

## Cover Page

**Order ID :** Q1697

**Project ID :** Former Schlumberger STC PTC Site # D3868221

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

### Lab Sample Number

Q1697-01  
Q1697-02  
Q1697-03  
Q1697-04  
Q1697-05  
Q1697-06  
Q1697-13  
Q1697-14  
Q1697-15  
Q1697-16  
Q1697-17

### Client Sample Number

MW-19B-72-040125  
IW-01-55-040125  
IW-02-55-040125  
IW-02-55-040125-FD  
IW-03-55-040125  
TB-01-040125  
MW-19B-72-040125  
IW-01-55-040125  
IW-02-55-040125  
IW-02-55-040125-FD  
IW-03-55-040125

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 : \_\_\_\_\_

Date: 4/4/2025

## 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:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(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. |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1697

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: PRADIP PRAJAPATI

Date: 04/04/2025

## LAB CHRONICLE

|                 |                                |                   |                                             |
|-----------------|--------------------------------|-------------------|---------------------------------------------|
| <b>OrderID:</b> | Q1697                          | <b>OrderDate:</b> | 4/2/2025 10:31:00 AM                        |
| <b>Client:</b>  | JACOBS Engineering Group, Inc. | <b>Project:</b>   | Former Schlumberger STC PTC Site # D3868221 |
| <b>Contact:</b> | John Ynfante                   | <b>Location:</b>  | I31,VOA Ref. #3 Water                       |

| LabID             | ClientID                       | Matrix       | Test           | Method        | Sample Date     | Prep Date | Anal Date | Received        |
|-------------------|--------------------------------|--------------|----------------|---------------|-----------------|-----------|-----------|-----------------|
| <b>Q1697-01</b>   | <b>MW-19B-72-040125</b>        | <b>Water</b> | SVOC-SIMGroup1 | 8270-Modified | <b>04/01/25</b> | 04/02/25  | 04/03/25  | <b>04/01/25</b> |
| <b>Q1697-01DL</b> | <b>MW-19B-72-040125D<br/>L</b> | <b>Water</b> | SVOC-SIMGroup1 | 8270-Modified | <b>04/01/25</b> | 04/02/25  | 04/03/25  | <b>04/01/25</b> |
| <b>Q1697-02</b>   | <b>IW-01-55-040125</b>         | <b>Water</b> | SVOC-SIMGroup1 | 8270-Modified | <b>04/01/25</b> | 04/02/25  | 04/03/25  | <b>04/01/25</b> |
| <b>Q1697-03</b>   | <b>IW-02-55-040125</b>         | <b>Water</b> | SVOC-SIMGroup1 | 8270-Modified | <b>04/01/25</b> | 04/02/25  | 04/03/25  | <b>04/01/25</b> |
| <b>Q1697-04</b>   | <b>IW-02-55-040125-FD</b>      | <b>Water</b> | SVOC-SIMGroup1 | 8270-Modified | <b>04/01/25</b> | 04/02/25  | 04/03/25  | <b>04/01/25</b> |
| <b>Q1697-05</b>   | <b>IW-03-55-040125</b>         | <b>Water</b> | SVOC-SIMGroup1 | 8270-Modified | <b>04/01/25</b> | 04/02/25  | 04/03/25  | <b>04/01/25</b> |





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### Hit Summary Sheet SW-846

**SDG No.:** Q1697  
**Client:** JACOBS Engineering Group, Inc.

| Sample ID          | Client ID                 |       | Parameter                   | Concentration | C | MDL         | RDL  | Units |
|--------------------|---------------------------|-------|-----------------------------|---------------|---|-------------|------|-------|
| <b>Client ID :</b> | <b>MW-19B-72-040125</b>   |       |                             |               |   |             |      |       |
| Q1697-01           | MW-19B-72-040125          | WATER | 1,4-Dioxane                 | 6.600         | E | 0.07        | 0.21 | ug/L  |
|                    |                           |       | <b>Total Svoc :</b>         |               |   | <b>6.60</b> |      |       |
|                    |                           |       | <b>Total Concentration:</b> |               |   | <b>6.60</b> |      |       |
| <b>Client ID :</b> | <b>MW-19B-72-040125DL</b> |       |                             |               |   |             |      |       |
| Q1697-01DL         | MW-19B-72-040125DL        | WATER | 1,4-Dioxane                 | 6.900         | D | 0.14        | 0.41 | ug/L  |
|                    |                           |       | <b>Total Svoc :</b>         |               |   | <b>6.90</b> |      |       |
|                    |                           |       | <b>Total Concentration:</b> |               |   | <b>6.90</b> |      |       |
| <b>Client ID :</b> | <b>IW-01-55-040125</b>    |       |                             |               |   |             |      |       |
| Q1697-02           | IW-01-55-040125           | WATER | 1,4-Dioxane                 | 0.910         |   | 0.07        | 0.2  | ug/L  |
|                    |                           |       | <b>Total Svoc :</b>         |               |   | <b>0.91</b> |      |       |
|                    |                           |       | <b>Total Concentration:</b> |               |   | <b>0.91</b> |      |       |
| <b>Client ID :</b> | <b>IW-02-55-040125</b>    |       |                             |               |   |             |      |       |
| Q1697-03           | IW-02-55-040125           | WATER | 1,4-Dioxane                 | 0.770         |   | 0.07        | 0.21 | ug/L  |
|                    |                           |       | <b>Total Svoc :</b>         |               |   | <b>0.77</b> |      |       |
|                    |                           |       | <b>Total Concentration:</b> |               |   | <b>0.77</b> |      |       |
| <b>Client ID :</b> | <b>IW-02-55-040125-FD</b> |       |                             |               |   |             |      |       |
| Q1697-04           | IW-02-55-040125-FD        | WATER | 1,4-Dioxane                 | 0.580         |   | 0.07        | 0.21 | ug/L  |
|                    |                           |       | <b>Total Svoc :</b>         |               |   | <b>0.58</b> |      |       |
|                    |                           |       | <b>Total Concentration:</b> |               |   | <b>0.58</b> |      |       |
| <b>Client ID :</b> | <b>IW-03-55-040125</b>    |       |                             |               |   |             |      |       |
| Q1697-05           | IW-03-55-040125           | WATER | 1,4-Dioxane                 | 0.620         |   | 0.07        | 0.2  | ug/L  |
|                    |                           |       | <b>Total Svoc :</b>         |               |   | <b>0.62</b> |      |       |
|                    |                           |       | <b>Total Concentration:</b> |               |   | <b>0.62</b> |      |       |



# QC SUMMARY

## Surrogate Summary

SW-846

SDG No.: Q1697

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified

| Lab Sample ID | Client ID          | Parameter               | Spike (PPM) | Result (PPM) | Recovery (%) | Qual | Limits (%) |           |
|---------------|--------------------|-------------------------|-------------|--------------|--------------|------|------------|-----------|
|               |                    |                         |             |              |              |      | Low        | High      |
| PB167430BL    | PB167430BL         | 2-Methylnaphthalene-d10 | 0.4         | 0.35         | 87           |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.39         | 97           |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.33         | 82           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.35         | 87           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.37         | 91           |      | 30 (54)    | 130 (175) |
| PB167430BS    | PB167430BS         | 2-Methylnaphthalene-d10 | 0.4         | 0.40         | 101          |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.35         | 88           |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.31         | 77           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.35         | 88           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.34         | 86           |      | 30 (54)    | 130 (175) |
| PB167430BSD   | PB167430BSD        | 2-Methylnaphthalene-d10 | 0.4         | 0.43         | 108          |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.35         | 86           |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.31         | 78           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.35         | 87           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.36         | 90           |      | 30 (54)    | 130 (175) |
| Q1697-01      | MW-19B-72-040125   | 2-Methylnaphthalene-d10 | 0.4         | 0.33         | 81           |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.42         | 104          |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.27         | 68           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.31         | 77           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.44         | 110          |      | 30 (54)    | 130 (175) |
| Q1697-01DL    | MW-19B-72-040125DL | 2-Methylnaphthalene-d10 | 0.4         | 0.29         | 72           |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.38         | 96           |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.26         | 65           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.28         | 70           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.37         | 93           |      | 30 (54)    | 130 (175) |
| Q1697-02      | IW-01-55-040125    | 2-Methylnaphthalene-d10 | 0.4         | 0.31         | 78           |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.44         | 110          |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.28         | 71           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.31         | 76           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.44         | 109          |      | 30 (54)    | 130 (175) |
| Q1697-03      | IW-02-55-040125    | 2-Methylnaphthalene-d10 | 0.4         | 0.35         | 87           |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.45         | 113          |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.34         | 84           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.35         | 88           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.40         | 100          |      | 30 (54)    | 130 (175) |
| Q1697-04      | IW-02-55-040125-FD | 2-Methylnaphthalene-d10 | 0.4         | 0.27         | 66           |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.43         | 107          |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.26         | 65           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.30         | 75           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.39         | 98           |      | 30 (54)    | 130 (175) |
| Q1697-05      | IW-03-55-040125    | 2-Methylnaphthalene-d10 | 0.4         | 0.31         | 77           |      | 30 (20)    | 150 (139) |
|               |                    | Fluoranthene-d10        | 0.4         | 0.46         | 115          |      | 30 (30)    | 150 (150) |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.30         | 75           |      | 30 (27)    | 130 (154) |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.32         | 81           |      | 30 (25)    | 130 (149) |
|               |                    | Terphenyl-d14           | 0.4         | 0.53         | 133          | *    | 30 (54)    | 130 (175) |

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

SW-846

SDG No.: Q1697

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified DataFile: BN036826.D

| Lab Sample ID | Parameter   | Spike | Result | Unit | Rec | RPD | Qual | RPD  | Low     | Limits    | RPD |
|---------------|-------------|-------|--------|------|-----|-----|------|------|---------|-----------|-----|
|               |             |       |        |      |     |     |      | Qual |         | High      |     |
| PB167430BS    | 1,4-Dioxane | 0.4   | 0.35   | ug/L | 88  |     |      |      | 20 (42) | 160 (127) |     |

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

SW-846

SDG No.: Q1697

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified DataFile: BN036827.D

| Lab Sample ID | Parameter   | Spike | Result | Unit | Rec | RPD | Qual | RPD  | Low     | Limits    | RPD     |
|---------------|-------------|-------|--------|------|-----|-----|------|------|---------|-----------|---------|
|               |             |       |        |      |     |     |      | Qual |         | High      |         |
| PB167430BSD   | 1,4-Dioxane | 0.4   | 0.35   | ug/L | 88  | 0   |      |      | 20 (42) | 160 (127) | 20 (20) |

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167430BL

Lab Name: CHEMTECH

Contract: JAC005

Lab Code: CHEM Case No.: Q1697

SAS No.: Q1697 SDG NO.: Q1697

Lab File ID: BN036818.D

Lab Sample ID: PB167430BL

Instrument ID: BNA\_N

Date Extracted: 04/02/2025

Matrix: (soil/water) Water

Date Analyzed: 04/03/2025

Level: (low/med) LOW

Time Analyzed: 12:24

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 |
|--------------------|------------------|----------------|------------------|
| PB167430BS         | PB167430BS       | BN036826.D     | 04/03/2025       |
| MW-19B-72-040125   | Q1697-01         | BN036820.D     | 04/03/2025       |
| IW-01-55-040125    | Q1697-02         | BN036821.D     | 04/03/2025       |
| IW-02-55-040125    | Q1697-03         | BN036822.D     | 04/03/2025       |
| PB167430BSD        | PB167430BSD      | BN036827.D     | 04/03/2025       |
| IW-02-55-040125-FD | Q1697-04         | BN036823.D     | 04/03/2025       |
| IW-03-55-040125    | Q1697-05         | BN036824.D     | 04/03/2025       |

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

\_\_\_\_\_



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: JAC005Lab Code: CHEMSAS No.: Q1697 SDG NO.: Q1697Lab File ID: BN036556.DDFTPP Injection Date: 03/10/2025Instrument ID: BNA\_NDFTPP Injection Time: 11:03

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 10.0 - 80.0% of mass 198           | 58.6                 |
| 68  | Less than 2.0% of mass 69          | 0.0 ( 0.0 ) 1        |
| 69  | Mass 69 relative abundance         | 52.3                 |
| 70  | Less than 2.0% of mass 69          | 0.3 ( 0.7 ) 1        |
| 127 | 10.0 - 80.0% of mass 198           | 50.7                 |
| 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                  |
| 275 | 10.0 - 60.0% of mass 198           | 24.8                 |
| 365 | Greater than 1% of mass 198        | 3.8                  |
| 441 | Present, but less than mass 443    | 9.3                  |
| 442 | Greater than 50% of mass 198       | 55.6                 |
| 443 | 15.0 - 24.0% of mass 442           | 10.9 ( 19.6 ) 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       | BN036557.D     | 03/10/2025       | 11:42            |
| SSTDICC0.2        | SSTDICC0.2       | BN036558.D     | 03/10/2025       | 12:18            |
| SSTDICCC0.4       | SSTDICCC0.4      | BN036559.D     | 03/10/2025       | 12:54            |
| SSTDICC0.8        | SSTDICC0.8       | BN036560.D     | 03/10/2025       | 13:31            |
| SSTDICC1.6        | SSTDICC1.6       | BN036561.D     | 03/10/2025       | 14:07            |
| SSTDICC3.2        | SSTDICC3.2       | BN036562.D     | 03/10/2025       | 14:43            |
| SSTDICC5.0        | SSTDICC5.0       | BN036563.D     | 03/10/2025       | 15:19            |



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: JAC005Lab Code: CHEMSAS No.: Q1697 SDG NO.: Q1697Lab File ID: BN036816.DDFTPP Injection Date: 04/03/2025Instrument ID: BNA\_NDFTPP Injection Time: 11:08

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 10.0 - 80.0% of mass 198           | 69.1                 |
| 68  | Less than 2.0% of mass 69          | 0.6 ( 1.1 ) 1        |
| 69  | Mass 69 relative abundance         | 56.8                 |
| 70  | Less than 2.0% of mass 69          | 0.1 ( 0.2 ) 1        |
| 127 | 10.0 - 80.0% of mass 198           | 51.4                 |
| 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            | 6.8                  |
| 275 | 10.0 - 60.0% of mass 198           | 24.2                 |
| 365 | Greater than 1% of mass 198        | 4.3                  |
| 441 | Present, but less than mass 443    | 8.6                  |
| 442 | Greater than 50% of mass 198       | 51.1                 |
| 443 | 15.0 - 24.0% of mass 442           | 10 ( 19.5 ) 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       | BN036817.D     | 04/03/2025       | 11:47            |
| PB167430BL         | PB167430BL       | BN036818.D     | 04/03/2025       | 12:24            |
| MW-19B-72-040125   | Q1697-01         | BN036820.D     | 04/03/2025       | 13:37            |
| IW-01-55-040125    | Q1697-02         | BN036821.D     | 04/03/2025       | 14:13            |
| IW-02-55-040125    | Q1697-03         | BN036822.D     | 04/03/2025       | 14:49            |
| IW-02-55-040125-FD | Q1697-04         | BN036823.D     | 04/03/2025       | 15:25            |
| IW-03-55-040125    | Q1697-05         | BN036824.D     | 04/03/2025       | 16:01            |
| MW-19B-72-040125DL | Q1697-01DL       | BN036825.D     | 04/03/2025       | 16:38            |
| PB167430BS         | PB167430BS       | BN036826.D     | 04/03/2025       | 17:14            |
| PB167430BSD        | PB167430BSD      | BN036827.D     | 04/03/2025       | 17:50            |



8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1697 SAS No.: Q1697 SDG NO.: Q1697

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 03/10/2025

Lab File ID: BN036559.D Time Analyzed: 12:54

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           | 2207                | 7.724 | 5091                | 10.51  | 3026                | 14.37  |
| UPPER LIMIT           | 4414                | 8.224 | 10182               | 11.009 | 6052                | 14.866 |
| LOWER LIMIT           | 1103.5              | 7.224 | 2545.5              | 10.009 | 1513                | 13.866 |
| EPA SAMPLE NO.        |                     |       |                     |        |                     |        |
| 01 PB167430BL         | 2093                | 7.70  | 4883                | 10.48  | 2586                | 14.33  |
| 02 PB167430BS         | 2292                | 7.70  | 5542                | 10.48  | 3005                | 14.33  |
| 03 PB167430BSD        | 2152                | 7.70  | 5190                | 10.48  | 2805                | 14.33  |
| 04 MW-19B-72-040125   | 3191                | 7.70  | 7703                | 10.48  | 4532                | 14.33  |
| 05 MW-19B-72-040125DL | 2050                | 7.70  | 4984                | 10.48  | 2883                | 14.33  |
| 06 IW-01-55-040125    | 2298                | 7.70  | 5538                | 10.48  | 3185                | 14.33  |
| 07 IW-02-55-040125    | 2465                | 7.70  | 5939                | 10.48  | 3300                | 14.33  |
| 08 IW-02-55-040125-FD | 2219                | 7.70  | 5351                | 10.48  | 2806                | 14.33  |
| 09 IW-03-55-040125    | 2109                | 7.70  | 5014                | 10.48  | 2862                | 14.33  |

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

\* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1697 SAS No.: Q1697 SDG NO.: Q1697

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 03/10/2025

Lab File ID: BN036559.D Time Analyzed: 12:54

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           | 6005                | 17.111 | 4110                | 21.295 | 3539                | 23.554 |
| UPPER LIMIT           | 12010               | 17.611 | 8220                | 21.795 | 7078                | 24.054 |
| LOWER LIMIT           | 3002.5              | 16.611 | 2055                | 20.795 | 1769.5              | 23.054 |
| EPA SAMPLE NO.        |                     |        |                     |        |                     |        |
| 01 PB167430BL         | 5170                | 17.09  | 4213                | 21.28  | 1585 *              | 23.52  |
| 02 PB167430BS         | 6134                | 17.09  | 4706                | 21.28  | 2869                | 23.52  |
| 03 PB167430BSD        | 5710                | 17.09  | 4059                | 21.28  | 1954                | 23.52  |
| 04 MW-19B-72-040125   | 9506                | 17.07  | 8074                | 21.27  | 7150 *              | 23.51  |
| 05 MW-19B-72-040125DL | 6204                | 17.09  | 5510                | 21.28  | 5286                | 23.51  |
| 06 IW-01-55-040125    | 6837                | 17.09  | 5987                | 21.28  | 5473                | 23.52  |
| 07 IW-02-55-040125    | 6930                | 17.09  | 6224                | 21.28  | 5856                | 23.52  |
| 08 IW-02-55-040125-FD | 5772                | 17.09  | 4952                | 21.28  | 4672                | 23.51  |
| 09 IW-03-55-040125    | 6078                | 17.07  | 5687                | 21.28  | 5490                | 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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1697 SAS No.: Q1697 SDG NO.: Q1697

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/03/2025

Lab File ID: BN036817.D Time Analyzed: 11:47

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           | 2349                | 7.696 | 5586                | 10.48  | 3520                | 14.33  |
| UPPER LIMIT           | 4698                | 8.196 | 11172               | 10.977 | 7040                | 14.834 |
| LOWER LIMIT           | 1174.5              | 7.196 | 2793                | 9.977  | 1760                | 13.834 |
| EPA SAMPLE NO.        |                     |       |                     |        |                     |        |
| 01 PB167430BL         | 2093                | 7.70  | 4883                | 10.48  | 2586                | 14.33  |
| 02 PB167430BS         | 2292                | 7.70  | 5542                | 10.48  | 3005                | 14.33  |
| 03 MW-19B-72-040125   | 3191                | 7.70  | 7703                | 10.48  | 4532                | 14.33  |
| 04 IW-01-55-040125    | 2298                | 7.70  | 5538                | 10.48  | 3185                | 14.33  |
| 05 PB167430BSD        | 2152                | 7.70  | 5190                | 10.48  | 2805                | 14.33  |
| 06 MW-19B-72-040125DL | 2050                | 7.70  | 4984                | 10.48  | 2883                | 14.33  |
| 07 IW-02-55-040125    | 2465                | 7.70  | 5939                | 10.48  | 3300                | 14.33  |
| 08 IW-02-55-040125-FD | 2219                | 7.70  | 5351                | 10.48  | 2806                | 14.33  |
| 09 IW-03-55-040125    | 2109                | 7.70  | 5014                | 10.48  | 2862                | 14.33  |

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

\* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1697 SAS No.: Q1697 SDG NO.: Q1697

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/03/2025

Lab File ID: BN036817.D Time Analyzed: 11:47

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           | 7454                | 17.074 | 6815                | 21.268 | 6111                | 23.514 |
| UPPER LIMIT           | 14908               | 17.574 | 13630               | 21.768 | 12222               | 24.014 |
| LOWER LIMIT           | 3727                | 16.574 | 3407.5              | 20.768 | 3055.5              | 23.014 |
| EPA SAMPLE NO.        |                     |        |                     |        |                     |        |
| 01 PB167430BL         | 5170                | 17.09  | 4213                | 21.28  | 1585 *              | 23.52  |
| 02 PB167430BS         | 6134                | 17.09  | 4706                | 21.28  | 2869 *              | 23.52  |
| 03 MW-19B-72-040125   | 9506                | 17.07  | 8074                | 21.27  | 7150                | 23.51  |
| 04 IW-01-55-040125    | 6837                | 17.09  | 5987                | 21.28  | 5473                | 23.52  |
| 05 PB167430BSD        | 5710                | 17.09  | 4059                | 21.28  | 1954 *              | 23.52  |
| 06 MW-19B-72-040125DL | 6204                | 17.09  | 5510                | 21.28  | 5286                | 23.51  |
| 07 IW-02-55-040125    | 6930                | 17.09  | 6224                | 21.28  | 5856                | 23.52  |
| 08 IW-02-55-040125-FD | 5772                | 17.09  | 4952                | 21.28  | 4672                | 23.51  |
| 09 IW-03-55-040125    | 6078                | 17.07  | 5687                | 21.28  | 5490                | 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

## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: | 04/01/25       |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  | 04/01/25       |
| Client Sample ID:  | MW-19B-72-040125                            | SDG No.:        | Q1697          |
| Lab Sample ID:     | Q1697-01                                    | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                                  | % Solid:        | 0              |
| Sample Wt/Vol:     | 970      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 |
| BN036820.D        | 1         | 04/02/25 14:40 | 04/03/25 13:37 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 6.60  | E         | 0.070               | 0.21       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.33  |           | 30 (20) - 150 (139) | 81%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.42  |           | 30 (30) - 150 (150) | 104%       | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.27  |           | 30 (27) - 130 (154) | 68%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.31  |           | 30 (25) - 130 (149) | 77%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.44  |           | 30 (54) - 130 (175) | 110%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 3190  | 7.696     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 7700  | 10.477    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 4530  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 9510  | 17.074    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 8070  | 21.268    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 7150  | 23.513    |                     |            |          |

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\BN040325\  
 Data File : BN036820.D  
 Acq On : 03 Apr 2025 13:37  
 Operator : RC/JU  
 Sample : Q1697-01  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 MW-19B-72-040125

Quant Time: Apr 03 14:09:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

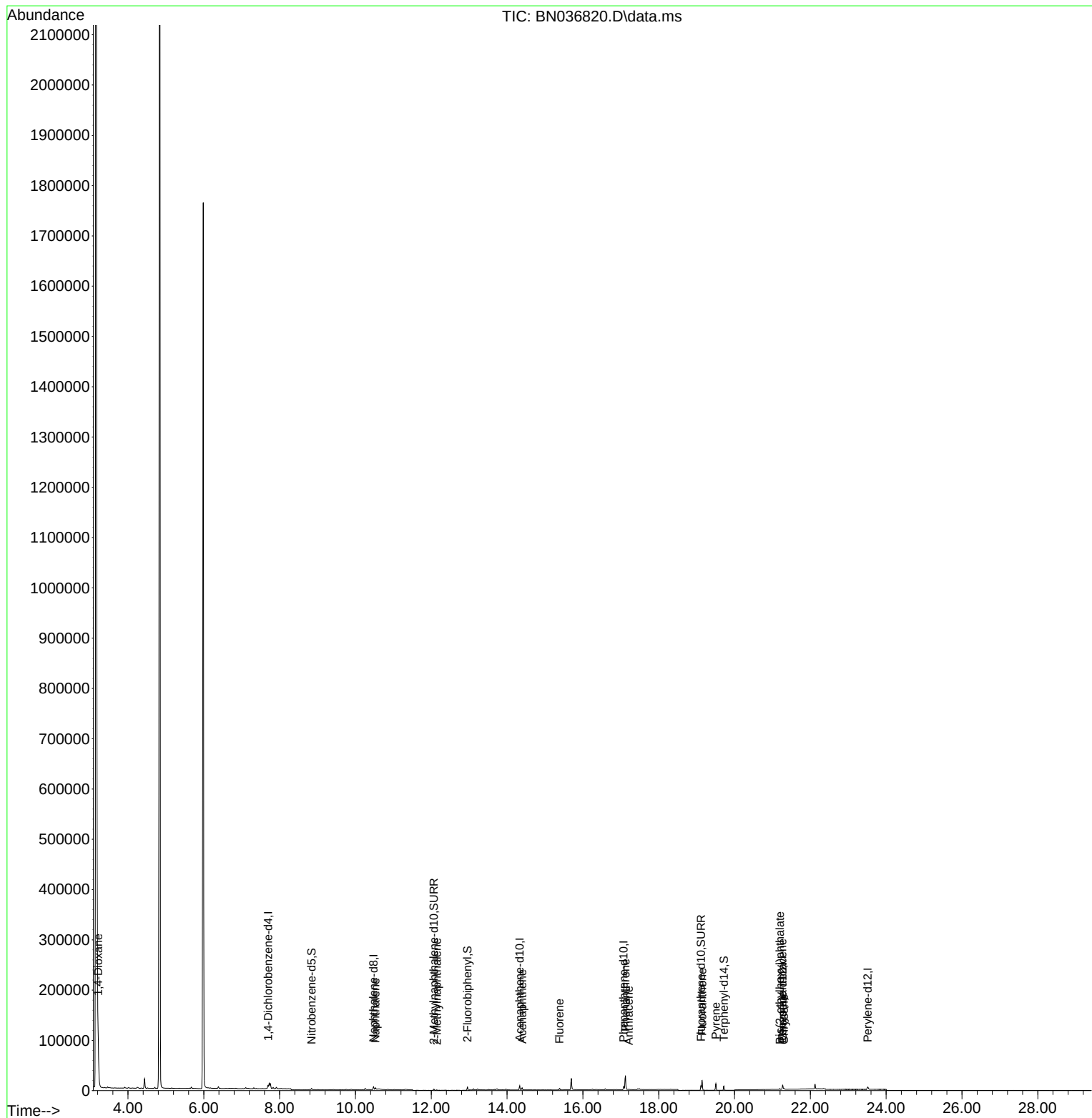
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.696  | 152  | 3191     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 7703     | 0.400 | ng    | #-0.03   |
| 13) Acenaphthene-d10          | 14.334 | 164  | 4532     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.074 | 188  | 9506     | 0.400 | ng    | #-0.04   |
| 29) Chrysene-d12              | 21.268 | 240  | 8074     | 0.400 | ng    | -0.03    |
| 35) Perylene-d12              | 23.513 | 264  | 7150     | 0.400 | ng    | #-0.04   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 0.000  | 112  | 0d       | 0.000 | ng    |          |
| 5) Phenol-d6                  | 0.000  | 99   | 0d       | 0.000 | ng    |          |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 2283     | 0.272 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.070 | 152  | 3723     | 0.325 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 0.000  | 330  | 0d       | 0.000 | ng    |          |
| 15) 2-Fluorobiphenyl          | 12.953 | 172  | 8110     | 0.308 | ng    | -0.04    |
| 27) Fluoranthene-d10          | 19.113 | 212  | 10192    | 0.418 | ng    | -0.03    |
| 31) Terphenyl-d14             | 19.717 | 244  | 8517     | 0.440 | ng    | -0.03    |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.218  | 88   | 22726    | 6.420 | ng    | 99       |
| 9) Naphthalene                | 10.530 | 128  | 4412     | 0.195 | ng    | 97       |
| 12) 2-Methylnaphthalene       | 12.146 | 142  | 676      | 0.047 | ng    | # 93     |
| 17) Acenaphthene              | 14.398 | 154  | 1967     | 0.141 | ng    | 99       |
| 18) Fluorene                  | 15.382 | 166  | 2050     | 0.108 | ng    | 98       |
| 25) Phenanthrene              | 17.124 | 178  | 31370    | 1.100 | ng    | 100      |
| 26) Anthracene                | 17.211 | 178  | 1433m    | 0.056 | ng    |          |
| 28) Fluoranthene              | 19.146 | 202  | 17850    | 0.557 | ng    | 100      |
| 30) Pyrene                    | 19.508 | 202  | 12122    | 0.307 | ng    | # 94     |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 901      | 0.032 | ng    | # 89     |
| 33) Chrysene                  | 21.304 | 228  | 1348     | 0.044 | ng    | # 89     |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 1663     | 0.083 | ng    | # 97     |
| -----                         |        |      |          |       |       |          |

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

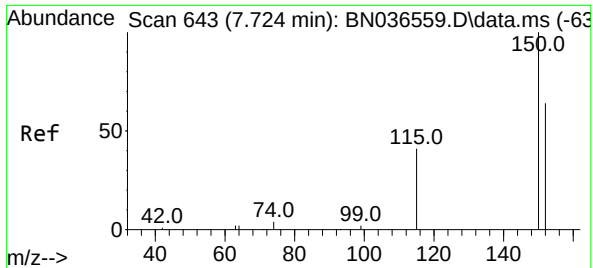
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Data File : BN036820.D  
Acq On : 03 Apr 2025 13:37  
Operator : RC/JU  
Sample : Q1697-01  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

Quant Time: Apr 03 14:09:04 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

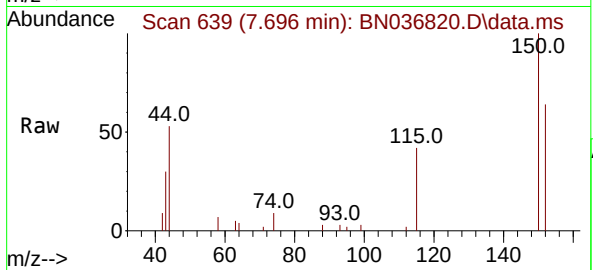




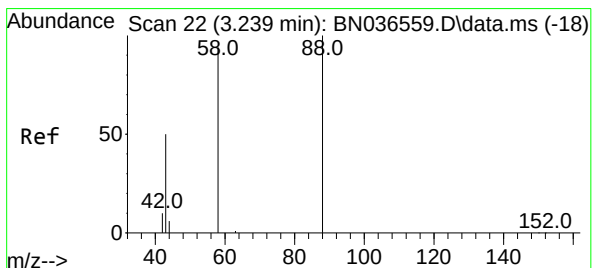
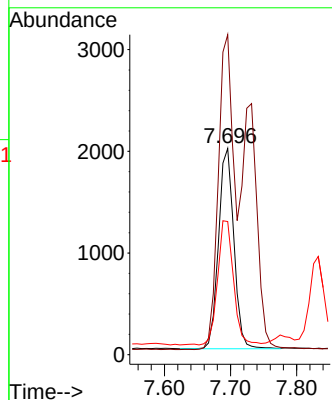
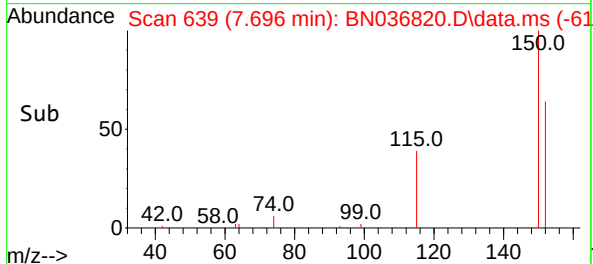


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.696 min Scan# 61  
Delta R.T. -0.028 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

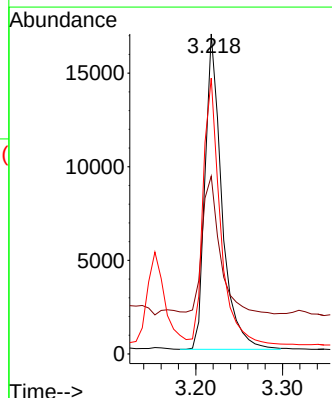
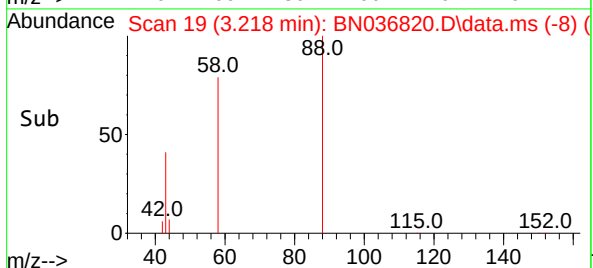
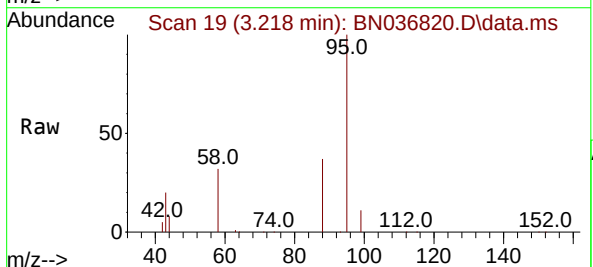


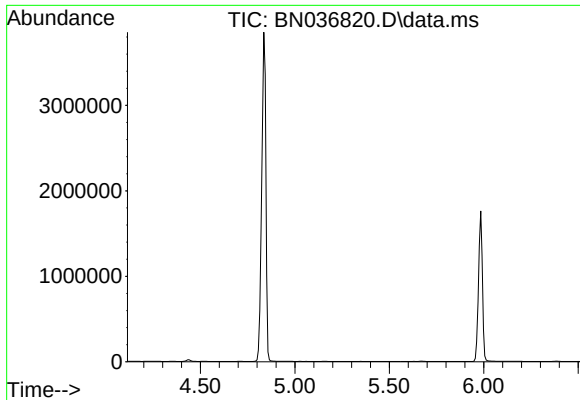
Tgt Ion:152 Resp: 3191  
Ion Ratio Lower Upper  
152 100  
150 155.1 123.7 185.5  
115 64.5 54.3 81.5



#2  
1,4-Dioxane  
Concen: 6.420 ng  
RT: 3.218 min Scan# 19  
Delta R.T. -0.021 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

Tgt Ion: 88 Resp: 22726  
Ion Ratio Lower Upper  
88 100  
43 46.6 37.8 56.8  
58 85.8 67.4 101.2

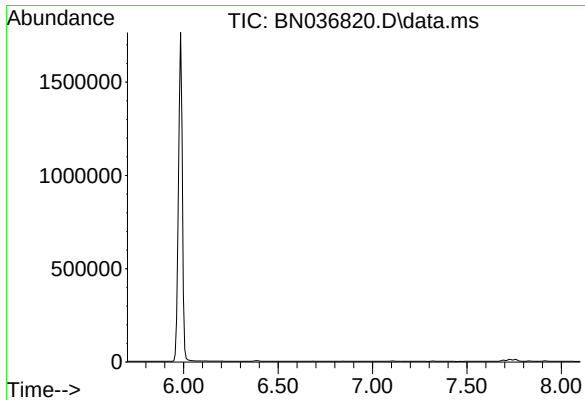
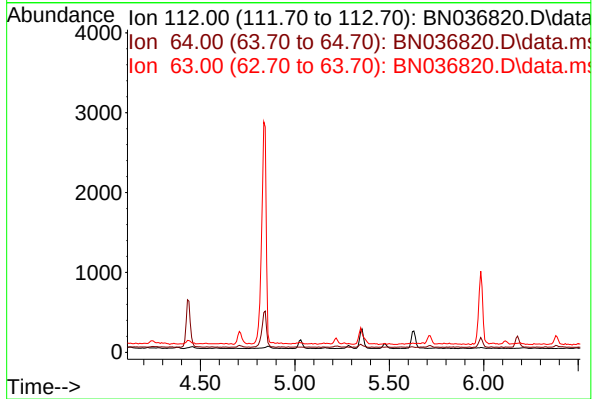




#4  
2-Fluorophenol  
Concen: 0.000 ng  
Expected RT: 5.31 min  
  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

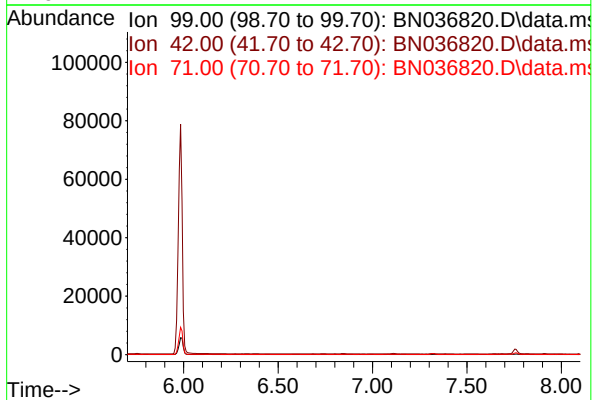
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

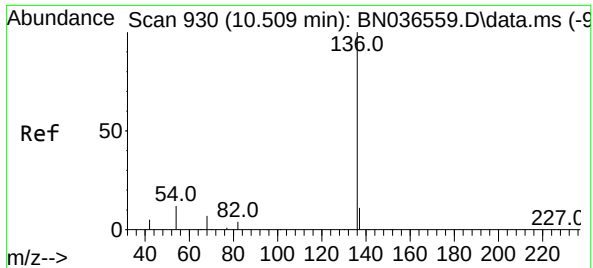
Tgt Ion: 112  
Sig Exp Ratio  
112 100  
64 66.4  
63 39.8



#5  
Phenol-d6  
Concen: 0.000 ng  
Expected RT: 6.90 min  
  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

Tgt Ion: 99  
Sig Exp Ratio  
99 100  
42 33.1  
71 42.6

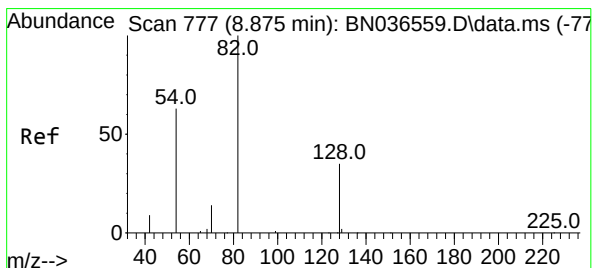
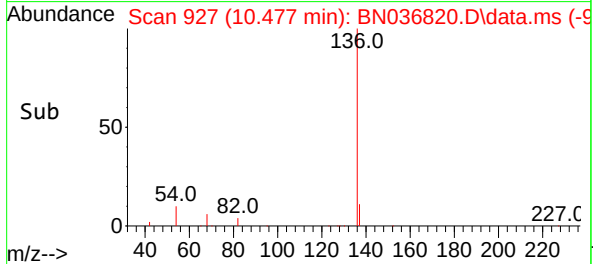
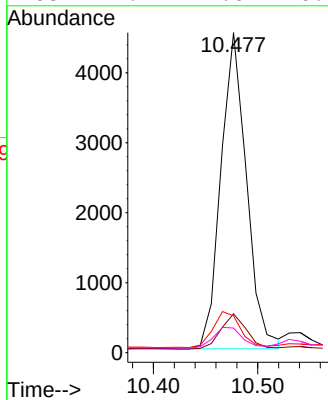
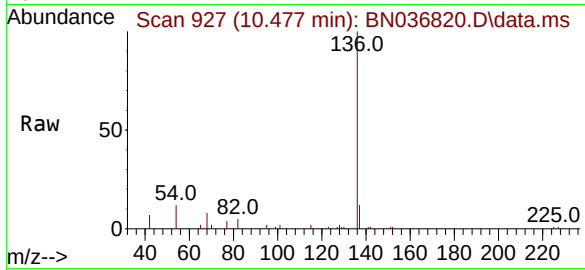




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

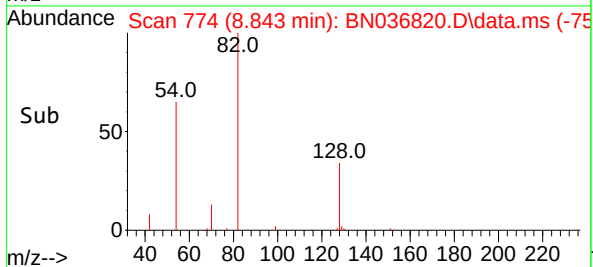
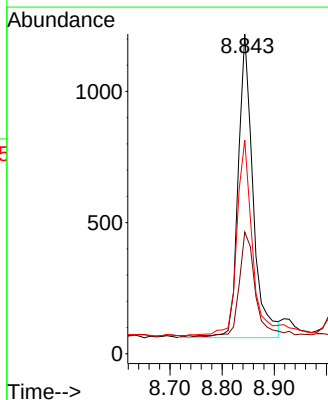
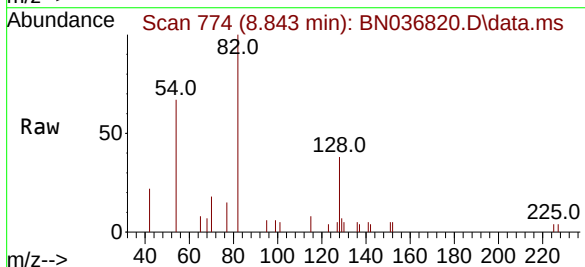
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

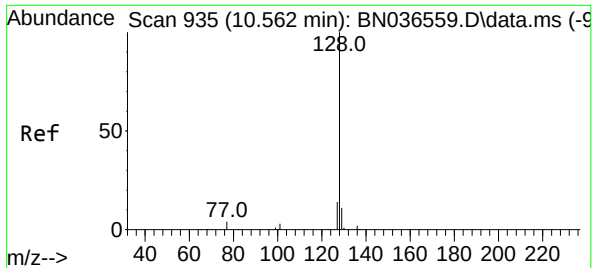
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 7703  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.2  | 10.3  | 15.5  |
| 54       | 11.5  | 11.5  | 17.3# |
| 68       | 7.7   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.272 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 2283  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 38.1  | 30.6  | 45.8  |
| 54       | 66.9  | 52.2  | 78.4  |

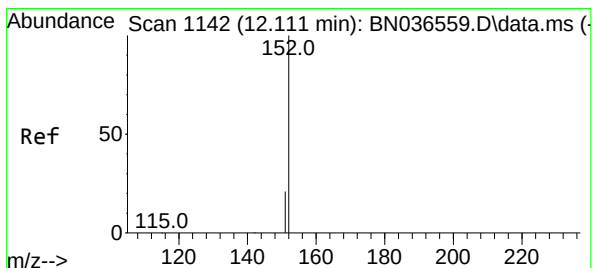
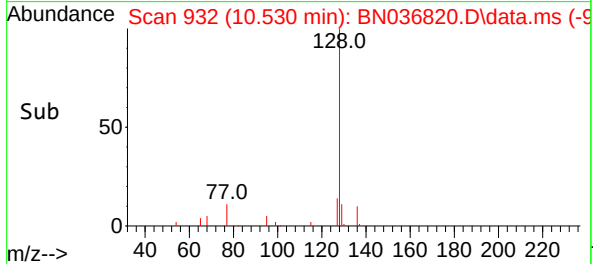
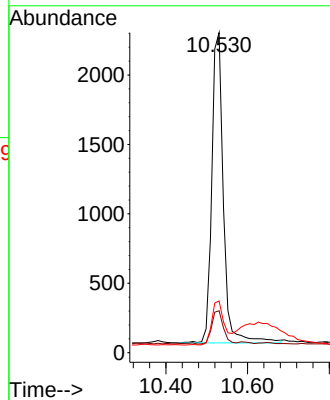
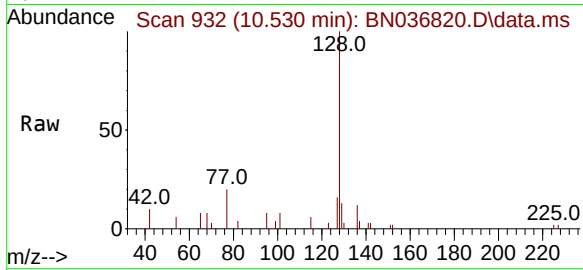




#9  
Naphthalene  
Concen: 0.195 ng  
RT: 10.530 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

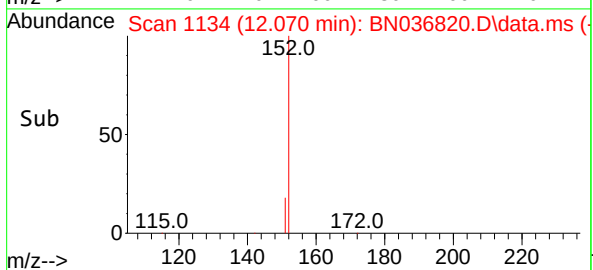
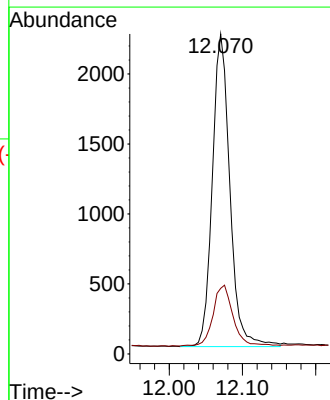
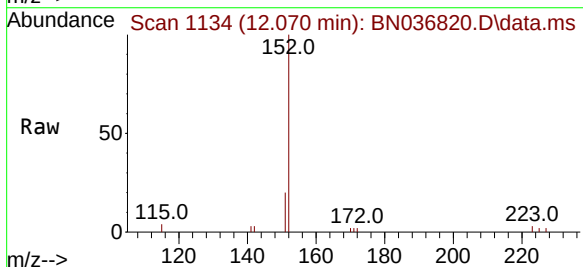
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

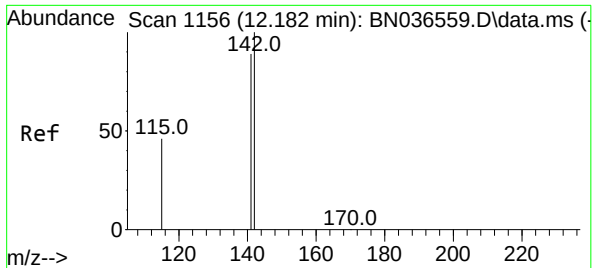
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 4412  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 13.1  | 9.8   | 14.6  |
| 127      | 16.1  | 11.8  | 17.8  |



#11  
2-Methylnaphthalene-d10  
Concen: 0.325 ng  
RT: 12.070 min Scan# 1134  
Delta R.T. -0.040 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 3723  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 151      | 22.7  | 17.0  | 25.6  |





#12

2-Methylnaphthalene

Concen: 0.047 ng

RT: 12.146 min Scan# 1149

Delta R.T. -0.035 min

Lab File: BN036820.D

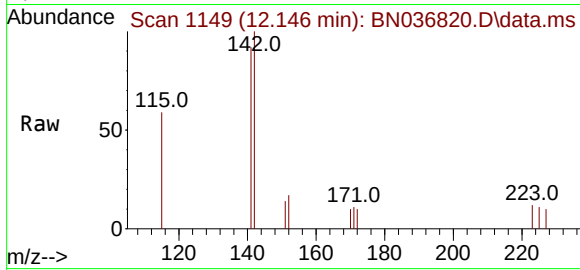
Acq: 03 Apr 2025 13:37

Instrument :

BNA\_N

ClientSampleId :

MW-19B-72-040125



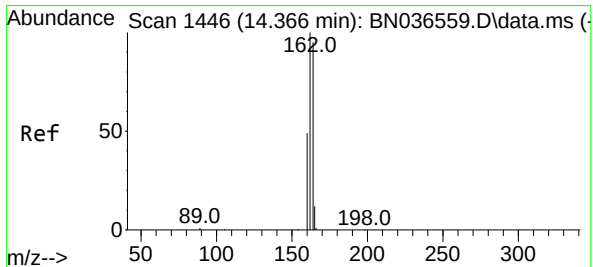
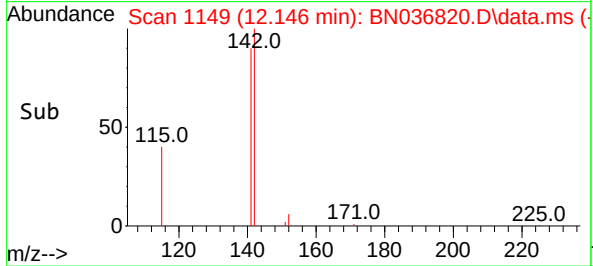
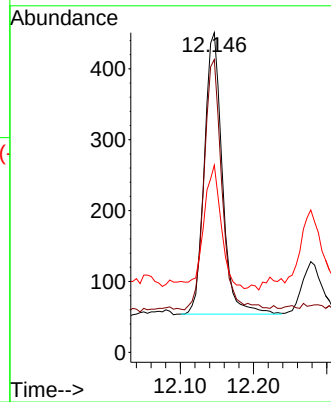
Tgt Ion:142 Resp: 676

Ion Ratio Lower Upper

142 100

141 91.6 71.7 107.5

115 58.5 38.3 57.5#



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.334 min Scan# 1443

Delta R.T. -0.032 min

Lab File: BN036820.D

Acq: 03 Apr 2025 13:37

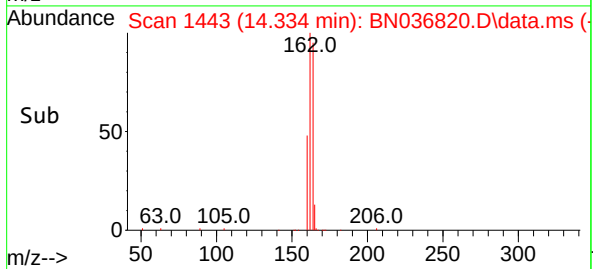
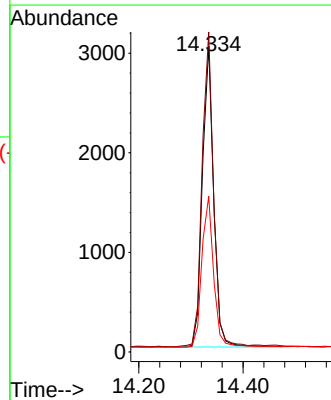
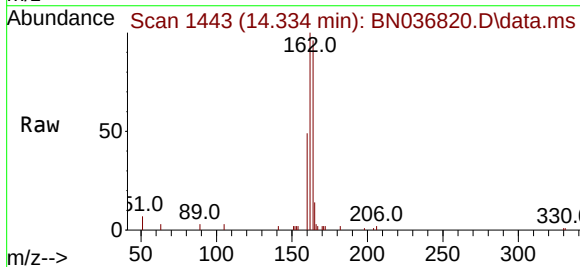
Tgt Ion:164 Resp: 4532

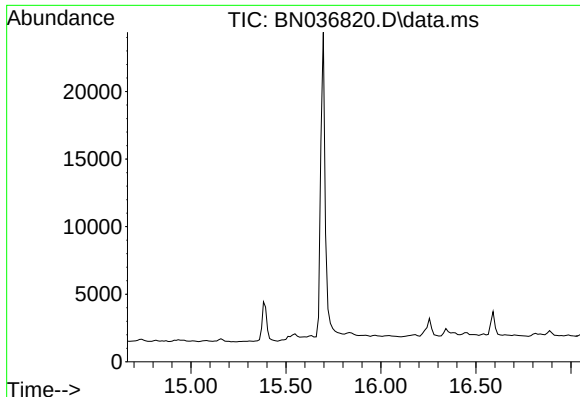
Ion Ratio Lower Upper

164 100

162 104.7 84.2 126.2

160 50.9 42.2 63.2

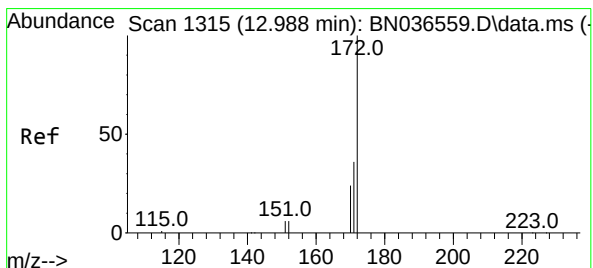
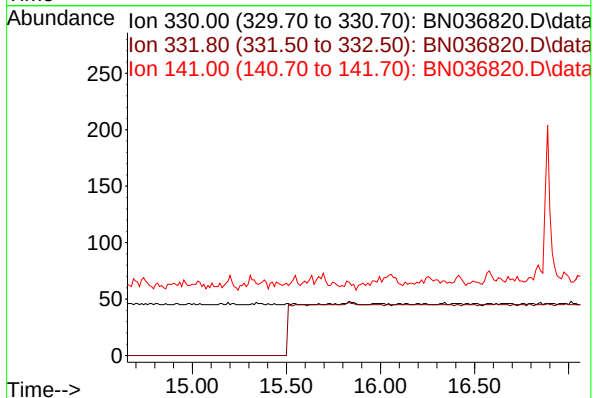




#14  
2,4,6-Tribromophenol  
Concen: 0.000 ng  
Expected RT: 15.86 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

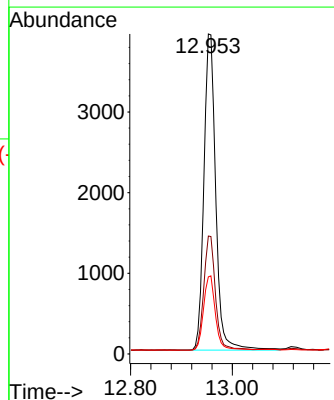
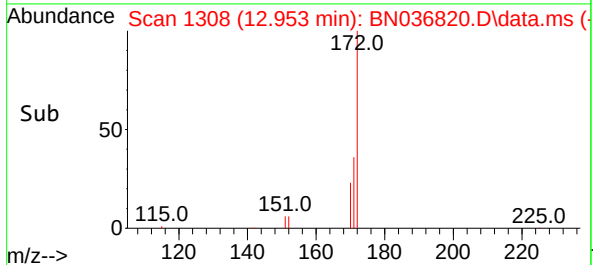
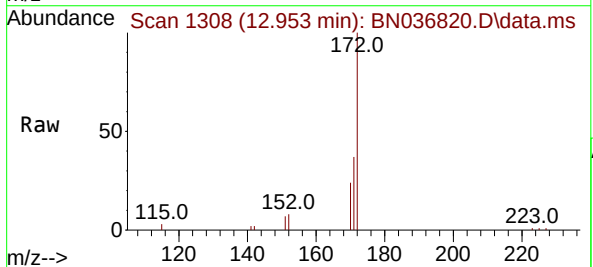
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

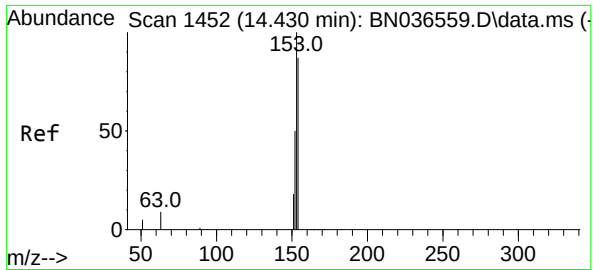
Tgt Ion: 330  
Sig Exp Ratio  
330 100  
332 94.0  
141 54.3



#15  
2-Fluorobiphenyl  
Concen: 0.308 ng  
RT: 12.953 min Scan# 1308  
Delta R.T. -0.035 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

Tgt Ion: 172 Resp: 8110  
Ion Ratio Lower Upper  
172 100  
171 36.8 29.5 44.3  
170 24.1 20.2 30.4

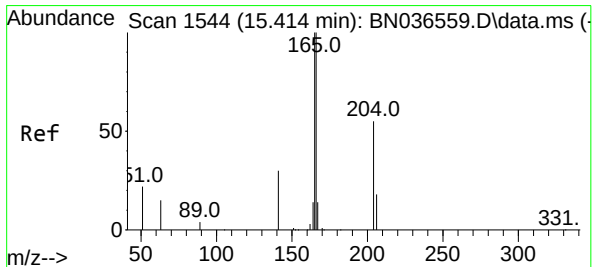
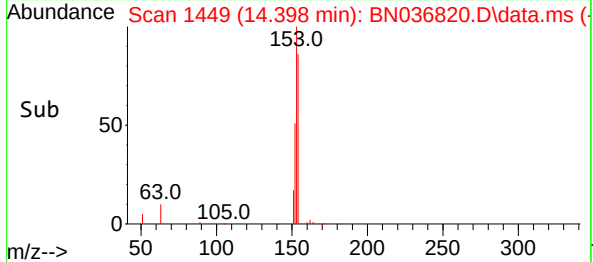
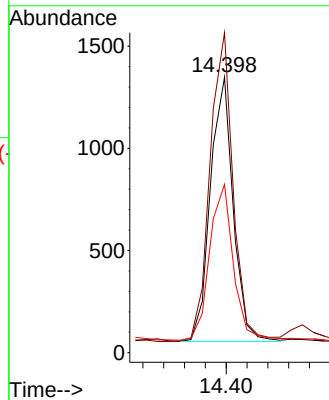
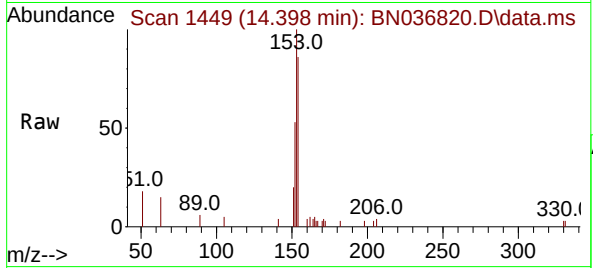




#17  
Acenaphthene  
Concen: 0.141 ng  
RT: 14.398 min Scan# 1449  
Delta R.T. -0.032 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

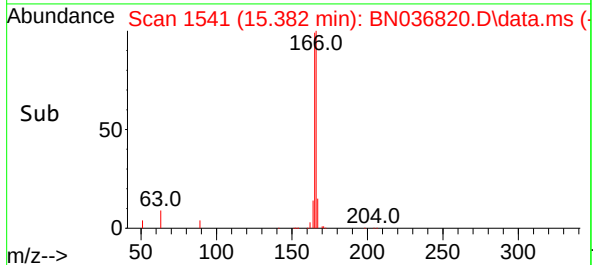
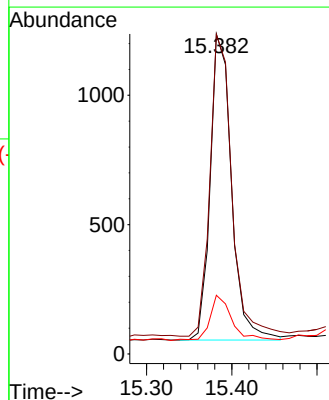
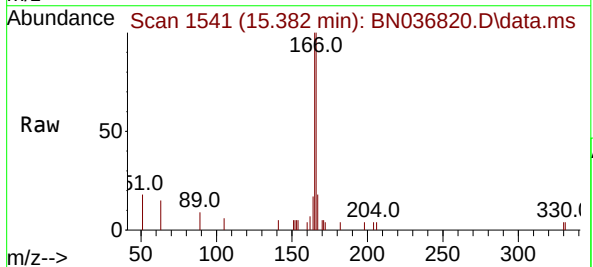
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

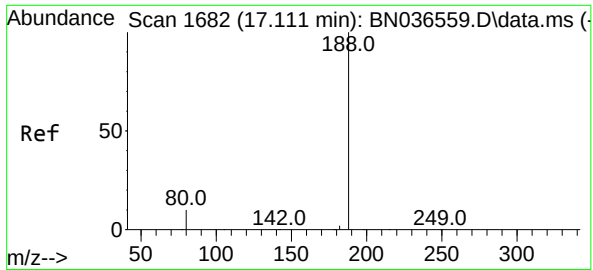
|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:154 | Resp: | 1967        |
| Ion         | Ratio | Lower Upper |
| 154         | 100   |             |
| 153         | 118.0 | 94.1 141.1  |
| 152         | 63.7  | 49.8 74.6   |



#18  
Fluorene  
Concen: 0.108 ng  
RT: 15.382 min Scan# 1541  
Delta R.T. -0.032 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:166 | Resp: | 2050        |
| Ion         | Ratio | Lower Upper |
| 166         | 100   |             |
| 165         | 101.3 | 79.8 119.8  |
| 167         | 15.4  | 10.6 15.8   |





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.074 min Scan# 1

Delta R.T. -0.037 min

Lab File: BN036820.D

Acq: 03 Apr 2025 13:37

Instrument :

BNA\_N

ClientSampleId :

MW-19B-72-040125

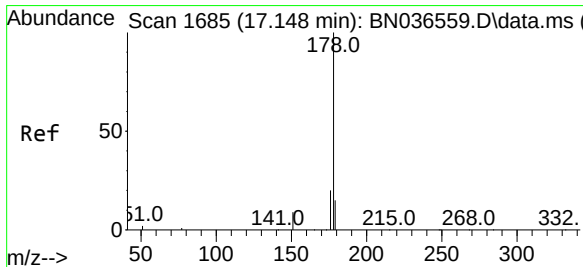
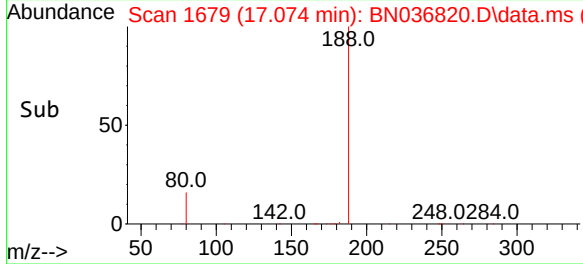
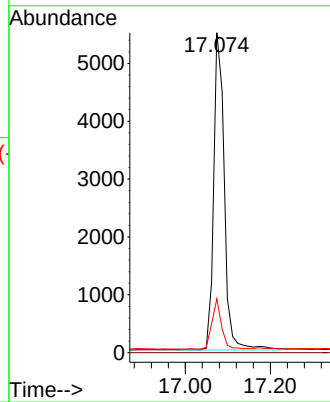
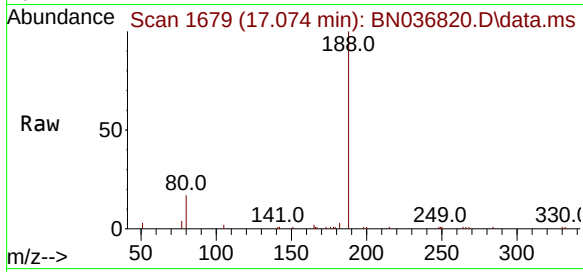
Tgt Ion:188 Resp: 9506

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 16.9 8.8 13.2#



#25

Phenanthrene

Concen: 1.100 ng

RT: 17.124 min Scan# 1683

Delta R.T. -0.025 min

Lab File: BN036820.D

Acq: 03 Apr 2025 13:37

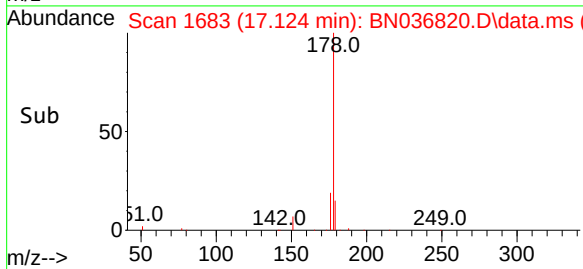
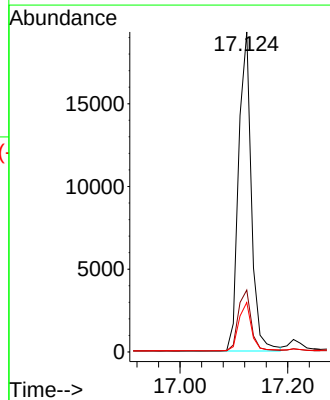
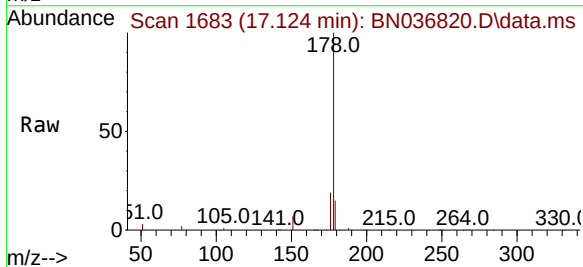
Tgt Ion:178 Resp: 31370

Ion Ratio Lower Upper

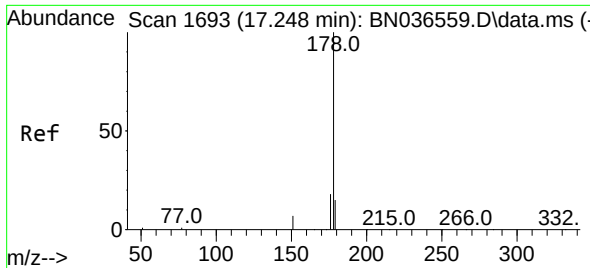
178 100

176 19.6 15.9 23.9

179 15.2 12.2 18.4



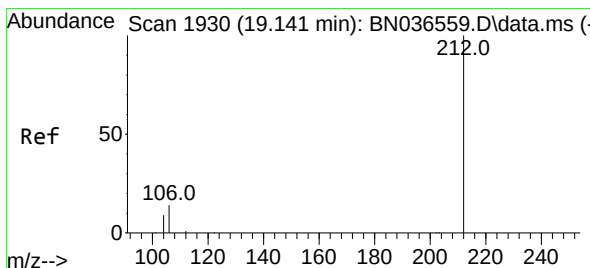
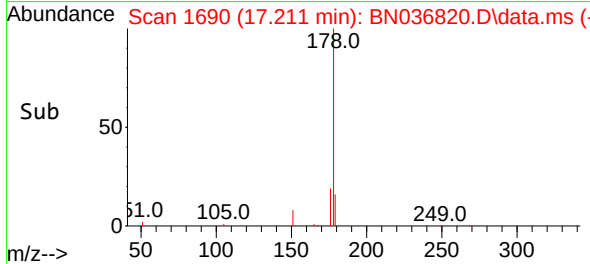
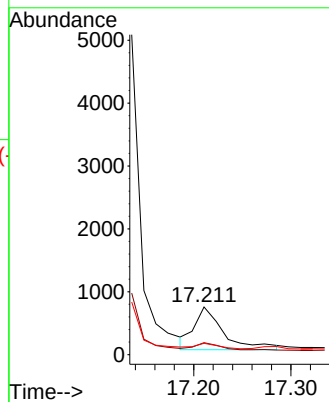
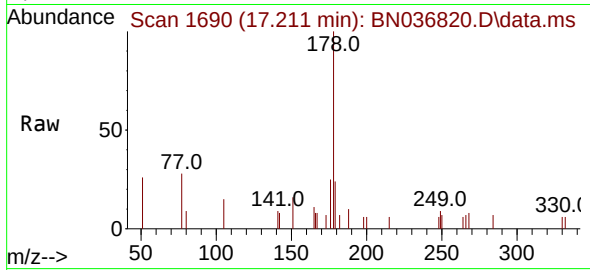




#26  
Anthracene  
Concen: 0.056 ng m  
RT: 17.211 min Scan# 1690  
Delta R.T. -0.037 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

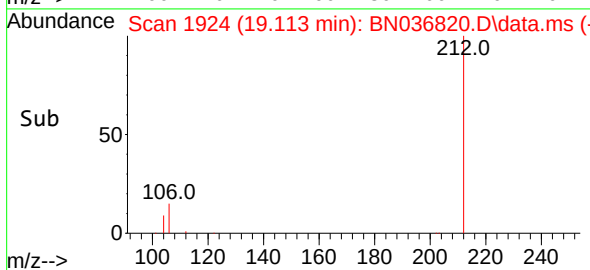
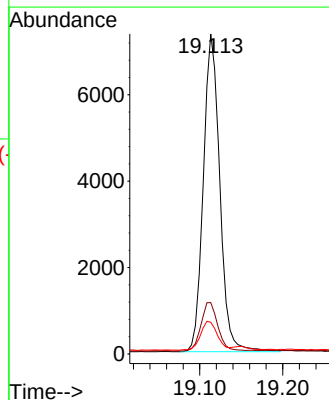
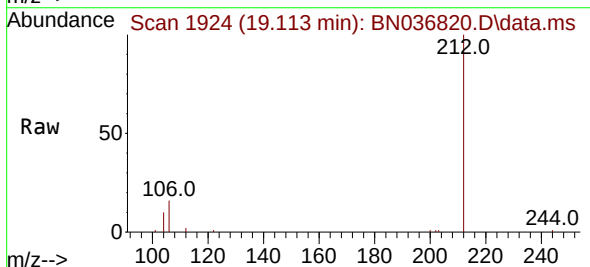
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

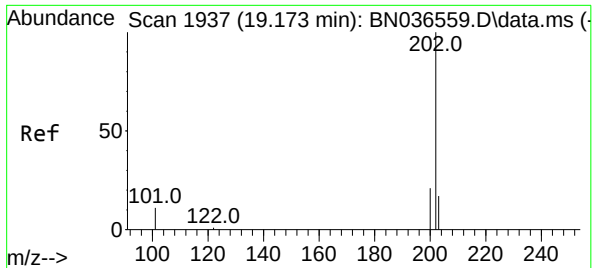
Tgt Ion:178 Resp: 1433  
Ion Ratio Lower Upper  
178 100  
176 429.4 15.4 23.2#  
179 332.4 12.6 18.8#



#27  
Fluoranthene-d10  
Concen: 0.418 ng  
RT: 19.113 min Scan# 1924  
Delta R.T. -0.028 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

Tgt Ion:212 Resp: 10192  
Ion Ratio Lower Upper  
212 100  
106 15.7 11.8 17.6  
104 9.2 7.3 10.9

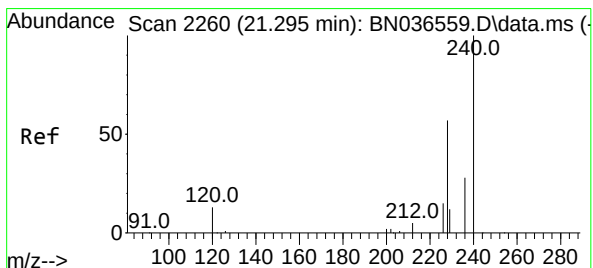
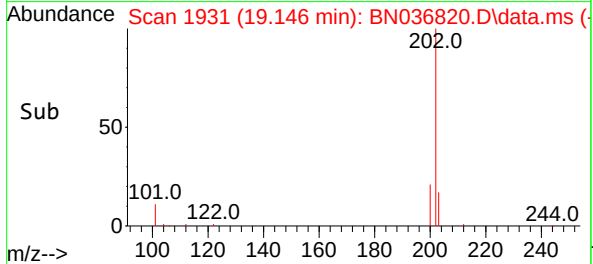
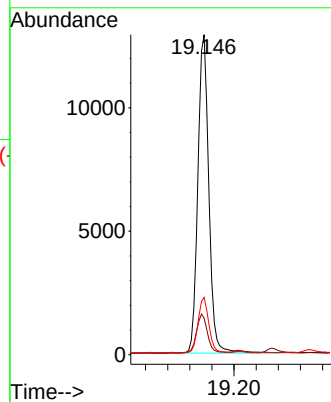
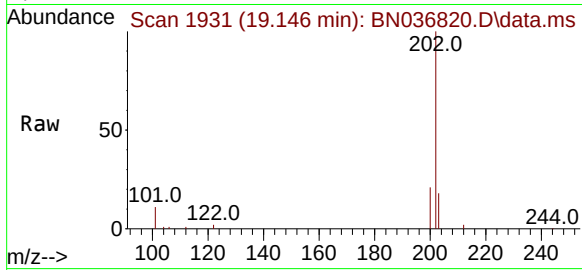




#28  
Fluoranthene  
Concen: 0.557 ng  
RT: 19.146 min Scan# 1931  
Delta R.T. -0.028 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

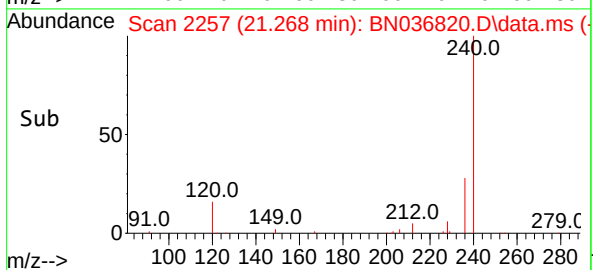
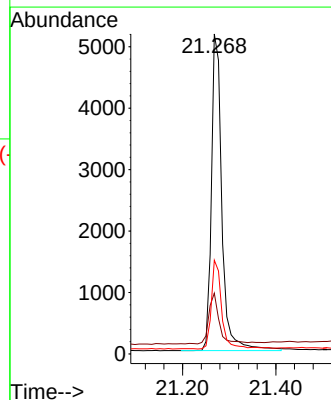
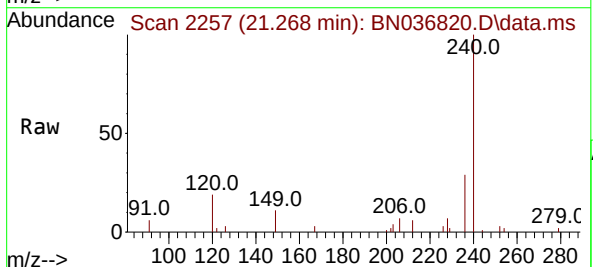
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

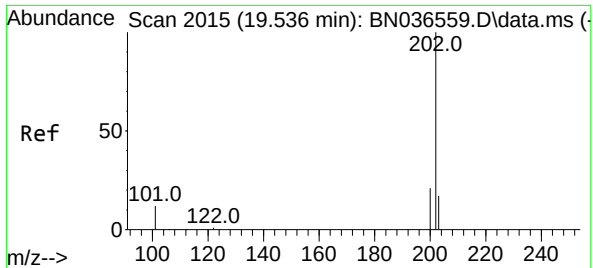
Tgt Ion:202 Resp: 17850  
Ion Ratio Lower Upper  
202 100  
101 12.1 9.4 14.0  
203 16.9 13.5 20.3



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 2257  
Delta R.T. -0.027 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

Tgt Ion:240 Resp: 8074  
Ion Ratio Lower Upper  
240 100  
120 19.0 14.6 22.0  
236 29.3 24.1 36.1

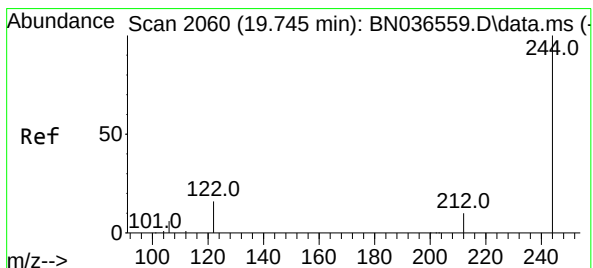
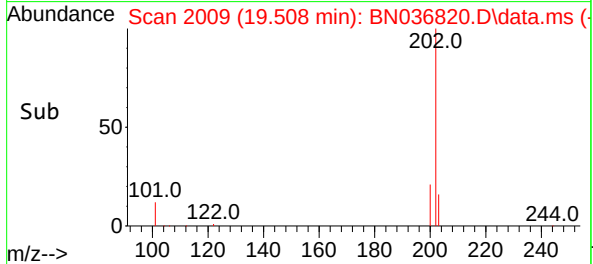
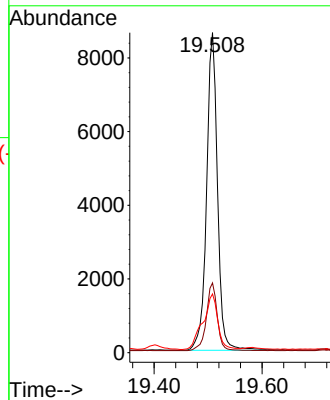
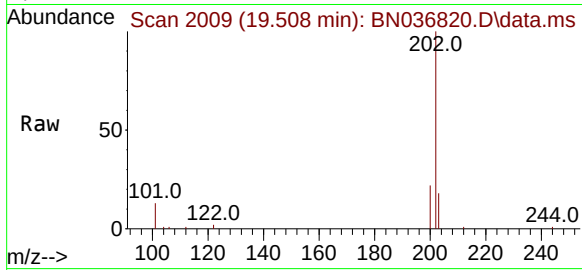




#30  
Pyrene  
Concen: 0.307 ng  
RT: 19.508 min Scan# 2009  
Delta R.T. -0.028 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

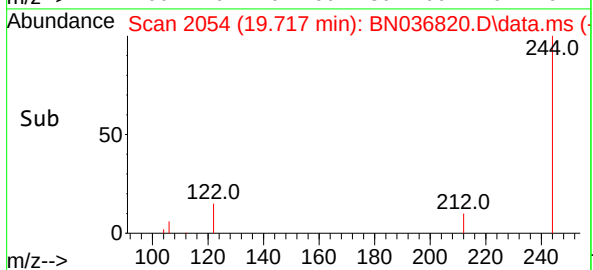
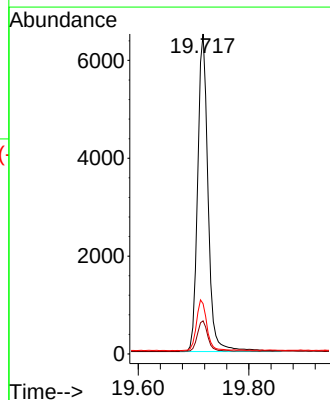
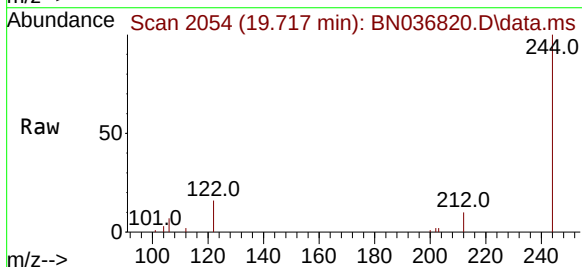
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

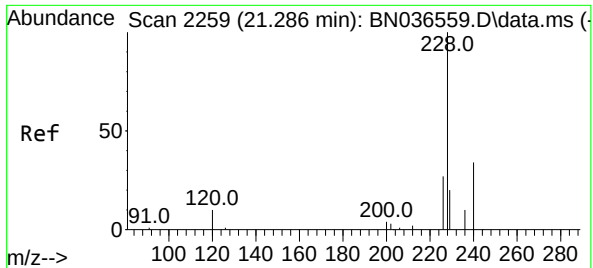
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.4  | 17.1  | 25.7  |
| 203     | 23.6  | 14.1  | 21.1# |



#31  
Terphenyl-d14  
Concen: 0.440 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.028 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 10.4  | 9.6   | 14.4  |
| 122     | 15.7  | 13.9  | 20.9  |





#32

Benzo(a)anthracene

Concen: 0.032 ng

RT: 21.259 min Scan# 21

Delta R.T. -0.027 min

Lab File: BN036820.D

Acq: 03 Apr 2025 13:37

Instrument :

BNA\_N

ClientSampleId :

MW-19B-72-040125

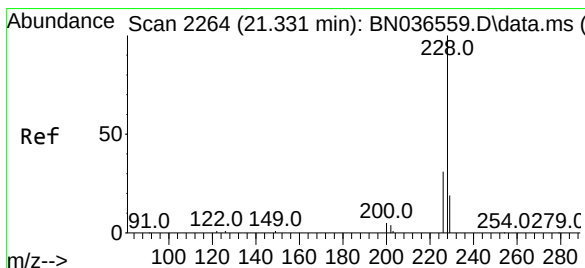
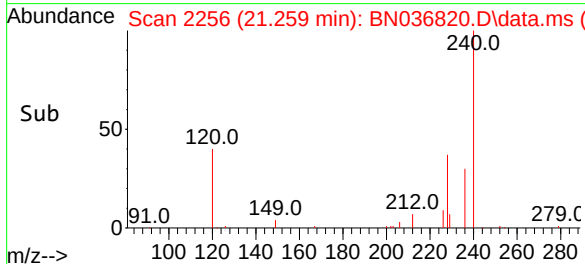
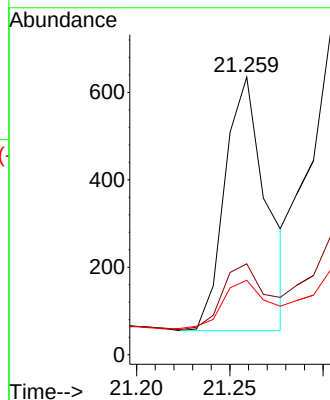
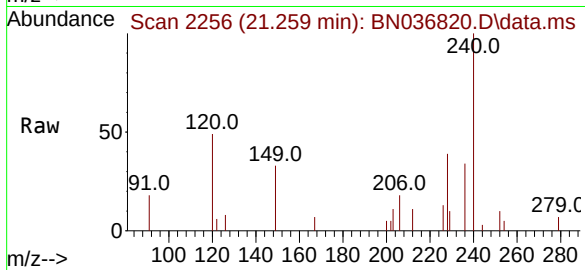
Tgt Ion:228 Resp: 901

Ion Ratio Lower Upper

228 100

226 32.8 22.5 33.7

229 26.8 16.6 25.0#



#33

Chrysene

Concen: 0.044 ng

RT: 21.304 min Scan# 2261

Delta R.T. -0.027 min

Lab File: BN036820.D

Acq: 03 Apr 2025 13:37

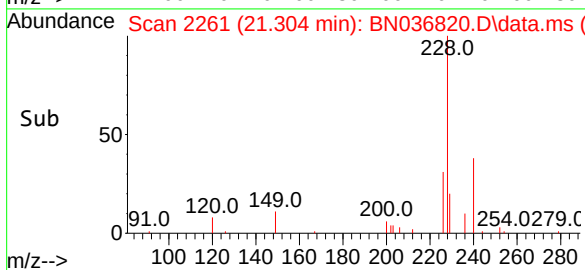
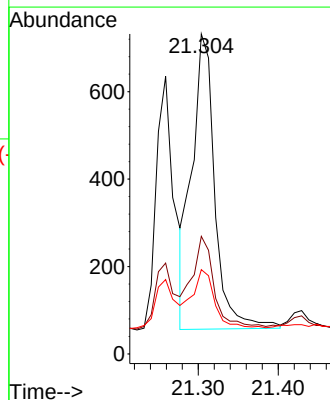
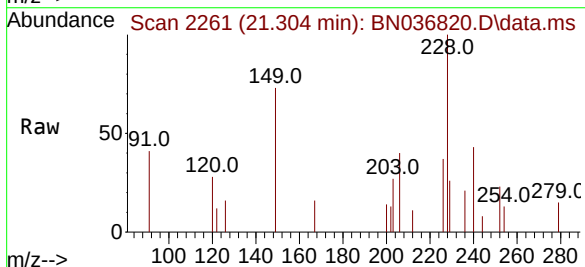
Tgt Ion:228 Resp: 1348

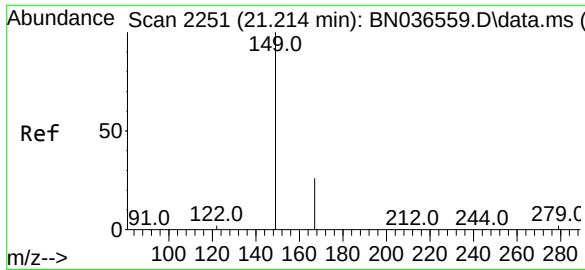
Ion Ratio Lower Upper

228 100

226 36.7 25.3 37.9

229 26.4 15.8 23.8#

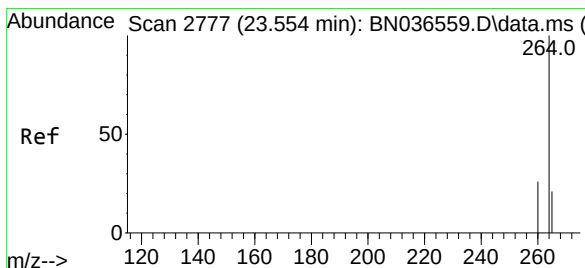
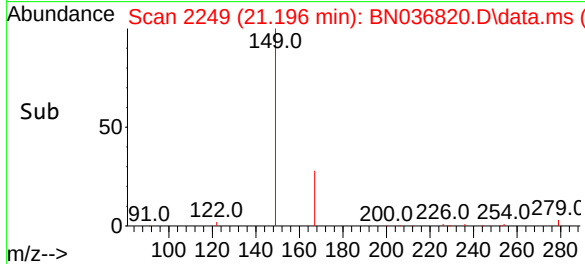
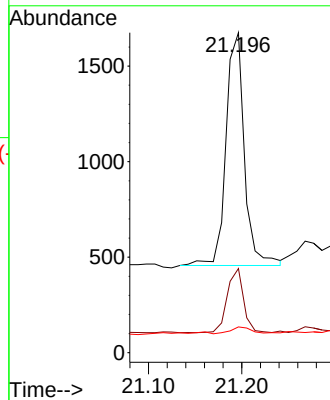
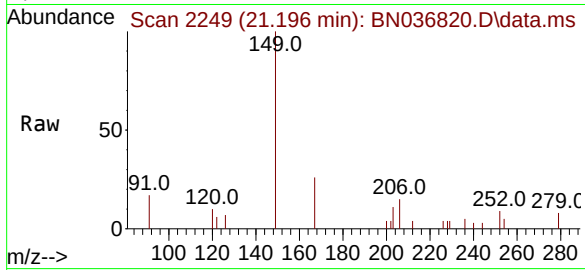




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.083 ng  
RT: 21.196 min Scan# 2119  
Delta R.T. -0.018 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

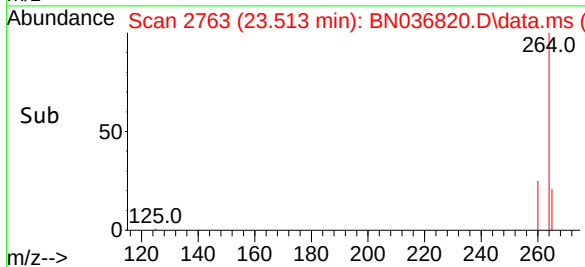
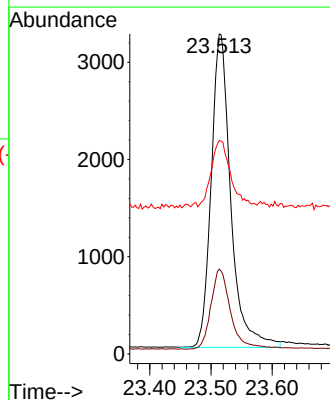
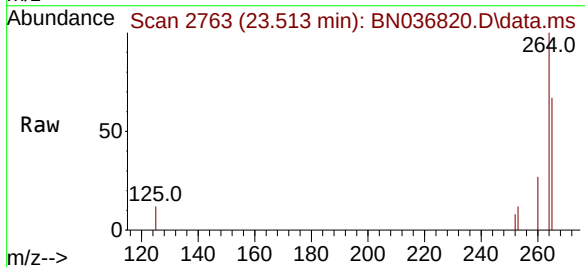
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125

Tgt Ion:149 Resp: 1663  
Ion Ratio Lower Upper  
149 100  
167 24.5 20.7 31.1  
279 3.2 3.6 5.4#



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2763  
Delta R.T. -0.041 min  
Lab File: BN036820.D  
Acq: 03 Apr 2025 13:37

Tgt Ion:264 Resp: 7150  
Ion Ratio Lower Upper  
264 100  
260 26.5 22.6 33.8  
265 66.7 88.1 132.1#



## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: | 04/01/25       |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  | 04/01/25       |
| Client Sample ID:  | MW-19B-72-040125DL                          | SDG No.:        | Q1697          |
| Lab Sample ID:     | Q1697-01DL                                  | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                                  | % Solid:        | 0              |
| Sample Wt/Vol:     | 970      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 |
| BN036825.D        | 2         | 04/02/25 14:40 | 04/03/25 16:38 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 6.90  | D         | 0.14                | 0.41       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.29  |           | 30 (20) - 150 (139) | 72%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.38  |           | 30 (30) - 150 (150) | 96%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.26  |           | 30 (27) - 130 (154) | 65%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.28  |           | 30 (25) - 130 (149) | 70%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.37  |           | 30 (54) - 130 (175) | 93%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2050  |           | 7.695               |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4980  |           | 10.477              |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2880  |           | 14.334              |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 6200  |           | 17.086              |            |          |
| 1719-03-5                 | Chrysene-d12            | 5510  |           | 21.277              |            |          |
| 1520-96-3                 | Perylene-d12            | 5290  |           | 23.513              |            |          |

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\BN040325\  
 Data File : BN036825.D  
 Acq On : 03 Apr 2025 16:38  
 Operator : RC/JU  
 Sample : Q1697-01DL 2X  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 MW-19B-72-040125DL

Quant Time: Apr 03 17:02:56 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

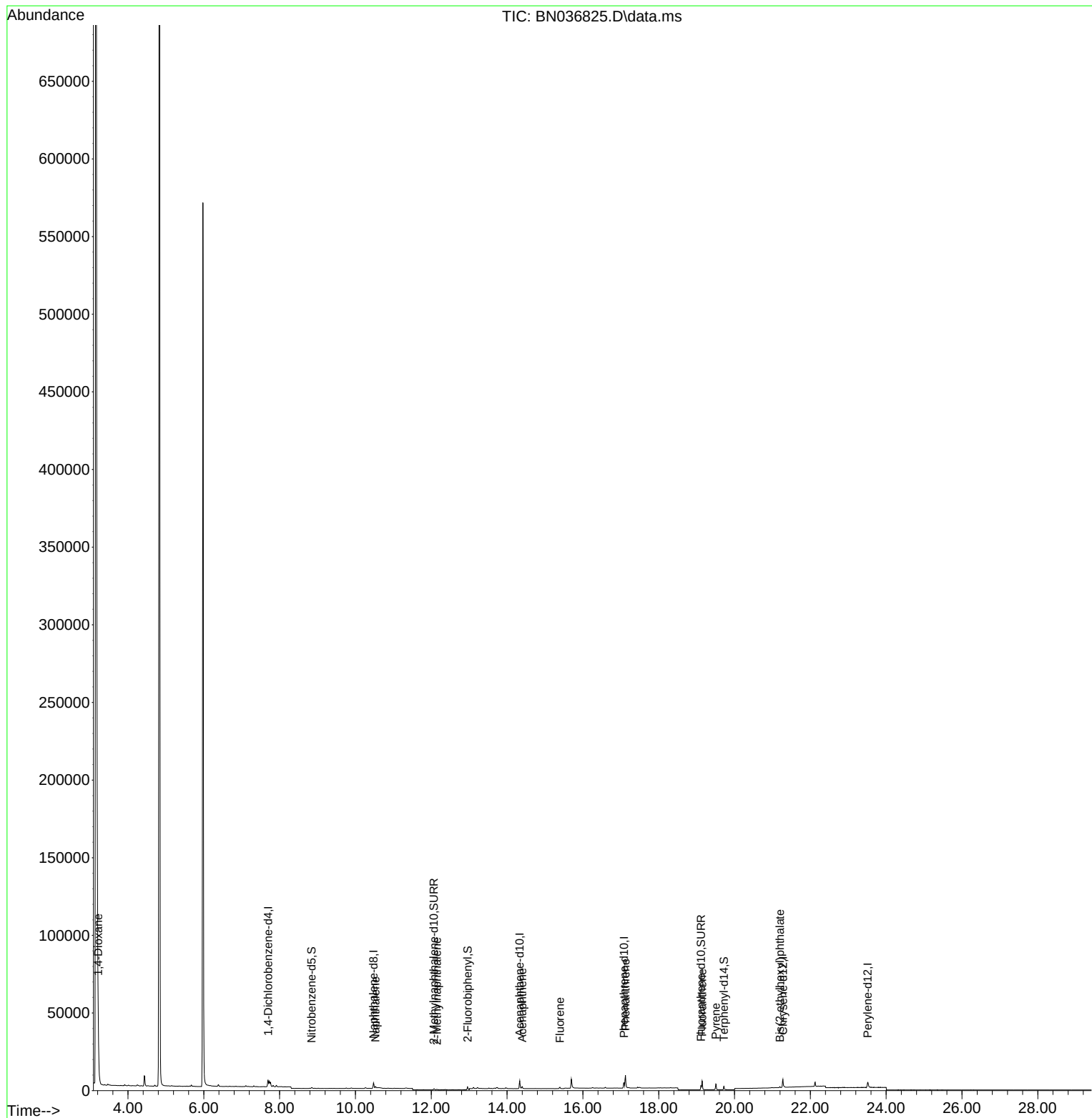
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.695  | 152  | 2050     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 4984     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10          | 14.334 | 164  | 2883     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 6204     | 0.400 | ng    | -0.02    |
| 29) Chrysene-d12              | 21.277 | 240  | 5510     | 0.400 | ng    | #-0.02   |
| 35) Perylene-d12              | 23.513 | 264  | 5286     | 0.400 | ng    | #-0.04   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 0.000  | 112  | 0d       | 0.000 | ng    |          |
| 5) Phenol-d6                  | 0.000  | 99   | 0d       | 0.000 | ng    |          |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 709      | 0.131 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.070 | 152  | 1058     | 0.143 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 0.000  | 330  | 0d       | 0.000 | ng    |          |
| 15) 2-Fluorobiphenyl          | 12.958 | 172  | 2353     | 0.140 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.113 | 212  | 3049     | 0.192 | ng    | -0.03    |
| 31) Terphenyl-d14             | 19.717 | 244  | 2447     | 0.185 | ng    | -0.03    |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.218  | 88   | 7577     | 3.332 | ng    | 97       |
| 9) Naphthalene                | 10.530 | 128  | 1348     | 0.092 | ng    | # 87     |
| 12) 2-Methylnaphthalene       | 12.146 | 142  | 195      | 0.021 | ng    | # 87     |
| 17) Acenaphthene              | 14.398 | 154  | 600      | 0.067 | ng    | 99       |
| 18) Fluorene                  | 15.392 | 166  | 672      | 0.056 | ng    | 99       |
| 25) Phenanthrene              | 17.124 | 178  | 9396     | 0.505 | ng    | 99       |
| 28) Fluoranthene              | 19.146 | 202  | 5405     | 0.259 | ng    | 99       |
| 30) Pyrene                    | 19.508 | 202  | 3678     | 0.137 | ng    | # 93     |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 690      | 0.051 | ng    | # 92     |
| -----                         |        |      |          |       |       |          |

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

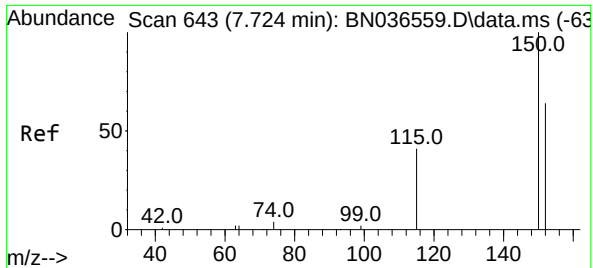
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Data File : BN036825.D  
Acq On : 03 Apr 2025 16:38  
Operator : RC/JU  
Sample : Q1697-01DL 2X  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

Quant Time: Apr 03 17:02:56 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

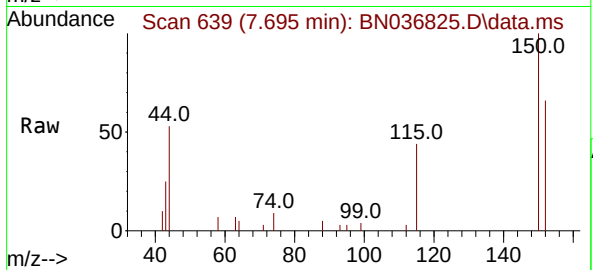




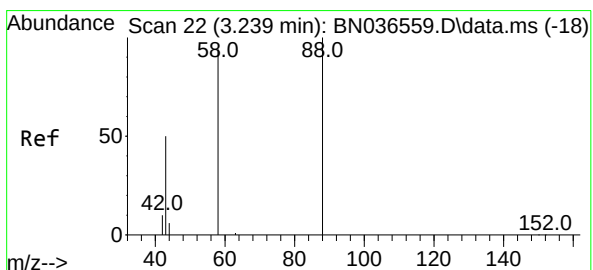
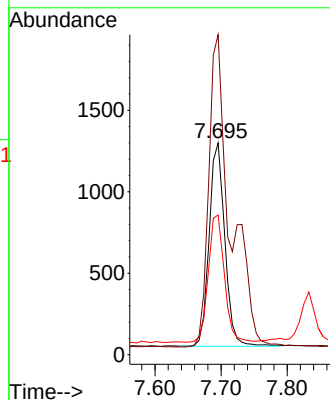
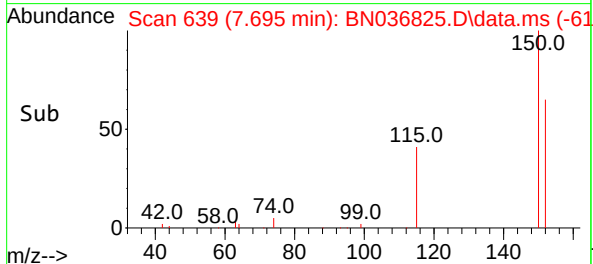


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 61  
Delta R.T. -0.029 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

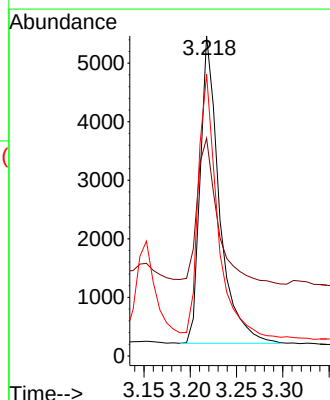
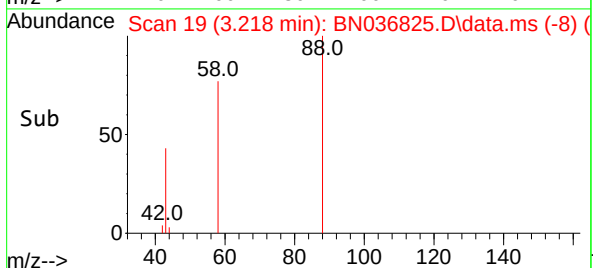
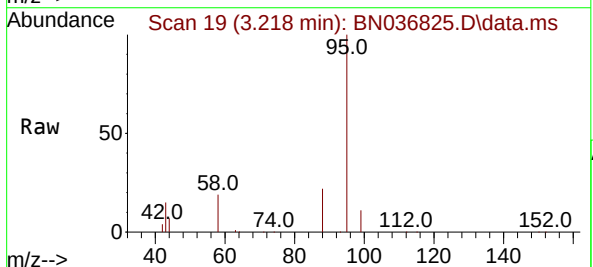


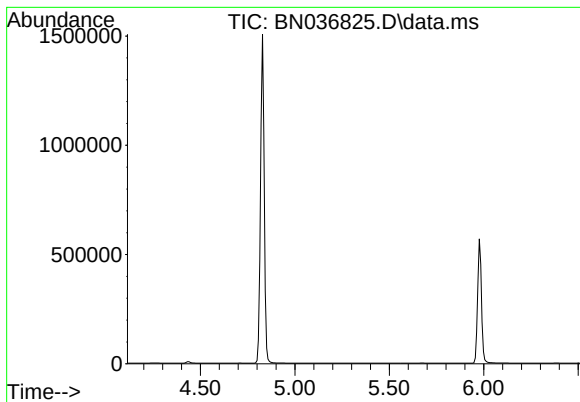
Tgt Ion:152 Resp: 2050  
Ion Ratio Lower Upper  
152 100  
150 151.2 123.7 185.5  
115 66.0 54.3 81.5



#2  
1,4-Dioxane  
Concen: 3.332 ng  
RT: 3.218 min Scan# 19  
Delta R.T. -0.021 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

Tgt Ion: 88 Resp: 7577  
Ion Ratio Lower Upper  
88 100  
43 51.1 37.8 56.8  
58 85.8 67.4 101.2

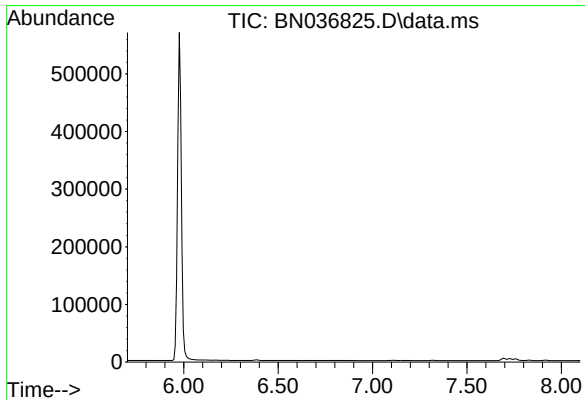
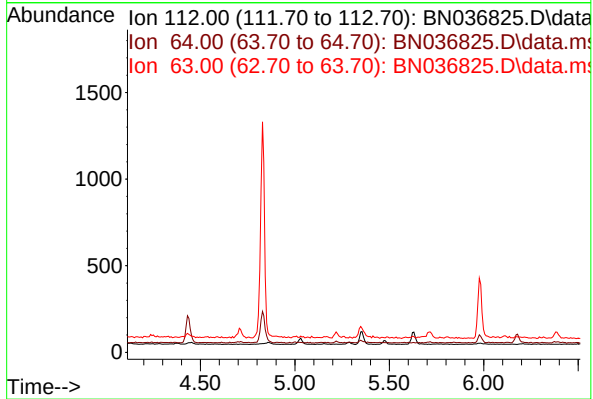




#4  
2-Fluorophenol  
Concen: 0.000 ng  
Expected RT: 5.31 min  
  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

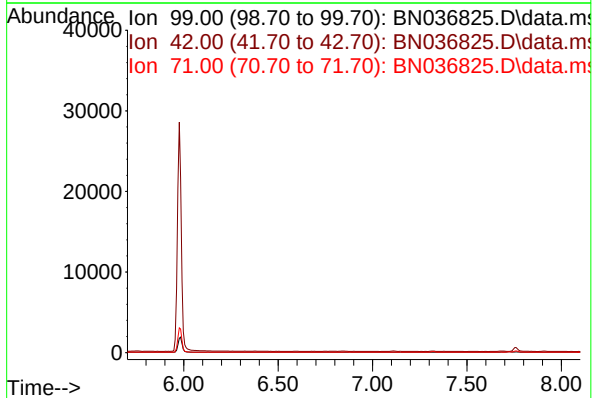
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

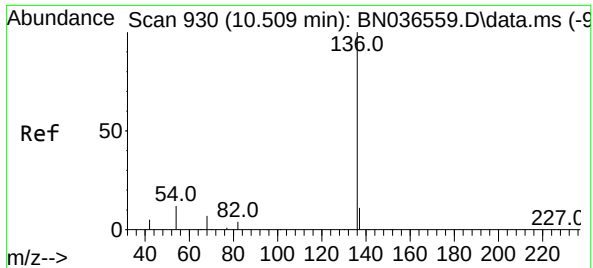
Tgt Ion: 112  
Sig Exp Ratio  
112 100  
64 66.4  
63 39.8



#5  
Phenol-d6  
Concen: 0.000 ng  
Expected RT: 6.90 min  
  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

Tgt Ion: 99  
Sig Exp Ratio  
99 100  
42 33.1  
71 42.6

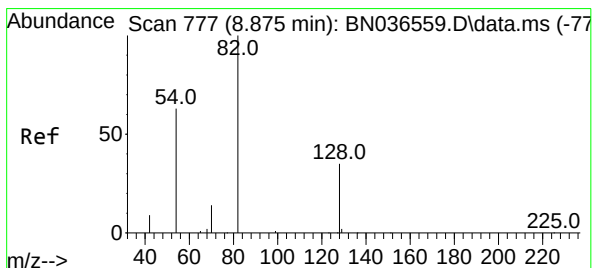
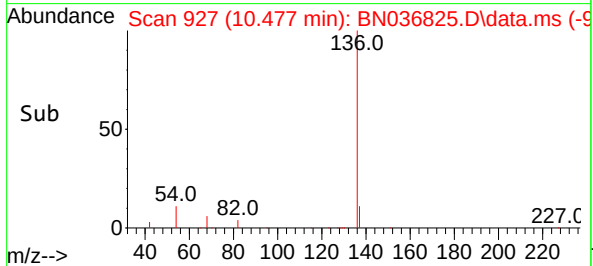
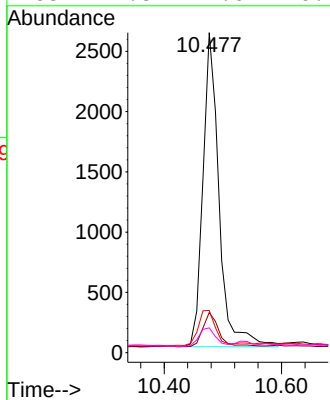
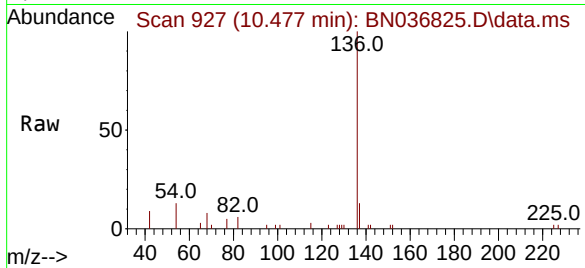




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

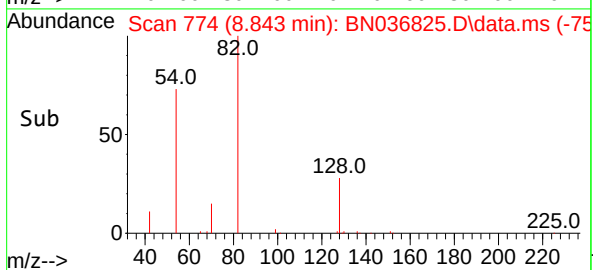
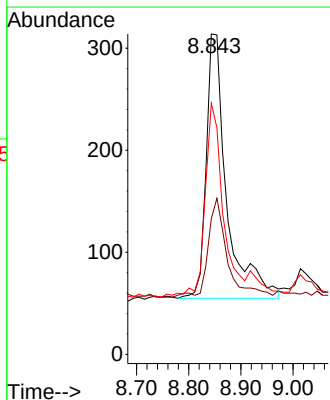
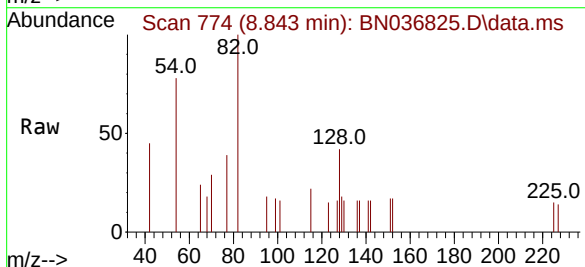
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

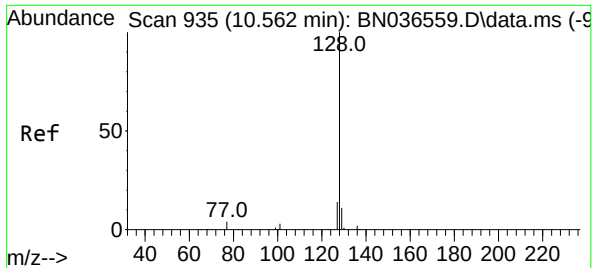
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 4984  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.5  | 10.3  | 15.5  |
| 54       | 13.2  | 11.5  | 17.3  |
| 68       | 7.8   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.131 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 709   |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 42.4  | 30.6  | 45.8  |
| 54       | 78.3  | 52.2  | 78.4  |

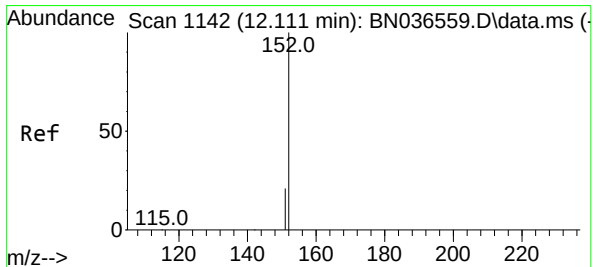
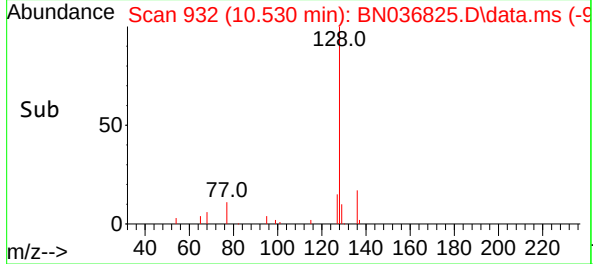
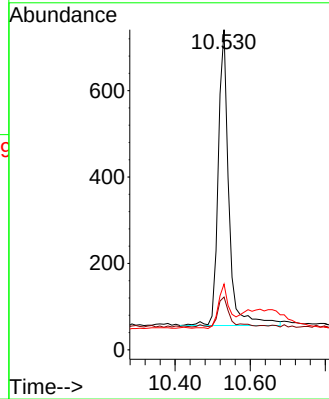
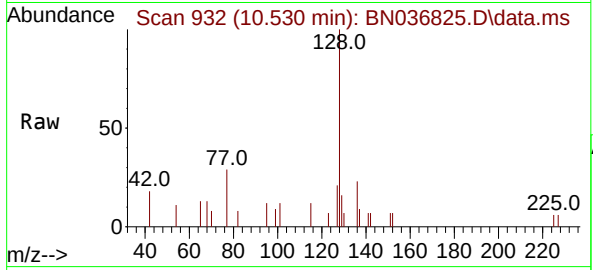




#9  
Naphthalene  
Concen: 0.092 ng  
RT: 10.530 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

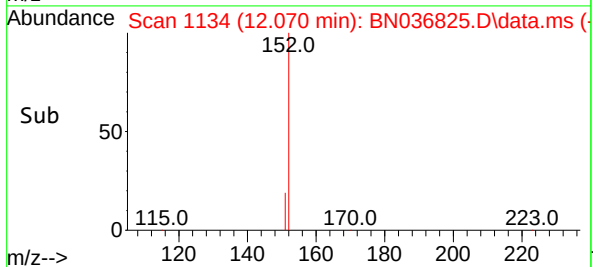
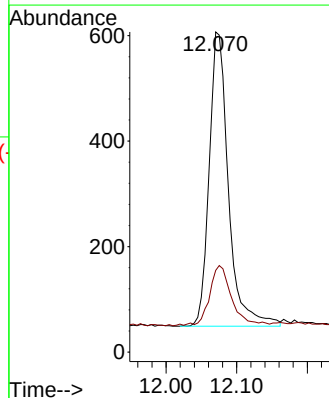
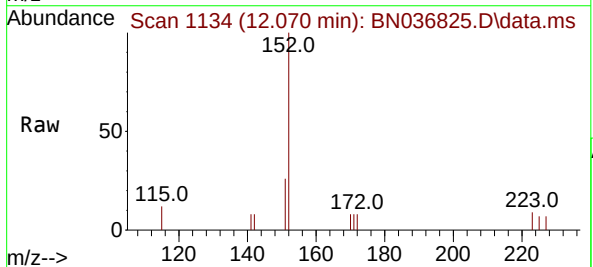
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

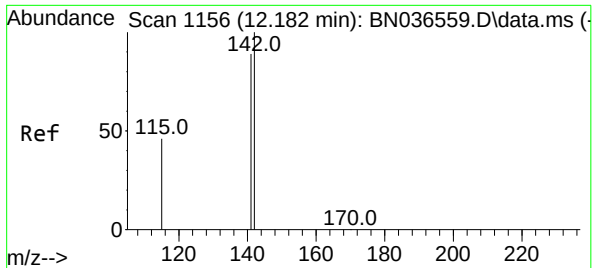
Tgt Ion:128 Resp: 1348  
Ion Ratio Lower Upper  
128 100  
129 16.5 9.8 14.6#  
127 20.5 11.8 17.8#



#11  
2-Methylnaphthalene-d10  
Concen: 0.143 ng  
RT: 12.070 min Scan# 1134  
Delta R.T. -0.040 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

Tgt Ion:152 Resp: 1058  
Ion Ratio Lower Upper  
152 100  
151 23.3 17.0 25.6





#12

2-Methylnaphthalene

Concen: 0.021 ng

RT: 12.146 min Scan# 1149

Delta R.T. -0.035 min

Lab File: BN036825.D

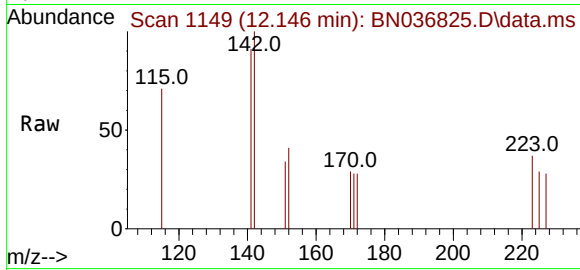
Acq: 03 Apr 2025 16:38

Instrument :

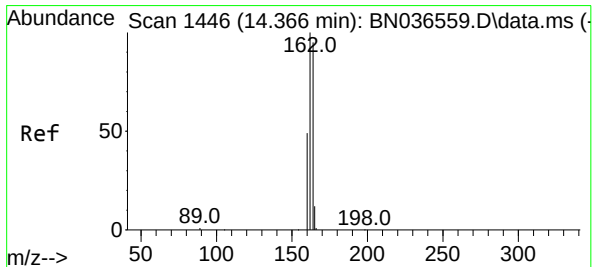
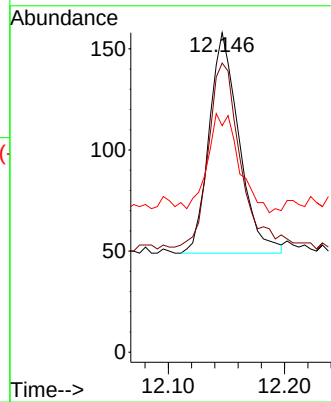
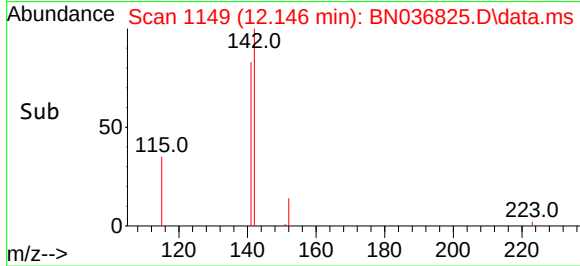
BNA\_N

ClientSampleId :

MW-19B-72-040125DL



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 142   | Resp: | 195   |
| Ion      | Ratio | Lower | Upper |
| 142      | 100   |       |       |
| 141      | 90.5  | 71.7  | 107.5 |
| 115      | 70.9  | 38.3  | 57.5  |



#13

Acenaphthene-d10

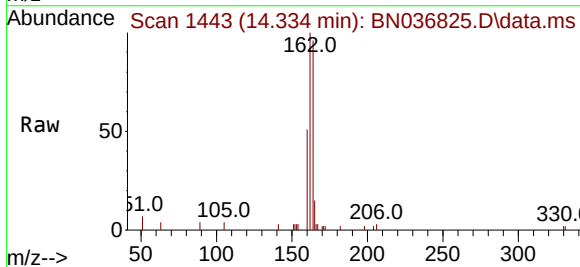
Concen: 0.400 ng

RT: 14.334 min Scan# 1443

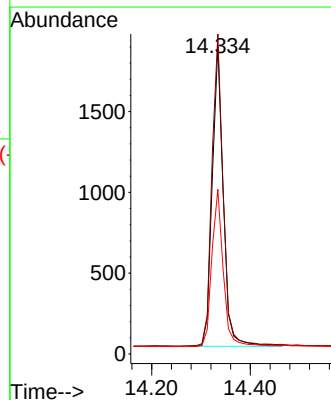
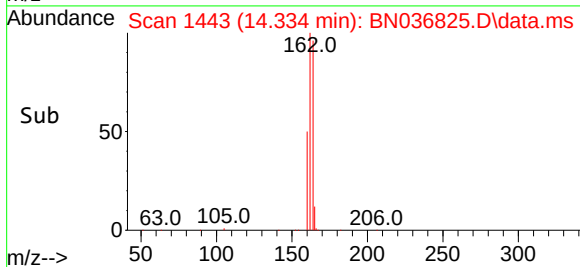
Delta R.T. -0.032 min

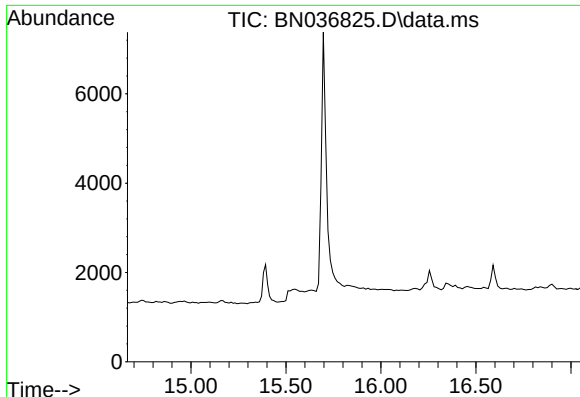
Lab File: BN036825.D

Acq: 03 Apr 2025 16:38



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 2883  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 162      | 103.7 | 84.2  | 126.2 |
| 160      | 53.4  | 42.2  | 63.2  |

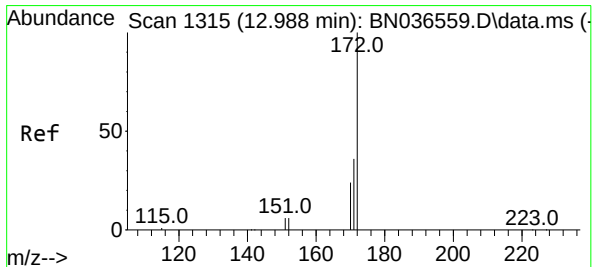
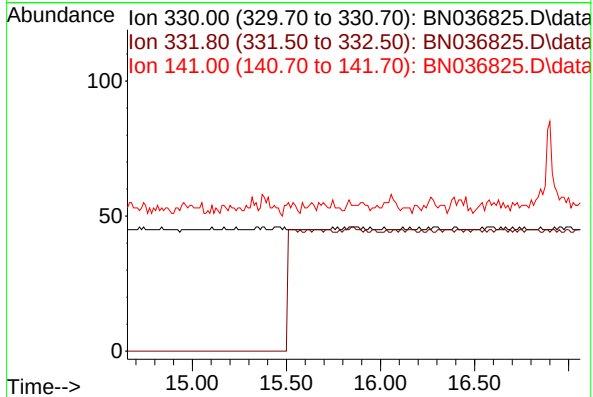




#14  
2,4,6-Tribromophenol  
Concen: 0.000 ng  
Expected RT: 15.86 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

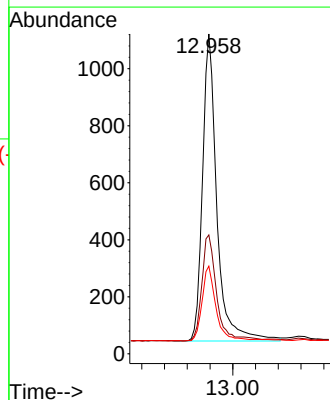
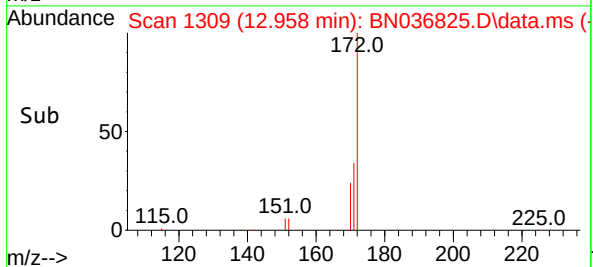
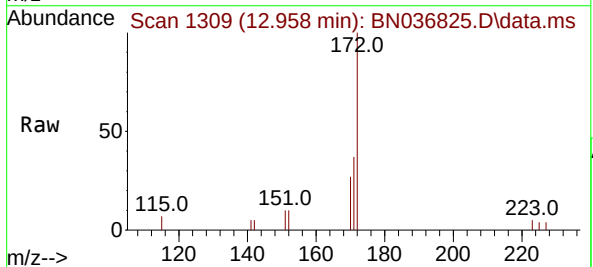
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

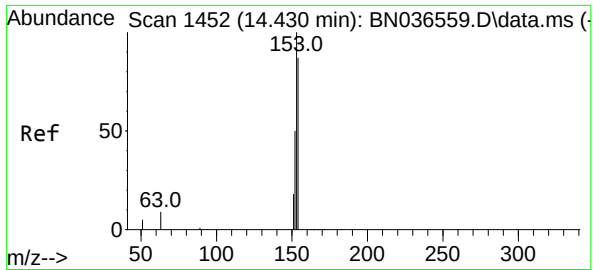
Tgt Ion: 330  
Sig Exp Ratio  
330 100  
332 94.0  
141 54.3



#15  
2-Fluorobiphenyl  
Concen: 0.140 ng  
RT: 12.958 min Scan# 1309  
Delta R.T. -0.030 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

Tgt Ion: 172 Resp: 2353  
Ion Ratio Lower Upper  
172 100  
171 37.2 29.5 44.3  
170 27.5 20.2 30.4

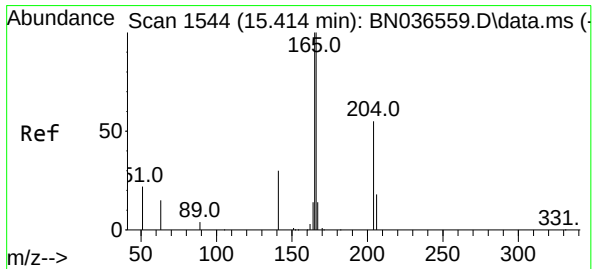
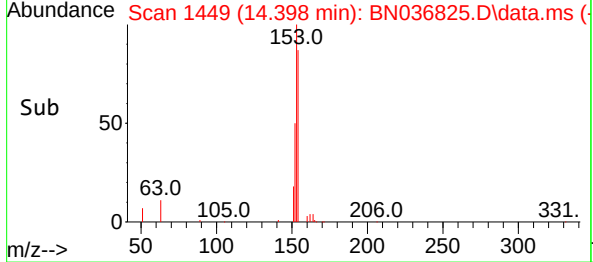
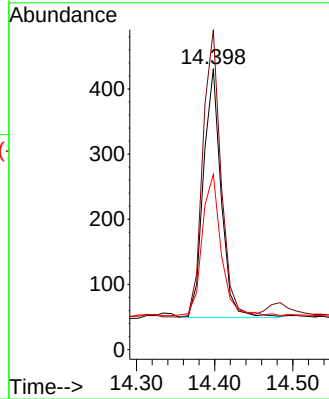
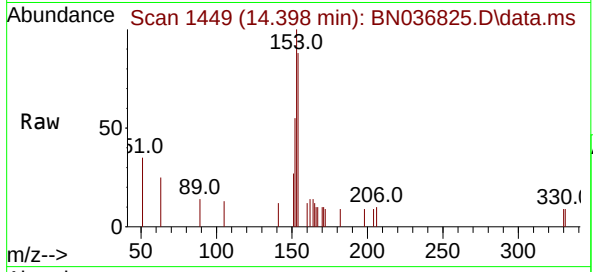




#17  
Acenaphthene  
Concen: 0.067 ng  
RT: 14.398 min Scan# 1449  
Delta R.T. -0.032 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

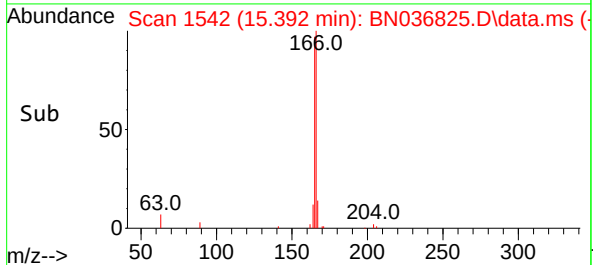
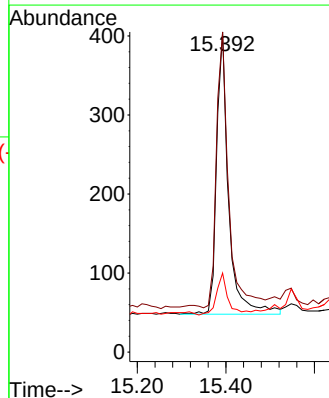
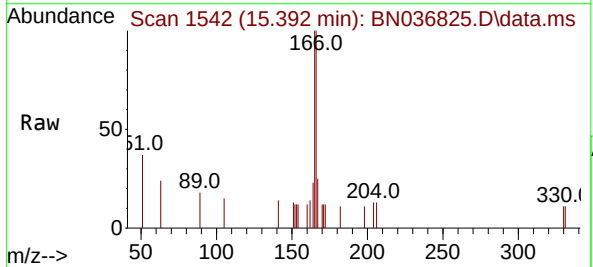
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

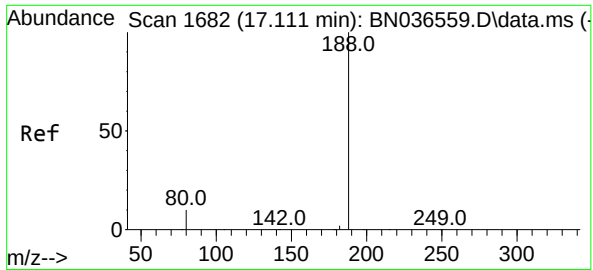
Tgt Ion:154 Resp: 600  
Ion Ratio Lower Upper  
154 100  
153 118.0 94.1 141.1  
152 61.3 49.8 74.6



#18  
Fluorene  
Concen: 0.056 ng  
RT: 15.392 min Scan# 1542  
Delta R.T. -0.021 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

Tgt Ion:166 Resp: 672  
Ion Ratio Lower Upper  
166 100  
165 98.7 79.8 119.8  
167 14.6 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.025 min

Lab File: BN036825.D

Acq: 03 Apr 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

MW-19B-72-040125DL

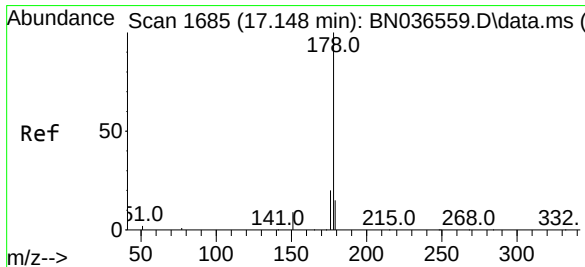
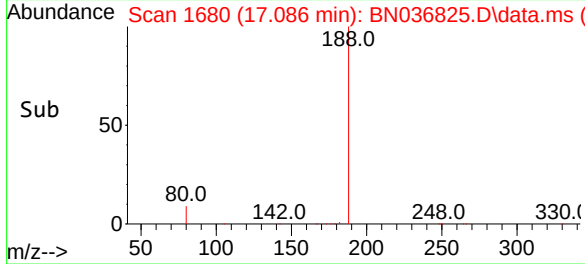
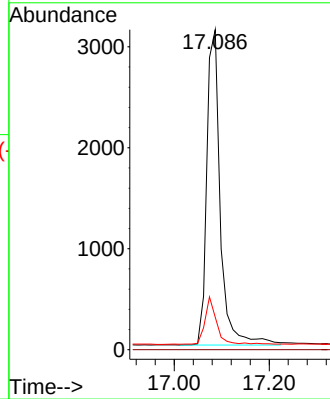
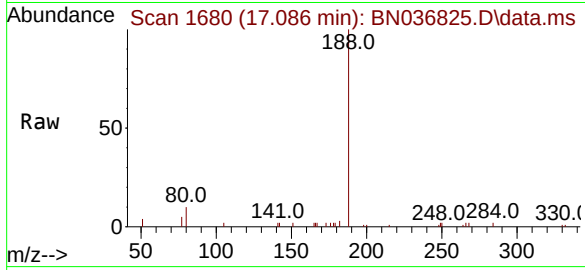
Tgt Ion:188 Resp: 6204

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.2 8.8 13.2



#25

Phenanthrene

Concen: 0.505 ng

RT: 17.124 min Scan# 1683

Delta R.T. -0.025 min

Lab File: BN036825.D

Acq: 03 Apr 2025 16:38

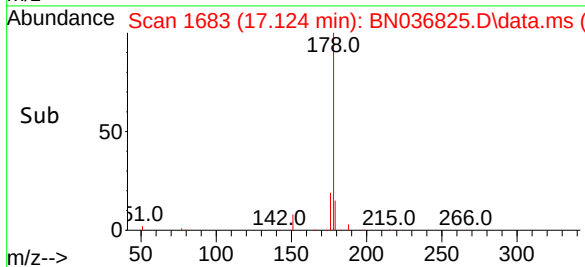
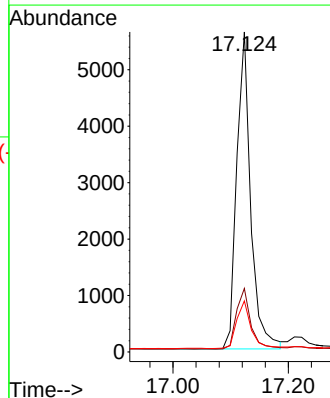
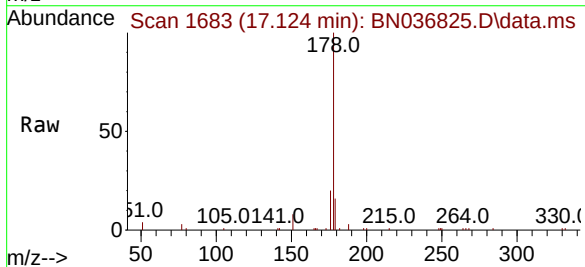
Tgt Ion:178 Resp: 9396

Ion Ratio Lower Upper

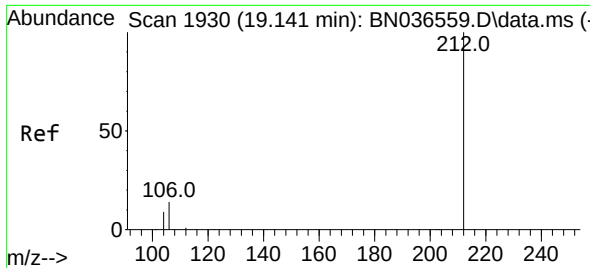
178 100

176 19.8 15.9 23.9

179 15.9 12.2 18.4



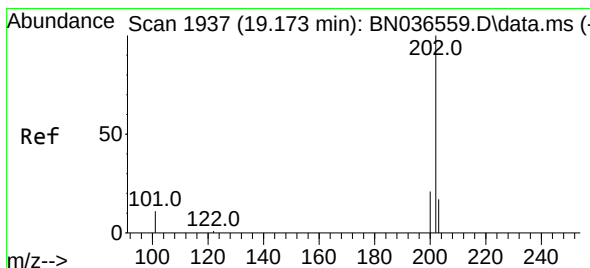
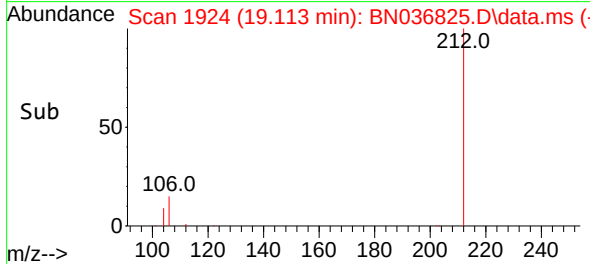
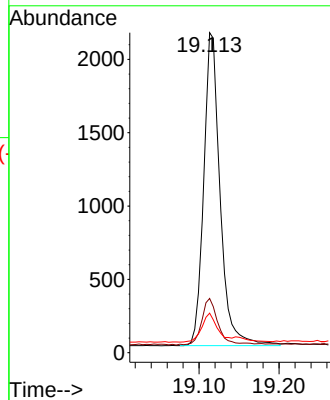
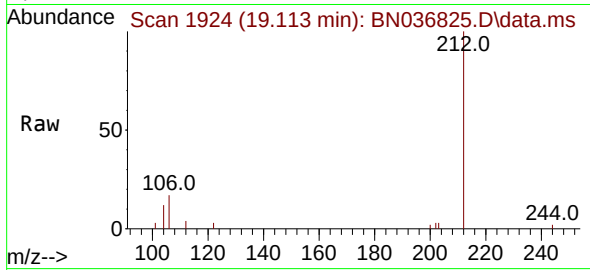




#27  
Fluoranthene-d10  
Concen: 0.192 ng  
RT: 19.113 min Scan# 1911  
Delta R.T. -0.028 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

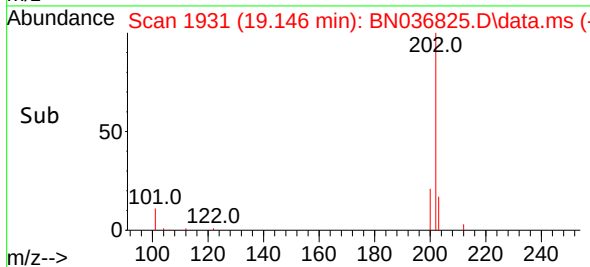
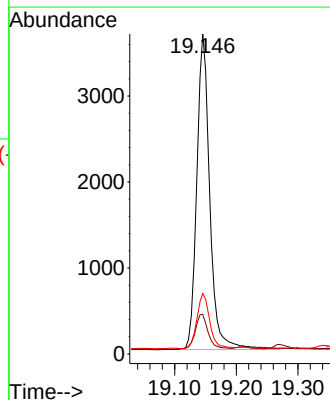
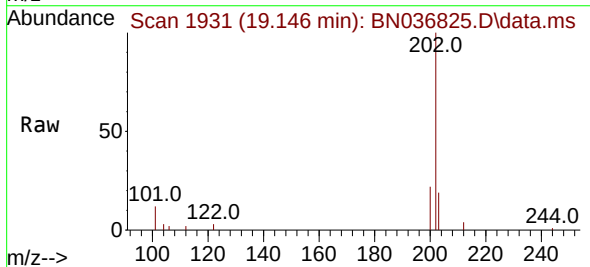
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

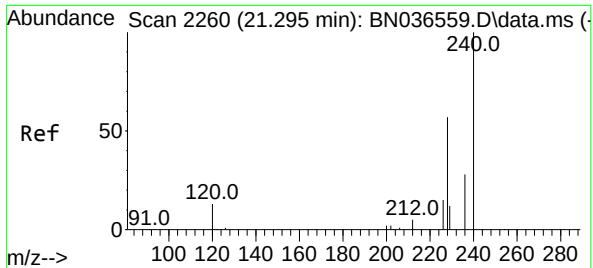
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 212     | 100   |       |       |
| 106     | 15.1  | 11.8  | 17.6  |
| 104     | 8.7   | 7.3   | 10.9  |



#28  
Fluoranthene  
Concen: 0.259 ng  
RT: 19.146 min Scan# 1931  
Delta R.T. -0.028 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.1  | 9.4   | 14.0  |
| 203     | 17.3  | 13.5  | 20.3  |

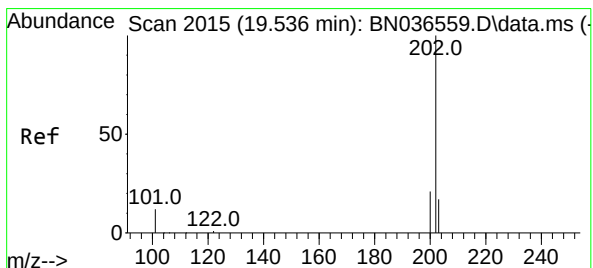
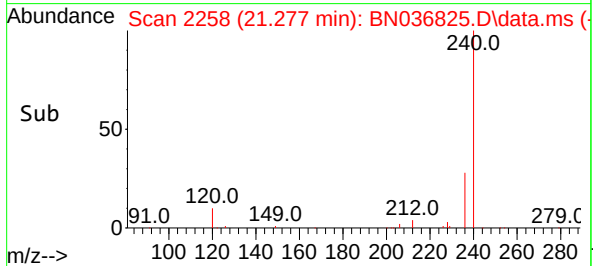
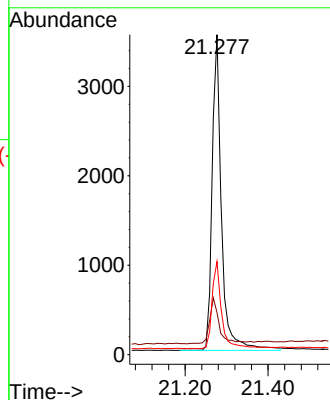
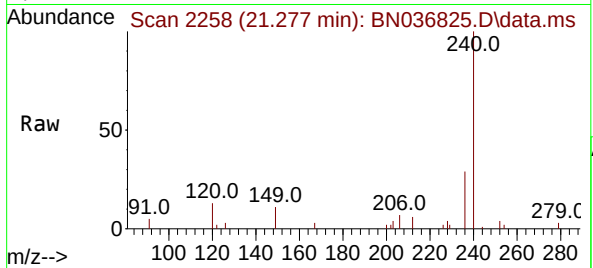




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

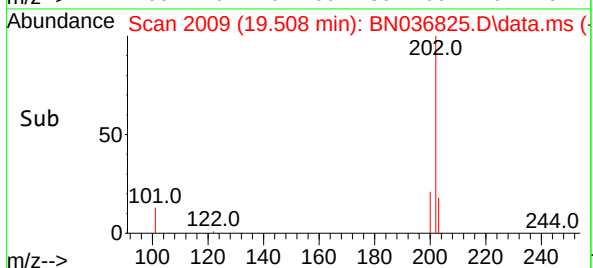
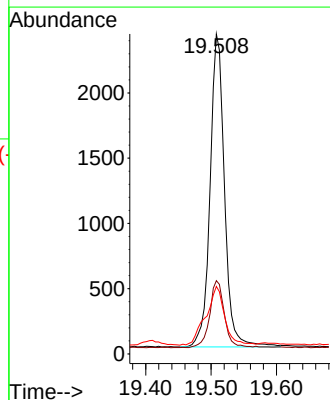
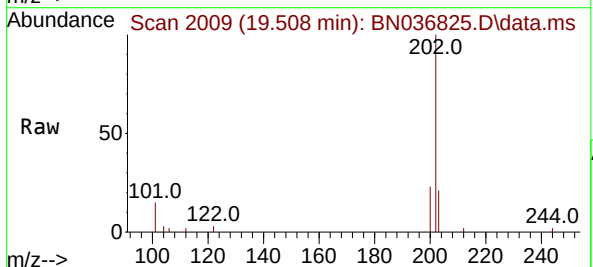
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

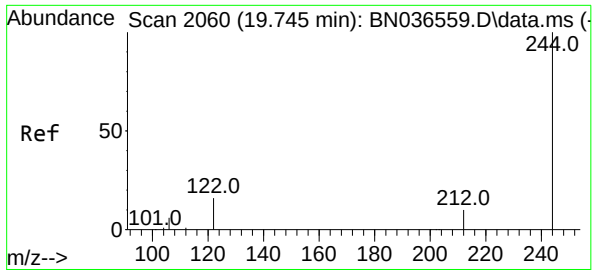
Tgt Ion:240 Resp: 5510  
Ion Ratio Lower Upper  
240 100  
120 13.2 14.6 22.0#  
236 29.1 24.1 36.1



#30  
Pyrene  
Concen: 0.137 ng  
RT: 19.508 min Scan# 2009  
Delta R.T. -0.028 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

Tgt Ion:202 Resp: 3678  
Ion Ratio Lower Upper  
202 100  
200 21.8 17.1 25.7  
203 24.4 14.1 21.1#

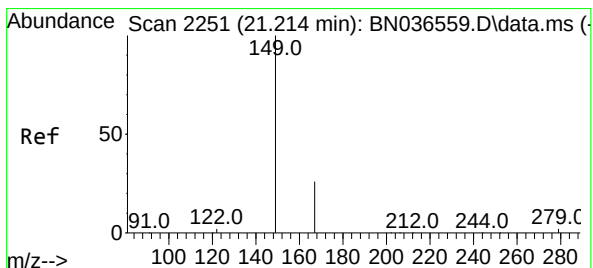
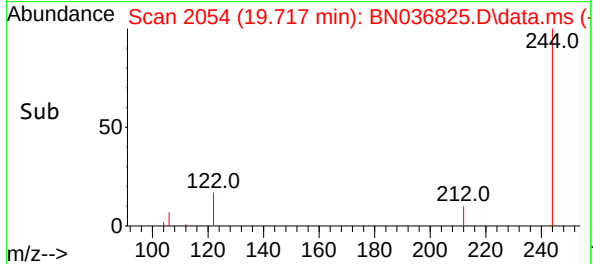
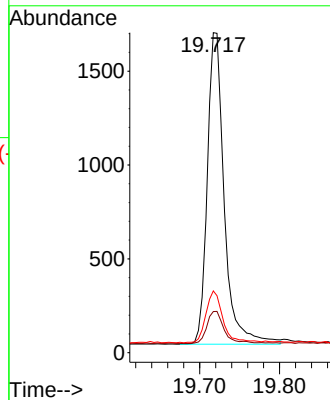
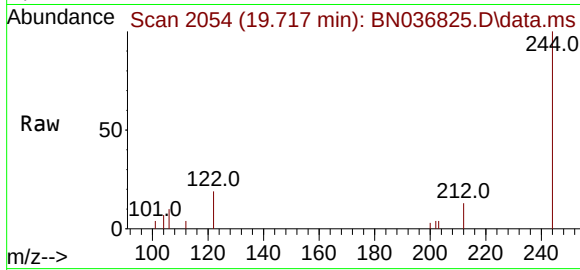




#31  
Terphenyl-d14  
Concen: 0.185 ng  
RT: 19.717 min Scan# 2060  
Delta R.T. -0.028 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

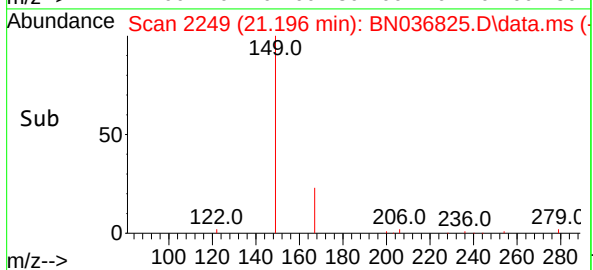
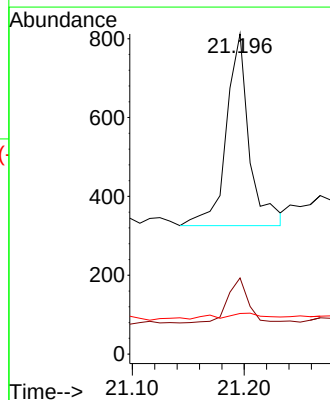
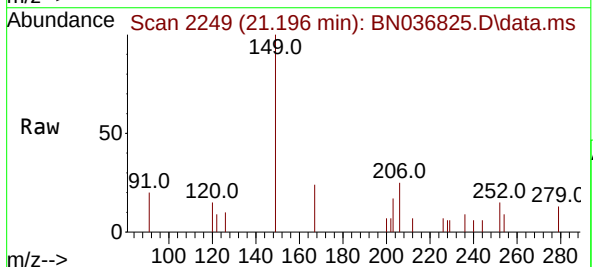
Instrument :  
BNA\_N  
ClientSampleId :  
MW-19B-72-040125DL

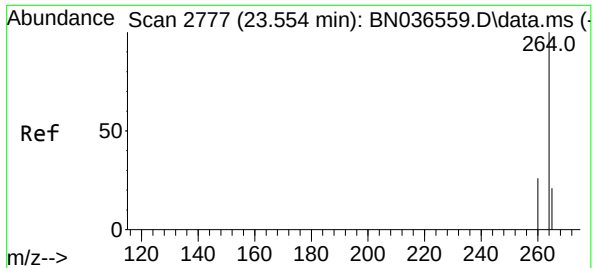
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 12.8  | 9.6   | 14.4  |
| 122     | 19.3  | 13.9  | 20.9  |



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.051 ng  
RT: 21.196 min Scan# 2249  
Delta R.T. -0.018 min  
Lab File: BN036825.D  
Acq: 03 Apr 2025 16:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 21.2  | 20.7  | 31.1  |
| 279     | 3.3   | 3.6   | 5.4   |





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.513 min Scan# 21

Delta R.T. -0.041 min

Lab File: BN036825.D

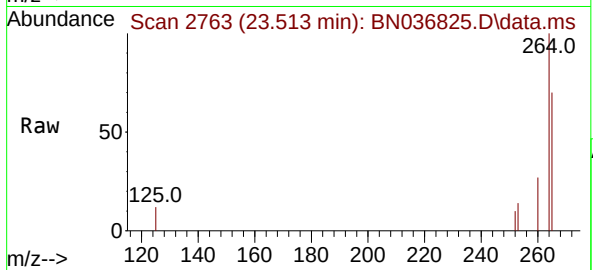
Acq: 03 Apr 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

MW-19B-72-040125DL



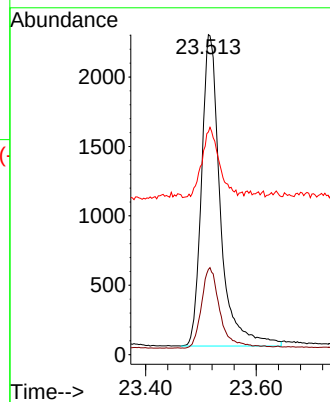
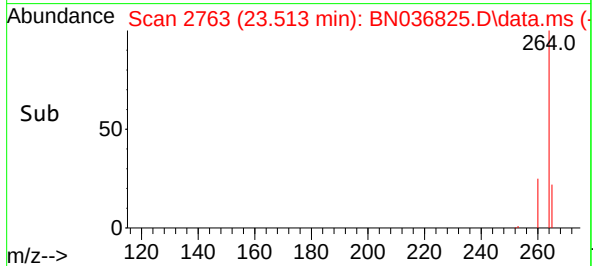
Tgt Ion:264 Resp: 5286

Ion Ratio Lower Upper

264 100

260 26.6 22.6 33.8

265 69.6 88.1 132.1#



## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: | 04/01/25       |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  | 04/01/25       |
| Client Sample ID:  | IW-01-55-040125                             | SDG No.:        | Q1697          |
| Lab Sample ID:     | Q1697-02                                    | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                                  | % Solid:        | 0              |
| Sample Wt/Vol:     | 990      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 |
| BN036821.D        | 1         | 04/02/25 14:40 | 04/03/25 14:13 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.91  |           | 0.070               | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.31  |           | 30 (20) - 150 (139) | 78%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.44  |           | 30 (30) - 150 (150) | 110%       | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.28  |           | 30 (27) - 130 (154) | 71%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.31  |           | 30 (25) - 130 (149) | 76%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.44  |           | 30 (54) - 130 (175) | 109%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2300  | 7.695     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5540  | 10.477    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 3190  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 6840  | 17.086    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 5990  | 21.277    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 5470  | 23.516    |                     |            |          |

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\BN040325\  
 Data File : BN036821.D  
 Acq On : 03 Apr 2025 14:13  
 Operator : RC/JU  
 Sample : Q1697-02  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 IW-01-55-040125

Quant Time: Apr 03 15:07:19 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

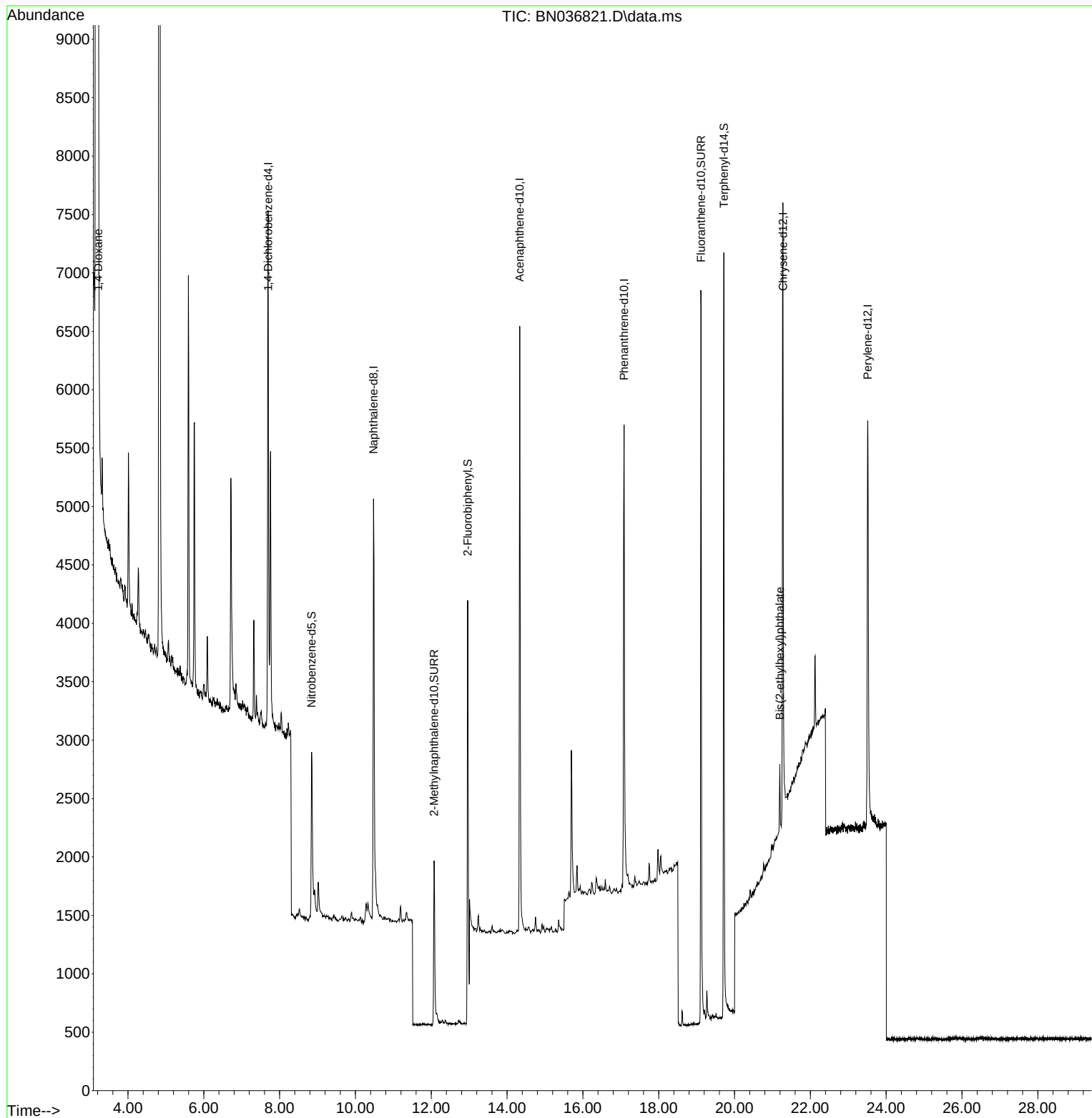
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.695  | 152  | 2298     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 5538     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10          | 14.334 | 164  | 3185     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 6837     | 0.400 | ng    | -0.02    |
| 29) Chrysene-d12              | 21.277 | 240  | 5987     | 0.400 | ng    | #-0.02   |
| 35) Perylene-d12              | 23.516 | 264  | 5473     | 0.400 | ng    | #-0.04   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 0.000  | 112  | 0d       | 0.000 | ng    |          |
| 5) Phenol-d6                  | 0.000  | 99   | 0d       | 0.000 | ng    |          |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 1715     | 0.285 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.075 | 152  | 2571     | 0.312 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 0.000  | 330  | 0d       | 0.000 | ng    |          |
| 15) 2-Fluorobiphenyl          | 12.963 | 172  | 5673     | 0.306 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.118 | 212  | 7692     | 0.439 | ng    | -0.02    |
| 31) Terphenyl-d14             | 19.717 | 244  | 6242     | 0.435 | ng    | -0.03    |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.217  | 88   | 2303     | 0.903 | ng    | # 90     |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 572      | 0.039 | ng    | # 97     |
| -----                         |        |      |          |       |       |          |

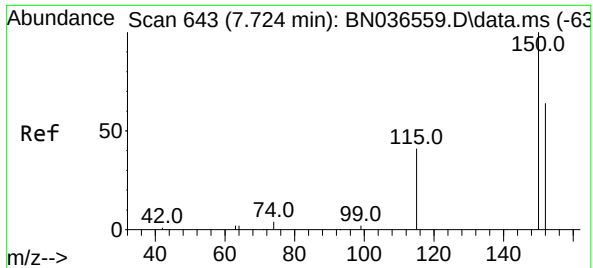
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
Data File : BN036821.D  
Acq On : 03 Apr 2025 14:13  
Operator : RC/JU  
Sample : Q1697-02  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

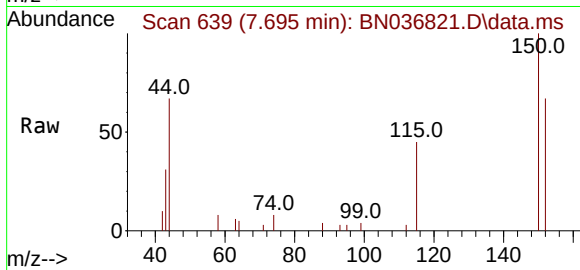
Quant Time: Apr 03 15:07:19 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration



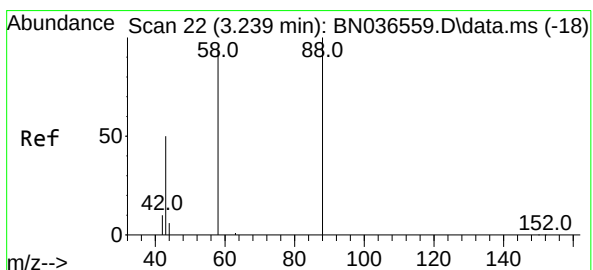
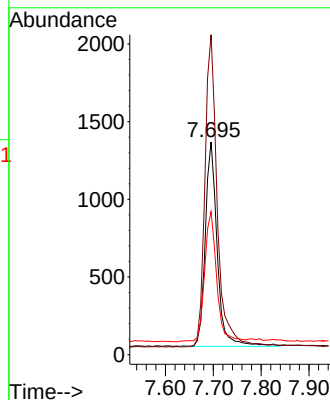
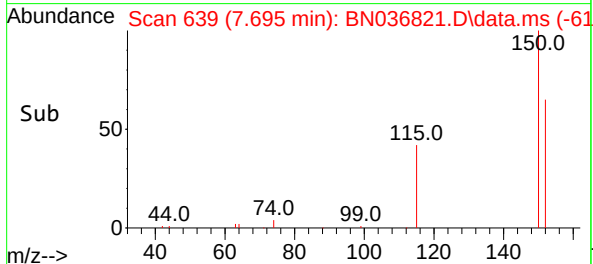


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 61  
Delta R.T. -0.029 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

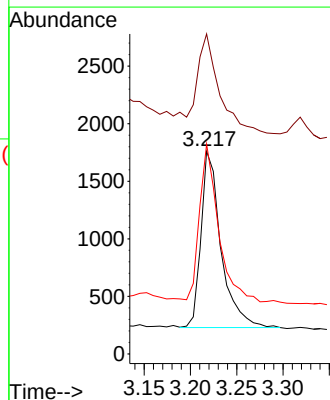
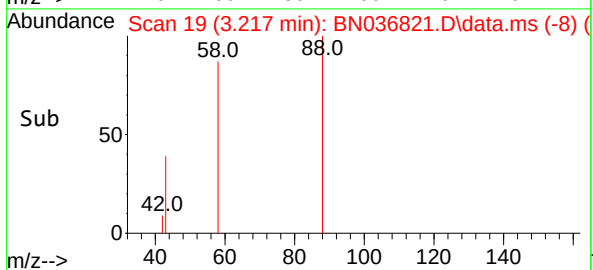
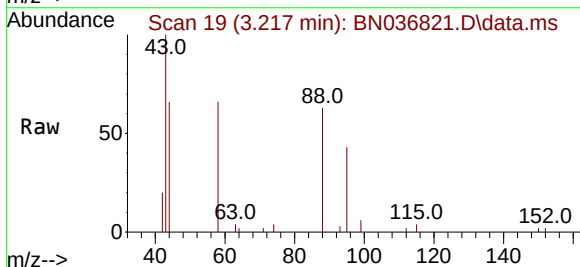


Tgt Ion:152 Resp: 2298  
Ion Ratio Lower Upper  
152 100  
150 150.4 123.7 185.5  
115 67.2 54.3 81.5

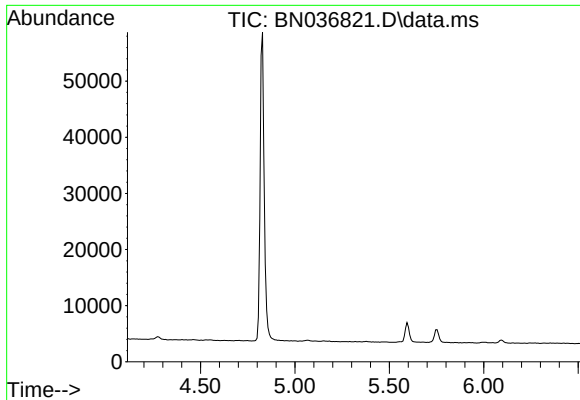


#2  
1,4-Dioxane  
Concen: 0.903 ng  
RT: 3.217 min Scan# 19  
Delta R.T. -0.022 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Tgt Ion: 88 Resp: 2303  
Ion Ratio Lower Upper  
88 100  
43 62.4 37.8 56.8#  
58 86.3 67.4 101.2



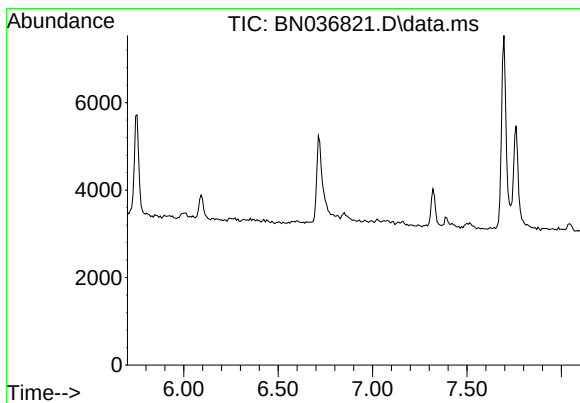
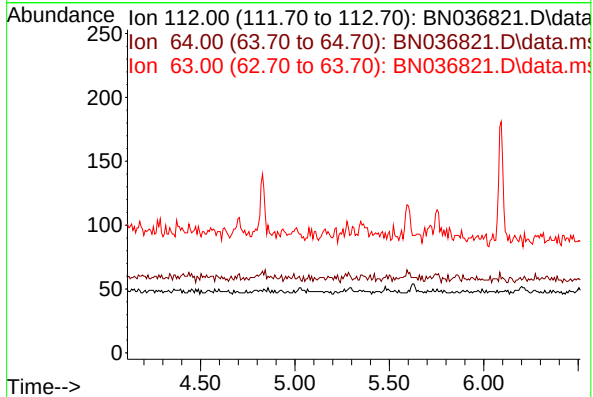




#4  
2-Fluorophenol  
Concen: 0.000 ng  
Expected RT: 5.31 min  
  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

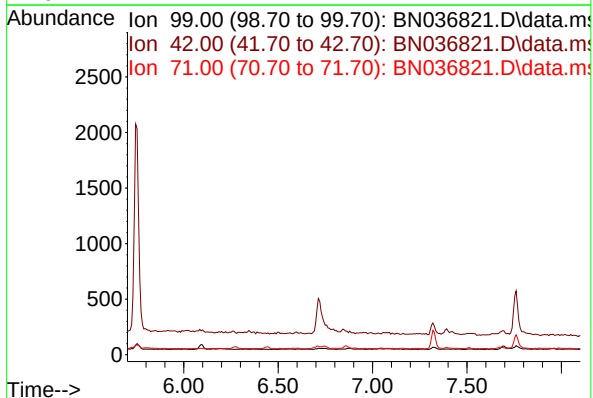
Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

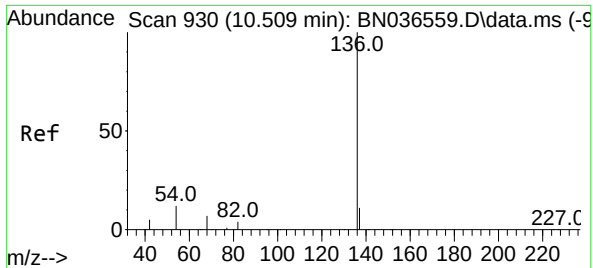
Tgt Ion: 112  
Sig Exp Ratio  
112 100  
64 66.4  
63 39.8



#5  
Phenol-d6  
Concen: 0.000 ng  
Expected RT: 6.90 min  
  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Tgt Ion: 99  
Sig Exp Ratio  
99 100  
42 33.1  
71 42.6

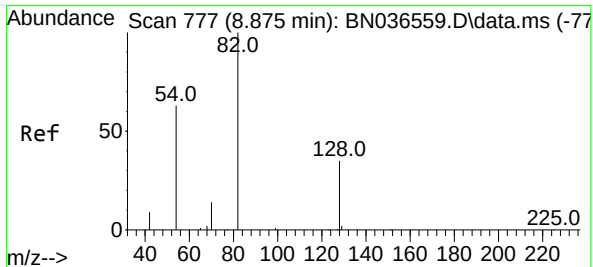
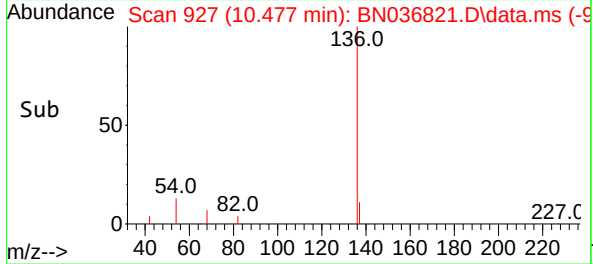
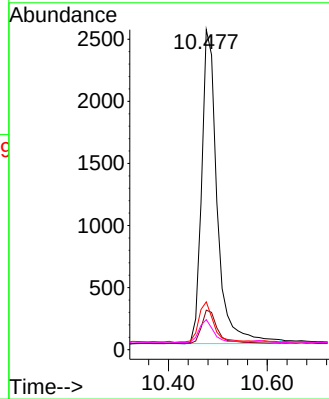
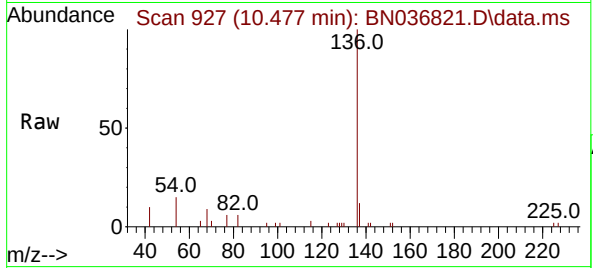




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

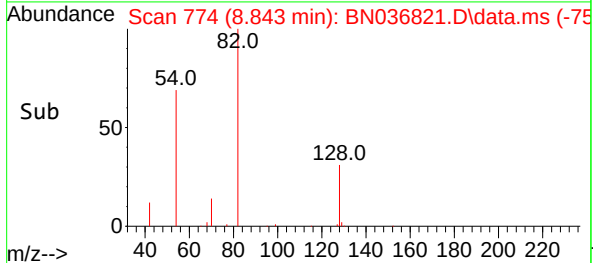
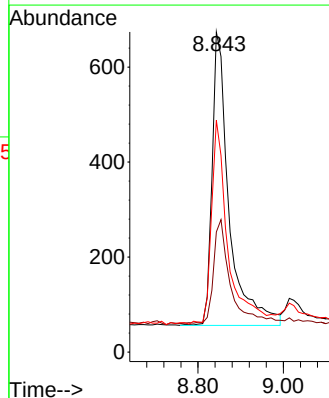
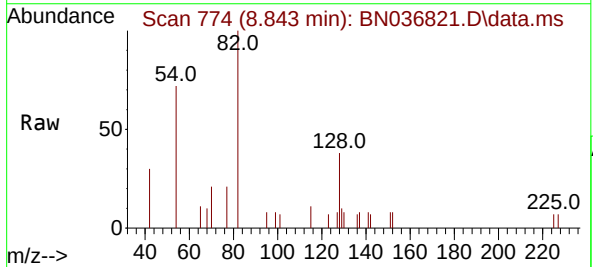
Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

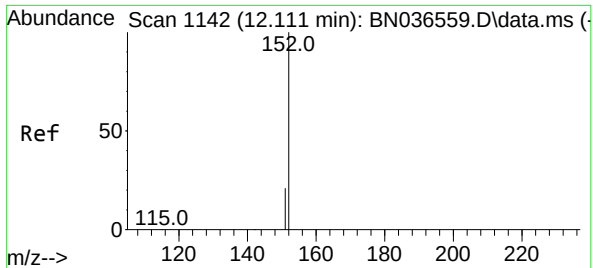
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5538  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.4  | 10.3  | 15.5  |
| 54       | 14.9  | 11.5  | 17.3  |
| 68       | 9.4   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.285 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1715  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 37.5  | 30.6  | 45.8  |
| 54       | 72.4  | 52.2  | 78.4  |

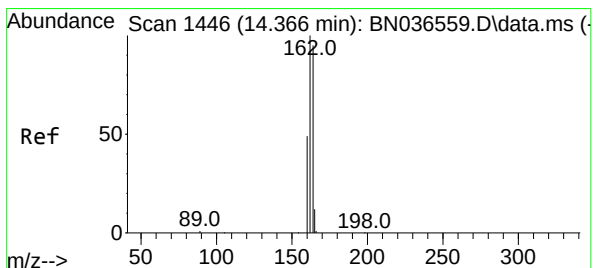
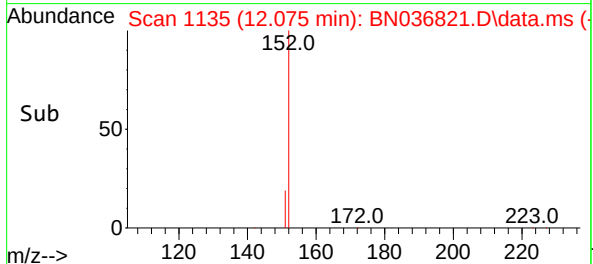
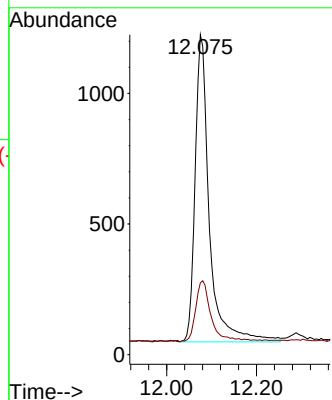
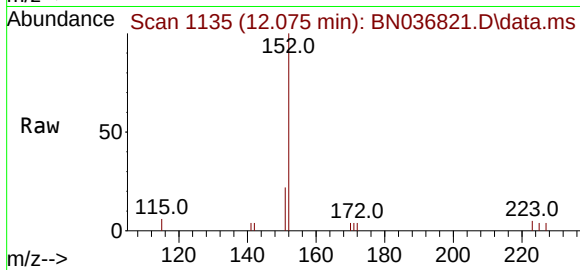




#11  
2-Methylnaphthalene-d10  
Concen: 0.312 ng  
RT: 12.075 min Scan# 1142  
Delta R.T. -0.036 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

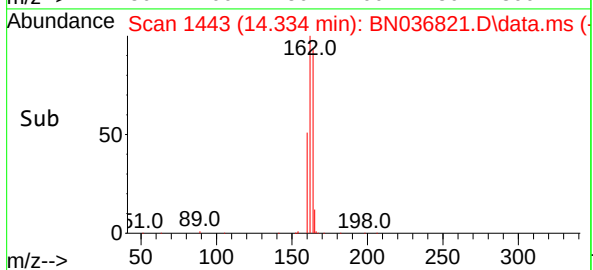
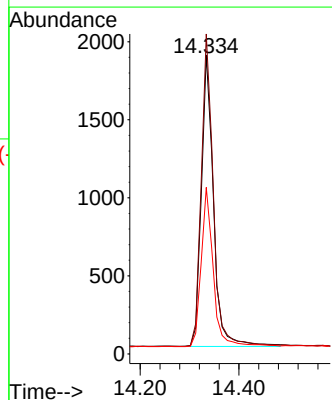
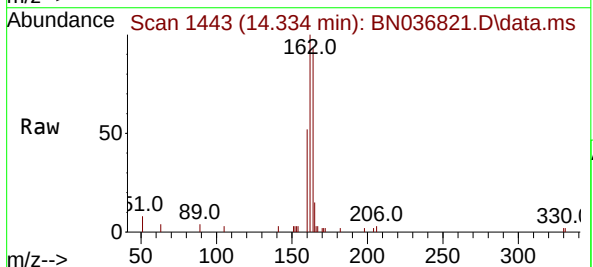
Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

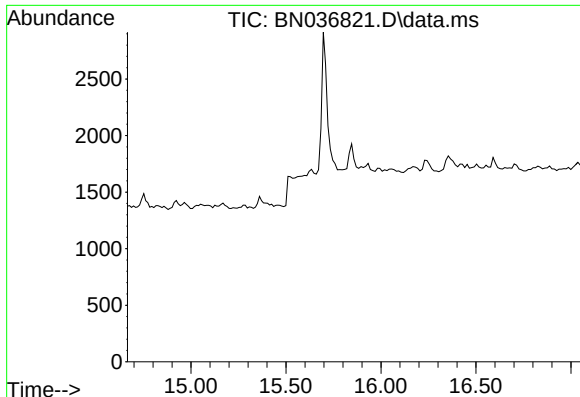
Tgt Ion:152 Resp: 2571  
Ion Ratio Lower Upper  
152 100  
151 21.4 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.032 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Tgt Ion:164 Resp: 3185  
Ion Ratio Lower Upper  
164 100  
162 107.0 84.2 126.2  
160 55.7 42.2 63.2

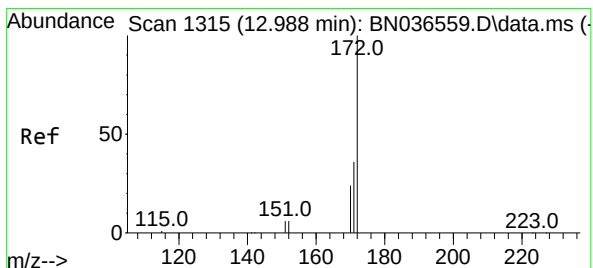
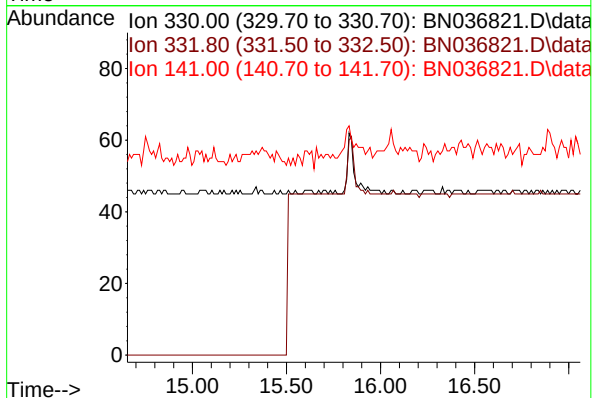




#14  
2,4,6-Tribromophenol  
Concen: 0.000 ng  
Expected RT: 15.86 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

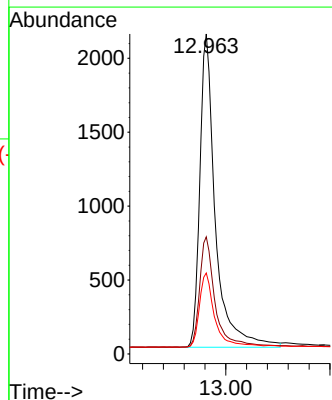
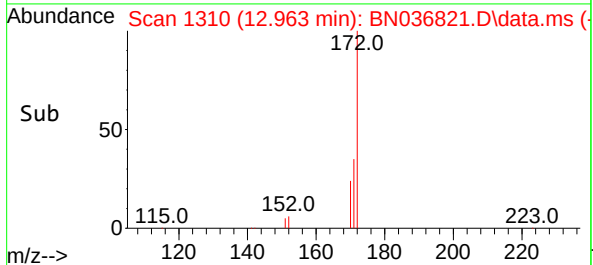
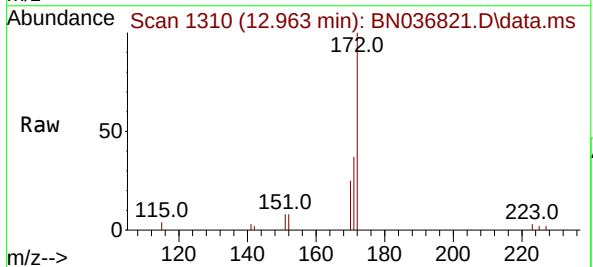
Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

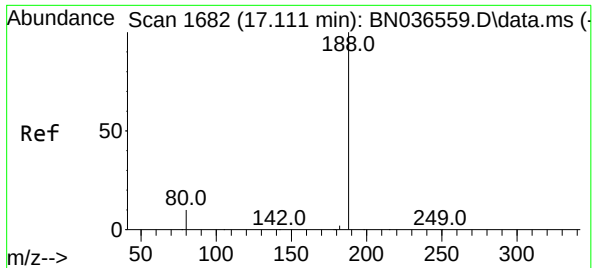
Tgt Ion: 330  
Sig Exp Ratio  
330 100  
332 94.0  
141 54.3



#15  
2-Fluorobiphenyl  
Concen: 0.306 ng  
RT: 12.963 min Scan# 1310  
Delta R.T. -0.025 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Tgt Ion: 172 Resp: 5673  
Ion Ratio Lower Upper  
172 100  
171 36.6 29.5 44.3  
170 25.3 20.2 30.4

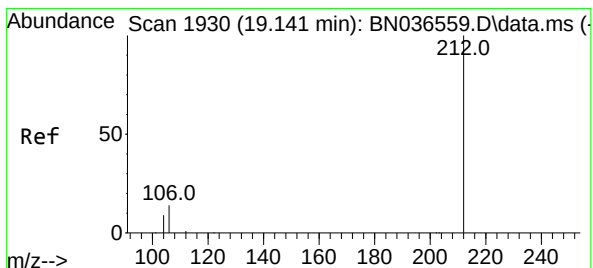
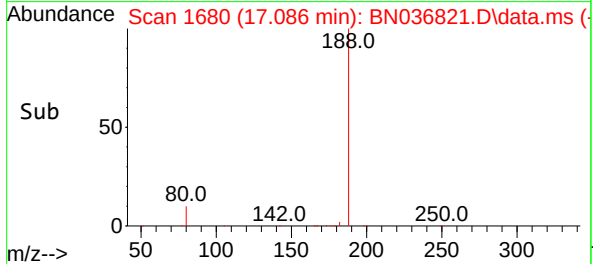
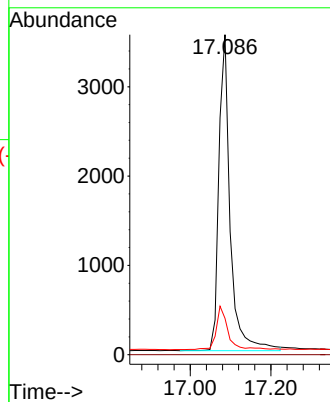
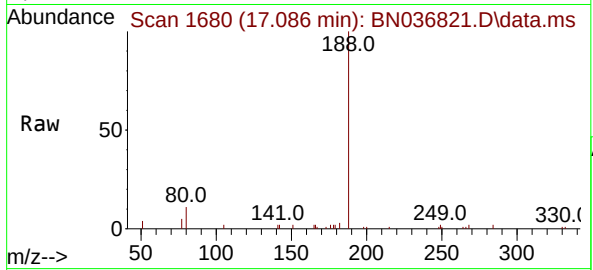




#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1680  
Delta R.T. -0.025 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

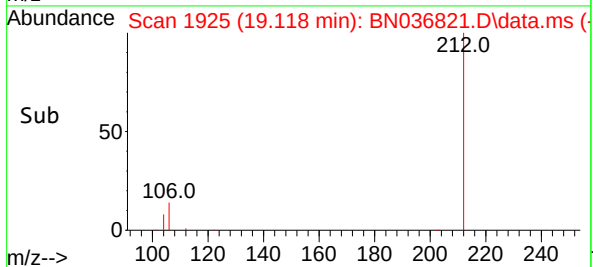
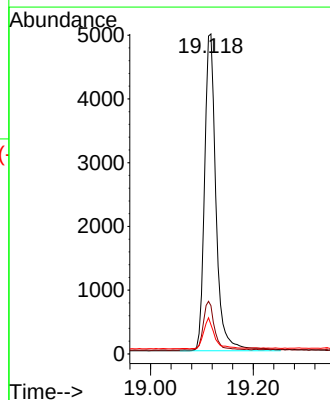
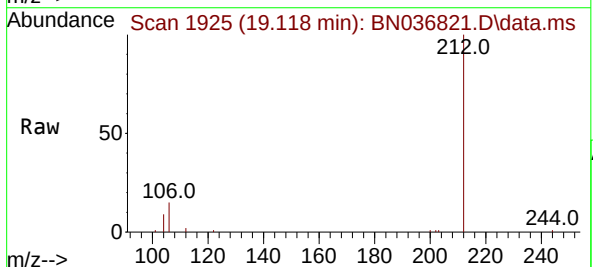
Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

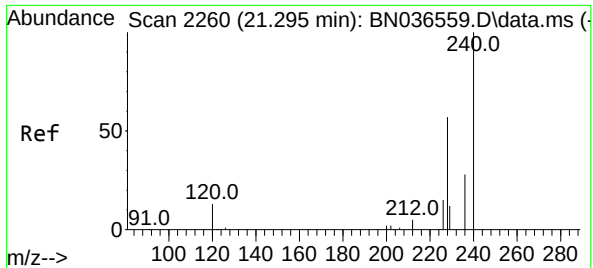
Tgt Ion:188 Resp: 6837  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.4 8.8 13.2



#27  
Fluoranthene-d10  
Concen: 0.439 ng  
RT: 19.118 min Scan# 1925  
Delta R.T. -0.023 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Tgt Ion:212 Resp: 7692  
Ion Ratio Lower Upper  
212 100  
106 14.8 11.8 17.6  
104 9.3 7.3 10.9

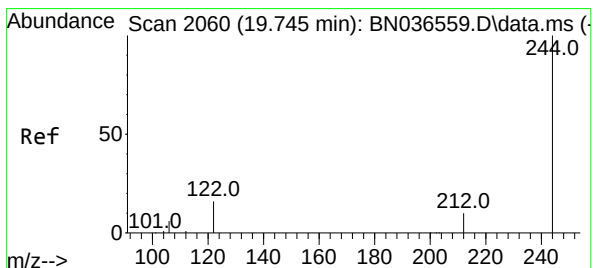
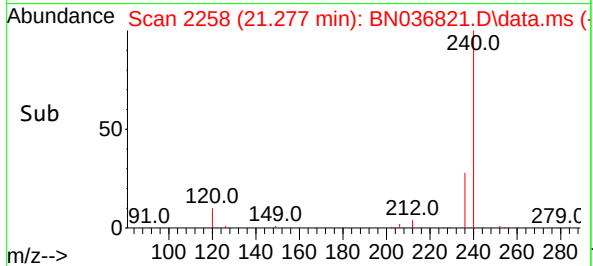
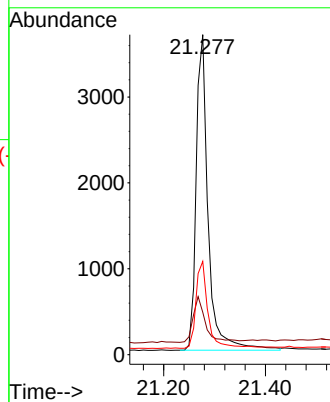
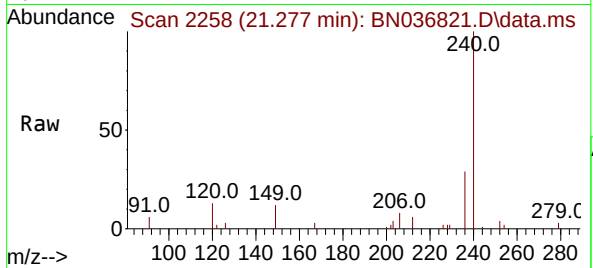




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

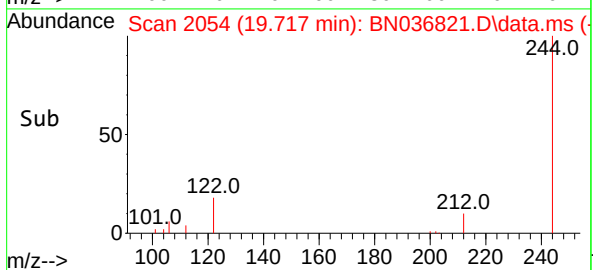
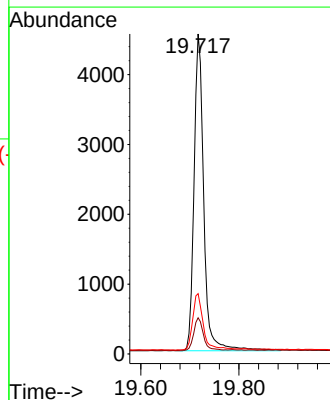
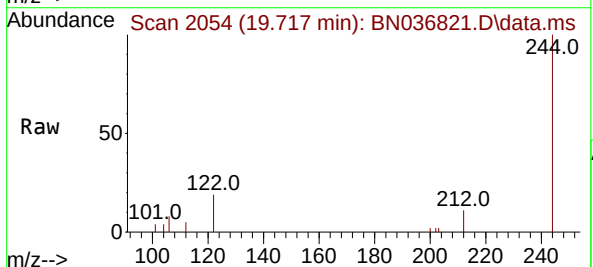
Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

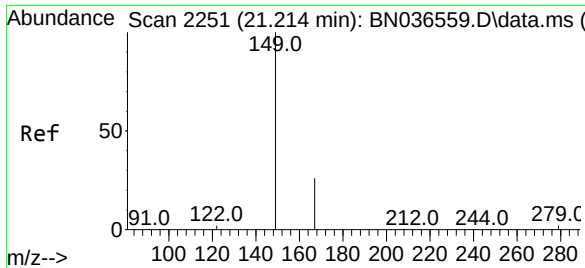
Tgt Ion:240 Resp: 5987  
Ion Ratio Lower Upper  
240 100  
120 13.2 14.6 22.0#  
236 29.1 24.1 36.1



#31  
Terphenyl-d14  
Concen: 0.435 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.028 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Tgt Ion:244 Resp: 6242  
Ion Ratio Lower Upper  
244 100  
212 11.3 9.6 14.4  
122 18.8 13.9 20.9

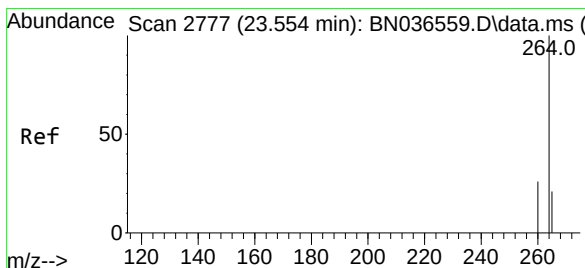
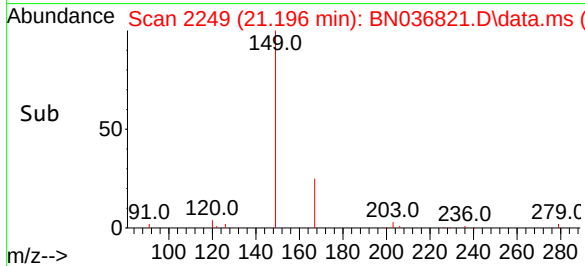
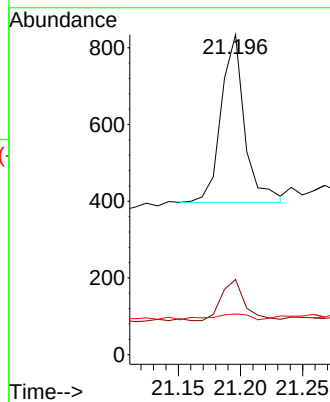
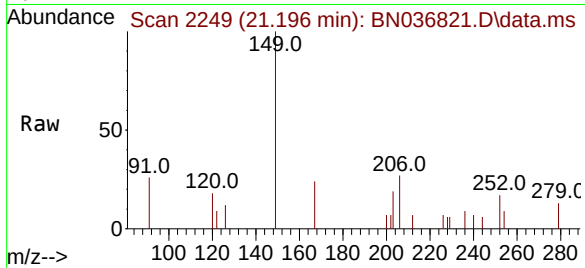




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.039 ng  
RT: 21.196 min Scan# 2119  
Delta R.T. -0.018 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

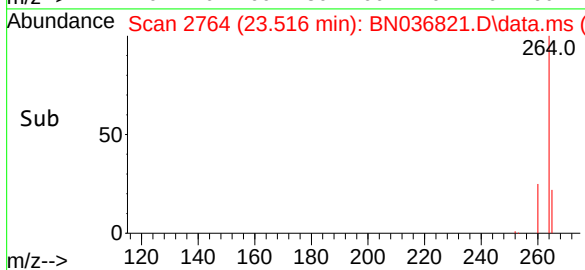
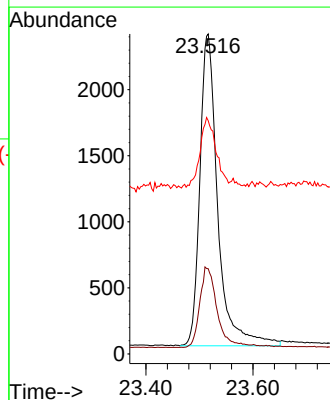
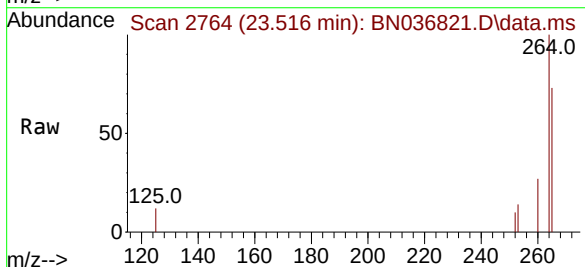
Instrument :  
BNA\_N  
ClientSampleId :  
IW-01-55-040125

Tgt Ion:149 Resp: 572  
Ion Ratio Lower Upper  
149 100  
167 24.5 20.7 31.1  
279 5.4 3.6 5.4#



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2764  
Delta R.T. -0.038 min  
Lab File: BN036821.D  
Acq: 03 Apr 2025 14:13

Tgt Ion:264 Resp: 5473  
Ion Ratio Lower Upper  
264 100  
260 26.6 22.6 33.8  
265 72.9 88.1 132.1#



## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: | 04/01/25       |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  | 04/01/25       |
| Client Sample ID:  | IW-02-55-040125                             | SDG No.:        | Q1697          |
| Lab Sample ID:     | Q1697-03                                    | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                                  | % Solid:        | 0              |
| Sample Wt/Vol:     | 970      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 |
| BN036822.D        | 1         | 04/02/25 14:40 | 04/03/25 14:49 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.77  |           | 0.070               | 0.21       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.35  |           | 30 (20) - 150 (139) | 87%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.45  |           | 30 (30) - 150 (150) | 113%       | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.34  |           | 30 (27) - 130 (154) | 84%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.35  |           | 30 (25) - 130 (149) | 88%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.40  |           | 30 (54) - 130 (175) | 100%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2470  | 7.695     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5940  | 10.477    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 3300  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 6930  | 17.086    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 6220  | 21.277    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 5860  | 23.516    |                     |            |          |

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\BN040325\  
 Data File : BN036822.D  
 Acq On : 03 Apr 2025 14:49  
 Operator : RC/JU  
 Sample : Q1697-03  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 IW-02-55-040125

Quant Time: Apr 03 15:15:17 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

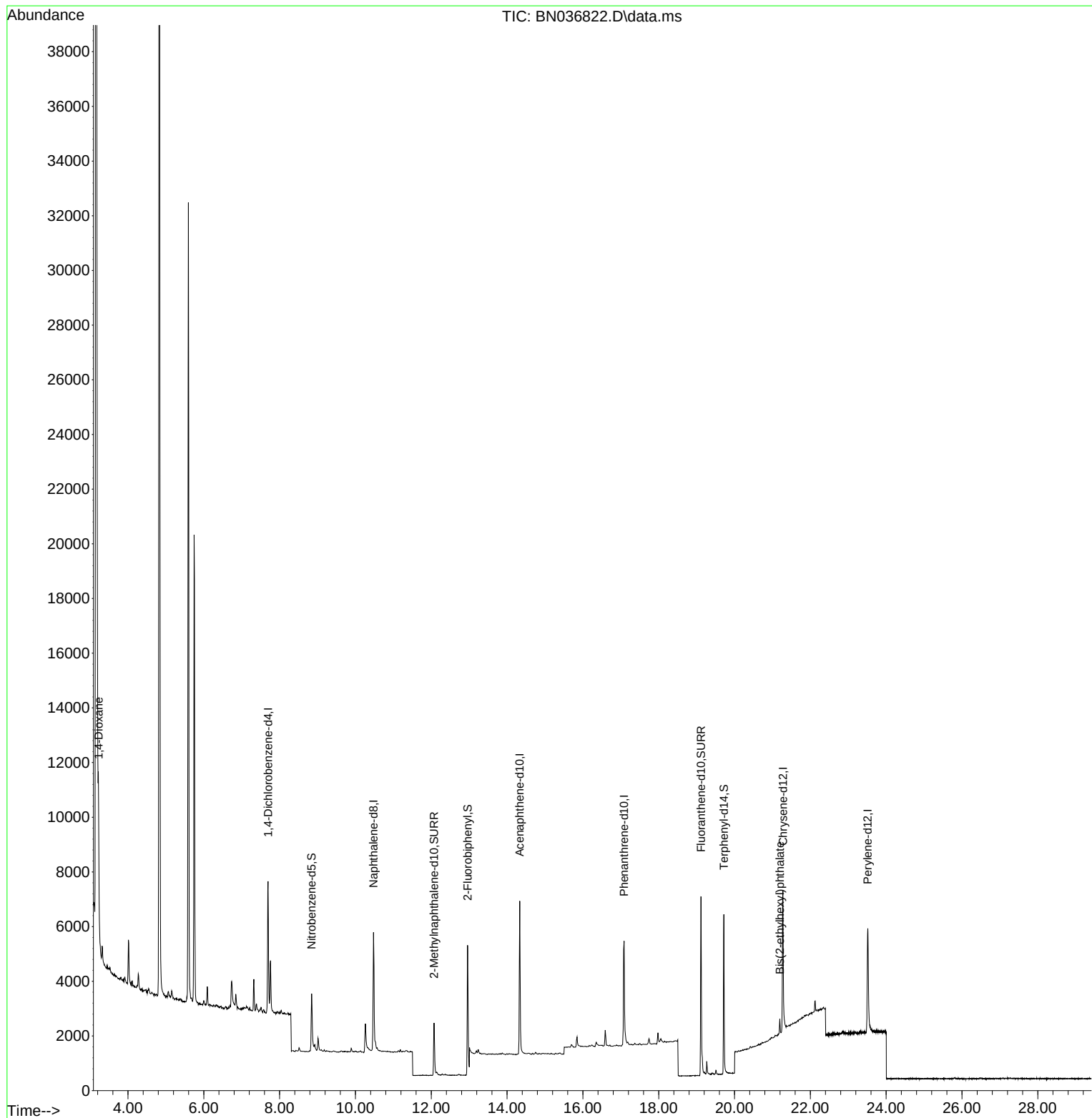
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.695  | 152  | 2465     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 5939     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10          | 14.334 | 164  | 3300     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 6930     | 0.400 | ng    | -0.02    |
| 29) Chrysene-d12              | 21.277 | 240  | 6224     | 0.400 | ng    | #-0.02   |
| 35) Perylene-d12              | 23.516 | 264  | 5856     | 0.400 | ng    | #-0.04   |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 0.000  | 112  | 0d       | 0.000 | ng    |          |
| 5) Phenol-d6                  | 0.000  | 99   | 0d       | 0.000 | ng    |          |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 2165     | 0.335 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.075 | 152  | 3075     | 0.348 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 0.000  | 330  | 0d       | 0.000 | ng    |          |
| 15) 2-Fluorobiphenyl          | 12.958 | 172  | 6746     | 0.351 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.118 | 212  | 8021     | 0.452 | ng    | -0.02    |
| 31) Terphenyl-d14             | 19.717 | 244  | 5985     | 0.401 | ng    | -0.03    |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.225  | 88   | 2039     | 0.746 | ng    | # 80     |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 566      | 0.037 | ng    | # 96     |

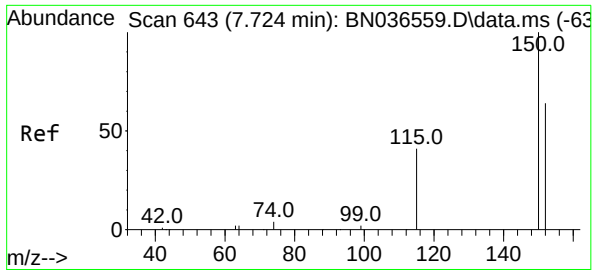
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : BN036822.D  
Acq On : 03 Apr 2025 14:49  
Operator : RC/JU  
Sample : Q1697-03  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

Quant Time: Apr 03 15:15:17 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

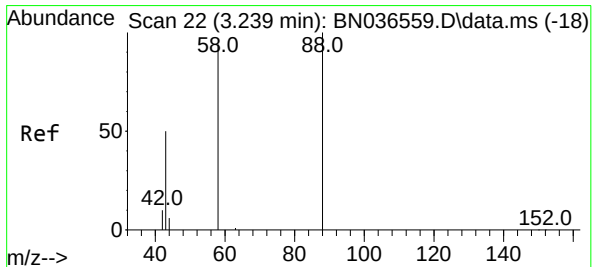
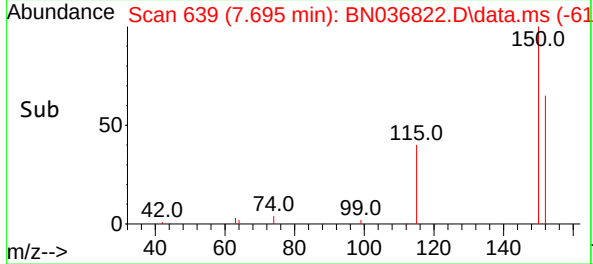
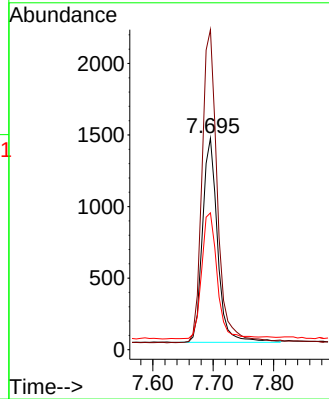
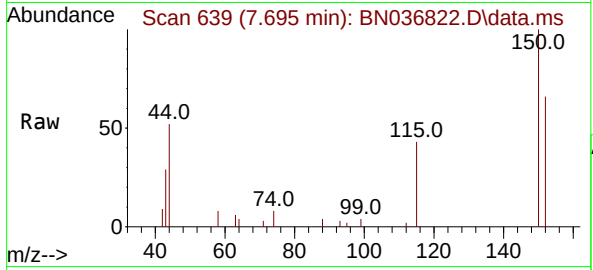




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 61  
Delta R.T. -0.029 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

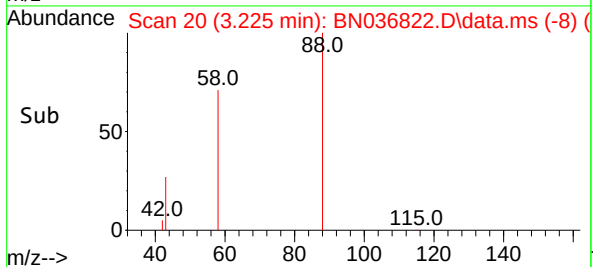
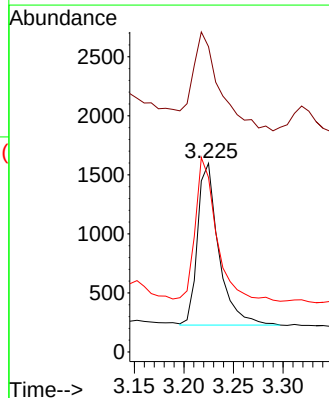
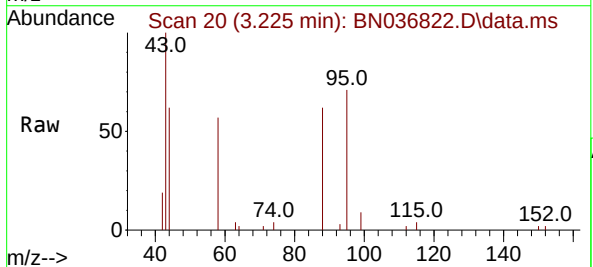
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

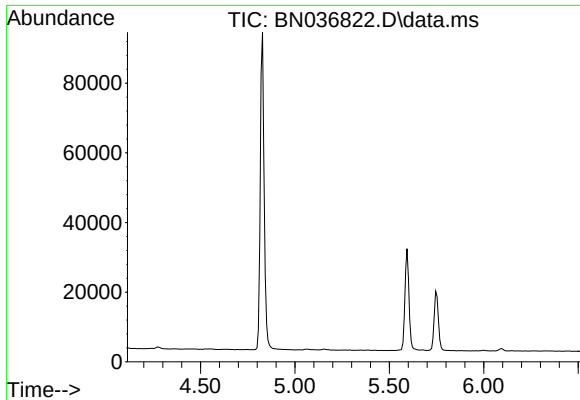
Tgt Ion:152 Resp: 2465  
Ion Ratio Lower Upper  
152 100  
150 151.3 123.7 185.5  
115 64.7 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.746 ng  
RT: 3.225 min Scan# 20  
Delta R.T. -0.014 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

Tgt Ion: 88 Resp: 2039  
Ion Ratio Lower Upper  
88 100  
43 77.5 37.8 56.8#  
58 89.8 67.4 101.2

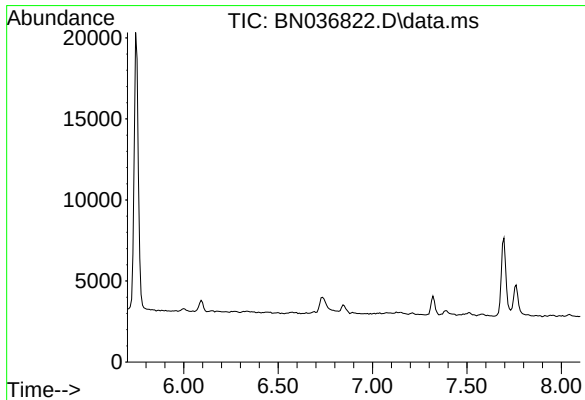
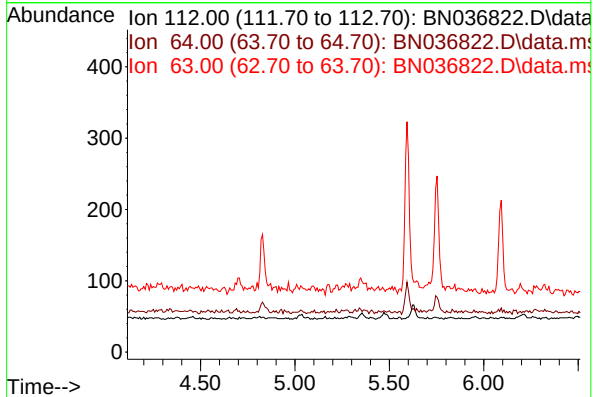




#4  
2-Fluorophenol  
Concen: 0.000 ng  
Expected RT: 5.31 min  
  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

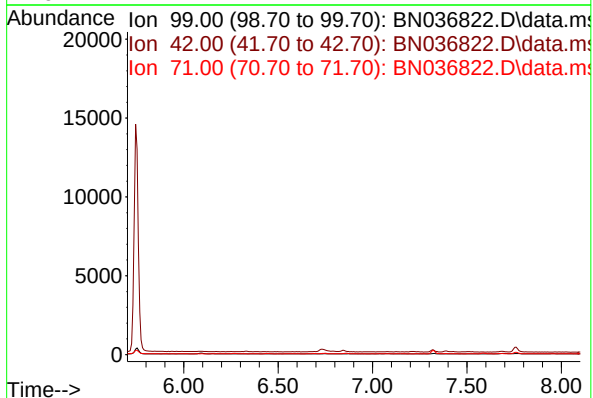
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

