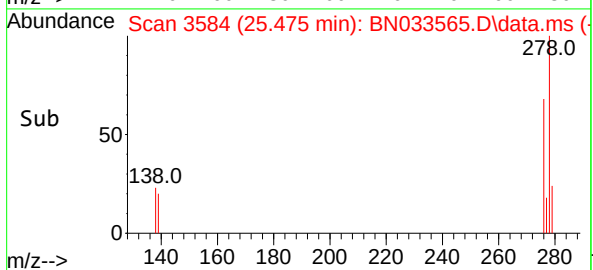
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

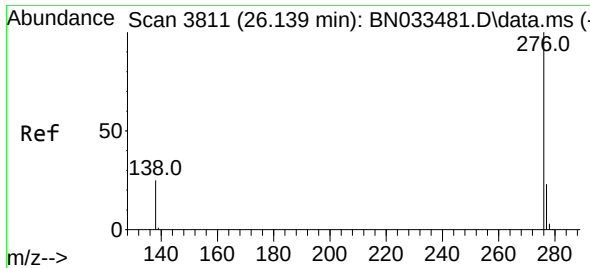


#40  
Dibenzo(a,h)anthracene  
Concen: 0.383 ng  
RT: 25.475 min Scan# 3584  
Delta R.T. 0.006 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16



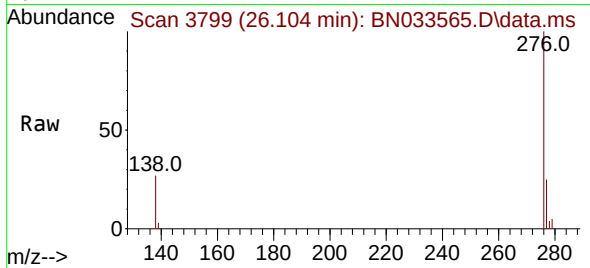
Tgt Ion:278 Resp: 15651  
Ion Ratio Lower Upper  
278 100  
139 21.5 19.1 28.7  
279 27.2 21.0 31.4





#41  
Benzo(g,h,i)perylene  
Concen: 0.364 ng  
RT: 26.104 min Scan# 31  
Delta R.T. -0.000 min  
Lab File: BN033565.D  
Acq: 22 Aug 2024 23:16

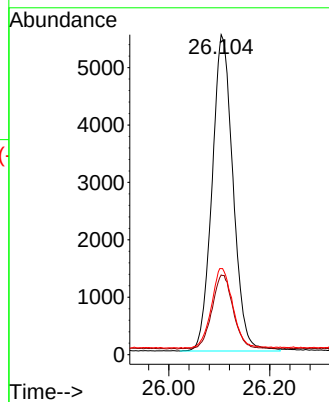
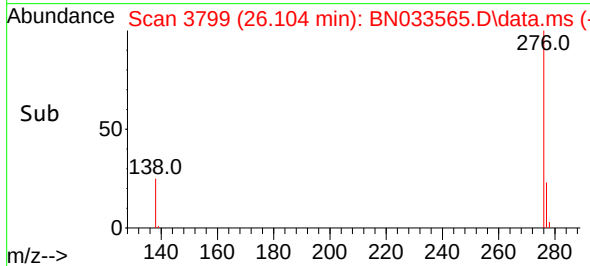
Instrument :  
BNA\_N  
ClientSampleId :  
PB162880BS



Tgt Ion:276 Resp: 15878  
Ion Ratio Lower Upper  
276 100  
277 24.9 19.7 29.5  
138 26.9 21.8 32.6

Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



## Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24      |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24      |
| Client Sample ID:  | S-928-K1-SO-0.5-1-081924MS            | SDG No.:        | P3671         |
| Lab Sample ID:     | P3671-10MS                            | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 57.2          |
| Sample Wt/Vol:     | 30.02 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033571.D        | 1         | 08/21/24 09:38 | 08/23/24 02:53 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 23.8  |           | 1.20                | 5.80       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 23.2  |           | 1.40                | 5.80       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 26.7  |           | 1.10                | 5.80       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 22.9  |           | 0.96                | 5.80       | ug/Kg             |
| 86-73-7                   | Fluorene                | 22.5  |           | 1.00                | 5.80       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 35.4  |           | 1.10                | 5.80       | ug/Kg             |
| 120-12-7                  | Anthracene              | 26.7  |           | 1.40                | 5.80       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 51.0  |           | 1.20                | 5.80       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 39.6  |           | 1.70                | 5.80       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 33.8  |           | 1.30                | 5.80       | ug/Kg             |
| 218-01-9                  | Chrysene                | 38.8  |           | 1.50                | 5.80       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 40.7  |           | 2.10                | 5.80       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 32.7  |           | 1.70                | 5.80       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 38.7  |           | 2.90                | 5.80       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 32.7  |           | 2.20                | 5.80       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 25.2  |           | 2.00                | 5.80       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 32.5  |           | 2.00                | 5.80       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 19.8  |           | 3.90                | 11.5       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.35  |           | 30 (17) - 150 (161) | 87%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.19  |           | 30 (23) - 150 (138) | 47%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.31  |           | 30 (33) - 130 (121) | 77%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.22  |           | 30 (32) - 130 (121) | 56%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.16  |           | 30 (21) - 130 (130) | 41%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7490  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 19600 | 10.304    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 9310  | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 18400 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-928-K1-SO-0.5-1-081924MS            | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-10MS                            | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 57.2                         |
| Sample Wt/Vol:     | 30.02      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :      N                     | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033571.D        | 1         | 08/21/24 09:38 | 08/23/24 02:53 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 15600 | 21.13     |     |            |       |
| 1520-96-3  | Perylene-d12 | 17100 | 23.3      |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033571.D  
 Acq On : 23 Aug 2024 02:53  
 Operator : MA/JU  
 Sample : P3671-10MS  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-928-K1-SO-0.5-1-081924MS

Quant Time: Aug 23 03:42:24 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
 Supervised By :mohammad ahmed 08/24/2024

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7489     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.304 | 136  | 19600    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 9306     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 18439    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.130 | 240  | 15566    | 0.400 | ng    | # 0.00   |
| 35) Perylene-d12              | 23.300 | 264  | 17073    | 0.400 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 6028     | 0.253 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.736  | 99   | 7305     | 0.258 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 5035     | 0.310 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.903 | 152  | 9719m    | 0.347 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 1113     | 0.222 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 8521     | 0.224 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 8340     | 0.188 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 5749     | 0.163 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.183  | 88   | 2931     | 0.340 | ng    | # 56     |
| 3) n-Nitrosodimethylamine     | 3.472  | 42   | 3858     | 0.385 | ng    | # 99     |
| 6) bis(2-Chloroethyl)ether    | 6.982  | 93   | 8602     | 0.428 | ng    | 99       |
| 9) Naphthalene                | 10.357 | 128  | 21425    | 0.409 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.656 | 225  | 4029     | 0.386 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 13206    | 0.398 | ng    | 99       |
| 16) Acenaphthylene            | 13.889 | 152  | 18719    | 0.459 | ng    | 100      |
| 17) Acenaphthene              | 14.242 | 154  | 11309    | 0.394 | ng    | 99       |
| 18) Fluorene                  | 15.236 | 166  | 14019    | 0.387 | ng    | 98       |
| 20) 4,6-Dinitro-2-methylph... | 15.311 | 198  | 849      | 0.295 | ng    | # 17     |
| 21) 4-Bromophenyl-phenylether | 16.135 | 248  | 4194     | 0.374 | ng    | 97       |
| 22) Hexachlorobenzene         | 16.247 | 284  | 4644     | 0.376 | ng    | 99       |
| 23) Atrazine                  | 16.420 | 200  | 3550     | 0.397 | ng    | # 90     |
| 24) Pentachlorophenol         | 16.582 | 266  | 3923     | 0.732 | ng    | 99       |
| 25) Phenanthrene              | 16.967 | 178  | 31168    | 0.608 | ng    | 99       |
| 26) Anthracene                | 17.066 | 178  | 20769    | 0.458 | ng    | 100      |
| 28) Fluoranthene              | 19.003 | 202  | 49606    | 0.875 | ng    | 100      |
| 30) Pyrene                    | 19.365 | 202  | 47212    | 0.680 | ng    | 98       |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 32639    | 0.580 | ng    | 97       |
| 33) Chrysene                  | 21.166 | 228  | 37338    | 0.667 | ng    | 98       |
| 34) Bis(2-ethylhexyl)phtha... | 21.077 | 149  | 17513m   | 0.492 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.446 | 276  | 39755    | 0.561 | ng    | 97       |
| 37) Benzo(b)fluoranthene      | 22.657 | 252  | 44559    | 0.699 | ng    | 99       |
| 38) Benzo(k)fluoranthene      | 22.698 | 252  | 35269m   | 0.562 | ng    |          |
| 39) Benzo(a)pyrene            | 23.203 | 252  | 35050    | 0.664 | ng    | 97       |
| 40) Dibenzo(a,h)anthracene    | 25.466 | 278  | 24536    | 0.433 | ng    | 98       |
| 41) Benzo(g,h,i)perylene      | 26.101 | 276  | 33814    | 0.558 | ng    | 99       |

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



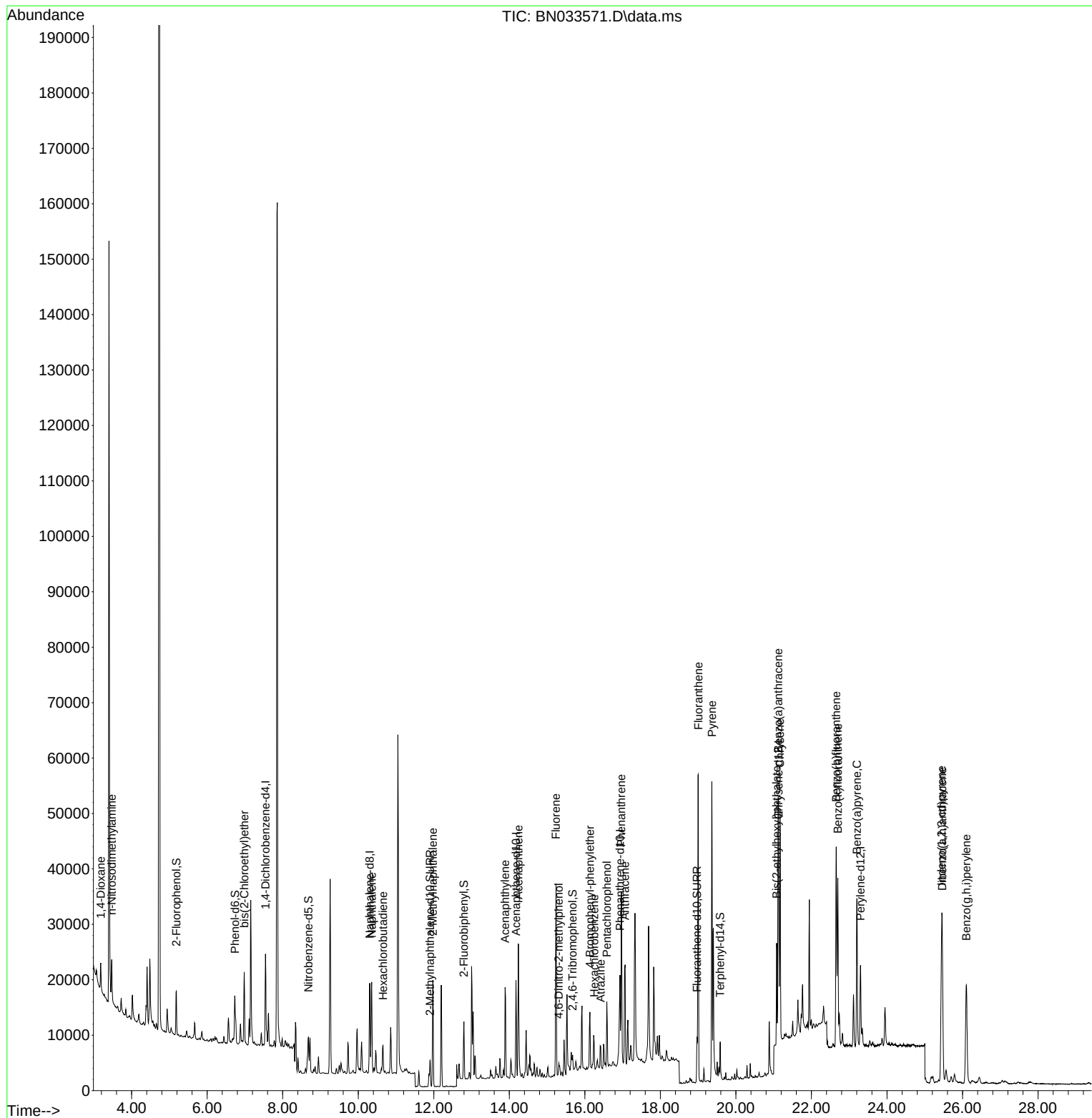
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 Data File : BN033571.D  
 Acq On : 23 Aug 2024 02:53  
 Operator : MA/JU  
 Sample : P3671-10MS  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

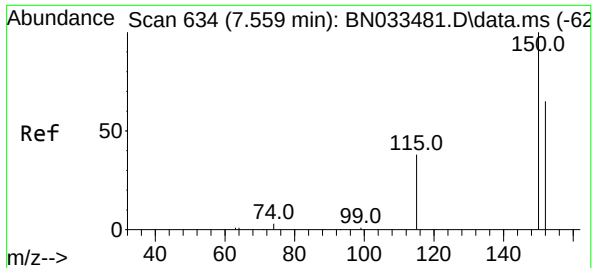
Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-928-K1-SO-0.5-1-081924MS

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
 Supervised By :mohammad ahmed 08/24/2024

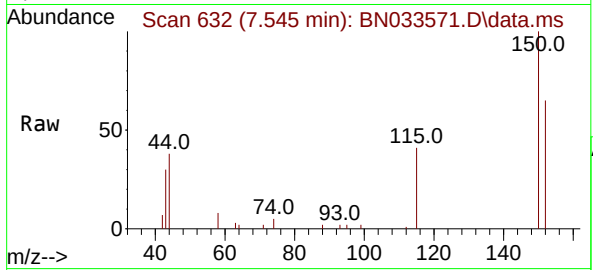
Quant Time: Aug 23 03:42:24 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

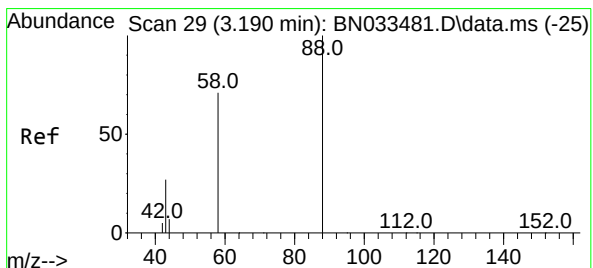
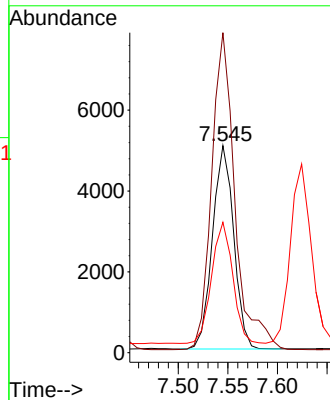
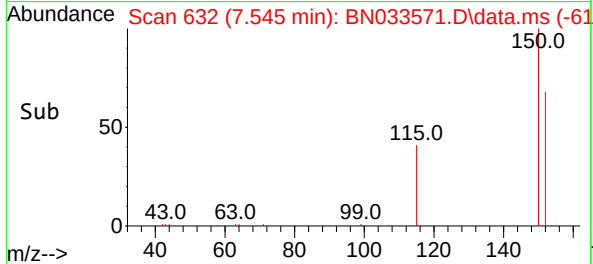
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:152 Resp: 7489  
Ion Ratio Lower Upper  
152 100  
150 154.6 122.2 183.2  
115 63.0 47.2 70.8

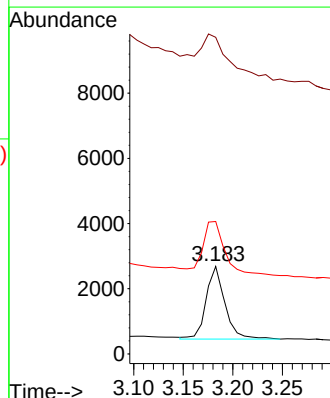
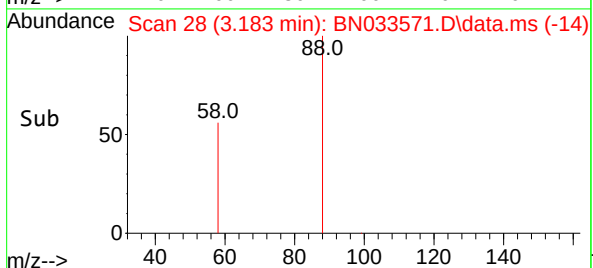
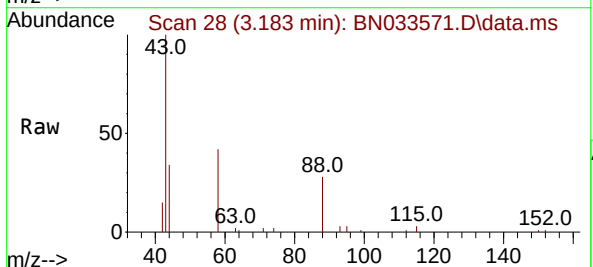
Manual Integrations  
APPROVED

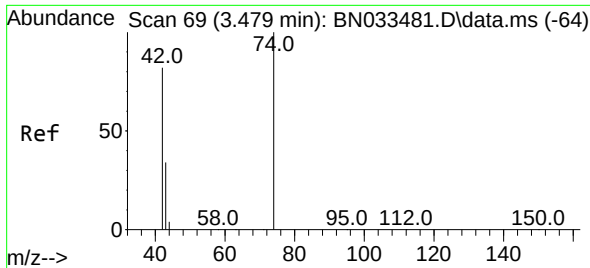
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#2  
1,4-Dioxane  
Concen: 0.340 ng  
RT: 3.183 min Scan# 28  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

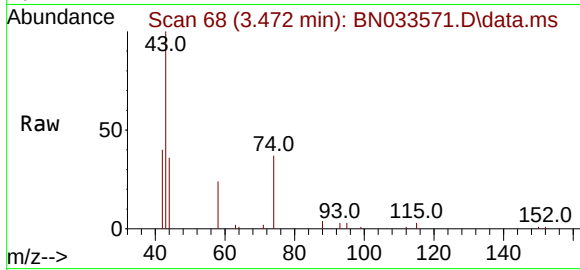
Tgt Ion: 88 Resp: 2931  
Ion Ratio Lower Upper  
88 100  
43 98.1 25.0 37.4#  
58 89.4 62.5 93.7





#3  
n-Nitrosodimethylamine  
Concen: 0.385 ng  
RT: 3.472 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

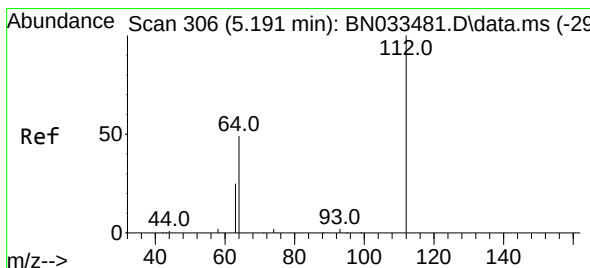
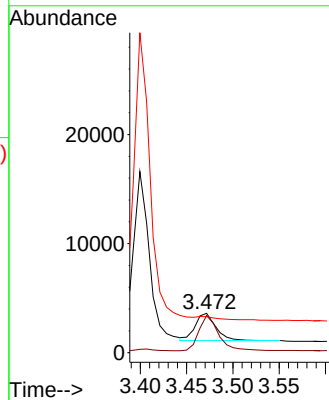
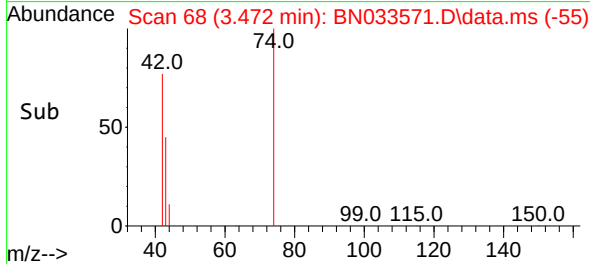
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion: 42 Resp: 385  
Ion Ratio Lower Upper  
42 100  
74 125.5 100.2 150.2  
44 0.0 5.3 7.9

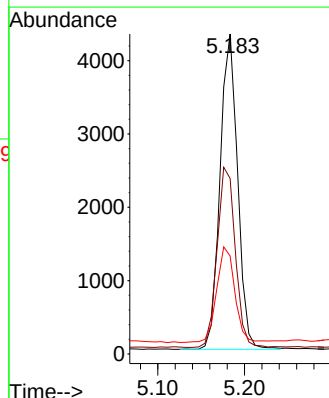
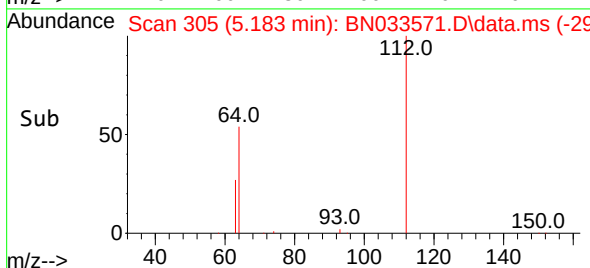
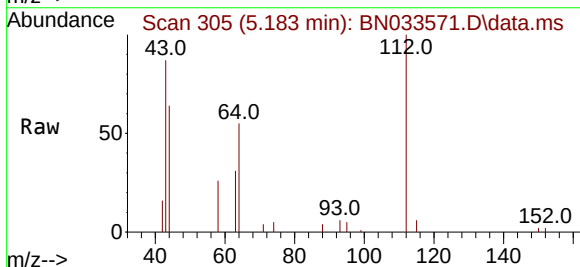
Manual Integrations  
APPROVED

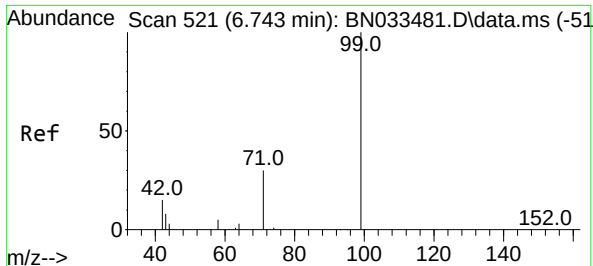
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.253 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

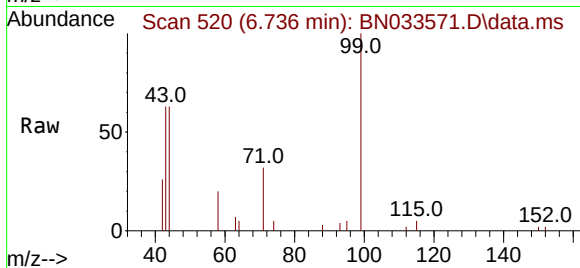
Tgt Ion:112 Resp: 6028  
Ion Ratio Lower Upper  
112 100  
64 59.3 47.1 70.7  
63 31.3 24.9 37.3





#5  
Phenol-d6  
Concen: 0.258 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

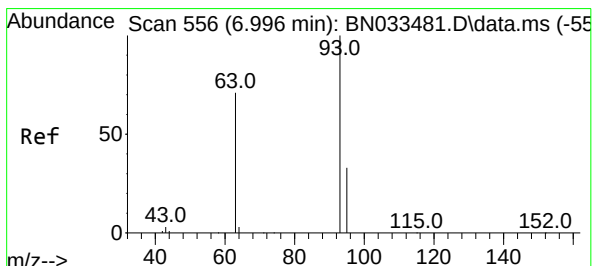
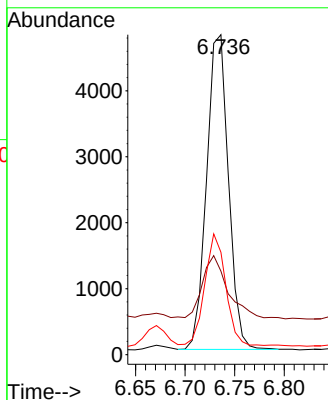
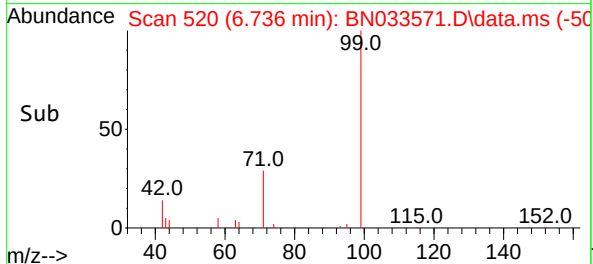
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion: 99 Resp: 730  
Ion Ratio Lower Upper  
99 100  
42 23.6 16.6 24.8  
71 34.2 26.2 39.4

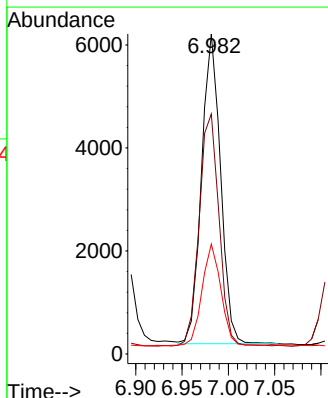
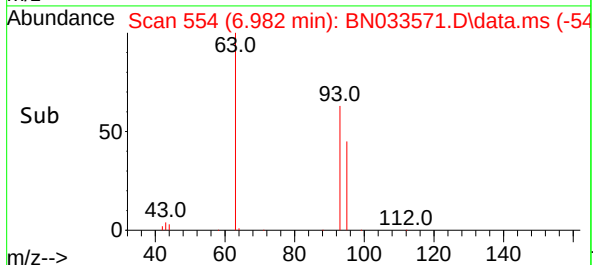
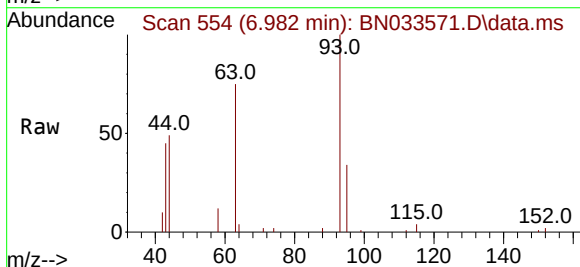
Manual Integrations  
**APPROVED**

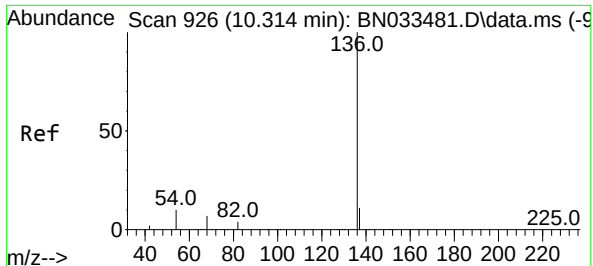
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#6  
bis(2-Chloroethyl)ether  
Concen: 0.428 ng  
RT: 6.982 min Scan# 554  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

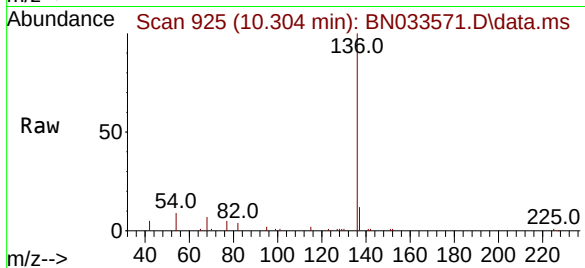
Tgt Ion: 93 Resp: 8602  
Ion Ratio Lower Upper  
93 100  
63 78.1 63.0 94.4  
95 32.8 26.0 39.0





#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.304 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

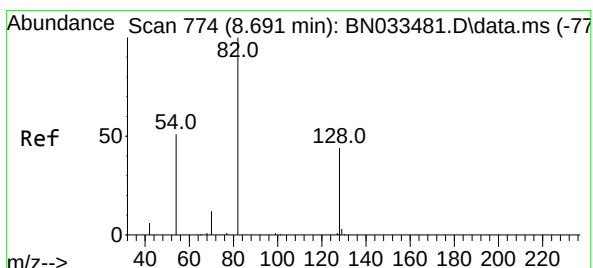
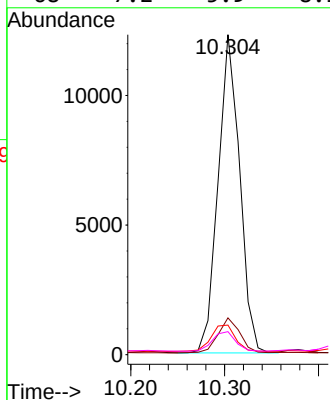
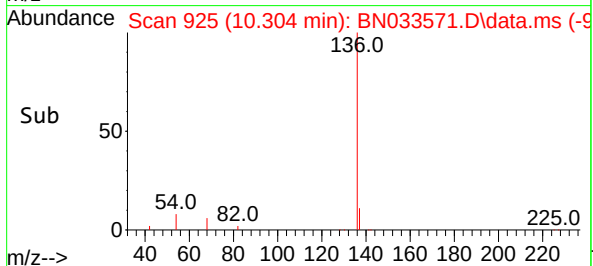
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion: 136 Resp: 19600  
Ion Ratio Lower Upper  
136 100  
137 11.5 9.0 13.6  
54 9.2 8.3 12.5  
68 7.2 5.9 8.9

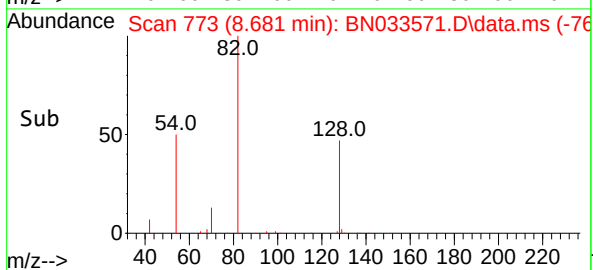
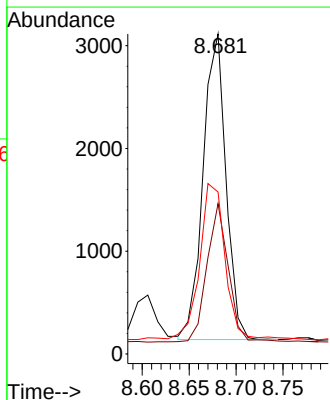
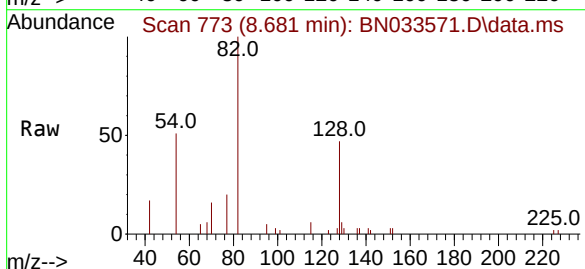
Manual Integrations  
APPROVED

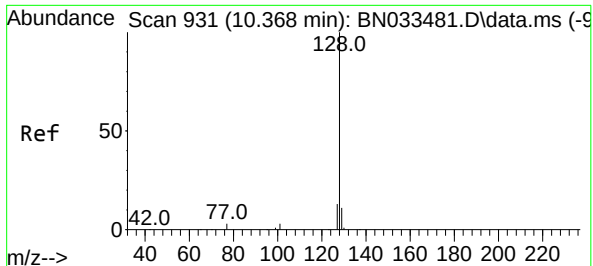
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#8  
Nitrobenzene-d5  
Concen: 0.310 ng  
RT: 8.681 min Scan# 773  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

Tgt Ion: 82 Resp: 5035  
Ion Ratio Lower Upper  
82 100  
128 47.0 36.0 54.0  
54 50.6 42.0 63.0





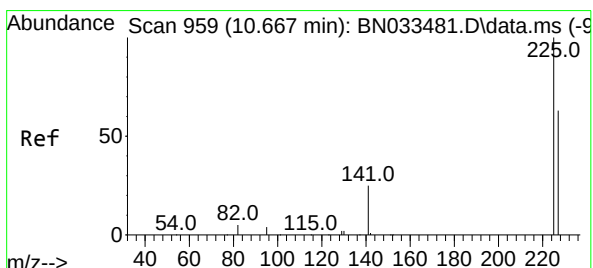
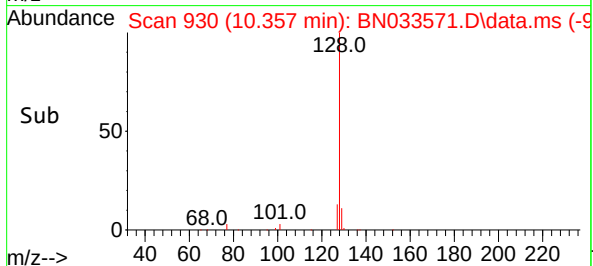
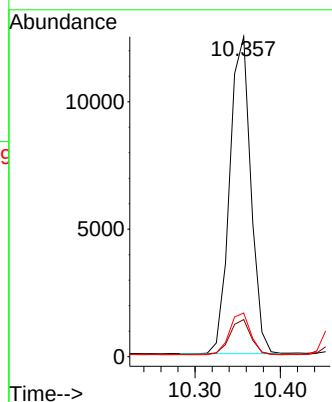
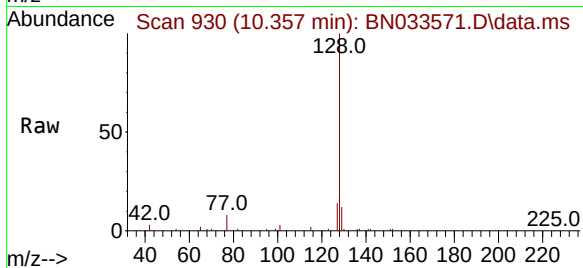
#9  
Naphthalene  
Concen: 0.409 ng  
RT: 10.357 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS

Tgt Ion:128 Resp: 2142  
Ion Ratio Lower Upper  
128 100  
129 11.6 9.1 13.7  
127 13.6 10.7 16.1

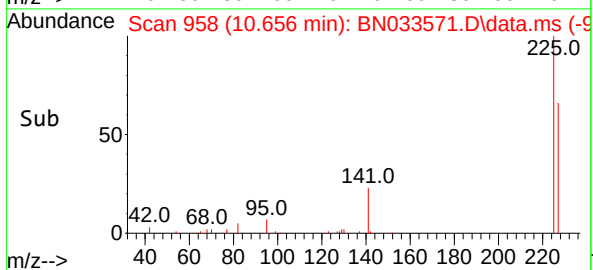
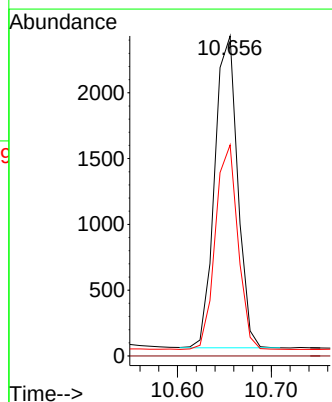
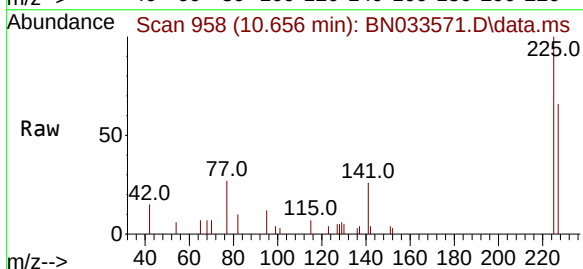
Manual Integrations  
APPROVED

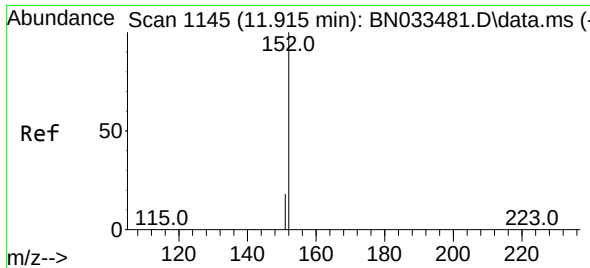
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#10  
Hexachlorobutadiene  
Concen: 0.386 ng  
RT: 10.656 min Scan# 958  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

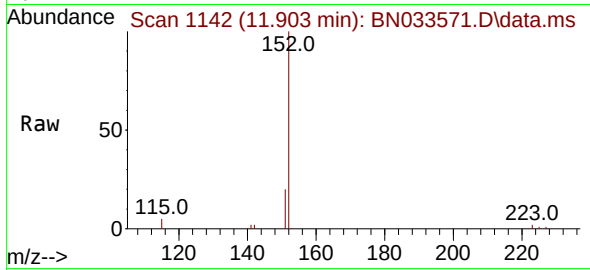
Tgt Ion:225 Resp: 4029  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.2 51.2 76.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.347 ng m  
RT: 11.903 min Scan# 1145  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

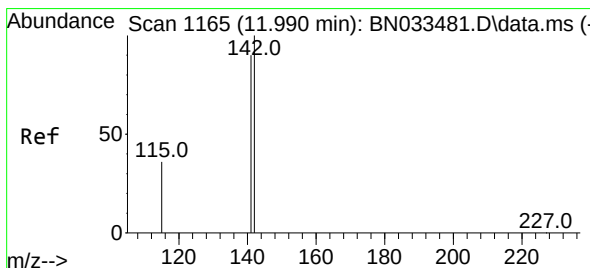
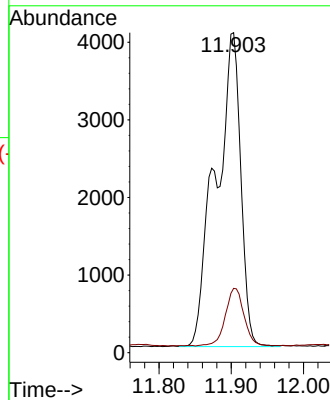
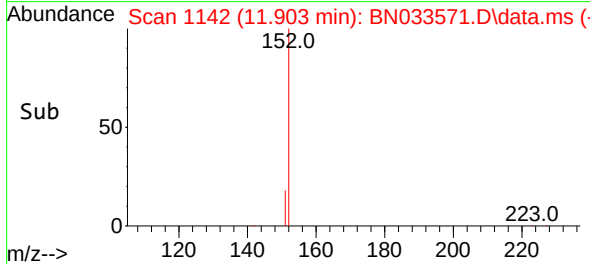
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:152 Resp: 9719  
Ion Ratio Lower Upper  
152 100  
151 13.7 16.6 25.0

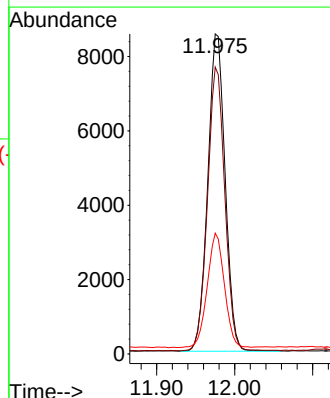
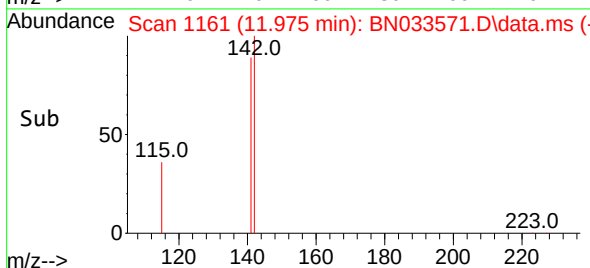
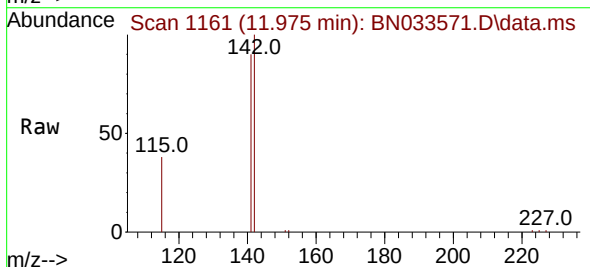
Manual Integrations  
APPROVED

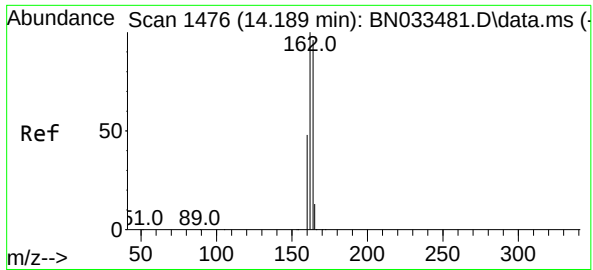
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#12  
2-Methylnaphthalene  
Concen: 0.398 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

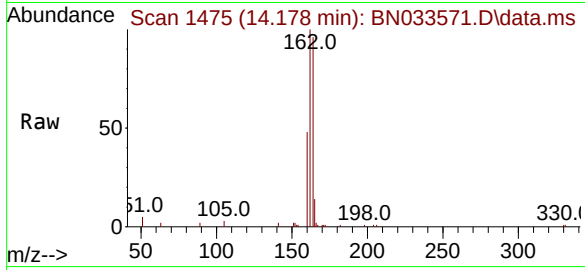
Tgt Ion:142 Resp: 13206  
Ion Ratio Lower Upper  
142 100  
141 89.7 71.7 107.5  
115 37.7 29.4 44.2





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

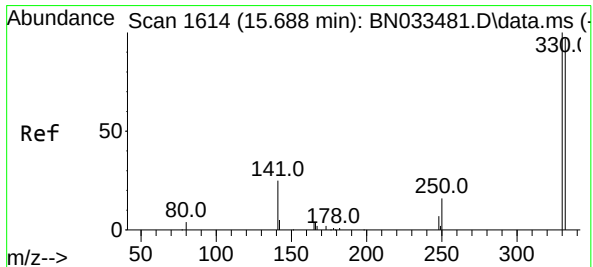
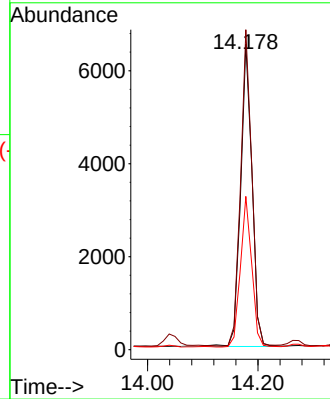
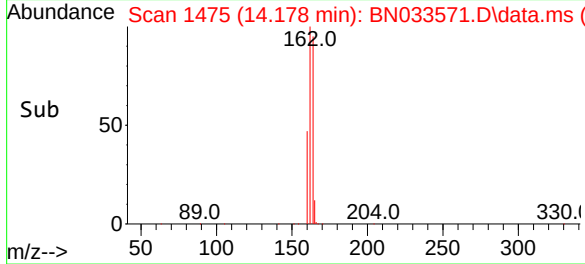
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



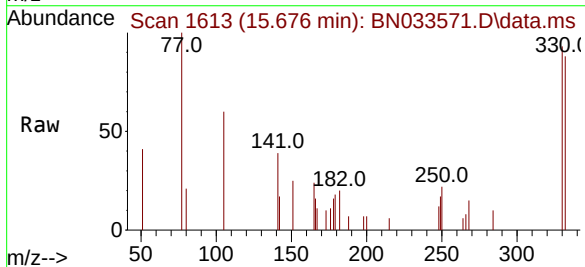
Tgt Ion:164 Resp: 9300  
Ion Ratio Lower Upper  
164 100  
162 104.7 83.5 125.3  
160 50.2 40.2 60.4

Manual Integrations  
APPROVED

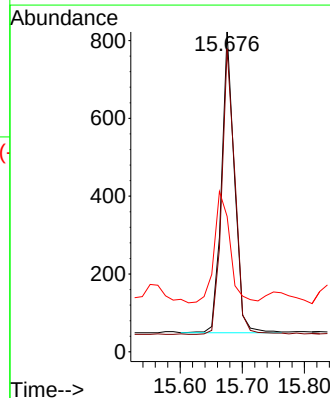
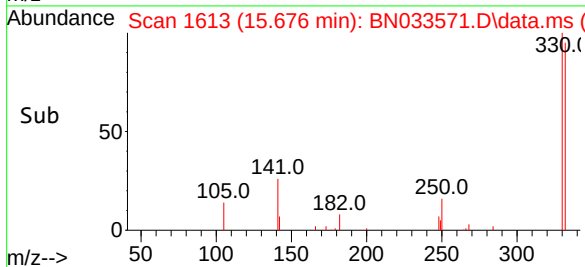
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



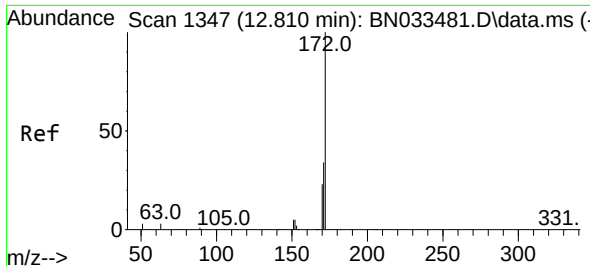
#14  
2,4,6-Tribromophenol  
Concen: 0.222 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53



Tgt Ion:330 Resp: 1113  
Ion Ratio Lower Upper  
330 100  
332 96.9 77.5 116.3  
141 45.0 33.9 50.9

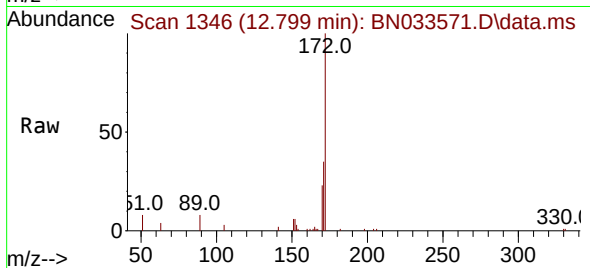






#15  
2-Fluorobiphenyl  
Concen: 0.224 ng  
RT: 12.799 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

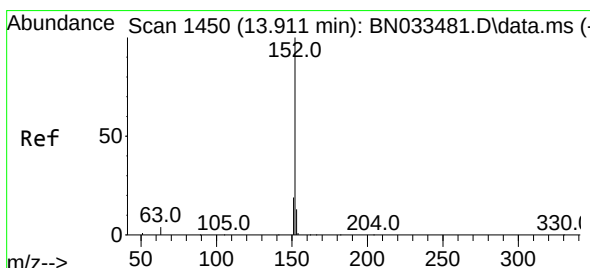
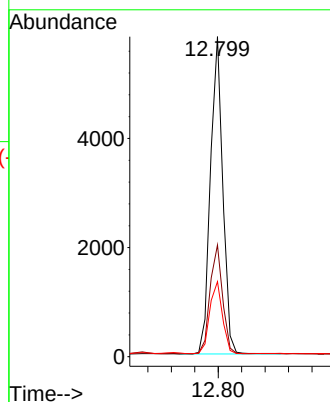
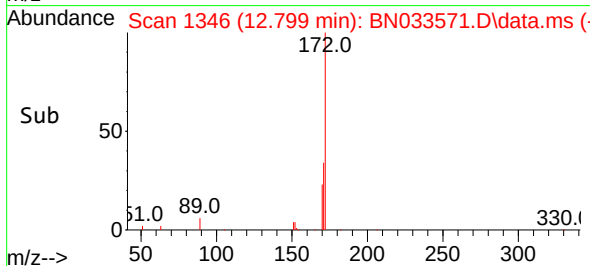
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



