

**DATA PACKAGE  
SEMI-VOLATILE ORGANICS**

**PROJECT NAME : NWIRP BETHPAGE - CTO WE13 1132341 WR6**

**TETRA TECH NUS, INC.**

**661 Andersen Drive**

**Suite 200**

**Pittsburgh, PA - 15220-2745**

**Phone No: 412-921-7090**

**ORDER ID : Q2745**

**ATTENTION : Ernie Wu**



**Laboratory Certification ID # 20012**



|                                             |     |
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## Cover Page

**Order ID :** Q2745

**Project ID :** NWIRP Bethpage - CTO WE13 1132341 WR6

**Client :** Tetra Tech NUS, Inc.

**Lab Sample Number**

Q2745-01  
Q2745-02

**Client Sample Number**

RW8-SP100-20250731  
RW8-SP303-20250731

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 1:41 pm, Aug 08, 2025*

Date: 8/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## **CASE NARRATIVE**

**Tetra Tech NUS, Inc.**

**Project Name: NWIRP Bethpage - CTO WE13 1132341 WR6**

**Project Manager : Ernie Wu**

**Order ID # Q2745**

**Test Name: SVOC-SIMGroup1**

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

1 Water sample was received on 08/01/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1. This data package contains results for SVOC-SIMGroup1.

### **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-GGA. The analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

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

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis.

The Internal Standards Areas were met for all analysis except for PB169094BSD, Failed internal standard is not associated with DOD , therefor no further corrective action was taken.

The Retention Times were met for all analysis.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration File ID BN037559.D met the requirements except for 2,4,6-Tribromophenol , Failed surrogate in Continuous Calibration is not associated with DOD, Therefor no further corrective action was taken.

The Tuning criteria met requirements.

**E. Additional Comments:**

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).”

The Sample RW8-SP100-20250731 has the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

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 1:41 pm, Aug 08, 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| U     | 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.                                                                                                                                                                                                                                                                                      |
| ND    | Indicates the analyte was analyzed for, but not detected                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| J     | 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     | Indicates the analyte was found in the blank as well as the sample report as “12 B”.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| E     | Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| D     | This flag identifies all compounds identified in an analysis at a secondary dilution factor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| P     | 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”.                                                                                                                                                                                                                                                                                                                                                                             |
| N     | 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.                                                                                                                                                                                                                                                                       |
| A     | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Q     | Indicates the LCS did not meet the control limits requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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

ORDER ID: Q2745

MATRIX: Water

METHOD: 8270-Modified/3510

|                                                                                                                                                                                                                                    | 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.                                                                                                                                                                                      |    |    |     |
| The Continuous Calibration File ID BN037559.D met the requirements except for<br>2,4,6-Tribromophenol , Failed surrogate in Continuous Calibration is not associated<br>with DOD, Therefor no further corrective action was taken. |    |    |     |
| 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.                                                                                                                                 |    |    |     |
| 8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria                                                                                                                                                                    |    |    | ✓   |
| If not met, list those compounds and their recoveries which fall outside the acceptable<br>range.                                                                                                                                  |    |    |     |
| The Blank Spike met requirements for all compounds.<br>The Blank Spike Duplicate met requirements for all compounds.                                                                                                               |    |    |     |

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

**(CONTINUED)**

|     |                                                                                                                                                                                                | NA | NO | YES |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|
| 9.  | Internal Standard Area/Retention Time Shift Meet Criteria                                                                                                                                      |    | ✓  |     |
|     | Comments: The Internal Standards Areas were met for all analysis except for PB169094BSD, Failed internal standard is not associated with DOD ,therefor no further corrective action was taken. |    |    |     |
| 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:**

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).”

The Sample RW8-SP100-20250731 has the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

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.

QA REVIEW

**REVIEWED**

By Sohil Jodhani, QA/QC Director at 9:40 am, Aug 08, 2025

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2745

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: 08/07/2025

## LAB CHRONICLE

|                 |                      |                   |                                       |
|-----------------|----------------------|-------------------|---------------------------------------|
| <b>OrderID:</b> | Q2745                | <b>OrderDate:</b> | 8/1/2025 10:26:00 AM                  |
| <b>Client:</b>  | Tetra Tech NUS, Inc. | <b>Project:</b>   | NWIRP Bethpage - CTO WE13 1132341 WR6 |
| <b>Contact:</b> | Ernie Wu             | <b>Location:</b>  | O41                                   |

| LabID    | ClientID               | Matrix | Test           | Method        | Sample Date | Prep Date | Anal Date | Received |
|----------|------------------------|--------|----------------|---------------|-------------|-----------|-----------|----------|
| Q2745-01 | RW8-SP100-2025073<br>1 | Water  |                |               | 07/31/25    |           |           | 08/01/25 |
|          |                        |        | SVOC-SIMGroup1 | 8270-Modified |             | 08/04/25  | 08/05/25  |          |
| Q2745-02 | RW8-SP303-2025073<br>1 | Water  |                |               | 07/31/25    |           |           | 08/01/25 |
|          |                        |        | SVOC-SIMGroup1 | 8270-Modified |             | 08/04/25  | 08/05/25  |          |



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Fax : 908 789 8922

### Hit Summary Sheet SW-846

SDG No.: Q2745

Client: Tetra Tech NUS, Inc.

| Sample ID            | Client ID | Matrix | Parameter | Concentration | C    | MDL | LOD | RDL | Units |
|----------------------|-----------|--------|-----------|---------------|------|-----|-----|-----|-------|
| Client ID :          |           |        |           | 0.000         |      |     |     |     |       |
| Total Svoc :         |           |        |           |               | 0.00 |     |     |     |       |
| Total Concentration: |           |        |           |               | 0.00 |     |     |     |       |



# QC SUMMARY

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

### Surrogate Summary

SW-846

SDG No.: Q2745

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

| Lab Sample ID | Client ID          | Parameter               | Spike (PPM) | Result (PPM) | Recovery (%) | Qual | Limits (%) |      |
|---------------|--------------------|-------------------------|-------------|--------------|--------------|------|------------|------|
|               |                    |                         |             |              |              |      | Low        | High |
| PB169094BL    | PB169094BL         | 2-Methylnaphthalene-d10 | 0.4         | 0.31         | 78           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.32         | 81           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.35         | 88           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.38         | 94           |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.39         | 97           |      | 58         | 132  |
| PB169094BS    | PB169094BS         | 2-Methylnaphthalene-d10 | 0.4         | 0.34         | 85           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.31         | 77           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.35         | 87           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.41         | 102          |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.36         | 90           |      | 58         | 132  |
| PB169094BSD   | PB169094BSD        | 2-Methylnaphthalene-d10 | 0.4         | 0.34         | 84           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.30         | 75           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.35         | 88           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.40         | 100          |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.37         | 92           |      | 58         | 132  |
| Q2745-01      | RW8-SP100-20250731 | 2-Methylnaphthalene-d10 | 0.4         | 0.32         | 79           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.38         | 94           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.34         | 85           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.38         | 96           |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.46         | 114          |      | 58         | 132  |
| Q2745-02      | RW8-SP303-20250731 | 2-Methylnaphthalene-d10 | 0.4         | 0.30         | 75           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.35         | 88           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.32         | 80           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.36         | 90           |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.47         | 116          |      | 58         | 132  |

## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2745

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037566.D

| Lab Sample ID | Parameter   | Spike | Result | Unit | Rec | RPD | Qual | RPD  | Limits |      |     |
|---------------|-------------|-------|--------|------|-----|-----|------|------|--------|------|-----|
|               |             |       |        |      |     |     |      | Qual | Low    | High | RPD |
| PB169094BS    | 1,4-Dioxane | 0.4   | 0.31   | ug/L | 78  |     |      |      | 70     | 130  |     |

## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

|                                            |                                                |
|--------------------------------------------|------------------------------------------------|
| <b>SDG No.:</b> <u>Q2745</u>               | <b>Analytical Method:</b> <u>8270-Modified</u> |
| <b>Client:</b> <u>Tetra Tech NUS, Inc.</u> | <b>DataFile:</b> <u>BN037567.D</u>             |

| Lab Sample ID | Parameter   | Spike | Result | Unit | Rec | RPD | Qual | RPD  |     | Limits |  | RPD |
|---------------|-------------|-------|--------|------|-----|-----|------|------|-----|--------|--|-----|
|               |             |       |        |      |     |     |      | Qual | Low | High   |  |     |
| PB169094BSD   | 1,4-Dioxane | 0.4   | 0.29   | ug/L | 73  | 7   |      |      | 70  | 130    |  | 20  |

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB169094BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2745

Lab File ID: BN037560.D

Lab Sample ID: PB169094BL

Instrument ID: BNA\_N

Date Extracted: 08/04/2025

Matrix: (soil/water) Water

Date Analyzed: 08/05/2025

Level: (low/med) LOW

Time Analyzed: 10:11

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 |
|--------------------|------------------|----------------|------------------|
| PB169094BS         | PB169094BS       | BN037566.D     | 08/05/2025       |
| RW8-SP100-20250731 | Q2745-01         | BN037561.D     | 08/05/2025       |
| RW8-SP303-20250731 | Q2745-02         | BN037562.D     | 08/05/2025       |
| PB169094BSD        | PB169094BSD      | BN037567.D     | 08/05/2025       |

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



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance  
Lab Code: ACE  
Lab File ID: BN037497.D  
Instrument ID: BNA\_N

Contract: TETR06  
SDG NO.: Q2745  
DFTPP Injection Date: 07/15/2025  
DFTPP Injection Time: 10:57

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 68  | Less than 2.0% of mass 69          | 0.0 ( 0.0 ) 1        |
| 69  | Mass 69 relative abundance         | 100                  |
| 70  | Less than 2.0% of mass 69          | 0.2 ( 0.6 ) 1        |
| 197 | Less than 2.0% of mass 198         | 0.0                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 6.7                  |
| 365 | Greater than 1% of mass 198        | 3.5                  |
| 441 | Present, but less than mass 443    | 83.6                 |
| 442 | Greater than 50% of mass 198       | 100                  |
| 443 | 15.0 - 24.0% of mass 442           | 17.4 (19.4) 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 |
|-------------------|------------------|----------------|------------------|------------------|
| SSTDICC0.1        | SSTDICC0.1       | BN037499.D     | 07/15/2025       | 12:36            |
| SSTDICC0.2        | SSTDICC0.2       | BN037500.D     | 07/15/2025       | 13:12            |
| SSTDICCC0.4       | SSTDICCC0.4      | BN037501.D     | 07/15/2025       | 13:49            |
| SSTDICC0.8        | SSTDICC0.8       | BN037502.D     | 07/15/2025       | 14:25            |
| SSTDICC1.6        | SSTDICC1.6       | BN037503.D     | 07/15/2025       | 15:01            |
| SSTDICC3.2        | SSTDICC3.2       | BN037504.D     | 07/15/2025       | 15:38            |
| SSTDICC5.0        | SSTDICC5.0       | BN037505.D     | 07/15/2025       | 16:14            |



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance  
Lab Code: ACE  
Lab File ID: BN037558.D  
Instrument ID: BNA\_N

Contract: TETR06  
SDG NO.: Q2745  
DFTPP Injection Date: 08/05/2025  
DFTPP Injection Time: 08:56

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 68  | Less than 2.0% of mass 69          | 0.4 ( 0.9 ) 1        |
| 69  | Mass 69 relative abundance         | 100                  |
| 70  | Less than 2.0% of mass 69          | 0.3 ( 0.6 ) 1        |
| 197 | Less than 2.0% of mass 198         | 0.0                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 6.9                  |
| 365 | Greater than 1% of mass 198        | 4                    |
| 441 | Present, but less than mass 443    | 90.3                 |
| 442 | Greater than 50% of mass 198       | 100                  |
| 443 | 15.0 - 24.0% of mass 442           | 14.5 (19.2) 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       | BN037559.D     | 08/05/2025       | 09:35            |
| PB169094BL         | PB169094BL       | BN037560.D     | 08/05/2025       | 10:11            |
| RW8-SP100-20250731 | Q2745-01         | BN037561.D     | 08/05/2025       | 10:47            |
| RW8-SP303-20250731 | Q2745-02         | BN037562.D     | 08/05/2025       | 11:23            |
| PB169094BS         | PB169094BS       | BN037566.D     | 08/05/2025       | 13:47            |
| PB169094BSD        | PB169094BSD      | BN037567.D     | 08/05/2025       | 14:23            |
| SSTDCCC0.4EC       | SSTDCCC0.4       | BN037568.D     | 08/05/2025       | 15:03            |

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2745

Client ID : SSTDCCC0.4

Date Analyzed: 08/05/2025

Lab File ID: BN037559.D

Time Analyzed: 09:35

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           | 2357                | 7.717 | 6191                | 10.50  | 3180                | 14.35  |
| UPPER LIMIT           | 4714                | 8.217 | 12382               | 10.998 | 6360                | 14.845 |
| LOWER LIMIT           | 1178.5              | 7.217 | 3095.5              | 9.998  | 1590                | 13.845 |
| EPA SAMPLE NO.        |                     |       |                     |        |                     |        |
| 01 PB169094BL         | 2263                | 7.72  | 5525                | 10.50  | 2603                | 14.35  |
| 02 RW8-SP100-20250731 | 2323                | 7.72  | 5684                | 10.50  | 2801                | 14.35  |
| 03 RW8-SP303-20250731 | 1755                | 7.72  | 4432                | 10.50  | 2203                | 14.35  |
| 04 PB169094BS         | 1587                | 7.72  | 3862                | 10.50  | 1765                | 14.35  |
| 05 PB169094BSD        | 1690                | 7.72  | 4042                | 10.50  | 1850                | 14.35  |

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: Alliance

Lab Code: ACE

SDG NO.: Q2745

Client ID: SSTDCCC0.4

Date Analyzed: 08/05/2025

Lab File ID: BN037559.D

Time Analyzed: 09:35

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           | 5684                | 17.086 | 4703                | 21.268 | 3993                | 23.505 |
| UPPER LIMIT           | 11368               | 17.586 | 9406                | 21.768 | 7986                | 24.005 |
| LOWER LIMIT           | 2842                | 16.586 | 2351.5              | 20.768 | 1996.5              | 23.005 |
| EPA SAMPLE NO.        |                     |        |                     |        |                     |        |
| 01 PB169094BL         | 4745                | 17.09  | 3478                | 21.28  | 3099                | 23.51  |
| 02 RW8-SP100-20250731 | 5308                | 17.09  | 4328                | 21.28  | 3857                | 23.51  |
| 03 RW8-SP303-20250731 | 4201                | 17.09  | 3117                | 21.28  | 2700                | 23.51  |
| 04 PB169094BS         | 3214                | 17.09  | 2404                | 21.27  | 2051                | 23.51  |
| 05 PB169094BSD        | 3303                | 17.09  | 2343 *              | 21.27  | 2004                | 23.51  |

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

### Report of Analysis

|                    |                                       |                  |                 |                |
|--------------------|---------------------------------------|------------------|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.                  |                  | Date Collected: | 07/31/25       |
| Project:           | NWIRP Bethpage - CTO WE13 1132341 WR6 |                  | Date Received:  | 08/01/25       |
| Client Sample ID:  | RW8-SP100-20250731                    |                  | SDG No.:        | Q2745          |
| Lab Sample ID:     | Q2745-01                              |                  | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                            |                  | % Solid:        | 0              |
| Sample Wt/Vol:     | 1000                                  | Units: mL        | Final Vol:      | 1000 uL        |
| Soil Aliquot Vol:  |                                       | uL               | Test:           | SVOC-SIMGroup1 |
| Extraction Type :  |                                       | Decanted : N     | Level :         | LOW            |
| Injection Volume : |                                       | GPC Factor : 1.0 | GPC Cleanup :   | N PH :         |
| Prep Method :      |                                       |                  |                 |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN037561.D        | 1         | 08/04/25 08:40 | 08/05/25 10:47 | PB169094      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.20  | U         | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.32  |           | 30 - 150 |      | 79%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.38  |           | 30 - 150 |      | 94%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.34  |           | 55 - 111 |      | 85%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.38  |           | 53 - 106 |      | 96%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.46  |           | 58 - 132 |      | 114%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2320  | 7.717     |          |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5680  | 10.498    |          |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2800  | 14.345    |          |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 5310  | 17.087    |          |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 4330  | 21.277    |          |      |            |          |
| 1520-96-3                 | Perylene-d12            | 3860  | 23.508    |          |      |            |          |

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\BN080525\  
Data File : BN037561.D  
Acq On : 05 Aug 2025 10:47  
Operator : RC/JU  
Sample : Q2745-01  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

Quant Time: Aug 06 01:38:36 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

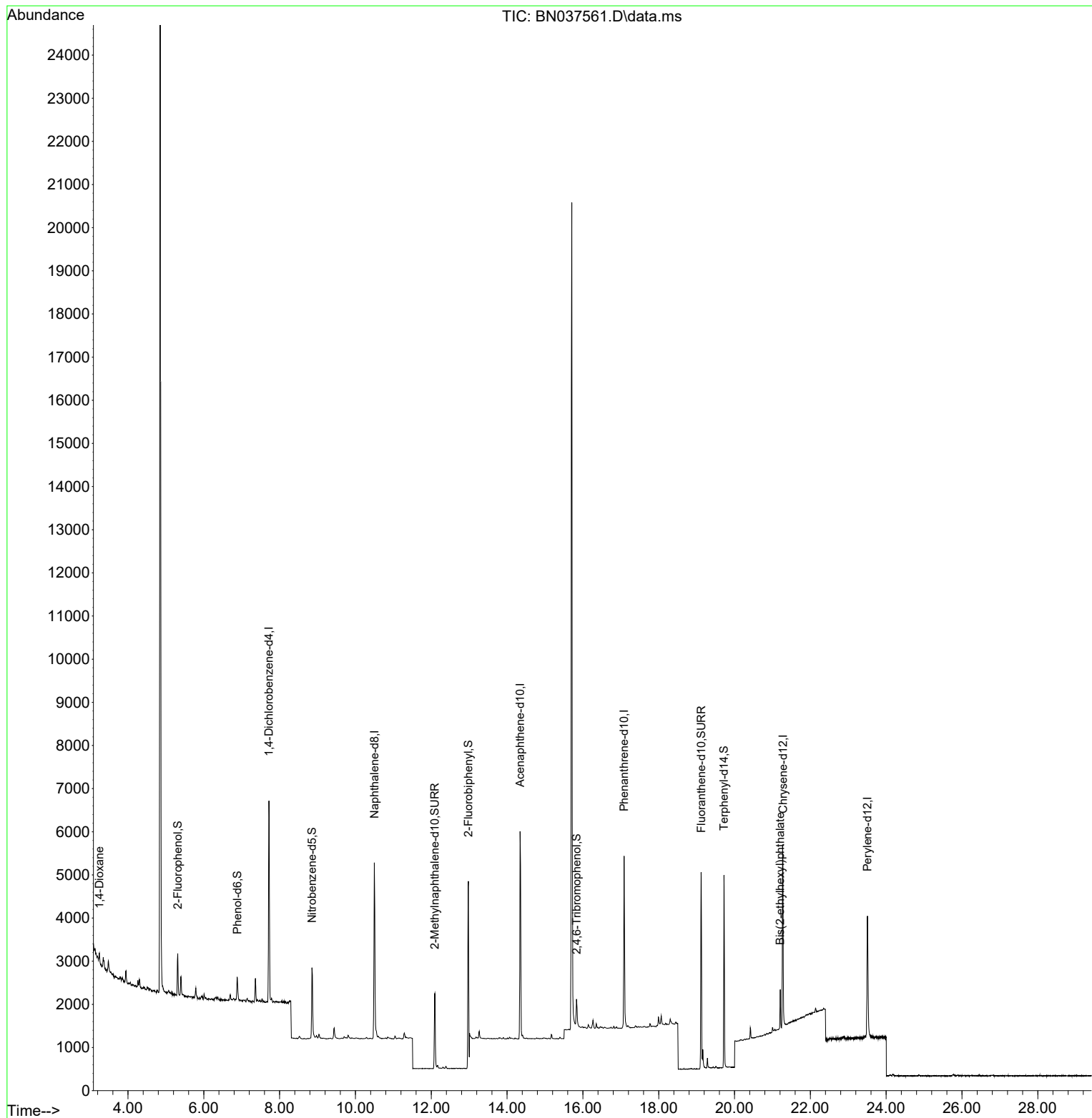
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.717  | 152  | 2323     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.498 | 136  | 5684     | 0.400 | ng    | -0.01    |
| 13) Acenaphthene-d10          | 14.345 | 164  | 2801     | 0.400 | ng    | -0.01    |
| 19) Phenanthrene-d10          | 17.087 | 188  | 5308     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12              | 21.277 | 240  | 4328     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.508 | 264  | 3857     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 750      | 0.131 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.887  | 99   | 512      | 0.071 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.854  | 82   | 1446     | 0.340 | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10   | 12.091 | 152  | 2581     | 0.317 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 372      | 0.270 | ng    | -0.01    |
| 15) 2-Fluorobiphenyl          | 12.978 | 172  | 5578     | 0.383 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.123 | 212  | 5300     | 0.377 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.722 | 244  | 4229     | 0.455 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.247  | 88   | 130      | 0.058 | ng    | # 47     |
| 34) Bis(2-ethylhexyl)phtha... | 21.205 | 149  | 801      | 0.117 | ng    | 99       |

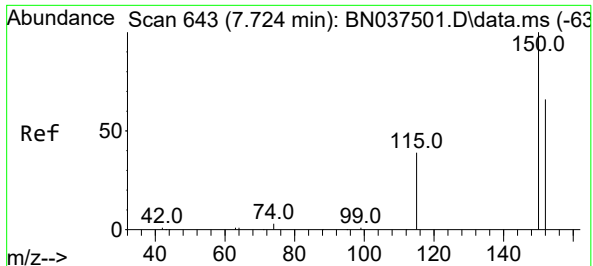
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037561.D  
Acq On : 05 Aug 2025 10:47  
Operator : RC/JU  
Sample : Q2745-01  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

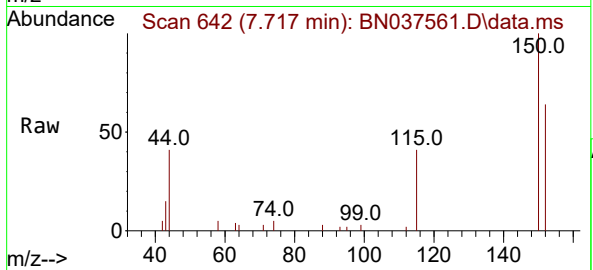
Quant Time: Aug 06 01:38:36 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration



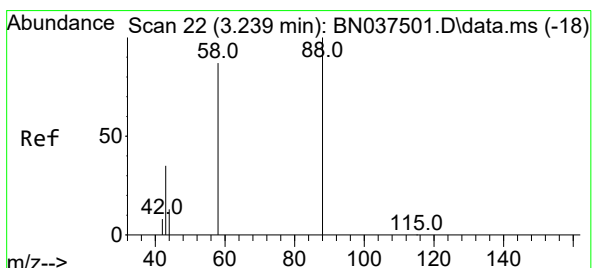
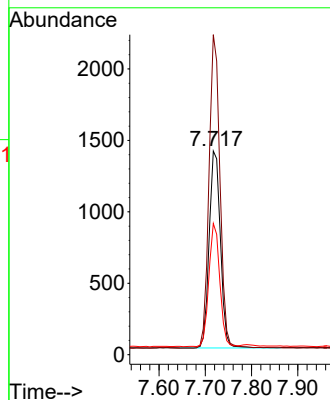
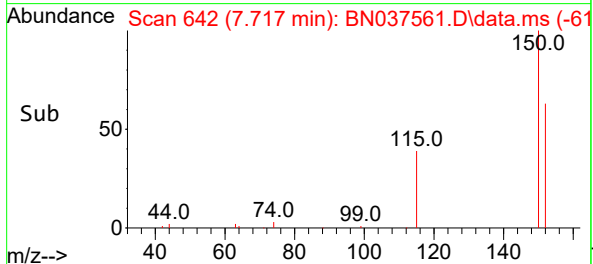


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 64  
Delta R.T. -0.007 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

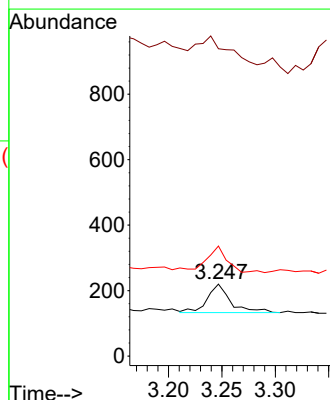
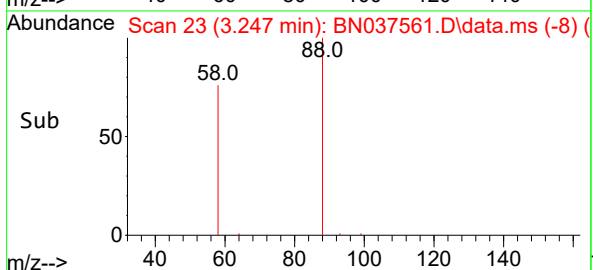
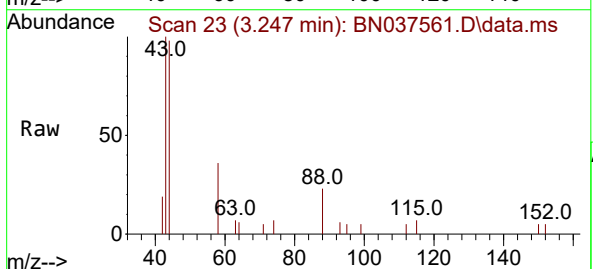


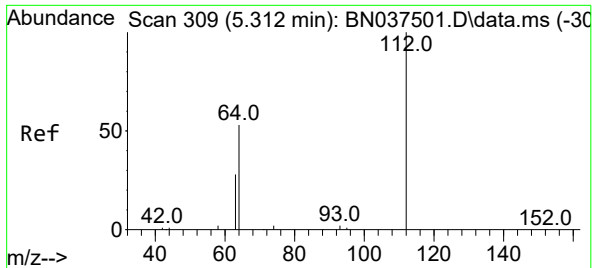
Tgt Ion:152 Resp: 2323  
Ion Ratio Lower Upper  
152 100  
150 157.1 119.8 179.8  
115 64.4 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.058 ng  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

Tgt Ion: 88 Resp: 130  
Ion Ratio Lower Upper  
88 100  
43 129.2 27.5 41.3#  
58 74.6 62.7 94.1

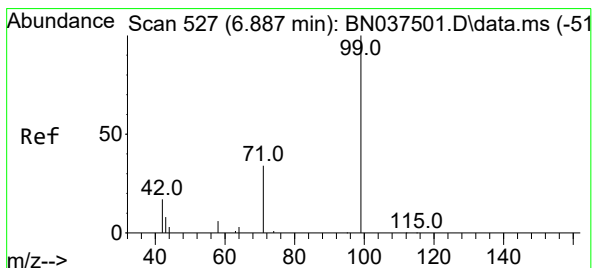
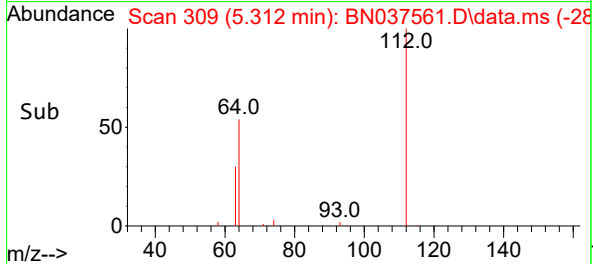
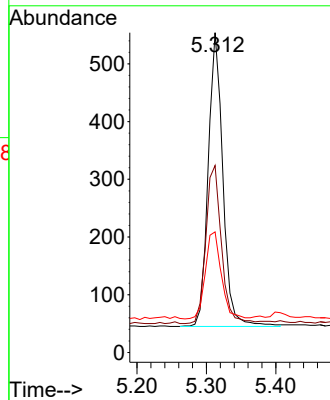
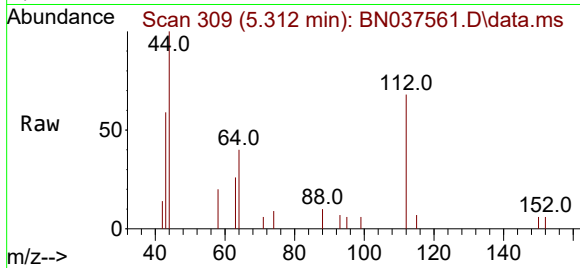




#4  
2-Fluorophenol  
Concen: 0.131 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

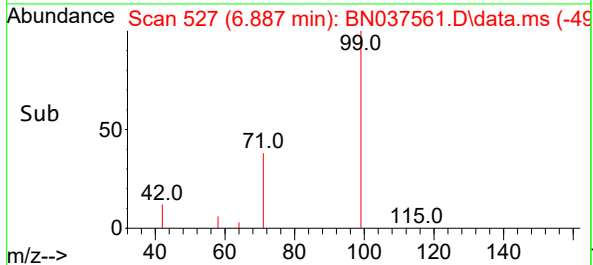
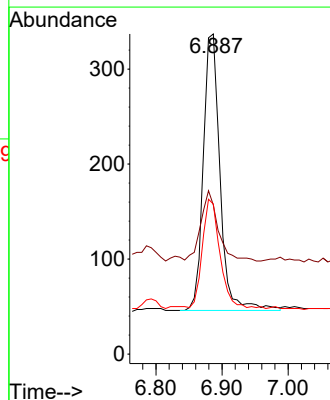
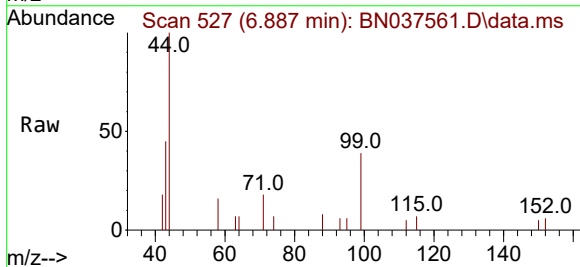
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

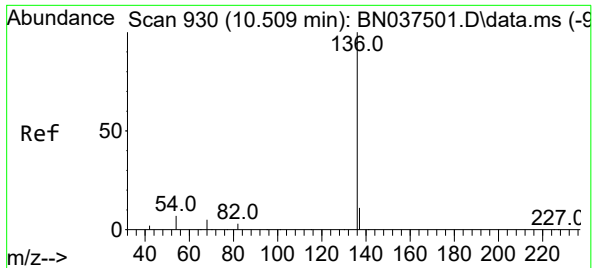
Tgt Ion:112 Resp: 750  
Ion Ratio Lower Upper  
112 100  
64 56.9 45.1 67.7  
63 32.1 23.8 35.8



#5  
Phenol-d6  
Concen: 0.071 ng  
RT: 6.887 min Scan# 527  
Delta R.T. 0.000 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

Tgt Ion: 99 Resp: 512  
Ion Ratio Lower Upper  
99 100  
42 26.8 17.1 25.7#  
71 41.6 27.8 41.8

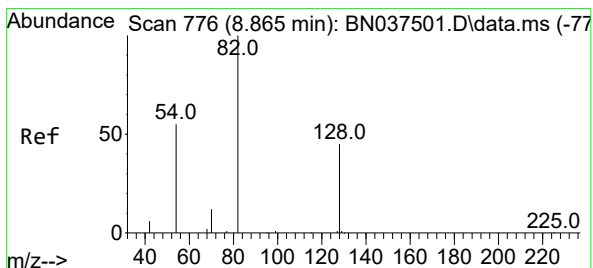
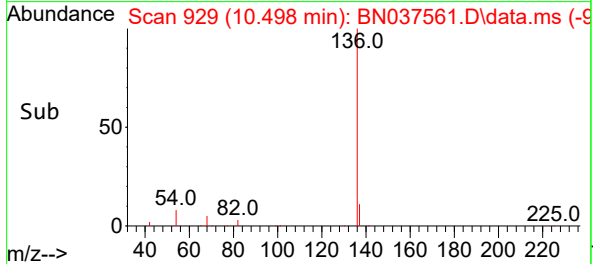
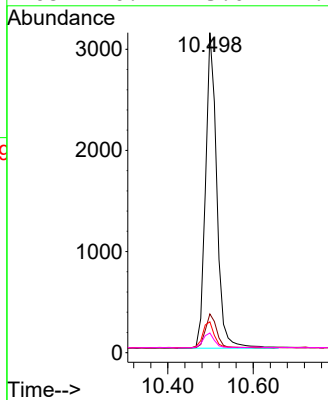
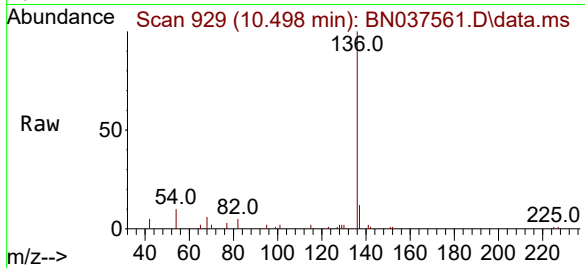




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 91  
Delta R.T. -0.011 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

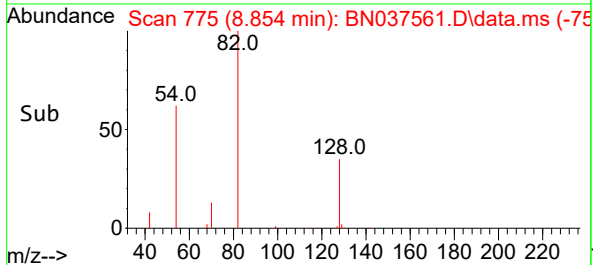
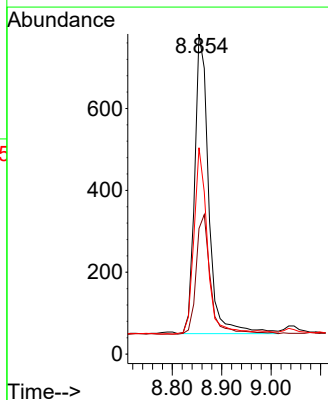
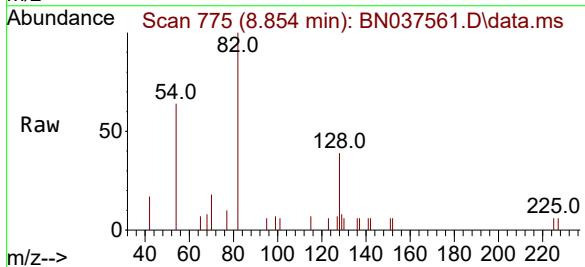
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

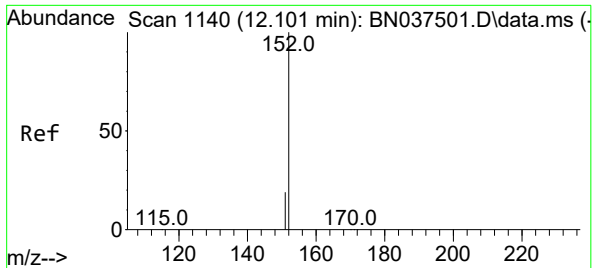
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5684  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.1  | 9.8   | 14.8  |
| 54       | 9.7   | 6.6   | 9.8   |
| 68       | 6.2   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 0.340 ng  
RT: 8.854 min Scan# 775  
Delta R.T. -0.011 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1446  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 39.3  | 37.5  | 56.3  |
| 54       | 64.5  | 45.3  | 67.9  |

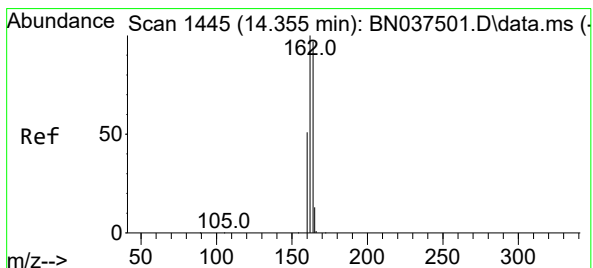
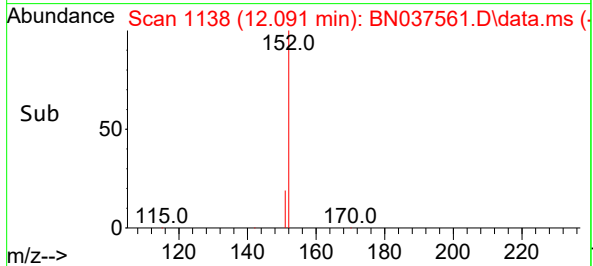
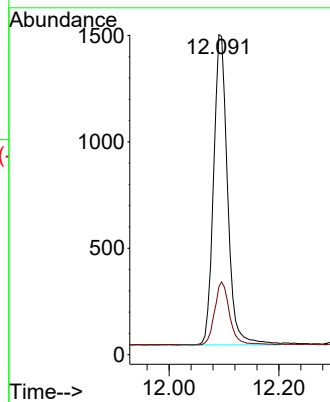
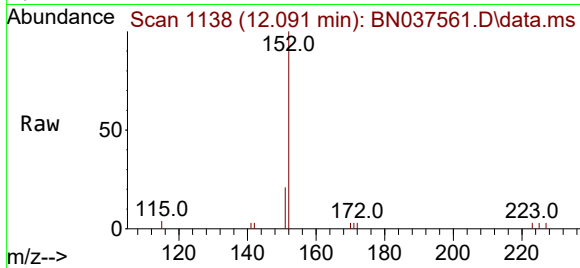




#11  
2-Methylnaphthalene-d10  
Concen: 0.317 ng  
RT: 12.091 min Scan# 1140  
Delta R.T. -0.010 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

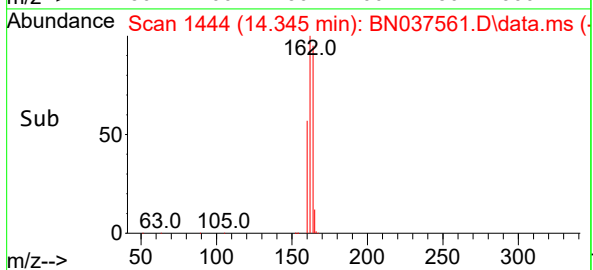
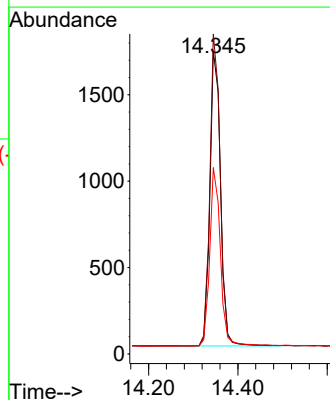
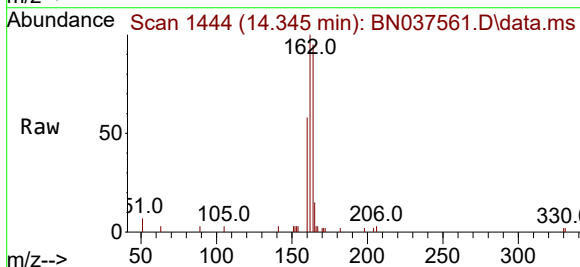
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

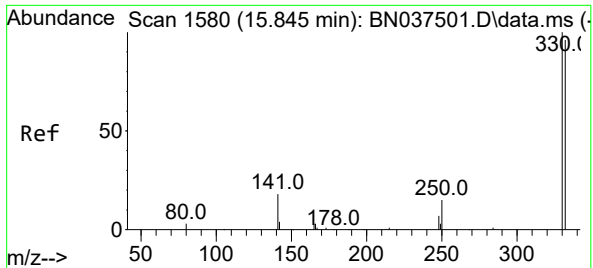
Tgt Ion:152 Resp: 2581  
Ion Ratio Lower Upper  
152 100  
151 21.8 16.8 25.2



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.345 min Scan# 1444  
Delta R.T. -0.011 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

Tgt Ion:164 Resp: 2801  
Ion Ratio Lower Upper  
164 100  
162 105.6 82.0 123.0  
160 61.5 42.4 63.6

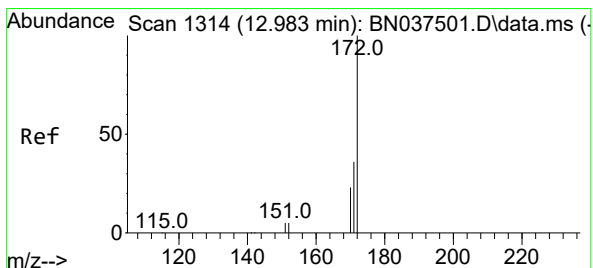
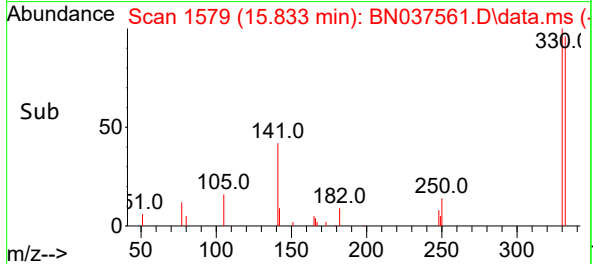
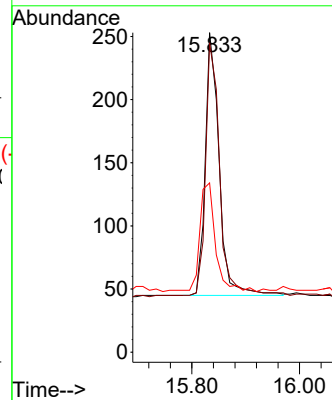
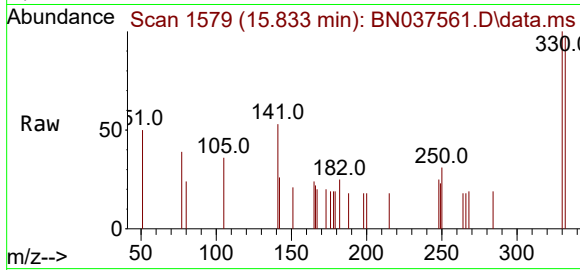




#14  
2,4,6-Tribromophenol  
Concen: 0.270 ng  
RT: 15.833 min Scan# 11  
Delta R.T. -0.012 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

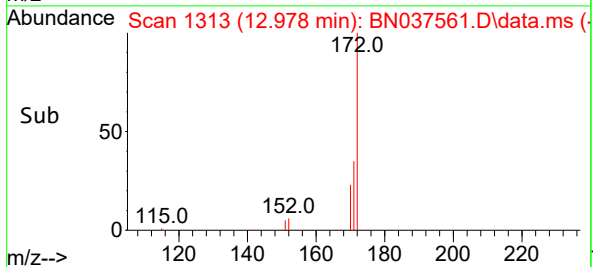
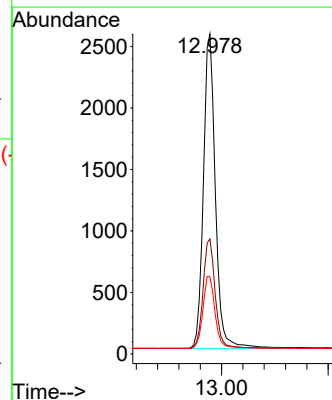
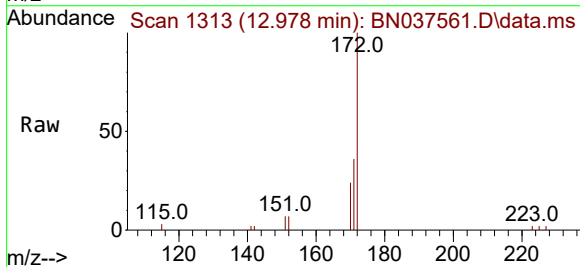
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

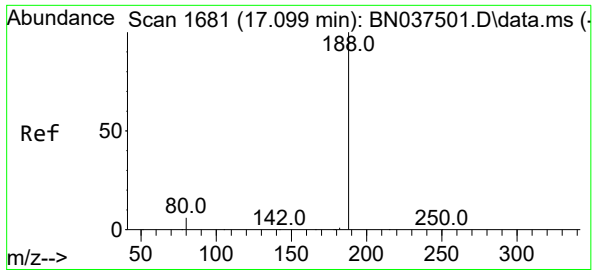
| Tgt Ion | 330   | Resp  | 372   |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 330     | 100   |       |       |
| 332     | 97.6  | 76.1  | 114.1 |
| 141     | 46.8  | 33.4  | 50.0  |



#15  
2-Fluorobiphenyl  
Concen: 0.383 ng  
RT: 12.978 min Scan# 1313  
Delta R.T. -0.005 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

| Tgt Ion | 172   | Resp  | 5578  |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 172     | 100   |       |       |
| 171     | 36.0  | 29.4  | 44.2  |
| 170     | 24.1  | 19.4  | 29.0  |





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.087 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037561.D

Acq: 05 Aug 2025 10:47

Instrument :

BNA\_N

ClientSampleId :

RW8-SP100-20250731

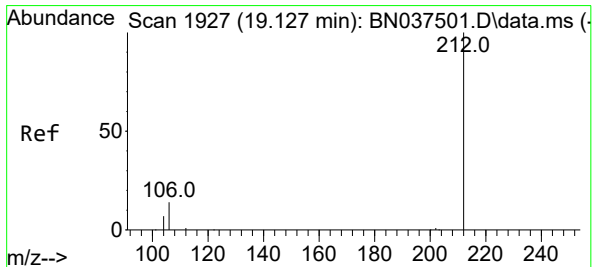
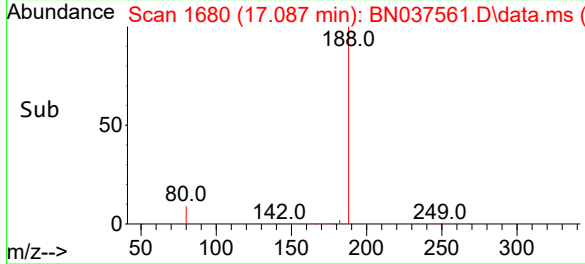
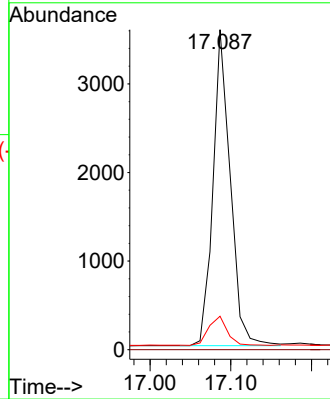
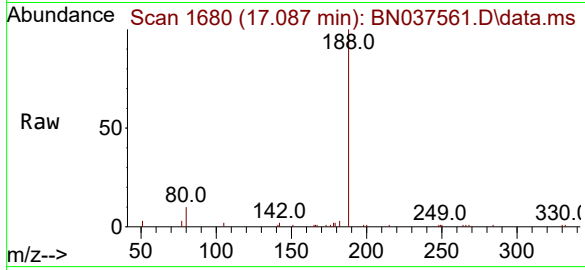
Tgt Ion:188 Resp: 5308

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.5 6.0 9.0#



#27

Fluoranthene-d10

Concen: 0.377 ng

RT: 19.123 min Scan# 1926

Delta R.T. -0.004 min

Lab File: BN037561.D

Acq: 05 Aug 2025 10:47

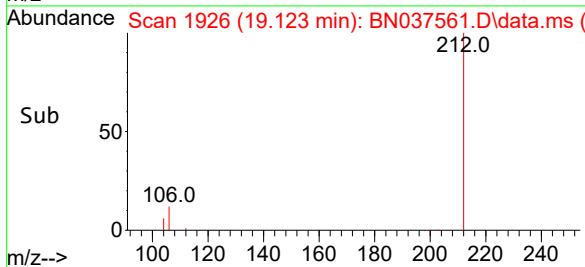
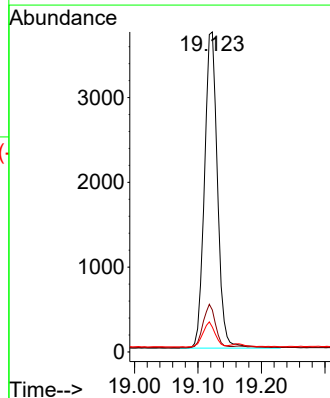
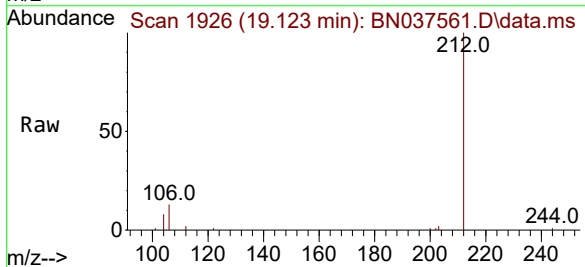
Tgt Ion:212 Resp: 5300

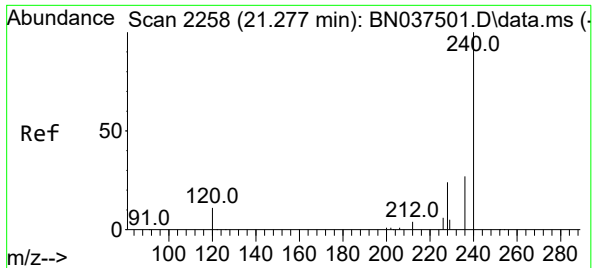
Ion Ratio Lower Upper

212 100

106 13.2 12.2 18.4

104 7.5 6.7 10.1

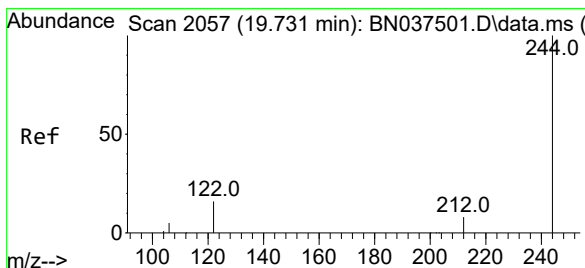
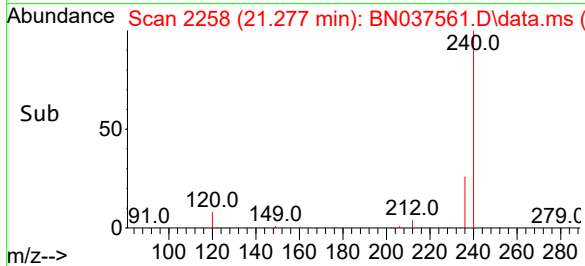
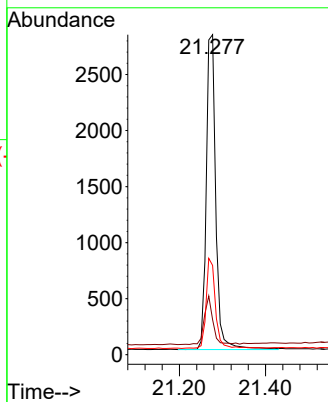
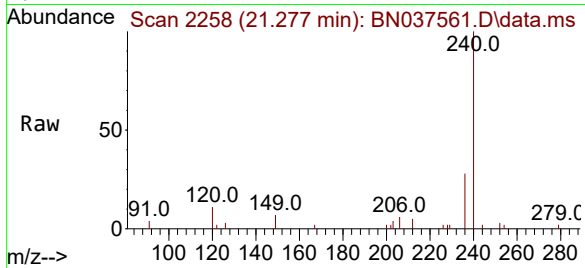




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

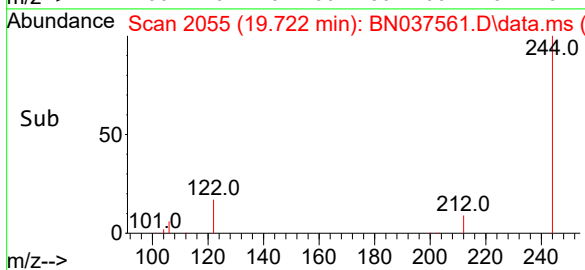
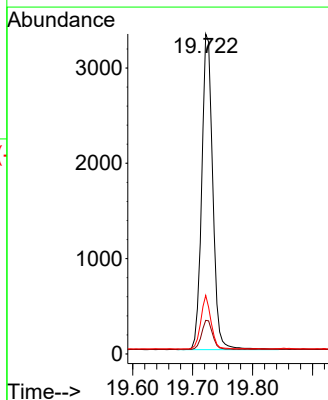
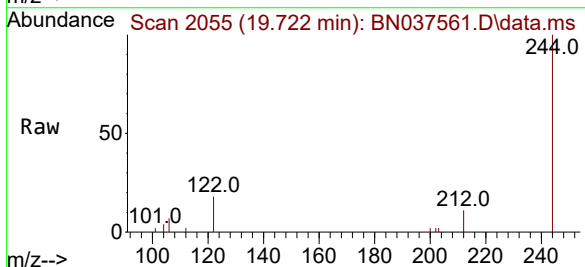
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

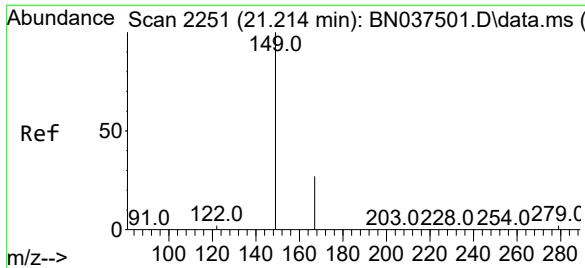
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 10.9  | 10.7  | 16.1  |
| 236     | 27.9  | 22.6  | 33.8  |



#31  
Terphenyl-d14  
Concen: 0.455 ng  
RT: 19.722 min Scan# 2055  
Delta R.T. -0.009 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 10.5  | 7.4   | 11.2  |
| 122     | 18.3  | 13.6  | 20.4  |

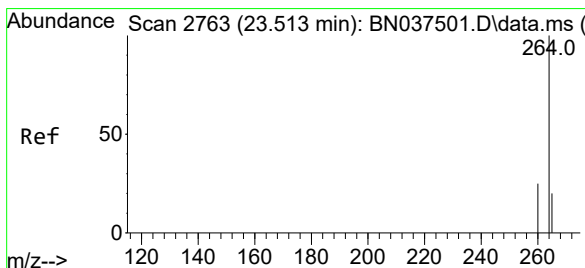
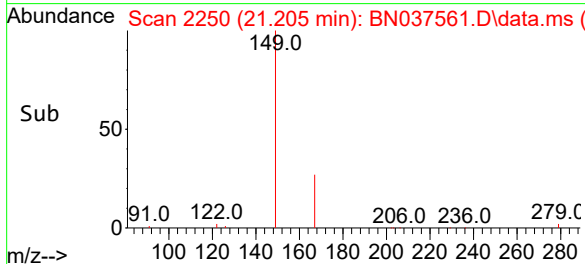
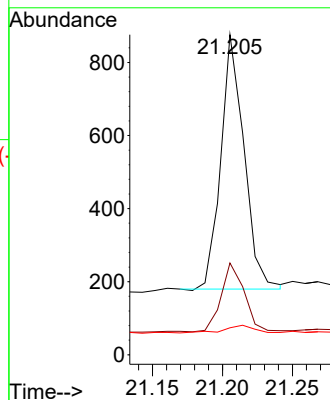
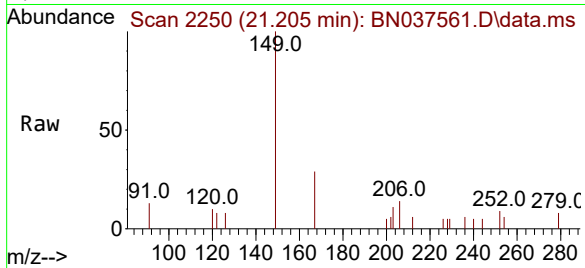




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.117 ng  
RT: 21.205 min Scan# 211  
Delta R.T. -0.009 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

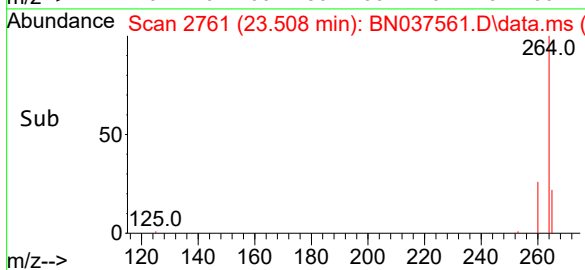
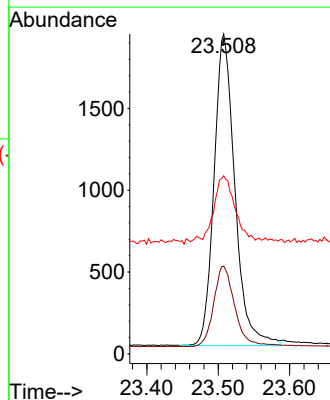
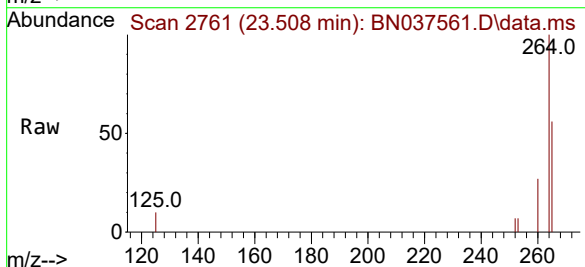
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250731

Tgt Ion:149 Resp: 801  
Ion Ratio Lower Upper  
149 100  
167 26.6 21.8 32.8  
279 3.7 3.0 4.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.508 min Scan# 2761  
Delta R.T. -0.006 min  
Lab File: BN037561.D  
Acq: 05 Aug 2025 10:47

Tgt Ion:264 Resp: 3857  
Ion Ratio Lower Upper  
264 100  
260 27.4 21.2 31.8  
265 55.7 40.4 60.6



## Report of Analysis

|                    |                                       |                 |                |
|--------------------|---------------------------------------|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.                  | Date Collected: | 07/31/25       |
| Project:           | NWIRP Bethpage - CTO WE13 1132341 WR6 | Date Received:  | 08/01/25       |
| Client Sample ID:  | RW8-SP303-20250731                    | SDG No.:        | Q2745          |
| Lab Sample ID:     | Q2745-02                              | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 0              |
| Sample Wt/Vol:     | 1000      Units:    mL                | Final Vol:      | 1000      uL   |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOC-SIMGroup1 |
| Extraction Type :  | Decanted :    N                       | Level :         | LOW            |
| Injection Volume : | GPC Factor :    1.0                   | GPC Cleanup :   | N      PH :    |
| Prep Method :      |                                       |                 |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN037562.D        | 1         | 08/04/25 08:40 | 08/05/25 11:23 | PB169094      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.20  | U         | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.30  |           | 30 - 150 |      | 75%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.35  |           | 30 - 150 |      | 88%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.32  |           | 55 - 111 |      | 80%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.36  |           | 53 - 106 |      | 90%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.47  |           | 58 - 132 |      | 116%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 1760  | 7.724     |          |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4430  | 10.498    |          |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2200  | 14.345    |          |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 4200  | 17.086    |          |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 3120  | 21.277    |          |      |            |          |
| 1520-96-3                 | Perylene-d12            | 2700  | 23.508    |          |      |            |          |

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\BN080525\  
Data File : BN037562.D  
Acq On : 05 Aug 2025 11:23  
Operator : RC/JU  
Sample : Q2745-02  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731

Quant Time: Aug 06 01:38:48 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

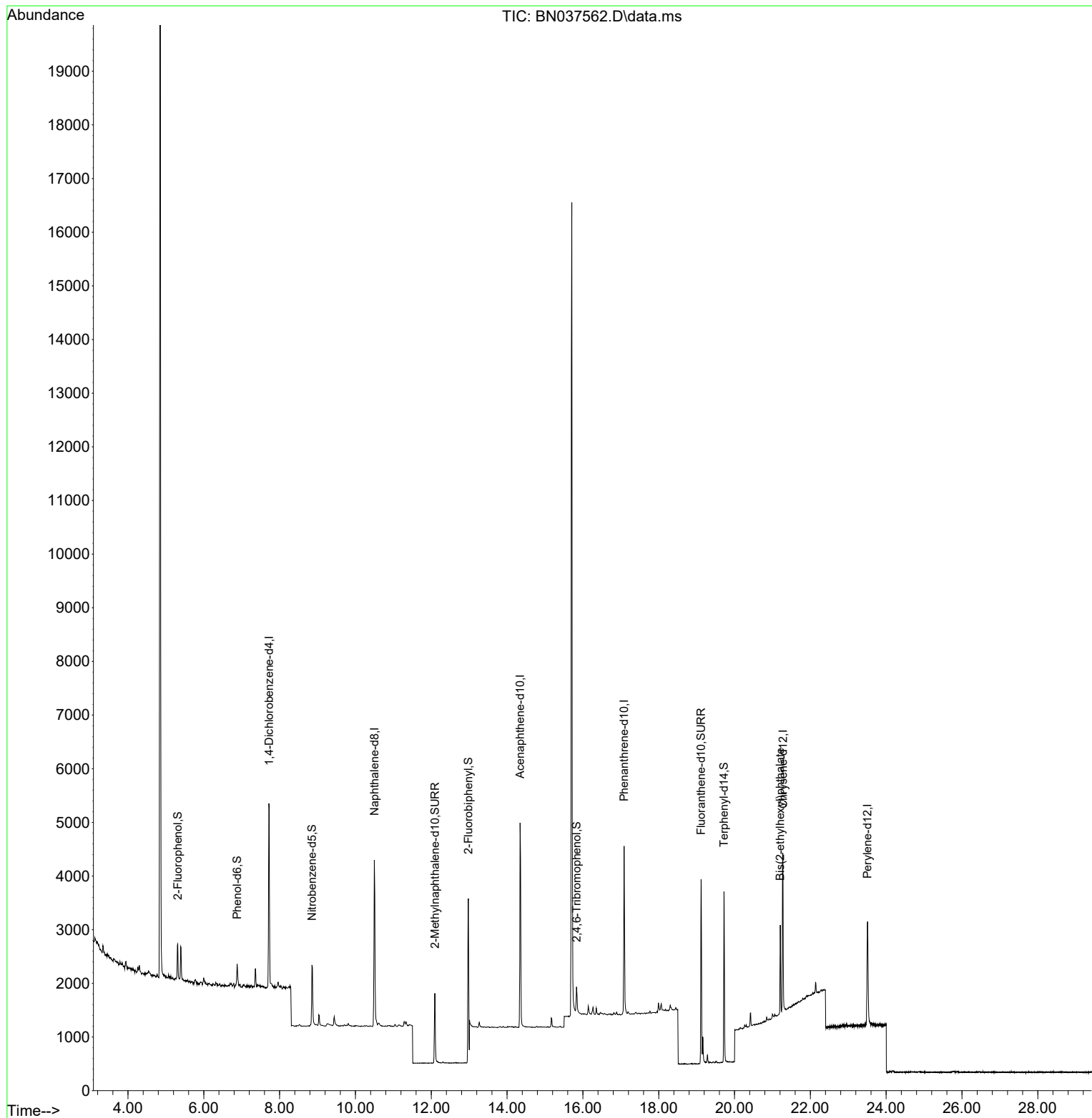
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 1755     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.498 | 136  | 4432     | 0.400 | ng    | #-0.01    |
| 13) Acenaphthene-d10          | 14.345 | 164  | 2203     | 0.400 | ng    | -0.01     |
| 19) Phenanthrene-d10          | 17.086 | 188  | 4201     | 0.400 | ng    | #-0.01    |
| 29) Chrysene-d12              | 21.277 | 240  | 3117     | 0.400 | ng    | 0.00      |
| 35) Perylene-d12              | 23.508 | 264  | 2700     | 0.400 | ng    | # 0.00    |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.312  | 112  | 519      | 0.120 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.879  | 99   | 355      | 0.065 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.854  | 82   | 1060     | 0.320 | ng    | -0.01     |
| 11) 2-Methylnaphthalene-d10   | 12.096 | 152  | 1916     | 0.301 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 299      | 0.276 | ng    | -0.01     |
| 15) 2-Fluorobiphenyl          | 12.978 | 172  | 4105     | 0.358 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 19.118 | 212  | 3897     | 0.350 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.722 | 244  | 3121     | 0.466 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 34) Bis(2-ethylhexyl)phtha... | 21.205 | 149  | 1548     | 0.315 | ng    | Qvalue 98 |

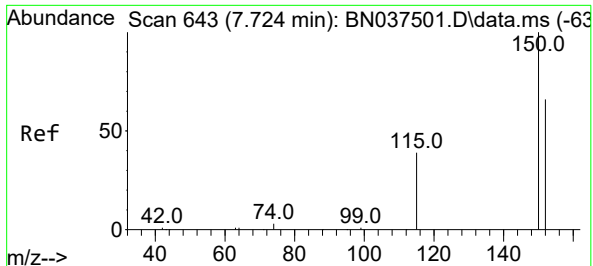
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037562.D  
Acq On : 05 Aug 2025 11:23  
Operator : RC/JU  
Sample : Q2745-02  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731

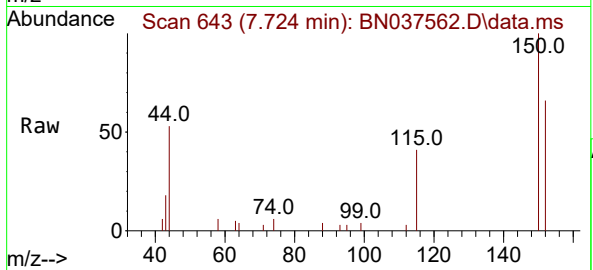
Quant Time: Aug 06 01:38:48 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration



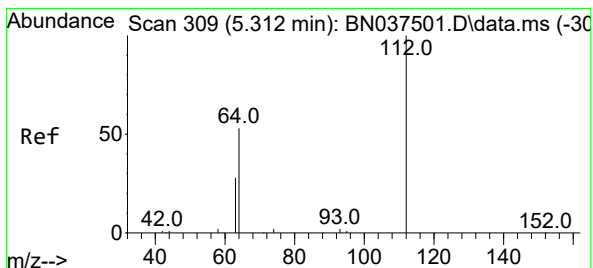
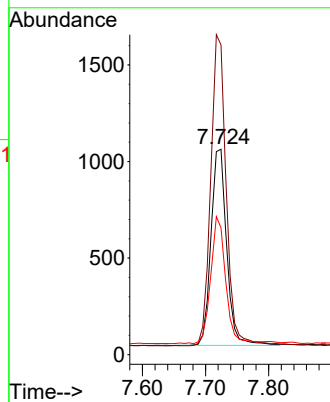
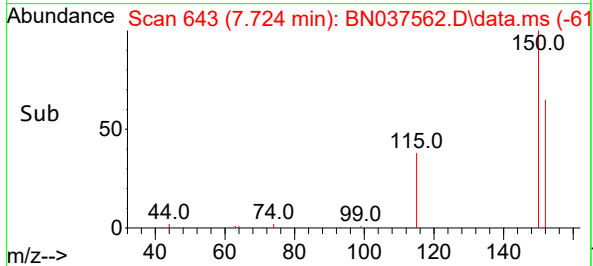


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 643  
Delta R.T. 0.000 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

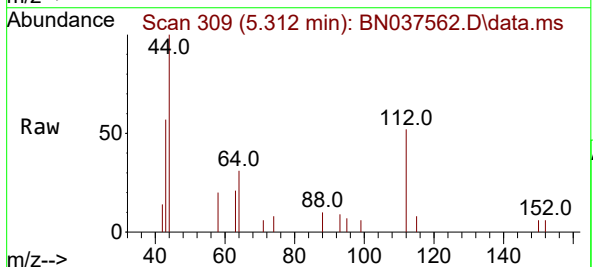
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731



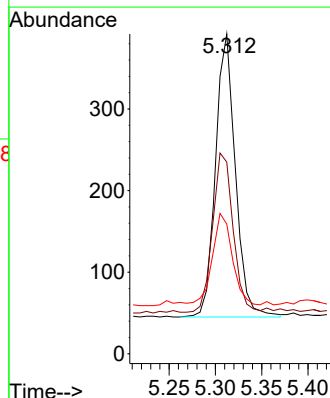
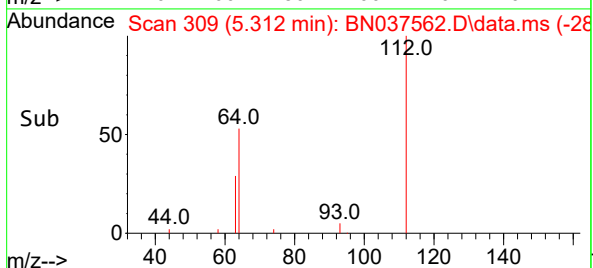
Tgt Ion:152 Resp: 1755  
Ion Ratio Lower Upper  
152 100  
150 150.8 119.8 179.8  
115 61.7 49.1 73.7

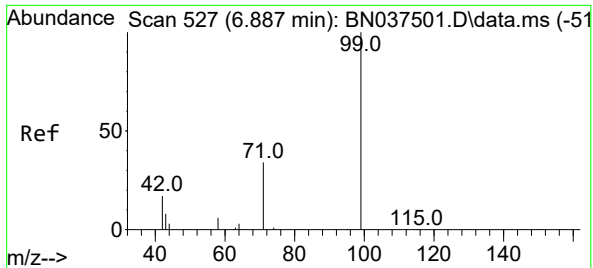


#4  
2-Fluorophenol  
Concen: 0.120 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23



Tgt Ion:112 Resp: 519  
Ion Ratio Lower Upper  
112 100  
64 57.6 45.1 67.7  
63 33.9 23.8 35.8

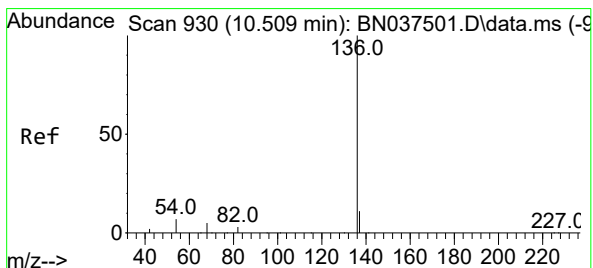
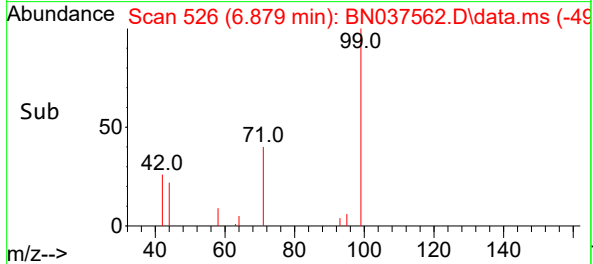
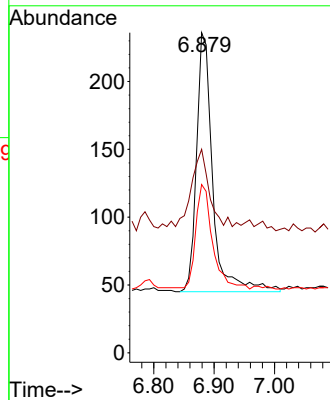
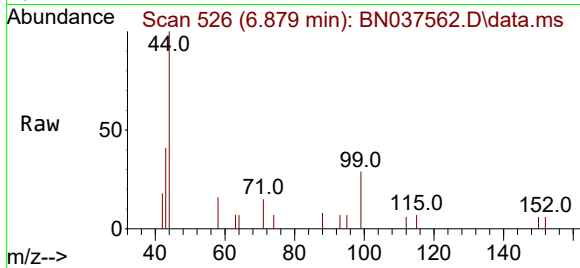




#5  
Phenol-d6  
Concen: 0.065 ng  
RT: 6.879 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

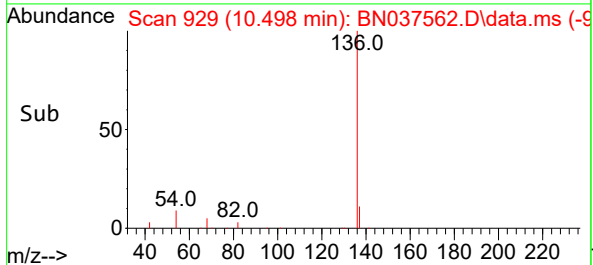
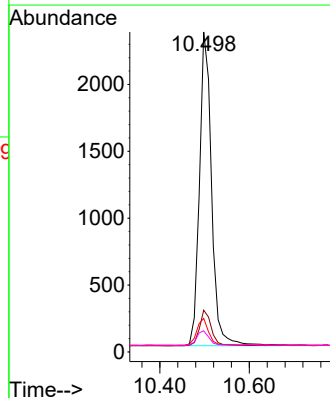
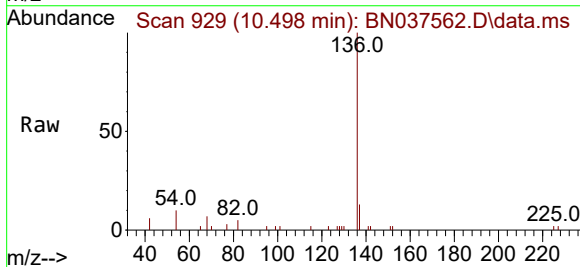
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731

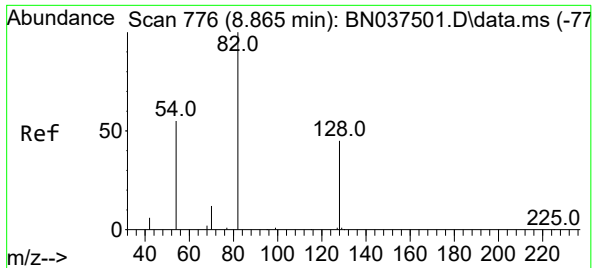
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 99      | 100   |       |       |
| 42      | 35.2  | 17.1  | 25.7# |
| 71      | 42.0  | 27.8  | 41.8# |



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 929  
Delta R.T. -0.011 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 13.0  | 9.8   | 14.8  |
| 54      | 10.5  | 6.6   | 9.8#  |
| 68      | 6.6   | 5.0   | 7.6   |

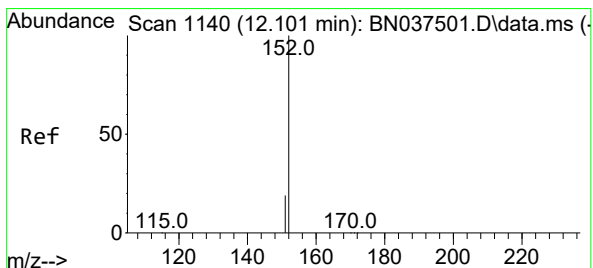
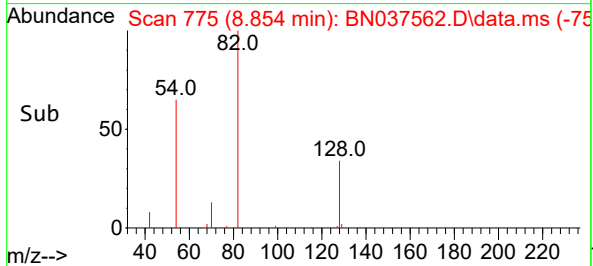
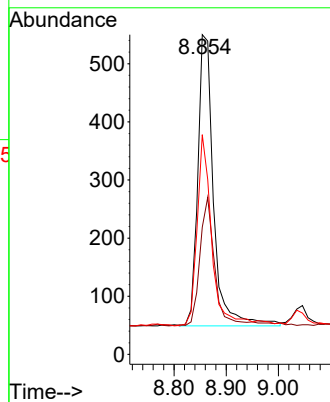
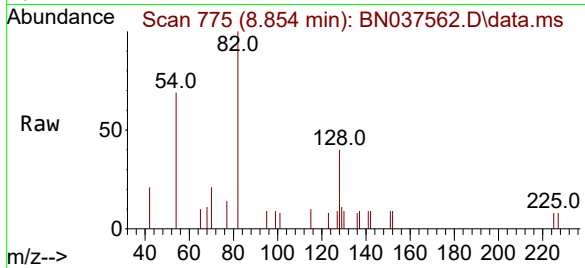




#8  
Nitrobenzene-d5  
Concen: 0.320 ng  
RT: 8.854 min Scan# 71  
Delta R.T. -0.011 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

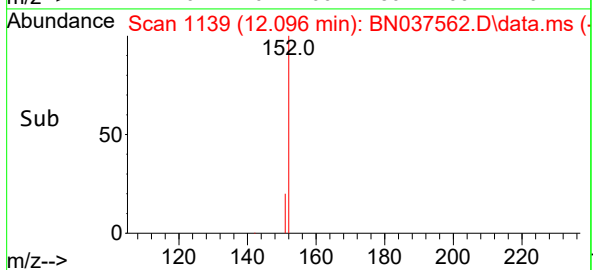
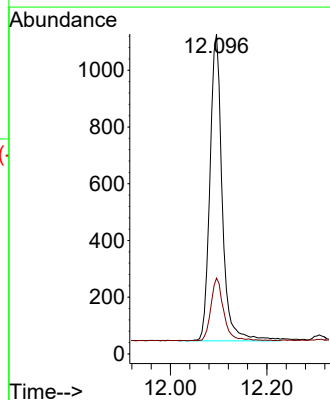
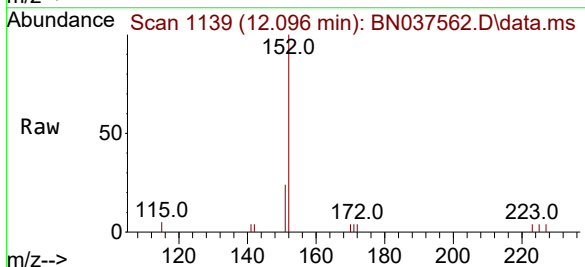
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731

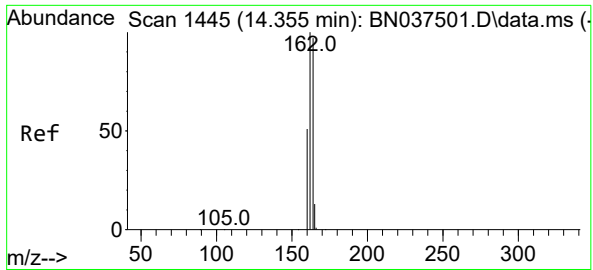
| Tgt Ion: | 82    | Resp: | 1060  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 39.8  | 37.5  | 56.3  |
| 54       | 68.7  | 45.3  | 67.9  |



#11  
2-Methylnaphthalene-d10  
Concen: 0.301 ng  
RT: 12.096 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

| Tgt Ion: | 152   | Resp: | 1916  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 21.5  | 16.8  | 25.2  |

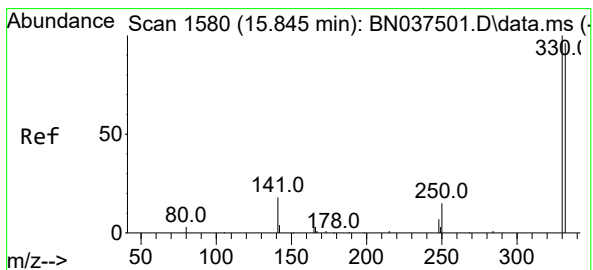
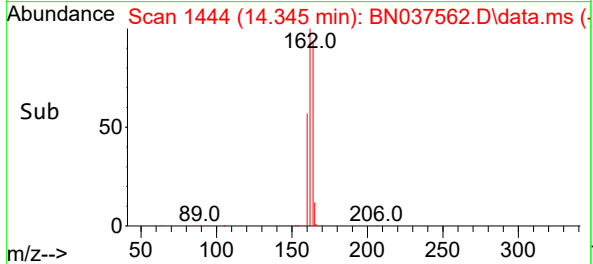
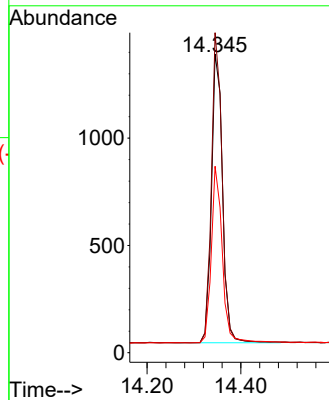
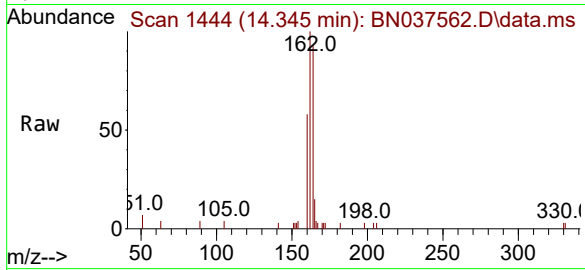




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.345 min Scan# 1444  
Delta R.T. -0.011 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

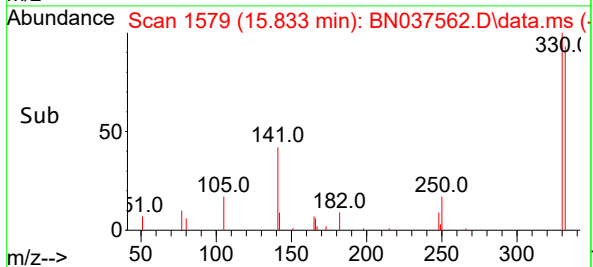
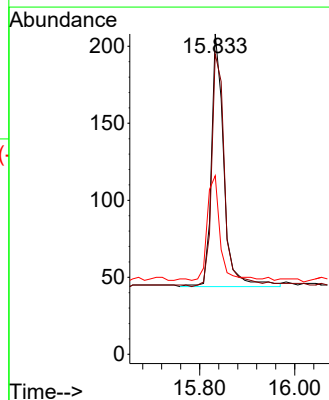
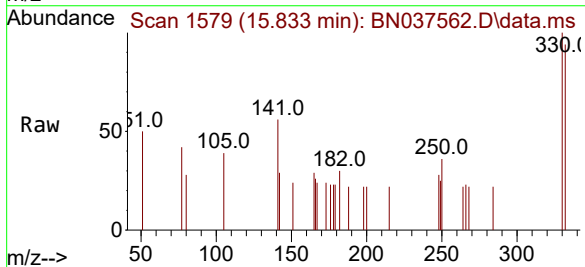
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731

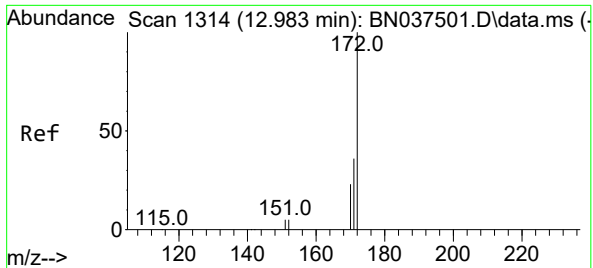
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 2203  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 162      | 107.1 | 82.0  | 123.0 |
| 160      | 62.4  | 42.4  | 63.6  |



#14  
2,4,6-Tribromophenol  
Concen: 0.276 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.012 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 330   | Resp: | 299   |
| Ion      | Ratio | Lower | Upper |
| 330      | 100   |       |       |
| 332      | 97.0  | 76.1  | 114.1 |
| 141      | 43.8  | 33.4  | 50.0  |

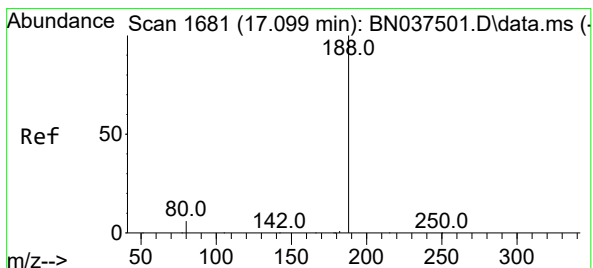
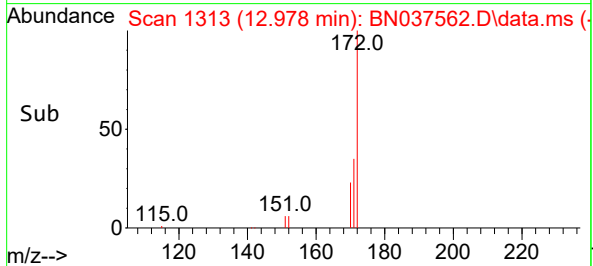
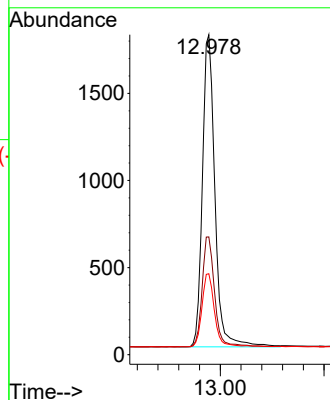
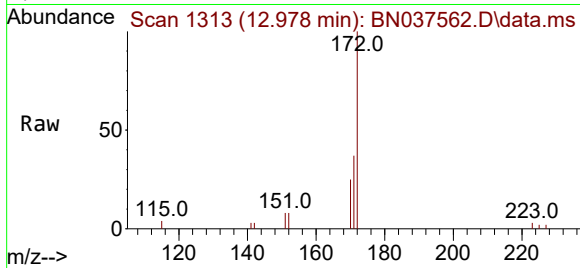




#15  
2-Fluorobiphenyl  
Concen: 0.358 ng  
RT: 12.978 min Scan# 11  
Delta R.T. -0.005 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

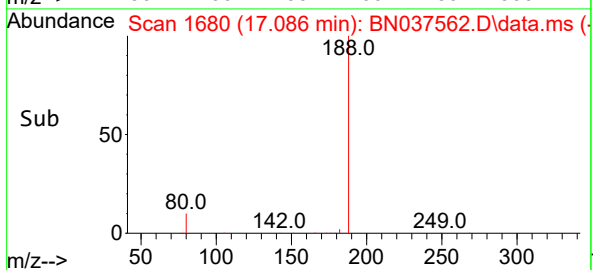
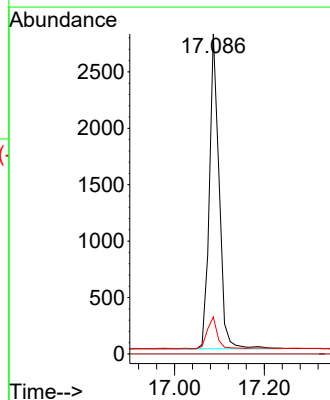
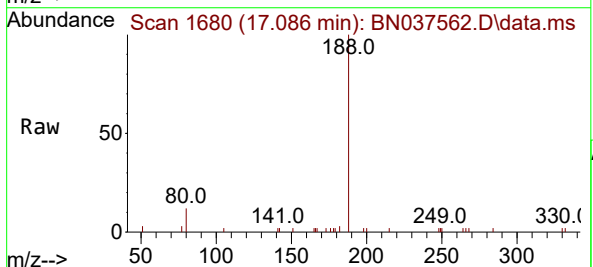
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731

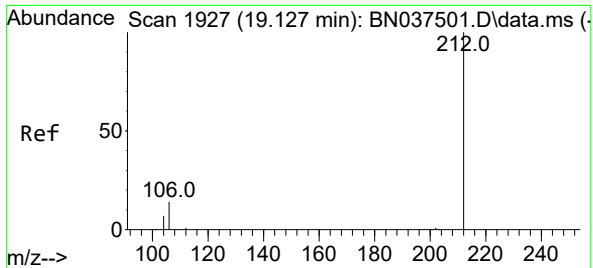
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.8  | 29.4  | 44.2  |
| 170     | 25.3  | 19.4  | 29.0  |



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1680  
Delta R.T. -0.012 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 11.5  | 6.0   | 9.0#  |





#27

Fluoranthene-d10

Concen: 0.350 ng

RT: 19.118 min Scan# 1925

Delta R.T. -0.009 min

Lab File: BN037562.D

Acq: 05 Aug 2025 11:23

Instrument :

BNA\_N

ClientSampleId :

RW8-SP303-20250731

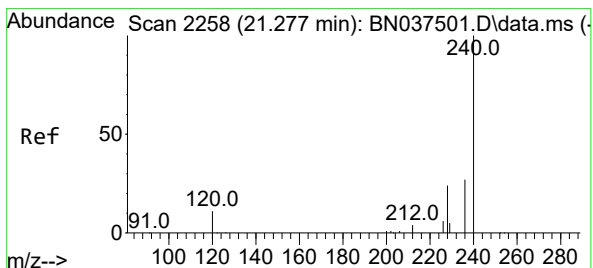
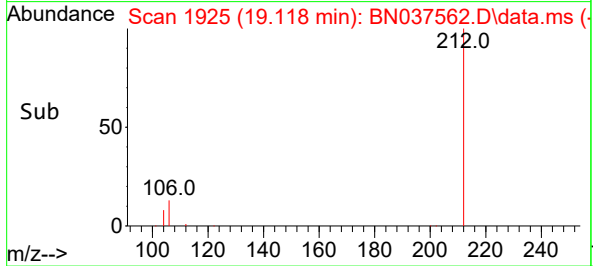
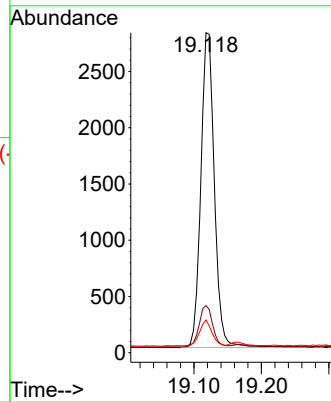
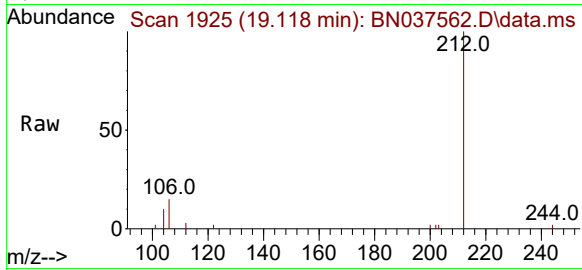
Tgt Ion:212 Resp: 3897

Ion Ratio Lower Upper

212 100

106 13.0 12.2 18.4

104 7.6 6.7 10.1



#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 2258

Delta R.T. -0.000 min

Lab File: BN037562.D

Acq: 05 Aug 2025 11:23

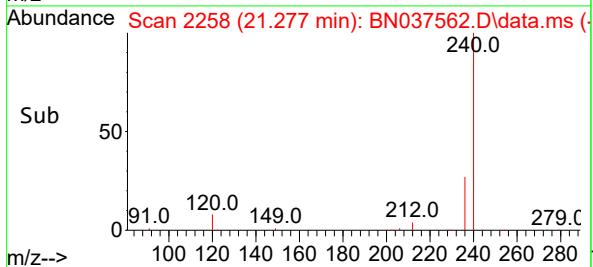
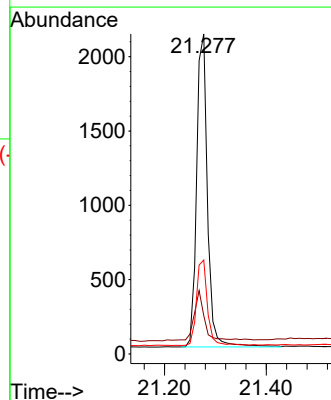
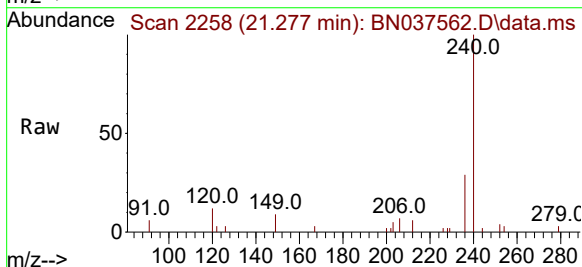
Tgt Ion:240 Resp: 3117

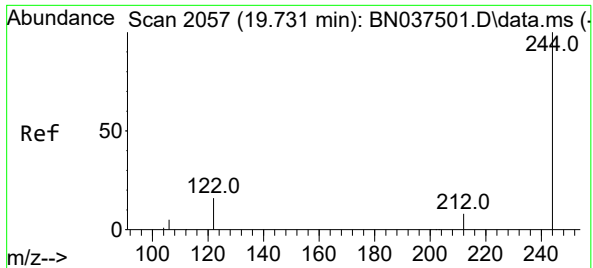
Ion Ratio Lower Upper

240 100

120 12.0 10.7 16.1

236 29.4 22.6 33.8

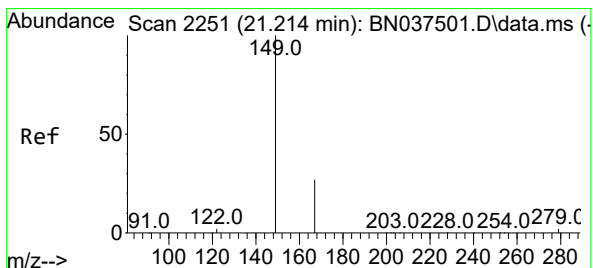
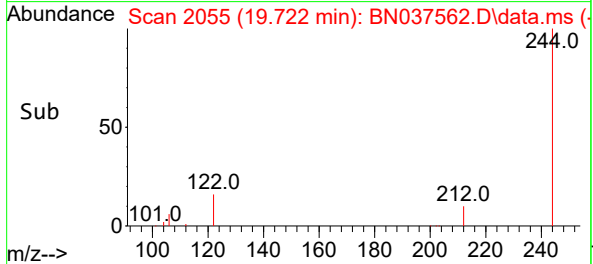
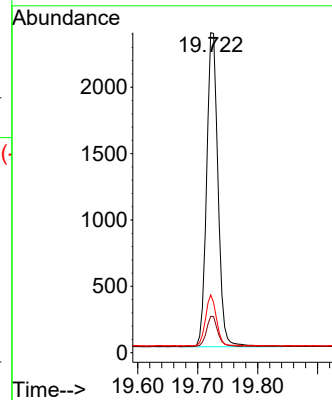
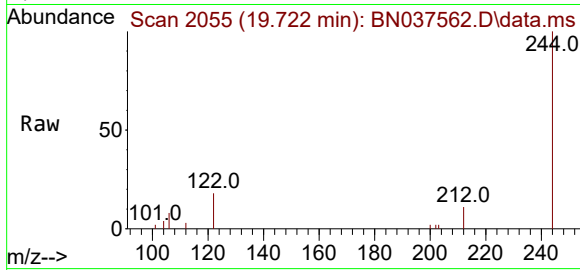




#31  
Terphenyl-d14  
Concen: 0.466 ng  
RT: 19.722 min Scan# 2055  
Delta R.T. -0.009 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

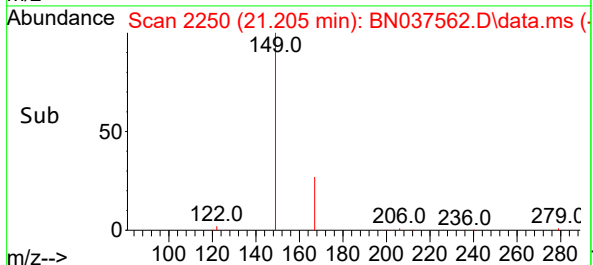
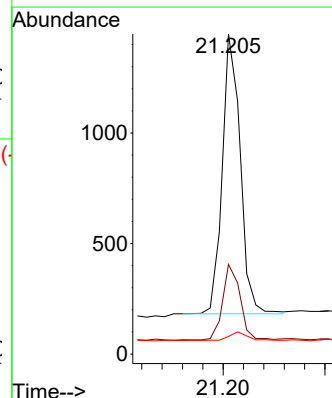
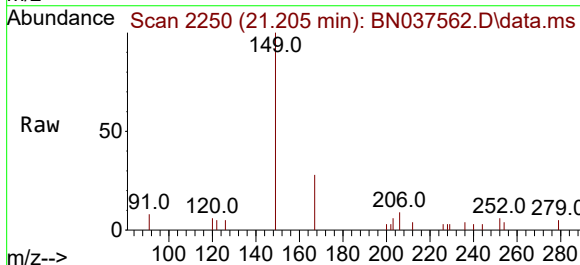
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250731

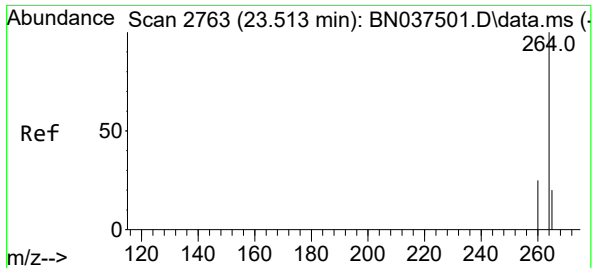
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 11.4  | 7.4   | 11.2# |
| 122     | 18.0  | 13.6  | 20.4  |



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.315 ng  
RT: 21.205 min Scan# 2250  
Delta R.T. -0.009 min  
Lab File: BN037562.D  
Acq: 05 Aug 2025 11:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 26.1  | 21.8  | 32.8  |
| 279     | 3.3   | 3.0   | 4.4   |





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.508 min Scan# 21

Delta R.T. -0.006 min

Lab File: BN037562.D

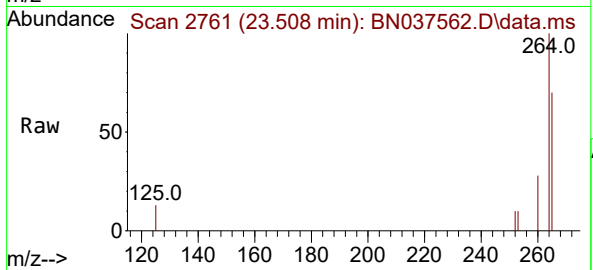
Acq: 05 Aug 2025 11:23

Instrument :

BNA\_N

ClientSampleId :

RW8-SP303-20250731



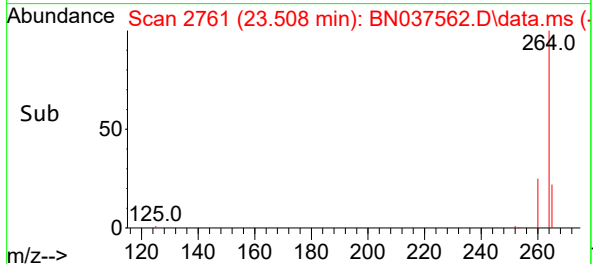
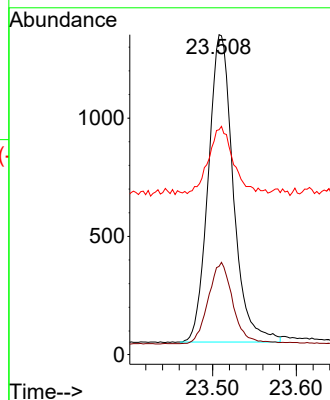
Tgt Ion:264 Resp: 2700

Ion Ratio Lower Upper

264 100

260 27.6 21.2 31.8

265 70.3 40.4 60.6#





# CALIBRATION SUMMARY

|    |
|----|
| 1  |
| 2  |
| 3  |
| 4  |
| 5  |
| 6  |
| 7  |
| 8  |
| 9  |
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| 16 |
| 17 |

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
 Method File : 8270-SIM-BN071525.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Wed Jul 16 02:38:11 2025  
 Response Via : Initial Calibration

## Calibration Files

0.1 =BN037499.D 0.2 =BN037500.D 0.4 =BN037501.D 0.8 =BN037502.D 1.6 =BN037503.D 3.2 =BN037504.D 5 =BN037505.D

|           | Compound              | 0.1            | 0.2   | 0.4   | 0.8   | 1.6   | 3.2   | 5     | Avg   | %RSD  |
|-----------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----     |                       |                |       |       |       |       |       |       |       |       |
| 1) I      | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2)        | 1,4-Dioxane           | 0.409          | 0.395 | 0.371 | 0.398 | 0.380 | 0.354 | 0.385 | 5.29  |       |
| 3)        | n-Nitrosodimet...     | 0.466          | 0.464 | 0.465 | 0.508 | 0.499 | 0.501 | 0.484 | 4.31  |       |
| 4) S      | 2-Fluorophenol        | 1.038          | 1.011 | 0.985 | 0.908 | 0.982 | 0.971 | 1.030 | 0.989 | 4.42  |
| 5) S      | Phenol-d6             | 1.448          | 1.238 | 1.190 | 1.105 | 1.201 | 1.229 | 1.275 | 1.241 | 8.52  |
| 6)        | bis(2-Chloroet...     | 1.082          | 1.052 | 1.024 | 0.983 | 1.037 | 1.033 | 1.016 | 1.033 | 2.99  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 7) I      | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |
| 8) S      | Nitrobenzene-d5       | 0.311          | 0.288 | 0.283 | 0.270 | 0.300 | 0.305 | 0.336 | 0.299 | 7.20  |
| 9)        | Naphthalene           | 1.069          | 1.054 | 1.046 | 1.009 | 1.091 | 1.073 | 1.126 | 1.067 | 3.45  |
| 10)       | Hexachlorobuta...     | 0.229          | 0.237 | 0.235 | 0.223 | 0.245 | 0.236 | 0.246 | 0.236 | 3.44  |
| 11) SURR2 | Methylnaphth...       | 0.556          | 0.534 | 0.541 | 0.522 | 0.562 | 0.590 | 0.711 | 0.574 | 11.24 |
| 12)       | 2-Methylnaphth...     | 0.704          | 0.655 | 0.678 | 0.665 | 0.716 | 0.736 | 0.756 | 0.701 | 5.34  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 13) I     | Acenaphthene-d10      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 14) S     | 2,4,6-Tribromo...     | 0.197          | 0.173 | 0.173 | 0.176 | 0.194 | 0.215 | 0.248 | 0.197 | 13.98 |
| 15) S     | 2-Fluorobiphenyl      | 1.818          | 1.794 | 2.045 | 2.024 | 2.277 | 2.205 | 2.397 | 2.080 | 10.91 |
| 16)       | Acenaphthylene        | 1.723          | 1.708 | 1.719 | 1.684 | 1.830 | 1.895 | 1.981 | 1.792 | 6.30  |
| 17)       | Acenaphthene          | 1.239          | 1.160 | 1.172 | 1.150 | 1.238 | 1.251 | 1.320 | 1.218 | 5.03  |
| 18)       | Fluorene              | 1.592          | 1.488 | 1.485 | 1.486 | 1.605 | 1.606 | 1.717 | 1.569 | 5.56  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 19) I     | Phenanthrene-d10      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 20)       | 4,6-Dinitro-2-...     | 0.044          | 0.041 | 0.047 | 0.057 | 0.070 | 0.080 | 0.057 | 27.89 |       |
| 21)       | 4-Bromophenyl-...     | 0.248          | 0.247 | 0.243 | 0.242 | 0.268 | 0.272 | 0.274 | 0.256 | 5.58  |
| 22)       | Hexachlorobenzene     | 0.315          | 0.330 | 0.328 | 0.321 | 0.345 | 0.340 | 0.338 | 0.331 | 3.26  |
| 23)       | Atrazine              | 0.173          | 0.161 | 0.159 | 0.158 | 0.181 | 0.200 | 0.220 | 0.179 | 13.24 |
| 24)       | Pentachlorophenol     | 0.131          | 0.125 | 0.126 | 0.151 | 0.170 | 0.189 | 0.149 | 17.64 |       |
| 25)       | Phenanthrene          | 1.167          | 1.163 | 1.160 | 1.129 | 1.248 | 1.248 | 1.273 | 1.198 | 4.70  |
| 26)       | Anthracene            | 1.025          | 1.025 | 1.013 | 1.023 | 1.160 | 1.176 | 1.232 | 1.093 | 8.45  |
| 27) SURR  | Fluoranthene-d10      | 1.023          | 0.998 | 0.962 | 0.928 | 1.041 | 1.078 | 1.385 | 1.060 | 14.34 |
| 28)       | Fluoranthene          | 1.358          | 1.310 | 1.290 | 1.270 | 1.429 | 1.431 | 1.585 | 1.382 | 7.96  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 29) I     | Chrysene-d12          | -----ISTD----- |       |       |       |       |       |       |       |       |
| 30)       | Pyrene                | 1.754          | 1.559 | 1.607 | 1.549 | 1.607 | 1.665 | 1.539 | 1.612 | 4.74  |
| 31) S     | Terphenyl-d14         | 0.926          | 0.815 | 0.844 | 0.811 | 0.854 | 0.902 | 0.865 | 0.859 | 4.94  |
| 32)       | Benzo(a)anthra...     | 1.414          | 1.357 | 1.341 | 1.285 | 1.429 | 1.464 | 1.517 | 1.401 | 5.63  |
| 33)       | Chrysene              | 1.452          | 1.461 | 1.434 | 1.358 | 1.488 | 1.490 | 1.528 | 1.459 | 3.70  |
| 34)       | Bis(2-ethylhex...     | 0.603          | 0.564 | 0.538 | 0.603 | 0.693 | 0.779 | 0.630 | 14.26 |       |
|           |                       |                |       |       |       |       |       |       |       |       |
| 35) I     | Perylene-d12          | -----ISTD----- |       |       |       |       |       |       |       |       |

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\

Method File : 8270-SIM-BN071525.M

|       |                   |       |       |       |       |       |       |       |       |       |
|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 36)   | Indeno(1,2,3-c... | 1.493 | 1.528 | 1.514 | 1.559 | 1.771 | 1.805 | 1.991 | 1.666 | 11.48 |
| 37)   | Benzo(b)fluora... | 1.464 | 1.378 | 1.454 | 1.436 | 1.589 | 1.617 | 1.692 | 1.518 | 7.53  |
| 38)   | Benzo(k)fluora... | 1.516 | 1.420 | 1.486 | 1.470 | 1.661 | 1.689 | 1.724 | 1.567 | 7.75  |
| 39) C | Benzo(a)pyrene    | 1.189 | 1.152 | 1.192 | 1.176 | 1.320 | 1.369 | 1.469 | 1.267 | 9.51  |
| 40)   | Dibenzo(a,h)an... | 1.201 | 1.218 | 1.216 | 1.256 | 1.444 | 1.483 | 1.627 | 1.349 | 12.46 |
| 41)   | Benzo(g,h,i)pe... | 1.247 | 1.283 | 1.309 | 1.297 | 1.482 | 1.497 | 1.663 | 1.397 | 10.98 |

-----  
(#) = Out of Range

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037499.D  
 Acq On : 15 Jul 2025 12:36  
 Operator : RC/JU  
 Sample : SSTDICC0.1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.1

Quant Time: Jul 15 17:25:41 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

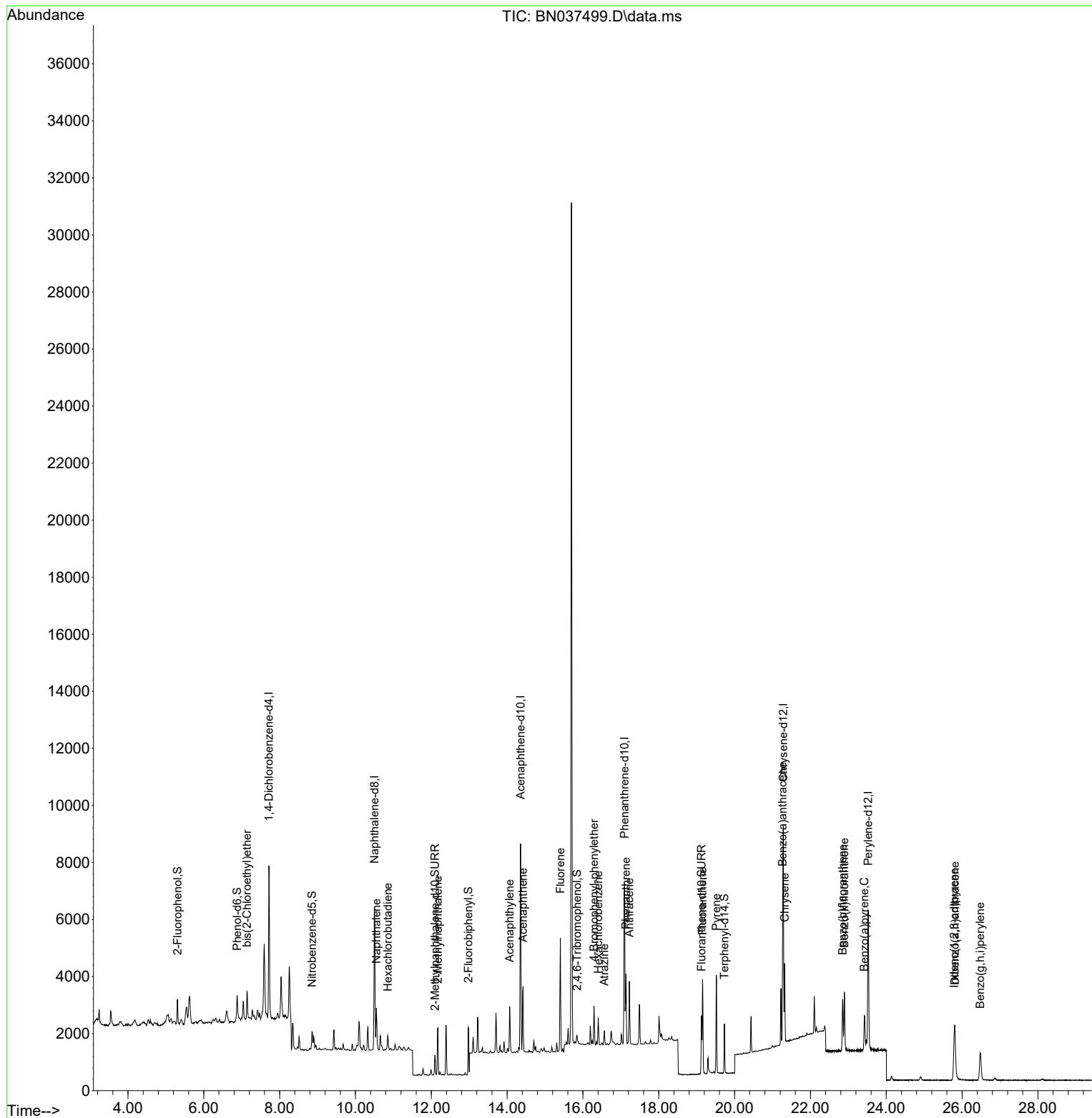
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.717  | 152  | 2613     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.498 | 136  | 6917     | 0.400 | ng    | #-0.01    |
| 13) Acenaphthene-d10          | 14.355 | 164  | 4050     | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 17.099 | 188  | 8501     | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.286 | 240  | 6753     | 0.400 | ng    | 0.00      |
| 35) Perylene-d12              | 23.522 | 264  | 6399     | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.305  | 112  | 678      | 0.105 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.879  | 99   | 946      | 0.117 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.854  | 82   | 538      | 0.104 | ng    | -0.01     |
| 11) 2-Methylnaphthalene-d10   | 12.096 | 152  | 962      | 0.097 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 199      | 0.100 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.978 | 172  | 1841     | 0.087 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 19.127 | 212  | 2175     | 0.097 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.731 | 244  | 1563     | 0.108 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 6) bis(2-Chloroethyl)ether    | 7.139  | 93   | 707      | 0.105 | ng    | Qvalue 97 |
| 9) Naphthalene                | 10.551 | 128  | 1848     | 0.100 | ng    | # 93      |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 396      | 0.097 | ng    | # 100     |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 1218     | 0.100 | ng    | 98        |
| 16) Acenaphthylene            | 14.067 | 152  | 1745     | 0.096 | ng    | 97        |
| 17) Acenaphthene              | 14.420 | 154  | 1254     | 0.102 | ng    | 98        |
| 18) Fluorene                  | 15.403 | 166  | 1612     | 0.101 | ng    | 97        |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 527      | 0.097 | ng    | 98        |
| 22) Hexachlorobenzene         | 16.404 | 284  | 670      | 0.095 | ng    | 100       |
| 23) Atrazine                  | 16.565 | 200  | 368      | 0.097 | ng    | # 81      |
| 25) Phenanthrene              | 17.136 | 178  | 2480     | 0.097 | ng    | 99        |
| 26) Anthracene                | 17.223 | 178  | 2179     | 0.094 | ng    | 100       |
| 28) Fluoranthene              | 19.155 | 202  | 2886     | 0.098 | ng    | 98        |
| 30) Pyrene                    | 19.517 | 202  | 2961     | 0.109 | ng    | 100       |
| 32) Benzo(a)anthracene        | 21.268 | 228  | 2388     | 0.101 | ng    | 97        |
| 33) Chrysene                  | 21.322 | 228  | 2451     | 0.100 | ng    | 98        |
| 36) Indeno(1,2,3-cd)pyrene    | 25.791 | 276  | 2389     | 0.090 | ng    | 96        |
| 37) Benzo(b)fluoranthene      | 22.850 | 252  | 2342     | 0.096 | ng    | # 85      |
| 38) Benzo(k)fluoranthene      | 22.896 | 252  | 2426     | 0.097 | ng    | # 73      |
| 39) Benzo(a)pyrene            | 23.426 | 252  | 1902     | 0.094 | ng    | # 77      |
| 40) Dibenzo(a,h)anthracene    | 25.811 | 278  | 1921     | 0.089 | ng    | # 78      |
| 41) Benzo(g,h,i)perylene      | 26.478 | 276  | 1995     | 0.089 | ng    | 90        |

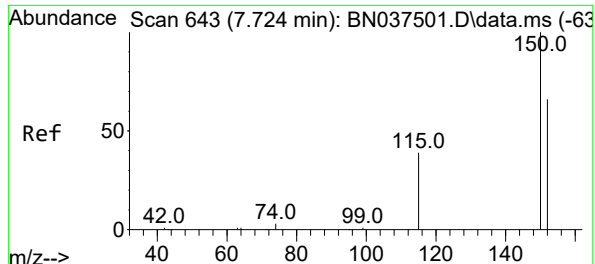
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Data File : BN037499.D  
Acq On : 15 Jul 2025 12:36  
Operator : RC/JU  
Sample : SSTDICC0.1  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

Quant Time: Jul 15 17:25:41 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 16:45:15 2025  
Response via : Initial Calibration

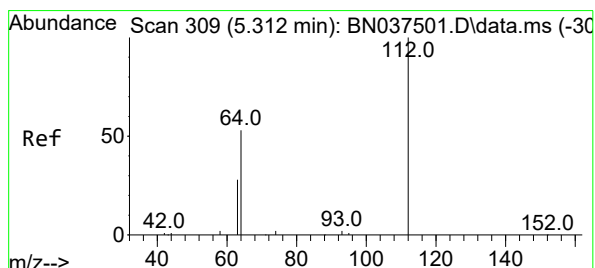
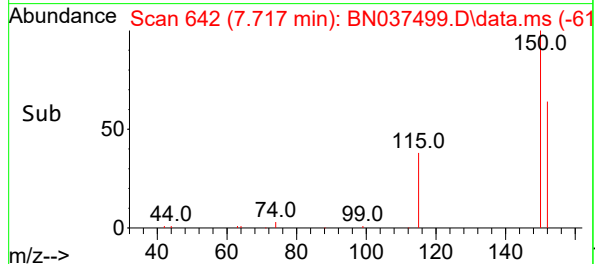
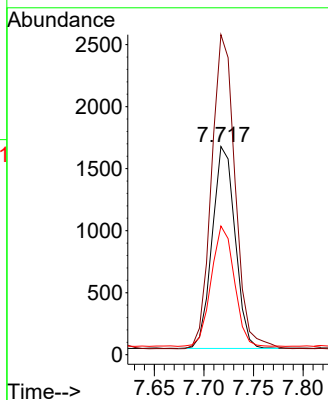
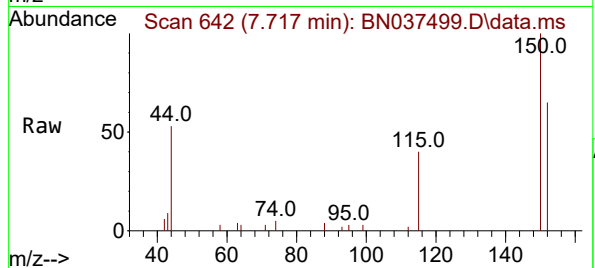




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 64  
Delta R.T. -0.007 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

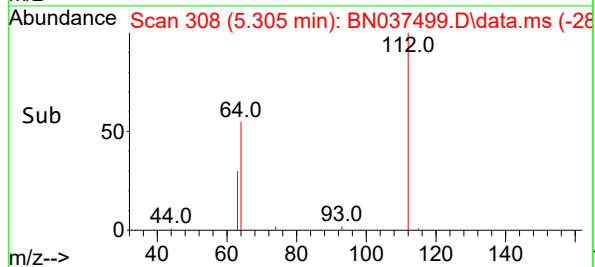
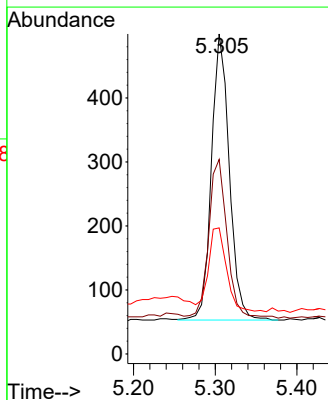
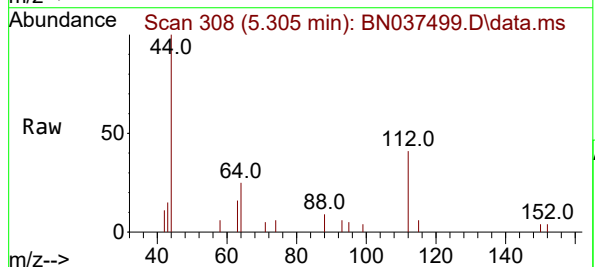
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

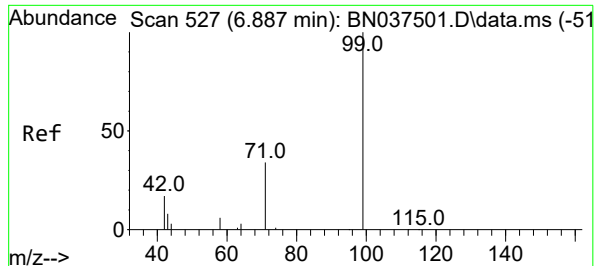
Tgt Ion:152 Resp: 2613  
Ion Ratio Lower Upper  
152 100  
150 153.7 119.8 179.8  
115 61.8 49.1 73.7



#4  
2-Fluorophenol  
Concen: 0.105 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:112 Resp: 678  
Ion Ratio Lower Upper  
112 100  
64 57.5 45.1 67.7  
63 29.1 23.8 35.8

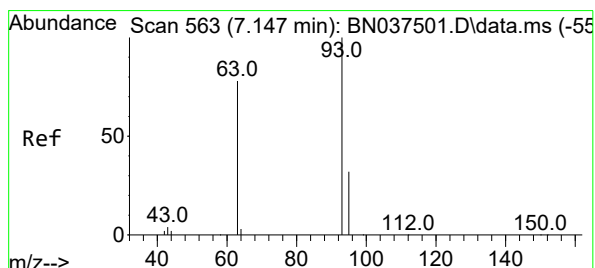
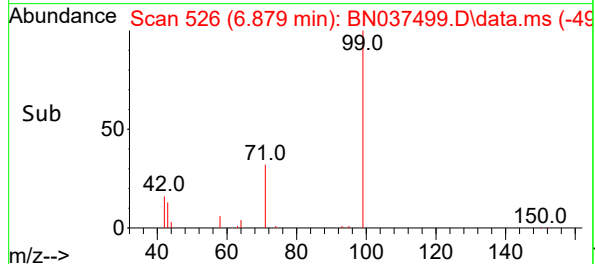
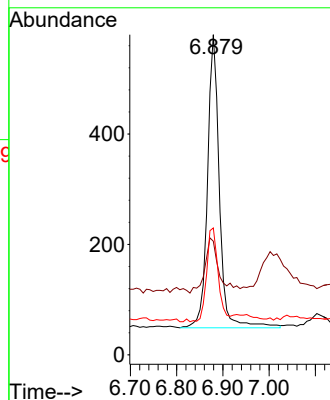
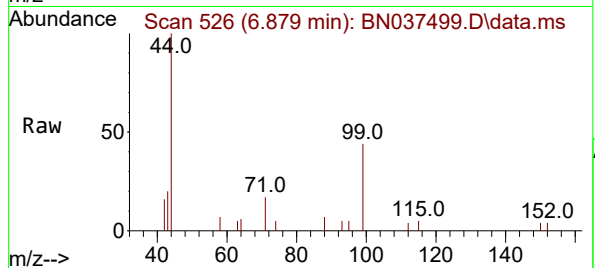




#5  
Phenol-d6  
Concen: 0.117 ng  
RT: 6.879 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

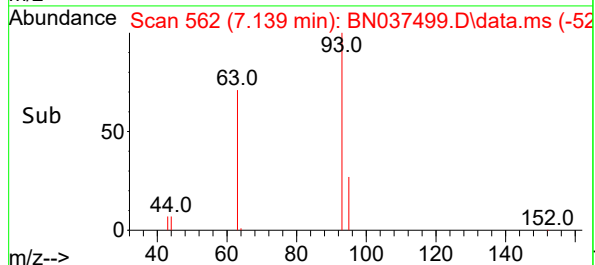
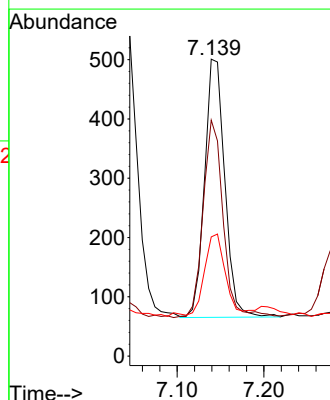
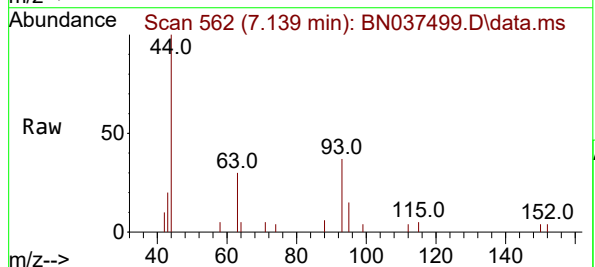
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

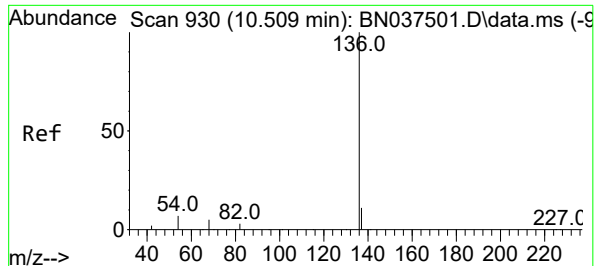
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 99      | 100   |       |       |
| 42      | 22.3  | 17.1  | 25.7  |
| 71      | 31.1  | 27.8  | 41.8  |



#6  
bis(2-Chloroethyl)ether  
Concen: 0.105 ng  
RT: 7.139 min Scan# 562  
Delta R.T. -0.007 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 93      | 100   |       |       |
| 63      | 75.8  | 58.2  | 87.4  |
| 95      | 33.2  | 25.3  | 37.9  |

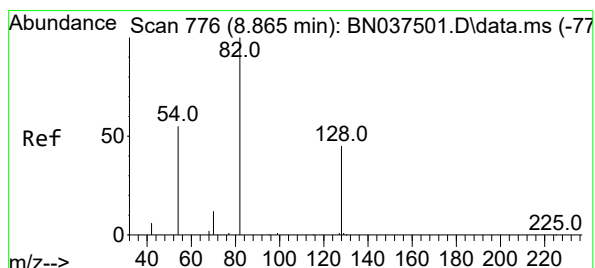
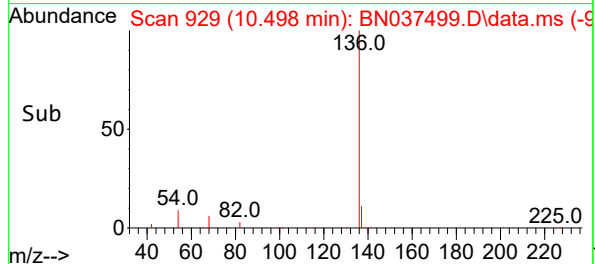
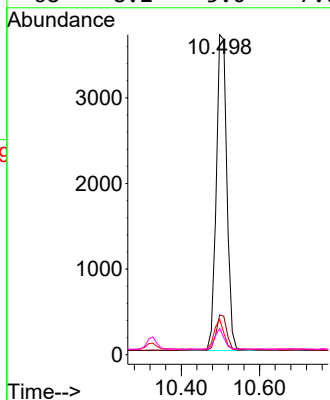
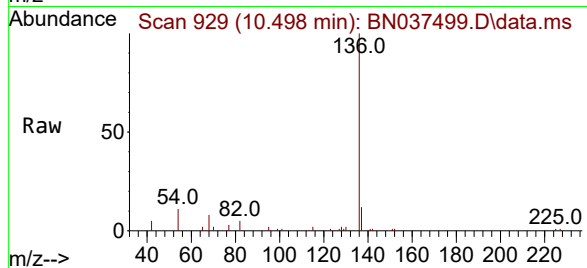




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 91  
Delta R.T. -0.011 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

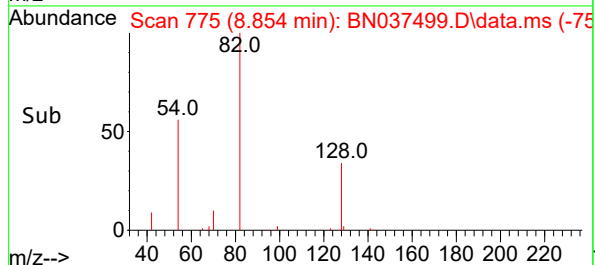
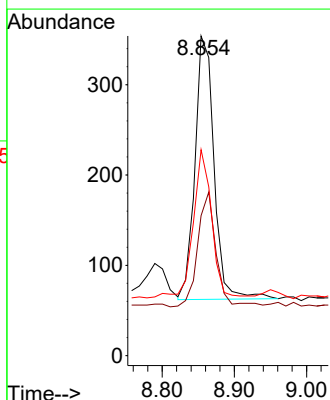
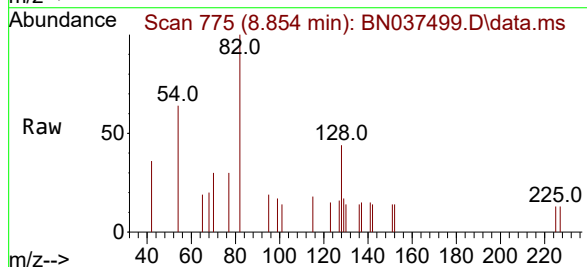
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

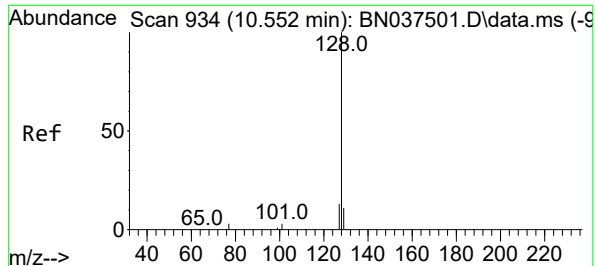
Tgt Ion:136 Resp: 6917  
Ion Ratio Lower Upper  
136 100  
137 12.5 9.8 14.8  
54 11.1 6.6 9.8#  
68 8.2 5.0 7.6#



#8  
Nitrobenzene-d5  
Concen: 0.104 ng  
RT: 8.854 min Scan# 775  
Delta R.T. -0.011 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion: 82 Resp: 538  
Ion Ratio Lower Upper  
82 100  
128 43.8 37.5 56.3  
54 64.4 45.3 67.9





#9

Naphthalene

Concen: 0.100 ng

RT: 10.551 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

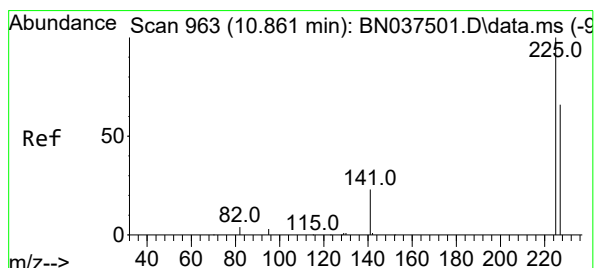
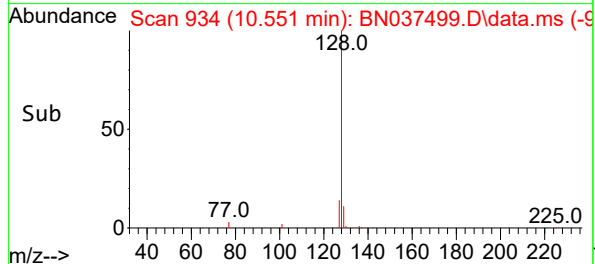
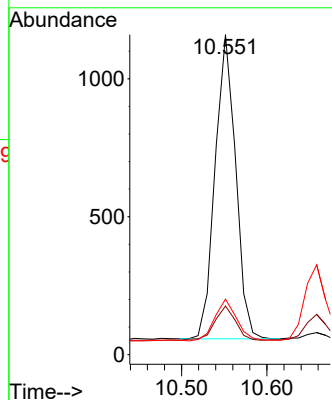
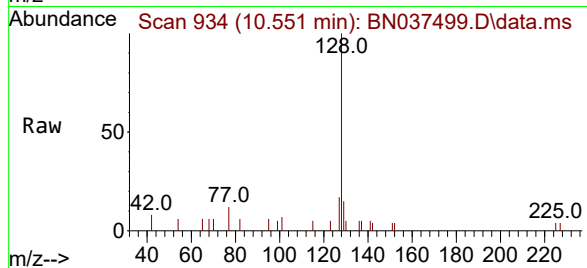
Tgt Ion:128 Resp: 1848

Ion Ratio Lower Upper

128 100

129 15.2 9.7 14.5#

127 17.3 11.5 17.3#



#10

Hexachlorobutadiene

Concen: 0.097 ng

RT: 10.850 min Scan# 962

Delta R.T. -0.011 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

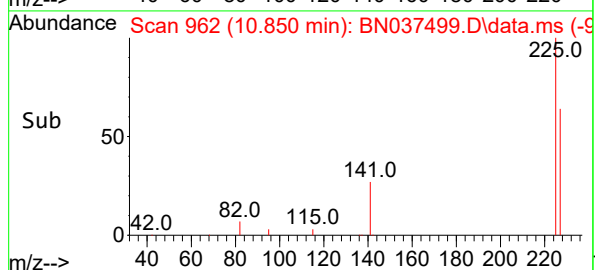
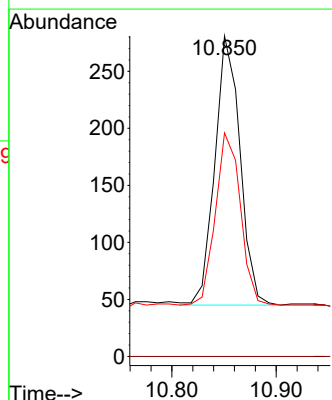
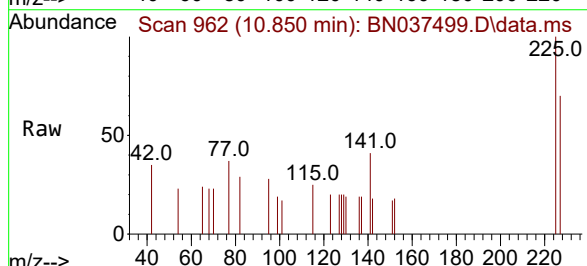
Tgt Ion:225 Resp: 396

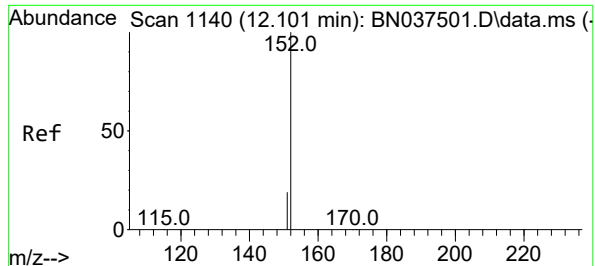
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.4 51.0 76.4

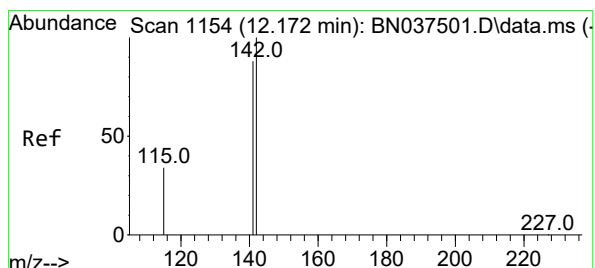
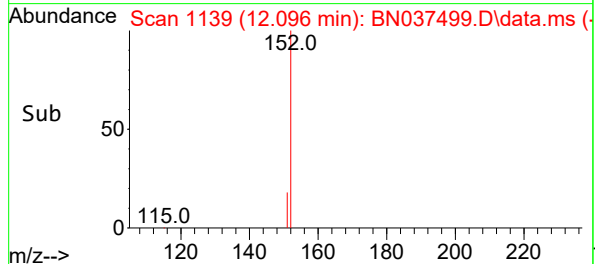
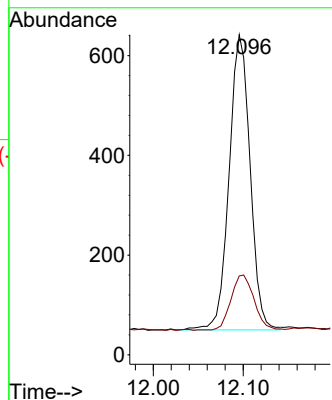
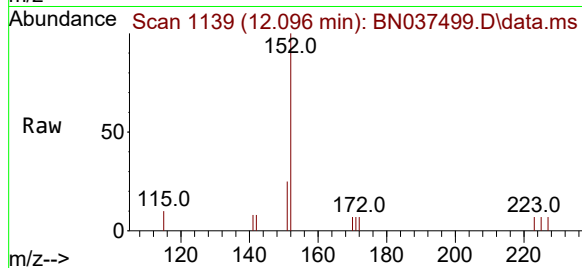




#11  
2-Methylnaphthalene-d10  
Concen: 0.097 ng  
RT: 12.096 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

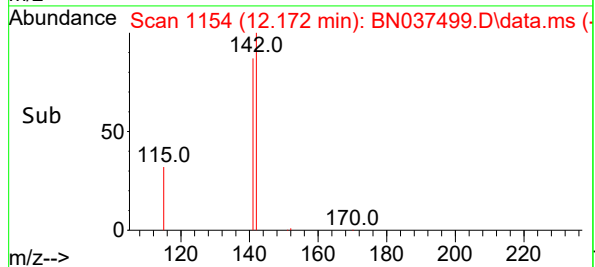
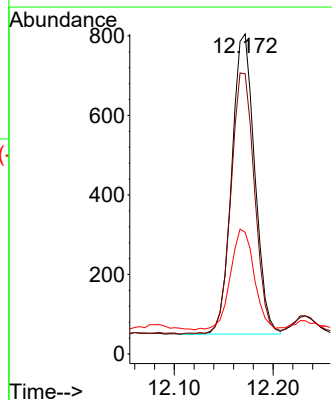
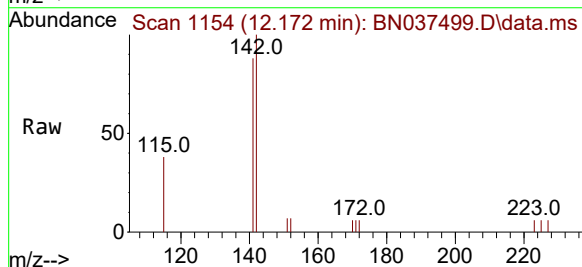
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

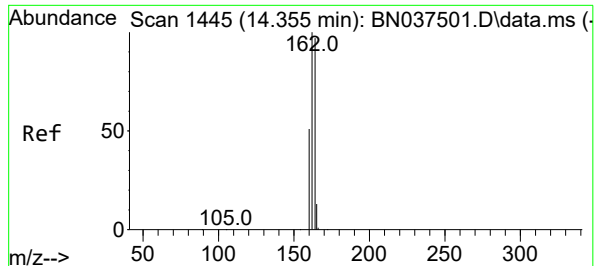
Tgt Ion:152 Resp: 962  
Ion Ratio Lower Upper  
152 100  
151 20.3 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.100 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:142 Resp: 1218  
Ion Ratio Lower Upper  
142 100  
141 87.6 71.0 106.4  
115 38.0 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1

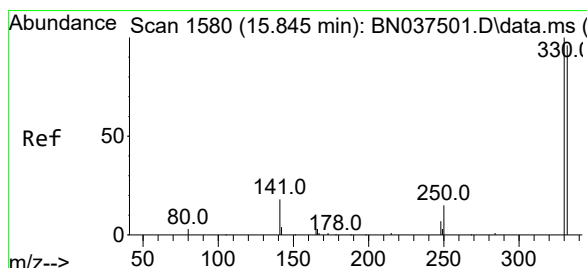
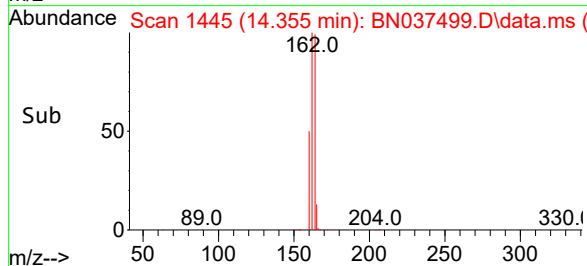
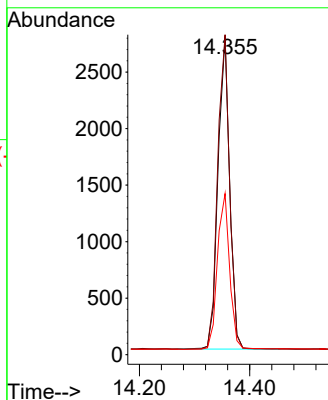
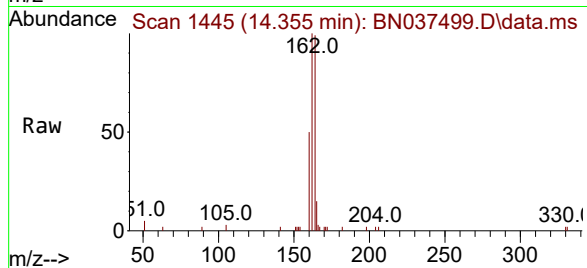
Tgt Ion:164 Resp: 4050

Ion Ratio Lower Upper

164 100

162 100.5 82.0 123.0

160 50.6 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.100 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

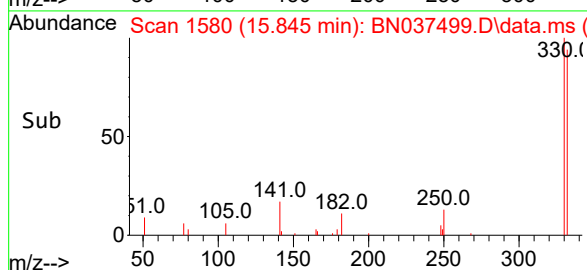
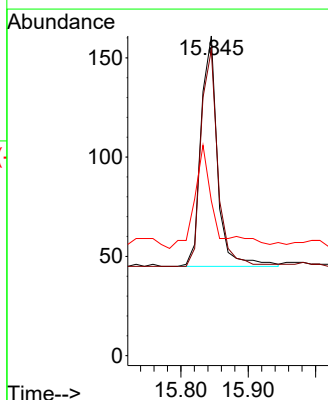
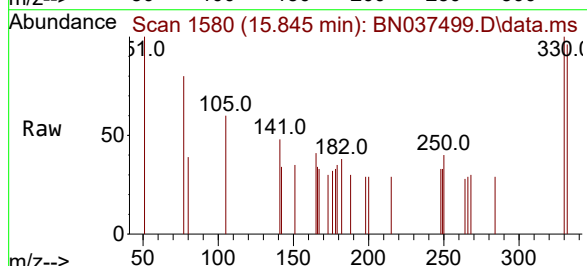
Tgt Ion:330 Resp: 199

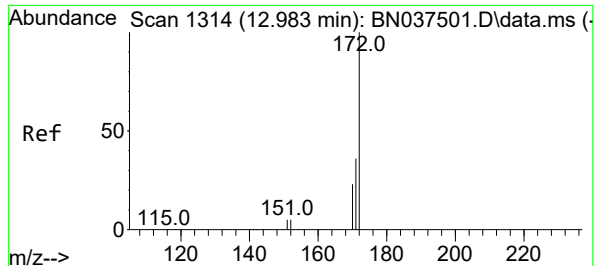
Ion Ratio Lower Upper

330 100

332 96.0 76.1 114.1

141 44.7 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 0.087 ng

RT: 12.978 min Scan# 11

Delta R.T. -0.005 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

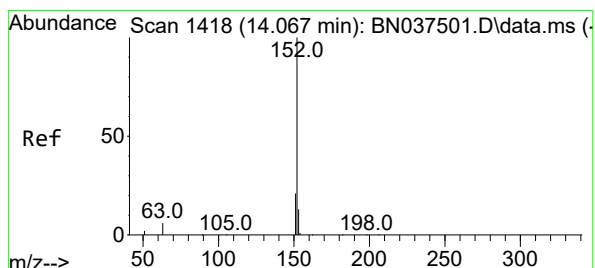
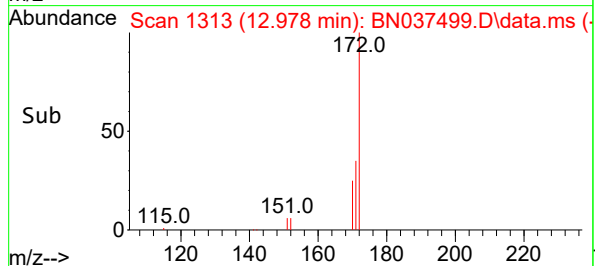
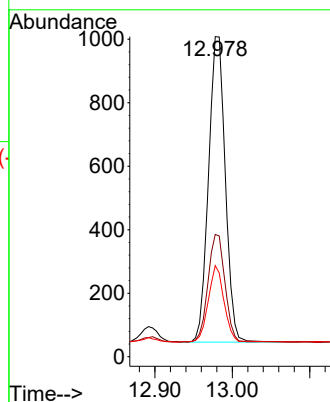
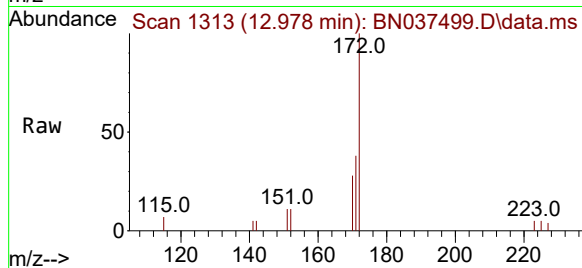
Tgt Ion:172 Resp: 1841

Ion Ratio Lower Upper

172 100

171 38.2 29.4 44.2

170 28.5 19.4 29.0



#16

Acenaphthylene

Concen: 0.096 ng

RT: 14.067 min Scan# 1418

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

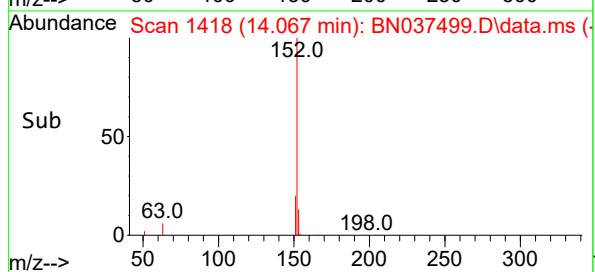
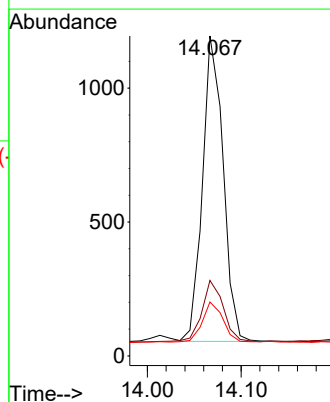
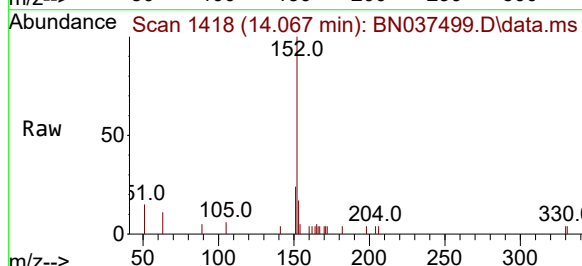
Tgt Ion:152 Resp: 1745

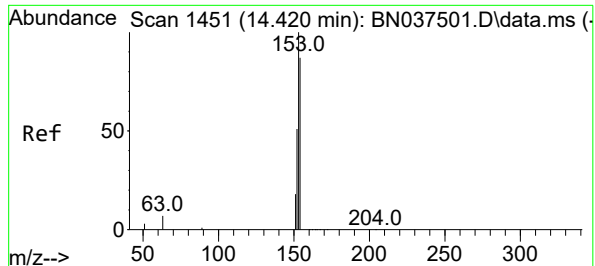
Ion Ratio Lower Upper

152 100

151 21.7 15.9 23.9

153 14.3 10.7 16.1





#17

Acenaphthene

Concen: 0.102 ng

RT: 14.420 min Scan# 1451

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1

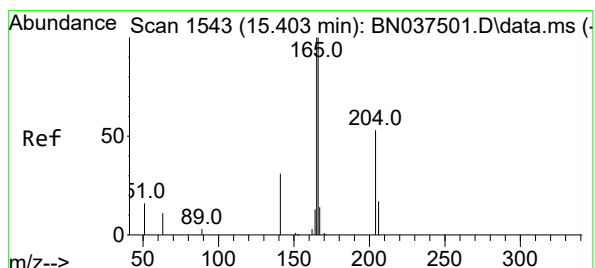
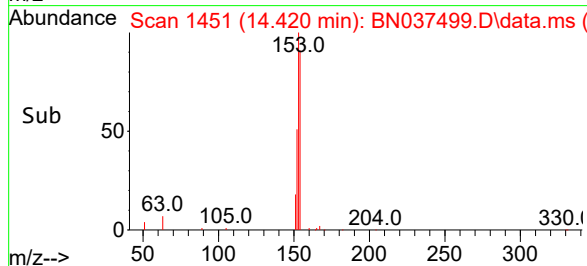
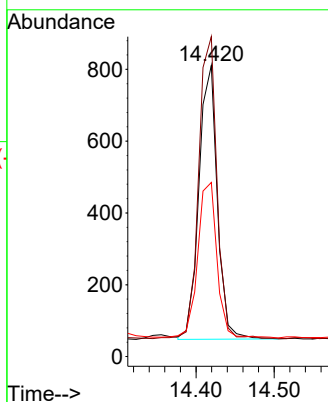
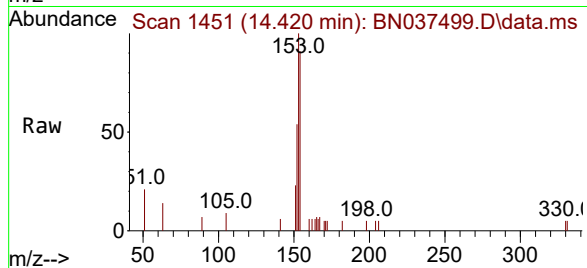
Tgt Ion:154 Resp: 1254

Ion Ratio Lower Upper

154 100

153 108.9 89.2 133.8

152 59.4 48.0 72.0



#18

Fluorene

Concen: 0.101 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

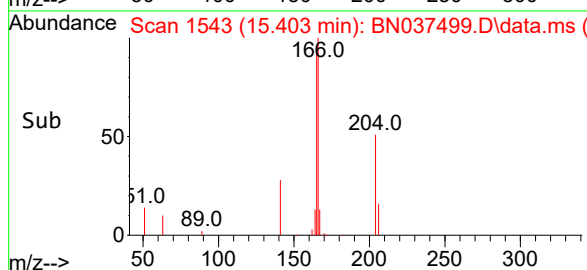
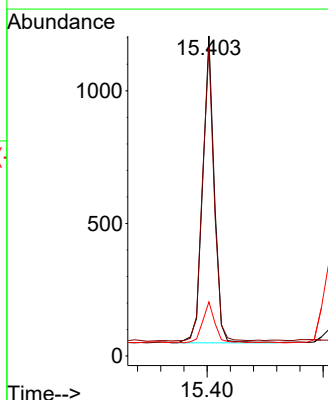
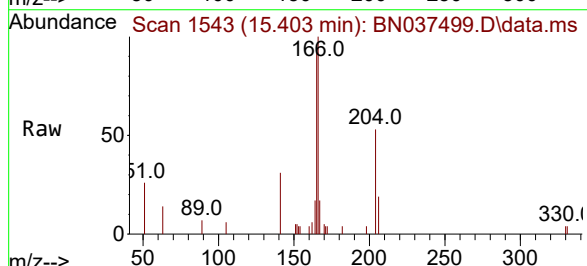
Tgt Ion:166 Resp: 1612

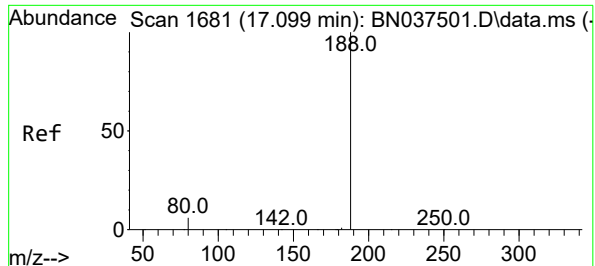
Ion Ratio Lower Upper

166 100

165 94.6 78.1 117.1

167 14.0 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

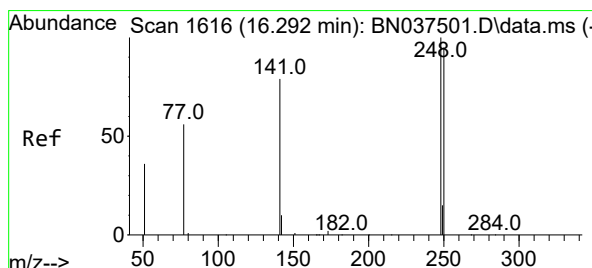
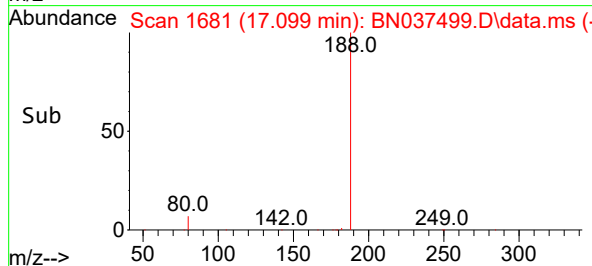
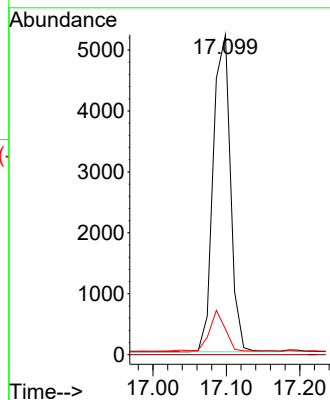
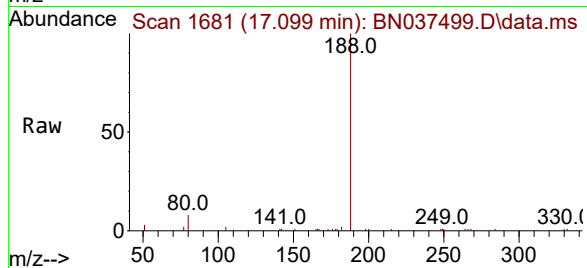
Tgt Ion:188 Resp: 8501

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.9 6.0 9.0



#21

4-Bromophenyl-phenylether

Concen: 0.097 ng

RT: 16.292 min Scan# 1616

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

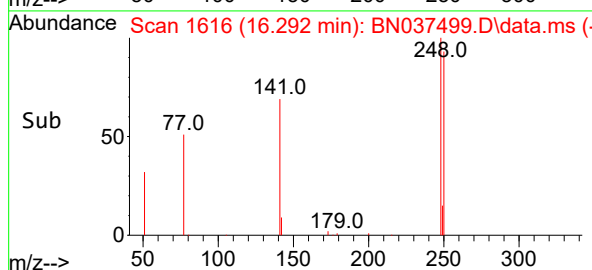
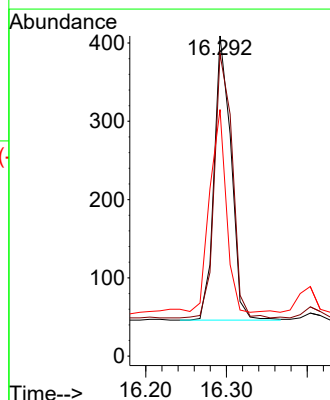
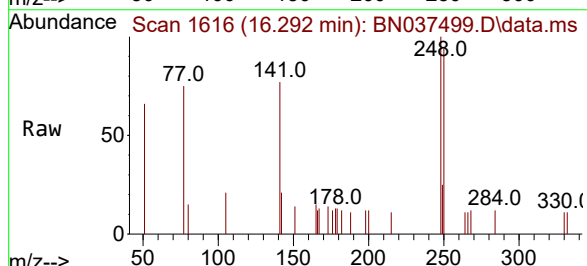
Tgt Ion:248 Resp: 527

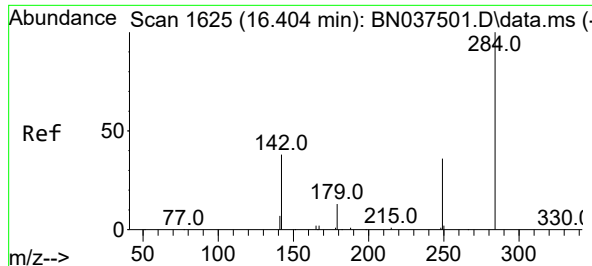
Ion Ratio Lower Upper

248 100

250 94.4 76.2 114.2

141 77.0 63.9 95.9





#22

Hexachlorobenzene

Concen: 0.095 ng

RT: 16.404 min Scan# 1625

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1

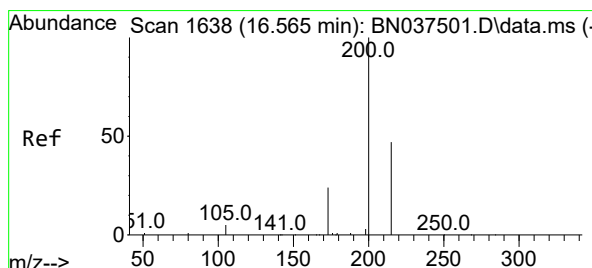
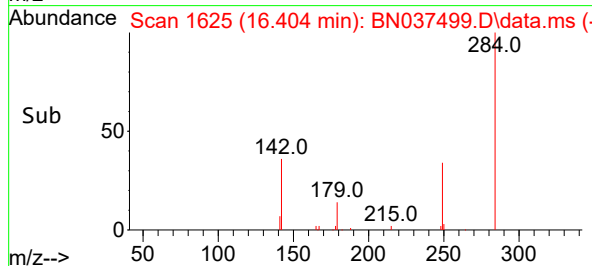
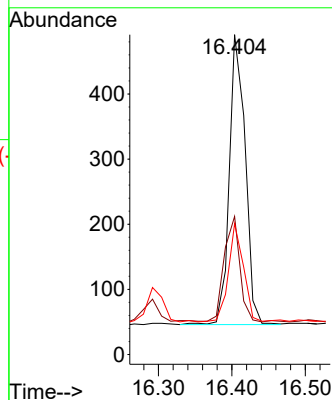
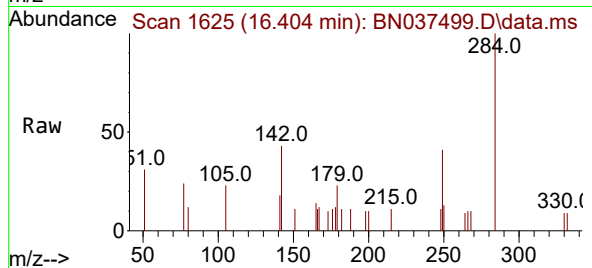
Tgt Ion:284 Resp: 670

Ion Ratio Lower Upper

284 100

142 36.1 28.9 43.3

249 32.4 25.8 38.6



#23

Atrazine

Concen: 0.097 ng

RT: 16.565 min Scan# 1638

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

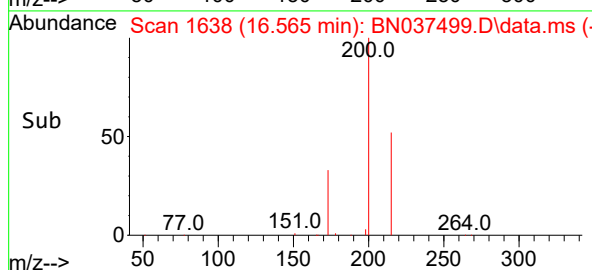
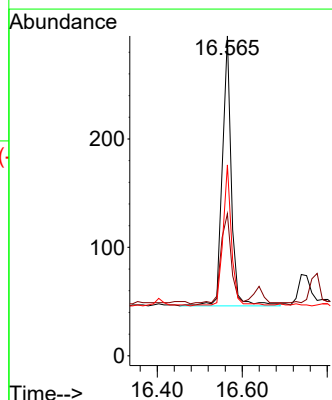
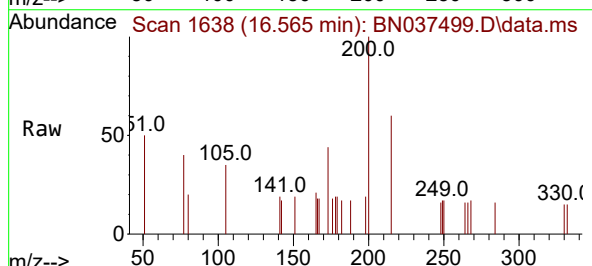
Tgt Ion:200 Resp: 368

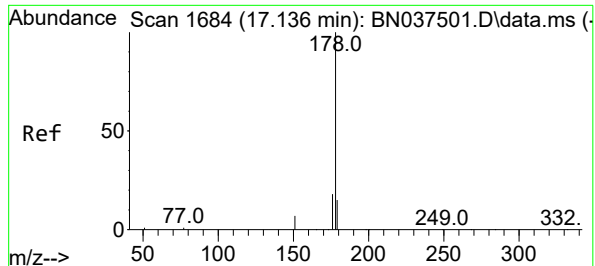
Ion Ratio Lower Upper

200 100

173 44.4 23.2 34.8#

215 59.7 40.2 60.4

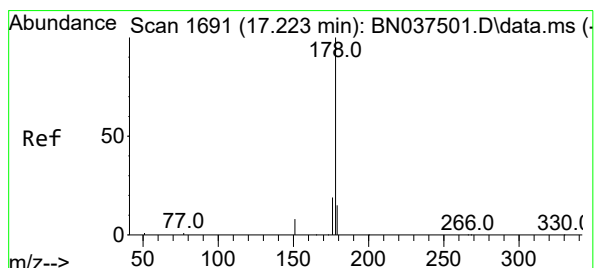
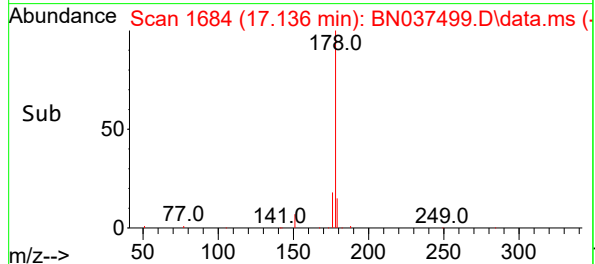
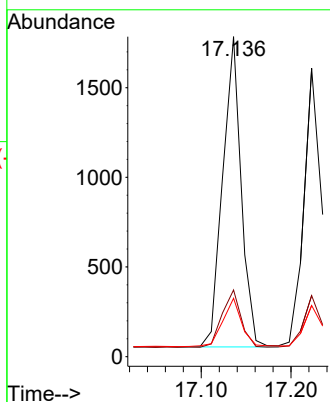
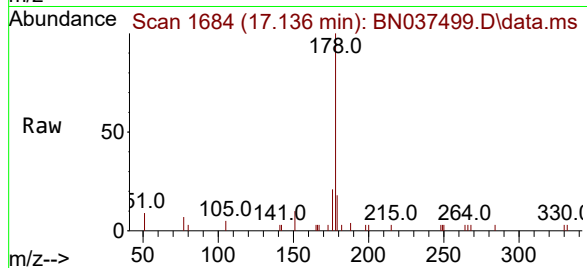




#25  
Phenanthrene  
Concen: 0.097 ng  
RT: 17.136 min Scan# 1684  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

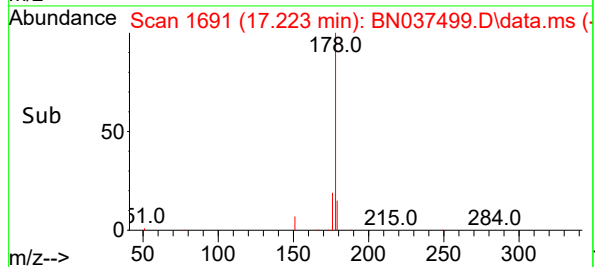
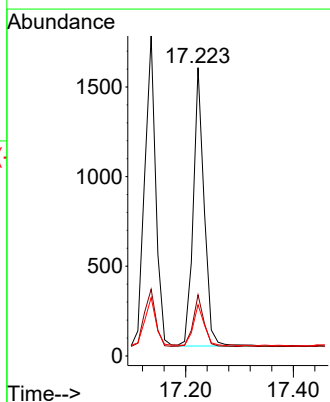
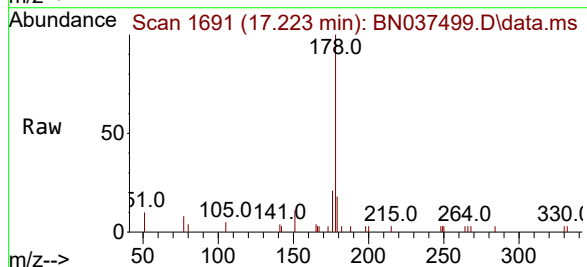
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

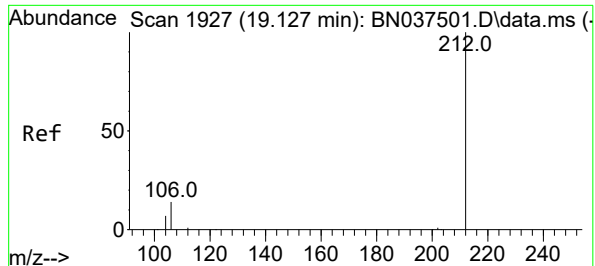
Tgt Ion:178 Resp: 2480  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.0 22.6  
179 15.8 12.2 18.2



#26  
Anthracene  
Concen: 0.094 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:178 Resp: 2179  
Ion Ratio Lower Upper  
178 100  
176 18.3 14.7 22.1  
179 15.3 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.097 ng

RT: 19.127 min Scan# 1927

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

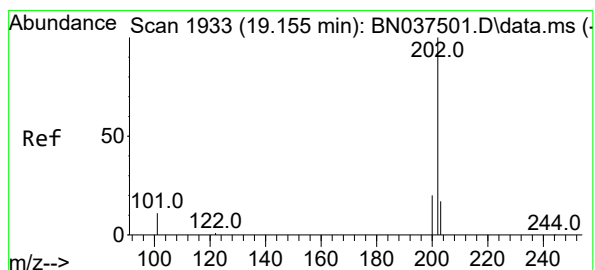
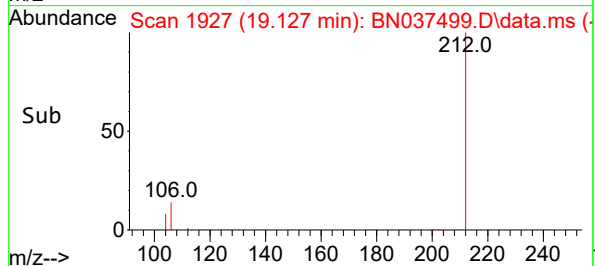
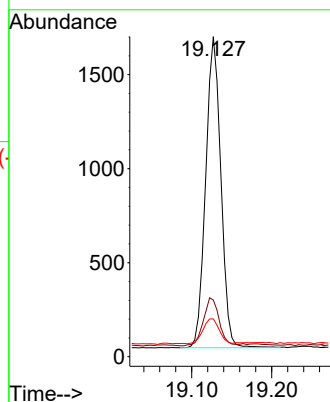
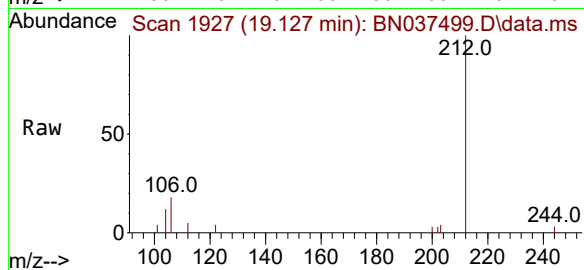
Tgt Ion:212 Resp: 2175

Ion Ratio Lower Upper

212 100

106 15.9 12.2 18.4

104 8.7 6.7 10.1



#28

Fluoranthene

Concen: 0.098 ng

RT: 19.155 min Scan# 1933

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

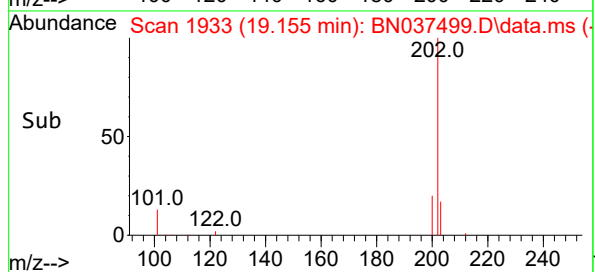
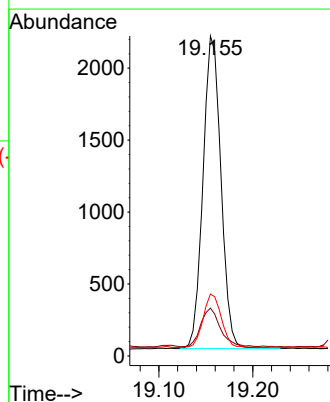
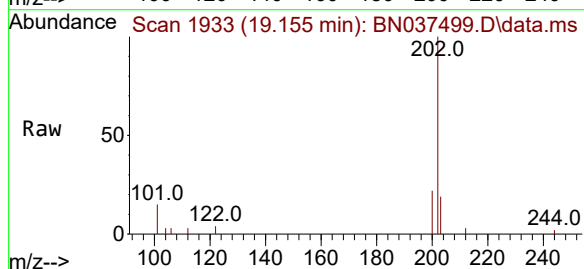
Tgt Ion:202 Resp: 2886

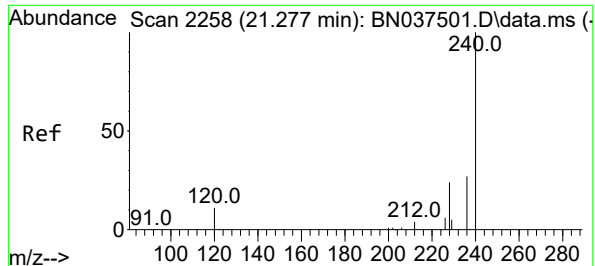
Ion Ratio Lower Upper

202 100

101 13.5 9.8 14.6

203 17.3 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1

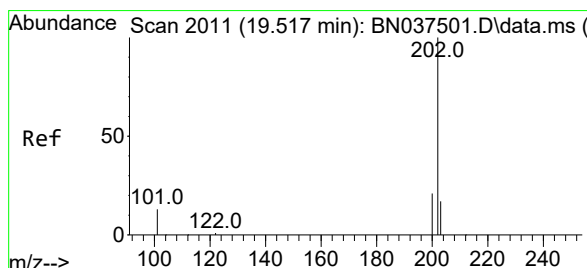
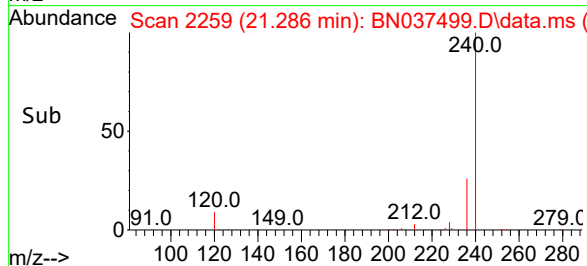
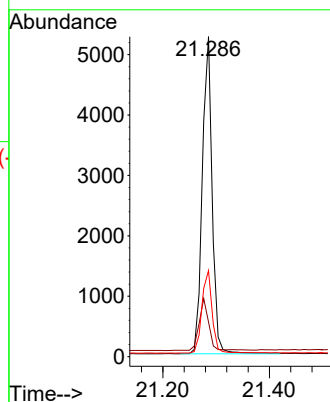
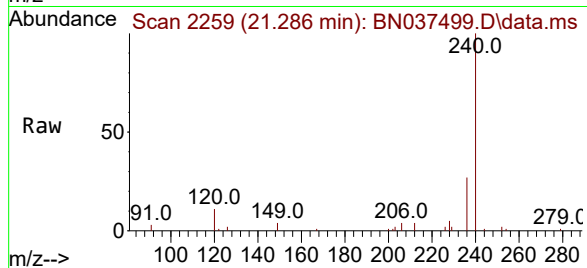
Tgt Ion:240 Resp: 6753

Ion Ratio Lower Upper

240 100

120 10.8 10.7 16.1

236 26.9 22.6 33.8



#30

Pyrene

Concen: 0.109 ng

RT: 19.517 min Scan# 2011

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

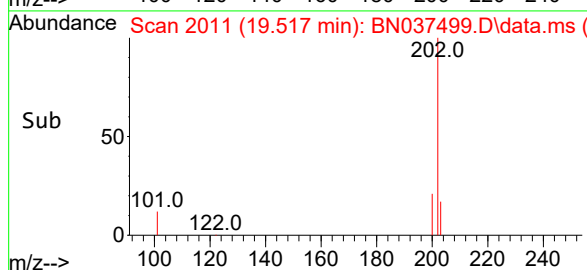
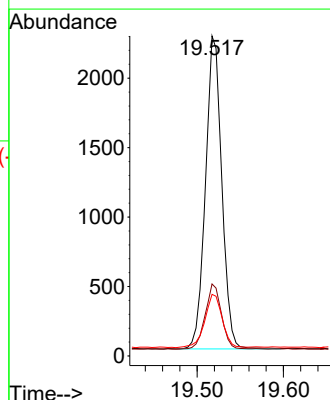
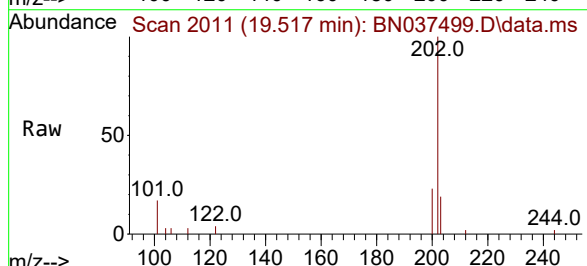
Tgt Ion:202 Resp: 2961

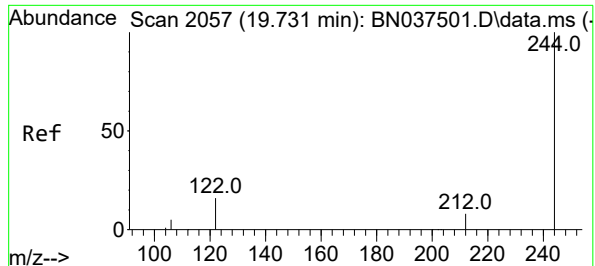
Ion Ratio Lower Upper

202 100

200 20.6 16.5 24.7

203 18.2 14.3 21.5

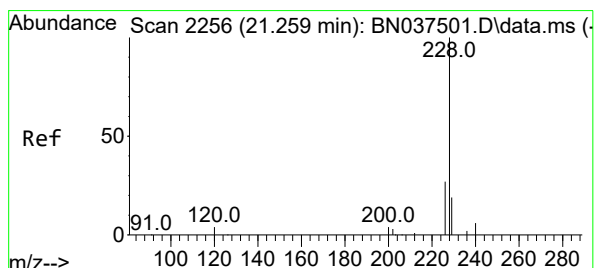
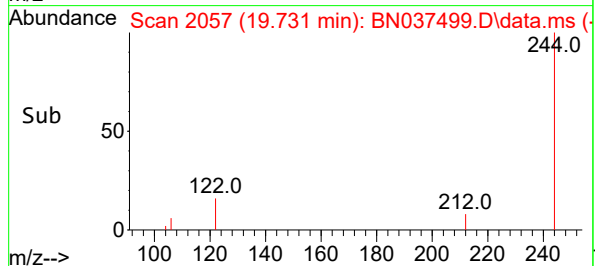
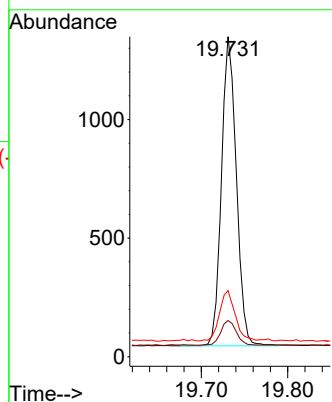
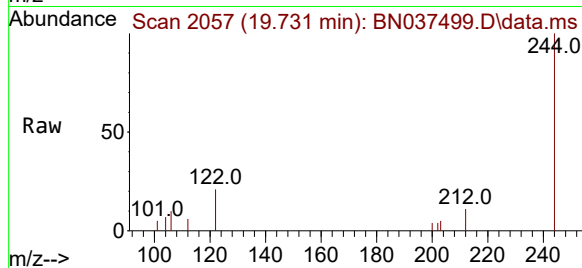




#31  
Terphenyl-d14  
Concen: 0.108 ng  
RT: 19.731 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

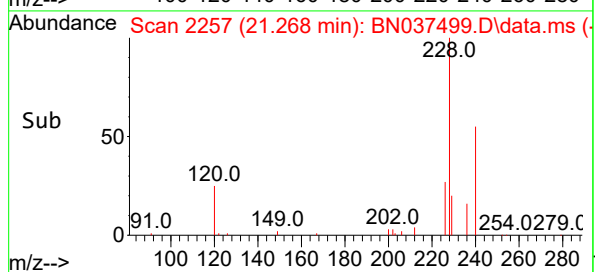
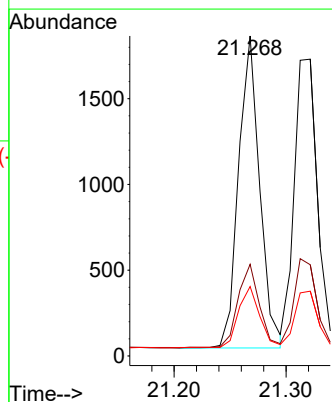
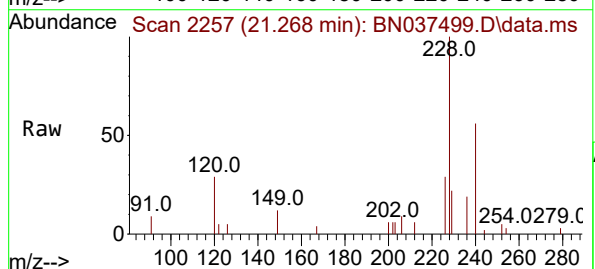
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

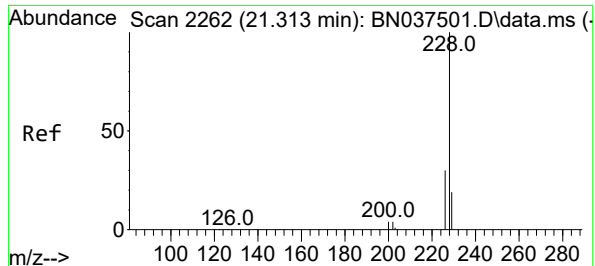
Tgt Ion:244 Resp: 1563  
Ion Ratio Lower Upper  
244 100  
212 11.3 7.4 11.2#  
122 20.7 13.6 20.4#



#32  
Benzo(a)anthracene  
Concen: 0.101 ng  
RT: 21.268 min Scan# 2257  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:228 Resp: 2388  
Ion Ratio Lower Upper  
228 100  
226 28.7 21.9 32.9  
229 21.7 15.8 23.8





#33

Chrysene

Concen: 0.100 ng

RT: 21.322 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.1

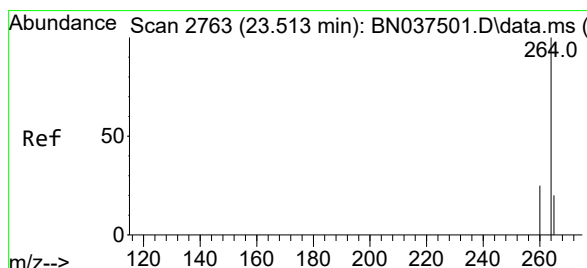
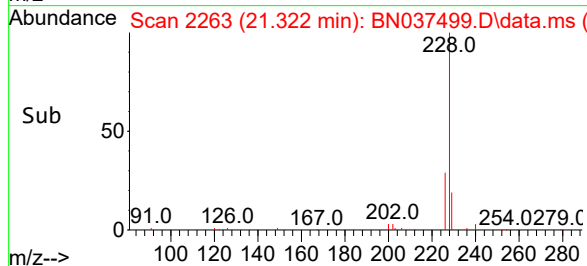
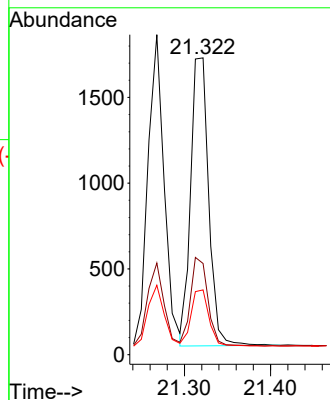
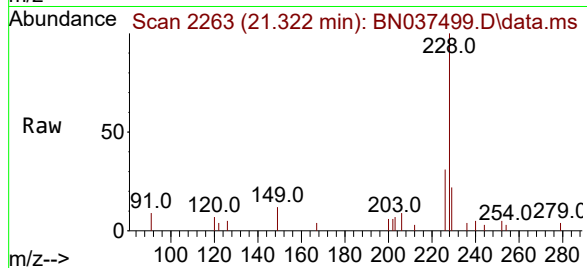
Tgt Ion:228 Resp: 2451

Ion Ratio Lower Upper

228 100

226 30.7 24.2 36.4

229 21.8 16.1 24.1



#35

Perylene-d12

Concen: 0.400 ng

RT: 23.522 min Scan# 2766

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

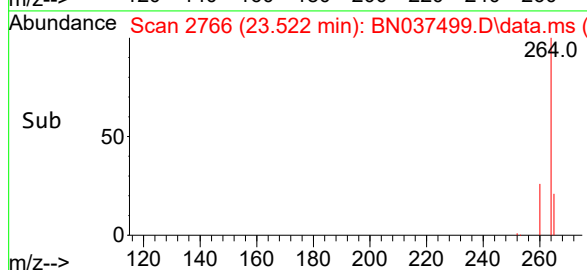
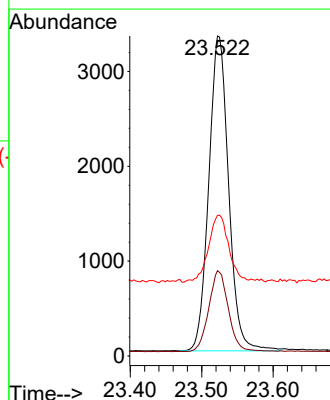
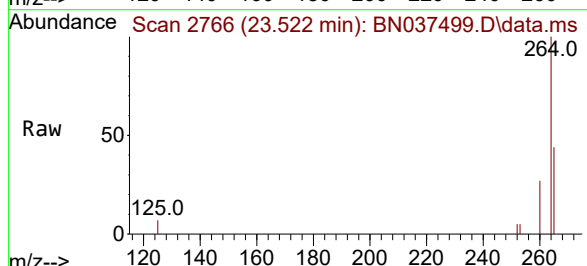
Tgt Ion:264 Resp: 6399

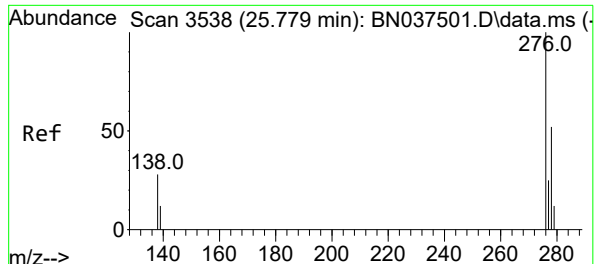
Ion Ratio Lower Upper

264 100

260 26.6 21.2 31.8

265 43.9 40.4 60.6





#36

Indeno(1,2,3-cd)pyrene

Concen: 0.090 ng

RT: 25.791 min Scan# 3

Delta R.T. 0.012 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

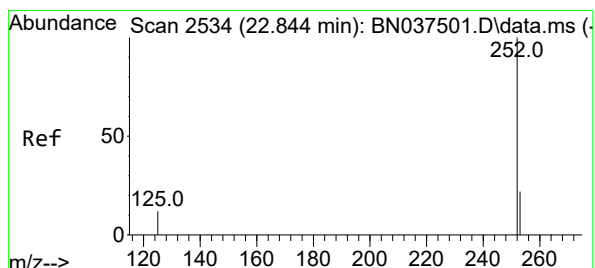
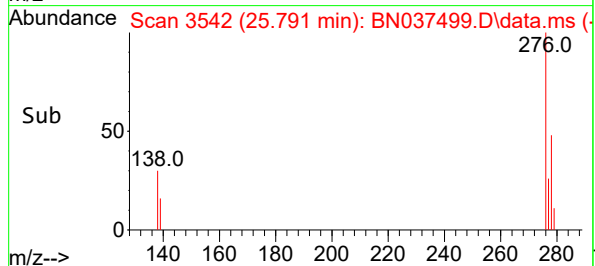
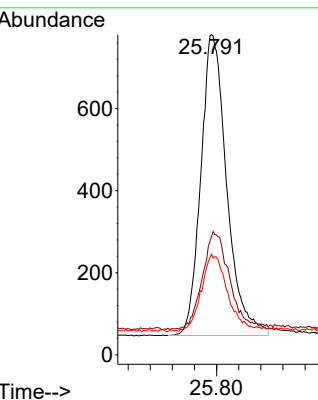
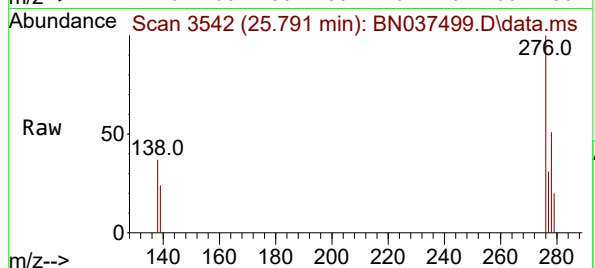
Tgt Ion:276 Resp: 2389