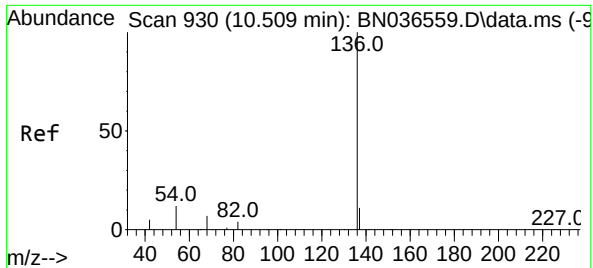
Tgt Ion: 112  
Sig Exp Ratio  
112 100  
64 66.4  
63 39.8



#5  
Phenol-d6  
Concen: 0.000 ng  
Expected RT: 6.90 min  
  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

Tgt Ion: 99  
Sig Exp Ratio  
99 100  
42 33.1  
71 42.6

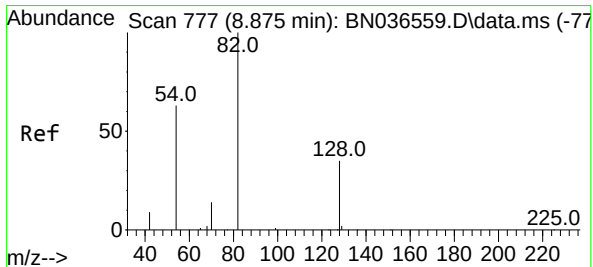
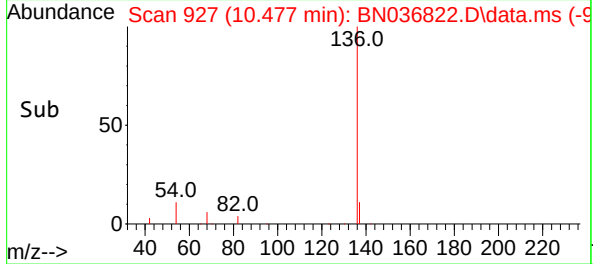
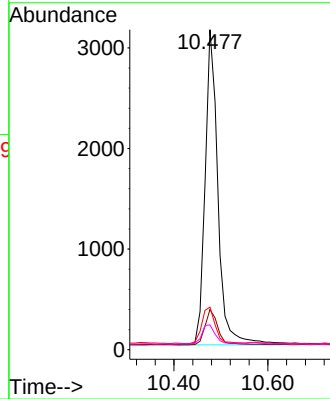
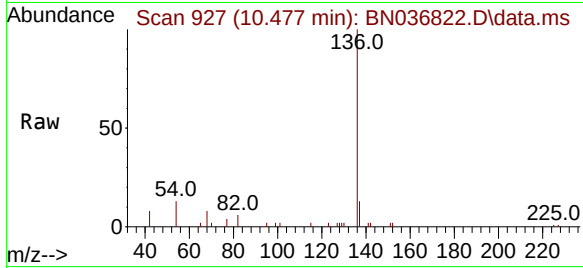




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

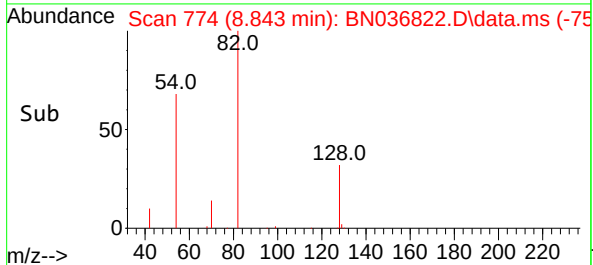
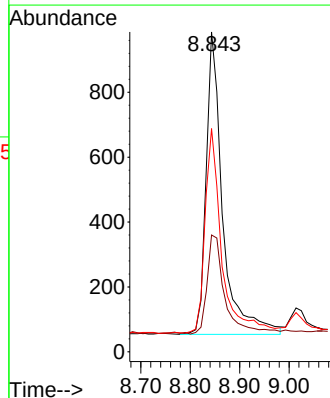
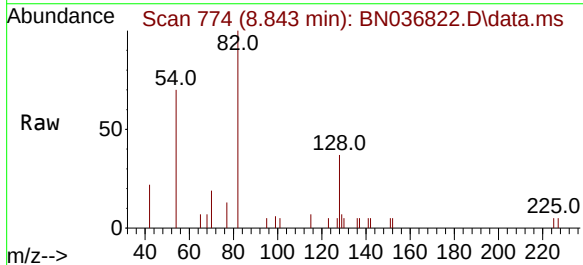
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

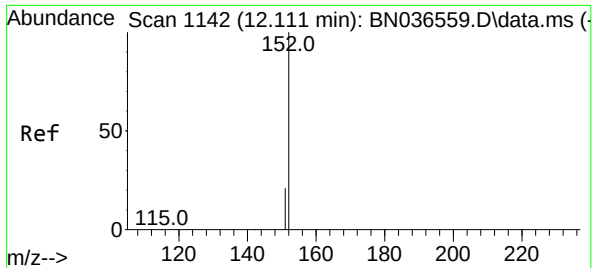
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5939  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.5  | 10.3  | 15.5  |
| 54       | 13.3  | 11.5  | 17.3  |
| 68       | 7.8   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.335 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 2165  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 36.5  | 30.6  | 45.8  |
| 54       | 69.8  | 52.2  | 78.4  |

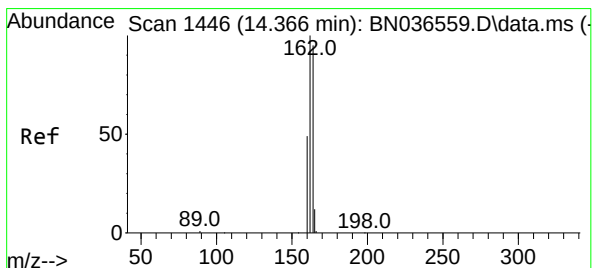
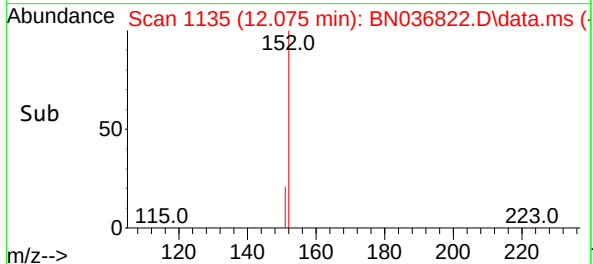
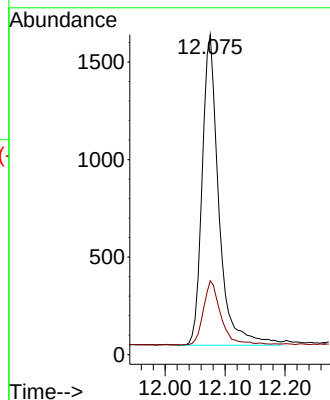
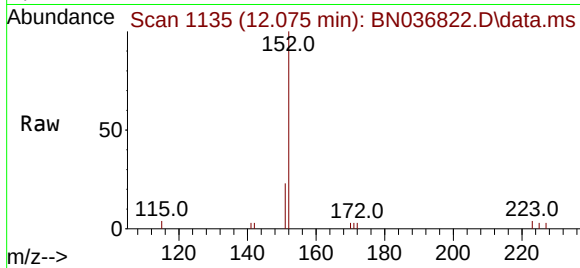




#11  
2-Methylnaphthalene-d10  
Concen: 0.348 ng  
RT: 12.075 min Scan# 1142  
Delta R.T. -0.036 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

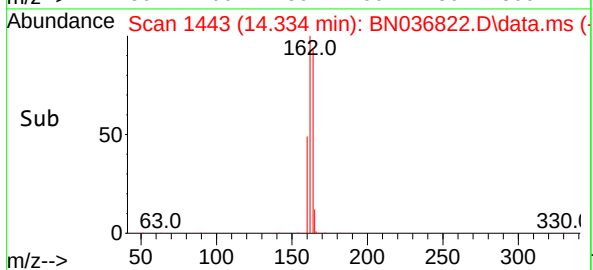
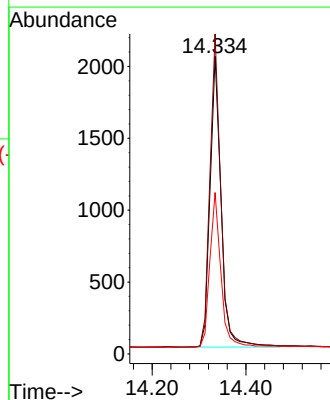
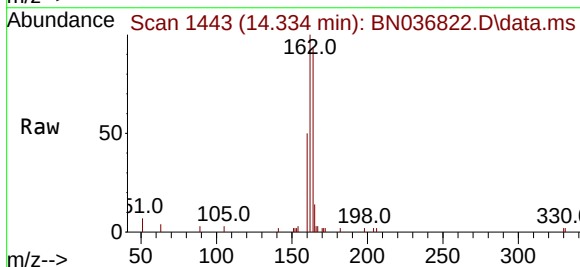
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

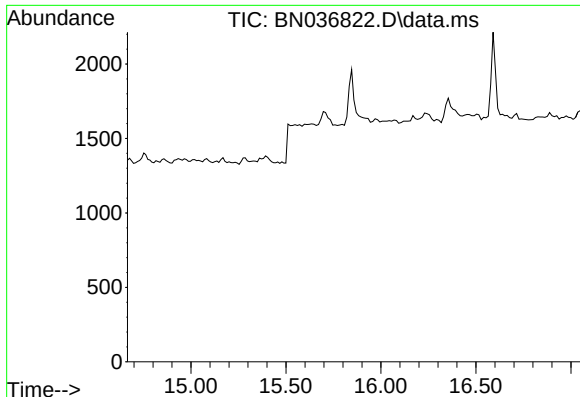
Tgt Ion:152 Resp: 3075  
Ion Ratio Lower Upper  
152 100  
151 21.5 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.032 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

Tgt Ion:164 Resp: 3300  
Ion Ratio Lower Upper  
164 100  
162 107.5 84.2 126.2  
160 54.2 42.2 63.2

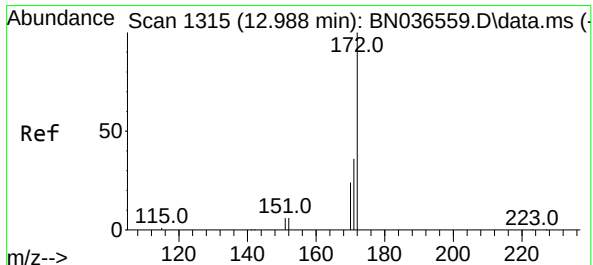
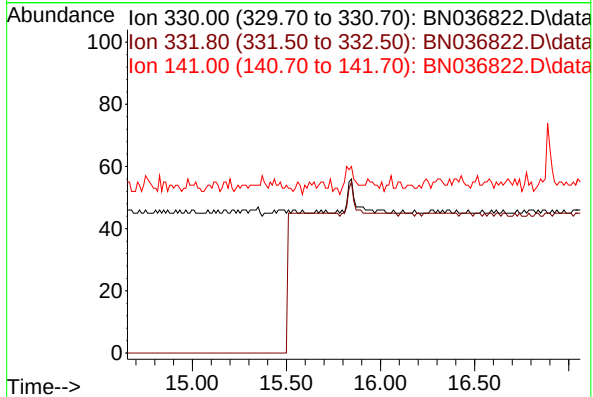




#14  
2,4,6-Tribromophenol  
Concen: 0.000 ng  
Expected RT: 15.86 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

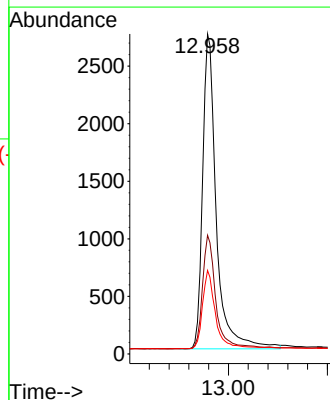
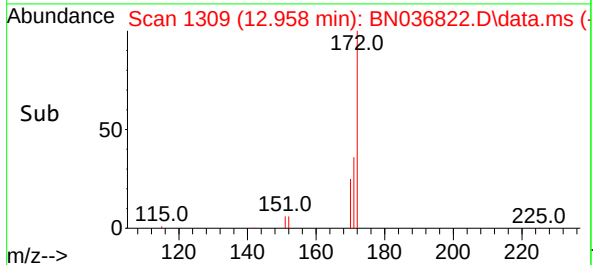
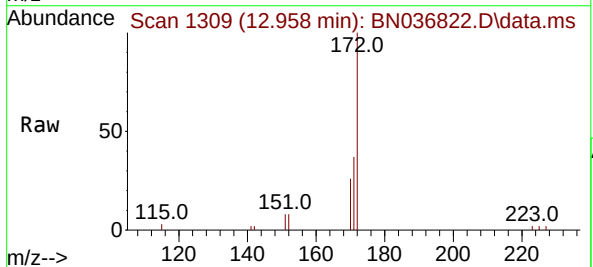
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

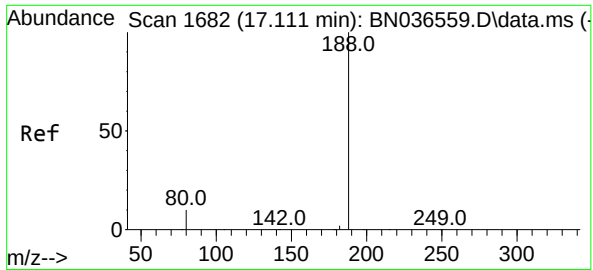
Tgt Ion: 330  
Sig Exp Ratio  
330 100  
332 94.0  
141 54.3



#15  
2-Fluorobiphenyl  
Concen: 0.351 ng  
RT: 12.958 min Scan# 1309  
Delta R.T. -0.030 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

Tgt Ion: 172 Resp: 6746  
Ion Ratio Lower Upper  
172 100  
171 37.1 29.5 44.3  
170 26.1 20.2 30.4

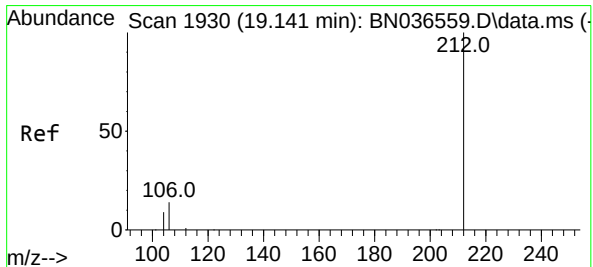
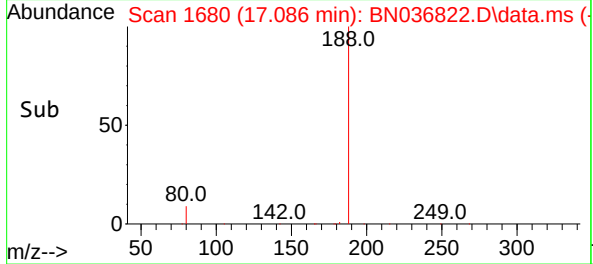
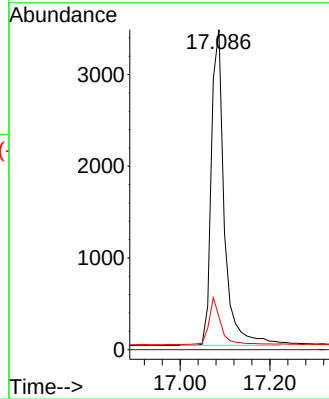
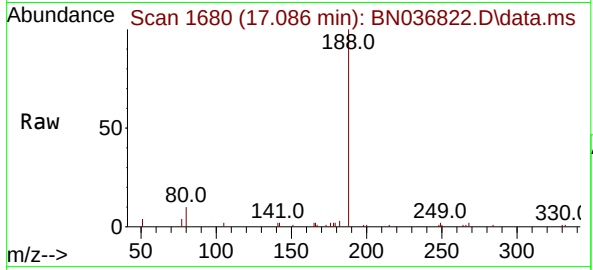




#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1680  
Delta R.T. -0.025 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

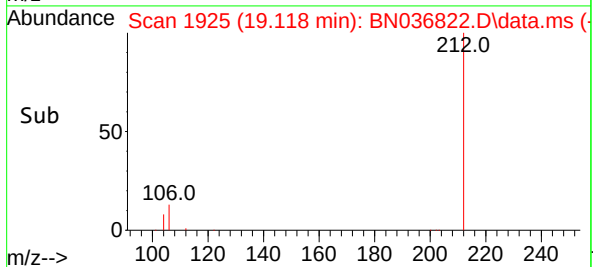
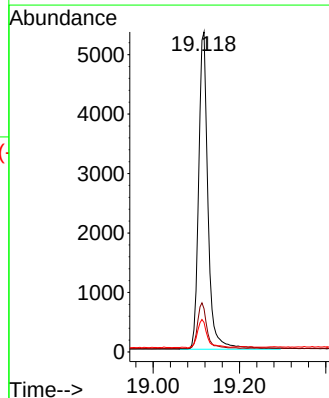
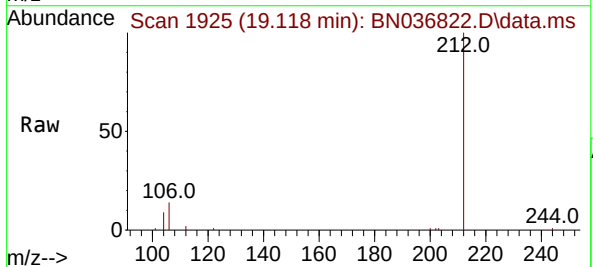
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

Tgt Ion:188 Resp: 6930  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 10.2 8.8 13.2

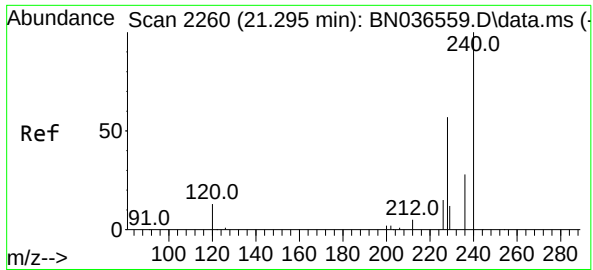


#27  
Fluoranthene-d10  
Concen: 0.452 ng  
RT: 19.118 min Scan# 1925  
Delta R.T. -0.023 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

Tgt Ion:212 Resp: 8021  
Ion Ratio Lower Upper  
212 100  
106 14.6 11.8 17.6  
104 9.6 7.3 10.9







#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 21

Delta R.T. -0.018 min

Lab File: BN036822.D

Acq: 03 Apr 2025 14:49

Instrument :

BNA\_N

ClientSampleId :

IW-02-55-040125

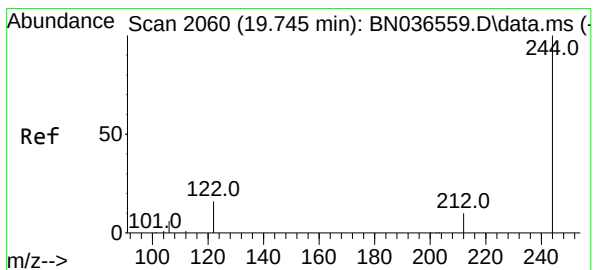
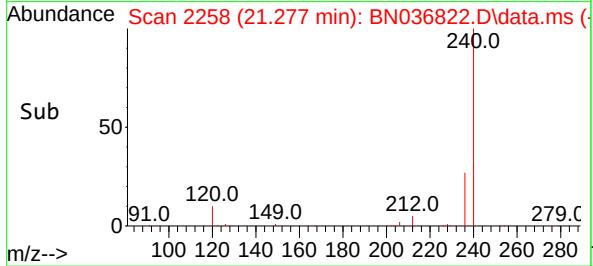
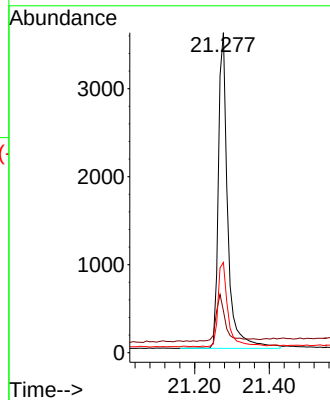
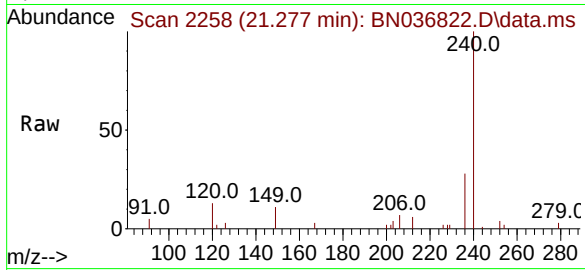
Tgt Ion:240 Resp: 6224

Ion Ratio Lower Upper

240 100

120 13.1 14.6 22.0#

236 28.2 24.1 36.1



#31

Terphenyl-d14

Concen: 0.401 ng

RT: 19.717 min Scan# 2054

Delta R.T. -0.028 min

Lab File: BN036822.D

Acq: 03 Apr 2025 14:49

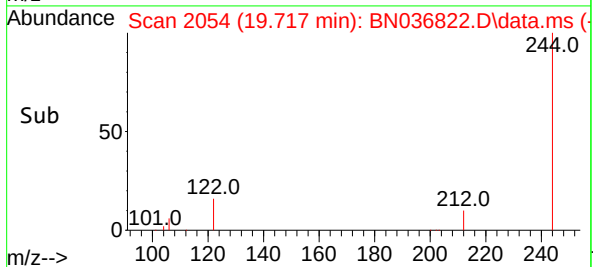
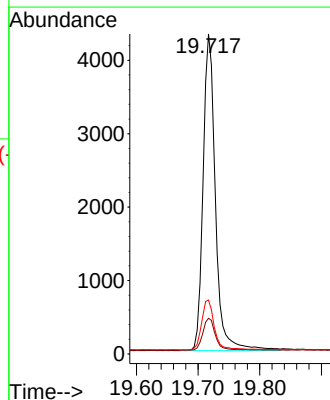
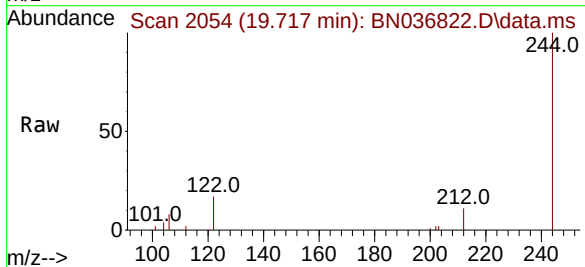
Tgt Ion:244 Resp: 5985

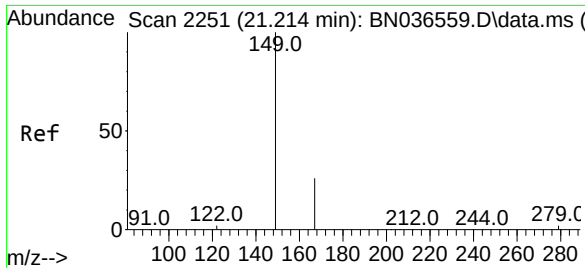
Ion Ratio Lower Upper

244 100

212 11.1 9.6 14.4

122 16.8 13.9 20.9

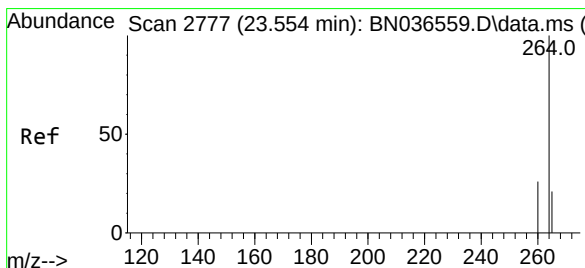
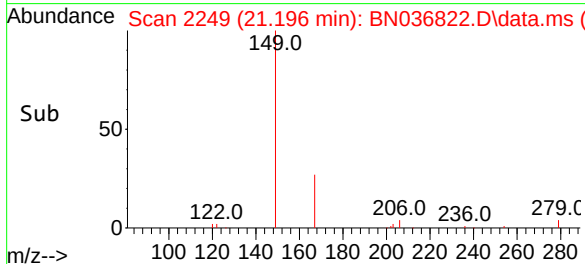
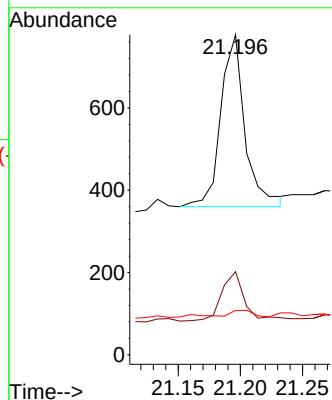
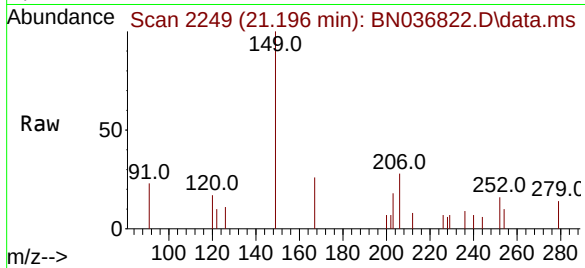




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.037 ng  
RT: 21.196 min Scan# 2119  
Delta R.T. -0.018 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

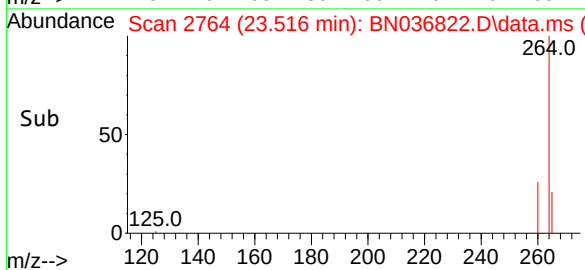
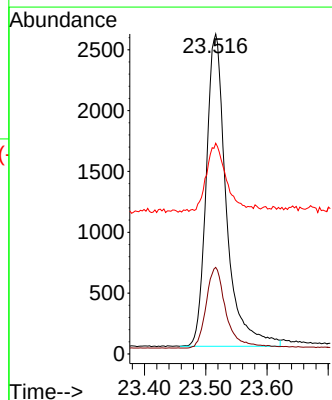
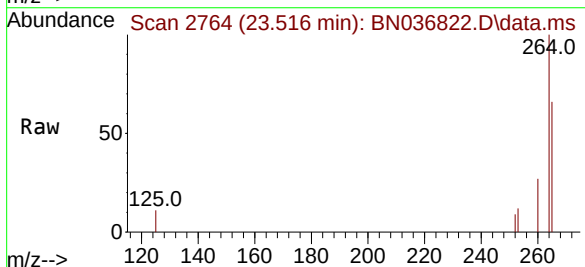
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125

Tgt Ion:149 Resp: 566  
Ion Ratio Lower Upper  
149 100  
167 27.7 20.7 31.1  
279 3.5 3.6 5.4#



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2764  
Delta R.T. -0.038 min  
Lab File: BN036822.D  
Acq: 03 Apr 2025 14:49

Tgt Ion:264 Resp: 5856  
Ion Ratio Lower Upper  
264 100  
260 27.0 22.6 33.8  
265 65.9 88.1 132.1#



## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: | 04/01/25       |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  | 04/01/25       |
| Client Sample ID:  | IW-02-55-040125-FD                          | SDG No.:        | Q1697          |
| Lab Sample ID:     | Q1697-04                                    | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                                  | % Solid:        | 0              |
| Sample Wt/Vol:     | 970      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 |
| BN036823.D        | 1         | 04/02/25 14:40 | 04/03/25 15:25 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.58  |           | 0.070               | 0.21       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.27  |           | 30 (20) - 150 (139) | 66%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.43  |           | 30 (30) - 150 (150) | 107%       | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.26  |           | 30 (27) - 130 (154) | 65%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.30  |           | 30 (25) - 130 (149) | 75%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.39  |           | 30 (54) - 130 (175) | 98%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2220  | 7.695     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5350  | 10.477    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2810  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 5770  | 17.086    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 4950  | 21.277    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 4670  | 23.513    |                     |            |          |

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\BN040325\  
 Data File : BN036823.D  
 Acq On : 03 Apr 2025 15:25  
 Operator : RC/JU  
 Sample : Q1697-04  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 IW-02-55-040125-FD

Quant Time: Apr 03 16:01:29 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

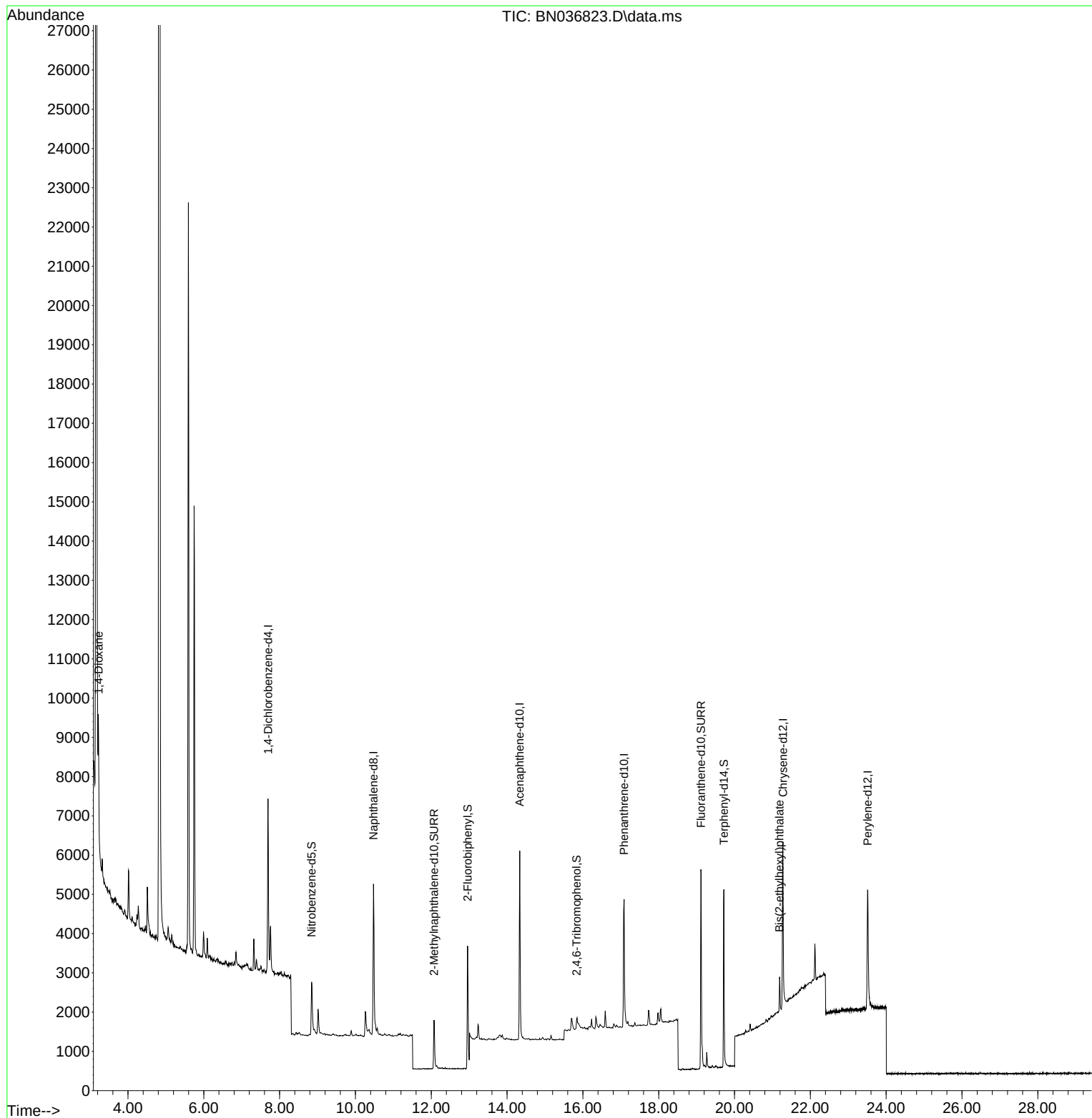
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.695  | 152  | 2219     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 5351     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10          | 14.334 | 164  | 2806     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 5772     | 0.400 | ng    | -0.02    |
| 29) Chrysene-d12              | 21.277 | 240  | 4952     | 0.400 | ng    | #-0.02   |
| 35) Perylene-d12              | 23.513 | 264  | 4672     | 0.400 | ng    | #-0.04   |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 0.000  | 112  | 0d       | 0.000 | ng    |          |
| 5) Phenol-d6                  | 0.000  | 99   | 0d       | 0.000 | ng    |          |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 1505     | 0.259 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.075 | 152  | 2107     | 0.265 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 36       | 0.028 | ng    | -0.02    |
| 15) 2-Fluorobiphenyl          | 12.958 | 172  | 4857     | 0.298 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.118 | 212  | 6350     | 0.429 | ng    | -0.02    |
| 31) Terphenyl-d14             | 19.717 | 244  | 4672     | 0.394 | ng    | -0.03    |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.225  | 88   | 1395     | 0.567 | ng    | # 67     |
| 34) Bis(2-ethylhexyl)phtha... | 21.187 | 149  | 995      | 0.081 | ng    | 94       |

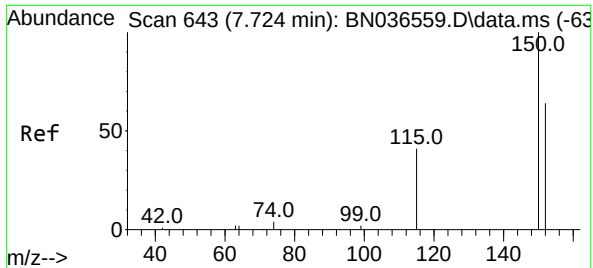
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
Data File : BN036823.D  
Acq On : 03 Apr 2025 15:25  
Operator : RC/JU  
Sample : Q1697-04  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

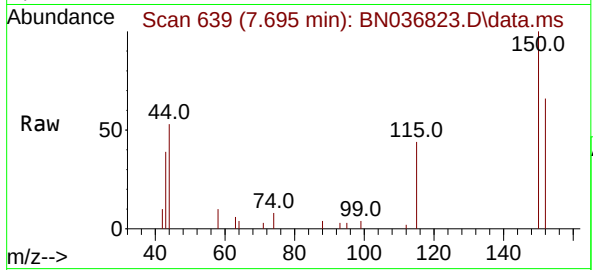
Quant Time: Apr 03 16:01:29 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration





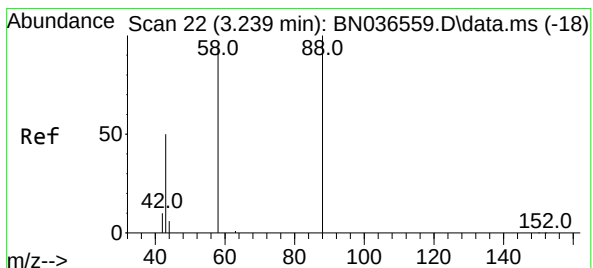
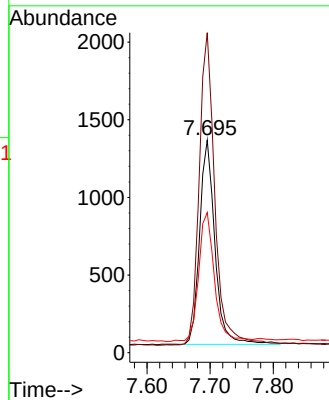
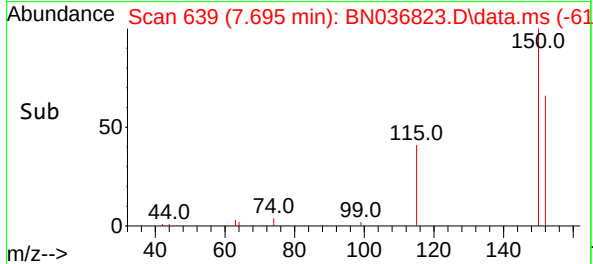
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.695 min Scan# 61  
 Delta R.T. -0.029 min  
 Lab File: BN036823.D  
 Acq: 03 Apr 2025 15:25

Instrument :  
 BNA\_N  
 ClientSampleId :  
 IW-02-55-040125-FD



Tgt Ion: 152 Resp: 2219

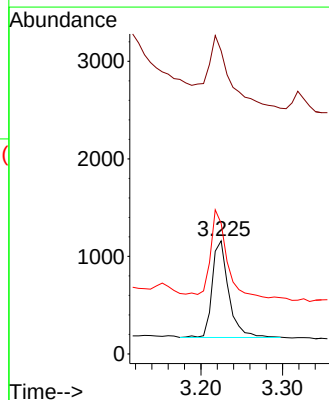
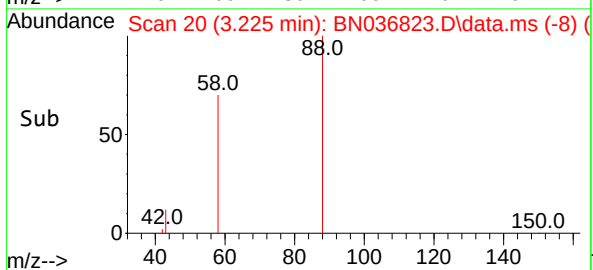
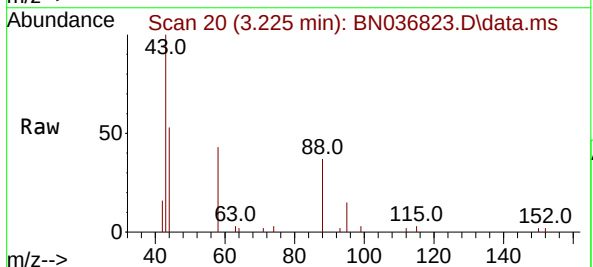
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 152 | 100   |       |       |
| 150 | 150.5 | 123.7 | 185.5 |
| 115 | 66.0  | 54.3  | 81.5  |

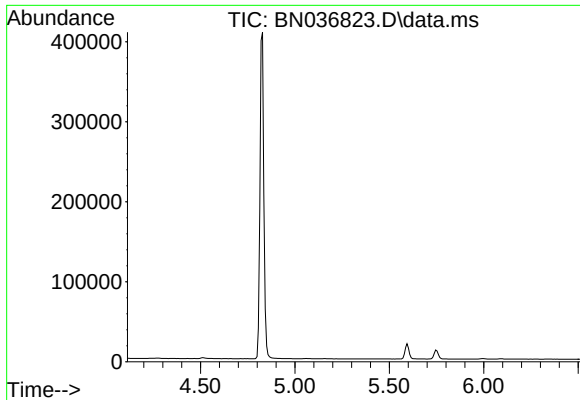


#2  
 1,4-Dioxane  
 Concen: 0.567 ng  
 RT: 3.225 min Scan# 20  
 Delta R.T. -0.014 min  
 Lab File: BN036823.D  
 Acq: 03 Apr 2025 15:25

Tgt Ion: 88 Resp: 1395

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 88  | 100   |       |       |
| 43  | 105.1 | 37.8  | 56.8  |
| 58  | 87.5  | 67.4  | 101.2 |

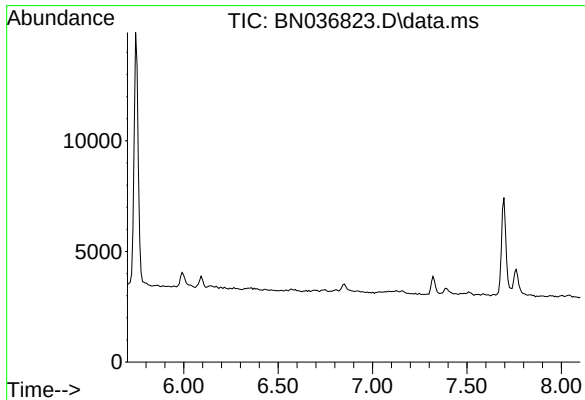
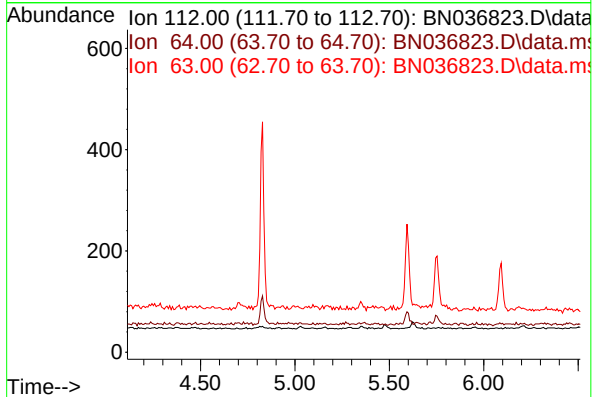




#4  
2-Fluorophenol  
Concen: 0.000 ng  
Expected RT: 5.31 min  
  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

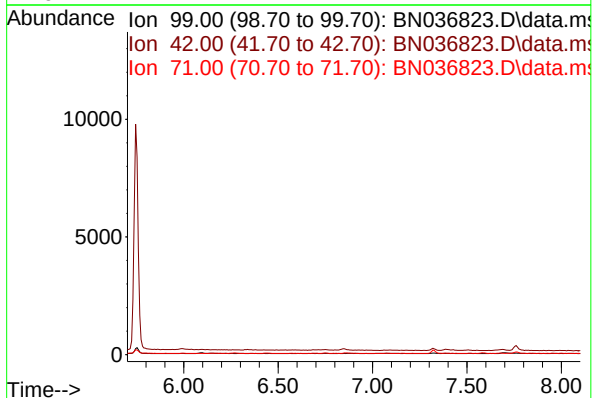
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

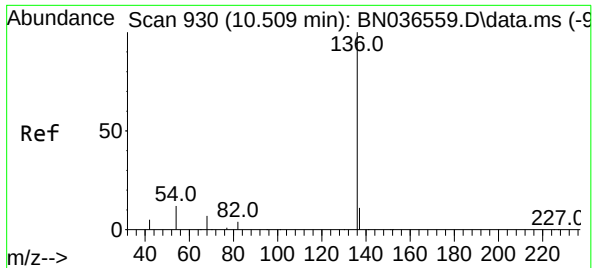
Tgt Ion: 112  
Sig Exp Ratio  
112 100  
64 66.4  
63 39.8



#5  
Phenol-d6  
Concen: 0.000 ng  
Expected RT: 6.90 min  
  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

Tgt Ion: 99  
Sig Exp Ratio  
99 100  
42 33.1  
71 42.6

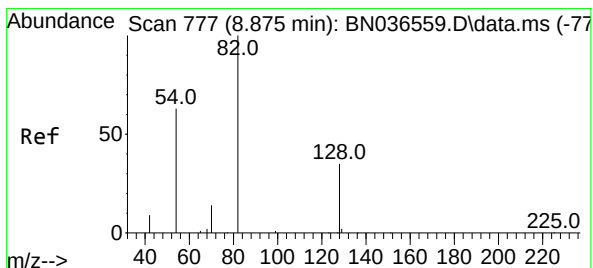
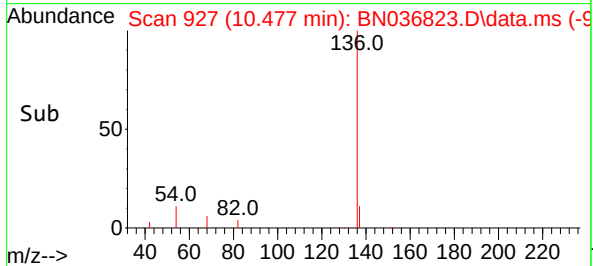
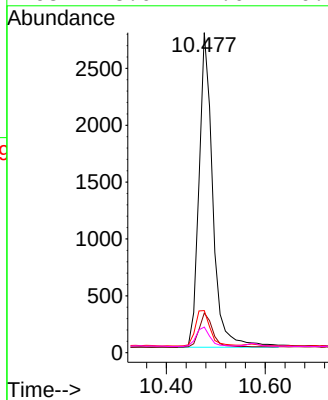
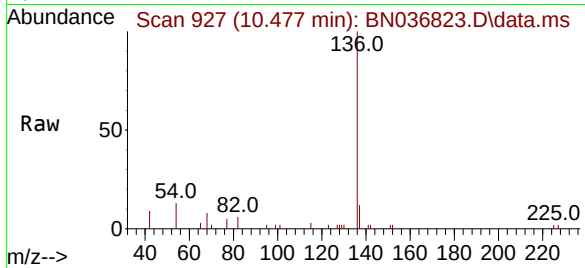




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

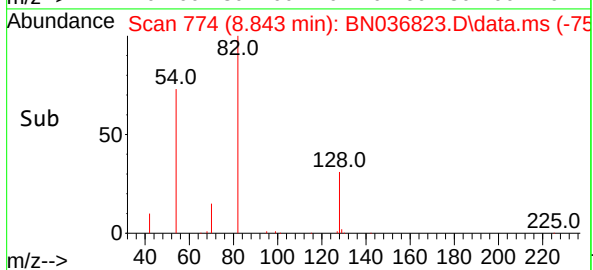
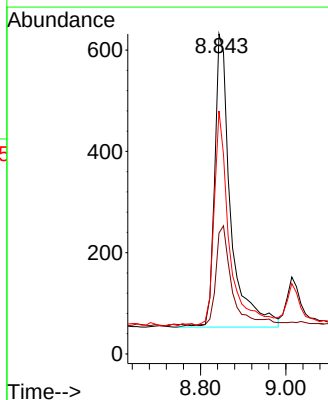
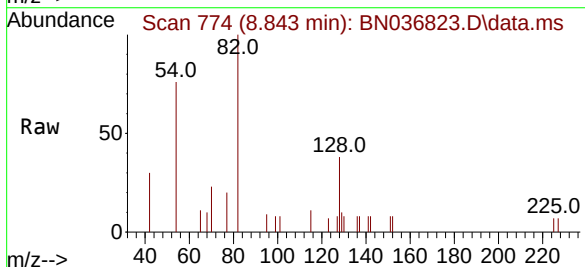
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5351  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.4  | 10.3  | 15.5  |
| 54       | 13.1  | 11.5  | 17.3  |
| 68       | 8.0   | 7.0   | 10.4  |

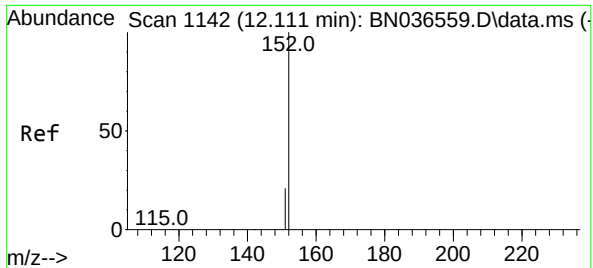


#8  
Nitrobenzene-d5  
Concen: 0.259 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1505  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 37.8  | 30.6  | 45.8  |
| 54       | 75.9  | 52.2  | 78.4  |



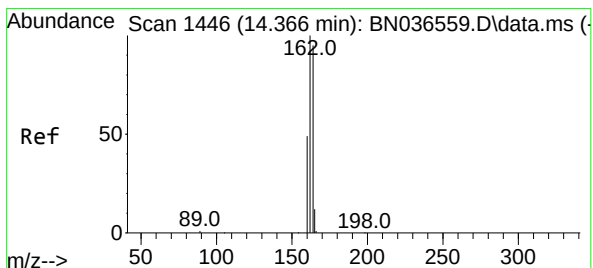
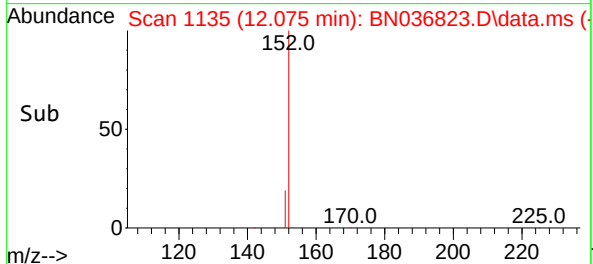
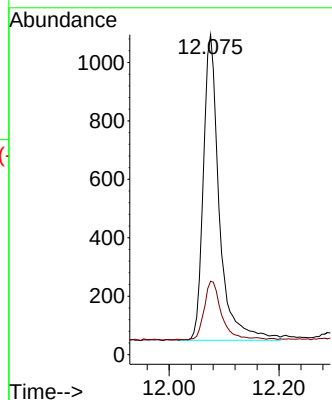
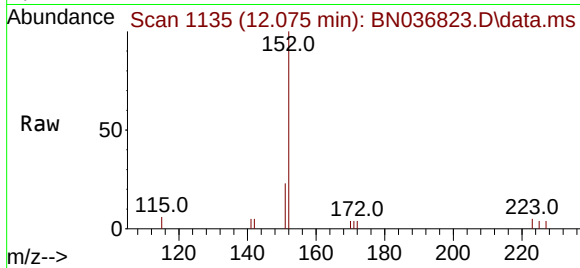




#11  
2-Methylnaphthalene-d10  
Concen: 0.265 ng  
RT: 12.075 min Scan# 1142  
Delta R.T. -0.035 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

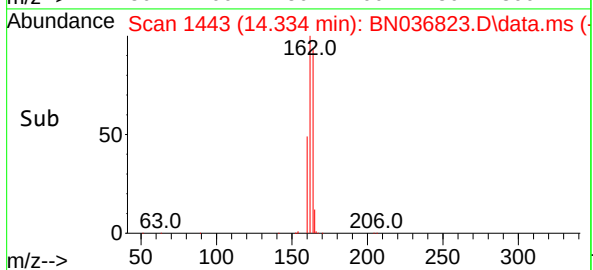
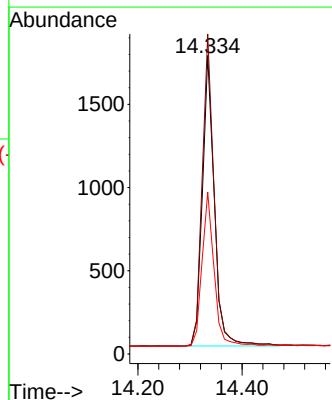
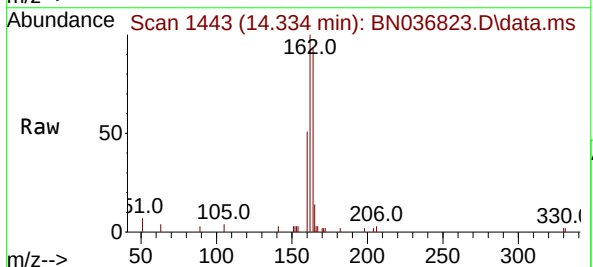
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

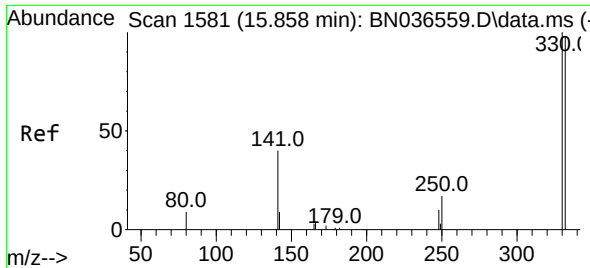
Tgt Ion:152 Resp: 2107  
Ion Ratio Lower Upper  
152 100  
151 20.4 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.032 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

Tgt Ion:164 Resp: 2806  
Ion Ratio Lower Upper  
164 100  
162 107.3 84.2 126.2  
160 54.3 42.2 63.2

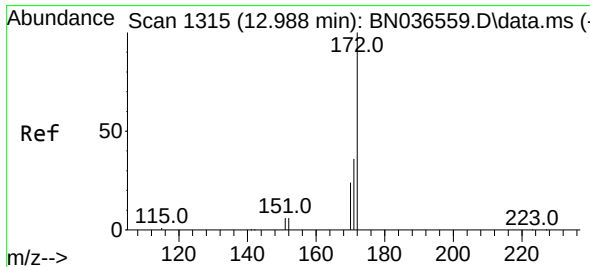
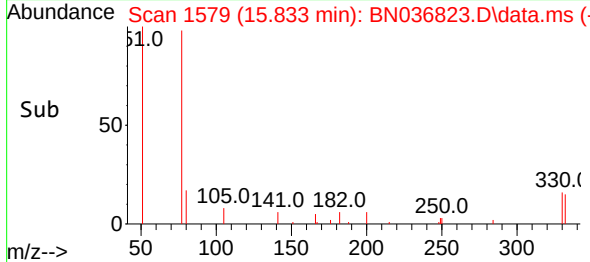
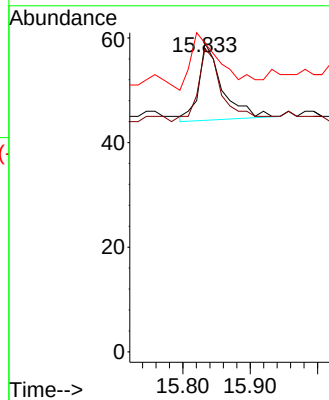
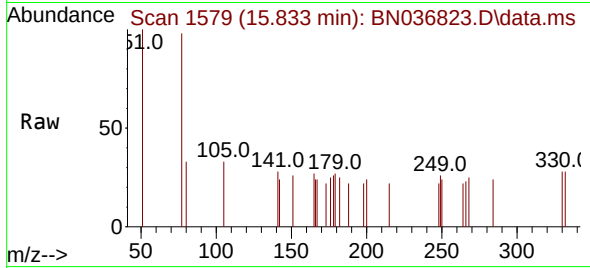




#14  
2,4,6-Tribromophenol  
Concen: 0.028 ng  
RT: 15.833 min Scan# 11  
Delta R.T. -0.025 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

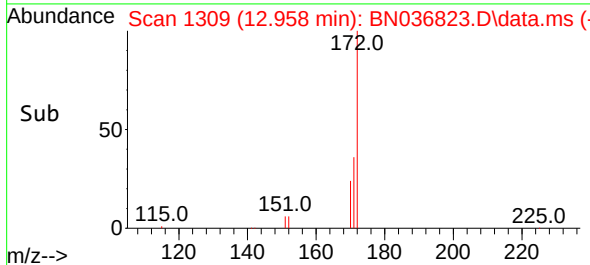
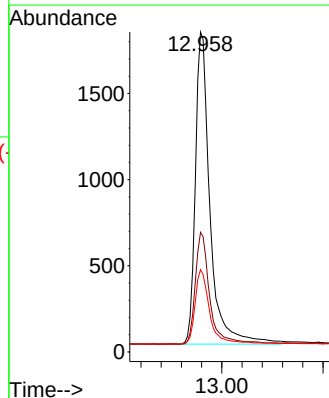
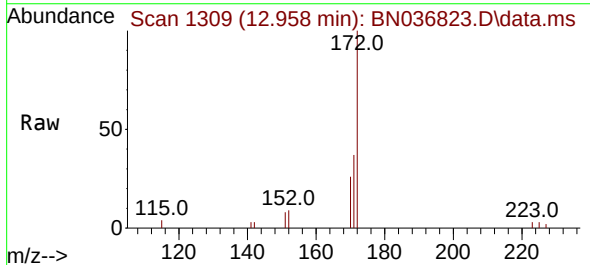
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

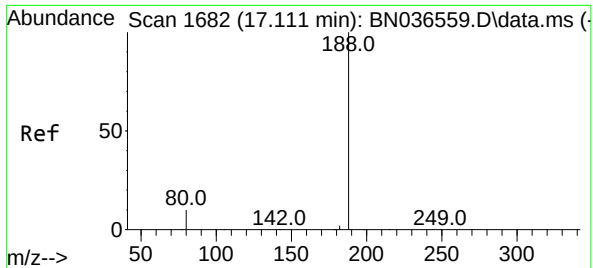
Tgt Ion:330 Resp: 36  
Ion Ratio Lower Upper  
330 100  
332 97.2 75.2 112.8  
141 97.2 43.4 65.2#



#15  
2-Fluorobiphenyl  
Concen: 0.298 ng  
RT: 12.958 min Scan# 1309  
Delta R.T. -0.030 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

Tgt Ion:172 Resp: 4857  
Ion Ratio Lower Upper  
172 100  
171 37.4 29.5 44.3  
170 25.7 20.2 30.4

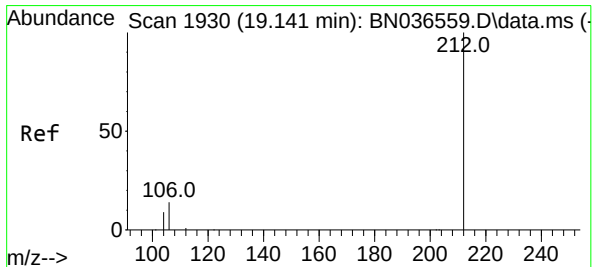
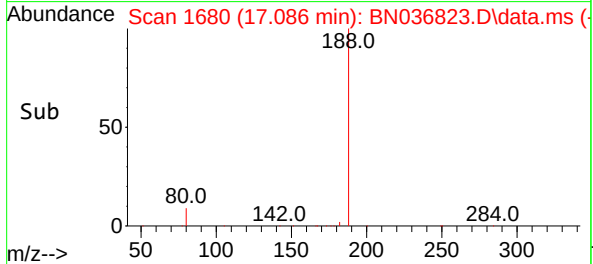
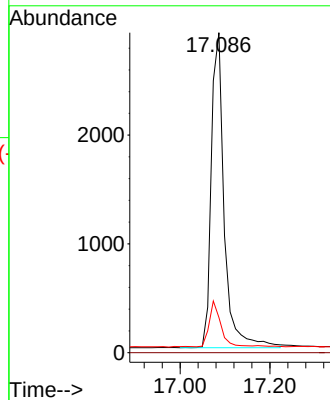
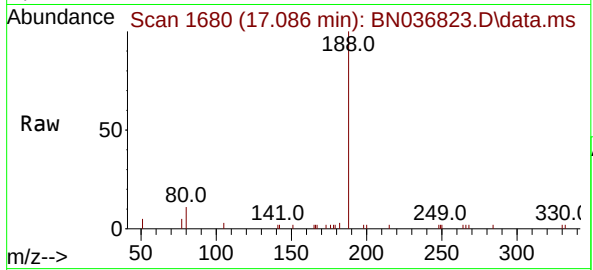




#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1680  
Delta R.T. -0.025 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

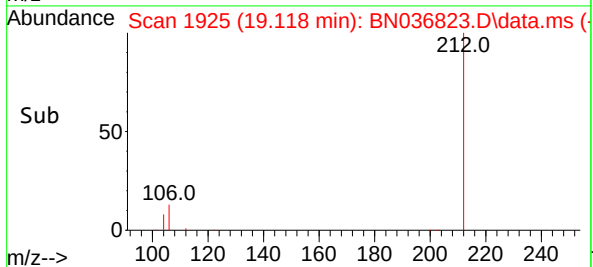
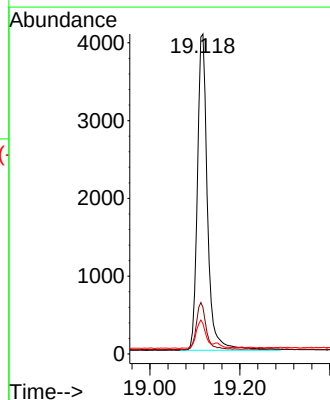
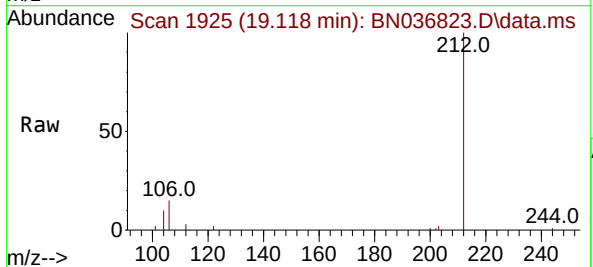
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

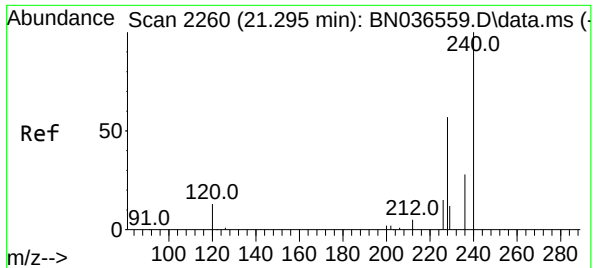
Tgt Ion:188 Resp: 5772  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.0 8.8 13.2



#27  
Fluoranthene-d10  
Concen: 0.429 ng  
RT: 19.118 min Scan# 1925  
Delta R.T. -0.023 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

Tgt Ion:212 Resp: 6350  
Ion Ratio Lower Upper  
212 100  
106 14.7 11.8 17.6  
104 8.6 7.3 10.9

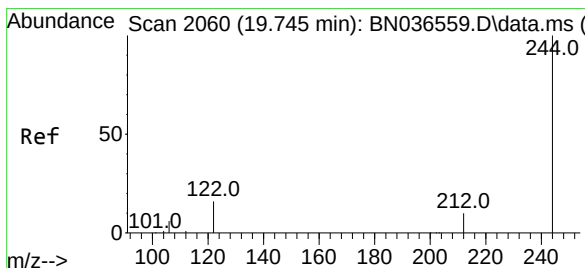
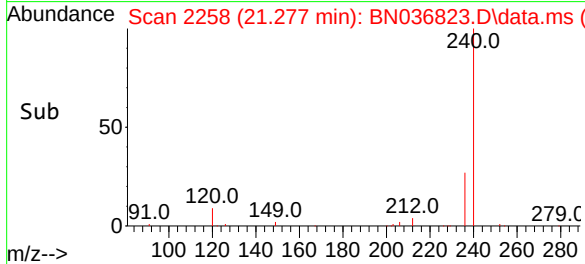
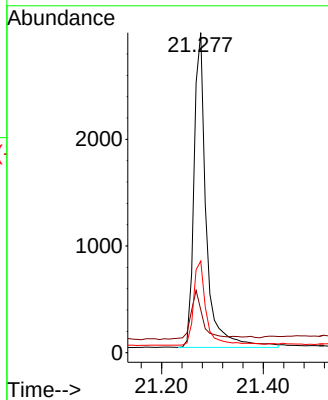
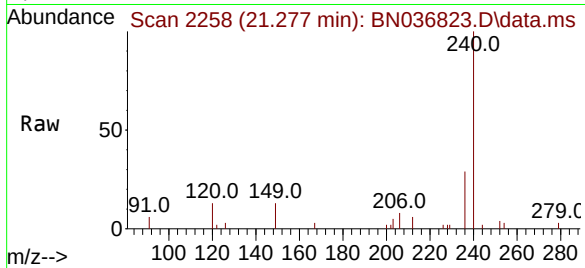




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

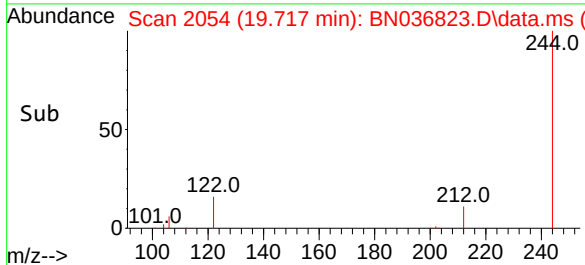
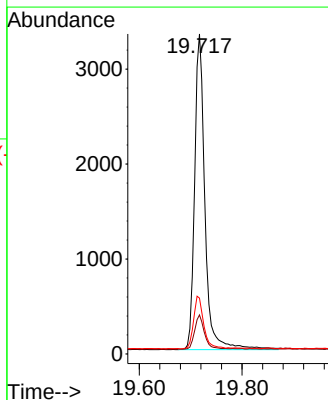
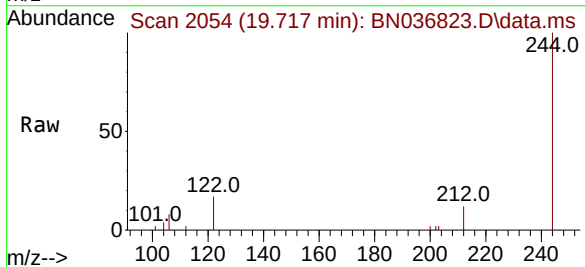
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

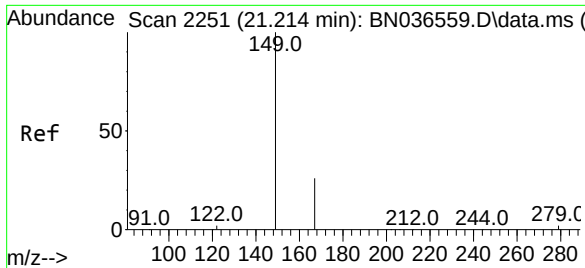
Tgt Ion:240 Resp: 4952  
Ion Ratio Lower Upper  
240 100  
120 13.4 14.6 22.0#  
236 28.6 24.1 36.1



#31  
Terphenyl-d14  
Concen: 0.394 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.028 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

Tgt Ion:244 Resp: 4672  
Ion Ratio Lower Upper  
244 100  
212 12.2 9.6 14.4  
122 17.5 13.9 20.9

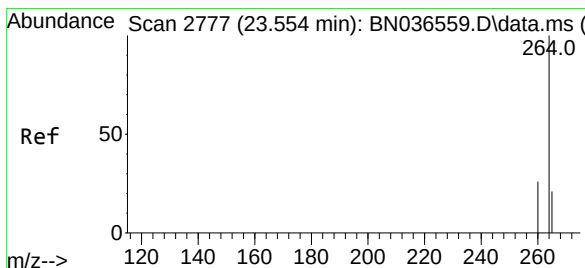
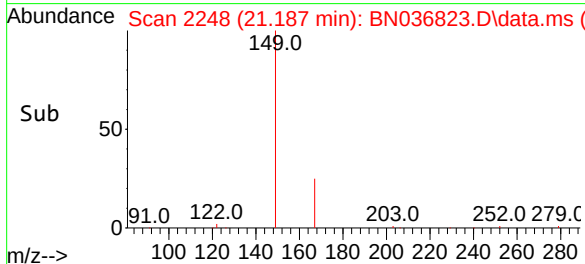
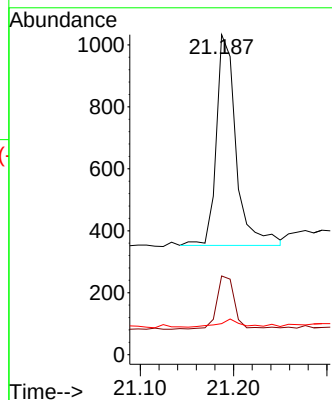
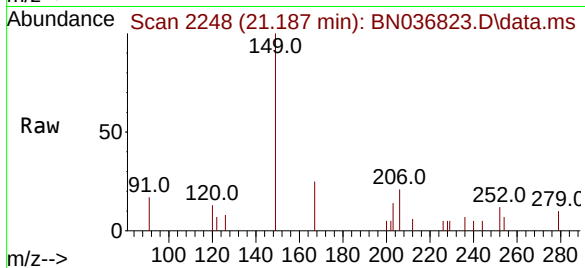




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.081 ng  
RT: 21.187 min Scan# 2118  
Delta R.T. -0.027 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

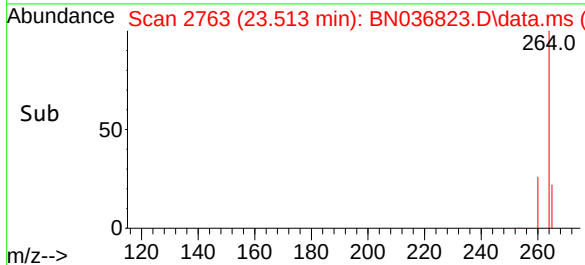
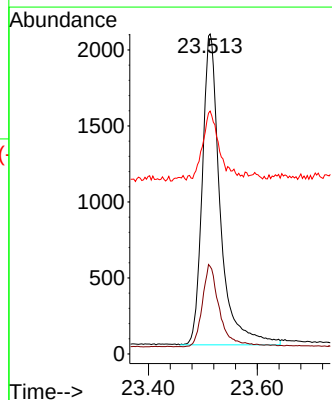
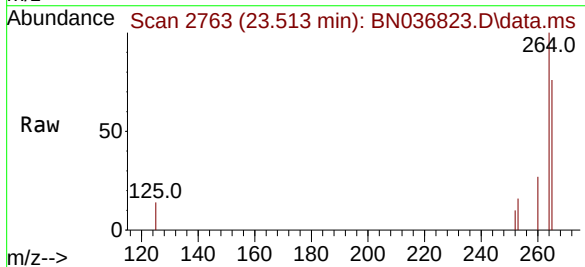
Instrument :  
BNA\_N  
ClientSampleId :  
IW-02-55-040125-FD

Tgt Ion:149 Resp: 995  
Ion Ratio Lower Upper  
149 100  
167 22.2 20.7 31.1  
279 4.1 3.6 5.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2763  
Delta R.T. -0.041 min  
Lab File: BN036823.D  
Acq: 03 Apr 2025 15:25

Tgt Ion:264 Resp: 4672  
Ion Ratio Lower Upper  
264 100  
260 27.4 22.6 33.8  
265 75.9 88.1 132.1#



## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: | 04/01/25       |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  | 04/01/25       |
| Client Sample ID:  | IW-03-55-040125                             | SDG No.:        | Q1697          |
| Lab Sample ID:     | Q1697-05                                    | Matrix:         | Water          |
| Analytical Method: | SW8270ESIM                                  | % Solid:        | 0              |
| Sample Wt/Vol:     | 980      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 |
| BN036824.D        | 1         | 04/02/25 14:40 | 04/03/25 16:01 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.62  |           | 0.070               | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.31  |           | 30 (20) - 150 (139) | 77%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.46  |           | 30 (30) - 150 (150) | 115%       | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.30  |           | 30 (27) - 130 (154) | 75%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.32  |           | 30 (25) - 130 (149) | 81%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.53  | *         | 30 (54) - 130 (175) | 133%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2110  | 7.695     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5010  | 10.477    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2860  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 6080  | 17.074    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 5690  | 21.277    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 5490  | 23.513    |                     |            |          |

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\BN040325\  
 Data File : BN036824.D  
 Acq On : 03 Apr 2025 16:01  
 Operator : RC/JU  
 Sample : Q1697-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 IW-03-55-040125

Quant Time: Apr 03 17:05:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

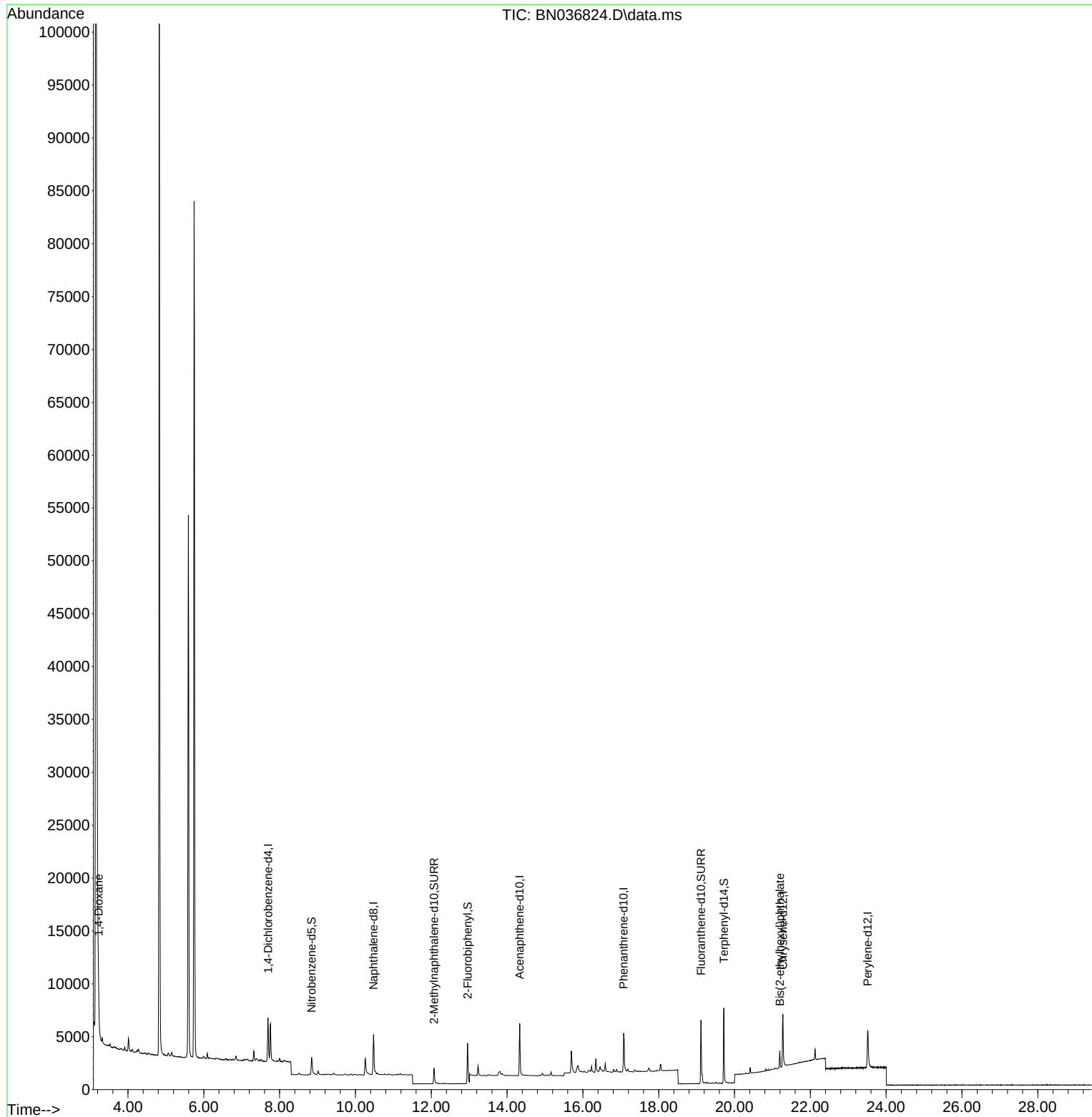
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.695  | 152  | 2109     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 5014     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10          | 14.334 | 164  | 2862     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.074 | 188  | 6078     | 0.400 | ng    | #-0.04   |
| 29) Chrysene-d12              | 21.277 | 240  | 5687     | 0.400 | ng    | #-0.02   |
| 35) Perylene-d12              | 23.513 | 264  | 5490     | 0.400 | ng    | #-0.04   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 0.000  | 112  | 0d       | 0.000 | ng    |          |
| 5) Phenol-d6                  | 0.000  | 99   | 0d       | 0.000 | ng    |          |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 1641     | 0.301 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.075 | 152  | 2307     | 0.309 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 0.000  | 330  | 0d       | 0.000 | ng    |          |
| 15) 2-Fluorobiphenyl          | 12.958 | 172  | 5380     | 0.323 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.113 | 212  | 7184     | 0.461 | ng    | -0.03    |
| 31) Terphenyl-d14             | 19.717 | 244  | 7267     | 0.533 | ng    | -0.03    |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.225  | 88   | 1420     | 0.607 | ng    | # 68     |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 1760     | 0.125 | ng    | 98       |
| -----                         |        |      |          |       |       |          |

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

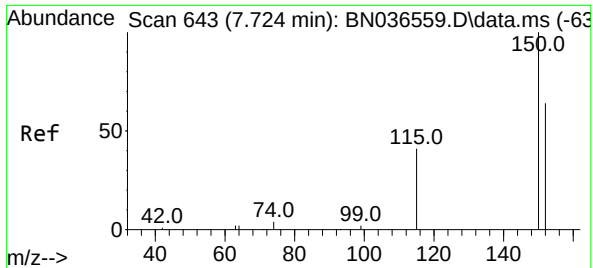
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Data File : BN036824.D  
Acq On : 03 Apr 2025 16:01  
Operator : RC/JU  
Sample : Q1697-05  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

Quant Time: Apr 03 17:05:05 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

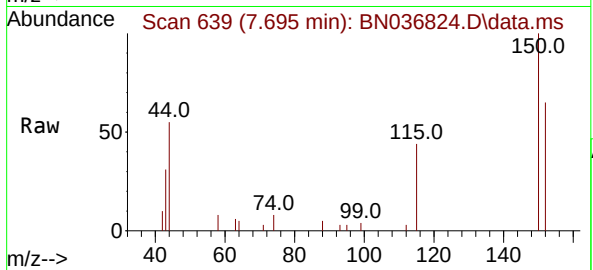




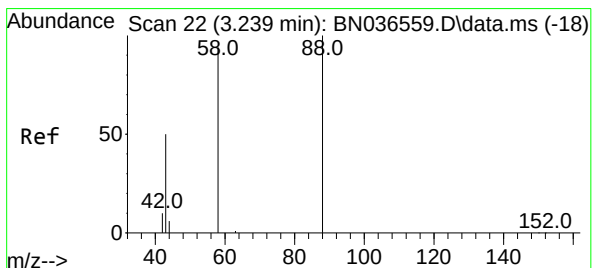
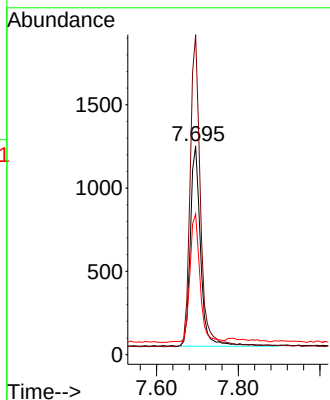
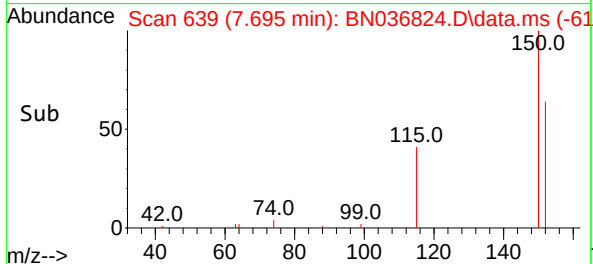


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 61  
Delta R.T. -0.029 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

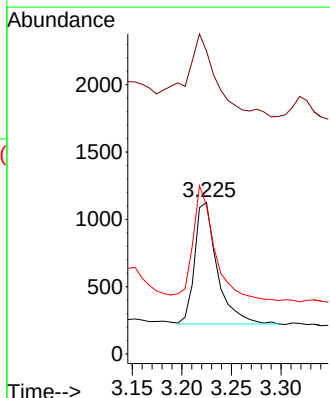
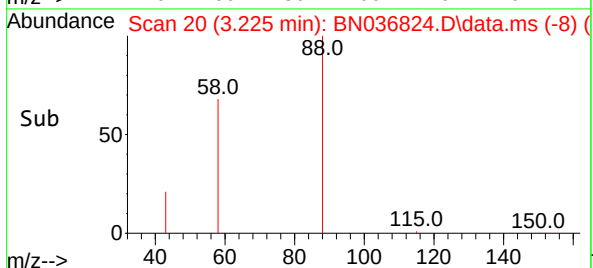
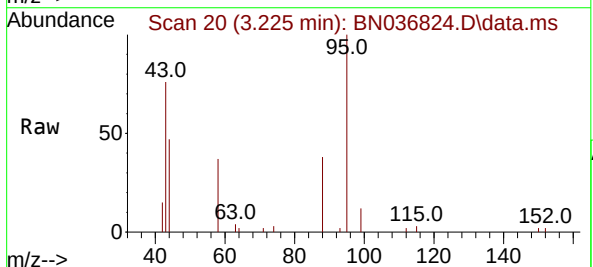


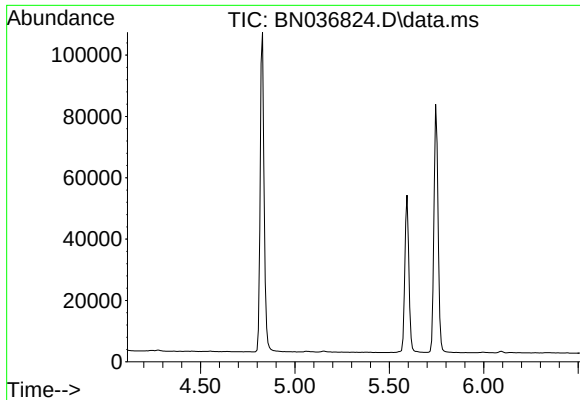
Tgt Ion:152 Resp: 2109  
Ion Ratio Lower Upper  
152 100  
150 153.3 123.7 185.5  
115 67.4 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.607 ng  
RT: 3.225 min Scan# 20  
Delta R.T. -0.014 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

Tgt Ion: 88 Resp: 1420  
Ion Ratio Lower Upper  
88 100  
43 95.4 37.8 56.8#  
58 92.4 67.4 101.2

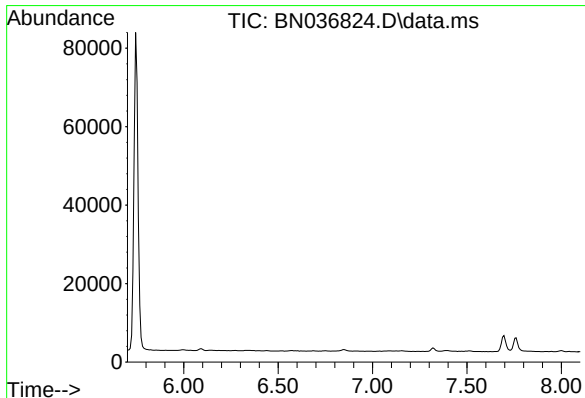
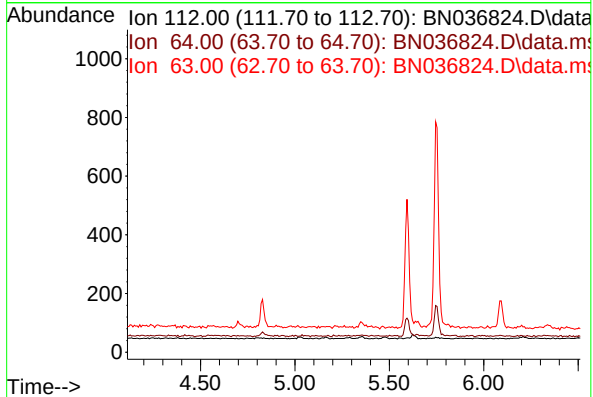




#4  
2-Fluorophenol  
Concen: 0.000 ng  
Expected RT: 5.31 min  
  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

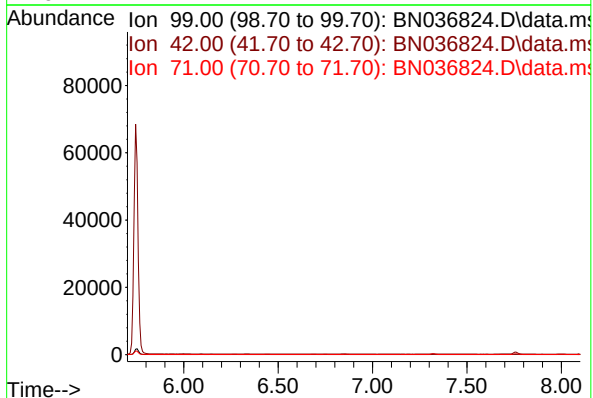
Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

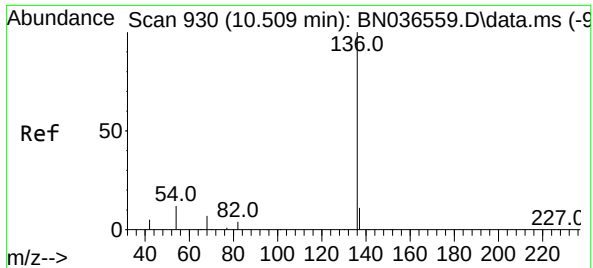
Tgt Ion: 112  
Sig Exp Ratio  
112 100  
64 66.4  
63 39.8



#5  
Phenol-d6  
Concen: 0.000 ng  
Expected RT: 6.90 min  
  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

Tgt Ion: 99  
Sig Exp Ratio  
99 100  
42 33.1  
71 42.6

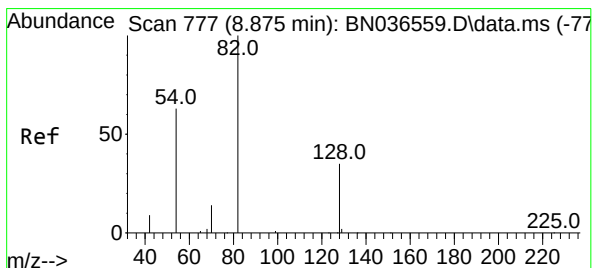
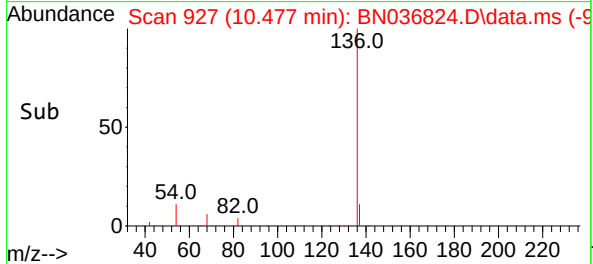
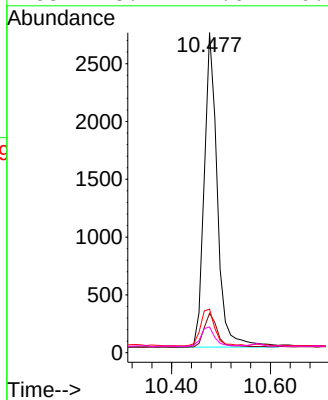
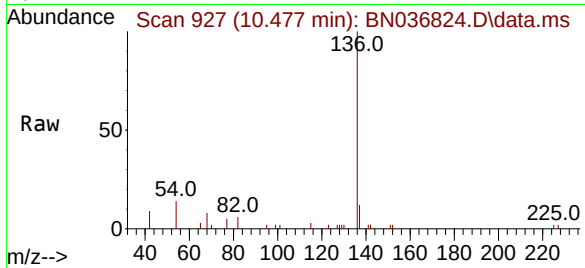




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

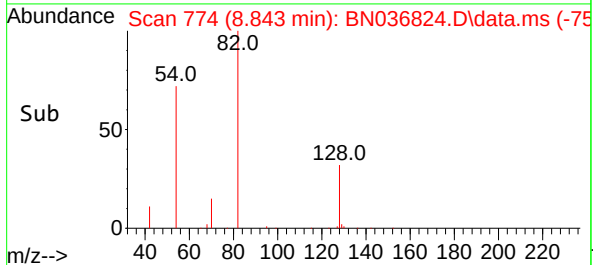
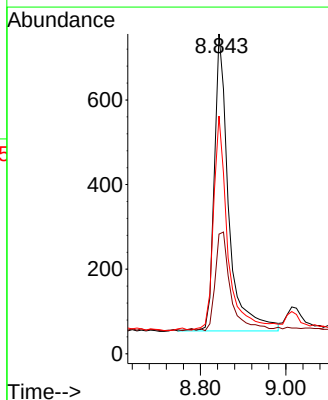
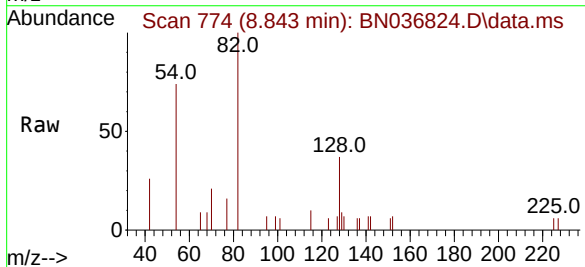
Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

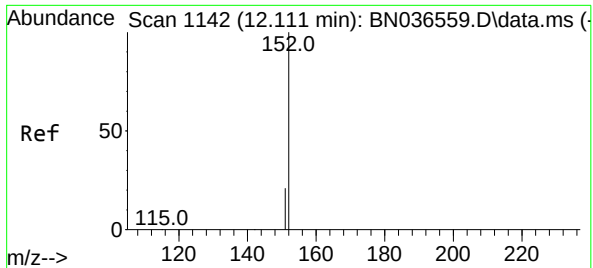
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5014  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.3  | 10.3  | 15.5  |
| 54       | 13.6  | 11.5  | 17.3  |
| 68       | 8.1   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.301 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1641  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 37.4  | 30.6  | 45.8  |
| 54       | 74.3  | 52.2  | 78.4  |

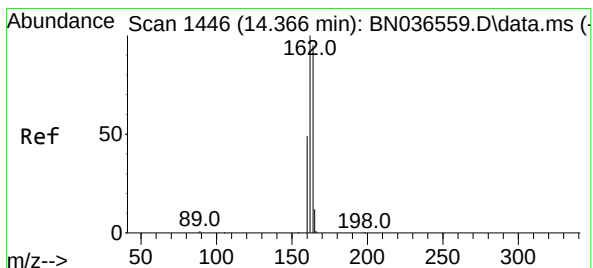
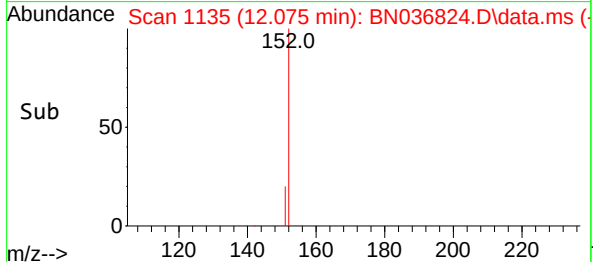
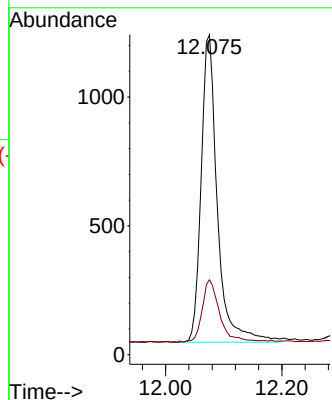
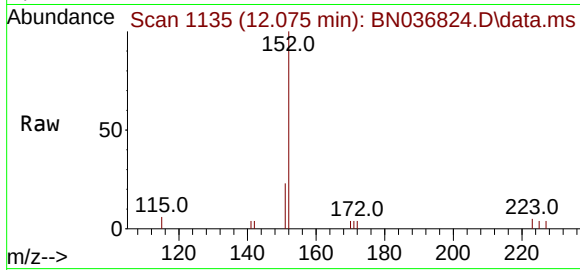




#11  
2-Methylnaphthalene-d10  
Concen: 0.309 ng  
RT: 12.075 min Scan# 1142  
Delta R.T. -0.035 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

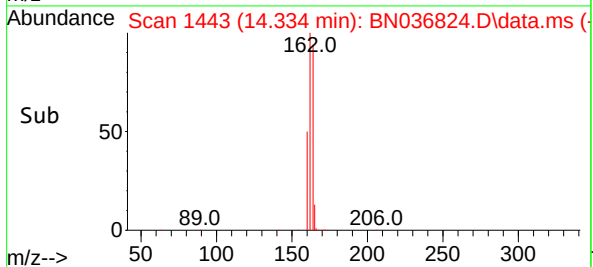
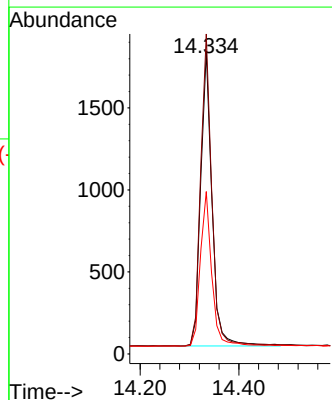
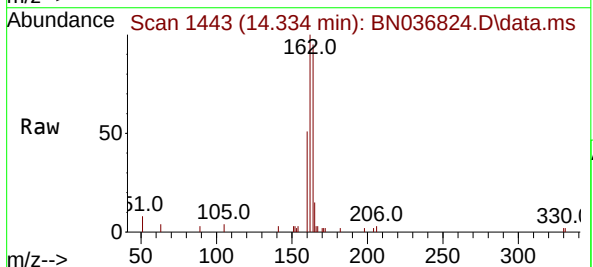
Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

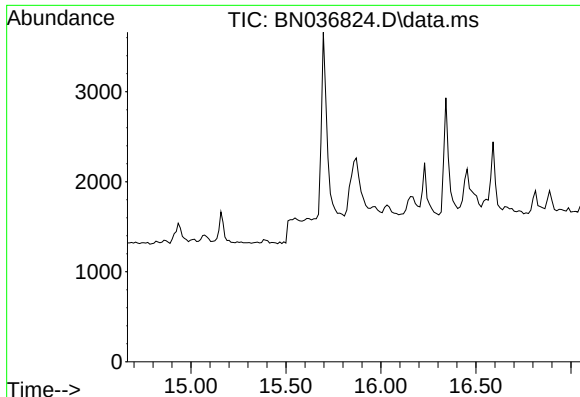
Tgt Ion:152 Resp: 2307  
Ion Ratio Lower Upper  
152 100  
151 22.0 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.032 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

Tgt Ion:164 Resp: 2862  
Ion Ratio Lower Upper  
164 100  
162 105.7 84.2 126.2  
160 53.7 42.2 63.2

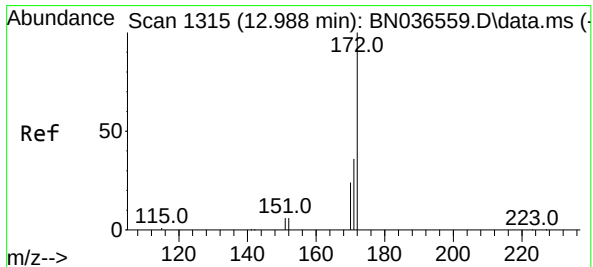
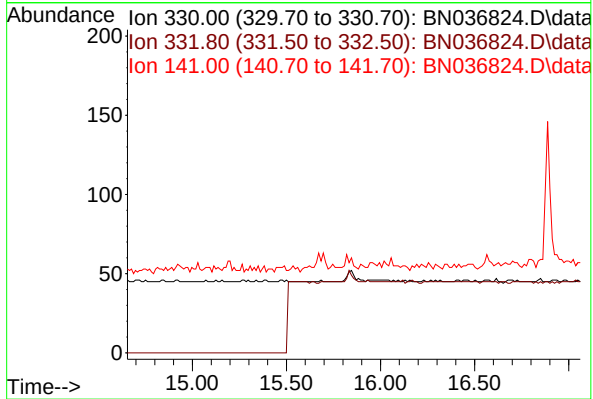




#14  
2,4,6-Tribromophenol  
Concen: 0.000 ng  
Expected RT: 15.86 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

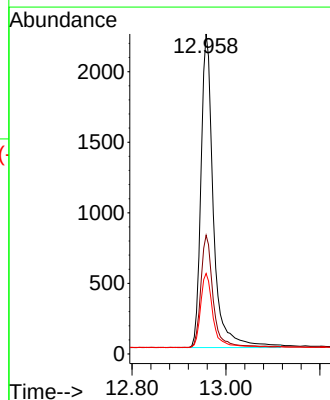
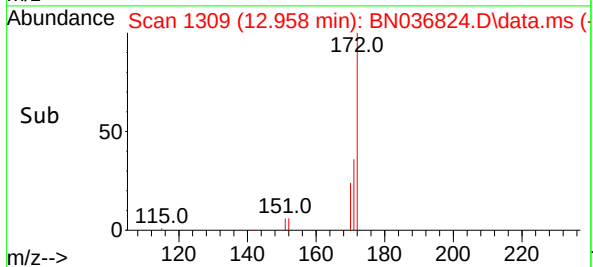
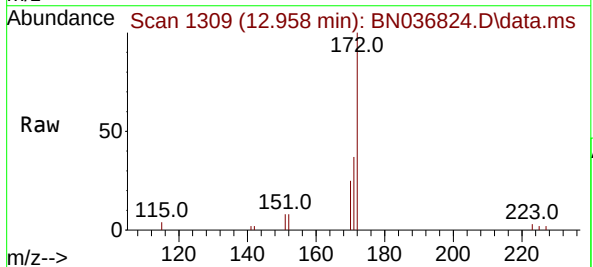
Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

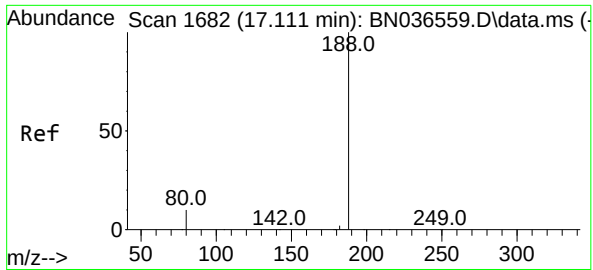
Tgt Ion: 330  
Sig Exp Ratio  
330 100  
332 94.0  
141 54.3



#15  
2-Fluorobiphenyl  
Concen: 0.323 ng  
RT: 12.958 min Scan# 1309  
Delta R.T. -0.030 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

Tgt Ion: 172 Resp: 5380  
Ion Ratio Lower Upper  
172 100  
171 37.1 29.5 44.3  
170 25.1 20.2 30.4





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.074 min Scan# 1

Delta R.T. -0.037 min

Lab File: BN036824.D

Acq: 03 Apr 2025 16:01

Instrument :

BNA\_N

ClientSampleId :

IW-03-55-040125

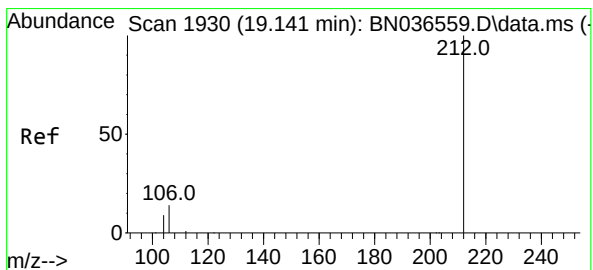
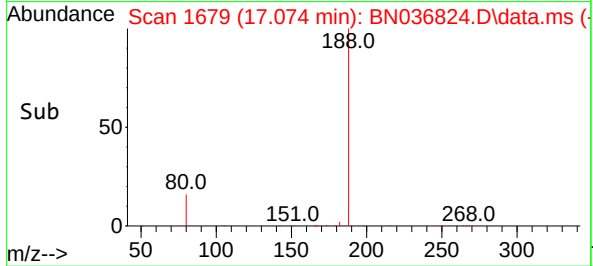
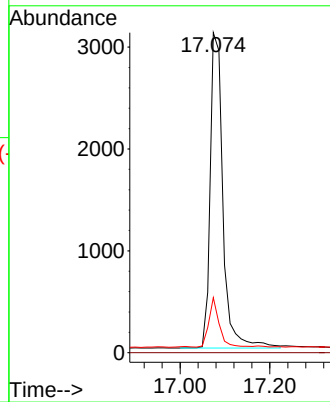
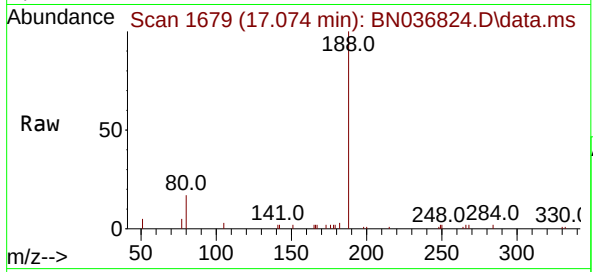
Tgt Ion:188 Resp: 6078

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 17.2 8.8 13.2#



#27

Fluoranthene-d10

Concen: 0.461 ng

RT: 19.113 min Scan# 1924

Delta R.T. -0.028 min

Lab File: BN036824.D

Acq: 03 Apr 2025 16:01

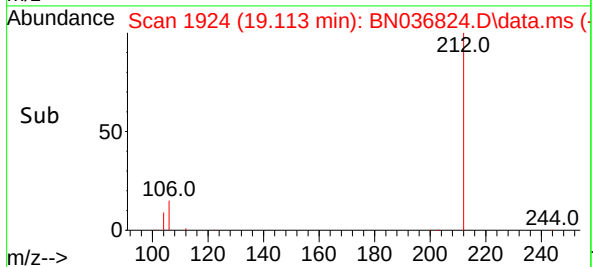
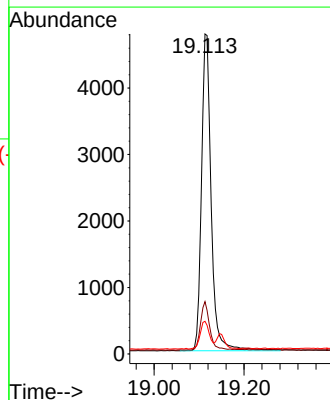
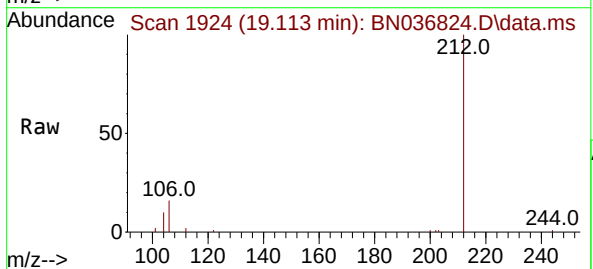
Tgt Ion:212 Resp: 7184

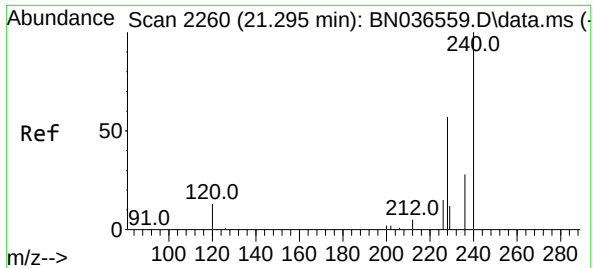
Ion Ratio Lower Upper

212 100

106 14.3 11.8 17.6

104 8.2 7.3 10.9

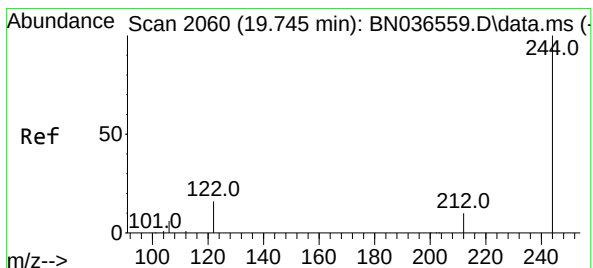
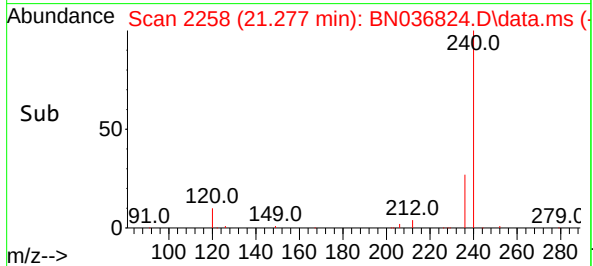
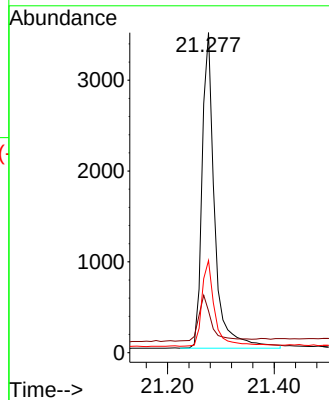
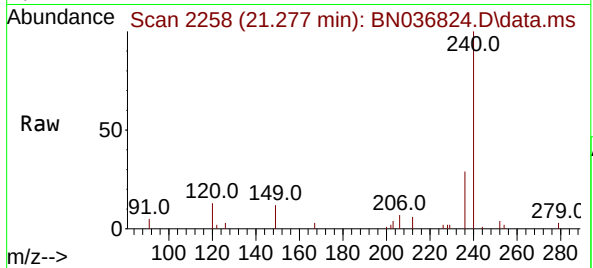




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

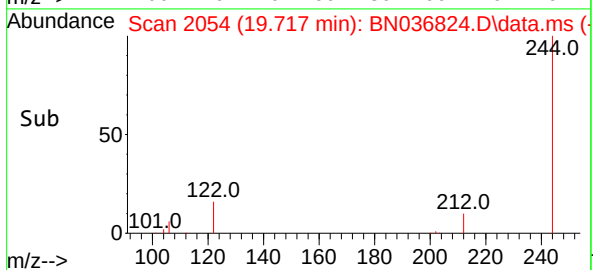
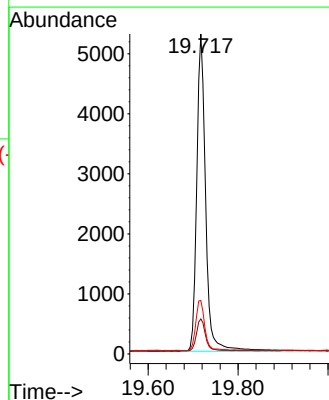
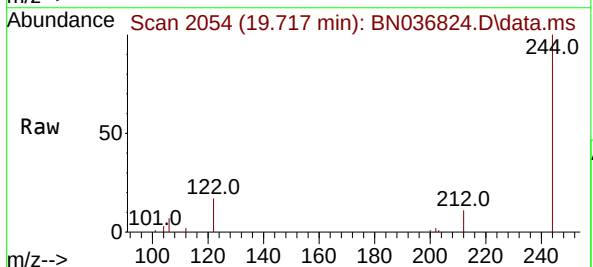
Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

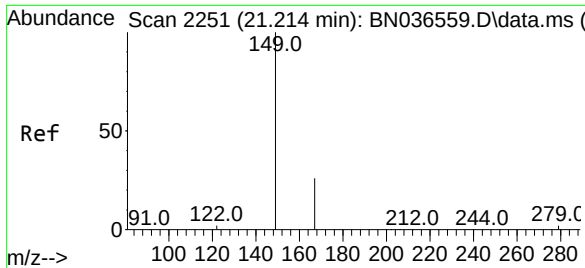
Tgt Ion:240 Resp: 5687  
Ion Ratio Lower Upper  
240 100  
120 13.1 14.6 22.0#  
236 28.8 24.1 36.1



#31  
Terphenyl-d14  
Concen: 0.533 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.028 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

Tgt Ion:244 Resp: 7267  
Ion Ratio Lower Upper  
244 100  
212 11.0 9.6 14.4  
122 16.7 13.9 20.9

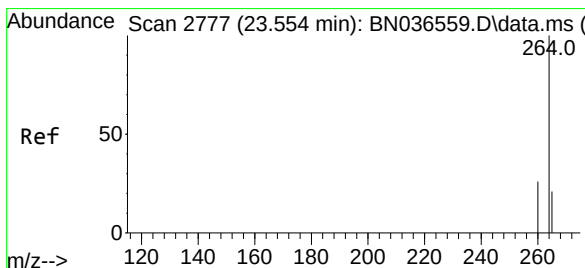
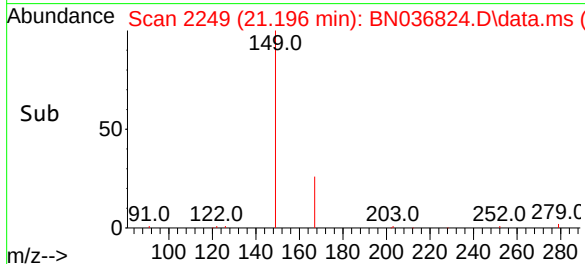
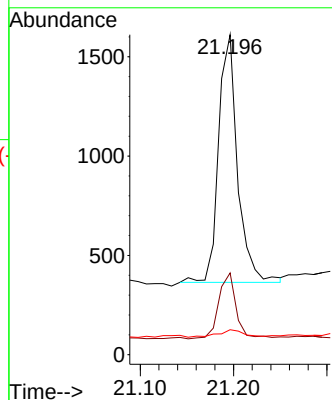
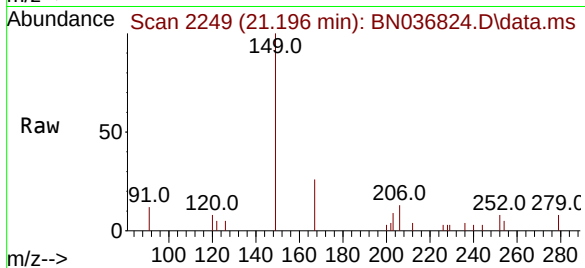




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.125 ng  
RT: 21.196 min Scan# 2119  
Delta R.T. -0.018 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

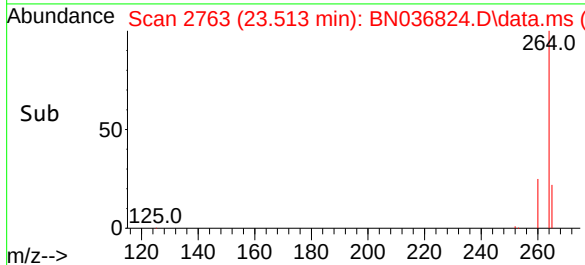
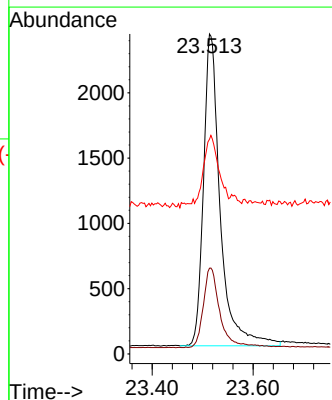
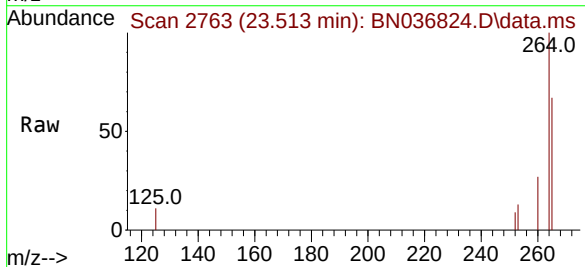
Instrument :  
BNA\_N  
ClientSampleId :  
IW-03-55-040125

Tgt Ion:149 Resp: 1760  
Ion Ratio Lower Upper  
149 100  
167 24.6 20.7 31.1  
279 4.1 3.6 5.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2763  
Delta R.T. -0.041 min  
Lab File: BN036824.D  
Acq: 03 Apr 2025 16:01

Tgt Ion:264 Resp: 5490  
Ion Ratio Lower Upper  
264 100  
260 26.8 22.6 33.8  
265 67.1 88.1 132.1#







# CALIBRATION SUMMARY



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

6C

## SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JAC005  
 Lab Code: CHEM Case No.: Q1697 SAS No.: Q1697 SDG No.: Q1697  
 Instrument ID: BNA\_N Calibration Date(s): 03/10/2025 03/10/2025  
 Calibration Time(s): 11:42 15:19

| LAB FILE ID:            |        | RRF0.1 = BN036557.D |        | RRF0.2 = BN036558.D |        | RRF0.4 = BN036559.D |       |       |
|-------------------------|--------|---------------------|--------|---------------------|--------|---------------------|-------|-------|
|                         |        | RRF0.8 = BN036560.D |        | RRF1.6 = BN036561.D |        | RRF3.2 = BN036562.D |       |       |
| COMPOUND                | RRF0.1 | RRF0.2              | RRF0.4 | RRF0.8              | RRF1.6 | RRF3.2              | RRF   | % RSD |
| 2-Methylnaphthalene-d10 | 0.656  | 0.549               | 0.606  | 0.562               | 0.577  | 0.633               | 0.595 | 6.5   |
| Fluoranthene-d10        | 1.037  | 0.955               | 1.116  | 0.956               | 1.025  | 1.087               | 1.025 | 6.0   |
| 2-Fluorophenol          | 0.931  | 0.908               | 0.987  | 0.878               | 0.914  | 0.996               | 0.932 | 4.7   |
| Phenol-d6               | 1.243  | 1.057               | 1.128  | 1.067               | 1.133  | 1.254               | 1.152 | 6.8   |
| Nitrobenzene-d5         | 0.572  | 0.396               | 0.415  | 0.401               | 0.402  | 0.450               | 0.435 | 14.5  |
| 2-Fluorobiphenyl        | 2.208  | 1.982               | 2.398  | 2.350               | 2.364  | 2.566               | 2.327 | 8.0   |
| 2,4,6-Tribromophenol    | 0.181  | 0.160               | 0.187  | 0.169               | 0.188  | 0.197               | 0.182 | 7.0   |
| Terphenyl-d14           | 0.962  | 0.965               | 1.028  | 0.924               | 0.915  | 0.987               | 0.958 | 4.2   |
| 1,4-Dioxane             | 0.434  | 0.439               | 0.498  | 0.451               | 0.440  | 0.445               | 0.444 | 6.6   |

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
 Method File : 8270-SIM-BN031025.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Mon Mar 10 16:06:28 2025  
 Response Via : Initial Calibration

## Calibration Files

0.1 =BN036557.D 0.2 =BN036558.D 0.4 =BN036559.D 0.8 =BN036560.D 1.6 =BN036561.D 3.2 =BN036562.D 5.0 =BN036563.D

|           | Compound              | 0.1            | 0.2   | 0.4   | 0.8   | 1.6   | 3.2   | 5.0   | Avg   | %RSD  |
|-----------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----     |                       |                |       |       |       |       |       |       |       |       |
| 1) I      | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2)        | 1,4-Dioxane           | 0.434          | 0.439 | 0.498 | 0.451 | 0.440 | 0.445 | 0.399 | 0.444 | 6.60  |
| 3)        | n-Nitrosodimet...     | 1.112          | 0.874 | 0.935 | 0.841 | 0.850 | 0.883 | 0.789 | 0.898 | 11.64 |
| 4) S      | 2-Fluorophenol        | 0.931          | 0.908 | 0.987 | 0.878 | 0.914 | 0.996 | 0.911 | 0.932 | 4.67  |
| 5) S      | Phenol-d6             | 1.243          | 1.057 | 1.128 | 1.067 | 1.133 | 1.254 | 1.180 | 1.152 | 6.79  |
| 6)        | bis(2-Chloroet...     | 1.426          | 1.150 | 1.183 | 1.129 | 1.132 | 1.210 | 1.104 | 1.190 | 9.22  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 7) I      | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |
| 8) S      | Nitrobenzene-d5       | 0.572          | 0.396 | 0.415 | 0.401 | 0.402 | 0.450 | 0.411 | 0.435 | 14.47 |
| 9)        | Naphthalene           | 1.371          | 1.125 | 1.206 | 1.111 | 1.108 | 1.222 | 1.094 | 1.177 | 8.45  |
| 10)       | Hexachlorobuta...     | 0.296          | 0.283 | 0.294 | 0.267 | 0.261 | 0.286 | 0.251 | 0.277 | 6.24  |
| 11) SURR2 | Methylnaphth...       | 0.656          | 0.549 | 0.606 | 0.562 | 0.577 | 0.633 | 0.581 | 0.595 | 6.55  |
| 12)       | 2-Methylnaphth...     | 0.810          | 0.696 | 0.765 | 0.703 | 0.734 | 0.802 | 0.731 | 0.749 | 6.03  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 13) I     | Acenaphthene-d10      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 14) S     | 2,4,6-Tribromo...     | 0.181          | 0.160 | 0.187 | 0.169 | 0.188 | 0.197 | 0.188 | 0.182 | 7.04  |
| 15) S     | 2-Fluorobiphenyl      | 2.208          | 1.982 | 2.398 | 2.350 | 2.364 | 2.566 | 2.419 | 2.327 | 7.96  |
| 16)       | Acenaphthylene        | 1.882          | 1.756 | 1.938 | 1.794 | 1.834 | 2.074 | 1.935 | 1.888 | 5.66  |
| 17)       | Acenaphthene          | 1.257          | 1.159 | 1.281 | 1.171 | 1.199 | 1.339 | 1.243 | 1.236 | 5.17  |
| 18)       | Fluorene              | 1.629          | 1.600 | 1.764 | 1.609 | 1.670 | 1.778 | 1.650 | 1.672 | 4.32  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 19) I     | Phenanthrene-d10      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 20)       | 4,6-Dinitro-2-...     | 0.057          | 0.077 | 0.075 | 0.088 | 0.110 | 0.111 | 0.086 |       | 24.66 |
| 21)       | 4-Bromophenyl-...     | 0.243          | 0.227 | 0.274 | 0.238 | 0.241 | 0.278 | 0.253 | 0.251 | 7.53  |
| 22)       | Hexachlorobenzene     | 0.306          | 0.288 | 0.336 | 0.295 | 0.283 | 0.322 | 0.289 | 0.303 | 6.58  |
| 23)       | Atrazine              | 0.193          | 0.191 | 0.213 | 0.192 | 0.200 | 0.216 | 0.200 | 0.201 | 5.08  |
| 24)       | Pentachlorophenol     | 0.140          | 0.116 | 0.137 | 0.122 | 0.135 | 0.161 | 0.155 | 0.138 | 11.76 |
| 25)       | Phenanthrene          | 1.190          | 1.111 | 1.297 | 1.141 | 1.165 | 1.300 | 1.195 | 1.200 | 6.09  |
| 26)       | Anthracene            | 1.026          | 0.971 | 1.147 | 1.033 | 1.075 | 1.215 | 1.112 | 1.083 | 7.60  |
| 27) SURR  | Fluoranthene-d10      | 1.037          | 0.955 | 1.116 | 0.956 | 1.025 | 1.087 | 1.000 | 1.025 | 5.98  |
| 28)       | Fluoranthene          | 1.341          | 1.243 | 1.452 | 1.272 | 1.364 | 1.447 | 1.316 | 1.348 | 5.95  |
|           |                       |                |       |       |       |       |       |       |       |       |
| 29) I     | Chrysene-d12          | -----ISTD----- |       |       |       |       |       |       |       |       |
| 30)       | Pyrene                | 1.945          | 2.005 | 2.131 | 1.910 | 1.870 | 1.992 | 1.837 | 1.956 | 5.04  |
| 31) S     | Terphenyl-d14         | 0.962          | 0.965 | 1.028 | 0.924 | 0.915 | 0.987 | 0.926 | 0.958 | 4.23  |
| 32)       | Benzo(a)anthra...     | 1.389          | 1.315 | 1.437 | 1.304 | 1.347 | 1.528 | 1.415 | 1.391 | 5.63  |
| 33)       | Chrysene              | 1.486          | 1.509 | 1.610 | 1.507 | 1.462 | 1.616 | 1.448 | 1.520 | 4.44  |
| 34)       | Bis(2-ethylhex...     | 1.196          | 1.100 | 1.044 | 0.865 | 0.946 | 0.912 | 0.870 | 0.990 | 12.74 |
|           |                       |                |       |       |       |       |       |       |       |       |
| 35) I     | Perylene-d12          | -----ISTD----- |       |       |       |       |       |       |       |       |

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

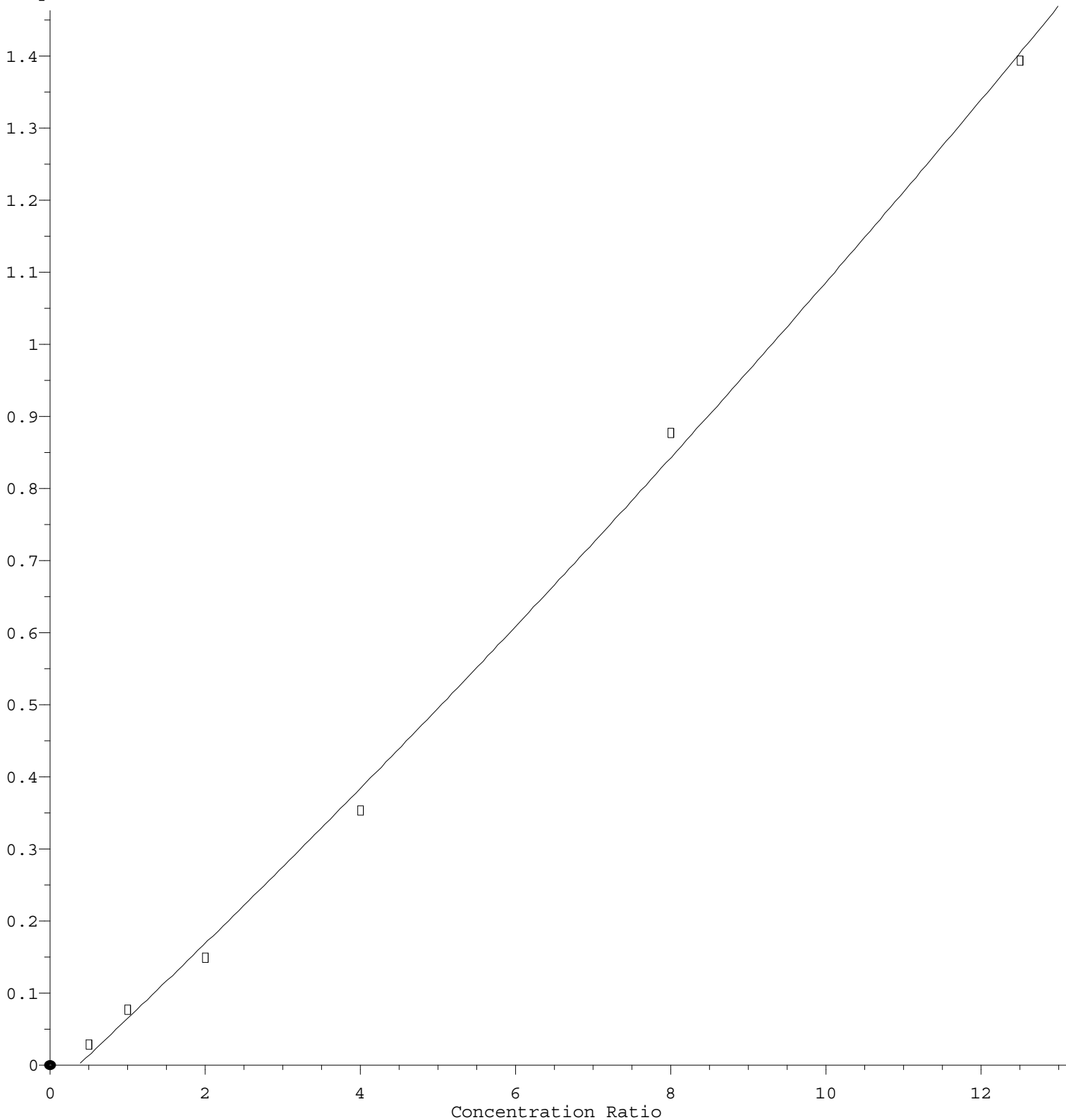
Method File : 8270-SIM-BN031025.M

|       |                   |       |       |       |       |       |       |       |       |       |
|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 36)   | Indeno(1,2,3-c... | 1.160 | 1.316 | 1.546 | 1.404 | 1.417 | 1.693 | 1.571 | 1.444 | 12.27 |
| 37)   | Benzo(b)fluora... | 1.311 | 1.360 | 1.547 | 1.402 | 1.477 | 1.595 | 1.498 | 1.456 | 7.04  |
| 38)   | Benzo(k)fluora... | 1.504 | 1.397 | 1.620 | 1.481 | 1.521 | 1.635 | 1.534 | 1.527 | 5.34  |
| 39) C | Benzo(a)pyrene    | 1.090 | 1.152 | 1.303 | 1.195 | 1.223 | 1.350 | 1.268 | 1.226 | 7.29  |
| 40)   | Dibenzo(a,h)an... | 0.893 | 0.981 | 1.163 | 1.126 | 1.102 | 1.351 | 1.252 | 1.124 | 13.76 |
| 41)   | Benzo(g,h,i)pe... | 1.138 | 1.213 | 1.382 | 1.250 | 1.233 | 1.449 | 1.334 | 1.286 | 8.36  |

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

# 4,6-Dinitro-2-methylphenol

Response Ratio



$R = 1.185e-003 A^2 + 1.005e-001 A - 3.674e-002$   
 Coef of Det ( $r^2$ ) = 0.997987    Curve Fit: Quadratic  
 Method Name: Z:\svoasrv\HPCHEM1\BNA N\Methods\8270-SIM-BN031025.M  
 Calibration Table Last Updated: Mon Mar 10 16:06:28 2025

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036557.D  
 Acq On : 10 Mar 2025 11:42  
 Operator : RC/JU  
 Sample : SSTDICC0.1  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.1

Manual Integrations  
 APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025

Quant Time: Mar 10 16:00:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2755     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 6575     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.366 | 164  | 3958     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.111 | 188  | 8269     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.295 | 240  | 5886     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.554 | 264  | 5207     | 0.400 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 641      | 0.100 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.901  | 99   | 856      | 0.108 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.875  | 82   | 940      | 0.131 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.111 | 152  | 1079     | 0.110 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 179      | 0.100 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.993 | 172  | 2185     | 0.095 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.141 | 212  | 2144     | 0.101 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.745 | 244  | 1416     | 0.100 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.247  | 88   | 299m     | 0.098 | ng    |          |
| 3) n-Nitrosodimethylamine     | 3.557  | 42   | 766      | 0.124 | ng    | # 95     |
| 6) bis(2-Chloroethyl)ether    | 7.154  | 93   | 982      | 0.120 | ng    | 98       |
| 9) Naphthalene                | 10.562 | 128  | 2254     | 0.117 | ng    | # 94     |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 486      | 0.107 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.187 | 142  | 1331     | 0.108 | ng    | 96       |
| 16) Acenaphthylene            | 14.078 | 152  | 1862     | 0.100 | ng    | 99       |
| 17) Acenaphthene              | 14.430 | 154  | 1244     | 0.102 | ng    | 99       |
| 18) Fluorene                  | 15.414 | 166  | 1612     | 0.097 | ng    | 99       |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248  | 502      | 0.097 | ng    | 95       |
| 22) Hexachlorobenzene         | 16.416 | 284  | 632      | 0.101 | ng    | 98       |
| 23) Atrazine                  | 16.578 | 200  | 400      | 0.096 | ng    | # 90     |
| 24) Pentachlorophenol         | 16.776 | 266  | 290      | 0.102 | ng    | 98       |
| 25) Phenanthrene              | 17.148 | 178  | 2459     | 0.099 | ng    | 99       |
| 26) Anthracene                | 17.248 | 178  | 2121     | 0.095 | ng    | 100      |
| 28) Fluoranthene              | 19.174 | 202  | 2772     | 0.099 | ng    | 97       |
| 30) Pyrene                    | 19.536 | 202  | 2862     | 0.099 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.286 | 228  | 2044     | 0.100 | ng    | 94       |
| 33) Chrysene                  | 21.331 | 228  | 2187     | 0.098 | ng    | 93       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 1760     | 0.121 | ng    | 96       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.841 | 276  | 1510     | 0.080 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.876 | 252  | 1707     | 0.090 | ng    | # 62     |
| 38) Benzo(k)fluoranthene      | 22.923 | 252  | 1958     | 0.098 | ng    | # 62     |
| 39) Benzo(a)pyrene            | 23.458 | 252  | 1419     | 0.089 | ng    | # 51     |
| 40) Dibenzo(a,h)anthracene    | 25.861 | 278  | 1163     | 0.079 | ng    | # 59     |
| 41) Benzo(g,h,i)perylene      | 26.539 | 276  | 1482     | 0.089 | ng    | # 84     |
| -----                         |        |      |          |       |       |          |

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

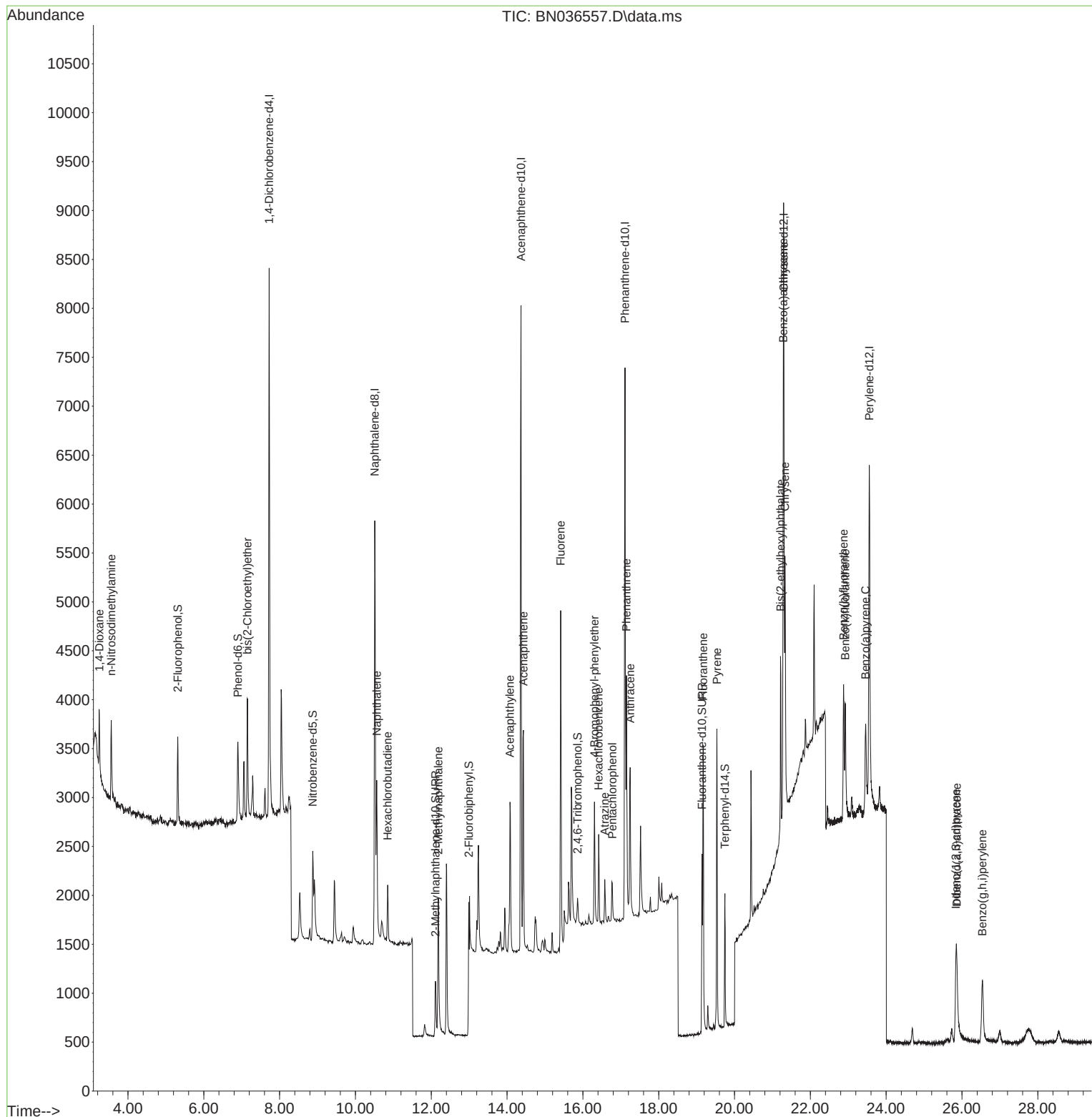
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Data File : BN036557.D  
Acq On : 10 Mar 2025 11:42  
Operator : RC/JU  
Sample : SSTDICC0.1  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

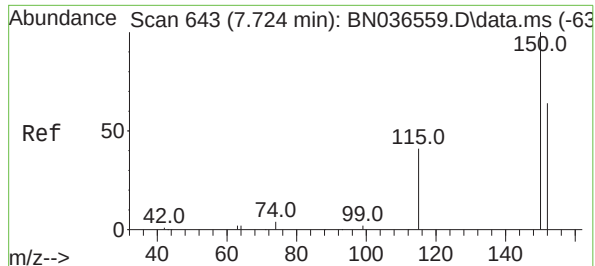
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

Quant Time: Mar 10 16:00:30 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

Manual Integrations  
APPROVED

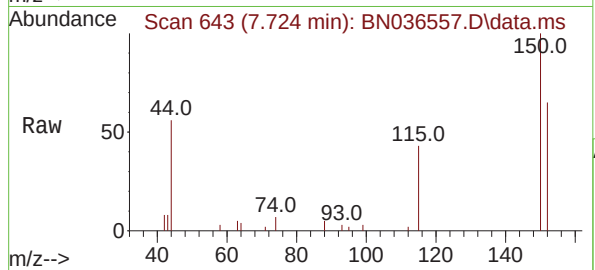
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

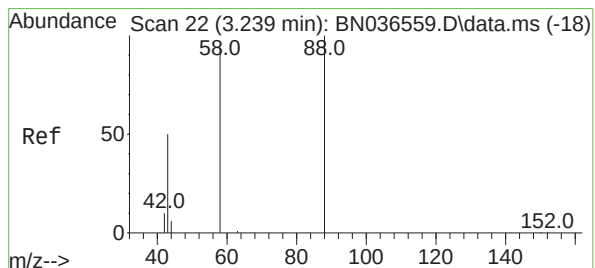
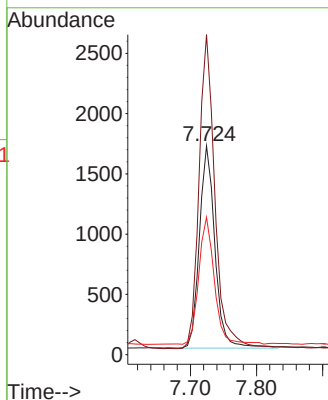
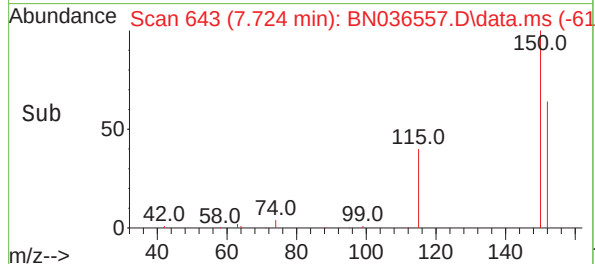
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1



Tgt Ion:152 Resp: 275  
Ion Ratio Lower Upper  
152 100  
150 153.3 123.7 185.5  
115 65.8 54.3 81.5

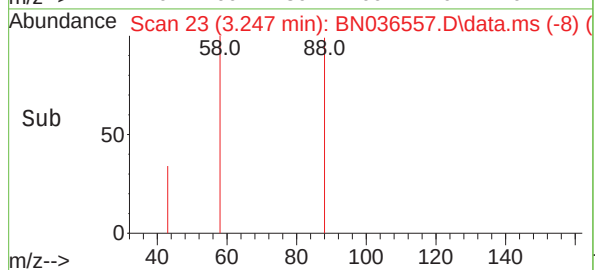
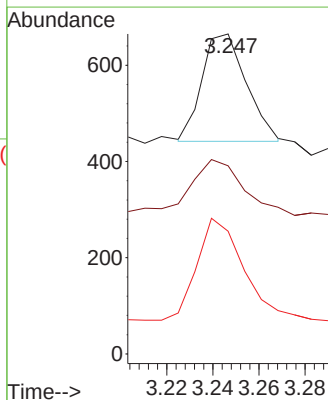
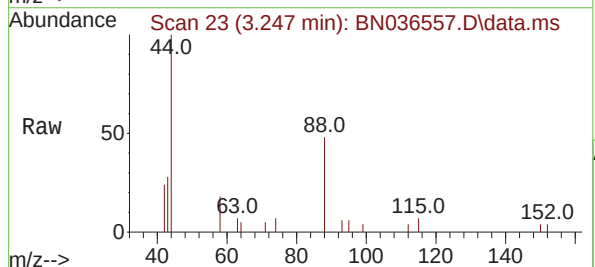
Manual Integrations  
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Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

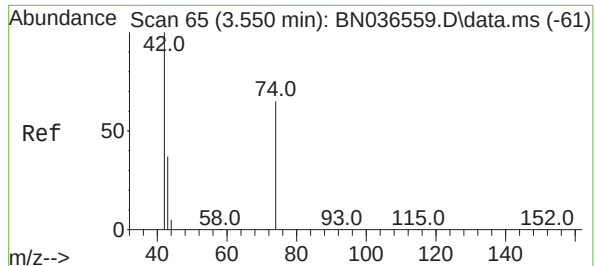


#2  
1,4-Dioxane  
Concen: 0.098 ng m  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 88 Resp: 299  
Ion Ratio Lower Upper  
88 100  
43 94.6 37.8 56.8#  
58 102.3 67.4 101.2#

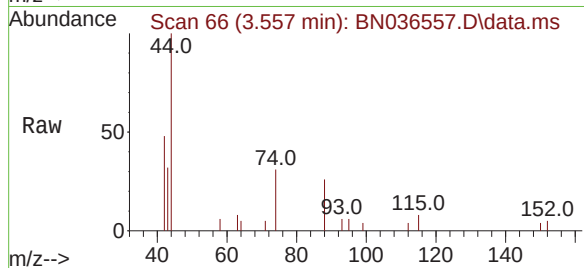






#3  
n-Nitrosodimethylamine  
Concen: 0.124 ng  
RT: 3.557 min Scan# 61  
Delta R.T. 0.007 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

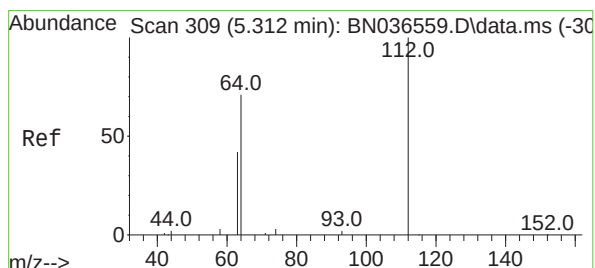
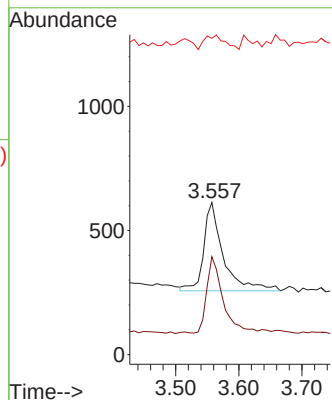
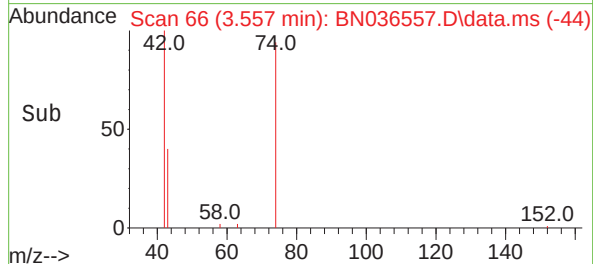
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1



Tgt Ion: 42 Resp: 760  
Ion Ratio Lower Upper  
42 100  
74 73.0 60.6 90.8  
44 16.6 6.3 9.5

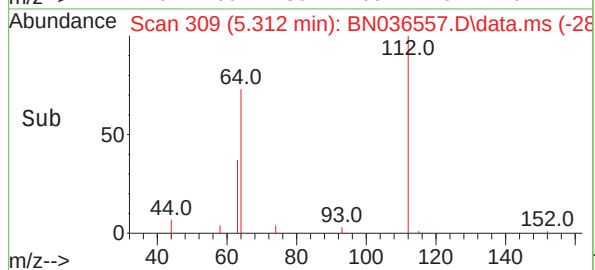
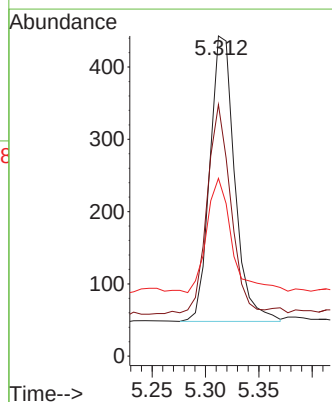
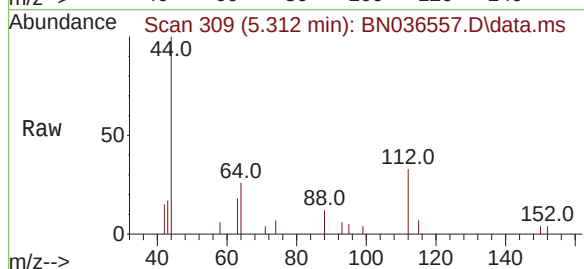
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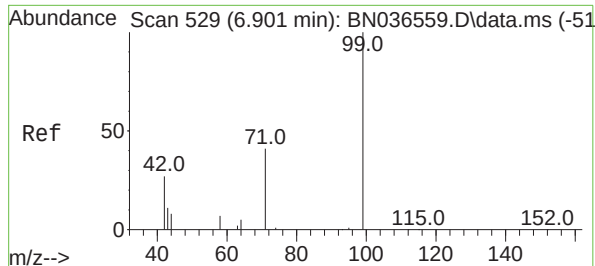
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#4  
2-Fluorophenol  
Concen: 0.100 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion:112 Resp: 641  
Ion Ratio Lower Upper  
112 100  
64 70.4 53.1 79.7  
63 40.9 31.8 47.8





#5

Phenol-d6

Concen: 0.108 ng

RT: 6.901 min Scan# 51

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

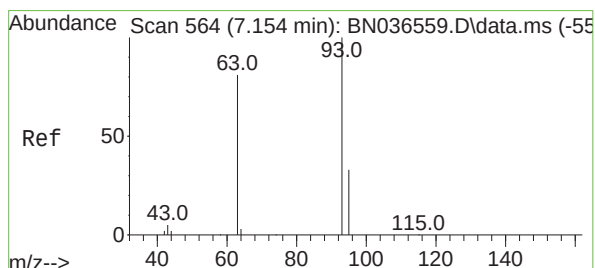
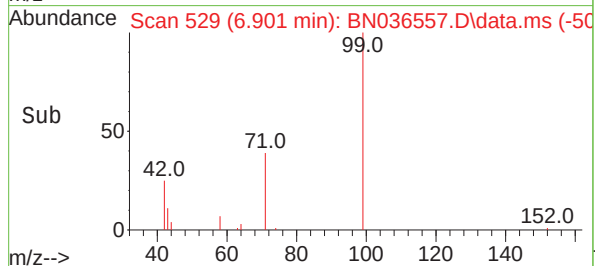
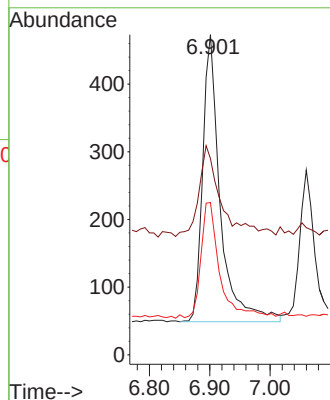
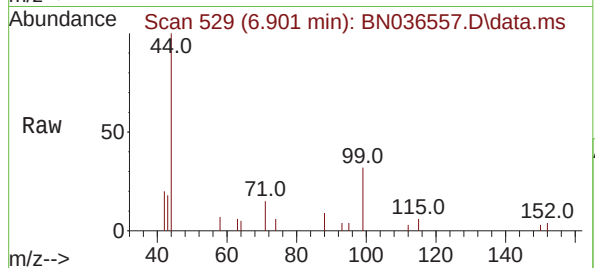
SSTDICC0.1

Tgt Ion: 99 Resp: 850  
Ion Ratio Lower Upper  
99 100  
42 39.8 26.5 39.7  
71 42.8 34.1 51.1

Manual Integrations

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Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#6

bis(2-Chloroethyl)ether

Concen: 0.120 ng

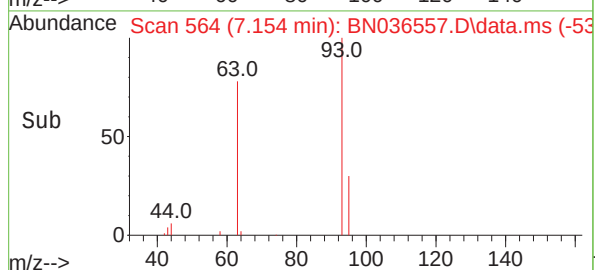
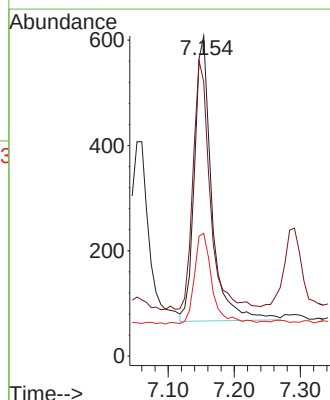
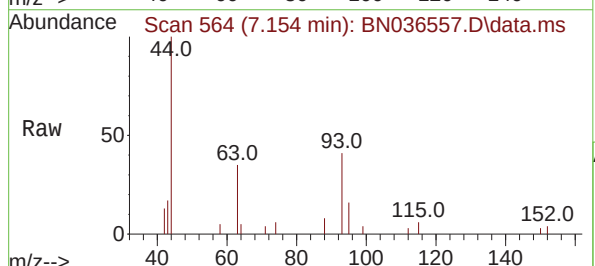
RT: 7.154 min Scan# 564

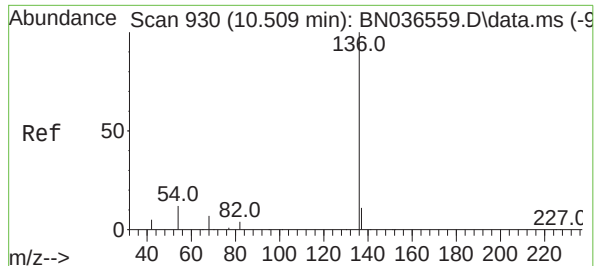
Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

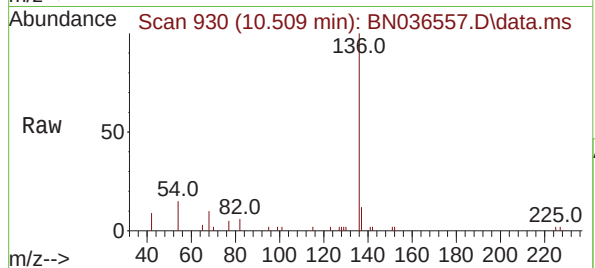
Tgt Ion: 93 Resp: 982  
Ion Ratio Lower Upper  
93 100  
63 86.7 67.7 101.5  
95 33.0 25.6 38.4





#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 930  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

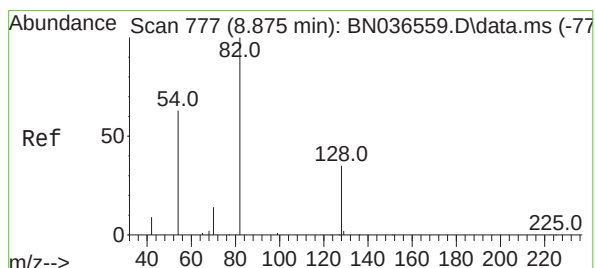
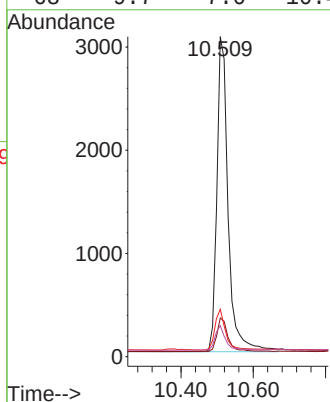
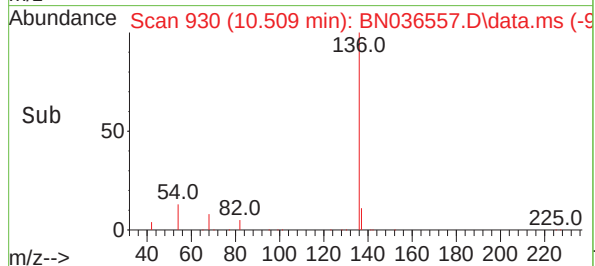
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1



Tgt Ion:136 Resp: 6579  
Ion Ratio Lower Upper  
136 100  
137 12.1 10.3 15.5  
54 14.8 11.5 17.3  
68 9.7 7.0 10.4

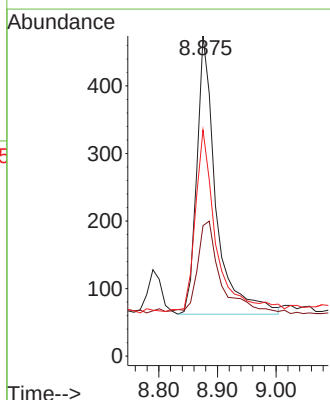
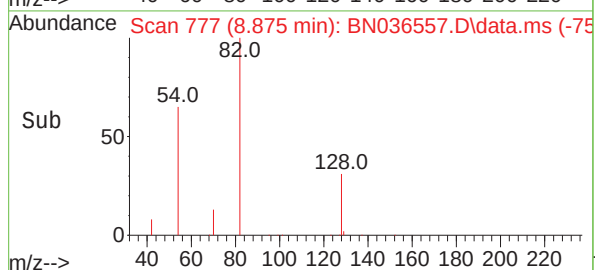
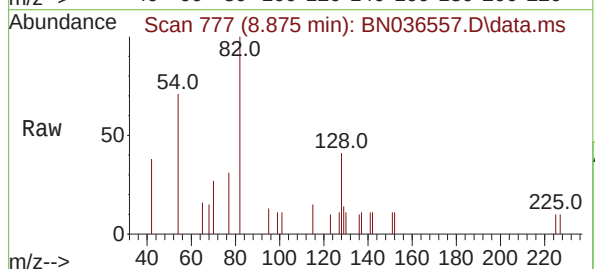
Manual Integrations  
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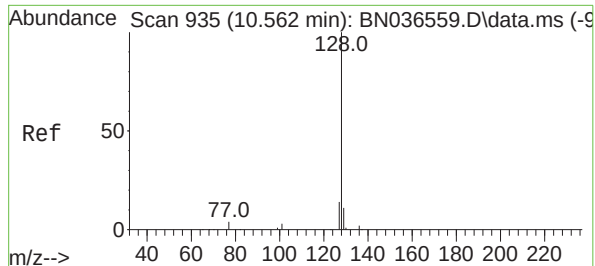
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#8  
Nitrobenzene-d5  
Concen: 0.131 ng  
RT: 8.875 min Scan# 777  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 82 Resp: 940  
Ion Ratio Lower Upper  
82 100  
128 40.7 30.6 45.8  
54 70.7 52.2 78.4





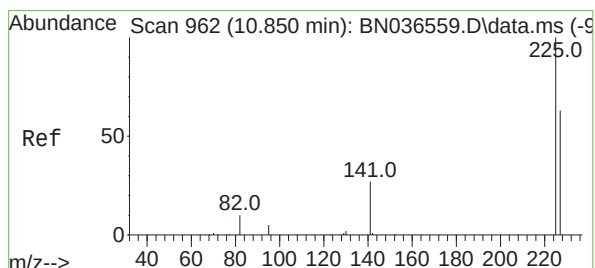
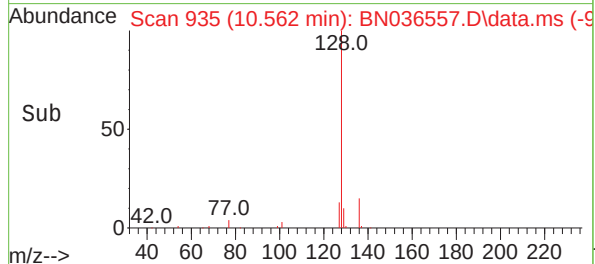
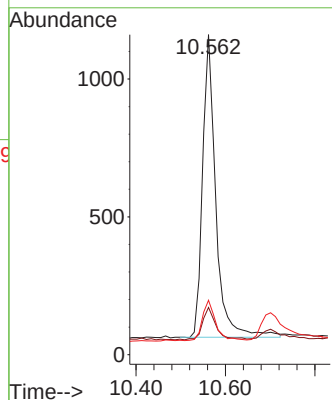
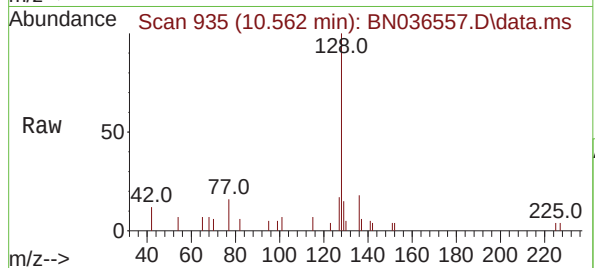
#9  
Naphthalene  
Concen: 0.117 ng  
RT: 10.562 min Scan# 935  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1

Tgt Ion:128 Resp: 225  
Ion Ratio Lower Upper  
128 100  
129 14.7 9.8 14.6  
127 17.0 11.8 17.8

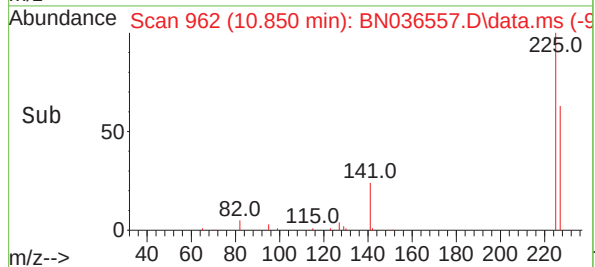
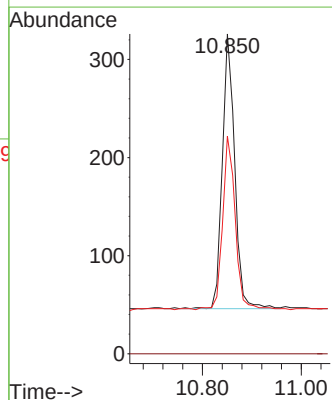
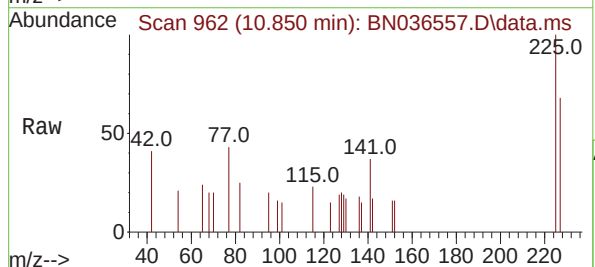
Manual Integrations  
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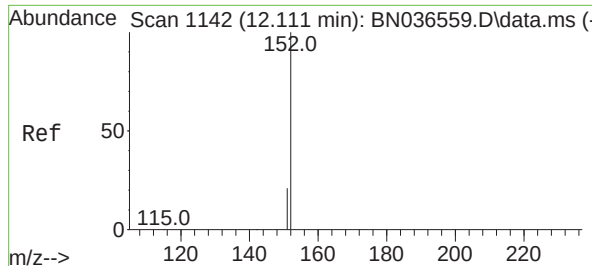
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#10  
Hexachlorobutadiene  
Concen: 0.107 ng  
RT: 10.850 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

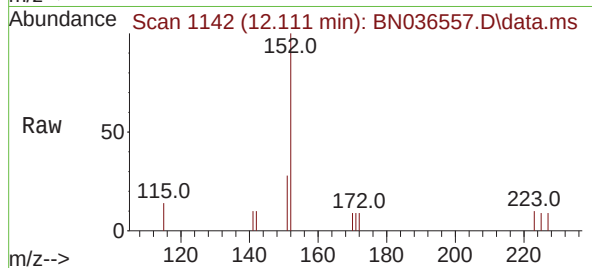
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Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.8 51.8 77.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.110 ng  
RT: 12.111 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

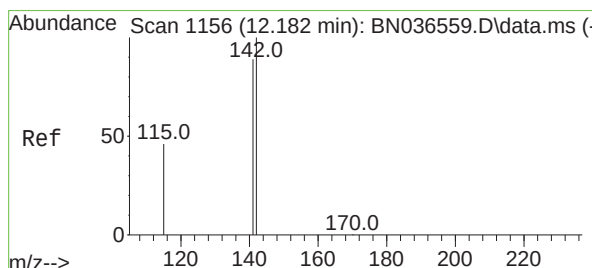
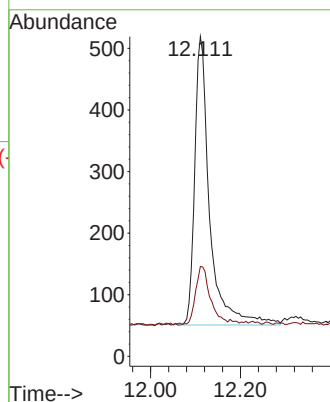
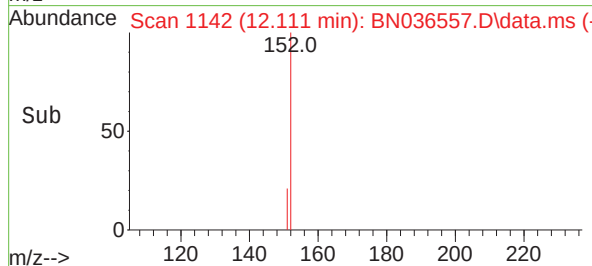
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1



Tgt Ion:152 Resp: 1079  
Ion Ratio Lower Upper  
152 100  
151 19.5 17.0 25.6

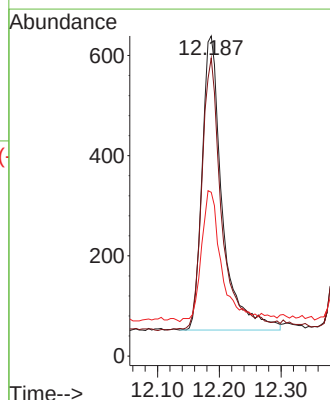
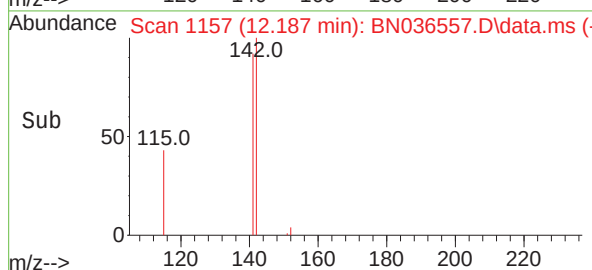
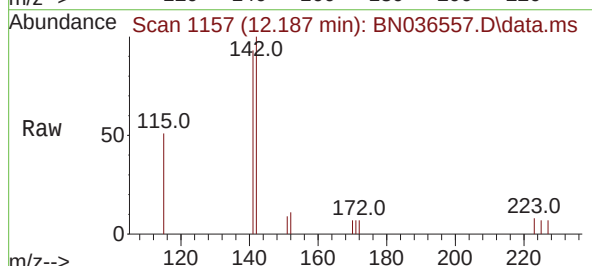
Manual Integrations  
APPROVED

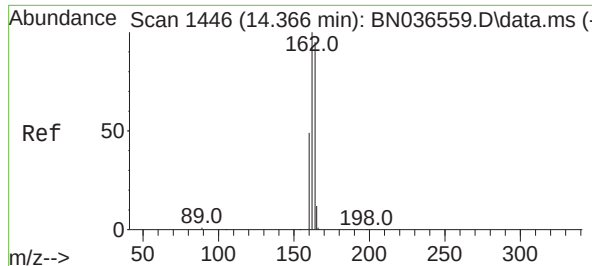
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#12  
2-Methylnaphthalene  
Concen: 0.108 ng  
RT: 12.187 min Scan# 1157  
Delta R.T. 0.005 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

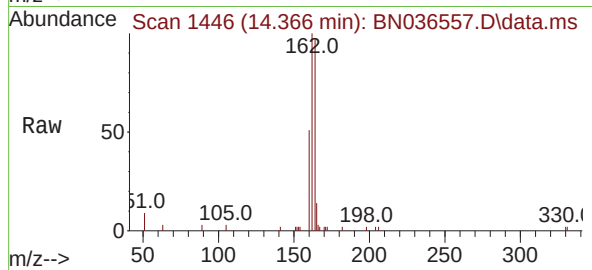
Tgt Ion:142 Resp: 1331  
Ion Ratio Lower Upper  
142 100  
141 93.1 71.7 107.5  
115 51.2 38.3 57.5





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.366 min Scan# 1446  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

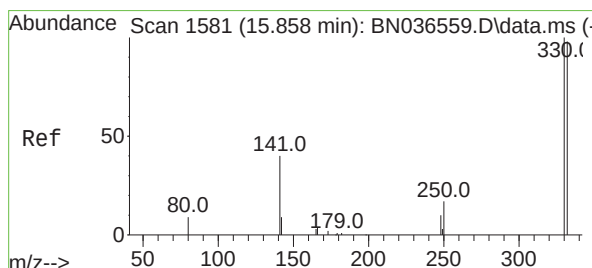
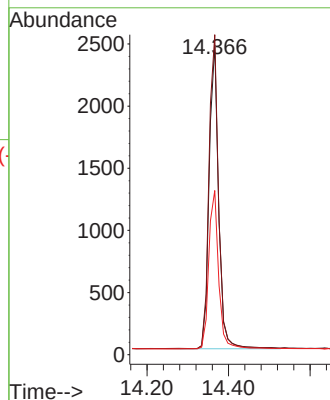
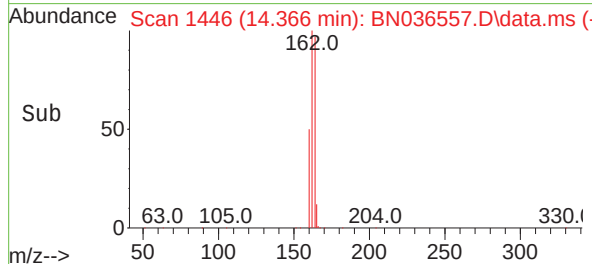
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1



Tgt Ion:164 Resp: 395  
Ion Ratio Lower Upper  
164 100  
162 103.3 84.2 126.2  
160 53.0 42.2 63.2

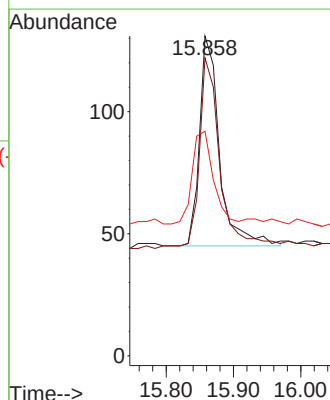
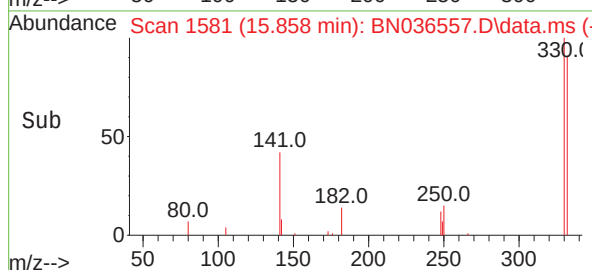
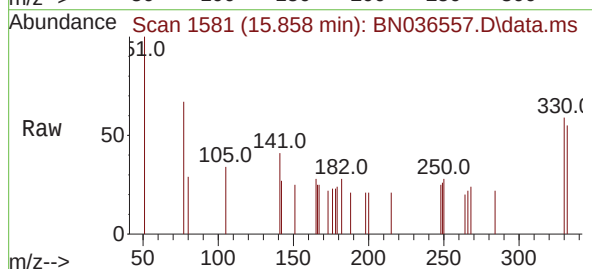
Manual Integrations  
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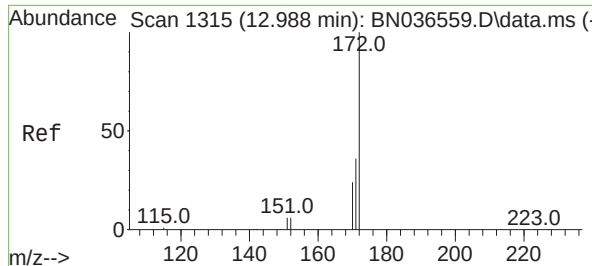
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#14  
2,4,6-Tribromophenol  
Concen: 0.100 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

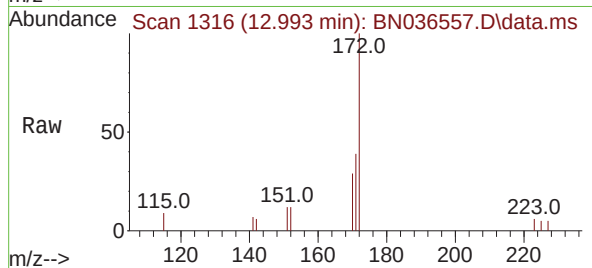
Tgt Ion:330 Resp: 179  
Ion Ratio Lower Upper  
330 100  
332 96.1 75.2 112.8  
141 46.4 43.4 65.2





#15  
2-Fluorobiphenyl  
Concen: 0.095 ng  
RT: 12.993 min Scan# 1316  
Delta R.T. 0.005 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

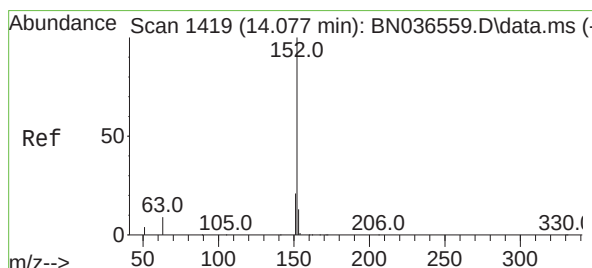
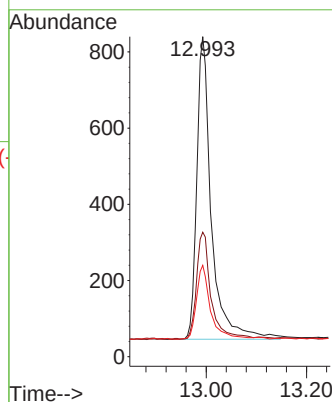
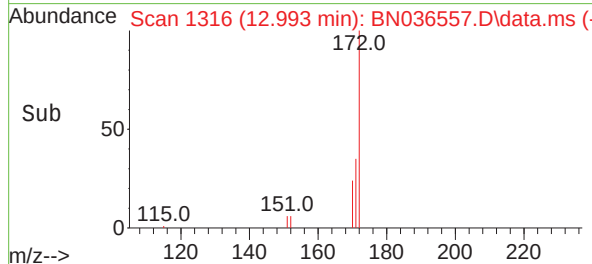
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1



Tgt Ion:172 Resp: 2184  
Ion Ratio Lower Upper  
172 100  
171 38.9 29.5 44.3  
170 28.6 20.2 30.4

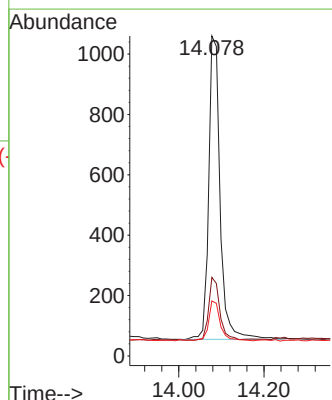
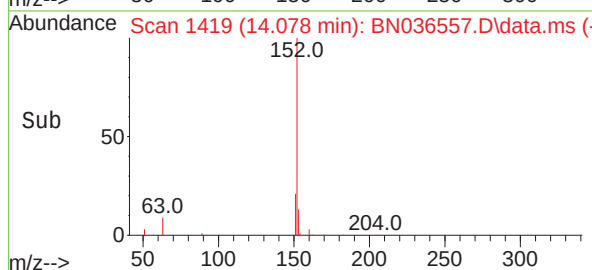
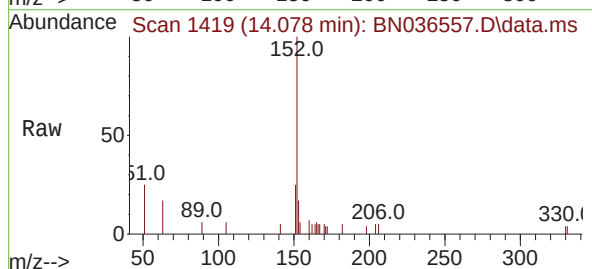
Manual Integrations  
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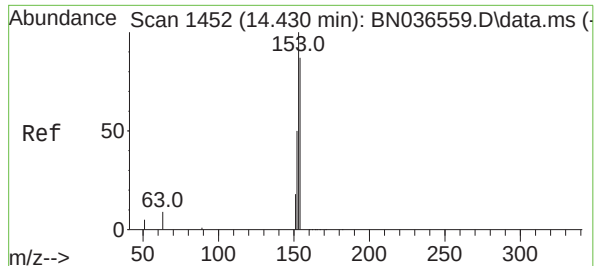
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#16  
Acenaphthylene  
Concen: 0.100 ng  
RT: 14.078 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion:152 Resp: 1862  
Ion Ratio Lower Upper  
152 100  
151 20.2 16.2 24.4  
153 14.1 10.6 15.8





#17

Acenaphthene

Concen: 0.102 ng

RT: 14.430 min Scan# 1452

Delta R.T. 0.000 min

Lab File: BN036557.D

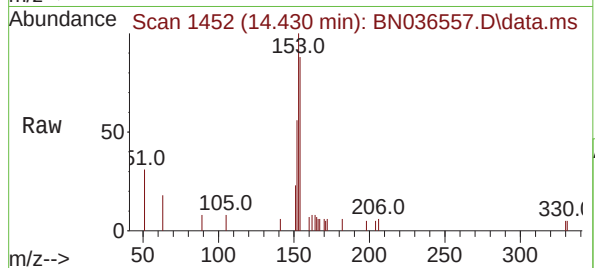
Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

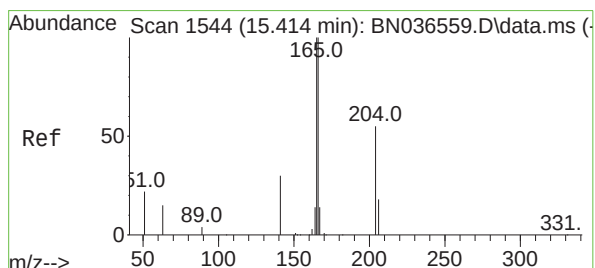
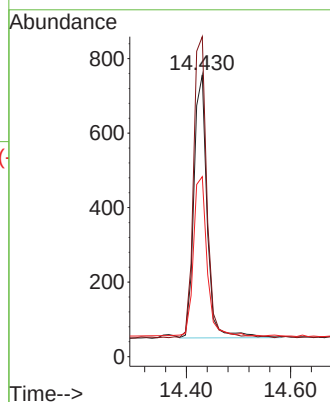
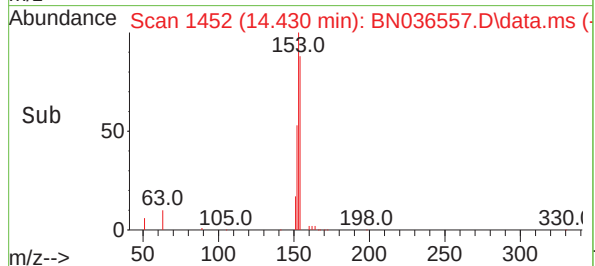


|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 154   | Resp: | 124   |
| Ion Ratio | Lower | Upper |       |
| 154       | 100   |       |       |
| 153       | 115.9 | 94.1  | 141.1 |
| 152       | 62.5  | 49.8  | 74.6  |

Manual Integrations

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Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#18

Fluorene

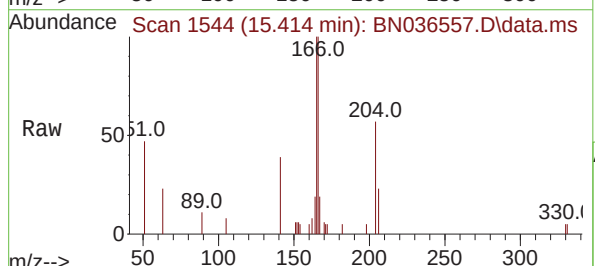
Concen: 0.097 ng

RT: 15.414 min Scan# 1544

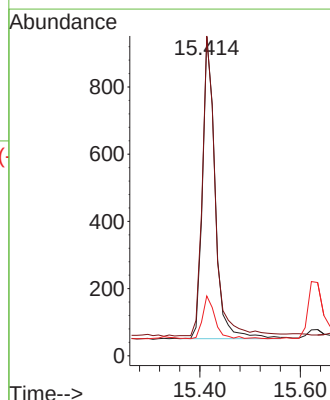
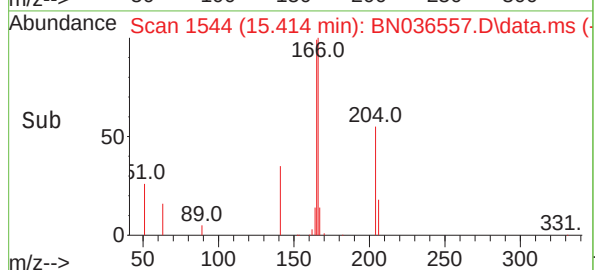
Delta R.T. 0.000 min

Lab File: BN036557.D

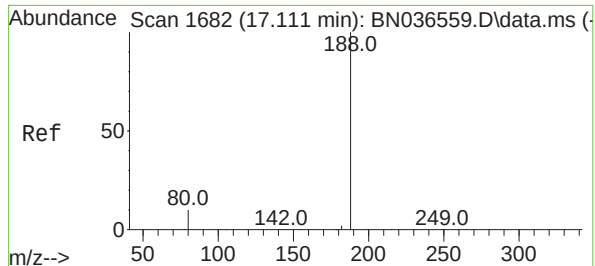
Acq: 10 Mar 2025 11:42



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 1612  |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 100.9 | 79.8  | 119.8 |
| 167       | 13.9  | 10.6  | 15.8  |







#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1682

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

Tgt Ion:188 Resp: 826

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

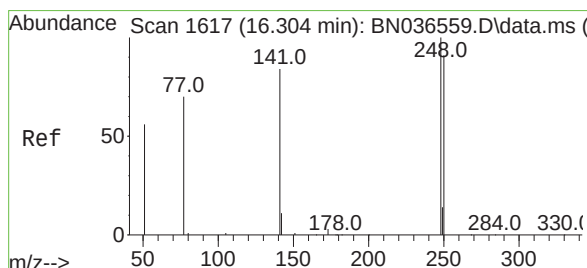
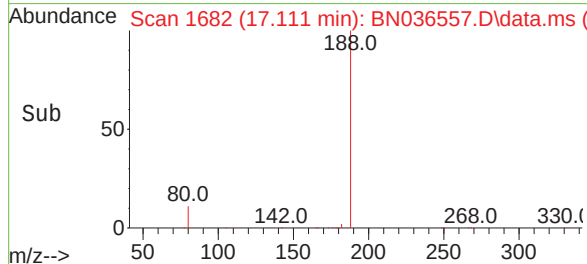
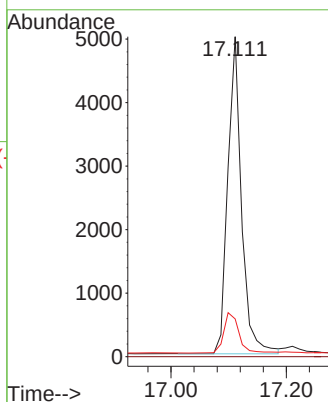
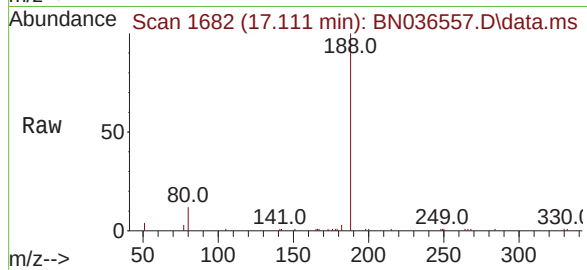
80 11.8 8.8 13.2

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Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#21

4-Bromophenyl-phenylether

Concen: 0.097 ng

RT: 16.304 min Scan# 1617

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

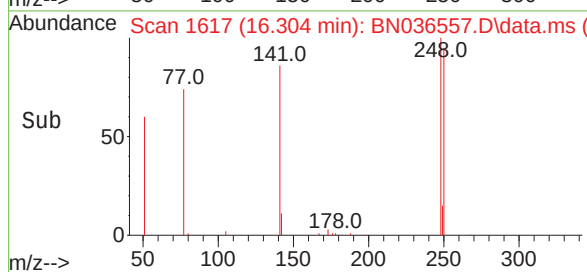
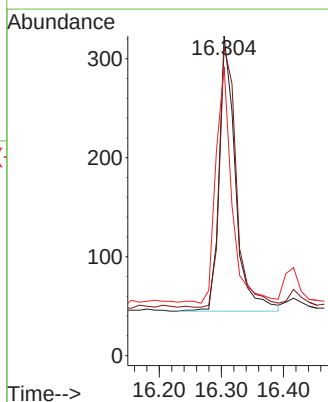
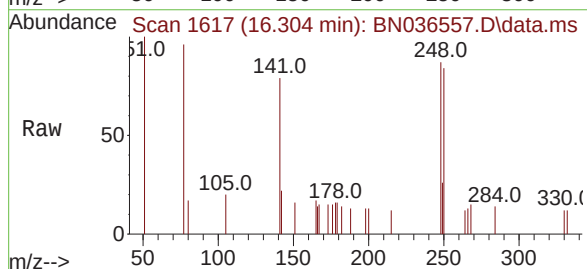
Tgt Ion:248 Resp: 502

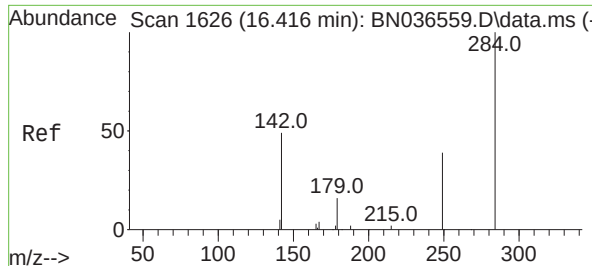
Ion Ratio Lower Upper

248 100

250 96.6 73.0 109.6

141 90.4 68.6 103.0





#22

Hexachlorobenzene

Concen: 0.101 ng

RT: 16.416 min Scan# 1626

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

Tgt Ion:284 Resp: 632

Ion Ratio Lower Upper

284 100

142 45.7 37.0 55.4

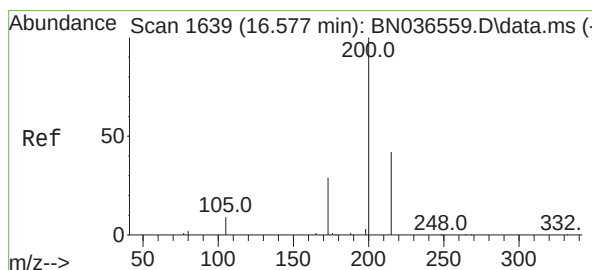
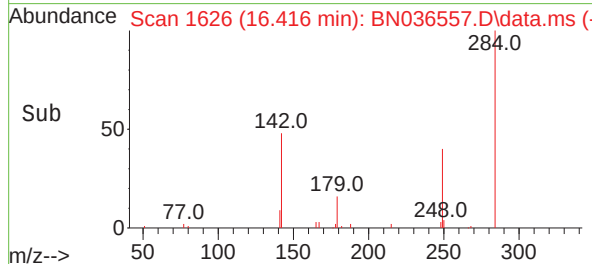
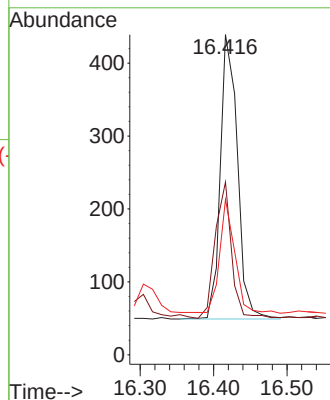
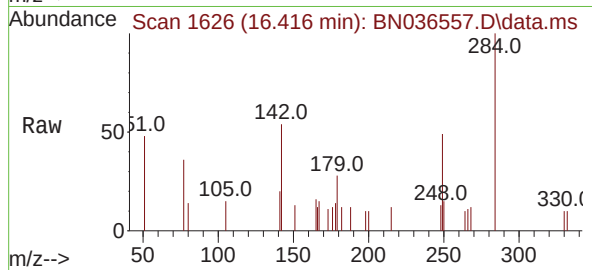
249 37.2 28.1 42.1

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Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#23

Atrazine

Concen: 0.096 ng

RT: 16.578 min Scan# 1639

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

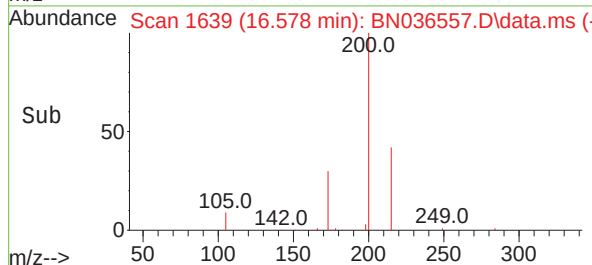
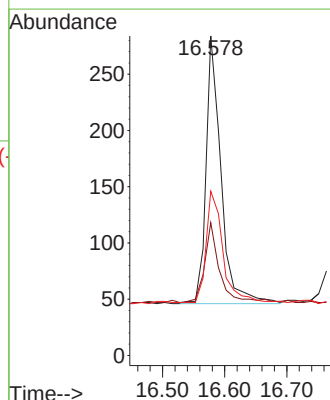
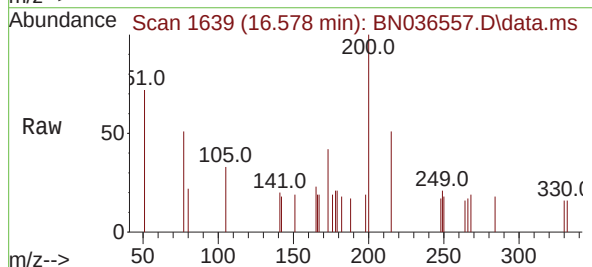
Tgt Ion:200 Resp: 400

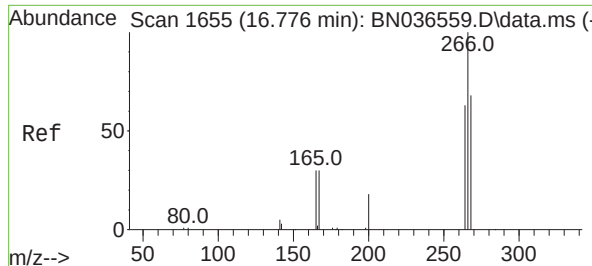
Ion Ratio Lower Upper

200 100

173 41.5 27.3 40.9#

215 51.4 36.8 55.2





#24

Pentachlorophenol

Concen: 0.102 ng

RT: 16.776 min Scan# 1655

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

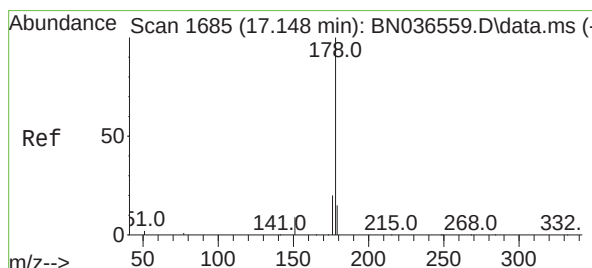
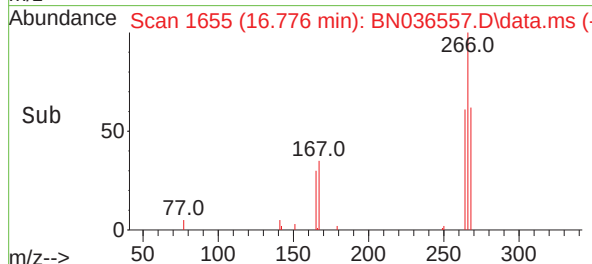
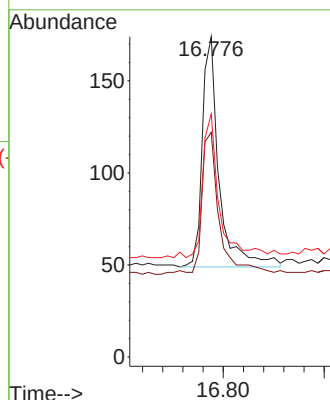
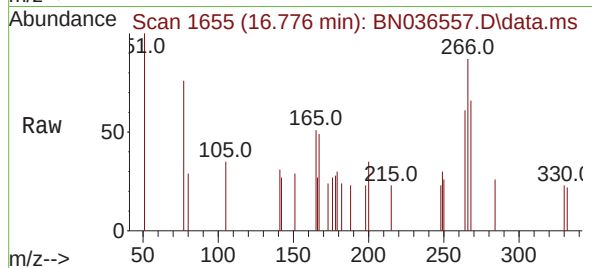
SSTDICC0.1

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 266   | Resp: | 290  |
| Ion Ratio | Lower | Upper |      |
| 266       | 100   |       |      |
| 264       | 64.8  | 49.6  | 74.4 |
| 268       | 62.8  | 50.9  | 76.3 |

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Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#25

Phenanthrene

Concen: 0.099 ng

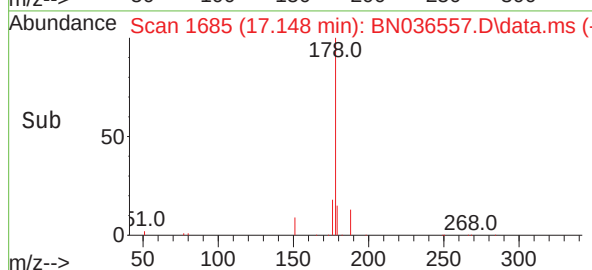
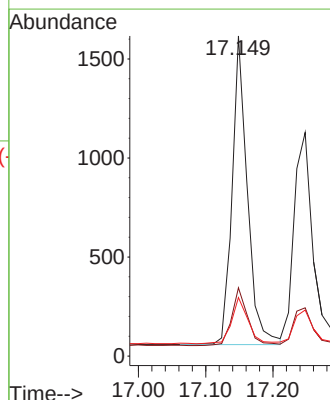
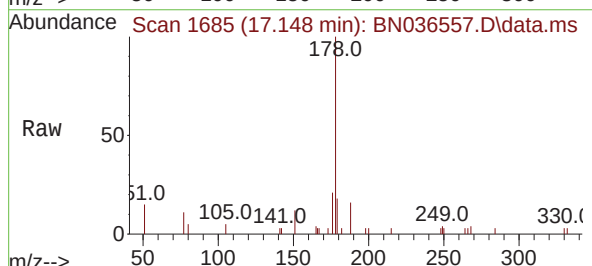
RT: 17.148 min Scan# 1685

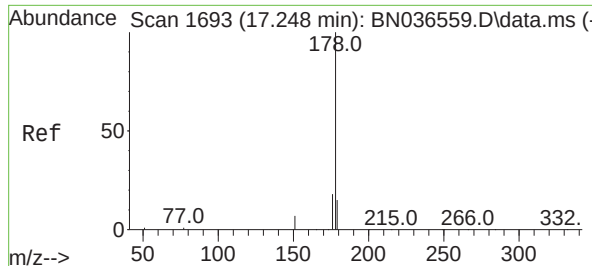
Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

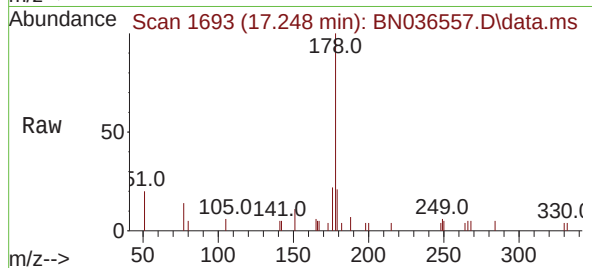
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 178   | Resp: | 2459 |
| Ion Ratio | Lower | Upper |      |
| 178       | 100   |       |      |
| 176       | 19.6  | 15.9  | 23.9 |
| 179       | 16.1  | 12.2  | 18.4 |





#26  
Anthracene  
Concen: 0.095 ng  
RT: 17.248 min Scan# 1693  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

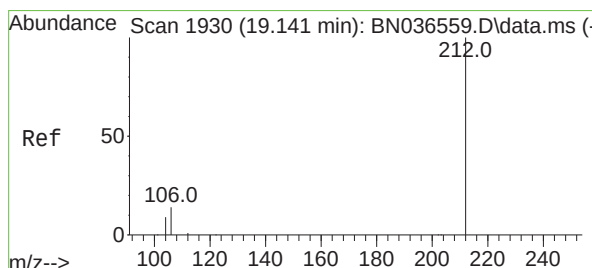
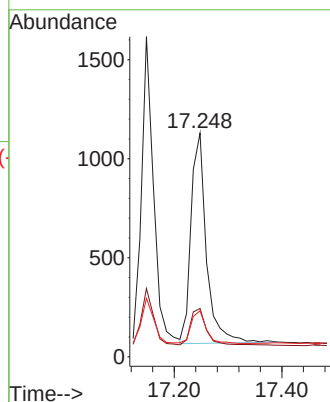
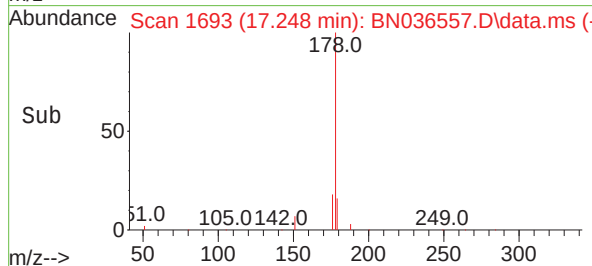
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.1



Tgt Ion:178 Resp: 212  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.4 23.2  
179 15.7 12.6 18.8

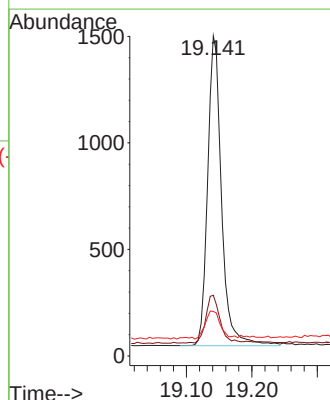
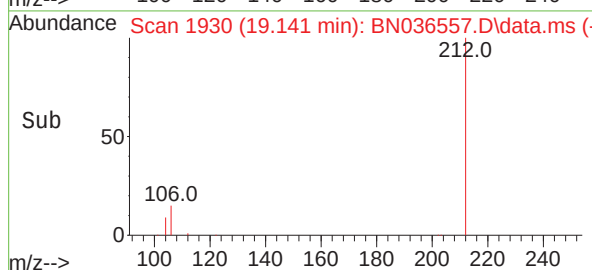
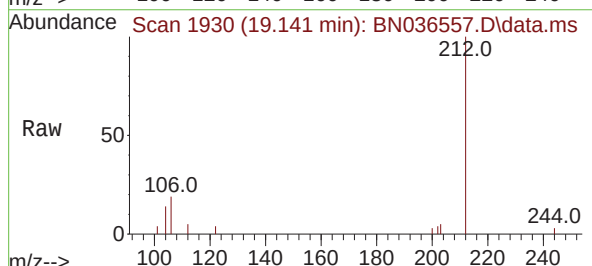
Manual Integrations  
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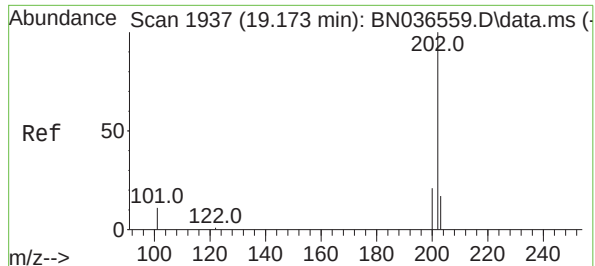
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#27  
Fluoranthene-d10  
Concen: 0.101 ng  
RT: 19.141 min Scan# 1930  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion:212 Resp: 2144  
Ion Ratio Lower Upper  
212 100  
106 15.5 11.8 17.6  
104 9.7 7.3 10.9





#28

Fluoranthene

Concen: 0.099 ng

RT: 19.174 min Scan# 1937

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

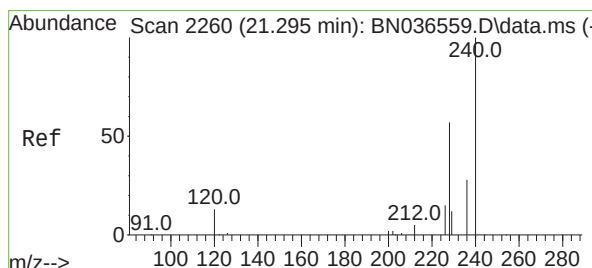
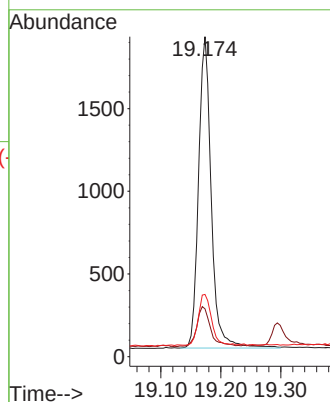
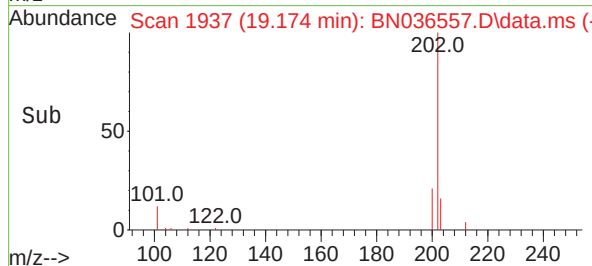
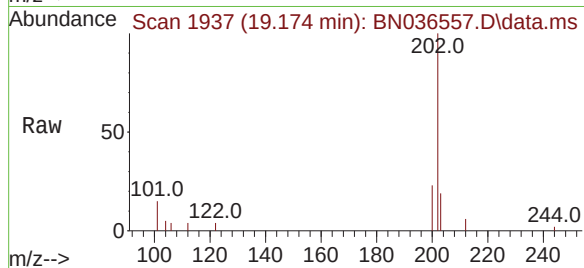
SSTDICC0.1

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 202   | Resp: | 277  |
| Ion Ratio | Lower | Upper |      |
| 202       | 100   |       |      |
| 101       | 14.0  | 9.4   | 14.0 |
| 203       | 17.0  | 13.5  | 20.3 |

Manual Integrations

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Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#29

Chrysene-d12

Concen: 0.400 ng

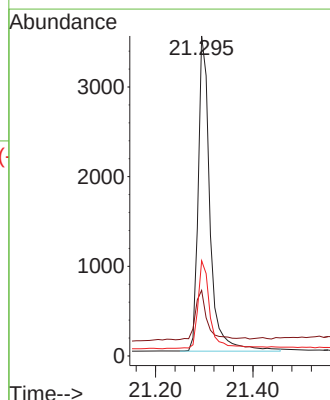
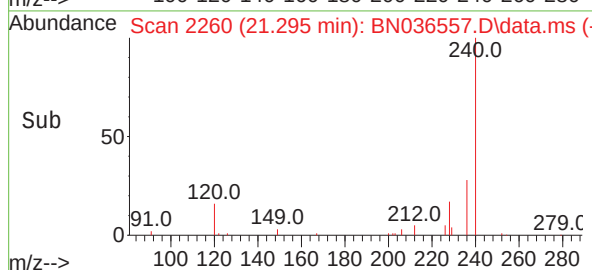
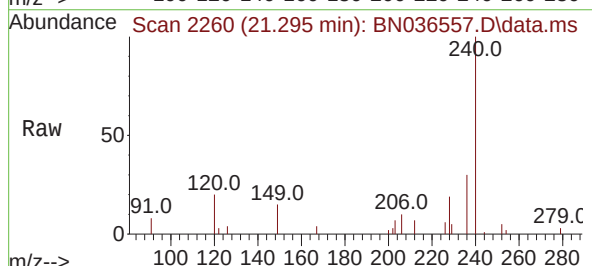
RT: 21.295 min Scan# 2260

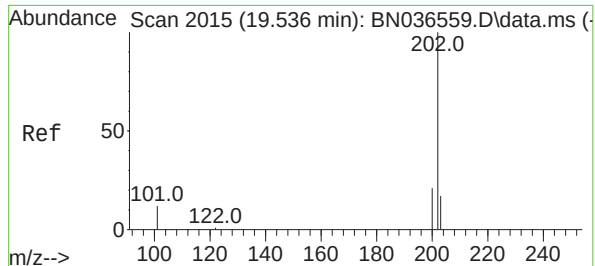
Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 240   | Resp: | 5886 |
| Ion Ratio | Lower | Upper |      |
| 240       | 100   |       |      |
| 120       | 20.5  | 14.6  | 22.0 |
| 236       | 29.8  | 24.1  | 36.1 |





#30

Pyrene

Concen: 0.099 ng

RT: 19.536 min Scan# 2015

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

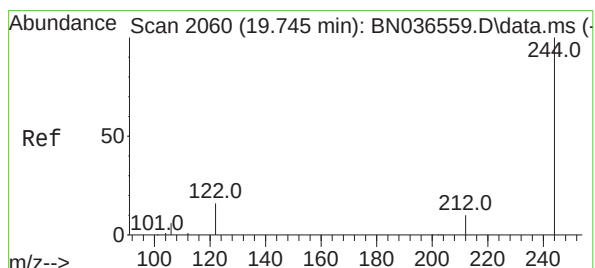
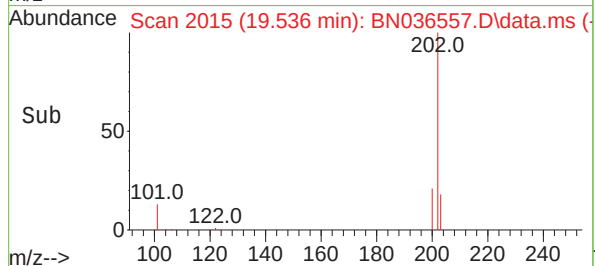
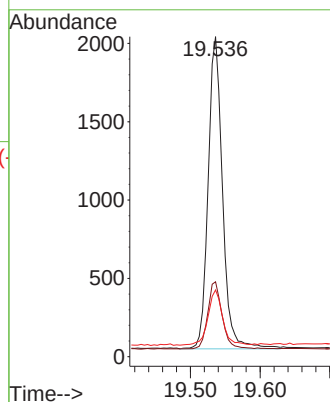
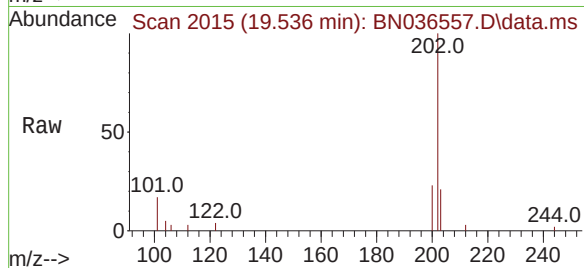
SSTDICC0.1

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 202   | Resp: | 286  |
| Ion Ratio | Lower | Upper |      |
| 202       | 100   |       |      |
| 200       | 21.3  | 17.1  | 25.7 |
| 203       | 17.9  | 14.1  | 21.1 |

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#31

Terphenyl-d14

Concen: 0.100 ng

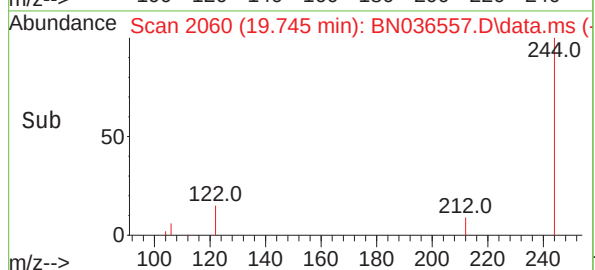
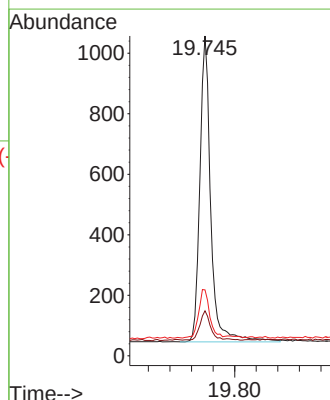
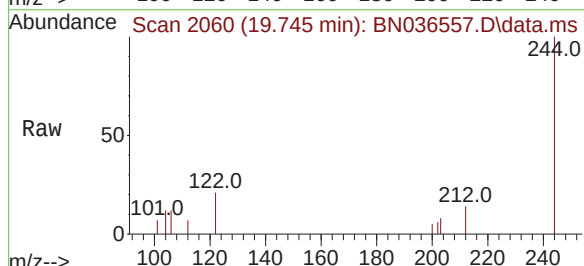
RT: 19.745 min Scan# 2060

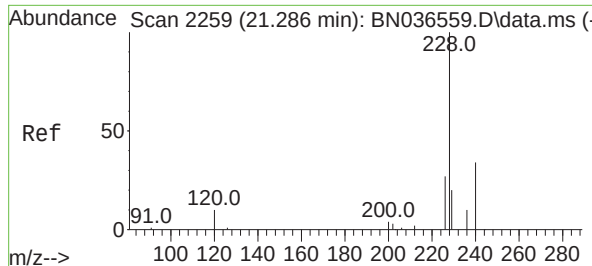
Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 244   | Resp: | 1416 |
| Ion Ratio | Lower | Upper |      |
| 244       | 100   |       |      |
| 212       | 14.1  | 9.6   | 14.4 |
| 122       | 20.6  | 13.9  | 20.9 |





