



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

## Cover Page

**Order ID :** Q2696

**Project ID :** NWIRP Bethpage 112G08005-WE13

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

**Lab Sample Number**

Q2696-01  
Q2696-02

**Client Sample Number**

RW8-SP100-20250724  
RW8-SP303-20250724

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: 7/31/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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## CASE NARRATIVE

**Tetra Tech NUS, Inc.**

**Project Name:** NWIRP Bethpage 112G08005-WE13

**Project :** Ernie Wu

**Order ID #** Q2696

**Test Name:** SVOC-SIMGroup1

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

2 Water samples were received on 07/25/2025.

**B. Parameters**

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

**C. Analytical Techniques:**

The samples were analyzed on instrument BNA\_N using GC Column ZB-SemiVolatile Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis except for RW8-SP100-20250724 [Terphenyl-d14 - 139%] and RW8-SP303-20250724 [Terphenyl-d14 - 147%], The Failure Surrogate is not Associated with DOD Parameter list, Therefore no Corrective Action was taken.

The Internal Standards Areas were met for all analysis.

The Retention Times were met for all analysis.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

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

The Initial Calibration met the Requirements.

The Continuous Calibration File ID BN037548.D met the requirements except for 2,4,6-Tribromophenol, which is not our target compound, therefore no corrective action taken.

The Tuning criteria met requirements.

**E. Additional Comments:**



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

The Sample RW8-SP100-20250724 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

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

**F. Manual Integration Comments:**

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

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

Signature\_\_\_\_\_

**DATA REPORTING QUALIFIERS- ORGANIC**

For reporting results, the following "Results Qualifiers" are used:

|           |   |
|-----------|---|
| Value     | If the result is a value greater than or equal to the detection limit, report the value   |
| <b>U</b>  | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.   |
| <b>ND</b> | Indicates the analyte was analyzed for, but not detected  |
| <b>J</b>  | Indicates an estimated value. This flag is used:<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>B</b>  | Indicates the analyte was found in the blank as well as the sample report as "12 B".  |
| <b>E</b>  | Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.   |
| <b>D</b>  | This flag identifies all compounds identified in an analysis at a secondary dilution factor.  |
| <b>P</b>  | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".  |
| <b>N</b>  | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.  |
| <b>A</b>  | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.   |
| <b>Q</b>  | Indicates the LCS did not meet the control limits requirements  |

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

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

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

ORDER ID: Q2696

MATRIX: Water

METHOD: 8270-Modified/3510

|   | NA | NO | YES |
|---|----|----|-----|
| 1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)  |    |    | ✓   |
| 2. GC/MS Tuning Specifications. DFTPP Meet Criteria.<br>(NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)   |    |    | ✓   |
| 3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.   |    |    | ✓   |
| 4. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series. |    |    | ✓   |
| 5. GC/MS Calibration Requirements.  |    |    | ✓   |

The Initial Calibration met the Requirements.

The Continuous Calibration File ID BN037548.D met the requirements except for 2,4,6-Tribromophenol, which is not our target compound, therefore no corrective action taken.

|   |   |
|---|---|
| 6. Blank Contamination - If yes, list compounds and concentrations in each blank: | ✓ |
| 7. Surrogate Recoveries Meet Criteria   | ✓ |

If not met, list those compounds and their recoveries which fall outside the acceptable ranges.

The Surrogate recoveries were met for all analysis except for RW8-SP100-20250724 [Terphenyl-d14 - 139%] and RW8-SP303-20250724 [Terphenyl-d14 - 147%]. The Failure Surrogate is not Associated with DOD Parameter list, Therefore no Corrective Action was taken.

|   |   |
|---|---|
| 8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria | ✓ |
|---|---|

If not met, list those compounds and their recoveries which fall outside the acceptable range.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

|  |   |
|--|---|
| 9. Internal Standard Area/Retention Time Shift Meet Criteria | ✓ |
|--|---|

Comments:

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

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

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

**(CONTINUED)**

NA      NO      YES

10. Extraction Holding Time Met ✓

If not met, list number of days exceeded for each sample:

11. Analysis Holding Time Met ✓

If not met, list number of days exceeded for each sample:

**ADDITIONAL COMMENTS:**

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

The Sample RW8-SP100-20250724 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

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

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QA REVIEW

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Date

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q2696

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 Castody ✓

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 ✓

## LAB CHRONICLE

| <b>OrderID:</b> | Q2696                  | <b>OrderDate:</b> | 7/25/2025 10:41:00 AM         |               |                 |           |           |                 |
|-----------------|------------------------|-------------------|-------------------------------|---------------|-----------------|-----------|-----------|-----------------|
| <b>Client:</b>  | Tetra Tech NUS, Inc.   | <b>Project:</b>   | NWIRP Bethpage 112G08005-WE13 |               |                 |           |           |                 |
| <b>Contact:</b> | Ernie Wu               | <b>Location:</b>  | D31                           |               |                 |           |           |                 |
| <hr/>           |                        |                   |                               |               |                 |           |           |                 |
| LabID           | ClientID               | Matrix            | Test                          | Method        | Sample Date     | Prep Date | Anal Date | Received        |
| Q2696-01        | RW8-SP100-2025072<br>4 | Water             |                               |               | <b>07/24/25</b> |           |           | <b>07/25/25</b> |
|                 |                        |                   | SVOC-SIMGroup1                | 8270-Modified |                 | 07/29/25  | 07/30/25  |                 |
| Q2696-02        | RW8-SP303-2025072<br>4 | Water             |                               |               | <b>07/24/25</b> |           |           | <b>07/25/25</b> |
|                 |                        |                   | SVOC-SIMGroup1                | 8270-Modified |                 | 07/29/25  | 07/30/25  |                 |



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

**SDG No.:** Q2696

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

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



QC

SUMMARY

### Surrogate Summary

**SW-846**

**SDG No.: Q2696**

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

**Analytical Method: 8270-Modified**

| Lab Sample ID | Client ID          | Parameter               | Spike (PPM) | Result (PPM) | Recovery (%) | Qual | Limits (%) |      |
|---------------|--------------------|-------------------------|-------------|--------------|--------------|------|------------|------|
|               |                    |                         |             |              |              |      | Low        | High |
| PB169039BL    | PB169039BL         | 2-Methylnaphthalene-d10 | 0.4         | 0.33         | 83           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.34         | 86           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.36         | 89           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.38         | 96           |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.40         | 100          |      | 58         | 132  |
| PB169039BS    | PB169039BS         | 2-Methylnaphthalene-d10 | 0.4         | 0.34         | 85           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.31         | 77           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.36         | 89           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.40         | 100          |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.37         | 93           |      | 58         | 132  |
| PB169039BSD   | PB169039BSD        | 2-Methylnaphthalene-d10 | 0.4         | 0.33         | 83           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.31         | 77           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.34         | 86           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.41         | 102          |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.37         | 93           |      | 58         | 132  |
| Q2696-01      | RW8-SP100-20250724 | 2-Methylnaphthalene-d10 | 0.4         | 0.28         | 71           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.36         | 90           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.31         | 78           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.34         | 84           |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.56         | 139          | *    | 58         | 132  |
| Q2696-02      | RW8-SP303-20250724 | 2-Methylnaphthalene-d10 | 0.4         | 0.26         | 65           |      | 30         | 150  |
|               |                    | Fluoranthene-d10        | 0.4         | 0.33         | 83           |      | 30         | 150  |
|               |                    | Nitrobenzene-d5         | 0.4         | 0.30         | 75           |      | 55         | 111  |
|               |                    | 2-Fluorobiphenyl        | 0.4         | 0.32         | 80           |      | 53         | 106  |
|               |                    | Terphenyl-d14           | 0.4         | 0.59         | 147          | *    | 58         | 132  |



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### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2696

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037555.D

| Lab Sample ID | Parameter   | Spike | Result | Unit | Rec | RPD | Qual | Qual | Limits |     |      |
|---------------|-------------|-------|--------|------|-----|-----|------|------|--------|-----|------|
|               |             |       |        |      |     |     |      |      | RPD    | Low | High |
| PB169039BS    | 1,4-Dioxane | 0.4   | 0.31   | ug/L | 78  |     |      |      | 70     | 130 |      |



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### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2696

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037556.D

| Lab Sample ID | Parameter   | Spike | Result | Unit | Rec | RPD | Qual | Qual | Limits |     |      |
|---------------|-------------|-------|--------|------|-----|-----|------|------|--------|-----|------|
|               |             |       |        |      |     |     |      |      | RPD    | Low | High |
| PB169039BSD   | 1,4-Dioxane | 0.4   | 0.30   | ug/L | 75  | 3   |      |      | 70     | 130 | 20   |



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4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB169039BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2696

Lab File ID: BN037549.D

Lab Sample ID: PB169039BL

Instrument ID: BNA\_N

Date Extracted: 07/29/2025

Matrix: (soil/water) Water

Date Analyzed: 07/30/2025

Level: (low/med) LOW

Time Analyzed: 10:14

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 |
|--------------------|------------------|----------------|------------------|
| PB169039BS         | PB169039BS       | BN037555.D     | 07/30/2025       |
| RW8-SP100-20250724 | Q2696-01         | BN037550.D     | 07/30/2025       |
| RW8-SP303-20250724 | Q2696-02         | BN037551.D     | 07/30/2025       |
| PB169039BSD        | PB169039BSD      | BN037556.D     | 07/30/2025       |

COMMENTS:



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

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

Contract: TETR06  
 SDG NO.: Q2696  
 DFTPP Injection Date: 07/15/2025  
 DFTPP Injection Time: 10:57

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 68  | Less than 2.0% of mass 69          | 0.0 ( 0.0 ) 1        |
| 69  | Mass 69 relative abundance         | 100                  |
| 70  | Less than 2.0% of mass 69          | 0.2 ( 0.6 ) 1        |
| 197 | Less than 2.0% of mass 198         | 0.0                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 6.7                  |
| 365 | Greater than 1% of mass 198        | 3.5                  |
| 441 | Present, but less than mass 443    | 83.6                 |
| 442 | Greater than 50% of mass 198       | 100.0                |
| 443 | 15.0 - 24.0% of mass 442           | 17.4 (19.4) 2        |

1-Value is % mass 69

2-Value is % mass 442

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| SSTDICC0.1        | SSTDICC0.1       | BN037499.D     | 07/15/2025       | 12:36            |
| SSTDICC0.2        | SSTDICC0.2       | BN037500.D     | 07/15/2025       | 13:12            |
| SSTDICCC0.4       | SSTDICCC0.4      | BN037501.D     | 07/15/2025       | 13:49            |
| SSTDICC0.8        | SSTDICC0.8       | BN037502.D     | 07/15/2025       | 14:25            |
| SSTDICC1.6        | SSTDICC1.6       | BN037503.D     | 07/15/2025       | 15:01            |
| SSTDICC3.2        | SSTDICC3.2       | BN037504.D     | 07/15/2025       | 15:38            |
| SSTDICC5.0        | SSTDICC5.0       | BN037505.D     | 07/15/2025       | 16:14            |



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance  
 Lab Code: ACE  
 Lab File ID: BN037547.D  
 Instrument ID: BNA\_N

Contract: TETR06  
 SDG NO.: Q2696  
 DFTPP Injection Date: 07/30/2025  
 DFTPP Injection Time: 08:59

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 68  | Less than 2.0% of mass 69          | 0.0 ( 0.0 ) 1        |
| 69  | Mass 69 relative abundance         | 100.0                |
| 70  | Less than 2.0% of mass 69          | 0.2 ( 0.6 ) 1        |
| 197 | Less than 2.0% of mass 198         | 0.0                  |
| 198 | Base Peak, 100% relative abundance | 100                  |
| 199 | 5.0 to 9.0% of mass 198            | 6.9                  |
| 365 | Greater than 1% of mass 198        | 4.1                  |
| 441 | Present, but less than mass 443    | 83.3                 |
| 442 | Greater than 50% of mass 198       | 100.0                |
| 443 | 15.0 - 24.0% of mass 442           | 17.3 (19.2) 2        |

1-Value is % mass 69

2-Value is % mass 442

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

| EPA<br>SAMPLE NO.  | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|--------------------|------------------|----------------|------------------|------------------|
| SSTDCCC0.4         | SSTDCCC0.4       | BN037548.D     | 07/30/2025       | 09:38            |
| PB169039BL         | PB169039BL       | BN037549.D     | 07/30/2025       | 10:14            |
| RW8-SP100-20250724 | Q2696-01         | BN037550.D     | 07/30/2025       | 10:51            |
| RW8-SP303-20250724 | Q2696-02         | BN037551.D     | 07/30/2025       | 11:27            |
| PB169039BS         | PB169039BS       | BN037555.D     | 07/30/2025       | 13:52            |
| PB169039BSD        | PB169039BSD      | BN037556.D     | 07/30/2025       | 14:28            |
| SSTDCCC0.4EC       | SSTDCCC0.4       | BN037557.D     | 07/30/2025       | 15:16            |



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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2696

Client ID : SSTDCCC0.4

Date Analyzed: 07/30/2025

Lab File ID: BN037548.D

Time Analyzed: 09:38

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           | 2372                | 7.717 | 6287                | 10.50  | 3213                | 14.35  |
| UPPER LIMIT           | 4744                | 8.217 | 12574               | 10.998 | 6426                | 14.845 |
| LOWER LIMIT           | 1186                | 7.217 | 3143.5              | 9.998  | 1606.5              | 13.845 |
| EPA SAMPLE NO.        |                     |       |                     |        |                     |        |
| 01 PB169039BL         | 2234                | 7.72  | 5448                | 10.50  | 2592                | 14.36  |
| 02 RW8-SP100-20250724 | 1935                | 7.72  | 4743                | 10.50  | 2423                | 14.36  |
| 03 RW8-SP303-20250724 | 1937                | 7.72  | 4777                | 10.50  | 2343                | 14.36  |
| 04 PB169039BS         | 1872                | 7.72  | 4499                | 10.50  | 2146                | 14.35  |
| 05 PB169039BSD        | 1856                | 7.72  | 4469                | 10.50  | 2108                | 14.36  |

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 LOWER LIMIT = -0.50 minutes of internal standard RT

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

\* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

|                |            |                                |
|----------------|------------|--------------------------------|
| Lab Name:      | Alliance   |                                |
| Lab Code:      | ACE        | SDG NO.: Q2696                 |
| Client ID:     | SSTDCCC0.4 | Date Analyzed: 07/30/2025      |
| Lab File ID:   | BN037548.D | Time Analyzed: 09:38           |
| 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           | 5852                | 17.087 | 4832                | 21.277 | 4297                | 23.508 |
|                       | 11704               | 17.587 | 9664                | 21.777 | 8594                | 24.008 |
|                       | 2926                | 16.587 | 2416                | 20.777 | 2148.5              | 23.008 |
| EPA SAMPLE NO.        |                     |        |                     |        |                     |        |
| 01 PB169039BL         | 4582                | 17.09  | 3451                | 21.28  | 3078                | 23.51  |
| 02 RW8-SP100-20250724 | 4635                | 17.09  | 3863                | 21.28  | 3344                | 23.51  |
| 03 RW8-SP303-20250724 | 4562                | 17.09  | 3546                | 21.28  | 3028                | 23.51  |
| 04 PB169039BS         | 3846                | 17.09  | 2873                | 21.28  | 2422                | 23.52  |
| 05 PB169039BSD        | 3782                | 17.09  | 2830                | 21.28  | 2422                | 23.52  |

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 LOWER 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



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

## Report of Analysis

|                    |                               |                  |                      |
|--------------------|-------------------------------|------------------|----------------------|
| Client:            | Tetra Tech NUS, Inc.          | Date Collected:  | 07/24/25             |
| Project:           | NWIRP Bethpage 112G08005-WE13 | Date Received:   | 07/25/25             |
| Client Sample ID:  | RW8-SP100-20250724            | SDG No.:         | Q2696                |
| Lab Sample ID:     | Q2696-01                      | 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 |
|-------------------|-----------|----------------|----------------|---------------|
| BN037550.D        | 1         | 07/29/25 08:49 | 07/30/25 10:51 | PB169039      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.20  | U         | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.28  |           | 30 - 150 |      | 71%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.36  |           | 30 - 150 |      | 90%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.31  |           | 55 - 111 |      | 78%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.34  |           | 53 - 106 |      | 84%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.56  | *         | 58 - 132 |      | 139%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 1940  |           | 7.724    |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4740  |           | 10.498   |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2420  |           | 14.355   |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 4640  |           | 17.086   |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 3860  |           | 21.277   |      |            |          |
| 1520-96-3                 | Perylene-d12            | 3340  |           | 23.51    |      |            |          |

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\BN073025\  
 Data File : BN037550.D  
 Acq On : 30 Jul 2025 10:51  
 Operator : RC/JU  
 Sample : Q2696-01  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RW8-SP100-20250724**

Quant Time: Jul 30 11:12:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

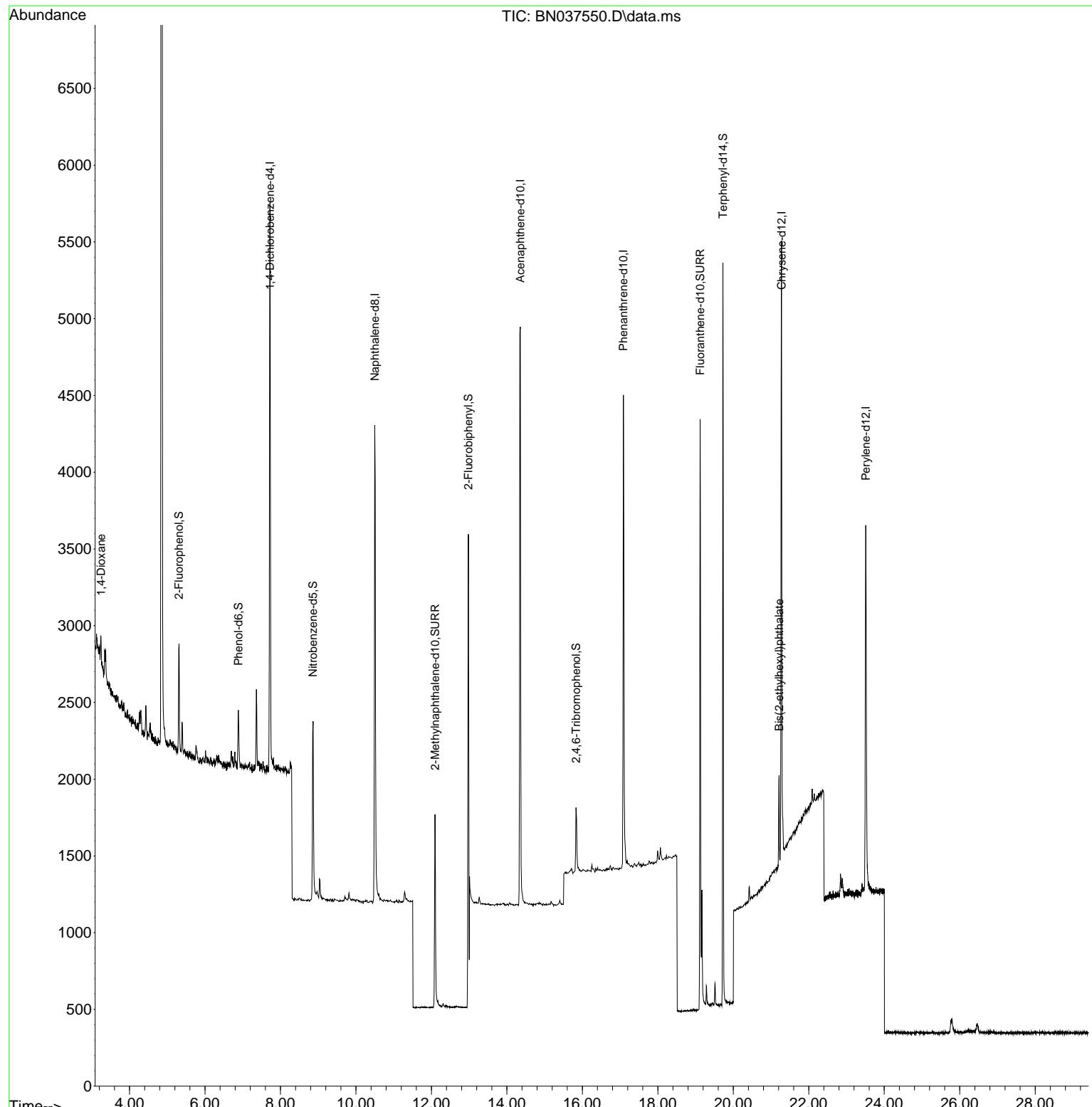
| Compound                           | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|------------------------------------|--------|------|----------|-------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4          | 7.724  | 152  | 1935     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8                  | 10.498 | 136  | 4743     | 0.400 | ng    | #-0.01   |
| 13) Acenaphthene-d10               | 14.355 | 164  | 2423     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10               | 17.086 | 188  | 4635     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12                   | 21.277 | 240  | 3863     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12                   | 23.510 | 264  | 3344     | 0.400 | ng    | # 0.00   |
| <b>System Monitoring Compounds</b> |        |      |          |       |       |          |
| 4) 2-Fluorophenol                  | 5.312  | 112  | 557      | 0.116 | ng    | 0.00     |
| 5) Phenol-d6                       | 6.887  | 99   | 367      | 0.061 | ng    | 0.00     |
| 8) Nitrobenzene-d5                 | 8.864  | 82   | 1110     | 0.313 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10        | 12.096 | 152  | 1929     | 0.284 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol           | 15.833 | 330  | 293      | 0.246 | ng    | -0.01    |
| 15) 2-Fluorobiphenyl               | 12.978 | 172  | 4260     | 0.338 | ng    | 0.00     |
| 27) Fluoranthene-d10               | 19.122 | 212  | 4430     | 0.361 | ng    | 0.00     |
| 31) Terphenyl-d14                  | 19.726 | 244  | 4608     | 0.555 | ng    | 0.00     |
| <b>Target Compounds</b>            |        |      |          |       |       |          |
| 2) 1,4-Dioxane                     | 3.247  | 88   | 92       | 0.049 | ng    | # 73     |
| 34) Bis(2-ethylhexyl)phtha...      | 21.214 | 149  | 622      | 0.102 | ng    | 96       |

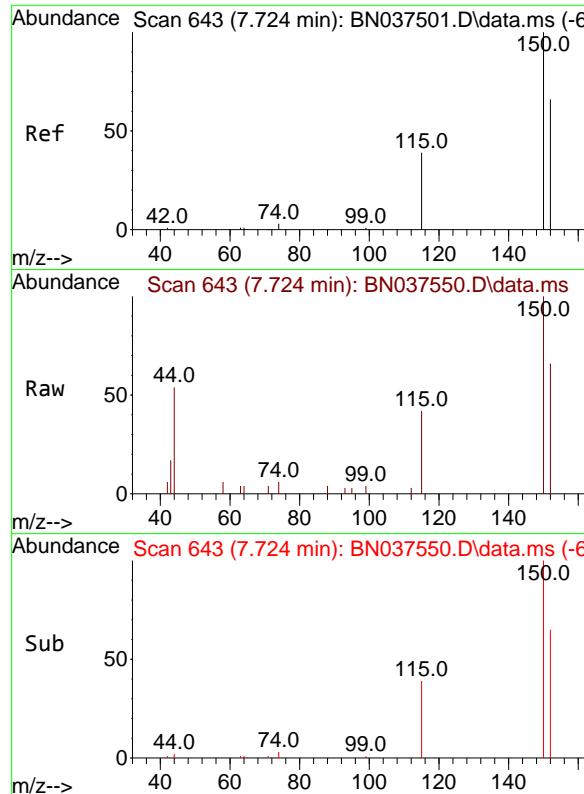
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037550.D  
 Acq On : 30 Jul 2025 10:51  
 Operator : RC/JU  
 Sample : Q2696-01  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RW8-SP100-20250724

Quant Time: Jul 30 11:12:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

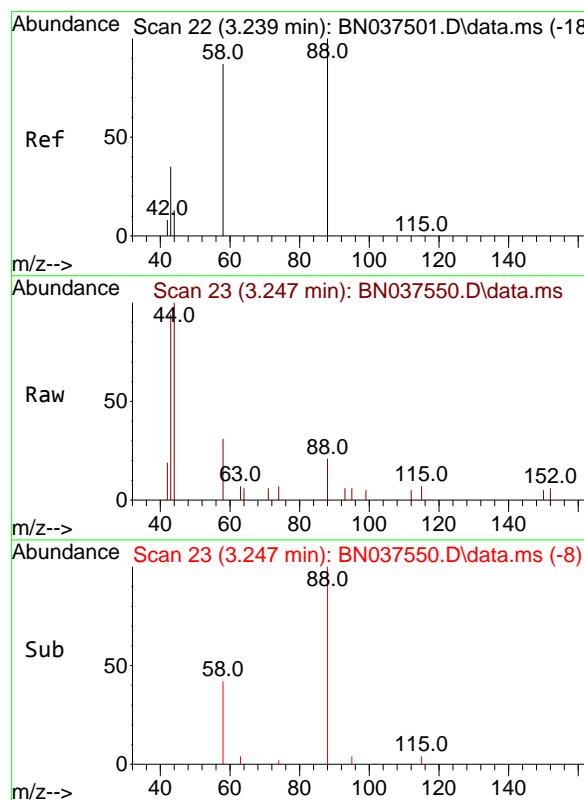
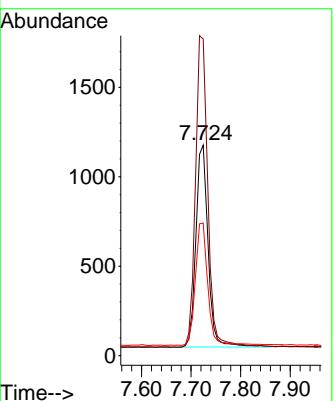




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

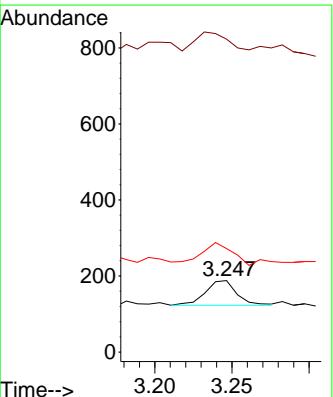
Instrument : BNA\_N  
ClientSampleId : RW8-SP100-20250724

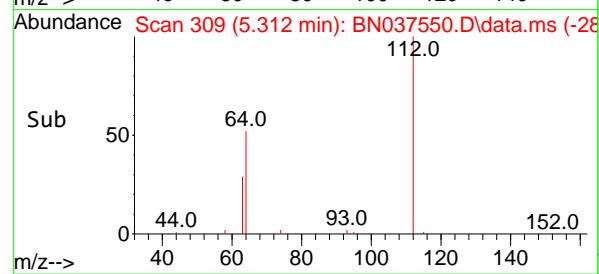
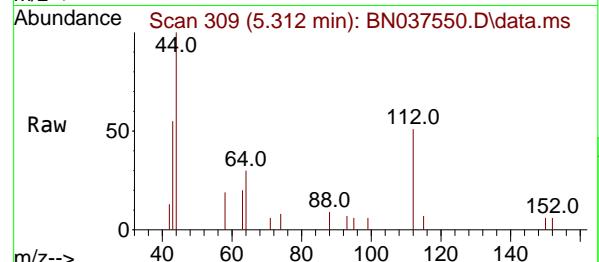
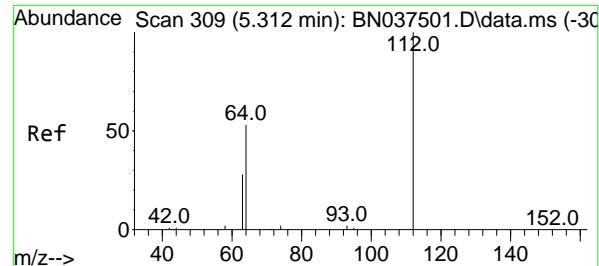
Tgt Ion:152 Resp: 1935  
Ion Ratio Lower Upper  
152 100  
150 150.4 119.8 179.8  
115 63.0 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.049 ng  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

Tgt Ion: 88 Resp: 92  
Ion Ratio Lower Upper  
88 100  
43 76.1 27.5 41.3#  
58 71.7 62.7 94.1

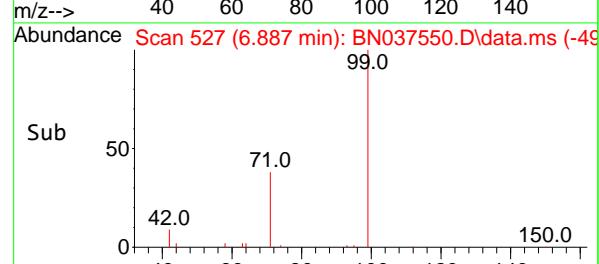
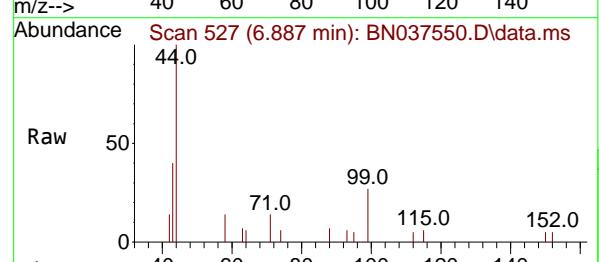
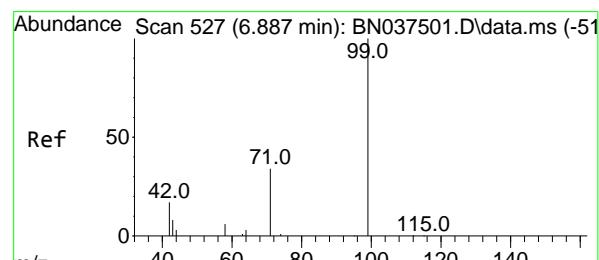
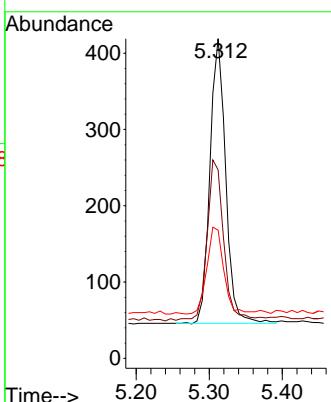




#4  
2-Fluorophenol  
Concen: 0.116 ng  
RT: 5.312 min Scan# 3  
Delta R.T. -0.000 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

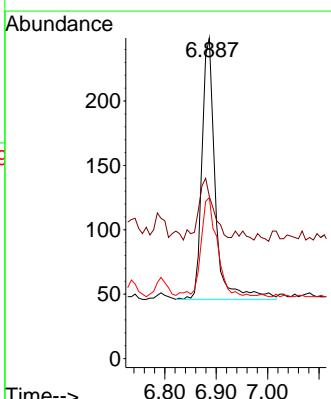
Instrument : BNA\_N  
ClientSampleId : RW8-SP100-20250724