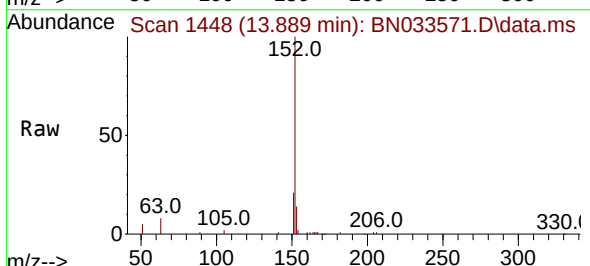
Tgt Ion:172 Resp: 852  
Ion Ratio Lower Upper  
172 100  
171 34.9 27.7 41.5  
170 23.4 18.3 27.5

Manual Integrations  
APPROVED

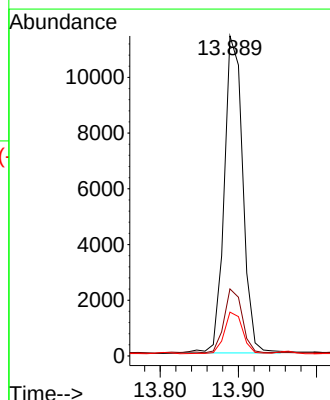
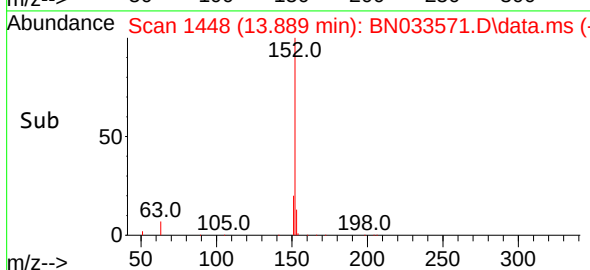
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

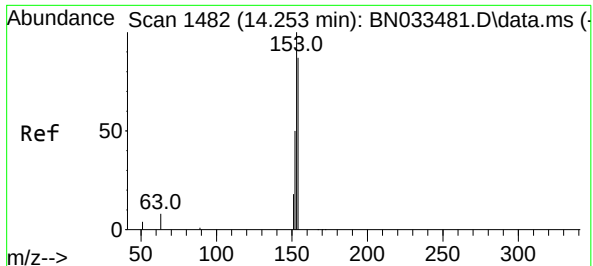


#16  
Acenaphthylene  
Concen: 0.459 ng  
RT: 13.889 min Scan# 1448  
Delta R.T. -0.011 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53



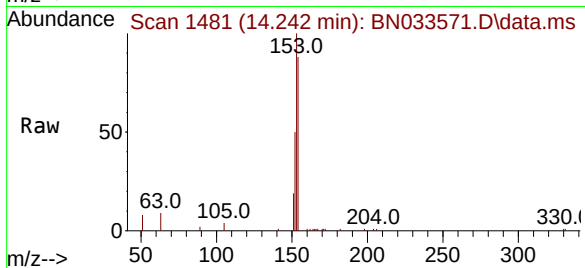
Tgt Ion:152 Resp: 18719  
Ion Ratio Lower Upper  
152 100  
151 19.3 15.7 23.5  
153 12.9 10.3 15.5





#17  
Acenaphthene  
Concen: 0.394 ng  
RT: 14.242 min Scan# 1482  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

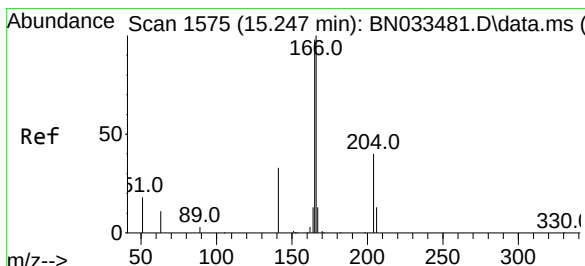
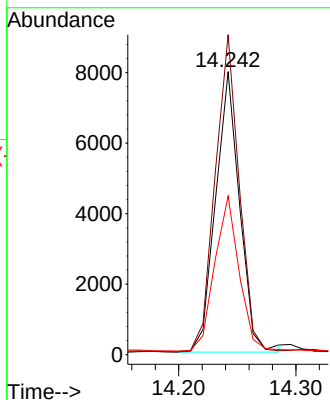
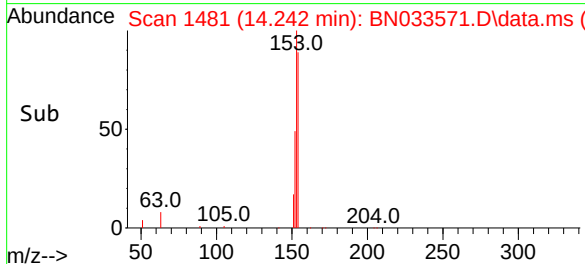
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



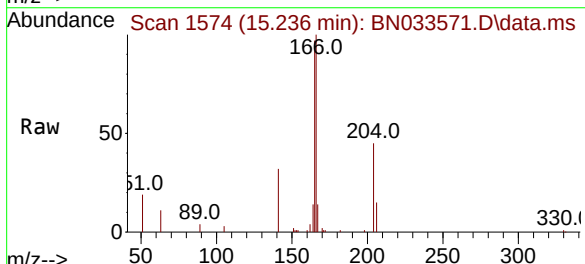
Tgt Ion:154 Resp: 11309  
Ion Ratio Lower Upper  
154 100  
153 113.0 89.0 133.6  
152 56.3 45.2 67.8

Manual Integrations  
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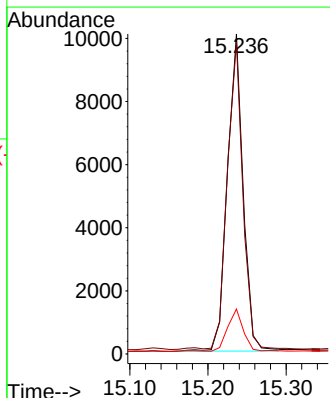
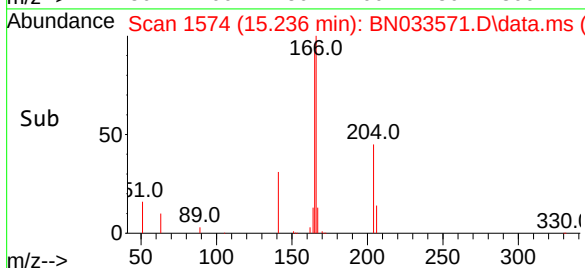
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

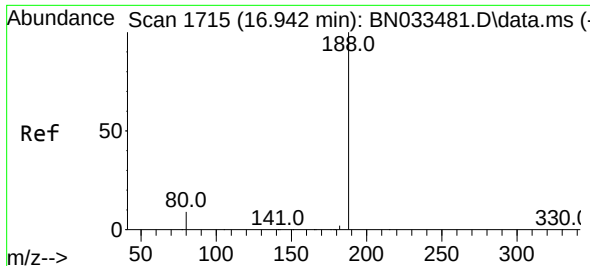


#18  
Fluorene  
Concen: 0.387 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53



Tgt Ion:166 Resp: 14019  
Ion Ratio Lower Upper  
166 100  
165 95.9 78.2 117.4  
167 13.2 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.929 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN033571.D

Acq: 23 Aug 2024 02:53

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924MS

Tgt Ion:188 Resp: 18439

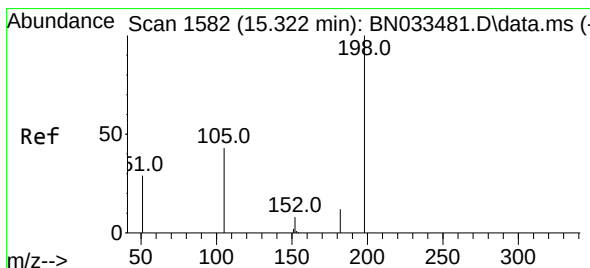
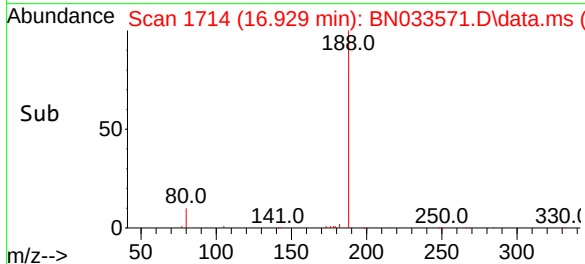
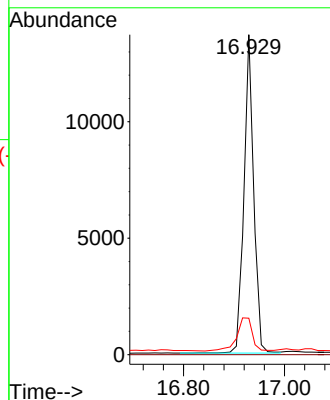
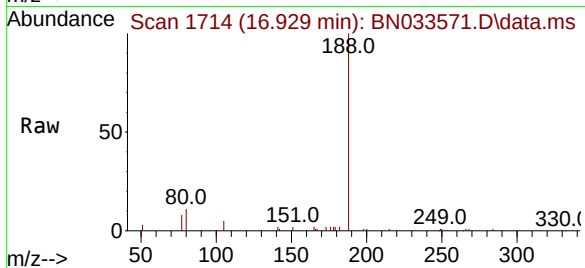
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 188 | 100   |       |       |
| 94  | 0.0   | 0.0   | 0.0   |
| 80  | 11.4  | 7.8   | 11.8  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#20

4,6-Dinitro-2-methylphenol

Concen: 0.295 ng

RT: 15.311 min Scan# 1581

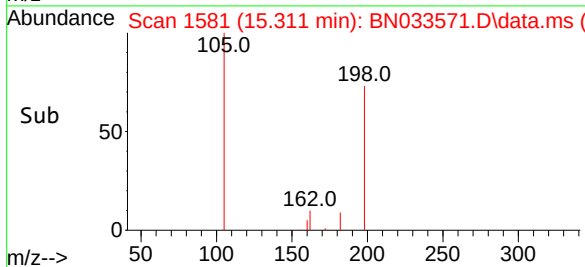
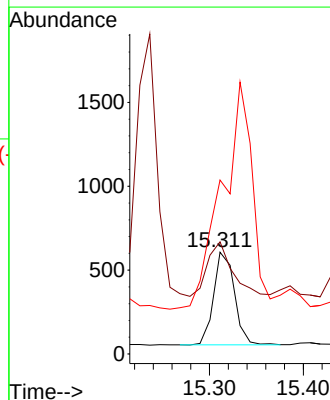
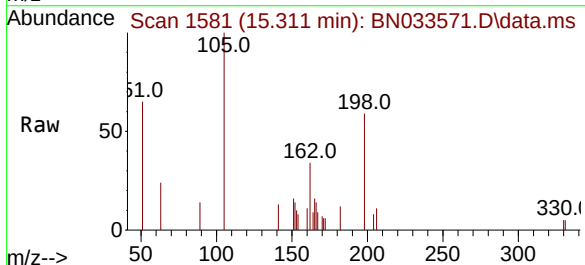
Delta R.T. -0.011 min

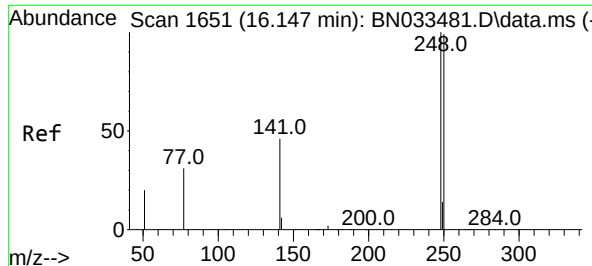
Lab File: BN033571.D

Acq: 23 Aug 2024 02:53

Tgt Ion:198 Resp: 849

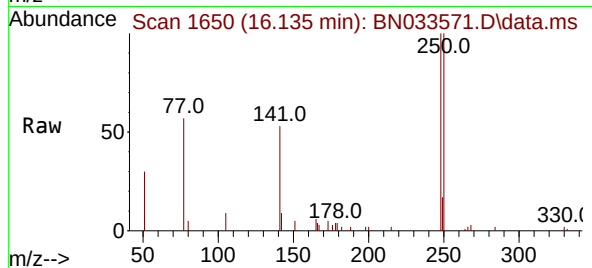
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 198 | 100   |       |       |
| 51  | 110.2 | 65.1  | 97.7# |
| 105 | 170.8 | 44.8  | 67.2# |





#21  
4-Bromophenyl-phenylether  
Concen: 0.374 ng  
RT: 16.135 min Scan# 1650  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

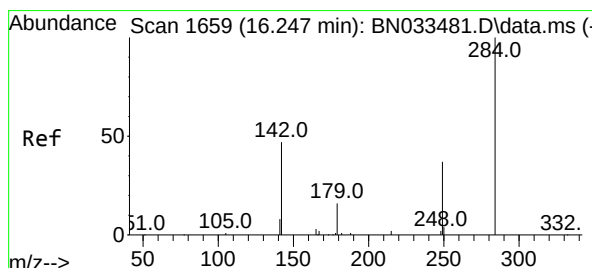
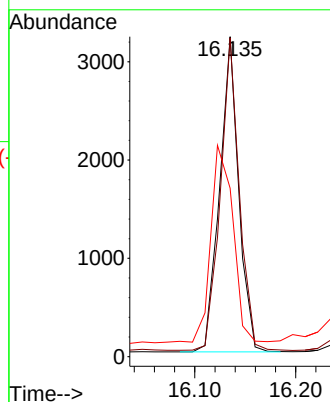
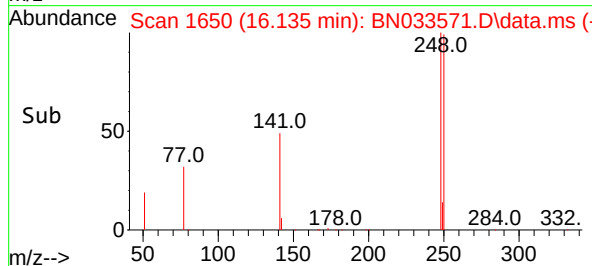
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion: 248 Resp: 4194  
Ion Ratio Lower Upper  
248 100  
250 99.6 79.2 118.8  
141 52.6 37.9 56.9

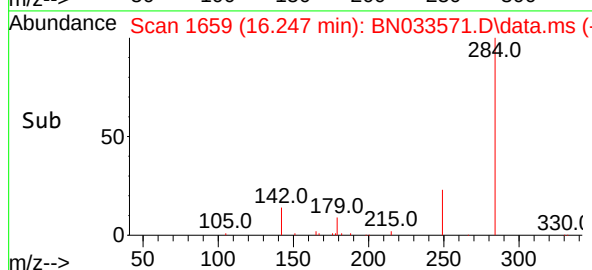
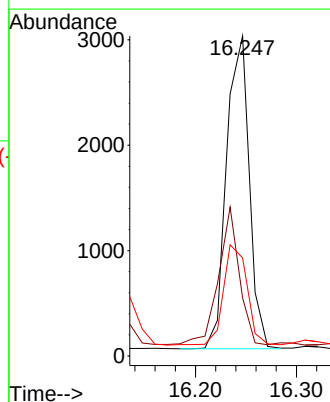
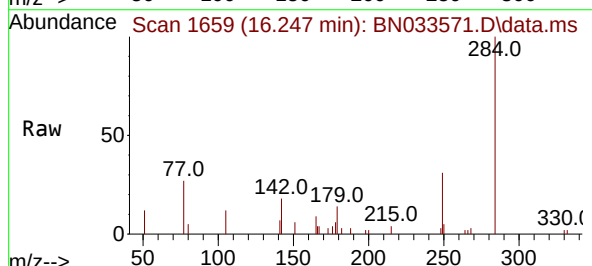
Manual Integrations  
APPROVED

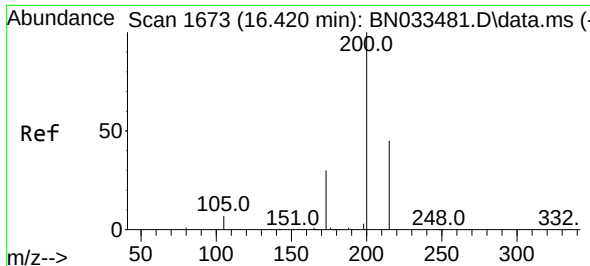
Reviewed By : Yogesh Patel 08/23/2024  
Supervised By : mohammad ahmed 08/24/2024



#22  
Hexachlorobenzene  
Concen: 0.376 ng  
RT: 16.247 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

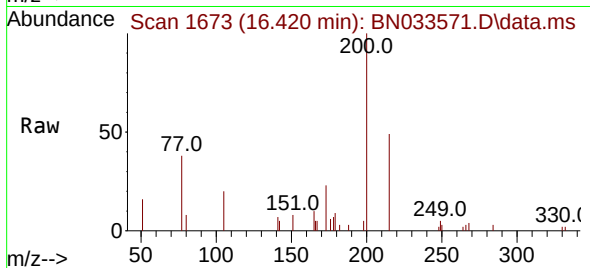
Tgt Ion: 284 Resp: 4644  
Ion Ratio Lower Upper  
284 100  
142 40.0 31.8 47.6  
249 33.1 26.0 39.0





#23  
Atrazine  
Concen: 0.397 ng  
RT: 16.420 min Scan# 1673  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

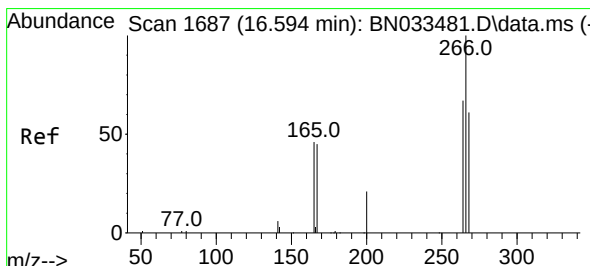
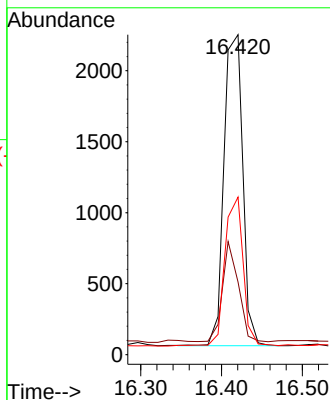
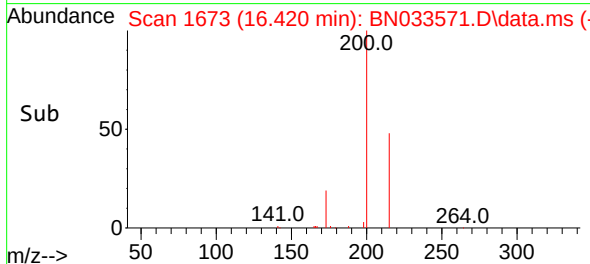
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:200 Resp: 3550  
Ion Ratio Lower Upper  
200 100  
173 22.7 25.3 37.9  
215 49.2 36.6 54.8

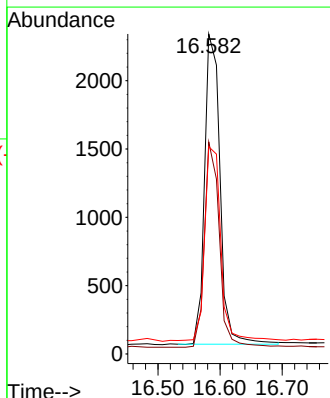
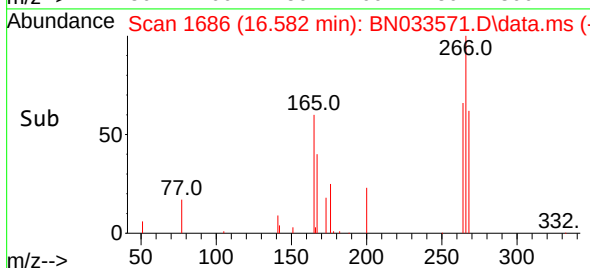
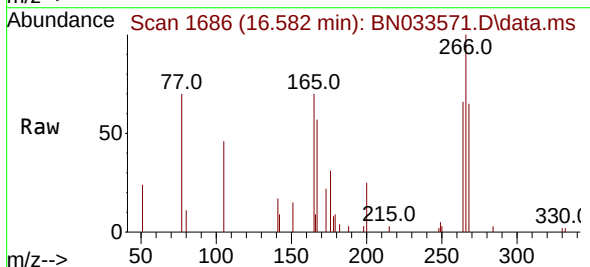
Manual Integrations  
APPROVED

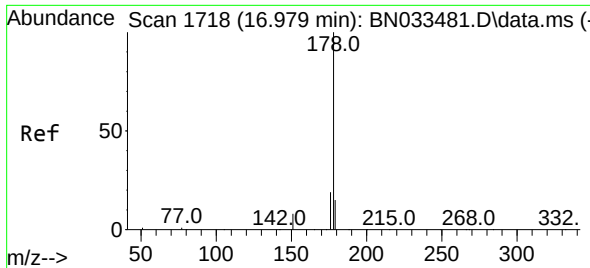
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#24  
Pentachlorophenol  
Concen: 0.732 ng  
RT: 16.582 min Scan# 1686  
Delta R.T. -0.013 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

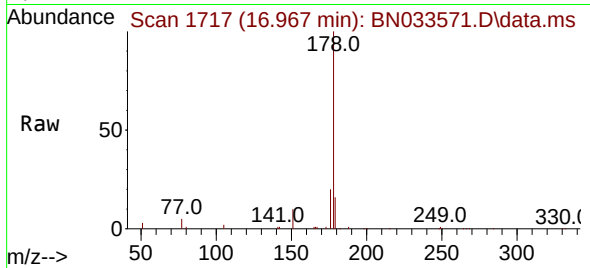
Tgt Ion:266 Resp: 3923  
Ion Ratio Lower Upper  
266 100  
264 63.9 51.9 77.9  
268 64.6 51.0 76.4





#25  
Phenanthrene  
Concen: 0.608 ng  
RT: 16.967 min Scan# 1718  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

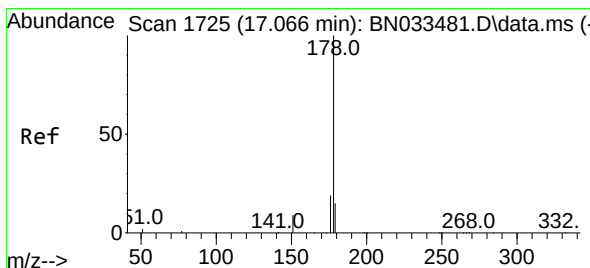
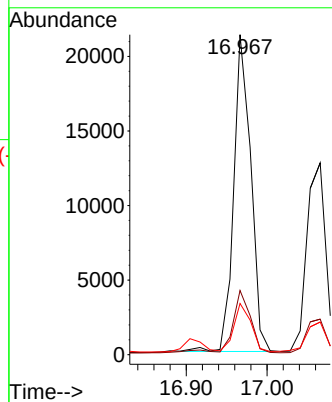
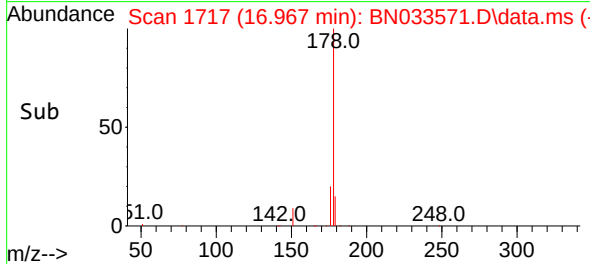
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:178 Resp: 31168  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.3 22.9  
179 15.0 12.3 18.5

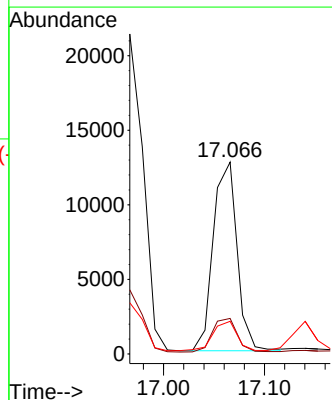
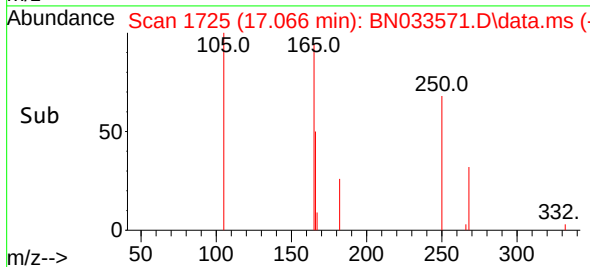
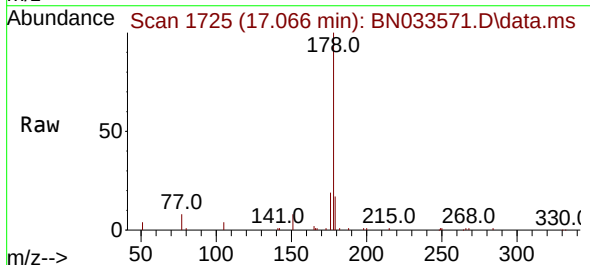
Manual Integrations  
APPROVED

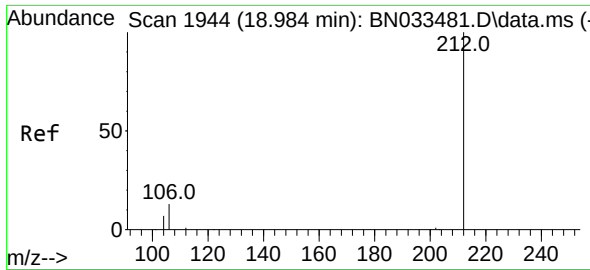
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#26  
Anthracene  
Concen: 0.458 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

Tgt Ion:178 Resp: 20769  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.0 22.6  
179 15.6 12.4 18.6





#27

Fluoranthene-d10

Concen: 0.188 ng

RT: 18.970 min Scan# 1941

Delta R.T. -0.000 min

Lab File: BN033571.D

Acq: 23 Aug 2024 02:53

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924MS

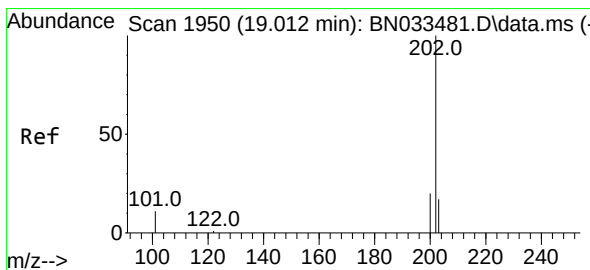
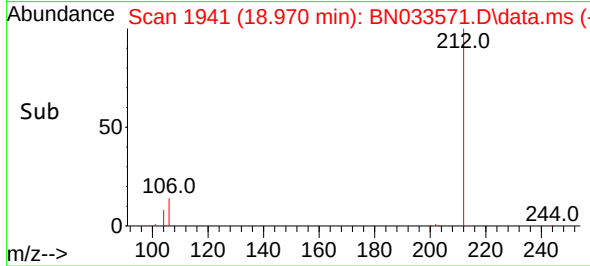
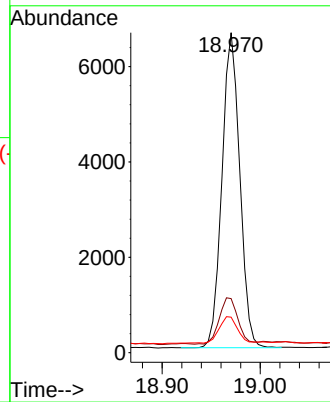
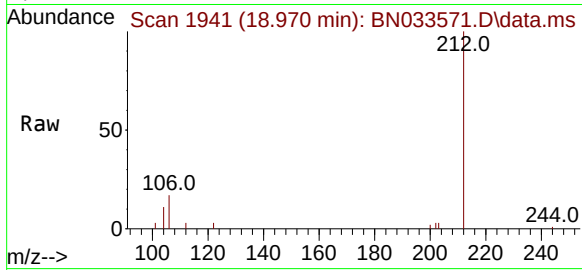
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 212   | Resp: | 8340  |
| Ion      | Ratio | Lower | Upper |
| 212      | 100   |       |       |
| 106      | 15.4  | 12.3  | 18.5  |
| 104      | 10.0  | 7.0   | 10.4  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#28

Fluoranthene

Concen: 0.875 ng

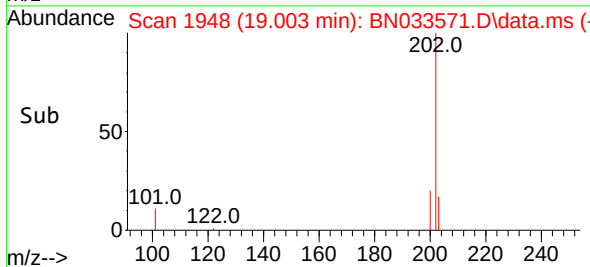
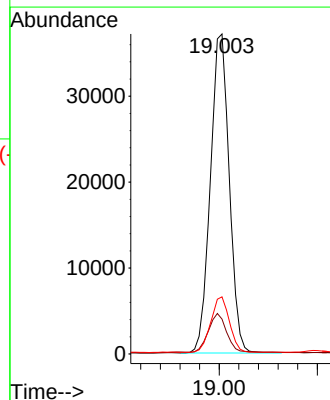
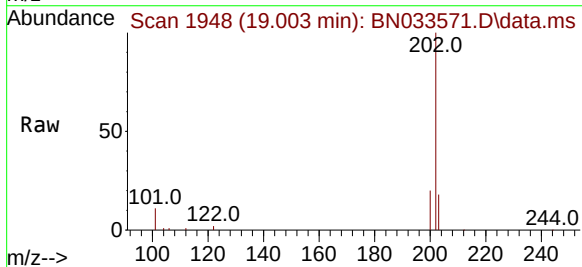
RT: 19.003 min Scan# 1948

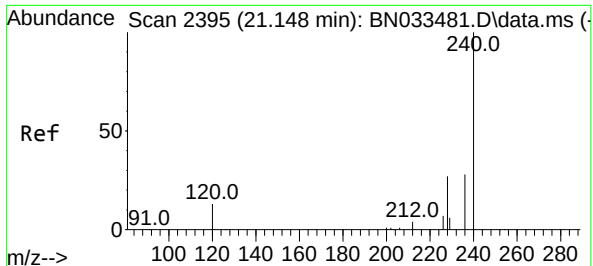
Delta R.T. -0.000 min

Lab File: BN033571.D

Acq: 23 Aug 2024 02:53

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 202   | Resp: | 49606 |
| Ion      | Ratio | Lower | Upper |
| 202      | 100   |       |       |
| 101      | 12.2  | 9.5   | 14.3  |
| 203      | 17.2  | 13.8  | 20.6  |





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.130 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN033571.D

Acq: 23 Aug 2024 02:53

Instrument :

BNA\_N

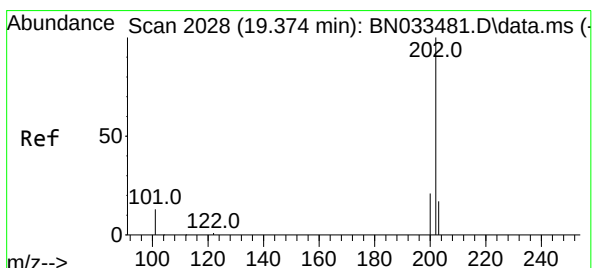
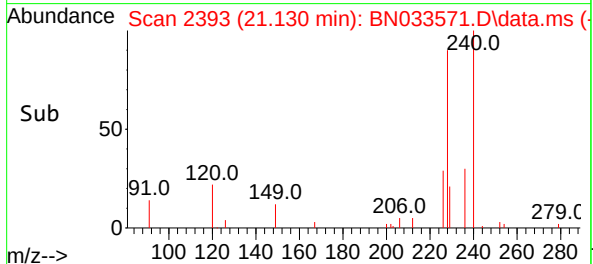
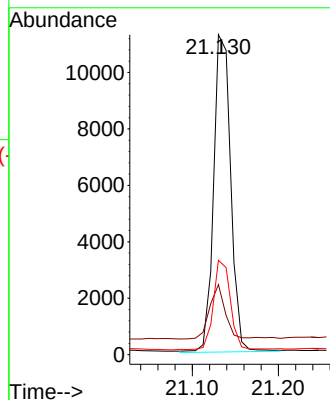
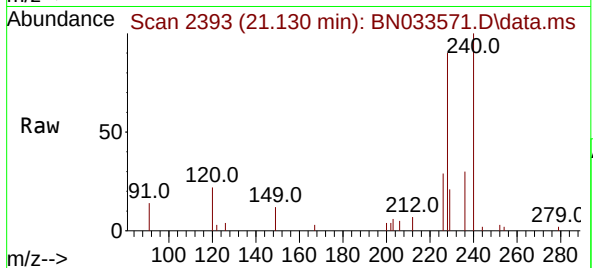
ClientSampleId :

S-928-K1-SO-0.5-1-081924MS

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:240 | Resp: | 1556      |
| Ion Ratio   | Lower | Upper     |
| 240         | 100   |           |
| 120         | 21.9  | 12.4 18.6 |
| 236         | 29.5  | 23.0 34.6 |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#30

Pyrene

Concen: 0.680 ng

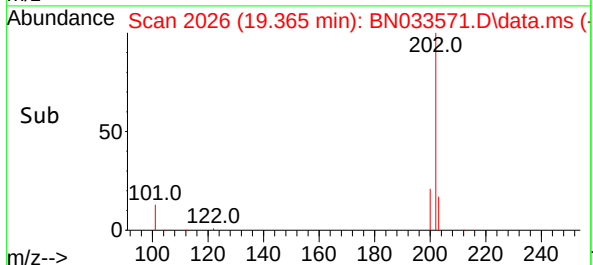
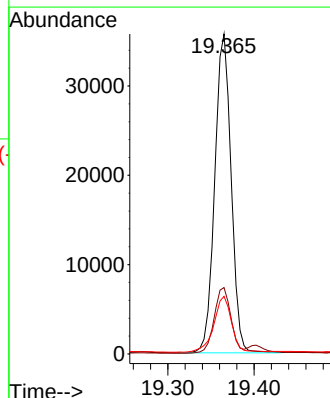
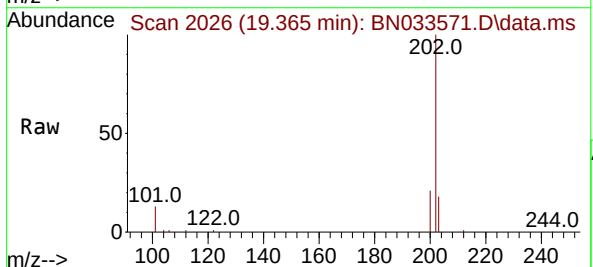
RT: 19.365 min Scan# 2026

Delta R.T. -0.000 min

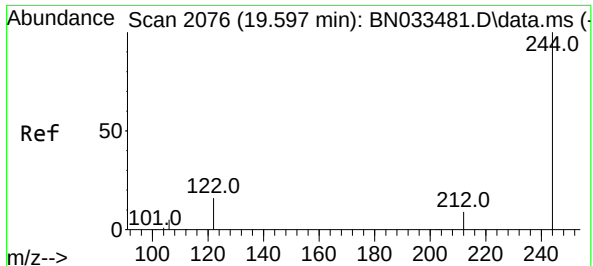
Lab File: BN033571.D

Acq: 23 Aug 2024 02:53

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:202 | Resp: | 47212     |
| Ion Ratio   | Lower | Upper     |
| 202         | 100   |           |
| 200         | 21.0  | 16.6 24.8 |
| 203         | 19.0  | 14.2 21.4 |

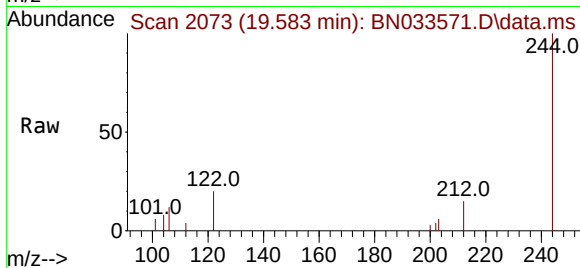






#31  
Terphenyl-d14  
Concen: 0.163 ng  
RT: 19.583 min Scan# 2076  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

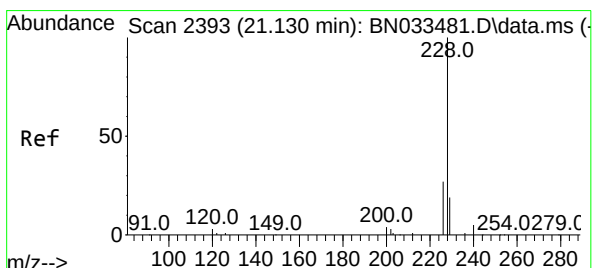
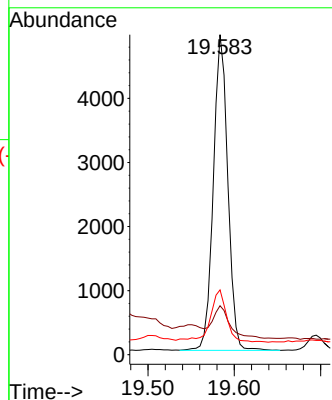
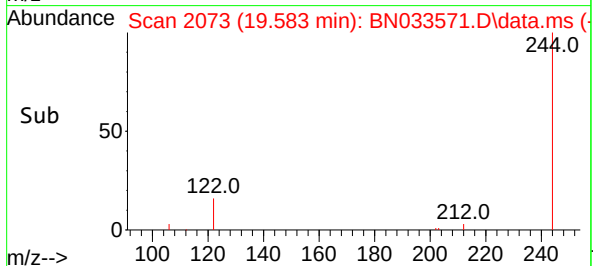
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:244 Resp: 5749  
Ion Ratio Lower Upper  
244 100  
212 15.3 7.8 11.6  
122 20.2 13.3 19.9

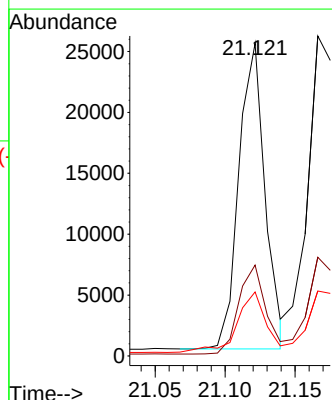
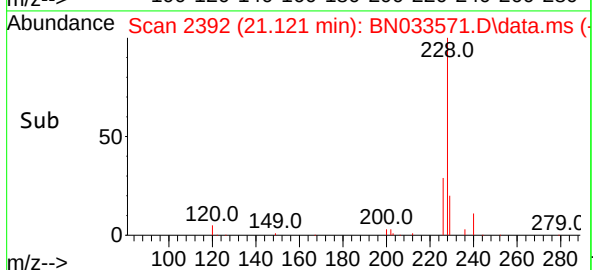
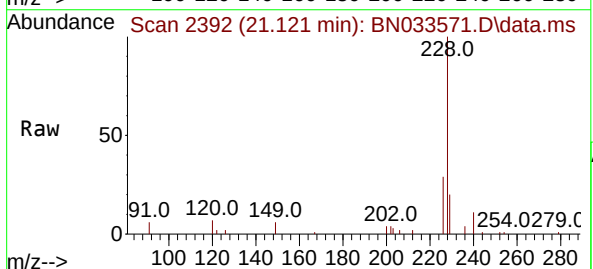
Manual Integrations  
APPROVED

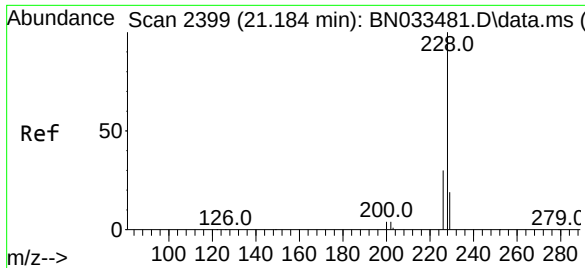
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#32  
Benzo(a)anthracene  
Concen: 0.580 ng  
RT: 21.121 min Scan# 2392  
Delta R.T. -0.000 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

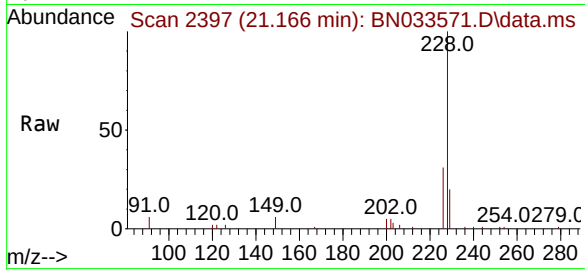
Tgt Ion:228 Resp: 32639  
Ion Ratio Lower Upper  
228 100  
226 29.1 21.8 32.6  
229 20.5 15.8 23.6





#33  
Chrysene  
Concen: 0.667 ng  
RT: 21.166 min Scan# 21166  
Delta R.T. -0.009 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

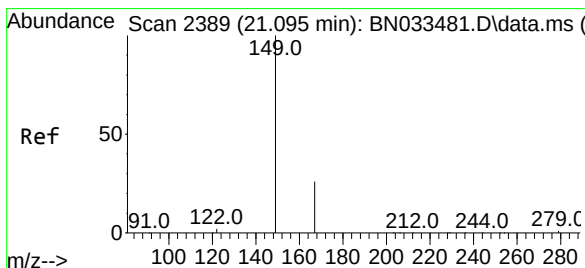
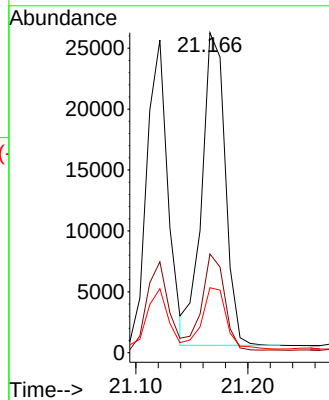
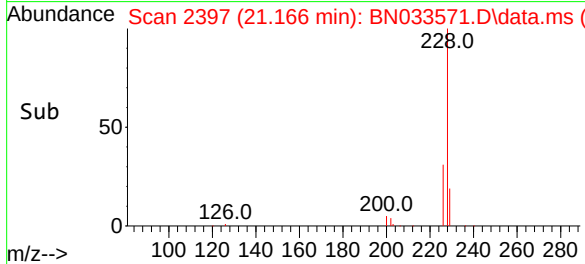
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:228 Resp: 37338  
Ion Ratio Lower Upper  
228 100  
226 30.9 23.8 35.8  
229 20.3 15.6 23.4

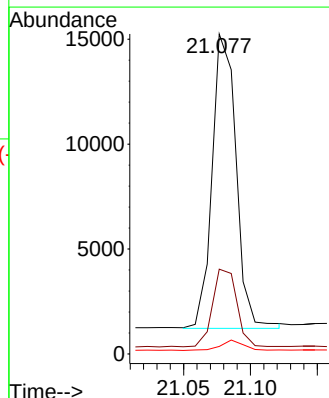
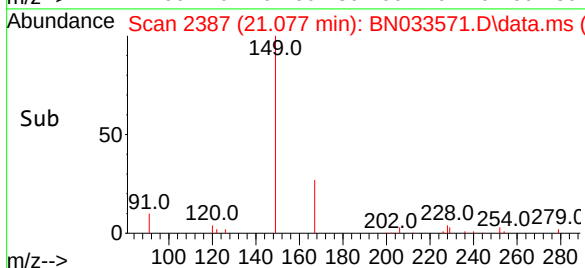
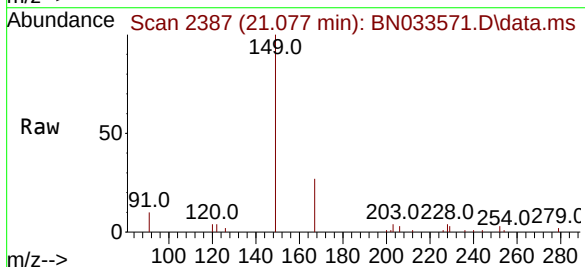
Manual Integrations  
**APPROVED**

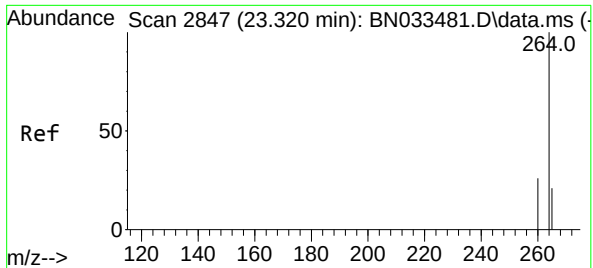
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.492 ng m  
RT: 21.077 min Scan# 2387  
Delta R.T. -0.009 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

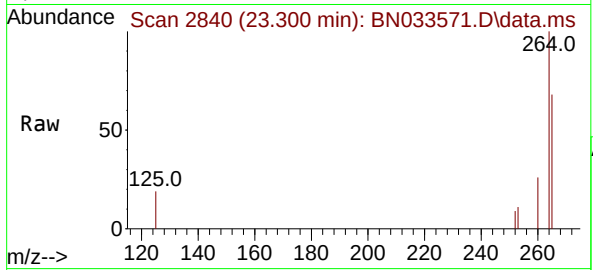
Tgt Ion:149 Resp: 17513  
Ion Ratio Lower Upper  
149 100  
167 29.2 21.5 32.3  
279 4.6 2.2 3.2#





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.300 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

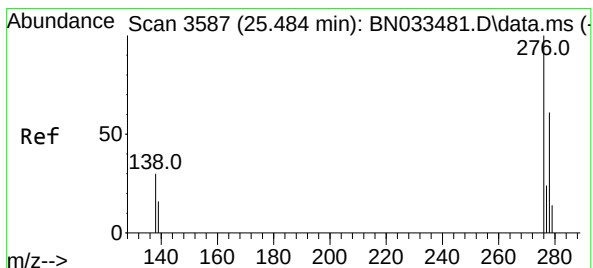
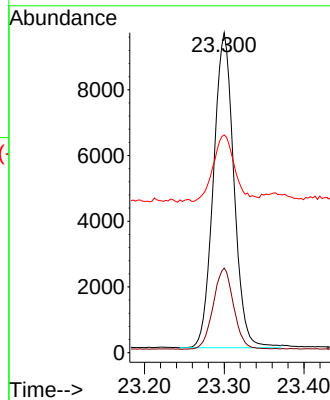
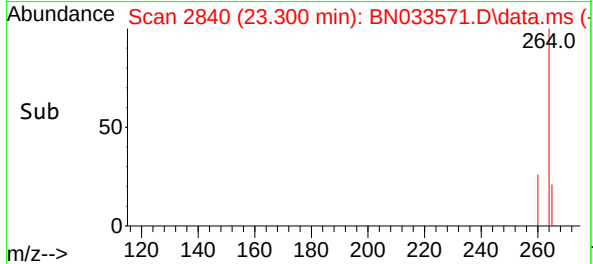
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:264 Resp: 1707  
Ion Ratio Lower Upper  
264 100  
260 26.5 20.8 31.2  
265 68.0 52.2 78.2