#32

Benzo(a)anthracene

Concen: 0.100 ng

RT: 21.286 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

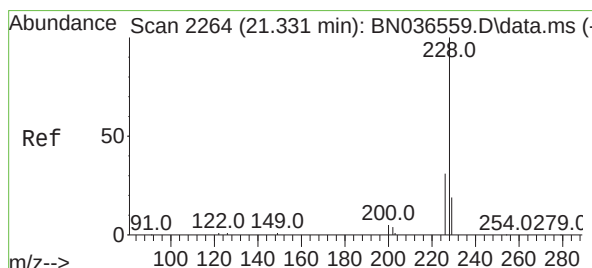
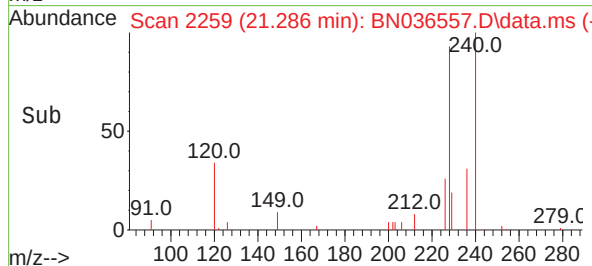
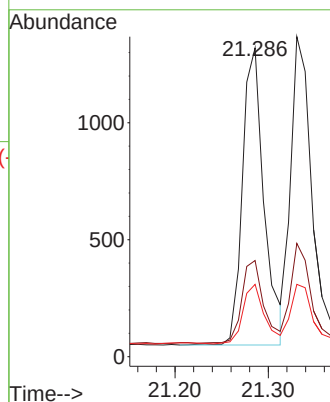
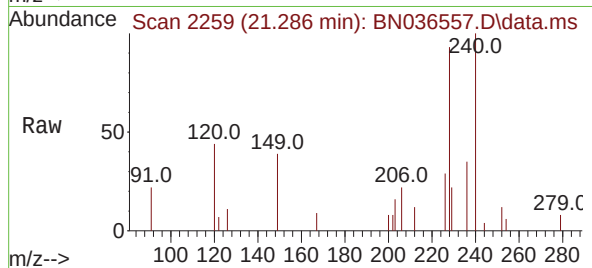
SSTDICC0.1

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 228   | Resp: | 204  |
| Ion Ratio | Lower | Upper |      |
| 228       | 100   |       |      |
| 226       | 31.1  | 22.5  | 33.7 |
| 229       | 23.4  | 16.6  | 25.0 |

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#33

Chrysene

Concen: 0.098 ng

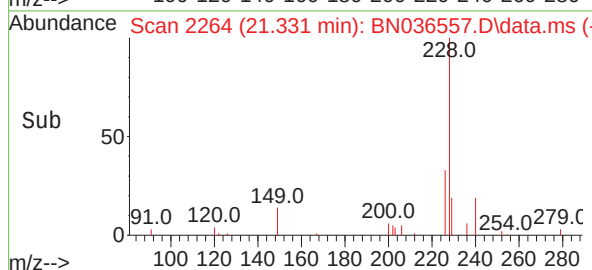
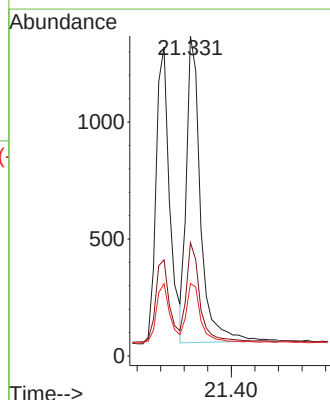
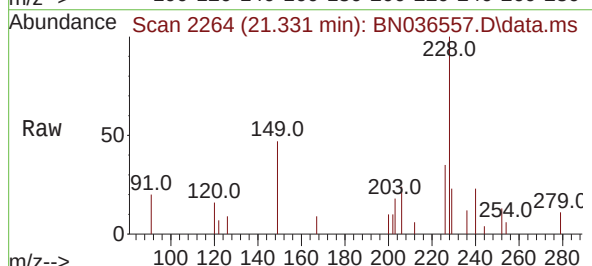
RT: 21.331 min Scan# 2264

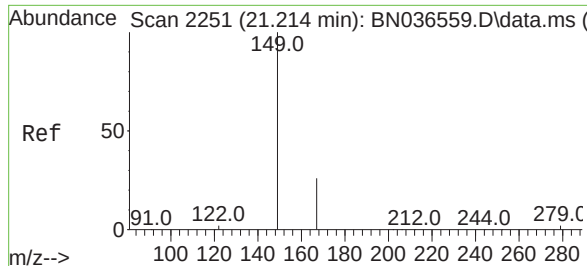
Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 228   | Resp: | 2187 |
| Ion Ratio | Lower | Upper |      |
| 228       | 100   |       |      |
| 226       | 35.4  | 25.3  | 37.9 |
| 229       | 22.6  | 15.8  | 23.8 |





#34

Bis(2-ethylhexyl)phthalate

Concen: 0.121 ng

RT: 21.214 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

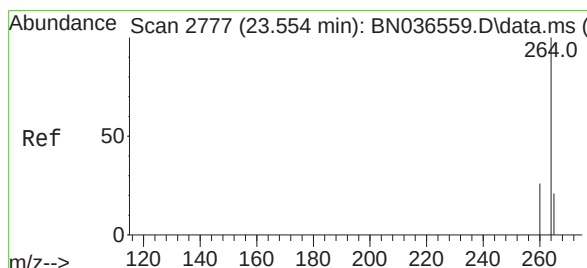
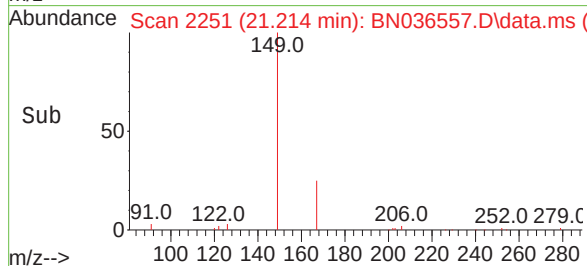
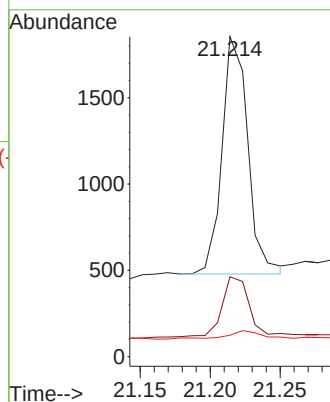
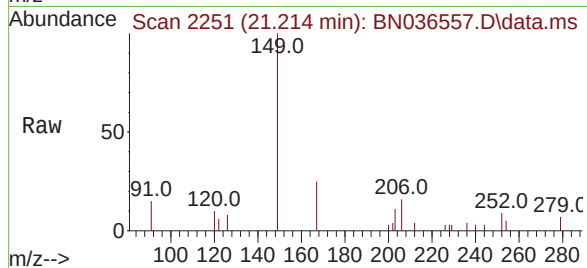
SSTDICC0.1

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 149   | Resp: | 1760 |
| Ion Ratio | Lower | Upper |      |
| 149       | 100   |       |      |
| 167       | 27.9  | 20.7  | 31.1 |
| 279       | 4.9   | 3.6   | 5.4  |

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#35

Perylene-d12

Concen: 0.400 ng

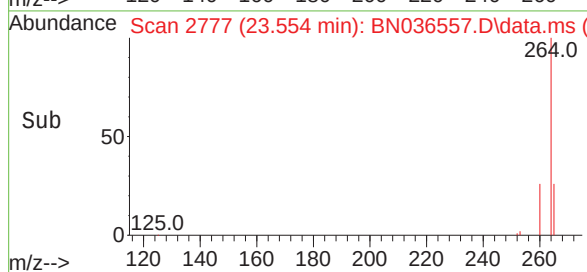
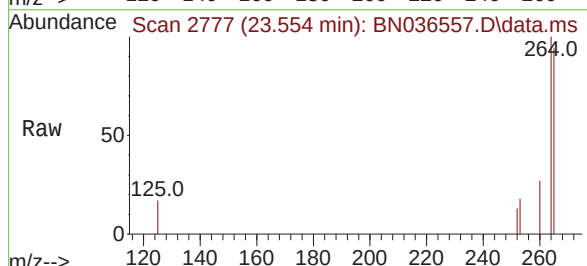
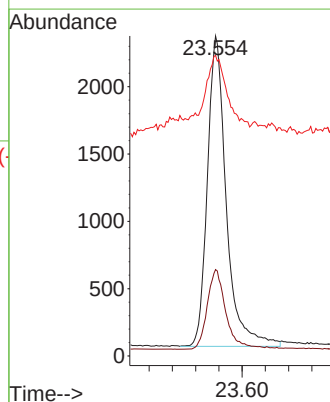
RT: 23.554 min Scan# 2777

Delta R.T. 0.000 min

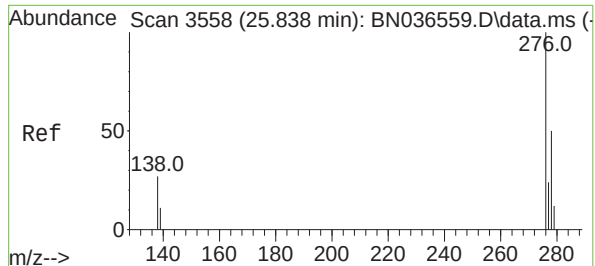
Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 264   | Resp: | 5207  |
| Ion Ratio | Lower | Upper |       |
| 264       | 100   |       |       |
| 260       | 27.0  | 22.6  | 33.8  |
| 265       | 93.9  | 88.1  | 132.1 |







#36

Indeno(1,2,3-cd)pyrene

Concen: 0.080 ng

RT: 25.841 min Scan# 3558

Delta R.T. 0.003 min

Lab File: BN036557.D

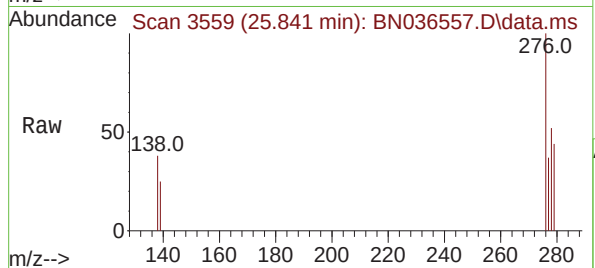
Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1



Tgt Ion:276 Resp: 1510

Ion Ratio Lower Upper

276 100

138 27.6 23.4 35.2

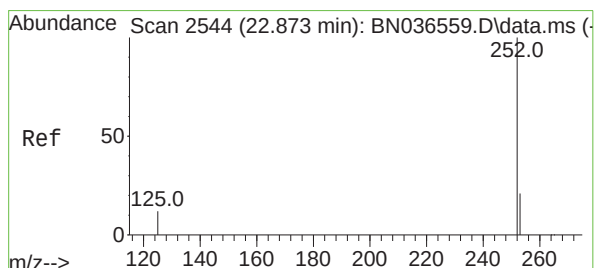
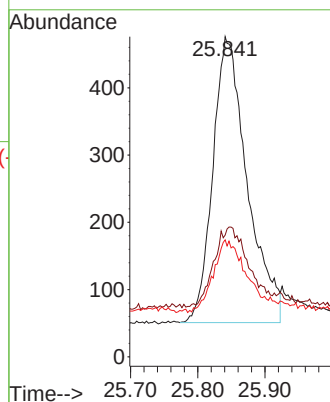
277 24.2 20.0 30.0

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#37

Benzo(b)fluoranthene

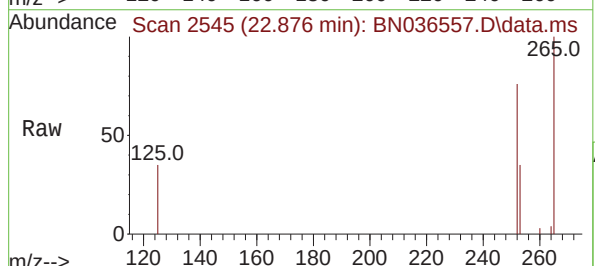
Concen: 0.090 ng

RT: 22.876 min Scan# 2545

Delta R.T. 0.003 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42



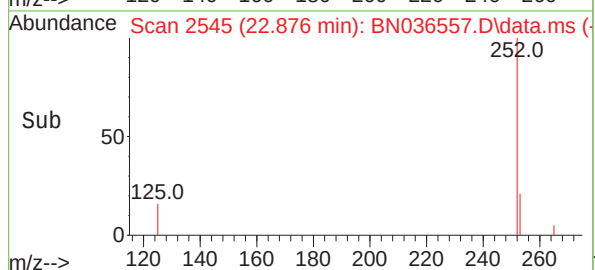
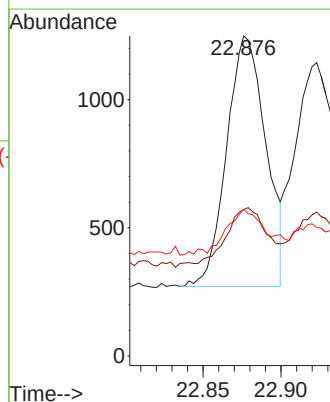
Tgt Ion:252 Resp: 1707

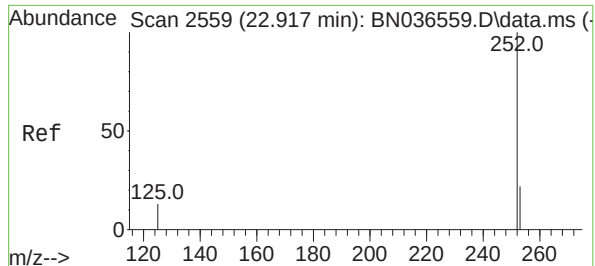
Ion Ratio Lower Upper

252 100

253 45.8 23.9 35.9#

125 45.8 17.4 26.2#





#38

Benzo(k)fluoranthene

Concen: 0.098 ng

RT: 22.923 min Scan# 2561

Delta R.T. 0.006 min

Lab File: BN036557.D

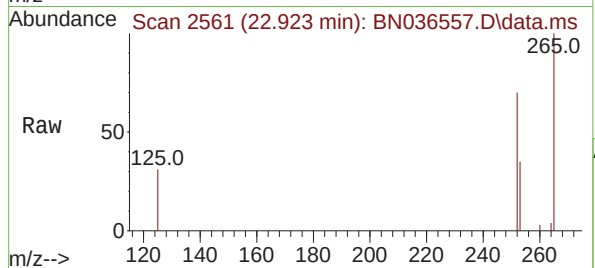
Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

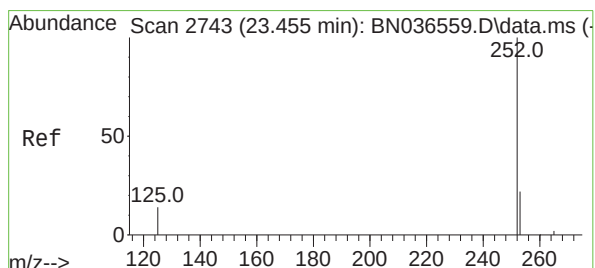
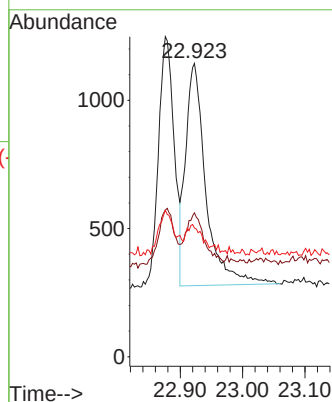
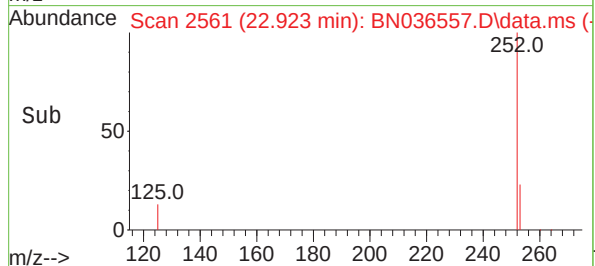


|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 1958  |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 49.0  | 24.6  | 36.8# |
| 125       | 43.9  | 17.8  | 26.8# |

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#39

Benzo(a)pyrene

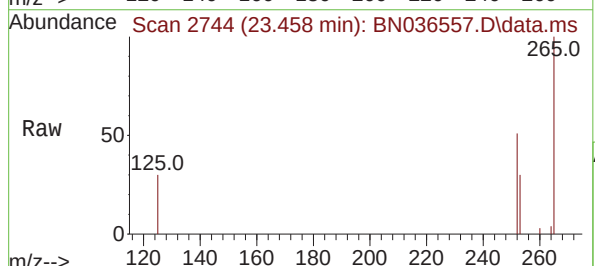
Concen: 0.089 ng

RT: 23.458 min Scan# 2744

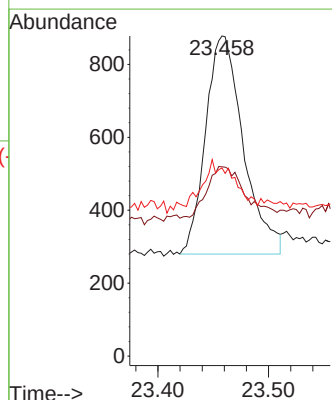
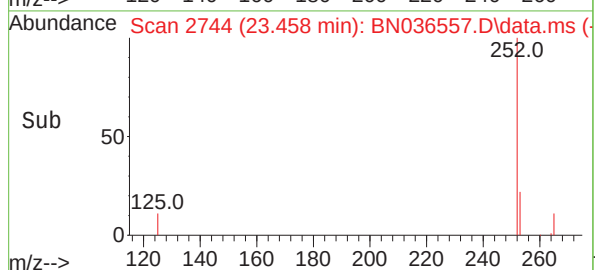
Delta R.T. 0.003 min

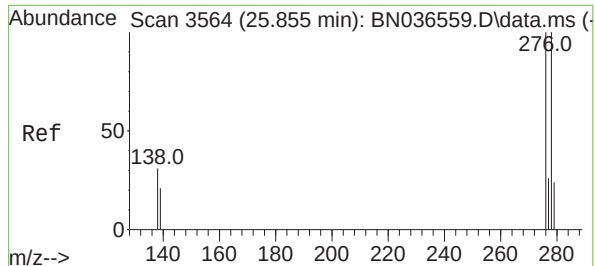
Lab File: BN036557.D

Acq: 10 Mar 2025 11:42



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 1419  |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 59.1  | 27.8  | 41.8# |
| 125       | 58.8  | 22.7  | 34.1# |





#40

Dibenzo(a,h)anthracene

Concen: 0.079 ng

RT: 25.861 min Scan# 3566

Delta R.T. 0.006 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

Tgt Ion:278 Resp: 1163

Ion Ratio Lower Upper

278 100

139 37.8 20.8 31.2#

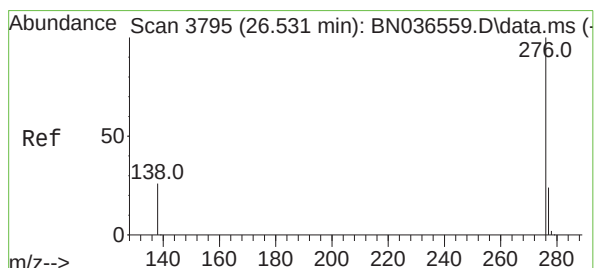
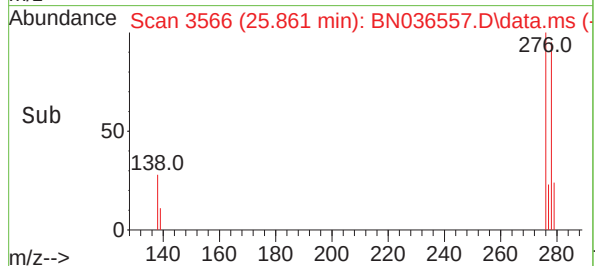
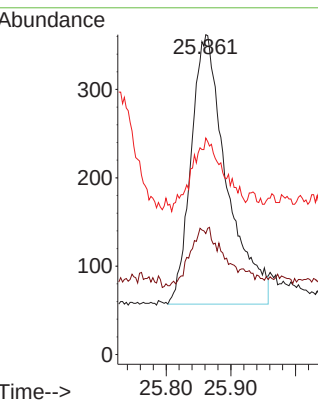
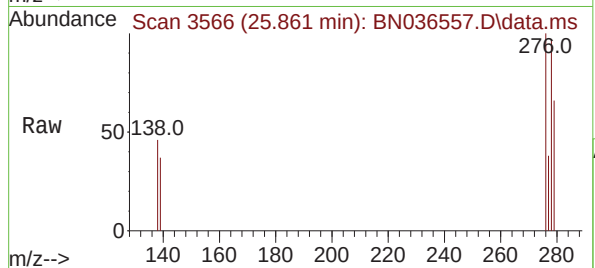
279 67.7 28.8 43.2#

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#41

Benzo(g,h,i)perylene

Concen: 0.089 ng

RT: 26.539 min Scan# 3798

Delta R.T. 0.009 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

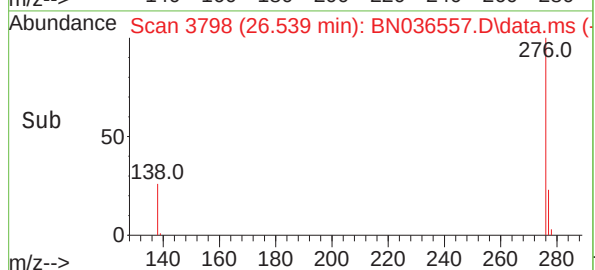
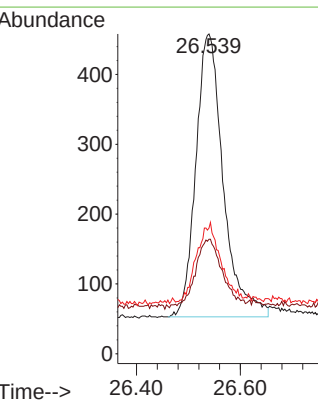
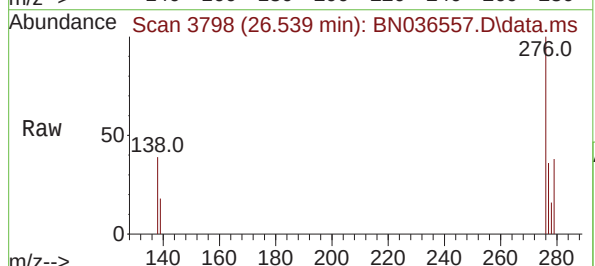
Tgt Ion:276 Resp: 1482

Ion Ratio Lower Upper

276 100

277 35.8 22.2 33.4#

138 39.3 24.1 36.1#



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036558.D  
 Acq On : 10 Mar 2025 12:18  
 Operator : RC/JU  
 Sample : SSTDICC0.2  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.2

Manual Integrations  
 APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025

Quant Time: Mar 10 16:00:58 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2504     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5844     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.366 | 164  | 3516     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.111 | 188  | 7506     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.295 | 240  | 4730     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.554 | 264  | 4241     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 1137     | 0.195 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.901  | 99   | 1323     | 0.184 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.875  | 82   | 1156     | 0.182 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.111 | 152  | 1603     | 0.184 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 282      | 0.177 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.993 | 172  | 3485     | 0.170 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.146 | 212  | 3583     | 0.186 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.745 | 244  | 2283     | 0.201 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
| 2) 1,4-Dioxane                | 3.247  | 88   | 550m     | 0.198 | ng    | Qvalue   |
| 3) n-Nitrosodimethylamine     | 3.557  | 42   | 1094     | 0.195 | ng    | 92       |
| 6) bis(2-Chloroethyl)ether    | 7.154  | 93   | 1440     | 0.193 | ng    | 99       |
| 9) Naphthalene                | 10.562 | 128  | 3286     | 0.191 | ng    | 97       |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 828      | 0.205 | ng    | # 97     |
| 12) 2-Methylnaphthalene       | 12.187 | 142  | 2034     | 0.186 | ng    | 97       |
| 16) Acenaphthylene            | 14.088 | 152  | 3087     | 0.186 | ng    | 100      |
| 17) Acenaphthene              | 14.430 | 154  | 2038     | 0.188 | ng    | 99       |
| 18) Fluorene                  | 15.414 | 166  | 2813     | 0.191 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.510 | 198  | 214      | 0.258 | ng    | # 69     |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248  | 853      | 0.181 | ng    | 93       |
| 22) Hexachlorobenzene         | 16.416 | 284  | 1079     | 0.190 | ng    | 99       |
| 23) Atrazine                  | 16.578 | 200  | 716      | 0.190 | ng    | 97       |
| 24) Pentachlorophenol         | 16.776 | 266  | 435      | 0.168 | ng    | 98       |
| 25) Phenanthrene              | 17.148 | 178  | 4171     | 0.185 | ng    | 100      |
| 26) Anthracene                | 17.248 | 178  | 3645     | 0.179 | ng    | 99       |
| 28) Fluoranthene              | 19.174 | 202  | 4666     | 0.184 | ng    | 99       |
| 30) Pyrene                    | 19.536 | 202  | 4742     | 0.205 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.286 | 228  | 3111     | 0.189 | ng    | 97       |
| 33) Chrysene                  | 21.331 | 228  | 3568     | 0.199 | ng    | 97       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 2601     | 0.222 | ng    | # 97     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.844 | 276  | 2790     | 0.182 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.876 | 252  | 2883     | 0.187 | ng    | # 83     |
| 38) Benzo(k)fluoranthene      | 22.917 | 252  | 2962     | 0.183 | ng    | # 86     |
| 39) Benzo(a)pyrene            | 23.458 | 252  | 2443     | 0.188 | ng    | # 76     |
| 40) Dibenzo(a,h)anthracene    | 25.858 | 278  | 2080     | 0.175 | ng    | # 83     |
| 41) Benzo(g,h,i)perylene      | 26.536 | 276  | 2573     | 0.189 | ng    | 95       |
| -----                         |        |      |          |       |       |          |

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

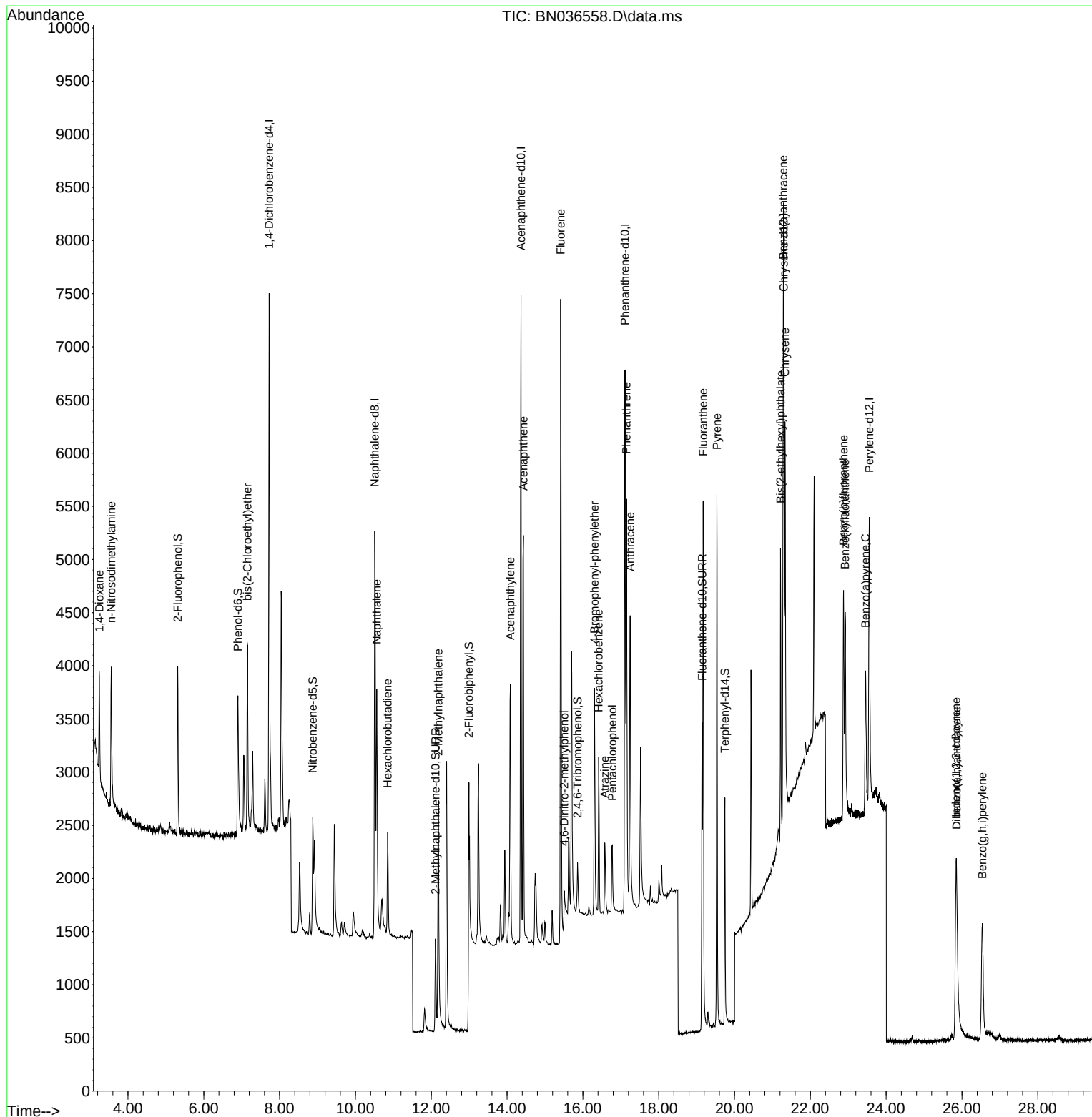
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036558.D  
Acq On : 10 Mar 2025 12:18  
Operator : RC/JU  
Sample : SSTDICC0.2  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

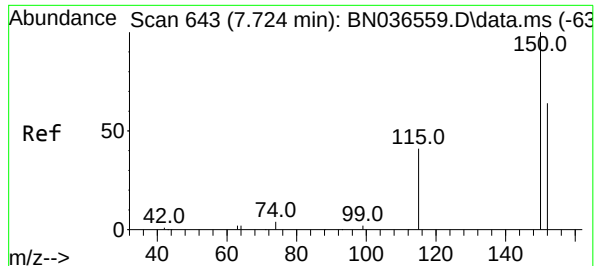
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

Quant Time: Mar 10 16:00:58 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

Manual Integrations  
APPROVED

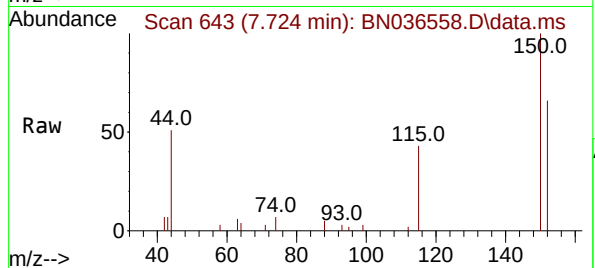
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

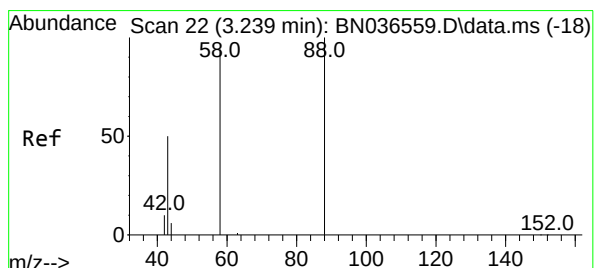
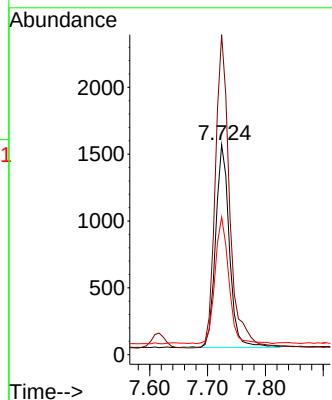
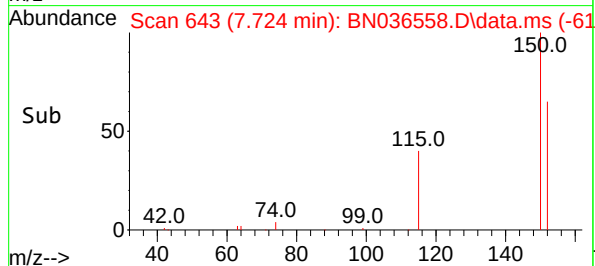
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion: 152 Resp: 2504  
Ion Ratio Lower Upper  
152 100  
150 152.3 123.7 185.5  
115 65.5 54.3 81.5

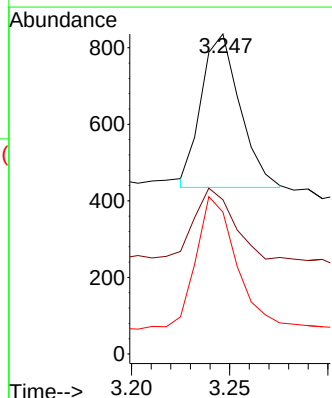
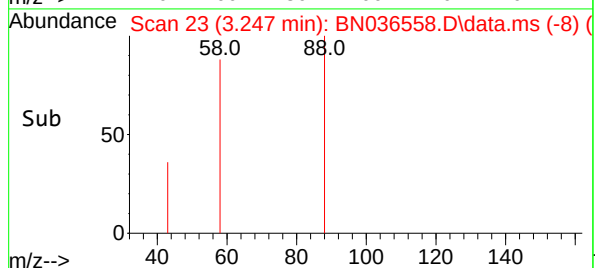
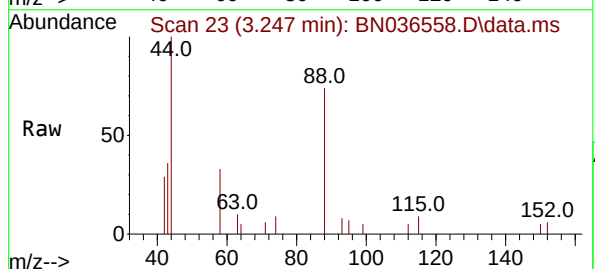
Manual Integrations  
APPROVED

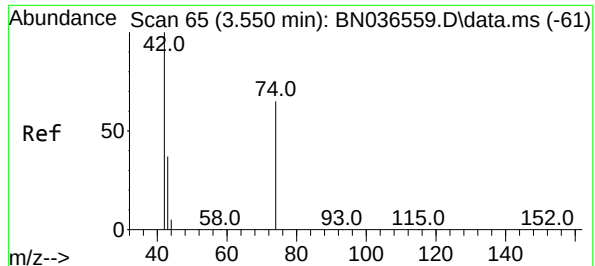
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#2  
1,4-Dioxane  
Concen: 0.198 ng m  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

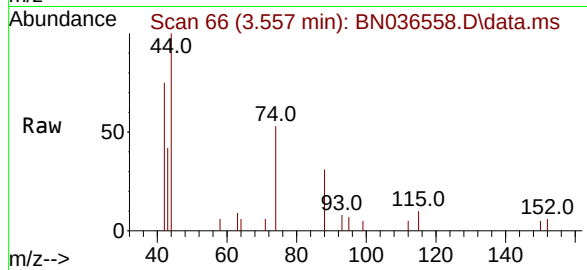
Tgt Ion: 88 Resp: 550  
Ion Ratio Lower Upper  
88 100  
43 56.5 37.8 56.8  
58 93.8 67.4 101.2





#3  
n-Nitrosodimethylamine  
Concen: 0.195 ng  
RT: 3.557 min Scan# 60  
Delta R.T. 0.007 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

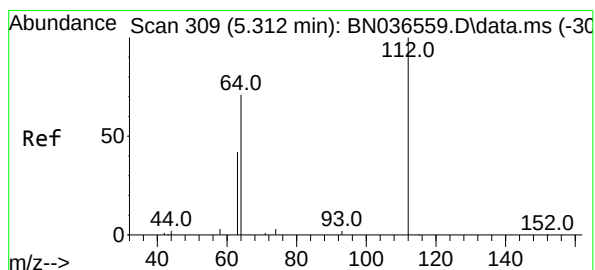
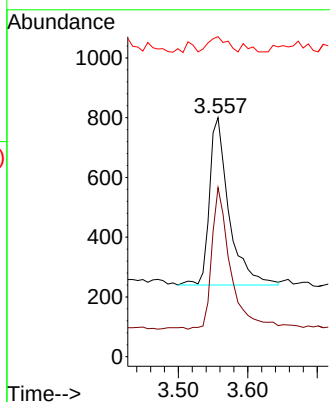
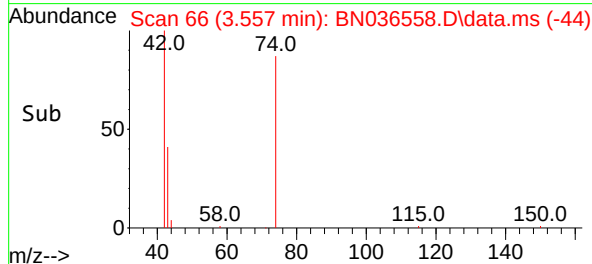
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion: 42 Resp: 1094  
Ion Ratio Lower Upper  
42 100  
74 83.2 60.6 90.8  
44 8.5 6.3 9.5

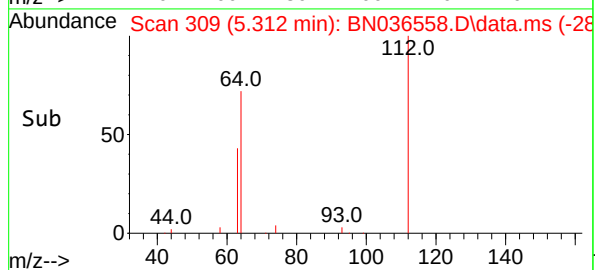
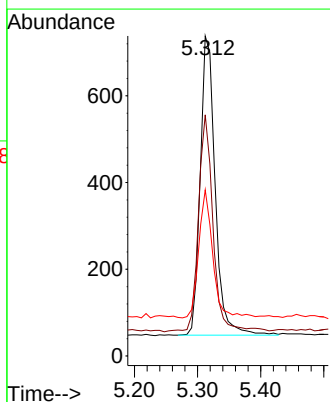
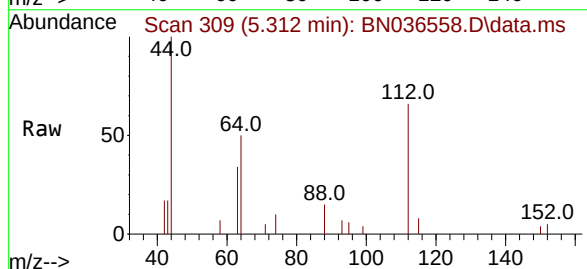
Manual Integrations  
APPROVED

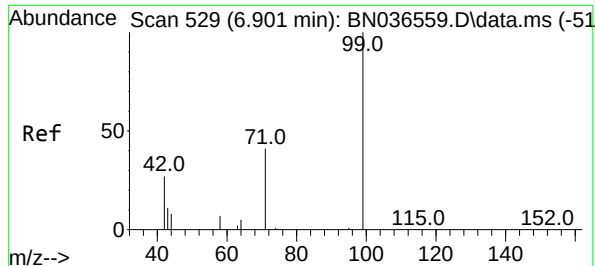
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#4  
2-Fluorophenol  
Concen: 0.195 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:112 Resp: 1137  
Ion Ratio Lower Upper  
112 100  
64 70.6 53.1 79.7  
63 40.3 31.8 47.8





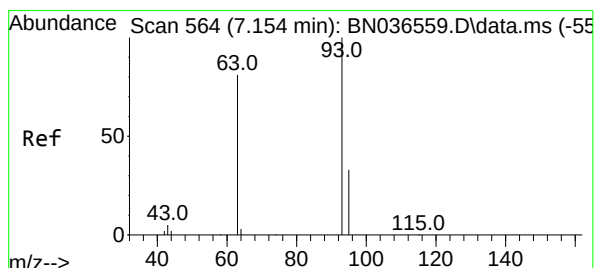
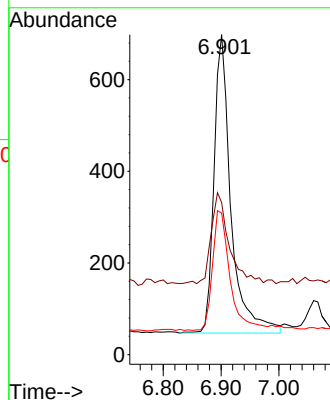
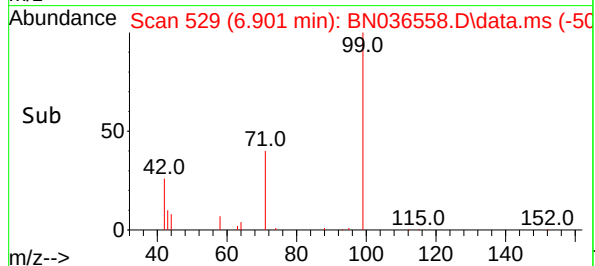
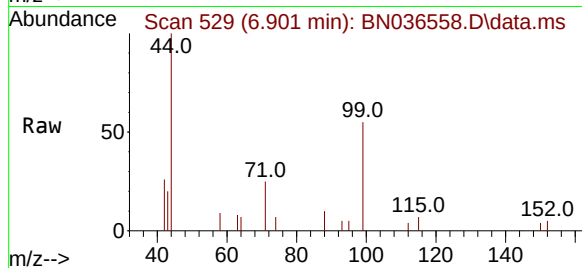
#5  
Phenol-d6  
Concen: 0.184 ng  
RT: 6.901 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

Tgt Ion: 99 Resp: 132  
Ion Ratio Lower Upper  
99 100  
42 32.7 26.5 39.7  
71 41.3 34.1 51.1

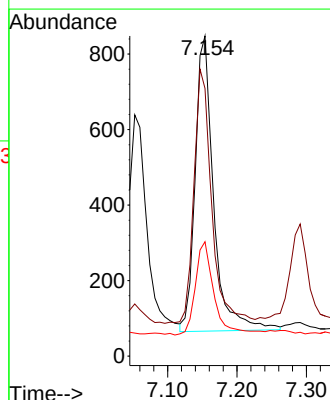
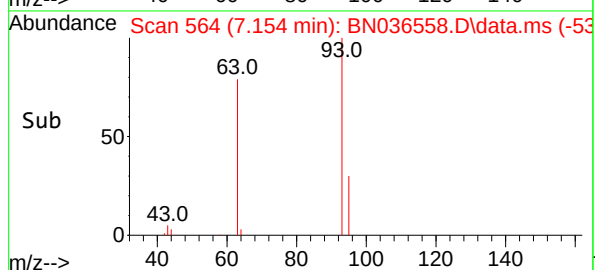
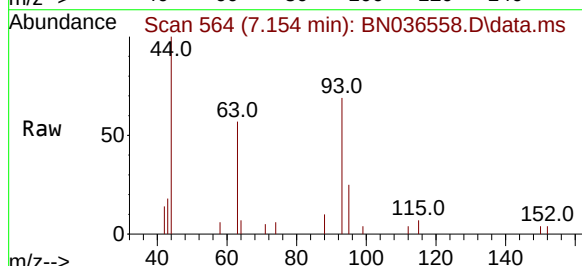
Manual Integrations  
APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

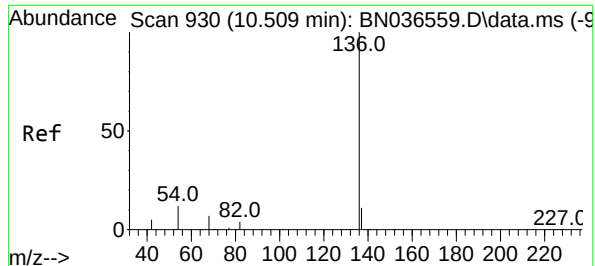


#6  
bis(2-Chloroethyl)ether  
Concen: 0.193 ng  
RT: 7.154 min Scan# 564  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion: 93 Resp: 1440  
Ion Ratio Lower Upper  
93 100  
63 82.9 67.7 101.5  
95 31.9 25.6 38.4

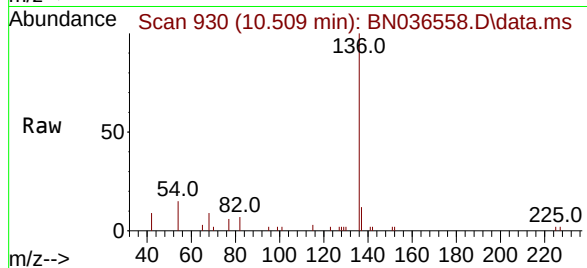






#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

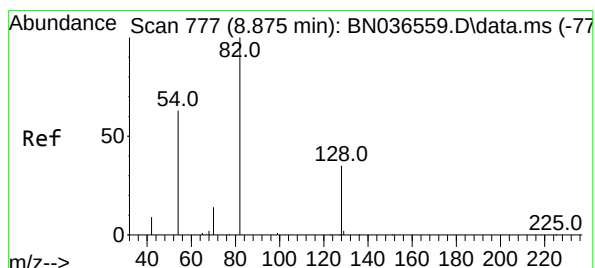
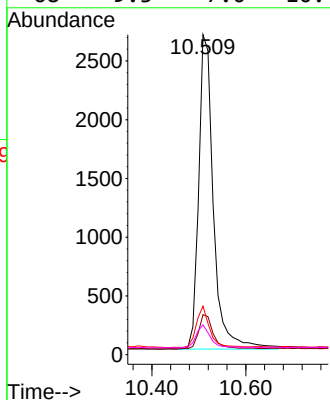
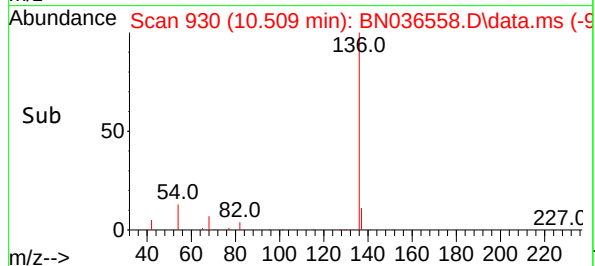
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:136 Resp: 584  
Ion Ratio Lower Upper  
136 100  
137 12.5 10.3 15.5  
54 15.1 11.5 17.3  
68 9.3 7.0 10.4

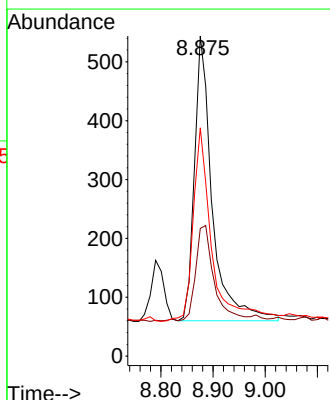
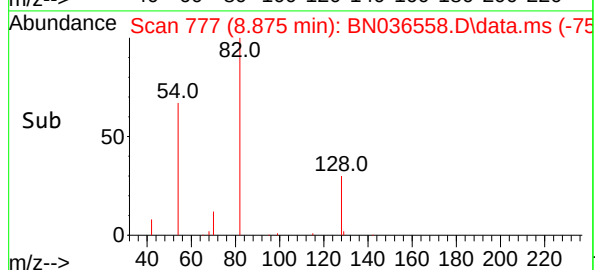
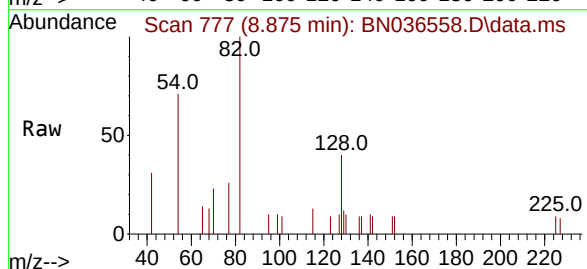
Manual Integrations  
APPROVED

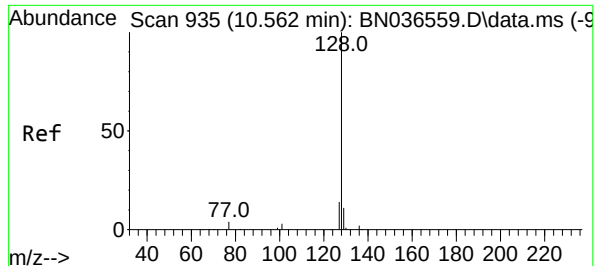
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#8  
Nitrobenzene-d5  
Concen: 0.182 ng  
RT: 8.875 min Scan# 777  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion: 82 Resp: 1156  
Ion Ratio Lower Upper  
82 100  
128 39.9 30.6 45.8  
54 71.3 52.2 78.4





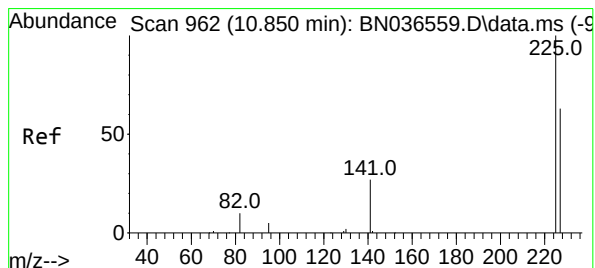
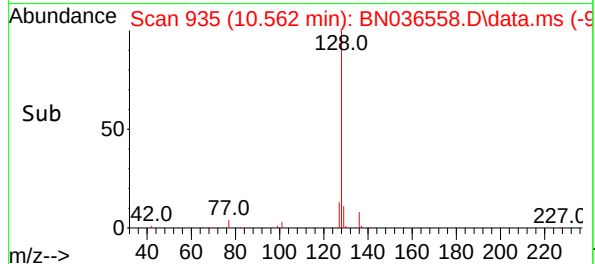
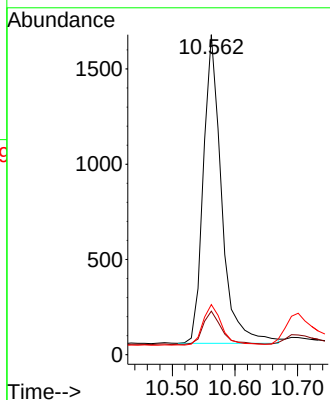
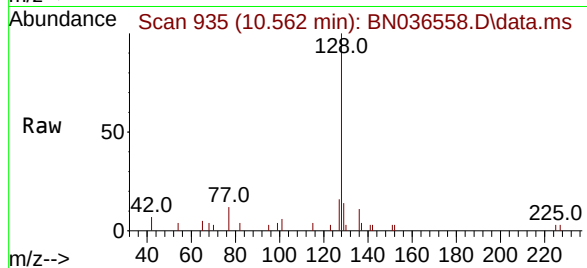
#9  
Naphthalene  
Concen: 0.191 ng  
RT: 10.562 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2

Tgt Ion:128 Resp: 3280  
Ion Ratio Lower Upper  
128 100  
129 13.6 9.8 14.6  
127 15.7 11.8 17.8

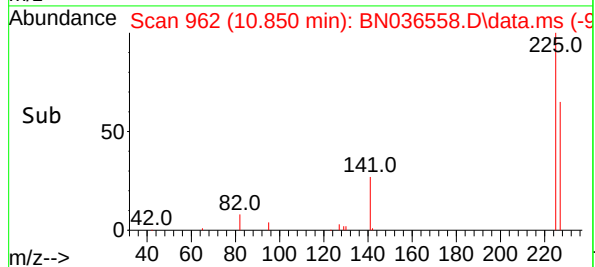
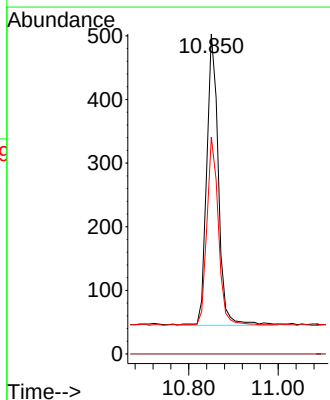
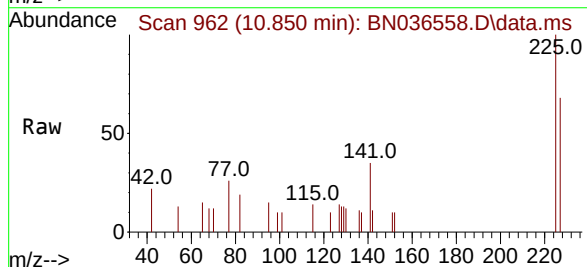
Manual Integrations  
APPROVED

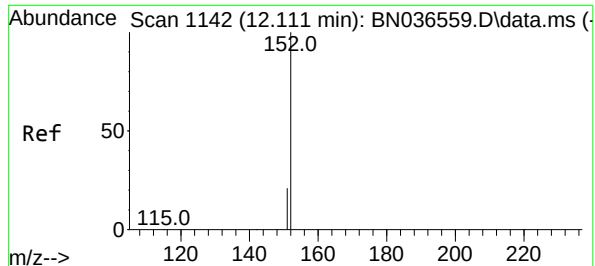
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#10  
Hexachlorobutadiene  
Concen: 0.205 ng  
RT: 10.850 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

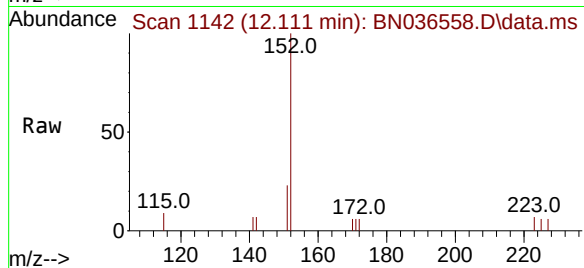
Tgt Ion:225 Resp: 828  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.6 51.8 77.8





#11  
2-Methylnaphthalene-d10  
Concen: 0.184 ng  
RT: 12.111 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

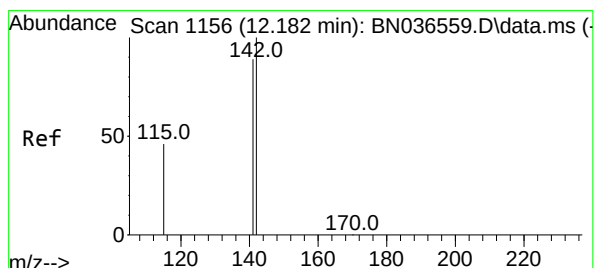
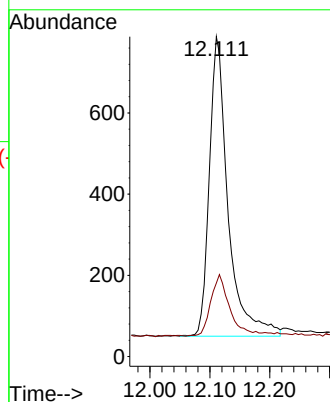
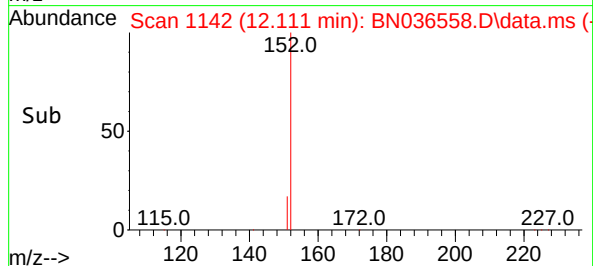
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:152 Resp: 160  
Ion Ratio Lower Upper  
152 100  
151 21.0 17.0 25.6

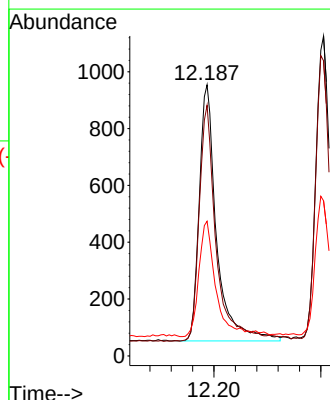
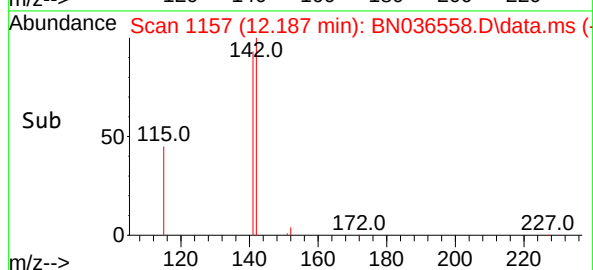
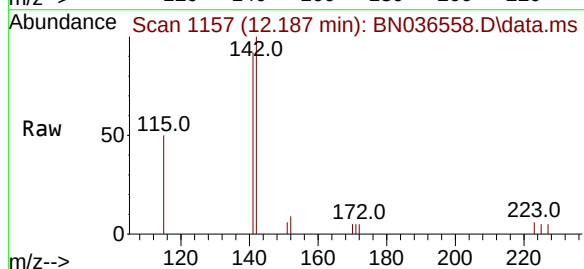
Manual Integrations  
APPROVED

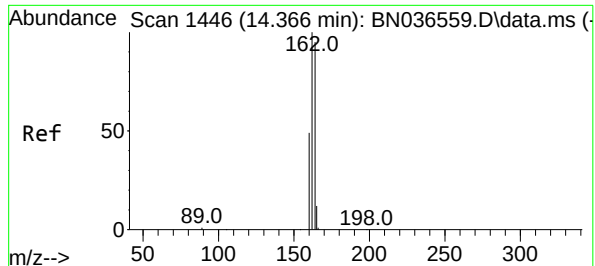
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#12  
2-Methylnaphthalene  
Concen: 0.186 ng  
RT: 12.187 min Scan# 1157  
Delta R.T. 0.005 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

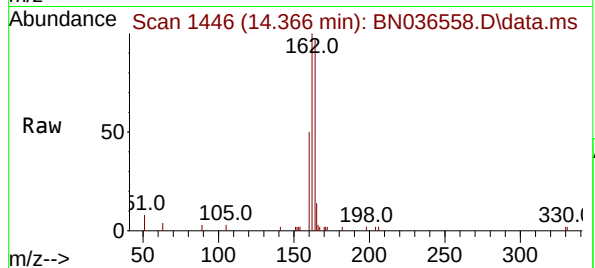
Tgt Ion:142 Resp: 2034  
Ion Ratio Lower Upper  
142 100  
141 92.5 71.7 107.5  
115 49.7 38.3 57.5





#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.366 min Scan# 1446  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

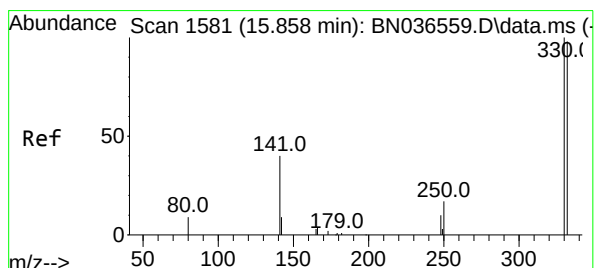
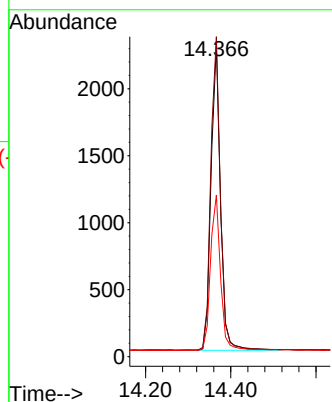
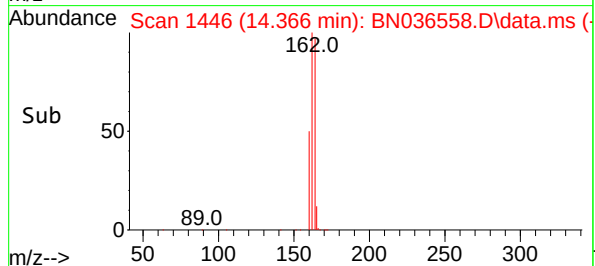
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



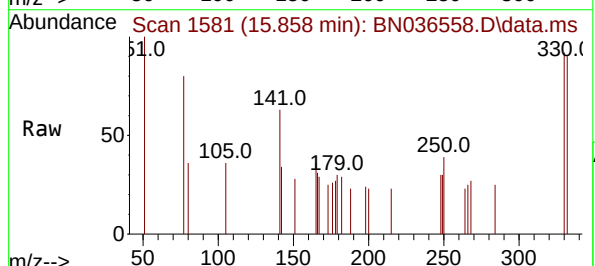
Tgt Ion:164 Resp: 3510  
Ion Ratio Lower Upper  
164 100  
162 102.6 84.2 126.2  
160 51.8 42.2 63.2

Manual Integrations  
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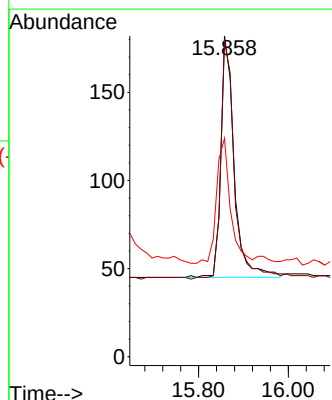
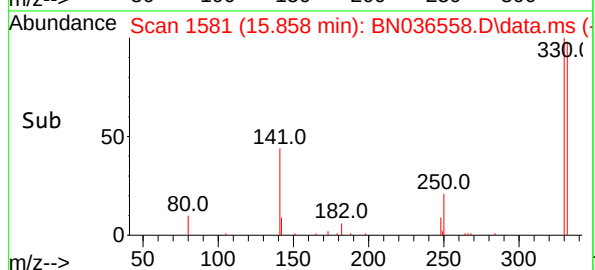
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

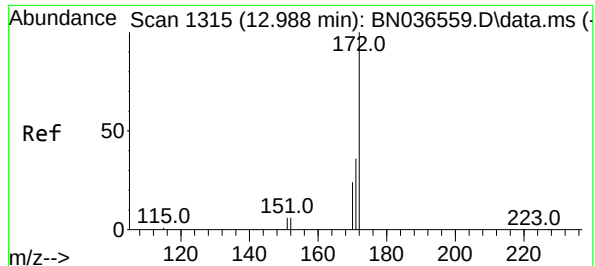


#14  
2,4,6-Tribromophenol  
Concen: 0.177 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18



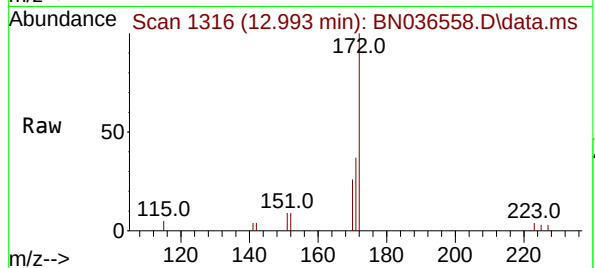
Tgt Ion:330 Resp: 282  
Ion Ratio Lower Upper  
330 100  
332 103.5 75.2 112.8  
141 53.9 43.4 65.2





#15  
2-Fluorobiphenyl  
Concen: 0.170 ng  
RT: 12.993 min Scan# 1315  
Delta R.T. 0.005 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

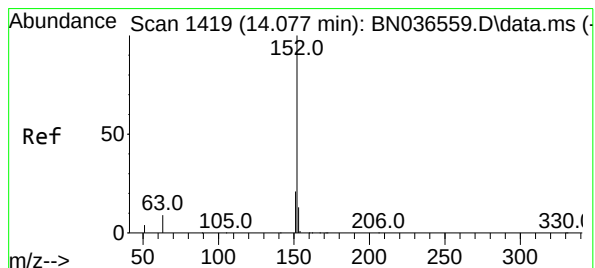
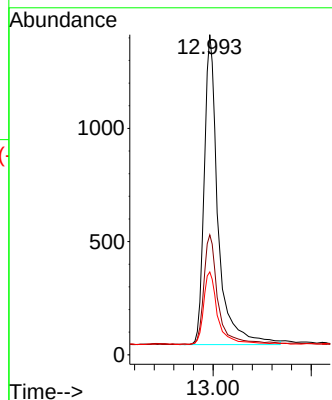
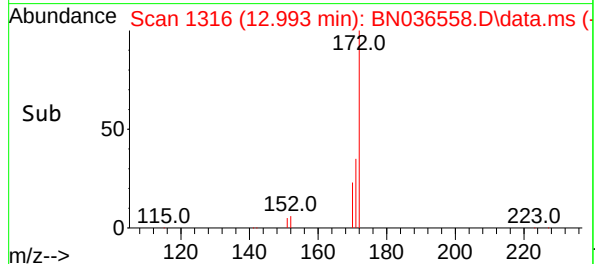
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:172 Resp: 3485  
Ion Ratio Lower Upper  
172 100  
171 37.5 29.5 44.3  
170 25.9 20.2 30.4

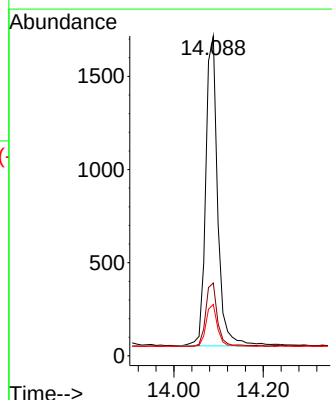
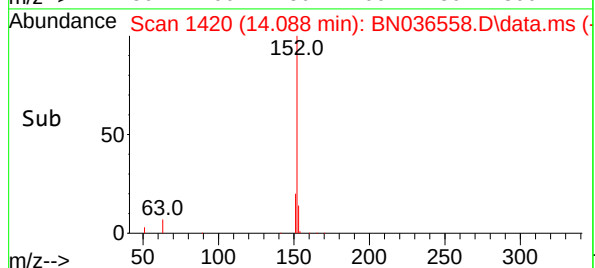
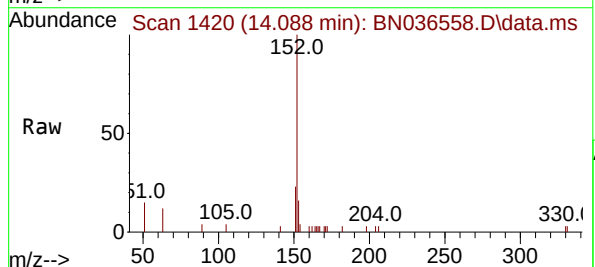
Manual Integrations  
APPROVED

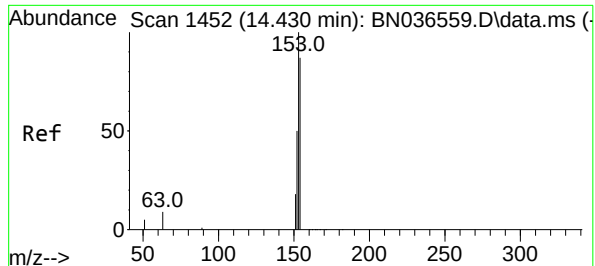
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#16  
Acenaphthylene  
Concen: 0.186 ng  
RT: 14.088 min Scan# 1420  
Delta R.T. 0.011 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

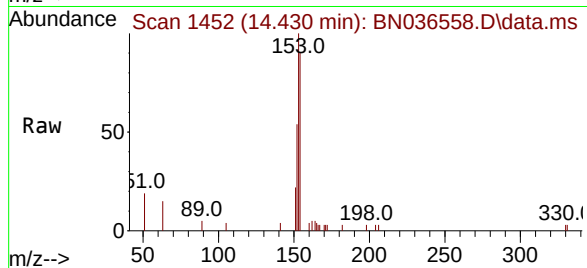
Tgt Ion:152 Resp: 3087  
Ion Ratio Lower Upper  
152 100  
151 20.4 16.2 24.4  
153 13.0 10.6 15.8





#17  
Acenaphthene  
Concen: 0.188 ng  
RT: 14.430 min Scan# 1452  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

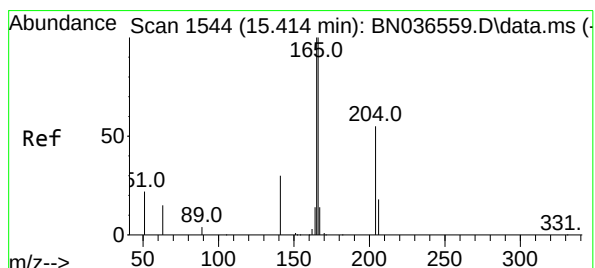
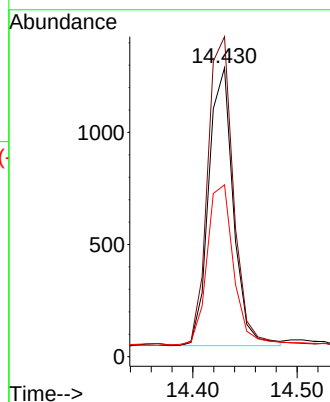
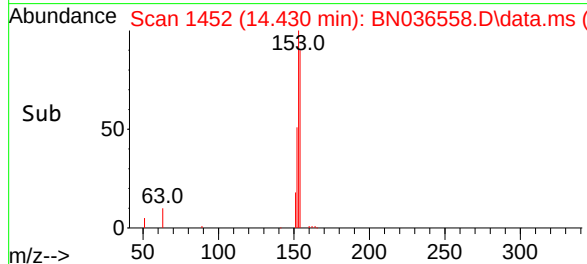
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:154 Resp: 2038  
Ion Ratio Lower Upper  
154 100  
153 117.8 94.1 141.1  
152 63.1 49.8 74.6

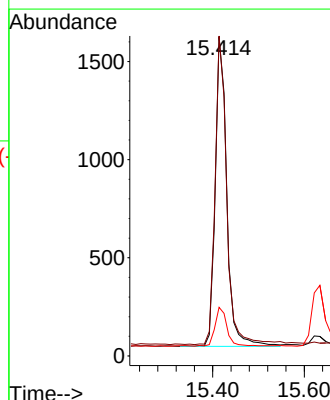
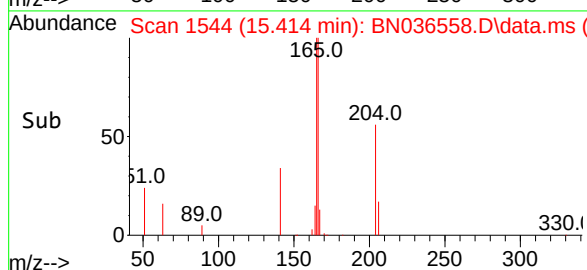
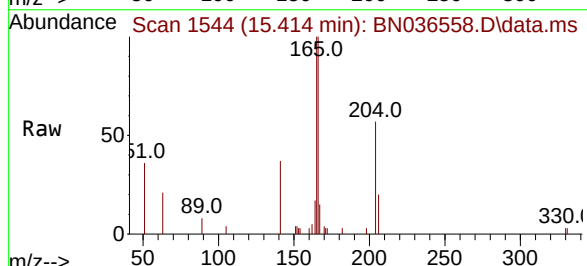
Manual Integrations  
APPROVED

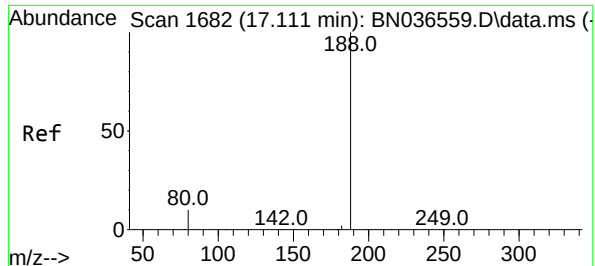
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#18  
Fluorene  
Concen: 0.191 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:166 Resp: 2813  
Ion Ratio Lower Upper  
166 100  
165 101.1 79.8 119.8  
167 12.6 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

Tgt Ion:188 Resp: 7500

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

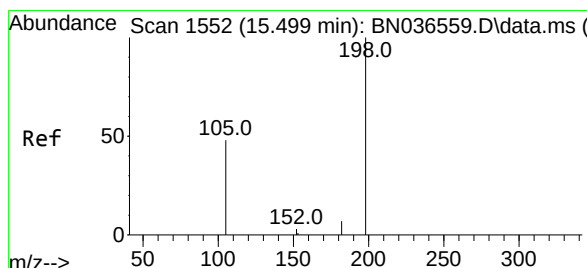
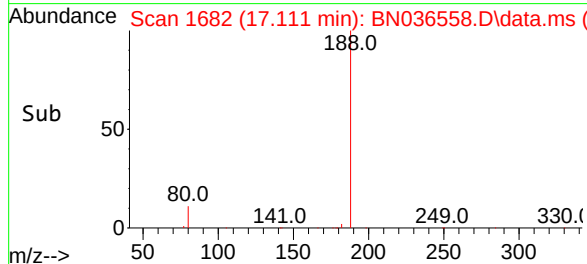
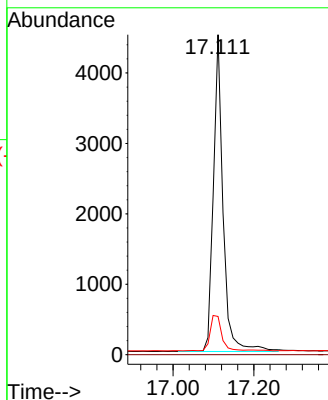
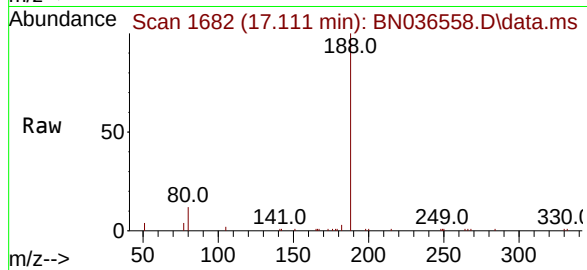
80 11.9 8.8 13.2

Manual Integrations

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Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#20

4,6-Dinitro-2-methylphenol

Concen: 0.258 ng

RT: 15.510 min Scan# 1553

Delta R.T. 0.011 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

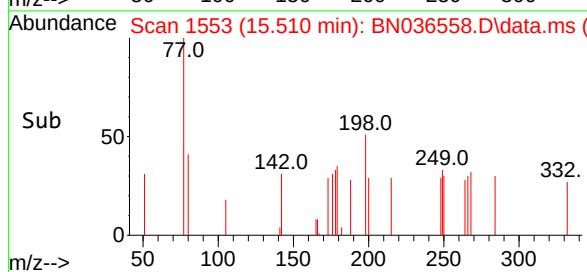
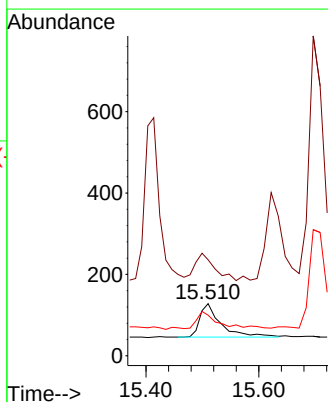
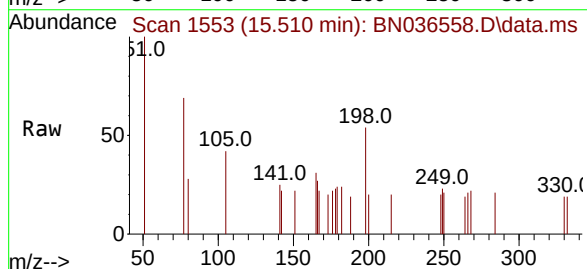
Tgt Ion:198 Resp: 214

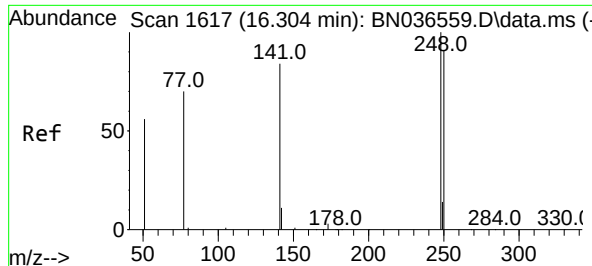
Ion Ratio Lower Upper

198 100

51 184.4 107.9 161.9

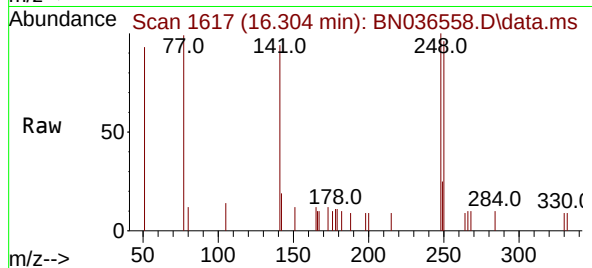
105 78.1 56.2 84.2





#21  
4-Bromophenyl-phenylether  
Concen: 0.181 ng  
RT: 16.304 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

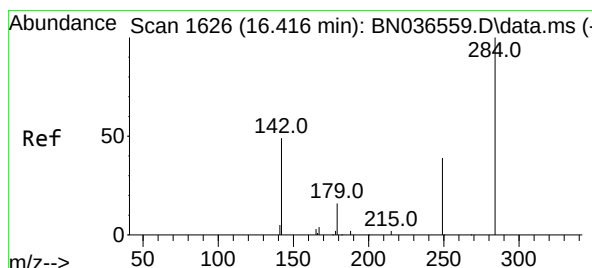
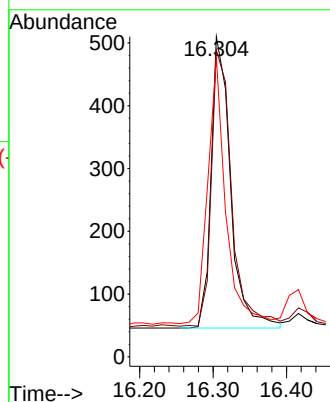
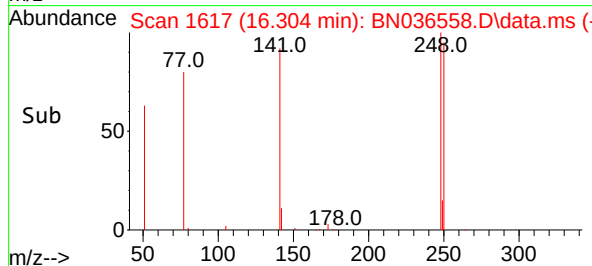
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:248 Resp: 85  
Ion Ratio Lower Upper  
248 100  
250 95.9 73.0 109.6  
141 93.7 68.6 103.0

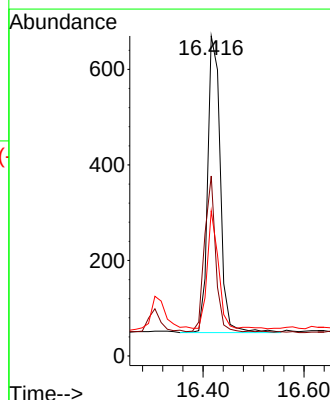
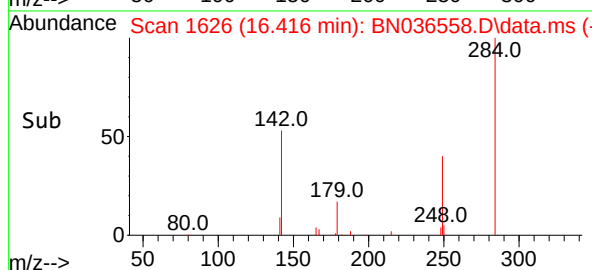
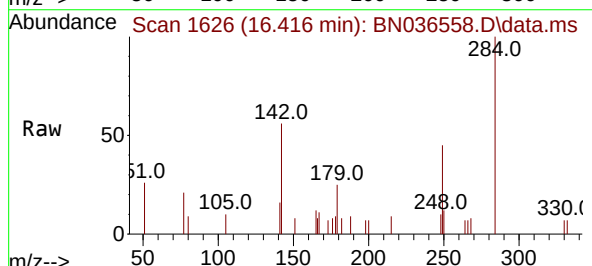
Manual Integrations  
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Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

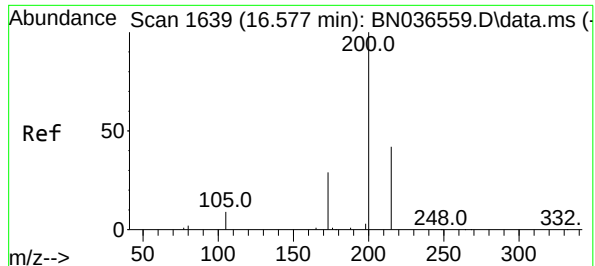


#22  
Hexachlorobenzene  
Concen: 0.190 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:284 Resp: 1079  
Ion Ratio Lower Upper  
284 100  
142 47.0 37.0 55.4  
249 34.8 28.1 42.1

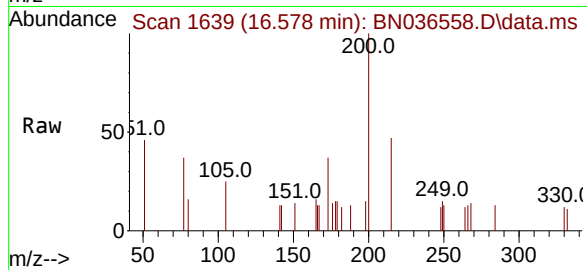






#23  
Atrazine  
Concen: 0.190 ng  
RT: 16.578 min Scan# 1639  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

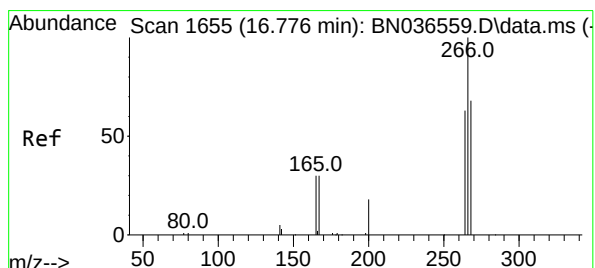
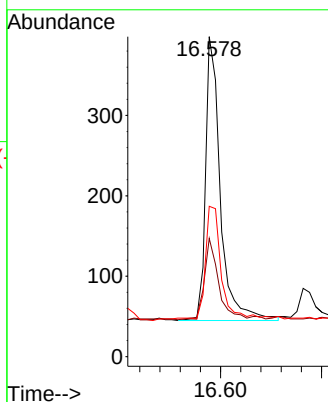
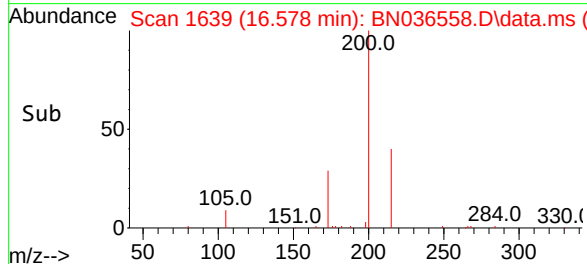
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:200 Resp: 710  
Ion Ratio Lower Upper  
200 100  
173 36.9 27.3 40.9  
215 47.0 36.8 55.2

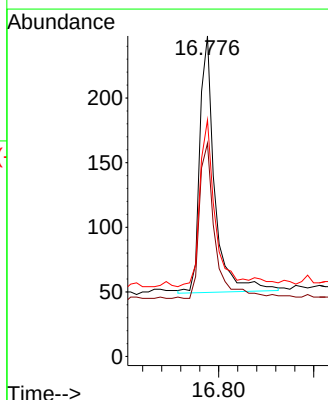
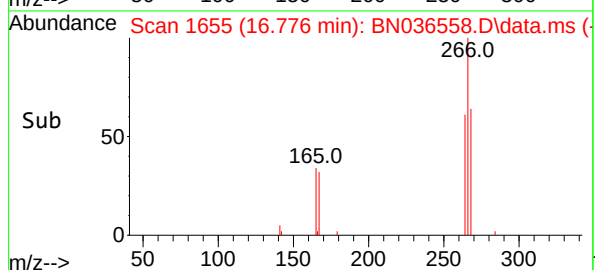
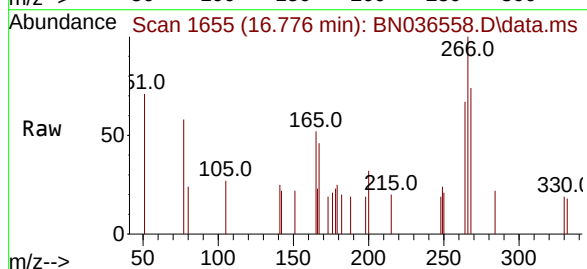
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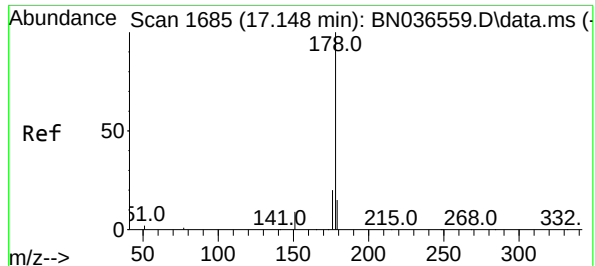
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#24  
Pentachlorophenol  
Concen: 0.168 ng  
RT: 16.776 min Scan# 1655  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

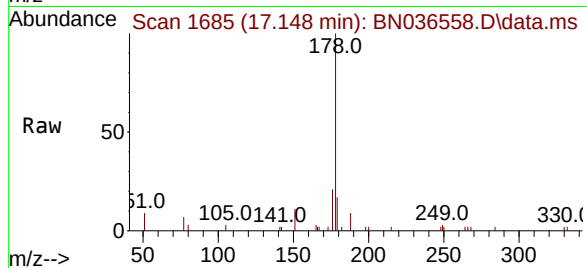
Tgt Ion:266 Resp: 435  
Ion Ratio Lower Upper  
266 100  
264 63.4 49.6 74.4  
268 65.7 50.9 76.3





#25  
Phenanthrene  
Concen: 0.185 ng  
RT: 17.148 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

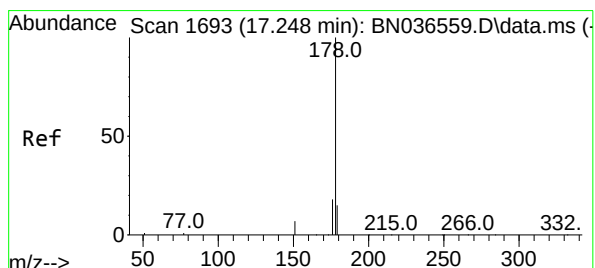
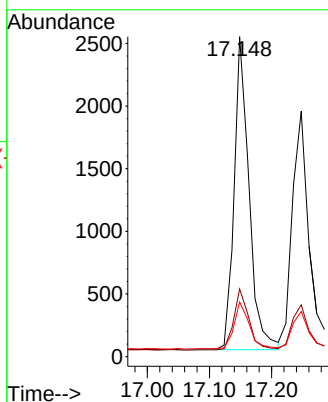
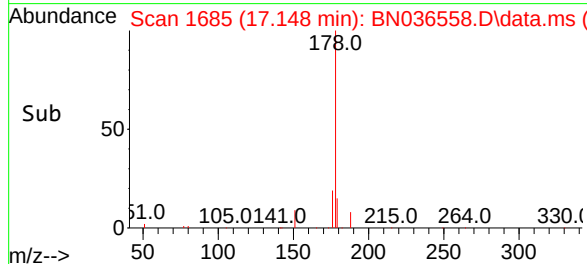
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:178 Resp: 417  
Ion Ratio Lower Upper  
178 100  
176 20.0 15.9 23.9  
179 15.5 12.2 18.4

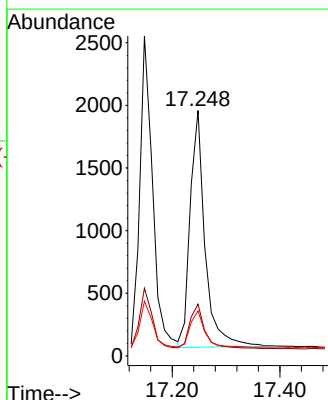
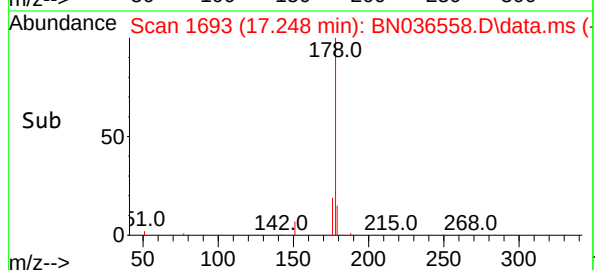
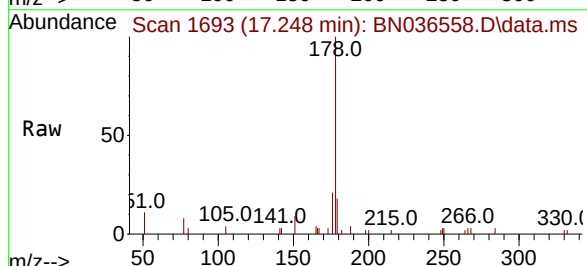
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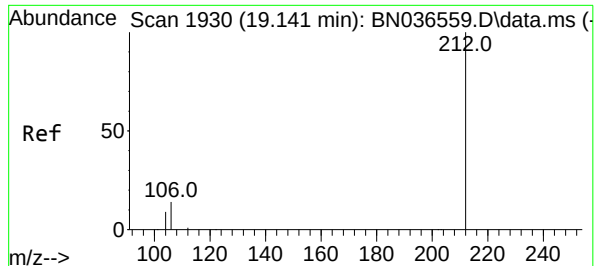
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#26  
Anthracene  
Concen: 0.179 ng  
RT: 17.248 min Scan# 1693  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

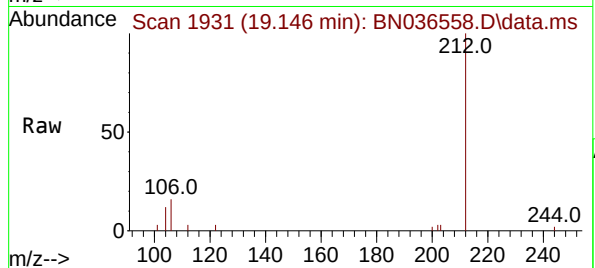
Tgt Ion:178 Resp: 3645  
Ion Ratio Lower Upper  
178 100  
176 19.1 15.4 23.2  
179 15.1 12.6 18.8





#27  
Fluoranthene-d10  
Concen: 0.186 ng  
RT: 19.146 min Scan# 1931  
Delta R.T. 0.005 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

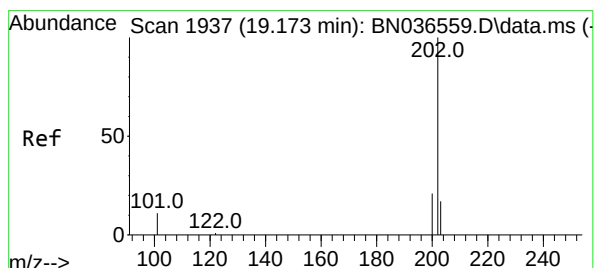
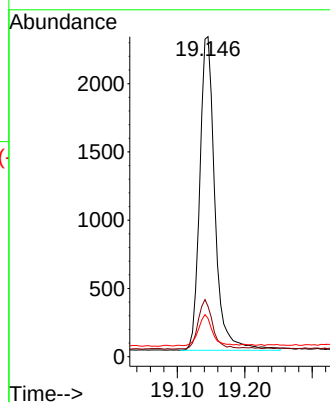
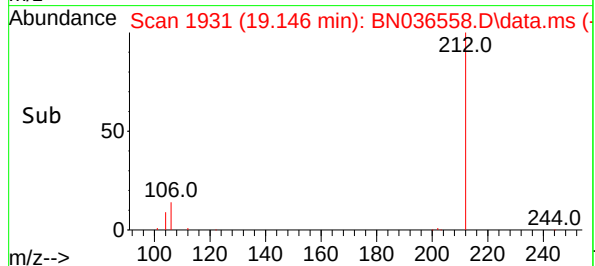
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.2



Tgt Ion:212 Resp: 358  
Ion Ratio Lower Upper  
212 100  
106 15.0 11.8 17.6  
104 9.3 7.3 10.9

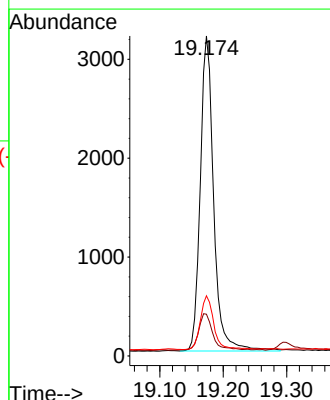
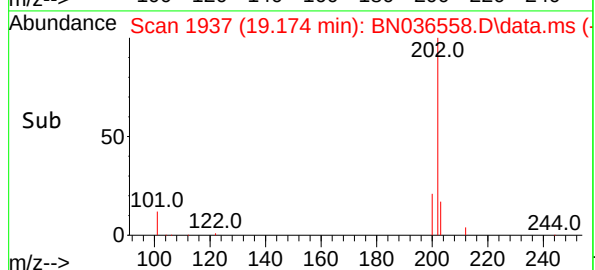
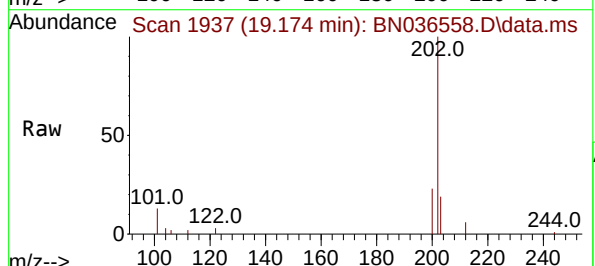
Manual Integrations  
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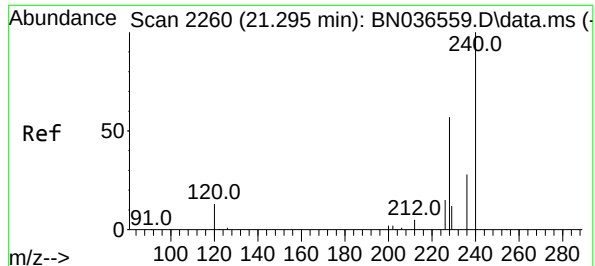
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#28  
Fluoranthene  
Concen: 0.184 ng  
RT: 19.174 min Scan# 1937  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4666  
Ion Ratio Lower Upper  
202 100  
101 12.1 9.4 14.0  
203 17.1 13.5 20.3





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.295 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

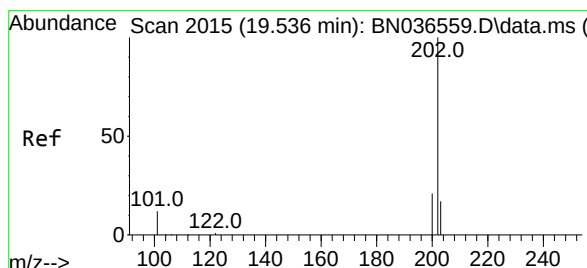
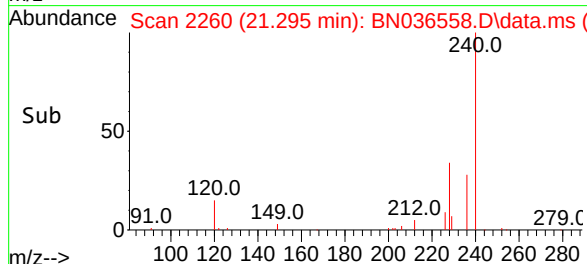
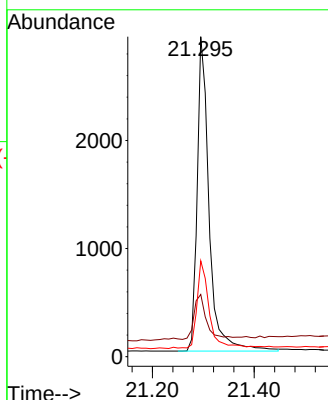
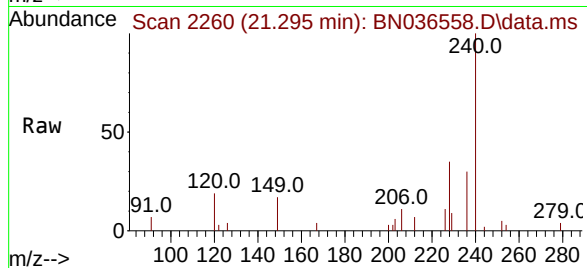
SSTDICC0.2

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:240 | Resp: | 4730      |
| Ion Ratio   | Lower | Upper     |
| 240         | 100   |           |
| 120         | 19.5  | 14.6 22.0 |
| 236         | 29.9  | 24.1 36.1 |

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Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#30

Pyrene

Concen: 0.205 ng

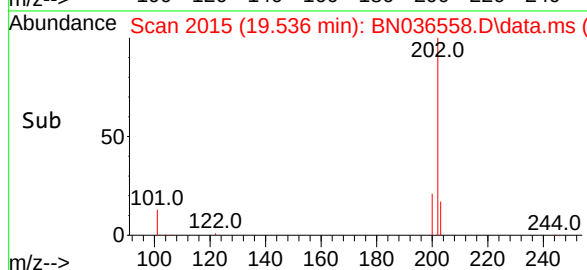
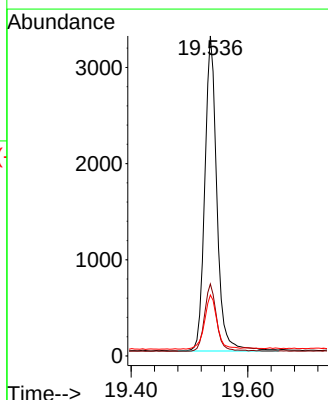
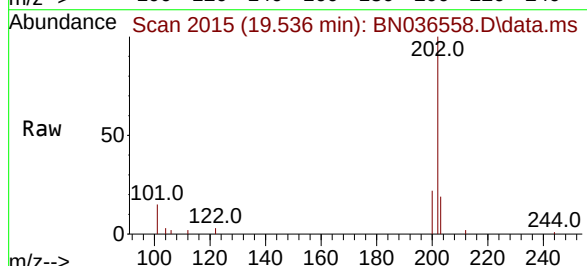
RT: 19.536 min Scan# 2015

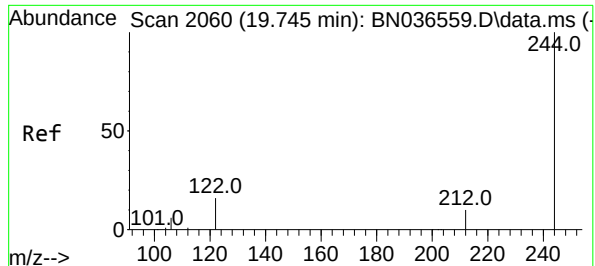
Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:202 | Resp: | 4742      |
| Ion Ratio   | Lower | Upper     |
| 202         | 100   |           |
| 200         | 21.1  | 17.1 25.7 |
| 203         | 17.7  | 14.1 21.1 |





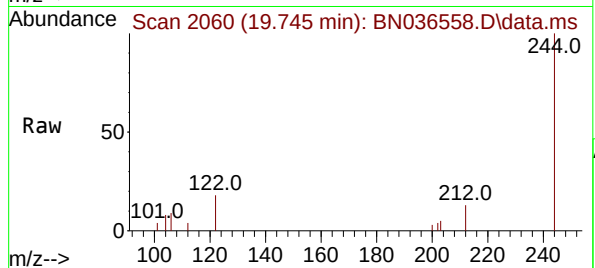
#31  
Terphenyl-d14  
Concen: 0.201 ng  
RT: 19.745 min Scan# 2060  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

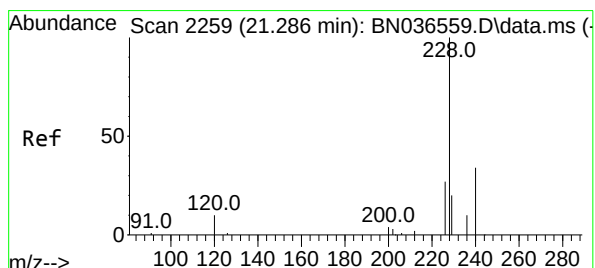
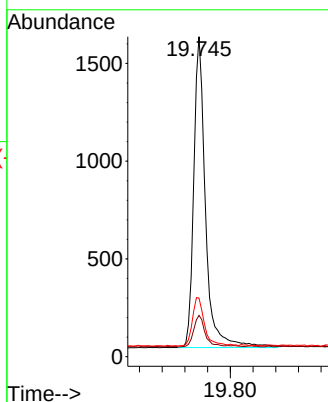
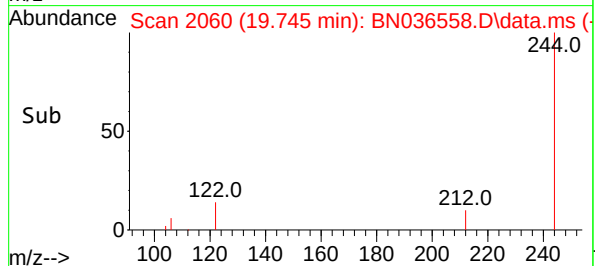


Tgt Ion:244 Resp: 228  
Ion Ratio Lower Upper  
244 100  
212 12.9 9.6 14.4  
122 18.3 13.9 20.9

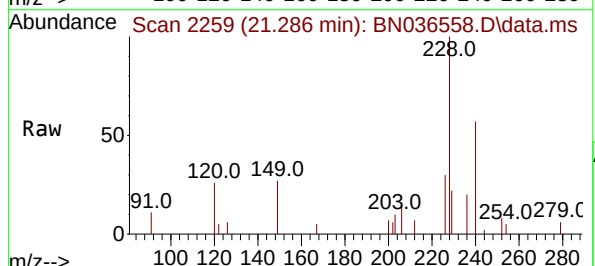
Manual Integrations

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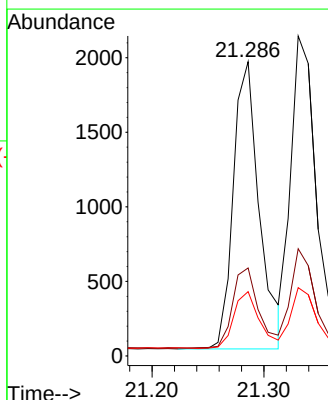
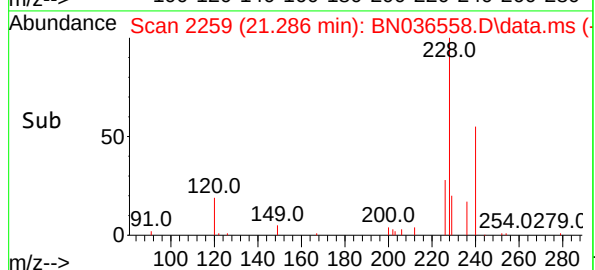
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

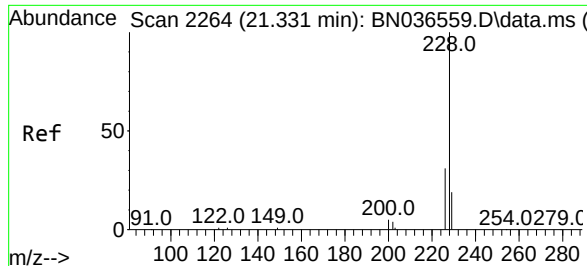


#32  
Benzo(a)anthracene  
Concen: 0.189 ng  
RT: 21.286 min Scan# 2259  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18



Tgt Ion:228 Resp: 3111  
Ion Ratio Lower Upper  
228 100  
226 29.9 22.5 33.7  
229 21.9 16.6 25.0





#33

Chrysene

Concen: 0.199 ng

RT: 21.331 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

Tgt Ion:228 Resp: 356

Ion Ratio Lower Upper

228 100

226 33.5 25.3 37.9

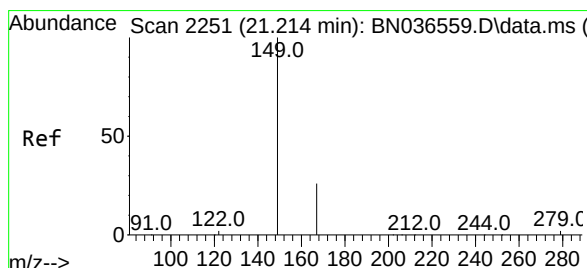
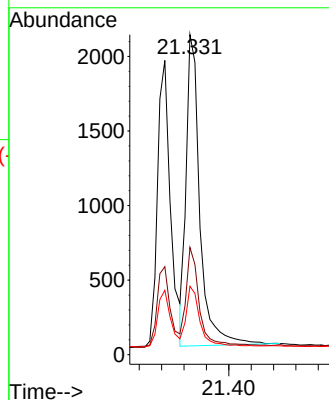
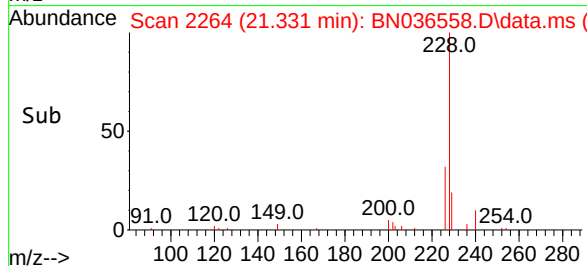
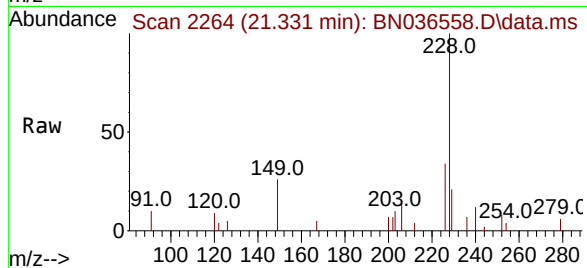
229 21.4 15.8 23.8

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.222 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

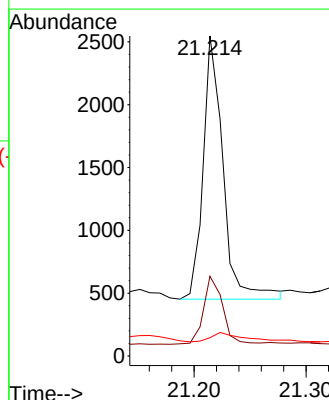
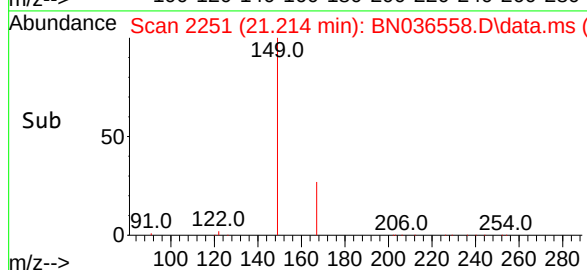
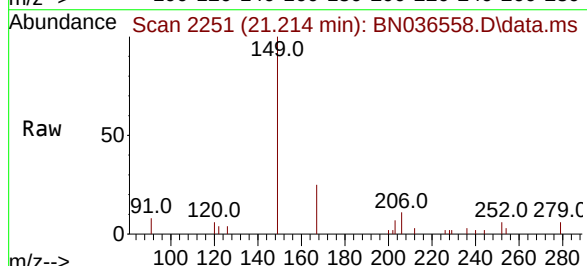
Tgt Ion:149 Resp: 2601

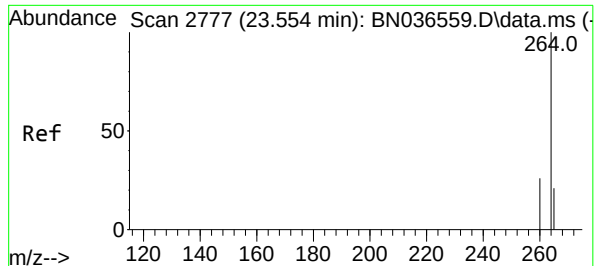
Ion Ratio Lower Upper

149 100

167 24.7 20.7 31.1

279 5.7 3.6 5.4#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.554 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

Tgt Ion:264 Resp: 424

Ion Ratio Lower Upper

264 100

260 26.8 22.6 33.8

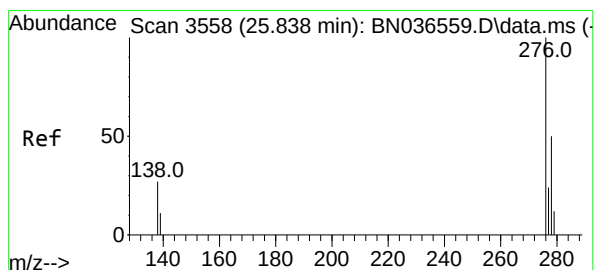
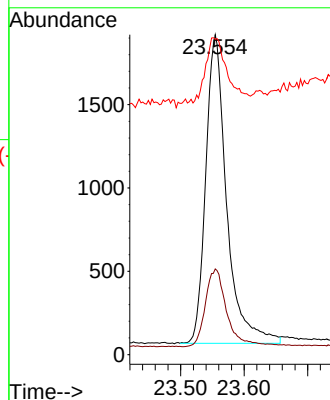
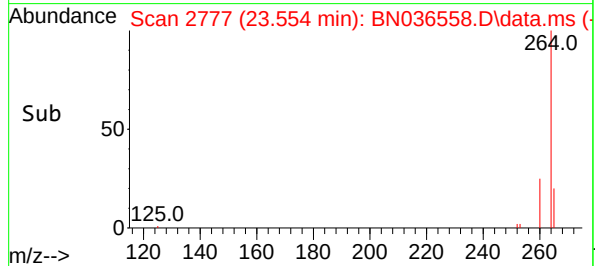
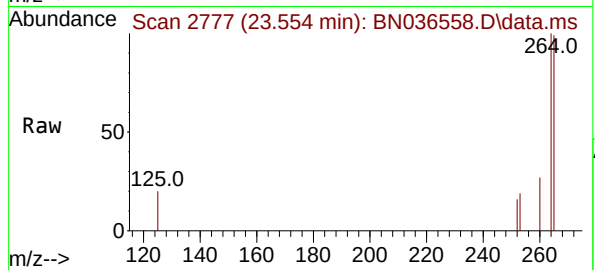
265 98.5 88.1 132.1

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.182 ng

RT: 25.844 min Scan# 3560

Delta R.T. 0.006 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

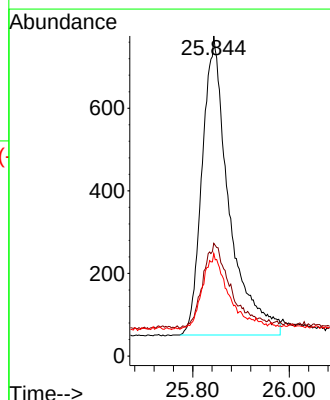
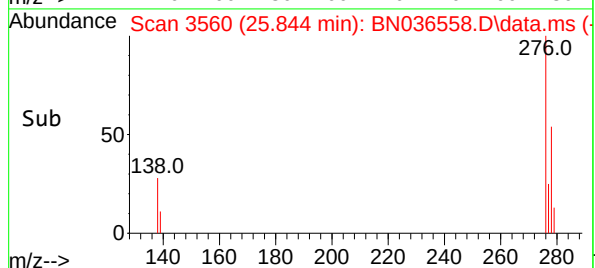
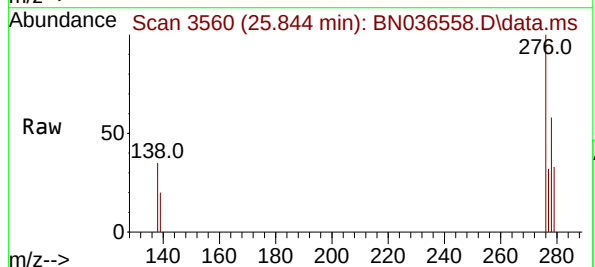
Tgt Ion:276 Resp: 2790

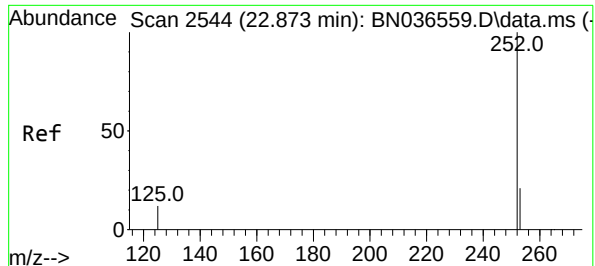
Ion Ratio Lower Upper

276 100

138 29.1 23.4 35.2

277 23.4 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.187 ng

RT: 22.876 min Scan# 2544

Delta R.T. 0.003 min

Lab File: BN036558.D

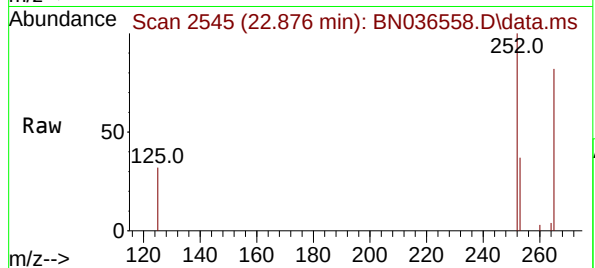
Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2



Tgt Ion:252 Resp: 288

Ion Ratio Lower Upper

252 100

253 37.1 23.9 35.9

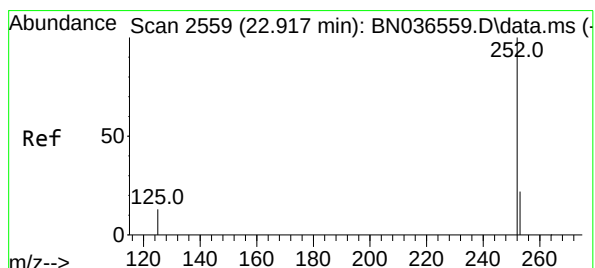
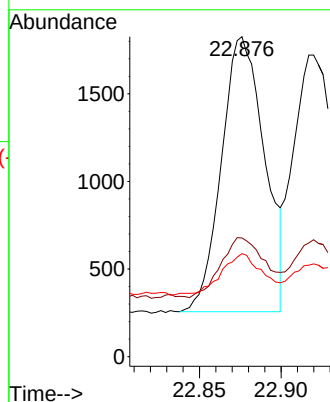
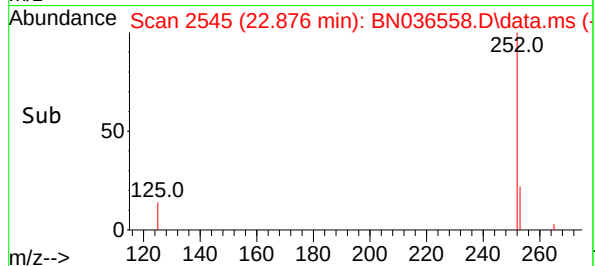
125 32.2 17.4 26.2

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#38

Benzo(k)fluoranthene

Concen: 0.183 ng

RT: 22.917 min Scan# 2559

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

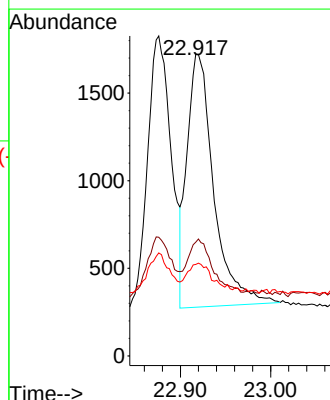
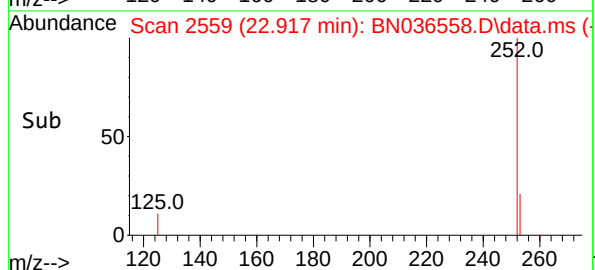
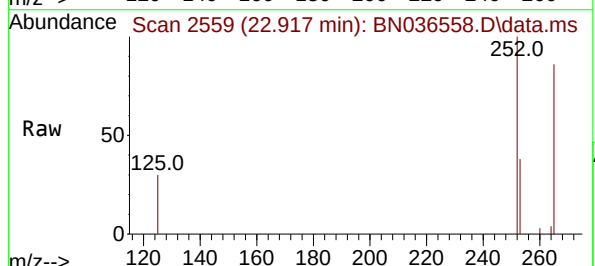
Tgt Ion:252 Resp: 2962

Ion Ratio Lower Upper

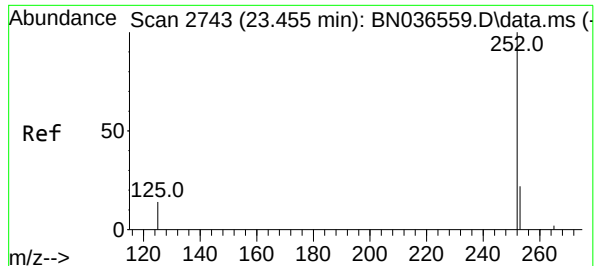
252 100

253 37.7 24.6 36.8#

125 30.3 17.8 26.8#







#39

Benzo(a)pyrene

Concen: 0.188 ng

RT: 23.458 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

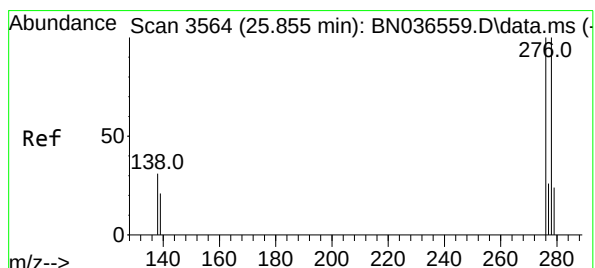
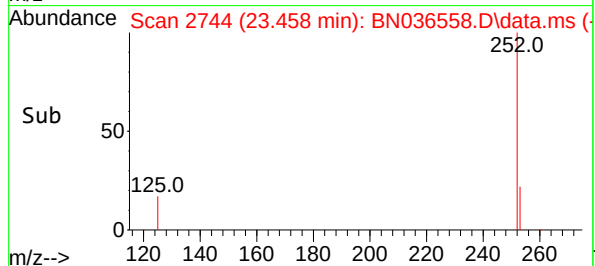
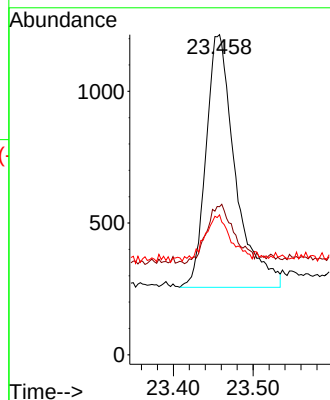
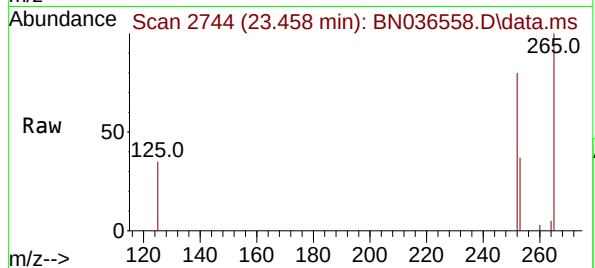
SSTDICC0.2

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 252   | Resp: | 244  |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 46.3  | 27.8  | 41.8 |
| 125       | 43.7  | 22.7  | 34.1 |

Manual Integrations

APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#40

Dibenzo(a,h)anthracene

Concen: 0.175 ng

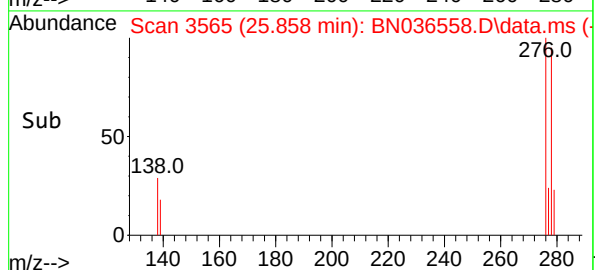
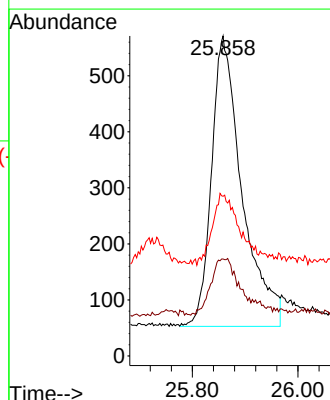
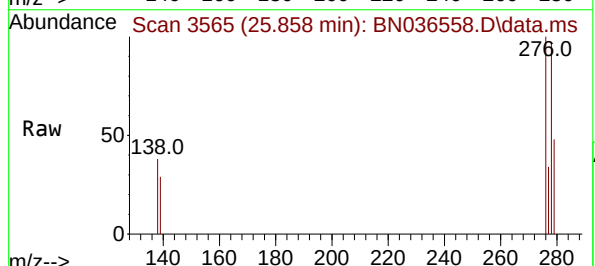
RT: 25.858 min Scan# 3565

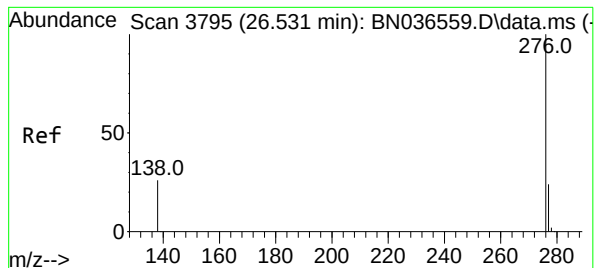
Delta R.T. 0.003 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 278   | Resp: | 2080 |
| Ion Ratio | Lower | Upper |      |
| 278       | 100   |       |      |
| 139       | 30.3  | 20.8  | 31.2 |
| 279       | 49.9  | 28.8  | 43.2 |





#41

Benzo(g,h,i)perylene

Concen: 0.189 ng

RT: 26.536 min Scan# 31

Delta R.T. 0.006 min

Lab File: BN036558.D

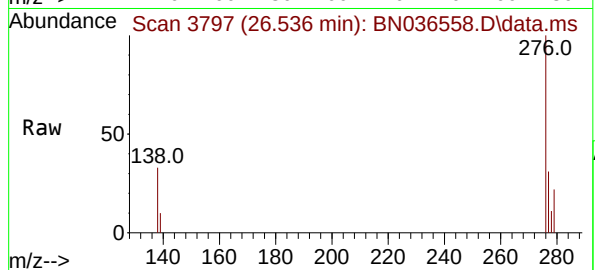
Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2



Tgt Ion: 276 Resp: 257

Ion Ratio Lower Upper

276 100

277 31.2 22.2 33.4

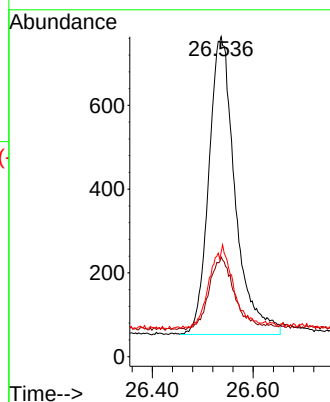
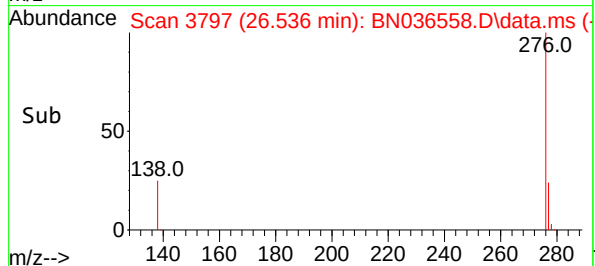
138 32.6 24.1 36.1

Manual Integrations

APPROVED

Reviewed By : Anahy Claudio 03/11/2025

Supervised By : Jagrut Upadhyay 03/11/2025



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036559.D  
 Acq On : 10 Mar 2025 12:54  
 Operator : RC/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

Quant Time: Mar 10 16:01:26 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

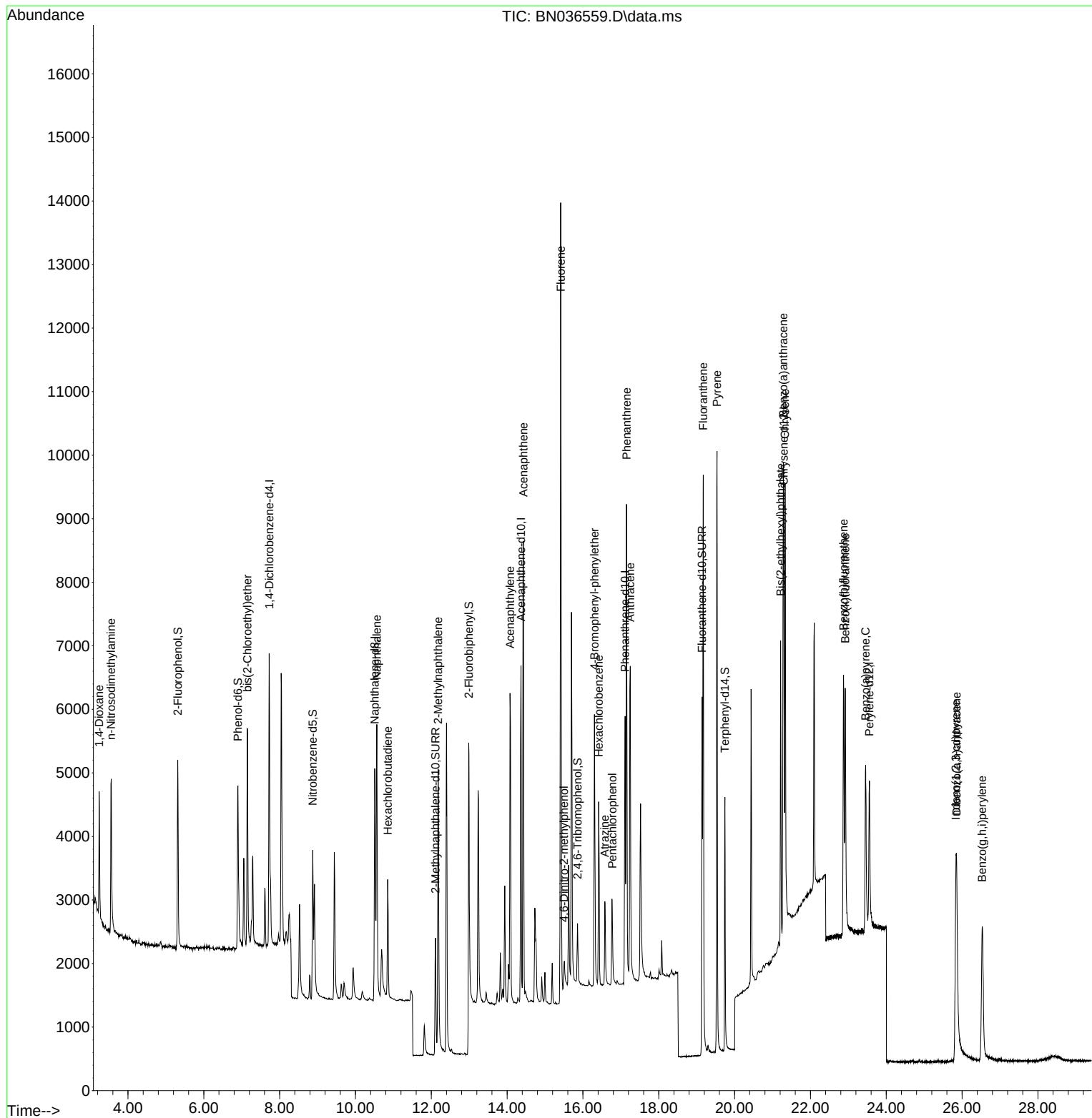
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2207     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5091     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.366 | 164  | 3026     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.111 | 188  | 6005     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.295 | 240  | 4110     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.554 | 264  | 3539     | 0.400 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 2178     | 0.423 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.901  | 99   | 2489     | 0.392 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.875  | 82   | 2113     | 0.382 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.111 | 152  | 3085     | 0.407 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 567      | 0.413 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.988 | 172  | 7257     | 0.412 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.141 | 212  | 6699     | 0.435 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.745 | 244  | 4226     | 0.429 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.239  | 88   | 1099     | 0.449 | ng    | 100      |
| 3) n-Nitrosodimethylamine     | 3.550  | 42   | 2063     | 0.417 | ng    | 100      |
| 6) bis(2-Chloroethyl)ether    | 7.154  | 93   | 2610     | 0.397 | ng    | 100      |
| 9) Naphthalene                | 10.562 | 128  | 6139     | 0.410 | ng    | 100      |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 1498     | 0.425 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.182 | 142  | 3897     | 0.409 | ng    | 100      |
| 16) Acenaphthylene            | 14.077 | 152  | 5865     | 0.411 | ng    | 100      |
| 17) Acenaphthene              | 14.430 | 154  | 3877     | 0.415 | ng    | 100      |
| 18) Fluorene                  | 15.414 | 166  | 5338     | 0.422 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.499 | 198  | 462      | 0.447 | ng    | 100      |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248  | 1644     | 0.437 | ng    | 100      |
| 22) Hexachlorobenzene         | 16.416 | 284  | 2018     | 0.444 | ng    | 100      |
| 23) Atrazine                  | 16.577 | 200  | 1279     | 0.424 | ng    | 100      |
| 24) Pentachlorophenol         | 16.776 | 266  | 821      | 0.396 | ng    | 100      |
| 25) Phenanthrene              | 17.148 | 178  | 7786     | 0.432 | ng    | 100      |
| 26) Anthracene                | 17.248 | 178  | 6886     | 0.424 | ng    | 100      |
| 28) Fluoranthene              | 19.173 | 202  | 8717     | 0.431 | ng    | 100      |
| 30) Pyrene                    | 19.536 | 202  | 8759     | 0.436 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.286 | 228  | 5908     | 0.413 | ng    | 100      |
| 33) Chrysene                  | 21.331 | 228  | 6617     | 0.424 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 4291     | 0.422 | ng    | 100      |
| 36) Indeno(1,2,3-cd)pyrene    | 25.838 | 276  | 5470     | 0.428 | ng    | 100      |
| 37) Benzo(b)fluoranthene      | 22.873 | 252  | 5475     | 0.425 | ng    | 100      |
| 38) Benzo(k)fluoranthene      | 22.917 | 252  | 5732     | 0.424 | ng    | 100      |
| 39) Benzo(a)pyrene            | 23.455 | 252  | 4612     | 0.425 | ng    | 100      |
| 40) Dibenzo(a,h)anthracene    | 25.855 | 278  | 4117     | 0.414 | ng    | 100      |
| 41) Benzo(g,h,i)perylene      | 26.531 | 276  | 4891     | 0.430 | ng    | 100      |
| -----                         |        |      |          |       |       |          |

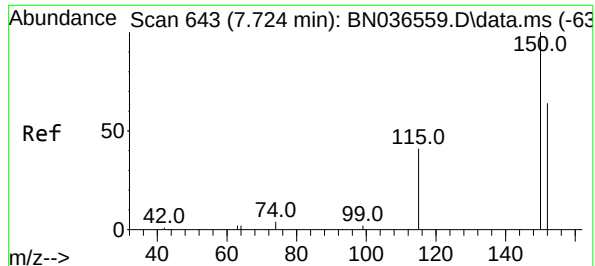
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036559.D  
Acq On : 10 Mar 2025 12:54  
Operator : RC/JU  
Sample : SSTDICCC0.4  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

Quant Time: Mar 10 16:01:26 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

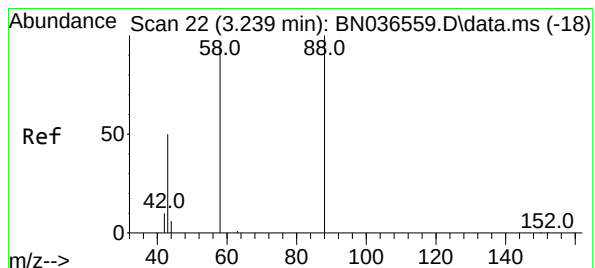
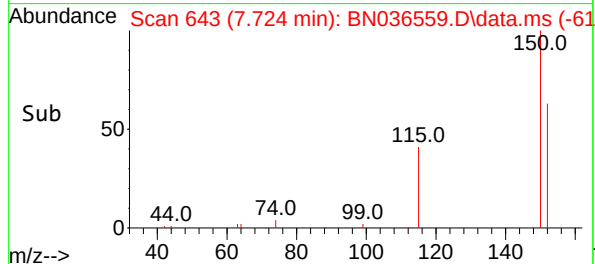
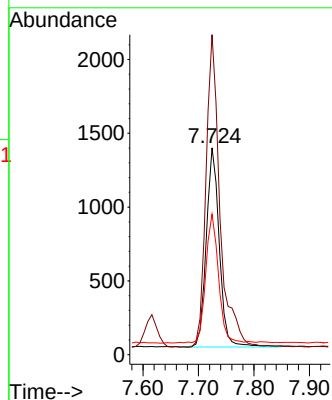
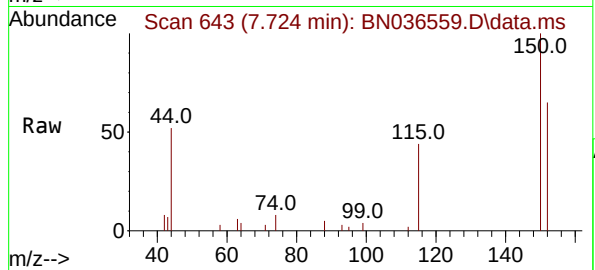




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

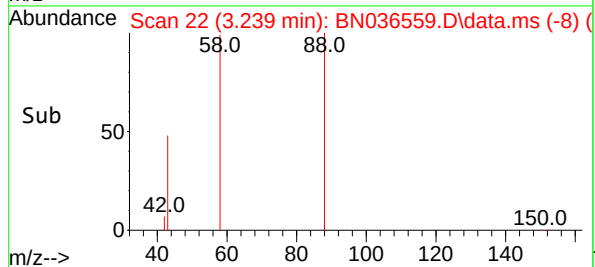
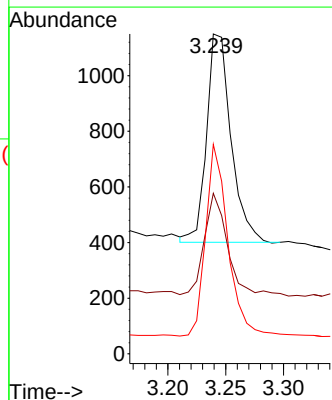
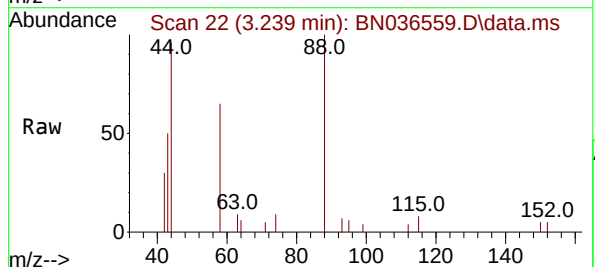
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

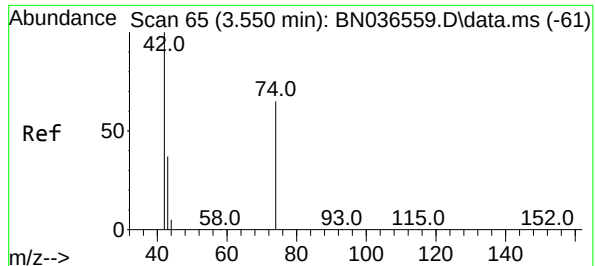
Tgt Ion:152 Resp: 2207  
Ion Ratio Lower Upper  
152 100  
150 154.6 123.7 185.5  
115 67.9 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.449 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion: 88 Resp: 1099  
Ion Ratio Lower Upper  
88 100  
43 47.3 37.8 56.8  
58 84.3 67.4 101.2

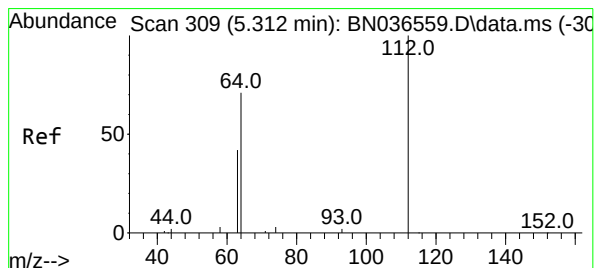
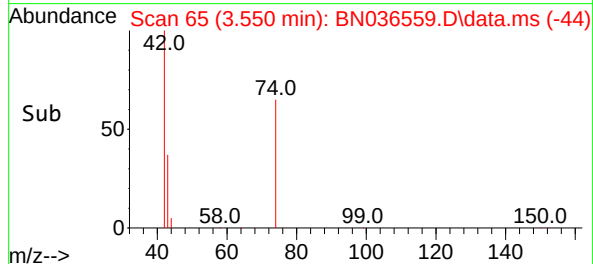
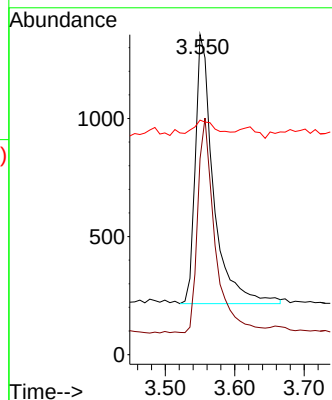
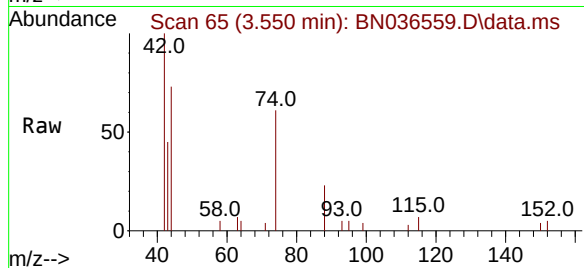




#3  
n-Nitrosodimethylamine  
Concen: 0.417 ng  
RT: 3.550 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

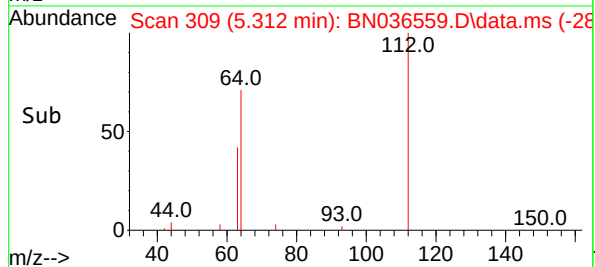
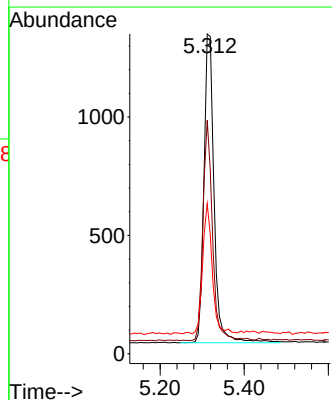
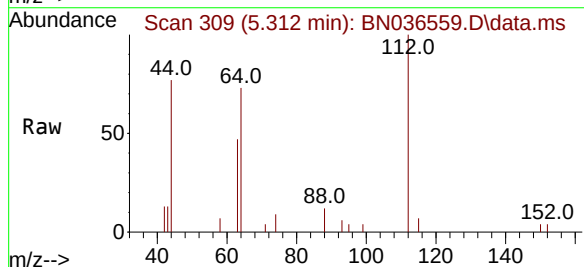
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

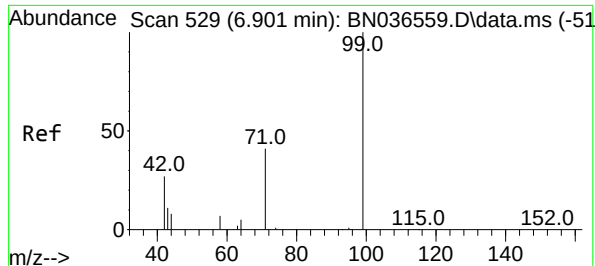
Tgt Ion: 42 Resp: 2063  
Ion Ratio Lower Upper  
42 100  
74 75.7 60.6 90.8  
44 7.9 6.3 9.5



#4  
2-Fluorophenol  
Concen: 0.423 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion: 112 Resp: 2178  
Ion Ratio Lower Upper  
112 100  
64 66.4 53.1 79.7  
63 39.8 31.8 47.8





#5

Phenol-d6

Concen: 0.392 ng

RT: 6.901 min Scan# 51

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

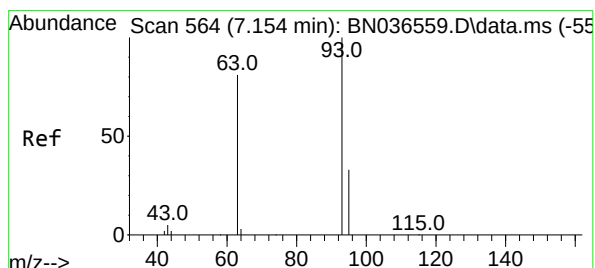
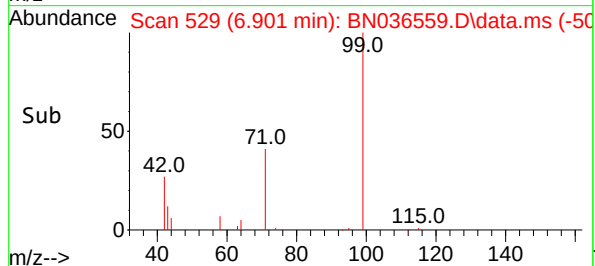
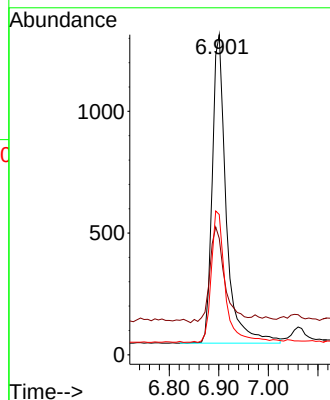
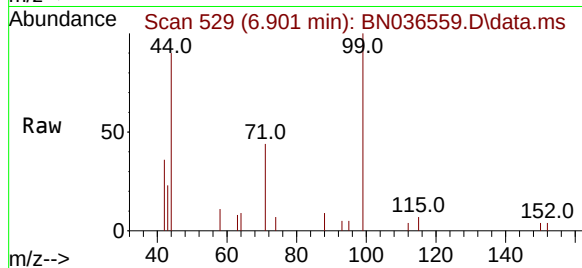
Tgt Ion: 99 Resp: 2489

Ion Ratio Lower Upper

99 100

42 33.1 26.5 39.7

71 42.6 34.1 51.1



#6

bis(2-Chloroethyl)ether

Concen: 0.397 ng

RT: 7.154 min Scan# 564

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

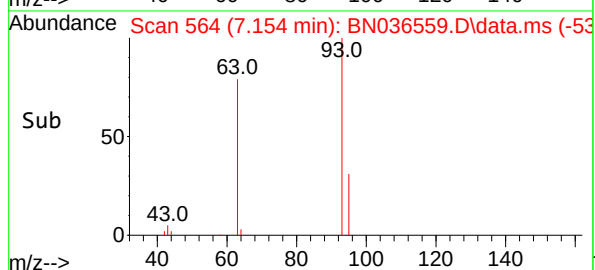
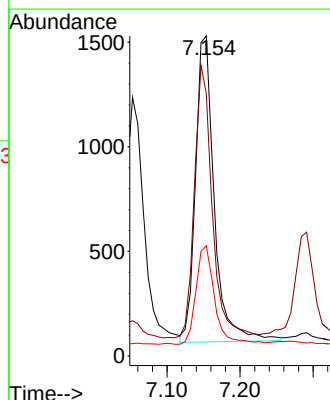
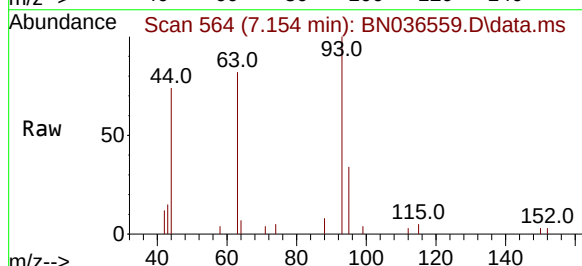
Tgt Ion: 93 Resp: 2610

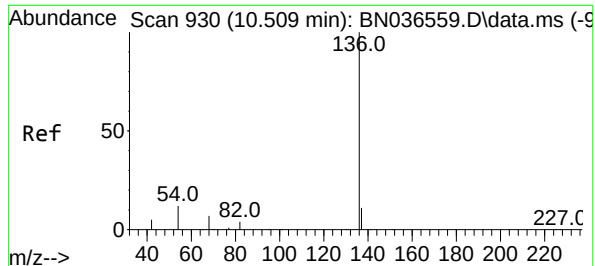
Ion Ratio Lower Upper

93 100

63 84.6 67.7 101.5

95 32.0 25.6 38.4

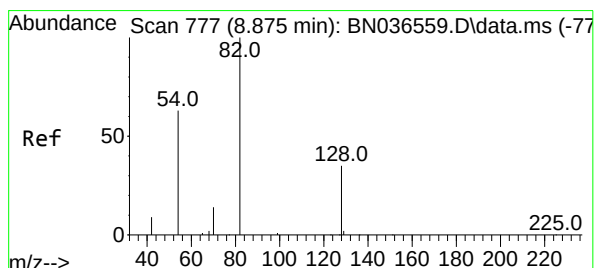
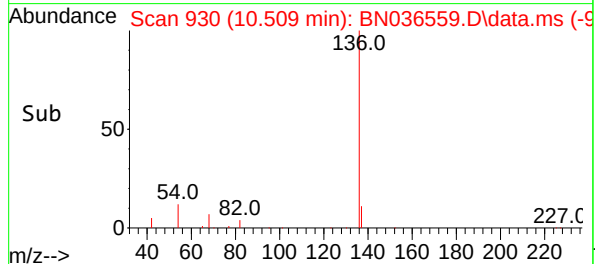
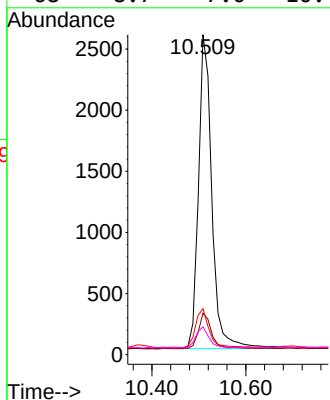
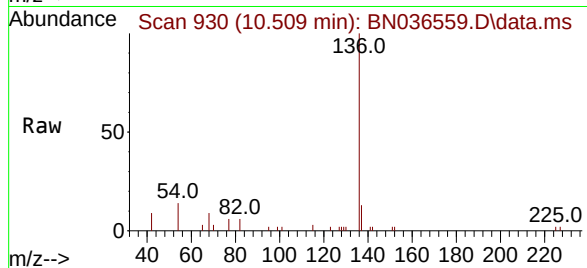




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

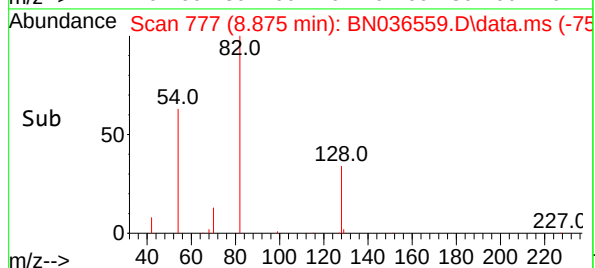
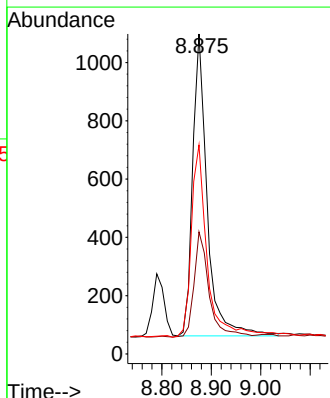
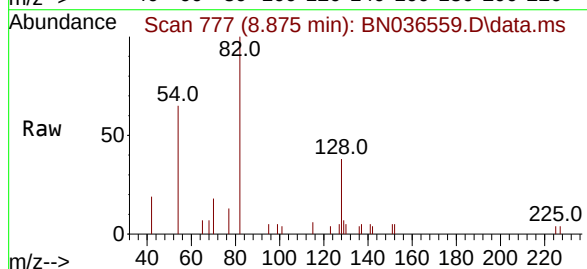
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5091  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.9  | 10.3  | 15.5  |
| 54       | 14.4  | 11.5  | 17.3  |
| 68       | 8.7   | 7.0   | 10.4  |

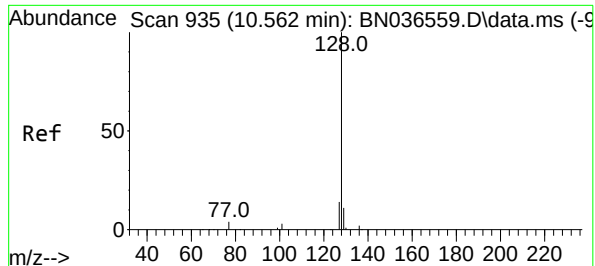


#8  
Nitrobenzene-d5  
Concen: 0.382 ng  
RT: 8.875 min Scan# 777  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 2113  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 38.2  | 30.6  | 45.8  |
| 54       | 65.3  | 52.2  | 78.4  |



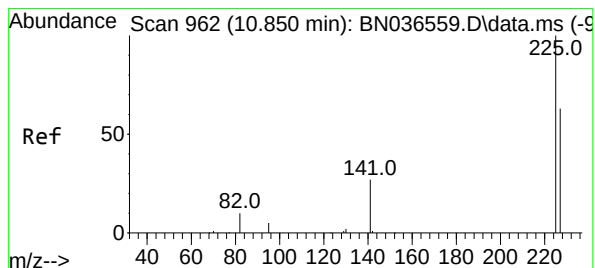
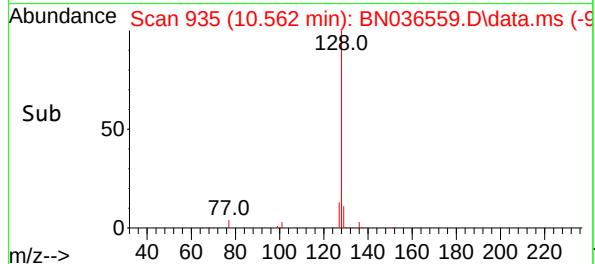
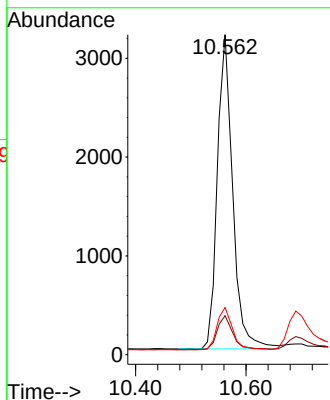
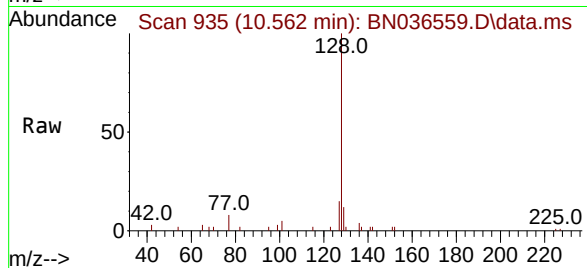




#9  
Naphthalene  
Concen: 0.410 ng  
RT: 10.562 min Scan# 911  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

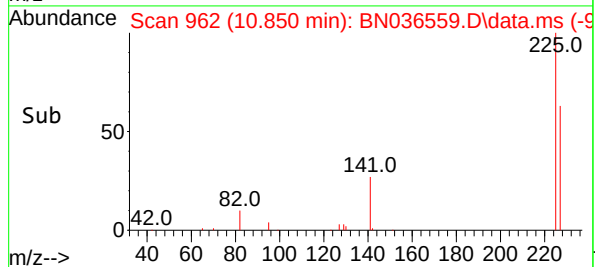
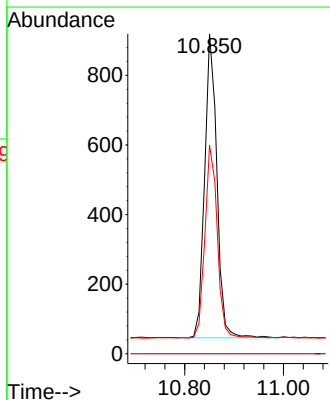
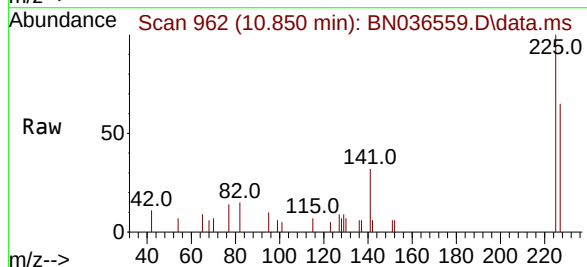
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

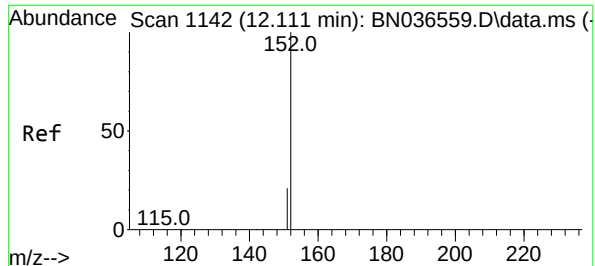
Tgt Ion:128 Resp: 6139  
Ion Ratio Lower Upper  
128 100  
129 12.2 9.8 14.6  
127 14.8 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 0.425 ng  
RT: 10.850 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:225 Resp: 1498  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.8 51.8 77.8

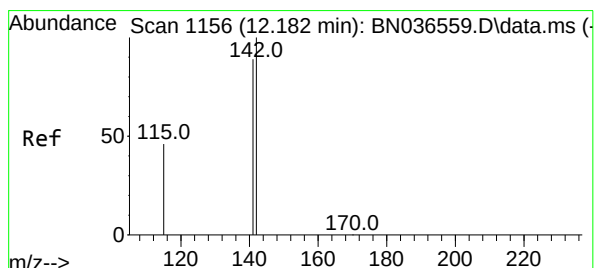
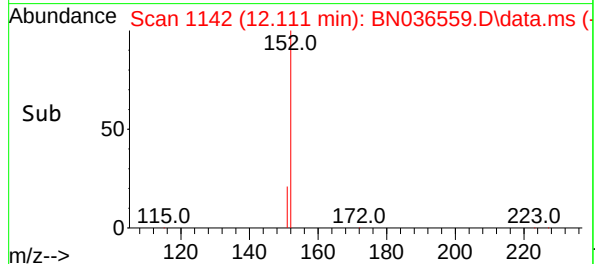
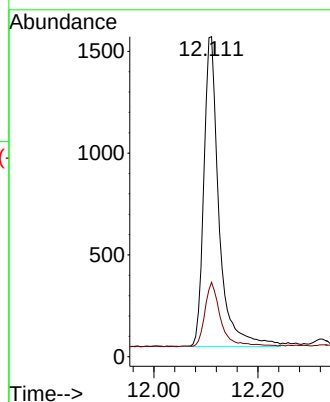
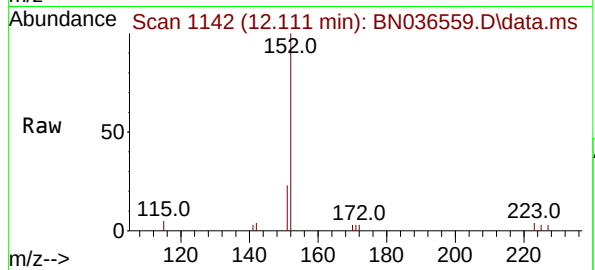




#11  
2-Methylnaphthalene-d10  
Concen: 0.407 ng  
RT: 12.111 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

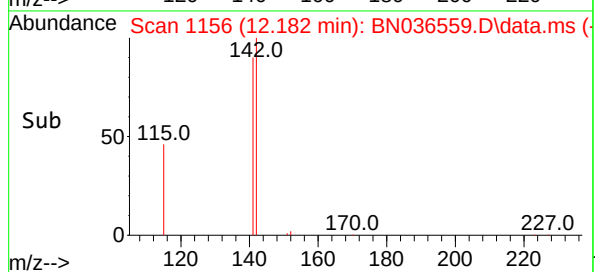
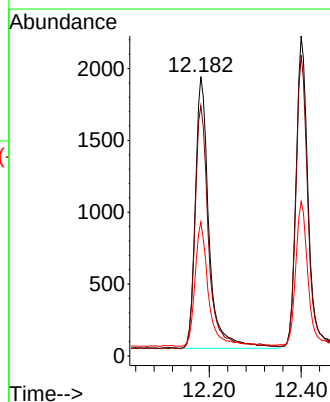
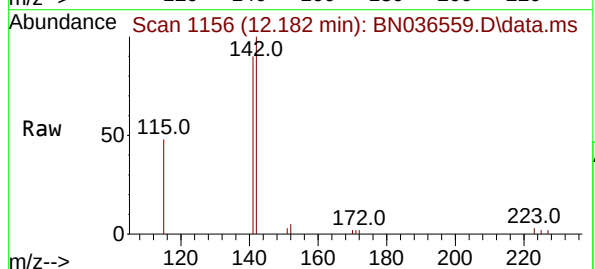
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

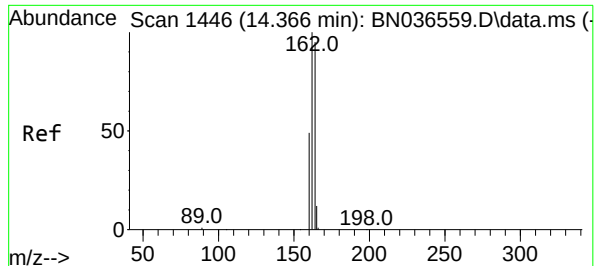
Tgt Ion:152 Resp: 3085  
Ion Ratio Lower Upper  
152 100  
151 21.3 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 0.409 ng  
RT: 12.182 min Scan# 1156  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:142 Resp: 3897  
Ion Ratio Lower Upper  
142 100  
141 89.6 71.7 107.5  
115 47.9 38.3 57.5

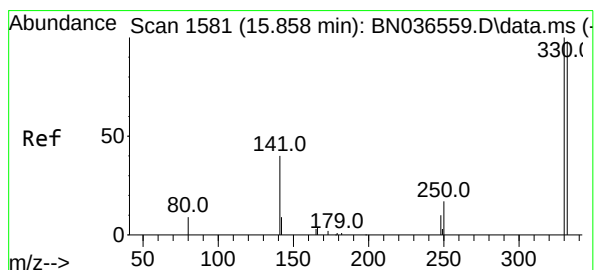
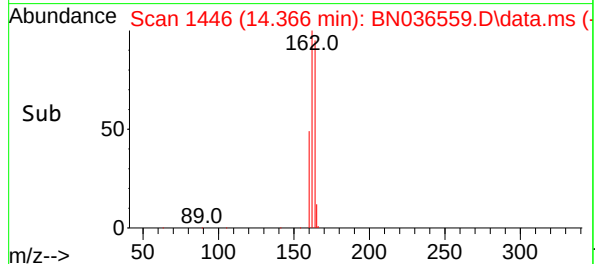
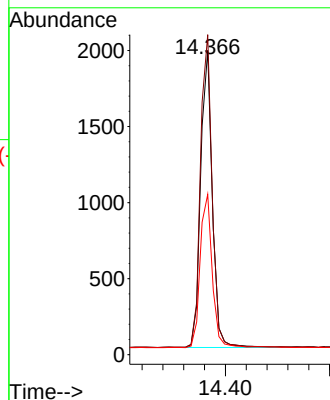
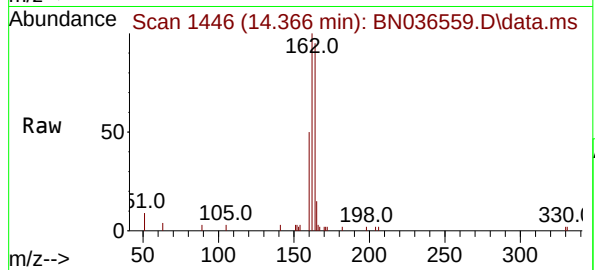




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.366 min Scan# 1446  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

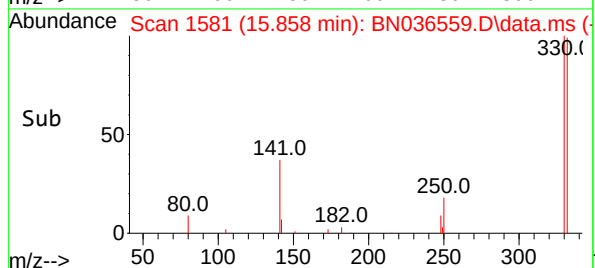
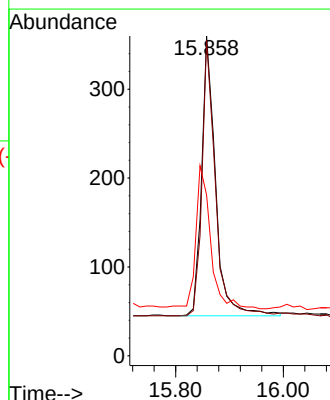
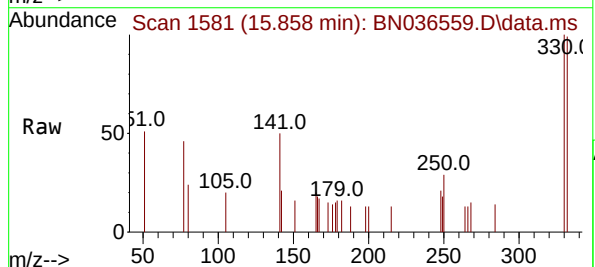
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

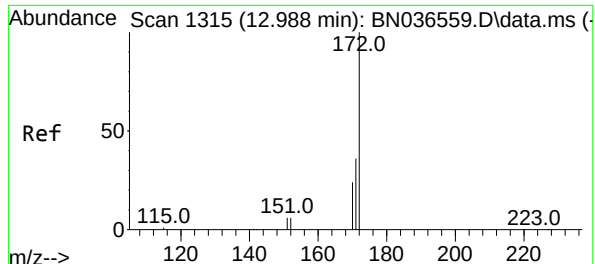
Tgt Ion:164 Resp: 3026  
Ion Ratio Lower Upper  
164 100  
162 105.2 84.2 126.2  
160 52.7 42.2 63.2



#14  
2,4,6-Tribromophenol  
Concen: 0.413 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:330 Resp: 567  
Ion Ratio Lower Upper  
330 100  
332 94.0 75.2 112.8  
141 54.3 43.4 65.2

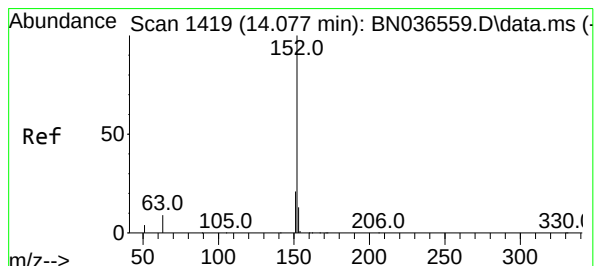
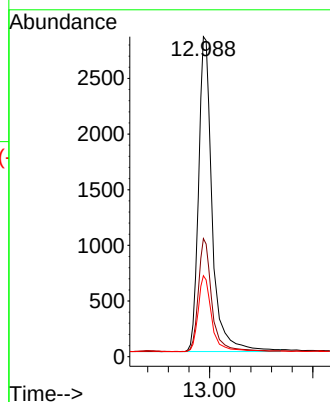
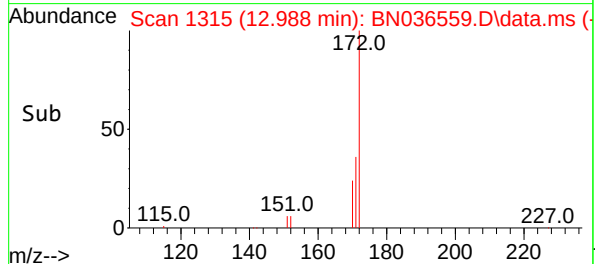
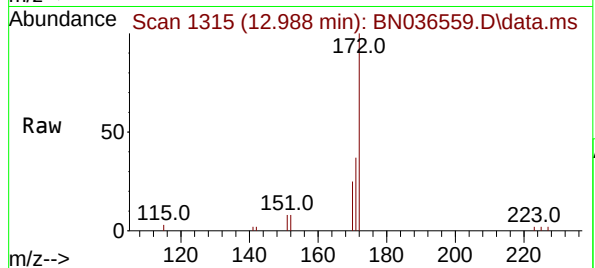




#15  
2-Fluorobiphenyl  
Concen: 0.412 ng  
RT: 12.988 min Scan# 1315  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

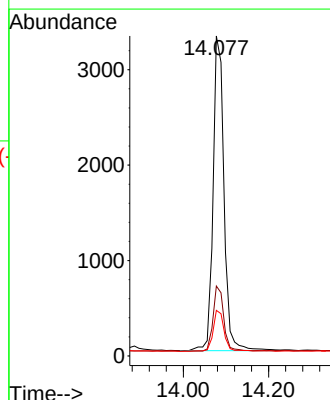
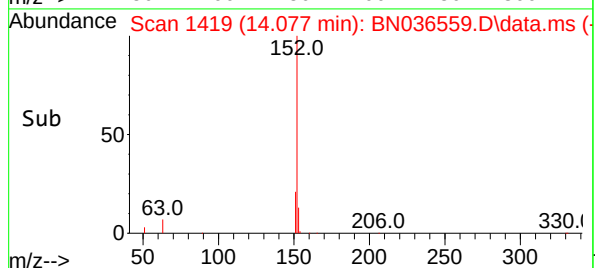
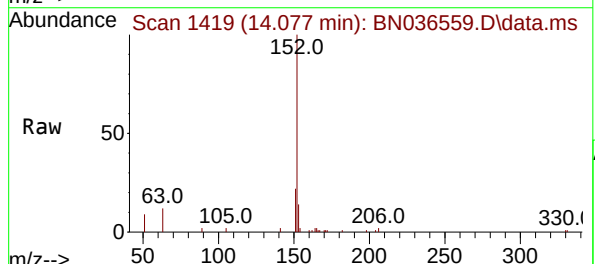
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

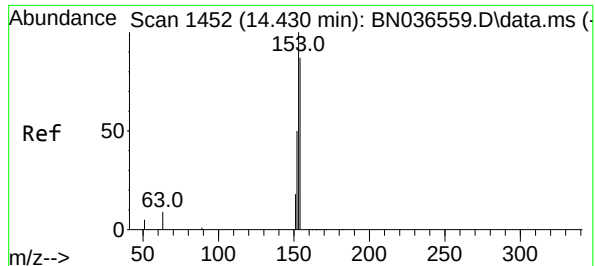
Tgt Ion:172 Resp: 7257  
Ion Ratio Lower Upper  
172 100  
171 36.9 29.5 44.3  
170 25.3 20.2 30.4



#16  
Acenaphthylene  
Concen: 0.411 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:152 Resp: 5865  
Ion Ratio Lower Upper  
152 100  
151 20.3 16.2 24.4  
153 13.2 10.6 15.8

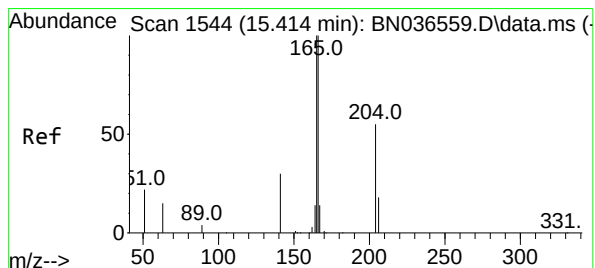
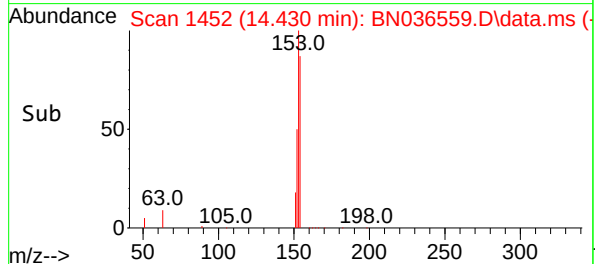
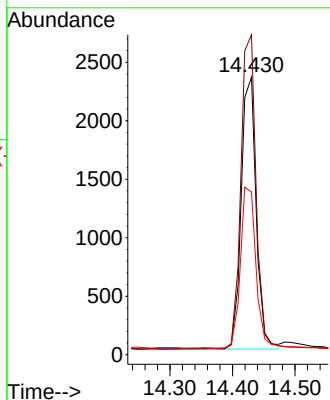
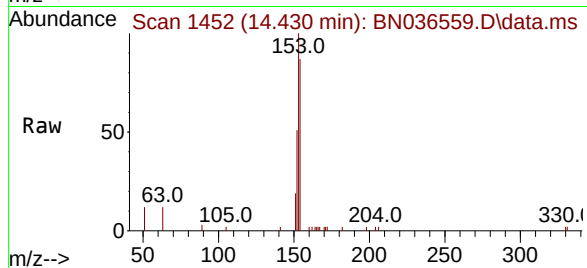




#17  
Acenaphthene  
Concen: 0.415 ng  
RT: 14.430 min Scan# 1452  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

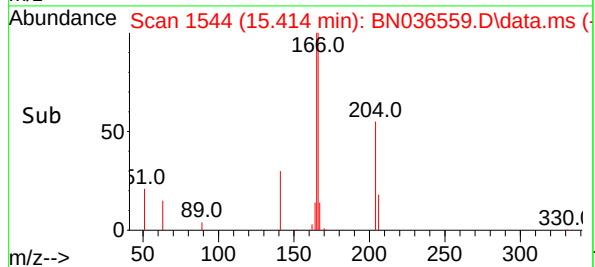
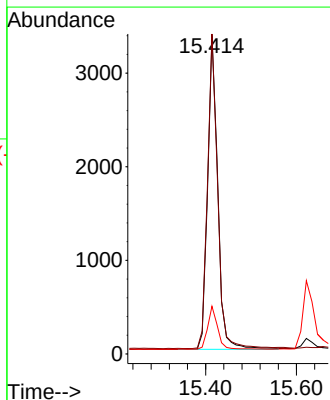
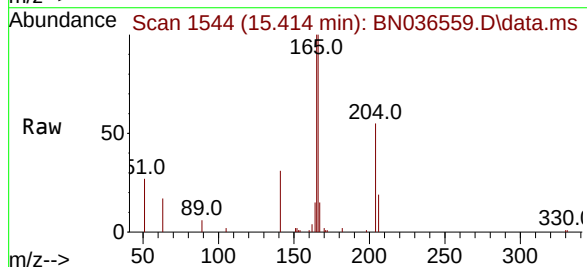
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

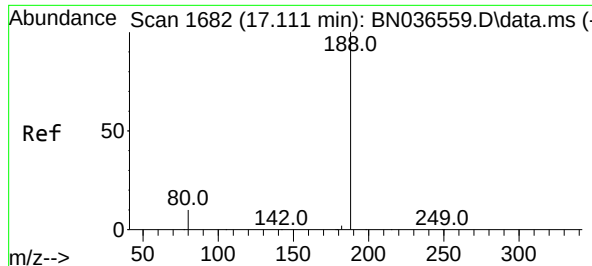
Tgt Ion:154 Resp: 3877  
Ion Ratio Lower Upper  
154 100  
153 117.6 94.1 141.1  
152 62.2 49.8 74.6



#18  
Fluorene  
Concen: 0.422 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:166 Resp: 5338  
Ion Ratio Lower Upper  
166 100  
165 99.8 79.8 119.8  
167 13.2 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

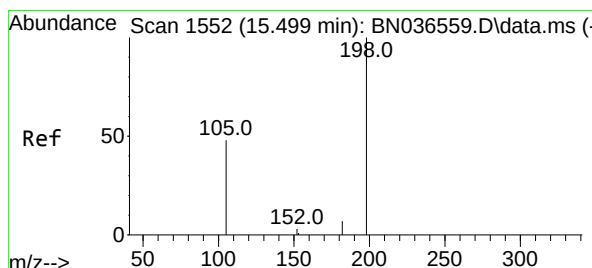
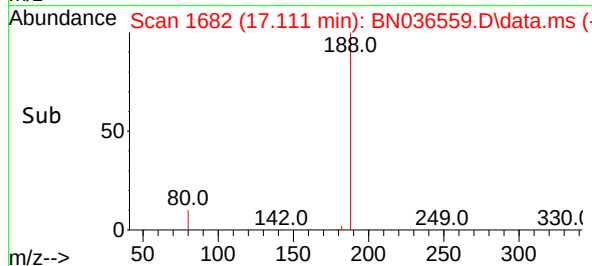
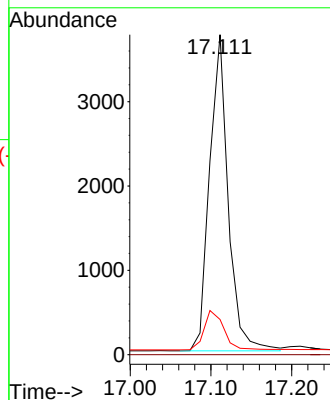
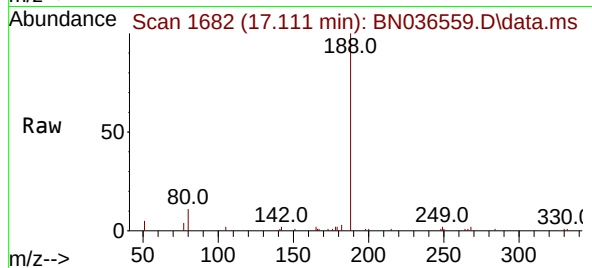
Tgt Ion:188 Resp: 6005

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.0 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 0.447 ng

RT: 15.499 min Scan# 1552

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

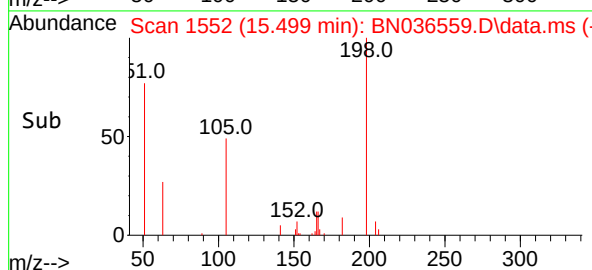
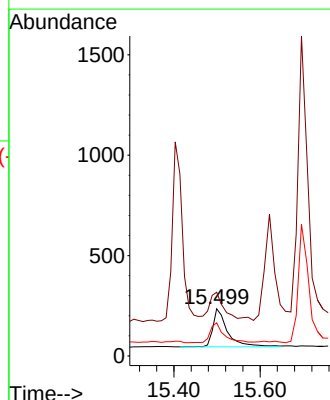
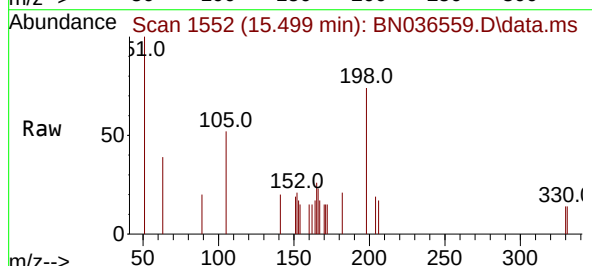
Tgt Ion:198 Resp: 462

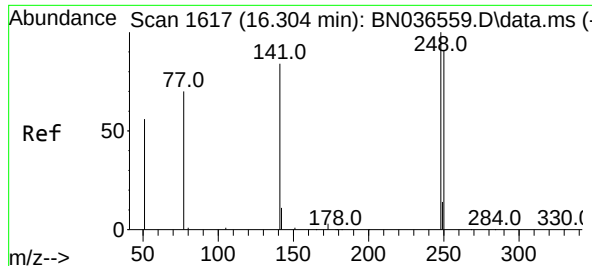
Ion Ratio Lower Upper

198 100

51 134.9 107.9 161.9

105 70.2 56.2 84.2

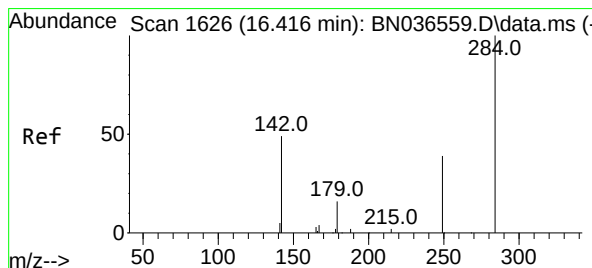
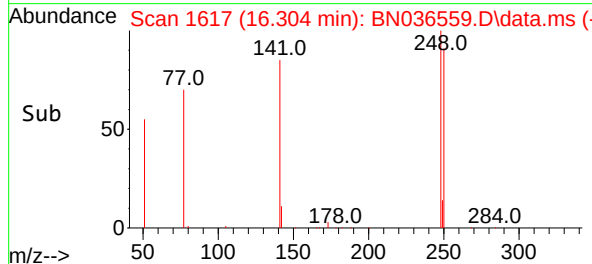
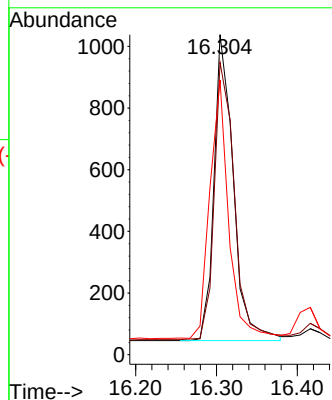
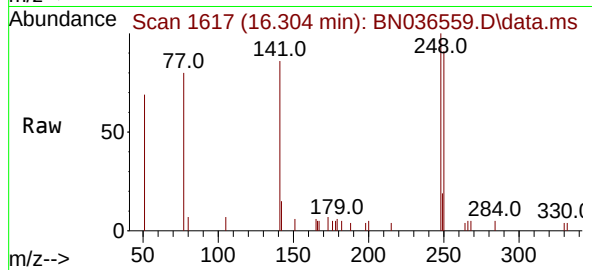




#21  
4-Bromophenyl-phenylether  
Concen: 0.437 ng  
RT: 16.304 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

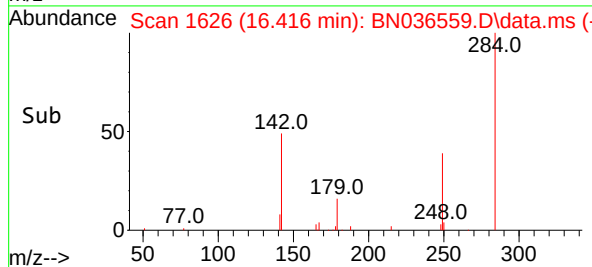
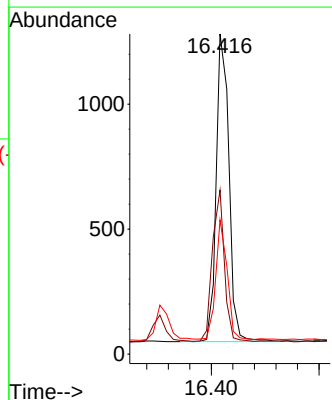
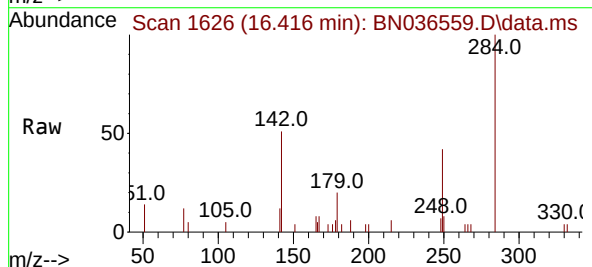
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

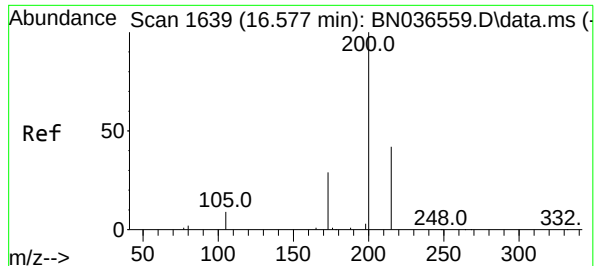
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 91.3  | 73.0  | 109.6 |
| 141     | 85.8  | 68.6  | 103.0 |



#22  
Hexachlorobenzene  
Concen: 0.444 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 46.2  | 37.0  | 55.4  |
| 249     | 35.1  | 28.1  | 42.1  |





#23

Atrazine

Concen: 0.424 ng

RT: 16.577 min Scan# 1639

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

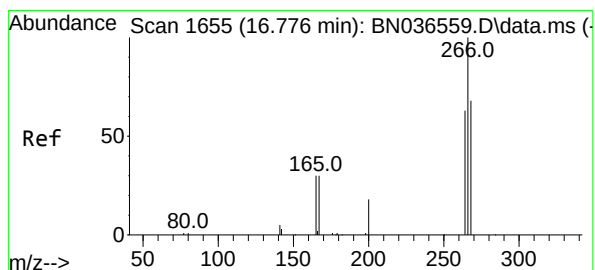
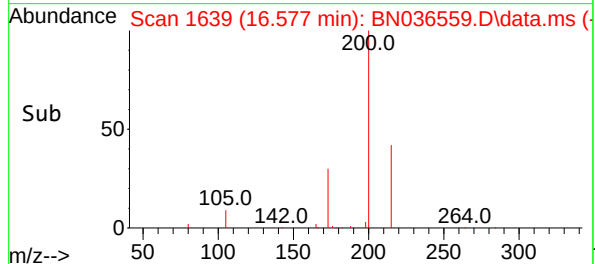
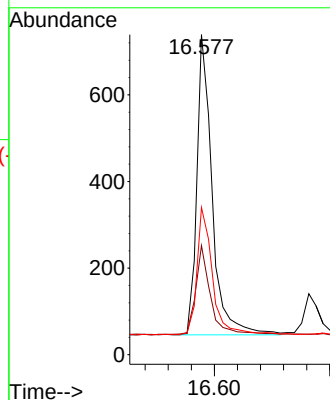
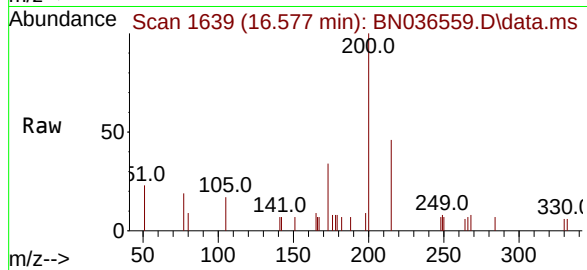
Tgt Ion:200 Resp: 1279

Ion Ratio Lower Upper

200 100

173 34.1 27.3 40.9

215 46.0 36.8 55.2



#24

Pentachlorophenol

Concen: 0.396 ng

RT: 16.776 min Scan# 1655

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

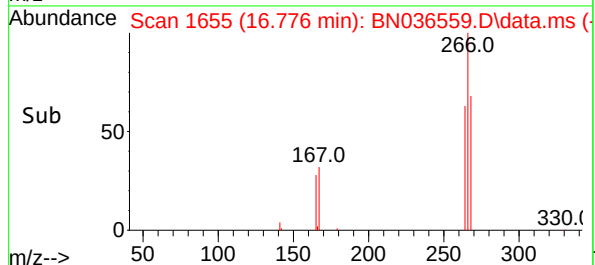
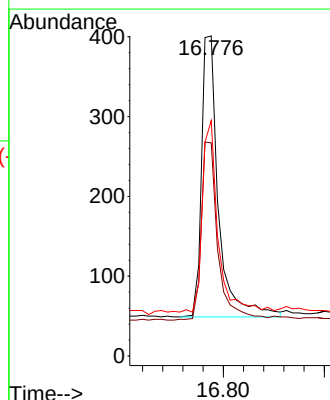
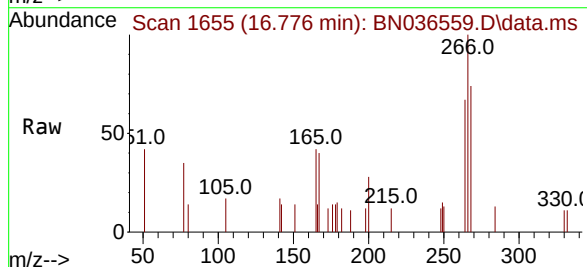
Tgt Ion:266 Resp: 821

Ion Ratio Lower Upper

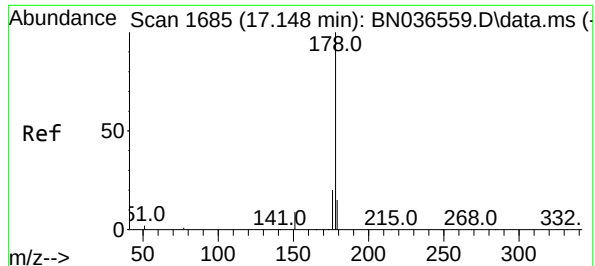
266 100

264 62.0 49.6 74.4

268 63.6 50.9 76.3



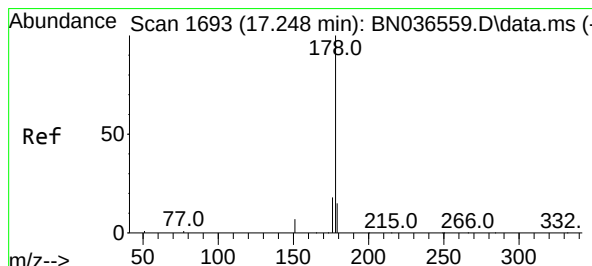
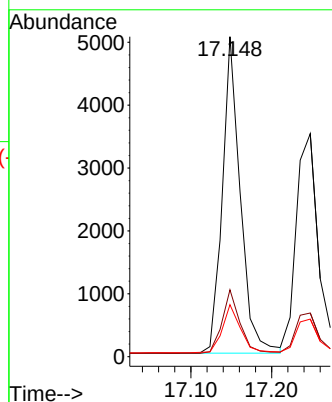
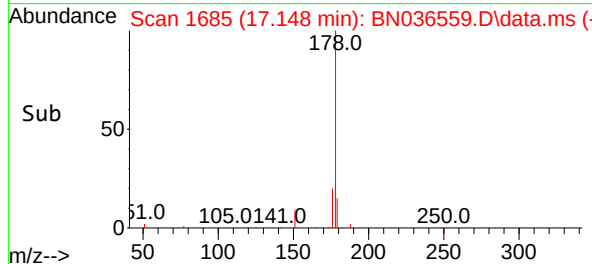
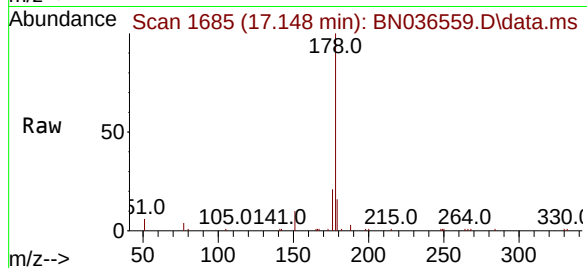




#25  
Phenanthrene  
Concen: 0.432 ng  
RT: 17.148 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

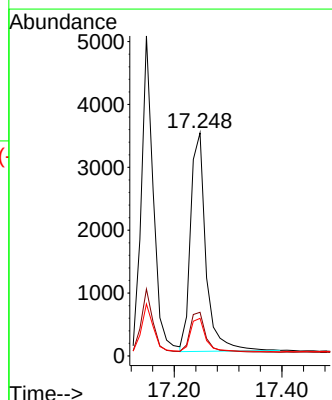
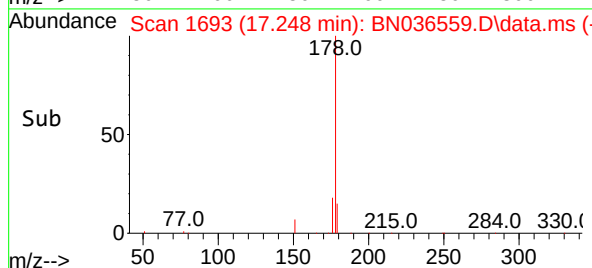
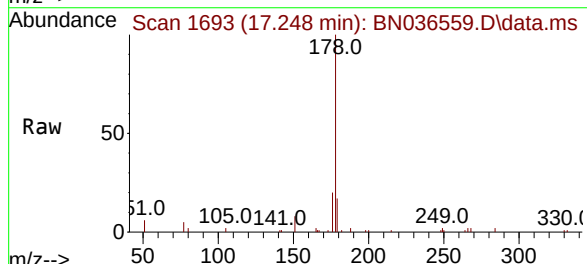
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

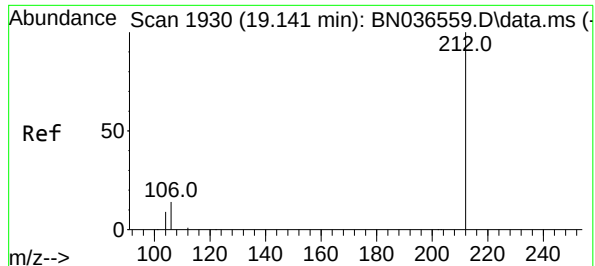
Tgt Ion:178 Resp: 7786  
Ion Ratio Lower Upper  
178 100  
176 19.9 15.9 23.9  
179 15.3 12.2 18.4



#26  
Anthracene  
Concen: 0.424 ng  
RT: 17.248 min Scan# 1693  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:178 Resp: 6886  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.4 23.2  
179 15.7 12.6 18.8





#27

Fluoranthene-d10

Concen: 0.435 ng

RT: 19.141 min Scan# 1930

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

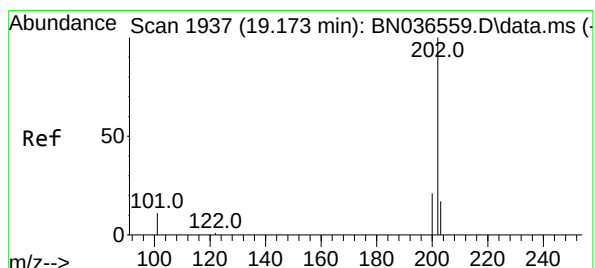
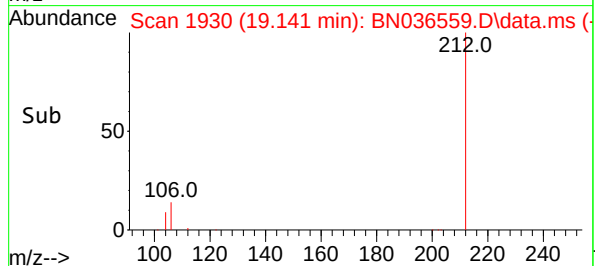
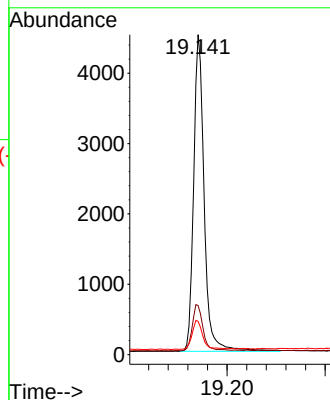
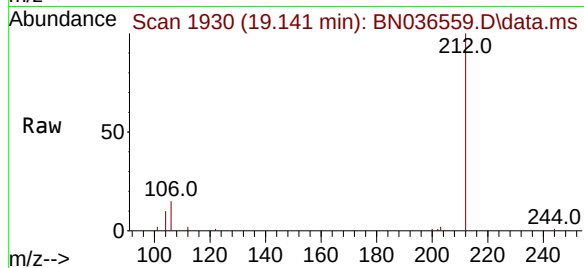
Tgt Ion:212 Resp: 6699

Ion Ratio Lower Upper

212 100

106 14.7 11.8 17.6

104 9.1 7.3 10.9



#28

Fluoranthene

Concen: 0.431 ng

RT: 19.173 min Scan# 1937

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

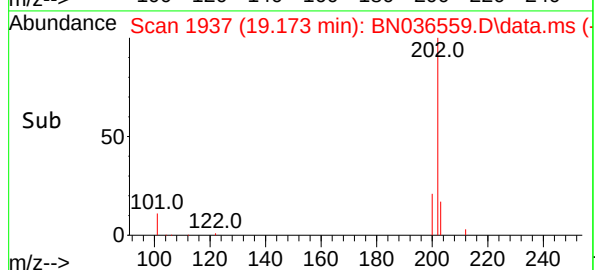
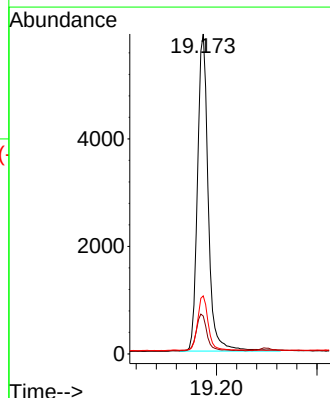
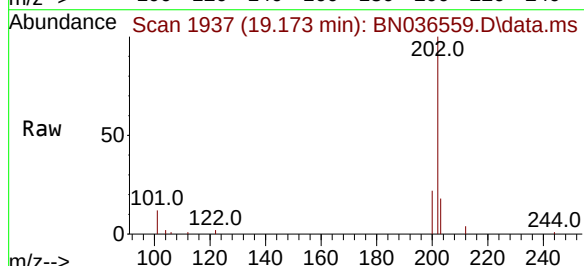
Tgt Ion:202 Resp: 8717

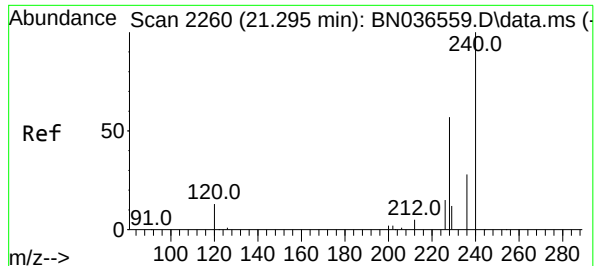
Ion Ratio Lower Upper

202 100

101 11.7 9.4 14.0

203 16.9 13.5 20.3





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.295 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

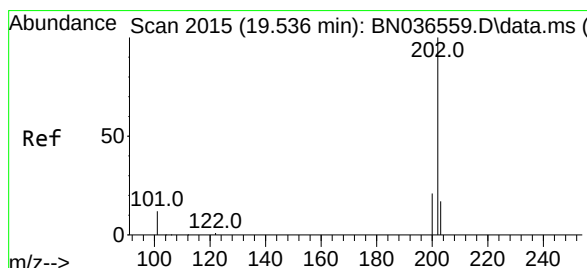
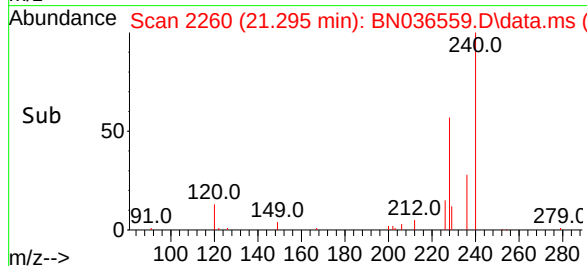
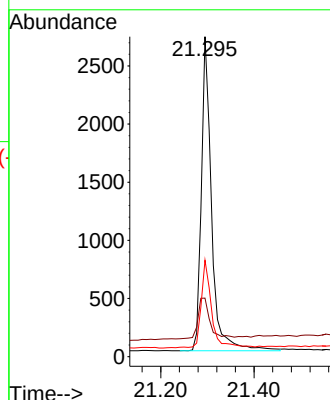
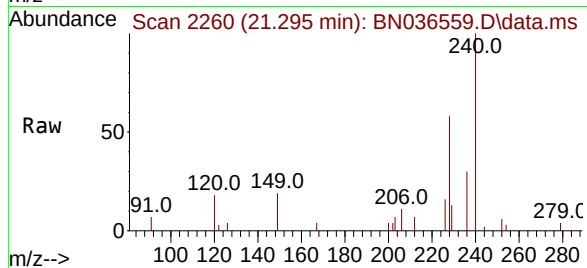
Tgt Ion:240 Resp: 4110

Ion Ratio Lower Upper

240 100

120 18.3 14.6 22.0

236 30.1 24.1 36.1



#30

Pyrene

Concen: 0.436 ng

RT: 19.536 min Scan# 2015

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

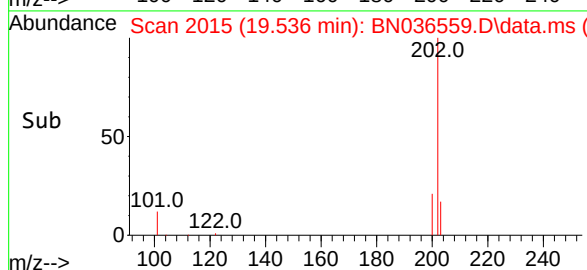
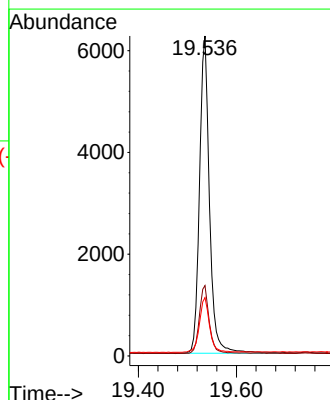
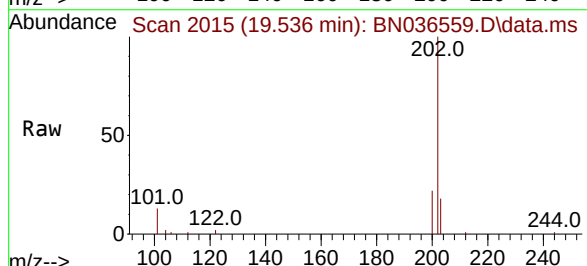
Tgt Ion:202 Resp: 8759

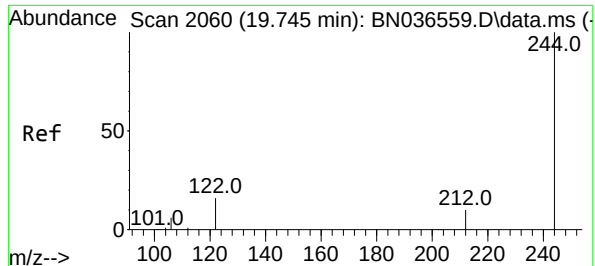
Ion Ratio Lower Upper

202 100

200 21.4 17.1 25.7

203 17.6 14.1 21.1

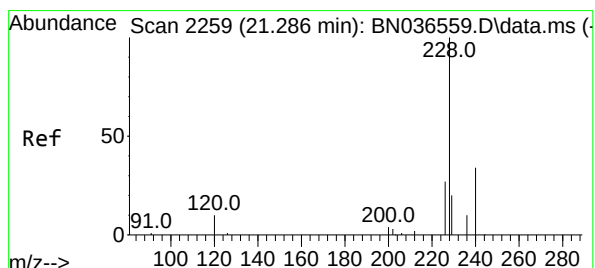
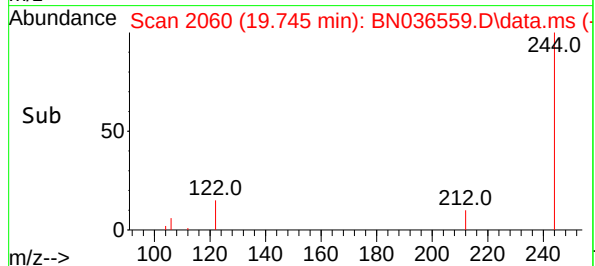
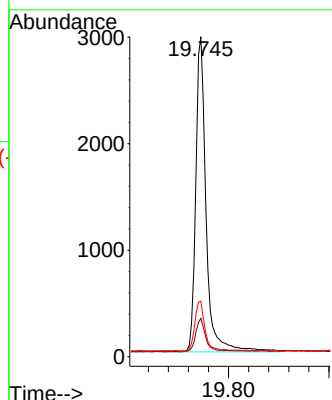
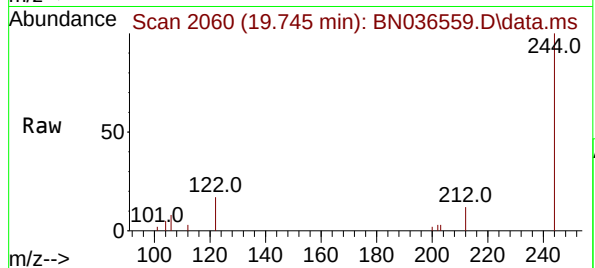




#31  
Terphenyl-d14  
Concen: 0.429 ng  
RT: 19.745 min Scan# 2060  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