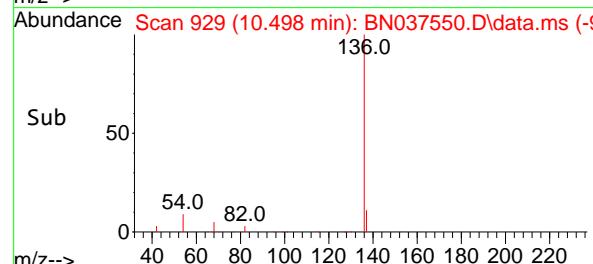
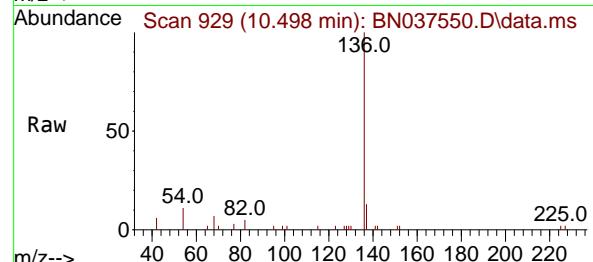
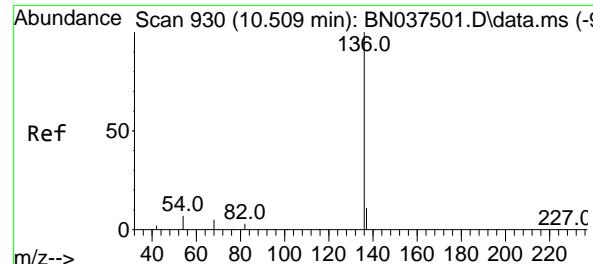
| Tgt | Ion:112 | Resp: | 557   |
|-----|---------|-------|-------|
| Ion | Ratio   | Lower | Upper |
| 112 | 100     |       |       |
| 64  | 60.1    | 45.1  | 67.7  |
| 63  | 32.7    | 23.8  | 35.8  |



#5  
Phenol-d6  
Concen: 0.061 ng  
RT: 6.887 min Scan# 527  
Delta R.T. -0.000 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

| Tgt | Ion: 99 | Resp: | 367   |
|-----|---------|-------|-------|
| Ion | Ratio   | Lower | Upper |
| 99  | 100     |       |       |
| 42  | 26.4    | 17.1  | 25.7# |
| 71  | 45.5    | 27.8  | 41.8# |



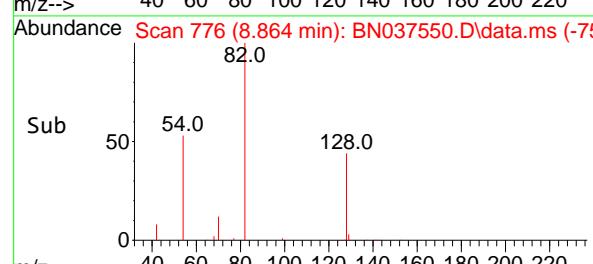
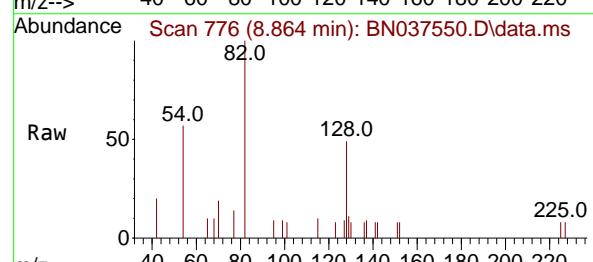
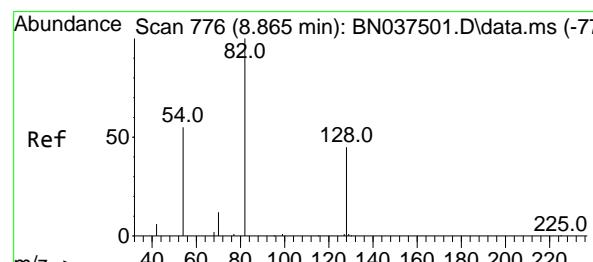
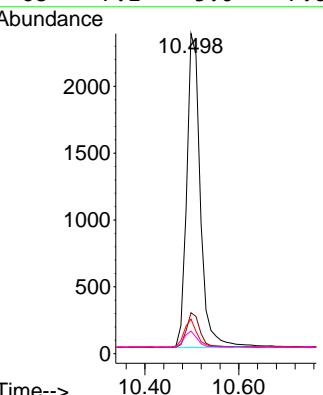


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037550.D  
 Acq: 30 Jul 2025 10:51

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RW8-SP100-20250724

Tgt Ion:136 Resp: 4743

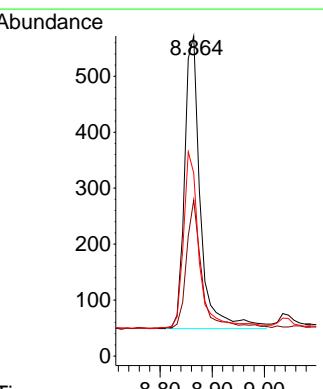
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 12.8  | 9.8   | 14.8  |
| 54  | 10.8  | 6.6   | 9.8#  |
| 68  | 7.1   | 5.0   | 7.6   |

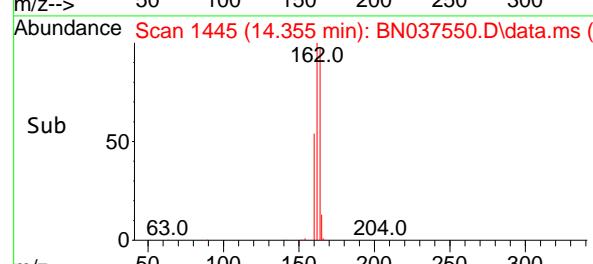
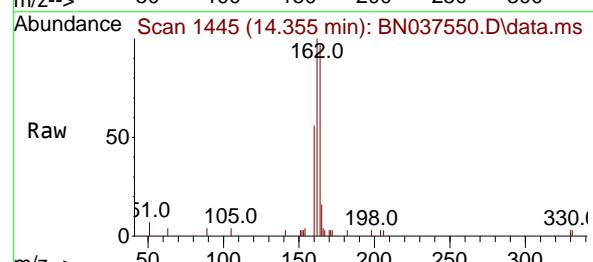
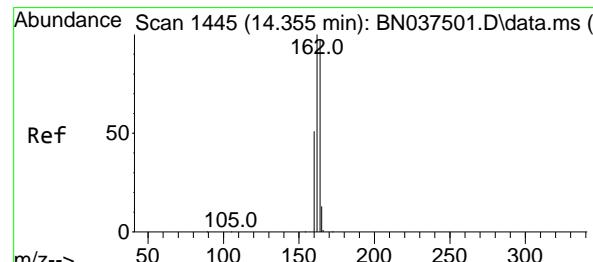
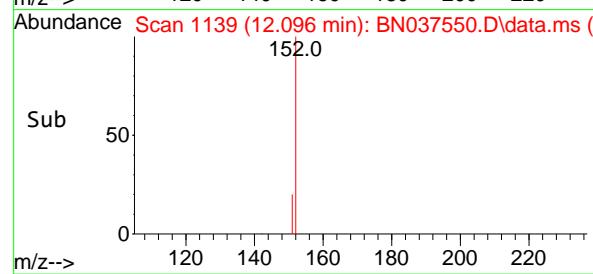
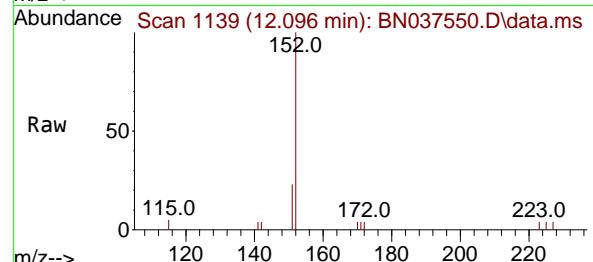
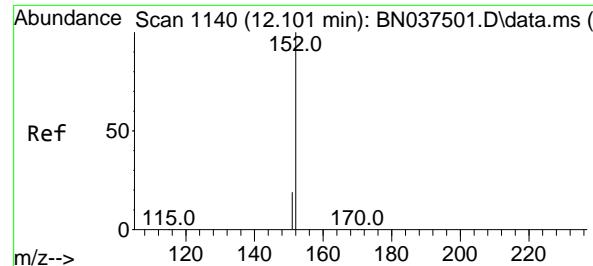


#8  
 Nitrobenzene-d5  
 Concen: 0.313 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037550.D  
 Acq: 30 Jul 2025 10:51

Tgt Ion: 82 Resp: 1110

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 48.8  | 37.5  | 56.3  |
| 54  | 57.2  | 45.3  | 67.9  |

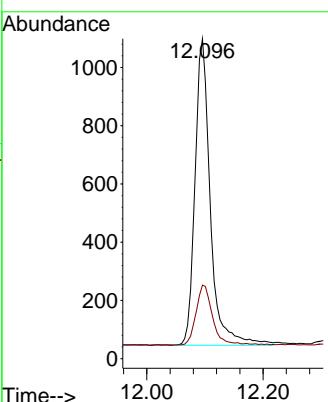




#11  
2-Methylnaphthalene-d10  
Concen: 0.284 ng  
RT: 12.096 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

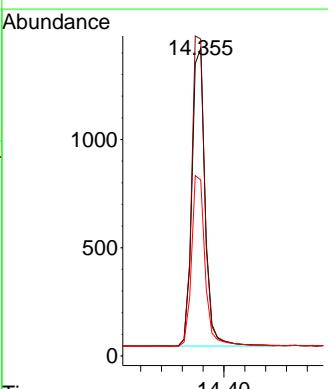
Instrument : BNA\_N  
ClientSampleId : RW8-SP100-20250724

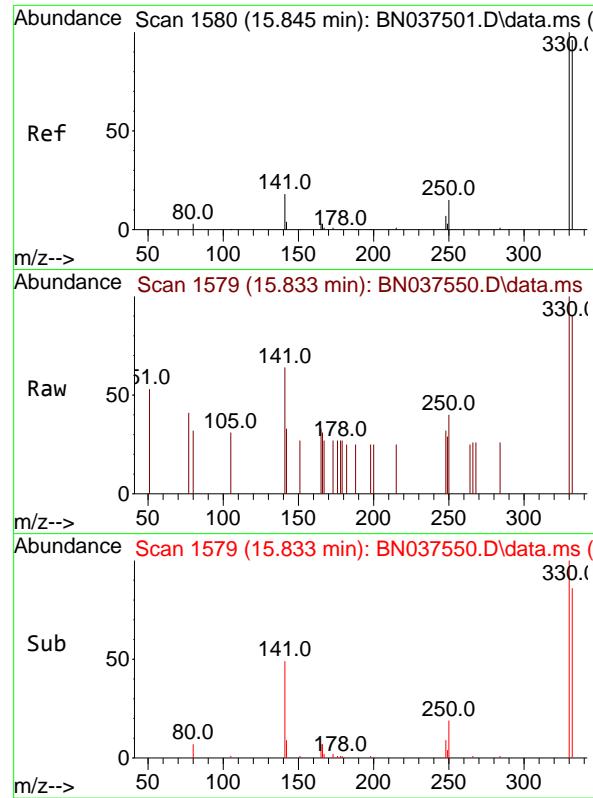
Tgt Ion:152 Resp: 1929  
Ion Ratio Lower Upper  
152 100  
151 21.8 16.8 25.2



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.355 min Scan# 1445  
Delta R.T. -0.000 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

Tgt Ion:164 Resp: 2423  
Ion Ratio Lower Upper  
164 100  
162 103.0 82.0 123.0  
160 57.2 42.4 63.6





#14

2,4,6-Tribromophenol

Concen: 0.246 ng

RT: 15.833 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037550.D

Acq: 30 Jul 2025 10:51

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250724

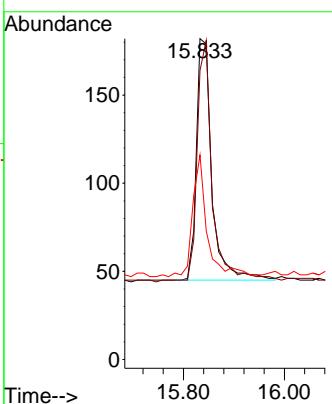
Tgt Ion:330 Resp: 293

Ion Ratio Lower Upper

330 100

332 94.2 76.1 114.1

141 47.1 33.4 50.0



#15

2-Fluorobiphenyl

Concen: 0.338 ng

RT: 12.978 min Scan# 1313

Delta R.T. -0.005 min

Lab File: BN037550.D

Acq: 30 Jul 2025 10:51

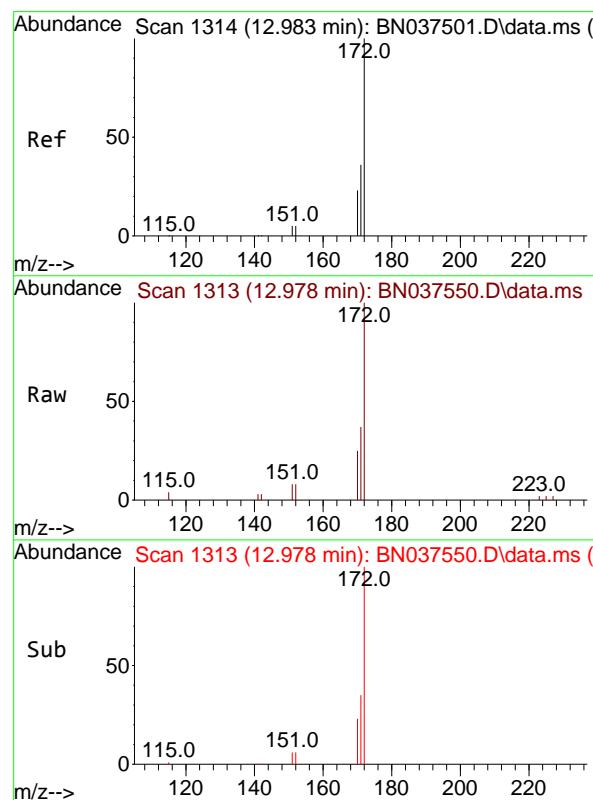
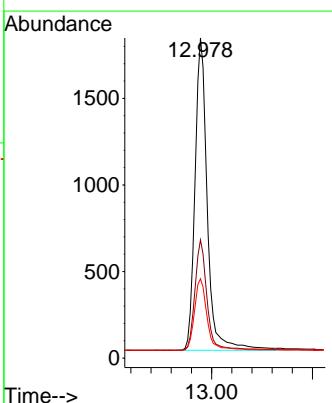
Tgt Ion:172 Resp: 4260

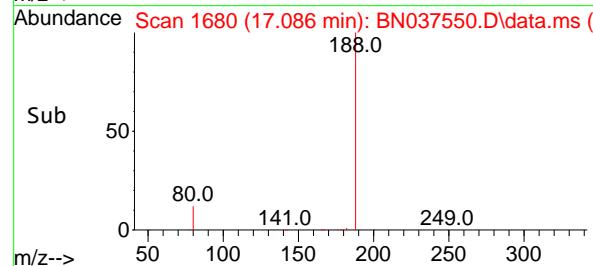
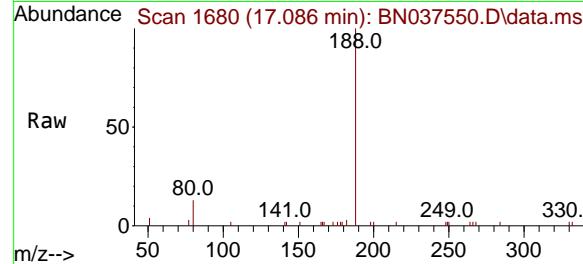
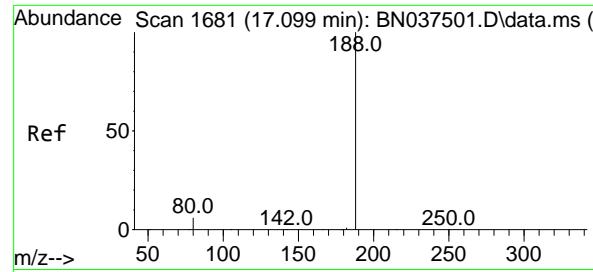
Ion Ratio Lower Upper

172 100

171 36.9 29.4 44.2

170 24.8 19.4 29.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037550.D

Acq: 30 Jul 2025 10:51

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250724

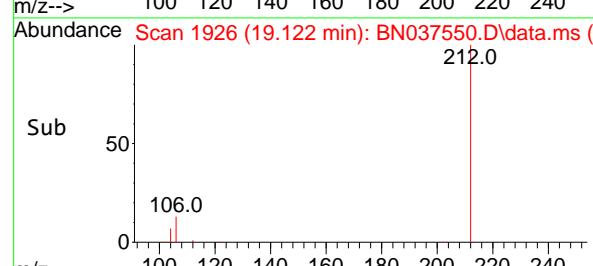
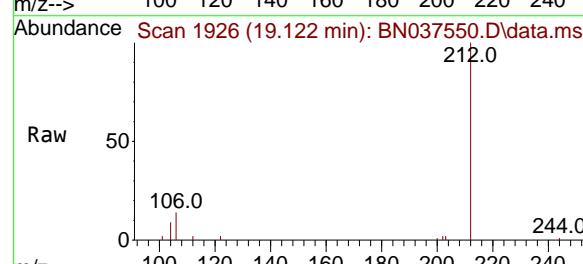
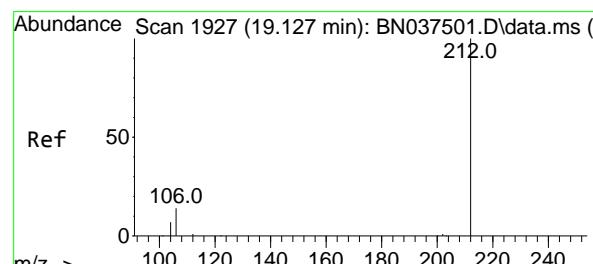
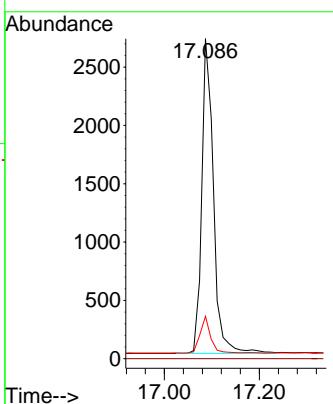
Tgt Ion:188 Resp: 4635

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.3 6.0 9.0#



#27

Fluoranthene-d10

Concen: 0.361 ng

RT: 19.122 min Scan# 1926

Delta R.T. -0.005 min

Lab File: BN037550.D

Acq: 30 Jul 2025 10:51

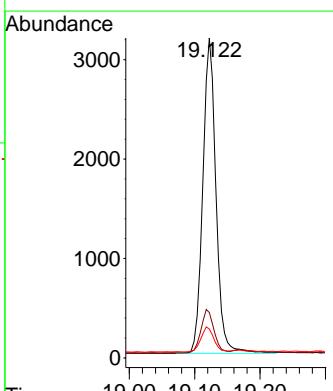
Tgt Ion:212 Resp: 4430

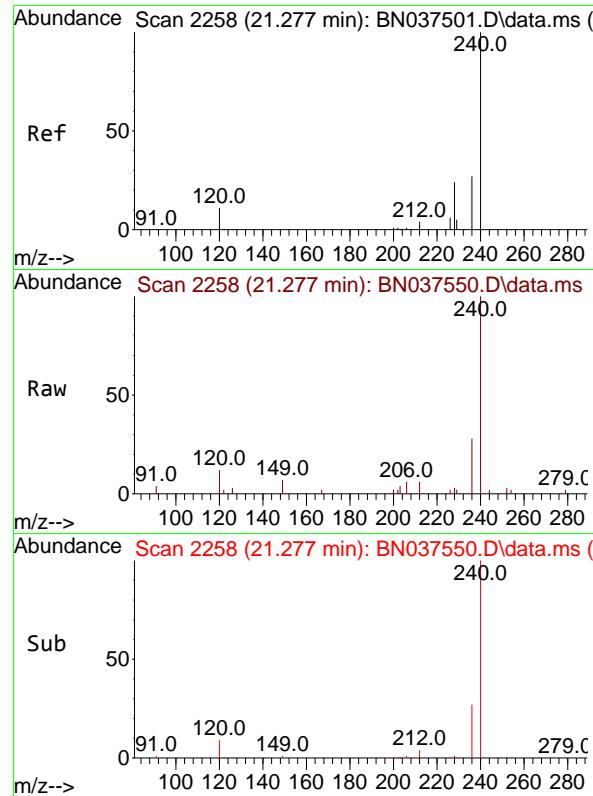
Ion Ratio Lower Upper

212 100

106 13.5 12.2 18.4

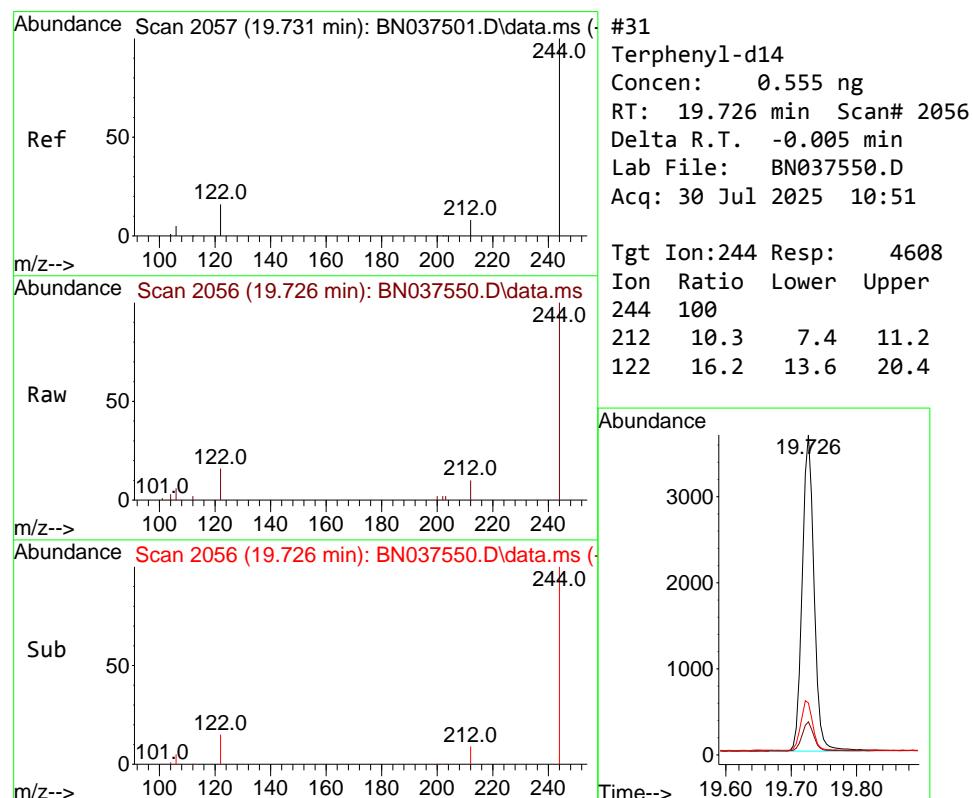
104 7.7 6.7 10.1





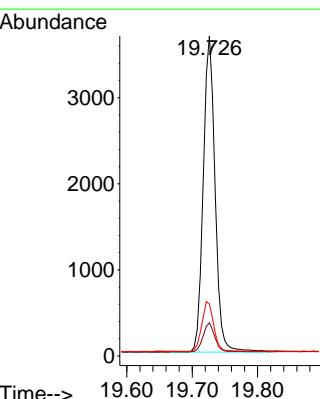
#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

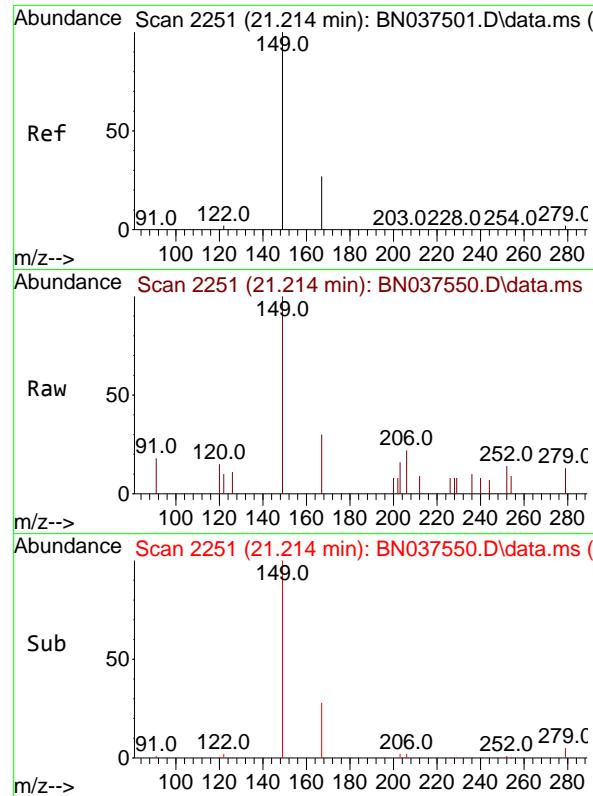
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250724



#31  
Terphenyl-d14  
Concen: 0.555 ng  
RT: 19.726 min Scan# 2056  
Delta R.T. -0.005 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

Tgt Ion:244 Resp: 4608  
Ion Ratio Lower Upper  
244 100  
212 10.3 7.4 11.2  
122 16.2 13.6 20.4

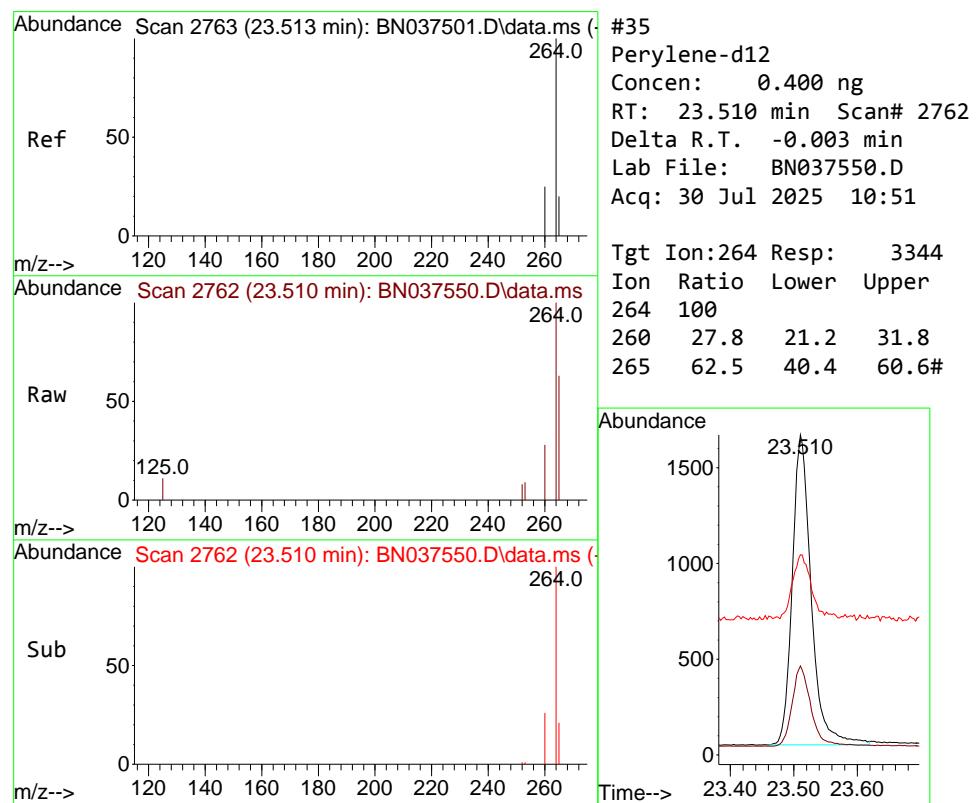
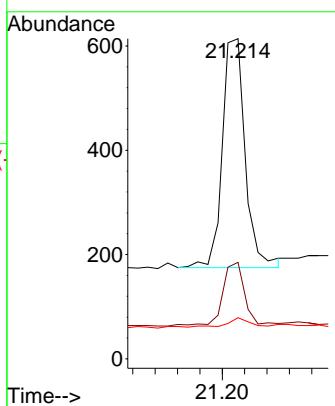




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.102 ng  
RT: 21.214 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

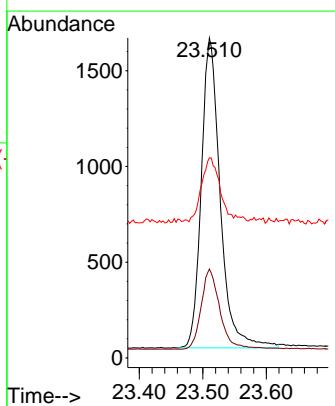
Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP100-20250724

Tgt Ion:149 Resp: 622  
Ion Ratio Lower Upper  
149 100  
167 25.2 21.8 32.8  
279 3.9 3.0 4.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.510 min Scan# 2762  
Delta R.T. -0.003 min  
Lab File: BN037550.D  
Acq: 30 Jul 2025 10:51

Tgt Ion:264 Resp: 3344  
Ion Ratio Lower Upper  
264 100  
260 27.8 21.2 31.8  
265 62.5 40.4 60.6#





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

## Report of Analysis

|                    |                               |                  |                      |
|--------------------|-------------------------------|------------------|----------------------|
| Client:            | Tetra Tech NUS, Inc.          | Date Collected:  | 07/24/25             |
| Project:           | NWIRP Bethpage 112G08005-WE13 | Date Received:   | 07/25/25             |
| Client Sample ID:  | RW8-SP303-20250724            | SDG No.:         | Q2696                |
| Lab Sample ID:     | Q2696-02                      | 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 |
|-------------------|-----------|----------------|----------------|---------------|
| BN037551.D        | 1         | 07/29/25 08:49 | 07/30/25 11:27 | PB169039      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.20  | U         | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.26  |           | 30 - 150 |      | 65%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.33  |           | 30 - 150 |      | 83%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.30  |           | 55 - 111 |      | 75%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.32  |           | 53 - 106 |      | 80%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.59  | *         | 58 - 132 |      | 147%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 1940  |           | 7.724    |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4780  |           | 10.498   |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2340  |           | 14.356   |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 4560  |           | 17.087   |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 3550  |           | 21.277   |      |            |          |
| 1520-96-3                 | Perylene-d12            | 3030  |           | 23.514   |      |            |          |

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\BN073025\  
 Data File : BN037551.D  
 Acq On : 30 Jul 2025 11:27  
 Operator : RC/JU  
 Sample : Q2696-02  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RW8-SP303-20250724**

Quant Time: Jul 30 12:08:14 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