Ion Ratio Lower Upper

276 100

138 33.7 24.0 36.0

277 25.3 20.5 30.7



#37

Benzo(b)fluoranthene

Concen: 0.096 ng

RT: 22.850 min Scan# 2536

Delta R.T. 0.006 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

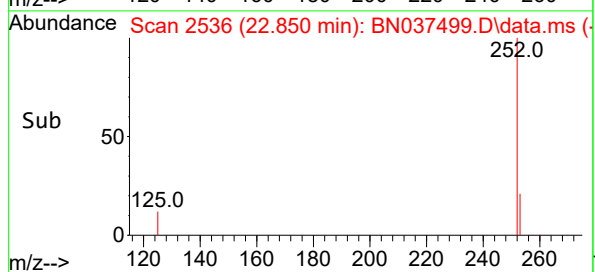
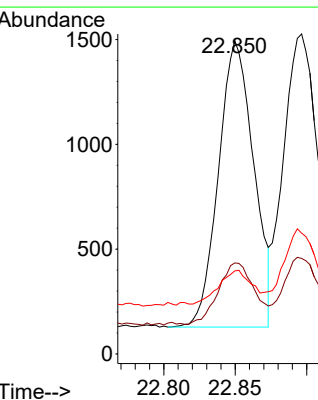
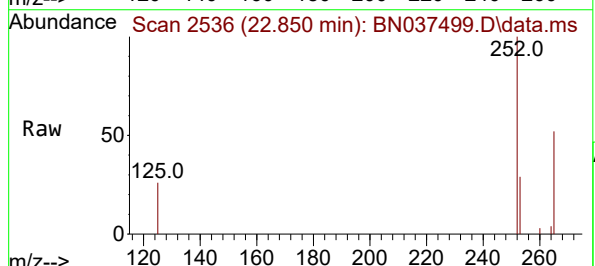
Tgt Ion:252 Resp: 2342

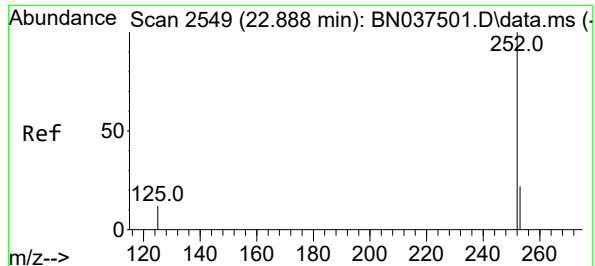
Ion Ratio Lower Upper

252 100

253 29.0 19.5 29.3

125 26.5 13.0 19.6#





#38

Benzo(k)fluoranthene

Concen: 0.097 ng

RT: 22.896 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

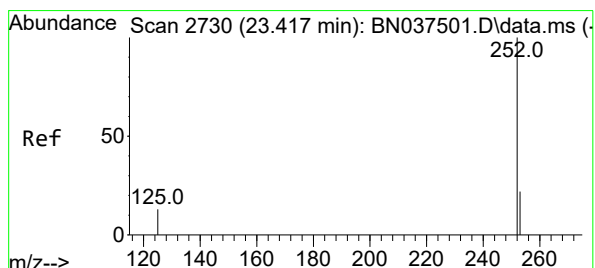
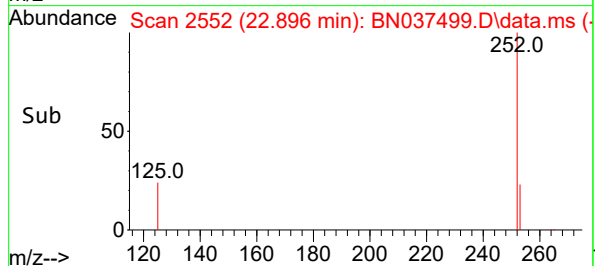
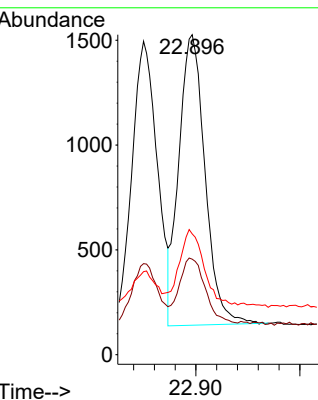
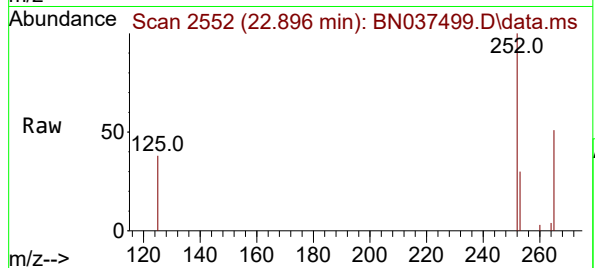
Tgt Ion:252 Resp: 2426

Ion Ratio Lower Upper

252 100

253 29.9 19.5 29.3#

125 37.7 13.1 19.7#



#39

Benzo(a)pyrene

Concen: 0.094 ng

RT: 23.426 min Scan# 2733

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

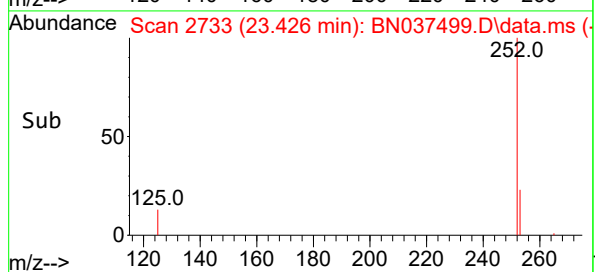
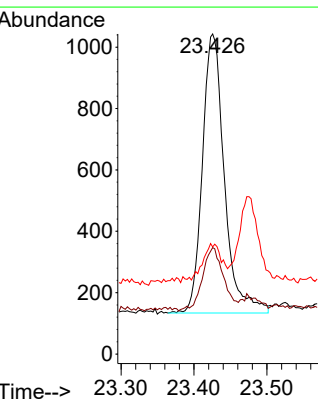
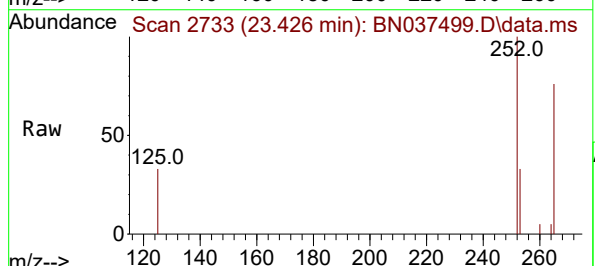
Tgt Ion:252 Resp: 1902

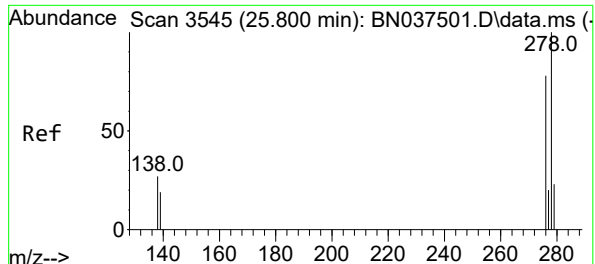
Ion Ratio Lower Upper

252 100

253 33.3 19.9 29.9#

125 33.5 15.2 22.8#





#40

Dibenzo(a,h)anthracene

Concen: 0.089 ng

RT: 25.811 min Scan# 3

Delta R.T. 0.012 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

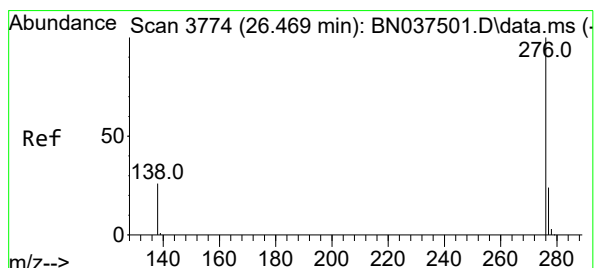
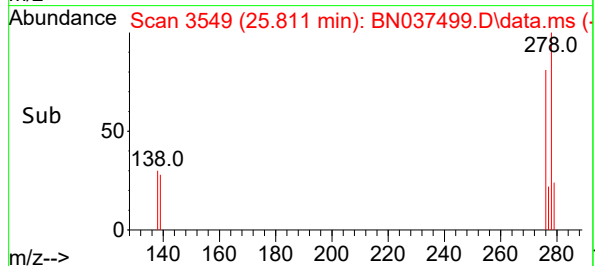
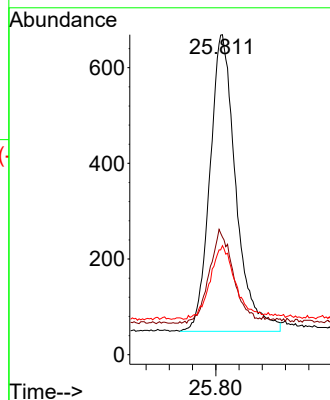
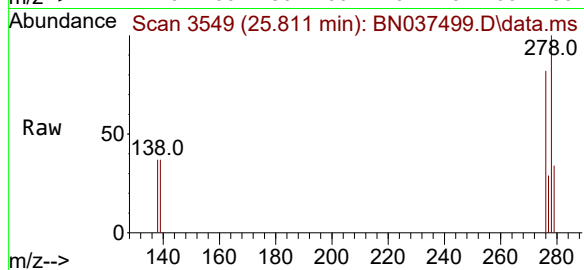
Tgt Ion:278 Resp: 1921

Ion Ratio Lower Upper

278 100

139 36.8 17.5 26.3#

279 34.1 21.3 31.9#



#41

Benzo(g,h,i)perylene

Concen: 0.089 ng

RT: 26.478 min Scan# 3777

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

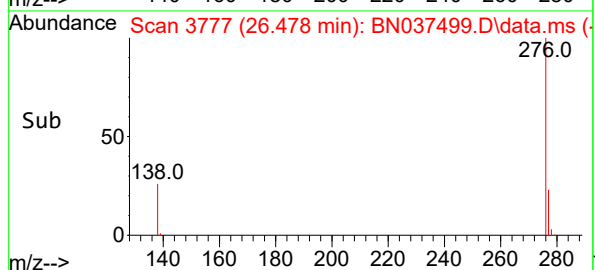
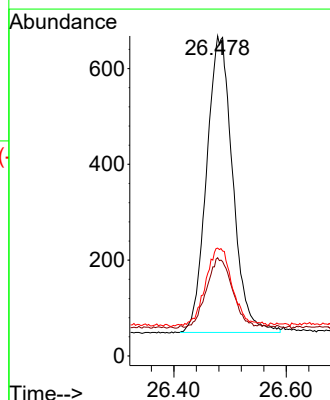
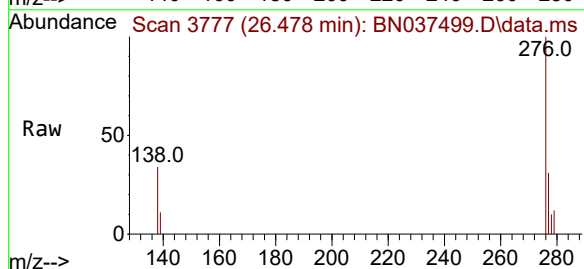
Tgt Ion:276 Resp: 1995

Ion Ratio Lower Upper

276 100

277 30.7 20.9 31.3

138 33.7 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037500.D  
 Acq On : 15 Jul 2025 13:12  
 Operator : RC/JU  
 Sample : SSTDICC0.2  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.2

Quant Time: Jul 15 17:26:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

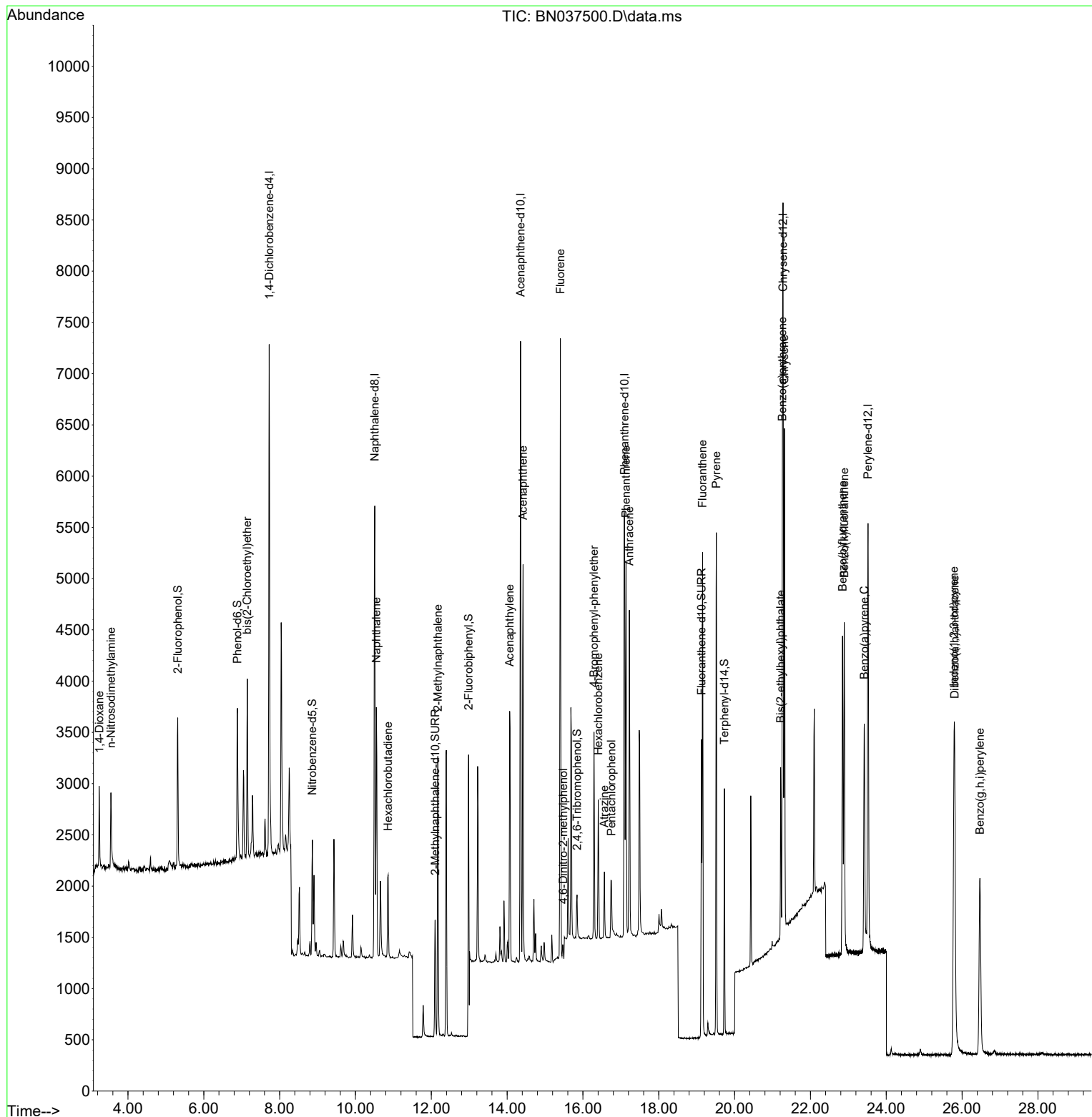
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2351     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.509 | 136  | 6017     | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.355 | 164  | 3325     | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 17.099 | 188  | 6414     | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.277 | 240  | 5490     | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.519 | 264  | 5600     | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.312  | 112  | 1188     | 0.204 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.887  | 99   | 1455     | 0.200 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.864  | 82   | 867      | 0.193 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 1606     | 0.186 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 288      | 0.176 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 2983     | 0.173 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 19.127 | 212  | 3202     | 0.188 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.731 | 244  | 2238     | 0.190 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 2) 1,4-Dioxane                | 3.247  | 88   | 481      | 0.213 | ng    | Qvalue 99 |
| 3) n-Nitrosodimethylamine     | 3.550  | 42   | 548      | 0.193 | ng    | # 94      |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 1237     | 0.204 | ng    | 99        |
| 9) Naphthalene                | 10.551 | 128  | 3170     | 0.198 | ng    | 97        |
| 10) Hexachlorobutadiene       | 10.861 | 225  | 712      | 0.201 | ng    | # 99      |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 1971     | 0.187 | ng    | 99        |
| 16) Acenaphthylene            | 14.067 | 152  | 2840     | 0.191 | ng    | 98        |
| 17) Acenaphthene              | 14.420 | 154  | 1928     | 0.190 | ng    | 99        |
| 18) Fluorene                  | 15.403 | 166  | 2474     | 0.190 | ng    | 100       |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198  | 140      | 0.255 | ng    | # 78      |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 793      | 0.193 | ng    | 97        |
| 22) Hexachlorobenzene         | 16.404 | 284  | 1057     | 0.199 | ng    | 100       |
| 23) Atrazine                  | 16.565 | 200  | 515      | 0.180 | ng    | # 94      |
| 24) Pentachlorophenol         | 16.751 | 266  | 419      | 0.176 | ng    | 99        |
| 25) Phenanthrene              | 17.136 | 178  | 3730     | 0.194 | ng    | 99        |
| 26) Anthracene                | 17.223 | 178  | 3288     | 0.188 | ng    | 100       |
| 28) Fluoranthene              | 19.155 | 202  | 4200     | 0.190 | ng    | 100       |
| 30) Pyrene                    | 19.517 | 202  | 4280     | 0.194 | ng    | 100       |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 3724     | 0.194 | ng    | 98        |
| 33) Chrysene                  | 21.313 | 228  | 4010     | 0.200 | ng    | 99        |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 1656     | 0.191 | ng    | 97        |
| 36) Indeno(1,2,3-cd)pyrene    | 25.788 | 276  | 4278     | 0.183 | ng    | 98        |
| 37) Benzo(b)fluoranthene      | 22.847 | 252  | 3857     | 0.181 | ng    | # 93      |
| 38) Benzo(k)fluoranthene      | 22.891 | 252  | 3977     | 0.181 | ng    | # 93      |
| 39) Benzo(a)pyrene            | 23.420 | 252  | 3225     | 0.182 | ng    | # 91      |
| 40) Dibenzo(a,h)anthracene    | 25.803 | 278  | 3411     | 0.181 | ng    | # 94      |
| 41) Benzo(g,h,i)perylene      | 26.472 | 276  | 3591     | 0.184 | ng    | 96        |

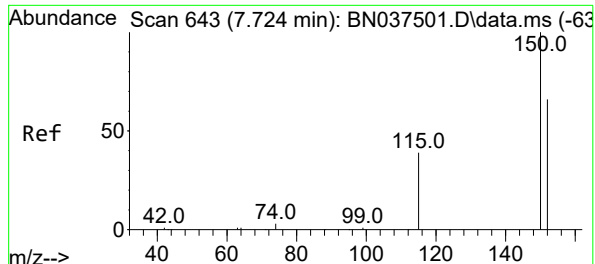
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037500.D  
Acq On : 15 Jul 2025 13:12  
Operator : RC/JU  
Sample : SSTDICC0.2  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

Quant Time: Jul 15 17:26:09 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 16:45:15 2025  
Response via : Initial Calibration

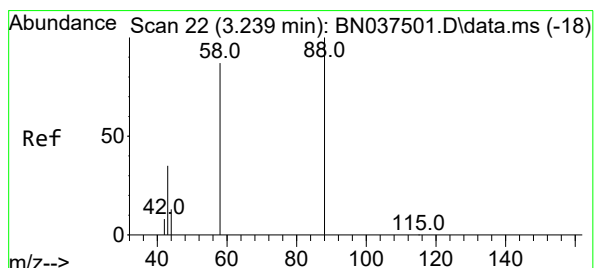
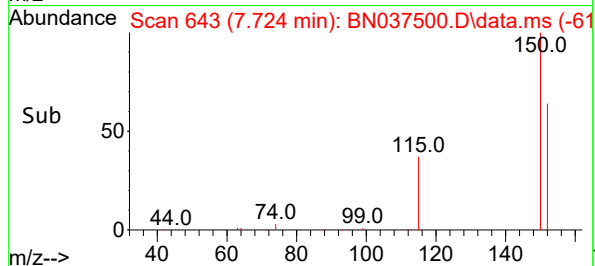
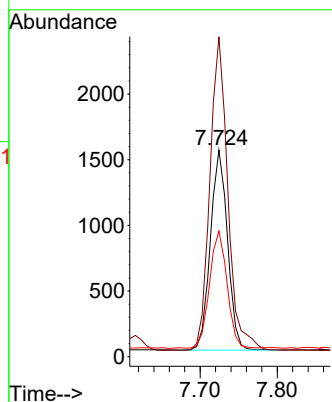
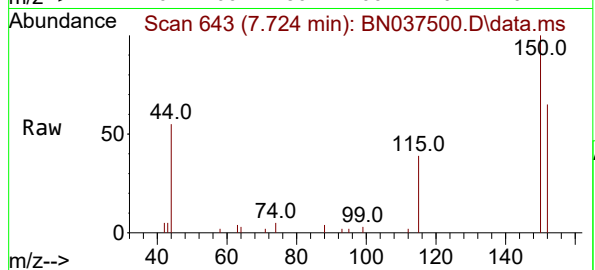




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

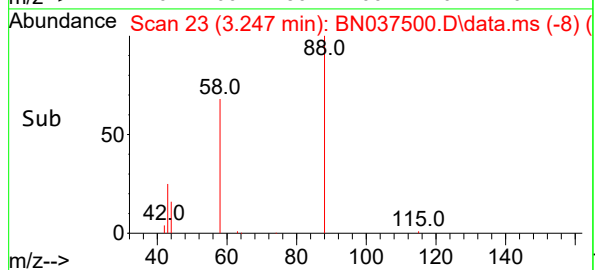
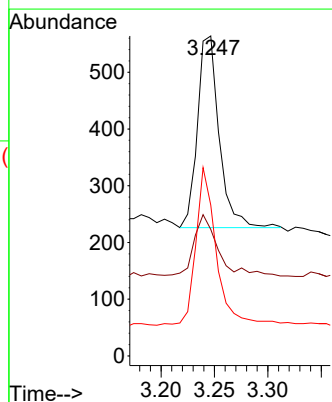
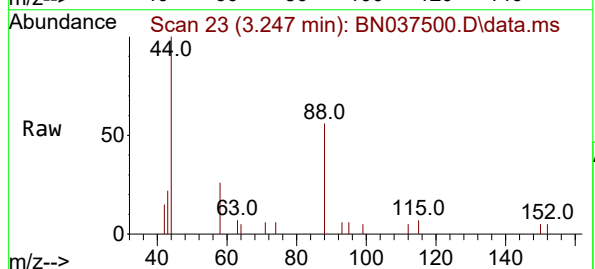
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

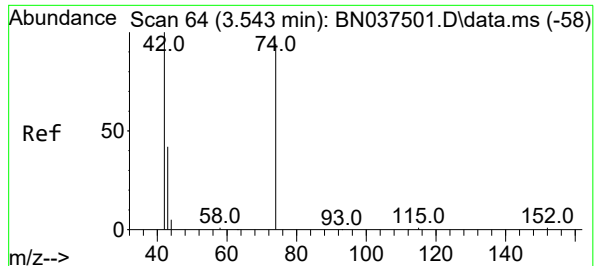
Tgt Ion:152 Resp: 2351  
Ion Ratio Lower Upper  
152 100  
150 154.9 119.8 179.8  
115 60.8 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.213 ng  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion: 88 Resp: 481  
Ion Ratio Lower Upper  
88 100  
43 34.9 27.5 41.3  
58 77.8 62.7 94.1

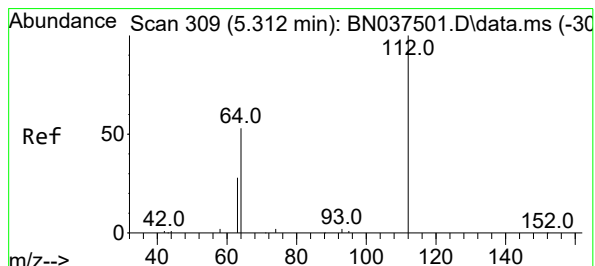
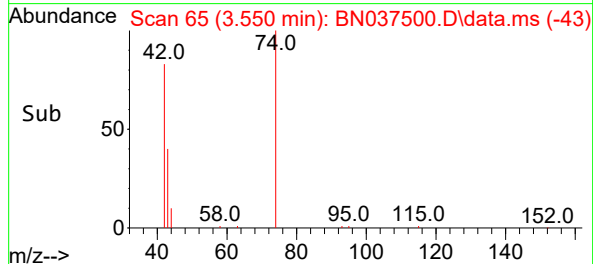
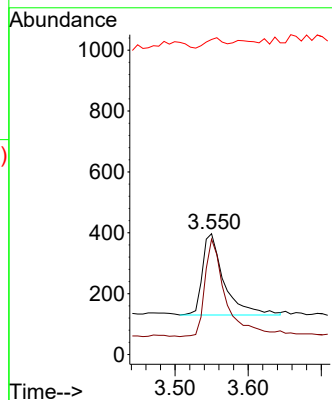
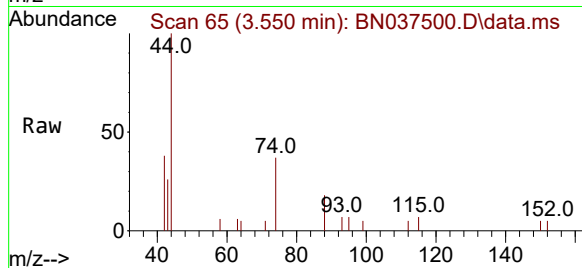




#3  
n-Nitrosodimethylamine  
Concen: 0.193 ng  
RT: 3.550 min Scan# 61  
Delta R.T. 0.007 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

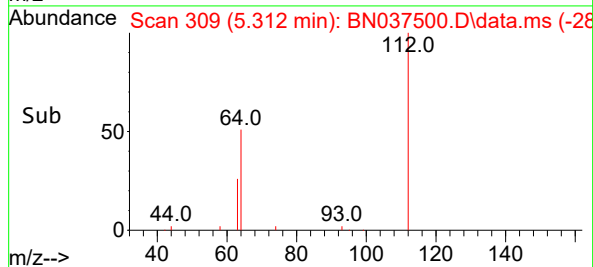
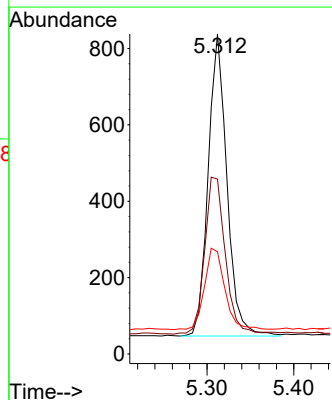
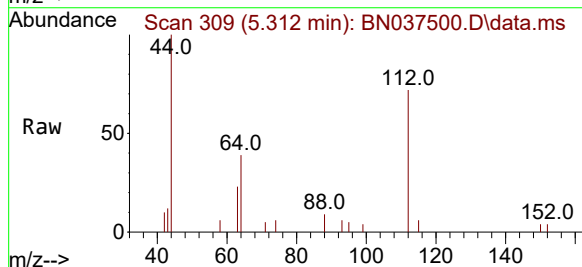
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

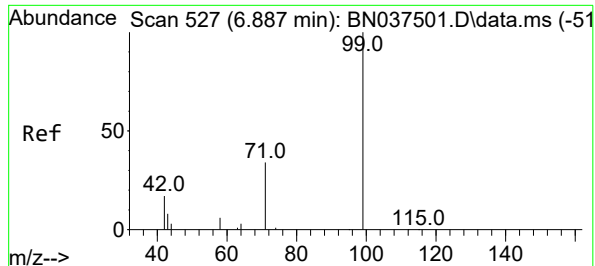
Tgt Ion: 42 Resp: 548  
Ion Ratio Lower Upper  
42 100  
74 119.2 91.8 137.6  
44 9.9 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.204 ng  
RT: 5.312 min Scan# 309  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion: 112 Resp: 1188  
Ion Ratio Lower Upper  
112 100  
64 57.9 45.1 67.7  
63 29.0 23.8 35.8

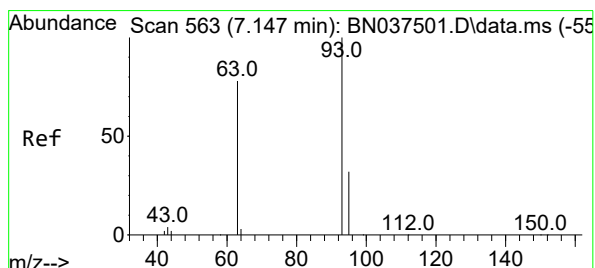
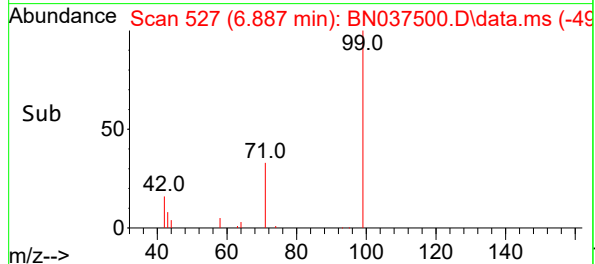
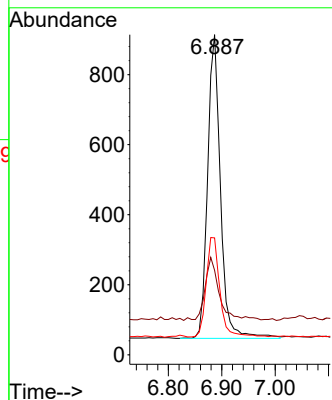
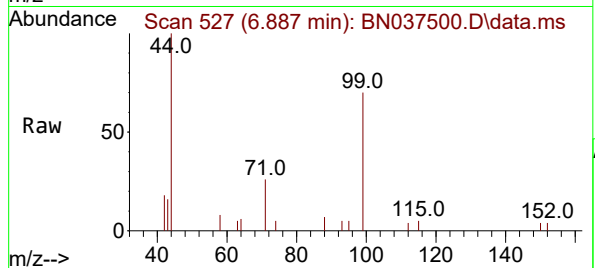




#5  
Phenol-d6  
Concen: 0.200 ng  
RT: 6.887 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

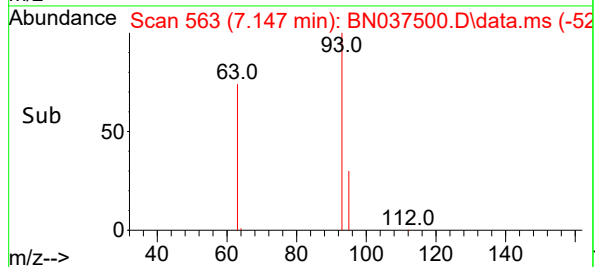
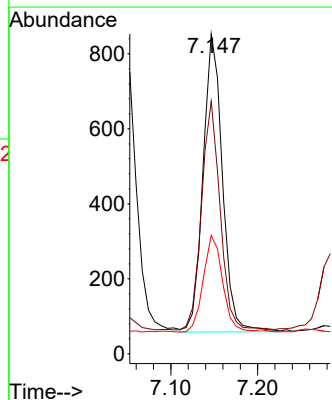
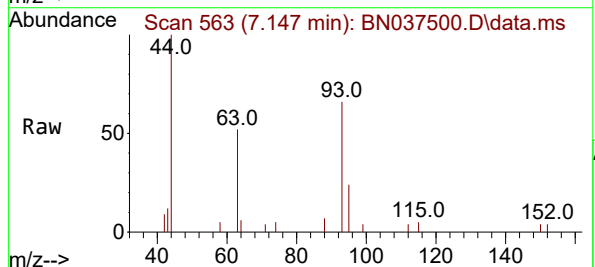
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

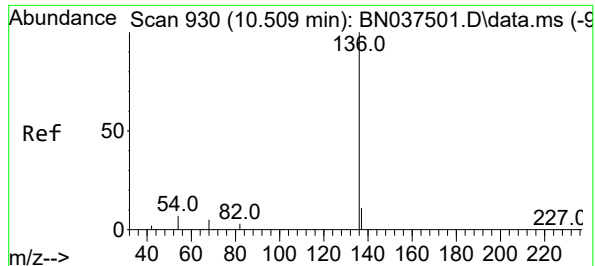
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 99    | Resp: | 1455  |
| Ion      | Ratio | Lower | Upper |
| 99       | 100   |       |       |
| 42       | 22.1  | 17.1  | 25.7  |
| 71       | 34.8  | 27.8  | 41.8  |



#6  
bis(2-Chloroethyl)ether  
Concen: 0.204 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 93    | Resp: | 1237  |
| Ion      | Ratio | Lower | Upper |
| 93       | 100   |       |       |
| 63       | 73.6  | 58.2  | 87.4  |
| 95       | 32.7  | 25.3  | 37.9  |

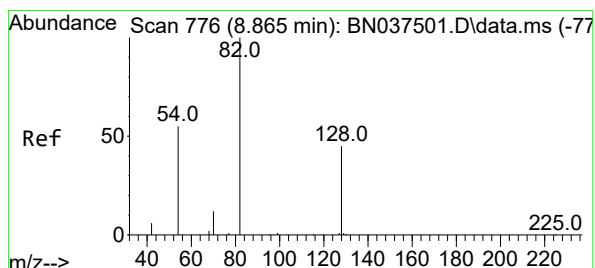
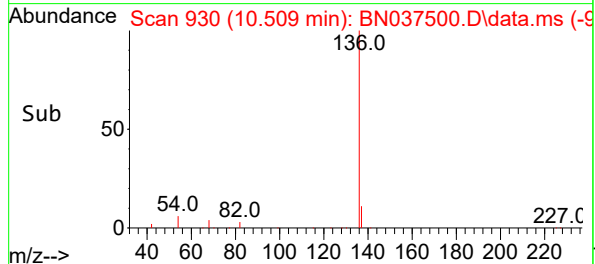
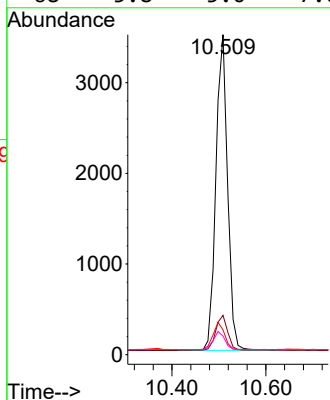
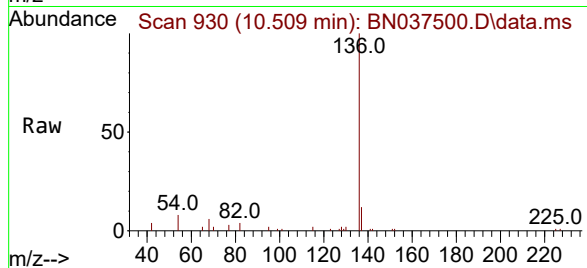




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

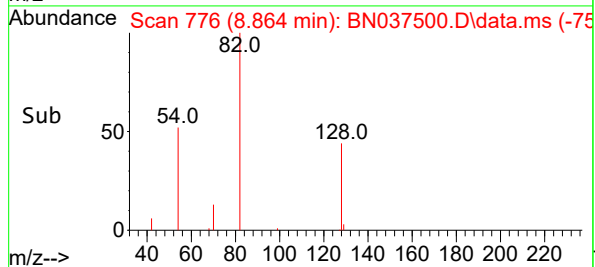
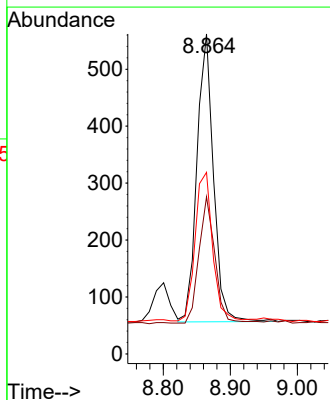
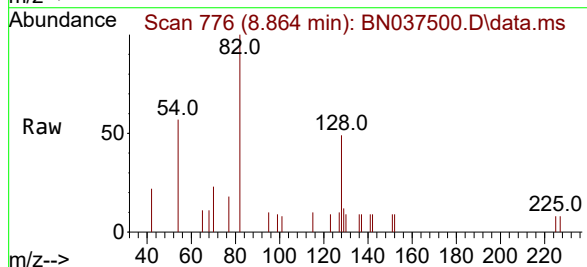
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

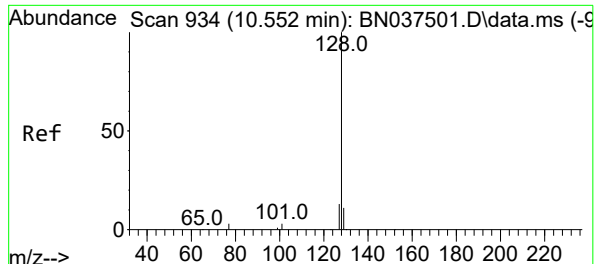
Tgt Ion:136 Resp: 6017  
Ion Ratio Lower Upper  
136 100  
137 12.3 9.8 14.8  
54 7.7 6.6 9.8  
68 5.8 5.0 7.6



#8  
Nitrobenzene-d5  
Concen: 0.193 ng  
RT: 8.864 min Scan# 776  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion: 82 Resp: 867  
Ion Ratio Lower Upper  
82 100  
128 49.1 37.5 56.3  
54 56.8 45.3 67.9





#9

Naphthalene

Concen: 0.198 ng

RT: 10.551 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

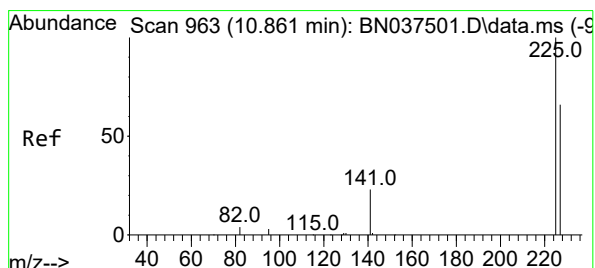
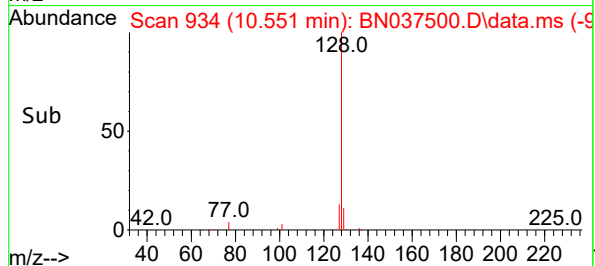
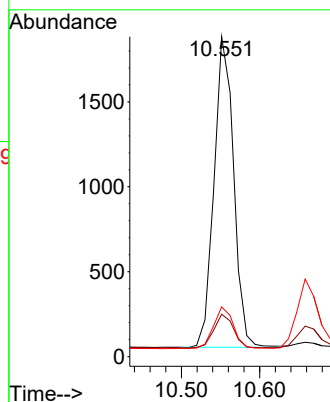
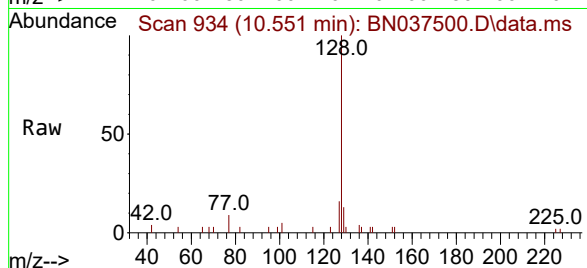
Tgt Ion:128 Resp: 3170

Ion Ratio Lower Upper

128 100

129 13.2 9.7 14.5

127 15.6 11.5 17.3



#10

Hexachlorobutadiene

Concen: 0.201 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

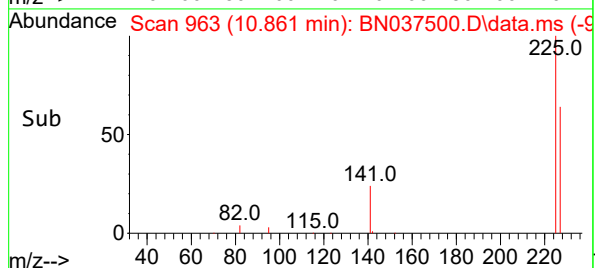
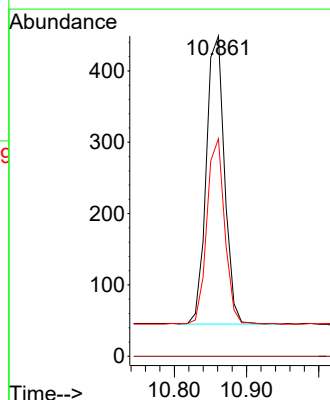
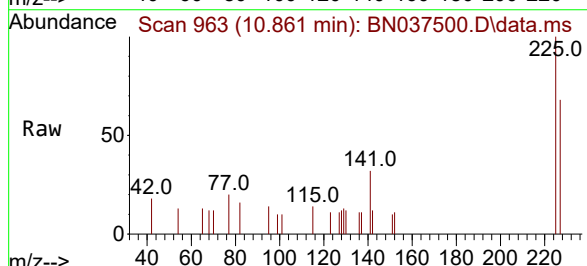
Tgt Ion:225 Resp: 712

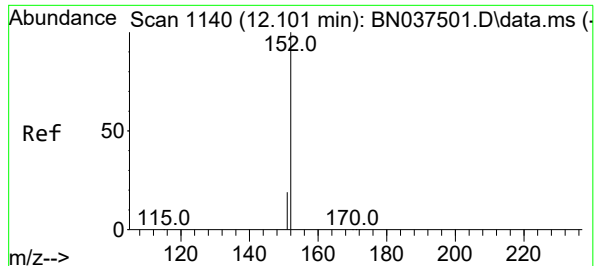
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 62.9 51.0 76.4

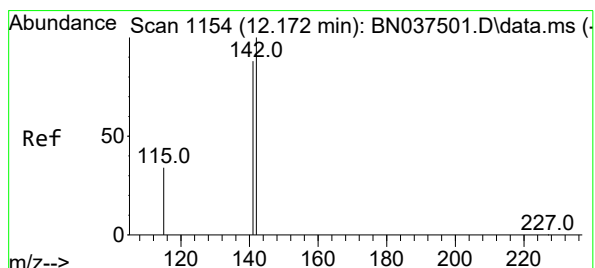
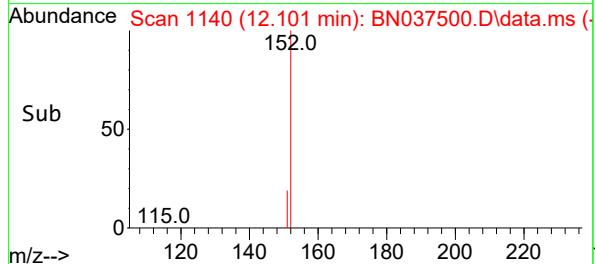
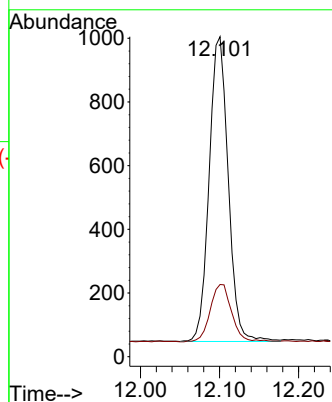
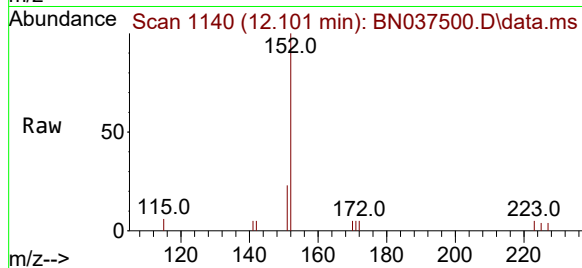




#11  
2-Methylnaphthalene-d10  
Concen: 0.186 ng  
RT: 12.101 min Scan# 1140  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

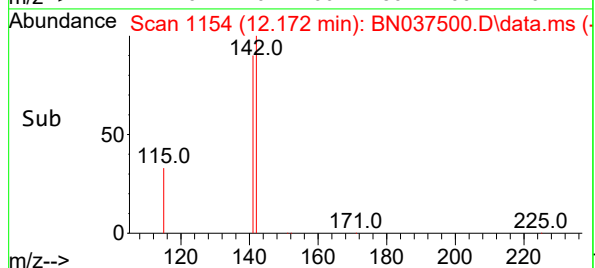
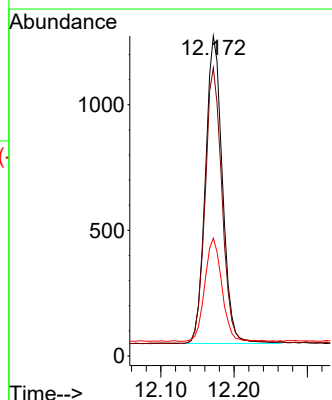
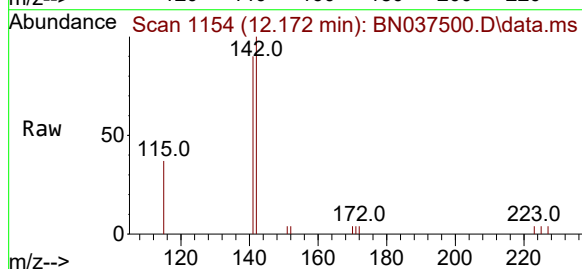
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

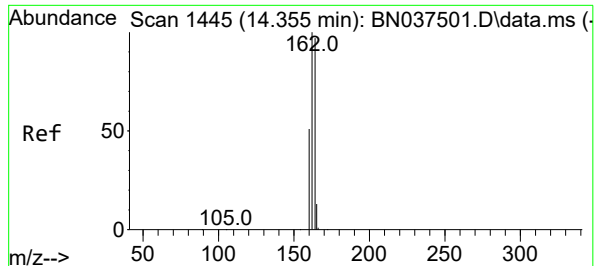
Tgt Ion:152 Resp: 1606  
Ion Ratio Lower Upper  
152 100  
151 21.2 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.187 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:142 Resp: 1971  
Ion Ratio Lower Upper  
142 100  
141 90.0 71.0 106.4  
115 36.8 29.0 43.4

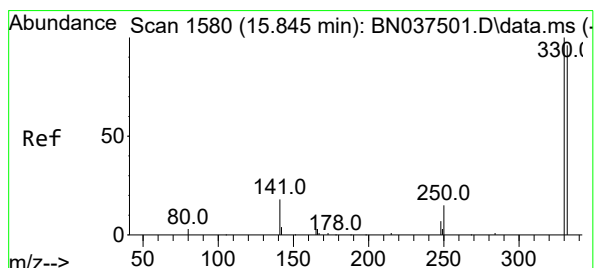
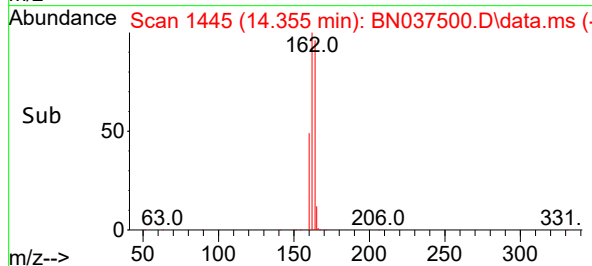
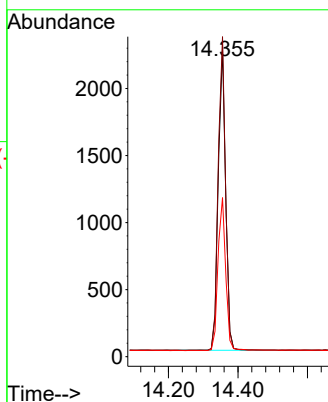
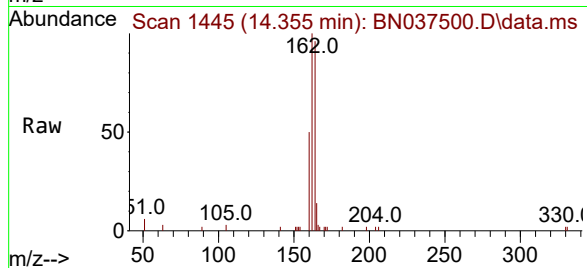




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.355 min Scan# 1445  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

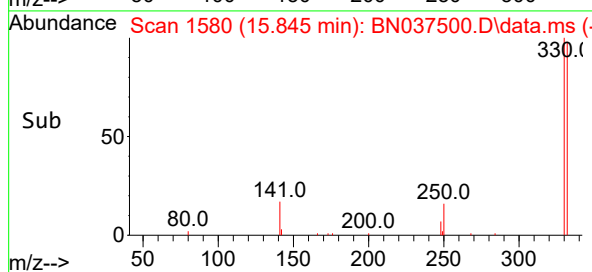
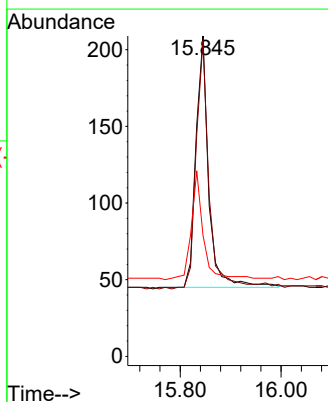
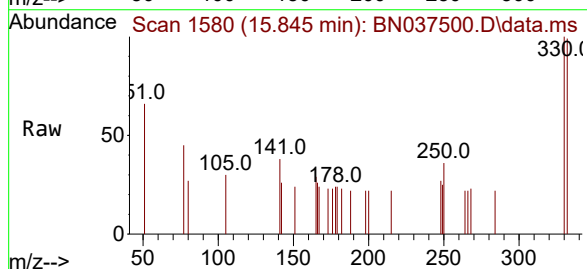
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

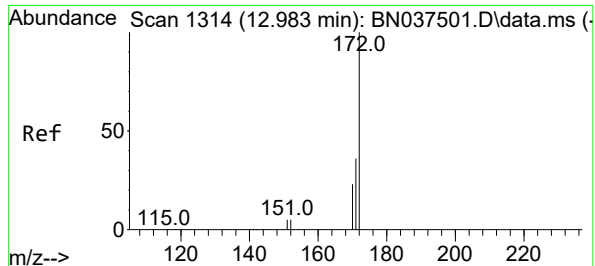
Tgt Ion:164 Resp: 3325  
Ion Ratio Lower Upper  
164 100  
162 103.8 82.0 123.0  
160 51.6 42.4 63.6



#14  
2,4,6-Tribromophenol  
Concen: 0.176 ng  
RT: 15.845 min Scan# 1580  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:330 Resp: 288  
Ion Ratio Lower Upper  
330 100  
332 99.7 76.1 114.1  
141 41.3 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 0.173 ng

RT: 12.983 min Scan# 1314

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

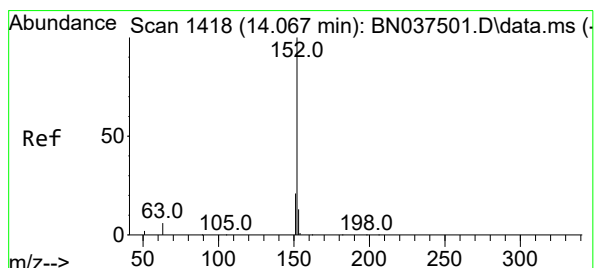
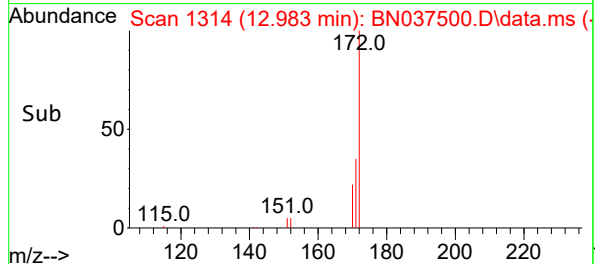
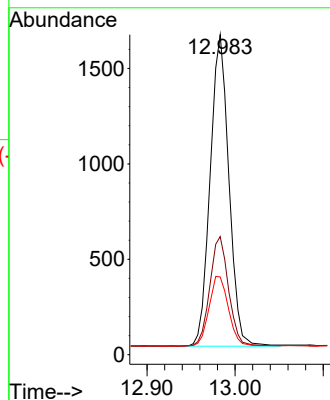
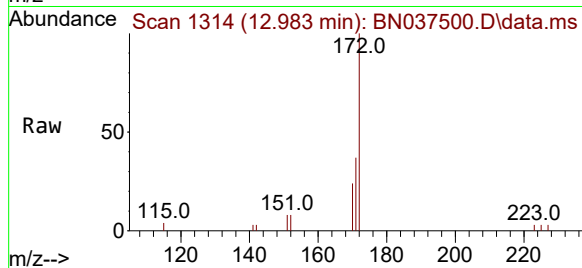
Tgt Ion:172 Resp: 2983

Ion Ratio Lower Upper

172 100

171 36.9 29.4 44.2

170 24.3 19.4 29.0



#16

Acenaphthylene

Concen: 0.191 ng

RT: 14.067 min Scan# 1418

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

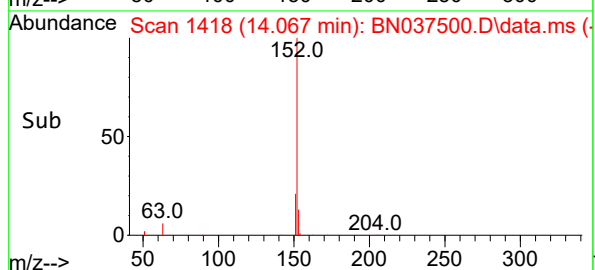
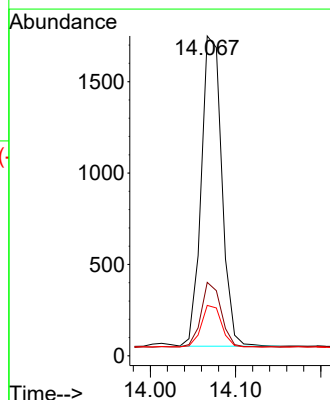
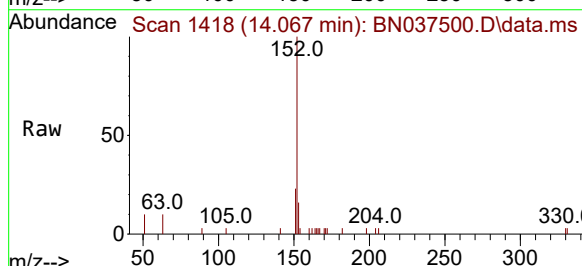
Tgt Ion:152 Resp: 2840

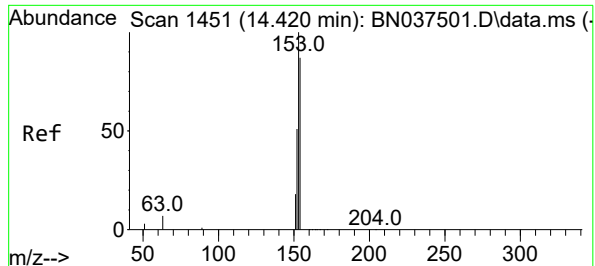
Ion Ratio Lower Upper

152 100

151 21.3 15.9 23.9

153 13.2 10.7 16.1





#17

Acenaphthene

Concen: 0.190 ng

RT: 14.420 min Scan# 1451

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.2

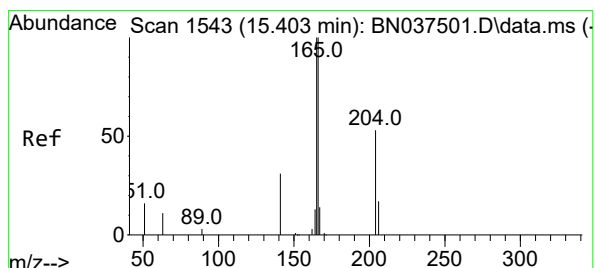
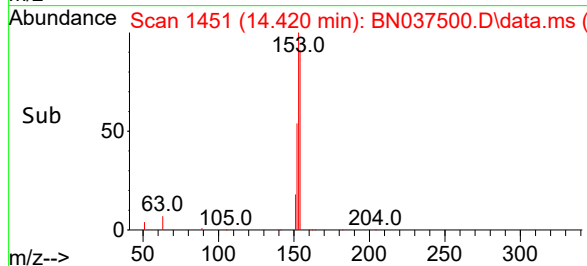
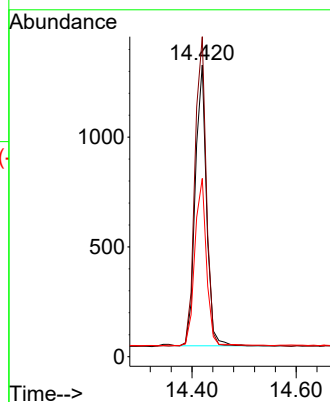
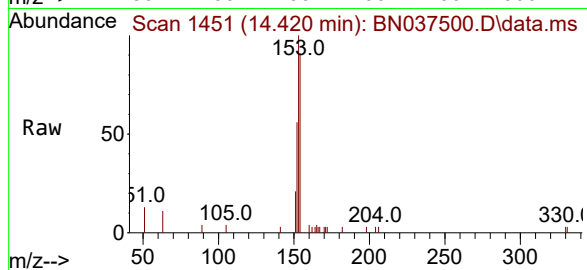
Tgt Ion:154 Resp: 1928

Ion Ratio Lower Upper

154 100

153 111.4 89.2 133.8

152 61.5 48.0 72.0



#18

Fluorene

Concen: 0.190 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

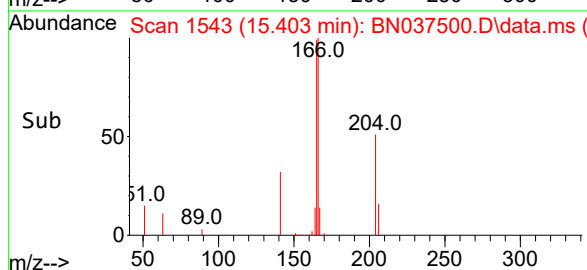
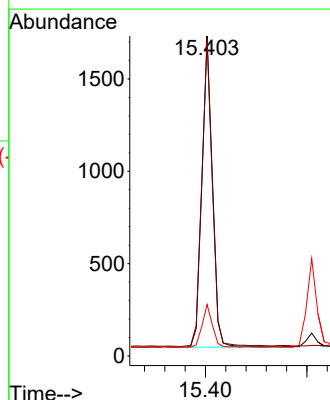
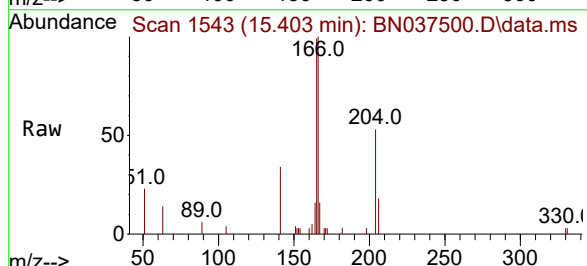
Tgt Ion:166 Resp: 2474

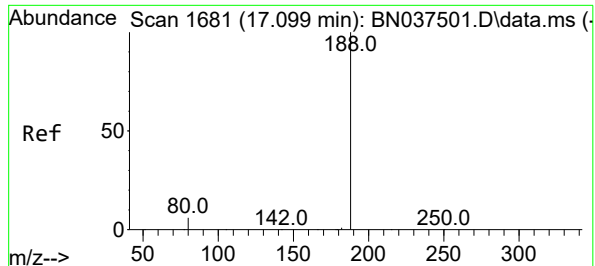
Ion Ratio Lower Upper

166 100

165 97.8 78.1 117.1

167 13.0 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

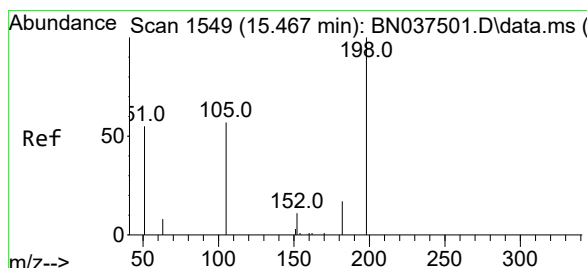
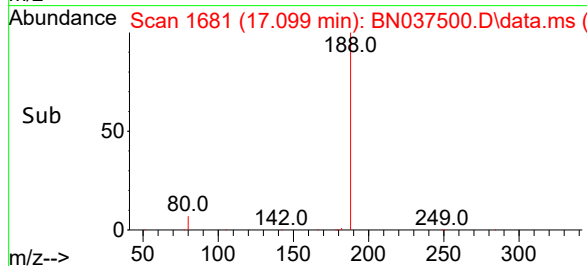
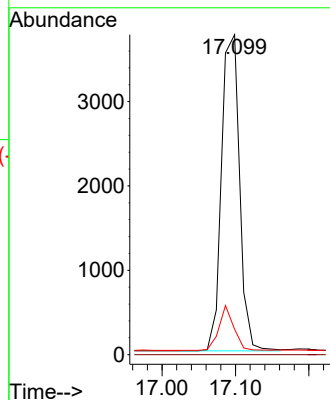
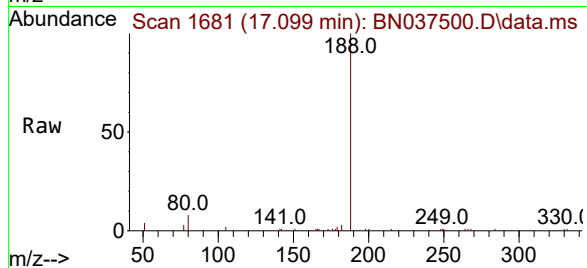
Tgt Ion:188 Resp: 6414

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.0 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 0.255 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.011 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

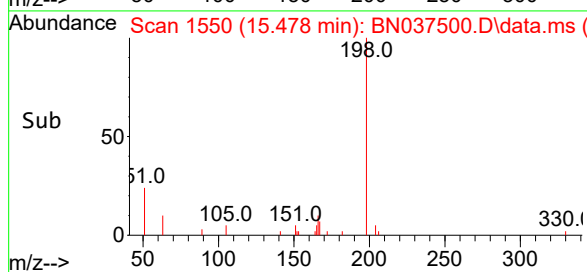
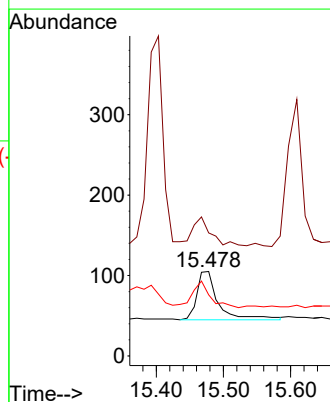
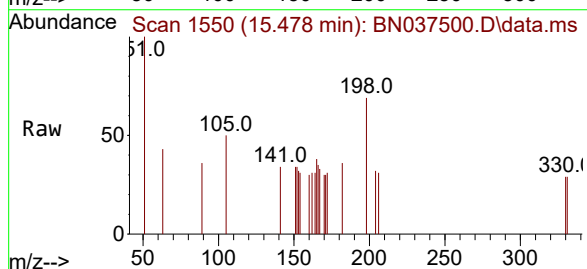
Tgt Ion:198 Resp: 140

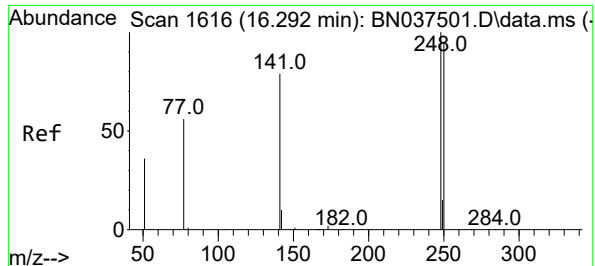
Ion Ratio Lower Upper

198 100

51 145.7 88.5 132.7#

105 72.4 61.2 91.8

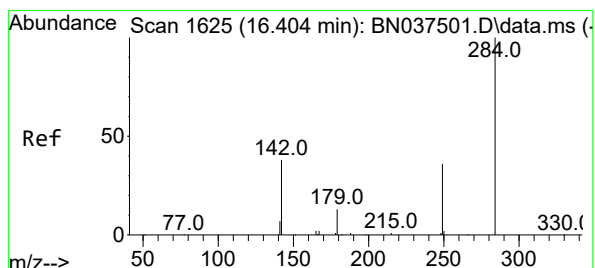
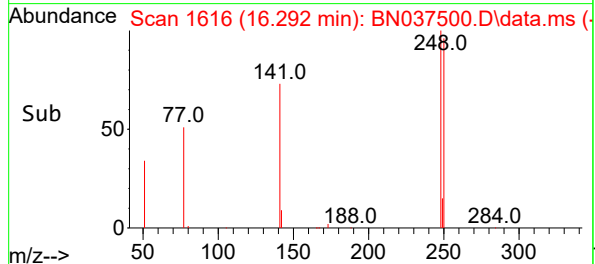
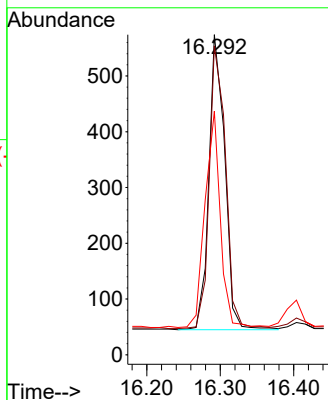
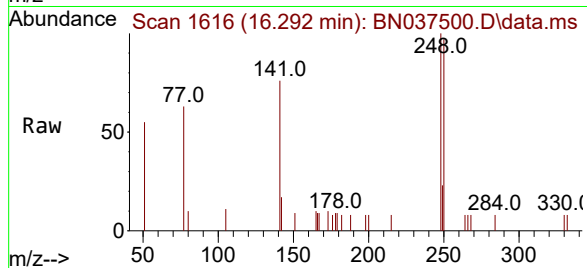




#21  
4-Bromophenyl-phenylether  
Concen: 0.193 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

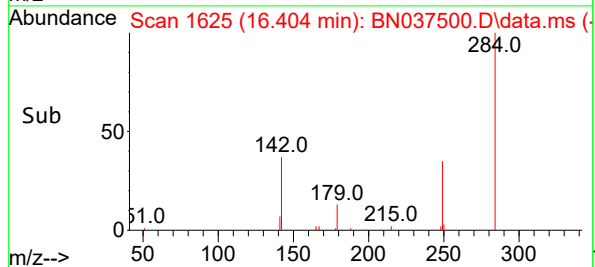
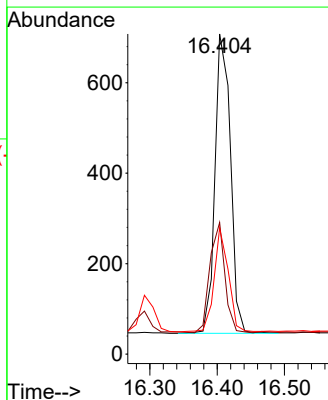
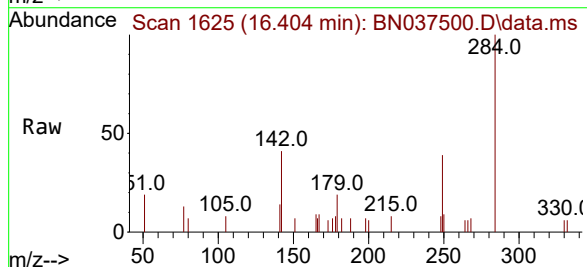
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

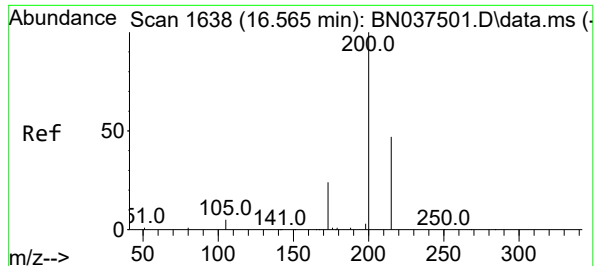
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 96.5  | 76.2  | 114.2 |
| 141     | 76.1  | 63.9  | 95.9  |



#22  
Hexachlorobenzene  
Concen: 0.199 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 35.8  | 28.9  | 43.3  |
| 249     | 32.2  | 25.8  | 38.6  |





#23

Atrazine

Concen: 0.180 ng

RT: 16.565 min Scan# 1638

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

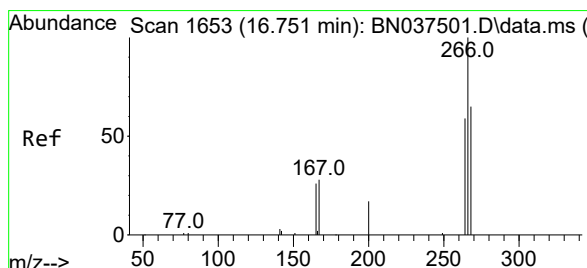
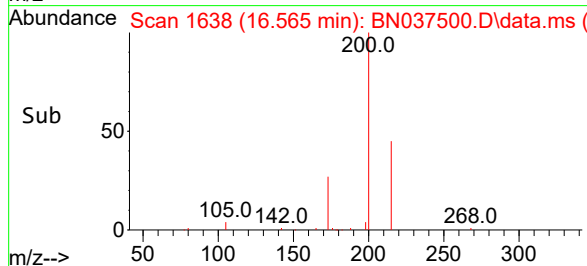
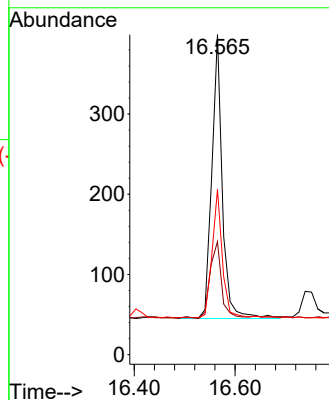
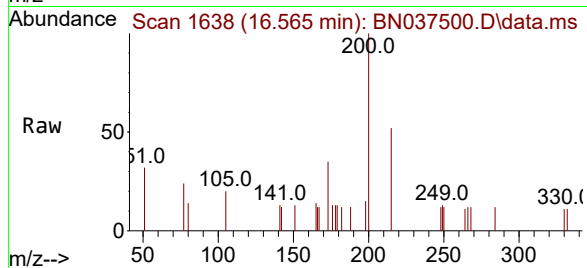
Tgt Ion:200 Resp: 515

Ion Ratio Lower Upper

200 100

173 35.3 23.2 34.8#

215 51.6 40.2 60.4



#24

Pentachlorophenol

Concen: 0.176 ng

RT: 16.751 min Scan# 1653

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

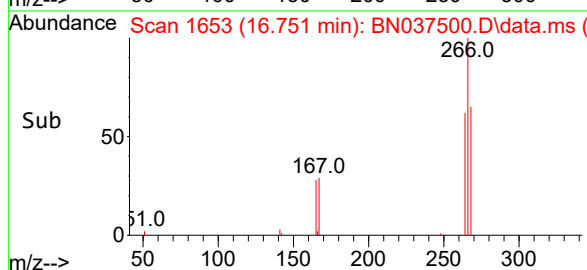
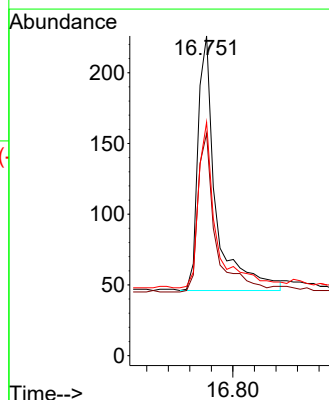
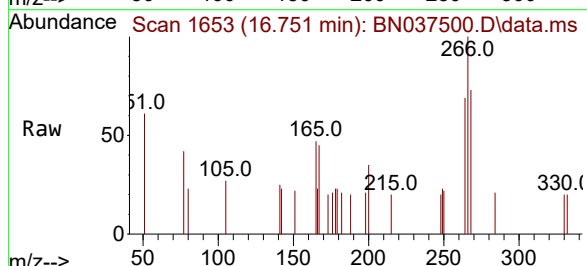
Tgt Ion:266 Resp: 419

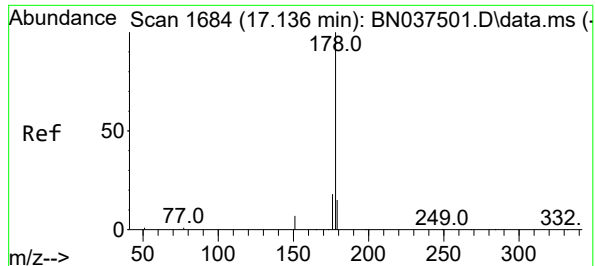
Ion Ratio Lower Upper

266 100

264 60.9 49.3 73.9

268 64.9 51.6 77.4





#25

Phenanthrene

Concen: 0.194 ng

RT: 17.136 min Scan# 1684

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

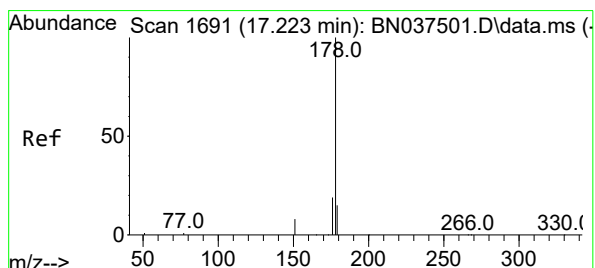
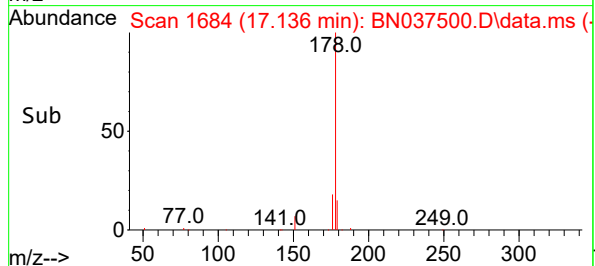
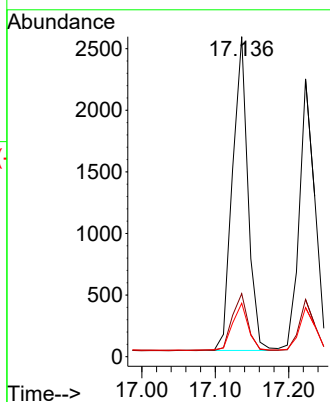
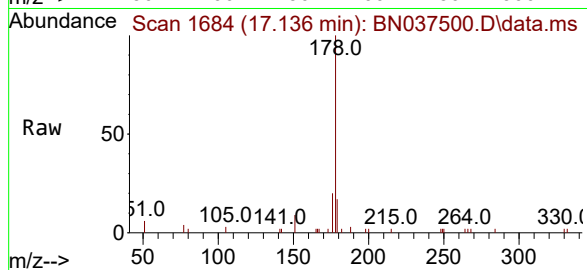
Tgt Ion:178 Resp: 3730

Ion Ratio Lower Upper

178 100

176 18.4 15.0 22.6

179 15.4 12.2 18.2



#26

Anthracene

Concen: 0.188 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

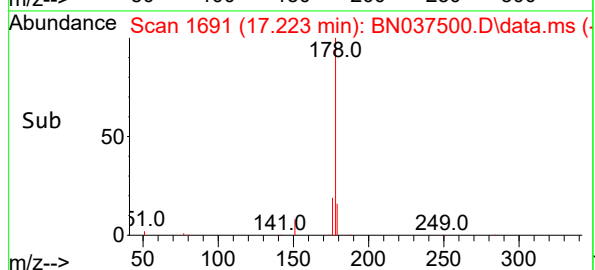
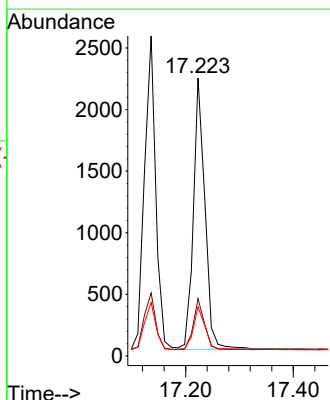
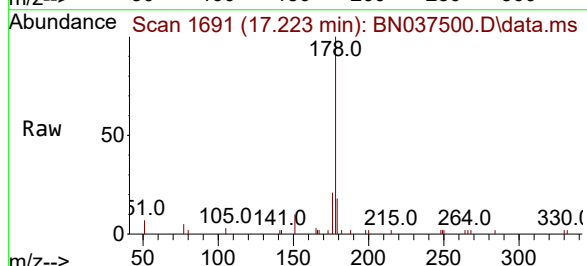
Tgt Ion:178 Resp: 3288

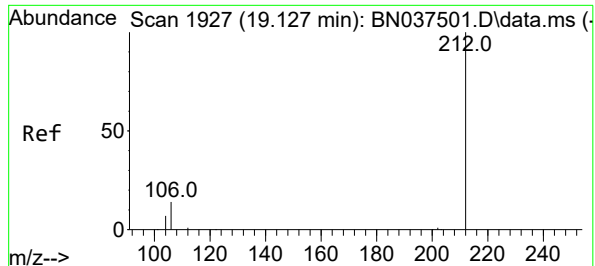
Ion Ratio Lower Upper

178 100

176 18.3 14.7 22.1

179 15.7 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.188 ng

RT: 19.127 min Scan# 1927

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

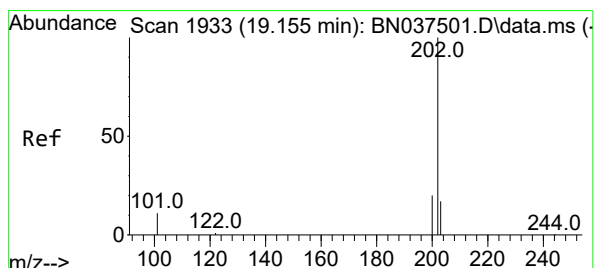
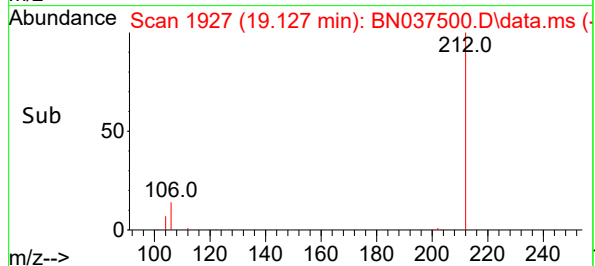
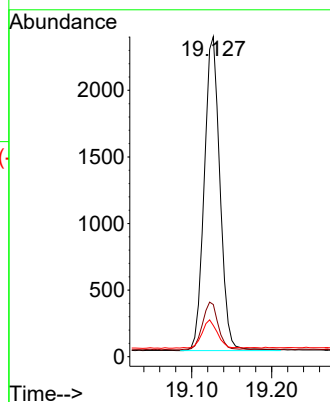
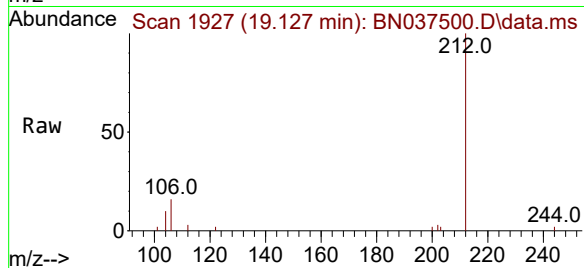
Tgt Ion:212 Resp: 3202

Ion Ratio Lower Upper

212 100

106 15.3 12.2 18.4

104 8.8 6.7 10.1



#28

Fluoranthene

Concen: 0.190 ng

RT: 19.155 min Scan# 1933

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

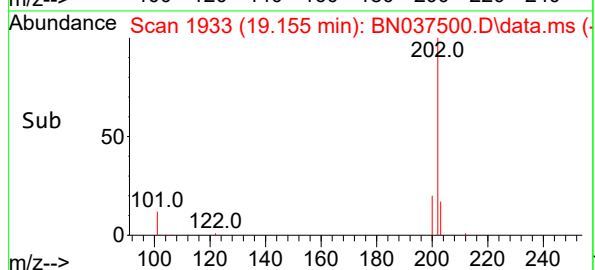
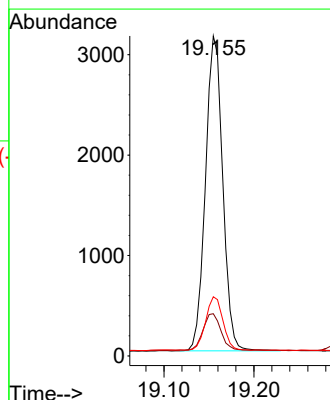
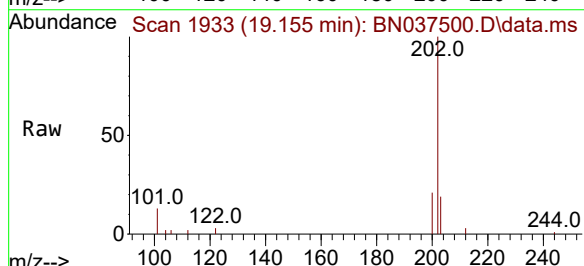
Tgt Ion:202 Resp: 4200

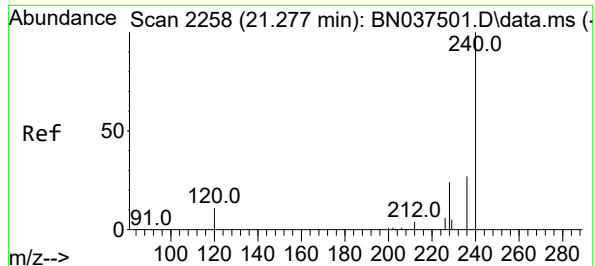
Ion Ratio Lower Upper

202 100

101 12.1 9.8 14.6

203 16.9 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

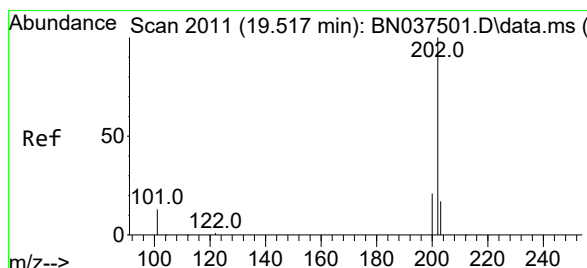
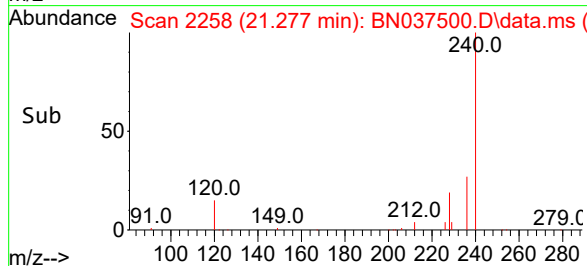
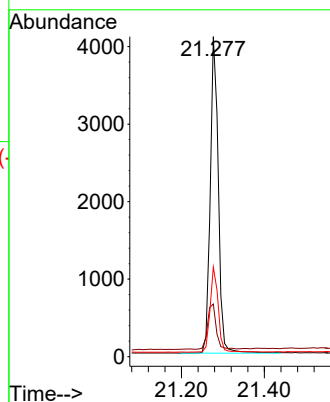
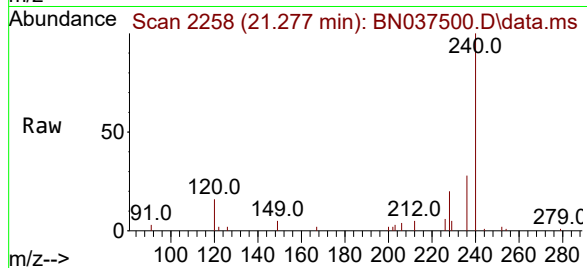
Tgt Ion:240 Resp: 5490

Ion Ratio Lower Upper

240 100

120 16.5 10.7 16.1#

236 28.0 22.6 33.8



#30

Pyrene

Concen: 0.194 ng

RT: 19.517 min Scan# 2011

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

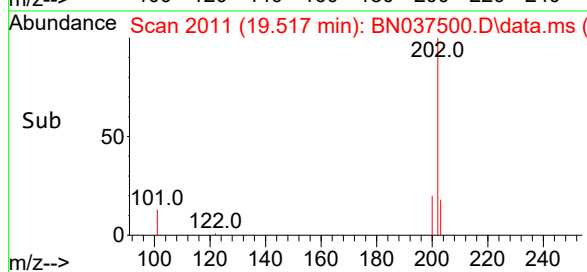
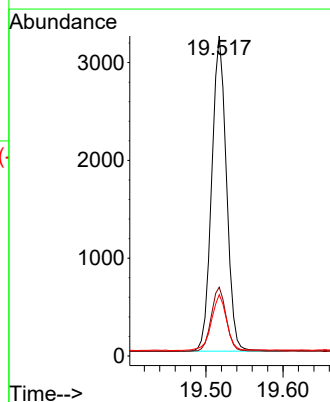
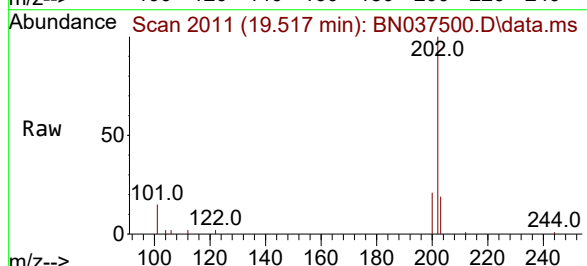
Tgt Ion:202 Resp: 4280

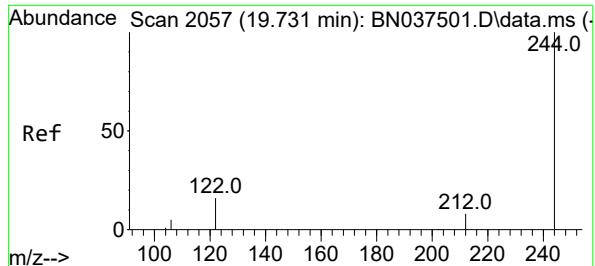
Ion Ratio Lower Upper

202 100

200 20.6 16.5 24.7

203 18.3 14.3 21.5

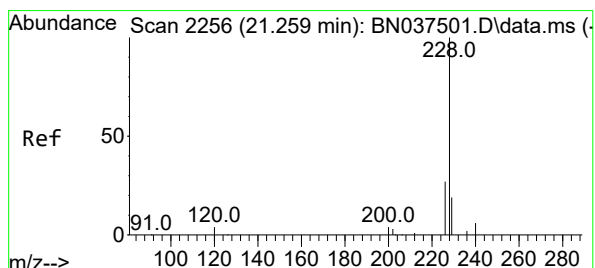
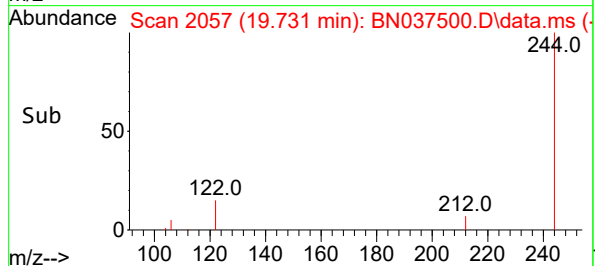
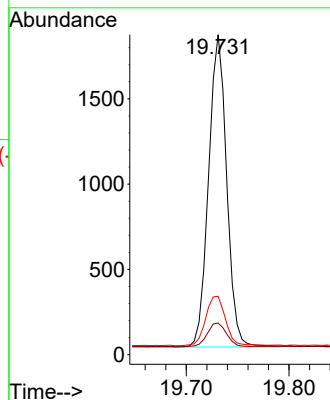
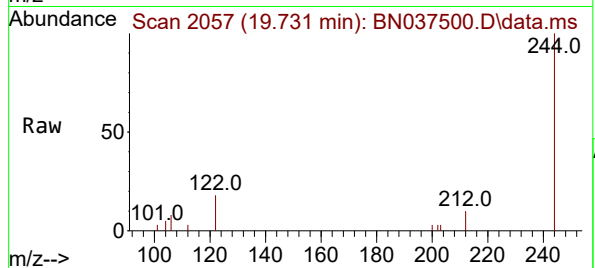




#31  
Terphenyl-d14  
Concen: 0.190 ng  
RT: 19.731 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

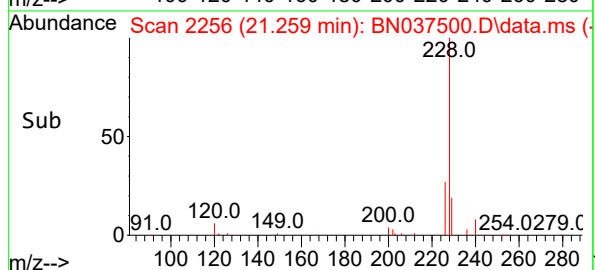
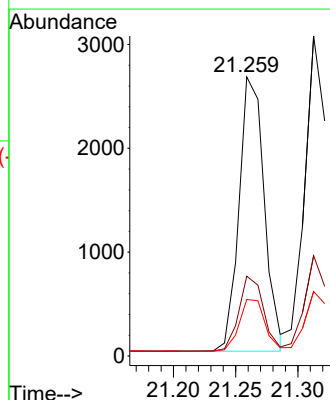
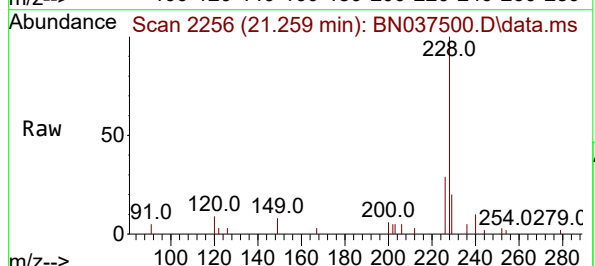
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

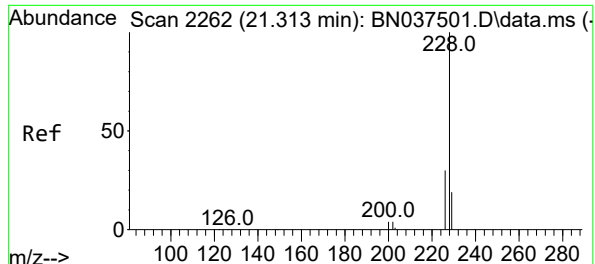
Tgt Ion:244 Resp: 2238  
Ion Ratio Lower Upper  
244 100  
212 9.9 7.4 11.2  
122 18.3 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.194 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:228 Resp: 3724  
Ion Ratio Lower Upper  
228 100  
226 28.6 21.9 32.9  
229 20.3 15.8 23.8

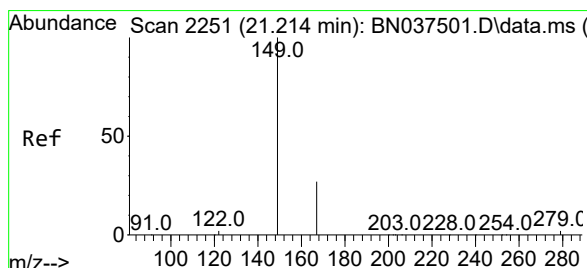
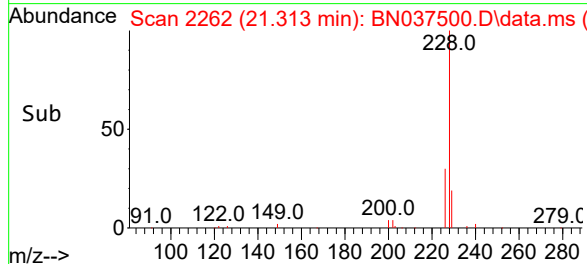
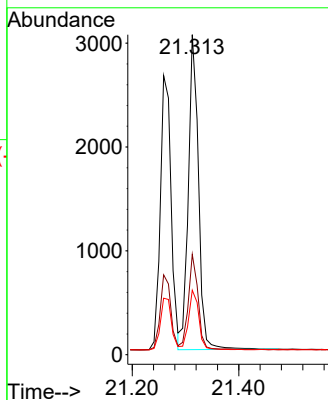
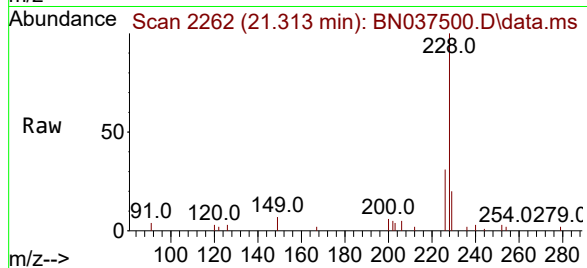




#33  
Chrysene  
Concen: 0.200 ng  
RT: 21.313 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

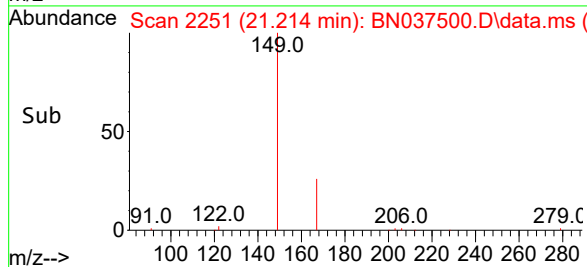
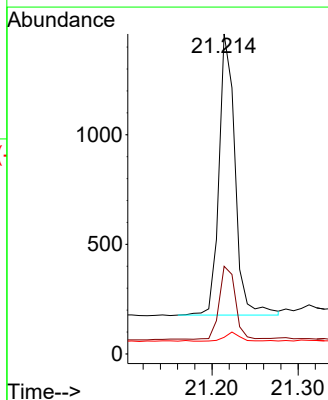
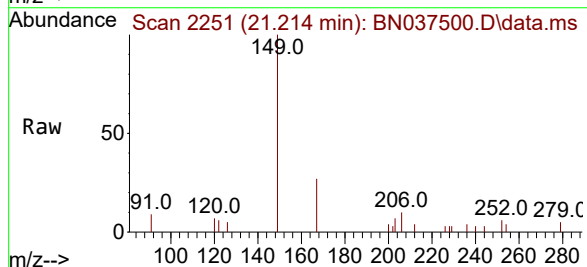
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

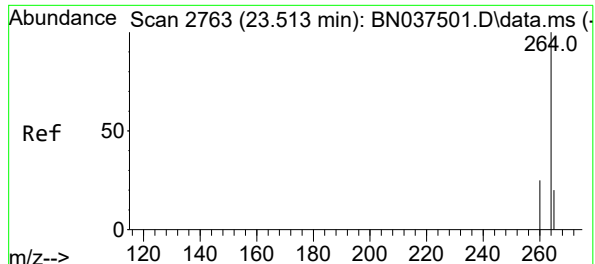
Tgt Ion:228 Resp: 4010  
Ion Ratio Lower Upper  
228 100  
226 31.3 24.2 36.4  
229 20.1 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.191 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:149 Resp: 1656  
Ion Ratio Lower Upper  
149 100  
167 25.8 21.8 32.8  
279 3.0 3.0 4.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.519 min Scan# 21

Delta R.T. 0.006 min

Lab File: BN037500.D

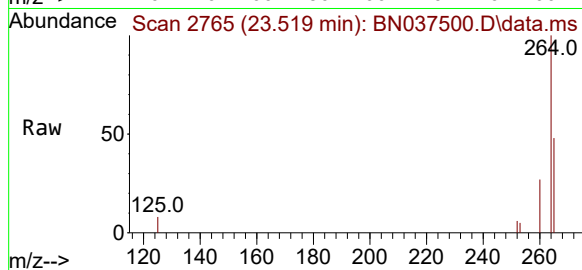
Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.2



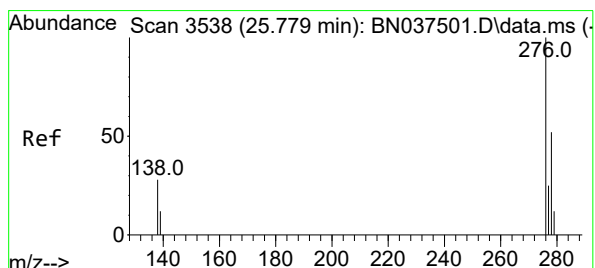
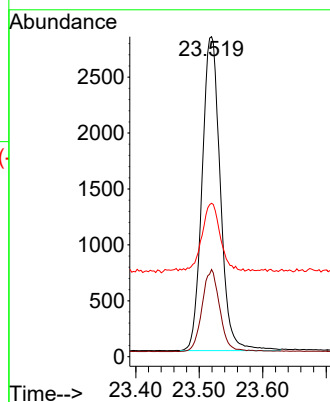
Tgt Ion:264 Resp: 5600

Ion Ratio Lower Upper

264 100

260 27.3 21.2 31.8

265 47.9 40.4 60.6



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.183 ng

RT: 25.788 min Scan# 3541

Delta R.T. 0.009 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

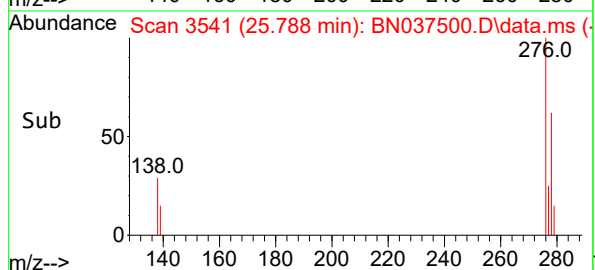
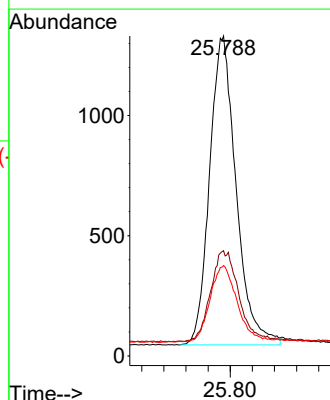
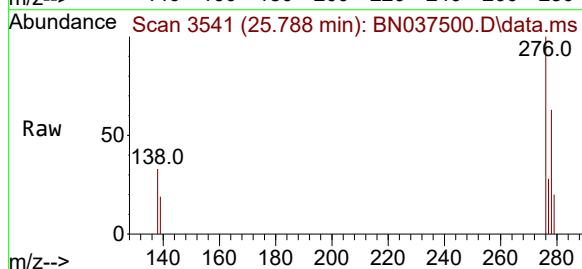
Tgt Ion:276 Resp: 4278

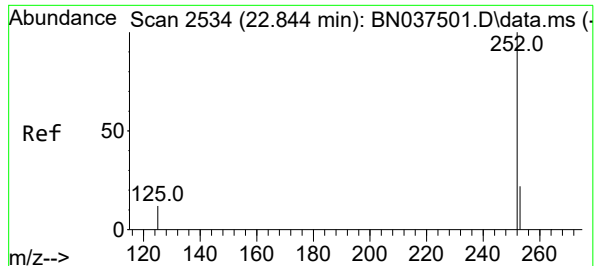
Ion Ratio Lower Upper

276 100

138 31.1 24.0 36.0

277 24.9 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.181 ng

RT: 22.847 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

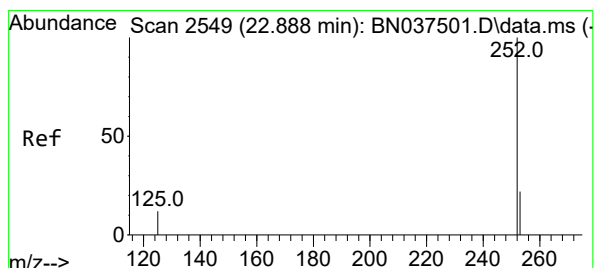
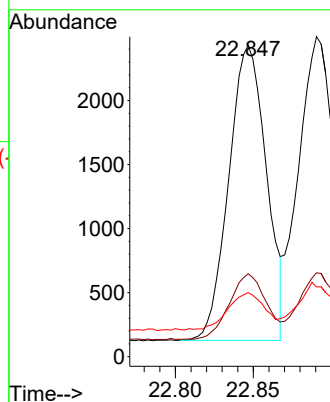
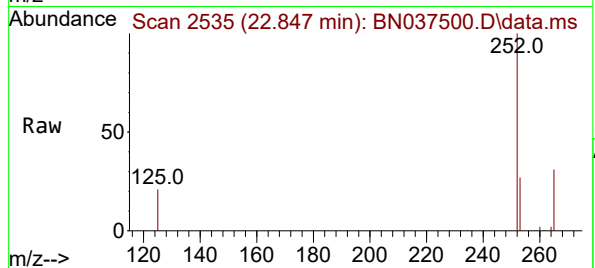
Tgt Ion:252 Resp: 3857

Ion Ratio Lower Upper

252 100

253 26.6 19.5 29.3

125 20.6 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 0.181 ng

RT: 22.891 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

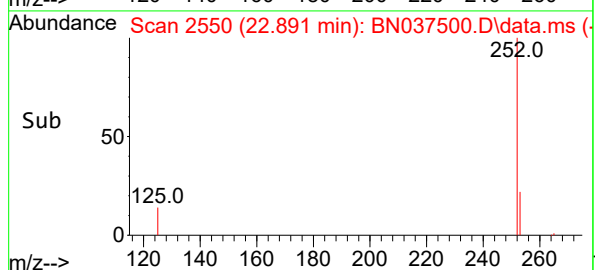
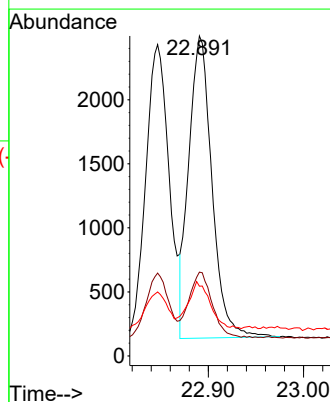
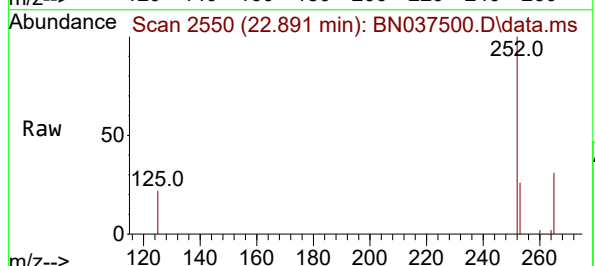
Tgt Ion:252 Resp: 3977

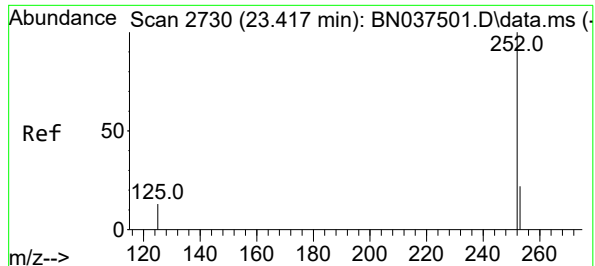
Ion Ratio Lower Upper

252 100

253 26.2 19.5 29.3

125 21.8 13.1 19.7#





#39

Benzo(a)pyrene

Concen: 0.182 ng

RT: 23.420 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.2

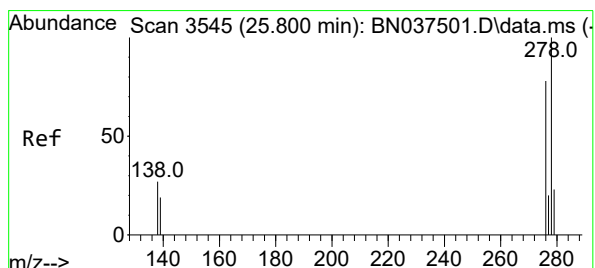
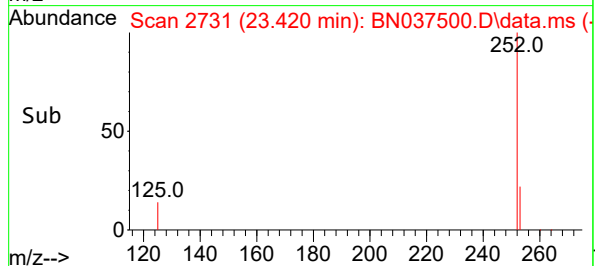
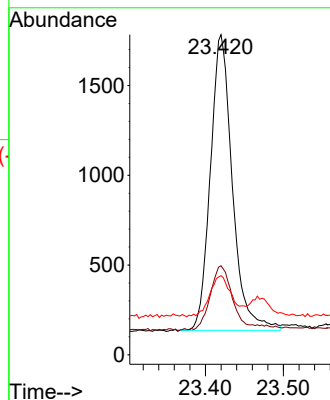
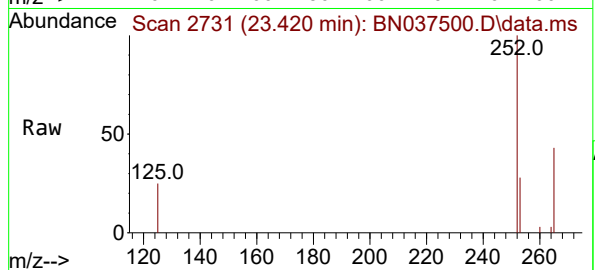
Tgt Ion:252 Resp: 3225

Ion Ratio Lower Upper

252 100

253 27.8 19.9 29.9

125 24.7 15.2 22.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.181 ng

RT: 25.803 min Scan# 3546

Delta R.T. 0.003 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

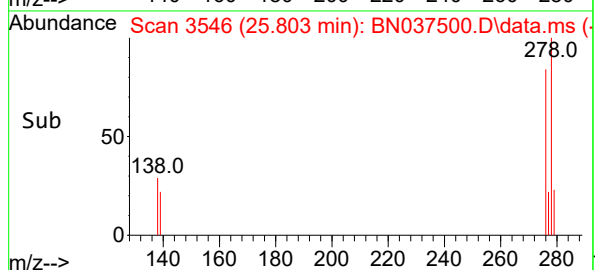
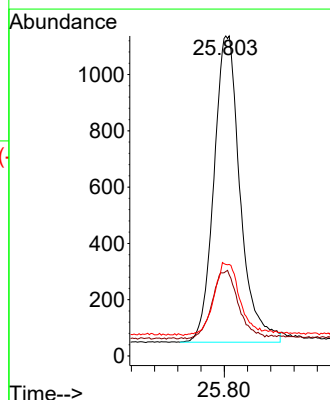
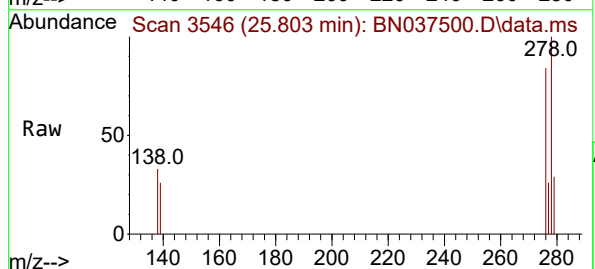
Tgt Ion:278 Resp: 3411

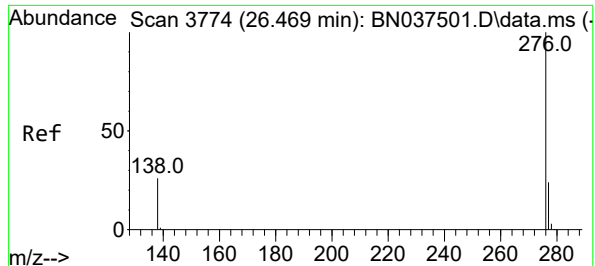
Ion Ratio Lower Upper

278 100

139 26.4 17.5 26.3#

279 28.6 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 0.184 ng

RT: 26.472 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN037500.D

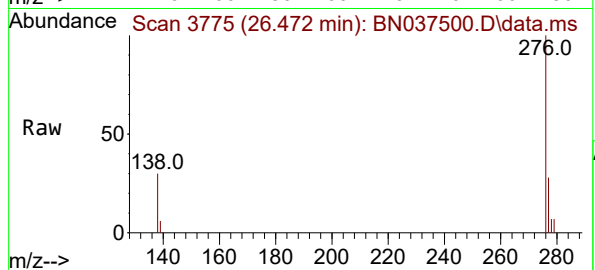
Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2



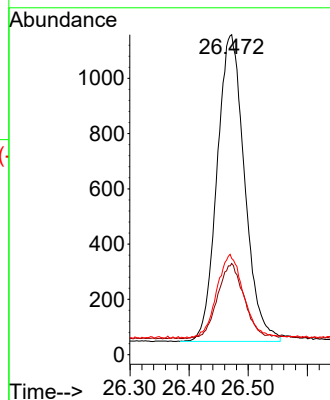
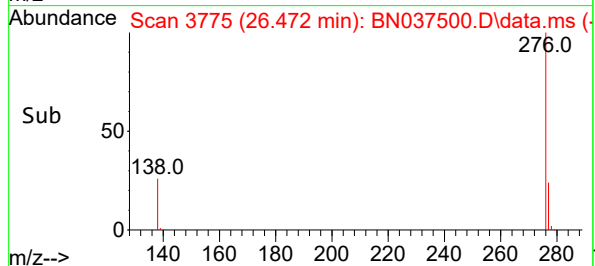
Tgt Ion:276 Resp: 3591

Ion Ratio Lower Upper

276 100

277 28.5 20.9 31.3

138 30.1 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037501.D  
 Acq On : 15 Jul 2025 13:49  
 Operator : RC/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

Quant Time: Jul 15 17:26:37 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

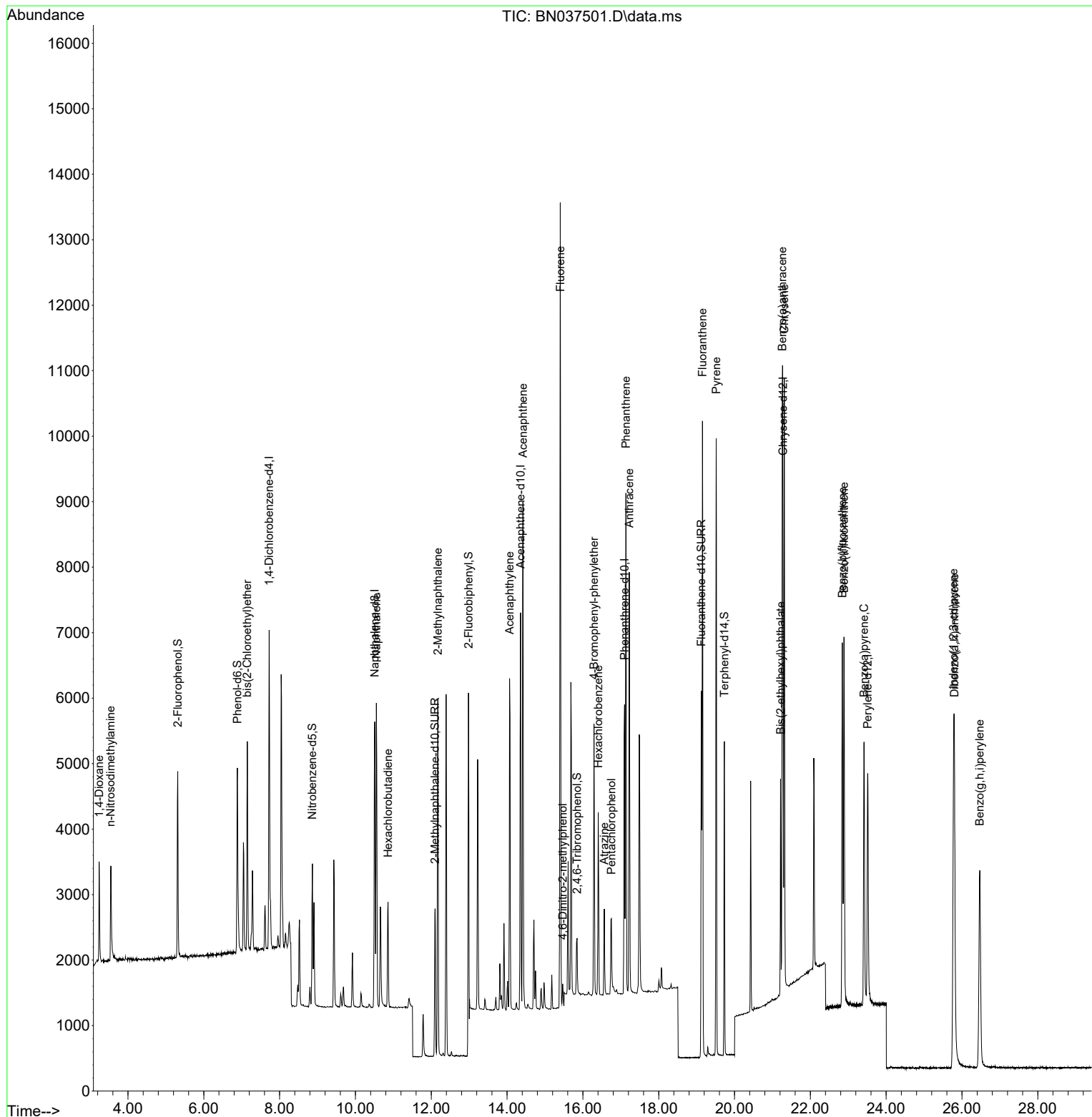
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2287     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5836     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.355 | 164  | 3328     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.099 | 188  | 6474     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.277 | 240  | 5210     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.513 | 264  | 4807     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 2253     | 0.398 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.887  | 99   | 2721     | 0.384 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.865  | 82   | 1650     | 0.378 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 3156     | 0.377 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 576      | 0.352 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 6806     | 0.393 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.127 | 212  | 6230     | 0.363 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.731 | 244  | 4396     | 0.393 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
|                               |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.239  | 88   | 904      | 0.411 | ng    | 100      |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 1061     | 0.384 | ng    | 99       |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 2342     | 0.397 | ng    | 100      |
| 9) Naphthalene                | 10.552 | 128  | 6104     | 0.392 | ng    | 100      |
| 10) Hexachlorobutadiene       | 10.861 | 225  | 1371     | 0.399 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 3956     | 0.387 | ng    | 100      |
| 16) Acenaphthylene            | 14.067 | 152  | 5722     | 0.384 | ng    | 100      |
| 17) Acenaphthene              | 14.420 | 154  | 3900     | 0.385 | ng    | 100      |
| 18) Fluorene                  | 15.403 | 166  | 4943     | 0.379 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 268      | 0.396 | ng    | 100      |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 1574     | 0.379 | ng    | 100      |
| 22) Hexachlorobenzene         | 16.404 | 284  | 2126     | 0.397 | ng    | 100      |
| 23) Atrazine                  | 16.565 | 200  | 1027     | 0.355 | ng    | 100      |
| 24) Pentachlorophenol         | 16.751 | 266  | 812      | 0.338 | ng    | 100      |
| 25) Phenanthrene              | 17.136 | 178  | 7511     | 0.387 | ng    | 100      |
| 26) Anthracene                | 17.223 | 178  | 6557     | 0.370 | ng    | 100      |
| 28) Fluoranthene              | 19.155 | 202  | 8352     | 0.373 | ng    | 100      |
| 30) Pyrene                    | 19.517 | 202  | 8375     | 0.399 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 6989     | 0.383 | ng    | 100      |
| 33) Chrysene                  | 21.313 | 228  | 7472     | 0.393 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 2941     | 0.358 | ng    | 100      |
| 36) Indeno(1,2,3-cd)pyrene    | 25.779 | 276  | 7280     | 0.364 | ng    | 100      |
| 37) Benzo(b)fluoranthene      | 22.844 | 252  | 6988     | 0.383 | ng    | 100      |
| 38) Benzo(k)fluoranthene      | 22.888 | 252  | 7143     | 0.379 | ng    | 100      |
| 39) Benzo(a)pyrene            | 23.417 | 252  | 5731     | 0.376 | ng    | 100      |
| 40) Dibenzo(a,h)anthracene    | 25.800 | 278  | 5845     | 0.360 | ng    | 100      |
| 41) Benzo(g,h,i)perylene      | 26.469 | 276  | 6293     | 0.375 | ng    | 100      |

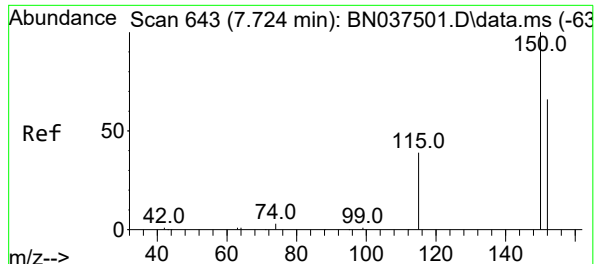
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Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037501.D  
Acq On : 15 Jul 2025 13:49  
Operator : RC/JU  
Sample : SSTDICCC0.4  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

Quant Time: Jul 15 17:26:37 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 16:45:15 2025  
Response via : Initial Calibration

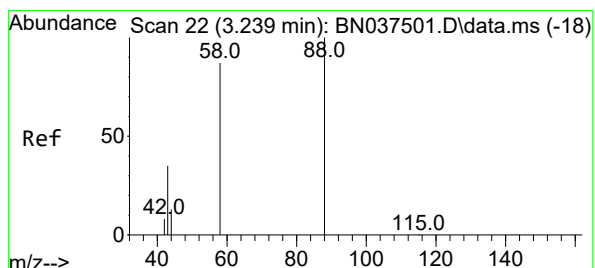
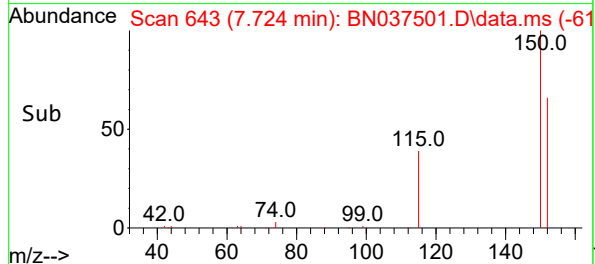
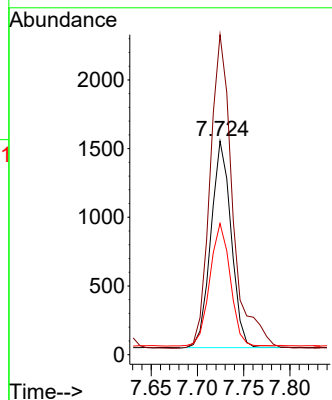
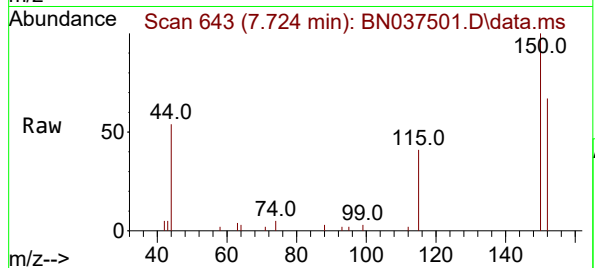




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

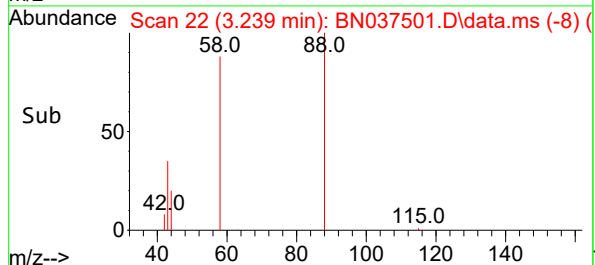
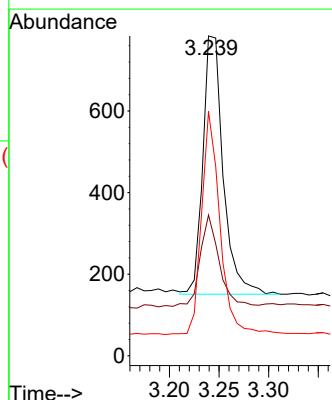
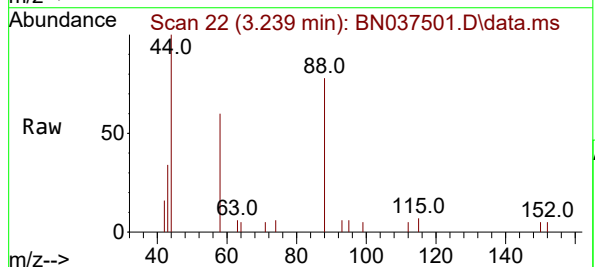
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

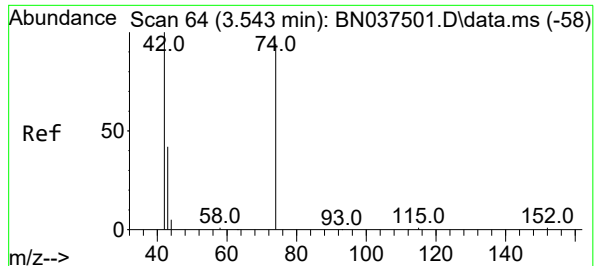
Tgt Ion:152 Resp: 2287  
Ion Ratio Lower Upper  
152 100  
150 149.8 119.8 179.8  
115 61.4 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.411 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion: 88 Resp: 904  
Ion Ratio Lower Upper  
88 100  
43 34.4 27.5 41.3  
58 78.3 62.7 94.1

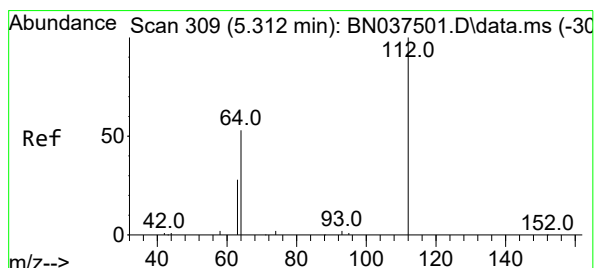
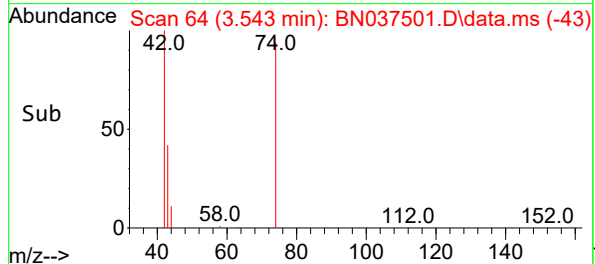
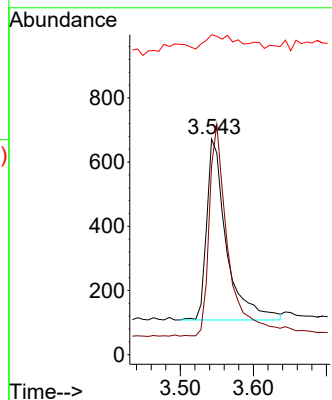
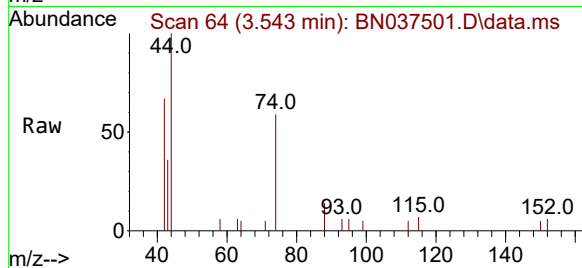




#3  
n-Nitrosodimethylamine  
Concen: 0.384 ng  
RT: 3.543 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

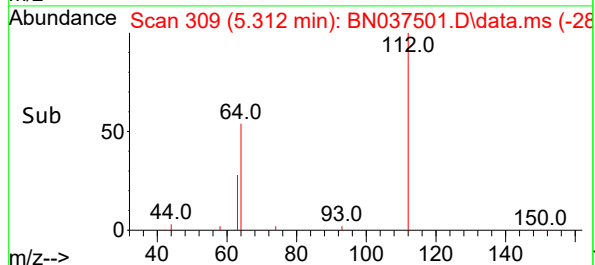
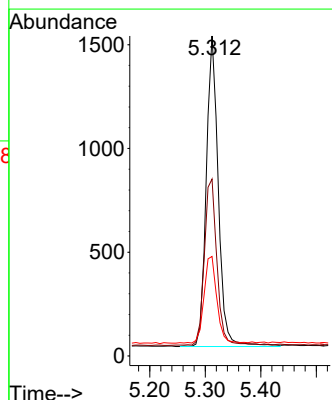
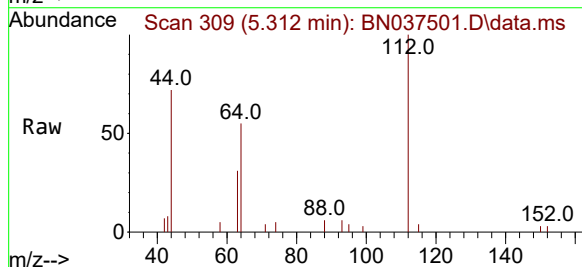
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BNA\_N  
ClientSampleId :  
SSTDICCC0.4

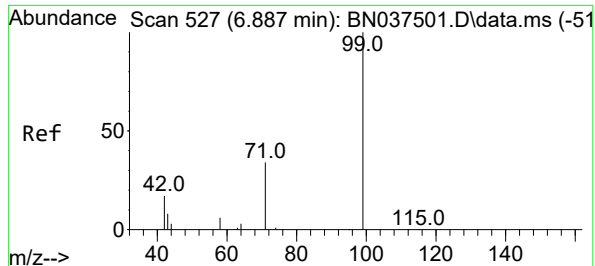
Tgt Ion: 42 Resp: 1061  
Ion Ratio Lower Upper  
42 100  
74 113.4 91.8 137.6  
44 18.8 15.0 22.6



#4  
2-Fluorophenol  
Concen: 0.398 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion: 112 Resp: 2253  
Ion Ratio Lower Upper  
112 100  
64 56.4 45.1 67.7  
63 29.8 23.8 35.8

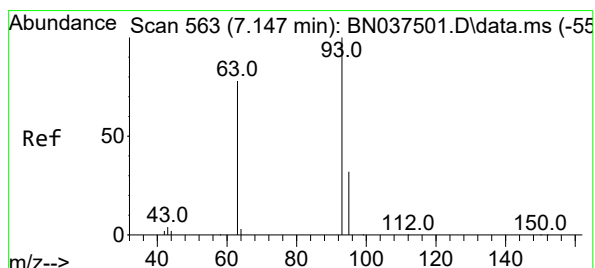
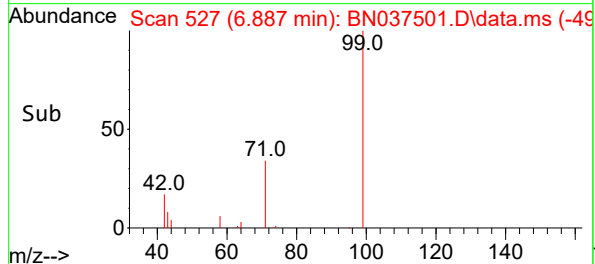
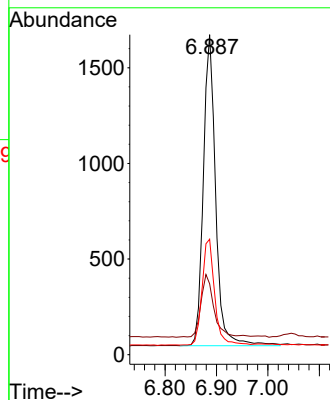
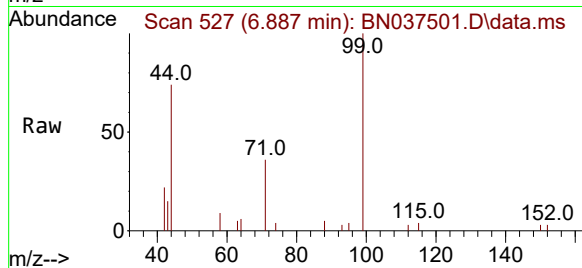




#5  
Phenol-d6  
Concen: 0.384 ng  
RT: 6.887 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

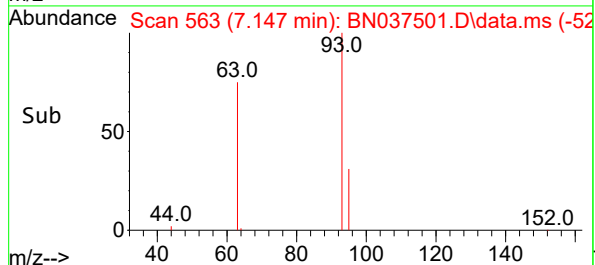
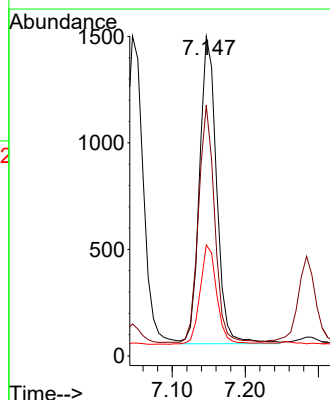
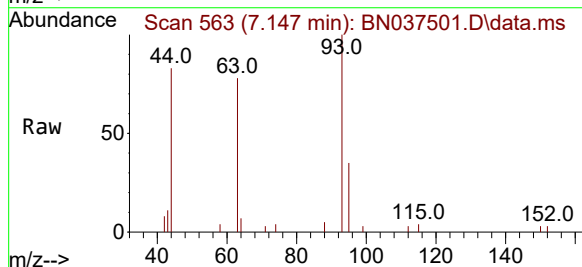
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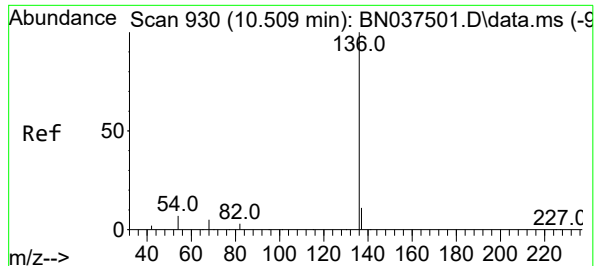
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 99      | 100   |       |       |
| 42      | 21.4  | 17.1  | 25.7  |
| 71      | 34.8  | 27.8  | 41.8  |



#6  
bis(2-Chloroethyl)ether  
Concen: 0.397 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 93      | 100   |       |       |
| 63      | 72.8  | 58.2  | 87.4  |
| 95      | 31.6  | 25.3  | 37.9  |

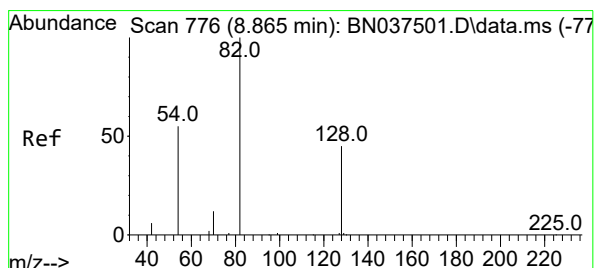
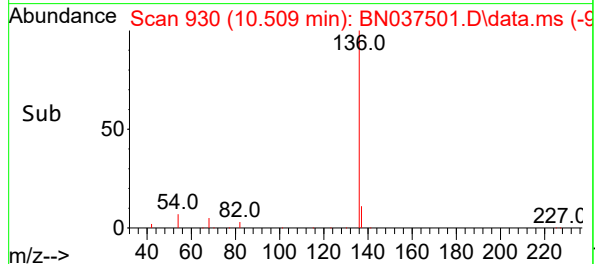
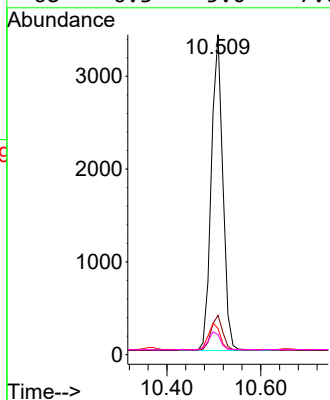
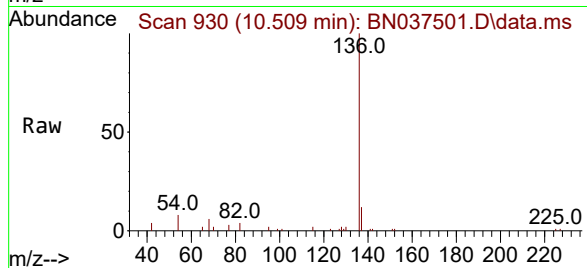




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

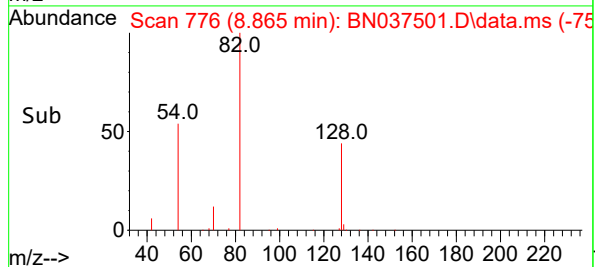
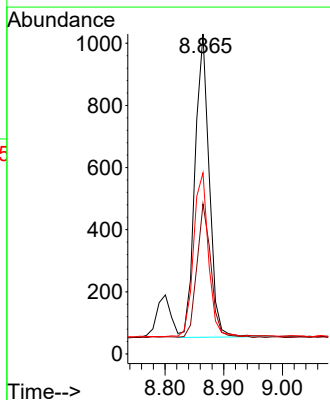
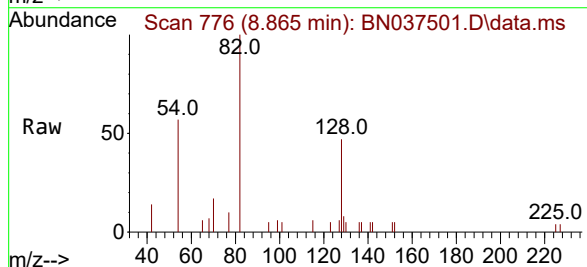
Instrument :  
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ClientSampleId :  
SSTDICCC0.4

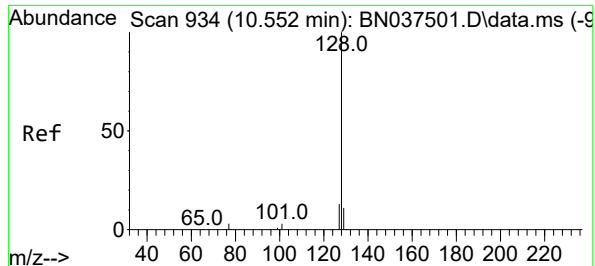
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5836  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.3  | 9.8   | 14.8  |
| 54       | 8.2   | 6.6   | 9.8   |
| 68       | 6.3   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 0.378 ng  
RT: 8.865 min Scan# 776  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1650  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 46.9  | 37.5  | 56.3  |
| 54       | 56.6  | 45.3  | 67.9  |

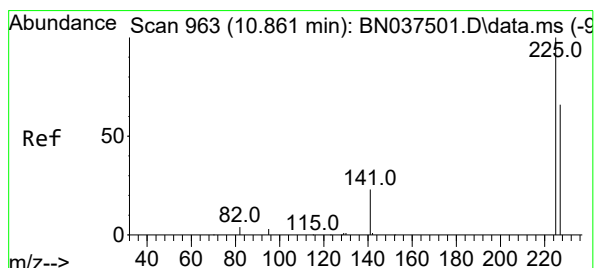
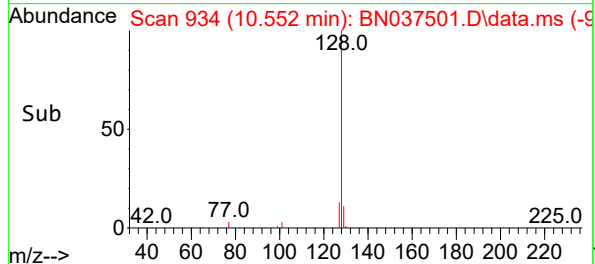
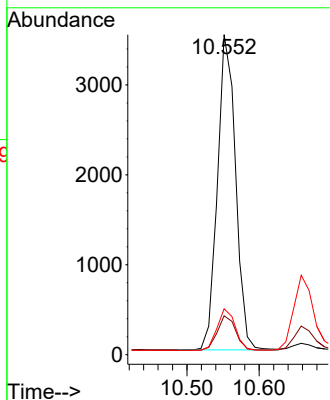
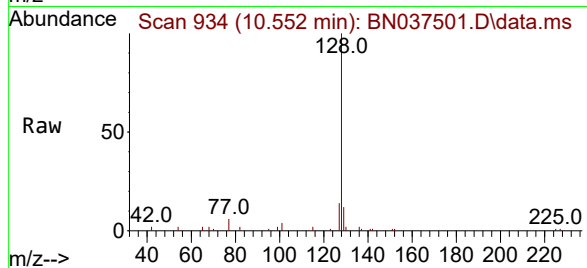




#9  
Naphthalene  
Concen: 0.392 ng  
RT: 10.552 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

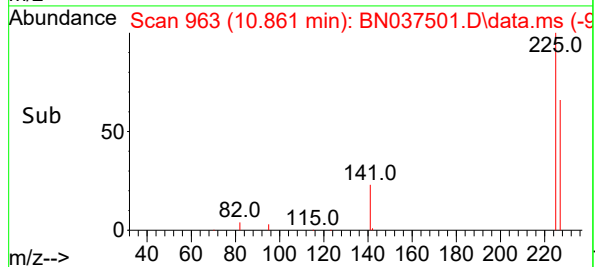
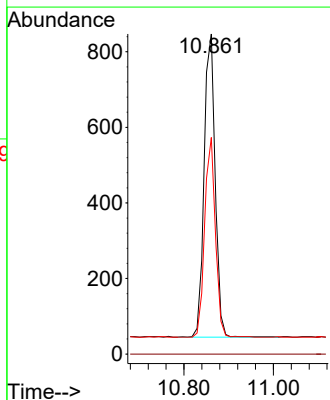
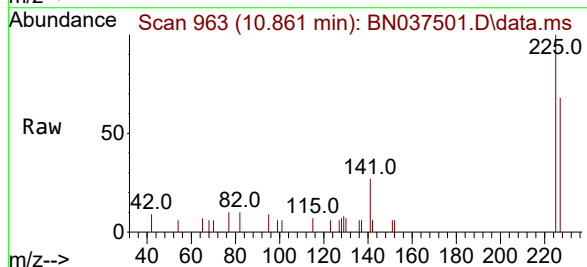
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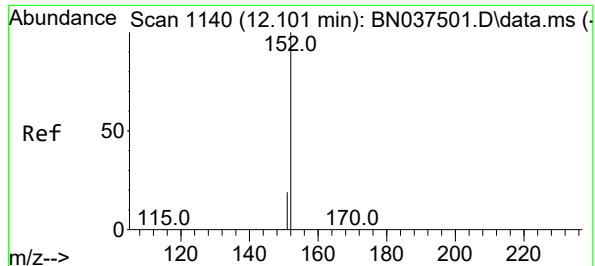
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Ion Ratio Lower Upper  
128 100  
129 12.1 9.7 14.5  
127 14.4 11.5 17.3



#10  
Hexachlorobutadiene  
Concen: 0.399 ng  
RT: 10.861 min Scan# 963  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:225 Resp: 1371  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.0 76.4

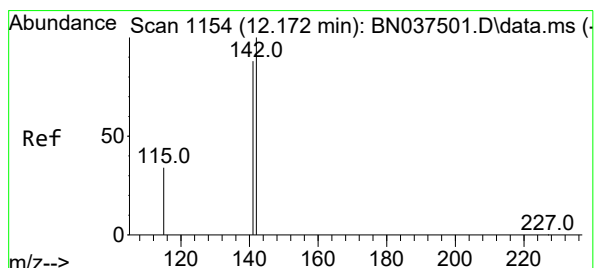
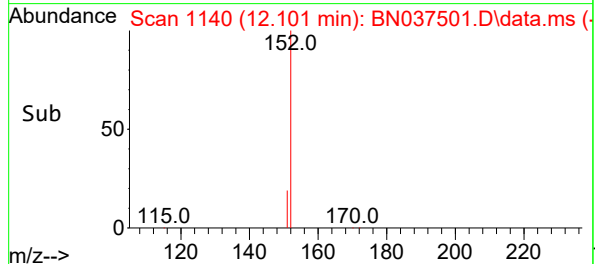
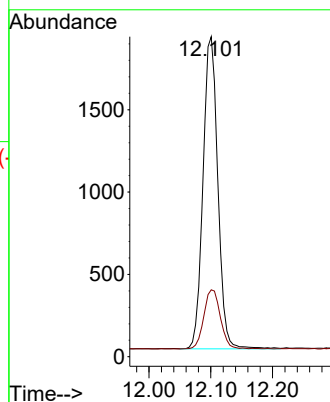
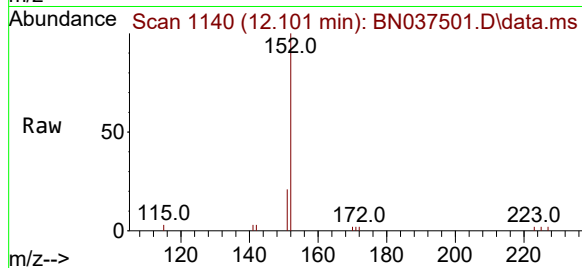




#11  
2-Methylnaphthalene-d10  
Concen: 0.377 ng  
RT: 12.101 min Scan# 1140  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

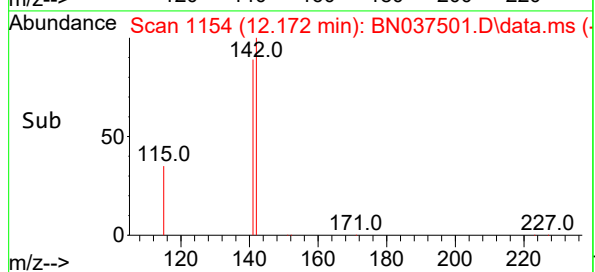
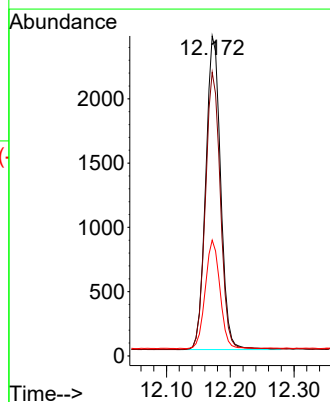
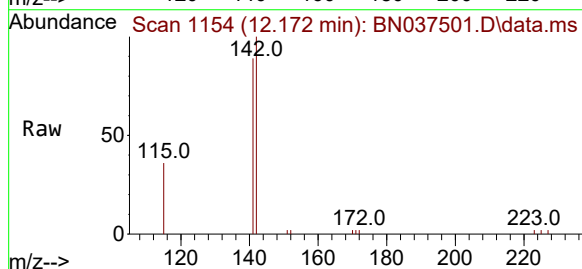
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ClientSampleId :  
SSTDICCC0.4

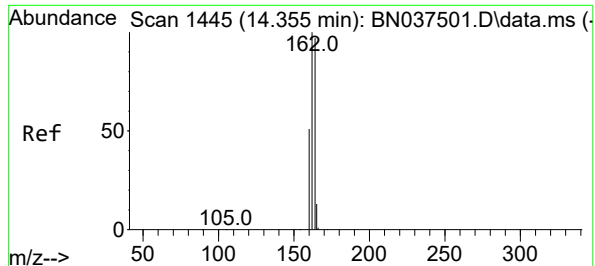
Tgt Ion:152 Resp: 3156  
Ion Ratio Lower Upper  
152 100  
151 21.0 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.387 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:142 Resp: 3956  
Ion Ratio Lower Upper  
142 100  
141 88.7 71.0 106.4  
115 36.2 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

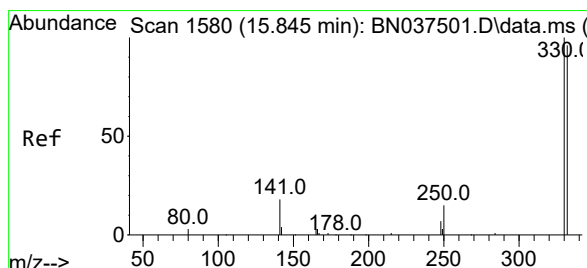
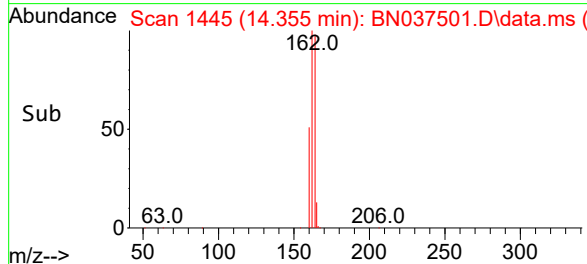
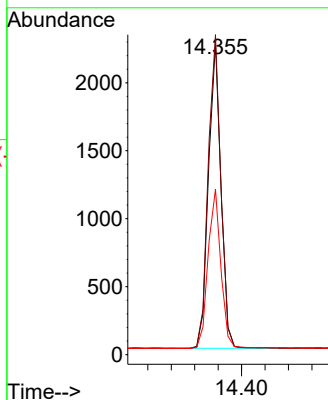
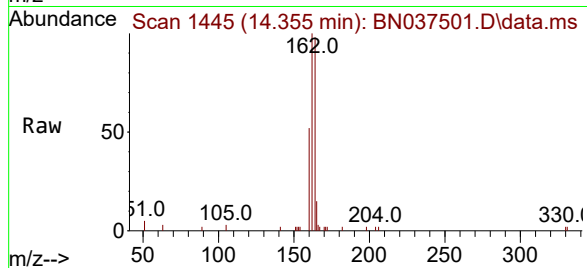
Tgt Ion:164 Resp: 3328

Ion Ratio Lower Upper

164 100

162 102.5 82.0 123.0

160 53.0 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.352 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

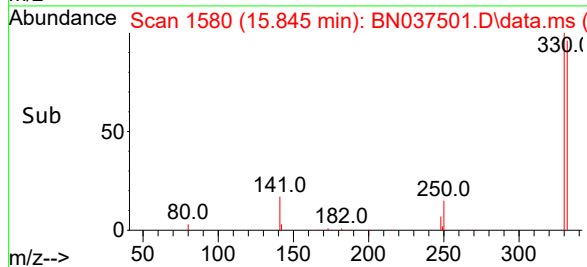
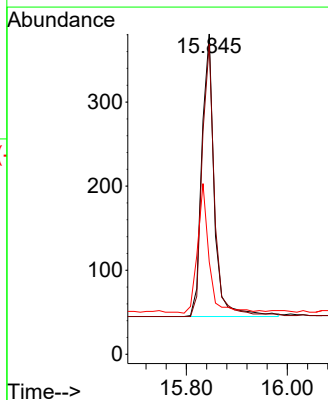
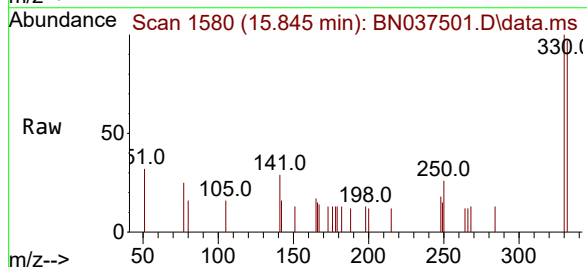
Tgt Ion:330 Resp: 576

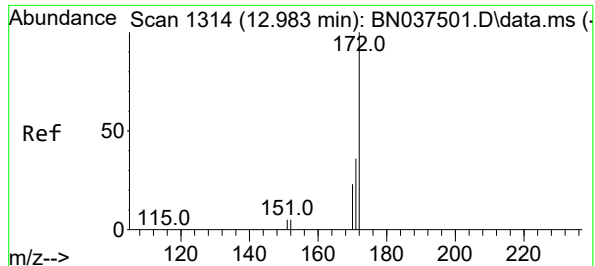
Ion Ratio Lower Upper

330 100

332 95.1 76.1 114.1

141 41.7 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 0.393 ng

RT: 12.983 min Scan# 1314

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

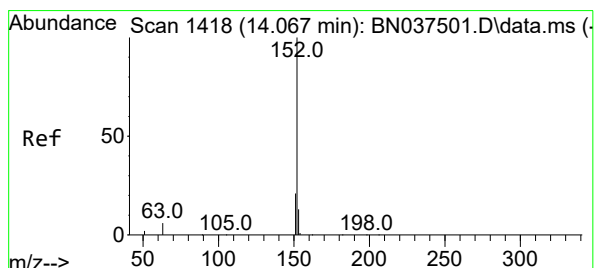
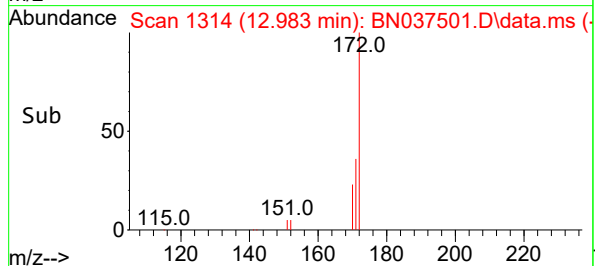
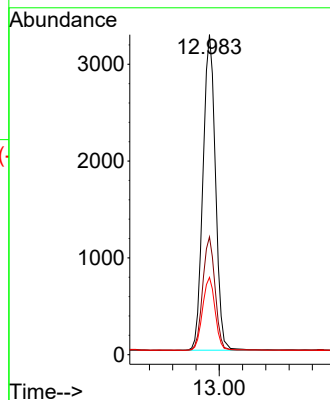
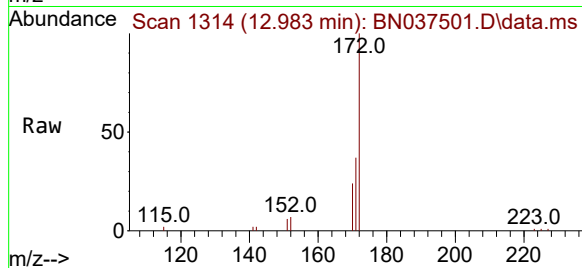
Tgt Ion:172 Resp: 6806

Ion Ratio Lower Upper

172 100

171 36.8 29.4 44.2

170 24.2 19.4 29.0



#16

Acenaphthylene

Concen: 0.384 ng

RT: 14.067 min Scan# 1418

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

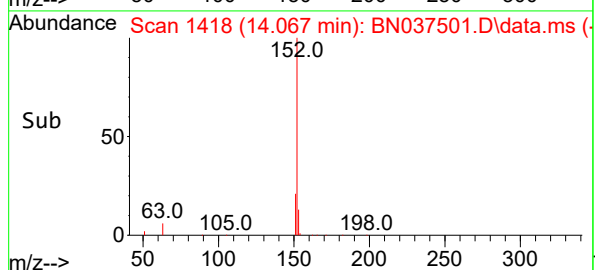
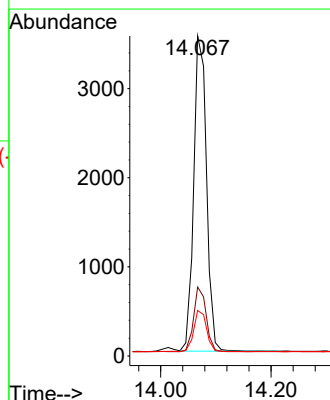
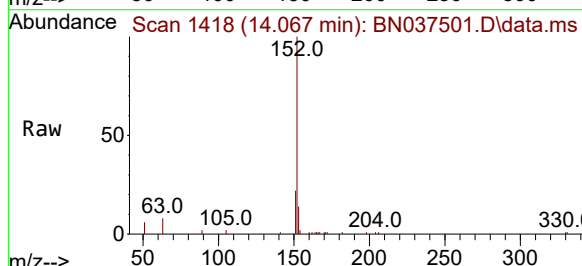
Tgt Ion:152 Resp: 5722

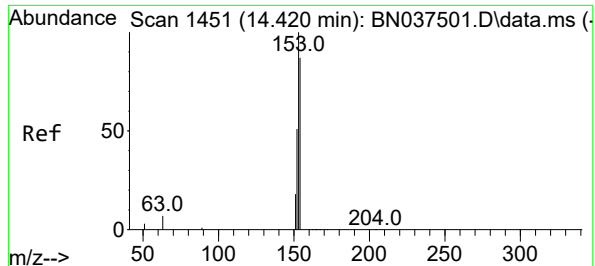
Ion Ratio Lower Upper

152 100

151 19.9 15.9 23.9

153 13.4 10.7 16.1

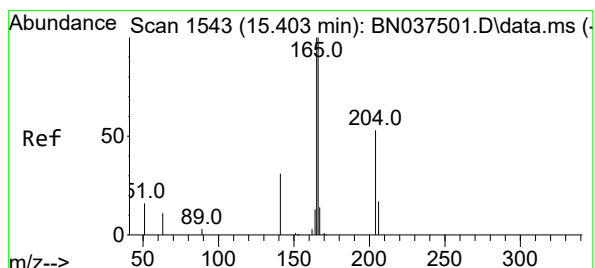
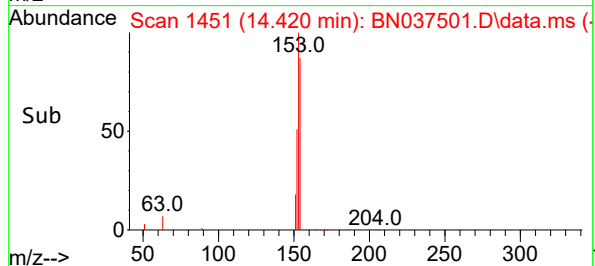
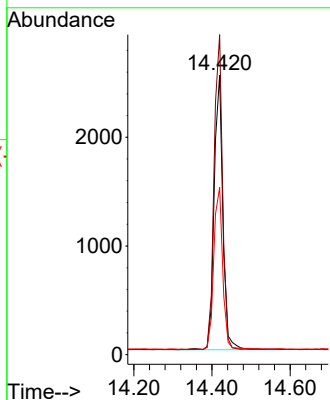
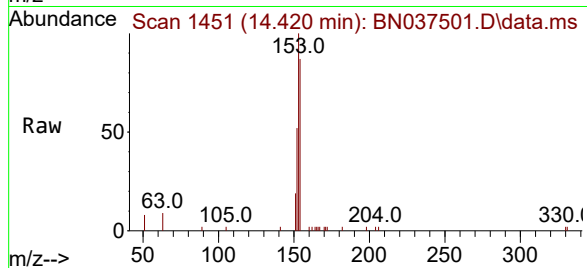




#17  
Acenaphthene  
Concen: 0.385 ng  
RT: 14.420 min Scan# 1451  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

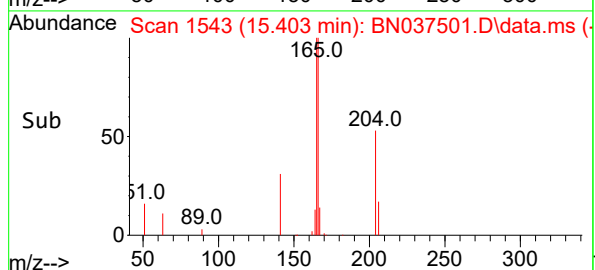
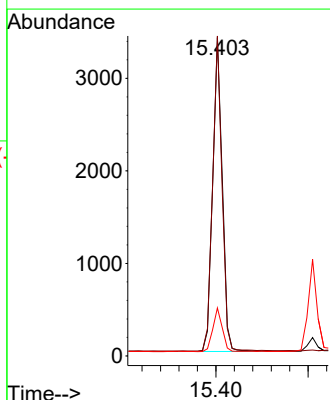
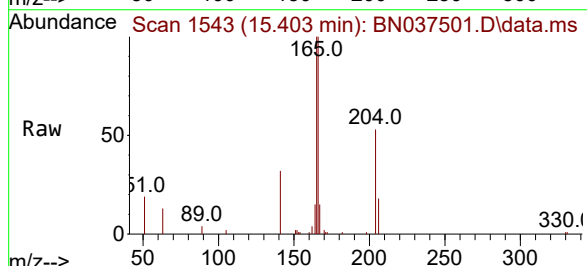
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

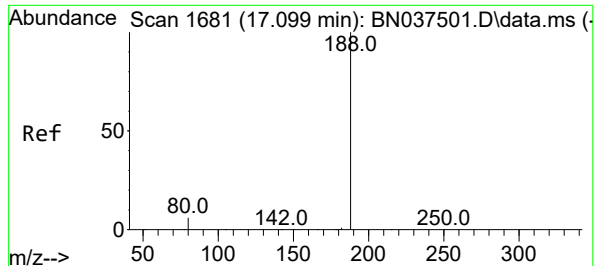
Tgt Ion:154 Resp: 3900  
Ion Ratio Lower Upper  
154 100  
153 111.5 89.2 133.8  
152 60.0 48.0 72.0



#18  
Fluorene  
Concen: 0.379 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:166 Resp: 4943  
Ion Ratio Lower Upper  
166 100  
165 97.6 78.1 117.1  
167 13.8 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

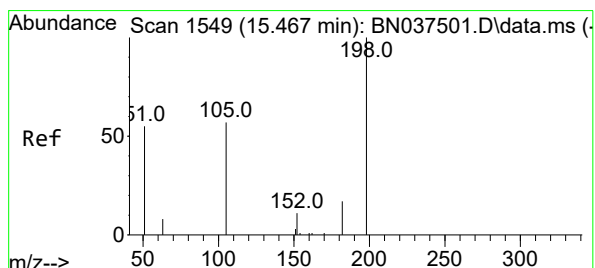
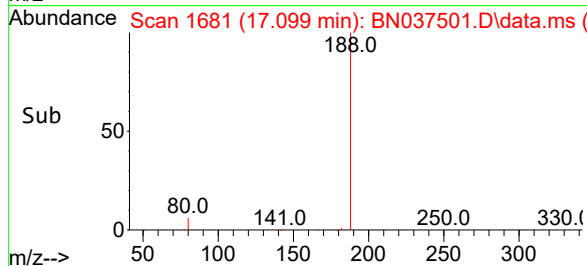
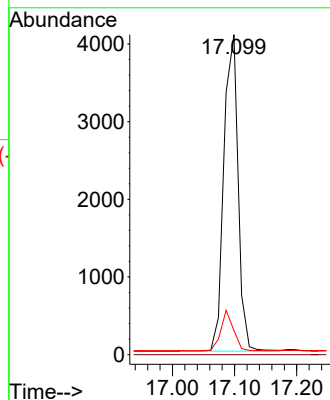
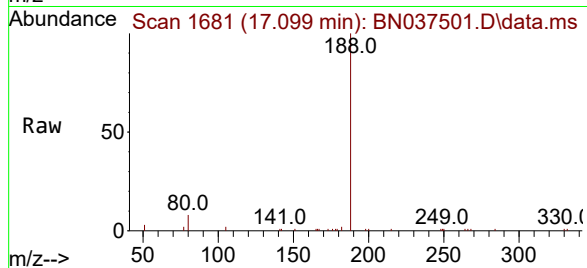
Tgt Ion:188 Resp: 6474

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.5 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 0.396 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

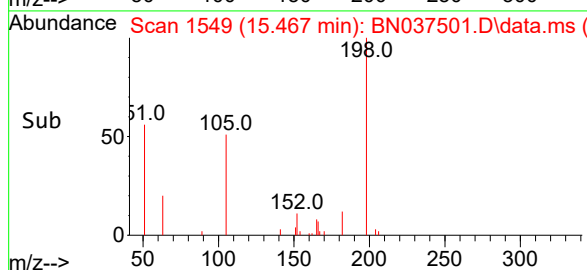
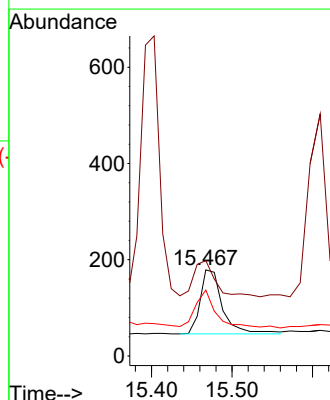
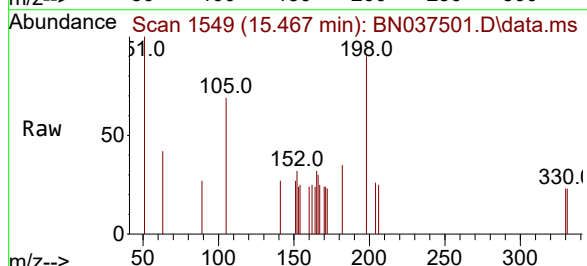
Tgt Ion:198 Resp: 268

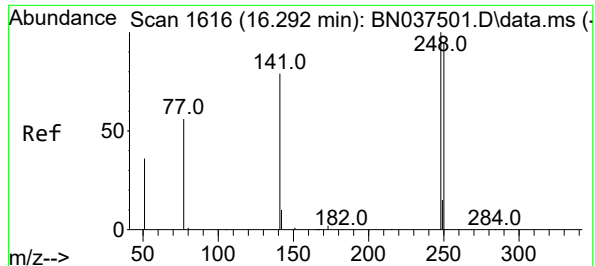
Ion Ratio Lower Upper

198 100

51 110.6 88.5 132.7

105 76.5 61.2 91.8

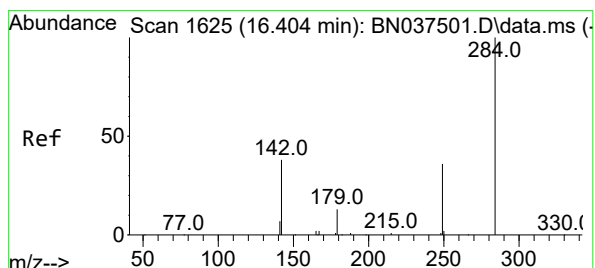
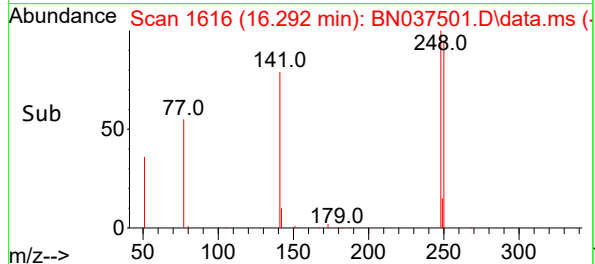
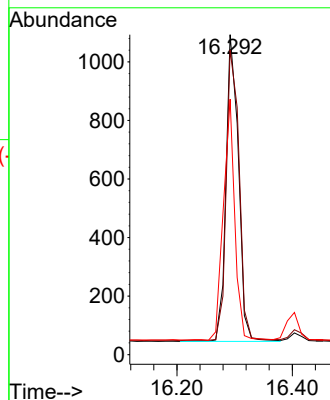
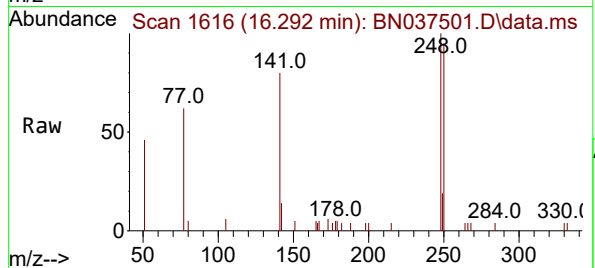




#21  
4-Bromophenyl-phenylether  
Concen: 0.379 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

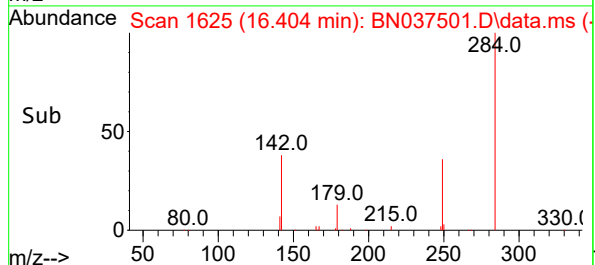
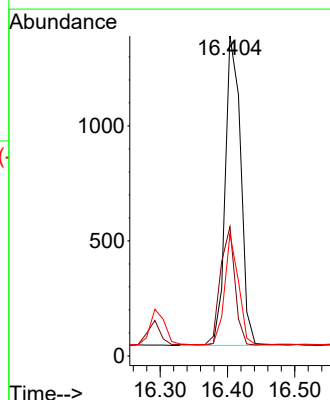
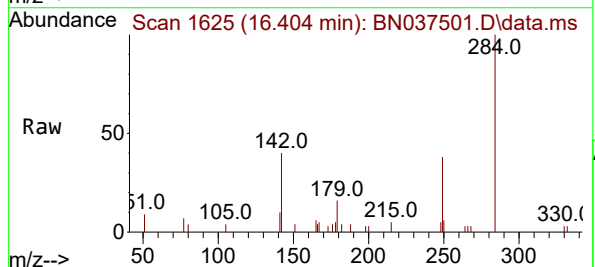
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

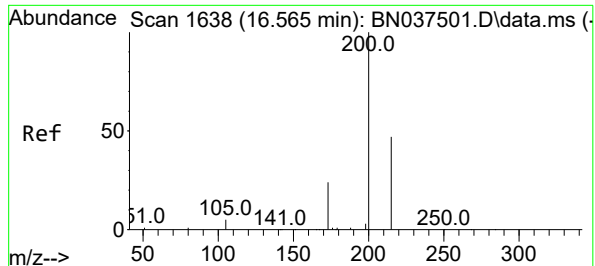
Tgt Ion:248 Resp: 1574  
Ion Ratio Lower Upper  
248 100  
250 95.2 76.2 114.2  
141 79.9 63.9 95.9



#22  
Hexachlorobenzene  
Concen: 0.397 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:284 Resp: 2126  
Ion Ratio Lower Upper  
284 100  
142 36.1 28.9 43.3  
249 32.2 25.8 38.6





#23

Atrazine

Concen: 0.355 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

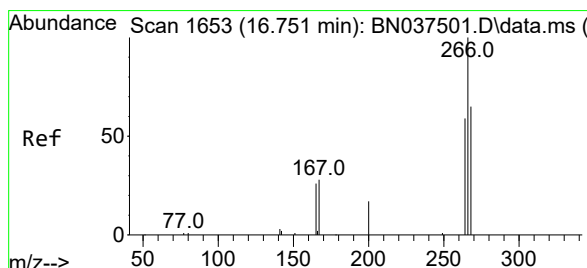
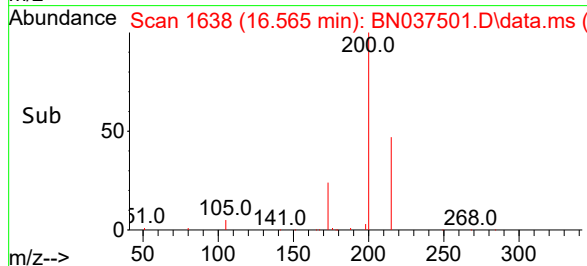
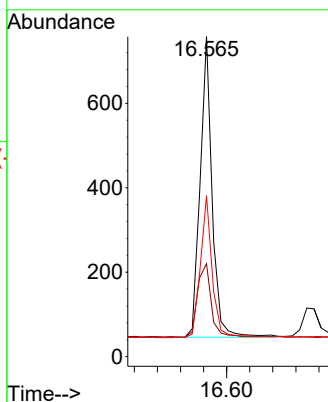
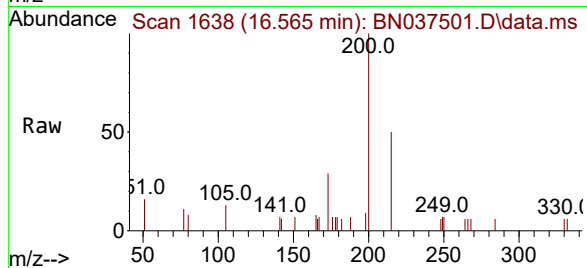
Tgt Ion:200 Resp: 1027

Ion Ratio Lower Upper

200 100

173 29.0 23.2 34.8

215 50.3 40.2 60.4



#24

Pentachlorophenol

Concen: 0.338 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

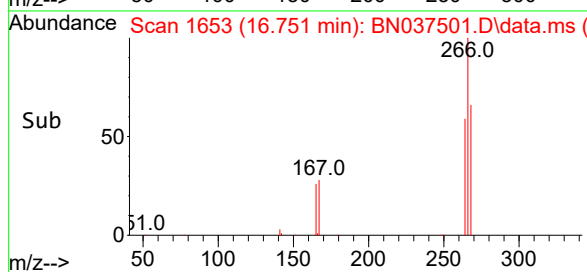
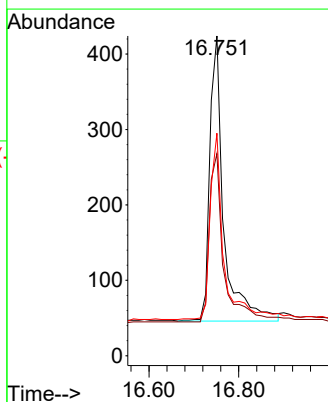
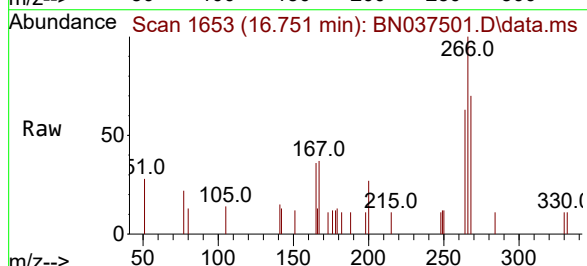
Tgt Ion:266 Resp: 812

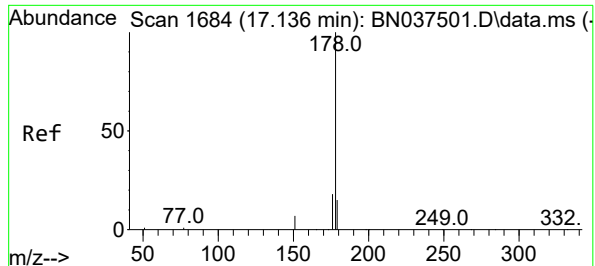
Ion Ratio Lower Upper

266 100

264 61.6 49.3 73.9

268 64.5 51.6 77.4





#25

Phenanthrene

Concen: 0.387 ng

RT: 17.136 min Scan# 1684

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

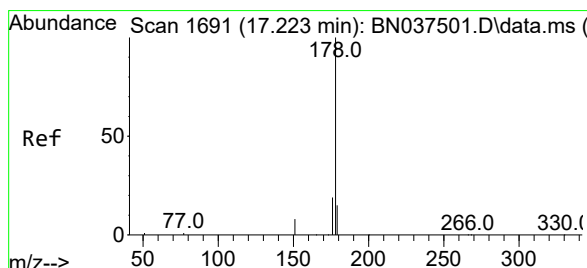
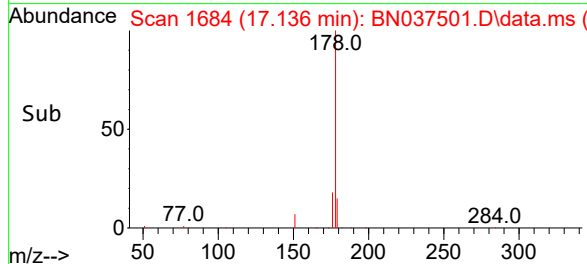
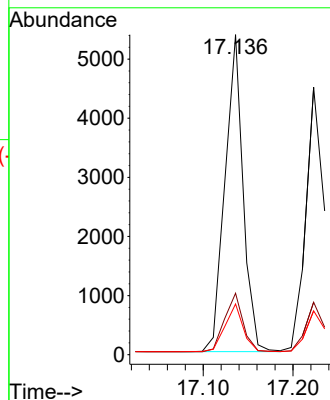
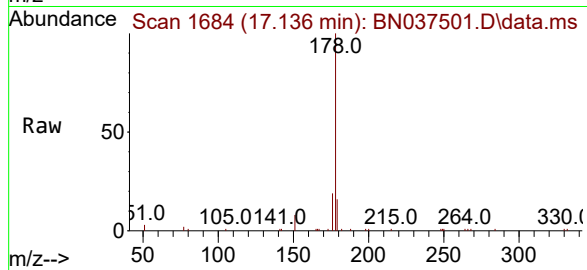
Tgt Ion:178 Resp: 7511

Ion Ratio Lower Upper

178 100

176 18.8 15.0 22.6

179 15.2 12.2 18.2



#26

Anthracene

Concen: 0.370 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

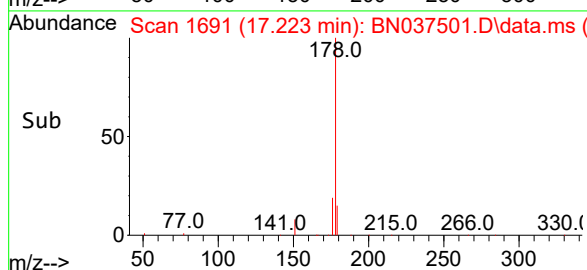
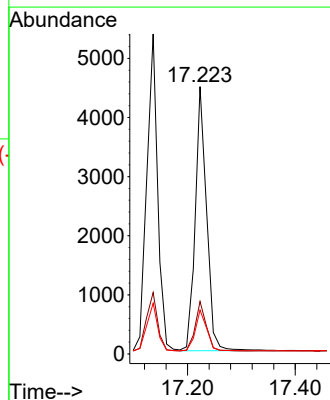
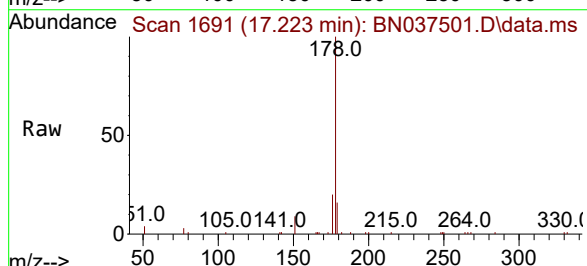
Tgt Ion:178 Resp: 6557

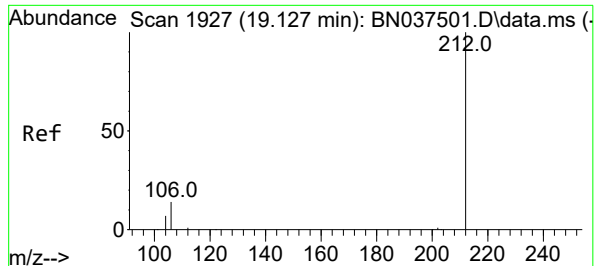
Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

179 15.4 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.363 ng

RT: 19.127 min Scan# 1927

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

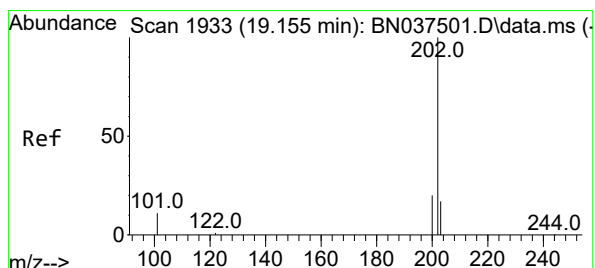
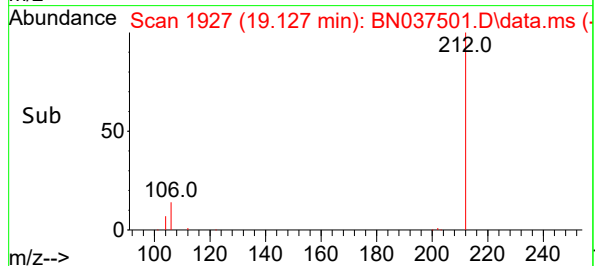
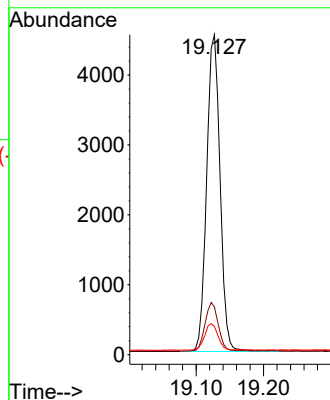
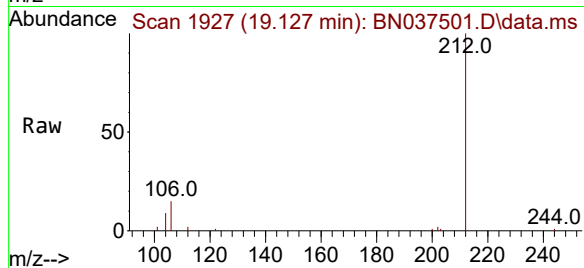
Tgt Ion:212 Resp: 6230

Ion Ratio Lower Upper

212 100

106 15.3 12.2 18.4

104 8.4 6.7 10.1



#28

Fluoranthene

Concen: 0.373 ng

RT: 19.155 min Scan# 1933

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

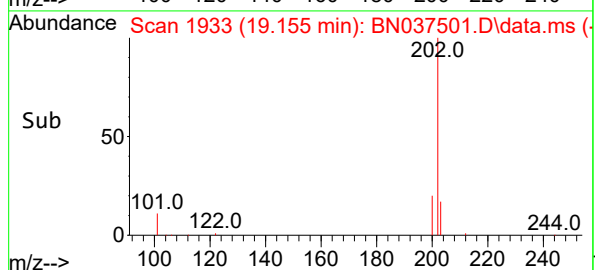
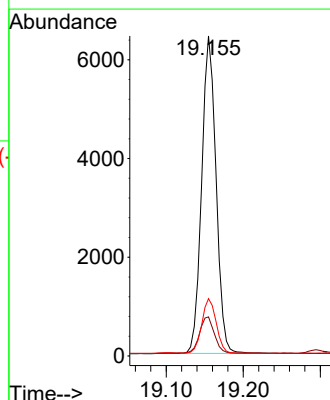
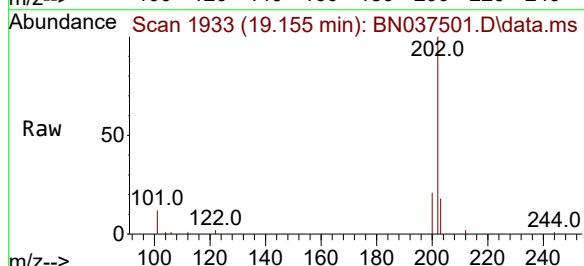
Tgt Ion:202 Resp: 8352

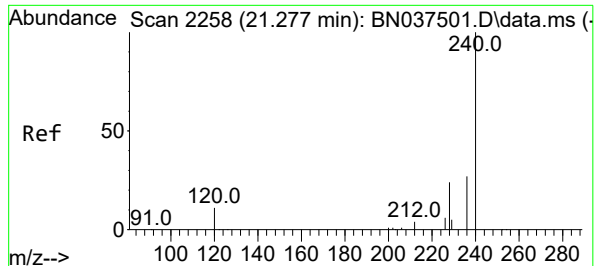
Ion Ratio Lower Upper

202 100

101 12.2 9.8 14.6

203 17.0 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

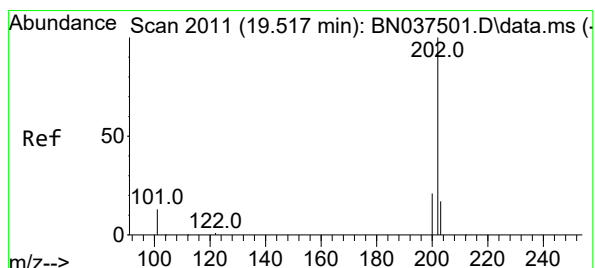
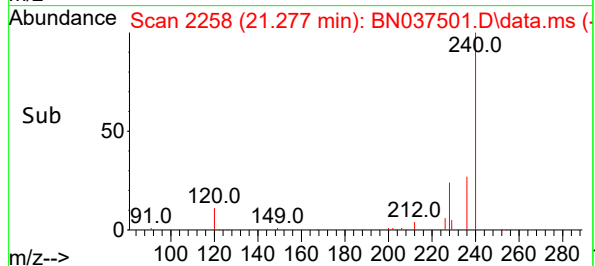
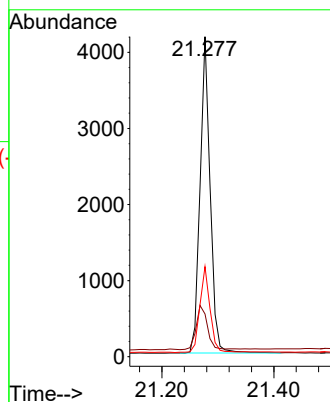
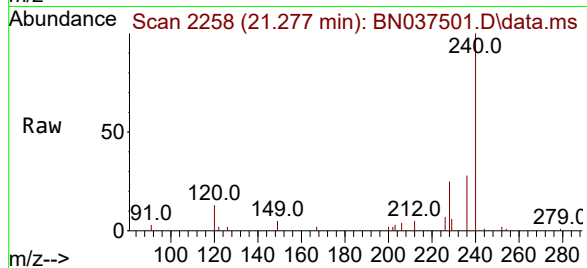
Tgt Ion:240 Resp: 5210