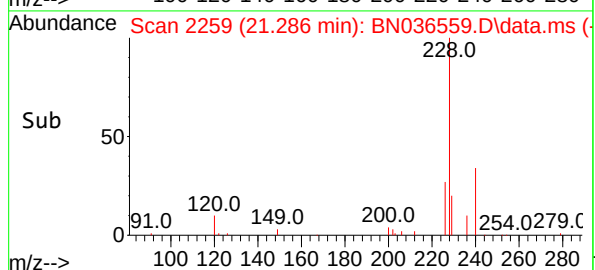
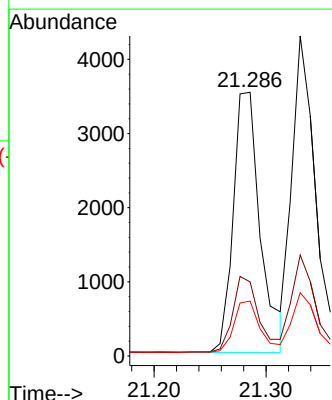
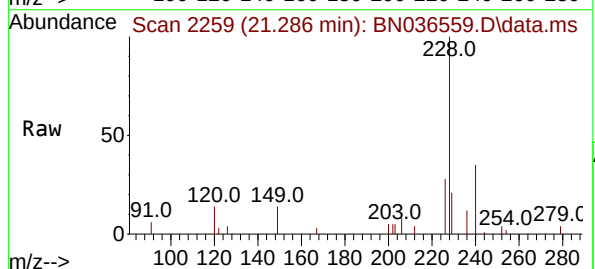
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

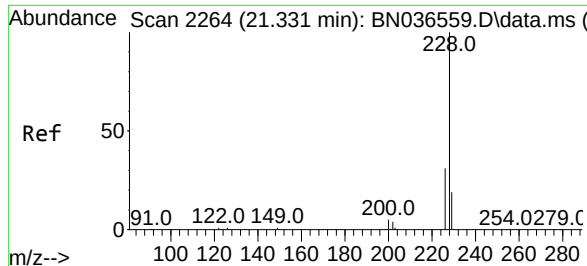
Tgt Ion:244 Resp: 4226  
Ion Ratio Lower Upper  
244 100  
212 12.0 9.6 14.4  
122 17.4 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 0.413 ng  
RT: 21.286 min Scan# 2259  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:228 Resp: 5908  
Ion Ratio Lower Upper  
228 100  
226 28.1 22.5 33.7  
229 20.8 16.6 25.0





#33

Chrysene

Concen: 0.424 ng

RT: 21.331 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

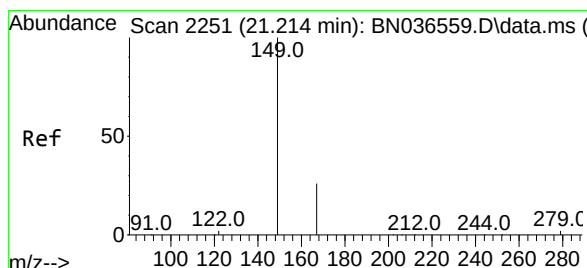
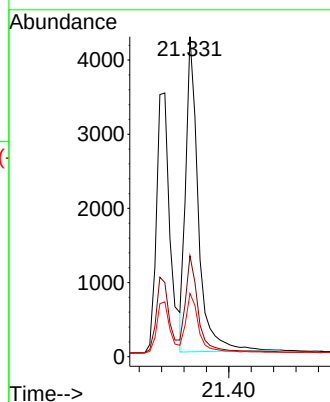
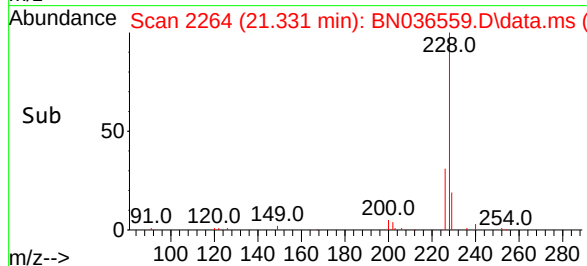
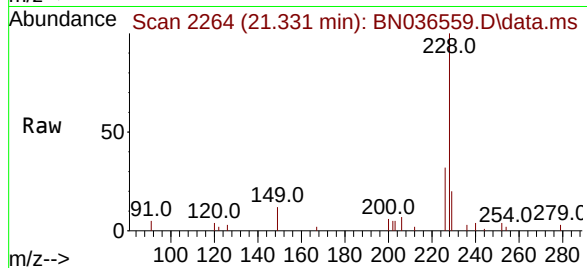
Tgt Ion:228 Resp: 6617

Ion Ratio Lower Upper

228 100

226 31.6 25.3 37.9

229 19.8 15.8 23.8



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.422 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

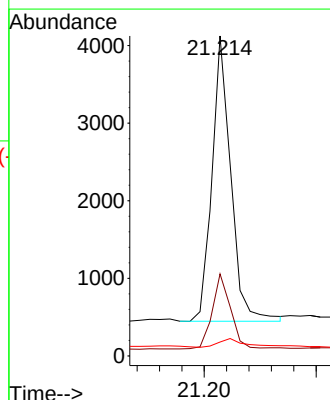
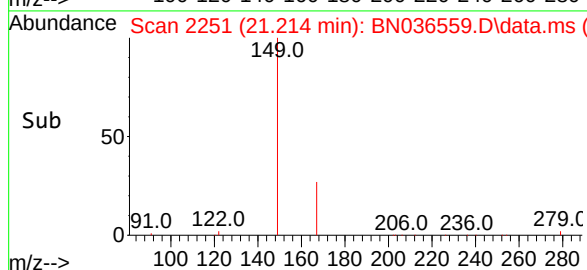
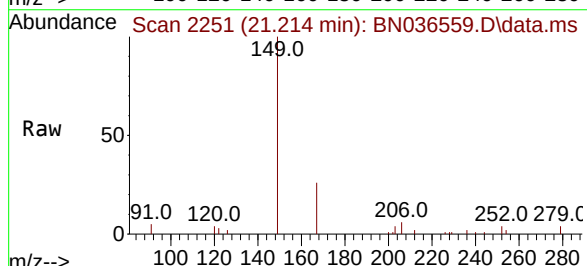
Tgt Ion:149 Resp: 4291

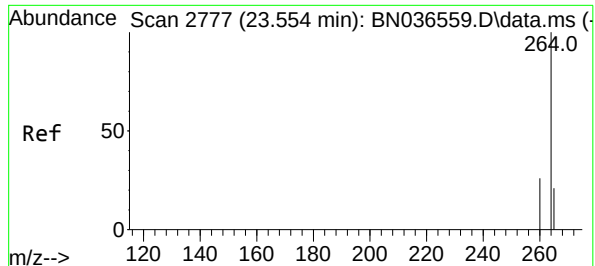
Ion Ratio Lower Upper

149 100

167 25.9 20.7 31.1

279 4.5 3.6 5.4





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.554 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

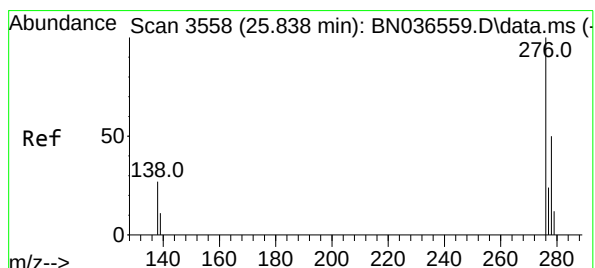
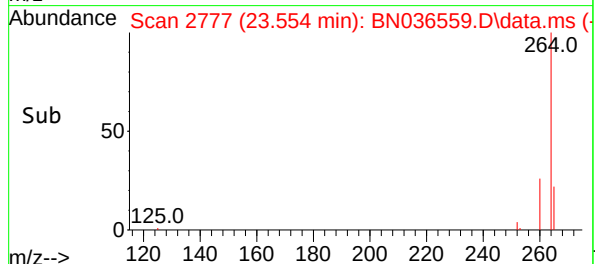
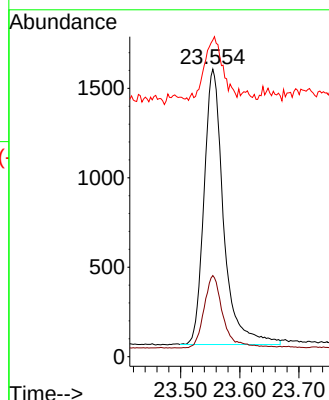
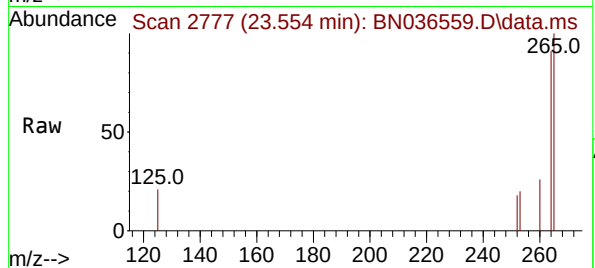
Tgt Ion:264 Resp: 3539

Ion Ratio Lower Upper

264 100

260 28.2 22.6 33.8

265 110.1 88.1 132.1



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.428 ng

RT: 25.838 min Scan# 3558

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

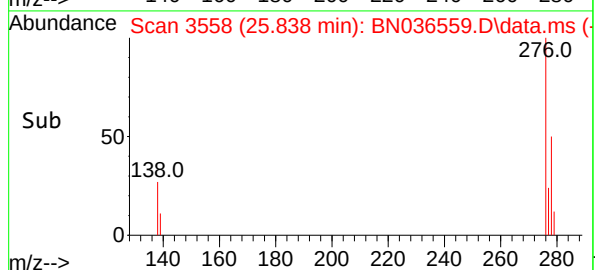
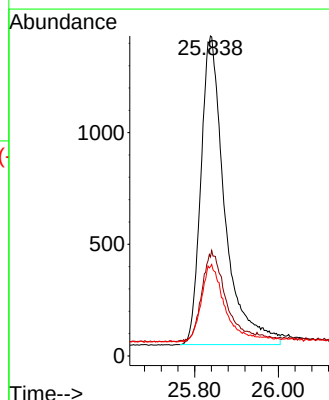
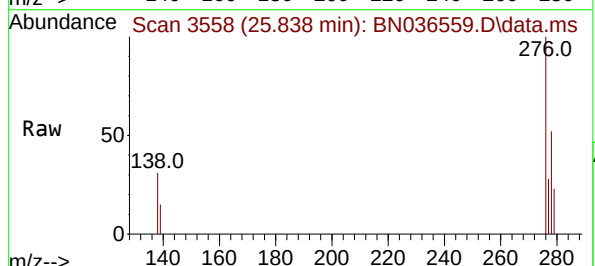
Tgt Ion:276 Resp: 5470

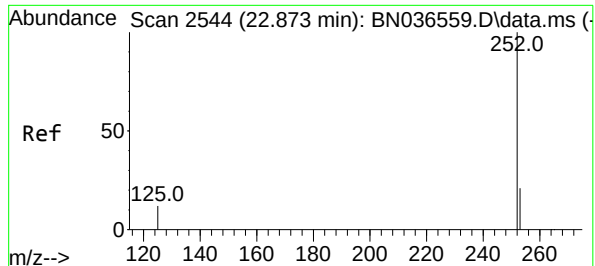
Ion Ratio Lower Upper

276 100

138 29.3 23.4 35.2

277 25.0 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.425 ng

RT: 22.873 min Scan# 2544

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

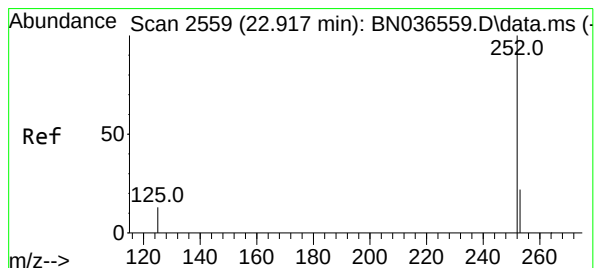
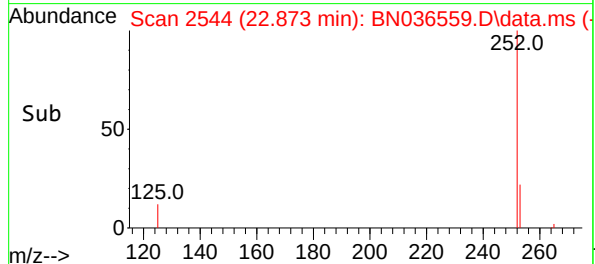
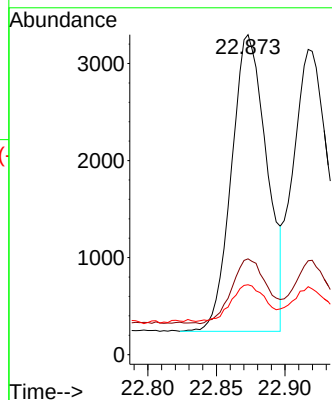
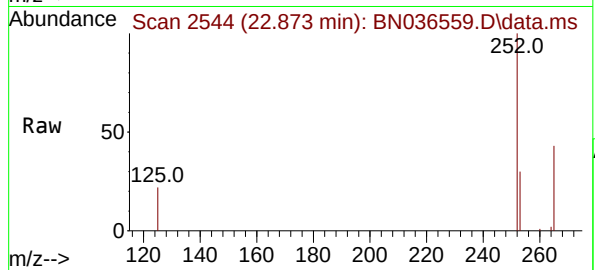
Tgt Ion:252 Resp: 5475

Ion Ratio Lower Upper

252 100

253 29.9 23.9 35.9

125 21.8 17.4 26.2



#38

Benzo(k)fluoranthene

Concen: 0.424 ng

RT: 22.917 min Scan# 2559

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

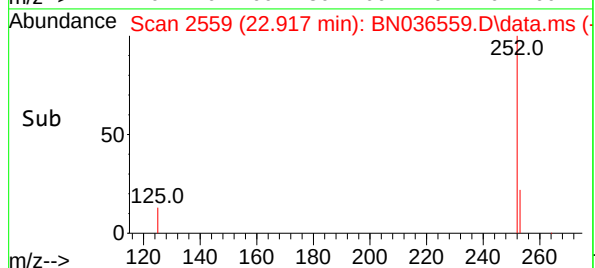
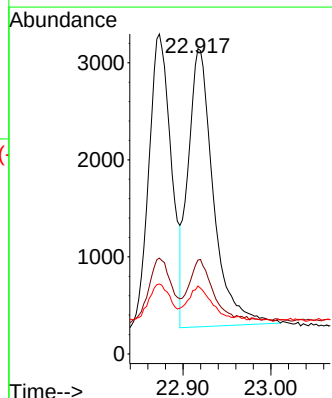
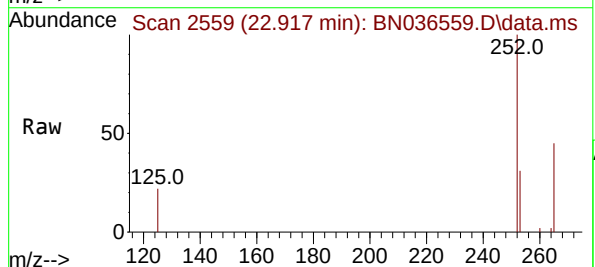
Tgt Ion:252 Resp: 5732

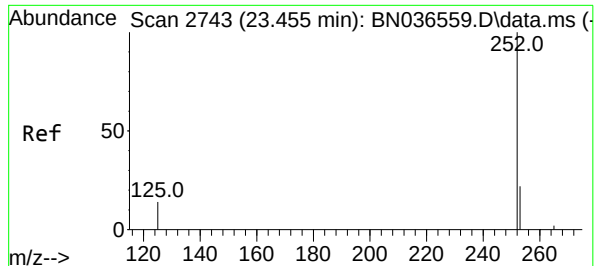
Ion Ratio Lower Upper

252 100

253 30.7 24.6 36.8

125 22.3 17.8 26.8





#39

Benzo(a)pyrene

Concen: 0.425 ng

RT: 23.455 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

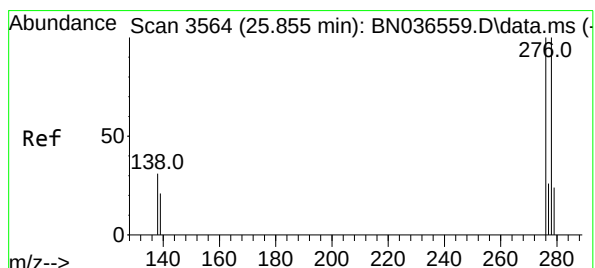
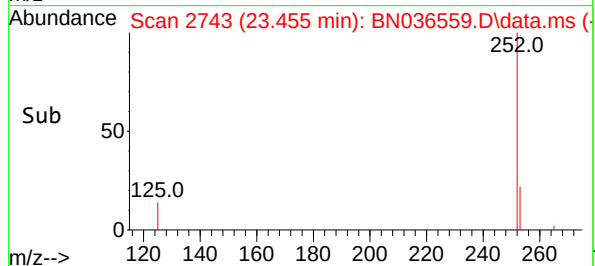
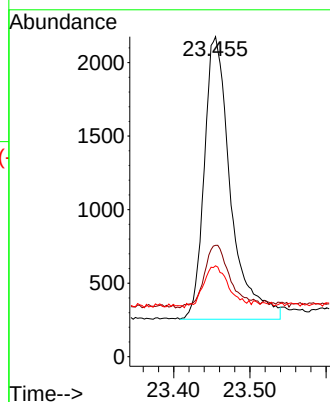
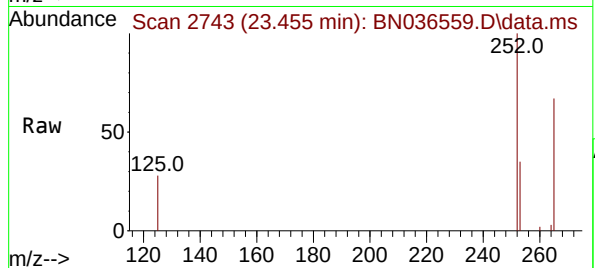
Tgt Ion:252 Resp: 4612

Ion Ratio Lower Upper

252 100

253 34.8 27.8 41.8

125 28.4 22.7 34.1



#40

Dibenzo(a,h)anthracene

Concen: 0.414 ng

RT: 25.855 min Scan# 3564

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

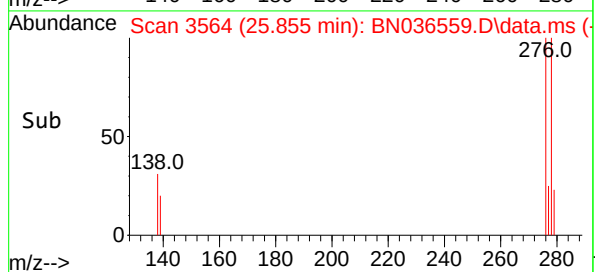
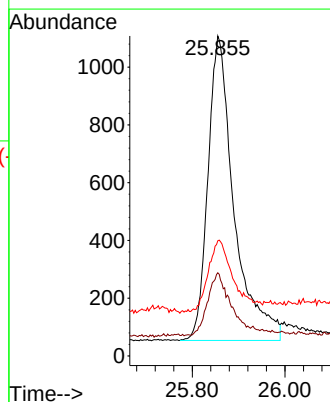
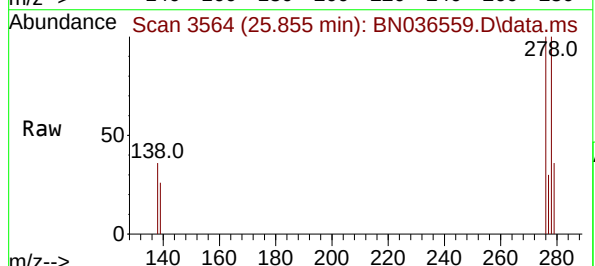
Tgt Ion:278 Resp: 4117

Ion Ratio Lower Upper

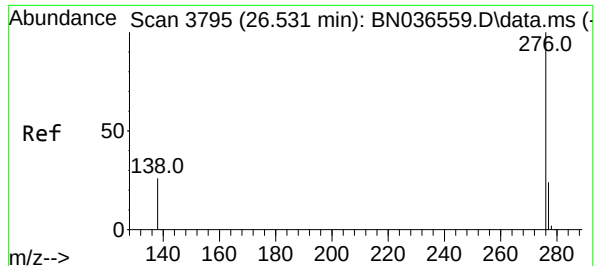
278 100

139 26.0 20.8 31.2

279 36.0 28.8 43.2







#41

Benzo(g,h,i)perylene

Concen: 0.430 ng

RT: 26.531 min Scan# 31

Delta R.T. 0.000 min

Lab File: BN036559.D

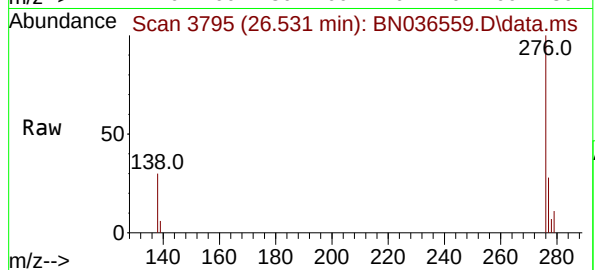
Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4



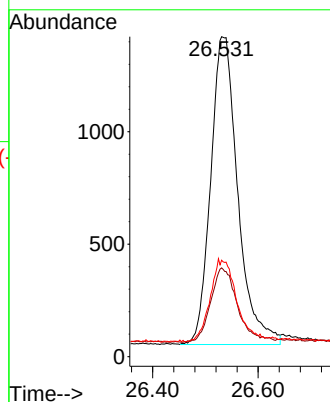
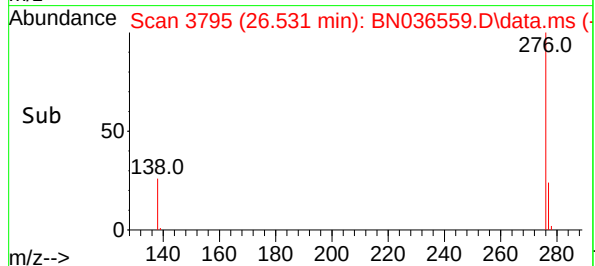
Tgt Ion:276 Resp: 4891

Ion Ratio Lower Upper

276 100

277 27.8 22.2 33.4

138 30.1 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036560.D  
 Acq On : 10 Mar 2025 13:31  
 Operator : RC/JU  
 Sample : SSTDICC0.8  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.8

Quant Time: Mar 10 16:01:54 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

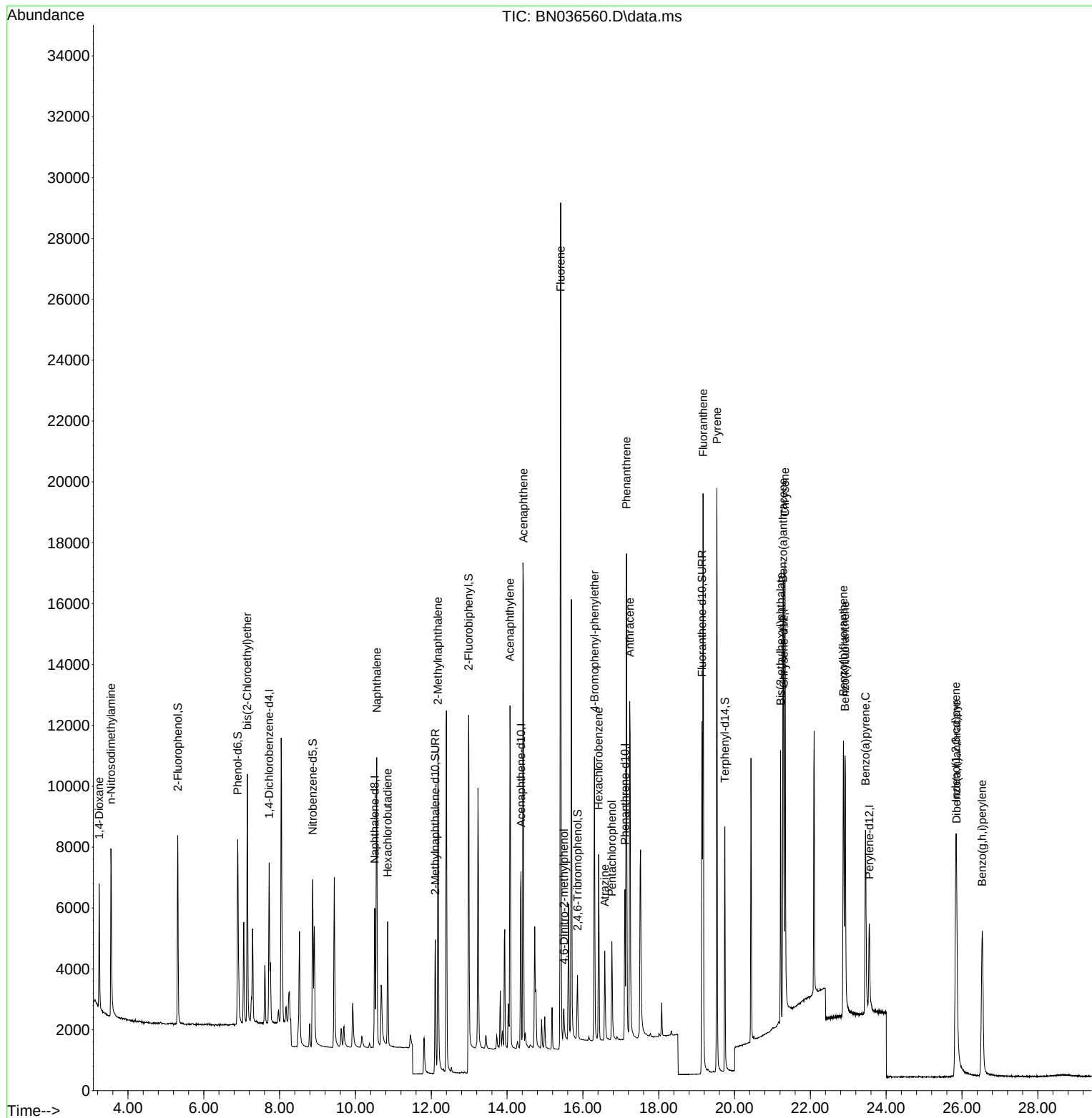
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2495     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5884     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.366 | 164  | 3456     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.111 | 188  | 6971     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.295 | 240  | 4636     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.554 | 264  | 4198     | 0.400 | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 4381     | 0.753 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.894  | 99   | 5324     | 0.741 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.875  | 82   | 4717     | 0.737 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.106 | 152  | 6616     | 0.756 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 1166     | 0.744 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.988 | 172  | 16243    | 0.808 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.141 | 212  | 13330    | 0.746 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.745 | 244  | 8571     | 0.772 | ng    | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
|                               |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.239  | 88   | 2251     | 0.813 | ng    | 99       |
| 3) n-Nitrosodimethylamine     | 3.550  | 42   | 4197     | 0.750 | ng    | 96       |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 5632     | 0.759 | ng    | 99       |
| 9) Naphthalene                | 10.562 | 128  | 13078    | 0.756 | ng    | 98       |
| 10) Hexachlorobutadiene       | 10.851 | 225  | 3147     | 0.772 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 12.177 | 142  | 8272     | 0.751 | ng    | 98       |
| 16) Acenaphthylene            | 14.078 | 152  | 12403    | 0.760 | ng    | 100      |
| 17) Acenaphthene              | 14.430 | 154  | 8096     | 0.758 | ng    | 99       |
| 18) Fluorene                  | 15.414 | 166  | 11120    | 0.770 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.499 | 198  | 1039     | 0.724 | ng    | # 59     |
| 21) 4-Bromophenyl-phenylether | 16.305 | 248  | 3324     | 0.761 | ng    | 93       |
| 22) Hexachlorobenzene         | 16.416 | 284  | 4115     | 0.780 | ng    | 99       |
| 23) Atrazine                  | 16.578 | 200  | 2677     | 0.764 | ng    | 94       |
| 24) Pentachlorophenol         | 16.764 | 266  | 1701     | 0.707 | ng    | 98       |
| 25) Phenanthrene              | 17.149 | 178  | 15910    | 0.761 | ng    | 99       |
| 26) Anthracene                | 17.236 | 178  | 14403    | 0.763 | ng    | 99       |
| 28) Fluoranthene              | 19.174 | 202  | 17738    | 0.755 | ng    | 99       |
| 30) Pyrene                    | 19.536 | 202  | 17714    | 0.781 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.277 | 228  | 12089    | 0.750 | ng    | 98       |
| 33) Chrysene                  | 21.331 | 228  | 13974    | 0.793 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 8021     | 0.699 | ng    | # 99     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.838 | 276  | 11785    | 0.778 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.873 | 252  | 11771    | 0.770 | ng    | # 91     |
| 38) Benzo(k)fluoranthene      | 22.917 | 252  | 12432    | 0.776 | ng    | # 90     |
| 39) Benzo(a)pyrene            | 23.455 | 252  | 10036    | 0.780 | ng    | # 87     |
| 40) Dibenzo(a,h)anthracene    | 25.858 | 278  | 9450     | 0.801 | ng    | 91       |
| 41) Benzo(g,h,i)perylene      | 26.534 | 276  | 10494    | 0.778 | ng    | 96       |
| -----                         |        |      |          |       |       |          |

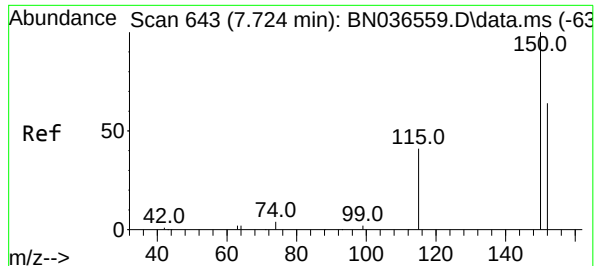
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036560.D  
Acq On : 10 Mar 2025 13:31  
Operator : RC/JU  
Sample : SSTDICC0.8  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

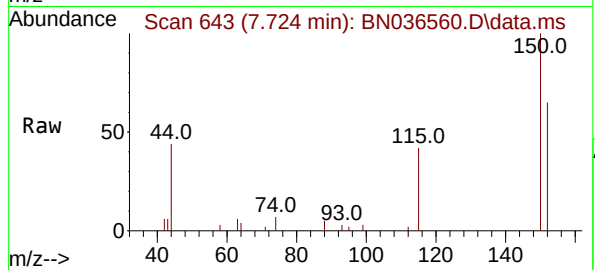
Quant Time: Mar 10 16:01:54 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration



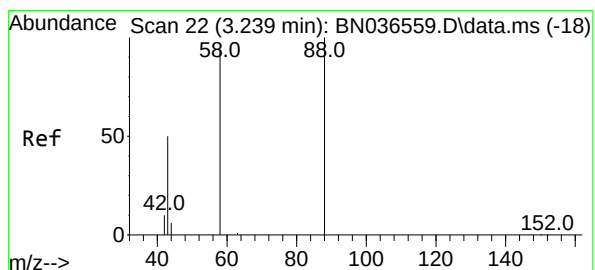
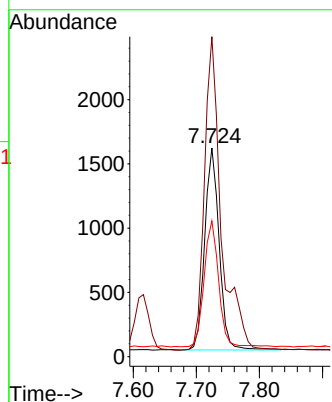


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

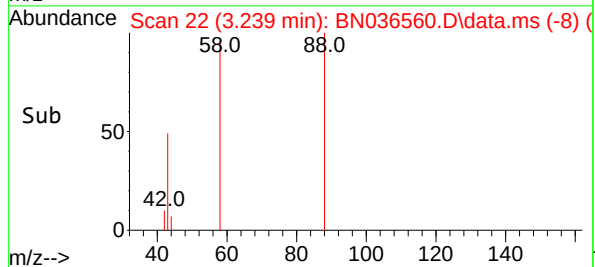
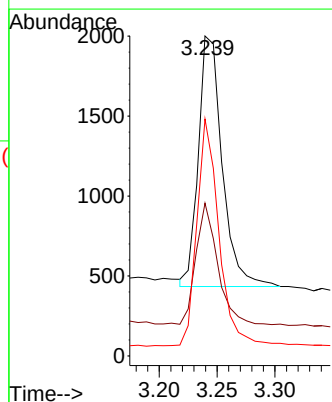
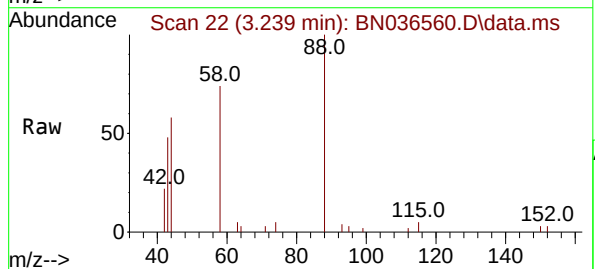


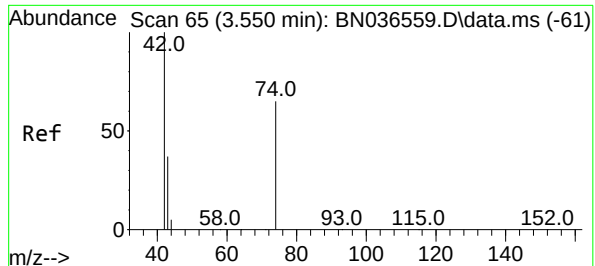
Tgt Ion:152 Resp: 2495  
Ion Ratio Lower Upper  
152 100  
150 153.3 123.7 185.5  
115 65.1 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.813 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion: 88 Resp: 2251  
Ion Ratio Lower Upper  
88 100  
43 45.6 37.8 56.8  
58 84.5 67.4 101.2

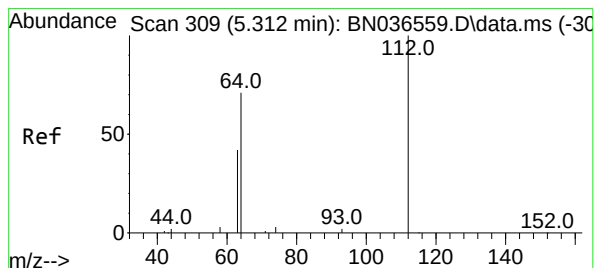
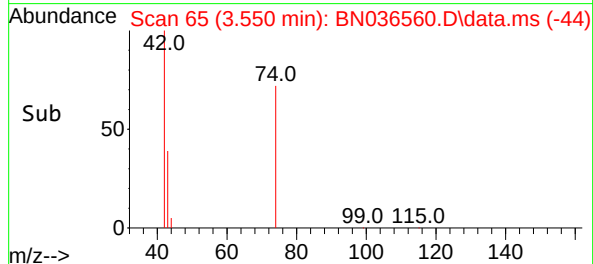
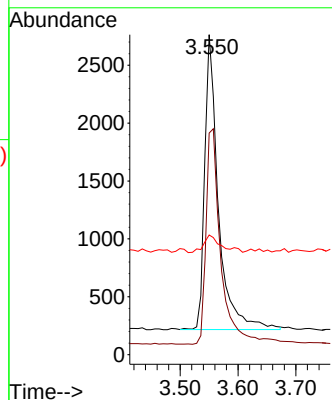
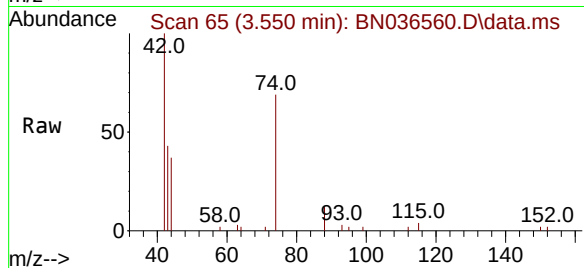




#3  
n-Nitrosodimethylamine  
Concen: 0.750 ng  
RT: 3.550 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

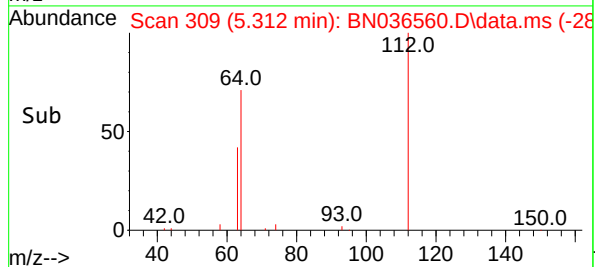
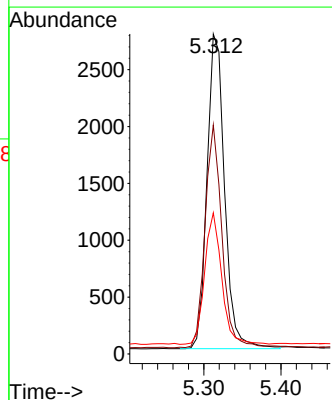
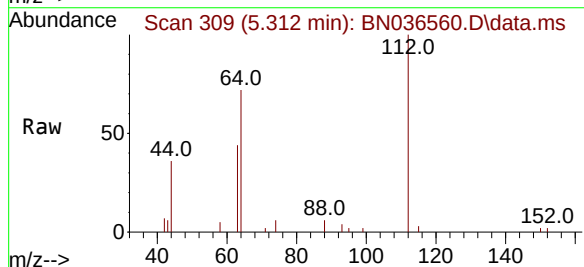
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

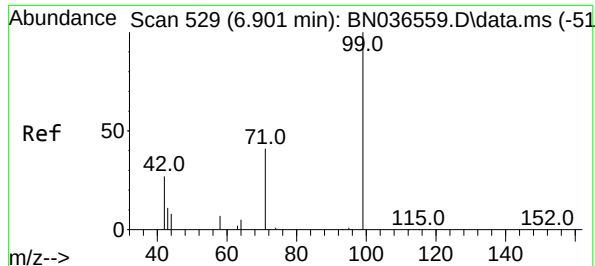
Tgt Ion: 42 Resp: 4197  
Ion Ratio Lower Upper  
42 100  
74 79.3 60.6 90.8  
44 7.4 6.3 9.5



#4  
2-Fluorophenol  
Concen: 0.753 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion: 112 Resp: 4381  
Ion Ratio Lower Upper  
112 100  
64 68.8 53.1 79.7  
63 40.4 31.8 47.8

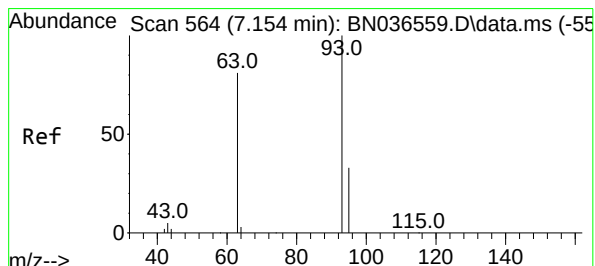
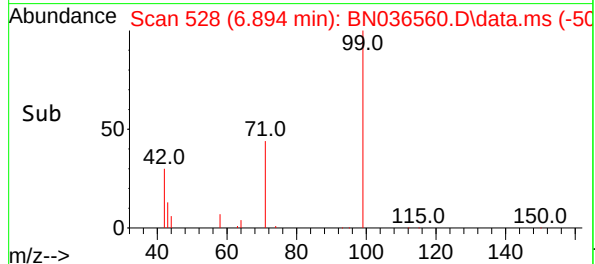
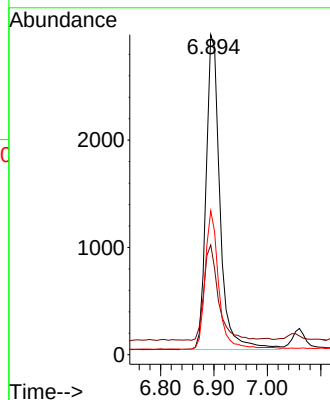
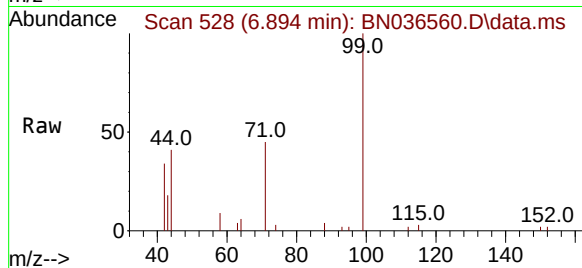




#5  
Phenol-d6  
Concen: 0.741 ng  
RT: 6.894 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

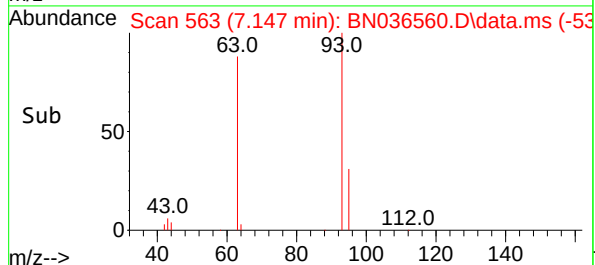
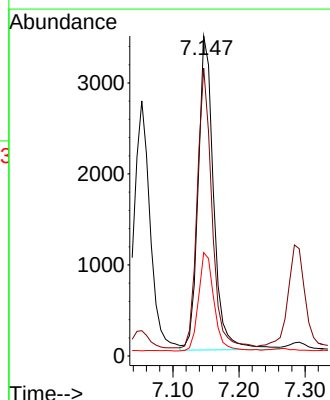
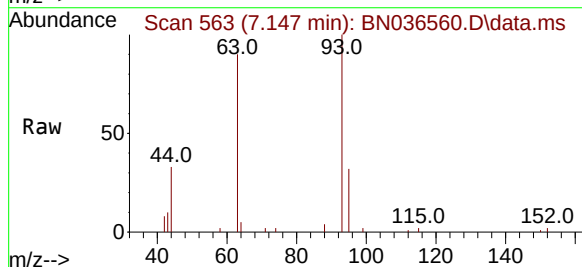
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

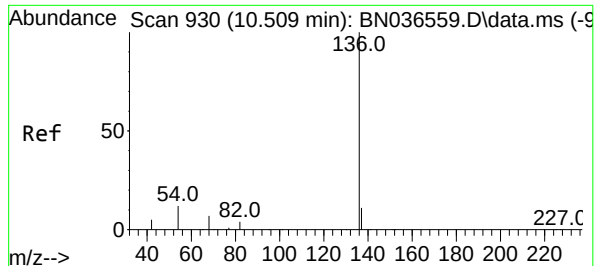
Tgt Ion: 99 Resp: 5324  
Ion Ratio Lower Upper  
99 100  
42 31.3 26.5 39.7  
71 42.6 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 0.759 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.007 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion: 93 Resp: 5632  
Ion Ratio Lower Upper  
93 100  
63 84.0 67.7 101.5  
95 31.6 25.6 38.4

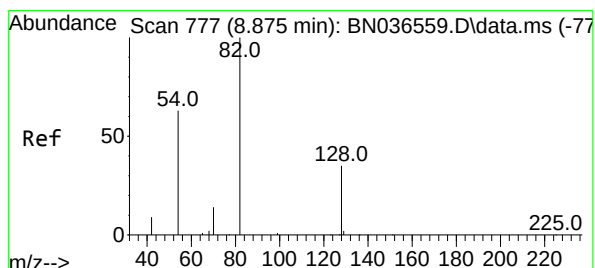
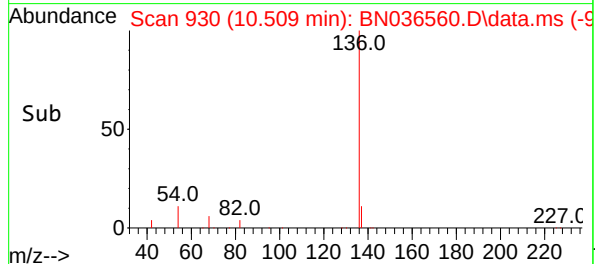
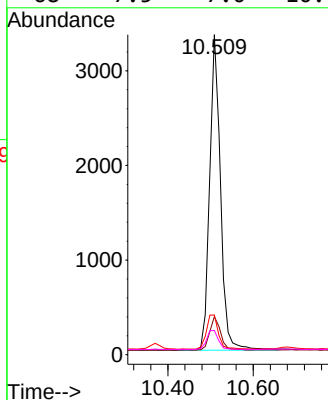
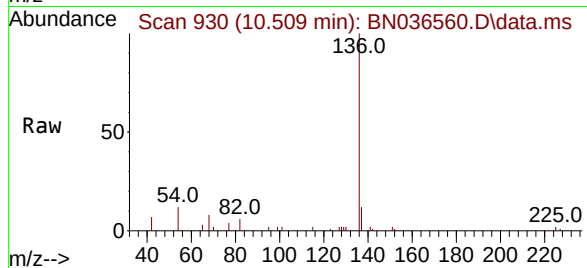




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

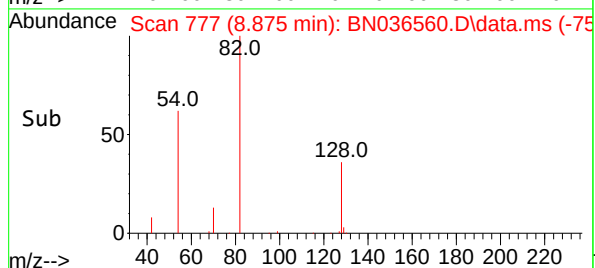
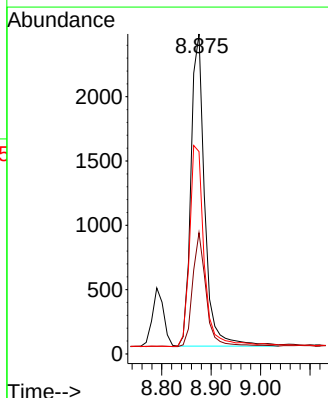
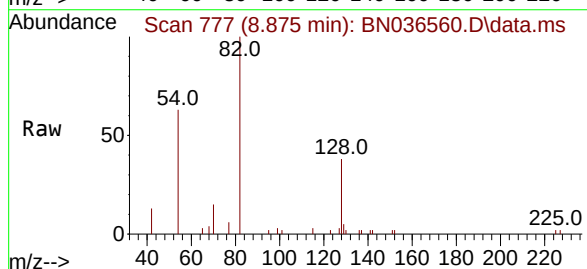
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

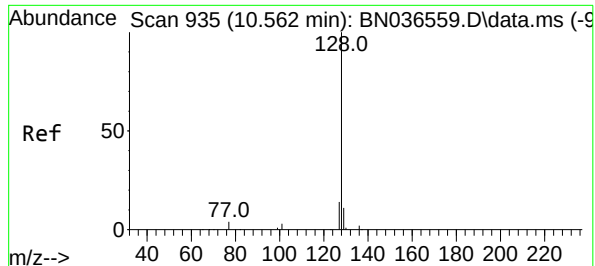
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5884  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.9  | 10.3  | 15.5  |
| 54       | 12.4  | 11.5  | 17.3  |
| 68       | 7.5   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.737 ng  
RT: 8.875 min Scan# 777  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 4717  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 37.9  | 30.6  | 45.8  |
| 54       | 63.2  | 52.2  | 78.4  |





#9

Naphthalene

Concen: 0.756 ng

RT: 10.562 min Scan# 91

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

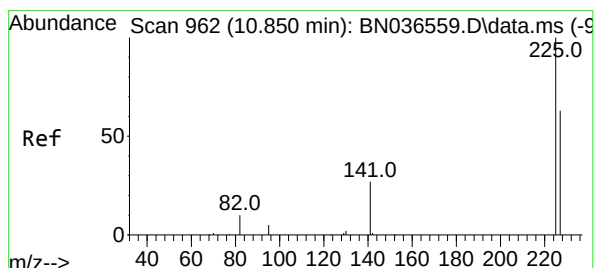
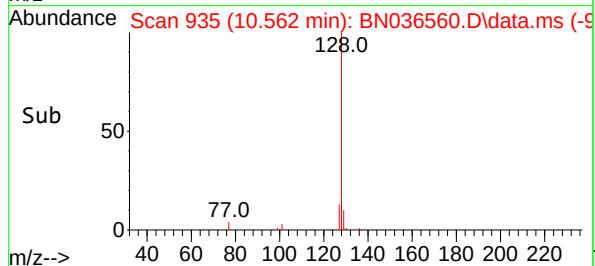
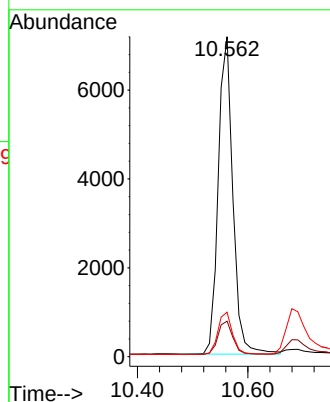
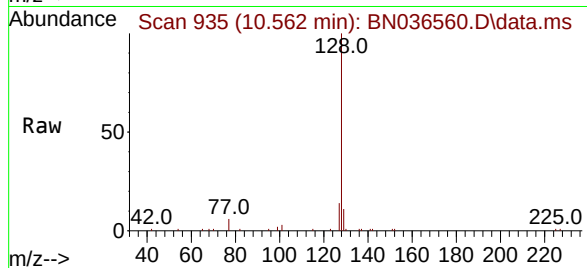
Tgt Ion:128 Resp: 13078

Ion Ratio Lower Upper

128 100

129 11.1 9.8 14.6

127 13.9 11.8 17.8



#10

Hexachlorobutadiene

Concen: 0.772 ng

RT: 10.851 min Scan# 962

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

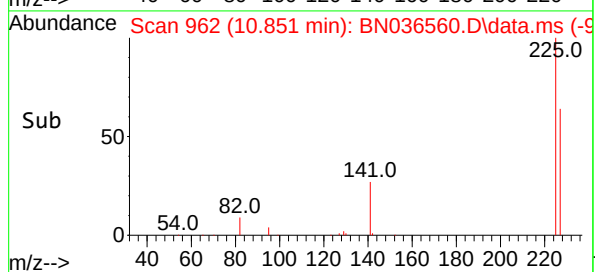
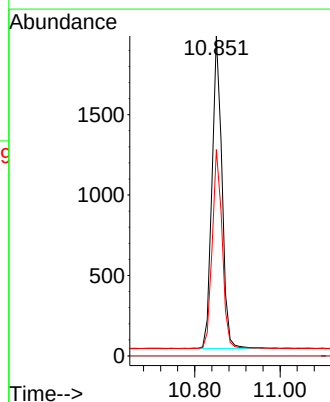
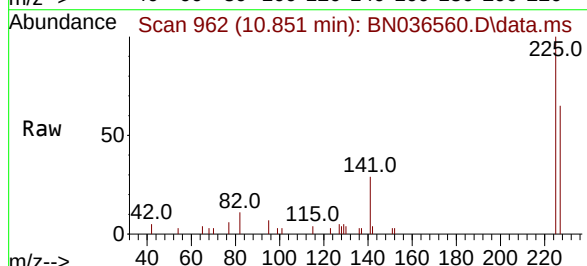
Tgt Ion:225 Resp: 3147

Ion Ratio Lower Upper

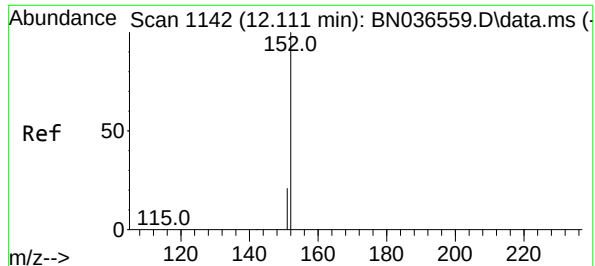
225 100

223 0.0 0.0 0.0

227 63.7 51.8 77.8



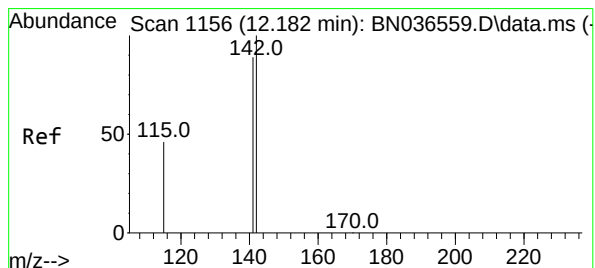
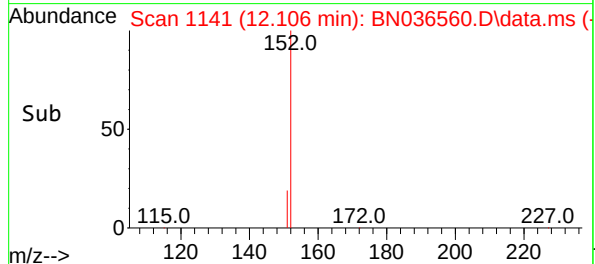
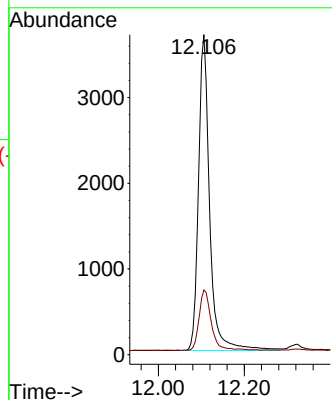
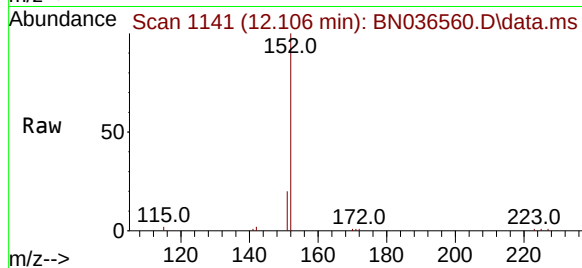




#11  
2-Methylnaphthalene-d10  
Concen: 0.756 ng  
RT: 12.106 min Scan# 1141  
Delta R.T. -0.005 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

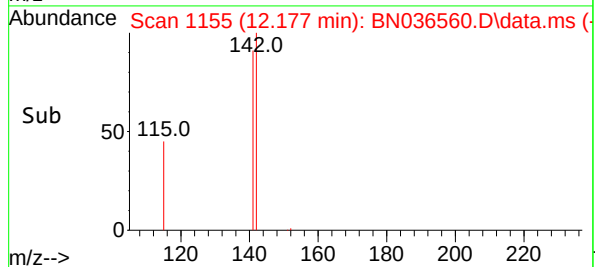
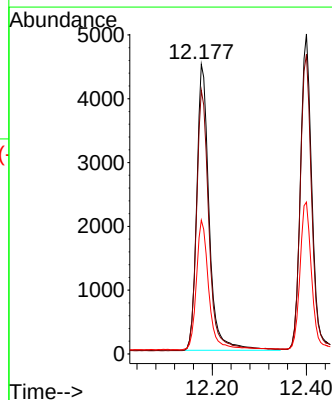
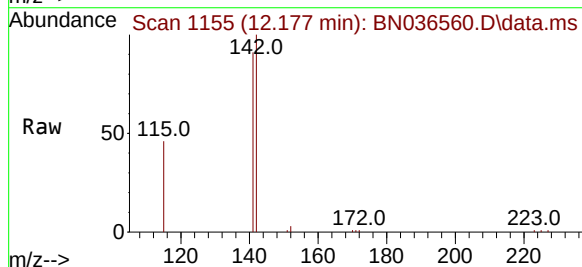
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

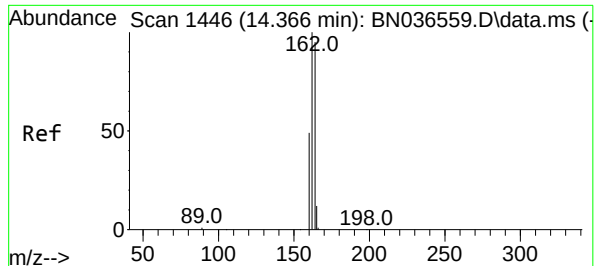
Tgt Ion:152 Resp: 6616  
Ion Ratio Lower Upper  
152 100  
151 20.8 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 0.751 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:142 Resp: 8272  
Ion Ratio Lower Upper  
142 100  
141 91.0 71.7 107.5  
115 46.2 38.3 57.5

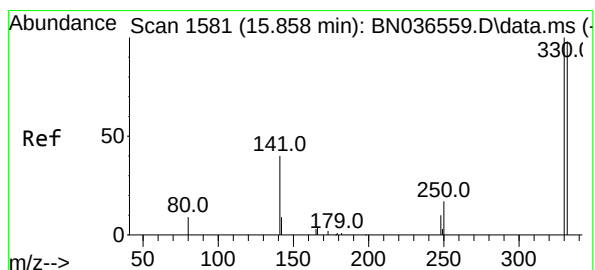
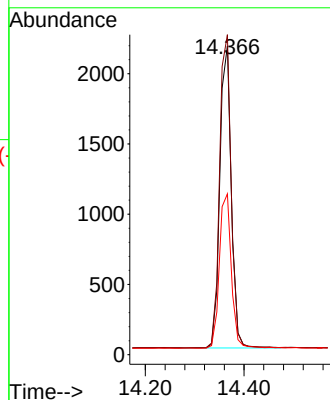
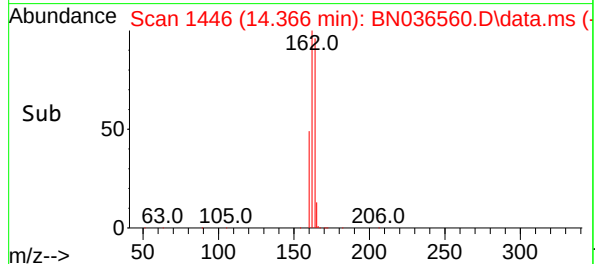
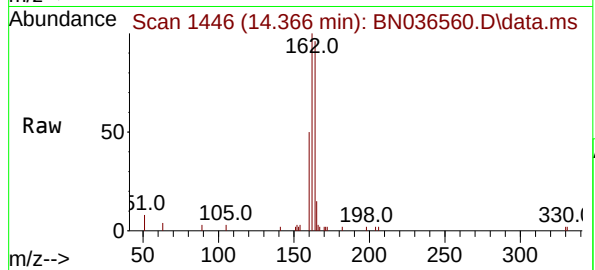




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.366 min Scan# 1446  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

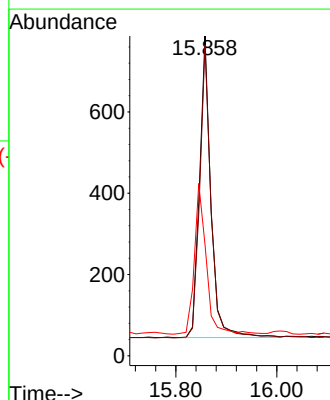
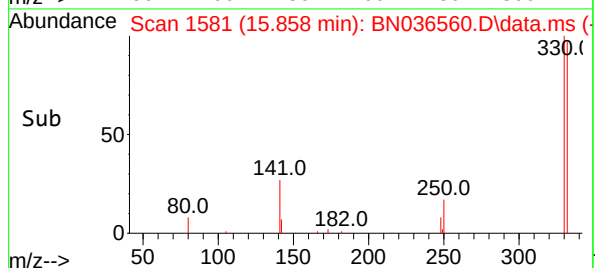
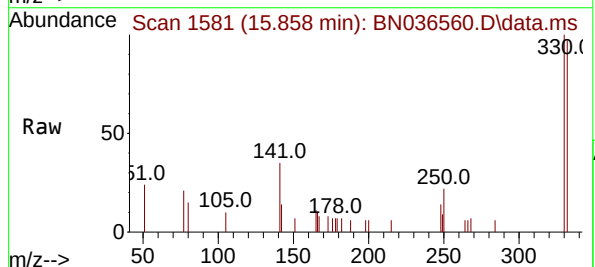
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

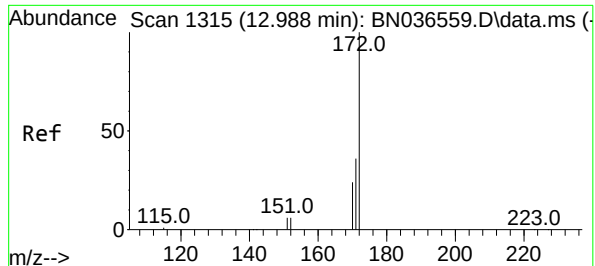
Tgt Ion:164 Resp: 3456  
Ion Ratio Lower Upper  
164 100  
162 103.6 84.2 126.2  
160 52.1 42.2 63.2



#14  
2,4,6-Tribromophenol  
Concen: 0.744 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:330 Resp: 1166  
Ion Ratio Lower Upper  
330 100  
332 97.6 75.2 112.8  
141 51.8 43.4 65.2

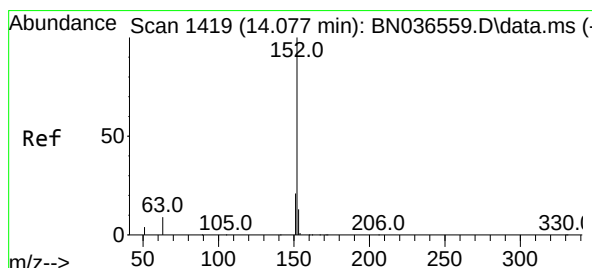
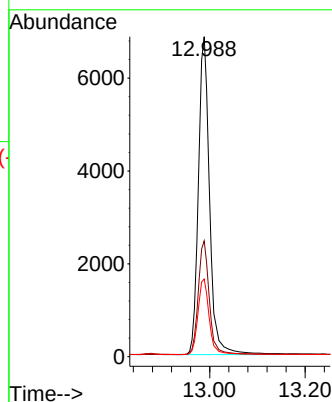
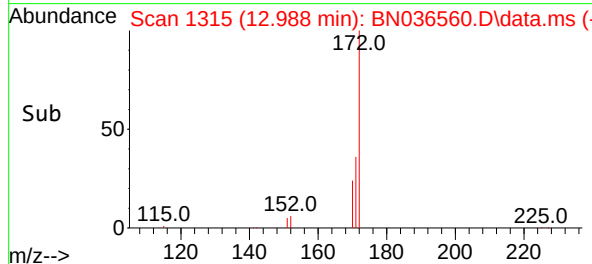
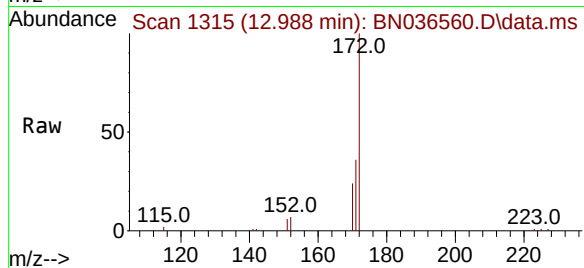




#15  
2-Fluorobiphenyl  
Concen: 0.808 ng  
RT: 12.988 min Scan# 1315  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

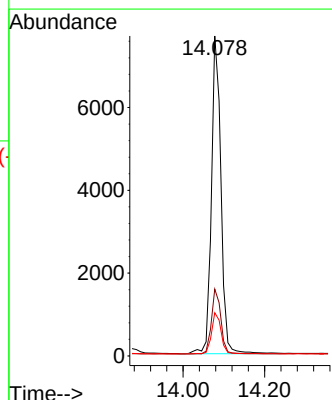
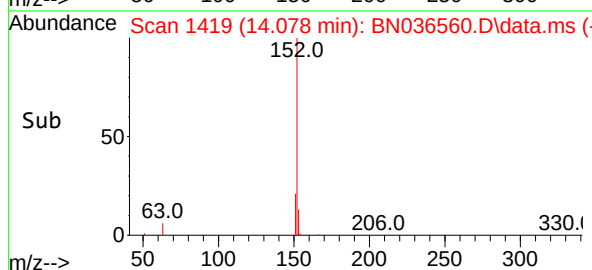
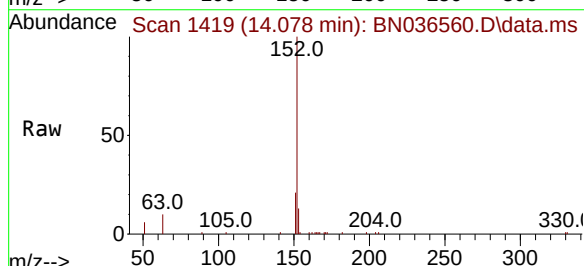
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

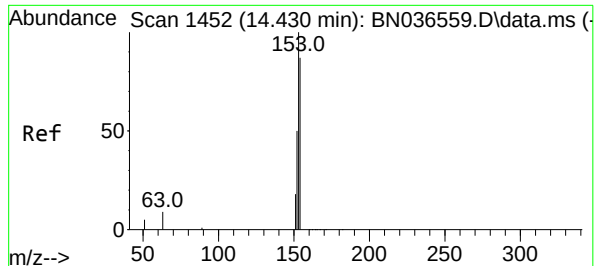
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.2  | 29.5  | 44.3  |
| 170     | 24.3  | 20.2  | 30.4  |



#16  
Acenaphthylene  
Concen: 0.760 ng  
RT: 14.078 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 20.1  | 16.2  | 24.4  |
| 153     | 13.1  | 10.6  | 15.8  |

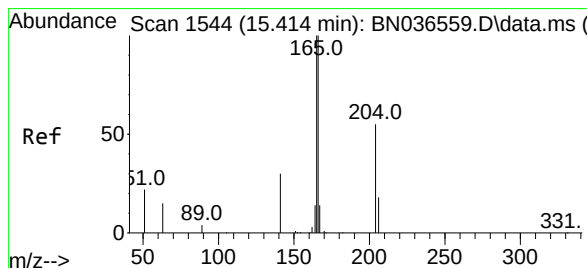
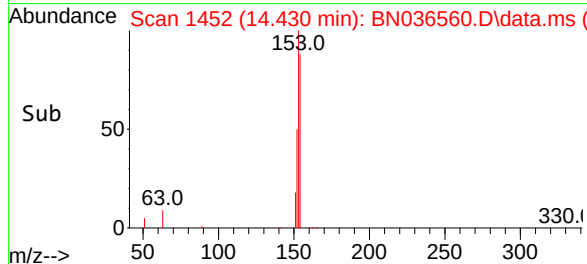
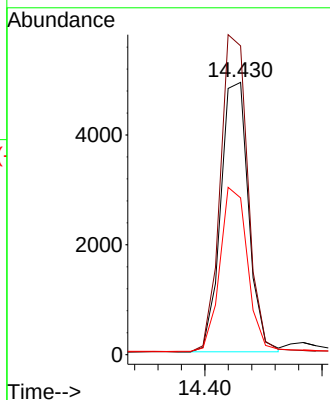
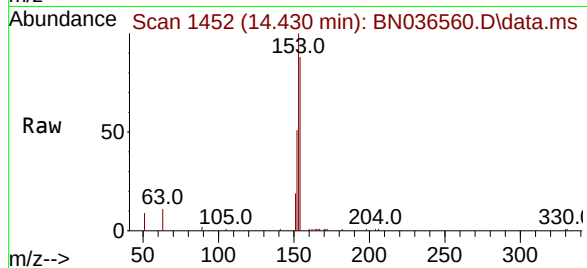




#17  
Acenaphthene  
Concen: 0.758 ng  
RT: 14.430 min Scan# 1452  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

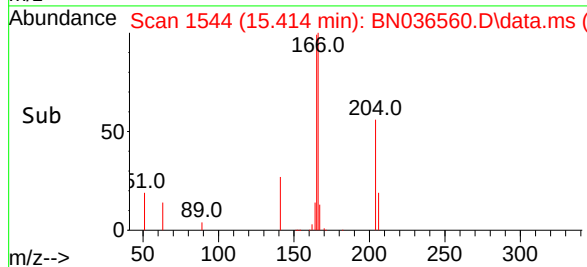
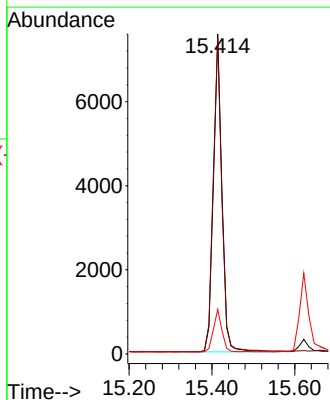
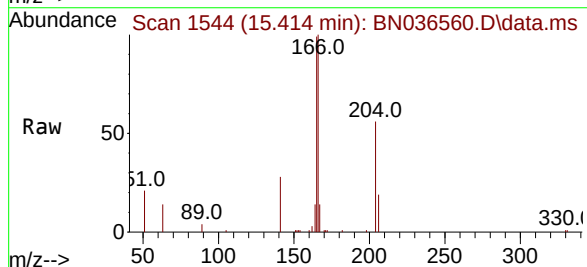
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

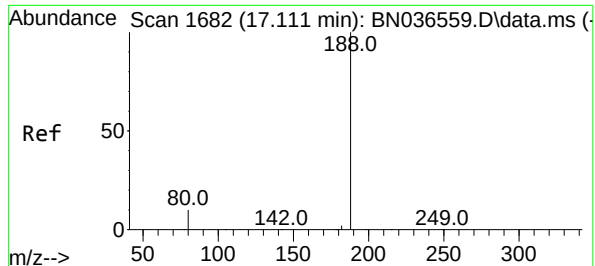
Tgt Ion:154 Resp: 8096  
Ion Ratio Lower Upper  
154 100  
153 117.8 94.1 141.1  
152 60.9 49.8 74.6



#18  
Fluorene  
Concen: 0.770 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:166 Resp: 11120  
Ion Ratio Lower Upper  
166 100  
165 99.8 79.8 119.8  
167 13.3 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

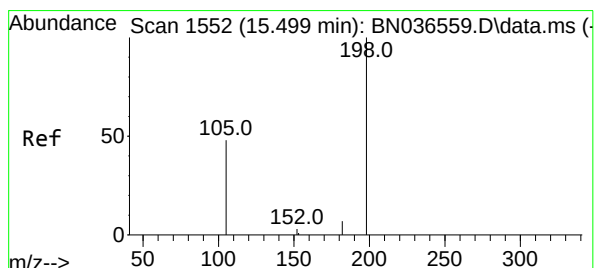
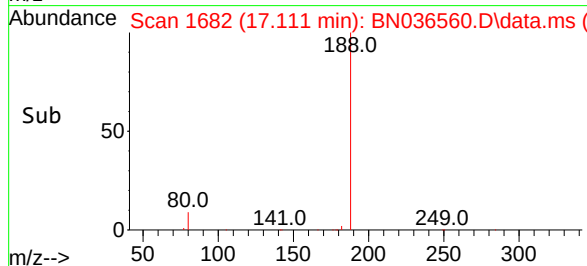
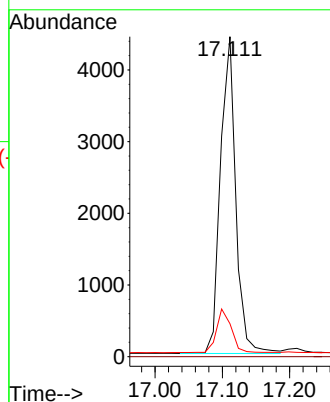
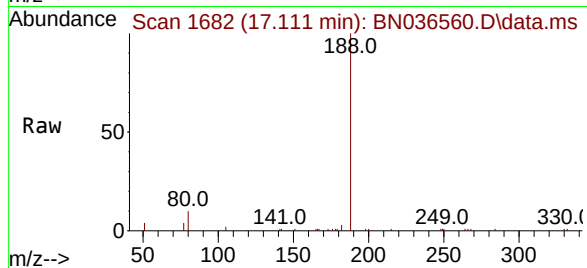
Tgt Ion:188 Resp: 6971

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.3 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 0.724 ng

RT: 15.499 min Scan# 1552

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

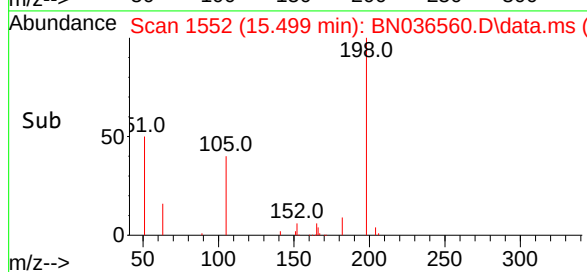
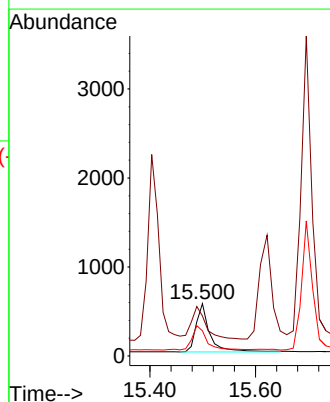
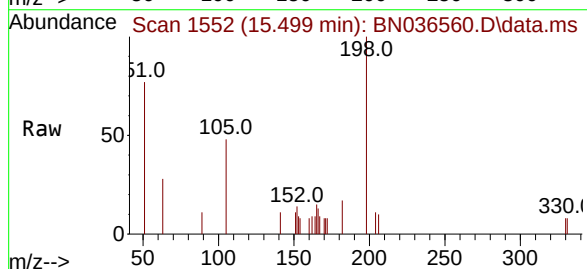
Tgt Ion:198 Resp: 1039

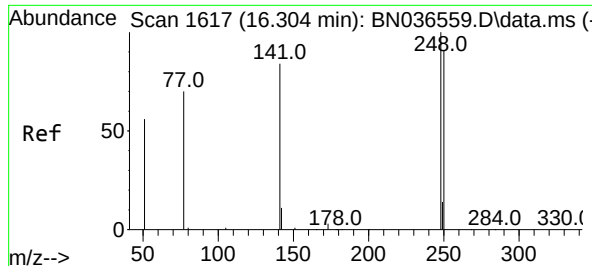
Ion Ratio Lower Upper

198 100

51 76.5 107.9 161.9#

105 48.1 56.2 84.2#





#21

4-Bromophenyl-phenylether

Concen: 0.761 ng

RT: 16.305 min Scan# 1617

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

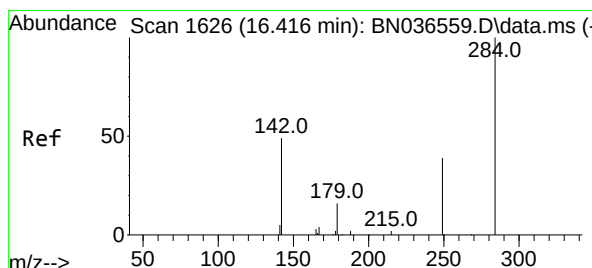
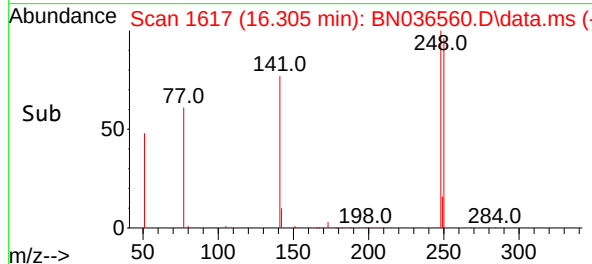
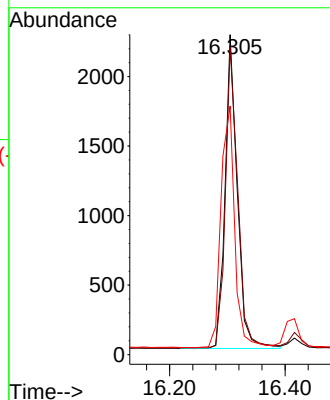
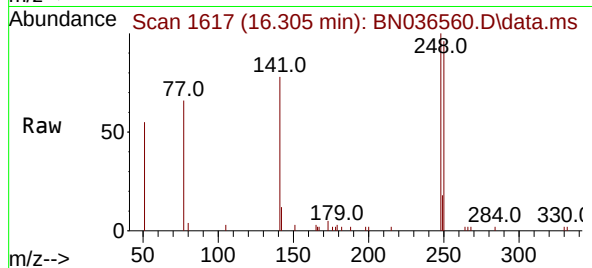
Tgt Ion:248 Resp: 3324

Ion Ratio Lower Upper

248 100

250 96.2 73.0 109.6

141 77.7 68.6 103.0



#22

Hexachlorobenzene

Concen: 0.780 ng

RT: 16.416 min Scan# 1626

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

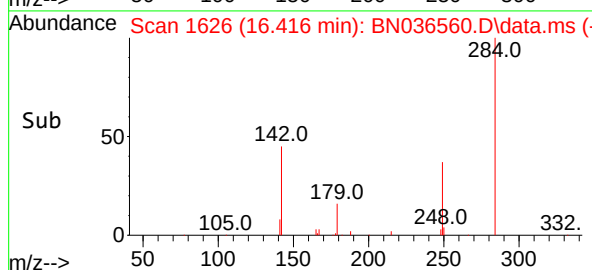
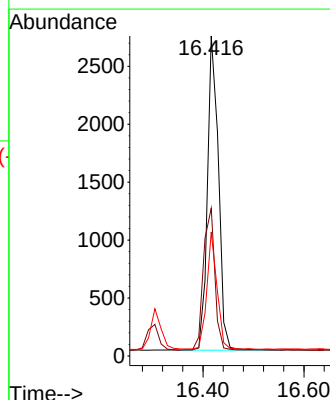
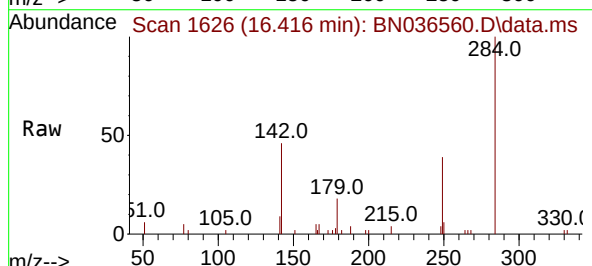
Tgt Ion:284 Resp: 4115

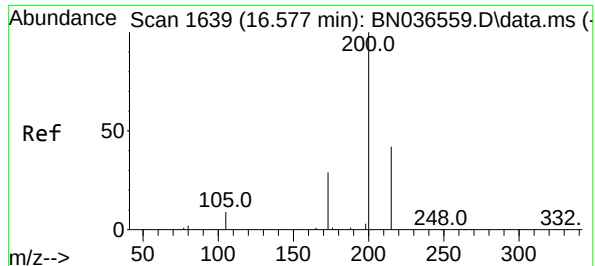
Ion Ratio Lower Upper

284 100

142 47.2 37.0 55.4

249 34.7 28.1 42.1

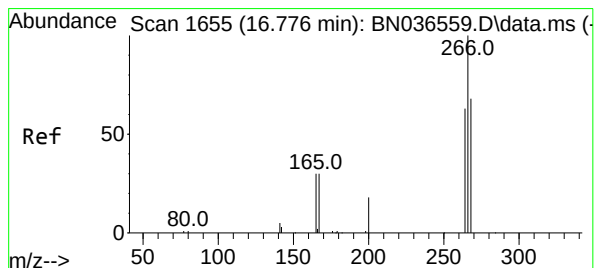
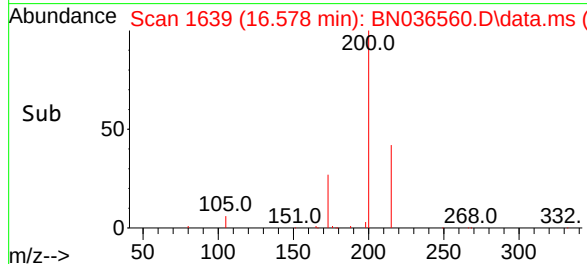
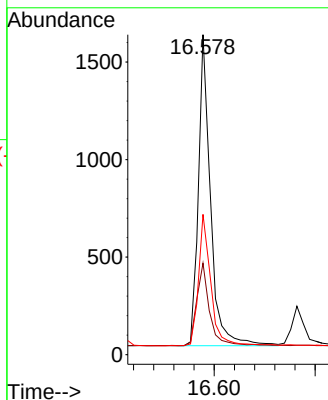
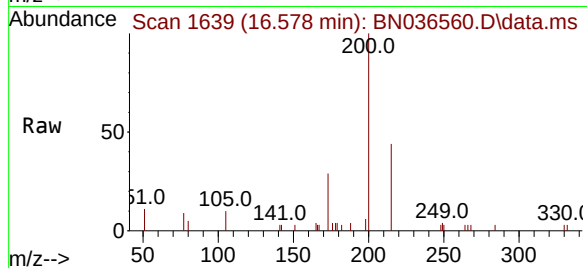




#23  
Atrazine  
Concen: 0.764 ng  
RT: 16.578 min Scan# 1639  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

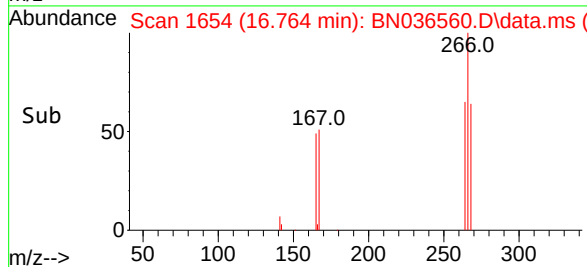
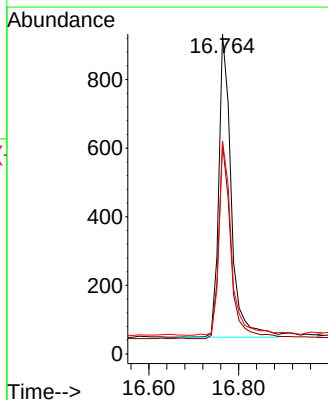
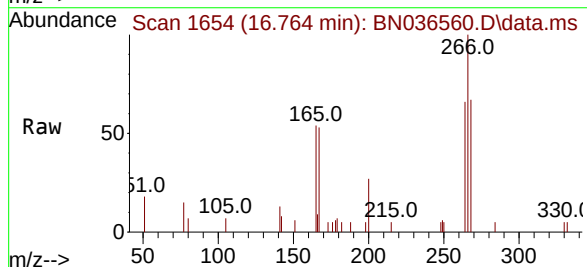
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

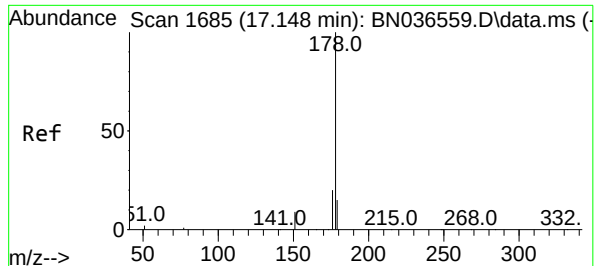
| Tgt Ion   | 200   | Resp: | 2677 |
|-----------|-------|-------|------|
| Ion Ratio | Lower | Upper |      |
| 200       | 100   |       |      |
| 173       | 28.6  | 27.3  | 40.9 |
| 215       | 43.8  | 36.8  | 55.2 |



#24  
Pentachlorophenol  
Concen: 0.707 ng  
RT: 16.764 min Scan# 1654  
Delta R.T. -0.012 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

| Tgt Ion   | 266   | Resp: | 1701 |
|-----------|-------|-------|------|
| Ion Ratio | Lower | Upper |      |
| 266       | 100   |       |      |
| 264       | 63.5  | 49.6  | 74.4 |
| 268       | 65.1  | 50.9  | 76.3 |

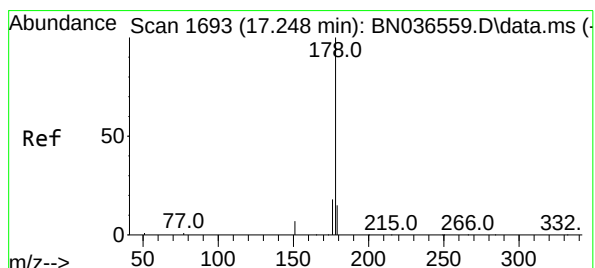
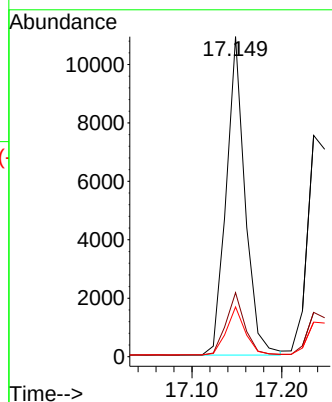
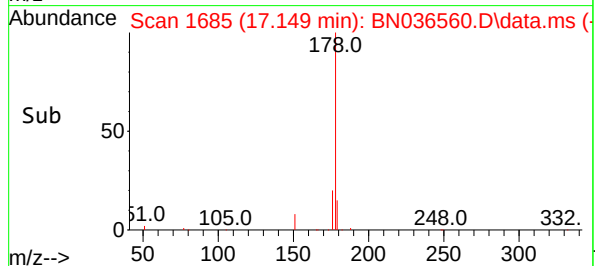
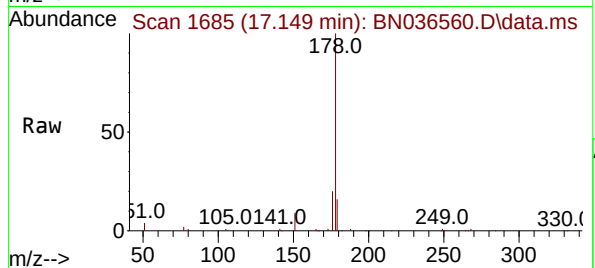




#25  
Phenanthrene  
Concen: 0.761 ng  
RT: 17.149 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

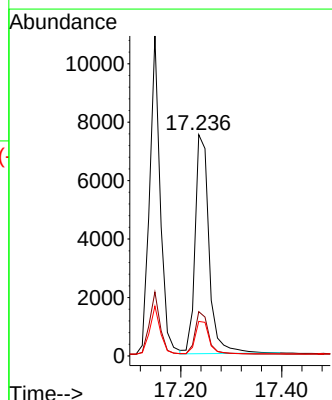
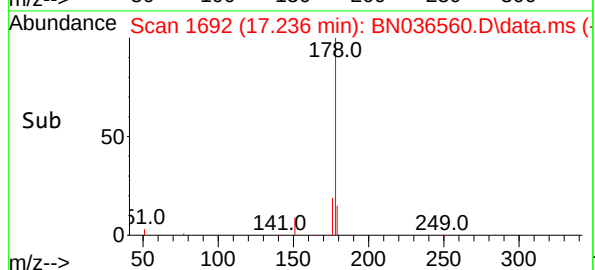
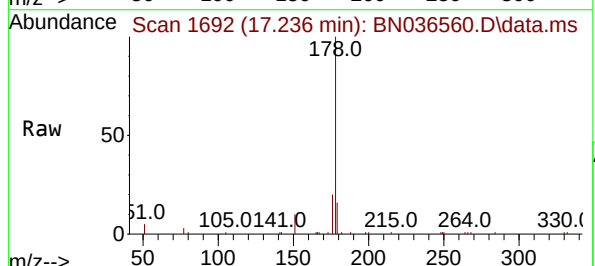
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

Tgt Ion:178 Resp: 15910  
Ion Ratio Lower Upper  
178 100  
176 19.6 15.9 23.9  
179 15.1 12.2 18.4

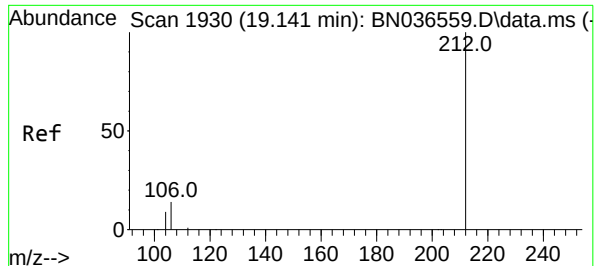


#26  
Anthracene  
Concen: 0.763 ng  
RT: 17.236 min Scan# 1692  
Delta R.T. -0.012 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:178 Resp: 14403  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.4 23.2  
179 15.1 12.6 18.8







#27

Fluoranthene-d10

Concen: 0.746 ng

RT: 19.141 min Scan# 1930

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

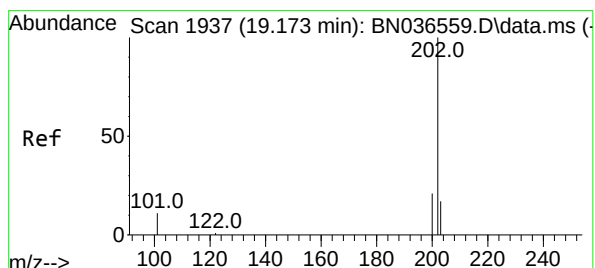
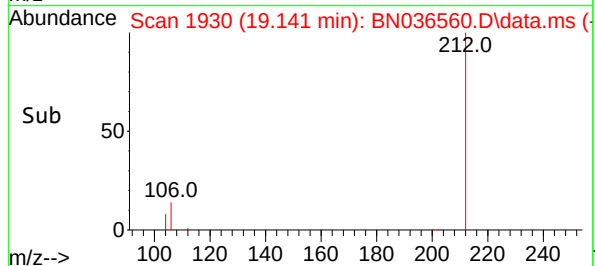
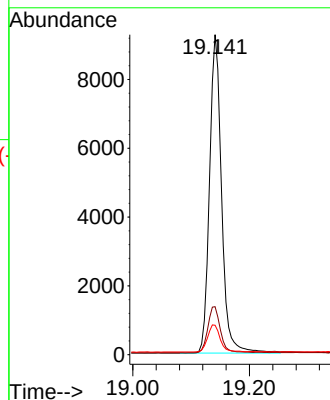
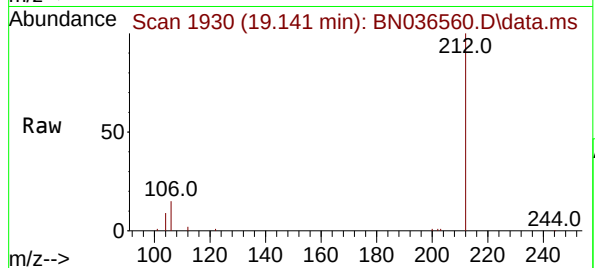
Tgt Ion:212 Resp: 13330

Ion Ratio Lower Upper

212 100

106 15.2 11.8 17.6

104 8.9 7.3 10.9



#28

Fluoranthene

Concen: 0.755 ng

RT: 19.174 min Scan# 1937

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

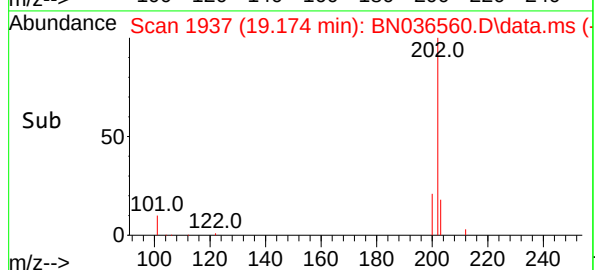
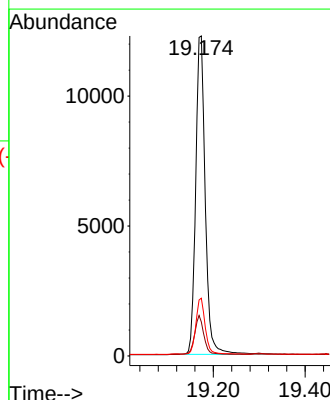
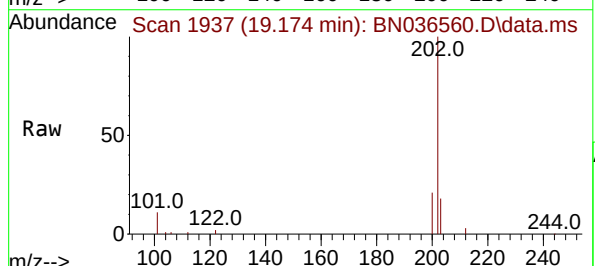
Tgt Ion:202 Resp: 17738

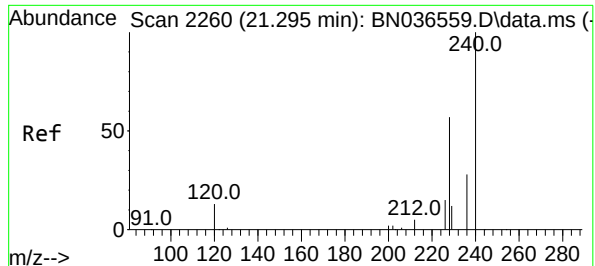
Ion Ratio Lower Upper

202 100

101 12.1 9.4 14.0

203 17.0 13.5 20.3





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.295 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

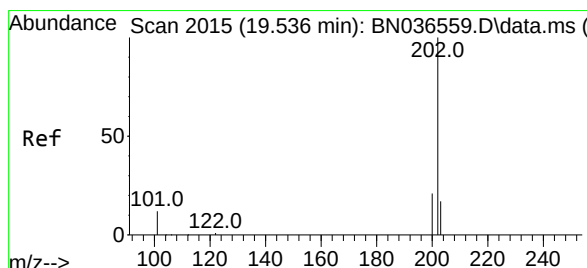
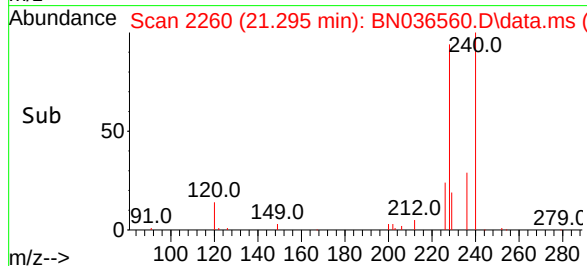
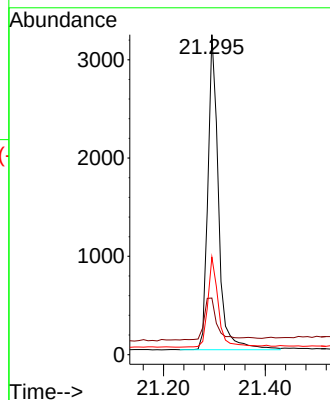
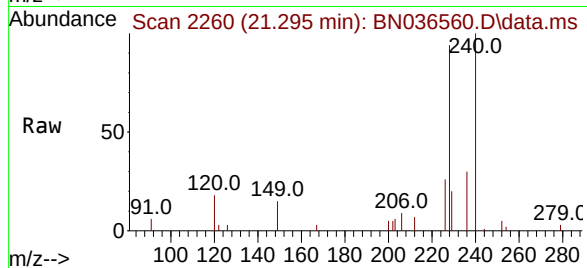
Tgt Ion:240 Resp: 4636

Ion Ratio Lower Upper

240 100

120 17.7 14.6 22.0

236 30.5 24.1 36.1



#30

Pyrene

Concen: 0.781 ng

RT: 19.536 min Scan# 2015

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

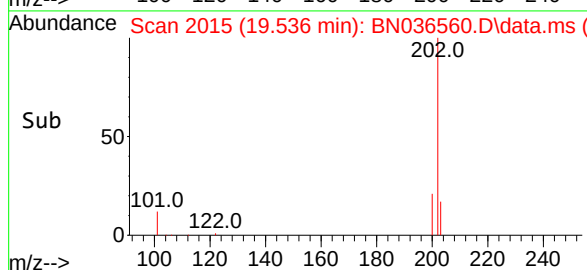
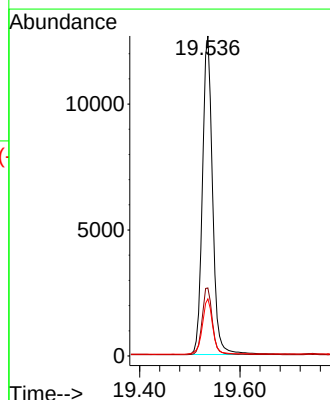
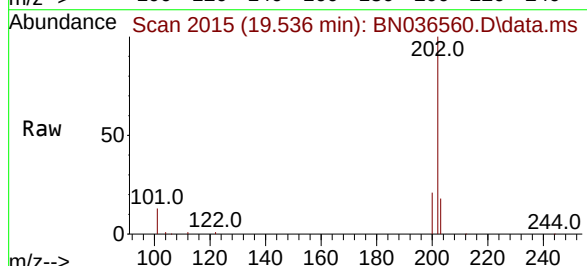
Tgt Ion:202 Resp: 17714

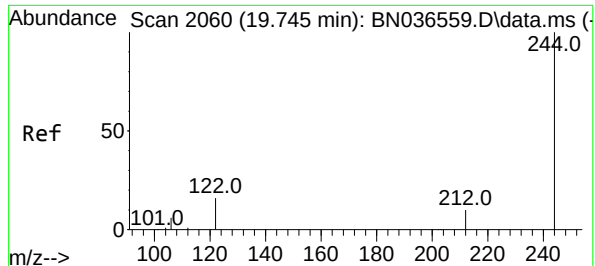
Ion Ratio Lower Upper

202 100

200 21.4 17.1 25.7

203 17.5 14.1 21.1





#31

Terphenyl-d14

Concen: 0.772 ng

RT: 19.745 min Scan# 2060

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

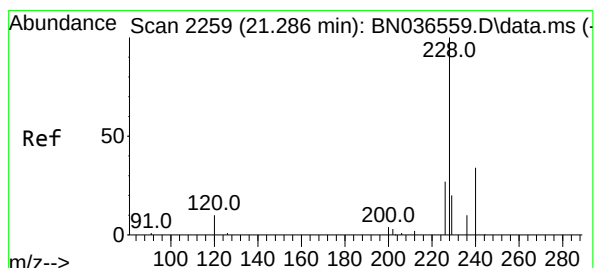
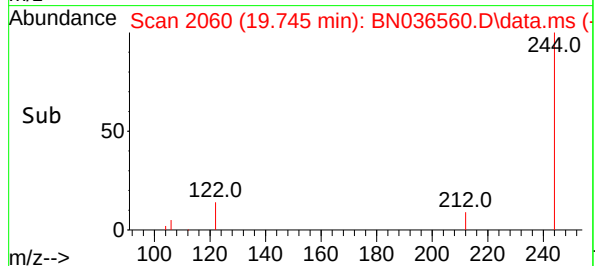
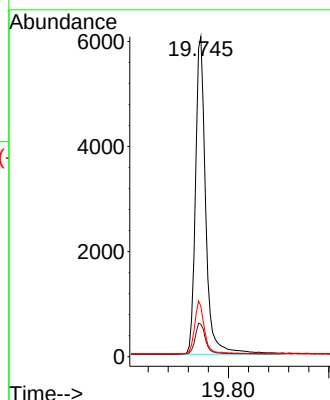
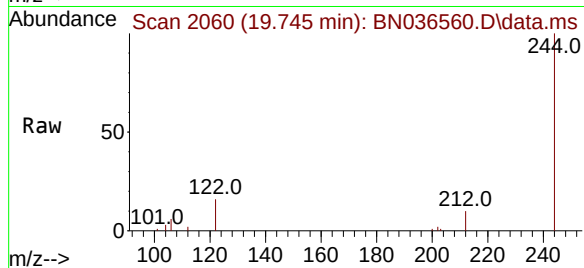
Tgt Ion:244 Resp: 8571

Ion Ratio Lower Upper

244 100

212 10.1 9.6 14.4

122 15.8 13.9 20.9



#32

Benzo(a)anthracene

Concen: 0.750 ng

RT: 21.277 min Scan# 2258

Delta R.T. -0.009 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

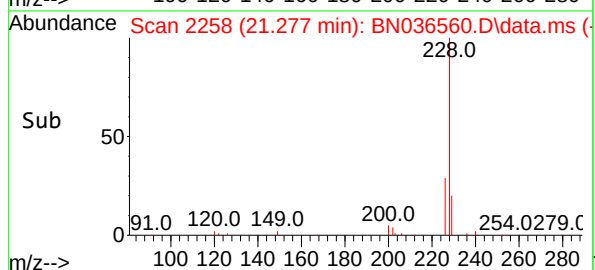
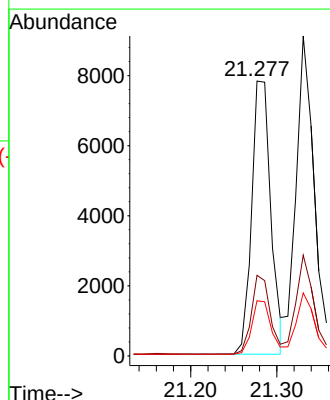
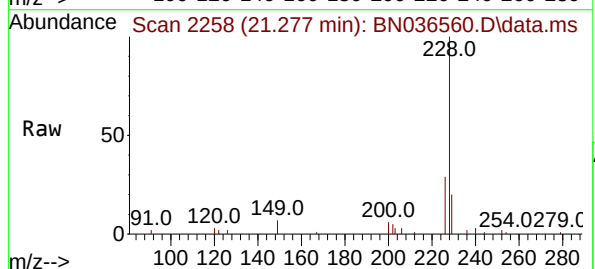
Tgt Ion:228 Resp: 12089

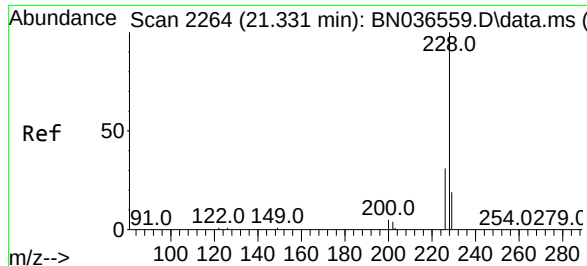
Ion Ratio Lower Upper

228 100

226 29.3 22.5 33.7

229 20.1 16.6 25.0





#33

Chrysene

Concen: 0.793 ng

RT: 21.331 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

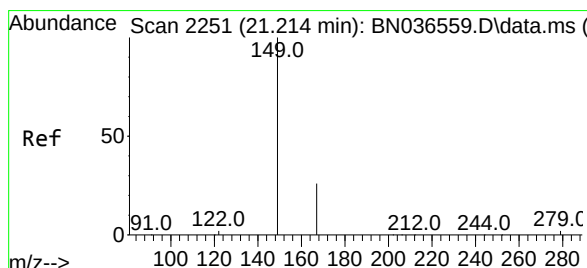
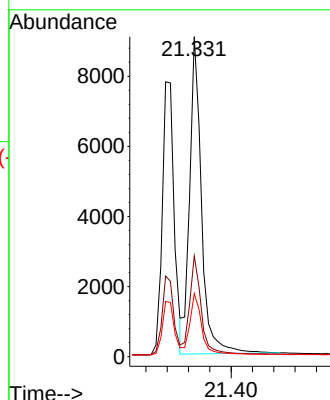
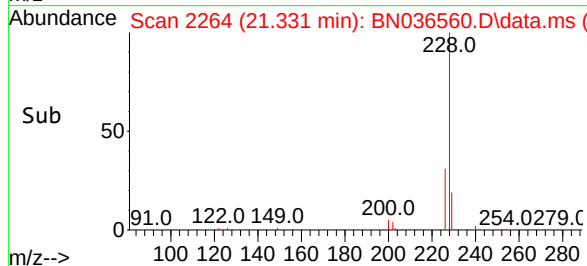
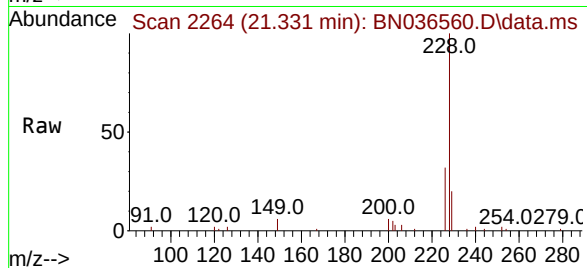
Tgt Ion:228 Resp: 13974

Ion Ratio Lower Upper

228 100

226 31.5 25.3 37.9

229 19.7 15.8 23.8



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.699 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

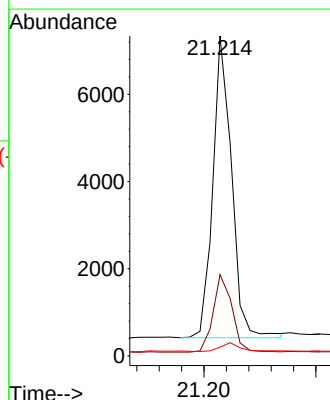
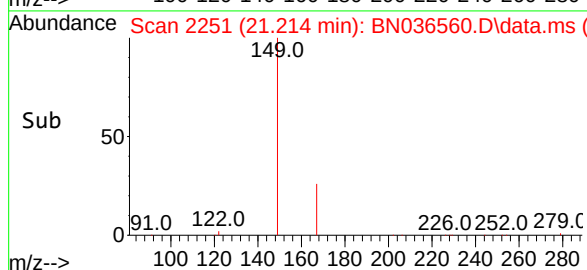
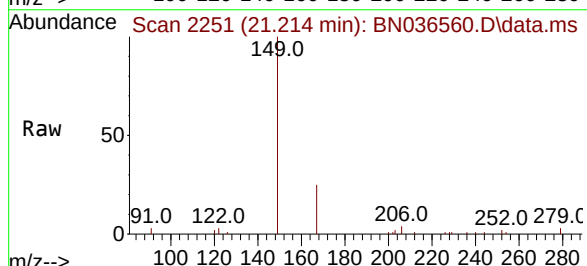
Tgt Ion:149 Resp: 8021

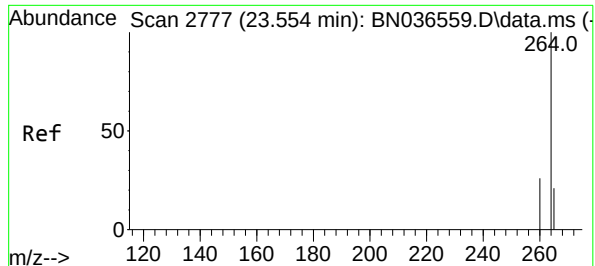
Ion Ratio Lower Upper

149 100

167 25.9 20.7 31.1

279 3.2 3.6 5.4#

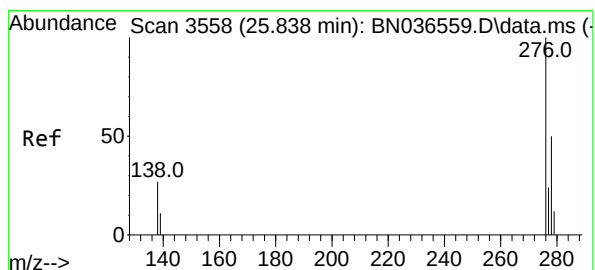
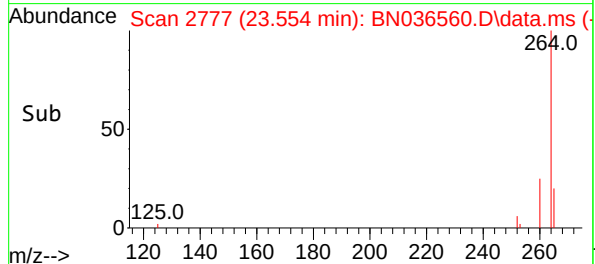
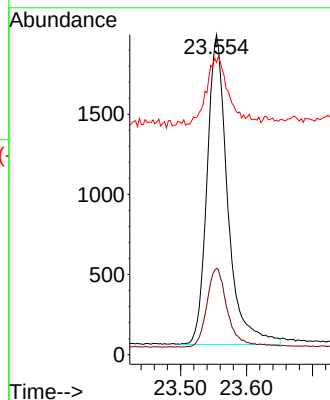
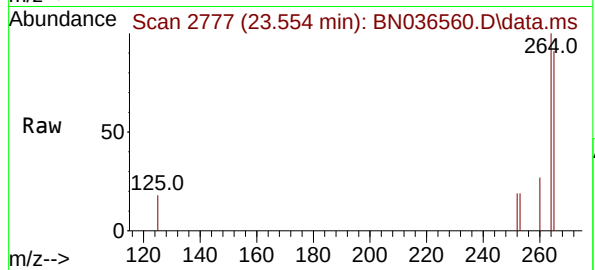




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.554 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

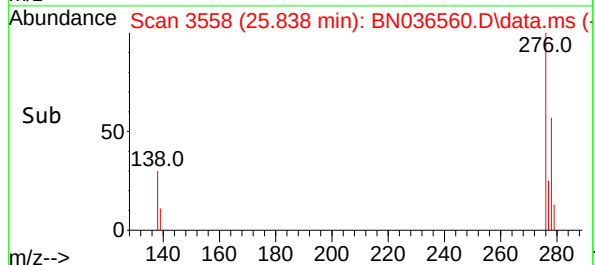
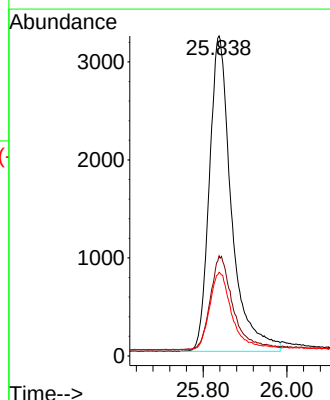
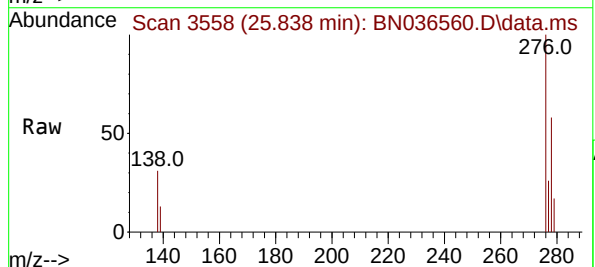
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

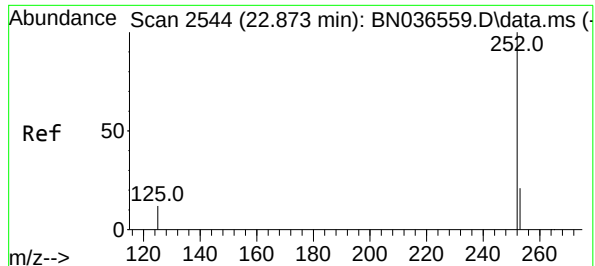
Tgt Ion:264 Resp: 4198  
Ion Ratio Lower Upper  
264 100  
260 27.0 22.6 33.8  
265 91.3 88.1 132.1



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.778 ng  
RT: 25.838 min Scan# 3558  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:276 Resp: 11785  
Ion Ratio Lower Upper  
276 100  
138 29.6 23.4 35.2  
277 24.7 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.770 ng

RT: 22.873 min Scan# 2544

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

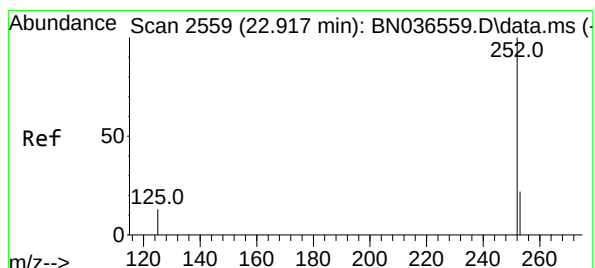
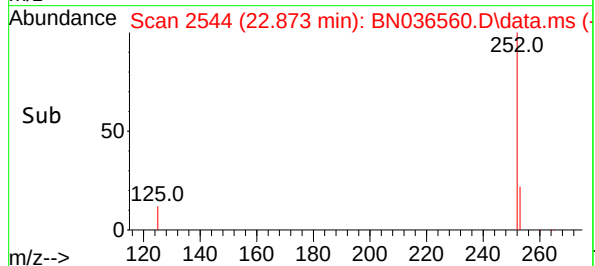
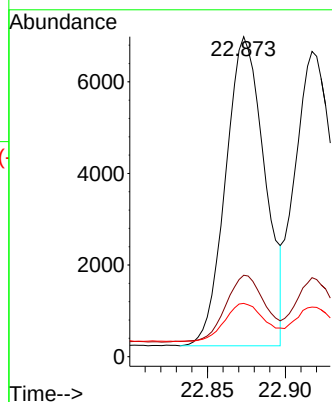
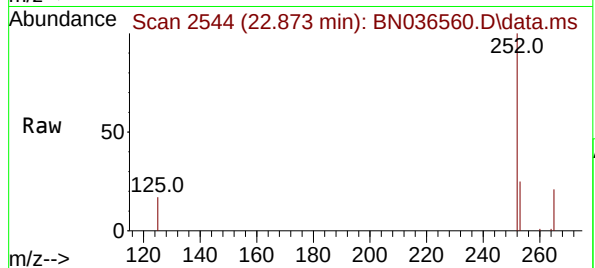
Tgt Ion:252 Resp: 11771

Ion Ratio Lower Upper

252 100

253 25.5 23.9 35.9

125 16.7 17.4 26.2#



#38

Benzo(k)fluoranthene

Concen: 0.776 ng

RT: 22.917 min Scan# 2559

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

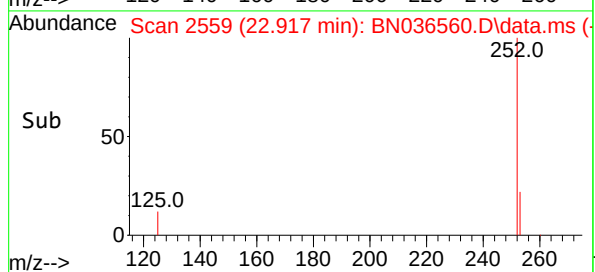
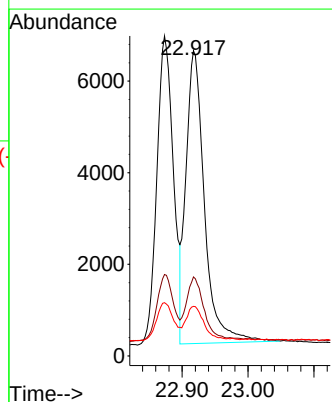
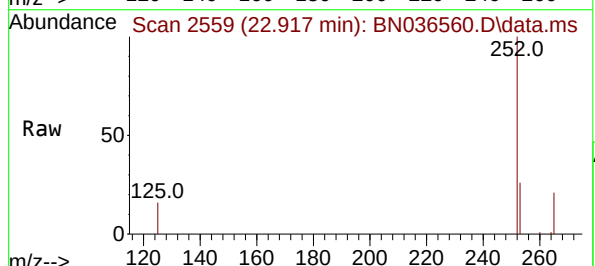
Tgt Ion:252 Resp: 12432

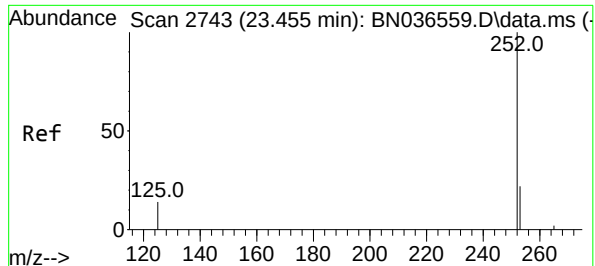
Ion Ratio Lower Upper

252 100

253 25.9 24.6 36.8

125 16.2 17.8 26.8#





#39

Benzo(a)pyrene

Concen: 0.780 ng

RT: 23.455 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

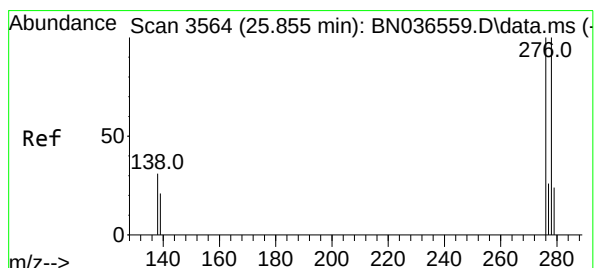
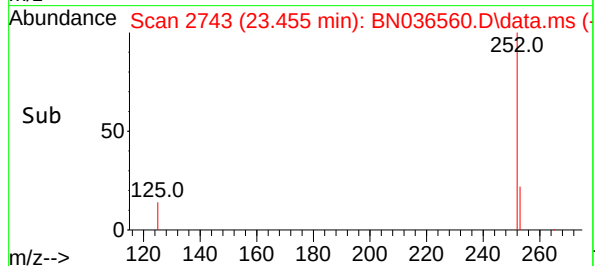
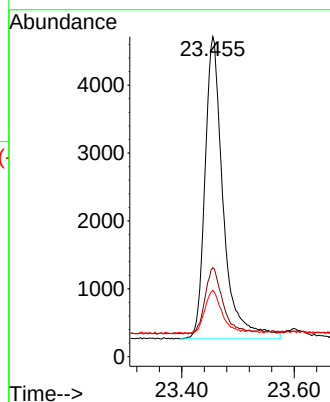
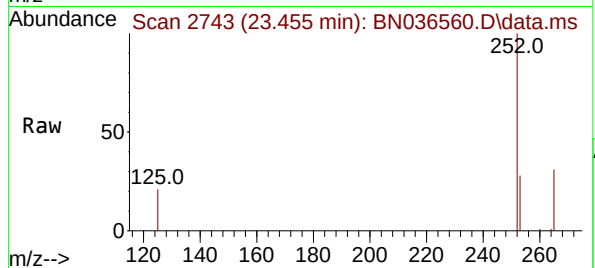
Tgt Ion:252 Resp: 10036

Ion Ratio Lower Upper

252 100

253 27.8 27.8 41.8#

125 20.7 22.7 34.1#



#40

Dibenzo(a,h)anthracene

Concen: 0.801 ng

RT: 25.858 min Scan# 3565

Delta R.T. 0.003 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

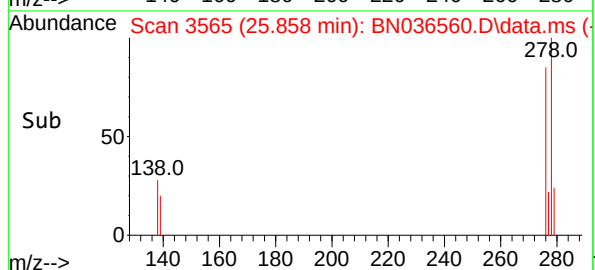
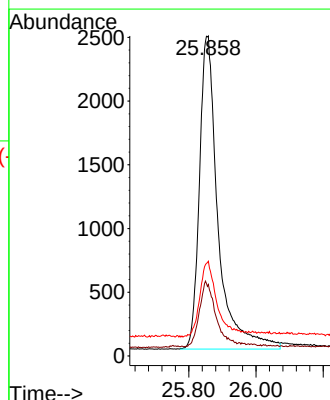
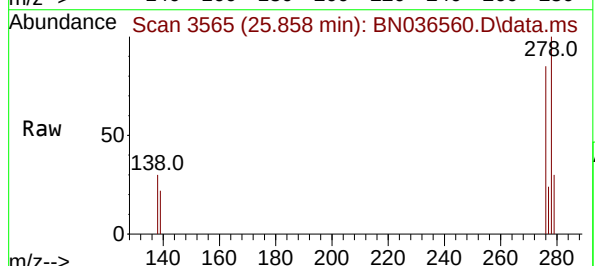
Tgt Ion:278 Resp: 9450

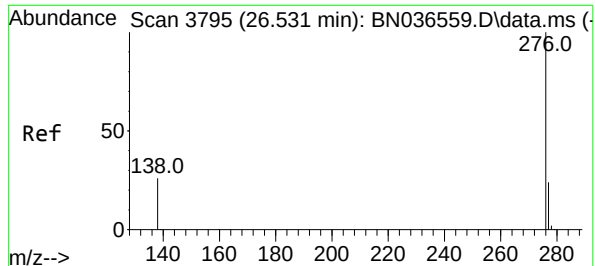
Ion Ratio Lower Upper

278 100

139 22.3 20.8 31.2

279 29.6 28.8 43.2





#41

Benzo(g,h,i)perylene

Concen: 0.778 ng

RT: 26.534 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN036560.D

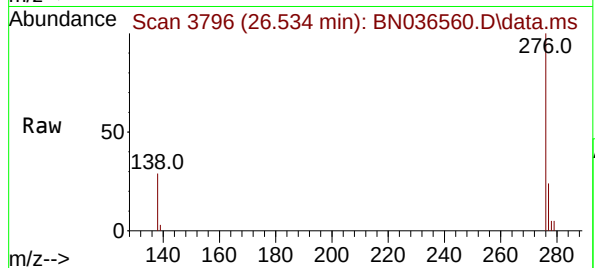
Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8



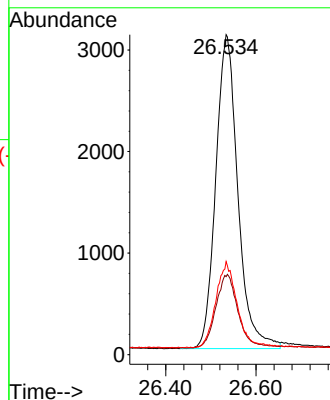
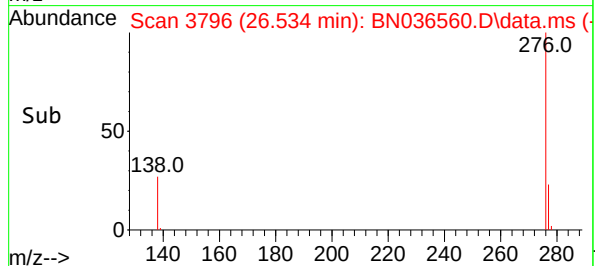
Tgt Ion:276 Resp: 10494

Ion Ratio Lower Upper

276 100

277 24.4 22.2 33.4

138 29.1 24.1 36.1





Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036561.D  
 Acq On : 10 Mar 2025 14:07  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Mar 10 16:02:21 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

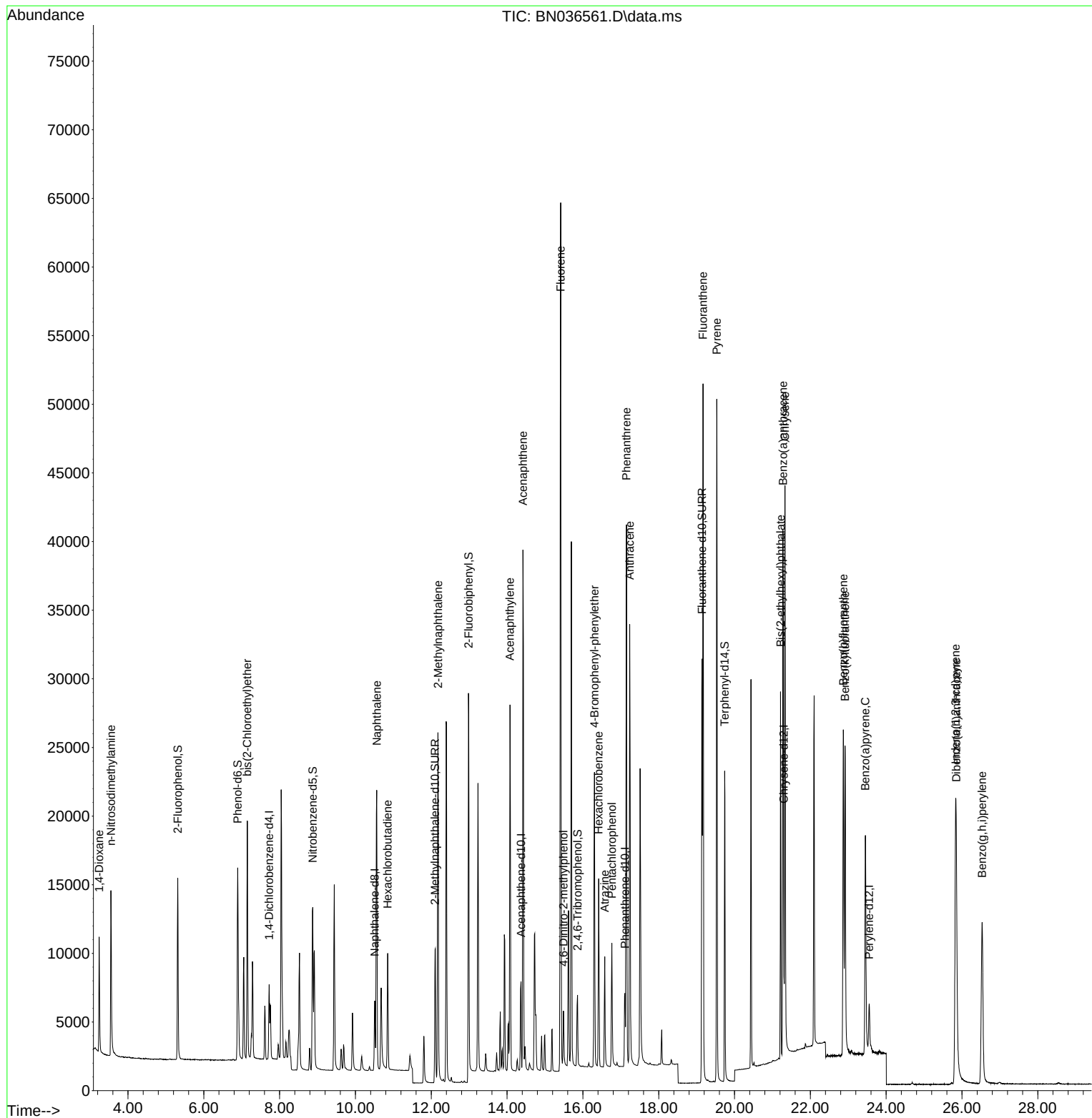
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2537     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 6200     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.366 | 164  | 3827     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.111 | 188  | 8149     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.295 | 240  | 5977     | 0.400 | ng    | # 0.00   |
| 35) Perylene-d12              | 23.552 | 264  | 5048     | 0.400 | ng    | # 0.00   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 9276     | 1.569 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.894  | 99   | 11493    | 1.574 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.875  | 82   | 9959     | 1.477 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 14319    | 1.553 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 2872     | 1.654 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 36192    | 1.626 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.141 | 212  | 33414    | 1.600 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.740 | 244  | 21872    | 1.527 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.239  | 88   | 4464     | 1.586 | ng    | 98       |
| 3) n-Nitrosodimethylamine     | 3.550  | 42   | 8625     | 1.515 | ng    | # 96     |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 11485    | 1.521 | ng    | 99       |
| 9) Naphthalene                | 10.562 | 128  | 27473    | 1.506 | ng    | 97       |
| 10) Hexachlorobutadiene       | 10.851 | 225  | 6466     | 1.506 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 12.177 | 142  | 18206    | 1.569 | ng    | 98       |
| 16) Acenaphthylene            | 14.078 | 152  | 28080    | 1.555 | ng    | 100      |
| 17) Acenaphthene              | 14.420 | 154  | 18355    | 1.553 | ng    | 98       |
| 18) Fluorene                  | 15.414 | 166  | 25565    | 1.599 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.489 | 198  | 2879     | 1.488 | ng    | # 64     |
| 21) 4-Bromophenyl-phenylether | 16.305 | 248  | 7859     | 1.539 | ng    | # 85     |
| 22) Hexachlorobenzene         | 16.416 | 284  | 9216     | 1.495 | ng    | 100      |
| 23) Atrazine                  | 16.578 | 200  | 6530     | 1.595 | ng    | # 91     |
| 24) Pentachlorophenol         | 16.764 | 266  | 4395     | 1.563 | ng    | 99       |
| 25) Phenanthrene              | 17.149 | 178  | 37989    | 1.554 | ng    | 99       |
| 26) Anthracene                | 17.235 | 178  | 35054    | 1.589 | ng    | 99       |
| 28) Fluoranthene              | 19.169 | 202  | 44451    | 1.619 | ng    | 99       |
| 30) Pyrene                    | 19.531 | 202  | 44705    | 1.530 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.277 | 228  | 32205    | 1.550 | ng    | 98       |
| 33) Chrysene                  | 21.331 | 228  | 34953    | 1.539 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 22621    | 1.529 | ng    | # 99     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.832 | 276  | 28605    | 1.570 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.870 | 252  | 29819    | 1.623 | ng    | # 86     |
| 38) Benzo(k)fluoranthene      | 22.917 | 252  | 30710    | 1.593 | ng    | # 85     |
| 39) Benzo(a)pyrene            | 23.452 | 252  | 24696    | 1.596 | ng    | # 79     |
| 40) Dibenzo(a,h)anthracene    | 25.850 | 278  | 22248    | 1.569 | ng    | # 85     |
| 41) Benzo(g,h,i)perylene      | 26.531 | 276  | 24906    | 1.535 | ng    | 93       |
| -----                         |        |      |          |       |       |          |

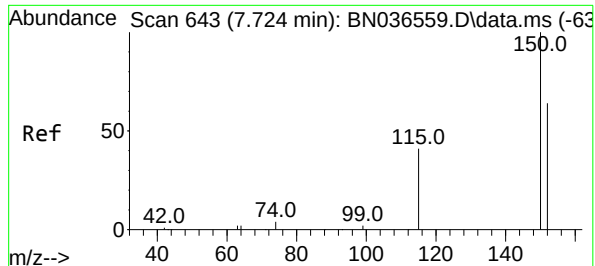
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036561.D  
Acq On : 10 Mar 2025 14:07  
Operator : RC/JU  
Sample : SSTDICC1.6  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

Quant Time: Mar 10 16:02:21 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

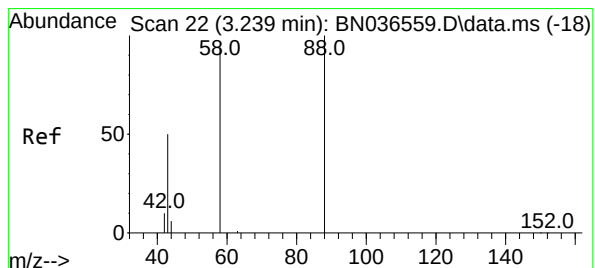
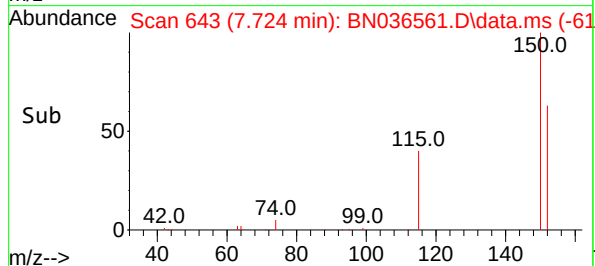
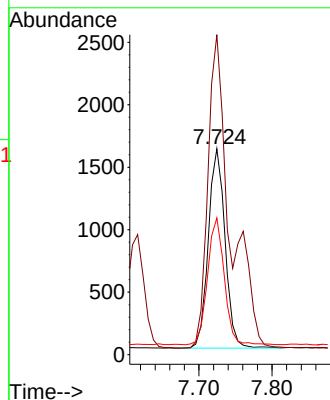
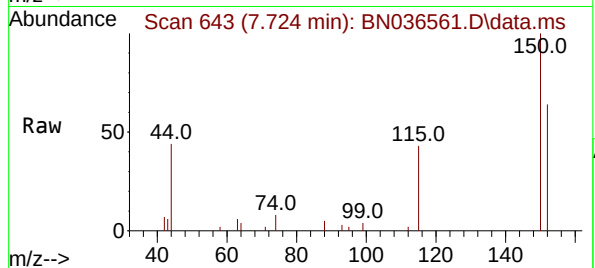




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

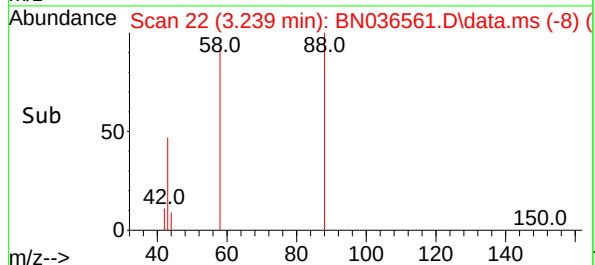
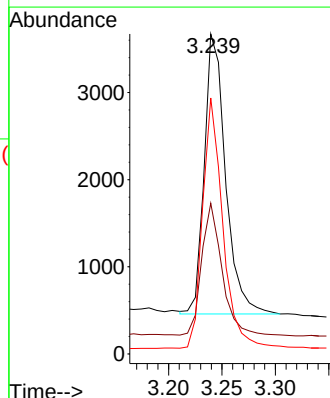
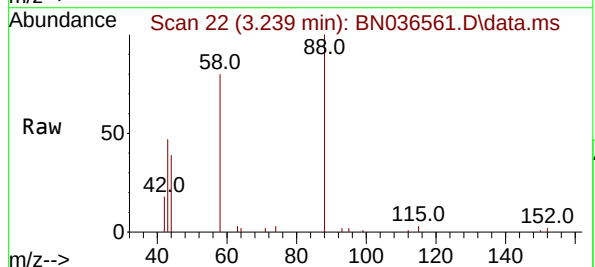
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

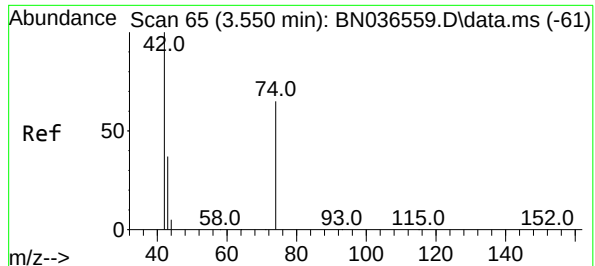
Tgt Ion:152 Resp: 2537  
Ion Ratio Lower Upper  
152 100  
150 155.4 123.7 185.5  
115 66.4 54.3 81.5



#2  
1,4-Dioxane  
Concen: 1.586 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion: 88 Resp: 4464  
Ion Ratio Lower Upper  
88 100  
43 45.1 37.8 56.8  
58 85.6 67.4 101.2

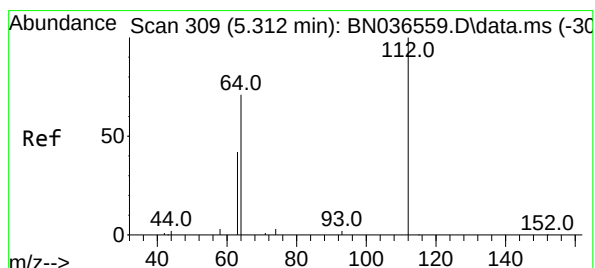
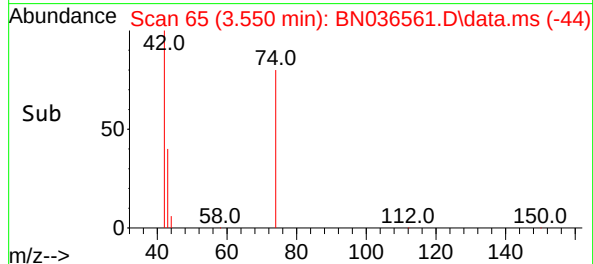
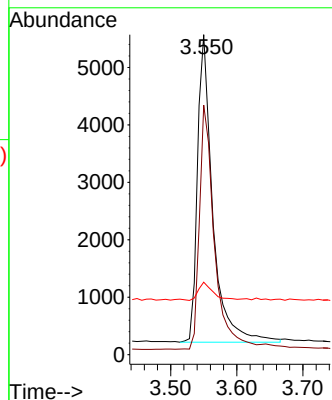
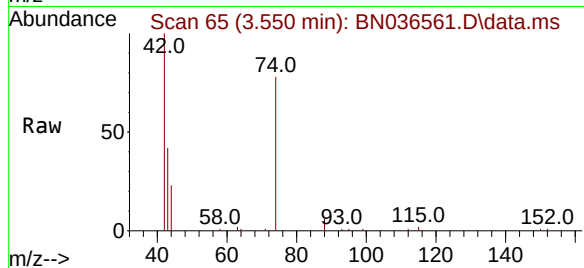




#3  
n-Nitrosodimethylamine  
Concen: 1.515 ng  
RT: 3.550 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

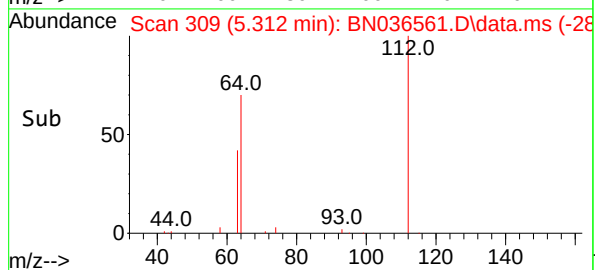
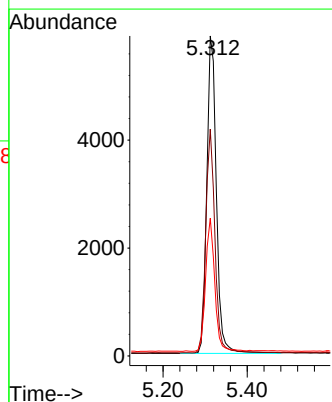
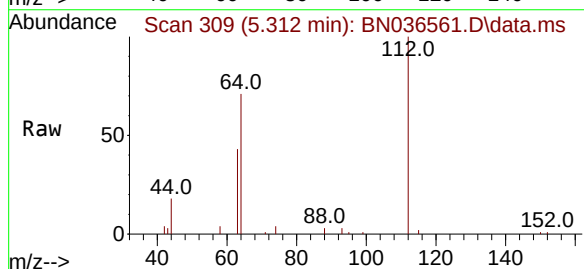
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

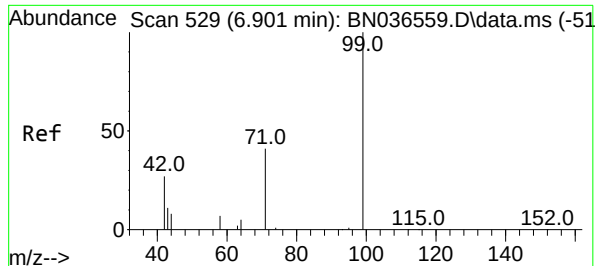
Tgt Ion: 42 Resp: 8625  
Ion Ratio Lower Upper  
42 100  
74 79.2 60.6 90.8  
44 5.8 6.3 9.5#



#4  
2-Fluorophenol  
Concen: 1.569 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion: 112 Resp: 9276  
Ion Ratio Lower Upper  
112 100  
64 68.3 53.1 79.7  
63 40.1 31.8 47.8

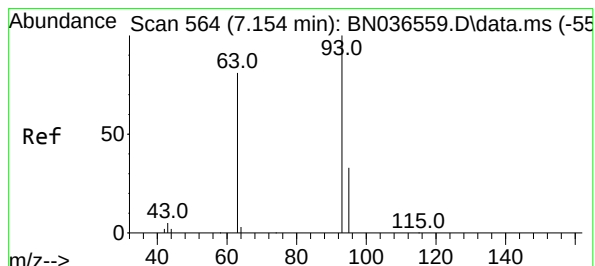
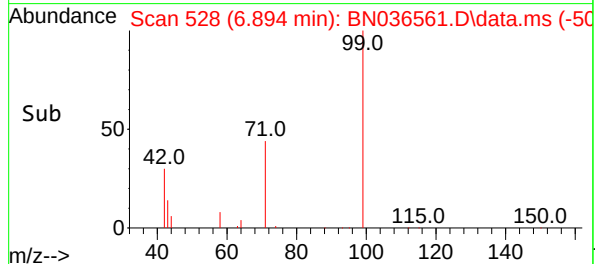
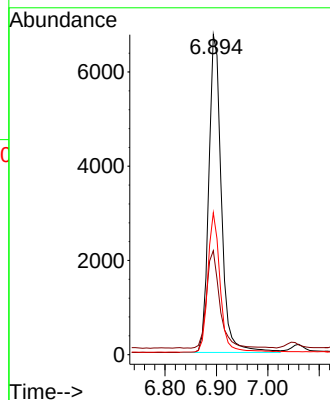
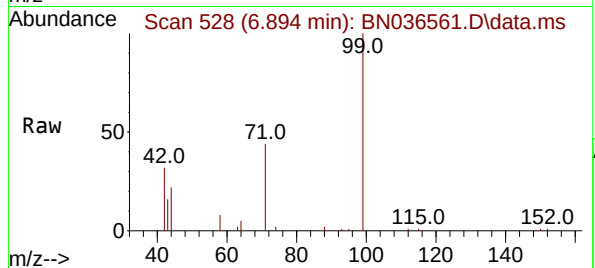




#5  
Phenol-d6  
Concen: 1.574 ng  
RT: 6.894 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

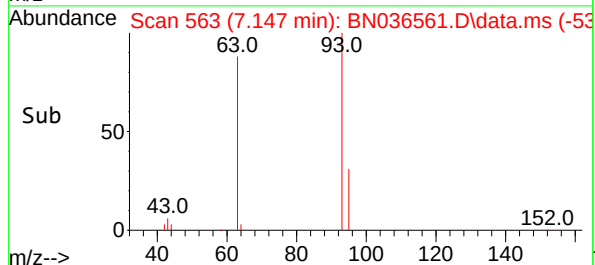
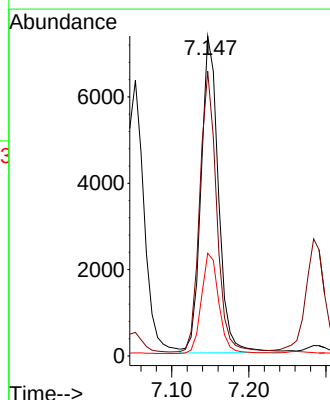
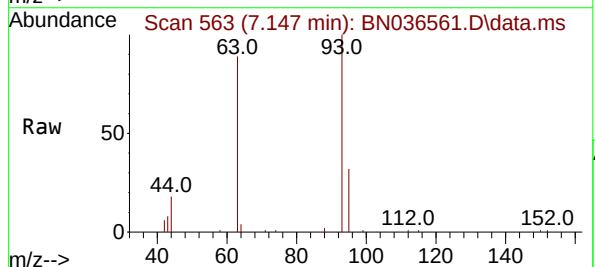
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

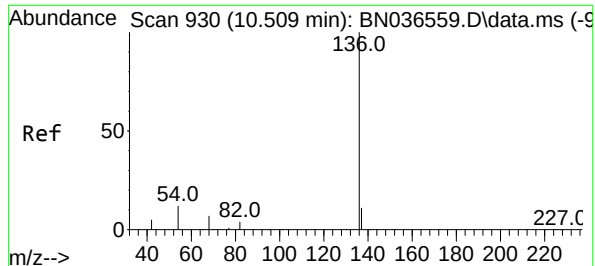
Tgt Ion: 99 Resp: 11493  
Ion Ratio Lower Upper  
99 100  
42 32.6 26.5 39.7  
71 43.3 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 1.521 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.007 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion: 93 Resp: 11485  
Ion Ratio Lower Upper  
93 100  
63 85.8 67.7 101.5  
95 31.8 25.6 38.4





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.509 min Scan# 91

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

Tgt Ion:136 Resp: 6200

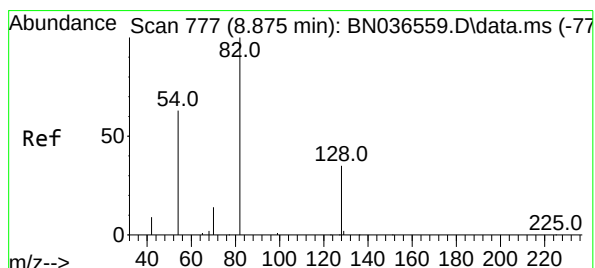
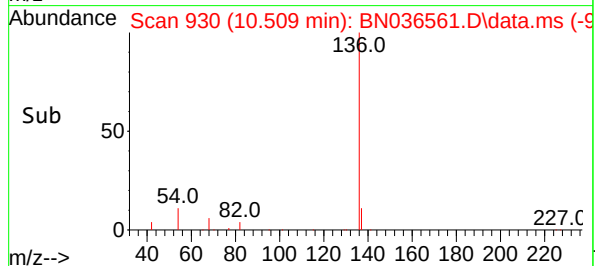
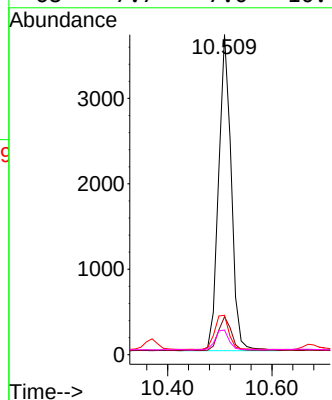
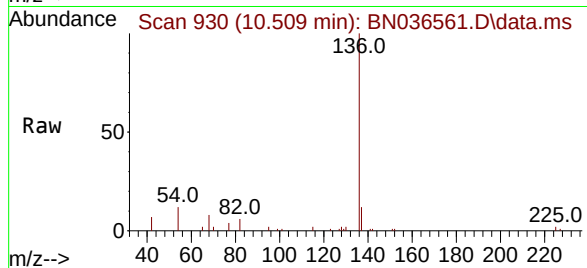
Ion Ratio Lower Upper

136 100

137 11.9 10.3 15.5

54 12.3 11.5 17.3

68 7.7 7.0 10.4



#8

Nitrobenzene-d5

Concen: 1.477 ng

RT: 8.875 min Scan# 777

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

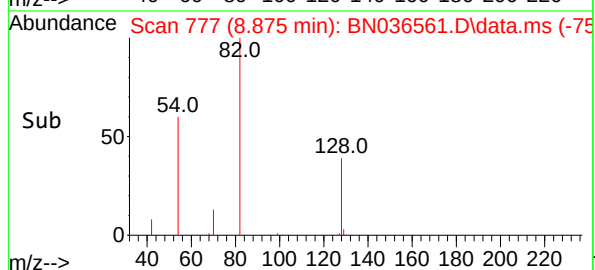
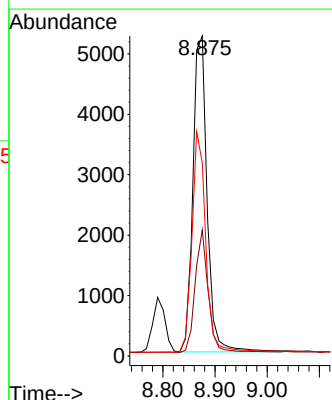
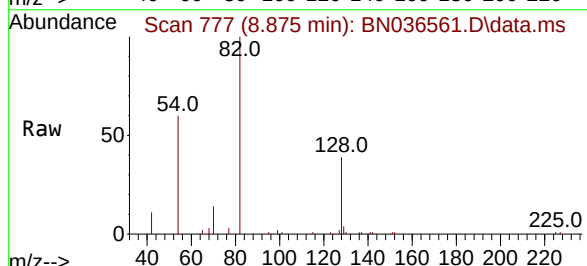
Tgt Ion: 82 Resp: 9959

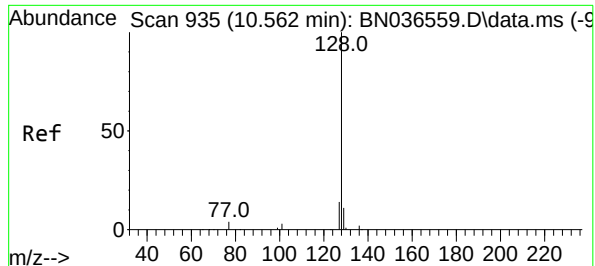
Ion Ratio Lower Upper

82 100

128 39.4 30.6 45.8

54 60.4 52.2 78.4

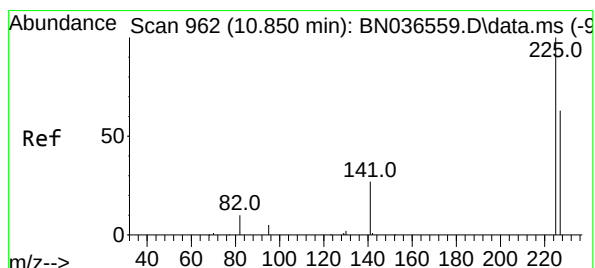
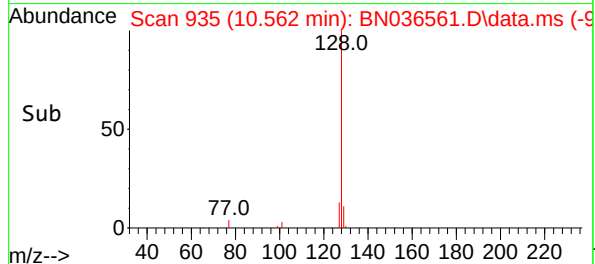
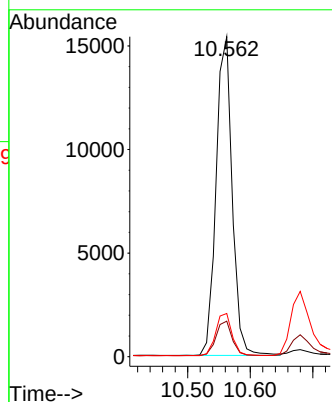
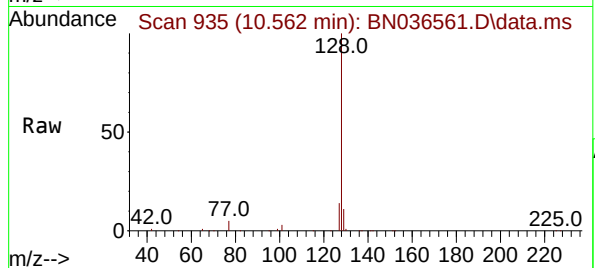




#9  
Naphthalene  
Concen: 1.506 ng  
RT: 10.562 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

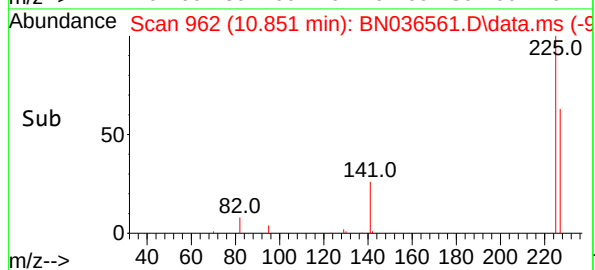
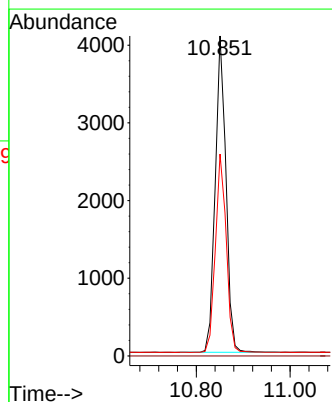
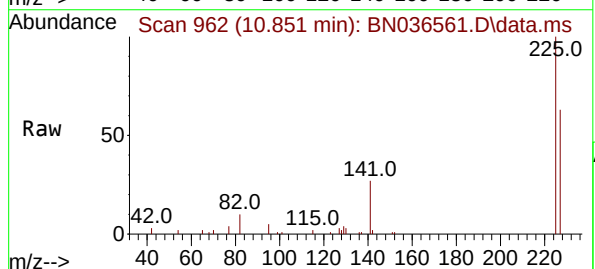
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

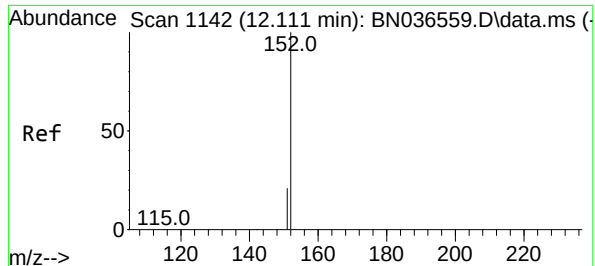
Tgt Ion:128 Resp: 27473  
Ion Ratio Lower Upper  
128 100  
129 11.1 9.8 14.6  
127 13.5 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 1.506 ng  
RT: 10.851 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:225 Resp: 6466  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.8 51.8 77.8

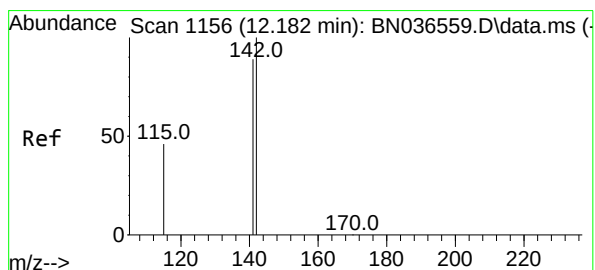
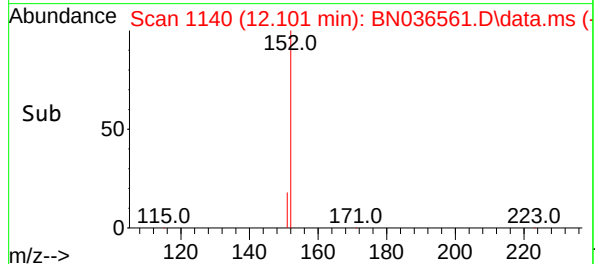
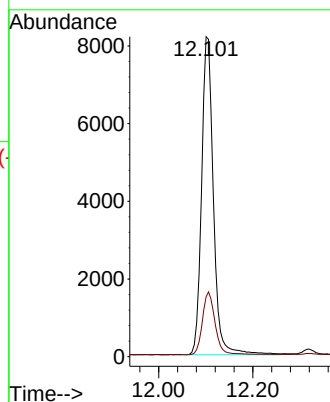
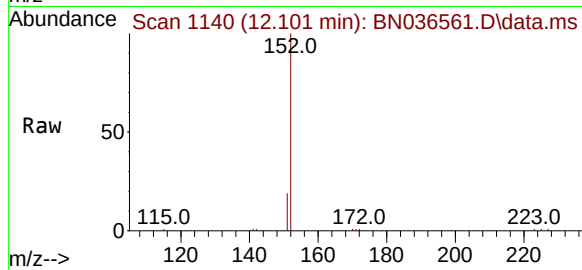




#11  
2-Methylnaphthalene-d10  
Concen: 1.553 ng  
RT: 12.101 min Scan# 1142  
Delta R.T. -0.010 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

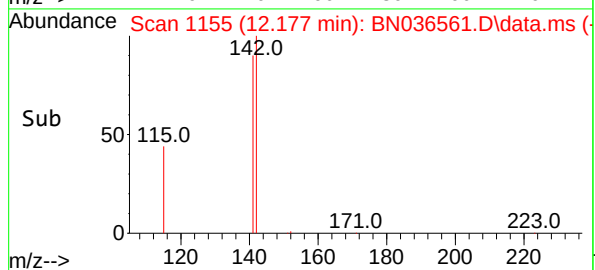
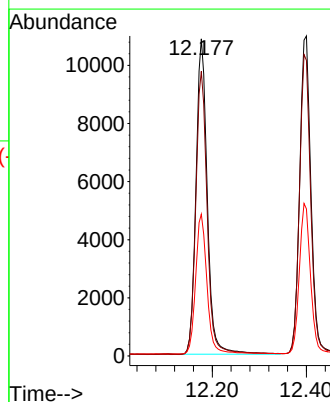
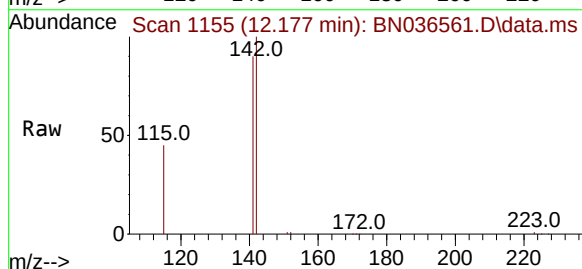
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

Tgt Ion:152 Resp: 14319  
Ion Ratio Lower Upper  
152 100  
151 21.3 17.0 25.6

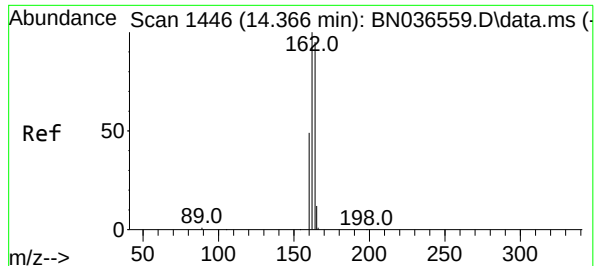


#12  
2-Methylnaphthalene  
Concen: 1.569 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:142 Resp: 18206  
Ion Ratio Lower Upper  
142 100  
141 89.7 71.7 107.5  
115 44.7 38.3 57.5



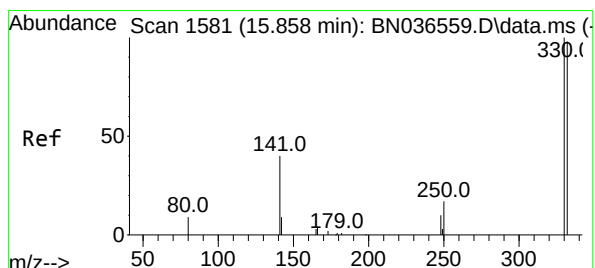
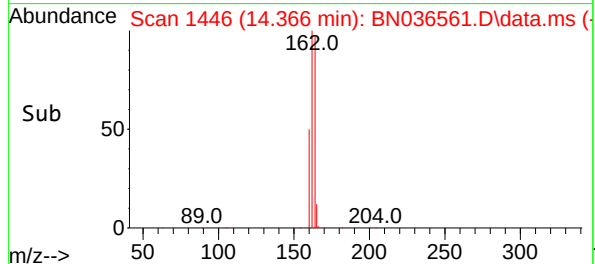
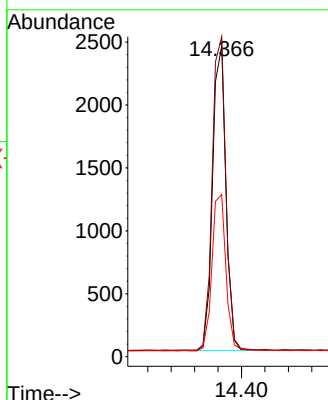
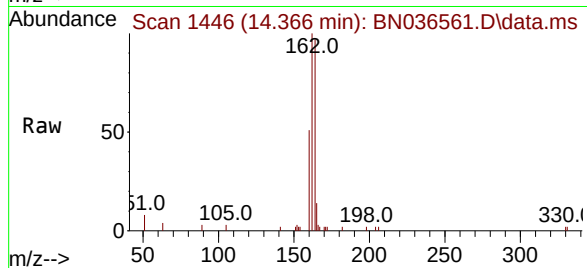




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.366 min Scan# 1446  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

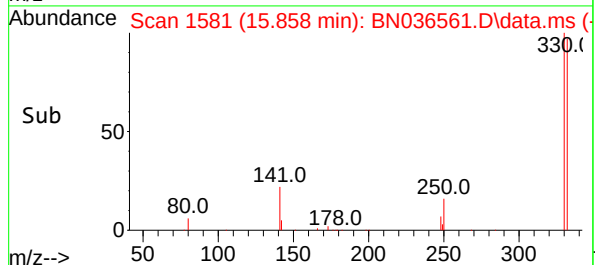
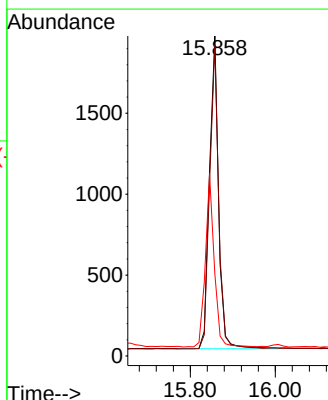
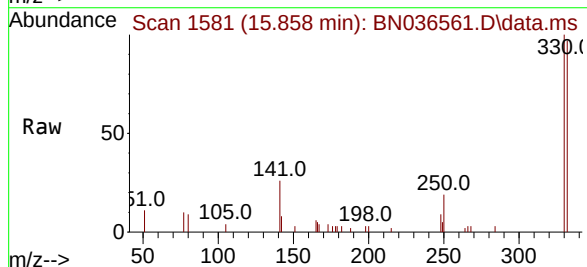
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

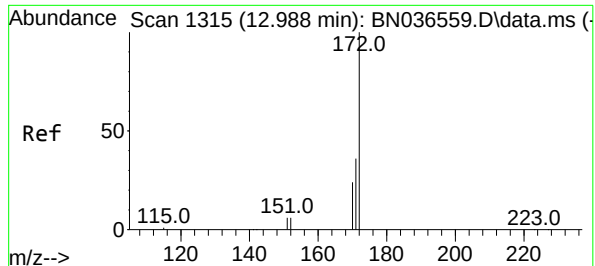
| Tgt Ion | 164  | 162   | 160  |
|---------|------|-------|------|
| Resp:   | 3827 | 102.9 | 52.1 |
| Ratio   | 100  | 102.9 | 52.1 |
| Lower   |      | 84.2  | 42.2 |
| Upper   |      | 126.2 | 63.2 |



#14  
2,4,6-Tribromophenol  
Concen: 1.654 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

| Tgt Ion | 330  | 332   | 141  |
|---------|------|-------|------|
| Resp:   | 2872 | 96.3  | 53.8 |
| Ratio   | 100  | 96.3  | 53.8 |
| Lower   |      | 75.2  | 43.4 |
| Upper   |      | 112.8 | 65.2 |

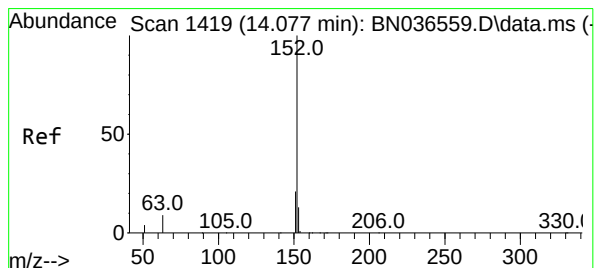
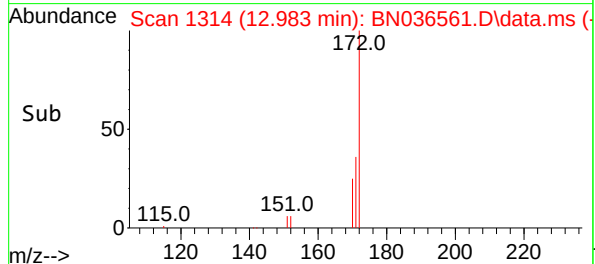
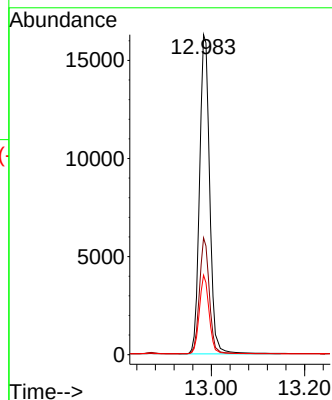
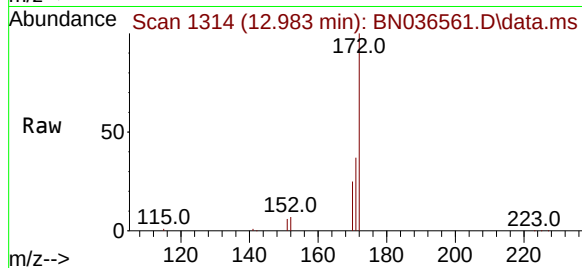




#15  
2-Fluorobiphenyl  
Concen: 1.626 ng  
RT: 12.983 min Scan# 1314  
Delta R.T. -0.005 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

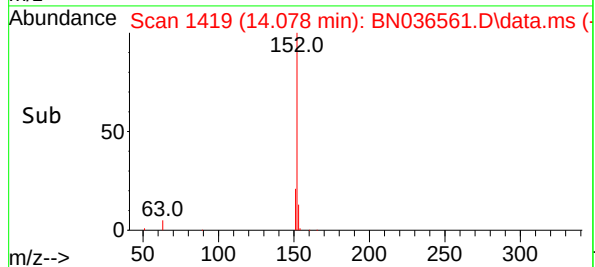
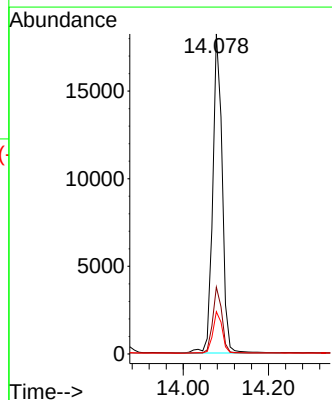
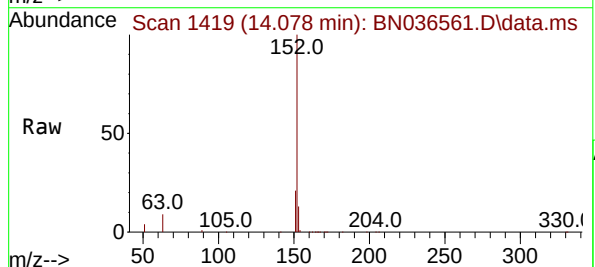
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

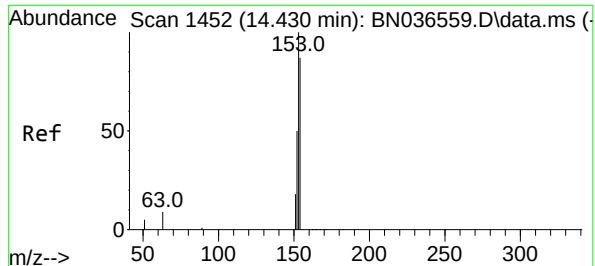
Tgt Ion:172 Resp: 36192  
Ion Ratio Lower Upper  
172 100  
171 36.5 29.5 44.3  
170 24.9 20.2 30.4



#16  
Acenaphthylene  
Concen: 1.555 ng  
RT: 14.078 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:152 Resp: 28080  
Ion Ratio Lower Upper  
152 100  
151 20.3 16.2 24.4  
153 13.0 10.6 15.8

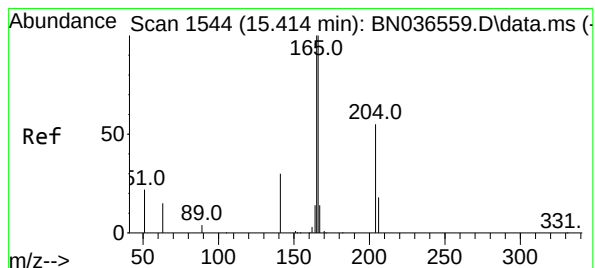
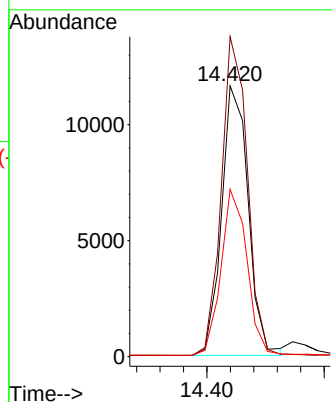
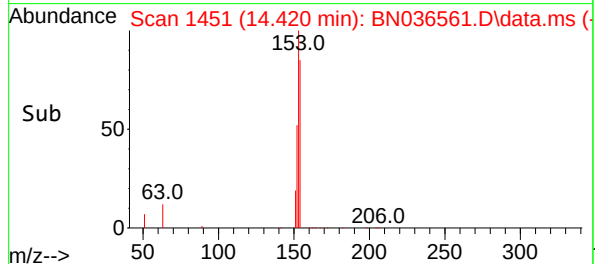
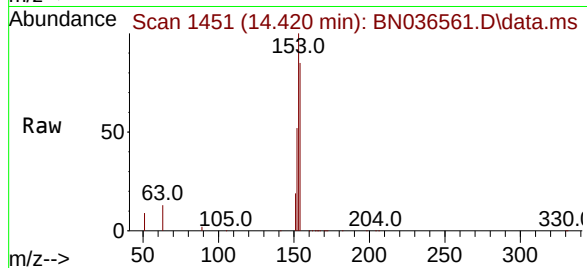




#17  
Acenaphthene  
Concen: 1.553 ng  
RT: 14.420 min Scan# 1451  
Delta R.T. -0.011 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

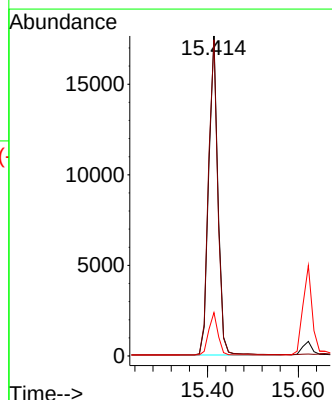
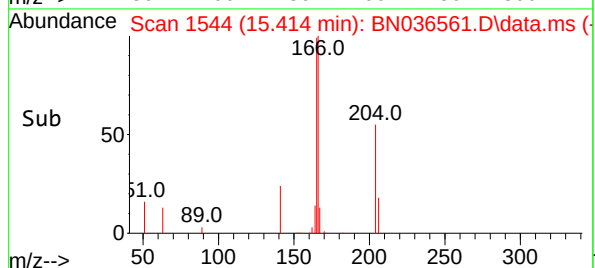
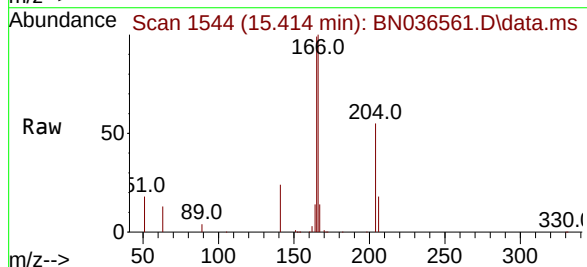
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

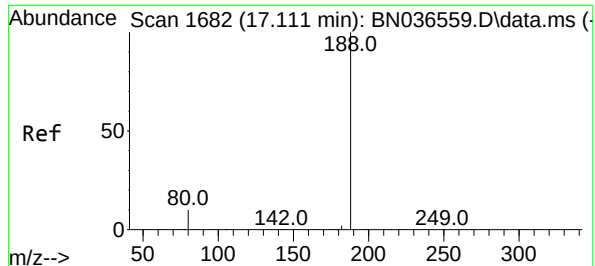
Tgt Ion:154 Resp: 18355  
Ion Ratio Lower Upper  
154 100  
153 115.7 94.1 141.1  
152 60.3 49.8 74.6



#18  
Fluorene  
Concen: 1.599 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:166 Resp: 25565  
Ion Ratio Lower Upper  
166 100  
165 100.5 79.8 119.8  
167 13.1 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

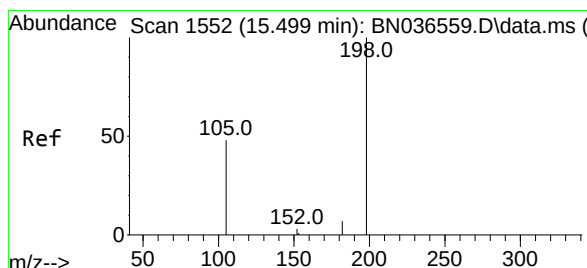
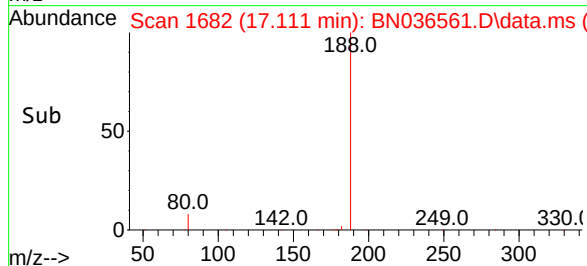
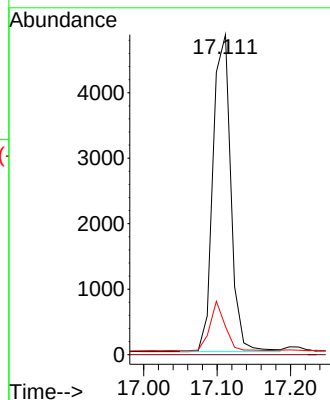
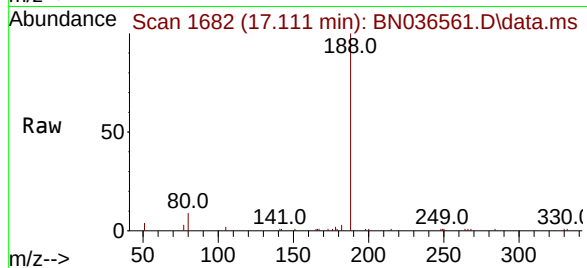
Tgt Ion:188 Resp: 8149

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.8 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 1.488 ng

RT: 15.489 min Scan# 1551

Delta R.T. -0.010 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

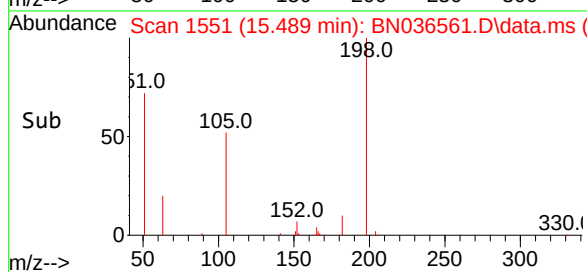
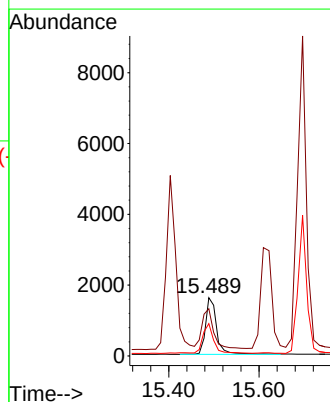
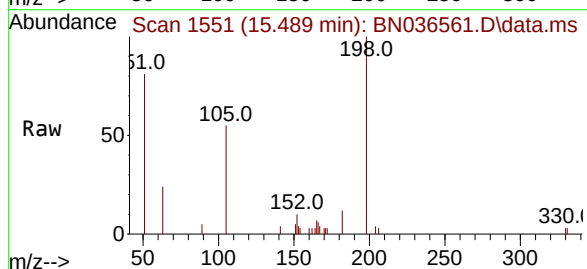
Tgt Ion:198 Resp: 2879

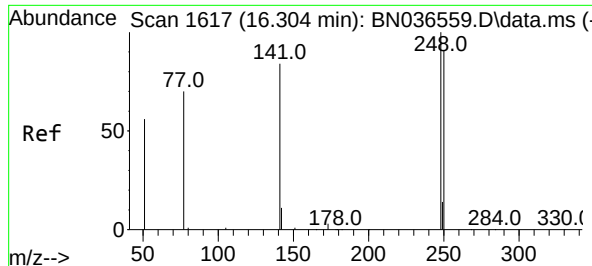
Ion Ratio Lower Upper

198 100

51 81.2 107.9 161.9#

105 55.5 56.2 84.2#

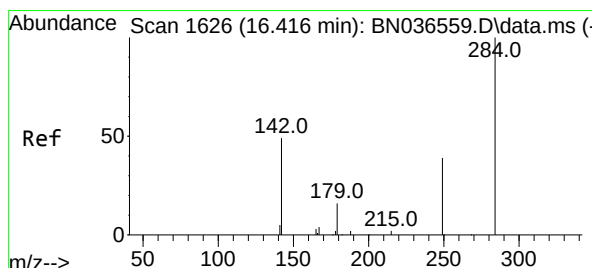
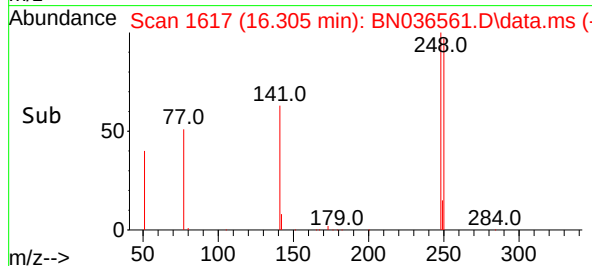
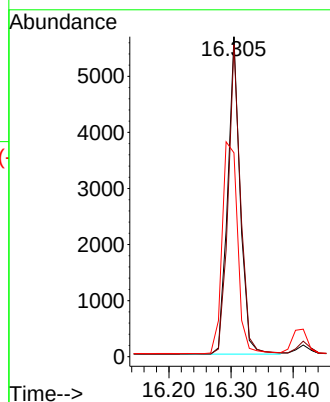
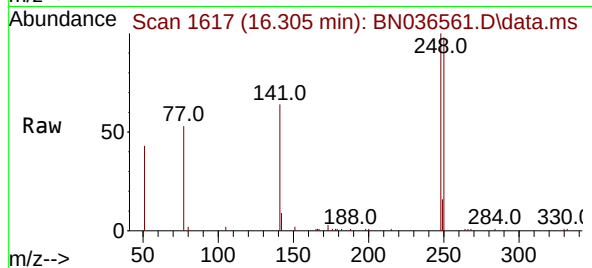




#21  
4-Bromophenyl-phenylether  
Concen: 1.539 ng  
RT: 16.305 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

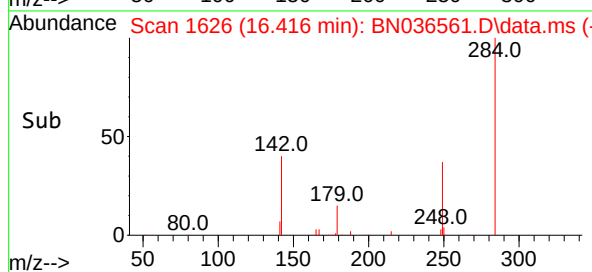
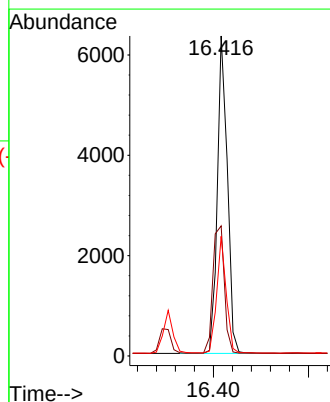
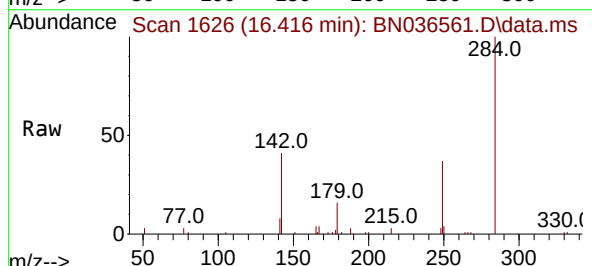
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

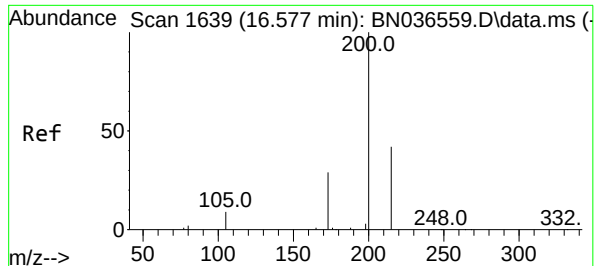
| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 248     | 100   |       |        |
| 250     | 97.5  | 73.0  | 109.6  |
| 141     | 63.7  | 68.6  | 103.0# |



#22  
Hexachlorobenzene  
Concen: 1.495 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 46.6  | 37.0  | 55.4  |
| 249     | 35.1  | 28.1  | 42.1  |

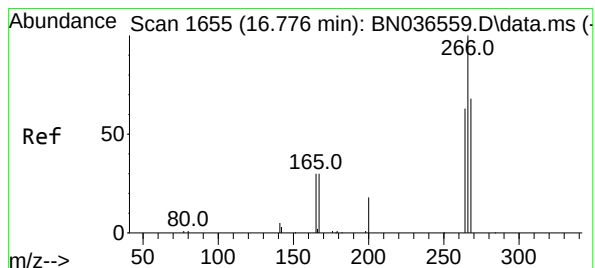
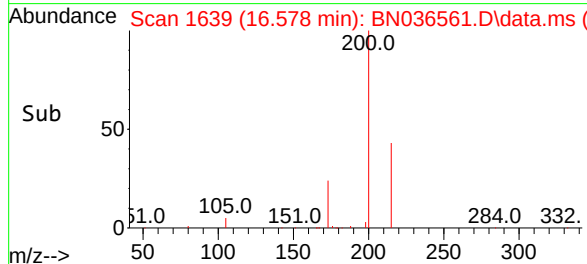
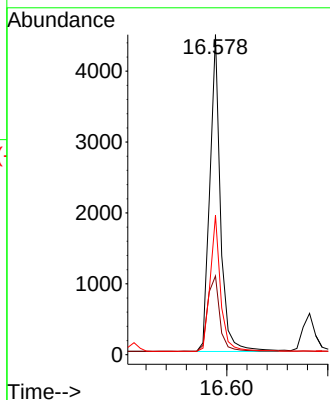
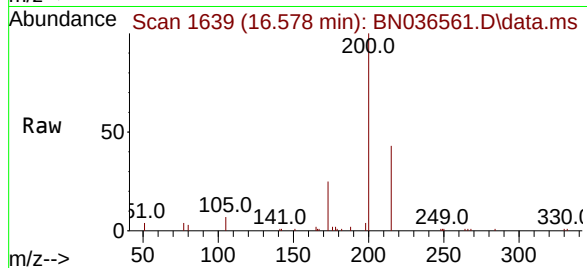




#23  
Atrazine  
Concen: 1.595 ng  
RT: 16.578 min Scan# 1639  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

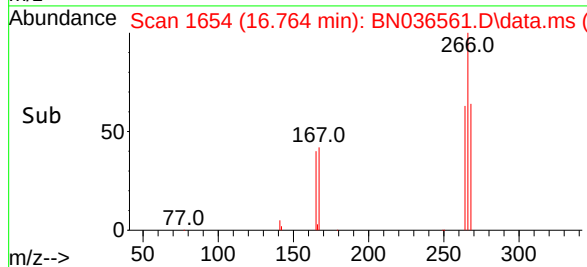
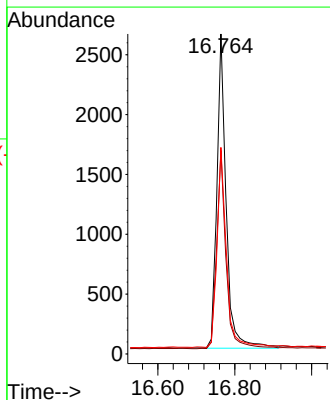
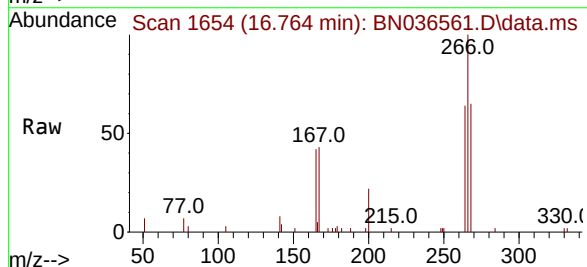
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

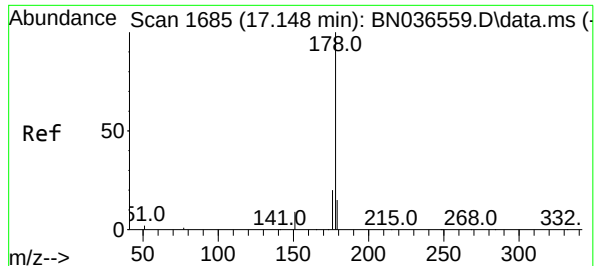
Tgt Ion:200 Resp: 6530  
Ion Ratio Lower Upper  
200 100  
173 24.6 27.3 40.9#  
215 43.5 36.8 55.2



#24  
Pentachlorophenol  
Concen: 1.563 ng  
RT: 16.764 min Scan# 1654  
Delta R.T. -0.012 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:266 Resp: 4395  
Ion Ratio Lower Upper  
266 100  
264 63.5 49.6 74.4  
268 64.4 50.9 76.3

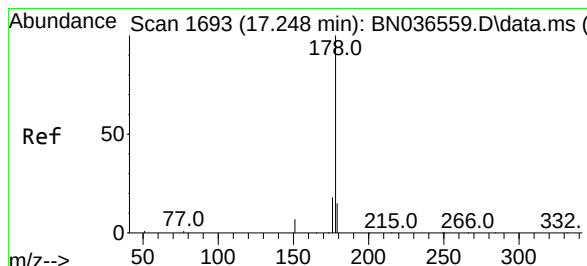
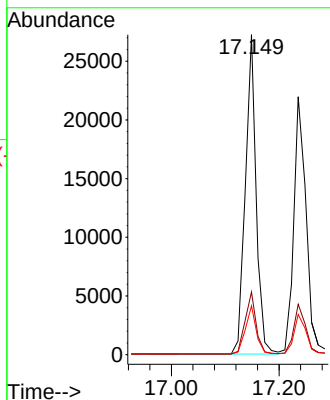
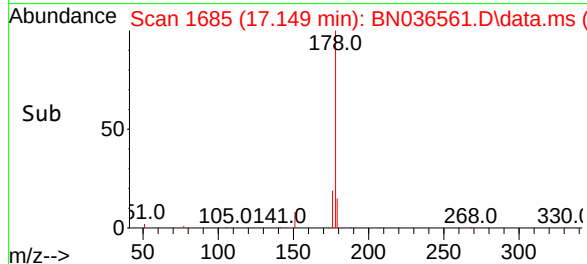
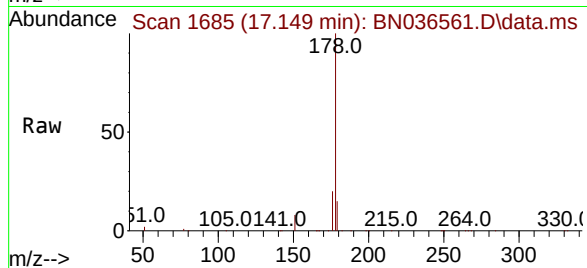




#25  
Phenanthrene  
Concen: 1.554 ng  
RT: 17.149 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

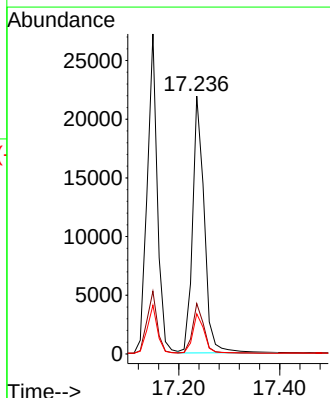
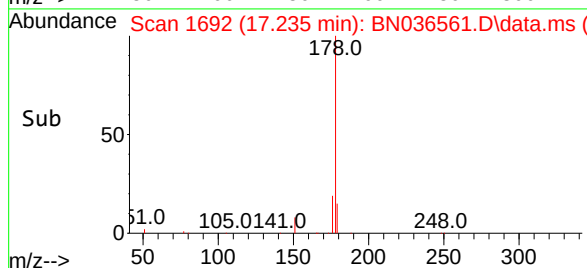
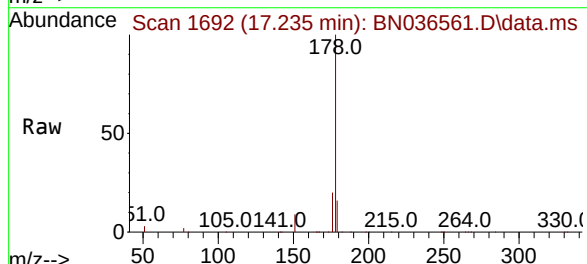
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

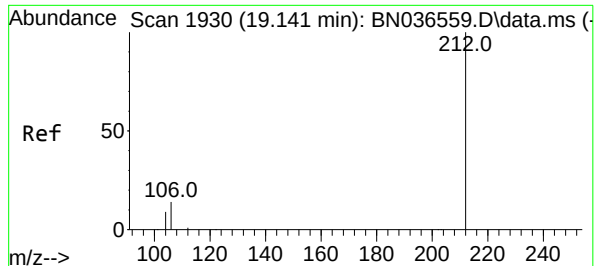
Tgt Ion:178 Resp: 37989  
Ion Ratio Lower Upper  
178 100  
176 19.7 15.9 23.9  
179 15.1 12.2 18.4



#26  
Anthracene  
Concen: 1.589 ng  
RT: 17.235 min Scan# 1692  
Delta R.T. -0.012 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:178 Resp: 35054  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.4 23.2  
179 15.3 12.6 18.8





#27

Fluoranthene-d10

Concen: 1.600 ng

RT: 19.141 min Scan# 1930

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

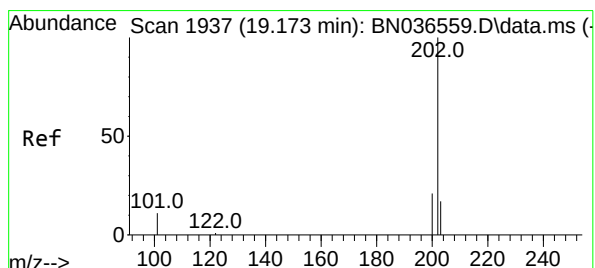
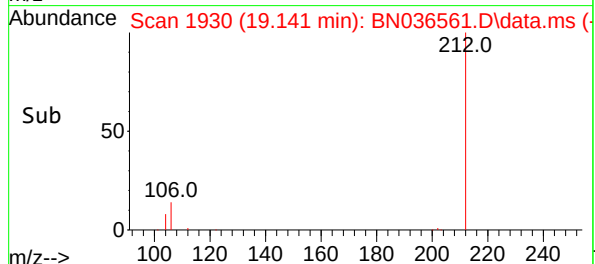
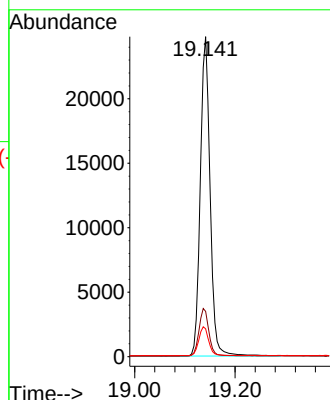
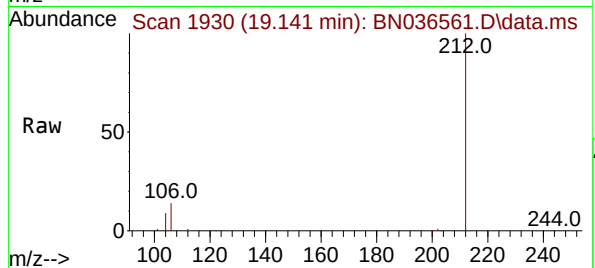
Tgt Ion:212 Resp: 33414

Ion Ratio Lower Upper

212 100

106 15.0 11.8 17.6

104 9.1 7.3 10.9



#28

Fluoranthene

Concen: 1.619 ng

RT: 19.169 min Scan# 1936

Delta R.T. -0.004 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

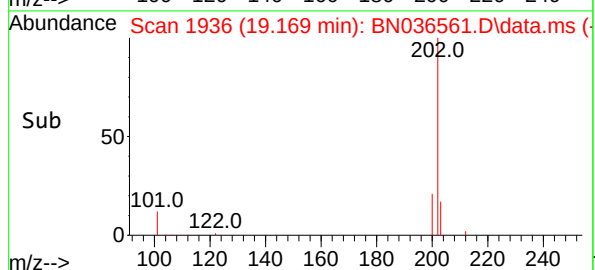
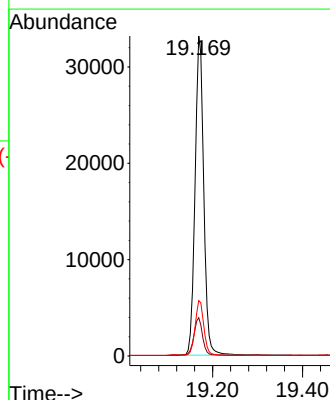
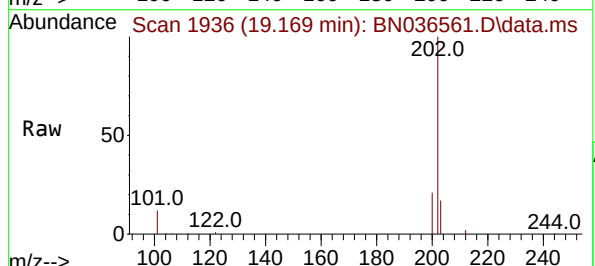
Tgt Ion:202 Resp: 44451

Ion Ratio Lower Upper

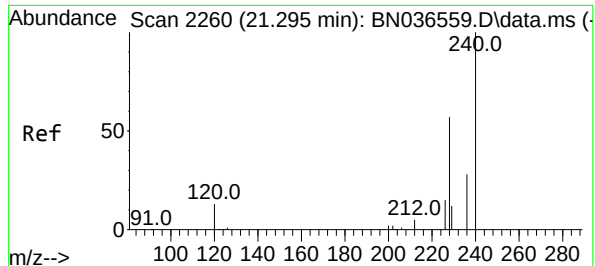
202 100

101 12.0 9.4 14.0

203 17.2 13.5 20.3







#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.295 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

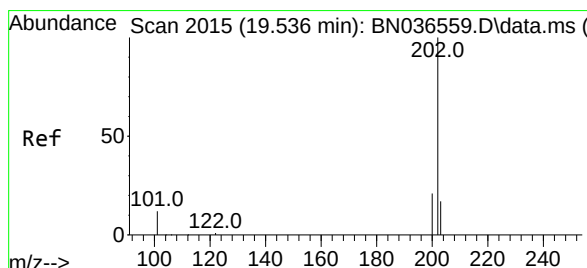
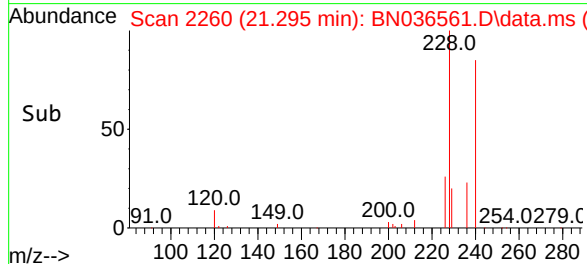
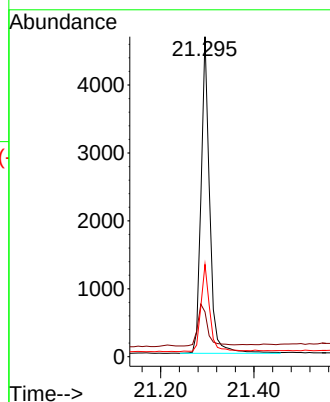
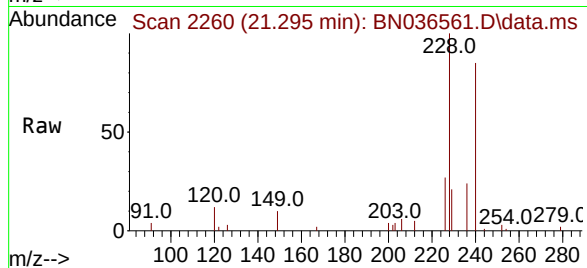
Tgt Ion:240 Resp: 5977

Ion Ratio Lower Upper

240 100

120 14.0 14.6 22.0#

236 28.9 24.1 36.1



#30

Pyrene

Concen: 1.530 ng

RT: 19.531 min Scan# 2014

Delta R.T. -0.004 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

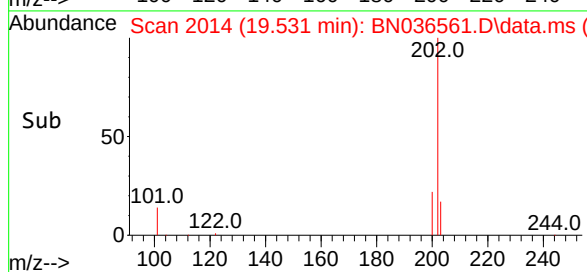
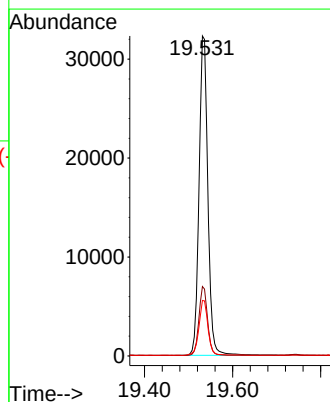
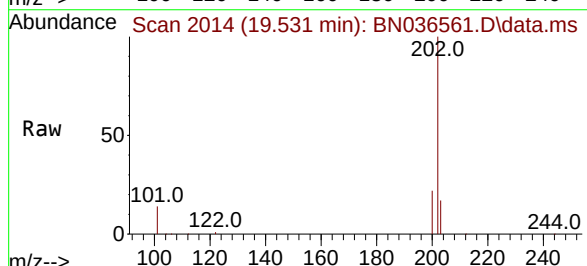
Tgt Ion:202 Resp: 44705

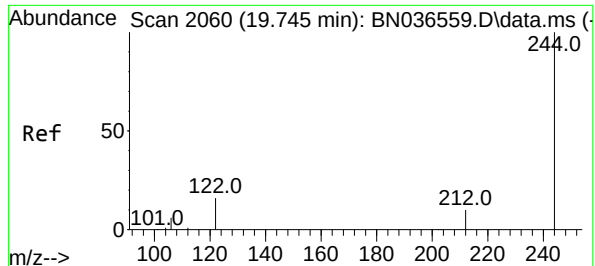
Ion Ratio Lower Upper

202 100

200 21.3 17.1 25.7

203 17.5 14.1 21.1

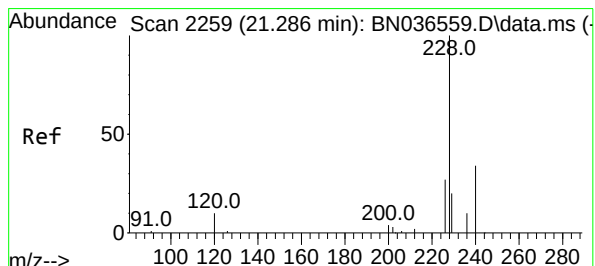
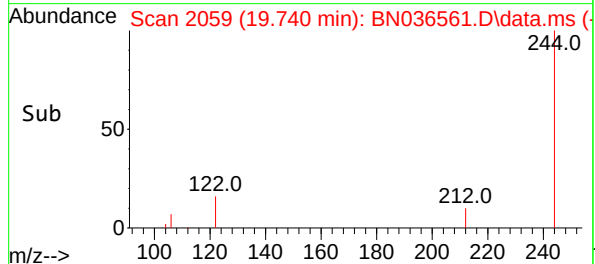
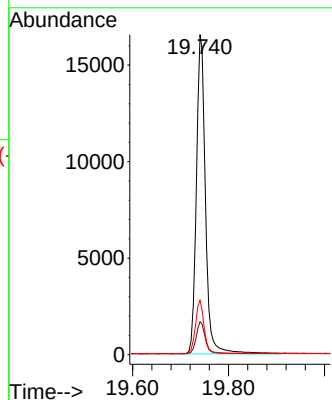
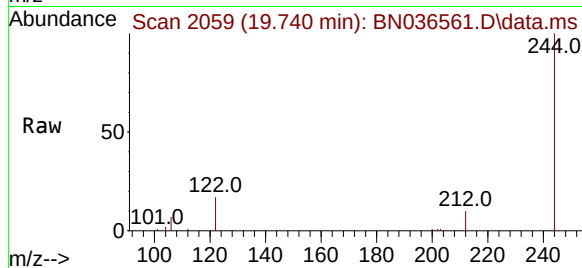




#31  
Terphenyl-d14  
Concen: 1.527 ng  
RT: 19.740 min Scan# 2060  
Delta R.T. -0.004 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

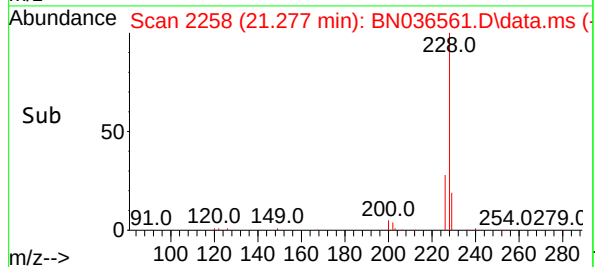
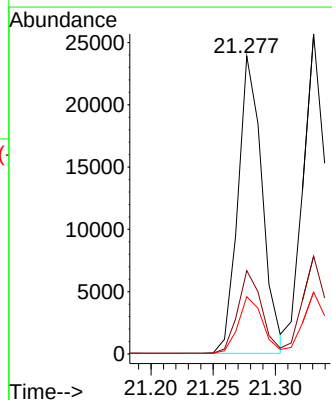
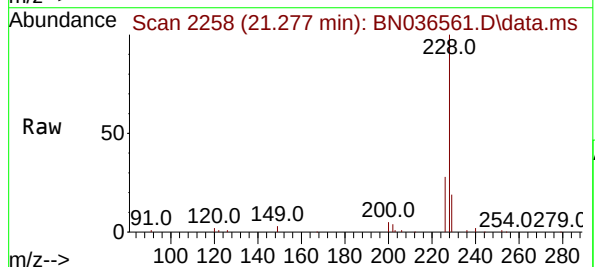
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

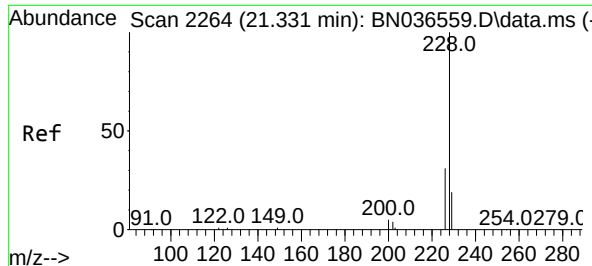
Tgt Ion:244 Resp: 21872  
Ion Ratio Lower Upper  
244 100  
212 10.3 9.6 14.4  
122 17.0 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 1.550 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.009 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:228 Resp: 32205  
Ion Ratio Lower Upper  
228 100  
226 28.0 22.5 33.7  
229 19.2 16.6 25.0