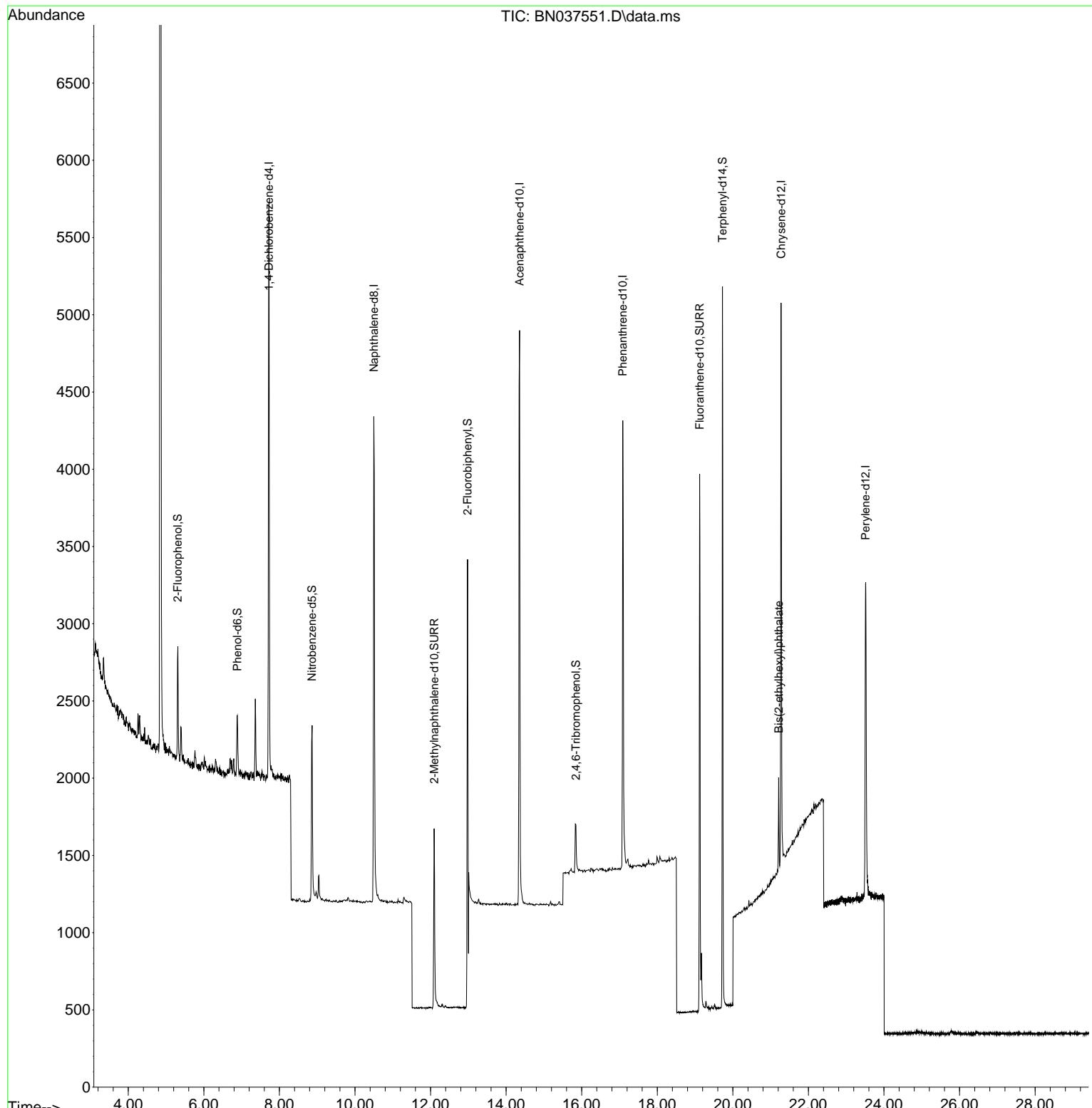
| Compound                           | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|------------------------------------|--------|------|----------|-------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4          | 7.724  | 152  | 1937     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8                  | 10.498 | 136  | 4777     | 0.400 | ng    | #-0.01   |
| 13) Acenaphthene-d10               | 14.356 | 164  | 2343     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10               | 17.087 | 188  | 4562     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12                   | 21.277 | 240  | 3546     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12                   | 23.514 | 264  | 3028     | 0.400 | ng    | # 0.00   |
| <b>System Monitoring Compounds</b> |        |      |          |       |       |          |
| 4) 2-Fluorophenol                  | 5.312  | 112  | 568      | 0.119 | ng    | 0.00     |
| 5) Phenol-d6                       | 6.887  | 99   | 378      | 0.063 | ng    | 0.00     |
| 8) Nitrobenzene-d5                 | 8.865  | 82   | 1075     | 0.301 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10        | 12.096 | 152  | 1791     | 0.261 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol           | 15.845 | 330  | 242      | 0.210 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl               | 12.978 | 172  | 3889     | 0.319 | ng    | 0.00     |
| 27) Fluoranthene-d10               | 19.123 | 212  | 4037     | 0.334 | ng    | 0.00     |
| 31) Terphenyl-d14                  | 19.727 | 244  | 4466     | 0.586 | ng    | 0.00     |
| <b>Target Compounds</b>            |        |      |          |       |       |          |
| 34) Bis(2-ethylhexyl)phtha...      | 21.214 | 149  | 605      | 0.108 | ng    | Q# 94    |

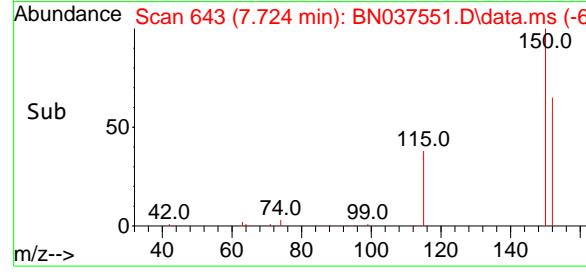
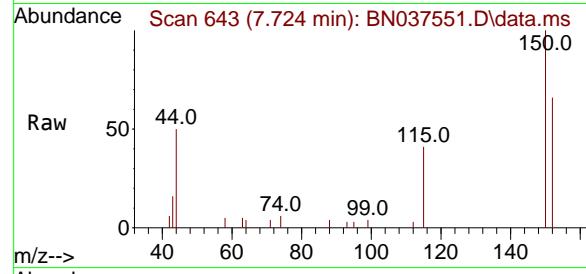
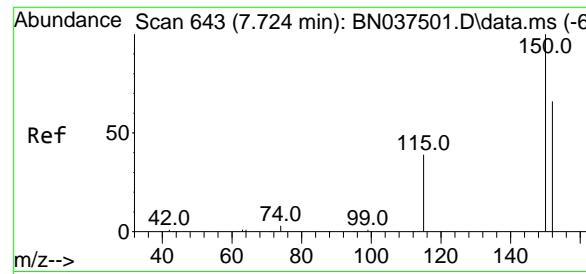
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037551.D  
 Acq On : 30 Jul 2025 11:27  
 Operator : RC/JU  
 Sample : Q2696-02  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RW8-SP303-20250724

Quant Time: Jul 30 12:08:14 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

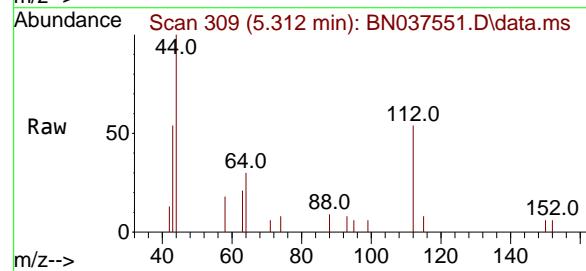
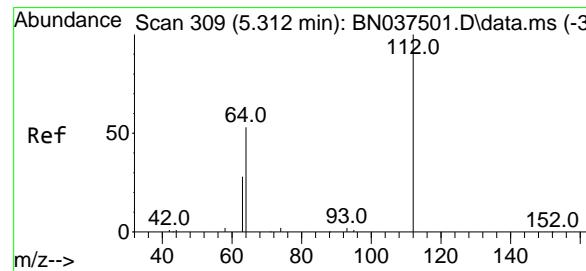
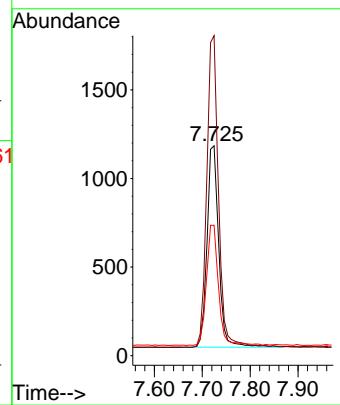




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037551.D  
Acq: 30 Jul 2025 11:27

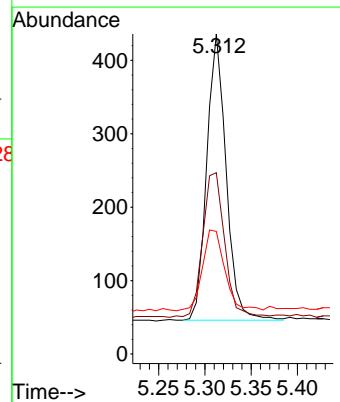
Instrument : BNA\_N  
ClientSampleId : RW8-SP303-20250724

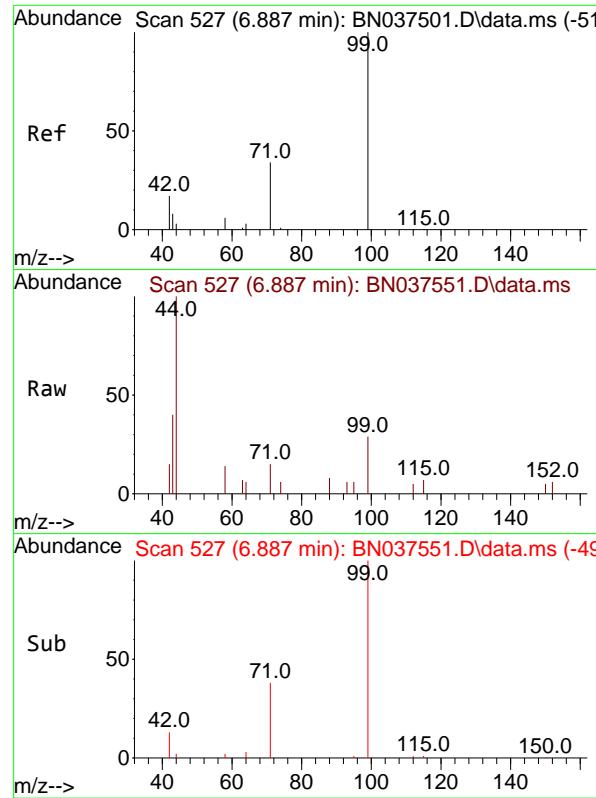
Tgt Ion:152 Resp: 1937  
Ion Ratio Lower Upper  
152 100  
150 152.4 119.8 179.8  
115 62.1 49.1 73.7



#4  
2-Fluorophenol  
Concen: 0.119 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037551.D  
Acq: 30 Jul 2025 11:27

Tgt Ion:112 Resp: 568  
Ion Ratio Lower Upper  
112 100  
64 57.2 45.1 67.7  
63 32.4 23.8 35.8

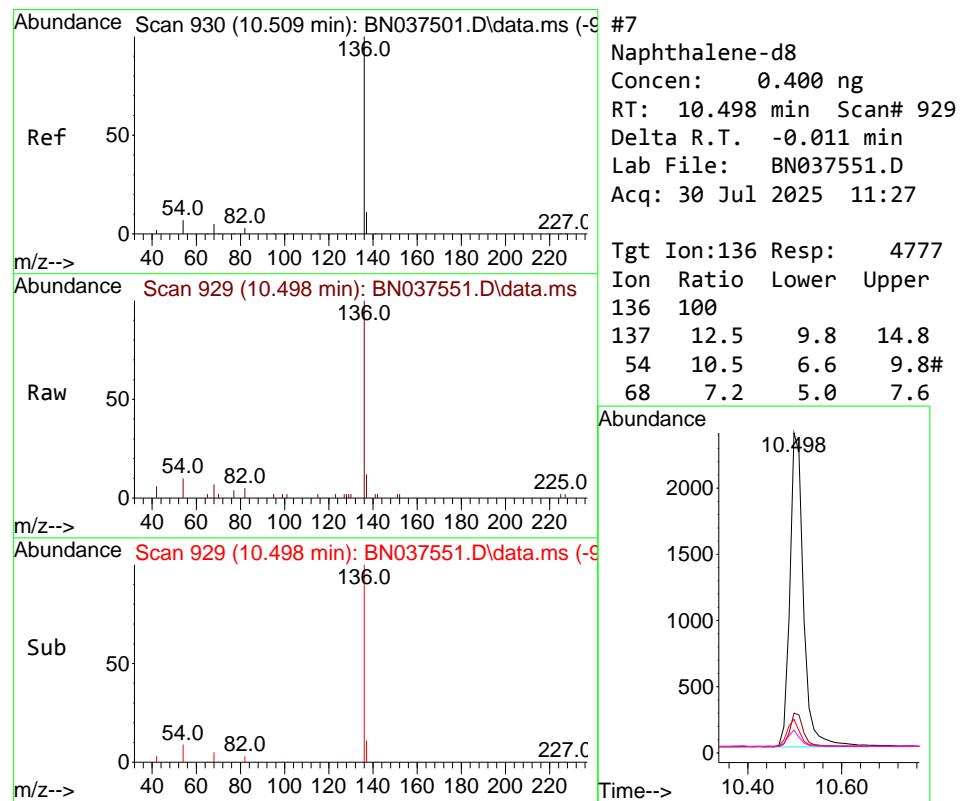
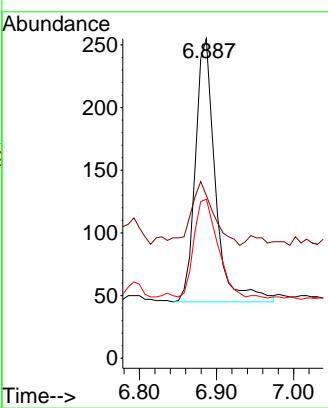




#5  
 Phenol-d6  
 Concen: 0.063 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037551.D  
 Acq: 30 Jul 2025 11:27

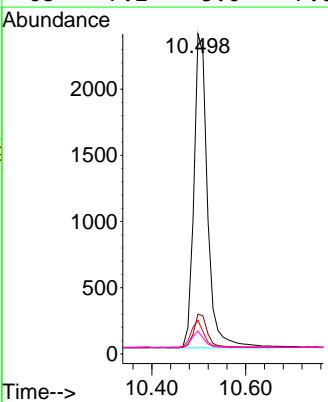
Instrument : BNA\_N  
 ClientSampleId : RW8-SP303-20250724

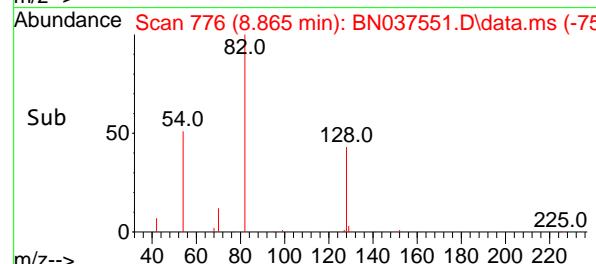
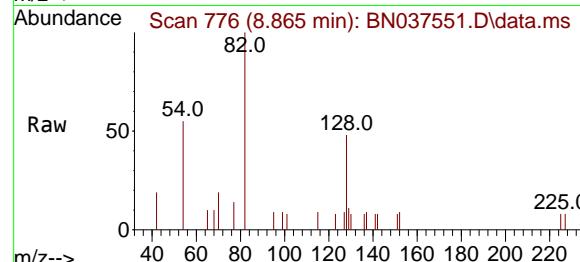
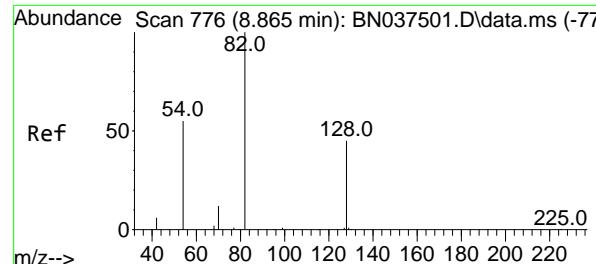
Tgt Ion: 99 Resp: 378  
 Ion Ratio Lower Upper  
 99 100  
 42 26.2 17.1 25.7#  
 71 45.5 27.8 41.8#



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 929  
 Delta R.T. -0.011 min  
 Lab File: BN037551.D  
 Acq: 30 Jul 2025 11:27

Tgt Ion:136 Resp: 4777  
 Ion Ratio Lower Upper  
 136 100  
 137 12.5 9.8 14.8  
 54 10.5 6.6 9.8#  
 68 7.2 5.0 7.6





#8

Nitrobenzene-d5

Concen: 0.301 ng

RT: 8.865 min Scan# 7

Delta R.T. 0.000 min

Lab File: BN037551.D

Acq: 30 Jul 2025 11:27

Instrument :

BNA\_N

ClientSampleId :

RW8-SP303-20250724

Tgt Ion: 82 Resp: 1075

Ion Ratio Lower Upper

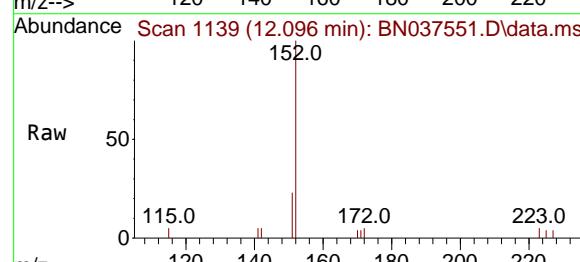
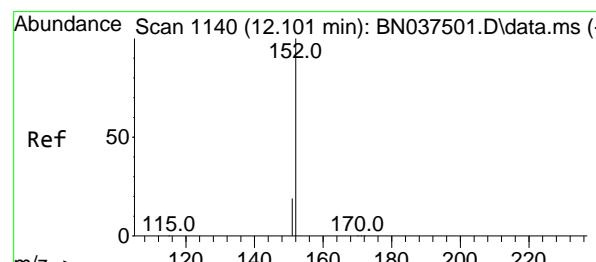
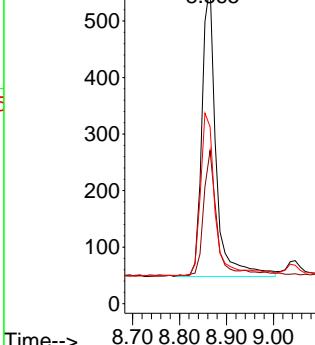
82 100

128 47.9 37.5 56.3

54 55.3 45.3 67.9

Abundance

8.865



#11

2-Methylnaphthalene-d10

Concen: 0.261 ng

RT: 12.096 min Scan# 1139

Delta R.T. -0.005 min

Lab File: BN037551.D

Acq: 30 Jul 2025 11:27

Tgt Ion: 152 Resp: 1791

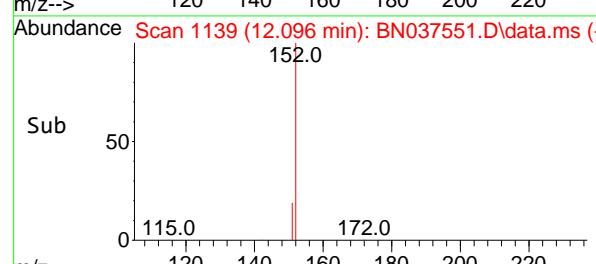
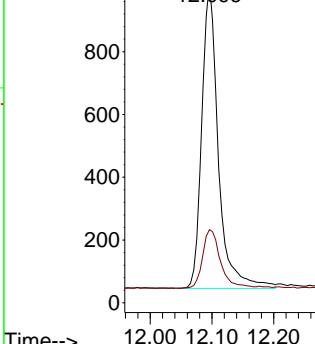
Ion Ratio Lower Upper

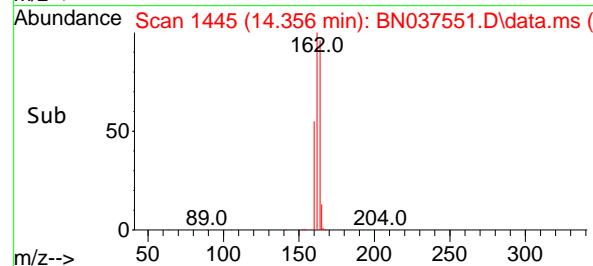
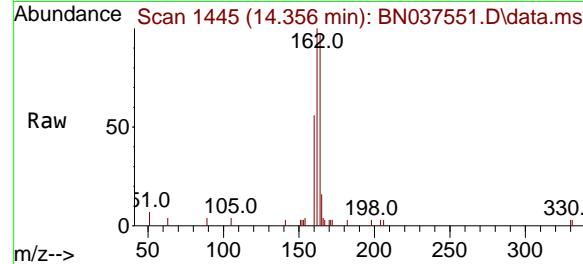
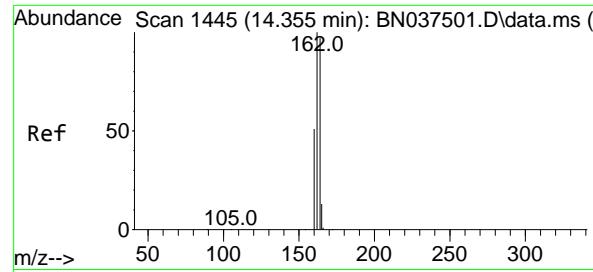
152 100

151 21.1 16.8 25.2

Abundance

12.096





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.356 min Scan# 1445

Delta R.T. 0.000 min

Lab File: BN037551.D

Acq: 30 Jul 2025 11:27

Instrument :

BNA\_N

ClientSampleId :

RW8-SP303-20250724

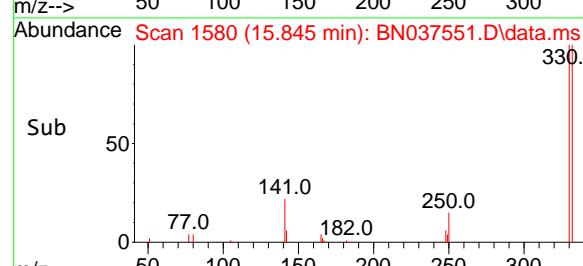
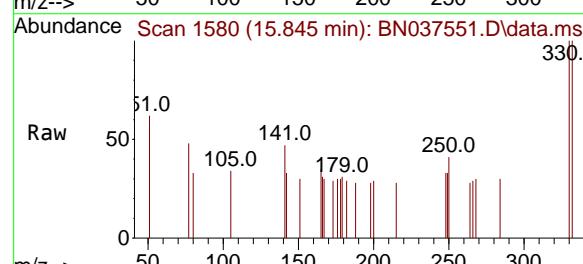
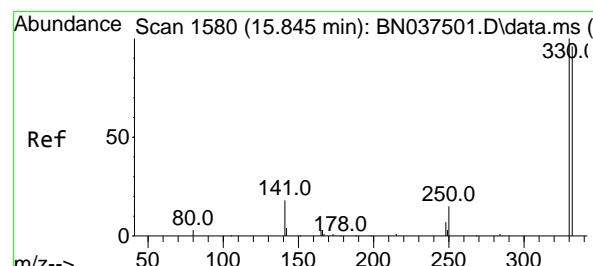
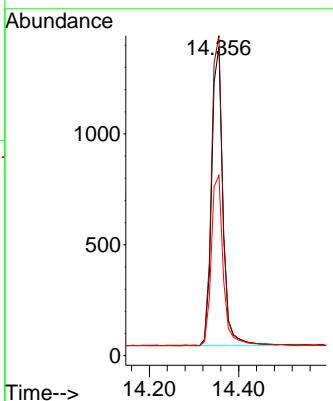
Tgt Ion:164 Resp: 2343

Ion Ratio Lower Upper

164 100

162 103.6 82.0 123.0

160 58.4 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.210 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037551.D

Acq: 30 Jul 2025 11:27

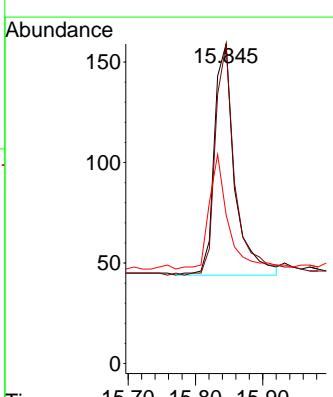
Tgt Ion:330 Resp: 242

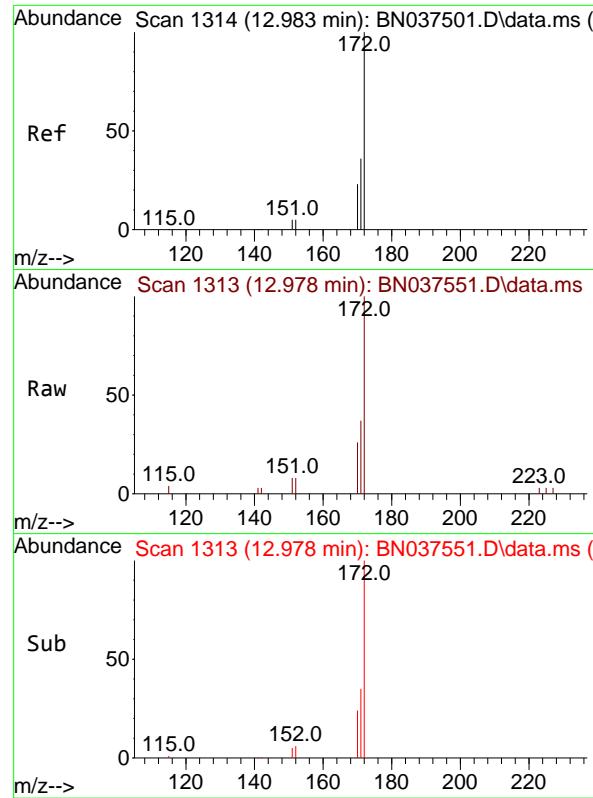
Ion Ratio Lower Upper

330 100

332 102.1 76.1 114.1

141 47.1 33.4 50.0

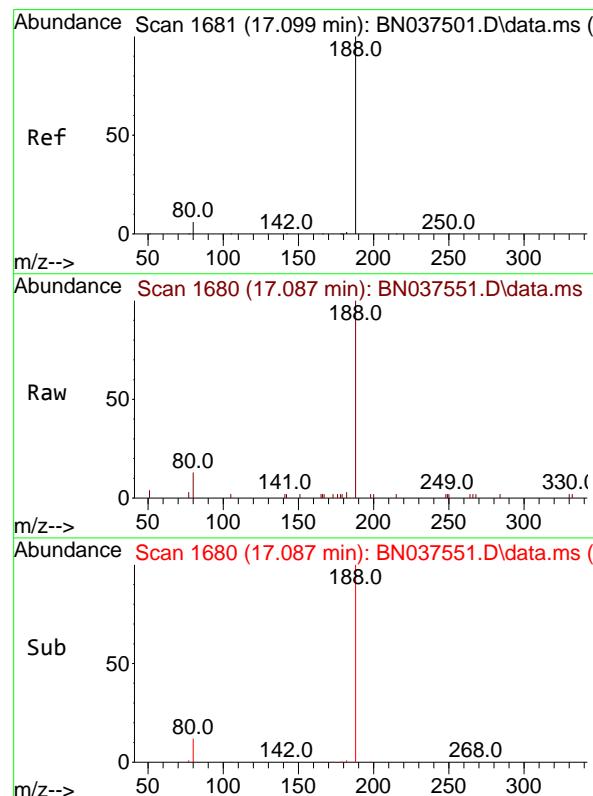
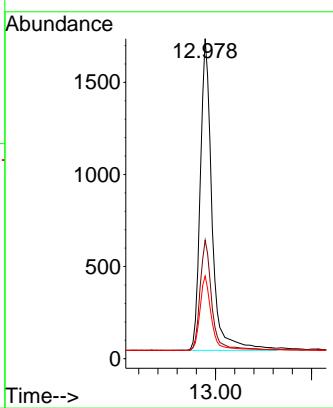




#15  
2-Fluorobiphenyl  
Concen: 0.319 ng  
RT: 12.978 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN037551.D  
Acq: 30 Jul 2025 11:27

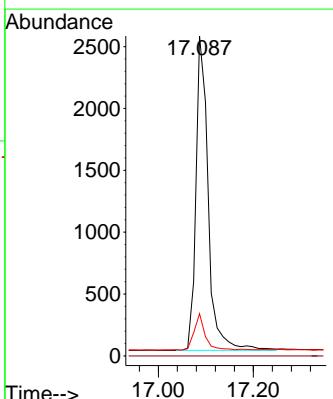
Instrument : BNA\_N  
ClientSampleId : RW8-SP303-20250724

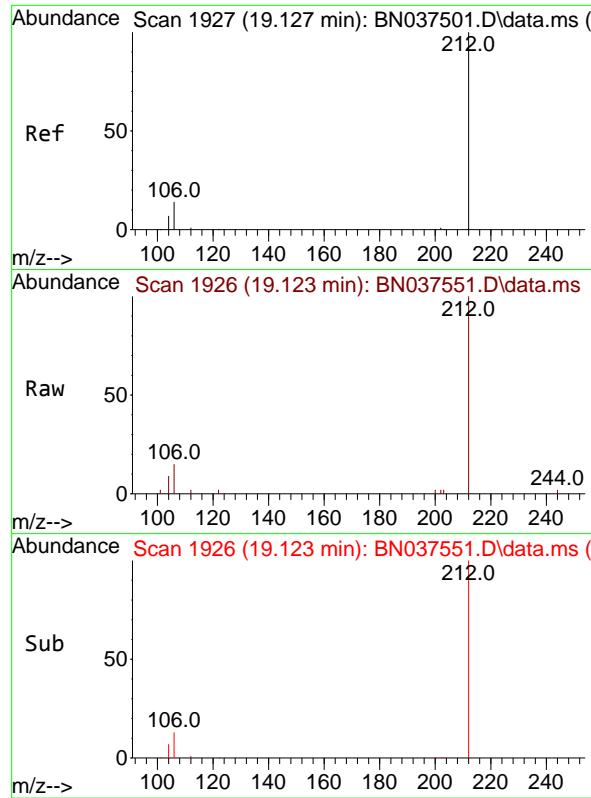
Tgt Ion:172 Resp: 3889  
Ion Ratio Lower Upper  
172 100  
171 37.1 29.4 44.2  
170 25.8 19.4 29.0



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.087 min Scan# 1680  
Delta R.T. -0.012 min  
Lab File: BN037551.D  
Acq: 30 Jul 2025 11:27

Tgt Ion:188 Resp: 4562  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 13.2 6.0 9.0#