Ion Ratio Lower Upper

240 100

120 13.4 10.7 16.1

236 28.2 22.6 33.8



#30

Pyrene

Concen: 0.399 ng

RT: 19.517 min Scan# 2011

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

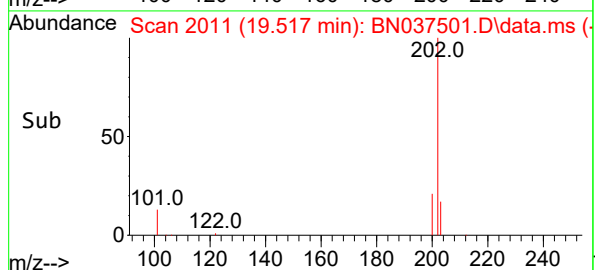
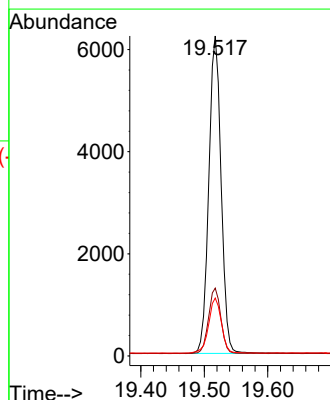
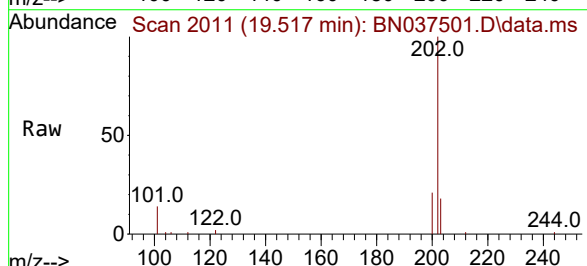
Tgt Ion:202 Resp: 8375

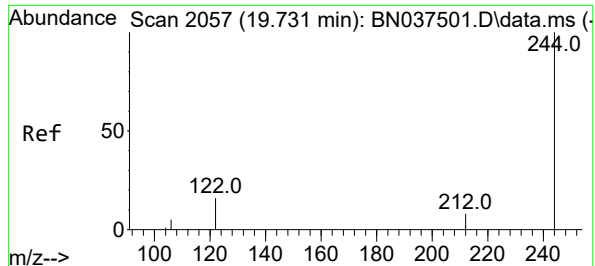
Ion Ratio Lower Upper

202 100

200 20.6 16.5 24.7

203 17.9 14.3 21.5

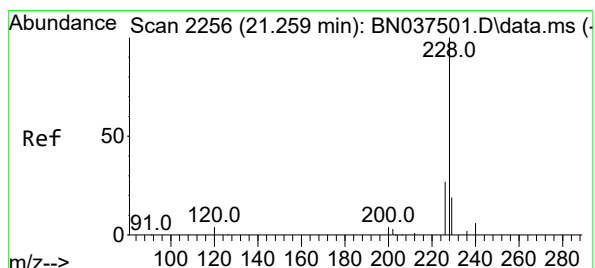
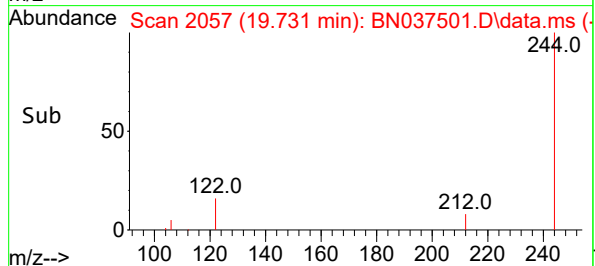
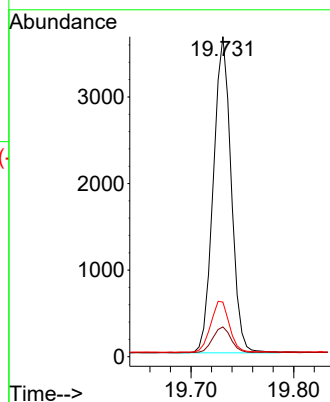
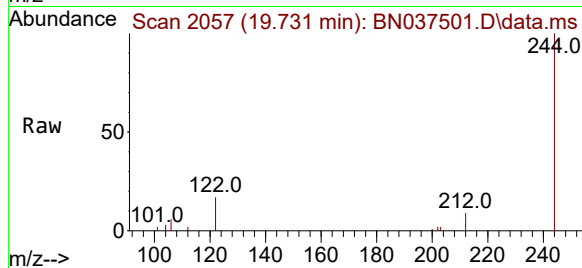




#31  
Terphenyl-d14  
Concen: 0.393 ng  
RT: 19.731 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

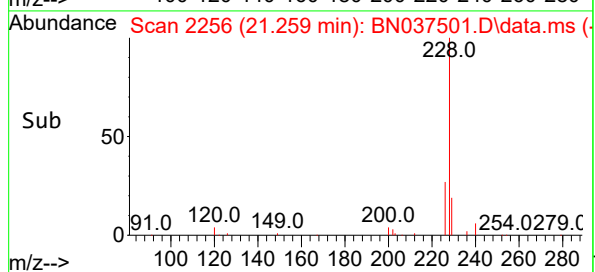
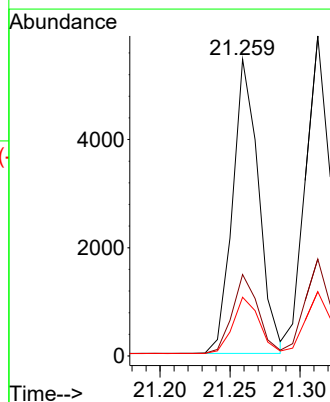
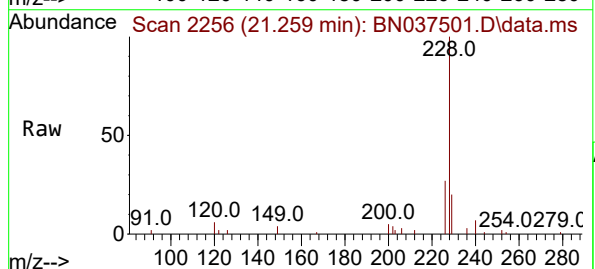
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

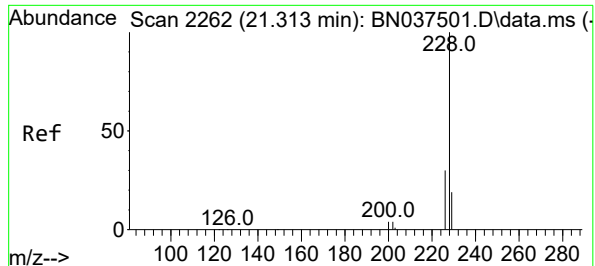
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 9.3   | 7.4   | 11.2  |
| 122     | 17.0  | 13.6  | 20.4  |



#32  
Benzo(a)anthracene  
Concen: 0.383 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.4  | 21.9  | 32.9  |
| 229     | 19.8  | 15.8  | 23.8  |





#33

Chrysene

Concen: 0.393 ng

RT: 21.313 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

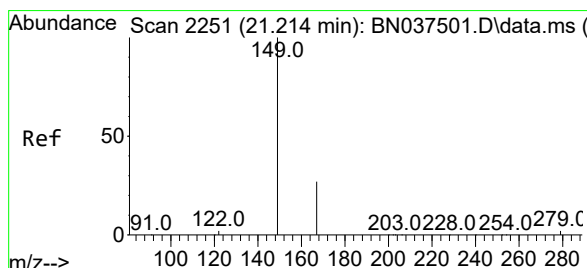
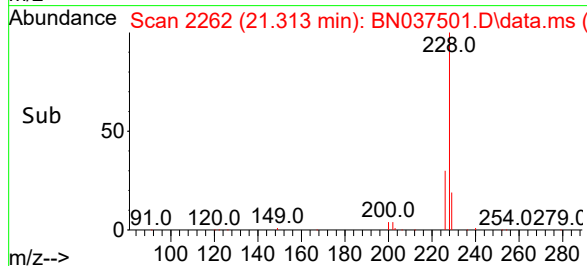
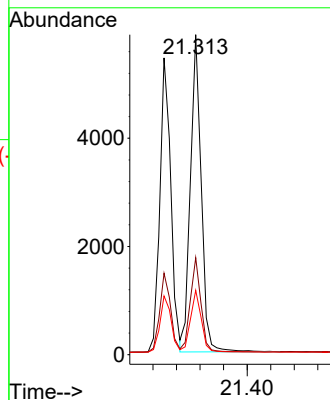
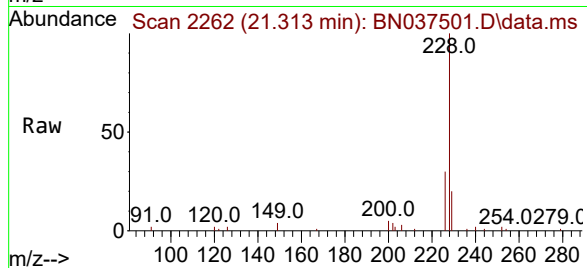
Tgt Ion:228 Resp: 7472

Ion Ratio Lower Upper

228 100

226 30.3 24.2 36.4

229 20.1 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.358 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

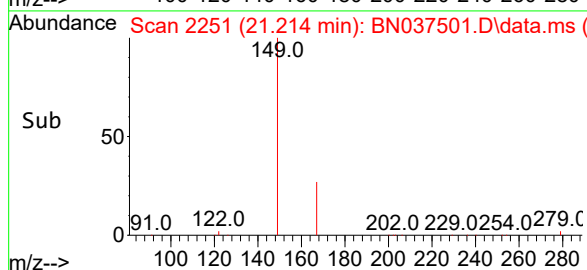
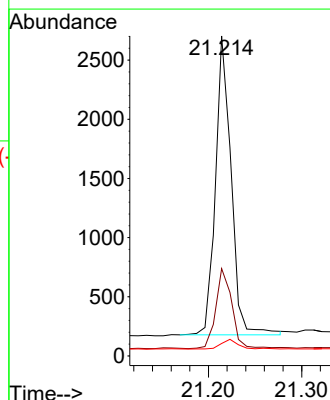
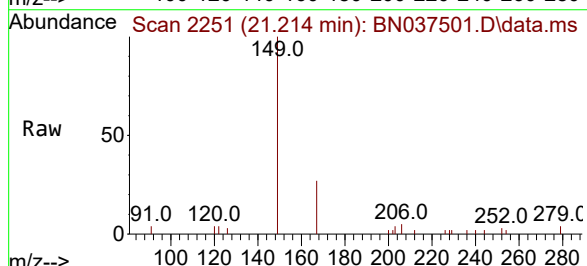
Tgt Ion:149 Resp: 2941

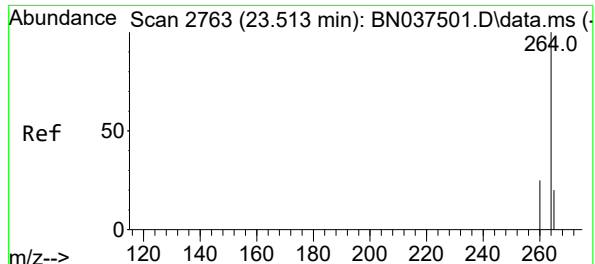
Ion Ratio Lower Upper

149 100

167 27.3 21.8 32.8

279 3.7 3.0 4.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.513 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

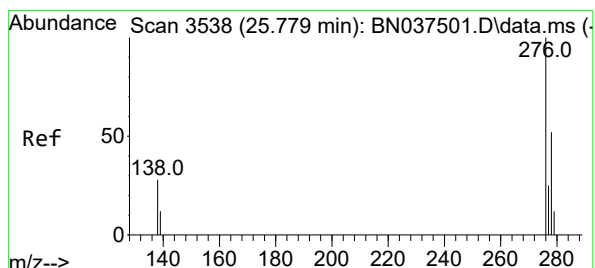
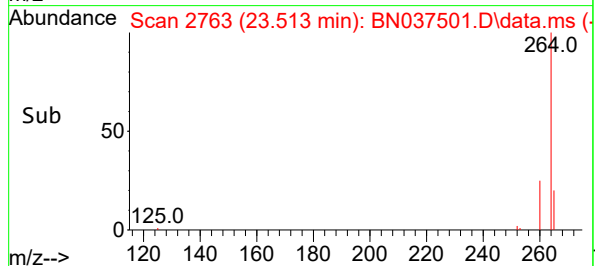
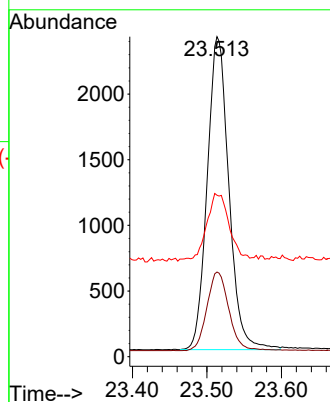
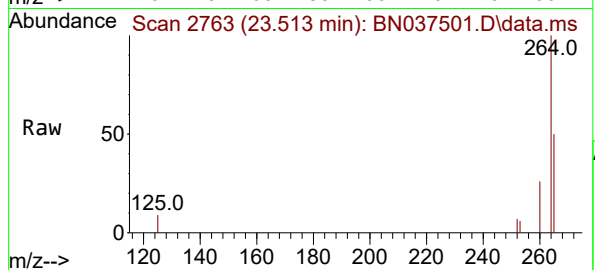
Tgt Ion:264 Resp: 4807

Ion Ratio Lower Upper

264 100

260 26.5 21.2 31.8

265 50.5 40.4 60.6



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.364 ng

RT: 25.779 min Scan# 3538

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

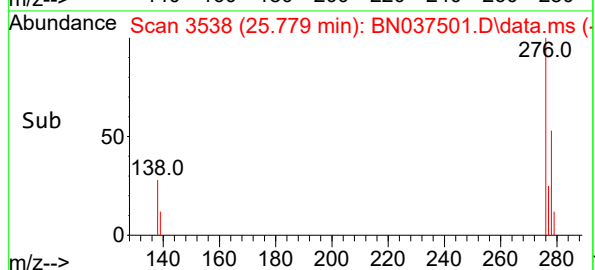
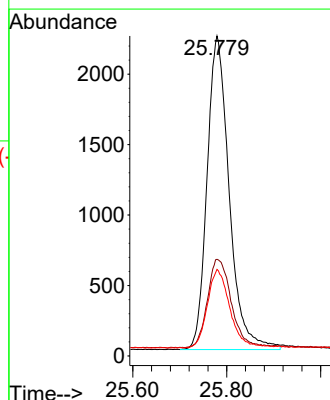
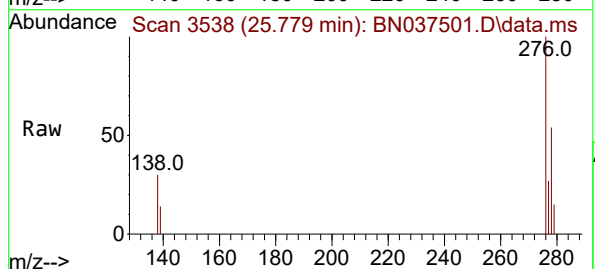
Tgt Ion:276 Resp: 7280

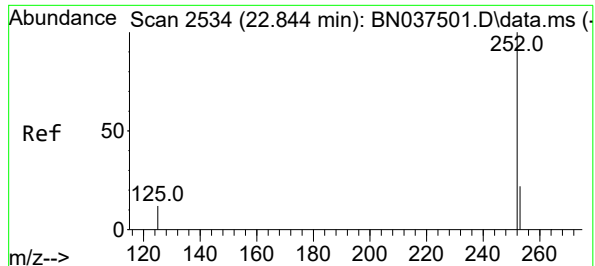
Ion Ratio Lower Upper

276 100

138 30.0 24.0 36.0

277 25.6 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.383 ng

RT: 22.844 min Scan# 2534

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

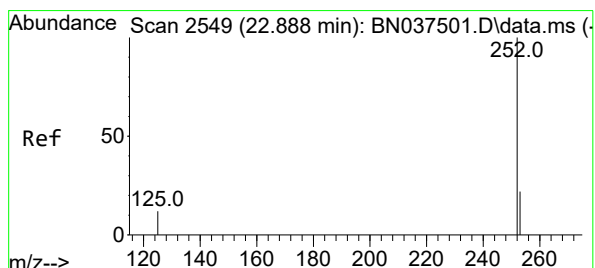
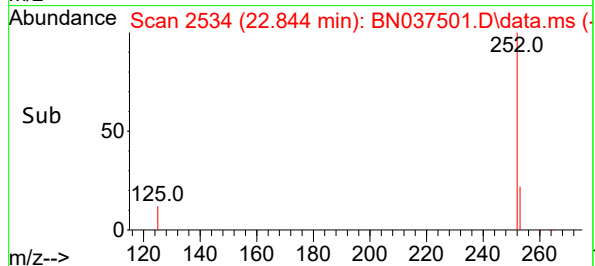
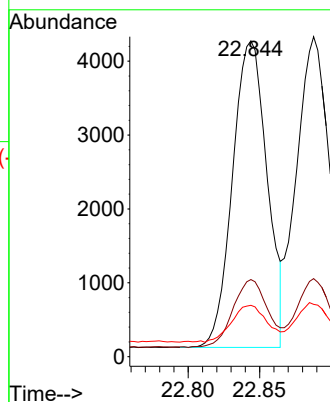
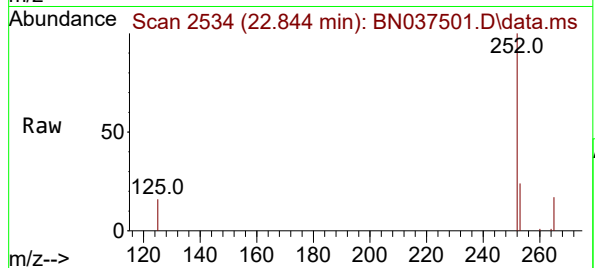
Tgt Ion:252 Resp: 6988

Ion Ratio Lower Upper

252 100

253 24.4 19.5 29.3

125 16.3 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.379 ng

RT: 22.888 min Scan# 2549

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

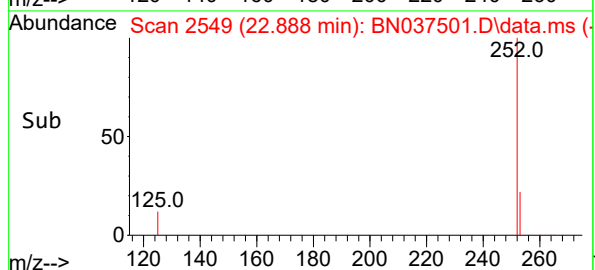
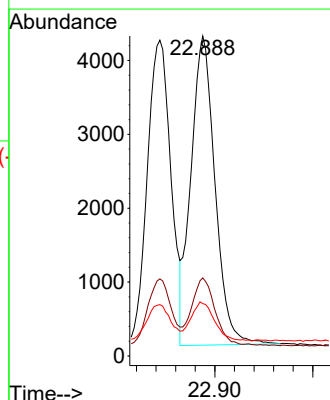
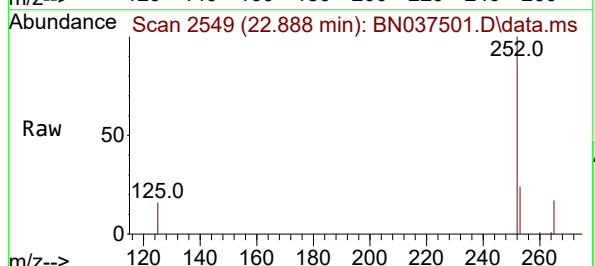
Tgt Ion:252 Resp: 7143

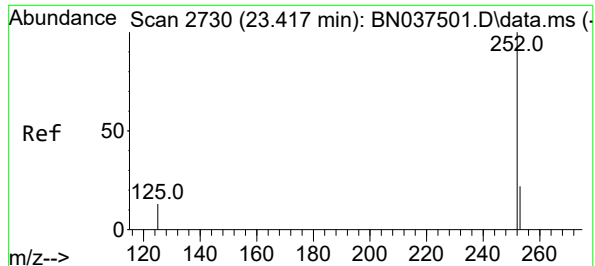
Ion Ratio Lower Upper

252 100

253 24.4 19.5 29.3

125 16.4 13.1 19.7





#39

Benzo(a)pyrene

Concen: 0.376 ng

RT: 23.417 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

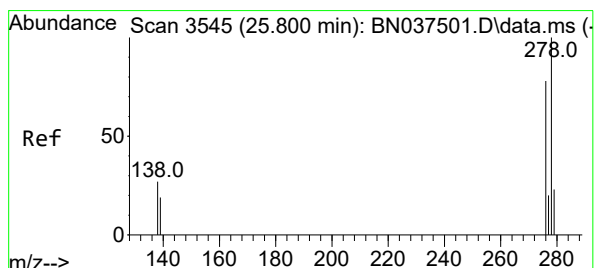
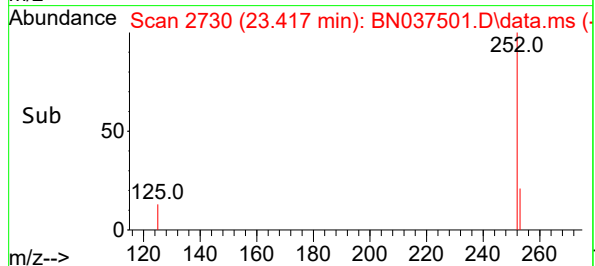
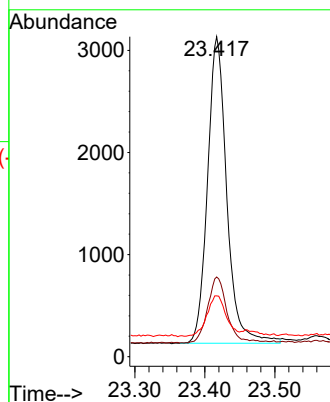
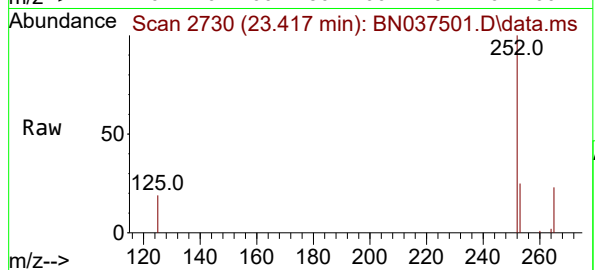
Tgt Ion:252 Resp: 5731

Ion Ratio Lower Upper

252 100

253 24.9 19.9 29.9

125 19.0 15.2 22.8



#40

Dibenzo(a,h)anthracene

Concen: 0.360 ng

RT: 25.800 min Scan# 3545

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

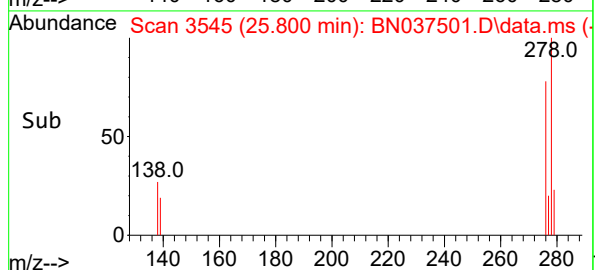
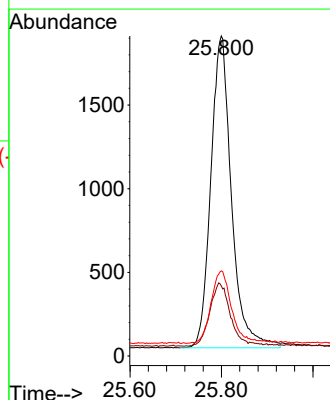
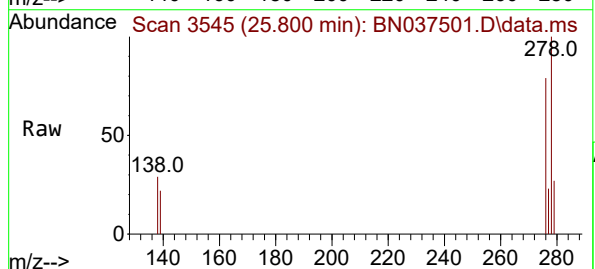
Tgt Ion:278 Resp: 5845

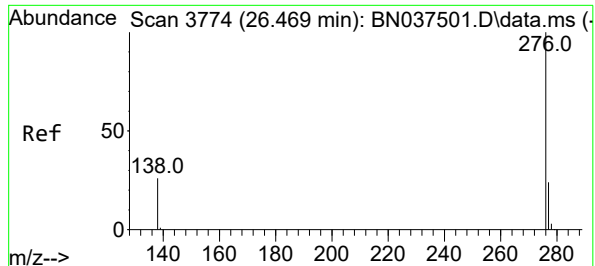
Ion Ratio Lower Upper

278 100

139 21.9 17.5 26.3

279 26.6 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 0.375 ng

RT: 26.469 min Scan# 31

Delta R.T. 0.000 min

Lab File: BN037501.D

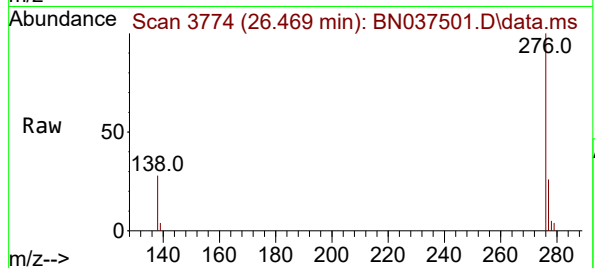
Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4



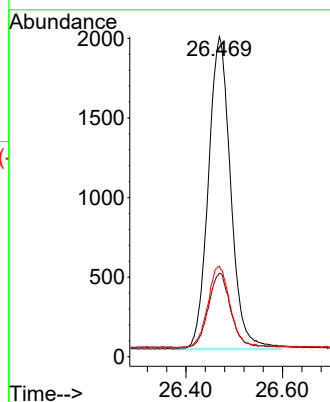
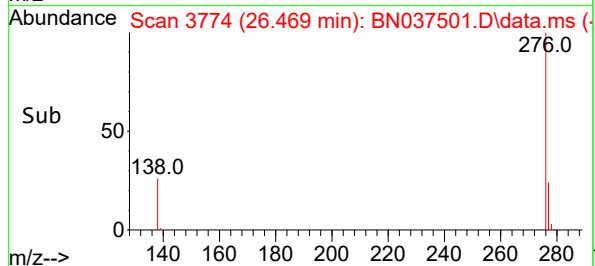
Tgt Ion:276 Resp: 6293

Ion Ratio Lower Upper

276 100

277 26.1 20.9 31.3

138 28.2 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037502.D  
 Acq On : 15 Jul 2025 14:25  
 Operator : RC/JU  
 Sample : SSTDICC0.8  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.8

Quant Time: Jul 15 17:27:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

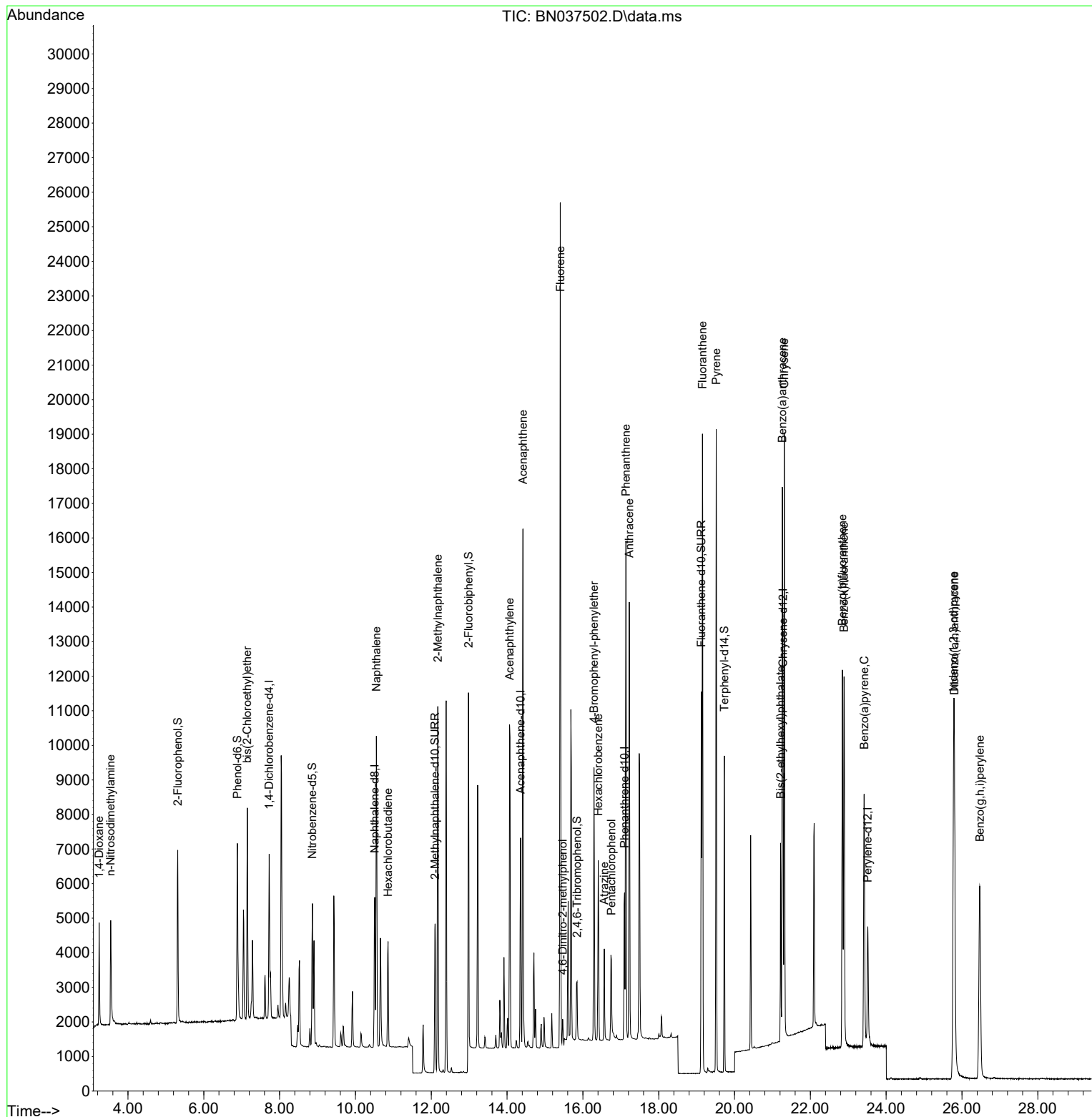
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2213     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5743     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.355 | 164  | 3273     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.099 | 188  | 6314     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.277 | 240  | 5167     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.516 | 264  | 4636     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 4020     | 0.735 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.887  | 99   | 4891     | 0.713 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.865  | 82   | 3103     | 0.723 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 5995     | 0.728 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 1155     | 0.718 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 13250    | 0.778 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.127 | 212  | 11723    | 0.701 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.731 | 244  | 8376     | 0.754 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.239  | 88   | 1641     | 0.771 | ng    | 98       |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 2056     | 0.768 | ng    | # 94     |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 4350     | 0.761 | ng    | 99       |
| 9) Naphthalene                | 10.552 | 128  | 11585    | 0.756 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.861 | 225  | 2561     | 0.757 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 7636     | 0.758 | ng    | 99       |
| 16) Acenaphthylene            | 14.067 | 152  | 11025    | 0.752 | ng    | 99       |
| 17) Acenaphthene              | 14.420 | 154  | 7528     | 0.755 | ng    | 100      |
| 18) Fluorene                  | 15.403 | 166  | 9729     | 0.758 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 589      | 0.750 | ng    | # 78     |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 3053     | 0.755 | ng    | 96       |
| 22) Hexachlorobenzene         | 16.404 | 284  | 4049     | 0.775 | ng    | 100      |
| 23) Atrazine                  | 16.565 | 200  | 1994     | 0.706 | ng    | 97       |
| 24) Pentachlorophenol         | 16.751 | 266  | 1588     | 0.677 | ng    | 98       |
| 25) Phenanthrene              | 17.136 | 178  | 14261    | 0.754 | ng    | 100      |
| 26) Anthracene                | 17.223 | 178  | 12919    | 0.748 | ng    | 99       |
| 28) Fluoranthene              | 19.155 | 202  | 16043    | 0.735 | ng    | 99       |
| 30) Pyrene                    | 19.517 | 202  | 16008    | 0.769 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 13280    | 0.734 | ng    | 99       |
| 33) Chrysene                  | 21.313 | 228  | 14034    | 0.745 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 5562     | 0.683 | ng    | 98       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.779 | 276  | 14458    | 0.749 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.844 | 252  | 13315    | 0.757 | ng    | 96       |
| 38) Benzo(k)fluoranthene      | 22.888 | 252  | 13634    | 0.751 | ng    | 97       |
| 39) Benzo(a)pyrene            | 23.420 | 252  | 10903    | 0.743 | ng    | 96       |
| 40) Dibenzo(a,h)anthracene    | 25.800 | 278  | 11648    | 0.745 | ng    | 97       |
| 41) Benzo(g,h,i)perylene      | 26.472 | 276  | 12022    | 0.743 | ng    | 97       |

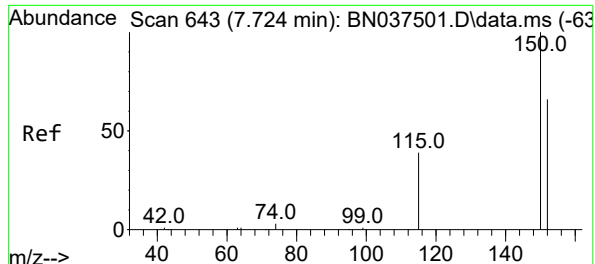
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037502.D  
Acq On : 15 Jul 2025 14:25  
Operator : RC/JU  
Sample : SSTDIC0.8  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDIC0.8

Quant Time: Jul 15 17:27:05 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 16:45:15 2025  
Response via : Initial Calibration

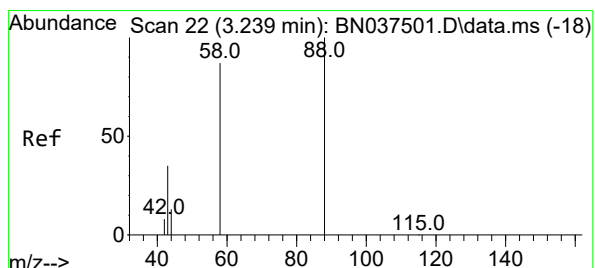
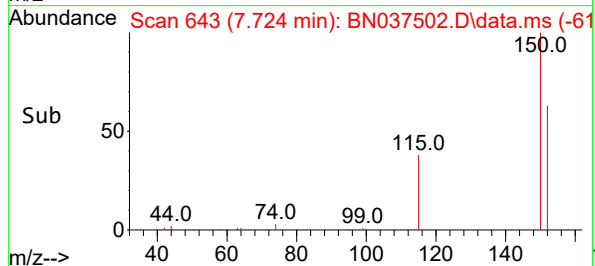
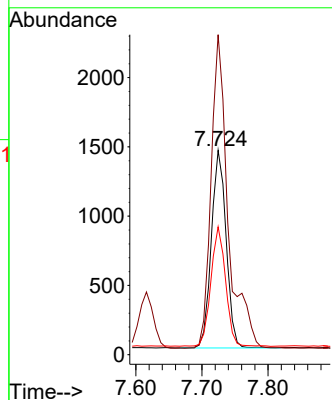
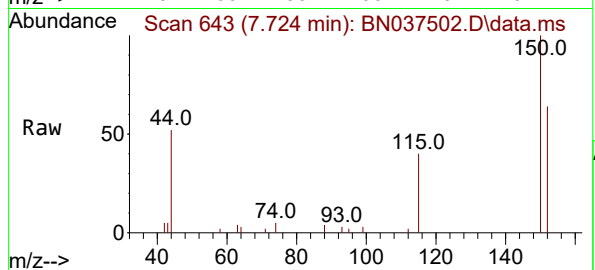




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

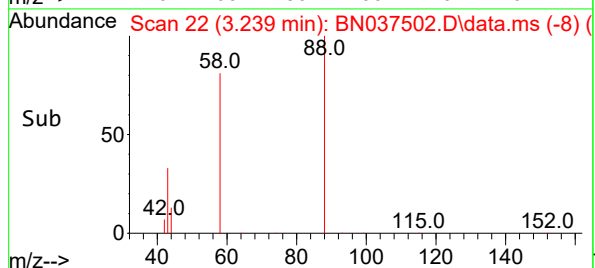
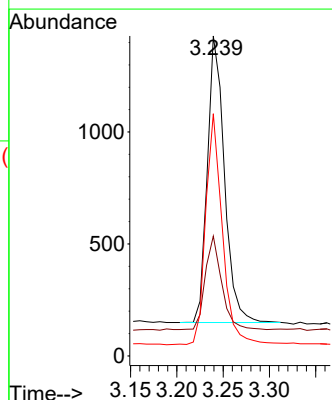
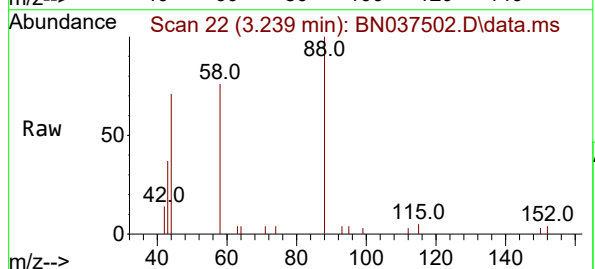
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

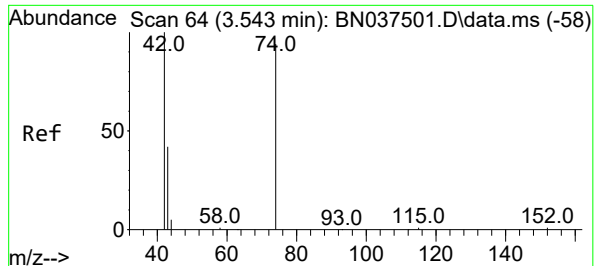
Tgt Ion:152 Resp: 2213  
Ion Ratio Lower Upper  
152 100  
150 156.6 119.8 179.8  
115 62.6 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.771 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion: 88 Resp: 1641  
Ion Ratio Lower Upper  
88 100  
43 31.3 27.5 41.3  
58 79.0 62.7 94.1

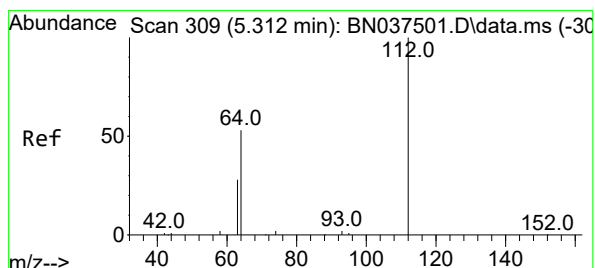
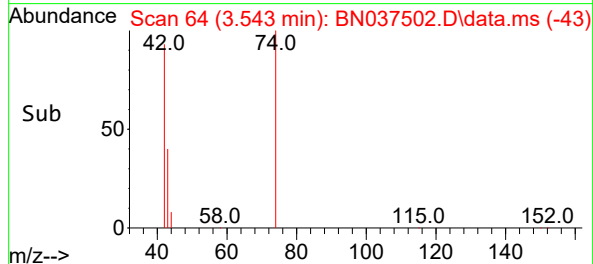
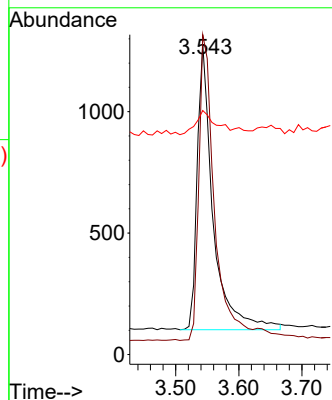
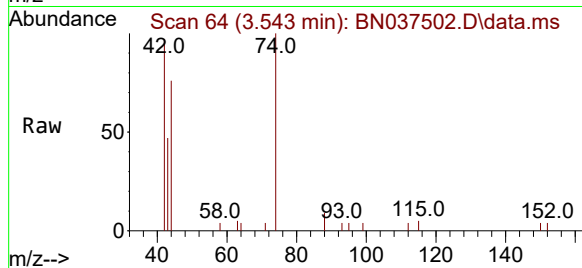




#3  
n-Nitrosodimethylamine  
Concen: 0.768 ng  
RT: 3.543 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

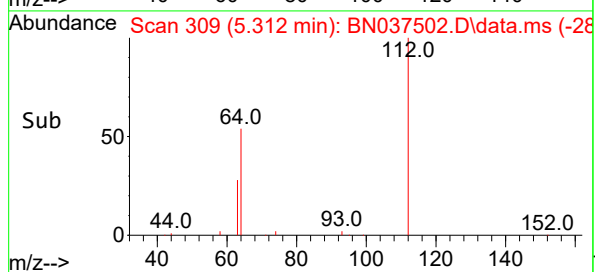
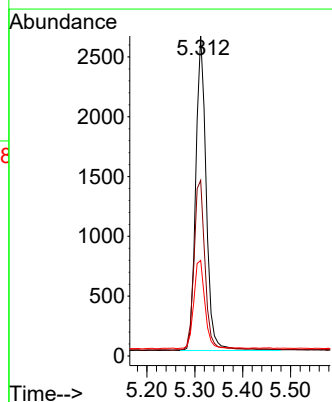
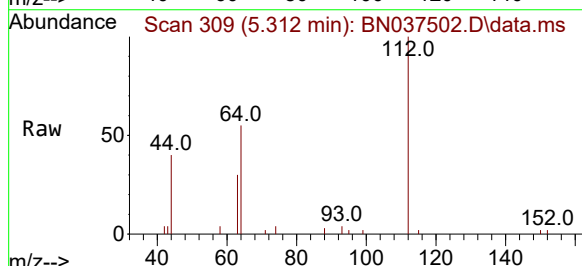
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

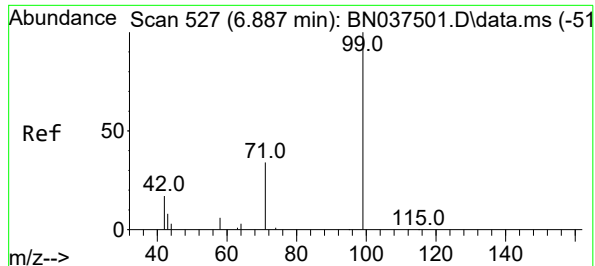
Tgt Ion: 42 Resp: 2056  
Ion Ratio Lower Upper  
42 100  
74 110.1 91.8 137.6  
44 12.3 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.735 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion: 112 Resp: 4020  
Ion Ratio Lower Upper  
112 100  
64 57.3 45.1 67.7  
63 29.7 23.8 35.8

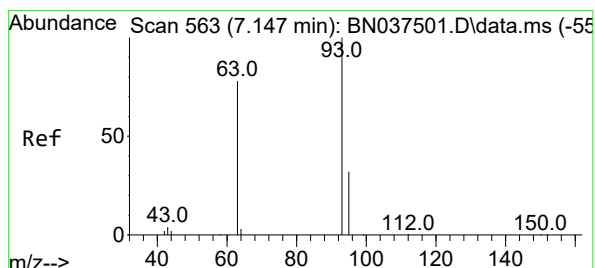
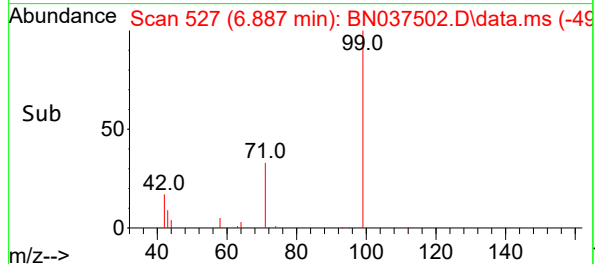
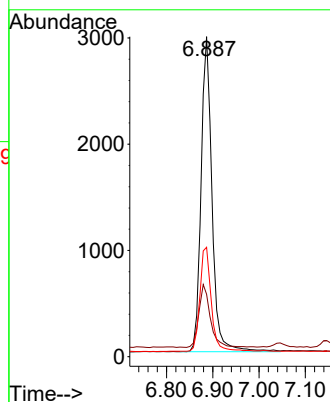
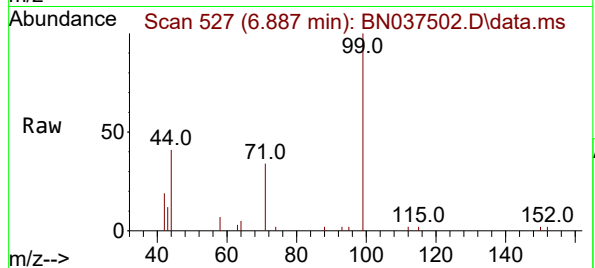




#5  
Phenol-d6  
Concen: 0.713 ng  
RT: 6.887 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

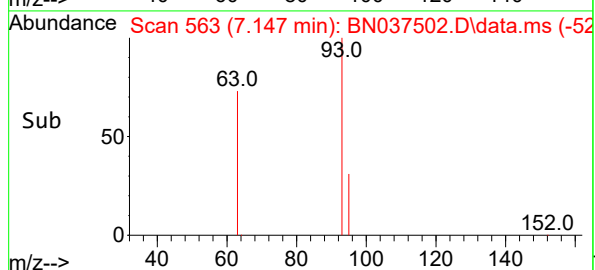
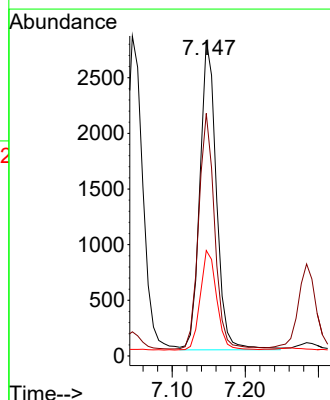
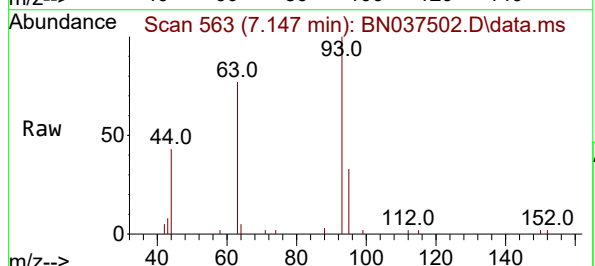
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

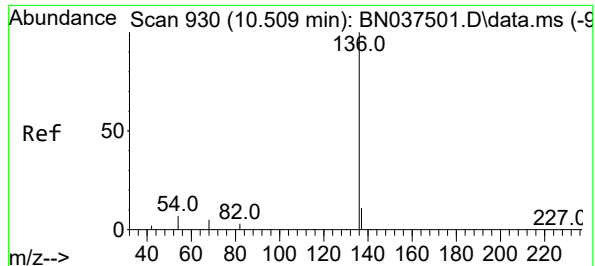
Tgt Ion: 99 Resp: 4891  
Ion Ratio Lower Upper  
99 100  
42 20.9 17.1 25.7  
71 34.1 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 0.761 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion: 93 Resp: 4350  
Ion Ratio Lower Upper  
93 100  
63 73.6 58.2 87.4  
95 32.3 25.3 37.9

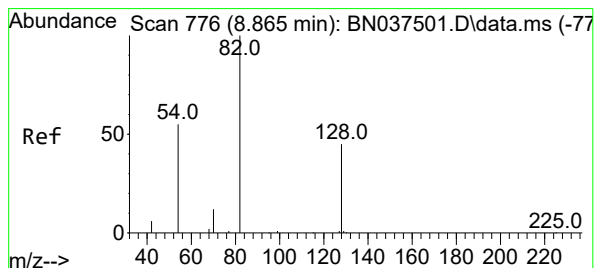
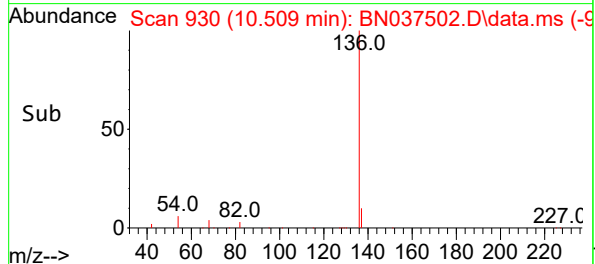
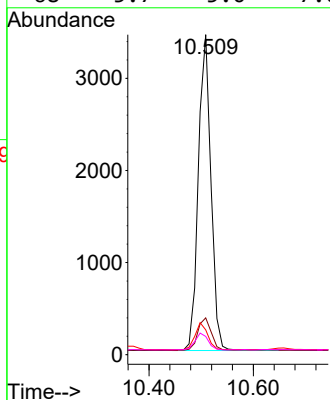
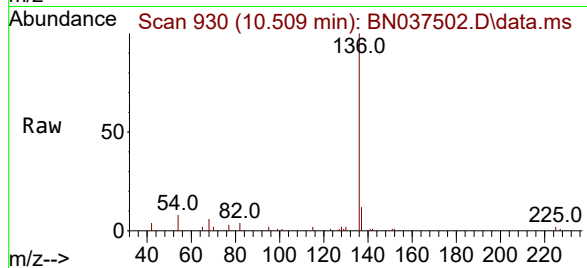




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

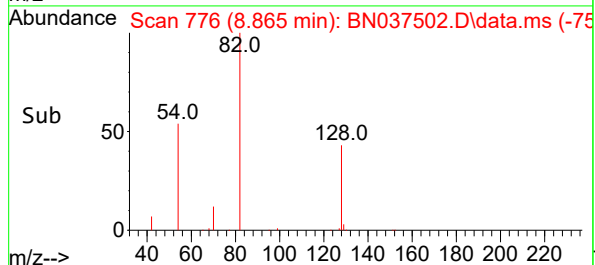
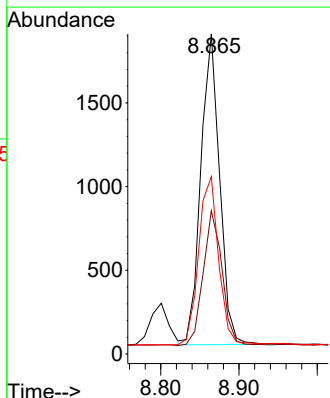
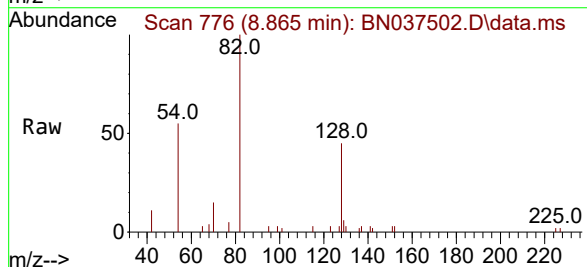
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

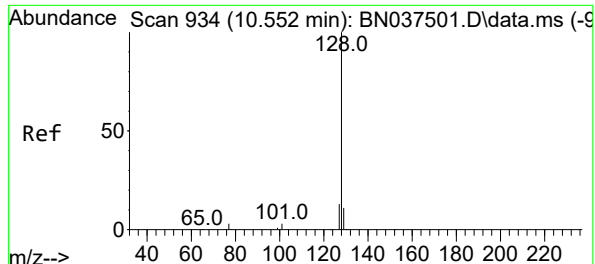
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5743  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.5  | 9.8   | 14.8  |
| 54       | 7.7   | 6.6   | 9.8   |
| 68       | 5.7   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 0.723 ng  
RT: 8.865 min Scan# 776  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 3103  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 44.8  | 37.5  | 56.3  |
| 54       | 55.4  | 45.3  | 67.9  |





#9

Naphthalene

Concen: 0.756 ng

RT: 10.552 min Scan# 911

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

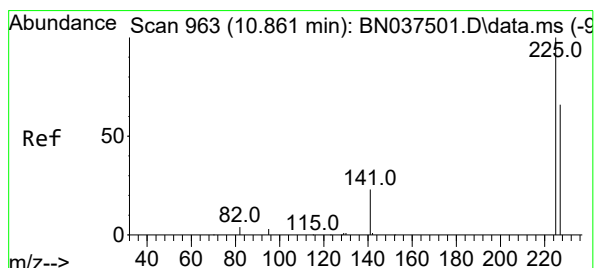
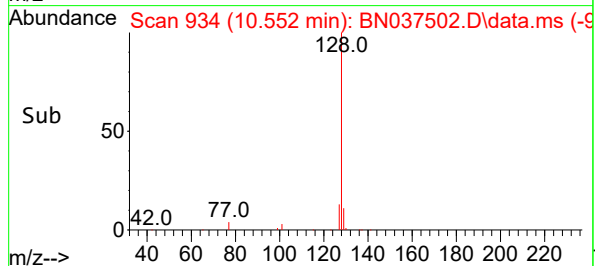
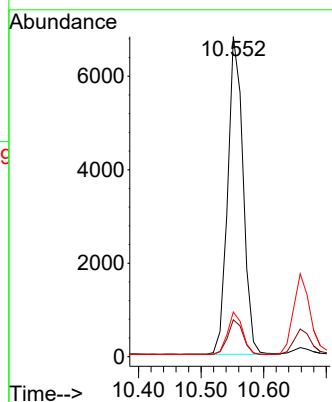
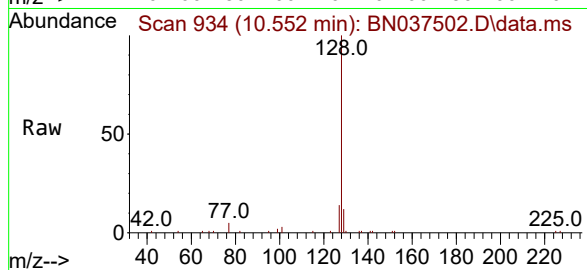
Tgt Ion:128 Resp: 11585

Ion Ratio Lower Upper

128 100

129 11.6 9.7 14.5

127 13.9 11.5 17.3



#10

Hexachlorobutadiene

Concen: 0.757 ng

RT: 10.861 min Scan# 963

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

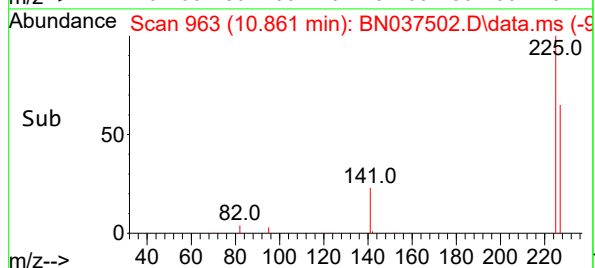
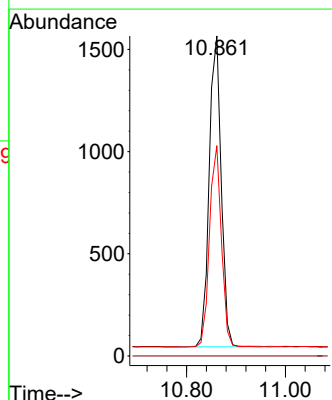
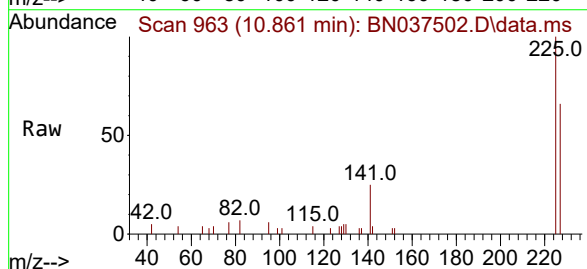
Tgt Ion:225 Resp: 2561

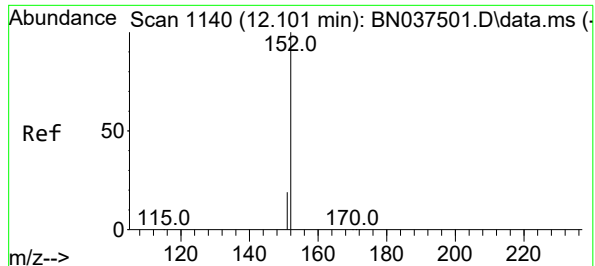
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.7 51.0 76.4

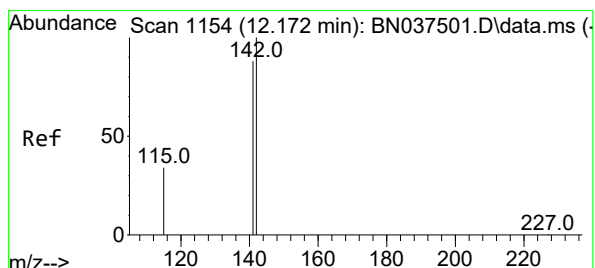
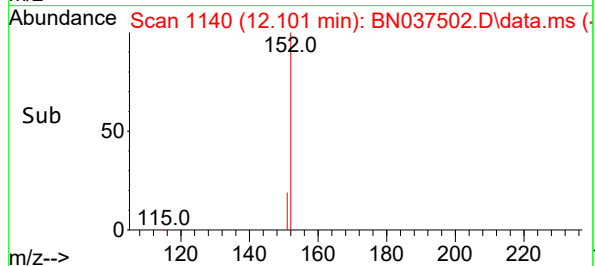
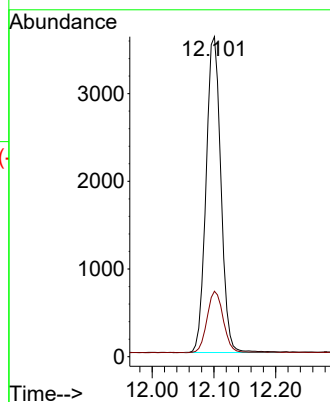
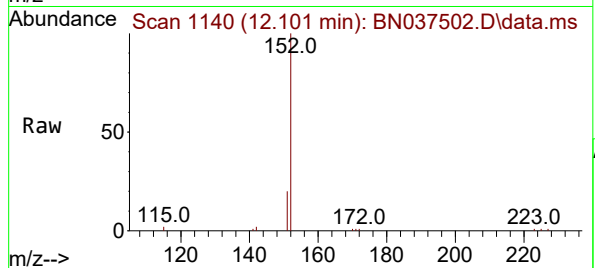




#11  
2-Methylnaphthalene-d10  
Concen: 0.728 ng  
RT: 12.101 min Scan# 1140  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

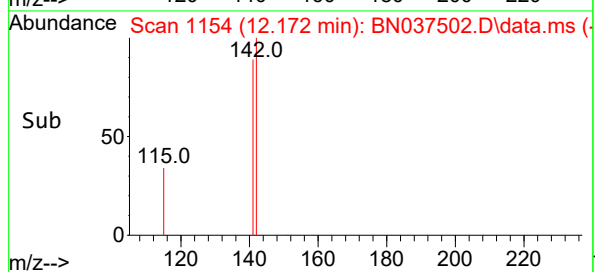
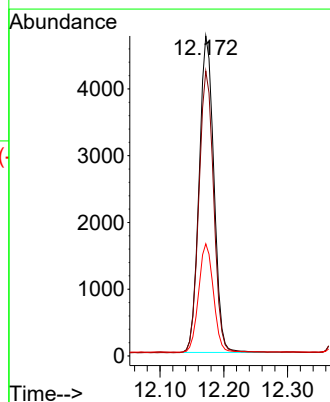
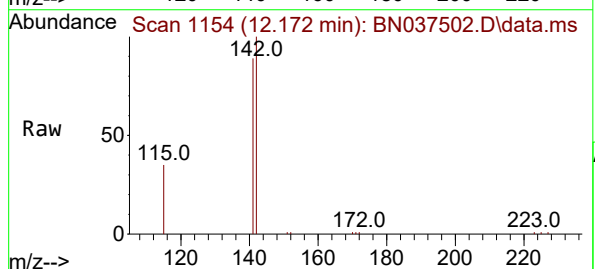
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDIC0.8

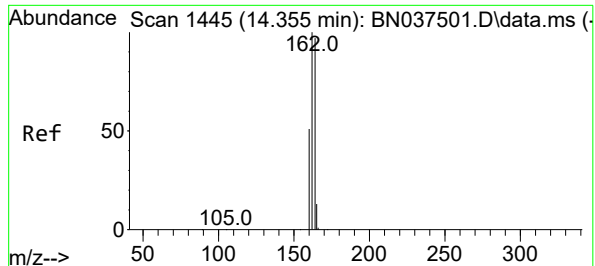
Tgt Ion:152 Resp: 5995  
Ion Ratio Lower Upper  
152 100  
151 21.3 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.758 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:142 Resp: 7636  
Ion Ratio Lower Upper  
142 100  
141 89.0 71.0 106.4  
115 35.1 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

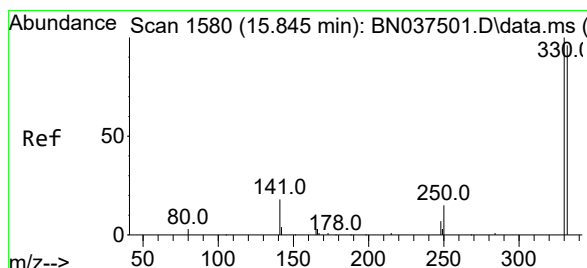
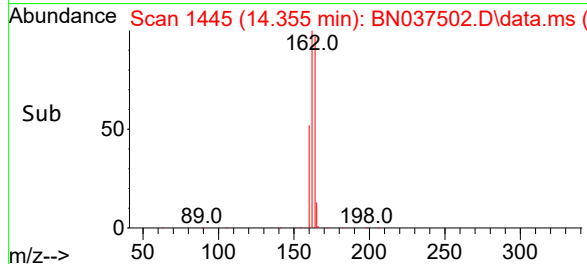
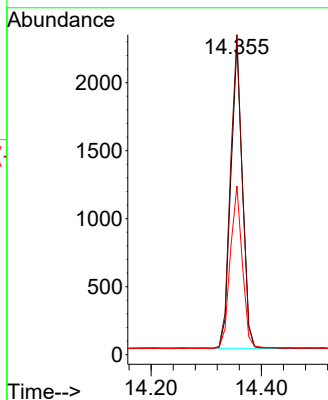
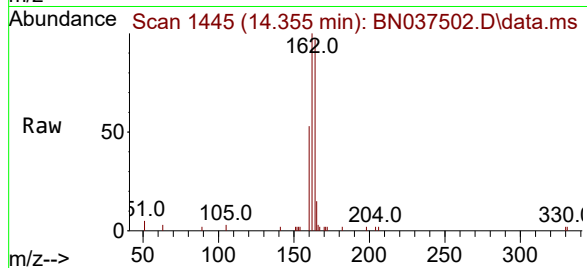
Tgt Ion:164 Resp: 3273

Ion Ratio Lower Upper

164 100

162 102.8 82.0 123.0

160 54.2 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.718 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

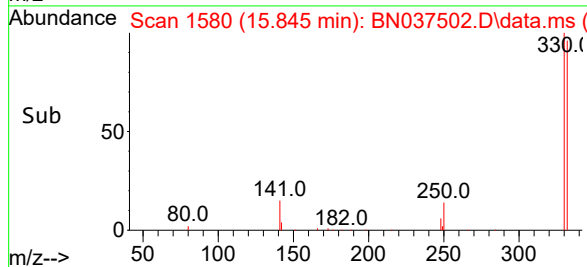
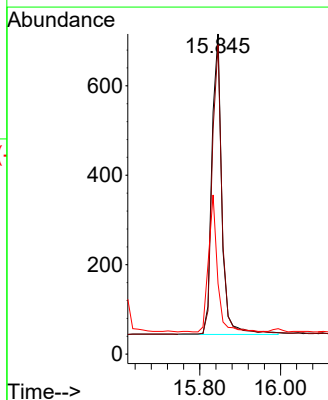
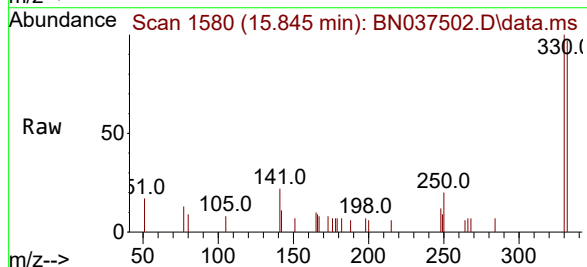
Tgt Ion:330 Resp: 1155

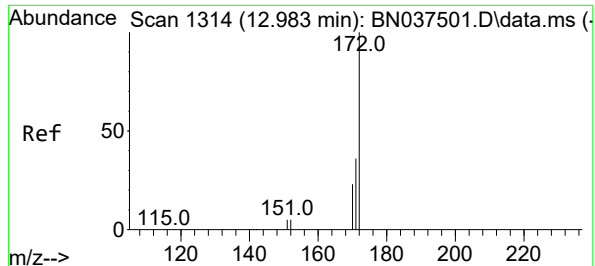
Ion Ratio Lower Upper

330 100

332 94.4 76.1 114.1

141 40.8 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 0.778 ng

RT: 12.983 min Scan# 1314

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

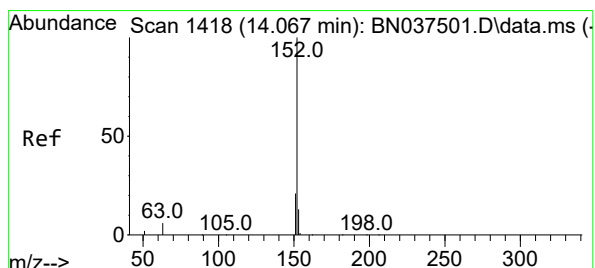
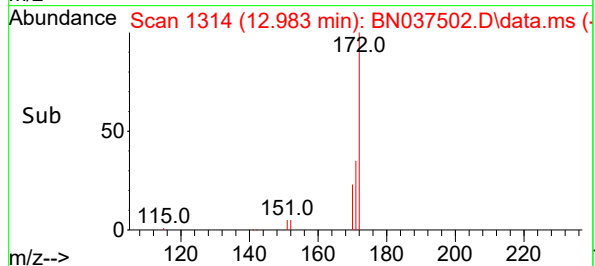
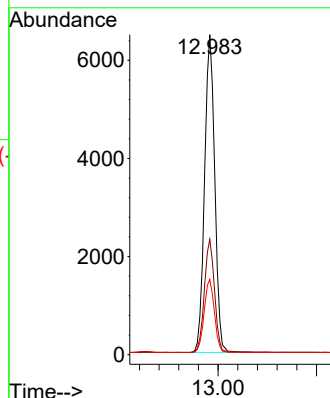
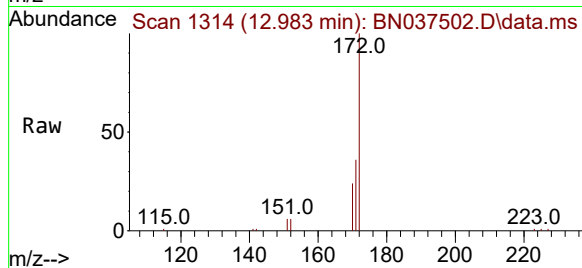
Tgt Ion:172 Resp: 13250

Ion Ratio Lower Upper

172 100

171 36.1 29.4 44.2

170 23.5 19.4 29.0



#16

Acenaphthylene

Concen: 0.752 ng

RT: 14.067 min Scan# 1418

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

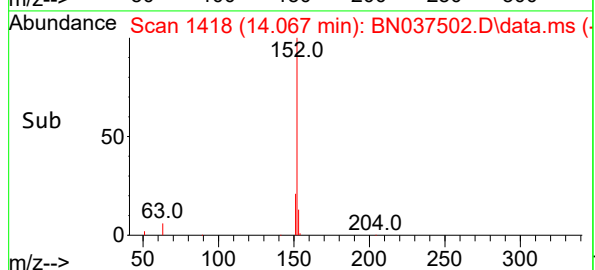
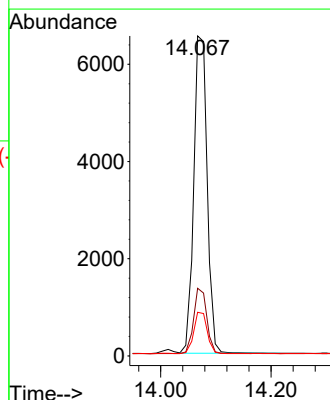
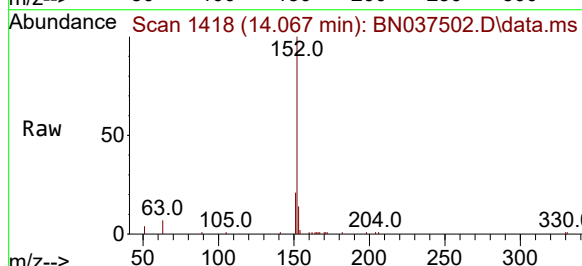
Tgt Ion:152 Resp: 11025

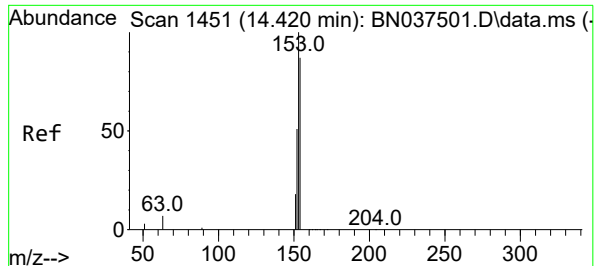
Ion Ratio Lower Upper

152 100

151 20.3 15.9 23.9

153 12.9 10.7 16.1

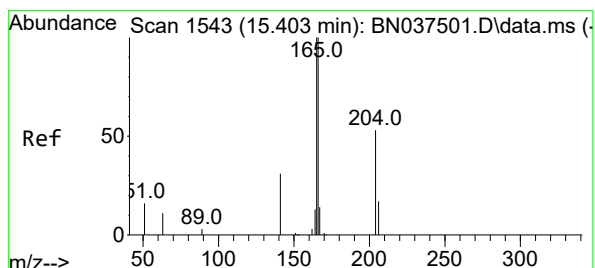
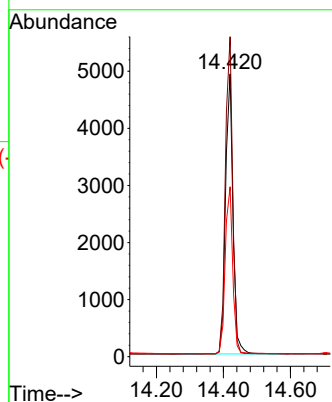
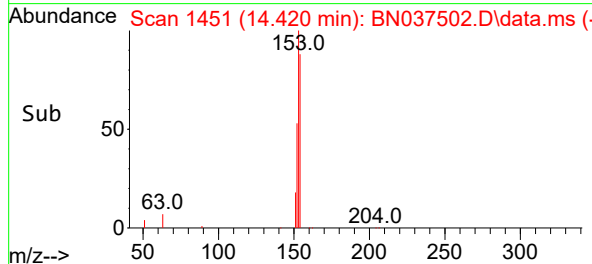
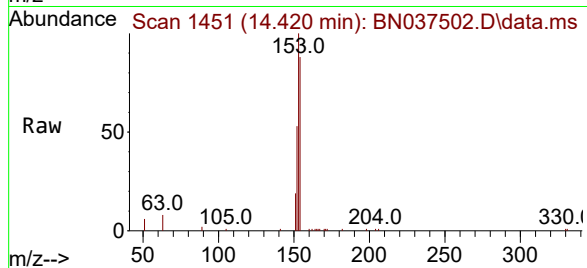




#17  
Acenaphthene  
Concen: 0.755 ng  
RT: 14.420 min Scan# 1451  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

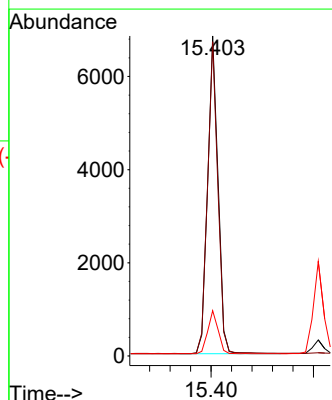
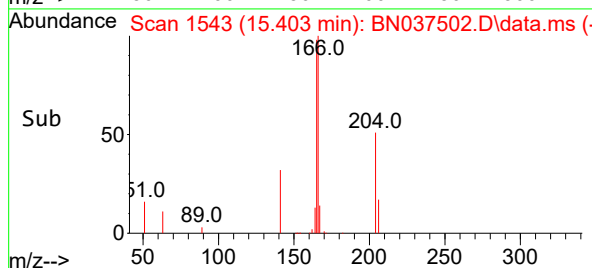
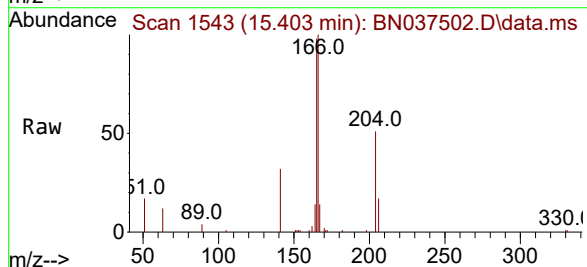
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

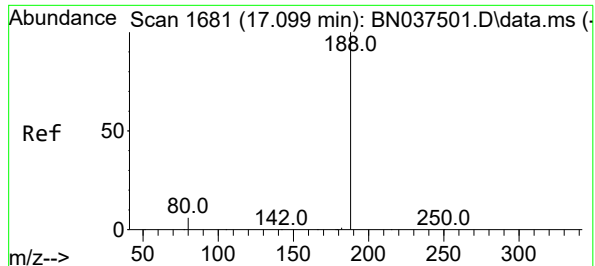
Tgt Ion:154 Resp: 7528  
Ion Ratio Lower Upper  
154 100  
153 111.1 89.2 133.8  
152 60.2 48.0 72.0



#18  
Fluorene  
Concen: 0.758 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:166 Resp: 9729  
Ion Ratio Lower Upper  
166 100  
165 98.6 78.1 117.1  
167 13.3 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

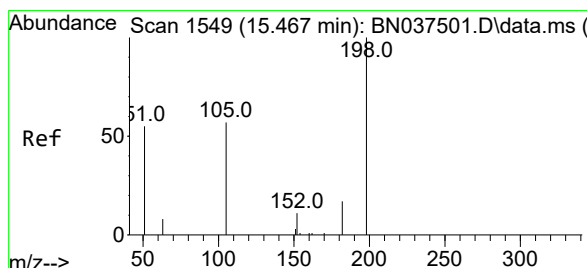
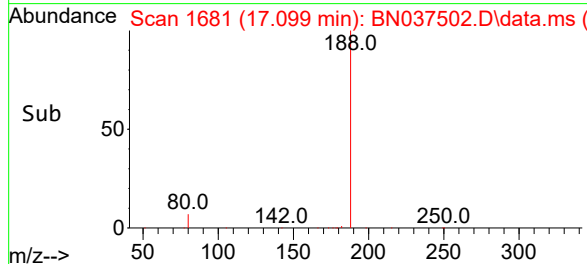
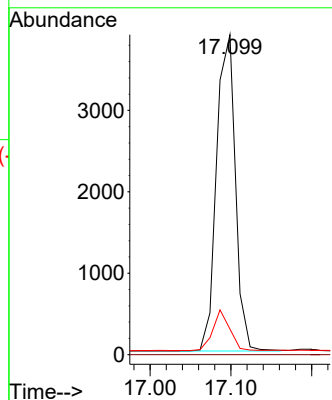
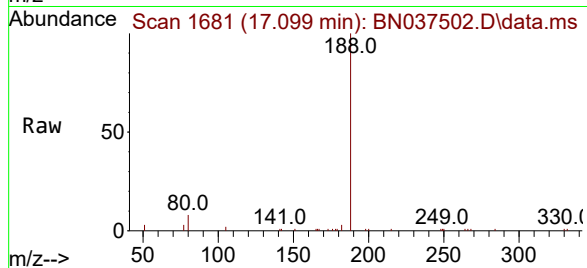
Tgt Ion:188 Resp: 6314

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.0 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 0.750 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

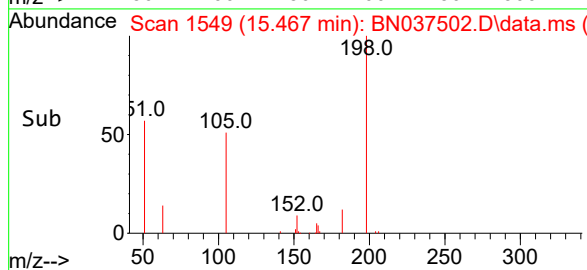
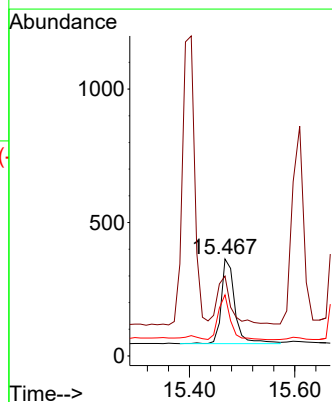
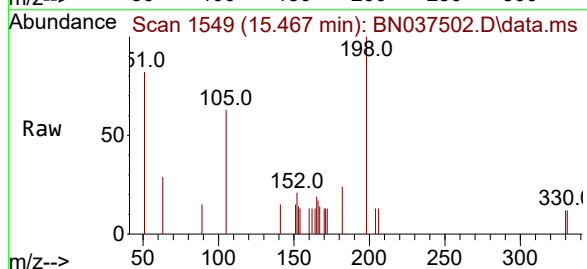
Tgt Ion:198 Resp: 589

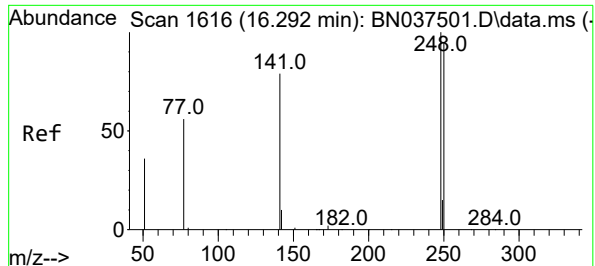
Ion Ratio Lower Upper

198 100

51 82.4 88.5 132.7#

105 63.1 61.2 91.8

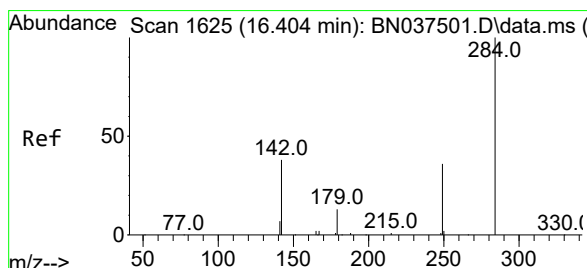
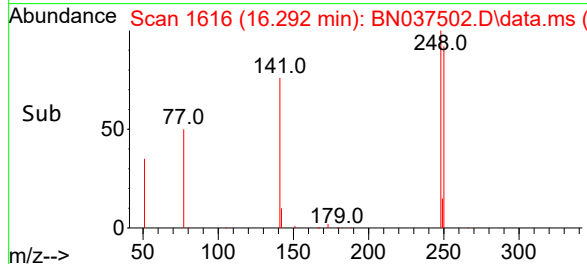
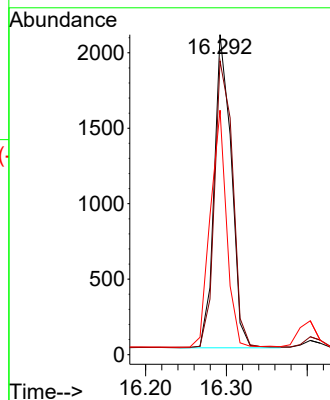
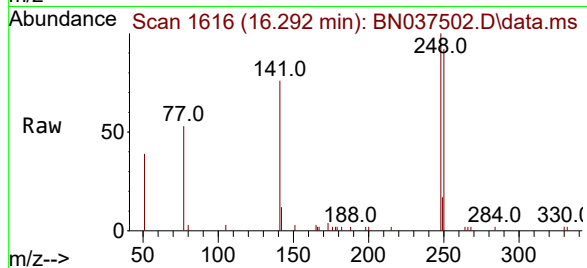




#21  
4-Bromophenyl-phenylether  
Concen: 0.755 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

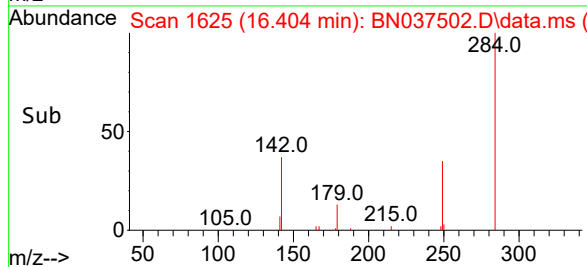
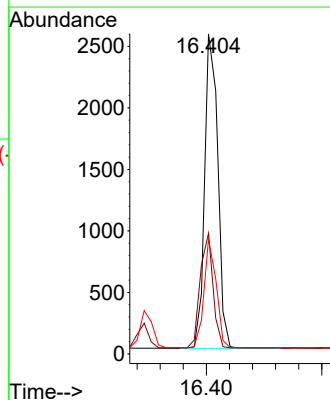
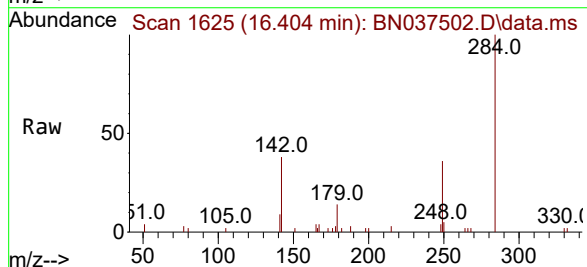
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

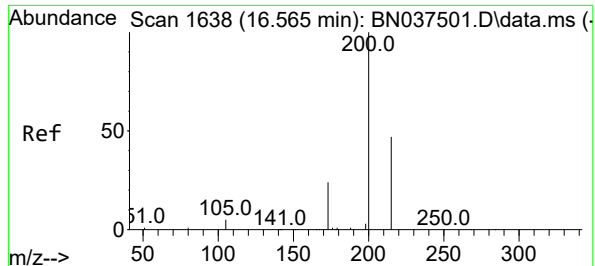
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 91.8  | 76.2  | 114.2 |
| 141     | 76.4  | 63.9  | 95.9  |



#22  
Hexachlorobenzene  
Concen: 0.775 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 35.7  | 28.9  | 43.3  |
| 249     | 32.1  | 25.8  | 38.6  |





#23

Atrazine

Concen: 0.706 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

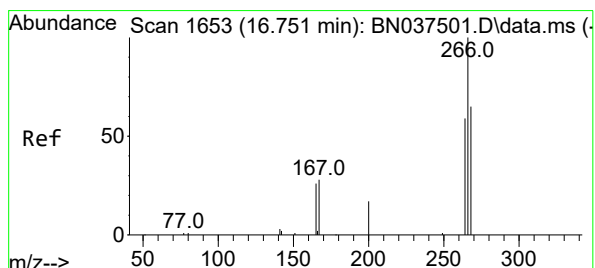
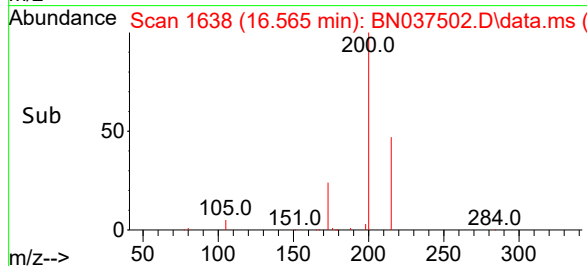
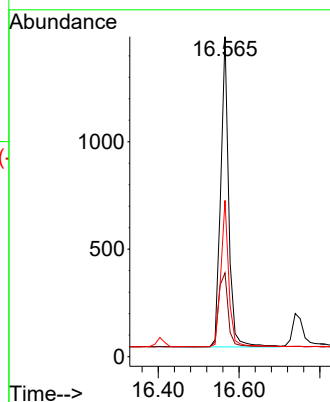
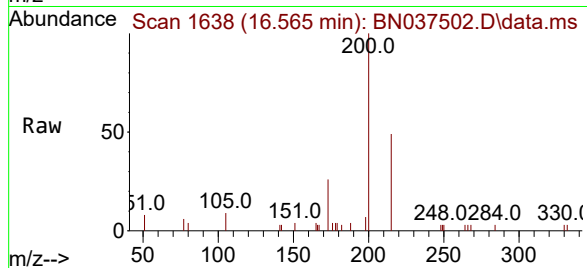
Tgt Ion:200 Resp: 1994

Ion Ratio Lower Upper

200 100

173 26.2 23.2 34.8

215 48.8 40.2 60.4



#24

Pentachlorophenol

Concen: 0.677 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

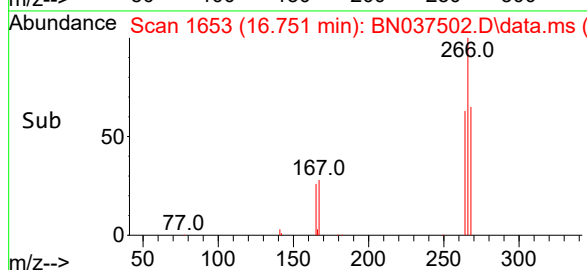
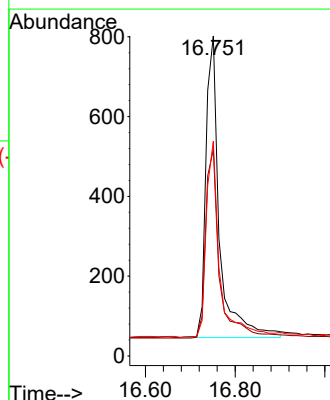
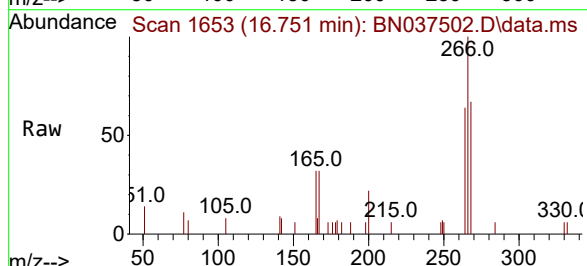
Tgt Ion:266 Resp: 1588

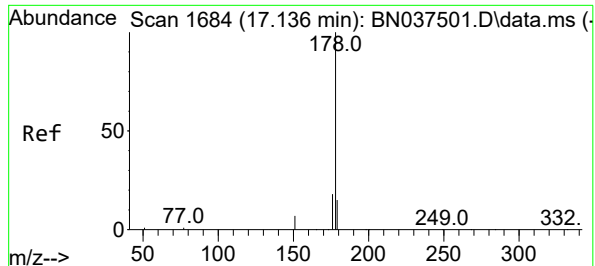
Ion Ratio Lower Upper

266 100

264 63.7 49.3 73.9

268 64.0 51.6 77.4

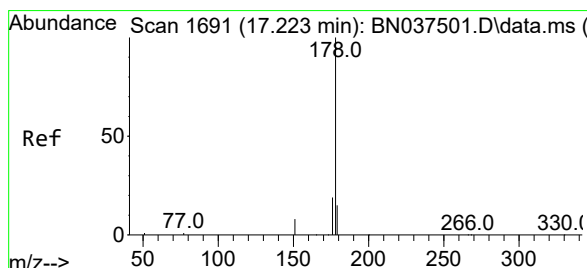
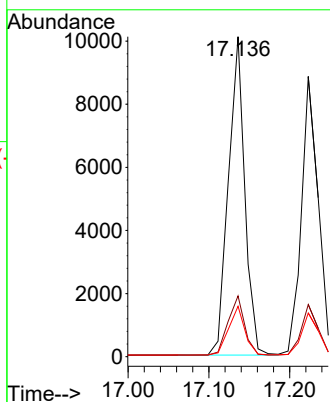
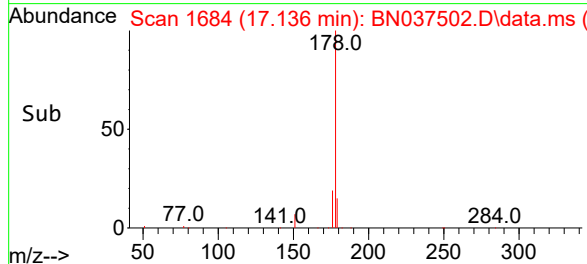
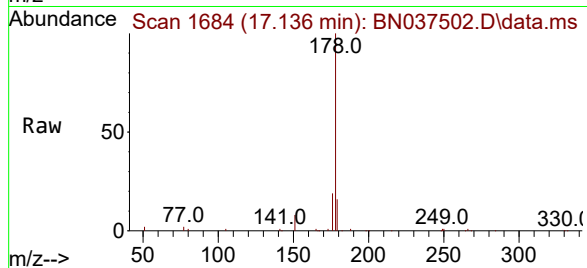




#25  
Phenanthrene  
Concen: 0.754 ng  
RT: 17.136 min Scan# 1684  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

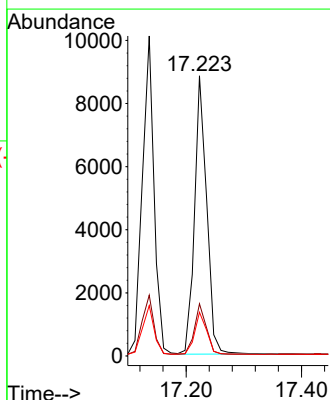
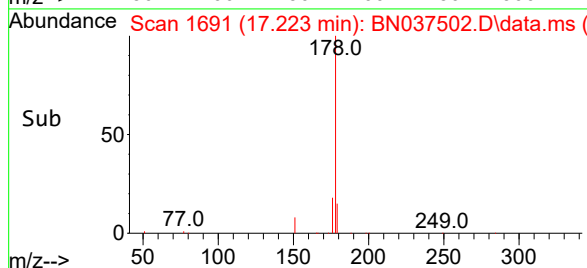
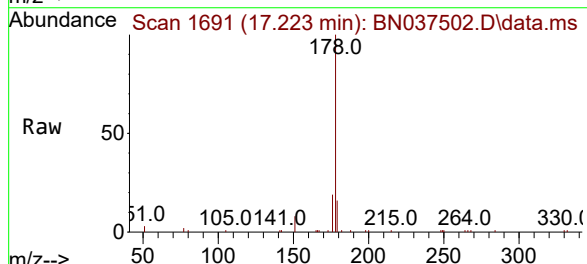
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

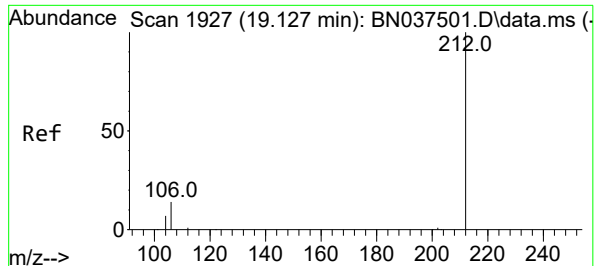
Tgt Ion:178 Resp: 14261  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.0 22.6  
179 15.2 12.2 18.2



#26  
Anthracene  
Concen: 0.748 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:178 Resp: 12919  
Ion Ratio Lower Upper  
178 100  
176 18.0 14.7 22.1  
179 15.1 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.701 ng

RT: 19.127 min Scan# 1927

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

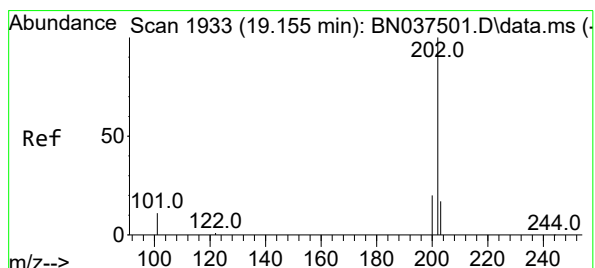
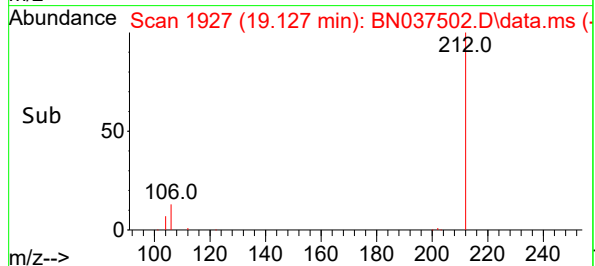
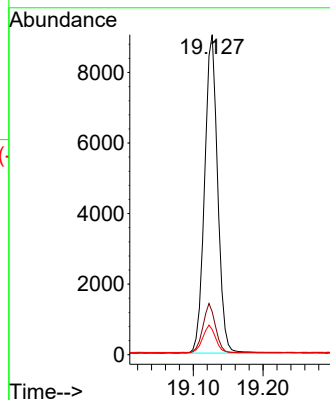
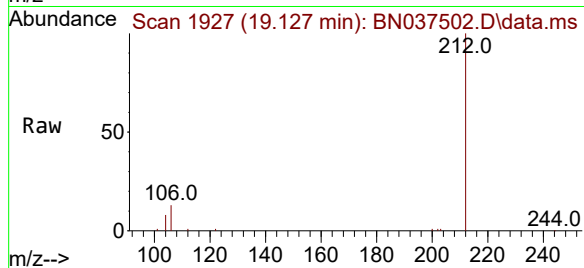
Tgt Ion:212 Resp: 11723

Ion Ratio Lower Upper

212 100

106 15.0 12.2 18.4

104 8.4 6.7 10.1



#28

Fluoranthene

Concen: 0.735 ng

RT: 19.155 min Scan# 1933

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

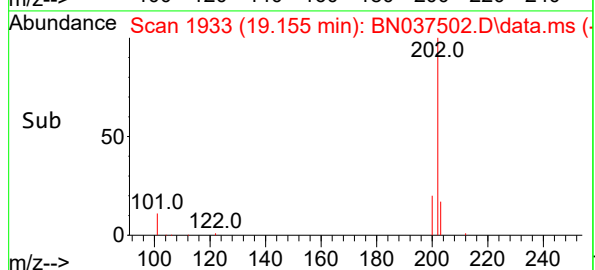
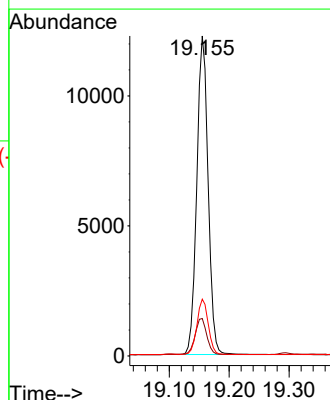
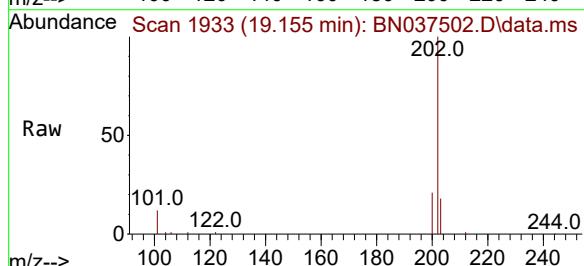
Tgt Ion:202 Resp: 16043

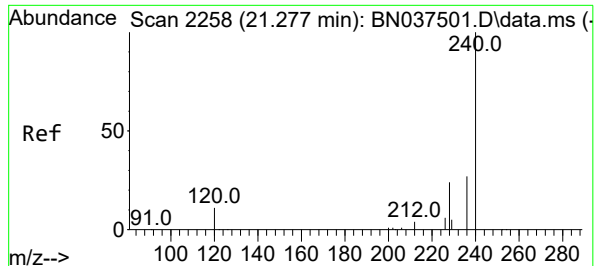
Ion Ratio Lower Upper

202 100

101 11.9 9.8 14.6

203 17.3 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

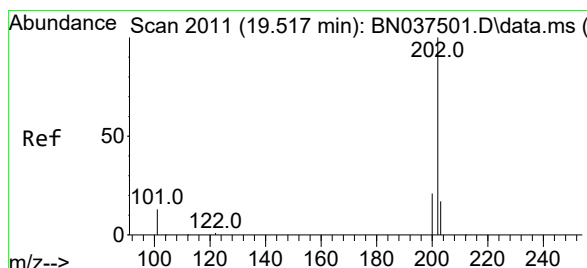
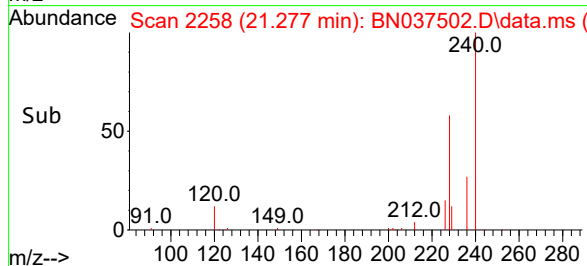
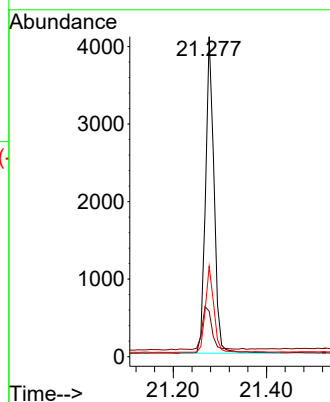
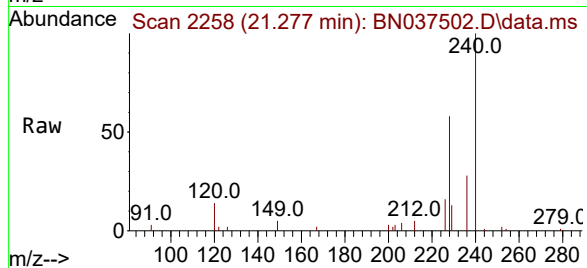
Tgt Ion:240 Resp: 5167

Ion Ratio Lower Upper

240 100

120 14.2 10.7 16.1

236 28.3 22.6 33.8



#30

Pyrene

Concen: 0.769 ng

RT: 19.517 min Scan# 2011

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

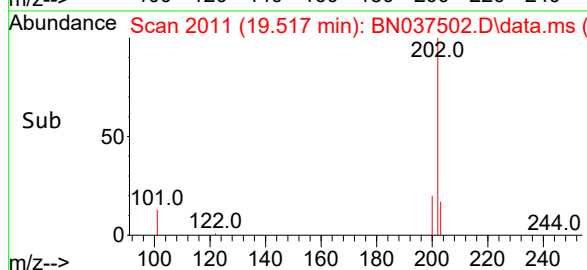
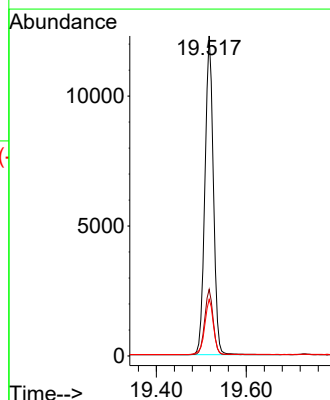
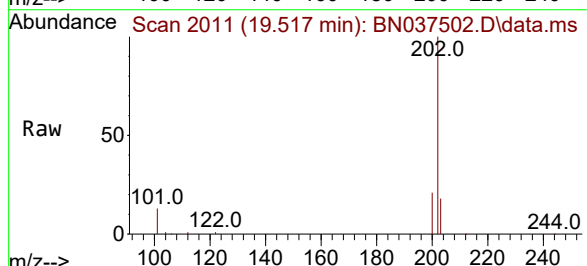
Tgt Ion:202 Resp: 16008

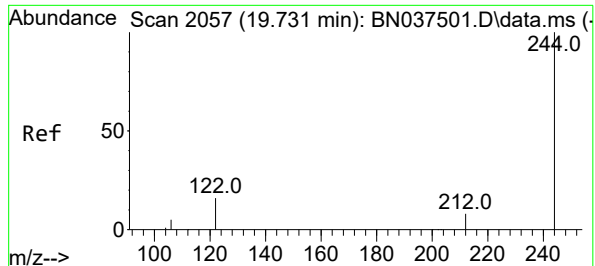
Ion Ratio Lower Upper

202 100

200 20.6 16.5 24.7

203 17.8 14.3 21.5

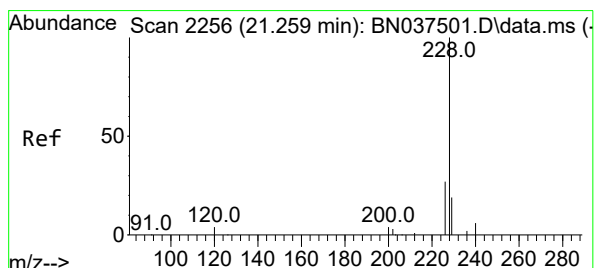
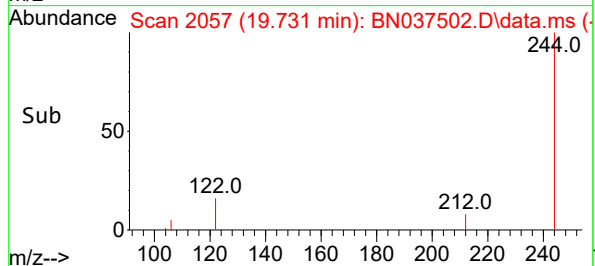
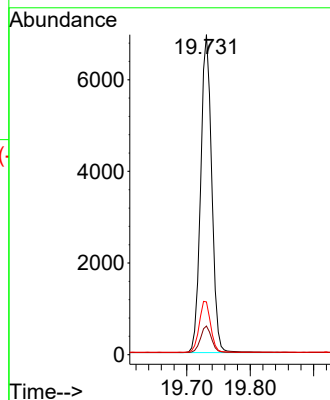
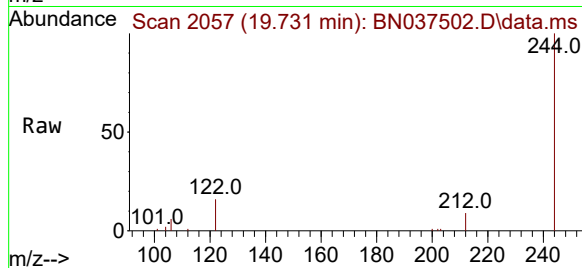




#31  
Terphenyl-d14  
Concen: 0.754 ng  
RT: 19.731 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

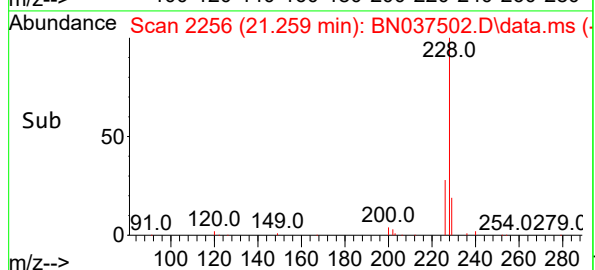
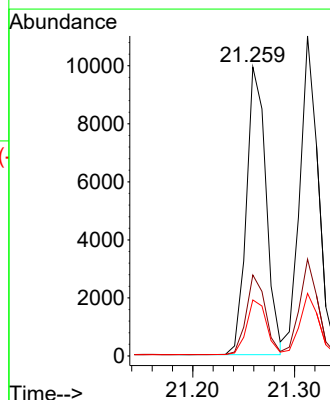
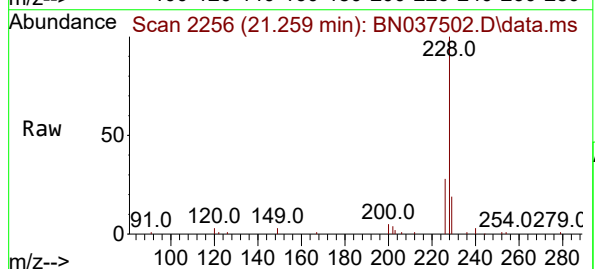
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

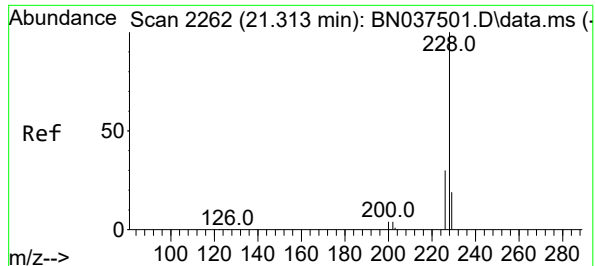
Tgt Ion:244 Resp: 8376  
Ion Ratio Lower Upper  
244 100  
212 8.9 7.4 11.2  
122 16.5 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.734 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:228 Resp: 13280  
Ion Ratio Lower Upper  
228 100  
226 28.0 21.9 32.9  
229 19.4 15.8 23.8





#33

Chrysene

Concen: 0.745 ng

RT: 21.313 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

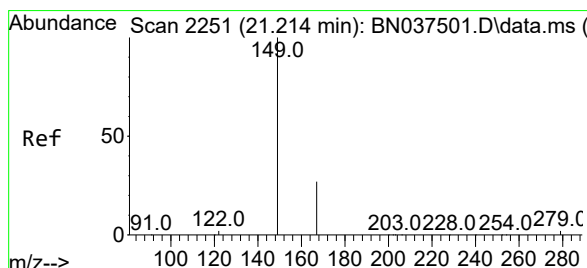
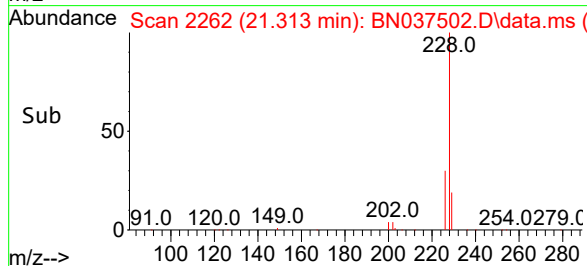
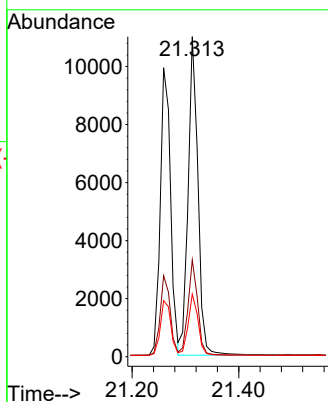
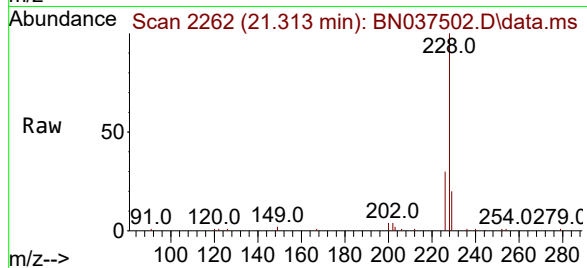
Tgt Ion:228 Resp: 14034

Ion Ratio Lower Upper

228 100

226 30.3 24.2 36.4

229 19.5 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.683 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

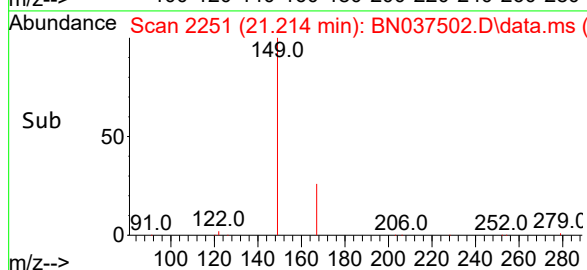
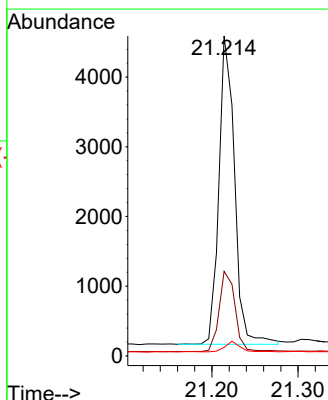
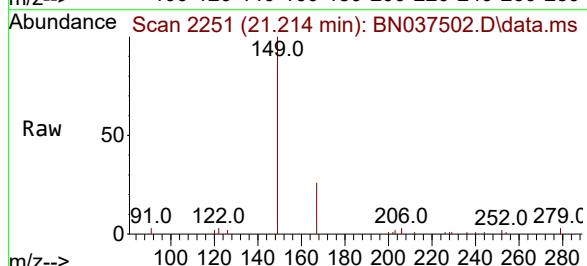
Tgt Ion:149 Resp: 5562

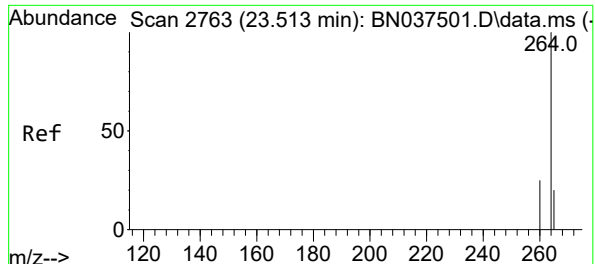
Ion Ratio Lower Upper

149 100

167 26.4 21.8 32.8

279 3.4 3.0 4.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.516 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037502.D

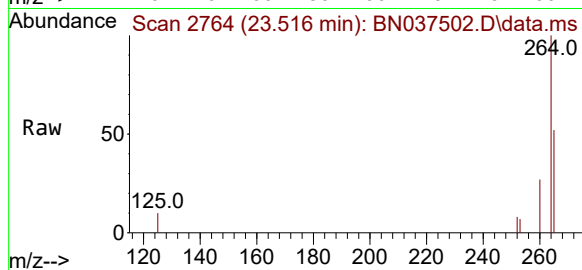
Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDIC0.8



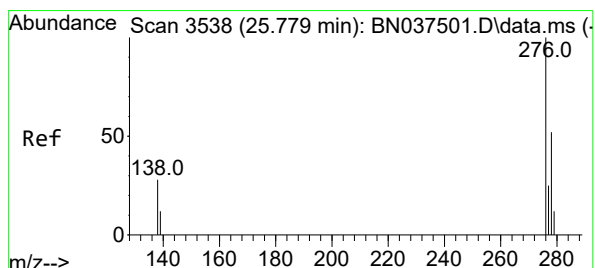
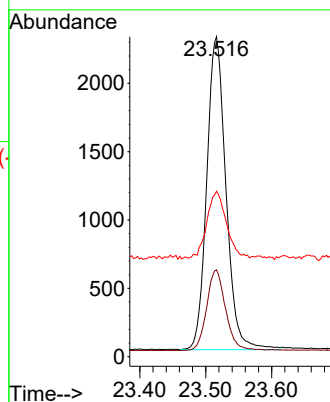
Tgt Ion:264 Resp: 4636

Ion Ratio Lower Upper

264 100

260 27.2 21.2 31.8

265 51.7 40.4 60.6



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.749 ng

RT: 25.779 min Scan# 3538

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

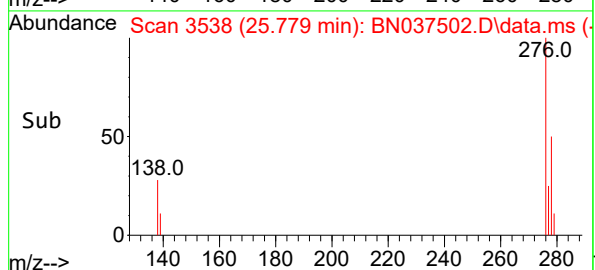
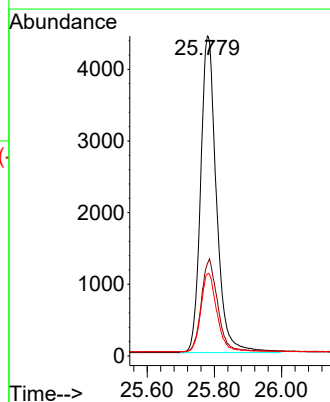
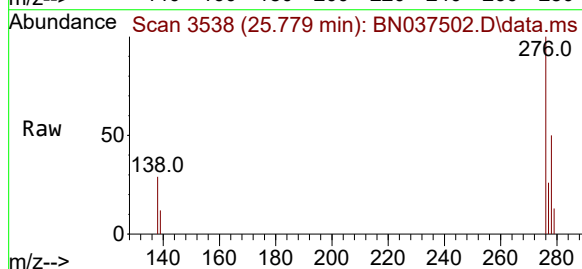
Tgt Ion:276 Resp: 14458

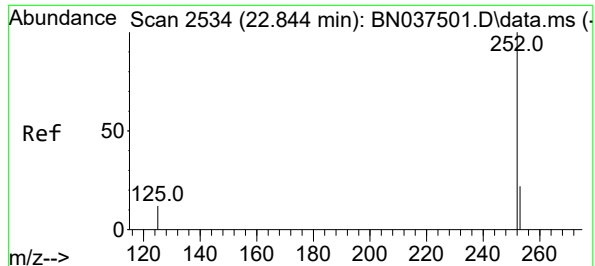
Ion Ratio Lower Upper

276 100

138 30.0 24.0 36.0

277 25.0 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.757 ng

RT: 22.844 min Scan# 2534

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

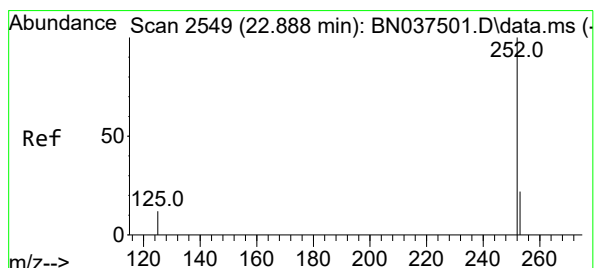
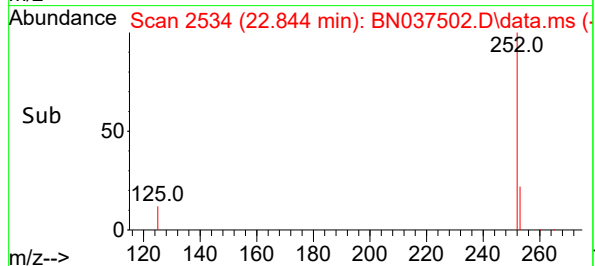
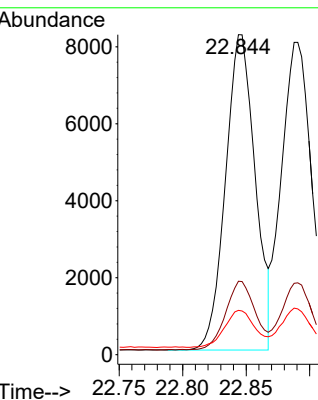
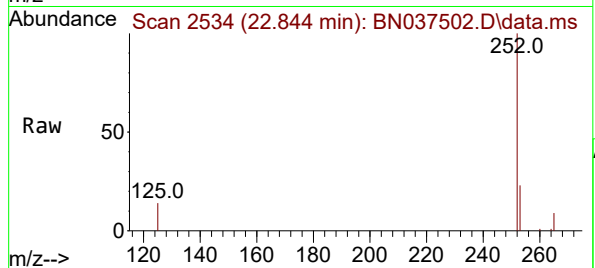
Tgt Ion:252 Resp: 13315

Ion Ratio Lower Upper

252 100

253 23.0 19.5 29.3

125 13.9 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.751 ng

RT: 22.888 min Scan# 2549

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

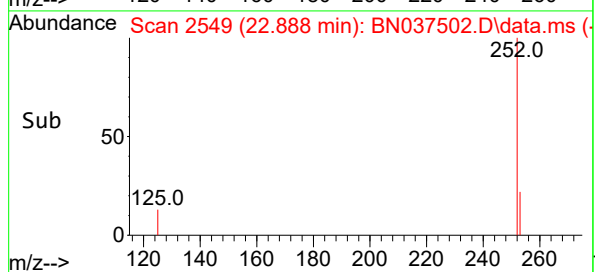
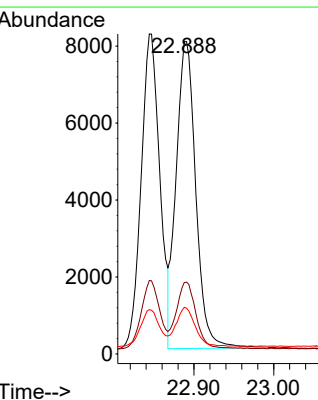
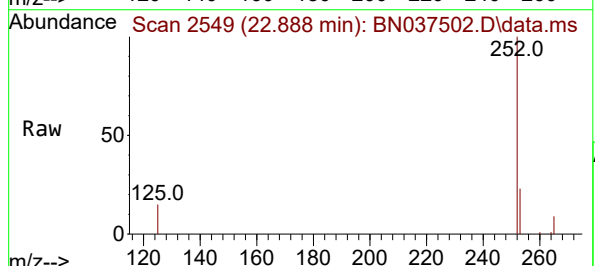
Tgt Ion:252 Resp: 13634

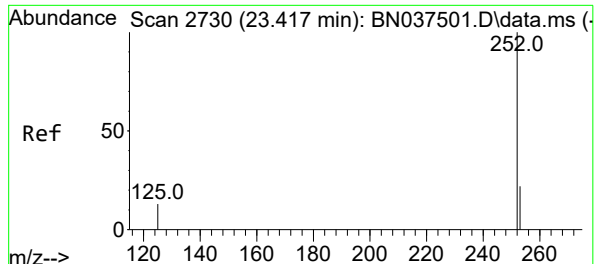
Ion Ratio Lower Upper

252 100

253 22.9 19.5 29.3

125 14.9 13.1 19.7





#39

Benzo(a)pyrene

Concen: 0.743 ng

RT: 23.420 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

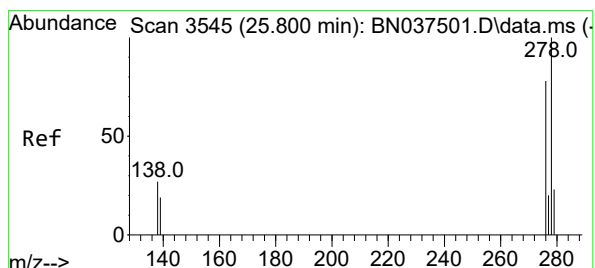
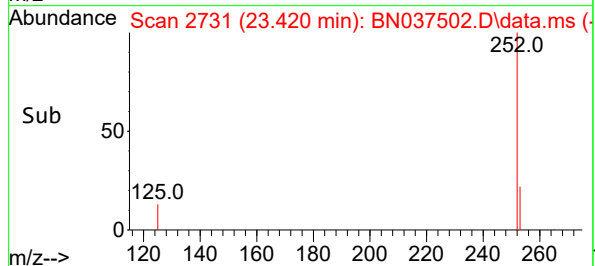
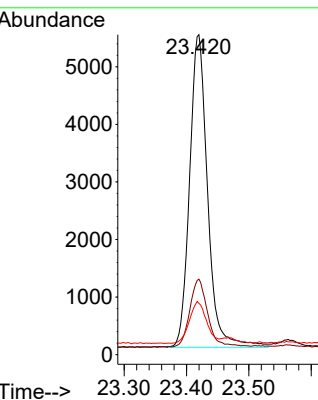
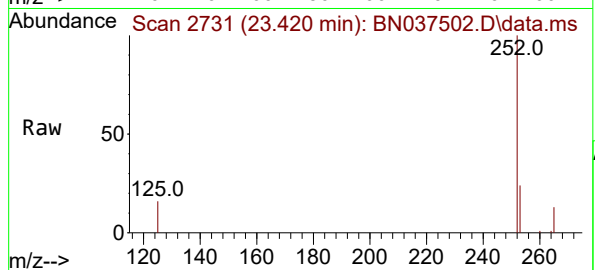
Tgt Ion:252 Resp: 10903

Ion Ratio Lower Upper

252 100

253 23.6 19.9 29.9

125 16.0 15.2 22.8



#40

Dibenzo(a,h)anthracene

Concen: 0.745 ng

RT: 25.800 min Scan# 3545

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

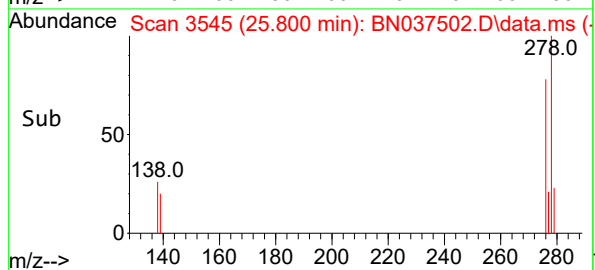
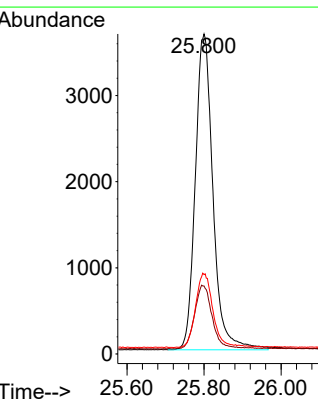
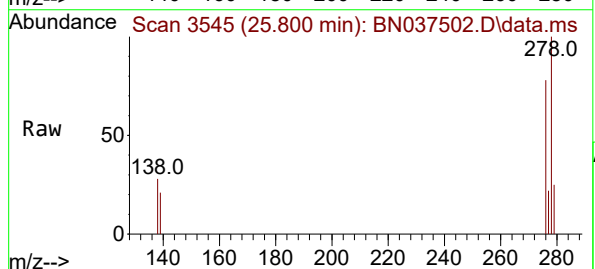
Tgt Ion:278 Resp: 11648

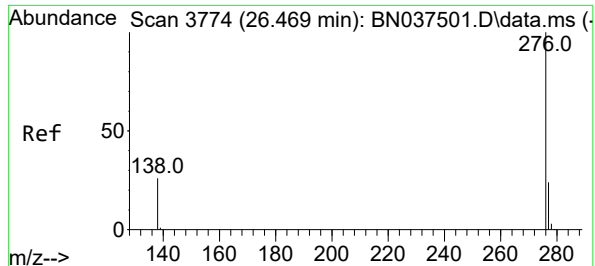
Ion Ratio Lower Upper

278 100

139 21.3 17.5 26.3

279 24.8 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 0.743 ng

RT: 26.472 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN037502.D

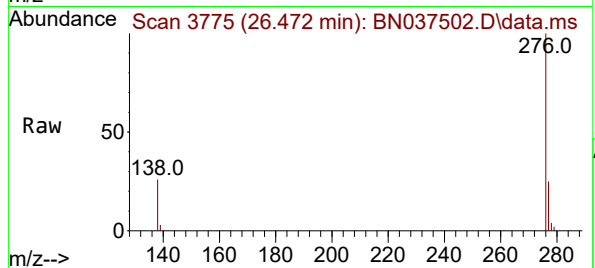
Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8



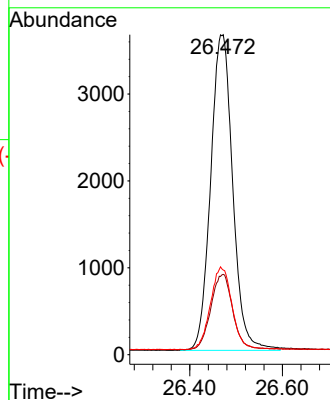
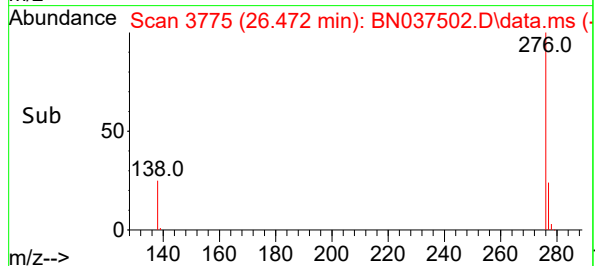
Tgt Ion:276 Resp: 12022

Ion Ratio Lower Upper

276 100

277 25.1 20.9 31.3

138 26.5 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037503.D  
 Acq On : 15 Jul 2025 15:01  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Jul 15 17:27:34 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

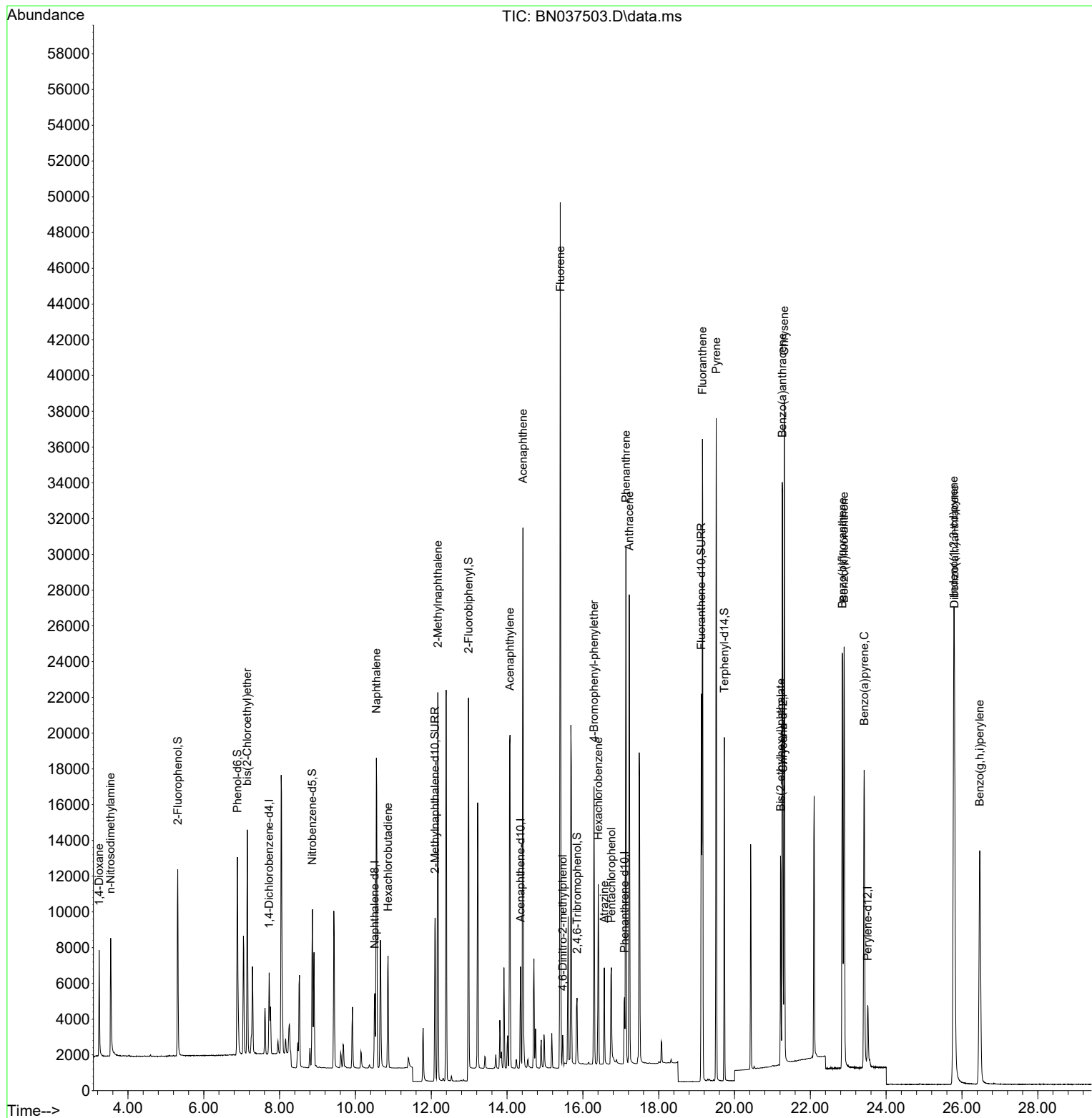
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2129     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5384     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.355 | 164  | 3005     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.099 | 188  | 5542     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.277 | 240  | 4955     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.516 | 264  | 4551     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 8362     | 1.588 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.886  | 99   | 10225    | 1.548 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.864  | 82   | 6457     | 1.604 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 12096    | 1.566 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 2331     | 1.578 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 27369    | 1.751 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.127 | 212  | 23071    | 1.572 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.731 | 244  | 16936    | 1.591 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.239  | 88   | 3392     | 1.657 | ng    | 98       |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 4327     | 1.681 | ng    | # 90     |
| 6) bis(2-Chloroethyl)ether    | 7.146  | 93   | 8832     | 1.607 | ng    | 99       |
| 9) Naphthalene                | 10.551 | 128  | 23495    | 1.636 | ng    | 98       |
| 10) Hexachlorobutadiene       | 10.861 | 225  | 5277     | 1.663 | ng    | # 98     |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 15410    | 1.632 | ng    | 99       |
| 16) Acenaphthylene            | 14.077 | 152  | 22002    | 1.635 | ng    | 100      |
| 17) Acenaphthene              | 14.419 | 154  | 14877    | 1.625 | ng    | 99       |
| 18) Fluorene                  | 15.403 | 166  | 19298    | 1.638 | ng    | 98       |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 1268     | 1.576 | ng    | # 75     |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 5943     | 1.674 | ng    | 98       |
| 22) Hexachlorobenzene         | 16.404 | 284  | 7650     | 1.668 | ng    | 100      |
| 23) Atrazine                  | 16.565 | 200  | 4016     | 1.621 | ng    | 95       |
| 24) Pentachlorophenol         | 16.751 | 266  | 3347     | 1.627 | ng    | 99       |
| 25) Phenanthrene              | 17.136 | 178  | 27669    | 1.666 | ng    | 100      |
| 26) Anthracene                | 17.223 | 178  | 25717    | 1.697 | ng    | 100      |
| 28) Fluoranthene              | 19.155 | 202  | 31674    | 1.654 | ng    | 99       |
| 30) Pyrene                    | 19.517 | 202  | 31858    | 1.596 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 28317    | 1.632 | ng    | 99       |
| 33) Chrysene                  | 21.313 | 228  | 29489    | 1.632 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 11959    | 1.532 | ng    | 99       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.782 | 276  | 32244    | 1.701 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.844 | 252  | 28933    | 1.675 | ng    | # 94     |
| 38) Benzo(k)fluoranthene      | 22.890 | 252  | 30228    | 1.696 | ng    | # 94     |
| 39) Benzo(a)pyrene            | 23.420 | 252  | 24034    | 1.668 | ng    | # 93     |
| 40) Dibenzo(a,h)anthracene    | 25.800 | 278  | 26285    | 1.712 | ng    | 95       |
| 41) Benzo(g,h,i)perylene      | 26.466 | 276  | 26971    | 1.697 | ng    | 96       |

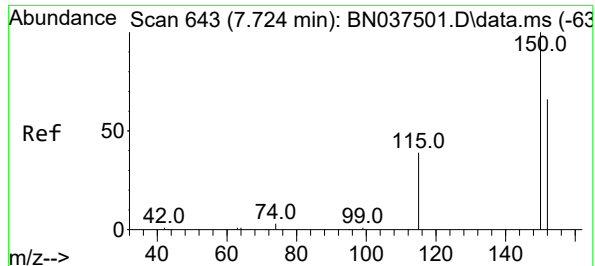
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037503.D  
Acq On : 15 Jul 2025 15:01  
Operator : RC/JU  
Sample : SSTDICC1.6  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

Quant Time: Jul 15 17:27:34 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 16:45:15 2025  
Response via : Initial Calibration

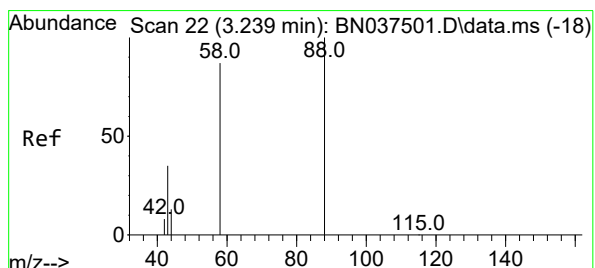
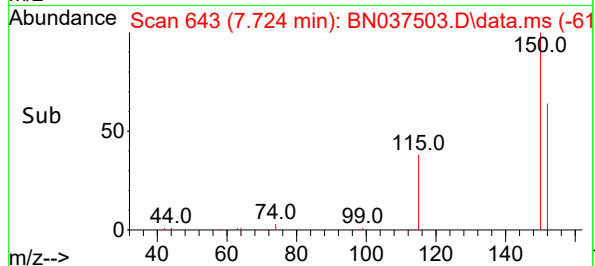
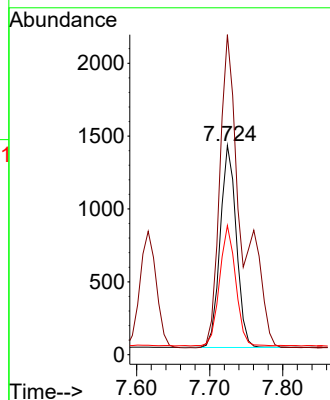
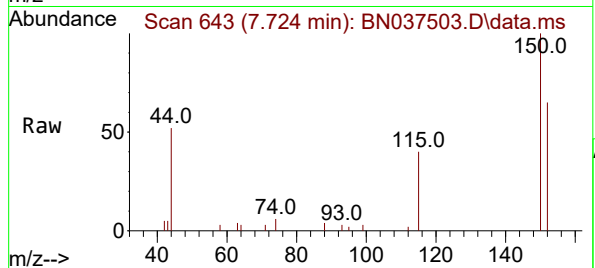




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

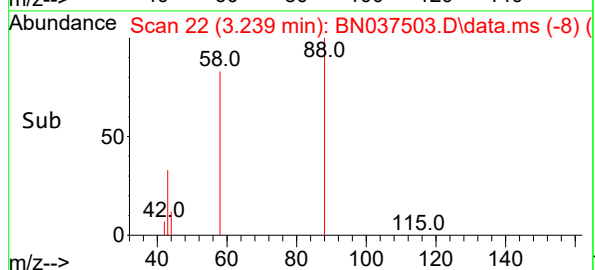
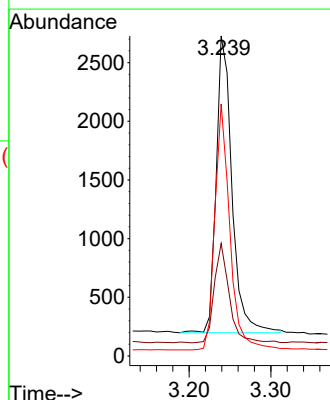
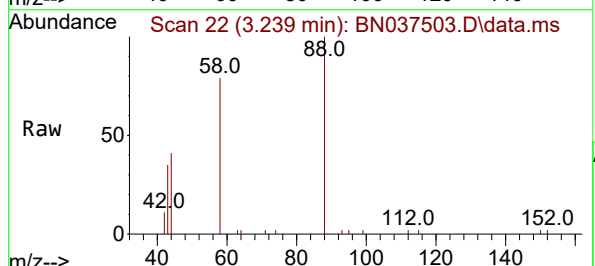
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

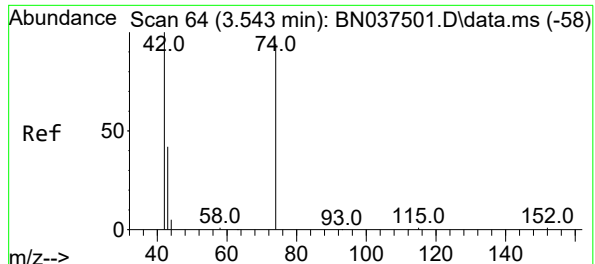
Tgt Ion:152 Resp: 2129  
Ion Ratio Lower Upper  
152 100  
150 152.9 119.8 179.8  
115 61.7 49.1 73.7



#2  
1,4-Dioxane  
Concen: 1.657 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion: 88 Resp: 3392  
Ion Ratio Lower Upper  
88 100  
43 31.9 27.5 41.3  
58 78.8 62.7 94.1

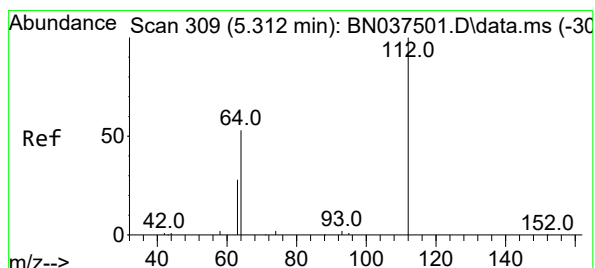
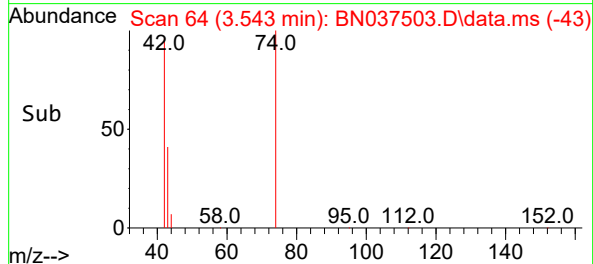
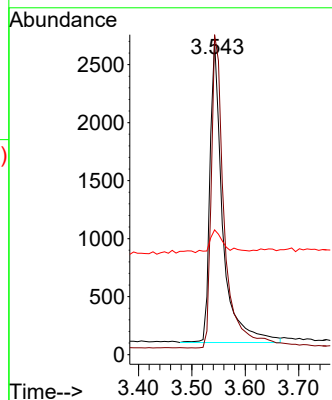
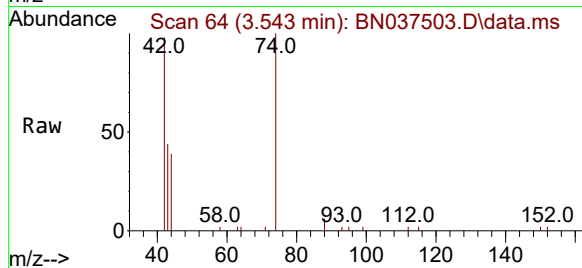




#3  
n-Nitrosodimethylamine  
Concen: 1.681 ng  
RT: 3.543 min Scan# 64  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

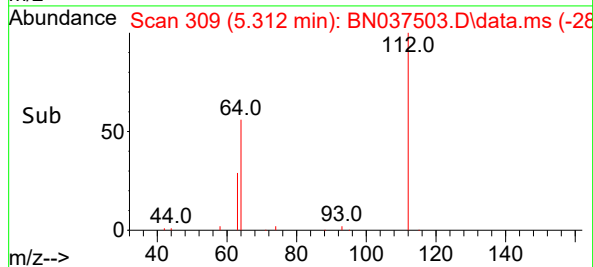
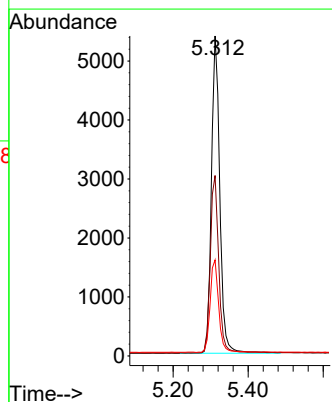
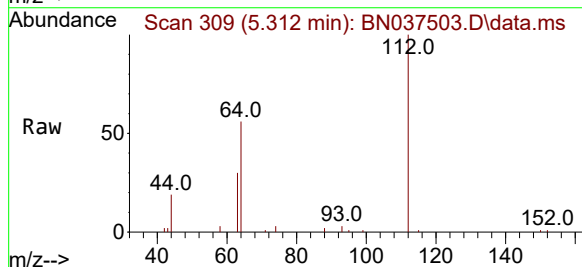
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

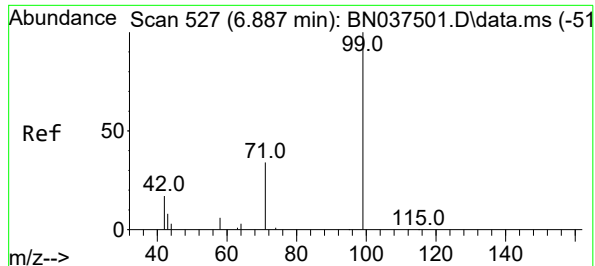
Tgt Ion: 42 Resp: 4327  
Ion Ratio Lower Upper  
42 100  
74 106.7 91.8 137.6  
44 8.3 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 1.588 ng  
RT: 5.312 min Scan# 309  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion: 112 Resp: 8362  
Ion Ratio Lower Upper  
112 100  
64 56.3 45.1 67.7  
63 29.9 23.8 35.8

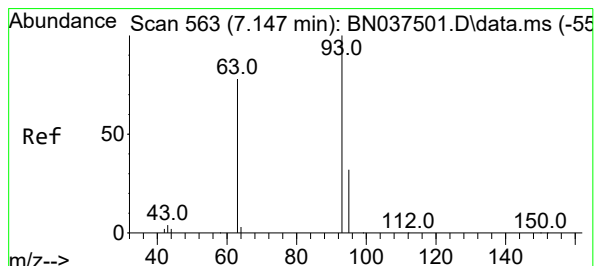
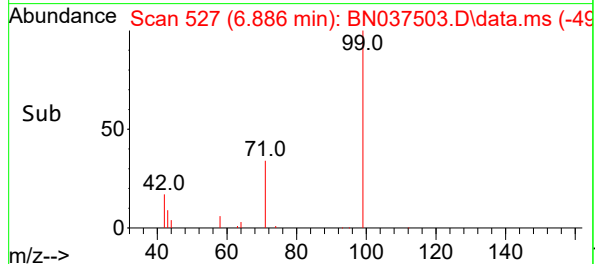
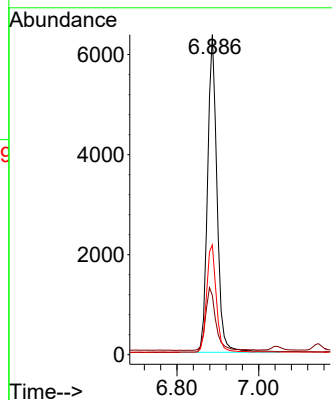
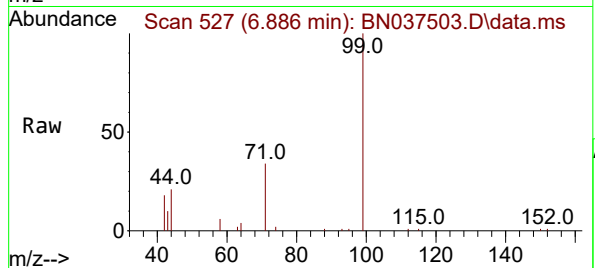




#5  
Phenol-d6  
Concen: 1.548 ng  
RT: 6.886 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

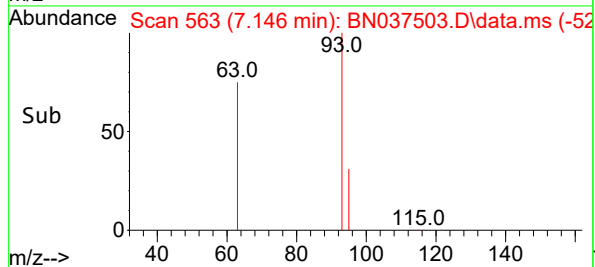
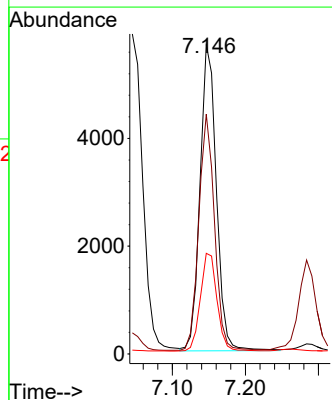
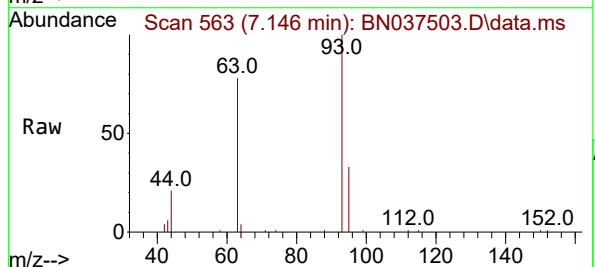
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

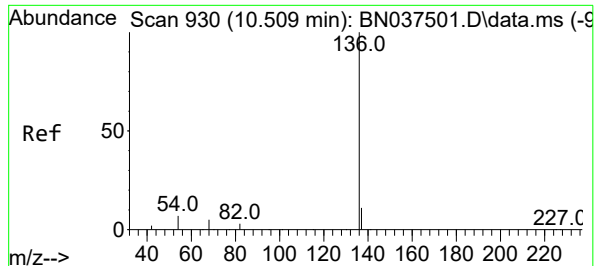
Tgt Ion: 99 Resp: 10225  
Ion Ratio Lower Upper  
99 100  
42 21.6 17.1 25.7  
71 34.7 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 1.607 ng  
RT: 7.146 min Scan# 563  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion: 93 Resp: 8832  
Ion Ratio Lower Upper  
93 100  
63 73.9 58.2 87.4  
95 32.4 25.3 37.9

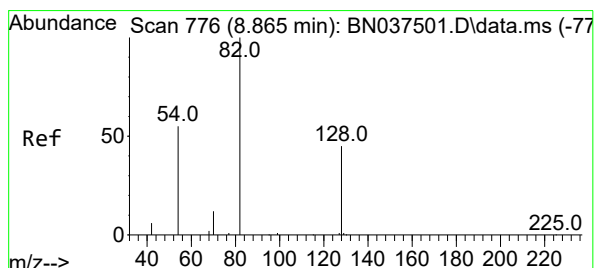
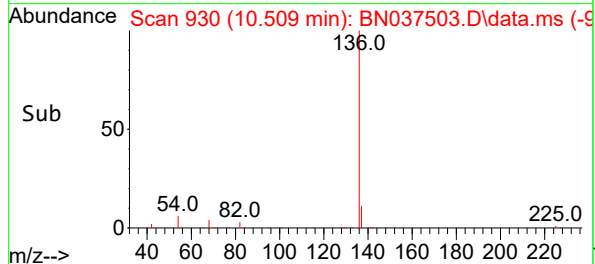
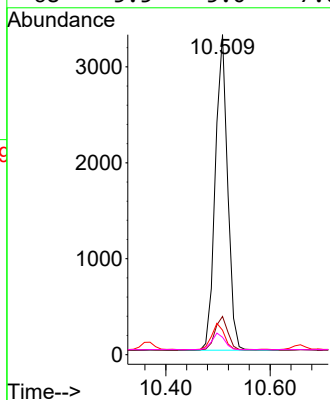
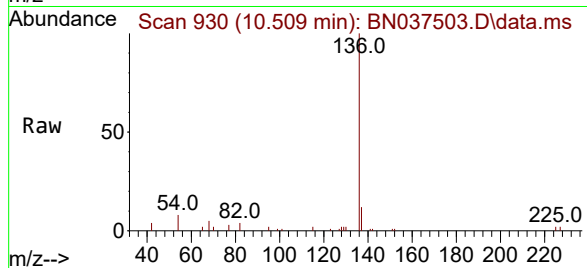




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

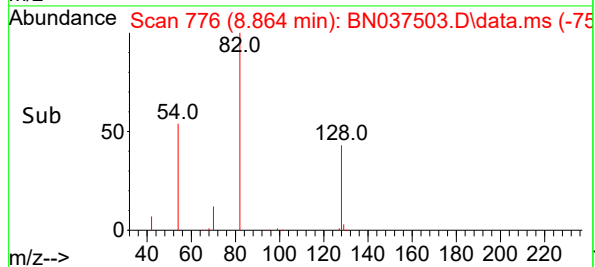
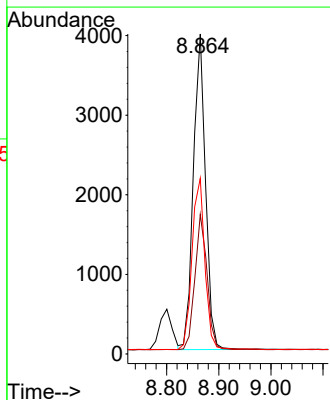
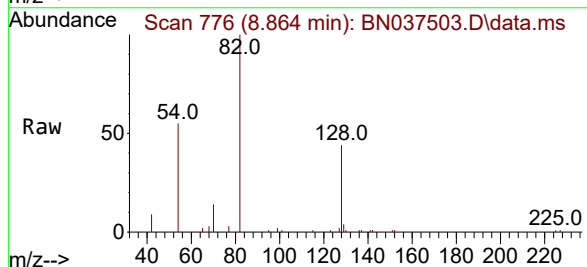
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

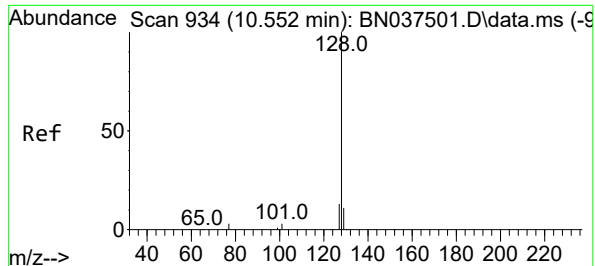
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5384  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.9  | 9.8   | 14.8  |
| 54       | 7.7   | 6.6   | 9.8   |
| 68       | 5.5   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 1.604 ng  
RT: 8.864 min Scan# 776  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 6457  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 43.6  | 37.5  | 56.3  |
| 54       | 54.9  | 45.3  | 67.9  |

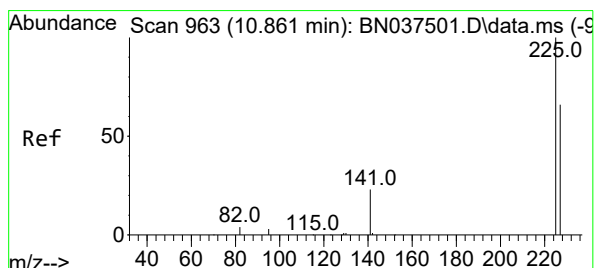
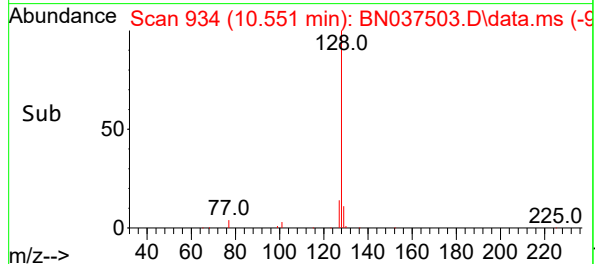
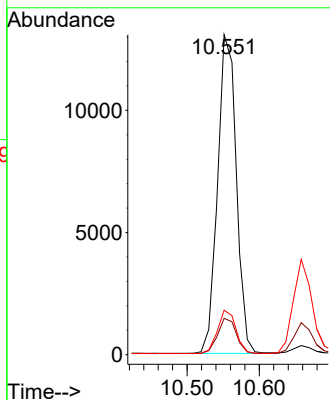
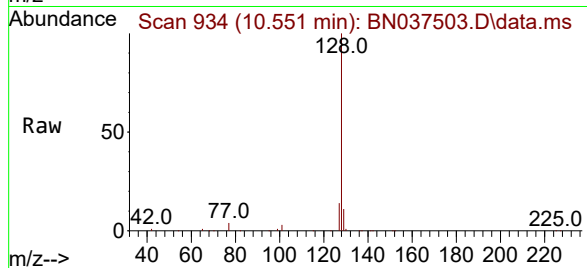




#9  
Naphthalene  
Concen: 1.636 ng  
RT: 10.551 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

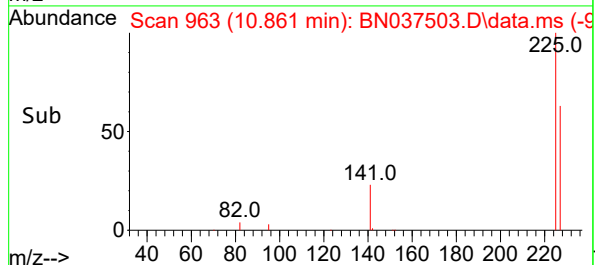
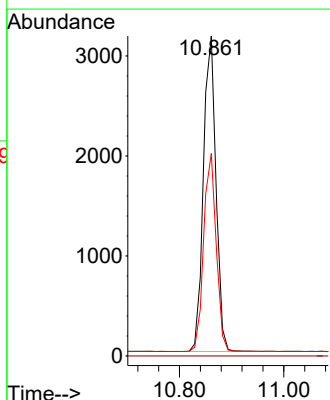
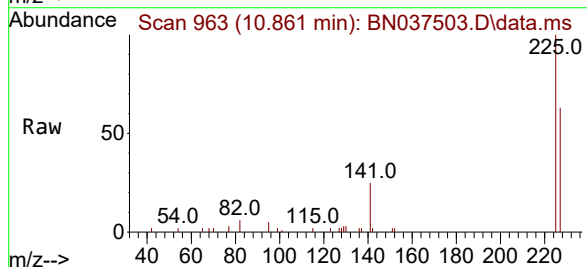
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

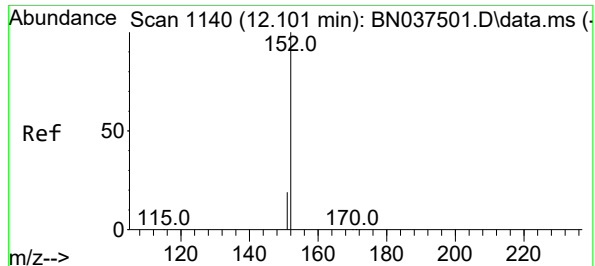
Tgt Ion:128 Resp: 23495  
Ion Ratio Lower Upper  
128 100  
129 11.3 9.7 14.5  
127 13.9 11.5 17.3



#10  
Hexachlorobutadiene  
Concen: 1.663 ng  
RT: 10.861 min Scan# 963  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:225 Resp: 5277  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.4 51.0 76.4

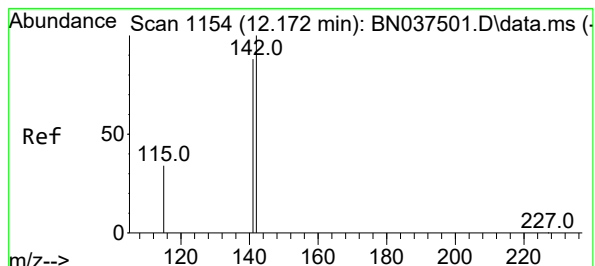
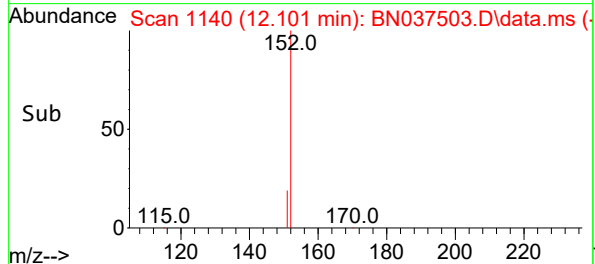
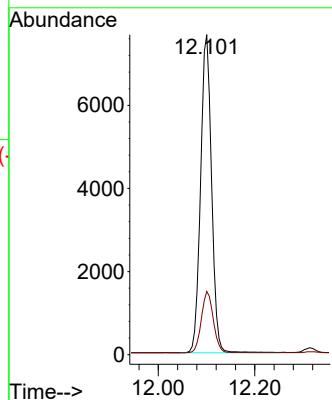
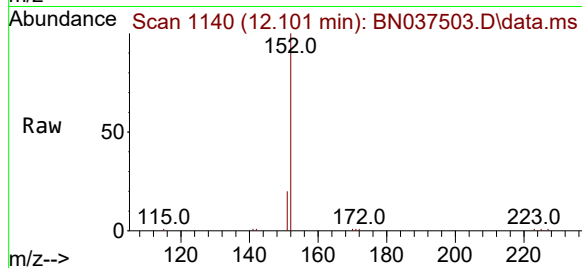




#11  
2-Methylnaphthalene-d10  
Concen: 1.566 ng  
RT: 12.101 min Scan# 1140  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

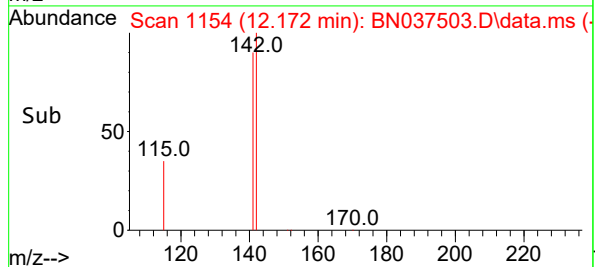
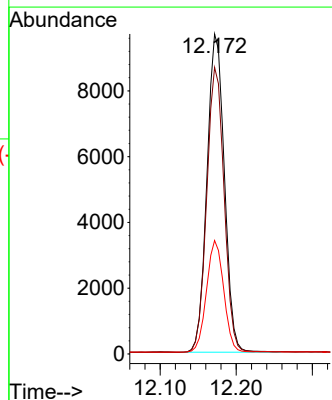
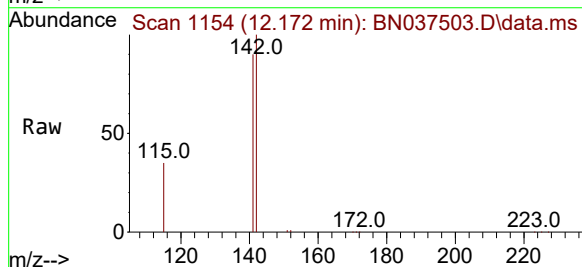
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

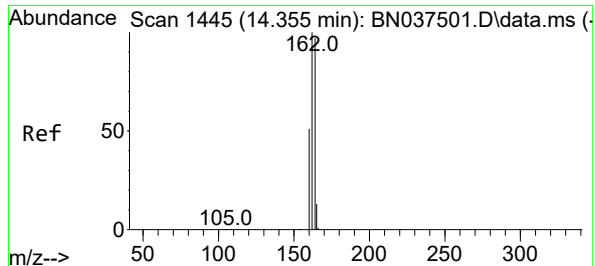
Tgt Ion:152 Resp: 12096  
Ion Ratio Lower Upper  
152 100  
151 20.9 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 1.632 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:142 Resp: 15410  
Ion Ratio Lower Upper  
142 100  
141 89.5 71.0 106.4  
115 35.4 29.0 43.4

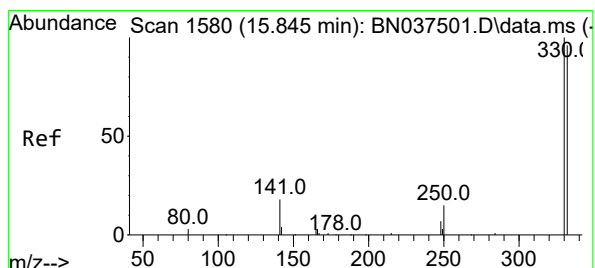
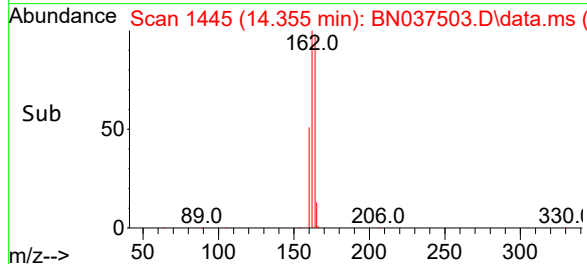
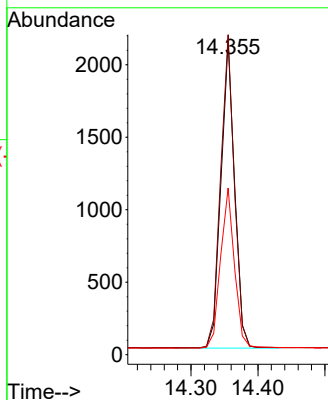
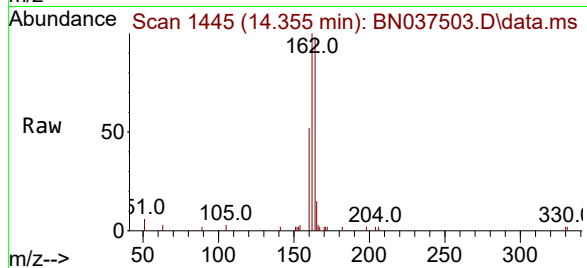




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.355 min Scan# 1445  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

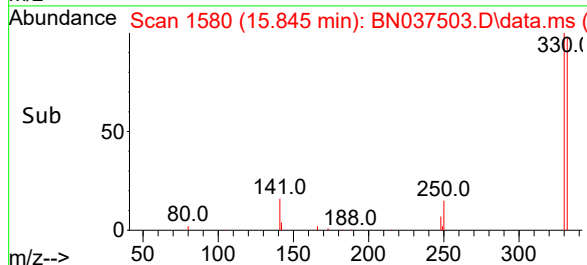
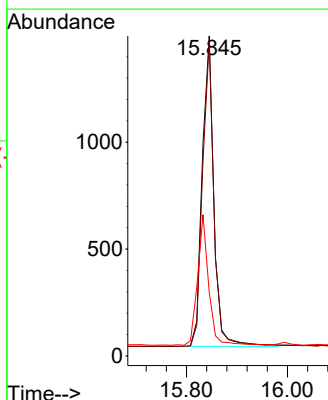
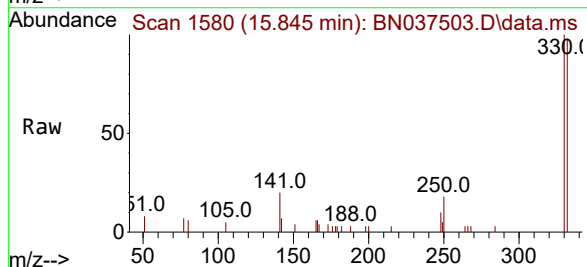
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

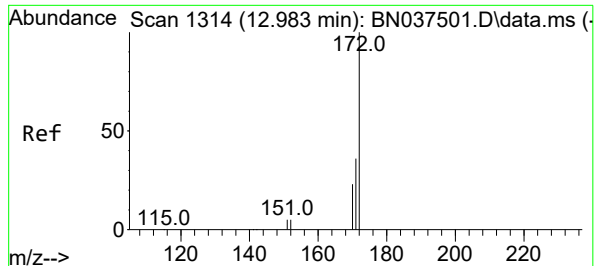
Tgt Ion:164 Resp: 3005  
Ion Ratio Lower Upper  
164 100  
162 102.0 82.0 123.0  
160 53.1 42.4 63.6



#14  
2,4,6-Tribromophenol  
Concen: 1.578 ng  
RT: 15.845 min Scan# 1580  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:330 Resp: 2331  
Ion Ratio Lower Upper  
330 100  
332 96.1 76.1 114.1  
141 40.0 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 1.751 ng

RT: 12.983 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

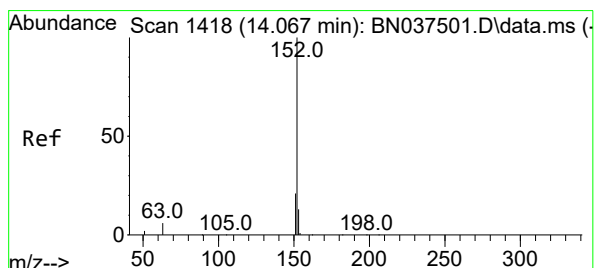
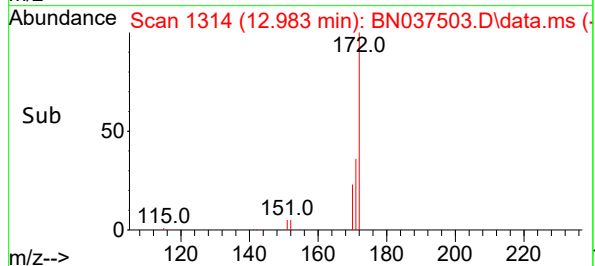
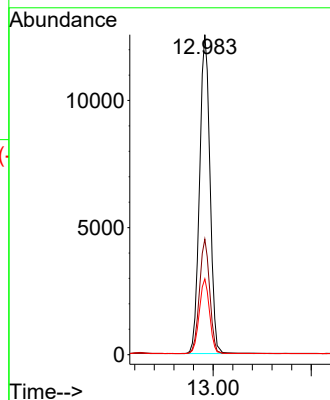
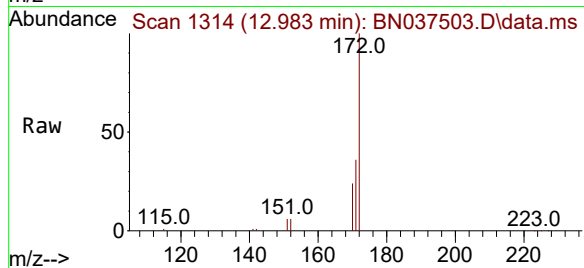
Tgt Ion:172 Resp: 27369

Ion Ratio Lower Upper

172 100

171 36.1 29.4 44.2

170 23.7 19.4 29.0



#16

Acenaphthylene

Concen: 1.635 ng

RT: 14.077 min Scan# 1419

Delta R.T. 0.011 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

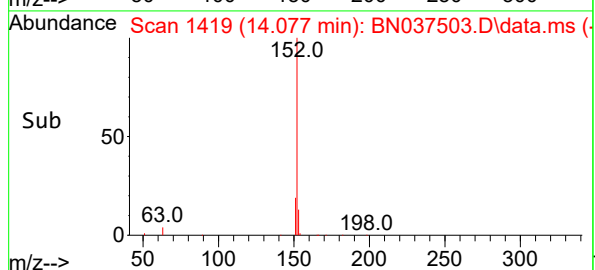
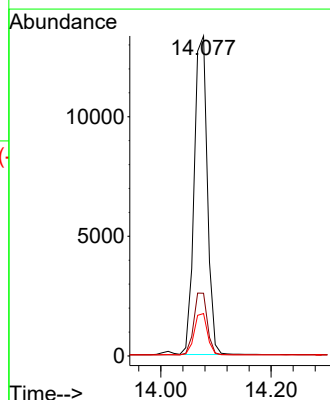
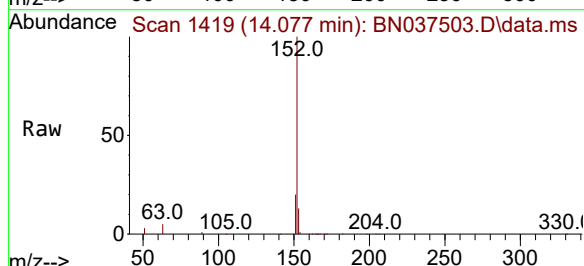
Tgt Ion:152 Resp: 22002

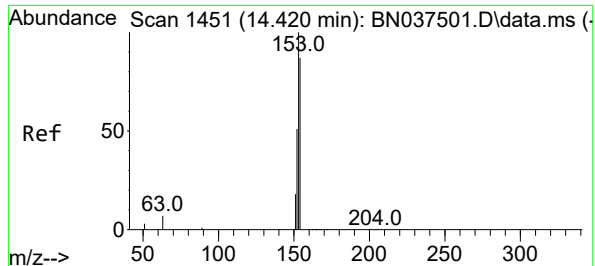
Ion Ratio Lower Upper

152 100

151 19.9 15.9 23.9

153 13.2 10.7 16.1

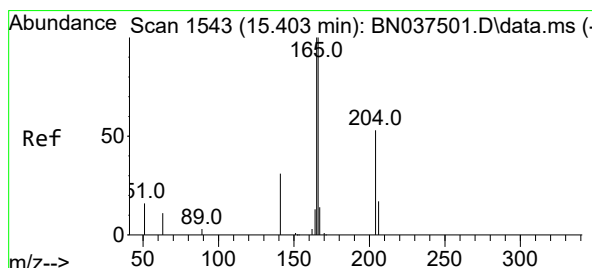
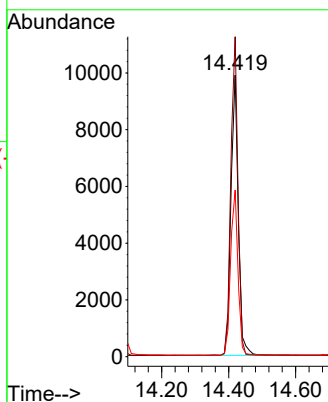
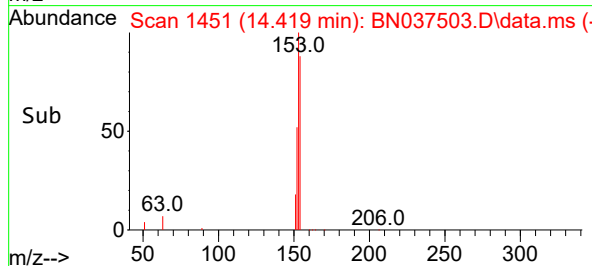
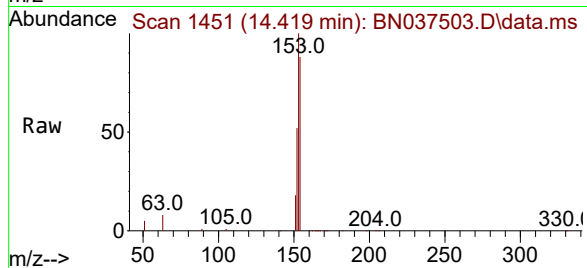




#17  
Acenaphthene  
Concen: 1.625 ng  
RT: 14.419 min Scan# 1451  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

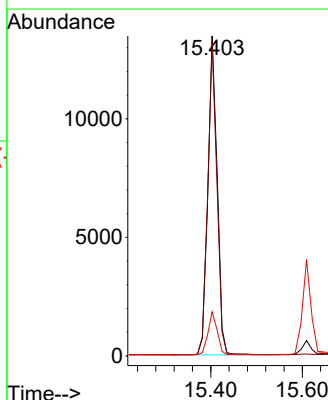
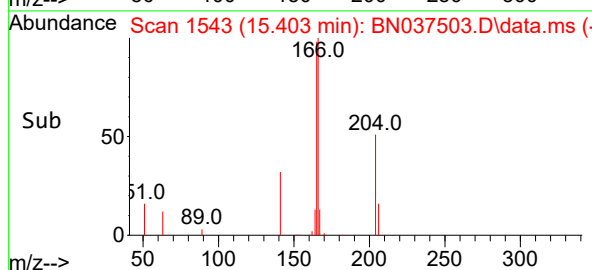
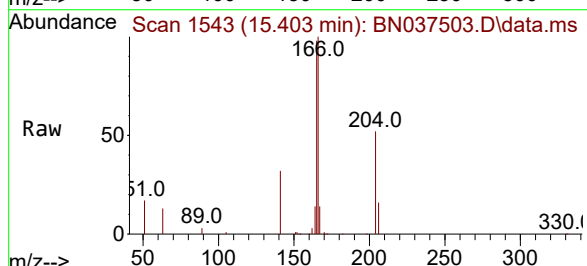
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

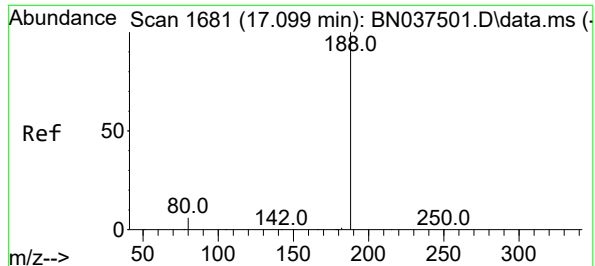
Tgt Ion:154 Resp: 14877  
Ion Ratio Lower Upper  
154 100  
153 110.6 89.2 133.8  
152 59.5 48.0 72.0



#18  
Fluorene  
Concen: 1.638 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:166 Resp: 19298  
Ion Ratio Lower Upper  
166 100  
165 96.1 78.1 117.1  
167 13.1 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

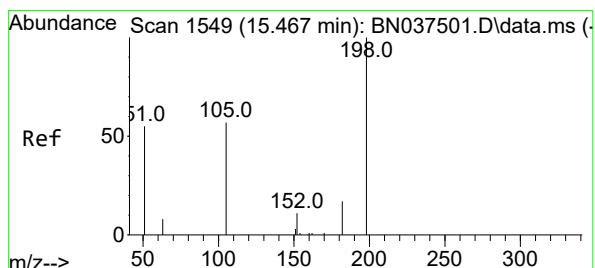
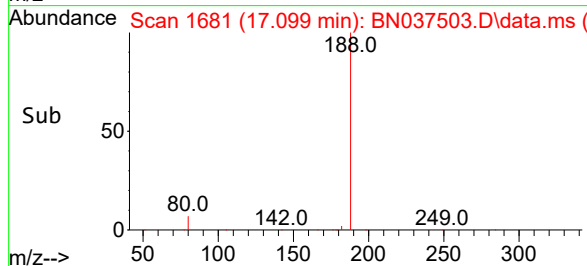
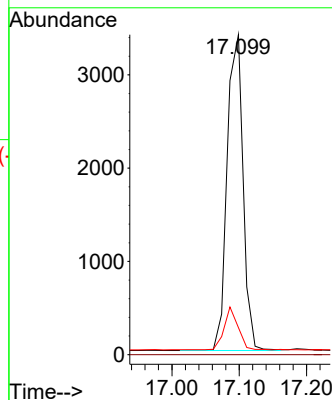
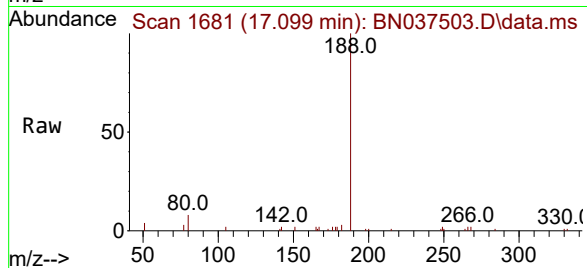
Tgt Ion:188 Resp: 5542

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.5 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 1.576 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

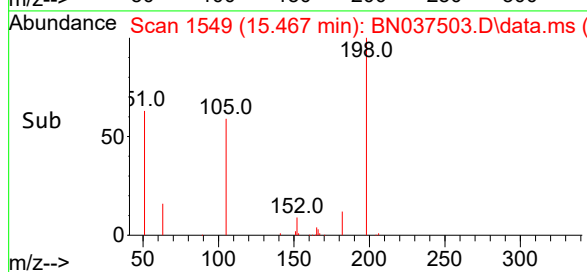
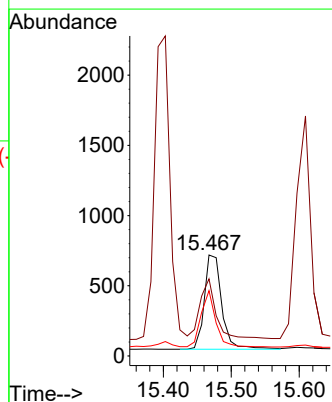
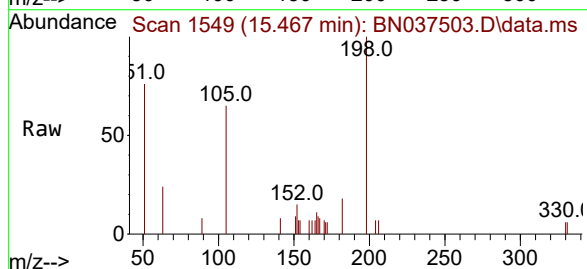
Tgt Ion:198 Resp: 1268

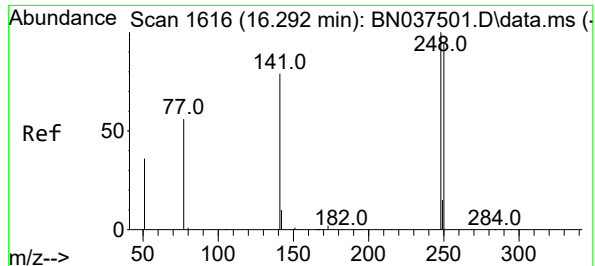
Ion Ratio Lower Upper

198 100

51 76.5 88.5 132.7#

105 64.7 61.2 91.8

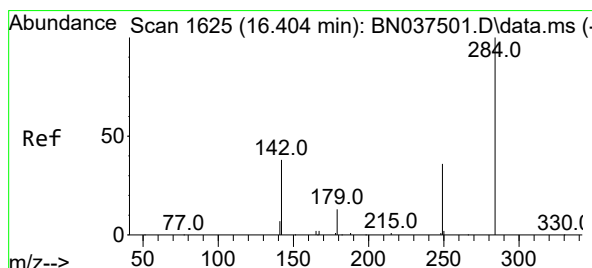
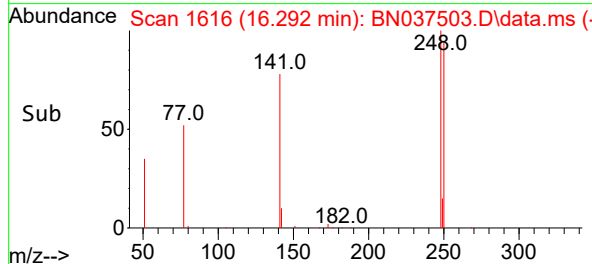
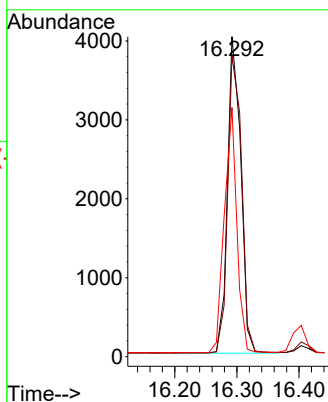
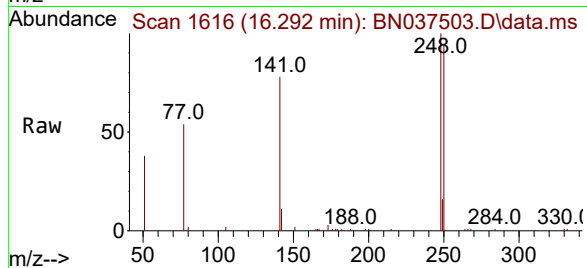




#21  
4-Bromophenyl-phenylether  
Concen: 1.674 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

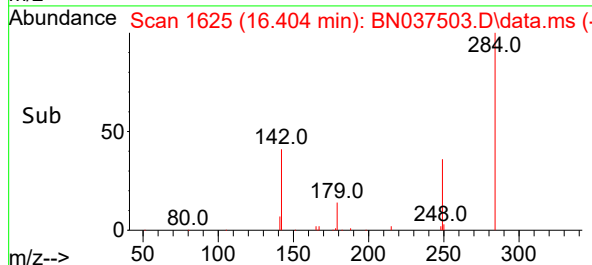
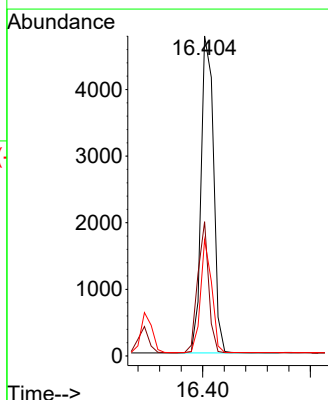
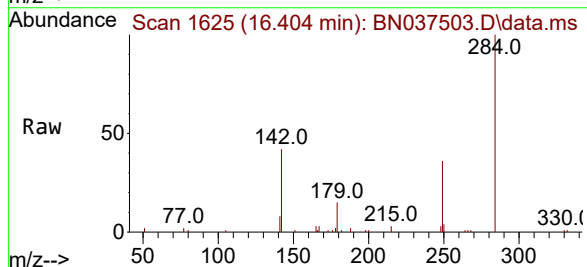
Instrument :  
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ClientSampleId :  
SSTDICC1.6

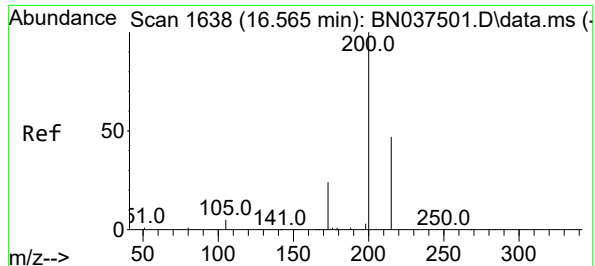
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 94.1  | 76.2  | 114.2 |
| 141     | 77.8  | 63.9  | 95.9  |



#22  
Hexachlorobenzene  
Concen: 1.668 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 36.4  | 28.9  | 43.3  |
| 249     | 32.1  | 25.8  | 38.6  |

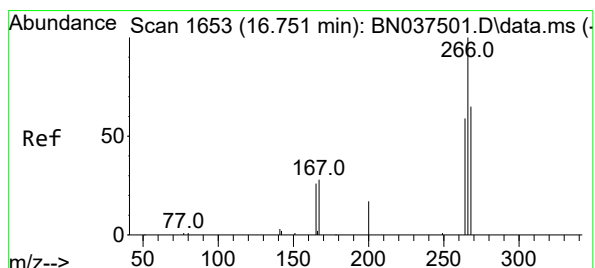
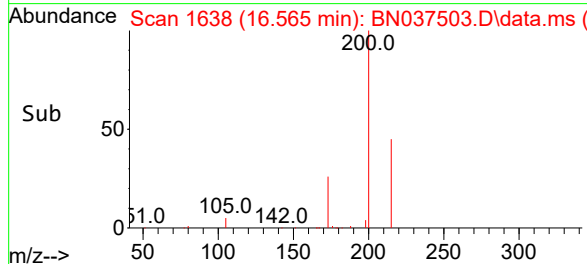
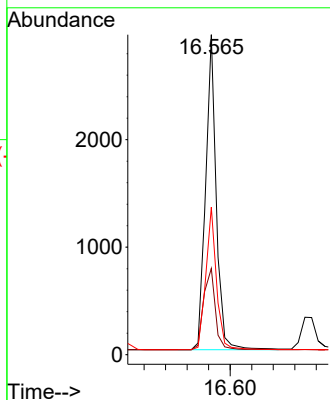
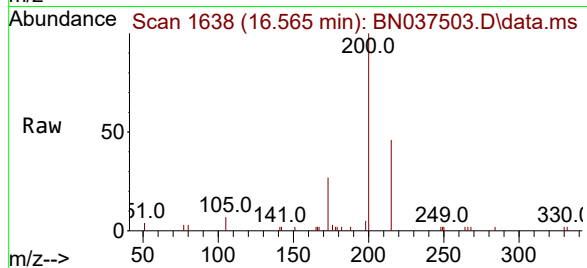




#23  
Atrazine  
Concen: 1.621 ng  
RT: 16.565 min Scan# 1638  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

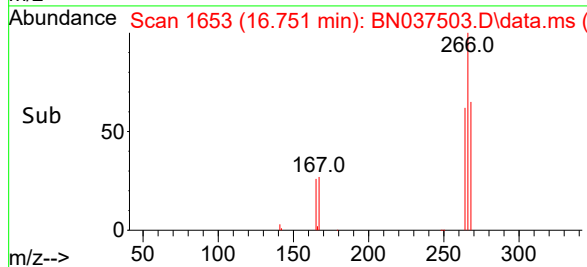
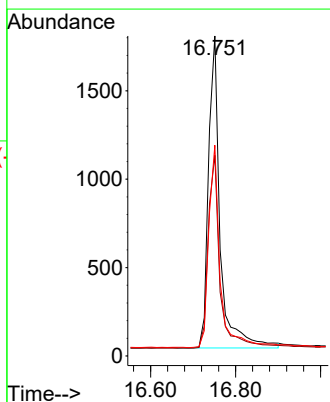
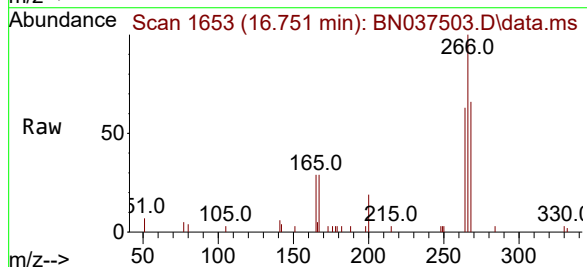
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