#33

Chrysene

Concen: 1.539 ng

RT: 21.331 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

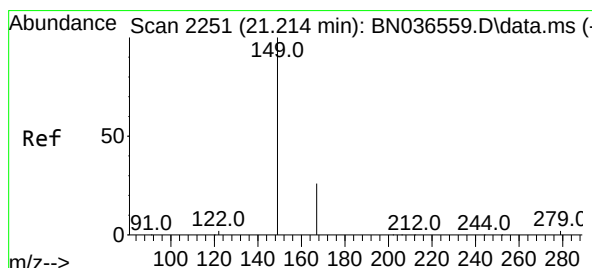
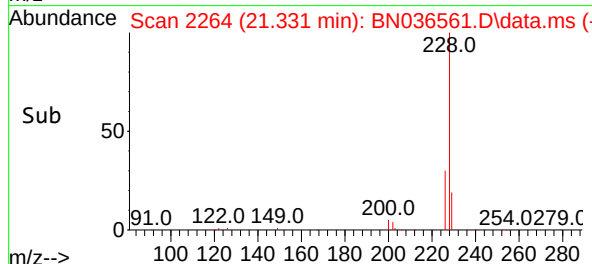
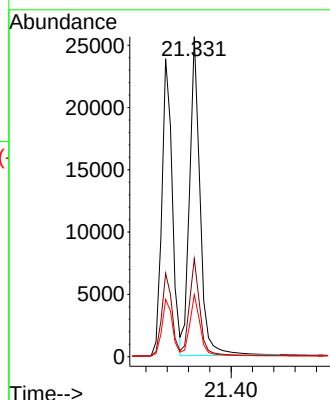
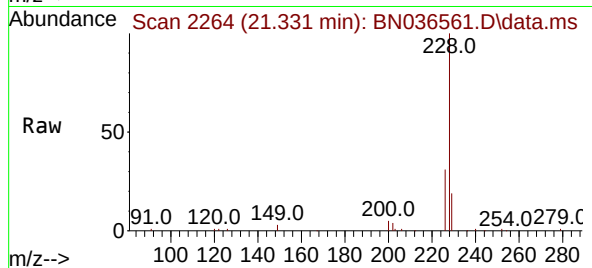
Tgt Ion:228 Resp: 34953

Ion Ratio Lower Upper

228 100

226 30.6 25.3 37.9

229 19.3 15.8 23.8



#34

Bis(2-ethylhexyl)phthalate

Concen: 1.529 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

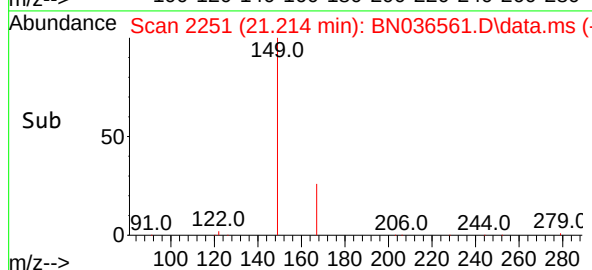
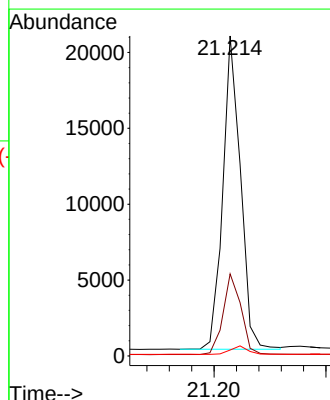
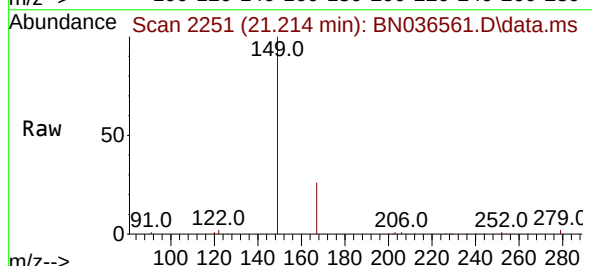
Tgt Ion:149 Resp: 22621

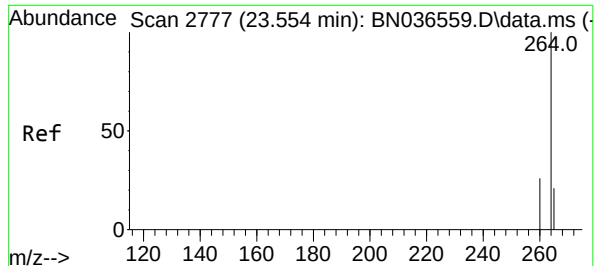
Ion Ratio Lower Upper

149 100

167 26.3 20.7 31.1

279 2.7 3.6 5.4#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.552 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

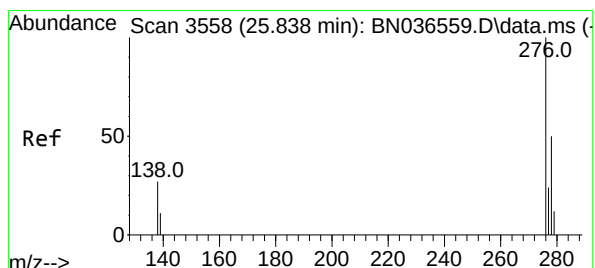
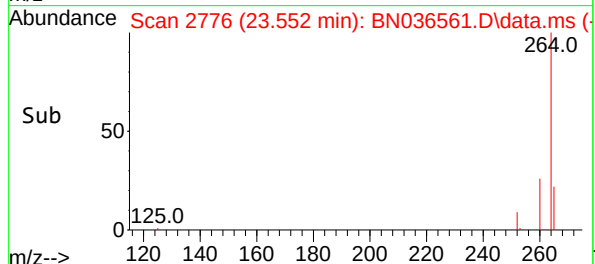
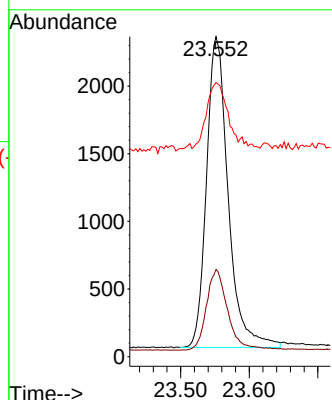
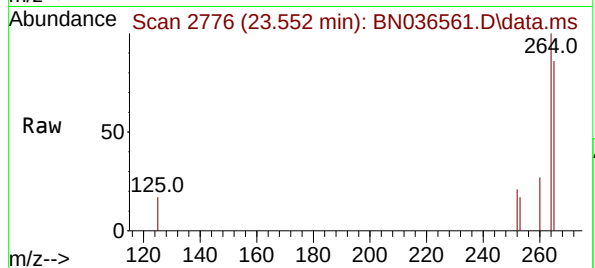
Tgt Ion:264 Resp: 5048

Ion Ratio Lower Upper

264 100

260 27.2 22.6 33.8

265 85.7 88.1 132.1#



#36

Indeno(1,2,3-cd)pyrene

Concen: 1.570 ng

RT: 25.832 min Scan# 3556

Delta R.T. -0.006 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

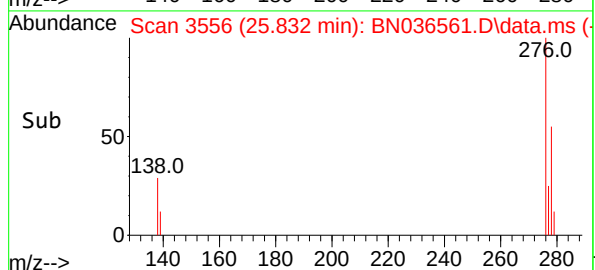
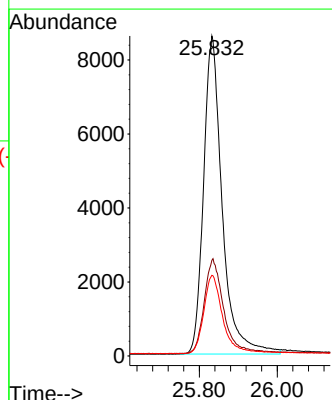
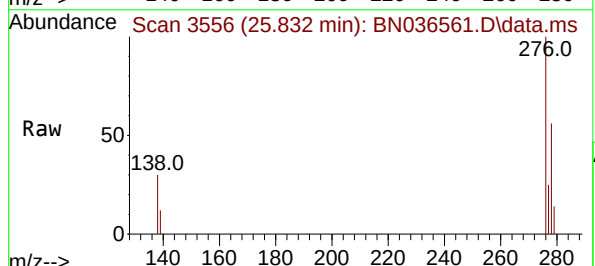
Tgt Ion:276 Resp: 28605

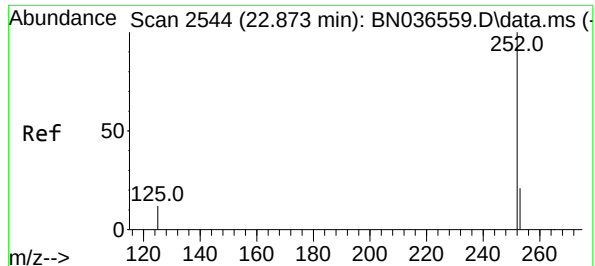
Ion Ratio Lower Upper

276 100

138 30.4 23.4 35.2

277 24.9 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 1.623 ng

RT: 22.870 min Scan# 2544

Delta R.T. -0.003 min

Lab File: BN036561.D

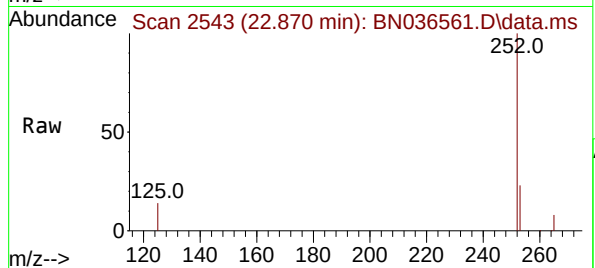
Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6



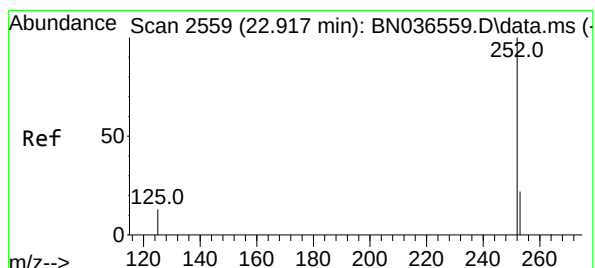
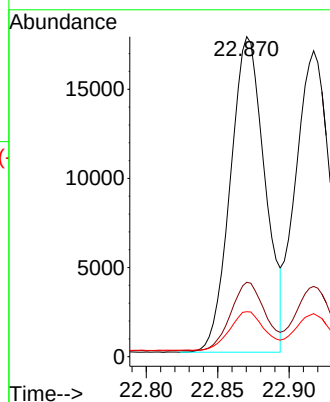
Tgt Ion:252 Resp: 29819

Ion Ratio Lower Upper

252 100

253 23.3 23.9 35.9#

125 14.0 17.4 26.2#



#38

Benzo(k)fluoranthene

Concen: 1.593 ng

RT: 22.917 min Scan# 2559

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

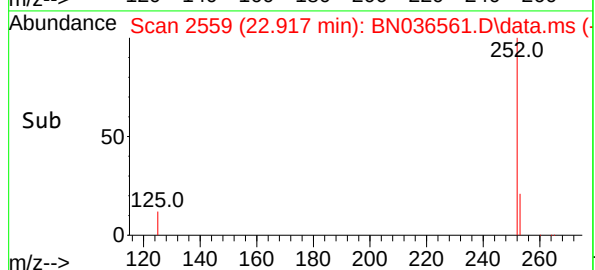
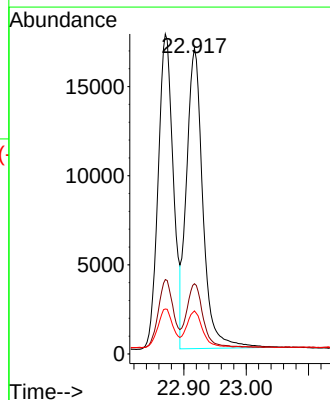
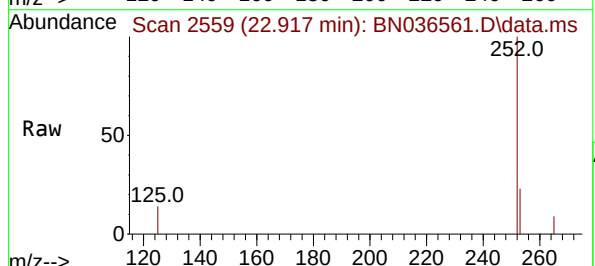
Tgt Ion:252 Resp: 30710

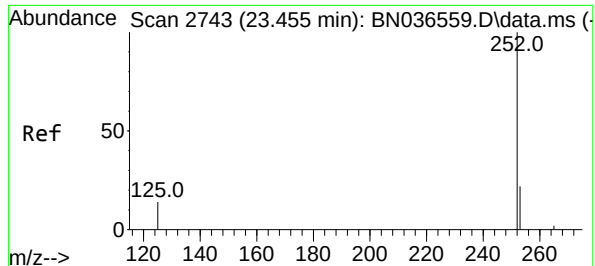
Ion Ratio Lower Upper

252 100

253 23.0 24.6 36.8#

125 14.1 17.8 26.8#





#39

Benzo(a)pyrene

Concen: 1.596 ng

RT: 23.452 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036561.D

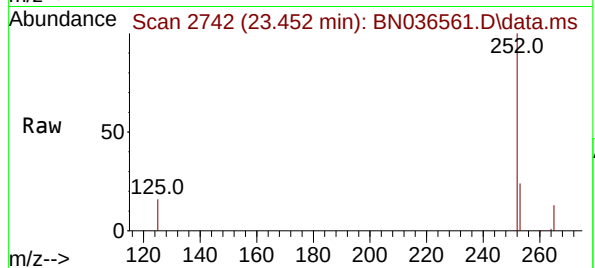
Acq: 10 Mar 2025 14:07

Instrument :

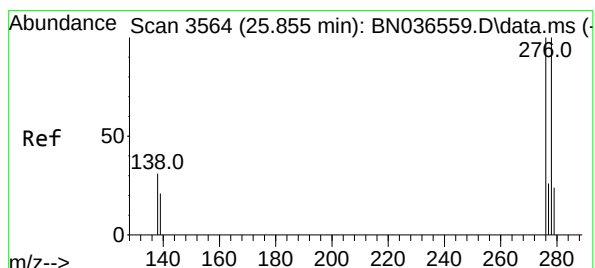
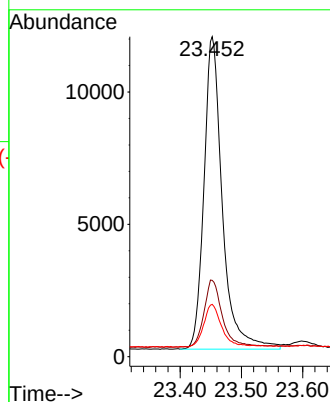
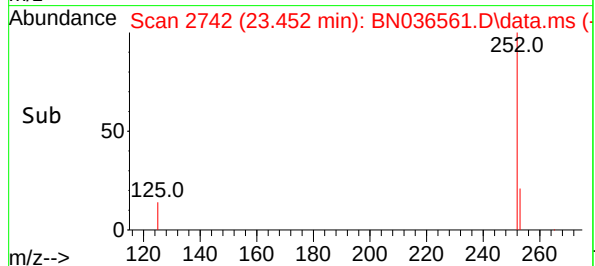
BNA\_N

ClientSampleId :

SSTDICC1.6



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 24696 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.9  | 27.8  | 41.8# |
| 125       | 16.3  | 22.7  | 34.1# |



#40

Dibenzo(a,h)anthracene

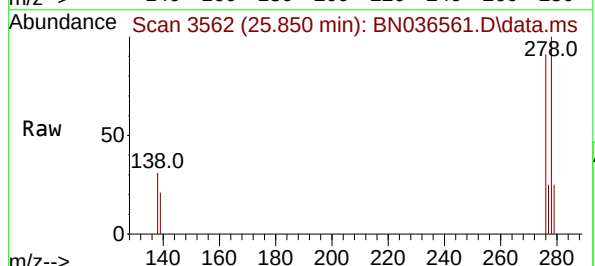
Concen: 1.569 ng

RT: 25.850 min Scan# 3562

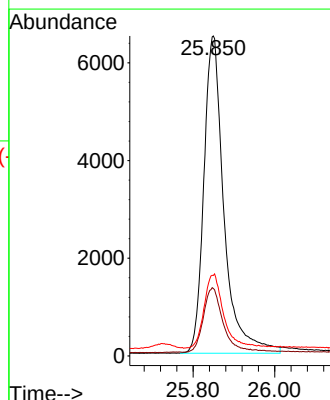
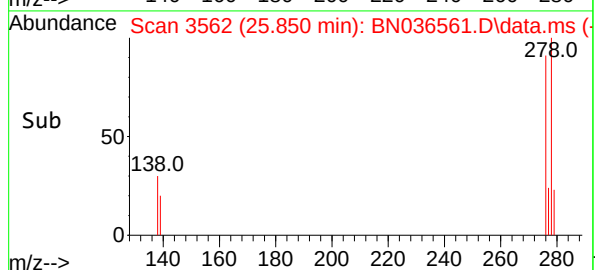
Delta R.T. -0.006 min

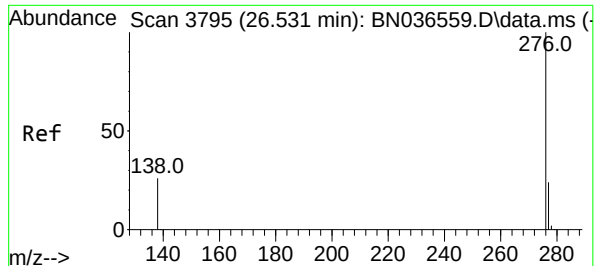
Lab File: BN036561.D

Acq: 10 Mar 2025 14:07



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 22248 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 21.1  | 20.8  | 31.2  |
| 279       | 25.1  | 28.8  | 43.2# |





#41

Benzo(g,h,i)perylene

Concen: 1.535 ng

RT: 26.531 min Scan# 31

Delta R.T. 0.000 min

Lab File: BN036561.D

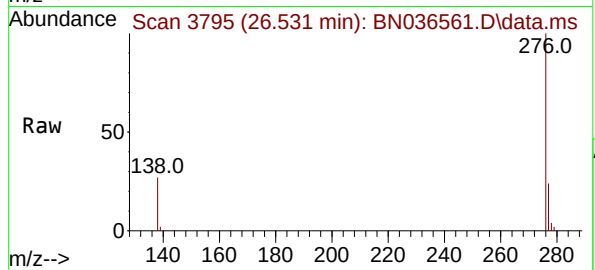
Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6



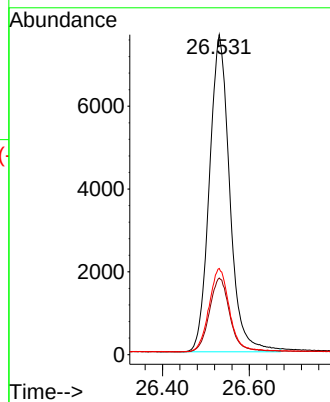
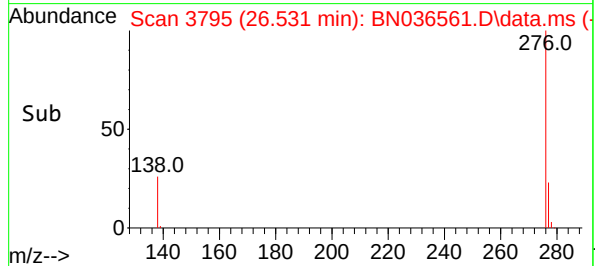
Tgt Ion:276 Resp: 24906

Ion Ratio Lower Upper

276 100

277 23.9 22.2 33.4

138 26.9 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036562.D  
 Acq On : 10 Mar 2025 14:43  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

Quant Time: Mar 10 16:02:50 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2890     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 6824     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.355 | 164  | 3957     | 0.400 | ng    | -0.01    |
| 19) Phenanthrene-d10          | 17.111 | 188  | 7488     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.295 | 240  | 5439     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.551 | 264  | 5002     | 0.400 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 23032    | 3.420 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.894  | 99   | 28996    | 3.485 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.864  | 82   | 24586    | 3.312 | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 34578    | 3.407 | ng    | -0.01    |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 6252     | 3.482 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 81236    | 3.529 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.141 | 212  | 65134    | 3.394 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.740 | 244  | 42959    | 3.297 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.239  | 88   | 10288    | 3.209 | ng    | 97       |
| 3) n-Nitrosodimethylamine     | 3.550  | 42   | 20412    | 3.147 | ng    | # 96     |
| 6) bis(2-Chloroethyl)ether    | 7.146  | 93   | 27978    | 3.253 | ng    | 99       |
| 9) Naphthalene                | 10.562 | 128  | 66694    | 3.323 | ng    | 96       |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 15618    | 3.305 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 12.177 | 142  | 43768    | 3.427 | ng    | 97       |
| 16) Acenaphthylene            | 14.077 | 152  | 65654    | 3.516 | ng    | 99       |
| 17) Acenaphthene              | 14.420 | 154  | 42378    | 3.467 | ng    | 97       |
| 18) Fluorene                  | 15.414 | 166  | 56295    | 3.404 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.489 | 198  | 6567     | 3.315 | ng    | # 58     |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248  | 16652    | 3.549 | ng    | # 82     |
| 22) Hexachlorobenzene         | 16.416 | 284  | 19287    | 3.406 | ng    | 100      |
| 23) Atrazine                  | 16.577 | 200  | 12969    | 3.448 | ng    | # 90     |
| 24) Pentachlorophenol         | 16.764 | 266  | 9625     | 3.726 | ng    | 99       |
| 25) Phenanthrene              | 17.148 | 178  | 77903    | 3.468 | ng    | 99       |
| 26) Anthracene                | 17.235 | 178  | 72775    | 3.590 | ng    | 99       |
| 28) Fluoranthene              | 19.169 | 202  | 86688    | 3.436 | ng    | 99       |
| 30) Pyrene                    | 19.531 | 202  | 86694    | 3.260 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.277 | 228  | 66496    | 3.516 | ng    | 99       |
| 33) Chrysene                  | 21.331 | 228  | 70334    | 3.403 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 39682    | 2.947 | ng    | # 98     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.829 | 276  | 67767    | 3.754 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.870 | 252  | 63823    | 3.506 | ng    | # 84     |
| 38) Benzo(k)fluoranthene      | 22.914 | 252  | 65410    | 3.425 | ng    | # 83     |
| 39) Benzo(a)pyrene            | 23.452 | 252  | 54009    | 3.523 | ng    | # 77     |
| 40) Dibenzo(a,h)anthracene    | 25.843 | 278  | 54058    | 3.846 | ng    | # 84     |
| 41) Benzo(g,h,i)perylene      | 26.528 | 276  | 57986    | 3.606 | ng    | 94       |
| -----                         |        |      |          |       |       |          |

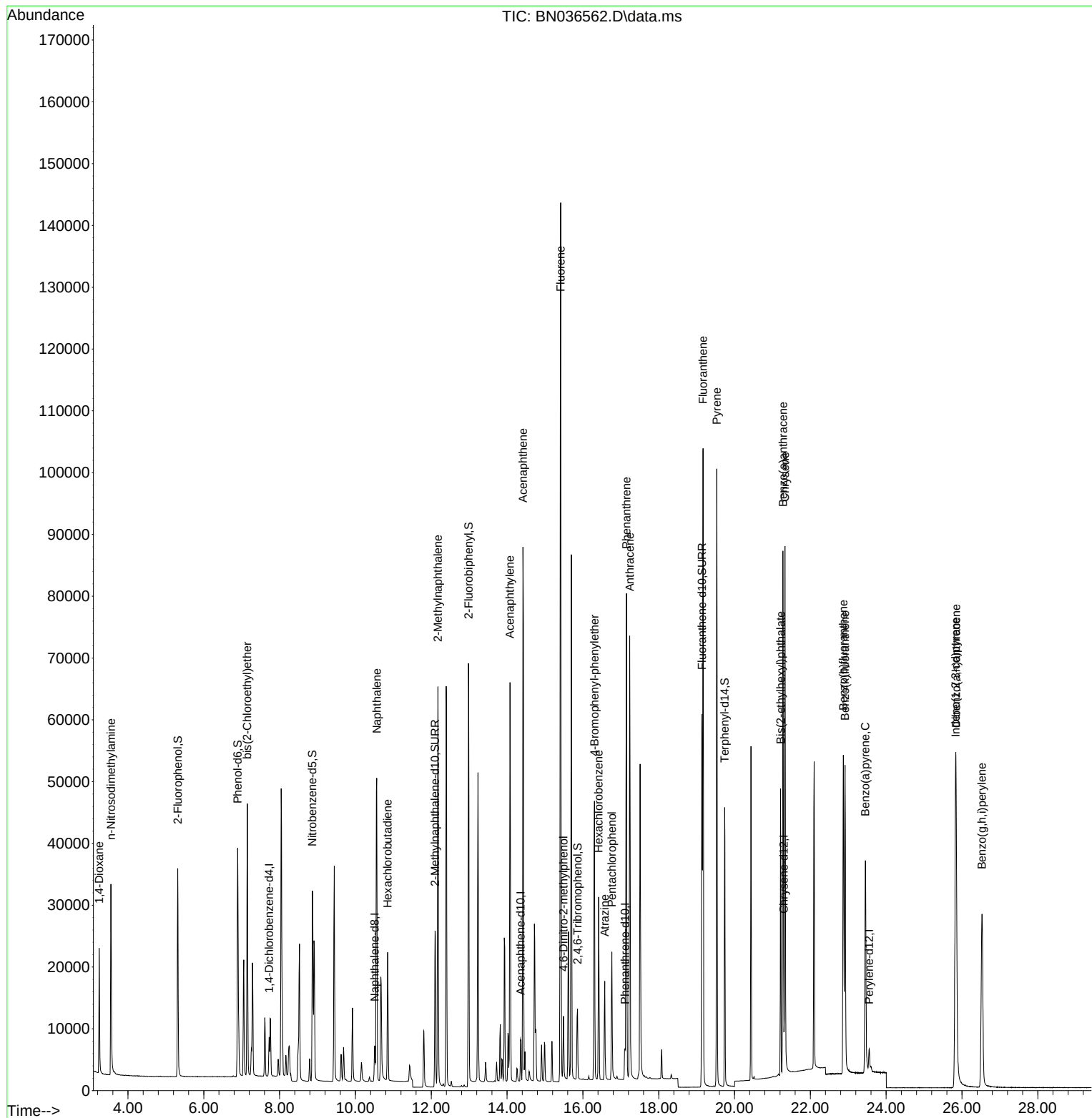
(#) = qualifier out of range (m) = manual integration (+) = signals summed

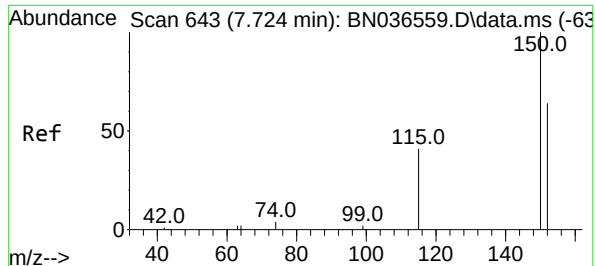


Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036562.D  
Acq On : 10 Mar 2025 14:43  
Operator : RC/JU  
Sample : SSTDICC3.2  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

Quant Time: Mar 10 16:02:50 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

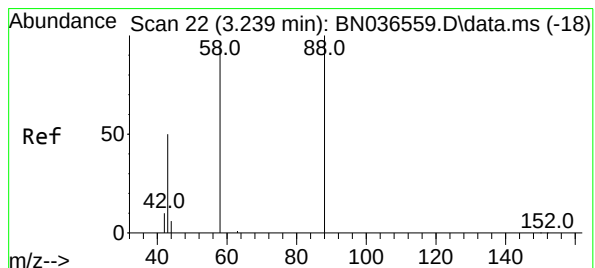
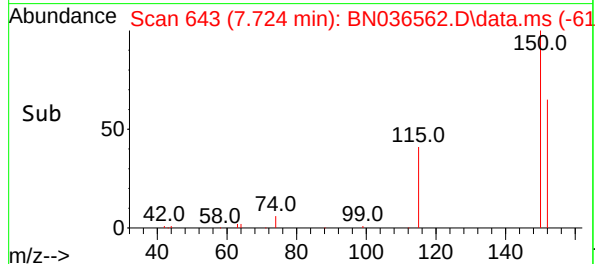
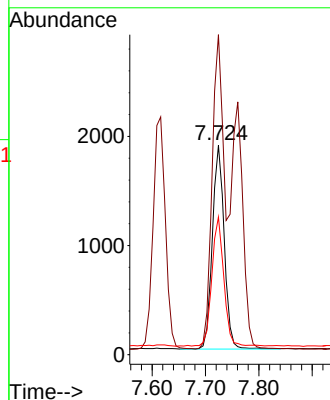
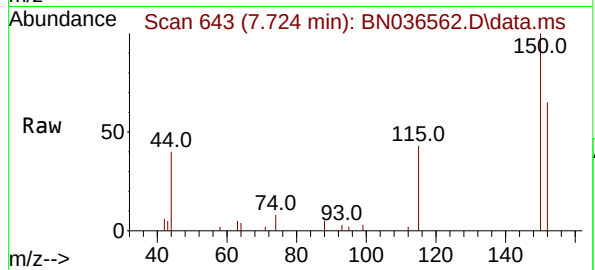




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

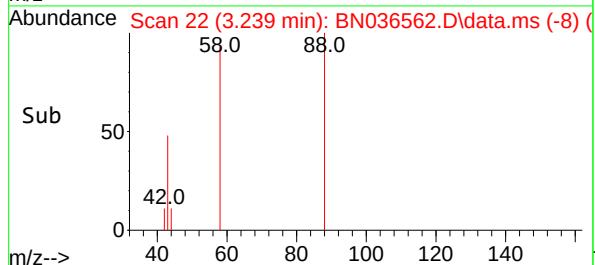
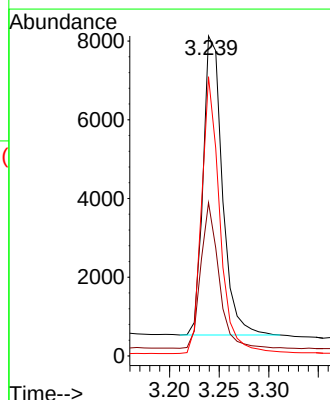
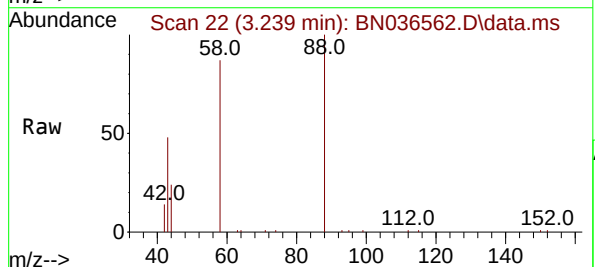
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

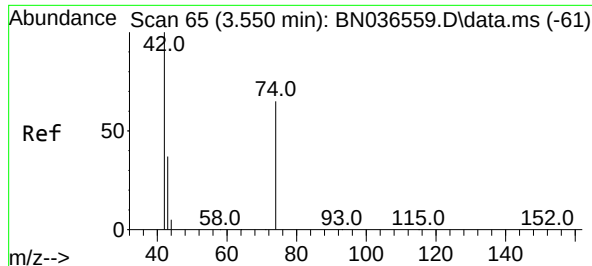
Tgt Ion:152 Resp: 2890  
Ion Ratio Lower Upper  
152 100  
150 152.9 123.7 185.5  
115 65.7 54.3 81.5



#2  
1,4-Dioxane  
Concen: 3.209 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion: 88 Resp: 10288  
Ion Ratio Lower Upper  
88 100  
43 45.2 37.8 56.8  
58 87.2 67.4 101.2

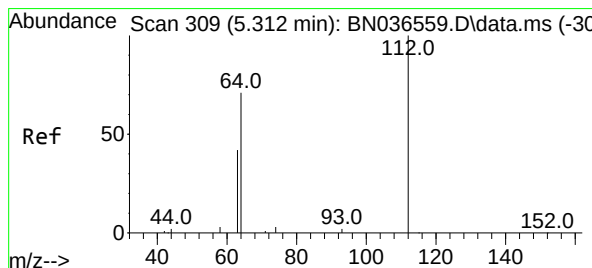
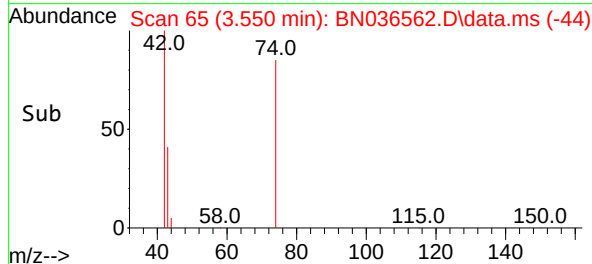
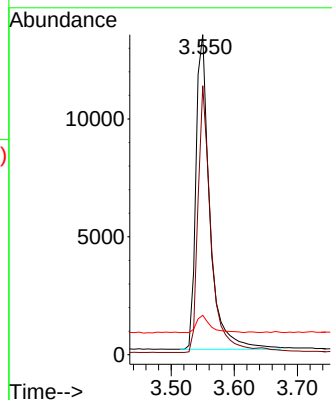
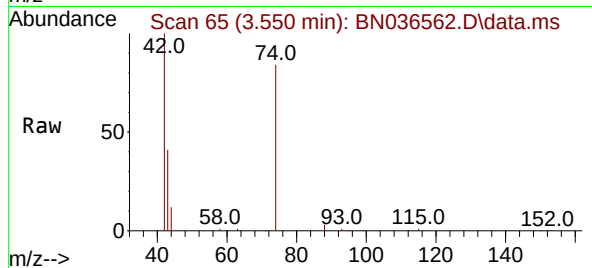




#3  
n-Nitrosodimethylamine  
Concen: 3.147 ng  
RT: 3.550 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

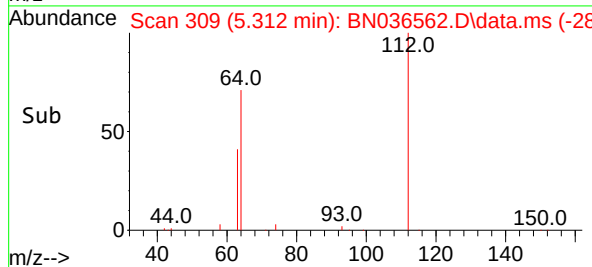
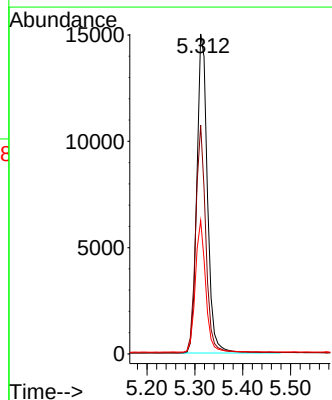
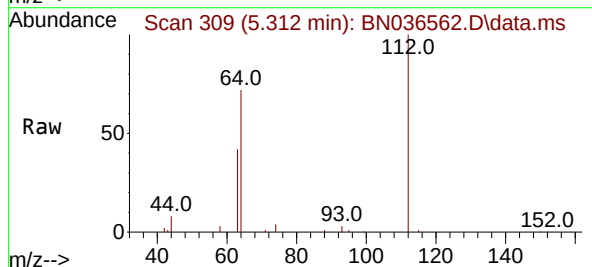
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

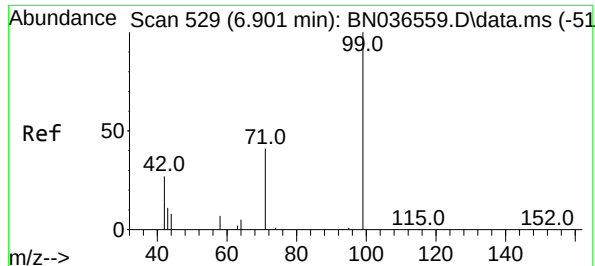
Tgt Ion: 42 Resp: 20412  
Ion Ratio Lower Upper  
42 100  
74 78.8 60.6 90.8  
44 5.5 6.3 9.5#



#4  
2-Fluorophenol  
Concen: 3.420 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion: 112 Resp: 23032  
Ion Ratio Lower Upper  
112 100  
64 68.4 53.1 79.7  
63 39.8 31.8 47.8

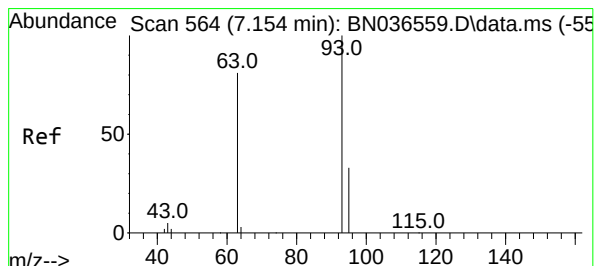
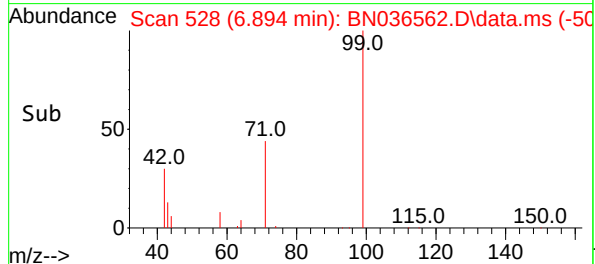
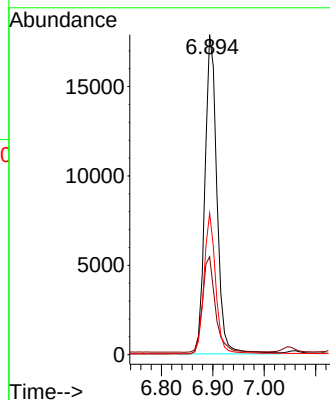
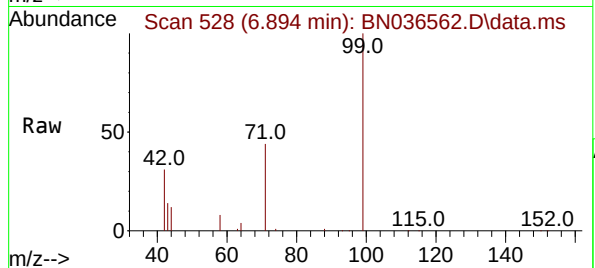




#5  
Phenol-d6  
Concen: 3.485 ng  
RT: 6.894 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

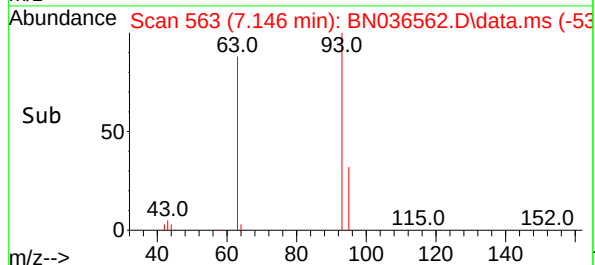
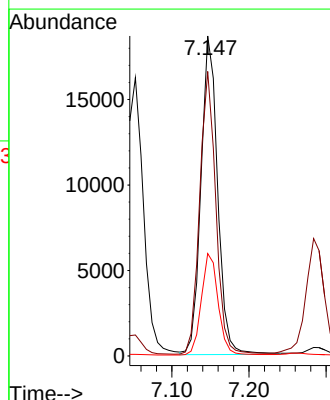
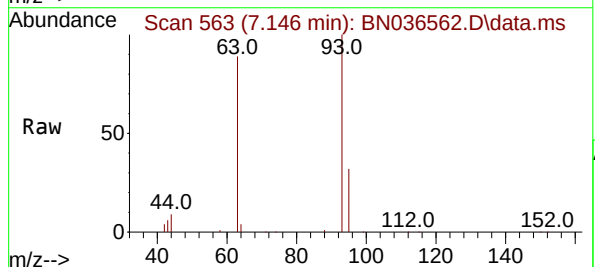
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

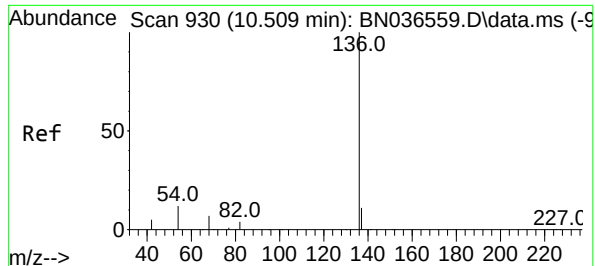
Tgt Ion: 99 Resp: 28996  
Ion Ratio Lower Upper  
99 100  
42 32.3 26.5 39.7  
71 43.2 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 3.253 ng  
RT: 7.146 min Scan# 563  
Delta R.T. -0.007 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion: 93 Resp: 27978  
Ion Ratio Lower Upper  
93 100  
63 85.7 67.7 101.5  
95 32.0 25.6 38.4

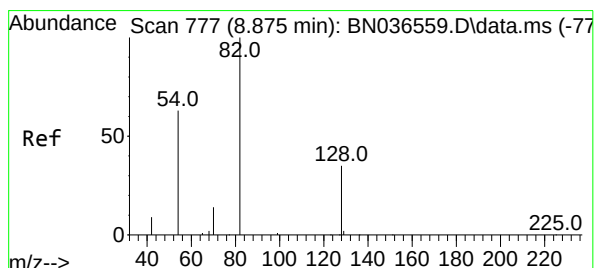
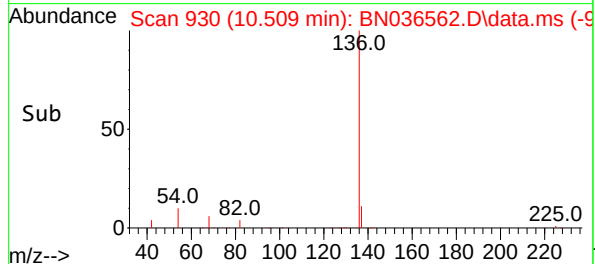
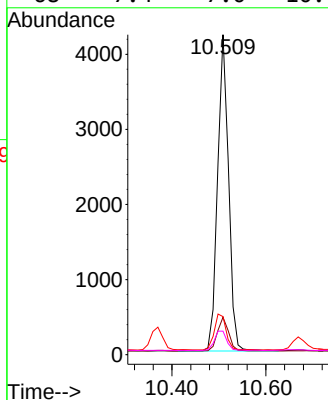
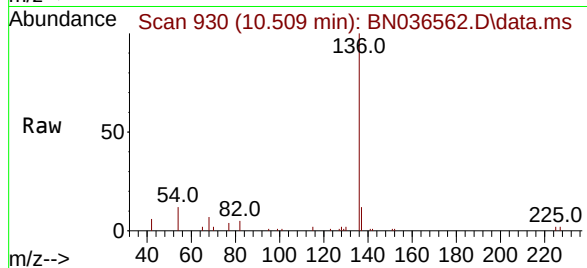




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

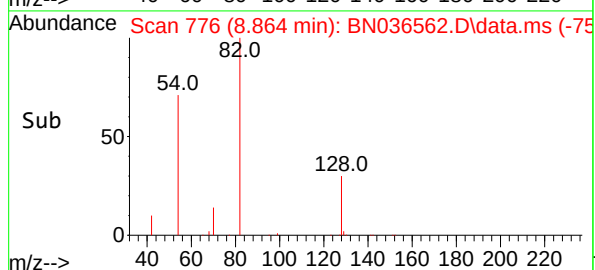
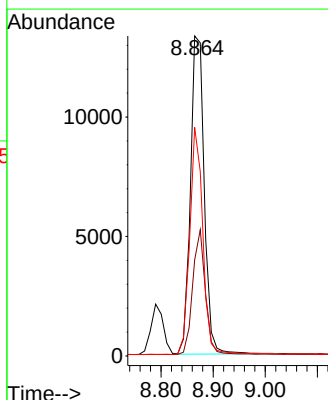
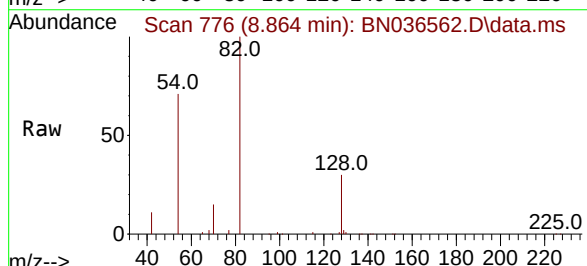
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

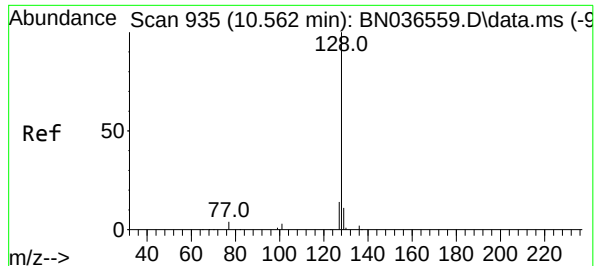
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 6824  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.7  | 10.3  | 15.5  |
| 54       | 11.9  | 11.5  | 17.3  |
| 68       | 7.4   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 3.312 ng  
RT: 8.864 min Scan# 776  
Delta R.T. -0.011 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 24586 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 30.0  | 30.6  | 45.8# |
| 54       | 71.4  | 52.2  | 78.4  |

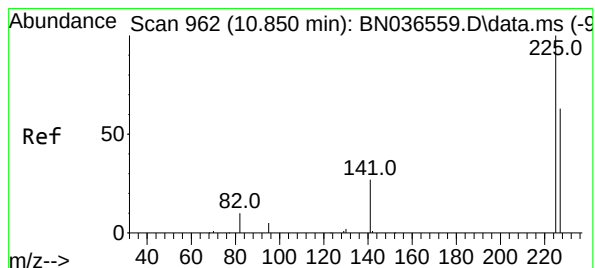
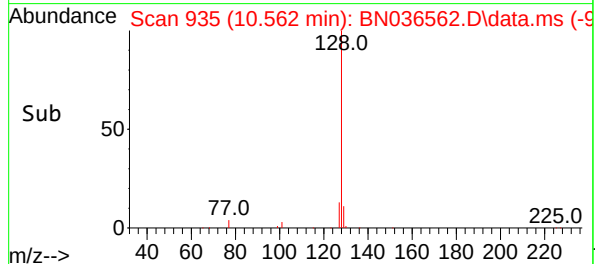
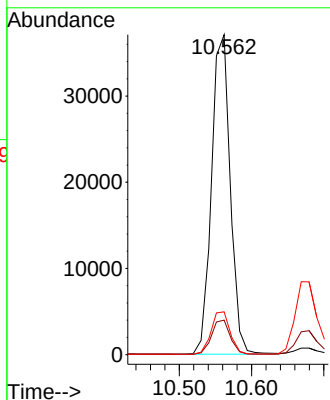
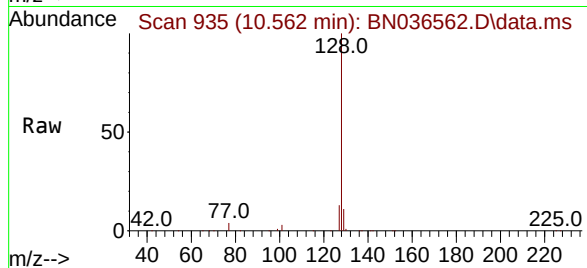




#9  
Naphthalene  
Concen: 3.323 ng  
RT: 10.562 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

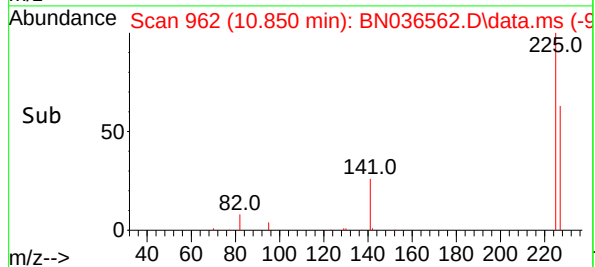
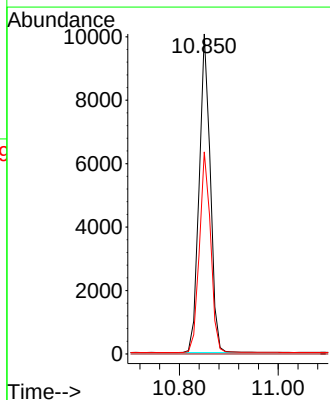
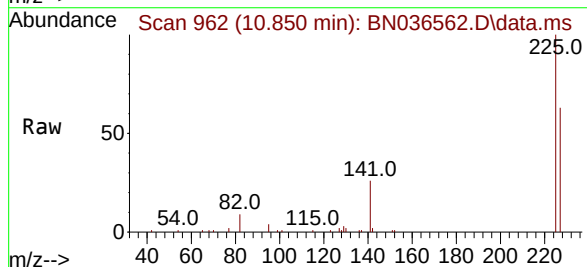
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

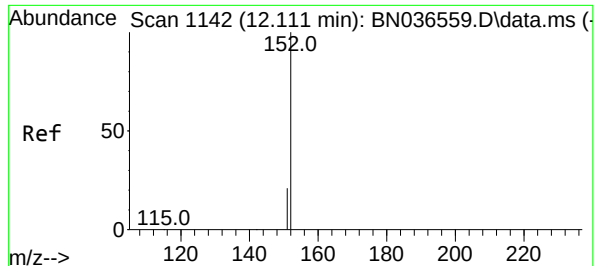
Tgt Ion:128 Resp: 66694  
Ion Ratio Lower Upper  
128 100  
129 10.8 9.8 14.6  
127 13.4 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 3.305 ng  
RT: 10.850 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:225 Resp: 15618  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.6 51.8 77.8

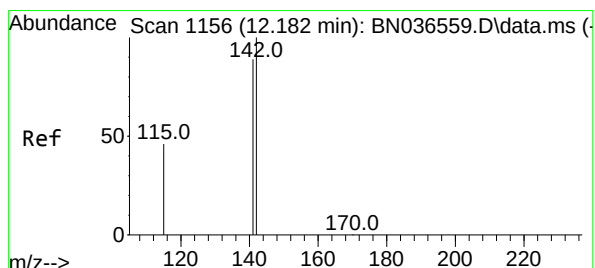
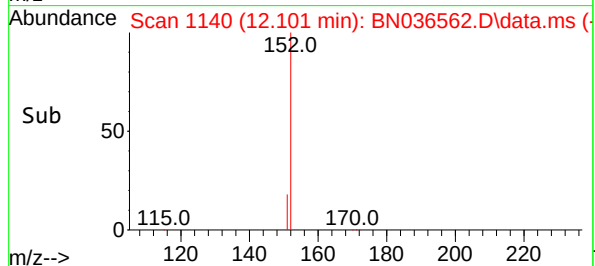
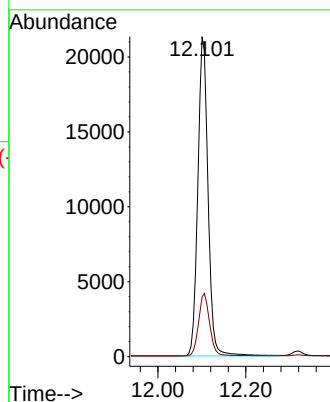
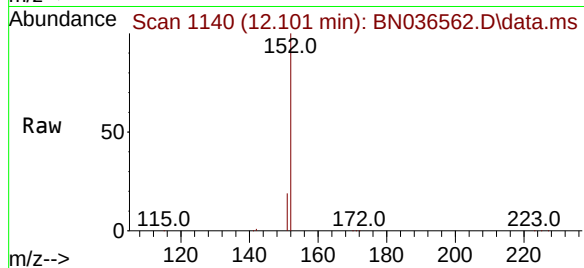




#11  
2-Methylnaphthalene-d10  
Concen: 3.407 ng  
RT: 12.101 min Scan# 1140  
Delta R.T. -0.010 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

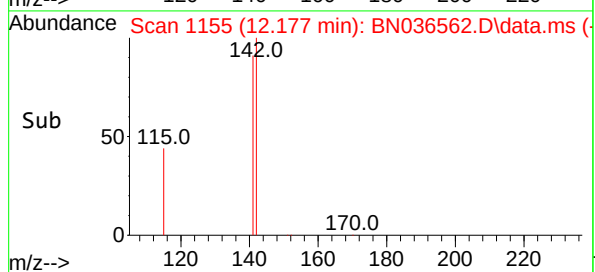
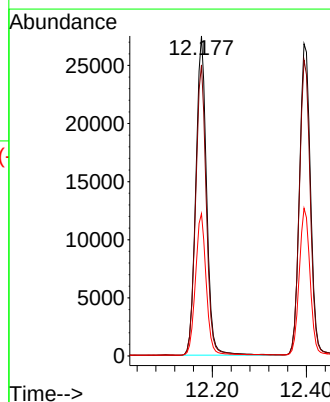
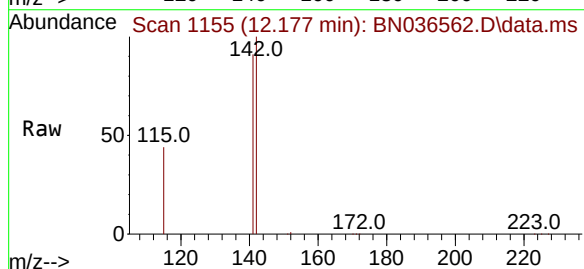
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

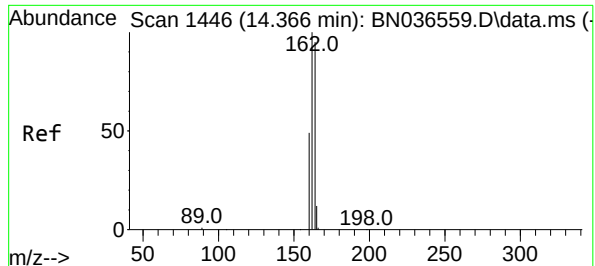
Tgt Ion:152 Resp: 34578  
Ion Ratio Lower Upper  
152 100  
151 21.2 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 3.427 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:142 Resp: 43768  
Ion Ratio Lower Upper  
142 100  
141 90.9 71.7 107.5  
115 44.5 38.3 57.5

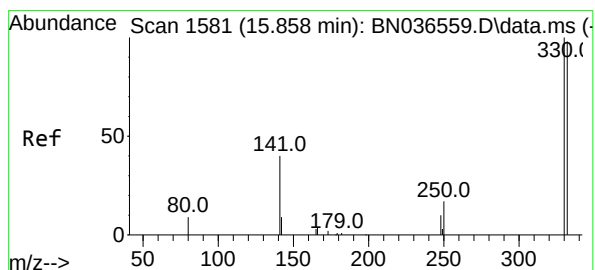
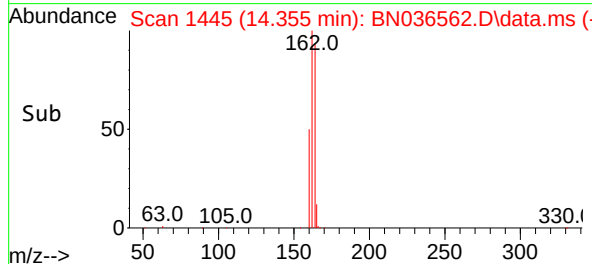
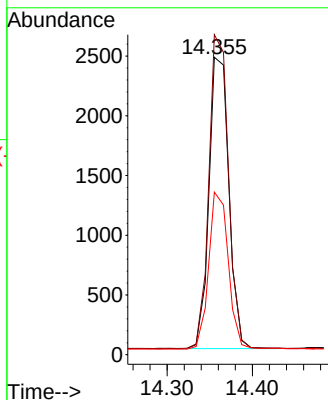
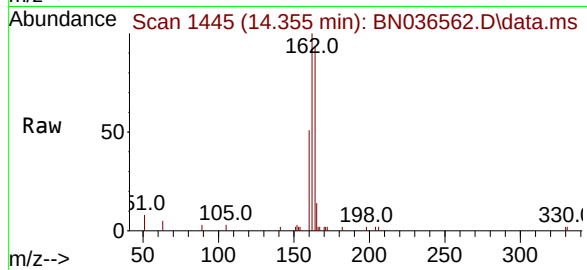




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.355 min Scan# 1445  
Delta R.T. -0.011 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

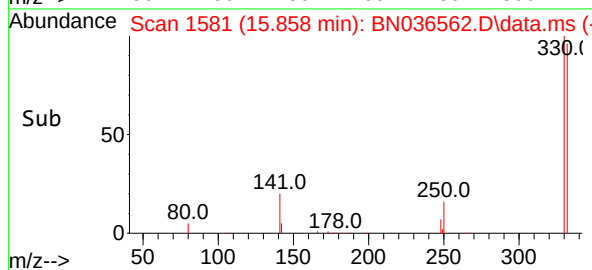
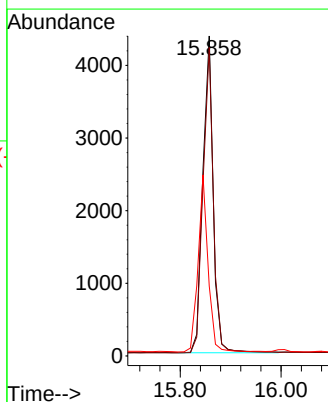
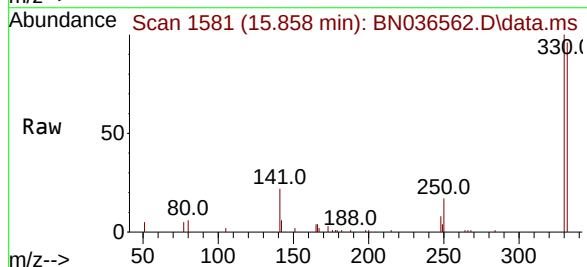
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

Tgt Ion:164 Resp: 3957  
Ion Ratio Lower Upper  
164 100  
162 107.6 84.2 126.2  
160 54.7 42.2 63.2

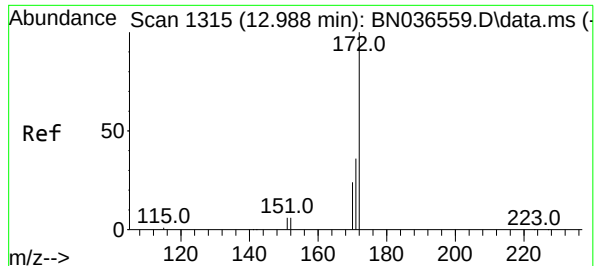


#14  
2,4,6-Tribromophenol  
Concen: 3.482 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:330 Resp: 6252  
Ion Ratio Lower Upper  
330 100  
332 96.1 75.2 112.8  
141 53.7 43.4 65.2



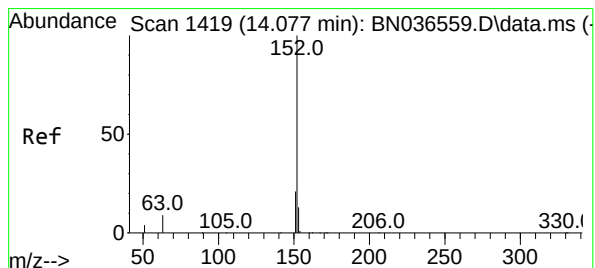
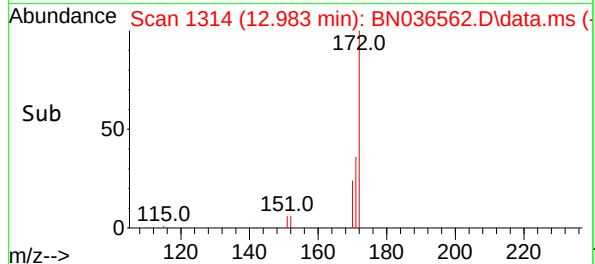
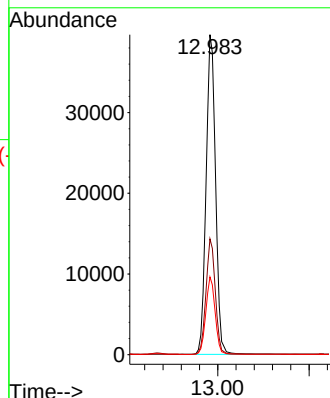
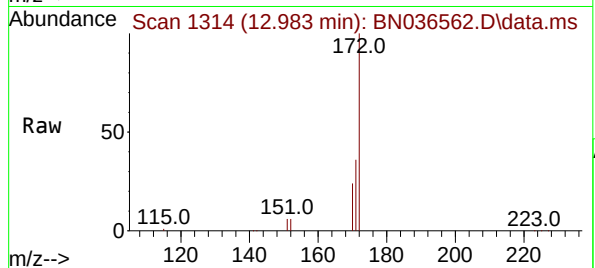




#15  
2-Fluorobiphenyl  
Concen: 3.529 ng  
RT: 12.983 min Scan# 1314  
Delta R.T. -0.005 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

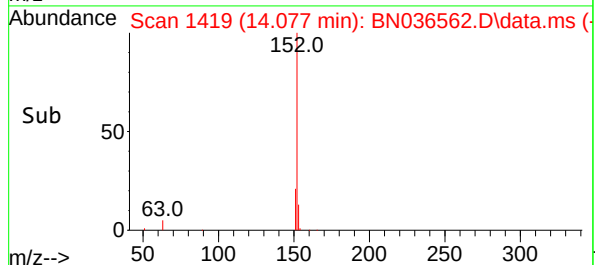
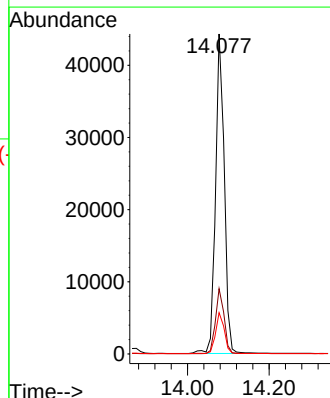
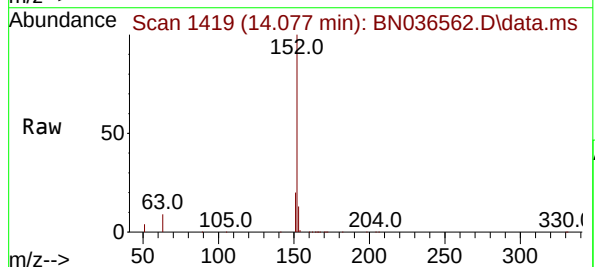
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

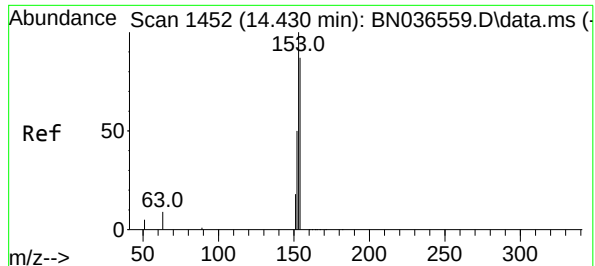
Tgt Ion:172 Resp: 81236  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.5 44.3  
170 24.3 20.2 30.4



#16  
Acenaphthylene  
Concen: 3.516 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:152 Resp: 65654  
Ion Ratio Lower Upper  
152 100  
151 20.0 16.2 24.4  
153 12.8 10.6 15.8

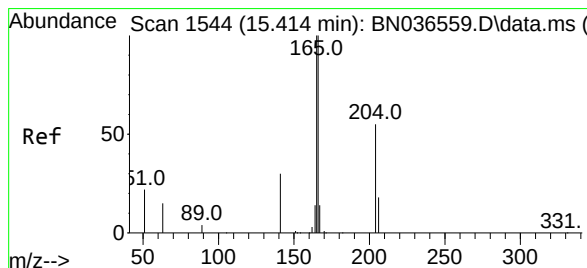
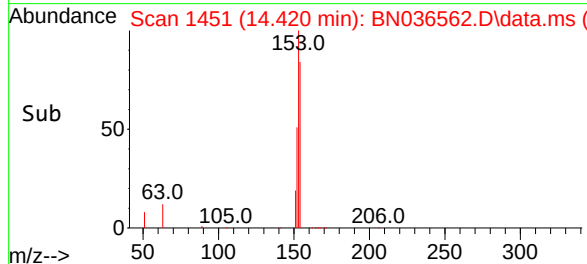
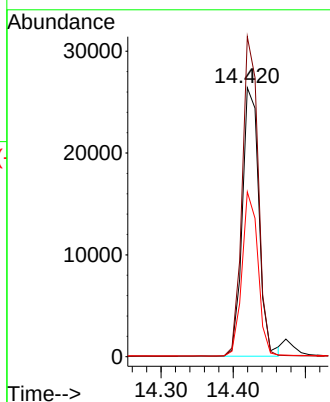
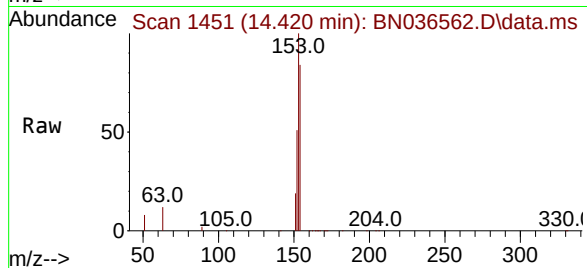




#17  
Acenaphthene  
Concen: 3.467 ng  
RT: 14.420 min Scan# 1451  
Delta R.T. -0.011 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

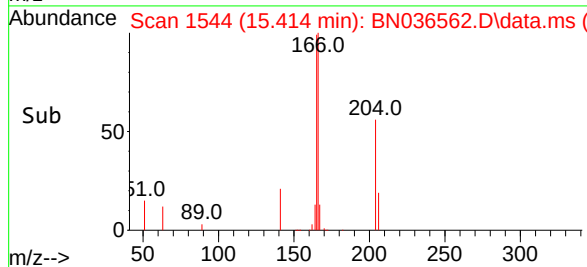
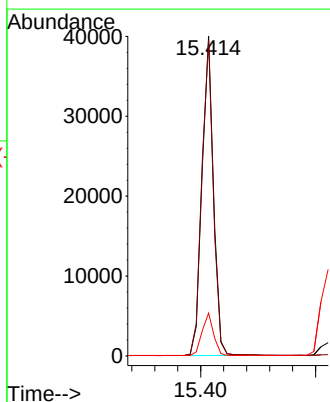
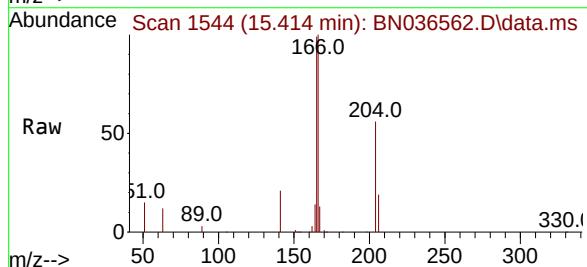
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

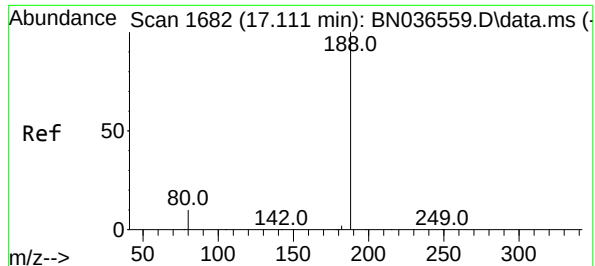
Tgt Ion:154 Resp: 42378  
Ion Ratio Lower Upper  
154 100  
153 114.6 94.1 141.1  
152 58.9 49.8 74.6



#18  
Fluorene  
Concen: 3.404 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. -0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:166 Resp: 56295  
Ion Ratio Lower Upper  
166 100  
165 100.2 79.8 119.8  
167 13.0 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

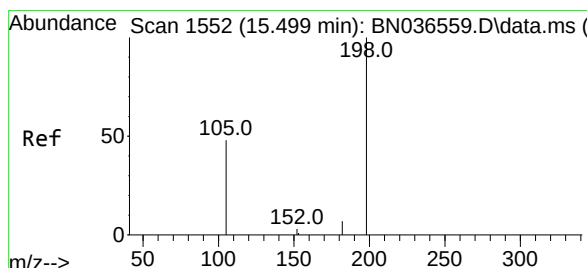
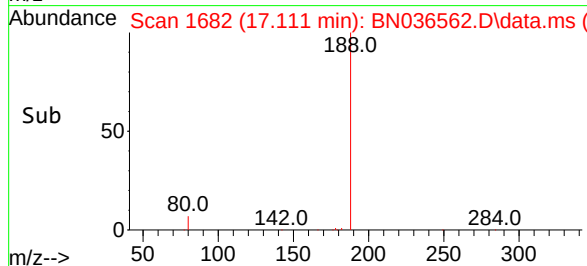
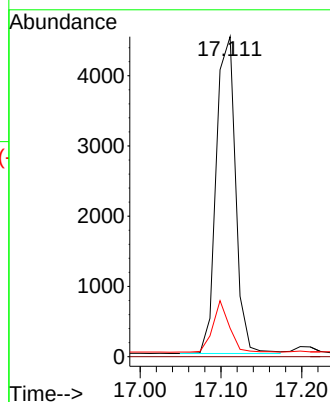
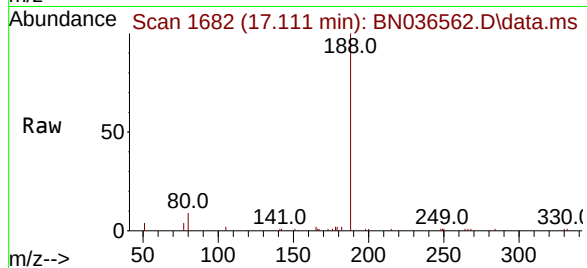
Tgt Ion:188 Resp: 7488

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.9 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 3.315 ng

RT: 15.489 min Scan# 1551

Delta R.T. -0.010 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

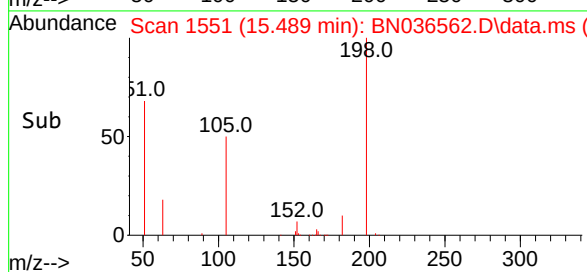
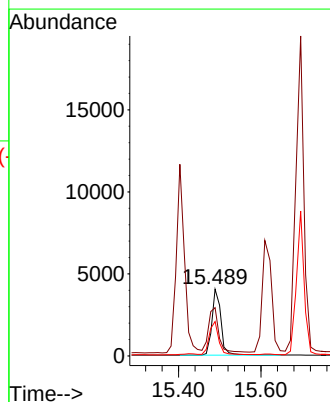
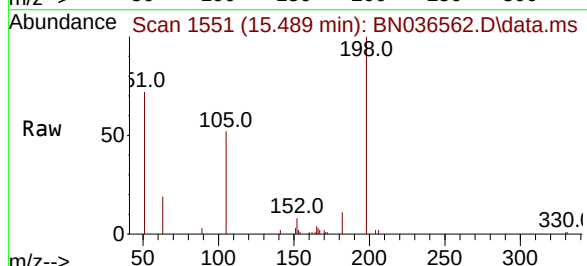
Tgt Ion:198 Resp: 6567

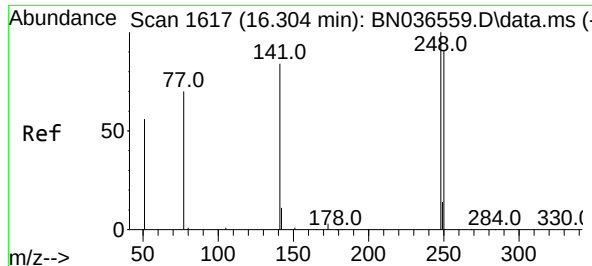
Ion Ratio Lower Upper

198 100

51 72.3 107.9 161.9#

105 51.5 56.2 84.2#

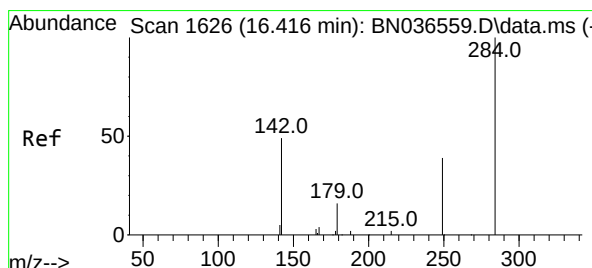
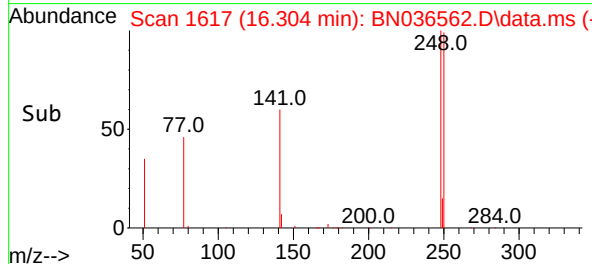
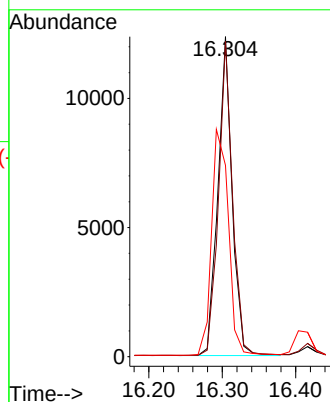
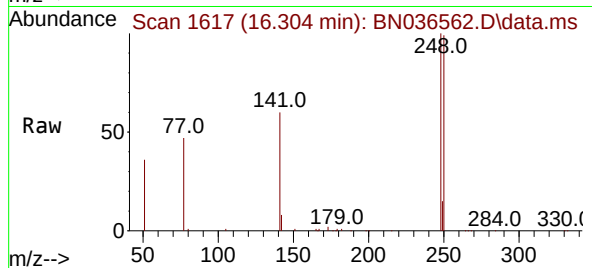




#21  
4-Bromophenyl-phenylether  
Concen: 3.549 ng  
RT: 16.304 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

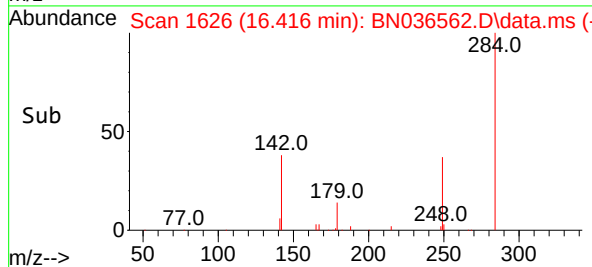
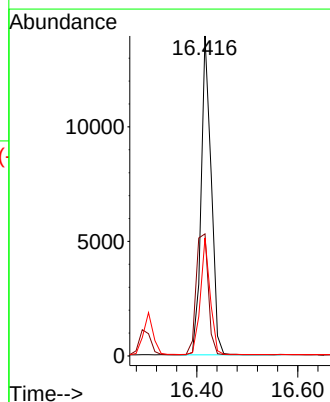
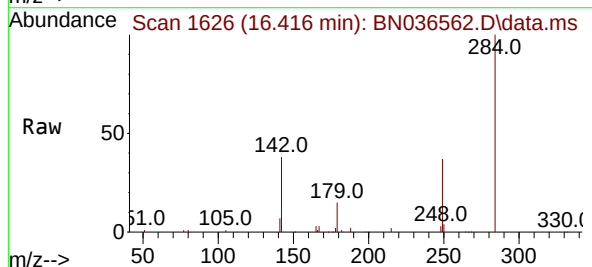
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

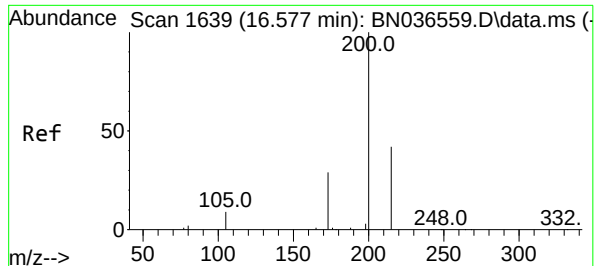
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 98.6  | 73.0  | 109.6 |
| 141     | 59.8  | 68.6  | 103.0 |



#22  
Hexachlorobenzene  
Concen: 3.406 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 46.2  | 37.0  | 55.4  |
| 249     | 35.5  | 28.1  | 42.1  |

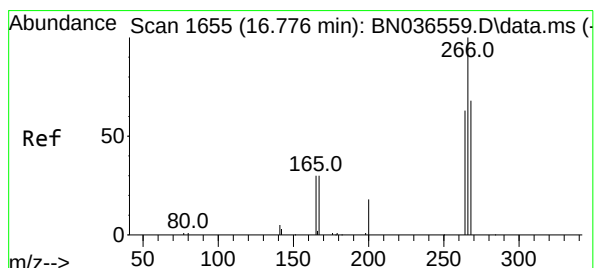
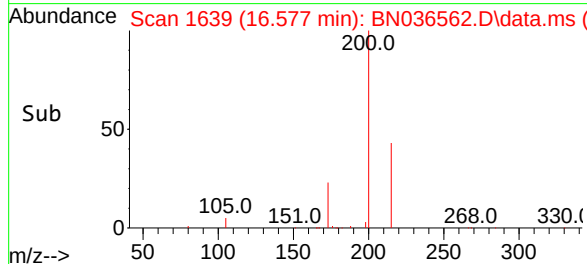
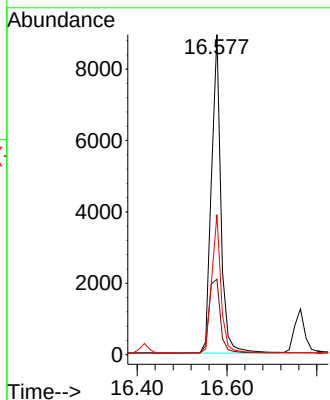
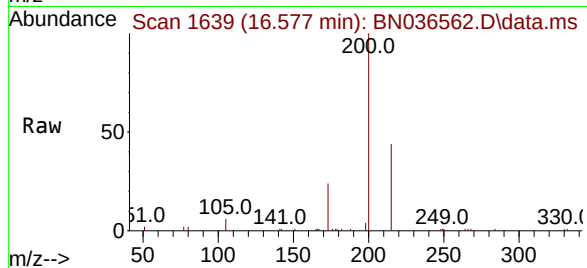




#23  
Atrazine  
Concen: 3.448 ng  
RT: 16.577 min Scan# 1639  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

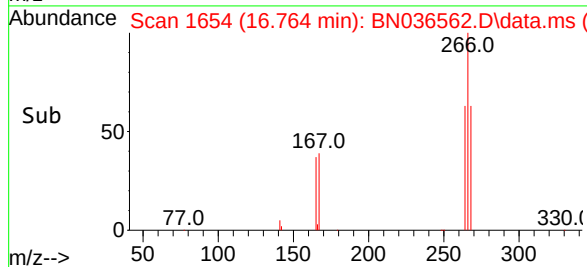
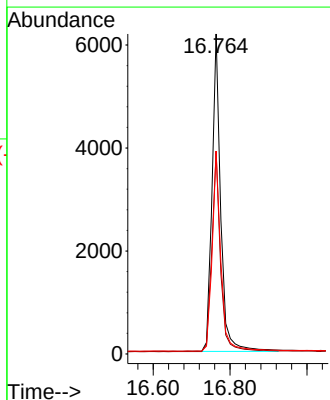
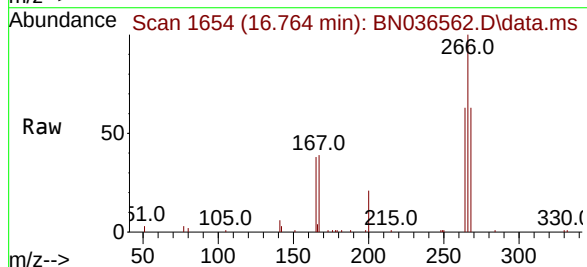
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

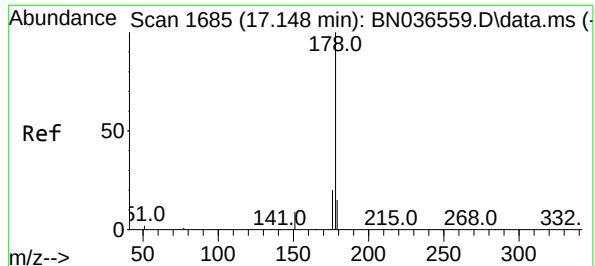
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 200     | 100   |       |       |
| 173     | 23.6  | 27.3  | 40.9# |
| 215     | 43.7  | 36.8  | 55.2  |



#24  
Pentachlorophenol  
Concen: 3.726 ng  
RT: 16.764 min Scan# 1654  
Delta R.T. -0.012 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 63.1  | 49.6  | 74.4  |
| 268     | 63.1  | 50.9  | 76.3  |

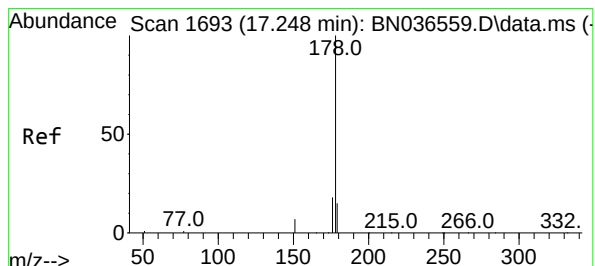
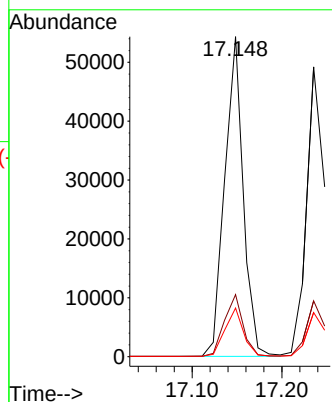
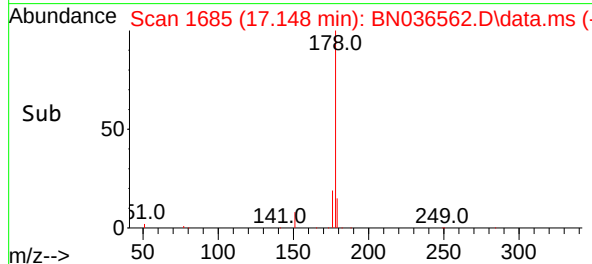
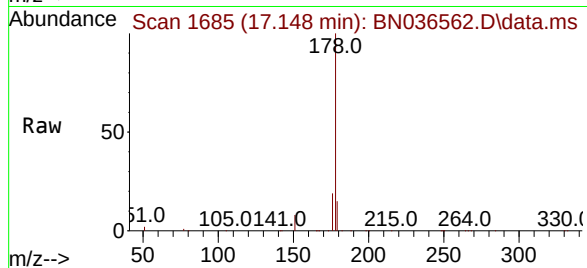




#25  
Phenanthrene  
Concen: 3.468 ng  
RT: 17.148 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

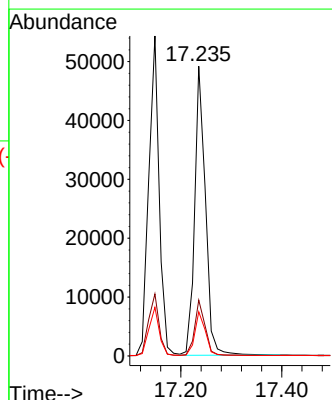
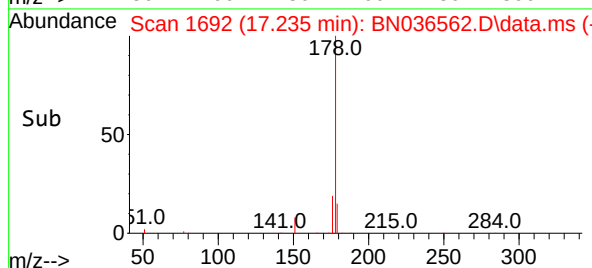
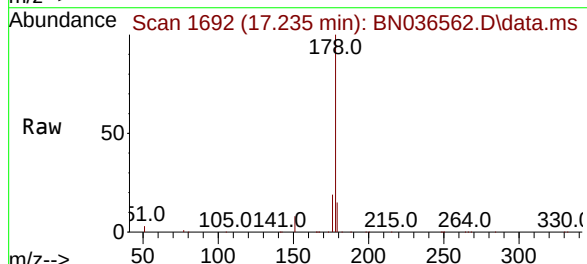
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

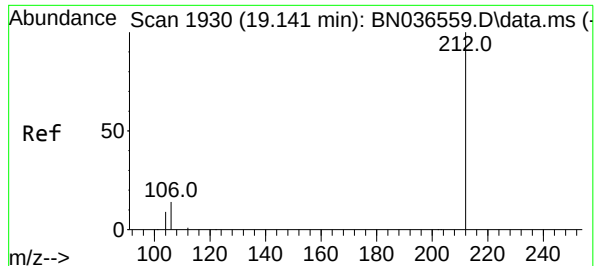
Tgt Ion:178 Resp: 77903  
Ion Ratio Lower Upper  
178 100  
176 19.5 15.9 23.9  
179 15.1 12.2 18.4



#26  
Anthracene  
Concen: 3.590 ng  
RT: 17.235 min Scan# 1692  
Delta R.T. -0.012 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:178 Resp: 72775  
Ion Ratio Lower Upper  
178 100  
176 18.9 15.4 23.2  
179 15.2 12.6 18.8





#27

Fluoranthene-d10

Concen: 3.394 ng

RT: 19.141 min Scan# 1930

Delta R.T. 0.000 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

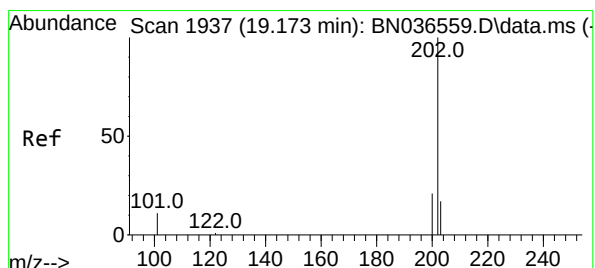
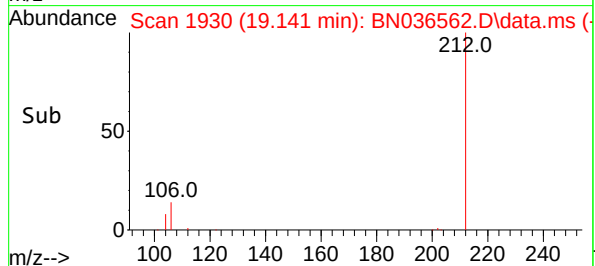
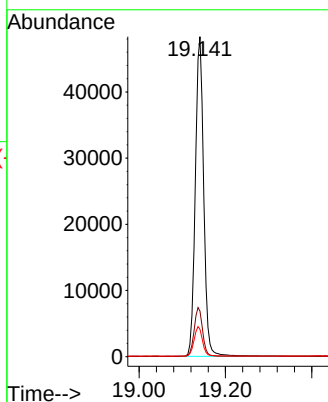
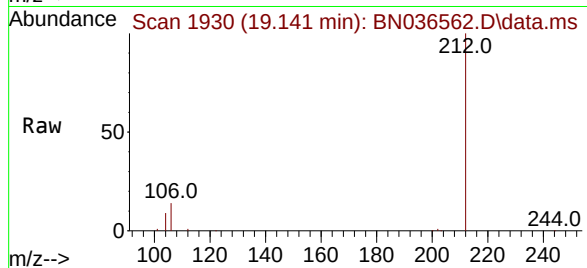
Tgt Ion:212 Resp: 65134

Ion Ratio Lower Upper

212 100

106 15.4 11.8 17.6

104 9.2 7.3 10.9



#28

Fluoranthene

Concen: 3.436 ng

RT: 19.169 min Scan# 1936

Delta R.T. -0.005 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

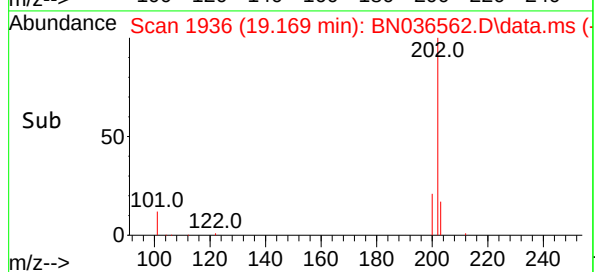
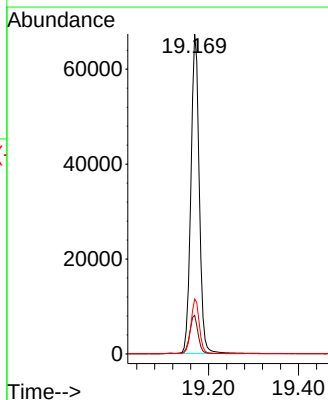
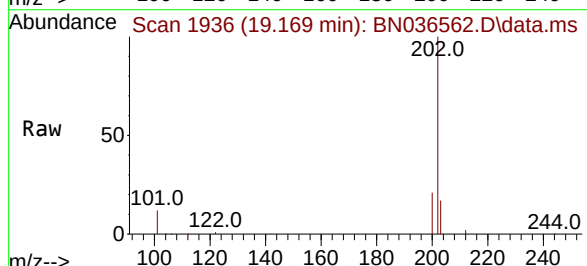
Tgt Ion:202 Resp: 86688

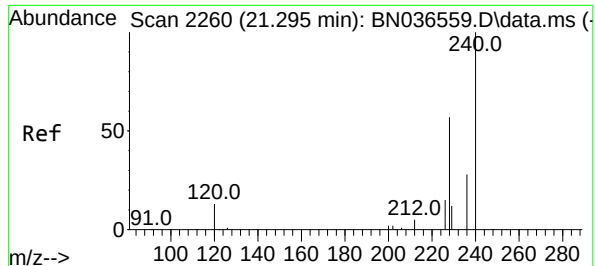
Ion Ratio Lower Upper

202 100

101 12.3 9.4 14.0

203 17.0 13.5 20.3





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.295 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

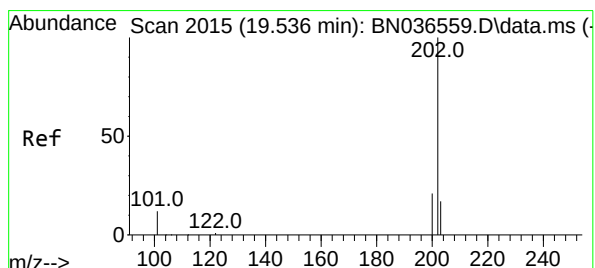
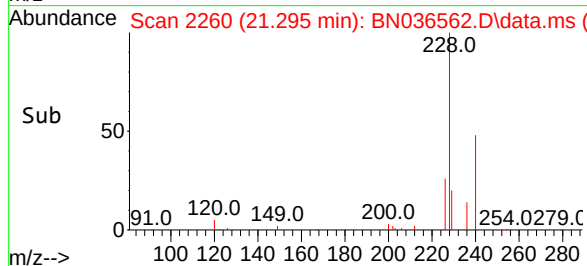
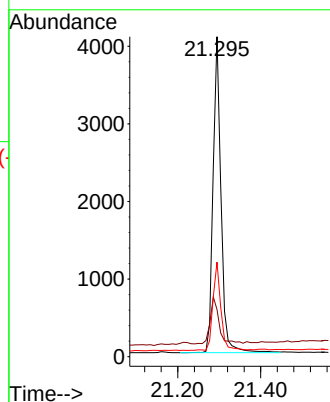
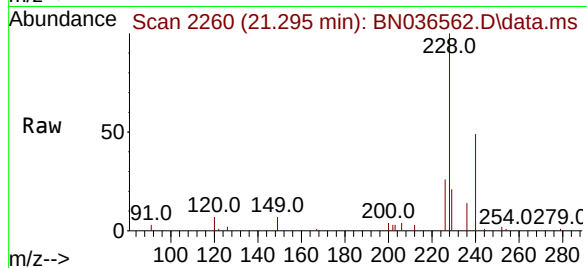
Tgt Ion:240 Resp: 5439

Ion Ratio Lower Upper

240 100

120 14.8 14.6 22.0

236 29.5 24.1 36.1



#30

Pyrene

Concen: 3.260 ng

RT: 19.531 min Scan# 2014

Delta R.T. -0.005 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

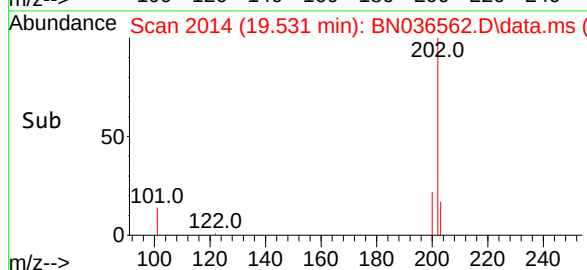
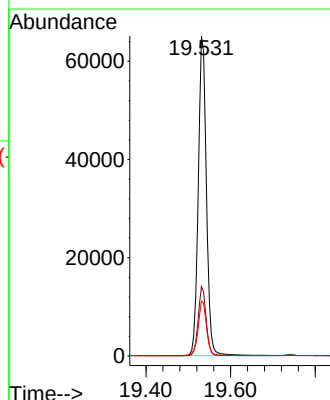
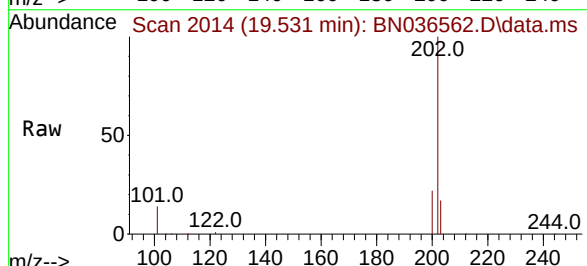
Tgt Ion:202 Resp: 86694

Ion Ratio Lower Upper

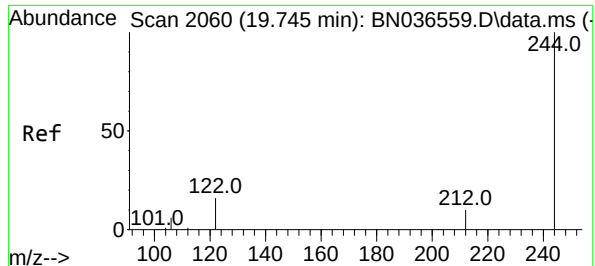
202 100

200 21.4 17.1 25.7

203 17.6 14.1 21.1



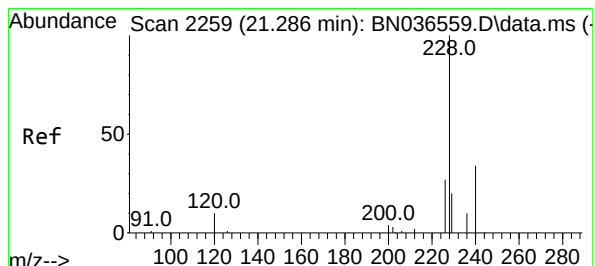
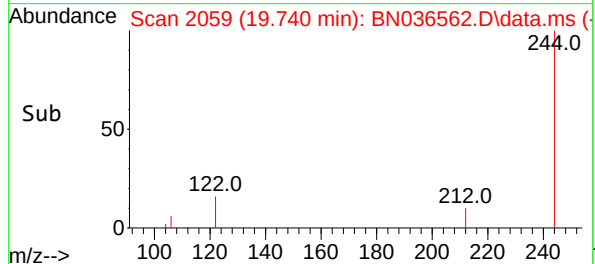
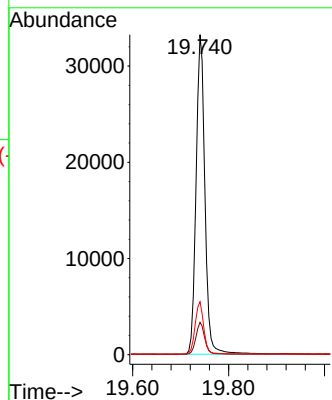
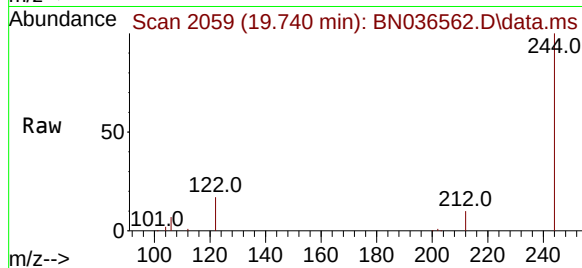




#31  
Terphenyl-d14  
Concen: 3.297 ng  
RT: 19.740 min Scan# 2060  
Delta R.T. -0.005 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

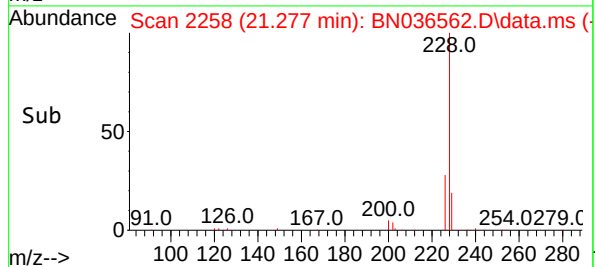
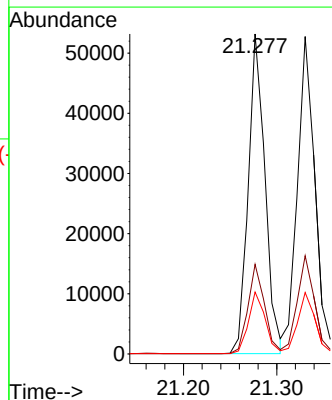
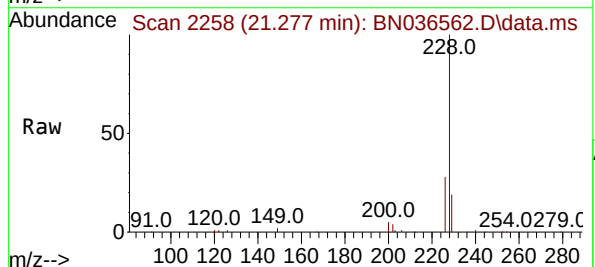
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

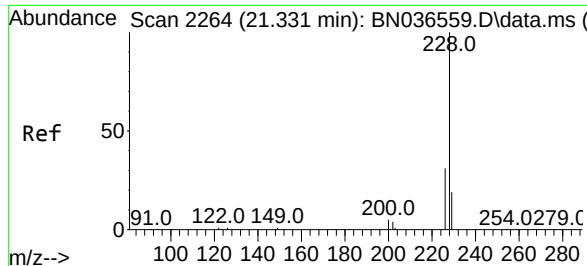
Tgt Ion:244 Resp: 42959  
Ion Ratio Lower Upper  
244 100  
212 10.1 9.6 14.4  
122 16.6 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 3.516 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.009 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:228 Resp: 66496  
Ion Ratio Lower Upper  
228 100  
226 28.0 22.5 33.7  
229 19.4 16.6 25.0





#33

Chrysene

Concen: 3.403 ng

RT: 21.331 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

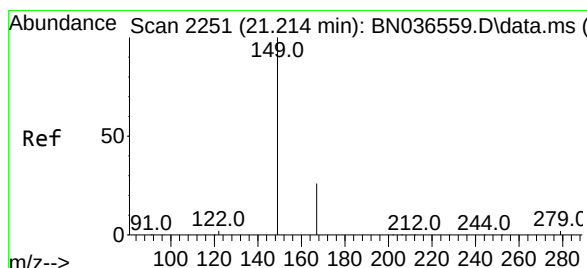
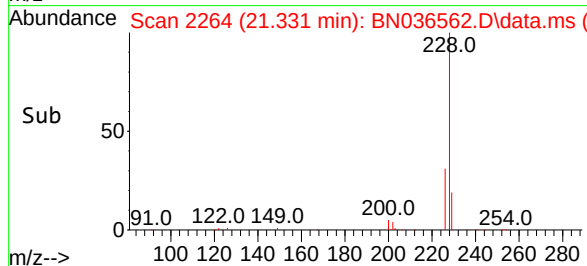
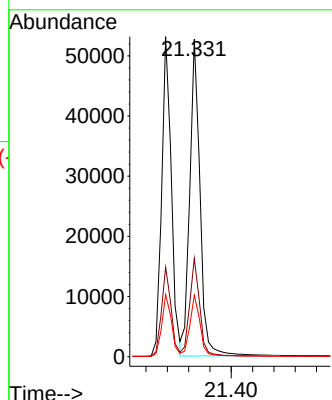
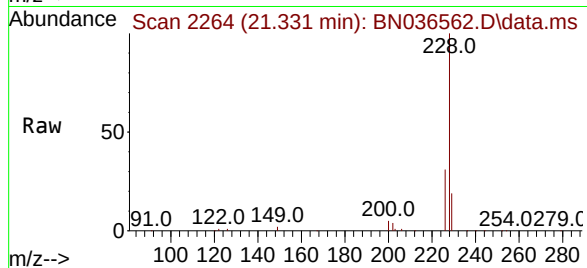
Tgt Ion:228 Resp: 70334

Ion Ratio Lower Upper

228 100

226 31.0 25.3 37.9

229 19.4 15.8 23.8



#34

Bis(2-ethylhexyl)phthalate

Concen: 2.947 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

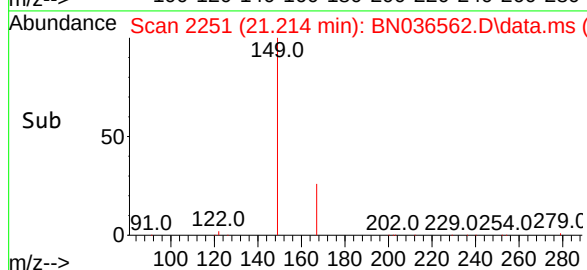
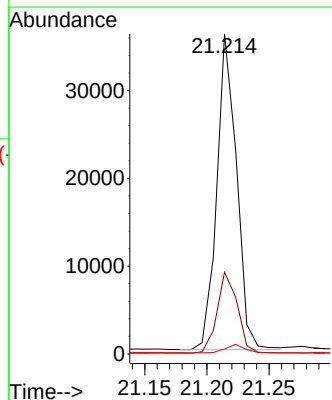
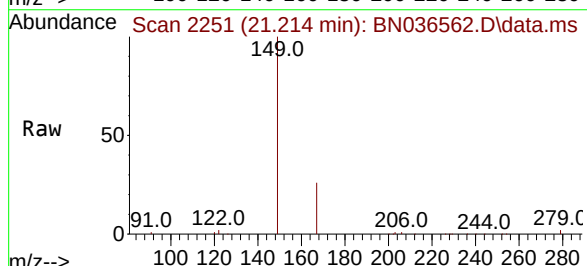
Tgt Ion:149 Resp: 39682

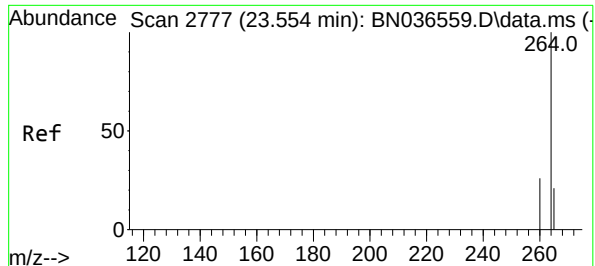
Ion Ratio Lower Upper

149 100

167 26.3 20.7 31.1

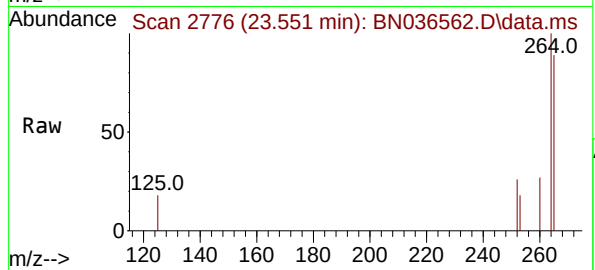
279 2.6 3.6 5.4#



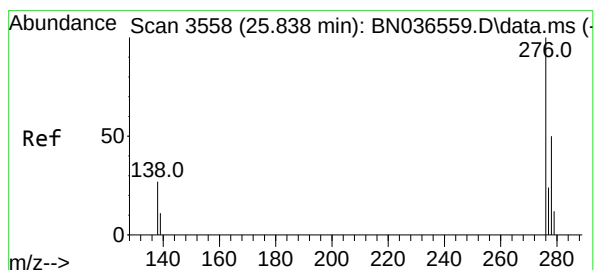
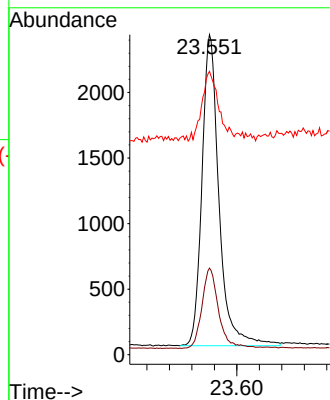
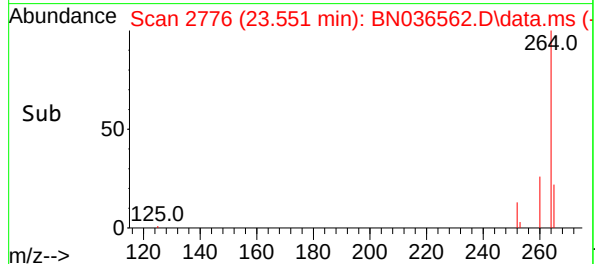


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.551 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

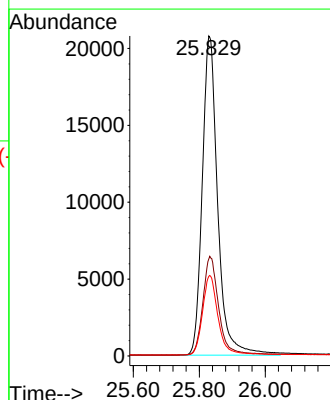
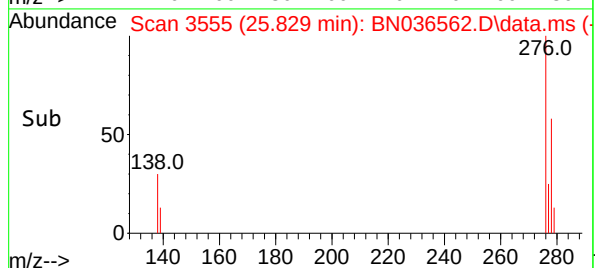
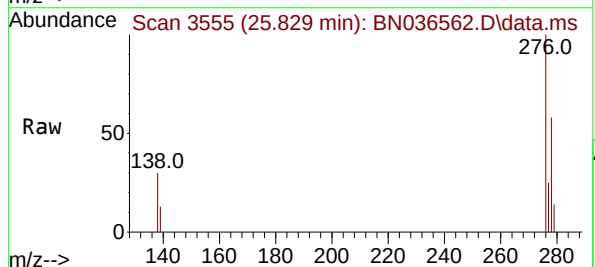


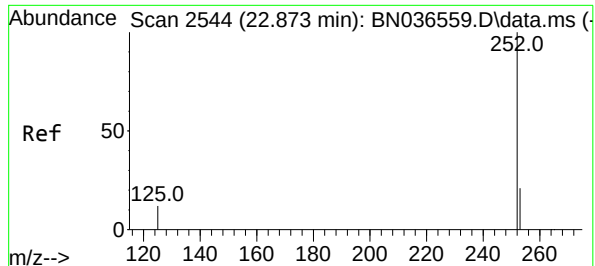
Tgt Ion:264 Resp: 5002  
Ion Ratio Lower Upper  
264 100  
260 27.0 22.6 33.8  
265 88.6 88.1 132.1



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 3.754 ng  
RT: 25.829 min Scan# 3555  
Delta R.T. -0.009 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:276 Resp: 67767  
Ion Ratio Lower Upper  
276 100  
138 31.3 23.4 35.2  
277 24.8 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 3.506 ng

RT: 22.870 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

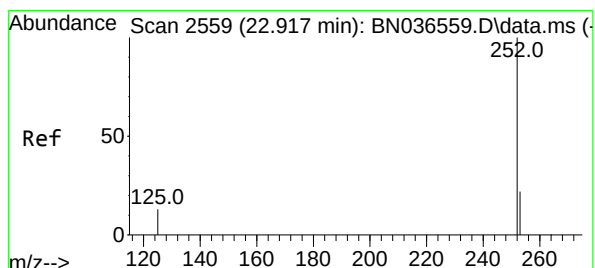
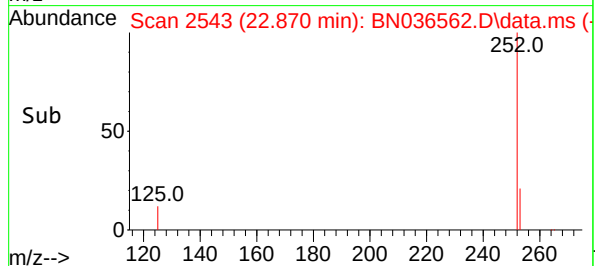
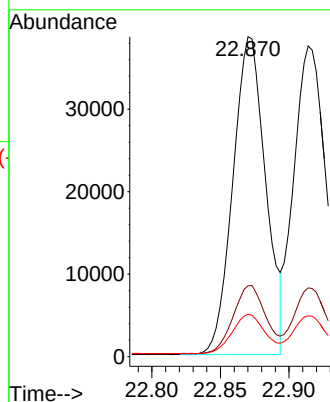
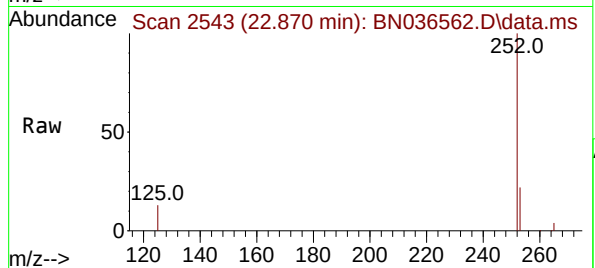
Tgt Ion:252 Resp: 63823

Ion Ratio Lower Upper

252 100

253 22.2 23.9 35.9#

125 13.3 17.4 26.2#



#38

Benzo(k)fluoranthene

Concen: 3.425 ng

RT: 22.914 min Scan# 2558

Delta R.T. -0.003 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

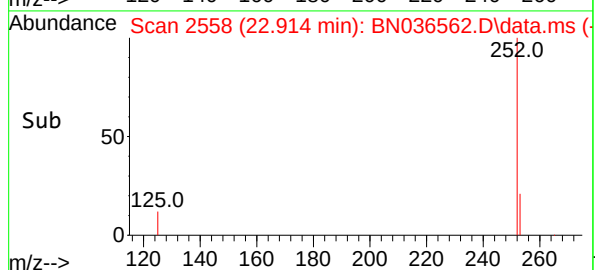
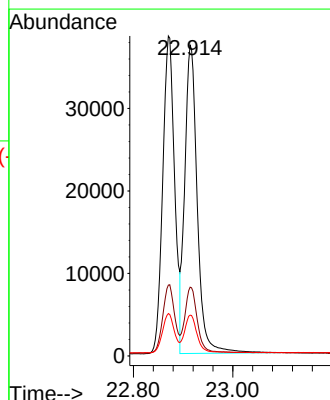
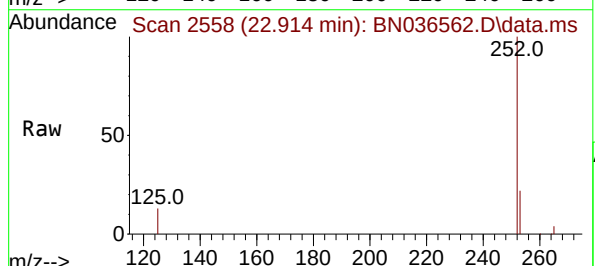
Tgt Ion:252 Resp: 65410

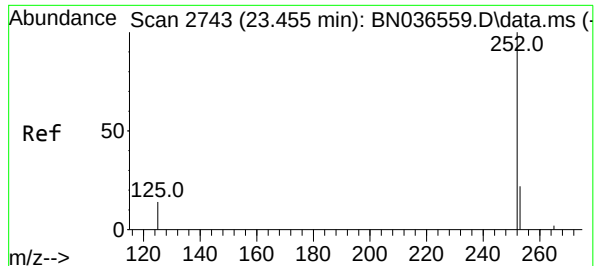
Ion Ratio Lower Upper

252 100

253 22.1 24.6 36.8#

125 13.2 17.8 26.8#





#39

Benzo(a)pyrene

Concen: 3.523 ng

RT: 23.452 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

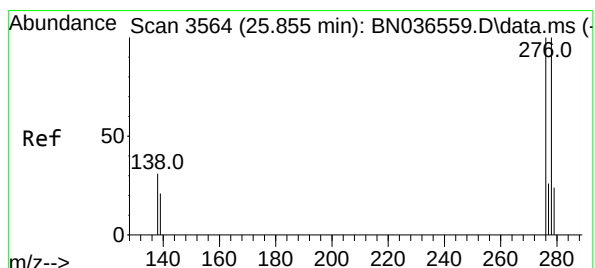
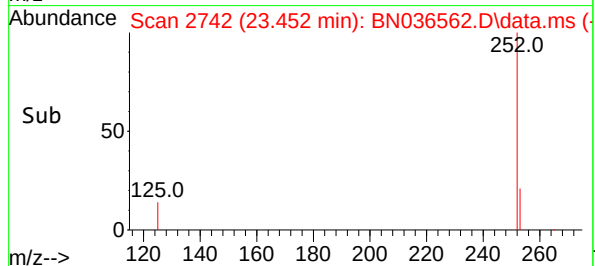
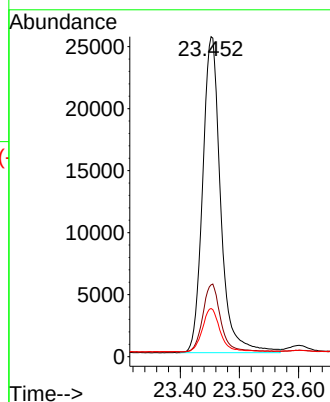
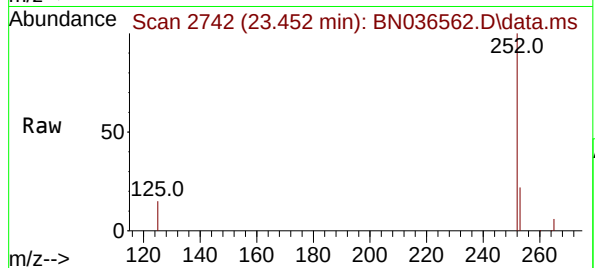
Tgt Ion:252 Resp: 54009

Ion Ratio Lower Upper

252 100

253 22.4 27.8 41.8#

125 15.1 22.7 34.1#



#40

Dibenzo(a,h)anthracene

Concen: 3.846 ng

RT: 25.843 min Scan# 3560

Delta R.T. -0.012 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

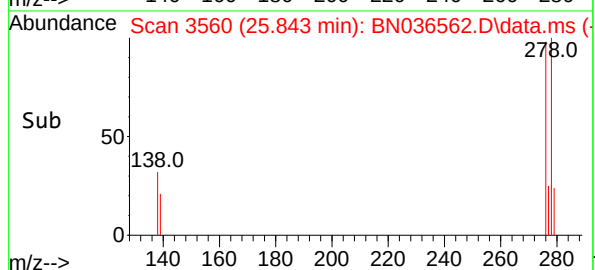
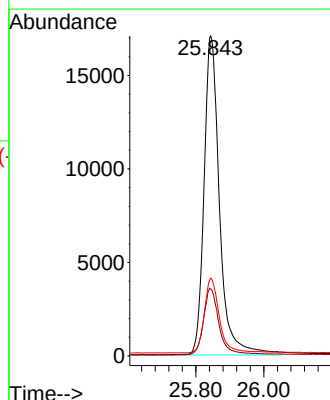
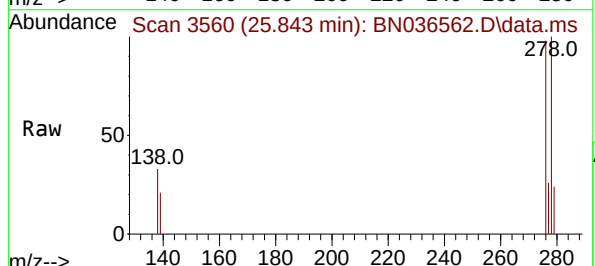
Tgt Ion:278 Resp: 54058

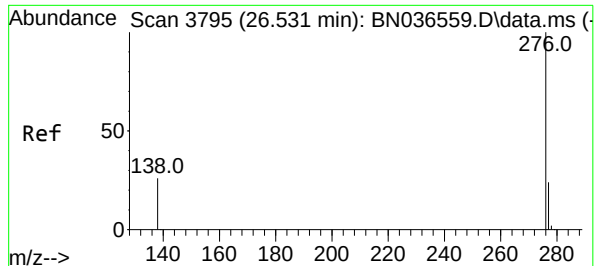
Ion Ratio Lower Upper

278 100

139 20.9 20.8 31.2

279 24.4 28.8 43.2#





#41

Benzo(g,h,i)perylene

Concen: 3.606 ng

RT: 26.528 min Scan# 31

Delta R.T. -0.003 min

Lab File: BN036562.D

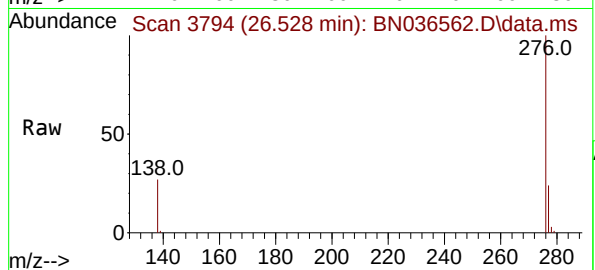
Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2



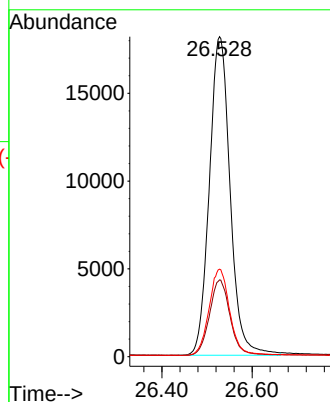
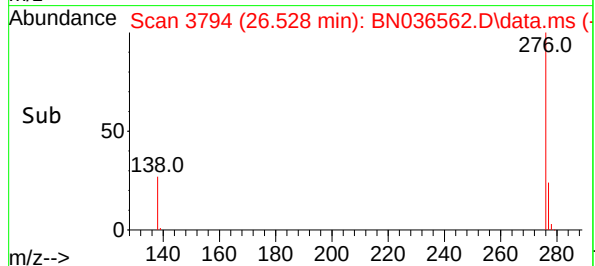
Tgt Ion:276 Resp: 57986

Ion Ratio Lower Upper

276 100

277 24.0 22.2 33.4

138 27.4 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036563.D  
 Acq On : 10 Mar 2025 15:19  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Mar 10 16:03:20 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

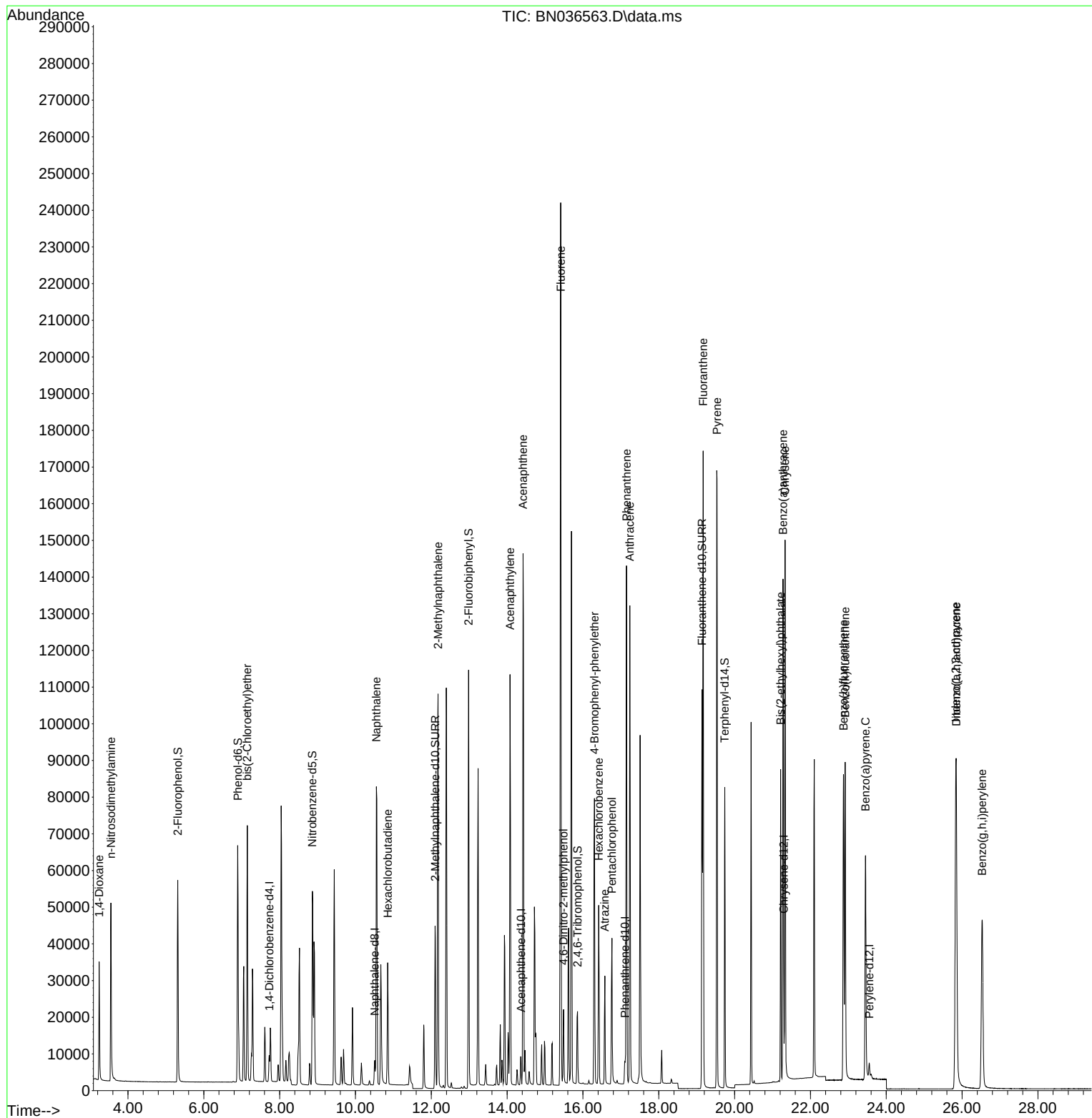
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 3261     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 7995     | 0.400 | ng    | # 0.00   |
| 13) Acenaphthene-d10          | 14.366 | 164  | 4664     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.111 | 188  | 9061     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.295 | 240  | 6472     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.551 | 264  | 5580     | 0.400 | ng    | # 0.00   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 37154    | 4.889 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.894  | 99   | 48085    | 5.122 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.864  | 82   | 41042    | 4.719 | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10   | 12.101 | 152  | 58048    | 4.881 | ng    | -0.01    |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 10964    | 5.181 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.983 | 172  | 141052   | 5.199 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.141 | 212  | 113317   | 4.879 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.740 | 244  | 74923    | 4.832 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.239  | 88   | 16253    | 4.492 | ng    | 97       |
| 3) n-Nitrosodimethylamine     | 3.550  | 42   | 32163    | 4.395 | ng    | # 95     |
| 6) bis(2-Chloroethyl)ether    | 7.146  | 93   | 44986    | 4.636 | ng    | 99       |
| 9) Naphthalene                | 10.551 | 128  | 109289   | 4.647 | ng    | 97       |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 25105    | 4.535 | ng    | # 99     |
| 12) 2-Methylnaphthalene       | 12.177 | 142  | 73010    | 4.879 | ng    | 98       |
| 16) Acenaphthylene            | 14.077 | 152  | 112792   | 5.125 | ng    | 99       |
| 17) Acenaphthene              | 14.420 | 154  | 72446    | 5.028 | ng    | 96       |
| 18) Fluorene                  | 15.414 | 166  | 96215    | 4.937 | ng    | 97       |
| 20) 4,6-Dinitro-2-methylph... | 15.489 | 198  | 12627    | 4.968 | ng    | # 56     |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248  | 28657    | 5.048 | ng    | # 81     |
| 22) Hexachlorobenzene         | 16.416 | 284  | 32686    | 4.770 | ng    | 99       |
| 23) Atrazine                  | 16.577 | 200  | 22705    | 4.988 | ng    | # 90     |
| 24) Pentachlorophenol         | 16.764 | 266  | 17612    | 5.634 | ng    | 99       |
| 25) Phenanthrene              | 17.148 | 178  | 135347   | 4.979 | ng    | 100      |
| 26) Anthracene                | 17.235 | 178  | 125954   | 5.135 | ng    | 99       |
| 28) Fluoranthene              | 19.169 | 202  | 149107   | 4.883 | ng    | 99       |
| 30) Pyrene                    | 19.536 | 202  | 148584   | 4.695 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.277 | 228  | 114481   | 5.087 | ng    | 98       |
| 33) Chrysene                  | 21.331 | 228  | 117149   | 4.764 | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 70345    | 4.390 | ng    | # 99     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.835 | 276  | 109561   | 5.440 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.873 | 252  | 104498   | 5.146 | ng    | # 84     |
| 38) Benzo(k)fluoranthene      | 22.917 | 252  | 106995   | 5.022 | ng    | # 82     |
| 39) Benzo(a)pyrene            | 23.452 | 252  | 88413    | 5.170 | ng    | # 76     |
| 40) Dibenzo(a,h)anthracene    | 25.846 | 278  | 87308    | 5.568 | ng    | # 84     |
| 41) Benzo(g,h,i)perylene      | 26.531 | 276  | 93067    | 5.189 | ng    | 93       |
| -----                         |        |      |          |       |       |          |

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

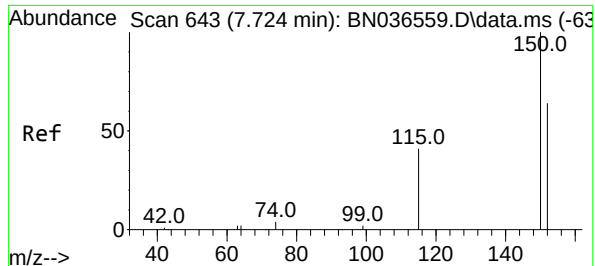
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Data File : BN036563.D  
Acq On : 10 Mar 2025 15:19  
Operator : RC/JU  
Sample : SSTDICC5.0  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Quant Time: Mar 10 16:03:20 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration



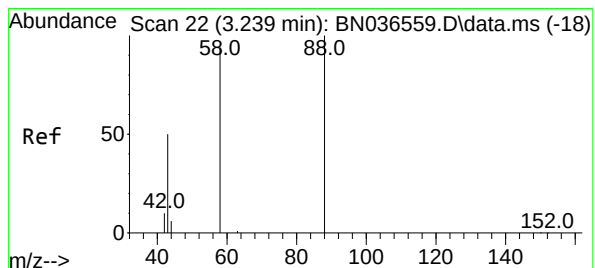
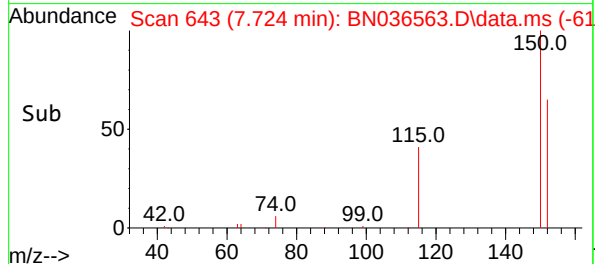
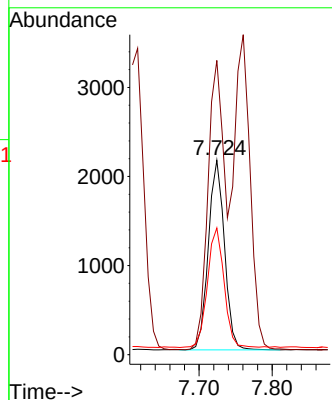
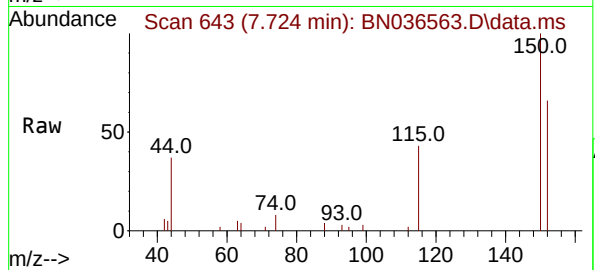




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

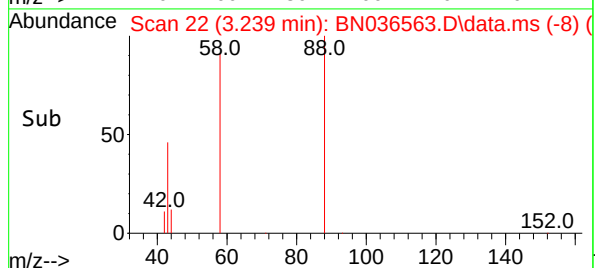
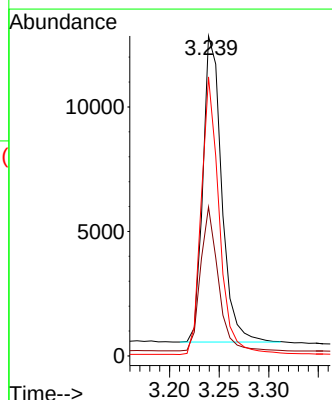
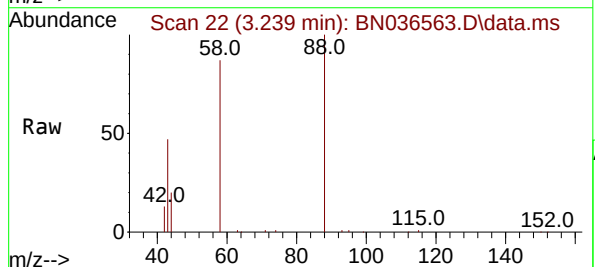
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

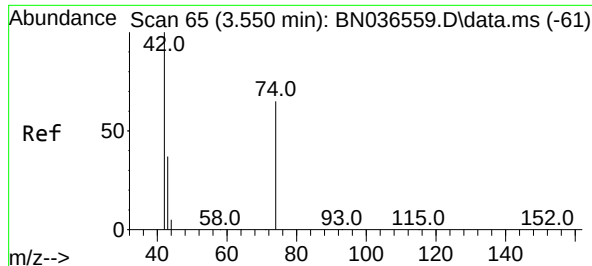
Tgt Ion:152 Resp: 3261  
Ion Ratio Lower Upper  
152 100  
150 151.3 123.7 185.5  
115 65.2 54.3 81.5



#2  
1,4-Dioxane  
Concen: 4.492 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion: 88 Resp: 16253  
Ion Ratio Lower Upper  
88 100  
43 44.3 37.8 56.8  
58 86.4 67.4 101.2

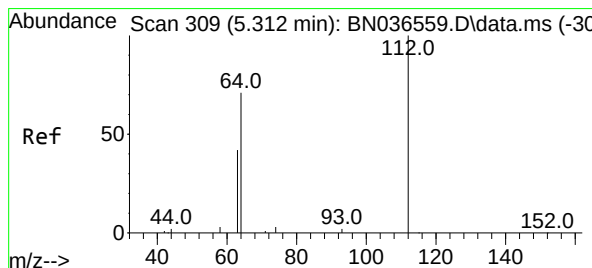
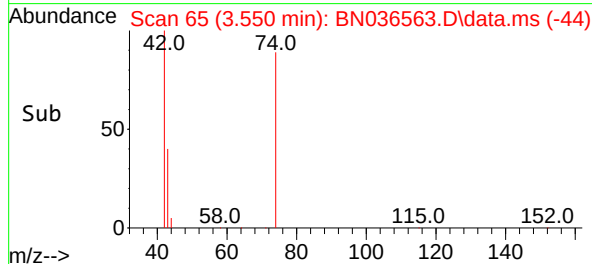
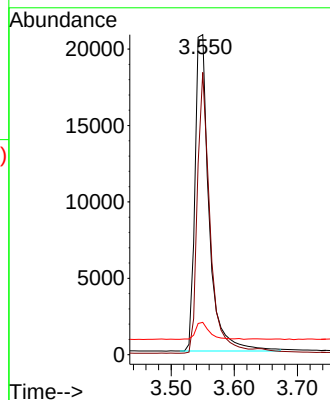
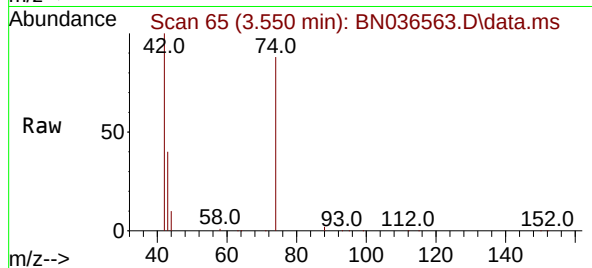




#3  
n-Nitrosodimethylamine  
Concen: 4.395 ng  
RT: 3.550 min Scan# 61  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

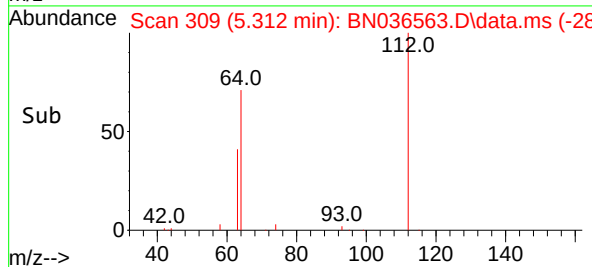
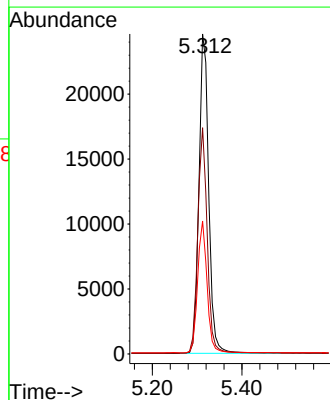
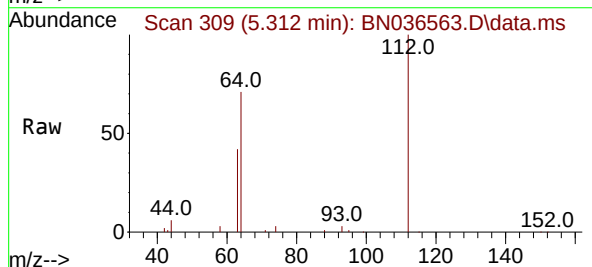
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

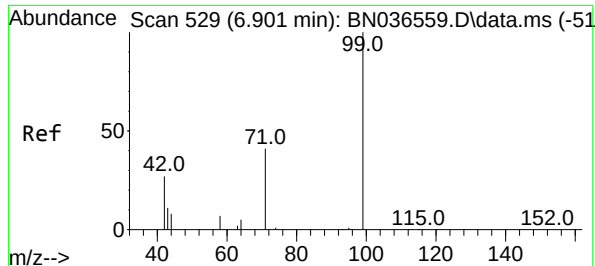
Tgt Ion: 42 Resp: 32163  
Ion Ratio Lower Upper  
42 100  
74 79.9 60.6 90.8  
44 5.3 6.3 9.5#



#4  
2-Fluorophenol  
Concen: 4.889 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion: 112 Resp: 37154  
Ion Ratio Lower Upper  
112 100  
64 68.5 53.1 79.7  
63 40.1 31.8 47.8

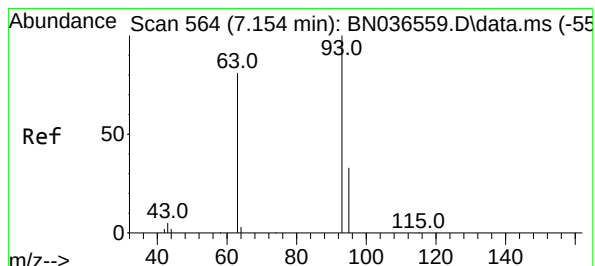
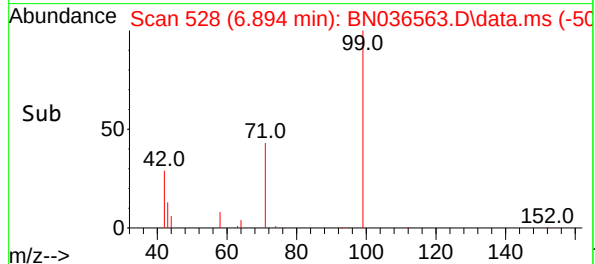
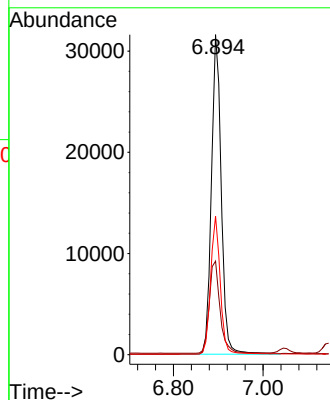
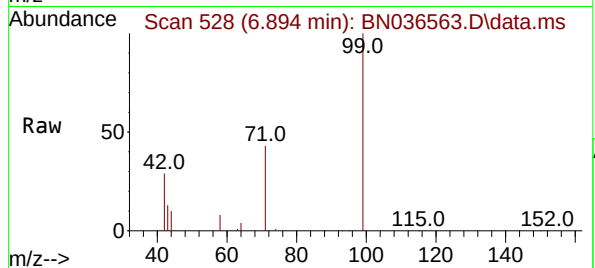




#5  
Phenol-d6  
Concen: 5.122 ng  
RT: 6.894 min Scan# 51  
Delta R.T. -0.007 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

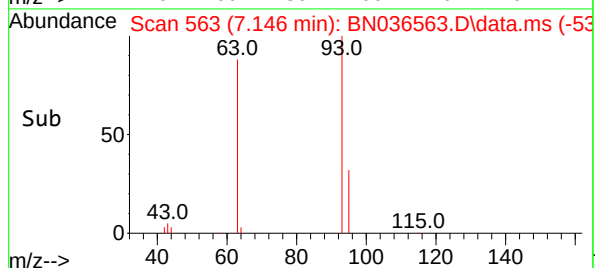
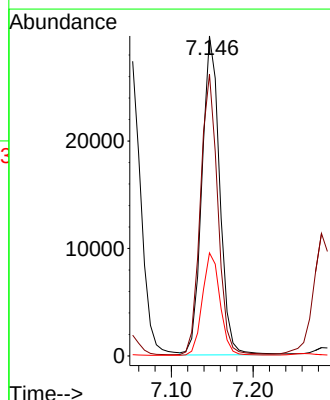
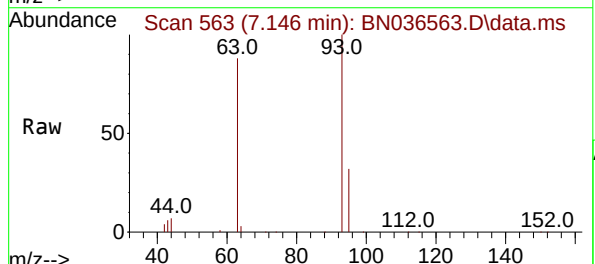
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

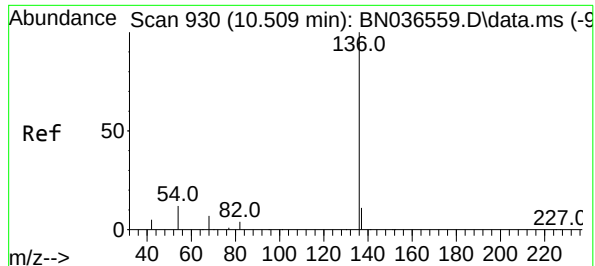
Tgt Ion: 99 Resp: 48085  
Ion Ratio Lower Upper  
99 100  
42 31.8 26.5 39.7  
71 42.6 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 4.636 ng  
RT: 7.146 min Scan# 563  
Delta R.T. -0.007 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion: 93 Resp: 44986  
Ion Ratio Lower Upper  
93 100  
63 85.8 67.7 101.5  
95 32.0 25.6 38.4

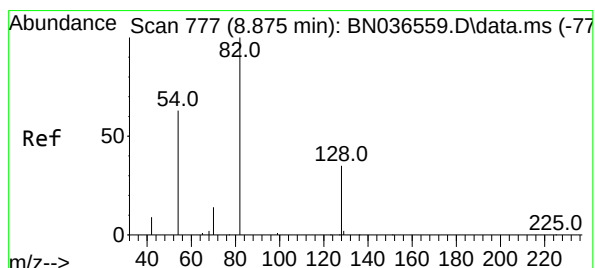
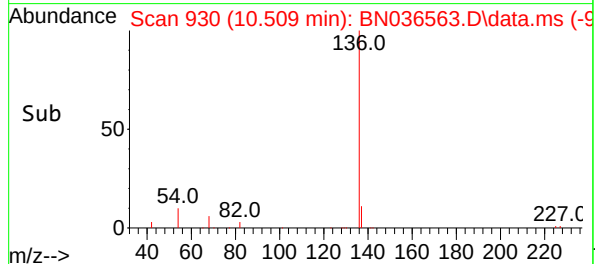
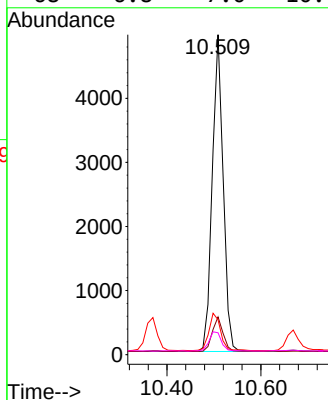
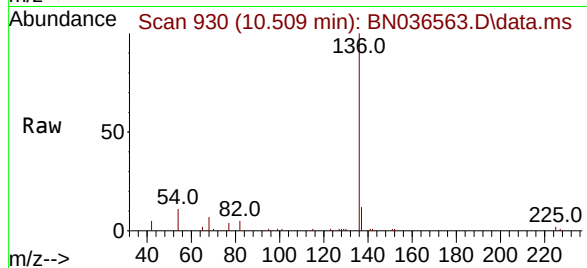




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

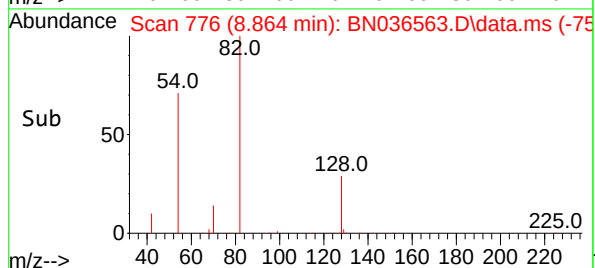
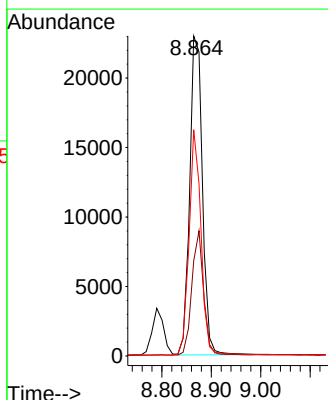
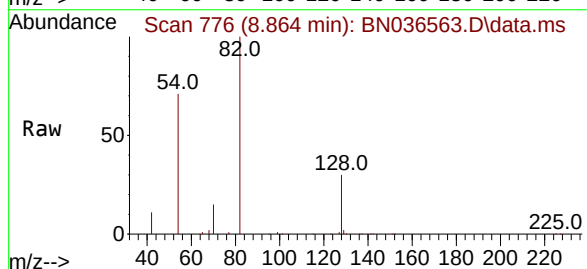
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

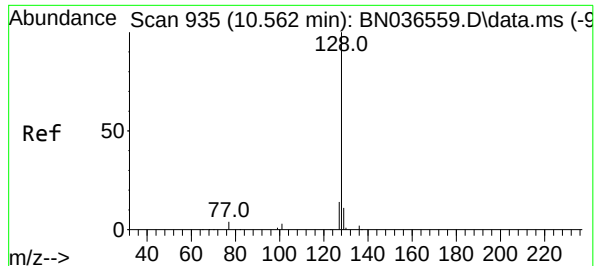
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 7995  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.8  | 10.3  | 15.5  |
| 54       | 10.9  | 11.5  | 17.3# |
| 68       | 6.8   | 7.0   | 10.4# |



#8  
Nitrobenzene-d5  
Concen: 4.719 ng  
RT: 8.864 min Scan# 776  
Delta R.T. -0.011 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 41042 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 29.7  | 30.6  | 45.8# |
| 54       | 70.7  | 52.2  | 78.4  |

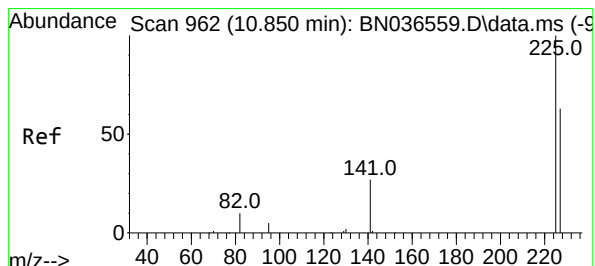
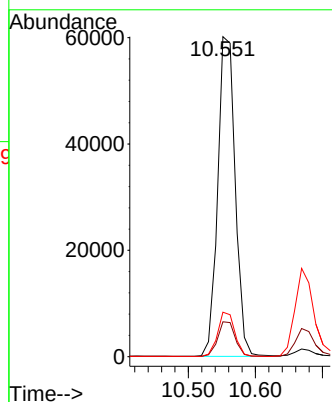
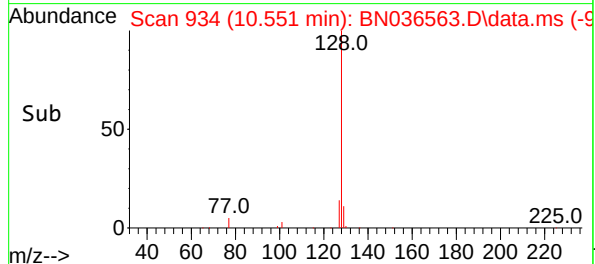
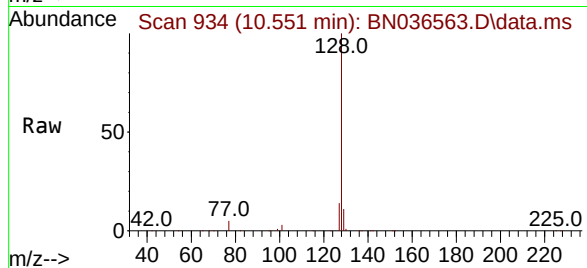




#9  
Naphthalene  
Concen: 4.647 ng  
RT: 10.551 min Scan# 91  
Delta R.T. -0.011 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

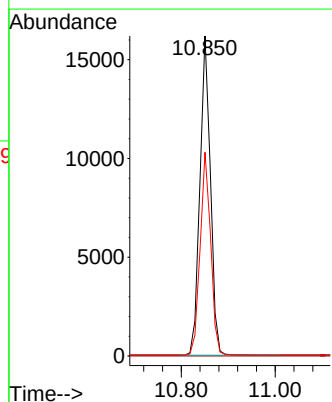
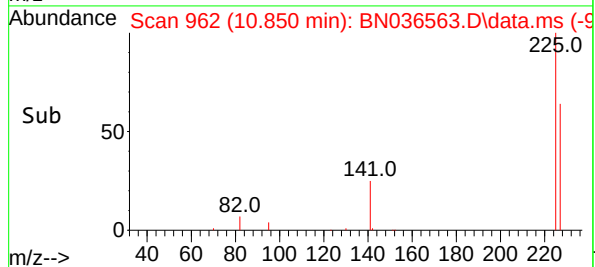
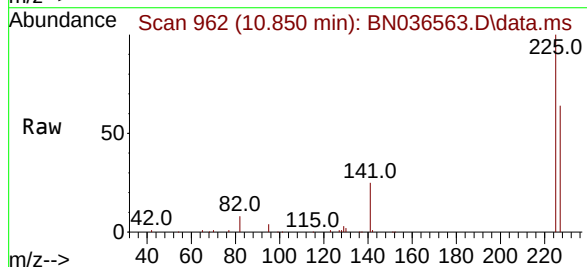
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

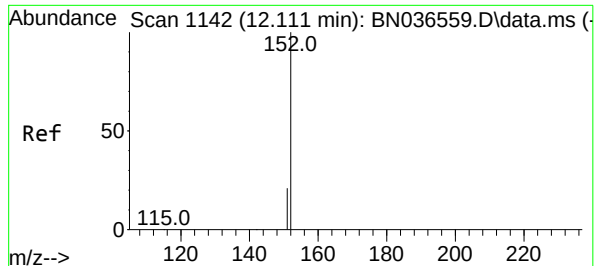
Tgt Ion:128 Resp: 109289  
Ion Ratio Lower Upper  
128 100  
129 10.9 9.8 14.6  
127 13.9 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 4.535 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:225 Resp: 25105  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.8 77.8

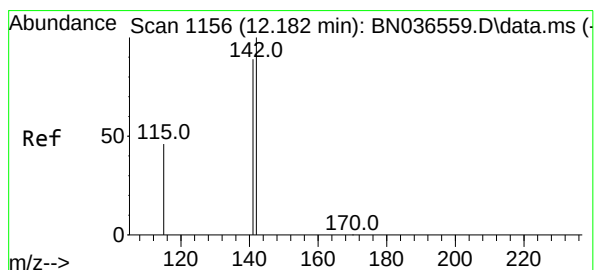
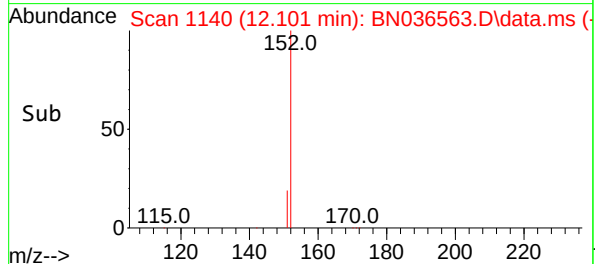
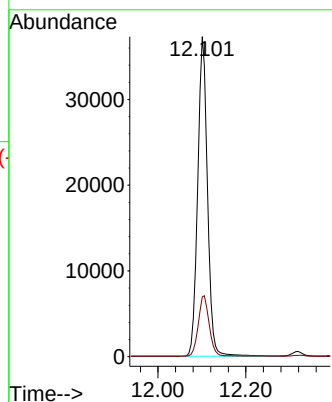
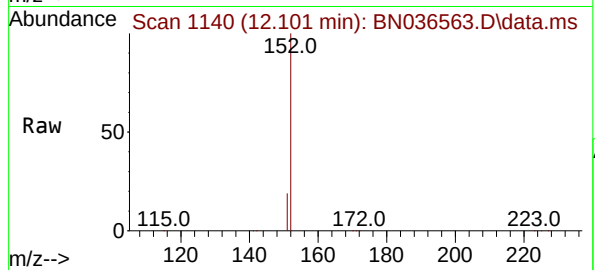




#11  
2-Methylnaphthalene-d10  
Concen: 4.881 ng  
RT: 12.101 min Scan# 1142  
Delta R.T. -0.010 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

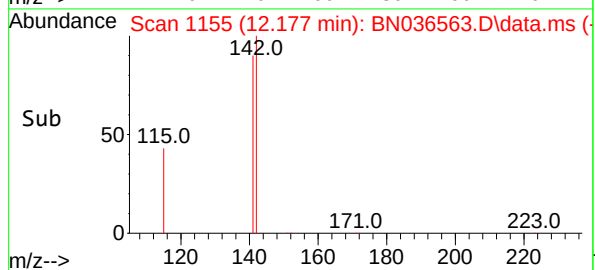
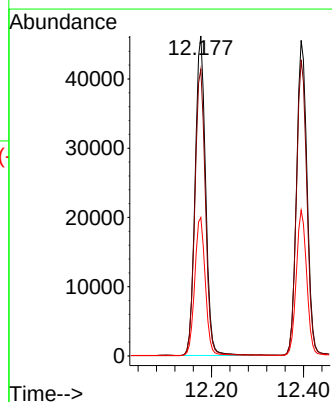
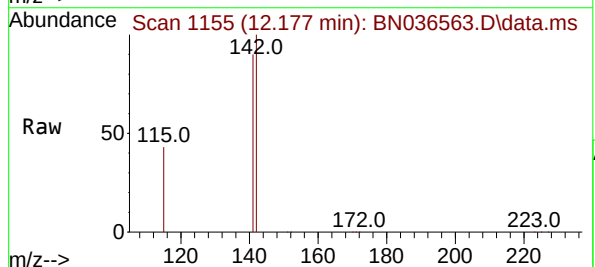
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

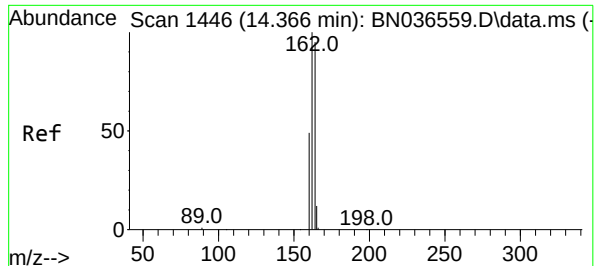
Tgt Ion:152 Resp: 58048  
Ion Ratio Lower Upper  
152 100  
151 21.2 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 4.879 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:142 Resp: 73010  
Ion Ratio Lower Upper  
142 100  
141 89.6 71.7 107.5  
115 43.2 38.3 57.5

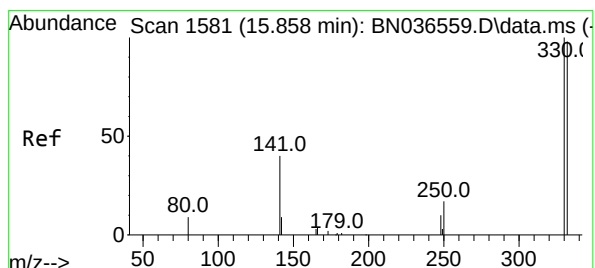
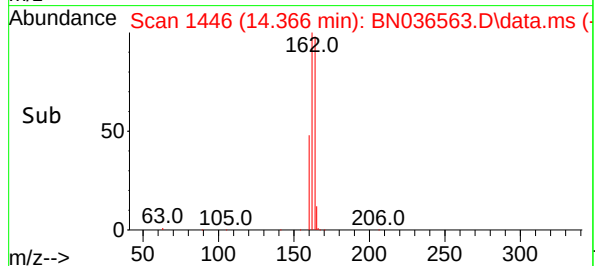
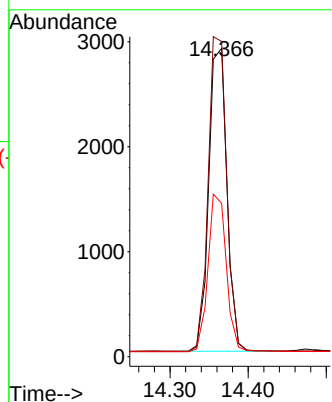
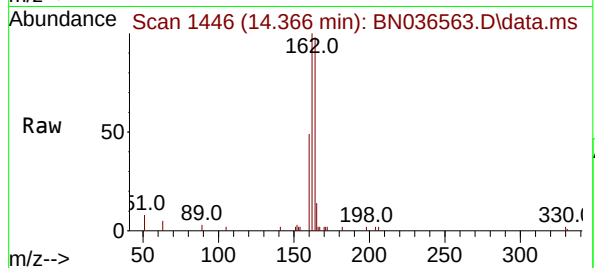




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.366 min Scan# 1446  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

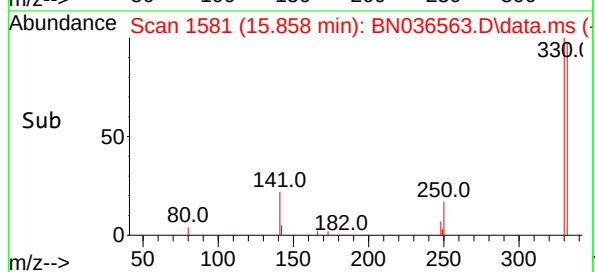
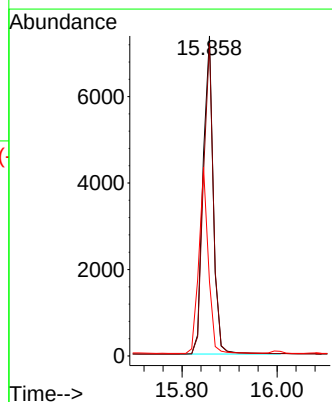
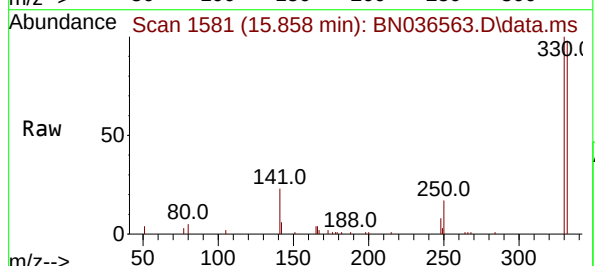
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

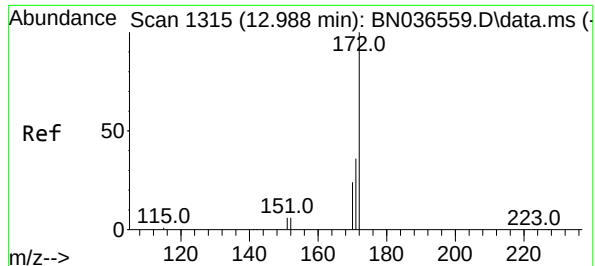
Tgt Ion:164 Resp: 4664  
Ion Ratio Lower Upper  
164 100  
162 102.2 84.2 126.2  
160 49.7 42.2 63.2



#14  
2,4,6-Tribromophenol  
Concen: 5.181 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:330 Resp: 10964  
Ion Ratio Lower Upper  
330 100  
332 95.9 75.2 112.8  
141 54.7 43.4 65.2

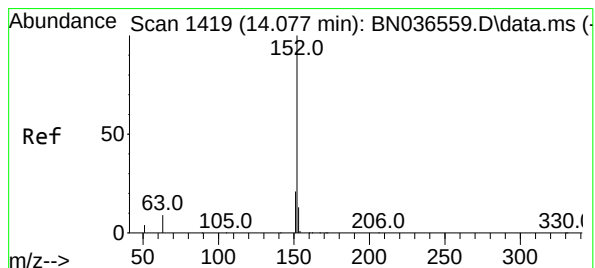
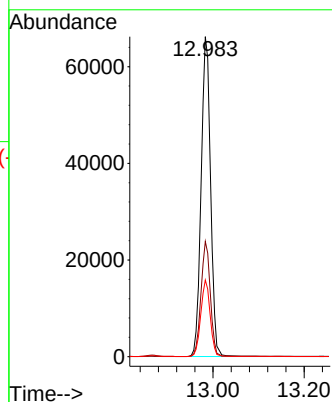
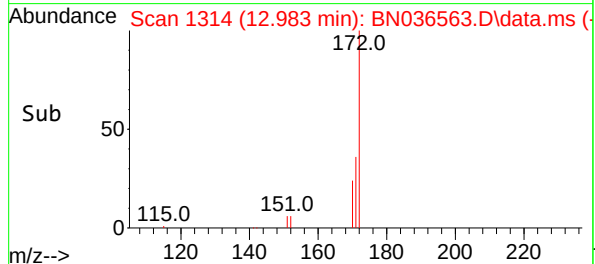
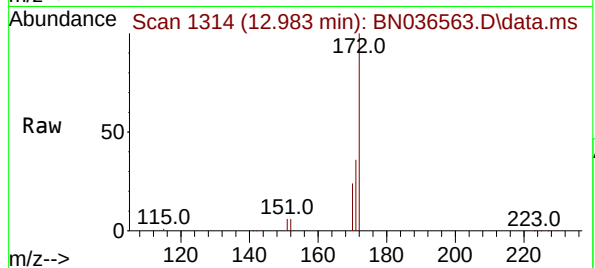




#15  
2-Fluorobiphenyl  
Concen: 5.199 ng  
RT: 12.983 min Scan# 1314  
Delta R.T. -0.005 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

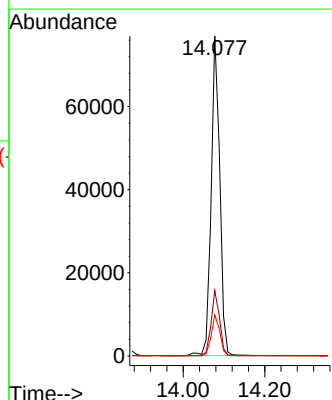
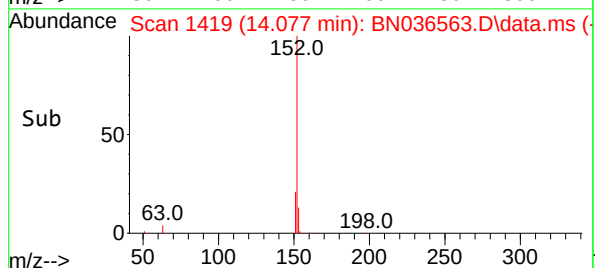
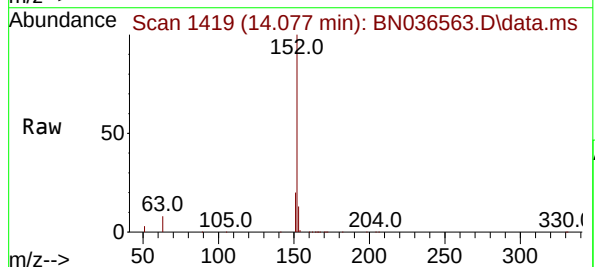
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Tgt Ion:172 Resp: 141052  
Ion Ratio Lower Upper  
172 100  
171 36.0 29.5 44.3  
170 24.0 20.2 30.4

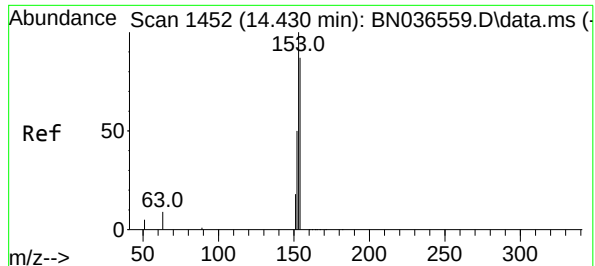


#16  
Acenaphthylene  
Concen: 5.125 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:152 Resp: 112792  
Ion Ratio Lower Upper  
152 100  
151 20.0 16.2 24.4  
153 12.8 10.6 15.8



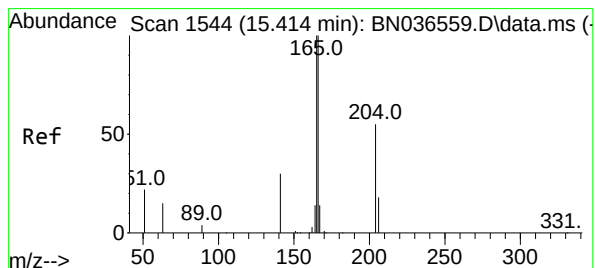
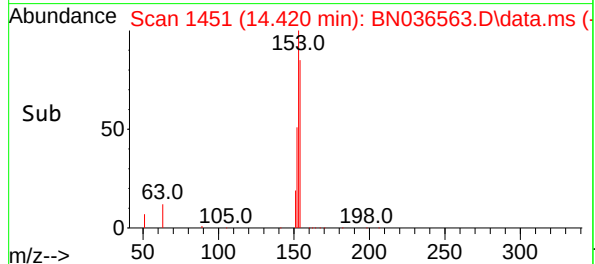
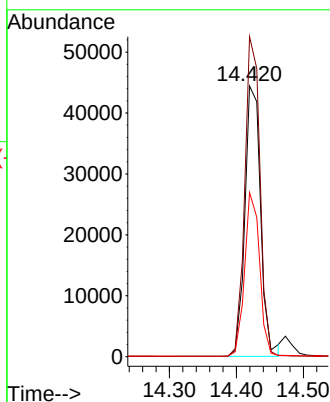
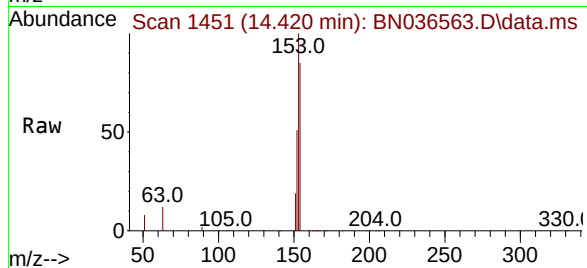




#17  
Acenaphthene  
Concen: 5.028 ng  
RT: 14.420 min Scan# 1451  
Delta R.T. -0.011 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

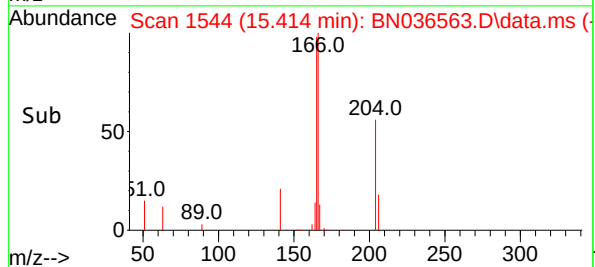
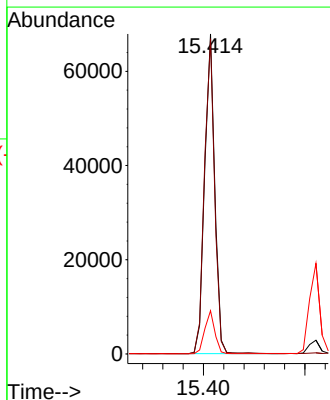
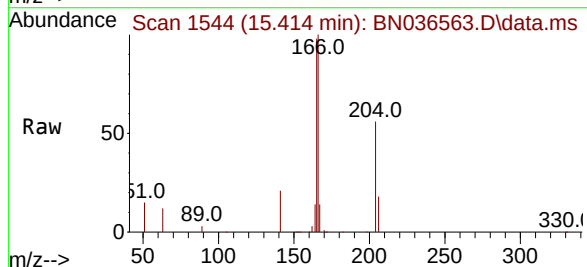
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

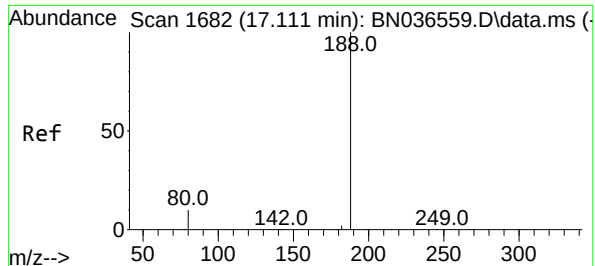
Tgt Ion:154 Resp: 72446  
Ion Ratio Lower Upper  
154 100  
153 114.1 94.1 141.1  
152 57.7 49.8 74.6



#18  
Fluorene  
Concen: 4.937 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:166 Resp: 96215  
Ion Ratio Lower Upper  
166 100  
165 96.5 79.8 119.8  
167 13.0 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

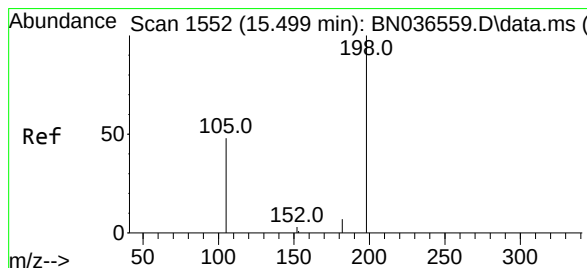
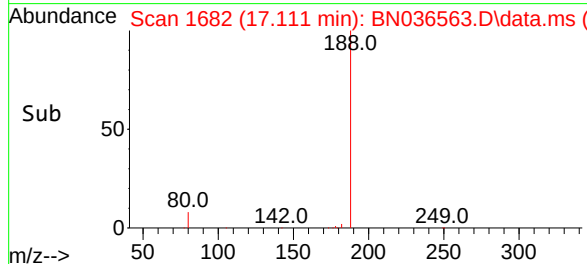
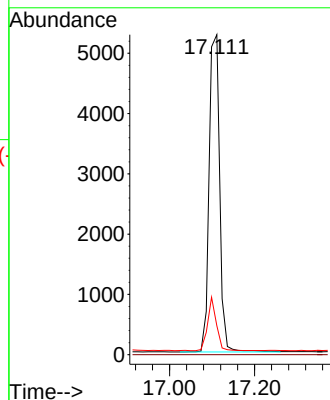
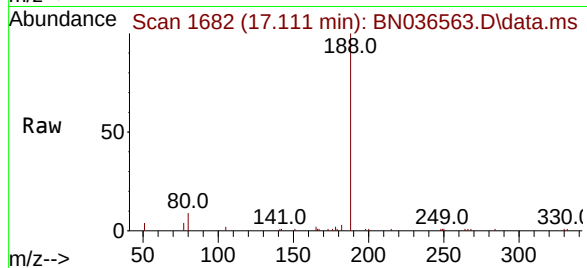
Tgt Ion:188 Resp: 9061

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.1 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 4.968 ng

RT: 15.489 min Scan# 1551

Delta R.T. -0.010 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

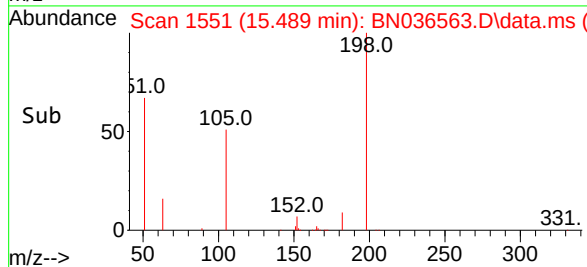
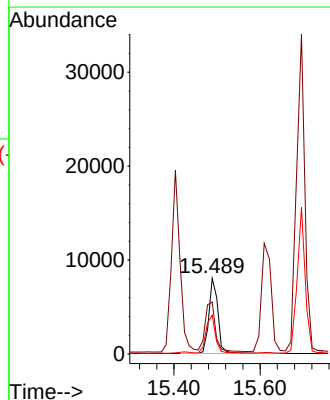
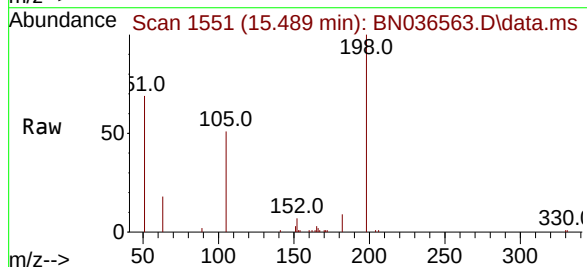
Tgt Ion:198 Resp: 12627

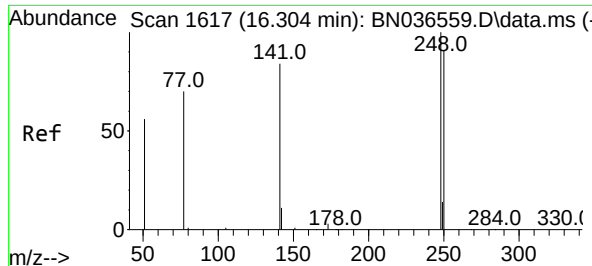
Ion Ratio Lower Upper

198 100

51 68.9 107.9 161.9#

105 51.3 56.2 84.2#

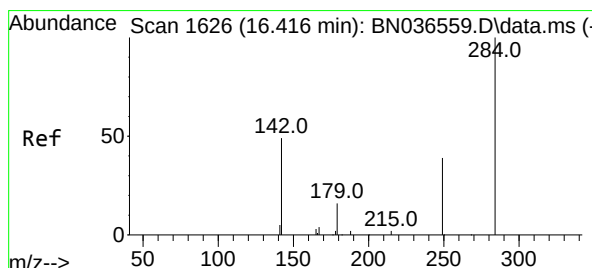
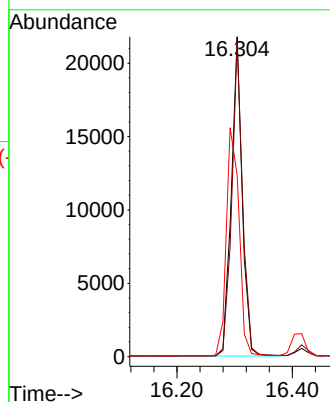
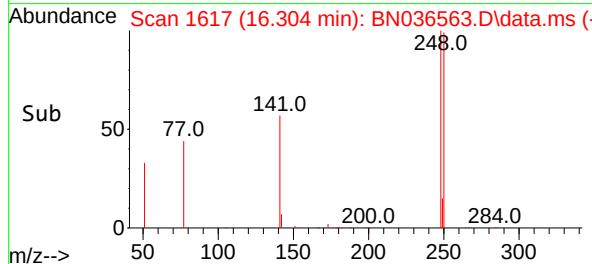
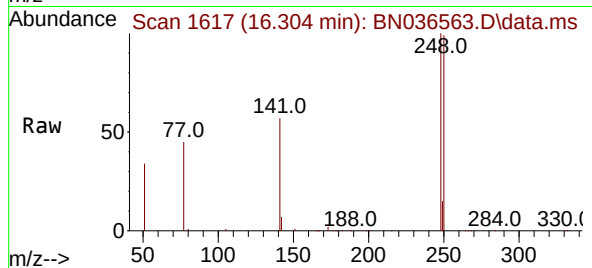




#21  
4-Bromophenyl-phenylether  
Concen: 5.048 ng  
RT: 16.304 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

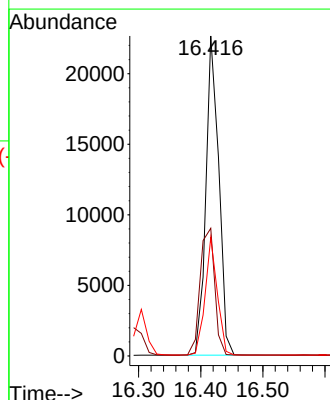
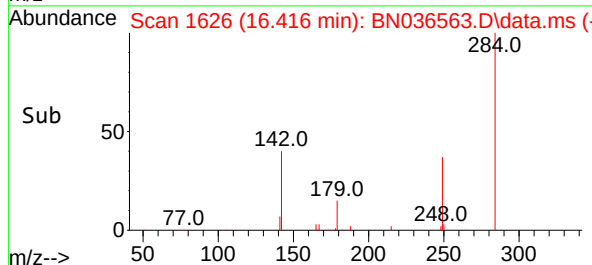
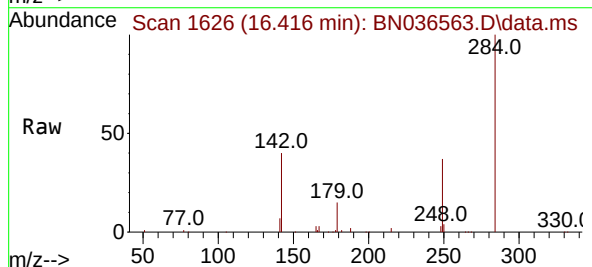
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

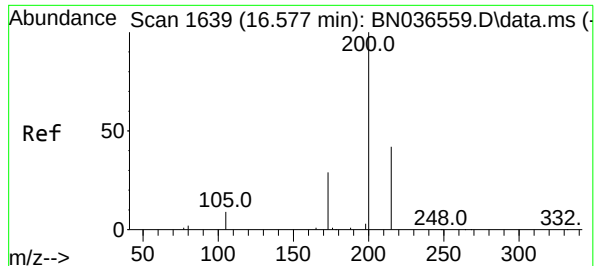
| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 248     | 100   |       |        |
| 250     | 98.6  | 73.0  | 109.6  |
| 141     | 56.7  | 68.6  | 103.0# |



#22  
Hexachlorobenzene  
Concen: 4.770 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 45.1  | 37.0  | 55.4  |
| 249     | 35.1  | 28.1  | 42.1  |





#23

Atrazine

Concen: 4.988 ng

RT: 16.577 min Scan# 1639

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

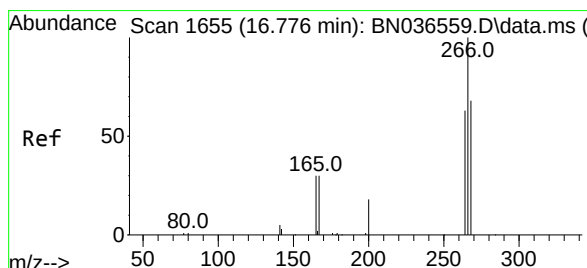
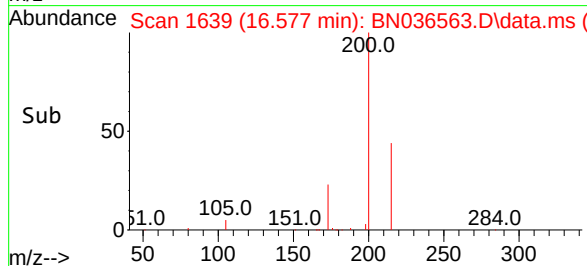
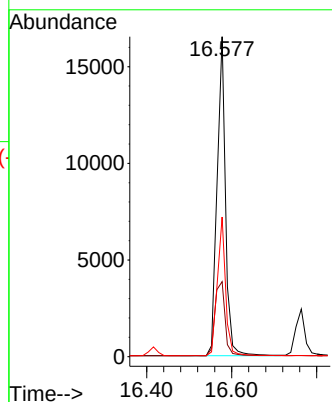
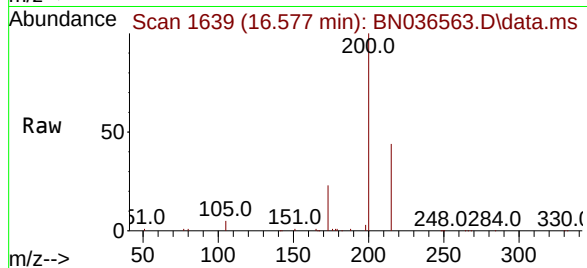
Tgt Ion:200 Resp: 22705

Ion Ratio Lower Upper

200 100

173 23.4 27.3 40.9#

215 43.7 36.8 55.2



#24

Pentachlorophenol

Concen: 5.634 ng

RT: 16.764 min Scan# 1654

Delta R.T. -0.012 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

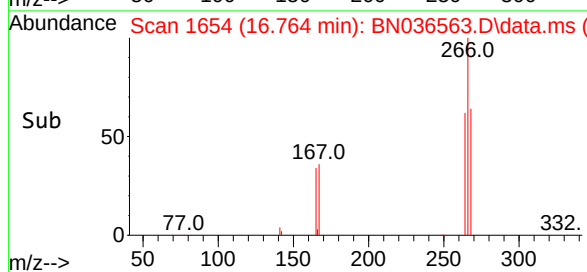
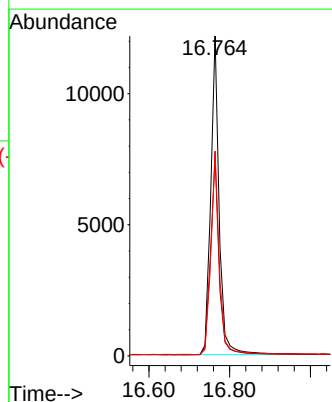
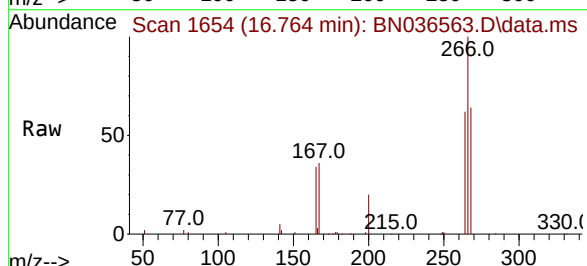
Tgt Ion:266 Resp: 17612

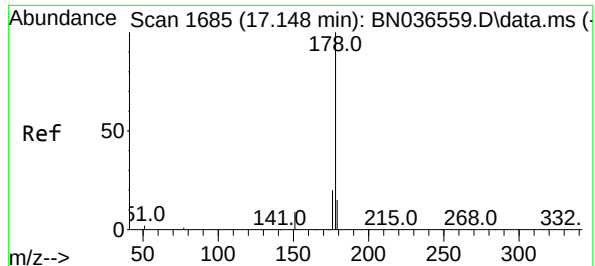
Ion Ratio Lower Upper

266 100

264 63.1 49.6 74.4

268 63.7 50.9 76.3

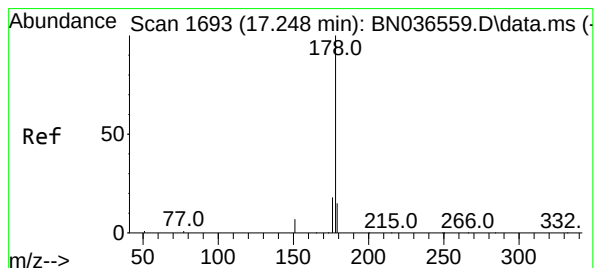
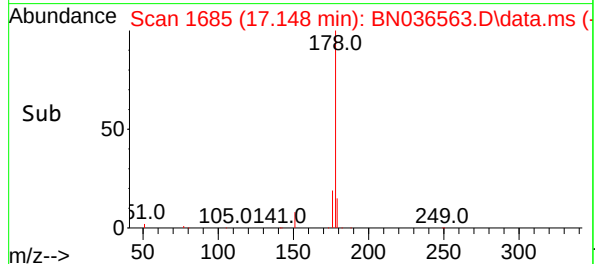
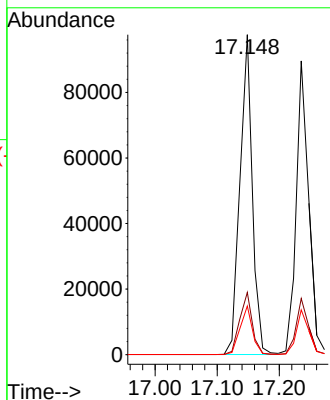
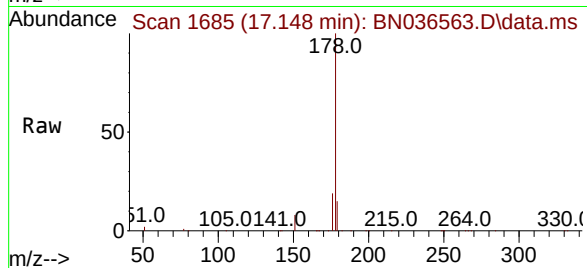




#25  
Phenanthrene  
Concen: 4.979 ng  
RT: 17.148 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

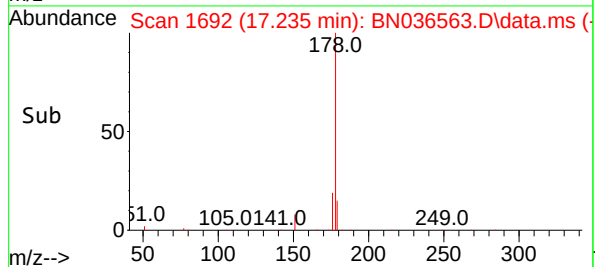
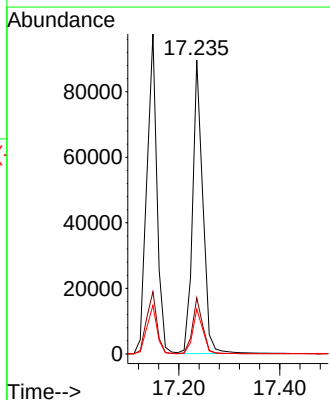
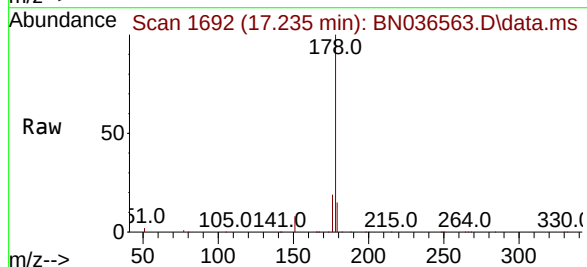
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

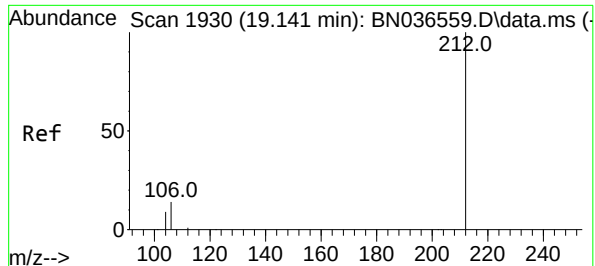
Tgt Ion:178 Resp: 135347  
Ion Ratio Lower Upper  
178 100  
176 19.7 15.9 23.9  
179 15.2 12.2 18.4



#26  
Anthracene  
Concen: 5.135 ng  
RT: 17.235 min Scan# 1692  
Delta R.T. -0.012 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:178 Resp: 125954  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.4 23.2  
179 15.2 12.6 18.8





#27

Fluoranthene-d10

Concen: 4.879 ng

RT: 19.141 min Scan# 1930

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

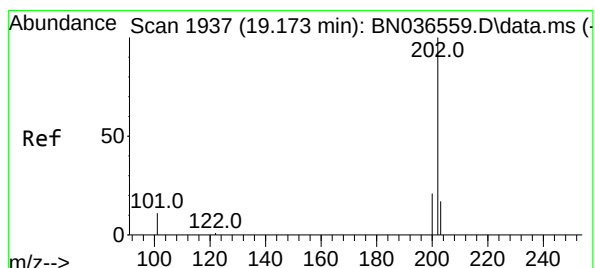
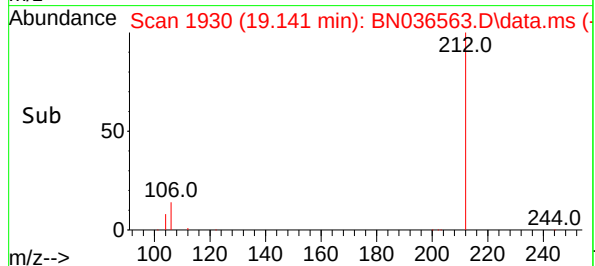
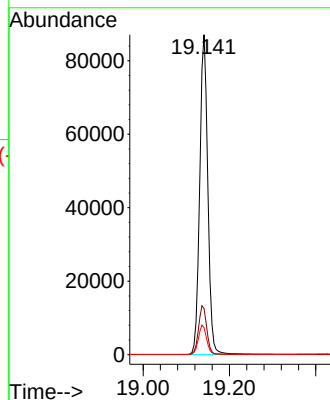
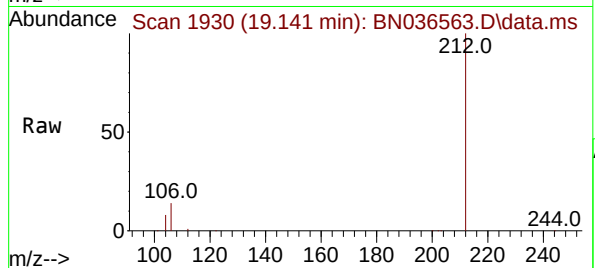
Tgt Ion:212 Resp: 113317

Ion Ratio Lower Upper

212 100

106 15.5 11.8 17.6

104 9.2 7.3 10.9



#28

Fluoranthene

Concen: 4.883 ng

RT: 19.169 min Scan# 1936

Delta R.T. -0.005 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

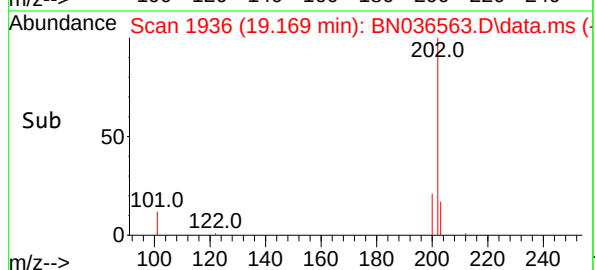
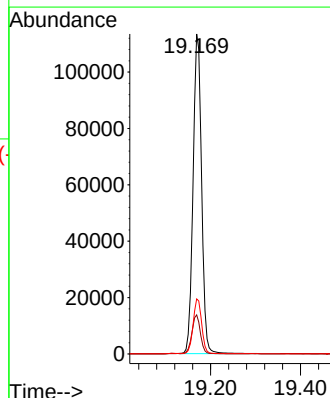
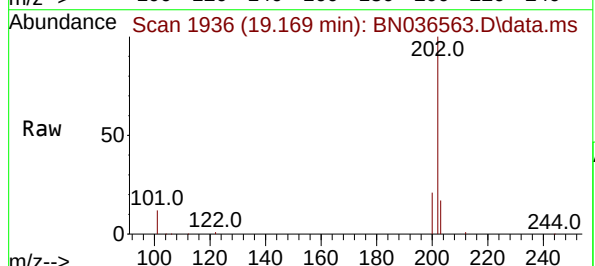
Tgt Ion:202 Resp: 149107

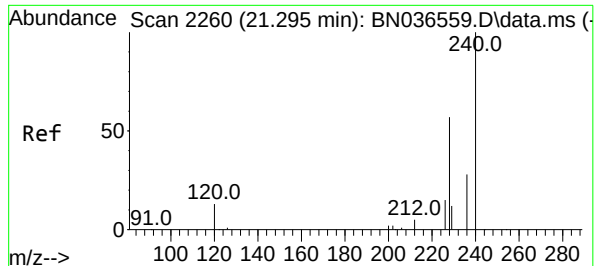
Ion Ratio Lower Upper

202 100

101 12.3 9.4 14.0

203 17.3 13.5 20.3





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.295 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

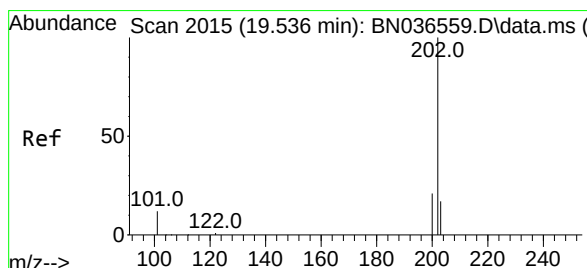
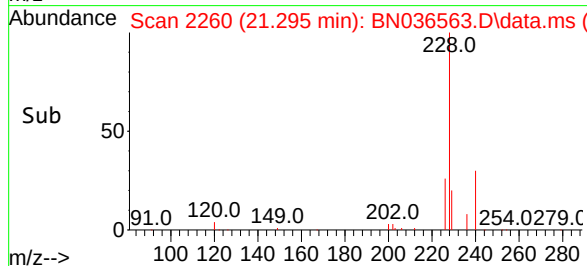
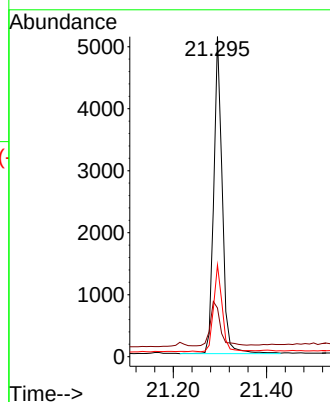
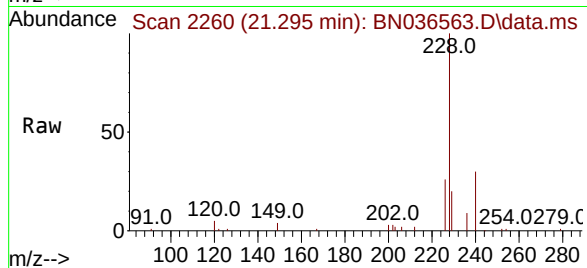
Tgt Ion:240 Resp: 6472

Ion Ratio Lower Upper

240 100

120 15.2 14.6 22.0

236 28.7 24.1 36.1



#30

Pyrene

Concen: 4.695 ng

RT: 19.536 min Scan# 2015

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

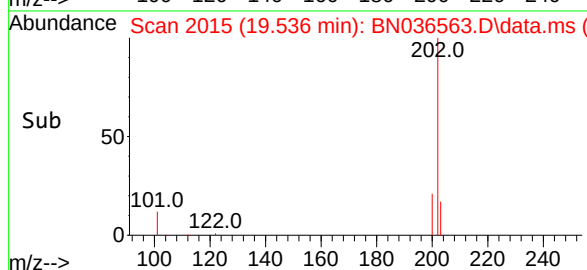
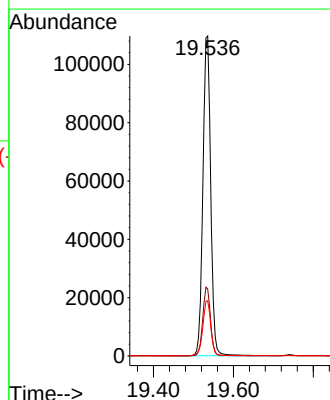
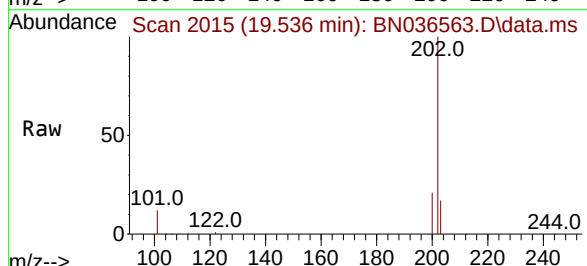
Tgt Ion:202 Resp: 148584

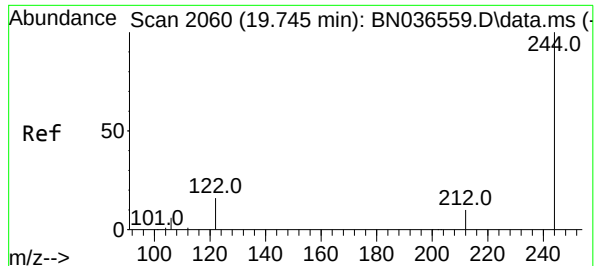
Ion Ratio Lower Upper

202 100

200 21.4 17.1 25.7

203 17.7 14.1 21.1

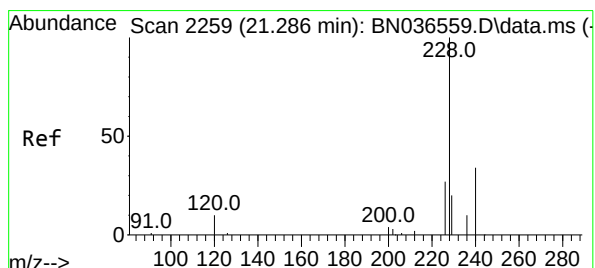
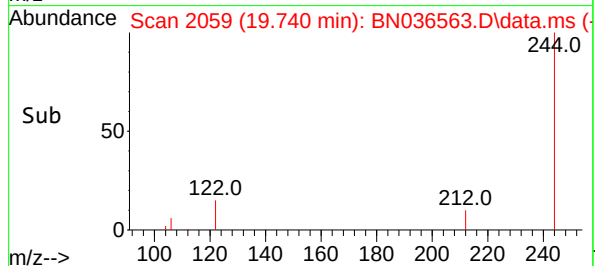
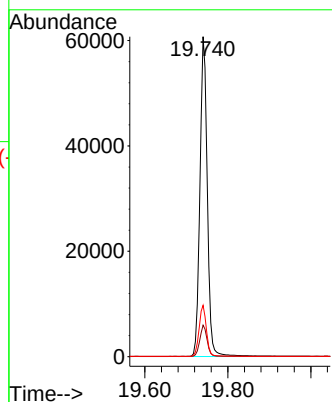
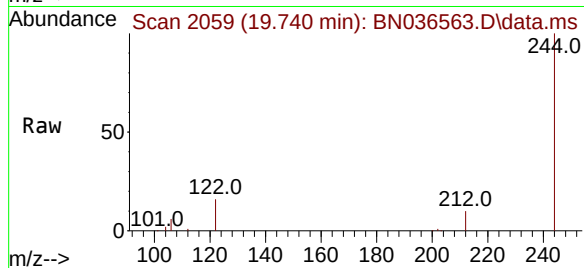




#31  
Terphenyl-d14  
Concen: 4.832 ng  
RT: 19.740 min Scan# 2060  
Delta R.T. -0.005 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

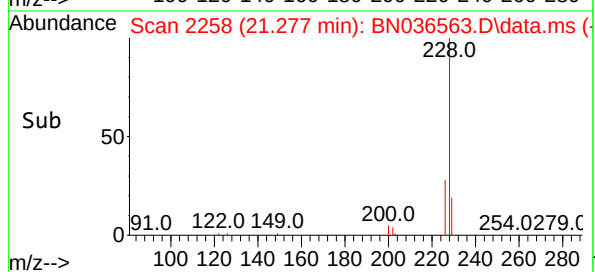
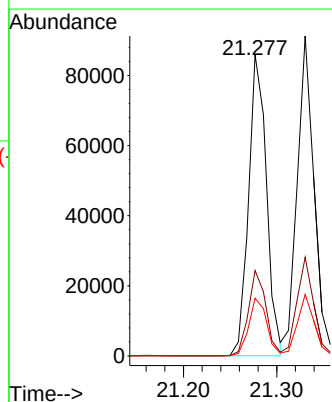
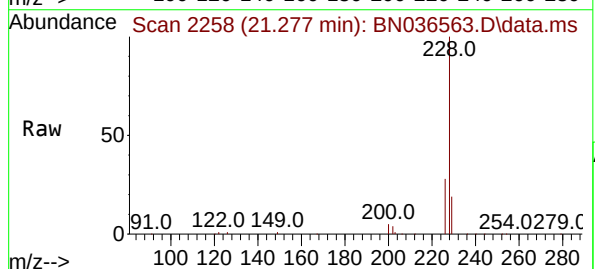
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Tgt Ion:244 Resp: 74923  
Ion Ratio Lower Upper  
244 100  
212 9.9 9.6 14.4  
122 16.1 13.9 20.9

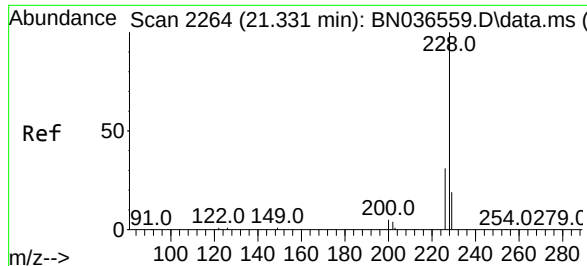


#32  
Benzo(a)anthracene  
Concen: 5.087 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.009 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:228 Resp: 114481  
Ion Ratio Lower Upper  
228 100  
226 28.3 22.5 33.7  
229 19.2 16.6 25.0







#33

Chrysene

Concen: 4.764 ng

RT: 21.331 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

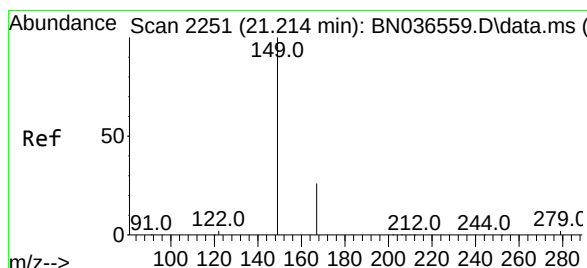
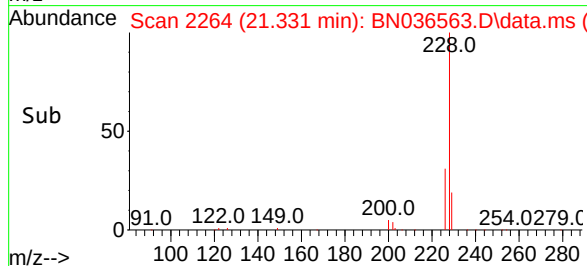
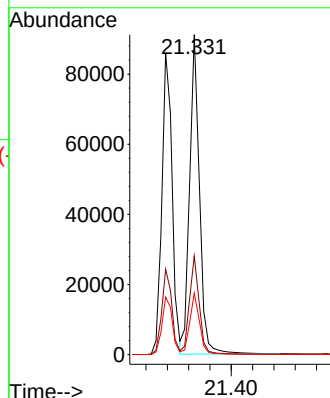
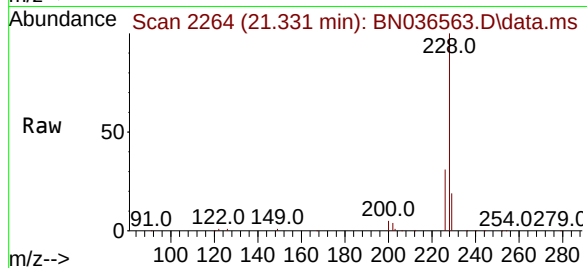
Tgt Ion:228 Resp: 117149