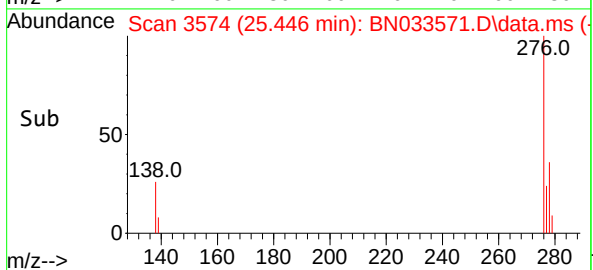
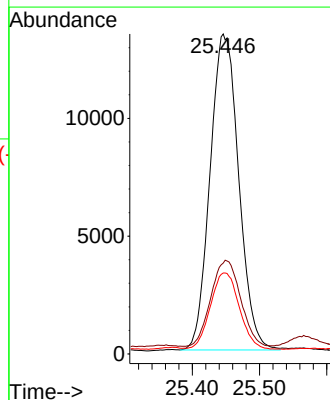
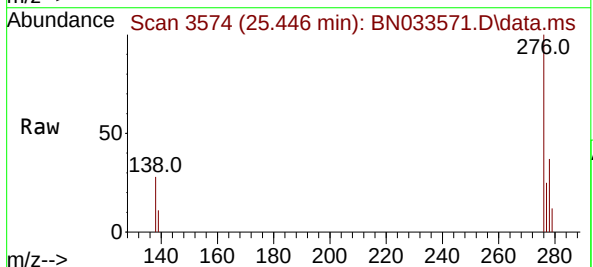
Manual Integrations  
APPROVED

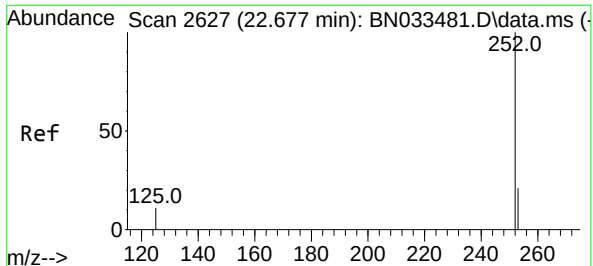
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.561 ng  
RT: 25.446 min Scan# 3574  
Delta R.T. -0.003 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

Tgt Ion:276 Resp: 39755  
Ion Ratio Lower Upper  
276 100  
138 28.1 24.4 36.6  
277 24.3 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.699 ng

RT: 22.657 min Scan# 2620

Delta R.T. -0.003 min

Lab File: BN033571.D

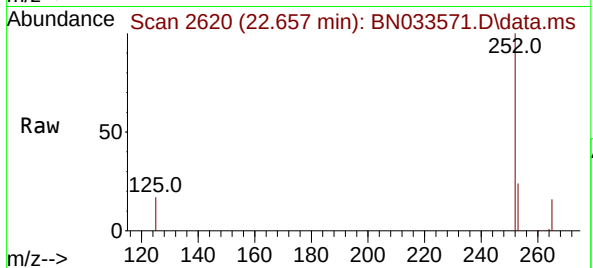
Acq: 23 Aug 2024 02:53

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924MS

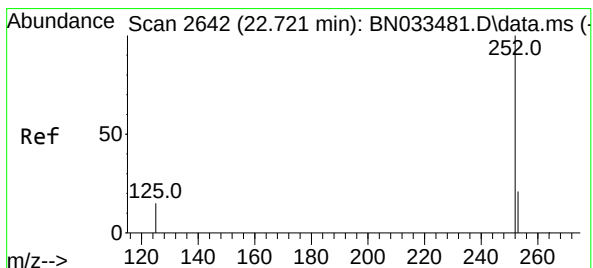
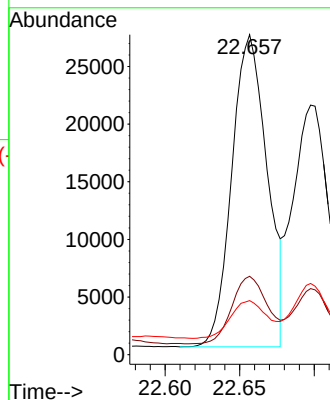
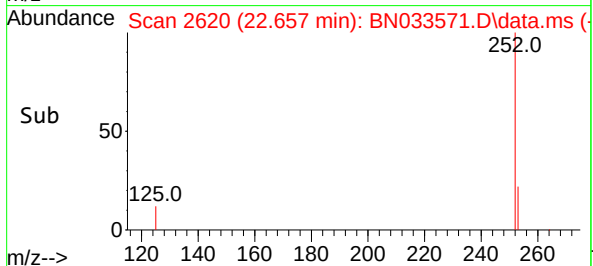


|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 4455      |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 24.5  | 19.8 29.8 |
| 125         | 16.9  | 13.9 20.9 |

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#38

Benzo(k)fluoranthene

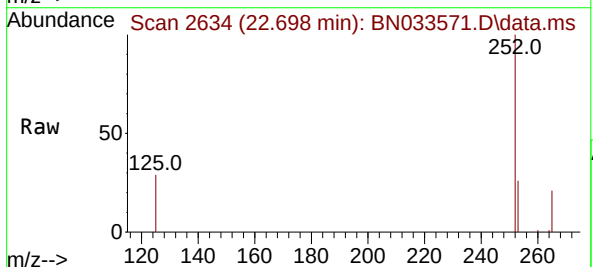
Concen: 0.562 ng m

RT: 22.698 min Scan# 2634

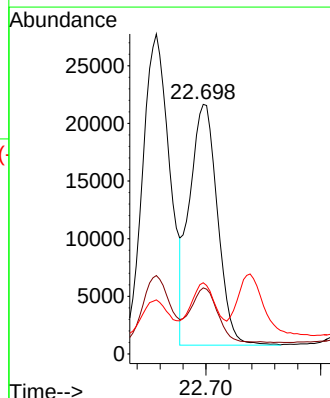
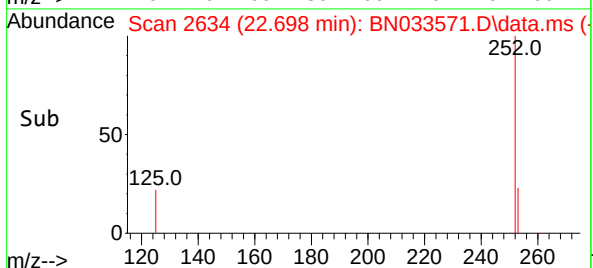
Delta R.T. -0.006 min

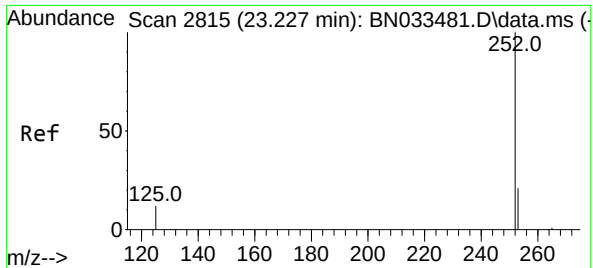
Lab File: BN033571.D

Acq: 23 Aug 2024 02:53



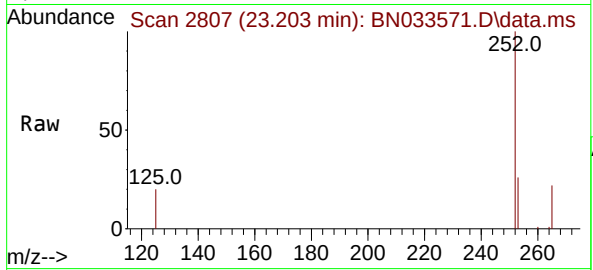
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 35269     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 26.4  | 19.8 29.8 |
| 125         | 28.5  | 15.8 23.8 |





#39  
Benzo(a)pyrene  
Concen: 0.664 ng  
RT: 23.203 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

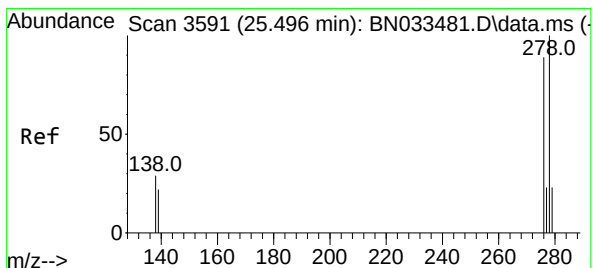
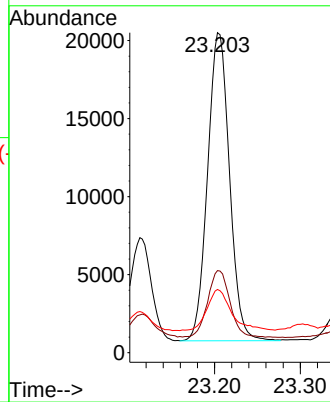
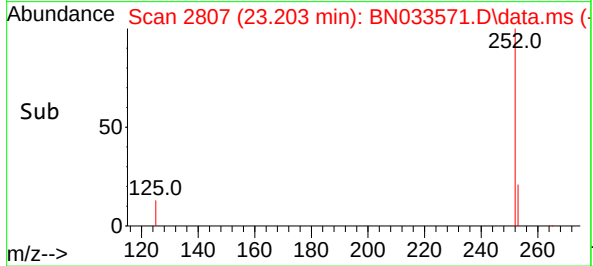
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:252 Resp: 35050  
Ion Ratio Lower Upper  
252 100  
253 25.7 21.5 32.3  
125 19.8 17.0 25.4

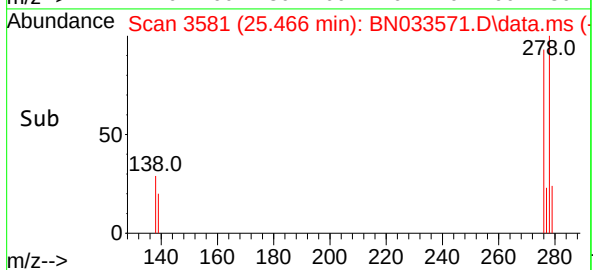
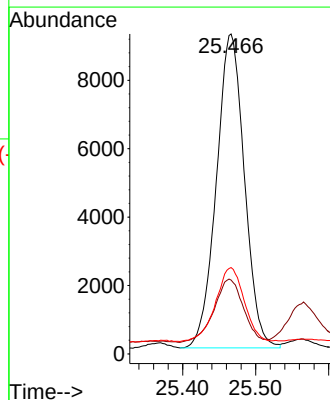
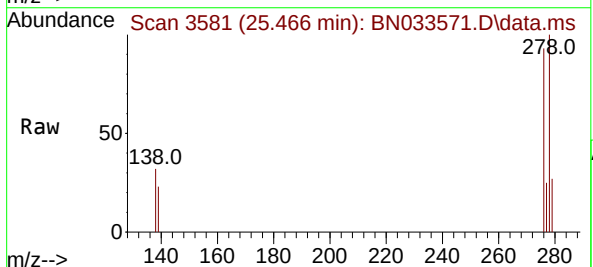
Manual Integrations  
APPROVED

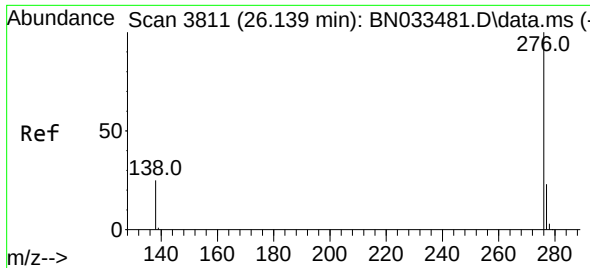
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#40  
Dibenzo(a,h)anthracene  
Concen: 0.433 ng  
RT: 25.466 min Scan# 3581  
Delta R.T. -0.003 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

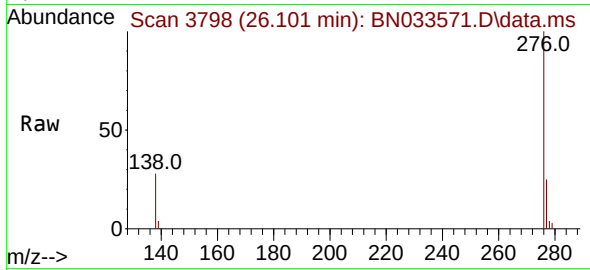
Tgt Ion:278 Resp: 24536  
Ion Ratio Lower Upper  
278 100  
139 23.1 19.1 28.7  
279 27.0 21.0 31.4





#41  
Benzo(g,h,i)perylene  
Concen: 0.558 ng  
RT: 26.101 min Scan# 31  
Delta R.T. -0.003 min  
Lab File: BN033571.D  
Acq: 23 Aug 2024 02:53

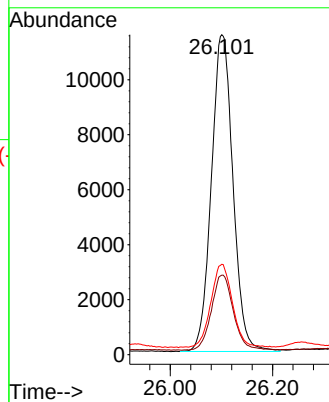
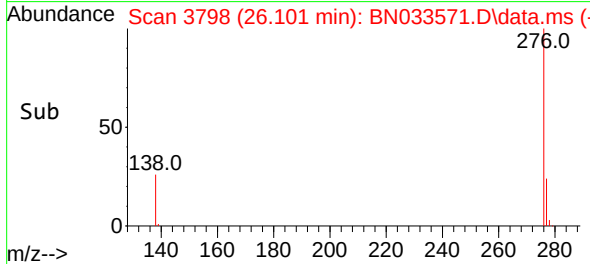
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MS



Tgt Ion:276 Resp: 33814  
Ion Ratio Lower Upper  
276 100  
277 24.8 19.7 29.5  
138 28.2 21.8 32.6

Manual Integrations  
**APPROVED**

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



### Report of Analysis

|                    |                                       |                 |               |
|--------------------|---------------------------------------|-----------------|---------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24      |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24      |
| Client Sample ID:  | S-928-K1-SO-0.5-1-081924MSD           | SDG No.:        | P3671         |
| Lab Sample ID:     | P3671-10MSD                           | Matrix:         | SOIL          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 57.2          |
| Sample Wt/Vol:     | 30.04 Units: g                        | Final Vol:      | 1000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW           |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :        |
| Prep Method :      | sw3541                                |                 |               |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033572.D        | 1         | 08/21/24 09:38 | 08/23/24 03:30 | PB162880      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|-------------------|
| <b>TARGETS</b>            |                         |       |           |                     |            |                   |
| 91-20-3                   | Naphthalene             | 24.5  |           | 1.20                | 5.80       | ug/Kg             |
| 91-57-6                   | 2-Methylnaphthalene     | 24.1  |           | 1.40                | 5.80       | ug/Kg             |
| 208-96-8                  | Acenaphthylene          | 27.9  |           | 1.10                | 5.80       | ug/Kg             |
| 83-32-9                   | Acenaphthene            | 23.7  |           | 0.96                | 5.80       | ug/Kg             |
| 86-73-7                   | Fluorene                | 23.4  |           | 1.00                | 5.80       | ug/Kg             |
| 85-01-8                   | Phenanthrene            | 37.4  |           | 1.10                | 5.80       | ug/Kg             |
| 120-12-7                  | Anthracene              | 28.2  |           | 1.40                | 5.80       | ug/Kg             |
| 206-44-0                  | Fluoranthene            | 52.2  |           | 1.20                | 5.80       | ug/Kg             |
| 129-00-0                  | Pyrene                  | 41.3  |           | 1.70                | 5.80       | ug/Kg             |
| 56-55-3                   | Benzo(a)anthracene      | 35.0  |           | 1.30                | 5.80       | ug/Kg             |
| 218-01-9                  | Chrysene                | 40.8  |           | 1.50                | 5.80       | ug/Kg             |
| 205-99-2                  | Benzo(b)fluoranthene    | 42.6  |           | 2.10                | 5.80       | ug/Kg             |
| 207-08-9                  | Benzo(k)fluoranthene    | 32.3  |           | 1.70                | 5.80       | ug/Kg             |
| 50-32-8                   | Benzo(a)pyrene          | 39.7  |           | 2.90                | 5.80       | ug/Kg             |
| 193-39-5                  | Indeno(1,2,3-cd)pyrene  | 33.3  |           | 2.20                | 5.80       | ug/Kg             |
| 53-70-3                   | Dibenzo(a,h)anthracene  | 25.7  |           | 2.00                | 5.80       | ug/Kg             |
| 191-24-2                  | Benzo(g,h,i)perylene    | 33.3  |           | 2.00                | 5.80       | ug/Kg             |
| 123-91-1                  | 1,4-Dioxane             | 20.1  |           | 3.90                | 11.5       | ug/Kg             |
| <b>SURROGATES</b>         |                         |       |           |                     |            |                   |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.36  |           | 30 (17) - 150 (161) | 91%        | SPK: 0.4          |
| 93951-69-0                | Fluoranthene-d10        | 0.20  |           | 30 (23) - 150 (138) | 49%        | SPK: 0.4          |
| 4165-60-0                 | Nitrobenzene-d5         | 0.33  |           | 30 (33) - 130 (121) | 81%        | SPK: 0.4          |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.23  |           | 30 (32) - 130 (121) | 58%        | SPK: 0.4          |
| 1718-51-0                 | Terphenyl-d14           | 0.17  |           | 30 (21) - 130 (130) | 43%        | SPK: 0.4          |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 7610  | 7.545     |                     |            |                   |
| 1146-65-2                 | Naphthalene-d8          | 20100 | 10.303    |                     |            |                   |
| 15067-26-2                | Acenaphthene-d10        | 9560  | 14.178    |                     |            |                   |
| 1517-22-2                 | Phenanthrene-d10        | 18300 | 16.929    |                     |            |                   |

## Report of Analysis

|                    |                                       |                 |                              |
|--------------------|---------------------------------------|-----------------|------------------------------|
| Client:            | JACOBS Engineering Group, Inc.        | Date Collected: | 08/19/24                     |
| Project:           | Former Schlumberger Site Princeton NJ | Date Received:  | 08/19/24                     |
| Client Sample ID:  | S-928-K1-SO-0.5-1-081924MSD           | SDG No.:        | P3671                        |
| Lab Sample ID:     | P3671-10MSD                           | Matrix:         | SOIL                         |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 57.2                         |
| Sample Wt/Vol:     | 30.04      Units:    g                | Final Vol:      | 1000                      uL |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOCMS Group3                |
| Extraction Type :  | Decanted :    N                       | Level :         | LOW                          |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N                      PH :  |
| Prep Method :      | sw3541                                |                 |                              |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN033572.D        | 1         | 08/21/24 09:38 | 08/23/24 03:30 | PB162880      |

| CAS Number | Parameter    | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------|-------|-----------|-----|------------|-------|
| 1719-03-5  | Chrysene-d12 | 15100 | 21.139    |     |            |       |
| 1520-96-3  | Perylene-d12 | 16900 | 23.3      |     |            |       |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033572.D  
 Acq On : 23 Aug 2024 03:30  
 Operator : MA/JU  
 Sample : P3671-10MSD  
 Misc :  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 S-928-K1-SO-0.5-1-081924MSD

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
 Supervised By :mohammad ahmed 08/24/2024

Quant Time: Aug 23 04:30:22 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.545  | 152  | 7606     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.303 | 136  | 20104    | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.178 | 164  | 9559     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 16.929 | 188  | 18339    | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.139 | 240  | 15128    | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.300 | 264  | 16860    | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.183  | 112  | 6356     | 0.263 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.736  | 99   | 7810     | 0.272 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.681  | 82   | 5422     | 0.325 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 11.899 | 152  | 10481m   | 0.364 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.676 | 330  | 1188     | 0.231 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.799 | 172  | 9105     | 0.233 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 18.970 | 212  | 8580     | 0.195 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.583 | 244  | 5867     | 0.171 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.183  | 88   | 3023     | 0.345 | ng    | # 51     |
| 3) n-Nitrosodimethylamine     | 3.471  | 42   | 4170     | 0.410 | ng    | # 94     |
| 6) bis(2-Chloroethyl)ether    | 6.981  | 93   | 8948     | 0.439 | ng    | 100      |
| 9) Naphthalene                | 10.357 | 128  | 22643    | 0.421 | ng    | 100      |
| 10) Hexachlorobutadiene       | 10.656 | 225  | 4201     | 0.392 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 11.975 | 142  | 14074    | 0.414 | ng    | 100      |
| 16) Acenaphthylene            | 13.889 | 152  | 20098    | 0.479 | ng    | 99       |
| 17) Acenaphthene              | 14.242 | 154  | 12044    | 0.408 | ng    | 99       |
| 18) Fluorene                  | 15.236 | 166  | 14948    | 0.402 | ng    | 98       |
| 20) 4,6-Dinitro-2-methylph... | 15.311 | 198  | 898      | 0.314 | ng    | # 12     |
| 21) 4-Bromophenyl-phenylether | 16.135 | 248  | 4449     | 0.399 | ng    | 97       |
| 22) Hexachlorobenzene         | 16.246 | 284  | 4872     | 0.396 | ng    | 98       |
| 23) Atrazine                  | 16.408 | 200  | 3710     | 0.417 | ng    | 96       |
| 24) Pentachlorophenol         | 16.582 | 266  | 4153     | 0.779 | ng    | 98       |
| 25) Phenanthrene              | 16.966 | 178  | 32765    | 0.642 | ng    | 99       |
| 26) Anthracene                | 17.066 | 178  | 21844    | 0.484 | ng    | 99       |
| 28) Fluoranthene              | 18.998 | 202  | 50573    | 0.897 | ng    | 100      |
| 30) Pyrene                    | 19.365 | 202  | 47906    | 0.710 | ng    | 98       |
| 32) Benzo(a)anthracene        | 21.121 | 228  | 32894    | 0.601 | ng    | 98       |
| 33) Chrysene                  | 21.166 | 228  | 38136    | 0.701 | ng    | 98       |
| 34) Bis(2-ethylhexyl)phtha... | 21.085 | 149  | 18178m   | 0.525 | ng    |          |
| 36) Indeno(1,2,3-cd)pyrene    | 25.449 | 276  | 40063    | 0.572 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.657 | 252  | 46095    | 0.732 | ng    | 100      |
| 38) Benzo(k)fluoranthene      | 22.700 | 252  | 34375m   | 0.555 | ng    |          |
| 39) Benzo(a)pyrene            | 23.206 | 252  | 35585    | 0.683 | ng    | 97       |
| 40) Dibenzo(a,h)anthracene    | 25.469 | 278  | 24745    | 0.442 | ng    | 98       |
| 41) Benzo(g,h,i)perylene      | 26.104 | 276  | 34247    | 0.572 | ng    | 99       |

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN082224\  
 Data File : BN033572.D  
 Acq On : 23 Aug 2024 03:30  
 Operator : MA/JU  
 Sample : P3671-10MSD  
 Misc :  
 ALS Vial : 29 Sample Multiplier: 1

**Instrument :**

BNA\_N

**ClientSampleId :**

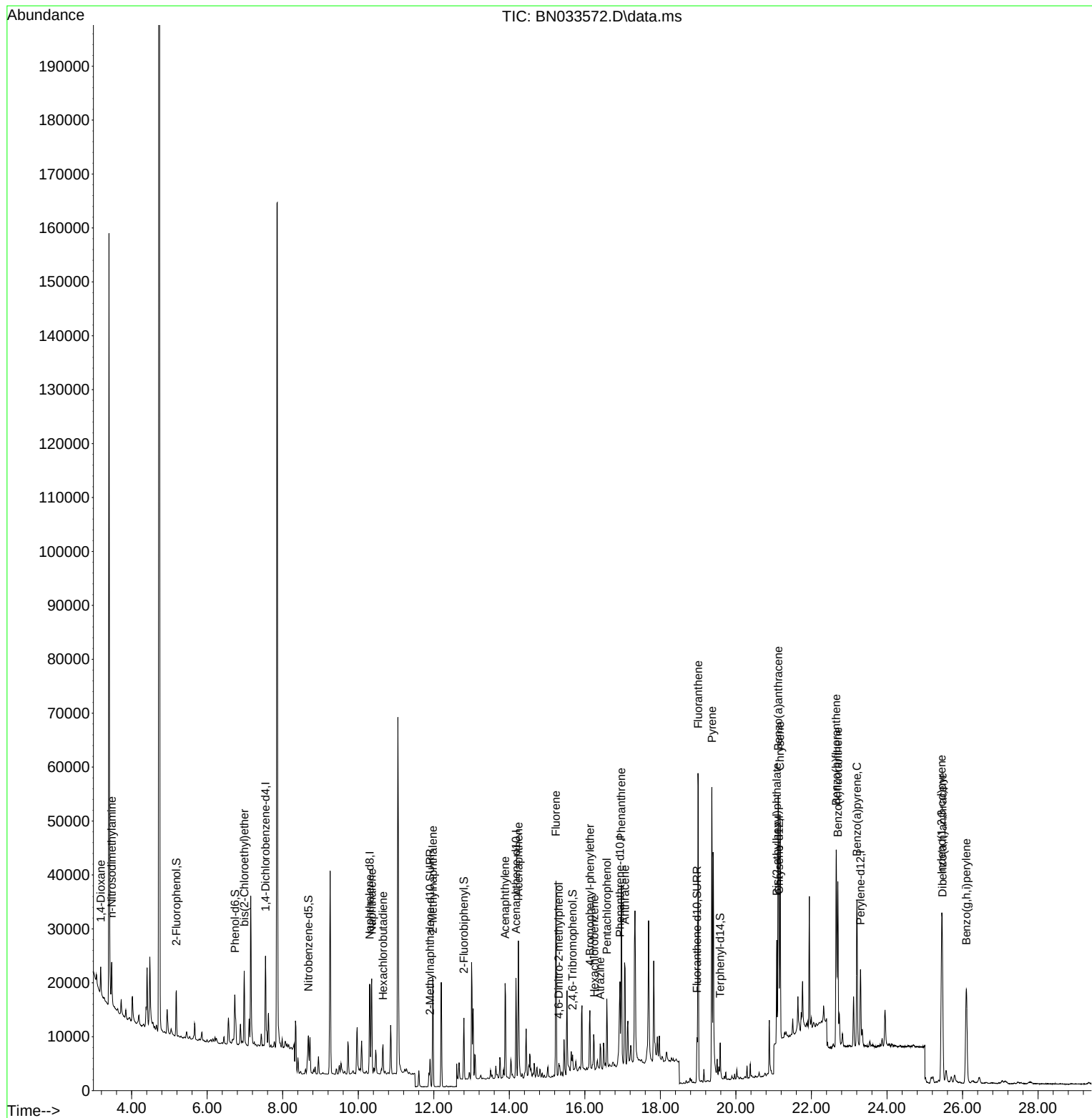
S-928-K1-SO-0.5-1-081924MSD

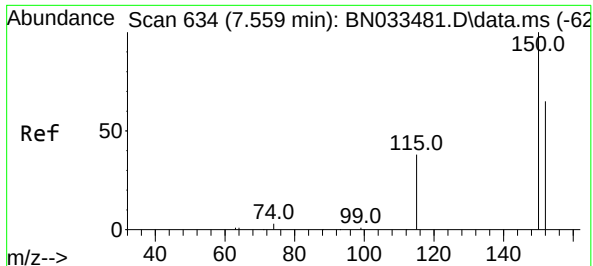
**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024

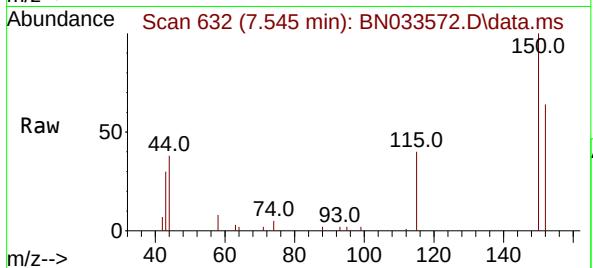
Quant Time: Aug 23 04:30:22 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN081924.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 00:22:18 2024  
 Response via : Initial Calibration





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.545 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

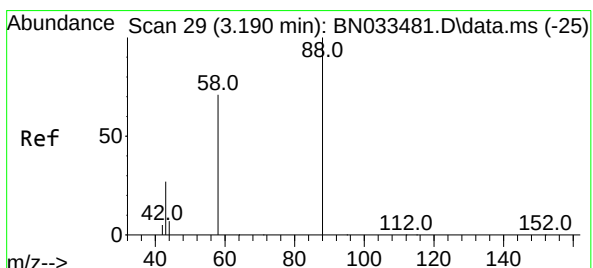
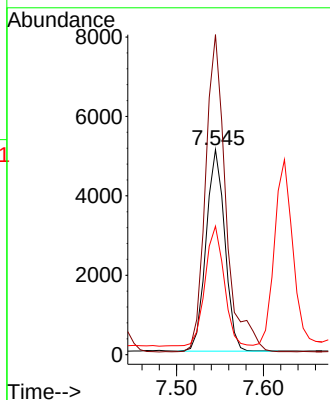
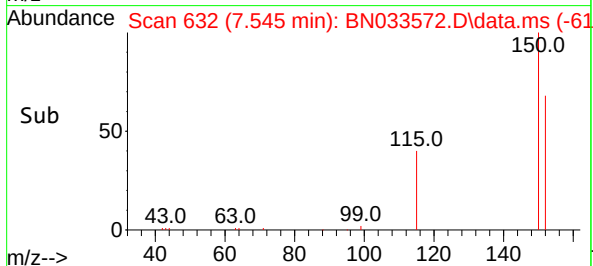
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:152 Resp: 7600  
Ion Ratio Lower Upper  
152 100  
150 156.0 122.2 183.2  
115 62.7 47.2 70.8

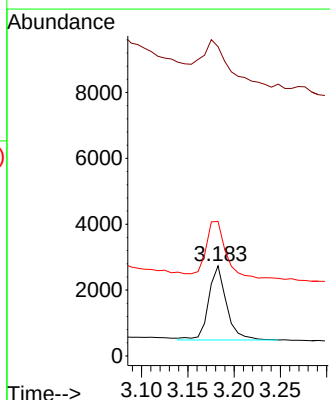
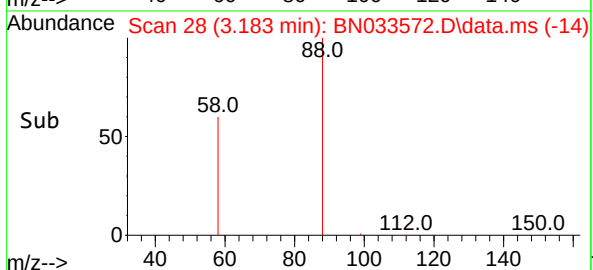
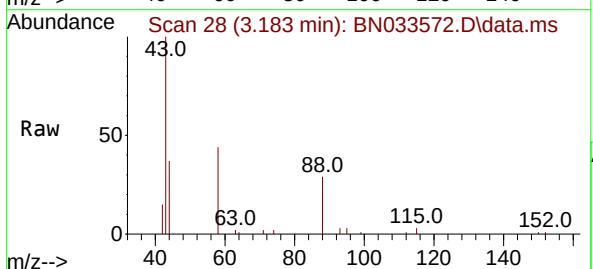
Manual Integrations  
APPROVED

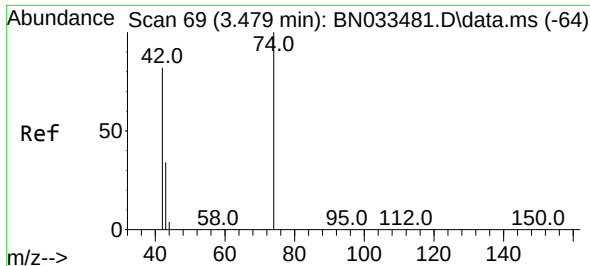
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#2  
1,4-Dioxane  
Concen: 0.345 ng  
RT: 3.183 min Scan# 28  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

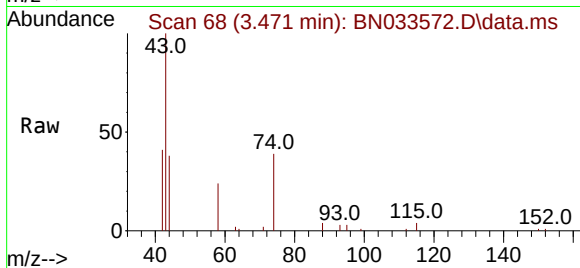
Tgt Ion: 88 Resp: 3023  
Ion Ratio Lower Upper  
88 100  
43 105.9 25.0 37.4#  
58 90.8 62.5 93.7





#3  
n-Nitrosodimethylamine  
Concen: 0.410 ng  
RT: 3.471 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

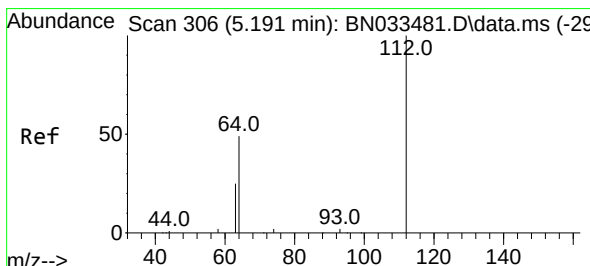
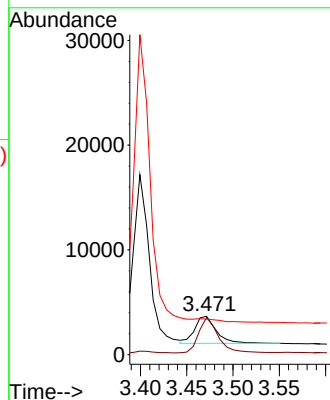
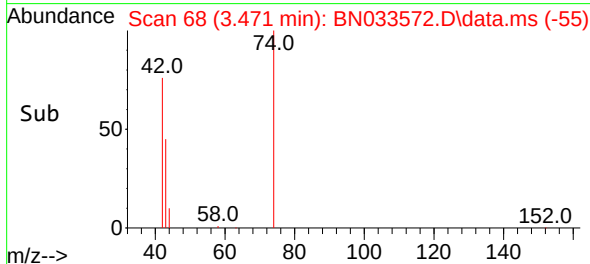
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion: 42 Resp: 4170  
Ion Ratio Lower Upper  
42 100  
74 119.0 100.2 150.2  
44 0.0 5.3 7.9

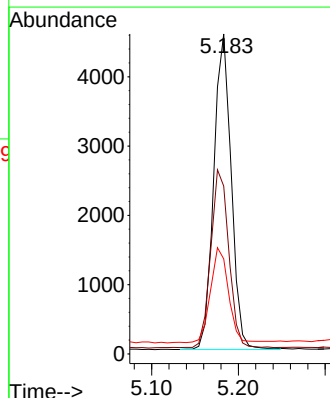
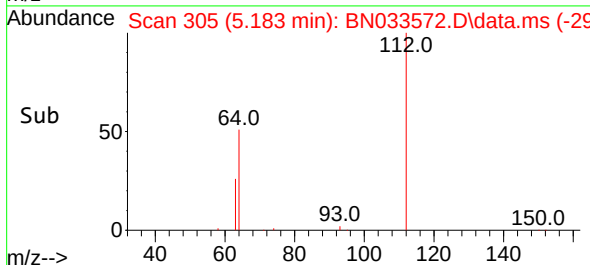
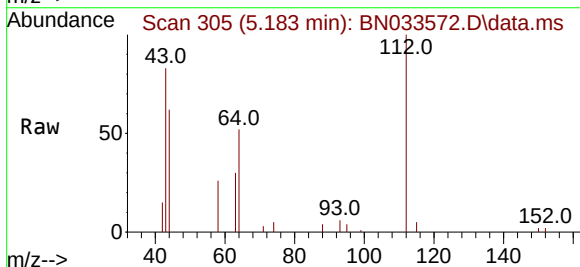
Manual Integrations  
APPROVED

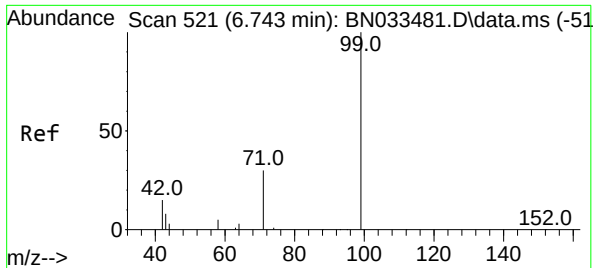
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#4  
2-Fluorophenol  
Concen: 0.263 ng  
RT: 5.183 min Scan# 305  
Delta R.T. 0.007 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

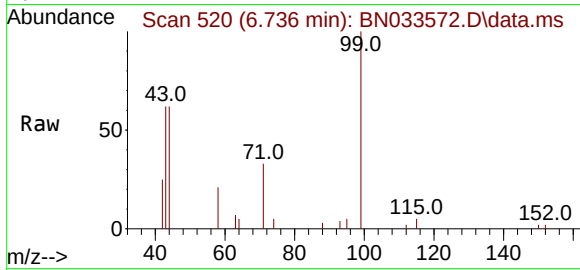
Tgt Ion:112 Resp: 6356  
Ion Ratio Lower Upper  
112 100  
64 58.9 47.1 70.7  
63 31.3 24.9 37.3





#5  
Phenol-d6  
Concen: 0.272 ng  
RT: 6.736 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

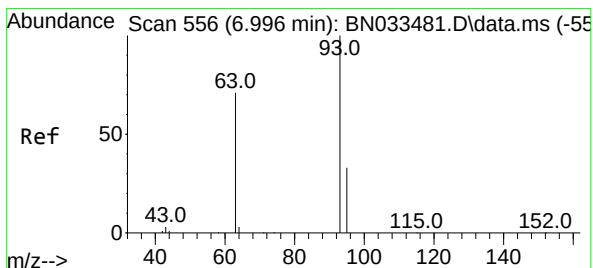
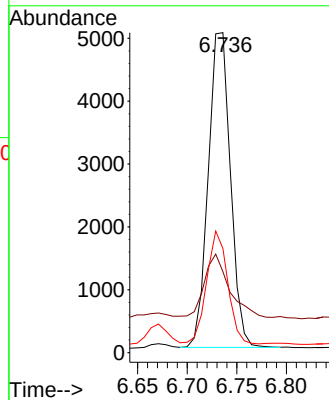
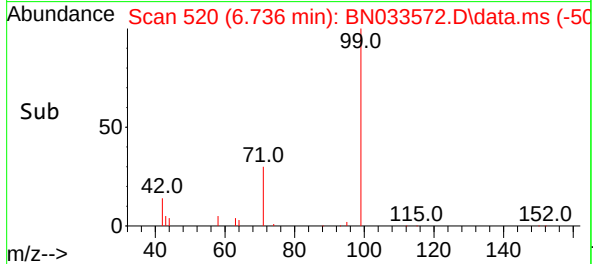
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion: 99 Resp: 7810  
Ion Ratio Lower Upper  
99 100  
42 23.1 16.6 24.8  
71 33.9 26.2 39.4

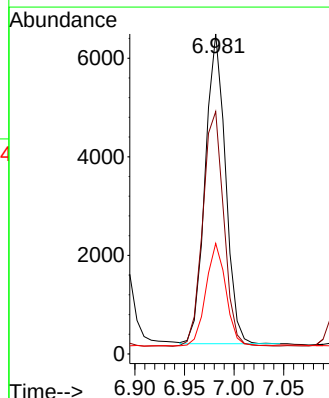
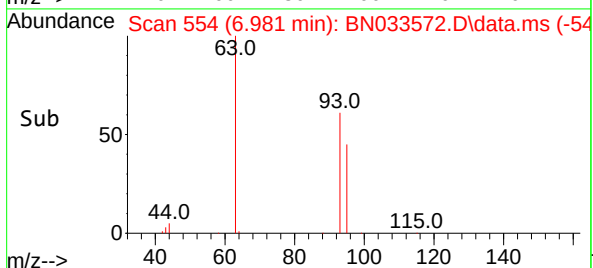
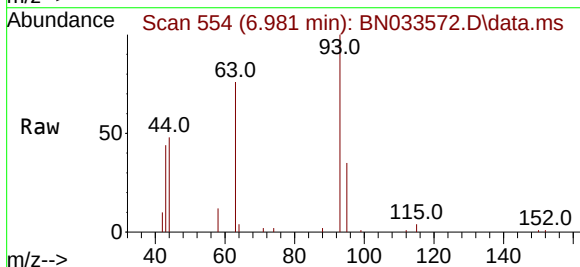
Manual Integrations  
APPROVED

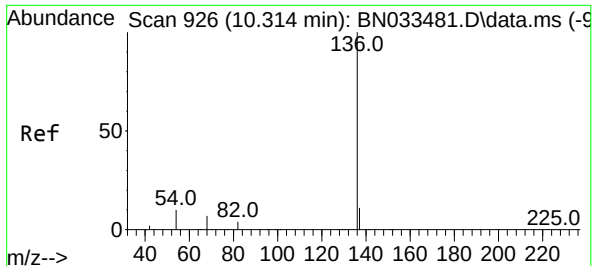
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#6  
bis(2-Chloroethyl)ether  
Concen: 0.439 ng  
RT: 6.981 min Scan# 554  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Tgt Ion: 93 Resp: 8948  
Ion Ratio Lower Upper  
93 100  
63 78.6 63.0 94.4  
95 33.0 26.0 39.0





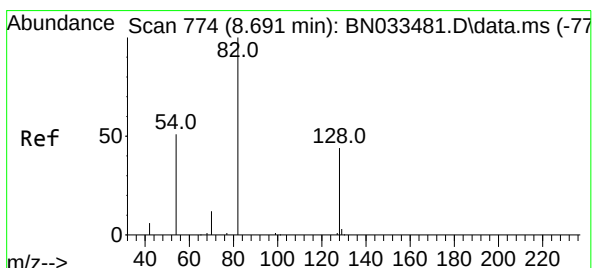
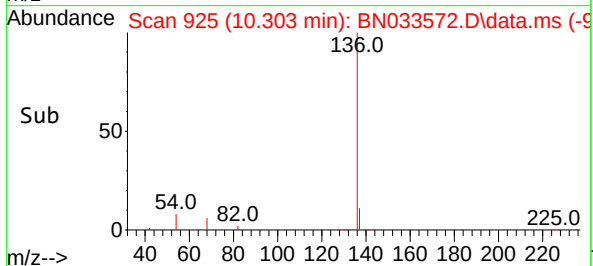
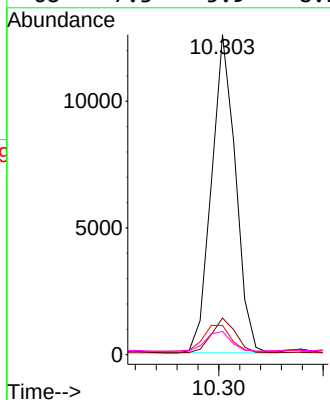
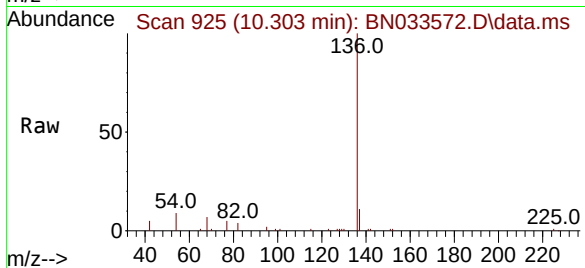
#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.303 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 2010  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.5  | 9.0   | 13.6  |
| 54       | 9.2   | 8.3   | 12.5  |
| 68       | 7.3   | 5.9   | 8.9   |

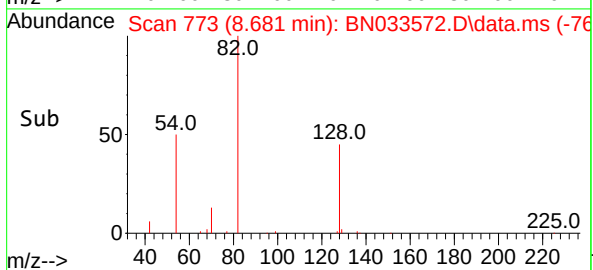
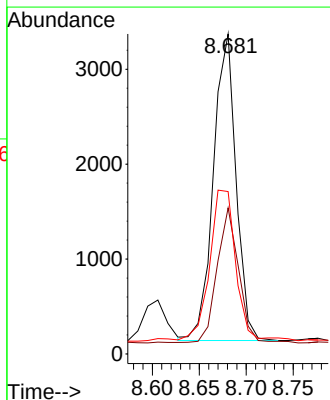
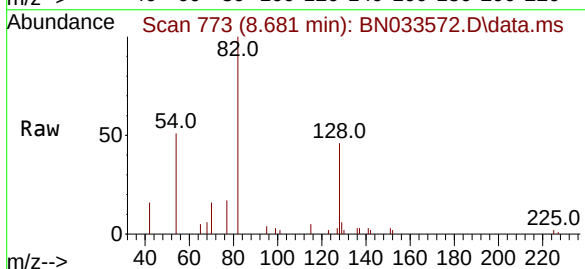
Manual Integrations  
APPROVED

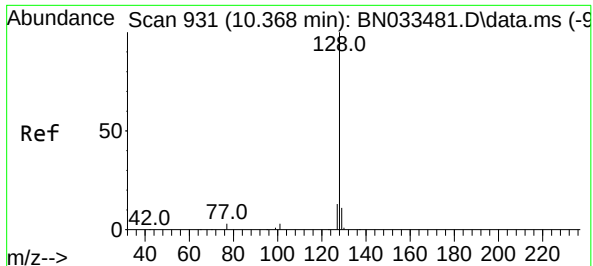
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#8  
Nitrobenzene-d5  
Concen: 0.325 ng  
RT: 8.681 min Scan# 773  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 5422  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 45.7  | 36.0  | 54.0  |
| 54       | 50.7  | 42.0  | 63.0  |





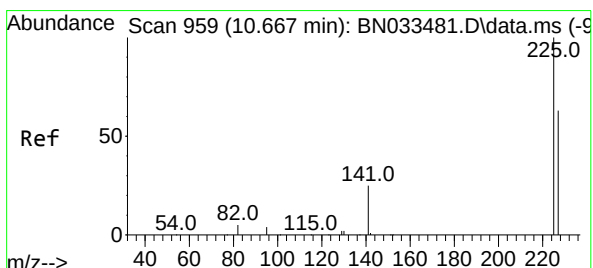
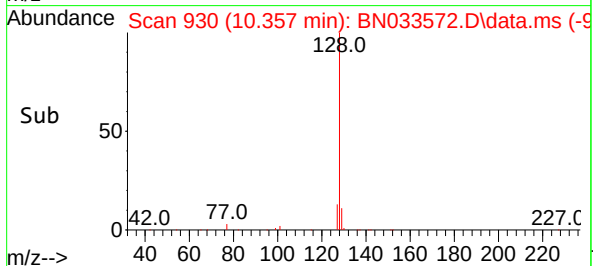
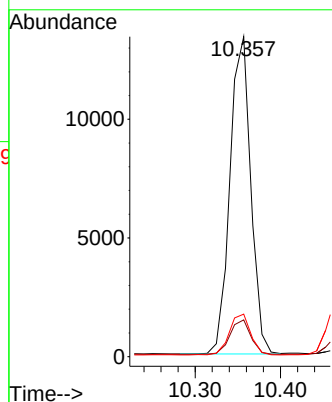
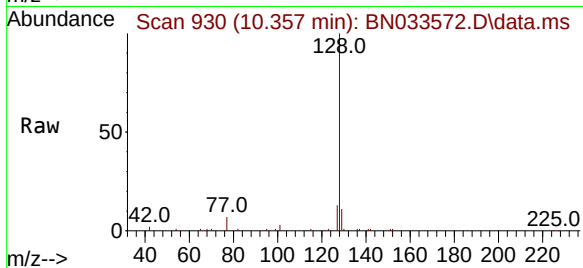
#9  
Naphthalene  
Concen: 0.421 ng  
RT: 10.357 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD

Tgt Ion:128 Resp: 2264  
Ion Ratio Lower Upper  
128 100  
129 11.5 9.1 13.7  
127 13.3 10.7 16.1

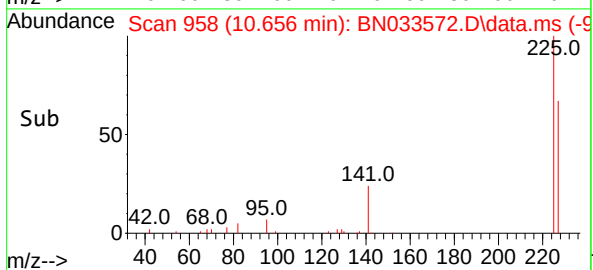
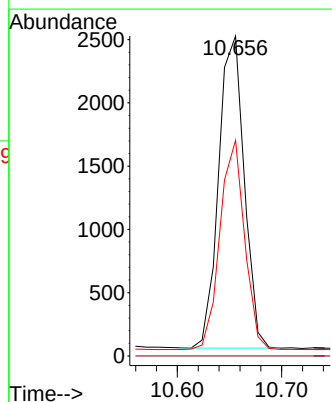
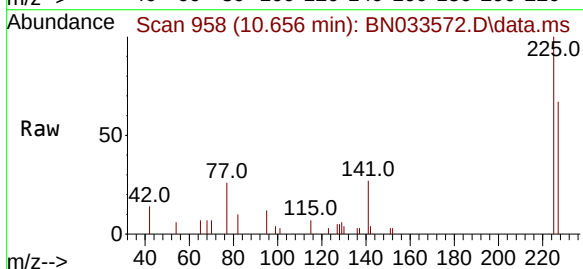
Manual Integrations  
APPROVED

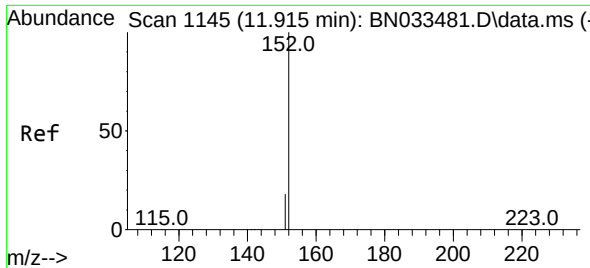
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#10  
Hexachlorobutadiene  
Concen: 0.392 ng  
RT: 10.656 min Scan# 958  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

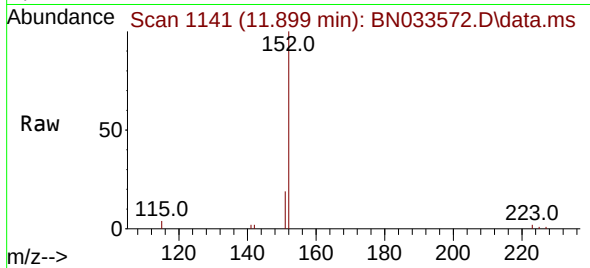
Tgt Ion:225 Resp: 4201  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.5 51.2 76.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.364 ng m  
RT: 11.899 min Scan# 1141  
Delta R.T. -0.004 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

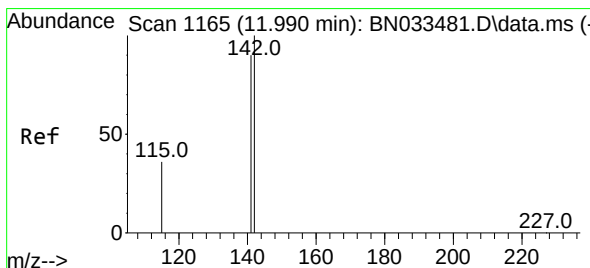
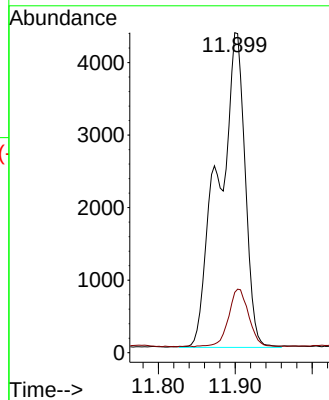
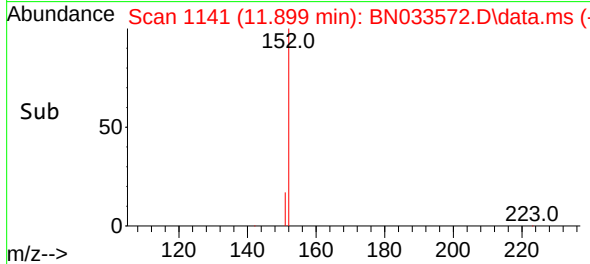
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:152 Resp: 1048  
Ion Ratio Lower Upper  
152 100  
151 13.8 16.6 25.0

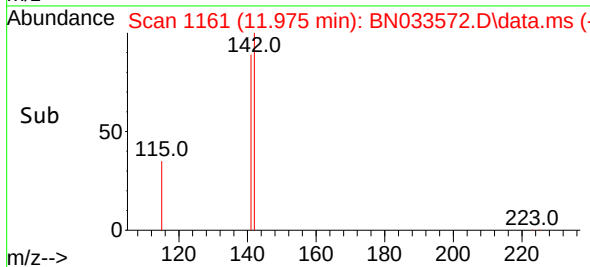
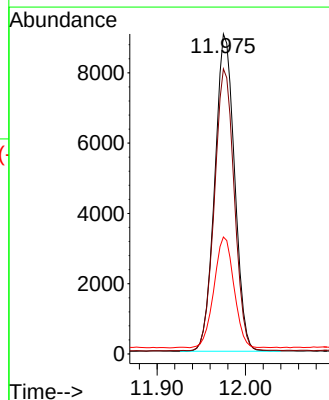
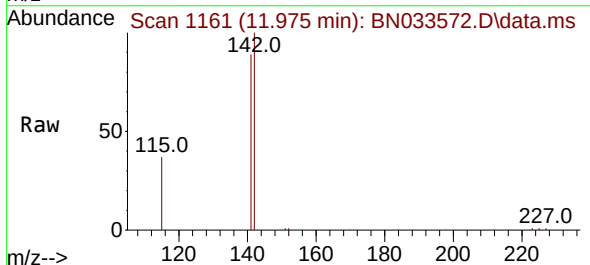
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

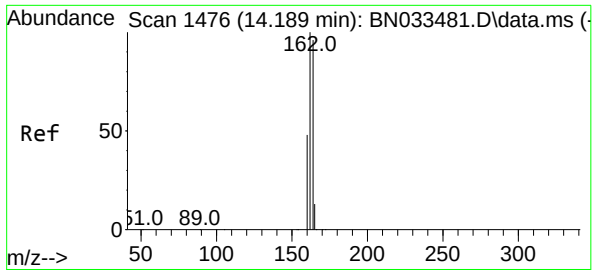


#12  
2-Methylnaphthalene  
Concen: 0.414 ng  
RT: 11.975 min Scan# 1161  
Delta R.T. -0.004 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Tgt Ion:142 Resp: 14074  
Ion Ratio Lower Upper  
142 100  
141 89.1 71.7 107.5  
115 36.6 29.4 44.2

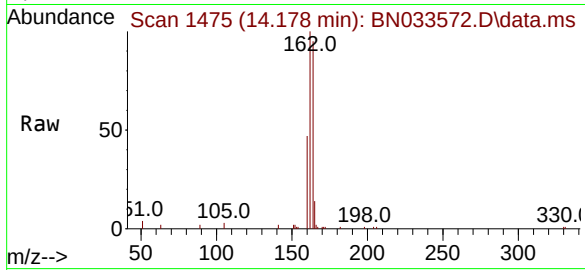






#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.178 min Scan# 1475  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

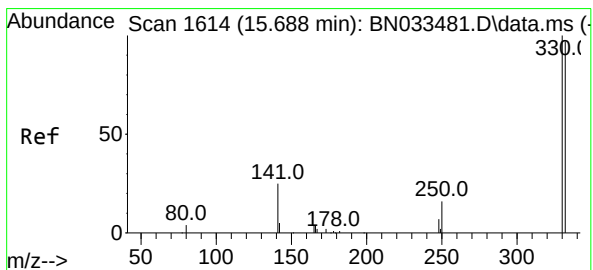
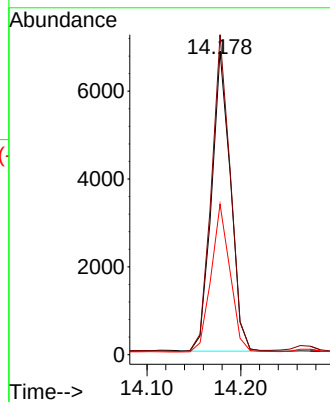
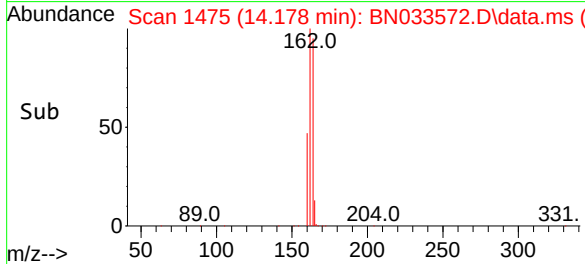
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



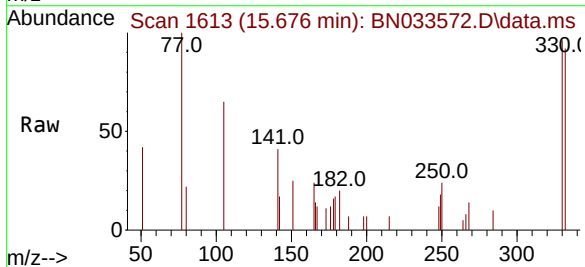
Tgt Ion:164 Resp: 955  
Ion Ratio Lower Upper  
164 100  
162 105.4 83.5 125.3  
160 49.6 40.2 60.4

Manual Integrations  
APPROVED

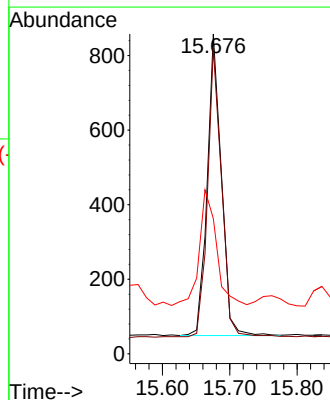
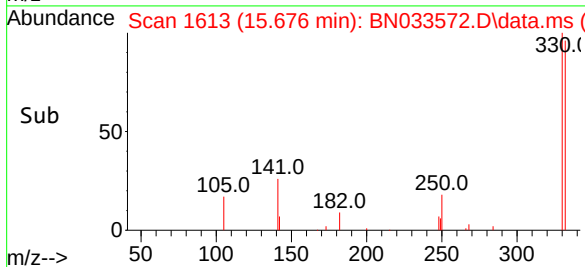
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

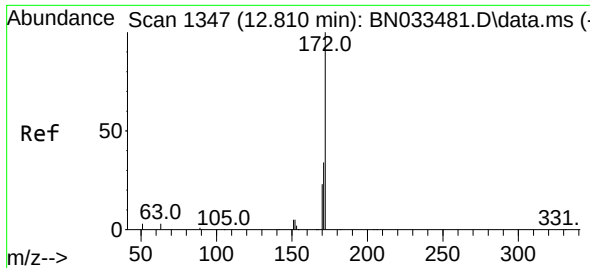


#14  
2,4,6-Tribromophenol  
Concen: 0.231 ng  
RT: 15.676 min Scan# 1613  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30



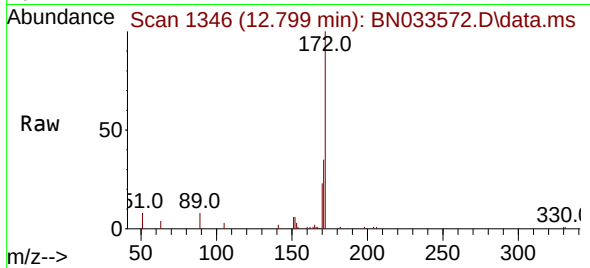
Tgt Ion:330 Resp: 1188  
Ion Ratio Lower Upper  
330 100  
332 93.9 77.5 116.3  
141 46.0 33.9 50.9





#15  
2-Fluorobiphenyl  
Concen: 0.233 ng  
RT: 12.799 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

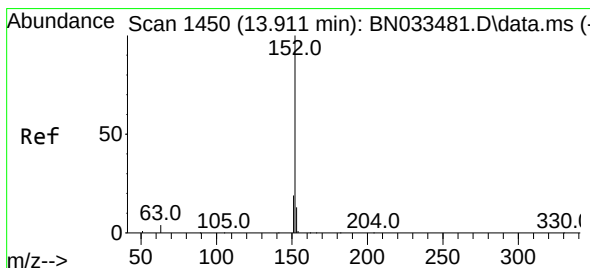
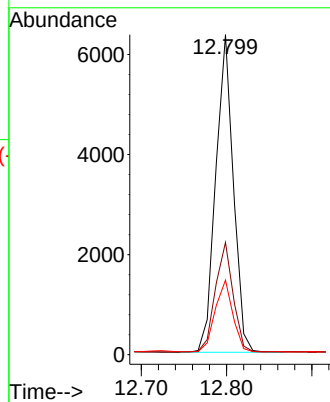
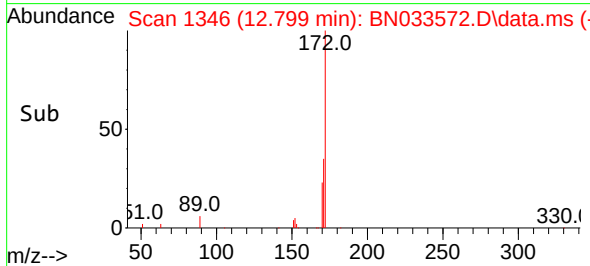
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:172 Resp: 910  
Ion Ratio Lower Upper  
172 100  
171 35.1 27.7 41.5  
170 23.3 18.3 27.5

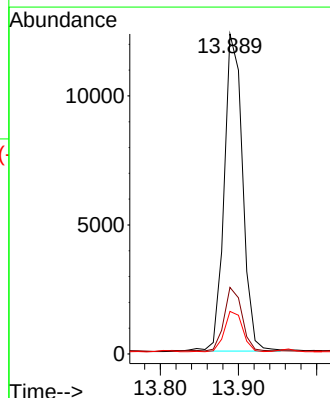
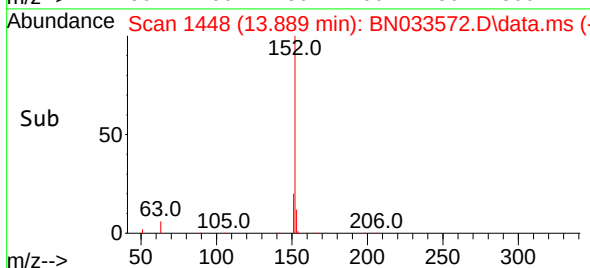
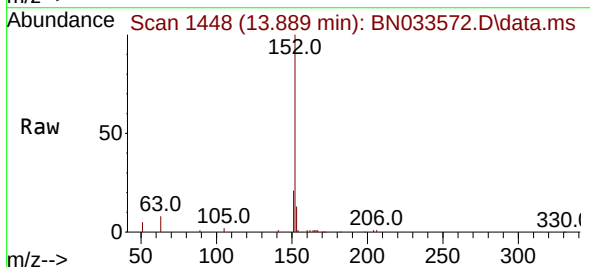
Manual Integrations  
APPROVED

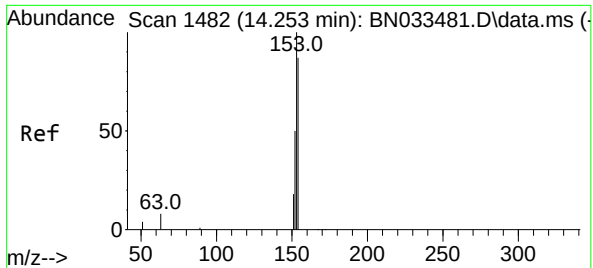
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#16  
Acenaphthylene  
Concen: 0.479 ng  
RT: 13.889 min Scan# 1448  
Delta R.T. -0.011 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

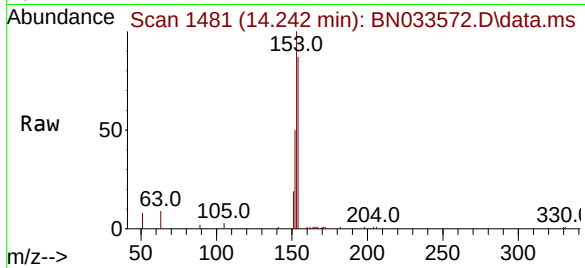
Tgt Ion:152 Resp: 20098  
Ion Ratio Lower Upper  
152 100  
151 19.1 15.7 23.5  
153 12.6 10.3 15.5





#17  
Acenaphthene  
Concen: 0.408 ng  
RT: 14.242 min Scan# 1481  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

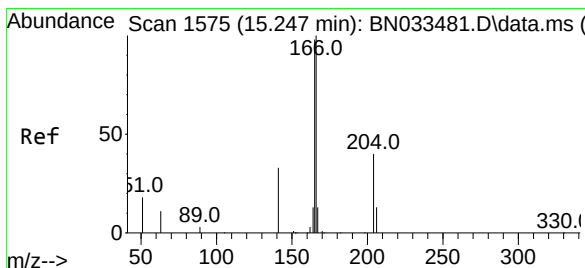
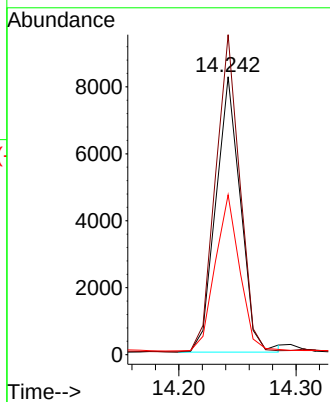
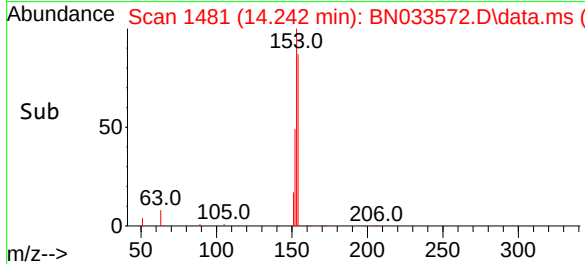
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:154 Resp: 12044  
Ion Ratio Lower Upper  
154 100  
153 112.8 89.0 133.6  
152 56.5 45.2 67.8

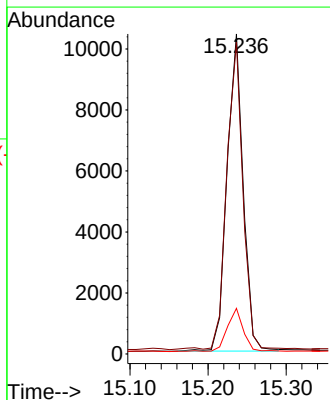
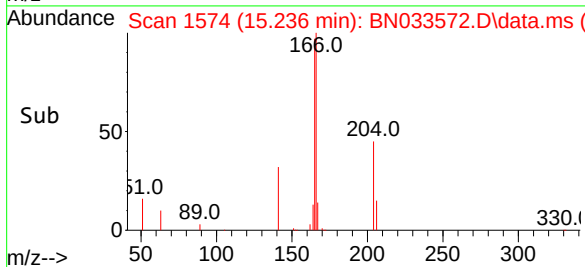
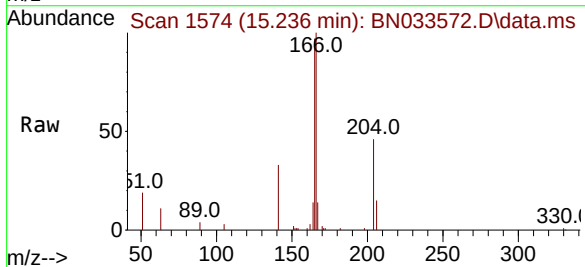
Manual Integrations  
APPROVED

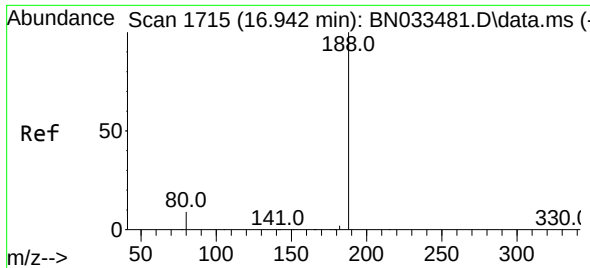
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#18  
Fluorene  
Concen: 0.402 ng  
RT: 15.236 min Scan# 1574  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Tgt Ion:166 Resp: 14948  
Ion Ratio Lower Upper  
166 100  
165 96.0 78.2 117.4  
167 13.4 10.6 16.0





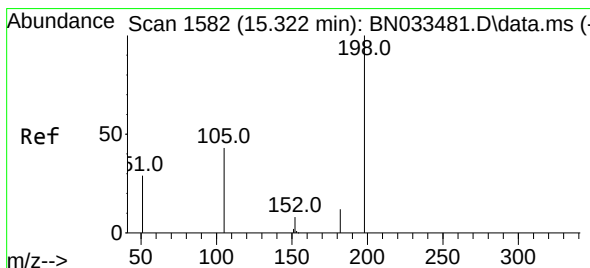
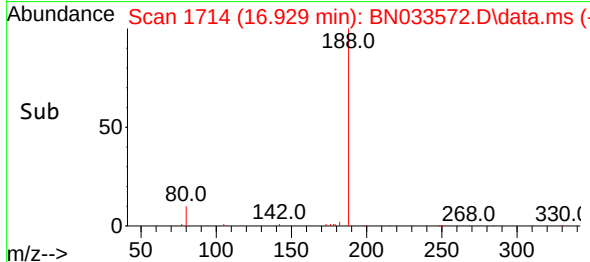
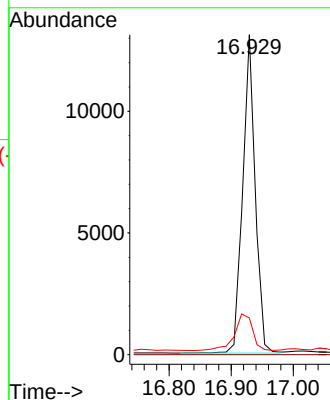
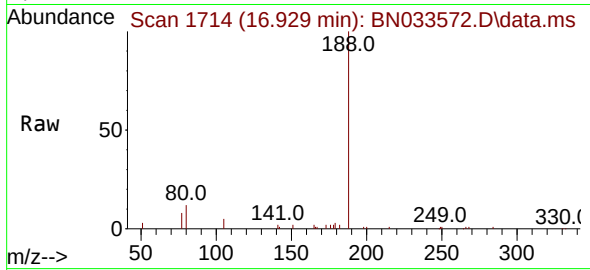
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.929 min Scan# 1715  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD

Tgt Ion:188 Resp: 18339  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.5 7.8 11.8

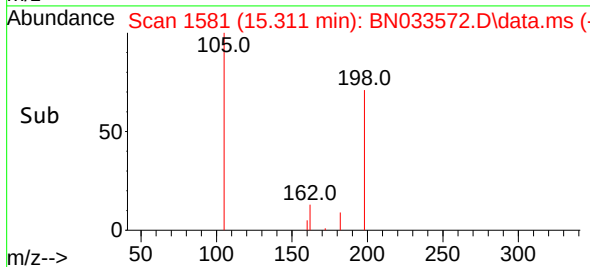
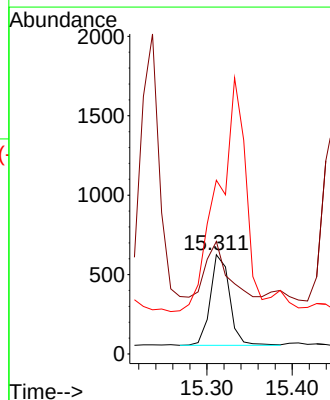
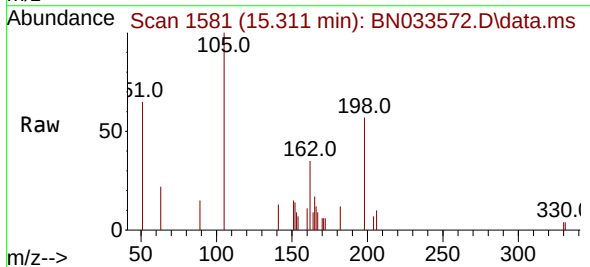
Manual Integrations  
APPROVED

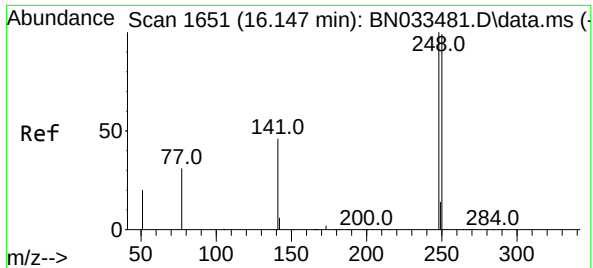
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.314 ng  
RT: 15.311 min Scan# 1581  
Delta R.T. -0.011 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

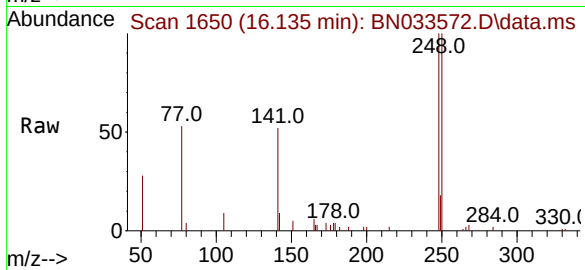
Tgt Ion:198 Resp: 898  
Ion Ratio Lower Upper  
198 100  
51 113.4 65.1 97.7#  
105 175.0 44.8 67.2#





#21  
4-Bromophenyl-phenylether  
Concen: 0.399 ng  
RT: 16.135 min Scan# 1650  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

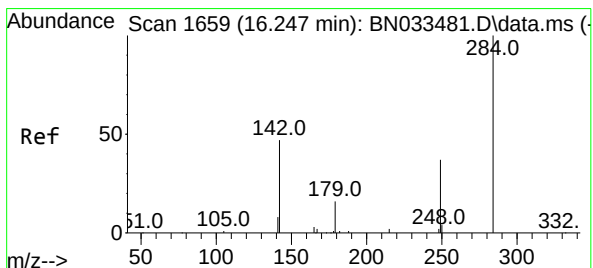
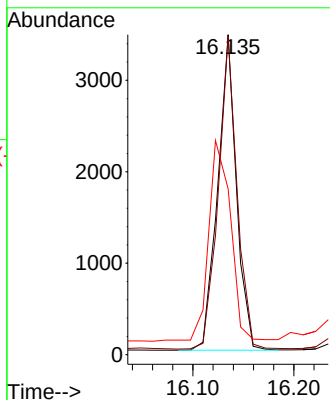
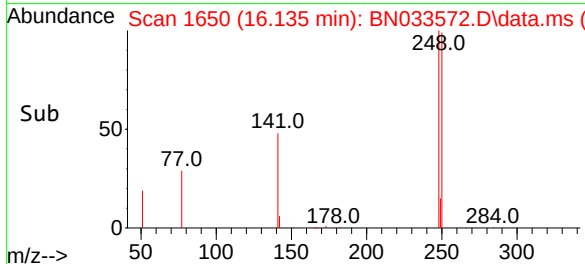
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:248 Resp: 4449  
Ion Ratio Lower Upper  
248 100  
250 99.6 79.2 118.8  
141 51.8 37.9 56.9

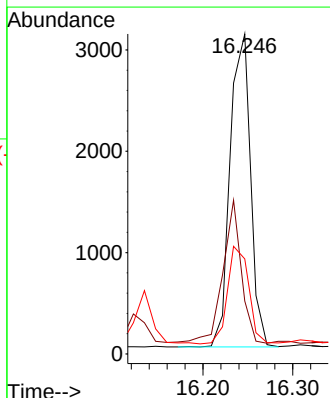
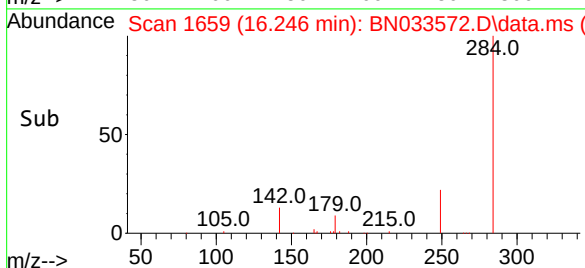
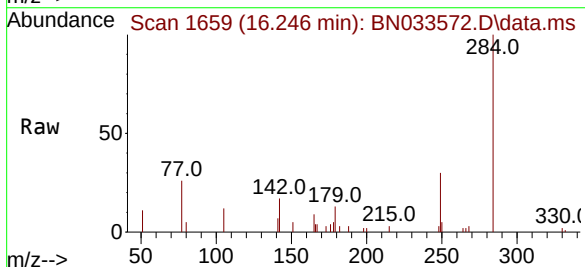
Manual Integrations  
APPROVED

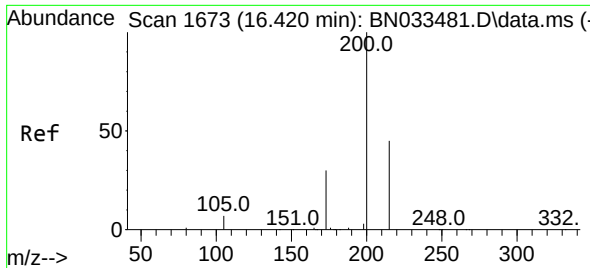
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#22  
Hexachlorobenzene  
Concen: 0.396 ng  
RT: 16.246 min Scan# 1659  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

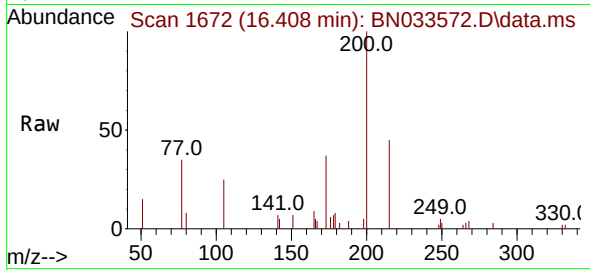
Tgt Ion:284 Resp: 4872  
Ion Ratio Lower Upper  
284 100  
142 41.2 31.8 47.6  
249 32.2 26.0 39.0





#23  
Atrazine  
Concen: 0.417 ng  
RT: 16.408 min Scan# 1672  
Delta R.T. -0.013 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

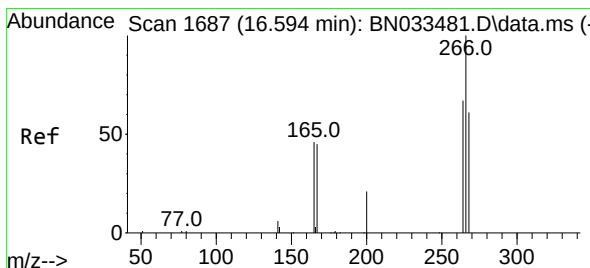
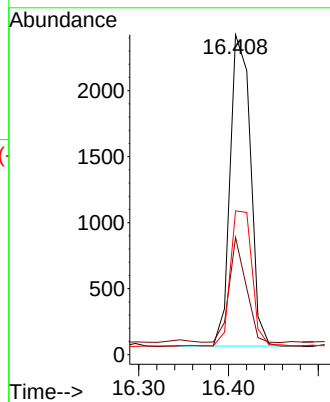
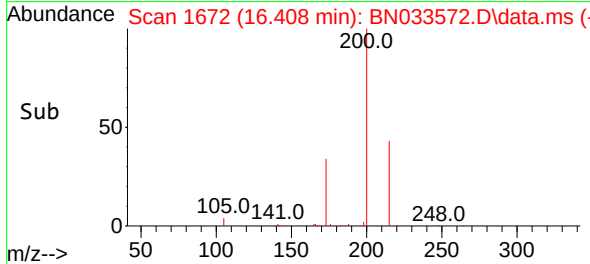
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:200 Resp: 3710  
Ion Ratio Lower Upper  
200 100  
173 36.6 25.3 37.9  
215 44.9 36.6 54.8

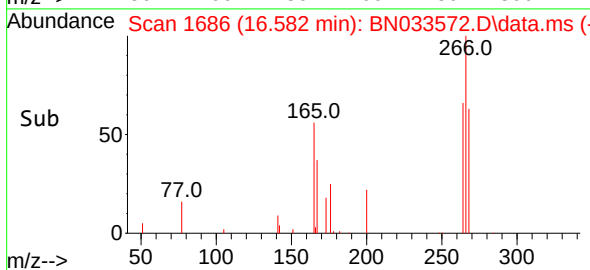
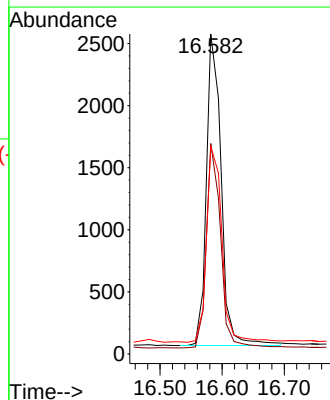
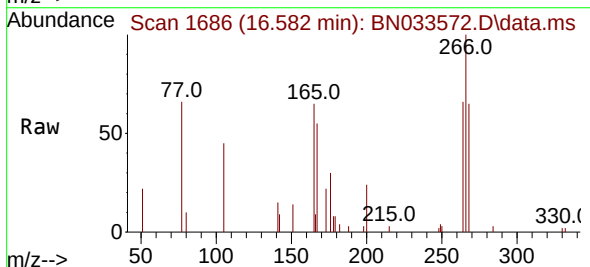
Manual Integrations  
APPROVED

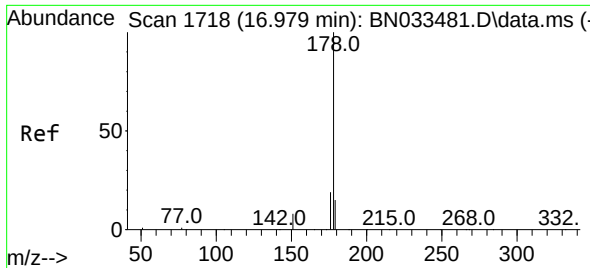
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#24  
Pentachlorophenol  
Concen: 0.779 ng  
RT: 16.582 min Scan# 1686  
Delta R.T. -0.013 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

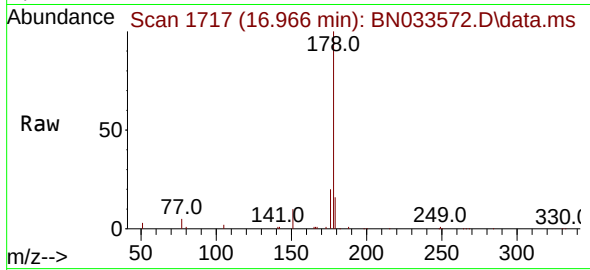
Tgt Ion:266 Resp: 4153  
Ion Ratio Lower Upper  
266 100  
264 63.3 51.9 77.9  
268 64.6 51.0 76.4





#25  
Phenanthrene  
Concen: 0.642 ng  
RT: 16.966 min Scan# 1718  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

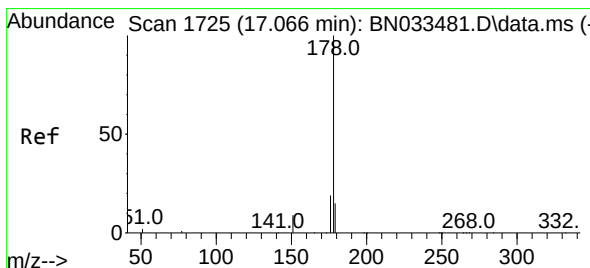
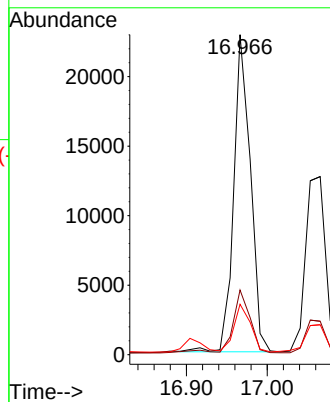
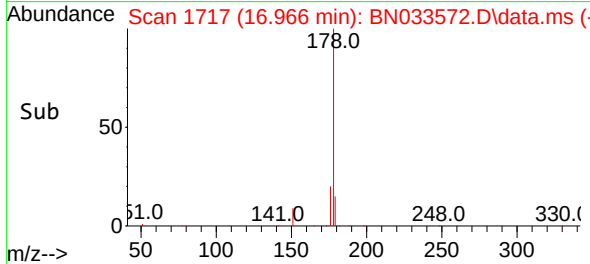
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:178 Resp: 3276  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.3 22.9  
179 14.9 12.3 18.5

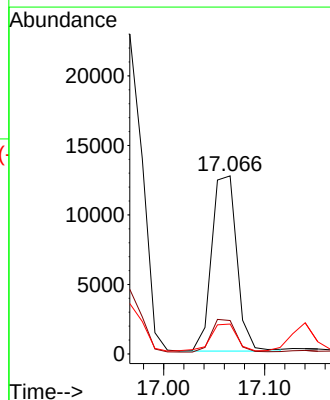
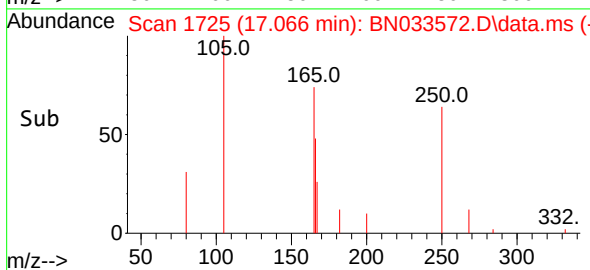
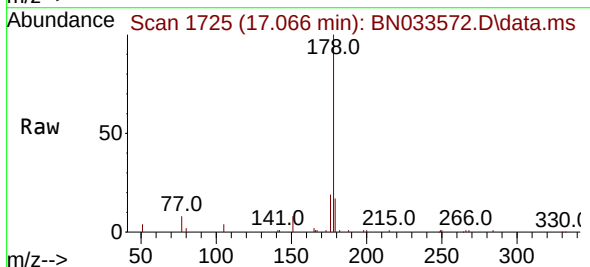
Manual Integrations  
**APPROVED**

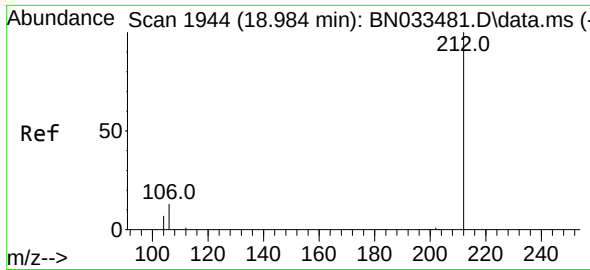
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#26  
Anthracene  
Concen: 0.484 ng  
RT: 17.066 min Scan# 1725  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

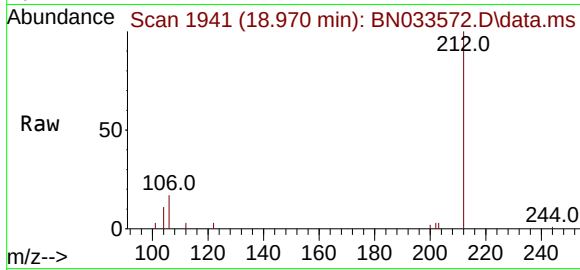
Tgt Ion:178 Resp: 21844  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.0 22.6  
179 15.7 12.4 18.6





#27  
Fluoranthene-d10  
Concen: 0.195 ng  
RT: 18.970 min Scan# 1941  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

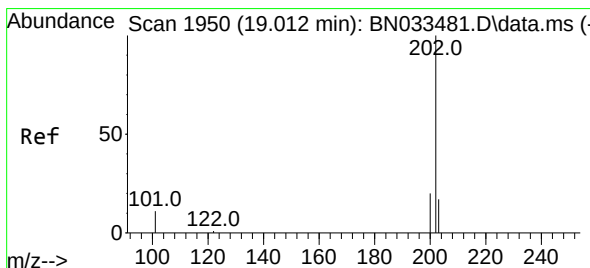
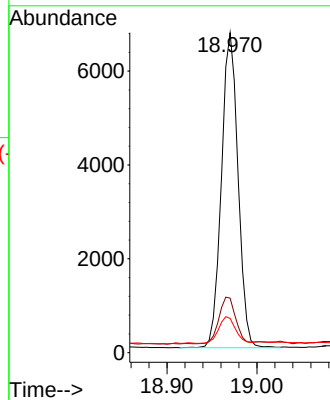
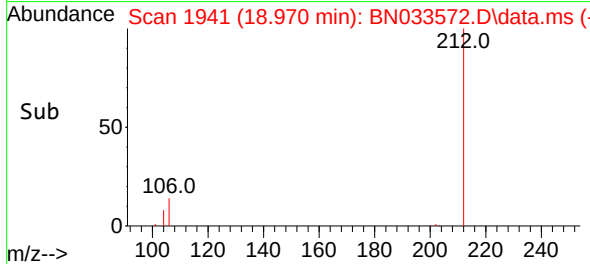
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:212 Resp: 8580  
Ion Ratio Lower Upper  
212 100  
106 14.9 12.3 18.5  
104 8.6 7.0 10.4

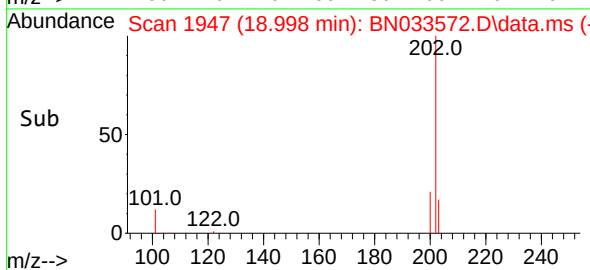
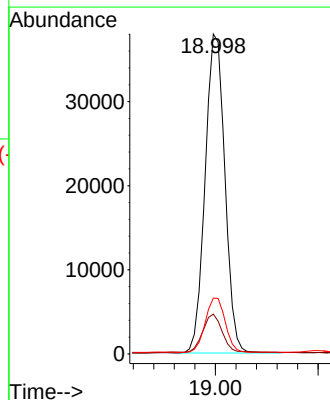
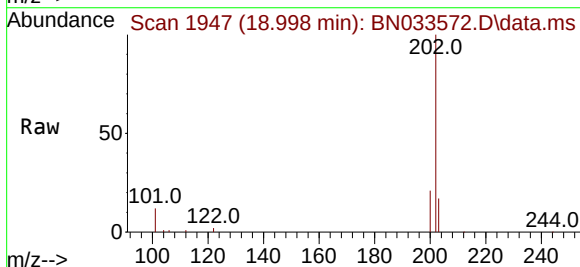
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024

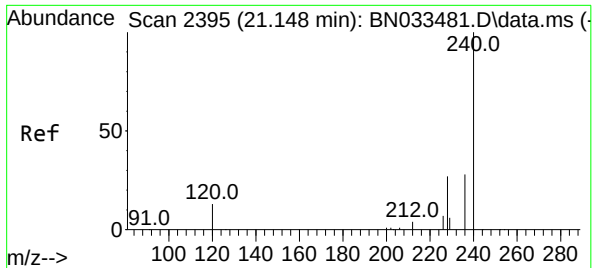


#28  
Fluoranthene  
Concen: 0.897 ng  
RT: 18.998 min Scan# 1947  
Delta R.T. -0.005 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Tgt Ion:202 Resp: 50573  
Ion Ratio Lower Upper  
202 100  
101 12.1 9.5 14.3  
203 17.2 13.8 20.6

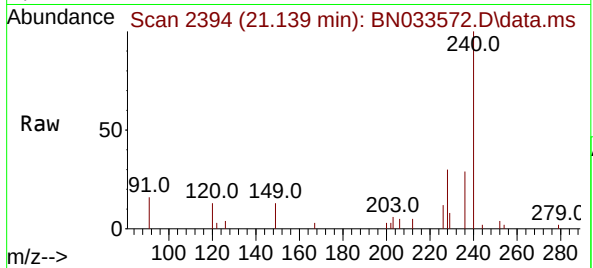






#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.139 min Scan# 21139  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

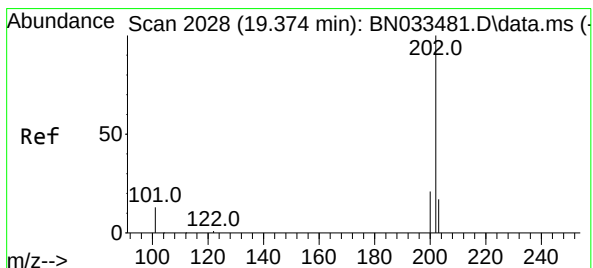
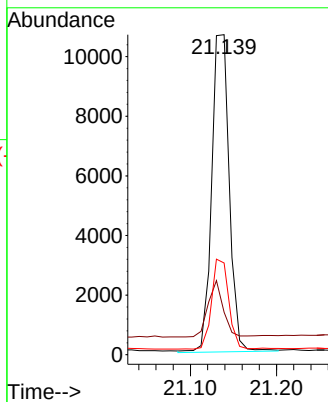
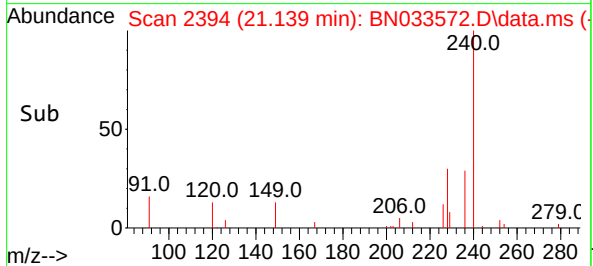
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:240 Resp: 15128  
Ion Ratio Lower Upper  
240 100  
120 13.3 12.4 18.6  
236 28.6 23.0 34.6

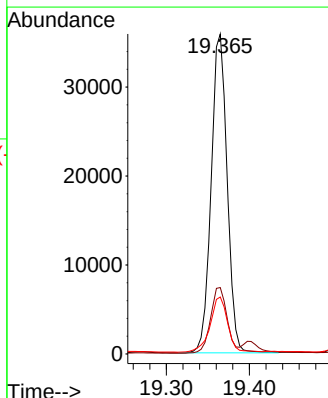
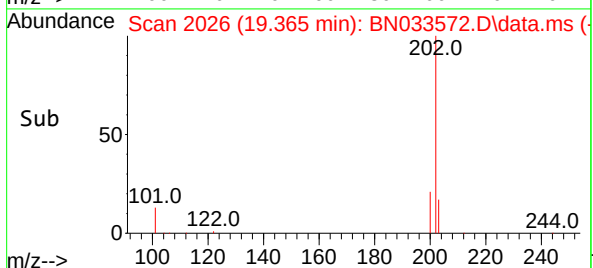
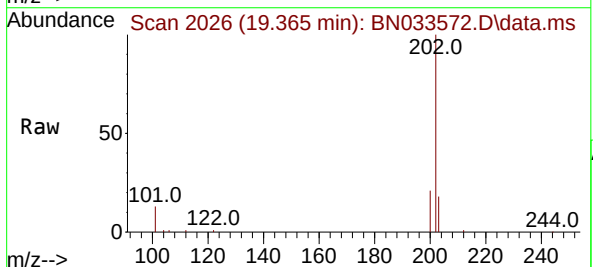
Manual Integrations  
APPROVED