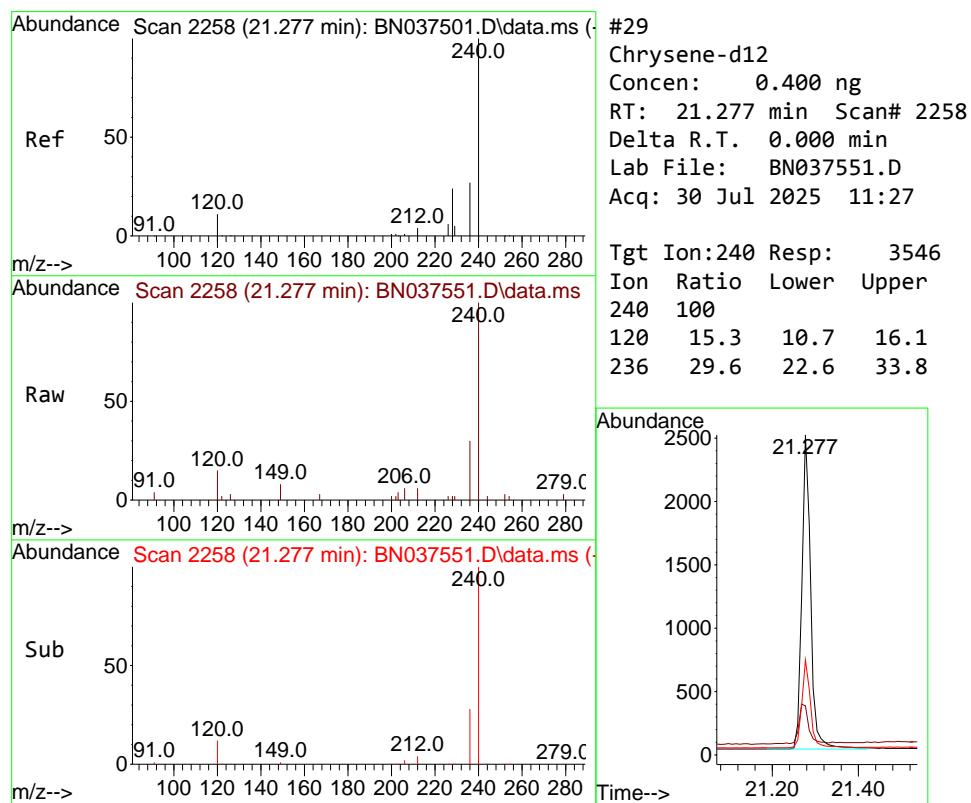
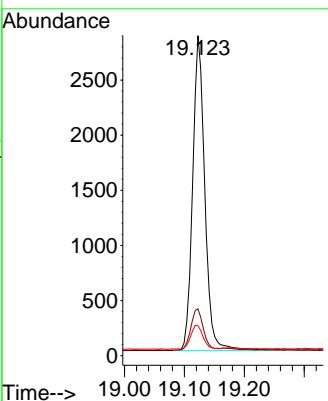




#27  
 Fluoranthene-d10  
 Concen: 0.334 ng  
 RT: 19.123 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN037551.D  
 Acq: 30 Jul 2025 11:27

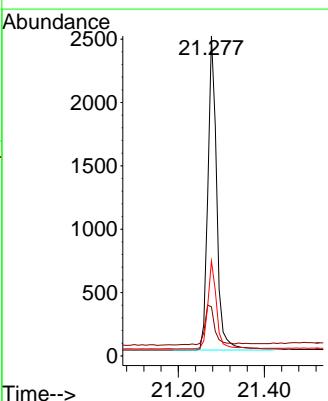
Instrument :  
 BNA\_N  
 ClientSampleId :  
 RW8-SP303-20250724

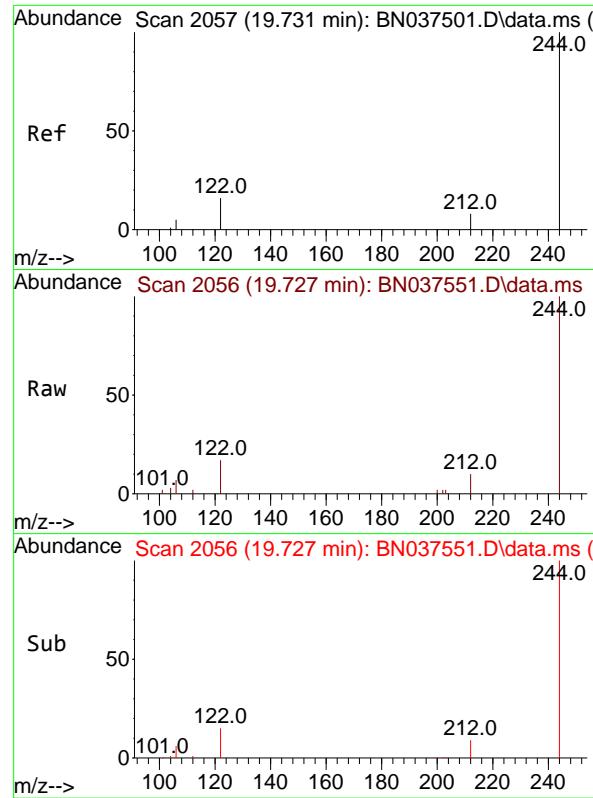
Tgt Ion:212 Resp: 4037  
 Ion Ratio Lower Upper  
 212 100  
 106 13.6 12.2 18.4  
 104 7.7 6.7 10.1



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2258  
 Delta R.T. 0.000 min  
 Lab File: BN037551.D  
 Acq: 30 Jul 2025 11:27

Tgt Ion:240 Resp: 3546  
 Ion Ratio Lower Upper  
 240 100  
 120 15.3 10.7 16.1  
 236 29.6 22.6 33.8

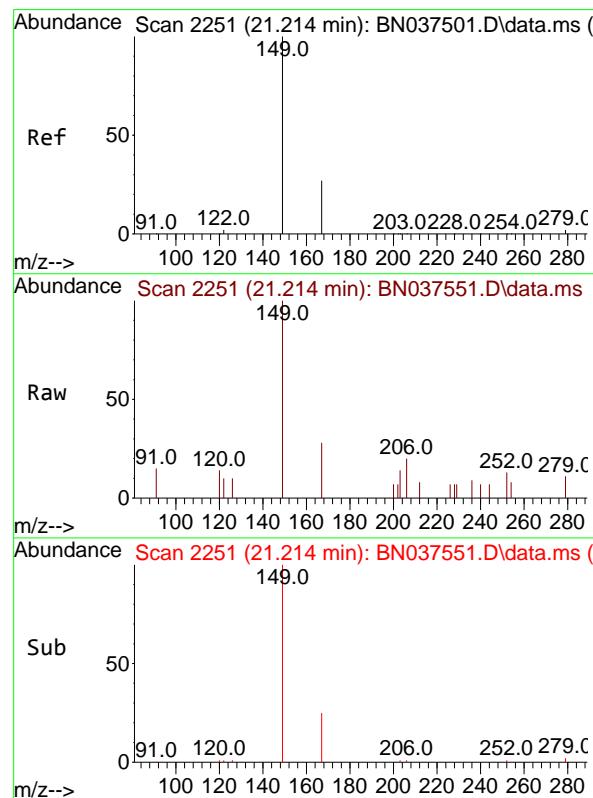
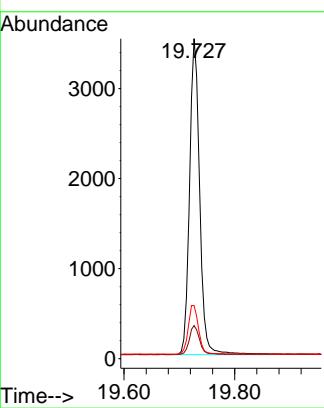




#31  
Terphenyl-d14  
Concen: 0.586 ng  
RT: 19.727 min Scan# 2  
Delta R.T. -0.005 min  
Lab File: BN037551.D  
Acq: 30 Jul 2025 11:27

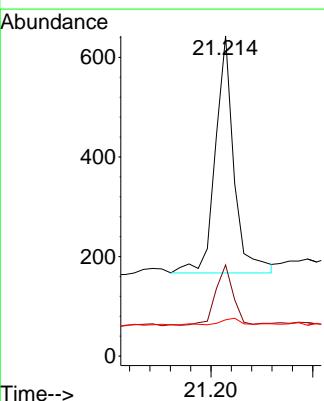
Instrument : BNA\_N  
ClientSampleId : RW8-SP303-20250724

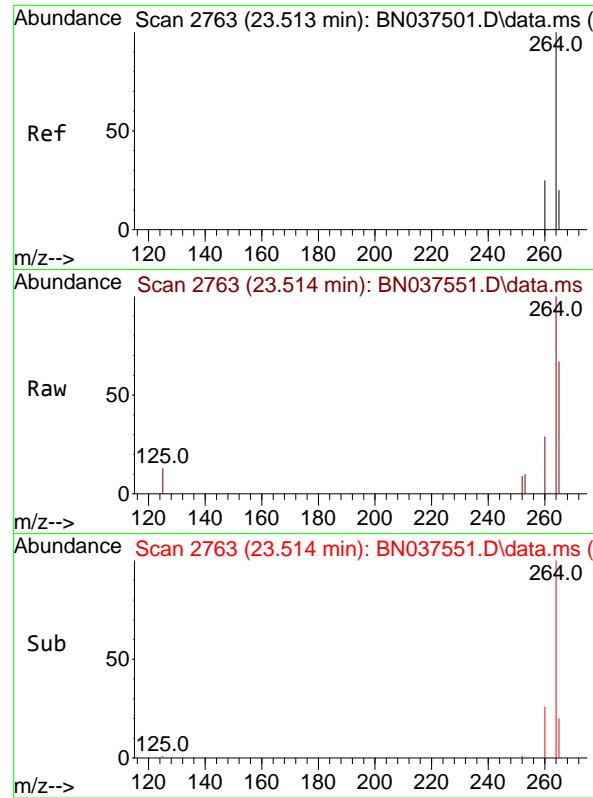
Tgt Ion:244 Resp: 4466  
Ion Ratio Lower Upper  
244 100  
212 10.3 7.4 11.2  
122 16.6 13.6 20.4



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.108 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037551.D  
Acq: 30 Jul 2025 11:27

Tgt Ion:149 Resp: 605  
Ion Ratio Lower Upper  
149 100  
167 23.8 21.8 32.8  
279 2.6 3.0 4.4#

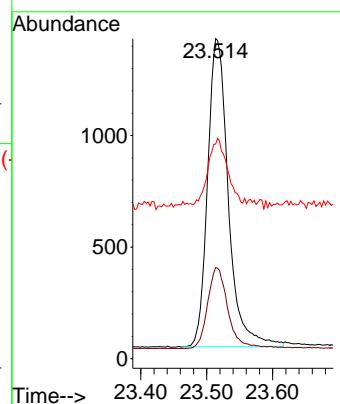




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.514 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037551.D  
Acq: 30 Jul 2025 11:27

Instrument :  
BNA\_N  
ClientSampleId :  
RW8-SP303-20250724

Tgt Ion:264 Resp: 3028  
Ion Ratio Lower Upper  
264 100  
260 28.5 21.2 31.8  
265 67.1 40.4 60.6#





# CALIBRATION

# SUMMARY

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

## Calibration Files

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

| Compound | 0.1 | 0.2 | 0.4 | 0.8 | 1.6 | 3.2 | 5 | Avg | %RSD |
|----------|-----|-----|-----|-----|-----|-----|---|-----|------|
|----------|-----|-----|-----|-----|-----|-----|---|-----|------|

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

Response Factor Report BNA\_N

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
Method File : 8270-SIM-BN071525.M

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

(#) = Out of Range

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

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDICCO.1**

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

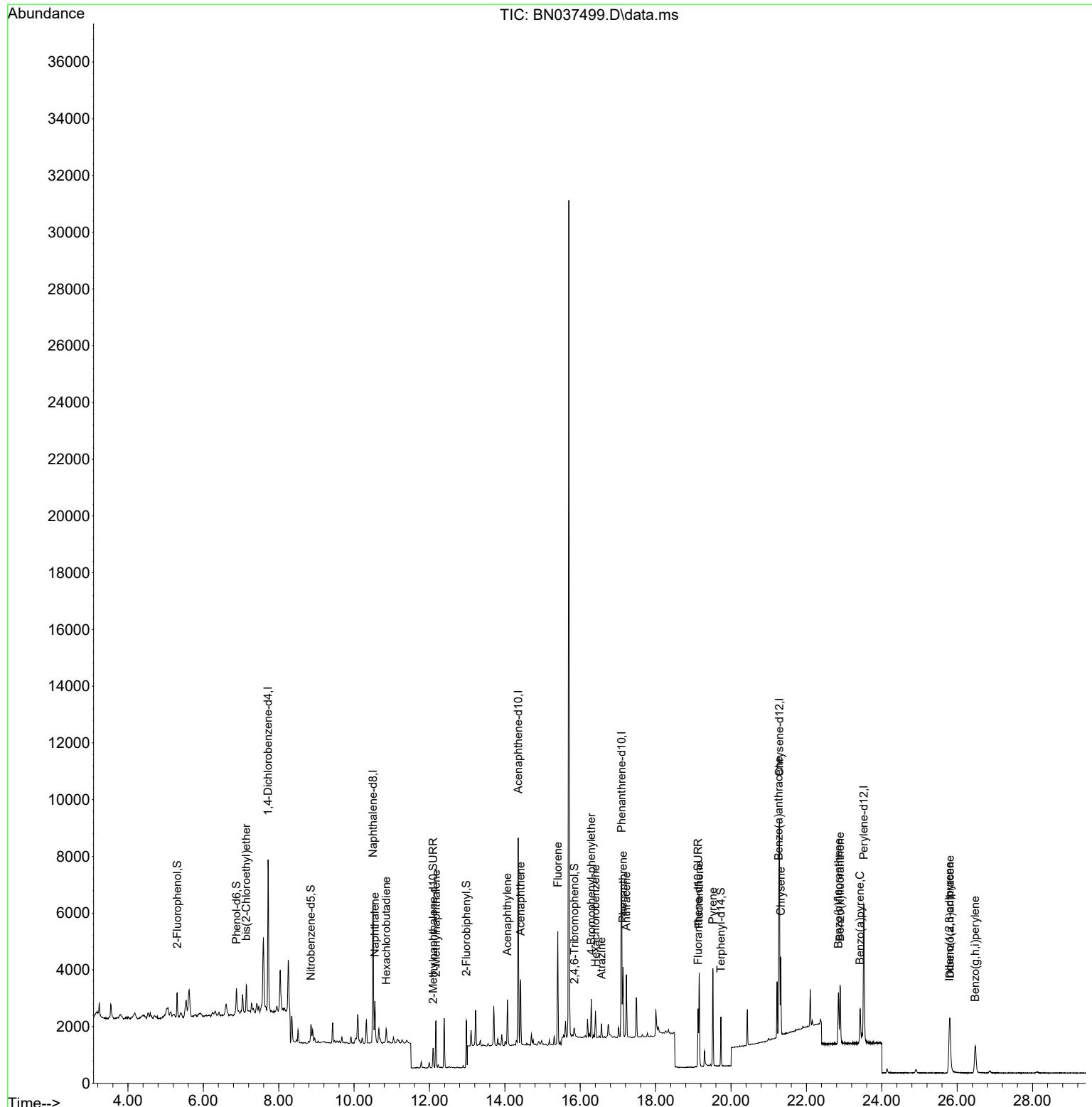
| Compound                           | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|------------------------------------|--------|------|----------|-------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4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

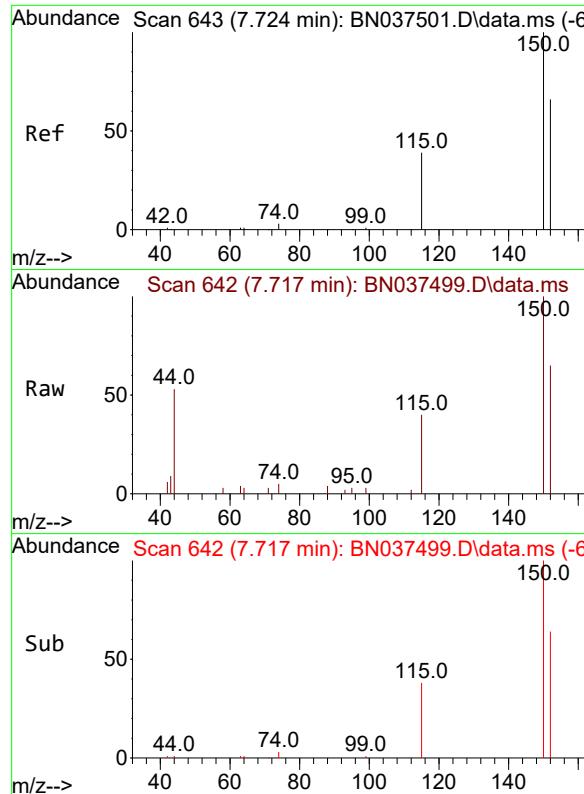
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.1

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

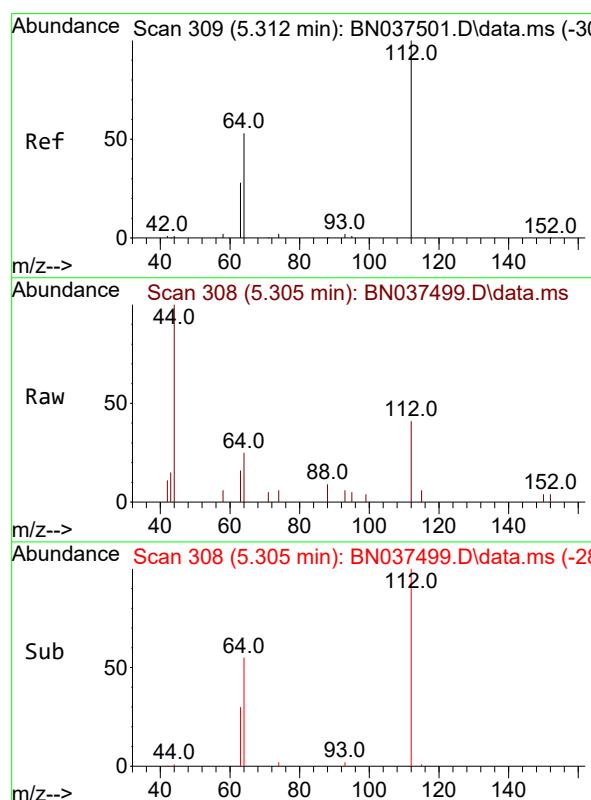
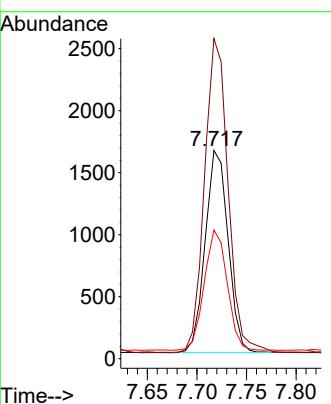




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 6  
Delta R.T. -0.007 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

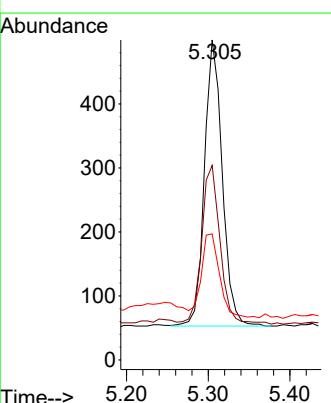
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

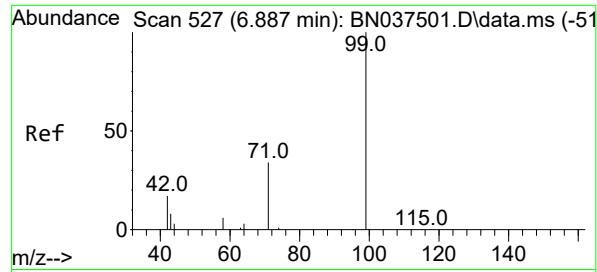
Tgt Ion:152 Resp: 2613  
Ion Ratio Lower Upper  
152 100  
150 153.7 119.8 179.8  
115 61.8 49.1 73.7



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

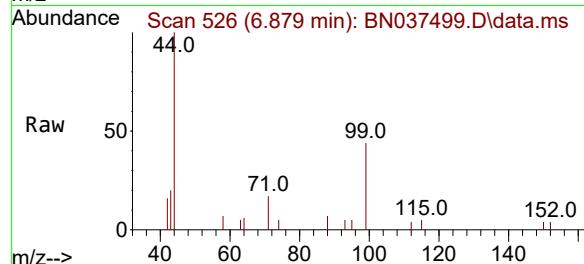
Tgt Ion:112 Resp: 678  
Ion Ratio Lower Upper  
112 100  
64 57.5 45.1 67.7  
63 29.1 23.8 35.8



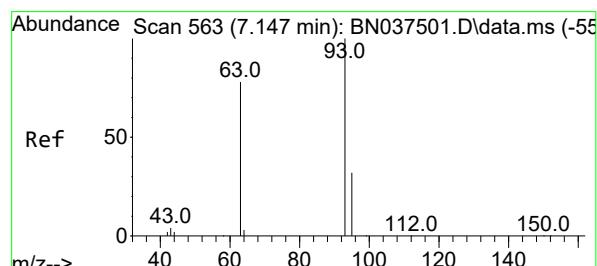
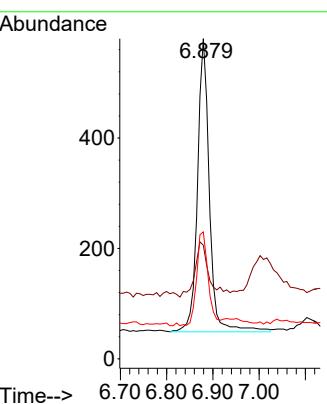
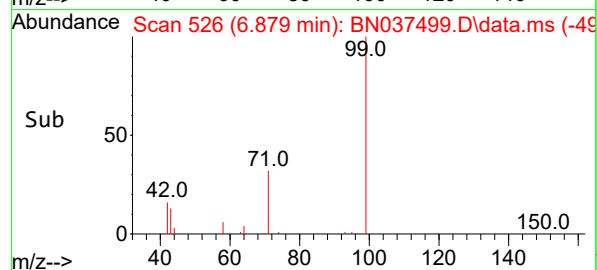


#5  
 Phenol-d6  
 Concen: 0.117 ng  
 RT: 6.879 min Scan# 51  
 Delta R.T. -0.007 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

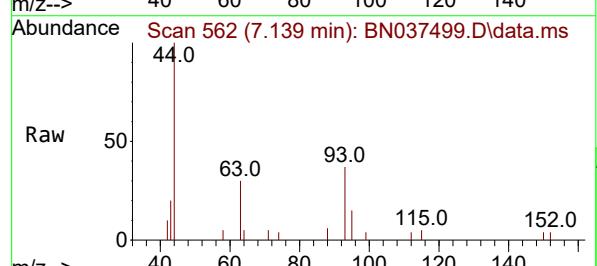
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1



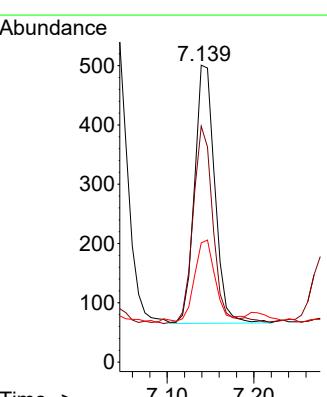
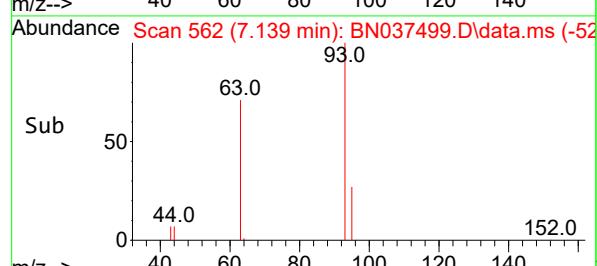
Tgt Ion: 99 Resp: 946  
 Ion Ratio Lower Upper  
 99 100  
 42 22.3 17.1 25.7  
 71 31.1 27.8 41.8

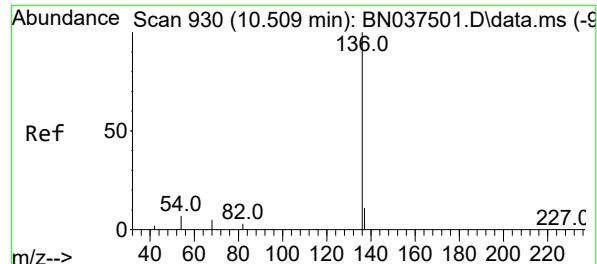


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.105 ng  
 RT: 7.139 min Scan# 562  
 Delta R.T. -0.007 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36



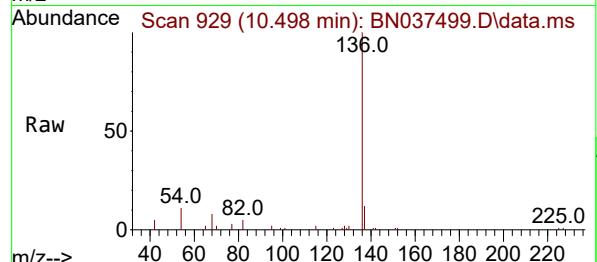
Tgt Ion: 93 Resp: 707  
 Ion Ratio Lower Upper  
 93 100  
 63 75.8 58.2 87.4  
 95 33.2 25.3 37.9



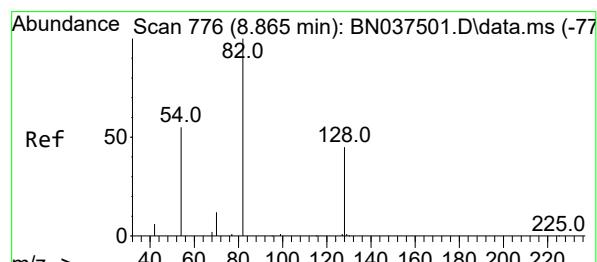
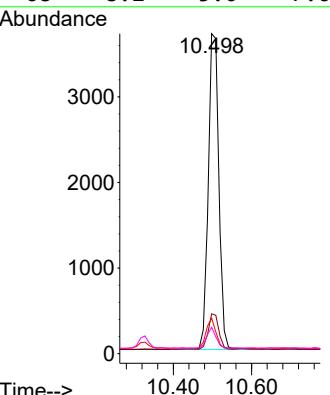
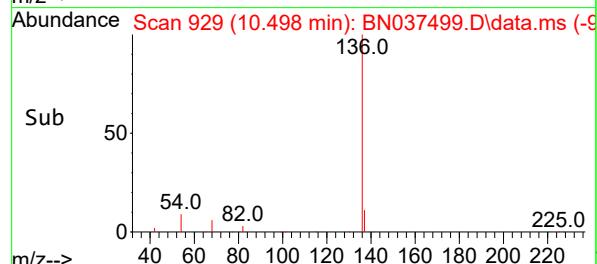


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

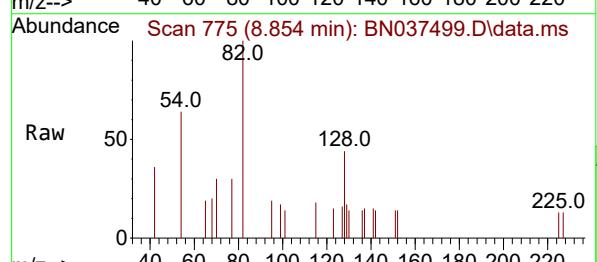
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1



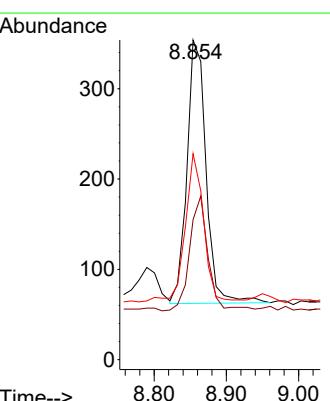
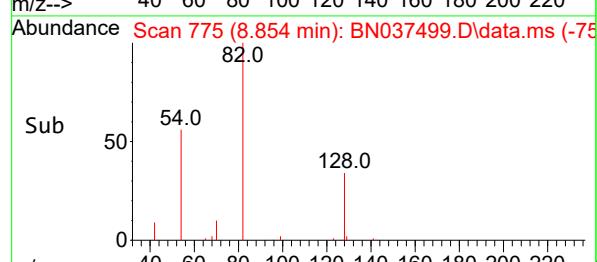
Tgt Ion:136 Resp: 6917  
 Ion Ratio Lower Upper  
 136 100  
 137 12.5 9.8 14.8  
 54 11.1 6.6 9.8#  
 68 8.2 5.0 7.6#

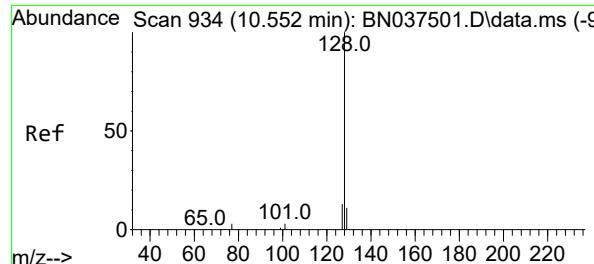


#8  
 Nitrobenzene-d5  
 Concen: 0.104 ng  
 RT: 8.854 min Scan# 775  
 Delta R.T. -0.011 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36



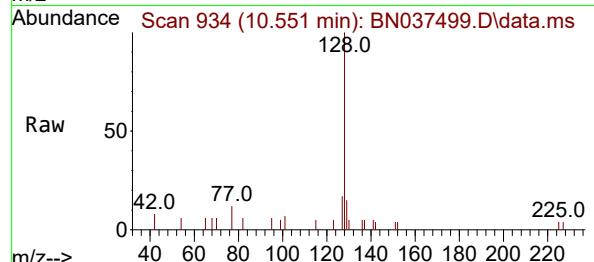
Tgt Ion: 82 Resp: 538  
 Ion Ratio Lower Upper  
 82 100  
 128 43.8 37.5 56.3  
 54 64.4 45.3 67.9



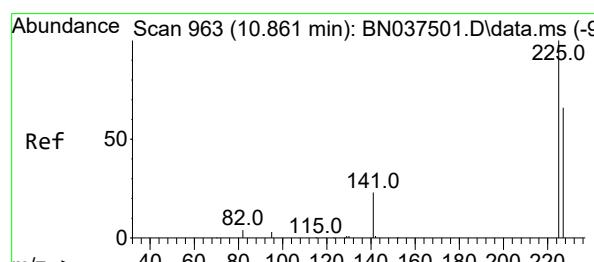
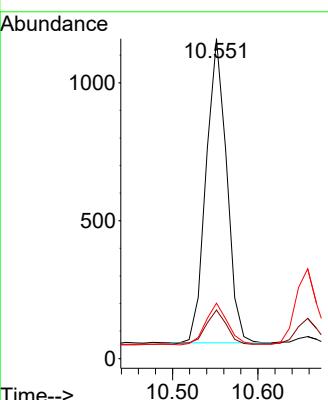
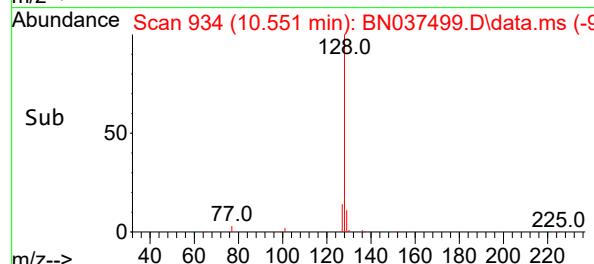