Ion Ratio Lower Upper

228 100

226 30.9 25.3 37.9

229 19.3 15.8 23.8



#34

Bis(2-ethylhexyl)phthalate

Concen: 4.390 ng

RT: 21.214 min Scan# 2251

Delta R.T. -0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

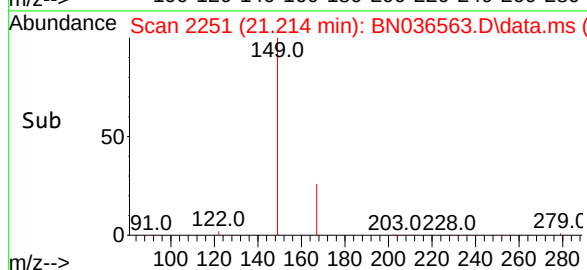
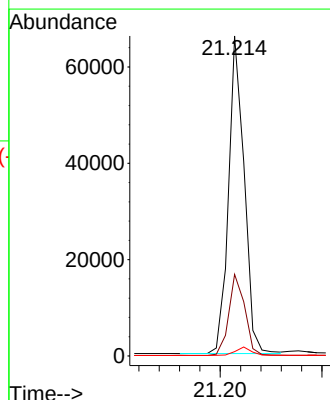
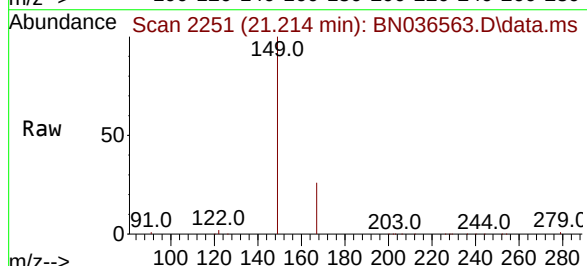
Tgt Ion:149 Resp: 70345

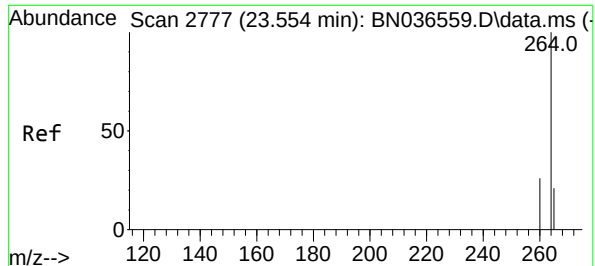
Ion Ratio Lower Upper

149 100

167 26.2 20.7 31.1

279 2.6 3.6 5.4#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.551 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036563.D

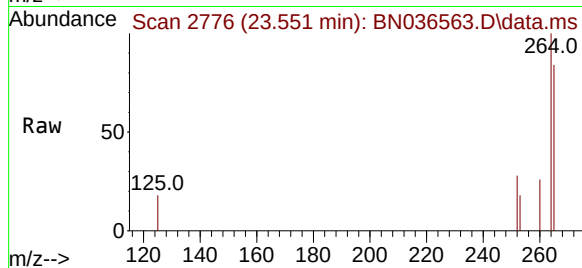
Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0



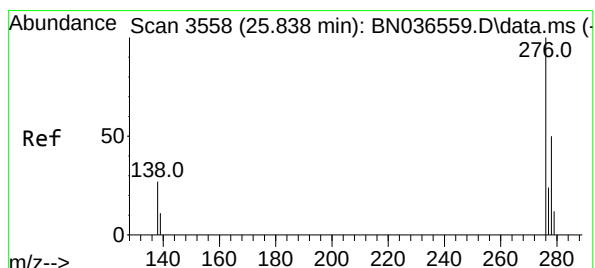
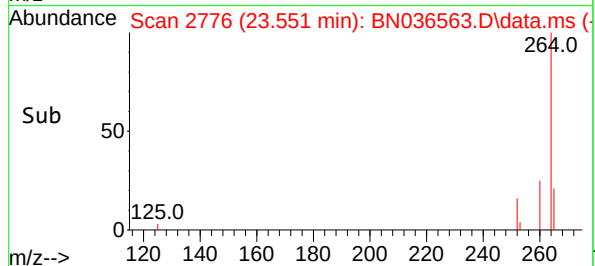
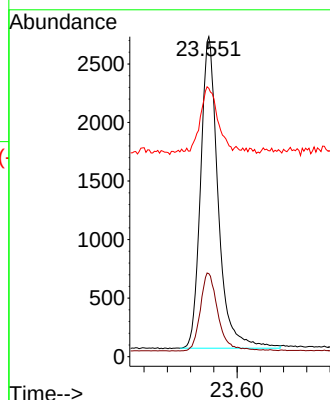
Tgt Ion:264 Resp: 5580

Ion Ratio Lower Upper

264 100

260 25.9 22.6 33.8

265 83.8 88.1 132.1#



#36

Indeno(1,2,3-cd)pyrene

Concen: 5.440 ng

RT: 25.835 min Scan# 3557

Delta R.T. -0.003 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

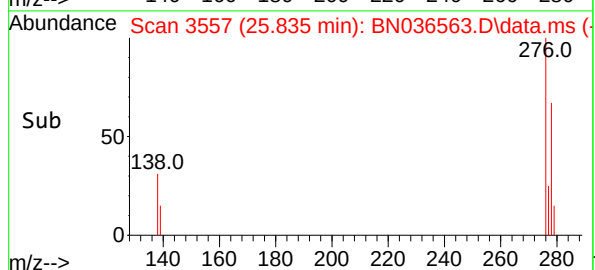
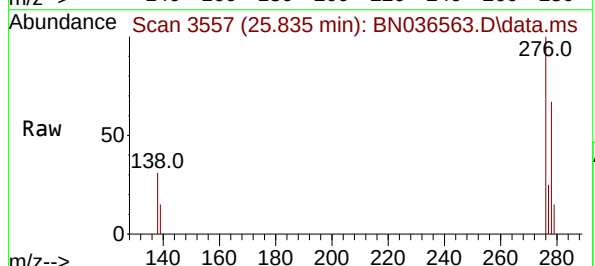
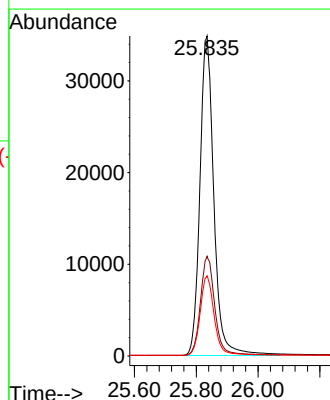
Tgt Ion:276 Resp: 109561

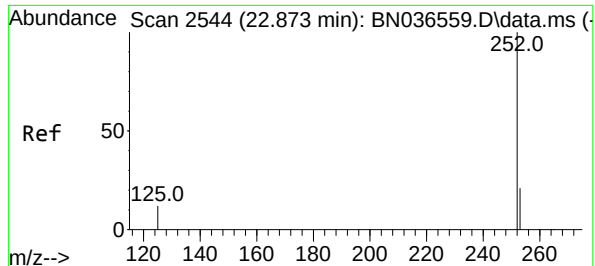
Ion Ratio Lower Upper

276 100

138 31.6 23.4 35.2

277 24.9 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 5.146 ng

RT: 22.873 min Scan# 2544

Delta R.T. -0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

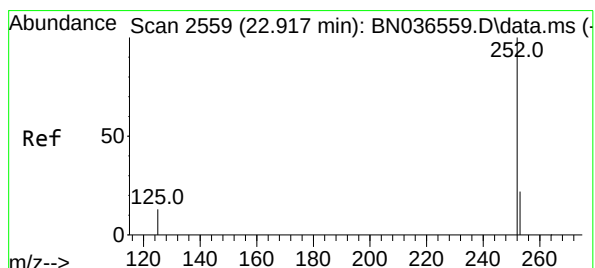
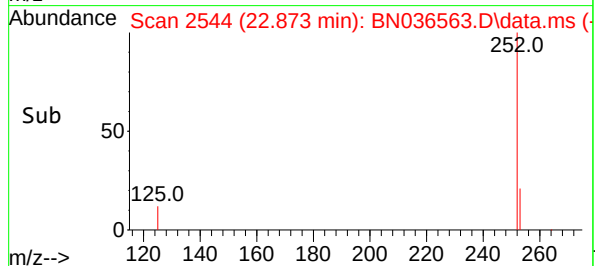
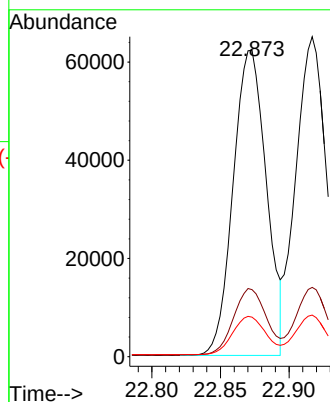
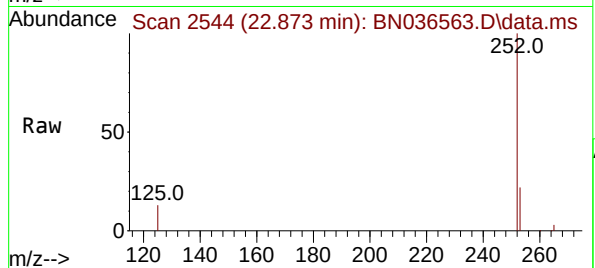
Tgt Ion:252 Resp: 104498

Ion Ratio Lower Upper

252 100

253 21.9 23.9 35.9#

125 12.9 17.4 26.2#



#38

Benzo(k)fluoranthene

Concen: 5.022 ng

RT: 22.917 min Scan# 2559

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

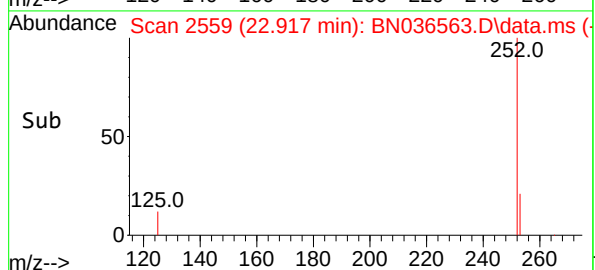
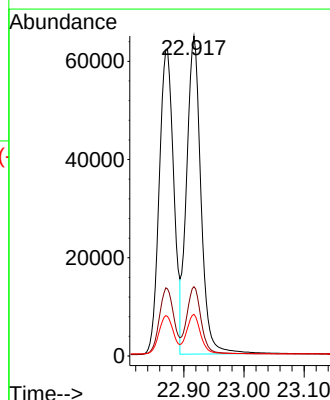
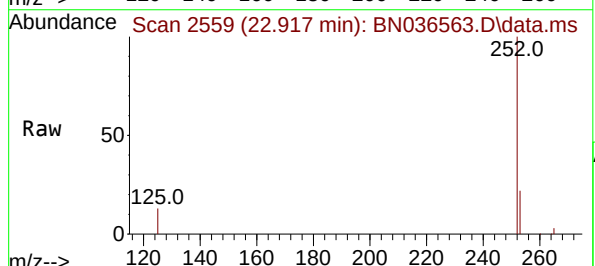
Tgt Ion:252 Resp: 106995

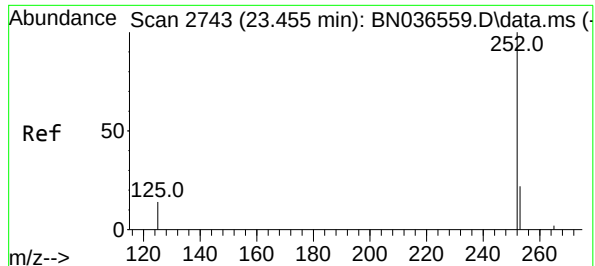
Ion Ratio Lower Upper

252 100

253 21.6 24.6 36.8#

125 13.0 17.8 26.8#





#39

Benzo(a)pyrene

Concen: 5.170 ng

RT: 23.452 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036563.D

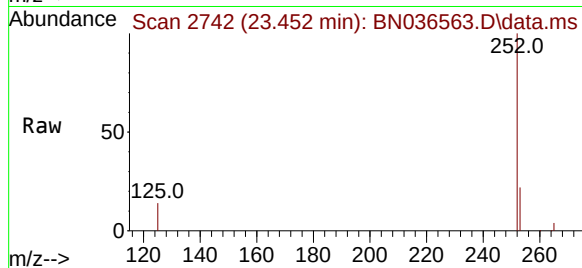
Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0



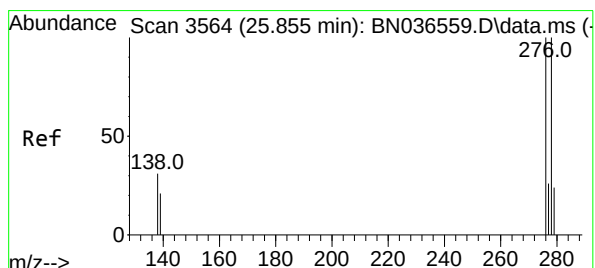
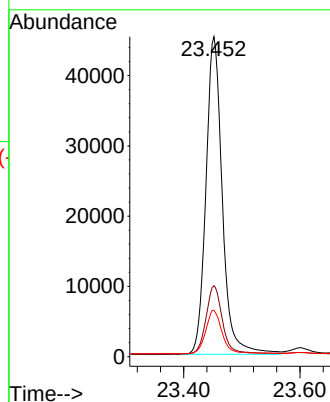
Tgt Ion:252 Resp: 88413

Ion Ratio Lower Upper

252 100

253 22.2 27.8 41.8#

125 14.5 22.7 34.1#



#40

Dibenzo(a,h)anthracene

Concen: 5.568 ng

RT: 25.846 min Scan# 3561

Delta R.T. -0.009 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

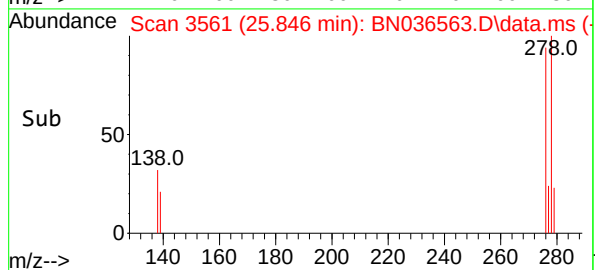
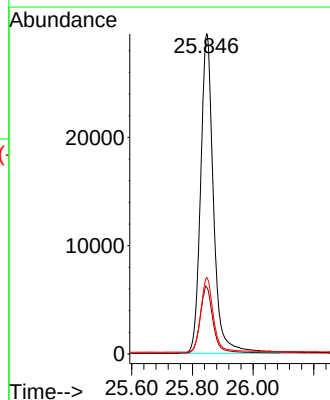
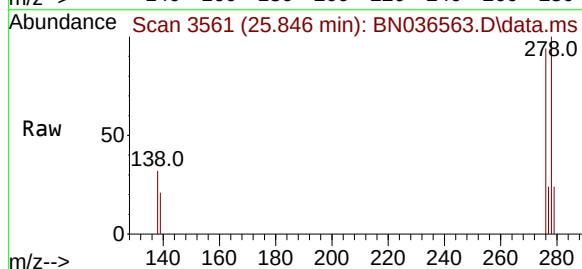
Tgt Ion:278 Resp: 87308

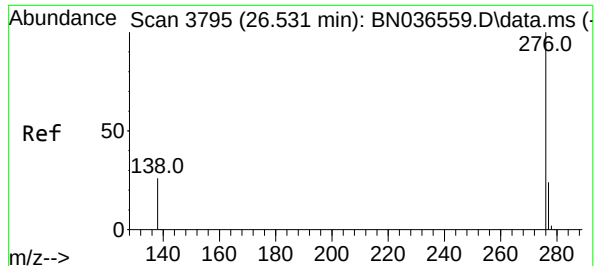
Ion Ratio Lower Upper

278 100

139 21.0 20.8 31.2

279 23.9 28.8 43.2#





#41

Benzo(g,h,i)perylene

Concen: 5.189 ng

RT: 26.531 min Scan# 31

Delta R.T. -0.000 min

Lab File: BN036563.D

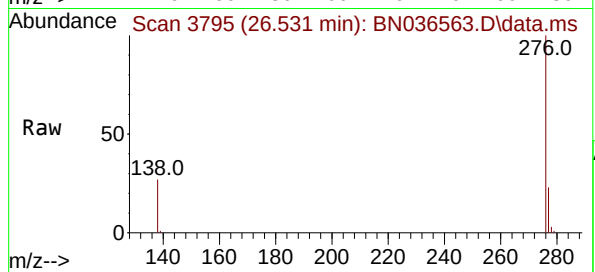
Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0



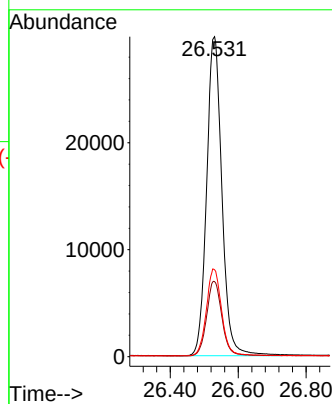
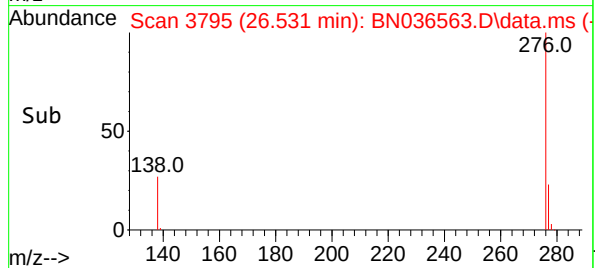
Tgt Ion:276 Resp: 93067

Ion Ratio Lower Upper

276 100

277 23.4 22.2 33.4

138 27.1 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036564.D  
 Acq On : 10 Mar 2025 16:38  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN031025

Quant Time: Mar 10 17:10:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

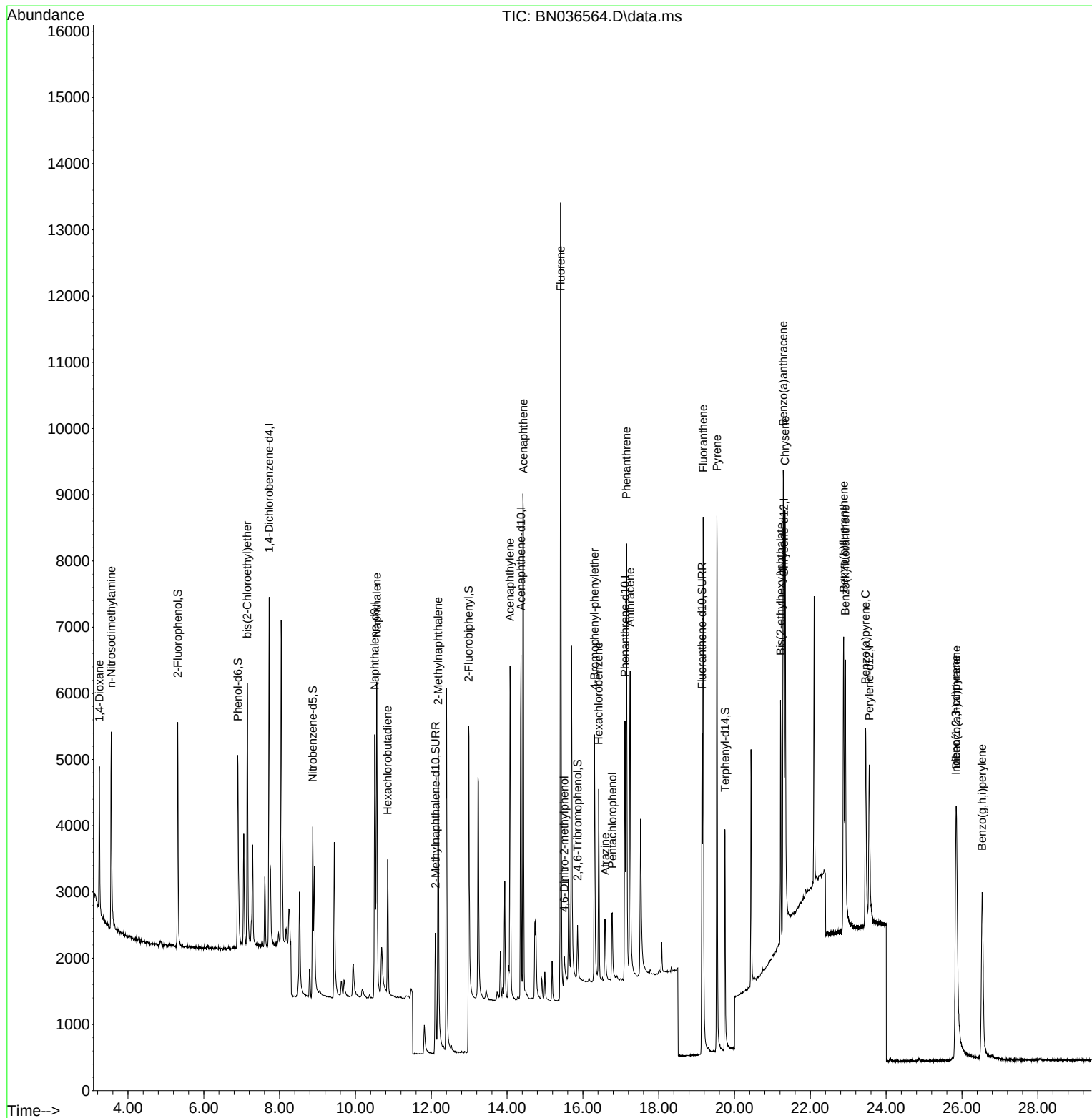
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.724  | 152  | 2488     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8             | 10.509 | 136  | 5634     | 0.400 | ng    | 0.00     |
| 13) Acenaphthene-d10          | 14.366 | 164  | 3085     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10          | 17.111 | 188  | 5778     | 0.400 | ng    | 0.00     |
| 29) Chrysene-d12              | 21.304 | 240  | 4219     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12              | 23.554 | 264  | 3835     | 0.400 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.312  | 112  | 2418     | 0.417 | ng    | 0.00     |
| 5) Phenol-d6                  | 6.901  | 99   | 2744     | 0.383 | ng    | 0.00     |
| 8) Nitrobenzene-d5            | 8.875  | 82   | 2356     | 0.384 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10   | 12.111 | 152  | 3345     | 0.399 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol      | 15.858 | 330  | 511      | 0.365 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl          | 12.988 | 172  | 7753     | 0.432 | ng    | 0.00     |
| 27) Fluoranthene-d10          | 19.141 | 212  | 6152     | 0.415 | ng    | 0.00     |
| 31) Terphenyl-d14             | 19.750 | 244  | 3880     | 0.384 | ng    | 0.00     |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.247  | 88   | 1297     | 0.470 | ng    | 97       |
| 3) n-Nitrosodimethylamine     | 3.557  | 42   | 2284     | 0.409 | ng    | 96       |
| 6) bis(2-Chloroethyl)ether    | 7.147  | 93   | 2945     | 0.398 | ng    | 100      |
| 9) Naphthalene                | 10.562 | 128  | 6710     | 0.405 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.850 | 225  | 1694     | 0.434 | ng    | # 98     |
| 12) 2-Methylnaphthalene       | 12.182 | 142  | 4064     | 0.385 | ng    | 99       |
| 16) Acenaphthylene            | 14.077 | 152  | 6059     | 0.416 | ng    | 99       |
| 17) Acenaphthene              | 14.430 | 154  | 4035     | 0.423 | ng    | 99       |
| 18) Fluorene                  | 15.414 | 166  | 5226     | 0.405 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.510 | 198  | 404      | 0.420 | ng    | 94       |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248  | 1524     | 0.421 | ng    | 96       |
| 22) Hexachlorobenzene         | 16.416 | 284  | 1987     | 0.455 | ng    | 99       |
| 23) Atrazine                  | 16.590 | 200  | 1165     | 0.401 | ng    | 95       |
| 24) Pentachlorophenol         | 16.776 | 266  | 699      | 0.351 | ng    | 95       |
| 25) Phenanthrene              | 17.148 | 178  | 7229     | 0.417 | ng    | 99       |
| 26) Anthracene                | 17.248 | 178  | 6358     | 0.407 | ng    | 99       |
| 28) Fluoranthene              | 19.174 | 202  | 8068     | 0.414 | ng    | 100      |
| 30) Pyrene                    | 19.536 | 202  | 8156     | 0.395 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.286 | 228  | 5814     | 0.396 | ng    | 100      |
| 33) Chrysene                  | 21.331 | 228  | 6940     | 0.433 | ng    | 98       |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149  | 3594     | 0.344 | ng    | 98       |
| 36) Indeno(1,2,3-cd)pyrene    | 25.841 | 276  | 6410     | 0.463 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.879 | 252  | 5902     | 0.423 | ng    | 99       |
| 38) Benzo(k)fluoranthene      | 22.923 | 252  | 6286     | 0.429 | ng    | 98       |
| 39) Benzo(a)pyrene            | 23.458 | 252  | 5147     | 0.438 | ng    | 99       |
| 40) Dibenzo(a,h)anthracene    | 25.855 | 278  | 4740     | 0.440 | ng    | 97       |
| 41) Benzo(g,h,i)perylene      | 26.534 | 276  | 5877     | 0.477 | ng    | 97       |
| -----                         |        |      |          |       |       |          |

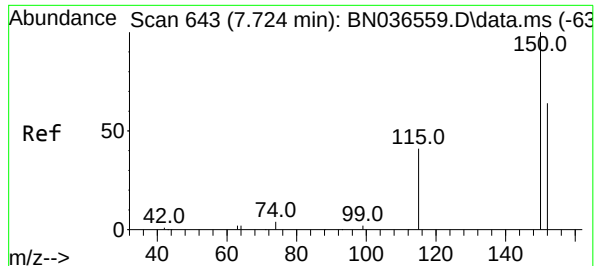
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036564.D  
Acq On : 10 Mar 2025 16:38  
Operator : RC/JU  
Sample : SSTDICV0.4  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

Quant Time: Mar 10 17:10:04 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

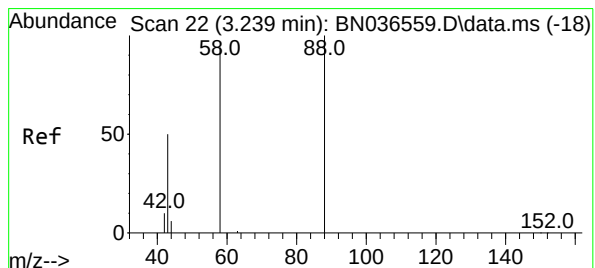
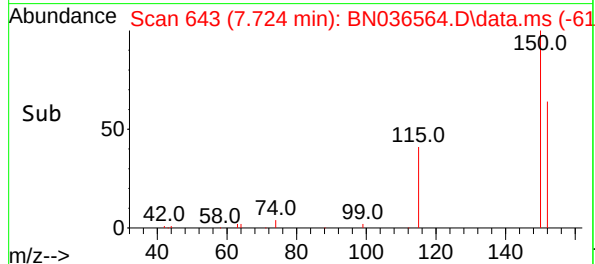
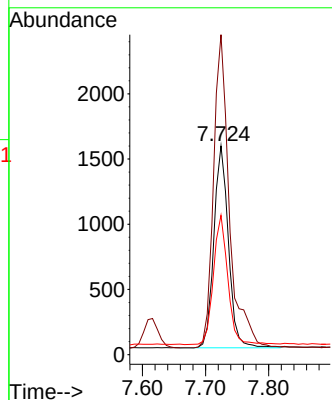
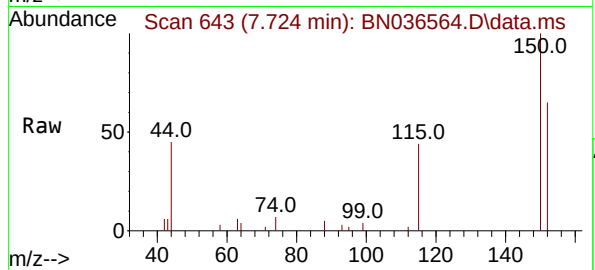




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

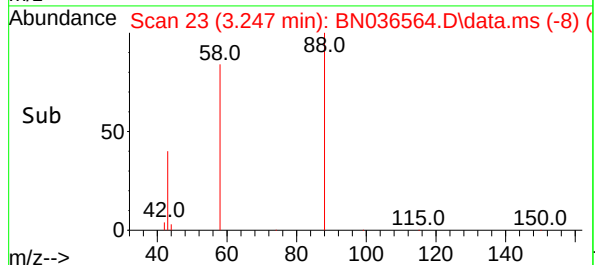
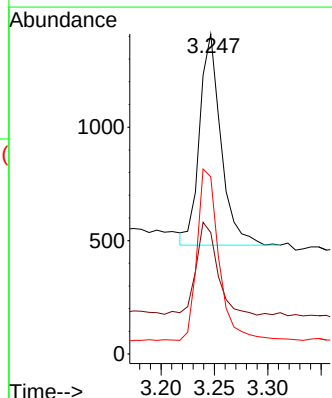
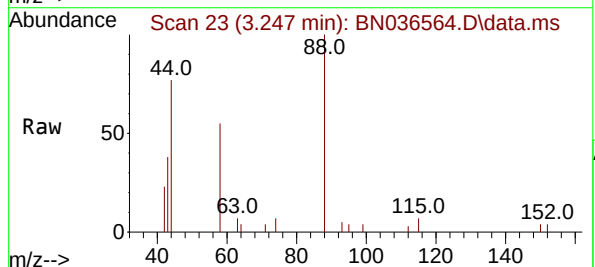
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

Tgt Ion:152 Resp: 2488  
Ion Ratio Lower Upper  
152 100  
150 153.3 123.7 185.5  
115 66.7 54.3 81.5

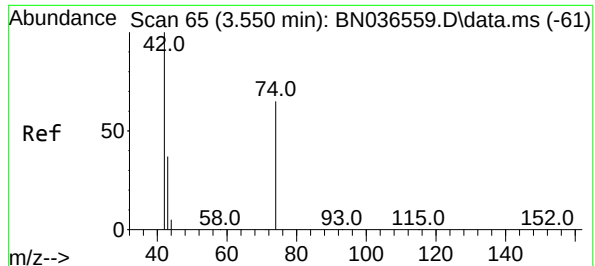


#2  
1,4-Dioxane  
Concen: 0.470 ng  
RT: 3.247 min Scan# 23  
Delta R.T. 0.008 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion: 88 Resp: 1297  
Ion Ratio Lower Upper  
88 100  
43 44.1 37.8 56.8  
58 82.4 67.4 101.2



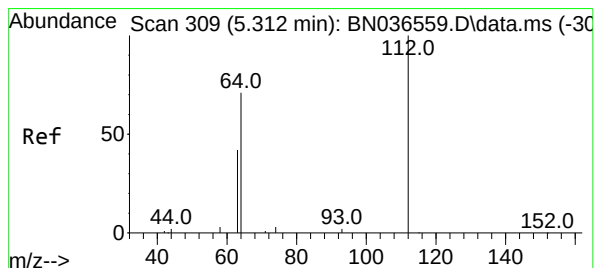
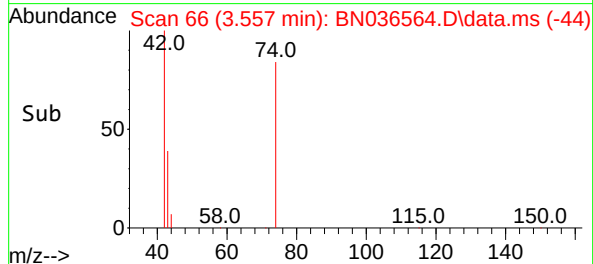
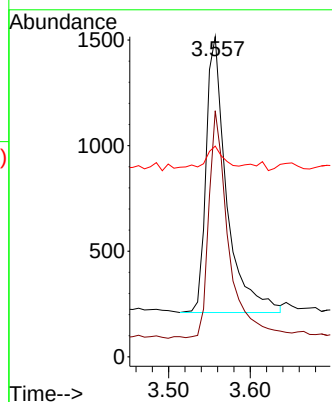
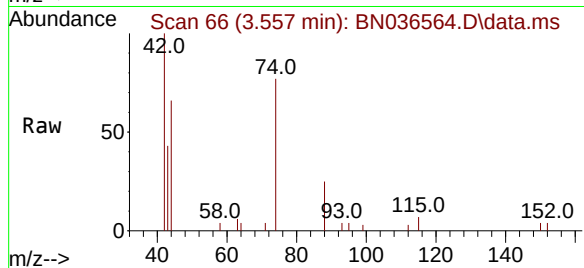




#3  
n-Nitrosodimethylamine  
Concen: 0.409 ng  
RT: 3.557 min Scan# 61  
Delta R.T. 0.007 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

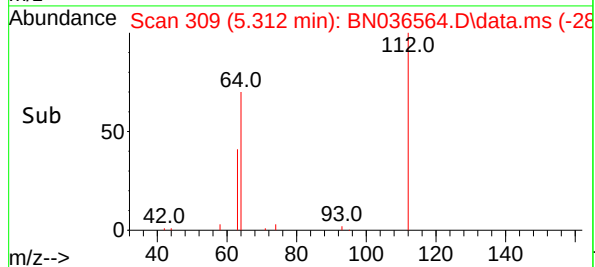
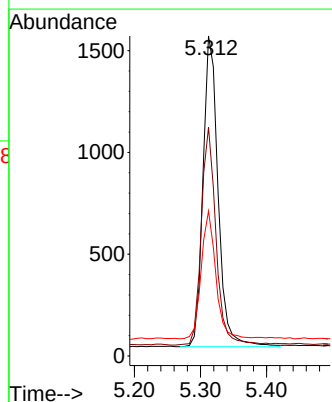
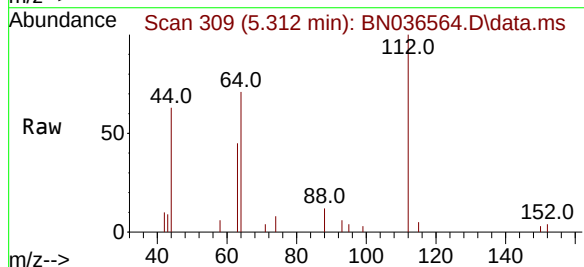
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

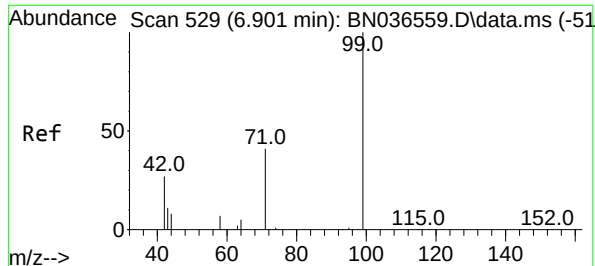
Tgt Ion: 42 Resp: 2284  
Ion Ratio Lower Upper  
42 100  
74 79.2 60.6 90.8  
44 8.2 6.3 9.5



#4  
2-Fluorophenol  
Concen: 0.417 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion: 112 Resp: 2418  
Ion Ratio Lower Upper  
112 100  
64 68.2 53.1 79.7  
63 39.8 31.8 47.8

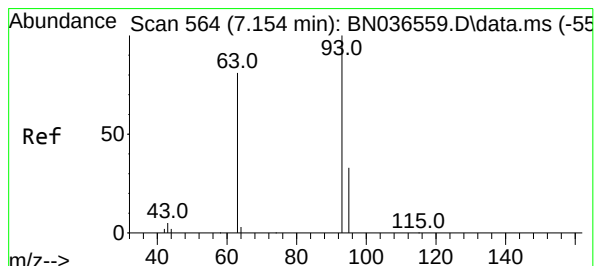
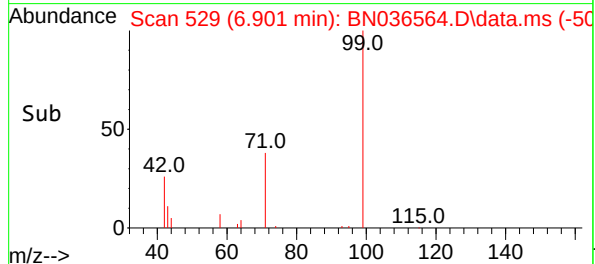
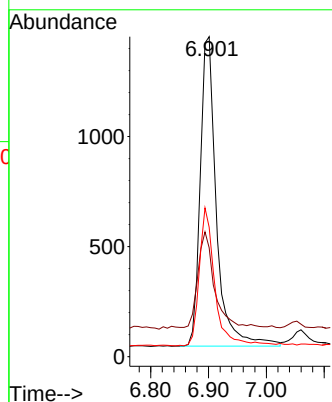
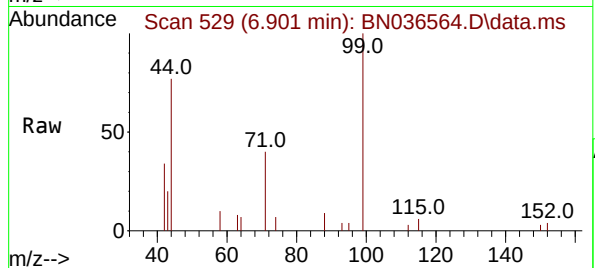




#5  
Phenol-d6  
Concen: 0.383 ng  
RT: 6.901 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

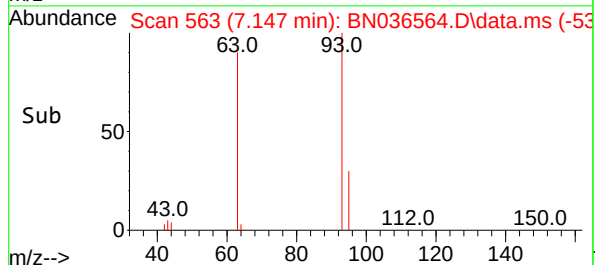
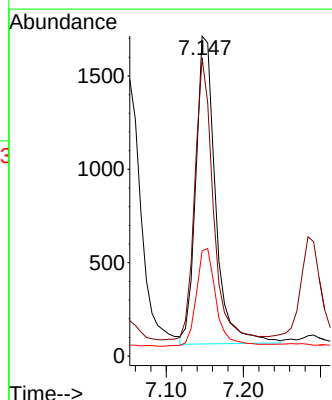
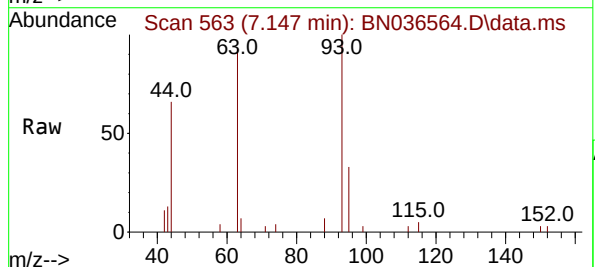
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

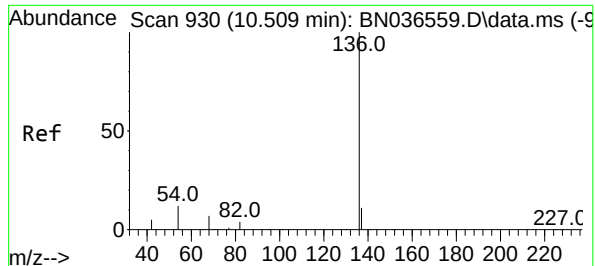
Tgt Ion: 99 Resp: 2744  
Ion Ratio Lower Upper  
99 100  
42 32.1 26.5 39.7  
71 42.9 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 0.398 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.007 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion: 93 Resp: 2945  
Ion Ratio Lower Upper  
93 100  
63 85.1 67.7 101.5  
95 31.7 25.6 38.4

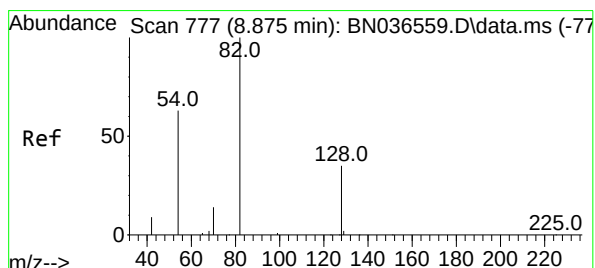
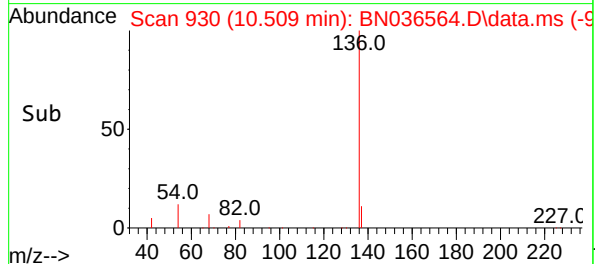
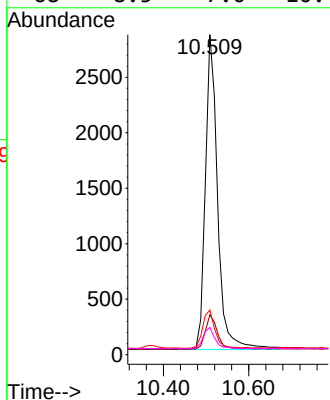
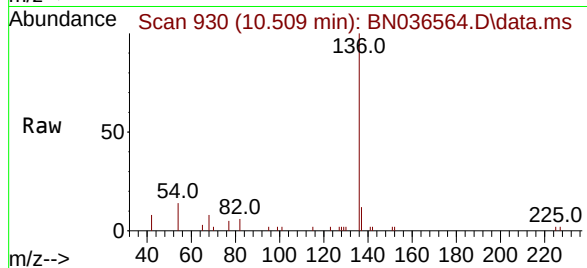




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

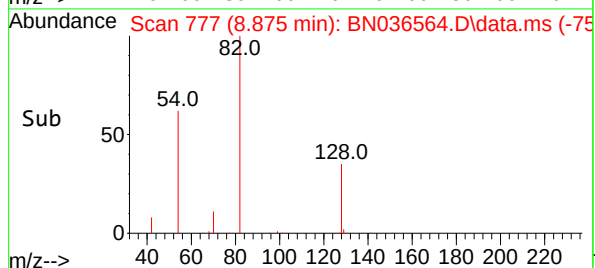
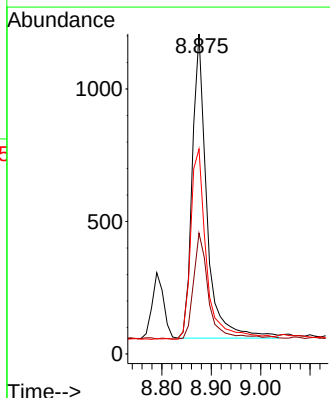
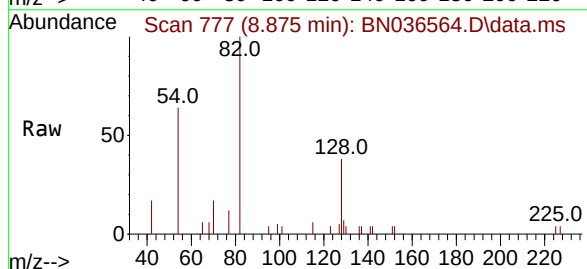
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

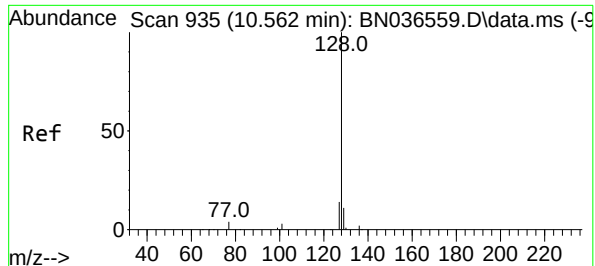
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5634  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.4  | 10.3  | 15.5  |
| 54       | 13.9  | 11.5  | 17.3  |
| 68       | 8.5   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.384 ng  
RT: 8.875 min Scan# 777  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 2356  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 37.7  | 30.6  | 45.8  |
| 54       | 64.1  | 52.2  | 78.4  |

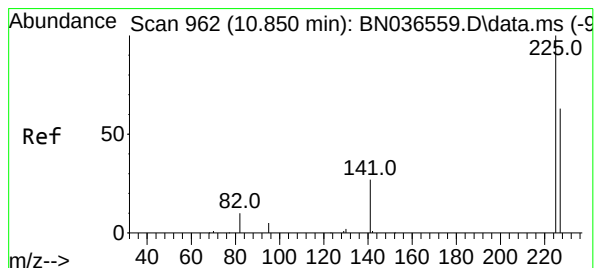
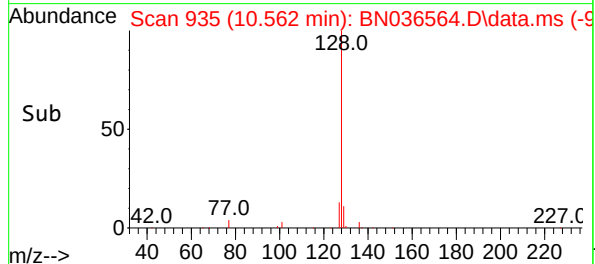
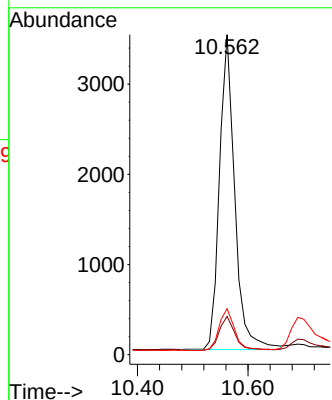
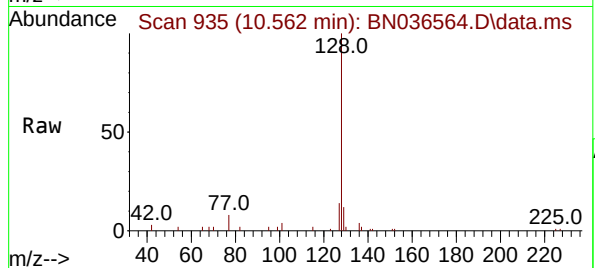




#9  
Naphthalene  
Concen: 0.405 ng  
RT: 10.562 min Scan# 910  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

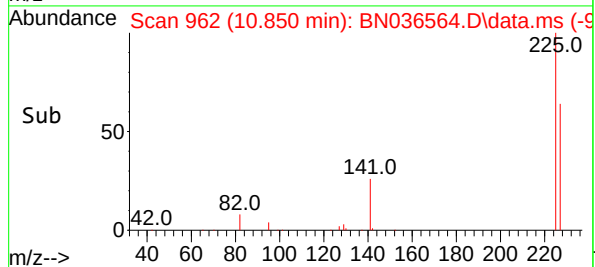
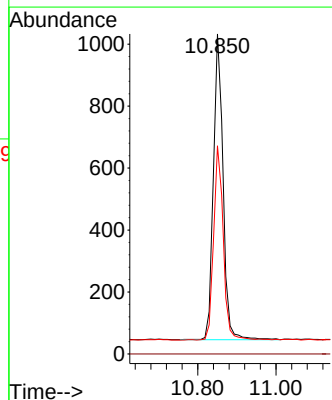
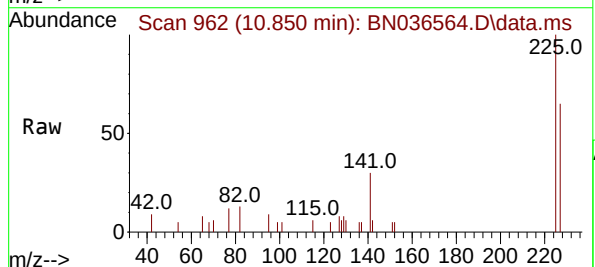
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

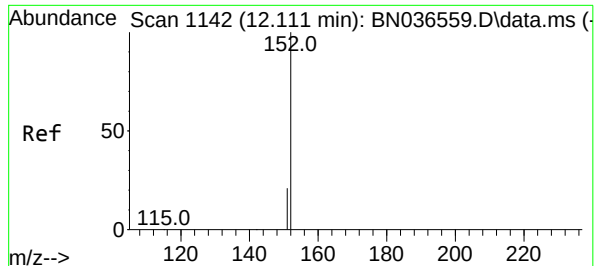
Tgt Ion:128 Resp: 6710  
Ion Ratio Lower Upper  
128 100  
129 11.9 9.8 14.6  
127 14.3 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 0.434 ng  
RT: 10.850 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:225 Resp: 1694  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.5 51.8 77.8

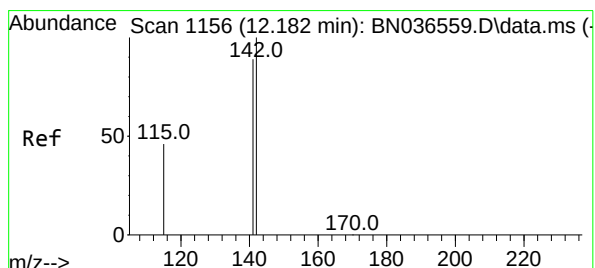
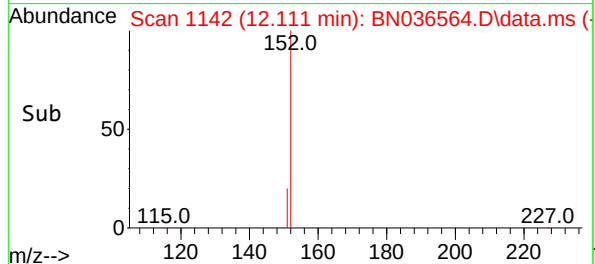
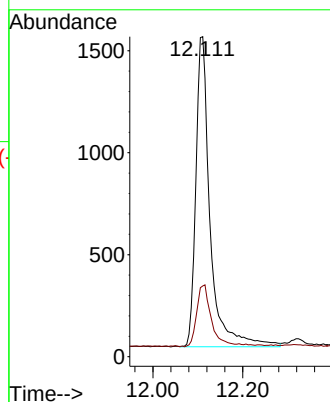
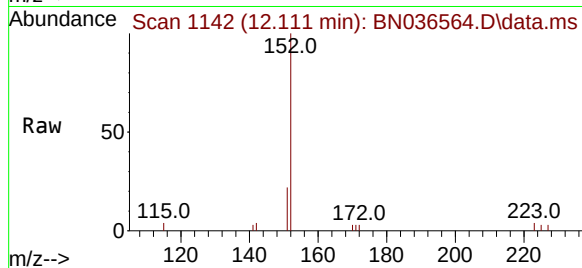




#11  
2-Methylnaphthalene-d10  
Concen: 0.399 ng  
RT: 12.111 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

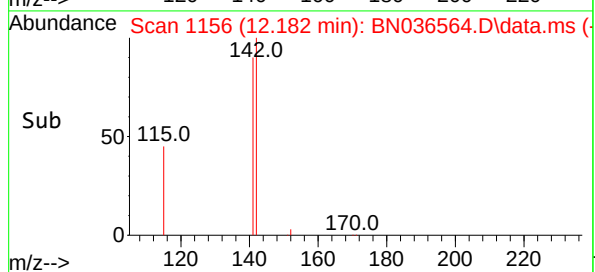
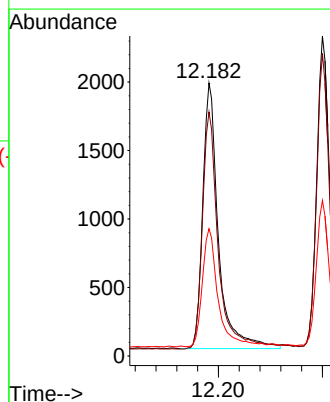
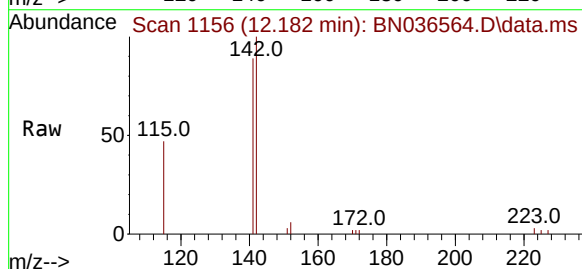
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

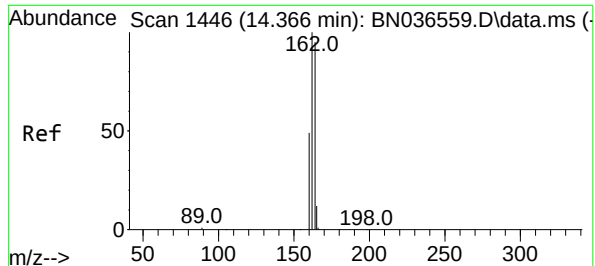
Tgt Ion:152 Resp: 3345  
Ion Ratio Lower Upper  
152 100  
151 20.2 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 0.385 ng  
RT: 12.182 min Scan# 1156  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:142 Resp: 4064  
Ion Ratio Lower Upper  
142 100  
141 89.4 71.7 107.5  
115 46.6 38.3 57.5

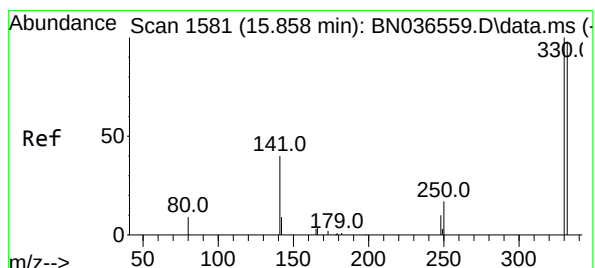
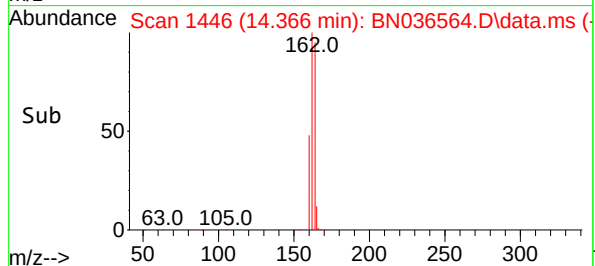
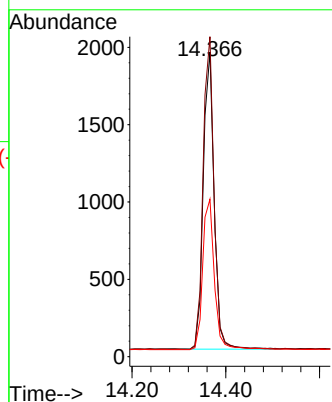
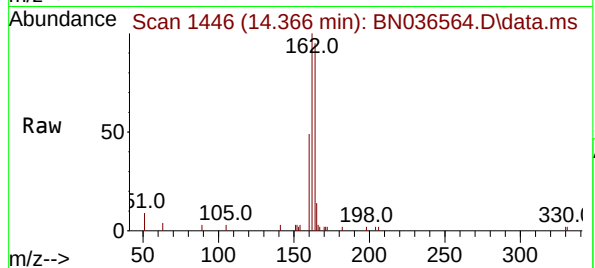




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.366 min Scan# 1446  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

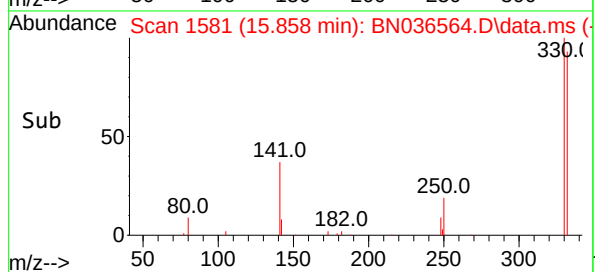
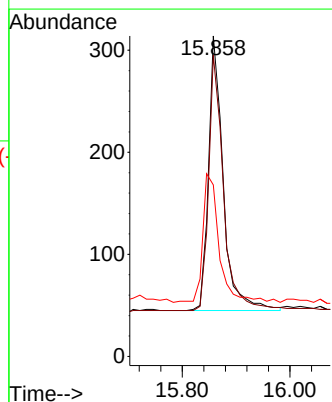
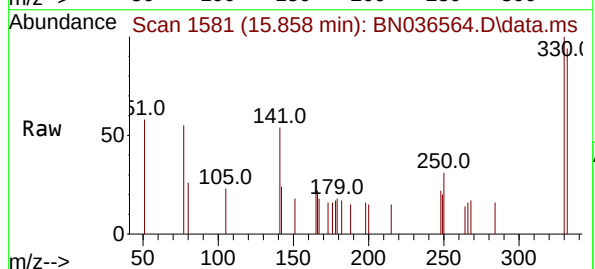
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

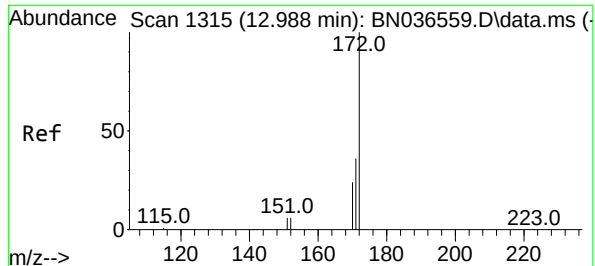
Tgt Ion:164 Resp: 3085  
Ion Ratio Lower Upper  
164 100  
162 105.0 84.2 126.2  
160 51.7 42.2 63.2



#14  
2,4,6-Tribromophenol  
Concen: 0.365 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:330 Resp: 511  
Ion Ratio Lower Upper  
330 100  
332 93.9 75.2 112.8  
141 51.5 43.4 65.2

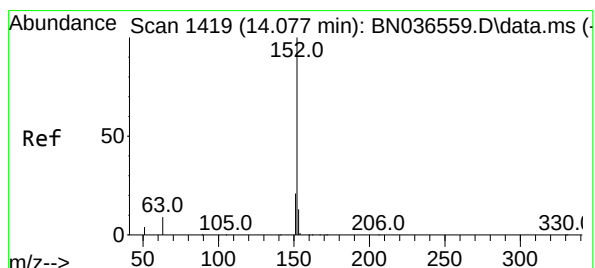
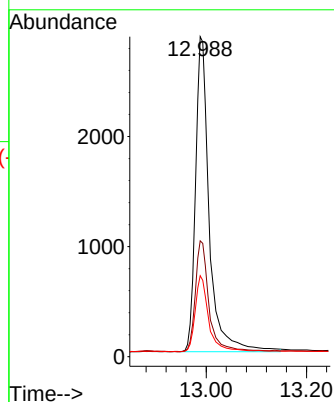
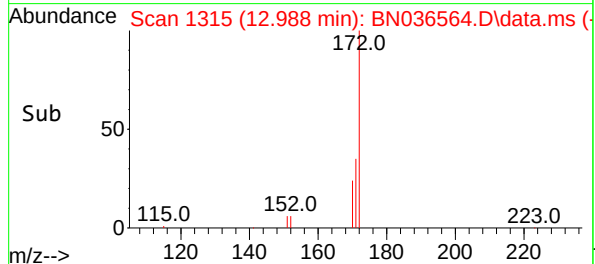
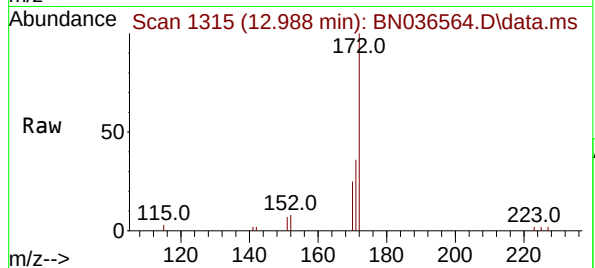




#15  
2-Fluorobiphenyl  
Concen: 0.432 ng  
RT: 12.988 min Scan# 1315  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

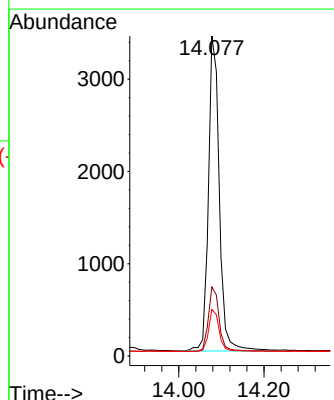
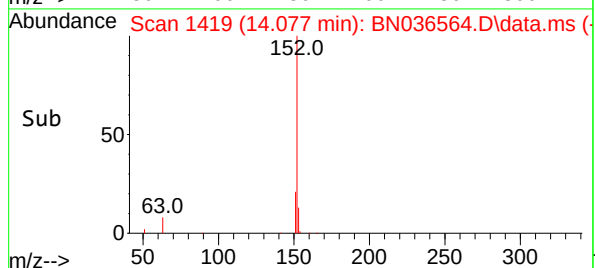
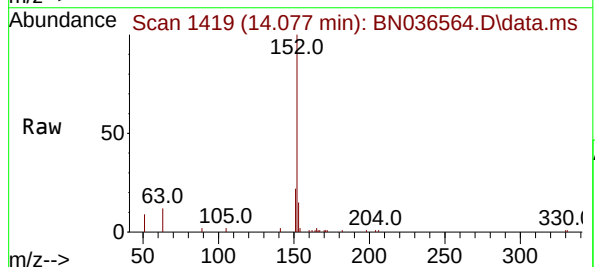
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

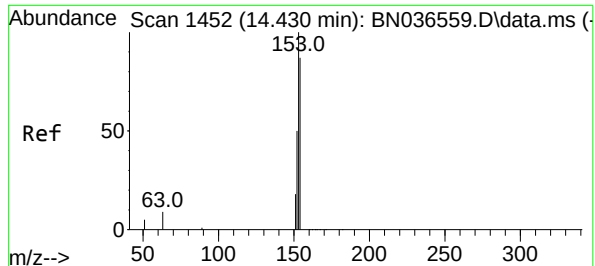
Tgt Ion:172 Resp: 7753  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.5 44.3  
170 25.3 20.2 30.4



#16  
Acenaphthylene  
Concen: 0.416 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:152 Resp: 6059  
Ion Ratio Lower Upper  
152 100  
151 20.1 16.2 24.4  
153 12.9 10.6 15.8

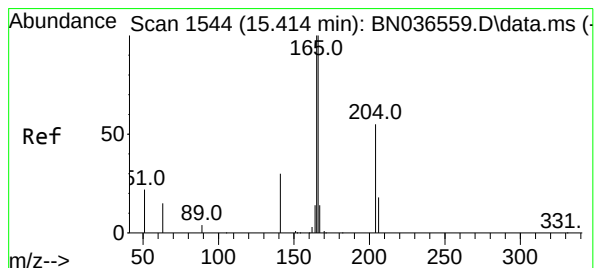
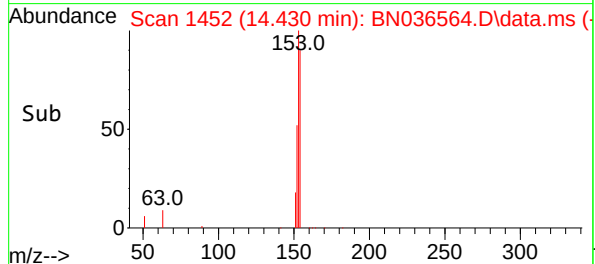
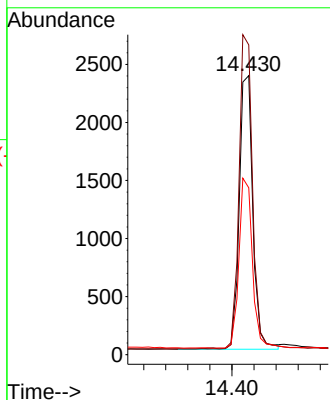
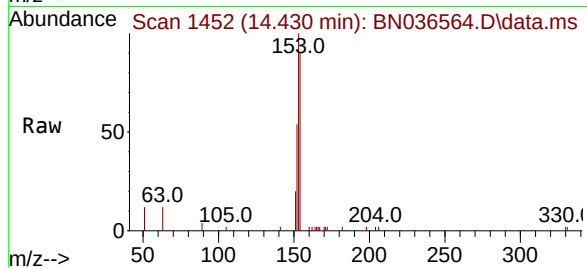




#17  
Acenaphthene  
Concen: 0.423 ng  
RT: 14.430 min Scan# 1452  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

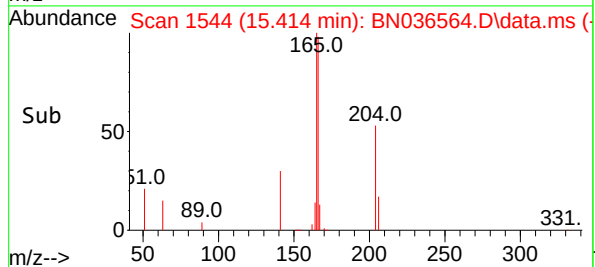
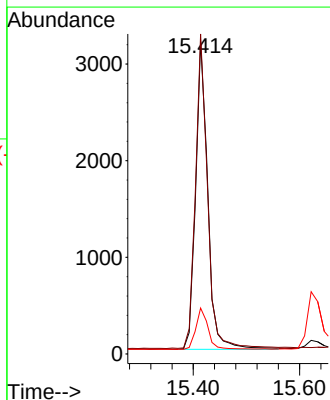
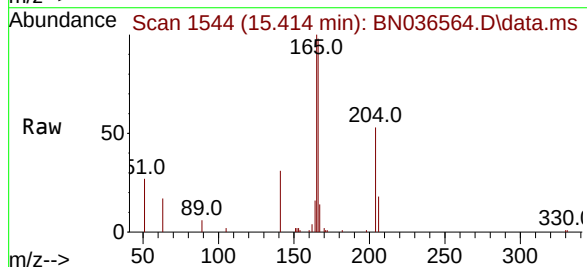
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

| Tgt Ion   | 154  | 153   | 152  |
|-----------|------|-------|------|
| Resp:     | 4035 | 115.5 | 61.9 |
| Ion Ratio | 100  | 100   | 100  |
| Lower     |      | 94.1  | 49.8 |
| Upper     |      | 141.1 | 74.6 |

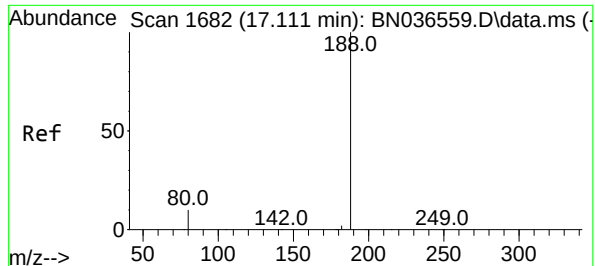


#18  
Fluorene  
Concen: 0.405 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

| Tgt Ion   | 166  | 165   | 167  |
|-----------|------|-------|------|
| Resp:     | 5226 | 101.1 | 13.1 |
| Ion Ratio | 100  | 100   | 100  |
| Lower     |      | 79.8  | 10.6 |
| Upper     |      | 119.8 | 15.8 |







#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

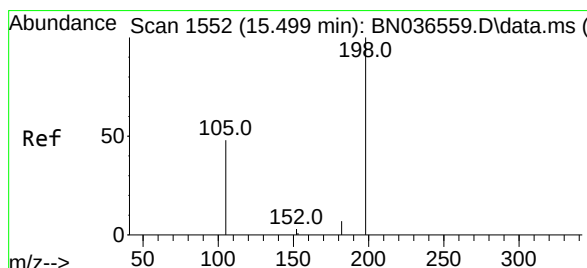
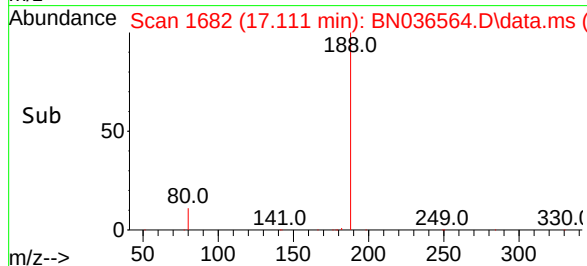
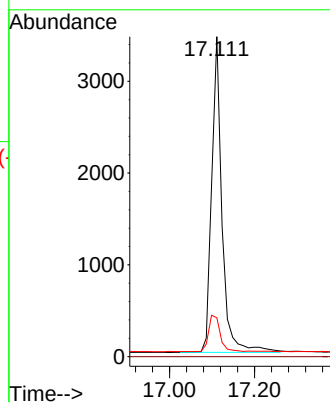
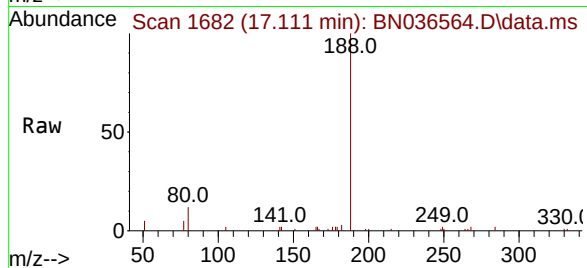
Tgt Ion:188 Resp: 5778

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.2 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 0.420 ng

RT: 15.510 min Scan# 1553

Delta R.T. 0.011 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

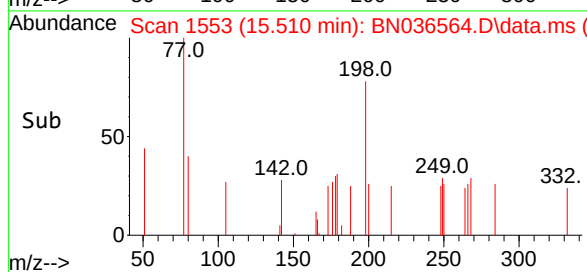
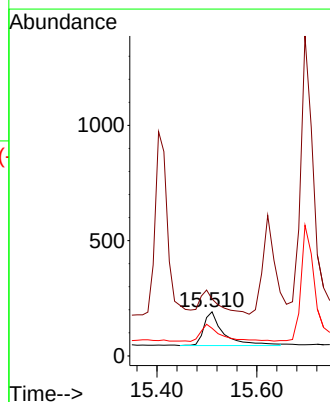
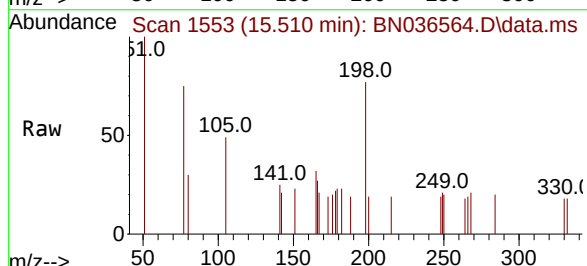
Tgt Ion:198 Resp: 404

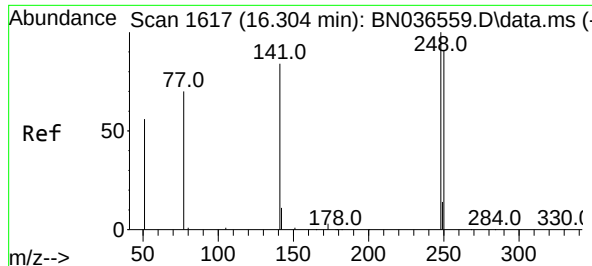
Ion Ratio Lower Upper

198 100

51 129.3 107.9 161.9

105 62.8 56.2 84.2

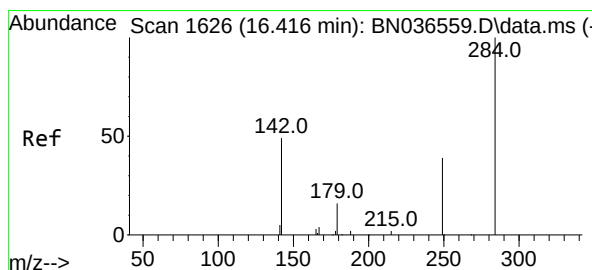
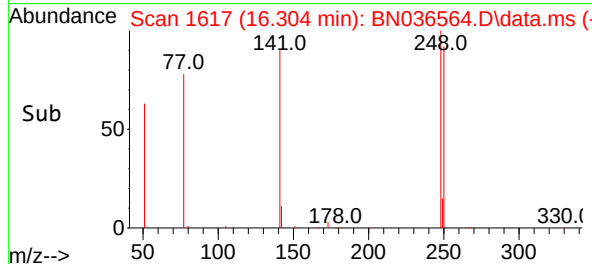
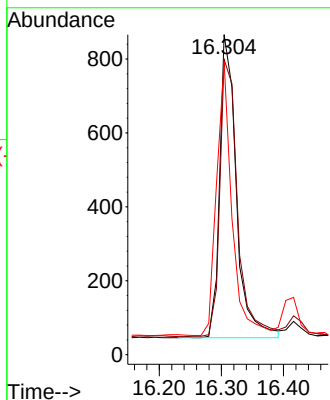
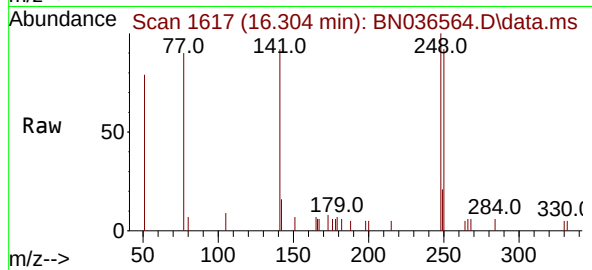




#21  
4-Bromophenyl-phenylether  
Concen: 0.421 ng  
RT: 16.304 min Scan# 1617  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

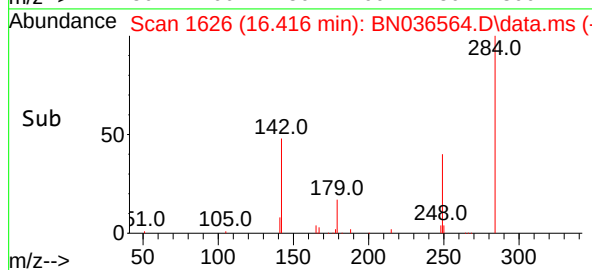
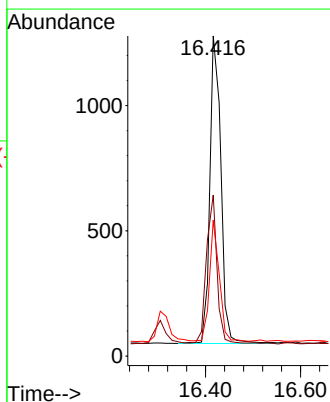
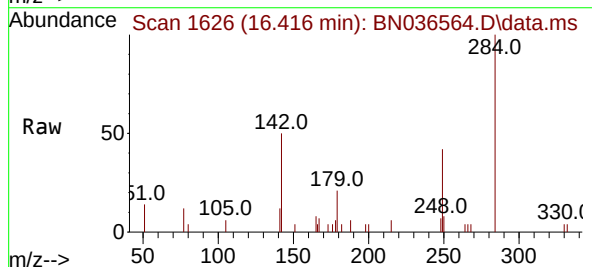
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

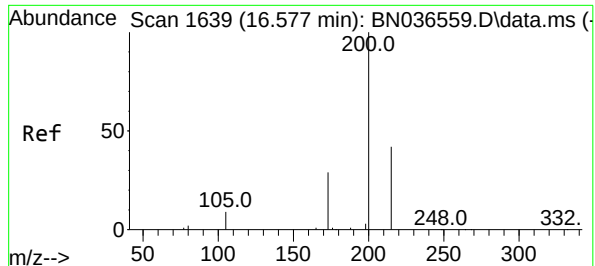
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 92.3  | 73.0  | 109.6 |
| 141     | 91.6  | 68.6  | 103.0 |



#22  
Hexachlorobenzene  
Concen: 0.455 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 47.5  | 37.0  | 55.4  |
| 249     | 34.9  | 28.1  | 42.1  |

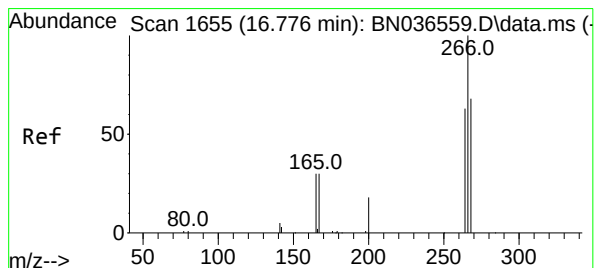
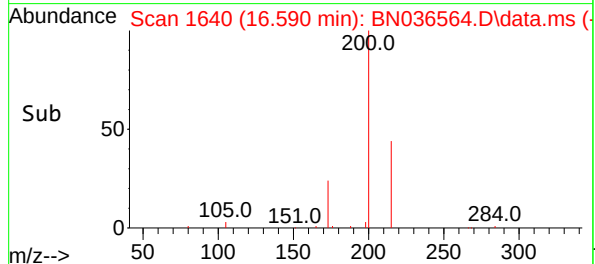
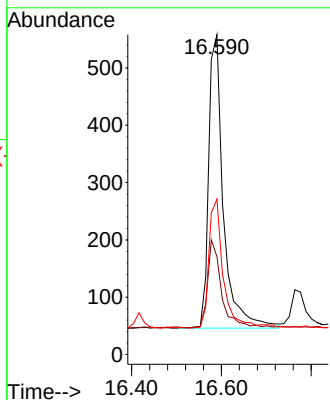
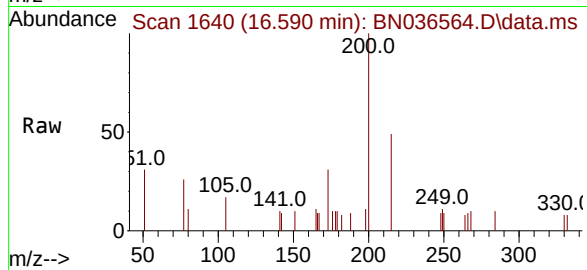




#23  
Atrazine  
Concen: 0.401 ng  
RT: 16.590 min Scan# 1640  
Delta R.T. 0.012 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

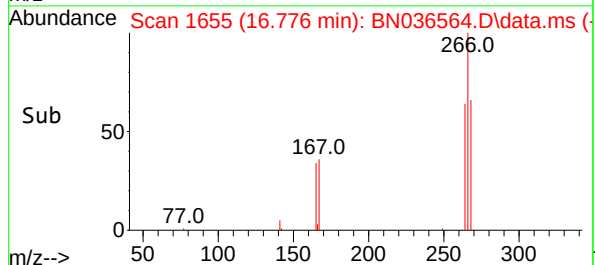
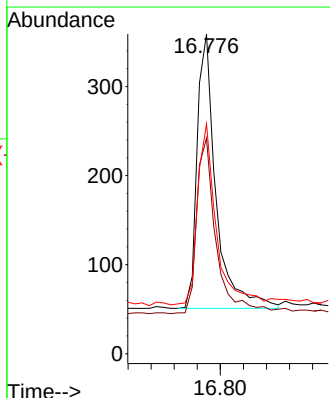
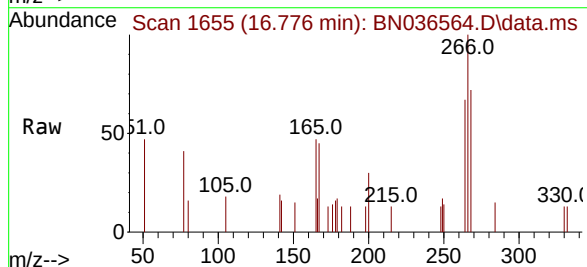
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

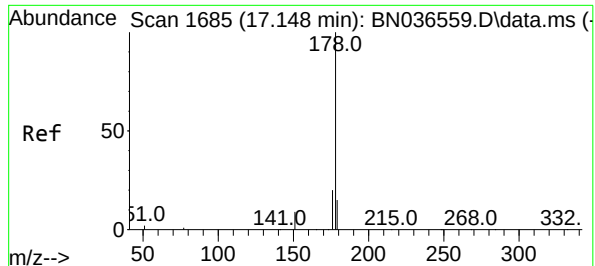
| Tgt Ion   | 200 | Resp | 1165 |
|-----------|-----|------|------|
| Ion Ratio | 100 |      |      |
| Lower     |     | 27.3 | 40.9 |
| Upper     |     | 36.8 | 55.2 |



#24  
Pentachlorophenol  
Concen: 0.351 ng  
RT: 16.776 min Scan# 1655  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

| Tgt Ion                                    | 266 | Resp | 699  |
|--------------------------------------------|-----|------|------|
| Ion Ratio <td>100</td> <td></td> <td></td> | 100 |      |      |
| Lower                                      |     | 49.6 | 74.4 |
| Upper                                      |     | 50.9 | 76.3 |

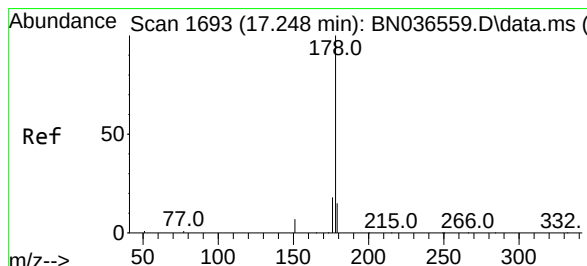
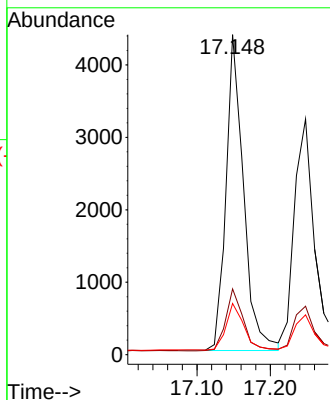
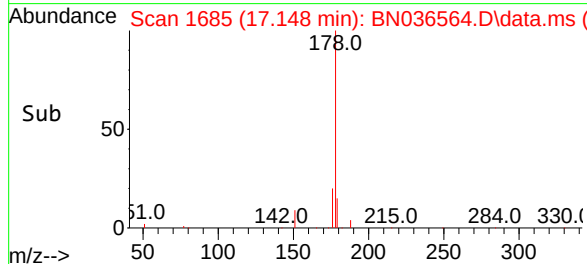
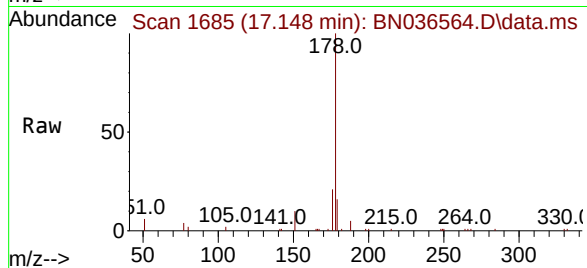




#25  
Phenanthrene  
Concen: 0.417 ng  
RT: 17.148 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

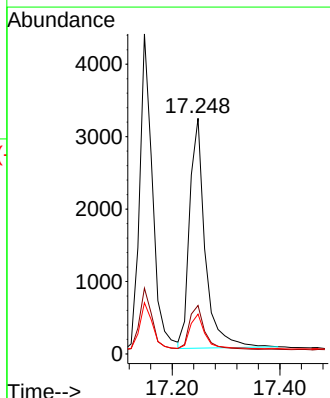
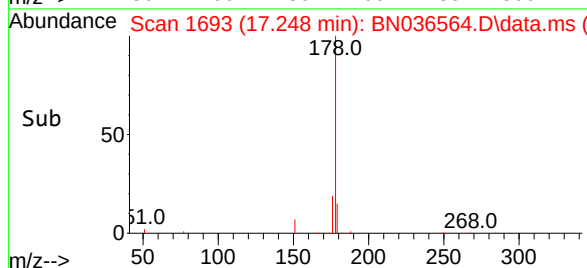
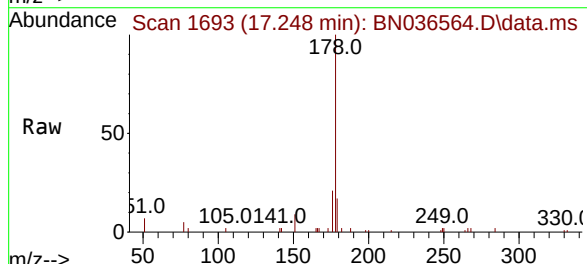
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

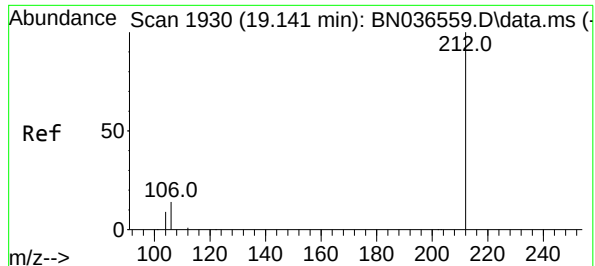
Tgt Ion:178 Resp: 7229  
Ion Ratio Lower Upper  
178 100  
176 19.8 15.9 23.9  
179 15.0 12.2 18.4



#26  
Anthracene  
Concen: 0.407 ng  
RT: 17.248 min Scan# 1693  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:178 Resp: 6358  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.4 23.2  
179 14.8 12.6 18.8





#27

Fluoranthene-d10

Concen: 0.415 ng

RT: 19.141 min Scan# 1930

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

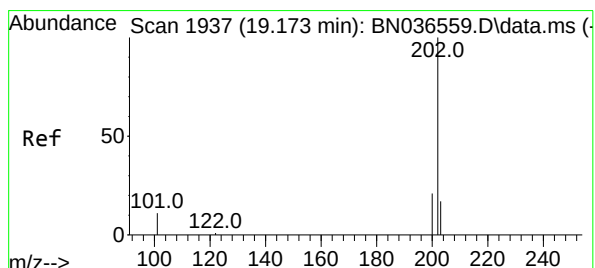
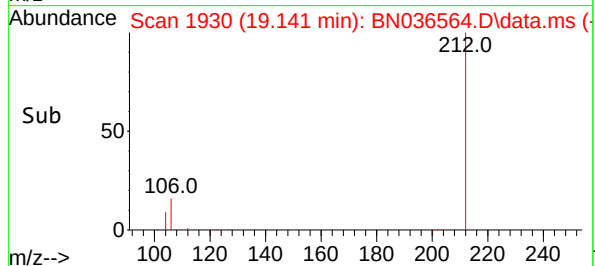
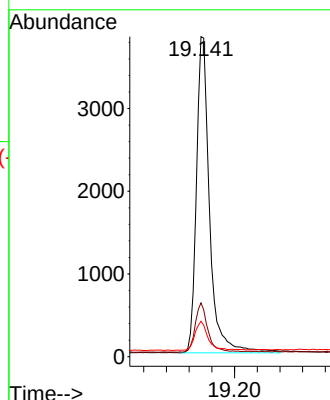
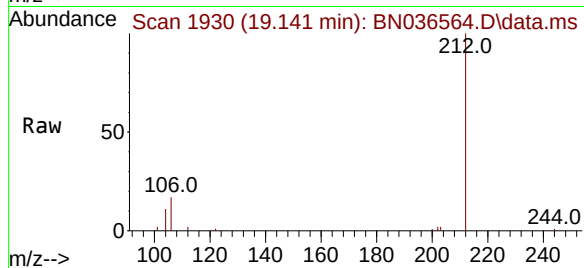
Tgt Ion:212 Resp: 6152

Ion Ratio Lower Upper

212 100

106 14.8 11.8 17.6

104 8.8 7.3 10.9



#28

Fluoranthene

Concen: 0.414 ng

RT: 19.174 min Scan# 1937

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

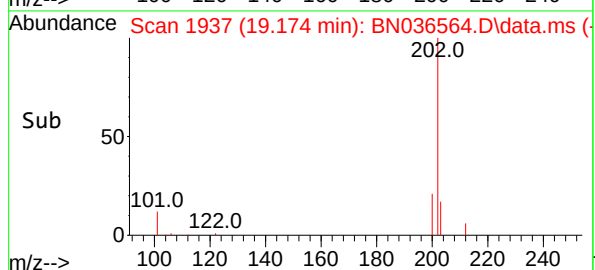
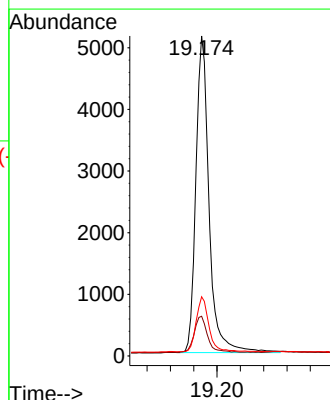
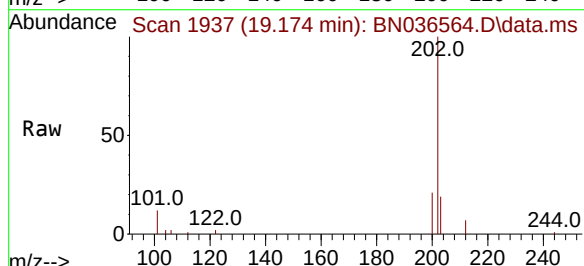
Tgt Ion:202 Resp: 8068

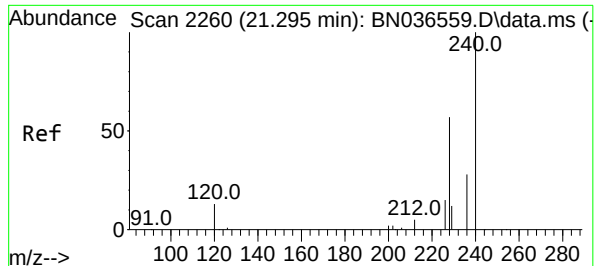
Ion Ratio Lower Upper

202 100

101 11.6 9.4 14.0

203 16.8 13.5 20.3





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.304 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

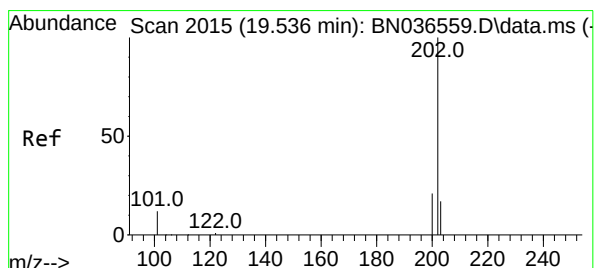
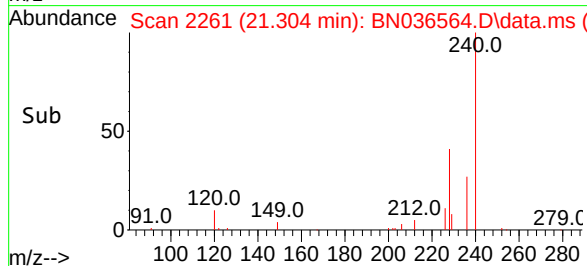
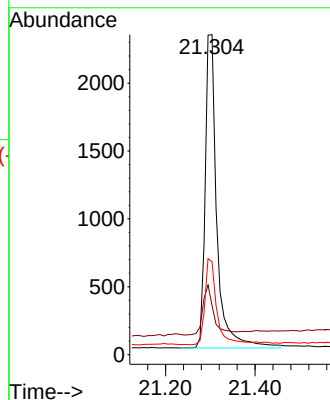
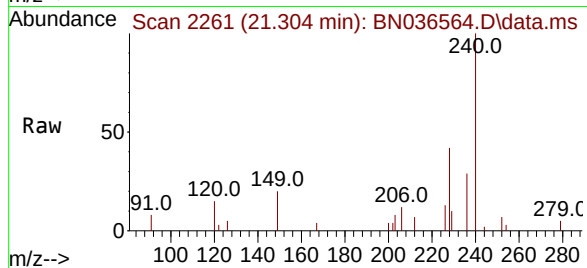
Tgt Ion:240 Resp: 4219

Ion Ratio Lower Upper

240 100

120 15.4 14.6 22.0

236 29.1 24.1 36.1



#30

Pyrene

Concen: 0.395 ng

RT: 19.536 min Scan# 2015

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

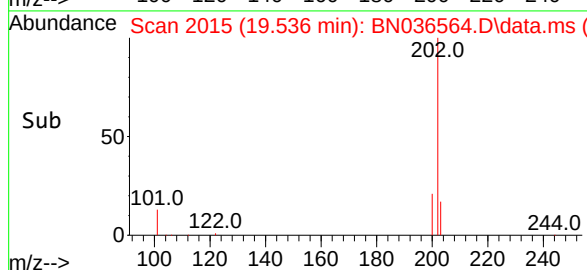
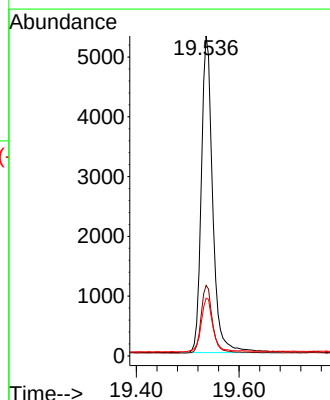
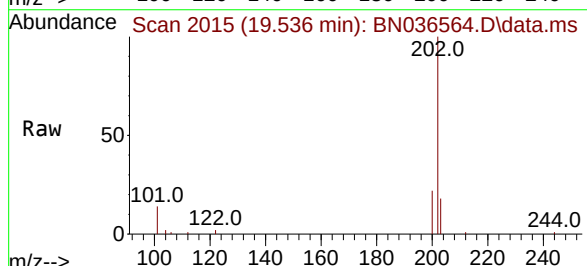
Tgt Ion:202 Resp: 8156

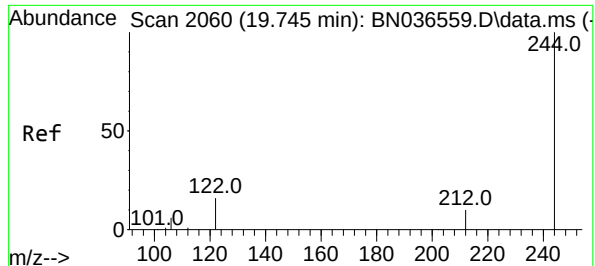
Ion Ratio Lower Upper

202 100

200 21.4 17.1 25.7

203 17.4 14.1 21.1

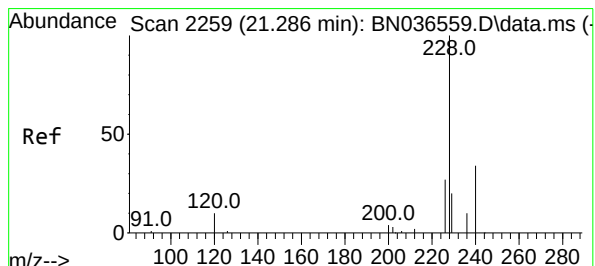
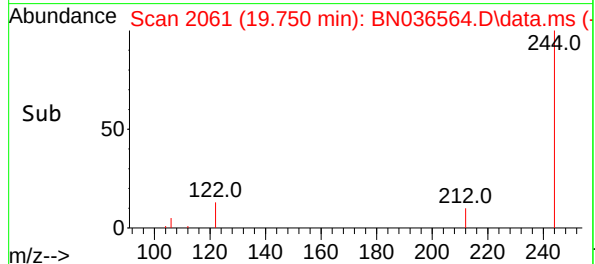
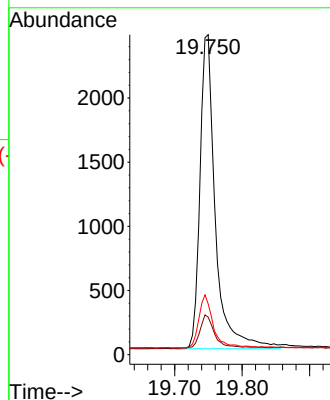
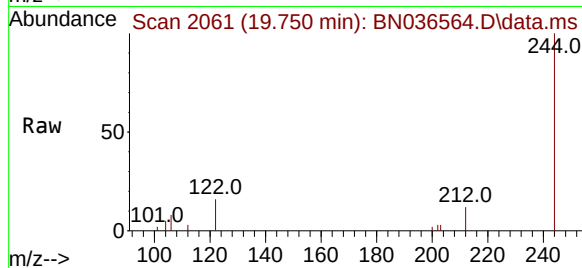




#31  
Terphenyl-d14  
Concen: 0.384 ng  
RT: 19.750 min Scan# 2061  
Delta R.T. 0.005 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

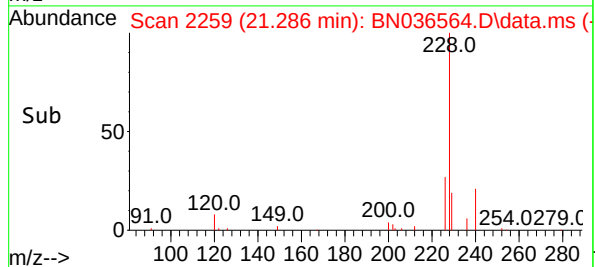
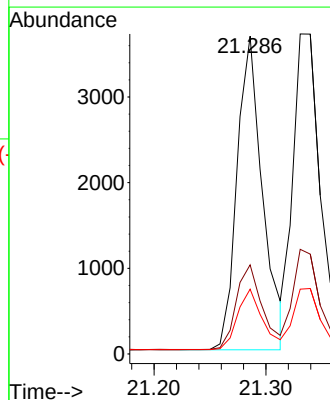
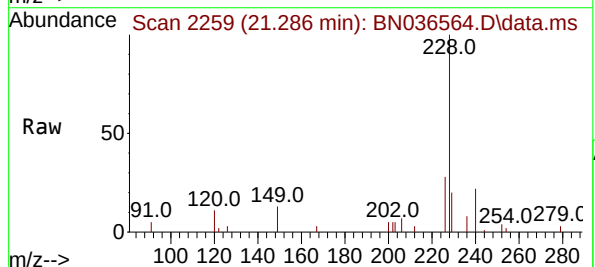
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN031025

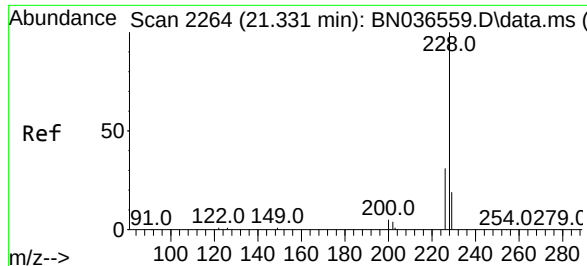
| Tgt Ion | 244  | Ratio | 100  | Lower | Upper |
|---------|------|-------|------|-------|-------|
| 244     | 100  |       |      |       |       |
| 212     | 11.7 |       | 9.6  | 14.4  |       |
| 122     | 15.8 |       | 13.9 | 20.9  |       |



#32  
Benzo(a)anthracene  
Concen: 0.396 ng  
RT: 21.286 min Scan# 2259  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

| Tgt Ion | 228  | Ratio | 100  | Lower | Upper |
|---------|------|-------|------|-------|-------|
| 228     | 100  |       |      |       |       |
| 226     | 28.1 |       | 22.5 | 33.7  |       |
| 229     | 20.4 |       | 16.6 | 25.0  |       |





#33

Chrysene

Concen: 0.433 ng

RT: 21.331 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

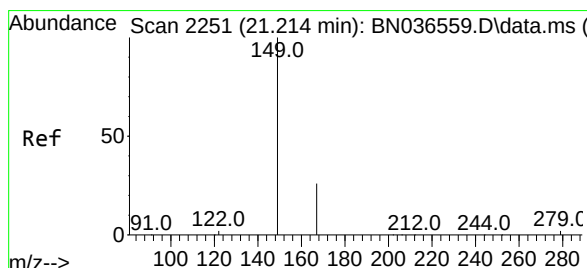
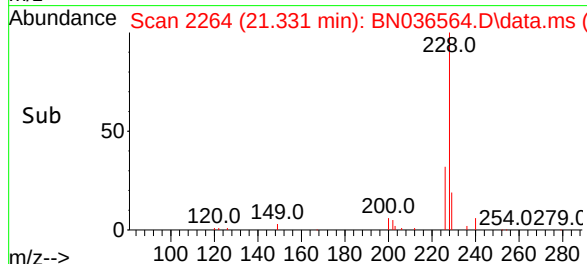
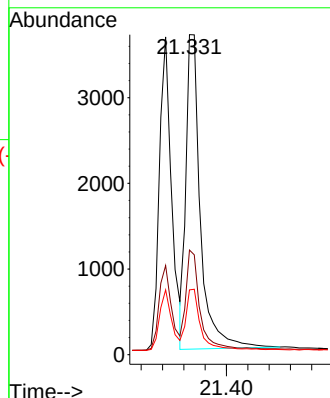
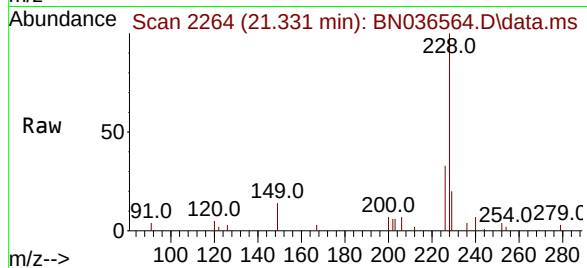
Tgt Ion:228 Resp: 6940

Ion Ratio Lower Upper

228 100

226 32.7 25.3 37.9

229 20.3 15.8 23.8



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.344 ng

RT: 21.214 min Scan# 2251

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

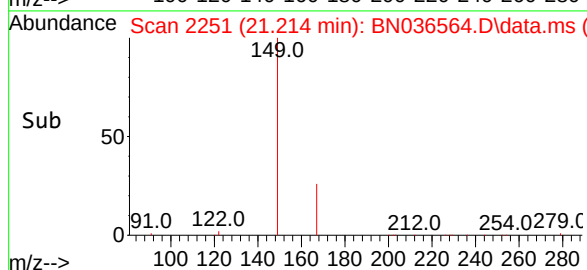
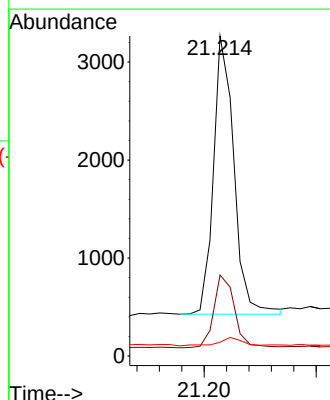
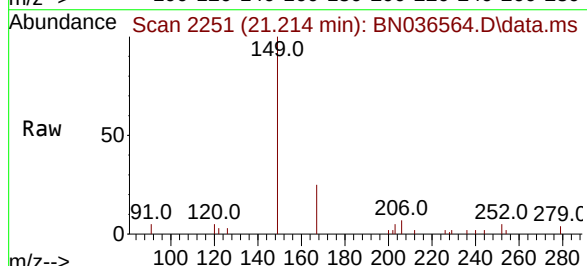
Tgt Ion:149 Resp: 3594

Ion Ratio Lower Upper

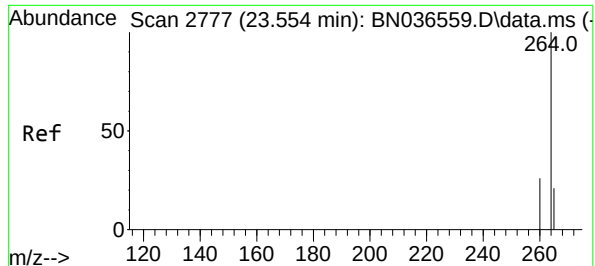
149 100

167 26.6 20.7 31.1

279 3.7 3.6 5.4







#35

Perylene-d12

Concen: 0.400 ng

RT: 23.554 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036564.D

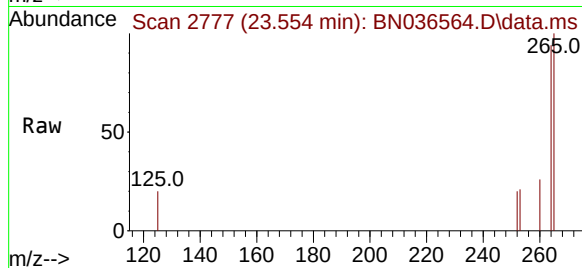
Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025



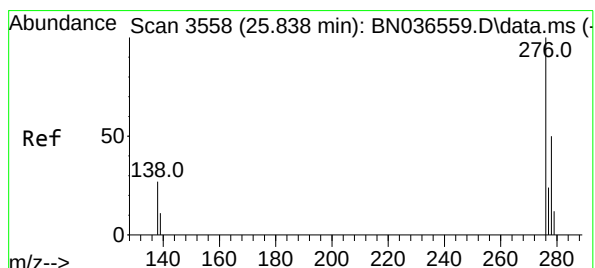
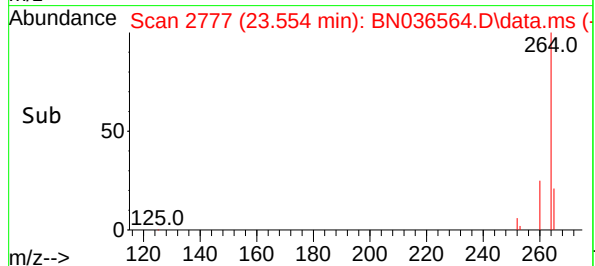
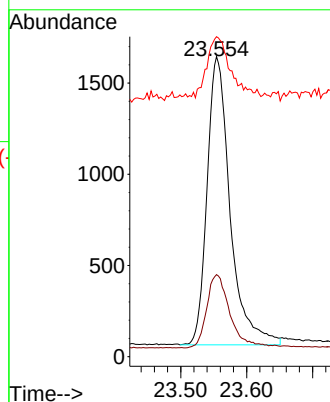
Tgt Ion:264 Resp: 3835

Ion Ratio Lower Upper

264 100

260 27.4 22.6 33.8

265 106.6 88.1 132.1



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.463 ng

RT: 25.841 min Scan# 3559

Delta R.T. 0.003 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

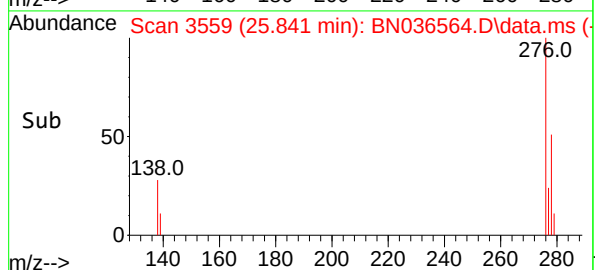
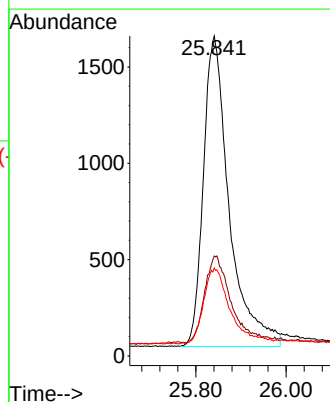
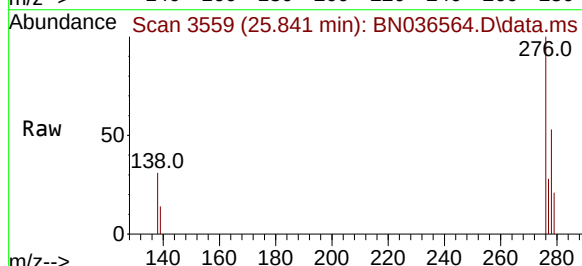
Tgt Ion:276 Resp: 6410

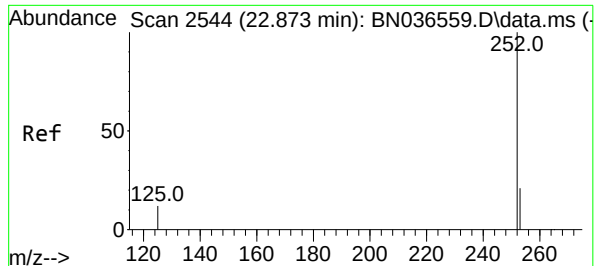
Ion Ratio Lower Upper

276 100

138 28.1 23.4 35.2

277 24.5 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.423 ng

RT: 22.879 min Scan# 2544

Delta R.T. 0.006 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

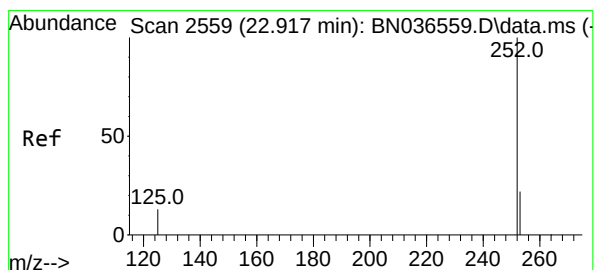
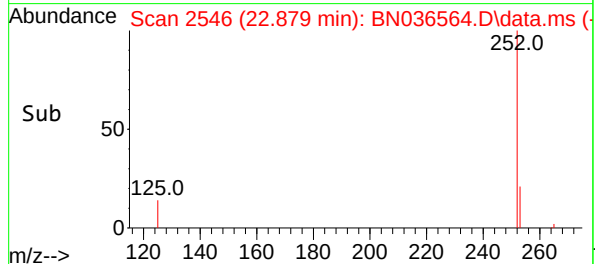
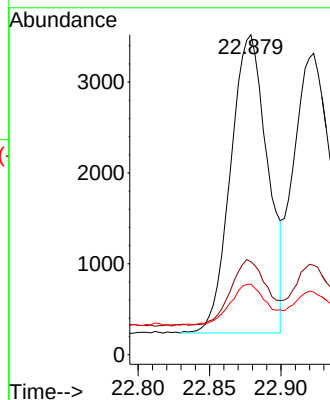
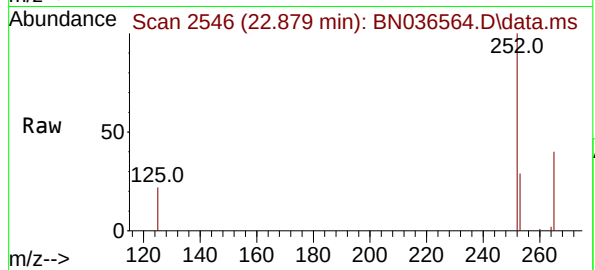
Tgt Ion:252 Resp: 5902

Ion Ratio Lower Upper

252 100

253 29.0 23.9 35.9

125 22.1 17.4 26.2



#38

Benzo(k)fluoranthene

Concen: 0.429 ng

RT: 22.923 min Scan# 2561

Delta R.T. 0.006 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

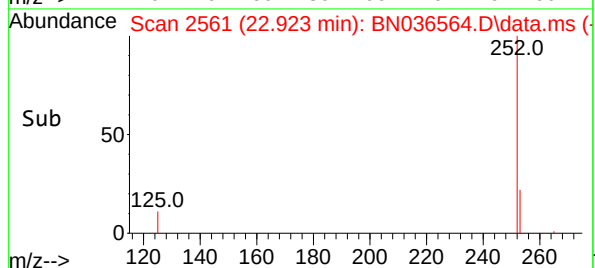
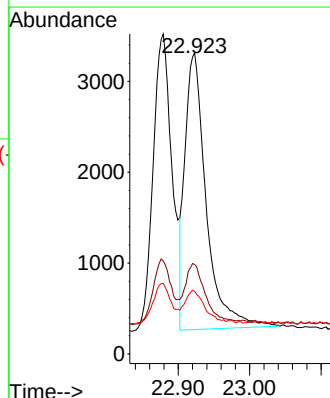
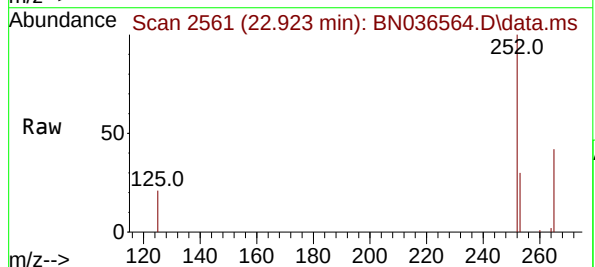
Tgt Ion:252 Resp: 6286

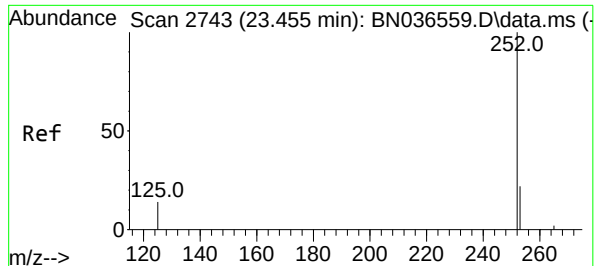
Ion Ratio Lower Upper

252 100

253 29.7 24.6 36.8

125 20.8 17.8 26.8





#39

Benzo(a)pyrene

Concen: 0.438 ng

RT: 23.458 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

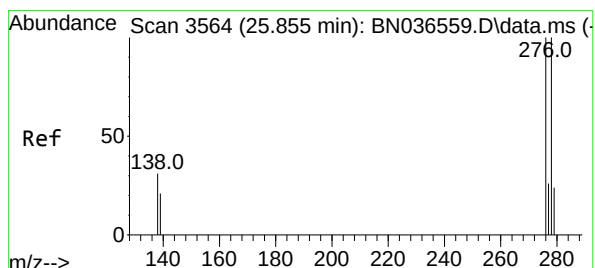
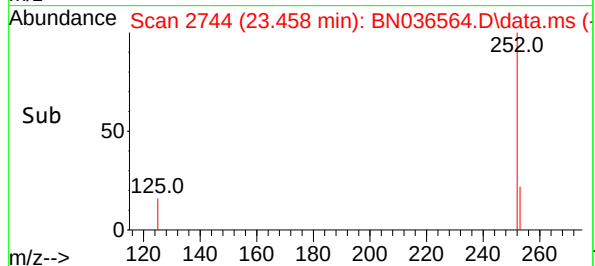
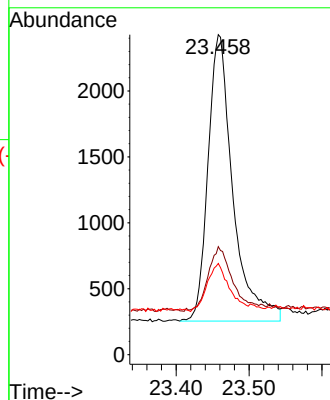
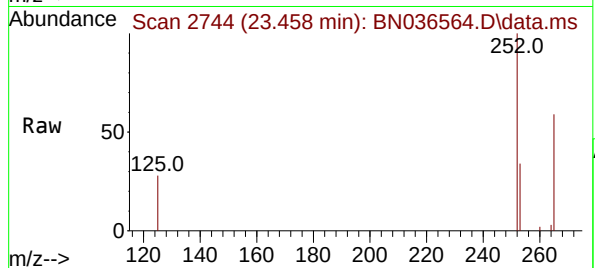
Tgt Ion:252 Resp: 5147

Ion Ratio Lower Upper

252 100

253 33.7 27.8 41.8

125 28.5 22.7 34.1



#40

Dibenzo(a,h)anthracene

Concen: 0.440 ng

RT: 25.855 min Scan# 3564

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

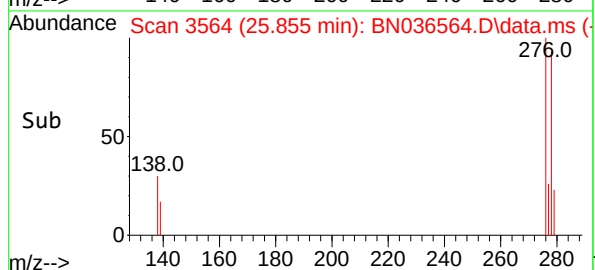
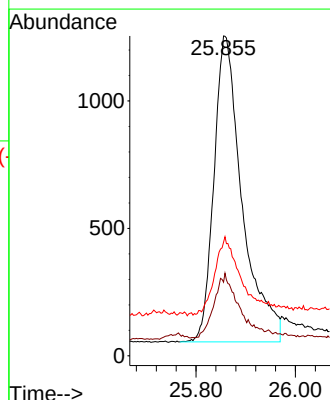
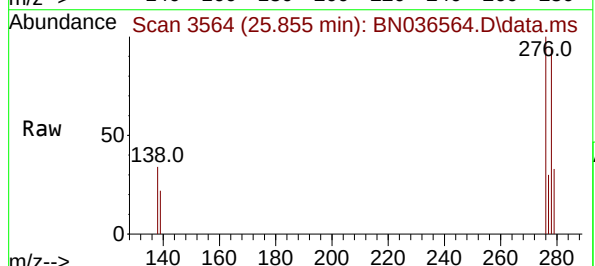
Tgt Ion:278 Resp: 4740

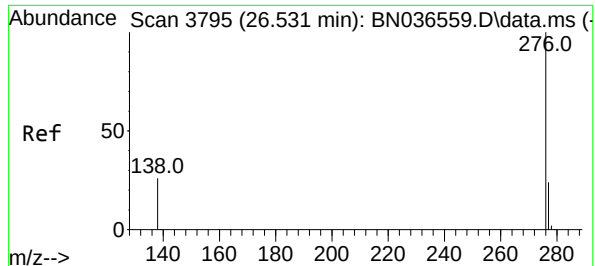
Ion Ratio Lower Upper

278 100

139 23.0 20.8 31.2

279 35.5 28.8 43.2





#41

Benzo(g,h,i)perylene

Concen: 0.477 ng

RT: 26.534 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN036564.D

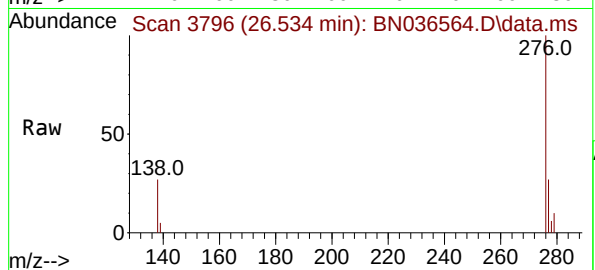
Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025



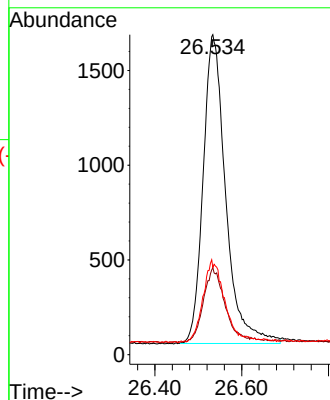
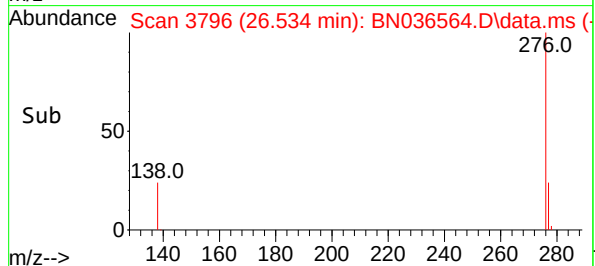
Tgt Ion:276 Resp: 5877

Ion Ratio Lower Upper

276 100

277 27.2 22.2 33.4

138 27.2 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036564.D  
 Acq On : 10 Mar 2025 16:38  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN031025

Quant Time: Mar 10 17:10:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 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   | 113   | 0.00     |
| 2       | 1,4-Dioxane                | 0.444 | 0.521 | -17.3 | 118   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.898 | 0.918 | -2.2  | 111   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.932 | 0.972 | -4.3  | 111   | 0.00     |
| 5 S     | Phenol-d6                  | 1.152 | 1.103 | 4.3   | 110   | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.190 | 1.184 | 0.5   | 113   | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 111   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.435 | 0.418 | 3.9   | 112   | 0.00     |
| 9       | Naphthalene                | 1.177 | 1.191 | -1.2  | 109   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.277 | 0.301 | -8.7  | 113   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.595 | 0.594 | 0.2   | 108   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.749 | 0.721 | 3.7   | 104   | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 102   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.182 | 0.166 | 8.8   | 90    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 2.327 | 2.513 | -8.0  | 107   | 0.00     |
| 16      | Acenaphthylene             | 1.888 | 1.964 | -4.0  | 103   | 0.00     |
| 17      | Acenaphthene               | 1.236 | 1.308 | -5.8  | 104   | 0.00     |
| 18      | Fluorene                   | 1.672 | 1.694 | -1.3  | 98    | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 96    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.086 | 0.070 | 18.6  | 87    | 0.01     |
| 21      | 4-Bromophenyl-phenylether  | 0.251 | 0.264 | -5.2  | 93    | 0.00     |
| 22      | Hexachlorobenzene          | 0.303 | 0.344 | -13.5 | 98    | 0.00     |
| 23      | Atrazine                   | 0.201 | 0.202 | -0.5  | 91    | 0.01     |
| 24      | Pentachlorophenol          | 0.138 | 0.121 | 12.3  | 85    | 0.00     |
| 25      | Phenanthrene               | 1.200 | 1.251 | -4.2  | 93    | 0.00     |
| 26      | Anthracene                 | 1.083 | 1.100 | -1.6  | 92    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 1.025 | 1.065 | -3.9  | 92    | 0.00     |
| 28      | Fluoranthene               | 1.348 | 1.396 | -3.6  | 93    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 103   | 0.00     |
| 30      | Pyrene                     | 1.956 | 1.933 | 1.2   | 93    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.958 | 0.920 | 4.0   | 92    | 0.00     |
| 32      | Benzo(a)anthracene         | 1.391 | 1.378 | 0.9   | 98    | 0.00     |
| 33      | Chrysene                   | 1.520 | 1.645 | -8.2  | 105   | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.990 | 0.852 | 13.9  | 84    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 108   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.444 | 1.671 | -15.7 | 117   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.456 | 1.539 | -5.7  | 108   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.527 | 1.639 | -7.3  | 110   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.226 | 1.342 | -9.5  | 112   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.124 | 1.236 | -10.0 | 115   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.286 | 1.532 | -19.1 | 120   | 0.00     |

(#) = Out of Range

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

**Instrument :**

BNA\_N

**ClientSampleId :**

ICVBN031025

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036564.D  
 Acq On : 10 Mar 2025 16:38  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN031025

Quant Time: Mar 10 17:10:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 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   | 113   | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.470 | -17.5 | 118   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.409 | -2.2  | 111   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.417 | -4.2  | 111   | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.383 | 4.3   | 110   | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.398 | 0.5   | 113   | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 111   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.384 | 4.0   | 112   | 0.00     |
| 9       | Naphthalene                | 0.400  | 0.405 | -1.3  | 109   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.434 | -8.5  | 113   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.399 | 0.3   | 108   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.385 | 3.8   | 104   | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 102   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.365 | 8.8   | 90    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.432 | -8.0  | 107   | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.416 | -4.0  | 103   | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.423 | -5.7  | 104   | 0.00     |
| 18      | Fluorene                   | 0.400  | 0.405 | -1.3  | 98    | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 96    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.420 | -5.0  | 87    | 0.01     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.421 | -5.2  | 93    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.455 | -13.7 | 98    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.401 | -0.3  | 91    | 0.01     |
| 24      | Pentachlorophenol          | 0.400  | 0.351 | 12.3  | 85    | 0.00     |
| 25      | Phenanthrene               | 0.400  | 0.417 | -4.2  | 93    | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.407 | -1.7  | 92    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.415 | -3.7  | 92    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.414 | -3.5  | 93    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 103   | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.395 | 1.3   | 93    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.384 | 4.0   | 92    | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.396 | 1.0   | 98    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.433 | -8.2  | 105   | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.344 | 14.0  | 84    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 108   | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.463 | -15.8 | 117   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.423 | -5.7  | 108   | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.429 | -7.2  | 110   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.438 | -9.5  | 112   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.440 | -10.0 | 115   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.477 | -19.2 | 120   | 0.00     |

(#) = Out of Range

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

**Instrument :**

BNA\_N

**ClientSampleId :**

ICVBN031025





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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JAC005

Lab Code: CHEM Case No.: Q1697 SAS No.: Q1697 SDG No.: Q1697

Instrument ID: BNA\_N Calibration Date/Time: 04/03/2025 11:47

Lab File ID: BN036817.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND                | RRF   | RRF0.4 | MIN<br>RRF | %D   | MAX%D |
|-------------------------|-------|--------|------------|------|-------|
| 2-Methylnaphthalene-d10 | 0.595 | 0.639  |            | 7.4  | 20.0  |
| Fluoranthene-d10        | 1.025 | 1.231  |            | 20.1 | 20.0  |
| 2-Fluorophenol          | 0.932 | 0.987  |            | 5.9  | 20.0  |
| Phenol-d6               | 1.152 | 1.200  |            | 4.2  | 20.0  |
| Nitrobenzene-d5         | 0.435 | 0.443  |            | 1.8  | 20.0  |
| 2-Fluorobiphenyl        | 2.327 | 2.227  |            | -4.3 | 20.0  |
| 2,4,6-Tribromophenol    | 0.182 | 0.178  |            | -2.2 | 20.0  |
| Terphenyl-d14           | 0.958 | 0.907  |            | -5.3 | 20.0  |
| 1,4-Dioxane             | 0.444 | 0.469  |            | 5.6  | 20.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
 Data File : BN036817.D  
 Acq On : 03 Apr 2025 11:47  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Apr 04 03:27:44 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 03:26:58 2025  
 Response via : Initial Calibration

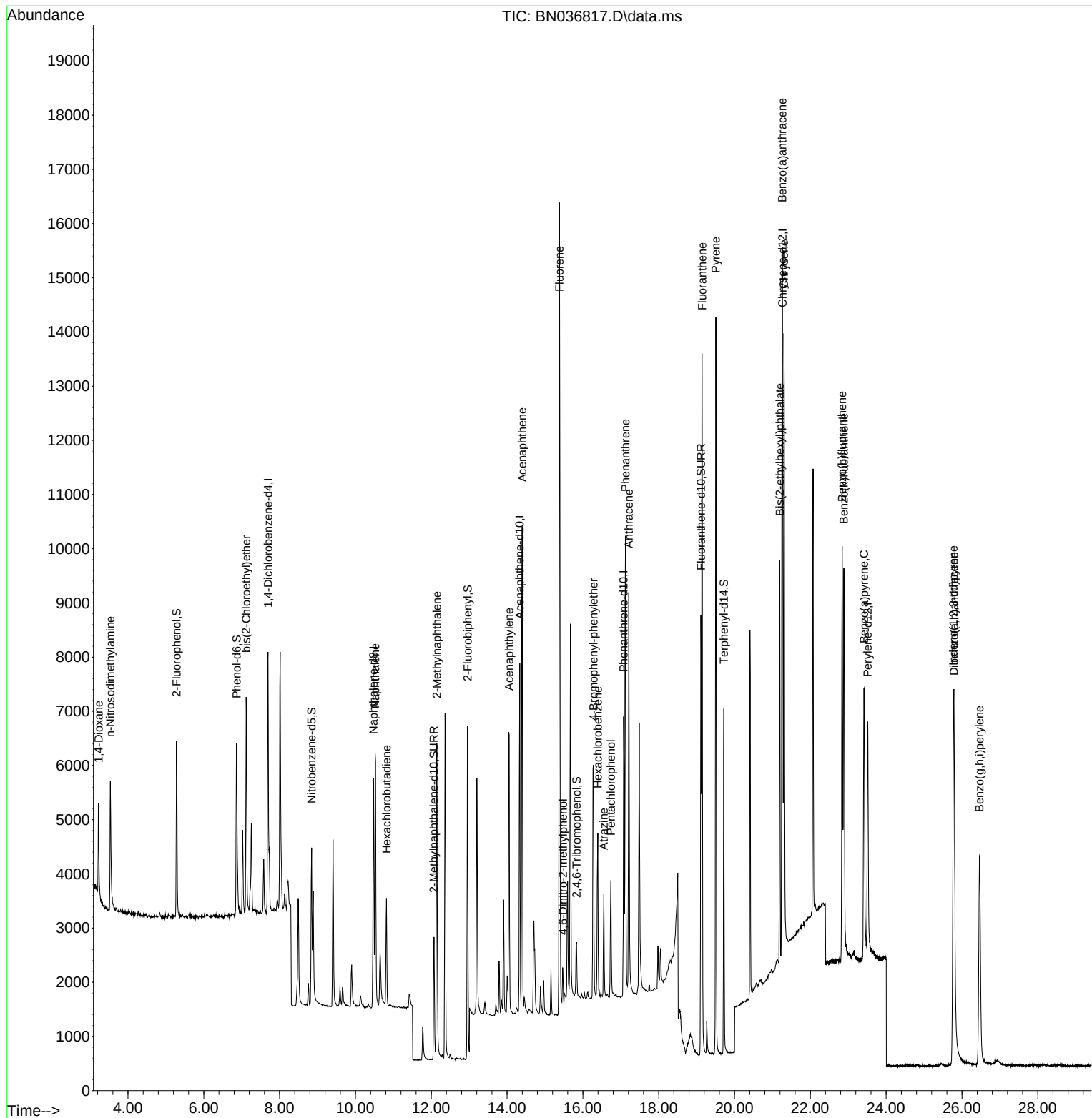
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.696  | 152  | 2349     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 5586     | 0.400 | ng    | #-0.03   |
| 13) Acenaphthene-d10          | 14.334 | 164  | 3520     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.074 | 188  | 7454     | 0.400 | ng    | #-0.04   |
| 29) Chrysene-d12              | 21.268 | 240  | 6815     | 0.400 | ng    | -0.03    |
| 35) Perylene-d12              | 23.514 | 264  | 6111     | 0.400 | ng    | #-0.04   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.283  | 112  | 2318     | 0.423 | ng    | -0.03    |
| 5) Phenol-d6                  | 6.865  | 99   | 2819     | 0.417 | ng    | -0.04    |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 2474     | 0.407 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.070 | 152  | 3571     | 0.430 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 626      | 0.392 | ng    | -0.02    |
| 15) 2-Fluorobiphenyl          | 12.958 | 172  | 7838     | 0.383 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.113 | 212  | 9177     | 0.480 | ng    | -0.03    |
| 31) Terphenyl-d14             | 19.717 | 244  | 6183     | 0.379 | ng    | -0.03    |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.225  | 88   | 1101     | 0.423 | ng    | 98       |
| 3) n-Nitrosodimethylamine     | 3.536  | 42   | 2104     | 0.399 | ng    | 95       |
| 6) bis(2-Chloroethyl)ether    | 7.118  | 93   | 2915     | 0.417 | ng    | 99       |
| 9) Naphthalene                | 10.520 | 128  | 6775     | 0.412 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.819 | 225  | 1566     | 0.405 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.146 | 142  | 4428     | 0.424 | ng    | 97       |
| 16) Acenaphthylene            | 14.056 | 152  | 6382     | 0.384 | ng    | 100      |
| 17) Acenaphthene              | 14.398 | 154  | 4368     | 0.402 | ng    | 100      |
| 18) Fluorene                  | 15.382 | 166  | 5998     | 0.408 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198  | 624      | 0.473 | ng    | # 68     |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248  | 1850     | 0.396 | ng    | # 81     |
| 22) Hexachlorobenzene         | 16.391 | 284  | 2163     | 0.384 | ng    | 99       |
| 23) Atrazine                  | 16.553 | 200  | 1628     | 0.435 | ng    | # 93     |
| 24) Pentachlorophenol         | 16.739 | 266  | 1145     | 0.445 | ng    | 98       |
| 25) Phenanthrene              | 17.124 | 178  | 9504     | 0.425 | ng    | 100      |
| 26) Anthracene                | 17.211 | 178  | 8239     | 0.408 | ng    | 99       |
| 28) Fluoranthene              | 19.146 | 202  | 11933    | 0.475 | ng    | 100      |
| 30) Pyrene                    | 19.508 | 202  | 12267    | 0.368 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 9912     | 0.418 | ng    | 99       |
| 33) Chrysene                  | 21.304 | 228  | 10681    | 0.413 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 6950     | 0.412 | ng    | # 99     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.776 | 276  | 9523     | 0.432 | ng    | 98       |
| 37) Benzo(b)fluoranthene      | 22.841 | 252  | 9669     | 0.435 | ng    | 92       |
| 38) Benzo(k)fluoranthene      | 22.885 | 252  | 9527m    | 0.408 | ng    |          |
| 39) Benzo(a)pyrene            | 23.417 | 252  | 8143     | 0.435 | ng    | # 89     |
| 40) Dibenzo(a,h)anthracene    | 25.791 | 278  | 7424     | 0.432 | ng    | 92       |
| 41) Benzo(g,h,i)perylene      | 26.464 | 276  | 8300     | 0.423 | ng    | 97       |
| -----                         |        |      |          |       |       |          |

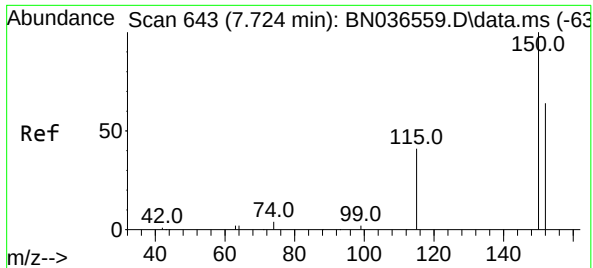
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : BN036817.D  
Acq On : 03 Apr 2025 11:47  
Operator : RC/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Quant Time: Apr 04 03:27:44 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Apr 04 03:26:58 2025  
Response via : Initial Calibration

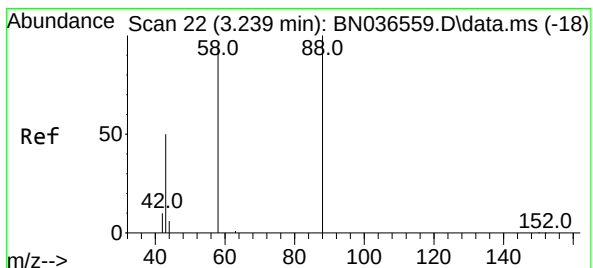
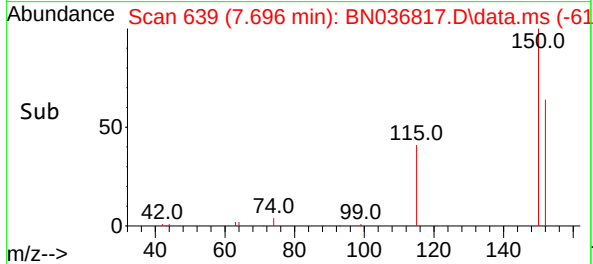
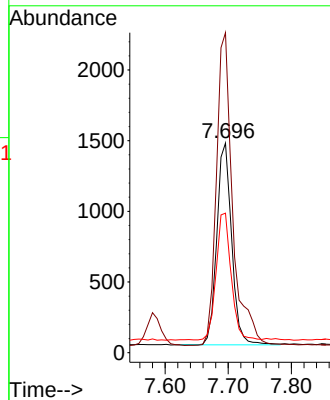
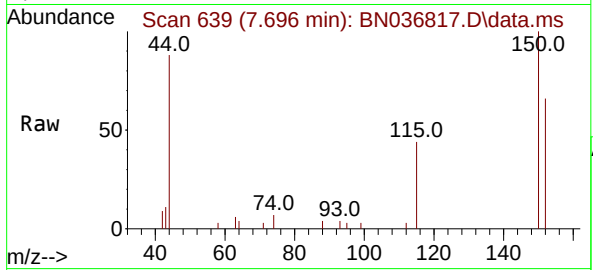




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.696 min Scan# 61  
Delta R.T. -0.028 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

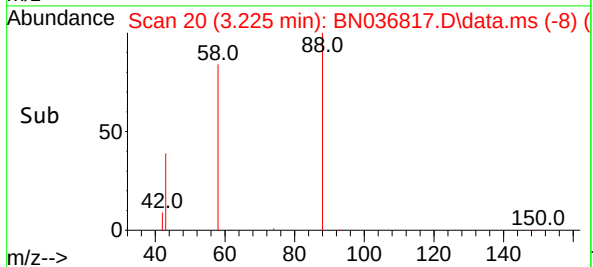
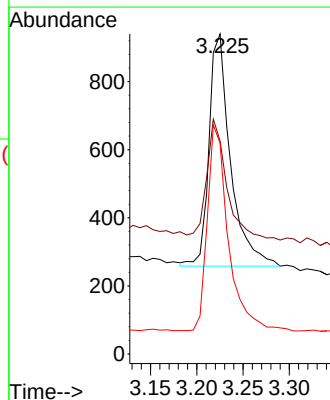
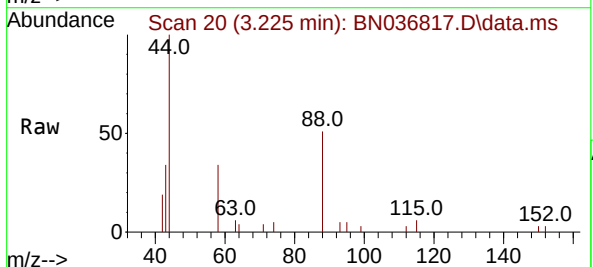
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

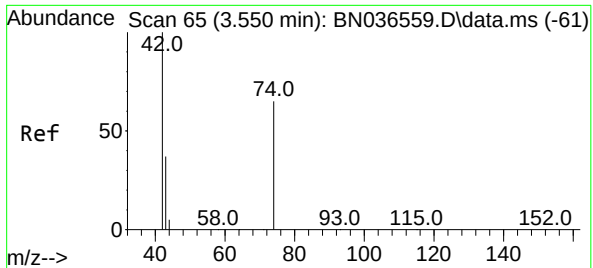
Tgt Ion:152 Resp: 2349  
Ion Ratio Lower Upper  
152 100  
150 152.7 123.7 185.5  
115 66.6 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.423 ng  
RT: 3.225 min Scan# 20  
Delta R.T. -0.014 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion: 88 Resp: 1101  
Ion Ratio Lower Upper  
88 100  
43 49.1 37.8 56.8  
58 85.8 67.4 101.2

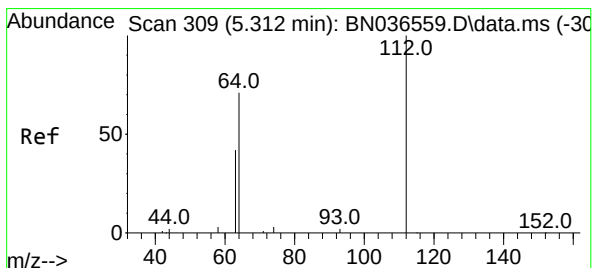
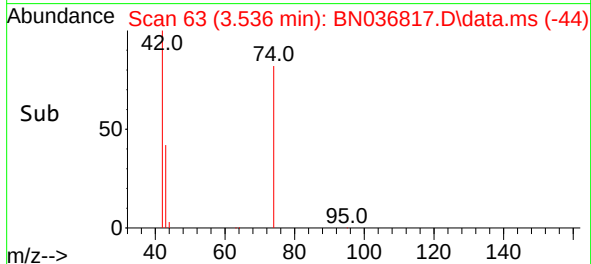
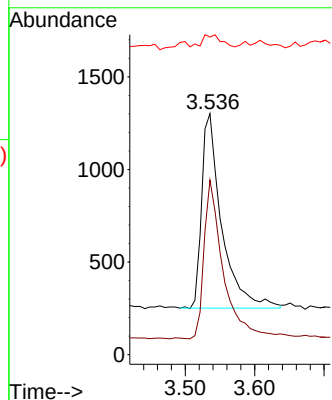
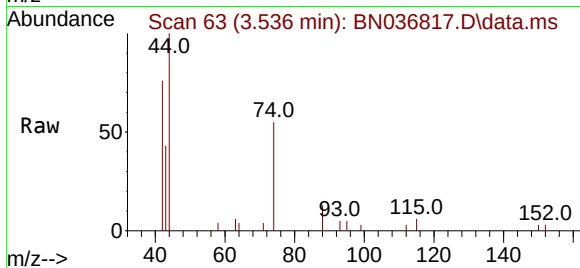




#3  
n-Nitrosodimethylamine  
Concen: 0.399 ng  
RT: 3.536 min Scan# 61  
Delta R.T. -0.014 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

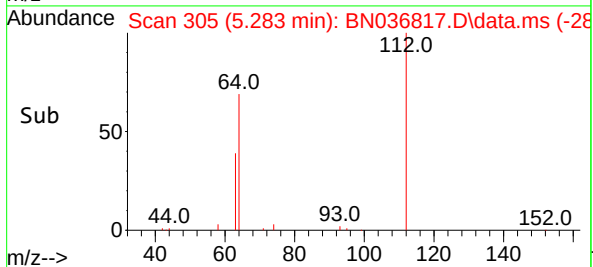
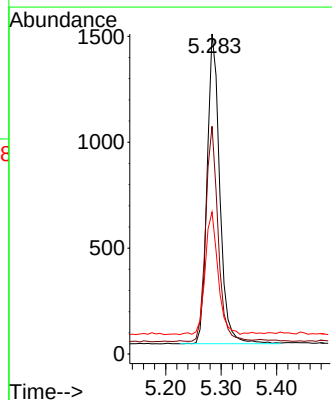
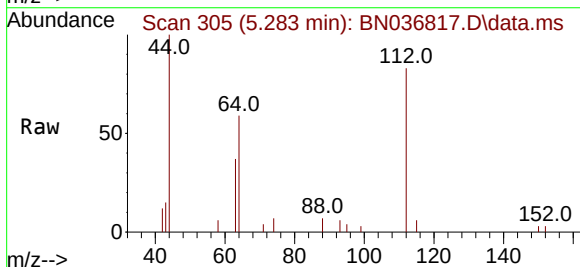
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ClientSampleId :  
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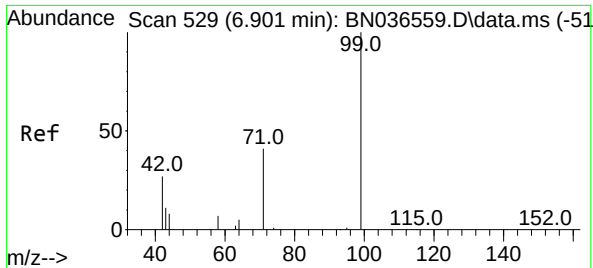
Tgt Ion: 42 Resp: 2104  
Ion Ratio Lower Upper  
42 100  
74 80.2 60.6 90.8  
44 7.3 6.3 9.5



#4  
2-Fluorophenol  
Concen: 0.423 ng  
RT: 5.283 min Scan# 305  
Delta R.T. -0.029 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion: 112 Resp: 2318  
Ion Ratio Lower Upper  
112 100  
64 68.0 53.1 79.7  
63 40.1 31.8 47.8

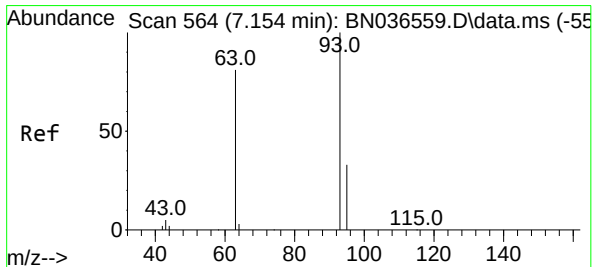
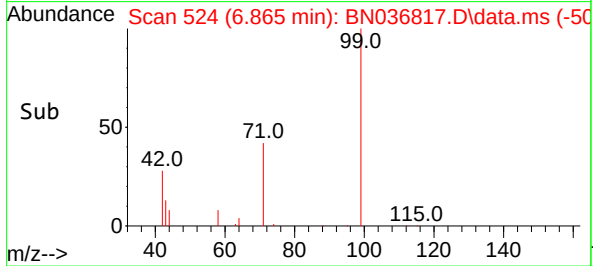
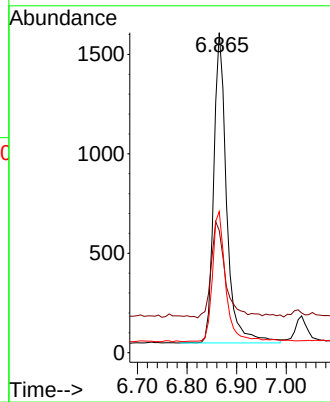
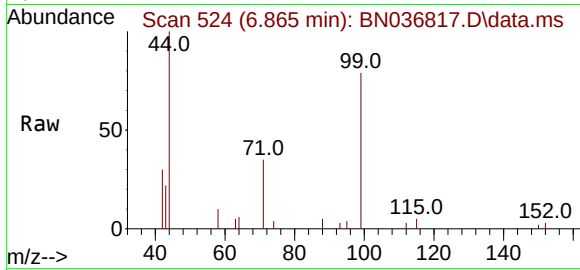




#5  
Phenol-d6  
Concen: 0.417 ng  
RT: 6.865 min Scan# 51  
Delta R.T. -0.036 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

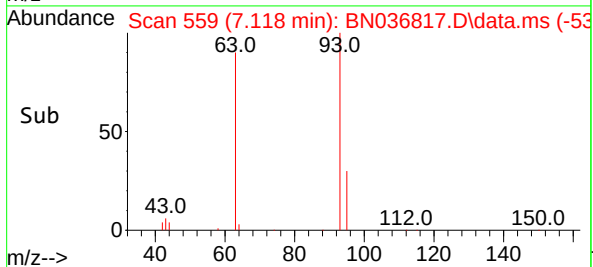
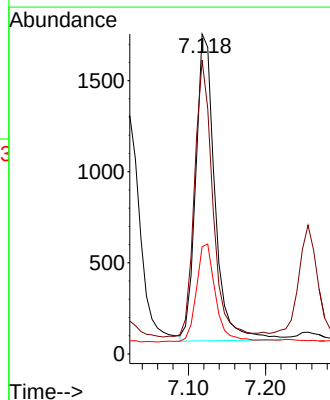
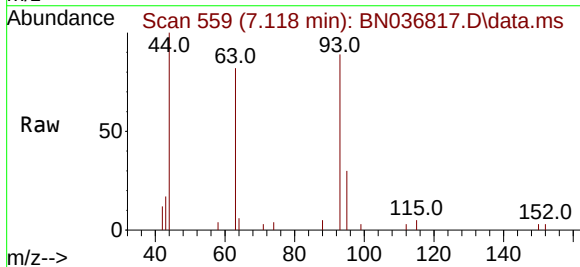
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SSTDCCC0.4

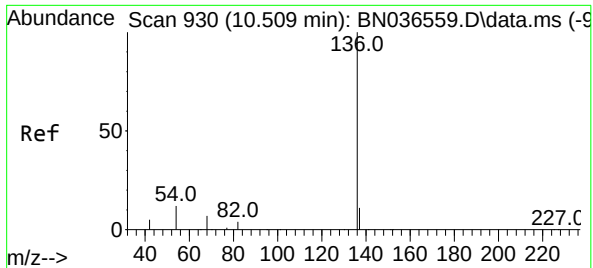
Tgt Ion: 99 Resp: 2819  
Ion Ratio Lower Upper  
99 100  
42 34.2 26.5 39.7  
71 43.5 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 0.417 ng  
RT: 7.118 min Scan# 559  
Delta R.T. -0.036 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion: 93 Resp: 2915  
Ion Ratio Lower Upper  
93 100  
63 85.5 67.7 101.5  
95 31.9 25.6 38.4

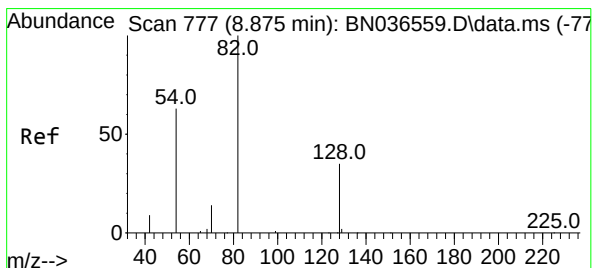
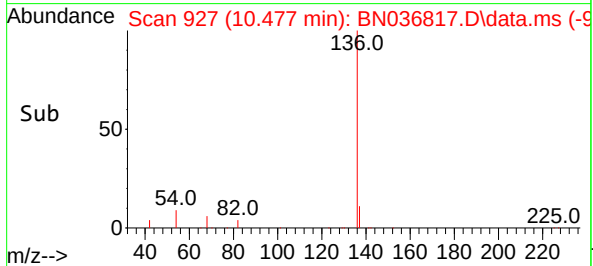
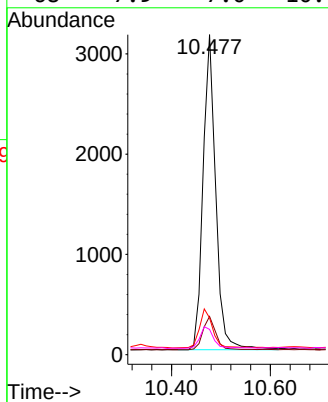
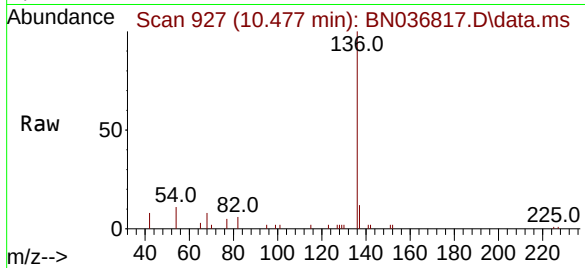




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

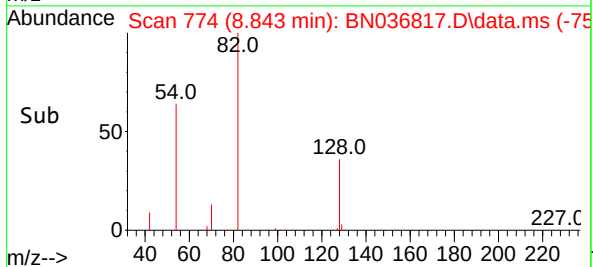
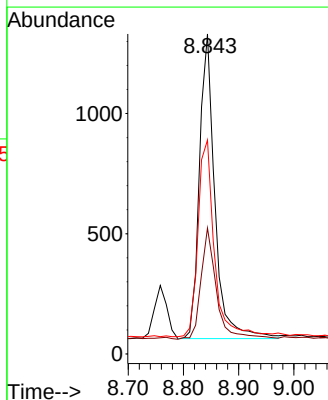
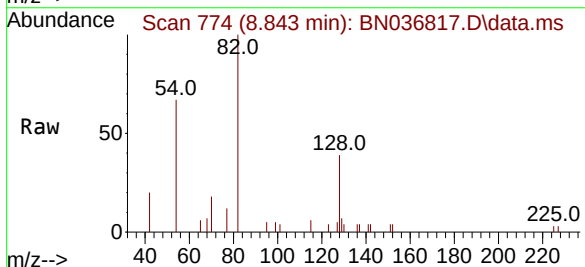
Instrument :  
BNA\_N  
ClientSampleId :  
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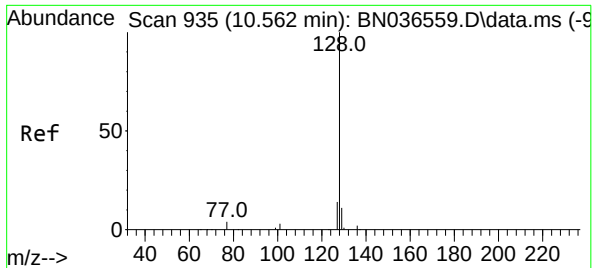
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5586  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.9  | 10.3  | 15.5  |
| 54       | 11.5  | 11.5  | 17.3# |
| 68       | 7.9   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.407 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 2474  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 39.4  | 30.6  | 45.8  |
| 54       | 66.9  | 52.2  | 78.4  |

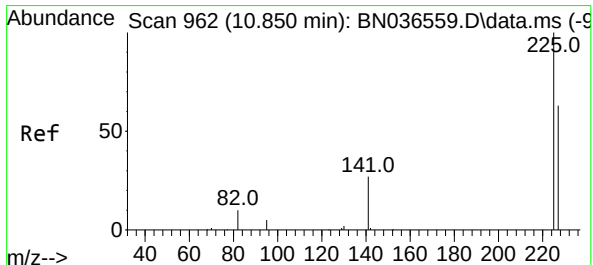
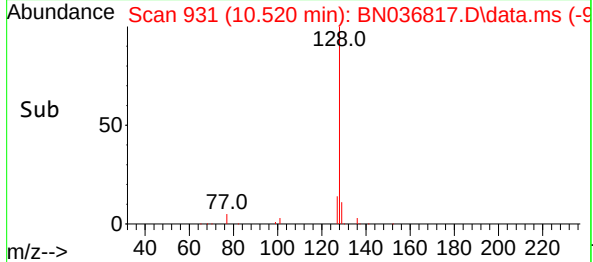
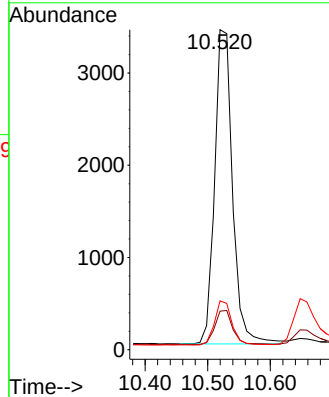
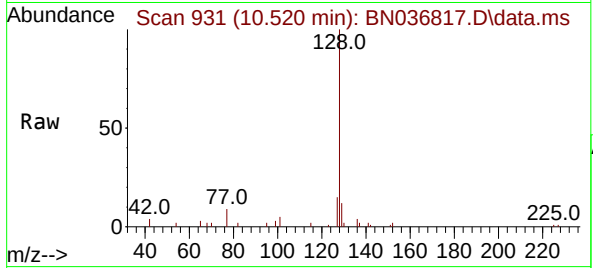




#9  
Naphthalene  
Concen: 0.412 ng  
RT: 10.520 min Scan# 91  
Delta R.T. -0.042 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

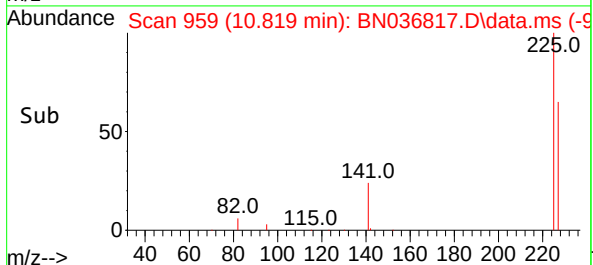
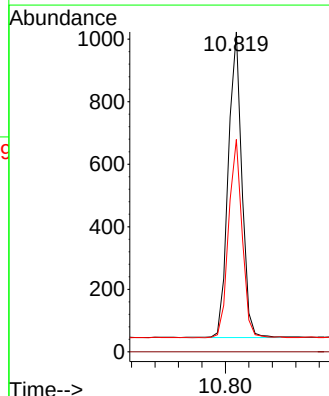
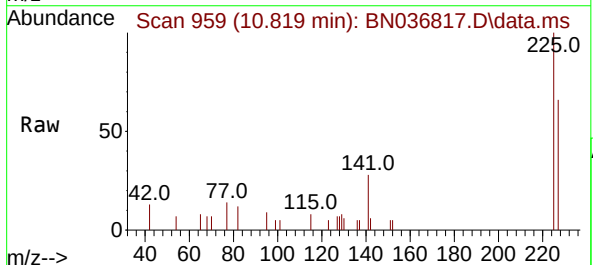
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 6775  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 12.1  | 9.8   | 14.6  |
| 127      | 15.2  | 11.8  | 17.8  |

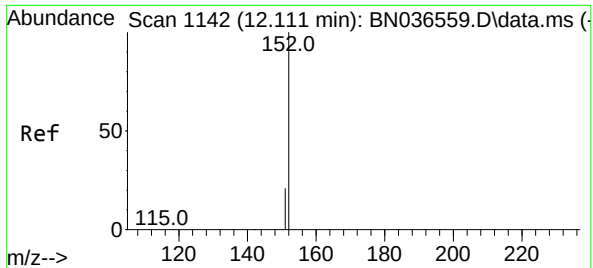


#10  
Hexachlorobutadiene  
Concen: 0.405 ng  
RT: 10.819 min Scan# 959  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 225   | Resp: | 1566  |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 0.0   | 0.0   | 0.0   |
| 227      | 65.0  | 51.8  | 77.8  |



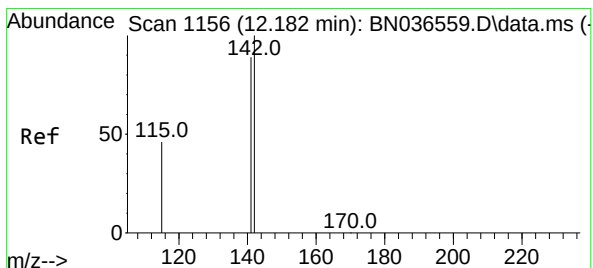
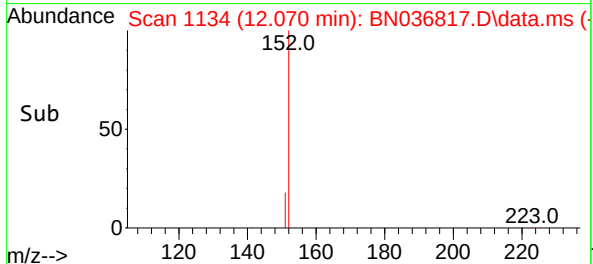
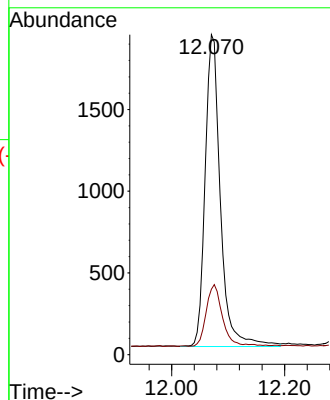
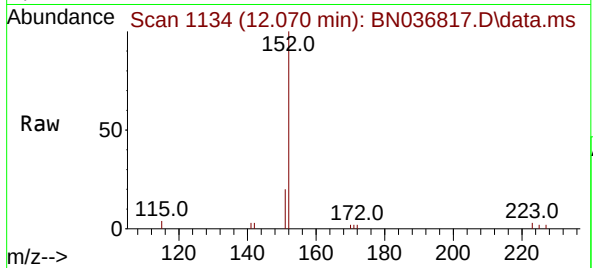




#11  
2-Methylnaphthalene-d10  
Concen: 0.430 ng  
RT: 12.070 min Scan# 1142  
Delta R.T. -0.040 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

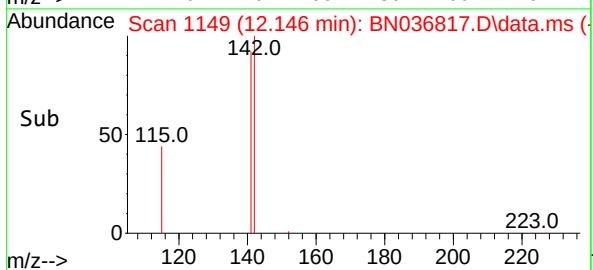
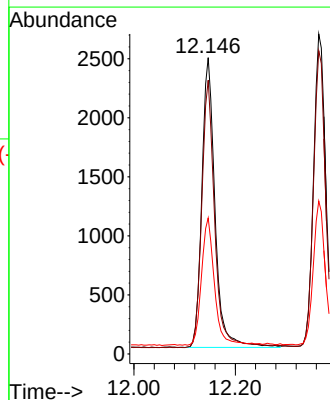
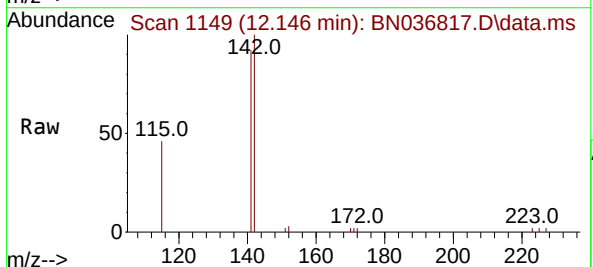
Instrument :  
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ClientSampleId :  
SSTDCCC0.4

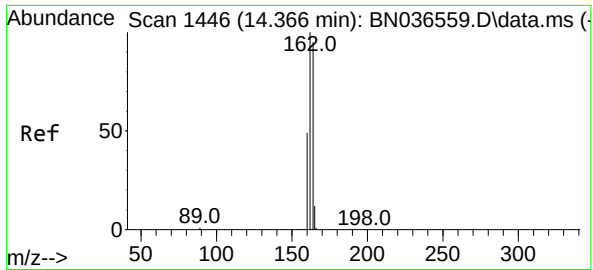
Tgt Ion:152 Resp: 3571  
Ion Ratio Lower Upper  
152 100  
151 20.5 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 0.424 ng  
RT: 12.146 min Scan# 1149  
Delta R.T. -0.035 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:142 Resp: 4428  
Ion Ratio Lower Upper  
142 100  
141 92.4 71.7 107.5  
115 45.9 38.3 57.5

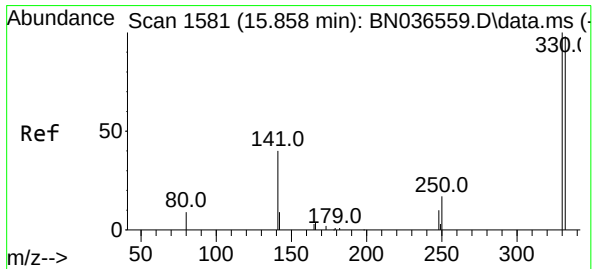
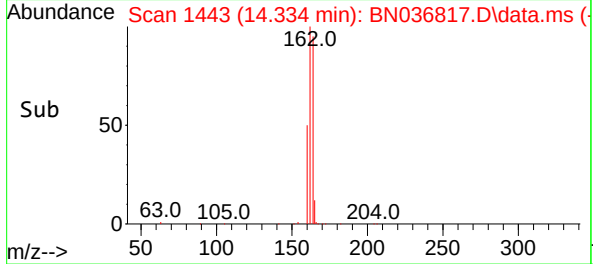
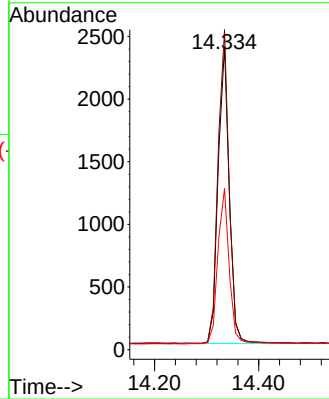
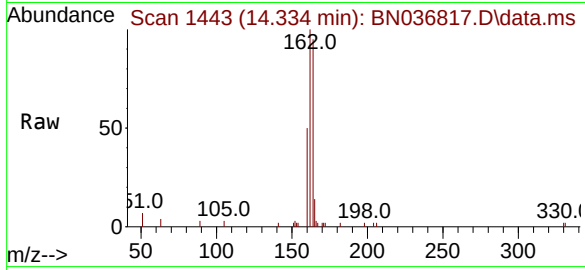




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

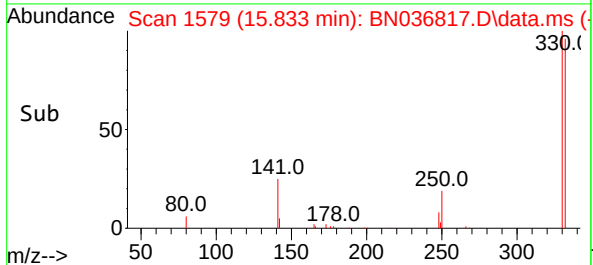
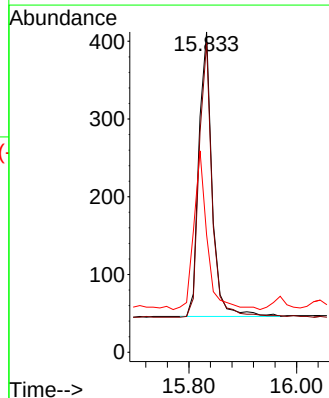
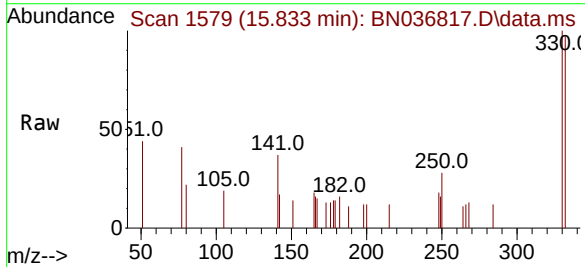
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ClientSampleId :  
SSTDCCC0.4

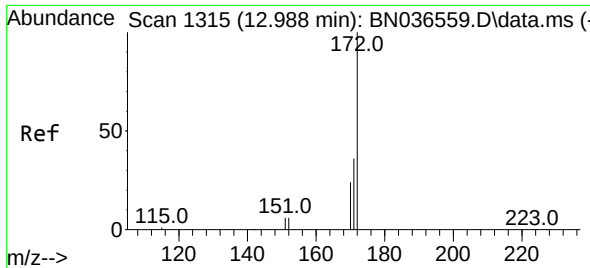
Tgt Ion:164 Resp: 3520  
Ion Ratio Lower Upper  
164 100  
162 105.5 84.2 126.2  
160 53.1 42.2 63.2



#14  
2,4,6-Tribromophenol  
Concen: 0.392 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.025 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:330 Resp: 626  
Ion Ratio Lower Upper  
330 100  
332 95.4 75.2 112.8  
141 56.1 43.4 65.2

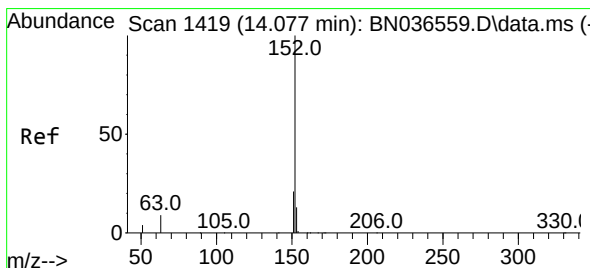
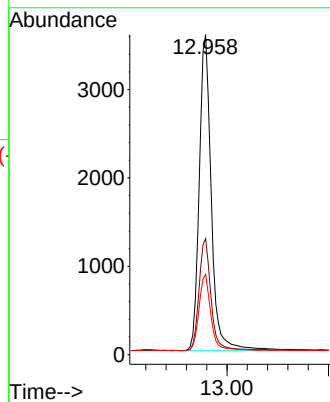
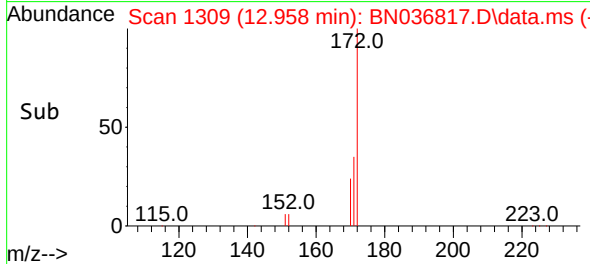
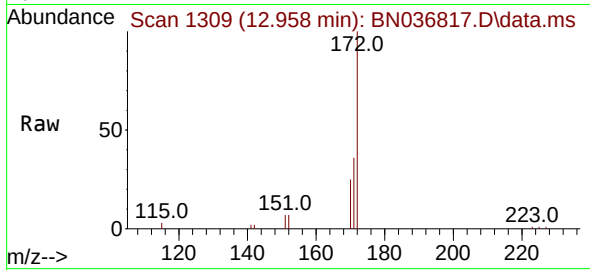




#15  
2-Fluorobiphenyl  
Concen: 0.383 ng  
RT: 12.958 min Scan# 11  
Delta R.T. -0.030 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

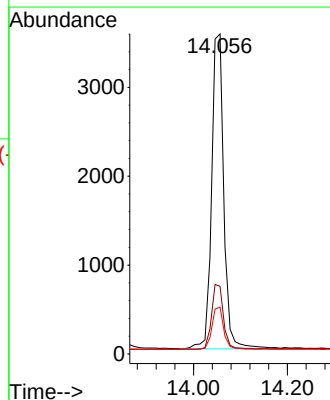
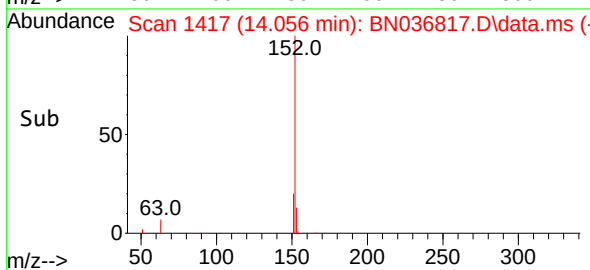
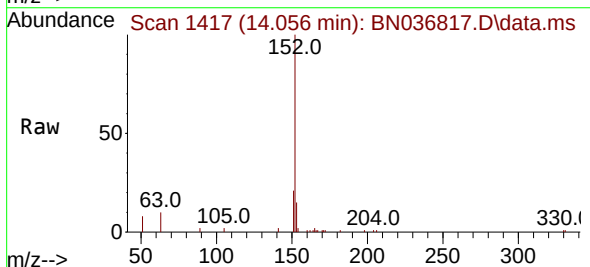
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

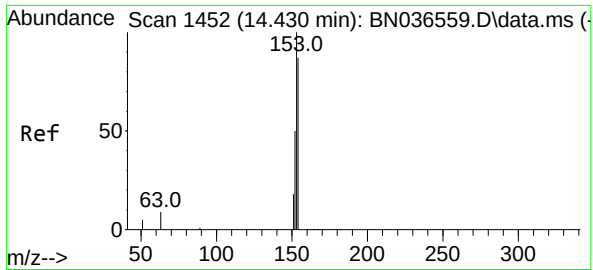
Tgt Ion:172 Resp: 7838  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.5 44.3  
170 25.1 20.2 30.4



#16  
Acenaphthylene  
Concen: 0.384 ng  
RT: 14.056 min Scan# 1417  
Delta R.T. -0.021 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:152 Resp: 6382  
Ion Ratio Lower Upper  
152 100  
151 20.2 16.2 24.4  
153 13.1 10.6 15.8

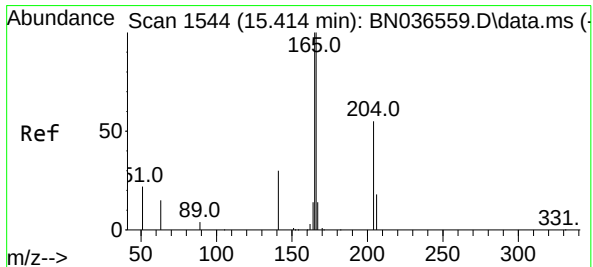
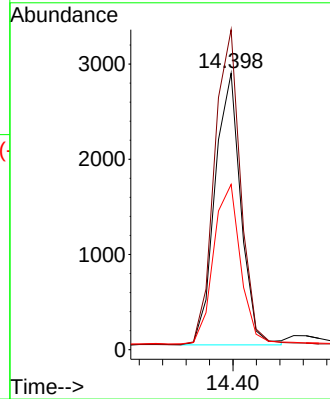
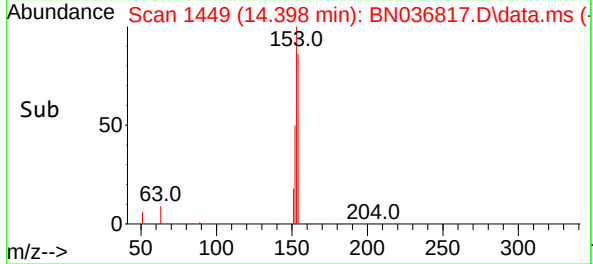
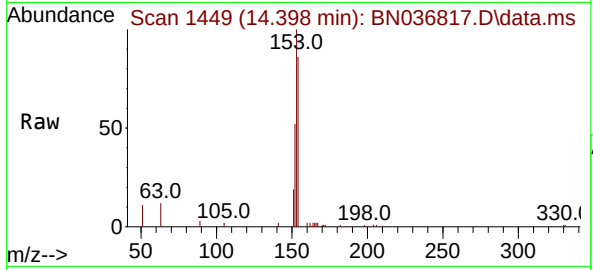




#17  
Acenaphthene  
Concen: 0.402 ng  
RT: 14.398 min Scan# 1449  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

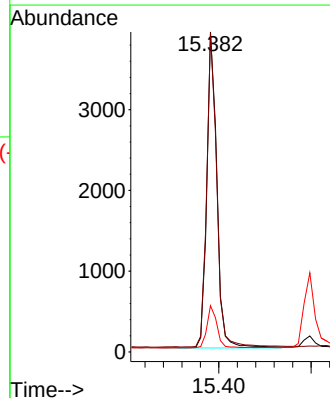
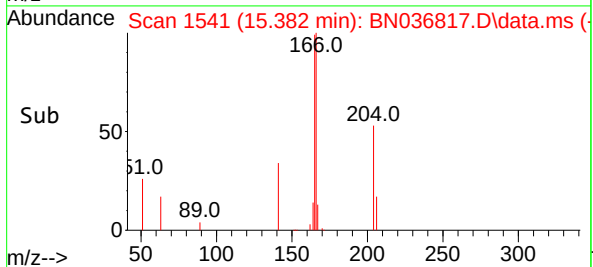
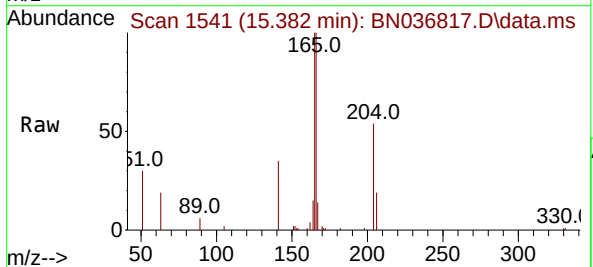
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

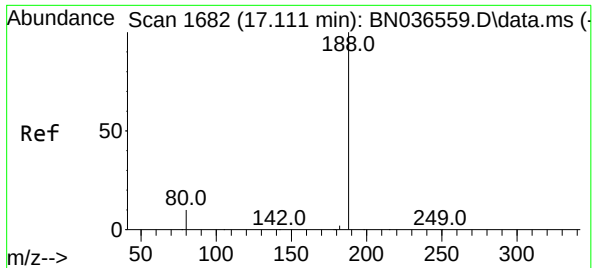
Tgt Ion:154 Resp: 4368  
Ion Ratio Lower Upper  
154 100  
153 117.9 94.1 141.1  
152 62.0 49.8 74.6



#18  
Fluorene  
Concen: 0.408 ng  
RT: 15.382 min Scan# 1541  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:166 Resp: 5998  
Ion Ratio Lower Upper  
166 100  
165 99.3 79.8 119.8  
167 13.0 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.074 min Scan# 1

Delta R.T. -0.037 min

Lab File: BN036817.D

Acq: 03 Apr 2025 11:47

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

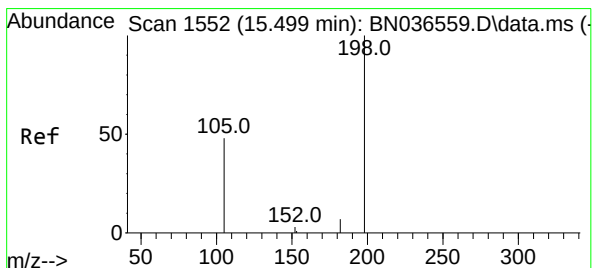
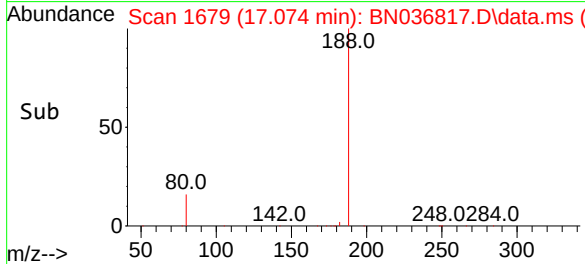
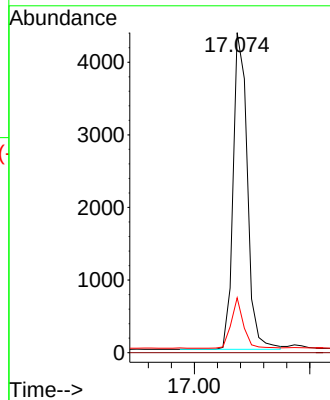
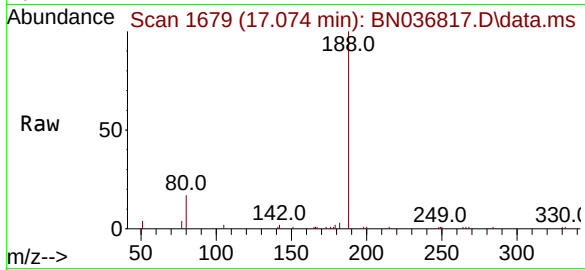
Tgt Ion:188 Resp: 7454

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 17.2 8.8 13.2#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.473 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.021 min

Lab File: BN036817.D

Acq: 03 Apr 2025 11:47

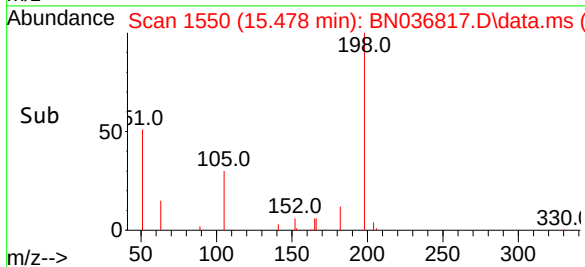
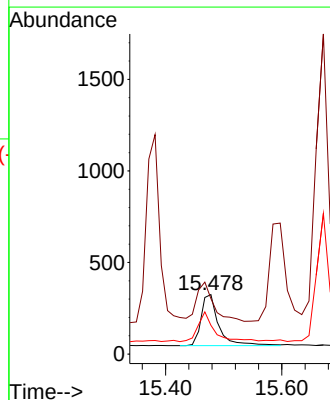
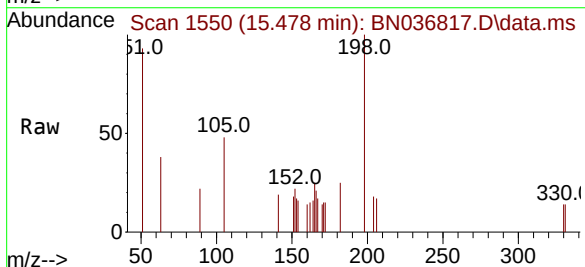
Tgt Ion:198 Resp: 624

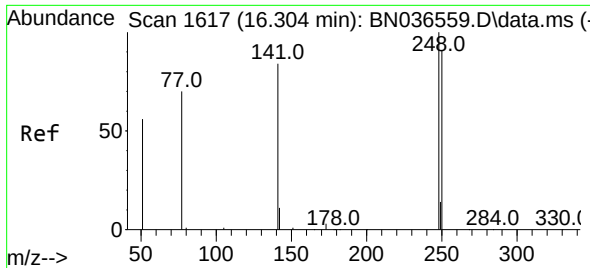
Ion Ratio Lower Upper

198 100

51 93.2 107.9 161.9#

105 48.3 56.2 84.2#

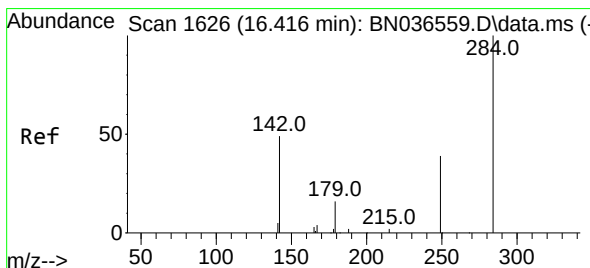
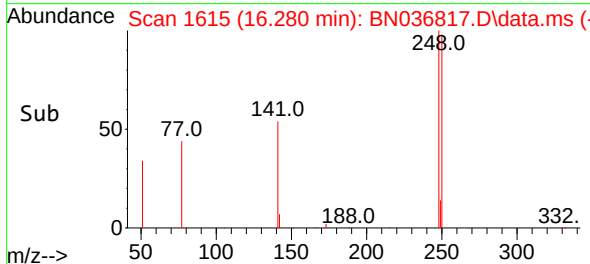
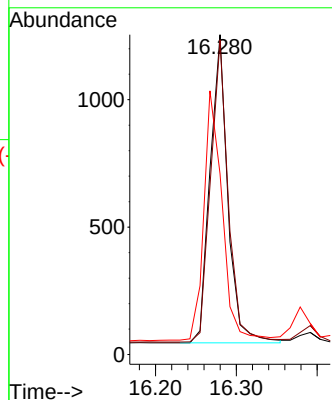
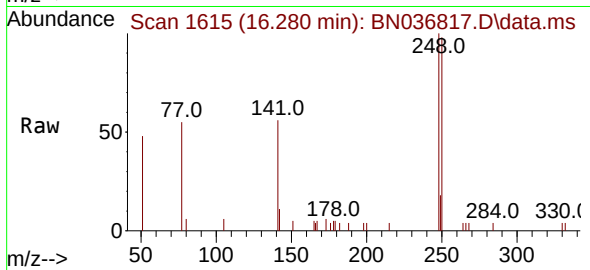




#21  
4-Bromophenyl-phenylether  
Concen: 0.396 ng  
RT: 16.280 min Scan# 1615  
Delta R.T. -0.025 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

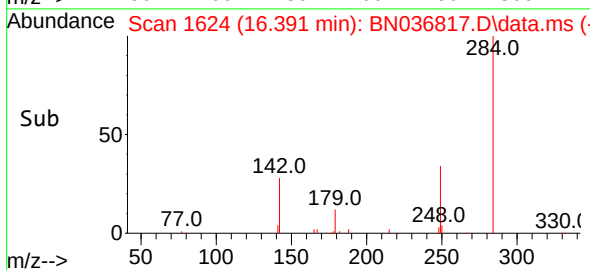
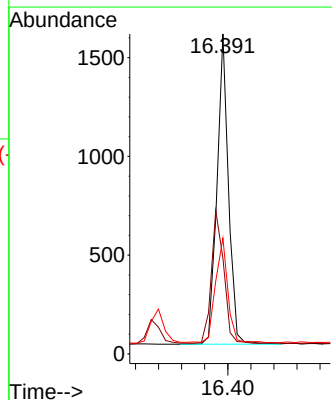
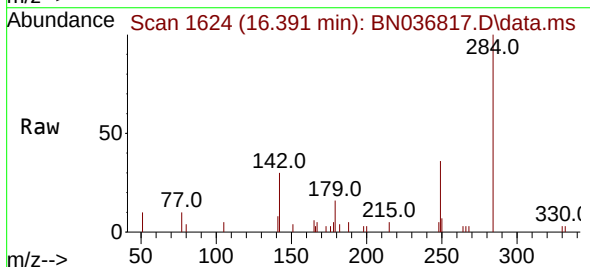
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

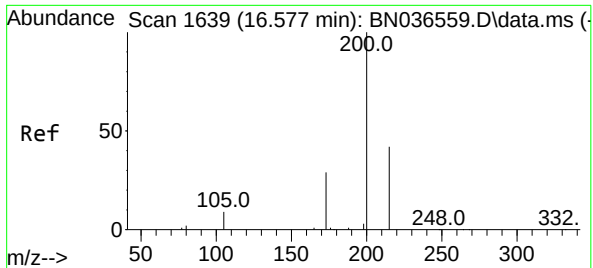
| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 248     | 100   |       |        |
| 250     | 98.4  | 73.0  | 109.6  |
| 141     | 56.5  | 68.6  | 103.0# |



#22  
Hexachlorobenzene  
Concen: 0.384 ng  
RT: 16.391 min Scan# 1624  
Delta R.T. -0.025 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 46.2  | 37.0  | 55.4  |
| 249     | 36.6  | 28.1  | 42.1  |

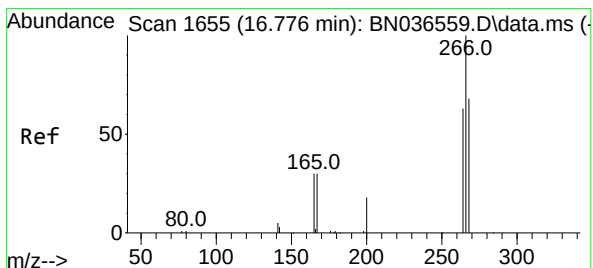
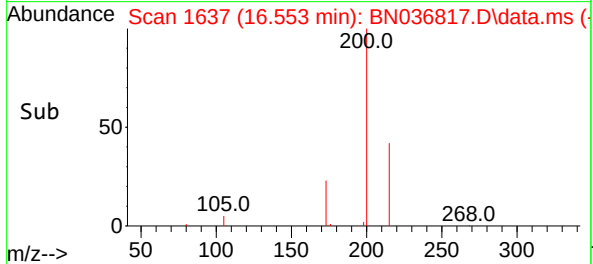
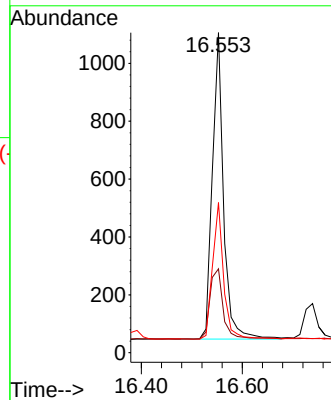
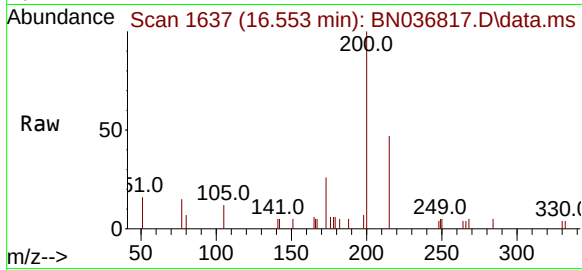




#23  
Atrazine  
Concen: 0.435 ng  
RT: 16.553 min Scan# 1637  
Delta R.T. -0.025 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

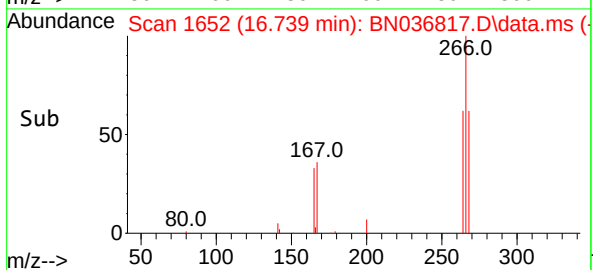
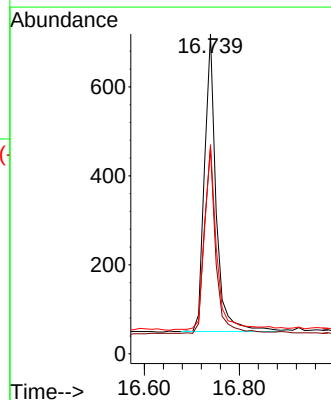
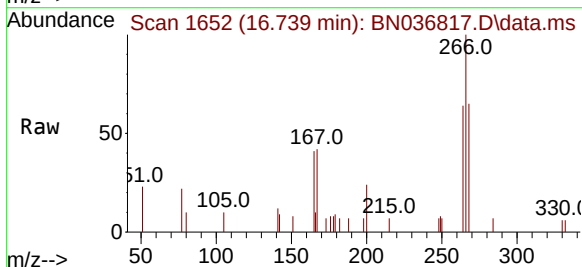
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

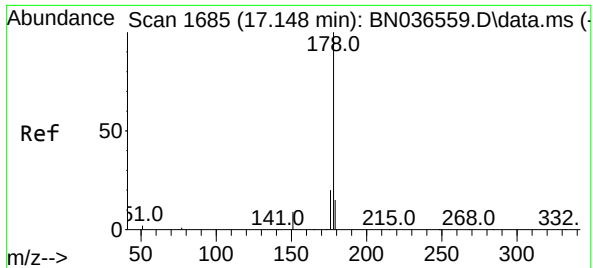
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 200     | 100   |       |       |
| 173     | 26.2  | 27.3  | 40.9# |
| 215     | 46.9  | 36.8  | 55.2  |



#24  
Pentachlorophenol  
Concen: 0.445 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.037 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 61.2  | 49.6  | 74.4  |
| 268     | 65.3  | 50.9  | 76.3  |

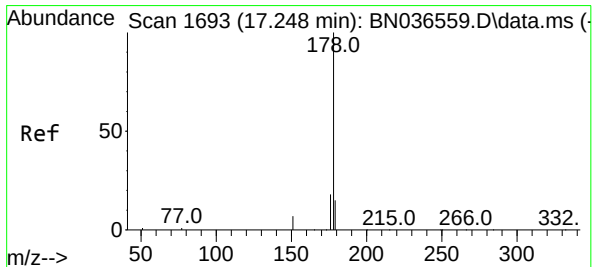
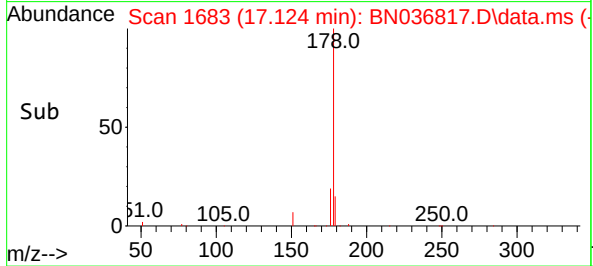
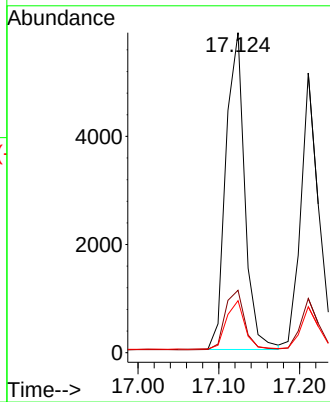
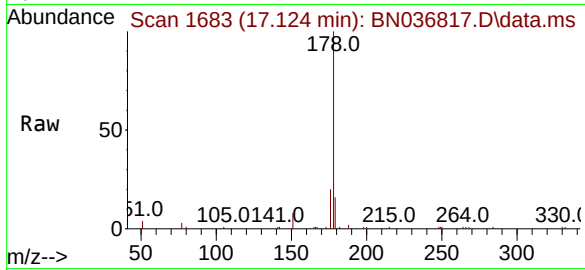




#25  
Phenanthrene  
Concen: 0.425 ng  
RT: 17.124 min Scan# 1683  
Delta R.T. -0.025 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

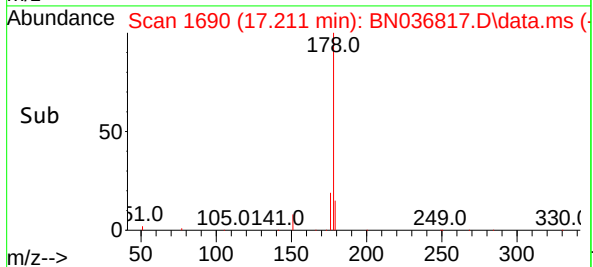
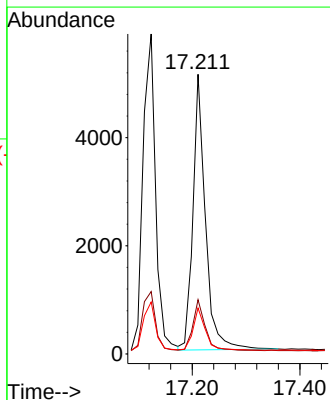
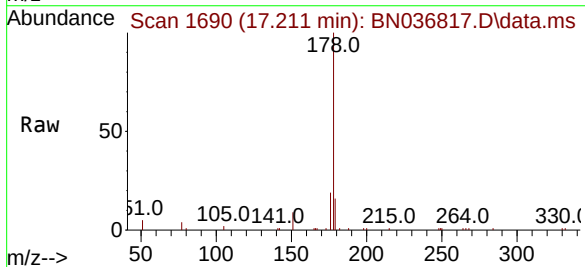
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Tgt Ion:178 Resp: 9504  
Ion Ratio Lower Upper  
178 100  
176 19.6 15.9 23.9  
179 15.4 12.2 18.4

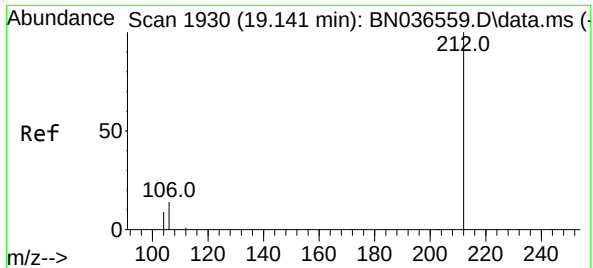


#26  
Anthracene  
Concen: 0.408 ng  
RT: 17.211 min Scan# 1690  
Delta R.T. -0.037 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:178 Resp: 8239  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.4 23.2  
179 15.5 12.6 18.8



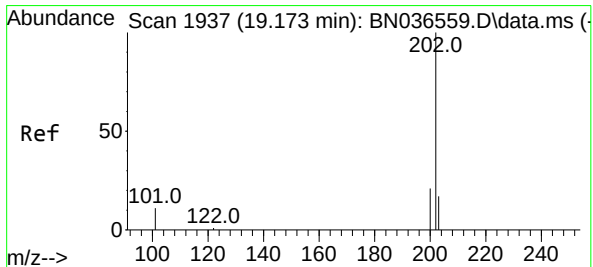
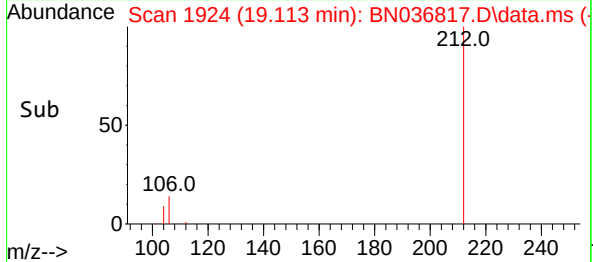
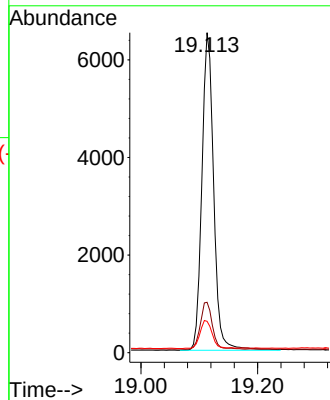
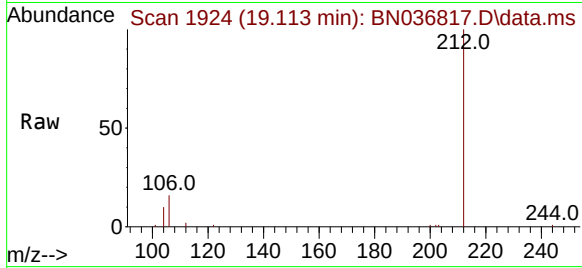




#27  
Fluoranthene-d10  
Concen: 0.480 ng  
RT: 19.113 min Scan# 1911  
Delta R.T. -0.028 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

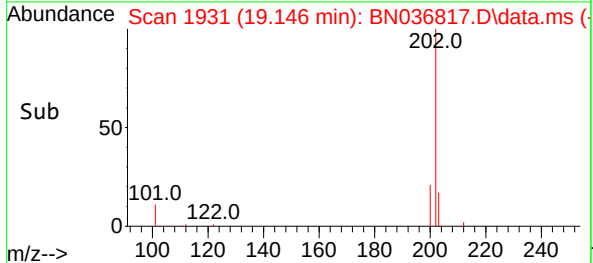
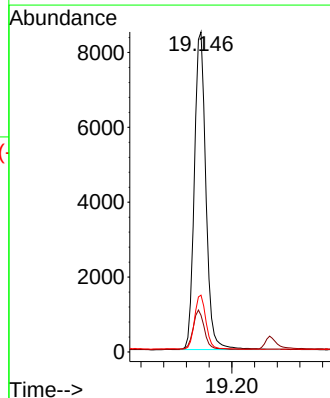
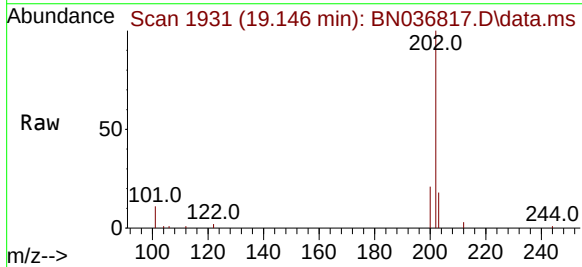
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

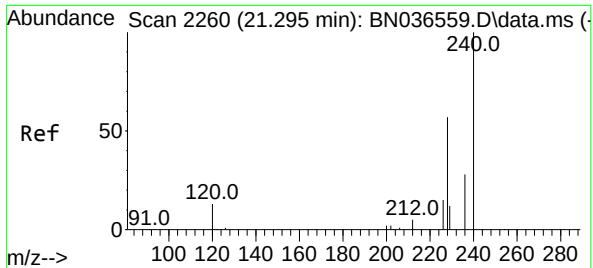
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 212     | 100   |       |       |
| 106     | 15.0  | 11.8  | 17.6  |
| 104     | 9.0   | 7.3   | 10.9  |



#28  
Fluoranthene  
Concen: 0.475 ng  
RT: 19.146 min Scan# 1931  
Delta R.T. -0.028 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.1  | 9.4   | 14.0  |
| 203     | 16.9  | 13.5  | 20.3  |

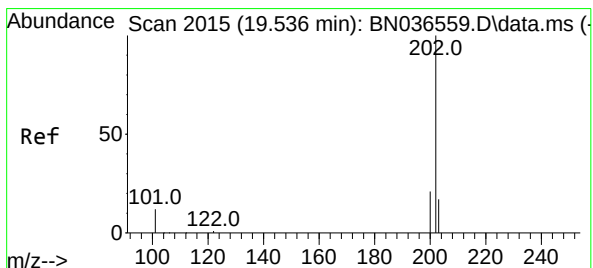
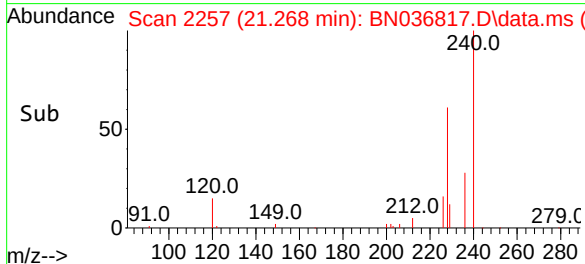
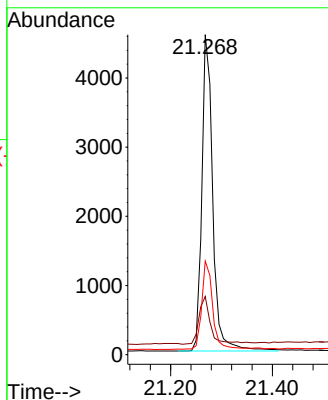
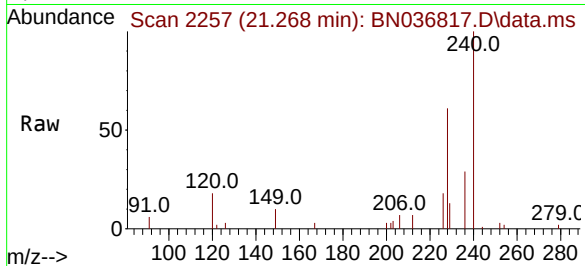




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 21  
Delta R.T. -0.027 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

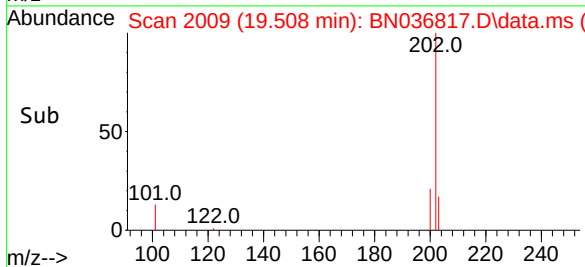
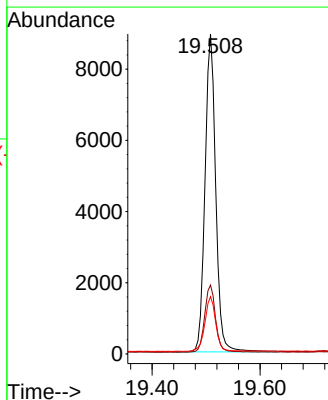
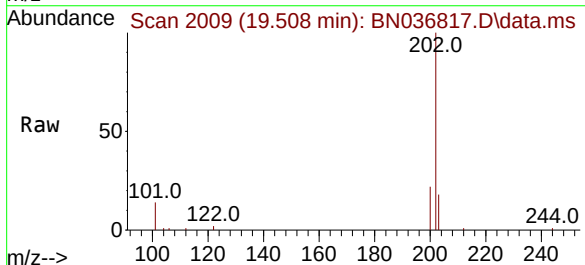
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