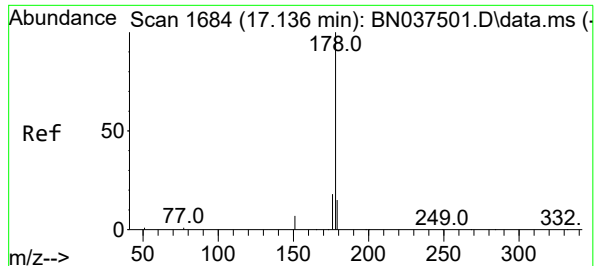
Tgt Ion:200 Resp: 4016  
Ion Ratio Lower Upper  
200 100  
173 27.0 23.2 34.8  
215 46.1 40.2 60.4



#24  
Pentachlorophenol  
Concen: 1.627 ng  
RT: 16.751 min Scan# 1653  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:266 Resp: 3347  
Ion Ratio Lower Upper  
266 100  
264 62.6 49.3 73.9  
268 64.1 51.6 77.4





#25

Phenanthrene

Concen: 1.666 ng

RT: 17.136 min Scan# 1684

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

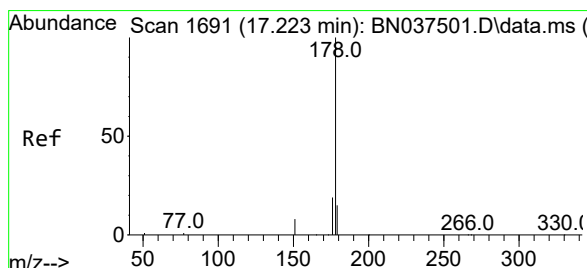
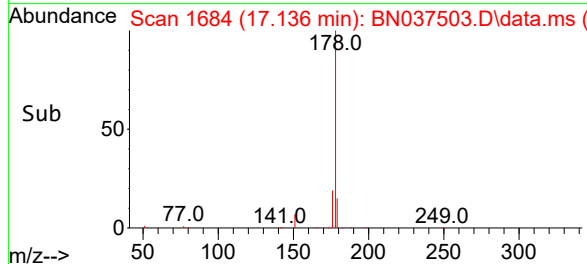
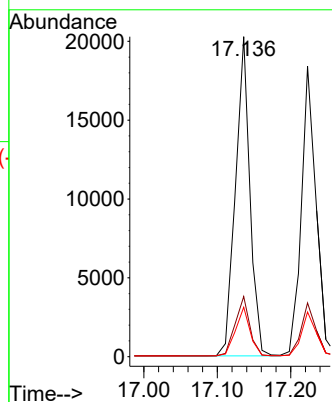
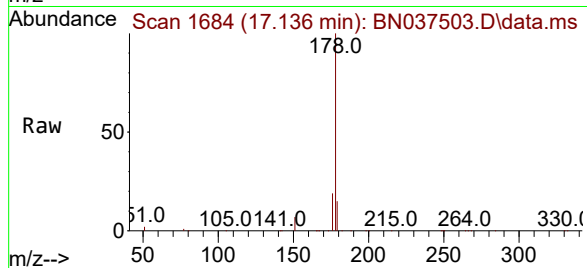
Tgt Ion:178 Resp: 27669

Ion Ratio Lower Upper

178 100

176 18.8 15.0 22.6

179 15.3 12.2 18.2



#26

Anthracene

Concen: 1.697 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

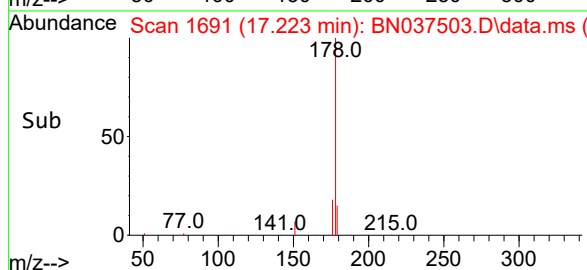
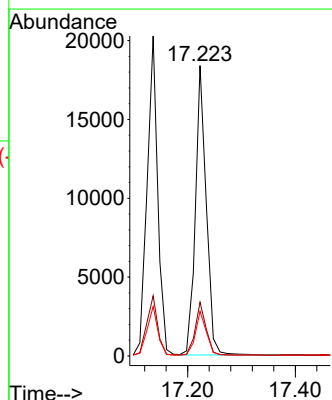
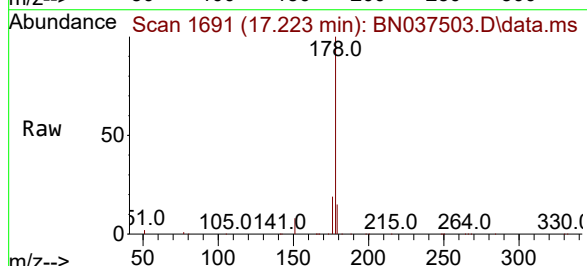
Tgt Ion:178 Resp: 25717

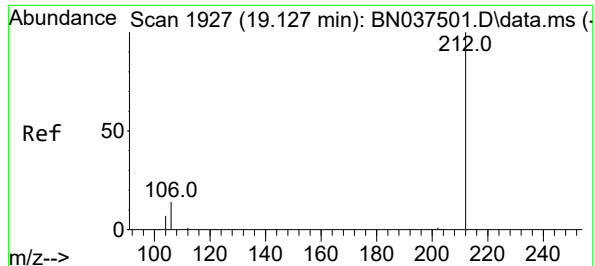
Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

179 15.3 12.3 18.5





#27

Fluoranthene-d10

Concen: 1.572 ng

RT: 19.127 min Scan# 1927

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

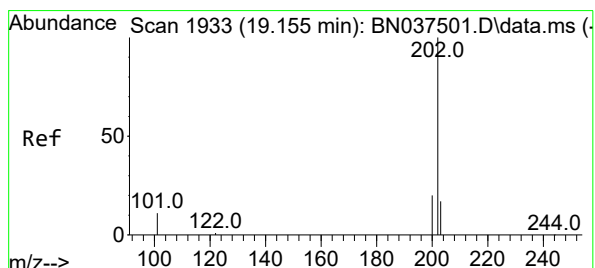
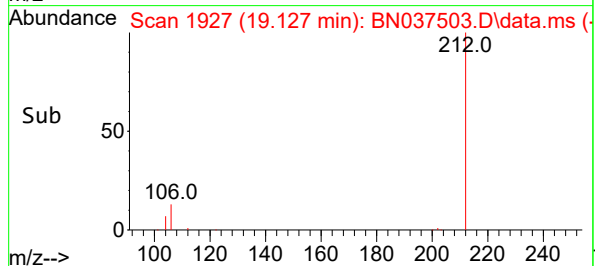
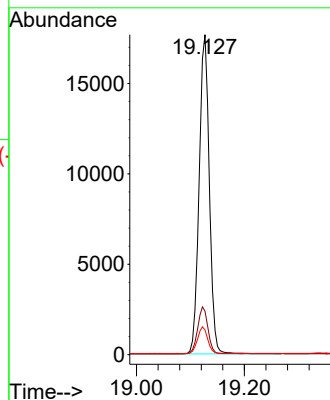
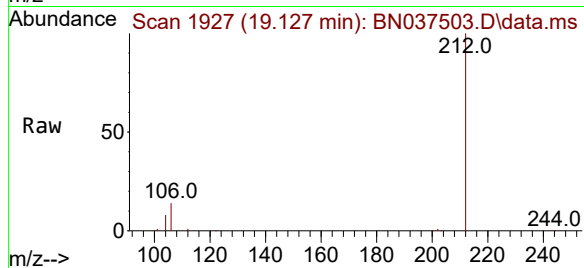
Tgt Ion:212 Resp: 23071

Ion Ratio Lower Upper

212 100

106 14.8 12.2 18.4

104 8.3 6.7 10.1



#28

Fluoranthene

Concen: 1.654 ng

RT: 19.155 min Scan# 1933

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

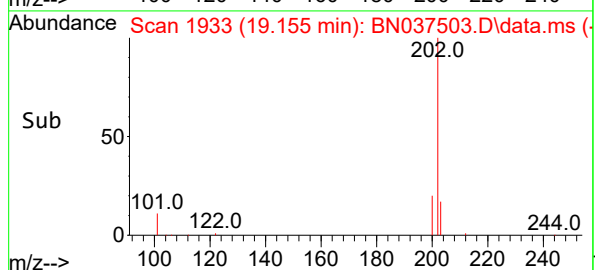
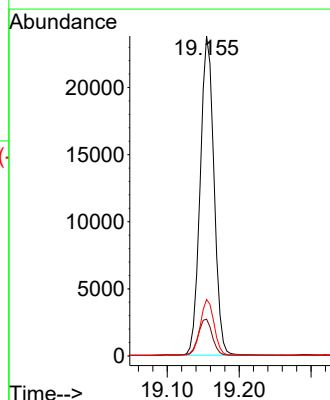
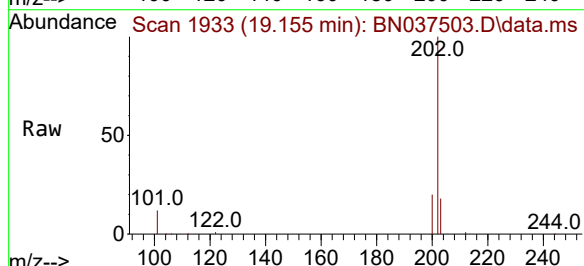
Tgt Ion:202 Resp: 31674

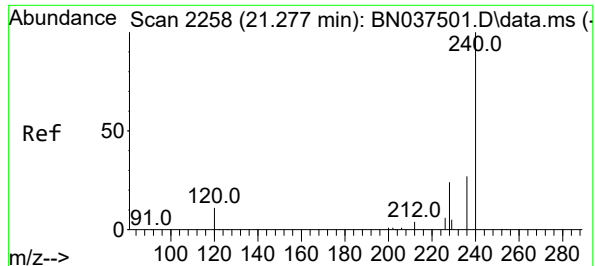
Ion Ratio Lower Upper

202 100

101 11.7 9.8 14.6

203 17.3 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

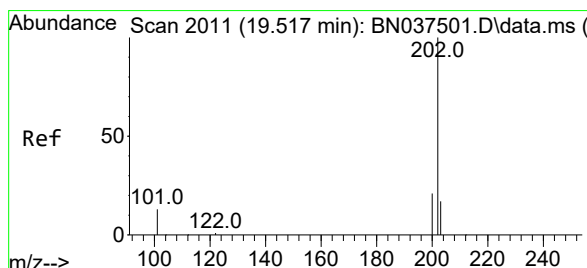
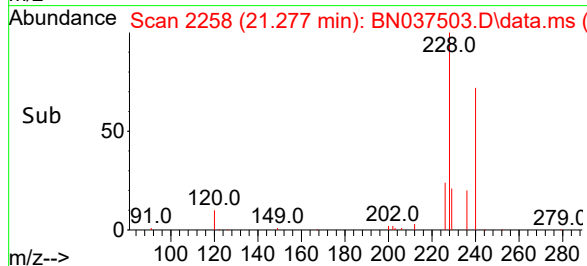
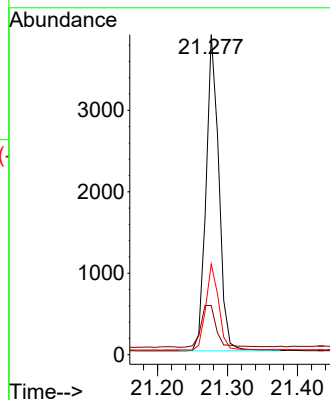
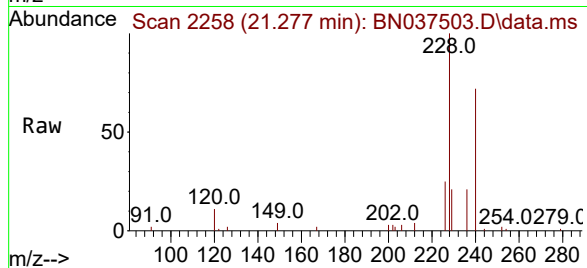
Tgt Ion:240 Resp: 4955

Ion Ratio Lower Upper

240 100

120 15.4 10.7 16.1

236 28.3 22.6 33.8



#30

Pyrene

Concen: 1.596 ng

RT: 19.517 min Scan# 2011

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

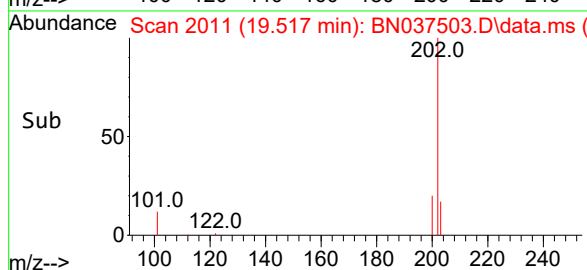
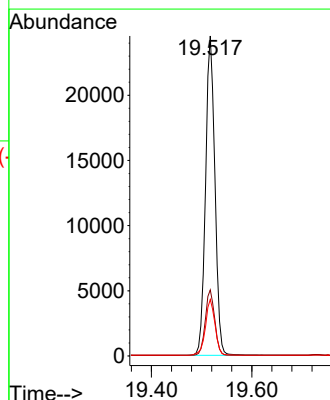
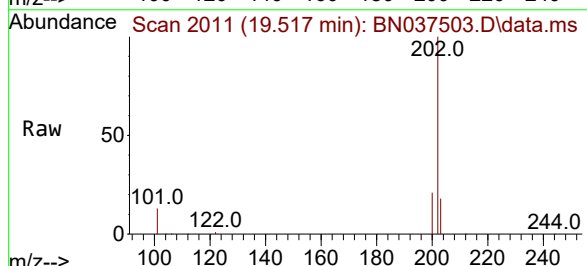
Tgt Ion:202 Resp: 31858

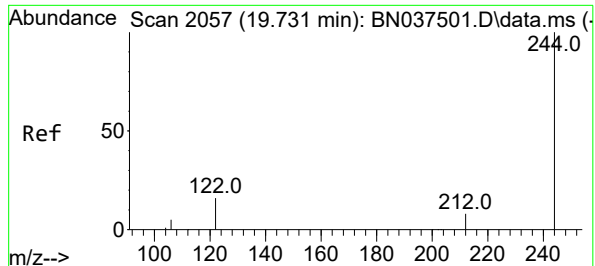
Ion Ratio Lower Upper

202 100

200 20.6 16.5 24.7

203 17.7 14.3 21.5

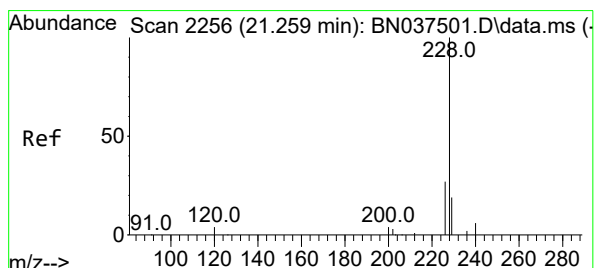
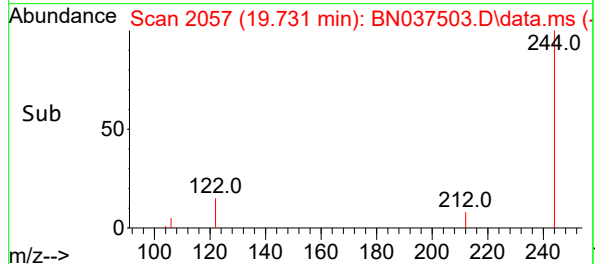
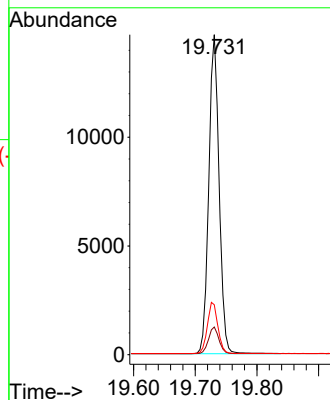
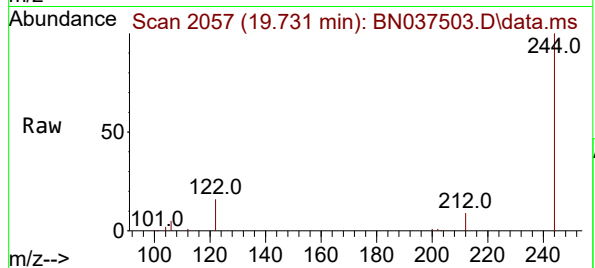




#31  
Terphenyl-d14  
Concen: 1.591 ng  
RT: 19.731 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

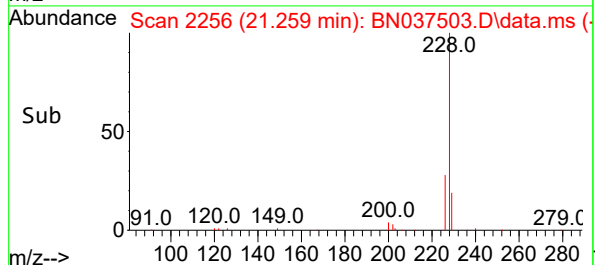
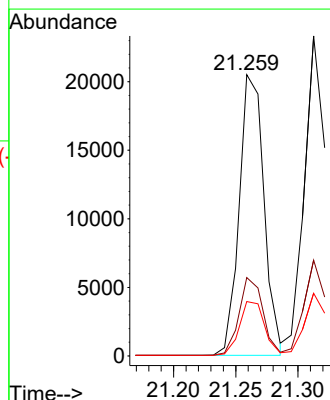
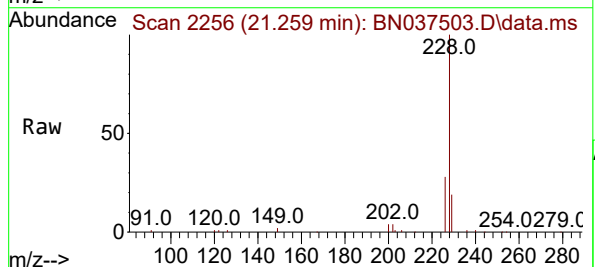
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

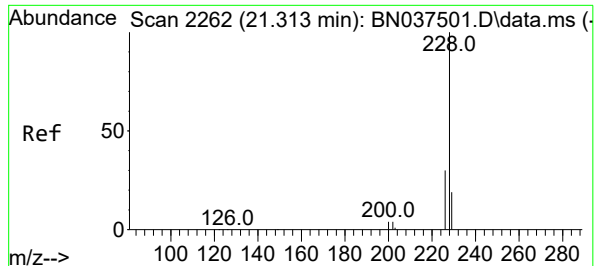
Tgt Ion:244 Resp: 16936  
Ion Ratio Lower Upper  
244 100  
212 8.6 7.4 11.2  
122 15.6 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 1.632 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:228 Resp: 28317  
Ion Ratio Lower Upper  
228 100  
226 27.9 21.9 32.9  
229 19.3 15.8 23.8





#33

Chrysene

Concen: 1.632 ng

RT: 21.313 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

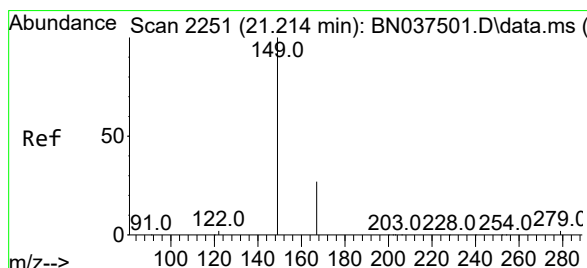
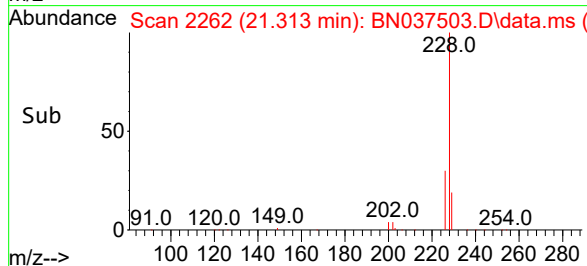
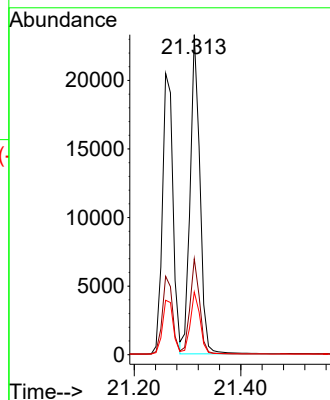
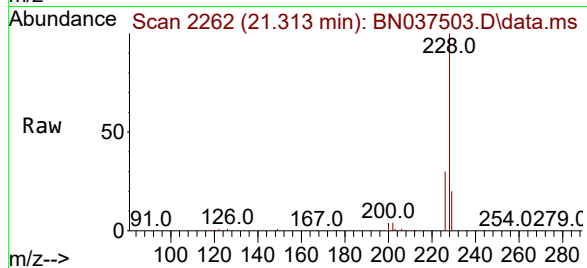
Tgt Ion:228 Resp: 29489

Ion Ratio Lower Upper

228 100

226 30.0 24.2 36.4

229 19.6 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 1.532 ng

RT: 21.214 min Scan# 2251

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

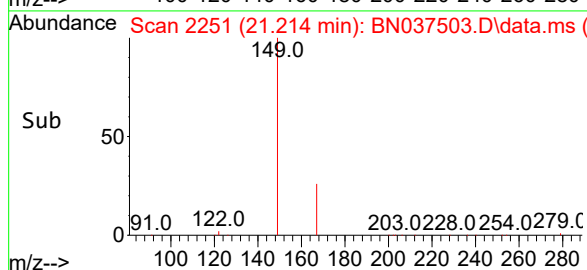
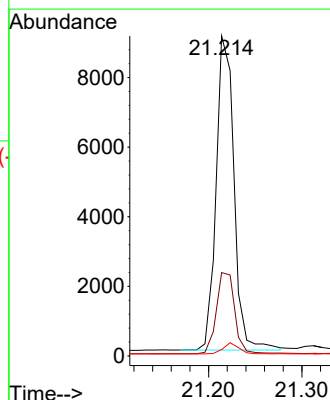
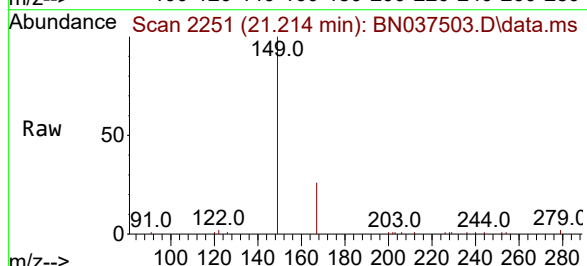
Tgt Ion:149 Resp: 11959

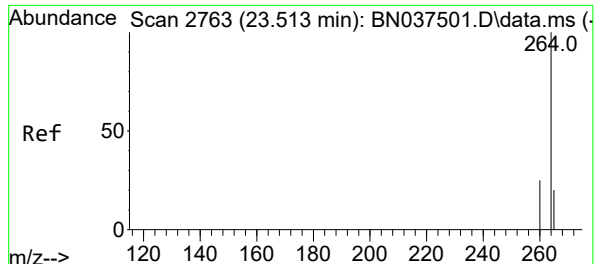
Ion Ratio Lower Upper

149 100

167 26.5 21.8 32.8

279 3.1 3.0 4.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.516 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037503.D

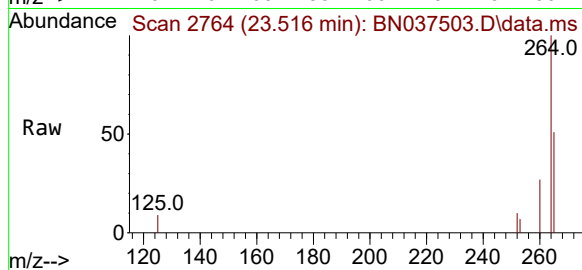
Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6



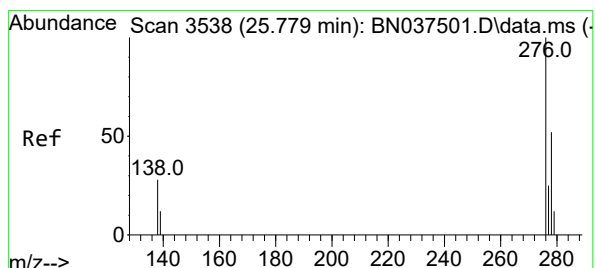
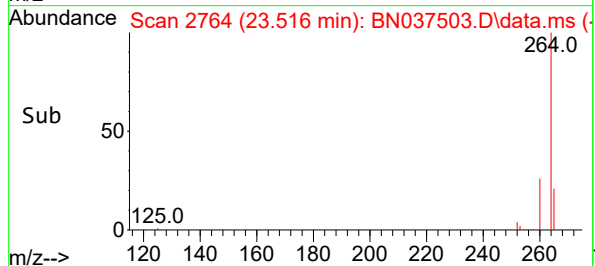
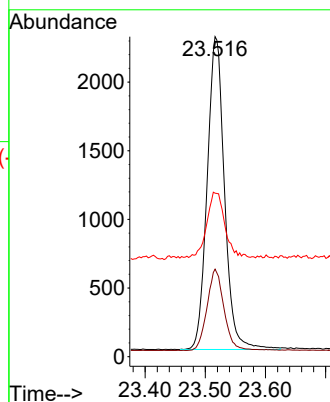
Tgt Ion:264 Resp: 4551

Ion Ratio Lower Upper

264 100

260 27.3 21.2 31.8

265 51.1 40.4 60.6



#36

Indeno(1,2,3-cd)pyrene

Concen: 1.701 ng

RT: 25.782 min Scan# 3539

Delta R.T. 0.003 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

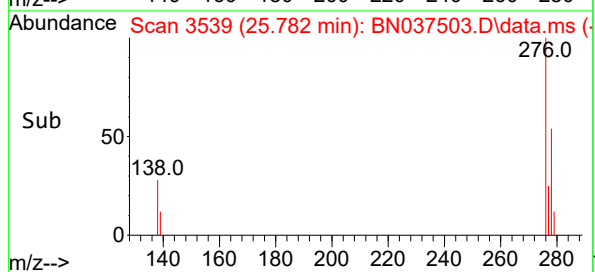
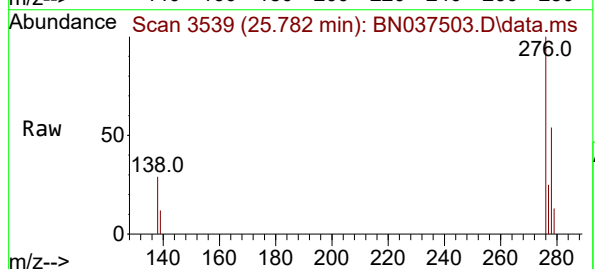
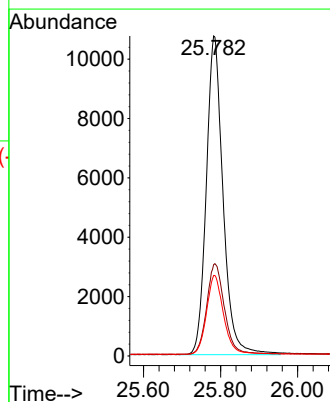
Tgt Ion:276 Resp: 32244

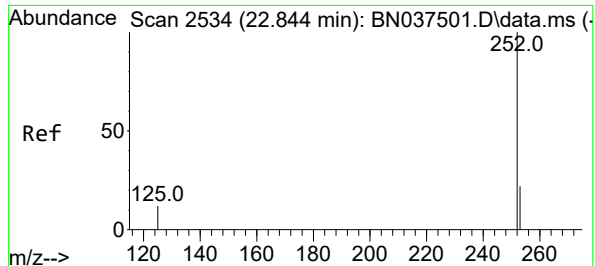
Ion Ratio Lower Upper

276 100

138 30.1 24.0 36.0

277 25.1 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 1.675 ng

RT: 22.844 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

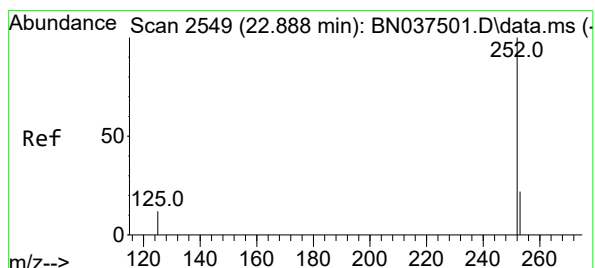
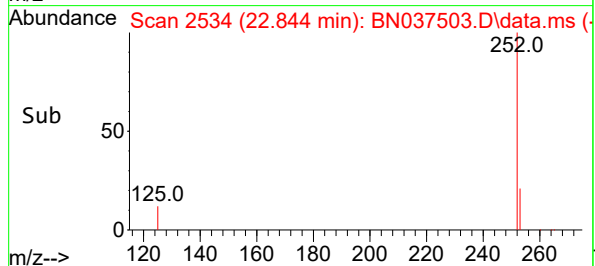
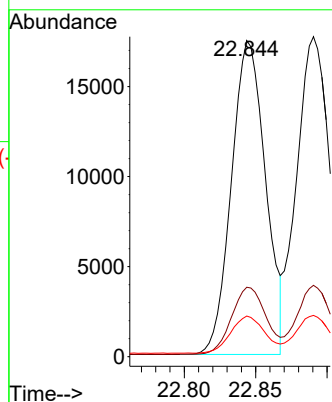
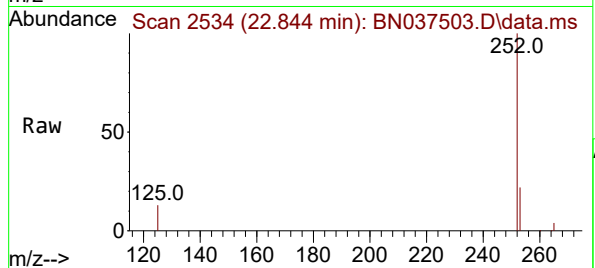
Tgt Ion:252 Resp: 28933

Ion Ratio Lower Upper

252 100

253 22.0 19.5 29.3

125 12.9 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 1.696 ng

RT: 22.890 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

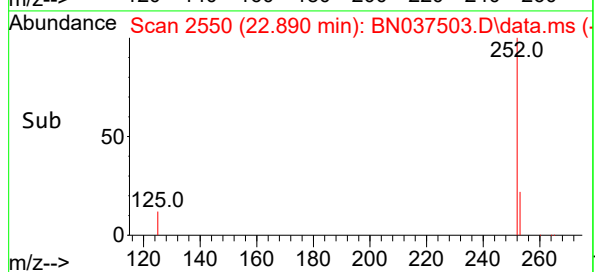
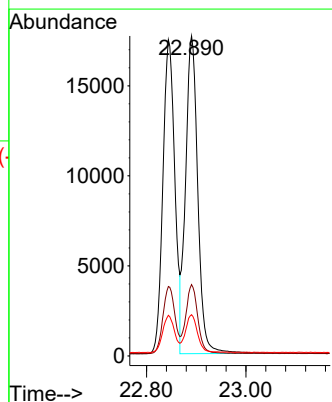
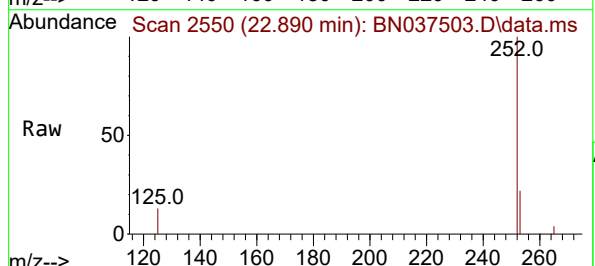
Tgt Ion:252 Resp: 30228

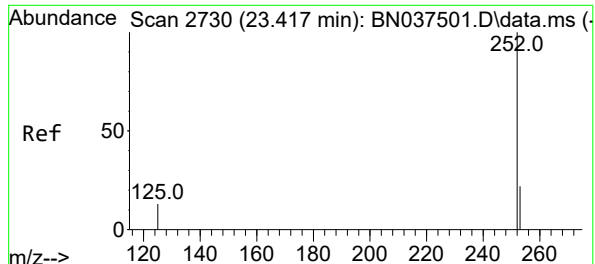
Ion Ratio Lower Upper

252 100

253 22.3 19.5 29.3

125 12.9 13.1 19.7#





#39

Benzo(a)pyrene

Concen: 1.668 ng

RT: 23.420 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

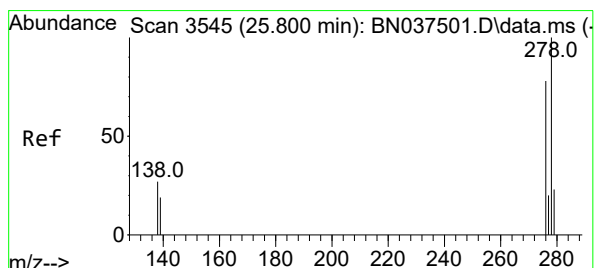
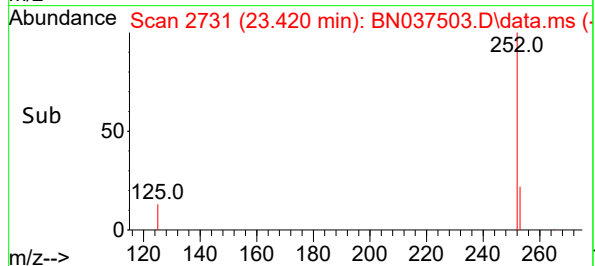
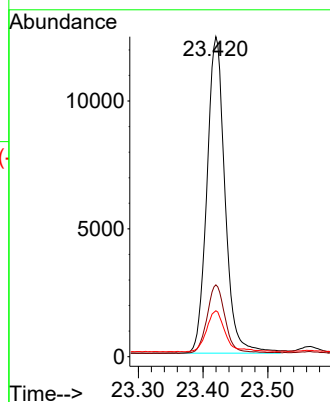
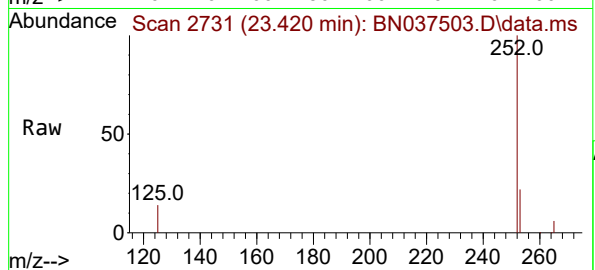
Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 24034 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 22.5  | 19.9  | 29.9  |
| 125       | 14.3  | 15.2  | 22.8# |



#40

Dibenzo(a,h)anthracene

Concen: 1.712 ng

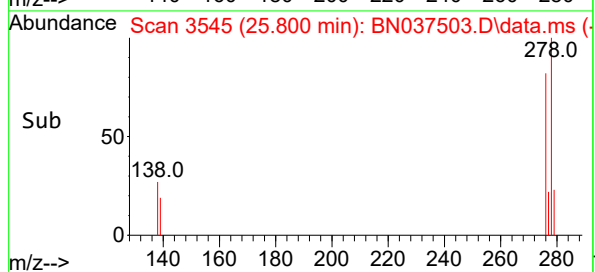
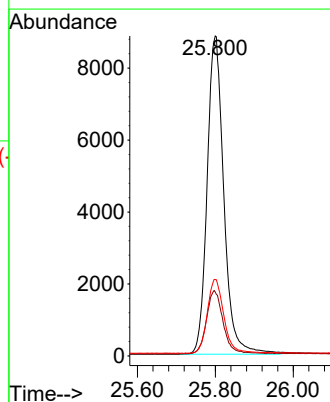
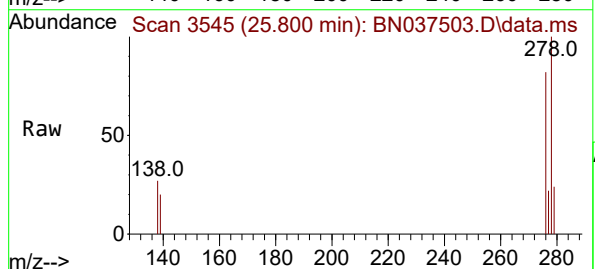
RT: 25.800 min Scan# 3545

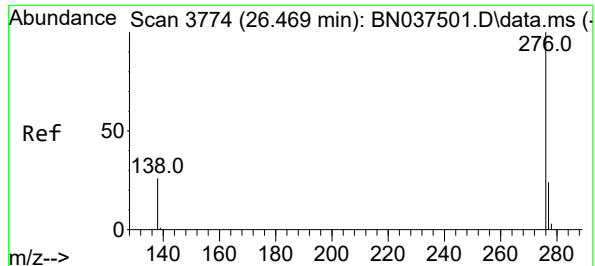
Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 26285 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 20.0  | 17.5  | 26.3  |
| 279       | 23.9  | 21.3  | 31.9  |





#41

Benzo(g,h,i)perylene

Concen: 1.697 ng

RT: 26.466 min Scan# 31

Delta R.T. -0.003 min

Lab File: BN037503.D

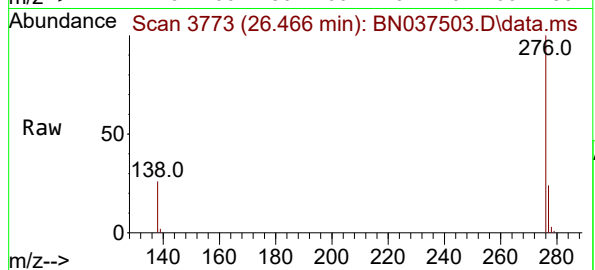
Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6



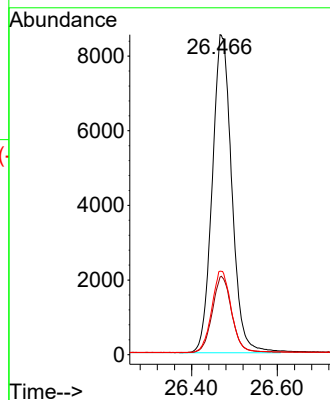
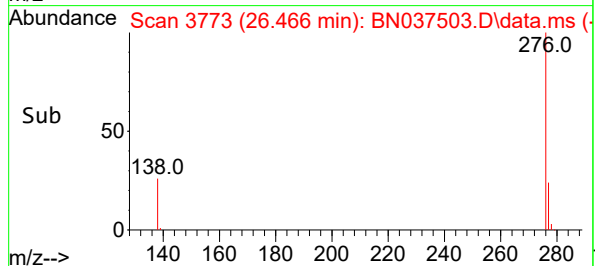
Tgt Ion:276 Resp: 26971

Ion Ratio Lower Upper

276 100

277 24.3 20.9 31.3

138 26.1 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037504.D  
 Acq On : 15 Jul 2025 15:38  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

Quant Time: Jul 15 17:28:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

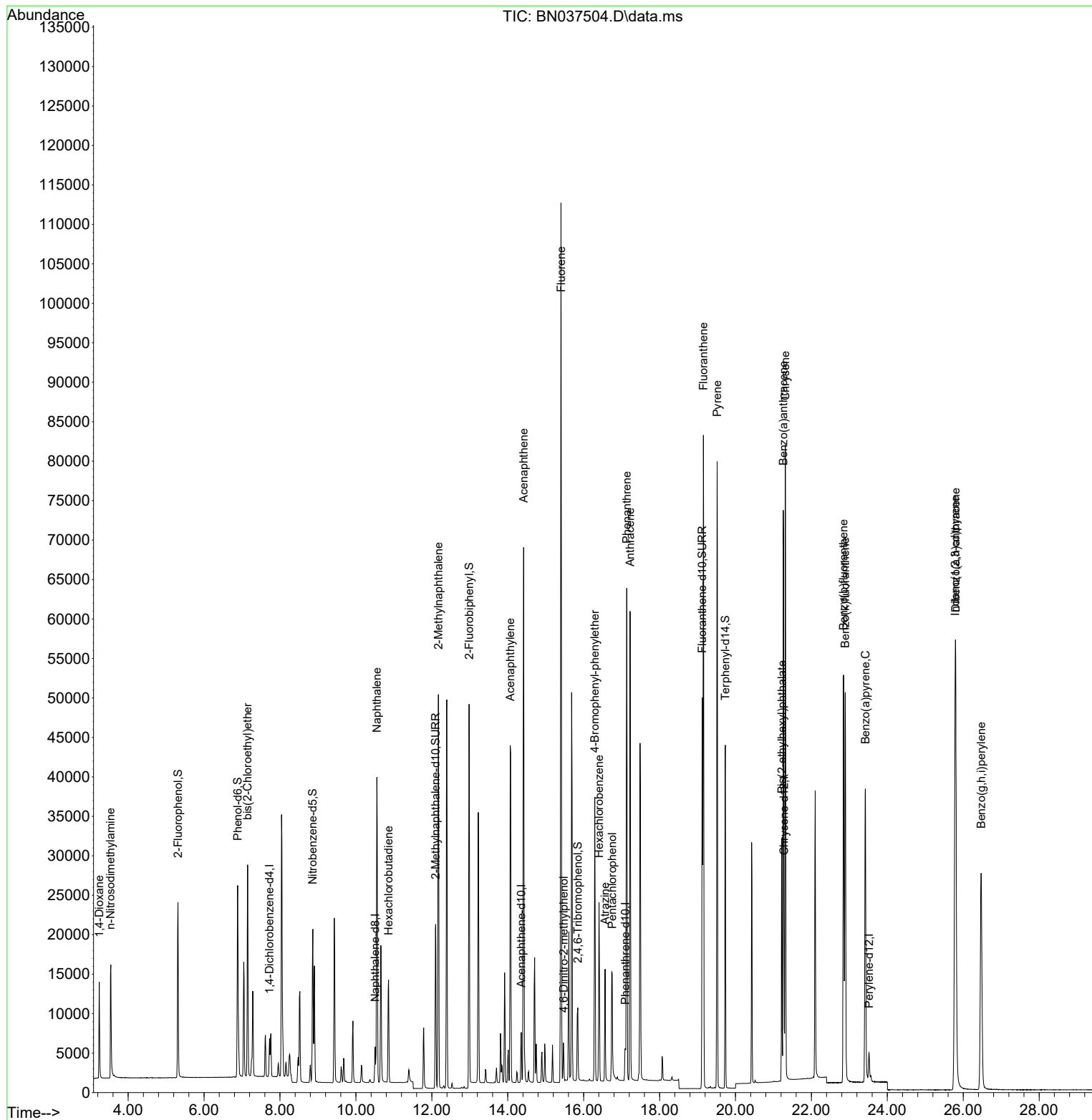
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2243     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5878     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.355 | 164  | 3382     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.099 | 188  | 6204     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.277 | 240  | 5331     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.519 | 264  | 4672     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 17416    | 3.140 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.887  | 99   | 22047    | 3.169 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.865  | 82   | 14330    | 3.261 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 27759    | 3.293 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 5808     | 3.494 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 59667    | 3.393 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.127 | 212  | 53521    | 3.257 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.731 | 244  | 38458    | 3.357 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.239  | 88   | 6815     | 3.161 | ng    | 98       |
| 3) n-Nitrosodimethylamine     | 3.535  | 42   | 8946     | 3.298 | ng    | # 93     |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 18545    | 3.203 | ng    | 98       |
| 9) Naphthalene                | 10.552 | 128  | 50467    | 3.219 | ng    | 98       |
| 10) Hexachlorobutadiene       | 10.861 | 225  | 11106    | 3.206 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 34611    | 3.358 | ng    | 99       |
| 16) Acenaphthylene            | 14.067 | 152  | 51277    | 3.385 | ng    | 99       |
| 17) Acenaphthene              | 14.420 | 154  | 33858    | 3.286 | ng    | 98       |
| 18) Fluorene                  | 15.403 | 166  | 43450    | 3.276 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198  | 3484     | 3.233 | ng    | # 28     |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 13494    | 3.395 | ng    | 96       |
| 22) Hexachlorobenzene         | 16.404 | 284  | 16890    | 3.289 | ng    | 99       |
| 23) Atrazine                  | 16.565 | 200  | 9939     | 3.584 | ng    | 95       |
| 24) Pentachlorophenol         | 16.751 | 266  | 8417     | 3.654 | ng    | 99       |
| 25) Phenanthrene              | 17.136 | 178  | 61959    | 3.333 | ng    | 100      |
| 26) Anthracene                | 17.223 | 178  | 58358    | 3.441 | ng    | 100      |
| 28) Fluoranthene              | 19.155 | 202  | 71018    | 3.313 | ng    | 99       |
| 30) Pyrene                    | 19.517 | 202  | 71002    | 3.306 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 62418    | 3.343 | ng    | 99       |
| 33) Chrysene                  | 21.313 | 228  | 63542    | 3.268 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.223 | 149  | 29561    | 3.519 | ng    | 99       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.788 | 276  | 67476    | 3.467 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.847 | 252  | 60420    | 3.407 | ng    | # 93     |
| 38) Benzo(k)fluoranthene      | 22.891 | 252  | 63137    | 3.450 | ng    | # 93     |
| 39) Benzo(a)pyrene            | 23.420 | 252  | 51171    | 3.459 | ng    | # 92     |
| 40) Dibenzo(a,h)anthracene    | 25.800 | 278  | 55412    | 3.516 | ng    | 95       |
| 41) Benzo(g,h,i)perylene      | 26.472 | 276  | 55959    | 3.430 | ng    | 96       |

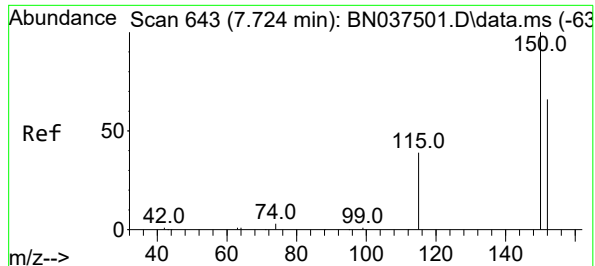
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037504.D  
Acq On : 15 Jul 2025 15:38  
Operator : RC/JU  
Sample : SSTDICC3.2  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

Quant Time: Jul 15 17:28:02 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 16:45:15 2025  
Response via : Initial Calibration

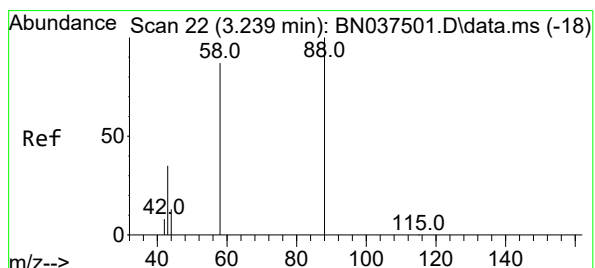
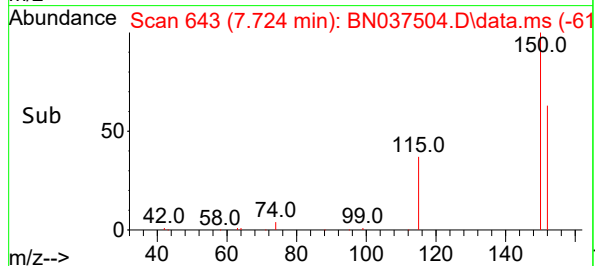
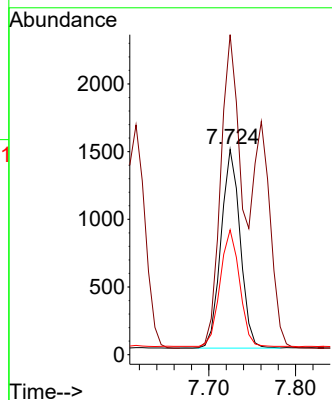
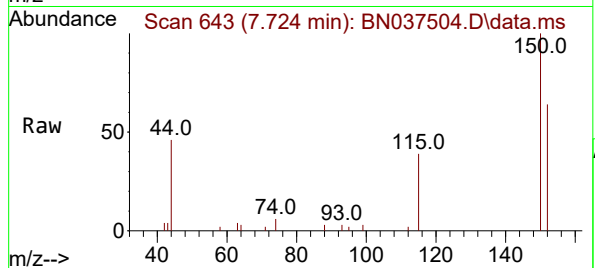




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

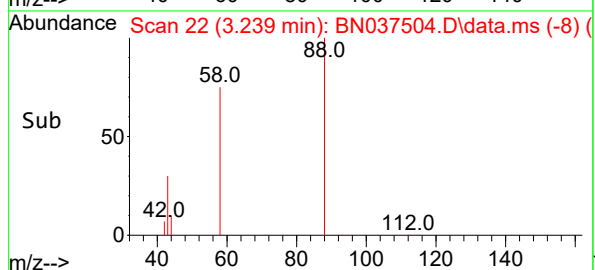
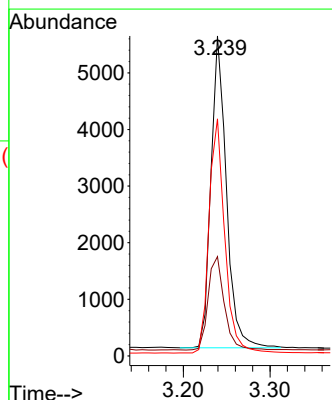
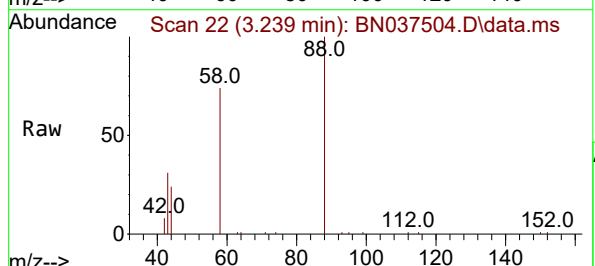
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

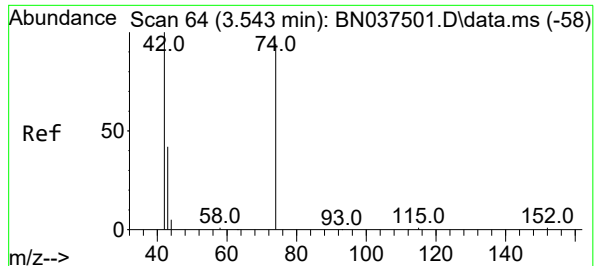
Tgt Ion:152 Resp: 2243  
Ion Ratio Lower Upper  
152 100  
150 155.8 119.8 179.8  
115 60.8 49.1 73.7



#2  
1,4-Dioxane  
Concen: 3.161 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion: 88 Resp: 6815  
Ion Ratio Lower Upper  
88 100  
43 31.7 27.5 41.3  
58 77.1 62.7 94.1

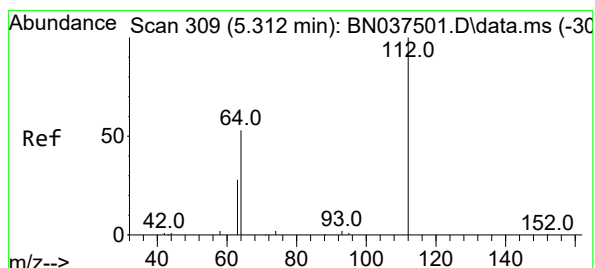
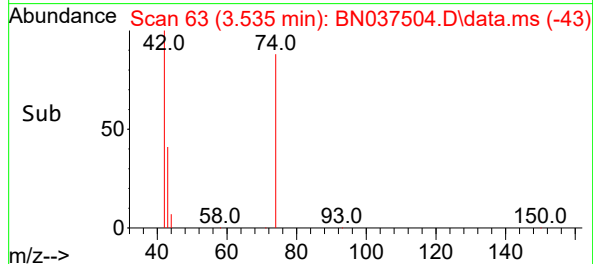
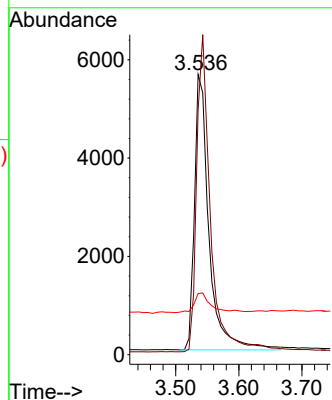
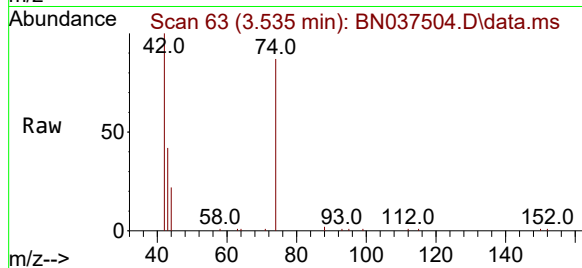




#3  
n-Nitrosodimethylamine  
Concen: 3.298 ng  
RT: 3.535 min Scan# 61  
Delta R.T. -0.007 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

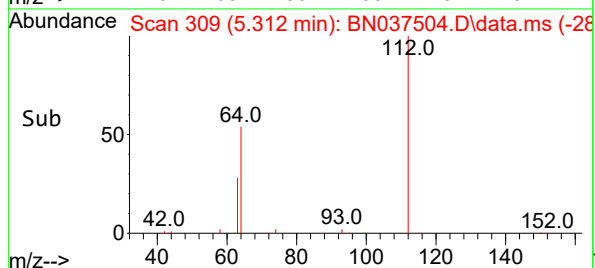
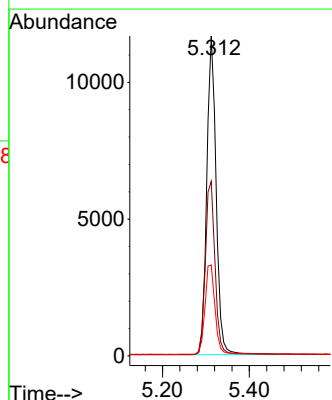
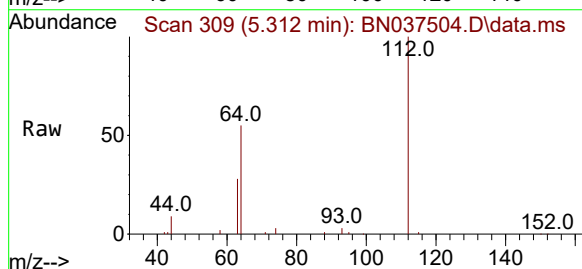
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

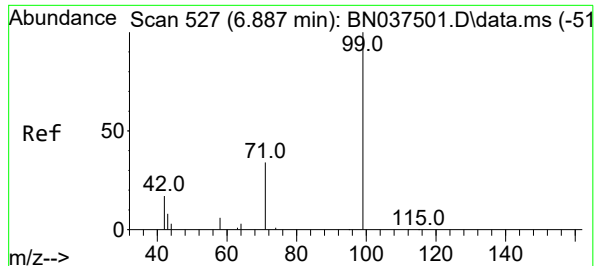
Tgt Ion: 42 Resp: 8946  
Ion Ratio Lower Upper  
42 100  
74 110.0 91.8 137.6  
44 8.4 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 3.140 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion: 112 Resp: 17416  
Ion Ratio Lower Upper  
112 100  
64 56.7 45.1 67.7  
63 29.6 23.8 35.8

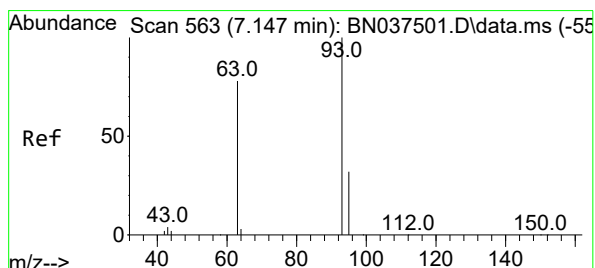
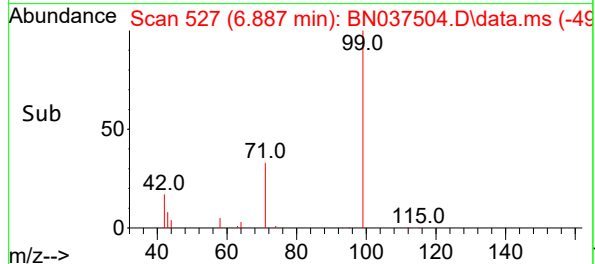
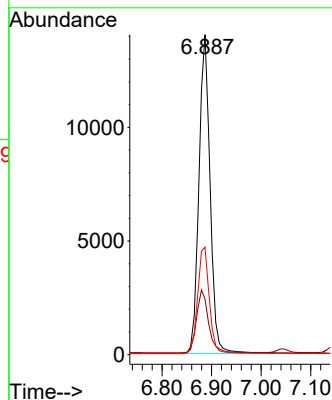
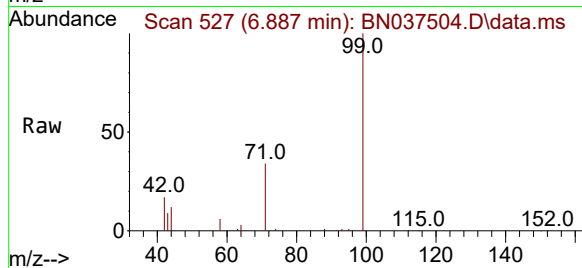




#5  
Phenol-d6  
Concen: 3.169 ng  
RT: 6.887 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

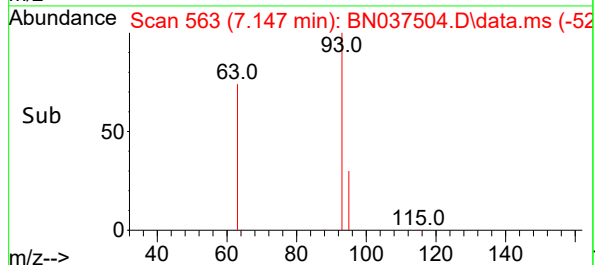
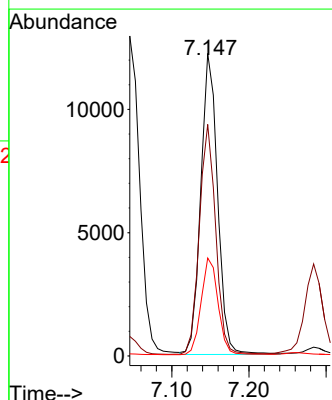
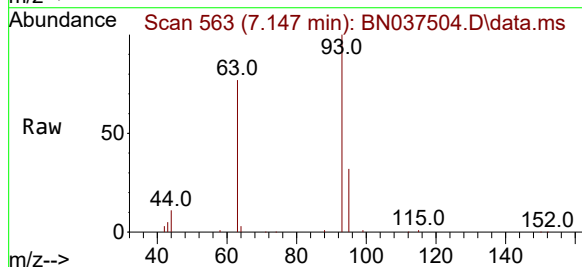
Instrument :  
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ClientSampleId :  
SSTDICC3.2

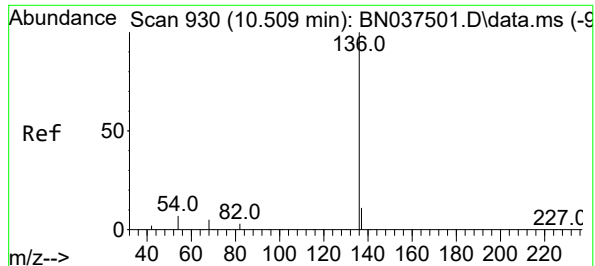
Tgt Ion: 99 Resp: 22047  
Ion Ratio Lower Upper  
99 100  
42 21.2 17.1 25.7  
71 34.8 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 3.203 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion: 93 Resp: 18545  
Ion Ratio Lower Upper  
93 100  
63 74.3 58.2 87.4  
95 32.2 25.3 37.9

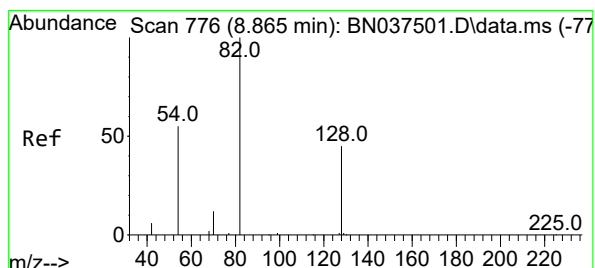
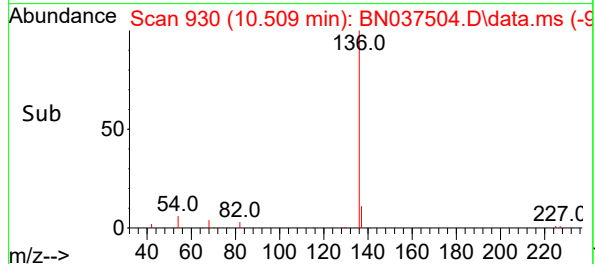
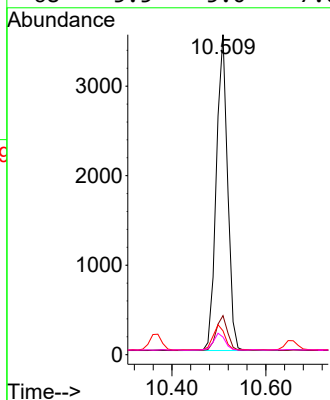
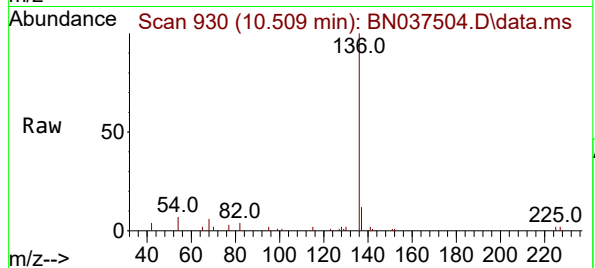




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

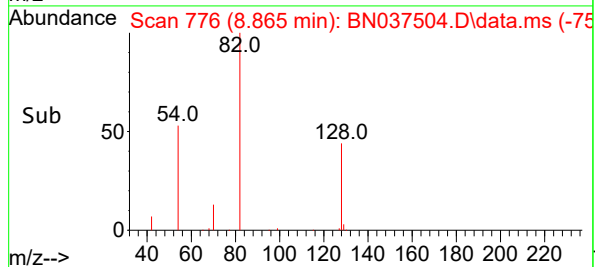
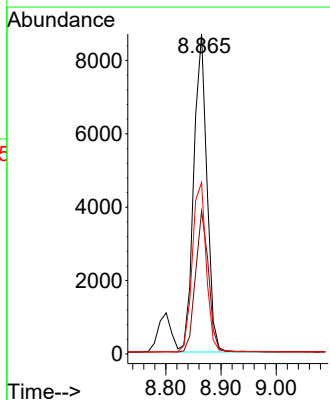
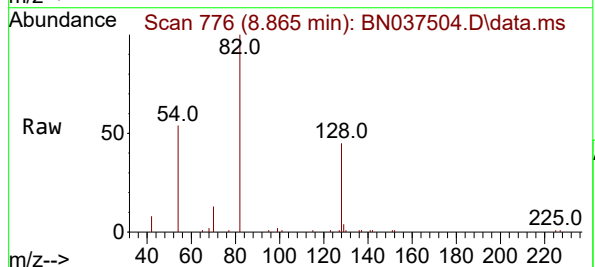
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

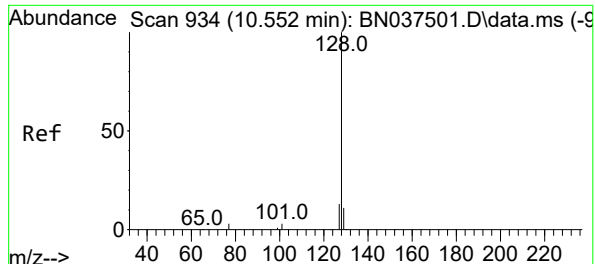
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5878  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.2  | 9.8   | 14.8  |
| 54       | 7.5   | 6.6   | 9.8   |
| 68       | 5.5   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 3.261 ng  
RT: 8.865 min Scan# 776  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 14330 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 44.7  | 37.5  | 56.3  |
| 54       | 53.6  | 45.3  | 67.9  |





#9

Naphthalene

Concen: 3.219 ng

RT: 10.552 min Scan# 91

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

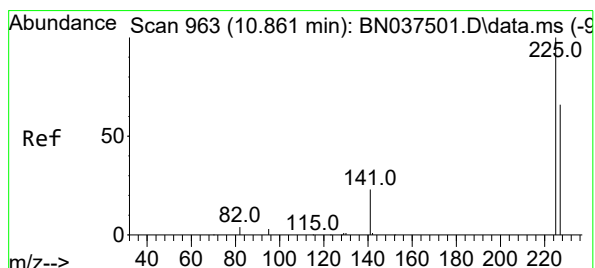
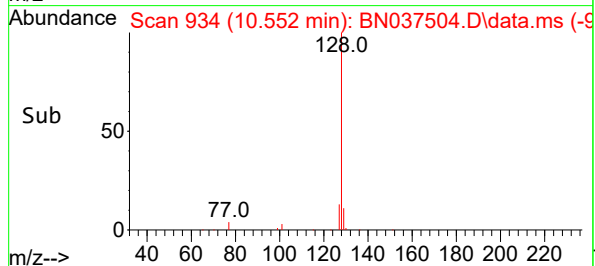
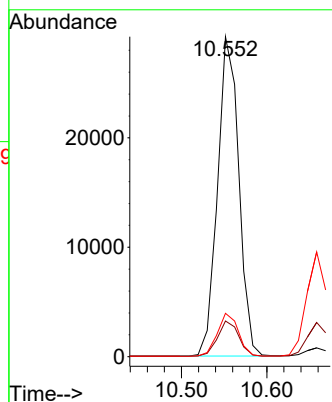
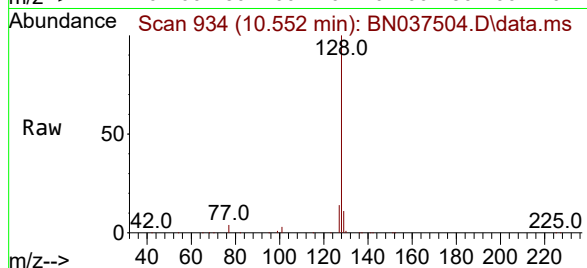
Tgt Ion:128 Resp: 50467

Ion Ratio Lower Upper

128 100

129 11.1 9.7 14.5

127 13.6 11.5 17.3



#10

Hexachlorobutadiene

Concen: 3.206 ng

RT: 10.861 min Scan# 963

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

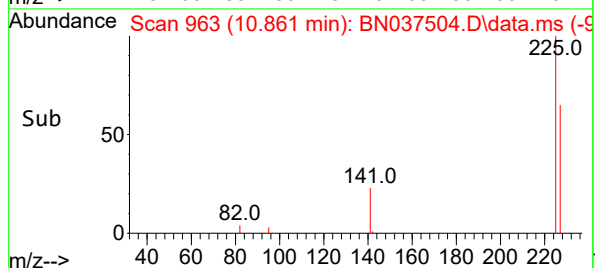
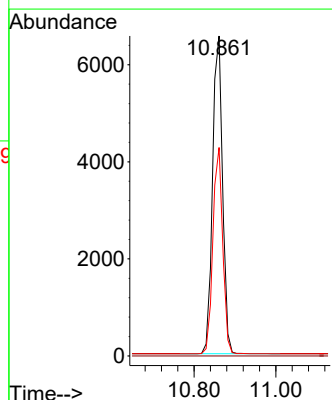
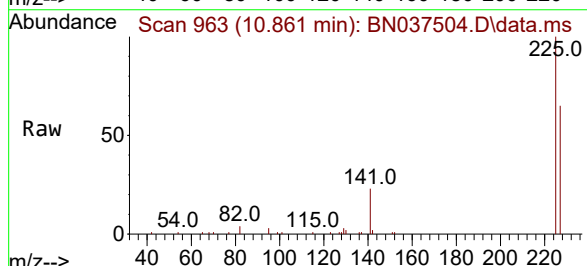
Tgt Ion:225 Resp: 11106

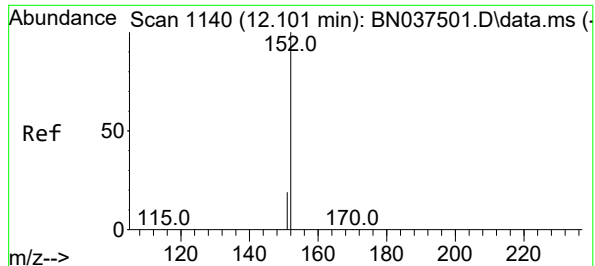
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.5 51.0 76.4

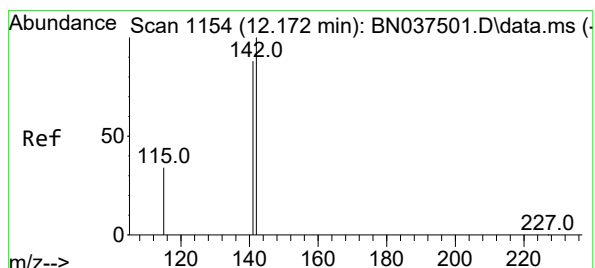
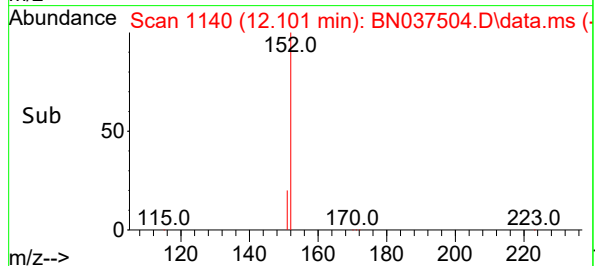
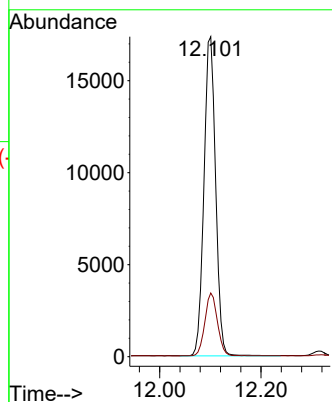
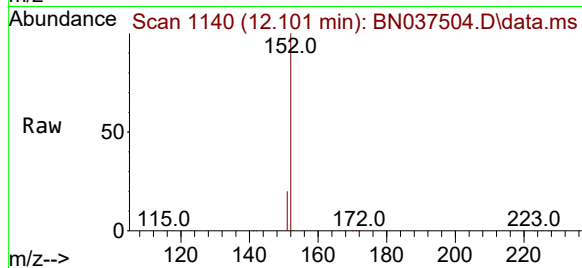




#11  
2-Methylnaphthalene-d10  
Concen: 3.293 ng  
RT: 12.101 min Scan# 1140  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

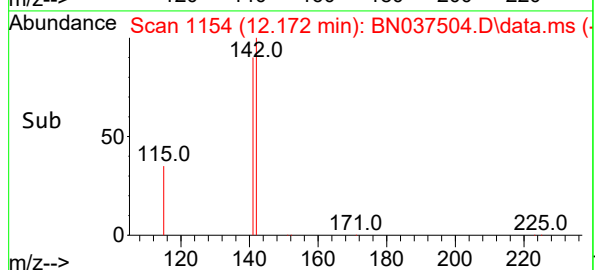
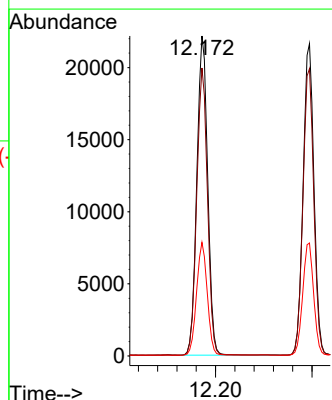
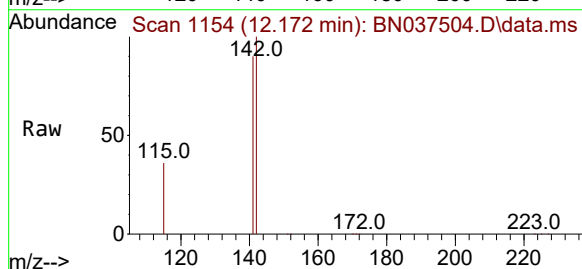
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

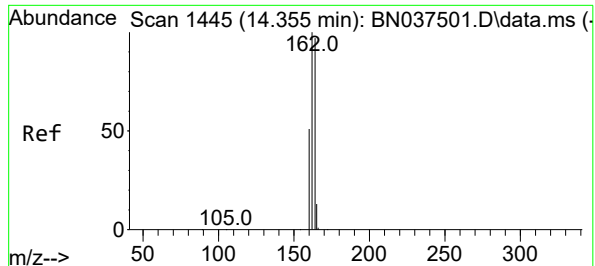
Tgt Ion:152 Resp: 27759  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 3.358 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:142 Resp: 34611  
Ion Ratio Lower Upper  
142 100  
141 90.0 71.0 106.4  
115 35.5 29.0 43.4

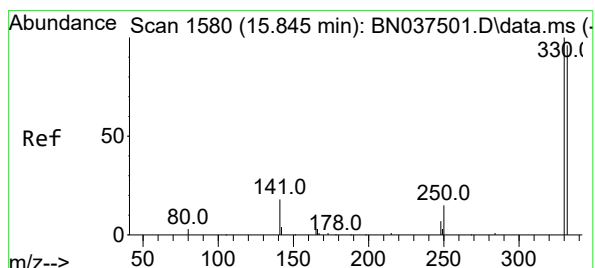
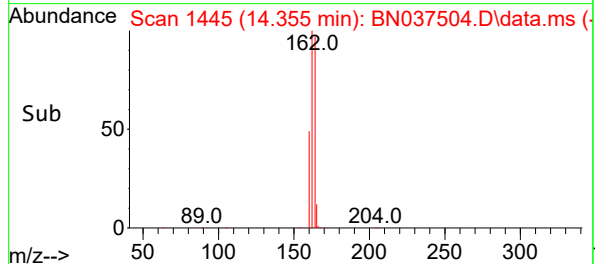
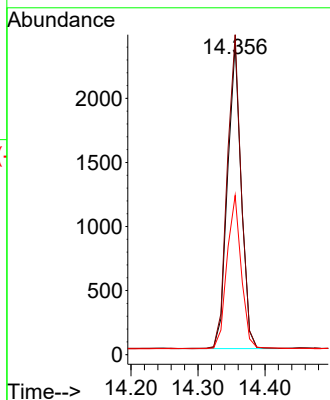
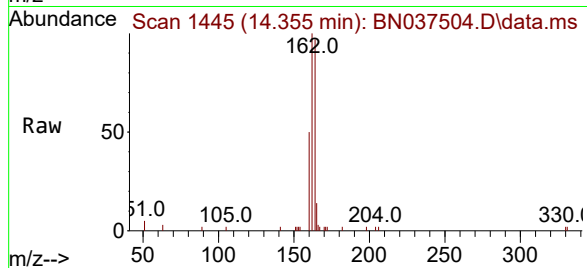




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.355 min Scan# 1445  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

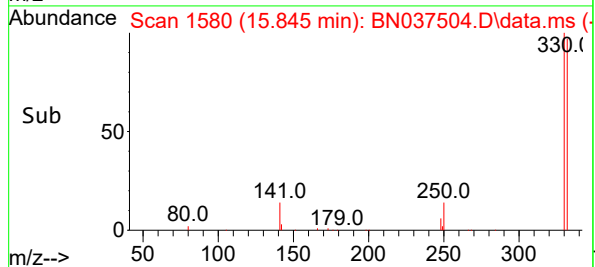
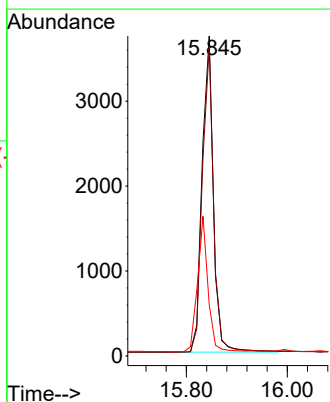
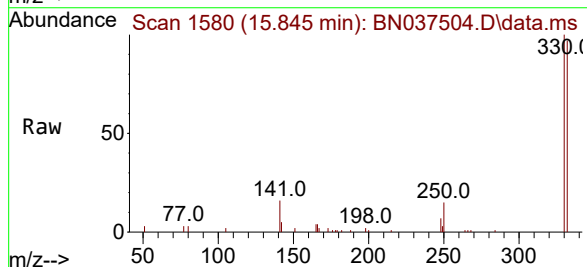
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

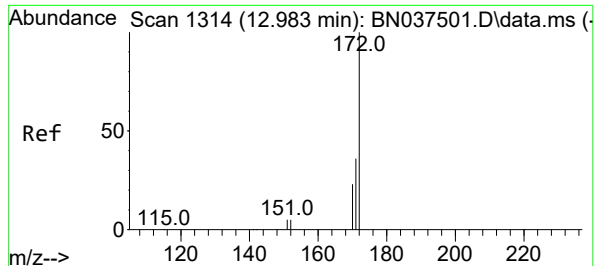
Tgt Ion:164 Resp: 3382  
Ion Ratio Lower Upper  
164 100  
162 102.9 82.0 123.0  
160 51.2 42.4 63.6



#14  
2,4,6-Tribromophenol  
Concen: 3.494 ng  
RT: 15.845 min Scan# 1580  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:330 Resp: 5808  
Ion Ratio Lower Upper  
330 100  
332 95.7 76.1 114.1  
141 39.8 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 3.393 ng

RT: 12.983 min Scan# 1314

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

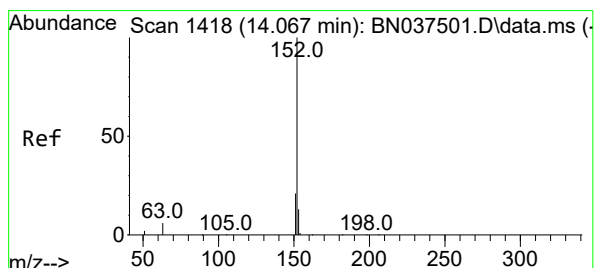
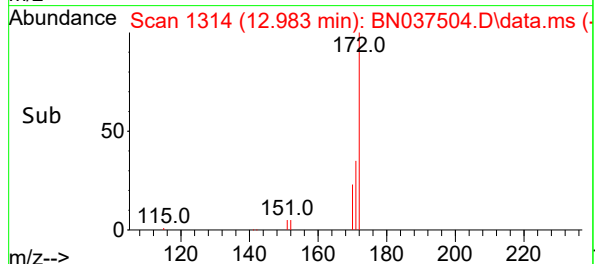
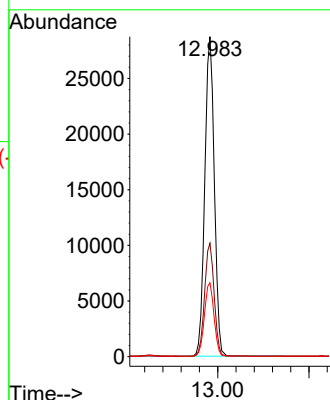
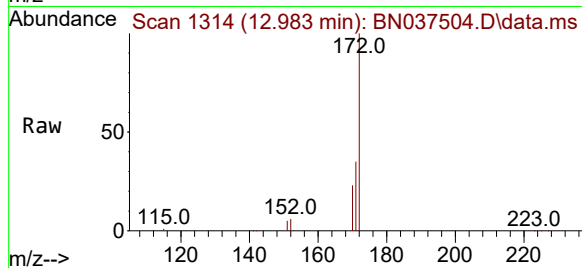
Tgt Ion:172 Resp: 59667

Ion Ratio Lower Upper

172 100

171 35.4 29.4 44.2

170 23.1 19.4 29.0



#16

Acenaphthylene

Concen: 3.385 ng

RT: 14.067 min Scan# 1418

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

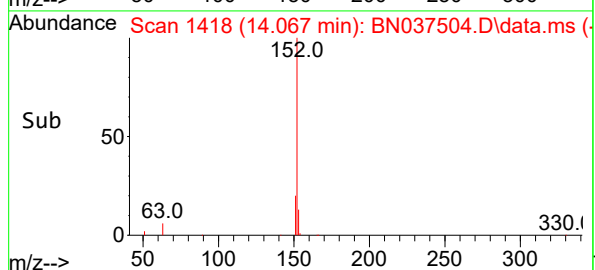
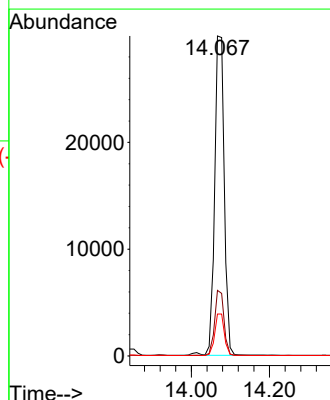
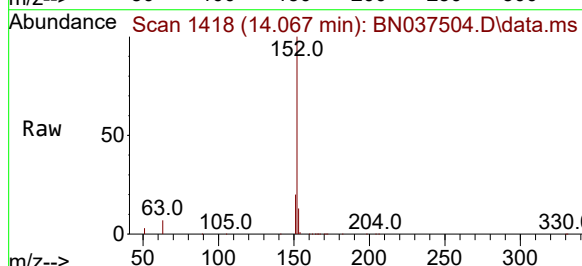
Tgt Ion:152 Resp: 51277

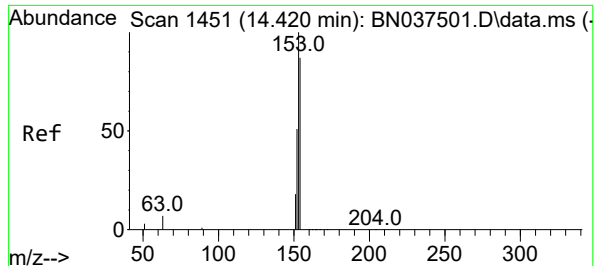
Ion Ratio Lower Upper

152 100

151 19.8 15.9 23.9

153 13.0 10.7 16.1





#17

Acenaphthene

Concen: 3.286 ng

RT: 14.420 min Scan# 1451

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

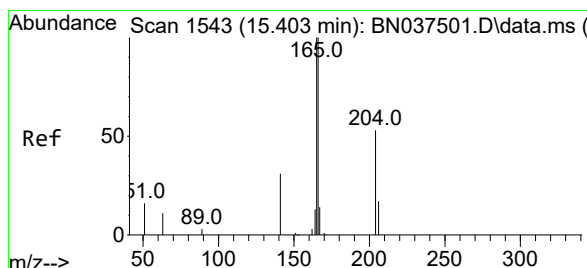
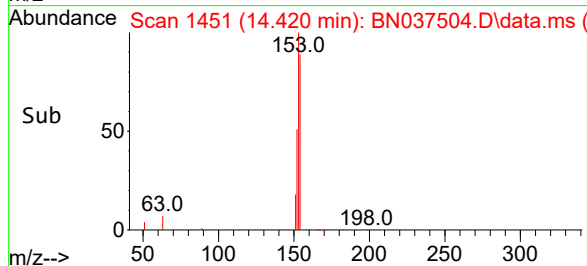
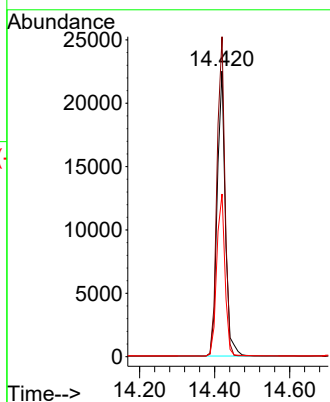
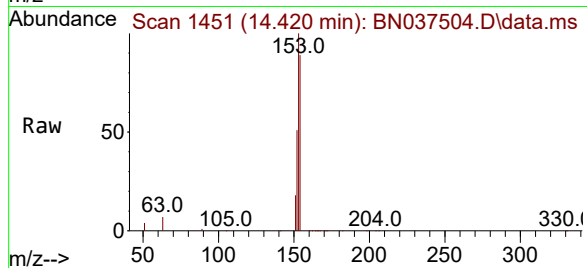
Tgt Ion:154 Resp: 33858

Ion Ratio Lower Upper

154 100

153 109.6 89.2 133.8

152 57.7 48.0 72.0



#18

Fluorene

Concen: 3.276 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

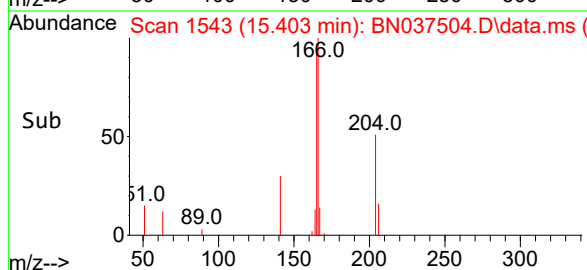
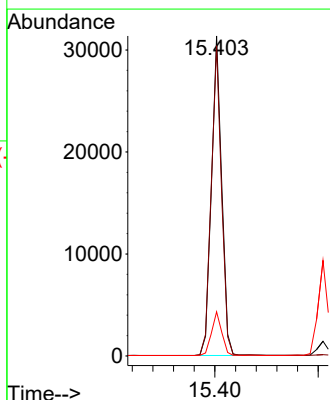
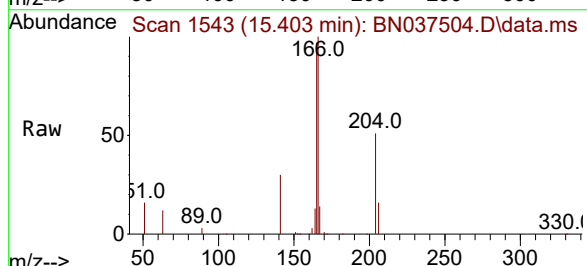
Tgt Ion:166 Resp: 43450

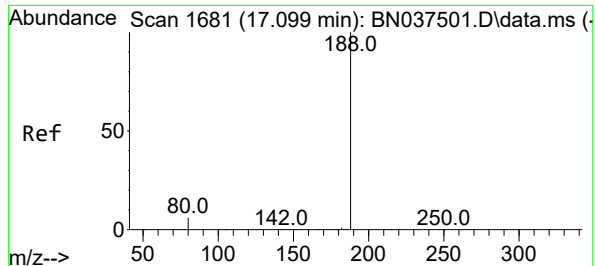
Ion Ratio Lower Upper

166 100

165 97.5 78.1 117.1

167 13.4 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

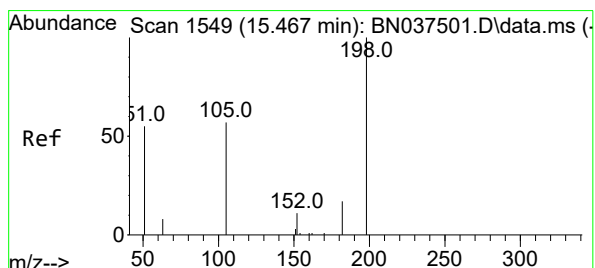
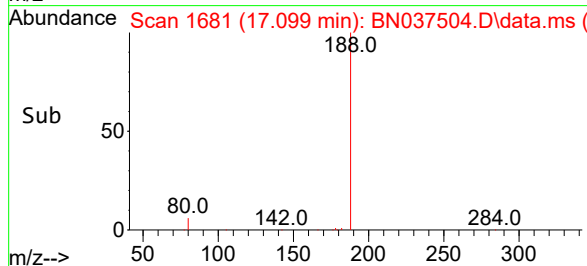
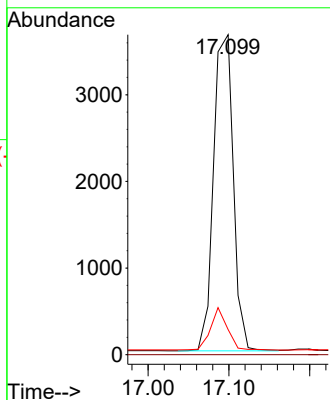
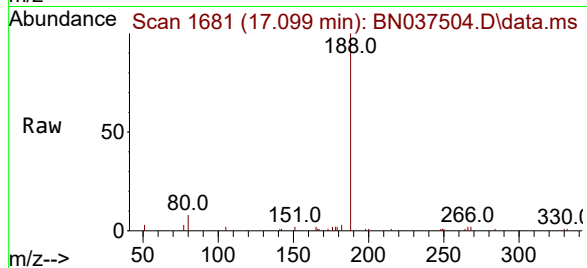
Tgt Ion:188 Resp: 6204

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.9 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 3.233 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.011 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

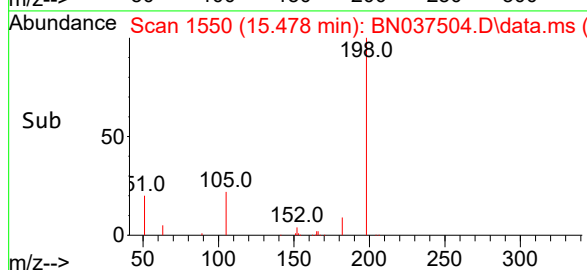
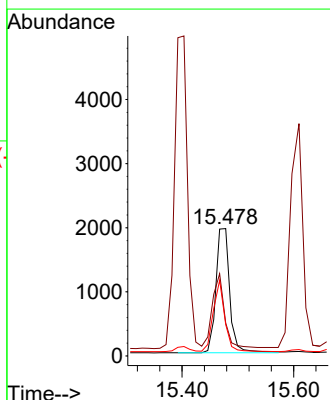
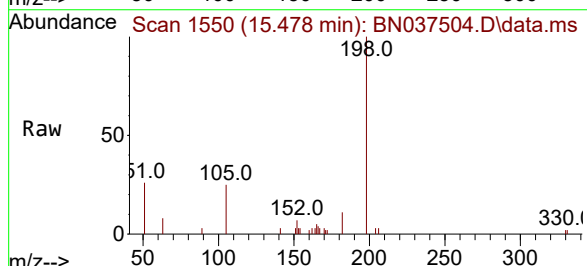
Tgt Ion:198 Resp: 3484

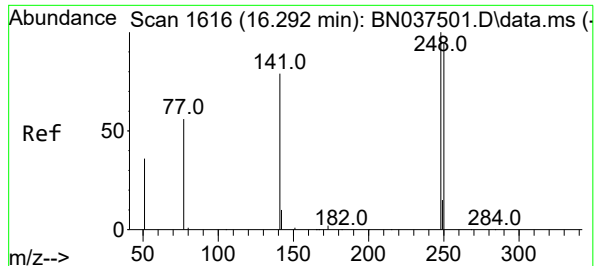
Ion Ratio Lower Upper

198 100

51 25.8 88.5 132.7#

105 24.7 61.2 91.8#

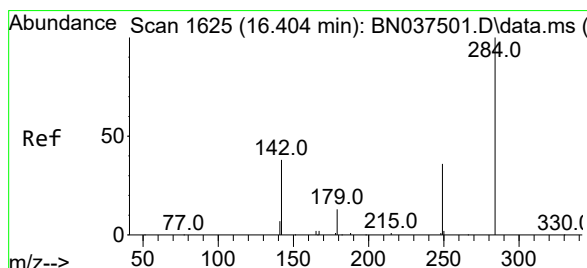
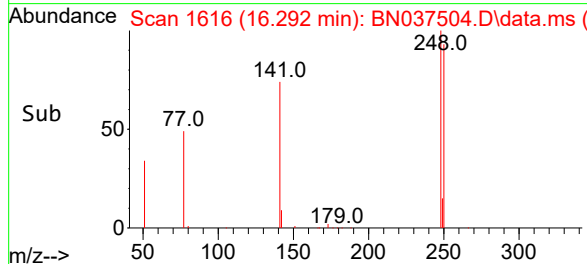
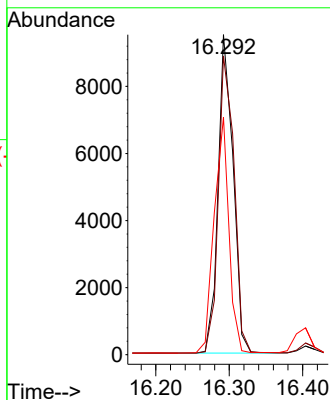
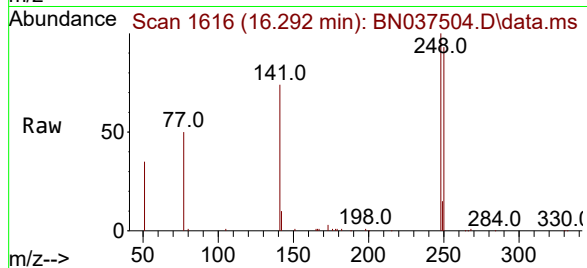




#21  
4-Bromophenyl-phenylether  
Concen: 3.395 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

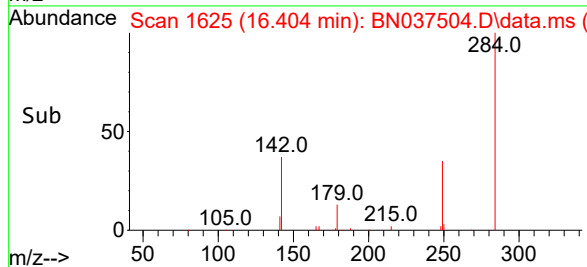
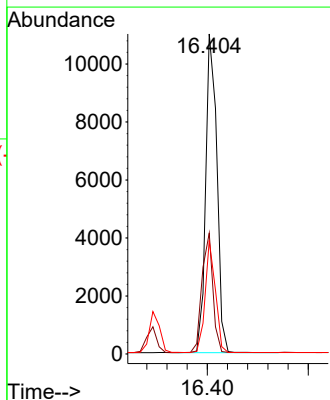
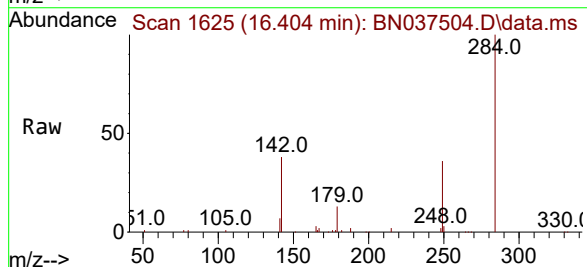
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

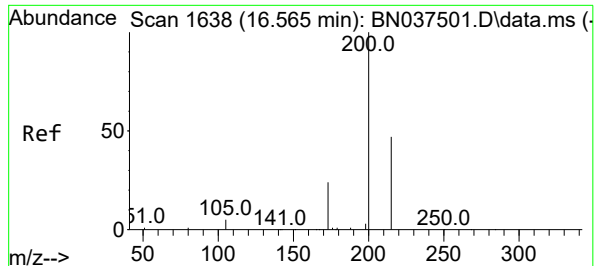
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 93.3  | 76.2  | 114.2 |
| 141     | 74.3  | 63.9  | 95.9  |



#22  
Hexachlorobenzene  
Concen: 3.289 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 36.7  | 28.9  | 43.3  |
| 249     | 32.2  | 25.8  | 38.6  |

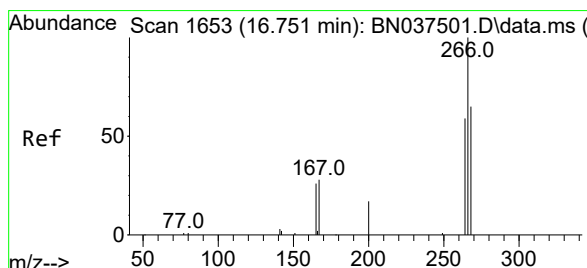
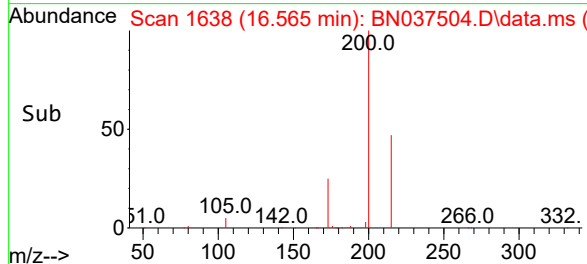
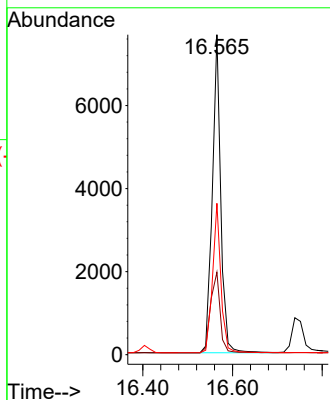
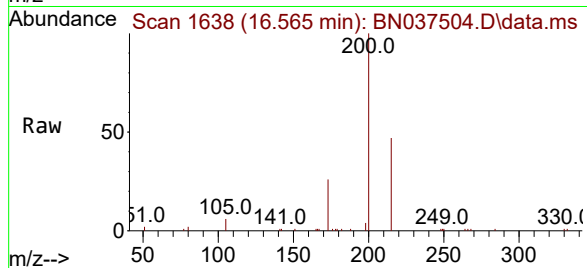




#23  
Atrazine  
Concen: 3.584 ng  
RT: 16.565 min Scan# 1638  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

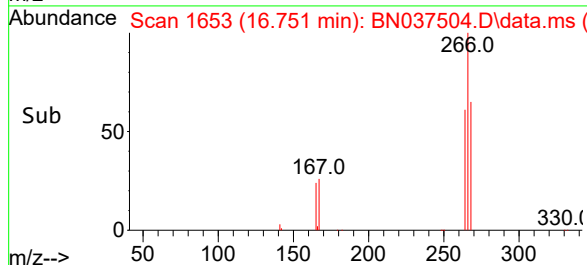
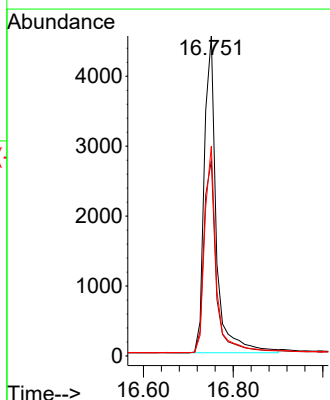
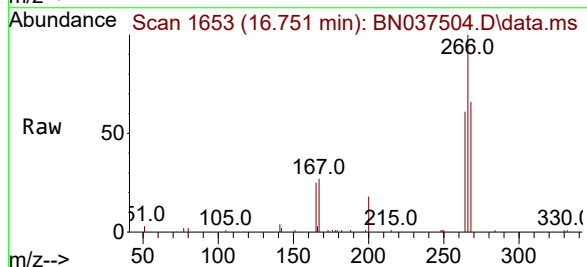
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

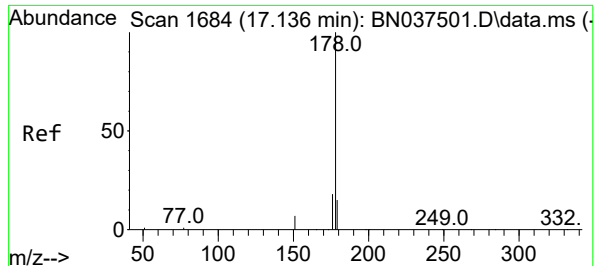
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 200     | 100   |       |       |
| 173     | 25.8  | 23.2  | 34.8  |
| 215     | 47.3  | 40.2  | 60.4  |



#24  
Pentachlorophenol  
Concen: 3.654 ng  
RT: 16.751 min Scan# 1653  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 62.4  | 49.3  | 73.9  |
| 268     | 63.0  | 51.6  | 77.4  |

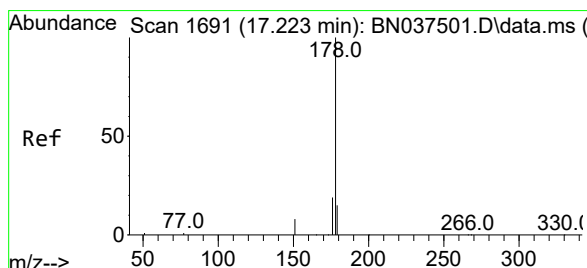
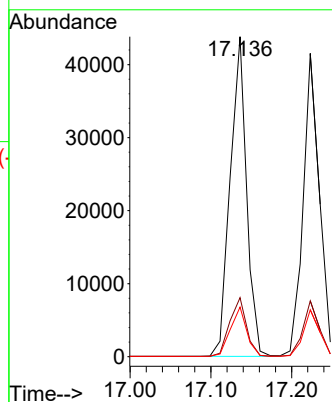
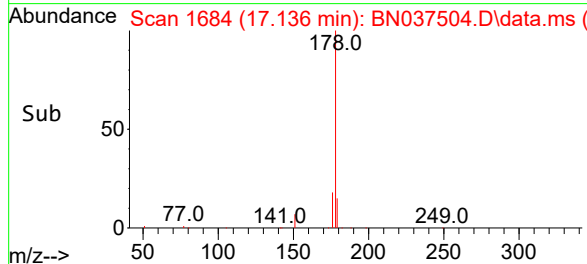
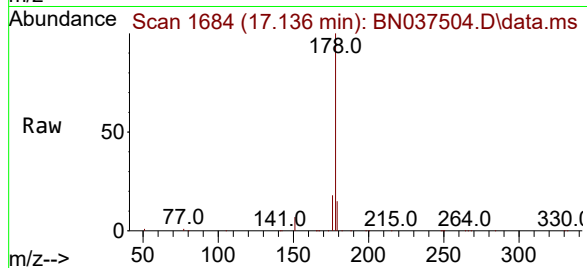




#25  
Phenanthrene  
Concen: 3.333 ng  
RT: 17.136 min Scan# 1684  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

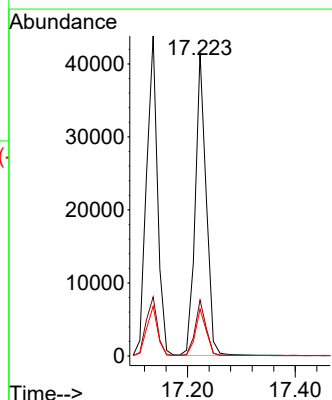
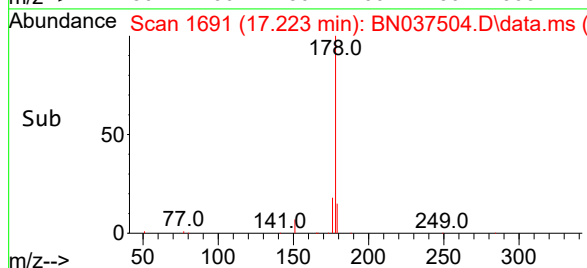
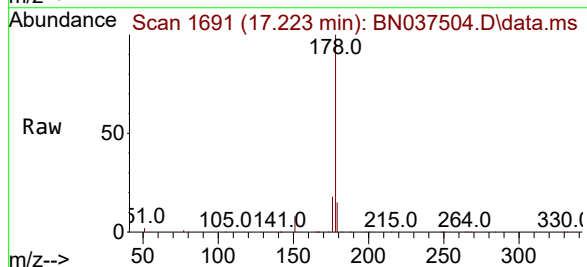
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

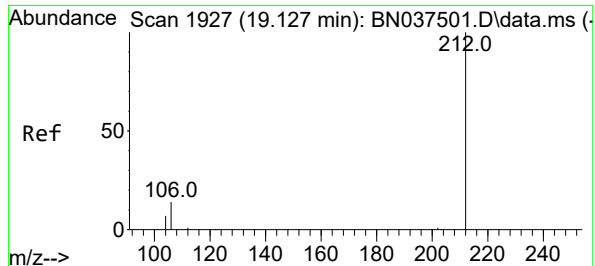
Tgt Ion:178 Resp: 61959  
Ion Ratio Lower Upper  
178 100  
176 18.7 15.0 22.6  
179 15.3 12.2 18.2



#26  
Anthracene  
Concen: 3.441 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:178 Resp: 58358  
Ion Ratio Lower Upper  
178 100  
176 18.2 14.7 22.1  
179 15.4 12.3 18.5





#27

Fluoranthene-d10

Concen: 3.257 ng

RT: 19.127 min Scan# 1927

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

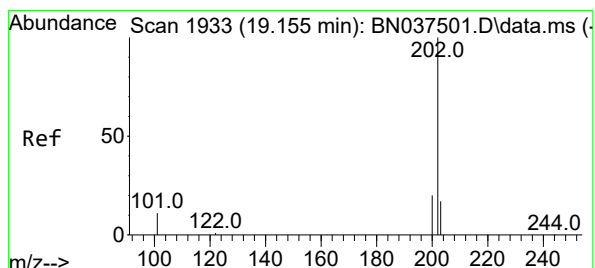
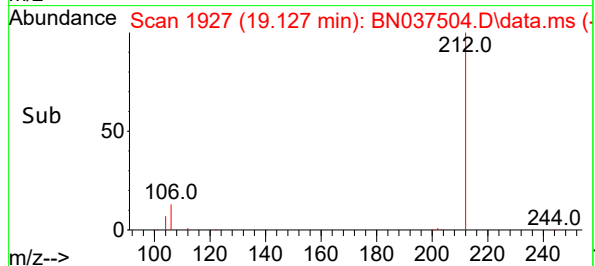
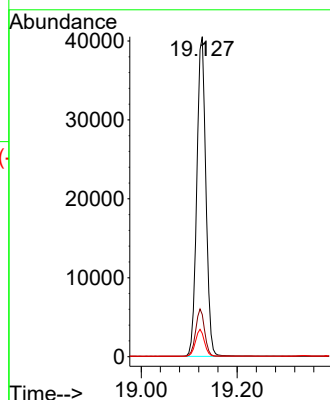
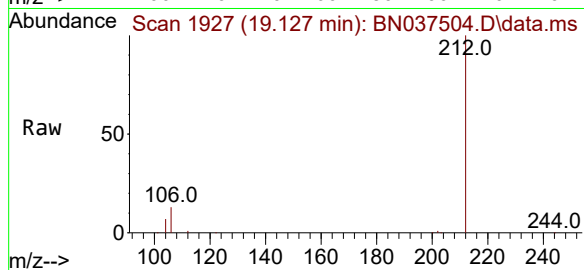
Tgt Ion:212 Resp: 53521

Ion Ratio Lower Upper

212 100

106 14.6 12.2 18.4

104 8.2 6.7 10.1



#28

Fluoranthene

Concen: 3.313 ng

RT: 19.155 min Scan# 1933

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

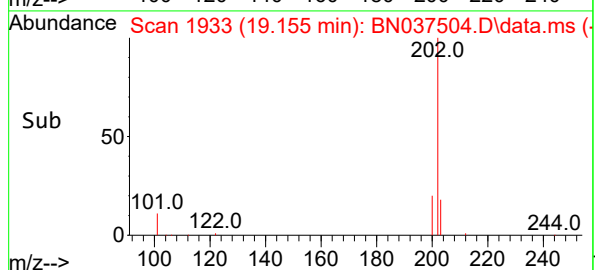
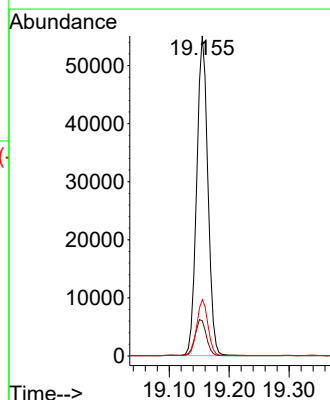
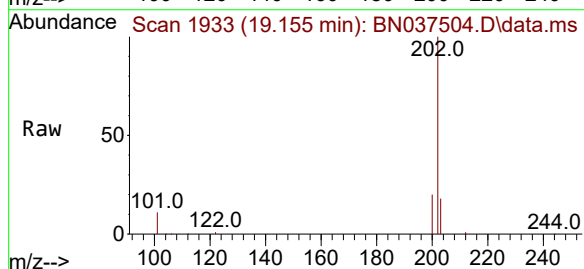
Tgt Ion:202 Resp: 71018

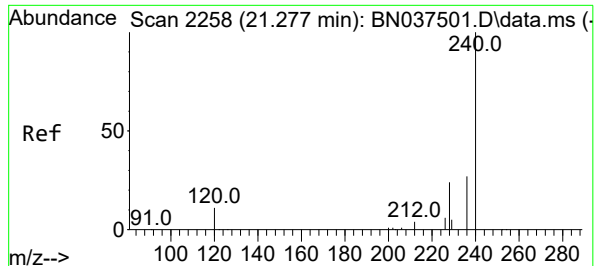
Ion Ratio Lower Upper

202 100

101 11.7 9.8 14.6

203 17.4 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

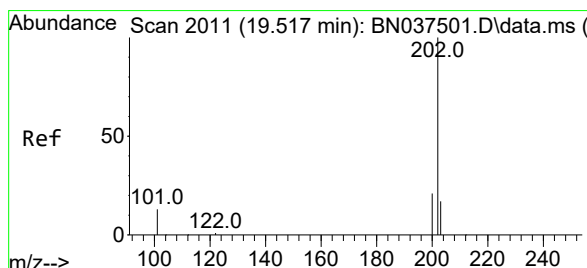
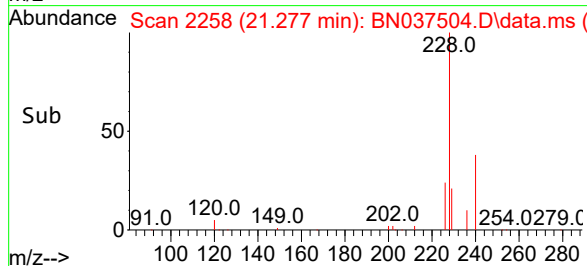
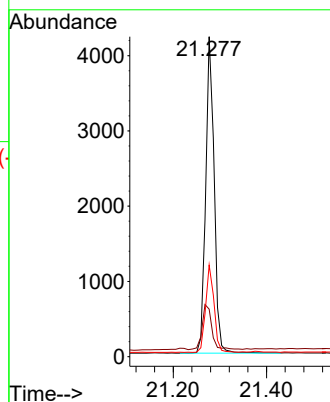
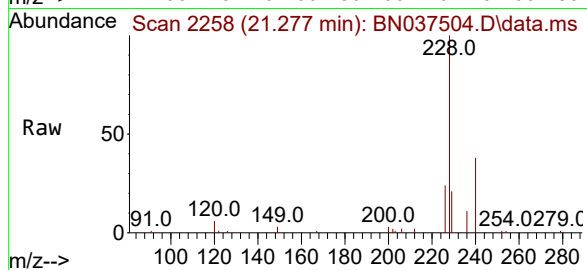
Tgt Ion:240 Resp: 5331

Ion Ratio Lower Upper

240 100

120 14.9 10.7 16.1

236 28.6 22.6 33.8



#30

Pyrene

Concen: 3.306 ng

RT: 19.517 min Scan# 2011

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

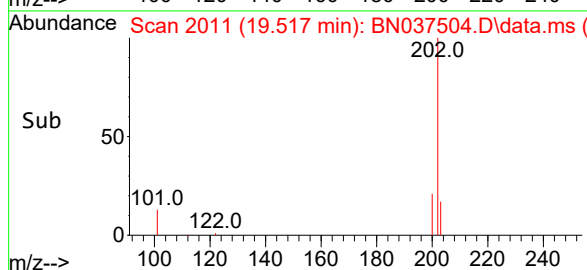
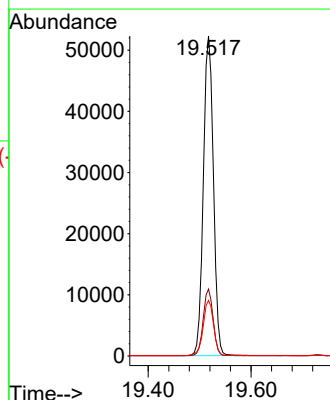
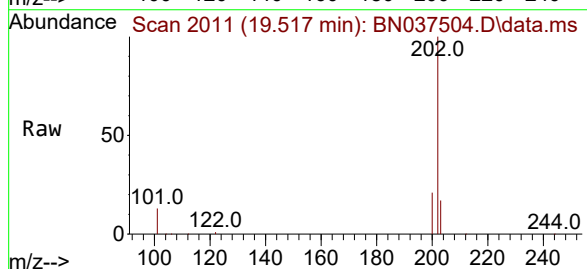
Tgt Ion:202 Resp: 71002

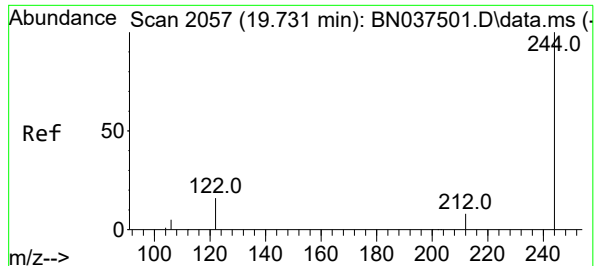
Ion Ratio Lower Upper

202 100

200 20.5 16.5 24.7

203 17.8 14.3 21.5

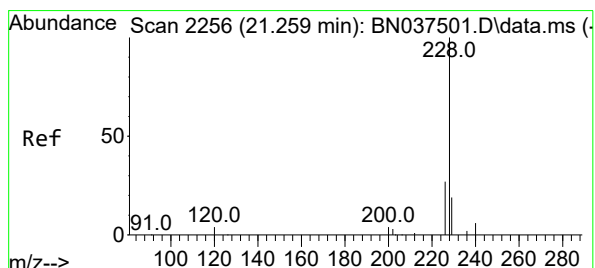
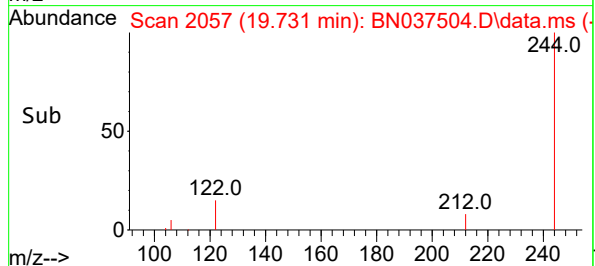
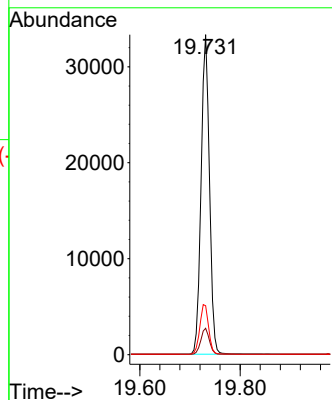
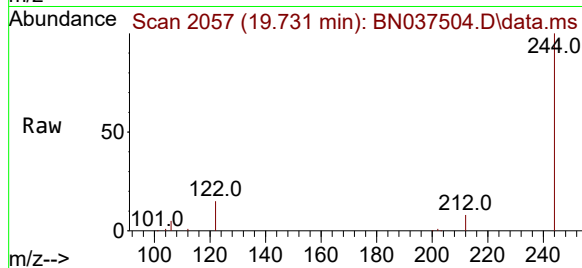




#31  
Terphenyl-d14  
Concen: 3.357 ng  
RT: 19.731 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

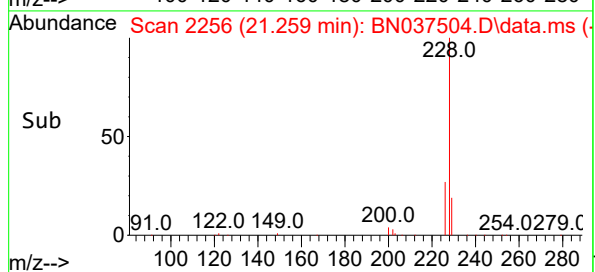
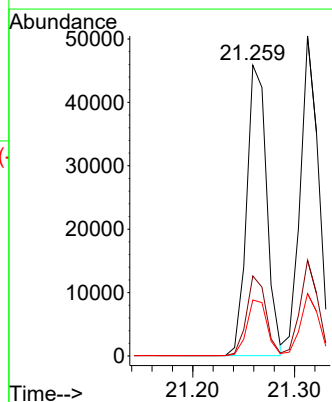
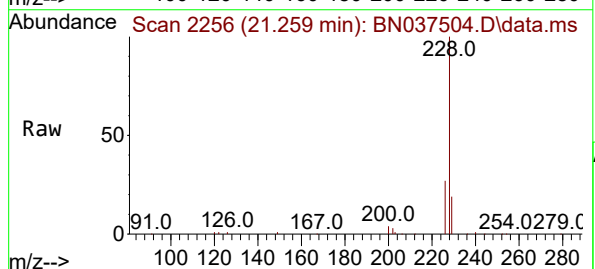
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

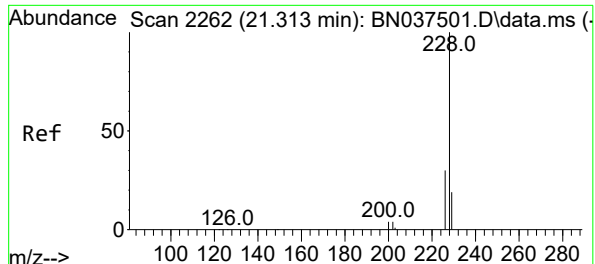
Tgt Ion:244 Resp: 38458  
Ion Ratio Lower Upper  
244 100  
212 8.3 7.4 11.2  
122 15.3 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 3.343 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:228 Resp: 62418  
Ion Ratio Lower Upper  
228 100  
226 27.5 21.9 32.9  
229 19.2 15.8 23.8





#33

Chrysene

Concen: 3.268 ng

RT: 21.313 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

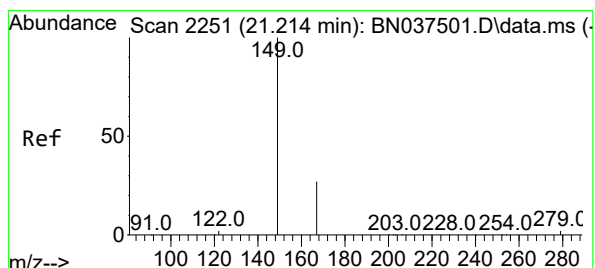
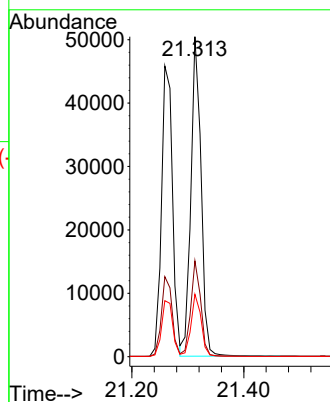
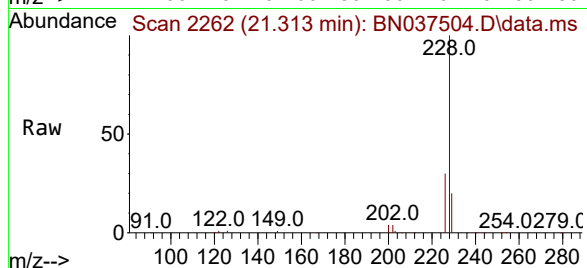
Tgt Ion:228 Resp: 63542

Ion Ratio Lower Upper

228 100

226 30.0 24.2 36.4

229 19.5 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 3.519 ng

RT: 21.223 min Scan# 2252

Delta R.T. 0.009 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

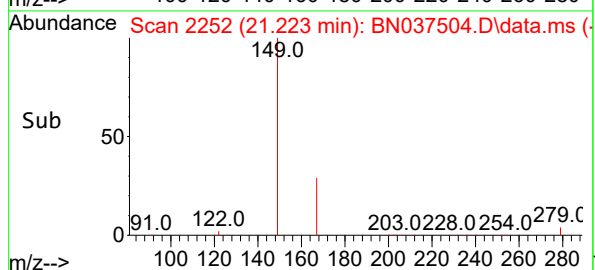
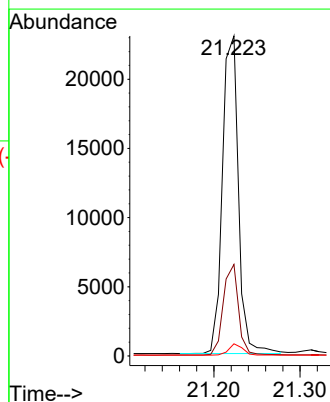
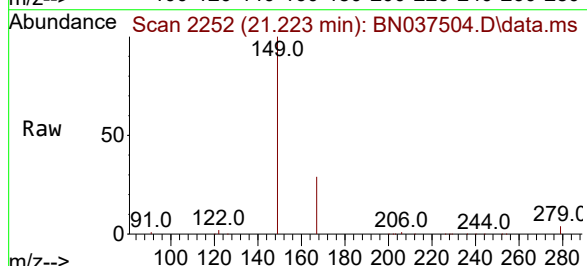
Tgt Ion:149 Resp: 29561

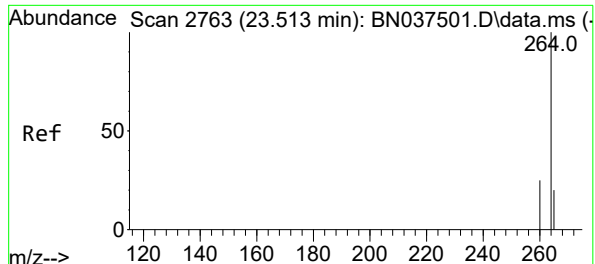
Ion Ratio Lower Upper

149 100

167 27.0 21.8 32.8

279 3.1 3.0 4.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.519 min Scan# 21

Delta R.T. 0.006 min

Lab File: BN037504.D

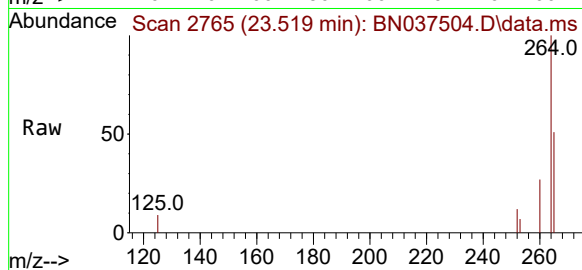
Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2



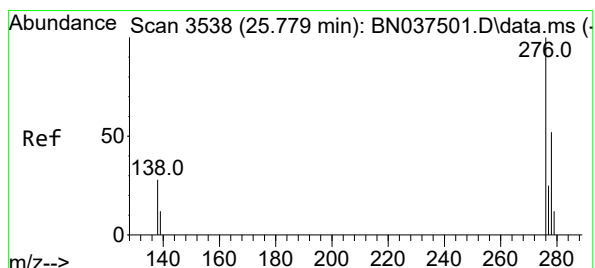
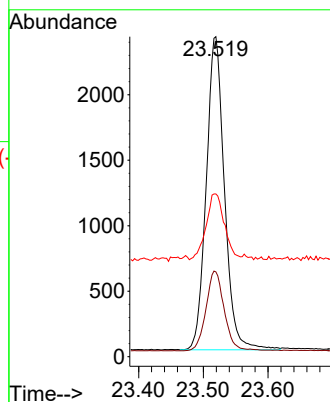
Tgt Ion:264 Resp: 4672

Ion Ratio Lower Upper

264 100

260 26.5 21.2 31.8

265 50.8 40.4 60.6



#36

Indeno(1,2,3-cd)pyrene

Concen: 3.467 ng

RT: 25.788 min Scan# 3541

Delta R.T. 0.009 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

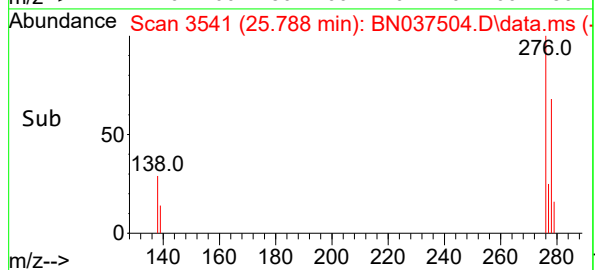
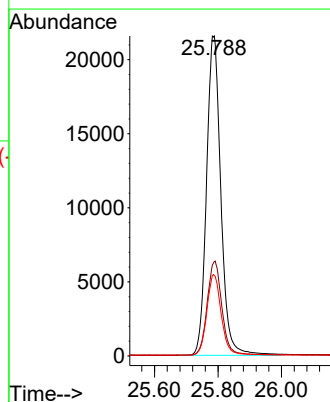
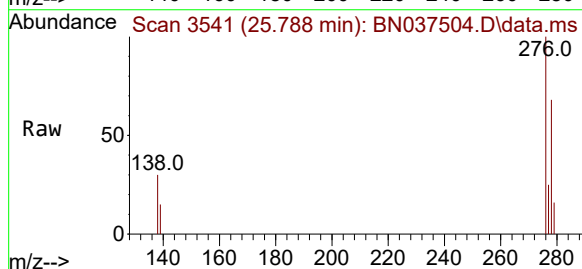
Tgt Ion:276 Resp: 67476

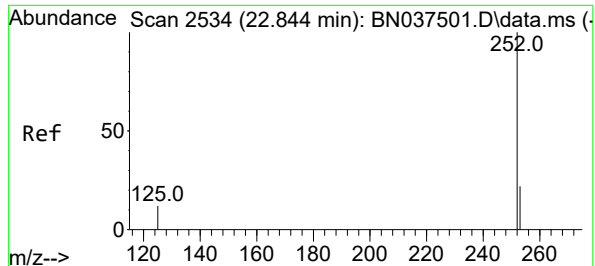
Ion Ratio Lower Upper

276 100

138 30.2 24.0 36.0

277 25.2 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 3.407 ng

RT: 22.847 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

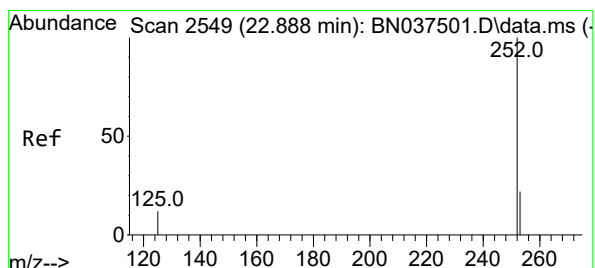
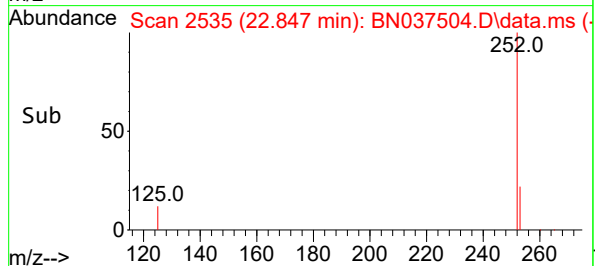
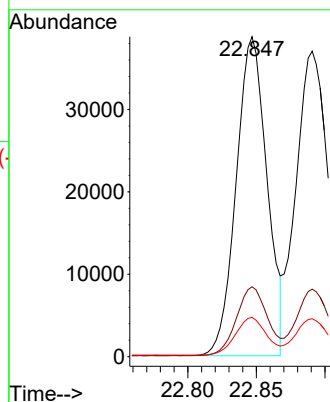
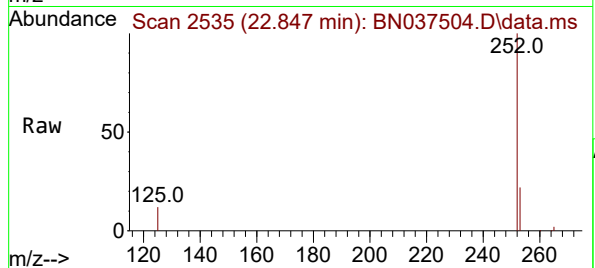
Tgt Ion:252 Resp: 60420

Ion Ratio Lower Upper

252 100

253 21.9 19.5 29.3

125 12.3 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 3.450 ng

RT: 22.891 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

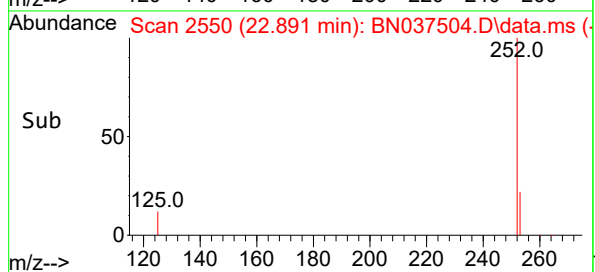
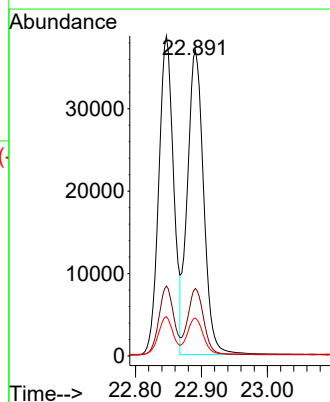
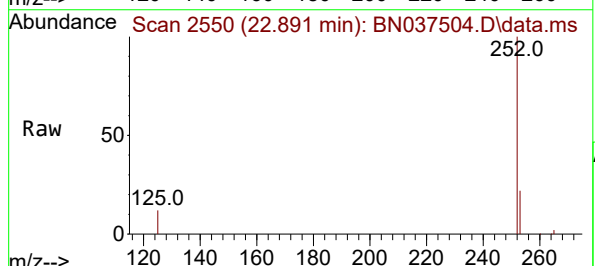
Tgt Ion:252 Resp: 63137

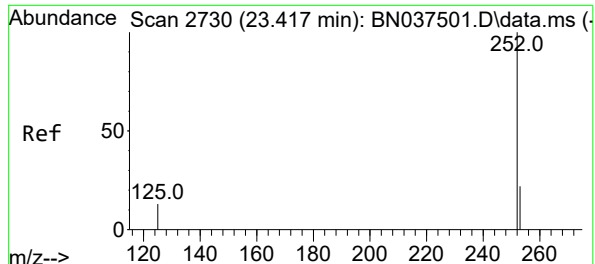
Ion Ratio Lower Upper

252 100

253 22.1 19.5 29.3

125 12.4 13.1 19.7#





#39

Benzo(a)pyrene

Concen: 3.459 ng

RT: 23.420 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

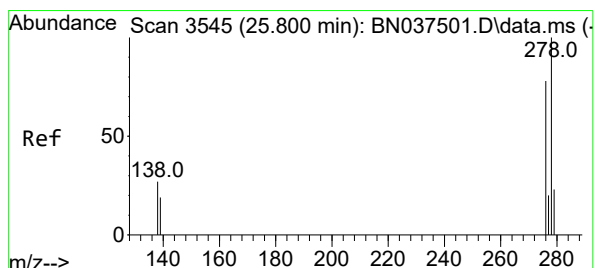
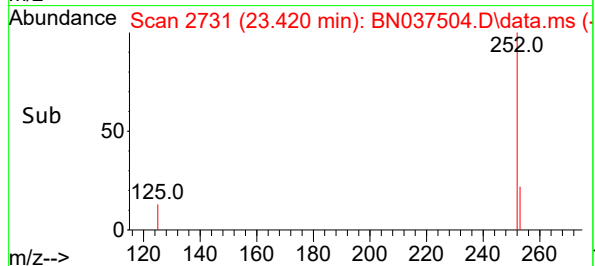
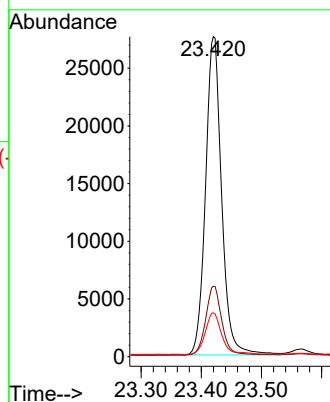
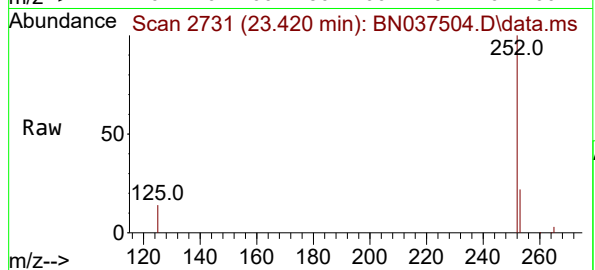
Tgt Ion:252 Resp: 51171

Ion Ratio Lower Upper

252 100

253 22.0 19.9 29.9

125 13.7 15.2 22.8#



#40

Dibenzo(a,h)anthracene

Concen: 3.516 ng

RT: 25.800 min Scan# 3545

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

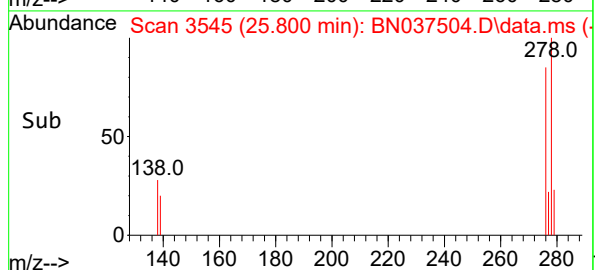
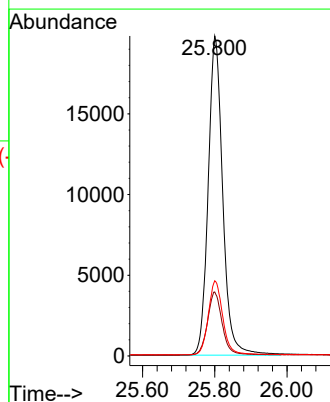
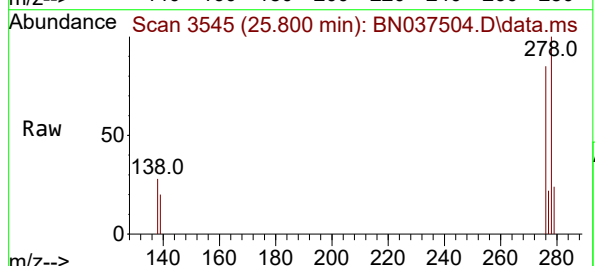
Tgt Ion:278 Resp: 55412

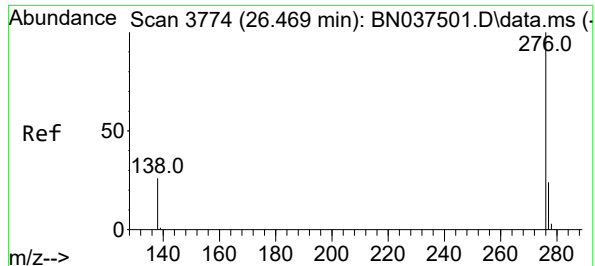
Ion Ratio Lower Upper

278 100

139 20.0 17.5 26.3

279 23.5 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 3.430 ng

RT: 26.472 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN037504.D

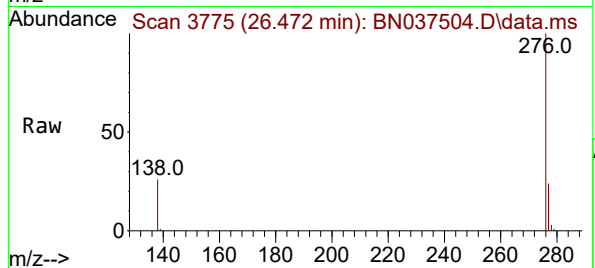
Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2



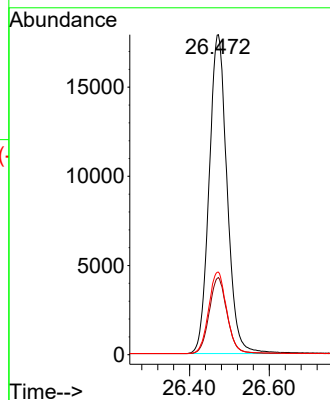
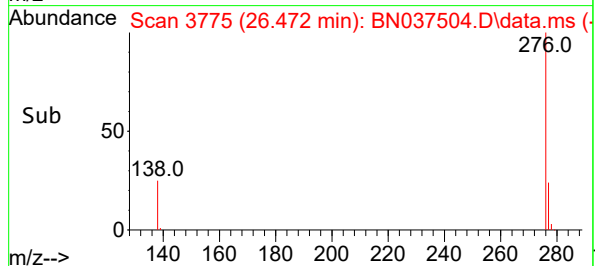
Tgt Ion:276 Resp: 55959

Ion Ratio Lower Upper

276 100

277 24.1 20.9 31.3

138 25.8 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037505.D  
 Acq On : 15 Jul 2025 16:14  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Jul 15 17:28:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

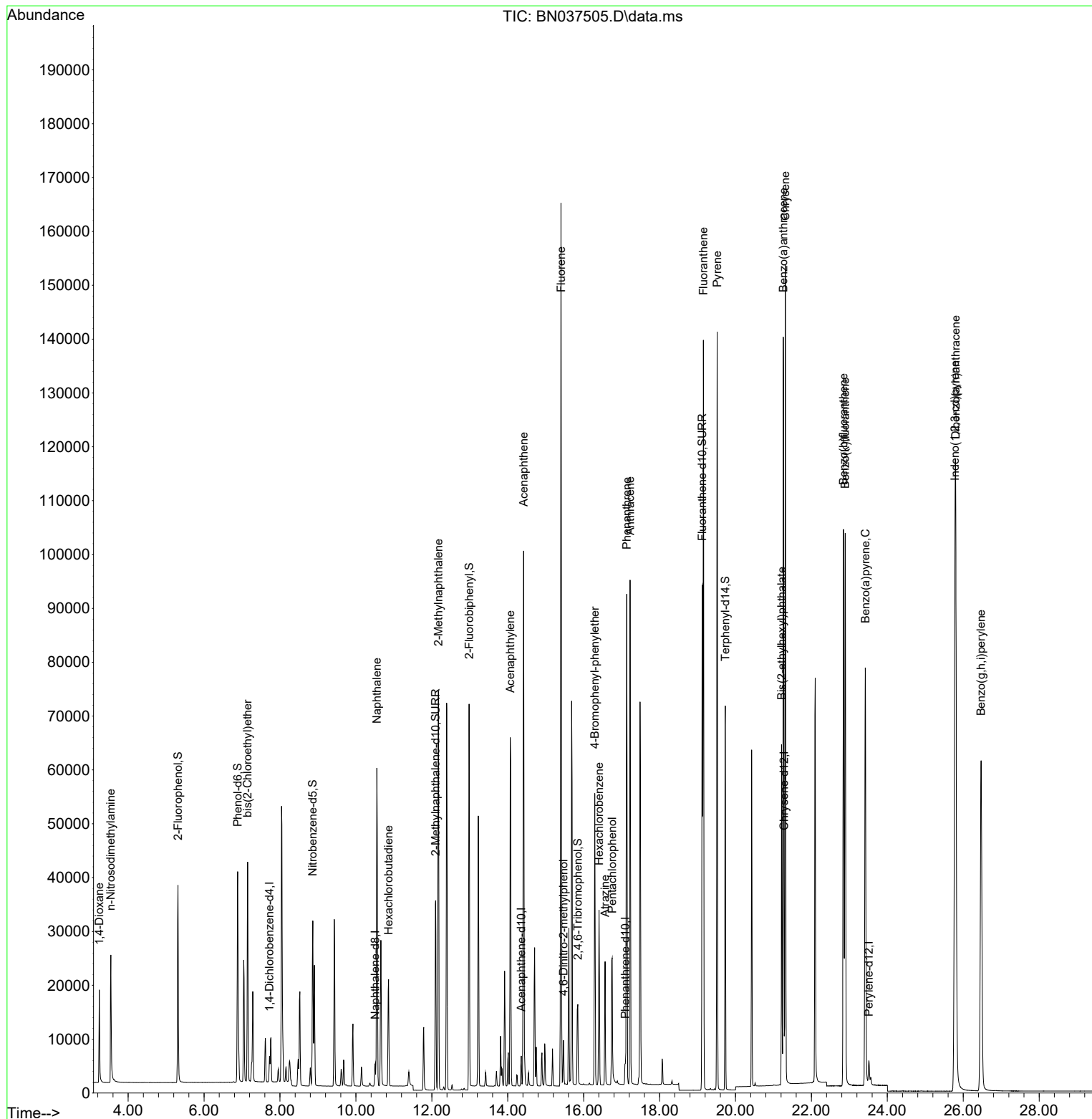
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2230     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5395     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.356 | 164  | 3026     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.099 | 188  | 5918     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.277 | 240  | 6176     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.516 | 264  | 5810     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 28715    | 5.207 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.887  | 99   | 35549    | 5.139 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.865  | 82   | 22676    | 5.623 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 47958    | 6.198 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 9399     | 6.319 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 90652    | 5.761 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.127 | 212  | 102473   | 6.537 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.731 | 244  | 66764    | 5.031 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.240  | 88   | 9864     | 4.601 | ng    | 97       |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 13961    | 5.177 | ng    | # 93     |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 28323    | 4.920 | ng    | 99       |
| 9) Naphthalene                | 10.552 | 128  | 75946    | 5.279 | ng    | 97       |
| 10) Hexachlorobutadiene       | 10.861 | 225  | 16562    | 5.208 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 50973    | 5.388 | ng    | 99       |
| 16) Acenaphthylene            | 14.067 | 152  | 74932    | 5.528 | ng    | 99       |
| 17) Acenaphthene              | 14.420 | 154  | 49935    | 5.417 | ng    | 96       |
| 18) Fluorene                  | 15.403 | 166  | 64957    | 5.474 | ng    | 97       |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 5939     | 4.991 | ng    | # 58     |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 20263    | 5.344 | ng    | 95       |
| 22) Hexachlorobenzene         | 16.404 | 284  | 25010    | 5.106 | ng    | 99       |
| 23) Atrazine                  | 16.565 | 200  | 16269    | 6.150 | ng    | 95       |
| 24) Pentachlorophenol         | 16.751 | 266  | 13954    | 6.351 | ng    | 99       |
| 25) Phenanthrene              | 17.136 | 178  | 94181    | 5.312 | ng    | 100      |
| 26) Anthracene                | 17.223 | 178  | 91147    | 5.634 | ng    | 100      |
| 28) Fluoranthene              | 19.155 | 202  | 117280   | 5.736 | ng    | 99       |
| 30) Pyrene                    | 19.517 | 202  | 118804   | 4.775 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 117117   | 5.414 | ng    | 99       |
| 33) Chrysene                  | 21.313 | 228  | 117985   | 5.239 | ng    | 98       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 60154    | 6.181 | ng    | 99       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.782 | 276  | 144593   | 5.975 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.844 | 252  | 122848   | 5.570 | ng    | # 93     |
| 38) Benzo(k)fluoranthene      | 22.891 | 252  | 125226   | 5.503 | ng    | # 93     |
| 39) Benzo(a)pyrene            | 23.420 | 252  | 106654   | 5.797 | ng    | # 91     |
| 40) Dibenzo(a,h)anthracene    | 25.800 | 278  | 118164   | 6.029 | ng    | 95       |
| 41) Benzo(g,h,i)perylene      | 26.469 | 276  | 120757   | 5.952 | ng    | 95       |

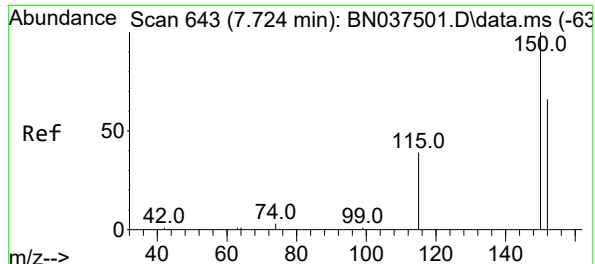
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037505.D  
Acq On : 15 Jul 2025 16:14  
Operator : RC/JU  
Sample : SSTDICC5.0  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Quant Time: Jul 15 17:28:30 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 16:45:15 2025  
Response via : Initial Calibration

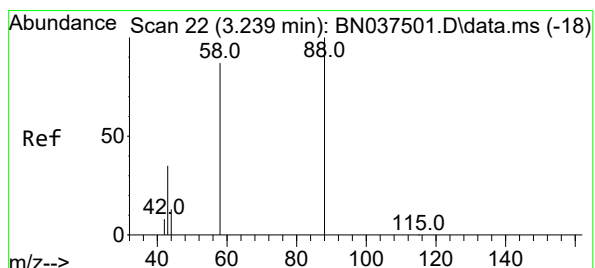
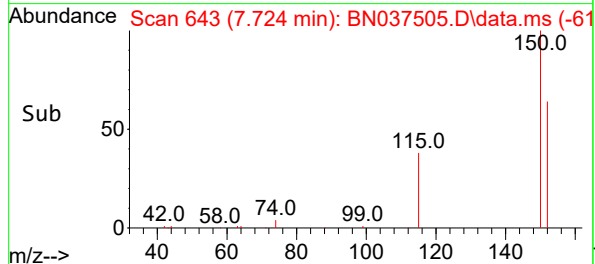
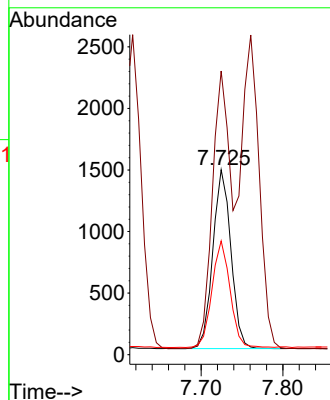
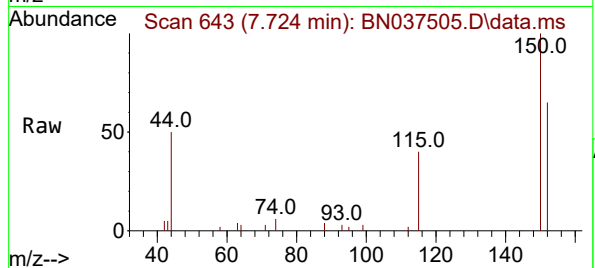




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

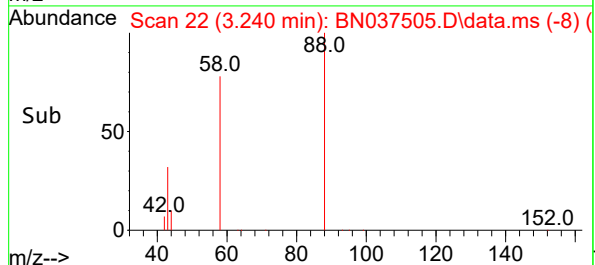
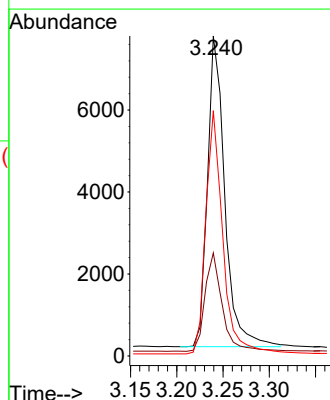
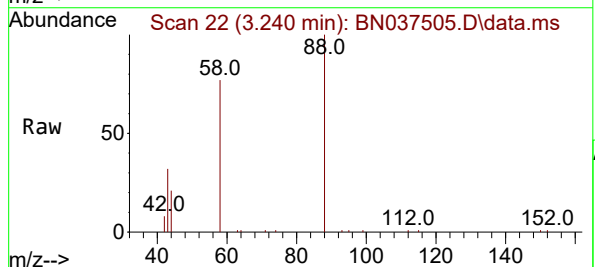
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

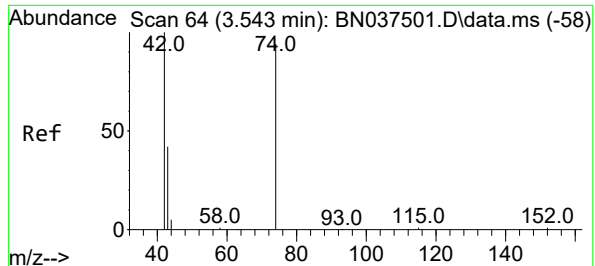
Tgt Ion:152 Resp: 2230  
Ion Ratio Lower Upper  
152 100  
150 153.4 119.8 179.8  
115 61.5 49.1 73.7



#2  
1,4-Dioxane  
Concen: 4.601 ng  
RT: 3.240 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion: 88 Resp: 9864  
Ion Ratio Lower Upper  
88 100  
43 31.4 27.5 41.3  
58 76.9 62.7 94.1

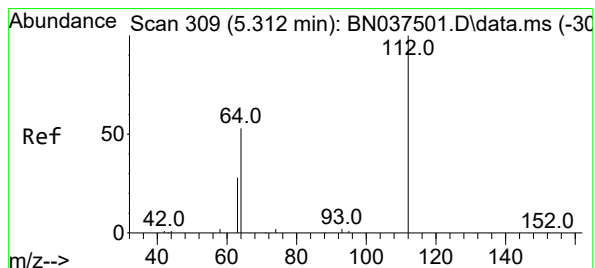
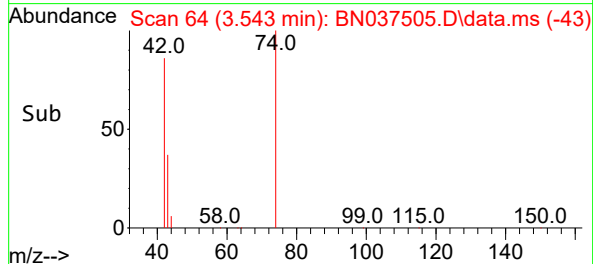
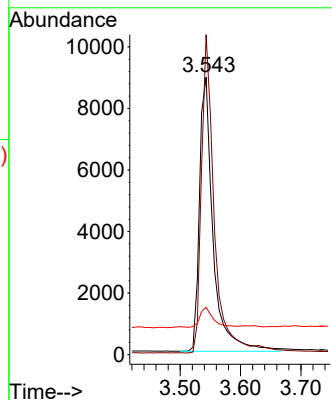
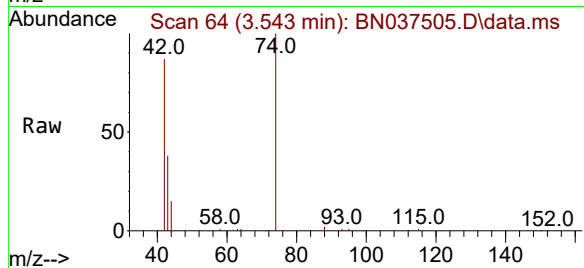




#3  
n-Nitrosodimethylamine  
Concen: 5.177 ng  
RT: 3.543 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

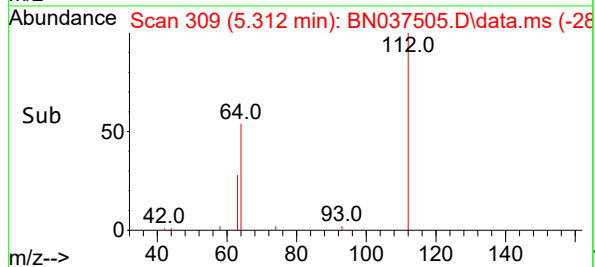
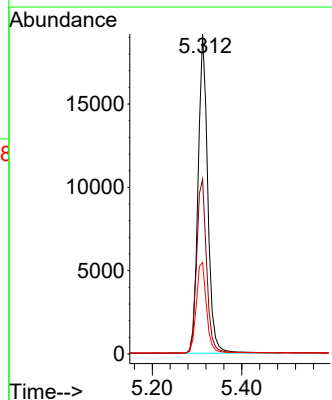
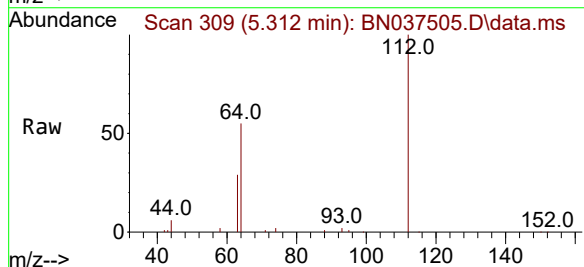
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

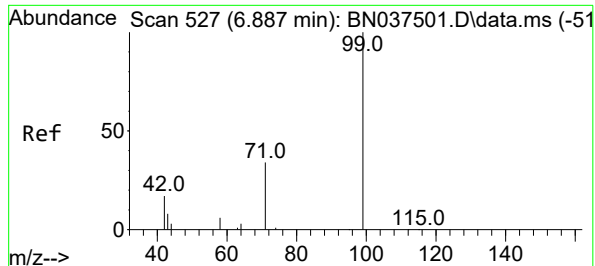
Tgt Ion: 42 Resp: 13961  
Ion Ratio Lower Upper  
42 100  
74 110.6 91.8 137.6  
44 7.0 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 5.207 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion: 112 Resp: 28715  
Ion Ratio Lower Upper  
112 100  
64 56.7 45.1 67.7  
63 29.7 23.8 35.8

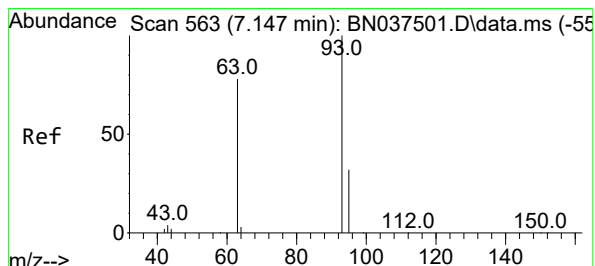
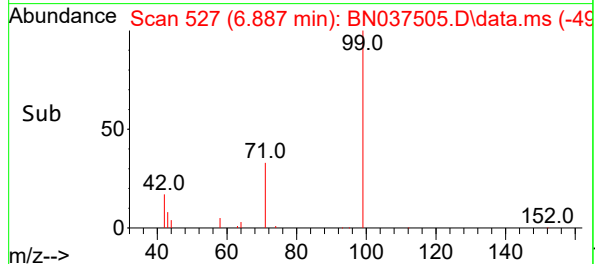
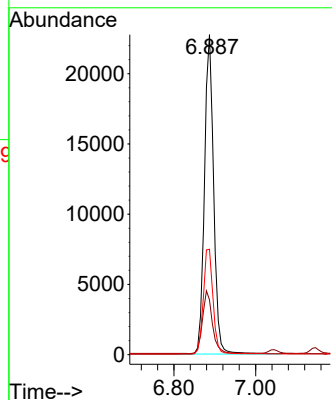
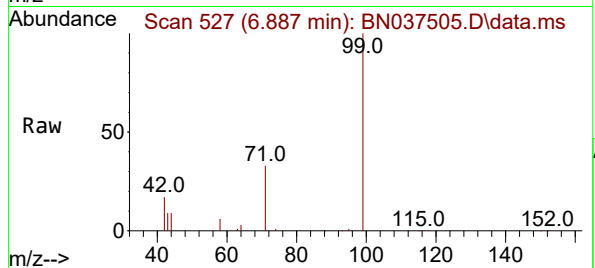




#5  
Phenol-d6  
Concen: 5.139 ng  
RT: 6.887 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

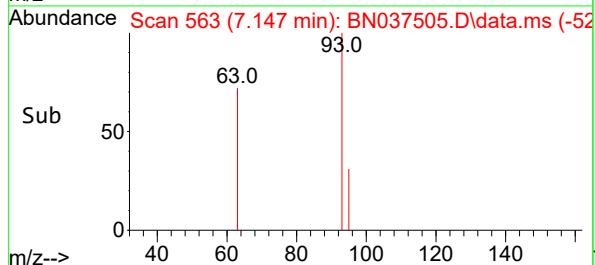
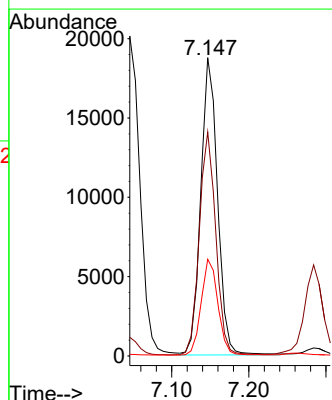
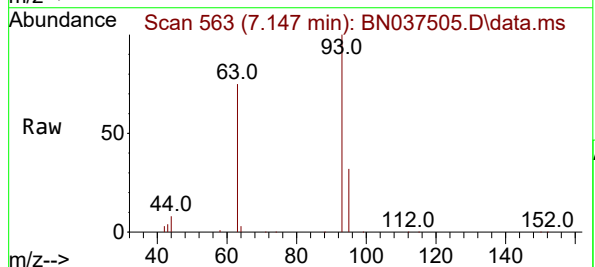
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

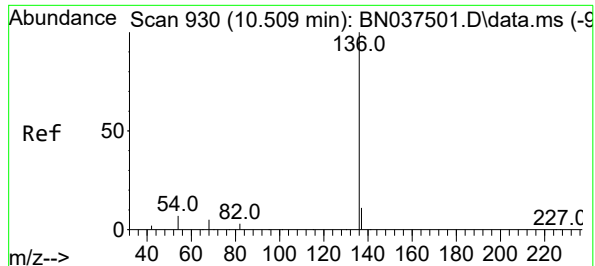
Tgt Ion: 99 Resp: 35549  
Ion Ratio Lower Upper  
99 100  
42 21.0 17.1 25.7  
71 34.9 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 4.920 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion: 93 Resp: 28323  
Ion Ratio Lower Upper  
93 100  
63 73.7 58.2 87.4  
95 32.2 25.3 37.9

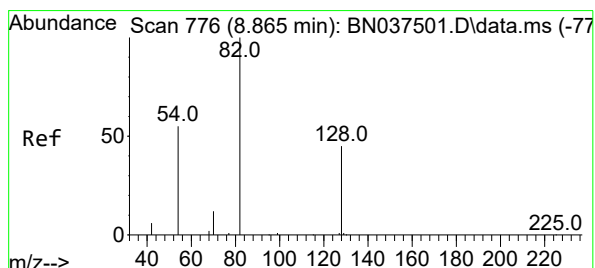
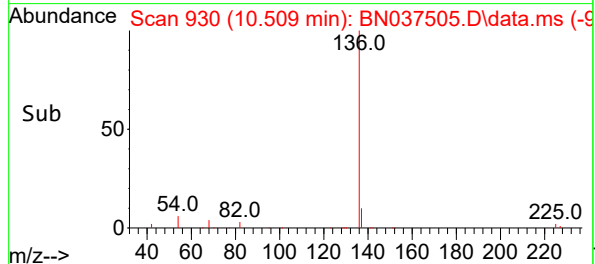
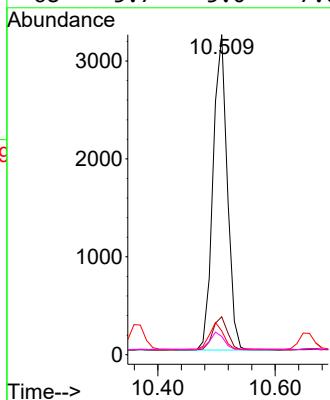
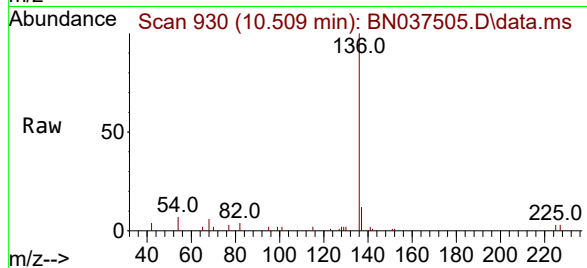




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

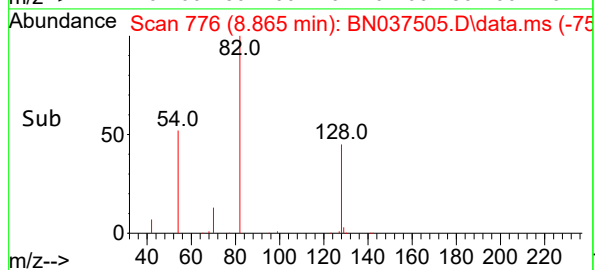
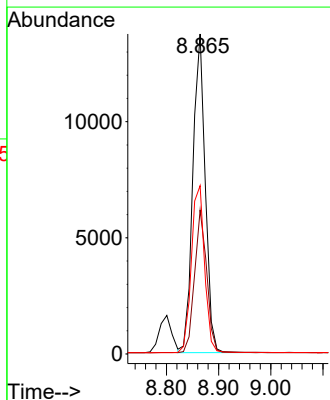
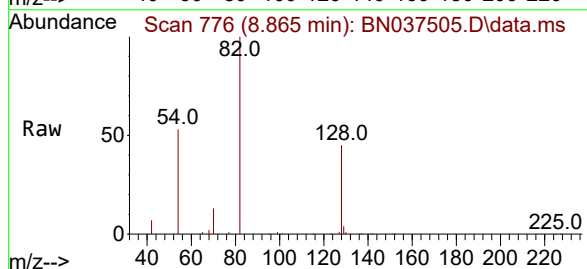
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

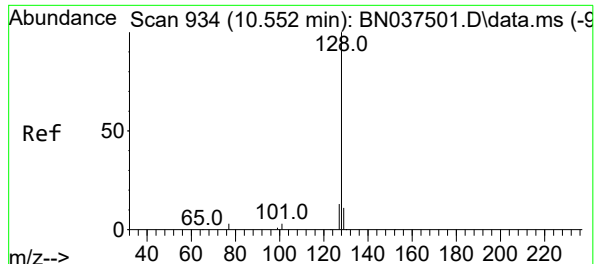
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5395  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.9  | 9.8   | 14.8  |
| 54       | 7.5   | 6.6   | 9.8   |
| 68       | 5.7   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 5.623 ng  
RT: 8.865 min Scan# 776  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 22676 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 45.0  | 37.5  | 56.3  |
| 54       | 52.6  | 45.3  | 67.9  |

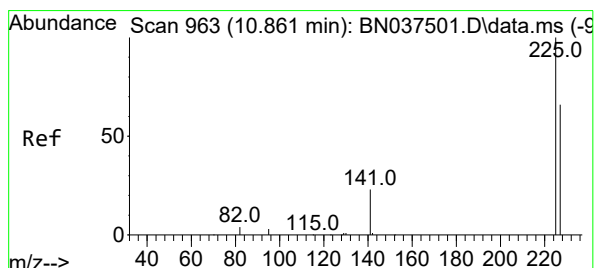
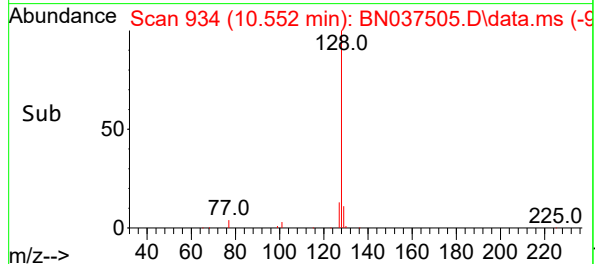
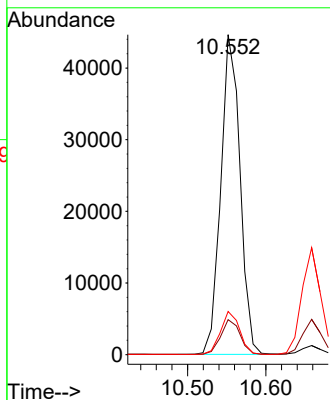
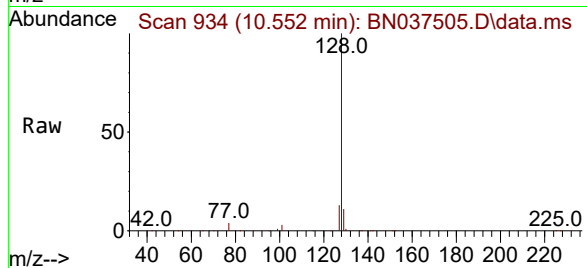




#9  
Naphthalene  
Concen: 5.279 ng  
RT: 10.552 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

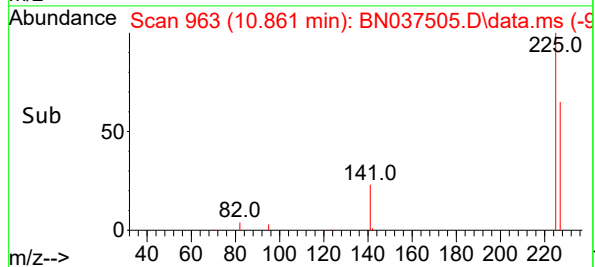
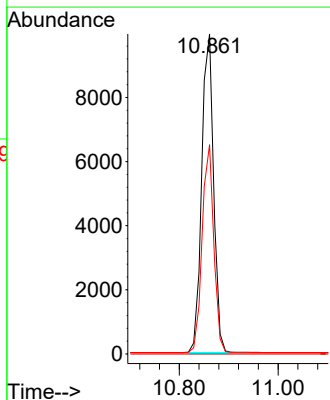
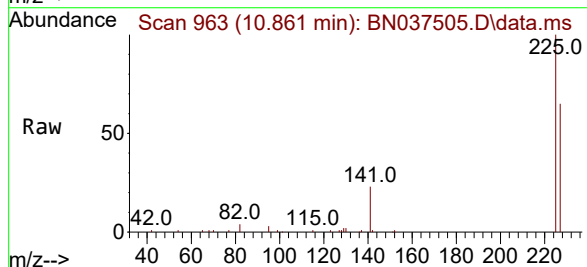
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

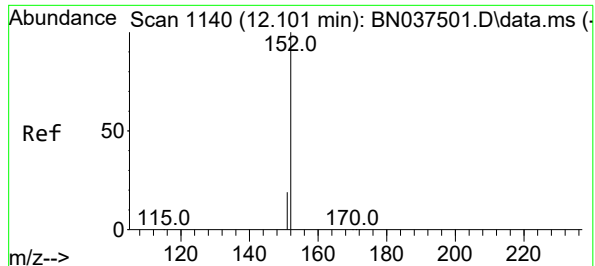
Tgt Ion:128 Resp: 75946  
Ion Ratio Lower Upper  
128 100  
129 11.0 9.7 14.5  
127 13.5 11.5 17.3



#10  
Hexachlorobutadiene  
Concen: 5.208 ng  
RT: 10.861 min Scan# 963  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:225 Resp: 16562  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.0 76.4





#11

2-Methylnaphthalene-d10

Concen: 6.198 ng

RT: 12.101 min Scan# 1140

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

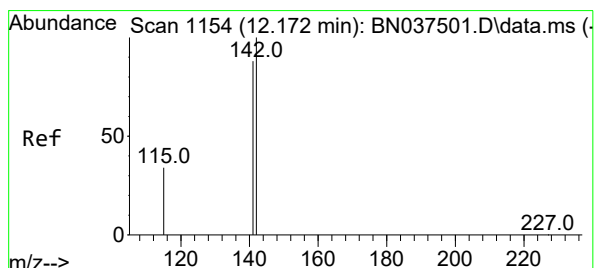
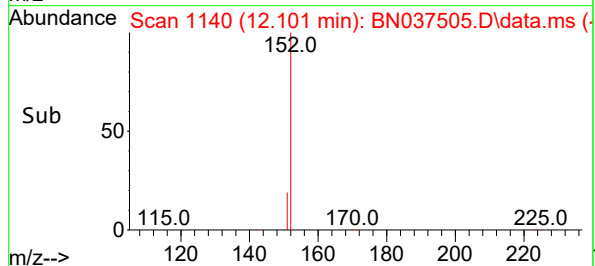
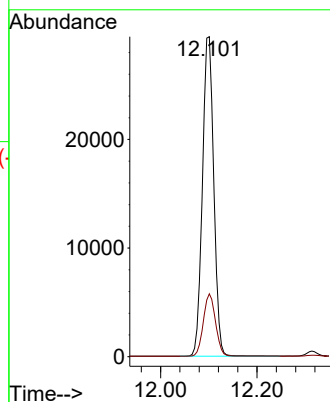
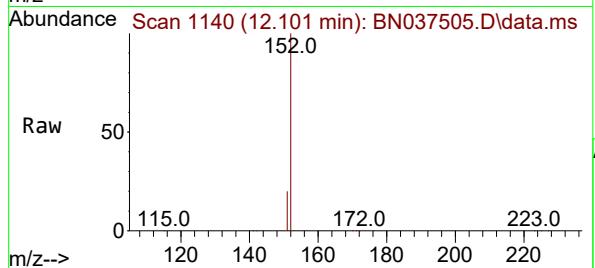
SSTDICC5.0

Tgt Ion:152 Resp: 47958

Ion Ratio Lower Upper

152 100

151 20.9 16.8 25.2



#12

2-Methylnaphthalene

Concen: 5.388 ng

RT: 12.172 min Scan# 1154

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

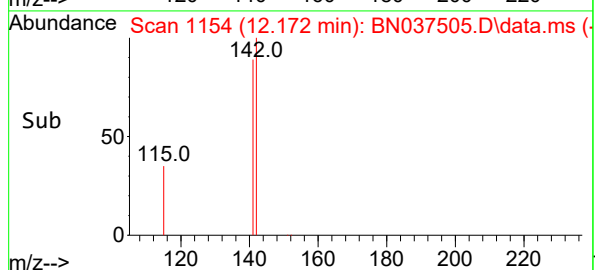
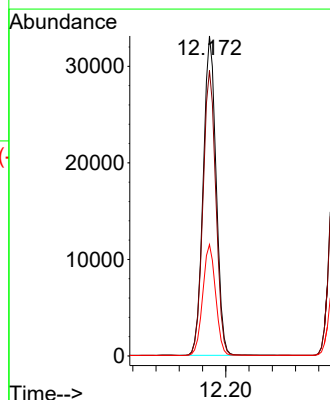
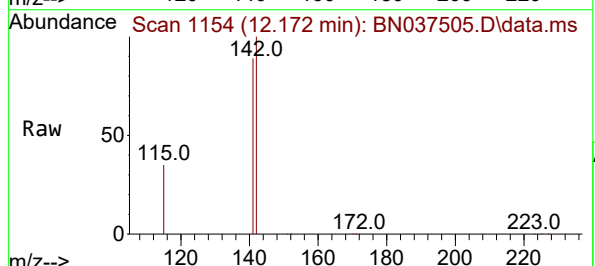
Tgt Ion:142 Resp: 50973

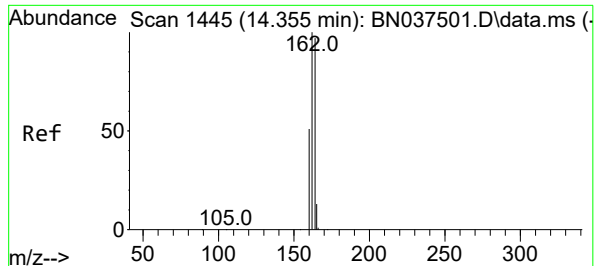
Ion Ratio Lower Upper

142 100

141 89.2 71.0 106.4

115 34.8 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.356 min Scan# 1445

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

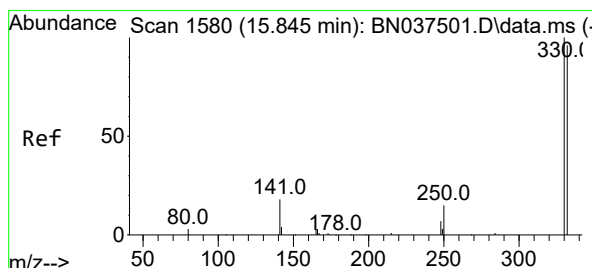
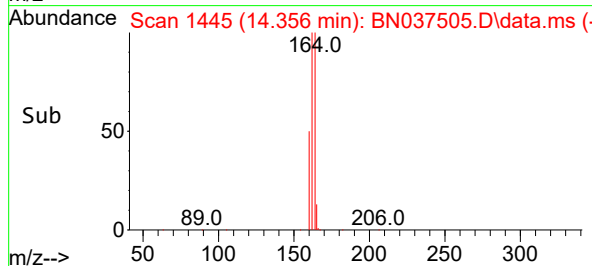
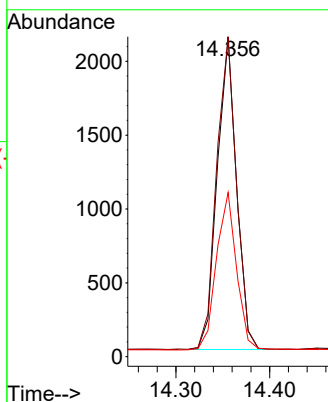
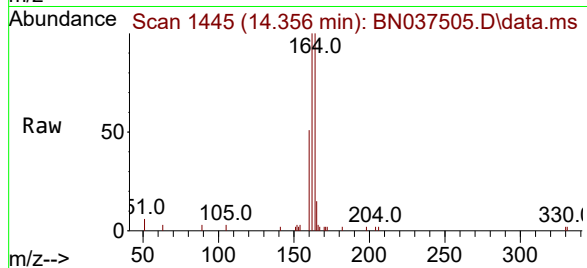
Tgt Ion:164 Resp: 3026

Ion Ratio Lower Upper

164 100

162 100.1 82.0 123.0

160 51.4 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 6.319 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

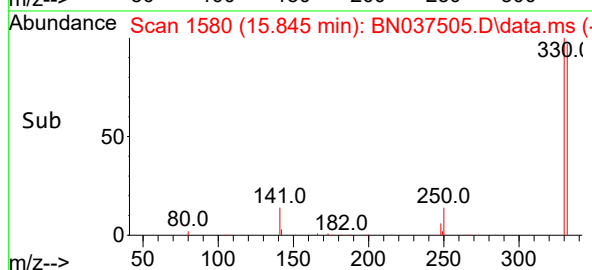
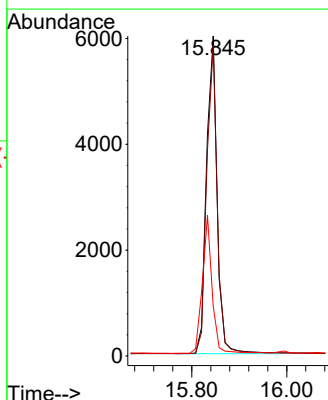
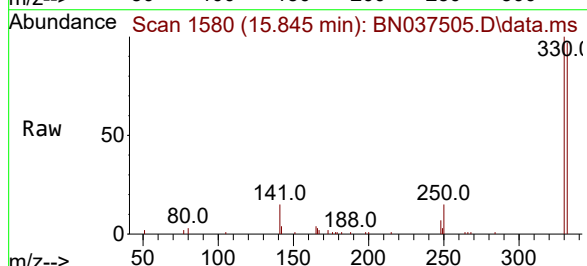
Tgt Ion:330 Resp: 9399

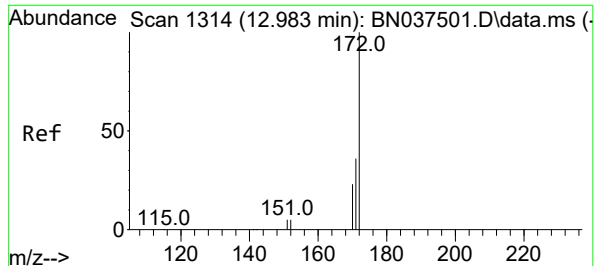
Ion Ratio Lower Upper

330 100

332 95.9 76.1 114.1

141 39.7 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 5.761 ng

RT: 12.983 min Scan# 1314

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

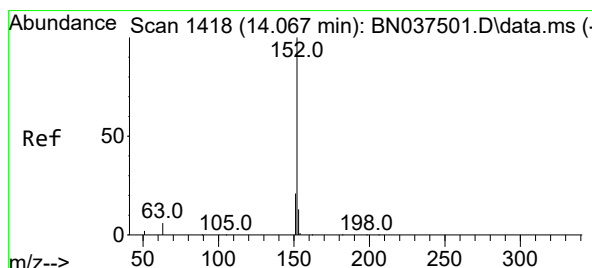
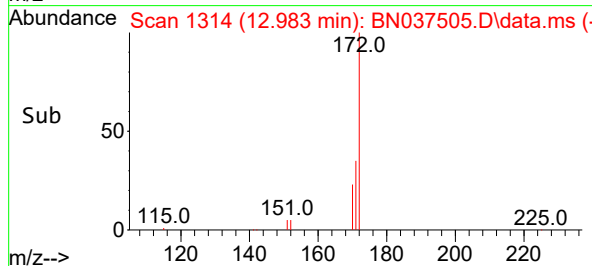
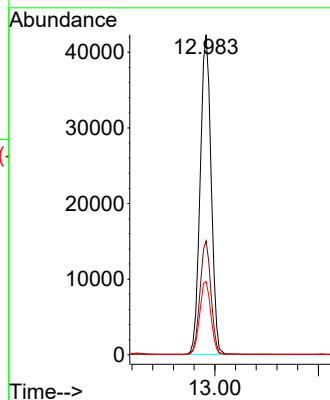
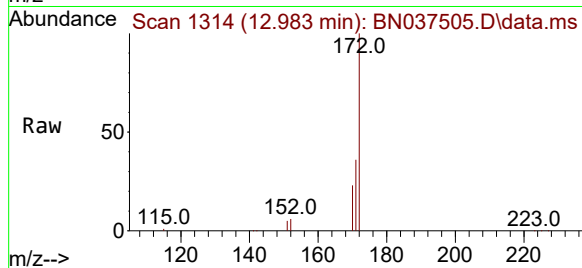
Tgt Ion:172 Resp: 90652

Ion Ratio Lower Upper

172 100

171 35.5 29.4 44.2

170 22.9 19.4 29.0



#16

Acenaphthylene

Concen: 5.528 ng

RT: 14.067 min Scan# 1418

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

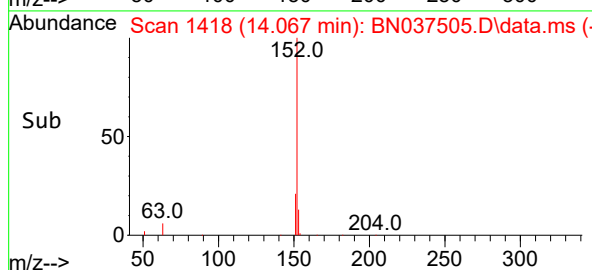
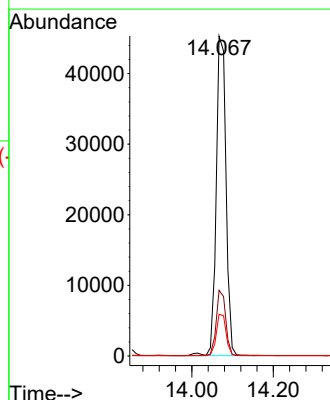
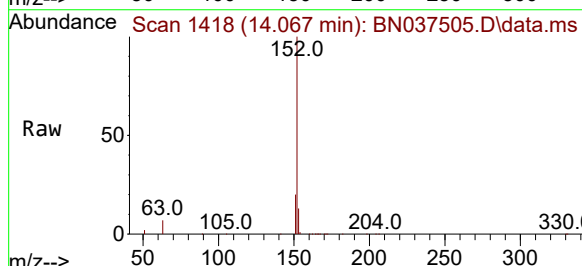
Tgt Ion:152 Resp: 74932

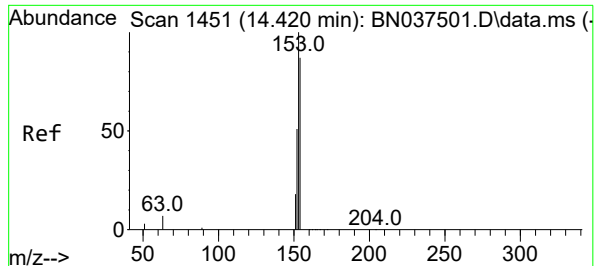
Ion Ratio Lower Upper

152 100

151 19.7 15.9 23.9

153 13.0 10.7 16.1

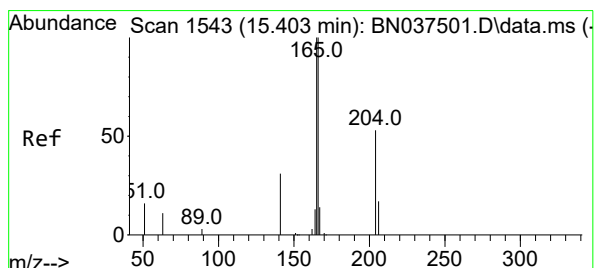
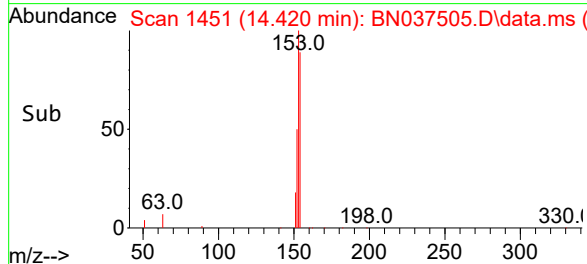
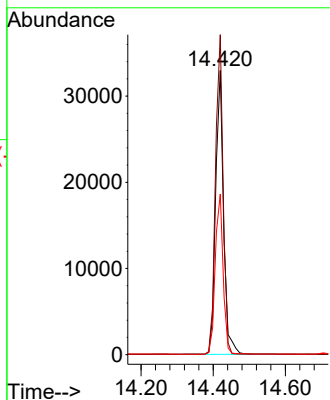
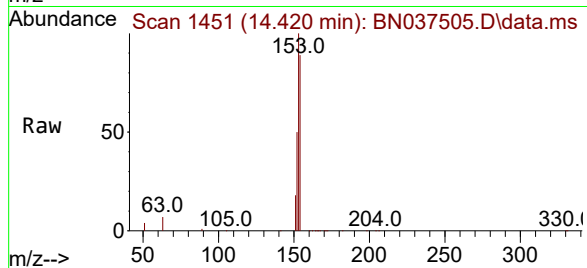




#17  
Acenaphthene  
Concen: 5.417 ng  
RT: 14.420 min Scan# 1451  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