#9  
Naphthalene  
Concen: 0.100 ng  
RT: 10.551 min Scan# 9  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

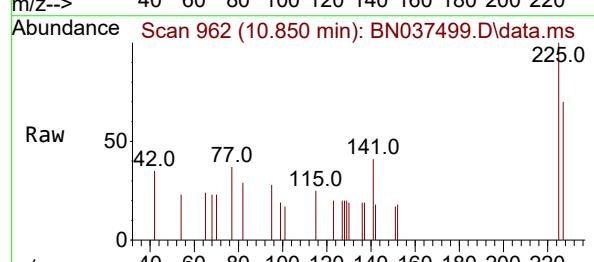
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.1



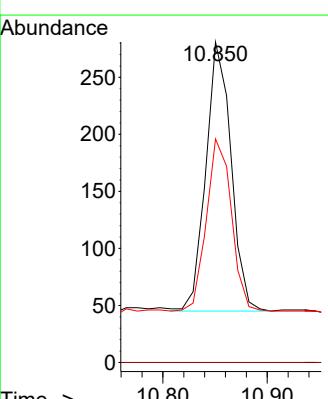
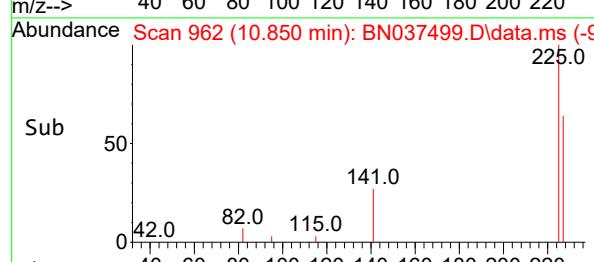
Tgt Ion:128 Resp: 1848  
Ion Ratio Lower Upper  
128 100  
129 15.2 9.7 14.5#  
127 17.3 11.5 17.3#



#10  
Hexachlorobutadiene  
Concen: 0.097 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36



Tgt Ion:225 Resp: 396  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.4 51.0 76.4



#11

2-Methylnaphthalene-d10

Concen: 0.097 ng

RT: 12.096 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

Tgt Ion:152 Resp: 962

Ion Ratio Lower Upper

152 100

151 20.3 16.8 25.2

Abundance

600

400

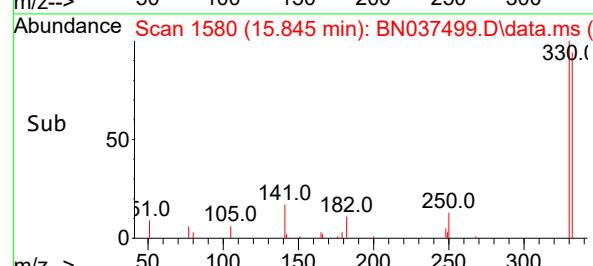
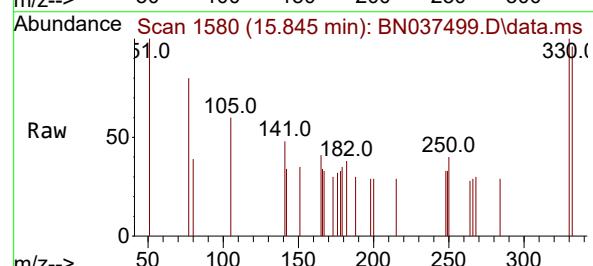
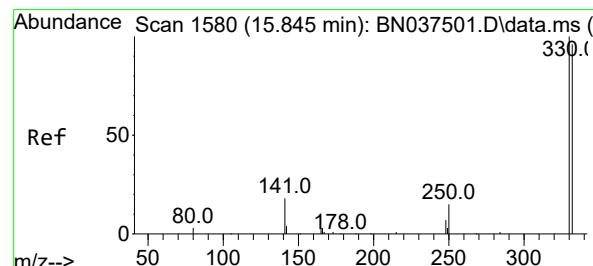
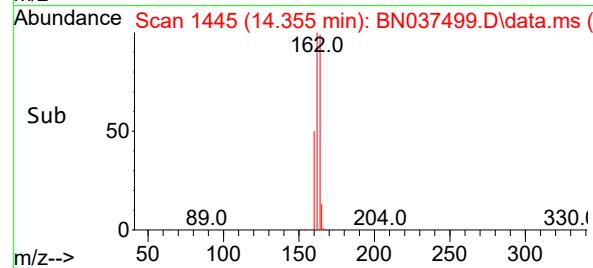
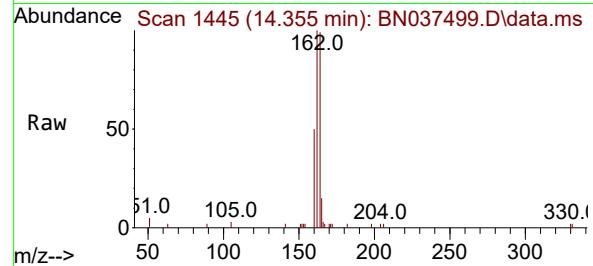
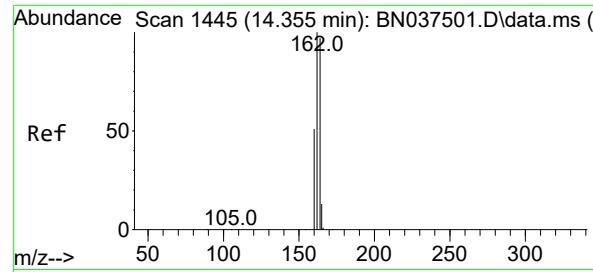
200

0

12.096

Time--&gt;

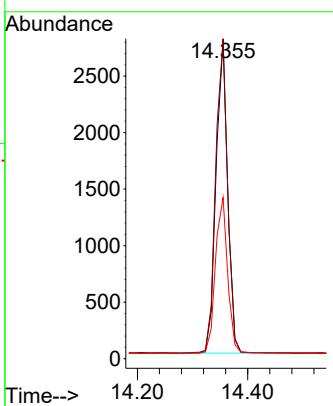
12.00 12.10 12.20



#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.355 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCO.1

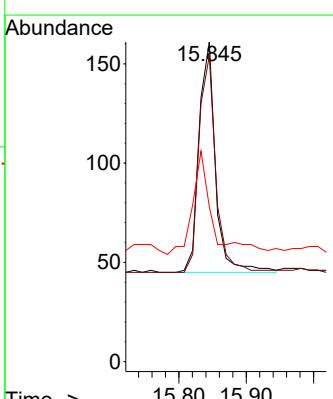
Tgt Ion:164 Resp: 4050  
Ion Ratio Lower Upper  
164 100  
162 100.5 82.0 123.0  
160 50.6 42.4 63.6

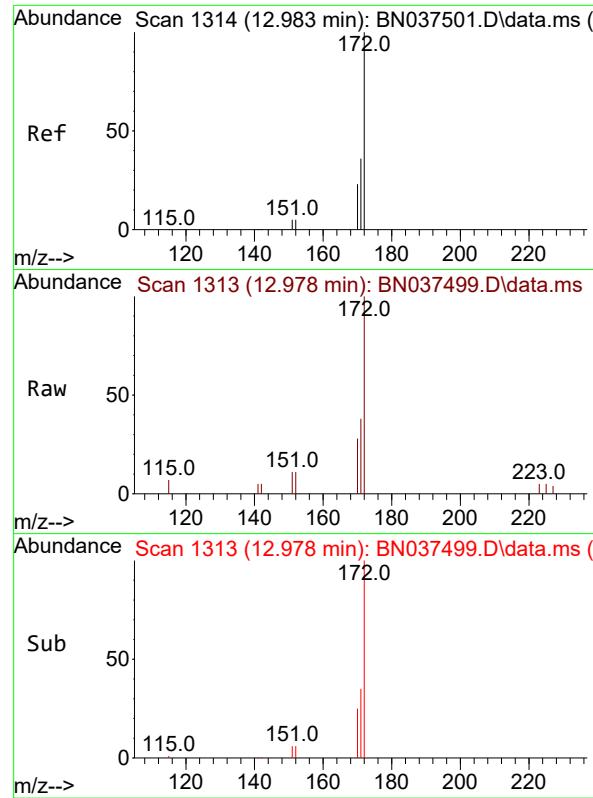


#14

2,4,6-Tribromophenol  
Concen: 0.100 ng  
RT: 15.845 min Scan# 1580  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

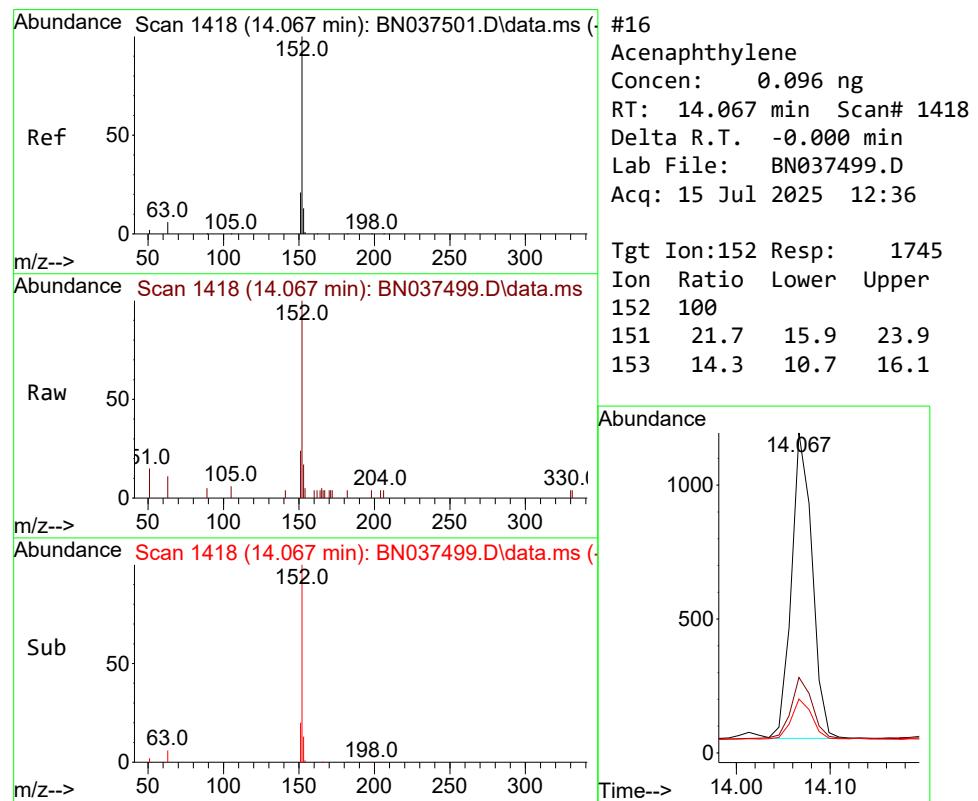
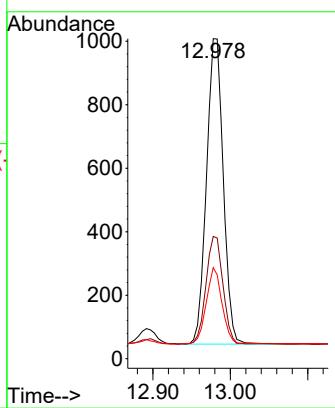
Tgt Ion:330 Resp: 199  
Ion Ratio Lower Upper  
330 100  
332 96.0 76.1 114.1  
141 44.7 33.4 50.0





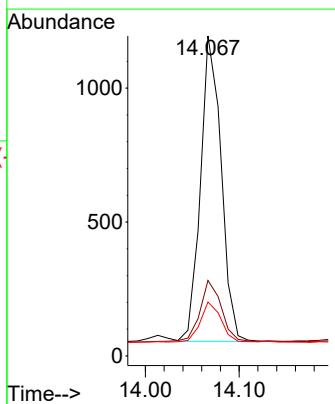
#15  
2-Fluorobiphenyl  
Concen: 0.087 ng  
RT: 12.978 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

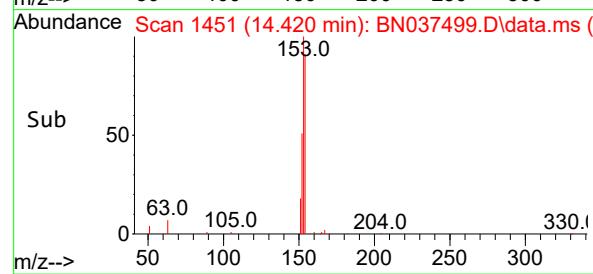
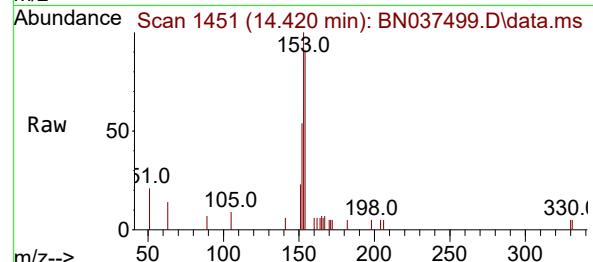
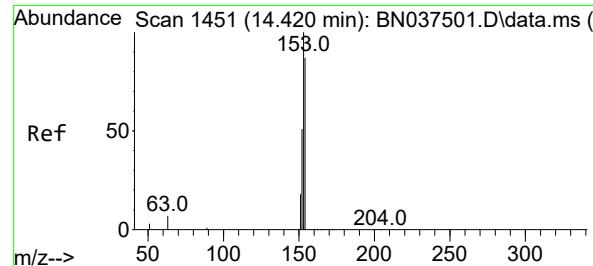
Tgt Ion:172 Resp: 1841  
Ion Ratio Lower Upper  
172 100  
171 38.2 29.4 44.2  
170 28.5 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.096 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:152 Resp: 1745  
Ion Ratio Lower Upper  
152 100  
151 21.7 15.9 23.9  
153 14.3 10.7 16.1





#17

Acenaphthene

Concen: 0.102 ng

RT: 14.420 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

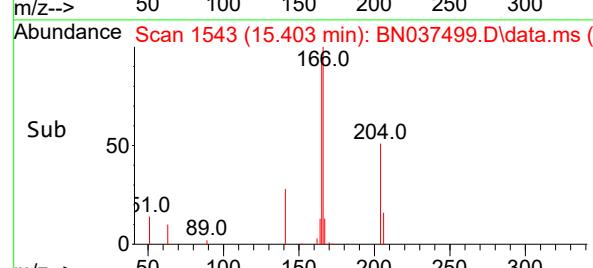
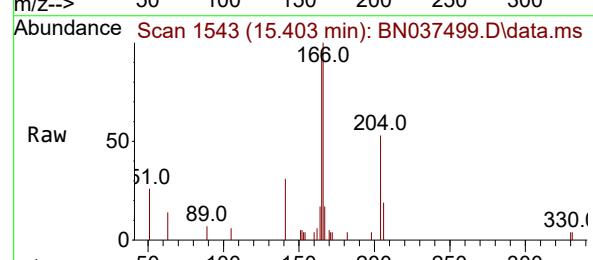
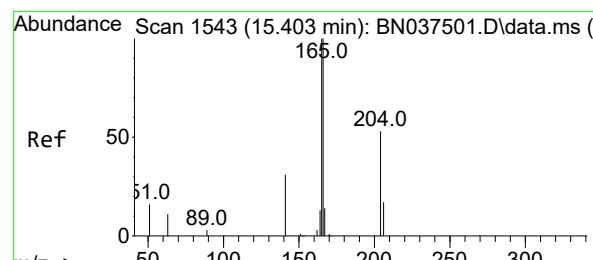
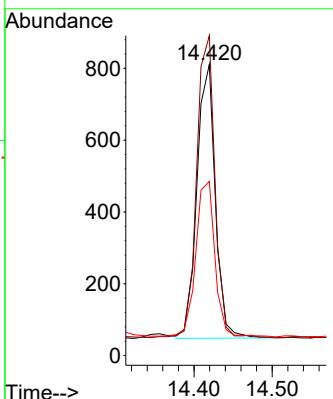
Tgt Ion:154 Resp: 1254

Ion Ratio Lower Upper

154 100

153 108.9 89.2 133.8

152 59.4 48.0 72.0



#18

Fluorene

Concen: 0.101 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

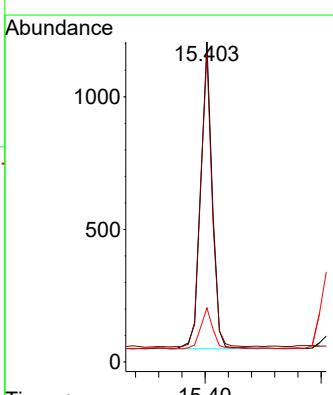
Tgt Ion:166 Resp: 1612

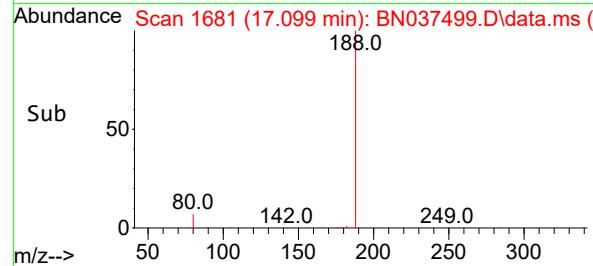
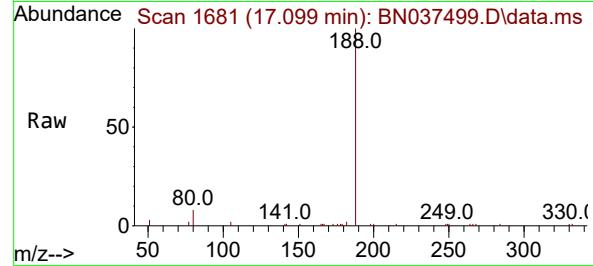
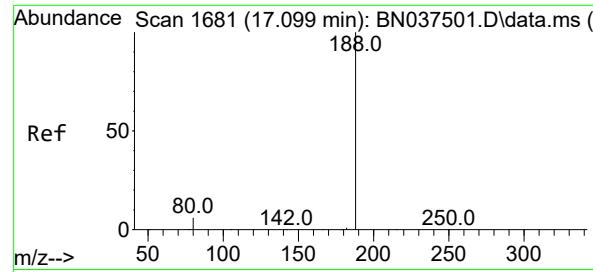
Ion Ratio Lower Upper

166 100

165 94.6 78.1 117.1

167 14.0 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

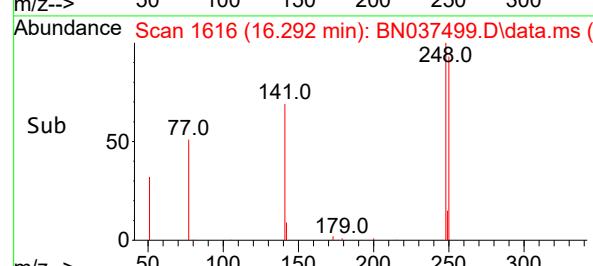
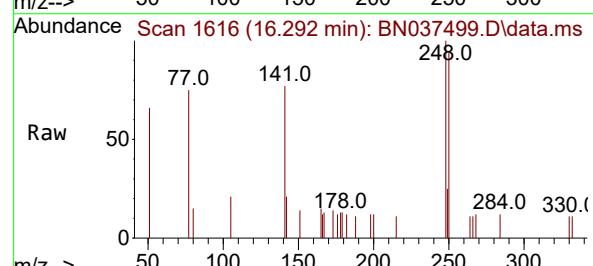
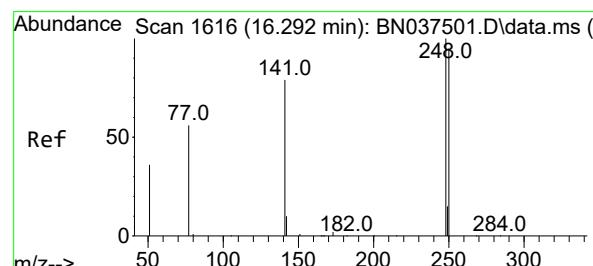
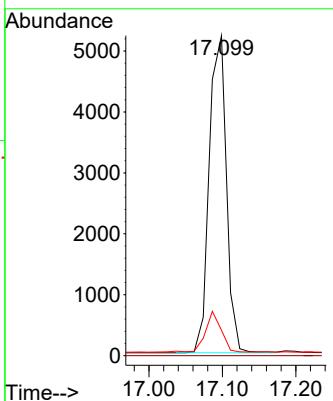
Tgt Ion:188 Resp: 8501

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.9 6.0 9.0



#21

4-Bromophenyl-phenylether

Concen: 0.097 ng

RT: 16.292 min Scan# 1616

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

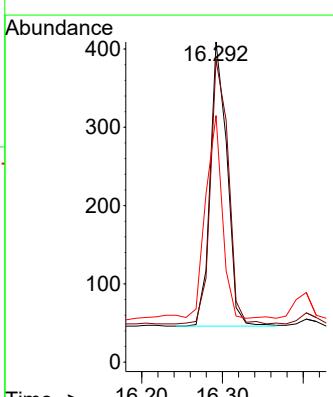
Tgt Ion:248 Resp: 527

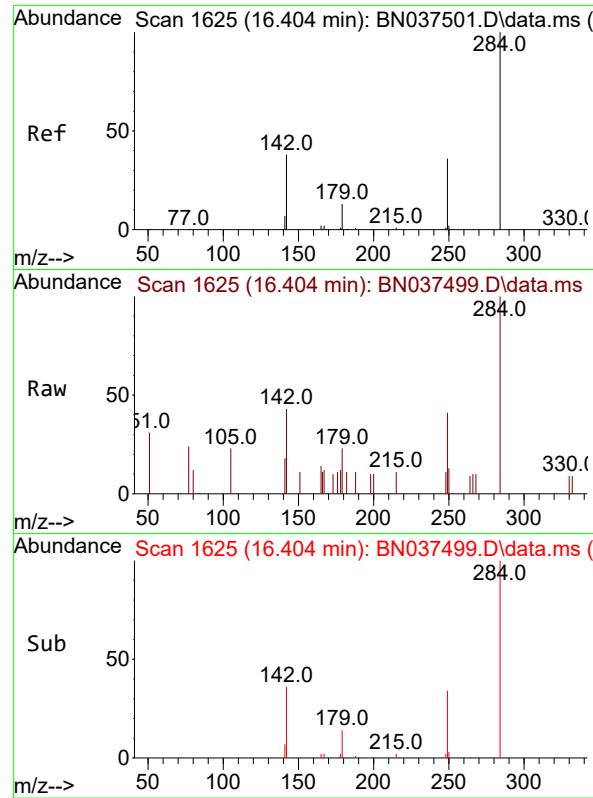
Ion Ratio Lower Upper

248 100

250 94.4 76.2 114.2

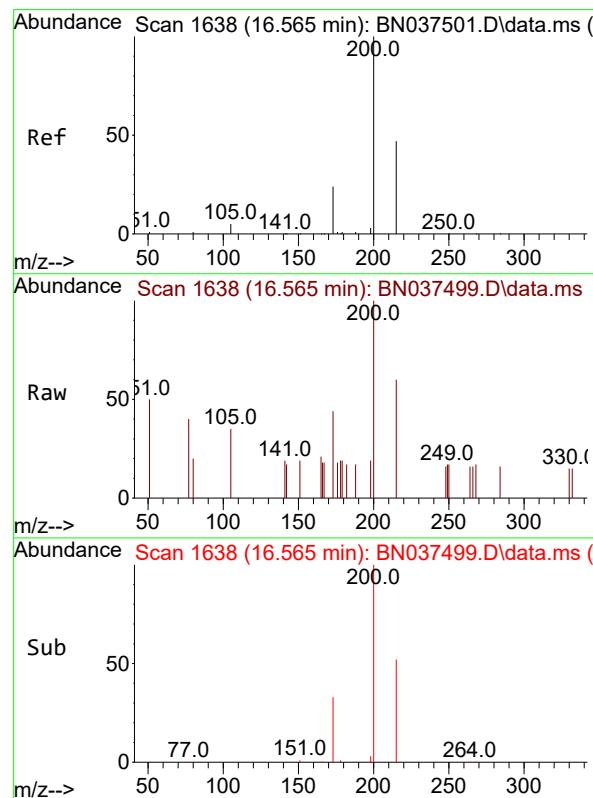
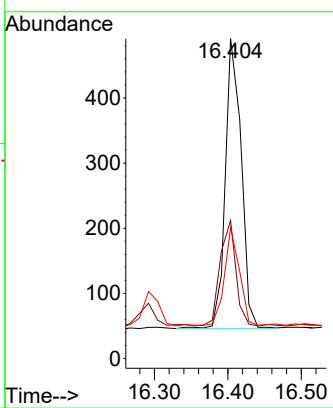
141 77.0 63.9 95.9





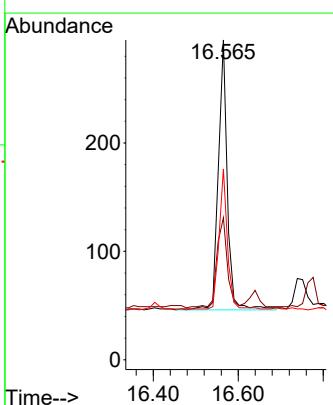
#22  
Hexachlorobenzene  
Concen: 0.095 ng  
RT: 16.404 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36  
ClientSampleId : SSTDICCO.1

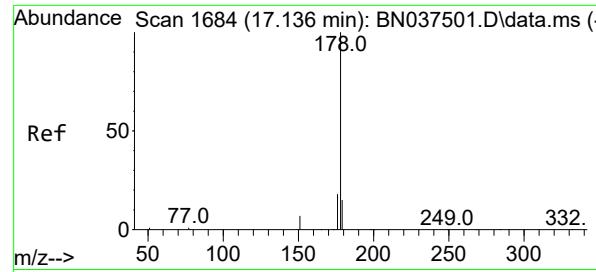
Tgt Ion:284 Resp: 670  
Ion Ratio Lower Upper  
284 100  
142 36.1 28.9 43.3  
249 32.4 25.8 38.6



#23  
Atrazine  
Concen: 0.097 ng  
RT: 16.565 min Scan# 1638  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:200 Resp: 368  
Ion Ratio Lower Upper  
200 100  
173 44.4 23.2 34.8#  
215 59.7 40.2 60.4

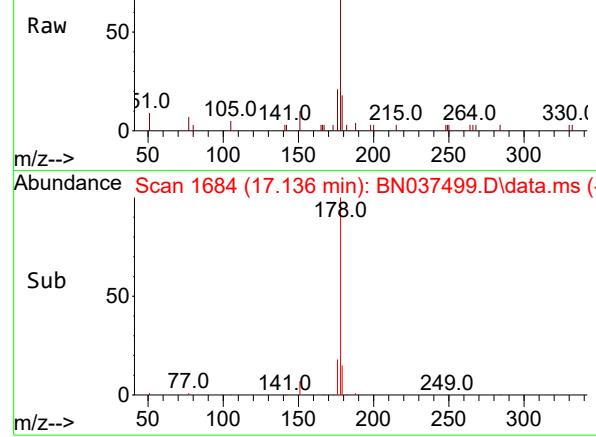




Ref 50  
0

Scan 1684 (17.136 min): BN037499.D\data.ms

178.0



Raw 50  
0

Sub 50  
0

Scan 1684 (17.136 min): BN037499.D\data.ms (-)

178.0

m/z-->

#25

Phenanthrene

Concen: 0.097 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

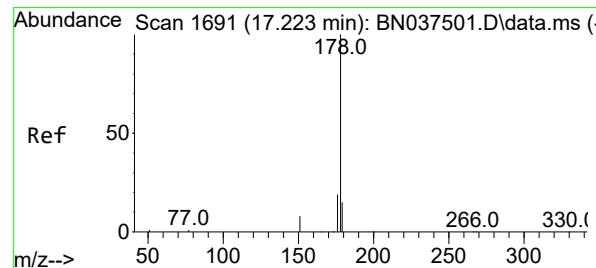
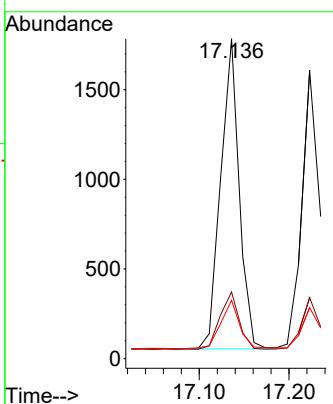
Tgt Ion:178 Resp: 2480

Ion Ratio Lower Upper

178 100

176 19.2 15.0 22.6

179 15.8 12.2 18.2



Ref 50  
0

Scan 1691 (17.223 min): BN037499.D\data.ms

178.0

m/z-->

Raw 50  
0

Scan 1691 (17.223 min): BN037499.D\data.ms (-)

178.0

m/z-->

Sub 50  
0

Scan 1691 (17.223 min): BN037499.D\data.ms (-)