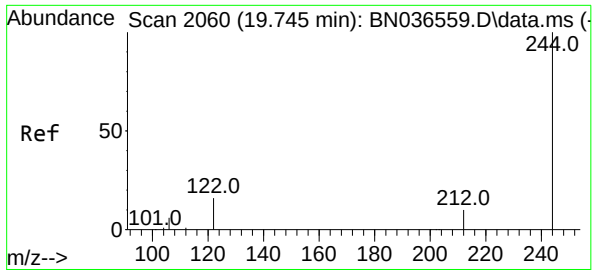
Tgt Ion:240 Resp: 6815  
Ion Ratio Lower Upper  
240 100  
120 18.2 14.6 22.0  
236 29.2 24.1 36.1



#30  
Pyrene  
Concen: 0.368 ng  
RT: 19.508 min Scan# 2009  
Delta R.T. -0.028 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:202 Resp: 12267  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.1 25.7  
203 17.7 14.1 21.1

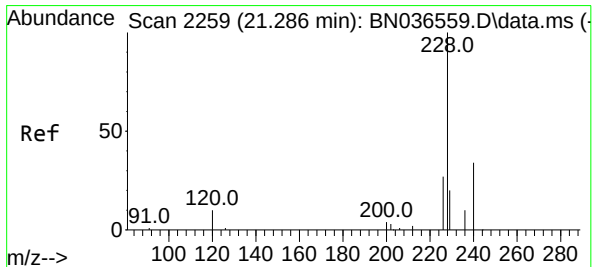
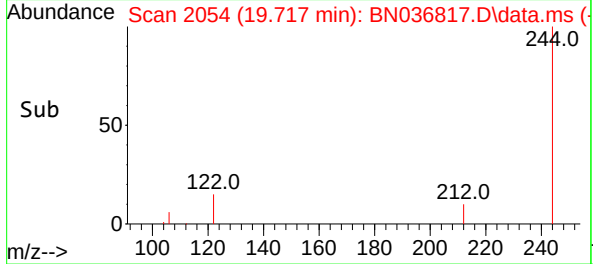
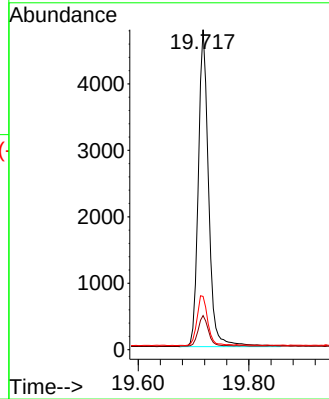
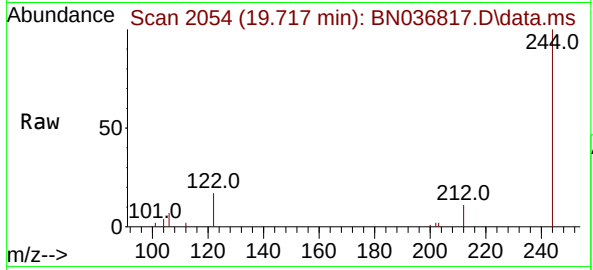




#31  
Terphenyl-d14  
Concen: 0.379 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.028 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

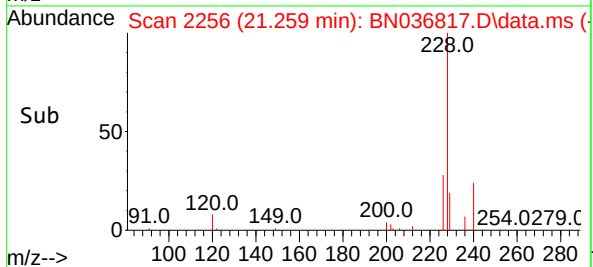
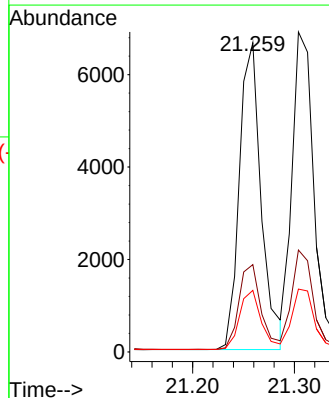
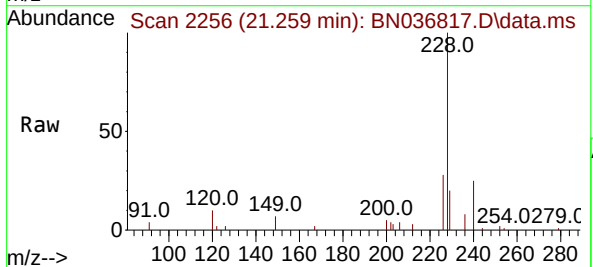
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

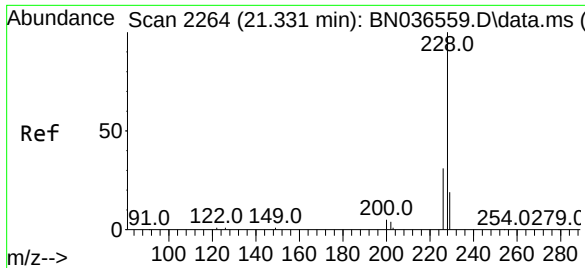
Tgt Ion:244 Resp: 6183  
Ion Ratio Lower Upper  
244 100  
212 10.6 9.6 14.4  
122 16.6 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 0.418 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.027 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:228 Resp: 9912  
Ion Ratio Lower Upper  
228 100  
226 28.3 22.5 33.7  
229 19.9 16.6 25.0

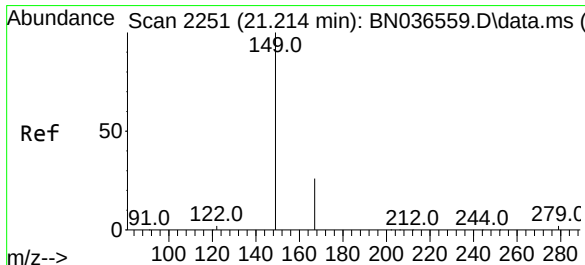
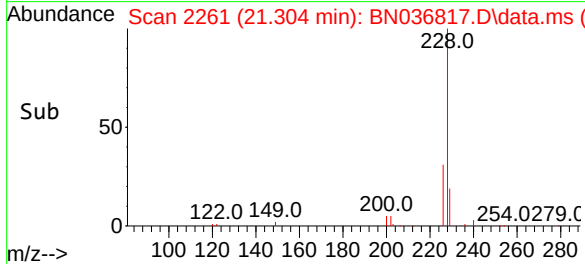
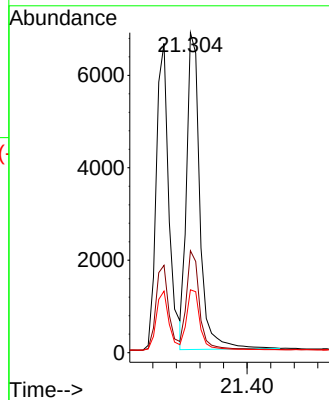
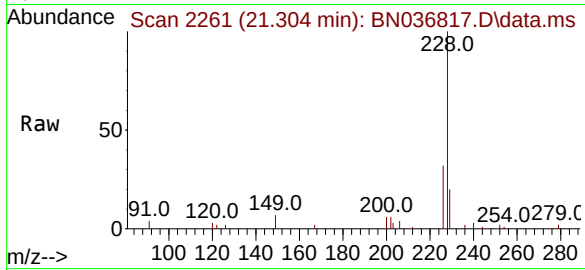




#33  
Chrysene  
Concen: 0.413 ng  
RT: 21.304 min Scan# 21  
Delta R.T. -0.027 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

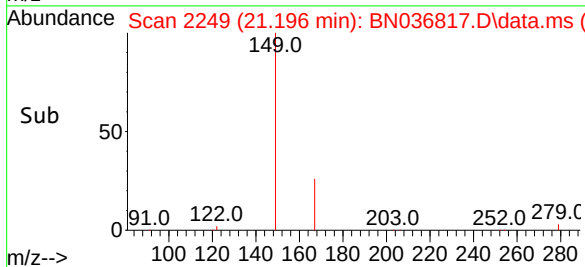
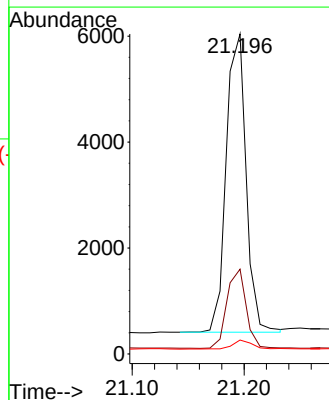
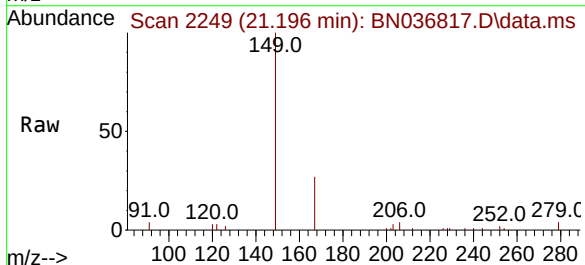
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

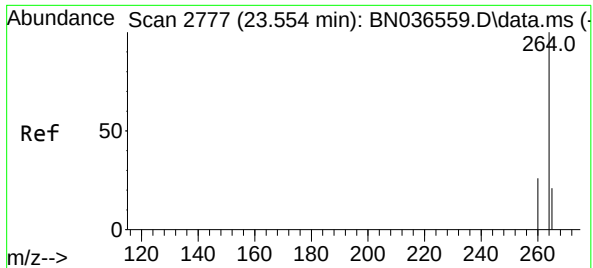
Tgt Ion:228 Resp: 10681  
Ion Ratio Lower Upper  
228 100  
226 31.9 25.3 37.9  
229 19.6 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.412 ng  
RT: 21.196 min Scan# 2249  
Delta R.T. -0.018 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:149 Resp: 6950  
Ion Ratio Lower Upper  
149 100  
167 25.9 20.7 31.1  
279 3.1 3.6 5.4#

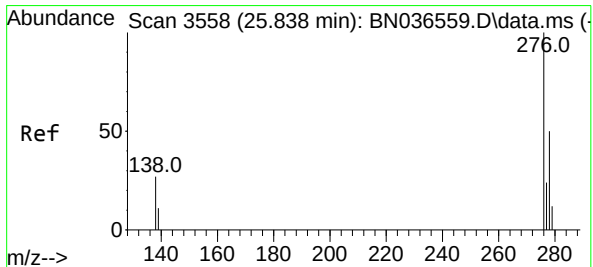
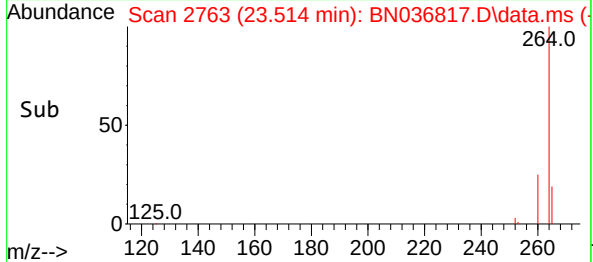
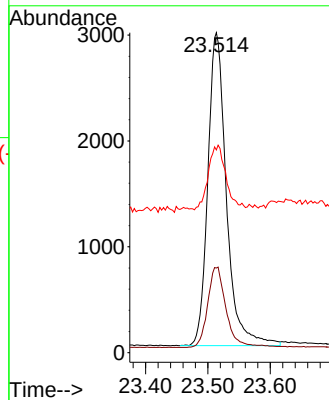
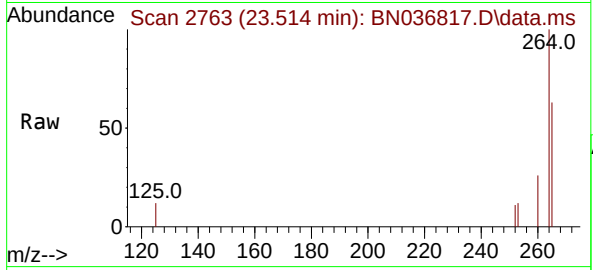




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.514 min Scan# 21  
Delta R.T. -0.041 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

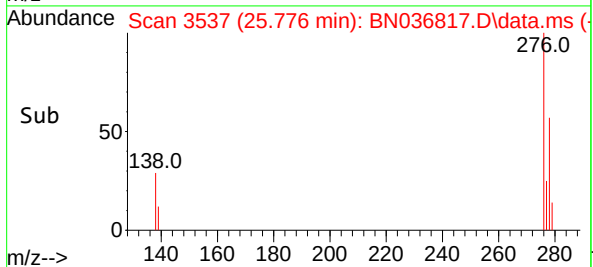
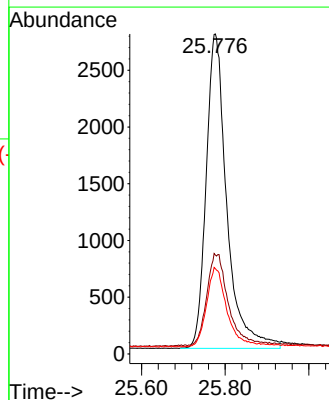
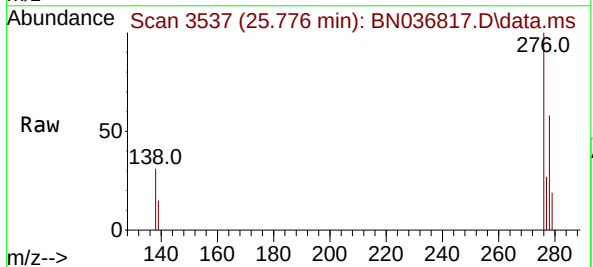
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

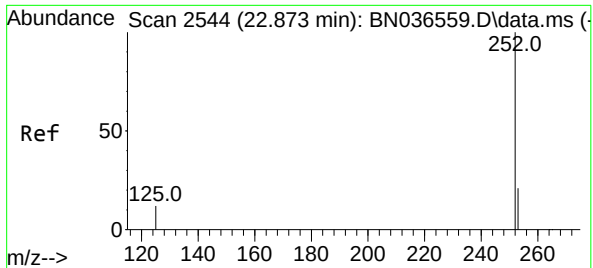
Tgt Ion:264 Resp: 6111  
Ion Ratio Lower Upper  
264 100  
260 26.4 22.6 33.8  
265 63.3 88.1 132.1#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.432 ng  
RT: 25.776 min Scan# 3537  
Delta R.T. -0.061 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:276 Resp: 9523  
Ion Ratio Lower Upper  
276 100  
138 30.4 23.4 35.2  
277 24.5 20.0 30.0

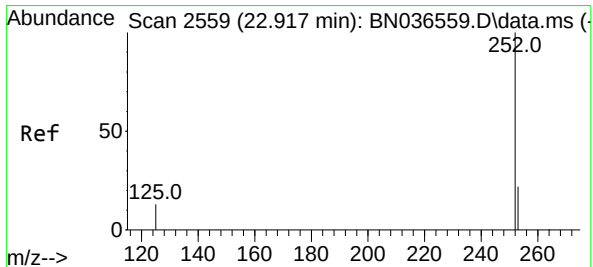
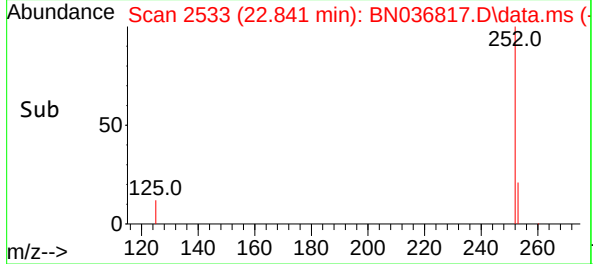
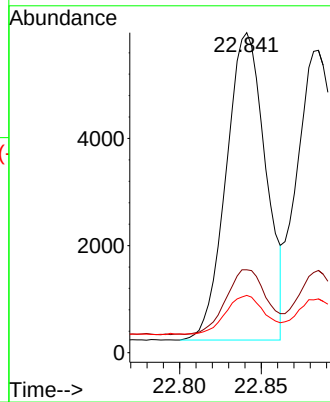
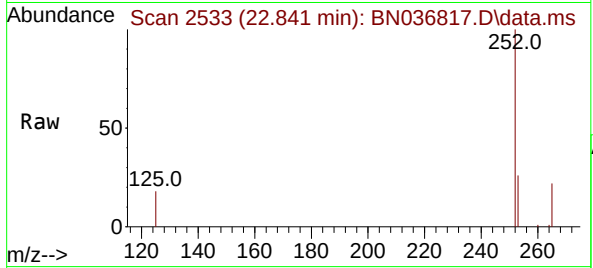




#37  
Benzo(b)fluoranthene  
Concen: 0.435 ng  
RT: 22.841 min Scan# 2543  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

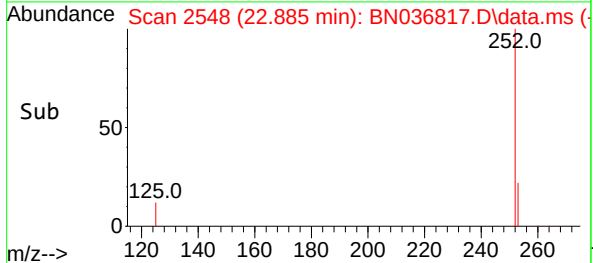
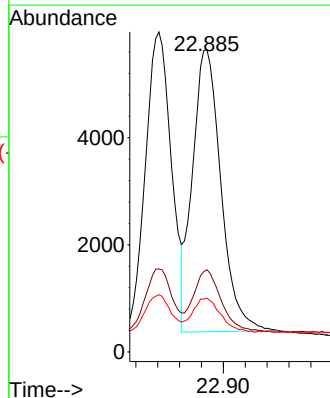
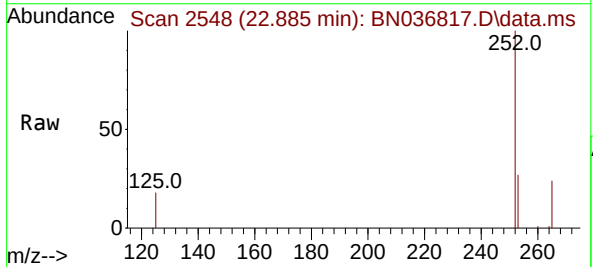
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

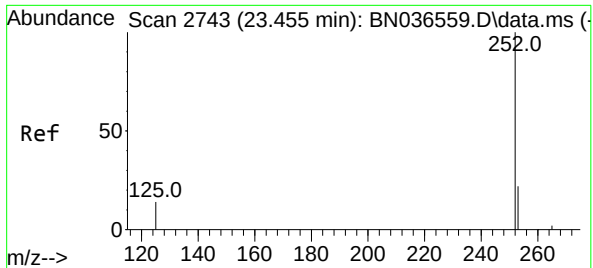
Tgt Ion:252 Resp: 9669  
Ion Ratio Lower Upper  
252 100  
253 25.9 23.9 35.9  
125 17.9 17.4 26.2



#38  
Benzo(k)fluoranthene  
Concen: 0.408 ng m  
RT: 22.885 min Scan# 2548  
Delta R.T. -0.032 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Tgt Ion:252 Resp: 9527  
Ion Ratio Lower Upper  
252 100  
253 27.2 24.6 36.8  
125 17.8 17.8 26.8#





#39

Benzo(a)pyrene

Concen: 0.435 ng

RT: 23.417 min Scan# 21

Delta R.T. -0.038 min

Lab File: BN036817.D

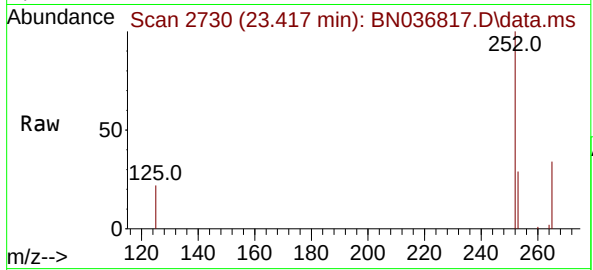
Acq: 03 Apr 2025 11:47

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



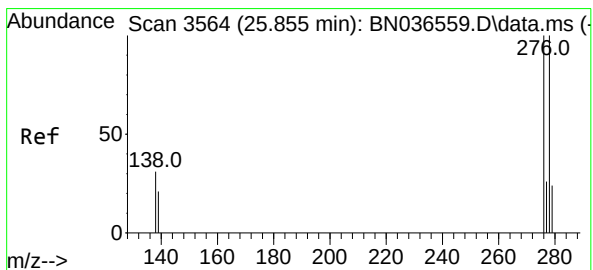
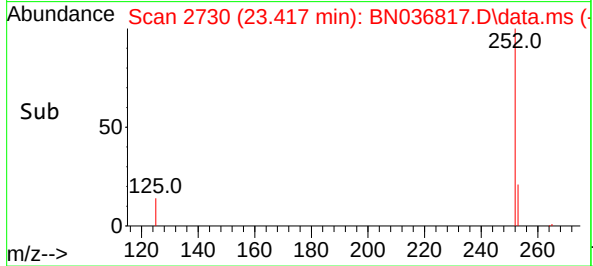
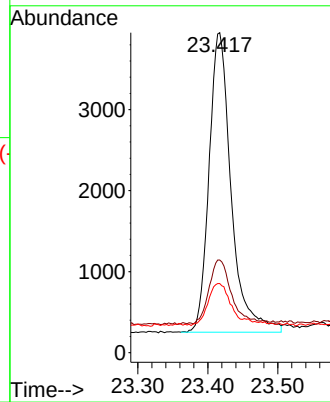
Tgt Ion:252 Resp: 8143

Ion Ratio Lower Upper

252 100

253 29.0 27.8 41.8

125 21.6 22.7 34.1#



#40

Dibenzo(a,h)anthracene

Concen: 0.432 ng

RT: 25.791 min Scan# 3542

Delta R.T. -0.064 min

Lab File: BN036817.D

Acq: 03 Apr 2025 11:47

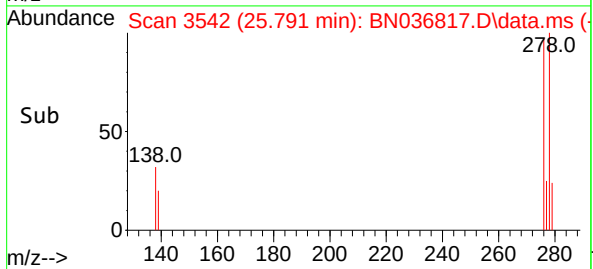
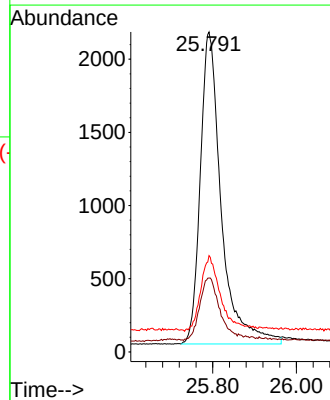
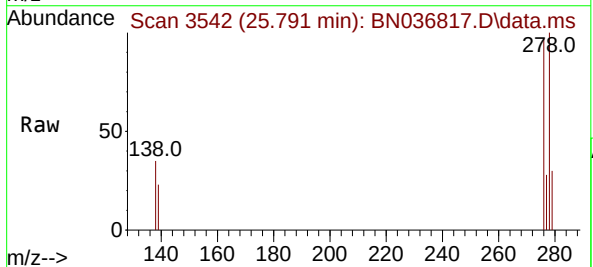
Tgt Ion:278 Resp: 7424

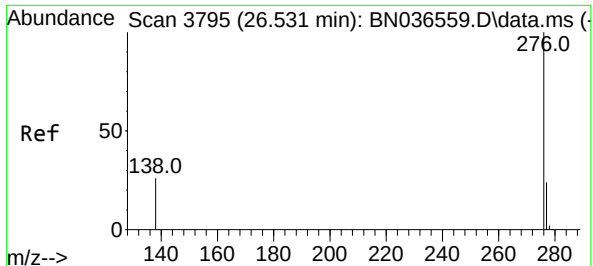
Ion Ratio Lower Upper

278 100

139 23.1 20.8 31.2

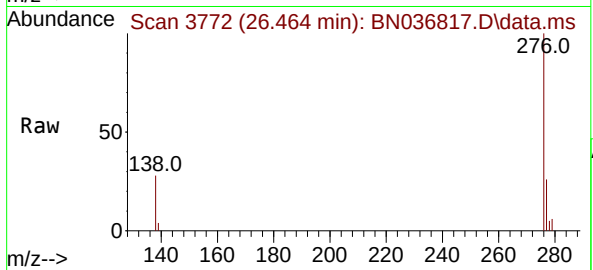
279 30.1 28.8 43.2



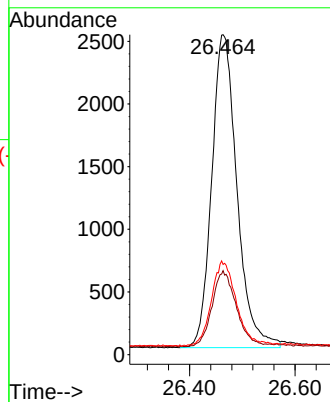
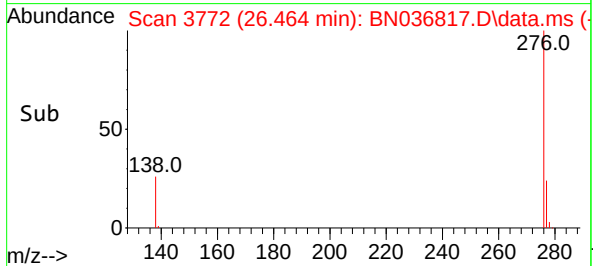


#41  
Benzo(g,h,i)perylene  
Concen: 0.423 ng  
RT: 26.464 min Scan# 31  
Delta R.T. -0.067 min  
Lab File: BN036817.D  
Acq: 03 Apr 2025 11:47

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 26.2  | 22.2  | 33.4  |
| 138     | 28.2  | 24.1  | 36.1  |





Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
 Data File : BN036817.D  
 Acq On : 03 Apr 2025 11:47  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Apr 04 03:27:44 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 03:26:58 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   | 106   | -0.03    |
| 2       | 1,4-Dioxane                | 0.444 | 0.469 | -5.6  | 100   | -0.01    |
| 3       | n-Nitrosodimethylamine     | 0.898 | 0.896 | 0.2   | 102   | -0.01    |
| 4 S     | 2-Fluorophenol             | 0.932 | 0.987 | -5.9  | 106   | -0.03    |
| 5 S     | Phenol-d6                  | 1.152 | 1.200 | -4.2  | 113   | -0.04    |
| 6       | bis(2-Chloroethyl)ether    | 1.190 | 1.241 | -4.3  | 112   | -0.04    |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 110   | -0.03    |
| 8 S     | Nitrobenzene-d5            | 0.435 | 0.443 | -1.8  | 117   | -0.03    |
| 9       | Naphthalene                | 1.177 | 1.213 | -3.1  | 110   | -0.04    |
| 10      | Hexachlorobutadiene        | 0.277 | 0.280 | -1.1  | 105   | -0.03    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.595 | 0.639 | -7.4  | 116   | -0.04    |
| 12      | 2-Methylnaphthalene        | 0.749 | 0.793 | -5.9  | 114   | -0.04    |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 116   | -0.03    |
| 14 S    | 2,4,6-Tribromophenol       | 0.182 | 0.178 | 2.2   | 110   | -0.02    |
| 15 S    | 2-Fluorobiphenyl           | 2.327 | 2.227 | 4.3   | 108   | -0.03    |
| 16      | Acenaphthylene             | 1.888 | 1.813 | 4.0   | 109   | -0.02    |
| 17      | Acenaphthene               | 1.236 | 1.241 | -0.4  | 113   | -0.03    |
| 18      | Fluorene                   | 1.672 | 1.704 | -1.9  | 112   | -0.03    |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 124   | -0.04    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.086 | 0.084 | 2.3   | 135   | -0.02    |
| 21      | 4-Bromophenyl-phenylether  | 0.251 | 0.248 | 1.2   | 113   | -0.02    |
| 22      | Hexachlorobenzene          | 0.303 | 0.290 | 4.3   | 107   | -0.02    |
| 23      | Atrazine                   | 0.201 | 0.218 | -8.5  | 127   | -0.02    |
| 24      | Pentachlorophenol          | 0.138 | 0.154 | -11.6 | 139   | -0.04    |
| 25      | Phenanthrene               | 1.200 | 1.275 | -6.2  | 122   | -0.02    |
| 26      | Anthracene                 | 1.083 | 1.105 | -2.0  | 120   | -0.04    |
| 27 SURR | Fluoranthene-d10           | 1.025 | 1.231 | -20.1 | 137   | -0.03    |
| 28      | Fluoranthene               | 1.348 | 1.601 | -18.8 | 137   | -0.03    |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 166#  | -0.03    |
| 30      | Pyrene                     | 1.956 | 1.800 | 8.0   | 140   | -0.03    |
| 31 S    | Terphenyl-d14              | 0.958 | 0.907 | 5.3   | 146   | -0.03    |
| 32      | Benzo(a)anthracene         | 1.391 | 1.454 | -4.5  | 168#  | -0.03    |
| 33      | Chrysene                   | 1.520 | 1.567 | -3.1  | 161#  | -0.03    |
| 34      | Bis(2-ethylhexyl)phthalate | 0.990 | 1.020 | -3.0  | 162#  | -0.02    |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 173#  | -0.04    |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.444 | 1.558 | -7.9  | 174#  | -0.06    |
| 37      | Benzo(b)fluoranthene       | 1.456 | 1.582 | -8.7  | 177#  | -0.03    |
| 38      | Benzo(k)fluoranthene       | 1.527 | 1.559 | -2.1  | 166#  | -0.03    |
| 39 C    | Benzo(a)pyrene             | 1.226 | 1.333 | -8.7  | 177#  | -0.04    |
| 40      | Dibenzo(a,h)anthracene     | 1.124 | 1.215 | -8.1  | 180#  | -0.06    |
| 41      | Benzo(g,h,i)perylene       | 1.286 | 1.358 | -5.6  | 170#  | -0.07    |

(#) = Out of Range

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

**Instrument :**

BNA\_N

**LabSampleId :**

SSTDCCC0.4

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
 Data File : BN036817.D  
 Acq On : 03 Apr 2025 11:47  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Apr 04 03:27:44 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 03:26:58 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   | 106   | -0.03    |
| 2       | 1,4-Dioxane                | 0.400  | 0.423 | -5.7  | 100   | -0.01    |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.399 | 0.3   | 102   | -0.01    |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.423 | -5.7  | 106   | -0.03    |
| 5 S     | Phenol-d6                  | 0.400  | 0.417 | -4.2  | 113   | -0.04    |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.417 | -4.2  | 112   | -0.04    |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 110   | -0.03    |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.407 | -1.7  | 117   | -0.03    |
| 9       | Naphthalene                | 0.400  | 0.412 | -3.0  | 110   | -0.04    |
| 10      | Hexachlorobutadiene        | 0.400  | 0.405 | -1.3  | 105   | -0.03    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.430 | -7.5  | 116   | -0.04    |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.424 | -6.0  | 114   | -0.04    |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 116   | -0.03    |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.392 | 2.0   | 110   | -0.02    |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.383 | 4.3   | 108   | -0.03    |
| 16      | Acenaphthylene             | 0.400  | 0.384 | 4.0   | 109   | -0.02    |
| 17      | Acenaphthene               | 0.400  | 0.402 | -0.5  | 113   | -0.03    |
| 18      | Fluorene                   | 0.400  | 0.408 | -2.0  | 112   | -0.03    |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 124   | -0.04    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.473 | -18.2 | 135   | -0.02    |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.396 | 1.0   | 113   | -0.02    |
| 22      | Hexachlorobenzene          | 0.400  | 0.384 | 4.0   | 107   | -0.02    |
| 23      | Atrazine                   | 0.400  | 0.435 | -8.7  | 127   | -0.02    |
| 24      | Pentachlorophenol          | 0.400  | 0.445 | -11.2 | 139   | -0.04    |
| 25      | Phenanthrene               | 0.400  | 0.425 | -6.2  | 122   | -0.02    |
| 26      | Anthracene                 | 0.400  | 0.408 | -2.0  | 120   | -0.04    |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.480 | -20.0 | 137   | -0.03    |
| 28      | Fluoranthene               | 0.400  | 0.475 | -18.7 | 137   | -0.03    |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 166   | -0.03    |
| 30      | Pyrene                     | 0.400  | 0.368 | 8.0   | 140   | -0.03    |
| 31 S    | Terphenyl-d14              | 0.400  | 0.379 | 5.3   | 146   | -0.03    |
| 32      | Benzo(a)anthracene         | 0.400  | 0.418 | -4.5  | 168   | -0.03    |
| 33      | Chrysene                   | 0.400  | 0.413 | -3.2  | 161   | -0.03    |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.412 | -3.0  | 162   | -0.02    |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 173   | -0.04    |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.432 | -8.0  | 174   | -0.06    |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.435 | -8.7  | 177   | -0.03    |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.408 | -2.0  | 166   | -0.03    |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.435 | -8.7  | 177   | -0.04    |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.432 | -8.0  | 180   | -0.06    |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.423 | -5.7  | 170   | -0.07    |

(#) = Out of Range

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

**Instrument :**

BNA\_N

**LabSampleId :**

SSTDCCC0.4



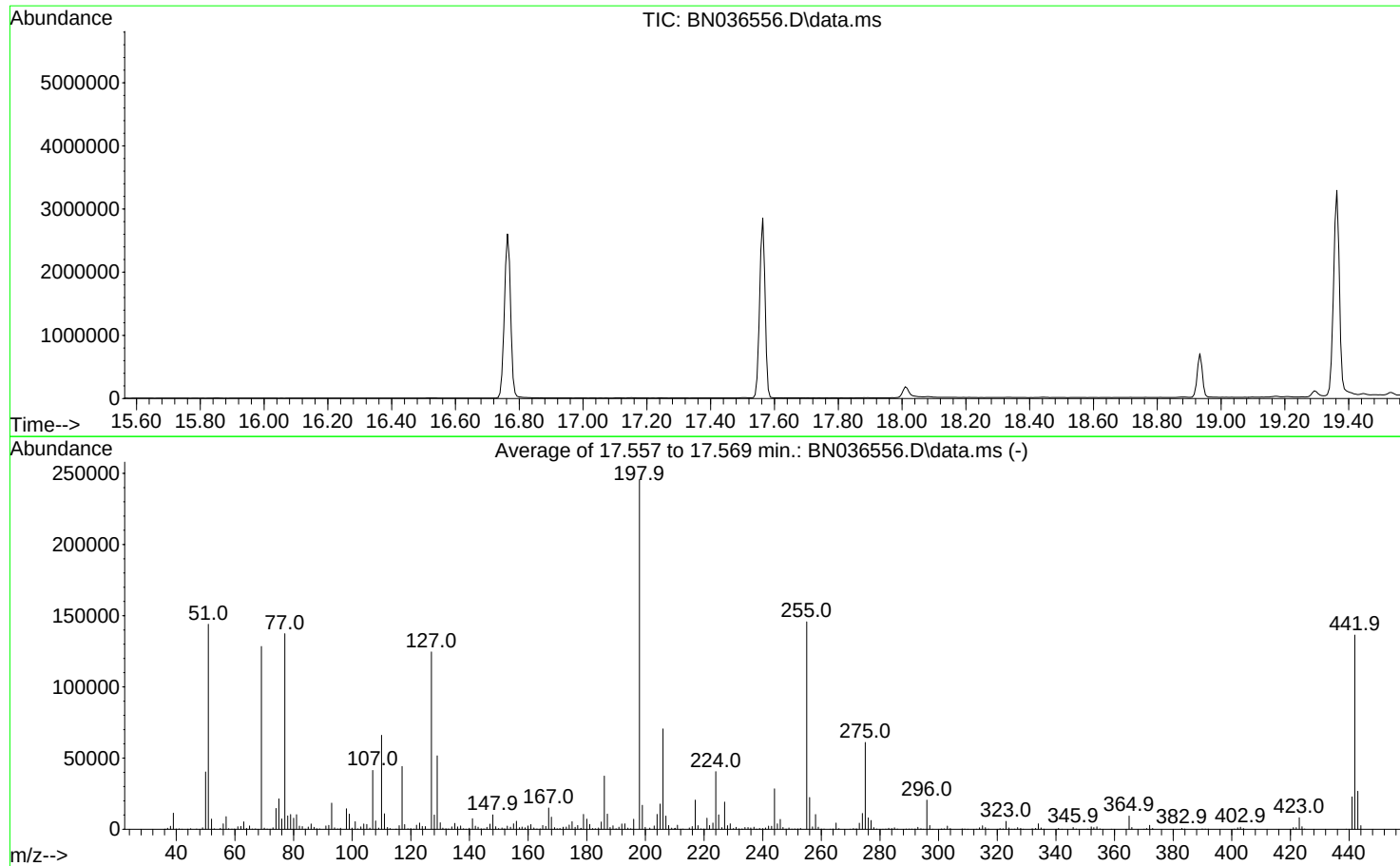
# QC SAMPLE DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036556.D  
Acq On : 10 Mar 2025 11:03  
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-BN031025.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Mon Mar 10 16:06:28 2025



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

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 51             | 198             | 10              | 80              | 58.6         | 144050     | PASS                |
| 68             | 69              | 0.00            | 2               | 0.0          | 0          | PASS                |
| 69             | 198             | 0.00            | 100             | 52.3         | 128410     | PASS                |
| 70             | 69              | 0.00            | 2               | 0.7          | 835        | PASS                |
| 127            | 198             | 10              | 80              | 50.7         | 124576     | PASS                |
| 197            | 198             | 0.00            | 2               | 0.0          | 0          | PASS                |
| 198            | 198             | 100             | 100             | 100.0        | 245632     | PASS                |
| 199            | 198             | 5               | 9               | 6.9          | 16887      | PASS                |
| 275            | 198             | 10              | 60              | 24.8         | 60997      | PASS                |
| 365            | 198             | 1               | 100             | 3.8          | 9349       | PASS                |
| 441            | 198             | 0.01            | 100             | 9.3          | 22761      | PASS                |
| 442            | 442             | 50              | 100             | 100.0        | 136488     | PASS                |
| 443            | 442             | 15              | 24              | 19.6         | 26765      | PASS                |

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

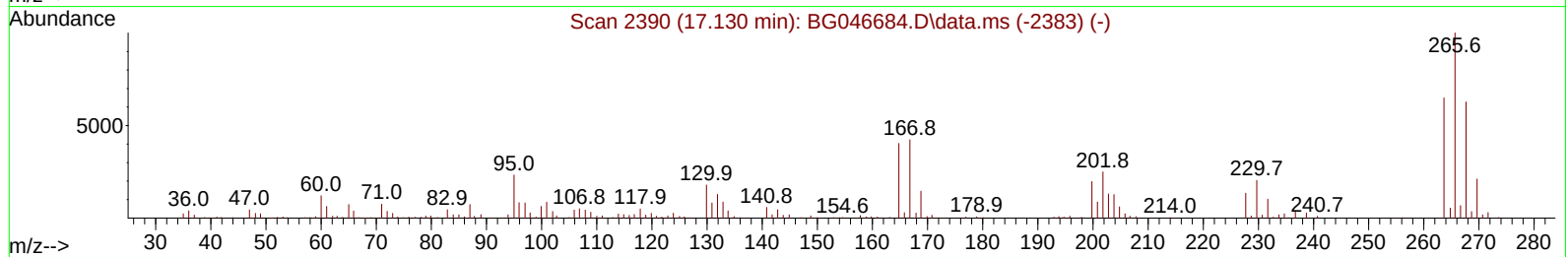
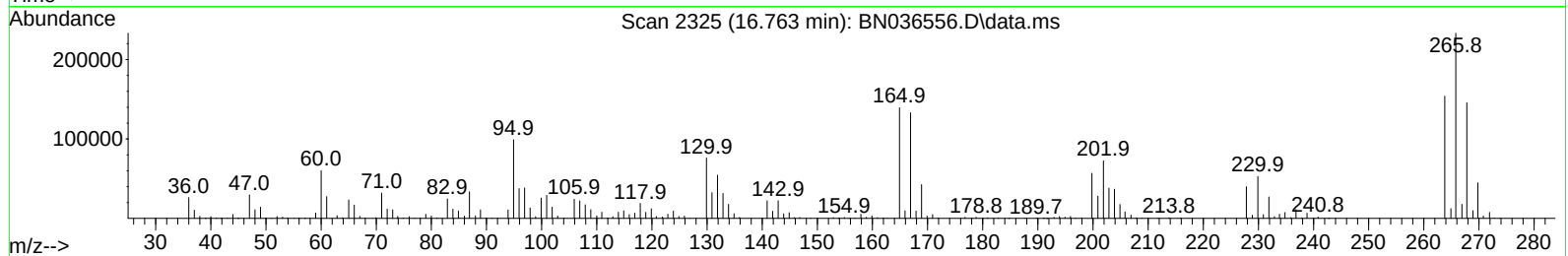
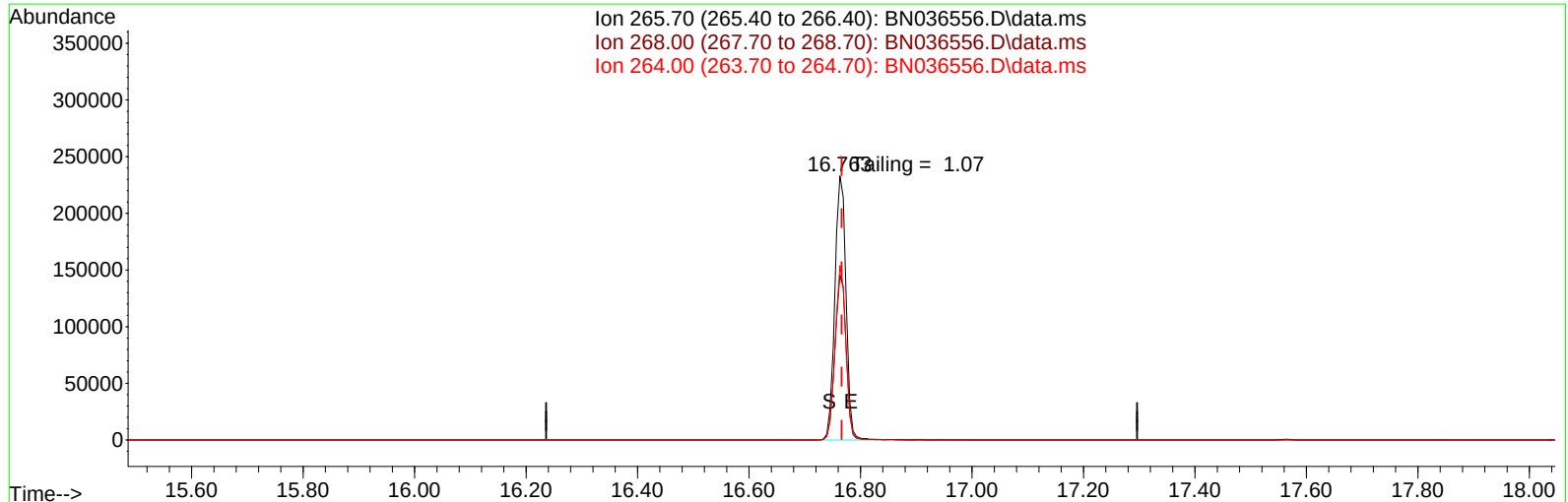
# DDT Breakdown

| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 3/10/2025     | BNA_N            | <u>BN036556.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 1110406          | 20.598             |
| DDD           | 11596            | 20.21              |
| DDE           | 530              | 19.645             |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 12126         | 1122532          | 1.08               |
|               |                  |                    |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036556.D  
Acq On : 10 Mar 2025 11:03  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Mar 10 17:07:28 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 25 04:23:53 2024  
Response via : Initial Calibration



TIC: BN036556.D\data.ms

**(70) Pentachlorophenol (C)**

16.763min (-0.003) 23577.14 ng

response 323613

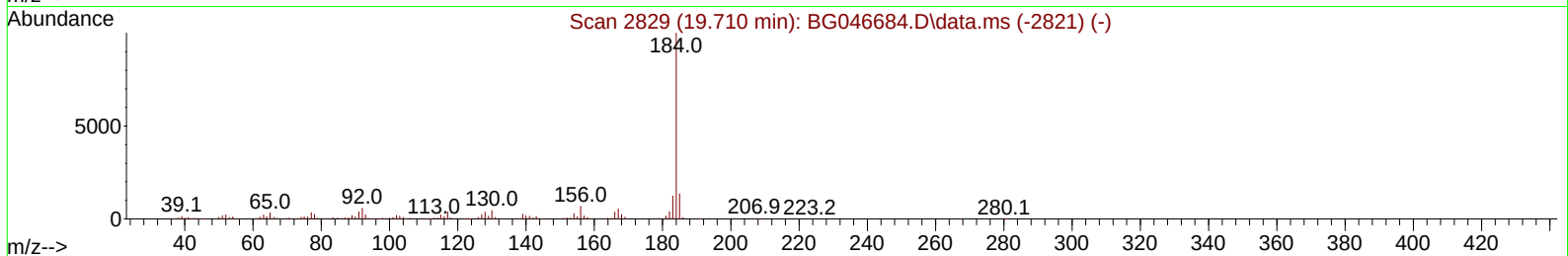
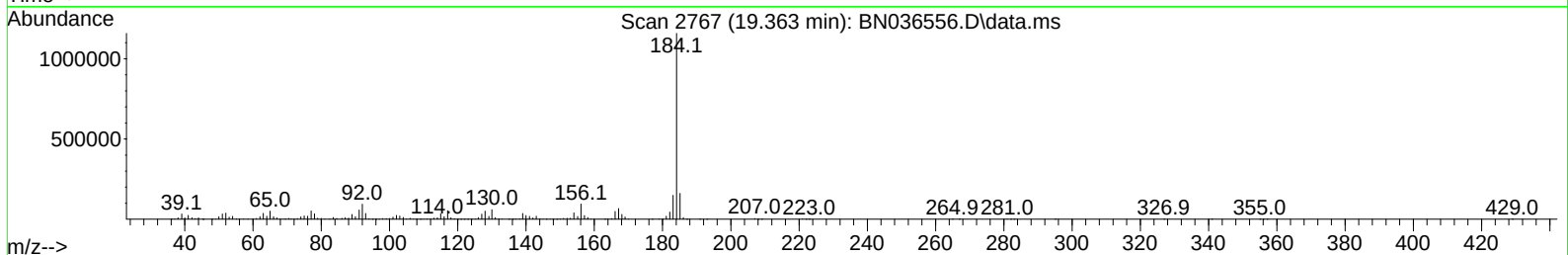
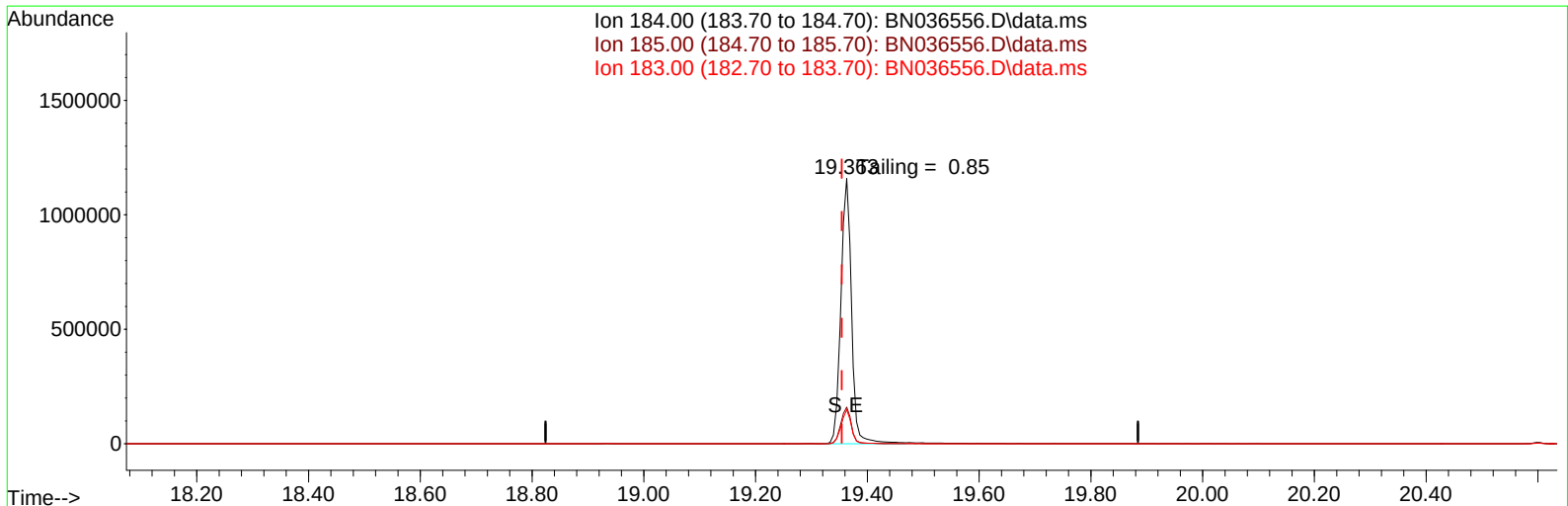
| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 62.52  |
| 264.00 | 61.60  | 66.01  |
| 0.00   | 0.00   | 0.00   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036556.D  
Acq On : 10 Mar 2025 11:03  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Mar 10 17:07:28 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 25 04:23:53 2024  
Response via : Initial Calibration



TIC: BN036556.D\data.ms

**(77) Benzidine**

**19.363min (+ 0.009) 0.00 ng**

**response 1553313**

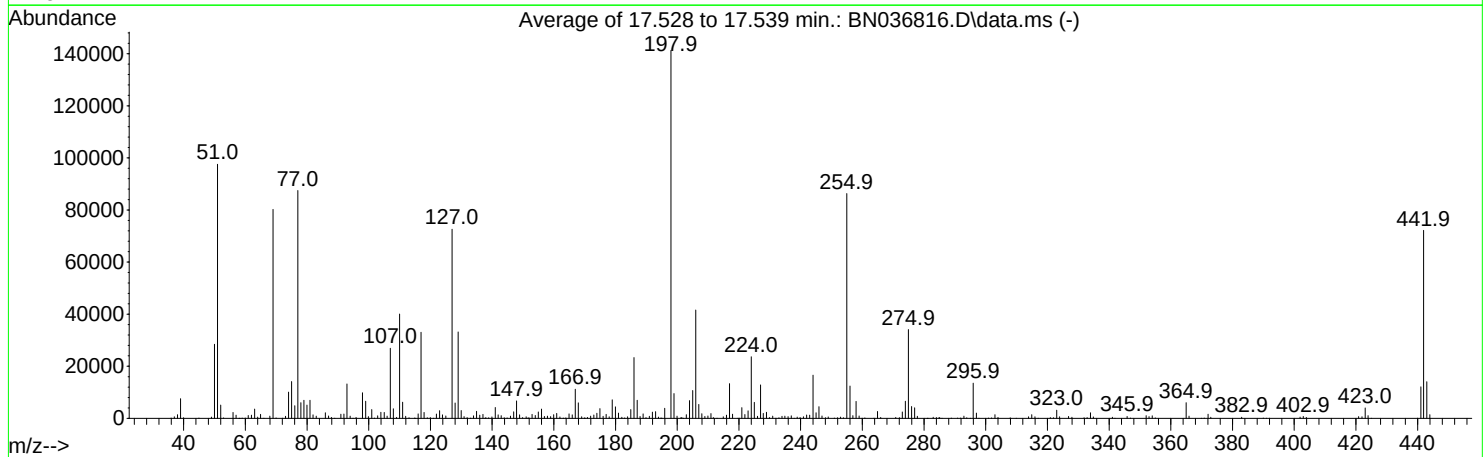
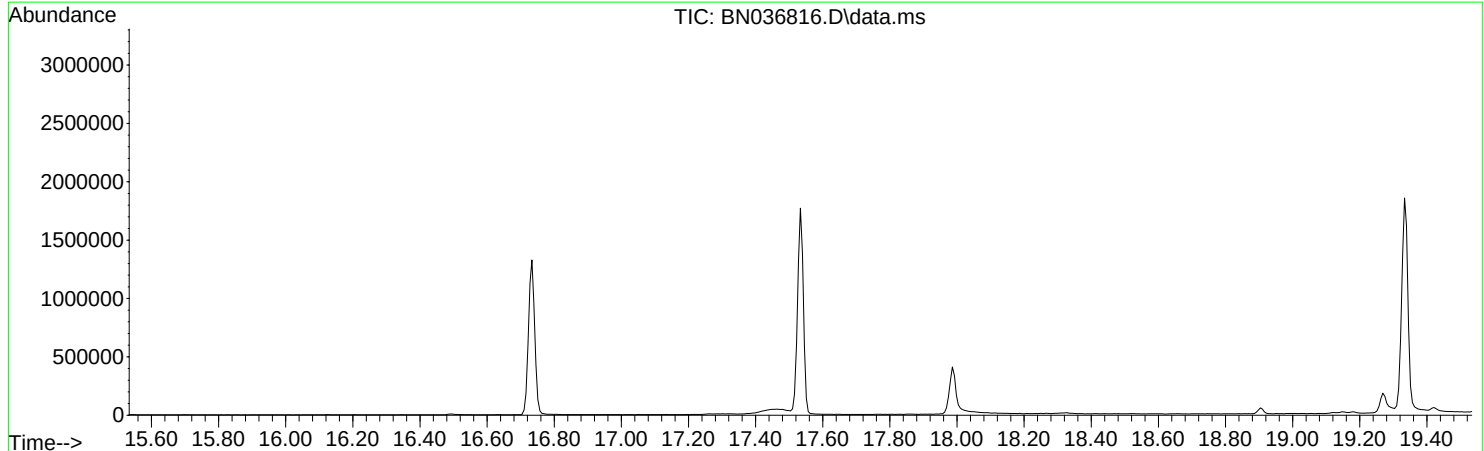
| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 13.86  |
| 183.00 | 13.20  | 12.85  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
Data File : BN036816.D  
Acq On : 03 Apr 2025 11:08  
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-BN031025.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Last Update : Fri Apr 04 03:26:58 2025



AutoFind: Scans 2455, 2456, 2457; Background Corrected with Scan 2448

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 51             | 198             | 10              | 80              | 69.1         | 97555      | PASS                |
| 68             | 69              | 0.00            | 2               | 1.1          | 870        | PASS                |
| 69             | 198             | 0.00            | 100             | 56.8         | 80233      | PASS                |
| 70             | 69              | 0.00            | 2               | 0.2          | 177        | PASS                |
| 127            | 198             | 10              | 80              | 51.4         | 72618      | PASS                |
| 197            | 198             | 0.00            | 2               | 0.0          | 0          | PASS                |
| 198            | 198             | 100             | 100             | 100.0        | 141227     | PASS                |
| 199            | 198             | 5               | 9               | 6.8          | 9559       | PASS                |
| 275            | 198             | 10              | 60              | 24.2         | 34109      | PASS                |
| 365            | 198             | 1               | 100             | 4.3          | 6027       | PASS                |
| 441            | 198             | 0.01            | 100             | 8.6          | 12097      | PASS                |
| 442            | 442             | 50              | 100             | 100.0        | 72160      | PASS                |
| 443            | 442             | 15              | 24              | 19.5         | 14074      | PASS                |

### DDT Breakdown

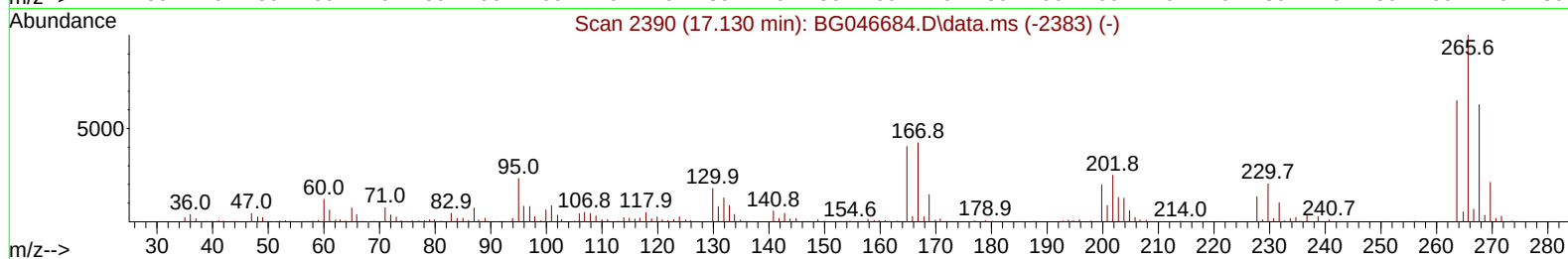
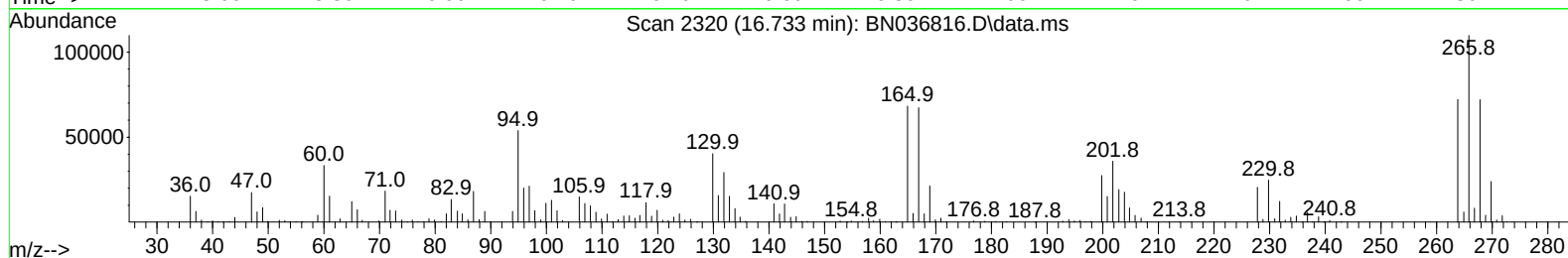
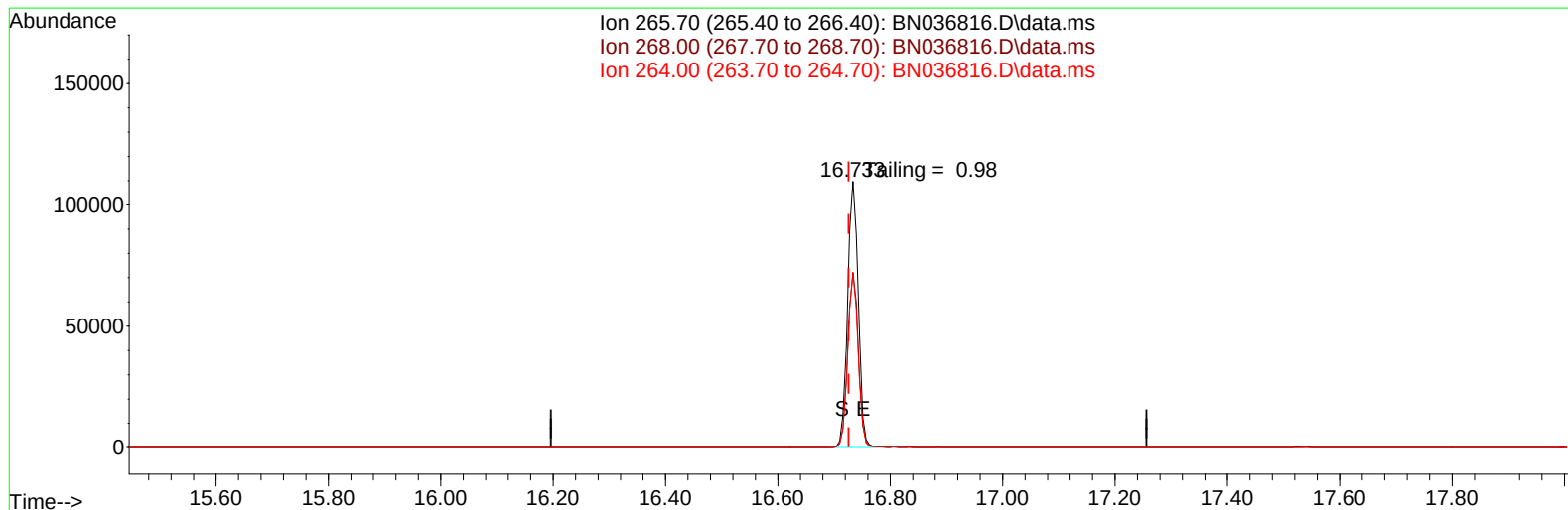
| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 4/3/2025      | BNA_N            | <u>BN036816.D</u>  |
|               |                  |                    |
|               |                  |                    |
| Compound Name | Response         | Retention Time     |
|               |                  |                    |
| DDT           | 569032           | 20.574             |
| DDD           | 7825             | 20.186             |
| DDE           | 69               | 19.622             |
|               |                  |                    |
|               |                  |                    |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
|               |                  |                    |
| 7894          | 576926           | 1.37               |
|               |                  |                    |

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
Data File : BN036816.D  
Acq On : 03 Apr 2025 11:08  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Apr 03 14:18:17 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Apr 03 14:16:27 2025  
Response via : Initial Calibration



TIC: BN036816.D\data.ms

**(70) Pentachlorophenol (C)**

16.733min (+ 0.007) 15766.87 ng

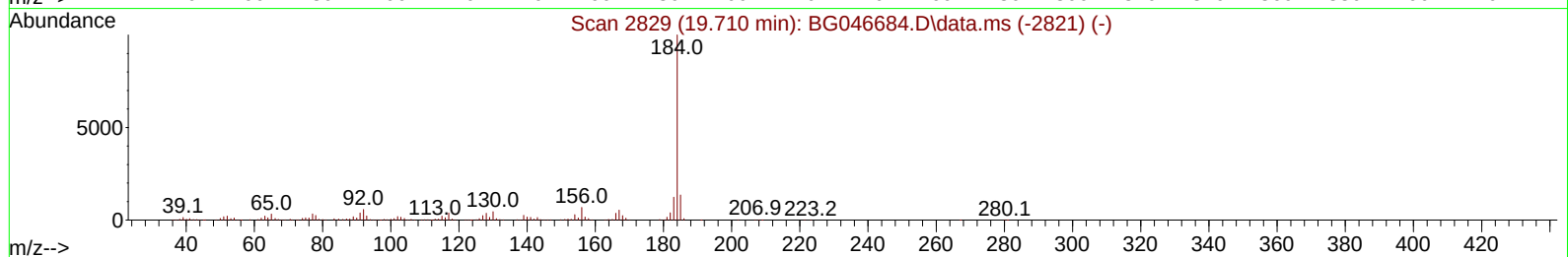
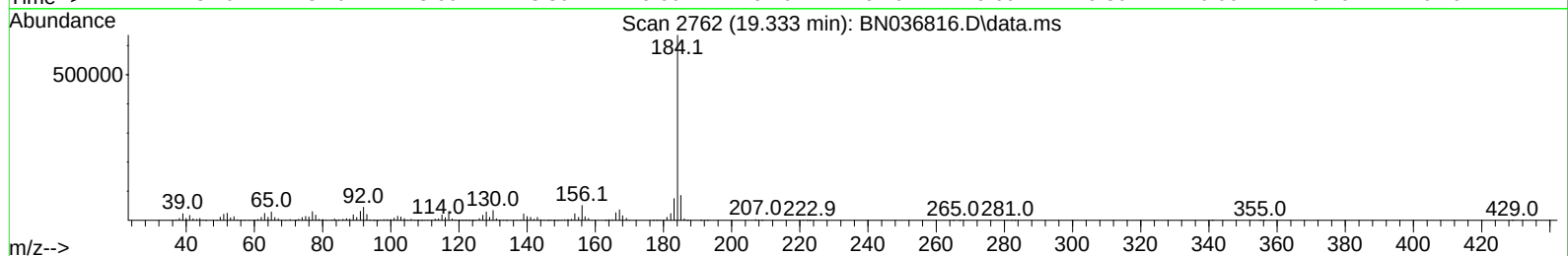
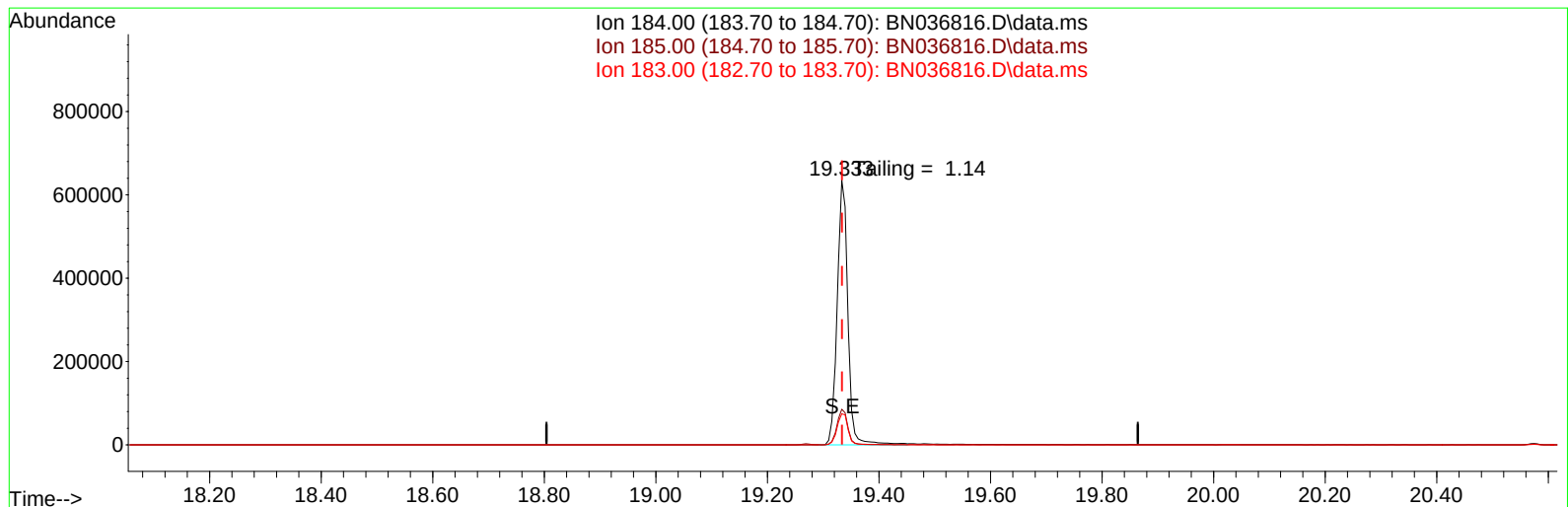
response 145132

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20  | 65.56  |
| 264.00 | 61.60  | 65.78  |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
Data File : BN036816.D  
Acq On : 03 Apr 2025 11:08  
Operator : RC/JU  
Sample : DFTPP  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

Quant Time: Apr 03 14:25:27 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Apr 03 14:16:27 2025  
Response via : Initial Calibration



TIC: BN036816.D\data.ms

**(77) Benzidine**

19.333min (-0.001) 0.00 ng

response 839528

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 13.48  |
| 183.00 | 13.20  | 11.75  |
| 0.00   | 0.00   | 0.00   |

## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: |                |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  |                |
| Client Sample ID:  | PB167430BL                                  | SDG No.:        | Q1697          |
| Lab Sample ID:     | PB167430BL                                  | 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 |
| BN036818.D        | 1         | 04/02/25 14:40 | 04/03/25 12:24 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.070 | U         | 0.070               | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.35  |           | 30 (20) - 150 (139) | 87%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.39  |           | 30 (30) - 150 (150) | 97%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.33  |           | 30 (27) - 130 (154) | 82%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.35  |           | 30 (25) - 130 (149) | 87%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.37  |           | 30 (54) - 130 (175) | 91%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2090  | 7.695     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4880  | 10.477    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2590  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 5170  | 17.086    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 4210  | 21.277    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 1590  | 23.522    |                     |            |          |

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\BN040325\  
Data File : BN036818.D  
Acq On : 03 Apr 2025 12:24  
Operator : RC/JU  
Sample : PB167430BL  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

Quant Time: Apr 03 12:57:57 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.695  | 152  | 2093     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8           | 10.477 | 136  | 4883     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10        | 14.334 | 164  | 2586     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10        | 17.086 | 188  | 5170     | 0.400 | ng    | -0.02    |
| 29) Chrysene-d12            | 21.277 | 240  | 4213     | 0.400 | ng    | -0.02    |
| 35) Perylene-d12            | 23.522 | 264  | 1585     | 0.400 | ng    | #-0.03   |
| System Monitoring Compounds |        |      |          |       |       |          |
| 4) 2-Fluorophenol           | 5.290  | 112  | 2043     | 0.419 | ng    | -0.02    |
| 5) Phenol-d6                | 6.872  | 99   | 2348     | 0.390 | ng    | -0.03    |
| 8) Nitrobenzene-d5          | 8.843  | 82   | 1748     | 0.329 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152  | 2530     | 0.348 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol    | 15.833 | 330  | 430      | 0.366 | ng    | -0.02    |
| 15) 2-Fluorobiphenyl        | 12.963 | 172  | 5223     | 0.347 | ng    | -0.03    |
| 27) Fluoranthene-d10        | 19.118 | 212  | 5136     | 0.388 | ng    | -0.02    |
| 31) Terphenyl-d14           | 19.717 | 244  | 3689     | 0.365 | ng    | -0.03    |

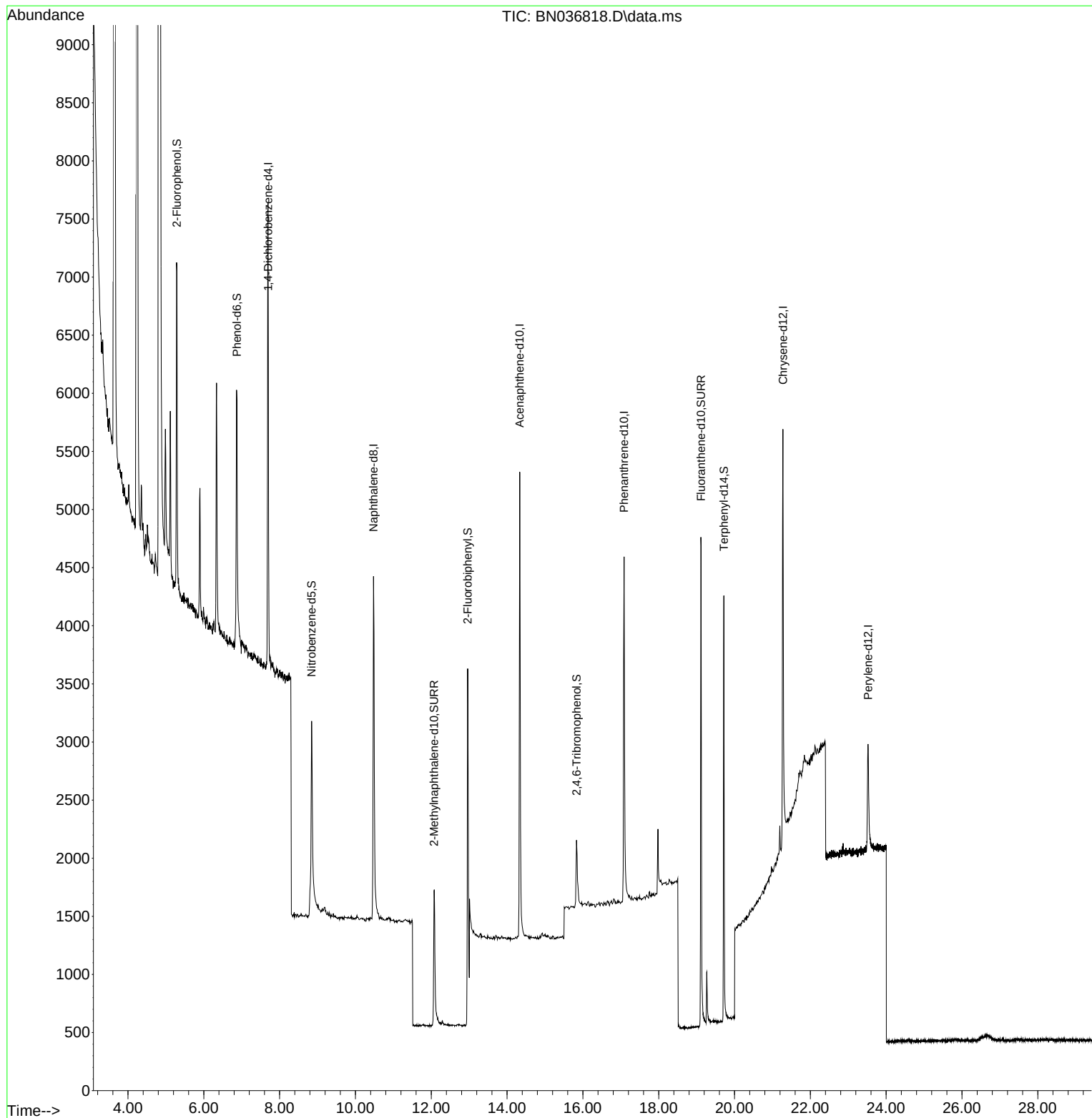
| Target Compounds | Qvalue |
|------------------|--------|
|------------------|--------|

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

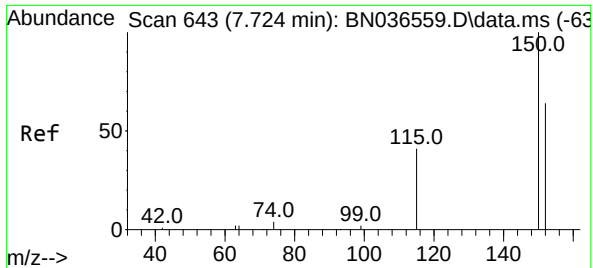
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
Data File : BN036818.D  
Acq On : 03 Apr 2025 12:24  
Operator : RC/JU  
Sample : PB167430BL  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

Quant Time: Apr 03 12:57:57 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

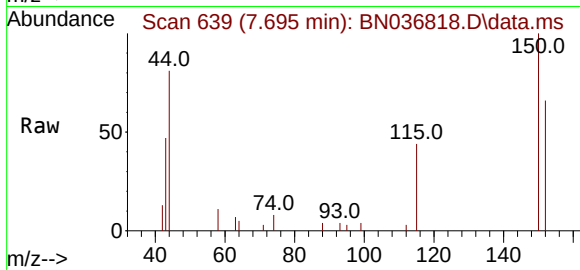




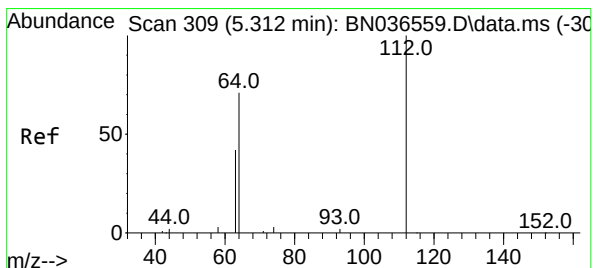
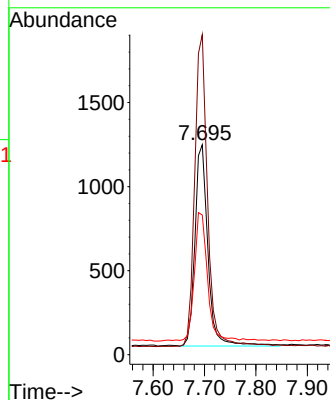
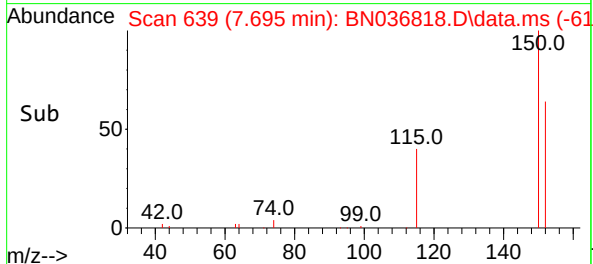


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 61  
Delta R.T. -0.029 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

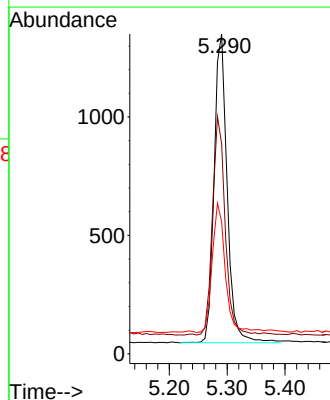
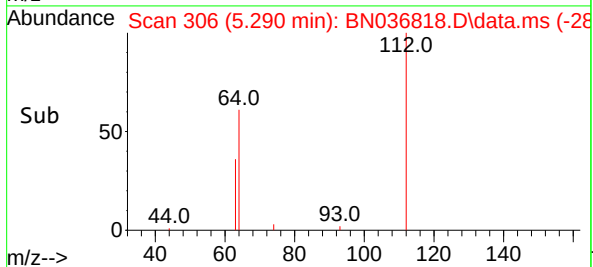
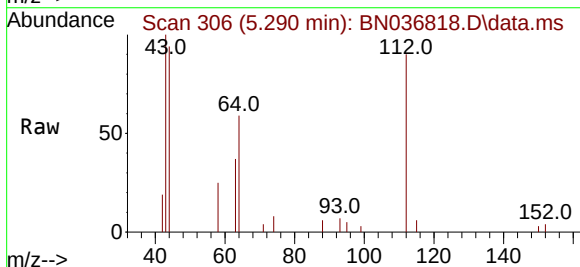


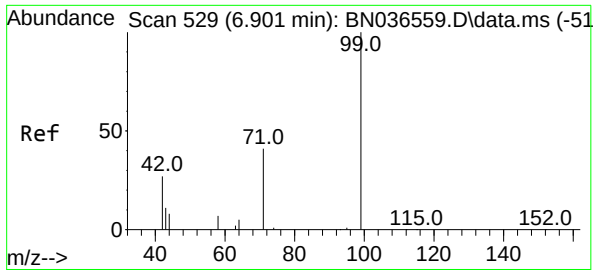
Tgt Ion:152 Resp: 2093  
Ion Ratio Lower Upper  
152 100  
150 152.4 123.7 185.5  
115 66.5 54.3 81.5



#4  
2-Fluorophenol  
Concen: 0.419 ng  
RT: 5.290 min Scan# 306  
Delta R.T. -0.022 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Tgt Ion:112 Resp: 2043  
Ion Ratio Lower Upper  
112 100  
64 69.3 53.1 79.7  
63 41.9 31.8 47.8

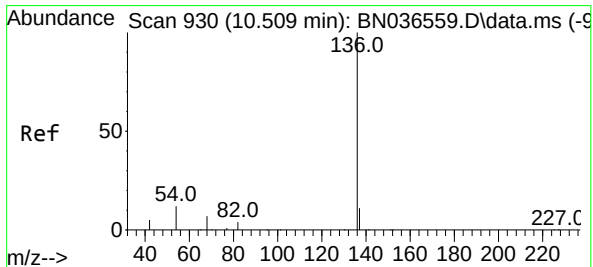
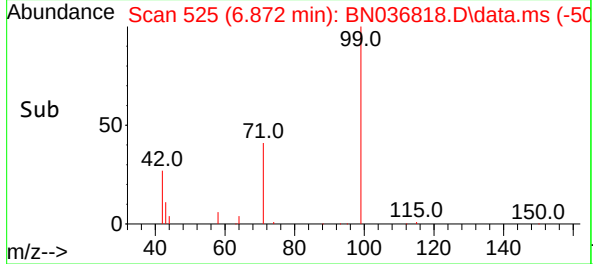
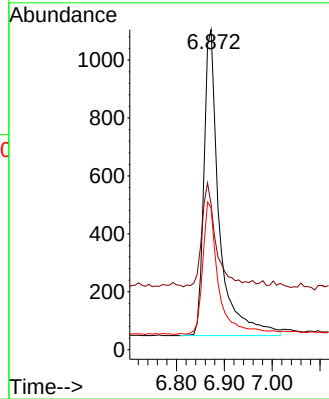
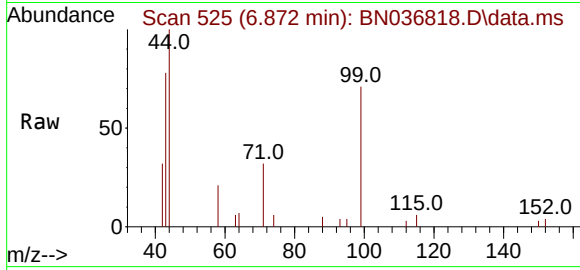




#5  
Phenol-d6  
Concen: 0.390 ng  
RT: 6.872 min Scan# 51  
Delta R.T. -0.029 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

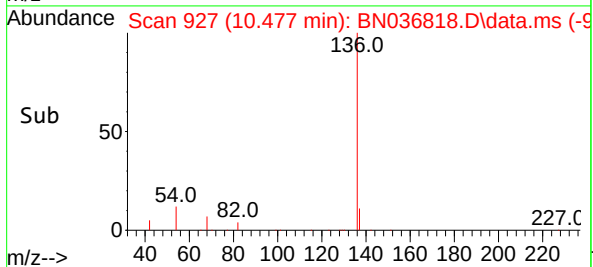
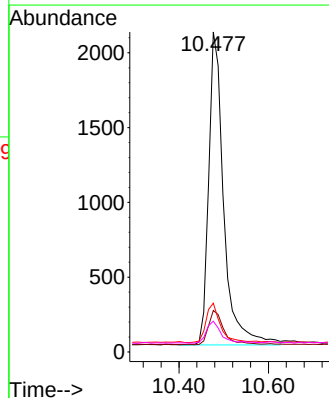
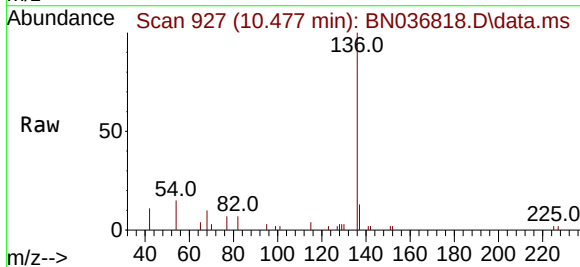
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

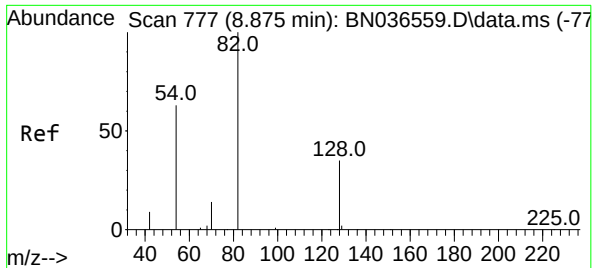
Tgt Ion: 99 Resp: 2348  
Ion Ratio Lower Upper  
99 100  
42 31.7 26.5 39.7  
71 44.8 34.1 51.1



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 927  
Delta R.T. -0.032 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Tgt Ion: 136 Resp: 4883  
Ion Ratio Lower Upper  
136 100  
137 12.9 10.3 15.5  
54 15.2 11.5 17.3  
68 9.6 7.0 10.4

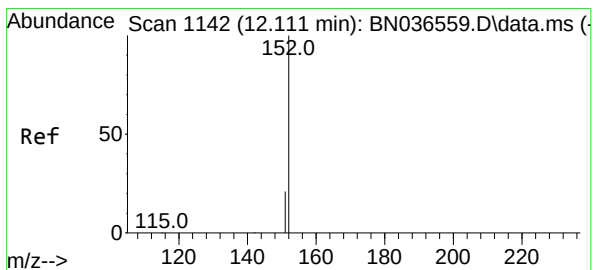
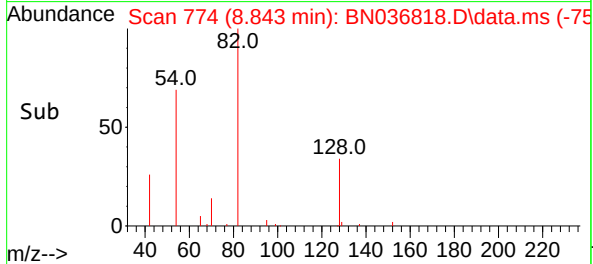
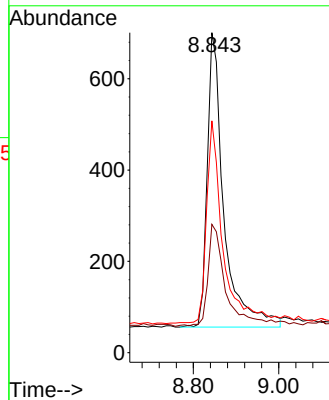
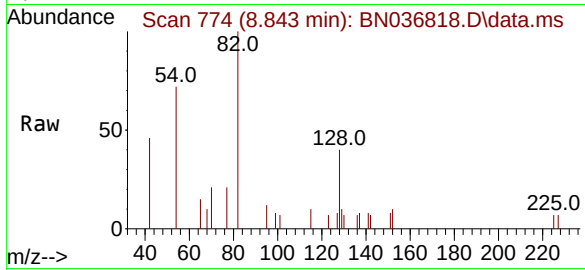




#8  
Nitrobenzene-d5  
Concen: 0.329 ng  
RT: 8.843 min Scan# 71  
Delta R.T. -0.032 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

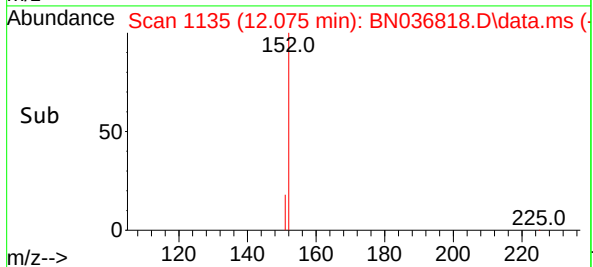
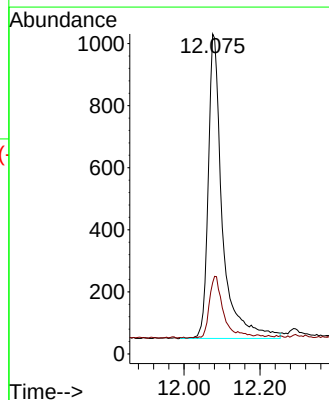
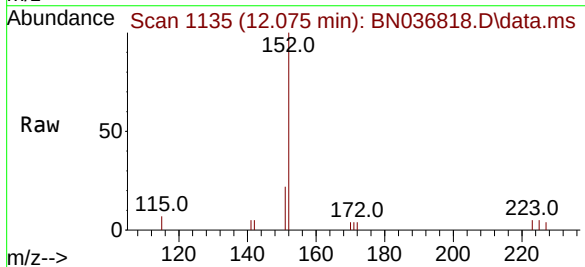
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

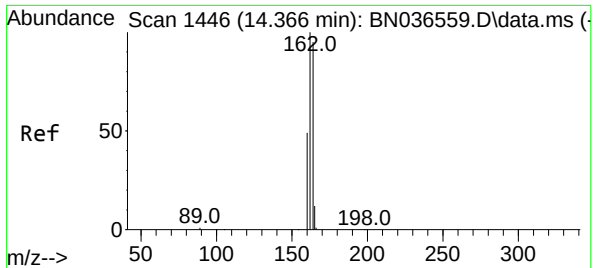
Tgt Ion: 82 Resp: 1748  
Ion Ratio Lower Upper  
82 100  
128 40.1 30.6 45.8  
54 72.5 52.2 78.4



#11  
2-Methylnaphthalene-d10  
Concen: 0.348 ng  
RT: 12.075 min Scan# 1135  
Delta R.T. -0.035 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Tgt Ion: 152 Resp: 2530  
Ion Ratio Lower Upper  
152 100  
151 18.7 17.0 25.6

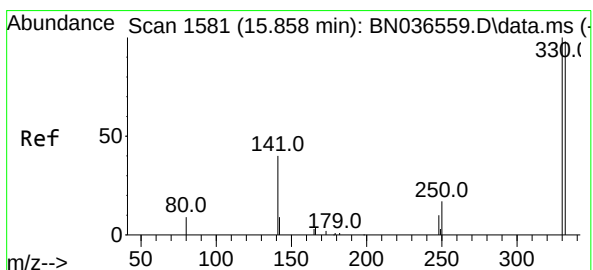
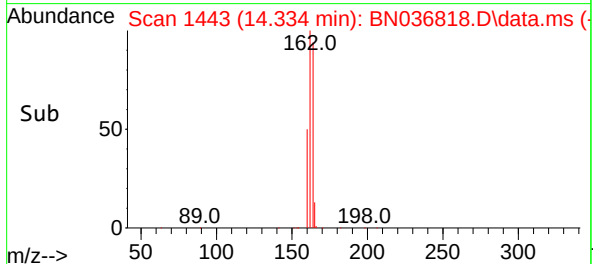
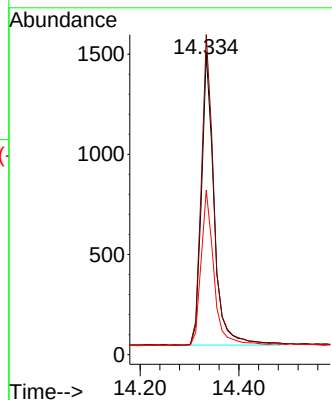
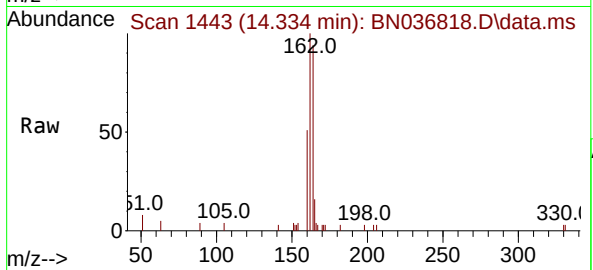




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.032 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

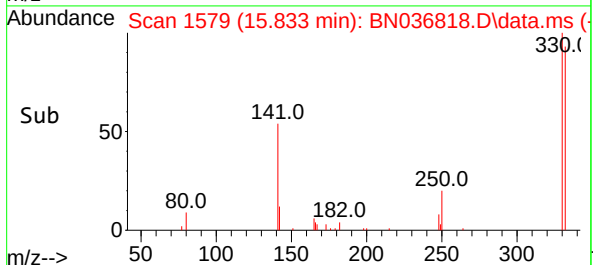
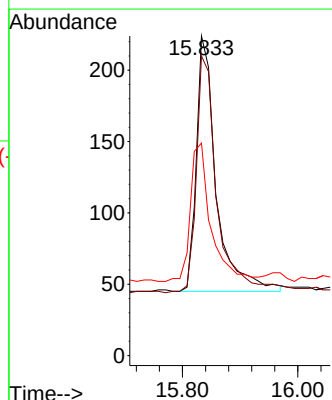
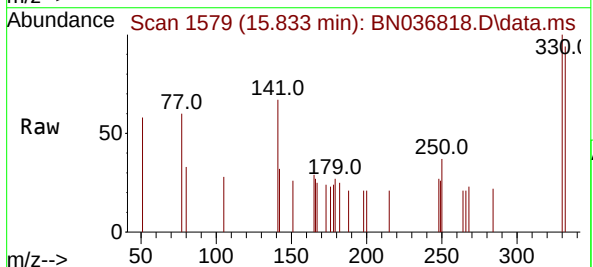
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

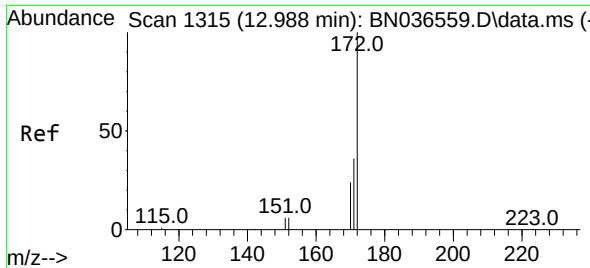
Tgt Ion:164 Resp: 2586  
Ion Ratio Lower Upper  
164 100  
162 106.3 84.2 126.2  
160 54.7 42.2 63.2



#14  
2,4,6-Tribromophenol  
Concen: 0.366 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.025 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Tgt Ion:330 Resp: 430  
Ion Ratio Lower Upper  
330 100  
332 96.7 75.2 112.8  
141 55.1 43.4 65.2

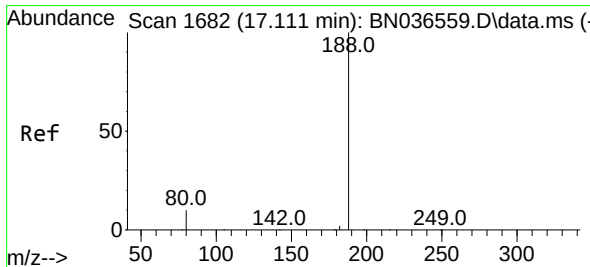
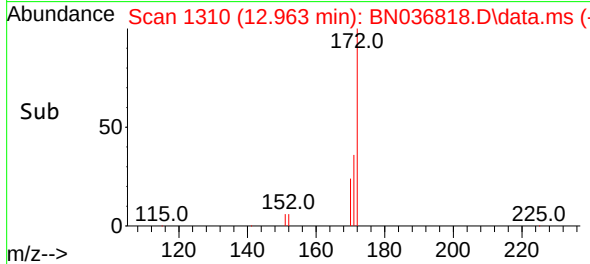
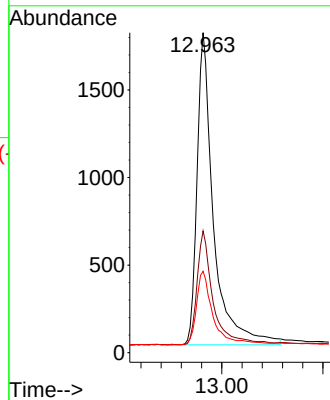
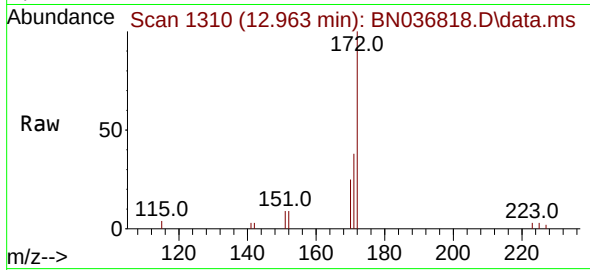




#15  
2-Fluorobiphenyl  
Concen: 0.347 ng  
RT: 12.963 min Scan# 11  
Delta R.T. -0.025 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

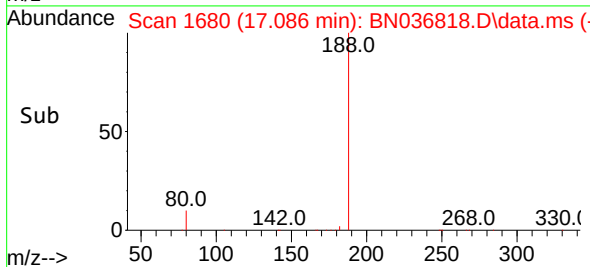
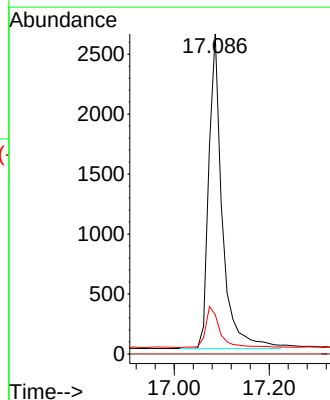
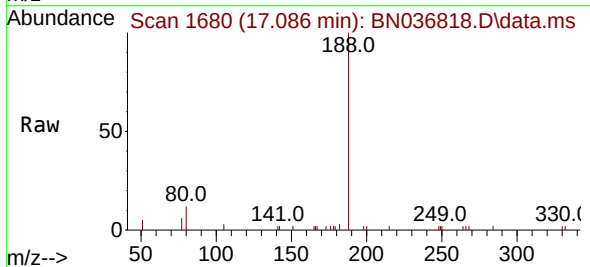
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

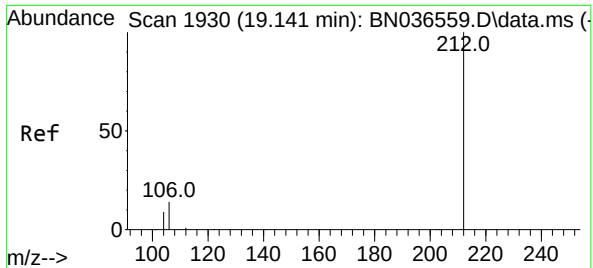
Tgt Ion:172 Resp: 5223  
Ion Ratio Lower Upper  
172 100  
171 38.0 29.5 44.3  
170 25.5 20.2 30.4



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1680  
Delta R.T. -0.025 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Tgt Ion:188 Resp: 5170  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 12.3 8.8 13.2

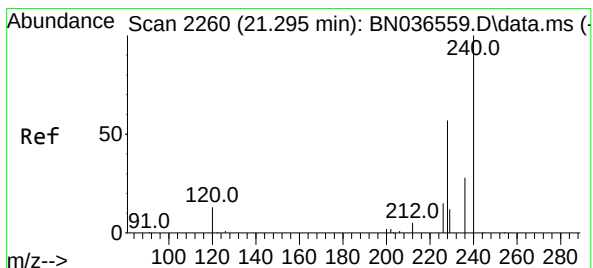
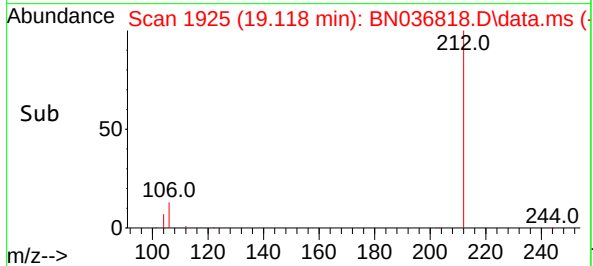
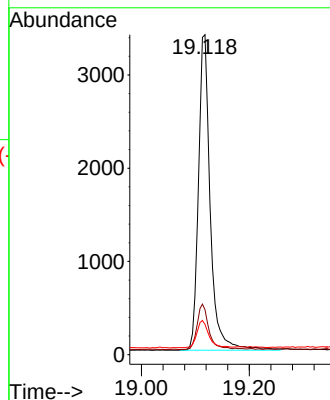
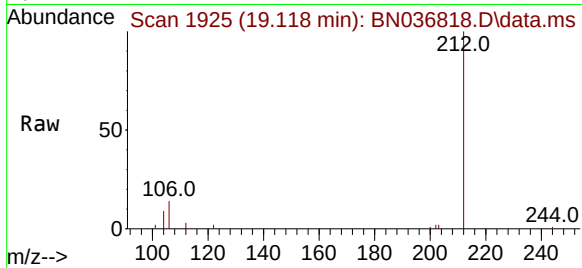




#27  
Fluoranthene-d10  
Concen: 0.388 ng  
RT: 19.118 min Scan# 19  
Delta R.T. -0.023 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

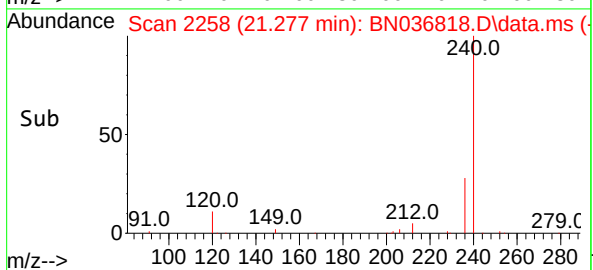
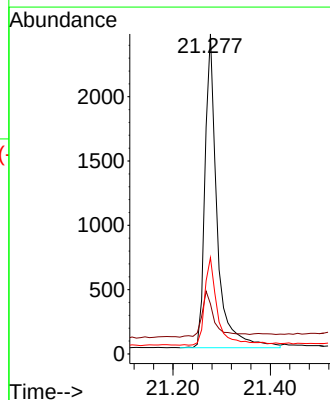
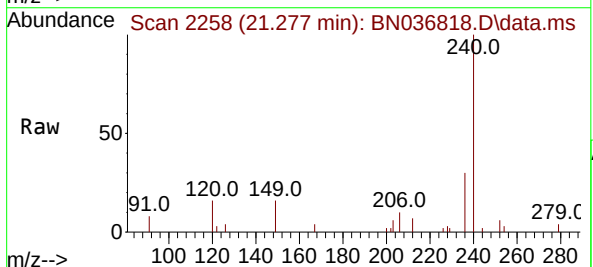
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

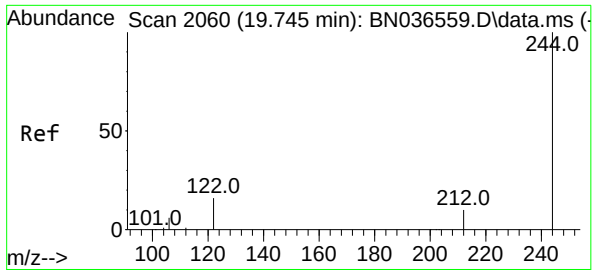
| Tgt Ion:  | 212   | Resp: | 5136 |
|-----------|-------|-------|------|
| Ion Ratio | Lower | Upper |      |
| 212       | 100   |       |      |
| 106       | 14.2  | 11.8  | 17.6 |
| 104       | 8.7   | 7.3   | 10.9 |



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.018 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

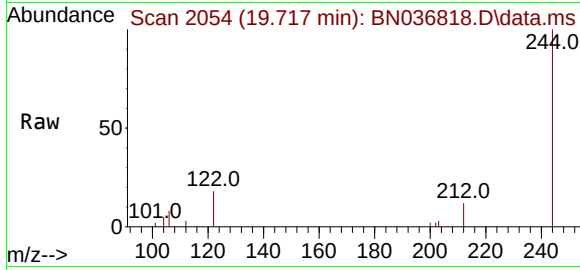
| Tgt Ion:  | 240   | Resp: | 4213 |
|-----------|-------|-------|------|
| Ion Ratio | Lower | Upper |      |
| 240       | 100   |       |      |
| 120       | 15.6  | 14.6  | 22.0 |
| 236       | 30.1  | 24.1  | 36.1 |



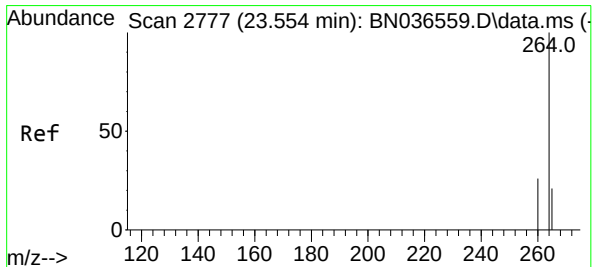
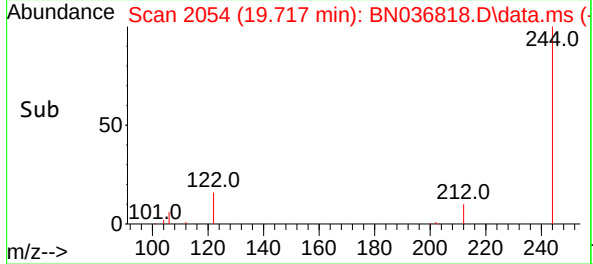
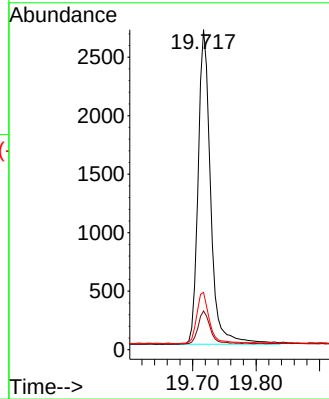


#31  
Terphenyl-d14  
Concen: 0.365 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.028 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BL

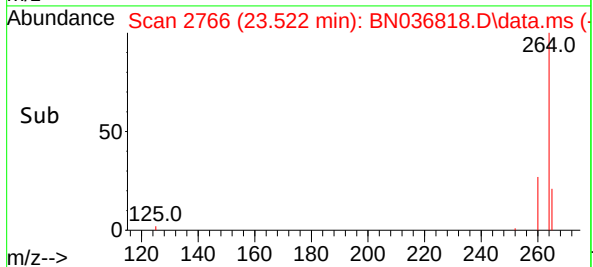
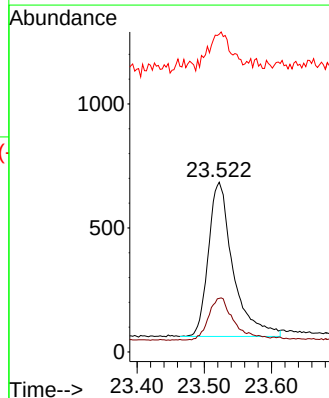
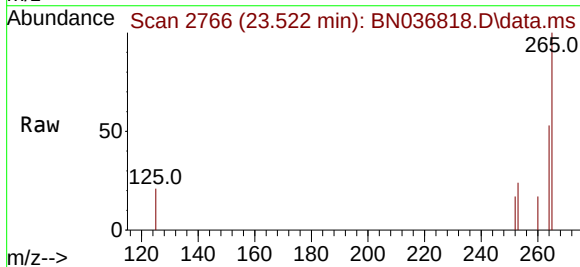


Tgt Ion:244 Resp: 3689  
Ion Ratio Lower Upper  
244 100  
212 12.1 9.6 14.4  
122 17.9 13.9 20.9



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.522 min Scan# 2766  
Delta R.T. -0.032 min  
Lab File: BN036818.D  
Acq: 03 Apr 2025 12:24

Tgt Ion:264 Resp: 1585  
Ion Ratio Lower Upper  
264 100  
260 31.6 22.6 33.8  
265 187.3 88.1 132.1#



## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: |                |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  |                |
| Client Sample ID:  | PB167430BS                                  | SDG No.:        | Q1697          |
| Lab Sample ID:     | PB167430BS                                  | 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 |
| BN036826.D        | 1         | 04/02/25 14:40 | 04/03/25 17:14 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.35  |           | 0.070               | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.40  |           | 30 (20) - 150 (139) | 101%       | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.35  |           | 30 (30) - 150 (150) | 88%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.31  |           | 30 (27) - 130 (154) | 77%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.35  |           | 30 (25) - 130 (149) | 88%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.34  |           | 30 (54) - 130 (175) | 86%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2290  | 7.695     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5540  | 10.476    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 3010  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 6130  | 17.086    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 4710  | 21.276    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 2870  | 23.516    |                     |            |          |

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\BN040325\  
 Data File : BN036826.D  
 Acq On : 03 Apr 2025 17:14  
 Operator : RC/JU  
 Sample : PB167430BS  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167430BS

Quant Time: Apr 03 17:39:54 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.695  | 152  | 2292     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.476 | 136  | 5542     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10          | 14.334 | 164  | 3005     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 6134     | 0.400 | ng    | -0.03    |
| 29) Chrysene-d12              | 21.276 | 240  | 4706     | 0.400 | ng    | #-0.02   |
| 35) Perylene-d12              | 23.516 | 264  | 2869     | 0.400 | ng    | -0.04    |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.290  | 112  | 2126     | 0.398 | ng    | -0.02    |
| 5) Phenol-d6                  | 6.872  | 99   | 2512     | 0.381 | ng    | -0.03    |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 1860     | 0.309 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.070 | 152  | 3322m    | 0.403 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 15.832 | 330  | 477      | 0.350 | ng    | -0.03    |
| 15) 2-Fluorobiphenyl          | 12.957 | 172  | 6173     | 0.353 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.117 | 212  | 5498     | 0.350 | ng    | -0.02    |
| 31) Terphenyl-d14             | 19.721 | 244  | 3856     | 0.342 | ng    | -0.02    |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.224  | 88   | 899      | 0.354 | ng    | # 56     |
| 3) n-Nitrosodimethylamine     | 3.528  | 42   | 1996     | 0.388 | ng    | # 96     |
| 6) bis(2-Chloroethyl)ether    | 7.125  | 93   | 2492     | 0.365 | ng    | 100      |
| 9) Naphthalene                | 10.530 | 128  | 5789     | 0.355 | ng    | 99       |
| 10) Hexachlorobutadiene       | 10.818 | 225  | 1352     | 0.352 | ng    | # 98     |
| 12) 2-Methylnaphthalene       | 12.146 | 142  | 3685     | 0.355 | ng    | 98       |
| 16) Acenaphthylene            | 14.056 | 152  | 5414     | 0.382 | ng    | 99       |
| 17) Acenaphthene              | 14.398 | 154  | 3532     | 0.380 | ng    | 100      |
| 18) Fluorene                  | 15.381 | 166  | 4682     | 0.373 | ng    | 100      |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198  | 460      | 0.439 | ng    | # 79     |
| 21) 4-Bromophenyl-phenylether | 16.279 | 248  | 1442     | 0.375 | ng    | 93       |
| 22) Hexachlorobenzene         | 16.391 | 284  | 1672     | 0.360 | ng    | 98       |
| 23) Atrazine                  | 16.552 | 200  | 539      | 0.175 | ng    | # 90     |
| 24) Pentachlorophenol         | 16.738 | 266  | 1402     | 0.663 | ng    | 97       |
| 25) Phenanthrene              | 17.123 | 178  | 7152     | 0.389 | ng    | 99       |
| 26) Anthracene                | 17.210 | 178  | 6515     | 0.392 | ng    | 99       |
| 28) Fluoranthene              | 19.145 | 202  | 8105     | 0.392 | ng    | 99       |
| 30) Pyrene                    | 19.508 | 202  | 7989     | 0.347 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 6210     | 0.379 | ng    | 99       |
| 33) Chrysene                  | 21.303 | 228  | 7470     | 0.418 | ng    | 100      |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 3886     | 0.334 | ng    | # 98     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.779 | 276  | 5626     | 0.543 | ng    | # 82     |
| 37) Benzo(b)fluoranthene      | 22.841 | 252  | 6012     | 0.576 | ng    | 94       |
| 38) Benzo(k)fluoranthene      | 22.887 | 252  | 6564     | 0.599 | ng    | # 93     |
| 39) Benzo(a)pyrene            | 23.419 | 252  | 4412     | 0.502 | ng    | 95       |
| 40) Dibenzo(a,h)anthracene    | 25.799 | 278  | 4493     | 0.557 | ng    | 96       |
| 41) Benzo(g,h,i)perylene      | 26.469 | 276  | 4427     | 0.480 | ng    | 100      |
| -----                         |        |      |          |       |       |          |

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

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
PB167430BS

Abundance

TIC: BN036826.D\data.ms

Time-->

1,4-Dioxane

n-Nitrosodimethylamine

2-Fluorophenol, S

Phenol-d6, S

bis(2-Chloroethyl)ether

1,4-Dichlorobenzene-d4, I

Nitrobenzene-d5, S

Hexachlorobutadiene

Naphthalene-d8, I

2-Methylnaphthalene

2-Fluorobiphenyl, S

Acenaphthylene

Acenaphthene-d10, I

Acenaphthene

Fluorene

4,6-Dinitro-2-methylphenol

2,4,6-Tribromophenol, S

Hexachlorobenzene

Bromophenyl-phenylether

Pentachlorophenol

Phenanthrene-d10, I

Phenanthrene

Fluoranthene-d10, SURR

Fluoranthene

Pyrene

Terphenyl-d14, S

Bis(2-ethylhexyloxy)phthalate

Chrysene-d12, I

Chrysene

Benzo(a)anthracene

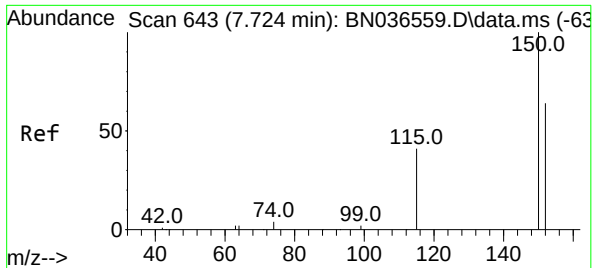
Benzo(a)fluoranthene

Perylene, C

Perylene, C

Dibenzo(a,h)pyrene

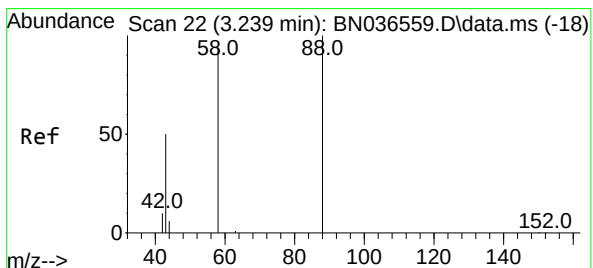
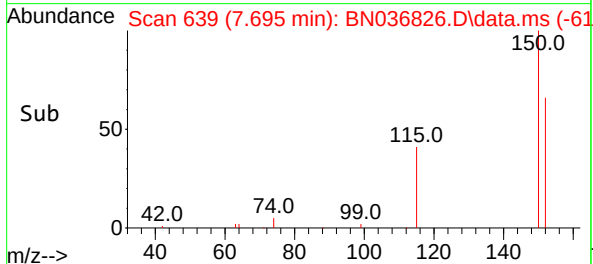
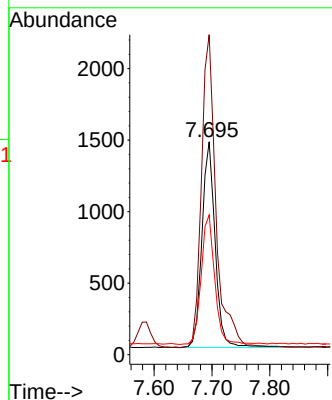
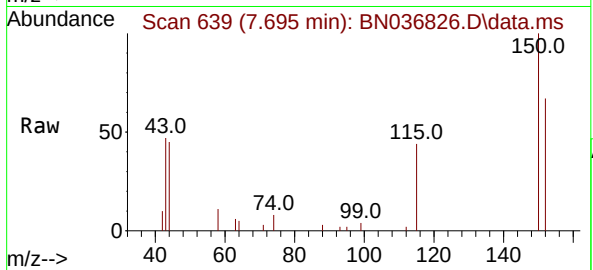
Benzo(g,h,i)perylene



#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 61  
Delta R.T. -0.029 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

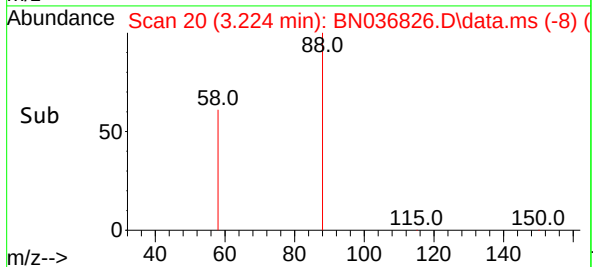
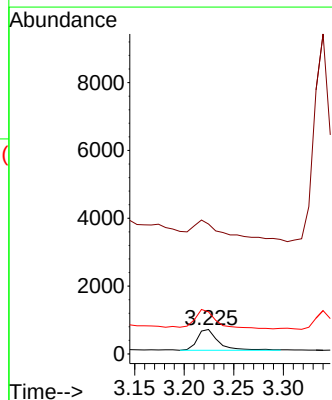
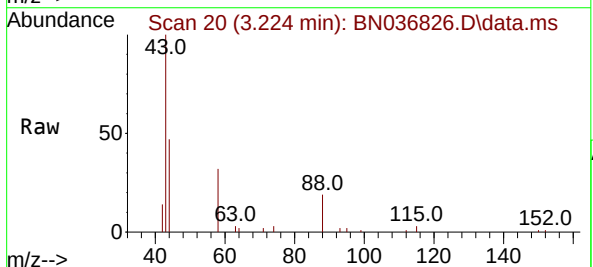
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

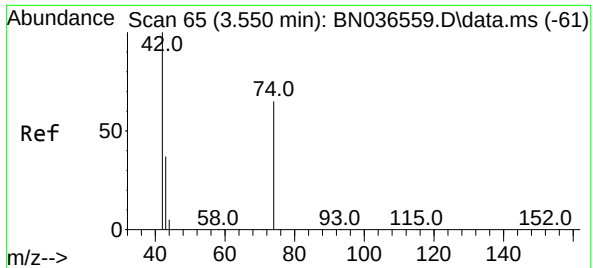
Tgt Ion:152 Resp: 2292  
Ion Ratio Lower Upper  
152 100  
150 150.2 123.7 185.5  
115 65.6 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.354 ng  
RT: 3.224 min Scan# 20  
Delta R.T. -0.014 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion: 88 Resp: 899  
Ion Ratio Lower Upper  
88 100  
43 115.2 37.8 56.8#  
58 94.4 67.4 101.2

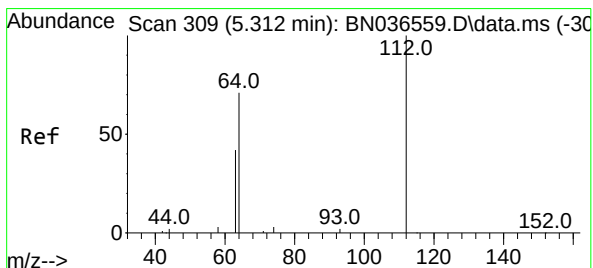
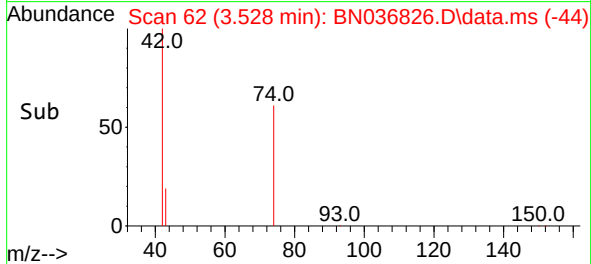
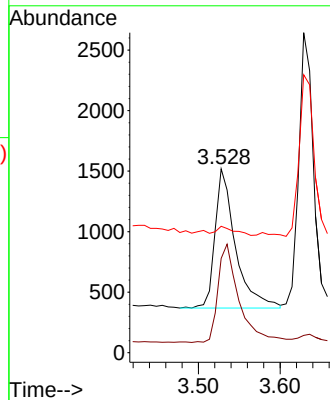
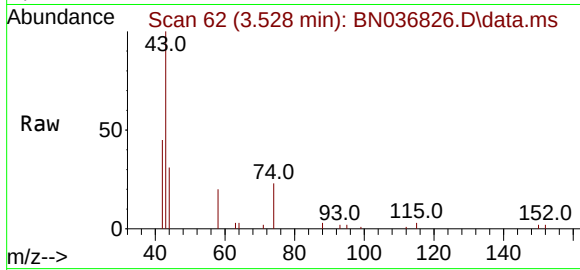




#3  
 n-Nitrosodimethylamine  
 Concen: 0.388 ng  
 RT: 3.528 min Scan# 61  
 Delta R.T. -0.022 min  
 Lab File: BN036826.D  
 Acq: 03 Apr 2025 17:14

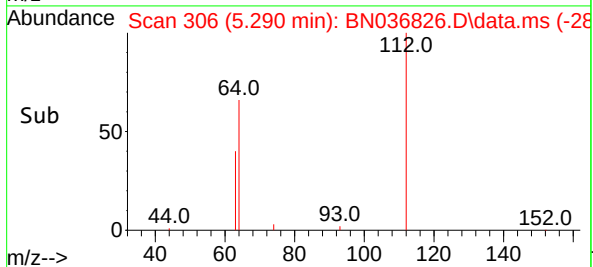
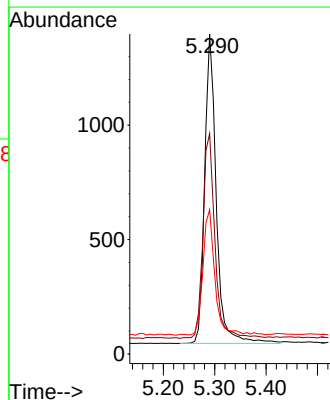
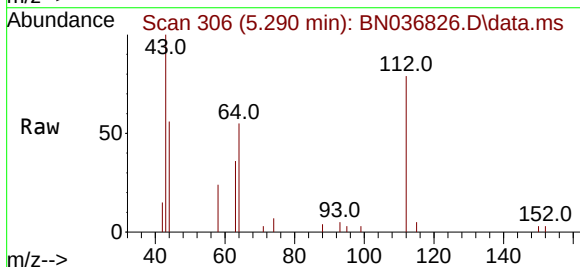
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167430BS

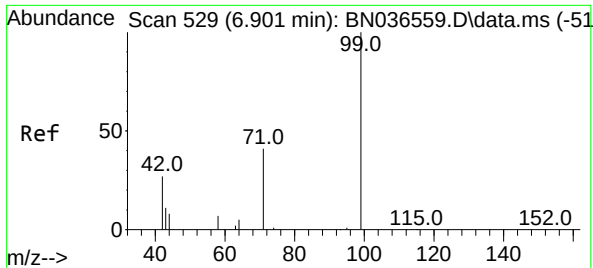
Tgt Ion: 42 Resp: 1996  
 Ion Ratio Lower Upper  
 42 100  
 74 72.5 60.6 90.8  
 44 5.5 6.3 9.5#



#4  
 2-Fluorophenol  
 Concen: 0.398 ng  
 RT: 5.290 min Scan# 306  
 Delta R.T. -0.022 min  
 Lab File: BN036826.D  
 Acq: 03 Apr 2025 17:14

Tgt Ion: 112 Resp: 2126  
 Ion Ratio Lower Upper  
 112 100  
 64 68.7 53.1 79.7  
 63 42.3 31.8 47.8

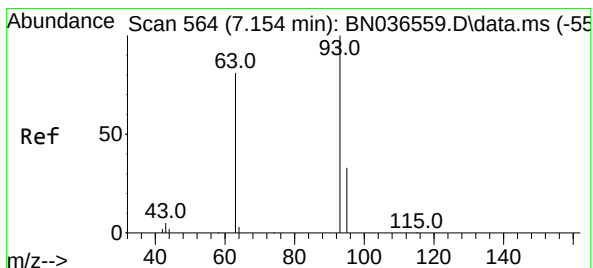
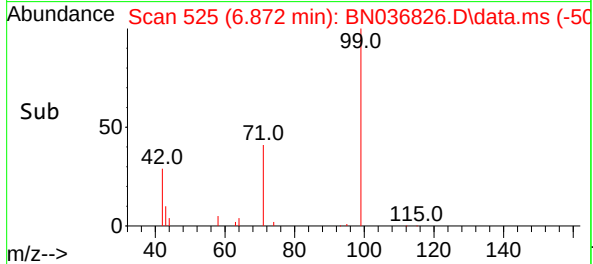
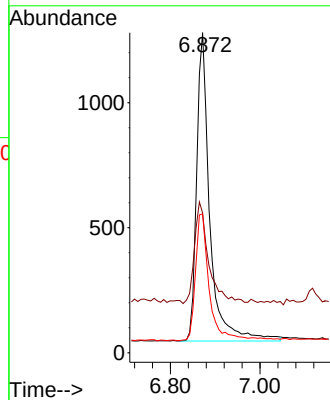
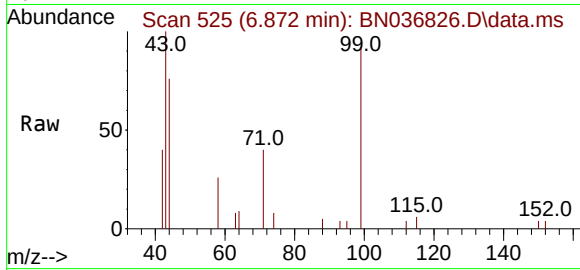




#5  
Phenol-d6  
Concen: 0.381 ng  
RT: 6.872 min Scan# 51  
Delta R.T. -0.029 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

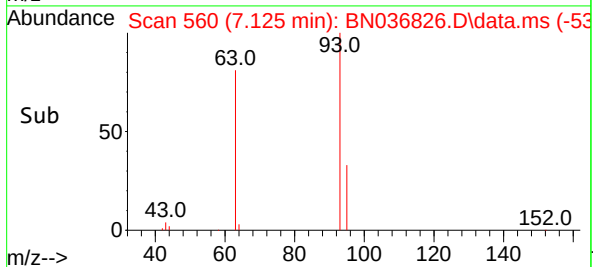
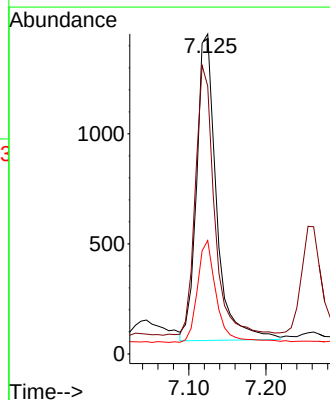
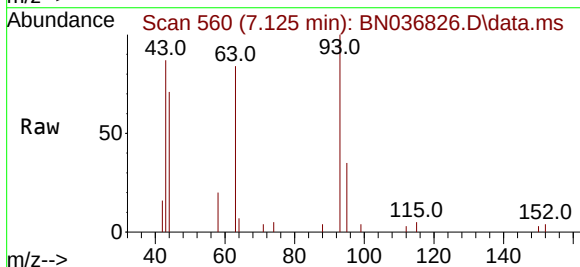
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

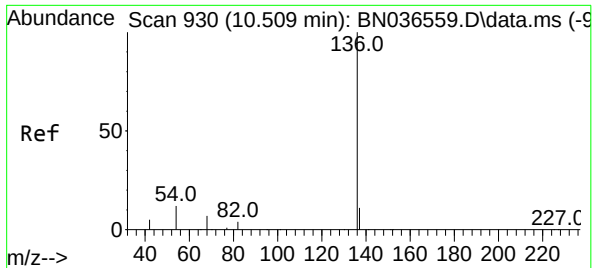
Tgt Ion: 99 Resp: 2512  
Ion Ratio Lower Upper  
99 100  
42 35.5 26.5 39.7  
71 42.1 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 0.365 ng  
RT: 7.125 min Scan# 560  
Delta R.T. -0.029 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion: 93 Resp: 2492  
Ion Ratio Lower Upper  
93 100  
63 84.5 67.7 101.5  
95 32.2 25.6 38.4

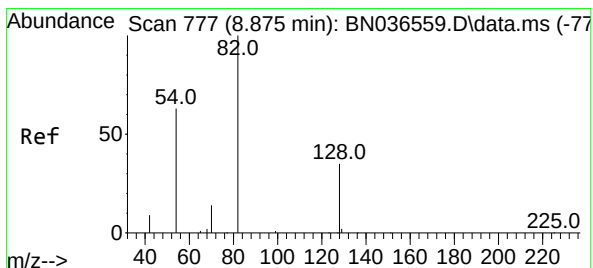
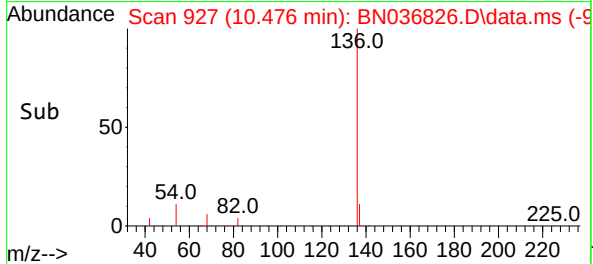
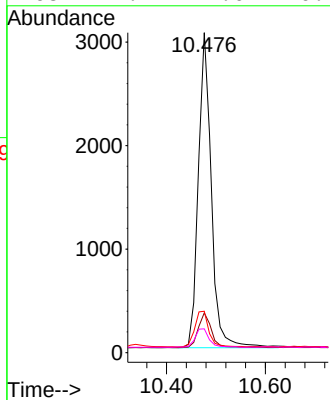
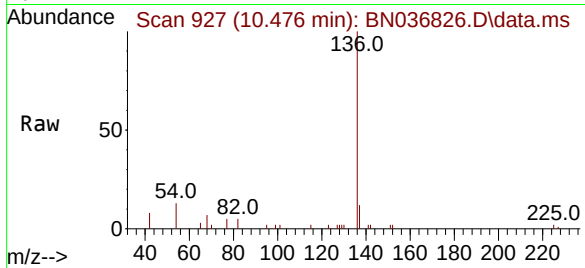




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.476 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

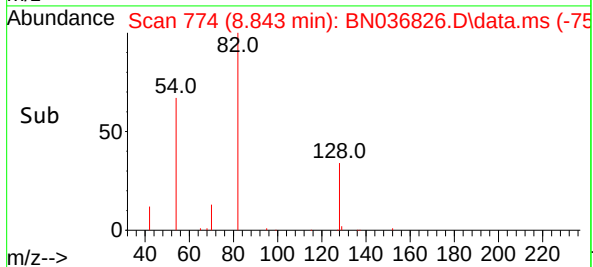
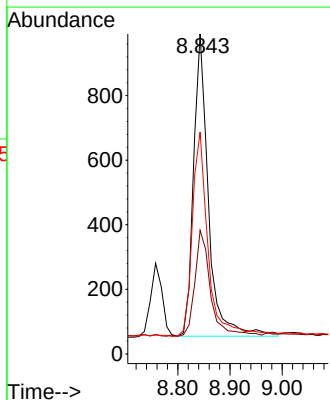
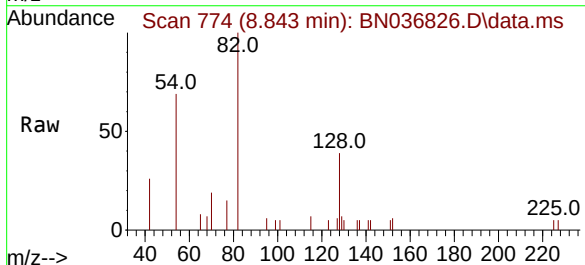
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BNA\_N  
ClientSampleId :  
PB167430BS

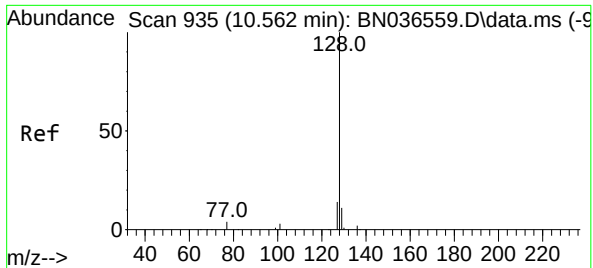
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5542  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.5  | 10.3  | 15.5  |
| 54       | 12.9  | 11.5  | 17.3  |
| 68       | 7.4   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.309 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1860  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 38.6  | 30.6  | 45.8  |
| 54       | 69.3  | 52.2  | 78.4  |

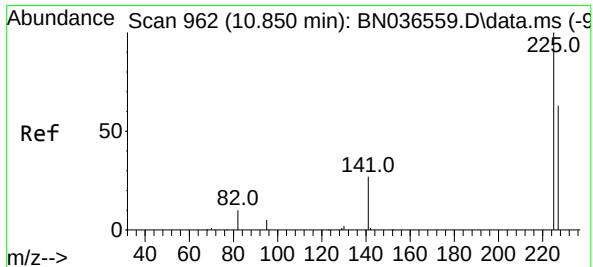
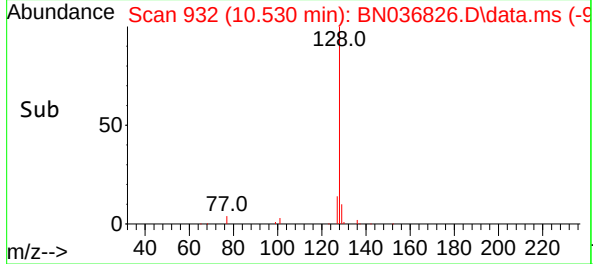
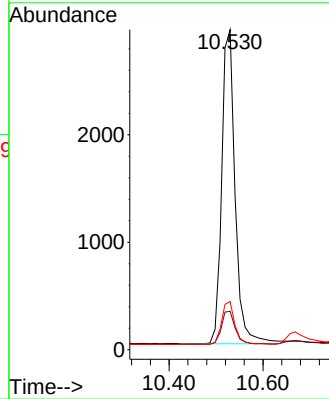
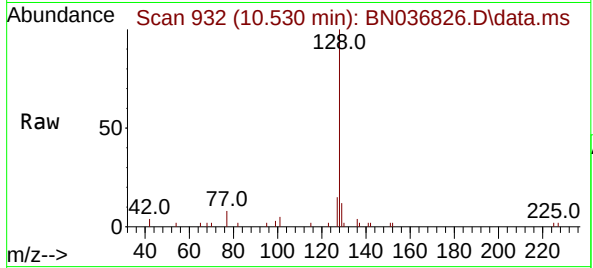




#9  
Naphthalene  
Concen: 0.355 ng  
RT: 10.530 min Scan# 911  
Delta R.T. -0.032 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

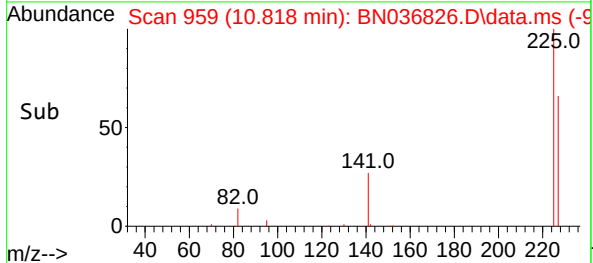
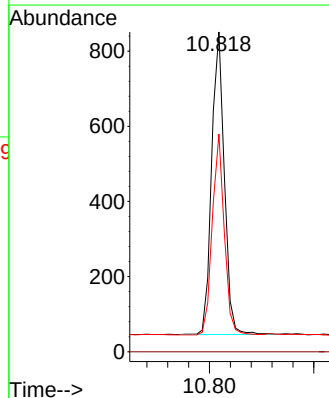
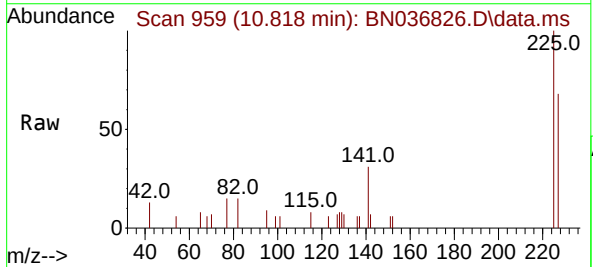
Instrument :  
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ClientSampleId :  
PB167430BS

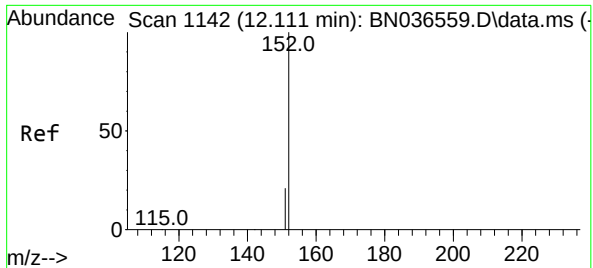
Tgt Ion:128 Resp: 5789  
Ion Ratio Lower Upper  
128 100  
129 12.0 9.8 14.6  
127 15.1 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 0.352 ng  
RT: 10.818 min Scan# 959  
Delta R.T. -0.032 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:225 Resp: 1352  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.9 51.8 77.8

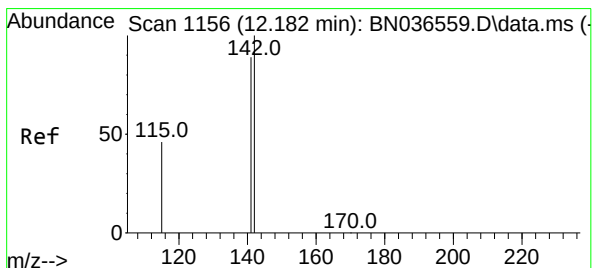
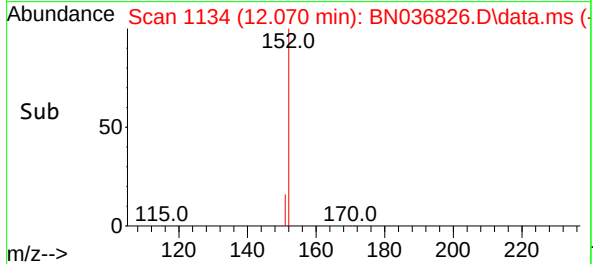
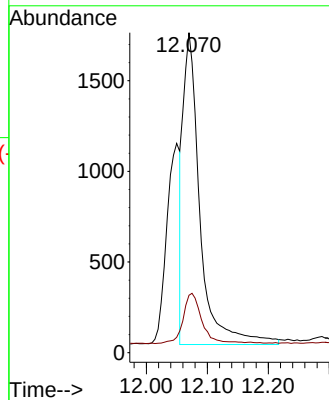
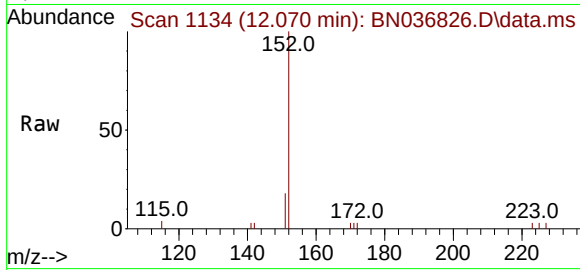




#11  
2-Methylnaphthalene-d10  
Concen: 0.403 ng m  
RT: 12.070 min Scan# 1142  
Delta R.T. -0.041 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

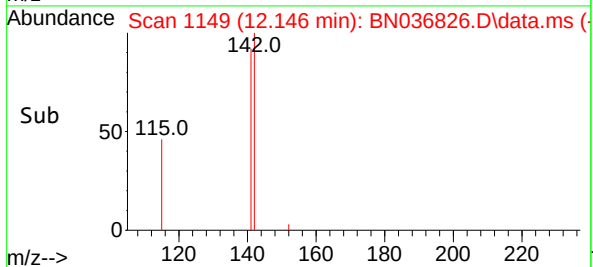
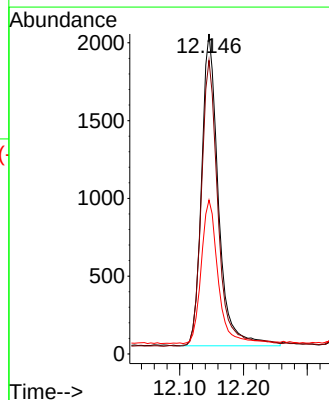
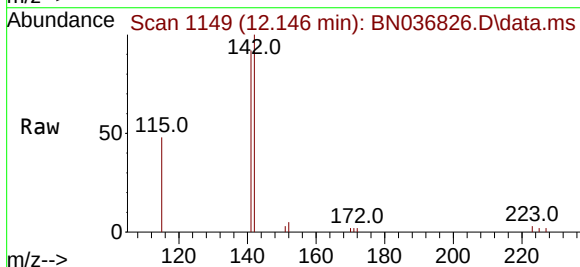
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

Tgt Ion:152 Resp: 3322  
Ion Ratio Lower Upper  
152 100  
151 17.9 17.0 25.6

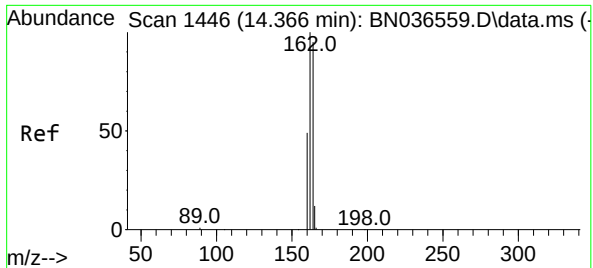


#12  
2-Methylnaphthalene  
Concen: 0.355 ng  
RT: 12.146 min Scan# 1149  
Delta R.T. -0.036 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:142 Resp: 3685  
Ion Ratio Lower Upper  
142 100  
141 91.7 71.7 107.5  
115 48.1 38.3 57.5



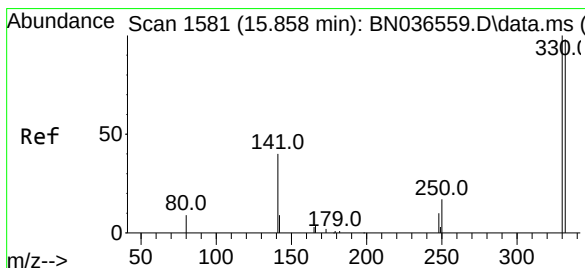
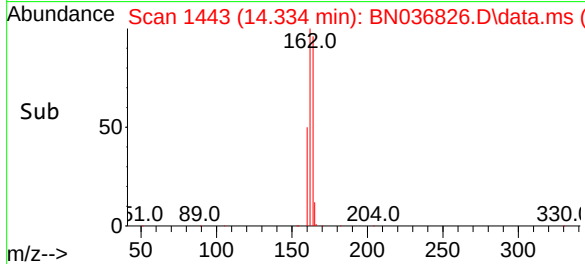
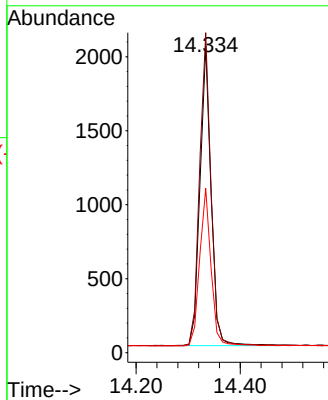
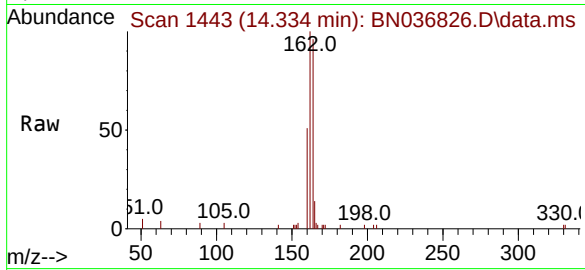




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 14  
Delta R.T. -0.032 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

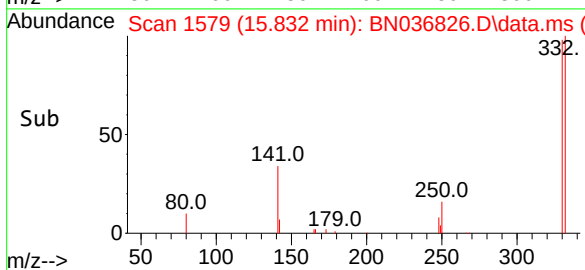
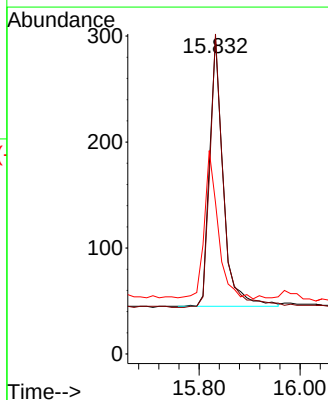
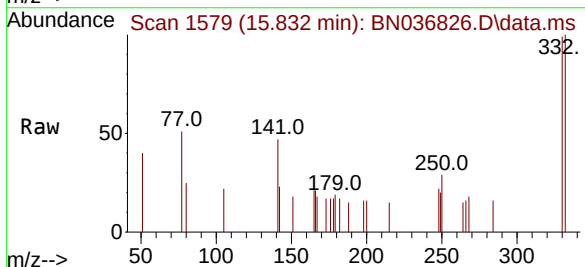
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

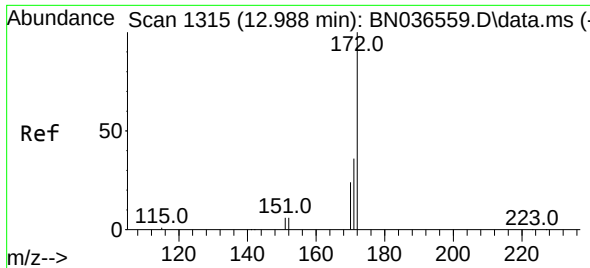
| Tgt Ion   | 164  | 162   | 160  |
|-----------|------|-------|------|
| Resp:     | 3005 |       |      |
| Ion Ratio | 100  | 104.3 | 53.6 |
| Lower     |      | 84.2  | 42.2 |
| Upper     |      | 126.2 | 63.2 |



#14  
2,4,6-Tribromophenol  
Concen: 0.350 ng  
RT: 15.832 min Scan# 1579  
Delta R.T. -0.025 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

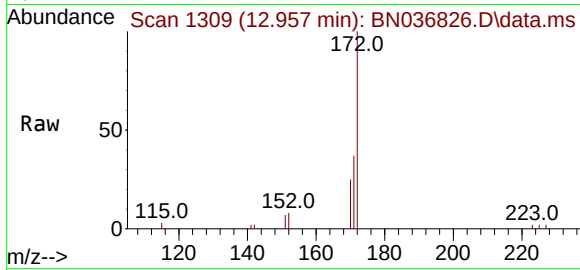
| Tgt Ion   | 330 | 332   | 141  |
|-----------|-----|-------|------|
| Resp:     | 477 |       |      |
| Ion Ratio | 100 | 100.6 | 55.8 |
| Lower     |     | 75.2  | 43.4 |
| Upper     |     | 112.8 | 65.2 |



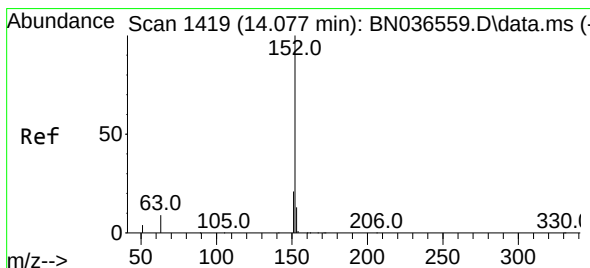
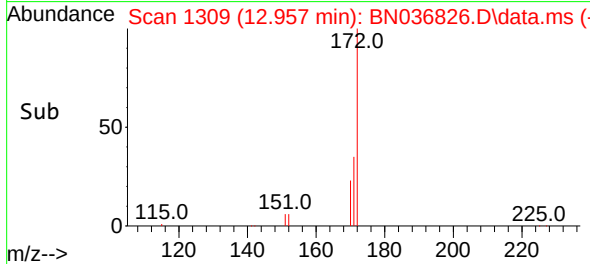
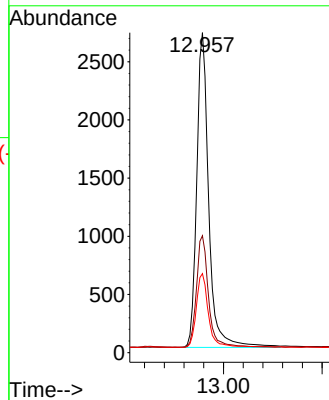


#15  
2-Fluorobiphenyl  
Concen: 0.353 ng  
RT: 12.957 min Scan# 11  
Delta R.T. -0.031 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

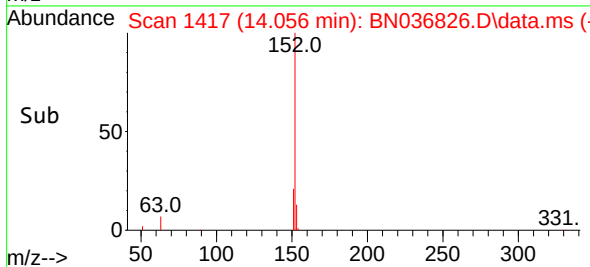
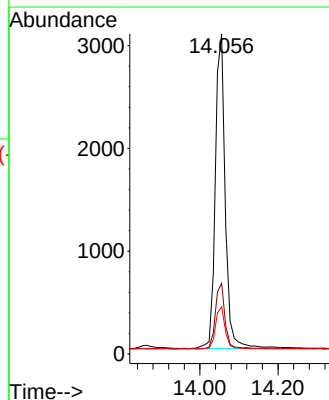
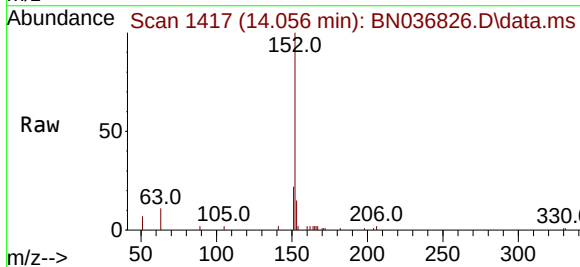


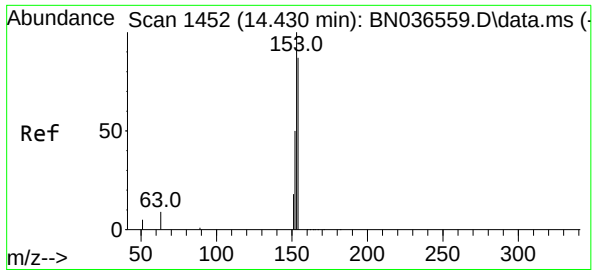
Tgt Ion:172 Resp: 6173  
Ion Ratio Lower Upper  
172 100  
171 36.5 29.5 44.3  
170 24.7 20.2 30.4



#16  
Acenaphthylene  
Concen: 0.382 ng  
RT: 14.056 min Scan# 1417  
Delta R.T. -0.022 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:152 Resp: 5414  
Ion Ratio Lower Upper  
152 100  
151 20.1 16.2 24.4  
153 13.5 10.6 15.8

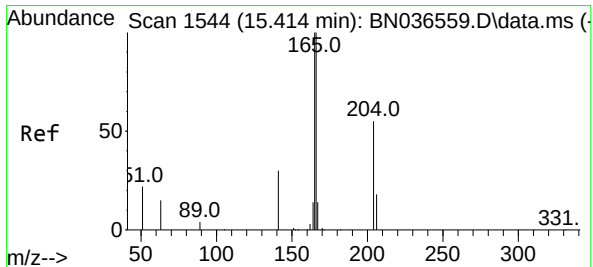
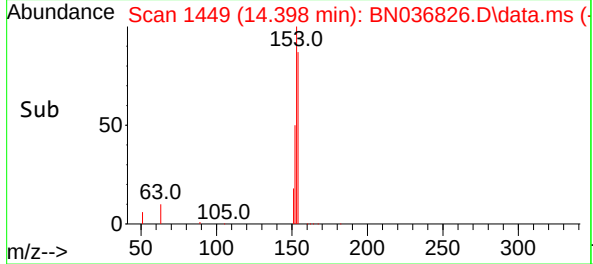
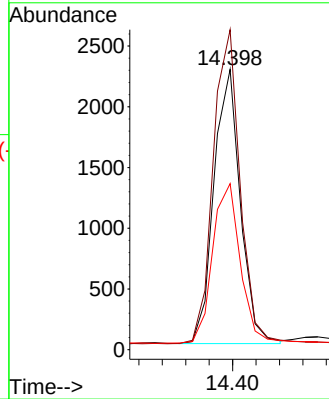
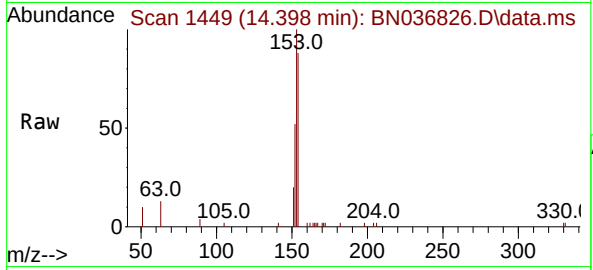




#17  
Acenaphthene  
Concen: 0.380 ng  
RT: 14.398 min Scan# 1449  
Delta R.T. -0.032 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

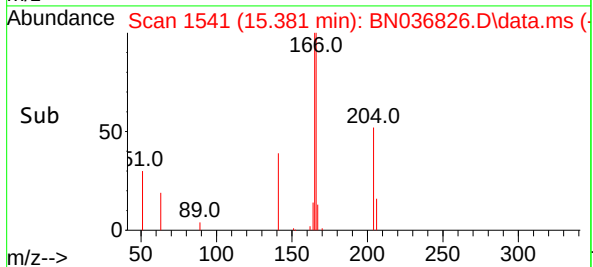
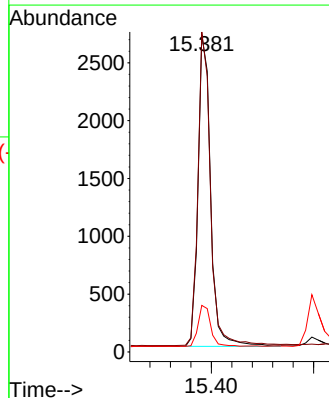
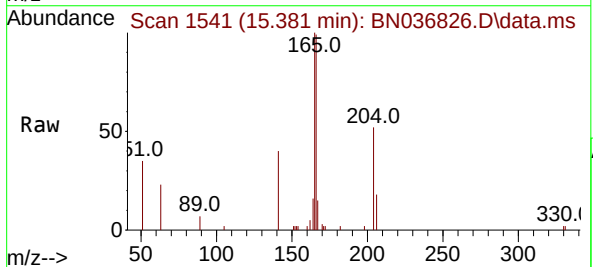
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

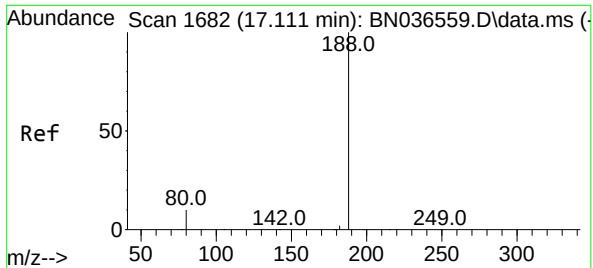
Tgt Ion:154 Resp: 3532  
Ion Ratio Lower Upper  
154 100  
153 117.4 94.1 141.1  
152 61.8 49.8 74.6



#18  
Fluorene  
Concen: 0.373 ng  
RT: 15.381 min Scan# 1541  
Delta R.T. -0.032 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:166 Resp: 4682  
Ion Ratio Lower Upper  
166 100  
165 100.1 79.8 119.8  
167 13.1 10.6 15.8

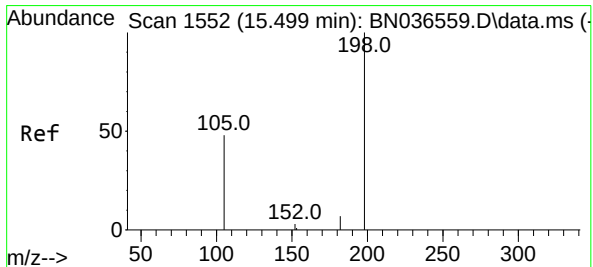
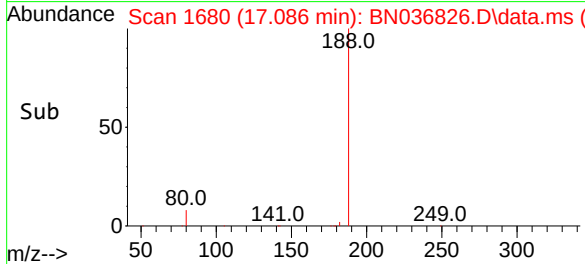
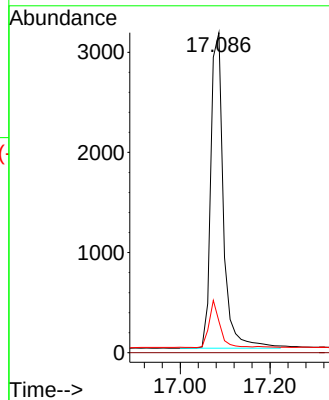
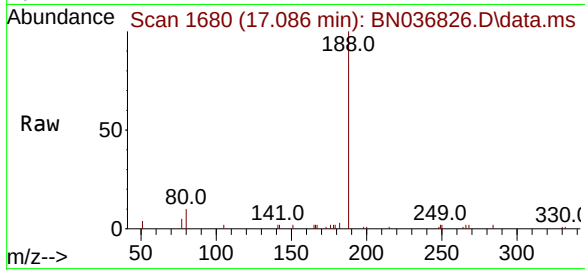




#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1  
Delta R.T. -0.025 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

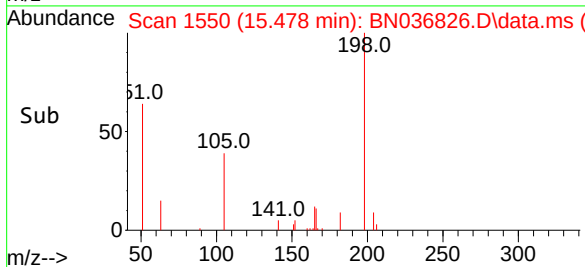
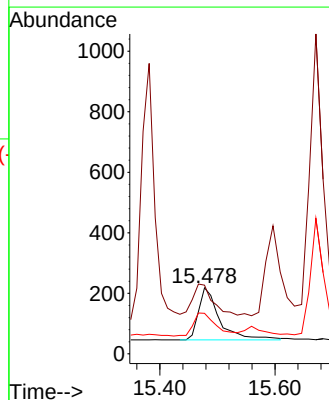
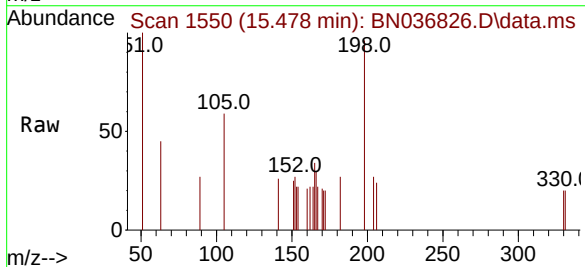
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

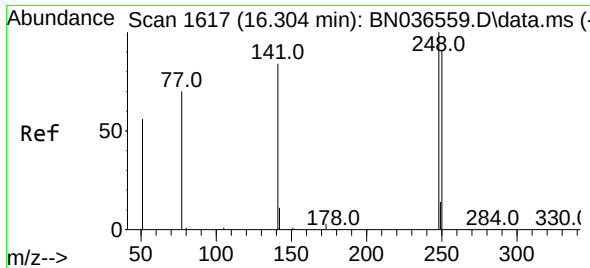
Tgt Ion:188 Resp: 6134  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 9.8 8.8 13.2



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.439 ng  
RT: 15.478 min Scan# 1550  
Delta R.T. -0.021 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:198 Resp: 460  
Ion Ratio Lower Upper  
198 100  
51 104.1 107.9 161.9#  
105 61.5 56.2 84.2

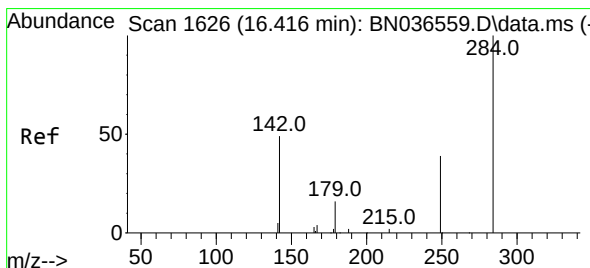
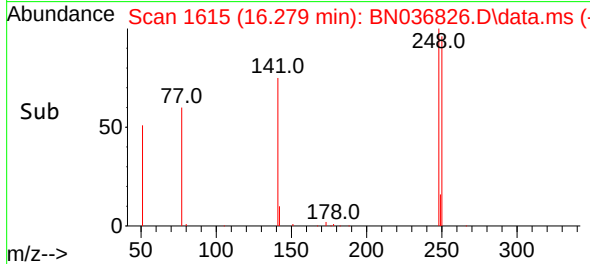
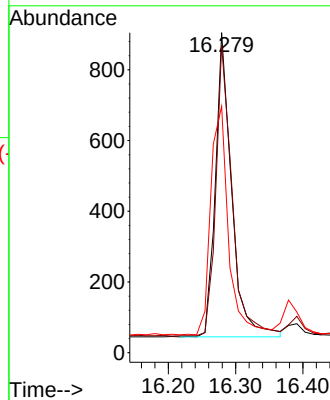
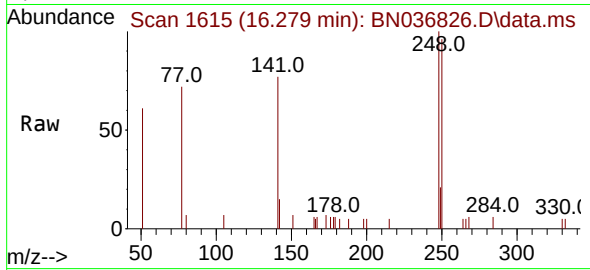




#21  
4-Bromophenyl-phenylether  
Concen: 0.375 ng  
RT: 16.279 min Scan# 1615  
Delta R.T. -0.025 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

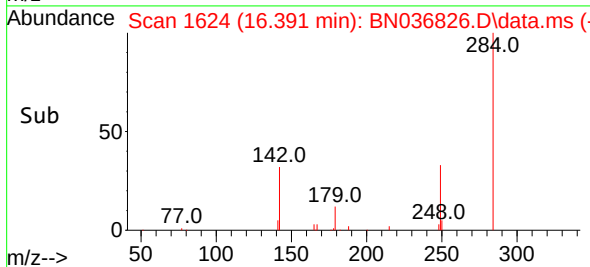
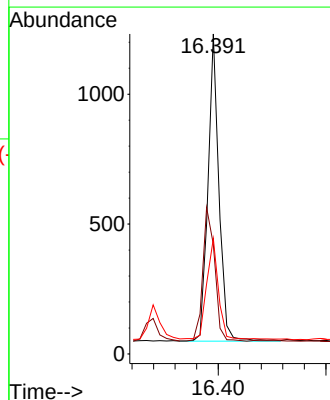
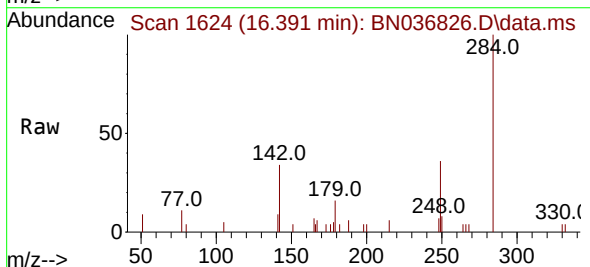
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

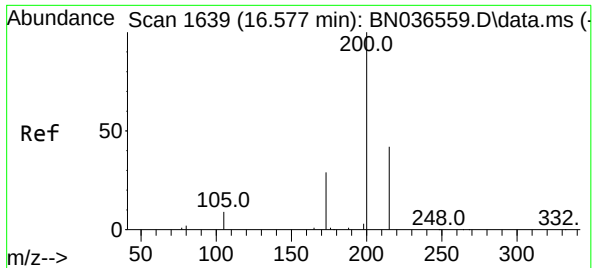
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 96.1  | 73.0  | 109.6 |
| 141     | 77.0  | 68.6  | 103.0 |



#22  
Hexachlorobenzene  
Concen: 0.360 ng  
RT: 16.391 min Scan# 1624  
Delta R.T. -0.025 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 47.3  | 37.0  | 55.4  |
| 249     | 35.9  | 28.1  | 42.1  |

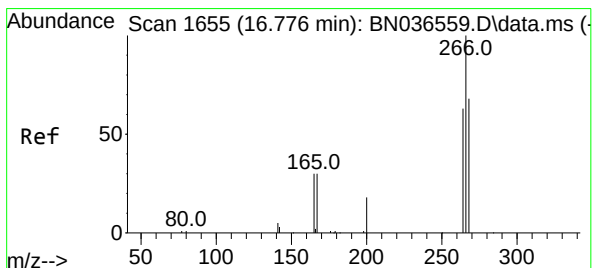
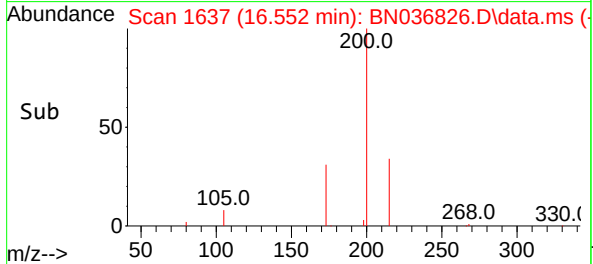
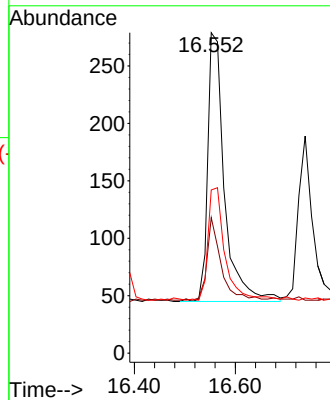
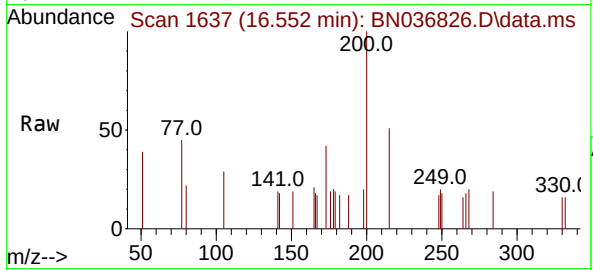




#23  
Atrazine  
Concen: 0.175 ng  
RT: 16.552 min Scan# 1637  
Delta R.T. -0.025 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

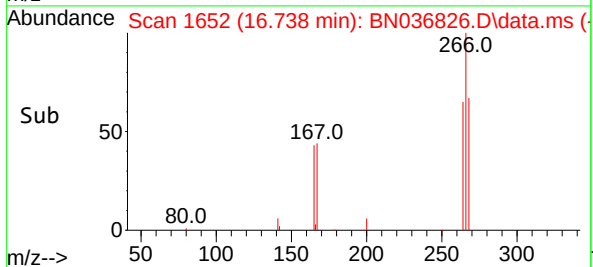
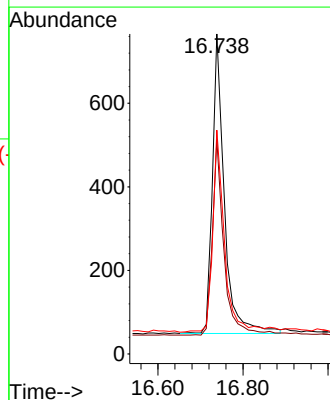
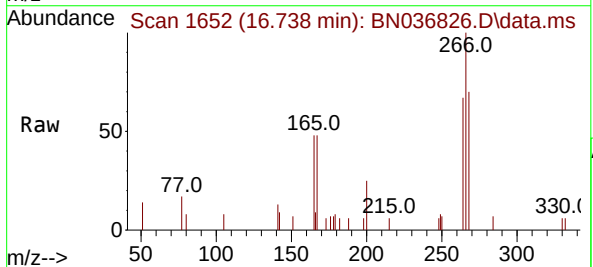
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

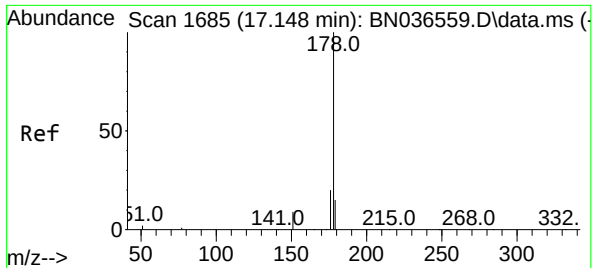
Tgt Ion:200 Resp: 539  
Ion Ratio Lower Upper  
200 100  
173 42.3 27.3 40.9#  
215 50.9 36.8 55.2



#24  
Pentachlorophenol  
Concen: 0.663 ng  
RT: 16.738 min Scan# 1652  
Delta R.T. -0.038 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:266 Resp: 1402  
Ion Ratio Lower Upper  
266 100  
264 63.2 49.6 74.4  
268 67.1 50.9 76.3

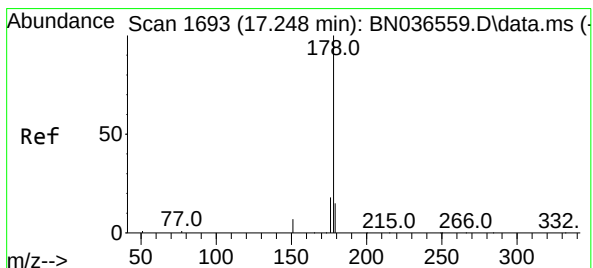
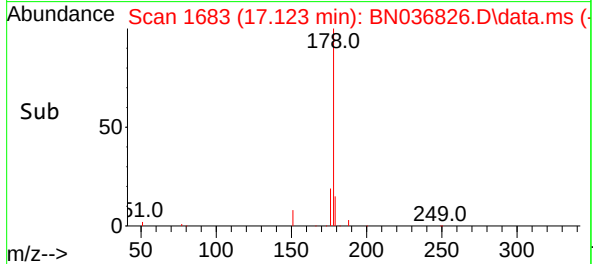
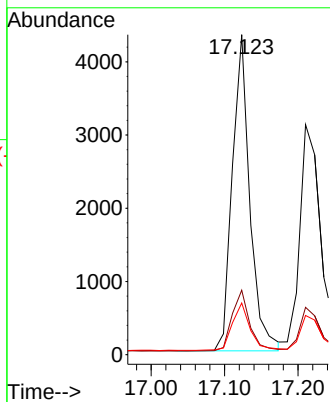
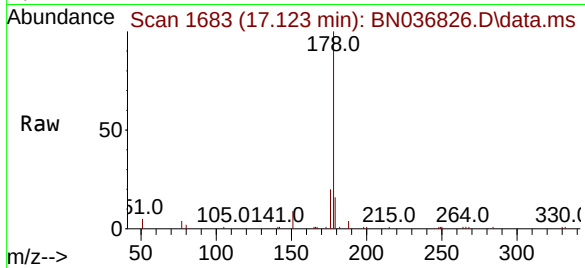




#25  
Phenanthrene  
Concen: 0.389 ng  
RT: 17.123 min Scan# 1683  
Delta R.T. -0.025 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

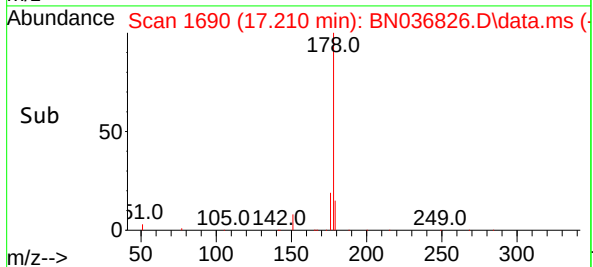
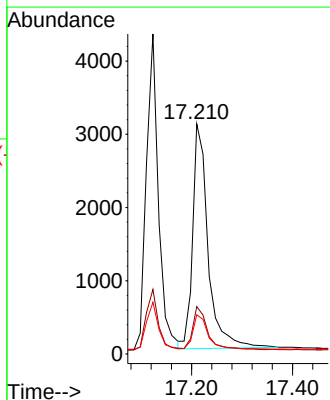
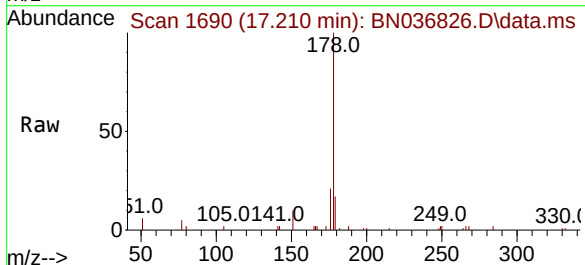
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

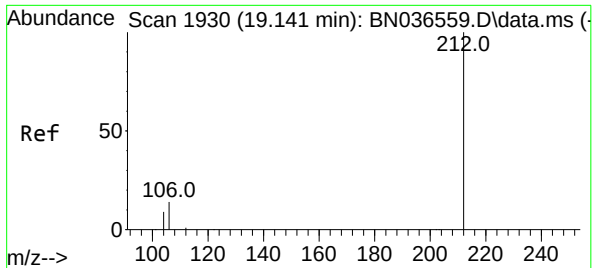
Tgt Ion:178 Resp: 7152  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.9 23.9  
179 15.6 12.2 18.4



#26  
Anthracene  
Concen: 0.392 ng  
RT: 17.210 min Scan# 1690  
Delta R.T. -0.038 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:178 Resp: 6515  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.4 23.2  
179 15.4 12.6 18.8





#27

Fluoranthene-d10

Concen: 0.350 ng

RT: 19.117 min Scan# 1911

Delta R.T. -0.024 min

Lab File: BN036826.D

Acq: 03 Apr 2025 17:14

Instrument :

BNA\_N

ClientSampleId :

PB167430BS

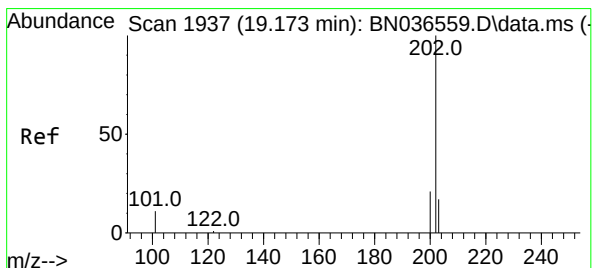
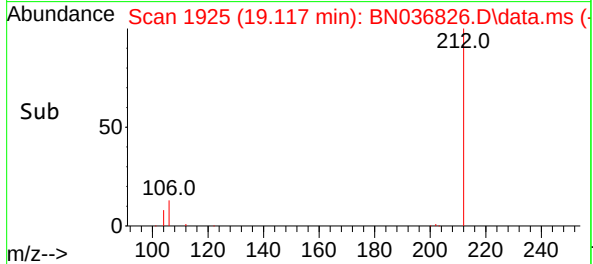
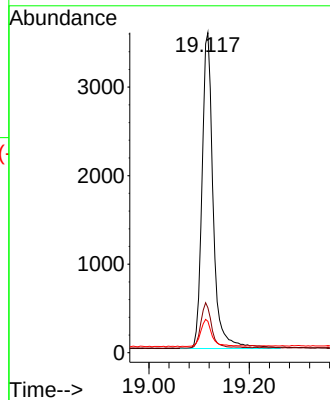
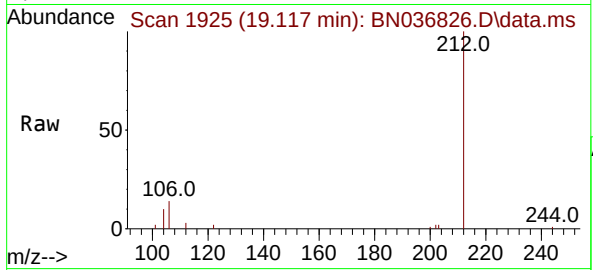
Tgt Ion:212 Resp: 5498

Ion Ratio Lower Upper

212 100

106 13.8 11.8 17.6

104 8.6 7.3 10.9



#28

Fluoranthene

Concen: 0.392 ng

RT: 19.145 min Scan# 1931

Delta R.T. -0.028 min

Lab File: BN036826.D

Acq: 03 Apr 2025 17:14

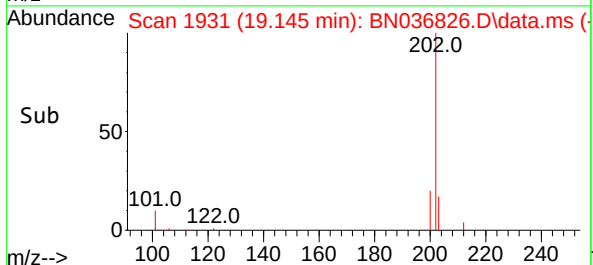
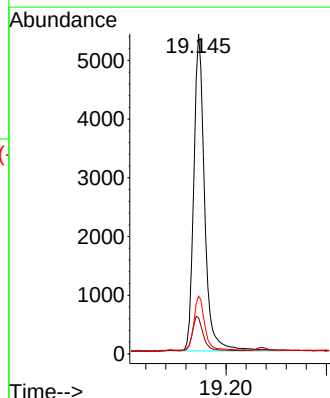
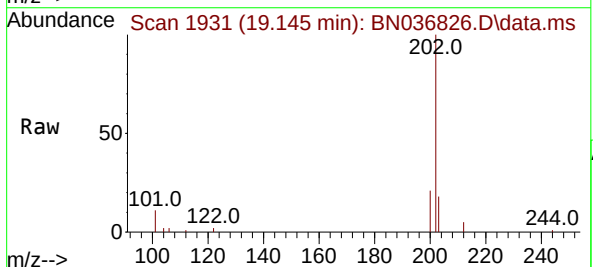
Tgt Ion:202 Resp: 8105

Ion Ratio Lower Upper

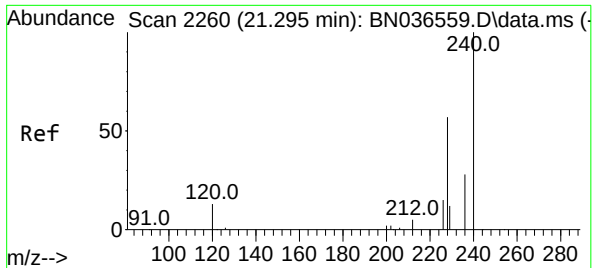
202 100

101 10.6 9.4 14.0

203 16.9 13.5 20.3







#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.276 min Scan# 21

Delta R.T. -0.018 min

Lab File: BN036826.D

Acq: 03 Apr 2025 17:14

Instrument :

BNA\_N

ClientSampleId :

PB167430BS

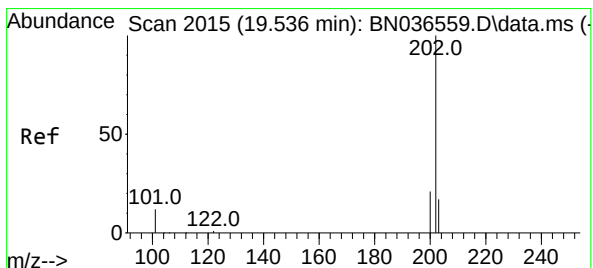
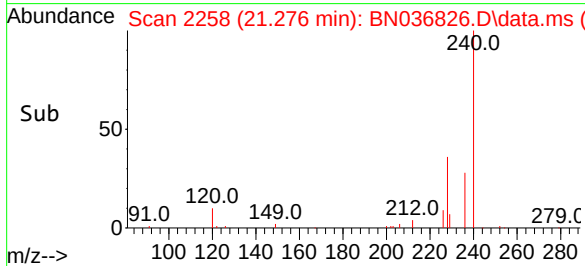
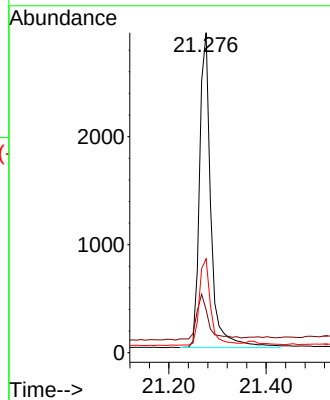
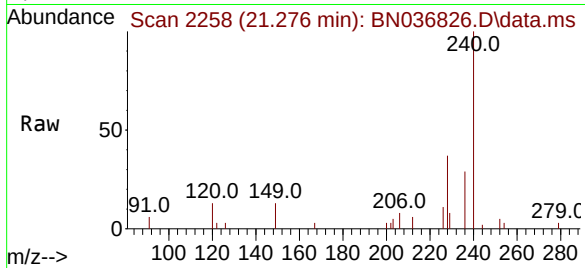
Tgt Ion:240 Resp: 4706

Ion Ratio Lower Upper

240 100

120 13.4 14.6 22.0#

236 29.3 24.1 36.1



#30

Pyrene

Concen: 0.347 ng

RT: 19.508 min Scan# 2009

Delta R.T. -0.028 min

Lab File: BN036826.D

Acq: 03 Apr 2025 17:14

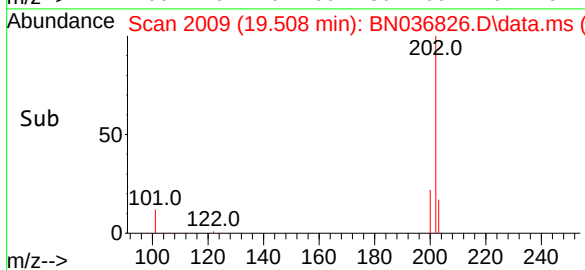
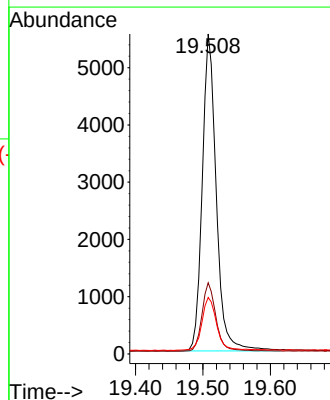
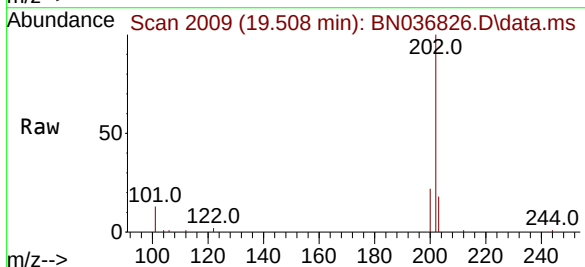
Tgt Ion:202 Resp: 7989

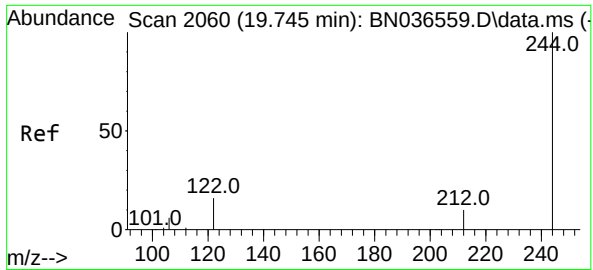
Ion Ratio Lower Upper

202 100

200 21.4 17.1 25.7

203 17.9 14.1 21.1

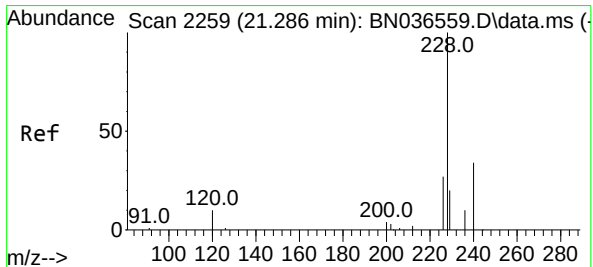
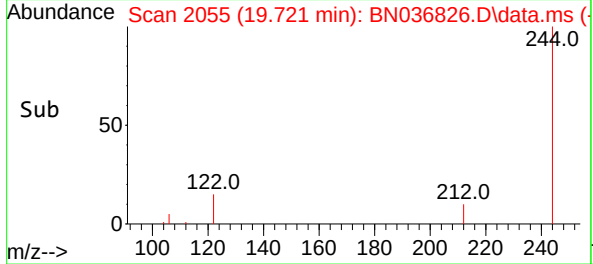
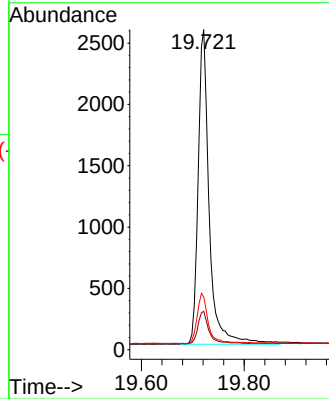
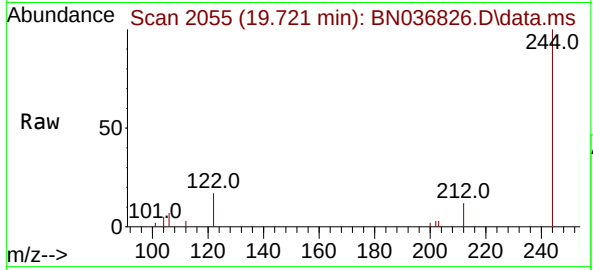




#31  
Terphenyl-d14  
Concen: 0.342 ng  
RT: 19.721 min Scan# 2060  
Delta R.T. -0.024 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

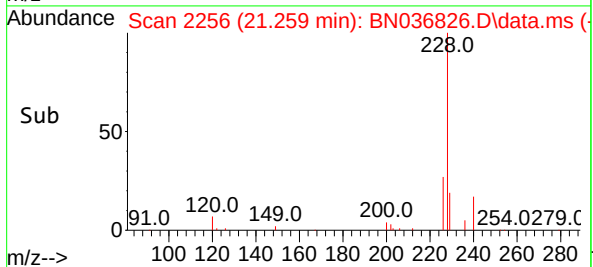
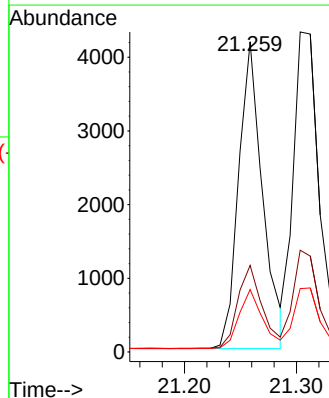
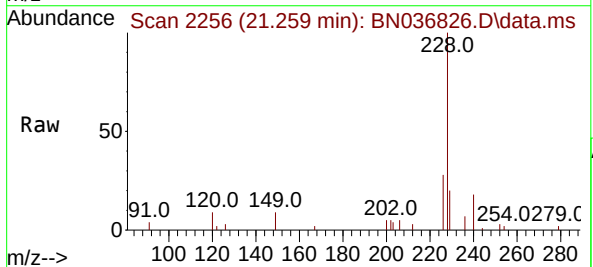
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

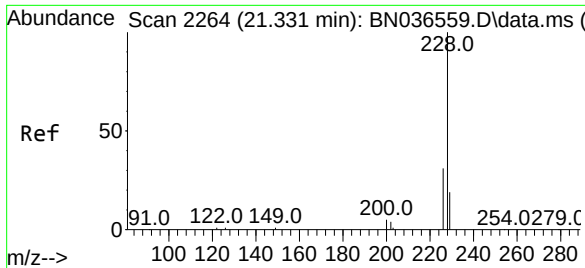
Tgt Ion:244 Resp: 3856  
Ion Ratio Lower Upper  
244 100  
212 12.0 9.6 14.4  
122 16.5 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 0.379 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.027 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:228 Resp: 6210  
Ion Ratio Lower Upper  
228 100  
226 27.9 22.5 33.7  
229 20.1 16.6 25.0

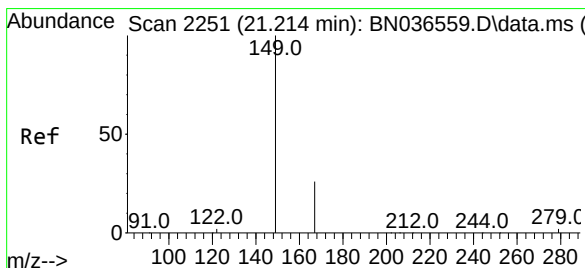
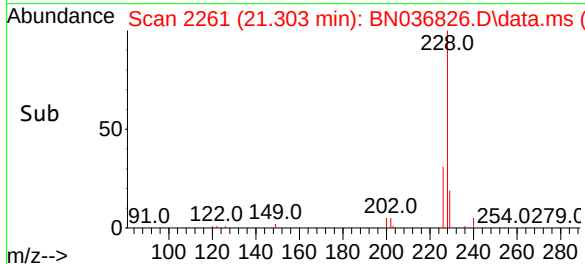
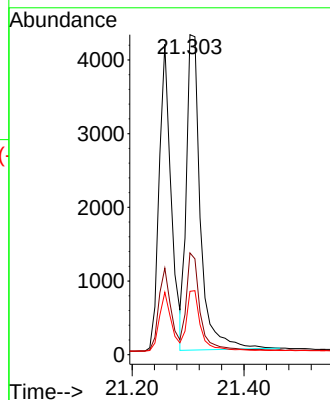
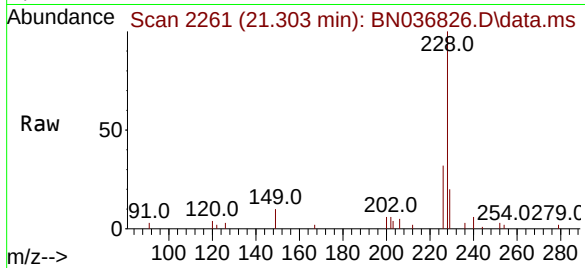




#33  
Chrysene  
Concen: 0.418 ng  
RT: 21.303 min Scan# 21249  
Delta R.T. -0.027 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

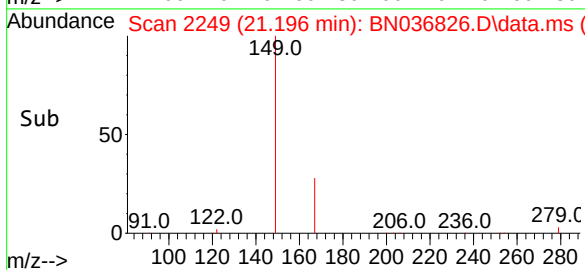
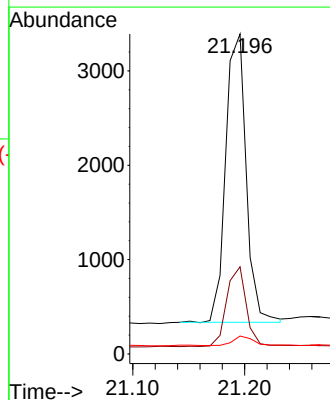
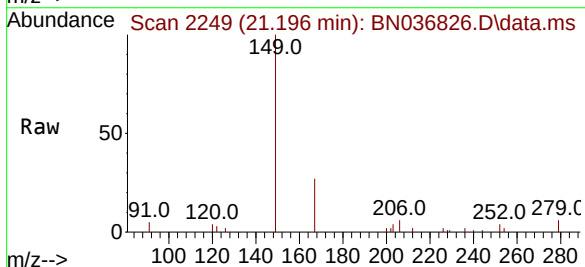
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

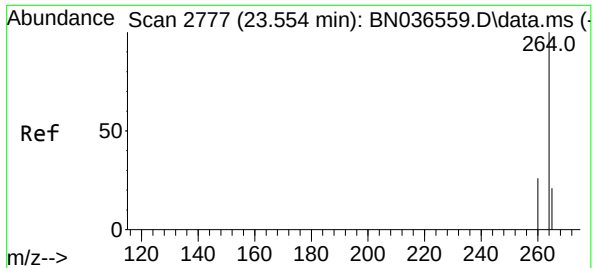
Tgt Ion:228 Resp: 7470  
Ion Ratio Lower Upper  
228 100  
226 31.8 25.3 37.9  
229 19.8 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.334 ng  
RT: 21.196 min Scan# 2249  
Delta R.T. -0.018 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

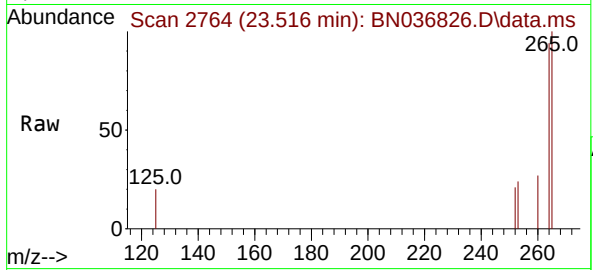
Tgt Ion:149 Resp: 3886  
Ion Ratio Lower Upper  
149 100  
167 26.8 20.7 31.1  
279 3.3 3.6 5.4#



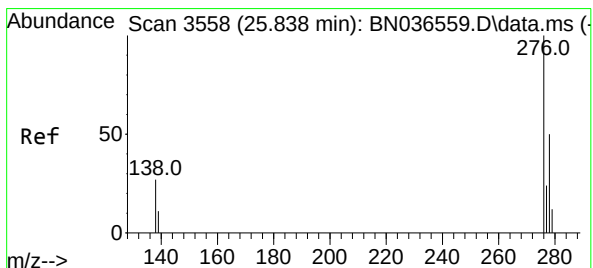
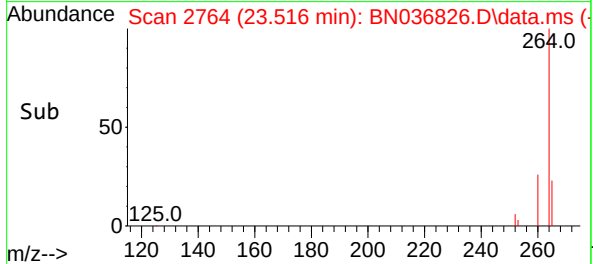
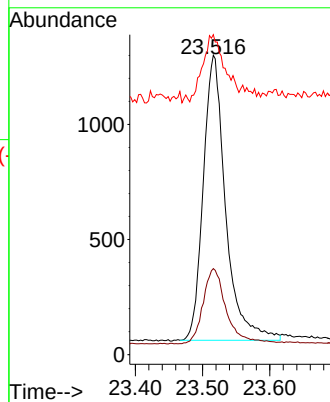


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.516 min Scan# 21  
Delta R.T. -0.038 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BS

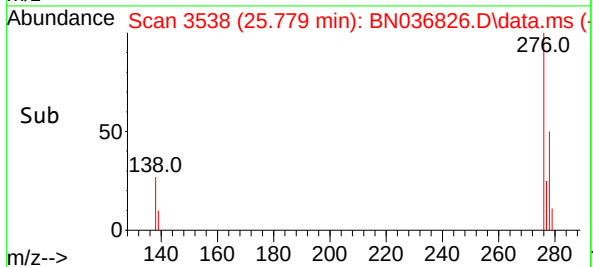
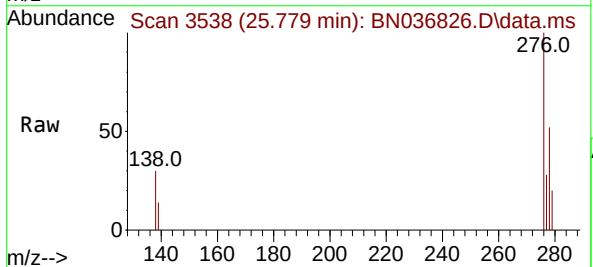
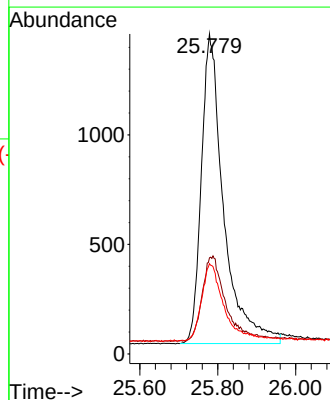


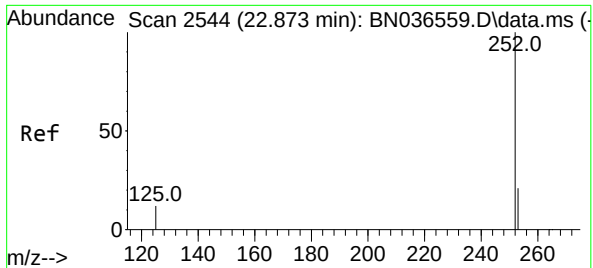
Tgt Ion:264 Resp: 2869  
Ion Ratio Lower Upper  
264 100  
260 28.7 22.6 33.8  
265 106.8 88.1 132.1



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.543 ng  
RT: 25.779 min Scan# 3538  
Delta R.T. -0.059 min  
Lab File: BN036826.D  
Acq: 03 Apr 2025 17:14

Tgt Ion:276 Resp: 5626  
Ion Ratio Lower Upper  
276 100  
138 11.9 23.4 35.2#  
277 24.5 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.576 ng

RT: 22.841 min Scan# 2549

Delta R.T. -0.032 min

Lab File: BN036826.D

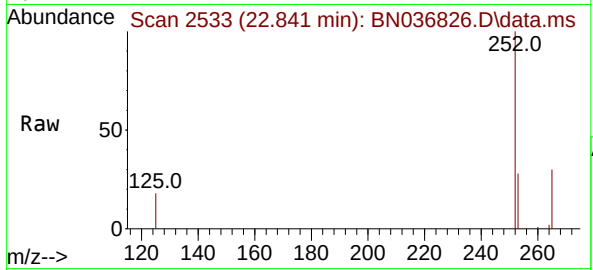
Acq: 03 Apr 2025 17:14

Instrument :

BNA\_N

ClientSampleId :

PB167430BS



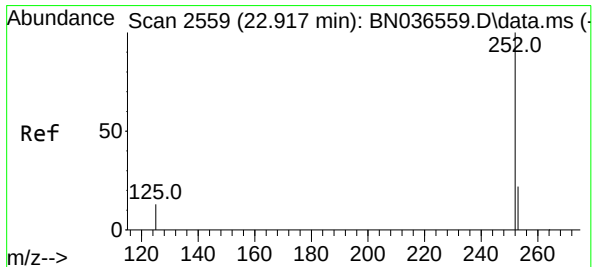
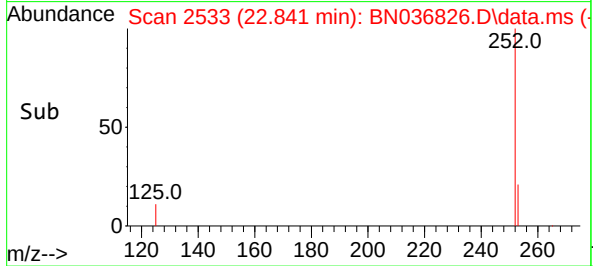
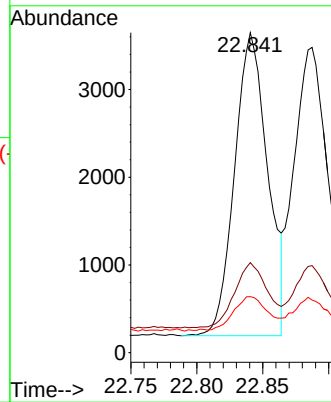
Tgt Ion:252 Resp: 6012

Ion Ratio Lower Upper

252 100

253 28.2 23.9 35.9

125 17.5 17.4 26.2



#38

Benzo(k)fluoranthene

Concen: 0.599 ng

RT: 22.887 min Scan# 2549

Delta R.T. -0.030 min

Lab File: BN036826.D

Acq: 03 Apr 2025 17:14

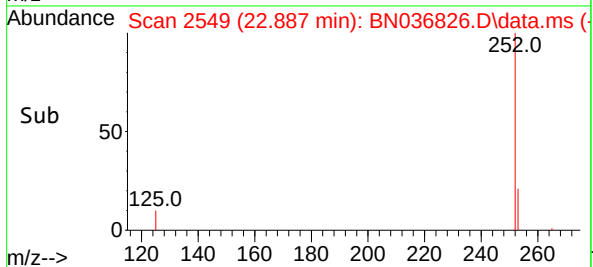
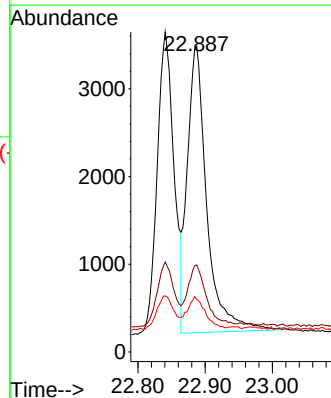
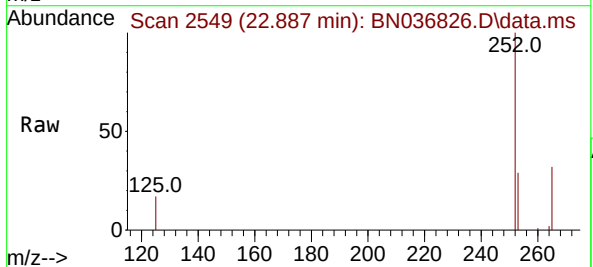
Tgt Ion:252 Resp: 6564

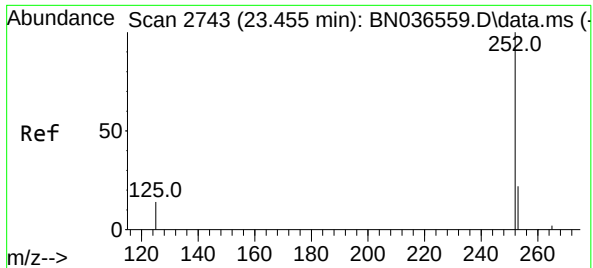
Ion Ratio Lower Upper

252 100

253 28.5 24.6 36.8

125 17.3 17.8 26.8#





#39

Benzo(a)pyrene

Concen: 0.502 ng

RT: 23.419 min Scan# 21

Delta R.T. -0.035 min

Lab File: BN036826.D

Acq: 03 Apr 2025 17:14

Instrument :

BNA\_N

ClientSampleId :