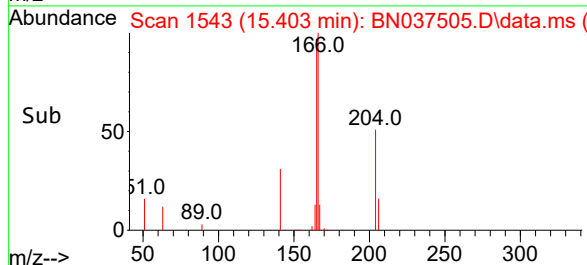
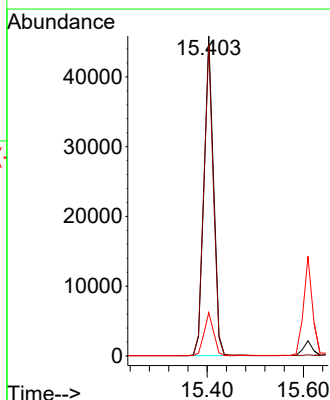
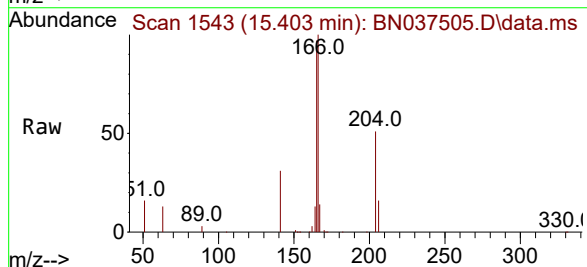
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

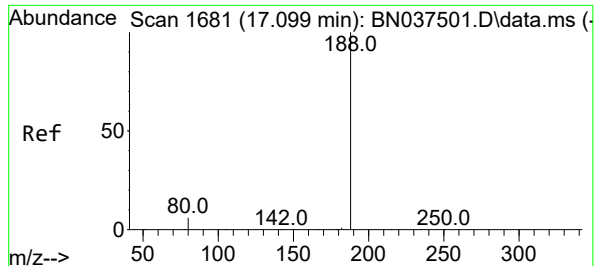
Tgt Ion:154 Resp: 49935  
Ion Ratio Lower Upper  
154 100  
153 108.5 89.2 133.8  
152 56.3 48.0 72.0



#18  
Fluorene  
Concen: 5.474 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:166 Resp: 64957  
Ion Ratio Lower Upper  
166 100  
165 95.0 78.1 117.1  
167 13.1 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

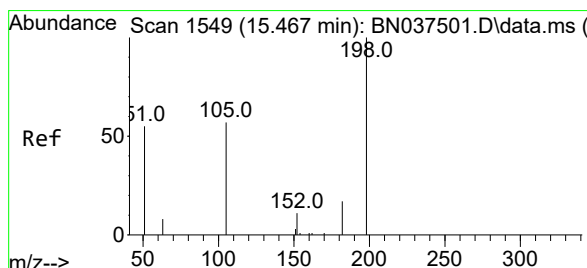
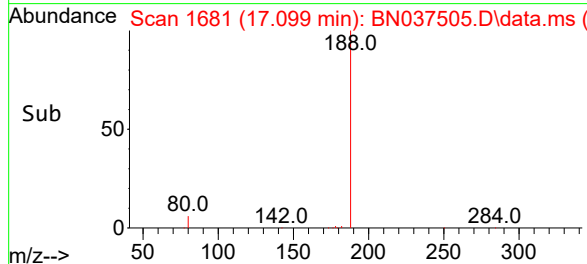
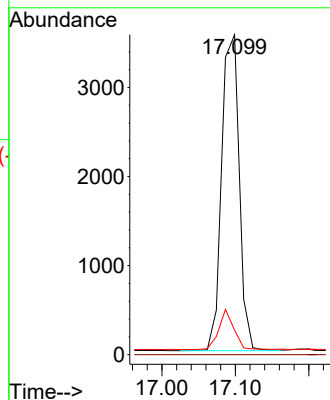
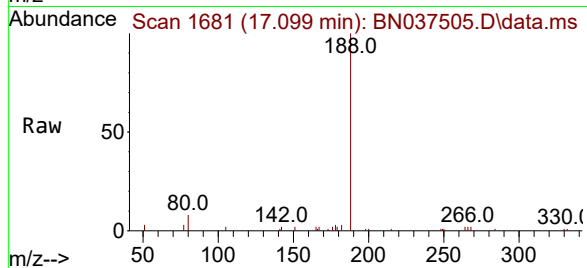
Tgt Ion:188 Resp: 5918

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.6 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 4.991 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

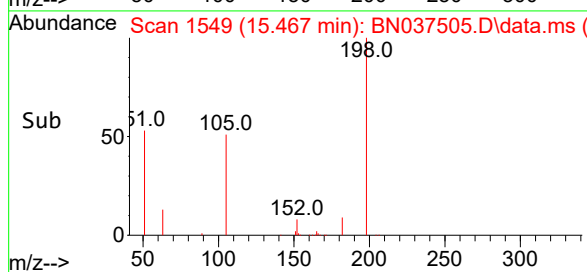
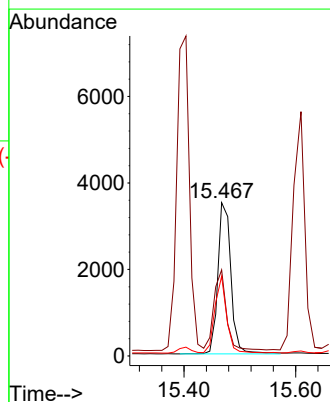
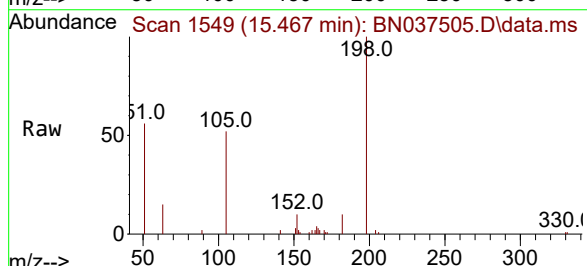
Tgt Ion:198 Resp: 5939

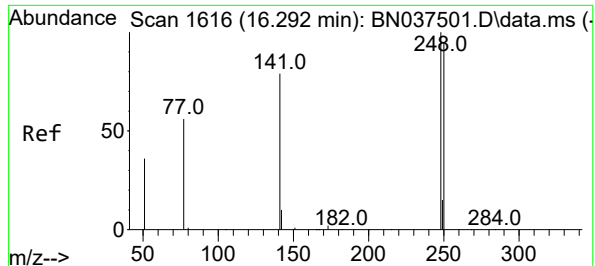
Ion Ratio Lower Upper

198 100

51 56.1 88.5 132.7#

105 52.0 61.2 91.8#

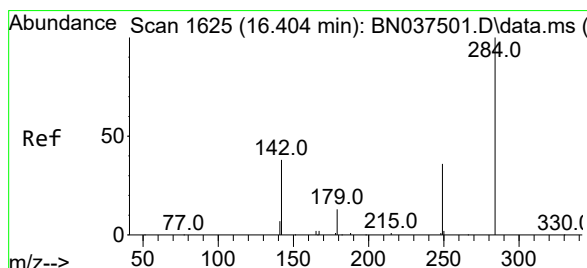
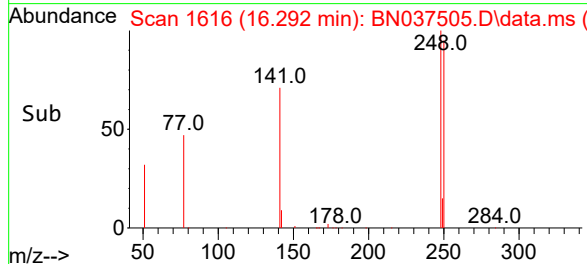
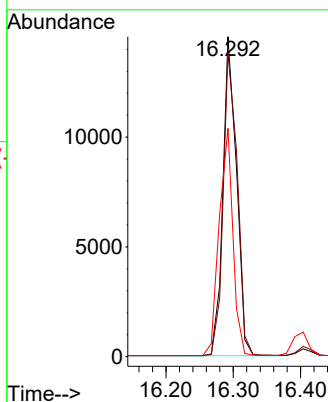
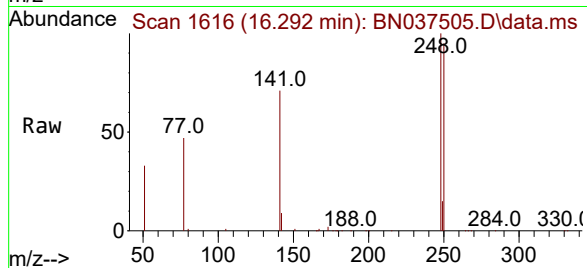




#21  
4-Bromophenyl-phenylether  
Concen: 5.344 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

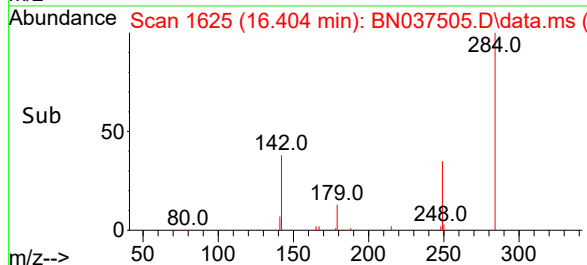
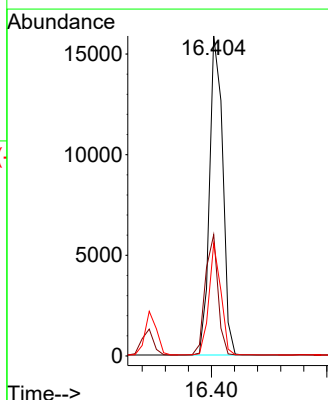
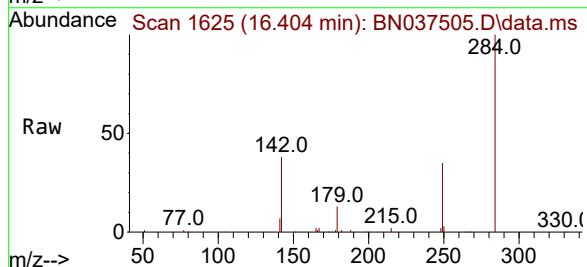
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

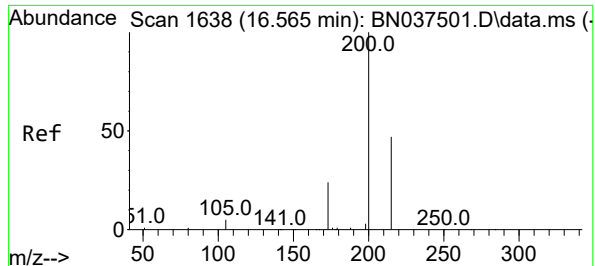
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 95.0  | 76.2  | 114.2 |
| 141     | 71.4  | 63.9  | 95.9  |



#22  
Hexachlorobenzene  
Concen: 5.106 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 36.4  | 28.9  | 43.3  |
| 249     | 31.8  | 25.8  | 38.6  |





#23

Atrazine

Concen: 6.150 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

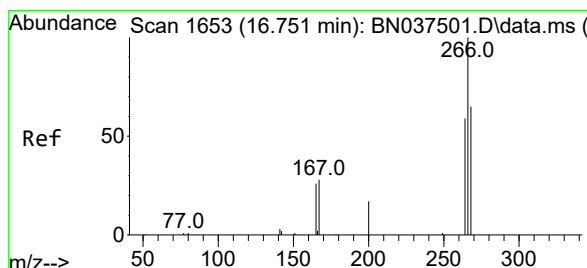
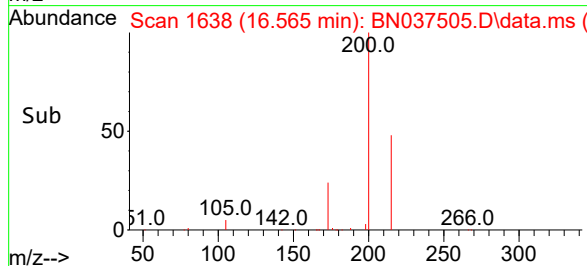
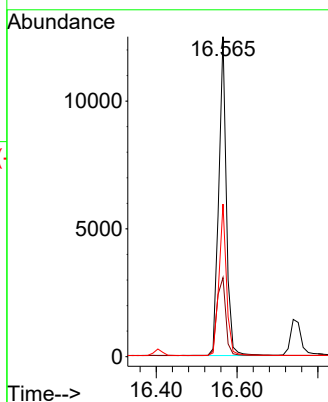
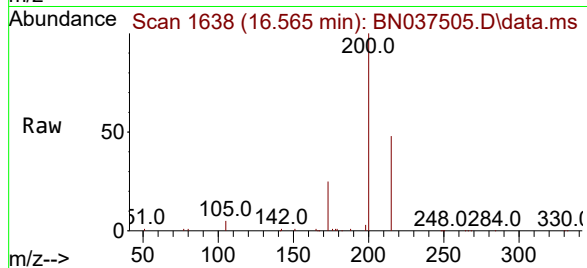
Tgt Ion:200 Resp: 16269

Ion Ratio Lower Upper

200 100

173 24.7 23.2 34.8

215 47.7 40.2 60.4



#24

Pentachlorophenol

Concen: 6.351 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

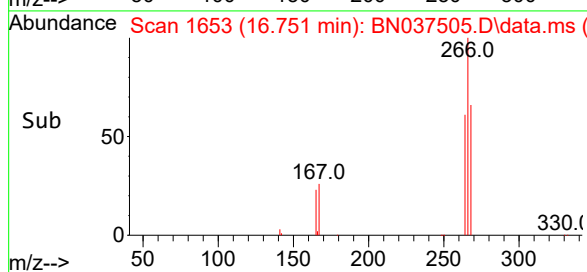
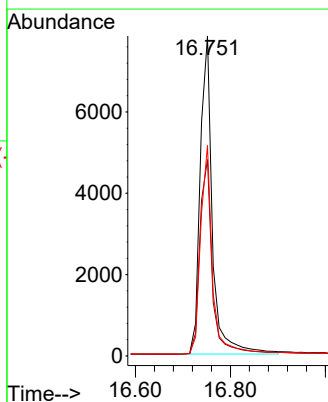
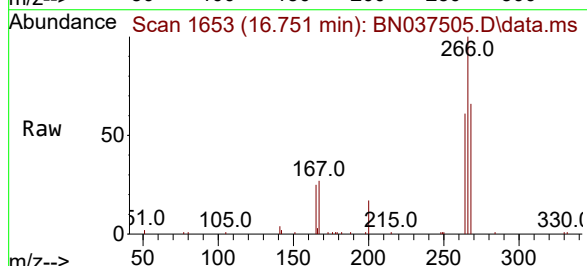
Tgt Ion:266 Resp: 13954

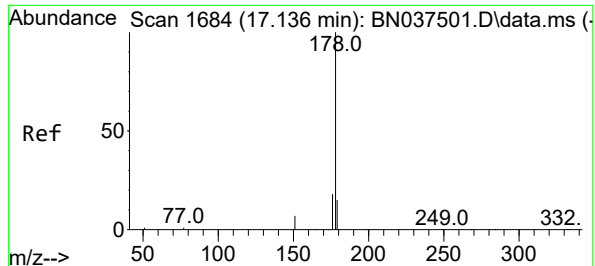
Ion Ratio Lower Upper

266 100

264 62.8 49.3 73.9

268 64.0 51.6 77.4





#25

Phenanthrene

Concen: 5.312 ng

RT: 17.136 min Scan# 1684

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

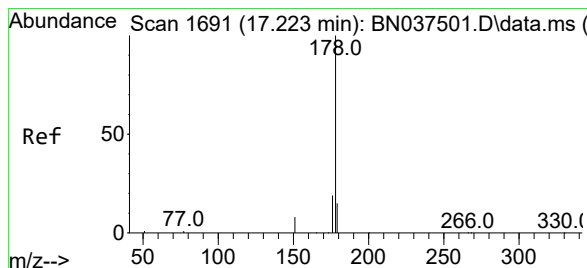
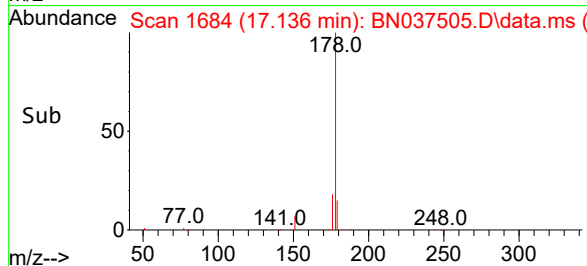
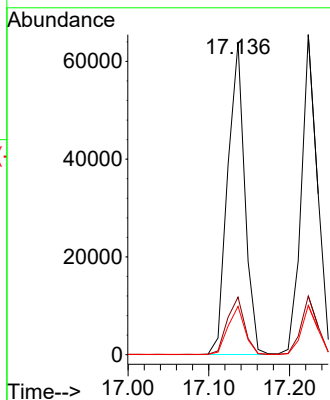
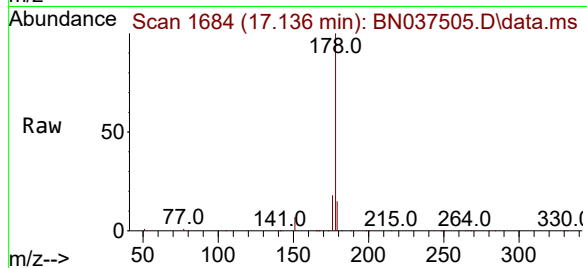
Tgt Ion:178 Resp: 94181

Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.6

179 15.3 12.2 18.2



#26

Anthracene

Concen: 5.634 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

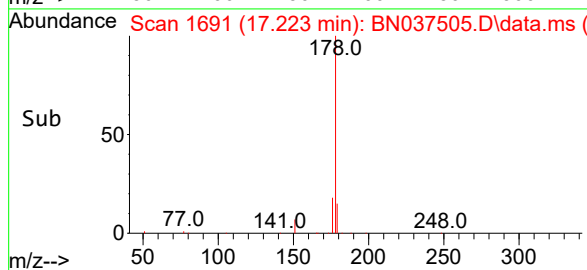
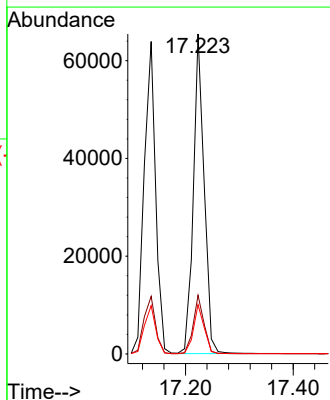
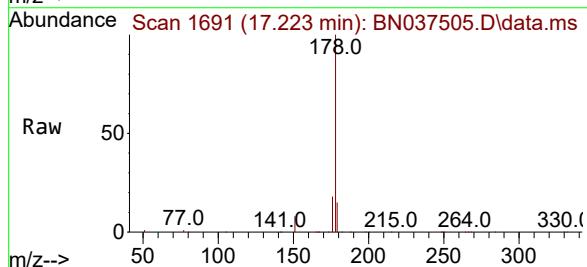
Tgt Ion:178 Resp: 91147

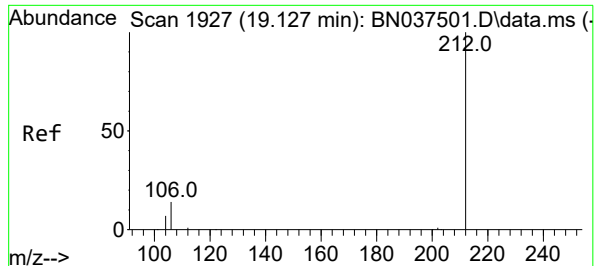
Ion Ratio Lower Upper

178 100

176 18.2 14.7 22.1

179 15.3 12.3 18.5





#27

Fluoranthene-d10

Concen: 6.537 ng

RT: 19.127 min Scan# 1927

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

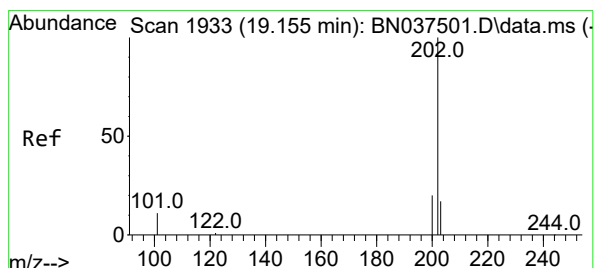
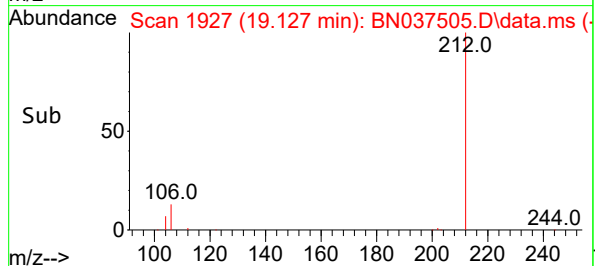
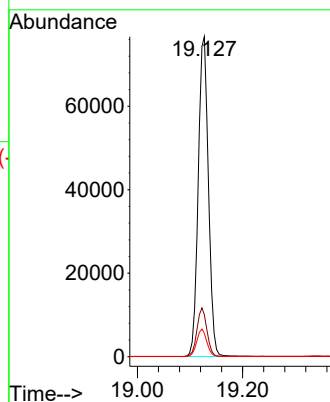
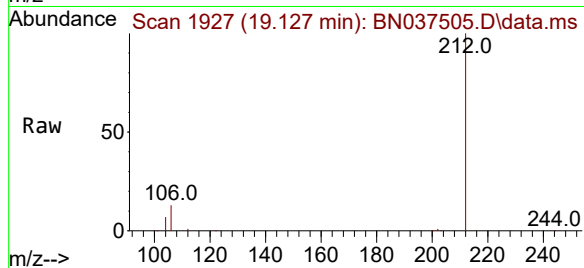
Tgt Ion:212 Resp: 102473

Ion Ratio Lower Upper

212 100

106 14.8 12.2 18.4

104 8.4 6.7 10.1



#28

Fluoranthene

Concen: 5.736 ng

RT: 19.155 min Scan# 1933

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

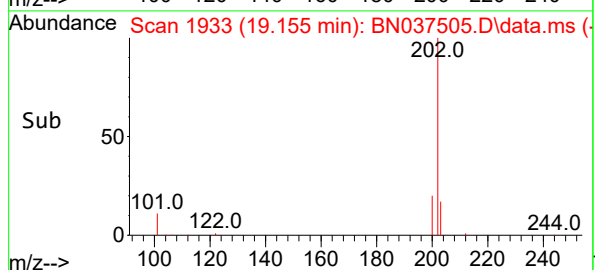
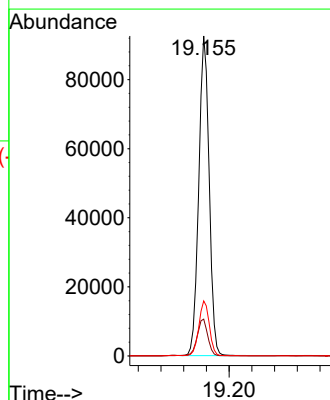
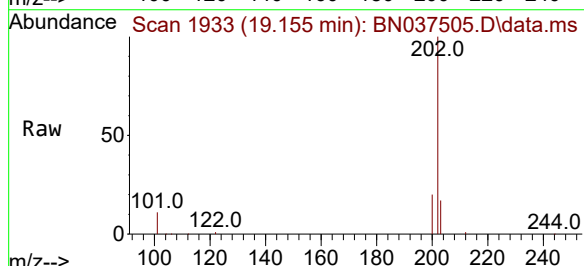
Tgt Ion:202 Resp: 117280

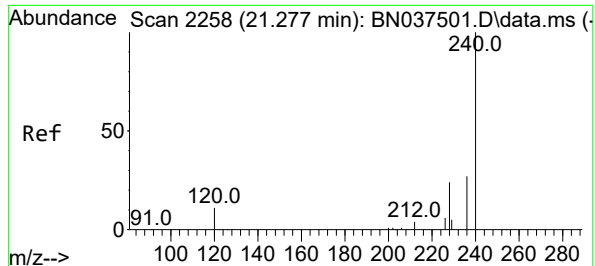
Ion Ratio Lower Upper

202 100

101 11.8 9.8 14.6

203 17.3 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

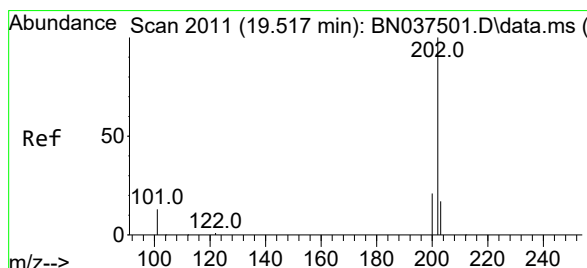
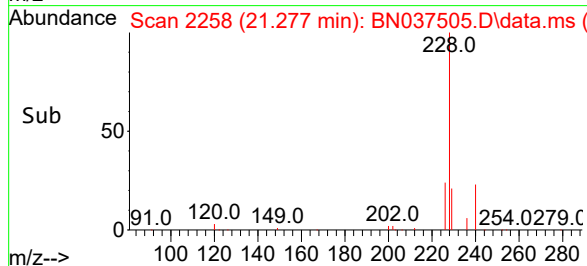
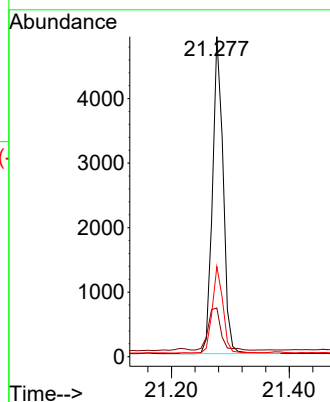
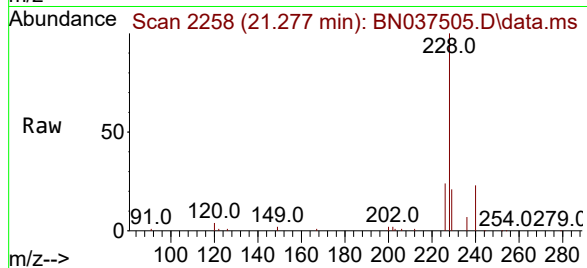
Tgt Ion:240 Resp: 6176

Ion Ratio Lower Upper

240 100

120 15.2 10.7 16.1

236 28.1 22.6 33.8



#30

Pyrene

Concen: 4.775 ng

RT: 19.517 min Scan# 2011

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

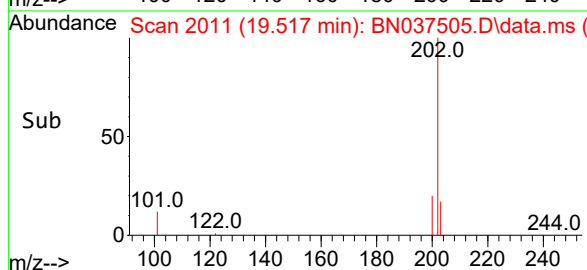
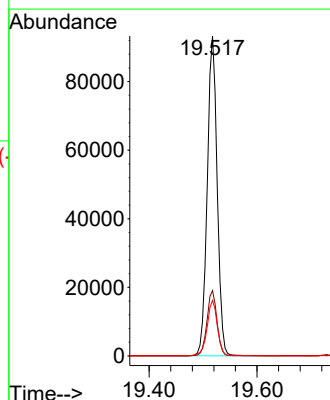
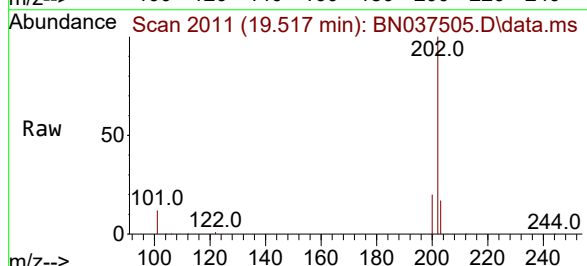
Tgt Ion:202 Resp: 118804

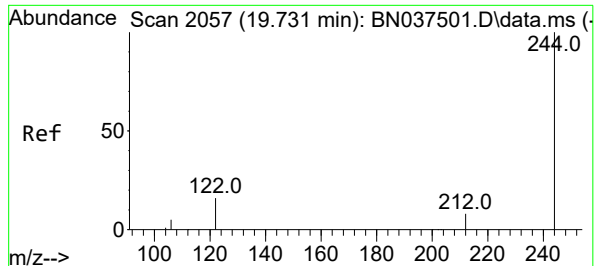
Ion Ratio Lower Upper

202 100

200 20.5 16.5 24.7

203 17.8 14.3 21.5

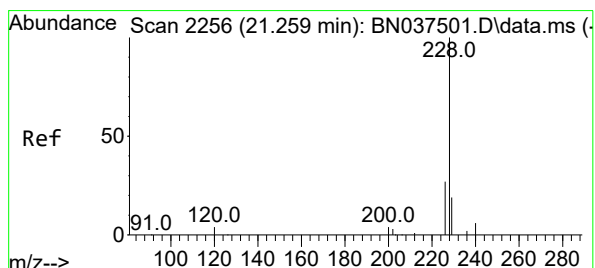
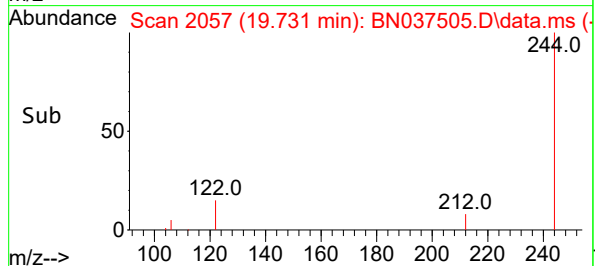
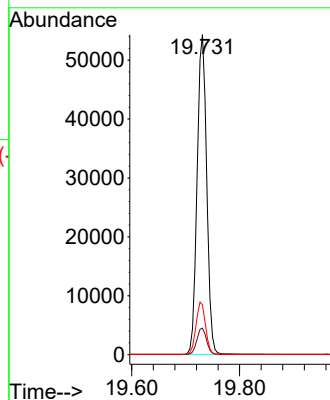
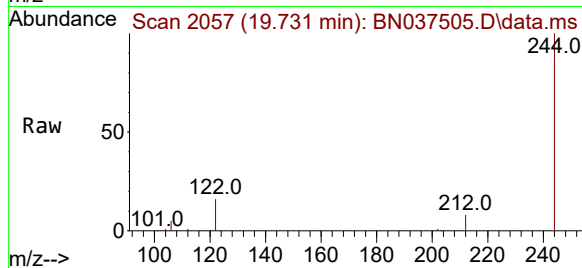




#31  
Terphenyl-d14  
Concen: 5.031 ng  
RT: 19.731 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

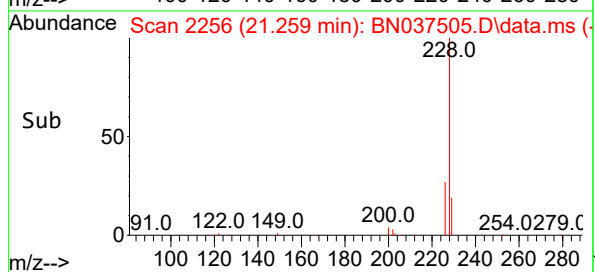
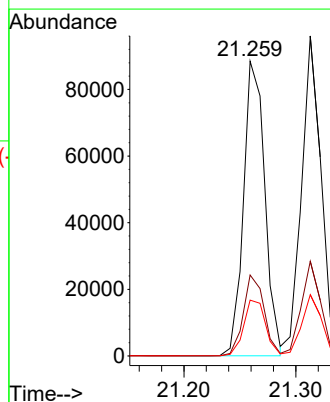
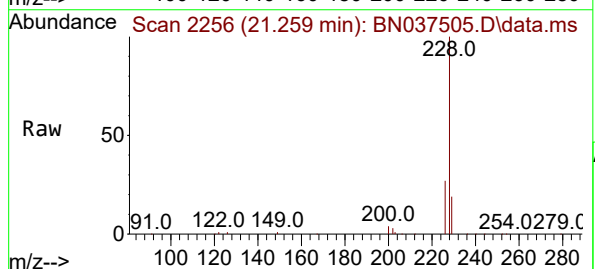
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

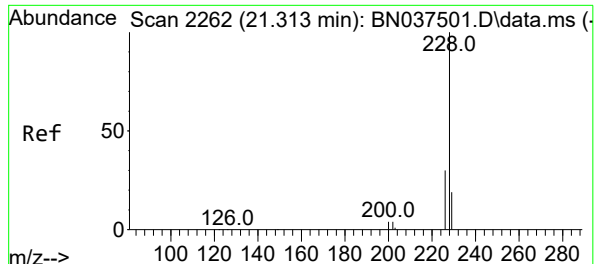
Tgt Ion:244 Resp: 66764  
Ion Ratio Lower Upper  
244 100  
212 8.3 7.4 11.2  
122 15.6 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 5.414 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:228 Resp: 117117  
Ion Ratio Lower Upper  
228 100  
226 27.5 21.9 32.9  
229 18.9 15.8 23.8





#33

Chrysene

Concen: 5.239 ng

RT: 21.313 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

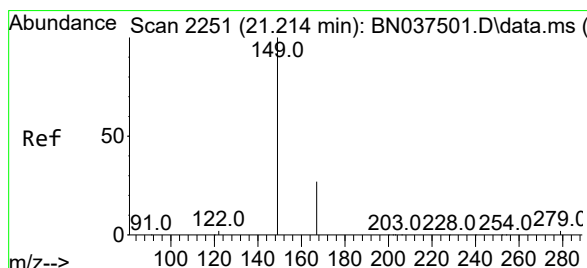
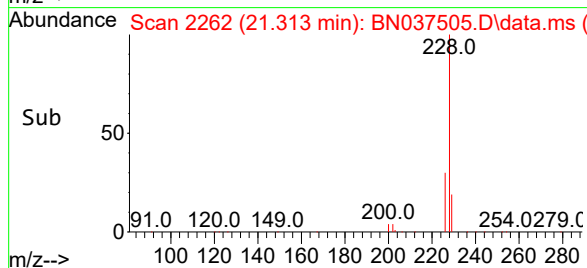
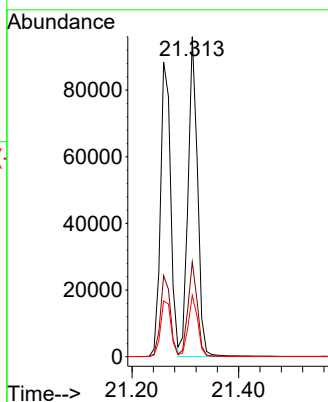
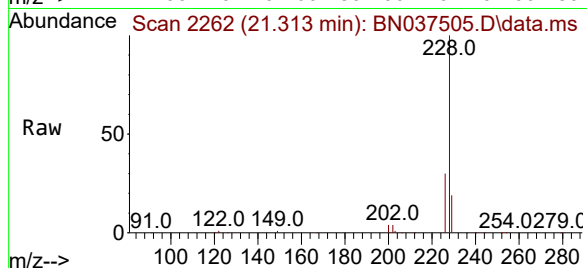
Tgt Ion:228 Resp: 117985

Ion Ratio Lower Upper

228 100

226 29.6 24.2 36.4

229 19.2 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 6.181 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

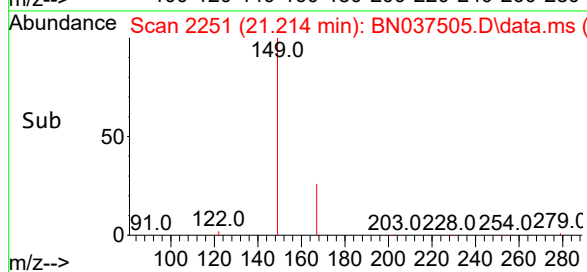
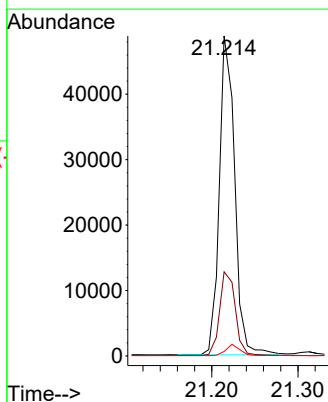
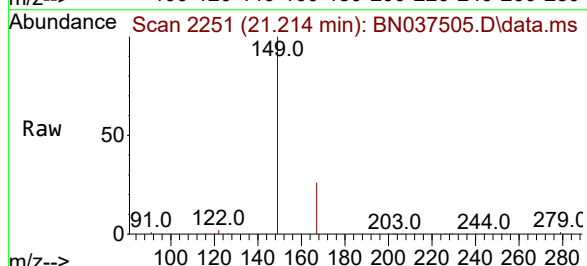
Tgt Ion:149 Resp: 60154

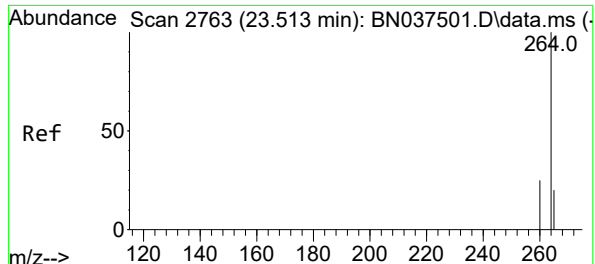
Ion Ratio Lower Upper

149 100

167 26.9 21.8 32.8

279 3.2 3.0 4.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.516 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037505.D

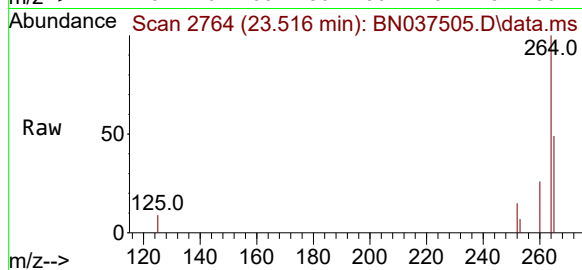
Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0



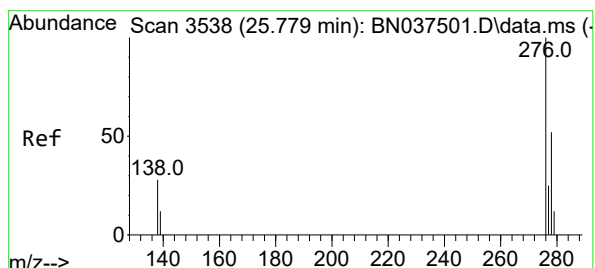
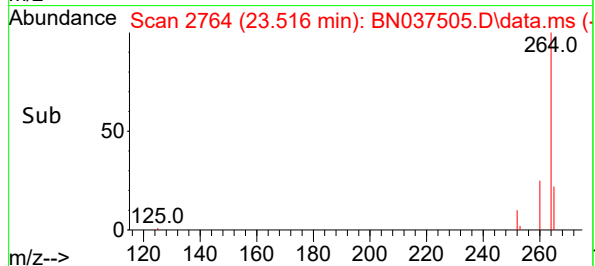
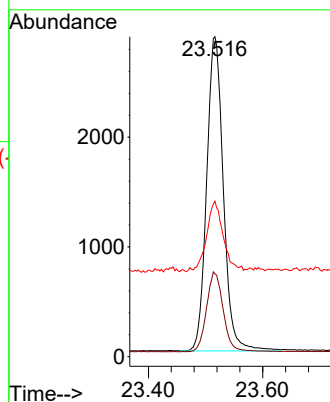
Tgt Ion:264 Resp: 5810

Ion Ratio Lower Upper

264 100

260 25.9 21.2 31.8

265 48.6 40.4 60.6



#36

Indeno(1,2,3-cd)pyrene

Concen: 5.975 ng

RT: 25.782 min Scan# 3539

Delta R.T. 0.003 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

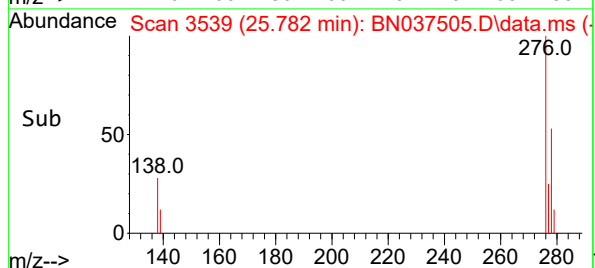
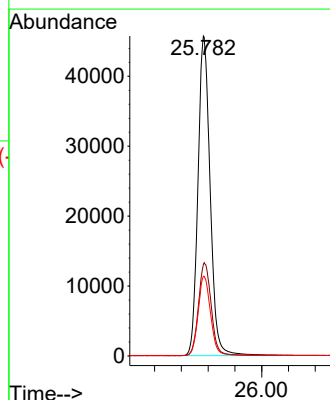
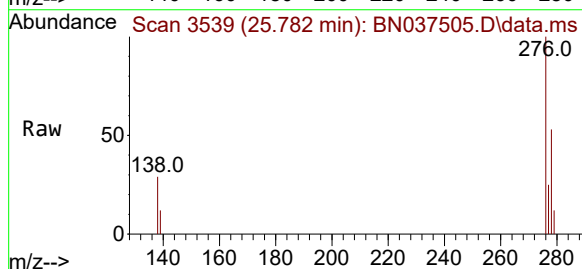
Tgt Ion:276 Resp: 144593

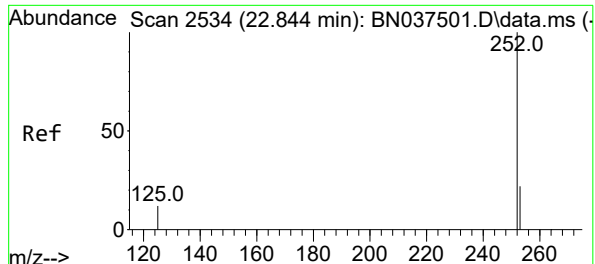
Ion Ratio Lower Upper

276 100

138 30.3 24.0 36.0

277 25.2 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 5.570 ng

RT: 22.844 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

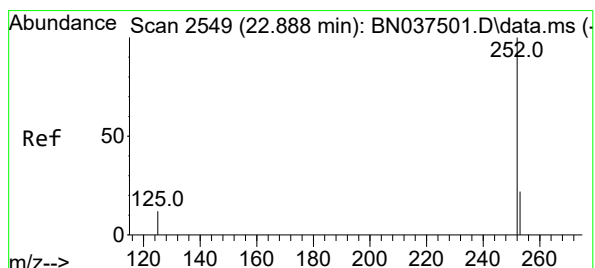
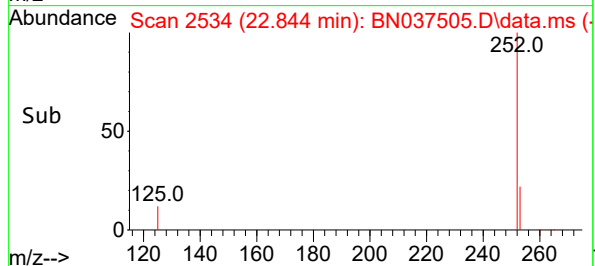
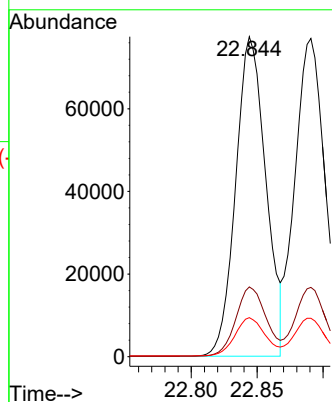
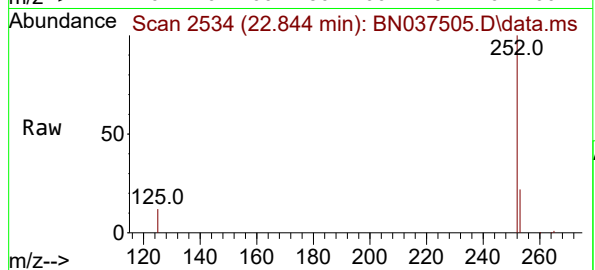
Tgt Ion:252 Resp: 122848

Ion Ratio Lower Upper

252 100

253 21.8 19.5 29.3

125 12.2 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 5.503 ng

RT: 22.891 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

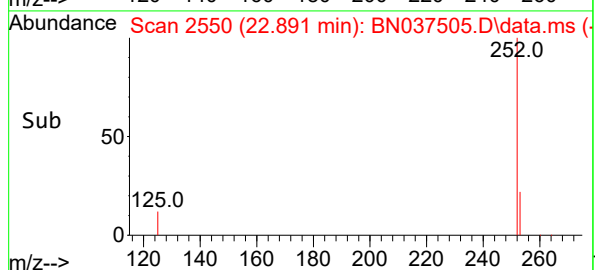
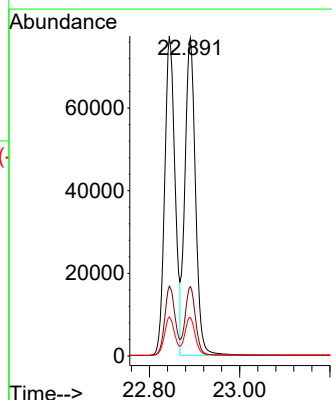
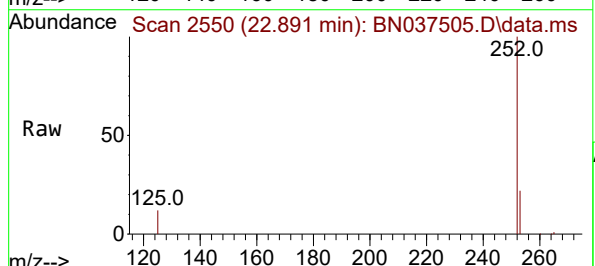
Tgt Ion:252 Resp: 125226

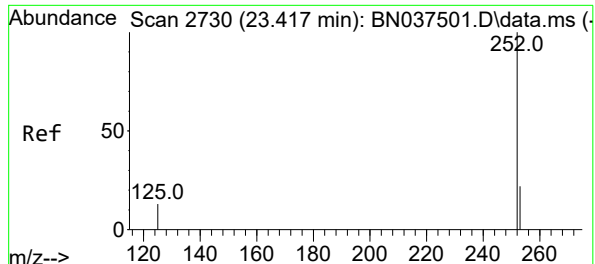
Ion Ratio Lower Upper

252 100

253 21.8 19.5 29.3

125 12.1 13.1 19.7#





#39

Benzo(a)pyrene

Concen: 5.797 ng

RT: 23.420 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

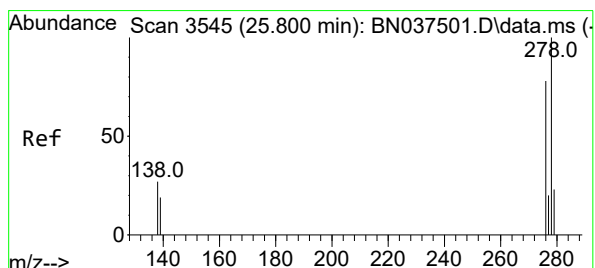
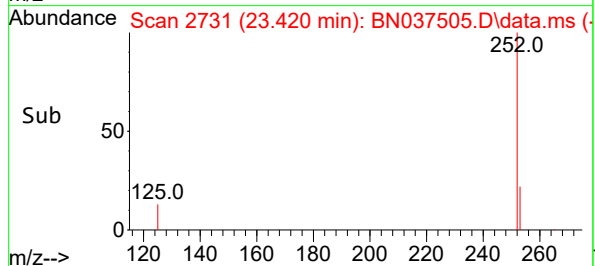
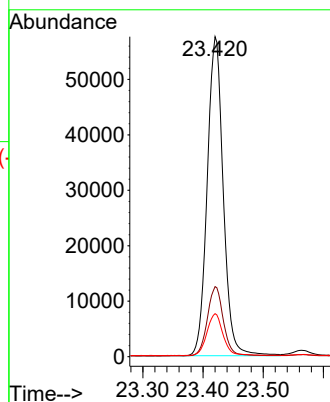
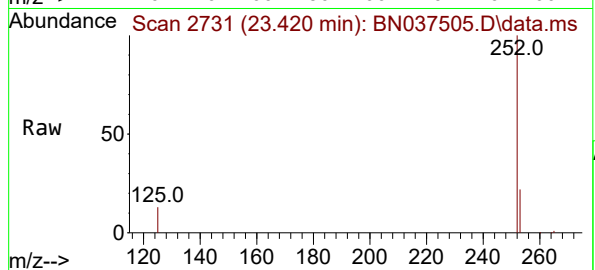
Tgt Ion:252 Resp: 106654

Ion Ratio Lower Upper

252 100

253 21.9 19.9 29.9

125 13.5 15.2 22.8#



#40

Dibenzo(a,h)anthracene

Concen: 6.029 ng

RT: 25.800 min Scan# 3545

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

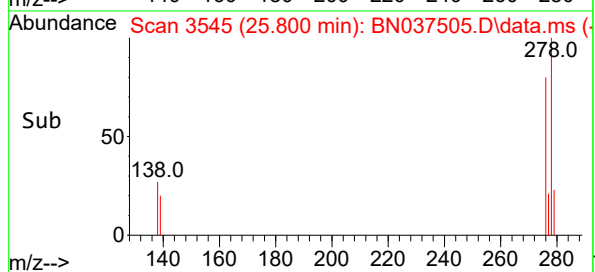
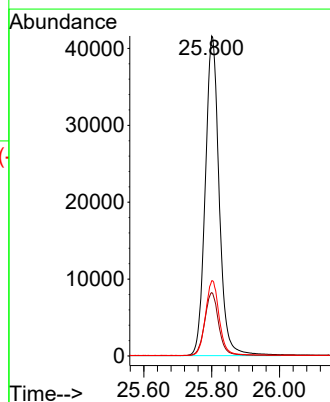
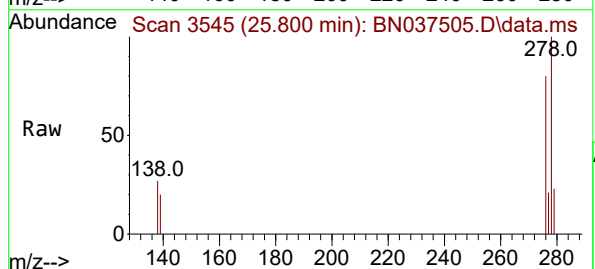
Tgt Ion:278 Resp: 118164

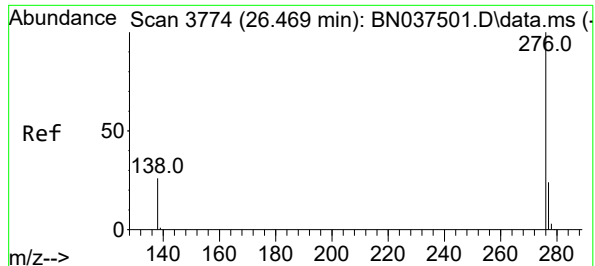
Ion Ratio Lower Upper

278 100

139 19.8 17.5 26.3

279 23.5 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 5.952 ng

RT: 26.469 min Scan# 31

Delta R.T. 0.000 min

Lab File: BN037505.D

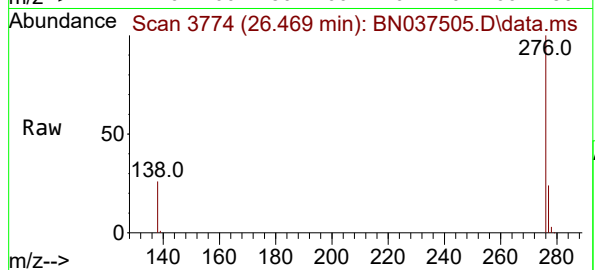
Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0



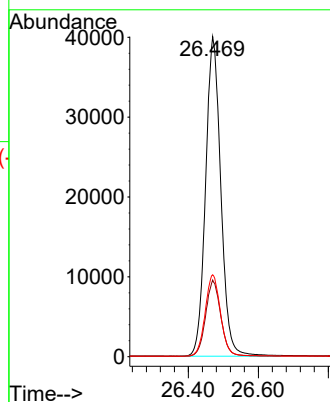
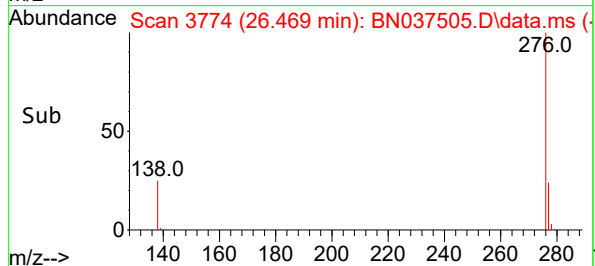
Tgt Ion:276 Resp: 120757

Ion Ratio Lower Upper

276 100

277 24.0 20.9 31.3

138 25.6 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037506.D  
 Acq On : 15 Jul 2025 16:58  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN071525

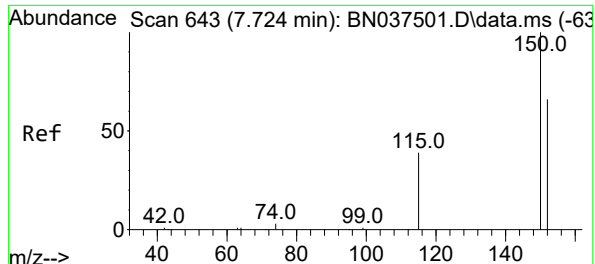
Quant Time: Jul 15 17:34:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 17:33:01 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2236     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.509 | 136  | 5813     | 0.400 | ng    | 0.00      |
| 13) Acenaphthene-d10          | 14.355 | 164  | 3335     | 0.400 | ng    | 0.00      |
| 19) Phenanthrene-d10          | 17.099 | 188  | 6334     | 0.400 | ng    | 0.00      |
| 29) Chrysene-d12              | 21.277 | 240  | 5040     | 0.400 | ng    | # 0.00    |
| 35) Perylene-d12              | 23.522 | 264  | 4669     | 0.400 | ng    | 0.00      |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.305  | 112  | 2030     | 0.367 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.879  | 99   | 2407     | 0.347 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.865  | 82   | 1802     | 0.415 | ng    | 0.00      |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 3375     | 0.405 | ng    | 0.00      |
| 14) 2,4,6-Tribromophenol      | 15.845 | 330  | 531      | 0.324 | ng    | 0.00      |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 8001     | 0.461 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 19.127 | 212  | 6495     | 0.387 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.731 | 244  | 5056     | 0.467 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 2) 1,4-Dioxane                | 3.239  | 88   | 1011     | 0.470 | ng    | Qvalue 95 |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 1083     | 0.401 | ng    | # 95      |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 2398     | 0.415 | ng    | 99        |
| 9) Naphthalene                | 10.551 | 128  | 6033     | 0.389 | ng    | 100       |
| 10) Hexachlorobutadiene       | 10.861 | 225  | 1386     | 0.405 | ng    | # 99      |
| 12) 2-Methylnaphthalene       | 12.172 | 142  | 3595     | 0.353 | ng    | 100       |
| 16) Acenaphthylene            | 14.067 | 152  | 6226     | 0.417 | ng    | 99        |
| 17) Acenaphthene              | 14.420 | 154  | 3826     | 0.377 | ng    | 99        |
| 18) Fluorene                  | 15.403 | 166  | 5028     | 0.384 | ng    | 99        |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 267      | 0.401 | ng    | 95        |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 1563     | 0.385 | ng    | 100       |
| 22) Hexachlorobenzene         | 16.404 | 284  | 2158     | 0.412 | ng    | 99        |
| 23) Atrazine                  | 16.565 | 200  | 1050     | 0.371 | ng    | 98        |
| 24) Pentachlorophenol         | 16.751 | 266  | 679      | 0.289 | ng    | 99        |
| 25) Phenanthrene              | 17.136 | 178  | 7640     | 0.403 | ng    | 99        |
| 26) Anthracene                | 17.223 | 178  | 6928     | 0.400 | ng    | 100       |
| 28) Fluoranthene              | 19.155 | 202  | 8063     | 0.368 | ng    | 100       |
| 30) Pyrene                    | 19.517 | 202  | 8002     | 0.394 | ng    | 100       |
| 32) Benzo(a)anthracene        | 21.268 | 228  | 6891     | 0.390 | ng    | 99        |
| 33) Chrysene                  | 21.313 | 228  | 7126     | 0.388 | ng    | 99        |
| 34) Bis(2-ethylhexyl)phtha... | 21.223 | 149  | 2705     | 0.341 | ng    | 98        |
| 36) Indeno(1,2,3-cd)pyrene    | 25.785 | 276  | 7666     | 0.394 | ng    | 99        |
| 37) Benzo(b)fluoranthene      | 22.847 | 252  | 6430     | 0.363 | ng    | 100       |
| 38) Benzo(k)fluoranthene      | 22.894 | 252  | 7254     | 0.397 | ng    | 98        |
| 39) Benzo(a)pyrene            | 23.420 | 252  | 5792     | 0.392 | ng    | 99        |
| 40) Dibenzo(a,h)anthracene    | 25.806 | 278  | 6203     | 0.394 | ng    | 98        |
| 41) Benzo(g,h,i)perylene      | 26.472 | 276  | 6018     | 0.369 | ng    | 98        |

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

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
ICVBN071525

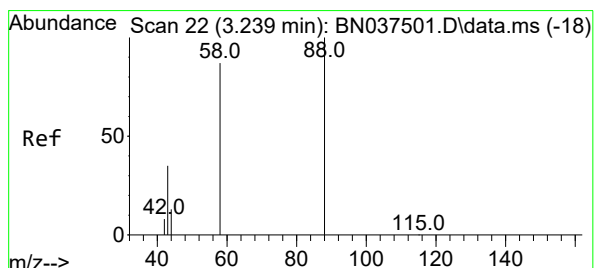
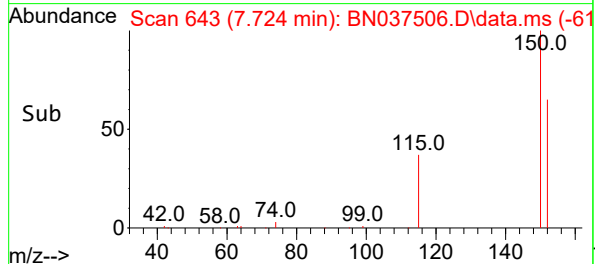
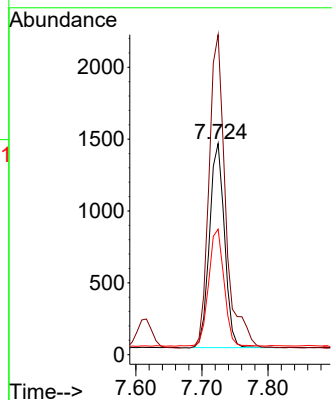
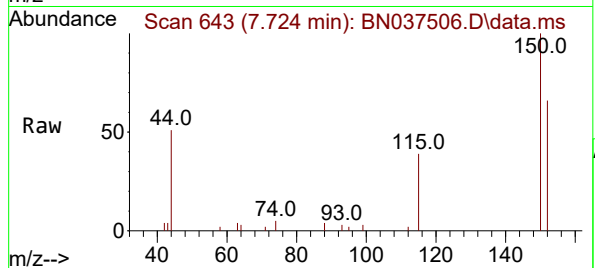
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17



#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

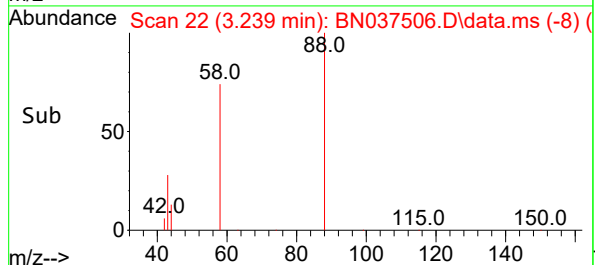
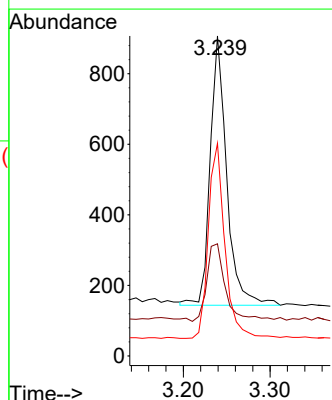
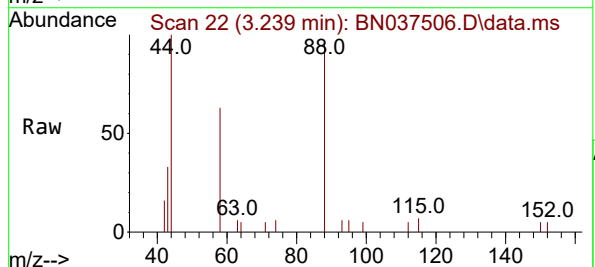
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

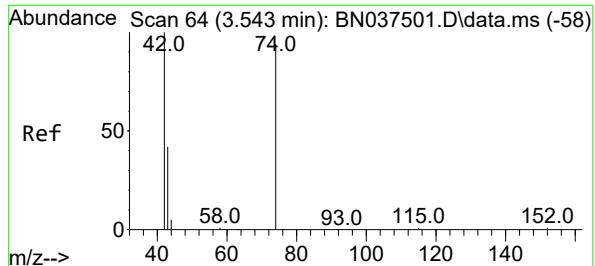
Tgt Ion:152 Resp: 2236  
Ion Ratio Lower Upper  
152 100  
150 151.5 119.8 179.8  
115 59.4 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.470 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion: 88 Resp: 1011  
Ion Ratio Lower Upper  
88 100  
43 33.0 27.5 41.3  
58 72.9 62.7 94.1

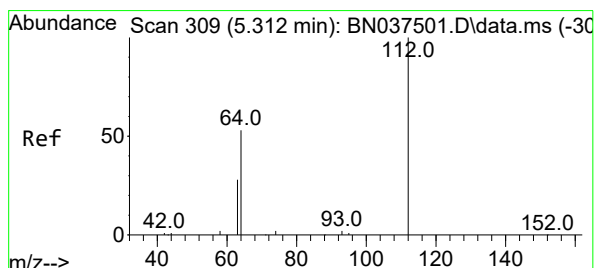
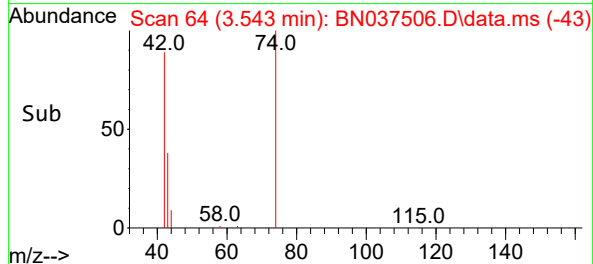
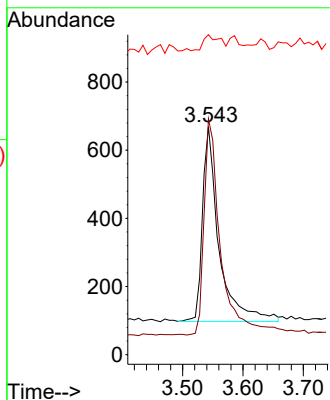
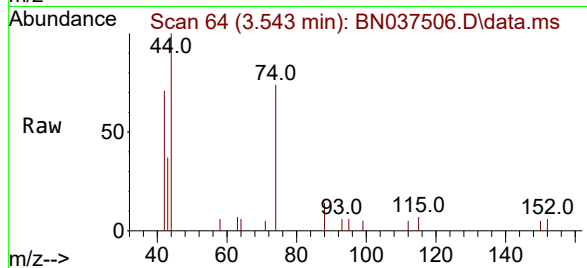




#3  
n-Nitrosodimethylamine  
Concen: 0.401 ng  
RT: 3.543 min Scan# 64  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

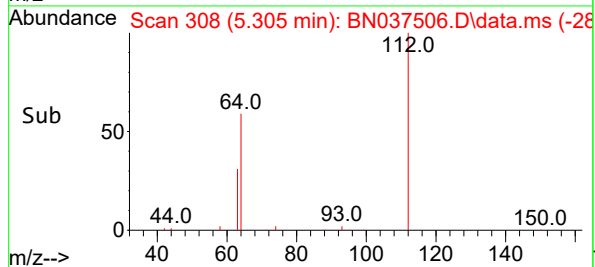
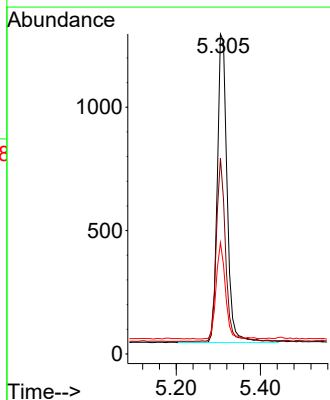
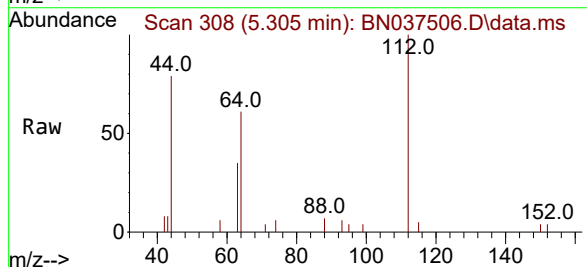
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

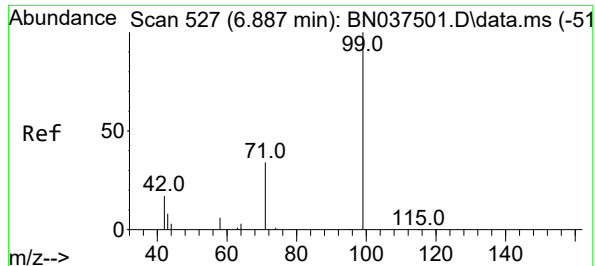
Tgt Ion: 42 Resp: 1083  
Ion Ratio Lower Upper  
42 100  
74 112.8 91.8 137.6  
44 8.5 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.367 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion: 112 Resp: 2030  
Ion Ratio Lower Upper  
112 100  
64 55.8 45.1 67.7  
63 29.2 23.8 35.8

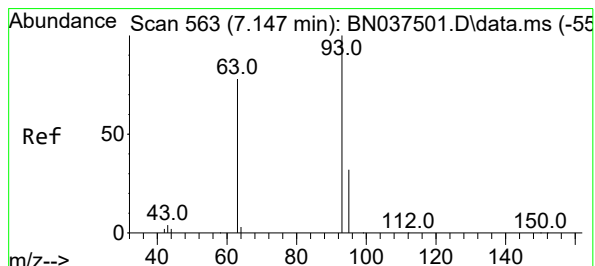
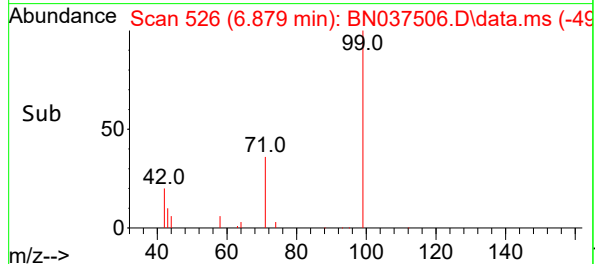
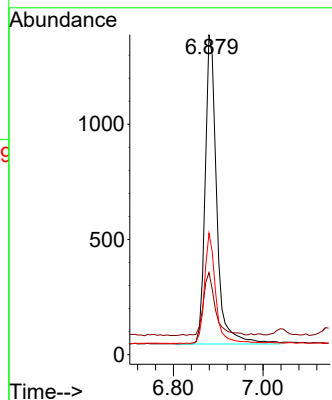
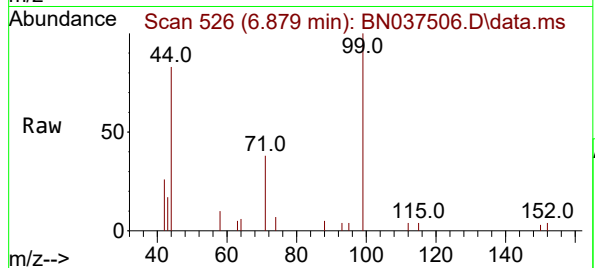




#5  
Phenol-d6  
Concen: 0.347 ng  
RT: 6.879 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

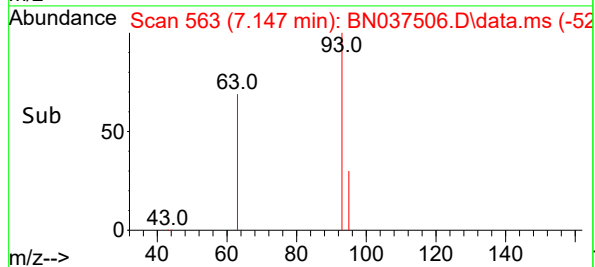
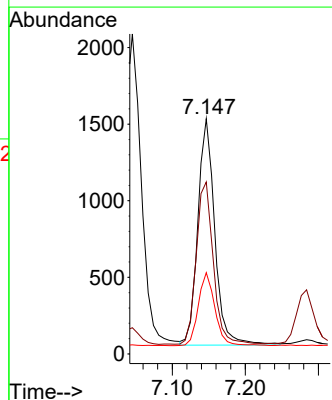
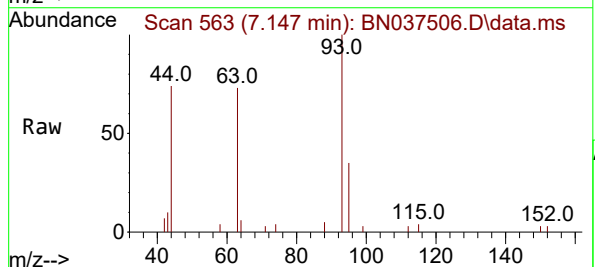
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

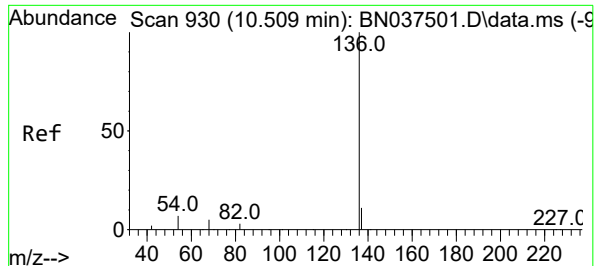
Tgt Ion: 99 Resp: 2407  
Ion Ratio Lower Upper  
99 100  
42 20.7 17.1 25.7  
71 34.6 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 0.415 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion: 93 Resp: 2398  
Ion Ratio Lower Upper  
93 100  
63 71.8 58.2 87.4  
95 31.4 25.3 37.9

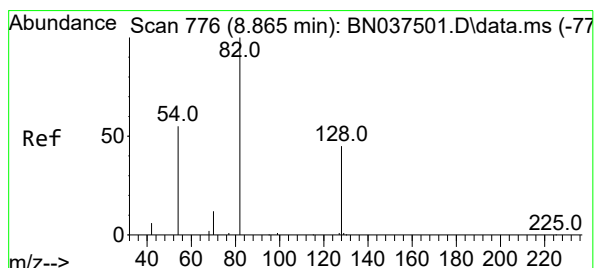
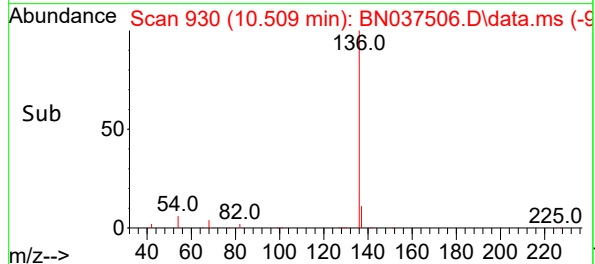
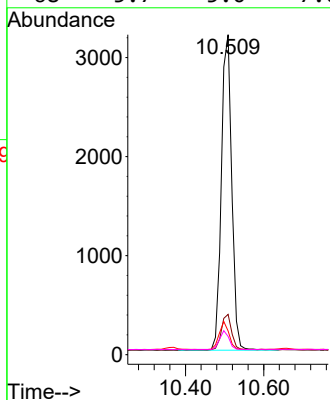
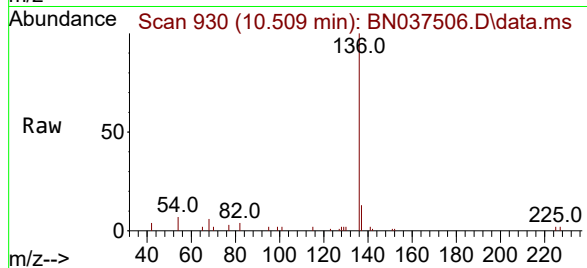




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

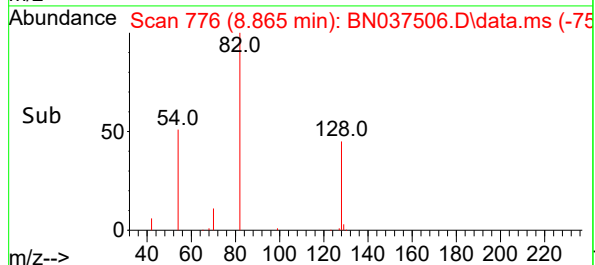
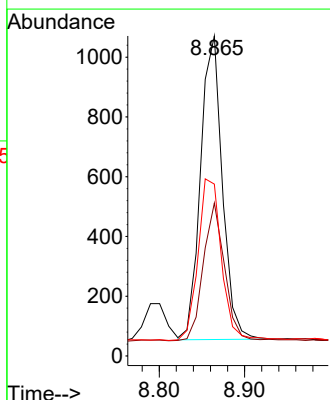
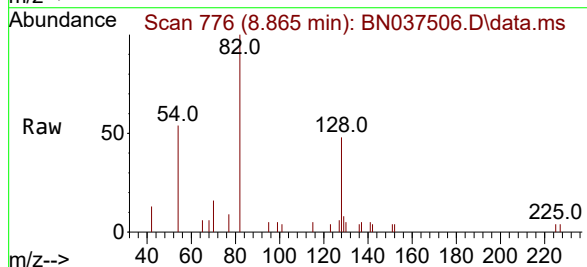
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

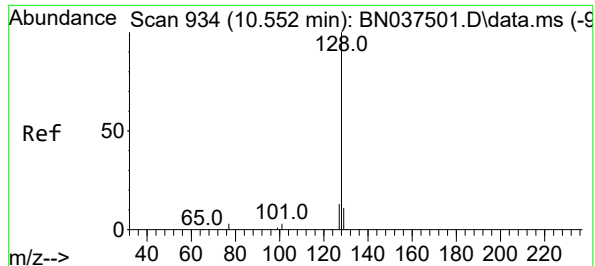
|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:136 | Resp: | 5813        |
| Ion         | Ratio | Lower Upper |
| 136         | 100   |             |
| 137         | 12.6  | 9.8 14.8    |
| 54          | 7.4   | 6.6 9.8     |
| 68          | 5.7   | 5.0 7.6     |



#8  
Nitrobenzene-d5  
Concen: 0.415 ng  
RT: 8.865 min Scan# 776  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion: 82 | Resp: | 1802        |
| Ion         | Ratio | Lower Upper |
| 82          | 100   |             |
| 128         | 47.8  | 37.5 56.3   |
| 54          | 53.7  | 45.3 67.9   |





#9

Naphthalene

Concen: 0.389 ng

RT: 10.551 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

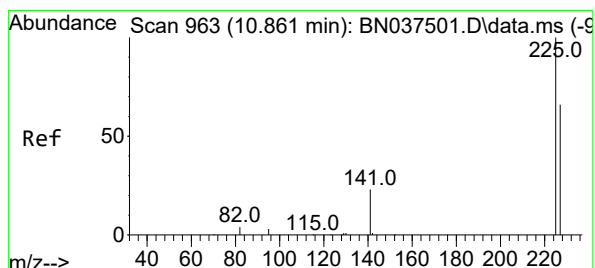
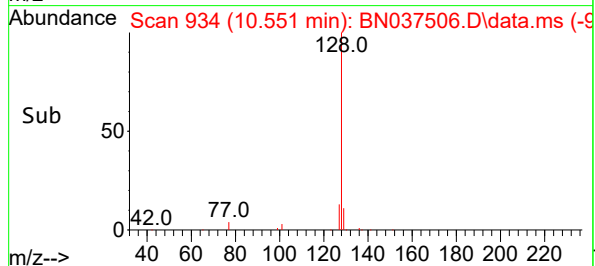
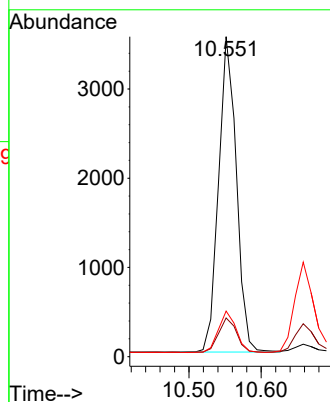
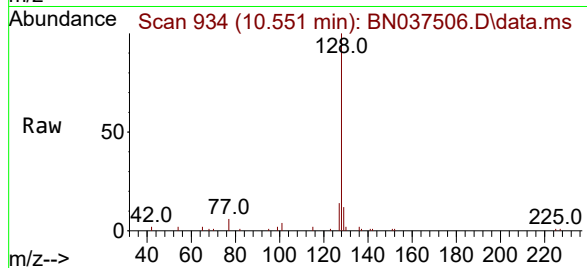
Tgt Ion:128 Resp: 6033

Ion Ratio Lower Upper

128 100

129 12.1 9.7 14.5

127 14.2 11.5 17.3



#10

Hexachlorobutadiene

Concen: 0.405 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

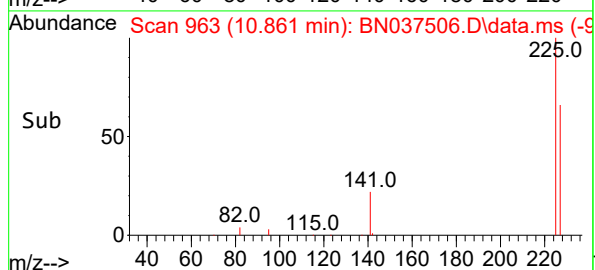
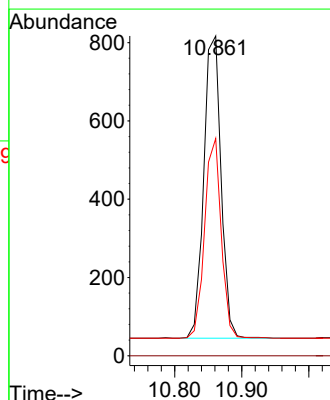
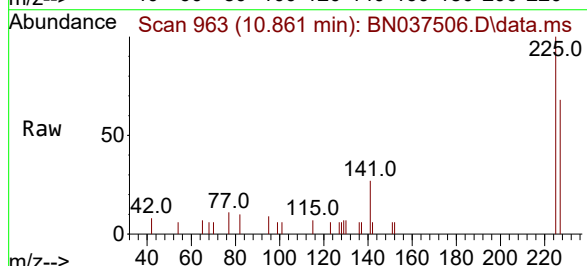
Tgt Ion:225 Resp: 1386

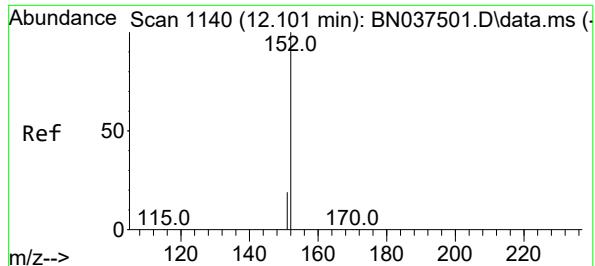
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.2 51.0 76.4

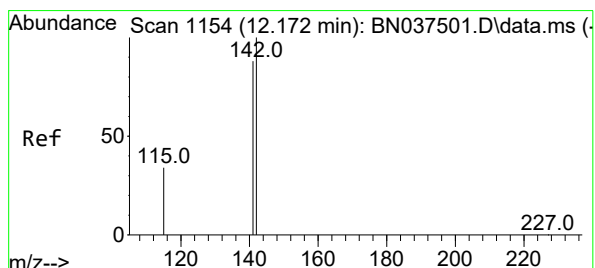
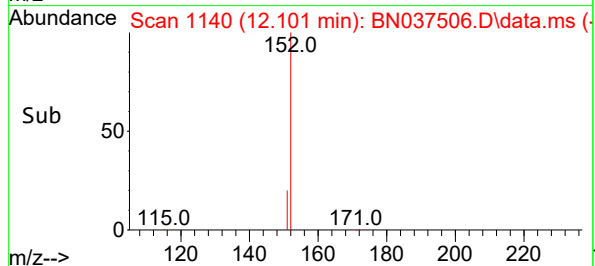
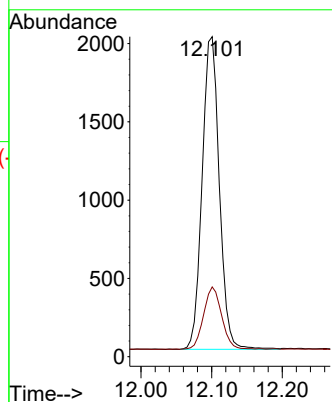
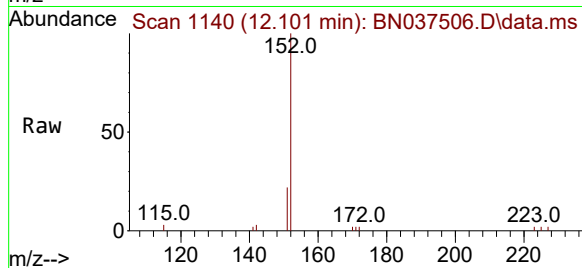




#11  
2-Methylnaphthalene-d10  
Concen: 0.405 ng  
RT: 12.101 min Scan# 1140  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

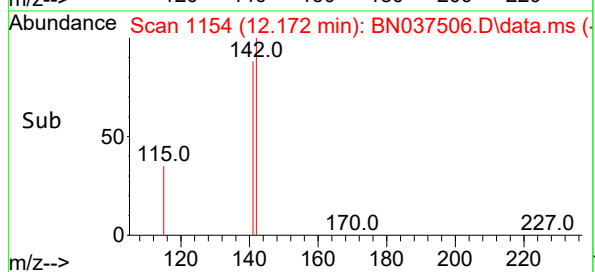
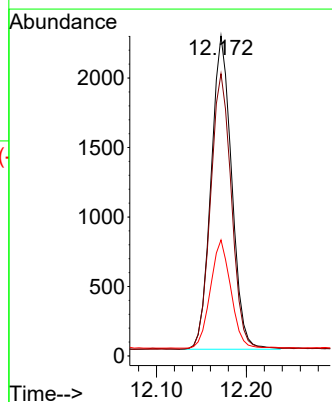
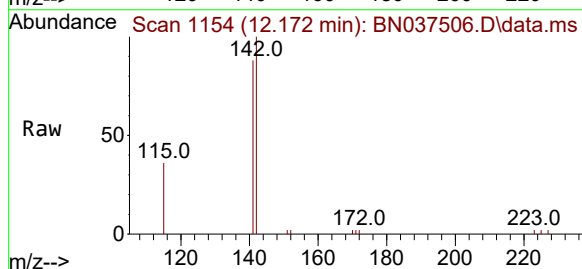
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

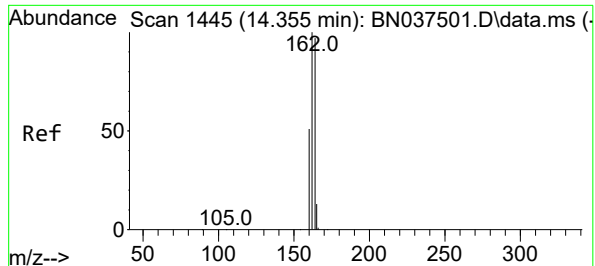
Tgt Ion:152 Resp: 3375  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.353 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:142 Resp: 3595  
Ion Ratio Lower Upper  
142 100  
141 88.2 71.0 106.4  
115 36.3 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

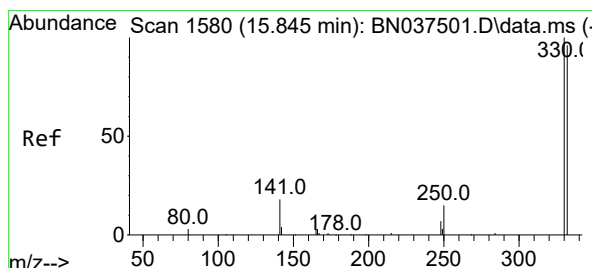
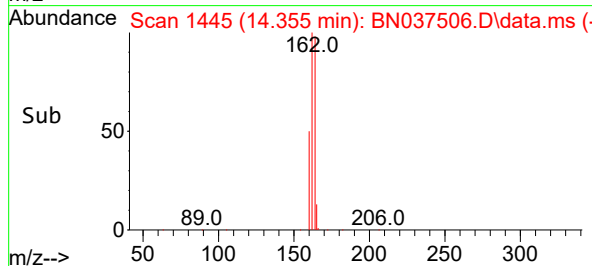
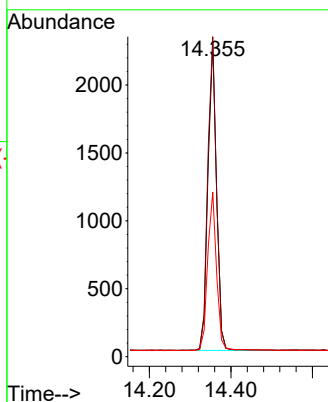
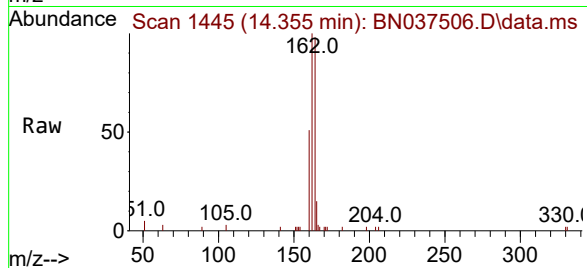
Tgt Ion:164 Resp: 3335

Ion Ratio Lower Upper

164 100

162 101.6 82.0 123.0

160 52.2 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.324 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

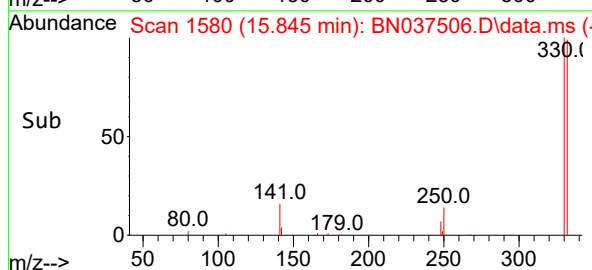
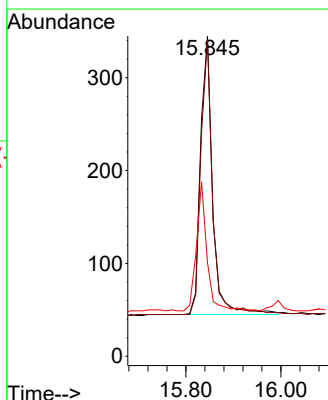
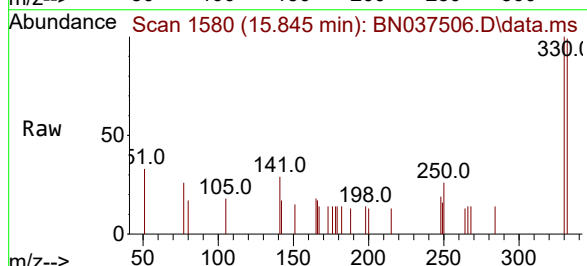
Tgt Ion:330 Resp: 531

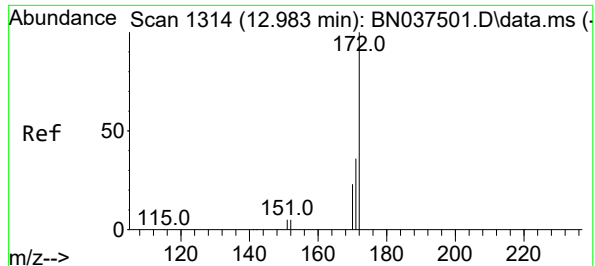
Ion Ratio Lower Upper

330 100

332 95.9 76.1 114.1

141 39.9 33.4 50.0





#15

2-Fluorobiphenyl

Concen: 0.461 ng

RT: 12.983 min Scan# 1314

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

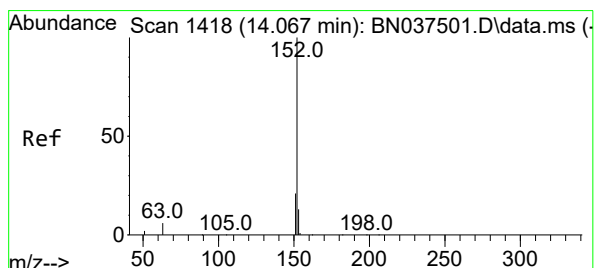
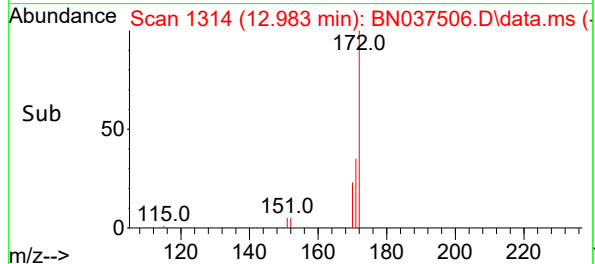
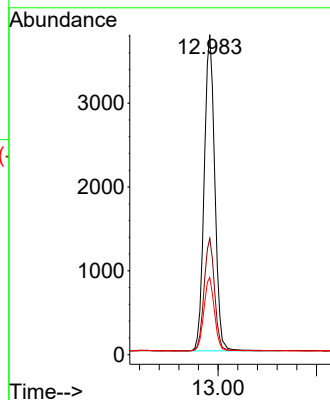
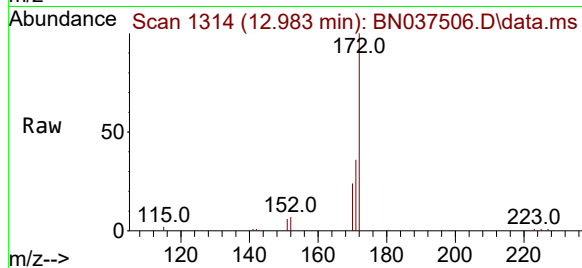
Tgt Ion:172 Resp: 8001

Ion Ratio Lower Upper

172 100

171 36.3 29.4 44.2

170 24.1 19.4 29.0



#16

Acenaphthylene

Concen: 0.417 ng

RT: 14.067 min Scan# 1418

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

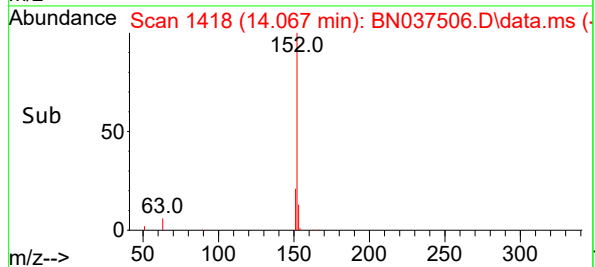
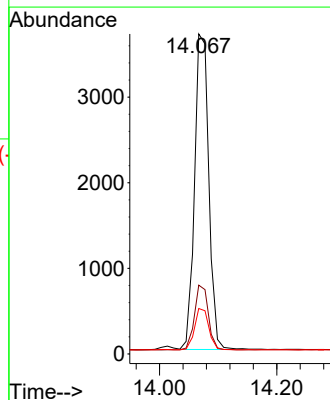
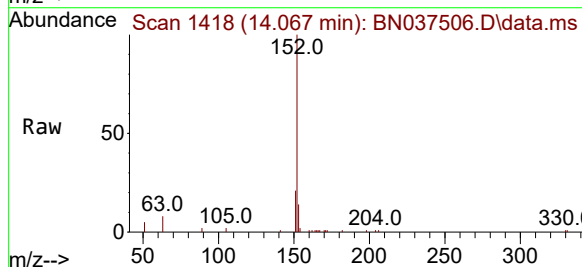
Tgt Ion:152 Resp: 6226

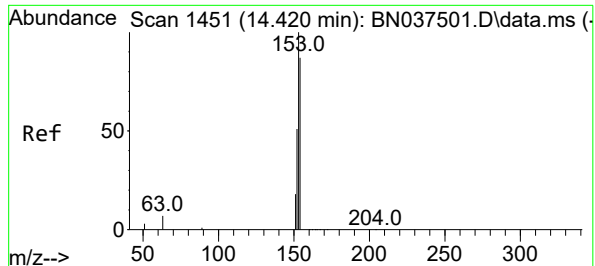
Ion Ratio Lower Upper

152 100

151 20.1 15.9 23.9

153 13.2 10.7 16.1





#17

Acenaphthene

Concen: 0.377 ng

RT: 14.420 min Scan# 1451

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

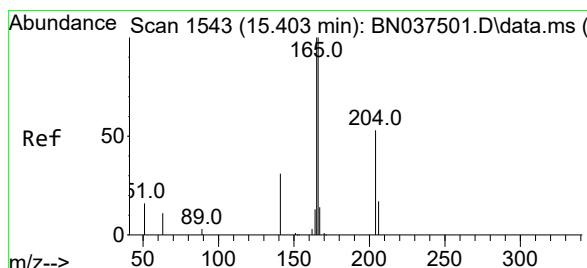
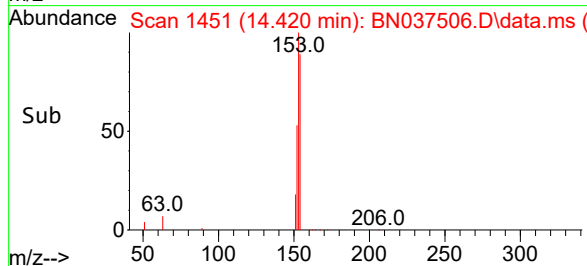
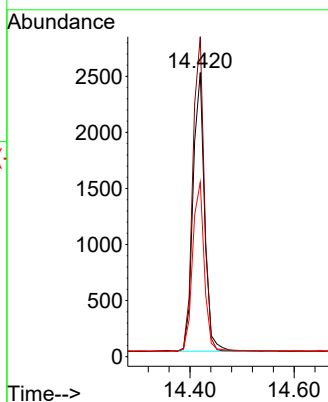
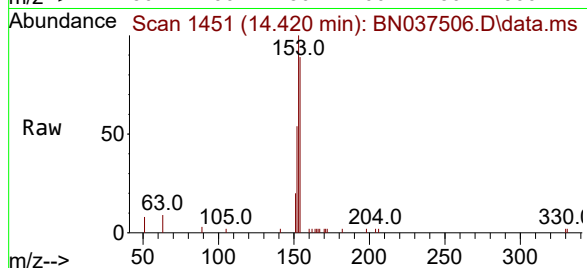
Tgt Ion:154 Resp: 3826

Ion Ratio Lower Upper

154 100

153 111.6 89.2 133.8

152 61.6 48.0 72.0



#18

Fluorene

Concen: 0.384 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

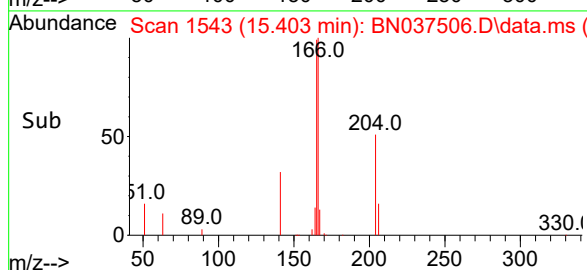
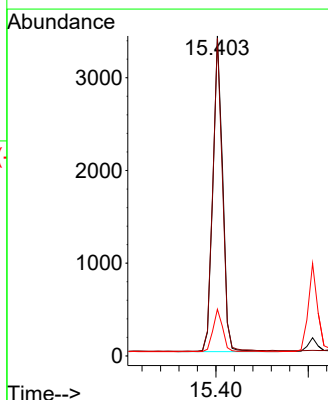
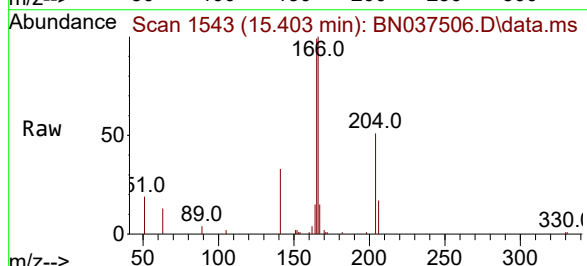
Tgt Ion:166 Resp: 5028

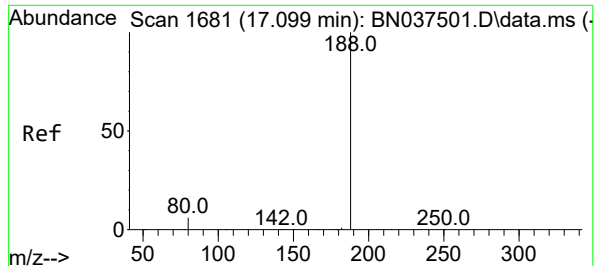
Ion Ratio Lower Upper

166 100

165 96.8 78.1 117.1

167 13.2 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

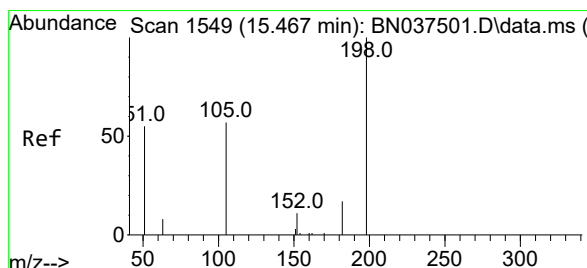
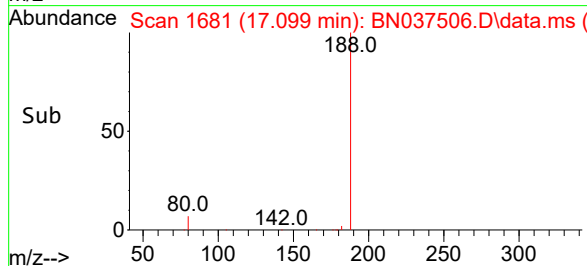
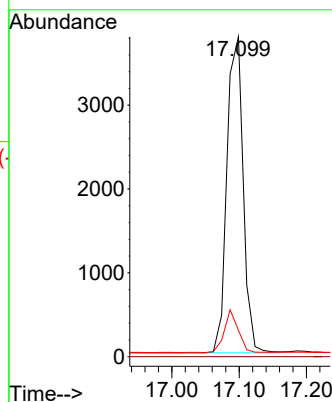
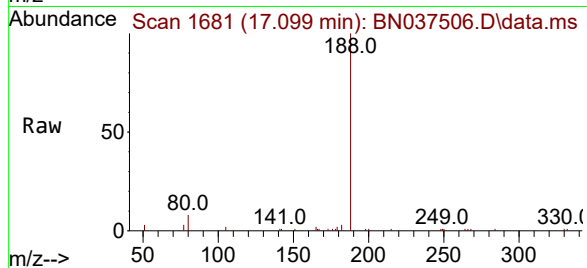
Tgt Ion:188 Resp: 6334

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.2 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 0.401 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

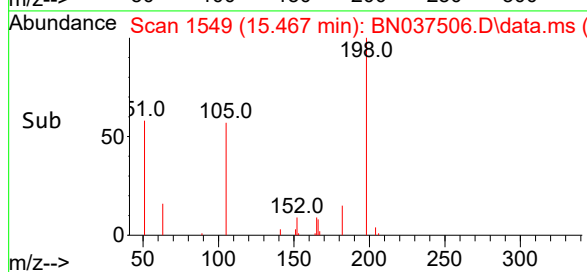
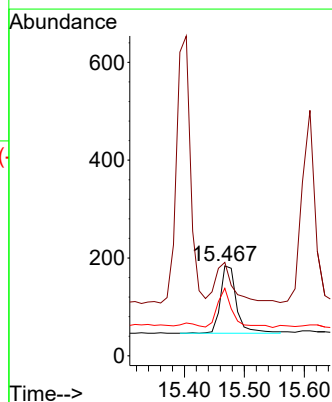
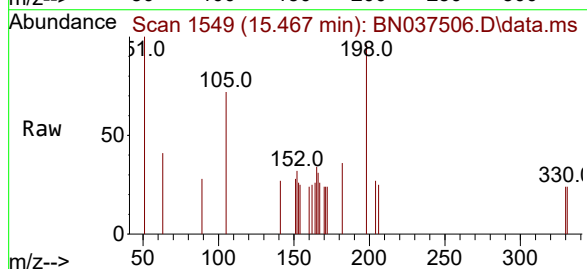
Tgt Ion:198 Resp: 267

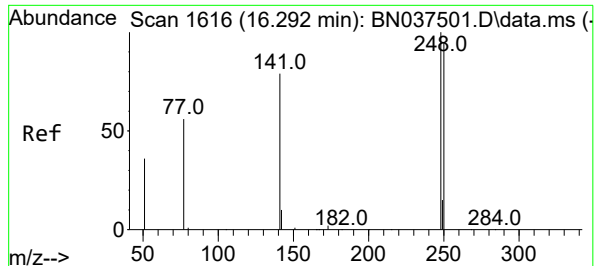
Ion Ratio Lower Upper

198 100

51 103.8 88.5 132.7

105 75.0 61.2 91.8

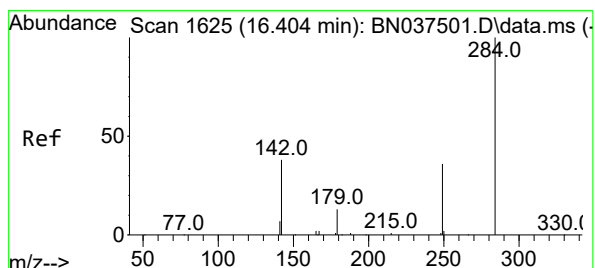
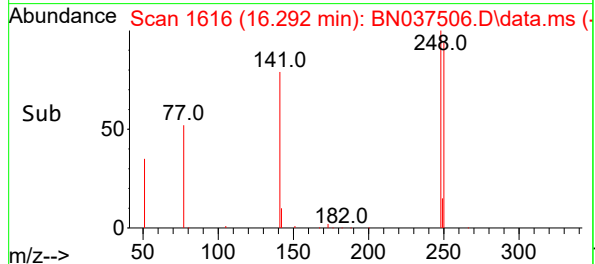
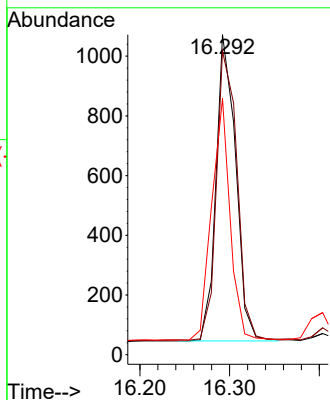
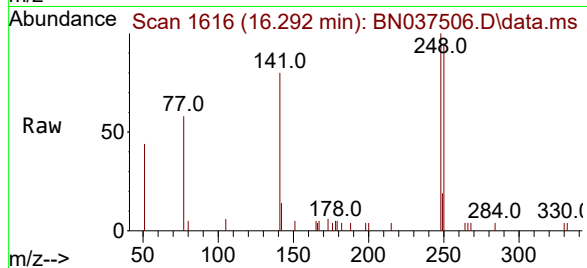




#21  
4-Bromophenyl-phenylether  
Concen: 0.385 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

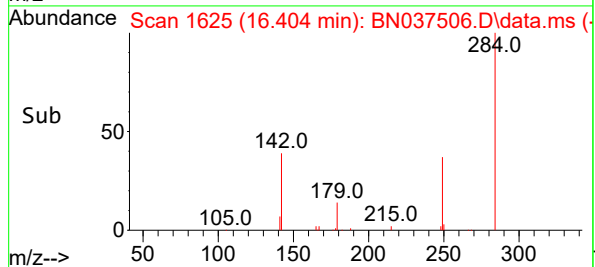
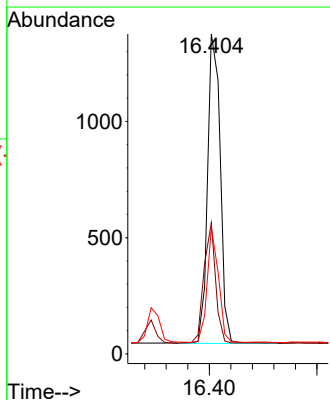
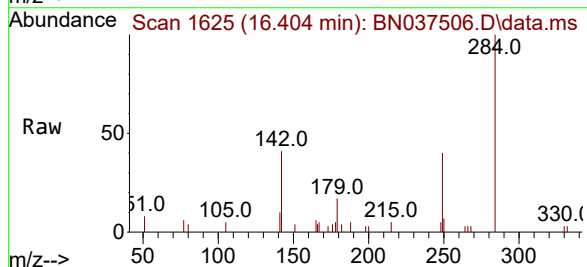
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

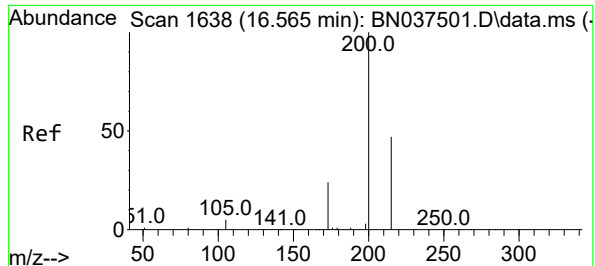
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 94.9  | 76.2  | 114.2 |
| 141     | 80.0  | 63.9  | 95.9  |



#22  
Hexachlorobenzene  
Concen: 0.412 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 35.9  | 28.9  | 43.3  |
| 249     | 33.0  | 25.8  | 38.6  |

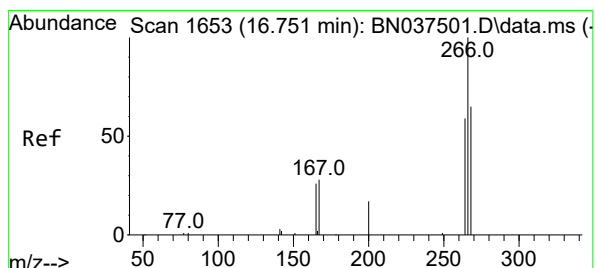
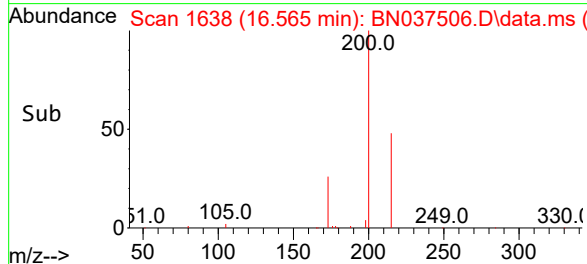
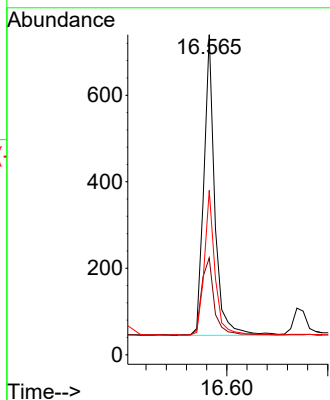
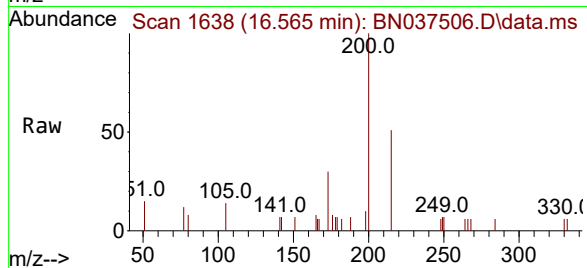




#23  
Atrazine  
Concen: 0.371 ng  
RT: 16.565 min Scan# 1638  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

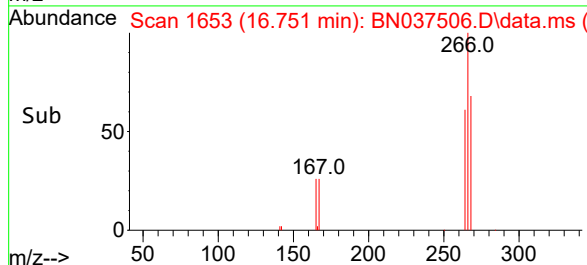
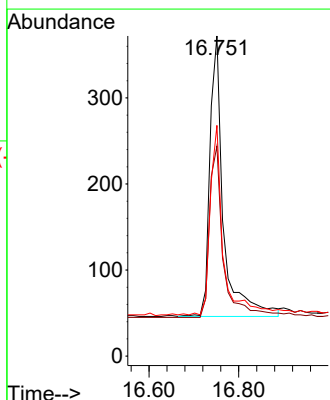
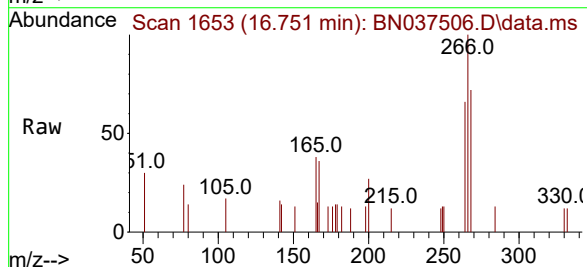
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

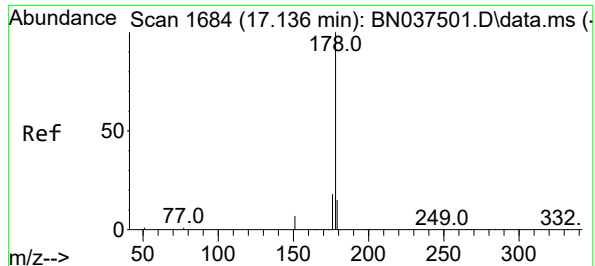
| Tgt Ion   | 200   | Resp: | 1050 |
|-----------|-------|-------|------|
| Ion Ratio | Lower | Upper |      |
| 200       | 100   |       |      |
| 173       | 30.3  | 23.2  | 34.8 |
| 215       | 51.4  | 40.2  | 60.4 |



#24  
Pentachlorophenol  
Concen: 0.289 ng  
RT: 16.751 min Scan# 1653  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

| Tgt Ion   | 266   | Resp: | 679  |
|-----------|-------|-------|------|
| Ion Ratio | Lower | Upper |      |
| 266       | 100   |       |      |
| 264       | 62.9  | 49.3  | 73.9 |
| 268       | 65.2  | 51.6  | 77.4 |





#25

Phenanthrene

Concen: 0.403 ng

RT: 17.136 min Scan# 1684

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

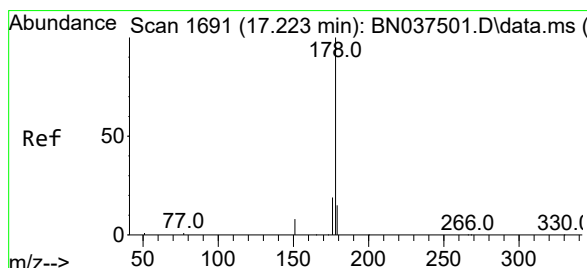
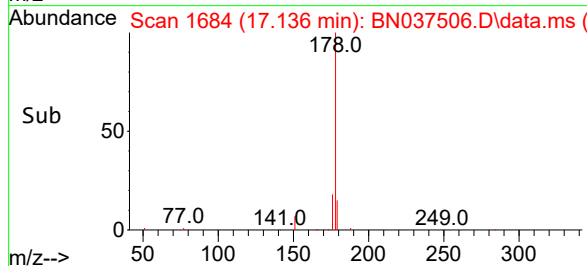
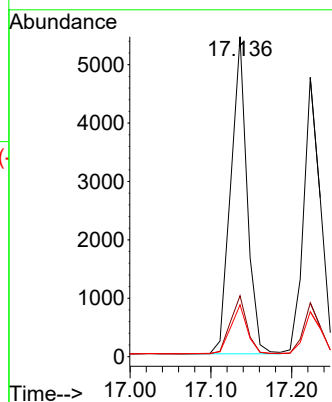
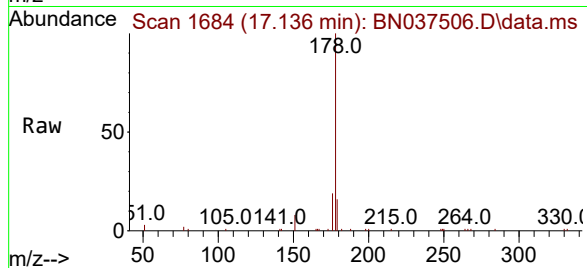
Tgt Ion:178 Resp: 7640

Ion Ratio Lower Upper

178 100

176 18.6 15.0 22.6

179 15.6 12.2 18.2



#26

Anthracene

Concen: 0.400 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

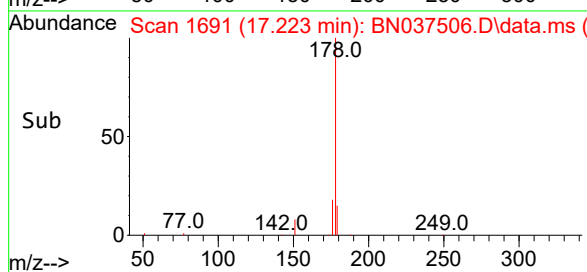
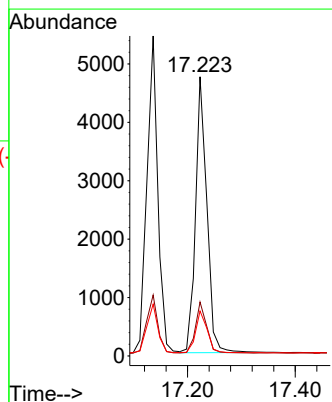
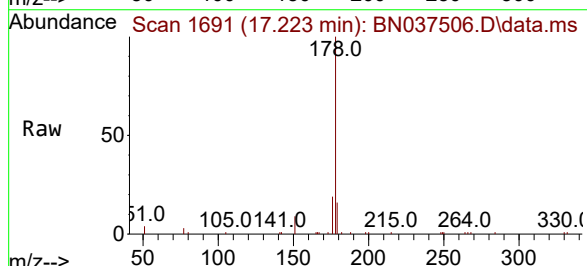
Tgt Ion:178 Resp: 6928

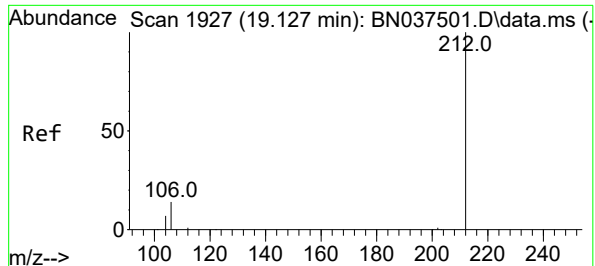
Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

179 15.4 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.387 ng

RT: 19.127 min Scan# 1927

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

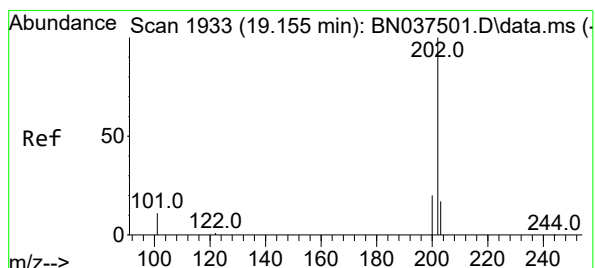
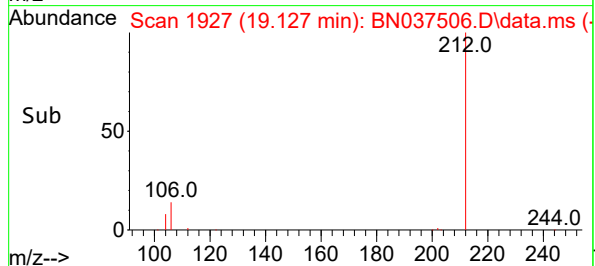
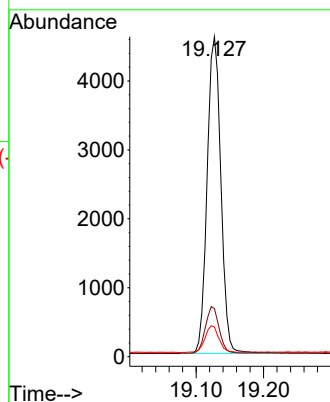
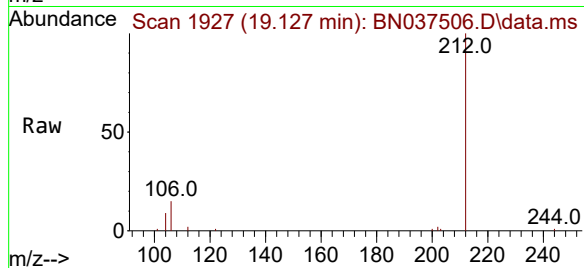
Tgt Ion:212 Resp: 6495

Ion Ratio Lower Upper

212 100

106 14.6 12.2 18.4

104 8.6 6.7 10.1



#28

Fluoranthene

Concen: 0.368 ng

RT: 19.155 min Scan# 1933

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

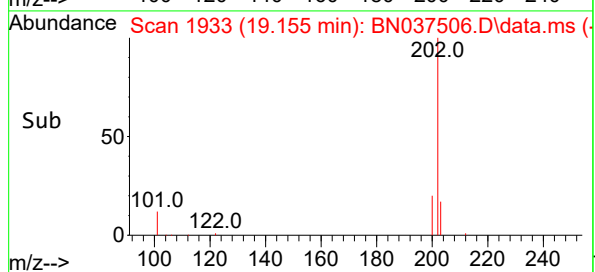
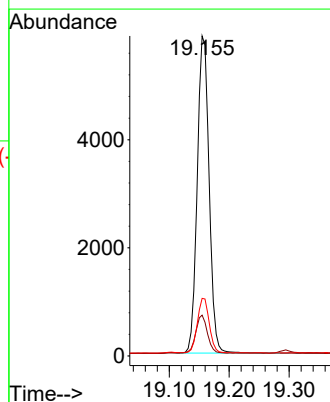
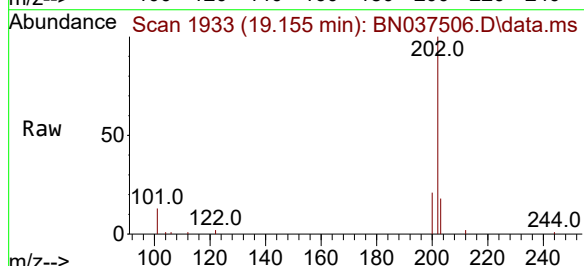
Tgt Ion:202 Resp: 8063

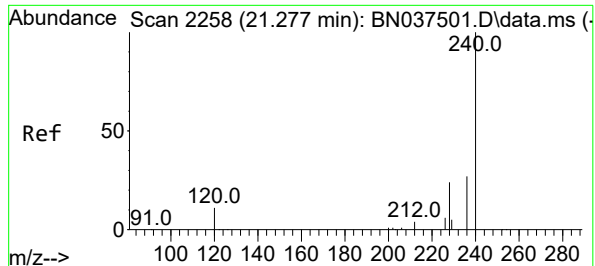
Ion Ratio Lower Upper

202 100

101 12.0 9.8 14.6

203 17.2 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

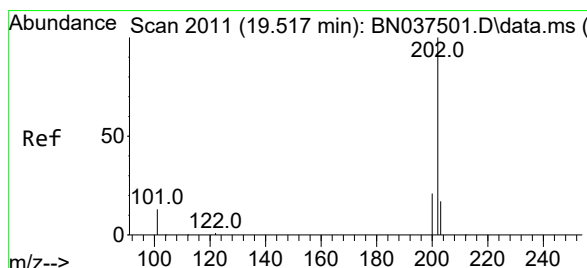
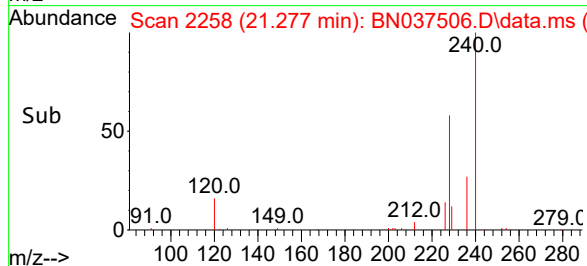
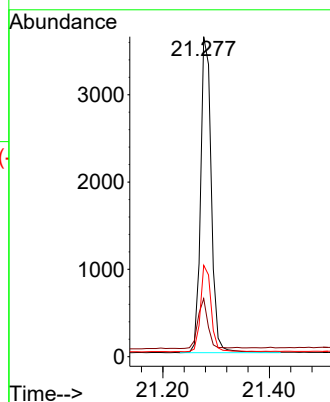
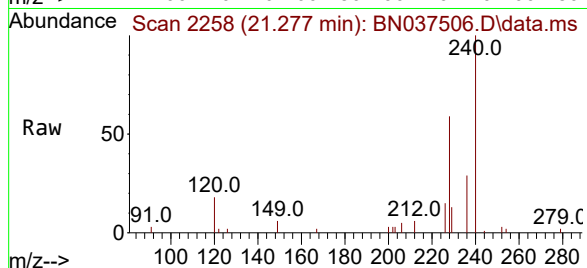
Tgt Ion:240 Resp: 5040

Ion Ratio Lower Upper

240 100

120 18.1 10.7 16.1#

236 28.5 22.6 33.8



#30

Pyrene

Concen: 0.394 ng

RT: 19.517 min Scan# 2011

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

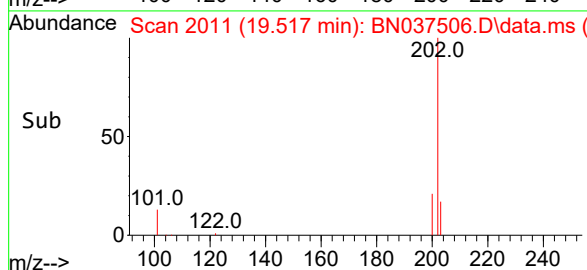
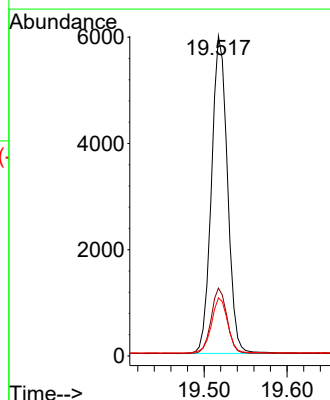
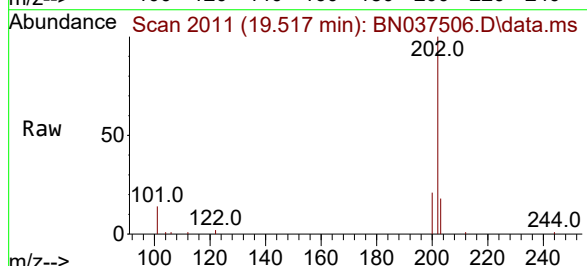
Tgt Ion:202 Resp: 8002

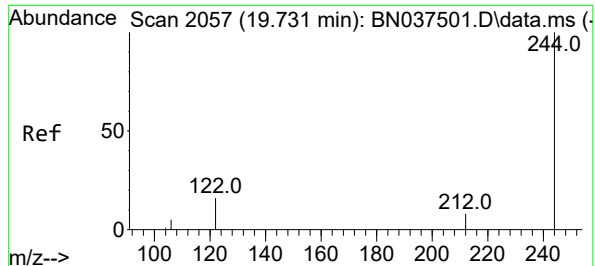
Ion Ratio Lower Upper

202 100

200 20.4 16.5 24.7

203 17.7 14.3 21.5





#31

Terphenyl-d14

Concen: 0.467 ng

RT: 19.731 min Scan# 2057

Delta R.T. -0.000 min

Lab File: BN037506.D

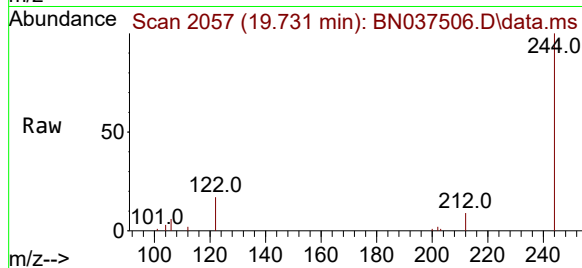
Acq: 15 Jul 2025 16:58

Instrument :

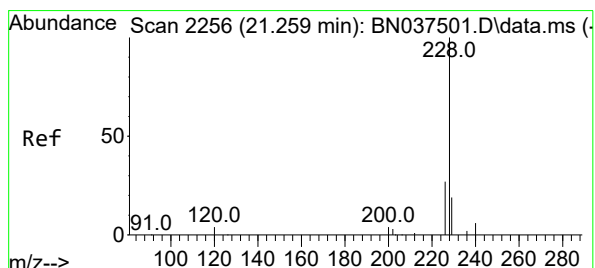
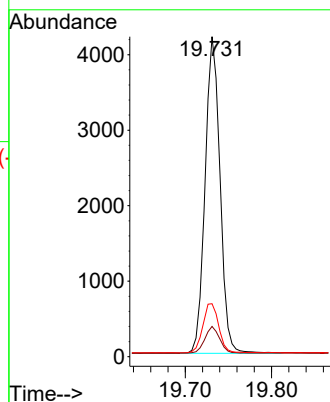
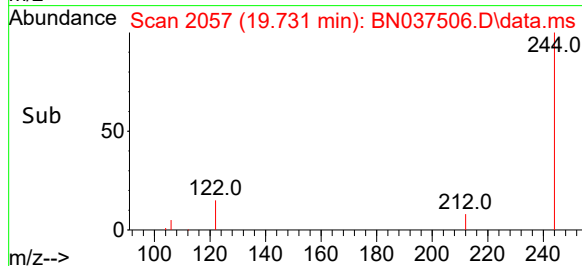
BNA\_N

ClientSampleId :

ICVBN071525



|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 244   | Resp: | 5056 |
| Ion Ratio | Lower | Upper |      |
| 244       | 100   |       |      |
| 212       | 9.4   | 7.4   | 11.2 |
| 122       | 16.6  | 13.6  | 20.4 |



#32

Benzo(a)anthracene

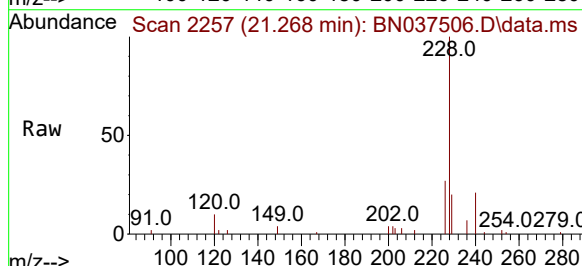
Concen: 0.390 ng

RT: 21.268 min Scan# 2257

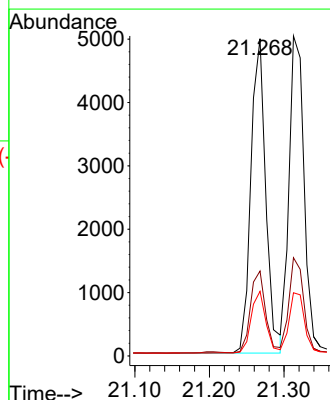
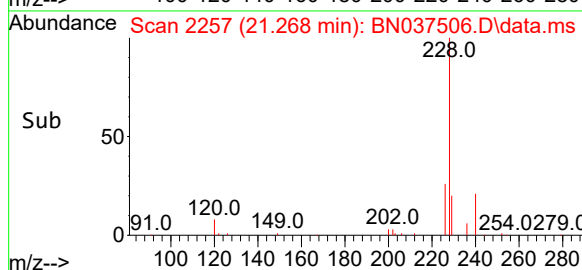
Delta R.T. 0.009 min

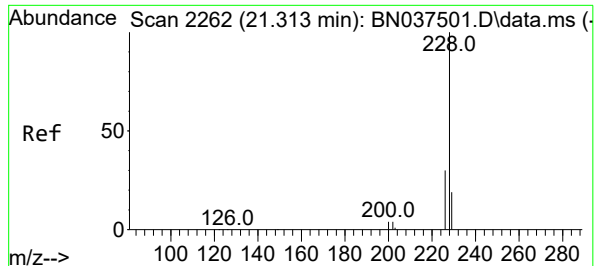
Lab File: BN037506.D

Acq: 15 Jul 2025 16:58



|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 228   | Resp: | 6891 |
| Ion Ratio | Lower | Upper |      |
| 228       | 100   |       |      |
| 226       | 26.8  | 21.9  | 32.9 |
| 229       | 20.4  | 15.8  | 23.8 |





#33

Chrysene

Concen: 0.388 ng

RT: 21.313 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037506.D

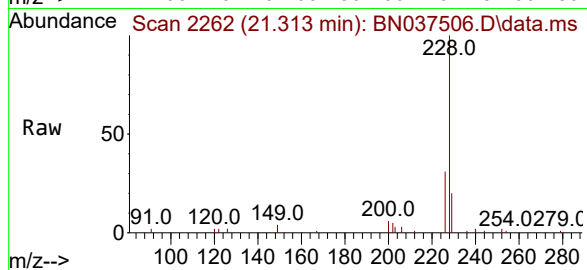
Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525



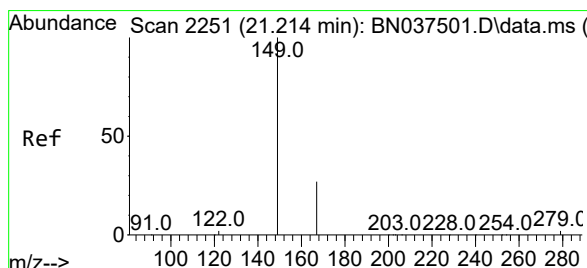
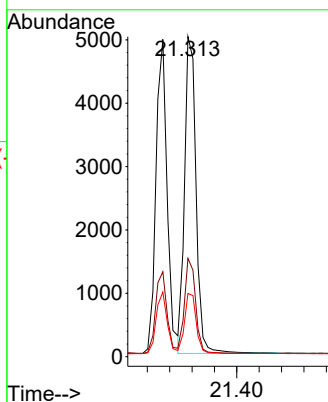
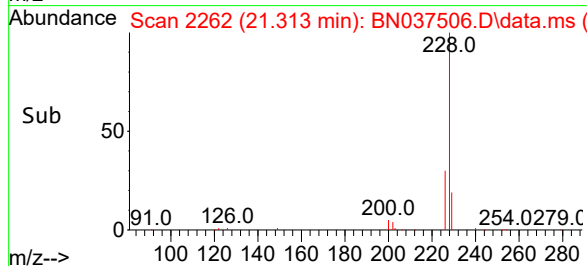
Tgt Ion:228 Resp: 7126

Ion Ratio Lower Upper

228 100

226 30.7 24.2 36.4

229 19.8 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

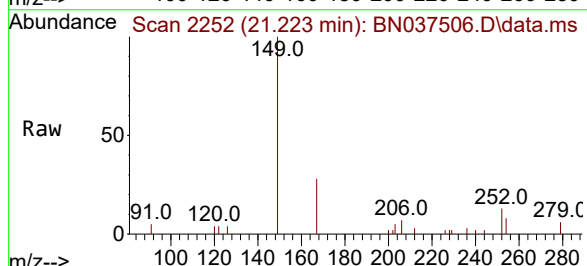
Concen: 0.341 ng

RT: 21.223 min Scan# 2252

Delta R.T. 0.009 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58



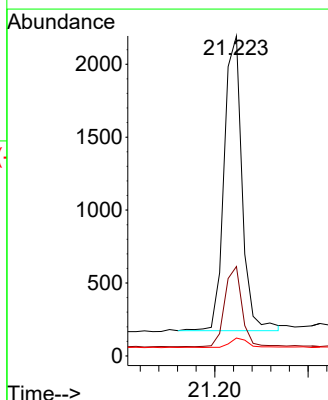
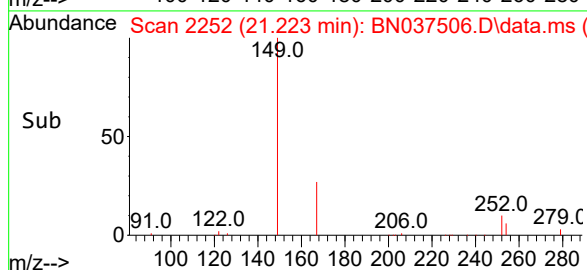
Tgt Ion:149 Resp: 2705

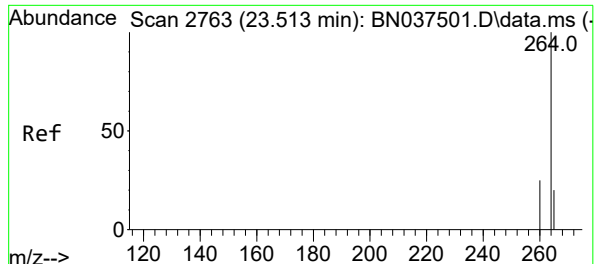
Ion Ratio Lower Upper

149 100

167 26.0 21.8 32.8

279 3.2 3.0 4.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.522 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN037506.D

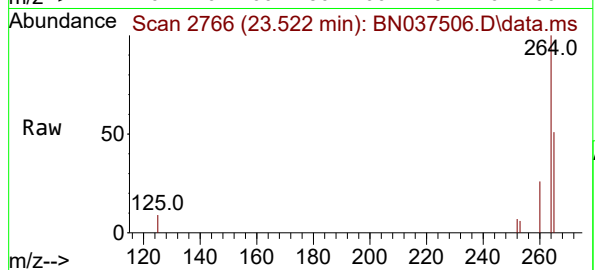
Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525



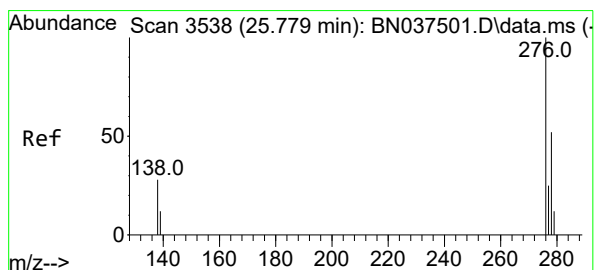
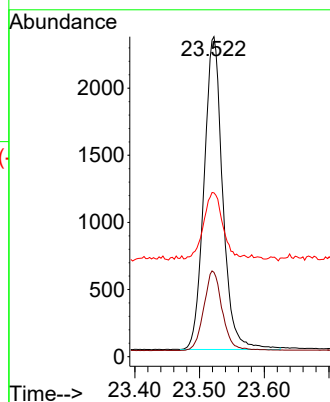
Tgt Ion:264 Resp: 4669

Ion Ratio Lower Upper

264 100

260 26.3 21.2 31.8

265 51.2 40.4 60.6



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.394 ng

RT: 25.785 min Scan# 3540

Delta R.T. 0.006 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

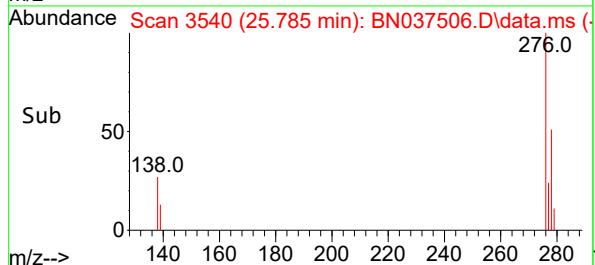
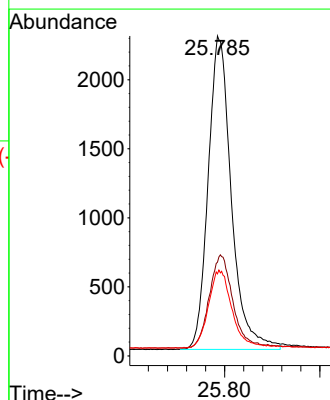
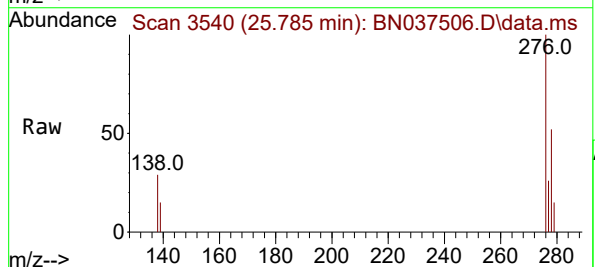
Tgt Ion:276 Resp: 7666

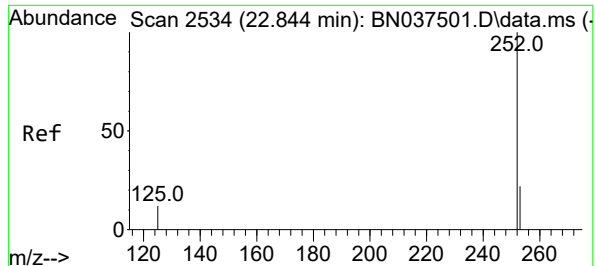
Ion Ratio Lower Upper

276 100

138 30.2 24.0 36.0

277 25.0 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.363 ng

RT: 22.847 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

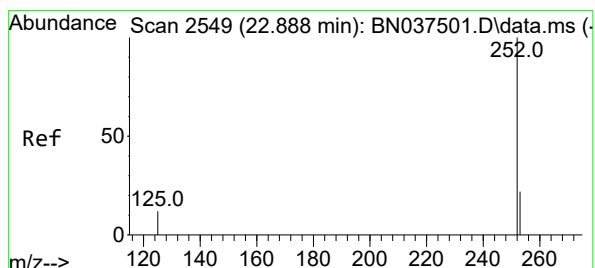
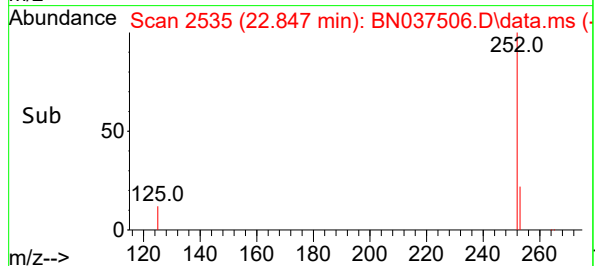
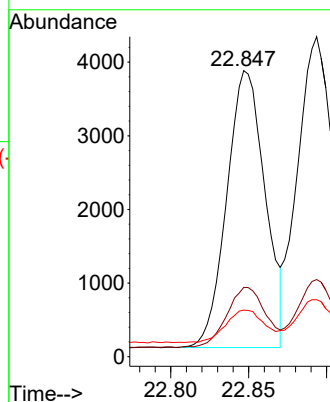
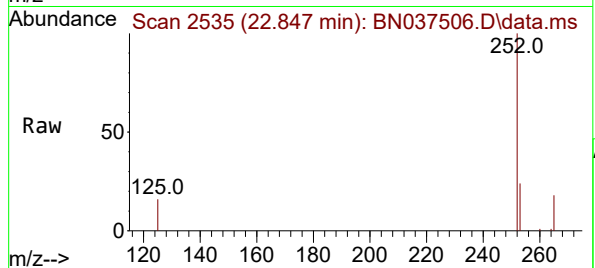
Tgt Ion:252 Resp: 6430

Ion Ratio Lower Upper

252 100

253 24.2 19.5 29.3

125 16.3 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.397 ng

RT: 22.894 min Scan# 2551

Delta R.T. 0.006 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

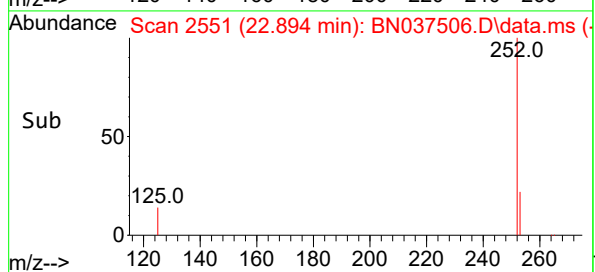
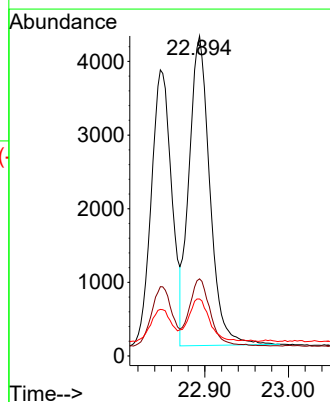
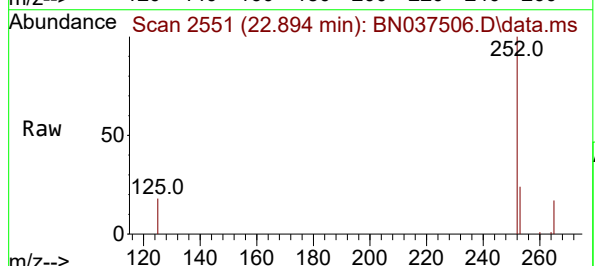
Tgt Ion:252 Resp: 7254

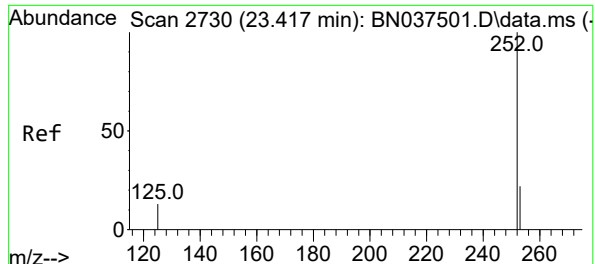
Ion Ratio Lower Upper

252 100

253 24.1 19.5 29.3

125 17.8 13.1 19.7





#39

Benzo(a)pyrene

Concen: 0.392 ng

RT: 23.420 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

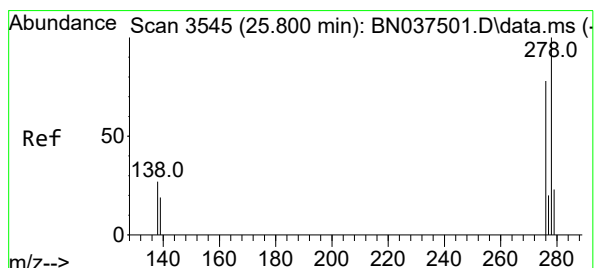
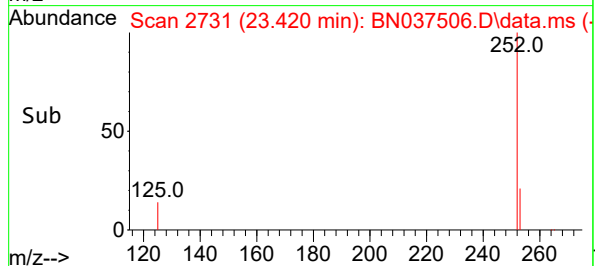
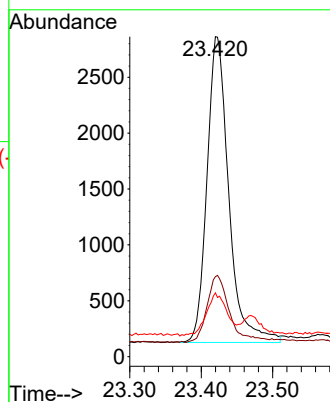
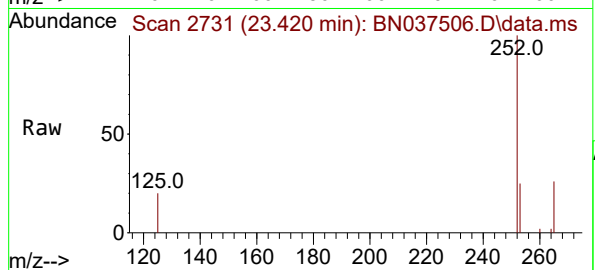
Tgt Ion:252 Resp: 5792

Ion Ratio Lower Upper

252 100

253 25.0 19.9 29.9

125 19.9 15.2 22.8



#40

Dibenzo(a,h)anthracene

Concen: 0.394 ng

RT: 25.806 min Scan# 3547

Delta R.T. 0.006 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

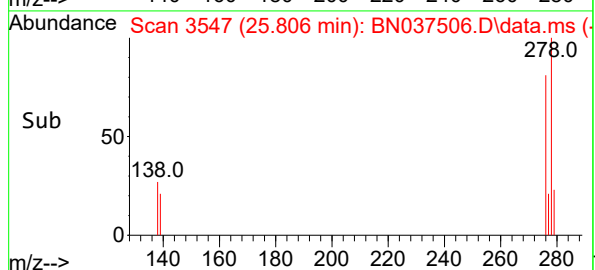
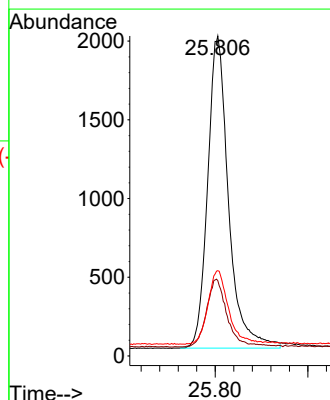
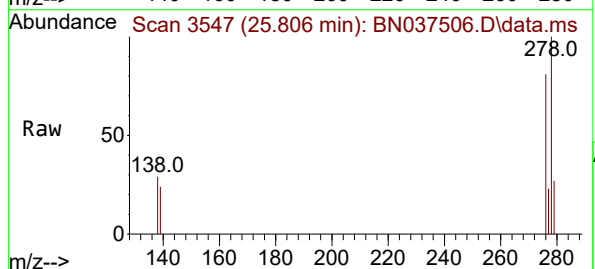
Tgt Ion:278 Resp: 6203

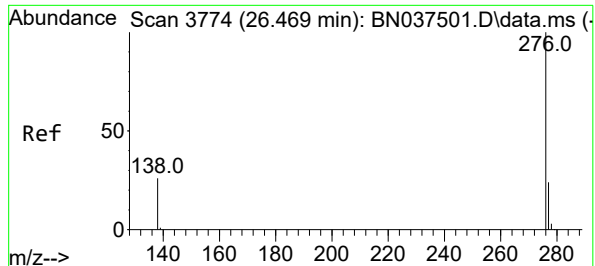
Ion Ratio Lower Upper

278 100

139 23.6 17.5 26.3

279 26.7 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 0.369 ng

RT: 26.472 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN037506.D

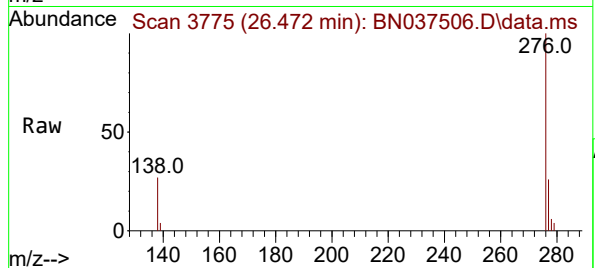
Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525



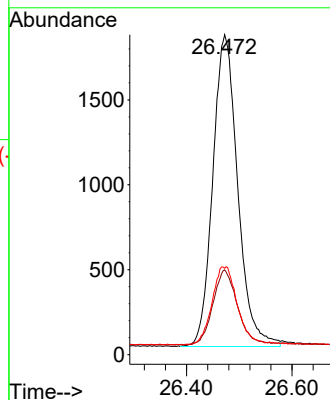
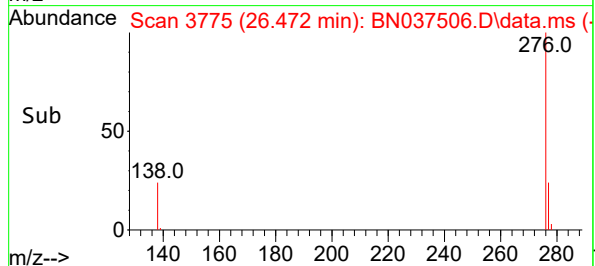
Tgt Ion:276 Resp: 6018

Ion Ratio Lower Upper

276 100

277 26.5 20.9 31.3

138 27.0 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037506.D  
 Acq On : 15 Jul 2025 16:58  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN071525

Quant Time: Jul 15 17:34:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 17:33:01 2025  
 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   | 98    | 0.00     |
| 2       | 1,4-Dioxane                | 0.385 | 0.452 | -17.4 | 112   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.484 | 0.484 | 0.0   | 102   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.989 | 0.908 | 8.2   | 90    | 0.00     |
| 5 S     | Phenol-d6                  | 1.241 | 1.076 | 13.3  | 88    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.033 | 1.072 | -3.8  | 102   | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 100   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.299 | 0.310 | -3.7  | 109   | 0.00     |
| 9       | Naphthalene                | 1.067 | 1.038 | 2.7   | 99    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.236 | 0.238 | -0.8  | 101   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.574 | 0.581 | -1.2  | 107   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.701 | 0.618 | 11.8  | 91    | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 100   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.197 | 0.159 | 19.3  | 92    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 2.080 | 2.399 | -15.3 | 118   | 0.00     |
| 16      | Acenaphthylene             | 1.792 | 1.867 | -4.2  | 109   | 0.00     |
| 17      | Acenaphthene               | 1.218 | 1.147 | 5.8   | 98    | 0.00     |
| 18      | Fluorene                   | 1.569 | 1.508 | 3.9   | 102   | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 98    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.057 | 0.042 | 26.3# | 100   | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.256 | 0.247 | 3.5   | 99    | 0.00     |
| 22      | Hexachlorobenzene          | 0.331 | 0.341 | -3.0  | 102   | 0.00     |
| 23      | Atrazine                   | 0.179 | 0.166 | 7.3   | 102   | 0.00     |
| 24      | Pentachlorophenol          | 0.149 | 0.107 | 28.2# | 84    | 0.00     |
| 25      | Phenanthrene               | 1.198 | 1.206 | -0.7  | 102   | 0.00     |
| 26      | Anthracene                 | 1.093 | 1.094 | -0.1  | 106   | 0.00     |
| 27 SURR | Fluoranthene-d10           | 1.060 | 1.025 | 3.3   | 104   | 0.00     |
| 28      | Fluoranthene               | 1.382 | 1.273 | 7.9   | 97    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 97    | 0.00     |
| 30      | Pyrene                     | 1.612 | 1.588 | 1.5   | 96    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.859 | 1.003 | -16.8 | 115   | 0.00     |
| 32      | Benzo(a)anthracene         | 1.401 | 1.367 | 2.4   | 99    | 0.00     |
| 33      | Chrysene                   | 1.459 | 1.414 | 3.1   | 95    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.630 | 0.537 | 14.8  | 92    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 97    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.666 | 1.642 | 1.4   | 105   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.518 | 1.377 | 9.3   | 92    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.567 | 1.554 | 0.8   | 102   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.267 | 1.241 | 2.1   | 101   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.349 | 1.329 | 1.5   | 106   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.397 | 1.289 | 7.7   | 96    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037506.D  
Acq On : 15 Jul 2025 16:58  
Operator : RC/JU  
Sample : SSTDICV0.4  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

Quant Time: Jul 15 17:34:11 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 15 17:33:01 2025  
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   | 98    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.470 | -17.5 | 112   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.401 | -0.3  | 102   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.367 | 8.3   | 90    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.347 | 13.3  | 88    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.415 | -3.7  | 102   | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 100   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.415 | -3.7  | 109   | 0.00     |
| 9       | Naphthalene                | 0.400  | 0.389 | 2.8   | 99    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.405 | -1.3  | 101   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.405 | -1.3  | 107   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.353 | 11.8  | 91    | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 100   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.324 | 19.0  | 92    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.461 | -15.3 | 118   | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.417 | -4.2  | 109   | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.377 | 5.8   | 98    | 0.00     |
| 18      | Fluorene                   | 0.400  | 0.384 | 4.0   | 102   | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 98    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.401 | -0.3  | 100   | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.385 | 3.8   | 99    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.412 | -3.0  | 102   | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.371 | 7.3   | 102   | 0.00     |
| 24      | Pentachlorophenol          | 0.400  | 0.289 | 27.8# | 84    | 0.00     |
| 25      | Phenanthrene               | 0.400  | 0.403 | -0.8  | 102   | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.400 | 0.0   | 106   | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.387 | 3.3   | 104   | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.368 | 8.0   | 97    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 97    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.394 | 1.5   | 96    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.467 | -16.8 | 115   | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.390 | 2.5   | 99    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.388 | 3.0   | 95    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.341 | 14.8  | 92    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 97    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.394 | 1.5   | 105   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.363 | 9.3   | 92    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.397 | 0.8   | 102   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.392 | 2.0   | 101   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.394 | 1.5   | 106   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.369 | 7.8   | 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: Alliance Contract: TETR06  
 Lab Code: ACE SDG No.: Q2745  
 Instrument ID: BNA\_N Calibration Date/Time: 08/05/2025 09:35  
 Lab File ID: BN037559.D Init. Calib. Date(s): 07/15/2025 07/15/2025  
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:36 16:14  
 GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND                | RRF   | RRF0.4 | MIN<br>RRF | %D    | MAX%D |
|-------------------------|-------|--------|------------|-------|-------|
| 2-Methylnaphthalene-d10 | 0.574 | 0.515  |            | -10.3 | 20.0  |
| Fluoranthene-d10        | 1.060 | 0.889  |            | -16.1 | 20.0  |
| 2-Fluorophenol          | 0.989 | 0.880  |            | -11.0 | 20.0  |
| Phenol-d6               | 1.241 | 1.098  |            | -11.5 | 20.0  |
| Nitrobenzene-d5         | 0.299 | 0.279  |            | -6.7  | 20.0  |
| 2-Fluorobiphenyl        | 2.080 | 2.181  |            | 4.9   | 20.0  |
| 2,4,6-Tribromophenol    | 0.197 | 0.140  |            | -28.9 | 20.0  |
| Terphenyl-d14           | 0.859 | 0.738  |            | -14.1 | 20.0  |
| 1,4-Dioxane             | 0.385 | 0.404  |            | 4.9   | 20.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
 Data File : BN037559.D  
 Acq On : 05 Aug 2025 09:35  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Aug 06 01:38:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

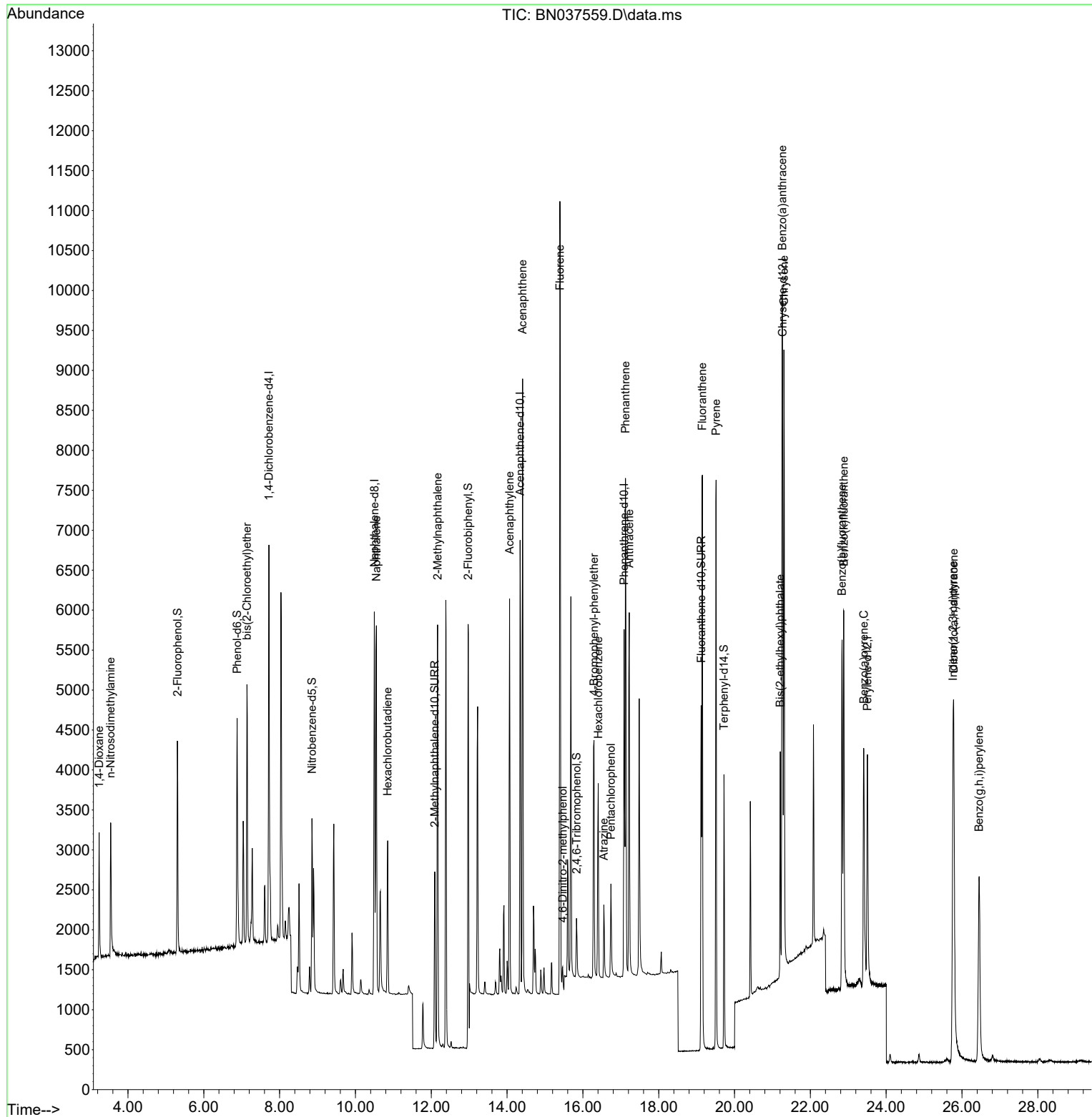
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.717  | 152  | 2357     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.498 | 136  | 6191     | 0.400 | ng    | -0.01    |
| 13) Acenaphthene-d10          | 14.345 | 164  | 3180     | 0.400 | ng    | -0.01    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 5684     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12              | 21.268 | 240  | 4703     | 0.400 | ng    | # 0.00   |
| 35) Perylene-d12              | 23.505 | 264  | 3993     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.305  | 112  | 2075     | 0.356 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.879  | 99   | 2587     | 0.354 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.854  | 82   | 1728     | 0.373 | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10   | 12.091 | 152  | 3187     | 0.359 | ng    | -0.01    |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 445      | 0.285 | ng    | -0.01    |
| 15) 2-Fluorobiphenyl          | 12.973 | 172  | 6937     | 0.419 | ng    | -0.01    |
| 27) Fluoranthene-d10          | 19.122 | 212  | 5051     | 0.335 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.722 | 244  | 3470     | 0.343 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.239  | 88   | 952      | 0.420 | ng    | 98       |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 1221     | 0.428 | ng    | # 85     |
| 6) bis(2-Chloroethyl)ether    | 7.139  | 93   | 2365     | 0.389 | ng    | 98       |
| 9) Naphthalene                | 10.551 | 128  | 6332     | 0.384 | ng    | 100      |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 1516     | 0.415 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.167 | 142  | 3959     | 0.365 | ng    | 99       |
| 16) Acenaphthylene            | 14.067 | 152  | 5250     | 0.369 | ng    | 100      |
| 17) Acenaphthene              | 14.409 | 154  | 3599     | 0.372 | ng    | 96       |
| 18) Fluorene                  | 15.392 | 166  | 4557     | 0.365 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 256      | 0.421 | ng    | # 80     |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 1367     | 0.375 | ng    | # 84     |
| 22) Hexachlorobenzene         | 16.404 | 284  | 1931     | 0.410 | ng    | 96       |
| 23) Atrazine                  | 16.553 | 200  | 790      | 0.311 | ng    | # 93     |
| 24) Pentachlorophenol         | 16.739 | 266  | 595      | 0.282 | ng    | 99       |
| 25) Phenanthrene              | 17.124 | 178  | 6657     | 0.391 | ng    | 99       |
| 26) Anthracene                | 17.223 | 178  | 5544     | 0.357 | ng    | 100      |
| 28) Fluoranthene              | 19.150 | 202  | 6780     | 0.345 | ng    | 98       |
| 30) Pyrene                    | 19.513 | 202  | 6578     | 0.347 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 6199     | 0.376 | ng    | 99       |
| 33) Chrysene                  | 21.304 | 228  | 6716     | 0.392 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.205 | 149  | 2480     | 0.335 | ng    | 100      |
| 36) Indeno(1,2,3-cd)pyrene    | 25.765 | 276  | 6340     | 0.381 | ng    | 97       |
| 37) Benzo(b)fluoranthene      | 22.835 | 252  | 5635     | 0.372 | ng    | 99       |
| 38) Benzo(k)fluoranthene      | 22.882 | 252  | 6267     | 0.401 | ng    | 98       |
| 39) Benzo(a)pyrene            | 23.408 | 252  | 4850     | 0.384 | ng    | 98       |
| 40) Dibenzo(a,h)anthracene    | 25.782 | 278  | 4787     | 0.355 | ng    | 98       |
| 41) Benzo(g,h,i)perylene      | 26.452 | 276  | 5081     | 0.364 | ng    | 98       |

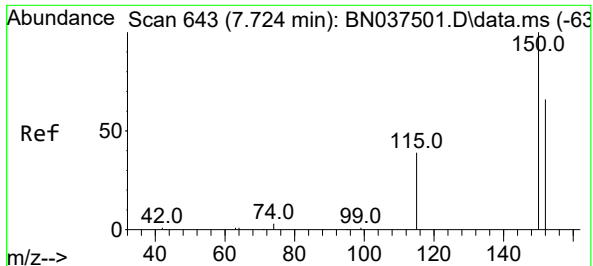
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037559.D  
Acq On : 05 Aug 2025 09:35  
Operator : RC/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Quant Time: Aug 06 01:38:05 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

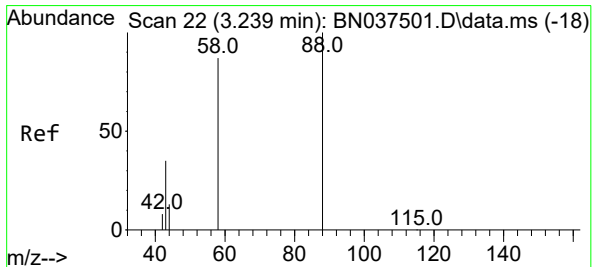
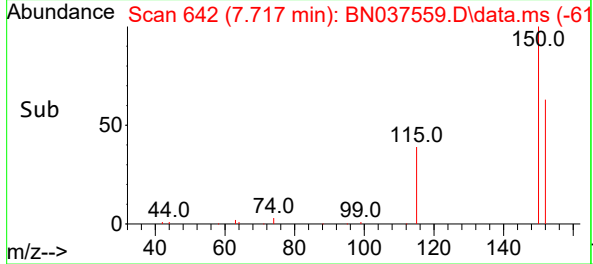
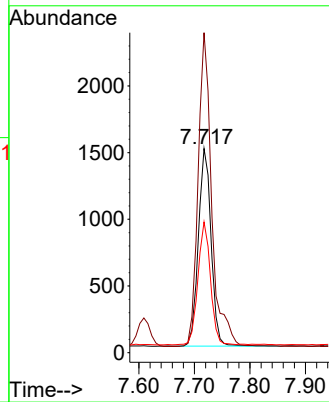
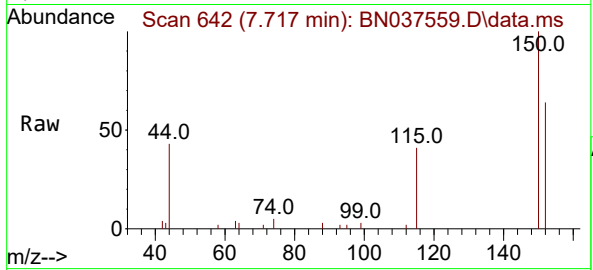




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 64  
Delta R.T. -0.007 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

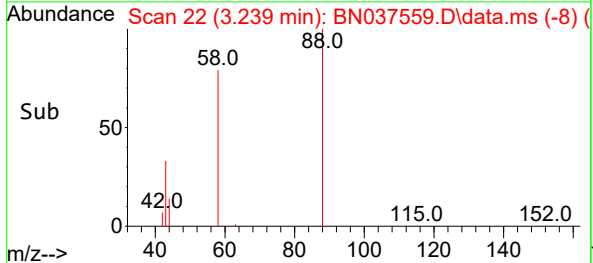
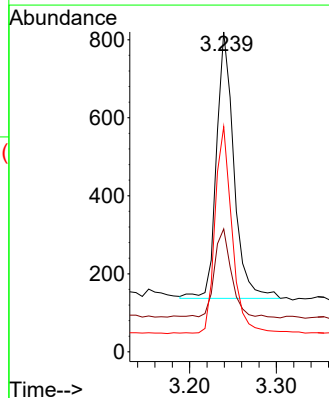
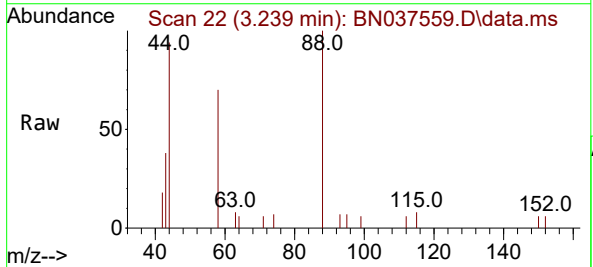
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

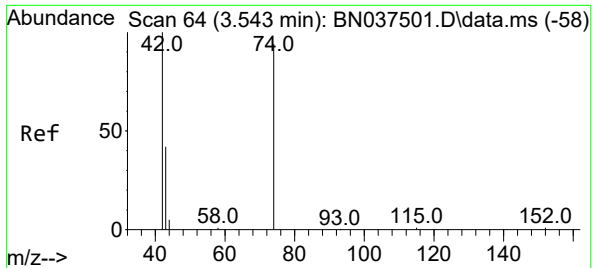
Tgt Ion:152 Resp: 2357  
Ion Ratio Lower Upper  
152 100  
150 156.7 119.8 179.8  
115 64.0 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.420 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion: 88 Resp: 952  
Ion Ratio Lower Upper  
88 100  
43 33.9 27.5 41.3  
58 76.2 62.7 94.1

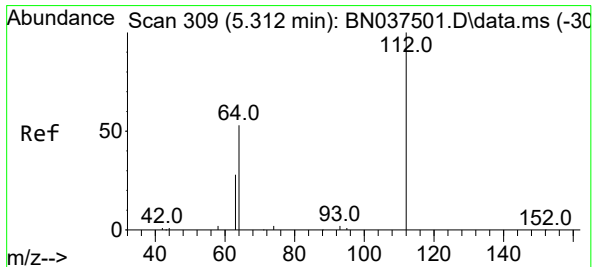
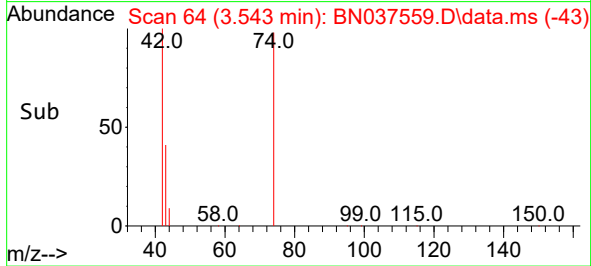
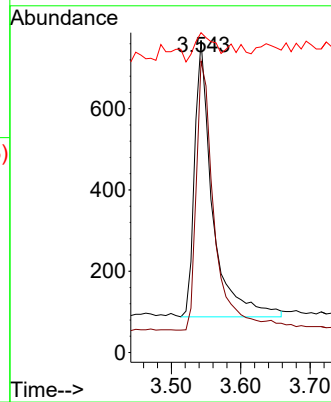
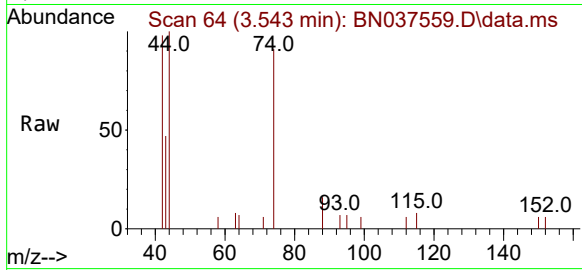




#3  
n-Nitrosodimethylamine  
Concen: 0.428 ng  
RT: 3.543 min Scan# 64  
Delta R.T. -0.000 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

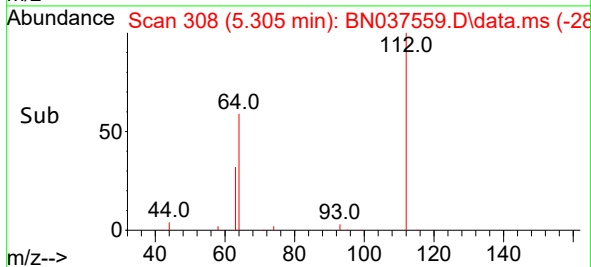
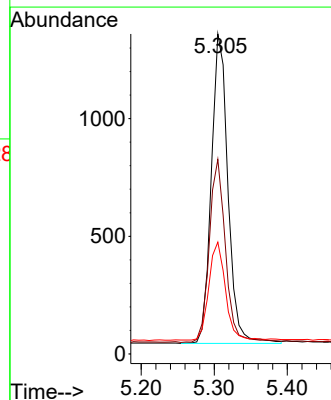
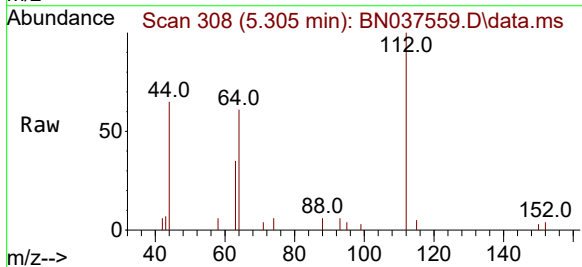
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

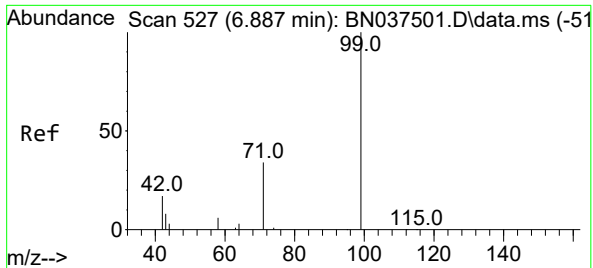
Tgt Ion: 42 Resp: 1221  
Ion Ratio Lower Upper  
42 100  
74 98.3 91.8 137.6  
44 11.3 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.356 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion: 112 Resp: 2075  
Ion Ratio Lower Upper  
112 100  
64 58.1 45.1 67.7  
63 31.4 23.8 35.8

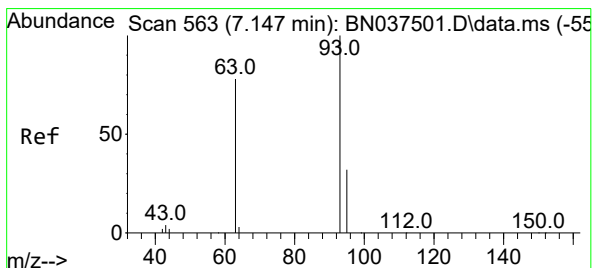
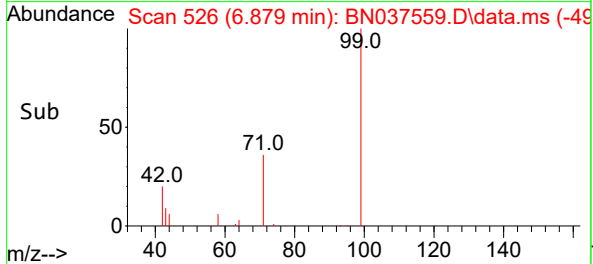
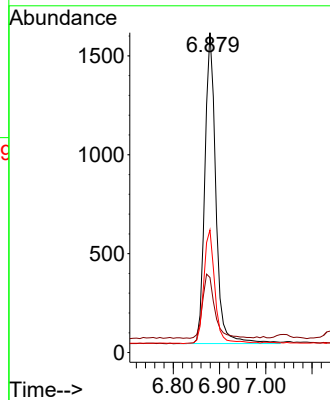
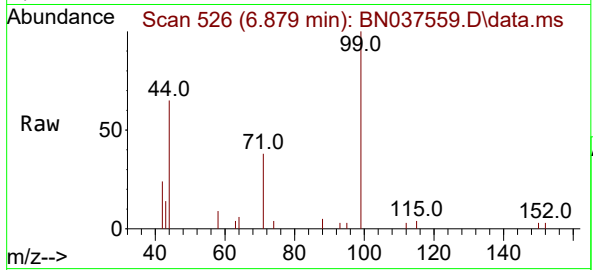




#5  
Phenol-d6  
Concen: 0.354 ng  
RT: 6.879 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

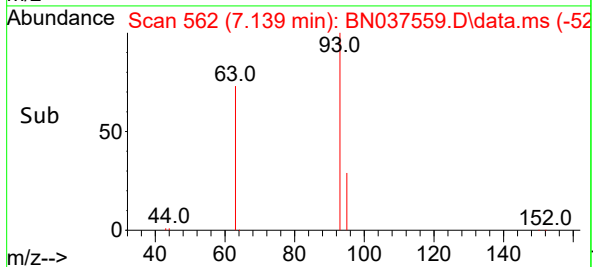
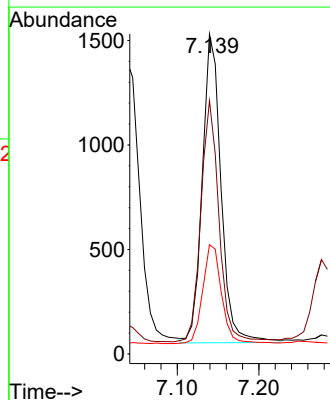
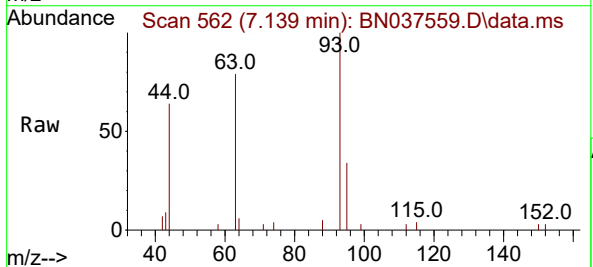
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

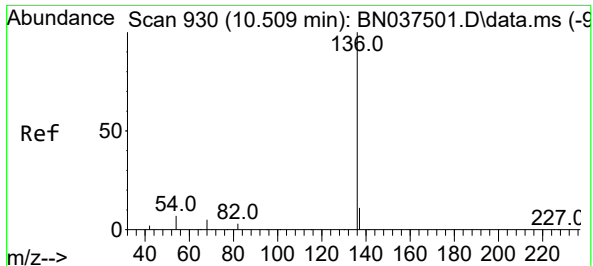
| Tgt Ion: | 99    | Resp: | 2587  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 99       | 100   |       |       |
| 42       | 23.1  | 17.1  | 25.7  |
| 71       | 37.2  | 27.8  | 41.8  |



#6  
bis(2-Chloroethyl)ether  
Concen: 0.389 ng  
RT: 7.139 min Scan# 562  
Delta R.T. -0.007 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

| Tgt Ion: | 93    | Resp: | 2365  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 93       | 100   |       |       |
| 63       | 75.3  | 58.2  | 87.4  |
| 95       | 32.1  | 25.3  | 37.9  |

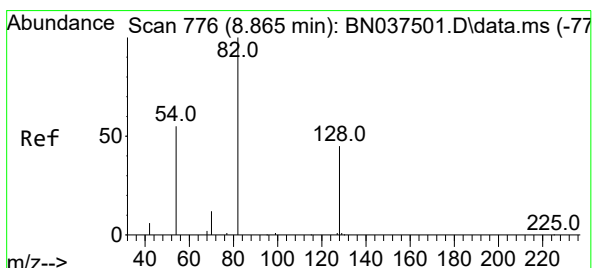
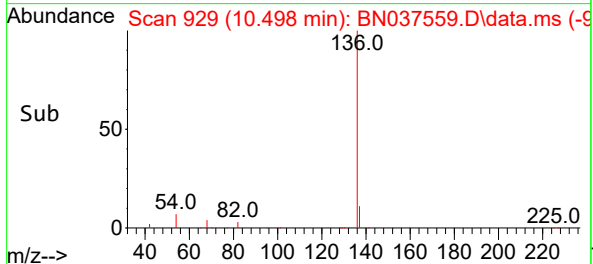
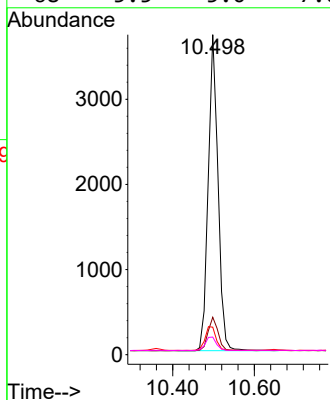
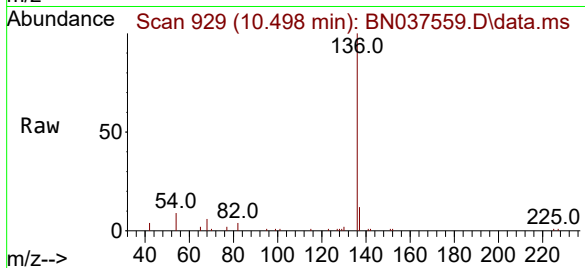




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 91  
Delta R.T. -0.011 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

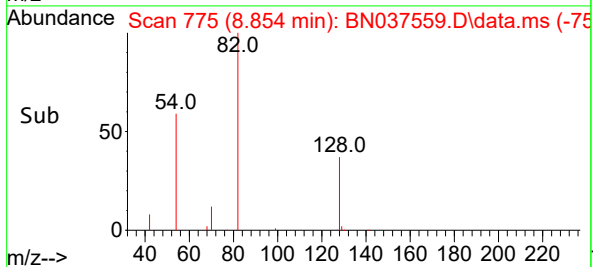
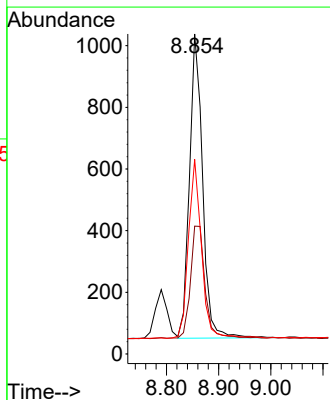
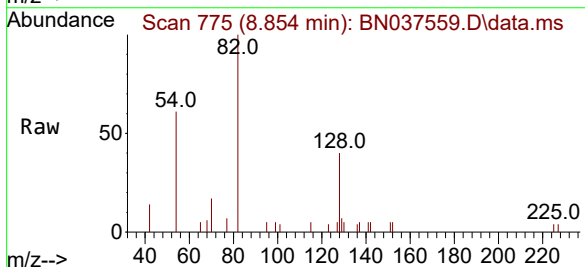
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

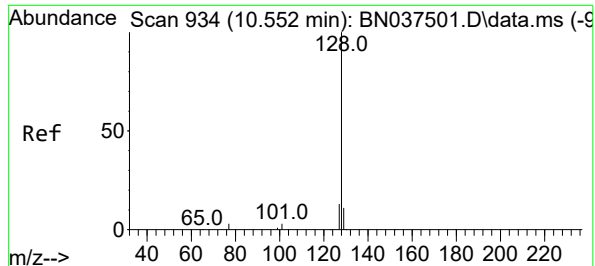
| Tgt Ion | 136  | 137  | 54  | 68  |
|---------|------|------|-----|-----|
| Resp:   | 6191 | 11.7 | 8.6 | 5.5 |
| Lower   |      | 9.8  | 6.6 | 5.0 |
| Upper   |      | 14.8 | 9.8 | 7.6 |



#8  
Nitrobenzene-d5  
Concen: 0.373 ng  
RT: 8.854 min Scan# 775  
Delta R.T. -0.011 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

| Tgt Ion | 82   | 128  | 54   |
|---------|------|------|------|
| Resp:   | 1728 | 40.0 | 60.8 |
| Lower   |      | 37.5 | 45.3 |
| Upper   |      | 56.3 | 67.9 |





#9

Naphthalene

Concen: 0.384 ng

RT: 10.551 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

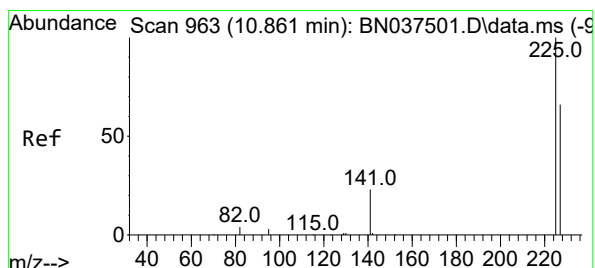
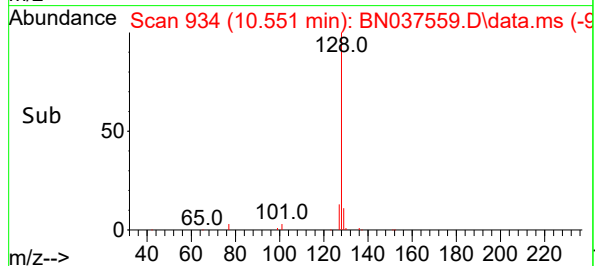
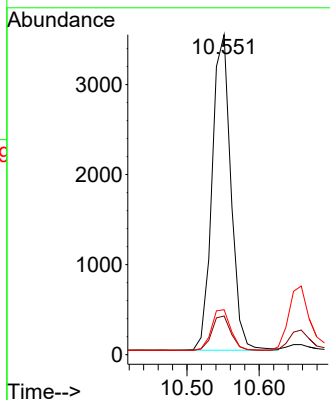
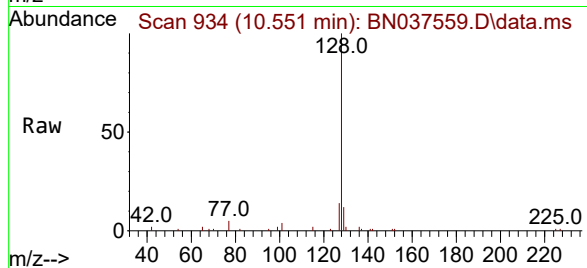
Tgt Ion:128 Resp: 6332