178.0

m/z-->

#26

Anthracene

Concen: 0.094 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

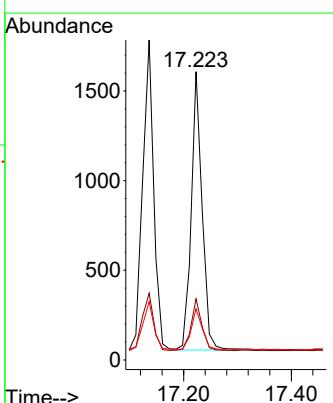
Tgt Ion:178 Resp: 2179

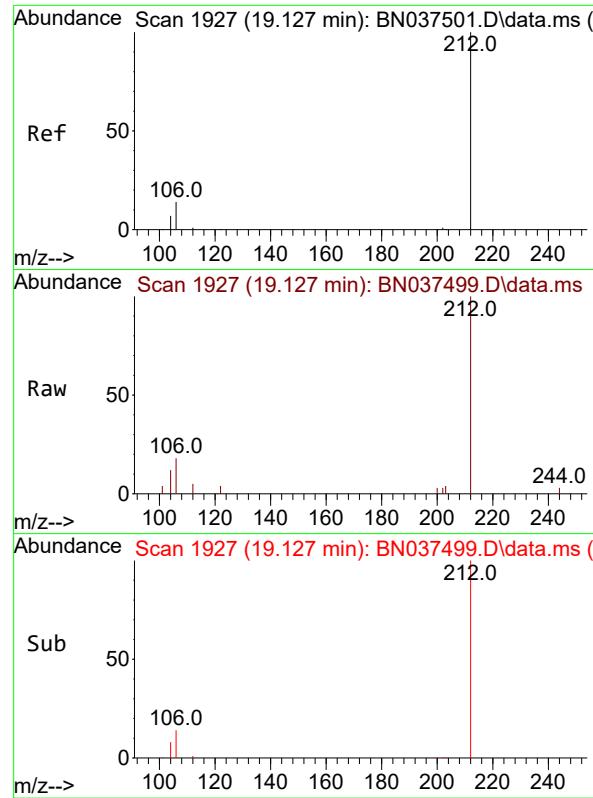
Ion Ratio Lower Upper

178 100

176 18.3 14.7 22.1

179 15.3 12.3 18.5

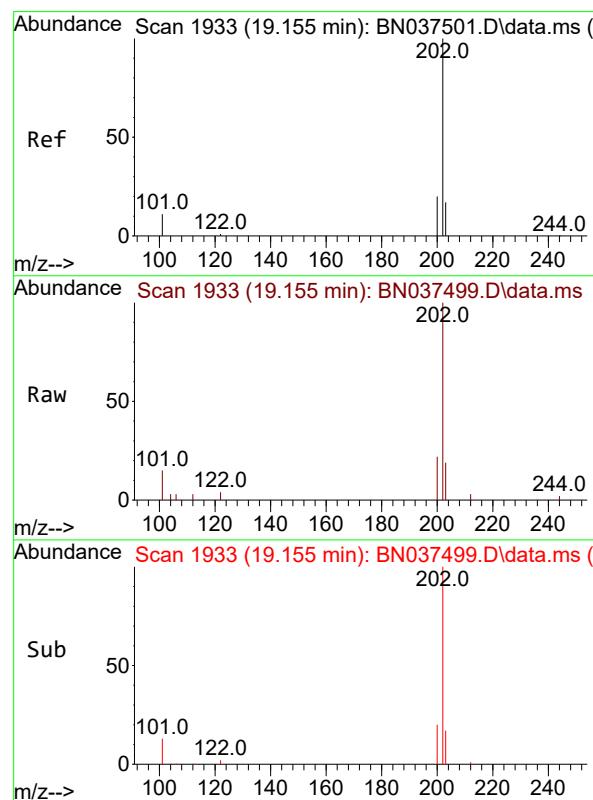
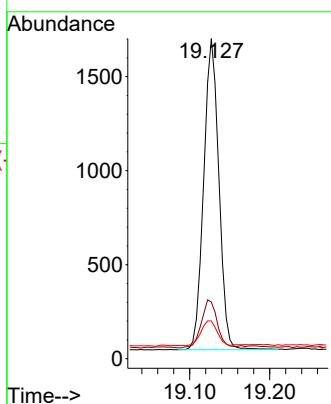




#27  
 Fluoranthene-d10  
 Concen: 0.097 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

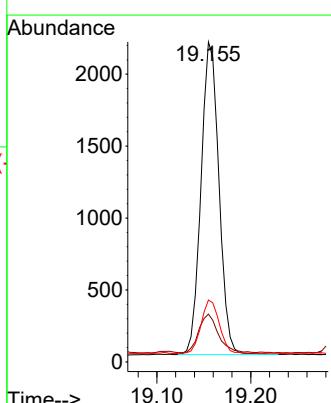
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

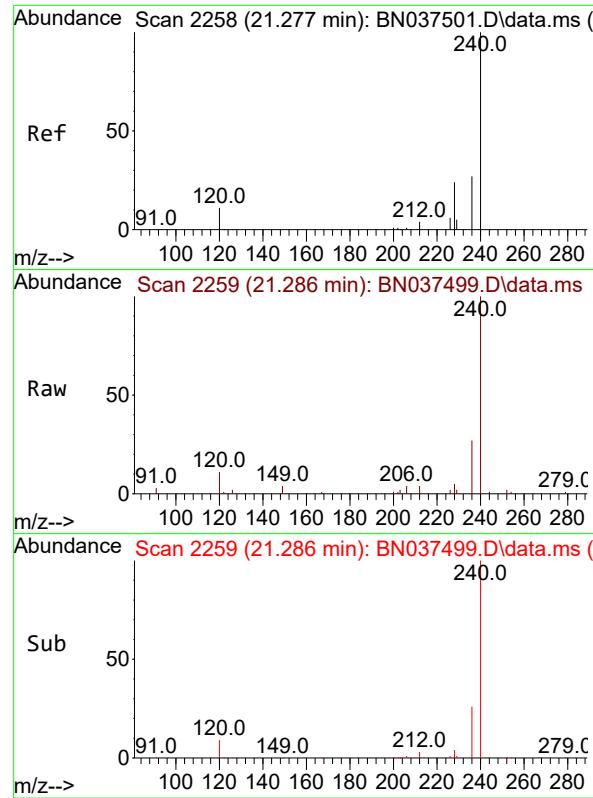
Tgt Ion:212 Resp: 2175  
 Ion Ratio Lower Upper  
 212 100  
 106 15.9 12.2 18.4  
 104 8.7 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.098 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

Tgt Ion:202 Resp: 2886  
 Ion Ratio Lower Upper  
 202 100  
 101 13.5 9.8 14.6  
 203 17.3 13.6 20.4

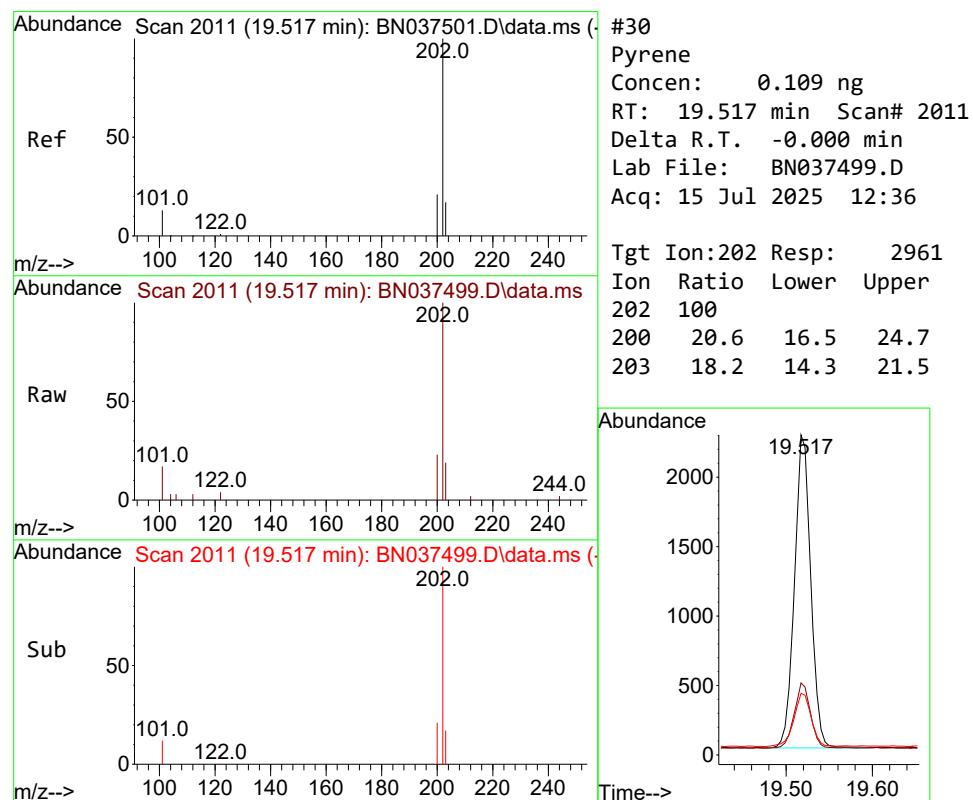
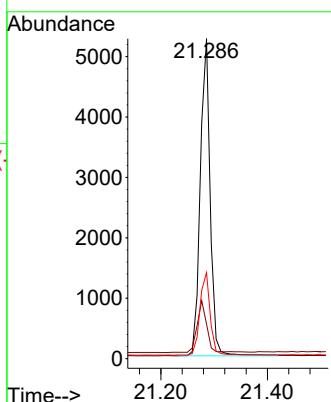




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.286 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

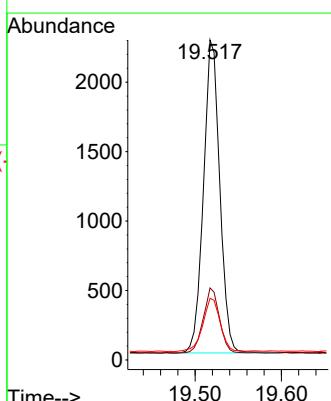
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

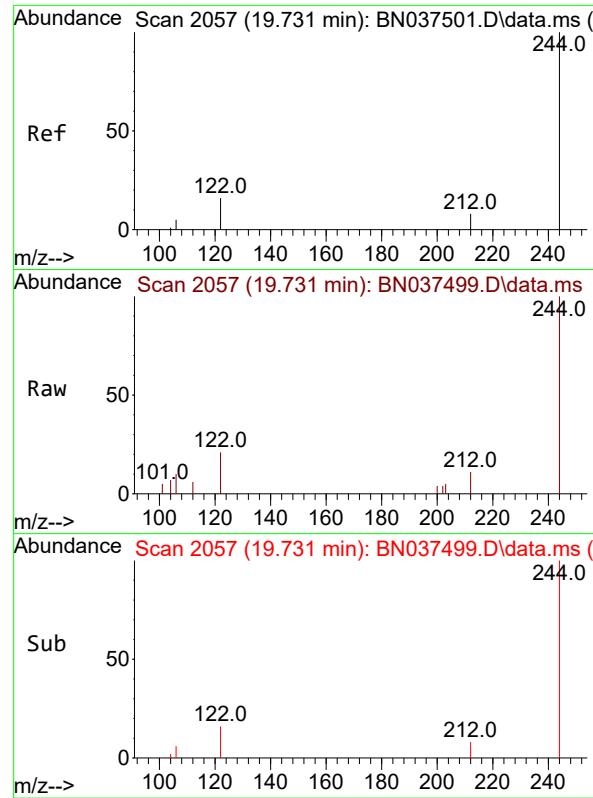
Tgt Ion:240 Resp: 6753  
Ion Ratio Lower Upper  
240 100  
120 10.8 10.7 16.1  
236 26.9 22.6 33.8



#30  
Pyrene  
Concen: 0.109 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:202 Resp: 2961  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 18.2 14.3 21.5

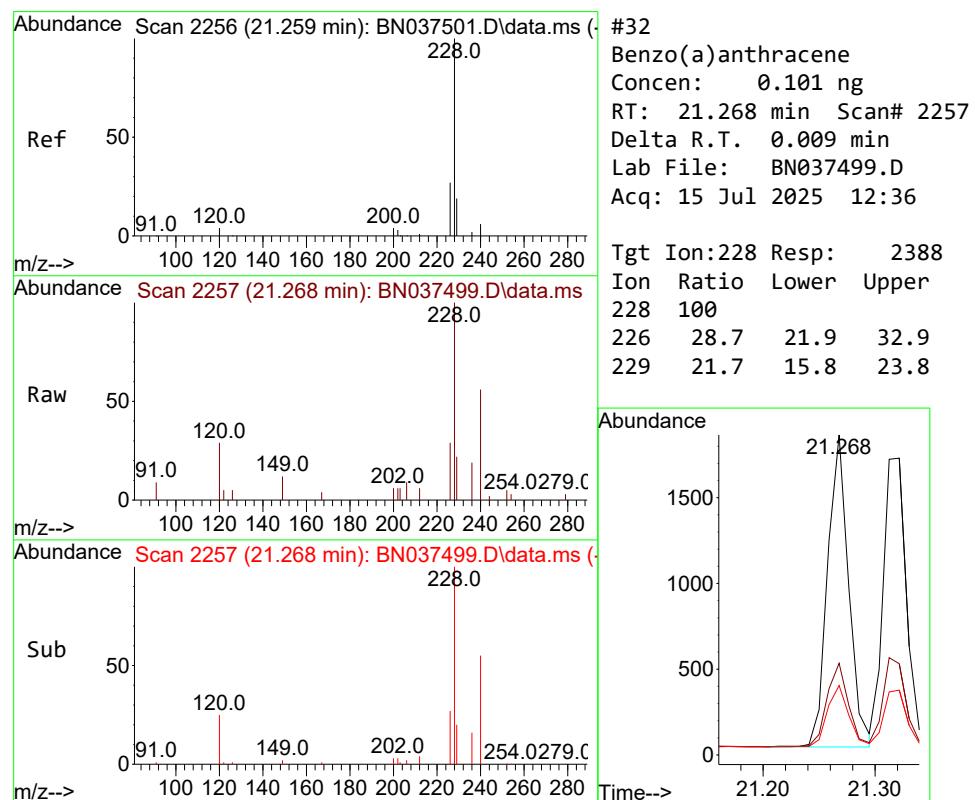
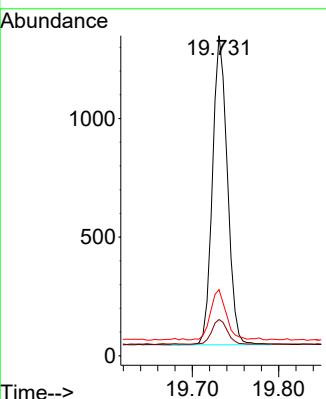




#31  
 Terphenyl-d14  
 Concen: 0.108 ng  
 RT: 19.731 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

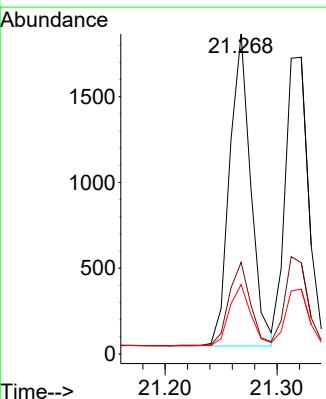
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

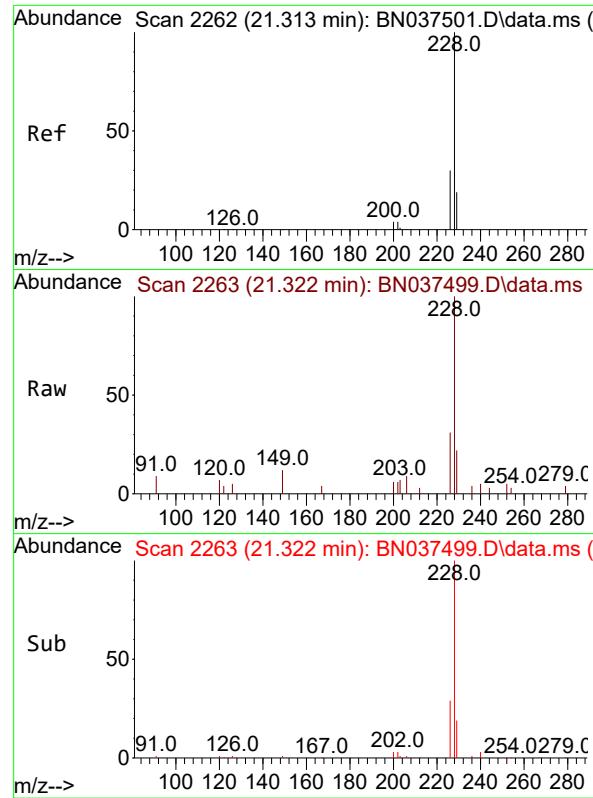
Tgt Ion:244 Resp: 1563  
 Ion Ratio Lower Upper  
 244 100  
 212 11.3 7.4 11.2#  
 122 20.7 13.6 20.4#



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

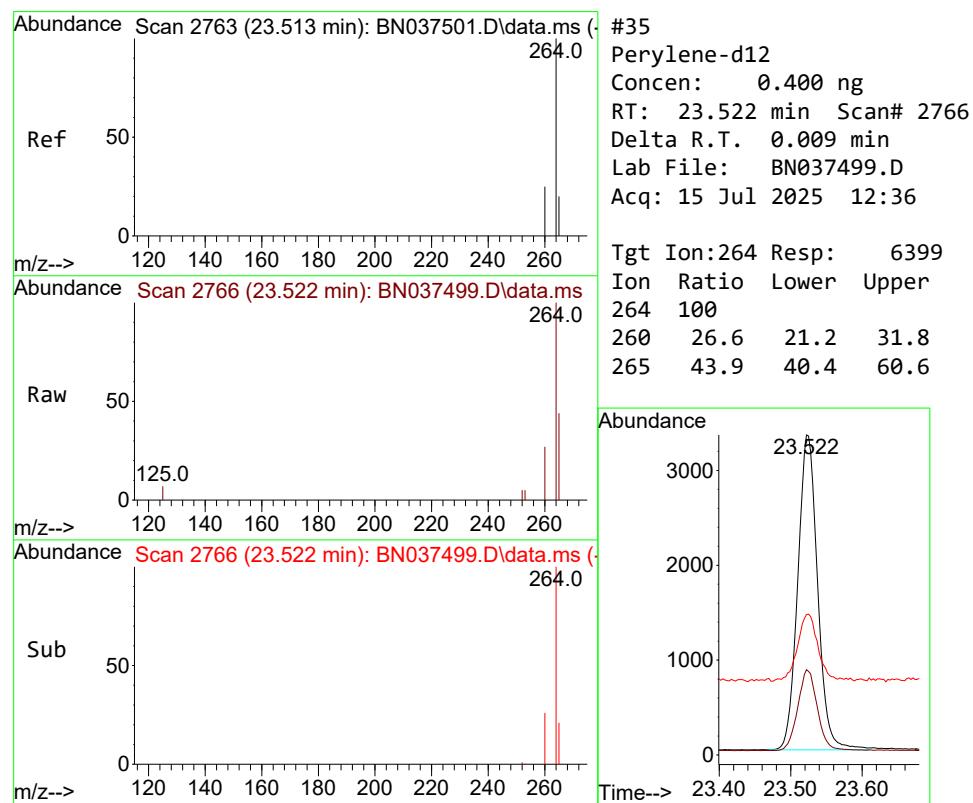
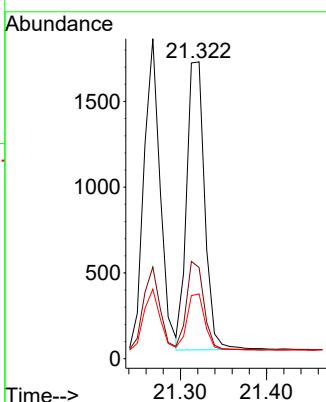
Tgt Ion:228 Resp: 2388  
 Ion Ratio Lower Upper  
 228 100  
 226 28.7 21.9 32.9  
 229 21.7 15.8 23.8





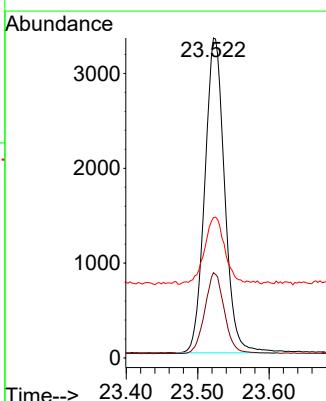
#33  
Chrysene  
Concen: 0.100 ng  
RT: 21.322 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36  
ClientSampleId : SSTDICCO.1

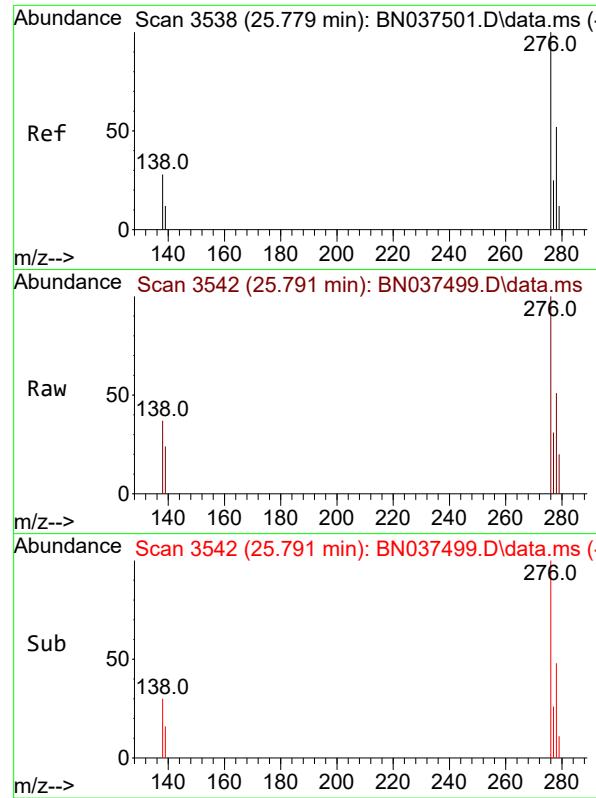
Tgt Ion:228 Resp: 2451  
Ion Ratio Lower Upper  
228 100  
226 30.7 24.2 36.4  
229 21.8 16.1 24.1



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.522 min Scan# 2766  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:264 Resp: 6399  
Ion Ratio Lower Upper  
264 100  
260 26.6 21.2 31.8  
265 43.9 40.4 60.6

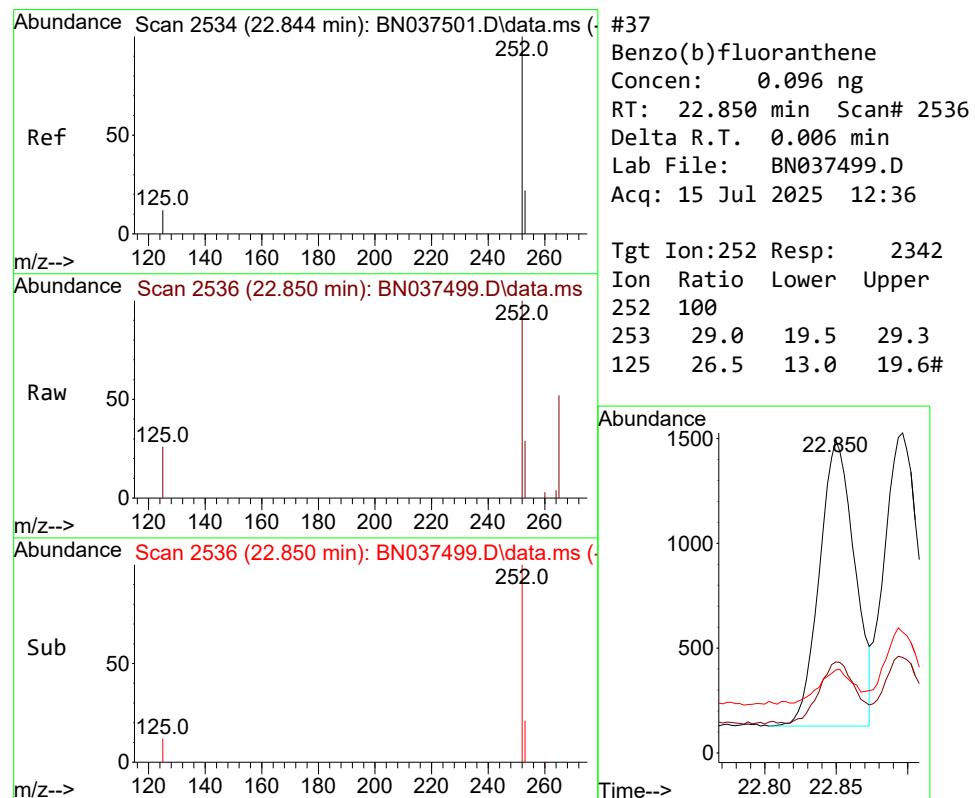
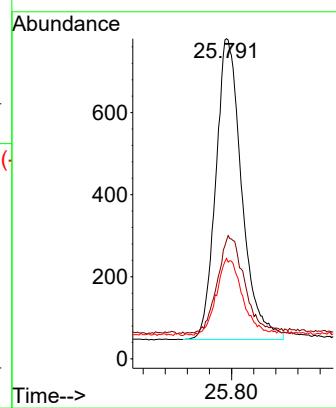




#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.090 ng  
RT: 25.791 min Scan# 3  
Delta R.T. 0.012 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

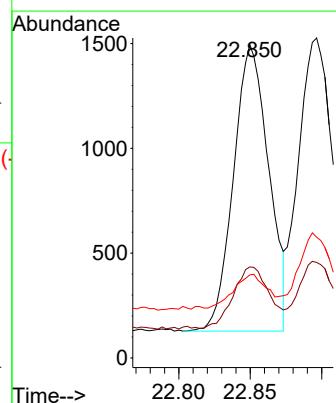
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

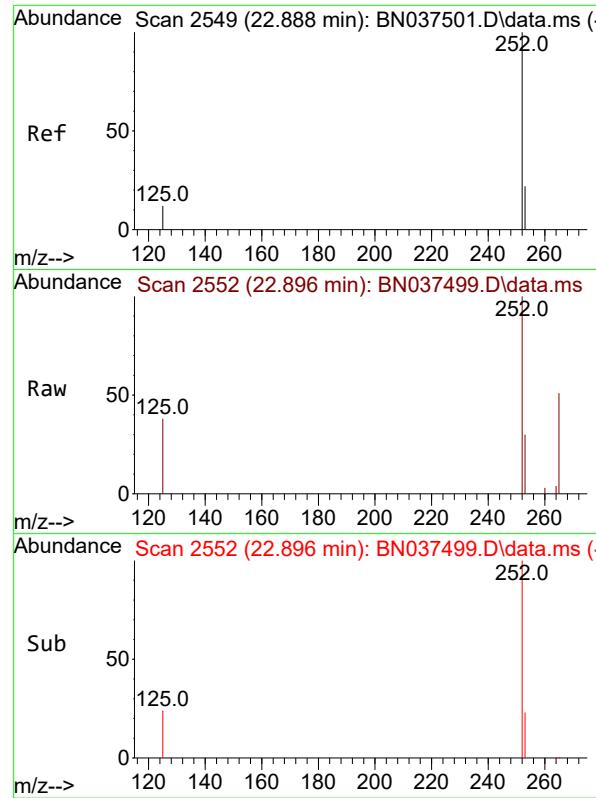
Tgt Ion:276 Resp: 2389  
Ion Ratio Lower Upper  
276 100  
138 33.7 24.0 36.0  
277 25.3 20.5 30.7



#37  
Benzo(b)fluoranthene  
Concen: 0.096 ng  
RT: 22.850 min Scan# 2536  
Delta R.T. 0.006 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:252 Resp: 2342  
Ion Ratio Lower Upper  
252 100  
253 29.0 19.5 29.3  
125 26.5 13.0 19.6#





#38

Benzo(k)fluoranthene

Concen: 0.097 ng

RT: 22.896 min Scan# 2

Instrument :

BNA\_N

Delta R.T. 0.009 min

Lab File: BN037499.D

ClientSampleId :

Acq: 15 Jul 2025 12:36

SSTDICC0.1

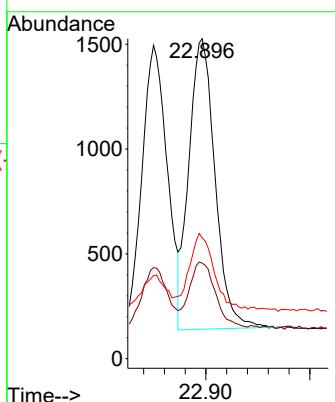
Tgt Ion:252 Resp: 2426

Ion Ratio Lower Upper

252 100

253 29.9 19.5 29.3#

125 37.7 13.1 19.7#



#39

Benzo(a)pyrene

Concen: 0.094 ng

RT: 23.426 min Scan# 2733

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

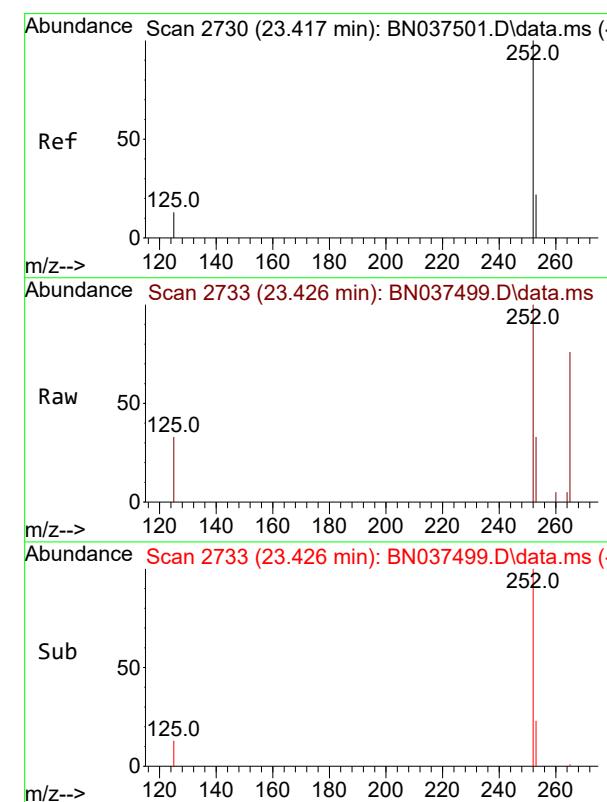
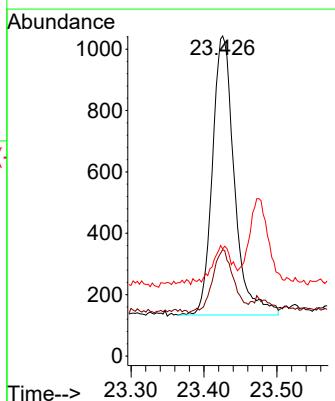
Tgt Ion:252 Resp: 1902