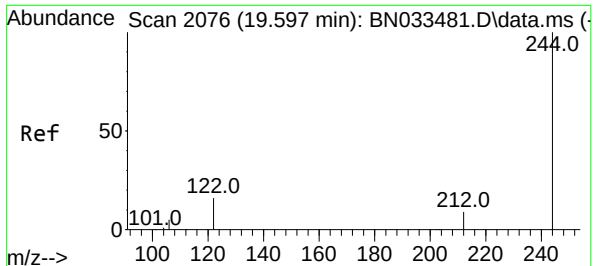
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#30  
Pyrene  
Concen: 0.710 ng  
RT: 19.365 min Scan# 2026  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

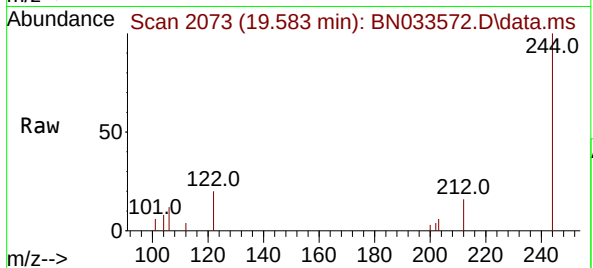
Tgt Ion:202 Resp: 47906  
Ion Ratio Lower Upper  
202 100  
200 21.3 16.6 24.8  
203 19.0 14.2 21.4





#31  
Terphenyl-d14  
Concen: 0.171 ng  
RT: 19.583 min Scan# 2076  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

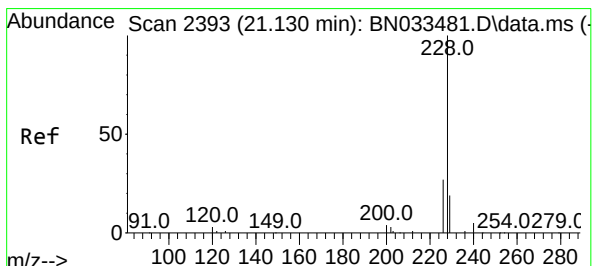
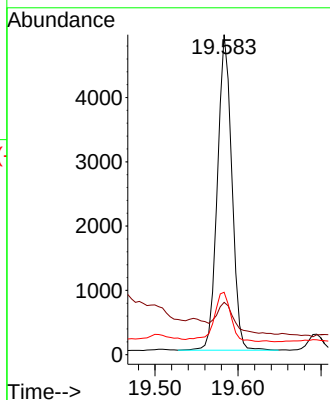
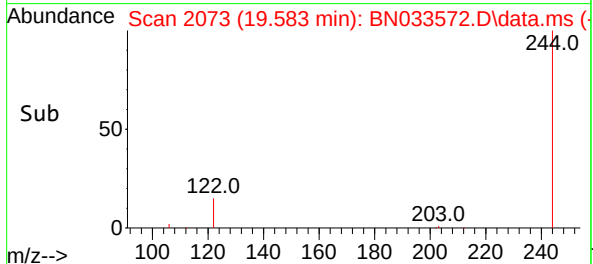
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:244 Resp: 586  
Ion Ratio Lower Upper  
244 100  
212 16.3 7.8 11.6  
122 19.5 13.3 19.9

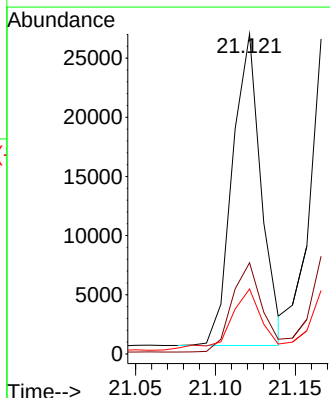
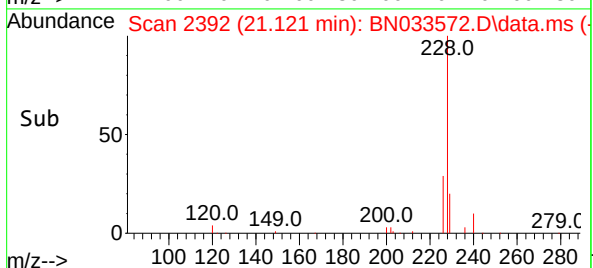
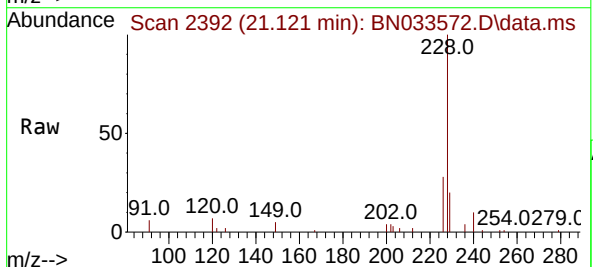
Manual Integrations  
APPROVED

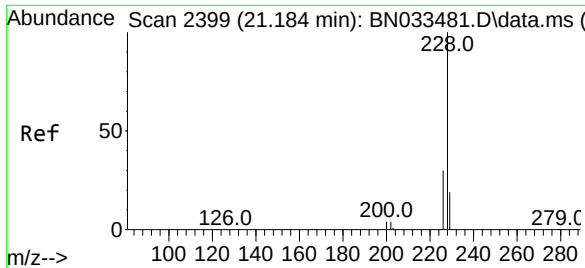
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#32  
Benzo(a)anthracene  
Concen: 0.601 ng  
RT: 21.121 min Scan# 2392  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

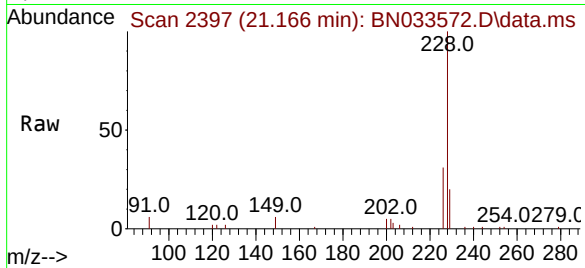
Tgt Ion:228 Resp: 32894  
Ion Ratio Lower Upper  
228 100  
226 28.5 21.8 32.6  
229 20.3 15.8 23.6





#33  
Chrysene  
Concen: 0.701 ng  
RT: 21.166 min Scan# 2116  
Delta R.T. -0.009 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

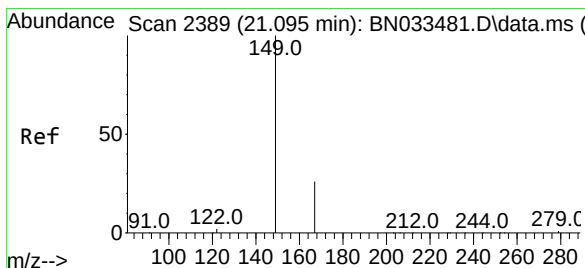
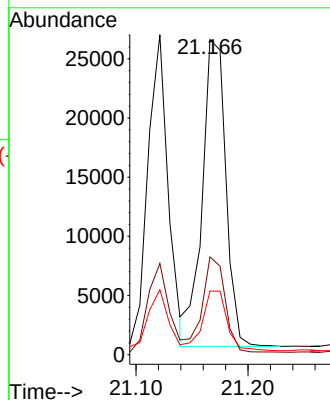
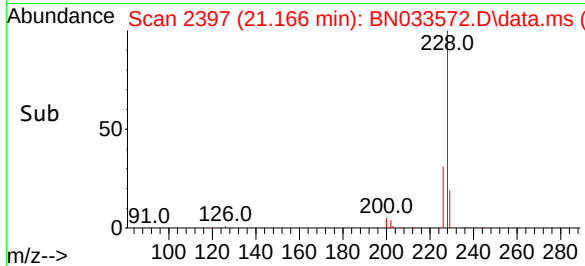
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:228 Resp: 38130  
Ion Ratio Lower Upper  
228 100  
226 31.1 23.8 35.8  
229 20.2 15.6 23.4

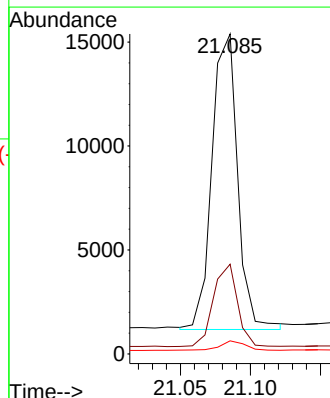
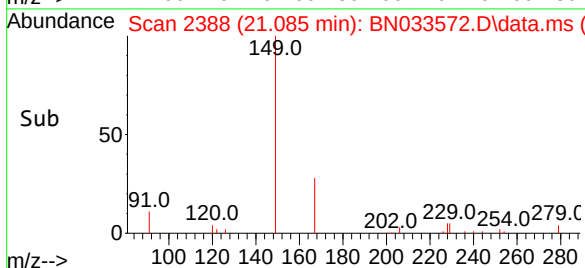
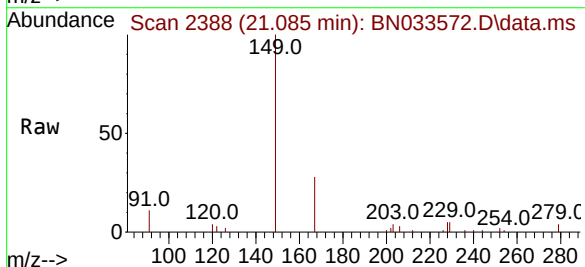
Manual Integrations  
**APPROVED**

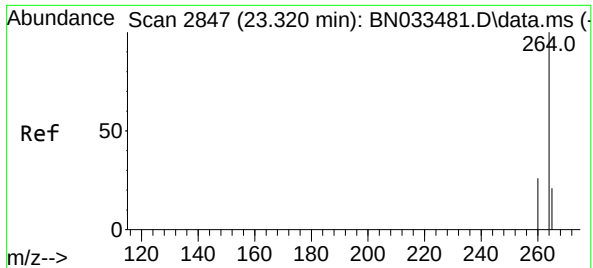
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.525 ng m  
RT: 21.085 min Scan# 2388  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

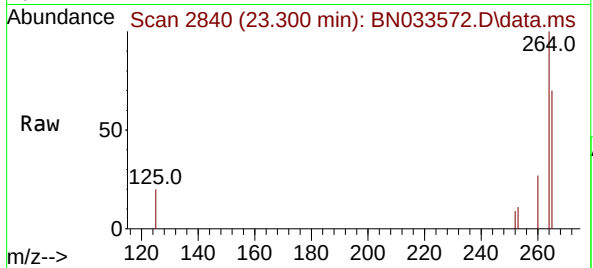
Tgt Ion:149 Resp: 18178  
Ion Ratio Lower Upper  
149 100  
167 29.1 21.5 32.3  
279 10.0 2.2 3.2#





#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.300 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

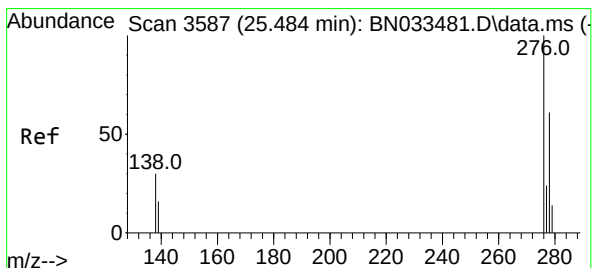
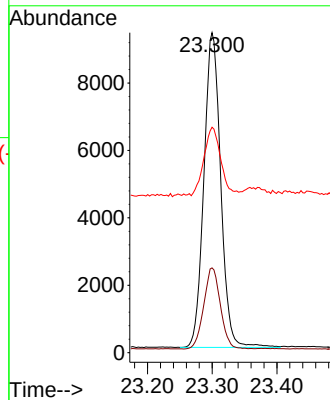
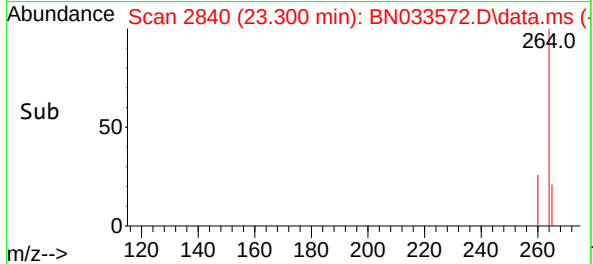
Instrument :  
BNA\_N  
ClientSampleId :  
S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:264 Resp: 16860  
Ion Ratio Lower Upper  
264 100  
260 26.5 20.8 31.2  
265 70.5 52.2 78.2

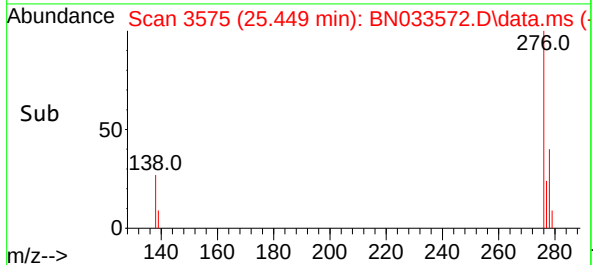
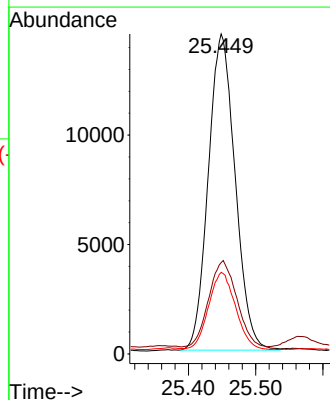
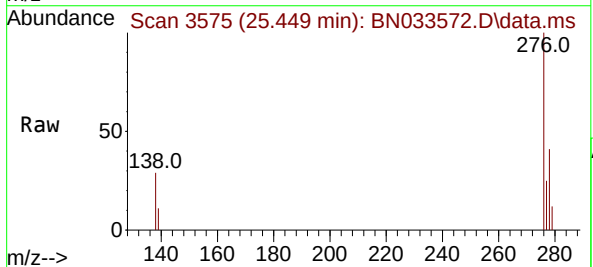
Manual Integrations  
APPROVED

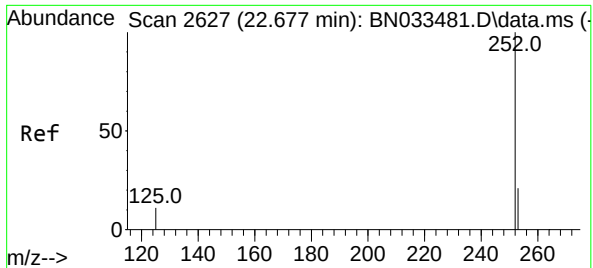
Reviewed By :Yogesh Patel 08/23/2024  
Supervised By :mohammad ahmed 08/24/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.572 ng  
RT: 25.449 min Scan# 3575  
Delta R.T. -0.000 min  
Lab File: BN033572.D  
Acq: 23 Aug 2024 03:30

Tgt Ion:276 Resp: 40063  
Ion Ratio Lower Upper  
276 100  
138 28.3 24.4 36.6  
277 24.4 19.8 29.6





#37

Benzo(b)fluoranthene

Concen: 0.732 ng

RT: 22.657 min Scan# 2620

Delta R.T. -0.003 min

Lab File: BN033572.D

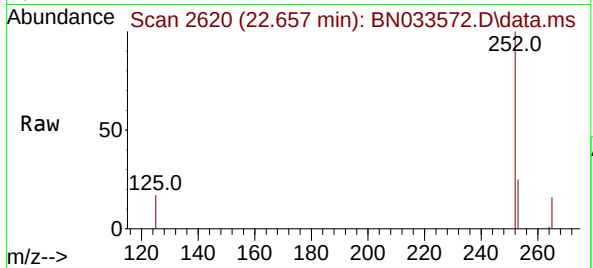
Acq: 23 Aug 2024 03:30

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924MSD



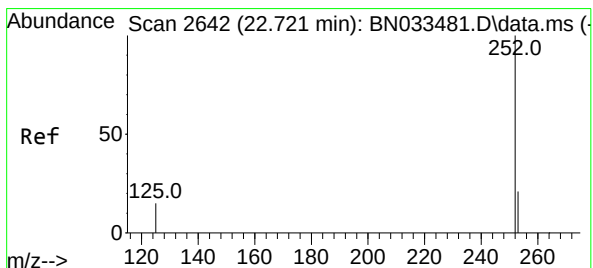
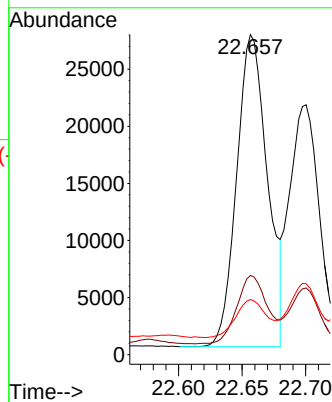
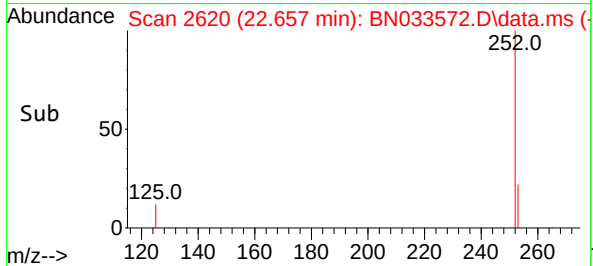
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 46095     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 24.8  | 19.8 29.8 |
| 125         | 17.2  | 13.9 20.9 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#38

Benzo(k)fluoranthene

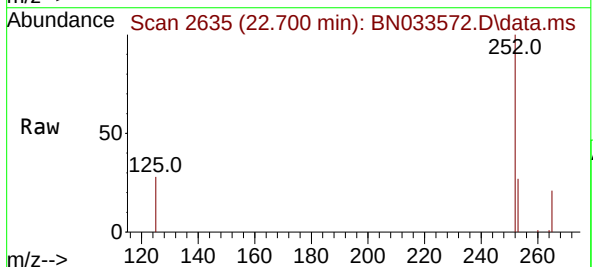
Concen: 0.555 ng m

RT: 22.700 min Scan# 2635

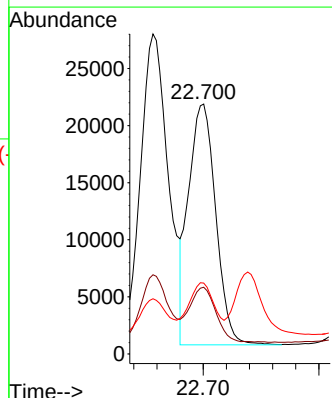
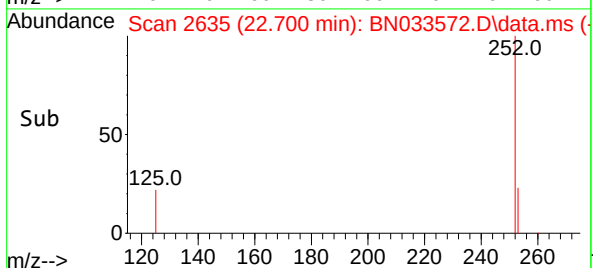
Delta R.T. -0.003 min

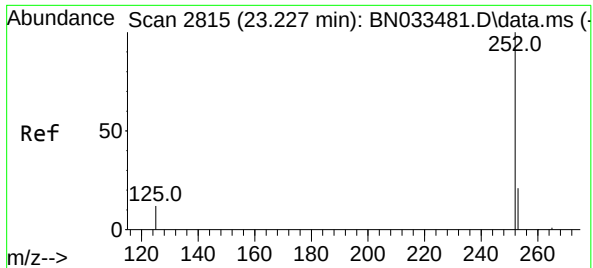
Lab File: BN033572.D

Acq: 23 Aug 2024 03:30



|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 34375     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 26.7  | 19.8 29.8 |
| 125         | 28.4  | 15.8 23.8 |





#39

Benzo(a)pyrene

Concen: 0.683 ng

RT: 23.206 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN033572.D

Acq: 23 Aug 2024 03:30

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924MSD

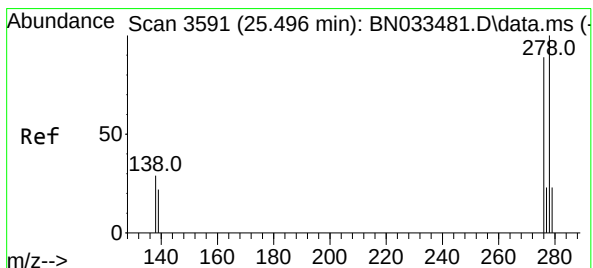
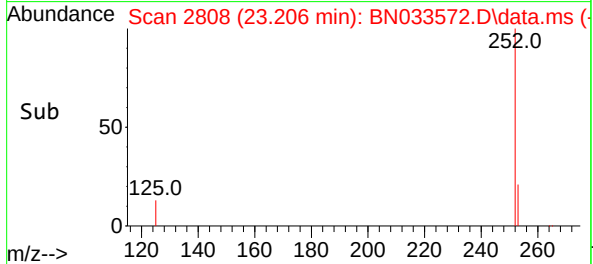
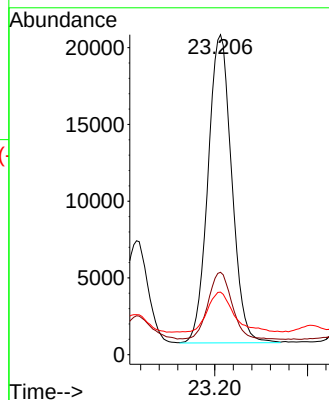
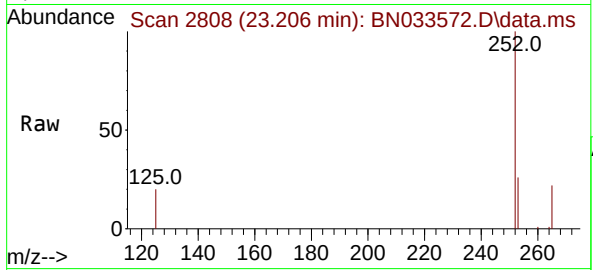
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 3558 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 25.8  | 21.5  | 32.3 |
| 125       | 19.6  | 17.0  | 25.4 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



#40

Dibenzo(a,h)anthracene

Concen: 0.442 ng

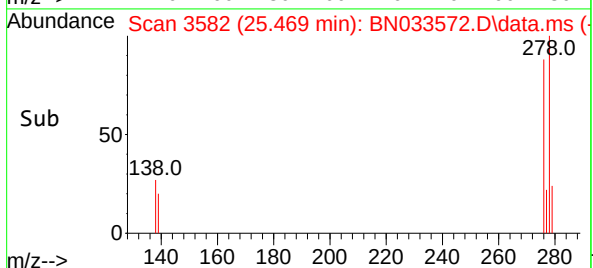
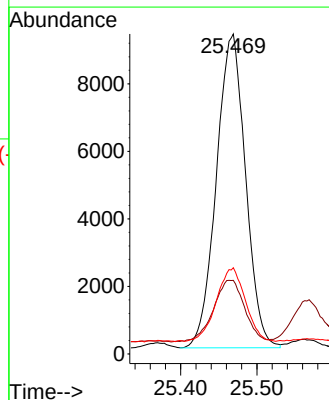
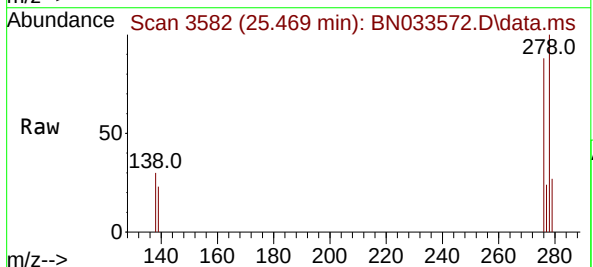
RT: 25.469 min Scan# 3582

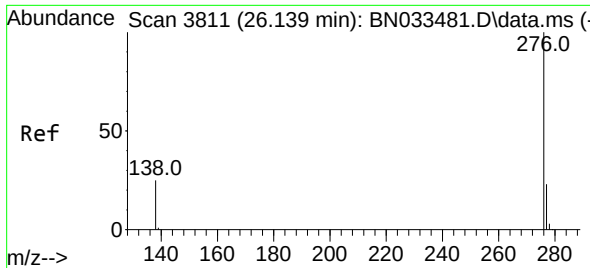
Delta R.T. -0.000 min

Lab File: BN033572.D

Acq: 23 Aug 2024 03:30

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 24745 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 23.0  | 19.1  | 28.7  |
| 279       | 26.9  | 21.0  | 31.4  |





#41

Benzo(g,h,i)perylene

Concen: 0.572 ng

RT: 26.104 min Scan# 31

Delta R.T. -0.000 min

Lab File: BN033572.D

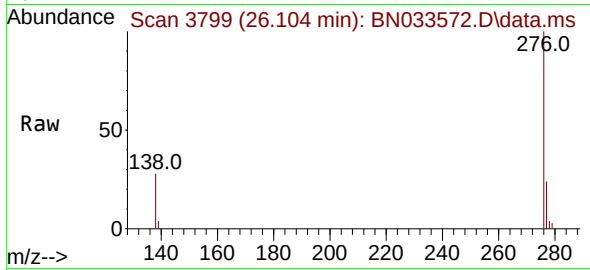
Acq: 23 Aug 2024 03:30

Instrument :

BNA\_N

ClientSampleId :

S-928-K1-SO-0.5-1-081924MSD



Tgt Ion:276 Resp: 3424

Ion Ratio Lower Upper

276 100

277 24.3 19.7 29.5

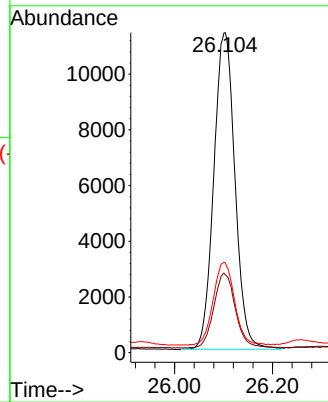
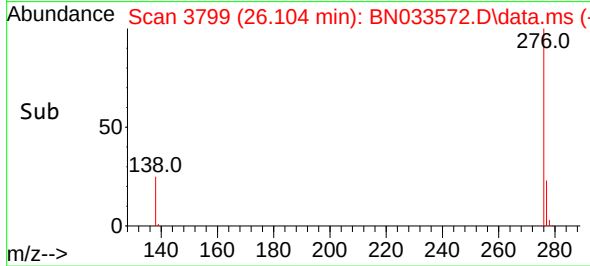
138 28.0 21.8 32.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/23/2024

Supervised By :mohammad ahmed 08/24/2024



## Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN081924 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID  | File ID    | Parameter            | Review By | Review On            | Supervised By | Supervised On        | Reason                      |
|------------|------------|----------------------|-----------|----------------------|---------------|----------------------|-----------------------------|
| SSTDICC0.2 | BN033480.D | Benzo(k)fluoranthene | yogesh    | 8/21/2024 1:29:07 AM | mohammad      | 8/22/2024 7:51:24 AM | Peak Integrated by Software |



## Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN082224 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID  | File ID    | Parameter                  | Review By | Review On            | Supervised By | Supervised On         | Reason                      |
|------------|------------|----------------------------|-----------|----------------------|---------------|-----------------------|-----------------------------|
| SSTDCCC0.4 | BN033544.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:43:59 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN033561.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:09 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN033563.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:11 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| PB162880BS | BN033565.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:12 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-14   | BN033566.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:13 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-14   | BN033566.D | Phenanthrene               | yogesh    | 8/23/2024 6:45:13 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-03   | BN033567.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:15 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-03   | BN033567.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:15 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-03   | BN033567.D | Phenanthrene               | yogesh    | 8/23/2024 6:45:15 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-06   | BN033568.D | Benzo(a)pyrene             | yogesh    | 8/23/2024 6:45:17 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-06   | BN033568.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:17 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-09   | BN033569.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:18 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-09   | BN033569.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:18 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN082224 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID   | File ID    | Parameter                  | Review By | Review On            | Supervised By | Supervised On         | Reason                      |
|-------------|------------|----------------------------|-----------|----------------------|---------------|-----------------------|-----------------------------|
| P3671-09    | BN033569.D | Phenanthrene               | yogesh    | 8/23/2024 6:45:18 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10    | BN033570.D | Benzo(a)anthracene         | yogesh    | 8/23/2024 6:45:20 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10    | BN033570.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:20 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10    | BN033570.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:20 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10    | BN033570.D | Fluorene                   | yogesh    | 8/23/2024 6:45:20 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10    | BN033570.D | Phenanthrene               | yogesh    | 8/23/2024 6:45:20 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10MS  | BN033571.D | 2-Methylnaphthalene-d10    | yogesh    | 8/23/2024 6:45:22 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10MS  | BN033571.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:22 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10MS  | BN033571.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:22 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10MSD | BN033572.D | 2-Methylnaphthalene-d10    | yogesh    | 8/23/2024 6:45:23 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10MSD | BN033572.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:23 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-10MSD | BN033572.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:23 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-13    | BN033573.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:25 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN082224 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID  | File ID    | Parameter                  | Review By | Review On            | Supervised By | Supervised On         | Reason                      |
|------------|------------|----------------------------|-----------|----------------------|---------------|-----------------------|-----------------------------|
| P3671-13   | BN033573.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:25 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-07   | BN033574.D | Benzo(a)pyrene             | yogesh    | 8/23/2024 6:45:26 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-07   | BN033574.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:26 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-07   | BN033574.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:26 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-07   | BN033574.D | Chrysene                   | yogesh    | 8/23/2024 6:45:26 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-12   | BN033575.D | Benzo(a)pyrene             | yogesh    | 8/23/2024 6:45:28 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-12   | BN033575.D | Benzo(k)fluoranthene       | yogesh    | 8/23/2024 6:45:28 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| P3671-12   | BN033575.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/23/2024 6:45:28 AM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN033580.D | Bis(2-ethylhexyl)phthalate | Jagrut    | 8/23/2024 1:55:25 PM | mohammad      | 8/24/2024 11:39:19 PM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN082324 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID  | File ID    | Parameter                  | Review By | Review On             | Supervised By | Supervised On        | Reason                      |
|------------|------------|----------------------------|-----------|-----------------------|---------------|----------------------|-----------------------------|
| SSTDCCC0.4 | BN033582.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/24/2024 5:24:14 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-05   | BN033591.D | Benzo(a)pyrene             | yogesh    | 8/24/2024 5:24:56 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-05   | BN033591.D | Benzo(k)fluoranthene       | yogesh    | 8/24/2024 5:24:56 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-05   | BN033591.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/24/2024 5:24:56 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-04   | BN033592.D | Benzo(k)fluoranthene       | yogesh    | 8/24/2024 5:25:00 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-04   | BN033592.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/24/2024 5:25:00 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-04   | BN033592.D | Chrysene-d12               | yogesh    | 8/24/2024 5:25:00 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-06DL | BN033595.D | Benzo(k)fluoranthene       | yogesh    | 8/24/2024 5:25:12 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-06DL | BN033595.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/24/2024 5:25:12 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN033597.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/24/2024 5:25:20 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN033599.D | Bis(2-ethylhexyl)phthalate | yogesh    | 8/24/2024 5:25:23 AM  | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-12DL | BN033610.D | Benzo(k)fluoranthene       | Jagrut    | 8/26/2024 10:44:51 AM | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-12DL | BN033610.D | Bis(2-ethylhexyl)phthalate | Jagrut    | 8/26/2024 10:44:51 AM | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |

## Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN082324 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID  | File ID    | Parameter                  | Review By | Review On                | Supervised By | Supervised On        | Reason                      |
|------------|------------|----------------------------|-----------|--------------------------|---------------|----------------------|-----------------------------|
| P3671-07DL | BN033613.D | Benzo(a)pyrene             | Jagrut    | 8/26/2024<br>10:44:59 AM | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-07DL | BN033613.D | Benzo(k)fluoranthene       | Jagrut    | 8/26/2024<br>10:44:59 AM | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| P3671-07DL | BN033613.D | Bis(2-ethylhexyl)phthalate | Jagrut    | 8/26/2024<br>10:44:59 AM | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN033616.D | Bis(2-ethylhexyl)phthalate | Jagrut    | 8/26/2024<br>10:45:06 AM | mohammad      | 8/29/2024 2:21:17 AM | Peak Integrated by Software |

Instrument ID: BNA\_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN081924

|                          |                                                  |                   |                                               |
|--------------------------|--------------------------------------------------|-------------------|-----------------------------------------------|
| Review By                | yogesh                                           | Review On         | 8/21/2024 1:29:22 AM                          |
| Supervise By             | mohammad                                         | Supervise On      | 8/22/2024 7:51:24 AM                          |
| SubDirectory             | BN081924                                         | HP Acquire Method | BNA_N, 8270_SiM HP Processing Method BN081924 |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |                   |                                               |
| Tune/Reschk              | SP6573                                           |                   |                                               |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                   |                                               |
| CCC                      | SP6601                                           |                   |                                               |
| Internal Standard/PEM    | SP6527                                           |                   |                                               |
| ICV/I.BLK                | SP6548                                           |                   |                                               |
| Surrogate Standard       |                                                  |                   |                                               |
| MS/MSD Standard          |                                                  |                   |                                               |
| LCS Standard             |                                                  |                   |                                               |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status   |
|-----|-------------|----------------|-------------------|----------|----------|
| 1   | DFTPP       | BN033476.D     | 19 Aug 2024 09:29 | MA/JU    | Ok       |
| 2   | SSTDCCC0.4  | BN033477.D     | 19 Aug 2024 10:09 | MA/JU    | Not Ok   |
| 3   | DFTPP       | BN033478.D     | 19 Aug 2024 15:37 | MA/JU    | Ok       |
| 4   | SSTDICC0.1  | BN033479.D     | 19 Aug 2024 16:16 | MA/JU    | Ok       |
| 5   | SSTDICC0.2  | BN033480.D     | 19 Aug 2024 16:52 | MA/JU    | Ok,M     |
| 6   | SSTDICCC0.4 | BN033481.D     | 19 Aug 2024 17:28 | MA/JU    | Ok       |
| 7   | SSTDICC0.8  | BN033482.D     | 19 Aug 2024 18:05 | MA/JU    | Ok       |
| 8   | SSTDICC1.6  | BN033483.D     | 19 Aug 2024 18:41 | MA/JU    | Ok       |
| 9   | SSTDICC3.2  | BN033484.D     | 19 Aug 2024 19:17 | MA/JU    | Ok       |
| 10  | SSTDICC5.0  | BN033485.D     | 19 Aug 2024 19:53 | MA/JU    | Ok       |
| 11  | SSTDICV0.4  | BN033486.D     | 20 Aug 2024 01:56 | MA/JU    | Ok       |
| 12  | PB162787BL  | BN033487.D     | 20 Aug 2024 02:49 | MA/JU    | Not Ok   |
| 13  | DFTPP       | BN033488.D     | 20 Aug 2024 04:04 | MA/JU    | Ok       |
| 14  | SSTDCCC0.4  | BN033489.D     | 20 Aug 2024 04:44 | MA/JU    | Ok       |
| 15  | PB162821BL  | BN033490.D     | 20 Aug 2024 05:20 | MA/JU    | Ok       |
| 16  | PB162821BS  | BN033491.D     | 20 Aug 2024 05:56 | MA/JU    | Ok       |
| 17  | PB162821BSD | BN033492.D     | 20 Aug 2024 06:32 | MA/JU    | Ok       |
| 18  | PB162787BS  | BN033493.D     | 20 Aug 2024 07:08 | MA/JU    | Ok       |
| 19  | PB162787BSD | BN033494.D     | 20 Aug 2024 07:44 | MA/JU    | Ok       |
| 20  | P3650-01    | BN033495.D     | 20 Aug 2024 08:21 | MA/JU    | Dilution |
| 21  | P3650-02    | BN033496.D     | 20 Aug 2024 08:59 | MA/JU    | Ok       |

Instrument ID: **BNA\_N**

**Daily Analysis Runlog For Sequence/QCBatch ID # BN081924**

| Review By                | yogesh                                           | Review On         | 8/21/2024 1:29:22 AM                          |
|--------------------------|--------------------------------------------------|-------------------|-----------------------------------------------|
| Supervise By             | mohammad                                         | Supervise On      | 8/22/2024 7:51:24 AM                          |
| SubDirectory             | BN081924                                         | HP Acquire Method | BNA_N, 8270_SiM HP Processing Method BN081924 |
| STD. NAME                | STD REF.#                                        |                   |                                               |
| Tune/Reschk              | SP6573                                           |                   |                                               |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                   |                                               |
| CCC                      | SP6601                                           |                   |                                               |
| Internal Standard/PEM    | SP6527                                           |                   |                                               |
| ICV/I.BLK                | SP6548                                           |                   |                                               |
| Surrogate Standard       |                                                  |                   |                                               |
| MS/MSD Standard          |                                                  |                   |                                               |
| LCS Standard             |                                                  |                   |                                               |

|    |            |            |                   |       |          |
|----|------------|------------|-------------------|-------|----------|
| 22 | P3646-01   | BN033497.D | 20 Aug 2024 09:46 | MA/JU | Ok       |
| 23 | P3650-03   | BN033498.D | 20 Aug 2024 10:22 | MA/JU | Ok       |
| 24 | P3650-04   | BN033499.D | 20 Aug 2024 10:58 | MA/JU | Ok       |
| 25 | P3651-01   | BN033500.D | 20 Aug 2024 11:35 | MA/JU | Ok       |
| 26 | P3657-01   | BN033501.D | 20 Aug 2024 12:11 | MA/JU | Ok,M     |
| 27 | P3580-04RE | BN033502.D | 20 Aug 2024 12:47 | MA/JU | Confirms |
| 28 | P3580-01DL | BN033503.D | 20 Aug 2024 13:23 | MA/JU | Ok,M     |
| 29 | SP6605     | BN033504.D | 20 Aug 2024 13:59 | MA/JU | Ok       |
| 30 | SSTDCCC0.4 | BN033505.D | 20 Aug 2024 14:36 | MA/JU | Ok       |

M : Manual Integration

Instrument ID: BNA\_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN082224

|                          |                                                  |                      |                       |
|--------------------------|--------------------------------------------------|----------------------|-----------------------|
| Review By                | yogesh                                           | Review On            | 8/23/2024 6:45:43 AM  |
| Supervise By             | mohammad                                         | Supervise On         | 8/24/2024 11:39:19 PM |
| SubDirectory             | BN082224                                         | HP Acquire Method    | BNA_N                 |
|                          |                                                  | HP Processing Method | BN081924              |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |                      |                       |
| Tune/Reschk              | SP6573                                           |                      |                       |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                      |                       |
| CCC                      | SP6601                                           |                      |                       |
| Internal Standard/PEM    | SP6527                                           |                      |                       |
| ICV/I.BLK                | SP6548                                           |                      |                       |
| Surrogate Standard       |                                                  |                      |                       |
| MS/MSD Standard          |                                                  |                      |                       |
| LCS Standard             |                                                  |                      |                       |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status   |
|-----|-------------|----------------|-------------------|----------|----------|
| 1   | DFTPP       | BN033543.D     | 22 Aug 2024 09:12 | MA/JU    | Ok       |
| 2   | SSTDCCC0.4  | BN033544.D     | 22 Aug 2024 09:52 | MA/JU    | Ok,M     |
| 3   | PB162844BL  | BN033545.D     | 22 Aug 2024 10:28 | MA/JU    | Ok       |
| 4   | P3623-02RE  | BN033546.D     | 22 Aug 2024 11:04 | MA/JU    | Confirms |
| 5   | P3623-03RE  | BN033547.D     | 22 Aug 2024 11:41 | MA/JU    | Confirms |
| 6   | P3643-10    | BN033548.D     | 22 Aug 2024 12:17 | MA/JU    | Ok,M     |
| 7   | P3663-04    | BN033549.D     | 22 Aug 2024 12:53 | MA/JU    | Ok,M     |
| 8   | P3663-03    | BN033550.D     | 22 Aug 2024 13:29 | MA/JU    | Ok,M     |
| 9   | P3663-05MS  | BN033551.D     | 22 Aug 2024 14:06 | MA/JU    | Ok,M     |
| 10  | P3663-06MSD | BN033552.D     | 22 Aug 2024 14:42 | MA/JU    | Ok,M     |
| 11  | P3660-08    | BN033553.D     | 22 Aug 2024 15:18 | MA/JU    | Ok,M     |
| 12  | P3663-08    | BN033554.D     | 22 Aug 2024 15:54 | MA/JU    | Ok,M     |
| 13  | P3643-13DL  | BN033555.D     | 22 Aug 2024 16:30 | MA/JU    | Ok,M     |
| 14  | P3643-07DL  | BN033556.D     | 22 Aug 2024 17:07 | MA/JU    | Ok,M     |
| 15  | P3663-07    | BN033557.D     | 22 Aug 2024 17:43 | MA/JU    | Dilution |
| 16  | P3663-12    | BN033558.D     | 22 Aug 2024 18:19 | MA/JU    | Dilution |
| 17  | P3660-02    | BN033559.D     | 22 Aug 2024 18:56 | MA/JU    | Dilution |
| 18  | PB162844BS  | BN033560.D     | 22 Aug 2024 19:32 | MA/JU    | Ok,M     |
| 19  | SSTDCCC0.4  | BN033561.D     | 22 Aug 2024 20:08 | MA/JU    | Ok,M     |
| 20  | DFTPP       | BN033562.D     | 22 Aug 2024 21:24 | MA/JU    | Ok       |
| 21  | SSTDCCC0.4  | BN033563.D     | 22 Aug 2024 22:03 | MA/JU    | Ok,M     |



Instrument ID: **BNA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # BN082224**

| Review By                | yogesh                                           | Review On            | 8/23/2024 6:45:43 AM  |
|--------------------------|--------------------------------------------------|----------------------|-----------------------|
| Supervise By             | mohammad                                         | Supervise On         | 8/24/2024 11:39:19 PM |
| SubDirectory             | BN082224                                         | HP Acquire Method    | BNA_N                 |
|                          |                                                  | HP Processing Method | BN081924              |
| STD. NAME                | STD REF.#                                        |                      |                       |
| Tune/Reschk              | SP6573                                           |                      |                       |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                      |                       |
| CCC                      | SP6601                                           |                      |                       |
| Internal Standard/PEM    | SP6527                                           |                      |                       |
| ICV/I.BLK                | SP6548                                           |                      |                       |
| Surrogate Standard       |                                                  |                      |                       |
| MS/MSD Standard          |                                                  |                      |                       |
| LCS Standard             |                                                  |                      |                       |

|    |             |            |                   |       |          |
|----|-------------|------------|-------------------|-------|----------|
| 22 | PB162880BL  | BN033564.D | 22 Aug 2024 22:39 | MA/JU | Ok       |
| 23 | PB162880BS  | BN033565.D | 22 Aug 2024 23:16 | MA/JU | Ok,M     |
| 24 | P3671-14    | BN033566.D | 22 Aug 2024 23:52 | MA/JU | Ok,M     |
| 25 | P3671-03    | BN033567.D | 23 Aug 2024 00:28 | MA/JU | Ok,M     |
| 26 | P3671-06    | BN033568.D | 23 Aug 2024 01:05 | MA/JU | Dilution |
| 27 | P3671-09    | BN033569.D | 23 Aug 2024 01:41 | MA/JU | Ok,M     |
| 28 | P3671-10    | BN033570.D | 23 Aug 2024 02:17 | MA/JU | Ok,M     |
| 29 | P3671-10MS  | BN033571.D | 23 Aug 2024 02:53 | MA/JU | Ok,M     |
| 30 | P3671-10MSD | BN033572.D | 23 Aug 2024 03:30 | MA/JU | Ok,M     |
| 31 | P3671-13    | BN033573.D | 23 Aug 2024 04:06 | MA/JU | Ok,M     |
| 32 | P3671-07    | BN033574.D | 23 Aug 2024 04:42 | MA/JU | Dilution |
| 33 | P3671-12    | BN033575.D | 23 Aug 2024 05:18 | MA/JU | Dilution |
| 34 | P3660-05    | BN033576.D | 23 Aug 2024 05:54 | MA/JU | Dilution |
| 35 | P3660-06MS  | BN033577.D | 23 Aug 2024 06:30 | MA/JU | Ok,M     |
| 36 | P3660-07MSD | BN033578.D | 23 Aug 2024 07:06 | MA/JU | Ok,M     |
| 37 | P3663-02    | BN033579.D | 23 Aug 2024 07:42 | MA/JU | Dilution |
| 38 | SSTDCCC0.4  | BN033580.D | 23 Aug 2024 08:18 | MA/JU | Ok,M     |

M : Manual Integration

Instrument ID: **BNA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # BN082324**

|                          |                                                  |                      |                      |
|--------------------------|--------------------------------------------------|----------------------|----------------------|
| Review By                | yogesh                                           | Review On            | 8/24/2024 5:26:17 AM |
| Supervise By             | mohammad                                         | Supervise On         | 8/29/2024 2:21:17 AM |
| SubDirectory             | BN082324                                         | HP Acquire Method    | BNA_N                |
|                          |                                                  | HP Processing Method | BN081024             |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |                      |                      |
| Tune/Reschk              | SP6573                                           |                      |                      |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                      |                      |
| CCC                      | SP6601                                           |                      |                      |
| Internal Standard/PEM    | SP6527                                           |                      |                      |
| ICV/I.BLK                | SP6548                                           |                      |                      |
| Surrogate Standard       |                                                  |                      |                      |
| MS/MSD Standard          |                                                  |                      |                      |
| LCS Standard             |                                                  |                      |                      |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status   |
|-----|-------------|----------------|-------------------|----------|----------|
| 1   | DFTPP       | BN033581.D     | 23 Aug 2024 09:06 | MA/JU    | Ok       |
| 2   | SSTDCCC0.4  | BN033582.D     | 23 Aug 2024 09:48 | MA/JU    | Ok,M     |
| 3   | PB162860BL  | BN033583.D     | 23 Aug 2024 11:10 | MA/JU    | Ok       |
| 4   | P3641-01    | BN033584.D     | 23 Aug 2024 11:46 | MA/JU    | Dilution |
| 5   | P3641-02    | BN033585.D     | 23 Aug 2024 12:22 | MA/JU    | Dilution |
| 6   | P3641-02MS  | BN033586.D     | 23 Aug 2024 12:58 | MA/JU    | Ok,M     |
| 7   | P3641-02MSD | BN033587.D     | 23 Aug 2024 13:34 | MA/JU    | Ok,M     |
| 8   | P3641-04    | BN033588.D     | 23 Aug 2024 14:10 | MA/JU    | Dilution |
| 9   | P3663-01    | BN033589.D     | 23 Aug 2024 14:46 | MA/JU    | Ok,M     |
| 10  | P3660-01    | BN033590.D     | 23 Aug 2024 15:23 | MA/JU    | Dilution |
| 11  | P3671-05    | BN033591.D     | 23 Aug 2024 15:59 | MA/JU    | Ok,M     |
| 12  | P3671-04    | BN033592.D     | 23 Aug 2024 16:35 | MA/JU    | Ok,M     |
| 13  | P3660-05DL  | BN033593.D     | 23 Aug 2024 17:11 | MA/JU    | Ok,M     |
| 14  | P3663-12DL  | BN033594.D     | 23 Aug 2024 17:47 | MA/JU    | Ok,M     |
| 15  | P3671-06DL  | BN033595.D     | 23 Aug 2024 18:23 | MA/JU    | Ok,M     |
| 16  | PB162859BS  | BN033596.D     | 23 Aug 2024 18:59 | MA/JU    | Ok,M     |
| 17  | SSTDCCC0.4  | BN033597.D     | 23 Aug 2024 19:35 | MA/JU    | Ok,M     |
| 18  | DFTPP       | BN033598.D     | 23 Aug 2024 20:51 | MA/JU    | Ok       |
| 19  | SSTDCCC0.4  | BN033599.D     | 23 Aug 2024 21:30 | MA/JU    | Ok,M     |
| 20  | PB162937BL  | BN033600.D     | 23 Aug 2024 22:07 | MA/JU    | Ok       |
| 21  | PB162937BS  | BN033601.D     | 23 Aug 2024 22:43 | MA/JU    | Ok,M     |