Ion Ratio Lower Upper

128 100

129 12.1 9.7 14.5

127 14.0 11.5 17.3



#10

Hexachlorobutadiene

Concen: 0.415 ng

RT: 10.850 min Scan# 962

Delta R.T. -0.011 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

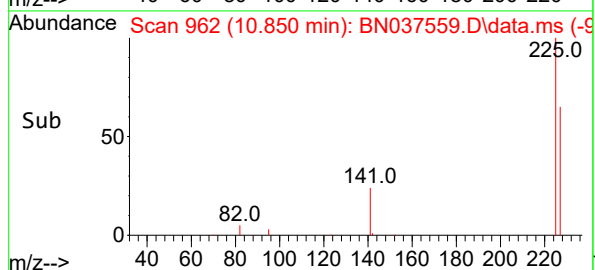
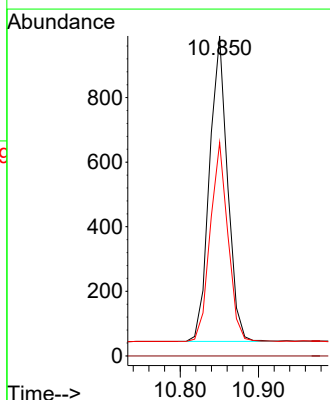
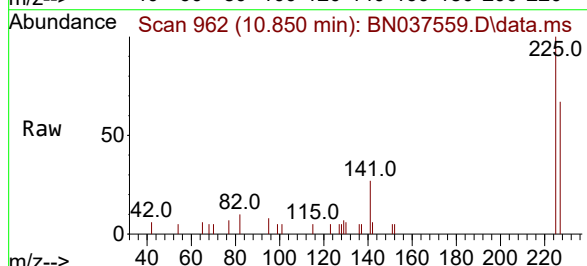
Tgt Ion:225 Resp: 1516

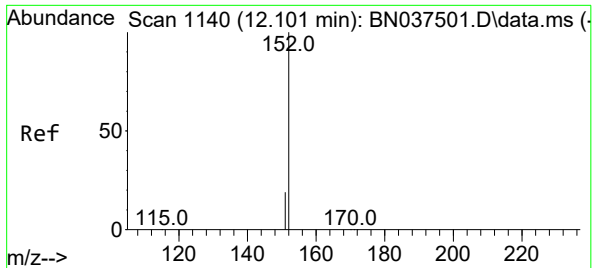
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.8 51.0 76.4

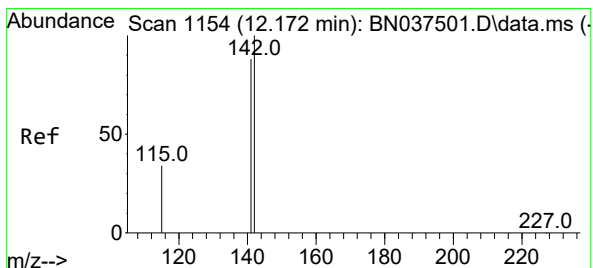
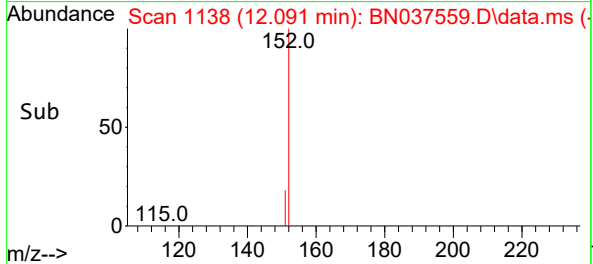
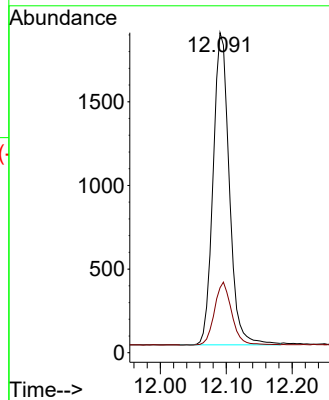
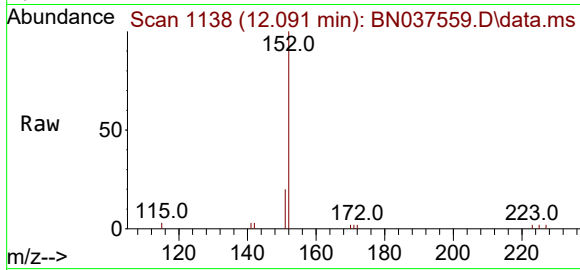




#11  
2-Methylnaphthalene-d10  
Concen: 0.359 ng  
RT: 12.091 min Scan# 1138  
Delta R.T. -0.010 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

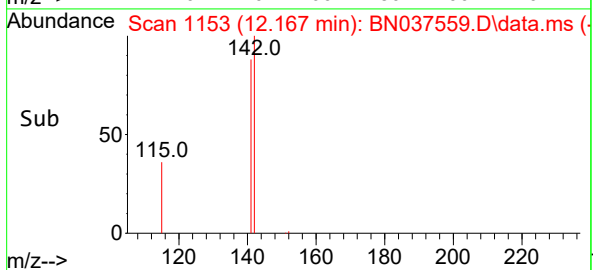
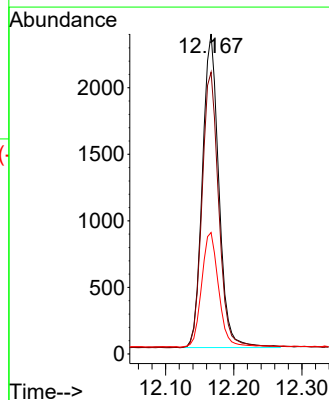
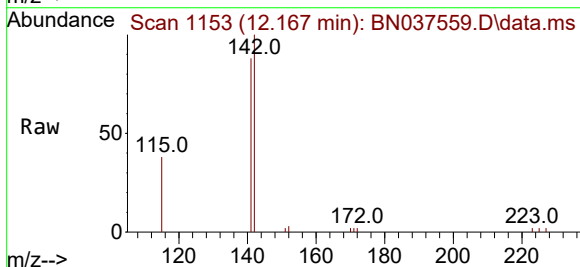
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

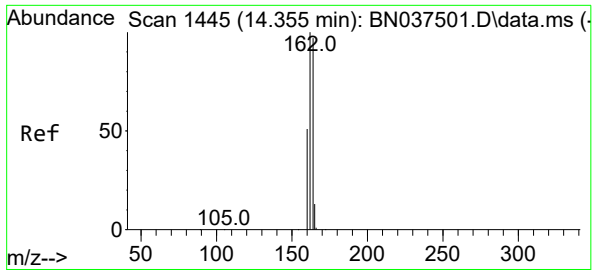
Tgt Ion:152 Resp: 3187  
Ion Ratio Lower Upper  
152 100  
151 21.5 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.365 ng  
RT: 12.167 min Scan# 1153  
Delta R.T. -0.005 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:142 Resp: 3959  
Ion Ratio Lower Upper  
142 100  
141 88.1 71.0 106.4  
115 38.0 29.0 43.4

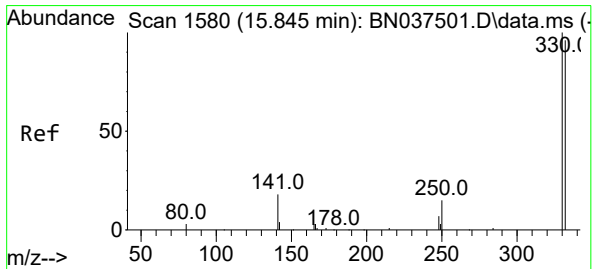
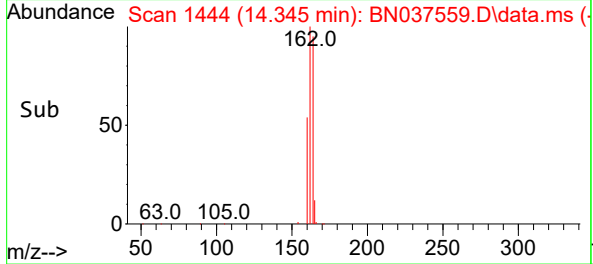
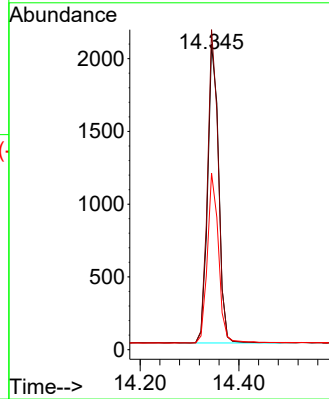
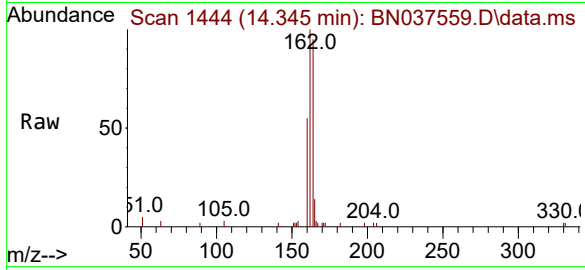




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.345 min Scan# 1445  
Delta R.T. -0.011 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

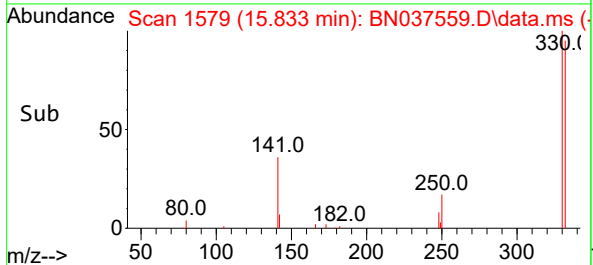
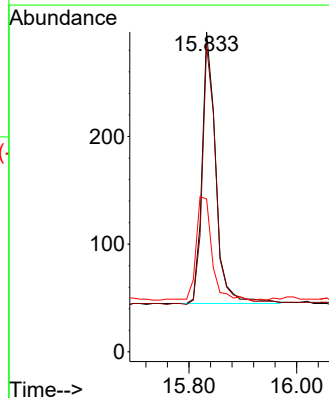
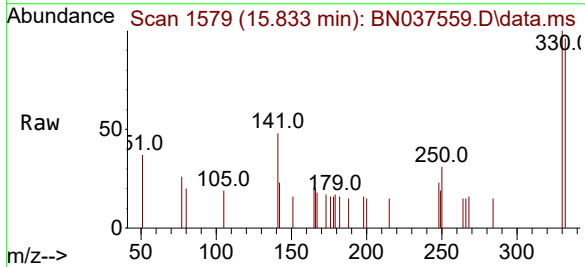
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

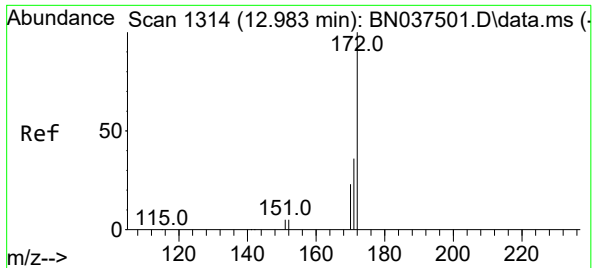
Tgt Ion:164 Resp: 3180  
Ion Ratio Lower Upper  
164 100  
162 104.8 82.0 123.0  
160 57.8 42.4 63.6



#14  
2,4,6-Tribromophenol  
Concen: 0.285 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.012 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:330 Resp: 445  
Ion Ratio Lower Upper  
330 100  
332 97.3 76.1 114.1  
141 43.8 33.4 50.0

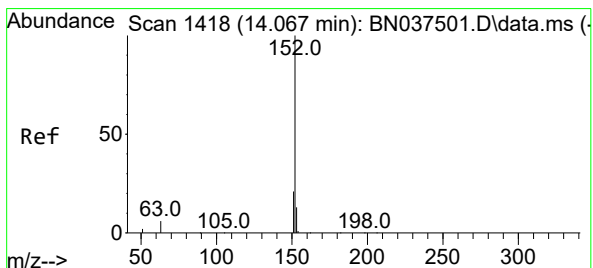
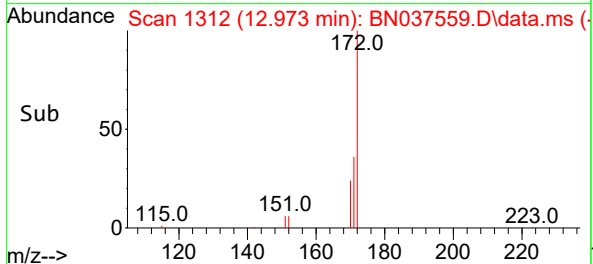
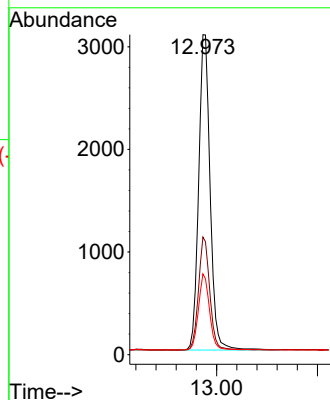
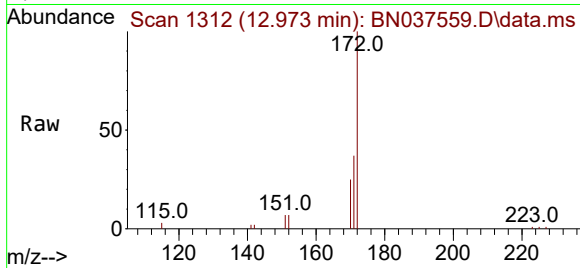




#15  
2-Fluorobiphenyl  
Concen: 0.419 ng  
RT: 12.973 min Scan# 11  
Delta R.T. -0.010 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

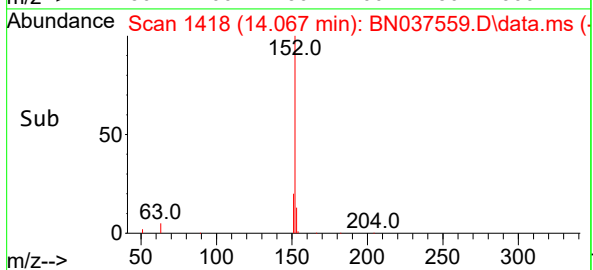
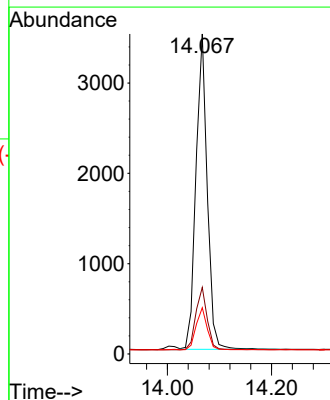
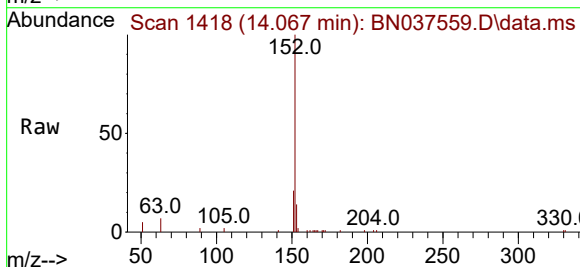
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

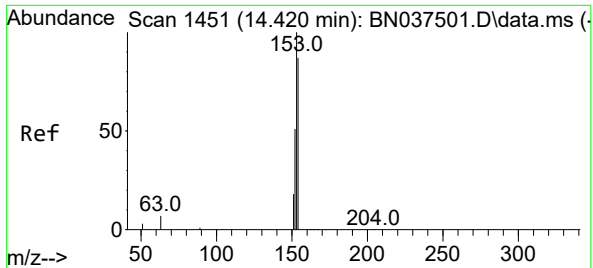
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 172   | Resp: | 6937 |
| Ion Ratio | Lower | Upper |      |
| 172       | 100   |       |      |
| 171       | 36.7  | 29.4  | 44.2 |
| 170       | 25.2  | 19.4  | 29.0 |



#16  
Acenaphthylene  
Concen: 0.369 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 152   | Resp: | 5250 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 20.1  | 15.9  | 23.9 |
| 153       | 13.5  | 10.7  | 16.1 |

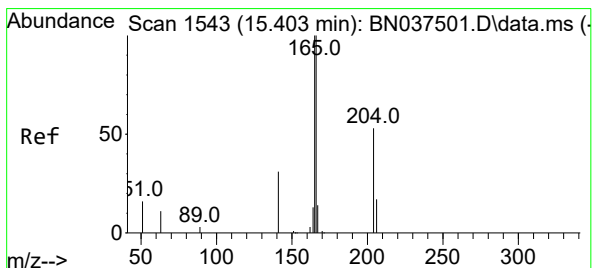
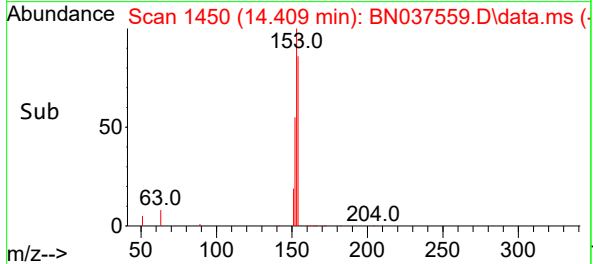
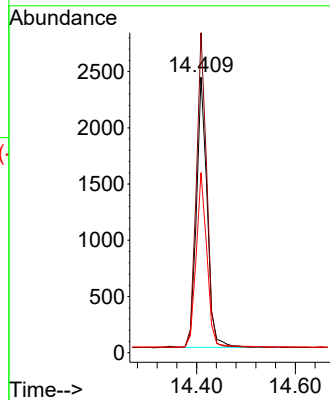
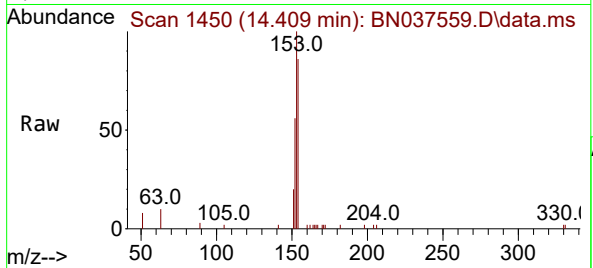




#17  
Acenaphthene  
Concen: 0.372 ng  
RT: 14.409 min Scan# 1450  
Delta R.T. -0.011 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

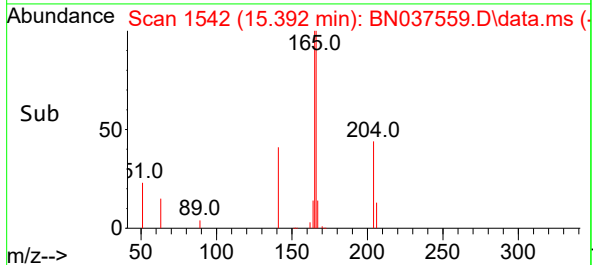
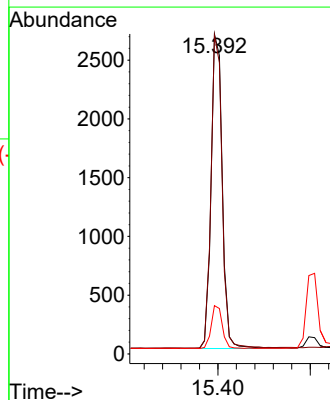
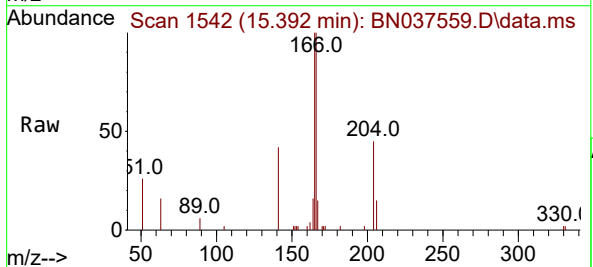
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

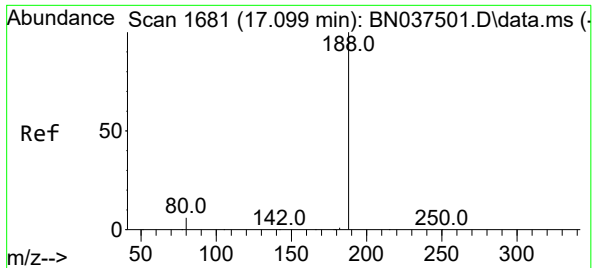
Tgt Ion:154 Resp: 3599  
Ion Ratio Lower Upper  
154 100  
153 113.5 89.2 133.8  
152 65.2 48.0 72.0



#18  
Fluorene  
Concen: 0.365 ng  
RT: 15.392 min Scan# 1542  
Delta R.T. -0.011 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:166 Resp: 4557  
Ion Ratio Lower Upper  
166 100  
165 97.7 78.1 117.1  
167 13.3 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

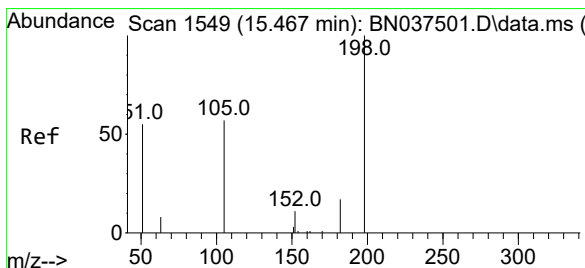
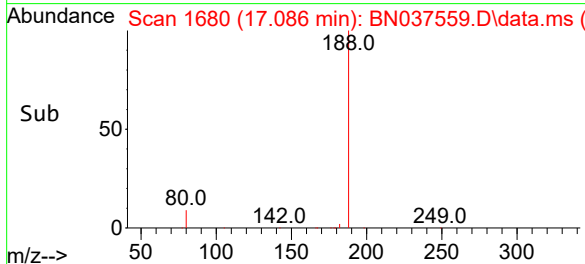
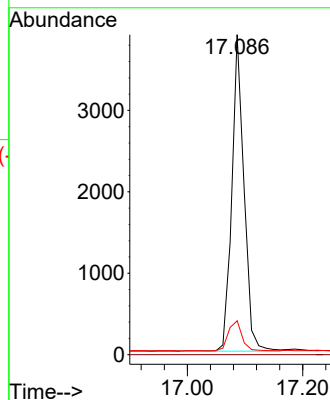
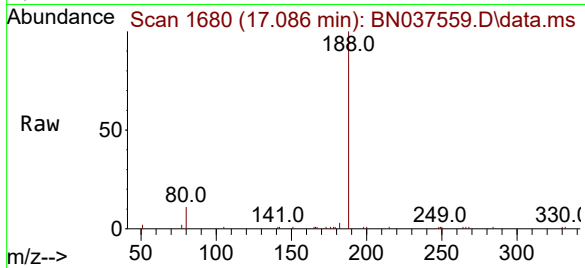
Tgt Ion:188 Resp: 5684

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.6 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.421 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

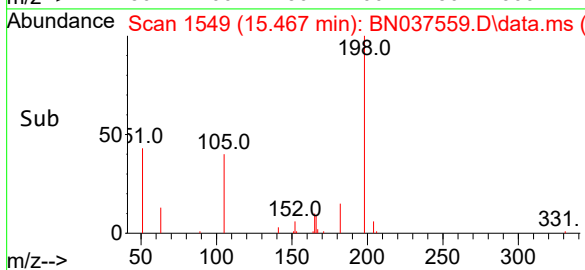
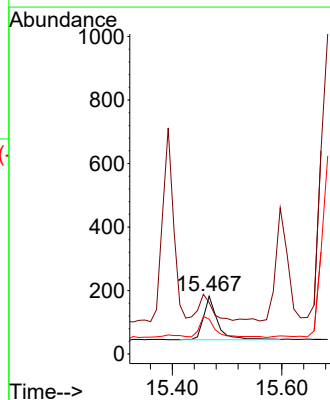
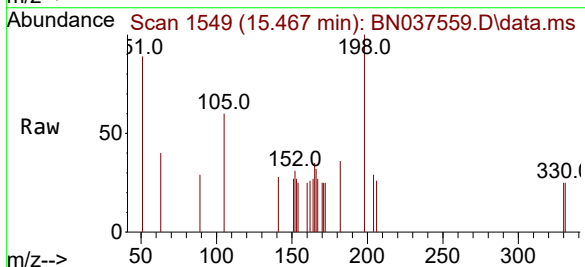
Tgt Ion:198 Resp: 256

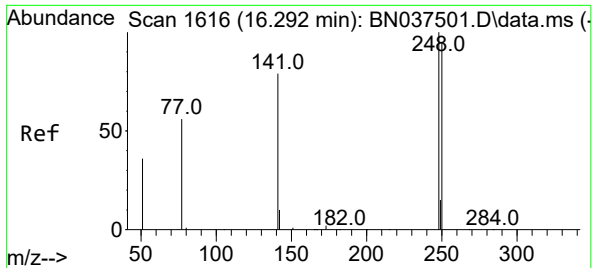
Ion Ratio Lower Upper

198 100

51 89.0 88.5 132.7

105 60.4 61.2 91.8#

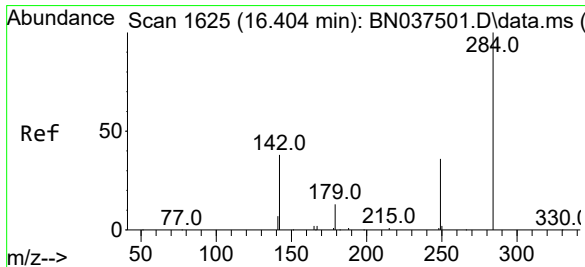
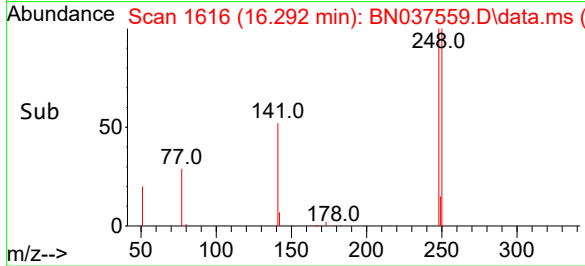
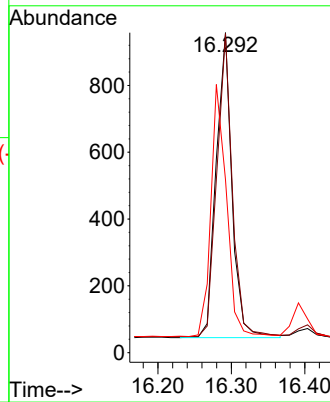
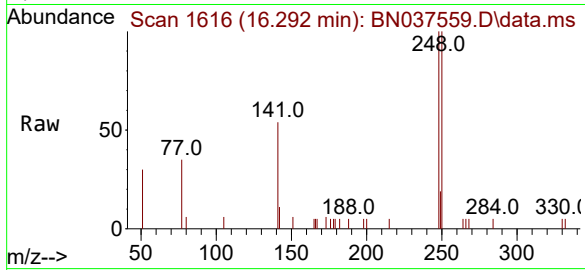




#21  
4-Bromophenyl-phenylether  
Concen: 0.375 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. -0.000 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

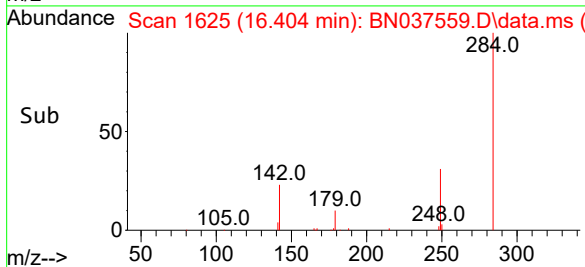
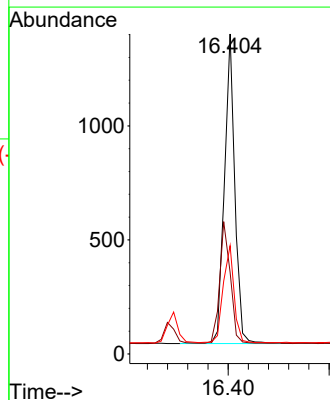
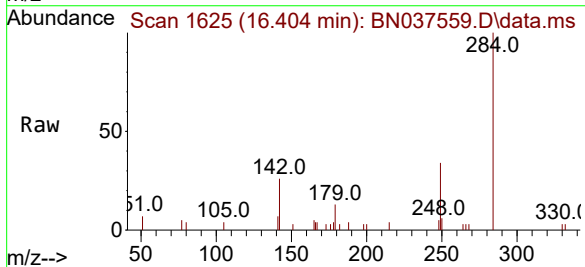
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

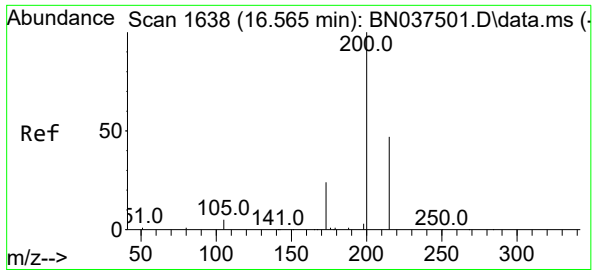
Tgt Ion:248 Resp: 1367  
Ion Ratio Lower Upper  
248 100  
250 99.7 76.2 114.2  
141 54.1 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.410 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:284 Resp: 1931  
Ion Ratio Lower Upper  
284 100  
142 40.0 28.9 43.3  
249 32.7 25.8 38.6





#23

Atrazine

Concen: 0.311 ng

RT: 16.553 min Scan# 1637

Delta R.T. -0.012 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

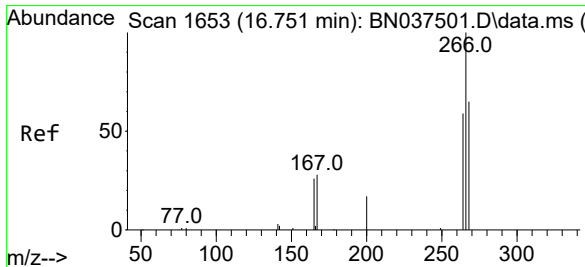
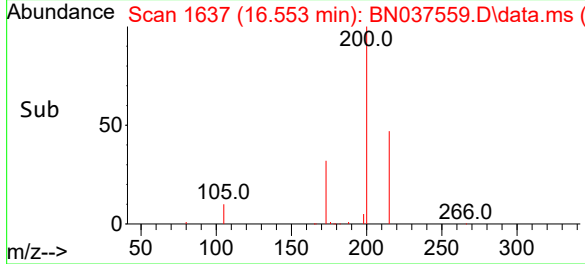
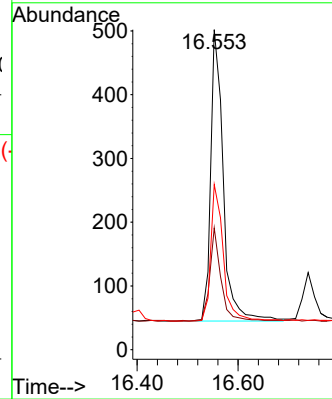
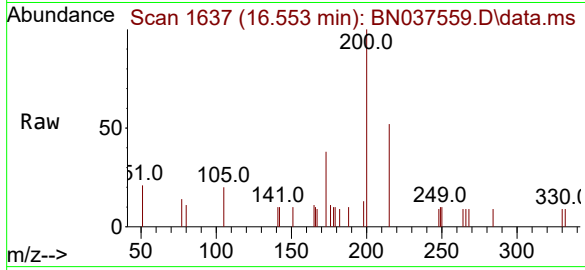
Tgt Ion:200 Resp: 790

Ion Ratio Lower Upper

200 100

173 38.0 23.2 34.8#

215 51.6 40.2 60.4



#24

Pentachlorophenol

Concen: 0.282 ng

RT: 16.739 min Scan# 1652

Delta R.T. -0.012 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

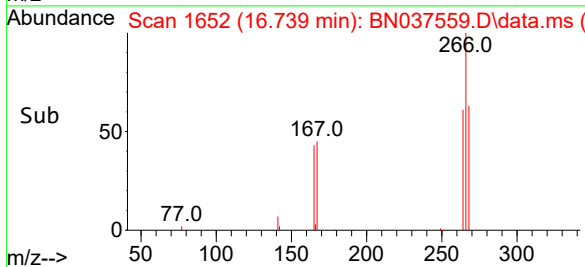
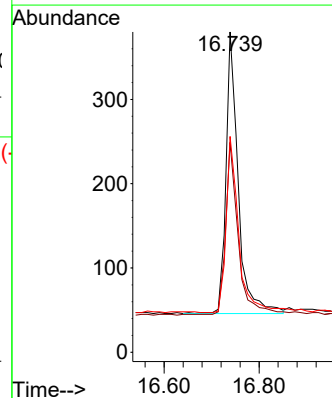
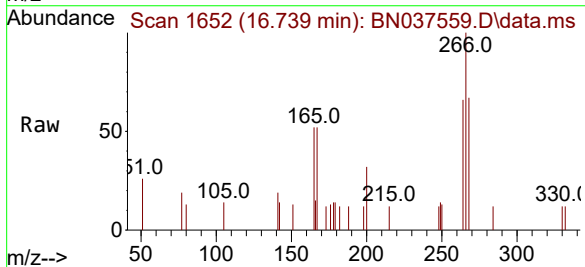
Tgt Ion:266 Resp: 595

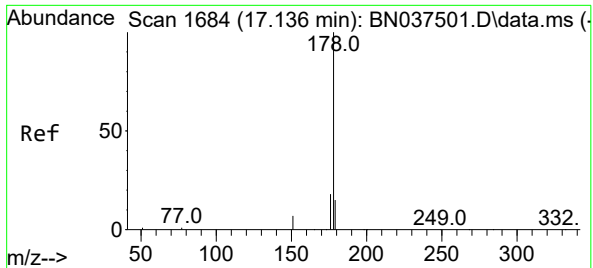
Ion Ratio Lower Upper

266 100

264 62.9 49.3 73.9

268 65.4 51.6 77.4

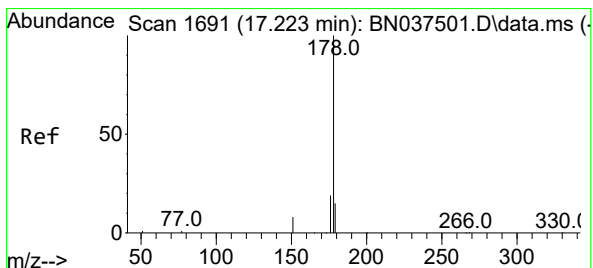
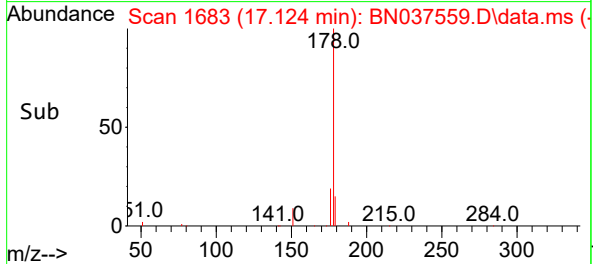
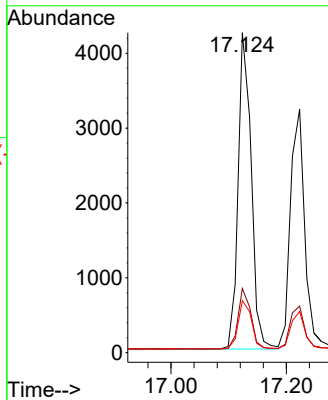
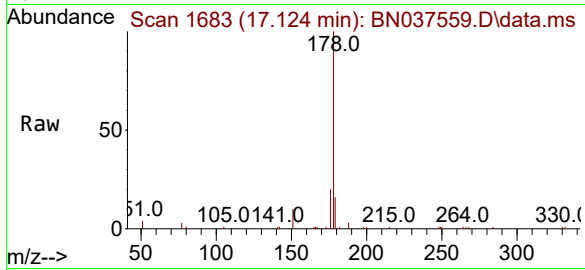




#25  
Phenanthrene  
Concen: 0.391 ng  
RT: 17.124 min Scan# 1683  
Delta R.T. -0.012 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

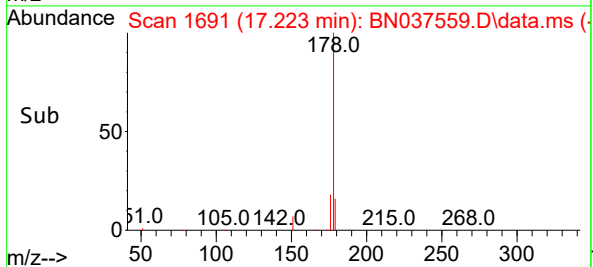
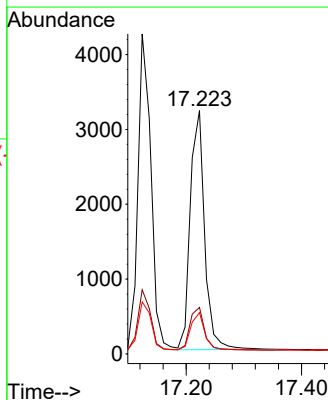
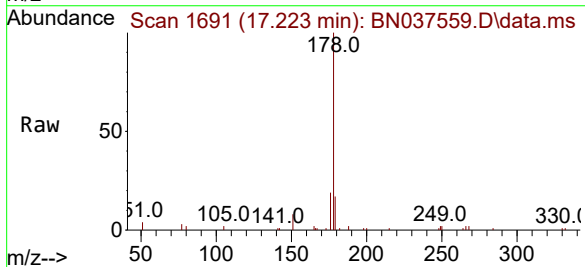
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

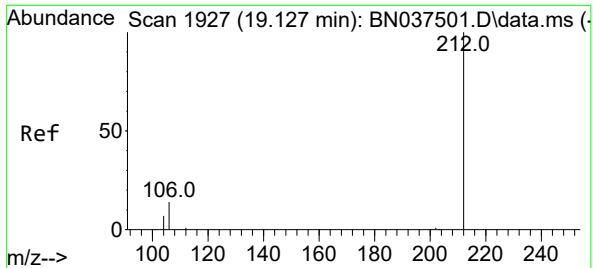
Tgt Ion:178 Resp: 6657  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.0 22.6  
179 15.7 12.2 18.2



#26  
Anthracene  
Concen: 0.357 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. -0.000 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:178 Resp: 5544  
Ion Ratio Lower Upper  
178 100  
176 18.2 14.7 22.1  
179 15.4 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.335 ng

RT: 19.122 min Scan# 1926

Delta R.T. -0.005 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

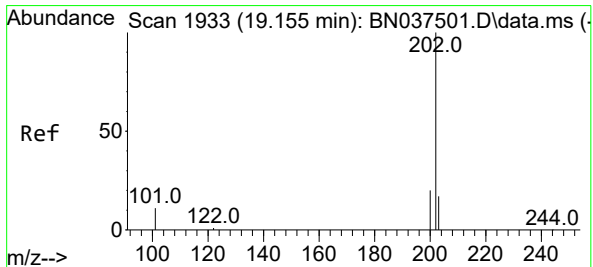
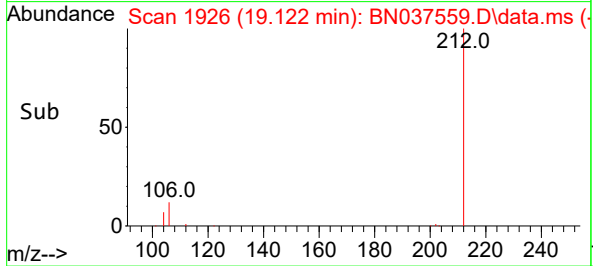
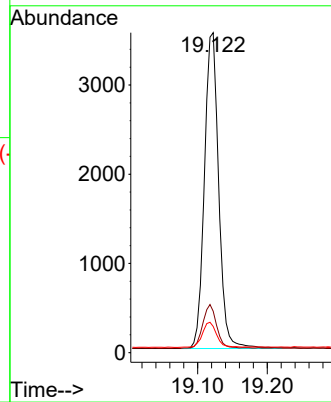
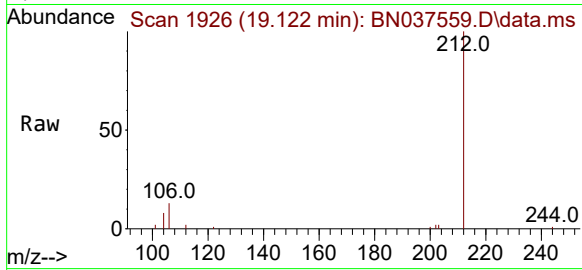
Tgt Ion:212 Resp: 5051

Ion Ratio Lower Upper

212 100

106 13.5 12.2 18.4

104 7.9 6.7 10.1



#28

Fluoranthene

Concen: 0.345 ng

RT: 19.150 min Scan# 1932

Delta R.T. -0.005 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

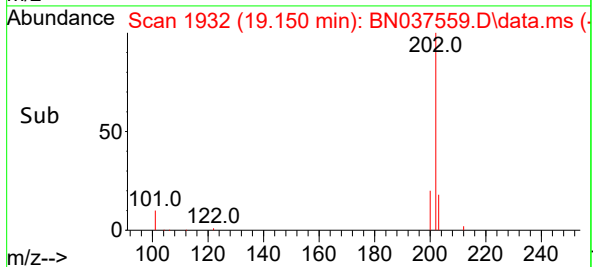
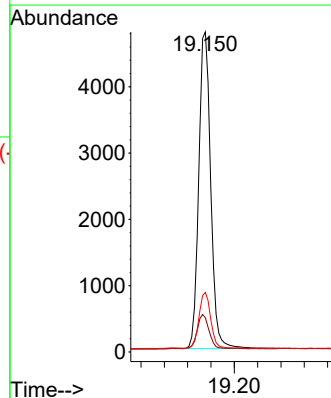
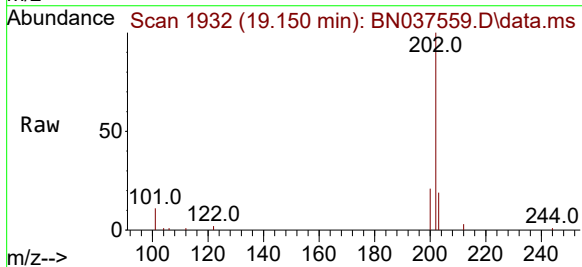
Tgt Ion:202 Resp: 6780

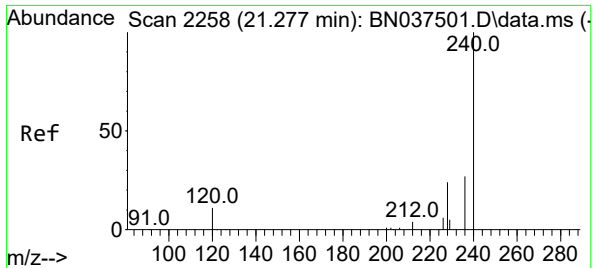
Ion Ratio Lower Upper

202 100

101 10.9 9.8 14.6

203 17.3 13.6 20.4

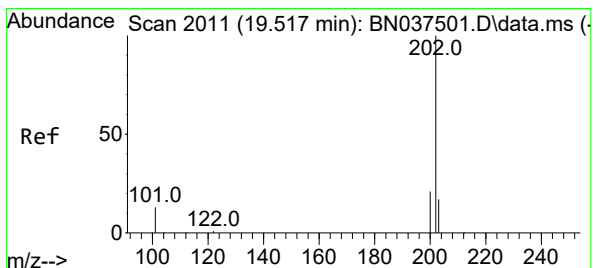
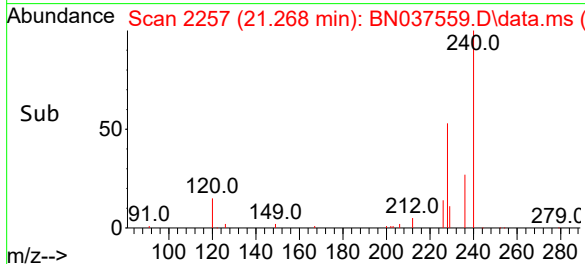
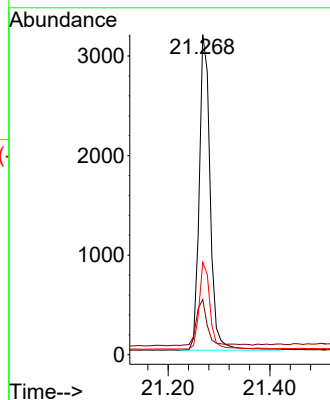
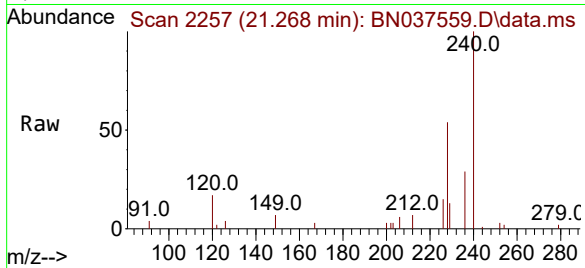




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

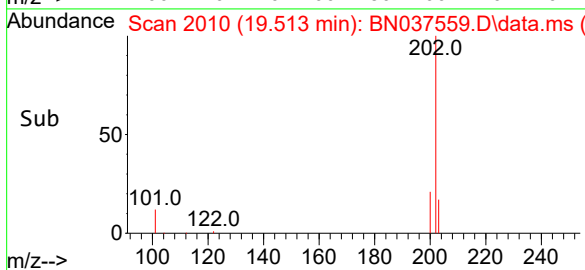
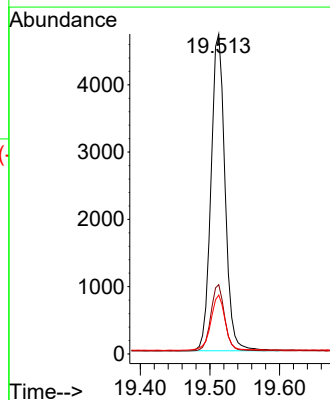
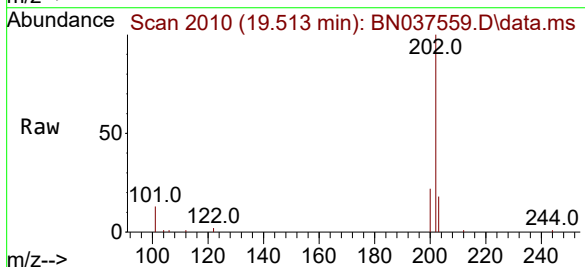
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

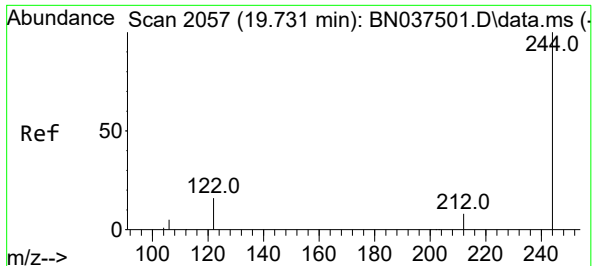
Tgt Ion:240 Resp: 4703  
Ion Ratio Lower Upper  
240 100  
120 17.2 10.7 16.1#  
236 28.9 22.6 33.8



#30  
Pyrene  
Concen: 0.347 ng  
RT: 19.513 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:202 Resp: 6578  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 17.7 14.3 21.5

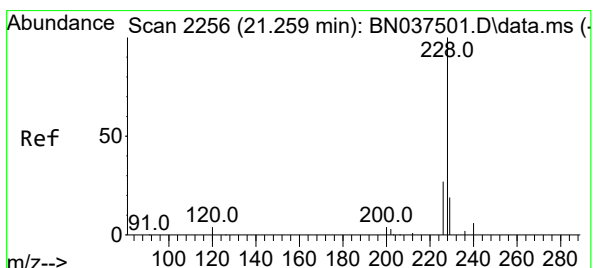
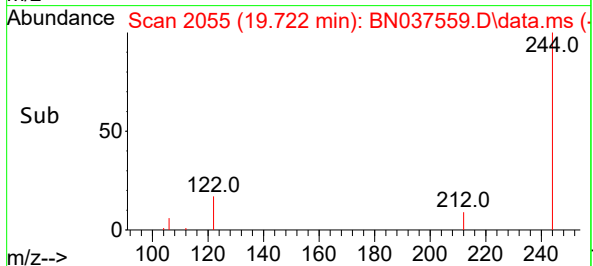
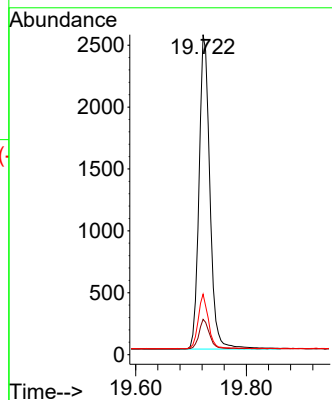
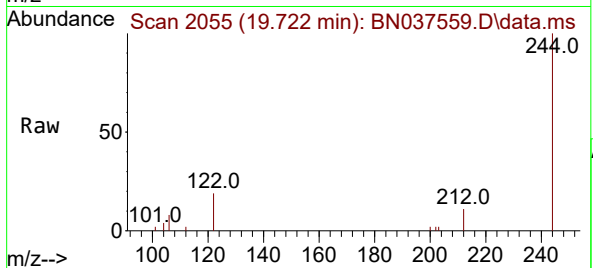




#31  
Terphenyl-d14  
Concen: 0.343 ng  
RT: 19.722 min Scan# 2055  
Delta R.T. -0.009 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

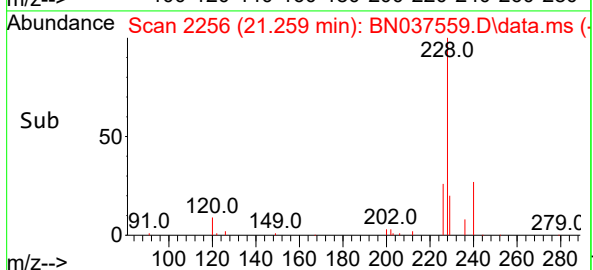
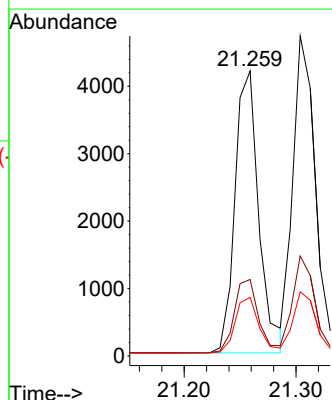
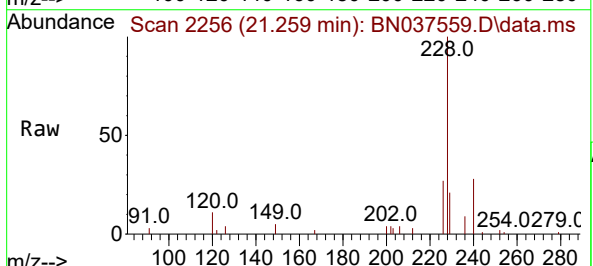
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

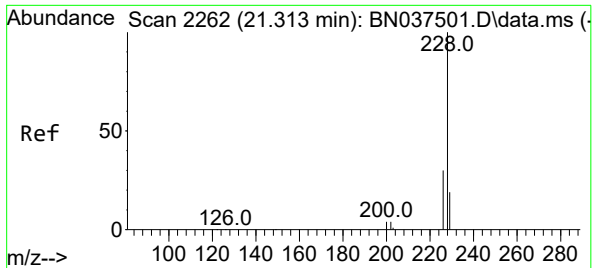
Tgt Ion:244 Resp: 3470  
Ion Ratio Lower Upper  
244 100  
212 11.0 7.4 11.2  
122 18.9 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.376 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:228 Resp: 6199  
Ion Ratio Lower Upper  
228 100  
226 26.8 21.9 32.9  
229 20.6 15.8 23.8





#33

Chrysene

Concen: 0.392 ng

RT: 21.304 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

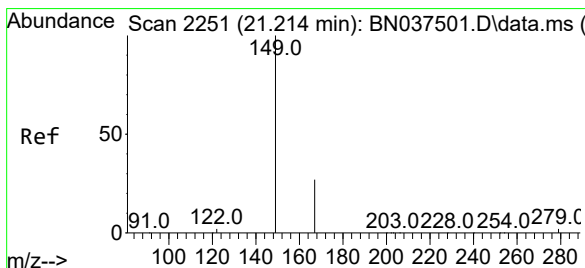
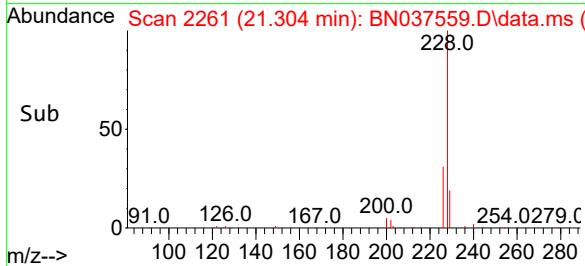
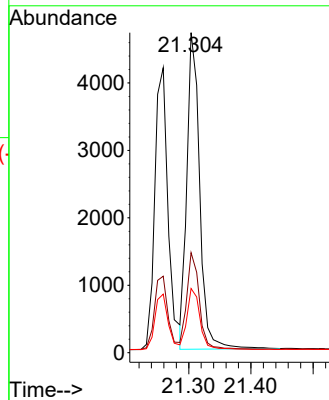
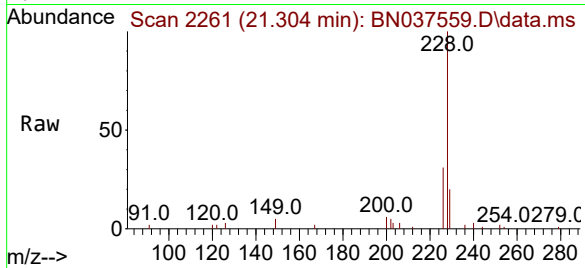
Tgt Ion:228 Resp: 6716

Ion Ratio Lower Upper

228 100

226 31.3 24.2 36.4

229 20.1 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.335 ng

RT: 21.205 min Scan# 2250

Delta R.T. -0.009 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

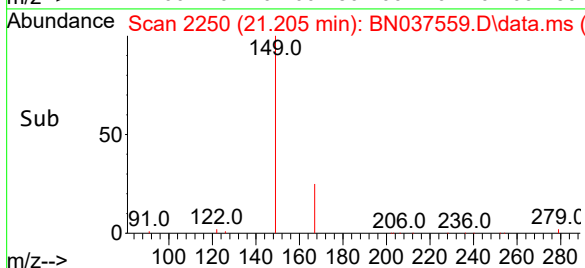
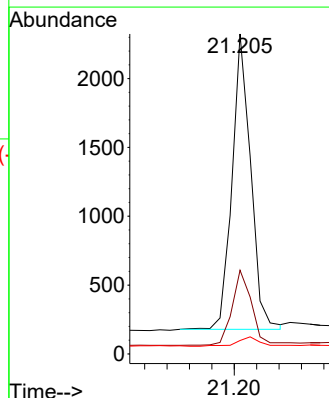
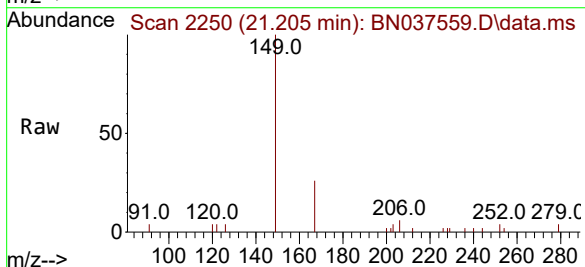
Tgt Ion:149 Resp: 2480

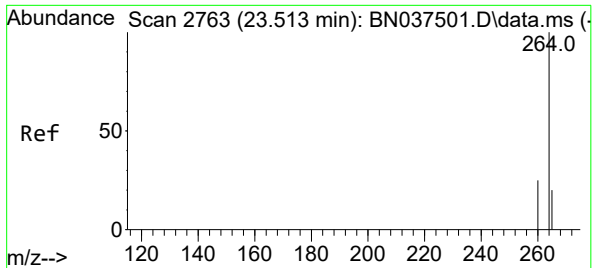
Ion Ratio Lower Upper

149 100

167 27.3 21.8 32.8

279 3.8 3.0 4.4

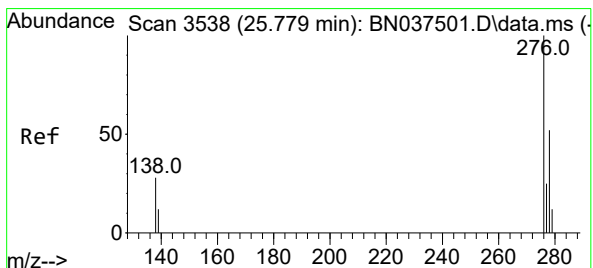
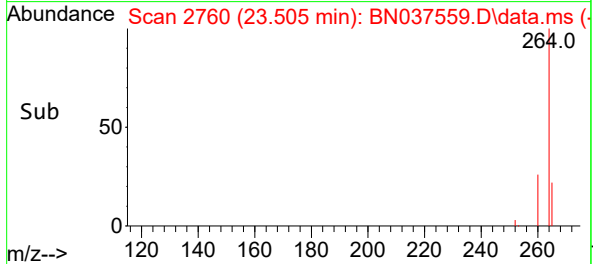
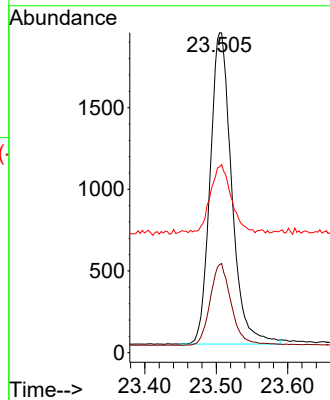
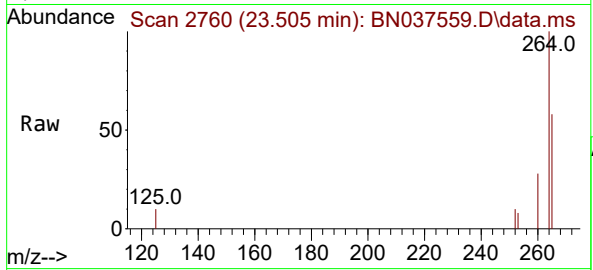




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.505 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

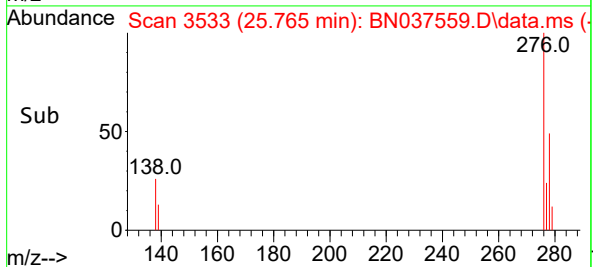
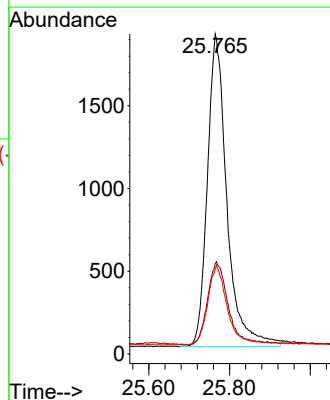
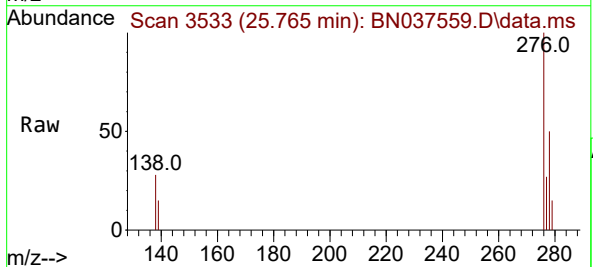
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

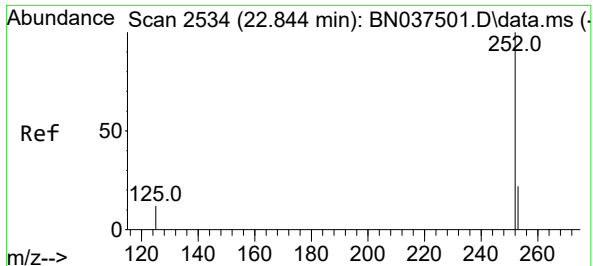
Tgt Ion:264 Resp: 3993  
Ion Ratio Lower Upper  
264 100  
260 27.6 21.2 31.8  
265 58.1 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.381 ng  
RT: 25.765 min Scan# 3533  
Delta R.T. -0.015 min  
Lab File: BN037559.D  
Acq: 05 Aug 2025 09:35

Tgt Ion:276 Resp: 6340  
Ion Ratio Lower Upper  
276 100  
138 27.3 24.0 36.0  
277 25.7 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.372 ng

RT: 22.835 min Scan# 2534

Delta R.T. -0.009 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

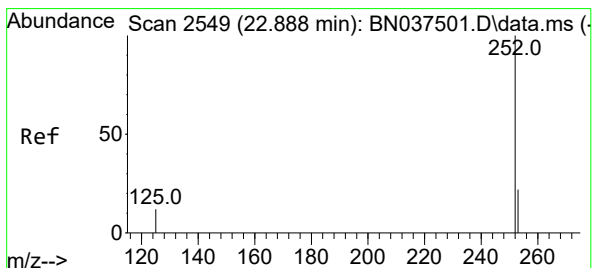
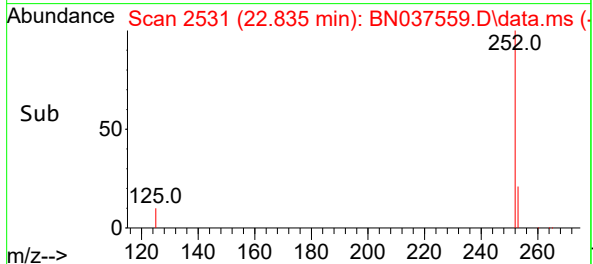
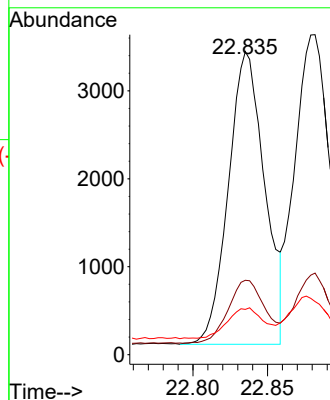
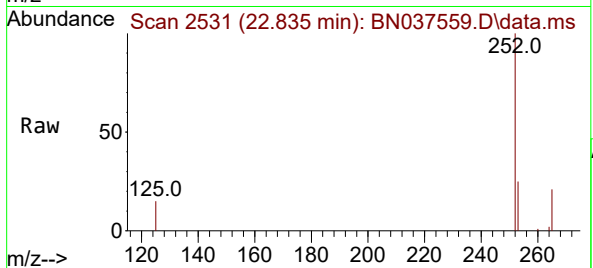
Tgt Ion:252 Resp: 5635

Ion Ratio Lower Upper

252 100

253 24.5 19.5 29.3

125 15.0 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.401 ng

RT: 22.882 min Scan# 2547

Delta R.T. -0.006 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

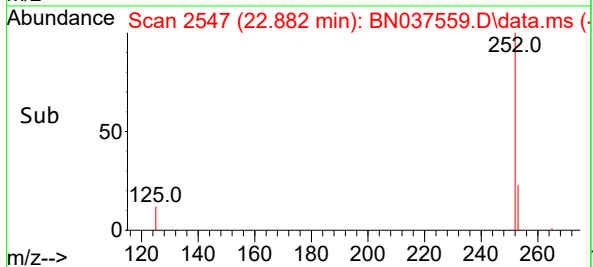
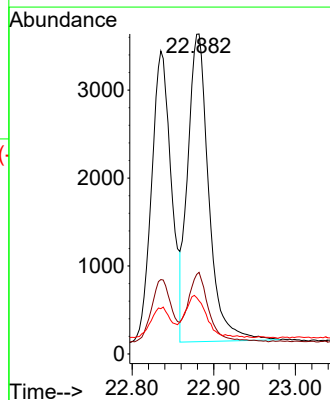
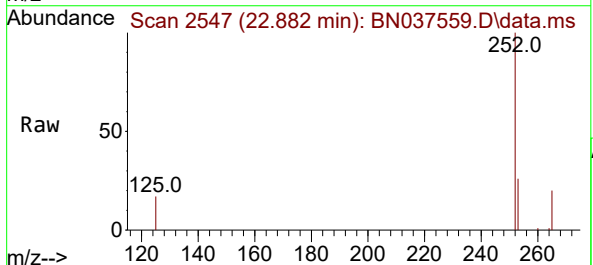
Tgt Ion:252 Resp: 6267

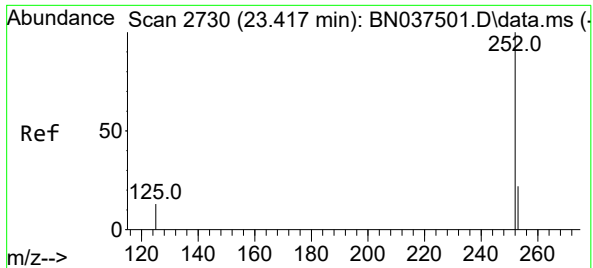
Ion Ratio Lower Upper

252 100

253 25.5 19.5 29.3

125 16.6 13.1 19.7





#39

Benzo(a)pyrene

Concen: 0.384 ng

RT: 23.408 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

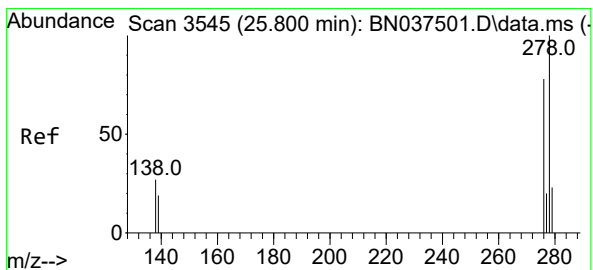
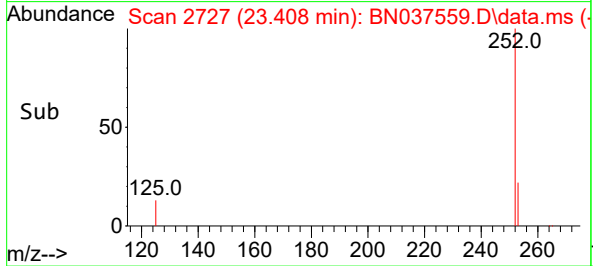
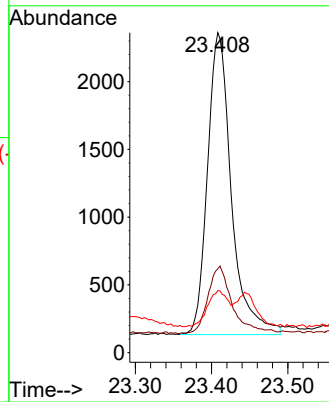
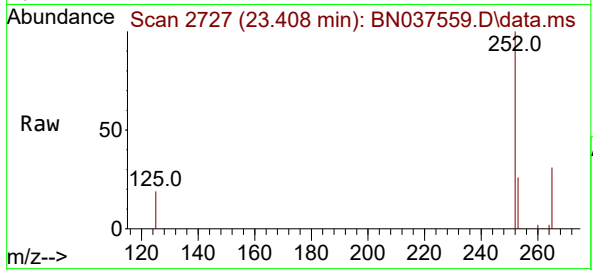
Tgt Ion:252 Resp: 4850

Ion Ratio Lower Upper

252 100

253 26.3 19.9 29.9

125 19.4 15.2 22.8



#40

Dibenzo(a,h)anthracene

Concen: 0.355 ng

RT: 25.782 min Scan# 3539

Delta R.T. -0.018 min

Lab File: BN037559.D

Acq: 05 Aug 2025 09:35

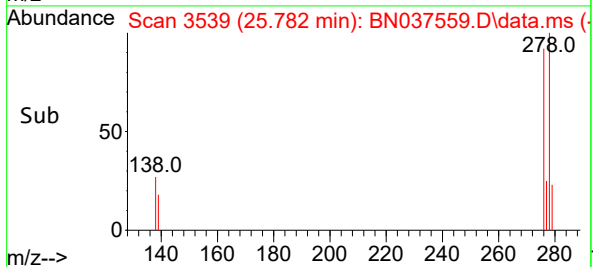
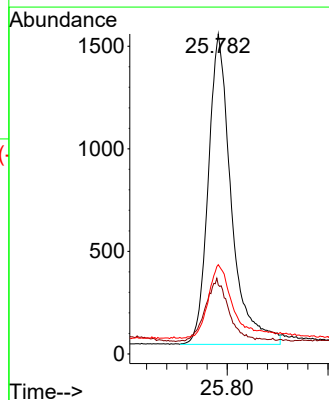
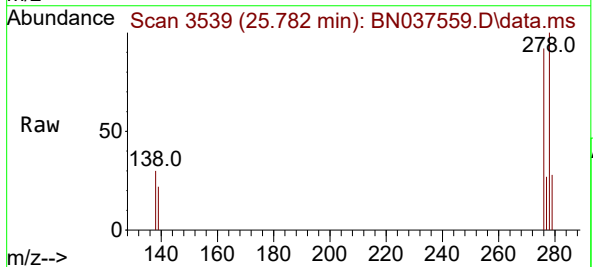
Tgt Ion:278 Resp: 4787

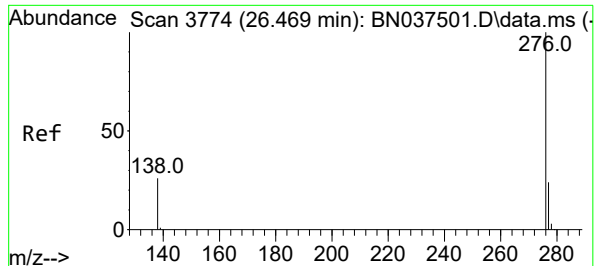
Ion Ratio Lower Upper

278 100

139 21.5 17.5 26.3

279 27.9 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 0.364 ng

RT: 26.452 min Scan# 31

Delta R.T. -0.018 min

Lab File: BN037559.D

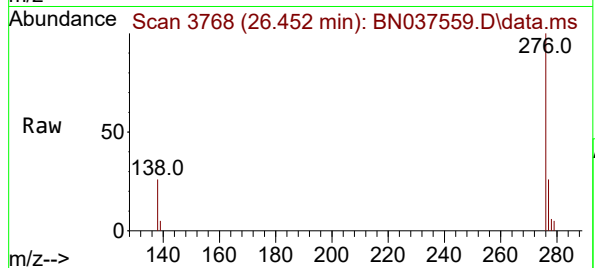
Acq: 05 Aug 2025 09:35

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



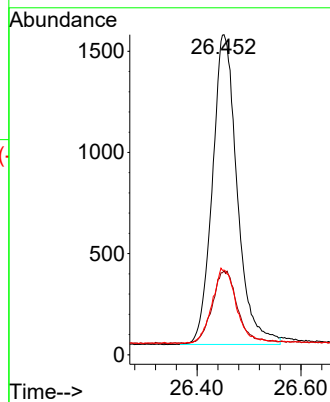
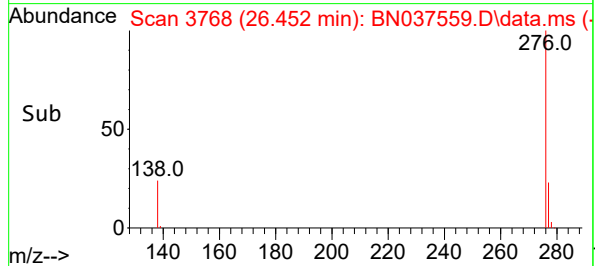
Tgt Ion:276 Resp: 5081

Ion Ratio Lower Upper

276 100

277 26.2 20.9 31.3

138 26.5 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
 Data File : BN037559.D  
 Acq On : 05 Aug 2025 09:35  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Aug 06 01:38:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 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   | 103   | 0.00     |
| 2       | 1,4-Dioxane                | 0.385 | 0.404 | -4.9  | 105   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.484 | 0.518 | -7.0  | 115   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.989 | 0.880 | 11.0  | 92    | 0.00     |
| 5 S     | Phenol-d6                  | 1.241 | 1.098 | 11.5  | 95    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.033 | 1.003 | 2.9   | 101   | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 106   | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.299 | 0.279 | 6.7   | 105   | -0.01    |
| 9       | Naphthalene                | 1.067 | 1.023 | 4.1   | 104   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.236 | 0.245 | -3.8  | 111   | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.574 | 0.515 | 10.3  | 101   | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.701 | 0.639 | 8.8   | 100   | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 96    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.197 | 0.140 | 28.9# | 77    | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 2.080 | 2.181 | -4.9  | 102   | -0.01    |
| 16      | Acenaphthylene             | 1.792 | 1.651 | 7.9   | 92    | 0.00     |
| 17      | Acenaphthene               | 1.218 | 1.132 | 7.1   | 92    | -0.01    |
| 18      | Fluorene                   | 1.569 | 1.433 | 8.7   | 92    | -0.01    |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 88    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.057 | 0.045 | 21.1  | 96    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.256 | 0.240 | 6.3   | 87    | 0.00     |
| 22      | Hexachlorobenzene          | 0.331 | 0.340 | -2.7  | 91    | 0.00     |
| 23      | Atrazine                   | 0.179 | 0.139 | 22.3  | 77    | -0.01    |
| 24      | Pentachlorophenol          | 0.149 | 0.105 | 29.5# | 73    | -0.01    |
| 25      | Phenanthrene               | 1.198 | 1.171 | 2.3   | 89    | -0.01    |
| 26      | Anthracene                 | 1.093 | 0.975 | 10.8  | 85    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 1.060 | 0.889 | 16.1  | 81    | 0.00     |
| 28      | Fluoranthene               | 1.382 | 1.193 | 13.7  | 81    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 90    | 0.00     |
| 30      | Pyrene                     | 1.612 | 1.399 | 13.2  | 79    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.859 | 0.738 | 14.1  | 79    | 0.00     |
| 32      | Benzo(a)anthracene         | 1.401 | 1.318 | 5.9   | 89    | 0.00     |
| 33      | Chrysene                   | 1.459 | 1.428 | 2.1   | 90    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.630 | 0.527 | 16.3  | 84    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 83    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.666 | 1.588 | 4.7   | 87    | -0.01    |
| 37      | Benzo(b)fluoranthene       | 1.518 | 1.411 | 7.0   | 81    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.567 | 1.569 | -0.1  | 88    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.267 | 1.215 | 4.1   | 85    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.349 | 1.199 | 11.1  | 82    | -0.02    |
| 41      | Benzo(g,h,i)perylene       | 1.397 | 1.272 | 8.9   | 81    | -0.02    |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037559.D  
Acq On : 05 Aug 2025 09:35  
Operator : RC/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
LabSampleId :  
SSTDCCC0.4

Quant Time: Aug 06 01:38:05 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
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   | 103   | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.420 | -5.0  | 105   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.428 | -7.0  | 115   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.356 | 11.0  | 92    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.354 | 11.5  | 95    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.389 | 2.8   | 101   | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 106   | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.373 | 6.8   | 105   | -0.01    |
| 9       | Naphthalene                | 0.400  | 0.384 | 4.0   | 104   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.415 | -3.7  | 111   | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.359 | 10.3  | 101   | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.365 | 8.8   | 100   | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 96    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.285 | 28.8# | 77    | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.419 | -4.7  | 102   | -0.01    |
| 16      | Acenaphthylene             | 0.400  | 0.369 | 7.8   | 92    | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.372 | 7.0   | 92    | -0.01    |
| 18      | Fluorene                   | 0.400  | 0.365 | 8.8   | 92    | -0.01    |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 88    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.421 | -5.2  | 96    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.375 | 6.3   | 87    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.410 | -2.5  | 91    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.311 | 22.3  | 77    | -0.01    |
| 24      | Pentachlorophenol          | 0.400  | 0.282 | 29.5# | 73    | -0.01    |
| 25      | Phenanthrene               | 0.400  | 0.391 | 2.3   | 89    | -0.01    |
| 26      | Anthracene                 | 0.400  | 0.357 | 10.8  | 85    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.335 | 16.3  | 81    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.345 | 13.8  | 81    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 90    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.347 | 13.3  | 79    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.343 | 14.2  | 79    | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.376 | 6.0   | 89    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.392 | 2.0   | 90    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.335 | 16.3  | 84    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 83    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.381 | 4.8   | 87    | -0.01    |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.372 | 7.0   | 81    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.401 | -0.3  | 88    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.384 | 4.0   | 85    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.355 | 11.3  | 82    | -0.02    |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.364 | 9.0   | 81    | -0.02    |

(#) = 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: Alliance Contract: TETR06  
 Lab Code: ACE SDG No.: Q2745  
 Instrument ID: BNA\_N Calibration Date/Time: 08/05/2025 15:03  
 Lab File ID: BN037568.D Init. Calib. Date(s): 07/15/2025 07/15/2025  
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 12:36 16:14  
 GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND                | RRF   | RRF0.4 | MIN<br>RRF | %D    | MAX%D |
|-------------------------|-------|--------|------------|-------|-------|
| 2-Methylnaphthalene-d10 | 0.574 | 0.505  |            | -12.0 | 50.0  |
| Fluoranthene-d10        | 1.060 | 0.905  |            | -14.6 | 50.0  |
| 2-Fluorophenol          | 0.989 | 0.840  |            | -15.1 | 50.0  |
| Phenol-d6               | 1.241 | 1.017  |            | -18.0 | 50.0  |
| Nitrobenzene-d5         | 0.299 | 0.288  |            | -3.7  | 50.0  |
| 2-Fluorobiphenyl        | 2.080 | 2.112  |            | 1.5   | 50.0  |
| 2,4,6-Tribromophenol    | 0.197 | 0.145  |            | -26.4 | 50.0  |
| Terphenyl-d14           | 0.859 | 0.819  |            | -4.7  | 50.0  |
| 1,4-Dioxane             | 0.385 | 0.388  |            | 0.8   | 50.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
 Data File : BN037568.D  
 Acq On : 05 Aug 2025 15:03  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Aug 06 01:40:14 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

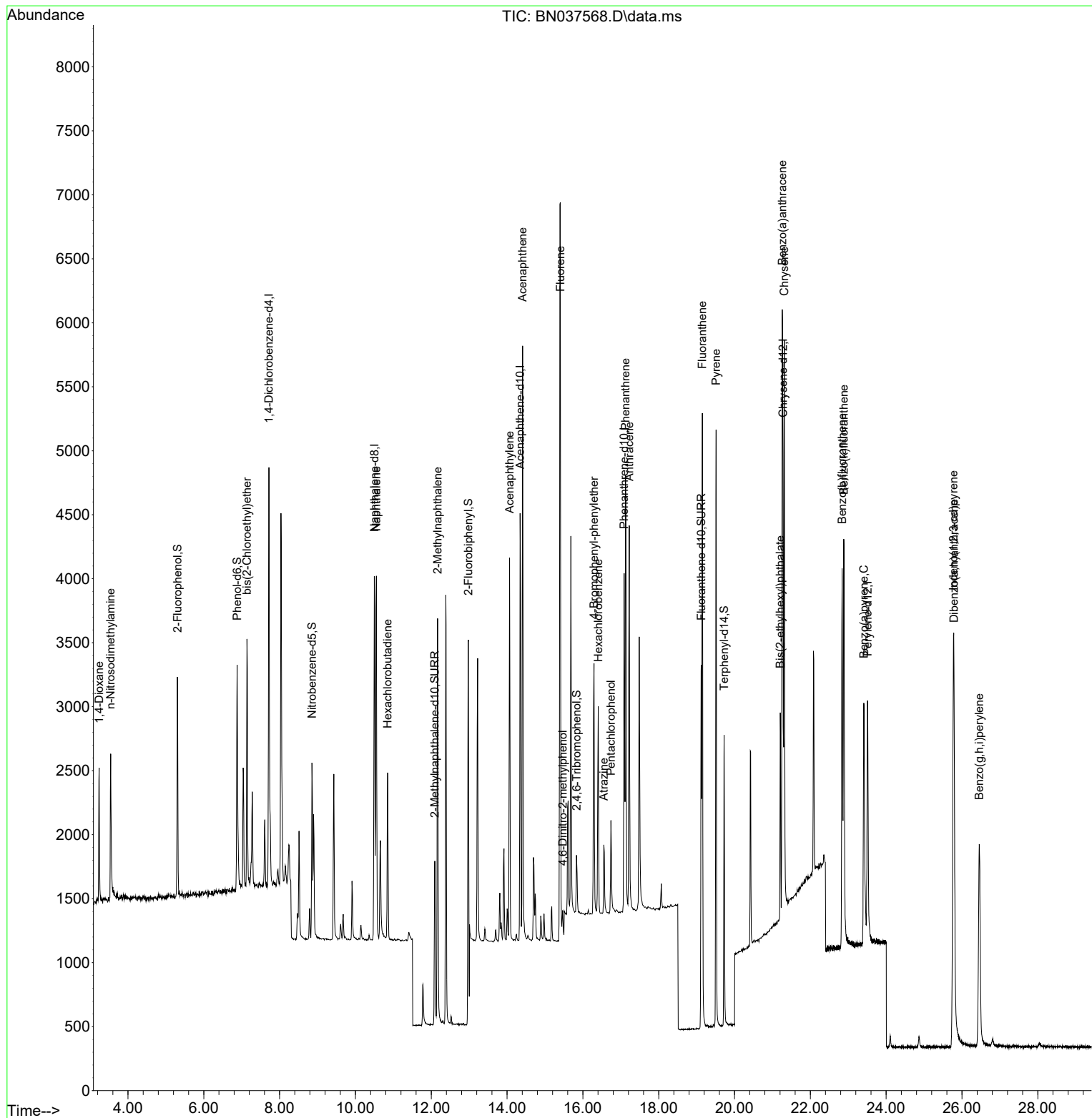
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min)  |
|-------------------------------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |      |          |       |       |           |
| 1) 1,4-Dichlorobenzene-d4     | 7.717  | 152  | 1570     | 0.400 | ng    | 0.00      |
| 7) Naphthalene-d8             | 10.498 | 136  | 3810     | 0.400 | ng    | -0.01     |
| 13) Acenaphthene-d10          | 14.345 | 164  | 1885     | 0.400 | ng    | -0.01     |
| 19) Phenanthrene-d10          | 17.086 | 188  | 3640     | 0.400 | ng    | #-0.01    |
| 29) Chrysene-d12              | 21.277 | 240  | 2815     | 0.400 | ng    | 0.00      |
| 35) Perylene-d12              | 23.510 | 264  | 2610     | 0.400 | ng    | # 0.00    |
| System Monitoring Compounds   |        |      |          |       |       |           |
| 4) 2-Fluorophenol             | 5.305  | 112  | 1319     | 0.340 | ng    | 0.00      |
| 5) Phenol-d6                  | 6.879  | 99   | 1596     | 0.328 | ng    | 0.00      |
| 8) Nitrobenzene-d5            | 8.854  | 82   | 1099     | 0.386 | ng    | -0.01     |
| 11) 2-Methylnaphthalene-d10   | 12.091 | 152  | 1923     | 0.352 | ng    | -0.01     |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 273      | 0.295 | ng    | -0.01     |
| 15) 2-Fluorobiphenyl          | 12.978 | 172  | 3981     | 0.406 | ng    | 0.00      |
| 27) Fluoranthene-d10          | 19.122 | 212  | 3296     | 0.342 | ng    | 0.00      |
| 31) Terphenyl-d14             | 19.726 | 244  | 2306     | 0.381 | ng    | 0.00      |
| Target Compounds              |        |      |          |       |       |           |
| 2) 1,4-Dioxane                | 3.239  | 88   | 609      | 0.404 | ng    | Qvalue 94 |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 869      | 0.458 | ng    | # 76      |
| 6) bis(2-Chloroethyl)ether    | 7.139  | 93   | 1481     | 0.365 | ng    | 97        |
| 9) Naphthalene                | 10.552 | 128  | 3907     | 0.385 | ng    | 98        |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 1070     | 0.476 | ng    | # 99      |
| 12) 2-Methylnaphthalene       | 12.167 | 142  | 2362     | 0.354 | ng    | 95        |
| 16) Acenaphthylene            | 14.067 | 152  | 3171     | 0.376 | ng    | 100       |
| 17) Acenaphthene              | 14.409 | 154  | 2133     | 0.371 | ng    | 93        |
| 18) Fluorene                  | 15.403 | 166  | 2824     | 0.382 | ng    | 98        |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 170      | 0.433 | ng    | 96        |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 843      | 0.361 | ng    | # 87      |
| 22) Hexachlorobenzene         | 16.404 | 284  | 1253     | 0.416 | ng    | 94        |
| 23) Atrazine                  | 16.553 | 200  | 540      | 0.332 | ng    | # 88      |
| 24) Pentachlorophenol         | 16.739 | 266  | 401      | 0.297 | ng    | 98        |
| 25) Phenanthrene              | 17.124 | 178  | 4049     | 0.371 | ng    | 99        |
| 26) Anthracene                | 17.223 | 178  | 3466     | 0.348 | ng    | 100       |
| 28) Fluoranthene              | 19.150 | 202  | 4363     | 0.347 | ng    | 98        |
| 30) Pyrene                    | 19.513 | 202  | 4250     | 0.375 | ng    | 100       |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 3529     | 0.358 | ng    | 97        |
| 33) Chrysene                  | 21.313 | 228  | 4089     | 0.398 | ng    | 98        |
| 34) Bis(2-ethylhexyl)phtha... | 21.205 | 149  | 1659     | 0.374 | ng    | 95        |
| 36) Indeno(1,2,3-cd)pyrene    | 25.776 | 276  | 4202     | 0.387 | ng    | 97        |
| 37) Benzo(b)fluoranthene      | 22.838 | 252  | 3823     | 0.386 | ng    | 97        |
| 38) Benzo(k)fluoranthene      | 22.882 | 252  | 4243     | 0.415 | ng    | 96        |
| 39) Benzo(a)pyrene            | 23.411 | 252  | 3084     | 0.373 | ng    | 93        |
| 40) Dibenzo(a,h)anthracene    | 25.788 | 278  | 3347     | 0.380 | ng    | 96        |
| 41) Benzo(g,h,i)perylene      | 26.455 | 276  | 3483     | 0.382 | ng    | 97        |

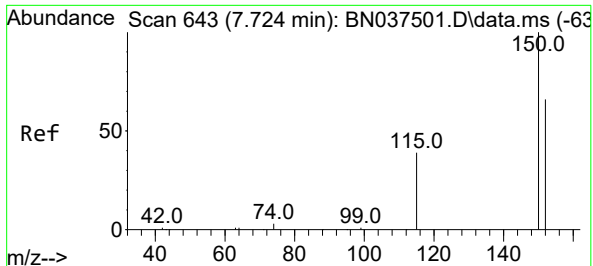
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037568.D  
Acq On : 05 Aug 2025 15:03  
Operator : RC/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

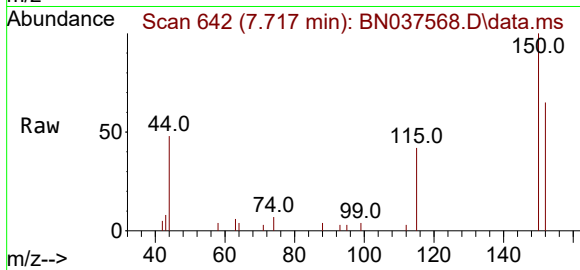
Quant Time: Aug 06 01:40:14 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration



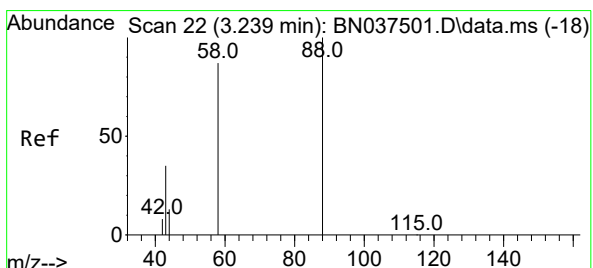
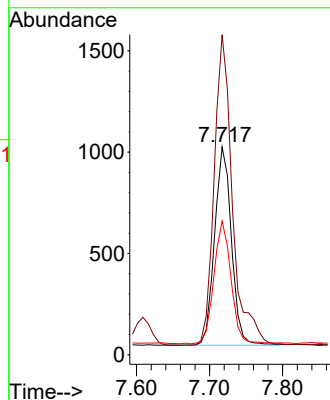
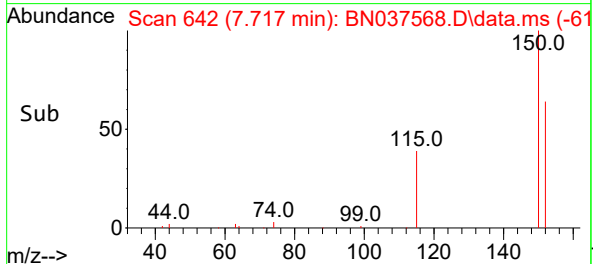


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 64  
Delta R.T. -0.007 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

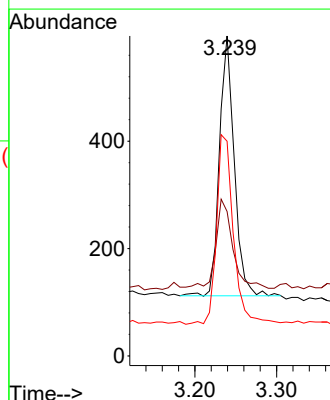
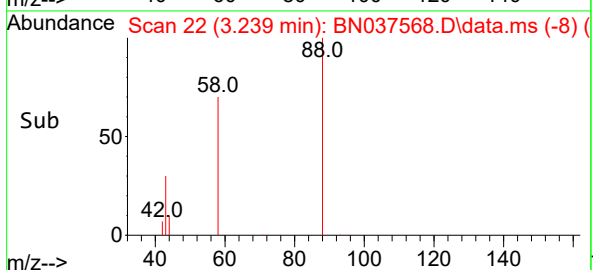
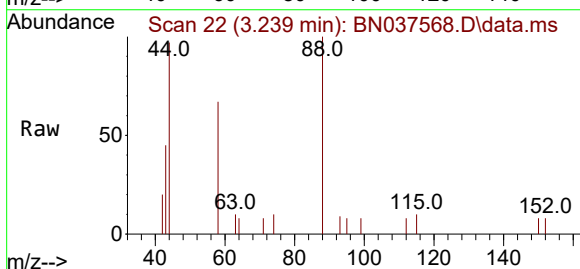


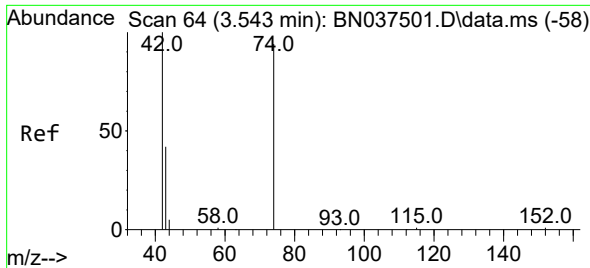
Tgt Ion:152 Resp: 1570  
Ion Ratio Lower Upper  
152 100  
150 154.0 119.8 179.8  
115 64.3 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.404 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion: 88 Resp: 609  
Ion Ratio Lower Upper  
88 100  
43 39.6 27.5 41.3  
58 83.1 62.7 94.1

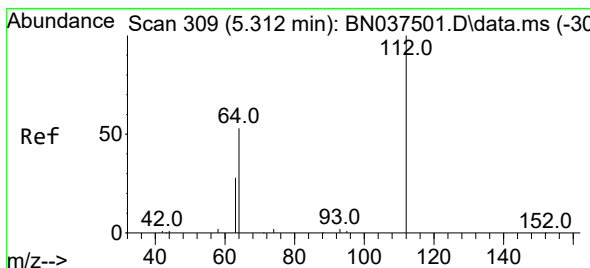
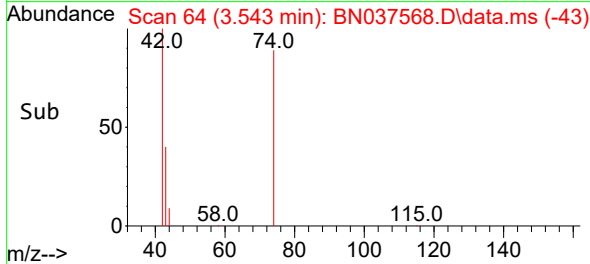
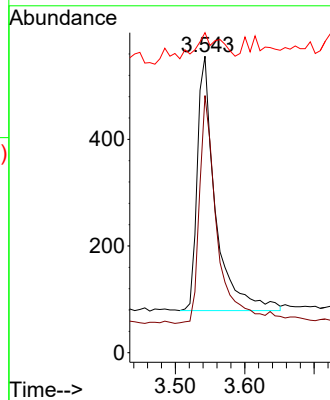
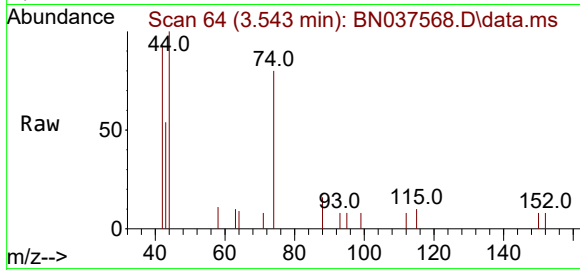




#3  
n-Nitrosodimethylamine  
Concen: 0.458 ng  
RT: 3.543 min Scan# 64  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

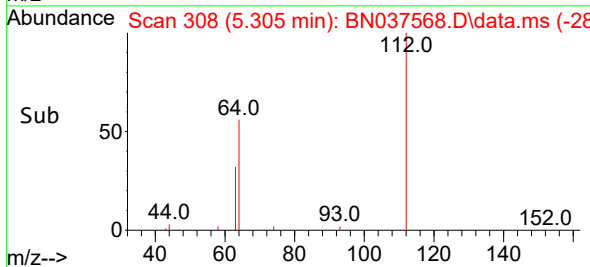
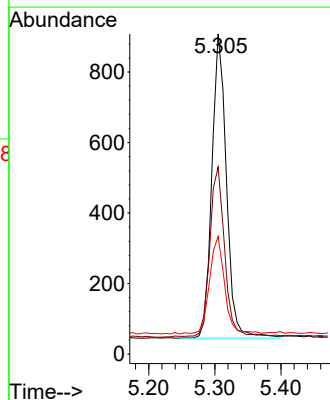
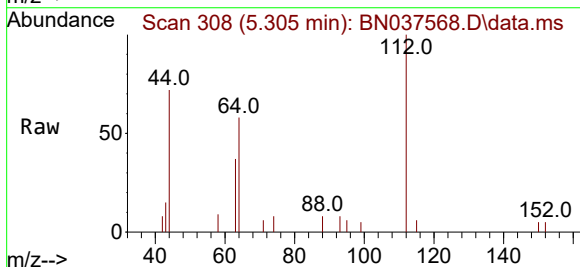
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

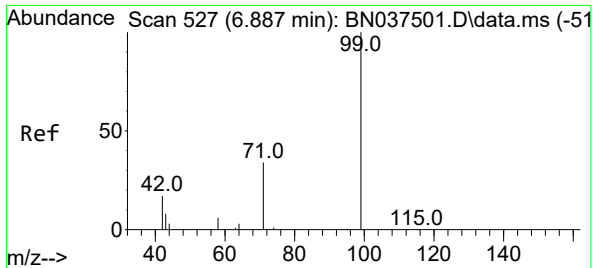
Tgt Ion: 42 Resp: 869  
Ion Ratio Lower Upper  
42 100  
74 86.2 91.8 137.6#  
44 13.2 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.340 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion: 112 Resp: 1319  
Ion Ratio Lower Upper  
112 100  
64 57.8 45.1 67.7  
63 33.3 23.8 35.8

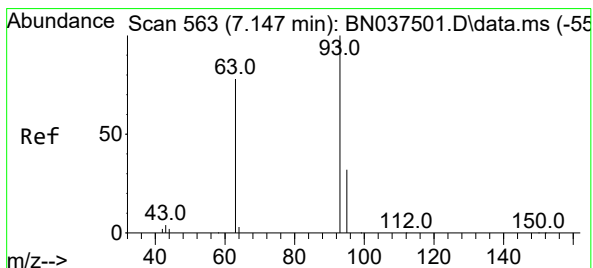
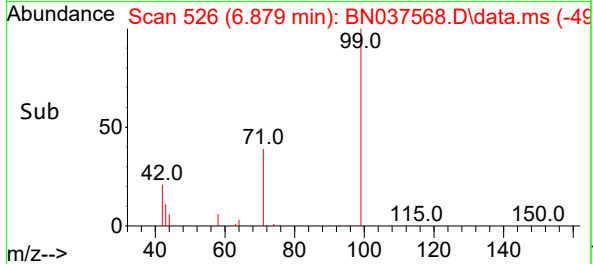
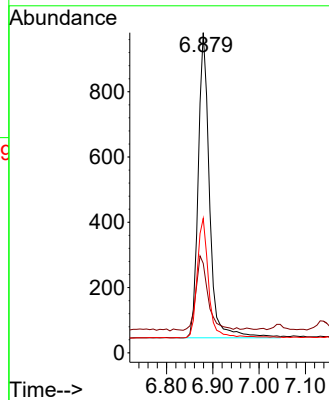
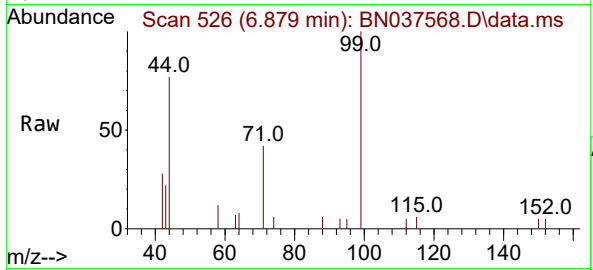




#5  
Phenol-d6  
Concen: 0.328 ng  
RT: 6.879 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

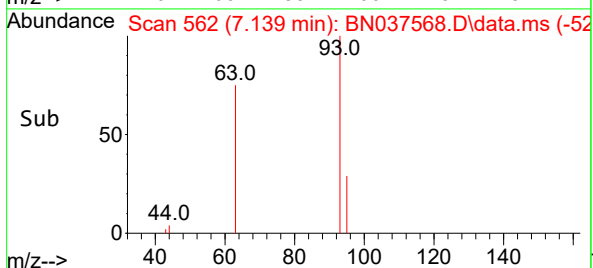
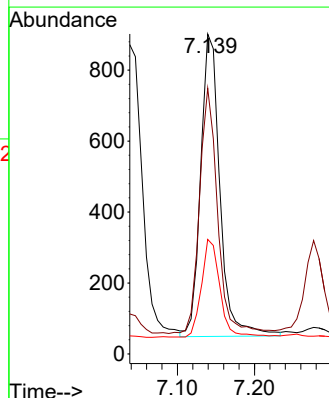
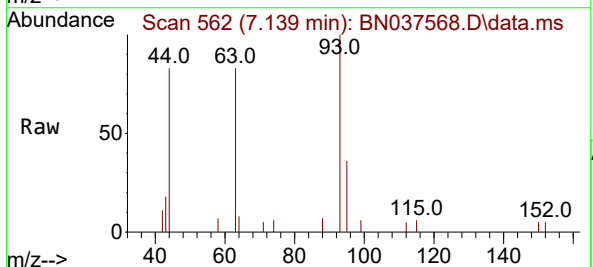
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

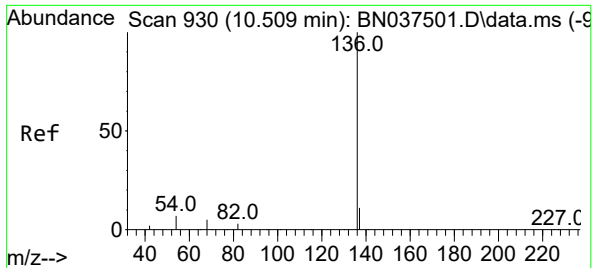
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 99      | 100   |       |       |
| 42      | 25.8  | 17.1  | 25.7# |
| 71      | 39.8  | 27.8  | 41.8  |



#6  
bis(2-Chloroethyl)ether  
Concen: 0.365 ng  
RT: 7.139 min Scan# 562  
Delta R.T. -0.007 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 93      | 100   |       |       |
| 63      | 76.0  | 58.2  | 87.4  |
| 95      | 30.9  | 25.3  | 37.9  |

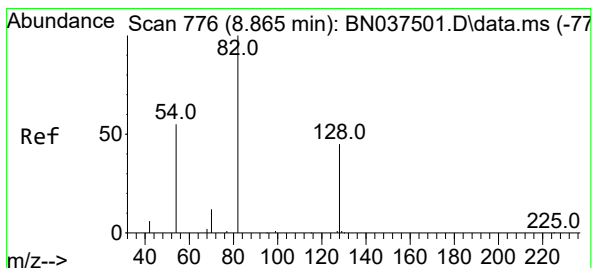
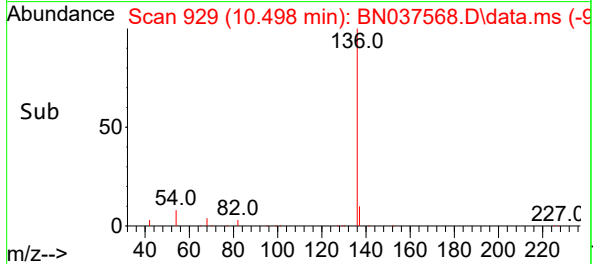
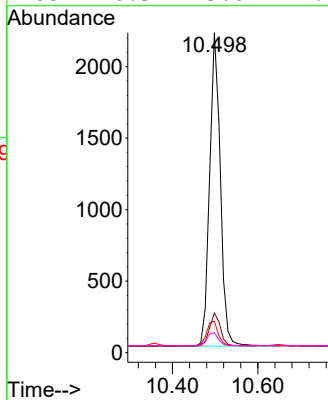
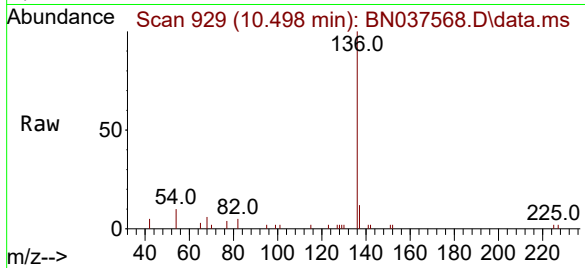




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 91  
Delta R.T. -0.011 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

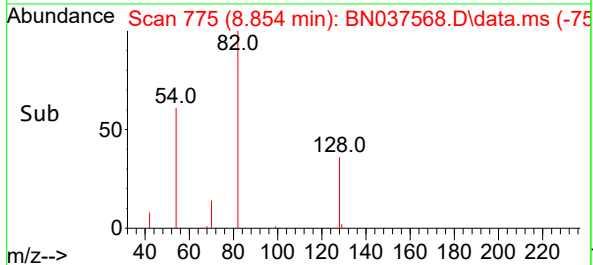
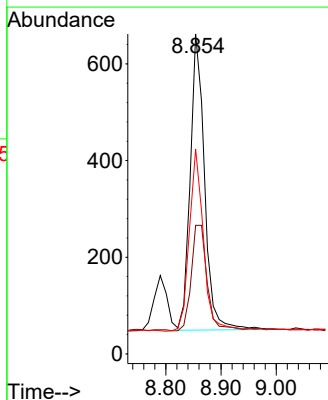
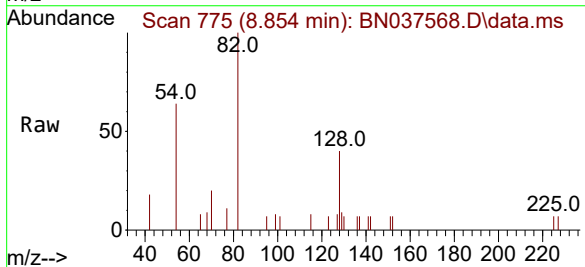
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

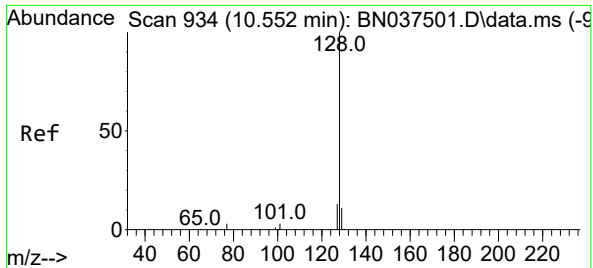
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 3810  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.4  | 9.8   | 14.8  |
| 54       | 9.8   | 6.6   | 9.8   |
| 68       | 6.3   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 0.386 ng  
RT: 8.854 min Scan# 775  
Delta R.T. -0.011 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1099  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 40.2  | 37.5  | 56.3  |
| 54       | 64.0  | 45.3  | 67.9  |

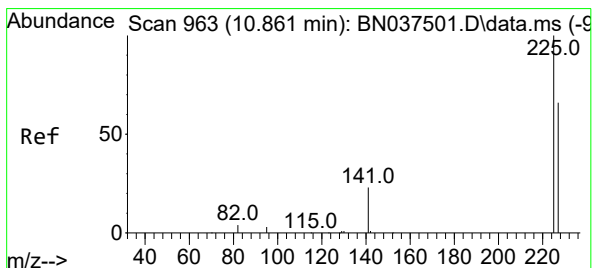
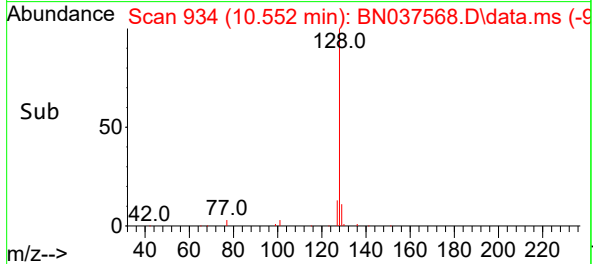
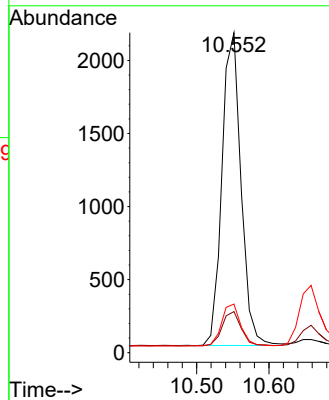
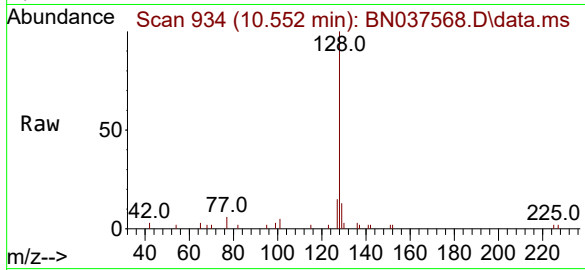




#9  
Naphthalene  
Concen: 0.385 ng  
RT: 10.552 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

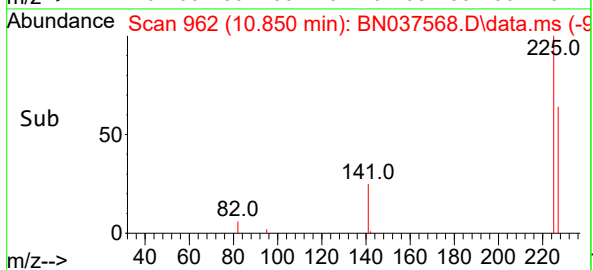
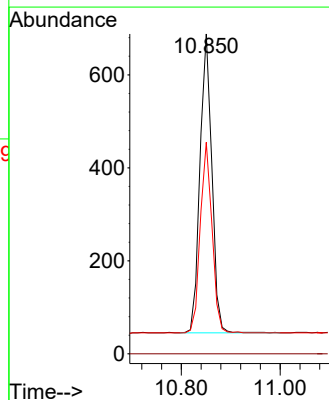
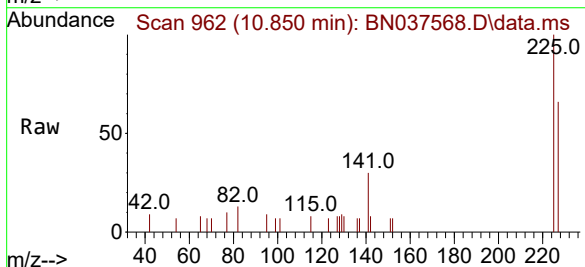
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

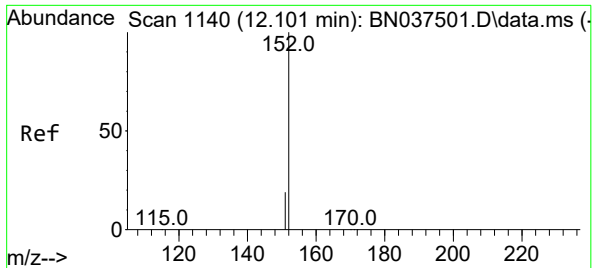
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 3907  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 12.8  | 9.7   | 14.5  |
| 127      | 15.2  | 11.5  | 17.3  |



#10  
Hexachlorobutadiene  
Concen: 0.476 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 225   | Resp: | 1070  |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 0.0   | 0.0   | 0.0   |
| 227      | 63.1  | 51.0  | 76.4  |

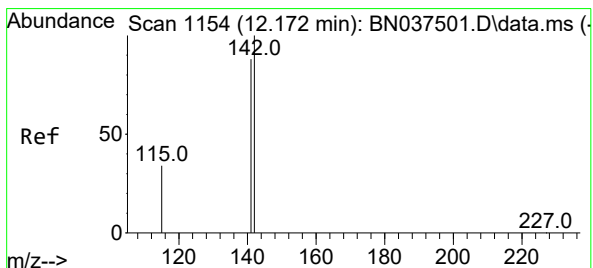
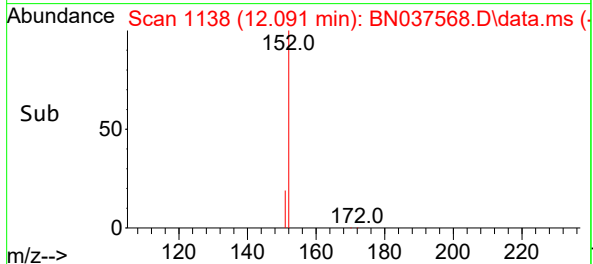
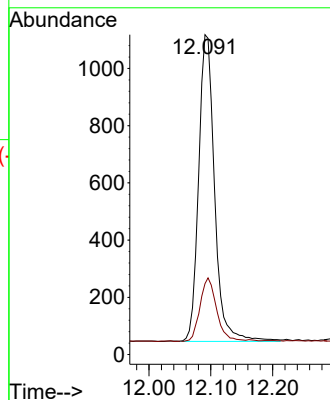
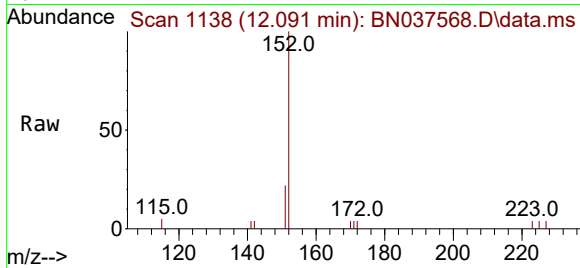




#11  
2-Methylnaphthalene-d10  
Concen: 0.352 ng  
RT: 12.091 min Scan# 1138  
Delta R.T. -0.010 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

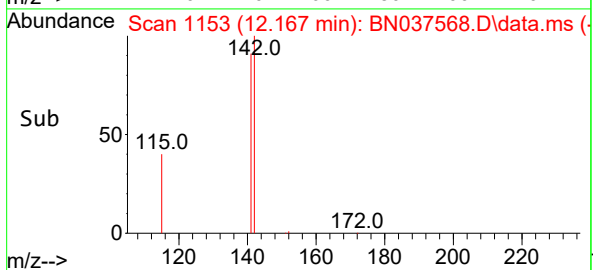
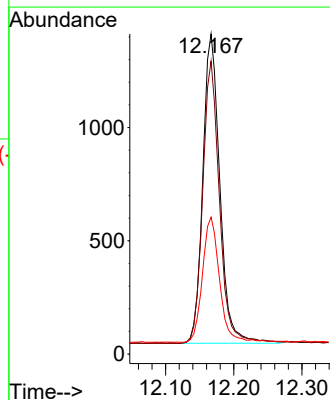
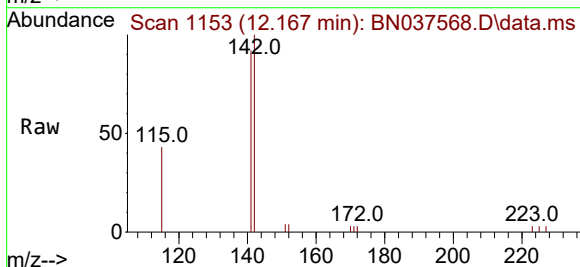
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

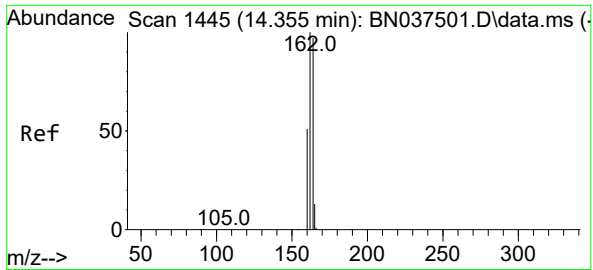
Tgt Ion:152 Resp: 1923  
Ion Ratio Lower Upper  
152 100  
151 21.5 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.354 ng  
RT: 12.167 min Scan# 1153  
Delta R.T. -0.005 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion:142 Resp: 2362  
Ion Ratio Lower Upper  
142 100  
141 91.5 71.0 106.4  
115 42.7 29.0 43.4

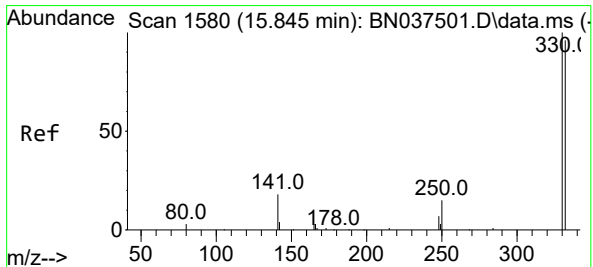
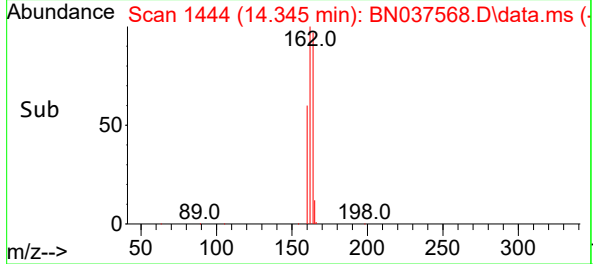
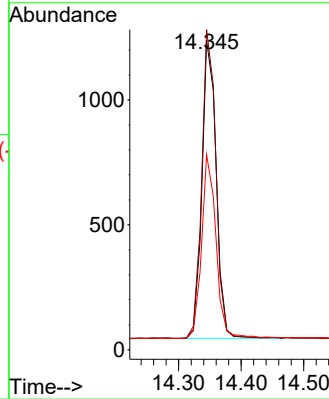
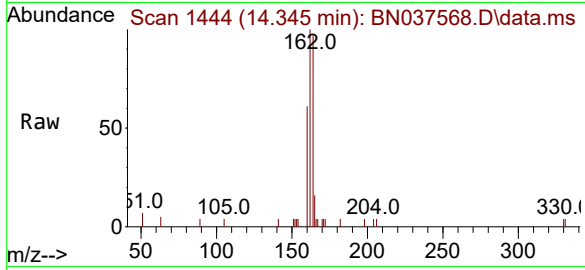




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.345 min Scan# 1445  
Delta R.T. -0.011 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

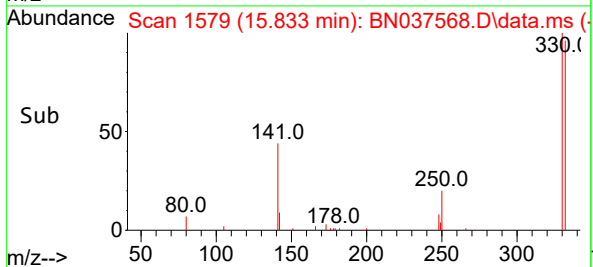
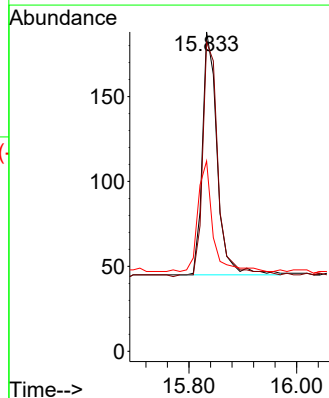
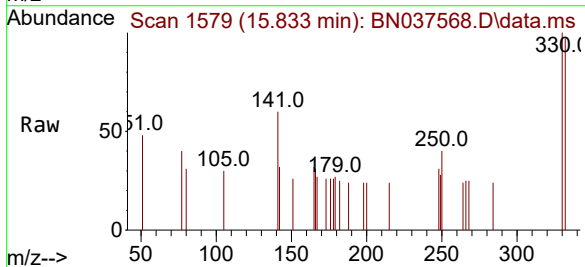
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

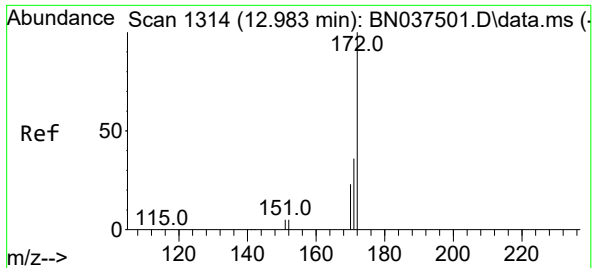
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.5 | 82.0  | 123.0 |
| 160     | 63.1  | 42.4  | 63.6  |



#14  
2,4,6-Tribromophenol  
Concen: 0.295 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.012 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 102.6 | 76.1  | 114.1 |
| 141     | 45.4  | 33.4  | 50.0  |

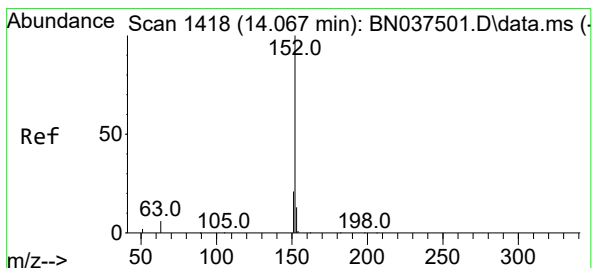
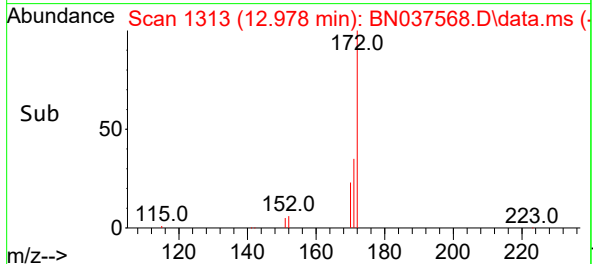
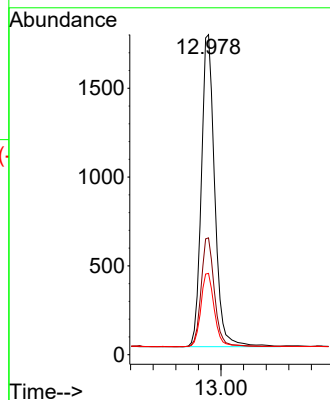
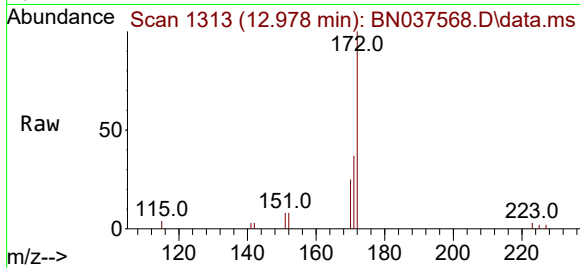




#15  
2-Fluorobiphenyl  
Concen: 0.406 ng  
RT: 12.978 min Scan# 1314  
Delta R.T. -0.005 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

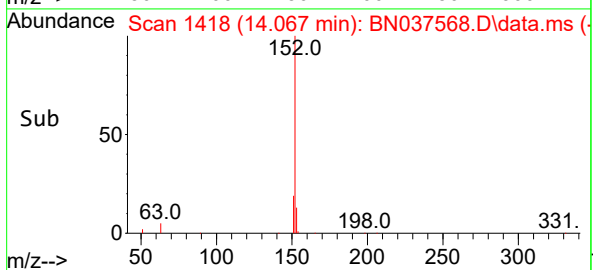
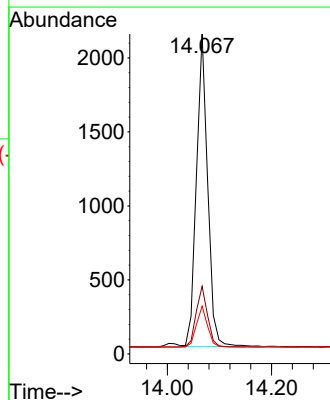
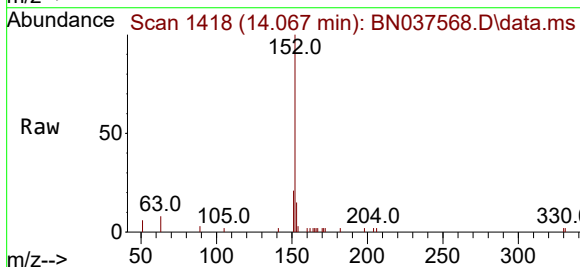
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

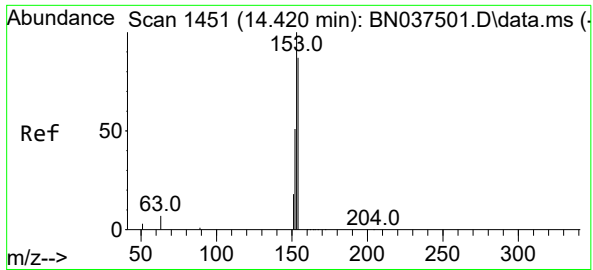
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 172   | Resp: | 3981  |
| Ion      | Ratio | Lower | Upper |
| 172      | 100   |       |       |
| 171      | 36.5  | 29.4  | 44.2  |
| 170      | 25.4  | 19.4  | 29.0  |



#16  
Acenaphthylene  
Concen: 0.376 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 3171  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 20.0  | 15.9  | 23.9  |
| 153      | 13.1  | 10.7  | 16.1  |

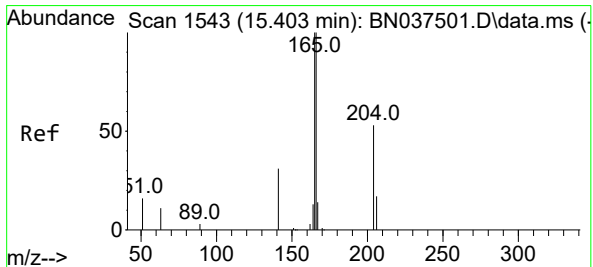
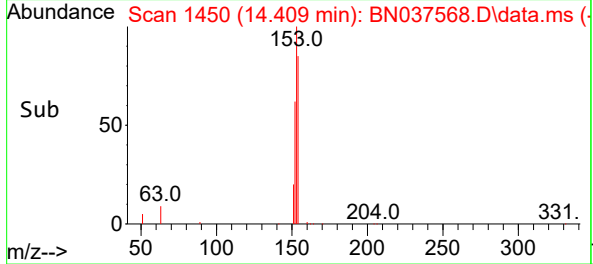
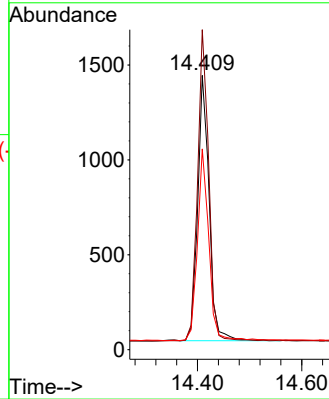
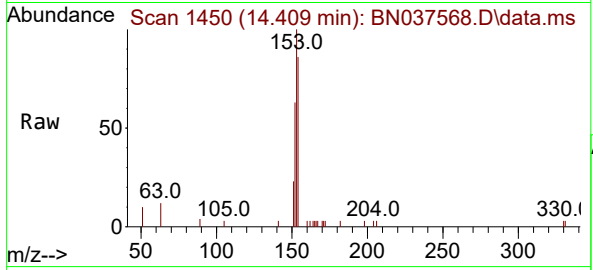




#17  
Acenaphthene  
Concen: 0.371 ng  
RT: 14.409 min Scan# 1451  
Delta R.T. -0.011 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

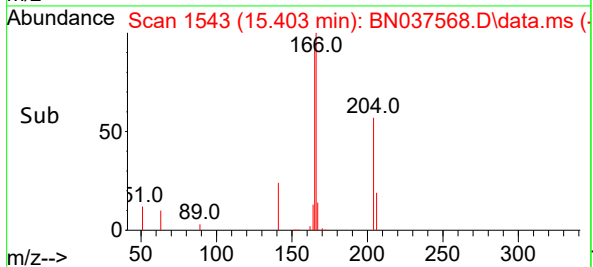
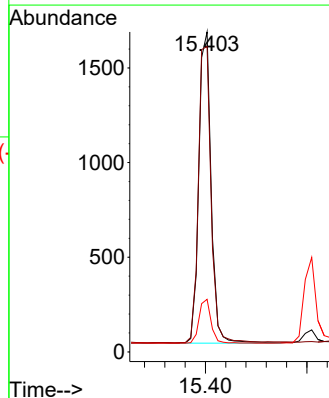
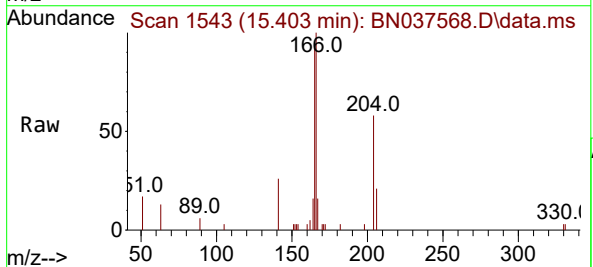
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

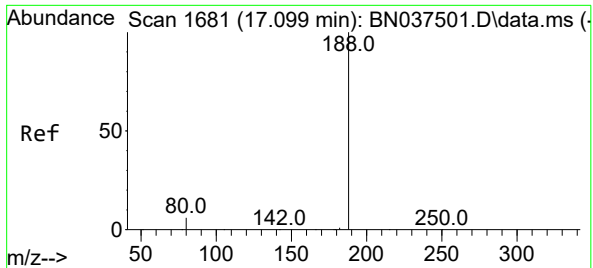
Tgt Ion:154 Resp: 2133  
Ion Ratio Lower Upper  
154 100  
153 114.1 89.2 133.8  
152 71.9 48.0 72.0



#18  
Fluorene  
Concen: 0.382 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion:166 Resp: 2824  
Ion Ratio Lower Upper  
166 100  
165 95.5 78.1 117.1  
167 13.4 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

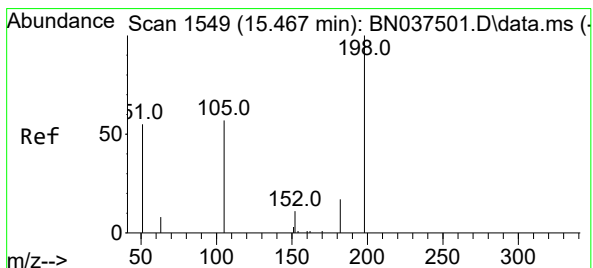
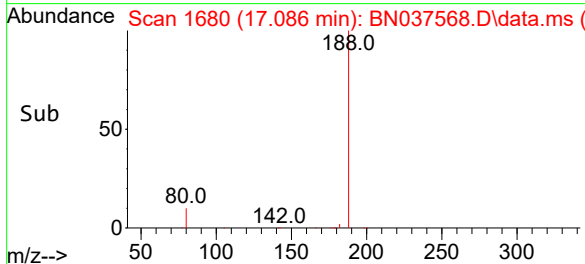
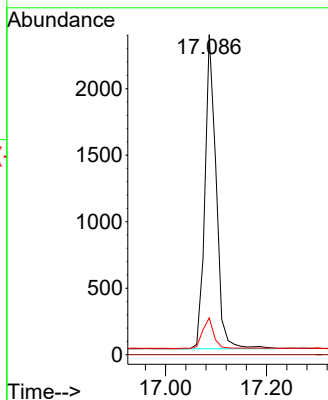
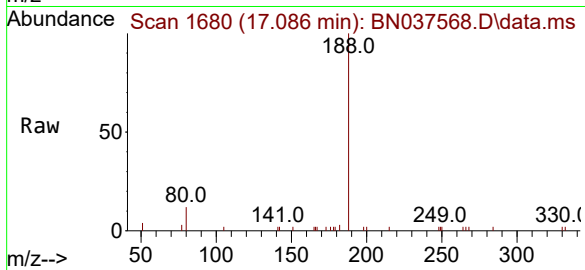
Tgt Ion:188 Resp: 3640

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.5 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.433 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

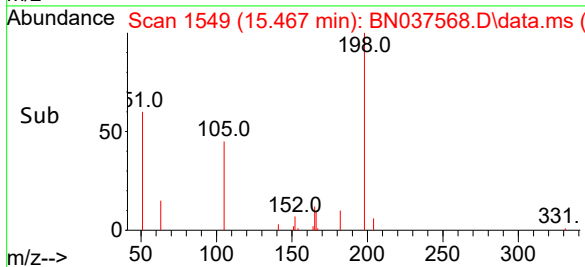
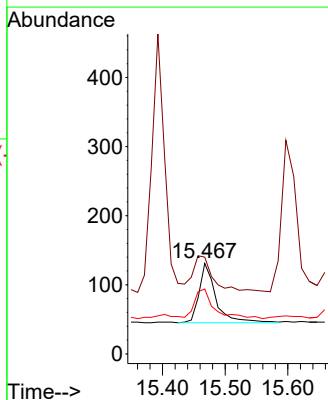
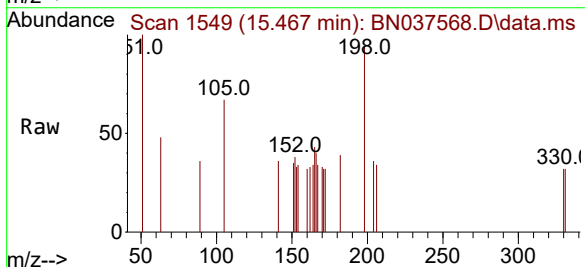
Tgt Ion:198 Resp: 170

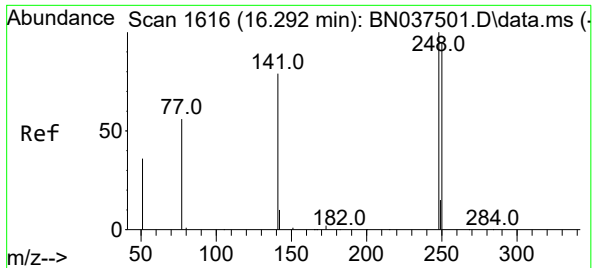
Ion Ratio Lower Upper

198 100

51 106.9 88.5 132.7

105 71.8 61.2 91.8

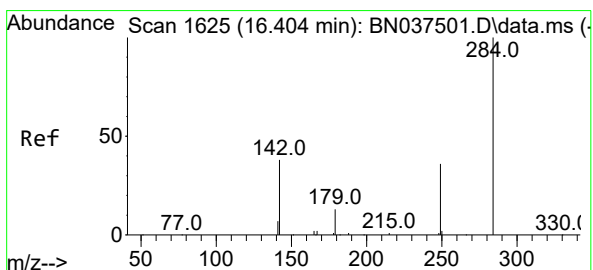
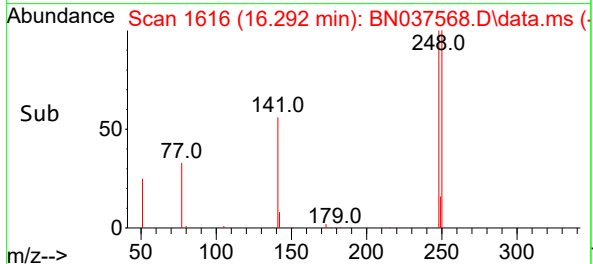
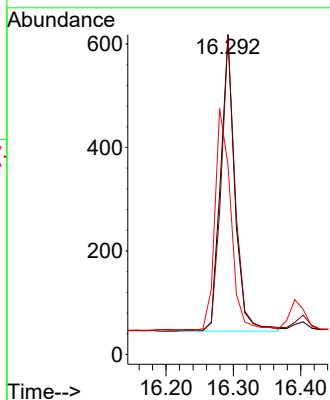
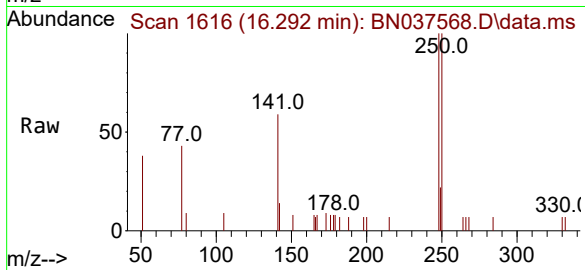




#21  
4-Bromophenyl-phenylether  
Concen: 0.361 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

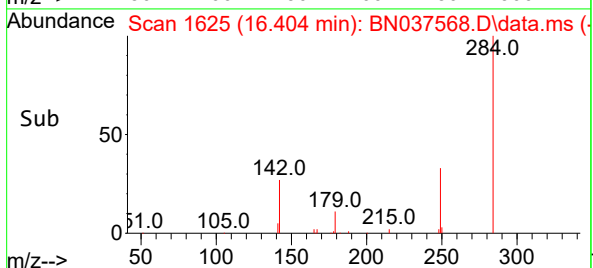
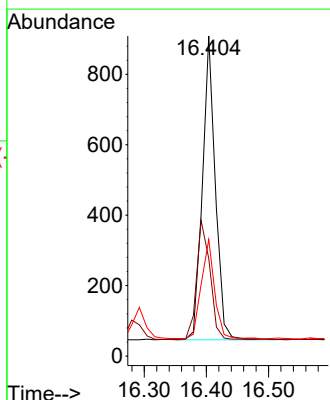
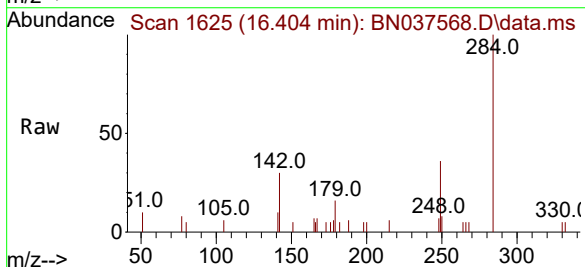
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

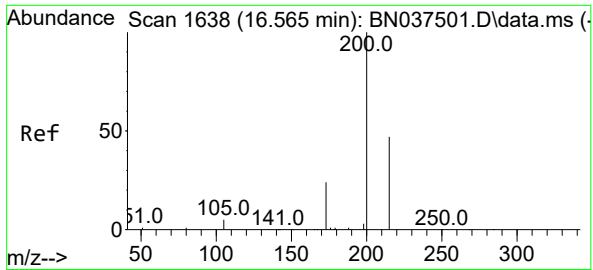
Tgt Ion:248 Resp: 843  
Ion Ratio Lower Upper  
248 100  
250 100.0 76.2 114.2  
141 59.4 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.416 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion:284 Resp: 1253  
Ion Ratio Lower Upper  
284 100  
142 40.6 28.9 43.3  
249 34.0 25.8 38.6

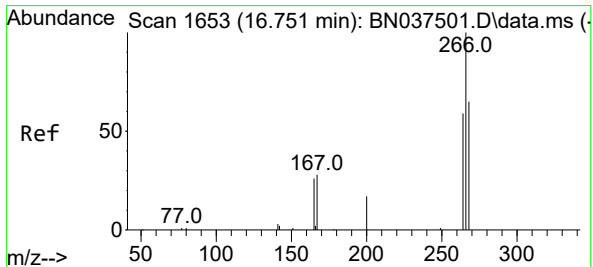
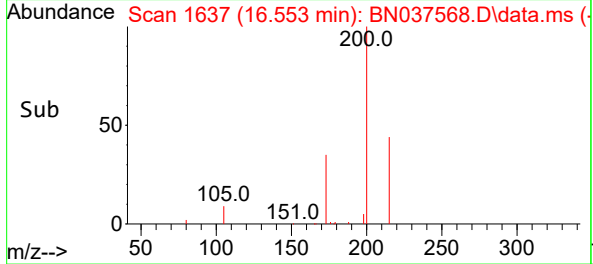
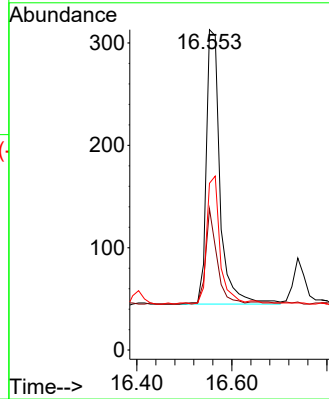
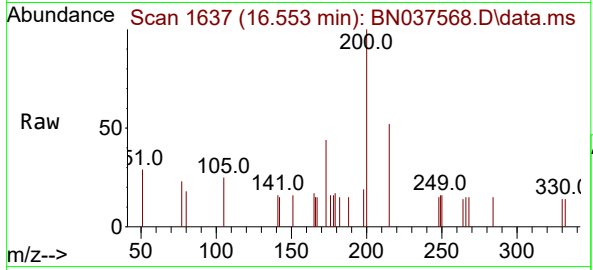




#23  
Atrazine  
Concen: 0.332 ng  
RT: 16.553 min Scan# 1637  
Delta R.T. -0.012 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

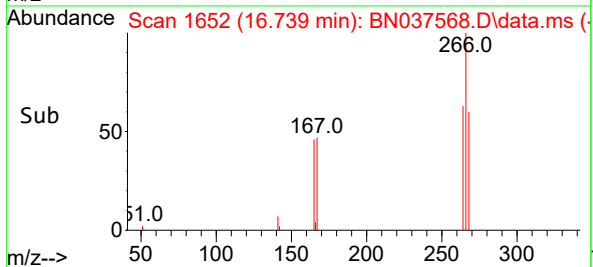
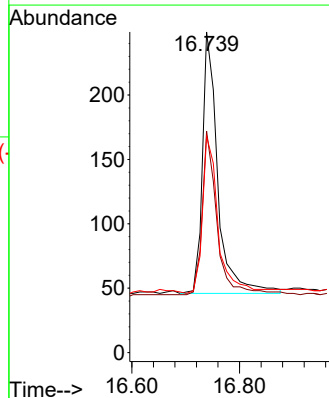
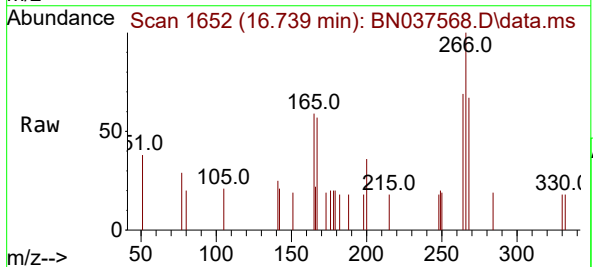
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

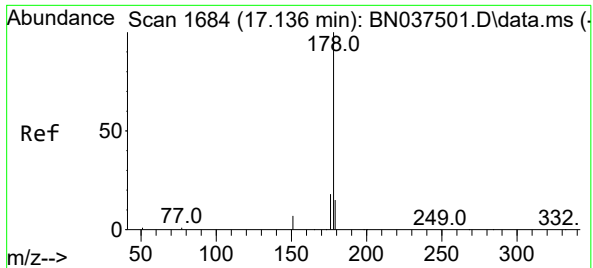
Tgt Ion:200 Resp: 540  
Ion Ratio Lower Upper  
200 100  
173 44.1 23.2 34.8#  
215 52.1 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.297 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.012 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion:266 Resp: 401  
Ion Ratio Lower Upper  
266 100  
264 60.1 49.3 73.9  
268 63.1 51.6 77.4

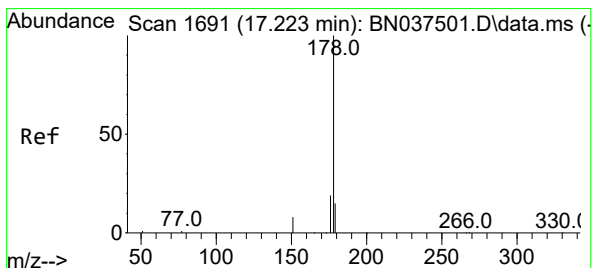
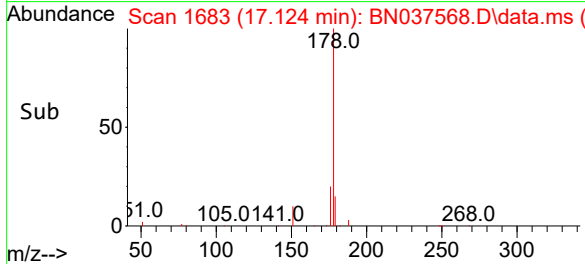
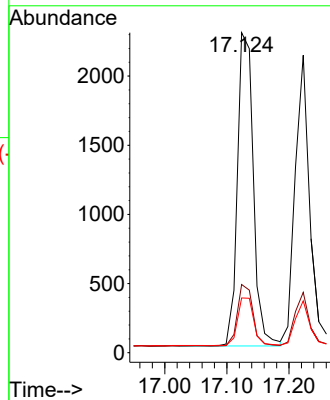
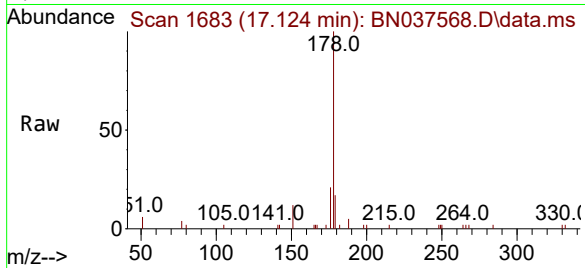




#25  
Phenanthrene  
Concen: 0.371 ng  
RT: 17.124 min Scan# 1683  
Delta R.T. -0.012 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

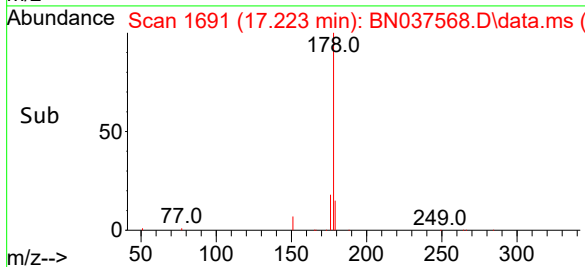
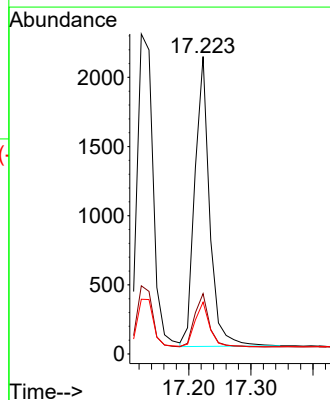
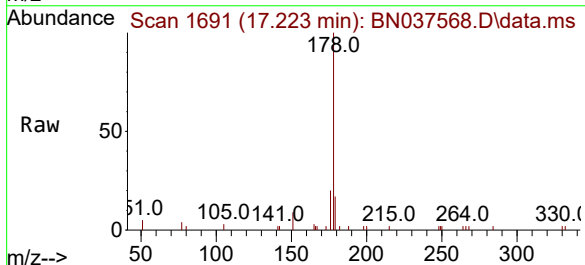
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

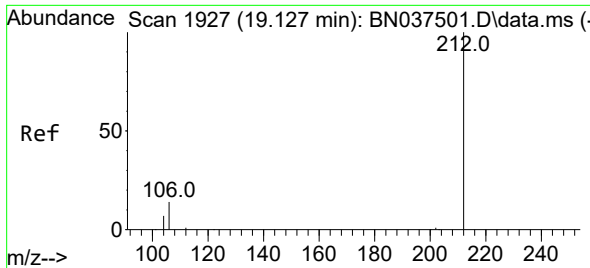
Tgt Ion:178 Resp: 4049  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.0 22.6  
179 15.6 12.2 18.2



#26  
Anthracene  
Concen: 0.348 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion:178 Resp: 3466  
Ion Ratio Lower Upper  
178 100  
176 18.4 14.7 22.1  
179 15.4 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.342 ng

RT: 19.122 min Scan# 1926

Delta R.T. -0.005 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

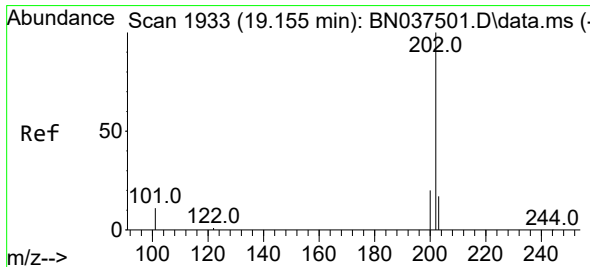
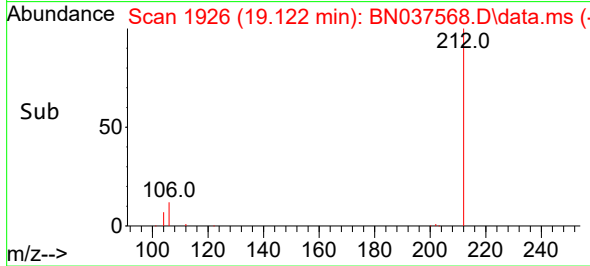
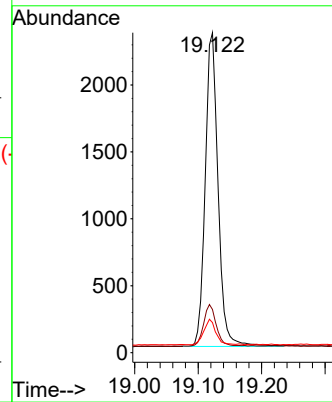
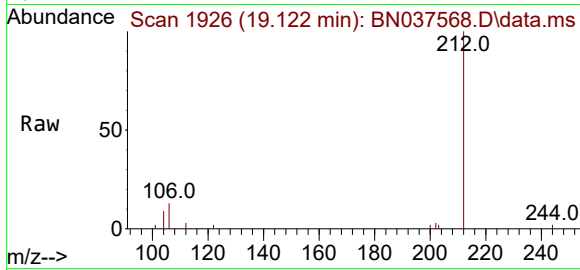
Tgt Ion:212 Resp: 3296

Ion Ratio Lower Upper

212 100

106 13.0 12.2 18.4

104 7.5 6.7 10.1



#28

Fluoranthene

Concen: 0.347 ng

RT: 19.150 min Scan# 1932

Delta R.T. -0.005 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

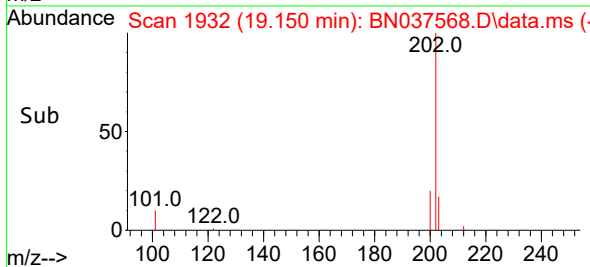
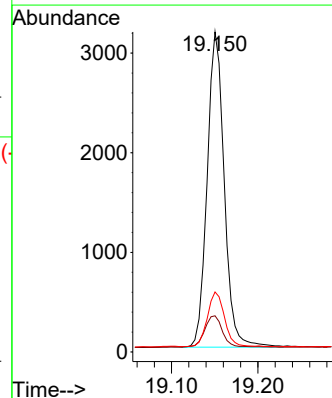
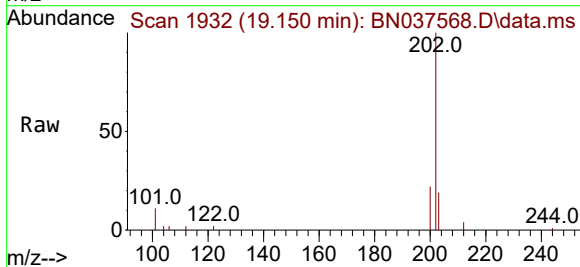
Tgt Ion:202 Resp: 4363

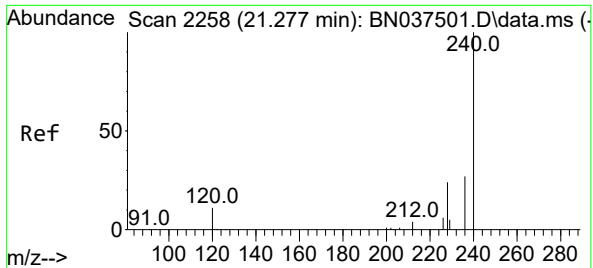
Ion Ratio Lower Upper

202 100

101 10.6 9.8 14.6

203 17.3 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

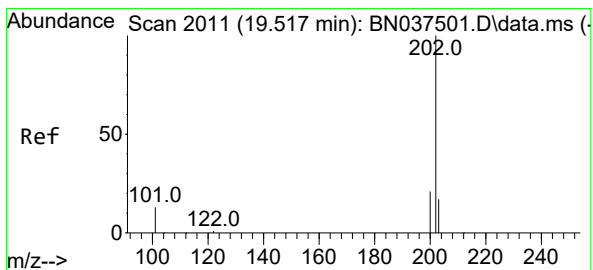
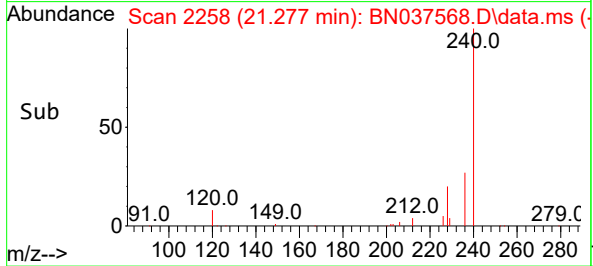
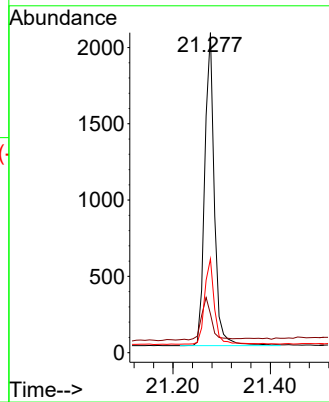
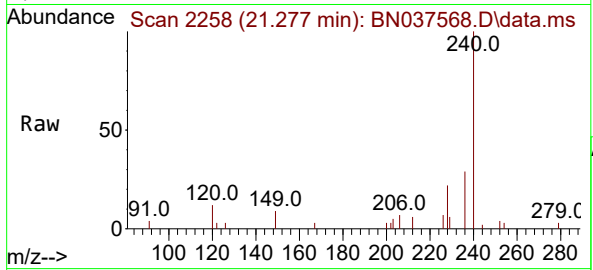
Tgt Ion:240 Resp: 2815

Ion Ratio Lower Upper

240 100

120 12.1 10.7 16.1

236 29.3 22.6 33.8



#30

Pyrene

Concen: 0.375 ng

RT: 19.513 min Scan# 2010

Delta R.T. -0.005 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

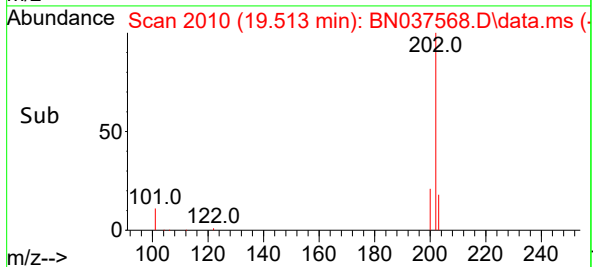
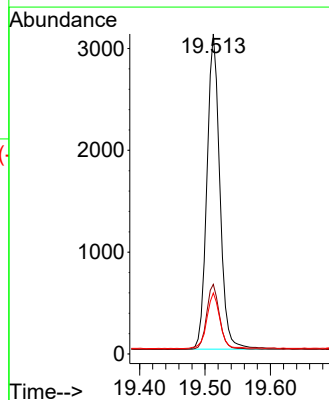
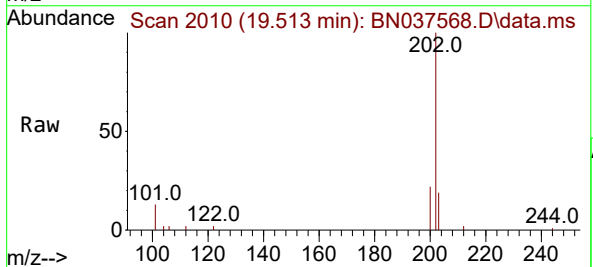
Tgt Ion:202 Resp: 4250

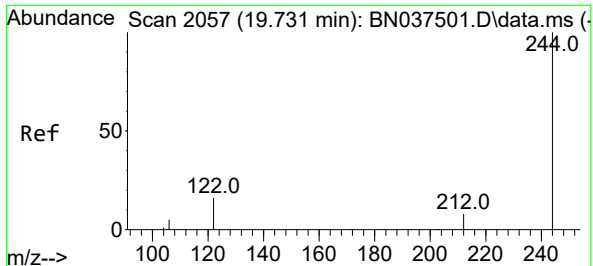
Ion Ratio Lower Upper

202 100

200 20.4 16.5 24.7

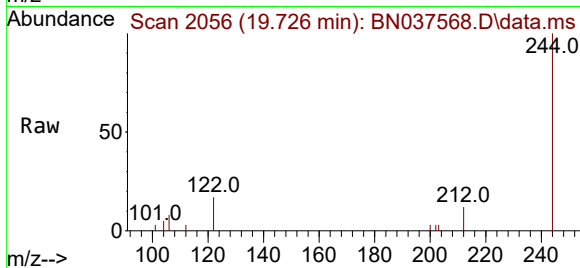
203 17.7 14.3 21.5



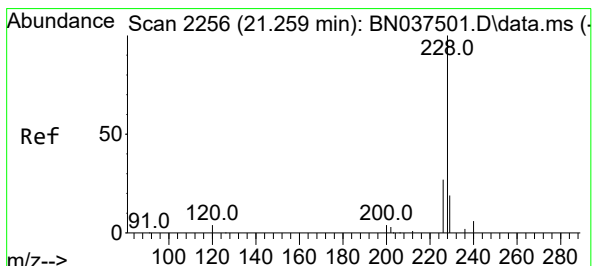
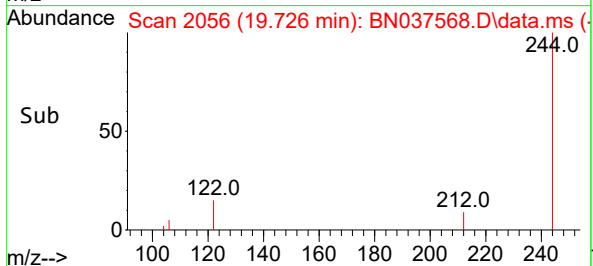
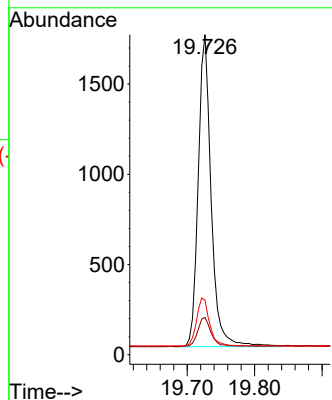


#31  
Terphenyl-d14  
Concen: 0.381 ng  
RT: 19.726 min Scan# 2056  
Delta R.T. -0.005 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

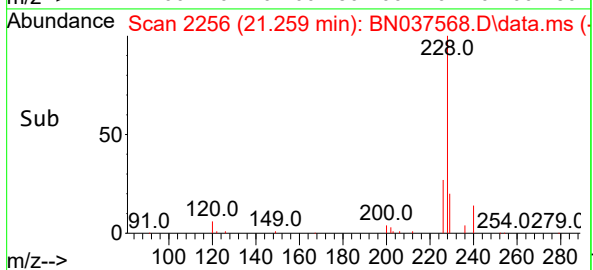
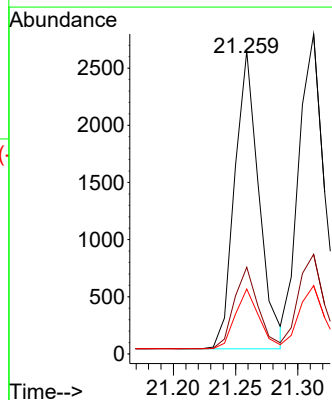
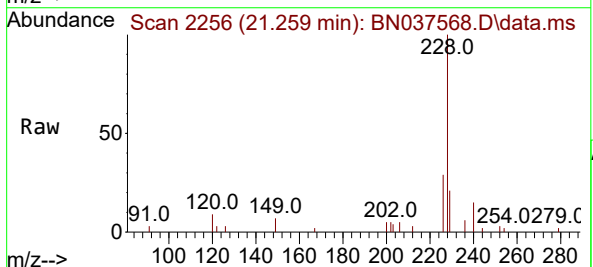


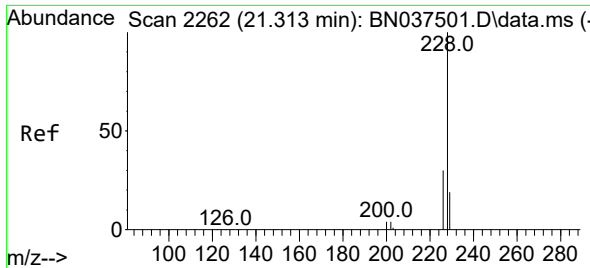
Tgt Ion:244 Resp: 2306  
Ion Ratio Lower Upper  
244 100  
212 11.7 7.4 11.2#  
122 17.1 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.358 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion:228 Resp: 3529  
Ion Ratio Lower Upper  
228 100  
226 28.6 21.9 32.9  
229 21.4 15.8 23.8





#33

Chrysene

Concen: 0.398 ng

RT: 21.313 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

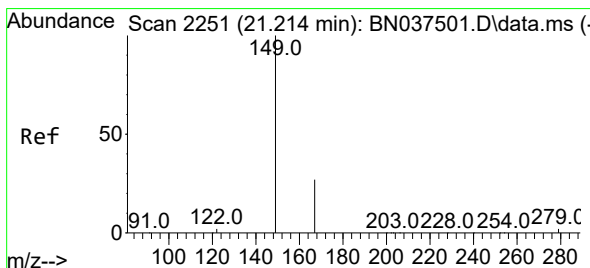
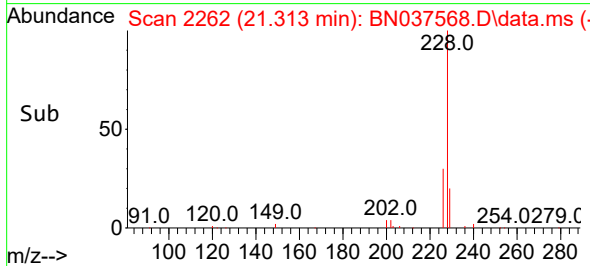
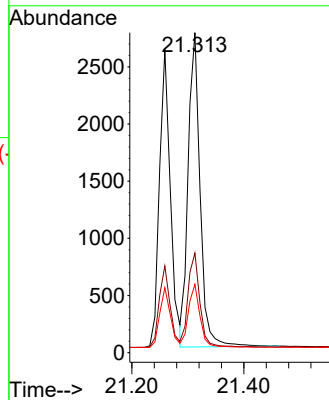
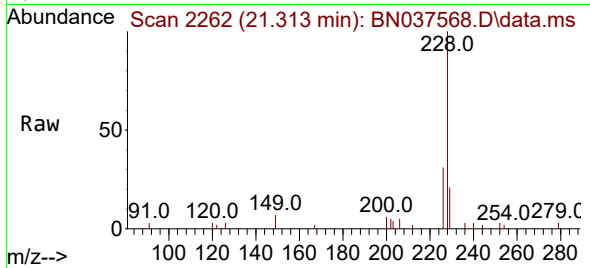
Tgt Ion:228 Resp: 4089

Ion Ratio Lower Upper

228 100

226 31.2 24.2 36.4

229 21.3 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.374 ng

RT: 21.205 min Scan# 2250

Delta R.T. -0.009 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

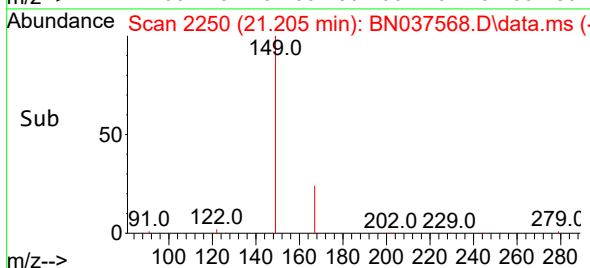
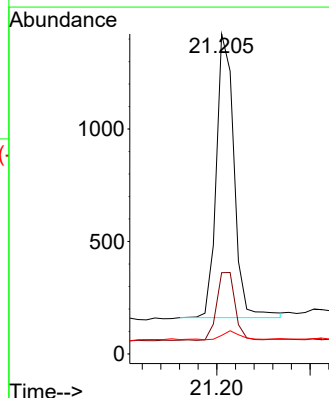
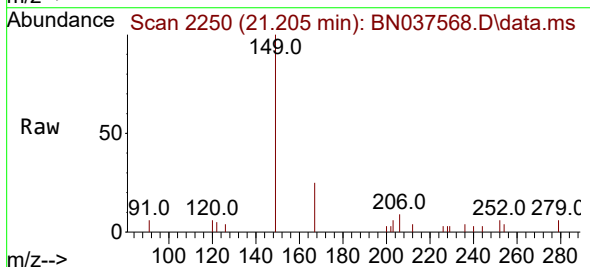
Tgt Ion:149 Resp: 1659

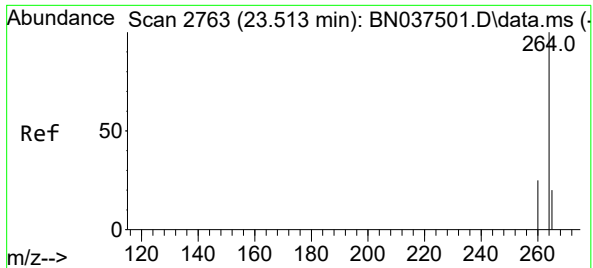
Ion Ratio Lower Upper

149 100

167 24.5 21.8 32.8

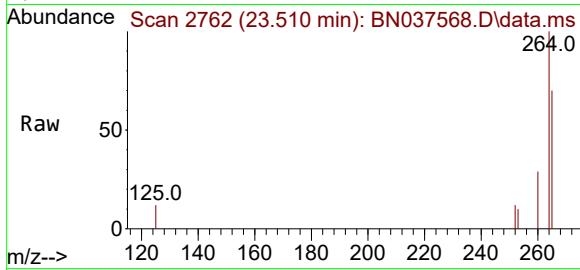
279 3.1 3.0 4.4



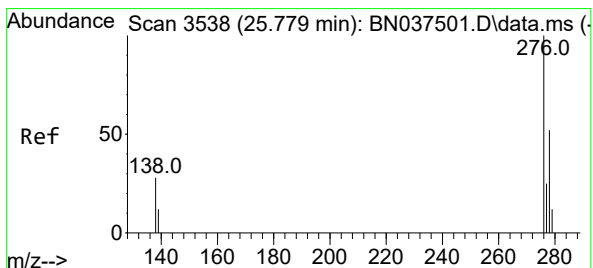
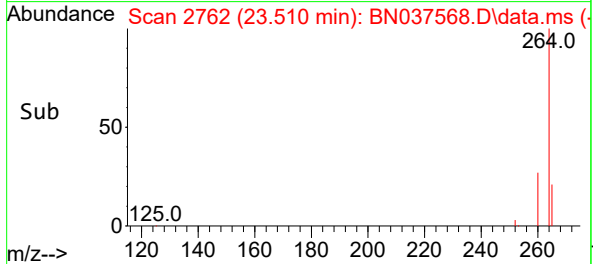
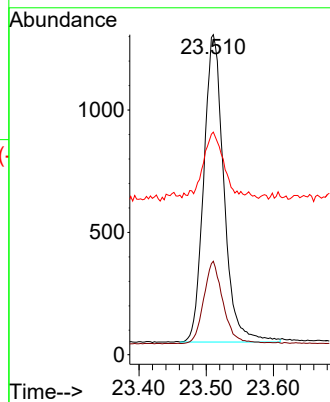


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.510 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

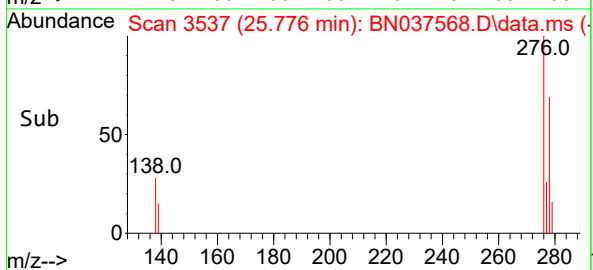
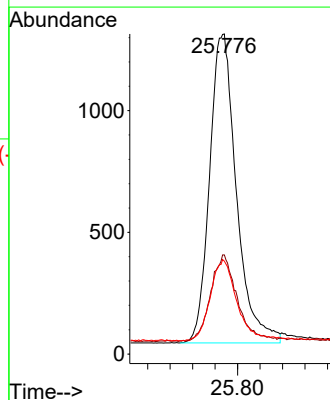
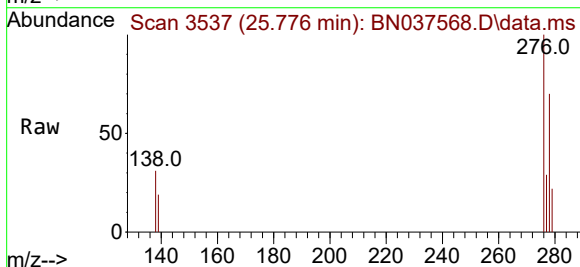


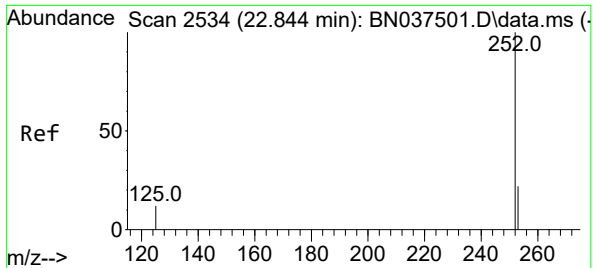
Tgt Ion:264 Resp: 2610  
Ion Ratio Lower Upper  
264 100  
260 29.2 21.2 31.8  
265 69.6 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.387 ng  
RT: 25.776 min Scan# 3537  
Delta R.T. -0.003 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

Tgt Ion:276 Resp: 4202  
Ion Ratio Lower Upper  
276 100  
138 27.6 24.0 36.0  
277 25.9 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.386 ng

RT: 22.838 min Scan# 21

Delta R.T. -0.006 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

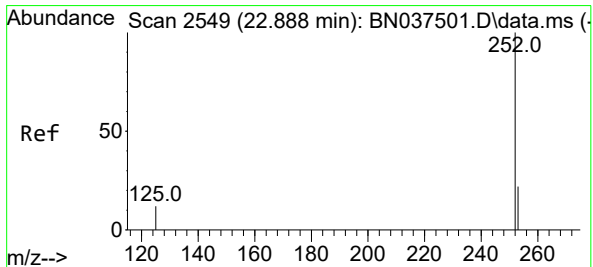
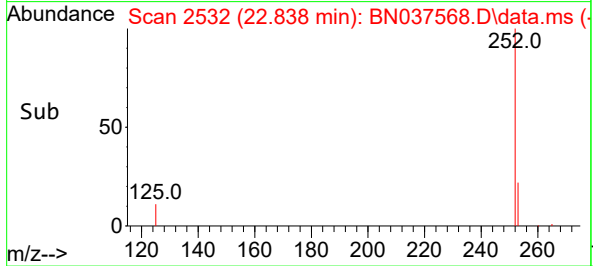
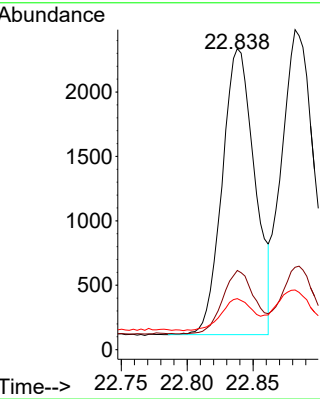
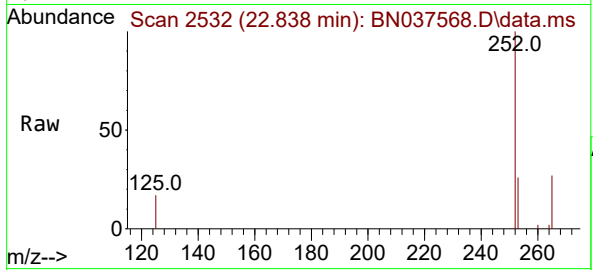
Tgt Ion:252 Resp: 3823

Ion Ratio Lower Upper

252 100

253 26.3 19.5 29.3

125 16.9 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.415 ng

RT: 22.882 min Scan# 2547

Delta R.T. -0.006 min

Lab File: BN037568.D

Acq: 05 Aug 2025 15:03

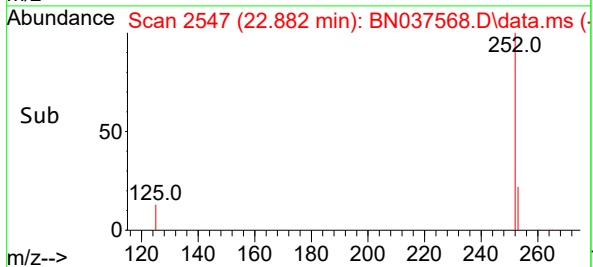
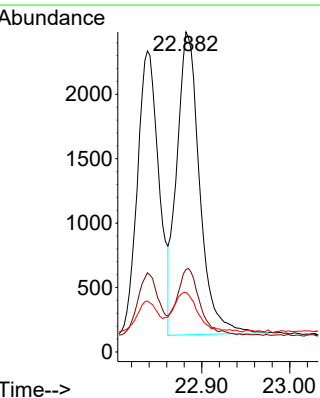
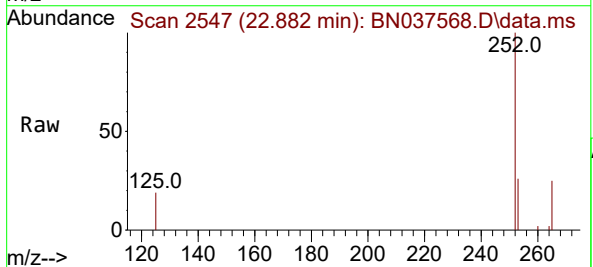
Tgt Ion:252 Resp: 4243

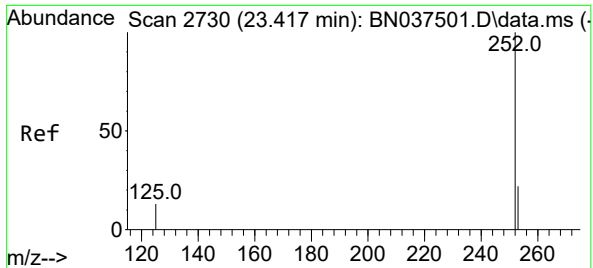
Ion Ratio Lower Upper

252 100

253 25.7 19.5 29.3

125 18.6 13.1 19.7

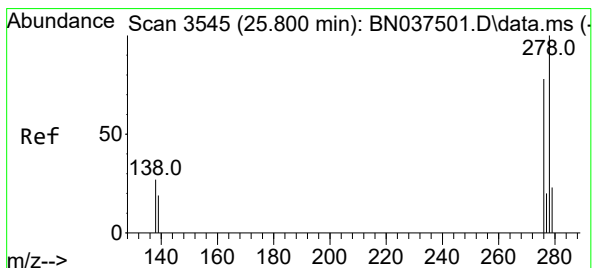
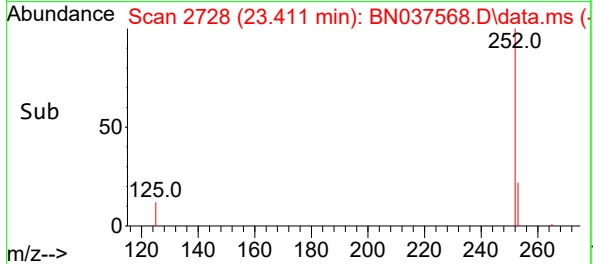
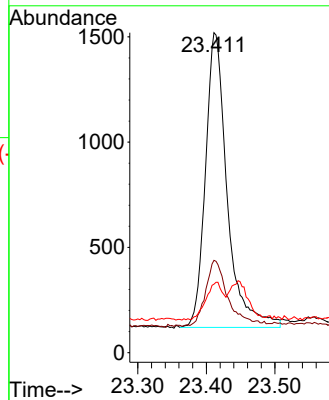
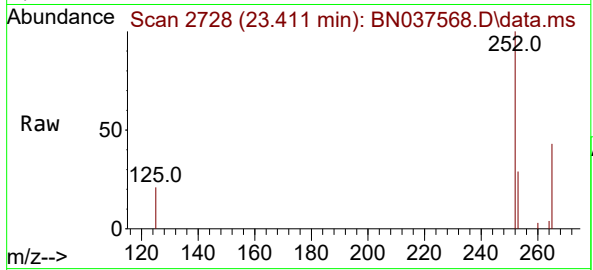




#39  
Benzo(a)pyrene  
Concen: 0.373 ng  
RT: 23.411 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

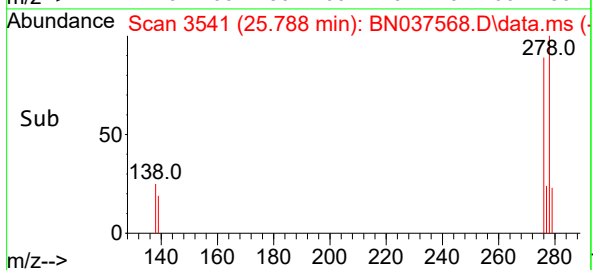
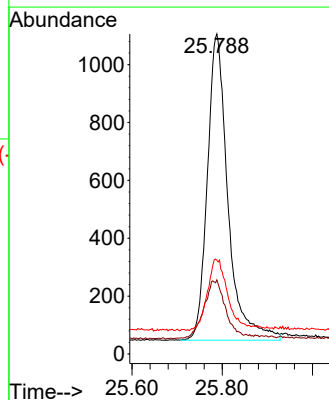
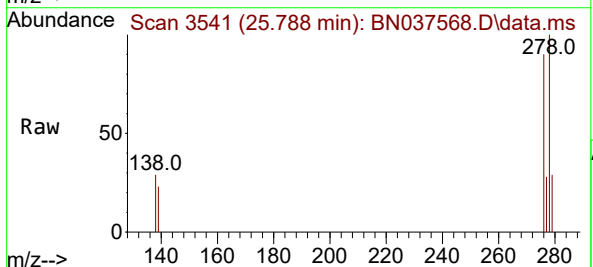
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

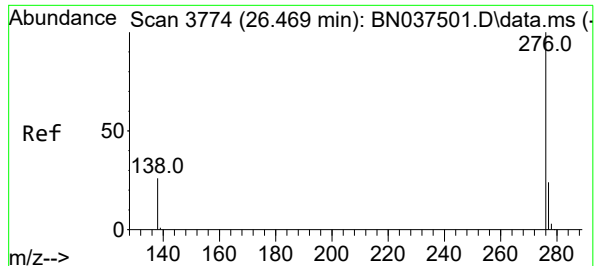
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 3084      |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 28.8  | 19.9 29.9 |
| 125         | 21.4  | 15.2 22.8 |



#40  
Dibenzo(a,h)anthracene  
Concen: 0.380 ng  
RT: 25.788 min Scan# 3541  
Delta R.T. -0.012 min  
Lab File: BN037568.D  
Acq: 05 Aug 2025 15:03

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:278 | Resp: | 3347      |
| Ion Ratio   | Lower | Upper     |
| 278         | 100   |           |
| 139         | 23.1  | 17.5 26.3 |
| 279         | 29.3  | 21.3 31.9 |





#41

Benzo(g,h,i)perylene

Concen: 0.382 ng

RT: 26.455 min Scan# 31

Delta R.T. -0.015 min

Lab File: BN037568.D

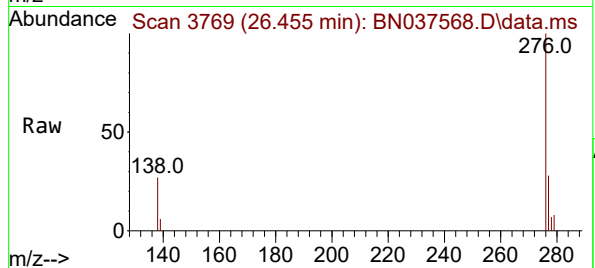
Acq: 05 Aug 2025 15:03

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC



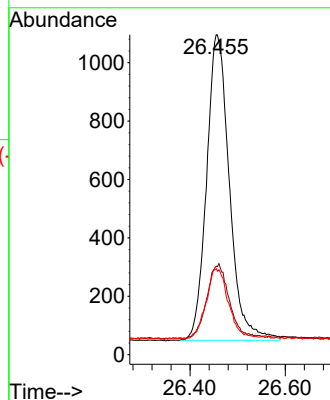
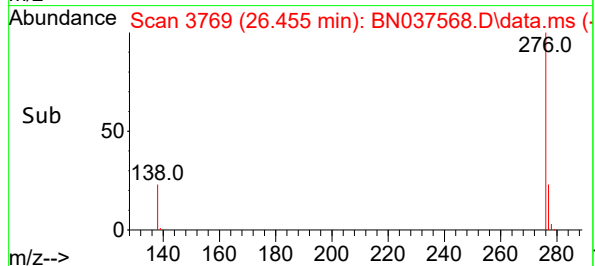
Tgt Ion:276 Resp: 3483

Ion Ratio Lower Upper

276 100

277 27.6 20.9 31.3

138 26.9 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
 Data File : BN037568.D  
 Acq On : 05 Aug 2025 15:03  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Aug 06 01:40:14 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 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   | 69    | 0.00     |
| 2       | 1,4-Dioxane                | 0.385 | 0.388 | -0.8  | 67    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.484 | 0.554 | -14.5 | 82    | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.989 | 0.840 | 15.1  | 59    | 0.00     |
| 5 S     | Phenol-d6                  | 1.241 | 1.017 | 18.0  | 59    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.033 | 0.943 | 8.7   | 63    | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 65    | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.299 | 0.288 | 3.7   | 67    | -0.01    |
| 9       | Naphthalene                | 1.067 | 1.025 | 3.9   | 64    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.236 | 0.281 | -19.1 | 78    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.574 | 0.505 | 12.0  | 61    | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.701 | 0.620 | 11.6  | 60    | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 57    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.197 | 0.145 | 26.4# | 47#   | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 2.080 | 2.112 | -1.5  | 58    | 0.00     |
| 16      | Acenaphthylene             | 1.792 | 1.682 | 6.1   | 55    | 0.00     |
| 17      | Acenaphthene               | 1.218 | 1.132 | 7.1   | 55    | -0.01    |
| 18      | Fluorene                   | 1.569 | 1.498 | 4.5   | 57    | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 56    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.057 | 0.047 | 17.5  | 63    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.256 | 0.232 | 9.4   | 54    | 0.00     |
| 22      | Hexachlorobenzene          | 0.331 | 0.344 | -3.9  | 59    | 0.00     |
| 23      | Atrazine                   | 0.179 | 0.148 | 17.3  | 53    | -0.01    |
| 24      | Pentachlorophenol          | 0.149 | 0.110 | 26.2# | 49#   | -0.01    |
| 25      | Phenanthrene               | 1.198 | 1.112 | 7.2   | 54    | -0.01    |
| 26      | Anthracene                 | 1.093 | 0.952 | 12.9  | 53    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 1.060 | 0.905 | 14.6  | 53    | 0.00     |
| 28      | Fluoranthene               | 1.382 | 1.199 | 13.2  | 52    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 54    | 0.00     |
| 30      | Pyrene                     | 1.612 | 1.510 | 6.3   | 51    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.859 | 0.819 | 4.7   | 52    | 0.00     |
| 32      | Benzo(a)anthracene         | 1.401 | 1.254 | 10.5  | 50    | 0.00     |
| 33      | Chrysene                   | 1.459 | 1.453 | 0.4   | 55    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.630 | 0.589 | 6.5   | 56    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 54    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.666 | 1.610 | 3.4   | 58    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.518 | 1.465 | 3.5   | 55    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.567 | 1.626 | -3.8  | 59    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.267 | 1.182 | 6.7   | 54    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.349 | 1.282 | 5.0   | 57    | -0.01    |
| 41      | Benzo(g,h,i)perylene       | 1.397 | 1.334 | 4.5   | 55    | -0.01    |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037568.D  
Acq On : 05 Aug 2025 15:03  
Operator : RC/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
LabSampleId :  
SSTDCCC0.4