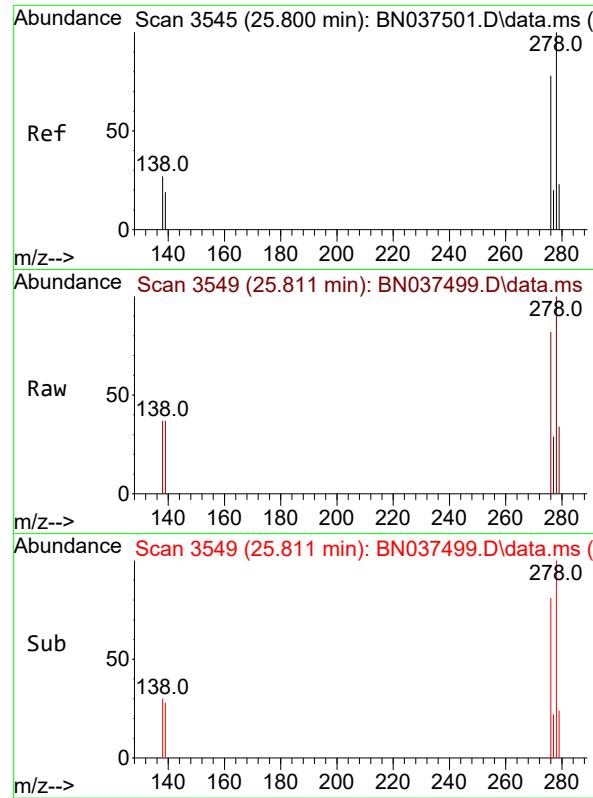
Ion Ratio Lower Upper

252 100

253 33.3 19.9 29.9#

125 33.5 15.2 22.8#

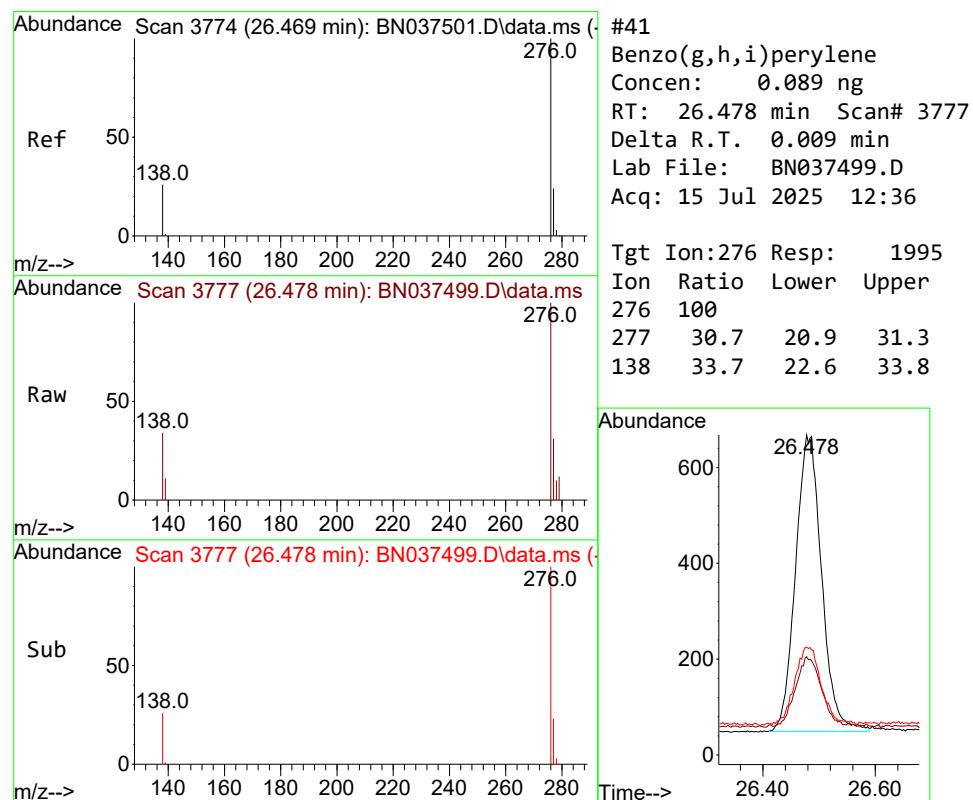
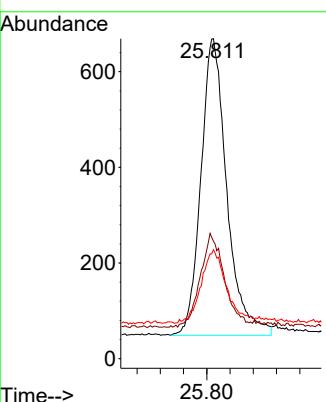




#40  
Dibenzo(a,h)anthracene  
Concen: 0.089 ng  
RT: 25.811 min Scan# 3  
Delta R.T. 0.012 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

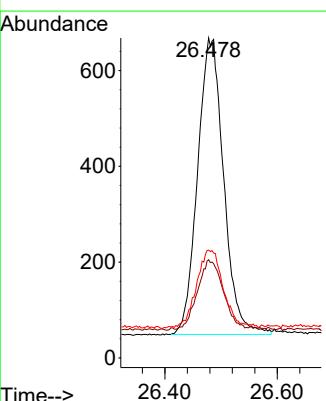
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

Tgt Ion:278 Resp: 1921  
Ion Ratio Lower Upper  
278 100  
139 36.8 17.5 26.3#  
279 34.1 21.3 31.9#



#41  
Benzo(g,h,i)perylene  
Concen: 0.089 ng  
RT: 26.478 min Scan# 3777  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:276 Resp: 1995  
Ion Ratio Lower Upper  
276 100  
277 30.7 20.9 31.3  
138 33.7 22.6 33.8



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

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDICCO.2**

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

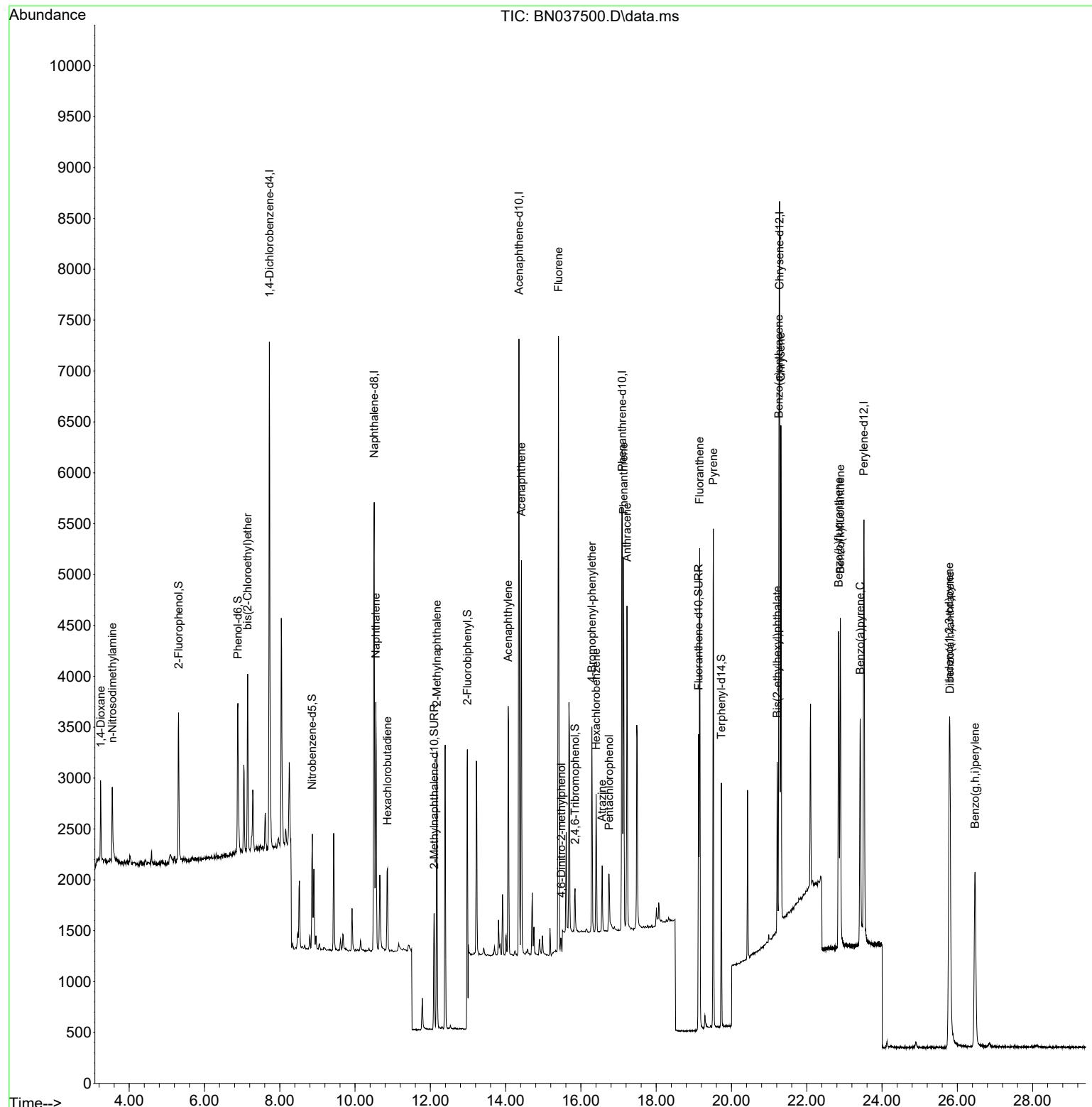
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4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

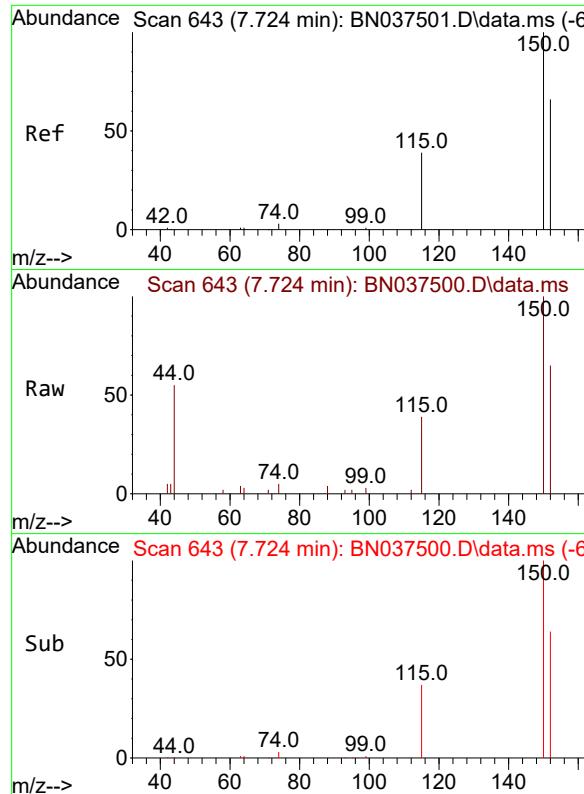
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.2

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

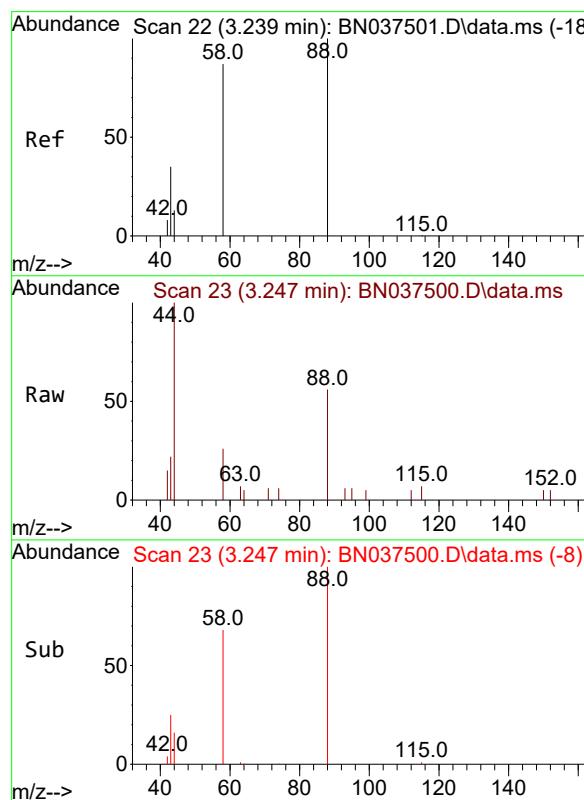
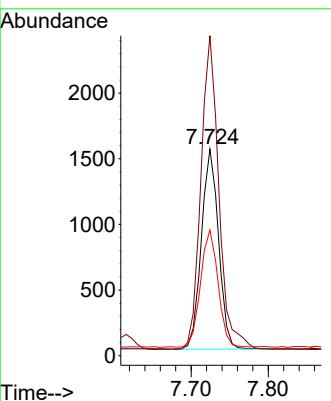




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

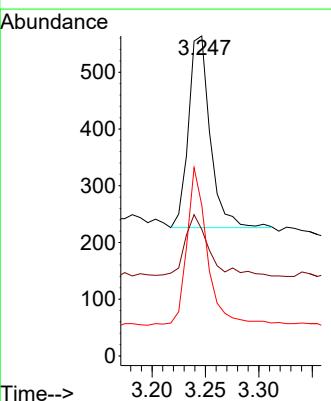
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

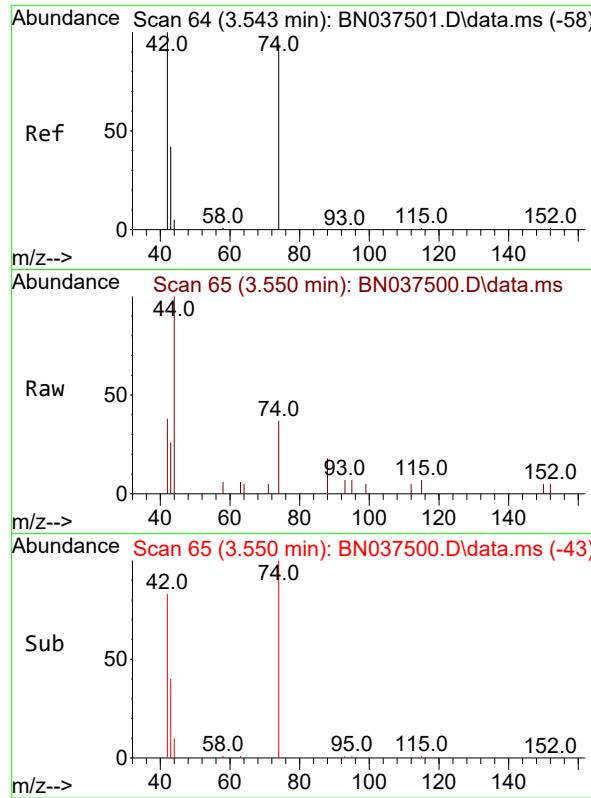
Tgt Ion:152 Resp: 2351  
Ion Ratio Lower Upper  
152 100  
150 154.9 119.8 179.8  
115 60.8 49.1 73.7



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

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

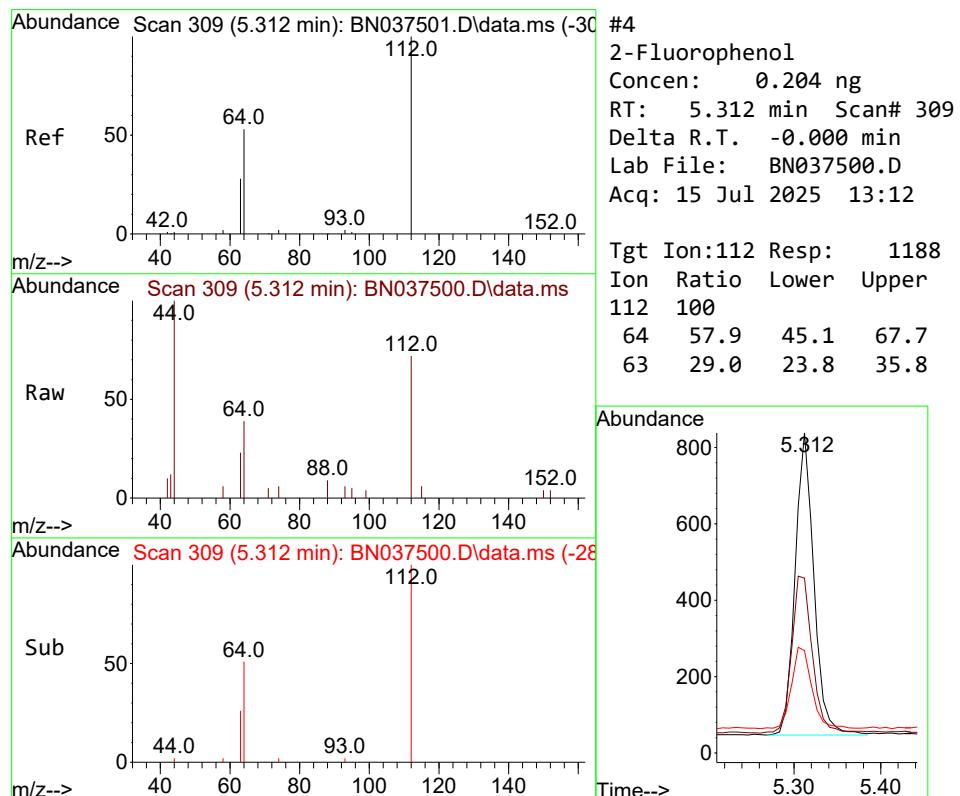
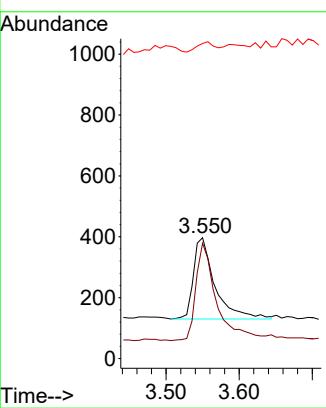




#3  
n-Nitrosodimethylamine  
Concen: 0.193 ng  
RT: 3.550 min Scan# 6  
Delta R.T. 0.007 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

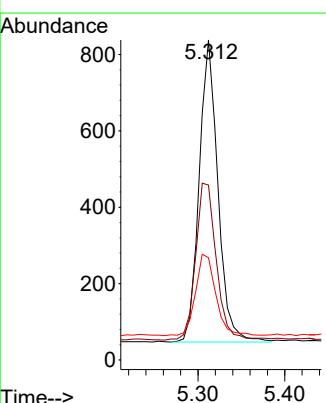
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

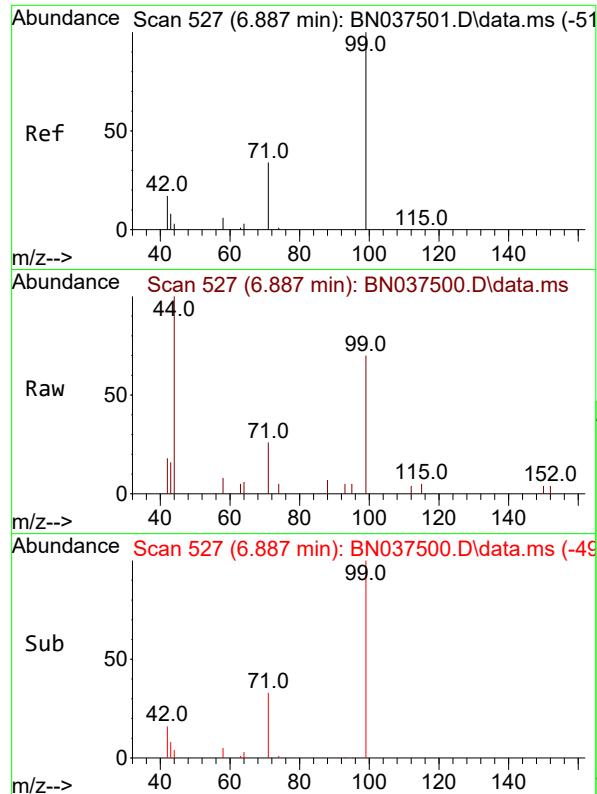
Tgt Ion: 42 Resp: 548  
Ion Ratio Lower Upper  
42 100  
74 119.2 91.8 137.6  
44 9.9 15.0 22.6#



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

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

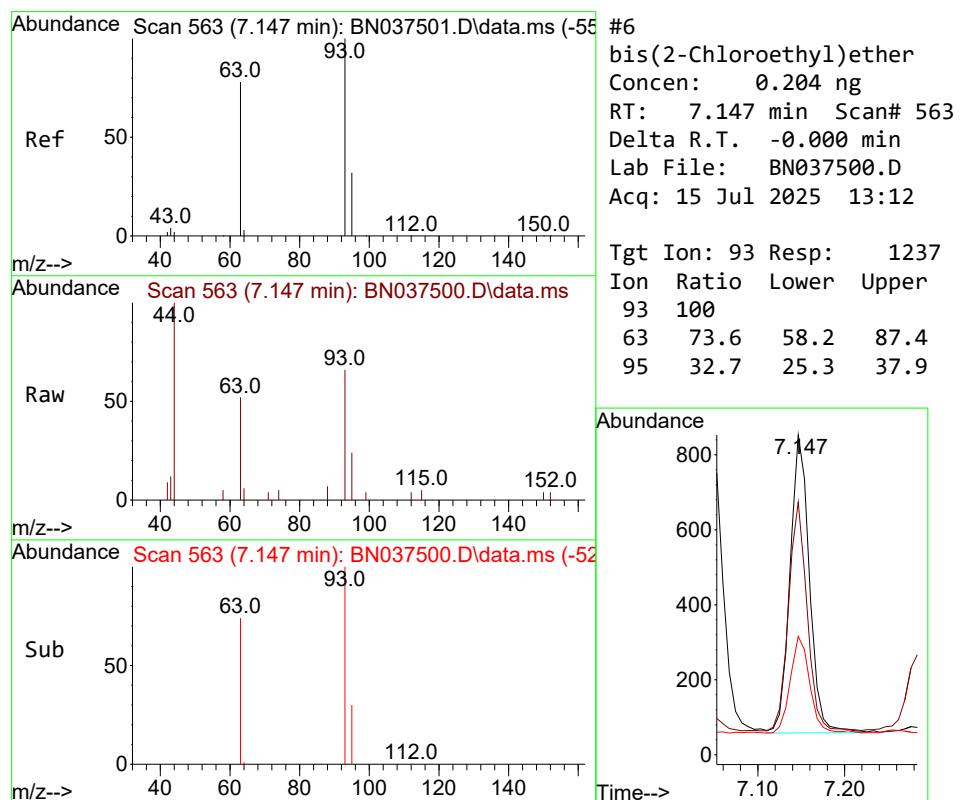
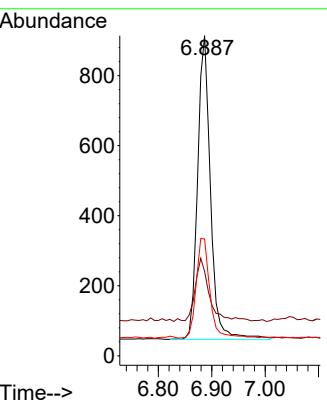




#5  
 Phenol-d6  
 Concen: 0.200 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

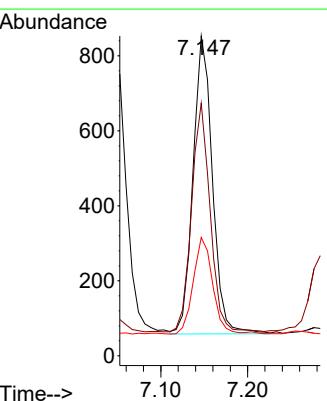
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

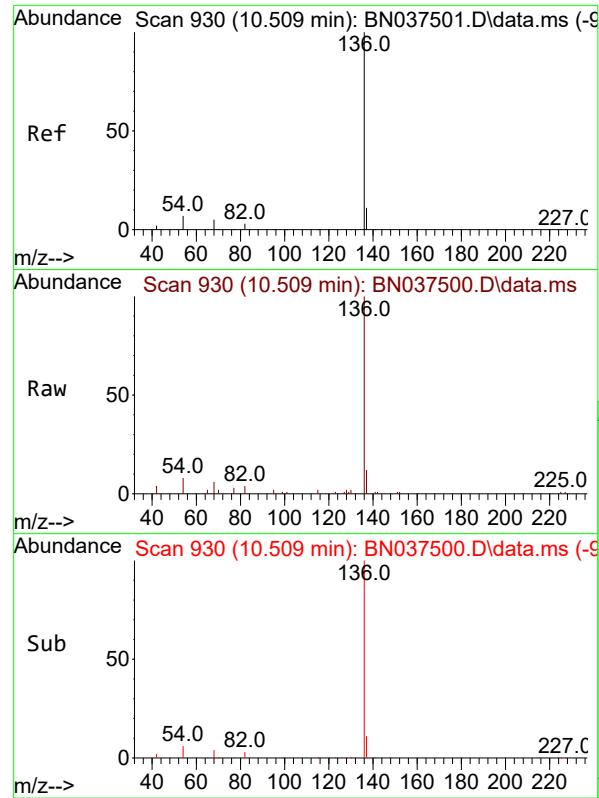
Tgt Ion: 99 Resp: 1455  
 Ion Ratio Lower Upper  
 99 100  
 42 22.1 17.1 25.7  
 71 34.8 27.8 41.8



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

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





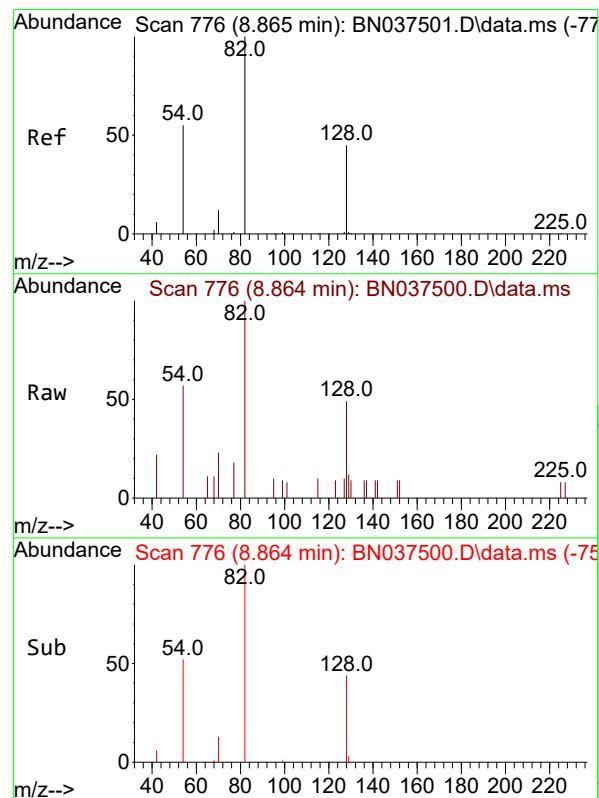
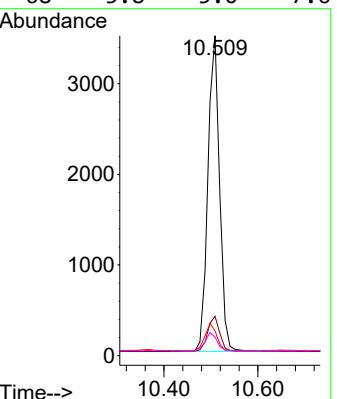
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

Tgt Ion:136 Resp: 6017

Ion Ratio Lower Upper

|     |      |     |      |
|-----|------|-----|------|
| 136 | 100  |     |      |
| 137 | 12.3 | 9.8 | 14.8 |
| 54  | 7.7  | 6.6 | 9.8  |
| 68  | 5.8  | 5.0 | 7.6  |

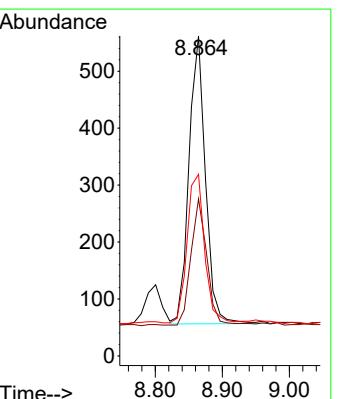


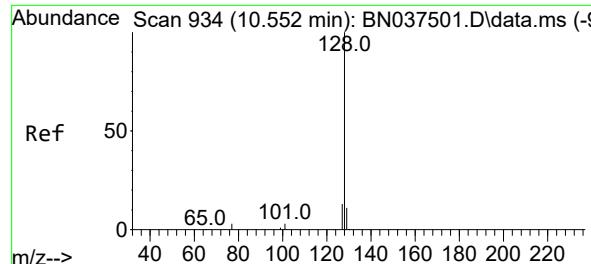
#8  
 Nitrobenzene-d5  
 Concen: 0.193 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Tgt Ion: 82 Resp: 867

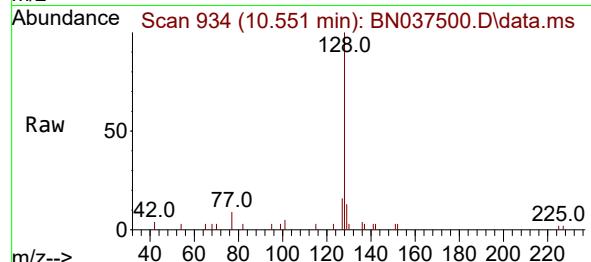
Ion Ratio Lower Upper

|     |      |      |      |
|-----|------|------|------|
| 82  | 100  |      |      |
| 128 | 49.1 | 37.5 | 56.3 |
| 54  | 56.8 | 45.3 | 67.9 |

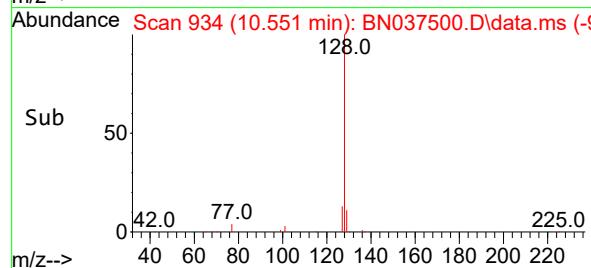
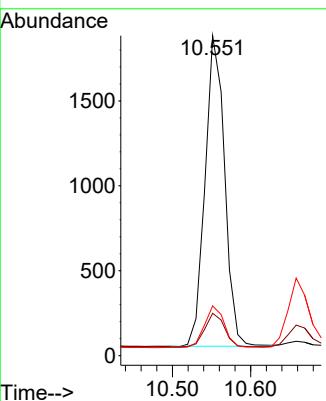




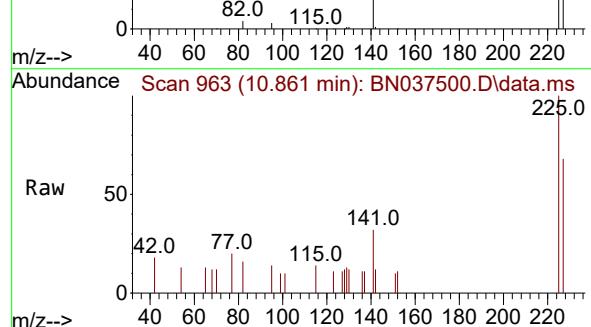
#9  
Naphthalene  
Concen: 0.198 ng  
RT: 10.551 min Scan# 9  
Instrument :  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12  
ClientSampleId : SSTDICCO.2



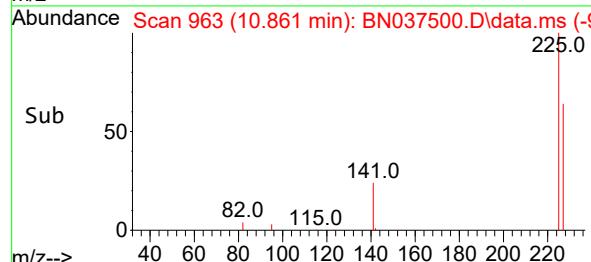
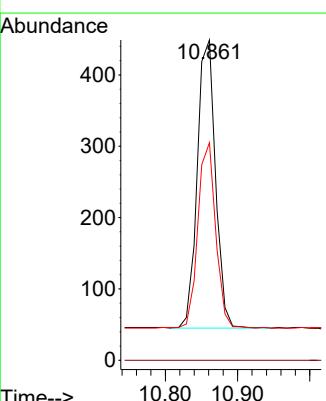
Tgt Ion:128 Resp: 3170  
Ion Ratio Lower Upper  
128 100  
129 13.2 9.7 14.5  
127 15.6 11.5 17.3