Instrument ID: **BNA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # BN082324**

| Review By                | yogesh                                           | Review On            | 8/24/2024 5:26:17 AM |
|--------------------------|--------------------------------------------------|----------------------|----------------------|
| Supervise By             | mohammad                                         | Supervise On         | 8/29/2024 2:21:17 AM |
| SubDirectory             | BN082324                                         | HP Acquire Method    | BNA_N                |
|                          |                                                  | HP Processing Method | BN081024             |
| STD. NAME                | STD REF.#                                        |                      |                      |
| Tune/Reschk              | SP6573                                           |                      |                      |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                      |                      |
| CCC                      | SP6601                                           |                      |                      |
| Internal Standard/PEM    | SP6527                                           |                      |                      |
| ICV/I.BLK                | SP6548                                           |                      |                      |
| Surrogate Standard       |                                                  |                      |                      |
| MS/MSD Standard          |                                                  |                      |                      |
| LCS Standard             |                                                  |                      |                      |

|    |             |            |                   |       |      |
|----|-------------|------------|-------------------|-------|------|
| 22 | P3707-06    | BN033602.D | 23 Aug 2024 23:19 | MA/JU | Ok,M |
| 23 | P3707-04    | BN033603.D | 23 Aug 2024 23:55 | MA/JU | Ok,M |
| 24 | P3707-01    | BN033604.D | 24 Aug 2024 00:31 | MA/JU | Ok,M |
| 25 | P3707-02MS  | BN033605.D | 24 Aug 2024 01:07 | MA/JU | Ok,M |
| 26 | P3707-03MSD | BN033606.D | 24 Aug 2024 01:43 | MA/JU | Ok,M |
| 27 | P3707-05    | BN033607.D | 24 Aug 2024 02:20 | MA/JU | Ok,M |
| 28 | P3641-01DL  | BN033608.D | 24 Aug 2024 02:56 | MA/JU | Ok,M |
| 29 | P3641-02DL  | BN033609.D | 24 Aug 2024 03:32 | MA/JU | Ok,M |
| 30 | P3671-12DL  | BN033610.D | 24 Aug 2024 04:08 | MA/JU | Ok,M |
| 31 | P3663-02DL  | BN033611.D | 24 Aug 2024 04:44 | MA/JU | Ok,M |
| 32 | P3660-02DL  | BN033612.D | 24 Aug 2024 05:21 | MA/JU | Ok,M |
| 33 | P3671-07DL  | BN033613.D | 24 Aug 2024 05:57 | MA/JU | Ok,M |
| 34 | P3707-07    | BN033614.D | 24 Aug 2024 06:33 | MA/JU | Ok,M |
| 35 | P3707-08    | BN033615.D | 24 Aug 2024 07:09 | MA/JU | Ok,M |
| 36 | SSTDCCC0.4  | BN033616.D | 24 Aug 2024 07:45 | MA/JU | Ok,M |

M : Manual Integration

Instrument ID: BNA\_N

### Daily Analysis Runlog For Sequence/QC Batch ID # BN081924

|              |          |                   |                                           |
|--------------|----------|-------------------|-------------------------------------------|
| Review By    | yogesh   | Review On         | 8/21/2024 1:29:22 AM                      |
| Supervise By | mohammad | Supervise On      | 8/22/2024 7:51:24 AM                      |
| SubDirectory | BN081924 | HP Acquire Method | BNA_N, 8270_HP Processing Method BN081924 |

| STD. NAME                | STD REF.#                                        |
|--------------------------|--------------------------------------------------|
| Tune/Reschk              | SP6573                                           |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |
| CCC                      | SP6601                                           |
| Internal Standard/PEM    | SP6527                                           |
| ICV/I.BLK                | SP6548                                           |
| Surrogate Standard       |                                                  |
| MS/MSD Standard          |                                                  |
| LCS Standard             |                                                  |

| Sr# | SampleID    | ClientID    | Data File Name | Date-Time         | Comment                                                  | Operator | Status |
|-----|-------------|-------------|----------------|-------------------|----------------------------------------------------------|----------|--------|
| 1   | DFTPP       | DFTPP       | BN033476.D     | 19 Aug 2024 09:29 |                                                          | MA/JU    | Ok     |
| 2   | SSTDCCC0.4  | SSTDCCC0.4  | BN033477.D     | 19 Aug 2024 10:09 | A Fresh Calibration is required.                         | MA/JU    | Not Ok |
| 3   | DFTPP       | DFTPP       | BN033478.D     | 19 Aug 2024 15:37 |                                                          | MA/JU    | Ok     |
| 4   | SSTDICC0.1  | SSTDICC0.1  | BN033479.D     | 19 Aug 2024 16:16 |                                                          | MA/JU    | Ok     |
| 5   | SSTDICC0.2  | SSTDICC0.2  | BN033480.D     | 19 Aug 2024 16:52 |                                                          | MA/JU    | Ok,M   |
| 6   | SSTDICCC0.4 | SSTDICCC0.4 | BN033481.D     | 19 Aug 2024 17:28 | The Calibration is Good For 8270 Sim DOD except Com#5,14 | MA/JU    | Ok     |
| 7   | SSTDICC0.8  | SSTDICC0.8  | BN033482.D     | 19 Aug 2024 18:05 |                                                          | MA/JU    | Ok     |
| 8   | SSTDICC1.6  | SSTDICC1.6  | BN033483.D     | 19 Aug 2024 18:41 |                                                          | MA/JU    | Ok     |
| 9   | SSTDICC3.2  | SSTDICC3.2  | BN033484.D     | 19 Aug 2024 19:17 |                                                          | MA/JU    | Ok     |
| 10  | SSTDICC5.0  | SSTDICC5.0  | BN033485.D     | 19 Aug 2024 19:53 |                                                          | MA/JU    | Ok     |
| 11  | SSTDICV0.4  | ICVBN081924 | BN033486.D     | 20 Aug 2024 01:56 | Com#5,14 failed in ICV for 8270 Sim DOD                  | MA/JU    | Ok     |
| 12  | PB162787BL  | PB162787BL  | BN033487.D     | 20 Aug 2024 02:49 | Analyzed for contamination check                         | MA/JU    | Not Ok |
| 13  | DFTPP       | DFTPP       | BN033488.D     | 20 Aug 2024 04:04 |                                                          | MA/JU    | Ok     |
| 14  | SSTDCCC0.4  | SSTDCCC0.4  | BN033489.D     | 20 Aug 2024 04:44 |                                                          | MA/JU    | Ok     |
| 15  | PB162821BL  | PB162821BL  | BN033490.D     | 20 Aug 2024 05:20 |                                                          | MA/JU    | Ok     |
| 16  | PB162821BS  | PB162821BS  | BN033491.D     | 20 Aug 2024 05:56 |                                                          | MA/JU    | Ok     |
| 17  | PB162821BSD | PB162821BSD | BN033492.D     | 20 Aug 2024 06:32 |                                                          | MA/JU    | Ok     |

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN081924**

|                          |                                                  |                   |                                           |
|--------------------------|--------------------------------------------------|-------------------|-------------------------------------------|
| Review By                | yogesh                                           | Review On         | 8/21/2024 1:29:22 AM                      |
| Supervise By             | mohammad                                         | Supervise On      | 8/22/2024 7:51:24 AM                      |
| SubDirectory             | BN081924                                         | HP Acquire Method | BNA_N, 8270_HP Processing Method BN081924 |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |                   |                                           |
| Tune/Reschk              | SP6573                                           |                   |                                           |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                   |                                           |
| CCC                      | SP6601                                           |                   |                                           |
| Internal Standard/PEM    | SP6527                                           |                   |                                           |
| ICV/I.BLK                | SP6548                                           |                   |                                           |
| Surrogate Standard       |                                                  |                   |                                           |
| MS/MSD Standard          |                                                  |                   |                                           |
| LCS Standard             |                                                  |                   |                                           |

|    |             |                       |            |                   |                           |       |          |
|----|-------------|-----------------------|------------|-------------------|---------------------------|-------|----------|
| 18 | PB162787BS  | PB162787BS            | BN033493.D | 20 Aug 2024 07:08 |                           | MA/JU | Ok       |
| 19 | PB162787BSD | PB162787BSD           | BN033494.D | 20 Aug 2024 07:44 |                           | MA/JU | Ok       |
| 20 | P3650-01    | RW7-SP100-20240814    | BN033495.D | 20 Aug 2024 08:21 | Need 2X Dilution          | MA/JU | Dilution |
| 21 | P3650-02    | RW7-SP201-20240814    | BN033496.D | 20 Aug 2024 08:59 |                           | MA/JU | Ok       |
| 22 | P3646-01    | 914-J-WPO-0.25-08152  | BN033497.D | 20 Aug 2024 09:46 |                           | MA/JU | Ok       |
| 23 | P3650-03    | RW7-SP302-20240814    | BN033498.D | 20 Aug 2024 10:22 |                           | MA/JU | Ok       |
| 24 | P3650-04    | RW7-SP303-20240814    | BN033499.D | 20 Aug 2024 10:58 |                           | MA/JU | Ok       |
| 25 | P3651-01    | RW7-SP201-20240815    | BN033500.D | 20 Aug 2024 11:35 |                           | MA/JU | Ok       |
| 26 | P3657-01    | 917-J-WS-081624       | BN033501.D | 20 Aug 2024 12:11 |                           | MA/JU | Ok,M     |
| 27 | P3580-04RE  | 925-K1-SD-0.5-1-08122 | BN033502.D | 20 Aug 2024 12:47 | Surrogate Fail            | MA/JU | Confirms |
| 28 | P3580-01DL  | 926-K1-SD-0-0.5-08122 | BN033503.D | 20 Aug 2024 13:23 |                           | MA/JU | Ok,M     |
| 29 | SP6605      | SP6605                | BN033504.D | 20 Aug 2024 13:59 | SP6605-8270-SIM Surrogate | MA/JU | Ok       |
| 30 | SSTDCCC0.4  | SSTDCCC0.4EC          | BN033505.D | 20 Aug 2024 14:36 |                           | MA/JU | Ok       |

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN082224**

|              |          |                      |                       |
|--------------|----------|----------------------|-----------------------|
| Review By    | yogesh   | Review On            | 8/23/2024 6:45:43 AM  |
| Supervise By | mohammad | Supervise On         | 8/24/2024 11:39:19 PM |
| SubDirectory | BN082224 | HP Acquire Method    | BNA_N                 |
|              |          | HP Processing Method | BN081924              |

| STD. NAME                | STD REF.#                                        |
|--------------------------|--------------------------------------------------|
| Tune/Reschk              | SP6573                                           |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |
| CCC                      | SP6601                                           |
| Internal Standard/PEM    | SP6527                                           |
| ICV/I.BLK                | SP6548                                           |
| Surrogate Standard       |                                                  |
| MS/MSD Standard          |                                                  |
| LCS Standard             |                                                  |

| Sr# | SampleID    | ClientID               | Data File Name | Date-Time         | Comment                         | Operator | Status   |
|-----|-------------|------------------------|----------------|-------------------|---------------------------------|----------|----------|
| 1   | DFTPP       | DFTPP                  | BN033543.D     | 22 Aug 2024 09:12 |                                 | MA/JU    | Ok       |
| 2   | SSTDCCC0.4  | SSTDCCC0.4             | BN033544.D     | 22 Aug 2024 09:52 |                                 | MA/JU    | Ok,M     |
| 3   | PB162844BL  | PB162844BL             | BN033545.D     | 22 Aug 2024 10:28 |                                 | MA/JU    | Ok       |
| 4   | P3623-02RE  | TT189D2-HYD-202408     | BN033546.D     | 22 Aug 2024 11:04 | Surrogate Fail                  | MA/JU    | Confirms |
| 5   | P3623-03RE  | BPOW6-7-HYD-202408     | BN033547.D     | 22 Aug 2024 11:41 | Surrogate Fail                  | MA/JU    | Confirms |
| 6   | P3643-10    | 924-K1-SD-0.5-1-081524 | BN033548.D     | 22 Aug 2024 12:17 |                                 | MA/JU    | Ok,M     |
| 7   | P3663-04    | 914-J-SD-0.5-1-081624  | BN033549.D     | 22 Aug 2024 12:53 |                                 | MA/JU    | Ok,M     |
| 8   | P3663-03    | 914-J-SD-0-0.5-081624  | BN033550.D     | 22 Aug 2024 13:29 |                                 | MA/JU    | Ok,M     |
| 9   | P3663-05MS  | 914-J-SD-0.5-1-081624  | BN033551.D     | 22 Aug 2024 14:06 |                                 | MA/JU    | Ok,M     |
| 10  | P3663-06MSD | 914-J-SD-0.5-1-081624  | BN033552.D     | 22 Aug 2024 14:42 |                                 | MA/JU    | Ok,M     |
| 11  | P3660-08    | S-906-J-0.5-1-081624   | BN033553.D     | 22 Aug 2024 15:18 |                                 | MA/JU    | Ok,M     |
| 12  | P3663-08    | 916-J-SD-0.5-1-081624  | BN033554.D     | 22 Aug 2024 15:54 |                                 | MA/JU    | Ok,M     |
| 13  | P3643-13DL  | 921-J-SD-0-0.5-081524  | BN033555.D     | 22 Aug 2024 16:30 |                                 | MA/JU    | Ok,M     |
| 14  | P3643-07DL  | 918-J-SD-0-0.5-081524  | BN033556.D     | 22 Aug 2024 17:07 |                                 | MA/JU    | Ok,M     |
| 15  | P3663-07    | 916-J-SD-0-0.5-081624  | BN033557.D     | 22 Aug 2024 17:43 | Need 5X Dilution                | MA/JU    | Dilution |
| 16  | P3663-12    | 919-J-SD-0.5-1-081624  | BN033558.D     | 22 Aug 2024 18:19 | Surrogate Fail,Need 5X Dilution | MA/JU    | Dilution |
| 17  | P3660-02    | S-901-J-0.5-1-081624   | BN033559.D     | 22 Aug 2024 18:56 | Need 2X Dilution                | MA/JU    | Dilution |
| 18  | PB162844BS  | PB162844BS             | BN033560.D     | 22 Aug 2024 19:32 |                                 | MA/JU    | Ok,M     |

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN082224**

| Review By                | yogesh                                           | Review On         | 8/23/2024 6:45:43 AM  |                      |          |
|--------------------------|--------------------------------------------------|-------------------|-----------------------|----------------------|----------|
| Supervise By             | mohammad                                         | Supervise On      | 8/24/2024 11:39:19 PM |                      |          |
| SubDirectory             | BN082224                                         | HP Acquire Method | BNA_N                 | HP Processing Method | BN081924 |
| STD. NAME                |                                                  | STD REF.#         |                       |                      |          |
| Tune/Reschk              | SP6573                                           |                   |                       |                      |          |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                   |                       |                      |          |
| CCC                      | SP6601                                           |                   |                       |                      |          |
| Internal Standard/PEM    | SP6527                                           |                   |                       |                      |          |
| ICV/I.BLK                | SP6548                                           |                   |                       |                      |          |
| Surrogate Standard       |                                                  |                   |                       |                      |          |
| MS/MSD Standard          |                                                  |                   |                       |                      |          |
| LCS Standard             |                                                  |                   |                       |                      |          |

|    |             |                         |            |                   |                       |       |          |
|----|-------------|-------------------------|------------|-------------------|-----------------------|-------|----------|
| 19 | SSTDCCC0.4  | SSTDCCC0.4EC            | BN033561.D | 22 Aug 2024 20:08 |                       | MA/JU | Ok,M     |
| 20 | DFTPP       | DFTPP                   | BN033562.D | 22 Aug 2024 21:24 |                       | MA/JU | Ok       |
| 21 | SSTDCCC0.4  | SSTDCCC0.4              | BN033563.D | 22 Aug 2024 22:03 |                       | MA/JU | Ok,M     |
| 22 | PB162880BL  | PB162880BL              | BN033564.D | 22 Aug 2024 22:39 |                       | MA/JU | Ok       |
| 23 | PB162880BS  | PB162880BS              | BN033565.D | 22 Aug 2024 23:16 |                       | MA/JU | Ok,M     |
| 24 | P3671-14    | S-912-J-SO-0.5-1-0819   | BN033566.D | 22 Aug 2024 23:52 |                       | MA/JU | Ok,M     |
| 25 | P3671-03    | S-911-K1-SO-0-0.5-0819  | BN033567.D | 23 Aug 2024 00:28 |                       | MA/JU | Ok,M     |
| 26 | P3671-06    | S-905-J-SO-0-0.5-0819   | BN033568.D | 23 Aug 2024 01:05 | Need 5X Dilution      | MA/JU | Dilution |
| 27 | P3671-09    | S-928-K1-SO-0-0.5-0819  | BN033569.D | 23 Aug 2024 01:41 |                       | MA/JU | Ok,M     |
| 28 | P3671-10    | S-928-K1-SO-0.5-1-0819  | BN033570.D | 23 Aug 2024 02:17 |                       | MA/JU | Ok,M     |
| 29 | P3671-10MS  | S-928-K1-SO-0.5-1-0819  | BN033571.D | 23 Aug 2024 02:53 |                       | MA/JU | Ok,M     |
| 30 | P3671-10MSD | S-928-K1-SO-0.5-1-0819  | BN033572.D | 23 Aug 2024 03:30 |                       | MA/JU | Ok,M     |
| 31 | P3671-13    | S-912-J-SO-0-0.5-0819   | BN033573.D | 23 Aug 2024 04:06 |                       | MA/JU | Ok,M     |
| 32 | P3671-07    | S-905-J-SO-0-0.5-0819   | BN033574.D | 23 Aug 2024 04:42 | Need 10X Dilution, FD | MA/JU | Dilution |
| 33 | P3671-12    | S-903-J-SO-0.5-1.0-0819 | BN033575.D | 23 Aug 2024 05:18 | Need 10X Dilution     | MA/JU | Dilution |
| 34 | P3660-05    | S-906-J-0-0.5-081624    | BN033576.D | 23 Aug 2024 05:54 | Need 5X Dilution      | MA/JU | Dilution |
| 35 | P3660-06MS  | S-906-J-0-0.5-081624M   | BN033577.D | 23 Aug 2024 06:30 |                       | MA/JU | Ok,M     |
| 36 | P3660-07MSD | S-906-J-0-0.5-081624M   | BN033578.D | 23 Aug 2024 07:06 |                       | MA/JU | Ok,M     |
| 37 | P3663-02    | 920-J-SD-0.5-1-081624   | BN033579.D | 23 Aug 2024 07:42 | Need 5X Dilution      | MA/JU | Dilution |

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN082224**

|                          |            |                                                  |                       |                      |          |       |      |
|--------------------------|------------|--------------------------------------------------|-----------------------|----------------------|----------|-------|------|
| Review By                | yogesh     | Review On                                        | 8/23/2024 6:45:43 AM  |                      |          |       |      |
| Supervise By             | mohammad   | Supervise On                                     | 8/24/2024 11:39:19 PM |                      |          |       |      |
| SubDirectory             | BN082224   | HP Acquire Method                                | BNA_N                 | HP Processing Method | BN081924 |       |      |
| STD. NAME                |            | STD REF.#                                        |                       |                      |          |       |      |
| Tune/Reschk              |            | SP6573                                           |                       |                      |          |       |      |
| Initial Calibration Stds |            | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                       |                      |          |       |      |
| CCC                      |            | SP6601                                           |                       |                      |          |       |      |
| Internal Standard/PEM    |            | SP6527                                           |                       |                      |          |       |      |
| ICV/I.BLK                |            | SP6548                                           |                       |                      |          |       |      |
| Surrogate Standard       |            |                                                  |                       |                      |          |       |      |
| MS/MSD Standard          |            |                                                  |                       |                      |          |       |      |
| LCS Standard             |            |                                                  |                       |                      |          |       |      |
| 38                       | SSTDCCC0.4 | SSTDCCC0.4EC                                     | BN033580.D            | 23 Aug 2024 08:18    |          | MA/JU | Ok,M |

M : Manual Integration



Instrument ID: BNA\_N

### Daily Analysis Runlog For Sequence/QC Batch ID # BN082324

|              |          |                      |                      |
|--------------|----------|----------------------|----------------------|
| Review By    | yogesh   | Review On            | 8/24/2024 5:26:17 AM |
| Supervise By | mohammad | Supervise On         | 8/29/2024 2:21:17 AM |
| SubDirectory | BN082324 | HP Acquire Method    | BNA_N                |
|              |          | HP Processing Method | BN081024             |

| STD. NAME                | STD REF.#                                        |
|--------------------------|--------------------------------------------------|
| Tune/Reschk              | SP6573                                           |
| Initial Calibration Stds | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |
| CCC                      | SP6601                                           |
| Internal Standard/PEM    | SP6527                                           |
| ICV/I.BLK                | SP6548                                           |
| Surrogate Standard       |                                                  |
| MS/MSD Standard          |                                                  |
| LCS Standard             |                                                  |

| Sr# | SampleID    | ClientID              | Data File Name | Date-Time         | Comment          | Operator | Status   |
|-----|-------------|-----------------------|----------------|-------------------|------------------|----------|----------|
| 1   | DFTPP       | DFTPP                 | BN033581.D     | 23 Aug 2024 09:06 |                  | MA/JU    | Ok       |
| 2   | SSTDCCC0.4  | SSTDCCC0.4            | BN033582.D     | 23 Aug 2024 09:48 |                  | MA/JU    | Ok,M     |
| 3   | PB162860BL  | PB162860BL            | BN033583.D     | 23 Aug 2024 11:10 |                  | MA/JU    | Ok       |
| 4   | P3641-01    | S-907-K1-0-0.5-081524 | BN033584.D     | 23 Aug 2024 11:46 | Need 5X Dilution | MA/JU    | Dilution |
| 5   | P3641-02    | S-907-K1-0.5-1.0-0815 | BN033585.D     | 23 Aug 2024 12:22 | Need 2X Dilution | MA/JU    | Dilution |
| 6   | P3641-02MS  | S-907-K1-0.5-1.0-0815 | BN033586.D     | 23 Aug 2024 12:58 |                  | MA/JU    | Ok,M     |
| 7   | P3641-02MSD | S-907-K1-0.5-1.0-0815 | BN033587.D     | 23 Aug 2024 13:34 |                  | MA/JU    | Ok,M     |
| 8   | P3641-04    | S-908-K1-0.5-1.0-0815 | BN033588.D     | 23 Aug 2024 14:10 | Need 5X Dilution | MA/JU    | Dilution |
| 9   | P3663-01    | 920-J-SD-0-0.5-081624 | BN033589.D     | 23 Aug 2024 14:46 |                  | MA/JU    | Ok,M     |
| 10  | P3660-01    | S-901-J-0-0.5-081624  | BN033590.D     | 23 Aug 2024 15:23 | Need 5X Dilution | MA/JU    | Dilution |
| 11  | P3671-05    | S-911-K1-SO-0-0.5-081 | BN033591.D     | 23 Aug 2024 15:59 |                  | MA/JU    | Ok,M     |
| 12  | P3671-04    | S-911-K1-SO-0.5-1-081 | BN033592.D     | 23 Aug 2024 16:35 |                  | MA/JU    | Ok,M     |
| 13  | P3660-05DL  | S-906-J-0-0.5-081624  | BN033593.D     | 23 Aug 2024 17:11 |                  | MA/JU    | Ok,M     |
| 14  | P3663-12DL  | 919-J-SD-0.5-1-081624 | BN033594.D     | 23 Aug 2024 17:47 |                  | MA/JU    | Ok,M     |
| 15  | P3671-06DL  | S-905-J-SO-0-0.5-0819 | BN033595.D     | 23 Aug 2024 18:23 |                  | MA/JU    | Ok,M     |
| 16  | PB162859BS  | PB162859BS            | BN033596.D     | 23 Aug 2024 18:59 |                  | MA/JU    | Ok,M     |
| 17  | SSTDCCC0.4  | SSTDCCC0.4EC          | BN033597.D     | 23 Aug 2024 19:35 |                  | MA/JU    | Ok,M     |
| 18  | DFTPP       | DFTPP                 | BN033598.D     | 23 Aug 2024 20:51 |                  | MA/JU    | Ok       |

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN082324**

| Review By                | yogesh   | Review On                                        | 8/24/2024 5:26:17 AM |                      |          |
|--------------------------|----------|--------------------------------------------------|----------------------|----------------------|----------|
| Supervise By             | mohammad | Supervise On                                     | 8/29/2024 2:21:17 AM |                      |          |
| SubDirectory             | BN082324 | HP Acquire Method                                | BNA_N                | HP Processing Method | BN081024 |
| STD. NAME                |          | STD REF.#                                        |                      |                      |          |
| Tune/Reschk              |          | SP6573                                           |                      |                      |          |
| Initial Calibration Stds |          | SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597 |                      |                      |          |
| CCC                      |          | SP6601                                           |                      |                      |          |
| Internal Standard/PEM    |          | SP6527                                           |                      |                      |          |
| ICV/I.BLK                |          | SP6548                                           |                      |                      |          |
| Surrogate Standard       |          |                                                  |                      |                      |          |
| MS/MSD Standard          |          |                                                  |                      |                      |          |
| LCS Standard             |          |                                                  |                      |                      |          |

|    |             |                        |            |                   |  |       |      |
|----|-------------|------------------------|------------|-------------------|--|-------|------|
| 19 | SSTDCCC0.4  | SSTDCCC0.4             | BN033599.D | 23 Aug 2024 21:30 |  | MA/JU | Ok,M |
| 20 | PB162937BL  | PB162937BL             | BN033600.D | 23 Aug 2024 22:07 |  | MA/JU | Ok   |
| 21 | PB162937BS  | PB162937BS             | BN033601.D | 23 Aug 2024 22:43 |  | MA/JU | Ok,M |
| 22 | P3707-06    | S-913-K1-SO-0.5-1-082  | BN033602.D | 23 Aug 2024 23:19 |  | MA/JU | Ok,M |
| 23 | P3707-04    | S-929-K1-SO-0.5-1-082  | BN033603.D | 23 Aug 2024 23:55 |  | MA/JU | Ok,M |
| 24 | P3707-01    | S-929-K1-SO-0-0.5-082  | BN033604.D | 24 Aug 2024 00:31 |  | MA/JU | Ok,M |
| 25 | P3707-02MS  | S-929-K1-SO-0-0.5-082  | BN033605.D | 24 Aug 2024 01:07 |  | MA/JU | Ok,M |
| 26 | P3707-03MSD | S-929-K1-SO-0-0.5-082  | BN033606.D | 24 Aug 2024 01:43 |  | MA/JU | Ok,M |
| 27 | P3707-05    | S-913-K1-SO-0-0.5-082  | BN033607.D | 24 Aug 2024 02:20 |  | MA/JU | Ok,M |
| 28 | P3641-01DL  | S-907-K1-0-0.5-081524  | BN033608.D | 24 Aug 2024 02:56 |  | MA/JU | Ok,M |
| 29 | P3641-02DL  | S-907-K1-0.5-1.0-0815  | BN033609.D | 24 Aug 2024 03:32 |  | MA/JU | Ok,M |
| 30 | P3671-12DL  | S-903-J-SO-0.5-1.0-081 | BN033610.D | 24 Aug 2024 04:08 |  | MA/JU | Ok,M |
| 31 | P3663-02DL  | 920-J-SD-0.5-1-081624  | BN033611.D | 24 Aug 2024 04:44 |  | MA/JU | Ok,M |
| 32 | P3660-02DL  | S-901-J-0.5-1-081624D  | BN033612.D | 24 Aug 2024 05:21 |  | MA/JU | Ok,M |
| 33 | P3671-07DL  | S-905-J-SO-0-0.5-0819  | BN033613.D | 24 Aug 2024 05:57 |  | MA/JU | Ok,M |
| 34 | P3707-07    | S-930-K1-SO-0-0.5-082  | BN033614.D | 24 Aug 2024 06:33 |  | MA/JU | Ok,M |
| 35 | P3707-08    | S-930-K1-SO-0.5-1-082  | BN033615.D | 24 Aug 2024 07:09 |  | MA/JU | Ok,M |
| 36 | SSTDCCC0.4  | SSTDCCC0.4EC           | BN033616.D | 24 Aug 2024 07:45 |  | MA/JU | Ok,M |

M : Manual Integration

# PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 8/21/2024

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:25  
In Date: 08/20/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:14  
Out Date: 08/21/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLIDS-OVEN

QC:LB132092

| Lab ID   | Client SampleID             | Dish # | Dish Wt (g) (A) | Sample Wt (g) | Dish + Sample Wt (g) (B) | Dish+Dry Sample Wt (g) (C) | % Solid | Comments |
|----------|-----------------------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| P3669-01 | 20430                       | 1      | 1.17            | 8.60          | 9.77                     | 8.15                       | 81.2    |          |
| P3669-02 | 20430                       | 2      | 1.17            | 8.60          | 9.77                     | 8.15                       | 81.2    |          |
| P3670-01 | WASTE                       | 3      | 1.15            | 8.48          | 9.63                     | 8.51                       | 86.8    |          |
| P3670-02 | VOC                         | 4      | 1.18            | 8.40          | 9.58                     | 8.49                       | 87.0    |          |
| P3670-03 | 1                           | 5      | 1.18            | 8.48          | 9.66                     | 8.48                       | 86.1    |          |
| P3670-04 | 2                           | 6      | 1.14            | 8.76          | 9.9                      | 8.66                       | 85.8    |          |
| P3670-05 | 3                           | 7      | 1.14            | 8.40          | 9.54                     | 8.35                       | 85.8    |          |
| P3670-06 | 4                           | 8      | 1.11            | 8.76          | 9.87                     | 8.73                       | 87.0    |          |
| P3670-07 | 5                           | 9      | 1.12            | 8.78          | 9.9                      | 8.69                       | 86.2    |          |
| P3671-01 | S-904-J-SO-0-0.5-081924     | 10     | 1.11            | 8.42          | 9.53                     | 7.11                       | 71.3    |          |
| P3671-02 | S-904-J-SO-0-1-081924       | 11     | 1.18            | 8.53          | 9.71                     | 7.98                       | 79.7    |          |
| P3671-03 | S-911-K1-SO-0-0.5-081924    | 12     | 1.18            | 8.52          | 9.7                      | 5.18                       | 46.9    |          |
| P3671-04 | S-911-K1-SO-0.5-1-081924    | 13     | 1.14            | 8.54          | 9.68                     | 5.92                       | 56.0    |          |
| P3671-05 | S-911-K1-SO-0-0.5-081924-FD | 14     | 1.18            | 8.51          | 9.69                     | 4.16                       | 35.0    |          |
| P3671-06 | S-905-KJ-SO-0-0.5-081924    | 15     | 1.15            | 8.50          | 9.65                     | 7.8                        | 78.2    |          |
| P3671-07 | S-905-KJ-SO-0-0.5-081924-FD | 16     | 1.12            | 8.47          | 9.59                     | 7.61                       | 76.6    |          |
| P3671-08 | S-905-J-SO-0.5-1.0-081924   | 17     | 1.13            | 8.74          | 9.87                     | 8.3                        | 82.0    |          |
| P3671-09 | S-928-K1-SO-0-0.5-081924    | 18     | 1.15            | 8.82          | 9.97                     | 5.38                       | 48.0    |          |
| P3671-10 | S-928-K1-SO-0.5-1-081924    | 19     | 1.15            | 8.80          | 9.95                     | 6.18                       | 57.2    |          |
| P3671-11 | S-903-J-SO--0-0.5-081924    | 20     | 1.19            | 8.53          | 9.72                     | 8.31                       | 83.5    |          |
| P3671-12 | S-903-J-SO--0-1.0-081924    | 21     | 1.17            | 8.60          | 9.77                     | 8.55                       | 85.8    |          |
| P3671-13 | S-912-J-SO-0-0.5-081924     | 22     | 1.13            | 8.70          | 9.83                     | 3.79                       | 30.6    |          |
| P3671-14 | S-912-J-SO-0.5-1-081924     | 23     | 1.15            | 8.81          | 9.96                     | 5.69                       | 51.5    |          |



PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 8/21/2024

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:25  
In Date: 08/20/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:14  
Out Date: 08/21/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLIDS-OVEN

QC:LB132092

| Lab ID   | Client SampleID | Dish # | Dish Wt (g) (A) | Sample Wt (g) | Dish + Sample Wt (g) (B) | Dish+Dry Sample Wt (g) (C) | % Solid | Comments |
|----------|-----------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| P3674-01 | PCB08724RB01    | 24     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3674-02 | PCB08724RB02    | 25     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3674-03 | PCB08724RB03    | 26     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3674-04 | PCB08724RB04    | 27     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3674-05 | PCB08724RB05    | 28     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3674-06 | PCB08724RB06    | 29     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3674-07 | PCB08724RB07    | 30     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3674-08 | PCB08724RB08    | 31     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-01 | PCB08724RB09    | 32     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-02 | PCB08724RB10    | 33     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-03 | PCB08724RB11    | 34     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-04 | PCB08724RB12    | 35     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-05 | PCB08724RB13    | 36     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-06 | PCB08724RB14    | 37     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-07 | PCB08724RB15    | 38     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-08 | PCB08724RB16    | 39     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-09 | PCB08724RB17    | 40     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-10 | PCB08724RB18    | 41     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-11 | PCB08724RB19    | 42     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-12 | PCB08724RB20    | 43     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-13 | PCB08724RB21    | 44     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-14 | PCB08724RB22    | 45     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-15 | PCB08724RB23    | 46     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-16 | PCB08724RB24    | 47     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-17 | PCB08724RB25    | 48     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-18 | PCB08724RB26    | 49     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-19 | PCB08724RB27    | 50     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |
| P3676-20 | PCB08724RB28    | 51     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk    |

# PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 8/21/2024

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:25  
In Date: 08/20/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:14  
Out Date: 08/21/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLIDS-OVEN

QC:LB132092

| Lab ID   | Client SampleID         | Dish # | Dish Wt (g) (A) | Sample Wt (g) | Dish + Sample Wt (g) (B) | Dish+Dry Sample Wt (g) (C) | % Solid | Comments    |
|----------|-------------------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|-------------|
| P3676-21 | PCB08724RB29            | 52     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-22 | PCB08724RB30            | 53     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-23 | PCB08724RB31            | 54     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-24 | PCB08724RB32            | 55     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-25 | PCB08724RB33            | 56     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-26 | PCB08724RB34            | 57     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-27 | PCB08724RB35            | 58     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-28 | PCB08724RB36            | 59     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-29 | PCB08724RB37            | 60     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-30 | PCB08724RB38            | 61     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-31 | PCB08724RB39            | 62     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3676-32 | PCB08724RB40            | 63     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | caluk       |
| P3677-01 | MX120                   | 64     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | P.T. SAMPLE |
| P3677-02 | MX121                   | 65     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | P.T. SAMPLE |
| P3678-01 | RE137-BagFilter20240819 | 71     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | Fabric      |
| P3681-01 | 57                      | 66     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oil sample  |
| P3681-02 | 0726-D                  | 67     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oil sample  |
| P3681-03 | 581                     | 68     | 1.14            | 8.66          | 9.8                      | 8.88                       | 89.4    |             |
| P3682-01 | 50407-A                 | 69     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| P3682-02 | 50407-B                 | 70     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| P3683-01 | KZA404B-END-1-1         | 72     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |
| P3683-02 | KZA404B-END-1-2         | 73     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |
| P3683-03 | BC274653-END-1-1        | 74     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |
| P3683-04 | BC274653-END-1-2        | 75     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |
| P3683-05 | BC274653-END-2-1        | 76     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |
| P3683-06 | BC274653-END-2-2        | 77     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |
| P3683-07 | HED930S-END-1-1         | 78     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |
| P3683-08 | HED930S-END-1-2         | 79     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | oilc        |



PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 8/21/2024

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:25  
In Date: 08/20/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:14  
Out Date: 08/21/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLIDS-OVEN

QC:LB132092

| Lab ID   | Client SampleID | Dish # | Dish Wt (g) (A) | Sample Wt (g) | Dish + Sample Wt (g) (B) | Dish+Dry Sample Wt (g) (C) | % Solid | Comments |
|----------|-----------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| P3684-03 | D3646           | 86     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | DEBRIS   |
| P3684-04 | D3638           | 87     | 1.18            | 8.42          | 9.6                      | 6.18                       | 59.4    |          |
| P3684-06 | D3564           | 88     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | DEBRIS   |
| P3685-01 | Stock Pile-1    | 80     | 1.15            | 8.43          | 9.58                     | 8.99                       | 93.0    |          |
| P3685-02 | Stock Pile-1    | 81     | 1.15            | 8.43          | 9.58                     | 8.99                       | 93.0    |          |
| P3685-03 | Stock Pile-2    | 82     | 1.18            | 8.72          | 9.9                      | 9.34                       | 93.6    |          |
| P3685-04 | Stock Pile-2    | 83     | 1.18            | 8.72          | 9.9                      | 9.34                       | 93.6    |          |
| P3685-06 | Stock Pile-1    | 84     | 1.15            | 8.43          | 9.58                     | 8.99                       | 93.0    |          |
| P3685-07 | Stock Pile-2    | 85     | 1.18            | 8.72          | 9.9                      | 9.34                       | 93.6    |          |

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

# WORKLIST(Hardcopy Internal Chain)

UB 132092

WorkList Name : %1-082024

WorkList ID : 182800

Department : Wet-Chemistry

Date : 08-20-2024 07:44:54

| Sample   | Customer Sample             | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-----------------------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| P3669-01 | 20430                       | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/19/2024   | Chemtech -SO |
| P3669-02 | 20430                       | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/19/2024   | Chemtech -SO |
| P3670-01 | WASTE                       | Solid  | Percent Solids | Cool 4 deg C | SCIA01   | G11                         | 08/19/2024   | Chemtech -SO |
| P3670-02 | VOC                         | Solid  | Percent Solids | Cool 4 deg C | SCIA01   | G11                         | 08/19/2024   | Chemtech -SO |
| P3670-03 | 1                           | Solid  | Percent Solids | Cool 4 deg C | SCIA01   | G11                         | 08/19/2024   | Chemtech -SO |
| P3670-04 | 2                           | Solid  | Percent Solids | Cool 4 deg C | SCIA01   | G11                         | 08/19/2024   | Chemtech -SO |
| P3670-05 | 3                           | Solid  | Percent Solids | Cool 4 deg C | SCIA01   | G11                         | 08/19/2024   | Chemtech -SO |
| P3670-06 | 4                           | Solid  | Percent Solids | Cool 4 deg C | SCIA01   | G11                         | 08/19/2024   | Chemtech -SO |
| P3670-07 | 5                           | Solid  | Percent Solids | Cool 4 deg C | SCIA01   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-01 | S-904-J-SO-0-0.5-081924     | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-02 | S-904-J-SO-0-1-081924       | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-03 | S-911-K1-SO-0-0.5-081924    | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-04 | S-911-K1-SO-0.5-1-081924    | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-05 | S-911-K1-SO-0-0.5-081924-FD | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-06 | S-905-KJ-SO-0-0.5-081924    | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-07 | S-905-KJ-SO-0-0.5-081924-FD | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-08 | S-905-J-SO-0.5-1.0-081924   | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-09 | S-928-K1-SO-0-0.5-081924    | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-10 | S-928-K1-SO-0.5-1-081924    | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-11 | S-903-J-SO--0-0.5-081924    | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-12 | S-903-J-SO--0-1.0-081924    | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |

Date/Time 08/20/24 16:10

Raw Sample Received by: JB GPC

Raw Sample Relinquished by: CP SM

Date/Time 08/20/24 17:30

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JB GPC



# WORKLIST(Hardcopy Internal Chain)

WB 132092

WorkList Name : %1-082024

WorkList ID : 182800

Department : Wet-Chemistry

Date : 08-20-2024 07:44:54

| Sample   | Customer Sample         | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-------------------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| P3671-13 | S-912-J-SO-0-0.5-081924 | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3671-14 | S-912-J-SO-0.5-1-081924 | Solid  | Percent Solids | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | Chemtech -SO |
| P3674-01 | PCB08724RB01            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3674-02 | PCB08724RB02            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3674-03 | PCB08724RB03            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3674-04 | PCB08724RB04            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3674-05 | PCB08724RB05            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3674-06 | PCB08724RB06            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3674-07 | PCB08724RB07            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3674-08 | PCB08724RB08            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-01 | PCB08724RB09            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-02 | PCB08724RB10            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-03 | PCB08724RB11            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-04 | PCB08724RB12            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-05 | PCB08724RB13            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-06 | PCB08724RB14            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-07 | PCB08724RB15            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-08 | PCB08724RB16            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-09 | PCB08724RB17            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-10 | PCB08724RB18            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-11 | PCB08724RB19            | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |

Date/Time 08/20/24 16:10  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

Date/Time 08/20/24 17:30  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]



# WORKLIST(Hardcopy Internal Chain)

WB 132092

WorkList Name : %1-082024

WorkList ID : 182800

Department : Wet-Chemistry

Date : 08-20-2024 07:44:54

| Sample   | Customer Sample | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-----------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| P3676-12 | PCB08724RB20    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-13 | PCB08724RB21    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-14 | PCB08724RB22    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-15 | PCB08724RB23    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-16 | PCB08724RB24    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-17 | PCB08724RB25    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-18 | PCB08724RB26    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-19 | PCB08724RB27    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-20 | PCB08724RB28    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-21 | PCB08724RB29    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-22 | PCB08724RB30    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-23 | PCB08724RB31    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-24 | PCB08724RB32    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-25 | PCB08724RB33    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-26 | PCB08724RB34    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-27 | PCB08724RB35    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-28 | PCB08724RB36    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-29 | PCB08724RB37    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-30 | PCB08724RB38    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-31 | PCB08724RB39    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |
| P3676-32 | PCB08724RB40    | Solid  | Percent Solids | Cool 4 deg C | CLOU03   | G11                         | 08/06/2024   | Chemtech -SO |

Date/Time 08/20/24 16:10  
Raw Sample Received by: JP WCC  
Raw Sample Relinquished by: CP SM

Date/Time 08/20/24 17:30  
Raw Sample Received by: CP SM  
Raw Sample Relinquished by: JP WCC

# WORKLIST(Hardcopy Internal Chain)

WB 132092

WorkList Name : %1-082024

WorkList ID : 182800

Department : Wet-Chemistry

Date : 08-20-2024 07:44:54

| Sample   | Customer Sample         | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-------------------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| P3677-01 | MX120                   | Solid  | Percent Solids | Cool 4 deg C | USEP01   | QA Of                       | 08/19/2024   | Chemtech -SO |
| P3677-02 | MX121                   | Solid  | Percent Solids | Cool 4 deg C | USEP01   | QA Of                       | 08/19/2024   | Chemtech -SO |
| P3678-01 | RE137-BagFilter20240819 | Solid  | Percent Solids | Cool 4 deg C | TETR06   | G11                         | 08/19/2024   | Chemtech -SO |
| P3681-01 | 57                      | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3681-02 | 0726-D                  | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3681-03 | 581                     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3682-01 | 50407-A                 | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3682-02 | 50407-B                 | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-01 | KZA404B-END-1-1         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-02 | KZA404B-END-1-2         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-03 | BC274653-END-1-1        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-04 | BC274653-END-1-2        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-05 | BC274653-END-2-1        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-06 | BC274653-END-2-2        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-07 | HED930S-END-1-1         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3683-08 | HED930S-END-1-2         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3684-03 | D3646                   | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3684-04 | D3638                   | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3684-06 | D3564                   | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3685-01 | Stock Pile-1            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3685-02 | Stock Pile-1            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |

Date/Time 08/20/24 16:40  
 Raw Sample Received by: JO WCC  
 Raw Sample Relinquished by: AL SM

Date/Time 08/20/24 17:30  
 Raw Sample Received by: AL SM  
 Raw Sample Relinquished by: JO WCC

# WORKLIST(Hardcopy Internal Chain)

UB132092

WorkList Name : %1-082024

WorkList ID : 182800

Department : Wet-Chemistry

Date : 08-20-2024 07:44:54

| Sample   | Customer Sample | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-----------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| P3685-03 | Stock Pile-2    | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3685-04 | Stock Pile-2    | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3685-06 | Stock Pile-1    | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |
| P3685-07 | Stock Pile-2    | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | G11                         | 08/20/2024   | Chemtech -SO |

Date/Time

08/20/24

16:10

Raw Sample Received by:

JP WOC,

Raw Sample Relinquished by:

CP SM

P3671-SVOCMS Group3

Date/Time

08/20/24

17:30

Raw Sample Received by:

CP SM

Raw Sample Relinquished by:

JP WOC, Revised

|                           |                                                                                                                                                                                                                     |                                |            |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|
| <b>SOP ID:</b>            | M3541-ASE Extraction-14                                                                                                                                                                                             |                                |            |
| <b>Clean Up SOP #:</b>    | N/A                                                                                                                                                                                                                 | <b>Extraction Start Date :</b> | 08/21/2024 |
| <b>Matrix :</b>           | Solid                                                                                                                                                                                                               | <b>Extraction Start Time :</b> | 09:38      |
| <b>Weigh By:</b>          | EH                                                                                                                                                                                                                  | <b>Extraction By:</b>          | RS         |
| <b>Balance check:</b>     | EH                                                                                                                                                                                                                  | <b>Extraction End Date :</b>   | 08/21/2024 |
| <b>Balance ID:</b>        | EX-SC-2                                                                                                                                                                                                             | <b>Filter By:</b>              | RS         |
| <b>pH Strip Lot#:</b>     | N/A                                                                                                                                                                                                                 | <b>Extraction End Time :</b>   | 12:40      |
|                           |                                                                                                                                                                                                                     | <b>Concentration By:</b>       | EH         |
|                           |                                                                                                                                                                                                                     | <b>Supervisor By :</b>         | rajesh     |
| <b>Extraction Method:</b> | <input type="checkbox"/> Separatory Funne <input type="checkbox"/> Continious Liquid/Liquid <input type="checkbox"/> Sonication <input type="checkbox"/> Waste Dilution <input checked="" type="checkbox"/> Soxhlet |                                |            |

| Standard Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---------------|----------|---------------------|---------------------|
| Spike Sol 1   | 1.0ML    | 0.4 PPM             | SP6572              |
| Surrogate     | 1.0ML    | 0.4 PPM             | SP6605              |
| N/A           | N/A      | N/A                 | N/A                 |
| N/A           | N/A      | N/A                 | N/A                 |
| N/A           | N/A      | N/A                 | N/A                 |

| Chemical Used      | ML/SAMPLE USED | Lot Number |
|--------------------|----------------|------------|
| MeCl2/Acetone/1:1  | N/A            | EP2527     |
| Baked Na2SO4       | N/A            | EP2521     |
| Sand               | N/A            | E2865      |
| Methylene Chloride | N/A            | E3787      |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |

**Extraction Conformance/Non-Conformance Comments:**

1.5 ml Vial lot# 2210673.

|                             |     |                           |          |
|-----------------------------|-----|---------------------------|----------|
| <b>KD Bath ID:</b>          | N/A | <b>Envap ID:</b>          | NEVAP-02 |
| <b>KD Bath Temperature:</b> | N/A | <b>Envap Temperature:</b> | 40 °C    |

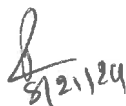
| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|-------------|-----------------------------------------|----------------------|
| 08/21/24    | RP (RM, Lab)                            | RC/SVOC              |
| 12:45       | Preparation Group                       | Analysis Group       |

Analytical Method: M3541-ASE Extraction-14

Concentration Date: 08/21/2024

| Sample ID    | Client Sample ID            | Test          | g/mL  | PH  | Surr/Spike By: |            | Final Vol.(mL) | JarID | Comments | Prep Pos |
|--------------|-----------------------------|---------------|-------|-----|----------------|------------|----------------|-------|----------|----------|
|              |                             |               |       |     | AddedBy        | VerifiedBy |                |       |          |          |
| PB162880BL   | SBLK880                     | SVOCMS Group3 | 30.02 | N/A | RUPESH         | Evelyn     | 1              |       |          | U4-1     |
| PB162880BS   | SLCS880                     | SVOCMS Group3 | 30.01 | N/A | RUPESH         | Evelyn     | 1              |       |          | 2        |
| P3671-01     | S-904-J-SO-0-0.5-081924     | SVOCMS Group3 | 30.04 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 3        |
| P3671-02     | S-904-J-SO-0-1-081924       | SVOCMS Group3 | 30.06 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 4        |
| P3671-03     | S-911-K1-SO-0-0.5-081924    | SVOCMS Group3 | 30.07 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 5        |
| P3671-04     | S-911-K1-SO-0.5-1-081924    | SVOCMS Group3 | 30.02 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 6        |
| P3671-05     | S-911-K1-SO-0-0.5-081924-FD | SVOCMS Group3 | 30.05 | N/A | RUPESH         | Evelyn     | 1              | E     |          | U5-1     |
| P3671-06     | S-905-KJ-SO-0-0.5-081924    | SVOCMS Group3 | 30.07 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 2        |
| P3671-07     | S-905-KJ-SO-0-0.5-081924-FD | SVOCMS Group3 | 30.01 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 3        |
| P3671-08     | S-905-J-SO-0.5-1.0-081924   | SVOCMS Group3 | 30.08 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 4        |
| P3671-09     | S-928-K1-SO-0-0.5-081924    | SVOCMS Group3 | 30.09 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 5        |
| P3671-10     | S-928-K1-SO-0.5-1-081924    | SVOCMS Group3 | 30.05 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 6        |
| P3671-10MS   | S-928-K1-SO-0.5-1-081924MS  | SVOCMS Group3 | 30.02 | N/A | RUPESH         | Evelyn     | 1              | E     |          | U6-1     |
| P3671-10MS D | S-928-K1-SO-0.5-1-081924MSD | SVOCMS Group3 | 30.04 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 2        |
| P3671-11     | S-903-J-SO--0-0.5-081924    | SVOCMS Group3 | 30.06 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 3        |
| P3671-12     | S-903-J-SO--0-1.0-081924    | SVOCMS Group3 | 30.08 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 4        |
| P3671-13     | S-912-J-SO-0-0.5-081924     | SVOCMS Group3 | 30.07 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 5        |
| P3671-14     | S-912-J-SO-0.5-1-081924     | SVOCMS Group3 | 30.04 | N/A | RUPESH         | Evelyn     | 1              | E     |          | 6        |

\* Extracts relinquished on the same date as received.