Quant Time: Aug 06 01:40:14 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
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   | 69    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.404 | -1.0  | 67    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.458 | -14.5 | 82    | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.340 | 15.0  | 59    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.328 | 18.0  | 59    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.365 | 8.8   | 63    | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 65    | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.386 | 3.5   | 67    | -0.01    |
| 9       | Naphthalene                | 0.400  | 0.385 | 3.8   | 64    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.476 | -19.0 | 78    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.352 | 12.0  | 61    | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.354 | 11.5  | 60    | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 57    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.295 | 26.3# | 47    | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.406 | -1.5  | 58    | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.376 | 6.0   | 55    | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.371 | 7.3   | 55    | -0.01    |
| 18      | Fluorene                   | 0.400  | 0.382 | 4.5   | 57    | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 56    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.433 | -8.2  | 63    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.361 | 9.8   | 54    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.416 | -4.0  | 59    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.332 | 17.0  | 53    | -0.01    |
| 24      | Pentachlorophenol          | 0.400  | 0.297 | 25.8# | 49    | -0.01    |
| 25      | Phenanthrene               | 0.400  | 0.371 | 7.3   | 54    | -0.01    |
| 26      | Anthracene                 | 0.400  | 0.348 | 13.0  | 53    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.342 | 14.5  | 53    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.347 | 13.3  | 52    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 54    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.375 | 6.3   | 51    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.381 | 4.8   | 52    | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.358 | 10.5  | 50    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.398 | 0.5   | 55    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.374 | 6.5   | 56    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 54    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.387 | 3.3   | 58    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.386 | 3.5   | 55    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.415 | -3.7  | 59    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.373 | 6.8   | 54    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.380 | 5.0   | 57    | -0.01    |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.382 | 4.5   | 55    | -0.01    |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



# QC SAMPLE DATA

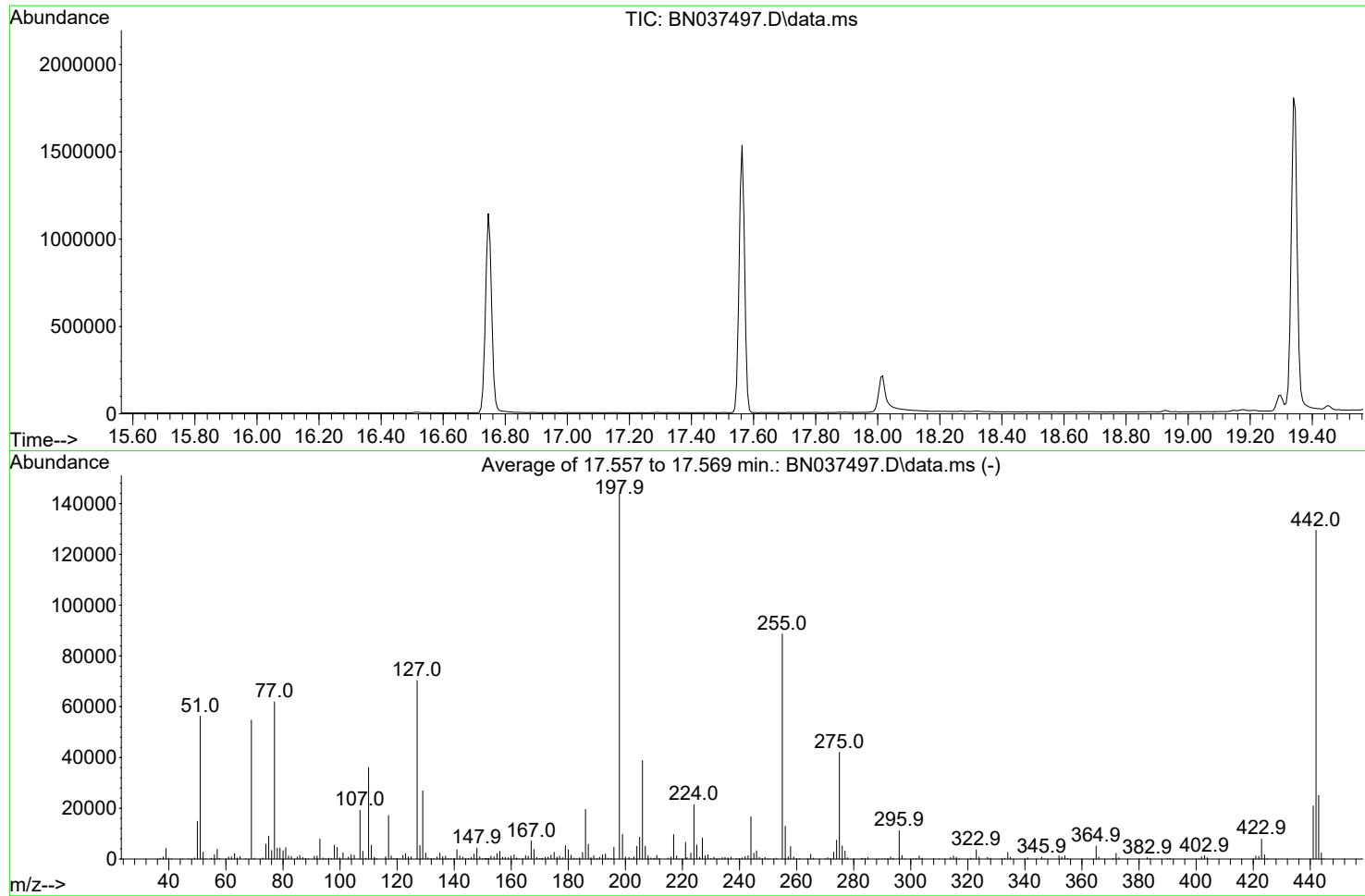
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037497.D  
Acq On : 15 Jul 2025 10:57  
Operator : RC/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-BN071525.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Wed Jul 16 01:39:21 2025



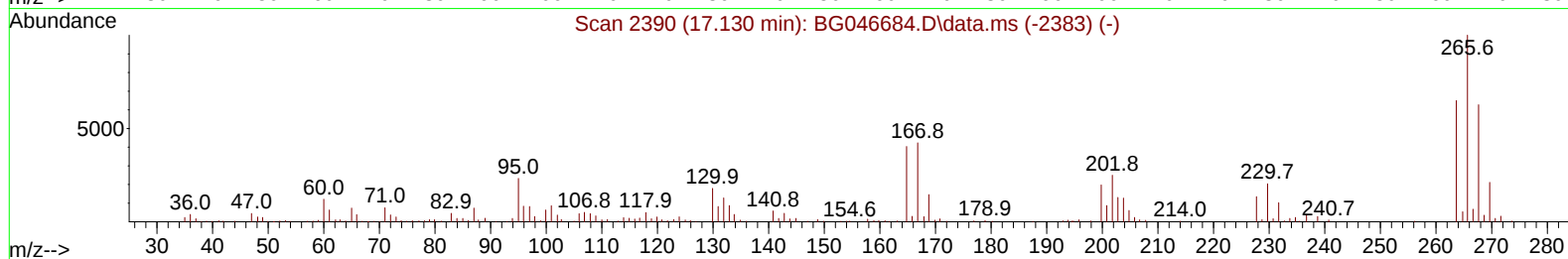
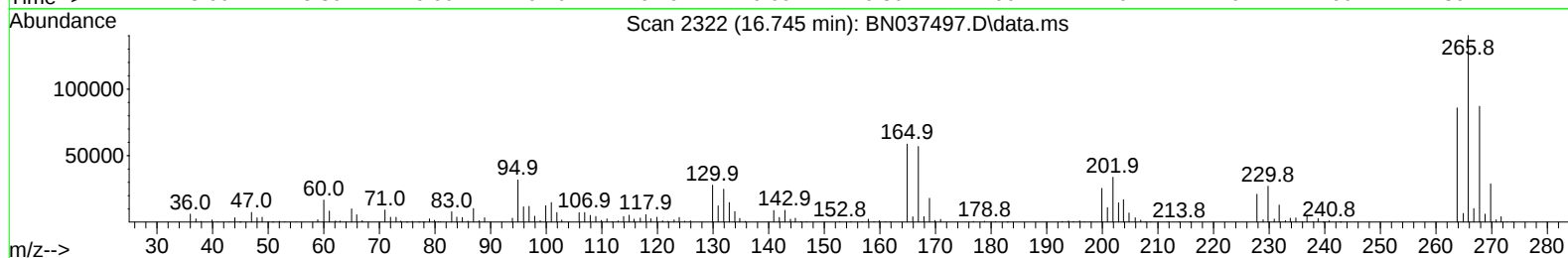
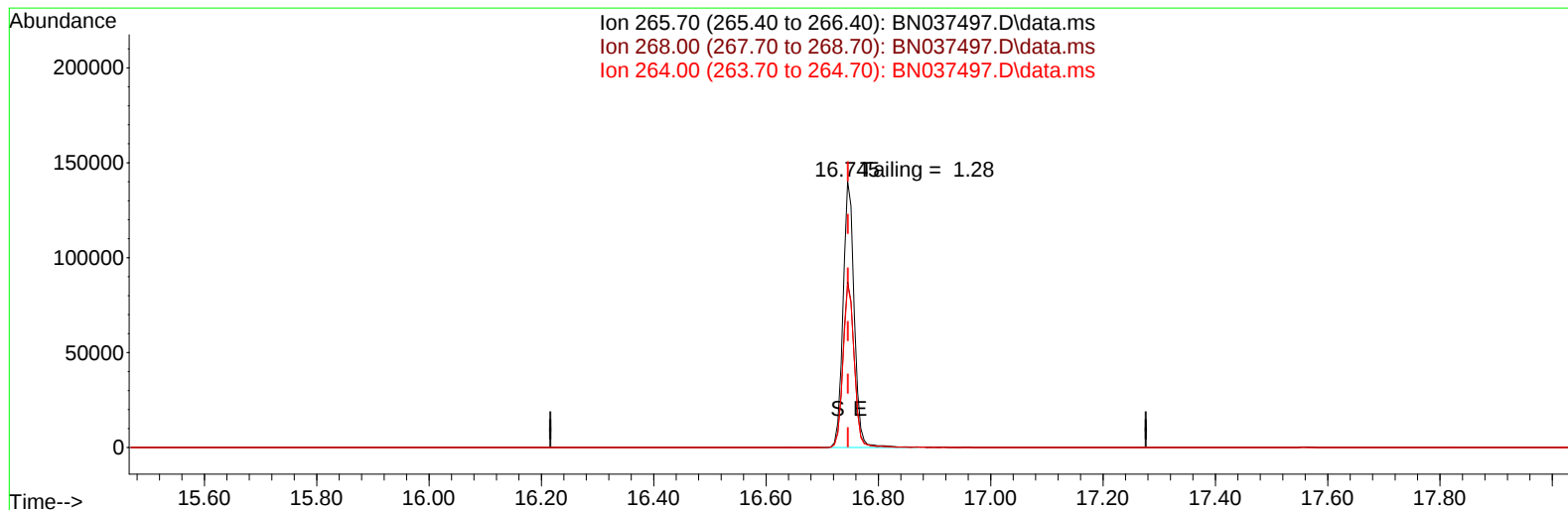
AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2453

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 68     | 69      | 0.00   | 2      | 0.0   | 0      | PASS      |
| 69     | 69      | 100    | 100    | 100.0 | 54709  | PASS      |
| 70     | 69      | 0.00   | 2      | 0.6   | 344    | PASS      |
| 197    | 198     | 0.00   | 2      | 0.0   | 0      | PASS      |
| 198    | 198     | 100    | 100    | 100.0 | 143808 | PASS      |
| 199    | 198     | 5      | 9      | 6.7   | 9669   | PASS      |
| 365    | 198     | 1      | 100    | 3.5   | 5100   | PASS      |
| 441    | 443     | 0.01   | 150    | 83.6  | 20941  | PASS      |
| 442    | 442     | 100    | 100    | 100.0 | 129491 | PASS      |
| 443    | 442     | 15     | 24     | 19.4  | 25064  | PASS      |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037497.D  
Acq On : 15 Jul 2025 10:57  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Jul 15 18:10:23 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jul 10 02:20:59 2025  
Response via : Initial Calibration



TIC: BN037497.D\data.ms

**(70) Pentachlorophenol (C)**

16.745min (-0.001) 31259.96 ng

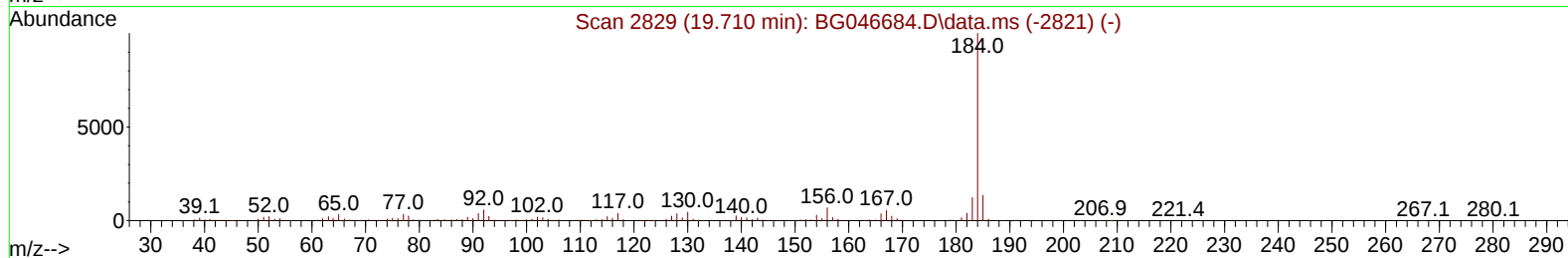
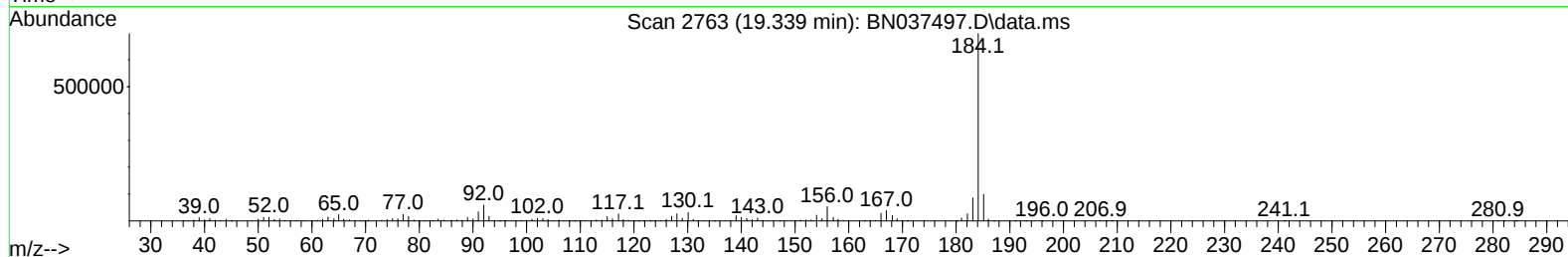
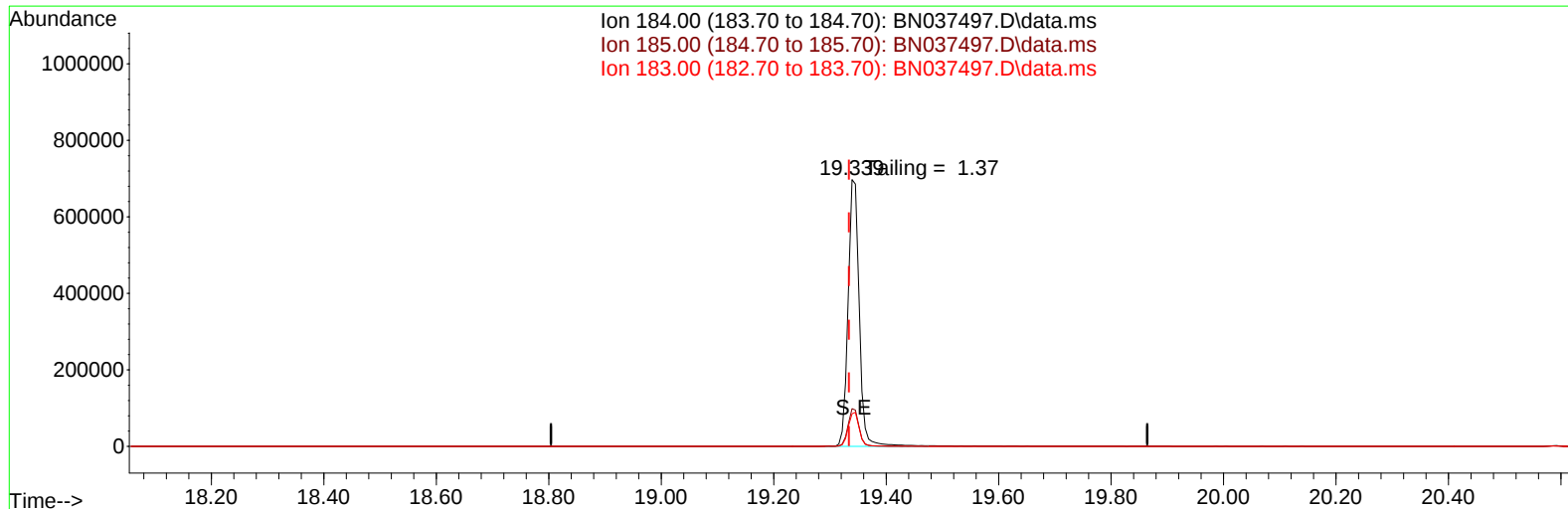
response 194539

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 62.06  |
| 264.00 | 61.60  | 61.25  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
Data File : BN037497.D  
Acq On : 15 Jul 2025 10:57  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Jul 15 18:10:23 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jul 10 02:20:59 2025  
Response via : Initial Calibration



TIC: BN037497.D\data.ms

**(77) Benzidine**

19.339min (+ 0.005) 0.00 ng

response 963155

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 14.14  |
| 183.00 | 13.20  | 12.27  |
| 0.00   | 0.00   | 0.00   |

DDT Breakdown

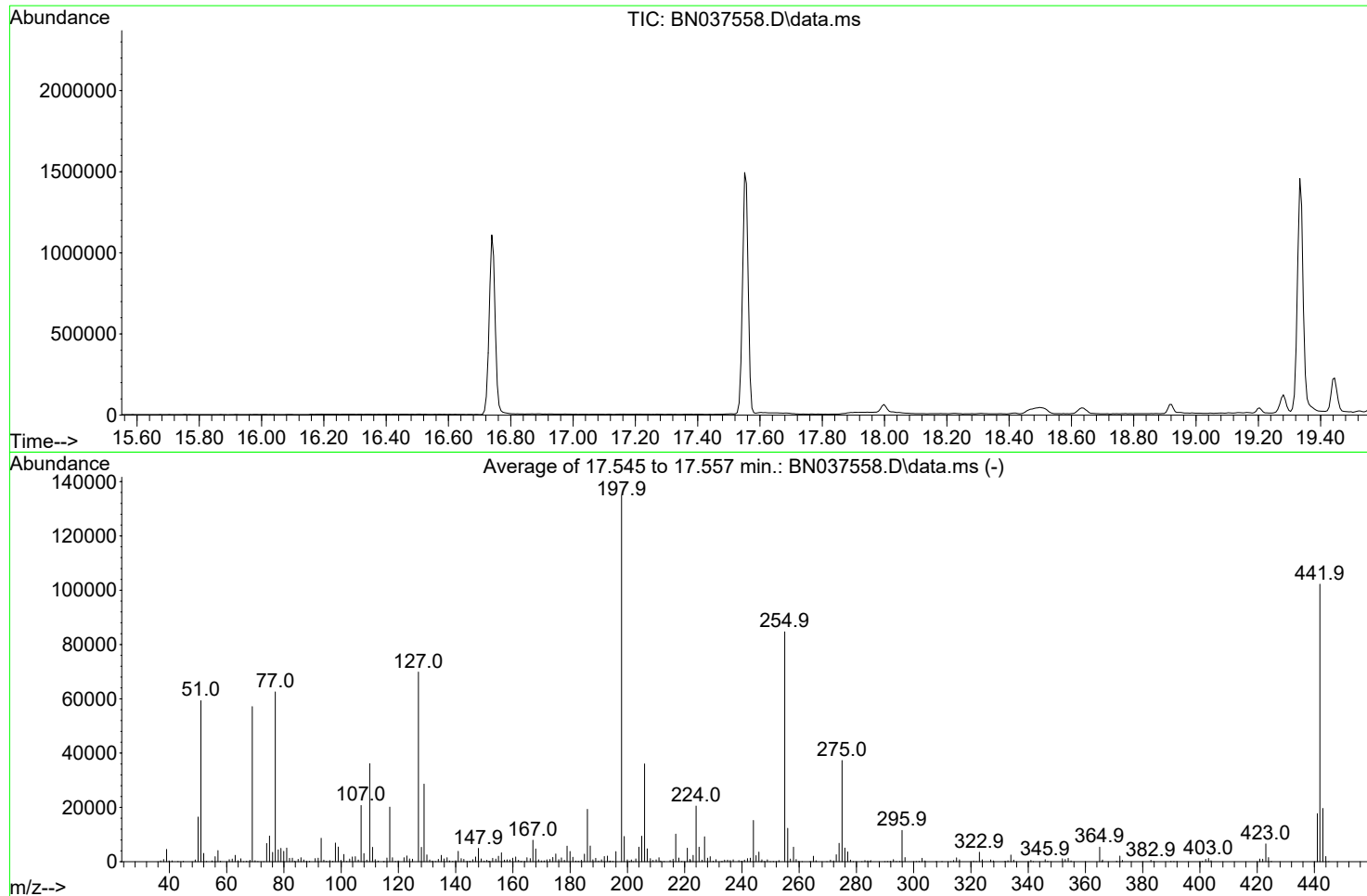
| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 7/15/2025     | BNA_N            | <u>BN037497.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 478094           | 20.592             |
| DDD           | 7051             | 20.145             |
| DDE           | 60               | 19.639             |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 7111          | 485205           | 1.47               |
|               |                  |                    |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037558.D  
Acq On : 05 Aug 2025 08:56  
Operator : RC/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-BN071525.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Sat Jul 19 01:46:16 2025



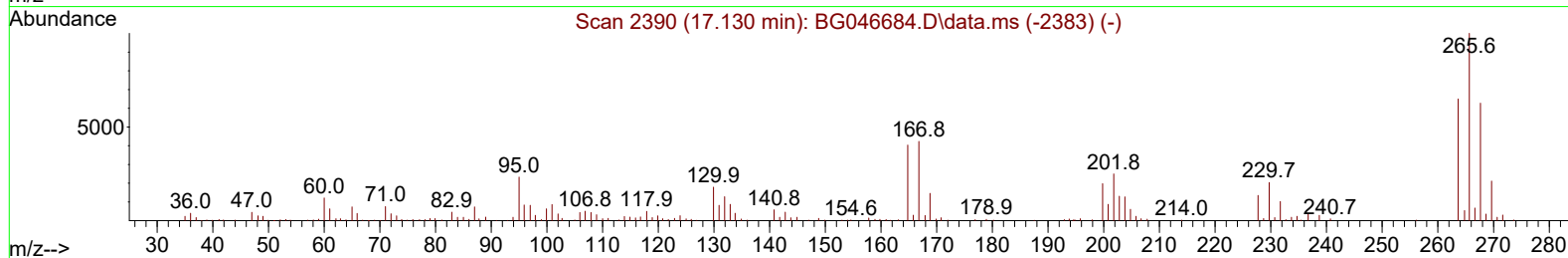
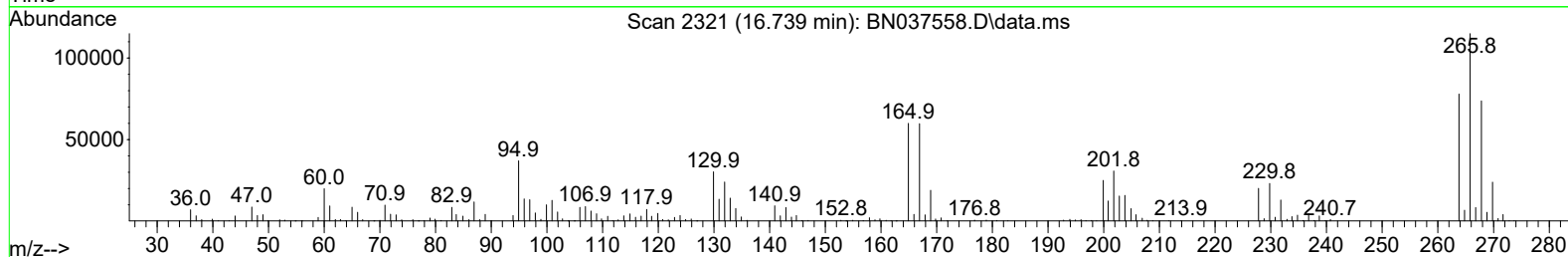
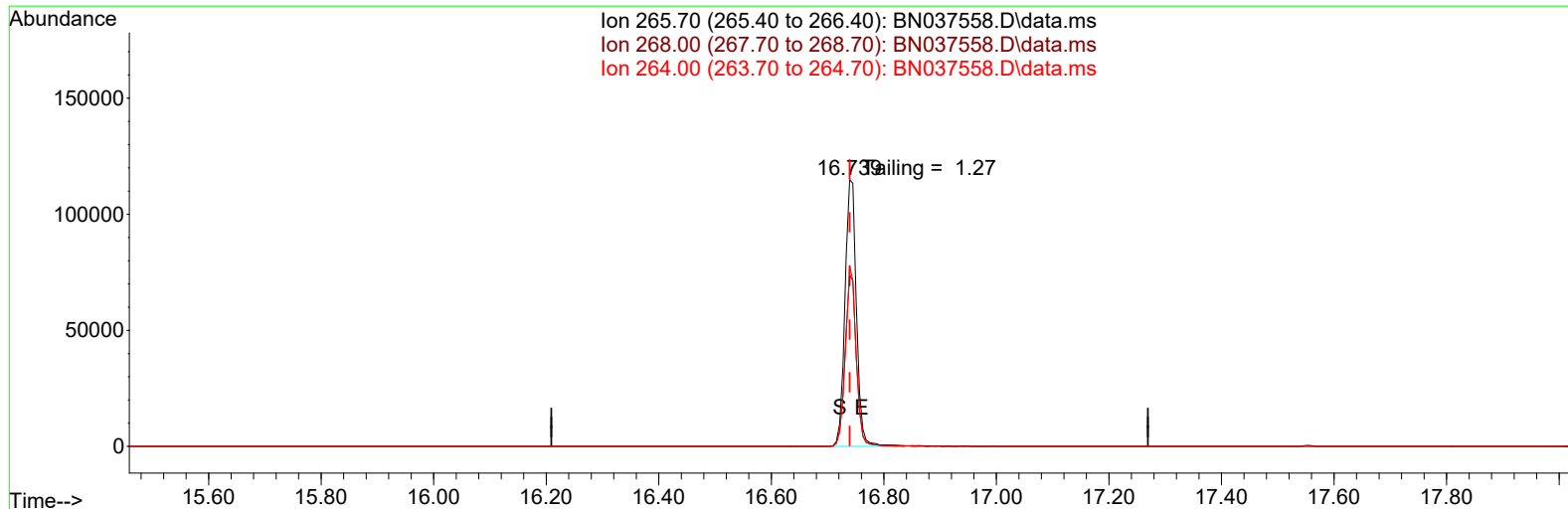
AutoFind: Scans 2458, 2459, 2460; Background Corrected with Scan 2452

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 68     | 69      | 0.00   | 2      | 0.9   | 529    | PASS      |
| 69     | 69      | 100    | 100    | 100.0 | 57147  | PASS      |
| 70     | 69      | 0.00   | 2      | 0.6   | 370    | PASS      |
| 197    | 198     | 0.00   | 2      | 0.0   | 0      | PASS      |
| 198    | 198     | 100    | 100    | 100.0 | 134912 | PASS      |
| 199    | 198     | 5      | 9      | 6.9   | 9307   | PASS      |
| 365    | 198     | 1      | 100    | 4.0   | 5372   | PASS      |
| 441    | 443     | 0.01   | 150    | 90.3  | 17710  | PASS      |
| 442    | 442     | 100    | 100    | 100.0 | 102248 | PASS      |
| 443    | 442     | 15     | 24     | 19.2  | 19611  | PASS      |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037558.D  
Acq On : 05 Aug 2025 08:56  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 06 01:49:28 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Aug 06 01:49:15 2025  
Response via : Initial Calibration



TIC: BN037558.D\data.ms

**(70) Pentachlorophenol (C)**

16.739min ( 0.000) 277.06 ng

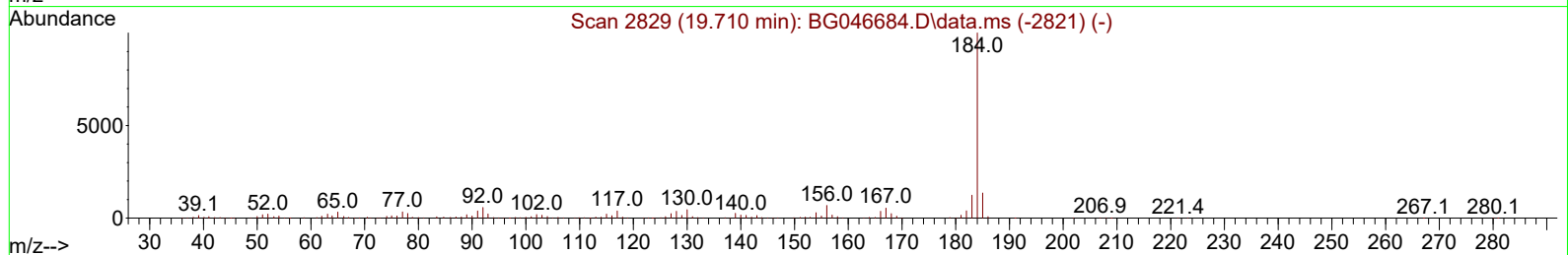
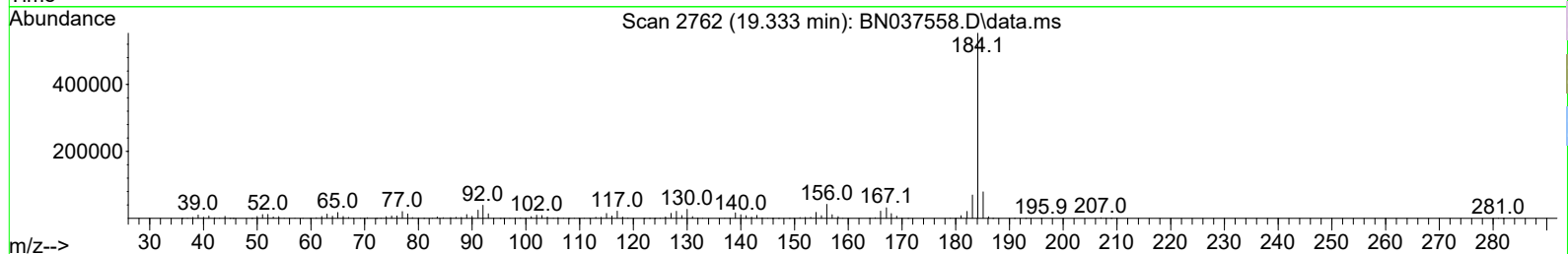
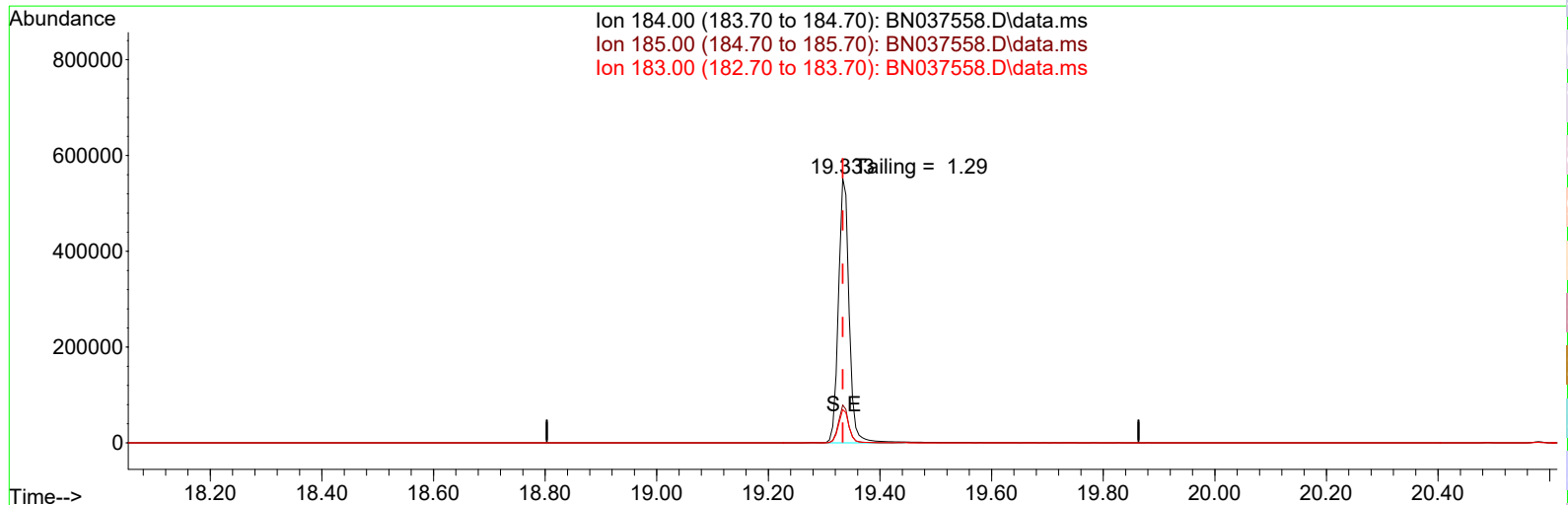
response 162965

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 64.12  |
| 264.00 | 61.60  | 67.79  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037558.D  
Acq On : 05 Aug 2025 08:56  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Aug 06 01:49:28 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Aug 06 01:49:15 2025  
Response via : Initial Calibration



TIC: BN037558.D\data.ms

**(77) Benzidine**

19.333min ( 0.000) 0.00 ng

response 738941

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 14.35  |
| 183.00 | 13.20  | 12.60  |
| 0.00   | 0.00   | 0.00   |

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

DDT Breakdown

| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 8/5/2025      | BNA_N            | <u>BN037558.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 445735           | 20.58              |
| DDD           | 4329             | 20.192             |
| DDE           | 60               | 19.633             |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 4389          | 450124           | 0.98               |
|               |                  |                    |

## Report of Analysis

|                    |                                       |                 |                |
|--------------------|---------------------------------------|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.                  | Date Collected: |                |
| Project:           | NWIRP Bethpage - CTO WE13 1132341 WR6 | Date Received:  |                |
| Client Sample ID:  | PB169094BL                            | SDG No.:        | Q2745          |
| Lab Sample ID:     | PB169094BL                            | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 0              |
| Sample Wt/Vol:     | 1000 Units: mL                        | Final Vol:      | 1000 uL        |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOC-SIMGroup1 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW            |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :         |
| Prep Method :      |                                       |                 |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN037560.D        | 1         | 08/04/25 08:40 | 08/05/25 10:11 | PB169094      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.20  | U         | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.31  |           | 30 - 150 |      | 78%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.32  |           | 30 - 150 |      | 81%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.35  |           | 55 - 111 |      | 88%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.38  |           | 53 - 106 |      | 94%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.39  |           | 58 - 132 |      | 97%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2260  | 7.724     |          |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5530  | 10.498    |          |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2600  | 14.345    |          |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 4750  | 17.086    |          |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 3480  | 21.277    |          |      |            |          |
| 1520-96-3                 | Perylene-d12            | 3100  | 23.507    |          |      |            |          |

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\BN080525\  
Data File : BN037560.D  
Acq On : 05 Aug 2025 10:11  
Operator : RC/JU  
Sample : PB169094BL  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

Quant Time: Aug 06 01:38:25 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.724  | 152  | 2263     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8           | 10.498 | 136  | 5525     | 0.400 | ng    | #-0.01   |
| 13) Acenaphthene-d10        | 14.345 | 164  | 2603     | 0.400 | ng    | -0.01    |
| 19) Phenanthrene-d10        | 17.086 | 188  | 4745     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12            | 21.277 | 240  | 3478     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12            | 23.507 | 264  | 3099     | 0.400 | ng    | # 0.00   |
| System Monitoring Compounds |        |      |          |       |       |          |
| 4) 2-Fluorophenol           | 5.312  | 112  | 1839     | 0.329 | ng    | 0.00     |
| 5) Phenol-d6                | 6.886  | 99   | 1996     | 0.284 | ng    | 0.00     |
| 8) Nitrobenzene-d5          | 8.854  | 82   | 1445     | 0.350 | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10 | 12.095 | 152  | 2480     | 0.313 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol    | 15.845 | 330  | 264      | 0.206 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl        | 12.978 | 172  | 5082     | 0.375 | ng    | 0.00     |
| 27) Fluoranthene-d10        | 19.122 | 212  | 4065     | 0.323 | ng    | 0.00     |
| 31) Terphenyl-d14           | 19.726 | 244  | 2893     | 0.387 | ng    | 0.00     |

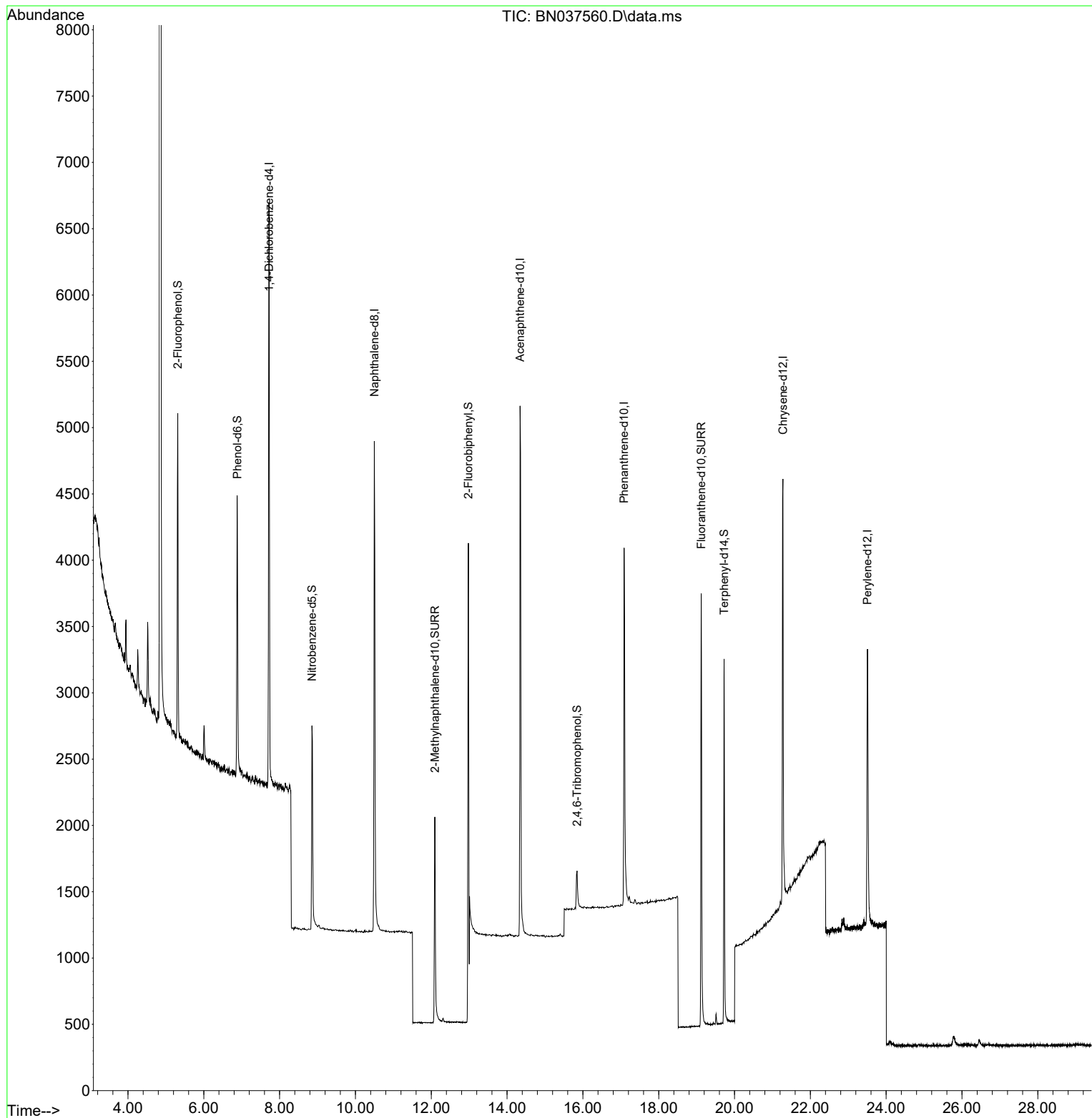
| Target Compounds | Qvalue |
|------------------|--------|
|------------------|--------|

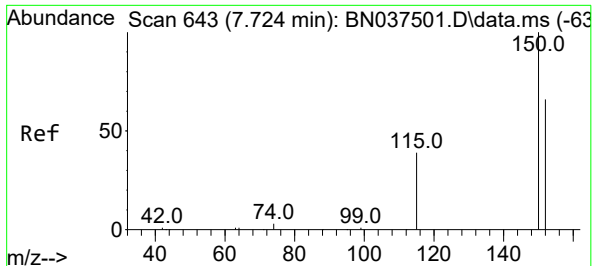
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037560.D  
Acq On : 05 Aug 2025 10:11  
Operator : RC/JU  
Sample : PB169094BL  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

Quant Time: Aug 06 01:38:25 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

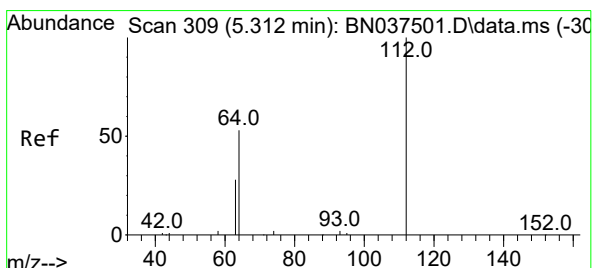
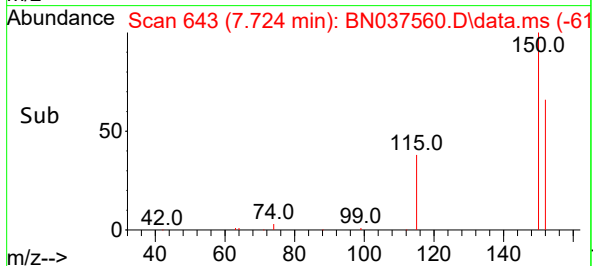
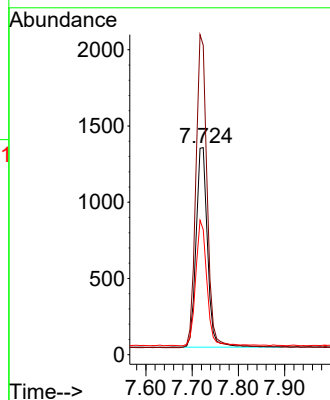
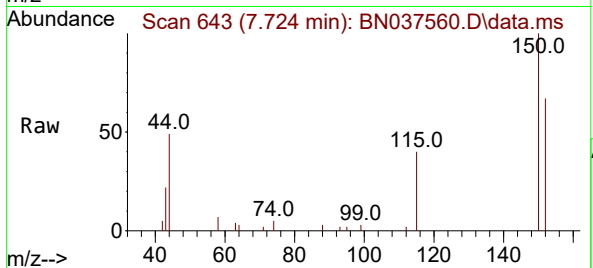




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 643  
Delta R.T. 0.000 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

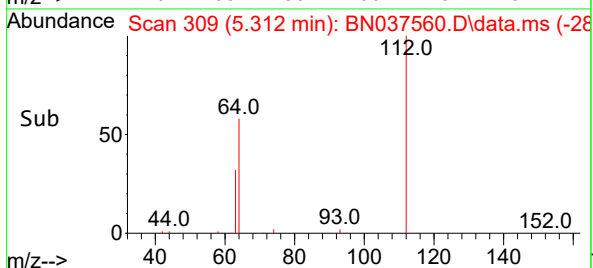
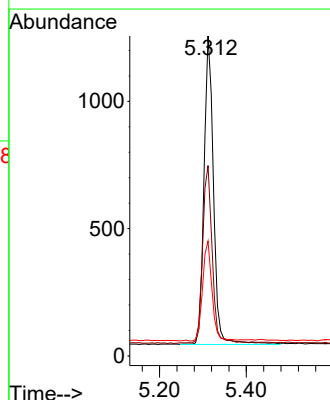
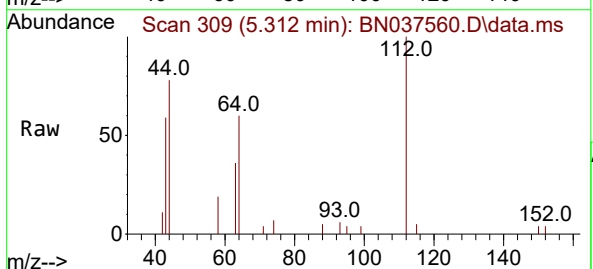
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

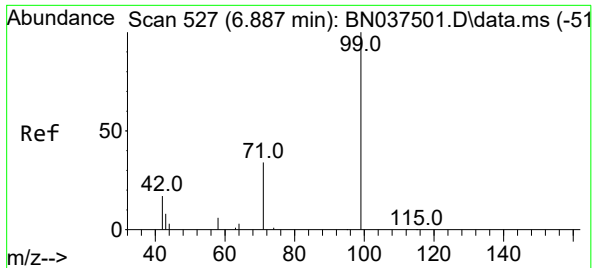
Tgt Ion:152 Resp: 2263  
Ion Ratio Lower Upper  
152 100  
150 149.5 119.8 179.8  
115 60.4 49.1 73.7



#4  
2-Fluorophenol  
Concen: 0.329 ng  
RT: 5.312 min Scan# 309  
Delta R.T. -0.000 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

Tgt Ion:112 Resp: 1839  
Ion Ratio Lower Upper  
112 100  
64 58.5 45.1 67.7  
63 31.8 23.8 35.8

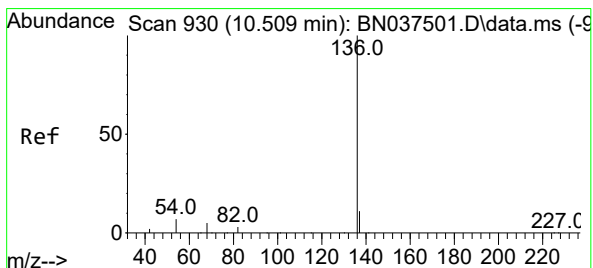
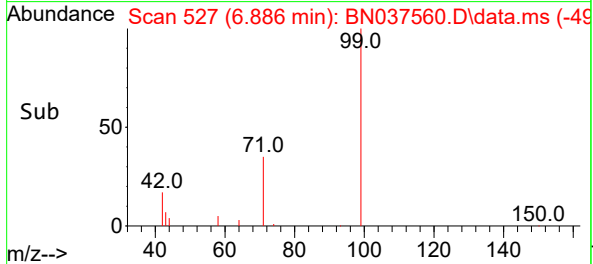
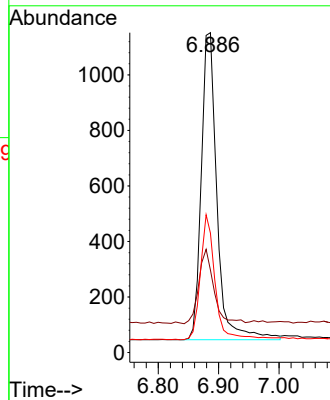
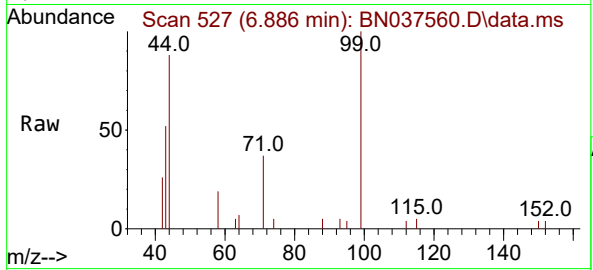




#5  
Phenol-d6  
Concen: 0.284 ng  
RT: 6.886 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

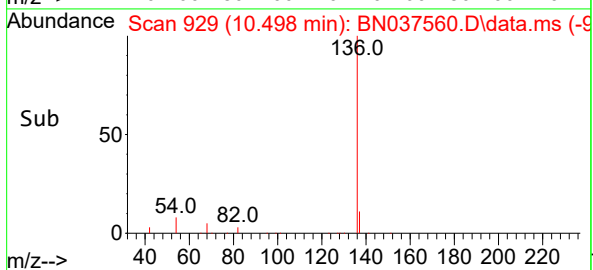
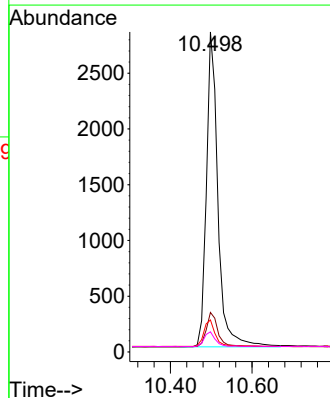
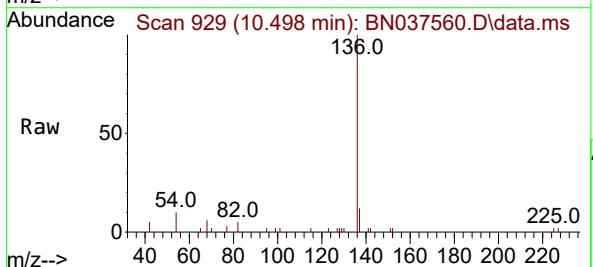
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

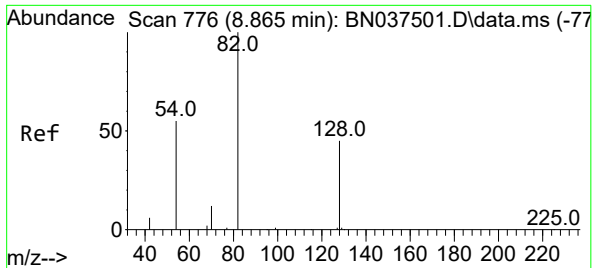
| Tgt Ion: | 99    | Resp: | 1996  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 99       | 100   |       |       |
| 42       | 23.3  | 17.1  | 25.7  |
| 71       | 39.4  | 27.8  | 41.8  |



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 929  
Delta R.T. -0.011 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

| Tgt Ion: | 136   | Resp: | 5525  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.4  | 9.8   | 14.8  |
| 54       | 10.0  | 6.6   | 9.8#  |
| 68       | 6.3   | 5.0   | 7.6   |

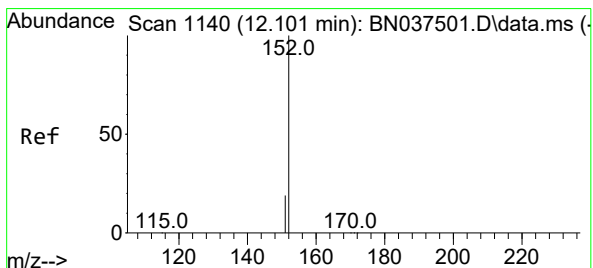
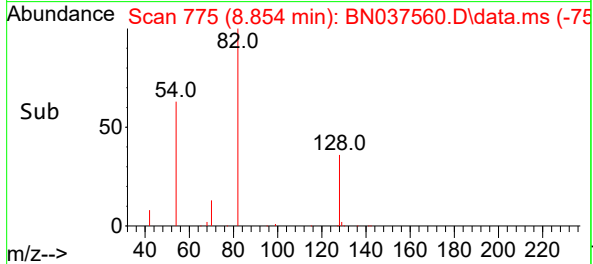
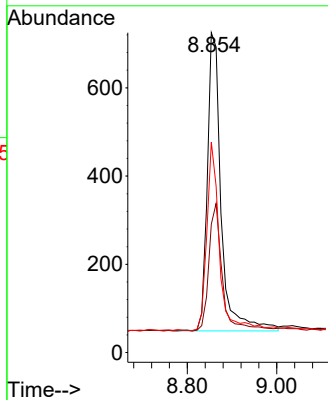
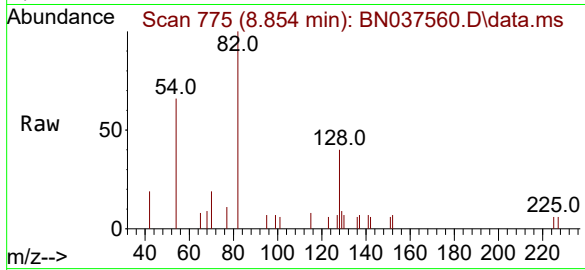




#8  
Nitrobenzene-d5  
Concen: 0.350 ng  
RT: 8.854 min Scan# 71  
Delta R.T. -0.011 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

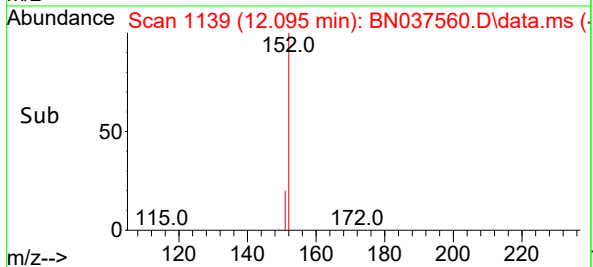
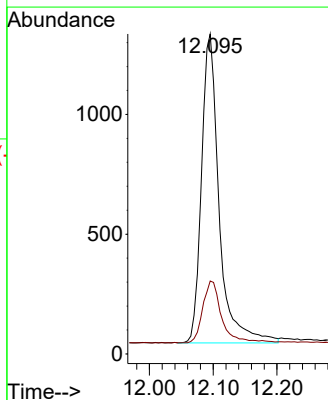
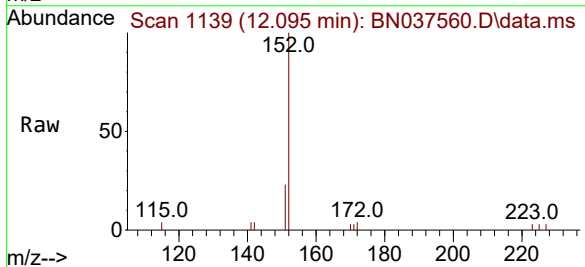
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

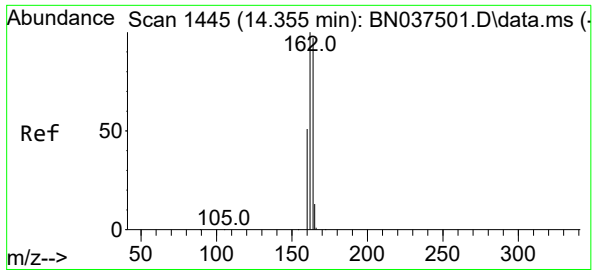
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 40.1  | 37.5  | 56.3  |
| 54      | 65.8  | 45.3  | 67.9  |



#11  
2-Methylnaphthalene-d10  
Concen: 0.313 ng  
RT: 12.095 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 21.3  | 16.8  | 25.2  |

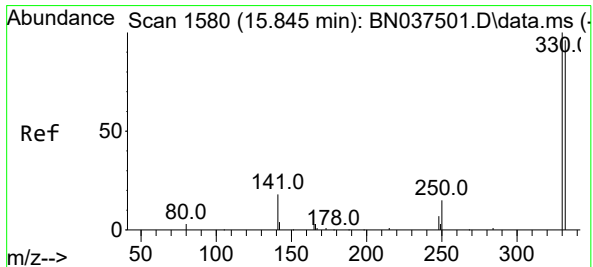
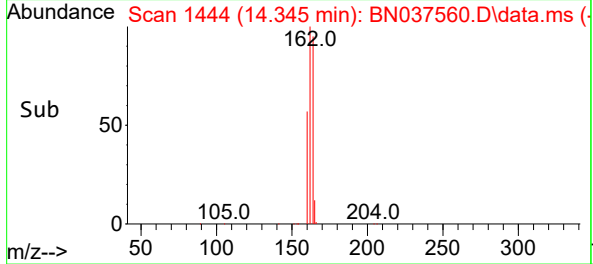
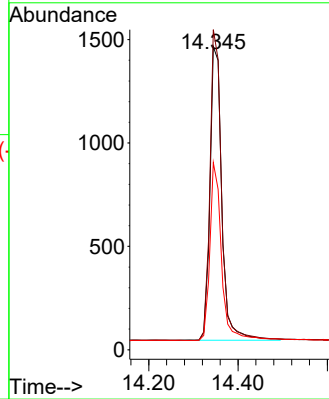
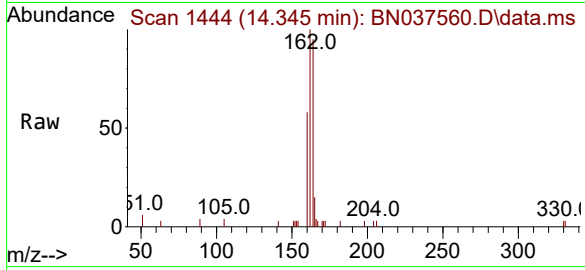




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.345 min Scan# 1444  
Delta R.T. -0.011 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

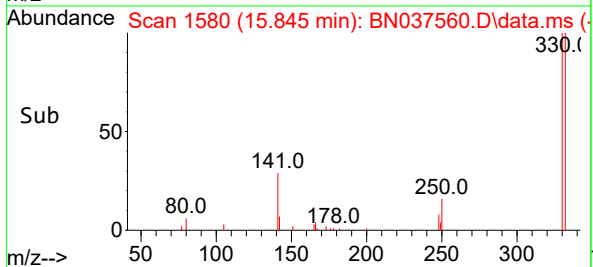
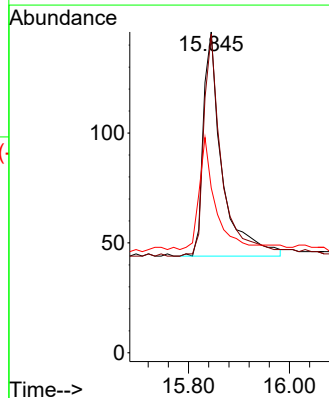
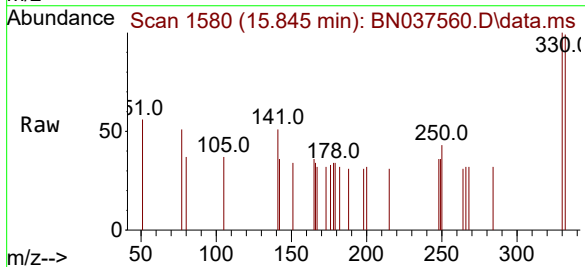
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

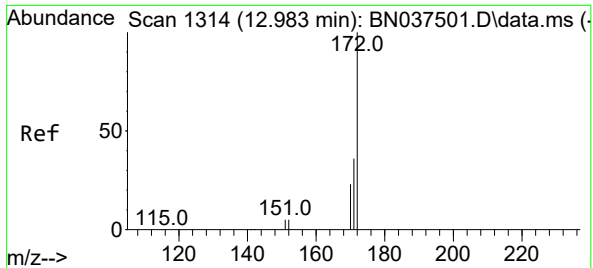
Tgt Ion:164 Resp: 2603  
Ion Ratio Lower Upper  
164 100  
162 105.6 82.0 123.0  
160 61.7 42.4 63.6



#14  
2,4,6-Tribromophenol  
Concen: 0.206 ng  
RT: 15.845 min Scan# 1580  
Delta R.T. -0.000 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

Tgt Ion:330 Resp: 264  
Ion Ratio Lower Upper  
330 100  
332 95.5 76.1 114.1  
141 44.3 33.4 50.0

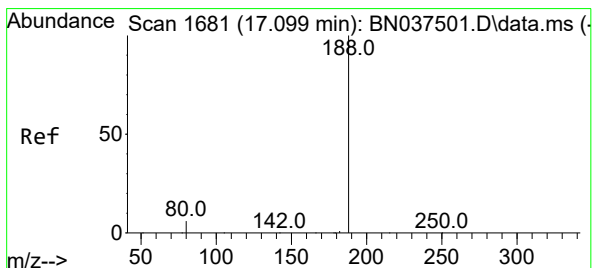
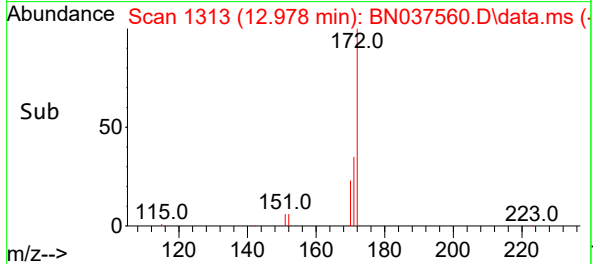
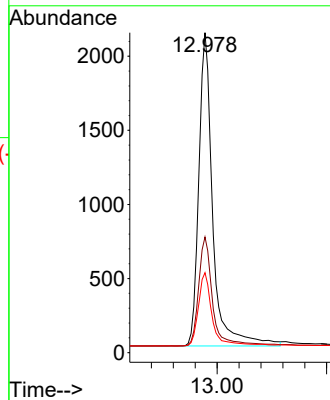
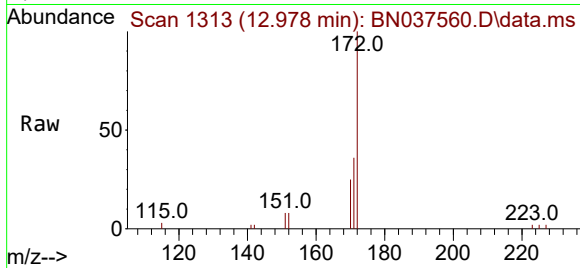




#15  
2-Fluorobiphenyl  
Concen: 0.375 ng  
RT: 12.978 min Scan# 11  
Delta R.T. -0.005 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

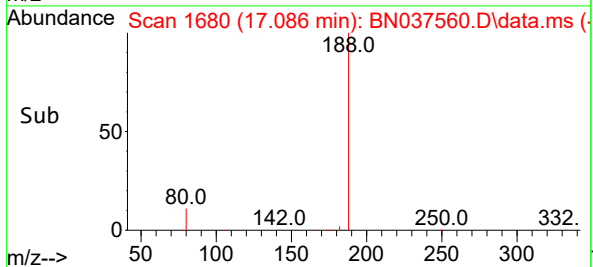
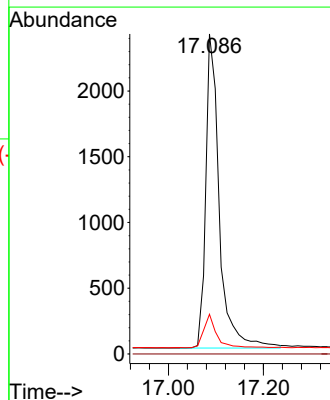
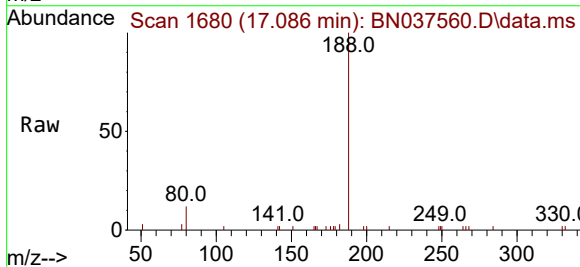
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

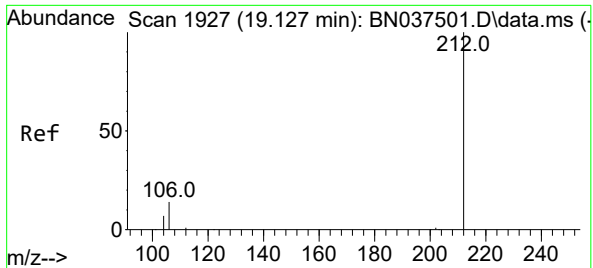
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.1  | 29.4  | 44.2  |
| 170     | 25.0  | 19.4  | 29.0  |



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1680  
Delta R.T. -0.013 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 12.4  | 6.0   | 9.0#  |

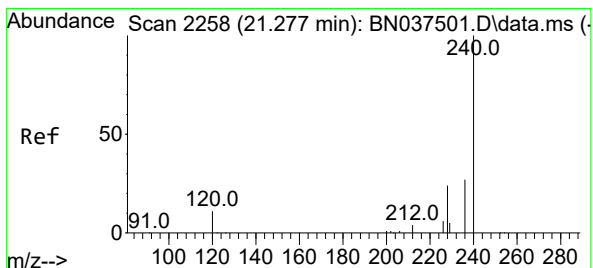
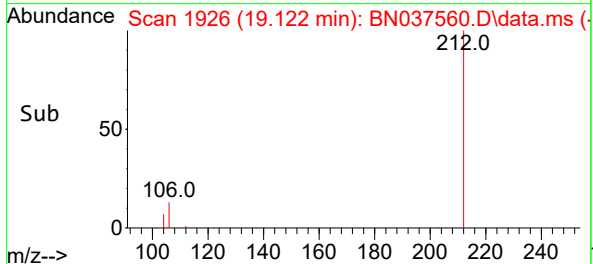
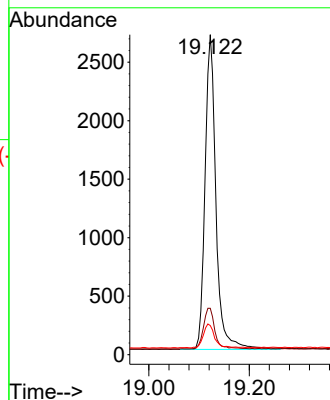
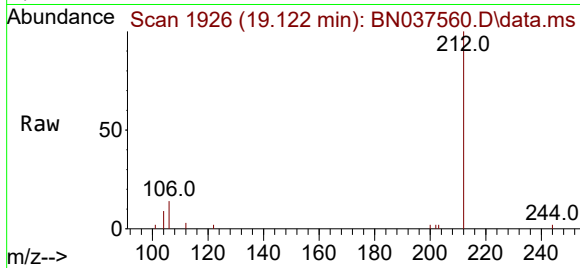




#27  
Fluoranthene-d10  
Concen: 0.323 ng  
RT: 19.122 min Scan# 1926  
Delta R.T. -0.005 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

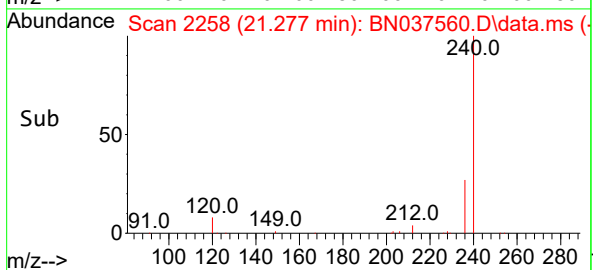
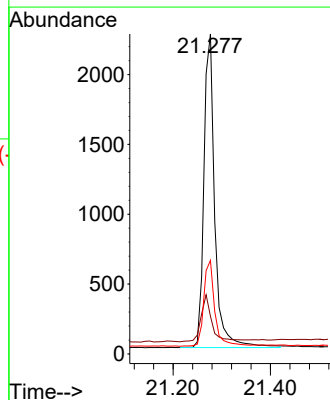
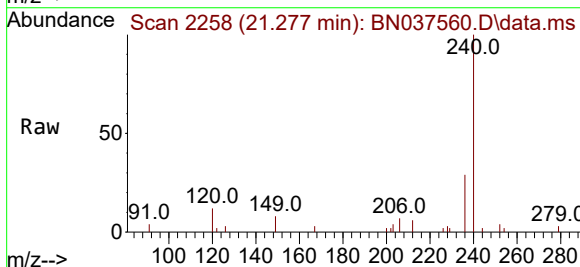
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

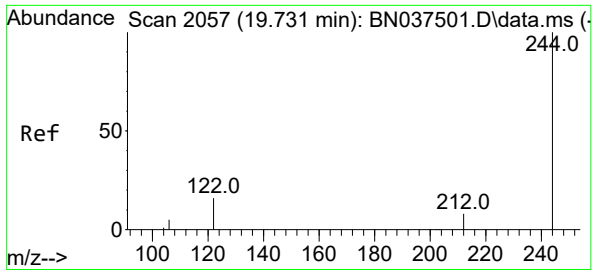
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 212     | 100   |       |       |
| 106     | 13.2  | 12.2  | 18.4  |
| 104     | 7.7   | 6.7   | 10.1  |



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.000 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

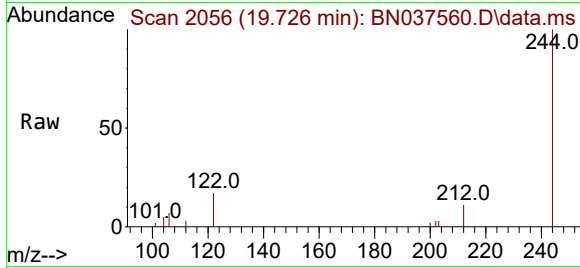
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 11.8  | 10.7  | 16.1  |
| 236     | 29.2  | 22.6  | 33.8  |



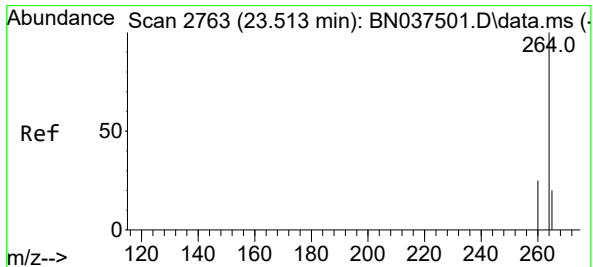
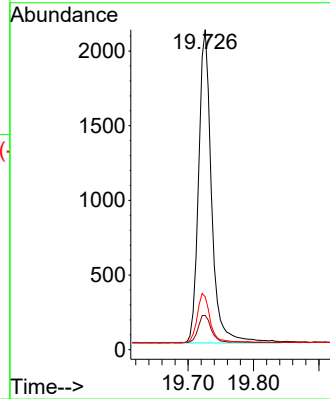
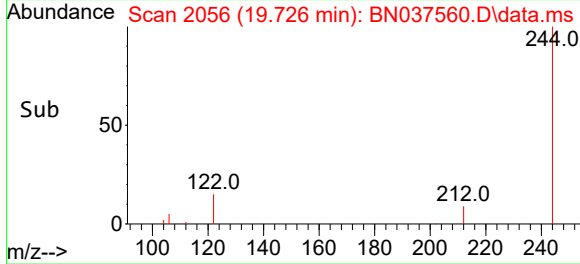


#31  
Terphenyl-d14  
Concen: 0.387 ng  
RT: 19.726 min Scan# 2056  
Delta R.T. -0.005 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BL

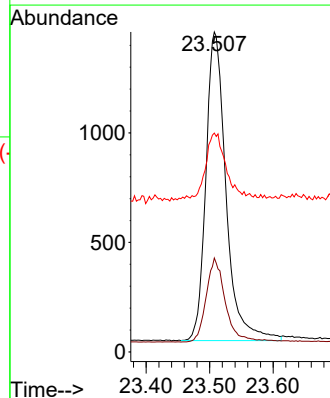
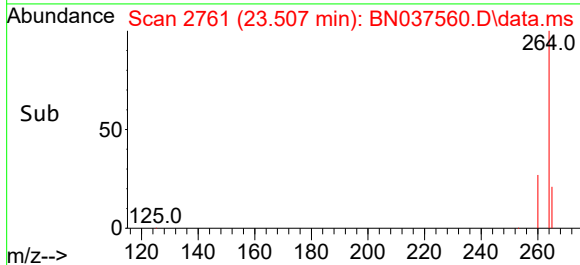
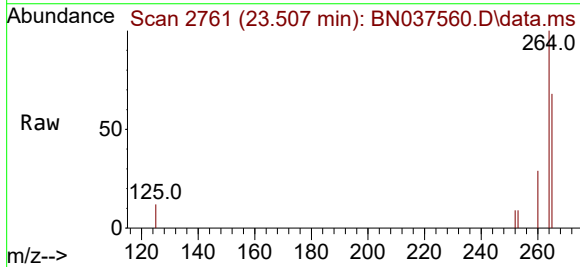


Tgt Ion:244 Resp: 2893  
Ion Ratio Lower Upper  
244 100  
212 10.7 7.4 11.2  
122 16.5 13.6 20.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.507 min Scan# 2761  
Delta R.T. -0.006 min  
Lab File: BN037560.D  
Acq: 05 Aug 2025 10:11

Tgt Ion:264 Resp: 3099  
Ion Ratio Lower Upper  
264 100  
260 29.4 21.2 31.8  
265 68.4 40.4 60.6#



## Report of Analysis

|                    |                                       |                 |                |
|--------------------|---------------------------------------|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.                  | Date Collected: |                |
| Project:           | NWIRP Bethpage - CTO WE13 1132341 WR6 | Date Received:  |                |
| Client Sample ID:  | PB169094BS                            | SDG No.:        | Q2745          |
| Lab Sample ID:     | PB169094BS                            | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 0              |
| Sample Wt/Vol:     | 1000 Units: mL                        | Final Vol:      | 1000 uL        |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOC-SIMGroup1 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW            |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :         |
| Prep Method :      |                                       |                 |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN037566.D        | 1         | 08/04/25 08:40 | 08/05/25 13:47 | PB169094      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.31  |           | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.34  |           | 30 - 150 |      | 85%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.31  |           | 30 - 150 |      | 77%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.35  |           | 55 - 111 |      | 87%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.41  |           | 53 - 106 |      | 102%       | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.36  |           | 58 - 132 |      | 90%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 1590  | 7.717     |          |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 3860  | 10.498    |          |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 1770  | 14.345    |          |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 3210  | 17.087    |          |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 2400  | 21.268    |          |      |            |          |
| 1520-96-3                 | Perylene-d12            | 2050  | 23.508    |          |      |            |          |

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\BN080525\  
 Data File : BN037566.D  
 Acq On : 05 Aug 2025 13:47  
 Operator : RC/JU  
 Sample : PB169094BS  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169094BS

Quant Time: Aug 06 01:39:34 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

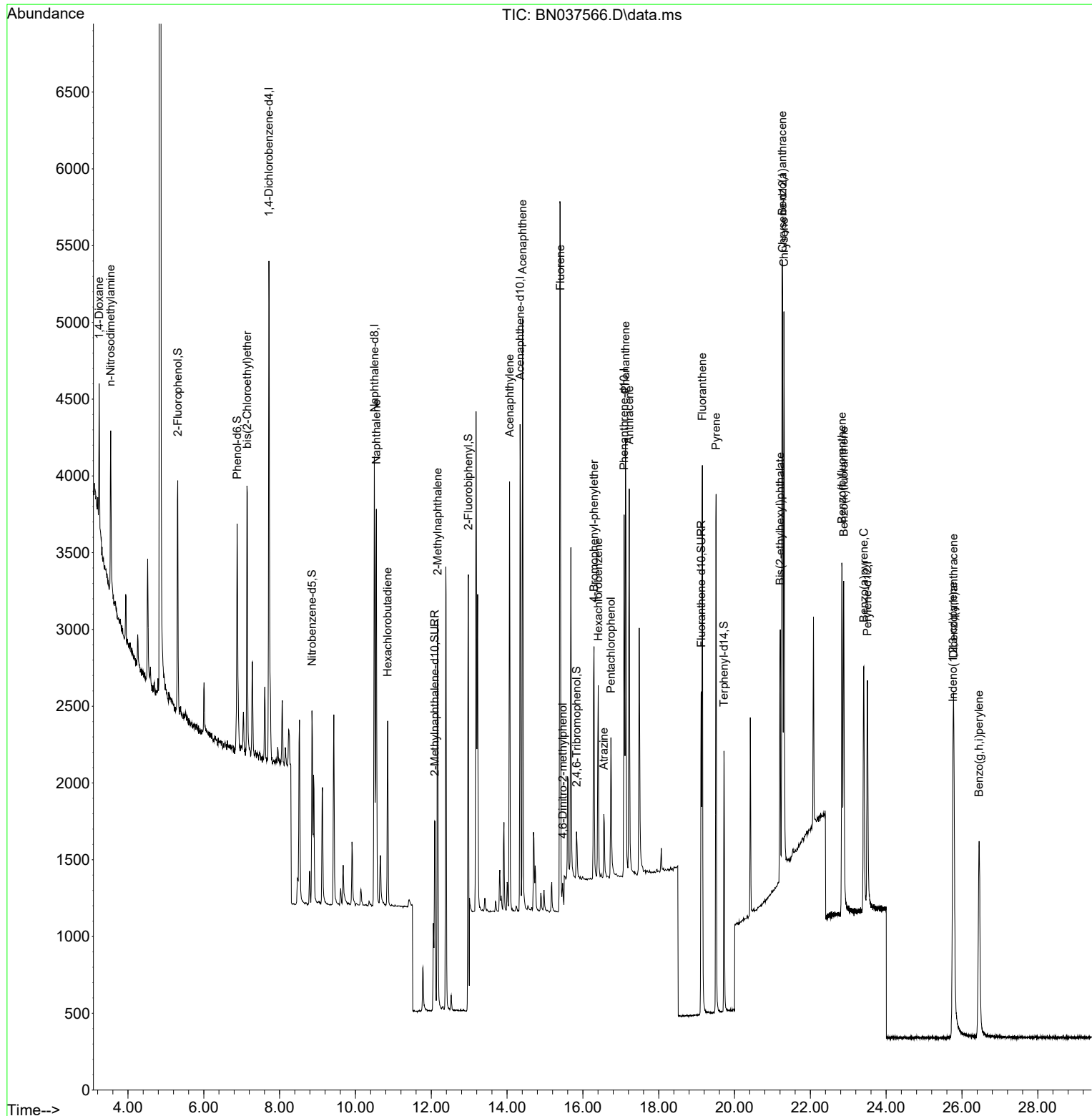
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.717  | 152  | 1587     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.498 | 136  | 3862     | 0.400 | ng    | #-0.01   |
| 13) Acenaphthene-d10          | 14.345 | 164  | 1765     | 0.400 | ng    | -0.01    |
| 19) Phenanthrene-d10          | 17.087 | 188  | 3214     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12              | 21.268 | 240  | 2404     | 0.400 | ng    | # 0.00   |
| 35) Perylene-d12              | 23.508 | 264  | 2051     | 0.400 | ng    | # 0.00   |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 1200     | 0.306 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.879  | 99   | 1356     | 0.275 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.854  | 82   | 1001     | 0.347 | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10   | 12.091 | 152  | 1882     | 0.340 | ng    | -0.01    |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 195      | 0.225 | ng    | -0.01    |
| 15) 2-Fluorobiphenyl          | 12.978 | 172  | 3760     | 0.410 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.122 | 212  | 2613     | 0.307 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.722 | 244  | 1857     | 0.359 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.239  | 88   | 468      | 0.307 | ng    | # 77     |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 731      | 0.381 | ng    | 83       |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 1320     | 0.322 | ng    | 96       |
| 9) Naphthalene                | 10.552 | 128  | 3441     | 0.334 | ng    | 97       |
| 10) Hexachlorobutadiene       | 10.851 | 225  | 964      | 0.423 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 12.167 | 142  | 1892     | 0.279 | ng    | 97       |
| 16) Acenaphthylene            | 14.067 | 152  | 2987     | 0.378 | ng    | 99       |
| 17) Acenaphthene              | 14.409 | 154  | 1807     | 0.336 | ng    | 96       |
| 18) Fluorene                  | 15.403 | 166  | 2272     | 0.328 | ng    | 97       |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 133      | 0.396 | ng    | 98       |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 678      | 0.329 | ng    | # 87     |
| 22) Hexachlorobenzene         | 16.404 | 284  | 998      | 0.375 | ng    | 93       |
| 23) Atrazine                  | 16.553 | 200  | 435      | 0.303 | ng    | # 85     |
| 24) Pentachlorophenol         | 16.739 | 266  | 507      | 0.425 | ng    | 99       |
| 25) Phenanthrene              | 17.124 | 178  | 3259     | 0.338 | ng    | 99       |
| 26) Anthracene                | 17.223 | 178  | 2908     | 0.331 | ng    | 99       |
| 28) Fluoranthene              | 19.150 | 202  | 3298     | 0.297 | ng    | 97       |
| 30) Pyrene                    | 19.513 | 202  | 3228     | 0.333 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 2903     | 0.345 | ng    | 98       |
| 33) Chrysene                  | 21.304 | 228  | 3135     | 0.358 | ng    | 97       |
| 34) Bis(2-ethylhexyl)phtha... | 21.205 | 149  | 1102     | 0.291 | ng    | 98       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.762 | 276  | 3100     | 0.363 | ng    | 97       |
| 37) Benzo(b)fluoranthene      | 22.835 | 252  | 2895     | 0.372 | ng    | 94       |
| 38) Benzo(k)fluoranthene      | 22.879 | 252  | 2995     | 0.373 | ng    | 95       |
| 39) Benzo(a)pyrene            | 23.408 | 252  | 2515     | 0.387 | ng    | 92       |
| 40) Dibenzo(a,h)anthracene    | 25.779 | 278  | 2418     | 0.350 | ng    | 93       |
| 41) Benzo(g,h,i)perylene      | 26.452 | 276  | 2798     | 0.391 | ng    | 97       |

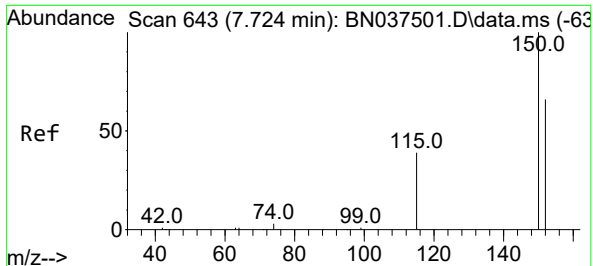
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Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037566.D  
Acq On : 05 Aug 2025 13:47  
Operator : RC/JU  
Sample : PB169094BS  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

Quant Time: Aug 06 01:39:34 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

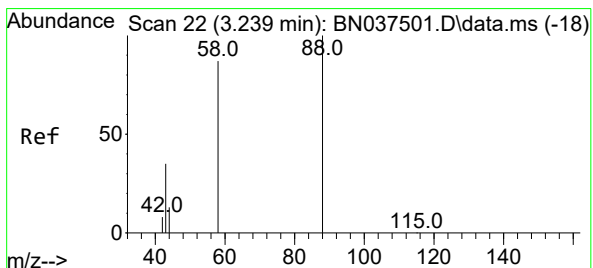
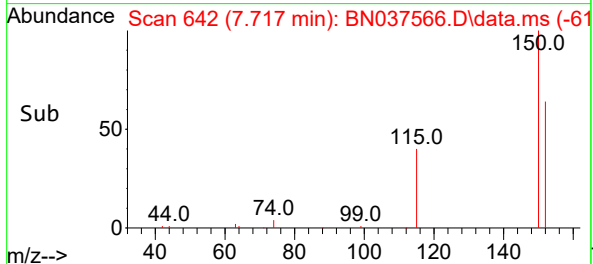
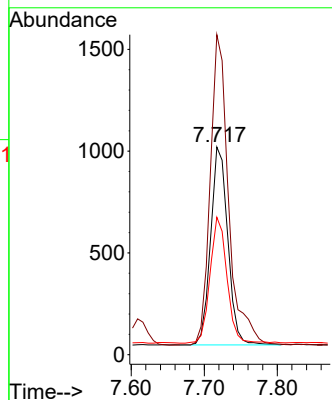
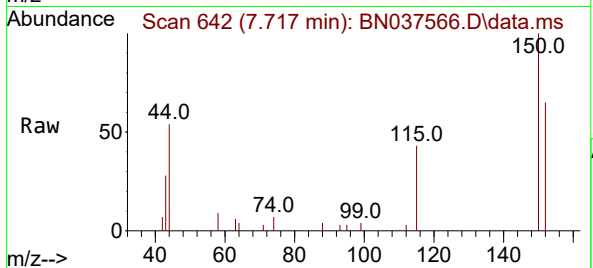




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 64  
Delta R.T. -0.007 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

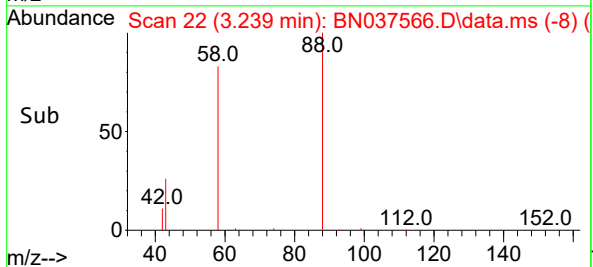
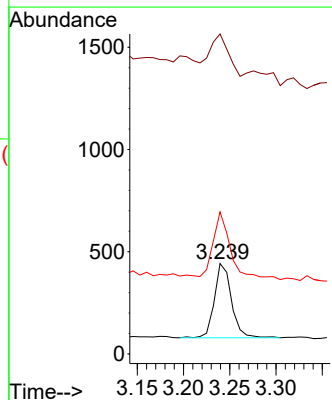
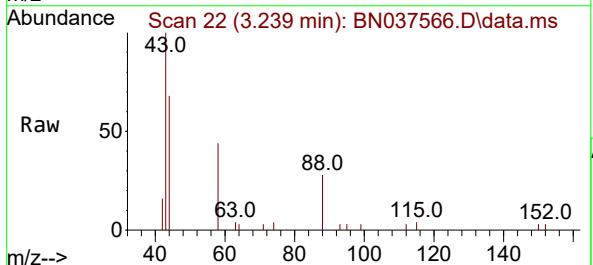
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

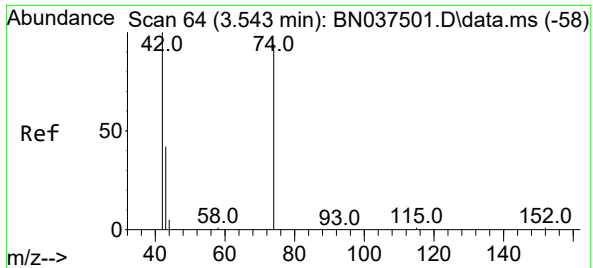
Tgt Ion:152 Resp: 1587  
Ion Ratio Lower Upper  
152 100  
150 154.1 119.8 179.8  
115 66.2 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.307 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion: 88 Resp: 468  
Ion Ratio Lower Upper  
88 100  
43 51.7 27.5 41.3#  
58 95.3 62.7 94.1#

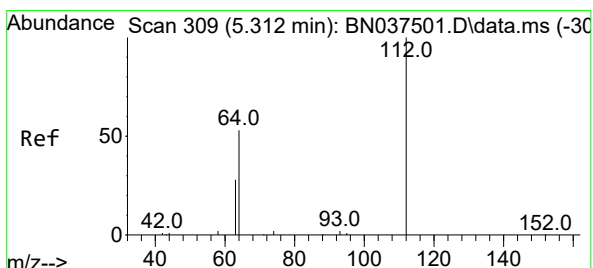
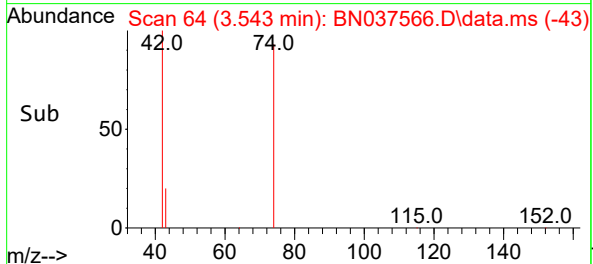
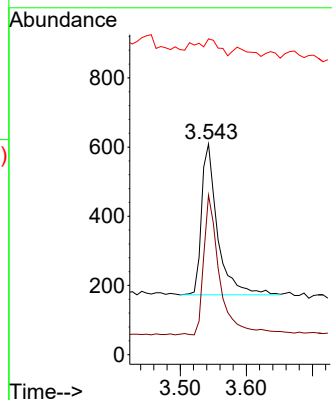
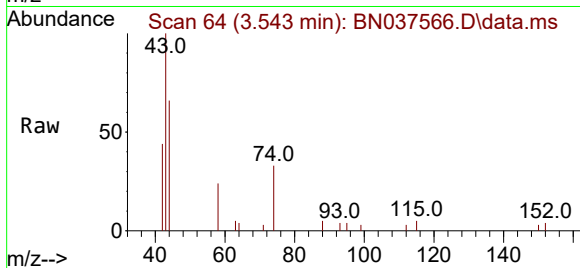




#3  
n-Nitrosodimethylamine  
Concen: 0.381 ng  
RT: 3.543 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

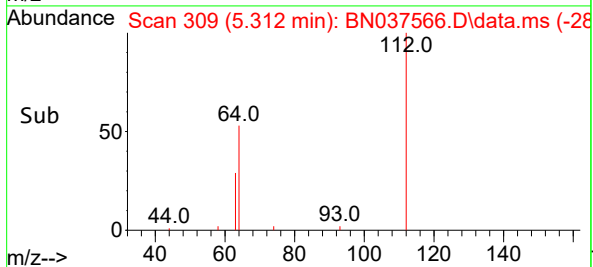
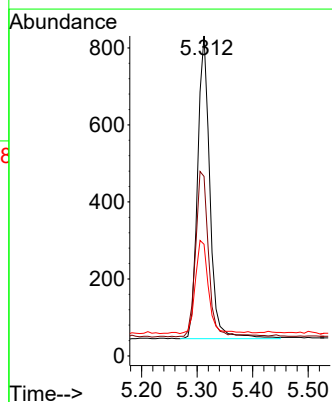
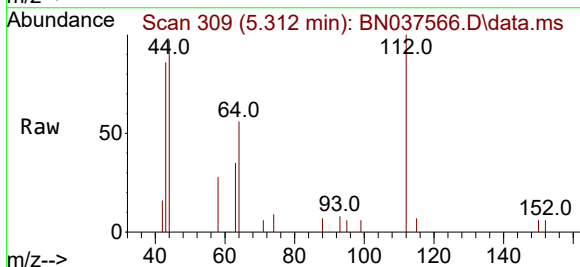
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

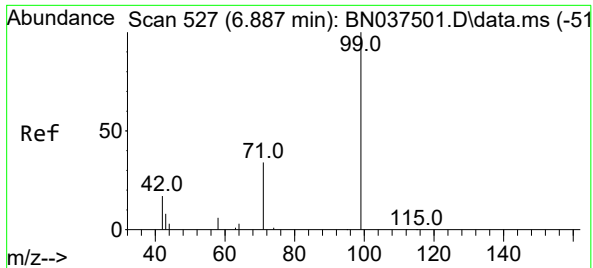
Tgt Ion: 42 Resp: 731  
Ion Ratio Lower Upper  
42 100  
74 93.8 91.8 137.6  
44 15.9 15.0 22.6



#4  
2-Fluorophenol  
Concen: 0.306 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion: 112 Resp: 1200  
Ion Ratio Lower Upper  
112 100  
64 56.6 45.1 67.7  
63 33.1 23.8 35.8

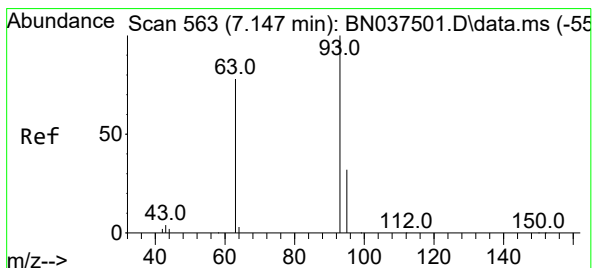
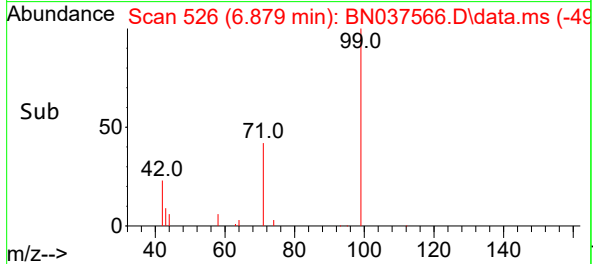
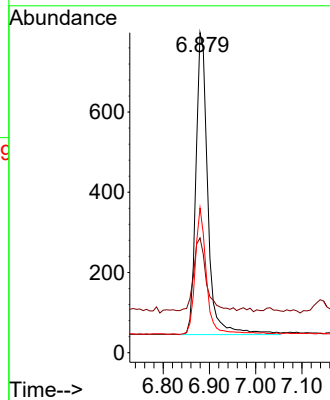
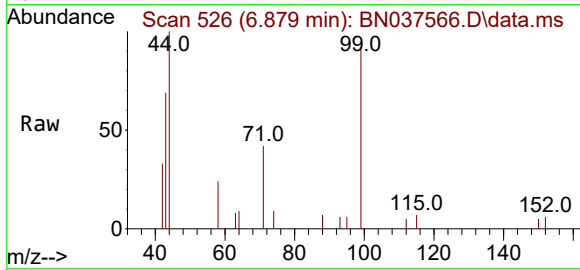




#5  
Phenol-d6  
Concen: 0.275 ng  
RT: 6.879 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

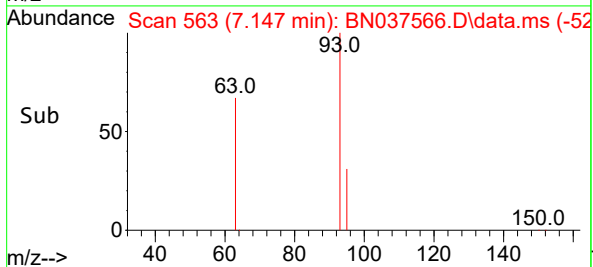
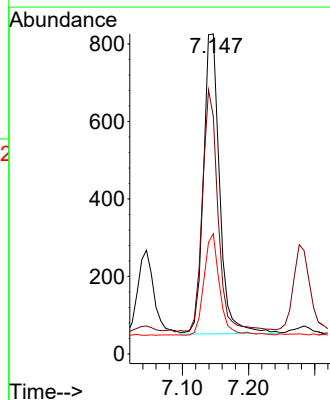
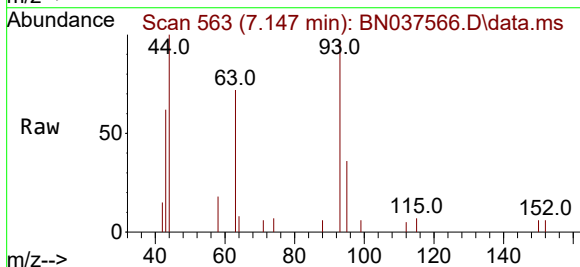
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

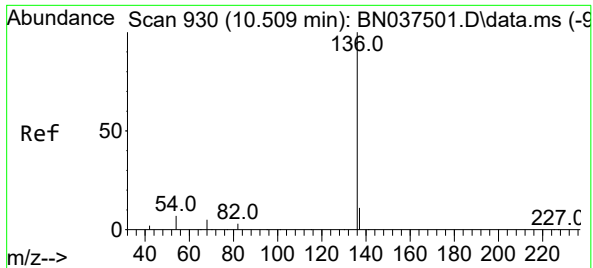
Tgt Ion: 99 Resp: 1356  
Ion Ratio Lower Upper  
99 100  
42 25.2 17.1 25.7  
71 39.8 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 0.322 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion: 93 Resp: 1320  
Ion Ratio Lower Upper  
93 100  
63 76.8 58.2 87.4  
95 32.7 25.3 37.9

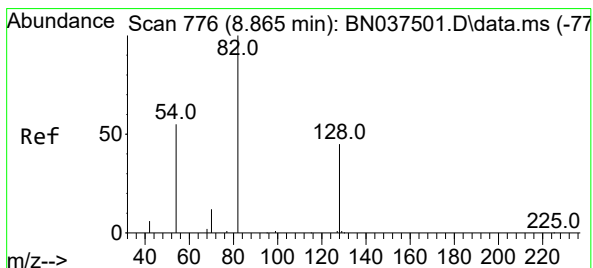
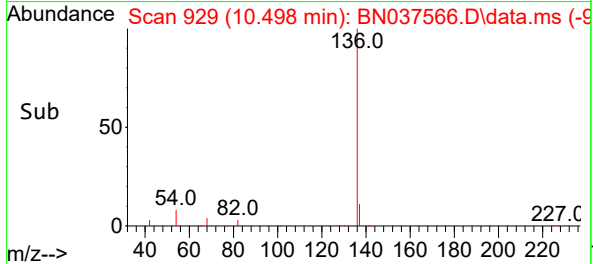
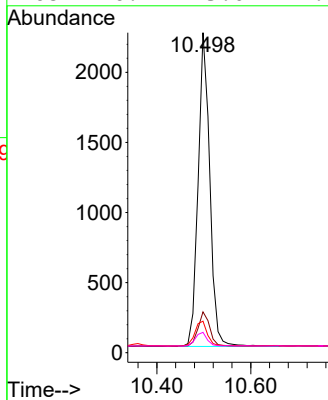
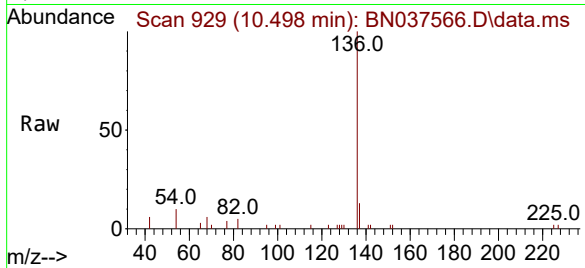




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 91  
Delta R.T. -0.011 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

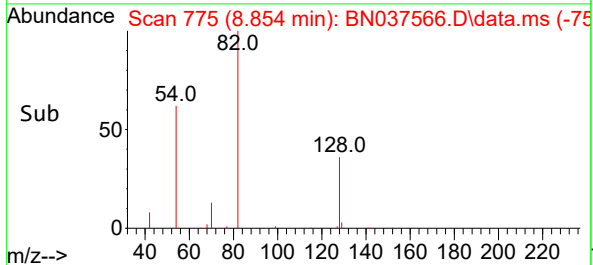
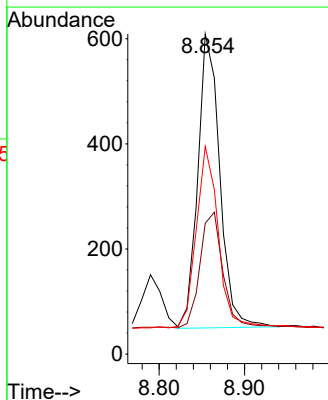
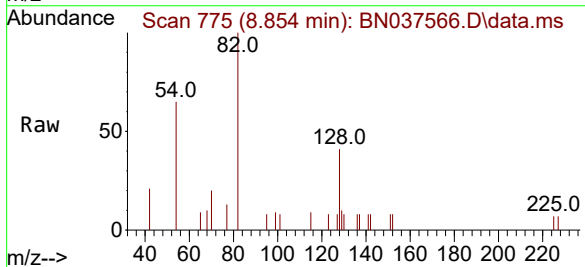
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

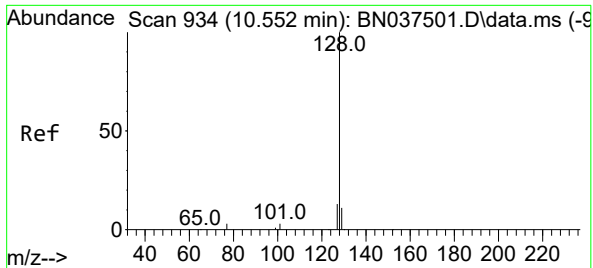
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 3862  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.8  | 9.8   | 14.8  |
| 54       | 9.9   | 6.6   | 9.8#  |
| 68       | 6.4   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 0.347 ng  
RT: 8.854 min Scan# 775  
Delta R.T. -0.011 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1001  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 40.9  | 37.5  | 56.3  |
| 54       | 64.9  | 45.3  | 67.9  |

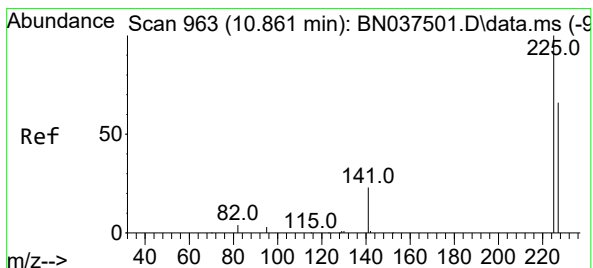
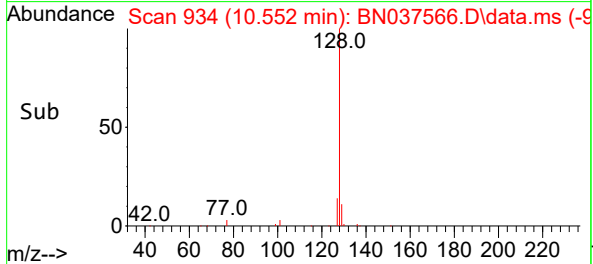
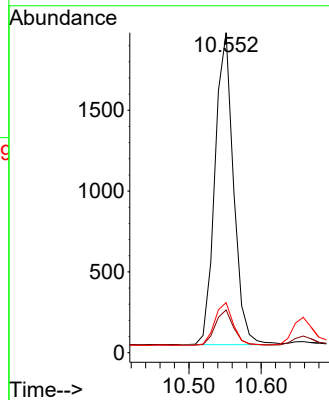
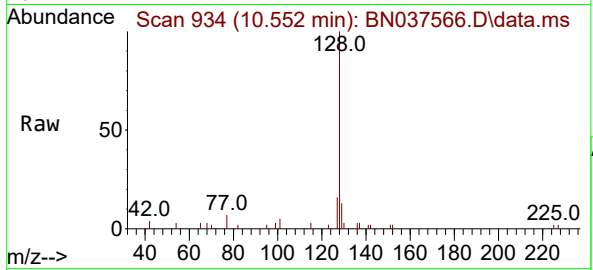




#9  
Naphthalene  
Concen: 0.334 ng  
RT: 10.552 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

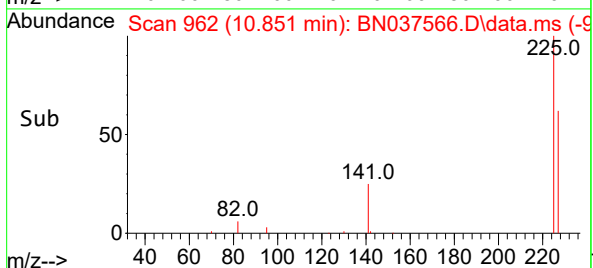
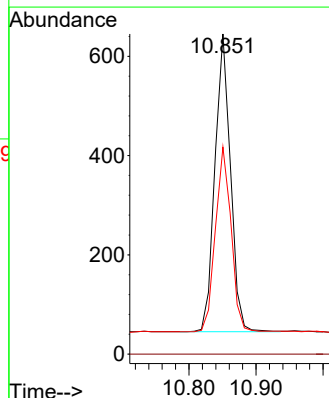
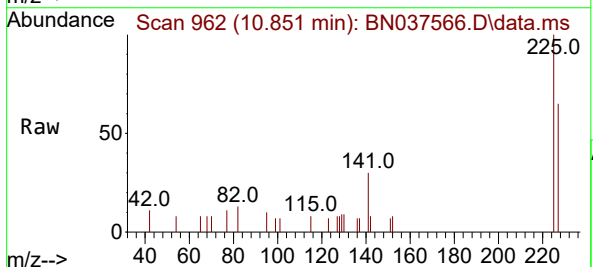
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BNA\_N  
ClientSampleId :  
PB169094BS

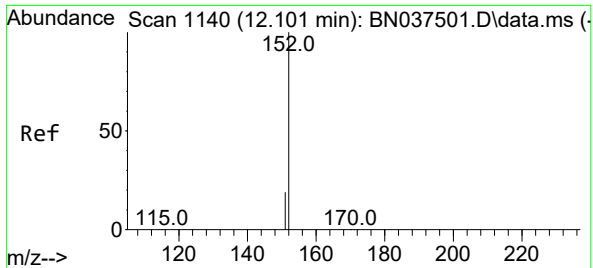
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 3441  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 13.4  | 9.7   | 14.5  |
| 127      | 15.7  | 11.5  | 17.3  |



#10  
Hexachlorobutadiene  
Concen: 0.423 ng  
RT: 10.851 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 225   | Resp: | 964   |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 0.0   | 0.0   | 0.0   |
| 227      | 62.9  | 51.0  | 76.4  |

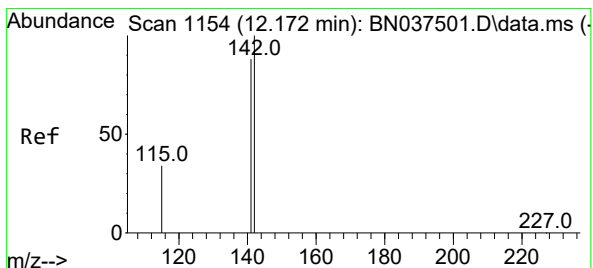
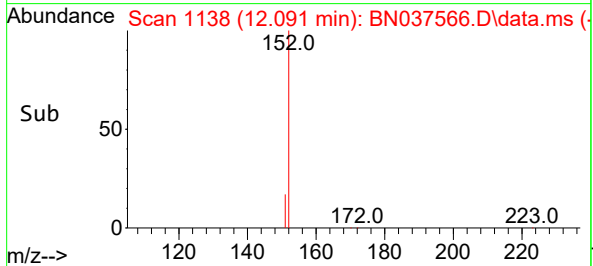
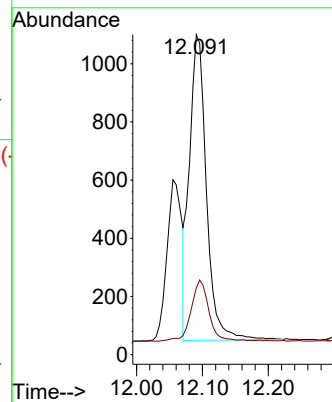
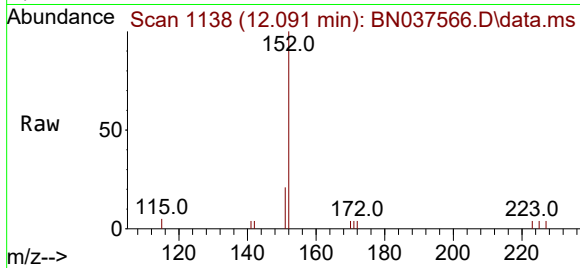




#11  
2-Methylnaphthalene-d10  
Concen: 0.340 ng  
RT: 12.091 min Scan# 1138  
Delta R.T. -0.010 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

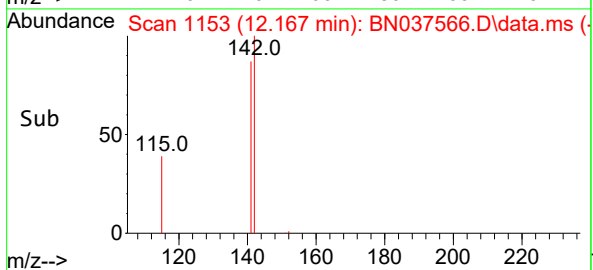
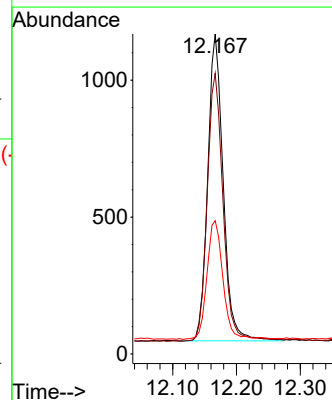
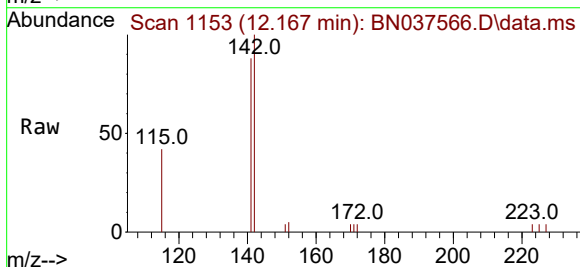
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ClientSampleId :  
PB169094BS

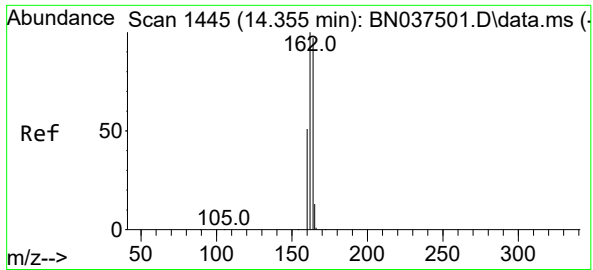
Tgt Ion:152 Resp: 1882  
Ion Ratio Lower Upper  
152 100  
151 21.3 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.279 ng  
RT: 12.167 min Scan# 1153  
Delta R.T. -0.005 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:142 Resp: 1892  
Ion Ratio Lower Upper  
142 100  
141 87.7 71.0 106.4  
115 41.7 29.0 43.4

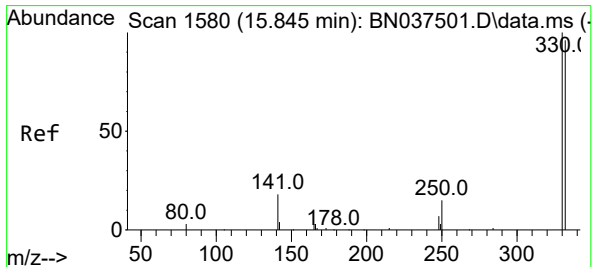
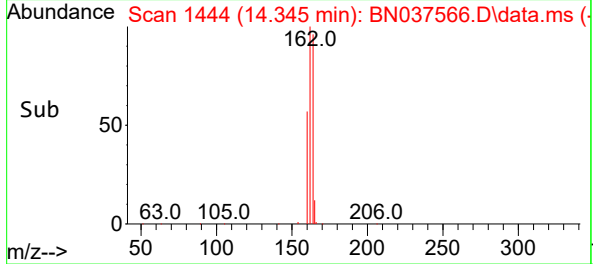
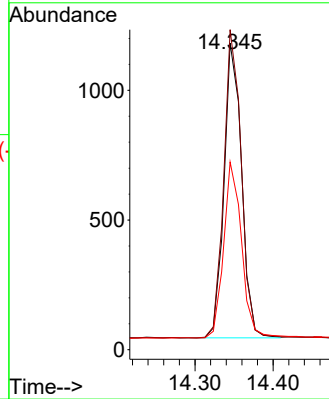
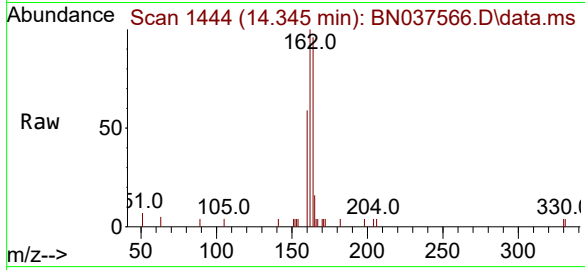




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.345 min Scan# 1445  
Delta R.T. -0.011 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

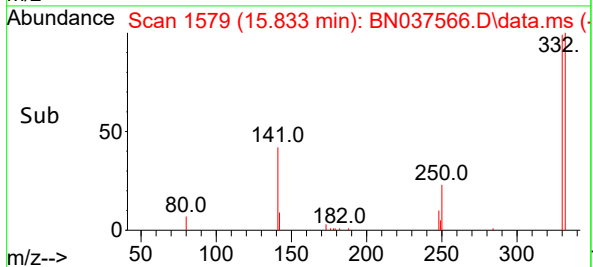
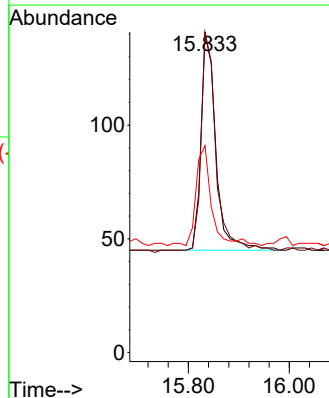
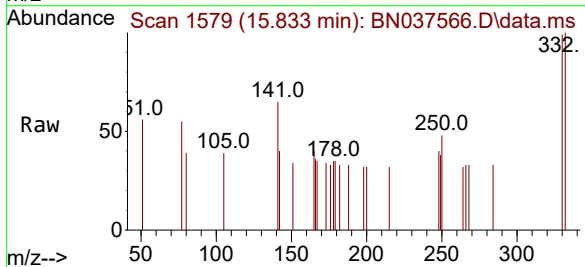
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

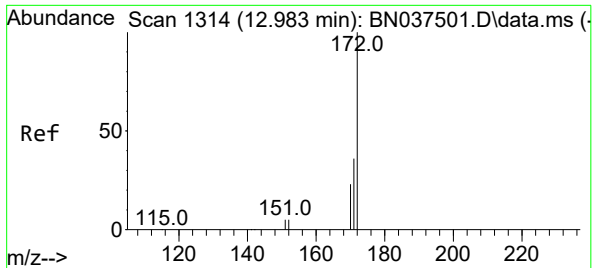
Tgt Ion:164 Resp: 1765  
Ion Ratio Lower Upper  
164 100  
162 104.4 82.0 123.0  
160 61.3 42.4 63.6



#14  
2,4,6-Tribromophenol  
Concen: 0.225 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.012 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:330 Resp: 195  
Ion Ratio Lower Upper  
330 100  
332 99.0 76.1 114.1  
141 48.7 33.4 50.0

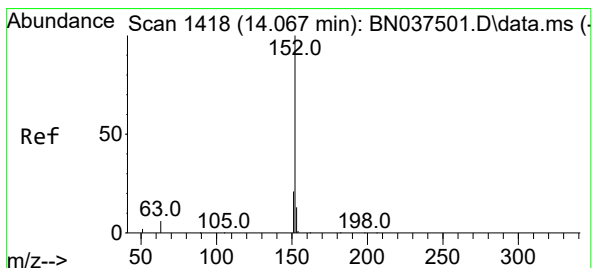
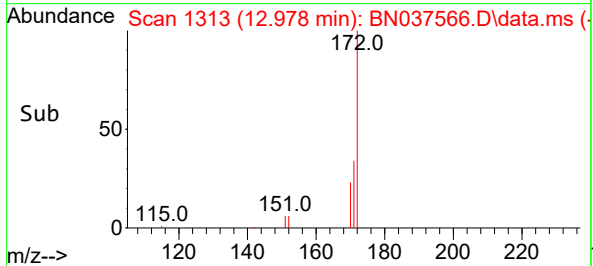
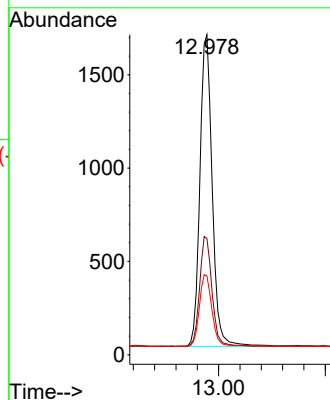
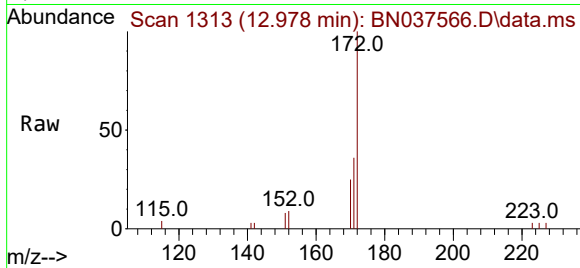




#15  
2-Fluorobiphenyl  
Concen: 0.410 ng  
RT: 12.978 min Scan# 1314  
Delta R.T. -0.005 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

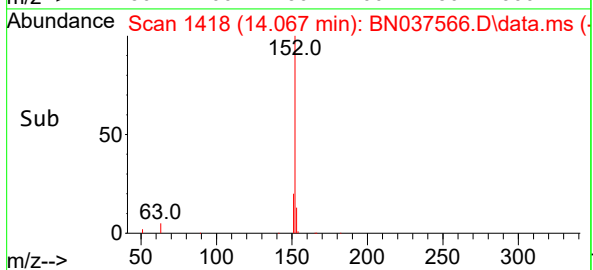
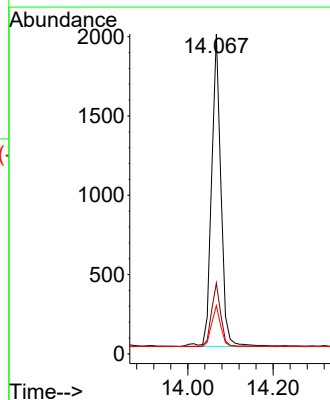
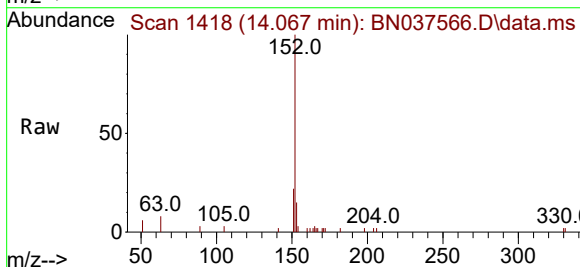
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ClientSampleId :  
PB169094BS

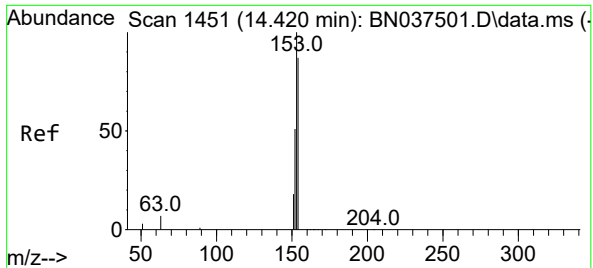
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 172   | Resp: | 3760  |
| Ion      | Ratio | Lower | Upper |
| 172      | 100   |       |       |
| 171      | 36.3  | 29.4  | 44.2  |
| 170      | 24.6  | 19.4  | 29.0  |



#16  
Acenaphthylene  
Concen: 0.378 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 2987  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 20.1  | 15.9  | 23.9  |
| 153      | 13.1  | 10.7  | 16.1  |

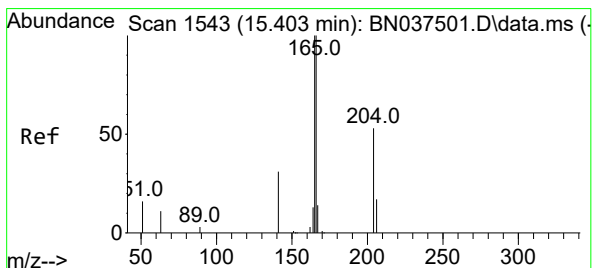
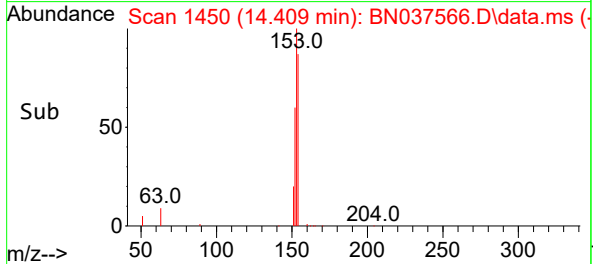
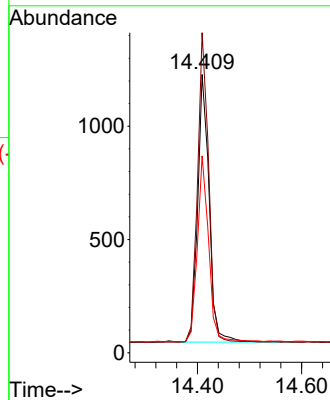
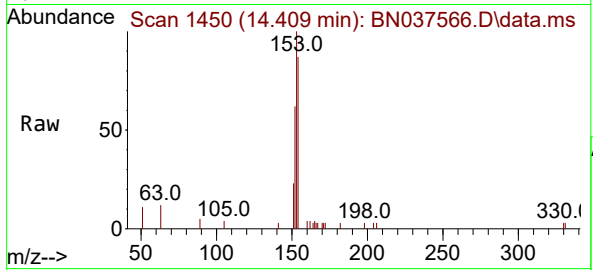




#17  
Acenaphthene  
Concen: 0.336 ng  
RT: 14.409 min Scan# 1450  
Delta R.T. -0.011 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

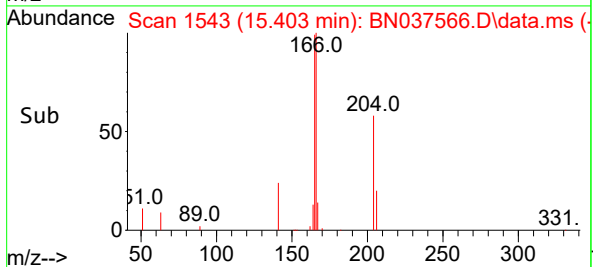
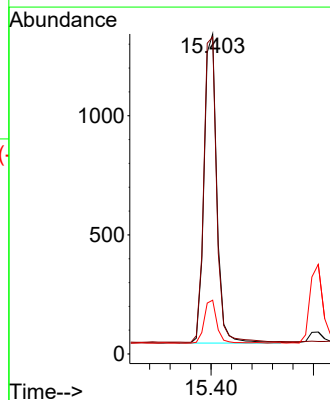
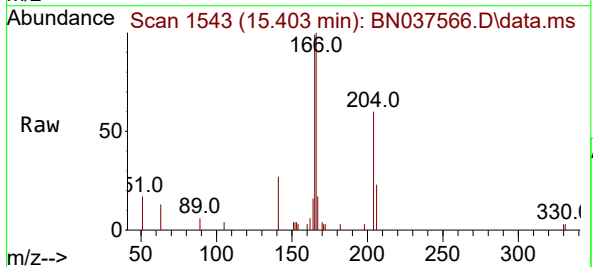
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

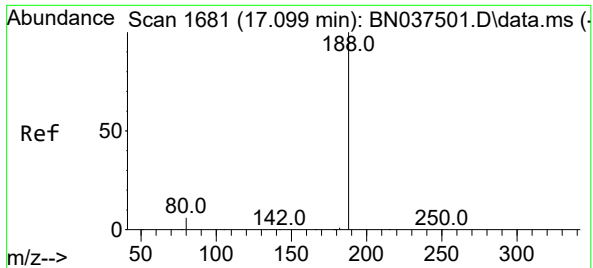
Tgt Ion:154 Resp: 1807  
Ion Ratio Lower Upper  
154 100  
153 112.0 89.2 133.8  
152 68.1 48.0 72.0



#18  
Fluorene  
Concen: 0.328 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:166 Resp: 2272  
Ion Ratio Lower Upper  
166 100  
165 100.9 78.1 117.1  
167 13.7 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.087 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

Instrument :

BNA\_N

ClientSampleId :

PB169094BS

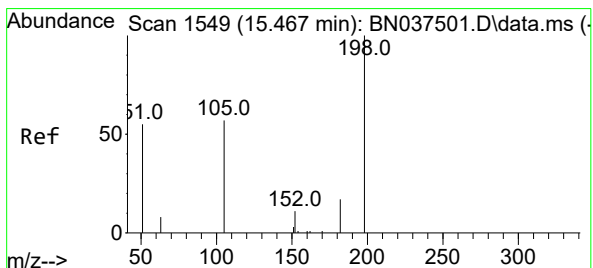
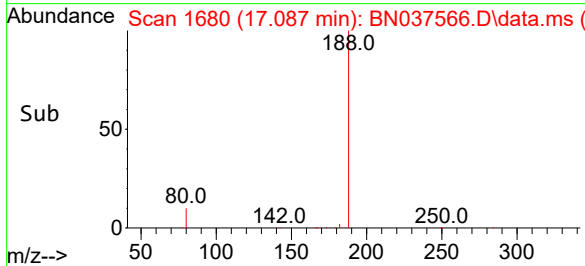
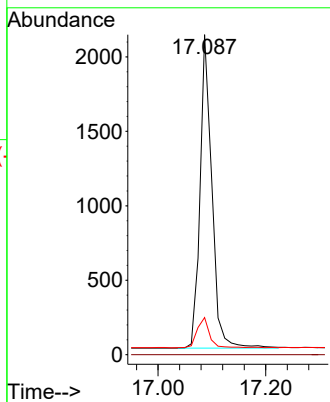
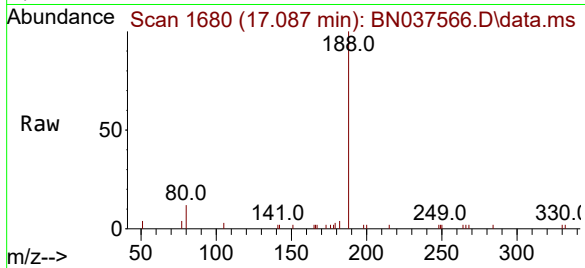
Tgt Ion:188 Resp: 3214

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.6 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.396 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

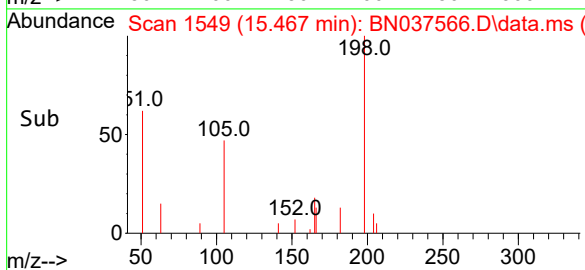
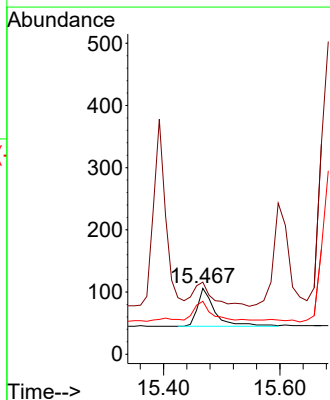
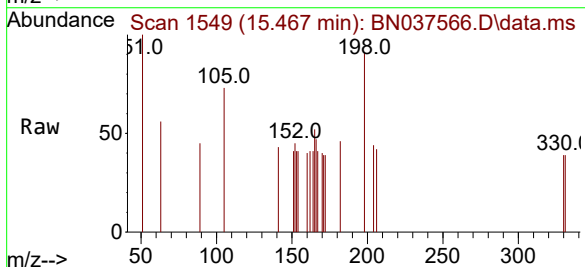
Tgt Ion:198 Resp: 133

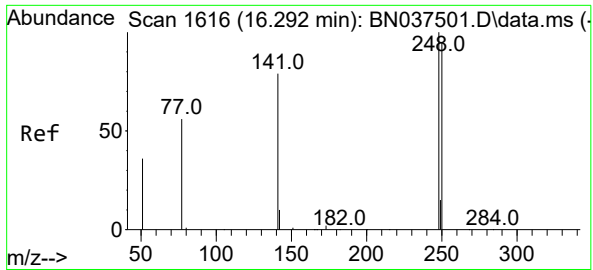
Ion Ratio Lower Upper

198 100

51 109.4 88.5 132.7

105 80.2 61.2 91.8

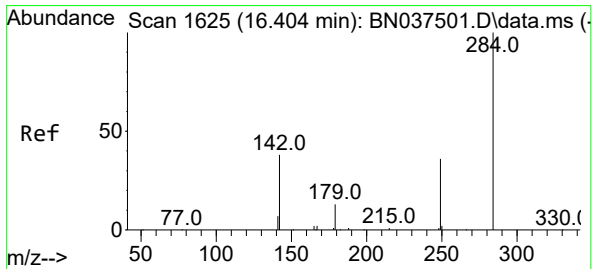
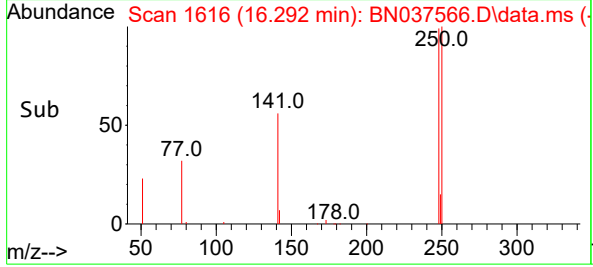
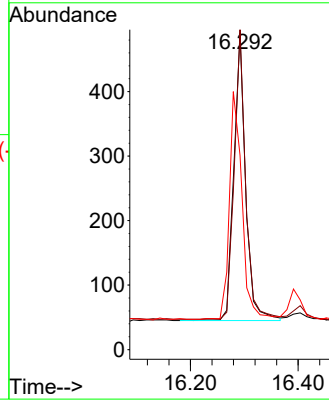
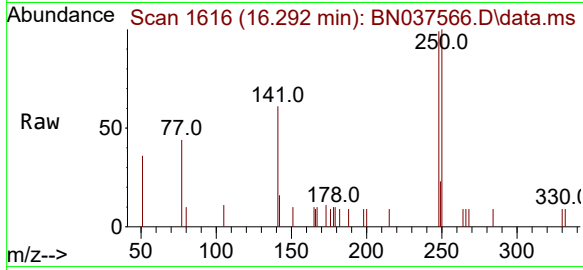




#21  
4-Bromophenyl-phenylether  
Concen: 0.329 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

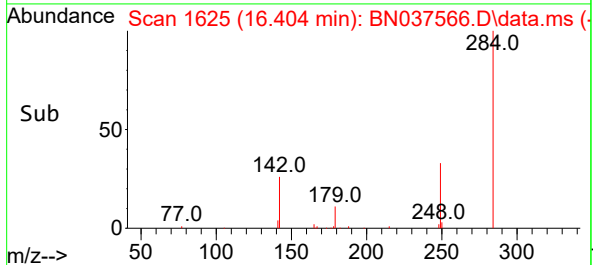
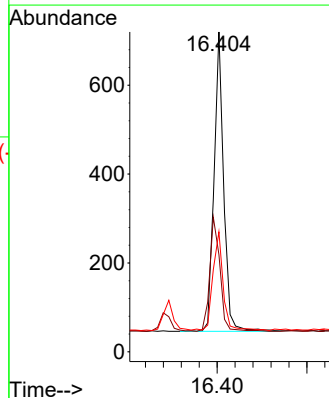
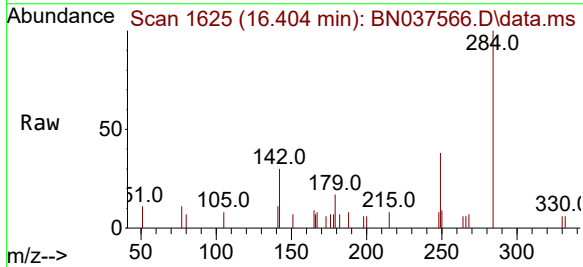
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

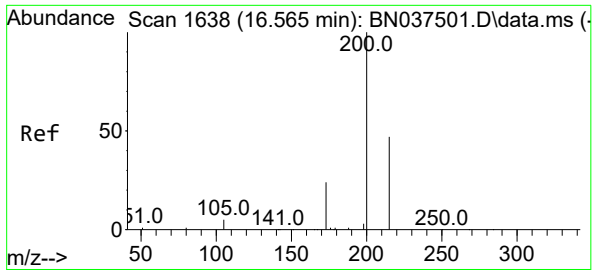
Tgt Ion:248 Resp: 678  
Ion Ratio Lower Upper  
248 100  
250 101.0 76.2 114.2  
141 61.3 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.375 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:284 Resp: 998  
Ion Ratio Lower Upper  
284 100  
142 40.8 28.9 43.3  
249 35.2 25.8 38.6

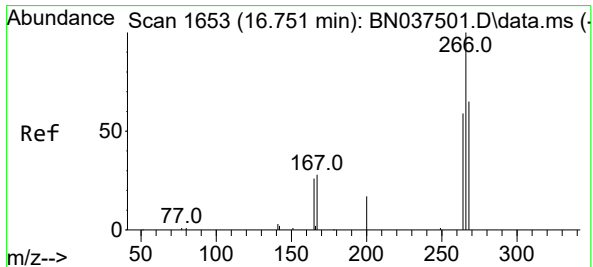
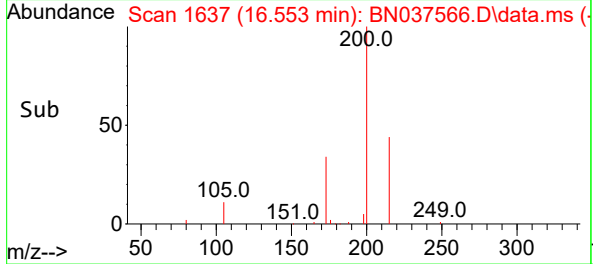
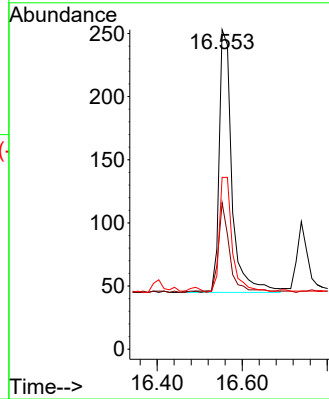
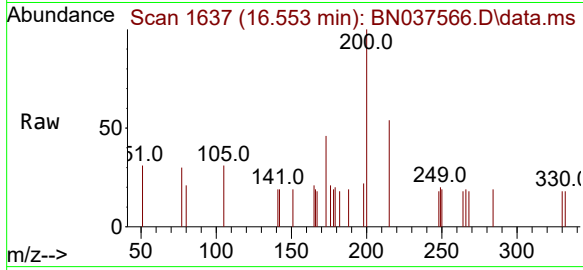




#23  
Atrazine  
Concen: 0.303 ng  
RT: 16.553 min Scan# 1637  
Delta R.T. -0.012 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

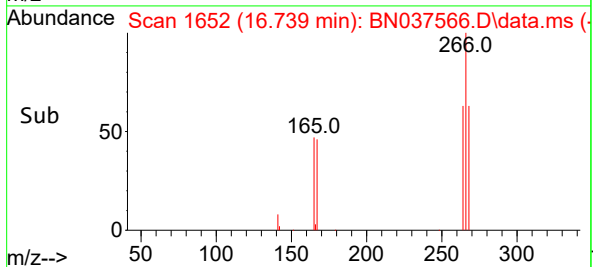
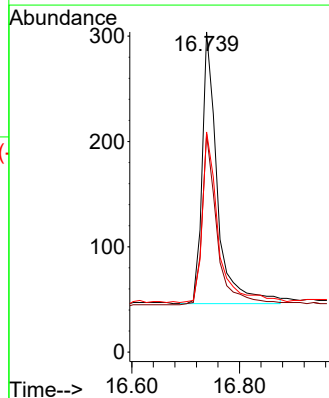
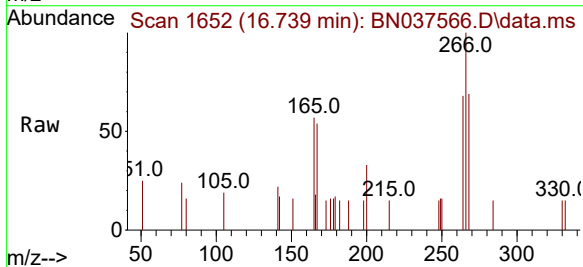
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

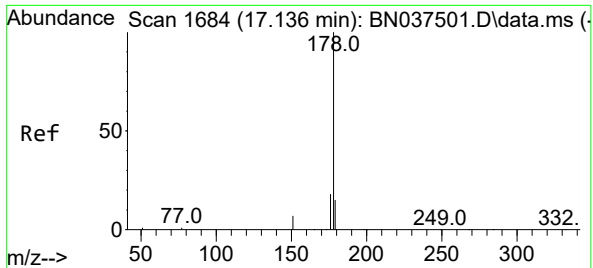
Tgt Ion:200 Resp: 435  
Ion Ratio Lower Upper  
200 100  
173 45.8 23.2 34.8#  
215 53.8 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.425 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.012 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:266 Resp: 507  
Ion Ratio Lower Upper  
266 100  
264 61.9 49.3 73.9  
268 65.9 51.6 77.4

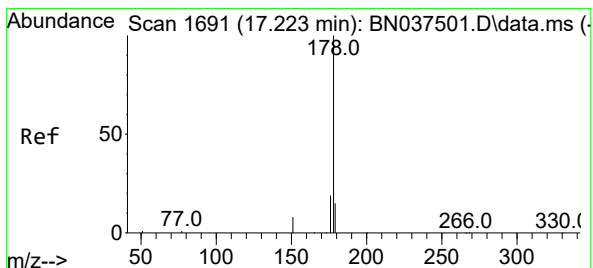
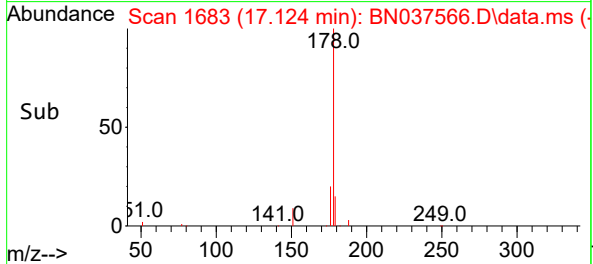
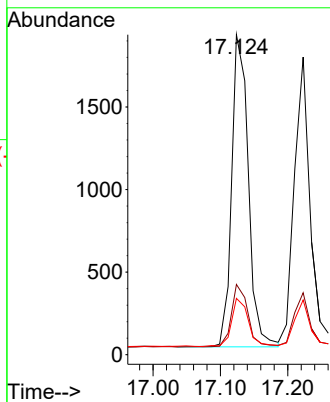
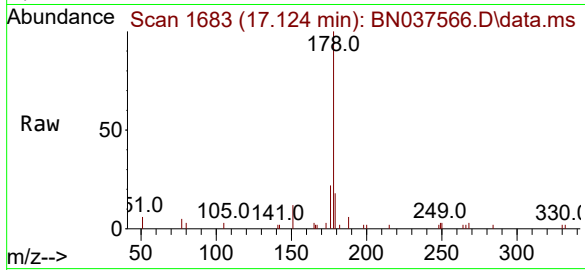




#25  
Phenanthrene  
Concen: 0.338 ng  
RT: 17.124 min Scan# 1683  
Delta R.T. -0.012 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

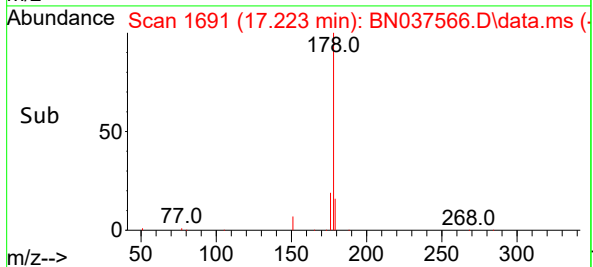
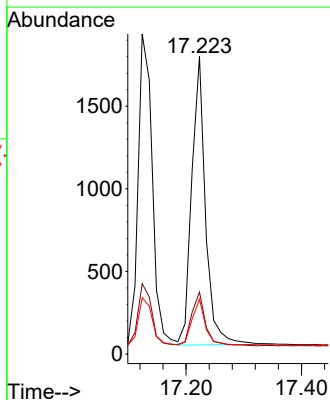
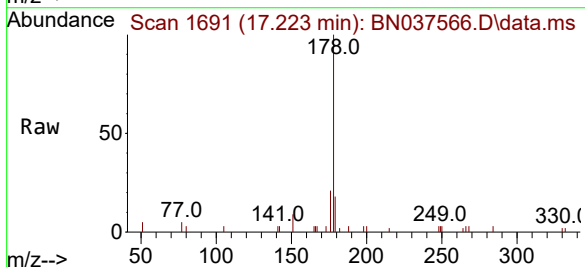
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

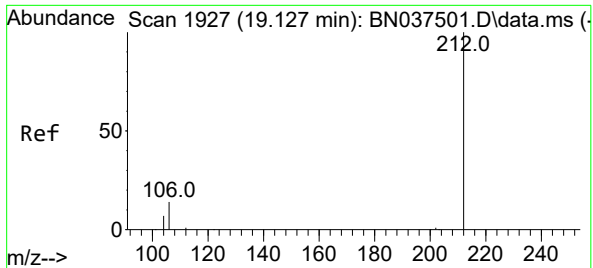
Tgt Ion:178 Resp: 3259  
Ion Ratio Lower Upper  
178 100  
176 19.6 15.0 22.6  
179 15.6 12.2 18.2



#26  
Anthracene  
Concen: 0.331 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:178 Resp: 2908  
Ion Ratio Lower Upper  
178 100  
176 18.7 14.7 22.1  
179 15.6 12.3 18.5

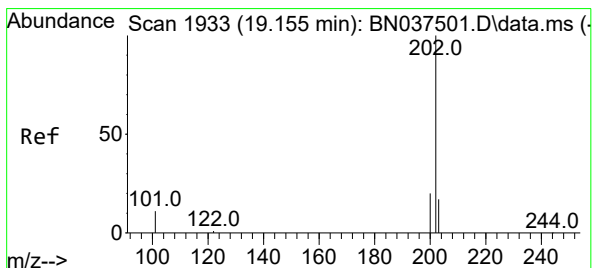
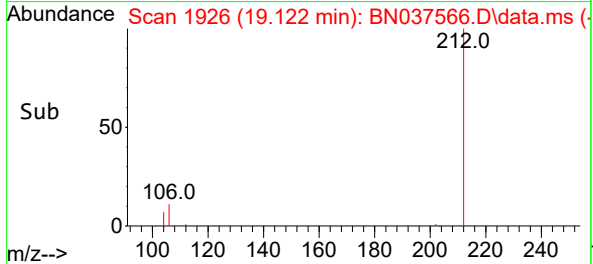
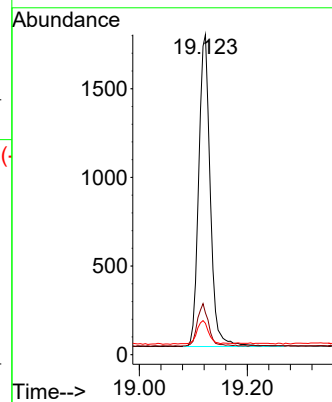
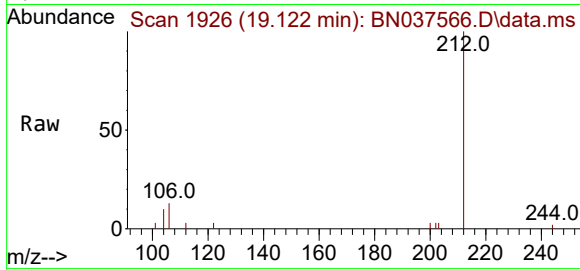




#27  
Fluoranthene-d10  
Concen: 0.307 ng  
RT: 19.122 min Scan# 1926  
Delta R.T. -0.005 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

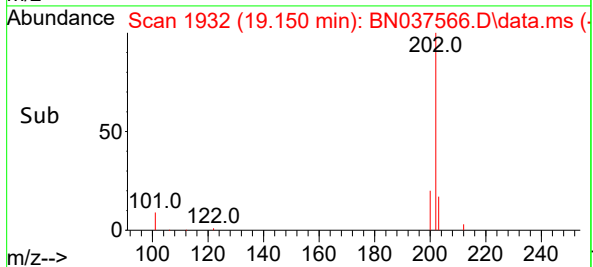
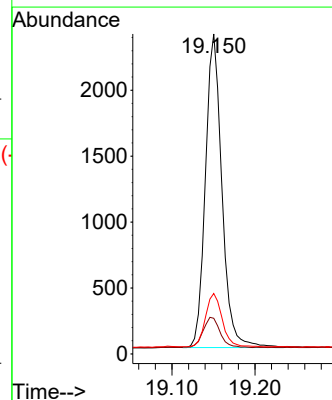
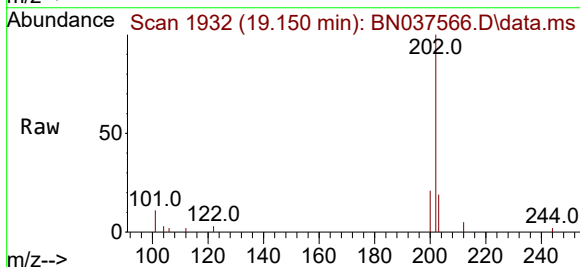
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

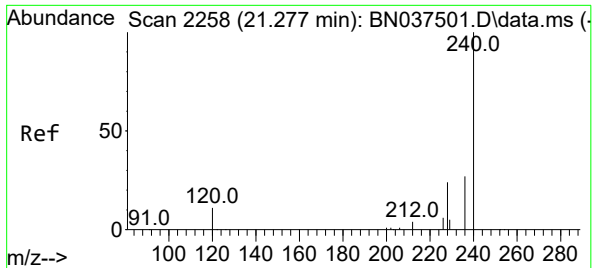
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 212     | 100   |       |       |
| 106     | 13.6  | 12.2  | 18.4  |
| 104     | 7.1   | 6.7   | 10.1  |



#28  
Fluoranthene  
Concen: 0.297 ng  
RT: 19.150 min Scan# 1932  
Delta R.T. -0.005 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.9   | 9.8   | 14.6  |
| 203     | 17.1  | 13.6  | 20.4  |

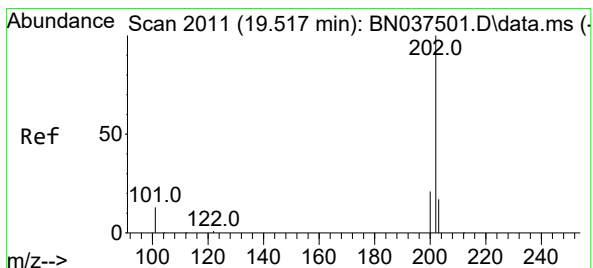
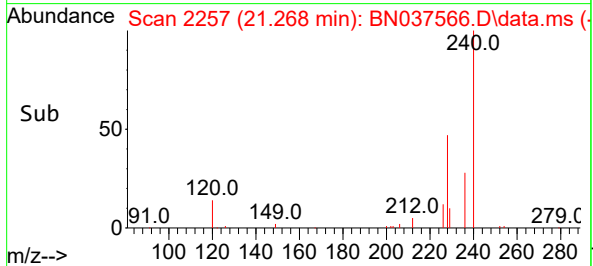
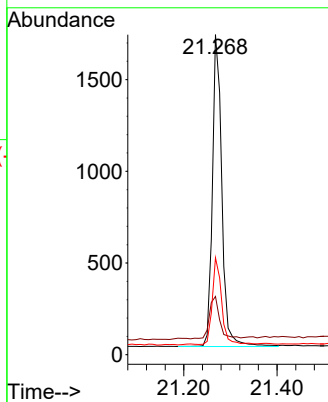
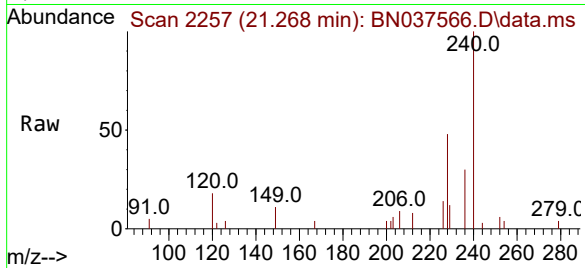




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

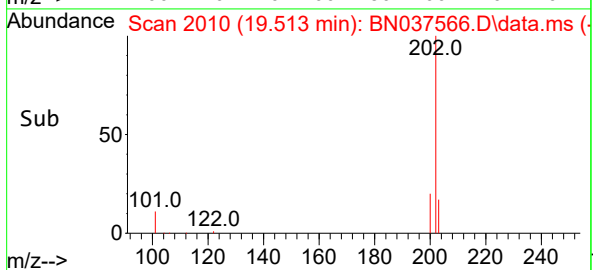
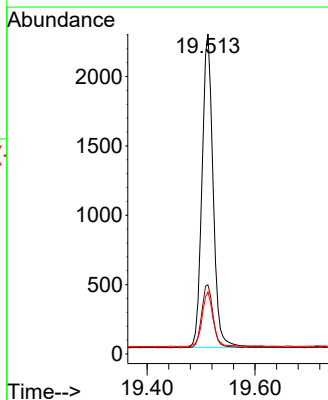
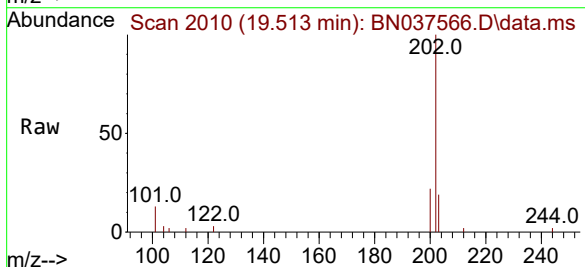
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

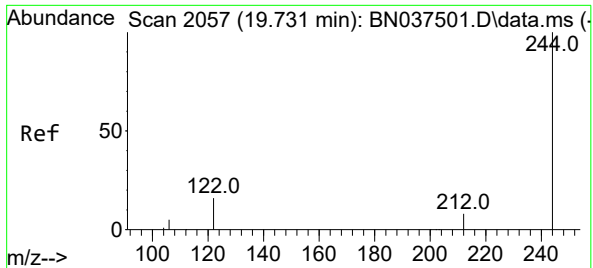
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 18.2  | 10.7  | 16.1# |
| 236     | 30.3  | 22.6  | 33.8  |



#30  
Pyrene  
Concen: 0.333 ng  
RT: 19.513 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.6  | 16.5  | 24.7  |
| 203     | 17.5  | 14.3  | 21.5  |

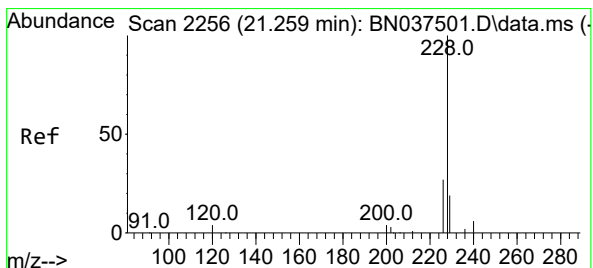
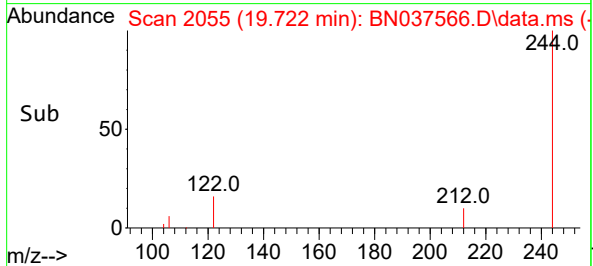
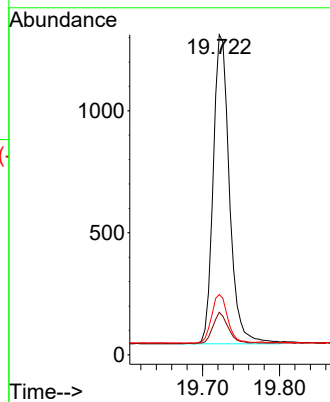
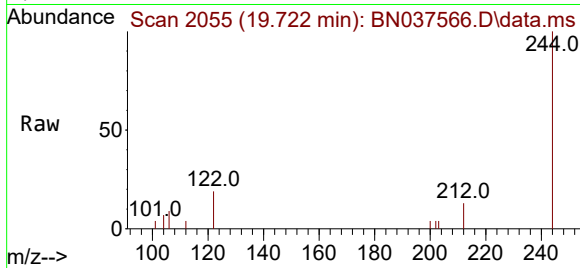




#31  
Terphenyl-d14  
Concen: 0.359 ng  
RT: 19.722 min Scan# 2055  
Delta R.T. -0.009 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

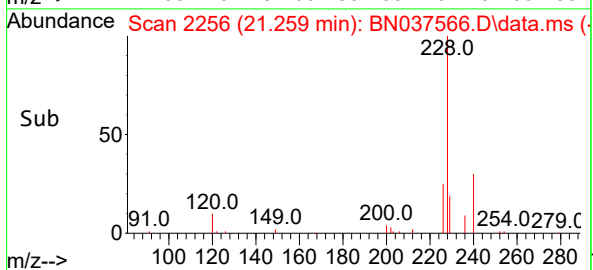
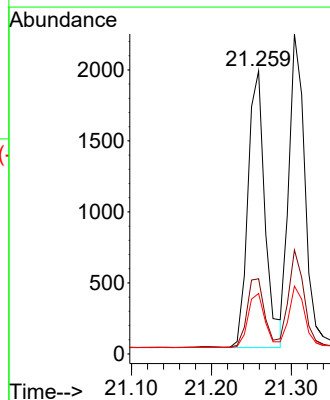
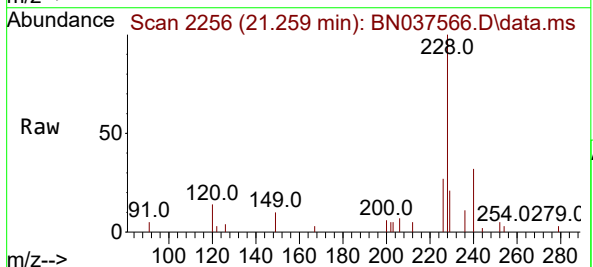
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

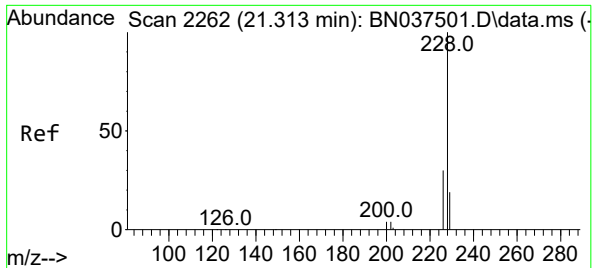
Tgt Ion:244 Resp: 1857  
Ion Ratio Lower Upper  
244 100  
212 13.3 7.4 11.2#  
122 18.8 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.345 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:228 Resp: 2903  
Ion Ratio Lower Upper  
228 100  
226 26.5 21.9 32.9  
229 21.3 15.8 23.8





#33

Chrysene

Concen: 0.358 ng

RT: 21.304 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

Instrument :

BNA\_N

ClientSampleId :

PB169094BS

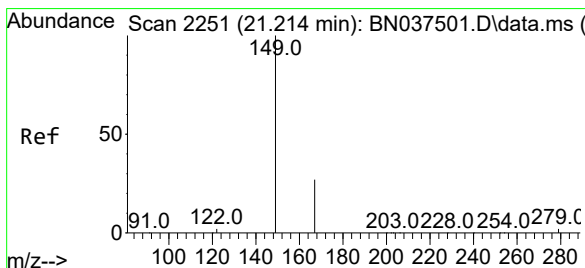
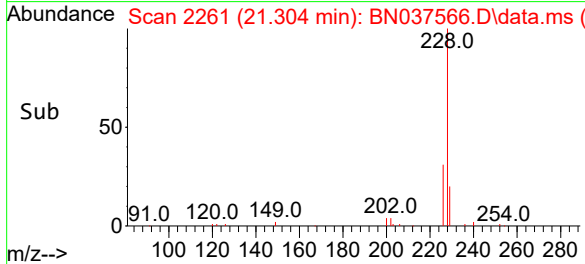
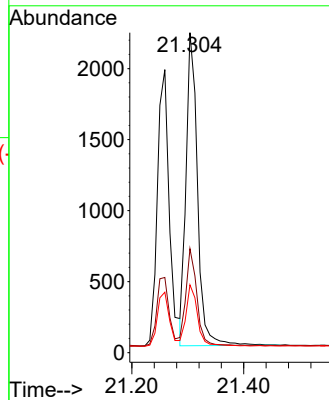
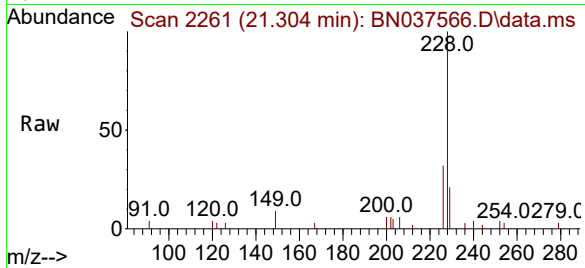
Tgt Ion:228 Resp: 3135

Ion Ratio Lower Upper

228 100

226 32.5 24.2 36.4

229 21.2 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.291 ng

RT: 21.205 min Scan# 2250

Delta R.T. -0.009 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

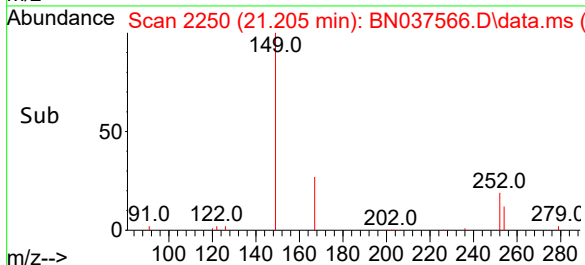
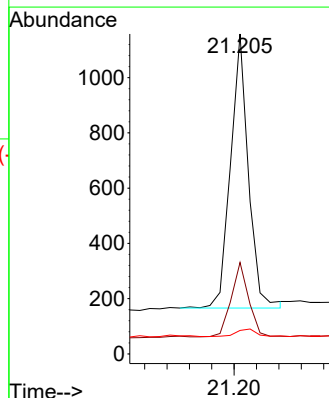
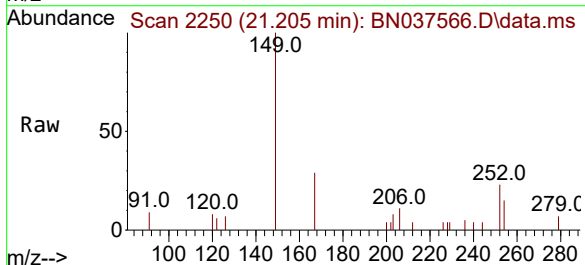
Tgt Ion:149 Resp: 1102

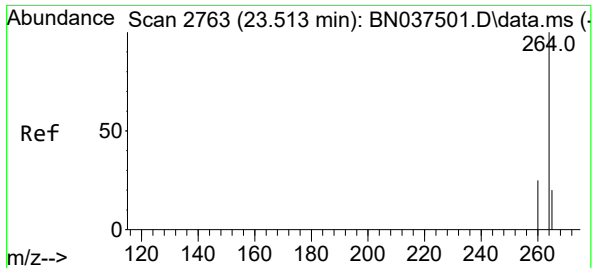
Ion Ratio Lower Upper

149 100

167 26.4 21.8 32.8

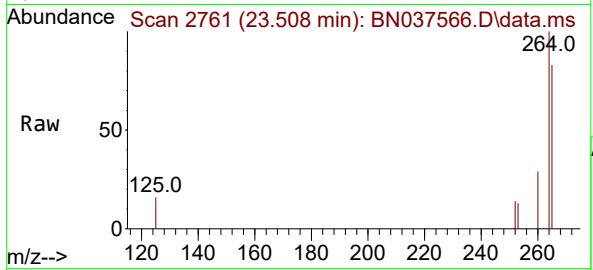
279 3.0 3.0 4.4



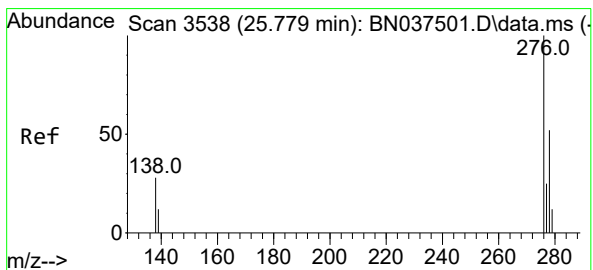
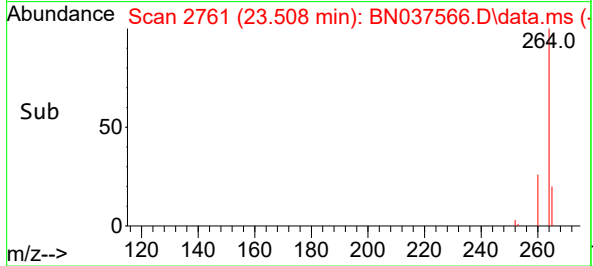
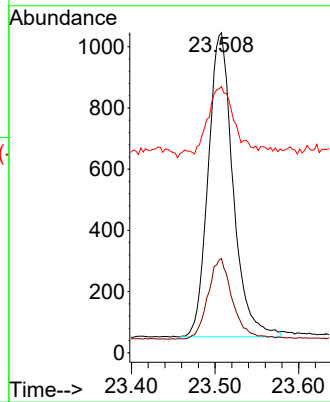


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.508 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BS

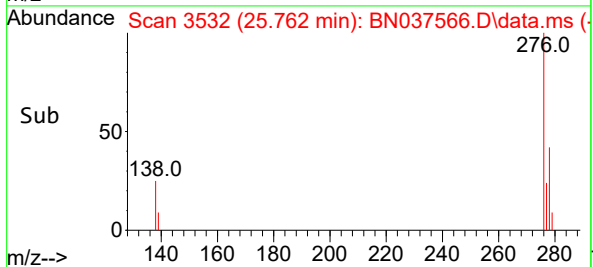
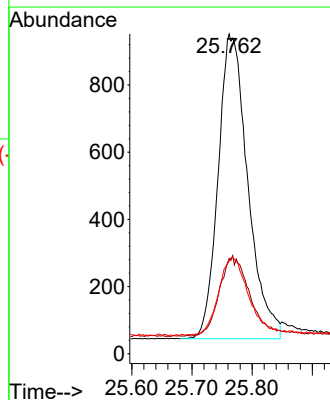
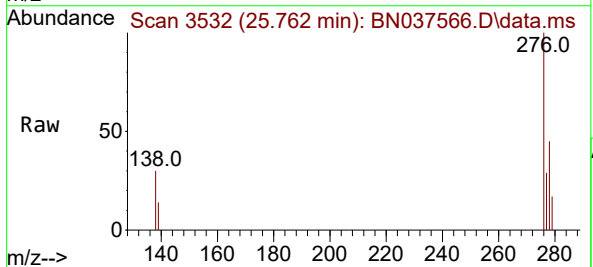


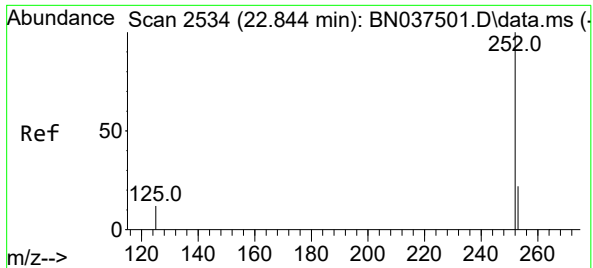
Tgt Ion:264 Resp: 2051  
Ion Ratio Lower Upper  
264 100  
260 29.4 21.2 31.8  
265 83.2 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.363 ng  
RT: 25.762 min Scan# 3532  
Delta R.T. -0.017 min  
Lab File: BN037566.D  
Acq: 05 Aug 2025 13:47

Tgt Ion:276 Resp: 3100  
Ion Ratio Lower Upper  
276 100  
138 27.2 24.0 36.0  
277 26.0 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.372 ng

RT: 22.835 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

Instrument :

BNA\_N

ClientSampleId :

PB169094BS

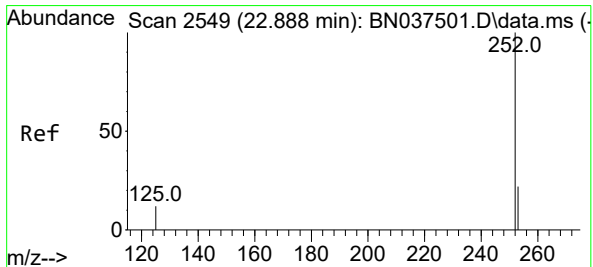
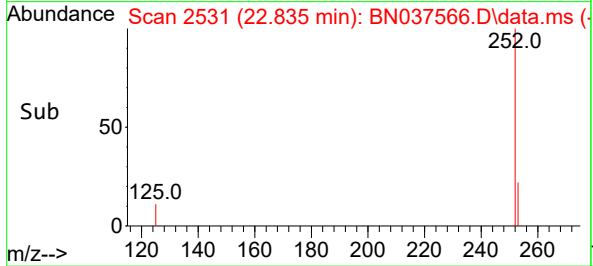
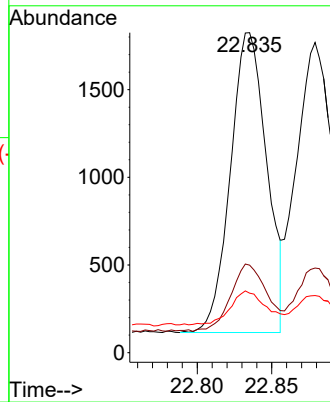
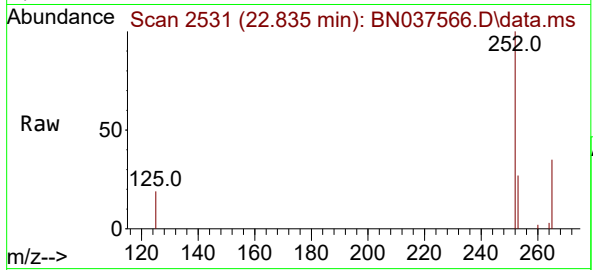
Tgt Ion:252 Resp: 2895

Ion Ratio Lower Upper

252 100

253 27.3 19.5 29.3

125 18.6 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.373 ng

RT: 22.879 min Scan# 2546

Delta R.T. -0.009 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

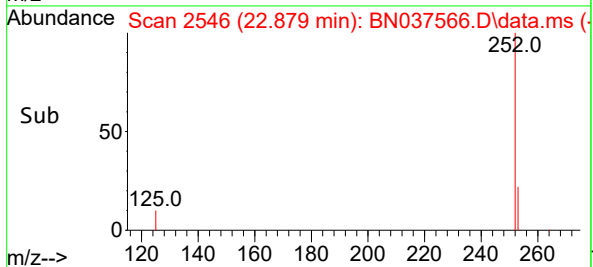
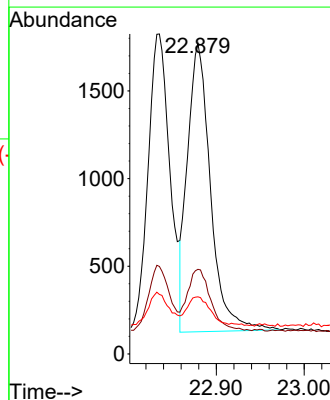
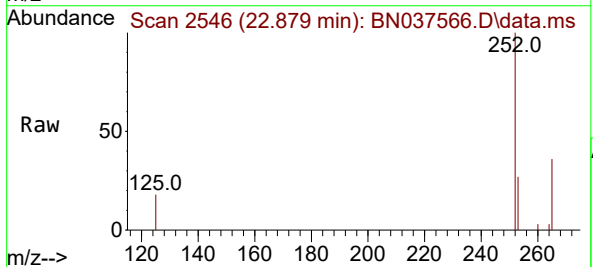
Tgt Ion:252 Resp: 2995

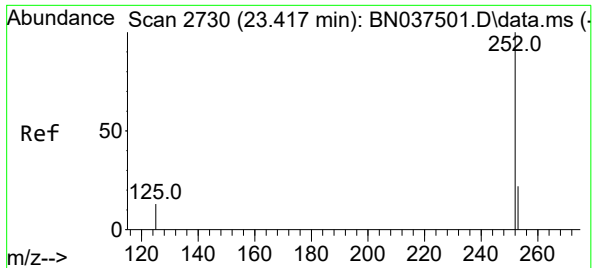
Ion Ratio Lower Upper

252 100

253 27.3 19.5 29.3

125 18.4 13.1 19.7





#39

Benzo(a)pyrene

Concen: 0.387 ng

RT: 23.408 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

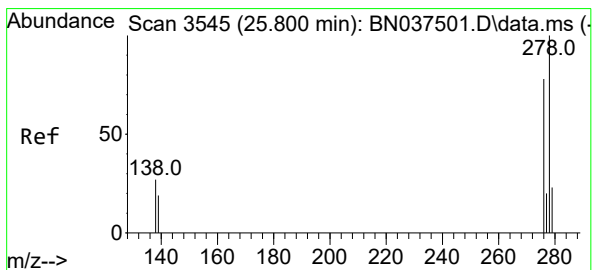
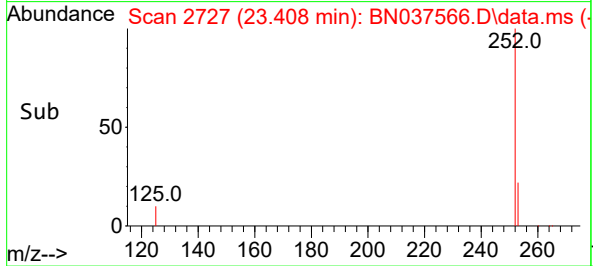
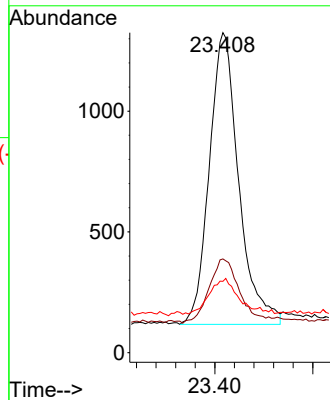
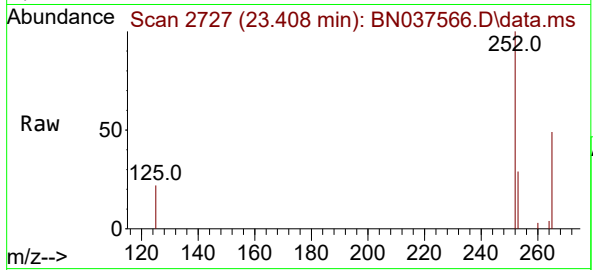
Instrument :

BNA\_N

ClientSampleId :

PB169094BS

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 2515 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 29.3  | 19.9  | 29.9 |
| 125       | 22.3  | 15.2  | 22.8 |



#40

Dibenzo(a,h)anthracene

Concen: 0.350 ng

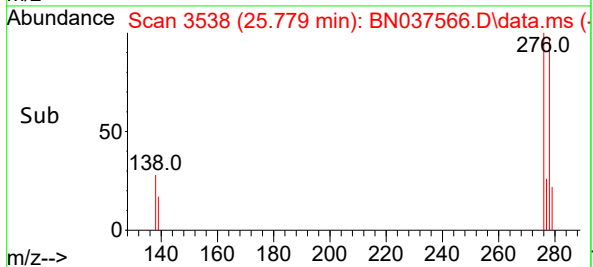
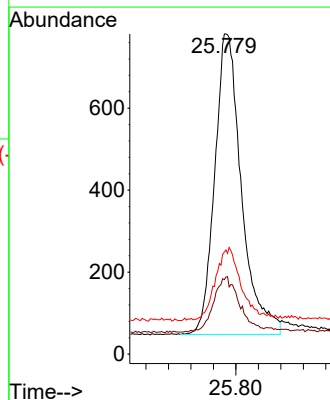
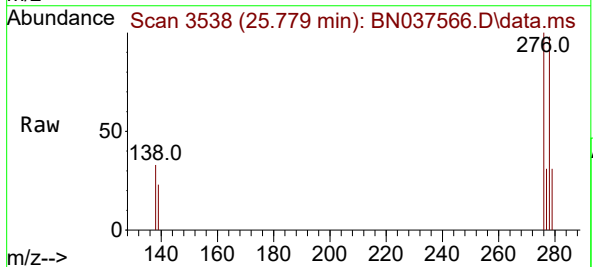
RT: 25.779 min Scan# 3538

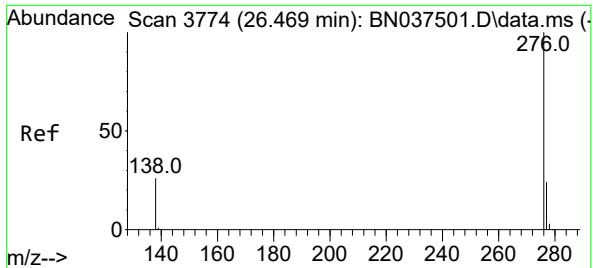
Delta R.T. -0.020 min

Lab File: BN037566.D

Acq: 05 Aug 2025 13:47

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 278   | Resp: | 2418 |
| Ion Ratio | Lower | Upper |      |
| 278       | 100   |       |      |
| 139       | 23.3  | 17.5  | 26.3 |
| 279       | 31.9  | 21.3  | 31.9 |





#41

Benzo(g,h,i)perylene

Concen: 0.391 ng

RT: 26.452 min Scan# 31

Delta R.T. -0.017 min

Lab File: BN037566.D

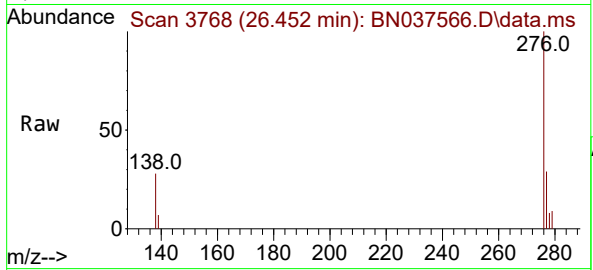
Acq: 05 Aug 2025 13:47

Instrument :

BNA\_N

ClientSampleId :

PB169094BS



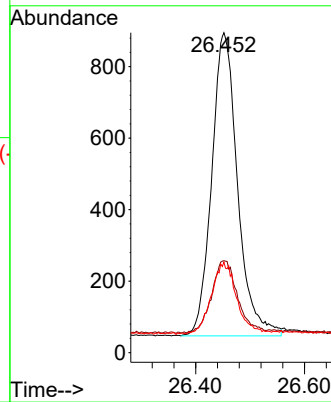
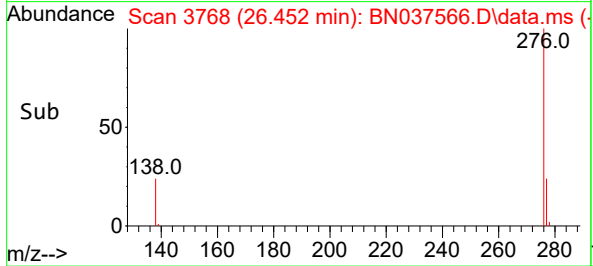
Tgt Ion:276 Resp: 2798

Ion Ratio Lower Upper

276 100

277 28.7 20.9 31.3

138 28.3 22.6 33.8



## Report of Analysis

|                    |                                       |                 |                |
|--------------------|---------------------------------------|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.                  | Date Collected: |                |
| Project:           | NWIRP Bethpage - CTO WE13 1132341 WR6 | Date Received:  |                |
| Client Sample ID:  | PB169094BSD                           | SDG No.:        | Q2745          |
| Lab Sample ID:     | PB169094BSD                           | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                            | % Solid:        | 0              |
| Sample Wt/Vol:     | 1000 Units: mL                        | Final Vol:      | 1000 uL        |
| Soil Aliquot Vol:  | uL                                    | Test:           | SVOC-SIMGroup1 |
| Extraction Type :  | Decanted : N                          | Level :         | LOW            |
| Injection Volume : | GPC Factor : 1.0                      | GPC Cleanup :   | N PH :         |
| Prep Method :      |                                       |                 |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| BN037567.D        | 1         | 08/04/25 08:40 | 08/05/25 14:23 | PB169094      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.29  |           | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.34  |           | 30 - 150 |      | 84%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.30  |           | 30 - 150 |      | 75%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.35  |           | 55 - 111 |      | 88%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.40  |           | 53 - 106 |      | 100%       | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.37  |           | 58 - 132 |      | 92%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 1690  | 7.717     |          |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4040  | 10.498    |          |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 1850  | 14.345    |          |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 3300  | 17.086    |          |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 2340  | 21.268    |          |      |            |          |
| 1520-96-3                 | Perylene-d12            | 2000  | 23.508    |          |      |            |          |

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\BN080525\  
 Data File : BN037567.D  
 Acq On : 05 Aug 2025 14:23  
 Operator : RC/JU  
 Sample : PB169094BSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169094BSD

Quant Time: Aug 06 01:39:54 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

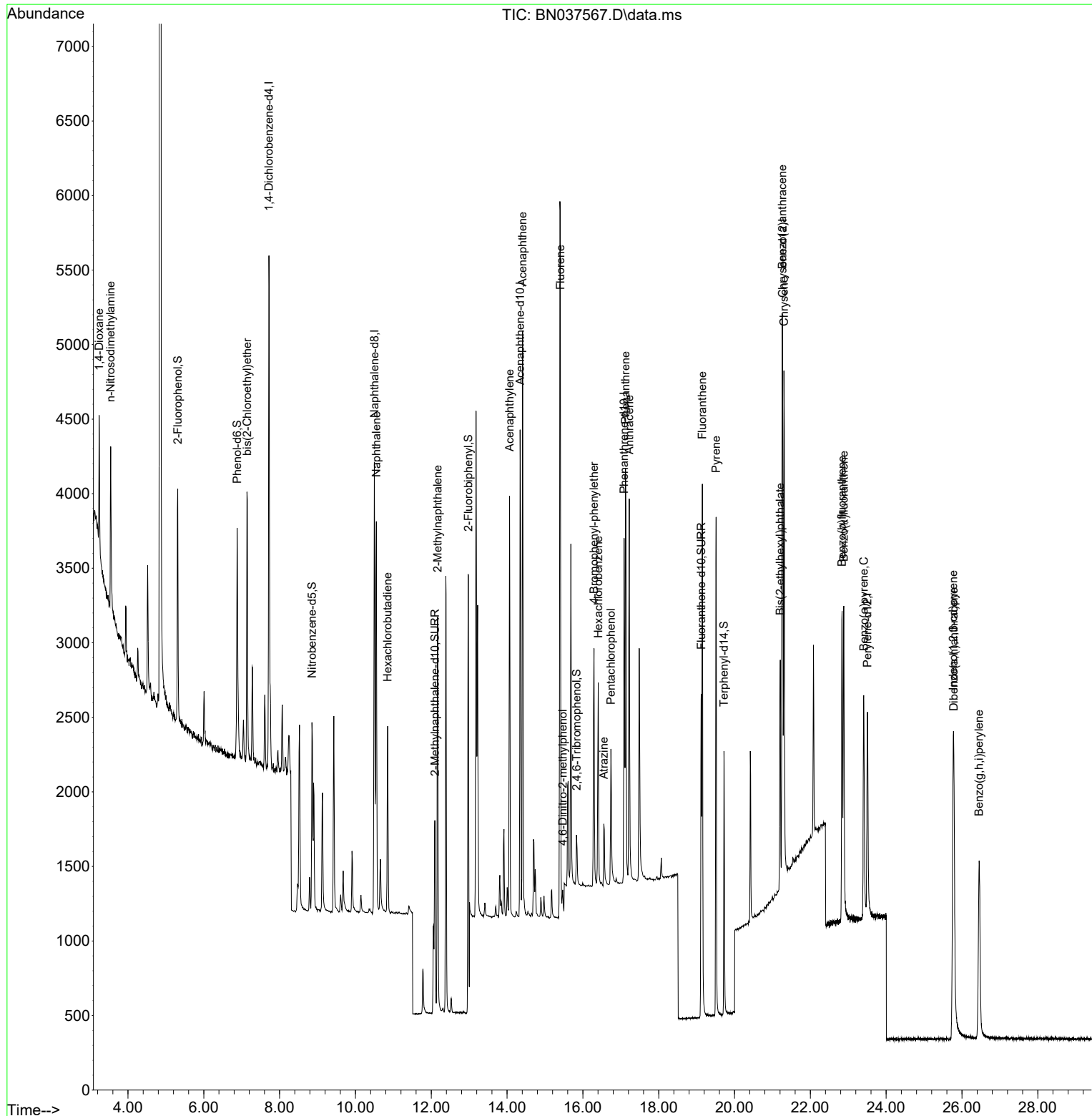
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.717  | 152  | 1690     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.498 | 136  | 4042     | 0.400 | ng    | #-0.01   |
| 13) Acenaphthene-d10          | 14.345 | 164  | 1850     | 0.400 | ng    | -0.01    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 3303     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12              | 21.268 | 240  | 2343     | 0.400 | ng    | # 0.00   |
| 35) Perylene-d12              | 23.508 | 264  | 2004     | 0.400 | ng    | # 0.00   |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 1226     | 0.293 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.879  | 99   | 1407     | 0.268 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.854  | 82   | 1069     | 0.354 | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10   | 12.096 | 152  | 1961     | 0.338 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 232      | 0.255 | ng    | -0.01    |
| 15) 2-Fluorobiphenyl          | 12.978 | 172  | 3867     | 0.402 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.122 | 212  | 2629     | 0.300 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.722 | 244  | 1858     | 0.369 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.239  | 88   | 472      | 0.291 | ng    | # 58     |
| 3) n-Nitrosodimethylamine     | 3.543  | 42   | 810      | 0.396 | ng    | # 76     |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 1369     | 0.314 | ng    | 96       |
| 9) Naphthalene                | 10.552 | 128  | 3541     | 0.328 | ng    | 98       |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 990      | 0.416 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.167 | 142  | 1955     | 0.276 | ng    | 97       |
| 16) Acenaphthylene            | 14.067 | 152  | 3078     | 0.371 | ng    | 99       |
| 17) Acenaphthene              | 14.409 | 154  | 1863     | 0.331 | ng    | 96       |
| 18) Fluorene                  | 15.403 | 166  | 2324     | 0.320 | ng    | 98       |
| 20) 4,6-Dinitro-2-methylph... | 15.467 | 198  | 129      | 0.379 | ng    | 96       |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248  | 680      | 0.321 | ng    | # 88     |
| 22) Hexachlorobenzene         | 16.404 | 284  | 1058     | 0.387 | ng    | 96       |
| 23) Atrazine                  | 16.553 | 200  | 434      | 0.294 | ng    | # 85     |
| 24) Pentachlorophenol         | 16.739 | 266  | 509      | 0.415 | ng    | 96       |
| 25) Phenanthrene              | 17.124 | 178  | 3319     | 0.335 | ng    | 99       |
| 26) Anthracene                | 17.223 | 178  | 3000     | 0.332 | ng    | 100      |
| 28) Fluoranthene              | 19.150 | 202  | 3311     | 0.290 | ng    | 97       |
| 30) Pyrene                    | 19.513 | 202  | 3180     | 0.337 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 2765     | 0.337 | ng    | 97       |
| 33) Chrysene                  | 21.304 | 228  | 3113     | 0.364 | ng    | 98       |
| 34) Bis(2-ethylhexyl)phtha... | 21.205 | 149  | 1100     | 0.298 | ng    | 99       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.770 | 276  | 3023     | 0.362 | ng    | 95       |
| 37) Benzo(b)fluoranthene      | 22.835 | 252  | 2770     | 0.364 | ng    | 95       |
| 38) Benzo(k)fluoranthene      | 22.882 | 252  | 2847     | 0.363 | ng    | 94       |
| 39) Benzo(a)pyrene            | 23.408 | 252  | 2409     | 0.380 | ng    | # 89     |
| 40) Dibenzo(a,h)anthracene    | 25.785 | 278  | 2339     | 0.346 | ng    | # 88     |
| 41) Benzo(g,h,i)perylene      | 26.452 | 276  | 2676     | 0.382 | ng    | 97       |