PB167430BS

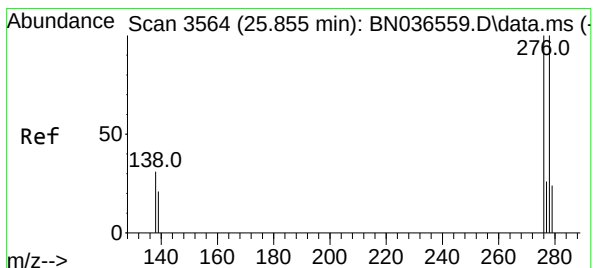
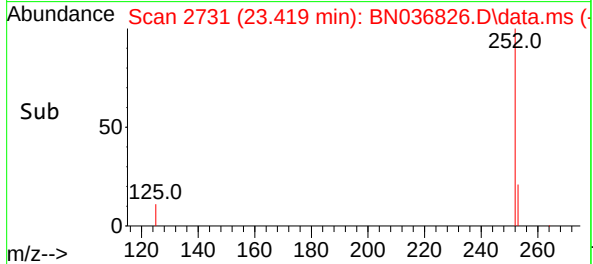
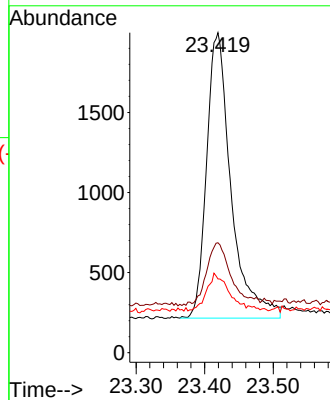
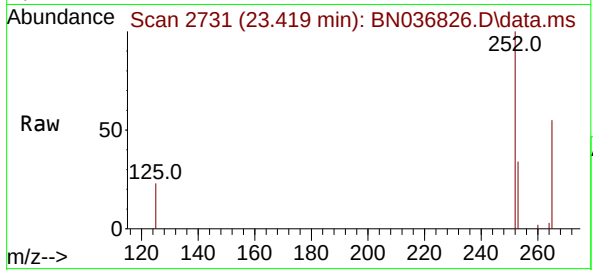
Tgt Ion:252 Resp: 4412

Ion Ratio Lower Upper

252 100

253 34.3 27.8 41.8

125 23.1 22.7 34.1



#40

Dibenzo(a,h)anthracene

Concen: 0.557 ng

RT: 25.799 min Scan# 3545

Delta R.T. -0.056 min

Lab File: BN036826.D

Acq: 03 Apr 2025 17:14

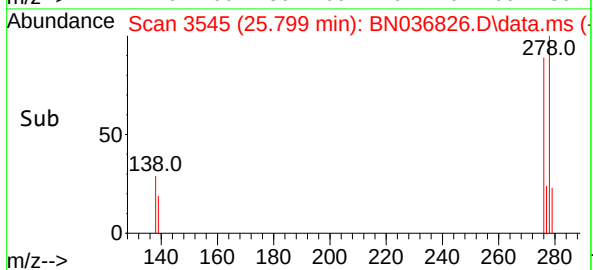
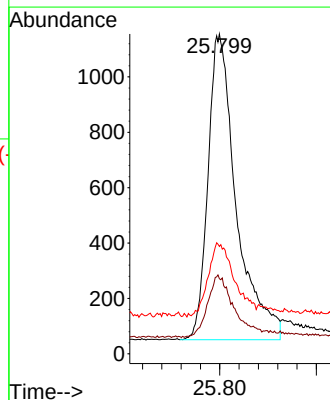
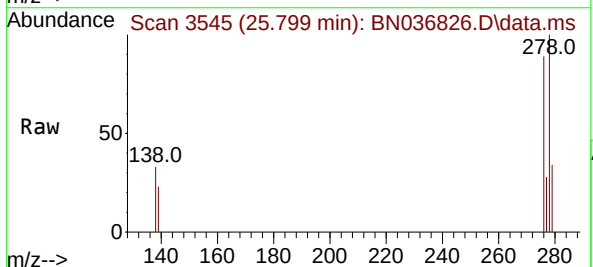
Tgt Ion:278 Resp: 4493

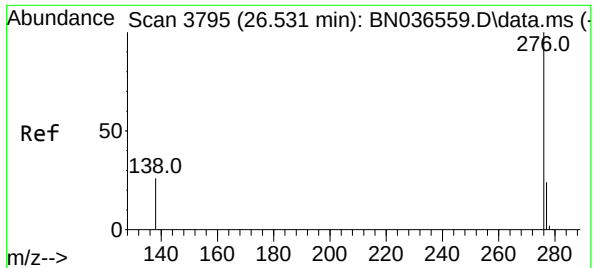
Ion Ratio Lower Upper

278 100

139 23.5 20.8 31.2

279 33.6 28.8 43.2





#41

Benzo(g,h,i)perylene

Concen: 0.480 ng

RT: 26.469 min Scan# 31

Delta R.T. -0.062 min

Lab File: BN036826.D

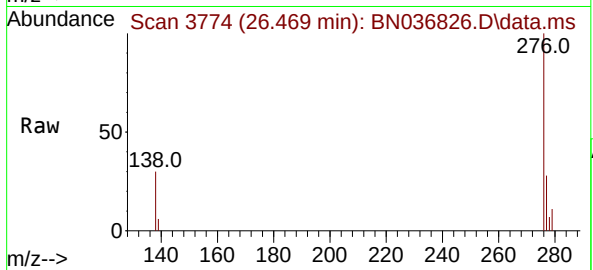
Acq: 03 Apr 2025 17:14

Instrument :

BNA\_N

ClientSampleId :

PB167430BS



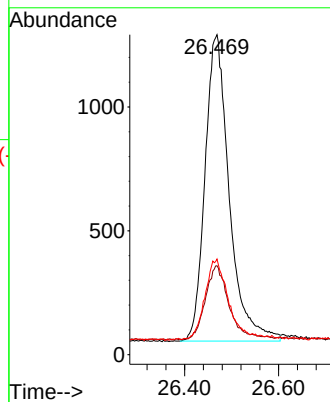
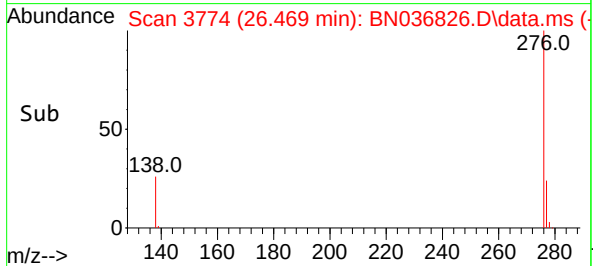
Tgt Ion:276 Resp: 4427

Ion Ratio Lower Upper

276 100

277 27.8 22.2 33.4

138 29.9 24.1 36.1



## Report of Analysis

|                    |                                             |                 |                |
|--------------------|---------------------------------------------|-----------------|----------------|
| Client:            | JACOBS Engineering Group, Inc.              | Date Collected: |                |
| Project:           | Former Schlumberger STC PTC Site # D3868221 | Date Received:  |                |
| Client Sample ID:  | PB167430BSD                                 | SDG No.:        | Q1697          |
| Lab Sample ID:     | PB167430BSD                                 | 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 |
| BN036827.D        | 1         | 04/02/25 14:40 | 04/03/25 17:50 | PB167430      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL                 | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|---------------------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |                     |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.35  |           | 0.070               | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |                     |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.43  |           | 30 (20) - 150 (139) | 108%       | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.35  |           | 30 (30) - 150 (150) | 86%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.31  |           | 30 (27) - 130 (154) | 78%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.35  |           | 30 (25) - 130 (149) | 87%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.36  |           | 30 (54) - 130 (175) | 90%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |                     |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2150  | 7.695     |                     |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5190  | 10.477    |                     |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2810  | 14.334    |                     |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 5710  | 17.086    |                     |            |          |
| 1719-03-5                 | Chrysene-d12            | 4060  | 21.277    |                     |            |          |
| 1520-96-3                 | Perylene-d12            | 1950  | 23.516    |                     |            |          |

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\BN040325\  
 Data File : BN036827.D  
 Acq On : 03 Apr 2025 17:50  
 Operator : RC/JU  
 Sample : PB167430BSD  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167430BSD

Quant Time: Apr 03 18:14:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

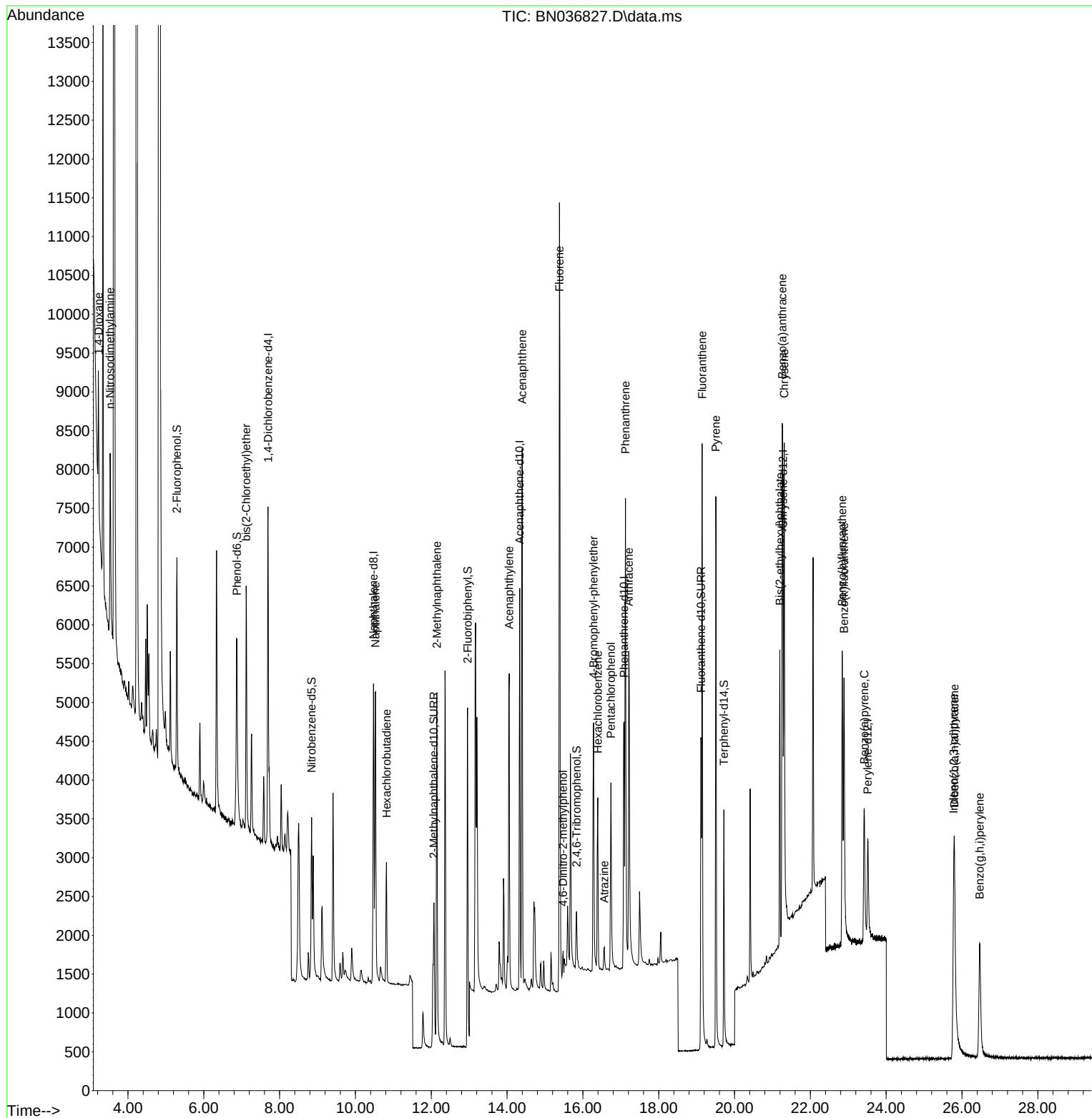
| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| -----                         |        |      |          |       |       |          |
| Internal Standards            |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.695  | 152  | 2152     | 0.400 | ng    | -0.03    |
| 7) Naphthalene-d8             | 10.477 | 136  | 5190     | 0.400 | ng    | -0.03    |
| 13) Acenaphthene-d10          | 14.334 | 164  | 2805     | 0.400 | ng    | -0.03    |
| 19) Phenanthrene-d10          | 17.086 | 188  | 5710     | 0.400 | ng    | -0.02    |
| 29) Chrysene-d12              | 21.277 | 240  | 4059     | 0.400 | ng    | #-0.02   |
| 35) Perylene-d12              | 23.516 | 264  | 1954     | 0.400 | ng    | #-0.04   |
|                               |        |      |          |       |       |          |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 4) 2-Fluorophenol             | 5.290  | 112  | 2032     | 0.405 | ng    | -0.02    |
| 5) Phenol-d6                  | 6.872  | 99   | 2364     | 0.382 | ng    | -0.03    |
| 8) Nitrobenzene-d5            | 8.843  | 82   | 1762     | 0.312 | ng    | -0.03    |
| 11) 2-Methylnaphthalene-d10   | 12.070 | 152  | 3326m    | 0.431 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol      | 15.833 | 330  | 465      | 0.365 | ng    | -0.02    |
| 15) 2-Fluorobiphenyl          | 12.958 | 172  | 5694     | 0.349 | ng    | -0.03    |
| 27) Fluoranthene-d10          | 19.113 | 212  | 5064     | 0.346 | ng    | -0.03    |
| 31) Terphenyl-d14             | 19.717 | 244  | 3498     | 0.360 | ng    | -0.03    |
|                               |        |      |          |       |       |          |
| Target Compounds              |        |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane                | 3.225  | 88   | 841      | 0.352 | ng    | # 38     |
| 3) n-Nitrosodimethylamine     | 3.528  | 42   | 1924     | 0.398 | ng    | # 95     |
| 6) bis(2-Chloroethyl)ether    | 7.118  | 93   | 2319     | 0.362 | ng    | 97       |
| 9) Naphthalene                | 10.530 | 128  | 5604     | 0.367 | ng    | 100      |
| 10) Hexachlorobutadiene       | 10.818 | 225  | 1249     | 0.348 | ng    | # 100    |
| 12) 2-Methylnaphthalene       | 12.146 | 142  | 3541     | 0.365 | ng    | 99       |
| 16) Acenaphthylene            | 14.056 | 152  | 5028     | 0.380 | ng    | 99       |
| 17) Acenaphthene              | 14.398 | 154  | 3346     | 0.386 | ng    | 99       |
| 18) Fluorene                  | 15.382 | 166  | 4448     | 0.379 | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198  | 472      | 0.469 | ng    | # 80     |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248  | 1317     | 0.368 | ng    | 93       |
| 22) Hexachlorobenzene         | 16.391 | 284  | 1540     | 0.357 | ng    | 97       |
| 23) Atrazine                  | 16.565 | 200  | 325      | 0.113 | ng    | # 84     |
| 24) Pentachlorophenol         | 16.739 | 266  | 1406     | 0.714 | ng    | 99       |
| 25) Phenanthrene              | 17.124 | 178  | 6736     | 0.393 | ng    | 99       |
| 26) Anthracene                | 17.210 | 178  | 6105     | 0.395 | ng    | 100      |
| 28) Fluoranthene              | 19.146 | 202  | 7399     | 0.385 | ng    | 99       |
| 30) Pyrene                    | 19.508 | 202  | 6876     | 0.346 | ng    | 100      |
| 32) Benzo(a)anthracene        | 21.259 | 228  | 5364     | 0.380 | ng    | 100      |
| 33) Chrysene                  | 21.313 | 228  | 6613     | 0.429 | ng    | 98       |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149  | 3514     | 0.350 | ng    | # 99     |
| 36) Indeno(1,2,3-cd)pyrene    | 25.782 | 276  | 4405     | 0.625 | ng    | 99       |
| 37) Benzo(b)fluoranthene      | 22.841 | 252  | 5131     | 0.722 | ng    | 97       |
| 38) Benzo(k)fluoranthene      | 22.888 | 252  | 5174     | 0.694 | ng    | 96       |
| 39) Benzo(a)pyrene            | 23.420 | 252  | 3260     | 0.544 | ng    | 95       |
| 40) Dibenzo(a,h)anthracene    | 25.803 | 278  | 4093     | 0.745 | ng    | 96       |
| 41) Benzo(g,h,i)perylene      | 26.466 | 276  | 3441     | 0.548 | ng    | 99       |
| -----                         |        |      |          |       |       |          |

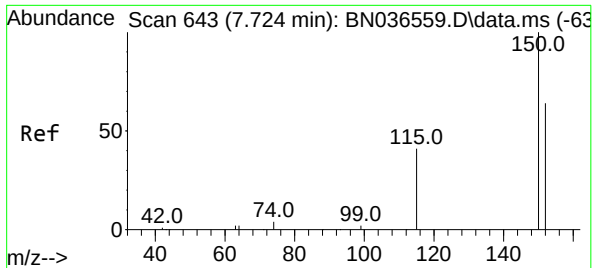
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040325\  
Data File : BN036827.D  
Acq On : 03 Apr 2025 17:50  
Operator : RC/JU  
Sample : PB167430BSD  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

Quant Time: Apr 03 18:14:02 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 16:06:28 2025  
Response via : Initial Calibration

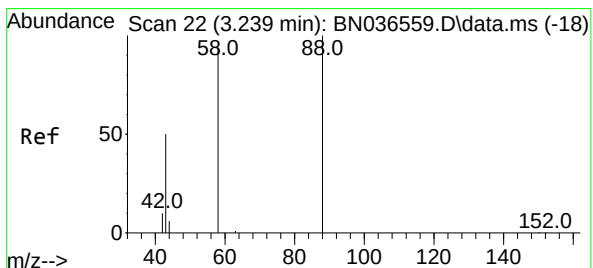
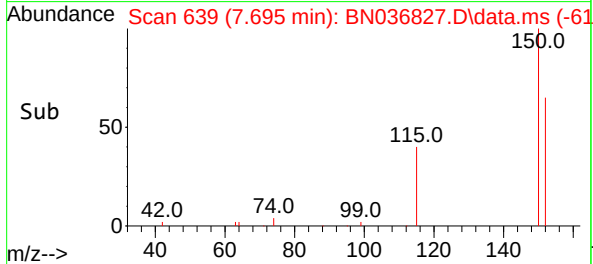
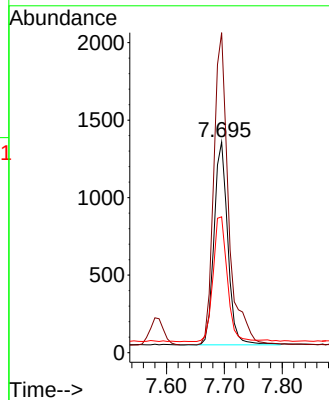
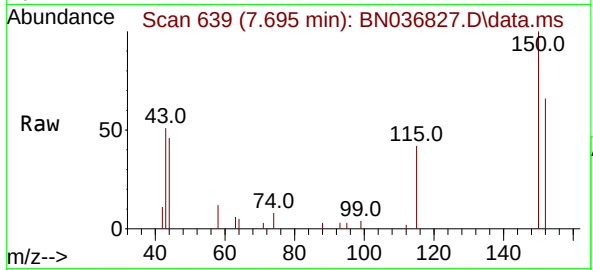




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 61  
Delta R.T. -0.029 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

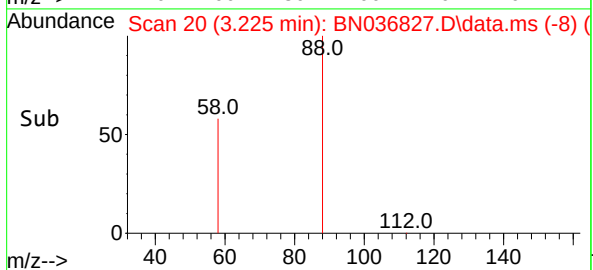
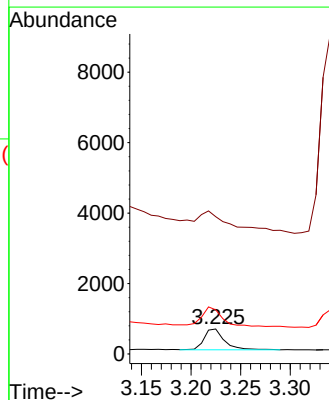
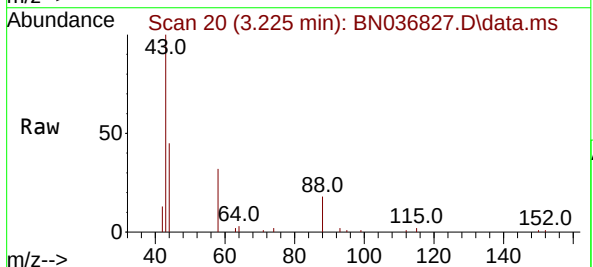
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

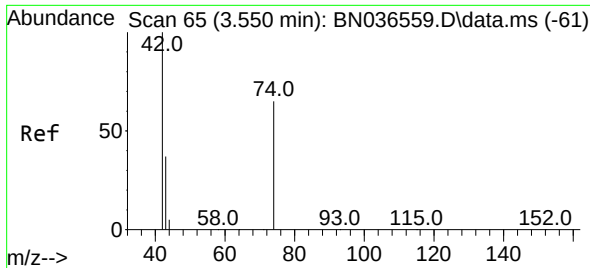
Tgt Ion:152 Resp: 2152  
Ion Ratio Lower Upper  
152 100  
150 151.9 123.7 185.5  
115 64.5 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.352 ng  
RT: 3.225 min Scan# 20  
Delta R.T. -0.014 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion: 88 Resp: 841  
Ion Ratio Lower Upper  
88 100  
43 140.2 37.8 56.8#  
58 102.0 67.4 101.2#

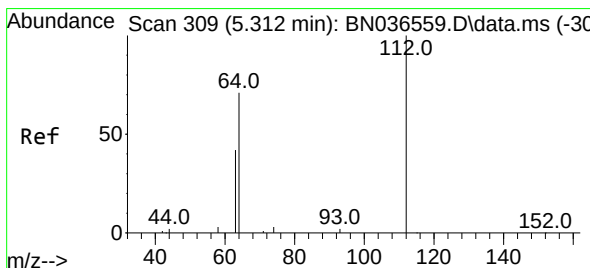
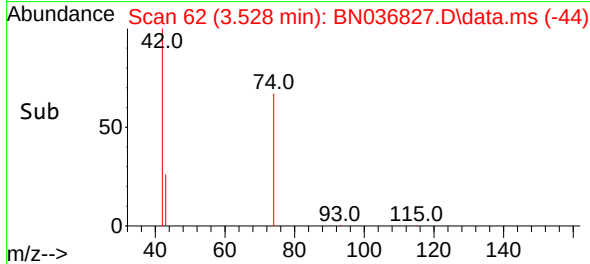
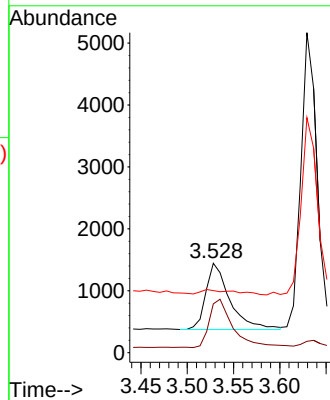
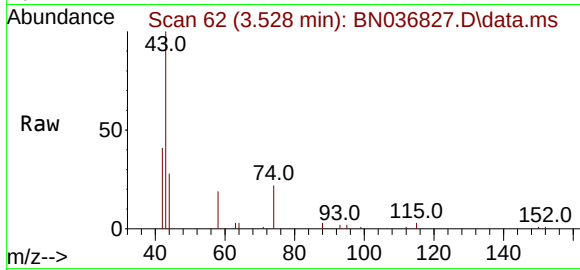




#3  
n-Nitrosodimethylamine  
Concen: 0.398 ng  
RT: 3.528 min Scan# 61  
Delta R.T. -0.022 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

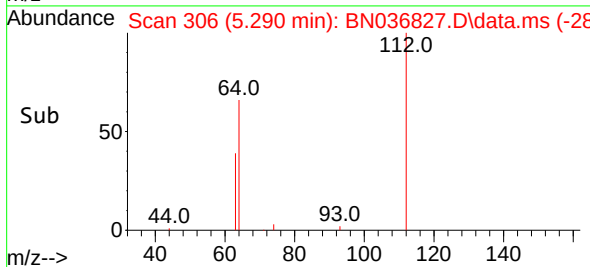
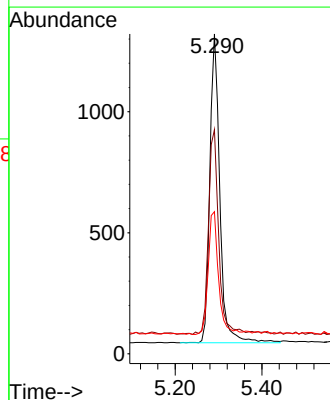
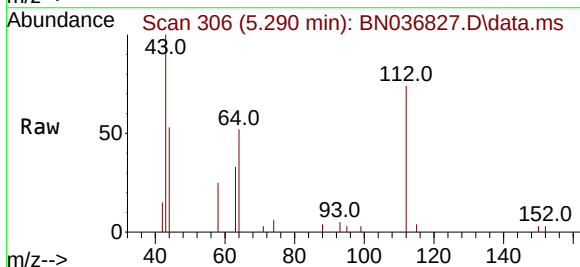
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

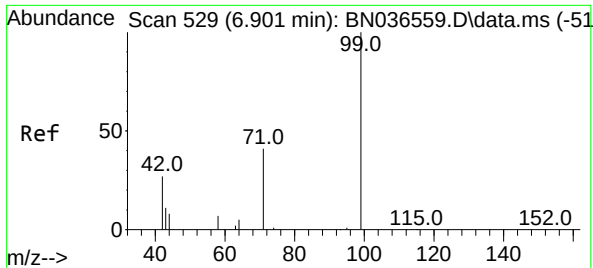
Tgt Ion: 42 Resp: 1924  
Ion Ratio Lower Upper  
42 100  
74 72.0 60.6 90.8  
44 11.0 6.3 9.5#



#4  
2-Fluorophenol  
Concen: 0.405 ng  
RT: 5.290 min Scan# 306  
Delta R.T. -0.022 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion: 112 Resp: 2032  
Ion Ratio Lower Upper  
112 100  
64 67.0 53.1 79.7  
63 41.3 31.8 47.8

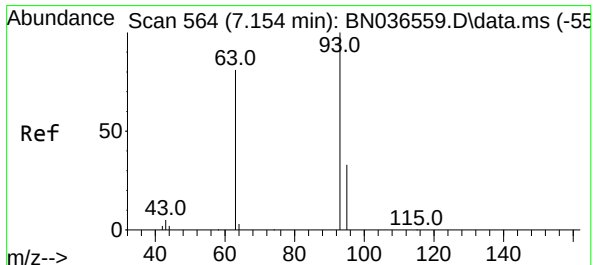
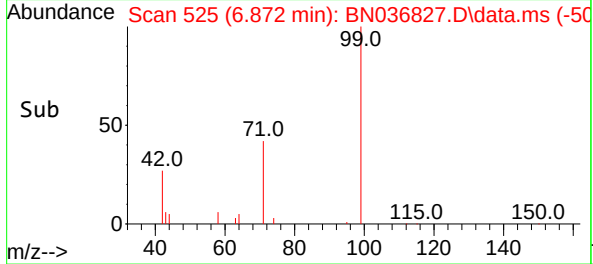
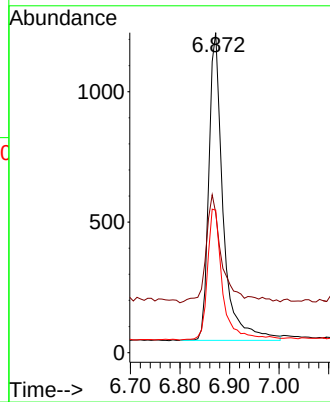
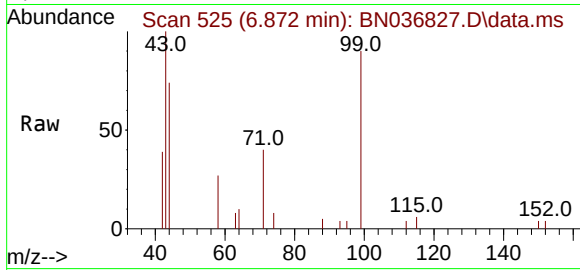




#5  
Phenol-d6  
Concen: 0.382 ng  
RT: 6.872 min Scan# 51  
Delta R.T. -0.029 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

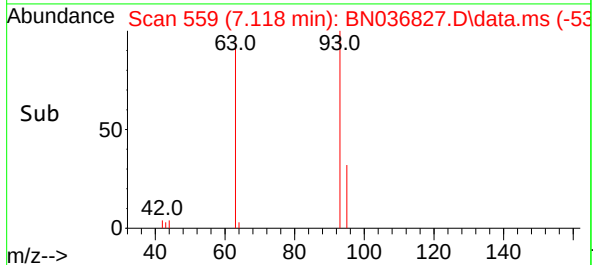
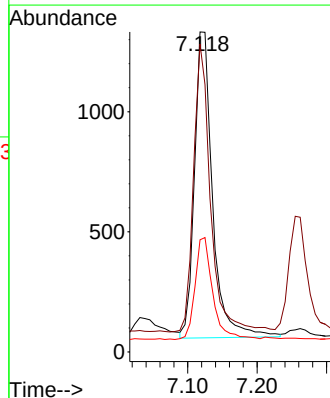
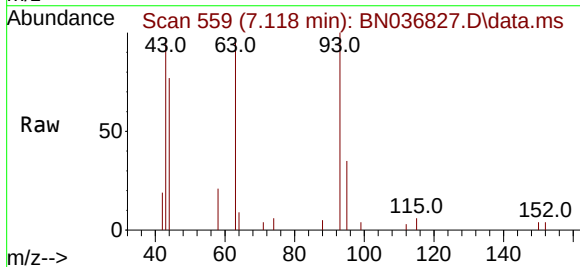
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

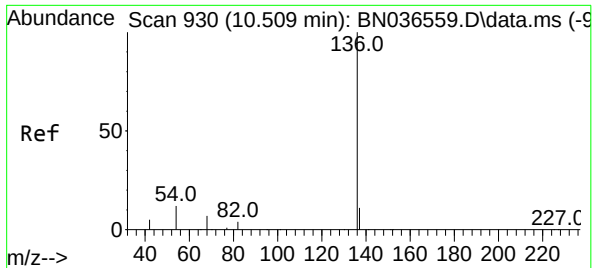
Tgt Ion: 99 Resp: 2364  
Ion Ratio Lower Upper  
99 100  
42 38.7 26.5 39.7  
71 45.4 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 0.362 ng  
RT: 7.118 min Scan# 559  
Delta R.T. -0.036 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion: 93 Resp: 2319  
Ion Ratio Lower Upper  
93 100  
63 87.9 67.7 101.5  
95 32.3 25.6 38.4

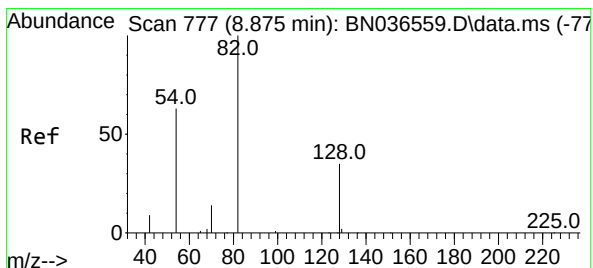
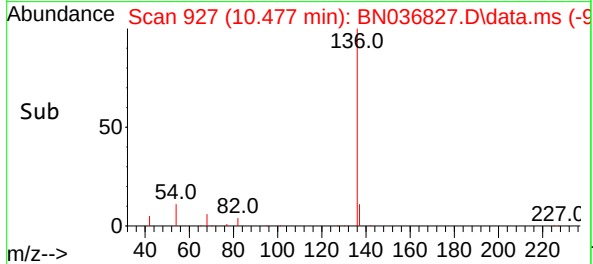
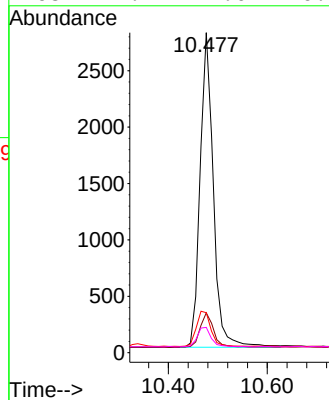
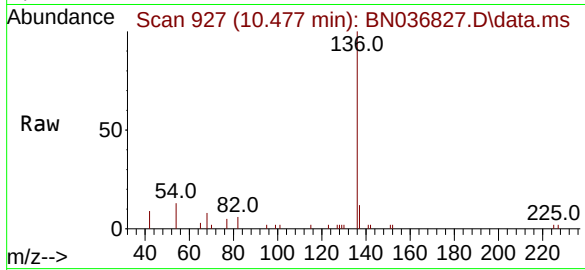




#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.477 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

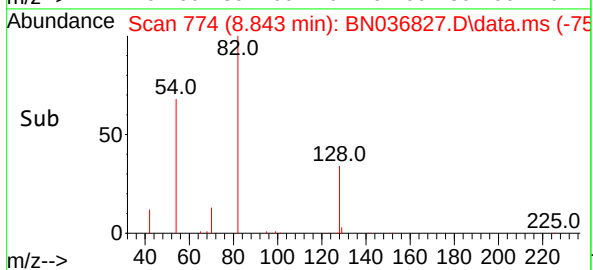
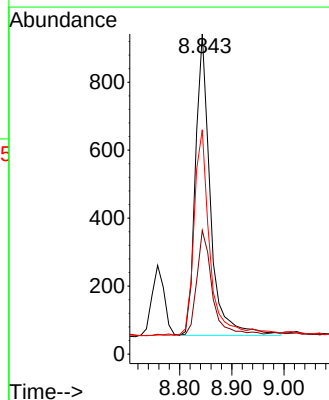
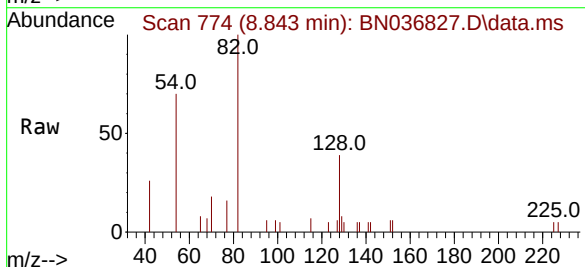
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

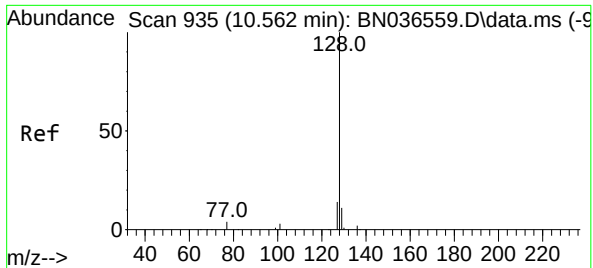
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 5190  |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 12.5  | 10.3  | 15.5  |
| 54       | 12.5  | 11.5  | 17.3  |
| 68       | 7.9   | 7.0   | 10.4  |



#8  
Nitrobenzene-d5  
Concen: 0.312 ng  
RT: 8.843 min Scan# 774  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 1762  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 38.6  | 30.6  | 45.8  |
| 54       | 70.1  | 52.2  | 78.4  |

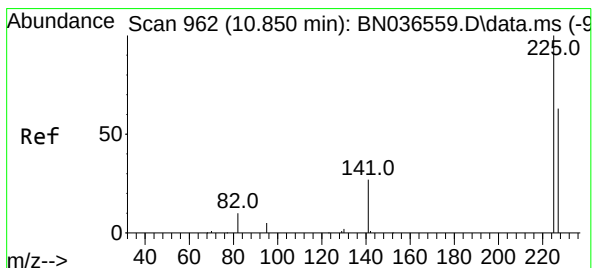
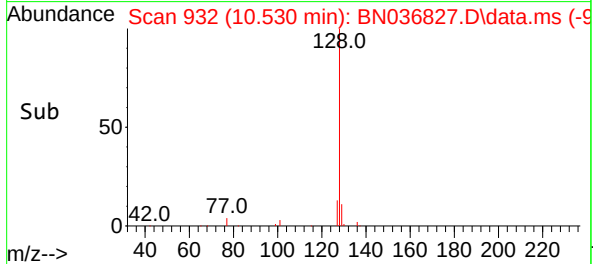
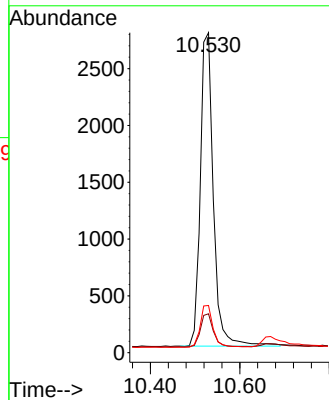
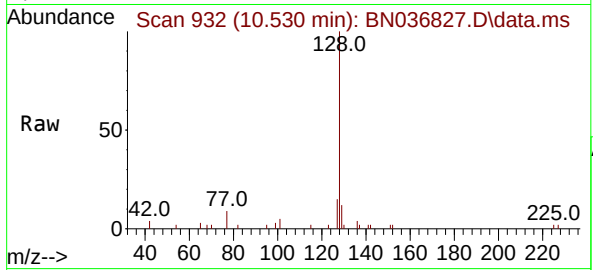




#9  
Naphthalene  
Concen: 0.367 ng  
RT: 10.530 min Scan# 91  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

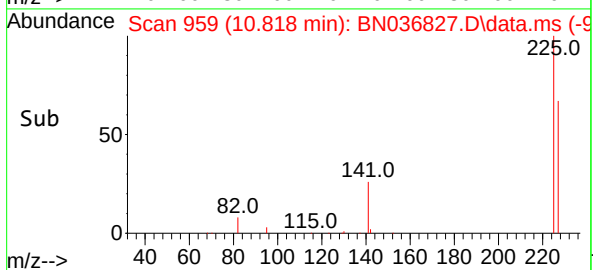
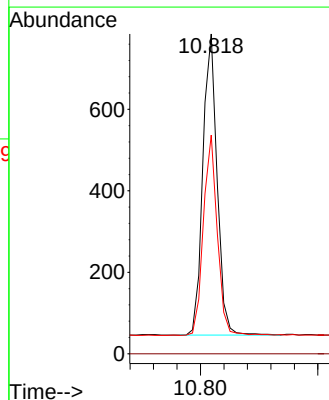
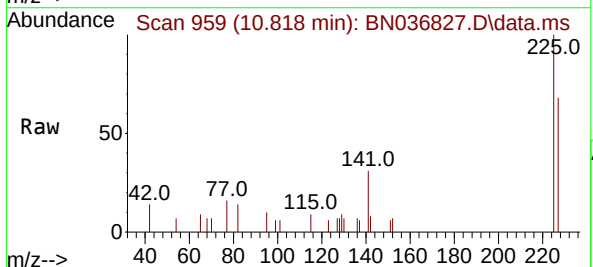
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

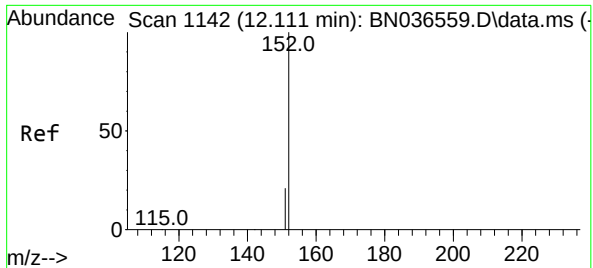
Tgt Ion:128 Resp: 5604  
Ion Ratio Lower Upper  
128 100  
129 12.1 9.8 14.6  
127 14.8 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 0.348 ng  
RT: 10.818 min Scan# 959  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:225 Resp: 1249  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.2 51.8 77.8

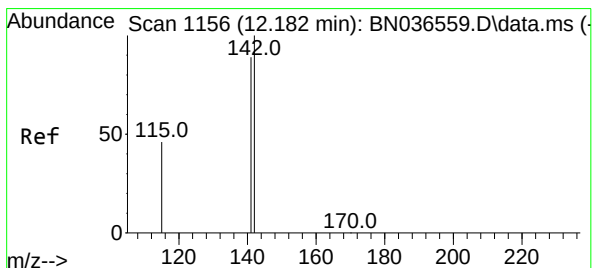
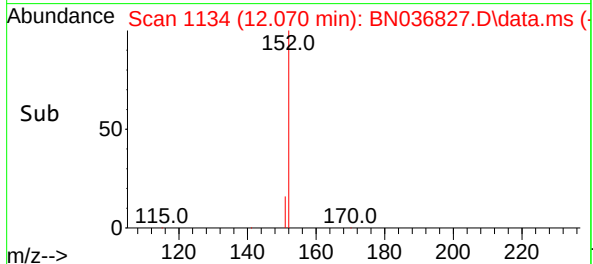
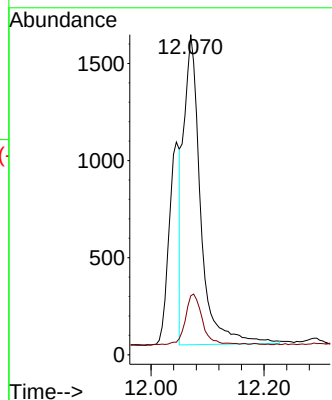
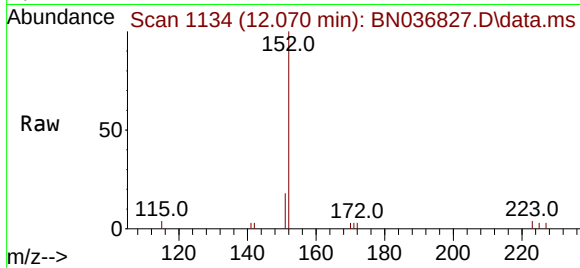




#11  
2-Methylnaphthalene-d10  
Concen: 0.431 ng m  
RT: 12.070 min Scan# 1142  
Delta R.T. -0.041 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

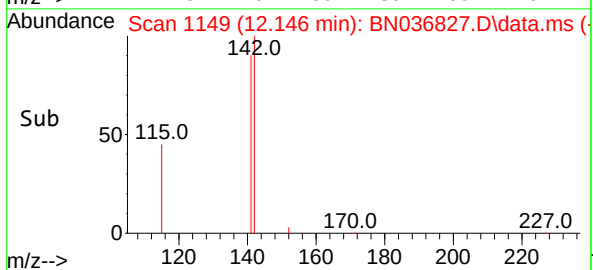
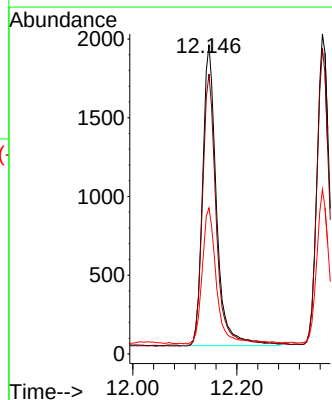
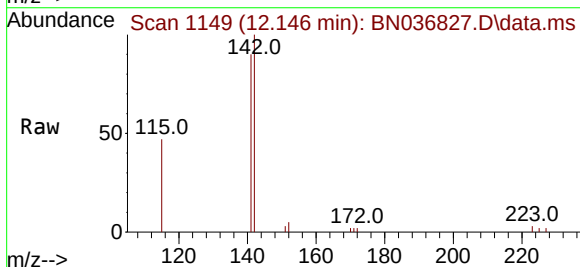
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

Tgt Ion:152 Resp: 3326  
Ion Ratio Lower Upper  
152 100  
151 16.6 17.0 25.6#

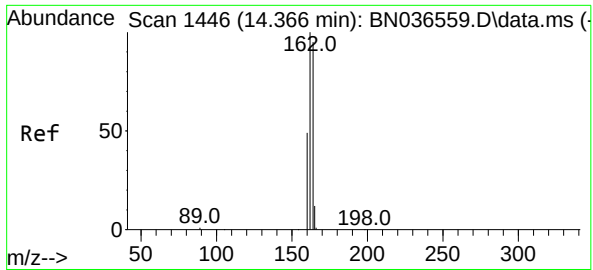


#12  
2-Methylnaphthalene  
Concen: 0.365 ng  
RT: 12.146 min Scan# 1149  
Delta R.T. -0.036 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:142 Resp: 3541  
Ion Ratio Lower Upper  
142 100  
141 90.5 71.7 107.5  
115 47.3 38.3 57.5



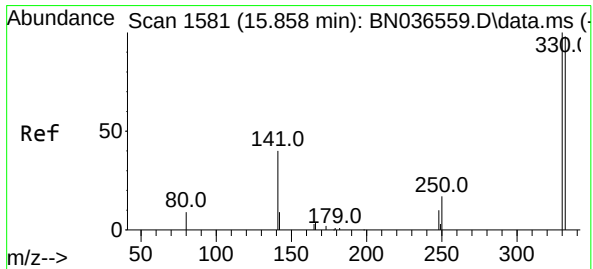
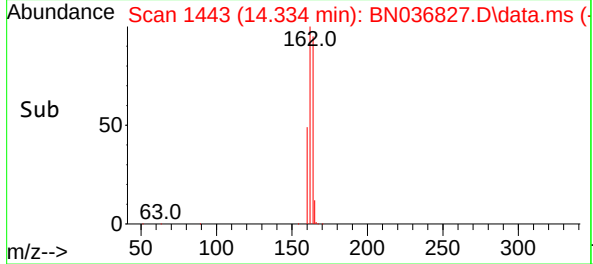
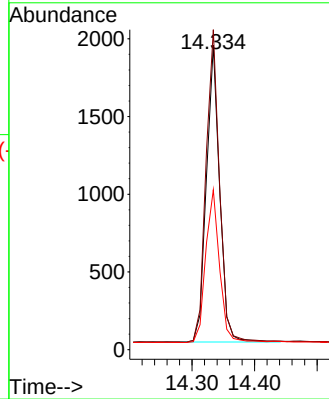
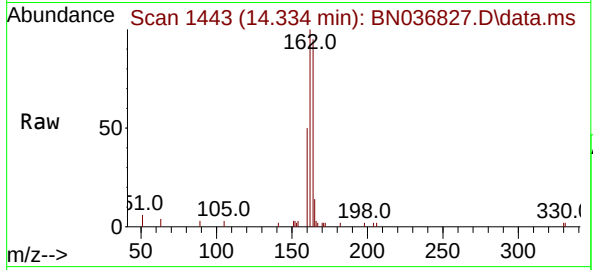




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

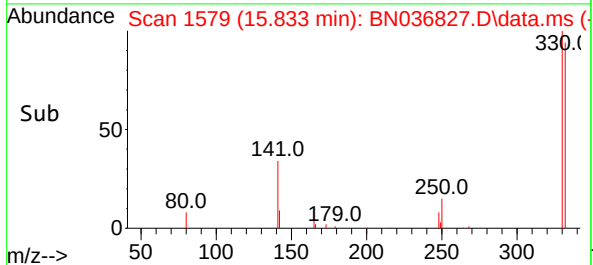
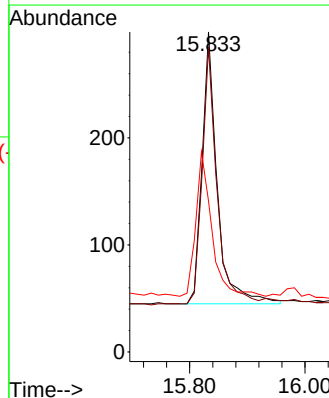
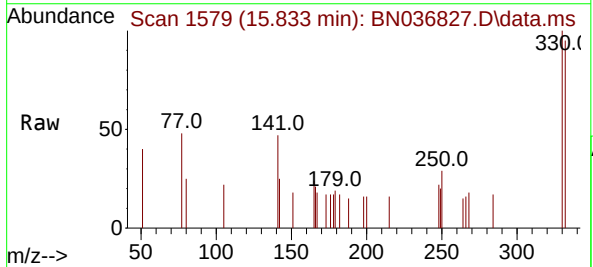
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

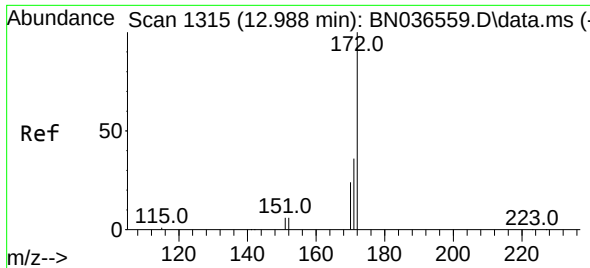
Tgt Ion:164 Resp: 2805  
Ion Ratio Lower Upper  
164 100  
162 105.1 84.2 126.2  
160 52.4 42.2 63.2



#14  
2,4,6-Tribromophenol  
Concen: 0.365 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.025 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

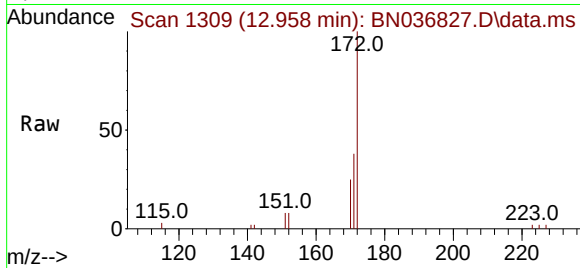
Tgt Ion:330 Resp: 465  
Ion Ratio Lower Upper  
330 100  
332 91.2 75.2 112.8  
141 55.5 43.4 65.2



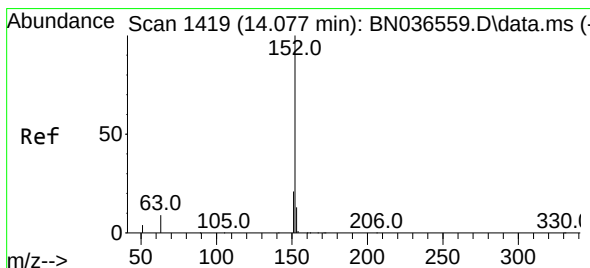
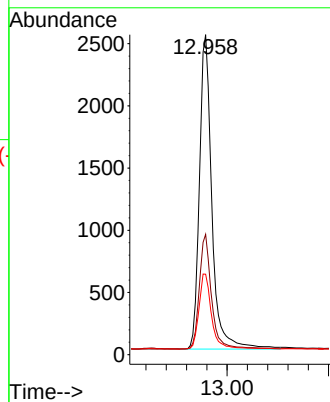
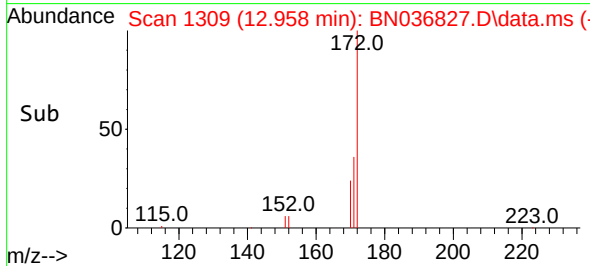


#15  
2-Fluorobiphenyl  
Concen: 0.349 ng  
RT: 12.958 min Scan# 11  
Delta R.T. -0.030 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

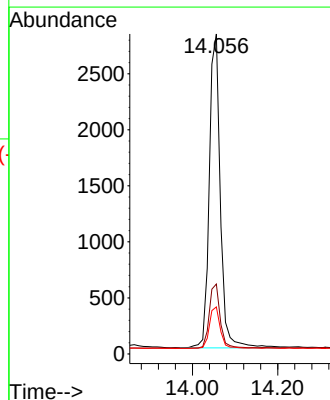
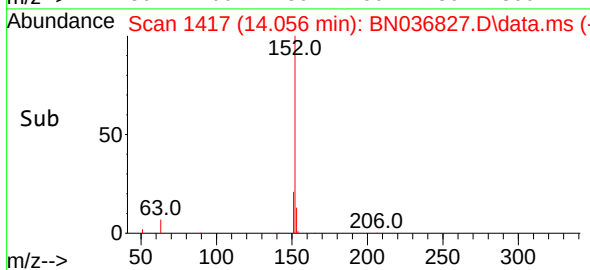
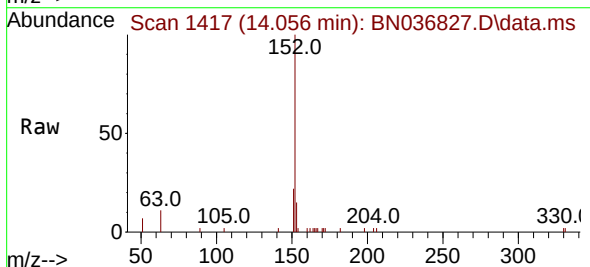


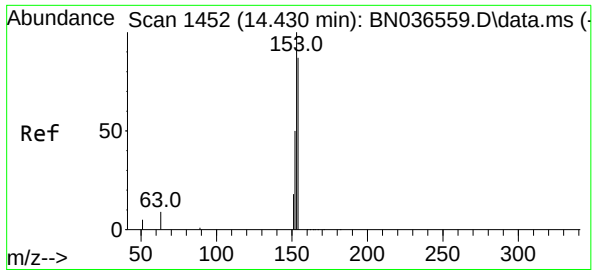
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 37.6  | 29.5  | 44.3  |
| 170     | 25.2  | 20.2  | 30.4  |



#16  
Acenaphthylene  
Concen: 0.380 ng  
RT: 14.056 min Scan# 1417  
Delta R.T. -0.021 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

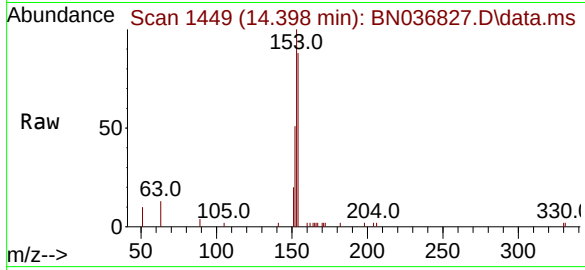
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 20.0  | 16.2  | 24.4  |
| 153     | 13.4  | 10.6  | 15.8  |



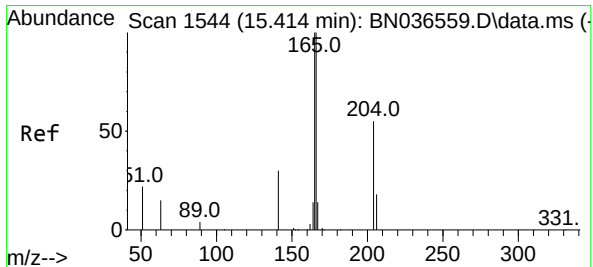
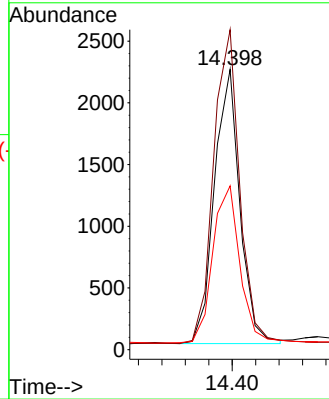
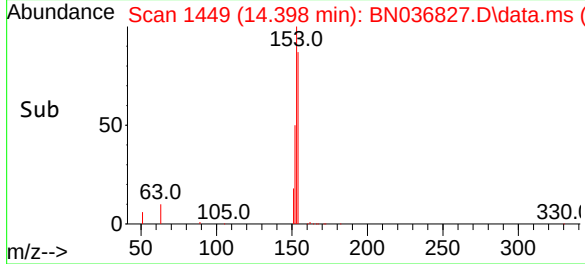


#17  
Acenaphthene  
Concen: 0.386 ng  
RT: 14.398 min Scan# 1449  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

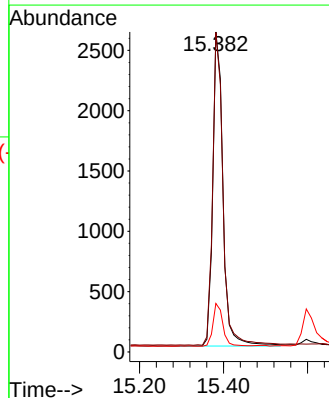
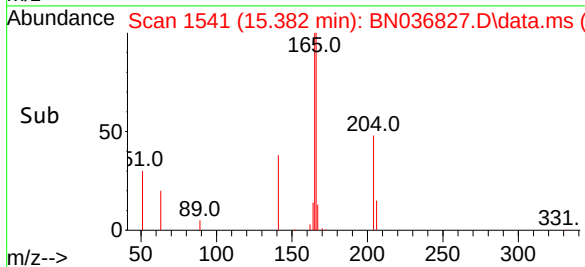
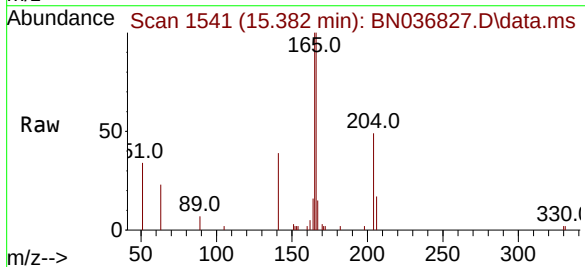


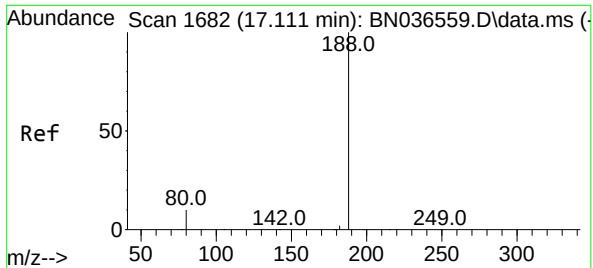
Tgt Ion:154 Resp: 3346  
Ion Ratio Lower Upper  
154 100  
153 118.8 94.1 141.1  
152 62.2 49.8 74.6



#18  
Fluorene  
Concen: 0.379 ng  
RT: 15.382 min Scan# 1541  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:166 Resp: 4448  
Ion Ratio Lower Upper  
166 100  
165 100.4 79.8 119.8  
167 13.2 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.025 min

Lab File: BN036827.D

Acq: 03 Apr 2025 17:50

Instrument :

BNA\_N

ClientSampleId :

PB167430BSD

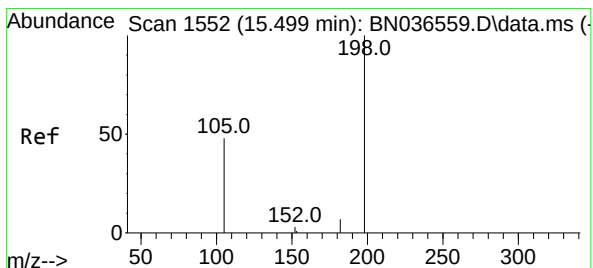
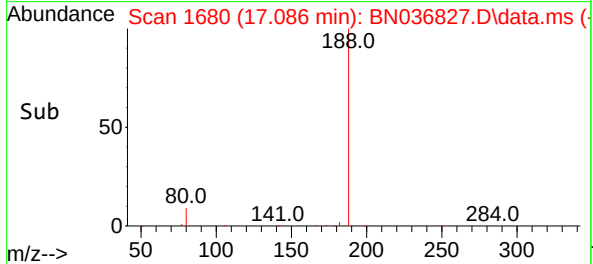
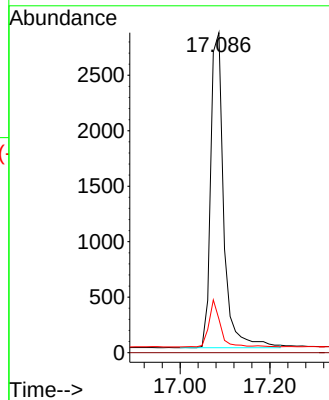
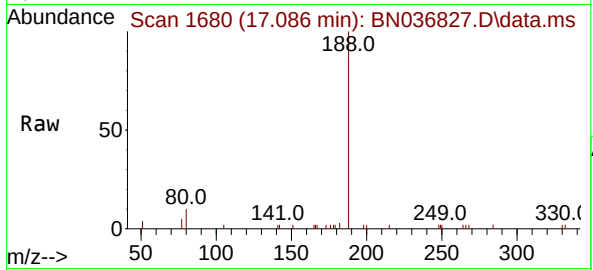
Tgt Ion:188 Resp: 5710

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.5 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 0.469 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.021 min

Lab File: BN036827.D

Acq: 03 Apr 2025 17:50

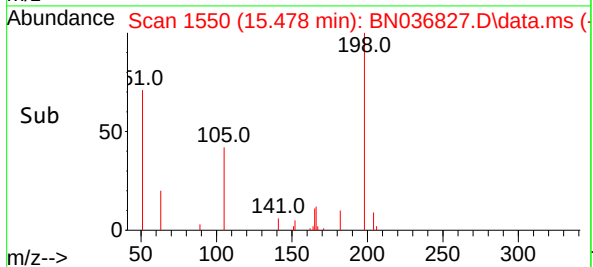
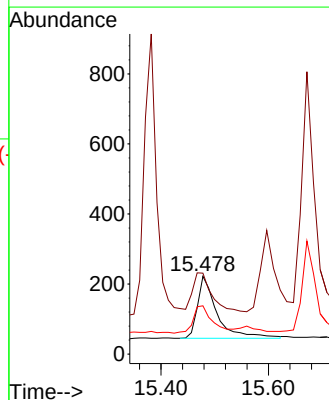
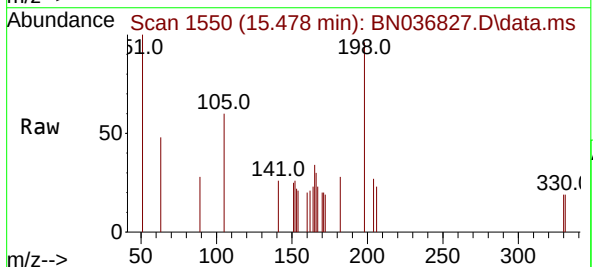
Tgt Ion:198 Resp: 472

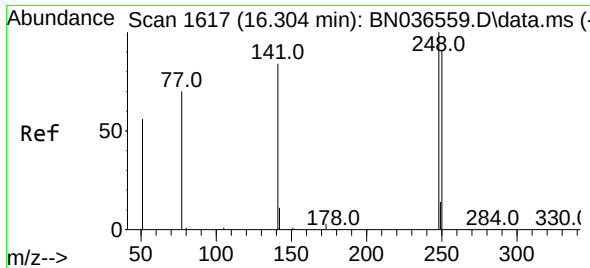
Ion Ratio Lower Upper

198 100

51 104.1 107.9 161.9#

105 62.2 56.2 84.2

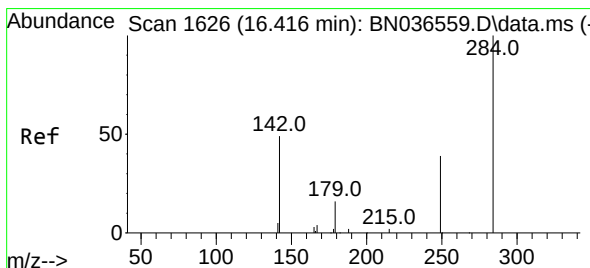
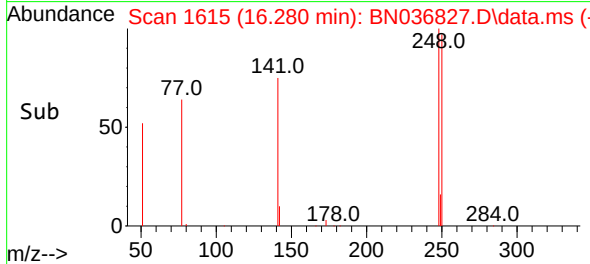
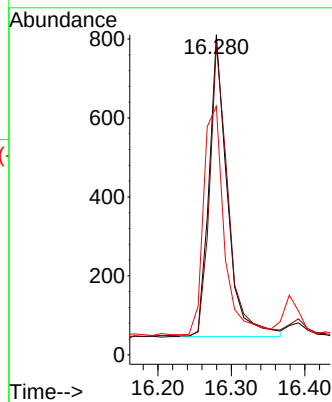
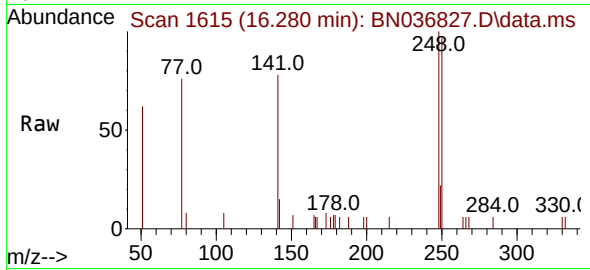




#21  
4-Bromophenyl-phenylether  
Concen: 0.368 ng  
RT: 16.280 min Scan# 1615  
Delta R.T. -0.025 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

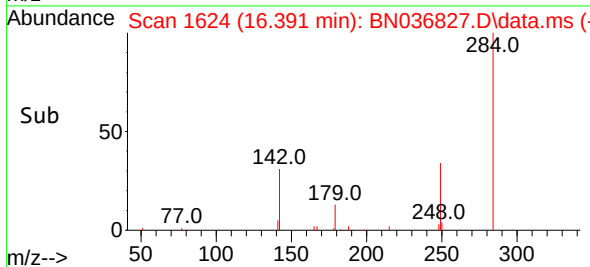
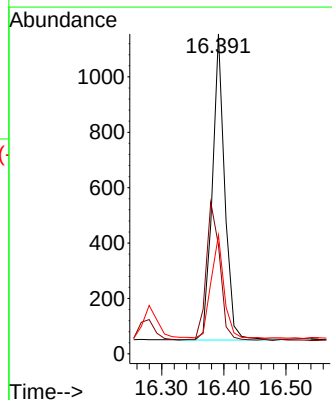
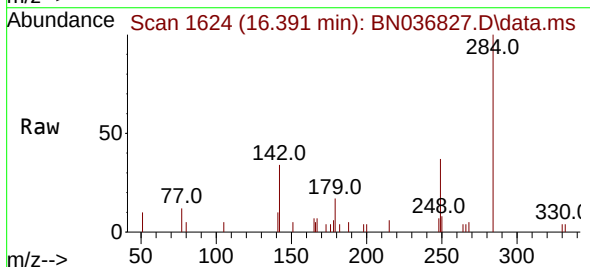
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

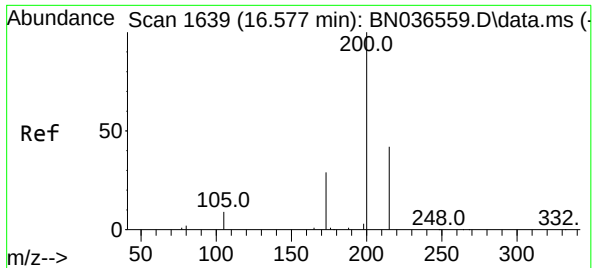
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 97.2  | 73.0  | 109.6 |
| 141     | 77.7  | 68.6  | 103.0 |



#22  
Hexachlorobenzene  
Concen: 0.357 ng  
RT: 16.391 min Scan# 1624  
Delta R.T. -0.025 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 49.5  | 37.0  | 55.4  |
| 249     | 35.4  | 28.1  | 42.1  |

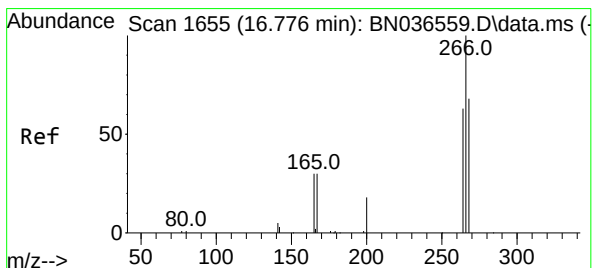
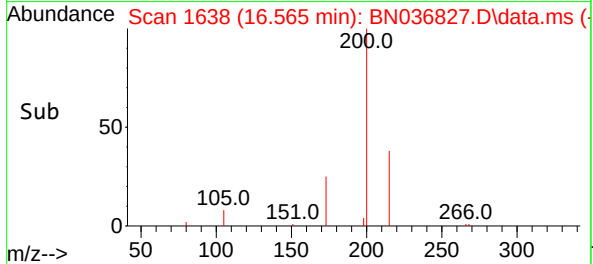
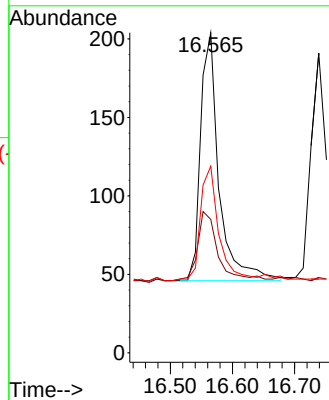
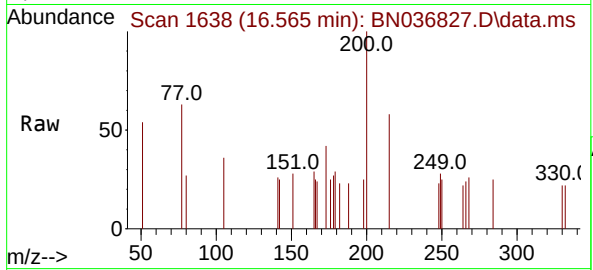




#23  
Atrazine  
Concen: 0.113 ng  
RT: 16.565 min Scan# 1638  
Delta R.T. -0.012 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

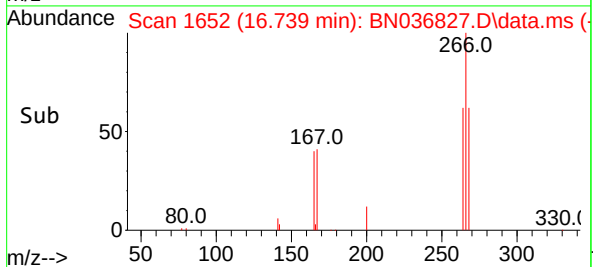
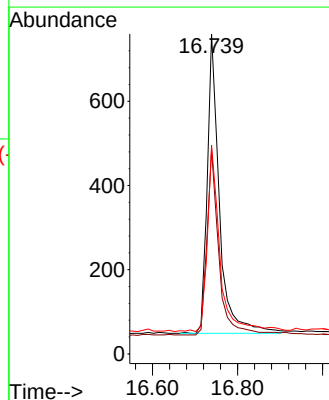
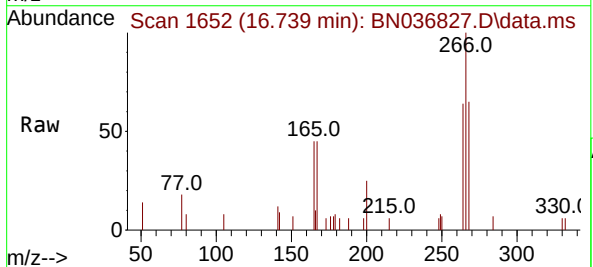
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

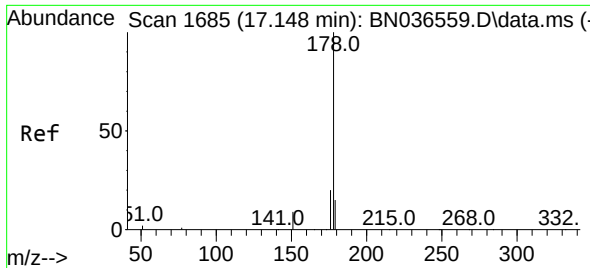
Tgt Ion:200 Resp: 325  
Ion Ratio Lower Upper  
200 100  
173 41.7 27.3 40.9#  
215 58.3 36.8 55.2#



#24  
Pentachlorophenol  
Concen: 0.714 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.037 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:266 Resp: 1406  
Ion Ratio Lower Upper  
266 100  
264 60.9 49.6 74.4  
268 64.2 50.9 76.3

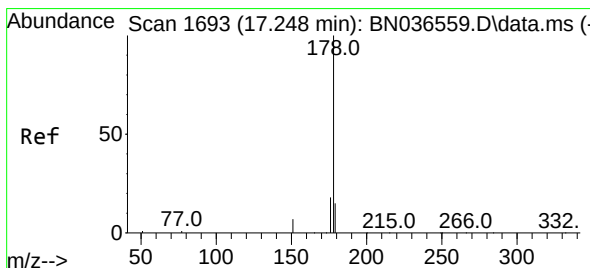
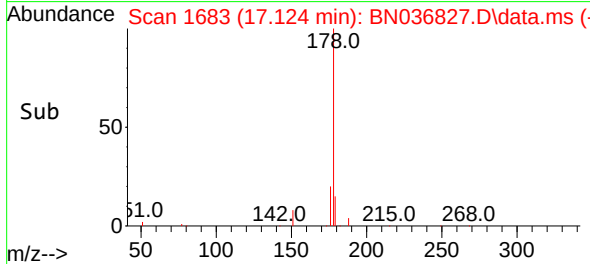
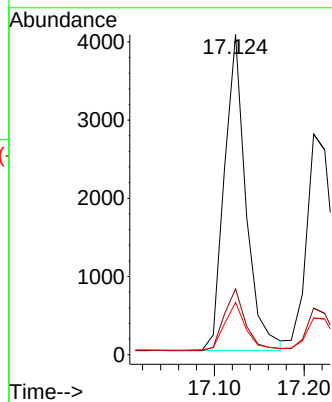
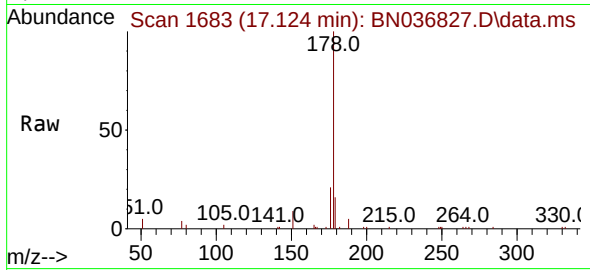




#25  
Phenanthrene  
Concen: 0.393 ng  
RT: 17.124 min Scan# 1683  
Delta R.T. -0.025 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

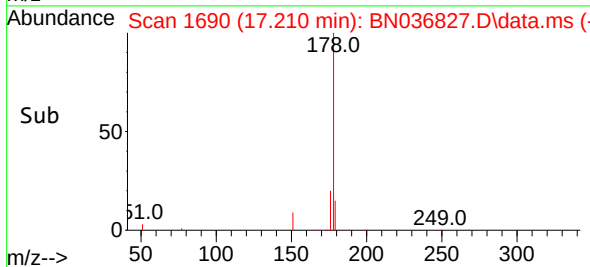
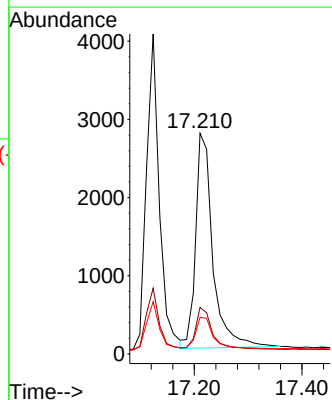
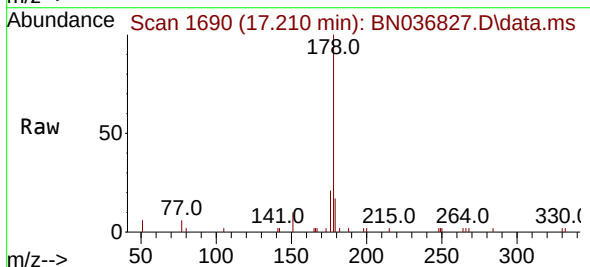
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

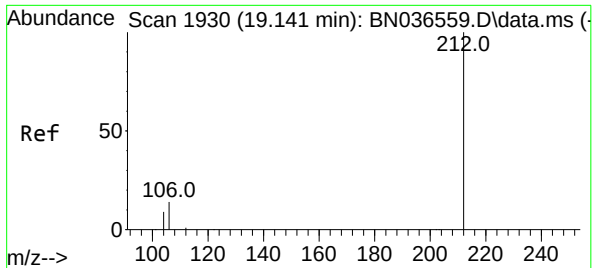
Tgt Ion:178 Resp: 6736  
Ion Ratio Lower Upper  
178 100  
176 19.6 15.9 23.9  
179 15.1 12.2 18.4



#26  
Anthracene  
Concen: 0.395 ng  
RT: 17.210 min Scan# 1690  
Delta R.T. -0.037 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:178 Resp: 6105  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.4 23.2  
179 15.5 12.6 18.8

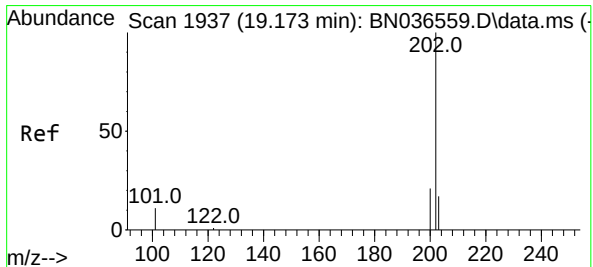
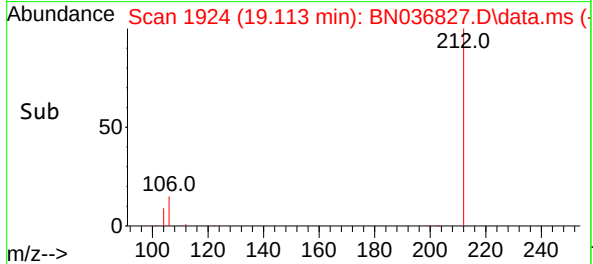
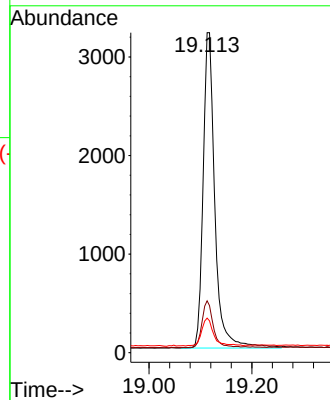
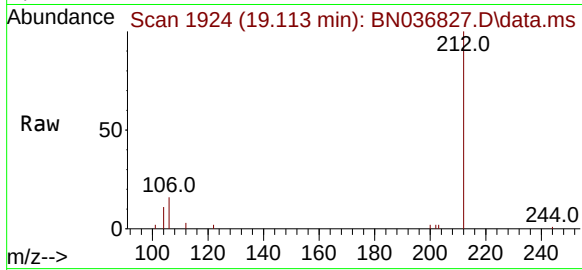




#27  
Fluoranthene-d10  
Concen: 0.346 ng  
RT: 19.113 min Scan# 1913  
Delta R.T. -0.028 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

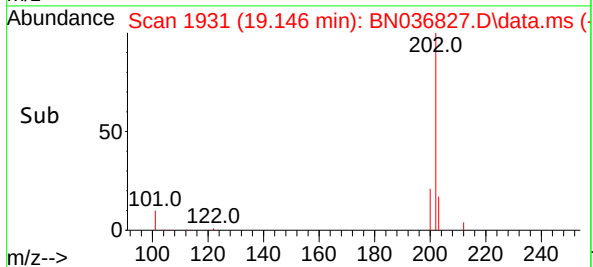
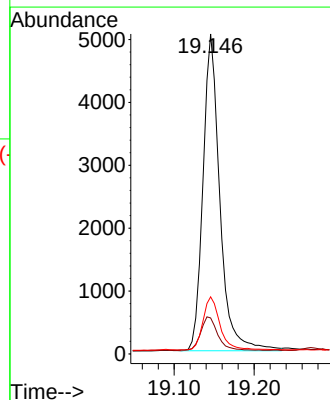
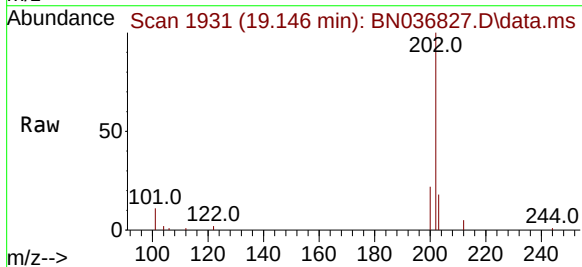
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 212     | 100   |       |       |
| 106     | 14.4  | 11.8  | 17.6  |
| 104     | 9.0   | 7.3   | 10.9  |

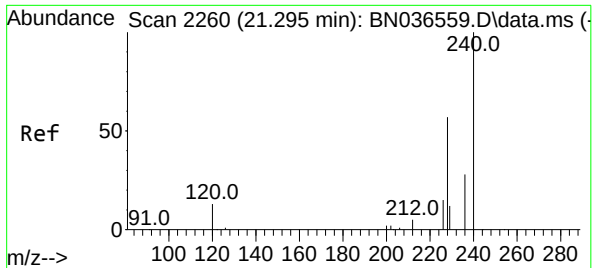


#28  
Fluoranthene  
Concen: 0.385 ng  
RT: 19.146 min Scan# 1931  
Delta R.T. -0.028 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.9  | 9.4   | 14.0  |
| 203     | 16.9  | 13.5  | 20.3  |

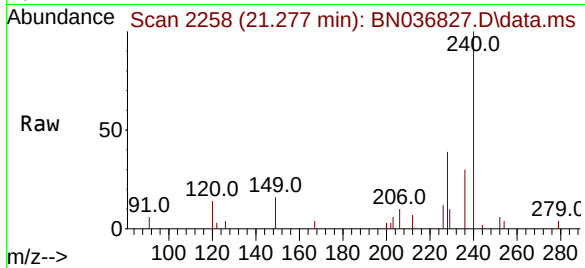




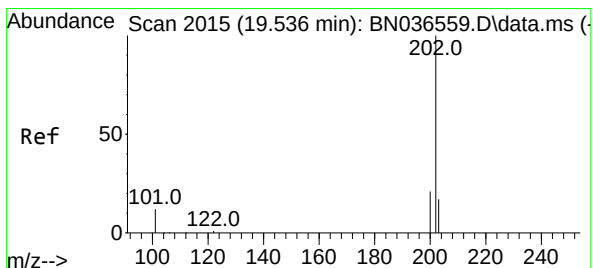
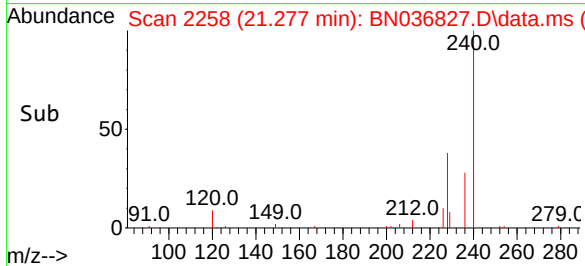
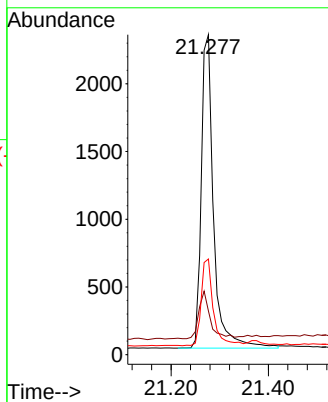


#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

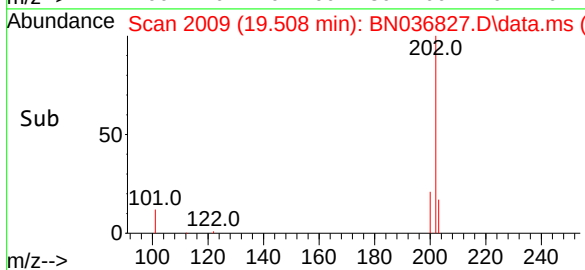
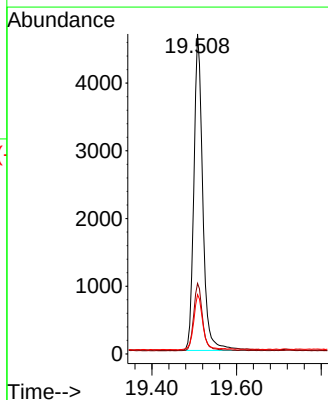
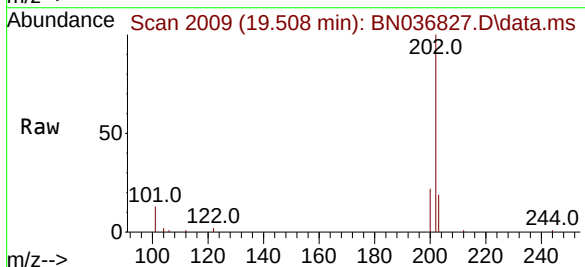


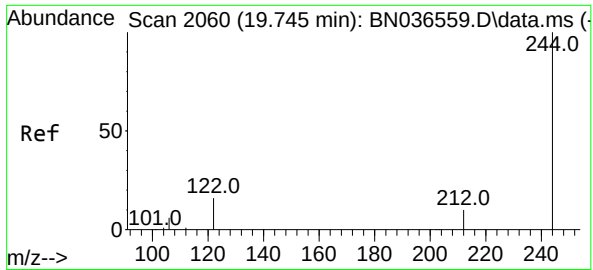
Tgt Ion:240 Resp: 4059  
Ion Ratio Lower Upper  
240 100  
120 13.7 14.6 22.0#  
236 29.9 24.1 36.1



#30  
Pyrene  
Concen: 0.346 ng  
RT: 19.508 min Scan# 2009  
Delta R.T. -0.028 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:202 Resp: 6876  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.1 25.7  
203 17.7 14.1 21.1

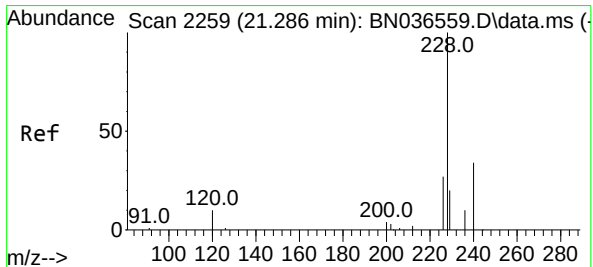
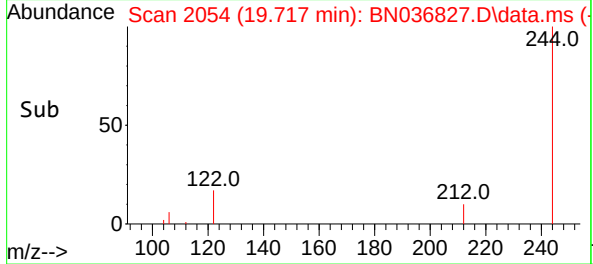
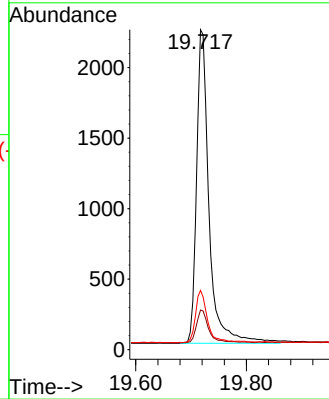
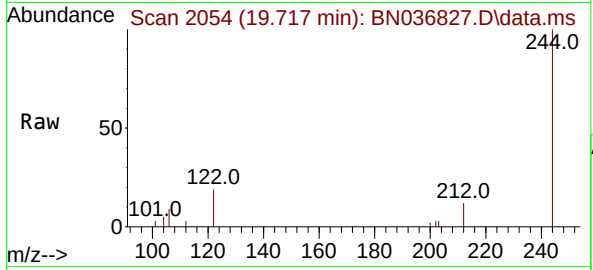




#31  
Terphenyl-d14  
Concen: 0.360 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.028 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

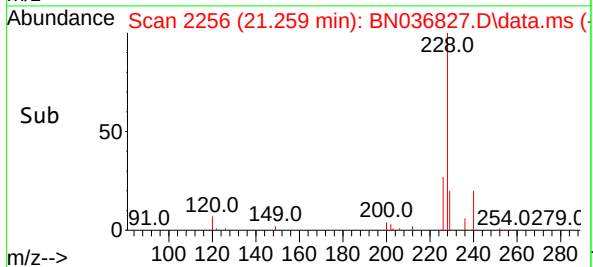
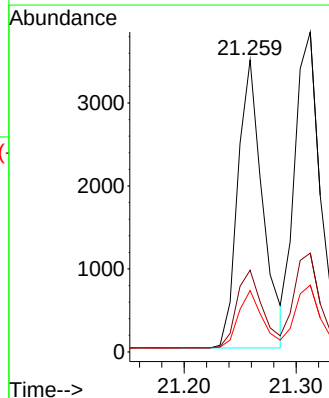
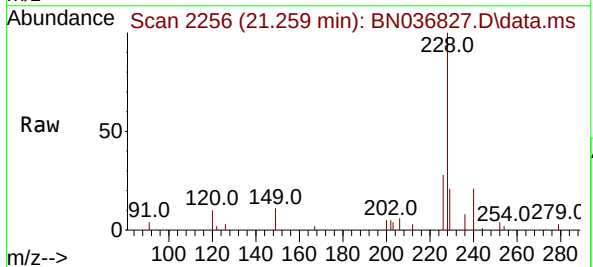
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

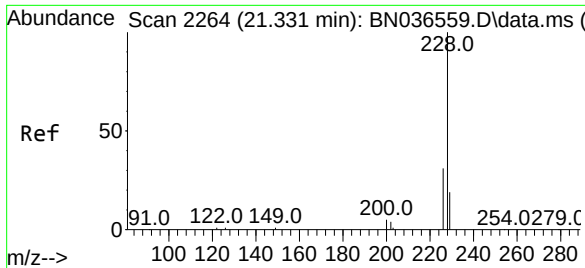
Tgt Ion:244 Resp: 3498  
Ion Ratio Lower Upper  
244 100  
212 12.4 9.6 14.4  
122 18.5 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 0.380 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.027 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:228 Resp: 5364  
Ion Ratio Lower Upper  
228 100  
226 28.0 22.5 33.7  
229 21.0 16.6 25.0

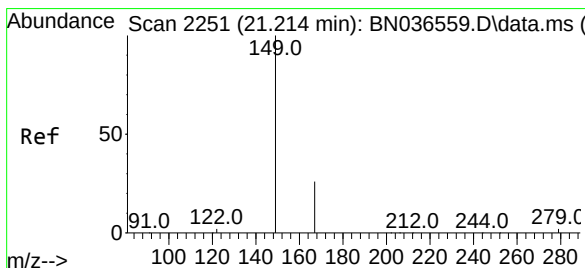
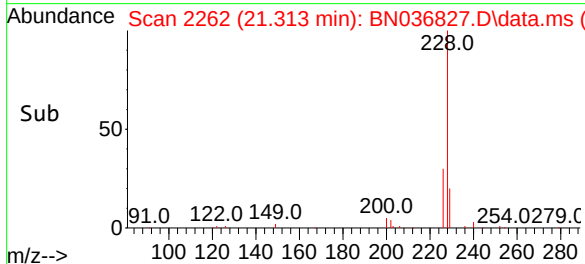
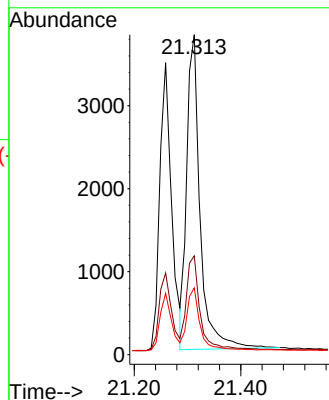
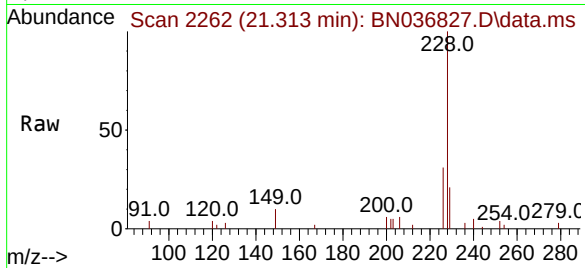




#33  
Chrysene  
Concen: 0.429 ng  
RT: 21.313 min Scan# 2113  
Delta R.T. -0.018 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

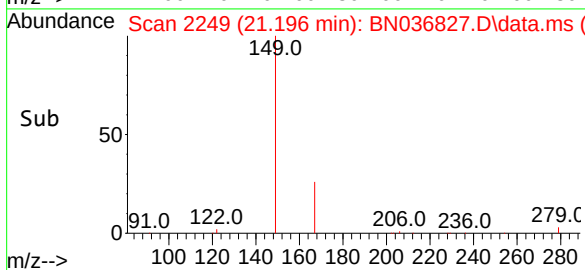
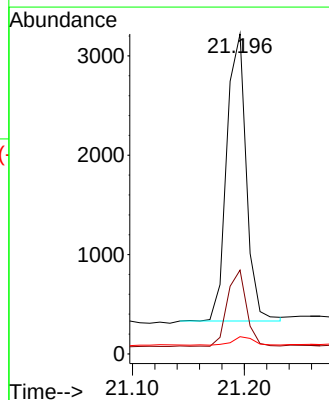
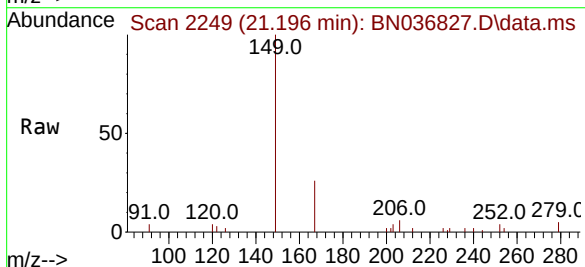
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

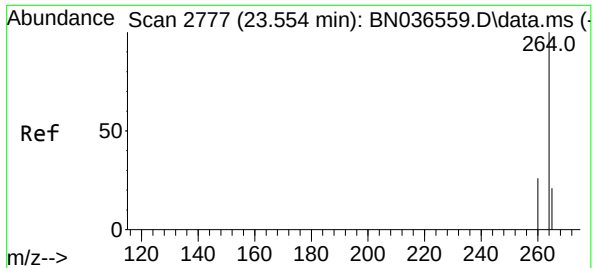
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.9  | 25.3  | 37.9  |
| 229     | 20.9  | 15.8  | 23.8  |



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.350 ng  
RT: 21.196 min Scan# 2249  
Delta R.T. -0.018 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

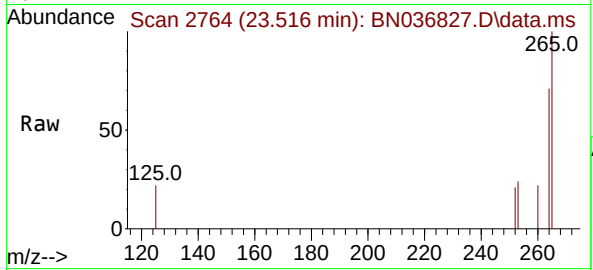
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 26.0  | 20.7  | 31.1  |
| 279     | 3.0   | 3.6   | 5.4   |



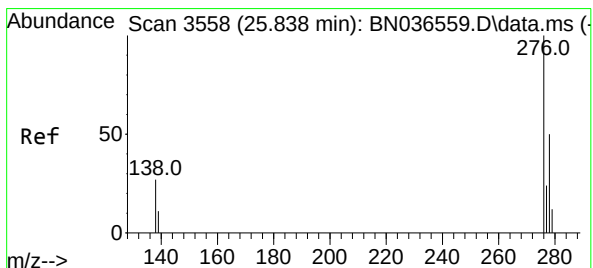
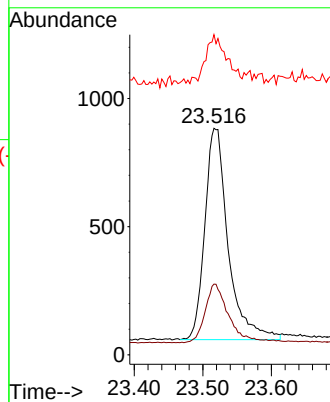
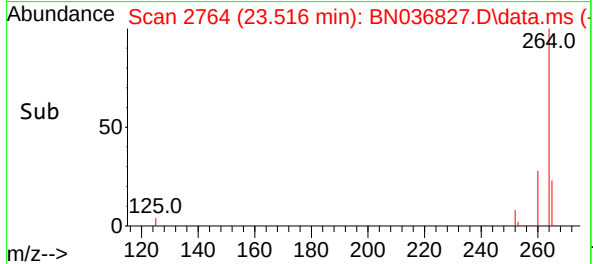


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.516 min Scan# 21  
Delta R.T. -0.038 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

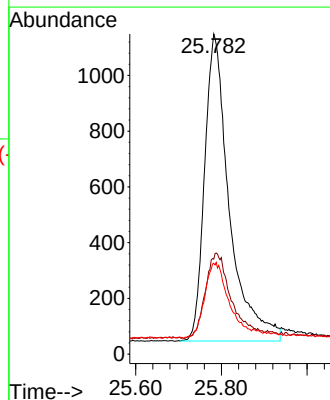
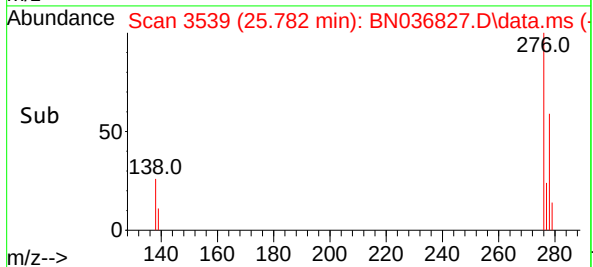
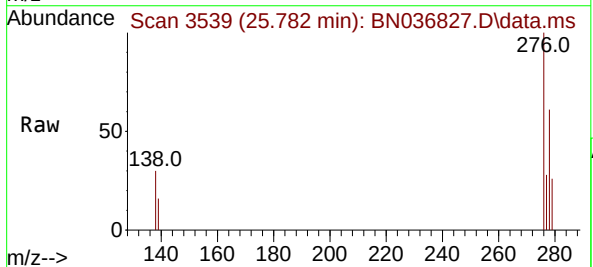


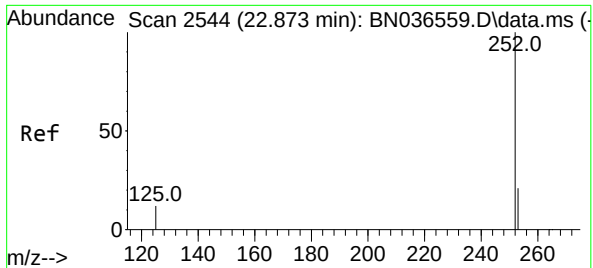
Tgt Ion:264 Resp: 1954  
Ion Ratio Lower Upper  
264 100  
260 31.2 22.6 33.8  
265 141.3 88.1 132.1#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.625 ng  
RT: 25.782 min Scan# 3539  
Delta R.T. -0.056 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:276 Resp: 4405  
Ion Ratio Lower Upper  
276 100  
138 29.6 23.4 35.2  
277 24.1 20.0 30.0

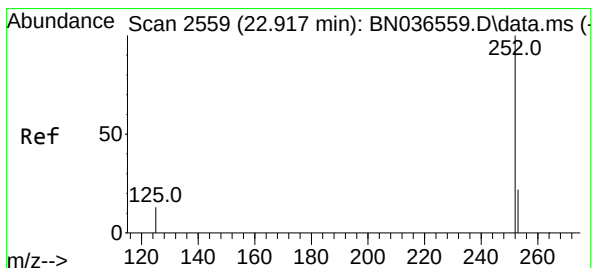
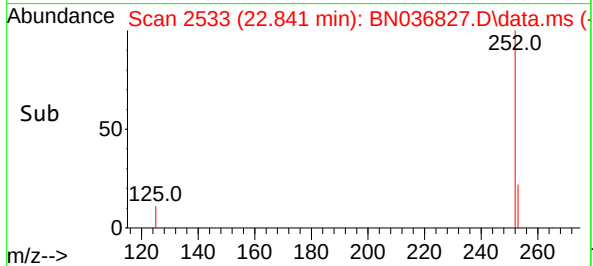
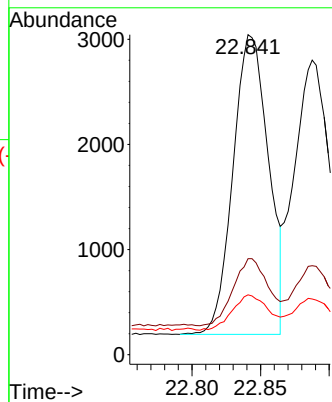
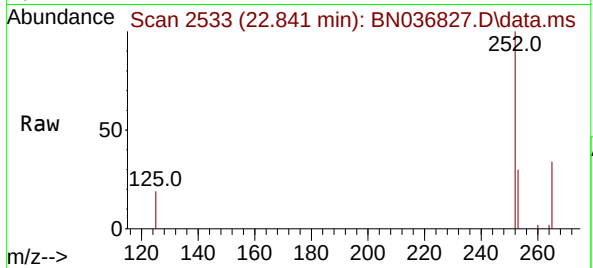




#37  
Benzo(b)fluoranthene  
Concen: 0.722 ng  
RT: 22.841 min Scan# 2549  
Delta R.T. -0.032 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

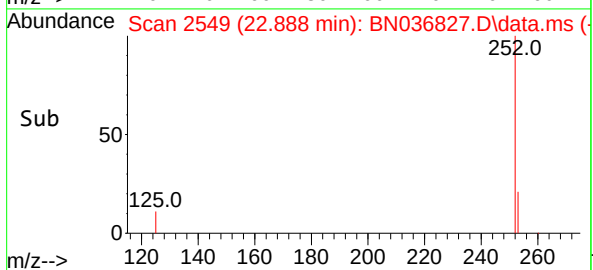
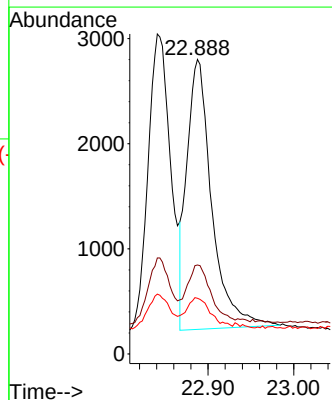
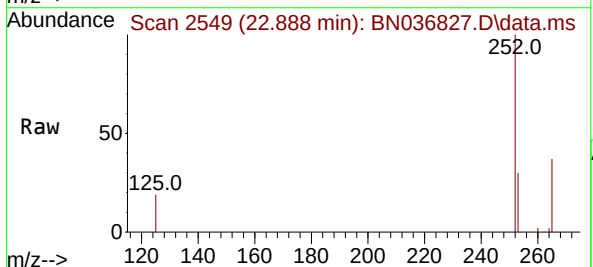
Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD

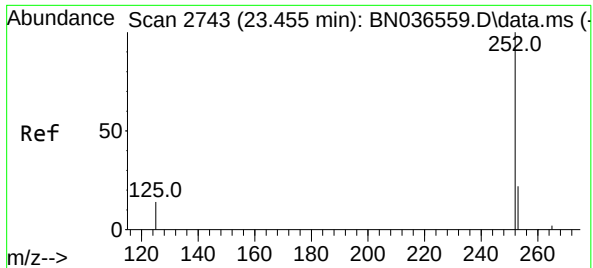
Tgt Ion:252 Resp: 5131  
Ion Ratio Lower Upper  
252 100  
253 30.0 23.9 35.9  
125 18.7 17.4 26.2



#38  
Benzo(k)fluoranthene  
Concen: 0.694 ng  
RT: 22.888 min Scan# 2549  
Delta R.T. -0.029 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Tgt Ion:252 Resp: 5174  
Ion Ratio Lower Upper  
252 100  
253 30.2 24.6 36.8  
125 18.9 17.8 26.8





#39

Benzo(a)pyrene

Concen: 0.544 ng

RT: 23.420 min Scan# 21

Delta R.T. -0.035 min

Lab File: BN036827.D

Acq: 03 Apr 2025 17:50

Instrument :

BNA\_N

ClientSampleId :

PB167430BSD

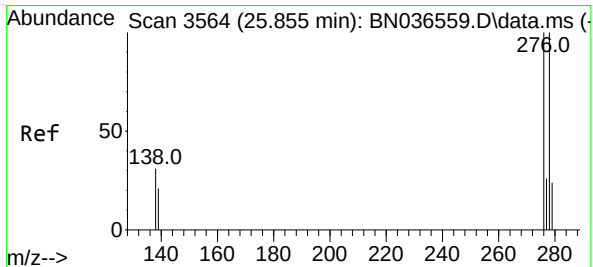
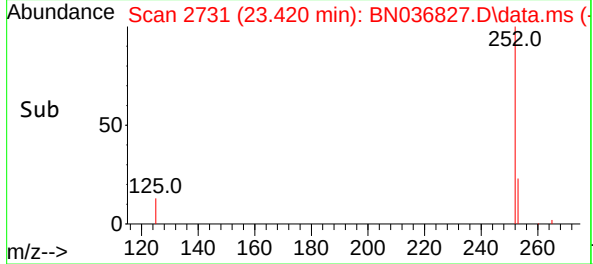
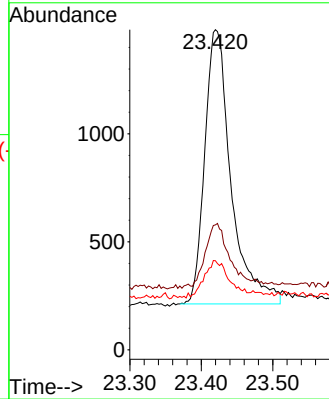
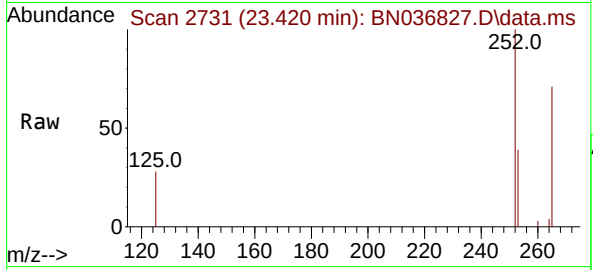
Tgt Ion:252 Resp: 3260

Ion Ratio Lower Upper

252 100

253 39.0 27.8 41.8

125 27.8 22.7 34.1



#40

Dibenzo(a,h)anthracene

Concen: 0.745 ng

RT: 25.803 min Scan# 3546

Delta R.T. -0.053 min

Lab File: BN036827.D

Acq: 03 Apr 2025 17:50

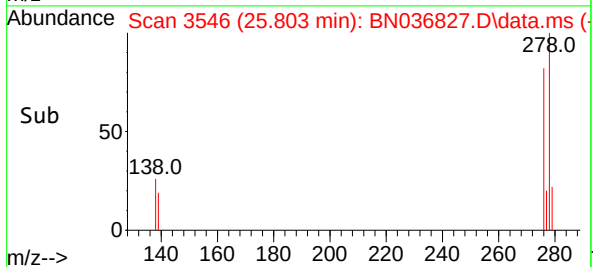
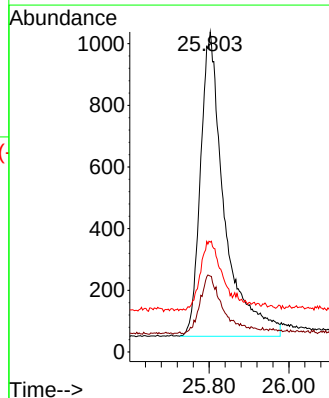
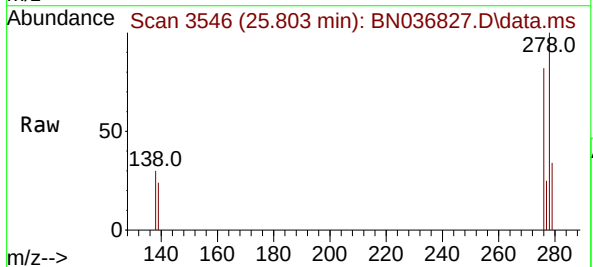
Tgt Ion:278 Resp: 4093

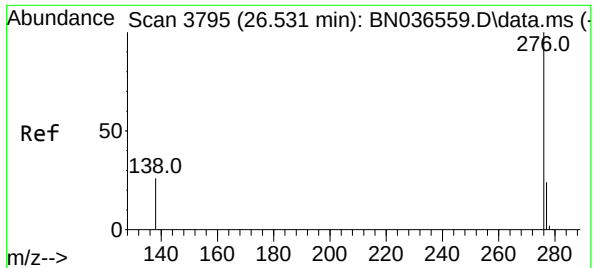
Ion Ratio Lower Upper

278 100

139 23.7 20.8 31.2

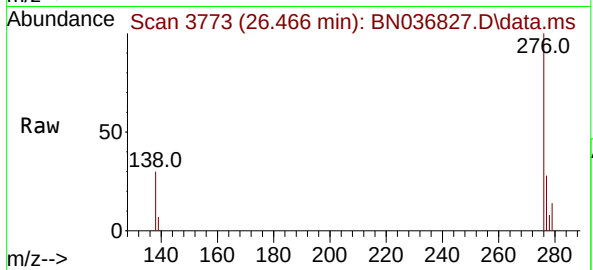
279 34.3 28.8 43.2



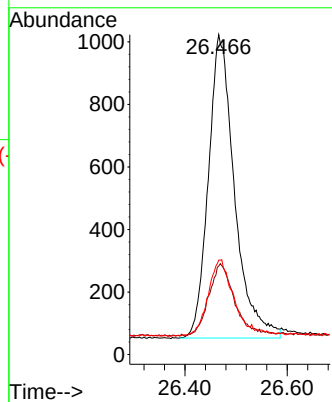
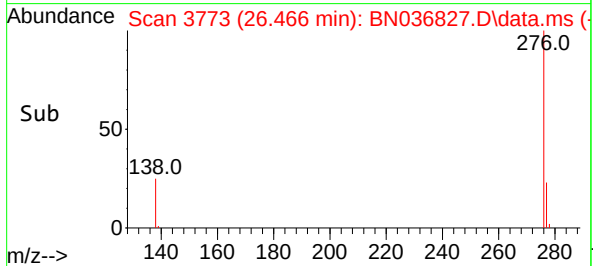


#41  
Benzo(g,h,i)perylene  
Concen: 0.548 ng  
RT: 26.466 min Scan# 31  
Delta R.T. -0.064 min  
Lab File: BN036827.D  
Acq: 03 Apr 2025 17:50

Instrument :  
BNA\_N  
ClientSampleId :  
PB167430BSD



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 27.7  | 22.2  | 33.4  |
| 138     | 29.5  | 24.1  | 36.1  |



## Manual Integration Report

Sequence:

BN031025

Instrument

BNA\_n

| Sample ID  | File ID    | Parameter            | Review By | Review On            | Supervised By | Supervised On         | Reason                      |
|------------|------------|----------------------|-----------|----------------------|---------------|-----------------------|-----------------------------|
| SSTDICC0.1 | BN036557.D | 1,4-Dioxane          | anahy     | 3/11/2025 9:18:29 AM | Jagrut        | 3/11/2025 10:27:49 AM | Peak Integrated by Software |
| SSTDICC0.2 | BN036558.D | 1,4-Dioxane          | anahy     | 3/11/2025 9:19:12 AM | Jagrut        | 3/11/2025 10:27:51 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036572.D | Benzo(k)fluoranthene | anahy     | 3/11/2025 9:20:59 AM | Jagrut        | 3/11/2025 10:27:55 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036572.D | Chrysene-d12         | anahy     | 3/11/2025 9:20:59 AM | Jagrut        | 3/11/2025 10:27:55 AM | Peak Integrated by Software |





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

## Manual Integration Report

Sequence:

BN040325

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 # BN031025**

|                          |                                                  |                   |                                               |
|--------------------------|--------------------------------------------------|-------------------|-----------------------------------------------|
| Review By                | anahy                                            | Review On         | 3/11/2025 9:36:11 AM                          |
| Supervise By             | Jagrut                                           | Supervise On      | 3/11/2025 10:28:11 AM                         |
| SubDirectory             | BN031025                                         | HP Acquire Method | BNA_N, 8270_SiM HP Processing Method bn031025 |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |                   |                                               |
| Tune/Reschk              | SP6717                                           |                   |                                               |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |                   |                                               |
| CCC                      | SP6735                                           |                   |                                               |
| Internal Standard/PEM    | SP6740,1ul/100ul sample                          |                   |                                               |
| ICV/I.BLK                | SP6684                                           |                   |                                               |
| Surrogate Standard       |                                                  |                   |                                               |
| MS/MSD Standard          |                                                  |                   |                                               |
| LCS Standard             |                                                  |                   |                                               |

| Sr# | SampleId   | Data File Name | Date-Time         | Operator | Status |
|-----|------------|----------------|-------------------|----------|--------|
| 1   | DFTPP      | BN036556.D     | 10 Mar 2025 11:03 | RC/JU    | Ok     |
| 2   | SSTDIC0.1  | BN036557.D     | 10 Mar 2025 11:42 | RC/JU    | Ok,M   |
| 3   | SSTDIC0.2  | BN036558.D     | 10 Mar 2025 12:18 | RC/JU    | Ok,M   |
| 4   | SSTDIC0.4  | BN036559.D     | 10 Mar 2025 12:54 | RC/JU    | Ok     |
| 5   | SSTDIC0.8  | BN036560.D     | 10 Mar 2025 13:31 | RC/JU    | Ok     |
| 6   | SSTDIC1.6  | BN036561.D     | 10 Mar 2025 14:07 | RC/JU    | Ok     |
| 7   | SSTDIC3.2  | BN036562.D     | 10 Mar 2025 14:43 | RC/JU    | Ok     |
| 8   | SSTDIC5.0  | BN036563.D     | 10 Mar 2025 15:19 | RC/JU    | Ok     |
| 9   | SSTDICV0.4 | BN036564.D     | 10 Mar 2025 16:38 | RC/JU    | Ok     |
| 10  | PB167057BL | BN036565.D     | 10 Mar 2025 17:14 | RC/JU    | Ok     |
| 11  | Q1531-03   | BN036566.D     | 10 Mar 2025 17:50 | RC/JU    | Ok     |
| 12  | Q1531-04   | BN036567.D     | 10 Mar 2025 18:26 | RC/JU    | Ok     |
| 13  | Q1531-05   | BN036568.D     | 10 Mar 2025 19:02 | RC/JU    | Ok     |
| 14  | Q1531-06   | BN036569.D     | 10 Mar 2025 19:38 | RC/JU    | Ok,M   |
| 15  | Q1531-13   | BN036570.D     | 10 Mar 2025 20:14 | RC/JU    | Ok     |
| 16  | Q1531-14   | BN036571.D     | 10 Mar 2025 20:50 | RC/JU    | Ok     |
| 17  | SSTDCCC0.4 | BN036572.D     | 10 Mar 2025 21:26 | RC/JU    | Ok,M   |

M : Manual Integration

Instrument ID: **BNA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # BN040325**

|                          |          |                                                  |                 |                      |          |
|--------------------------|----------|--------------------------------------------------|-----------------|----------------------|----------|
| Review By                |          | Review On                                        |                 |                      |          |
| Supervise By             |          | Supervise On                                     |                 |                      |          |
| SubDirectory             | BN040325 | HP Acquire Method                                | BNA_N, 8270_SiM | HP Processing Method | bn031025 |
| STD. NAME                |          | STD REF.#                                        |                 |                      |          |
| Tune/Reschk              |          | SP6757                                           |                 |                      |          |
| Initial Calibration Stds |          | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |                 |                      |          |
| CCC                      |          | SP6735                                           |                 |                      |          |
| Internal Standard/PEM    |          | SP6740,1ul/100ul sample                          |                 |                      |          |
| ICV/I.BLK                |          | SP6684                                           |                 |                      |          |
| Surrogate Standard       |          |                                                  |                 |                      |          |
| MS/MSD Standard          |          |                                                  |                 |                      |          |
| LCS Standard             |          |                                                  |                 |                      |          |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status   |
|-----|-------------|----------------|-------------------|----------|----------|
| 1   | DFTPP       | BN036816.D     | 03 Apr 2025 11:08 | RC/JU    | Ok       |
| 2   | SSTDCCC0.4  | BN036817.D     | 03 Apr 2025 11:47 | RC/JU    | Ok,NR    |
| 3   | PB167430BL  | BN036818.D     | 03 Apr 2025 12:24 | RC/JU    | Ok       |
| 4   | Q1690-01    | BN036819.D     | 03 Apr 2025 13:00 | RC/JU    | Ok       |
| 5   | Q1697-01    | BN036820.D     | 03 Apr 2025 13:37 | RC/JU    | Dilution |
| 6   | Q1697-02    | BN036821.D     | 03 Apr 2025 14:13 | RC/JU    | Ok       |
| 7   | Q1697-03    | BN036822.D     | 03 Apr 2025 14:49 | RC/JU    | Ok       |
| 8   | Q1697-04    | BN036823.D     | 03 Apr 2025 15:25 | RC/JU    | Ok       |
| 9   | Q1697-05    | BN036824.D     | 03 Apr 2025 16:01 | RC/JU    | Ok       |
| 10  | Q1697-01DL  | BN036825.D     | 03 Apr 2025 16:38 | RC/JU    | Ok       |
| 11  | PB167430BS  | BN036826.D     | 03 Apr 2025 17:14 | RC/JU    | Ok,NR    |
| 12  | PB167430BSD | BN036827.D     | 03 Apr 2025 17:50 | RC/JU    | Ok,NR    |
| 13  | PB167450BS  | BN036828.D     | 03 Apr 2025 18:26 | RC/JU    | Ok,NR    |
| 14  | PB167450BL  | BN036829.D     | 03 Apr 2025 19:02 | RC/JU    | Ok       |
| 15  | Q1711-04    | BN036830.D     | 03 Apr 2025 19:38 | RC/JU    | Ok,NR    |
| 16  | Q1711-07    | BN036831.D     | 03 Apr 2025 20:14 | RC/JU    | Ok       |
| 17  | Q1711-08    | BN036832.D     | 03 Apr 2025 20:51 | RC/JU    | Ok       |
| 18  | Q1711-01    | BN036833.D     | 03 Apr 2025 21:27 | RC/JU    | Ok       |
| 19  | Q1711-02MS  | BN036834.D     | 03 Apr 2025 22:03 | RC/JU    | Ok       |
| 20  | Q1711-03MSD | BN036835.D     | 03 Apr 2025 22:39 | RC/JU    | Ok       |

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN031025**

|              |          |                   |                                           |
|--------------|----------|-------------------|-------------------------------------------|
| Review By    | anahy    | Review On         | 3/11/2025 9:36:11 AM                      |
| Supervise By | Jagrut   | Supervise On      | 3/11/2025 10:28:11 AM                     |
| SubDirectory | BN031025 | HP Acquire Method | BNA_N, 8270_HP Processing Method bn031025 |

| STD. NAME                | STD REF.#                                        |
|--------------------------|--------------------------------------------------|
| Tune/Reschk              | SP6717                                           |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC                      | SP6735                                           |
| Internal Standard/PEM    | SP6740,1ul/100ul sample                          |
| ICV/I.BLK                | SP6684                                           |
| Surrogate Standard       |                                                  |
| MS/MSD Standard          |                                                  |
| LCS Standard             |                                                  |

| Sr# | SampleID    | ClientID         | Data File Name | Date-Time         | Comment                  | Operator | Status |
|-----|-------------|------------------|----------------|-------------------|--------------------------|----------|--------|
| 1   | DFTPP       | DFTPP            | BN036556.D     | 10 Mar 2025 11:03 |                          | RC/JU    | Ok     |
| 2   | SSTDICC0.1  | SSTDICC0.1       | BN036557.D     | 10 Mar 2025 11:42 | Compound #20 removed.    | RC/JU    | Ok,M   |
| 3   | SSTDICC0.2  | SSTDICC0.2       | BN036558.D     | 10 Mar 2025 12:18 |                          | RC/JU    | Ok,M   |
| 4   | SSTDICCC0.4 | SSTDICCC0.4      | BN036559.D     | 10 Mar 2025 12:54 |                          | RC/JU    | Ok     |
| 5   | SSTDICC0.8  | SSTDICC0.8       | BN036560.D     | 10 Mar 2025 13:31 |                          | RC/JU    | Ok     |
| 6   | SSTDICC1.6  | SSTDICC1.6       | BN036561.D     | 10 Mar 2025 14:07 | Compound #20 kept on QR. | RC/JU    | Ok     |
| 7   | SSTDICC3.2  | SSTDICC3.2       | BN036562.D     | 10 Mar 2025 14:43 | Method is good for DOD.  | RC/JU    | Ok     |
| 8   | SSTDICC5.0  | SSTDICC5.0       | BN036563.D     | 10 Mar 2025 15:19 |                          | RC/JU    | Ok     |
| 9   | SSTDICV0.4  | ICVBN031025      | BN036564.D     | 10 Mar 2025 16:38 |                          | RC/JU    | Ok     |
| 10  | PB167057BL  | PB167057BL       | BN036565.D     | 10 Mar 2025 17:14 |                          | RC/JU    | Ok     |
| 11  | Q1531-03    | RE122D1-20250305 | BN036566.D     | 10 Mar 2025 17:50 |                          | RC/JU    | Ok     |
| 12  | Q1531-04    | RE126D1-20250306 | BN036567.D     | 10 Mar 2025 18:26 |                          | RC/JU    | Ok     |
| 13  | Q1531-05    | RE126D2-20250306 | BN036568.D     | 10 Mar 2025 19:02 |                          | RC/JU    | Ok     |
| 14  | Q1531-06    | DUP01-20250306   | BN036569.D     | 10 Mar 2025 19:38 |                          | RC/JU    | Ok,M   |
| 15  | Q1531-13    | RE108D1-20250306 | BN036570.D     | 10 Mar 2025 20:14 |                          | RC/JU    | Ok     |
| 16  | Q1531-14    | RE105D1-20250306 | BN036571.D     | 10 Mar 2025 20:50 |                          | RC/JU    | Ok     |
| 17  | SSTDCCC0.4  | SSTDCCC0.4EC     | BN036572.D     | 10 Mar 2025 21:26 |                          | RC/JU    | Ok,M   |

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN040325**

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| Review By                | Review On                                        |
| Supervise By             | Supervise On                                     |
| SubDirectory             | BN040325                                         |
| HP Acquire Method        | BNA_N, 8270_HP Processing Method                 |
|                          | bn031025                                         |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                 |
| Tune/Reschk              | SP6757                                           |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC                      | SP6735                                           |
| Internal Standard/PEM    | SP6740,1ul/100ul sample                          |
| ICV/I.BLK                | SP6684                                           |
| Surrogate Standard       |                                                  |
| MS/MSD Standard          |                                                  |
| LCS Standard             |                                                  |

| Sr# | SampleID    | ClientID           | Data File Name | Date-Time         | Comment          | Operator | Status   |
|-----|-------------|--------------------|----------------|-------------------|------------------|----------|----------|
| 1   | DFTPP       | DFTPP              | BN036816.D     | 03 Apr 2025 11:08 |                  | RC/JU    | Ok       |
| 2   | SSTDCCC0.4  | SSTDCCC0.4         | BN036817.D     | 03 Apr 2025 11:47 |                  | RC/JU    | Ok,NR    |
| 3   | PB167430BL  | PB167430BL         | BN036818.D     | 03 Apr 2025 12:24 |                  | RC/JU    | Ok       |
| 4   | Q1690-01    | MW112010           | BN036819.D     | 03 Apr 2025 13:00 |                  | RC/JU    | Ok       |
| 5   | Q1697-01    | MW-19B-72-040125   | BN036820.D     | 03 Apr 2025 13:37 | Need 2X Dilution | RC/JU    | Dilution |
| 6   | Q1697-02    | IW-01-55-040125    | BN036821.D     | 03 Apr 2025 14:13 |                  | RC/JU    | Ok       |
| 7   | Q1697-03    | IW-02-55-040125    | BN036822.D     | 03 Apr 2025 14:49 |                  | RC/JU    | Ok       |
| 8   | Q1697-04    | IW-02-55-040125-FD | BN036823.D     | 03 Apr 2025 15:25 |                  | RC/JU    | Ok       |
| 9   | Q1697-05    | IW-03-55-040125    | BN036824.D     | 03 Apr 2025 16:01 |                  | RC/JU    | Ok       |
| 10  | Q1697-01DL  | MW-19B-72-040125DL | BN036825.D     | 03 Apr 2025 16:38 |                  | RC/JU    | Ok       |
| 11  | PB167430BS  | PB167430BS         | BN036826.D     | 03 Apr 2025 17:14 |                  | RC/JU    | Ok,NR    |
| 12  | PB167430BSD | PB167430BSD        | BN036827.D     | 03 Apr 2025 17:50 |                  | RC/JU    | Ok,NR    |
| 13  | PB167450BS  | PB167450BS         | BN036828.D     | 03 Apr 2025 18:26 |                  | RC/JU    | Ok,NR    |
| 14  | PB167450BL  | PB167450BL         | BN036829.D     | 03 Apr 2025 19:02 |                  | RC/JU    | Ok       |
| 15  | Q1711-04    | MW-17B-55-040225   | BN036830.D     | 03 Apr 2025 19:38 |                  | RC/JU    | Ok,NR    |
| 16  | Q1711-07    | RMW-05B-89-040225  | BN036831.D     | 03 Apr 2025 20:14 |                  | RC/JU    | Ok       |
| 17  | Q1711-08    | EB01-040225        | BN036832.D     | 03 Apr 2025 20:51 |                  | RC/JU    | Ok       |
| 18  | Q1711-01    | MW-18B-56-040225   | BN036833.D     | 03 Apr 2025 21:27 |                  | RC/JU    | Ok       |

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # BN040325**

|                   |                                  |
|-------------------|----------------------------------|
| Review By         | Review On                        |
| Supervise By      | Supervise On                     |
| SubDirectory      | BN040325                         |
| HP Acquire Method | BNA_N, 8270_HP Processing Method |
|                   | bn031025                         |

| STD. NAME                | STD REF.#                                        |
|--------------------------|--------------------------------------------------|
| Tune/Reschk              | SP6757                                           |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC                      | SP6735                                           |
| Internal Standard/PEM    | SP6740,1ul/100ul sample                          |
| ICV/I.BLK                | SP6684                                           |
| Surrogate Standard       |                                                  |
| MS/MSD Standard          |                                                  |
| LCS Standard             |                                                  |

|    |             |                    |            |                   |  |       |    |
|----|-------------|--------------------|------------|-------------------|--|-------|----|
| 19 | Q1711-02MS  | MW-18B-56-040225MS | BN036834.D | 03 Apr 2025 22:03 |  | RC/JU | Ok |
| 20 | Q1711-03MSD | MW-18B-56-040225MS | BN036835.D | 03 Apr 2025 22:39 |  | RC/JU | Ok |

M : Manual Integration

**SOP ID:** M3510C,3580A-Extraction SVOC-20

**Clean Up SOP #:** N/A

**Matrix :** Water

**Weigh By:** N/A

**Balance check:** N/A

**Balance ID:** N/A

**pH Strip Lot#:** E3880

**Extraction By:** RJ

**Filter By:** RJ

**pH Meter ID:** N/A

**Hood ID:** 4,5,6,7

**Extraction Start Date :** 04/02/2025

**Extraction Start Time :** 14:40

**Extraction End Date :** 04/03/2025

**Extraction End Time :** 09:40

**Concentration By:** EH

**Supervisor By :** rajesh

**Extraction Method:** ☒ Seperatory 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             | SP6739              |
| Surrogate     | 1.0ML    | 0.4 PPM             | SP6755              |
| 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            | E3904      |
| Baked Na2SO4       | N/A            | EP2597     |
| 10N NaoH           | N/A            | EP2559     |
| H2SO4 1:1          | N/A            | EP2565     |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |
| N/A                | N/A            | N/A        |

**Extraction Conformance/Non-Conformance Comments:**

1.5 ML Vial lot# 2210673. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

**KD Bath ID:** WATER BATH-1,2

**KD Bath Temperature:** 60 °C

**Envap ID:** NEVAP-02

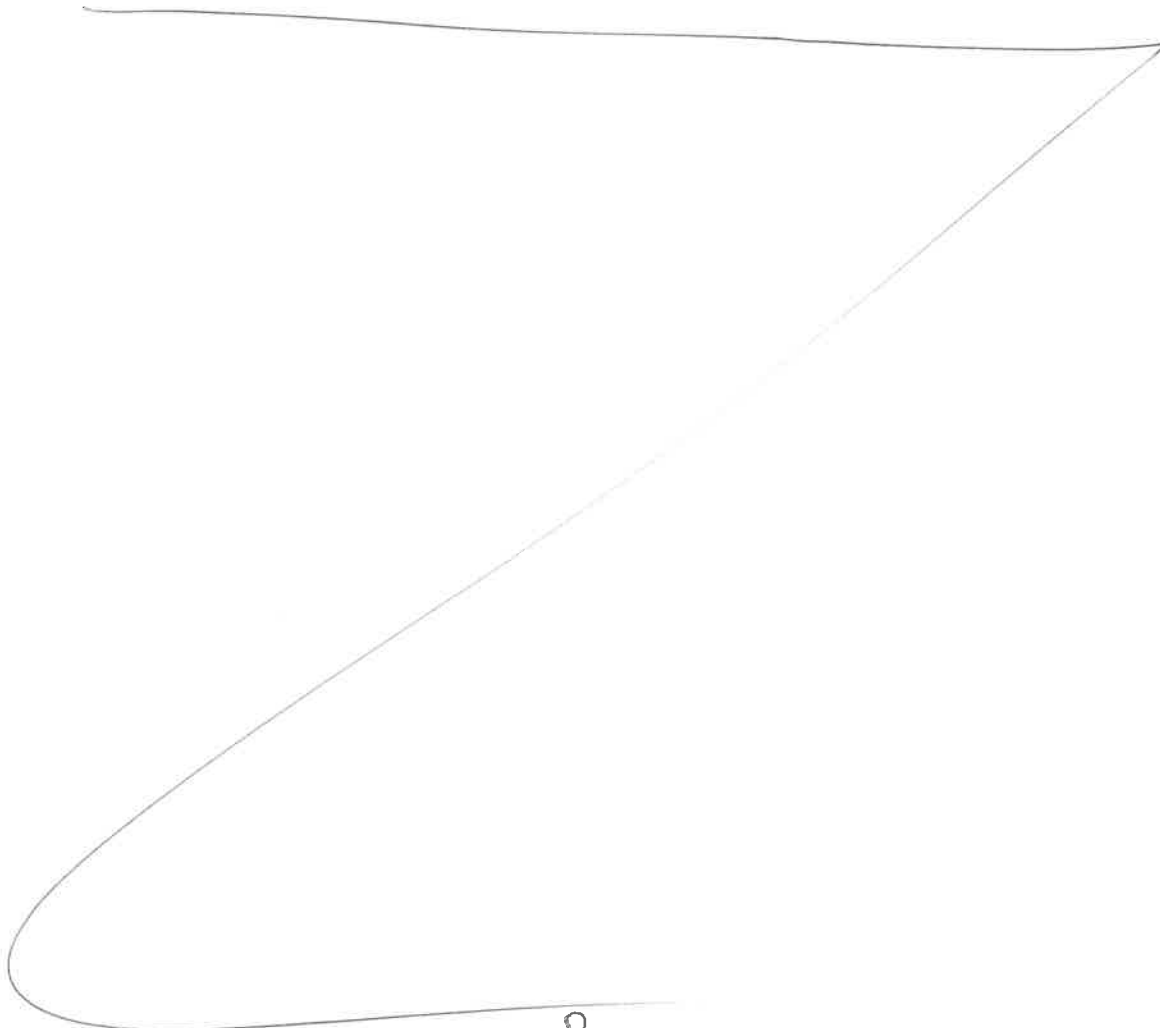
**Envap Temperature:** 40 °C

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|-------------|-----------------------------------------|----------------------|
| 04/03/25    | RP (Ext. Lab)                           | R/SVOC               |
| 9:45        | Preparation Group                       | Analysis Group       |

Analytical Method: M3510C,3580A-Extraction SVOC-20

Concentration Date: 04/03/2025

| Sample ID       | Client Sample ID   | Test               | g //mL | PH | Surr/Spike By: |            | Final Vol.<br>(mL) | JarID | Comments | Prep<br>Pos |
|-----------------|--------------------|--------------------|--------|----|----------------|------------|--------------------|-------|----------|-------------|
|                 |                    |                    |        |    | AddedBy        | VerifiedBy |                    |       |          |             |
| PB167430BL      | SBLK430            | SVOC-SIMGrou<br>p1 | 1000   | 6  | ritesh         | rajesh     | 1                  |       |          | SEP-01      |
| PB167430BS      | SLCS430            | SVOC-SIMGrou<br>p1 | 1000   | 6  | ritesh         | rajesh     | 1                  |       |          | 2           |
| PB167430BS<br>D | SLCSD430           | SVOC-SIMGrou<br>p1 | 1000   | 6  | ritesh         | rajesh     | 1                  |       |          | 3           |
| Q1690-01        | MW112010           | SVOC-SIMGrou<br>p1 | 1000   | 6  | ritesh         | rajesh     | 1                  | E     |          | 4           |
| Q1697-01        | MW-19B-72-040125   | SVOC-SIMGrou<br>p1 | 970    | 6  | ritesh         | rajesh     | 1                  | I     |          | 5           |
| Q1697-02        | IW-01-55-040125    | SVOC-SIMGrou<br>p1 | 990    | 6  | ritesh         | rajesh     | 1                  | I     |          | 6           |
| Q1697-03        | IW-02-55-040125    | SVOC-SIMGrou<br>p1 | 970    | 6  | ritesh         | rajesh     | 1                  | I     |          | 7           |
| Q1697-04        | IW-02-55-040125-FD | SVOC-SIMGrou<br>p1 | 970    | 6  | ritesh         | rajesh     | 1                  | I     |          | 8           |
| Q1697-05        | IW-03-55-040125    | SVOC-SIMGrou<br>p1 | 980    | 6  | ritesh         | rajesh     | 1                  | I     |          | 9           |



\* Extracts relinquished on the same date as received.

8  
4/3/25



1104-11

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1697      WorkList ID : 188686      Department : Extraction      Date : 04-02-2025 14:36:22

| Sample   | Customer Sample    | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method        |
|----------|--------------------|--------|----------------|--------------|----------|-----------------------------|--------------|---------------|
| Q1690-01 | MW112010           | Water  | SVOC-SIMGroup1 | Cool 4 deg C | GENV01   | I31                         | 03/31/2025   | 8270-Modified |
| Q1697-01 | MW-19B-72-040125   | Water  | SVOC-SIMGroup1 | Cool 4 deg C | JACO05   | I31                         | 04/01/2025   | 8270-Modified |
| Q1697-02 | IW-01-55-040125    | Water  | SVOC-SIMGroup1 | Cool 4 deg C | JACO05   | I31                         | 04/01/2025   | 8270-Modified |
| Q1697-03 | IW-02-55-040125    | Water  | SVOC-SIMGroup1 | Cool 4 deg C | JACO05   | I31                         | 04/01/2025   | 8270-Modified |
| Q1697-04 | IW-02-55-040125-FD | Water  | SVOC-SIMGroup1 | Cool 4 deg C | JACO05   | I31                         | 04/01/2025   | 8270-Modified |
| Q1697-05 | IW-03-55-040125    | Water  | SVOC-SIMGroup1 | Cool 4 deg C | JACO05   | I31                         | 04/01/2025   | 8270-Modified |

Date/Time      04/02/25      14:38  
Raw Sample Received by:      RJ (Ext Lab)  
Raw Sample Relinquished by:      f.p. (Ext Lab)

Date/Time      04/02/25      15:00  
Raw Sample Received by:      RJ (Ext Lab)  
Raw Sample Relinquished by:      RJ (Ext Lab)

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1697

**Test :** SVOC-SIMGroup1

**Prepbatch ID :** PB167430,

**Sequence ID/Qc Batch ID:** BN040325,

**Standard ID :**

EP2559,EP2565,EP2597,SP6682,SP6683,SP6684,SP6730,SP6731,SP6732,SP6733,SP6734,SP6735,SP6736,SP6738,SP6739,SP6740,SP6755,SP6757,

**Chemical ID :**

1ul/100ul

sample,E3551,E3657,E3828,E3873,E3874,E3902,E3904,M5173,S10104,S11074,S11495,S11650,S11785,S11831,S11832,S12114,S12142,S12189,S12195,S12208,S12216,S12270,S12328,S12469,S12478,S12517,S12525,S12577,S12651,S12791,S12966,W3112,



| <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="#">EP2559</a> | 11/14/2024       | 05/14/2025             | Rajesh Parikh      | Extraction_SC<br>ALE_2<br>(EX-SC-2) | None             | RUPESHKUMAR<br>SHAH<br>11/14/2024 |
| <u>FROM</u>      | 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="#">EP2565</a> | 11/20/2024       | 05/20/2025             | Rajesh Parikh      | None           | None             | RUPESHKUMAR<br>SHAH<br>11/20/2024 |
| <b><u>FROM</u></b> 1000.00000ml of M5173 + 1000.00000ml of W3112 = Final Quantity: 2000.000 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>           |
|----------------------------------------------------------------------------|----------------------|------------------------|------------------|------------------------|--------------------|-------------------------------------|------------------|--------------------------------|
| 3923                                                                       | Baked Sodium Sulfate | <a href="#">EP2597</a> | 03/28/2025       | 07/01/2025             | Rajesh Parikh      | Extraction_SC<br>ALE_2<br>(EX-SC-2) | None             | Evelyn Huang<br><br>03/28/2025 |
| <b><u>FROM</u></b> 4000.00000gram of E3551 = Final Quantity: 4000.000 gram |                      |                        |                  |                        |                    |                                     |                  |                                |

| <u>Recipe ID</u>                                                                       | <u>NAME</u>               | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|----------------------------------------------------------------------------------------|---------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3493                                                                                   | Internal Standard 0.4 PPM | <a href="#">SP6682</a> | 11/15/2024       | 05/09/2025             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
| <b><u>FROM</u></b> 0.10000ml of S12328 + 4.90000ml of E3828 = Final Quantity: 5.000 ml |                           |                        |                  |                        |                    |                |                  |                      |



| <u>Recipe ID</u>                                                                                                                                                                                                              | <u>NAME</u>                                       | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3355                                                                                                                                                                                                                          | 8270-SIM MDL-3.2PPM<br>CALIBRATION STOCK SOL- 2ND | <a href="#">SP6683</a> | 11/15/2024       | 04/10/2025             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
| <b>SOURCE</b><br>0.00630ml of S12189 + 0.01280ml of S12208 + 0.03200ml of S11074 + 0.03200ml of S11831 + 0.06400ml of S12142 +<br>0.06400ml of S12469 + 0.06400ml of S12517 + 19.72490ml of E3828 = Final Quantity: 20.000 ml |                                                   |                        |                  |                        |                    |                |                  |                      |
| <b>FROM</b><br>0.00630ml of S12189 + 0.01280ml of S12208 + 0.03200ml of S11074 + 0.03200ml of S11831 + 0.06400ml of S12142 +<br>0.06400ml of S12469 + 0.06400ml of S12517 + 19.72490ml of E3828 = Final Quantity: 20.000 ml   |                                                   |                        |                  |                        |                    |                |                  |                      |

| <u>Recipe ID</u>                                                                                    | <u>NAME</u>                                    | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3356                                                                                                | 8270-SIM MDL-0.4PPM<br>CALIBRATION SOL ICV-2ND | <a href="#">SP6684</a> | 11/15/2024       | 04/10/2025             | Jagrut Upadhyay    | None           | None             | Yogesh Patel         |
| SOURCE<br>0.87500ml of E3828 + 0.01000ml of SP6682 + 0.12500ml of SP6683 = Final Quantity: 1.010 ml |                                                |                        |                  |                        |                    |                |                  |                      |

[illegible]

| <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<br>CALIBRATION SOLUTION | <a href="#">SP6731</a> | 02/04/2025       | 05/09/2025             | Jagrut<br>Upadhyay | None           | None             | Shreena Patel<br><br>02/07/2025 |
| <b><u>FROM</u></b> 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6730 = 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="#">SP6732</a> | 02/04/2025       | 05/09/2025             | Jagrut Upadhyay    | None           | None             | Shreena Patel        |
|                  |                                          |                        |                  |                        |                    |                |                  | 02/07/2025           |

**FROM** 0.68000ml of E3874 + 0.01000ml of SP6682 + 0.32000ml of SP6730 = 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="#">SP6733</a> | 02/04/2025       | 05/09/2025             | Jagrut Upadhyay    | None           | None             | Shreena Patel        |
|                  |                                          |                        |                  |                        |                    |                |                  | 02/07/2025           |

**FROM** 0.84000ml of E3874 + 0.01000ml of SP6682 + 0.16000ml of SP6730 = 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="#">SP6734</a> | 02/04/2025       | 05/09/2025             | Jagrut Upadhyay    | None           | None             | Shreena Patel        |
|                  |                                          |                        |                  |                        |                    |                |                  | 02/07/2025           |

**FROM** 0.92000ml of E3874 + 0.01000ml of SP6682 + 0.08000ml of SP6730 = 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="#">SP6735</a> | 02/04/2025       | 05/09/2025             | Jagrut Upadhyay    | None           | None             | Shreena Patel        |
|                  |                                          |                        |                  |                        |                    |                |                  | 02/07/2025           |

**FROM** 0.96000ml of E3874 + 0.01000ml of SP6682 + 0.04000ml of SP6730 = 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="#">SP6736</a> | 02/04/2025       | 05/09/2025             | Jagrut Upadhyay    | None           | None             | Shreena Patel        |
|                  |                                          |                        |                  |                        |                    |                |                  | 02/07/2025           |

**FROM** 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6735 = 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="#">SP6738</a> | 02/04/2025       | 05/09/2025             | Jagrut Upadhyay    | None           | None             | Shreena Patel        |
|                  |                                          |                        |                  |                        |                    |                |                  | 02/07/2025           |

**FROM** 0.75000ml of E3874 + 0.01000ml of SP6682 + 0.25000ml of SP6735 = Final Quantity: 1.010 ml



| <u>Recipe ID</u>   | <u>NAME</u>                                                                                                                                                   | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>        |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|-----------------------------|
| 3492               | 8270-SIM-Spike 0.4 PPM                                                                                                                                        | <a href="#">SP6739</a> | 02/05/2025       | 07/29/2025             | Jagrut Upadhyay    | None           | None             | Shreena Patel<br>02/07/2025 |
| <b><u>FROM</u></b> | 0.00080ml of S11650 + 0.01000ml of S11785 + 0.02000ml of S12478 + 0.02000ml of S12525 + 0.02000ml of S12966 + 49.92920ml of E3873 = Final Quantity: 50.000 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>       |
|----------------------------------------------------------------------------------------|---------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3493                                                                                   | Internal Standard 0.4 PPM | <a href="#">SP6740</a> | 02/13/2025       | 07/30/2025             | Rahul Chavli       | None           | None             | Yogesh Patel<br>02/28/2025 |
| <b><u>FROM</u></b> 0.10000ml of S12651 + 4.90000ml of E3874 = Final Quantity: 5.000 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> |
|------------------|----------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3491             | 8270-SIM-Surrogate 0.4 PPM | <a href="#">SP6755</a> | 03/20/2025       | 07/24/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |
|                  |                            |                        |                  |                        |                    |                |                  | 04/01/2025           |

**FROM** 0.00400ml of S12195 + 0.00800ml of S12216 + 0.02000ml of S11832 + 99.96800ml of E3902 = Final Quantity: 100.000 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> |
|------------------|----------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3895             | 50 ug/ml DFTPP 8270E | <a href="#">SP6757</a> | 03/31/2025       | 09/30/2025             | Rahul Chavli       | None           | None             | Jagrut Upadhyay      |
|                  |                      |                        |                  |                        |                    |                |                  | 04/01/2025           |

**FROM** 1.00000ml of S12577 + 19.00000ml of E3904 = Final Quantity: 20.000 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. | PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1 | 313201 | 07/01/2025      | 01/03/2024 / Rajesh     | 07/20/2023 / Rajesh         | E3551          |

| Supplier                    | ItemCode / ItemName                                  | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-----------------------------|------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| 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 # |
|------------------|-------------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24G0862003 | 05/09/2025      | 11/09/2024 / Rajesh     | 11/04/2024 / Rajesh         | E3828          |

| 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) | 24H2762008 | 07/29/2025      | 01/29/2025 / Rajesh     | 01/29/2025 / Rajesh         | E3873          |

| 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) | 25A0262002 | 07/30/2025      | 01/30/2025 / Rajesh     | 01/20/2025 / Rajesh         | E3874          |

| 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) | 24H2762008 | 09/18/2025      | 03/18/2025 / RUPESH     | 02/12/2025 / RUPESH         | E3902          |

## 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) | 24K1762005 | 01/07/2026      | 03/13/2025 /            | 12/27/2024 / RUPESH         | E3904          |

| 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) | 0000281827 | 06/02/2025      | 06/01/2022 /            | 04/05/2022 / william        | M5173          |

| 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 | 07/30/2025      | 01/30/2025 / anahy      | 12/09/2021 / Christian      | S10104         |

| 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 | 05/15/2025      | 11/15/2024 / Jagrut     | 02/06/2023 / Christian      | S11074         |

| 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 | 05/12/2025      | 11/12/2024 / Jagrut     | 08/11/2023 / Yogesh         | S11495         |

| 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 | 07/29/2025      | 01/29/2025 / anahy      | 11/09/2023 / Yogesh         | S11650         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride | A0196453 | 07/29/2025      | 01/29/2025 / anahy      | 11/21/2023 / Rahul          | S11785         |

| 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 | 04/11/2025      | 10/11/2024 / Jagrut     | 11/21/2023 / rahul          | S11831         |

| 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 | 07/24/2025      | 01/24/2025 / anahy      | 11/21/2023 / rahul          | S11832         |

| 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 | 05/12/2025      | 11/12/2024 / Jagrut     | 03/08/2024 / Rahul          | S12114         |

| Supplier | ItemCode / ItemName                                                                                                                    | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> [New Solvent 100% CH <sub>2</sub> Cl <sub>2</sub> ] | A0203726 | 04/30/2025      | 11/14/2024 / anahy      | 03/15/2024 / Rahul          | S12142         |

| 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 | 04/10/2025      | 10/10/2024 / anahy      | 03/15/2024 / Rahul          | S12189         |

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                            | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31087 / Acid Surrogate<br>10,000ug/ml, methanol, 5ml/<br>ampul | A0206206 | 09/18/2025      | 03/18/2025 /<br>anahy   | 03/15/2024 /<br>Rahul       | S12195         |

| Supplier | ItemCode / ItemName                                                                   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31086 / Base Neutral<br>Surrogate<br>5000ug/ml, CH <sub>2</sub> Cl <sub>2</sub> , 5ml | A0206381 | 05/15/2025      | 11/15/2024 /<br>Jagrut  | 03/15/2024 /<br>Rahul       | S12208         |

| Supplier | ItemCode / ItemName                                                                   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31086 / Base Neutral<br>Surrogate<br>5000ug/ml, CH <sub>2</sub> Cl <sub>2</sub> , 5ml | A0206381 | 09/18/2025      | 03/18/2025 /<br>anahy   | 03/15/2024 /<br>Rahul       | S12216         |

| Supplier          | ItemCode / ItemName                                                        | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|----------------------------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | z-110381-01 / 8270<br>Calibration Solution, 76-1,<br>500 & 1,000 mg/L, 1ml | 520963 | 07/30/2025      | 01/30/2025 /<br>anahy   | 05/24/2024 /<br>Rahul       | S12270         |

| Supplier | ItemCode / ItemName                                                                              | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31206 / SV Mix, CLP<br>method, Internal Std,<br>2000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> , 1mL | A0206540 | 05/13/2025      | 11/13/2024 /<br>anahy   | 05/30/2024 /<br>Rahul       | S12328         |

| Supplier | ItemCode / ItemName                                                                                            | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555223 / Custom 8270<br>Plus Std #1 [2nd lot at \$100<br>per ampul if requested -<br>contact ARM with Request] | A0214021 | 05/14/2025      | 11/14/2024 /<br>anahy   | 07/23/2024 /<br>RAHUL       | S12469         |

[CS 4978-1]

## CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                                                                            | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555223 / Custom 8270<br>Plus Std #1 [2nd lot at \$100<br>per ampul if requested -<br>contact ARM with Request] | A0214021 | 07/29/2025      | 01/29/2025 /<br>anahy   | 07/23/2024 /<br>RAHUL       | S12478         |

[CS 4978-1]

| Supplier | ItemCode / ItemName                                                                                           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555224 / Custom 8270<br>Plus Std #2 [2nd lot at \$85<br>per ampul if requested -<br>contact ARM with Request] | A0214017 | 05/14/2025      | 11/14/2024 /<br>anahy   | 07/23/2024 /<br>RAHUL       | S12517         |

[CS 4978-2]

| Supplier | ItemCode / ItemName                                                                                           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555224 / Custom 8270<br>Plus Std #2 [2nd lot at \$85<br>per ampul if requested -<br>contact ARM with Request] | A0214017 | 07/29/2025      | 01/29/2025 /<br>anahy   | 07/23/2024 /<br>RAHUL       | S12525         |

[CS 4978-2]

| Supplier | ItemCode / ItemName                                                                    | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|----------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31615 / SV Mixture,<br>GC/MS Tuning Mixture,<br>CH <sub>2</sub> Cl <sub>2</sub> , 1mL, | A0212955 | 06/30/2027      | 03/31/2025 /<br>Rahul   | 08/01/2024 /<br>Rahul       | S12577         |

| Supplier | ItemCode / ItemName                                                                              | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31206 / SV Mix, CLP<br>method, Internal Std,<br>2000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> , 1mL | A0212266 | 08/07/2025      | 02/07/2025 /<br>anahy   | 09/20/2024 /<br>anahy       | S12651         |

| Supplier          | ItemCode / ItemName                                                                           | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|-----------------------------------------------------------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | Z-110816-01 / Custom<br>8270 Mix, 4-79, 1000 mg/L,<br>1 mL, (Maximum Expiration:<br>180 Days) | 414127 | 06/21/2025      | 01/30/2025 /<br>anahy   | 05/24/2024 /<br>Rahul       | S12791         |



### CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                                                                                                             | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31850 / 8270 SV Mix,<br>8270 Mega Mix 1mL,<br>1000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> [New<br>Solvent 100% CH <sub>2</sub> Cl <sub>2</sub> ] | A0219438 | 07/29/2025      | 01/29/2025 /<br>anahy   | 12/11/2024 /<br>anahy       | S12966         |

| 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 /<br>lwona   | 07/03/2024 /<br>lwona       | W3112          |



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-112090            | 440246          | ≤ -10 °C        | Methylene Chloride | 2/16/2026         | CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL |
| -04                 |                 |                 |                    |                   |                                               |

| Compound                      | CAS No.    | Purity (%) | Compound Lot No. | Concentration, mg/L |
|-------------------------------|------------|------------|------------------|---------------------|
| 2-chlorophenol-d <sub>4</sub> | 93951-73-6 | 99.3       | 248.12.7P        | 7487 ± 17.2         |
| 2-fluorophenol                | 367-12-4   | 99.8       | 10.7.3.3P        | 7513 ± 17.26        |
| phenol-d <sub>6</sub>         | 13127-88-3 | 99.9       | 949.120.8P       | 7481 ± 17.19        |
| 2,4,6-tribromophenol          | 118-79-6   | 99.8       | 12.1.6P          | 7469 ± 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  
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:**

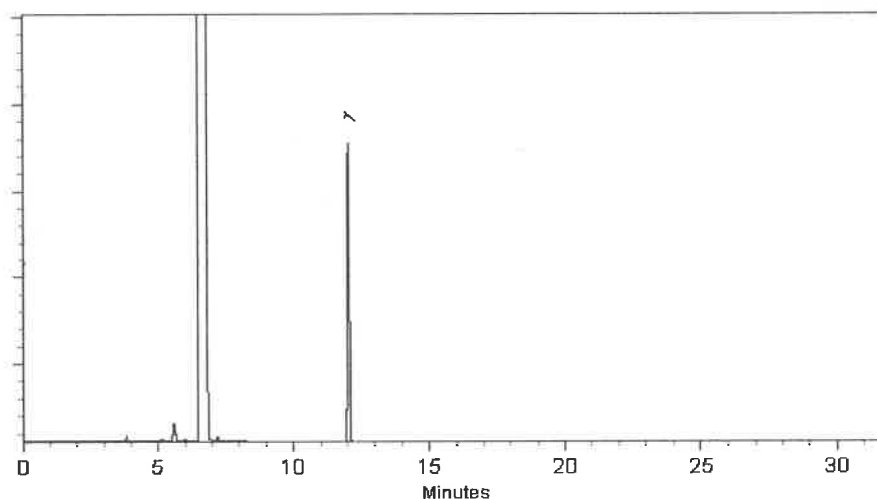
200°C

**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



**PRODUCTOS  
QUÍMICOS  
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR  
MONTERREY, N.L. MEXICO  
CP 64070  
TEL +52 81 13 52 57 57  
www.pqm.com.mx

## CERTIFICATE OF ANALYSIS

|                        |                                   |               |                                 |
|------------------------|-----------------------------------|---------------|---------------------------------|
| PRODUCT :              | SODIUM SULFATE CRYSTALS ANHYDROUS |               |                                 |
| QUALITY :              | ACS (CODE RMB3375)                | FORMULA :     | Na <sub>2</sub> SO <sub>4</sub> |
| SPECIFICATION NUMBER : | 6399                              | RELEASE DATE: | ABR/21/2023                     |
| LOT NUMBER :           | 313201                            |               |                                 |

| TEST                                     | SPECIFICATIONS | LOT VALUES  |
|------------------------------------------|----------------|-------------|
| Assay (Na <sub>2</sub> SO <sub>4</sub> ) | Min. 99.0%     | 99.7 %      |
| pH of a 5% solution at 25°C              | 5.2 - 9.2      | 6.1         |
| Insoluble matter                         | Max. 0.01%     | 0.005 %     |
| Loss on ignition                         | Max. 0.5%      | 0.1 %       |
| Chloride (Cl)                            | Max. 0.001%    | <0.001 %    |
| Nitrogen compounds (as N)                | Max. 5 ppm     | <5 ppm      |
| Phosphate (PO <sub>4</sub> )             | Max. 0.001%    | <0.001 %    |
| Heavy metals (as Pb)                     | Max. 5 ppm     | <5 ppm      |
| Iron (Fe)                                | Max. 0.001%    | <0.001 %    |
| Calcium (Ca)                             | Max. 0.01%     | 0.002 %     |
| Magnesium (Mg)                           | Max. 0.005%    | 0.001 %     |
| Potassium (K)                            | Max. 0.008%    | 0.003 %     |
| Extraction-concentration suitability     | Passes test    | Passes test |
| Appearance                               | Passes test    | Passes test |
| Identification                           | Passes test    | Passes test |
| Solubility and foreign matter            | Passes test    | Passes test |
| Retained on US Standard No. 10 sieve     | Max. 1%        | 0.1 %       |
| Retained on US Standard No. 60 sieve     | Min. 94%       | 97.3 %      |
| Through US Standard No. 60 sieve         | Max. 5%        | 2.5 %       |
| Through US Standard No. 100 sieve        | Max. 10%       | 0.1 %       |

### COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3



# 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.

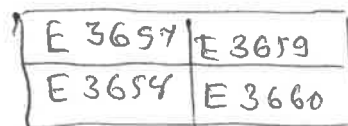
This document has been electronically produced and is valid without a signature.

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.



Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)

avantor™



Material No.: 9266-A4

Batch No.: 24J0862003

Manufactured Date: 2024-09-12

Expiration Date: 2025-12-12

Revision No.: 0

## Certificate of Analysis

| Test                                                                                       | Specification  | Result     |
|--------------------------------------------------------------------------------------------|----------------|------------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                       | $\leq 5$       | 2          |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)                        | $\leq 10$      | 1          |
| Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water) | $\geq 99.8\%$  | 100.0 %    |
| Color (APHA)                                                                               | $\leq 10$      | 5          |
| Residue after Evaporation                                                                  | $\leq 1.0$ ppm | 0.2 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

E 3828

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

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

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 %     | 100.0 %     |
| Color (APHA)                                                            | <= 10         | 5           |
| Residue after Evaporation                                               | <= 1.0 ppm    | 0.0 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 %      | <0.1 %      |
| 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

Recd. by RP on 1/29/25

E 3873

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.: 25A0262002  
Manufactured Date: 2024-11-21  
Expiration Date: 2026-02-20  
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)                        | $\leq 10$      | 4          |
| Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water) | $\geq 99.8\%$  | 99.9%      |
| Color (APHA)                                                                               | $\leq 10$      | 10         |
| Residue after Evaporation                                                                  | $\leq 1.0$ ppm | 0.8 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

E 3874

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

 avantor

Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

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 %     | 100.0 %     |
| Color (APHA)                                                            | <= 10         | 5           |
| Residue after Evaporation                                               | <= 1.0 ppm    | 0.0 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 %      | <0.1 %      |
| 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 &amp; DC

E3902

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087 U.S.A. Phone 610.386.1700

Hydrochloric Acid, 36.5–38.0%  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis



Material No.: 9530-33  
Batch No.: 0000281827  
Manufactured Date: 2021/03/30  
Retest Date: 2026/03/29  
Revision No: 1

## Certificate of Analysis

| Test                                      | Specification | Result  |
|-------------------------------------------|---------------|---------|
| ACS – Assay (as HCl) (by acid–base titrn) | 36.5 – 38.0 % | 37.6    |
| ACS – Color (APHA)                        | <= 10         | 5       |
| ACS – Residue after Ignition              | <= 3 ppm      | 1       |
| ACS – Specific Gravity at 60°/60°F        | 1.185 – 1.192 | 1.189   |
| ACS – Bromide (Br)                        | <= 0.005 %    | < 0.005 |
| ACS – Extractable Organic Substances      | <= 5 ppm      | < 1     |
| ACS – Free Chlorine (as Cl <sub>2</sub> ) | <= 0.5 ppm    | < 0.5   |
| Phosphate (PO <sub>4</sub> )              | <= 0.05 ppm   | < 0.03  |
| Sulfate (SO <sub>4</sub> )                | <= 0.5 ppm    | < 0.3   |
| Sulfite (SO <sub>3</sub> )                | <= 0.8 ppm    | 0.3     |
| Ammonium (NH <sub>4</sub> )               | <= 3 ppm      | < 1     |
| Trace Impurities – Arsenic (As)           | <= 0.010 ppm  | < 0.003 |
| Trace Impurities – Aluminum (Al)          | <= 10.0 ppb   | 0.5     |
| Arsenic and Antimony (as As)              | <= 5 ppb      | < 3     |
| Trace Impurities – Barium (Ba)            | <= 1.0 ppb    | < 0.2   |
| Trace Impurities – Beryllium (Be)         | <= 1.0 ppb    | < 0.2   |
| Trace Impurities – Bismuth (Bi)           | <= 10.0 ppb   | < 1.0   |
| Trace Impurities – Boron (B)              | <= 20.0 ppb   | < 5.0   |
| Trace Impurities – Cadmium (Cd)           | <= 1.0 ppb    | < 0.3   |
| Trace Impurities – Calcium (Ca)           | <= 50.0 ppb   | 15.0    |
| Trace Impurities – Chromium (Cr)          | <= 1.0 ppb    | < 0.4   |
| Trace Impurities – Cobalt (Co)            | <= 1.0 ppb    | < 0.3   |
| Trace Impurities – Copper (Cu)            | <= 1.0 ppb    | < 0.1   |
| Trace Impurities – Gallium (Ga)           | <= 1.0 ppb    | < 0.2   |

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700  
Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

| Test                                                   | Specification | Result |
|--------------------------------------------------------|---------------|--------|
| Trace Impurities – Germanium (Ge)                      | <= 3.0 ppb    | < 2.0  |
| Trace Impurities – Gold (Au)                           | <= 4.0 ppb    | 3.0    |
| Heavy Metals (as Pb)                                   | <= 100 ppb    | < 50   |
| Trace Impurities – Iron (Fe)                           | <= 15.0 ppb   | 1.0    |
| Trace Impurities – Lead (Pb)                           | <= 1.0 ppb    | < 0.5  |
| Trace Impurities – Lithium (Li)                        | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Magnesium (Mg)                      | <= 10.0 ppb   | < 0.4  |
| Trace Impurities – Manganese (Mn)                      | <= 1.0 ppb    | < 0.4  |
| Trace Impurities – Mercury (Hg)                        | <= 0.5 ppb    | 0.2    |
| Trace Impurities – Molybdenum (Mo)                     | <= 10.0 ppb   | < 5.0  |
| Trace Impurities – Nickel (Ni)                         | <= 4.0 ppb    | < 0.3  |
| Trace Impurities – Niobium (Nb)                        | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Potassium (K)                       | <= 9.0 ppb    | < 2.0  |
| Trace Impurities – Selenium (Se), For Information Only | ppb           | 1.0    |
| Trace Impurities – Silicon (Si)                        | <= 100.0 ppb  | 18.0   |
| Trace Impurities – Silver (Ag)                         | <= 1.0 ppb    | < 0.3  |
| Trace Impurities – Sodium (Na)                         | <= 100.0 ppb  | < 5.0  |
| Trace Impurities – Strontium (Sr)                      | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Tantalum (Ta)                       | <= 1.0 ppb    | < 0.9  |
| Trace Impurities – Thallium (Tl)                       | <= 5.0 ppb    | < 2.0  |
| Trace Impurities – Tin (Sn)                            | <= 5.0 ppb    | < 0.8  |
| Trace Impurities – Titanium (Ti)                       | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Vanadium (V)                        | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Zinc (Zn)                           | <= 5.0 ppb    | 0.4    |
| Trace Impurities – Zirconium (Zr)                      | <= 1.0 ppb    | < 0.1  |

For Laboratory, Research or Manufacturing Use

Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC

  
Jamie Ethier  
Vice President Global Quality



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

Page 1 of 1

| Catalog No.: Lot No.:              | Storage: | Solvent:           | Exp. Date: | Rev              | Description:                                          |
|------------------------------------|----------|--------------------|------------|------------------|-------------------------------------------------------|
| Z-110094-02 506889                 | ≤ -10 °C | Methylene Chloride | 7/25/2028  | 0                | 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.  
↓ 08/11/2023  
511498

\*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.





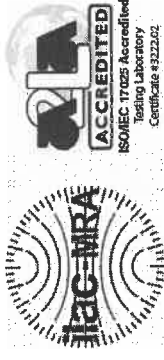
110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No.:** 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 } Y.P.  
↓ 11/13/23  
511658 }

### 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.





110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

**Catalog No. :** 31853 **Lot No.:** A0196453  
**Description :** 1,4-dioxane  
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2028 **Storage:** 0°C or colder  
**Ship:** Ambient

S11749  
↓  
S11794 } RC / 11/30/23

### CERTIFIED VALUES

| Elution Order | Compound    | CAS #    | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------|----------|----------|--------|-----------------------------|----------------------------------------|
| 1             | 1,4-Dioxane | 123-91-1 | SHBN3770 | 99%    | 2,013.0 µg/mL               | +/- 25.0521                            |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

## Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant flow 1.8 mL/min.

**Temp. Program:**

80°C (hold 0.1 min.) to 330°C  
@ 9.6°C/min. (hold 2.86 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

340°C

**Det. Type:**

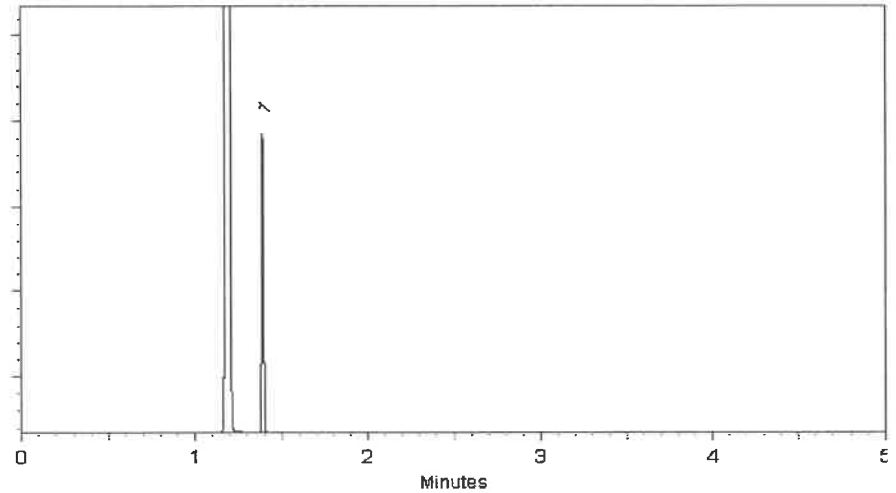
FID

**Split Vent:**

100 ml/min.

**Inj. Vol**

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Sam Moodler*  
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023

Balance Serial # B707717271

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.





110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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:**

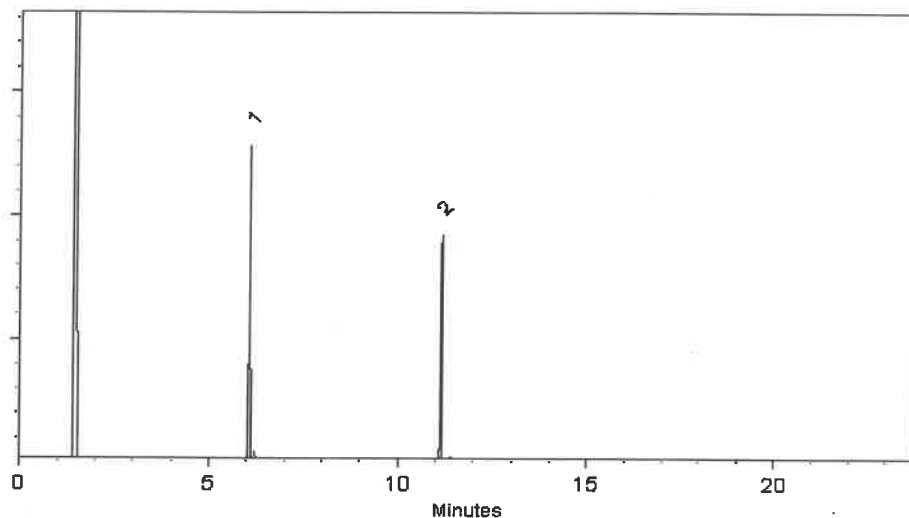
FID

**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.



110 Benner Circle  
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Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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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:**

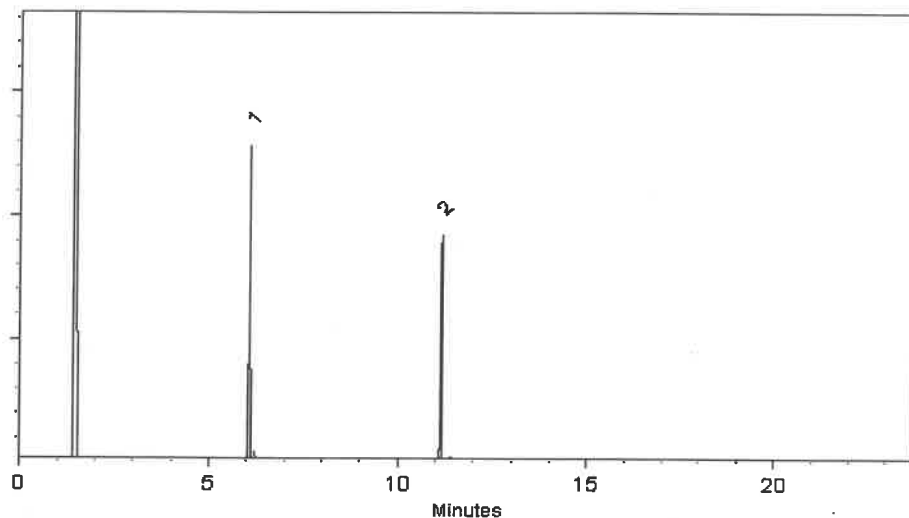
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

1µl

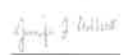


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
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.



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

| 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*

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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Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850 **Lot No.:** A0203726

**Description :** 8270 MegaMix®  
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025 **Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

512117 } RC/  
↓ 03/18/24  
512146 }

### CERTIFIED VALUES

| Elution Order | Compound                     | CAS #    | Lot #       | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|------------------------------|----------|-------------|--------|-----------------------------|----------------------------------------|
| 1             | Pyridine                     | 110-86-1 | SHBP6240    | 99%    | 1,001.6 µg/mL               | +/- 36.4412                            |
| 2             | N-Nitrosodimethylamine       | 62-75-9  | 230209JLM   | 99%    | 1,005.9 µg/mL               | +/- 36.5968                            |
| 3             | Phenol                       | 108-95-2 | MKCK1120    | 99%    | 1,003.3 µg/mL               | +/- 36.5038                            |
| 4             | Aniline                      | 62-53-3  | X22F726     | 99%    | 1,005.8 µg/mL               | +/- 36.5928                            |
| 5             | Bis(2-chloroethyl)ether      | 111-44-4 | SHBL6942    | 99%    | 1,008.1 µg/mL               | +/- 36.6776                            |
| 6             | 2-Chlorophenol               | 95-57-8  | STBJ3909    | 99%    | 1,001.8 µg/mL               | +/- 36.4492                            |
| 7             | 1,3-Dichlorobenzene          | 541-73-1 | BCCD5315    | 99%    | 1,002.3 µg/mL               | +/- 36.4654                            |
| 8             | 1,4-Dichlorobenzene          | 106-46-7 | MKBS7929V   | 99%    | 1,003.7 µg/mL               | +/- 36.5159                            |
| 9             | Benzyl alcohol               | 100-51-6 | SHBK5469    | 99%    | 1,008.7 µg/mL               | +/- 36.6979                            |
| 10            | 1,2-Dichlorobenzene          | 95-50-1  | SHBN3835    | 99%    | 1,000.3 µg/mL               | +/- 36.3926                            |
| 11            | 2-Methylphenol (o-cresol)    | 95-48-7  | SHBN7598    | 99%    | 1,003.5 µg/mL               | +/- 36.5099                            |
| 12            | 2,2'-oxybis(1-chloropropane) | 108-60-1 | 29-MAR-45-5 | 99%    | 1,007.3 µg/mL               | +/- 36.6493                            |
| 13            | 3-Methylphenol (m-cresol)    | 108-39-4 | STBJ0710    | 99%    | 504.3 µg/mL                 | +/- 18.3500                            |
| 14            | 4-Methylphenol (p-cresol)    | 106-44-5 | SHBN3411    | 99%    | 503.6 µg/mL                 | +/- 18.3237                            |
| 15            | N-Nitroso-di-n-propylamine   | 621-64-7 | N63MG       | 99%    | 1,008.3 µg/mL               | +/- 36.6857                            |
| 16            | Hexachloroethane             | 67-72-1  | QTORH       | 99%    | 1,007.5 µg/mL               | +/- 36.6554                            |
| 17            | Nitrobenzene                 | 98-95-3  | 10224044    | 99%    | 1,008.6 µg/mL               | +/- 36.6938                            |

|    |                                               |           |             |     |         |       |             |
|----|-----------------------------------------------|-----------|-------------|-----|---------|-------|-------------|
| 18 | Isophorone                                    | 78-59-1   | MKCC9506    | 99% | 1,005.9 | µg/mL | +/- 36.5988 |
| 19 | 2-Nitrophenol                                 | 88-75-5   | RP230710    | 99% | 1,003.2 | µg/mL | +/- 36.4998 |
| 20 | 2,4-Dimethylphenol                            | 105-67-9  | XW5GK       | 99% | 1,003.8 | µg/mL | +/- 36.5200 |
| 21 | Bis(2-chloroethoxy)methane                    | 111-91-1  | 13670200    | 99% | 1,002.1 | µg/mL | +/- 36.4573 |
| 22 | 2,4-Dichlorophenol                            | 120-83-2  | BCBZ6787    | 99% | 1,003.7 | µg/mL | +/- 36.5180 |
| 23 | 1,2,4-Trichlorobenzene                        | 120-82-1  | SHBP5900    | 99% | 1,007.6 | µg/mL | +/- 36.6574 |
| 24 | Naphthalene                                   | 91-20-3   | STBL1057    | 99% | 1,008.3 | µg/mL | +/- 36.6837 |
| 25 | 4-Chloroaniline                               | 106-47-8  | BCCJ3217    | 99% | 1,001.3 | µg/mL | +/- 36.4290 |
| 26 | Hexachlorobutadiene                           | 87-68-3   | RP230823RSR | 98% | 1,008.3 | µg/mL | +/- 36.6829 |
| 27 | 4-Chloro-3-methylphenol                       | 59-50-7   | BCCD4461    | 99% | 1,003.1 | µg/mL | +/- 36.4937 |
| 28 | 2-Methylnaphthalene                           | 91-57-6   | STBK0259    | 96% | 1,001.9 | µg/mL | +/- 36.4505 |
| 29 | 1-Methylnaphthalene                           | 90-12-0   | 5234.00-8   | 98% | 1,000.0 | µg/mL | +/- 36.3838 |
| 30 | Hexachlorocyclopentadiene                     | 77-47-4   | 099063I14L  | 98% | 1,008.5 | µg/mL | +/- 36.6909 |
| 31 | 2,4,6-Trichlorophenol                         | 88-06-2   | STBJ5914    | 99% | 1,004.4 | µg/mL | +/- 36.5442 |
| 32 | 2,4,5-Trichlorophenol                         | 95-95-4   | FHN01       | 98% | 1,001.9 | µg/mL | +/- 36.4512 |
| 33 | 2-Chloronaphthalene                           | 91-58-7   | RPN7O       | 99% | 1,001.1 | µg/mL | +/- 36.4230 |
| 34 | 2-Nitroaniline                                | 88-74-4   | RP230531    | 99% | 1,002.9 | µg/mL | +/- 36.4876 |
| 35 | 1,4-Dinitrobenzene                            | 100-25-4  | RP230816    | 99% | 1,005.7 | µg/mL | +/- 36.5887 |
| 36 | Acenaphthylene                                | 208-96-8  | p06V        | 98% | 1,009.5 | µg/mL | +/- 36.7265 |
| 37 | 1,3-Dinitrobenzene                            | 99-65-0   | 1-DXX-24-1  | 99% | 1,004.4 | µg/mL | +/- 36.5422 |
| 38 | Dimethylphthalate                             | 131-11-3  | 358221L17K  | 99% | 1,005.9 | µg/mL | +/- 36.5968 |
| 39 | 2,6-Dinitrotoluene                            | 606-20-2  | BCCG1833    | 99% | 1,003.2 | µg/mL | +/- 36.4998 |
| 40 | 1,2-Dinitrobenzene                            | 528-29-0  | RP230428    | 99% | 1,002.2 | µg/mL | +/- 36.4634 |
| 41 | Acenaphthene                                  | 83-32-9   | MKCR7169    | 99% | 1,009.3 | µg/mL | +/- 36.7221 |
| 42 | 3-Nitroaniline                                | 99-09-2   | RP230822RSR | 99% | 1,003.9 | µg/mL | +/- 36.5240 |
| 43 | 2,4-Dinitrophenol                             | 51-28-5   | DR230417RSR | 99% | 1,002.0 | µg/mL | +/- 36.4553 |
| 44 | Dibenzofuran                                  | 132-64-9  | MKCD9952    | 99% | 1,006.7 | µg/mL | +/- 36.6251 |
| 45 | 2,4-Dinitrotoluene                            | 121-14-2  | MKAA0690V   | 99% | 1,003.8 | µg/mL | +/- 36.5220 |
| 46 | 4-Nitrophenol                                 | 100-02-7  | RP230627    | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 47 | 2,3,4,6-Tetrachlorophenol                     | 58-90-2   | PR-30126    | 99% | 1,008.7 | µg/mL | +/- 36.6979 |
| 48 | 2,3,5,6-Tetrachlorophenol                     | 935-95-5  | RP230919    | 99% | 1,006.3 | µg/mL | +/- 36.6130 |
| 49 | Fluorene                                      | 86-73-7   | 10241100    | 99% | 1,008.3 | µg/mL | +/- 36.6857 |
| 50 | 4-Chlorophenyl phenyl ether                   | 7005-72-3 | MKCT7248    | 99% | 1,003.8 | µg/mL | +/- 36.5220 |
| 51 | Diethylphthalate                              | 84-66-2   | MKCD2547    | 99% | 1,008.6 | µg/mL | +/- 36.6958 |
| 52 | 4-Nitroaniline                                | 100-01-6  | RP230111    | 99% | 1,001.1 | µg/mL | +/- 36.4230 |
| 53 | 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) | 534-52-1  | 230718JLM   | 99% | 1,002.0 | µg/mL | +/- 36.4553 |

|    |                            |          |               |     |         |       |             |
|----|----------------------------|----------|---------------|-----|---------|-------|-------------|
| 54 | Diphenylamine              | 122-39-4 | MKCH1042      | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 55 | Azobenzene                 | 103-33-3 | BCKK0887      | 99% | 1,005.8 | µg/mL | +/- 36.5928 |
| 56 | 4-Bromophenyl phenyl ether | 101-55-3 | STBH6361      | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 57 | Hexachlorobenzene          | 118-74-1 | 14821700      | 99% | 1,007.5 | µg/mL | +/- 36.6554 |
| 58 | Pentachlorophenol          | 87-86-5  | RP230530RSR   | 99% | 1,008.8 | µg/mL | +/- 36.7019 |
| 59 | Phenanthrene               | 85-01-8  | MKCQ8876      | 99% | 1,008.4 | µg/mL | +/- 36.6877 |
| 60 | Anthracene                 | 120-12-7 | MKCR0570      | 99% | 1,009.0 | µg/mL | +/- 36.7100 |
| 61 | Carbazole                  | 86-74-8  | 14351100      | 99% | 1,000.9 | µg/mL | +/- 36.4149 |
| 62 | Di-n-butylphthalate        | 84-74-2  | MKCN4337      | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 63 | Fluoranthene               | 206-44-0 | MKCQ4728      | 99% | 1,009.6 | µg/mL | +/- 36.7302 |
| 64 | Pyrene                     | 129-00-0 | BCCG8479      | 98% | 1,007.2 | µg/mL | +/- 36.6453 |
| 65 | Benzyl butyl phthalate     | 85-68-7  | X12I018       | 99% | 1,002.1 | µg/mL | +/- 36.4573 |
| 66 | Bis(2-ethylhexyl)adipate   | 103-23-1 | MKCM1988      | 99% | 1,005.2 | µg/mL | +/- 36.5705 |
| 67 | Benz(a)anthracene          | 56-55-3  | I220012022BAA | 99% | 1,002.2 | µg/mL | +/- 36.4614 |
| 68 | Chrysene                   | 218-01-9 | RP230601      | 99% | 1,008.3 | µg/mL | +/- 36.6837 |
| 69 | Bis(2-ethylhexyl)phthalate | 117-81-7 | MKCQ3468      | 99% | 1,001.8 | µg/mL | +/- 36.4472 |
| 70 | Di-n-octyl phthalate       | 117-84-0 | 14382700      | 99% | 1,006.0 | µg/mL | +/- 36.6008 |
| 71 | Benzo(b)fluoranthene       | 205-99-2 | 012013B       | 99% | 1,002.8 | µg/mL | +/- 36.4836 |
| 72 | Benzo(k)fluoranthene       | 207-08-9 | 012022K       | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 73 | Benzo(a)pyrene             | 50-32-8  | P54915-0703   | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 74 | Indeno(1,2,3-cd)pyrene     | 193-39-5 | 12-JKL-118-9  | 97% | 1,009.4 | µg/mL | +/- 36.7243 |
| 75 | Dibenz(a,h)anthracene      | 53-70-3  | 2-ASA-59-1    | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 76 | Benzo(g,h,i)perylene       | 191-24-2 | RP231003RSR   | 99% | 1,002.9 | µg/mL | +/- 36.4876 |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%





110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

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/  
↓ } 03/18/24  
512206 }

### 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:**

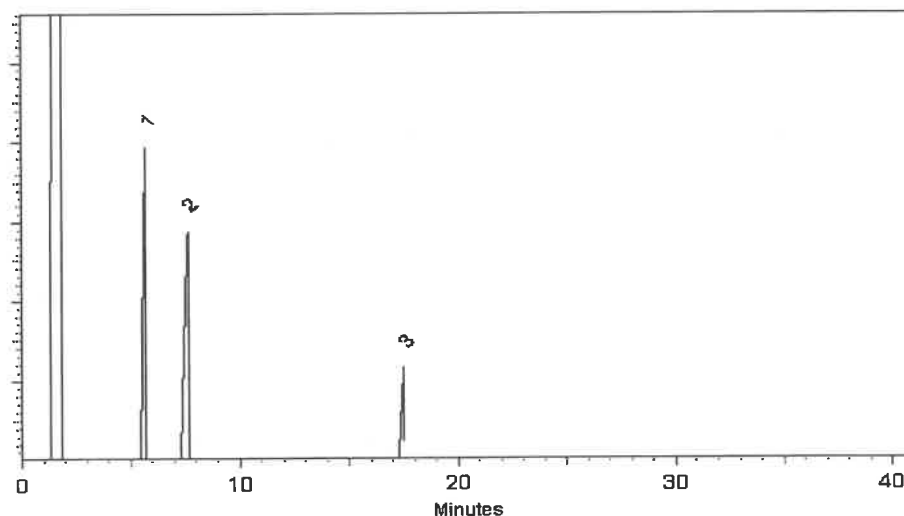
FID

**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 S. Riglin*

Penelope Riglin - Operations Tech I

Date Mixed: 04-Jan-2024

Balance Serial # 1128360905

*Christie Mills*

Christie Mills - Operations Lead Tech - ARM QC

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. :** 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/  
↓ } 03/18/24  
512206 }

### 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:**

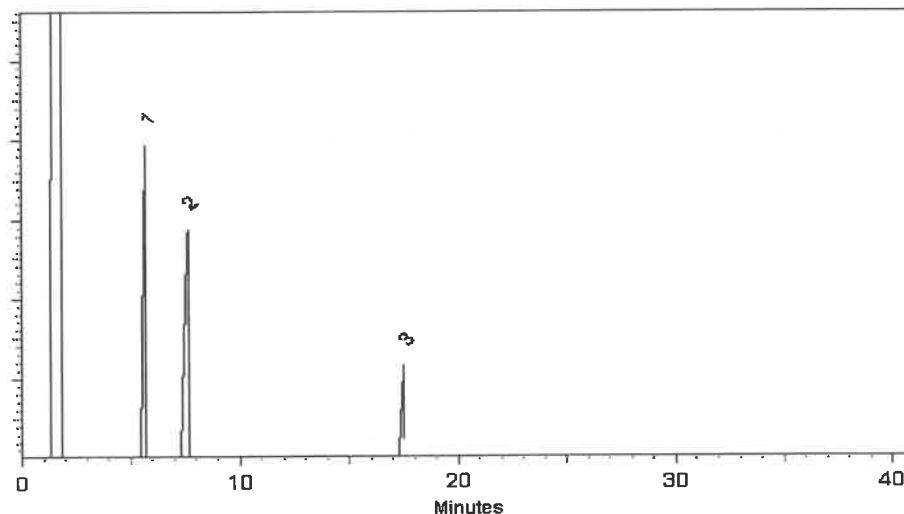
FID

**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 S. Riglin*

Penelope Riglin - Operations Tech I

Date Mixed: 04-Jan-2024

Balance Serial # 1128360905

*Christie Mills*

Christie Mills - Operations Lead Tech - ARM QC

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:**

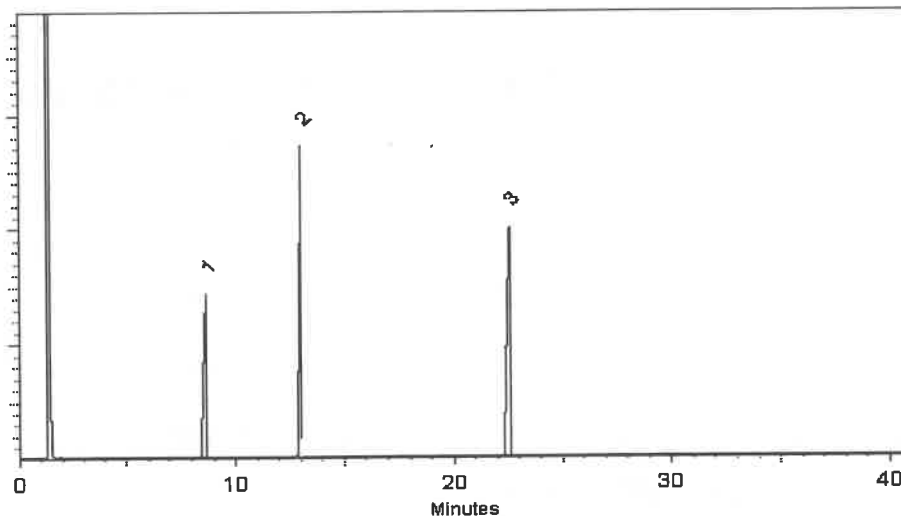
FID

**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



110 Benner Circle  
Bellefonte, PA 16823-8812  
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Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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:**

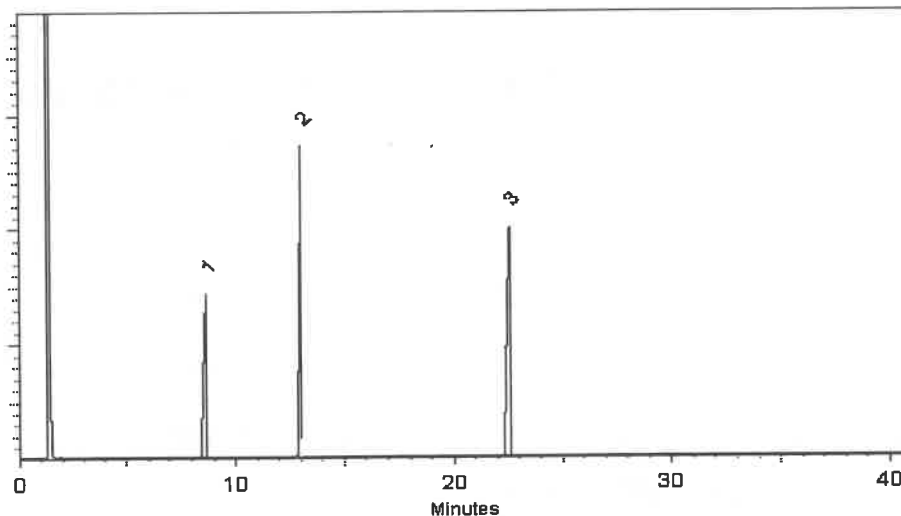
FID

**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



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Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 4

|                     |                 |                 |                    |                   |                                                                |
|---------------------|-----------------|-----------------|--------------------|-------------------|----------------------------------------------------------------|
| <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

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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

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# Certificate of Analysis

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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

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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

| <u>Compound</u>        | <u>CAS No.</u> | <u>Purity (%)</u> | <u>Compound Lot No.</u> | <u>Concentration, mg/L</u> |
|------------------------|----------------|-------------------|-------------------------|----------------------------|
| 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

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Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



110 Benner Circle  
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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



## FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31206 **Lot No.:** A0206540

**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 :** December 31, 2029 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

S12312 } RC/  
↓ 05/30/24  
S12331

## 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%    | 2,007.1 µg/mL               | +/- 90.4025                            |
| 2             | Naphthalene-d8         | 1146-65-2  | M-2180   | 99%    | 2,005.9 µg/mL               | +/- 90.3454                            |
| 3             | Acenaphthene-d10       | 15067-26-2 | PR-33507 | 99%    | 2,007.9 µg/mL               | +/- 90.4385                            |
| 4             | Phenanthrene-d10       | 1517-22-2  | PR-32303 | 99%    | 2,006.7 µg/mL               | +/- 90.3845                            |
| 5             | Chrysene-d12           | 1719-03-5  | PR-32210 | 99%    | 2,015.5 µg/mL               | +/- 90.7778                            |
| 6             | Perylene-d12           | 1520-96-3  | PR-33205 | 99%    | 2,014.7 µg/mL               | +/- 90.7448                            |

\* 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:**

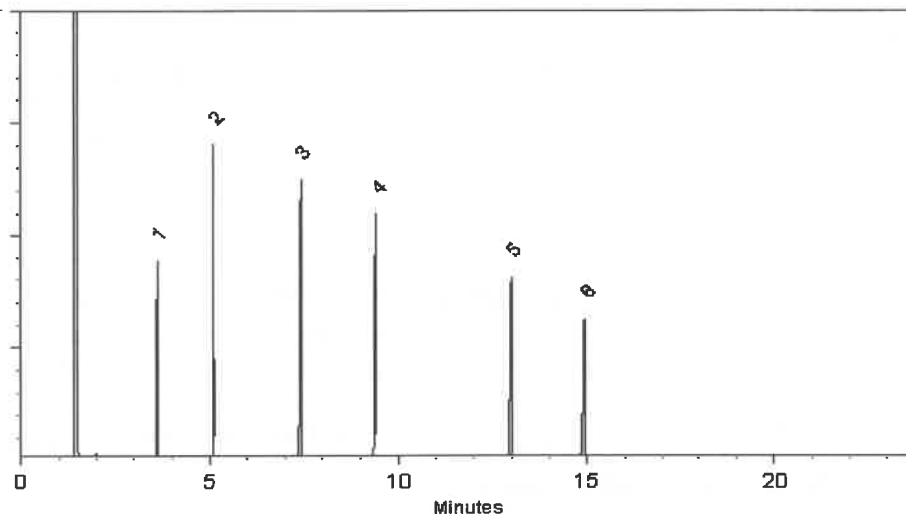
FID

**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.

*Malina Homan*  
**Malina Homan - Operations Technician I**

**Date Mixed:** 12-Jan-2024

**Balance Serial #** 1128360905

*Jennifer J. Pollino*  
**Jennifer Pollino - Operations Tech III - ARM QC**

**Date Passed:** 16-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

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. :** 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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Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224 **Lot No.:** 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

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.
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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:**

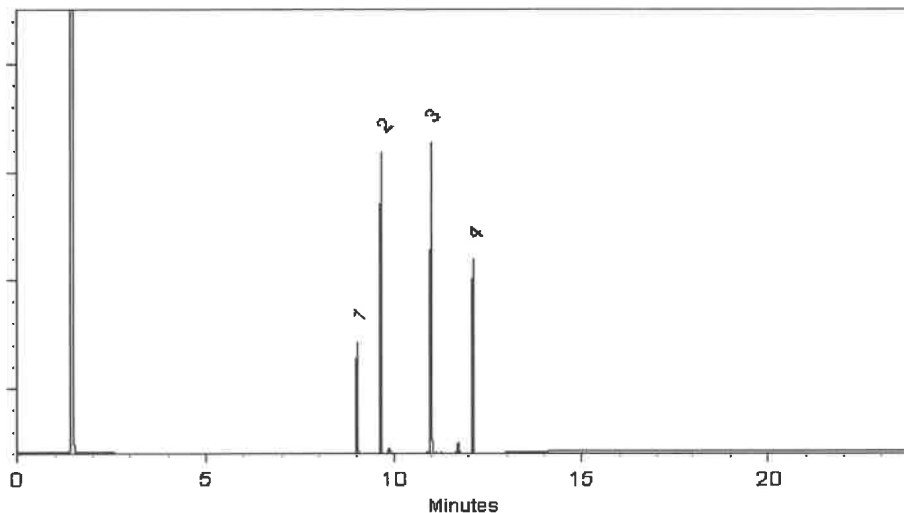
FID

**Split Vent:**

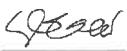
10 ml/min.

**Inj. Vol**

1µl

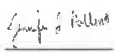


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
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

# Certificate of Analysis

chromatographic plus



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31206 **Lot No.:** 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  
↓  
S12674 } AC  
10/1/24





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

|              |          |          |                    |            |                                           |
|--------------|----------|----------|--------------------|------------|-------------------------------------------|
| Catalog No.: | Lot No.: | Storage: | Solvent:           | Exp. Date: | Description:                              |
| Z-110816-01  | 414127   | ≤ -10 °C | Methylene Chloride | 6/21/2025  | Custom 8270 Mix, 4-79,<br>1000 mg/L, 1 mL |

| Compound    | CAS No.   | Purity (%) | Compound Lot No. | Concentration, mg/L |
|-------------|-----------|------------|------------------|---------------------|
| atrazine    | 1912-24-9 | 99.5       | 337.7.3P         | 997 ± 5.81          |
| benzidine   | 92-87-5   | 99.9       | 124.18.6.2P      | 991.8 ± 5.77        |
| caprolactam | 105-60-2  | 99.9       | 271.1.6P         | 999 ± 5.82          |

~~512280~~ } RCL  
↓  
~~512284~~ } 05/24/24

New Numbers Generated.

512790 } RCL  
↓  
512794 } 11/12/24

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: \_\_\_\_\_

Shane Overcash  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.



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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  
12/17/24

### 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.





# SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Jacobs  
ADDRESS: 412 Mt Kemble Ave Suite 100  
CITY: Morris Plains NJ STATE: NJ ZIP: 07960  
ATTENTION: John Yufante John.Yufante@Jacobs.com  
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC  
PROJECT NO.: D3868221 LOCATION: Princeton Junction  
PROJECT MANAGER: Mary Murphy  
e-mail: Mary.Murphy@Jacobs.com  
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#: ADDRESS:  
CITY STATE: ZIP: ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) Rush TAT (2 day) DAYS\*  
HARDCOPY (DATA PACKAGE): DAYS\*  
EDD: DAYS\*

\*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)  
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP  
☒ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B  
+ Raw Data ☐ Other  
☐ EDD FORMAT

1. Site Spec. VOCs (SU2320B)  
2. 1.4 Disinfectant (SU2320B)  
3. Total Dissolved Iron (SU2320B)  
4. Dissolved Iron (SU2320B)  
5. Alkalinity (SU2320B)  
6. TDS (SU2320B)  
7. Ammonia (SU2320B)  
8. Nitrite (SU2320B)  
9. Nitrate (SU2320B)

| ALLIANCE<br>SAMPLE<br>ID | PROJECT<br>SAMPLE IDENTIFICATION | SAMPLE<br>MATRIX | SAMPLE<br>TYPE |      | SAMPLE<br>COLLECTION |      | # OF BOTTLES | PRESERVATIVES |   |    |                    |   |   |   |   |   | COMMENTS                                                                   |  |
|--------------------------|----------------------------------|------------------|----------------|------|----------------------|------|--------------|---------------|---|----|--------------------|---|---|---|---|---|----------------------------------------------------------------------------|--|
|                          |                                  |                  | COMP           | GRAB | DATE                 | TIME |              | A/E           | E | EB | <del>SB</del><br>E | E | E | E |   |   | ← Specify Preservatives<br>A-HCl D-NaOH<br>B-HNO3 E-ICE<br>C-H2SO4 F-OTHER |  |
|                          |                                  |                  |                |      |                      |      |              | 1             | 2 | 3  | 4                  | 5 | 6 | 7 | 8 | 9 |                                                                            |  |
| 1.                       | MW-19B-72-040125                 | GW               |                | ✓    | 4/1/25               | 1215 | 9            | ✓             | ✓ | ✓  | ✓                  | ✓ | ✓ | ✓ |   |   | pH 1.6 / Dis pH 1.0                                                        |  |
| 2.                       | IW-01-55-040125                  | GW               |                | ✓    | 4/1/25               | 1230 | 9            | ✓             | ✓ | ✓  | ✓                  | ✓ | ✓ | ✓ |   |   |                                                                            |  |
| 3.                       | IW-02-55-040125                  | GW               |                | ✓    | 4/1/25               | 1505 | 9            | ✓             | ✓ | ✓  | ✓                  | ✓ | ✓ | ✓ |   |   | pH 10 + #<br>BDA0441                                                       |  |
| 4.                       | IW-02-55-040125-FD               | GW               |                | ✓    | 4/1/25               | 1510 | 9            | ✓             | ✓ | ✓  | ✓                  | ✓ | ✓ | ✓ |   |   |                                                                            |  |
| 5.                       | IW-03-55-040125                  | GW               |                | ✓    | 4/1/25               | 1530 | 9            | ✓             | ✓ | ✓  | ✓                  | ✓ | ✓ | ✓ |   |   |                                                                            |  |
| 6.                       | TB-01-040125                     | DI               |                | ✓    | 4/1/25               | 1550 | 2            | ✓             |   |    |                    |   |   |   |   |   | Dis. Samples preserved                                                     |  |
| 7.                       |                                  |                  |                |      |                      |      |              |               |   |    |                    |   |   |   |   |   | in Lab @ 12:25 on                                                          |  |
| 8.                       |                                  |                  |                |      |                      |      |              |               |   |    |                    |   |   |   |   |   | 4/2/25 and held for                                                        |  |
| 9.                       |                                  |                  |                |      |                      |      |              |               |   |    |                    |   |   |   |   |   | 18 hrs and will be released                                                |  |
| 10.                      |                                  |                  |                |      |                      |      |              |               |   |    |                    |   |   |   |   |   | 4/3/25                                                                     |  |

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

|                                            |                           |                                               |                                                                                                                                                                                                      |
|--------------------------------------------|---------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RELINQUISHED BY SAMPLER:<br>1. [Signature] | DATE/TIME: 1630<br>4/1/25 | RECEIVED BY:<br>1. [Signature] 1630<br>4-1-25 | Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP: 23.3°C                                  |
| RELINQUISHED BY SAMPLER:<br>2. [Signature] | DATE/TIME:                | RECEIVED BY:<br>2. [Signature]                | Comments: see work order for list of site specific VOCs<br>Labels on sample bottles switched accidentally, bottles labeled diss iron are total metals +<br>PO # 148064311 total metals are diss iron |
| RELINQUISHED BY SAMPLER:<br>3. [Signature] | DATE/TIME: 1817<br>4-1-25 | RECEIVED BY:<br>3. [Signature]                | Temp 2.3°C Adjusted Factor +1 IR Gun #1                                                                                                                                                              |
| Page 1 of 2                                |                           |                                               | CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other                                                                                                                       |
|                                            |                           |                                               | Shipment Complete<br><input type="checkbox"/> YES <input type="checkbox"/> NO                                                                                                                        |

Q11697

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Jacobs  
ADDRESS: 412 Mt Kemble Ave Suite 100  
CITY: Morrisstown STATE: NJ ZIP: 07960  
ATTENTION: John Yufante John.Yufante@Jacobs.com  
PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC  
PROJECT NO.: D3808221 LOCATION: Princeton Junction  
PROJECT MANAGER: Mary Murphy  
e-mail: Mary.Murphy@Jacobs.com  
PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
ATTENTION: \_\_\_\_\_ PHONE: \_\_\_\_\_

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) Rush TAT (2 Day) DAYS\*  
HARDCOPY (DATA PACKAGE): \_\_\_\_\_ DAYS\*  
EDD: \_\_\_\_\_ DAYS\*  
\*TO BE APPROVED BY CHEMTECH  
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)  
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP  
☒ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B  
+ Raw Data ☐ Other \_\_\_\_\_  
☐ EDD FORMAT \_\_\_\_\_

1. Trace VOCs (SFM 10.1-15.1M)  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_  
6. \_\_\_\_\_  
7. \_\_\_\_\_  
8. \_\_\_\_\_  
9. \_\_\_\_\_

PRESERVATIVES

COMMENTS

| ALLIANCE<br>SAMPLE<br>ID | PROJECT<br>SAMPLE IDENTIFICATION | SAMPLE<br>MATRIX | SAMPLE<br>TYPE |      | SAMPLE<br>COLLECTION |      | # OF BOTTLES | A/E |   |   |   |   |   |   |   |   |   | Specify Preservatives<br>A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-OTHER |
|--------------------------|----------------------------------|------------------|----------------|------|----------------------|------|--------------|-----|---|---|---|---|---|---|---|---|---|--------------------------------------------------------------------|
|                          |                                  |                  | COMP           | GRAB | DATE                 | TIME |              |     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                                                                    |
| 1.                       | MW-KB-72-040125-SIM              | GW               |                | ✓    | 4/1/25               | 1215 | 2            | ✓   |   |   |   |   |   |   |   |   |   |                                                                    |
| 2.                       |                                  |                  |                |      |                      |      |              |     |   |   |   |   |   |   |   |   |   |                                                                    |
| 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:<br>1. <u>[Signature]</u> | DATE/TIME: <u>4/1/25 1636</u> | RECEIVED BY: <u>[Signature]</u> <u>4-1-25 1636</u> | Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP <u>23.3, 3.0</u> °C |
| RELINQUISHED BY SAMPLER:<br>2. <u>[Signature]</u> | DATE/TIME: _____              | RECEIVED BY: _____                                 | Comments: <u>See work order for list of site specific vocs</u>                                                                                                                  |
| RELINQUISHED BY SAMPLER:<br>3. <u>[Signature]</u> | DATE/TIME: <u>4-1-25 1817</u> | RECEIVED BY: _____                                 | PO# <u>108664311</u><br>Temp <u>23°C</u> (Adjusted Factor +1) IR Gun # <u>1</u>                                                                                                 |
| Page <u>2</u> of <u>2</u>                         |                               |                                                    | CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other _____                                                                                            |
|                                                   |                               |                                                    | 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       |