# WORKLIST(Hardcopy Internal Chain)

WorkList Name : P3671M

WorkList ID : 182832

Department : Extraction

Date : 08-21-2024 08:07:50

| Sample   | Customer Sample             | Matrix | Test          | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method        |
|----------|-----------------------------|--------|---------------|--------------|----------|-----------------------------|--------------|---------------|
| P3671-01 | S-904-J-SO-0-0.5-081924     | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-02 | S-904-J-SO-0-1-081924       | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-03 | S-911-K1-SO-0-0.5-081924    | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-04 | S-911-K1-SO-0.5-1-081924    | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-05 | S-911-K1-SO-0-0.5-081924-FD | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-06 | S-905-KJ-SO-0-0.5-081924    | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-07 | S-905-KJ-SO-0-0.5-081924-FD | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-08 | S-905-J-SO-0.5-1.0-081924   | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-09 | S-928-K1-SO-0-0.5-081924    | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-10 | S-928-K1-SO-0.5-1-081924    | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-11 | S-903-J-SO--0-0.5-081924    | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-12 | S-903-J-SO--0-1.0-081924    | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-13 | S-912-J-SO-0-0.5-081924     | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |
| P3671-14 | S-912-J-SO-0.5-1-081924     | Solid  | SVOCMS Group3 | Cool 4 deg C | JACO05   | G11                         | 08/19/2024   | 8270-Modified |

Date/Time 08/21/24 9:30  
 Raw Sample Received by: RS (E-L)  
 Raw Sample Relinquished by: RM SM

Date/Time 08/21/24 10:05  
 Raw Sample Received by: RM SM  
 Raw Sample Relinquished by: RS (E-L)

## Prep Standard - Chemical Standard Summary

**Order ID :** P3671  
**Test :** SVOCMS Group3  
**Prepbatch ID :** PB162880,  
**Sequence ID/Qc Batch ID:** BN082224,BN082324,

**Standard ID :**  
EP2521,EP2527,SP6527,SP6547,SP6548,SP6572,SP6573,SP6596,SP6597,SP6598,SP6599,SP6600,SP6601,SP6602,SP6603,SP6605,

**Chemical ID :**  
E2865,E3551,E3746,E3759,E3768,E3769,E3786,E3787,E3788,S10103,S10247,S10782,S10977,S 11003,S11012,S11097,S11494,S11566,S11766,S11767,S12029,S12077,S12096,S12097,S12112,S12113,S12117,S12118,

## Extractions STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>                      | <u>PipetteID</u> | <u>Supervised By</u>              |
|------------------|----------------------|------------------------|------------------|------------------------|--------------------|-------------------------------------|------------------|-----------------------------------|
| 3923             | Baked Sodium Sulfate | <a href="#">EP2521</a> | 08/10/2024       | 01/03/2025             | Rajesh Parikh      | Extraction_SC<br>ALE_2<br>(EX-SC-2) | None             | RUPESHKUMAR<br>SHAH<br>08/10/2024 |

**FROM** 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

| <u>Recipe ID</u> | <u>NAME</u>                       | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>              |
|------------------|-----------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|-----------------------------------|
| 2017             | 1:1 ACETONE/METHYLENE<br>CHLORIDE | <a href="#">EP2527</a> | 08/14/2024       | 02/13/2025             | Rajesh Parikh      | None           | None             | RUPESHKUMAR<br>SHAH<br>08/14/2024 |

**FROM** 4000.00000ml of E3787 + 4000.00000ml of E3788 = Final Quantity: 16000.000 ml



## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>               | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>         |
|------------------|---------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|------------------------------|
| 3493             | Internal Standard 0.4 PPM | <a href="#">SP6527</a> | 06/10/2024       | 12/05/2024             | Jagrut Upadhyay    | None           | None             | mohammad ahmed<br>07/05/2024 |

**FROM** 0.10000ml of S12029 + 4.90000ml of E3759 = Final Quantity: 5.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                                       | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>         |
|------------------|---------------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|------------------------------|
| 3355             | 8270-SIM MDL-3.2PPM<br>CALIBRATION STOCK SOL- 2ND | <a href="#">SP6547</a> | 07/08/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | mohammad ahmed<br>07/08/2024 |

**FROM** SOURCE  
0.00630ml of S10977 + 0.01280ml of S11003 + 0.03200ml of S10782 + 0.03200ml of S11766 + 0.06400ml of S11566 +  
0.06400ml of S12096 + 0.06400ml of S12117 + 19.72490ml of E3746 = Final Quantity: 20.000 ml

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                                       | <u>NAME</u>                                    | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3356                                                                                                                   | 8270-SIM MDL-0.4PPM<br>CALIBRATION SOL ICV-2ND | <a href="#">SP6548</a> | 07/08/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | mohammad ahmed       |
| <b>SOURCE</b><br><b>FROM</b> 0.87500ml of E3746 + 0.01000ml of SP6527 + 0.12500ml of SP6547 = Final Quantity: 1.010 ml |                                                |                        |                  |                        |                    |                |                  |                      |

| <u>Recipe ID</u>                                                                                                                                                             | <u>NAME</u>            | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3492                                                                                                                                                                         | 8270-SIM-Spike 0.4 PPM | <a href="#">SP6572</a> | 07/12/2024       | 10/26/2024             | Rahul Chavli       | None           | None             | Yogesh Patel         |
| <b>FROM</b> 0.00080ml of S11012 + 0.01000ml of S11767 + 0.02000ml of S11566 + 0.02000ml of S12097 + 0.02000ml of S12118 +<br>49.92920ml of E3769 = Final Quantity: 50.000 ml |                        |                        |                  |                        |                    |                |                  |                      |

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|----------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3895             | 50 ug/ml DFTPP 8270E | <a href="#">SP6573</a> | 07/15/2024       | 01/08/2025             | Rahul Chavli       | None           | None             | Yogesh Patel         |
|                  |                      |                        |                  |                        |                    |                |                  | 07/17/2024           |

**FROM** 1.00000ml of S10247 + 19.00000ml of E3768 = Final Quantity: 20.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                            | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|----------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3339             | 8270 sim calibration stock 10ppm (CPI) | <a href="#">SP6596</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
|                  |                                        |                        |                  |                        |                    |                |                  | 08/21/2024           |

**FROM** 0.02500ml of S12113 + 0.03350ml of S10103 + 0.05000ml of S11494 + 0.10000ml of S12112 + 0.12500ml of S10782 + 0.25000ml of S11097 + 0.25000ml of S12077 + 24.16650ml of E3786 = Final Quantity: 25.000 ml

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                            | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|----------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3361             | 8270-SIM MDL-5PPM CALIBRATION SOLUTION | <a href="#">SP6597</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
|                  |                                        |                        |                  |                        |                    |                |                  | 08/21/2024           |

**FROM** 0.50000ml of E3786 + 0.01000ml of SP6527 + 0.50000ml of SP6596 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3341             | 8270-SIM MDL-3.2PPM CALIBRATION SOLUTION | <a href="#">SP6598</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
|                  |                                          |                        |                  |                        |                    |                |                  | 08/21/2024           |

**FROM** 0.68000ml of E3786 + 0.01000ml of SP6527 + 0.32000ml of SP6596 = Final Quantity: 1.010 ml

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3344             | 8270-SIM MDL-1.6PPM CALIBRATION SOLUTION | <a href="#">SP6599</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
|                  |                                          |                        |                  |                        |                    |                |                  | 08/21/2024           |

**FROM** 0.84000ml of E3786 + 0.01000ml of SP6527 + 0.16000ml of SP6596 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3342             | 8270-SIM MDL-0.8PPM CALIBRATION SOLUTION | <a href="#">SP6600</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
|                  |                                          |                        |                  |                        |                    |                |                  | 08/21/2024           |

**FROM** 0.92000ml of E3786 + 0.01000ml of SP6527 + 0.08000ml of SP6596 = Final Quantity: 1.010 ml

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3343             | 8270-SIM MDL-0.4PPM CALIBRATION SOLUTION | <a href="#">SP6601</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
| 08/21/2024       |                                          |                        |                  |                        |                    |                |                  |                      |

**FROM** 0.96000ml of E3786 + 0.01000ml of SP6527 + 0.04000ml of SP6596 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3345             | 8270-SIM MDL-0.2PPM CALIBRATION SOLUTION | <a href="#">SP6602</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
| 08/21/2024       |                                          |                        |                  |                        |                    |                |                  |                      |

**FROM** 0.50000ml of E3786 + 0.01000ml of SP6527 + 0.50000ml of SP6601 = Final Quantity: 1.010 ml

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3346             | 8270-SIM MDL-0.1PPM CALIBRATION SOLUTION | <a href="#">SP6603</a> | 08/09/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
|                  |                                          |                        |                  |                        |                    |                |                  | 08/21/2024           |

**FROM** 0.75000ml of E3786 + 0.01000ml of SP6527 + 0.25000ml of SP6601 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>                | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|----------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3491             | 8270-SIM-Surrogate 0.4 PPM | <a href="#">SP6605</a> | 08/15/2024       | 11/21/2024             | Jagrut Upadhyay    | None           | None             | mohammad ahmed       |
|                  |                            |                        |                  |                        |                    |                |                  | 08/21/2024           |

**FROM** 0.00800ml of S10977 + 0.01600ml of S11003 + 0.04000ml of S10782 + 199.93600ml of E3788 = Final Quantity: 200.000 ml

## CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName                      | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-3382-05 / Sand, Purified (cs/4x2.5kg) | 0000243821 | 06/30/2025      | 04/30/2020 / RAJESH     | 04/28/2020 / RAJESH         | E2865          |

| Supplier                    | ItemCode / ItemName                                    | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-----------------------------|--------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| PCI Scientific Supply, Inc. | PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1 | 313201 | 07/01/2025      | 01/03/2024 / Rajesh     | 07/20/2023 / Rajesh         | E3551          |

| Supplier         | ItemCode / ItemName                                         | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-------------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24C0162011 | 11/25/2024      | 05/25/2024 / Rajesh     | 05/08/2024 / Rajesh         | E3746          |

| Supplier         | ItemCode / ItemName                                         | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-------------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24D1962005 | 12/08/2024      | 06/08/2024 / Rajesh     | 05/31/2024 / Rajesh         | E3759          |

| Supplier         | ItemCode / ItemName                                         | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-------------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24E2462004 | 01/08/2025      | 07/08/2024 / Rajesh     | 06/21/2024 / Rajesh         | E3768          |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L) | 23H1462005 | 01/12/2025      | 07/12/2024 /            | 07/02/2024 / Rajesh         | E3769          |



## CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName                                         | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-------------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24F1062004 | 02/01/2025      | 08/01/2024 / Rajesh     | 07/16/2024 / Rajesh         | E3786          |

| Supplier         | ItemCode / ItemName                                         | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-------------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24G0862022 | 02/13/2025      | 08/13/2024 / Rajesh     | 08/07/2024 / Rajesh         | E3787          |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L) | 23H1462005 | 04/23/2025      | 08/13/2024 / Rajesh     | 08/13/2024 / Rajesh         | E3788          |

| Supplier          | ItemCode / ItemName                                       | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|-----------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml | 440246 | 02/08/2025      | 08/08/2024 / Jagrut     | 12/09/2021 / Christian      | S10103         |

| Supplier | ItemCode / ItemName                                    | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL, | A0182667 | 01/15/2025      | 07/15/2024 / Rahul      | 03/18/2022 / Christian      | S10247         |

| Supplier | ItemCode / ItemName                                         | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM | A0186160 | 11/21/2024      | 05/21/2024 / Jagrut     | 09/07/2022 / Christian      | S10782         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                          | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31087 / Acid Surrogate<br>10,000ug/ml,methanol,5ml/<br>ampul | A0188108 | 11/30/2024      | 05/31/2024 /<br>Jagrut  | 12/28/2022 /<br>Christian   | S10977         |

| Supplier | ItemCode / ItemName                                                                 | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31086 / Base Neutral<br>Surrogate<br>5000ug/ml,CH <sub>2</sub> Cl <sub>2</sub> ,5ml | A0189418 | 11/30/2024      | 05/31/2024 /<br>Jagrut  | 12/28/2022 /<br>Christian   | S11003         |

| Supplier | ItemCode / ItemName                                                  | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555872 / Custom<br>Standard,<br>pentachlorophenol Std [CS<br>5328-5] | A0193449 | 10/26/2024      | 04/26/2024 /<br>Rahul   | 01/13/2023 /<br>Christian   | S11012         |

| Supplier          | ItemCode / ItemName                                                        | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|----------------------------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | z-110381-01 / 8270<br>Calibration Solution, 76-1,<br>500 & 1,000 mg/L, 1ml | 495831 | 02/08/2025      | 08/08/2024 /<br>Jagrut  | 02/07/2023 /<br>Christian   | S11097         |

| Supplier          | ItemCode / ItemName                                                     | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|-------------------------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | Z-110094-02 / CLP<br>Base/Neutral Surrogate<br>Solution, 5000 mg/L, 1ml | 506889 | 02/08/2025      | 08/08/2024 /<br>Jagrut  | 08/11/2023 /<br>Yogesh      | S11494         |

| Supplier | ItemCode / ItemName                                                                                                           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555223 / Custom 8270<br>Plus Std #1 [2nd lot at \$100<br>per ampul if requested -<br>contact ARM with Request]<br>[CS 4978-1] | A0201940 | 12/05/2024      | 06/05/2024 /<br>Rahul   | 09/18/2023 /<br>Kiran       | S11566         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride | A0196453 | 12/14/2024      | 06/14/2024 / Rahul      | 11/21/2023 / Rahul          | S11766         |

| Supplier | ItemCode / ItemName                                           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride | A0196453 | 01/12/2025      | 07/12/2024 / Rahul      | 11/21/2023 / Rahul          | S11767         |

| Supplier | ItemCode / ItemName                                              | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL | A0201320 | 12/05/2024      | 06/05/2024 / Rahul      | 12/21/2023 / Rahul          | S12029         |

| Supplier          | ItemCode / ItemName                                                                  | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|--------------------------------------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days) | 414127 | 02/08/2025      | 08/08/2024 / Jagrut     | 01/31/2024 / Rahul          | S12077         |

| Supplier | ItemCode / ItemName                                                                                  | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request] | A0207706 | 12/05/2024      | 06/05/2024 / Rahul      | 02/05/2024 / Rahul          | S12096         |

[CS 4978-2]

| Supplier | ItemCode / ItemName                                                                                  | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request] | A0207706 | 01/09/2025      | 07/09/2024 / Jagrut     | 02/05/2024 / Rahul          | S12097         |

[CS 4978-2]

## CHEMICAL RECEIPT LOG BOOK

| Supplier          | ItemCode / ItemName                                | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|----------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml | 454157 | 01/09/2025      | 07/09/2024 / Jagrut     | 03/08/2024 / Rahul          | S12112         |

| Supplier          | ItemCode / ItemName                                | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|----------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml | 454157 | 02/09/2025      | 08/09/2024 / Jagrut     | 03/08/2024 / Rahul          | S12113         |

| Supplier | ItemCode / ItemName                                                                                                                    | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> [New Solvent 100% CH <sub>2</sub> Cl <sub>2</sub> ] | A0203726 | 12/05/2024      | 06/05/2024 / Rahul      | 03/15/2024 / Rahul          | S12117         |

| Supplier | ItemCode / ItemName                                                                                                                    | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> [New Solvent 100% CH <sub>2</sub> Cl <sub>2</sub> ] | A0203726 | 04/30/2025      | 01/10/2025 / Jagrut     | 03/15/2024 / Rahul          | S12118         |



5580 Skylane Blvd  
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by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

**Catalog No.:** Lot No.: **Storage:** **Solvent:** **Exp. Date:** **Description:**  
Z-112090 440246  $\leq -10^{\circ}\text{C}$  Methylene Chloride 2/16/2026 CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL  
-04

| Compound                      | CAS No.    | Purity (%) | Compound Lot No. | Concentration, mg/L |
|-------------------------------|------------|------------|------------------|---------------------|
| 2-chlorophenol-d <sub>4</sub> | 93951-73-6 | 99.3       | 248.12.7P        | 7487 $\pm$ 17.2     |
| 2-fluorophenol                | 367-12-4   | 99.8       | 10.7.3.3P        | 7513 $\pm$ 17.26    |
| phenol-d <sub>6</sub>         | 13127-88-3 | 99.9       | 949.120.8P       | 7481 $\pm$ 17.19    |
| 2,4,6-tribromophenol          | 118-79-6   | 99.8       | 12.1.6P          | 7469 $\pm$ 17.17    |

Received on

02/25/21

by  
CG

S9236  
to

S9240

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certified By: Erica Castiglione  
Erica Castiglione  
Chemist



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Santa Rosa, CA 95403

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(707)545-7901 Fax

Receivalon  
02/07/23 by CG

Sheet 511096  
to  
511099

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 4

| Catalog No.: | Lot No.: | Storage: | Solvent:           | Exp. Date: | Description:                                                   |
|--------------|----------|----------|--------------------|------------|----------------------------------------------------------------|
| Z-110381-01  | 495831   | ≤ -10 °C | Methylene Chloride | 10/30/2027 | Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL |

| Compound                          | CAS No.  | Purity (%) | Compound Lot No. | Concentration, mg/L |
|-----------------------------------|----------|------------|------------------|---------------------|
| acenaphthene                      | 83-32-9  | 99.9       | 13.1.5P          | 1003 ± 17.27        |
| acenaphthylene                    | 208-96-8 | 97.6       | 14.290.1P        | 999.8 ± 17.22       |
| aniline                           | 62-53-3  | 99.9       | 64.7.1P          | 995 ± 17.13         |
| anthracene                        | 120-12-7 | 99.5       | 15.7.1P          | 1001 ± 17.24        |
| azobenzene                        | 103-33-3 | 98.1       | 252.7.2P         | 999.1 ± 17.21       |
| benzo[a]anthracene                | 56-55-3  | 100        | 16.7.3P          | 1001 ± 17.24        |
| benzo[b]fluoranthene              | 205-99-2 | 99.8       | 17.421.3P        | 1001 ± 19.91        |
| benzo[k]fluoranthene              | 207-08-9 | 98.9       | 18.421.4P        | 1001 ± 17.92        |
| benzo[ghi]perylene                | 191-24-2 | 93         | 19.286.4P        | 999.6 ± 19.88       |
| benzo[a]pyrene                    | 50-32-8  | 97         | 20.286.2P        | 999.1 ± 26.35       |
| benzyl alcohol                    | 100-51-6 | 99.9       | 65.18.1P         | 1001 ± 17.24        |
| bis(2-chloroethoxy)methane        | 111-91-1 | 99.1       | 31.3.15P         | 999.7 ± 17.89       |
| bis(2-chloroethyl)ether           | 111-44-4 | 99.8       | 32.7.1P          | 1001 ± 17.23        |
| bis(2-chloro-1-methylethyl) ether | 108-60-1 | 99.5       | 34.3.13P         | 999.5 ± 17.89       |
| bis(2-ethylhexyl)adipate          | 103-23-1 | 99.5       | 874.7.1P         | 999.5 ± 17.21       |
| bis(2-ethylhexyl)phthalate        | 117-81-7 | 99.4       | 33.29.1P         | 998.8 ± 19.86       |
| 4-bromophenyl phenyl ether        | 101-55-3 | 99.4       | 35.7.1P          | 999.1 ± 17.2        |
| butyl benzyl phthalate            | 85-68-7  | 98.4       | 36.1.6P          | 984.7 ± 19.58       |
| carbazole                         | 86-74-8  | 99.4       | 239.7.2P         | 1000 ± 17.22        |

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

*Brianna Smith*

Certified By: \_\_\_\_\_

Brianna Smith  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 495831

Expiration Date: 10/30/2027

| Compound               | CAS No.  | Purity (%) | Compound Lot No. | Concentration, mg/L |
|------------------------|----------|------------|------------------|---------------------|
| 1,2,4-trichlorobenzene | 120-82-1 | 99.6       | 54.29.1P         | 1000 ± 17.22        |
| 2,4,5-trichlorophenol  | 95-95-4  | 96.5       | 121.7.1.1P       | 1000 ± 17.22        |
| 2,4,6-trichlorophenol  | 88-06-2  | 99.6       | 113.7.1P         | 1002 ± 17.25        |

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By:



Briana Smith  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Received on  
03/10/22  
by  
CG  
S10242  
to  
S10247

**Catalog No. :** 31615 **Lot No.:** A0182667  
**Description :** GC/MS Tuning Mixture  
GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2025 **Storage:** 10°C or colder  
**Handling:** Contains carcinogen/reproductive toxin. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound                                                                             | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                       |                                       |
|---------------|--------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------|---------------------------------------|
| 1             | Pentachlorophenol<br>CAS # 87-86-5 (Lot 211229RSR)<br>Purity 99%                     | 1,003.6 µg/mL               | +/- 5.8897 µg/mL<br>+/- 45.7132 µg/mL<br>+/- 66.0037 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2             | DFTPP (Decafluorotriphenylphosphine)<br>CAS # 5074-71-5 (Lot Q117-147)<br>Purity 95% | 1,006.6 µg/mL               | +/- 5.9074 µg/mL<br>+/- 45.8508 µg/mL<br>+/- 66.2023 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3             | Benzidine<br>CAS # 92-87-5 (Lot 211228JLM)<br>Purity 99%                             | 1,008.4 µg/mL               | +/- 5.9179 µg/mL<br>+/- 45.9318 µg/mL<br>+/- 66.3193 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4             | 4,4'-DDT<br>CAS # 50-29-3 (Lot 210916JLM)<br>Purity 99%                              | 1,007.6 µg/mL               | +/- 5.9132 µg/mL<br>+/- 45.8954 µg/mL<br>+/- 66.2667 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** Methylene chloride  
CAS # 75-09-2  
Purity 99%



**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

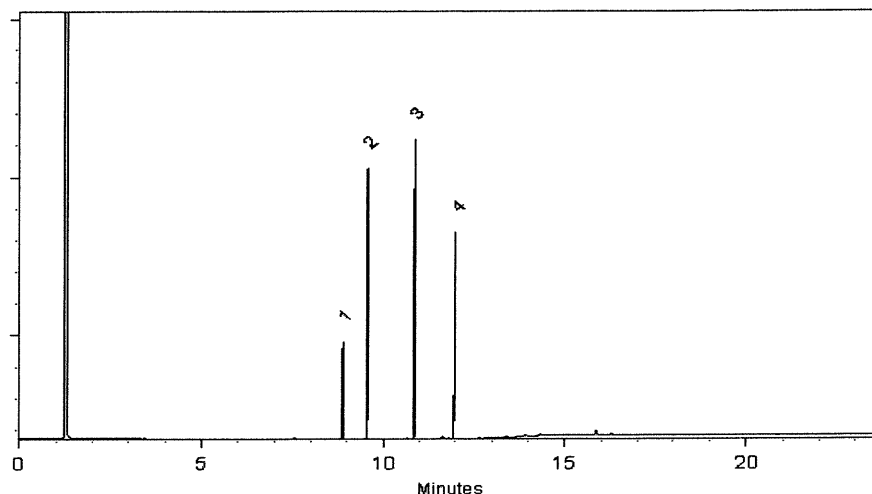
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

**Temp. Program:**  
75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 08-Mar-2022

Balance: B345965662

Marlene Cowan - Operations Tech I

Date Passed: 10-Mar-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Received on  
09/07/22  
by  
CG  
S10778  
to  
S10782

**Catalog No. :** 33913 **Lot No.:** A0186160

**Description :** SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2028 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order   | Compound                                                              | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                         |                                       |
|-----------------|-----------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------|---------------------------------------|
| 1               | 2-Methylnaphthalene-d10<br>CAS # 7297-45-2 (Lot EF-135)<br>Purity 96% | 2,015.0 µg/mL               | +/- 11.8254 µg/mL<br>+/- 90.7728 µg/mL<br>+/- 100.7207 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2               | Fluoranthene-d10<br>CAS # 93951-69-0 (Lot PR-20668)<br>Purity 99%     | 2,007.0 µg/mL               | +/- 11.7782 µg/mL<br>+/- 90.4107 µg/mL<br>+/- 100.3188 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| <b>Solvent:</b> | Methylene chloride<br>CAS # 75-09-2<br>Purity 99%                     |                             |                                                              |                                       |

**Column:**

30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant pressure 10 psi.

**Temp. Program:**

75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**

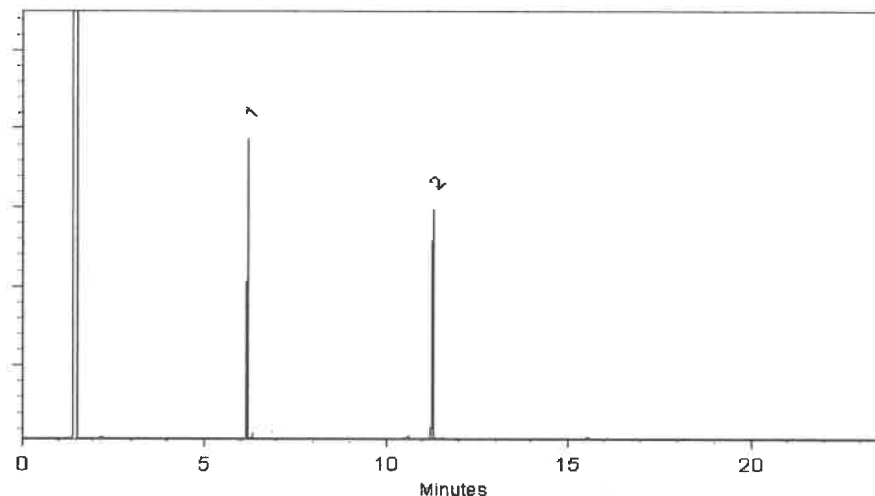
250°C

**Det. Temp:**

330°C

**Det. Type:**

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

John Friedline - Operations Technician I

Date Mixed: 09-Jun-2022

Balance: B442140311

Marlina Cowan - Operations Tech II ARM QC

Date Passed: 13-Jun-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis



ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31087 **Lot No.:** A0188108  
**Description :** Acid Surrogate Mix (4/89 SOW)  
Acid Surrogate 10,000µg/mL, Methanol, 5mL/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** August 31, 2030 **Storage:** 10°C or colder  
**Ship:** Ambient

Received by  
CG on  
12/28/22  
S10951  
to  
S10980

### CERTIFIED VALUES

| Elution Order | Compound                                                               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                          |
|---------------|------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| 1             | 2-Fluorophenol<br>CAS # 367-12-4<br>Purity 99%<br>(Lot STBF3761V)      | 10,088.5 µg/mL              | +/- 58.6554 µg/mL Gravimetric<br>+/- 294.4162 µg/mL Unstressed<br>+/- 357.2628 µg/mL Stressed |
| 2             | Phenol-d6<br>CAS # 13127-88-3<br>Purity 99%<br>(Lot PR-31262)          | 10,043.3 µg/mL              | +/- 58.3923 µg/mL Gravimetric<br>+/- 293.0957 µg/mL Unstressed<br>+/- 355.6603 µg/mL Stressed |
| 3             | 2,4,6-Tribromophenol<br>CAS # 118-79-6<br>Purity 99%<br>(Lot MKCJ7664) | 10,010.0 µg/mL              | +/- 58.1990 µg/mL Gravimetric<br>+/- 292.1253 µg/mL Unstressed<br>+/- 354.4829 µg/mL Stressed |

**Solvent:** Methanol  
CAS # 67-56-1  
Purity 99%

**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

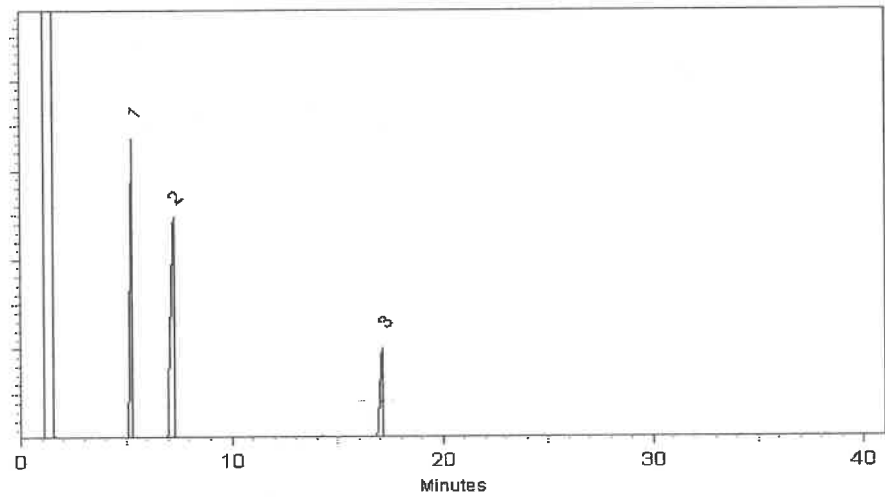
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

**Temp. Program:**  
40°C (hold 2 min.) to 330°C  
@ 10°C/min. (hold 10 min.)

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Morgan Craighead - Mix Technician

**Date Mixed:** 02-Aug-2022      **Balance:** 1127510105

  
Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 05-Aug-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31086 **Lot No.:** A0189418  
**Description :** B/N Surrogate Mix (4/89 SOW)  
Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** August 31, 2028 **Storage:** 10°C or colder  
**Handling:** Sonicate prior to use. **Ship:** Ambient

Received by  
CG on  
12/28/22  
\$10981  
to  
S11010

### CERTIFIED VALUES

| Elution Order | Compound                                                         | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                          |
|---------------|------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| 1             | Nitrobenzene-d5<br>CAS # 4165-60-0 (Lot PR-29940A)<br>Purity 99% | 5,009.8 µg/mL               | +/- 29.1271 µg/mL Gravimetric<br>+/- 225.6421 µg/mL Unstressed<br>+/- 250.3778 µg/mL Stressed |
| 2             | 2-Fluorobiphenyl<br>CAS # 321-60-8 (Lot 00021384)<br>Purity 99%  | 5,026.6 µg/mL               | +/- 29.2250 µg/mL Gravimetric<br>+/- 226.4003 µg/mL Unstressed<br>+/- 251.2191 µg/mL Stressed |
| 3             | p-Terphenyl-d14<br>CAS # 1718-51-0 (Lot PR-30504)<br>Purity 99%  | 5,027.3 µg/mL               | +/- 29.2289 µg/mL Gravimetric<br>+/- 226.4304 µg/mL Unstressed<br>+/- 251.2524 µg/mL Stressed |

**Solvent:** Methylene chloride  
CAS # 75-09-2  
Purity 99%

#### Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

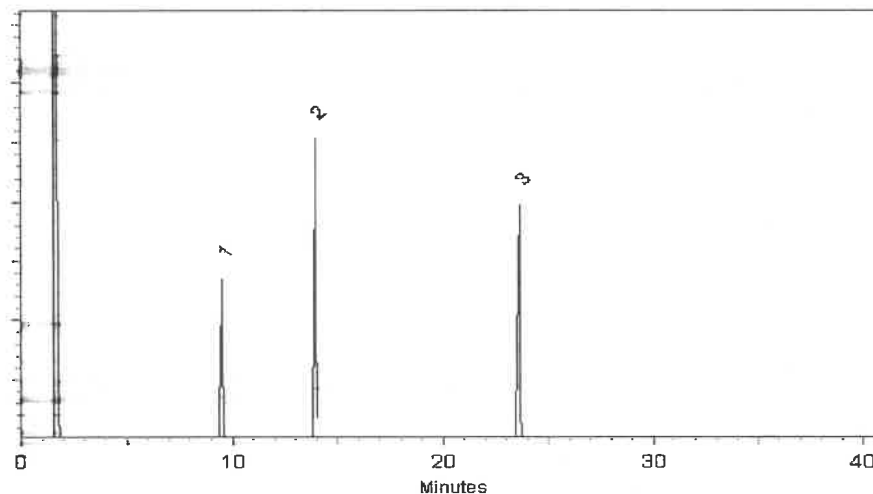
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

**Temp. Program:**  
40°C (hold 2 min.) to 330°C  
@ 10°C/min. (hold 10 min.)

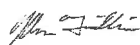
**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
John Friedline - Operations Technician I

**Date Mixed:** 09-Sep-2022 **Balance:** 1128353505

  
Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 13-Sep-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



## FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555872 **Lot No.:** A0193449  
**Description :** Custom Pentachlorophenol Standard  
Custom Pentachlorophenol Standard 25,000µg/mL, Methanol,  
1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** January 31, 2026 **Storage:** 10°C or colder  
**Ship:** Ambient

Received on  
01/13/23  
by  
CG  
S11011  
+0  
S11015

## CERTIFIED VALUES

| Component # | Compound          | CAS #   | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|-------------|-------------------|---------|----------|--------|-----------------------------|----------------------------------------|
| 1           | Pentachlorophenol | 87-86-5 | RP221012 | 99%    | 25,050.0 µg/mL              | +/- 778.6378                           |

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

*Russ Bookhamer*

Russ Bookhamer - Operations Technician I

**Date Mixed:** 11-Jan-2023

**Balance:** B442140311

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Sand  
Purified  
Washed and Ignited



Material No.: 3382-05  
Batch No.: 0000243821  
Manufactured Date: 2018/04/09  
Retest Date: 2025/04/07  
Revision No: 1

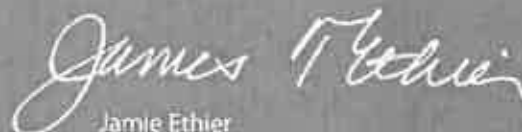
## Certificate of Analysis

| Test                      | Specification | Result |
|---------------------------|---------------|--------|
| Substances Soluble in HCl | $\leq 0.16\%$ | 0.01   |

For Laboratory, Research or Manufacturing Use  
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US  
Packaging Site: Paris Mfg Ctr & DC

E 2865

  
Jamie Ethier  
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



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QUÍMICOS  
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR  
MONTERREY, N.L. MEXICO  
CP 64070  
TEL +52 81 13 52 57 57  
www.pqm.com.mx

## CERTIFICATE OF ANALYSIS

|                        |                                   |               |                                 |
|------------------------|-----------------------------------|---------------|---------------------------------|
| PRODUCT :              | SODIUM SULFATE CRYSTALS ANHYDROUS |               |                                 |
| QUALITY :              | ACS (CODE RMB3375)                | FORMULA :     | Na <sub>2</sub> SO <sub>4</sub> |
| SPECIFICATION NUMBER : | 6399                              | RELEASE DATE: | ABR/21/2023                     |
| LOT NUMBER :           | 313201                            |               |                                 |

| TEST                                     | SPECIFICATIONS | LOT VALUES  |
|------------------------------------------|----------------|-------------|
| Assay (Na <sub>2</sub> SO <sub>4</sub> ) | Min. 99.0%     | 99.7 %      |
| pH of a 5% solution at 25°C              | 5.2 - 9.2      | 6.1         |
| Insoluble matter                         | Max. 0.01%     | 0.005 %     |
| Loss on ignition                         | Max. 0.5%      | 0.1 %       |
| Chloride (Cl)                            | Max. 0.001%    | <0.001 %    |
| Nitrogen compounds (as N)                | Max. 5 ppm     | <5 ppm      |
| Phosphate (PO <sub>4</sub> )             | Max. 0.001%    | <0.001 %    |
| Heavy metals (as Pb)                     | Max. 5 ppm     | <5 ppm      |
| Iron (Fe)                                | Max. 0.001%    | <0.001 %    |
| Calcium (Ca)                             | Max. 0.01%     | 0.002 %     |
| Magnesium (Mg)                           | Max. 0.005%    | 0.001 %     |
| Potassium (K)                            | Max. 0.008%    | 0.003 %     |
| Extraction-concentration suitability     | Passes test    | Passes test |
| Appearance                               | Passes test    | Passes test |
| Identification                           | Passes test    | Passes test |
| Solubility and foreign matter            | Passes test    | Passes test |
| Retained on US Standard No. 10 sieve     | Max. 1%        | 0.1 %       |
| Retained on US Standard No. 60 sieve     | Min. 94%       | 97.3 %      |
| Through US Standard No. 60 sieve         | Max. 5%        | 2.5 %       |
| Through US Standard No. 100 sieve        | Max. 10%       | 0.1 %       |

### COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24C0162011  
Manufactured Date: 2024-01-04  
Expiration Date: 2025-04-04  
Revision No.: 0

Certificate of Analysis

| Test                                                                                             | Specification | Result   |
|--------------------------------------------------------------------------------------------------|---------------|----------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                             | ≤ 5           | < 1      |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)                             | ≤ 10          | 2        |
| Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water) | ≥ 99.8 %      | 100.0 %  |
| Color (APHA)                                                                                     | ≤ 10          | 10       |
| Residue after Evaporation                                                                        | ≤ 1.0 ppm     | 0.2 ppm  |
| Titration Acid (μeq/g)                                                                           | ≤ 0.3         | < 0.1    |
| Chloride (Cl)                                                                                    | ≤ 10 ppm      | < 5 ppm  |
| Water (by KF, coulometric)                                                                       | ≤ 0.02 %      | < 0.01 % |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24A04224

E 3746

Ken Koehnlein  
Sr. Manager, Quality Assurance

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24D1962005  
Manufactured Date: 2024-03-16  
Expiration Date: 2025-06-15  
Revision No.: 0

Certificate of Analysis

| Test                                                                                             | Specification | Result   |
|--------------------------------------------------------------------------------------------------|---------------|----------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                             | ≤ 5           | < 1      |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)                             | ≤ 10          | 8        |
| Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water) | ≥ 99.8 %      | 99.9 %   |
| Color (APHA)                                                                                     | ≤ 10          | 5        |
| Residue after Evaporation                                                                        | ≤ 1.0 ppm     | 0.1 ppm  |
| Titration Acid (µeq/g)                                                                           | ≤ 0.3         | < 0.1    |
| Chloride (Cl)                                                                                    | ≤ 10 ppm      | < 5 ppm  |
| Water (by KF, coulometric)                                                                       | ≤ 0.02 %      | < 0.01 % |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD  
  
Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24C16563

E 3759

  
Jamie Croak  
Director Quality Operations, Bioscience Production

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24E2462004  
Manufactured Date: 2024-04-10  
Expiration Date: 2025-07-10  
Revision No.: 0

Certificate of Analysis

| Test                                                                                             | Specification | Result   |
|--------------------------------------------------------------------------------------------------|---------------|----------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                             | ≤ 5           | 3        |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)                             | ≤ 10          | 3        |
| Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water) | ≥ 99.8 %      | 100.0 %  |
| Color (APHA)                                                                                     | ≤ 10          | 5        |
| Residue after Evaporation                                                                        | ≤ 1.0 ppm     | 0.1 ppm  |
| Titration Acid (μeq/g)                                                                           | ≤ 0.3         | < 0.1    |
| Chloride (Cl)                                                                                    | ≤ 10 ppm      | 5 ppm    |
| Water (by KF, coulometric)                                                                       | ≤ 0.02 %      | < 0.01 % |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24D10725

E 3768

  
Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700  
Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700  
Page 1 of 1

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis



Material No.: 9254-03  
Batch No.: 23H1462005  
Manufactured Date: 2023-07-26  
Expiration Date: 2026-07-25  
Revision No.: 0

## Certificate of Analysis

| Test                                                                    | Specification | Result      |
|-------------------------------------------------------------------------|---------------|-------------|
| Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water) | ≥ 99.4 %      | 99.7 %      |
| Color (APHA)                                                            | ≤ 10          | 5           |
| Residue after Evaporation                                               | ≤ 1.0 ppm     | 0.3 ppm     |
| Substances Reducing Permanganate                                        | Passes Test   | Passes Test |
| Titration Acid (µeq/g)                                                  | ≤ 0.3         | 0.1         |
| Titration Base (µeq/g)                                                  | ≤ 0.6         | < 0.1       |
| Water (H <sub>2</sub> O)                                                | ≤ 0.5 %       | 0.3 %       |
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)    | ≤ 5           | < 1         |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)    | ≤ 10          | 1           |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 7/21/24

E 3769

Ken Koehnlein  
Sr. Manager, Quality Assurance



Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24F1062004  
Manufactured Date: 2024-04-15  
Expiration Date: 2025-07-15  
Revision No.: 0

## Certificate of Analysis

| Test                                                                                       | Specification  | Result  |
|--------------------------------------------------------------------------------------------|----------------|---------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                       | $\leq 5$       | < 1     |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)                       | $\leq 10$      | 7       |
| Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water) | $\geq 99.8\%$  | 100.0%  |
| Color (APHA)                                                                               | $\leq 10$      | 5       |
| Residue after Evaporation                                                                  | $\leq 1.0$ ppm | 0.1 ppm |
| Titration Acid ( $\mu\text{eq/g}$ )                                                        | $\leq 0.3$     | < 0.1   |
| Chloride (Cl)                                                                              | $\leq 10$ ppm  | < 5 ppm |
| Water (by KF, coulometric)                                                                 | $\leq 0.02\%$  | < 0.01% |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24D15750

E 3786

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700  
Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700  
Page 1 of 1



Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24G0862022  
Manufactured Date: 2024-06-05  
Expiration Date: 2025-09-04  
Revision No.: 0

Certificate of Analysis

| Test                                                                                             | Specification | Result   |
|--------------------------------------------------------------------------------------------------|---------------|----------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                             | ≤ 5           | 3        |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)                             | ≤ 10          | 4        |
| Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water) | ≥ 99.8 %      | 100.0 %  |
| Color (APHA)                                                                                     | ≤ 10          | 5        |
| Residue after Evaporation                                                                        | ≤ 1.0 ppm     | 0.3 ppm  |
| Titration Acid (μeq/g)                                                                           | ≤ 0.3         | < 0.1    |
| Chloride (Cl)                                                                                    | ≤ 10 ppm      | < 5 ppm  |
| Water (by KF, coulometric)                                                                       | ≤ 0.02 %      | < 0.01 % |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24F05012

E 3787

Jamie Croak  
Director Quality Operations, Bioscience Production

Acetone

BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

Avantor™



Material No.: 9254-03  
Batch No.: 23H1462005  
Manufactured Date: 2023-07-26  
Expiration Date: 2026-07-25  
Revision No.: 0

## Certificate of Analysis

| Test                                                                    | Specification | Result      |
|-------------------------------------------------------------------------|---------------|-------------|
| Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water) | ≥ 99.4 %      | 99.7 %      |
| Color (APHA)                                                            | ≤ 10          | 5           |
| Residue after Evaporation                                               | ≤ 1.0 ppm     | 0.3 ppm     |
| Substances Reducing Permanganate                                        | Passes Test   | Passes Test |
| Titration Acid (μeq/g)                                                  | ≤ 0.3         | 0.1         |
| Titration Base (μeq/g)                                                  | ≤ 0.6         | < 0.1       |
| Water (H <sub>2</sub> O)                                                | ≤ 0.5 %       | 0.3 %       |
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)    | ≤ 5           | < 1         |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)    | ≤ 10          | 1           |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 8/13/24

E 3788

Ken Koehnlein  
Sr. Manager, Quality Assurance



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

|                     |                 |                 |                    |                   |                                                       |
|---------------------|-----------------|-----------------|--------------------|-------------------|-------------------------------------------------------|
| <b>Catalog No.:</b> | <b>Lot No.:</b> | <b>Storage:</b> | <b>Solvent:</b>    | <b>Exp. Date:</b> | <b>Description:</b>                                   |
| Z-110094-02         | 506889          | ≤ -10 °C        | Methylene Chloride | 7/25/2028         | CLP Base/Neutral Surrogate Solution, 5,000 mg/L, 1 ml |

| Compound                           | CAS No.   | Purity (%) | Compound Lot No. | Concentration, mg/L |
|------------------------------------|-----------|------------|------------------|---------------------|
| 1,2-dichlorobenzene-d <sub>4</sub> | 2199-69-1 | 99.7       | 247.29.3P        | 5035 ± 28.02        |
| 2-fluorobiphenyl                   | 321-60-8  | 99.69      | 8.286.1.1P       | 4999 ± 103.66       |
| nitrobenzene-d <sub>5</sub>        | 4165-60-0 | 99.67      | 7.9.3P           | 4988 ± 27.32        |
| p-terphenyl-d14                    | 1718-51-0 | 99.3       | 9.120.8P         | 5005 ± 27.85        |

511494 } Y.P.  
↓  
511498 } 08/11/2023

\*Not a certified value

Certified By: Shane C. Tipton  
Clint Tipton  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223

Lot No.: A0201940

Description :

Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size :

2 mL

Expiration Date :

September 30, 2025

Handling:

This product is photosensitive.