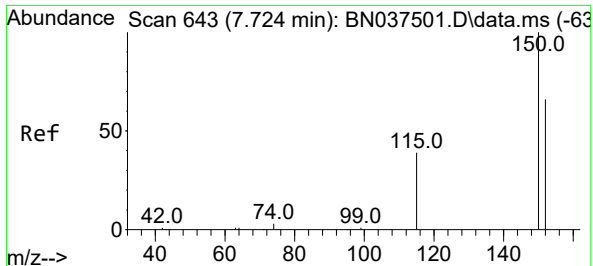
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN080525\  
Data File : BN037567.D  
Acq On : 05 Aug 2025 14:23  
Operator : RC/JU  
Sample : PB169094BSD  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

Quant Time: Aug 06 01:39:54 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

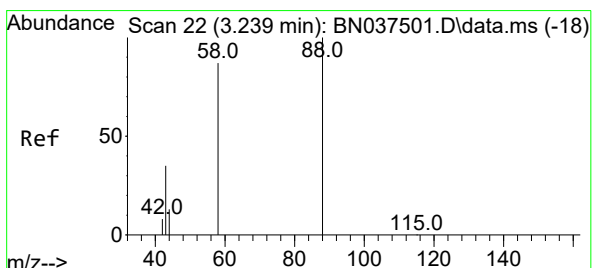
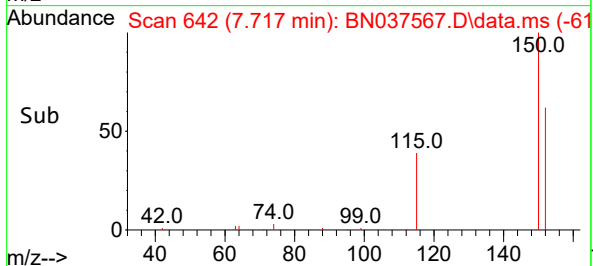
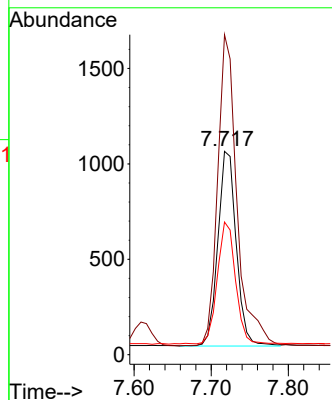
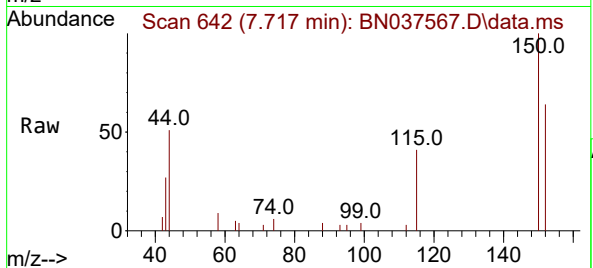




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.717 min Scan# 64  
 Delta R.T. -0.007 min  
 Lab File: BN037567.D  
 Acq: 05 Aug 2025 14:23

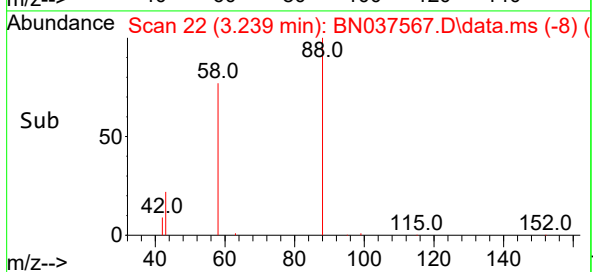
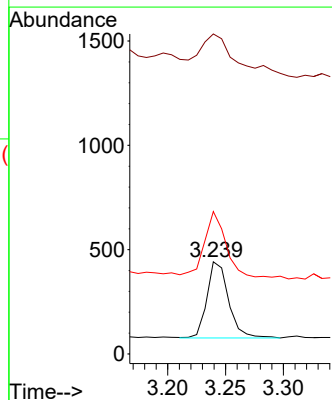
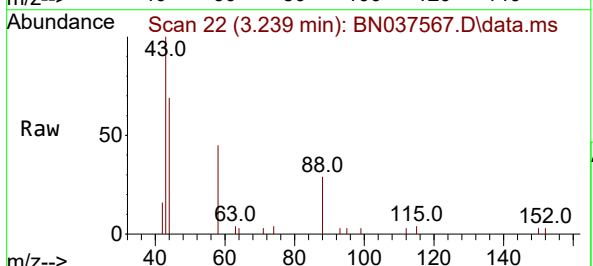
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169094BSD

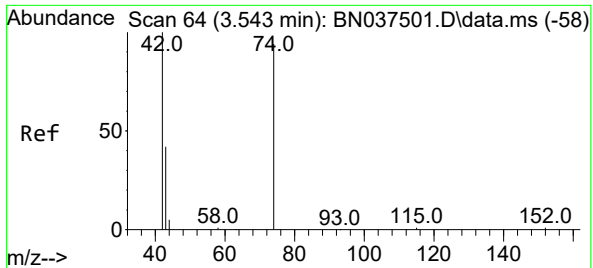
Tgt Ion:152 Resp: 1690  
 Ion Ratio Lower Upper  
 152 100  
 150 157.3 119.8 179.8  
 115 65.2 49.1 73.7



#2  
 1,4-Dioxane  
 Concen: 0.291 ng  
 RT: 3.239 min Scan# 22  
 Delta R.T. 0.000 min  
 Lab File: BN037567.D  
 Acq: 05 Aug 2025 14:23

Tgt Ion: 88 Resp: 472  
 Ion Ratio Lower Upper  
 88 100  
 43 89.8 27.5 41.3#  
 58 94.5 62.7 94.1#

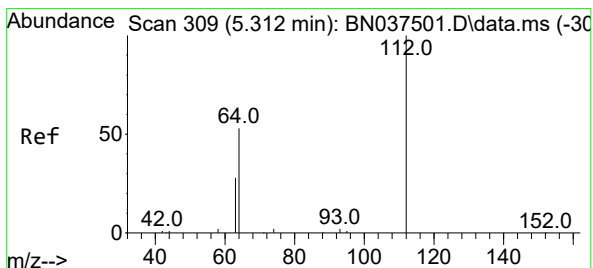
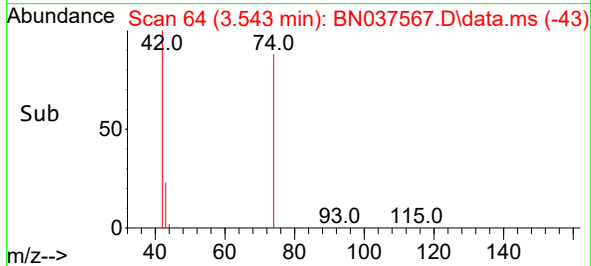
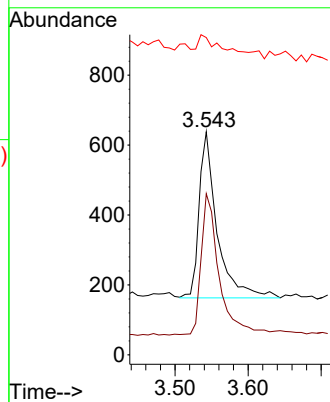
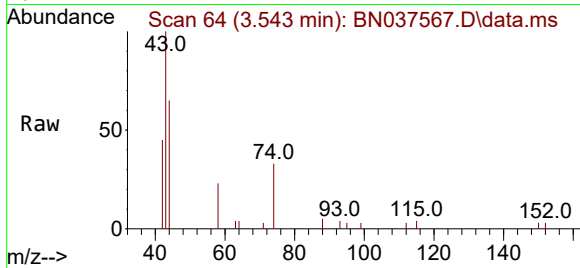




#3  
n-Nitrosodimethylamine  
Concen: 0.396 ng  
RT: 3.543 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

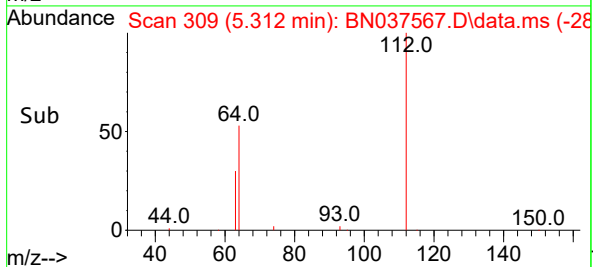
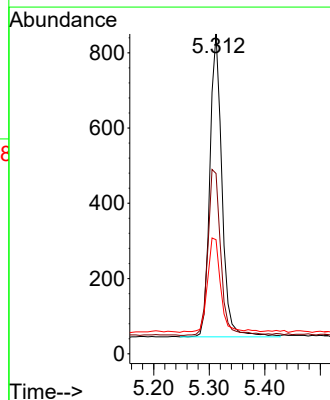
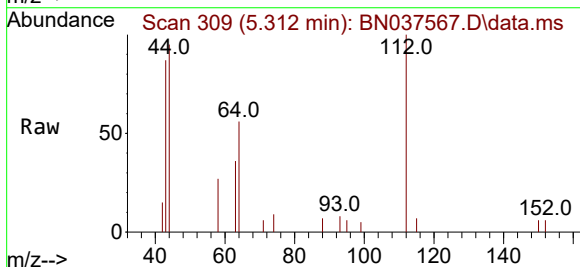
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

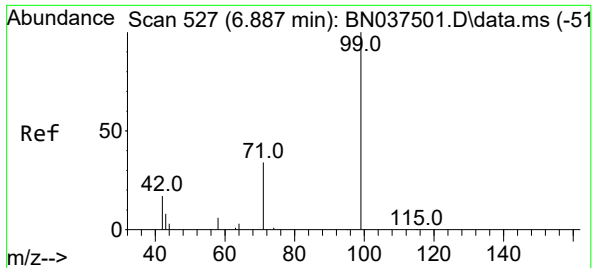
Tgt Ion: 42 Resp: 810  
Ion Ratio Lower Upper  
42 100  
74 85.4 91.8 137.6#  
44 22.6 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.293 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion: 112 Resp: 1226  
Ion Ratio Lower Upper  
112 100  
64 57.9 45.1 67.7  
63 33.4 23.8 35.8

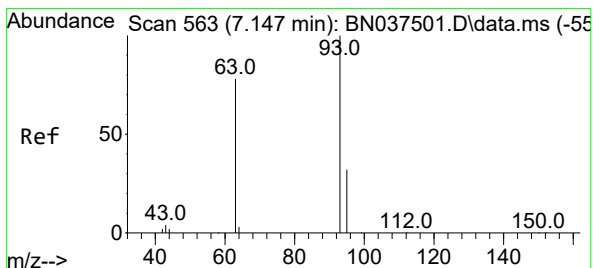
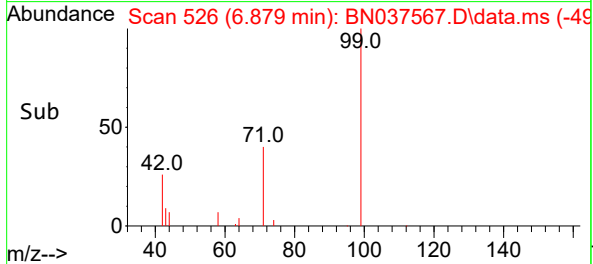
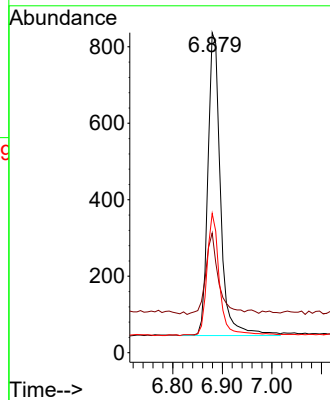
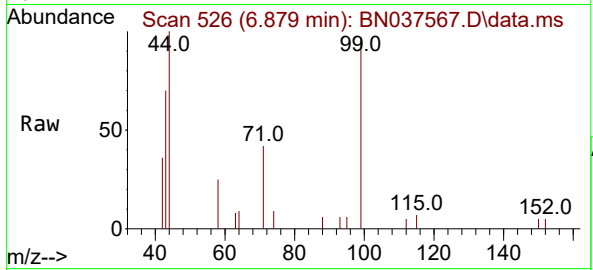




#5  
Phenol-d6  
Concen: 0.268 ng  
RT: 6.879 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

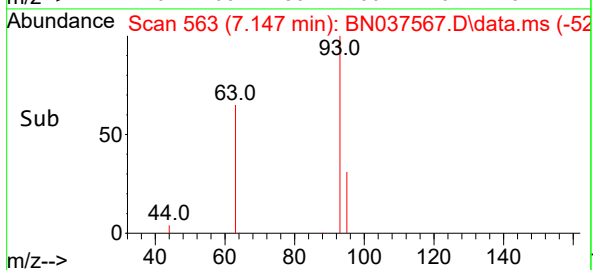
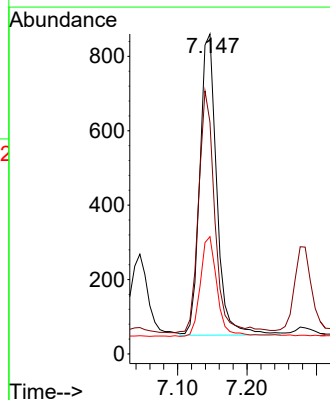
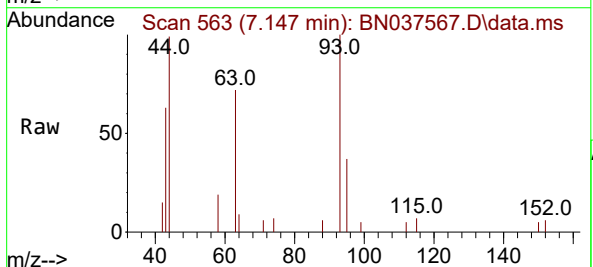
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

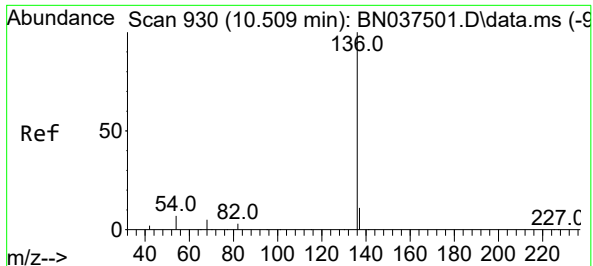
Tgt Ion: 99 Resp: 1407  
Ion Ratio Lower Upper  
99 100  
42 27.2 17.1 25.7#  
71 40.2 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 0.314 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion: 93 Resp: 1369  
Ion Ratio Lower Upper  
93 100  
63 77.4 58.2 87.4  
95 32.8 25.3 37.9

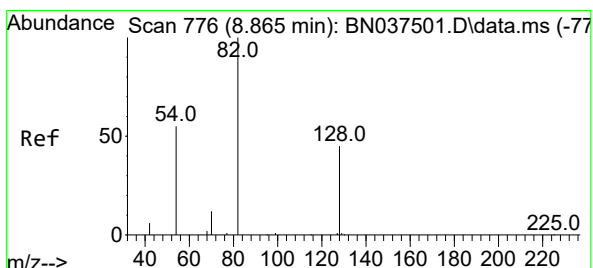
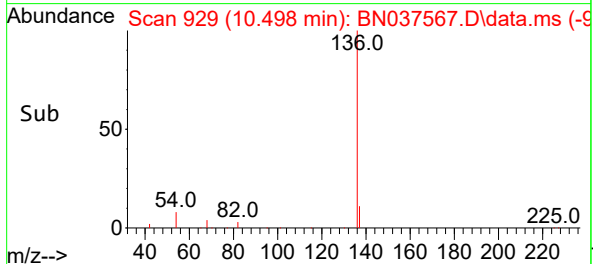
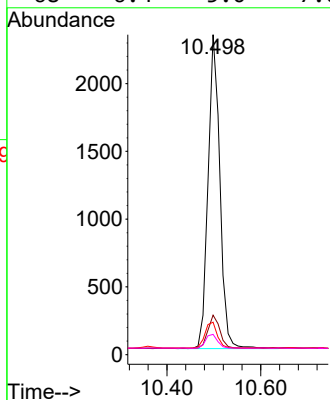
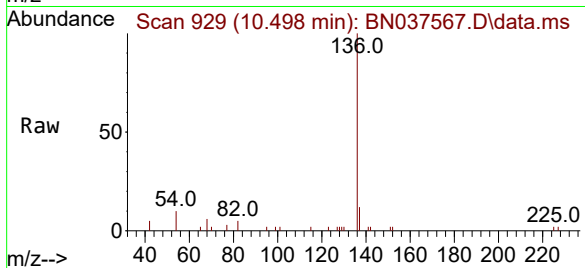




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 91  
Delta R.T. -0.011 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

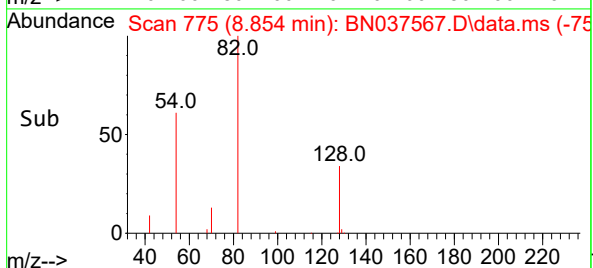
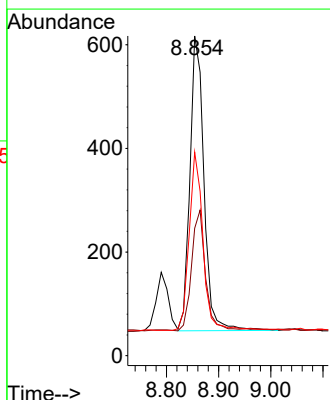
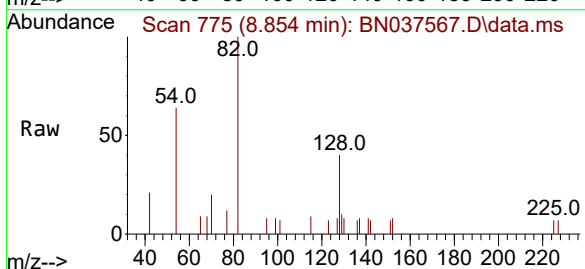
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

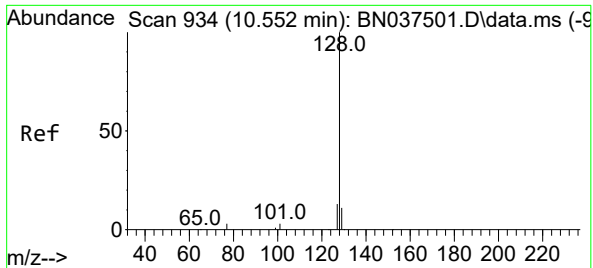
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 4042  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.4  | 9.8   | 14.8  |
| 54       | 10.1  | 6.6   | 9.8#  |
| 68       | 6.4   | 5.0   | 7.6   |



#8  
Nitrobenzene-d5  
Concen: 0.354 ng  
RT: 8.854 min Scan# 775  
Delta R.T. -0.011 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1069  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 39.9  | 37.5  | 56.3  |
| 54       | 63.7  | 45.3  | 67.9  |

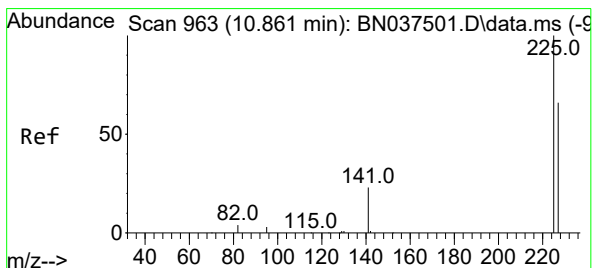
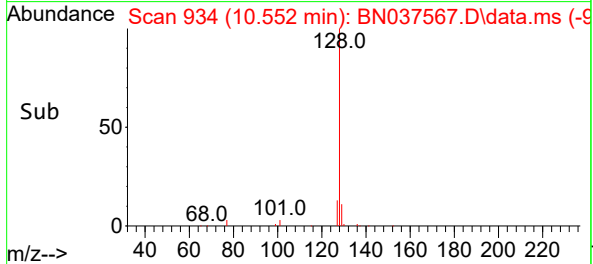
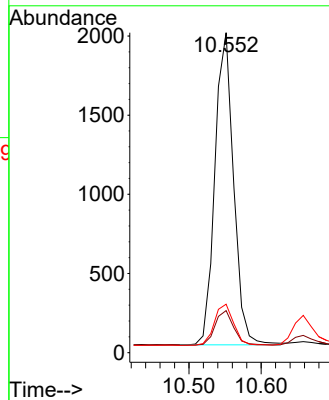
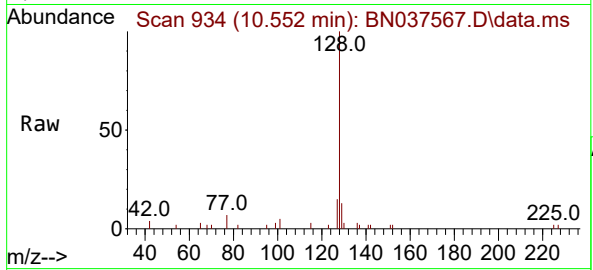




#9  
Naphthalene  
Concen: 0.328 ng  
RT: 10.552 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

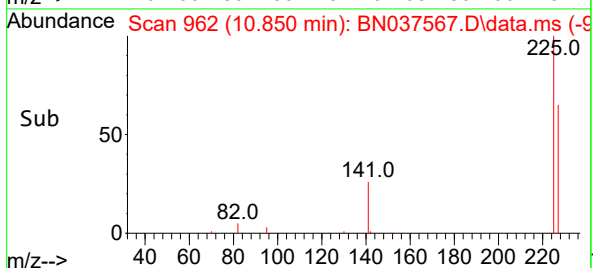
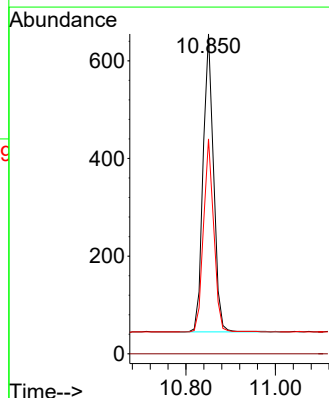
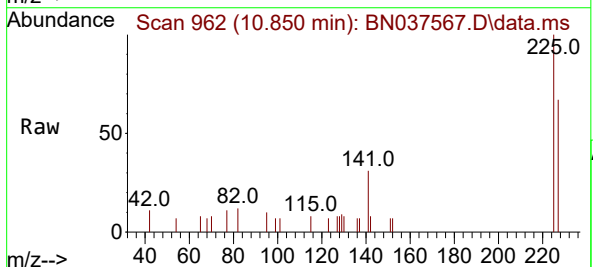
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

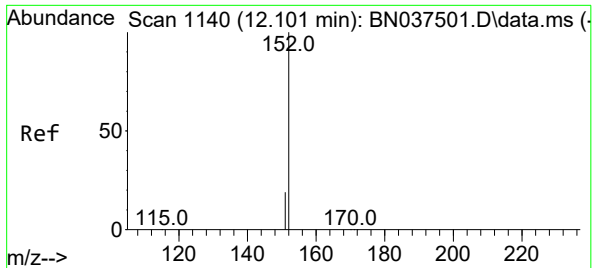
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 3541  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 13.1  | 9.7   | 14.5  |
| 127      | 15.1  | 11.5  | 17.3  |



#10  
Hexachlorobutadiene  
Concen: 0.416 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 225   | Resp: | 990   |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 0.0   | 0.0   | 0.0   |
| 227      | 63.3  | 51.0  | 76.4  |

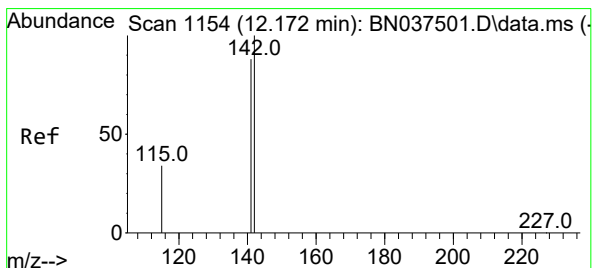
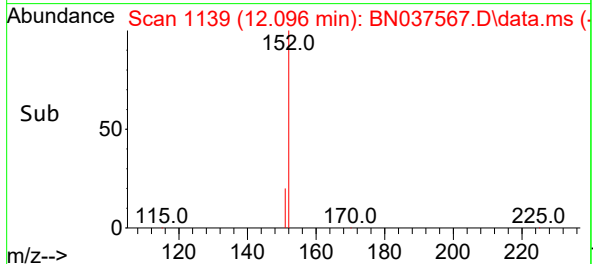
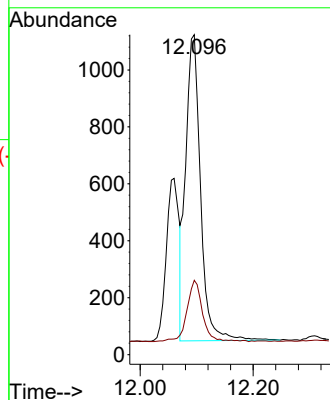
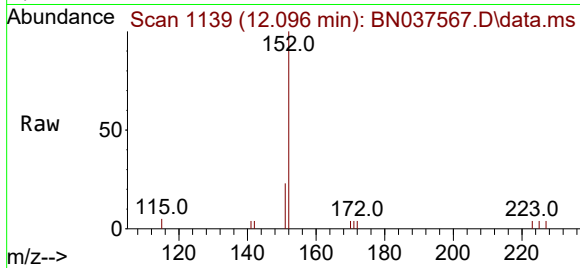




#11  
2-Methylnaphthalene-d10  
Concen: 0.338 ng  
RT: 12.096 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

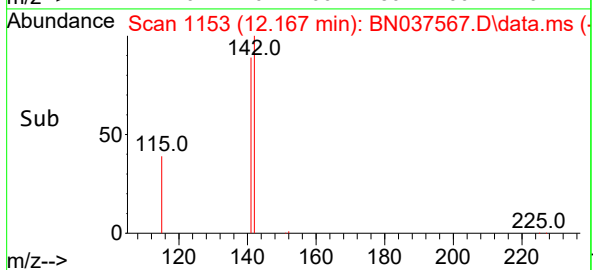
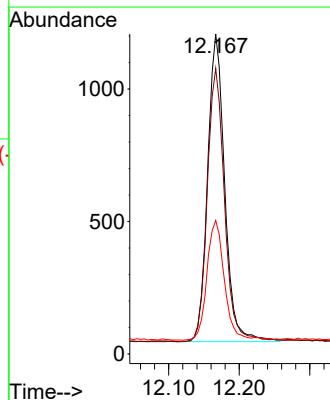
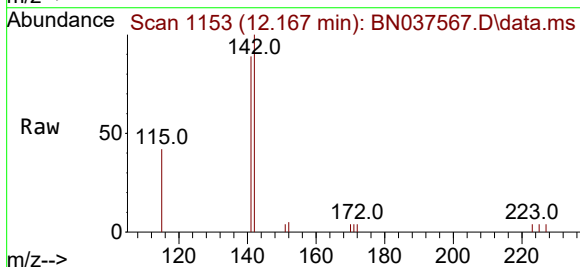
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

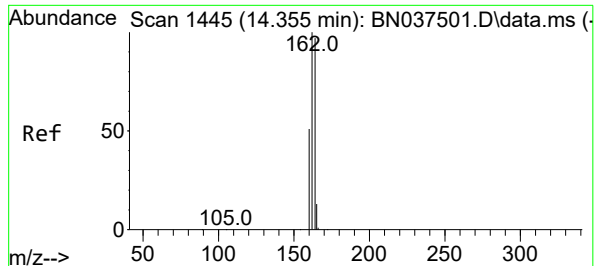
Tgt Ion:152 Resp: 1961  
Ion Ratio Lower Upper  
152 100  
151 21.0 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.276 ng  
RT: 12.167 min Scan# 1153  
Delta R.T. -0.005 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion:142 Resp: 1955  
Ion Ratio Lower Upper  
142 100  
141 89.2 71.0 106.4  
115 41.7 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.345 min Scan# 1445

Delta R.T. -0.011 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

Instrument :

BNA\_N

ClientSampleId :

PB169094BSD

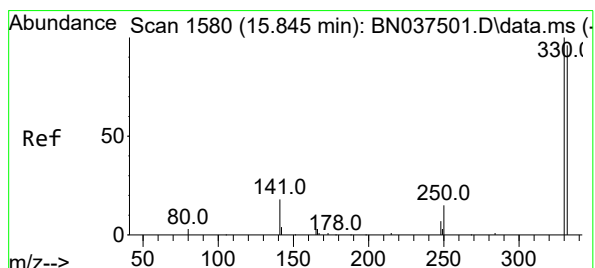
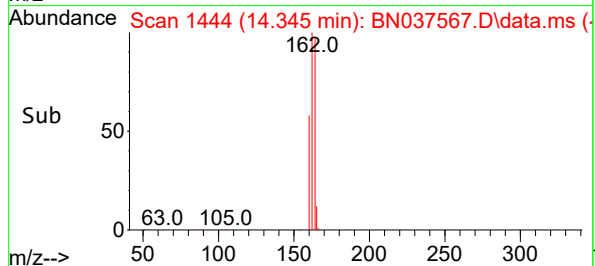
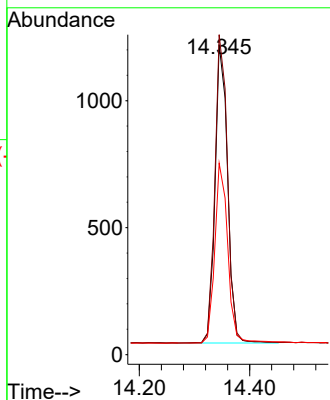
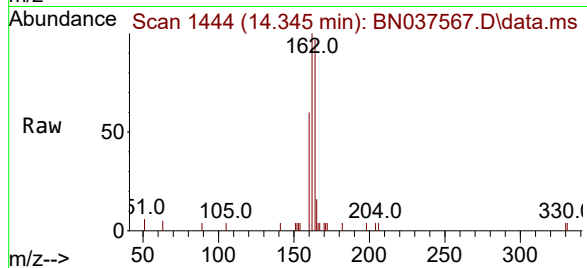
Tgt Ion:164 Resp: 1850

Ion Ratio Lower Upper

164 100

162 103.2 82.0 123.0

160 61.8 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.255 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.012 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

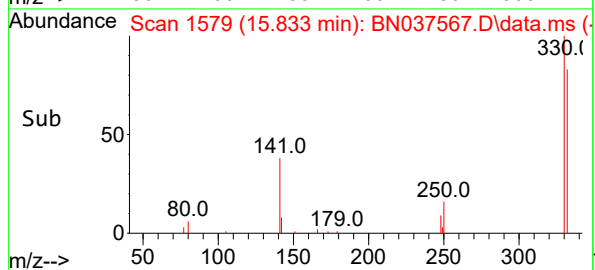
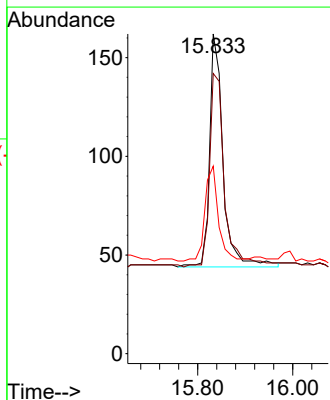
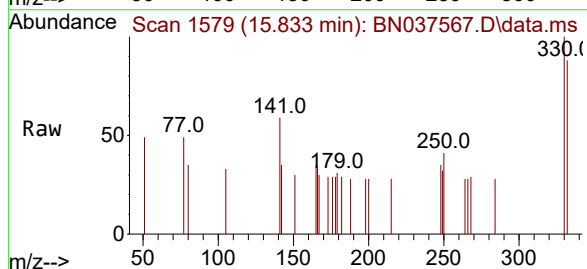
Tgt Ion:330 Resp: 232

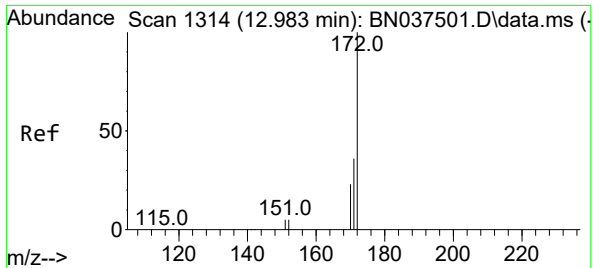
Ion Ratio Lower Upper

330 100

332 92.7 76.1 114.1

141 40.9 33.4 50.0

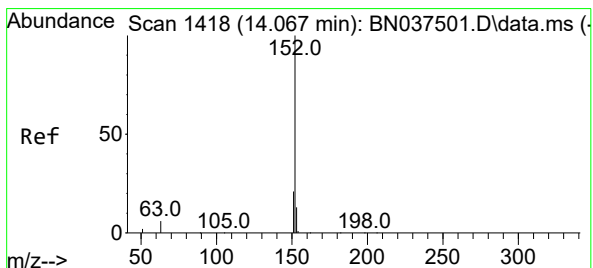
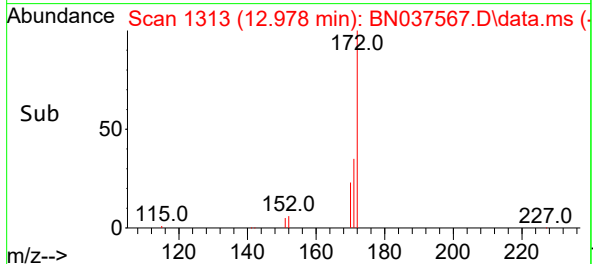
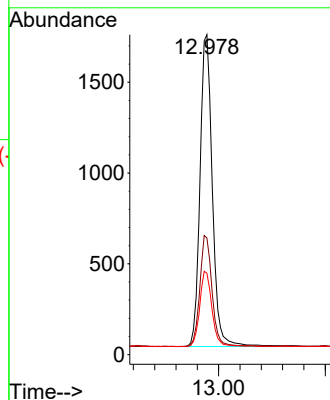
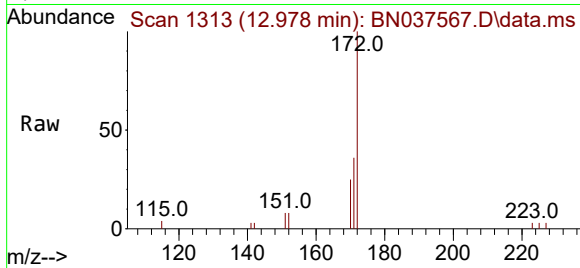




#15  
2-Fluorobiphenyl  
Concen: 0.402 ng  
RT: 12.978 min Scan# 1314  
Delta R.T. -0.005 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

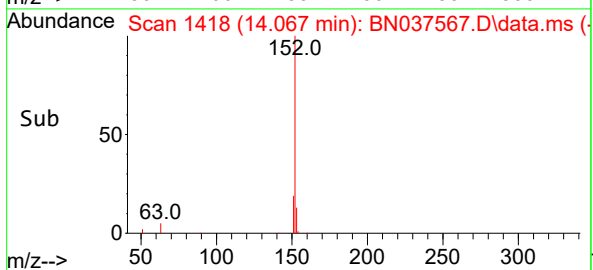
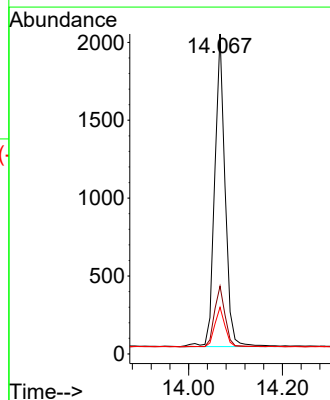
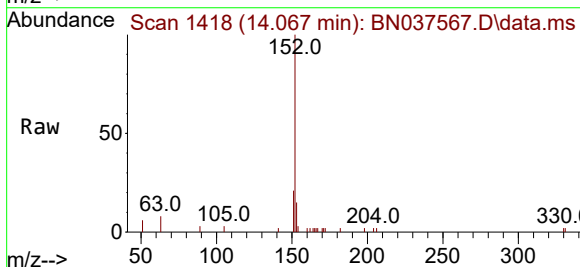
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

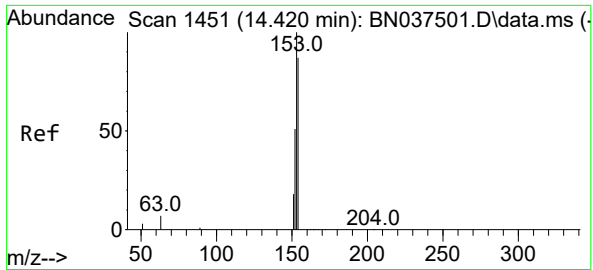
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 172   | Resp: | 3867  |
| Ion      | Ratio | Lower | Upper |
| 172      | 100   |       |       |
| 171      | 36.4  | 29.4  | 44.2  |
| 170      | 25.4  | 19.4  | 29.0  |



#16  
Acenaphthylene  
Concen: 0.371 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 3078  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 20.1  | 15.9  | 23.9  |
| 153      | 12.5  | 10.7  | 16.1  |

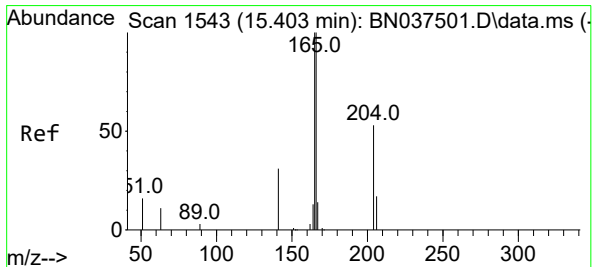
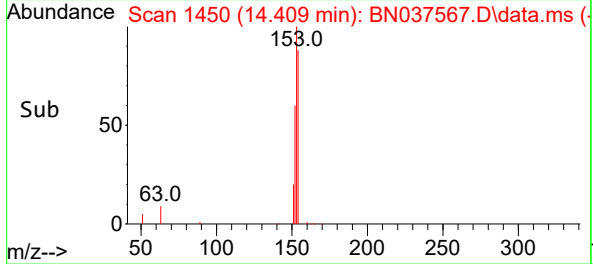
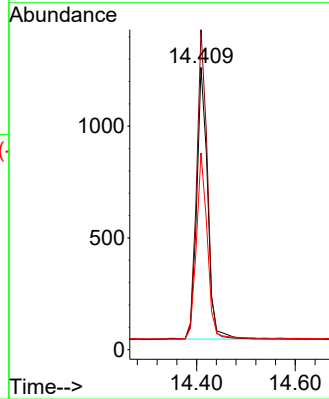
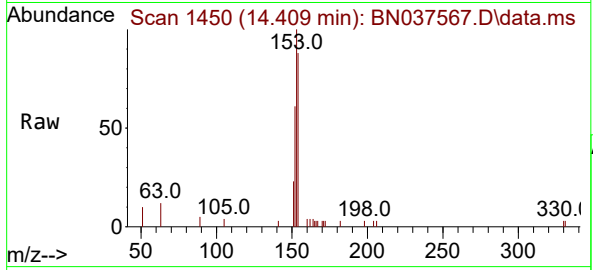




#17  
Acenaphthene  
Concen: 0.331 ng  
RT: 14.409 min Scan# 1450  
Delta R.T. -0.011 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

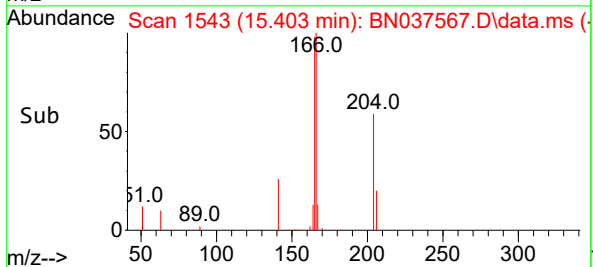
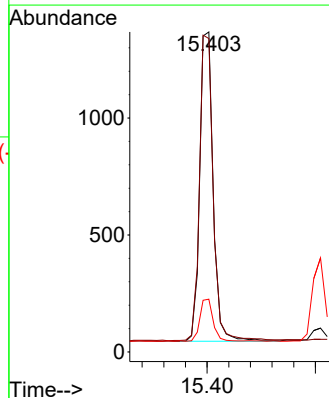
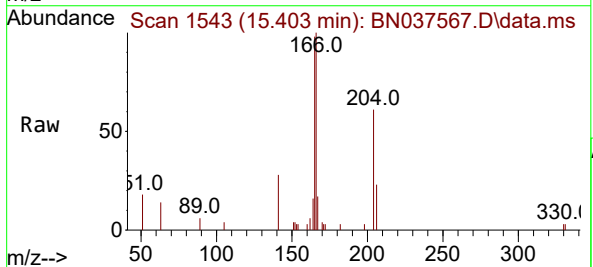
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

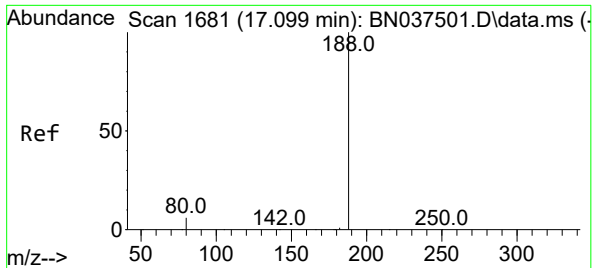
Tgt Ion:154 Resp: 1863  
Ion Ratio Lower Upper  
154 100  
153 111.5 89.2 133.8  
152 69.2 48.0 72.0



#18  
Fluorene  
Concen: 0.320 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion:166 Resp: 2324  
Ion Ratio Lower Upper  
166 100  
165 99.1 78.1 117.1  
167 13.1 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

Instrument :

BNA\_N

ClientSampleId :

PB169094BSD

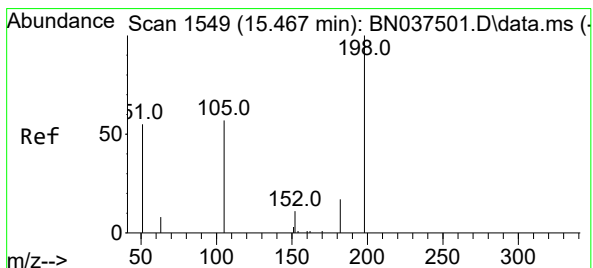
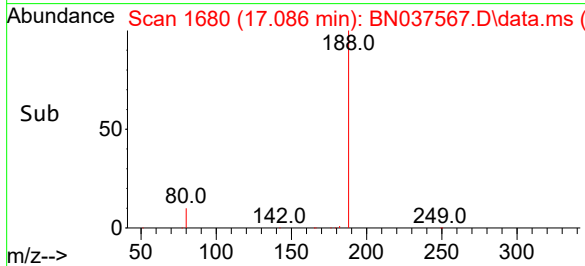
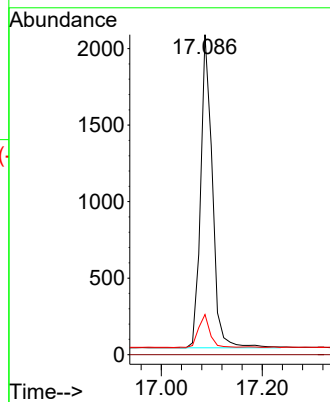
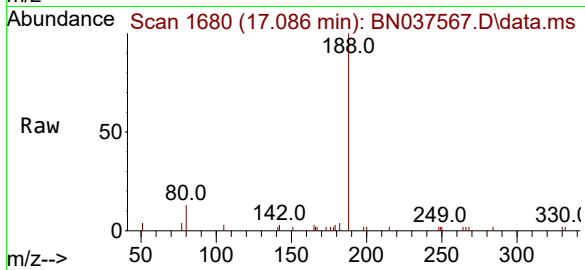
Tgt Ion:188 Resp: 3303

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.5 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.379 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

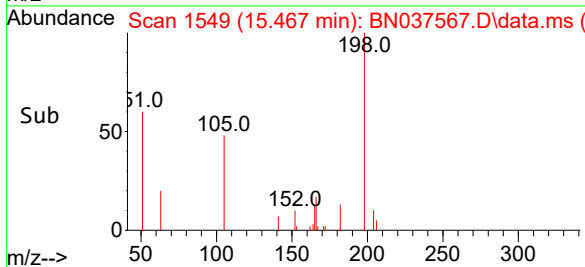
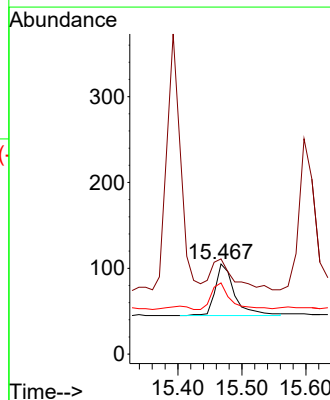
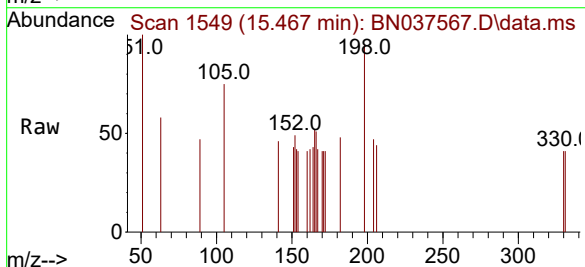
Tgt Ion:198 Resp: 129

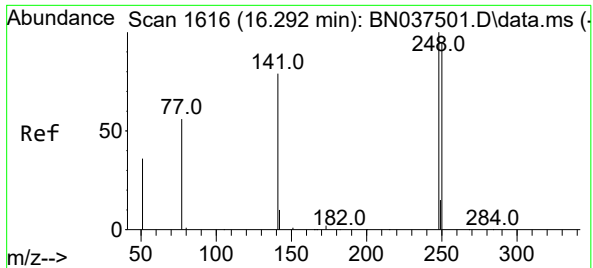
Ion Ratio Lower Upper

198 100

51 105.7 88.5 132.7

105 79.0 61.2 91.8

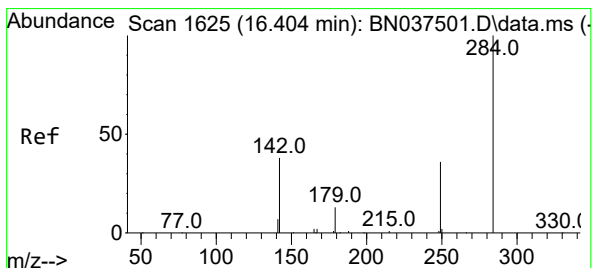
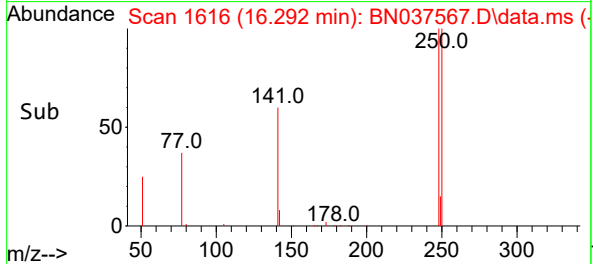
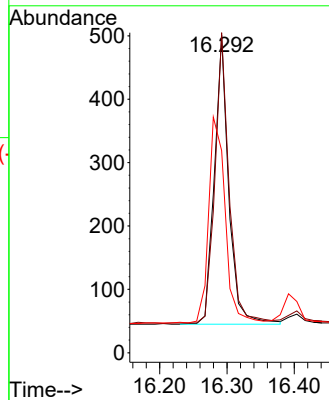
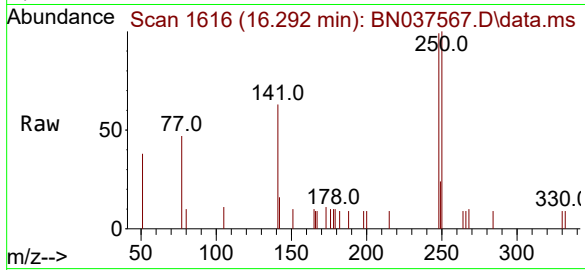




#21  
4-Bromophenyl-phenylether  
Concen: 0.321 ng  
RT: 16.292 min Scan# 1616  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

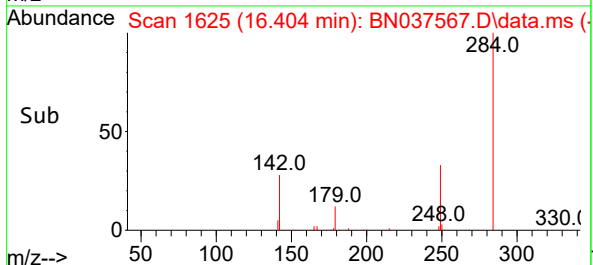
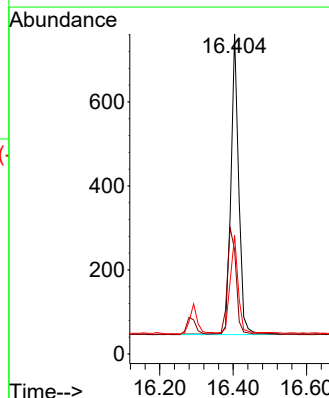
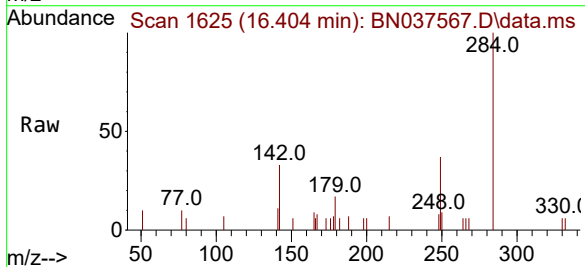
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

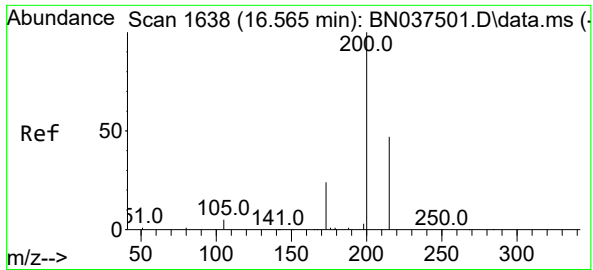
Tgt Ion:248 Resp: 680  
Ion Ratio Lower Upper  
248 100  
250 100.8 76.2 114.2  
141 63.7 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.387 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion:284 Resp: 1058  
Ion Ratio Lower Upper  
284 100  
142 40.3 28.9 43.3  
249 32.4 25.8 38.6

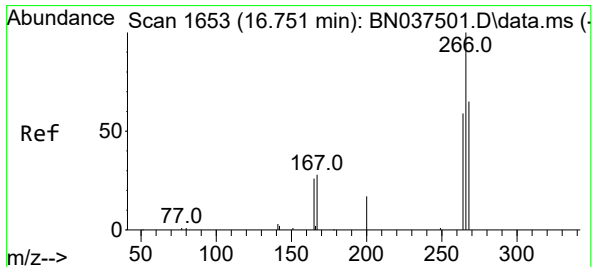
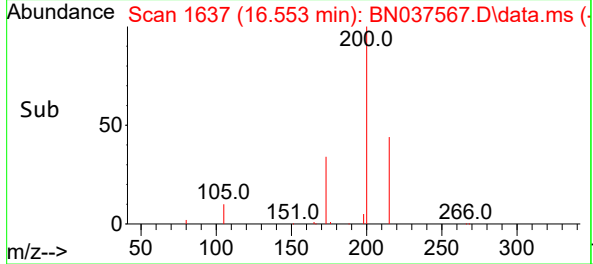
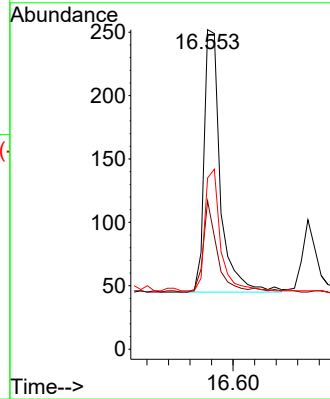
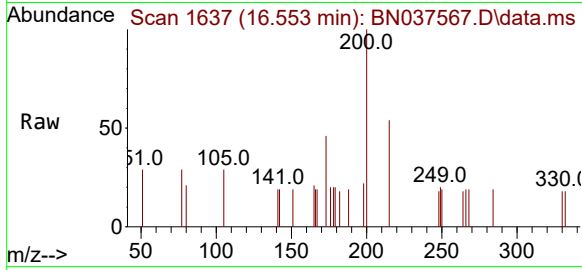




#23  
Atrazine  
Concen: 0.294 ng  
RT: 16.553 min Scan# 1637  
Delta R.T. -0.012 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

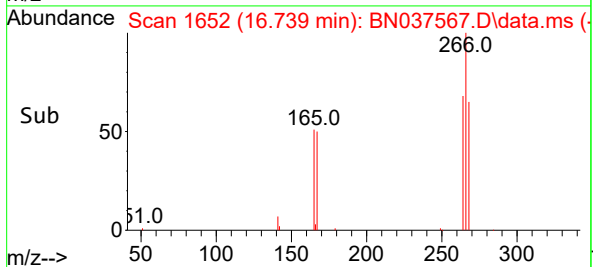
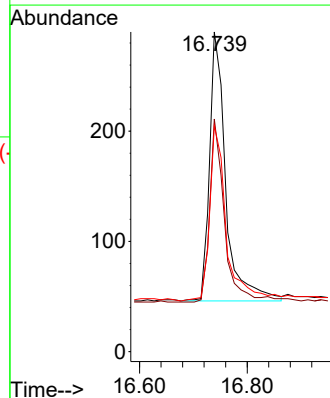
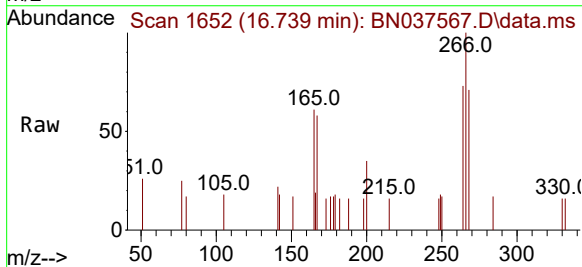
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

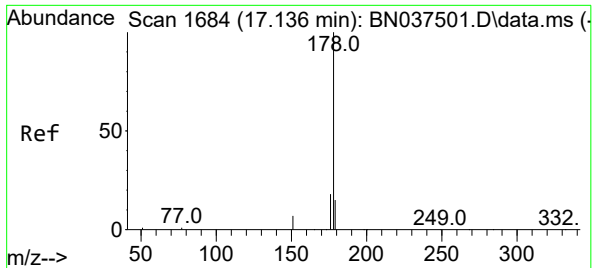
Tgt Ion:200 Resp: 434  
Ion Ratio Lower Upper  
200 100  
173 46.4 23.2 34.8#  
215 53.6 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.415 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.012 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion:266 Resp: 509  
Ion Ratio Lower Upper  
266 100  
264 62.7 49.3 73.9  
268 69.0 51.6 77.4

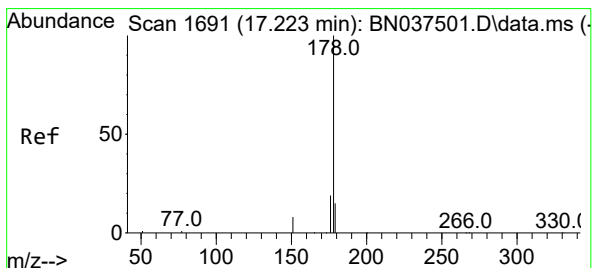
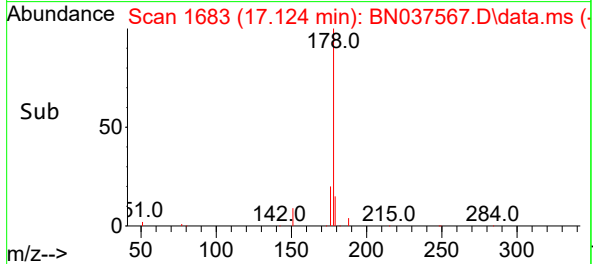
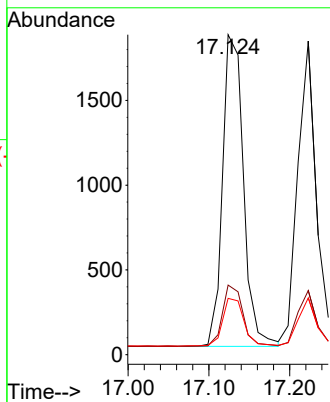
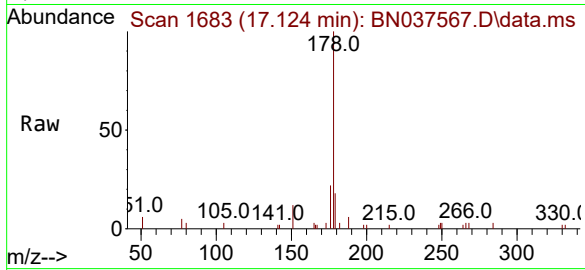




#25  
Phenanthrene  
Concen: 0.335 ng  
RT: 17.124 min Scan# 1683  
Delta R.T. -0.012 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

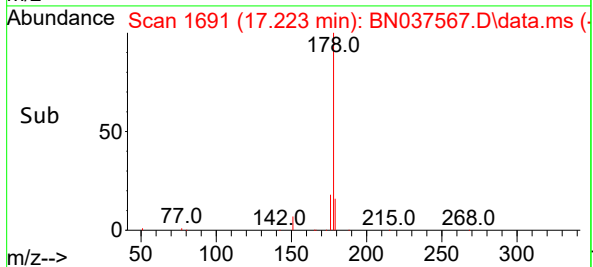
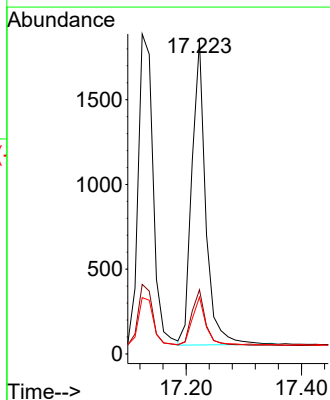
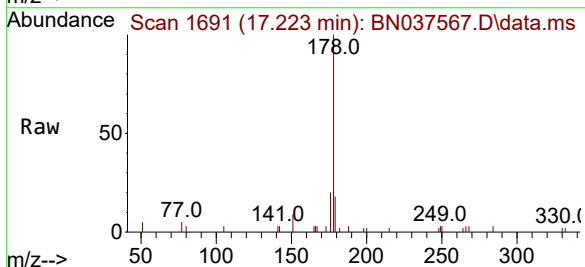
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

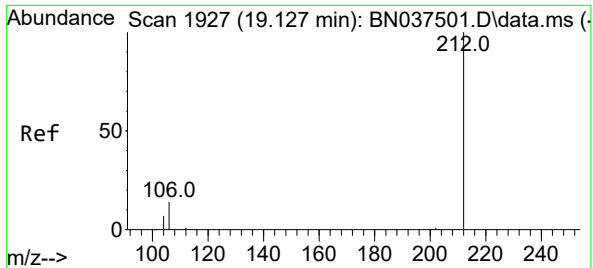
Tgt Ion:178 Resp: 3319  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.0 22.6  
179 15.6 12.2 18.2



#26  
Anthracene  
Concen: 0.332 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion:178 Resp: 3000  
Ion Ratio Lower Upper  
178 100  
176 18.1 14.7 22.1  
179 15.4 12.3 18.5

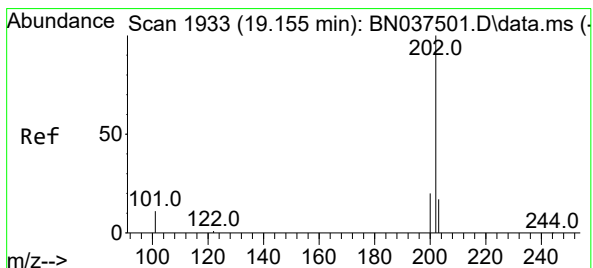
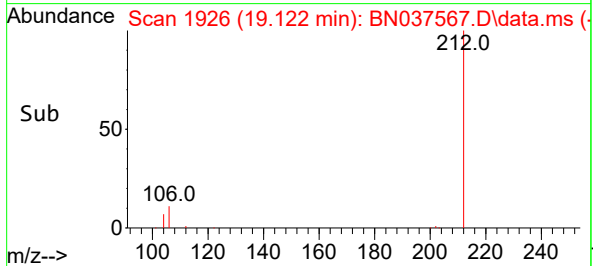
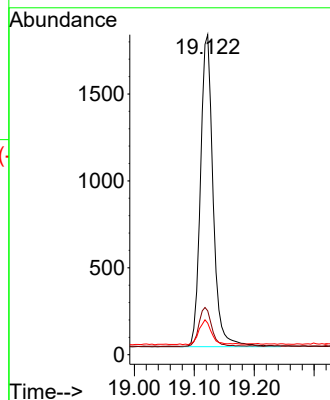
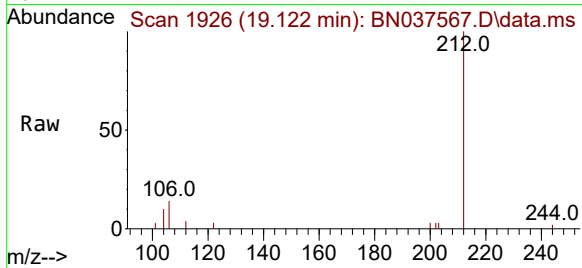




#27  
Fluoranthene-d10  
Concen: 0.300 ng  
RT: 19.122 min Scan# 1926  
Delta R.T. -0.005 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

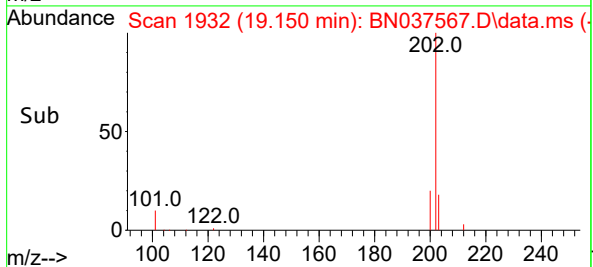
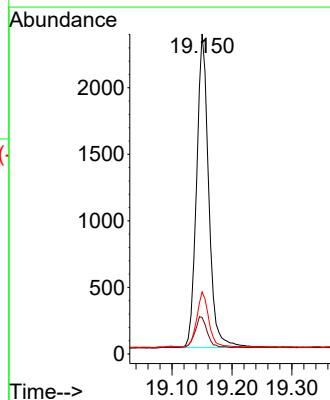
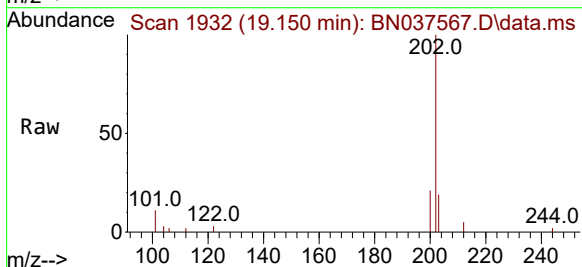
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

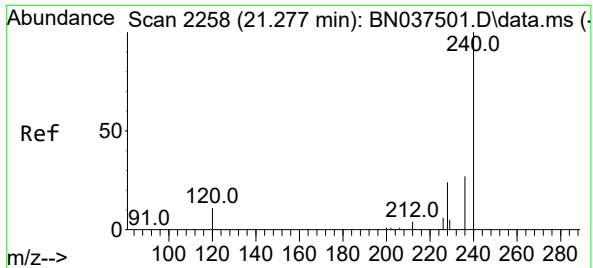
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 212     | 100   |       |       |
| 106     | 12.9  | 12.2  | 18.4  |
| 104     | 7.8   | 6.7   | 10.1  |



#28  
Fluoranthene  
Concen: 0.290 ng  
RT: 19.150 min Scan# 1932  
Delta R.T. -0.005 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.8   | 9.8   | 14.6  |
| 203     | 17.2  | 13.6  | 20.4  |

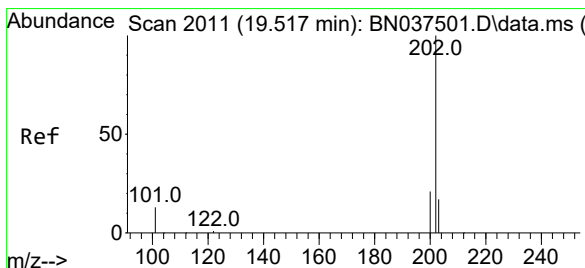
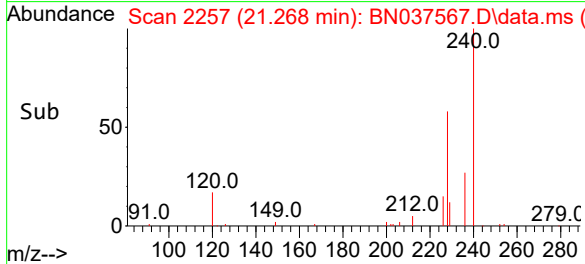
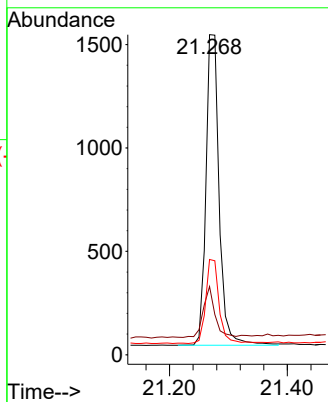
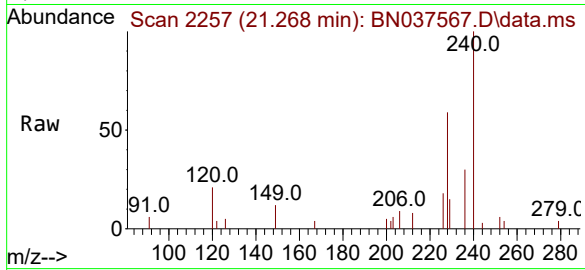




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

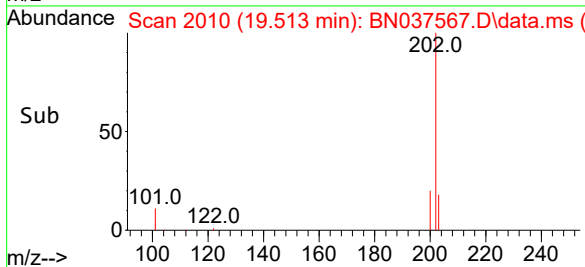
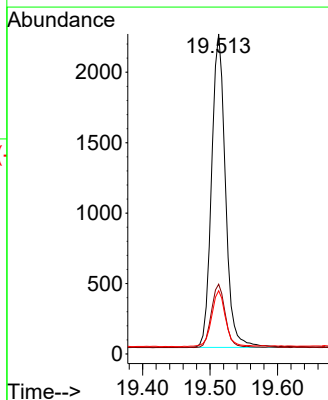
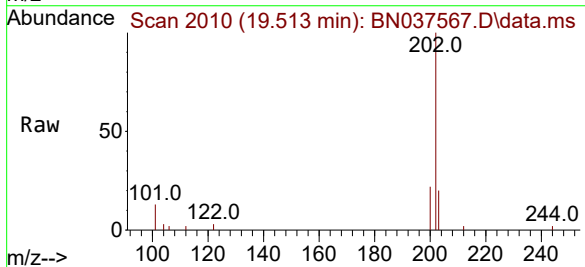
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

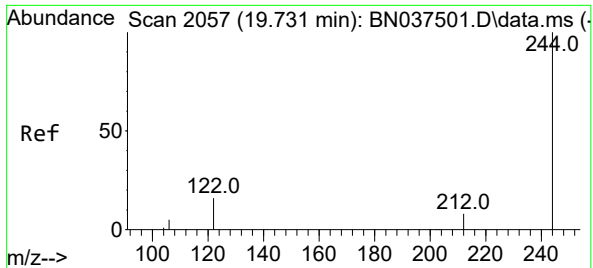
Tgt Ion:240 Resp: 2343  
Ion Ratio Lower Upper  
240 100  
120 21.3 10.7 16.1#  
236 29.8 22.6 33.8



#30  
Pyrene  
Concen: 0.337 ng  
RT: 19.513 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

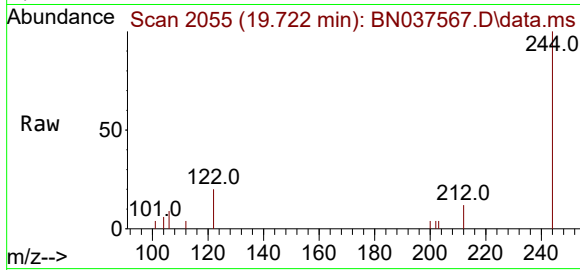
Tgt Ion:202 Resp: 3180  
Ion Ratio Lower Upper  
202 100  
200 20.3 16.5 24.7  
203 17.9 14.3 21.5



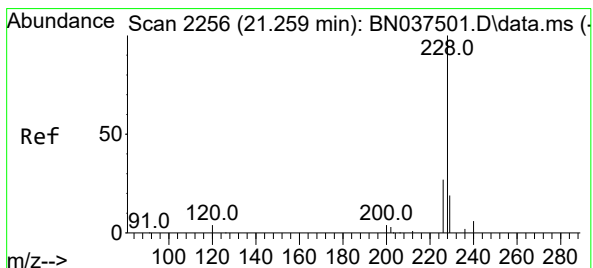
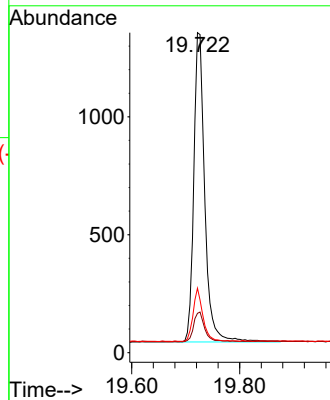
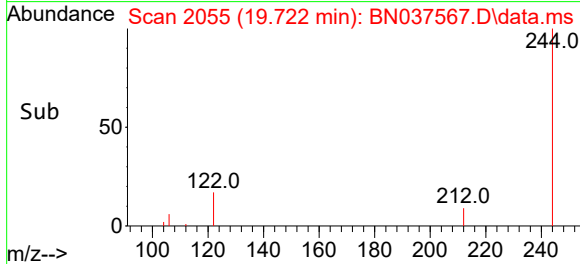


#31  
Terphenyl-d14  
Concen: 0.369 ng  
RT: 19.722 min Scan# 2055  
Delta R.T. -0.009 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

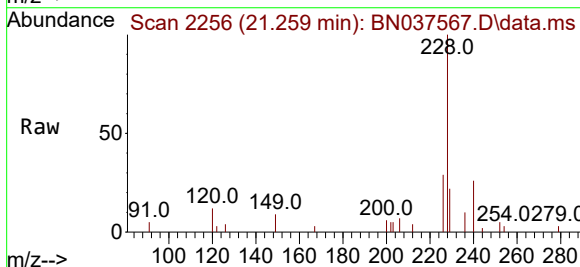
Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD



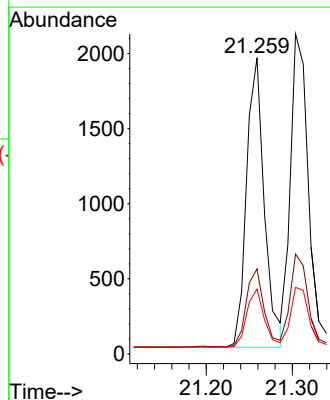
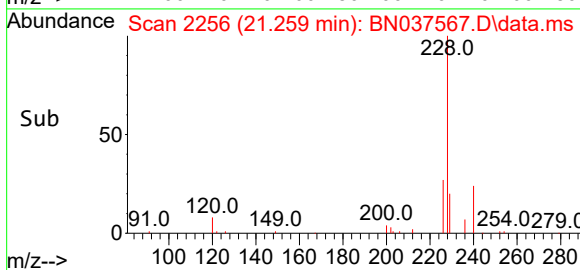
Tgt Ion:244 Resp: 1858  
Ion Ratio Lower Upper  
244 100  
212 12.3 7.4 11.2#  
122 20.1 13.6 20.4

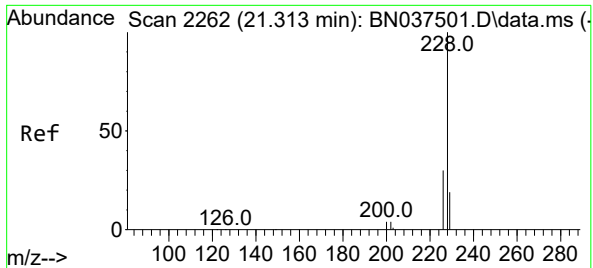


#32  
Benzo(a)anthracene  
Concen: 0.337 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23



Tgt Ion:228 Resp: 2765  
Ion Ratio Lower Upper  
228 100  
226 28.8 21.9 32.9  
229 21.9 15.8 23.8





#33

Chrysene

Concen: 0.364 ng

RT: 21.304 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

Instrument :

BNA\_N

ClientSampleId :

PB169094BSD

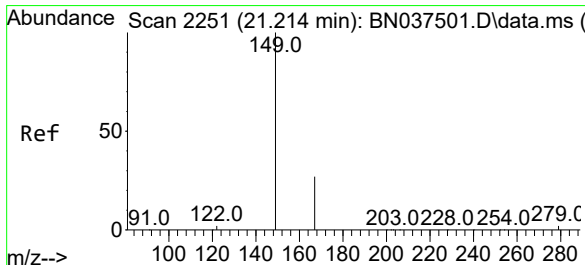
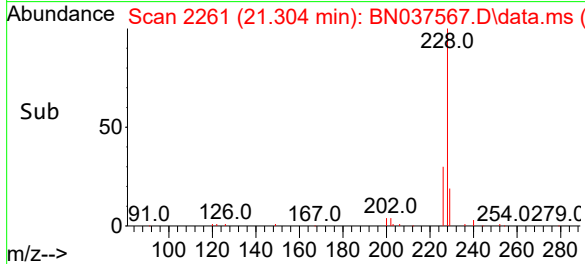
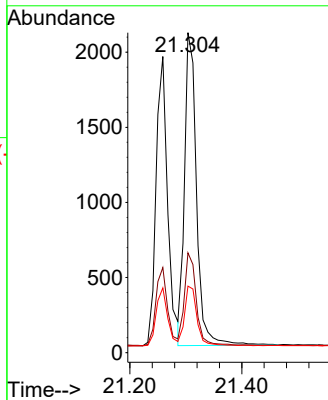
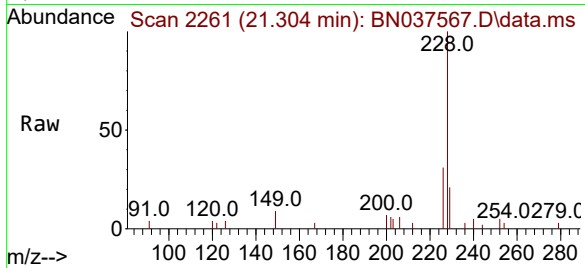
Tgt Ion:228 Resp: 3113

Ion Ratio Lower Upper

228 100

226 31.2 24.2 36.4

229 20.8 16.1 24.1



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.298 ng

RT: 21.205 min Scan# 2250

Delta R.T. -0.009 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

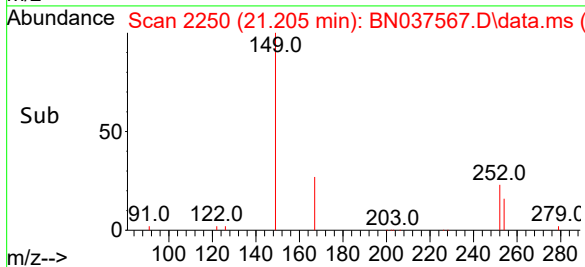
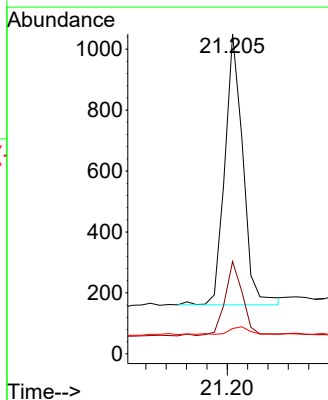
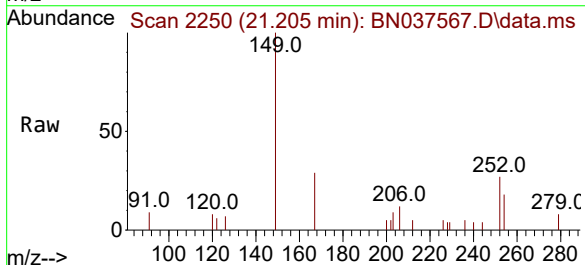
Tgt Ion:149 Resp: 1100

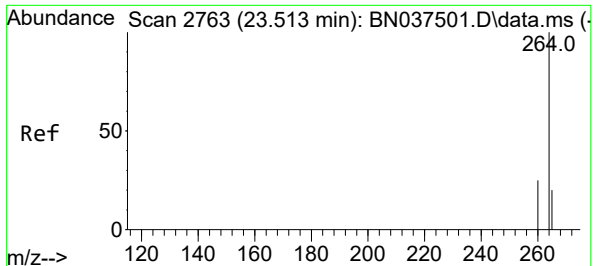
Ion Ratio Lower Upper

149 100

167 27.0 21.8 32.8

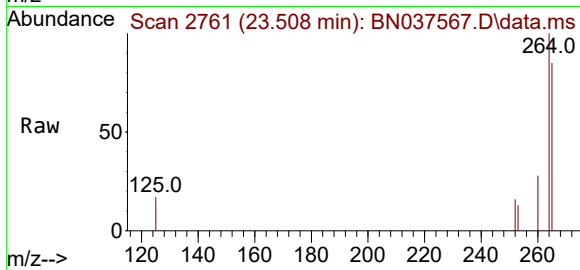
279 3.5 3.0 4.4



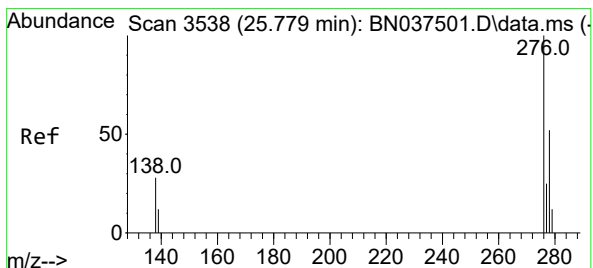
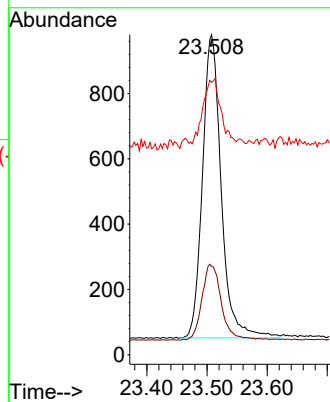
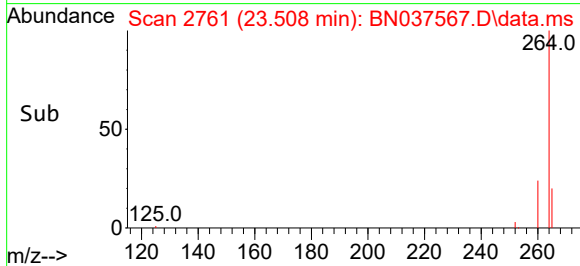


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.508 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD

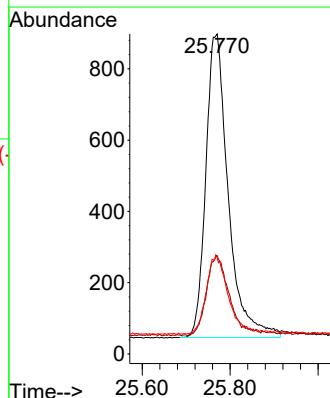
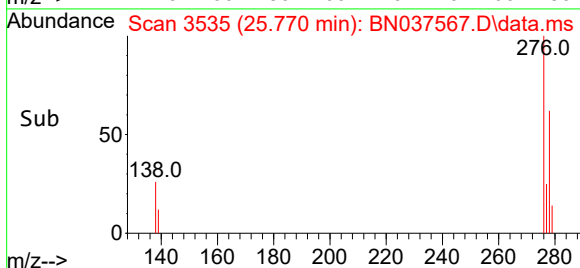
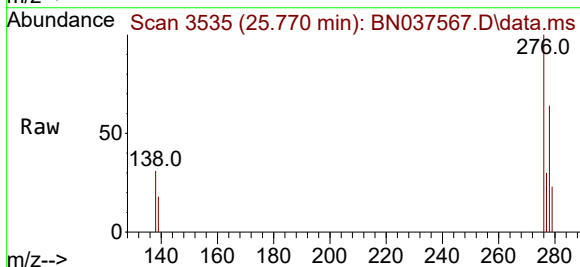


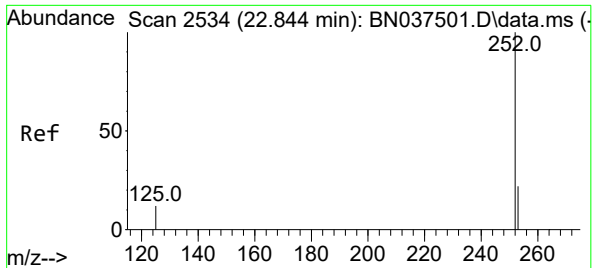
Tgt Ion:264 Resp: 2004  
Ion Ratio Lower Upper  
264 100  
260 27.7 21.2 31.8  
265 85.1 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.362 ng  
RT: 25.770 min Scan# 3535  
Delta R.T. -0.009 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Tgt Ion:276 Resp: 3023  
Ion Ratio Lower Upper  
276 100  
138 26.6 24.0 36.0  
277 24.2 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.364 ng

RT: 22.835 min Scan# 2531

Delta R.T. -0.009 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

Instrument :

BNA\_N

ClientSampleId :

PB169094BSD

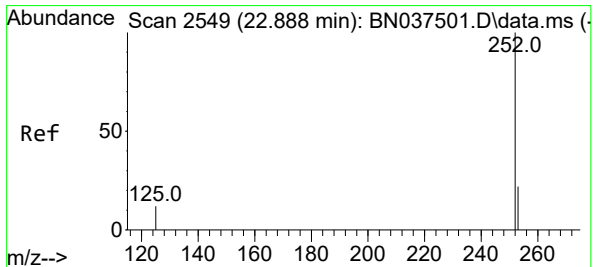
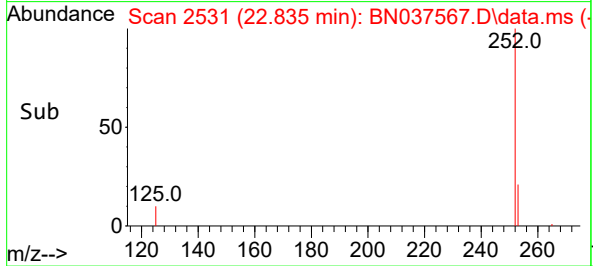
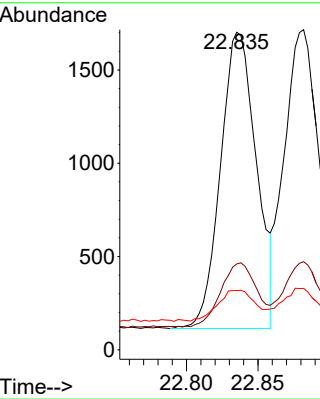
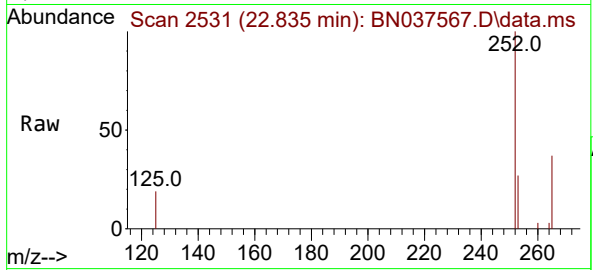
Tgt Ion:252 Resp: 2770

Ion Ratio Lower Upper

252 100

253 27.0 19.5 29.3

125 18.7 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.363 ng

RT: 22.882 min Scan# 2547

Delta R.T. -0.006 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

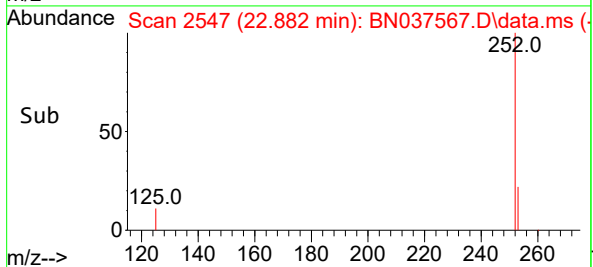
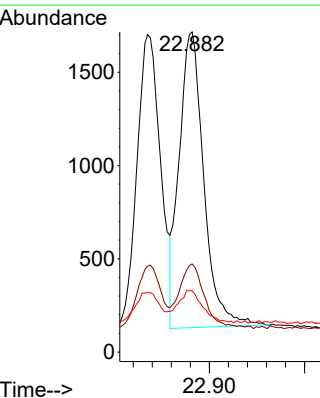
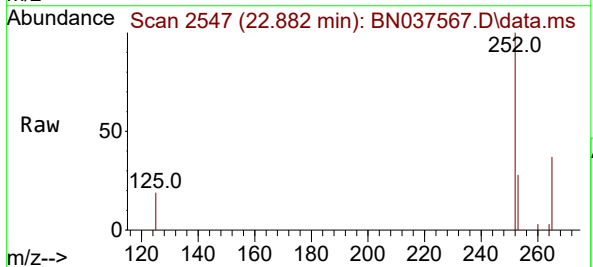
Tgt Ion:252 Resp: 2847

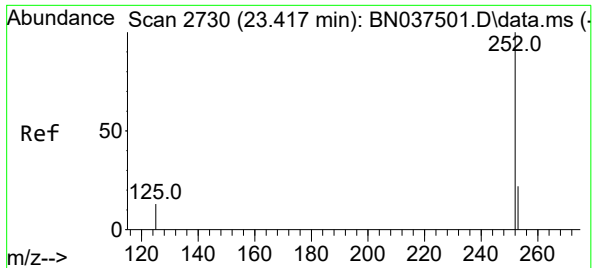
Ion Ratio Lower Upper

252 100

253 27.5 19.5 29.3

125 19.2 13.1 19.7





#39

Benzo(a)pyrene

Concen: 0.380 ng

RT: 23.408 min Scan# 21

Delta R.T. -0.009 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

Instrument :

BNA\_N

ClientSampleId :

PB169094BSD

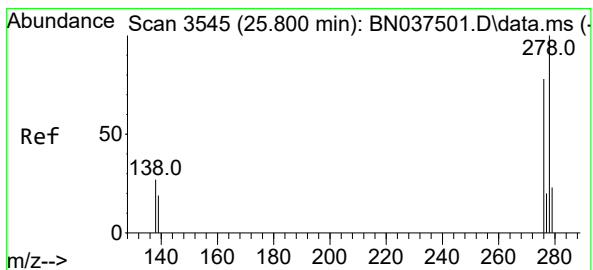
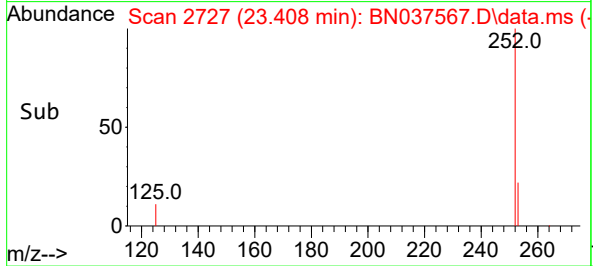
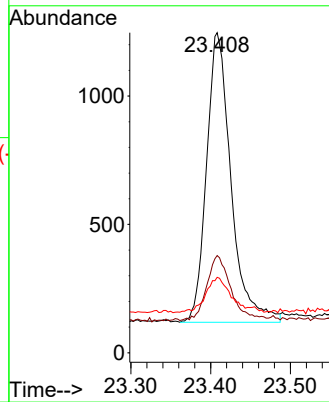
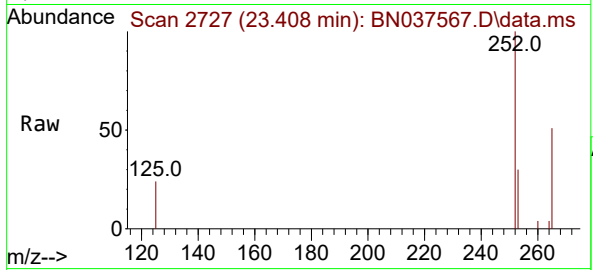
Tgt Ion:252 Resp: 2409

Ion Ratio Lower Upper

252 100

253 30.4 19.9 29.9#

125 23.6 15.2 22.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.346 ng

RT: 25.785 min Scan# 3540

Delta R.T. -0.015 min

Lab File: BN037567.D

Acq: 05 Aug 2025 14:23

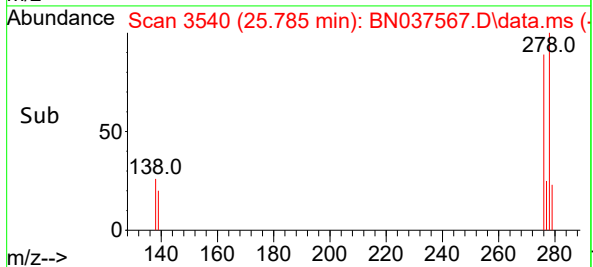
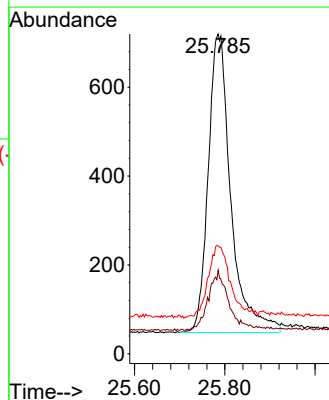
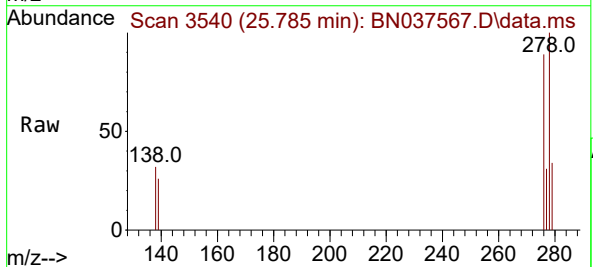
Tgt Ion:278 Resp: 2339

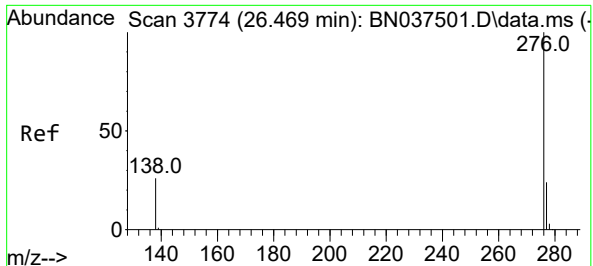
Ion Ratio Lower Upper

278 100

139 26.1 17.5 26.3

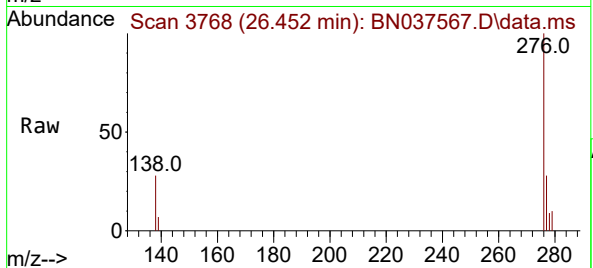
279 33.8 21.3 31.9#



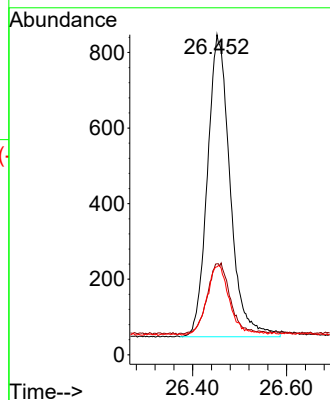
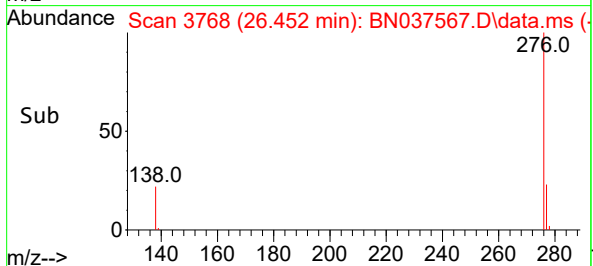


#41  
Benzo(g,h,i)perylene  
Concen: 0.382 ng  
RT: 26.452 min Scan# 31  
Delta R.T. -0.018 min  
Lab File: BN037567.D  
Acq: 05 Aug 2025 14:23

Instrument :  
BNA\_N  
ClientSampleId :  
PB169094BSD



Tgt Ion:276 Resp: 2676  
Ion Ratio Lower Upper  
276 100  
277 28.5 20.9 31.3  
138 27.5 22.6 33.8





Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN071525 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|



Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN080525 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN071525**

|                          |                                                  |                   |                                               |
|--------------------------|--------------------------------------------------|-------------------|-----------------------------------------------|
| Review By                | Rahul                                            | Review On         | 7/16/2025 11:47:41 AM                         |
| Supervise By             | Jagrut                                           | Supervise On      | 7/16/2025 12:31:26 PM                         |
| SubDirectory             | BN071525                                         | HP Acquire Method | BNA_N, 8270_SiM HP Processing Method BN071525 |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |                   |                                               |
| Tune/Reschk              | SP6757                                           |                   |                                               |
| Initial Calibration Stds | SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848 |                   |                                               |
| CCC                      | SP6846                                           |                   |                                               |
| Internal Standard/PEM    | SP6740,1ul/100ul sample                          |                   |                                               |
| ICV/I.BLK                | SP6854                                           |                   |                                               |
| Surrogate Standard       |                                                  |                   |                                               |
| MS/MSD Standard          |                                                  |                   |                                               |
| LCS Standard             |                                                  |                   |                                               |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | DFTPP       | BN037497.D     | 15 Jul 2025 10:57 | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | BN037498.D     | 15 Jul 2025 11:37 | RC/JU    | Not Ok |
| 3   | SSTDICC0.1  | BN037499.D     | 15 Jul 2025 12:36 | RC/JU    | Ok     |
| 4   | SSTDICC0.2  | BN037500.D     | 15 Jul 2025 13:12 | RC/JU    | Ok     |
| 5   | SSTDICCC0.4 | BN037501.D     | 15 Jul 2025 13:49 | RC/JU    | Ok     |
| 6   | SSTDICC0.8  | BN037502.D     | 15 Jul 2025 14:25 | RC/JU    | Ok     |
| 7   | SSTDICC1.6  | BN037503.D     | 15 Jul 2025 15:01 | RC/JU    | Ok     |
| 8   | SSTDICC3.2  | BN037504.D     | 15 Jul 2025 15:38 | RC/JU    | Ok     |
| 9   | SSTDICC5.0  | BN037505.D     | 15 Jul 2025 16:14 | RC/JU    | Ok     |
| 10  | SSTDICV0.4  | BN037506.D     | 15 Jul 2025 16:58 | RC/JU    | Ok     |
| 11  | PB168696BL  | BN037507.D     | 15 Jul 2025 17:34 | RC/JU    | Ok     |
| 12  | SSTDCCC0.4  | BN037508.D     | 15 Jul 2025 18:11 | RC/JU    | Ok     |

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN080525**

|                          |                                                  |                   |                                               |
|--------------------------|--------------------------------------------------|-------------------|-----------------------------------------------|
| Review By                | Rahul                                            | Review On         | 8/6/2025 10:19:05 AM                          |
| Supervise By             | Jagrut                                           | Supervise On      | 8/6/2025 4:11:35 PM                           |
| SubDirectory             | BN080525                                         | HP Acquire Method | BNA_N, 8270_SiM HP Processing Method BN071525 |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |                   |                                               |
| Tune/Reschk              | SP6757                                           |                   |                                               |
| Initial Calibration Stds | SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848 |                   |                                               |
| CCC                      | SP6846                                           |                   |                                               |
| Internal Standard/PEM    | SP6830,1ul/100ul sample                          |                   |                                               |
| ICV/I.BLK                | SP6854                                           |                   |                                               |
| Surrogate Standard       |                                                  |                   |                                               |
| MS/MSD Standard          |                                                  |                   |                                               |
| LCS Standard             |                                                  |                   |                                               |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | DFTPP       | BN037558.D     | 05 Aug 2025 08:56 | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | BN037559.D     | 05 Aug 2025 09:35 | RC/JU    | Ok     |
| 3   | PB169094BL  | BN037560.D     | 05 Aug 2025 10:11 | RC/JU    | Ok     |
| 4   | Q2745-01    | BN037561.D     | 05 Aug 2025 10:47 | RC/JU    | Ok     |
| 5   | Q2745-02    | BN037562.D     | 05 Aug 2025 11:23 | RC/JU    | Ok     |
| 6   | Q2746-01    | BN037563.D     | 05 Aug 2025 11:59 | RC/JU    | Ok     |
| 7   | Q2746-02    | BN037564.D     | 05 Aug 2025 12:35 | RC/JU    | Ok     |
| 8   | Q2746-03    | BN037565.D     | 05 Aug 2025 13:11 | RC/JU    | Ok     |
| 9   | PB169094BS  | BN037566.D     | 05 Aug 2025 13:47 | RC/JU    | Ok     |
| 10  | PB169094BSD | BN037567.D     | 05 Aug 2025 14:23 | RC/JU    | Ok     |
| 11  | SSTDCCC0.4  | BN037568.D     | 05 Aug 2025 15:03 | RC/JU    | Ok     |

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN071525**

|              |          |                   |                                           |
|--------------|----------|-------------------|-------------------------------------------|
| Review By    | Rahul    | Review On         | 7/16/2025 11:47:41 AM                     |
| Supervise By | Jagrut   | Supervise On      | 7/16/2025 12:31:26 PM                     |
| SubDirectory | BN071525 | HP Acquire Method | BNA_N, 8270_HP Processing Method BN071525 |

| STD. NAME                | STD REF.#                                              |
|--------------------------|--------------------------------------------------------|
| Tune/Reschk              | SP6757                                                 |
| Initial Calibration Stds | SP6842, SP6843, SP6844, SP6845, SP6846, SP6847, SP6848 |
| CCC                      | SP6846                                                 |
| Internal Standard/PEM    | SP6740, 1ul/100ul sample                               |
| ICV/I.BLK                | SP6854                                                 |
| Surrogate Standard       |                                                        |
| MS/MSD Standard          |                                                        |
| LCS Standard             |                                                        |

| Sr# | SampleID    | ClientID     | Data File Name | Date-Time         | Comment                          | Operator | Status |
|-----|-------------|--------------|----------------|-------------------|----------------------------------|----------|--------|
| 1   | DFTPP       | DFTPP        | BN037497.D     | 15 Jul 2025 10:57 |                                  | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | SSTDCCC0.4   | BN037498.D     | 15 Jul 2025 11:37 | A Fresh Calibration is required. | RC/JU    | Not Ok |
| 3   | SSTDICC0.1  | SSTDICC0.1   | BN037499.D     | 15 Jul 2025 12:36 |                                  | RC/JU    | Ok     |
| 4   | SSTDICC0.2  | SSTDICC0.2   | BN037500.D     | 15 Jul 2025 13:12 |                                  | RC/JU    | Ok     |
| 5   | SSTDICCC0.4 | SSTDICCC0.4  | BN037501.D     | 15 Jul 2025 13:49 | Compound #20 kept on QR          | RC/JU    | Ok     |
| 6   | SSTDICC0.8  | SSTDICC0.8   | BN037502.D     | 15 Jul 2025 14:25 |                                  | RC/JU    | Ok     |
| 7   | SSTDICC1.6  | SSTDICC1.6   | BN037503.D     | 15 Jul 2025 15:01 |                                  | RC/JU    | Ok     |
| 8   | SSTDICC3.2  | SSTDICC3.2   | BN037504.D     | 15 Jul 2025 15:38 |                                  | RC/JU    | Ok     |
| 9   | SSTDICC5.0  | SSTDICC5.0   | BN037505.D     | 15 Jul 2025 16:14 |                                  | RC/JU    | Ok     |
| 10  | SSTDICV0.4  | ICVBN071525  | BN037506.D     | 15 Jul 2025 16:58 |                                  | RC/JU    | Ok     |
| 11  | PB168696BL  | PB168696BL   | BN037507.D     | 15 Jul 2025 17:34 |                                  | RC/JU    | Ok     |
| 12  | SSTDCCC0.4  | SSTDCCC0.4EC | BN037508.D     | 15 Jul 2025 18:11 |                                  | RC/JU    | Ok     |

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN080525**

|              |          |                   |                                           |
|--------------|----------|-------------------|-------------------------------------------|
| Review By    | Rahul    | Review On         | 8/6/2025 10:19:05 AM                      |
| Supervise By | Jagrut   | Supervise On      | 8/6/2025 4:11:35 PM                       |
| SubDirectory | BN080525 | HP Acquire Method | BNA_N, 8270_HP Processing Method BN071525 |

| STD. NAME                | STD REF.#                                              |
|--------------------------|--------------------------------------------------------|
| Tune/Reschk              | SP6757                                                 |
| Initial Calibration Stds | SP6842, SP6843, SP6844, SP6845, SP6846, SP6847, SP6848 |
| CCC                      | SP6846                                                 |
| Internal Standard/PEM    | SP6830, 1ul/100ul sample                               |
| ICV/I.BLK                | SP6854                                                 |
| Surrogate Standard       |                                                        |
| MS/MSD Standard          |                                                        |
| LCS Standard             |                                                        |

| Sr# | SampleID    | ClientID           | Data File Name | Date-Time         | Comment | Operator | Status |
|-----|-------------|--------------------|----------------|-------------------|---------|----------|--------|
| 1   | DFTPP       | DFTPP              | BN037558.D     | 05 Aug 2025 08:56 |         | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | SSTDCCC0.4         | BN037559.D     | 05 Aug 2025 09:35 |         | RC/JU    | Ok     |
| 3   | PB169094BL  | PB169094BL         | BN037560.D     | 05 Aug 2025 10:11 |         | RC/JU    | Ok     |
| 4   | Q2745-01    | RW8-SP100-20250731 | BN037561.D     | 05 Aug 2025 10:47 |         | RC/JU    | Ok     |
| 5   | Q2745-02    | RW8-SP303-20250731 | BN037562.D     | 05 Aug 2025 11:23 |         | RC/JU    | Ok     |
| 6   | Q2746-01    | RW7-SP100-20250731 | BN037563.D     | 05 Aug 2025 11:59 |         | RC/JU    | Ok     |
| 7   | Q2746-02    | RW7-SP201-20250731 | BN037564.D     | 05 Aug 2025 12:35 |         | RC/JU    | Ok     |
| 8   | Q2746-03    | RW7-SP303-20250731 | BN037565.D     | 05 Aug 2025 13:11 |         | RC/JU    | Ok     |
| 9   | PB169094BS  | PB169094BS         | BN037566.D     | 05 Aug 2025 13:47 |         | RC/JU    | Ok     |
| 10  | PB169094BSD | PB169094BSD        | BN037567.D     | 05 Aug 2025 14:23 |         | RC/JU    | Ok     |
| 11  | SSTDCCC0.4  | SSTDCCC0.4EC       | BN037568.D     | 05 Aug 2025 15:03 |         | RC/JU    | Ok     |

M : Manual Integration

**SOP ID:** M3510C,3580A-Extraction SVOC-21

**Clean Up SOP #:** N/A **Extraction Start Date :** 08/04/2025

**Matrix :** Water **Extraction Start Time :** 08:40

**Welgh By:** N/A **Extraction By:** RS **Extraction End Date :** 08/04/2025

**Balance check:** N/A **Filter By:** RJ **Extraction End Time :** 13:45

**Balance ID:** N/A **pH Meter ID:** N/A **Concentration By:** RS

**pH Strip Lot#:** E3880 **Hood ID:** 4,6,7 **Supervisor By :** RUPESH

**Extraction Method:** ☒ Separatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☐ Soxhlet

| Standard Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---------------|----------|---------------------|---------------------|
| Spike Sol 1   | 1.0ML    | 0.4 PPM             | SP6855              |
| Surrogate     | 1.0ML    | 0.4 PPM             | SP6831              |
| 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 |
|--------------------|----------------|------------|
| Methylene Chloride | N/A            | E3954      |
| Baked Na2SO4       | N/A            | EP2629     |
| 10N NaoH           | N/A            | EP2609     |
| H2SO4 1:1          | N/A            | EP2610     |
| 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# 2210443. pH Adjusted&lt;2 with 1:1 H2SO4 &amp;&gt;11 with 10 N NaOH.

**KD Bath ID:** WATER BATH-1,2 **Envap ID:** NEVAP-02

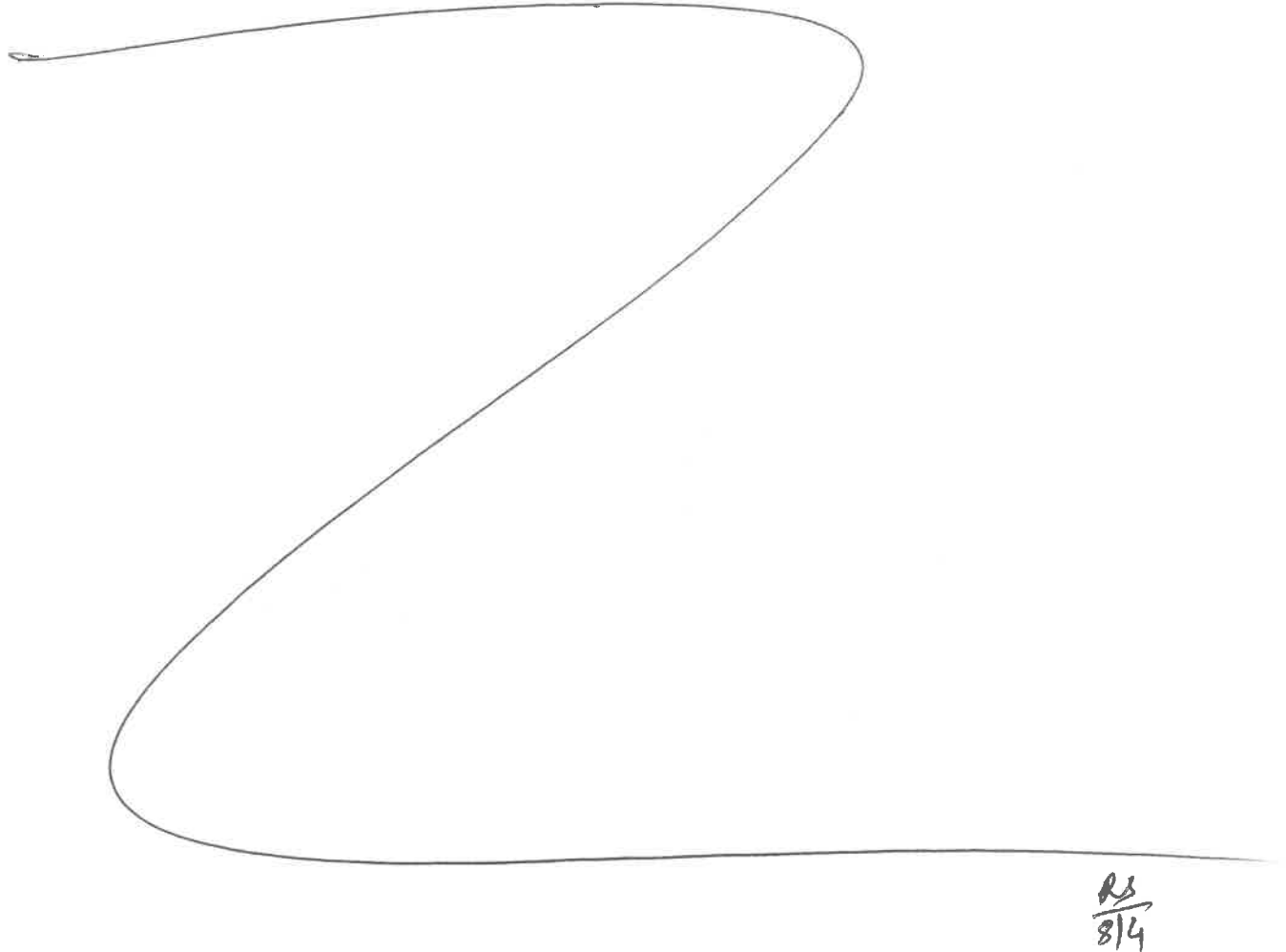
**KD Bath Temperature:** 60 °C **Envap Temperature:** 40 °C

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|-------------|-----------------------------------------|----------------------|
| 8/4/25      | RS (Ext Lab)                            | Rc/sur               |
| 13:50       | Preparation Group                       | Analysis Group       |

Analytical Method: M3510C,3580A-Extraction SVOC-21

Concentration Date: 08/04/2025

| Sample ID    | Client Sample ID   | Test            | g / mL | PH | Surr/Spike By: |            | Final Vol. (mL) | JarID | Comments | Prep Pos |
|--------------|--------------------|-----------------|--------|----|----------------|------------|-----------------|-------|----------|----------|
|              |                    |                 |        |    | AddedBy        | VerifiedBy |                 |       |          |          |
| PB169094BL   | SBLK094            | SVOC-SIMGrou p1 | 1000   | 6  | RUPEsh         | ritesh     | 1               |       |          | SEP-1    |
| PB169094BS   | SLCS094            | SVOC-SIMGrou p1 | 1000   | 6  | RUPEsh         | ritesh     | 1               |       |          | 2        |
| PB169094BS D | SLCSD094           | SVOC-SIMGrou p1 | 1000   | 6  | RUPEsh         | ritesh     | 1               |       |          | 3        |
| Q2745-01     | RW8-SP100-20250731 | SVOC-SIMGrou p1 | 1000   | 6  | RUPEsh         | ritesh     | 1               | B     |          | 4        |
| Q2745-02     | RW8-SP303-20250731 | SVOC-SIMGrou p1 | 1000   | 6  | RUPEsh         | ritesh     | 1               | D     |          | 5        |
| Q2746-01     | RW7-SP100-20250731 | SVOC-SIMGrou p1 | 1000   | 6  | RUPEsh         | ritesh     | 1               |       |          | 6        |
| Q2746-02     | RW7-SP201-20250731 | SVOC-SIMGrou p1 | 1000   | 6  | RUPEsh         | ritesh     | 1               |       |          | 7        |
| Q2746-03     | RW7-SP303-20250731 | SVOC-SIMGrou p1 | 970    | 6  | RUPEsh         | ritesh     | 1               |       |          | 8        |



\* Extracts relinquished on the same date as received.

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2745      WorkList ID : 191083      Department : Extraction      Date : 08-04-2025 08:35:47

| Sample   | Customer Sample    | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method        |
|----------|--------------------|--------|----------------|--------------|----------|-----------------------------|--------------|---------------|
| Q2745-01 | RW8-SP100-20250731 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | O41                         | 07/31/2025   | 8270-Modified |
| Q2745-02 | RW8-SP303-20250731 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | O41                         | 07/31/2025   | 8270-Modified |
| Q2746-01 | RW7-SP100-20250731 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | A43                         | 07/31/2025   | 8270-Modified |
| Q2746-02 | RW7-SP201-20250731 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | A43                         | 07/31/2025   | 8270-Modified |
| Q2746-03 | RW7-SP303-20250731 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | A43                         | 07/31/2025   | 8270-Modified |

Date/Time 8/4/25 8:35  
Raw Sample Received by: RS (Ext-66)  
Raw Sample Relinquished by: SA SH

Date/Time 8/4/25 9:15  
Raw Sample Received by: SA SH  
Raw Sample Relinquished by: RS (Ext-66)

## Prep Standard - Chemical Standard Summary

**Order ID :** Q2745  
**Test :** SVOC-SIMGroup1  
**Prepbatch ID :** PB169094,  
**Sequence ID/Qc Batch ID:** BN080525,

**Standard ID :**  
EP2609,EP2610,EP2629,SP6757,SP6830,SP6831,SP6841,SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848,SP6853,SP6854,SP6855,

**Chemical ID :**  
1ul/100ul  
sample,E3657,E3875,E3904,E3932,E3940,E3942,E3943,E3954,M6157,S10105,S 11073,S11496,S11652,S11807,S11828,S12115,S12195,S12197,S12216,S12220,S12273,S12498,S12499,S12552,S12577,S12670,S12986,S13058,W 3112,

## 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> |
|------------------|----------------------------|------------------------|------------------|------------------------|--------------------|---------------------|------------------|----------------------|
| 1874             | 10 N SODIUM HYDROXIDE SOLN | <a href="#">EP2609</a> | 05/07/2025       | 11/07/2025             | RUPESHKUMAR SHAH   | Extraction_SC ALE_2 | None             | Riteshkumar Patel    |

(EX-SC-2)

**FROM** 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 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> |
|------------------|----------------|------------------------|------------------|------------------------|--------------------|---------------------|------------------|----------------------|
| 314              | 1.1 H2SO4 SOLN | <a href="#">EP2610</a> | 05/07/2025       | 11/07/2025             | RUPESHKUMAR SHAH   | Extraction_SC ALE_2 | None             | Riteshkumar Patel    |

(EX-SC-2)

**FROM** 1000.00000ml of M6157 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

## 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="#">EP2629</a> | 07/28/2025       | 01/28/2026             | RUPESHKUMAR SHAH   | Extraction_SCALE_2<br>(EX-SC-2) | None             | Riteshkumar Patel<br>07/28/2025 |

**FROM** 4000.00000gram of E3875 = 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>          |
|------------------|----------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|-------------------------------|
| 3895             | 50 ug/ml DFTPP 8270E | <a href="#">SP6757</a> | 03/31/2025       | 09/30/2025             | Rahul Chavli       | None           | None             | Jagrut Upadhyay<br>04/01/2025 |

**FROM** 1.00000ml of S12577 + 19.00000ml of E3904 = 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> |
|------------------|---------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3493             | Internal Standard 0.4 PPM | <a href="#">SP6830</a> | 06/17/2025       | 12/13/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                           |                        |                  |                        |                    |                |                  | 06/19/2025           |

**FROM** 0.10000ml of S12670 + 4.90000ml of E3942 = 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> |
|------------------|----------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3491             | 8270-SIM-Surrogate 0.4 PPM | <a href="#">SP6831</a> | 06/18/2025       | 09/18/2025             | Rahul Chavli       | None           | None             | Jagrut Upadhyay      |
|                  |                            |                        |                  |                        |                    |                |                  | 06/18/2025           |

**FROM** 0.00800ml of S12195 + 0.01600ml of S12216 + 0.04000ml of S11828 + 199.93600ml of E3940 = Final Quantity: 200.000 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> |
|------------------|----------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3339             | 8270 sim calibration stock 10ppm (CPI) | <a href="#">SP6841</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                        |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.03350ml of S10105 + 0.05000ml of S11496 + 0.12500ml of S11828 + 0.12500ml of S12115 + 0.25000ml of S12273 + 0.25000ml of S13058 + 24.16650ml of E3943 = Final Quantity: 25.000 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> |
|------------------|----------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3361             | 8270-SIM MDL-5PPM CALIBRATION SOLUTION | <a href="#">SP6842</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                        |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6841 = 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> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3341             | 8270-SIM MDL-3.2PPM CALIBRATION SOLUTION | <a href="#">SP6843</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                          |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.68000ml of E3943 + 0.01000ml of SP6830 + 0.32000ml of SP6841 = 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> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3344             | 8270-SIM MDL-1.6PPM CALIBRATION SOLUTION | <a href="#">SP6844</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                          |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.84000ml of E3943 + 0.01000ml of SP6830 + 0.16000ml of SP6841 = 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> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3342             | 8270-SIM MDL-0.8PPM CALIBRATION SOLUTION | <a href="#">SP6845</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                          |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.92000ml of E3943 + 0.01000ml of SP6830 + 0.08000ml of SP6841 = 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> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3343             | 8270-SIM MDL-0.4PPM CALIBRATION SOLUTION | <a href="#">SP6846</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                          |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.96000ml of E3943 + 0.01000ml of SP6830 + 0.04000ml of SP6841 = 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> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3345             | 8270-SIM MDL-0.2PPM CALIBRATION SOLUTION | <a href="#">SP6847</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                          |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6846 = 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> |
|------------------|------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3346             | 8270-SIM MDL-0.1PPM CALIBRATION SOLUTION | <a href="#">SP6848</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                                          |                        |                  |                        |                    |                |                  | 06/25/2025           |

**FROM** 0.75000ml of E3943 + 0.01000ml of SP6830 + 0.25000ml of SP6846 = 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> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3355                                                                                                                                                                                                                                              | 8270-SIM MDL-3.2PPM<br>CALIBRATION STOCK SOL- 2ND | <a href="#">SP6853</a> | 07/02/2025       | 09/30/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
| <p><b>SOURCE</b></p> <p><b>FROM</b> 0.00630ml of S12197 + 0.01280ml of S12220 + 0.03200ml of S11073 + 0.03200ml of S11828 + 0.06400ml of S12499 + 0.06400ml of S12552 + 0.06400ml of S12986 + 19.72490ml of E3943 = Final Quantity: 20.000 ml</p> |                                                   |                        |                  |                        |                    |                |                  |                      |

| <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="#">SP6854</a> | 07/02/2025       | 09/30/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
| <p><b>SOURCE</b></p> <p><b>FROM</b> 0.87500ml of E3943 + 0.01000ml of SP6830 + 0.12500ml of SP6853 = Final Quantity: 1.010 ml</p> |                                                |                        |                  |                        |                    |                |                  |                      |

## 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> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3492                                                                                                                                                                      | 8270-SIM-Spike 0.4 PPM | <a href="#">SP6855</a> | 07/30/2025       | 09/30/2025             | Rahul Chavli       | None           | None             | Jagrut Upadhyay      |
| <b>FROM</b> 0.00080ml of S11652 + 0.01000ml of S11807 + 0.02000ml of S12498 + 0.02000ml of S12552 + 0.02000ml of S12986 + 49.92920ml of E3932 = Final Quantity: 50.000 ml |                        |                        |                  |                        |                    |                |                  |                      |

## CHEMICAL RECEIPT LOG BOOK

| Supplier                    | ItemCode / ItemName                                  | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-----------------------------|------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| PCI Scientific Supply, Inc. | PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4 | 23B1556310 | 12/31/2025      | 12/04/2023 / Rajesh     | 12/01/2023 / Rajesh         | E3657          |

| 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 | 417203 | 01/28/2026      | 07/28/2025 / RUPESH     | 01/29/2025 / Rajesh         | E3875          |

| 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) | 24K1762005 | 01/07/2026      | 03/13/2025 / RUPESH     | 12/27/2024 / RUPESH         | E3904          |

| 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) | 24H1462005 | 11/05/2025      | 05/05/2025 / RUPESH     | 04/23/2025 / RUPESH         | E3932          |

| 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) | 24H1462005 | 12/11/2025      | 06/11/2025 / Rajesh     | 06/04/2025 / Rajesh         | E3940          |

| 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) | 25A2862010 | 12/13/2025      | 06/13/2025 / Rajesh     | 02/28/2025 / Rajesh         | E3942          |

## 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) | 25A2862010 | 12/13/2025      | 06/13/2025 / Rajesh     | 02/28/2025 / Rajesh         | E3943          |

| 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) | 25B1862001 | 03/19/2026      | 07/14/2025 / RUPESH     | 06/11/2025 / RUPESH         | E3954          |

| Supplier         | ItemCode / ItemName                                     | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L) | 24i1262013 | 11/07/2025      | 05/07/2025 / RUPESH     | 02/18/2025 / Mohan          | M6157          |

| 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 | 12/19/2025      | 06/19/2025 / Jagrut     | 12/09/2021 / Christian      | S10105         |

| 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 | A0187043 | 11/16/2025      | 05/16/2025 / Jagrut     | 02/06/2023 / Christian      | S11073         |

| Supplier          | ItemCode / ItemName                                               | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|-------------------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml | 506889 | 10/28/2025      | 04/28/2025 / Jagrut     | 08/11/2023 / Yogesh         | S11496         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                         | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555872 / Custom Standard, pentachlorophenol Std [CS 5328-5] | A0201728 | 01/30/2026      | 07/30/2025 / Rahul      | 11/09/2023 / Yogesh         | S11652         |

| 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 | A0200655 | 01/01/2026      | 07/01/2025 / Rahul      | 11/21/2023 / rahul          | S11807         |

| 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 | A0201976 | 12/09/2025      | 06/09/2025 / Jagrut     | 11/21/2023 / rahul          | S11828         |

| 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 | 10/28/2025      | 04/28/2025 / Jagrut     | 03/08/2024 / Rahul          | S12115         |

| Supplier | ItemCode / ItemName                                      | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31087 / Acid Surrogate 10,000ug/ml, methanol, 5ml/ ampul | A0206206 | 09/18/2025      | 03/18/2025 / anahy      | 03/15/2024 / Rahul          | S12195         |

| Supplier | ItemCode / ItemName                                      | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31087 / Acid Surrogate 10,000ug/ml, methanol, 5ml/ ampul | A0206206 | 01/02/2026      | 07/02/2025 / Jagrut     | 03/15/2024 / Rahul          | S12197         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                                              | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31086 / Base Neutral Surrogate<br>5000ug/ml,CH <sub>2</sub> Cl <sub>2</sub> ,5ml | A0206381 | 09/18/2025      | 03/18/2025 / anahy      | 03/15/2024 / Rahul          | S12216         |

| Supplier | ItemCode / ItemName                                                              | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31086 / Base Neutral Surrogate<br>5000ug/ml,CH <sub>2</sub> Cl <sub>2</sub> ,5ml | A0206381 | 01/02/2026      | 07/02/2025 / Jagrut     | 03/15/2024 / Rahul          | S12220         |

| Supplier          | ItemCode / ItemName                                                  | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|----------------------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml | 520963 | 12/25/2025      | 06/25/2025 / Jagrut     | 05/24/2024 / Rahul          | S12273         |

| Supplier | ItemCode / ItemName                                                                                   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request] | A0214021 | 12/04/2025      | 06/04/2025 / Jagrut     | 07/23/2024 / RAHUL          | S12498         |

[CS 4978-1]

| Supplier | ItemCode / ItemName                                                                                   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request] | A0214021 | 01/01/2026      | 07/01/2025 / Rahul      | 07/23/2024 / RAHUL          | S12499         |

[CS 4978-1]

| 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] | A0214017 | 01/01/2026      | 07/01/2025 / Rahul      | 07/23/2024 / RAHUL          | S12552         |

[CS 4978-2]

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                                              | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31615 / SV Mixture, GC/MS Tuning Mixture, CH <sub>2</sub> Cl <sub>2</sub> , 1mL, | A0212955 | 06/30/2027      | 03/31/2025 / Rahul      | 08/01/2024 / Rahul          | S12577         |

| 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, CH <sub>2</sub> Cl <sub>2</sub> , 1mL | A0212266 | 12/16/2025      | 06/16/2025 / anahy      | 09/20/2024 / anahy          | S12670         |

| 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> ] | A0219438 | 09/30/2025      | 06/04/2025 / Jagrut     | 12/11/2024 / anahy          | S12986         |

| 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) | 531243 | 12/25/2025      | 06/25/2025 / Jagrut     | 01/16/2025 / anahy          | S13058         |

| Supplier         | ItemCode / ItemName | Lot #               | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---------------------|---------------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | DIW / DI Water      | Daily Lab-Certified | 07/03/2029      | 07/03/2024 / Iwona      | 07/03/2024 / Iwona          | W3112          |



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
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by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

**Catalog No.:** Z-112090 **Lot No.:** 440246 **Storage:**  $\leq -10^{\circ}\text{C}$  **Solvent:** Methylene Chloride **Exp. Date:** 2/16/2026 **Description:** 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



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## 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  
02/08/23

b1  
CG

S 11071  
to  
S 11075

Catalog No. : 31853 Lot No.: A0187043  
Description : 1,4-dioxane  
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : July 31, 2027 Storage: 0°C or colder  
Ship: Ambient

### CERTIFIED VALUES

| Elution Order | Compound                                                      | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                        |
|---------------|---------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------|
| 1             | 1,4-Dioxane<br>CAS # 123-91-1<br>Purity 99%<br>(Lot SHBN5929) | 2,019.0 µg/mL               | +/- 11.8486 µg/mL Gravimetric<br>+/- 43.2570 µg/mL Unstressed<br>+/- 44.5129 µg/mL Stressed |

Solvent: Methylene chloride  
CAS # 75-09-2  
Purity 99%

**Column:**

105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**

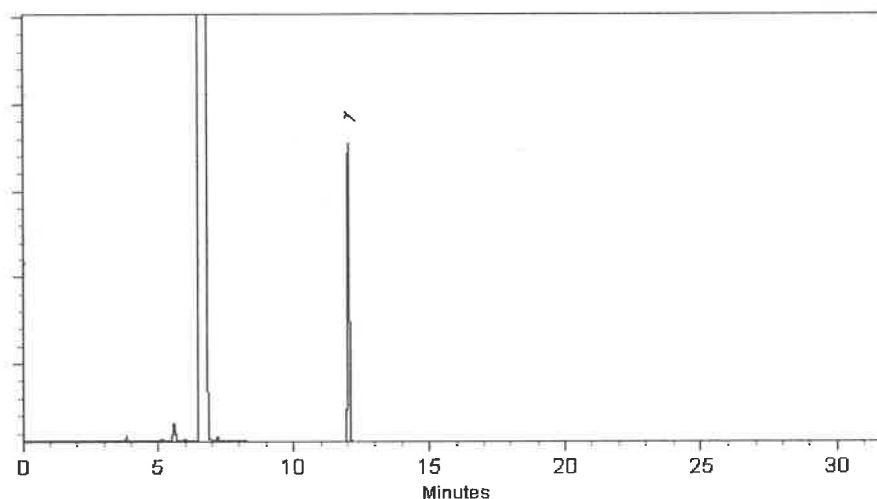
200°C

**Det. Temp:**

250°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.

Brittany Federinko - Operations Tech I

Date Mixed: 07-Jul-2022

Balance: 1128360905

Marlina Cowan - Operations Tech II ARM QC

Date Passed: 12-Jul-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



# Certificate of Analysis

## Sodium Hydroxide (Pellets)

**Material:** 0583  
**Grade:** ACS GRADE  
**Batch Number:** 23B1556310

**Chemical Formula:** NaOH  
**Molecular Weight:** 40  
**CAS #:** 1310-73-2  
**Appearance:**

**Manufacture Date:** 12/14/2022  
**Expiration Date:** 12/31/2025

**Storage:** Room Temperature

Pellets

| TEST               | SPECIFICATION          | ANALYSIS            | DISPOSITION |
|--------------------|------------------------|---------------------|-------------|
| Calcium            | $\leq 0.005 \%$        | $< 0.005 \%$        | PASS        |
| Chloride           | $\leq 0.005 \%$        | 0.002 %             | PASS        |
| Heavy Metals       | $\leq 0.002 \%$        | $< 0.002 \%$        | PASS        |
| Iron               | $\leq 0.001 \%$        | $< 0.001 \%$        | PASS        |
| Magnesium          | $\leq 0.002 \%$        | $< 0.002 \%$        | PASS        |
| Mercury            | $\leq 0.1 \text{ ppm}$ | $< 0.1 \text{ ppm}$ | PASS        |
| Nickel             | $\leq 0.001 \%$        | $< 0.001 \%$        | PASS        |
| Nitrogen Compounds | $\leq 0.001 \%$        | $< 0.001 \%$        | PASS        |
| Phosphate          | $\leq 0.001 \%$        | $< 0.001 \%$        | PASS        |
| Potassium          | $\leq 0.02 \%$         | $< 0.02 \%$         | PASS        |
| Purity             | $\geq 97.0 \%$         | 99.2 %              | PASS        |
| Sodium Carbonate   | $\leq 1.0 \%$          | 0.5 %               | PASS        |
| Sulfate            | $\leq 0.003 \%$        | $< 0.003 \%$        | PASS        |

Internal ID #: 710

### Signature

We certify that this batch conforms to the specifications listed.

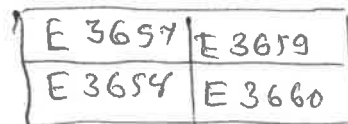
This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon  
VWR Chemicals, LLC.  
28600 Fountain Parkway, Solon OH 44139 USA

### Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.





**PRODUCTOS  
QUÍMICOS  
MONTERREY, S.A. DE C.V.**

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MONTERREY, N.L. MÉXICO  
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TEL +52 81 13 52 67 67  
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: | MAY/23/2024                     |
| LOT NUMBER :          | 417203                            |               |                                 |

| TEST                                     | SPECIFICATIONS | LOT VALUES  |
|------------------------------------------|----------------|-------------|
| Assay (Na <sub>2</sub> SO <sub>4</sub> ) | Min. 99.0%     | 99.8 %      |
| pH of a 5% solution at 25°C              | 5.2 - 9.2      | 6.2         |
| Insoluble matter                         | Max. 0.01%     | 0.001 %     |
| 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%     | 0.001 %     |
| Magnesium (Mg)                           | Max. 0.005%    | 0.001 %     |
| Potassium (K)                            | Max. 0.008%    | 0.001 %     |
| 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%        | 0.2 %       |
| Retained on US Standard No. 60 sieve     | Min. 94%       | 96.2 %      |
| Through US Standard No. 60 sieve         | Max. 5%        | 3.5 %       |
| 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.

RE-02-01, Ed. 3

E 3875

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

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 %     | 99.8 %      |
| Color (APHA)                                                            | <= 10         | 5           |
| Residue after Evaporation                                               | <= 1.0 ppm    | 0.2 ppm     |
| Substances Reducing Permanganate                                        | Passes Test   | Passes Test |
| Titration Acid (μeq/g)                                                  | <= 0.3        | 0.2         |
| Titration Base (μeq/g)                                                  | <= 0.6        | <0.1        |
| Water (H <sub>2</sub> O)                                                | <= 0.5 %      | 0.2 %       |
| 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

RS

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3932

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

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

Avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

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 %     | 99.8 %      |
| Color (APHA)                                                            | <= 10         | 5           |
| Residue after Evaporation                                               | <= 1.0 ppm    | 0.2 ppm     |
| Substances Reducing Permanganate                                        | Passes Test   | Passes Test |
| Titration Acid (µeq/g)                                                  | <= 0.3        | 0.2         |
| Titration Base (µeq/g)                                                  | <= 0.6        | <0.1        |
| Water (H <sub>2</sub> O)                                                | <= 0.5 %      | 0.2 %       |
| 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: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

Rec'd by RP on 6/11/25

E3940

*J. Croak*

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

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 25A2862010  
Manufactured Date: 2024-12-18  
Expiration Date: 2026-03-19  
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)                       | $\leq 10$              | 2                 |
| Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water) | $\geq 99.8 \%$         | 99.9 %            |
| Color (APHA)                                                                               | $\leq 10$              | 5                 |
| Residue after Evaporation                                                                  | $\leq 1.0 \text{ ppm}$ | 0.3 ppm           |
| Titration Acid ( $\mu\text{eq/g}$ )                                                        | $\leq 0.3$             | $< 0.1$           |
| Chloride (Cl)                                                                              | $\leq 10 \text{ ppm}$  | $< 5 \text{ ppm}$ |
| Water (by KF, coulometric)                                                                 | $\leq 0.02 \%$         | $< 0.01 \%$       |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

E3942

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

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4

Batch No.: 25A2862010

Manufactured Date: 2024-12-18

Expiration Date: 2026-03-19

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)                       | $\leq 10$      | 2          |
| Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water) | $\geq 99.8\%$  | 99.9%      |
| Color (APHA)                                                                               | $\leq 10$      | 5          |
| Residue after Evaporation                                                                  | $\leq 1.0$ ppm | 0.3 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: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E3942

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

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 25B1862001  
Manufactured Date: 2024-12-18  
Expiration Date: 2026-03-19  
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 HeptachlorEpoxide) Single Peak (pg/mL)                              | $\leq 10$      | 2       |
| Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water) | $\geq 99.8 \%$ | 99.9 %  |
| Color (APHA)                                                                                     | $\leq 10$      | 5       |
| Residue after Evaporation                                                                        | $\leq 1.0$ ppm | 0.3 ppm |
| Titration Acid (μeq/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: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

RS  
7/14/25

E3954

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

Sulfuric Acid  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis  
Low Selenium

avantor™



MG157  
MS

Material No.: 9673-33

Batch No.: 24I1262013

Manufactured Date: 2024-08-07

Retest Date: 2029-08-06

Revision No.: 0

## Certificate of Analysis

| Test                                                        | Specification | Result      |
|-------------------------------------------------------------|---------------|-------------|
| ACS – Assay (H <sub>2</sub> SO <sub>4</sub> )               | 95.0 – 98.0 % | 96.2 %      |
| Appearance                                                  | Passes Test   | Passes Test |
| ACS – Color (APHA)                                          | <= 10         | 5           |
| ACS – Residue after Ignition                                | <= 3 ppm      | <1 ppm      |
| ACS – Substances Reducing Permanganate(as SO <sub>2</sub> ) | <= 2 ppm      | <2 ppm      |
| Ammonium (NH <sub>4</sub> )                                 | <= 1 ppm      | <1 ppm      |
| Chloride (Cl)                                               | <= 0.1 ppm    | <0.1 ppm    |
| Nitrate (NO <sub>3</sub> )                                  | <= 0.2 ppm    | 0.1 ppm     |
| Phosphate (PO <sub>4</sub> )                                | <= 0.5 ppm    | <0.1 ppm    |
| Trace Impurities – Aluminum (Al)                            | <= 30.0 ppb   | <5.0 ppb    |
| Arsenic & Antimony (as As)                                  | <= 4.0 ppb    | <2.0 ppb    |
| Trace Impurities – Boron (B)                                | <= 10.0 ppb   | <5.0 ppb    |
| Trace Impurities – Cadmium (Cd)                             | <= 2.0 ppb    | <1.0 ppb    |
| Trace Impurities – Chromium (Cr)                            | <= 6.0 ppb    | <1.0 ppb    |
| Trace Impurities – Cobalt (Co)                              | <= 0.5 ppb    | <0.3 ppb    |
| Trace Impurities – Copper (Cu)                              | <= 1.0 ppb    | <1.0 ppb    |
| Trace Impurities – Gold (Au)                                | <= 10.0 ppb   | <5.0 ppb    |
| Heavy Metals (as Pb)                                        | <= 500.0 ppb  | <100.0 ppb  |
| Trace Impurities – Iron (Fe)                                | <= 50.0 ppb   | <1.0 ppb    |
| Trace Impurities – Lead (Pb)                                | <= 0.5 ppb    | <0.5 ppb    |
| Trace Impurities – Magnesium (Mg)                           | <= 7.0 ppb    | <1.0 ppb    |
| Trace Impurities – Manganese (Mn)                           | <= 1.0 ppb    | <1.0 ppb    |
| Trace Impurities – Mercury (Hg)                             | <= 0.5 ppb    | <0.1 ppb    |
| Trace Impurities – Nickel (Ni)                              | <= 2.0 ppb    | <0.3 ppb    |
| Trace Impurities – Potassium (K)                            | <= 500.0 ppb  | <10.0 ppb   |
| Trace Impurities – Selenium (Se)                            | <= 50.0 ppb   | 7.2 ppb     |
| Trace Impurities – Silicon (Si)                             | <= 100.0 ppb  | 12.8 ppb    |
| Trace Impurities – Silver (Ag)                              | <= 1.0 ppb    | <1.0 ppb    |

Sulfuric Acid

BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis

Low Selenium

 **avantors**™



Material No.: 9673-33

Batch No.: 24I1262013

| Test                              | Specification    | Result      |
|-----------------------------------|------------------|-------------|
| Trace Impurities – Sodium (Na)    | $\leq 500.0$ ppb | $< 5.0$ ppb |
| Trace Impurities – Strontium (Sr) | $\leq 5.0$ ppb   | $< 1.0$ ppb |
| Trace Impurities – Tin (Sn)       | $\leq 5.0$ ppb   | 1.1 ppb     |
| Trace Impurities – Zinc (Zn)      | $\leq 5.0$ ppb   | $< 1.0$ ppb |

For Laboratory, Research, or Manufacturing Use

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak

Director Quality Operations, Bioscience Production



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-d5                    | 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: \_\_\_\_\_

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.



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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.:** A0201728

**Description :** Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

511649  
↓  
511658 } Y.P.  
11/13/23

### CERTIFIED VALUES

| Component # | Compound          | CAS #   | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|-------------|-------------------|---------|-------------|--------|-----------------------------|----------------------------------------|
| 1           | Pentachlorophenol | 87-86-5 | RP230530RSR | 99%    | 25,000.0 µg/mL              | +/- 777.0837                           |

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

Josh McCloskey - Operations Technician I

**Date Mixed:** 05-Sep-2023

**Balance:** B251644995

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.



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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. :** 31853 **Lot No.:** A0200655  
**Description :** 1,4-dioxane  
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** August 31, 2028 **Storage:** 0°C or colder  
**Ship:** Ambient

S11795  
↓  
S11808 } 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 | SHBQ1693 | 99%    | 2,007.0 µg/mL               | +/- 24.9775                            |

\* 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:**

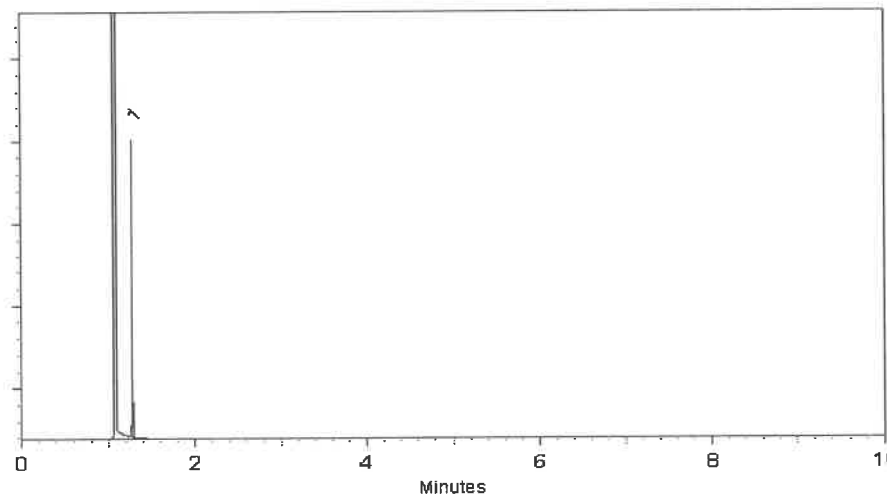
FID

**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.

Penelope Riglin - Operations Tech I

Date Mixed: 06-Aug-2023

Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-Aug-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.



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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. :** 33913 **Lot No.:** A0201976  
**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 :** August 31, 2029 **Storage:** 10°C or colder  
**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

S11828  
↓  
S11832 } RC/  
11/30/23

## CERTIFIED VALUES

| Elution Order | Compound                | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------------------|------------|----------|--------|-----------------------------|----------------------------------------|
| 1             | 2-Methylnaphthalene-d10 | 7297-45-2  | EF-135   | 98%    | 2,015.9 µg/mL               | +/- 90.8098                            |
| 2             | Fluoranthene-d10        | 93951-69-0 | PR-32557 | 99%    | 2,020.0 µg/mL               | +/- 90.9963                            |

\* 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:**

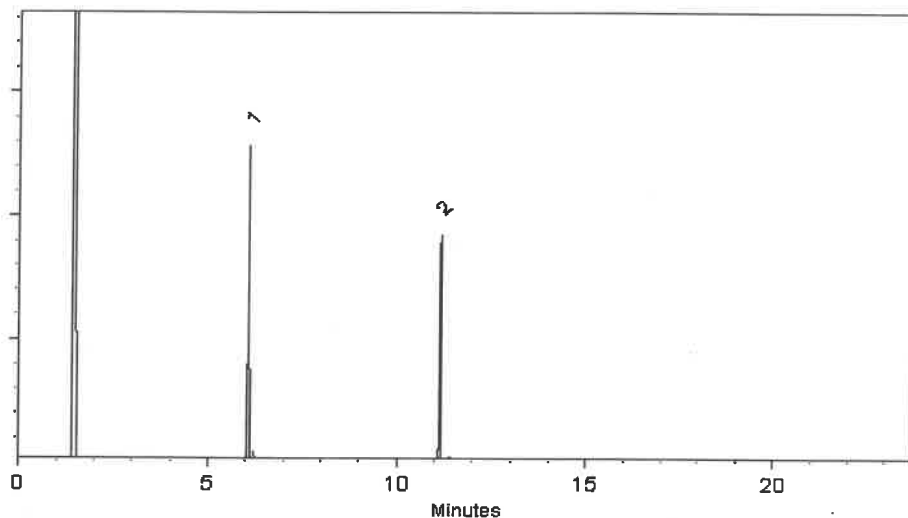
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

1µl

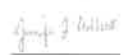


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Dakota Parson - Operations Technician I

Date Mixed: 13-Sep-2023

Balance Serial # B442140311

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 28-Sep-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.



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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

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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. :** 31087 **Lot No.:** A0206206  
**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 :** January 31, 2032 **Storage:** 10°C or colder  
**Ship:** Ambient

512187 } RC/  
↓  
512206 } 03/18/24

### CERTIFIED VALUES

| Elution Order | Compound             | CAS #      | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|----------------------|------------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | 2-Fluorophenol       | 367-12-4   | STBK1705    | 99%    | 10,005.3 µg/mL              | +/- 302.5390                           |
| 2             | Phenol-d6            | 13127-88-3 | PR-33287A   | 99%    | 10,005.5 µg/mL              | +/- 302.5475                           |
| 3             | 2,4,6-Tribromophenol | 118-79-6   | RP230831RSR | 99%    | 10,006.6 µg/mL              | +/- 302.5783                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methanol  
**CAS #** 67-56-1  
**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:**

40°C (hold 2 min.) to 330°C  
@ 10°C/min. (hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

330°C

**Det. Type:**

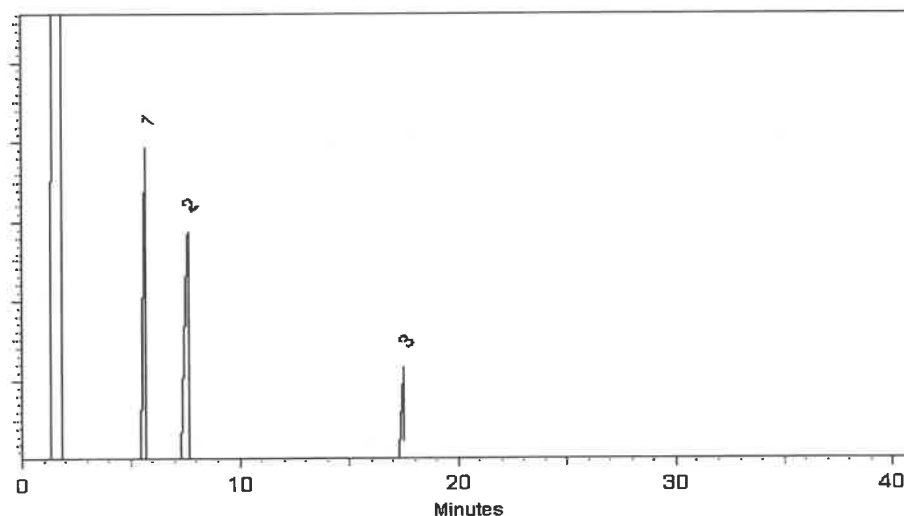
FID

**Split Vent:**

2 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.

*Penelope A. Riglin*

Penelope Riglin - Operations Tech I

*Christie Mills*

Christie Mills - Operations Lead Tech - ARM QC

Date Mixed: 04-Jan-2024

Balance Serial # 1128360905

Date Passed: 08-Jan-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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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. :** 31086 **Lot No.:** A0206381  
**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 :** December 31, 2029 **Storage:** 10°C or colder  
**Handling:** Sonicate prior to use. **Ship:** Ambient

S12207 } RC/  
↓  
S12221 } 03/18/24

### CERTIFIED VALUES

| Elution Order | Compound         | CAS #     | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|------------------|-----------|----------|--------|-----------------------------|----------------------------------------|
| 1             | Nitrobenzene-d5  | 4165-60-0 | I-25158  | 99%    | 5,029.3 µg/mL               | +/- 226.5204                           |
| 2             | 2-Fluorobiphenyl | 321-60-8  | 00021384 | 99%    | 5,030.9 µg/mL               | +/- 226.5936                           |
| 3             | p-Terphenyl-d14  | 1718-51-0 | PR-32599 | 99%    | 5,026.4 µg/mL               | +/- 226.3909                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**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.

# Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25µm  
Rtx-S (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:**

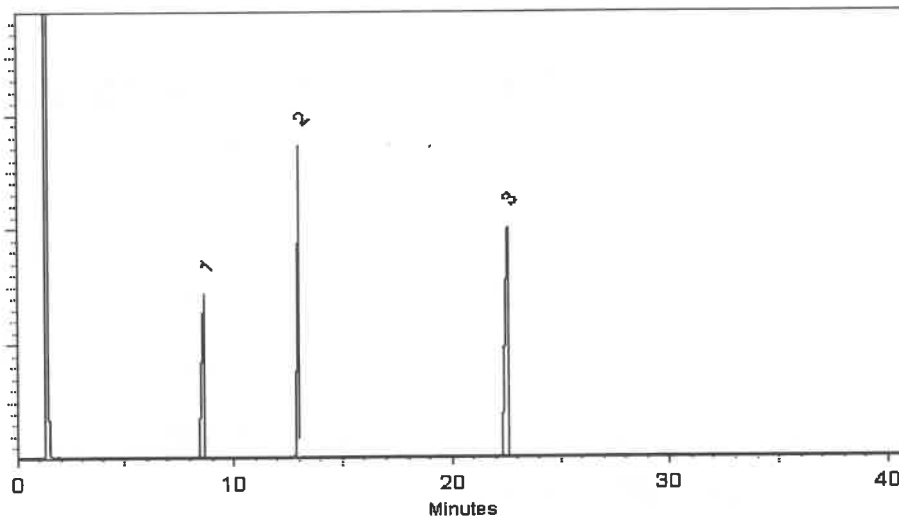
FID

**Split Vent:**

2 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.

Jess Hoy - Operations Tech I

Date Mixed: 09-Jan-2024

Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Jan-2024

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-110381-01         | 520963          | ≤ -10 °C        | Methylene Chloride | 10/10/2028        | 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          | 1010 ± 9.89         |
| acenaphthylene                    | 208-96-8 | 97.6       | 14.290.1P        | 1014 ± 9.93         |
| aniline                           | 62-53-3  | 99.97      | 64.1.4P          | 1001 ± 9.8          |
| anthracene                        | 120-12-7 | 99.5       | 15.7.1P          | 999.6 ± 9.79        |
| azobenzene                        | 103-33-3 | 98.1       | 252.7.2P         | 999.1 ± 9.8         |
| benzo[a]anthracene                | 56-55-3  | 100        | 16.7.3P          | 1007 ± 9.86         |
| benzo[b]fluoranthene              | 205-99-2 | 99.8       | 17.421.3P        | 1011 ± 14.11        |
| benzo[k]fluoranthene              | 207-08-9 | 98.9       | 18.421.4P        | 1001 ± 10.96        |
| benzo[ghi]perylene                | 191-24-2 | 93         | 19.286.4P        | 999.6 ± 13.95       |
| benzo[a]pyrene                    | 50-32-8  | 97         | 20.286.2P        | 999.9 ± 22.24       |
| benzyl alcohol                    | 100-51-6 | 99.9       | 65.18.1P         | 1001 ± 9.82         |
| bis(2-chloroethoxy)methane        | 111-91-1 | 99.1       | 31.3.15P         | 1000 ± 14.69        |
| bis(2-chloroethyl)ether           | 111-44-4 | 99.8       | 32.7.1P          | 1003 ± 13.89        |
| bis(2-chloro-1-methylethyl) ether | 108-60-1 | 99.5       | 34.3.15P         | 999.4 ± 14.68       |
| bis(2-ethylhexyl)adipate          | 103-23-1 | 99.5       | 874.7.1P         | 999.5 ± 9.8         |
| bis(2-ethylhexyl)phthalate        | 117-81-7 | 99.4       | 33.29.1P         | 998.8 ± 17.03       |
| 4-bromophenyl phenyl ether        | 101-55-3 | 99.4       | 35.7.1.1P        | 1000 ± 13.85        |
| butyl benzyl phthalate            | 85-68-7  | 98.4       | 36.1.6P          | 984.7 ± 16.79       |
| carbazole                         | 86-74-8  | 99.4       | 239.7.2P         | 1000 ± 9.8          |

\*Not a certified value

512270 } RC/  
↓  
512274 } 05/24/24

*Kerry Kane*

Certified By: \_\_\_\_\_

Kerry Kane  
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 2 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

| Compound                   | CAS No.   | Purity (%) | Compound Lot No. | Concentration, mg/L |
|----------------------------|-----------|------------|------------------|---------------------|
| 4-chloroaniline            | 106-47-8  | 100        | 66.7.1P          | 1000 ± 9.79         |
| 4-chlorophenylphenyl ether | 7005-72-3 | 98         | 37.158.2P        | 1001 ± 17.07        |
| 4-chloro-3-methylphenol    | 59-50-7   | 99         | 102.1.2P         | 1006 ± 17.16        |
| 2-chloronaphthalene        | 91-58-7   | 99.9       | 42.7.6P          | 1000 ± 9.79         |
| 2-chlorophenol             | 95-57-8   | 99.8       | 103.7.1P         | 1007 ± 13.96        |
| chrysene                   | 218-01-9  | 96         | 21.286.2P        | 998.4 ± 12.85       |
| dibenz[a,h]anthracene      | 53-70-3   | 99.44      | 22.286.3P        | 1000 ± 9.74         |
| dibenzofuran               | 132-64-9  | 100        | 67.7.2.1P        | 1002 ± 9.77         |
| di-n-butyl phthalate       | 84-74-2   | 99.84      | 40.286.1P        | 1007 ± 24.48        |
| 1,2-dichlorobenzene        | 95-50-1   | 99.8       | 43.7.1P          | 1000 ± 9.79         |
| 1,3-dichlorobenzene        | 541-73-1  | 99.5       | 44.1.3P          | 999.4 ± 9.79        |
| 1,4-dichlorobenzene        | 106-46-7  | 99.9       | 45.29.2P         | 1000 ± 9.79         |
| 2,4-dichlorophenol         | 120-83-2  | 99.6       | 104.7.1.1P       | 1005 ± 13.93        |
| diethyl phthalate          | 84-66-2   | 99.8       | 38.7.1P          | 1011 ± 14           |
| 2,4-dimethylphenol         | 105-67-9  | 99.6       | 105.7.1.1P       | 1009 ± 13.98        |
| dimethyl phthalate         | 131-11-3  | 99.9       | 39.9.2P          | 996.5 ± 13.8        |
| 1,2-dinitrobenzene         | 528-29-0  | 99.86      | 86.7.3.1P        | 999.5 ± 9.75        |
| 1,3-dinitrobenzene         | 99-65-0   | 100        | 313.7.2P         | 998 ± 9.79          |
| 1,4-dinitrobenzene         | 100-25-4  | 100        | 907.7.1P         | 999.5 ± 9.8         |
| 2,4-dinitrophenol          | 51-28-5   | 99.9       | 106.1.6DP        | 1002 ± 13.89        |
| 2,4-dinitrotoluene         | 121-14-2  | 100        | 87.7.3P          | 999.8 ± 13.85       |
| 2,6-dinitrotoluene         | 606-20-2  | 99.4       | 88.7.2.1P        | 999.6 ± 13.85       |
| di-n-octyl phthalate       | 117-84-0  | 99.1       | 41.7.5P          | 991.6 ± 13.74       |
| diphenylamine              | 122-39-4  | 100        | 78.1.6P          | 998 ± 13.79         |
| 2,3,5,6-tetrachlorophenol  | 935-95-5  | 97         | 1112.286.1P      | 1004 ± 14.02        |
| fluoranthene               | 206-44-0  | 98.6       | 23.7.4P          | 999.6 ± 9.79        |
| fluorene                   | 86-73-7   | 98.4       | 24.7.1P          | 999.7 ± 9.79        |

\*Not a certified value

*Kerry Kane*

Certified By:

Kerry Kane  
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 3 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

| Compound                   | CAS No.  | Purity (%) | Compound Lot No. | Concentration, mg/L |
|----------------------------|----------|------------|------------------|---------------------|
| hexachlorobenzene          | 118-74-1 | 99         | 46.158.4P        | 999.9 ± 13.96       |
| hexachlorobutadiene        | 87-68-3  | 97.4       | 47.1.4P          | 1000 ± 9.79         |
| hexachlorocyclopentadiene  | 77-47-4  | 99.2       | 48.2.2P          | 1001 ± 9.8          |
| hexachloroethane           | 67-72-1  | 99.9       | 49.1.4P          | 1003 ± 9.82         |
| indeno[1,2,3-cd]pyrene     | 193-39-5 | 98         | 25.286.4P        | 999.4 ± 22.23       |
| isophorone                 | 78-59-1  | 98.9       | 90.1.4P          | 999.9 ± 13.85       |
| 2-methyl-4,6-dinitrophenol | 534-52-1 | 99.6       | 107.421.2DP      | 991 ± 24.09         |
| 1-methylnaphthalene        | 90-12-0  | 97.1       | 249.7.5P         | 999.2 ± 13.95       |
| 2-methylnaphthalene        | 91-57-6  | 97.4       | 68.7.2P          | 1006 ± 22.38        |
| 2-methylphenol             | 95-48-7  | 99.6       | 114.7.3P         | 1001 ± 13.87        |
| 3-methylphenol             | 108-39-4 | 99.1       | 115.7.4P         | 499.7 ± 6.92        |
| 4-methylphenol             | 106-44-5 | 99.5       | 116.7.1P         | 501.2 ± 6.94        |
| naphthalene                | 91-20-3  | 99.8       | 26.9.1P          | 1018 ± 9.97         |
| 2-nitroaniline             | 88-74-4  | 99.7       | 69.29.1P         | 999.6 ± 9.79        |
| 3-nitroaniline             | 99-09-2  | 100        | 70.7.3P          | 1000 ± 9.74         |
| 4-nitroaniline             | 100-01-6 | 99.7       | 71.29.1P         | 1001 ± 9.8          |
| nitrobenzene               | 98-95-3  | 100        | 94.7.1P          | 1000 ± 13.85        |
| 2-nitrophenol              | 88-75-5  | 99.1       | 108.29.1P        | 996.5 ± 13.81       |
| 4-nitrophenol              | 100-02-7 | 100        | 109.7.1P         | 1000 ± 13.82        |
| N-nitrosodimethylamine     | 62-75-9  | 99.5       | 57.3.19P         | 998.5 ± 14.67       |
| N-nitrosodi-n-propylamine  | 621-64-7 | 99.8       | 59.286.1P        | 996.8 ± 17          |
| pentachlorophenol          | 87-86-5  | 99         | 110.1.7P         | 1004 ± 13.92        |
| phenanthrene               | 85-01-8  | 99.7       | 27.1.5P          | 999 ± 12.87         |
| phenol                     | 108-95-2 | 100        | 112.7.1P         | 998.5 ± 13.8        |
| pyrene                     | 129-00-0 | 99.2       | 28.9.2P          | 998.9 ± 9.78        |
| pyridine                   | 110-86-1 | 100        | 101.24.1P        | 999 ± 9.73          |
| 2,3,4,6-Tetrachlorophenol  | 58-90-2  | 91.8       | 120.421.1P       | 996.5 ± 13.92       |

\*Not a certified value

*Kerry Kane*

Certified By:

Kerry Kane  
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.: 520963

Expiration Date: 10/10/2028

| Compound               | CAS No.  | Purity (%) | Compound Lot No. | Concentration, mg/L |
|------------------------|----------|------------|------------------|---------------------|
| 1,2,4-trichlorobenzene | 120-82-1 | 99.6       | 54.29.1P         | 999.6 ± 9.79        |
| 2,4,5-trichlorophenol  | 95-95-4  | 96.5       | 121.7.1.1P       | 999.5 ± 13.85       |
| 2,4,6-trichlorophenol  | 88-06-2  | 99.6       | 113.7.1P         | 996 ± 13.8          |

\*Not a certified value



Certified By:

Kerry Kane  
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

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.:** A0214021

**Description :** Custom 8270 Plus Standard #1  
Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026 **Storage:** 10°C or colder

**Handling:** This product is photosensitive. **Ship:** Ambient

### 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   | S240326RSR | 99%    | 1,004.0 µg/mL               | +/- 23.0487                            |
| 2           | Atrazine               | 1912-24-9 | 5FYWL      | 99%    | 1,005.0 µg/mL               | +/- 23.0717                            |
| 3           | Benzidine              | 92-87-5   | S240430RSR | 99%    | 1,006.0 µg/mL               | +/- 23.0947                            |
| 4           | epsilon-Caprolactam    | 105-60-2  | Y16H012    | 99%    | 1,000.0 µg/mL               | +/- 22.9569                            |

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12449 } RC/  
↓  
S12508 } 7/24/24

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 18-Jul-2024

**Balance:** 1128353505

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.



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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.:** A0214017

**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 :** July 31, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

### 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%    | 1,005.0 µg/mL               | +/- 29.541899                          |
| 2           | Acetophenone               | 98-86-2  | STBH8205     | 99%    | 1,005.0 µg/mL               | +/- 29.541899                          |
| 3           | Benzaldehyde               | 100-52-7 | RD231129RSRA | 99%    | 1,008.0 µg/mL               | +/- 29.630084                          |
| 4           | Benzoic acid               | 65-85-0  | MKCR2694     | 99%    | 1,010.0 µg/mL               | +/- 29.688874                          |
| 5           | Biphenyl                   | 92-52-4  | MKCS5928     | 99%    | 1,008.0 µg/mL               | +/- 29.630084                          |

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12509 } RC/  
↓  
S12568 } 7/24/24

  
Jess Hoy - Operations Tech I

Date Mixed: 18-Jul-2024

Balance: 1128360905

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.



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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. :** 31615 **Lot No.:** A0212955  
**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 :** June 30, 2027 **Storage:** 10°C or colder  
**Handling:** Contains carcinogen/reproductive toxin. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound                             | CAS #     | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|--------------------------------------|-----------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | Pentachlorophenol                    | 87-86-5   | RP240517RSR | 99%    | 1,004.5 µg/mL               | +/- 44.8902                            |
| 2             | DFTPP (Decafluorotriphenylphosphine) | 5074-71-5 | Q117-147    | 99%    | 1,004.5 µg/mL               | +/- 44.8902                            |
| 3             | Benzidine                            | 92-87-5   | S240430RSR  | 99%    | 1,006.0 µg/mL               | +/- 44.9572                            |
| 4             | 4,4'-DDT                             | 50-29-3   | S240530RSR  | 97%    | 1,000.1 µg/mL               | +/- 44.6922                            |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12577 } RC  
↓  
S12579 } 8/2/24

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.)

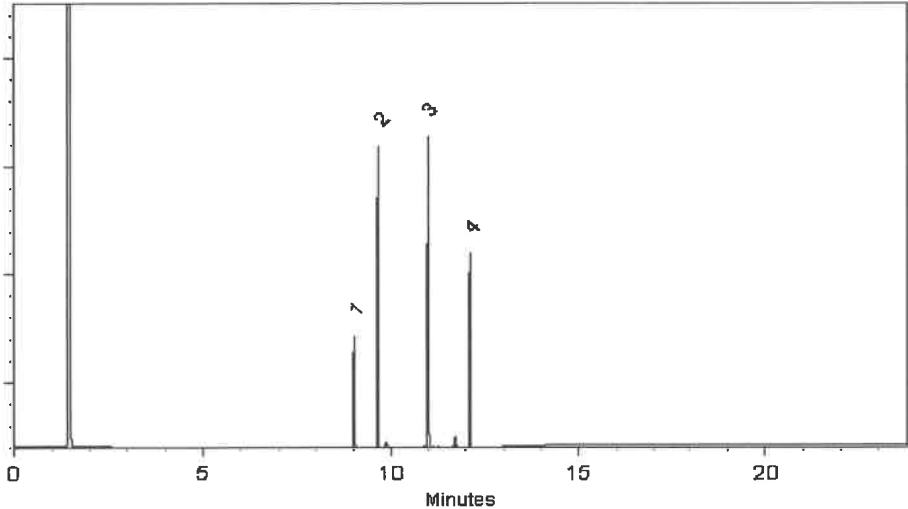
**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID

**Split Vent:**  
10 ml/min.

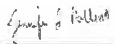
**Inj. Vol**  
1µl



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.

  
Ethan Winiarski - Operations Tech I

Date Mixed: 19-Jun-2024      Balance Serial # 1128353505

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 26-Jun-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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## CERTIFIED REFERENCE MATERIAL

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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.:** A0212266

**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 :** April 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

### 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%    | 2,000.6 µg/mL               | +/- 90.1075                            |
| 2             | Naphthalene-d8         | 1146-65-2  | M-2180   | 99%    | 2,000.3 µg/mL               | +/- 90.0925                            |
| 3             | Acenaphthene-d10       | 15067-26-2 | PR-33507 | 99%    | 2,000.4 µg/mL               | +/- 90.1000                            |
| 4             | Phenanthrene-d10       | 1517-22-2  | PR-34099 | 99%    | 2,000.5 µg/mL               | +/- 90.1037                            |
| 5             | Chrysene-d12           | 1719-03-5  | PR-33506 | 99%    | 2,000.7 µg/mL               | +/- 90.1112                            |
| 6             | Perylene-d12           | 1520-96-3  | PR-33205 | 99%    | 2,000.6 µg/mL               | +/- 90.1075                            |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12645 } AC  
↓  
S12674 } 10/1/24



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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.:** A0219438

**Description :** 8270 MegaMix®  
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025 **Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

S12963  
↓  
S12992 } AC  
12/17/20

### 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%    | 1,008.3 µg/mL               | +/- 36.6849                            |
| 2             | N-Nitrosodimethylamine       | 62-75-9  | S240313RSR  | 99%    | 1,008.6 µg/mL               | +/- 36.6985                            |
| 3             | Phenol                       | 108-95-2 | MKCK1120    | 99%    | 1,003.5 µg/mL               | +/- 36.5120                            |
| 4             | Aniline                      | 62-53-3  | X22F726     | 99%    | 1,002.9 µg/mL               | +/- 36.4893                            |
| 5             | Bis(2-chloroethyl)ether      | 111-44-4 | 002891T24M  | 99%    | 1,003.0 µg/mL               | +/- 36.4938                            |
| 6             | 2-Chlorophenol               | 95-57-8  | STBJ3909    | 99%    | 1,005.6 µg/mL               | +/- 36.5894                            |
| 7             | 1,3-Dichlorobenzene          | 541-73-1 | BCCD5315    | 99%    | 1,004.1 µg/mL               | +/- 36.5348                            |
| 8             | 1,4-Dichlorobenzene          | 106-46-7 | MKBS7929V   | 99%    | 1,002.1 µg/mL               | +/- 36.4620                            |
| 9             | Benzyl alcohol               | 100-51-6 | SHBK5469    | 99%    | 1,003.5 µg/mL               | +/- 36.5120                            |
| 10            | 1,2-Dichlorobenzene          | 95-50-1  | SHBL6287    | 99%    | 1,005.3 µg/mL               | +/- 36.5757                            |
| 11            | 2-Methylphenol (o-cresol)    | 95-48-7  | SHBN7598    | 99%    | 1,008.4 µg/mL               | +/- 36.6894                            |
| 12            | 2,2'-oxybis(1-chloropropane) | 108-60-1 | 29-MAR-45-5 | 99%    | 1,004.6 µg/mL               | +/- 36.5530                            |
| 13            | 3-Methylphenol (m-cresol)    | 108-39-4 | STBJ0710    | 99%    | 502.1 µg/mL                 | +/- 18.2697                            |
| 14            | 4-Methylphenol (p-cresol)    | 106-44-5 | SHBN3411    | 99%    | 503.8 µg/mL                 | +/- 18.3288                            |
| 15            | N-Nitroso-di-n-propylamine   | 621-64-7 | N63MG       | 99%    | 1,006.5 µg/mL               | +/- 36.6212                            |
| 16            | Hexachloroethane             | 67-72-1  | DAXRI       | 99%    | 1,004.5 µg/mL               | +/- 36.5484                            |
| 17            | Nitrobenzene                 | 98-95-3  | 10224044    | 99%    | 1,002.5 µg/mL               | +/- 36.4757                            |

|    |                                               |           |                  |       |         |       |             |
|----|-----------------------------------------------|-----------|------------------|-------|---------|-------|-------------|
| 18 | Isophorone                                    | 78-59-1   | MKCR3249         | 99%   | 1,003.4 | µg/mL | +/- 36.5075 |
| 19 | 2-Nitrophenol                                 | 88-75-5   | RP230710         | 99%   | 1,002.5 | µg/mL | +/- 36.4757 |
| 20 | 2,4-Dimethylphenol                            | 105-67-9  | XW5GK            | 99%   | 1,006.5 | µg/mL | +/- 36.6212 |
| 21 | Bis(2-chloroethoxy)methane                    | 111-91-1  | 15705100         | 99%   | 1,006.6 | µg/mL | +/- 36.6257 |
| 22 | 2,4-Dichlorophenol                            | 120-83-2  | BCKK6969         | 99%   | 1,001.5 | µg/mL | +/- 36.4393 |
| 23 | 1,2,4-Trichlorobenzene                        | 120-82-1  | SHBP5900         | 99%   | 1,006.4 | µg/mL | +/- 36.6166 |
| 24 | Naphthalene                                   | 91-20-3   | STBL1057         | 99%   | 1,002.1 | µg/mL | +/- 36.4620 |
| 25 | 4-Chloroaniline                               | 106-47-8  | BCCJ3217         | 99%   | 1,004.4 | µg/mL | +/- 36.5439 |
| 26 | Hexachlorobutadiene                           | 87-68-3   | X05J             | 98%   | 1,002.5 | µg/mL | +/- 36.4771 |
| 27 | 4-Chloro-3-methylphenol                       | 59-50-7   | BCCD4461         | 99%   | 1,004.5 | µg/mL | +/- 36.5484 |
| 28 | 2-Methylnaphthalene                           | 91-57-6   | STBL3028         | 99%   | 1,000.0 | µg/mL | +/- 36.3847 |
| 29 | 1-Methylnaphthalene                           | 90-12-0   | 5234.00-8        | 98%   | 990.2   | µg/mL | +/- 36.0269 |
| 30 | Hexachlorocyclopentadiene                     | 77-47-4   | 099063I14L       | 98%   | 1,001.3 | µg/mL | +/- 36.4325 |
| 31 | 2,4,6-Trichlorophenol                         | 88-06-2   | STBK8870         | 99%   | 1,006.4 | µg/mL | +/- 36.6166 |
| 32 | 2,4,5-Trichlorophenol                         | 95-95-4   | 3YFRE            | 97%   | 1,004.6 | µg/mL | +/- 36.5505 |
| 33 | 2-Chloronaphthalene                           | 91-58-7   | RPN7O            | 99%   | 1,004.3 | µg/mL | +/- 36.5393 |
| 34 | 2-Nitroaniline                                | 88-74-4   | RP240715RSR      | 99%   | 1,004.4 | µg/mL | +/- 36.5439 |
| 35 | 1,4-Dinitrobenzene                            | 100-25-4  | RP240703RSR      | 99%   | 1,002.8 | µg/mL | +/- 36.4847 |
| 36 | Acenaphthylene                                | 208-96-8  | RP241029RSR      | 98%   | 1,000.0 | µg/mL | +/- 36.3835 |
| 37 | 1,3-Dinitrobenzene                            | 99-65-0   | TRC3-1075941-2-1 | 99%   | 1,006.3 | µg/mL | +/- 36.6121 |
| 38 | Dimethylphthalate                             | 131-11-3  | 358221L17K       | 99%   | 1,008.9 | µg/mL | +/- 36.7076 |
| 39 | 2,6-Dinitrotoluene                            | 606-20-2  | BCCG1833         | 99%   | 1,006.6 | µg/mL | +/- 36.6257 |
| 40 | 1,2-Dinitrobenzene                            | 528-29-0  | RP240701RSR      | 99%   | 1,002.5 | µg/mL | +/- 36.4757 |
| 41 | Acenaphthene                                  | 83-32-9   | MKCR7169         | 99%   | 1,000.0 | µg/mL | +/- 36.3847 |
| 42 | 3-Nitroaniline                                | 99-09-2   | RP240708RSR      | 99%   | 1,004.6 | µg/mL | +/- 36.5530 |
| 43 | 2,4-Dinitrophenol                             | 51-28-5   | D240927RSR       | ----% | 1,005.6 | µg/mL | +/- 36.5894 |
| 44 | Dibenzofuran                                  | 132-64-9  | MKCN1772         | 99%   | 1,003.5 | µg/mL | +/- 36.5120 |
| 45 | 2,4-Dinitrotoluene                            | 121-14-2  | 102869V26E       | 99%   | 1,008.3 | µg/mL | +/- 36.6849 |
| 46 | 4-Nitrophenol                                 | 100-02-7  | 20241029-2-AN    | 99%   | 1,004.8 | µg/mL | +/- 36.5575 |
| 47 | 2,3,4,6-Tetrachlorophenol                     | 58-90-2   | PR-34476         | 99%   | 1,005.8 | µg/mL | +/- 36.5939 |
| 48 | 2,3,5,6-Tetrachlorophenol                     | 935-95-5  | RP231219RSR      | 99%   | 1,006.4 | µg/mL | +/- 36.6166 |
| 49 | Fluorene                                      | 86-73-7   | 10246250         | 98%   | 1,000.7 | µg/mL | +/- 36.4102 |
| 50 | 4-Chlorophenyl phenyl ether                   | 7005-72-3 | MKCT7248         | 99%   | 1,004.9 | µg/mL | +/- 36.5621 |
| 51 | Diethylphthalate                              | 84-66-2   | BCCJ6241         | 99%   | 1,003.9 | µg/mL | +/- 36.5257 |
| 52 | 4-Nitroaniline                                | 100-01-6  | RP230111         | 99%   | 1,006.6 | µg/mL | +/- 36.6257 |
| 53 | 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) | 534-52-1  | S241008RSR       | 99%   | 1,001.3 | µg/mL | +/- 36.4302 |

|    |                            |          |              |     |         |       |             |
|----|----------------------------|----------|--------------|-----|---------|-------|-------------|
| 54 | Diphenylamine              | 122-39-4 | MKCT1512     | 99% | 1,003.0 | µg/mL | +/- 36.4938 |
| 55 | Azobenzene                 | 103-33-3 | BCKK0887     | 99% | 1,002.4 | µg/mL | +/- 36.4711 |
| 56 | 4-Bromophenyl phenyl ether | 101-55-3 | STBH6361     | 99% | 1,008.8 | µg/mL | +/- 36.7031 |
| 57 | Hexachlorobenzene          | 118-74-1 | 15458400     | 99% | 1,005.1 | µg/mL | +/- 36.5712 |
| 58 | Pentachlorophenol          | 87-86-5  | RP240517RSR  | 99% | 1,005.9 | µg/mL | +/- 36.5984 |
| 59 | Phenanthrene               | 85-01-8  | MKCT3391     | 99% | 1,004.9 | µg/mL | +/- 36.5621 |
| 60 | Anthracene                 | 120-12-7 | 101492T18R   | 99% | 1,005.1 | µg/mL | +/- 36.5712 |
| 61 | Carbazole                  | 86-74-8  | 15276700     | 99% | 1,005.4 | µg/mL | +/- 36.5803 |
| 62 | Di-n-butylphthalate        | 84-74-2  | MKCN4337     | 99% | 1,006.3 | µg/mL | +/- 36.6121 |
| 63 | Fluoranthene               | 206-44-0 | MKCQ4728     | 99% | 1,003.5 | µg/mL | +/- 36.5120 |
| 64 | Pyrene                     | 129-00-0 | BCKK2592     | 99% | 1,002.0 | µg/mL | +/- 36.4575 |
| 65 | Benzyl butyl phthalate     | 85-68-7  | X12I018      | 99% | 1,007.5 | µg/mL | +/- 36.6576 |
| 66 | Bis(2-ethylhexyl)adipate   | 103-23-1 | MKCM1988     | 99% | 1,005.9 | µg/mL | +/- 36.5984 |
| 67 | Benz(a)anthracene          | 56-55-3  | I70012022BAA | 99% | 1,005.5 | µg/mL | +/- 36.5848 |
| 68 | Chrysene                   | 218-01-9 | RP241007RSR  | 99% | 1,005.3 | µg/mL | +/- 36.5757 |
| 69 | Bis(2-ethylhexyl)phthalate | 117-81-7 | MKCS8065     | 99% | 1,007.5 | µg/mL | +/- 36.6576 |
| 70 | Di-n-octyl phthalate       | 117-84-0 | 15566400     | 99% | 1,002.3 | µg/mL | +/- 36.4666 |
| 71 | Benzo(b)fluoranthene       | 205-99-2 | 052013B      | 99% | 1,004.1 | µg/mL | +/- 36.5348 |
| 72 | Benzo(k)fluoranthene       | 207-08-9 | 012022K      | 99% | 1,002.8 | µg/mL | +/- 36.4847 |
| 73 | Benzo(a)pyrene             | 50-32-8  | NQLXA        | 98% | 1,006.2 | µg/mL | +/- 36.6108 |
| 74 | Indeno(1,2,3-cd)pyrene     | 193-39-5 | 12-JKL-118-9 | 97% | 1,001.8 | µg/mL | +/- 36.4490 |
| 75 | Dibenz(a,h)anthracene      | 53-70-3  | 2-ASA-59-1   | 99% | 1,003.3 | µg/mL | +/- 36.5029 |
| 76 | Benzo(g,h,i)perylene       | 191-24-2 | RP241014RSR  | 98% | 1,003.8 | µg/mL | +/- 36.5217 |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

#### Tech Tips:

N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.



5580 Skyline 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

| Catalog No.: | Lot No.: | Storage:                   | Solvent:           | Exp. Date: | Description:                              |
|--------------|----------|----------------------------|--------------------|------------|-------------------------------------------|
| Z-110816-01  | 531243   | $\leq -10^{\circ}\text{C}$ | Methylene Chloride | 1/2/2030   | 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       | 337.7.4P         | 997 $\pm$ 5.81      |
| benzidine   | 92-87-5   | 99.9       | 124.18.6.2P      | 993.8 $\pm$ 5.78    |
| caprolactam | 105-60-2  | 99.9       | 271.1.6P         | 999 $\pm$ 5.82      |

513057  
↓  
513061 } AC  
1/16/25

\*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: \_\_\_\_\_

*Melissa Workoff*

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.



# SHIPPING DOCUMENTS

- 1
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- 4
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- 15
- 16
- 17

| <b>CHEMTECH</b><br>CHAIN OF CUSTODY RECORD                                                                                                                               |                                  | 284 Sheffield Street, Mountainside, NJ 07092<br>(908) 789-8900 Fax: (908) 78-8922<br>www.chemtech.net                                                                                                                                                                                                                                                                                         |                             | Chemtech Project Number: <span style="font-size: 1.5em;">Q 2745</span>                                                                                                                                                                                                                                                                                                                                                                                                                       |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---|---|---|---|---|---|---|---|---|-------------|-----|-----|--|--|--|--|--|--|
|                                                                                                                                                                          |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             | COC Number:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| CLIENT INFORMATION                                                                                                                                                       |                                  | PROJECT INFORMATION                                                                                                                                                                                                                                                                                                                                                                           |                             | BILLING INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| COMPANY: Tetra Tech                                                                                                                                                      |                                  | PROJECT NAME: NWIRP Bethpage                                                                                                                                                                                                                                                                                                                                                                  |                             | BILL TO: PO#                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| ADDRESS: 4433 Corporation Ln, Suite 300                                                                                                                                  |                                  | PROJECT #: 112G08005-WE13 LOCATION: RW8                                                                                                                                                                                                                                                                                                                                                       |                             | ADDRESS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| CITY: Virginia Beach STATE: VA ZIP: 23462                                                                                                                                |                                  | PROJECT MANAGER: Ernie Wu                                                                                                                                                                                                                                                                                                                                                                     |                             | CITY: STATE: ZIP:                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| ATTENTION: Ernie Wu                                                                                                                                                      |                                  | E-MAIL: ernie.wu@tetratech.com                                                                                                                                                                                                                                                                                                                                                                |                             | ATTENTION: PHONE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| PHONE: 757-466-4901 FAX: 757-461-4148                                                                                                                                    |                                  | PHONE: 757-466-4901 FAX: 757-461-4148                                                                                                                                                                                                                                                                                                                                                         |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| DATA TURNAROUND INFORMATION                                                                                                                                              |                                  | DATA DELIVERABLE INFORMATION                                                                                                                                                                                                                                                                                                                                                                  |                             | ANALYSIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| FAX: _____ 10 _____ DAYS*<br>HARD COPY: _____ 10 _____ DAYS*<br>EDD _____ 10 _____ DAYS*<br>* TO BE APPROVED BY CHEMTECH<br>STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS |                                  | <input type="checkbox"/> RESULTS ONLY <input type="checkbox"/> USEPA CLP<br><input type="checkbox"/> RESULTS + QC <input type="checkbox"/> New York State ASP "B"<br><input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New York State ASP "A"<br><input type="checkbox"/> New Jersey CLP <input type="checkbox"/> Other _____<br><input type="checkbox"/> EDD Format _____ |                             | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">1,4-Dioxane SW846 8270</div> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th> </tr> <tr> <td>Iron, Total</td><td>TSS</td><td>TDS</td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table> </div> |              | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Iron, Total | TSS | TDS |  |  |  |  |  |  |
| 1                                                                                                                                                                        | 2                                | 3                                                                                                                                                                                                                                                                                                                                                                                             | 4                           | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6            | 7 | 8 | 9 |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| Iron, Total                                                                                                                                                              | TSS                              | TDS                                                                                                                                                                                                                                                                                                                                                                                           |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
|                                                                                                                                                                          |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             | PRESERVATIVES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
|                                                                                                                                                                          |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             | COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| CHEMTECH<br>SAMPLE<br>ID                                                                                                                                                 | PROJECT<br>SAMPLE IDENTIFICATION | SAMPLE<br>MATRIX                                                                                                                                                                                                                                                                                                                                                                              | SAMPLE<br>TYPE<br>COMP CRAB | SAMPLE<br>COLLECTION<br>DATE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                            | # of Bottles |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
|                                                                                                                                                                          |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 1.                                                                                                                                                                       | RW8-SP100-20250731               | GW                                                                                                                                                                                                                                                                                                                                                                                            | X                           | 7/31/25 13:05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2            |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 2.                                                                                                                                                                       | RW8-SP303-20250731               | GW                                                                                                                                                                                                                                                                                                                                                                                            | X                           | 7/31/25 13:13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4            |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 3.                                                                                                                                                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 4.                                                                                                                                                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 5.                                                                                                                                                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 6.                                                                                                                                                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 7.                                                                                                                                                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 8.                                                                                                                                                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 9.                                                                                                                                                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |
| 10.                                                                                                                                                                      |                                  |                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |   |   |   |   |   |   |   |   |   |             |     |     |  |  |  |  |  |  |

|                                                                                                        |           |                       |                                                                                                                                                                                                                                                            |  |  |
|--------------------------------------------------------------------------------------------------------|-----------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY |           |                       |                                                                                                                                                                                                                                                            |  |  |
| RELINQUISHED BY SAMPLER                                                                                | DATE/TIME | RECEIVED BY           | Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp <u>1.9°C</u><br>MeOH extraction requires an additional 4oz. Jar for percent solid<br>Comments: |  |  |
| 1. <i>[Signature]</i>                                                                                  | 7/31/25   | 1. <i>[Signature]</i> |                                                                                                                                                                                                                                                            |  |  |
| RELINQUISHED BY                                                                                        | DATE/TIME | RECEIVED BY           |                                                                                                                                                                                                                                                            |  |  |
| 2. <i>Feder</i>                                                                                        | 8-1-25    | 2. <i>[Signature]</i> | SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight<br>CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight                                                                         |  |  |
| RELINQUISHED BY                                                                                        | DATE/TIME | RECEIVED FOR LAB BY   |                                                                                                                                                                                                                                                            |  |  |
| 3.                                                                                                     |           | 3.                    | Page _____ of _____                                                                                                                                                                                                                                        |  |  |

|                                                                               |  |
|-------------------------------------------------------------------------------|--|
| SHIPMENT COMPLETE<br><input type="checkbox"/> YES <input type="checkbox"/> NO |  |
|-------------------------------------------------------------------------------|--|

**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       |