Pkg Amt: > 1 mL

Storage: 10°C or colder

Ship: Ambient

511539  
↓  
51568  
7.6  
0911

## CERTIFIED VALUES

| Component # | Compound               | CAS #     | Lot #      | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|-------------|------------------------|-----------|------------|--------|-----------------------------|----------------------------------------|
| 1           | 3,3'-Dichlorobenzidine | 91-94-1   | S230321RSR | 99%    | 1,001.0 µg/mL               | +/- 22.9799                            |
| 2           | Atrazine               | 1912-24-9 | 5FYWL      | 99%    | 1,010.0 µg/mL               | +/- 23.1865                            |
| 3           | Benzidine              | 92-87-5   | S221205RSR | 99%    | 1,008.0 µg/mL               | +/- 23.1406                            |
| 4           | epsilon-Caprolactam    | 105-60-2  | I16X016    | 99%    | 1,008.0 µg/mL               | +/- 23.1406                            |

Solvent:

Methylene chloride

CAS # 75-09-2

Purity 99%

REVIEWED

By Jennifer Pollino at 7:10 am, Sep 13, 2023

Date Mixed: 13-Sep-2023

Balance: B345965662

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

**Catalog No. :** 31853 **Lot No.:** A0196453  
**Description :** 1,4-dioxane  
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2028 **Storage:** 0°C or colder  
**Ship:** Ambient

S11749  
↓  
S11794 } RC / 11/30/23

### CERTIFIED VALUES

| Elution Order | Compound    | CAS #    | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------|----------|----------|--------|-----------------------------|----------------------------------------|
| 1             | 1,4-Dioxane | 123-91-1 | SHBN3770 | 99%    | 2,013.0 µg/mL               | +/- 25.0521                            |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

## Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant flow 1.8 mL/min.

**Temp. Program:**

80°C (hold 0.1 min.) to 330°C  
@ 9.6°C/min. (hold 2.86 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

340°C

**Det. Type:**

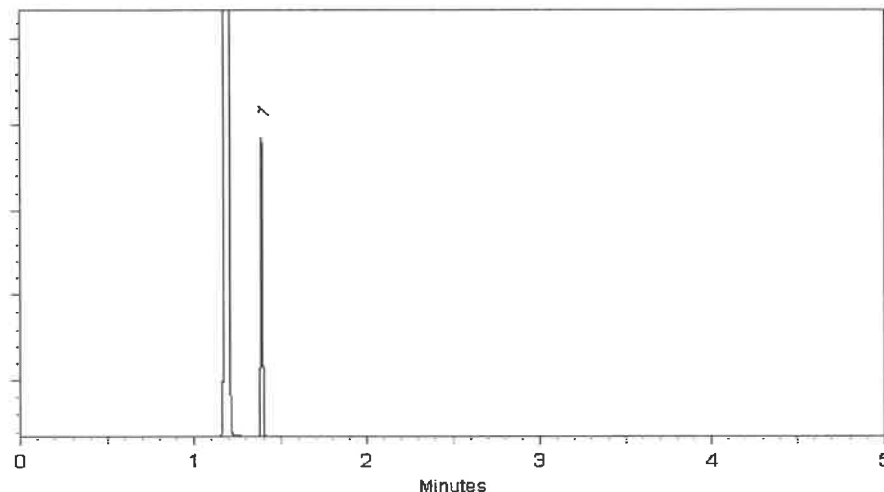
FID

**Split Vent:**

100 ml/min.

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Sam Moodler*  
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023

Balance Serial # B707717271

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.





110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

**Catalog No. :** 31853 **Lot No.:** A0196453  
**Description :** 1,4-dioxane  
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2028 **Storage:** 0°C or colder  
**Ship:** Ambient

S11749  
↓  
S11794 } RC / 11/30/23

### CERTIFIED VALUES

| Elution Order | Compound    | CAS #    | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------|----------|----------|--------|-----------------------------|----------------------------------------|
| 1             | 1,4-Dioxane | 123-91-1 | SHBN3770 | 99%    | 2,013.0 µg/mL               | +/- 25.0521                            |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

## Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant flow 1.8 mL/min.

**Temp. Program:**

80°C (hold 0.1 min.) to 330°C  
@ 9.6°C/min. (hold 2.86 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

340°C

**Det. Type:**

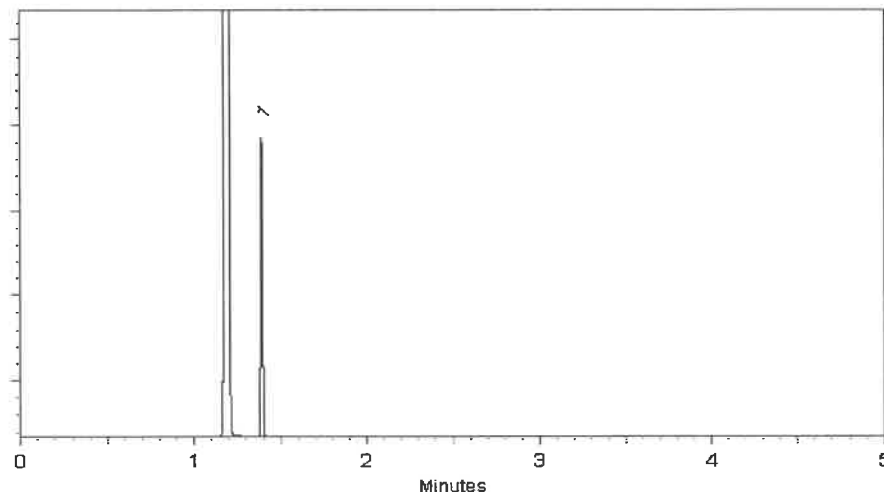
FID

**Split Vent:**

100 ml/min.

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Sam Moodler*  
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023

Balance Serial # B707717271

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle  
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Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31206 **Lot No.:** A0201320

**Description :** SV Internal Standard Mix 2mg/ml  
SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2029 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

S12013  
↓  
S12042 } RC  
12/26/23

### CERTIFIED VALUES

| Elution Order | Compound               | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|------------------------|------------|----------|--------|-----------------------------|----------------------------------------|
| 1             | 1,4-Dichlorobenzene-d4 | 3855-82-1  | PR-30447 | 99%    | 2,017.0 µg/mL               | +/- 90.8469                            |
| 2             | Naphthalene-d8         | 1146-65-2  | M-2180   | 99%    | 2,011.3 µg/mL               | +/- 90.5917                            |
| 3             | Acenaphthene-d10       | 15067-26-2 | PR-33507 | 99%    | 2,008.6 µg/mL               | +/- 90.4685                            |
| 4             | Phenanthrene-d10       | 1517-22-2  | PR-32303 | 99%    | 2,019.4 µg/mL               | +/- 90.9550                            |
| 5             | Chrysene-d12           | 1719-03-5  | PR-32210 | 99%    | 2,013.7 µg/mL               | +/- 90.6968                            |
| 6             | Perylene-d12           | 1520-96-3  | PR-33205 | 99%    | 2,012.7 µg/mL               | +/- 90.6517                            |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

## Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant pressure 10 psi.

**Temp. Program:**

75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

330°C

**Det. Type:**

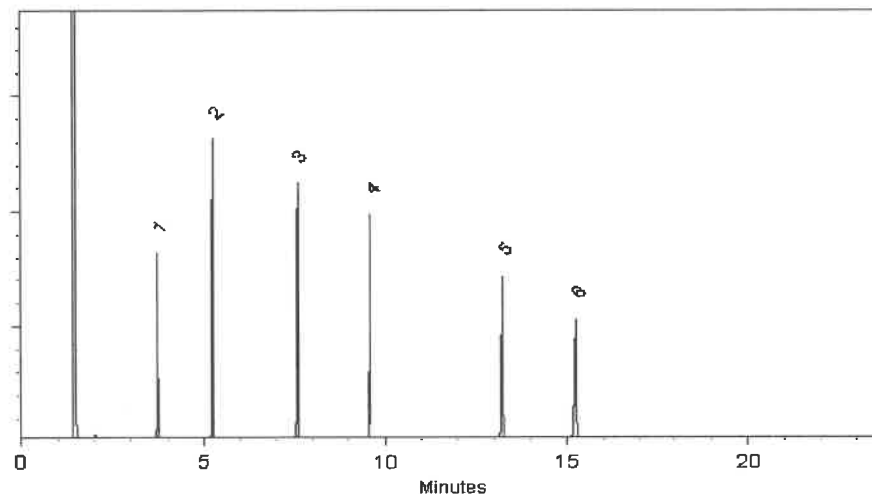
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Peter Robbins - Operations Technician I

Date Mixed: 23-Aug-2023

Balance Serial # B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 25-Aug-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

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|                     |                 |                 |                    |                   |                                           |
|---------------------|-----------------|-----------------|--------------------|-------------------|-------------------------------------------|
| <b>Catalog No.:</b> | <b>Lot No.:</b> | <b>Storage:</b> | <b>Solvent:</b>    | <b>Exp. Date:</b> | <b>Description:</b>                       |
| Z-110816-01         | 414127          | ≤ -10 °C        | Methylene Chloride | 6/21/2025         | Custom 8270 Mix, 4-79,<br>1000 mg/L, 1 mL |

| Compound    | CAS No.   | Purity (%) | Compound Lot No. | Concentration, mg/L |
|-------------|-----------|------------|------------------|---------------------|
| atrazine    | 1912-24-9 | 99.5       | 337.7.3P         | 997 ± 5.81          |
| benzidine   | 92-87-5   | 99.9       | 124.18.6.2P      | 991.8 ± 5.77        |
| caprolactam | 105-60-2  | 99.9       | 271.1.6P         | 999 ± 5.82          |

S12075 } RC  
↓  
S12079 } 02/01/24

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: \_\_\_\_\_

Shane Overcash  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224 **Lot No.:** A0207706

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** February 28, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

512082 } RC/  
↓  
512111 } 02/22/24

## CERTIFIED VALUES

| Component # | Compound                   | CAS #    | Lot #        | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|-------------|----------------------------|----------|--------------|--------|-----------------------------|----------------------------------------|
| 1           | 1,2,4,5-Tetrachlorobenzene | 95-94-3  | MKCT9480     | 99%    | 1,001.0 µg/mL               | +/- 29.424320                          |
| 2           | Acetophenone               | 98-86-2  | STBH8205     | 99%    | 1,004.0 µg/mL               | +/- 29.512504                          |
| 3           | Benzaldehyde               | 100-52-7 | RD231129RSRA | 99%    | 1,005.0 µg/mL               | +/- 29.541899                          |
| 4           | Benzoic acid               | 65-85-0  | MKCR2694     | 99%    | 1,003.0 µg/mL               | +/- 29.483110                          |
| 5           | Biphenyl                   | 92-52-4  | MKCL6515     | 99%    | 1,006.0 µg/mL               | +/- 29.571294                          |

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024

Balance: B345965662



110 Benner Circle  
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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224 **Lot No.:** A0207706

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** February 28, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

512082 } RC/  
↓  
512111 } 02/22/24

### CERTIFIED VALUES

| Component # | Compound                   | CAS #    | Lot #        | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|-------------|----------------------------|----------|--------------|--------|-----------------------------|----------------------------------------|
| 1           | 1,2,4,5-Tetrachlorobenzene | 95-94-3  | MKCT9480     | 99%    | 1,001.0 µg/mL               | +/- 29.424320                          |
| 2           | Acetophenone               | 98-86-2  | STBH8205     | 99%    | 1,004.0 µg/mL               | +/- 29.512504                          |
| 3           | Benzaldehyde               | 100-52-7 | RD231129RSRA | 99%    | 1,005.0 µg/mL               | +/- 29.541899                          |
| 4           | Benzoic acid               | 65-85-0  | MKCR2694     | 99%    | 1,003.0 µg/mL               | +/- 29.483110                          |
| 5           | Biphenyl                   | 92-52-4  | MKCL6515     | 99%    | 1,006.0 µg/mL               | +/- 29.571294                          |

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024

Balance: B345965662





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Santa Rosa, CA 95403

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Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

|                     |                 |                 |                 |                   |                                          |
|---------------------|-----------------|-----------------|-----------------|-------------------|------------------------------------------|
| <b>Catalog No.:</b> | <b>Lot No.:</b> | <b>Storage:</b> | <b>Solvent:</b> | <b>Exp. Date:</b> | <b>Description:</b>                      |
| Z-020223-01         | 454157          | ≤ -10 °C        | P/T Methanol    | 6/10/2026         | 1,4-Dioxane Solution, 2000 mg/L,<br>1 mL |

| <u>Compound</u> | <u>CAS No.</u> | <u>Purity (%)</u> | <u>Compound Lot No.</u> | <u>Concentration, mg/L</u> |
|-----------------|----------------|-------------------|-------------------------|----------------------------|
| 1,4-dioxane     | 123-91-1       | 100               | 223.1.3P                | 1997 ± 57.08               |

512112 } RC/  
↓  
912116 } 03/08/24

\*Not a certified value

Certified By: \_\_\_\_\_

Melissa Workoff  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



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Manufacturer's Quality System  
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Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

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|              |          |          |              |            |                                          |
|--------------|----------|----------|--------------|------------|------------------------------------------|
| Catalog No.: | Lot No.: | Storage: | Solvent:     | Exp. Date: | Description:                             |
| Z-020223-01  | 454157   | ≤ -10 °C | P/T Methanol | 6/10/2026  | 1,4-Dioxane Solution, 2000 mg/L,<br>1 mL |

| Compound    | CAS No.  | Purity (%) | Compound Lot No. | Concentration, mg/L |
|-------------|----------|------------|------------------|---------------------|
| 1,4-dioxane | 123-91-1 | 100        | 223.1.3P         | 1997 ± 57.08        |

512112 } RC/  
↓  
912116 } 03/08/24

\*Not a certified value

Certified By: \_\_\_\_\_

Melissa Workoff  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850 **Lot No.:** A0203726

**Description :** 8270 MegaMix®  
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025 **Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

512117 } RC/  
↓ 03/18/24  
512146 }

### CERTIFIED VALUES

| Elution Order | Compound                     | CAS #    | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|------------------------------|----------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | Pyridine                     | 110-86-1 | SHBP6240    | 99%    | 1,001.6 µg/mL               | +/- 36.4412                            |
| 2             | N-Nitrosodimethylamine       | 62-75-9  | 230209JLM   | 99%    | 1,005.9 µg/mL               | +/- 36.5968                            |
| 3             | Phenol                       | 108-95-2 | MKCK1120    | 99%    | 1,003.3 µg/mL               | +/- 36.5038                            |
| 4             | Aniline                      | 62-53-3  | X22F726     | 99%    | 1,005.8 µg/mL               | +/- 36.5928                            |
| 5             | Bis(2-chloroethyl)ether      | 111-44-4 | SHBL6942    | 99%    | 1,008.1 µg/mL               | +/- 36.6776                            |
| 6             | 2-Chlorophenol               | 95-57-8  | STBJ3909    | 99%    | 1,001.8 µg/mL               | +/- 36.4492                            |
| 7             | 1,3-Dichlorobenzene          | 541-73-1 | BCCD5315    | 99%    | 1,002.3 µg/mL               | +/- 36.4654                            |
| 8             | 1,4-Dichlorobenzene          | 106-46-7 | MKBS7929V   | 99%    | 1,003.7 µg/mL               | +/- 36.5159                            |
| 9             | Benzyl alcohol               | 100-51-6 | SHBK5469    | 99%    | 1,008.7 µg/mL               | +/- 36.6979                            |
| 10            | 1,2-Dichlorobenzene          | 95-50-1  | SHBN3835    | 99%    | 1,000.3 µg/mL               | +/- 36.3926                            |
| 11            | 2-Methylphenol (o-cresol)    | 95-48-7  | SHBN7598    | 99%    | 1,003.5 µg/mL               | +/- 36.5099                            |
| 12            | 2,2'-oxybis(1-chloropropane) | 108-60-1 | 29-MAR-45-5 | 99%    | 1,007.3 µg/mL               | +/- 36.6493                            |
| 13            | 3-Methylphenol (m-cresol)    | 108-39-4 | STBJ0710    | 99%    | 504.3 µg/mL                 | +/- 18.3500                            |
| 14            | 4-Methylphenol (p-cresol)    | 106-44-5 | SHBN3411    | 99%    | 503.6 µg/mL                 | +/- 18.3237                            |
| 15            | N-Nitroso-di-n-propylamine   | 621-64-7 | N63MG       | 99%    | 1,008.3 µg/mL               | +/- 36.6857                            |
| 16            | Hexachloroethane             | 67-72-1  | QTORH       | 99%    | 1,007.5 µg/mL               | +/- 36.6554                            |
| 17            | Nitrobenzene                 | 98-95-3  | 10224044    | 99%    | 1,008.6 µg/mL               | +/- 36.6938                            |

|    |                                               |           |             |     |         |       |             |    |
|----|-----------------------------------------------|-----------|-------------|-----|---------|-------|-------------|----|
| 18 | Isophorone                                    | 78-59-1   | MKCC9506    | 99% | 1,005.9 | µg/mL | +/- 36.5988 |    |
| 19 | 2-Nitrophenol                                 | 88-75-5   | RP230710    | 99% | 1,003.2 | µg/mL | +/- 36.4998 |    |
| 20 | 2,4-Dimethylphenol                            | 105-67-9  | XW5GK       | 99% | 1,003.8 | µg/mL | +/- 36.5200 |    |
| 21 | Bis(2-chloroethoxy)methane                    | 111-91-1  | 13670200    | 99% | 1,002.1 | µg/mL | +/- 36.4573 | 1  |
| 22 | 2,4-Dichlorophenol                            | 120-83-2  | BCBZ6787    | 99% | 1,003.7 | µg/mL | +/- 36.5180 | 2  |
| 23 | 1,2,4-Trichlorobenzene                        | 120-82-1  | SHBP5900    | 99% | 1,007.6 | µg/mL | +/- 36.6574 | 3  |
| 24 | Naphthalene                                   | 91-20-3   | STBL1057    | 99% | 1,008.3 | µg/mL | +/- 36.6837 | 4  |
| 25 | 4-Chloroaniline                               | 106-47-8  | BCCJ3217    | 99% | 1,001.3 | µg/mL | +/- 36.4290 | 5  |
| 26 | Hexachlorobutadiene                           | 87-68-3   | RP230823RSR | 98% | 1,008.3 | µg/mL | +/- 36.6829 | 6  |
| 27 | 4-Chloro-3-methylphenol                       | 59-50-7   | BCCD4461    | 99% | 1,003.1 | µg/mL | +/- 36.4937 | 7  |
| 28 | 2-Methylnaphthalene                           | 91-57-6   | STBK0259    | 96% | 1,001.9 | µg/mL | +/- 36.4505 | 8  |
| 29 | 1-Methylnaphthalene                           | 90-12-0   | 5234.00-8   | 98% | 1,000.0 | µg/mL | +/- 36.3838 | 9  |
| 30 | Hexachlorocyclopentadiene                     | 77-47-4   | 099063I14L  | 98% | 1,008.5 | µg/mL | +/- 36.6909 | 10 |
| 31 | 2,4,6-Trichlorophenol                         | 88-06-2   | STBJ5914    | 99% | 1,004.4 | µg/mL | +/- 36.5442 | 11 |
| 32 | 2,4,5-Trichlorophenol                         | 95-95-4   | FHN01       | 98% | 1,001.9 | µg/mL | +/- 36.4512 | 12 |
| 33 | 2-Chloronaphthalene                           | 91-58-7   | RPN7O       | 99% | 1,001.1 | µg/mL | +/- 36.4230 | 13 |
| 34 | 2-Nitroaniline                                | 88-74-4   | RP230531    | 99% | 1,002.9 | µg/mL | +/- 36.4876 | 14 |
| 35 | 1,4-Dinitrobenzene                            | 100-25-4  | RP230816    | 99% | 1,005.7 | µg/mL | +/- 36.5887 | 15 |
| 36 | Acenaphthylene                                | 208-96-8  | p06V        | 98% | 1,009.5 | µg/mL | +/- 36.7265 | 16 |
| 37 | 1,3-Dinitrobenzene                            | 99-65-0   | 1-DXX-24-1  | 99% | 1,004.4 | µg/mL | +/- 36.5422 | 17 |
| 38 | Dimethylphthalate                             | 131-11-3  | 358221L17K  | 99% | 1,005.9 | µg/mL | +/- 36.5968 | 18 |
| 39 | 2,6-Dinitrotoluene                            | 606-20-2  | BCCG1833    | 99% | 1,003.2 | µg/mL | +/- 36.4998 |    |
| 40 | 1,2-Dinitrobenzene                            | 528-29-0  | RP230428    | 99% | 1,002.2 | µg/mL | +/- 36.4634 |    |
| 41 | Acenaphthene                                  | 83-32-9   | MKCR7169    | 99% | 1,009.3 | µg/mL | +/- 36.7221 |    |
| 42 | 3-Nitroaniline                                | 99-09-2   | RP230822RSR | 99% | 1,003.9 | µg/mL | +/- 36.5240 |    |
| 43 | 2,4-Dinitrophenol                             | 51-28-5   | DR230417RSR | 99% | 1,002.0 | µg/mL | +/- 36.4553 |    |
| 44 | Dibenzofuran                                  | 132-64-9  | MKCD9952    | 99% | 1,006.7 | µg/mL | +/- 36.6251 |    |
| 45 | 2,4-Dinitrotoluene                            | 121-14-2  | MKAA0690V   | 99% | 1,003.8 | µg/mL | +/- 36.5220 |    |
| 46 | 4-Nitrophenol                                 | 100-02-7  | RP230627    | 99% | 1,002.3 | µg/mL | +/- 36.4674 |    |
| 47 | 2,3,4,6-Tetrachlorophenol                     | 58-90-2   | PR-30126    | 99% | 1,008.7 | µg/mL | +/- 36.6979 |    |
| 48 | 2,3,5,6-Tetrachlorophenol                     | 935-95-5  | RP230919    | 99% | 1,006.3 | µg/mL | +/- 36.6130 |    |
| 49 | Fluorene                                      | 86-73-7   | 10241100    | 99% | 1,008.3 | µg/mL | +/- 36.6857 |    |
| 50 | 4-Chlorophenyl phenyl ether                   | 7005-72-3 | MKCT7248    | 99% | 1,003.8 | µg/mL | +/- 36.5220 |    |
| 51 | Diethylphthalate                              | 84-66-2   | MKCD2547    | 99% | 1,008.6 | µg/mL | +/- 36.6958 |    |
| 52 | 4-Nitroaniline                                | 100-01-6  | RP230111    | 99% | 1,001.1 | µg/mL | +/- 36.4230 |    |
| 53 | 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) | 534-52-1  | 230718JLM   | 99% | 1,002.0 | µg/mL | +/- 36.4553 |    |

|    |                            |          |               |     |         |       |             |
|----|----------------------------|----------|---------------|-----|---------|-------|-------------|
| 54 | Diphenylamine              | 122-39-4 | MKCH1042      | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 55 | Azobenzene                 | 103-33-3 | BCKK0887      | 99% | 1,005.8 | µg/mL | +/- 36.5928 |
| 56 | 4-Bromophenyl phenyl ether | 101-55-3 | STBH6361      | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 57 | Hexachlorobenzene          | 118-74-1 | 14821700      | 99% | 1,007.5 | µg/mL | +/- 36.6554 |
| 58 | Pentachlorophenol          | 87-86-5  | RP230530RSR   | 99% | 1,008.8 | µg/mL | +/- 36.7019 |
| 59 | Phenanthrene               | 85-01-8  | MKCQ8876      | 99% | 1,008.4 | µg/mL | +/- 36.6877 |
| 60 | Anthracene                 | 120-12-7 | MKCR0570      | 99% | 1,009.0 | µg/mL | +/- 36.7100 |
| 61 | Carbazole                  | 86-74-8  | 14351100      | 99% | 1,000.9 | µg/mL | +/- 36.4149 |
| 62 | Di-n-butylphthalate        | 84-74-2  | MKCN4337      | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 63 | Fluoranthene               | 206-44-0 | MKCQ4728      | 99% | 1,009.6 | µg/mL | +/- 36.7302 |
| 64 | Pyrene                     | 129-00-0 | BCCG8479      | 98% | 1,007.2 | µg/mL | +/- 36.6453 |
| 65 | Benzyl butyl phthalate     | 85-68-7  | X12I018       | 99% | 1,002.1 | µg/mL | +/- 36.4573 |
| 66 | Bis(2-ethylhexyl)adipate   | 103-23-1 | MKCM1988      | 99% | 1,005.2 | µg/mL | +/- 36.5705 |
| 67 | Benz(a)anthracene          | 56-55-3  | I220012022BAA | 99% | 1,002.2 | µg/mL | +/- 36.4614 |
| 68 | Chrysene                   | 218-01-9 | RP230601      | 99% | 1,008.3 | µg/mL | +/- 36.6837 |
| 69 | Bis(2-ethylhexyl)phthalate | 117-81-7 | MKCQ3468      | 99% | 1,001.8 | µg/mL | +/- 36.4472 |
| 70 | Di-n-octyl phthalate       | 117-84-0 | 14382700      | 99% | 1,006.0 | µg/mL | +/- 36.6008 |
| 71 | Benzo(b)fluoranthene       | 205-99-2 | 012013B       | 99% | 1,002.8 | µg/mL | +/- 36.4836 |
| 72 | Benzo(k)fluoranthene       | 207-08-9 | 012022K       | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 73 | Benzo(a)pyrene             | 50-32-8  | P54915-0703   | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 74 | Indeno(1,2,3-cd)pyrene     | 193-39-5 | 12-JKL-118-9  | 97% | 1,009.4 | µg/mL | +/- 36.7243 |
| 75 | Dibenz(a,h)anthracene      | 53-70-3  | 2-ASA-59-1    | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 76 | Benzo(g,h,i)perylene       | 191-24-2 | RP231003RSR   | 99% | 1,002.9 | µg/mL | +/- 36.4876 |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%



110 Benner Circle  
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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850 **Lot No.:** A0203726

**Description :** 8270 MegaMix®  
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025 **Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

512117 } RC/  
↓ 03/18/24  
512146 }

### CERTIFIED VALUES

| Elution Order | Compound                     | CAS #    | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|------------------------------|----------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | Pyridine                     | 110-86-1 | SHBP6240    | 99%    | 1,001.6 µg/mL               | +/- 36.4412                            |
| 2             | N-Nitrosodimethylamine       | 62-75-9  | 230209JLM   | 99%    | 1,005.9 µg/mL               | +/- 36.5968                            |
| 3             | Phenol                       | 108-95-2 | MKCK1120    | 99%    | 1,003.3 µg/mL               | +/- 36.5038                            |
| 4             | Aniline                      | 62-53-3  | X22F726     | 99%    | 1,005.8 µg/mL               | +/- 36.5928                            |
| 5             | Bis(2-chloroethyl)ether      | 111-44-4 | SHBL6942    | 99%    | 1,008.1 µg/mL               | +/- 36.6776                            |
| 6             | 2-Chlorophenol               | 95-57-8  | STBJ3909    | 99%    | 1,001.8 µg/mL               | +/- 36.4492                            |
| 7             | 1,3-Dichlorobenzene          | 541-73-1 | BCCD5315    | 99%    | 1,002.3 µg/mL               | +/- 36.4654                            |
| 8             | 1,4-Dichlorobenzene          | 106-46-7 | MKBS7929V   | 99%    | 1,003.7 µg/mL               | +/- 36.5159                            |
| 9             | Benzyl alcohol               | 100-51-6 | SHBK5469    | 99%    | 1,008.7 µg/mL               | +/- 36.6979                            |
| 10            | 1,2-Dichlorobenzene          | 95-50-1  | SHBN3835    | 99%    | 1,000.3 µg/mL               | +/- 36.3926                            |
| 11            | 2-Methylphenol (o-cresol)    | 95-48-7  | SHBN7598    | 99%    | 1,003.5 µg/mL               | +/- 36.5099                            |
| 12            | 2,2'-oxybis(1-chloropropane) | 108-60-1 | 29-MAR-45-5 | 99%    | 1,007.3 µg/mL               | +/- 36.6493                            |
| 13            | 3-Methylphenol (m-cresol)    | 108-39-4 | STBJ0710    | 99%    | 504.3 µg/mL                 | +/- 18.3500                            |
| 14            | 4-Methylphenol (p-cresol)    | 106-44-5 | SHBN3411    | 99%    | 503.6 µg/mL                 | +/- 18.3237                            |
| 15            | N-Nitroso-di-n-propylamine   | 621-64-7 | N63MG       | 99%    | 1,008.3 µg/mL               | +/- 36.6857                            |
| 16            | Hexachloroethane             | 67-72-1  | QTORH       | 99%    | 1,007.5 µg/mL               | +/- 36.6554                            |
| 17            | Nitrobenzene                 | 98-95-3  | 10224044    | 99%    | 1,008.6 µg/mL               | +/- 36.6938                            |



|    |                                               |           |             |     |         |       |             |    |
|----|-----------------------------------------------|-----------|-------------|-----|---------|-------|-------------|----|
| 18 | Isophorone                                    | 78-59-1   | MKCC9506    | 99% | 1,005.9 | µg/mL | +/- 36.5988 | 1  |
| 19 | 2-Nitrophenol                                 | 88-75-5   | RP230710    | 99% | 1,003.2 | µg/mL | +/- 36.4998 | 2  |
| 20 | 2,4-Dimethylphenol                            | 105-67-9  | XW5GK       | 99% | 1,003.8 | µg/mL | +/- 36.5200 | 3  |
| 21 | Bis(2-chloroethoxy)methane                    | 111-91-1  | 13670200    | 99% | 1,002.1 | µg/mL | +/- 36.4573 | 4  |
| 22 | 2,4-Dichlorophenol                            | 120-83-2  | BCBZ6787    | 99% | 1,003.7 | µg/mL | +/- 36.5180 | 5  |
| 23 | 1,2,4-Trichlorobenzene                        | 120-82-1  | SHBP5900    | 99% | 1,007.6 | µg/mL | +/- 36.6574 | 6  |
| 24 | Naphthalene                                   | 91-20-3   | STBL1057    | 99% | 1,008.3 | µg/mL | +/- 36.6837 | 7  |
| 25 | 4-Chloroaniline                               | 106-47-8  | BCCJ3217    | 99% | 1,001.3 | µg/mL | +/- 36.4290 | 8  |
| 26 | Hexachlorobutadiene                           | 87-68-3   | RP230823RSR | 98% | 1,008.3 | µg/mL | +/- 36.6829 | 9  |
| 27 | 4-Chloro-3-methylphenol                       | 59-50-7   | BCCD4461    | 99% | 1,003.1 | µg/mL | +/- 36.4937 | 10 |
| 28 | 2-Methylnaphthalene                           | 91-57-6   | STBK0259    | 96% | 1,001.9 | µg/mL | +/- 36.4505 | 11 |
| 29 | 1-Methylnaphthalene                           | 90-12-0   | 5234.00-8   | 98% | 1,000.0 | µg/mL | +/- 36.3838 | 12 |
| 30 | Hexachlorocyclopentadiene                     | 77-47-4   | 099063I14L  | 98% | 1,008.5 | µg/mL | +/- 36.6909 | 13 |
| 31 | 2,4,6-Trichlorophenol                         | 88-06-2   | STBJ5914    | 99% | 1,004.4 | µg/mL | +/- 36.5442 | 14 |
| 32 | 2,4,5-Trichlorophenol                         | 95-95-4   | FHN01       | 98% | 1,001.9 | µg/mL | +/- 36.4512 | 15 |
| 33 | 2-Chloronaphthalene                           | 91-58-7   | RPN7O       | 99% | 1,001.1 | µg/mL | +/- 36.4230 | 16 |
| 34 | 2-Nitroaniline                                | 88-74-4   | RP230531    | 99% | 1,002.9 | µg/mL | +/- 36.4876 | 17 |
| 35 | 1,4-Dinitrobenzene                            | 100-25-4  | RP230816    | 99% | 1,005.7 | µg/mL | +/- 36.5887 | 18 |
| 36 | Acenaphthylene                                | 208-96-8  | p06V        | 98% | 1,009.5 | µg/mL | +/- 36.7265 |    |
| 37 | 1,3-Dinitrobenzene                            | 99-65-0   | 1-DXX-24-1  | 99% | 1,004.4 | µg/mL | +/- 36.5422 |    |
| 38 | Dimethylphthalate                             | 131-11-3  | 358221L17K  | 99% | 1,005.9 | µg/mL | +/- 36.5968 |    |
| 39 | 2,6-Dinitrotoluene                            | 606-20-2  | BCCG1833    | 99% | 1,003.2 | µg/mL | +/- 36.4998 |    |
| 40 | 1,2-Dinitrobenzene                            | 528-29-0  | RP230428    | 99% | 1,002.2 | µg/mL | +/- 36.4634 |    |
| 41 | Acenaphthene                                  | 83-32-9   | MKCR7169    | 99% | 1,009.3 | µg/mL | +/- 36.7221 |    |
| 42 | 3-Nitroaniline                                | 99-09-2   | RP230822RSR | 99% | 1,003.9 | µg/mL | +/- 36.5240 |    |
| 43 | 2,4-Dinitrophenol                             | 51-28-5   | DR230417RSR | 99% | 1,002.0 | µg/mL | +/- 36.4553 |    |
| 44 | Dibenzofuran                                  | 132-64-9  | MKCD9952    | 99% | 1,006.7 | µg/mL | +/- 36.6251 |    |
| 45 | 2,4-Dinitrotoluene                            | 121-14-2  | MKAA0690V   | 99% | 1,003.8 | µg/mL | +/- 36.5220 |    |
| 46 | 4-Nitrophenol                                 | 100-02-7  | RP230627    | 99% | 1,002.3 | µg/mL | +/- 36.4674 |    |
| 47 | 2,3,4,6-Tetrachlorophenol                     | 58-90-2   | PR-30126    | 99% | 1,008.7 | µg/mL | +/- 36.6979 |    |
| 48 | 2,3,5,6-Tetrachlorophenol                     | 935-95-5  | RP230919    | 99% | 1,006.3 | µg/mL | +/- 36.6130 |    |
| 49 | Fluorene                                      | 86-73-7   | 10241100    | 99% | 1,008.3 | µg/mL | +/- 36.6857 |    |
| 50 | 4-Chlorophenyl phenyl ether                   | 7005-72-3 | MKCT7248    | 99% | 1,003.8 | µg/mL | +/- 36.5220 |    |
| 51 | Diethylphthalate                              | 84-66-2   | MKCD2547    | 99% | 1,008.6 | µg/mL | +/- 36.6958 |    |
| 52 | 4-Nitroaniline                                | 100-01-6  | RP230111    | 99% | 1,001.1 | µg/mL | +/- 36.4230 |    |
| 53 | 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) | 534-52-1  | 230718JLM   | 99% | 1,002.0 | µg/mL | +/- 36.4553 |    |

|    |                            |          |               |     |         |       |             |
|----|----------------------------|----------|---------------|-----|---------|-------|-------------|
| 54 | Diphenylamine              | 122-39-4 | MKCH1042      | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 55 | Azobenzene                 | 103-33-3 | BCKK0887      | 99% | 1,005.8 | µg/mL | +/- 36.5928 |
| 56 | 4-Bromophenyl phenyl ether | 101-55-3 | STBH6361      | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 57 | Hexachlorobenzene          | 118-74-1 | 14821700      | 99% | 1,007.5 | µg/mL | +/- 36.6554 |
| 58 | Pentachlorophenol          | 87-86-5  | RP230530RSR   | 99% | 1,008.8 | µg/mL | +/- 36.7019 |
| 59 | Phenanthrene               | 85-01-8  | MKCQ8876      | 99% | 1,008.4 | µg/mL | +/- 36.6877 |
| 60 | Anthracene                 | 120-12-7 | MKCR0570      | 99% | 1,009.0 | µg/mL | +/- 36.7100 |
| 61 | Carbazole                  | 86-74-8  | 14351100      | 99% | 1,000.9 | µg/mL | +/- 36.4149 |
| 62 | Di-n-butylphthalate        | 84-74-2  | MKCN4337      | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 63 | Fluoranthene               | 206-44-0 | MKCQ4728      | 99% | 1,009.6 | µg/mL | +/- 36.7302 |
| 64 | Pyrene                     | 129-00-0 | BCCG8479      | 98% | 1,007.2 | µg/mL | +/- 36.6453 |
| 65 | Benzyl butyl phthalate     | 85-68-7  | X12I018       | 99% | 1,002.1 | µg/mL | +/- 36.4573 |
| 66 | Bis(2-ethylhexyl)adipate   | 103-23-1 | MKCM1988      | 99% | 1,005.2 | µg/mL | +/- 36.5705 |
| 67 | Benz(a)anthracene          | 56-55-3  | I220012022BAA | 99% | 1,002.2 | µg/mL | +/- 36.4614 |
| 68 | Chrysene                   | 218-01-9 | RP230601      | 99% | 1,008.3 | µg/mL | +/- 36.6837 |
| 69 | Bis(2-ethylhexyl)phthalate | 117-81-7 | MKCQ3468      | 99% | 1,001.8 | µg/mL | +/- 36.4472 |
| 70 | Di-n-octyl phthalate       | 117-84-0 | 14382700      | 99% | 1,006.0 | µg/mL | +/- 36.6008 |
| 71 | Benzo(b)fluoranthene       | 205-99-2 | 012013B       | 99% | 1,002.8 | µg/mL | +/- 36.4836 |
| 72 | Benzo(k)fluoranthene       | 207-08-9 | 012022K       | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 73 | Benzo(a)pyrene             | 50-32-8  | P54915-0703   | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 74 | Indeno(1,2,3-cd)pyrene     | 193-39-5 | 12-JKL-118-9  | 97% | 1,009.4 | µg/mL | +/- 36.7243 |
| 75 | Dibenz(a,h)anthracene      | 53-70-3  | 2-ASA-59-1    | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 76 | Benzo(g,h,i)perylene       | 191-24-2 | RP231003RSR   | 99% | 1,002.9 | µg/mL | +/- 36.4876 |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%





# SHIPPING DOCUMENTS

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**From:** Ynfante, John <John.Ynfante@jacobs.com>  
**Sent:** Friday, May 30, 2025 7:52 PM  
**To:** Yazmeen Gomez  
**Subject:** sample ID correction

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Hi Yazmeen,

We are working on a multi-year report and it was brought to my attention that a couple of samples in SDG P3671 had a slight error due to a crossout that was made on the chain and misinterpreted by login. Would you be able to reissue a revised pdf and EDD for that job to make the following corrections?

For lab sample P3671-06: "S-905-**KJ**-SO-0-0.5-081924" should be "S-905-**J**-SO-0-0.5-081924"

For lab sample P3671-07: "S-905-**KJ** -SO-0-0.5-081924-FD" should be "S-905-**J** -SO-0-0.5-081924-FD"

Thanks!

John Ynfante  
Jacobs  
Chemist  
281-414-1719 mobile  
[John.Ynfante@jacobs.com](mailto:John.Ynfante@jacobs.com)  
[www.jacobs.com](http://www.jacobs.com)

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### Laboratory Certification

| Certified By         | License No.      |
|----------------------|------------------|
| CAS EPA CLP Contract | 68HERH20D0011    |
| Connecticut          | PH-0830          |
| DOD ELAP (ANAB)      | L2219            |
| Maine                | 2024021          |
| Maryland             | 296              |
| New Hampshire        | 255424 Rev 1     |
| New Jersey           | 20012            |
| New York             | 11376            |
| Pennsylvania         | 68-00548         |
| Soil Permit          | 525-24-234-08441 |
| Texas                | T104704488       |

## LOGIN REPORT/SAMPLE TRANSFER

|                                               |        |                                                  |                                            |
|-----------------------------------------------|--------|--------------------------------------------------|--------------------------------------------|
| <b>Order ID :</b> P3671                       | JACO05 | <b>Order Date :</b> 8/20/2024 10:36:00 AM        | <b>Project Mgr :</b> Kiran                 |
| <b>Client Name :</b> JACOBS Engineering Grou  |        | <b>Project Name :</b> Former Schlumberger Site I | <b>Report Type :</b> Level 4               |
| <b>Client Contact :</b> Mary I. Murphy        |        | <b>Receive DateTime :</b> 8/19/2024 6:20:00 PM   | <b>EDD Type :</b> CH2MHILL                 |
| <b>Invoice Name :</b> JACOBS Engineering Grou |        | <b>Purchase Order :</b>                          | <b>Hard Copy Date :</b>                    |
| <b>Invoice Contact :</b> Mary I. Murphy       |        |                                                  | <b>Date Signoff :</b> 8/20/2024 1:52:05 PM |

| LAB ID   | CLIENT ID                   | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST         | TEST GROUP | METHOD | FAX DATE     | DUE DATES |
|----------|-----------------------------|--------|-------------|-------------|--------------|------------|--------|--------------|-----------|
| P3671-01 | S-904-J-SO-0-0.5-081924     | Solid  | 08/19/2024  | 09:15       |              |            |        |              |           |
|          |                             |        |             |             | VOCMS Group5 |            | 8260D  | 10 Bus. Days |           |
| P3671-02 | S-904-J-SO-0.5-1.0-081924   | Solid  | 08/19/2024  | 09:30       |              |            |        |              |           |
|          |                             |        |             |             | VOCMS Group5 |            | 8260D  | 10 Bus. Days |           |
| P3671-03 | S-911-K1-SO-0-0.5-081924    | Solid  | 08/19/2024  | 09:45       |              |            |        |              |           |
|          |                             |        |             |             | VOCMS Group5 |            | 8260D  | 10 Bus. Days |           |
| P3671-04 | S-911-K1-SO-0.5-1-081924    | Solid  | 08/19/2024  | 10:00       |              |            |        |              |           |
|          |                             |        |             |             | VOCMS Group5 |            | 8260D  | 10 Bus. Days |           |
| P3671-05 | S-911-K1-SO-0-0.5-081924-FD | Solid  | 08/19/2024  | 10:10       |              |            |        |              |           |
|          |                             |        |             |             | VOCMS Group5 |            | 8260D  | 10 Bus. Days |           |
| P3671-06 | S-905-KJ-SO-0-0.5-081924    | Solid  | 08/19/2024  | 10:30       |              |            |        |              |           |
|          |                             |        |             |             | VOCMS Group5 |            | 8260D  | 10 Bus. Days |           |
| P3671-07 | S-905-KJ-SO-0-0.5-081924-FD | Solid  | 08/19/2024  | 10:35       |              |            |        |              |           |
|          |                             |        |             |             | VOCMS Group5 |            | 8260D  | 10 Bus. Days |           |
| P3671-08 | S-905-J-SO-0.5-1.0-081924   | Solid  | 08/19/2024  | 10:45       |              |            |        |              |           |

## LOGIN REPORT/SAMPLE TRANSFER

|                                               |        |                                                  |                                            |
|-----------------------------------------------|--------|--------------------------------------------------|--------------------------------------------|
| <b>Order ID :</b> P3671                       | JACO05 | <b>Order Date :</b> 8/20/2024 10:36:00 AM        | <b>Project Mgr :</b> Kiran                 |
| <b>Client Name :</b> JACOBS Engineering Grou  |        | <b>Project Name :</b> Former Schlumberger Site I | <b>Report Type :</b> Level 4               |
| <b>Client Contact :</b> Mary I. Murphy        |        | <b>Receive DateTime :</b> 8/19/2024 6:20:00 PM   | <b>EDD Type :</b> CH2MHILL                 |
| <b>Invoice Name :</b> JACOBS Engineering Grou |        | <b>Purchase Order :</b>                          | <b>Hard Copy Date :</b>                    |
| <b>Invoice Contact :</b> Mary I. Murphy       |        |                                                  | <b>Date Signoff :</b> 8/20/2024 1:52:05 PM |

| LAB ID   | CLIENT ID                 | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST         | TEST GROUP | METHOD   | FAX DATE | DUE DATES    |
|----------|---------------------------|--------|-------------|-------------|--------------|------------|----------|----------|--------------|
|          |                           |        |             |             | VOCMS Group5 |            | 8260D    |          | 10 Bus. Days |
| P3671-09 | S-928-K1-SO-0-0.5-081924  | Solid  | 08/19/2024  | 12:10       |              |            |          |          |              |
|          |                           |        |             |             | VOCMS Group5 |            | 8260D    |          | 10 Bus. Days |
| P3671-10 | S-928-K1-SO-0.5-1-081924  | Solid  | 08/19/2024  | 12:20       |              |            |          |          |              |
|          |                           |        |             |             | VOCMS Group5 |            | 8260D    |          | 10 Bus. Days |
| P3671-11 | S-903-J-SO-0-0.5-081924   | Solid  | 08/19/2024  | 13:10       |              |            |          |          |              |
|          |                           |        |             |             | VOCMS Group5 |            | 8260D    |          | 10 Bus. Days |
| P3671-12 | S-903-J-SO-0.5-1.0-081924 | Solid  | 08/19/2024  | 13:20       |              |            |          |          |              |
|          |                           |        |             |             | VOCMS Group5 |            | 8260D    |          | 10 Bus. Days |
| P3671-13 | S-912-J-SO-0-0.5-081924   | Solid  | 08/19/2024  | 13:30       |              |            |          |          |              |
|          |                           |        |             |             | VOCMS Group5 |            | 8260D    |          | 10 Bus. Days |
| P3671-14 | S-912-J-SO-0.5-1-081924   | Solid  | 08/19/2024  | 13:40       |              |            |          |          |              |
|          |                           |        |             |             | VOCMS Group5 |            | 8260D    |          | 10 Bus. Days |
| P3671-15 | TB-01-081924              | Water  | 08/19/2024  | 09:40       |              |            |          |          |              |
|          |                           |        |             |             | VOCMS Group6 |            | 8260-Low |          | 10 Bus. Days |



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
Fax : 908 789 8922

## LOGIN REPORT/SAMPLE TRANSFER

|                                               |        |                                                  |                              |
|-----------------------------------------------|--------|--------------------------------------------------|------------------------------|
| <b>Order ID :</b> P3671                       | JACO05 | <b>Order Date :</b> 8/20/2024 10:36:00 AM        | <b>Project Mgr :</b>         |
| <b>Client Name :</b> JACOBS Engineering Grou  |        | <b>Project Name :</b> Former Schlumberger Site I | <b>Report Type :</b> Level 4 |
| <b>Client Contact :</b> Mary I. Murphy        |        | <b>Receive DateTime :</b> 8/19/2024 6:20:00 PM   | <b>EDD Type :</b> CH2MHILL   |
| <b>Invoice Name :</b> JACOBS Engineering Grou |        | <b>Purchase Order :</b>                          | <b>Hard Copy Date :</b>      |
| <b>Invoice Contact :</b> Mary I. Murphy       |        |                                                  | <b>Date Signoff :</b>        |

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|--------|-----------|--------|-------------|-------------|------|------------|--------|----------|-----------|
|--------|-----------|--------|-------------|-------------|------|------------|--------|----------|-----------|

Relinquished By :

Date / Time : 8/20/24 1330

Received By :

Date / Time : 8/20/24 13:30

Storage Area : VOA Refridgerator Room

Ref 6  
P22  
Ref #5