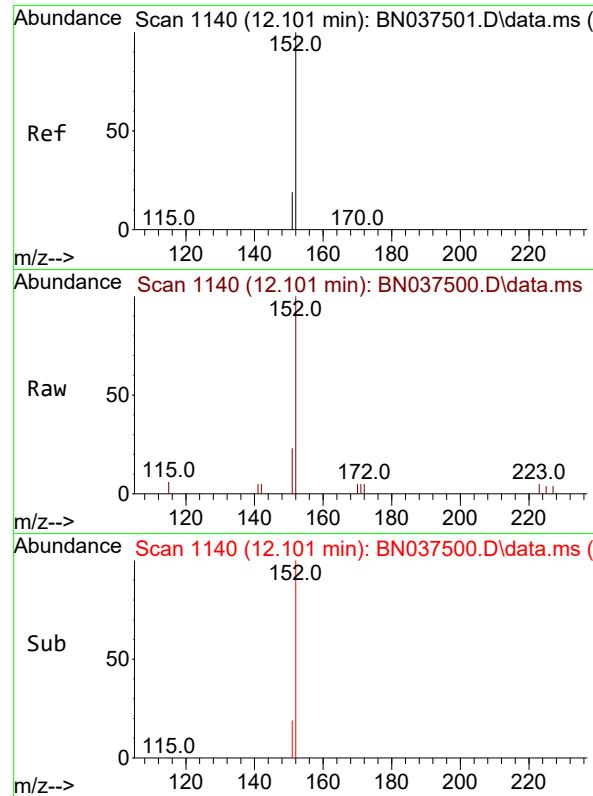


#10  
Hexachlorobutadiene  
Concen: 0.201 ng  
RT: 10.861 min Scan# 963  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12



Tgt Ion:225 Resp: 712  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.9 51.0 76.4

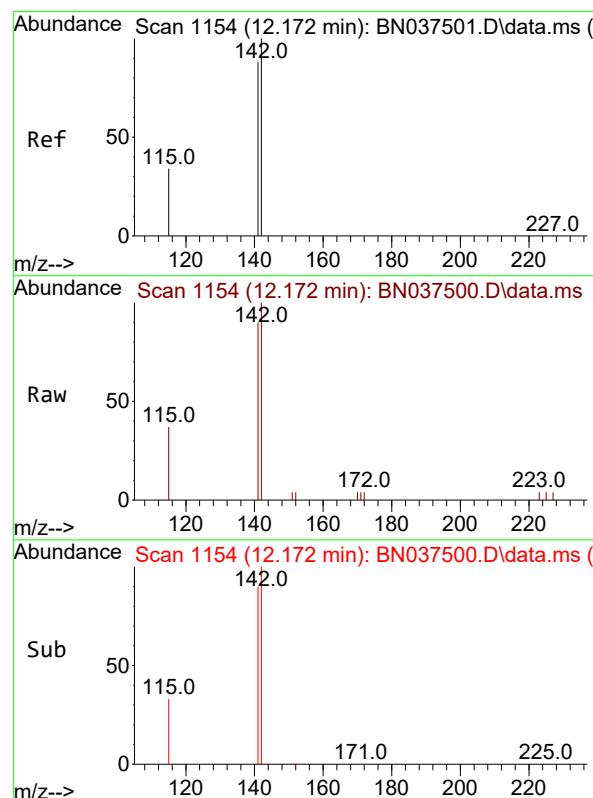
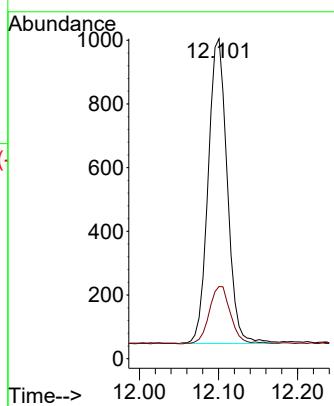




#11  
2-Methylnaphthalene-d10  
Concen: 0.186 ng  
RT: 12.101 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

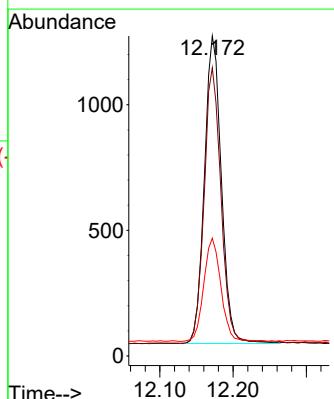
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

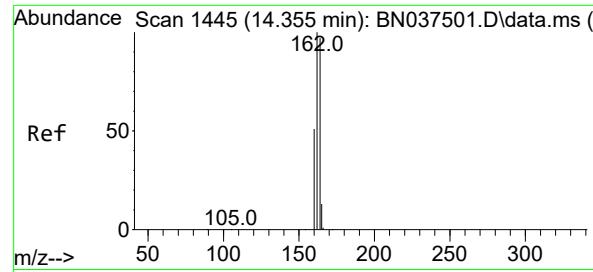
Tgt Ion:152 Resp: 1606  
Ion Ratio Lower Upper  
152 100  
151 21.2 16.8 25.2



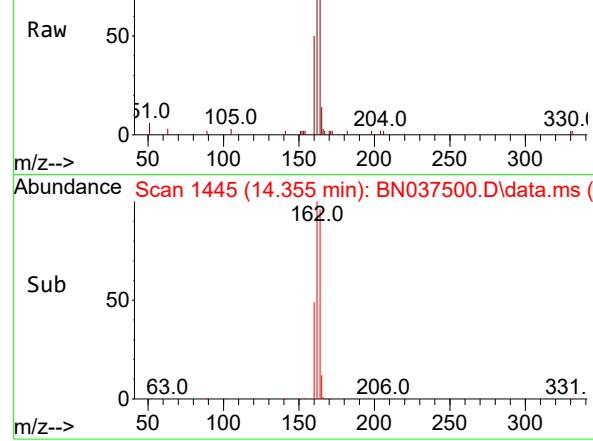
#12  
2-Methylnaphthalene  
Concen: 0.187 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

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





Abundance Scan 1445 (14.355 min): BN037500.D\data.ms (-)



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

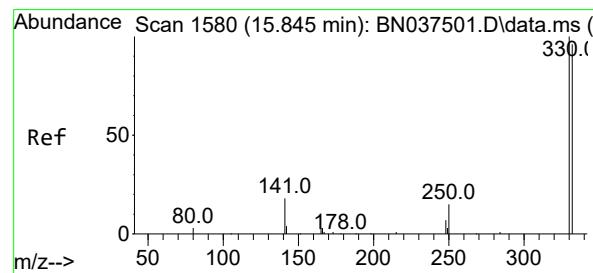
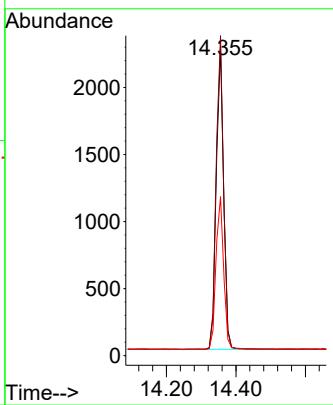
Tgt Ion:164 Resp: 3325

Ion Ratio Lower Upper

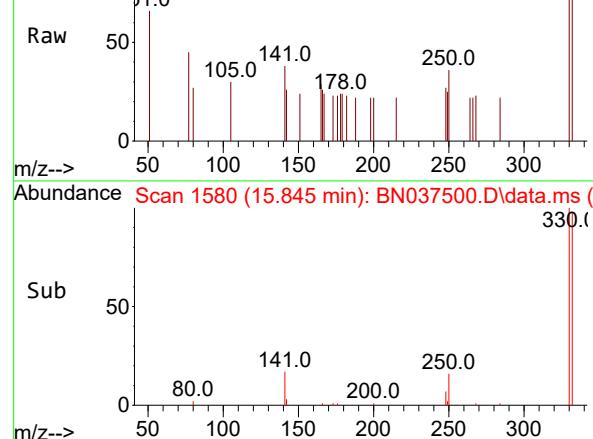
164 100

162 103.8 82.0 123.0

160 51.6 42.4 63.6



Abundance Scan 1580 (15.845 min): BN037500.D\data.ms (-)



#14

2,4,6-Tribromophenol

Concen: 0.176 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

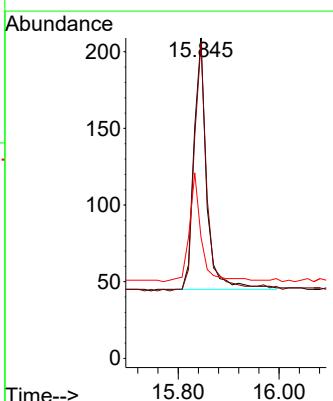
Tgt Ion:330 Resp: 288

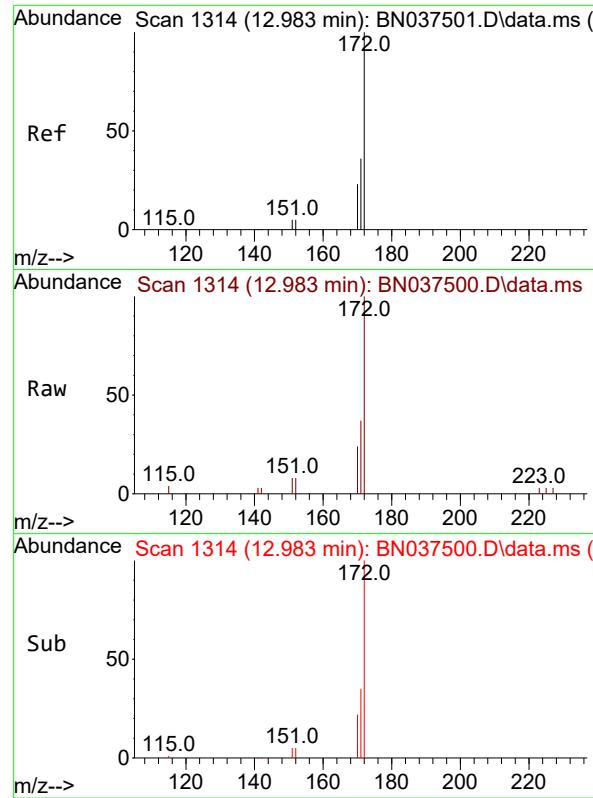
Ion Ratio Lower Upper

330 100

332 99.7 76.1 114.1

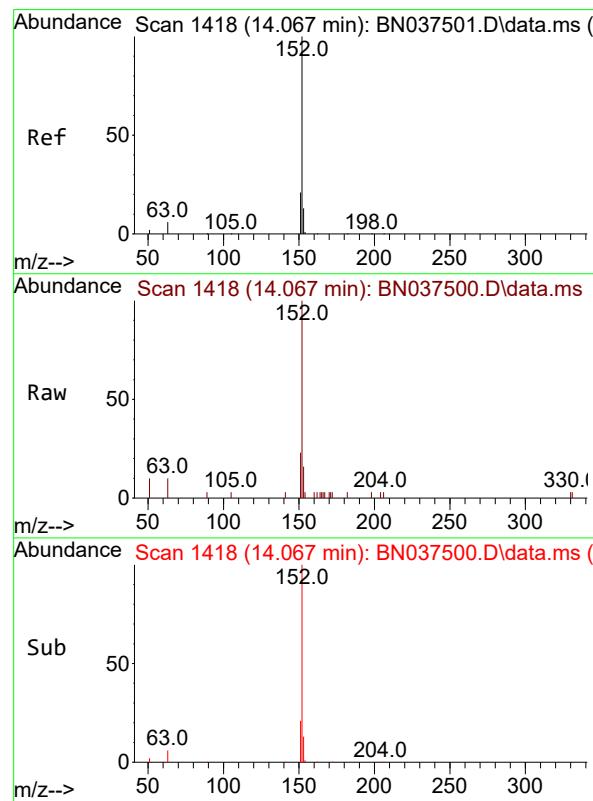
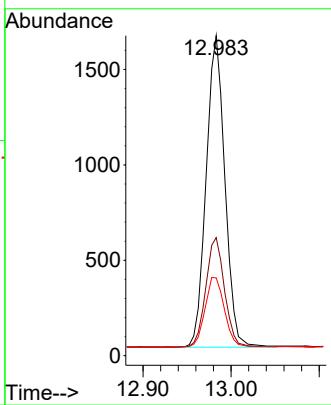
141 41.3 33.4 50.0





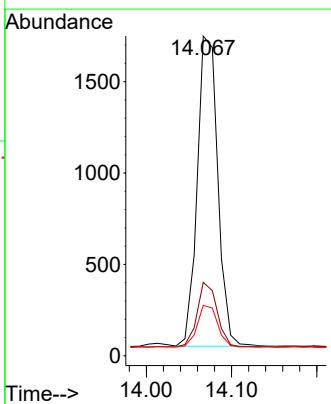
#15  
2-Fluorobiphenyl  
Concen: 0.173 ng  
RT: 12.983 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12  
ClientSampleId : SSTDICCO.2

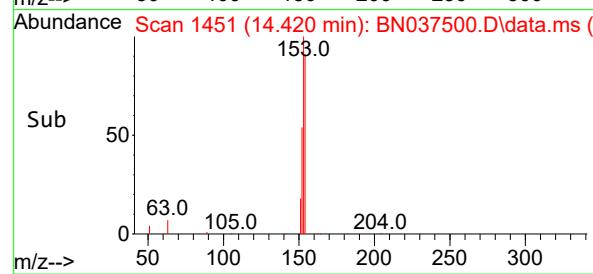
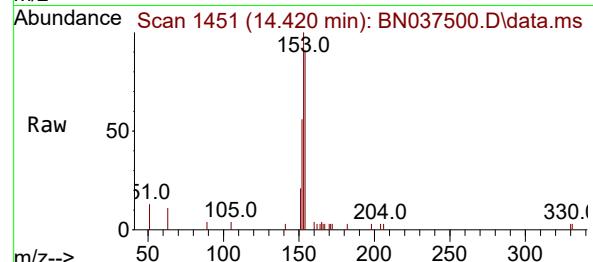
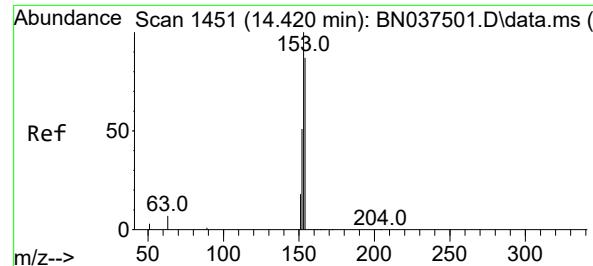
Tgt Ion:172 Resp: 2983  
Ion Ratio Lower Upper  
172 100  
171 36.9 29.4 44.2  
170 24.3 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.191 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:152 Resp: 2840  
Ion Ratio Lower Upper  
152 100  
151 21.3 15.9 23.9  
153 13.2 10.7 16.1





#17

Acenaphthene

Concen: 0.190 ng

RT: 14.420 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

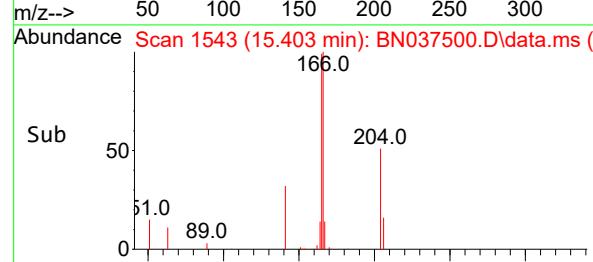
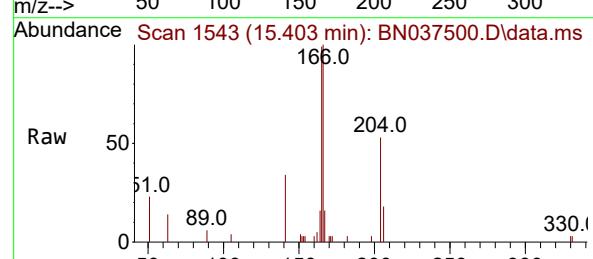
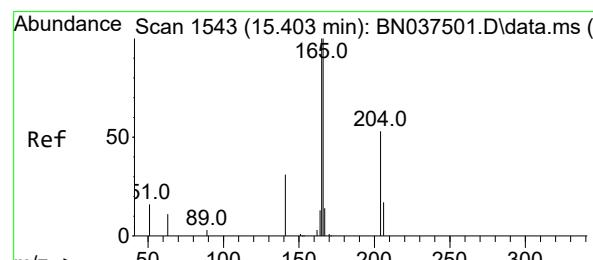
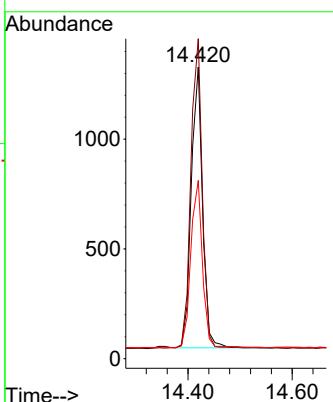
Tgt Ion:154 Resp: 1928

Ion Ratio Lower Upper

154 100

153 111.4 89.2 133.8

152 61.5 48.0 72.0



#18

Fluorene

Concen: 0.190 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

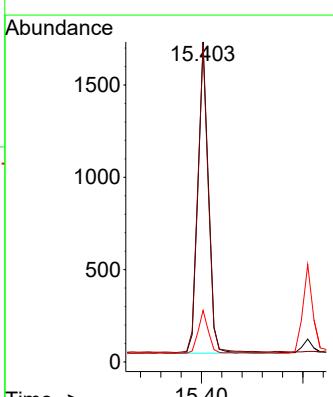
Tgt Ion:166 Resp: 2474

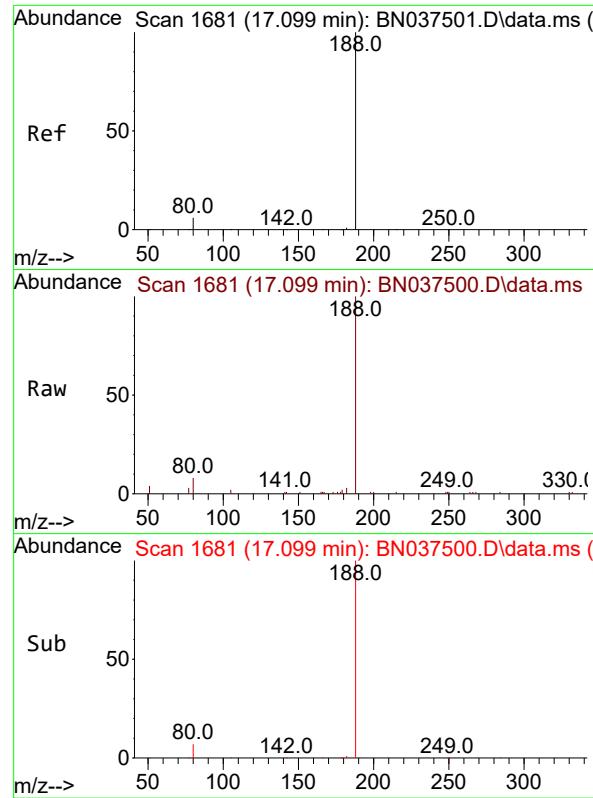
Ion Ratio Lower Upper

166 100

165 97.8 78.1 117.1

167 13.0 11.0 16.6

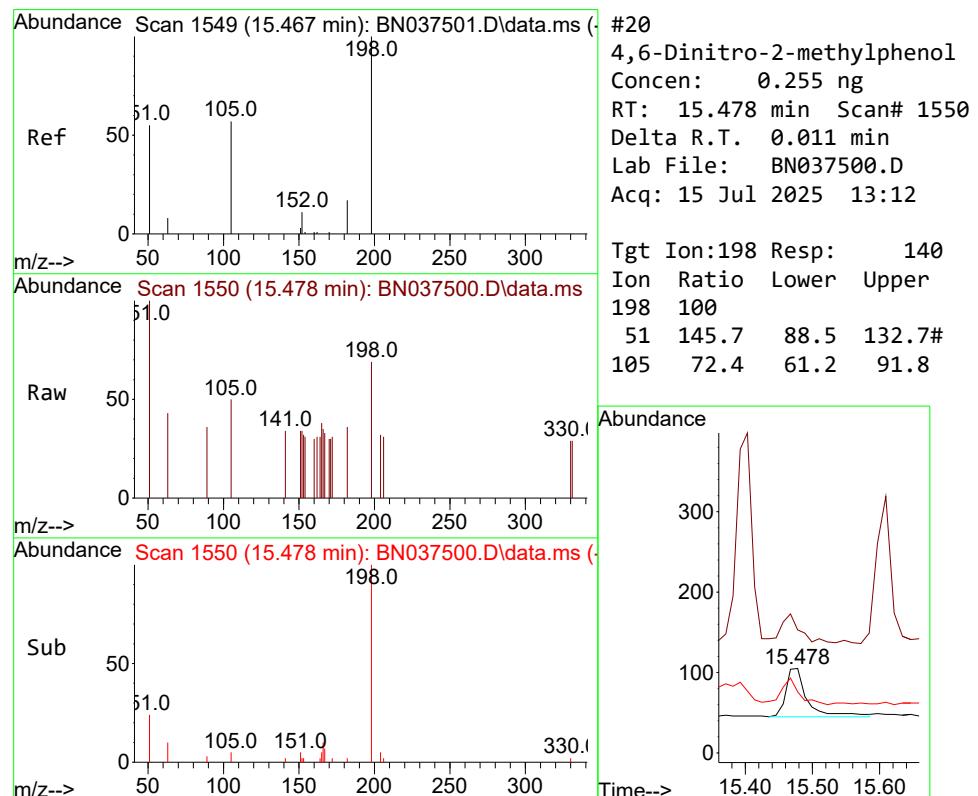
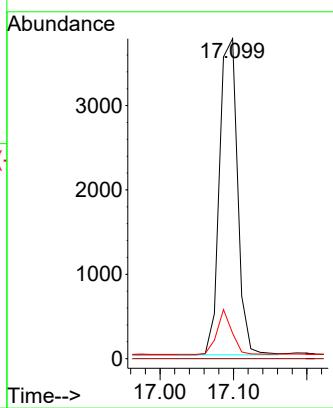




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.099 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

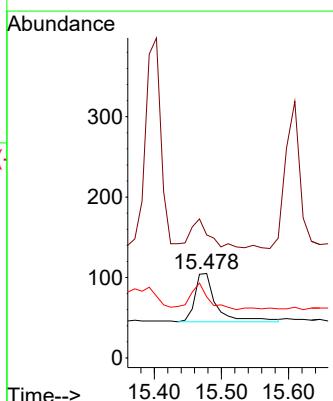
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

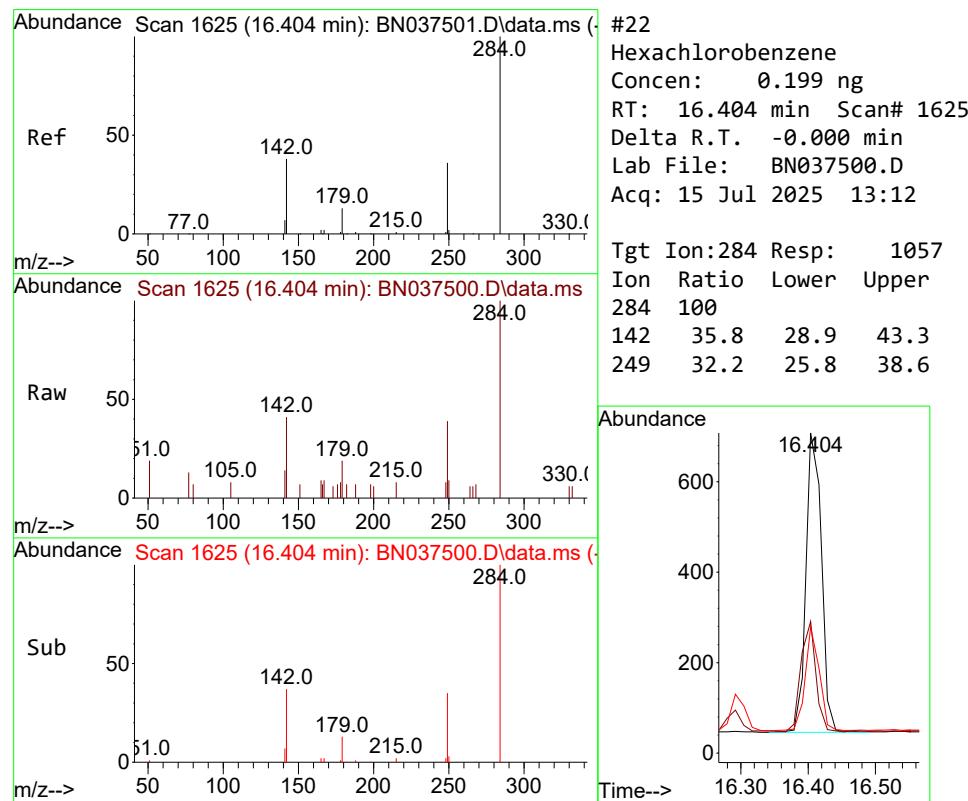
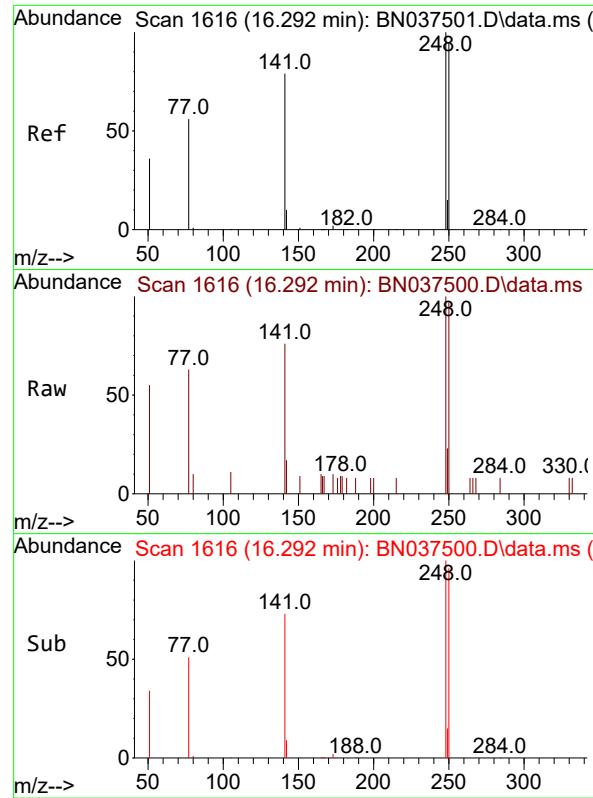
Tgt Ion:188 Resp: 6414  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 8.0 6.0 9.0

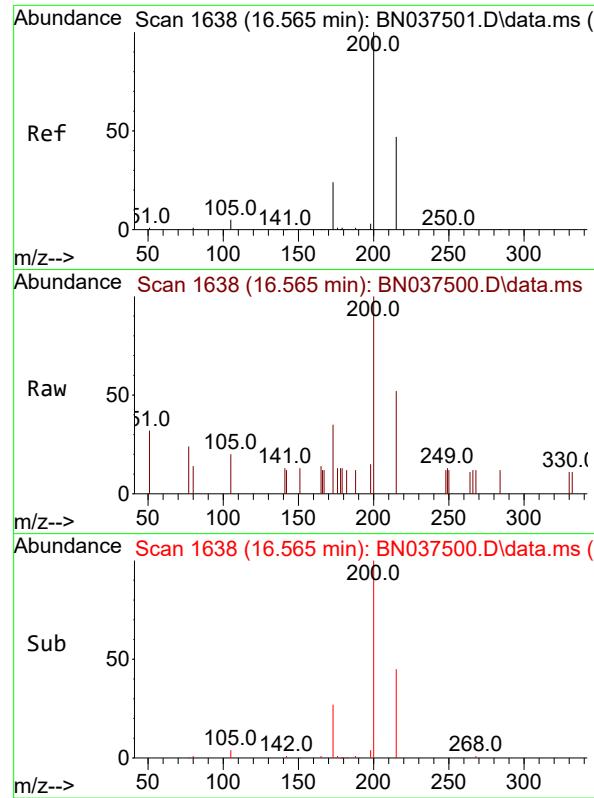


#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.255 ng  
 RT: 15.478 min Scan# 1550  
 Delta R.T. 0.011 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Tgt Ion:198 Resp: 140  
 Ion Ratio Lower Upper  
 198 100  
 51 145.7 88.5 132.7#  
 105 72.4 61.2 91.8



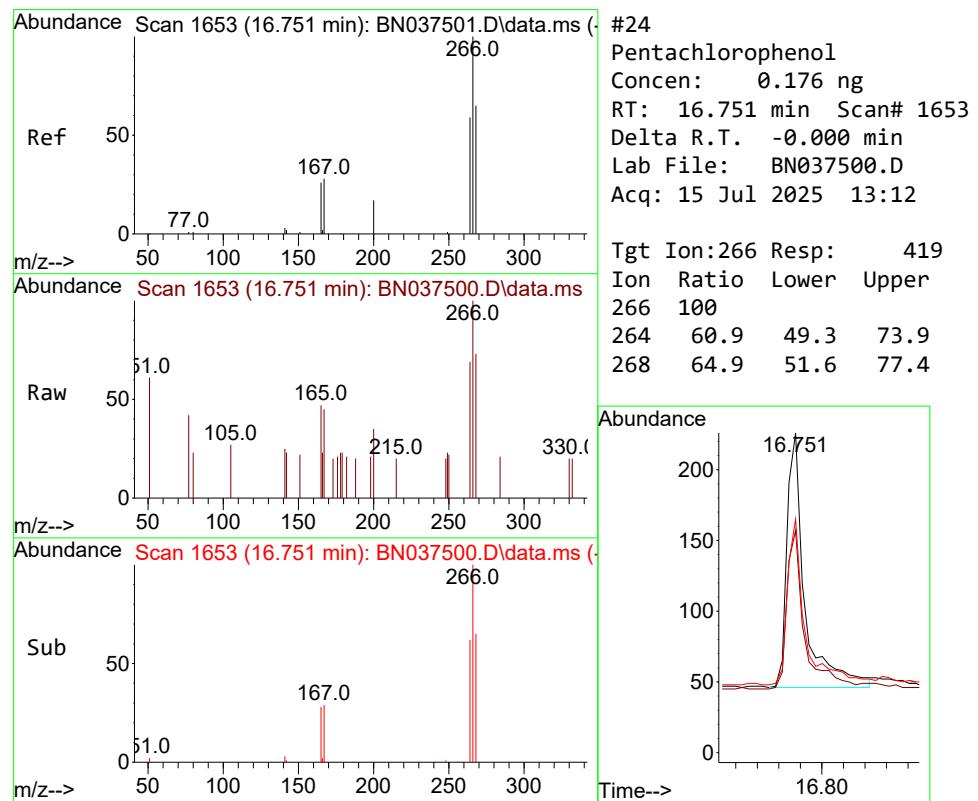
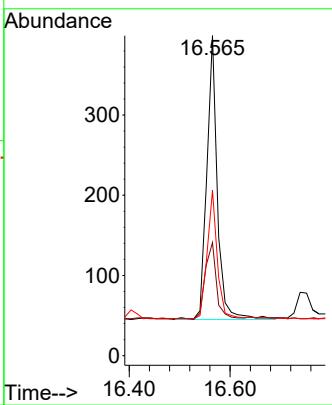




#23  
Atrazine  
Concen: 0.180 ng  
RT: 16.565 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

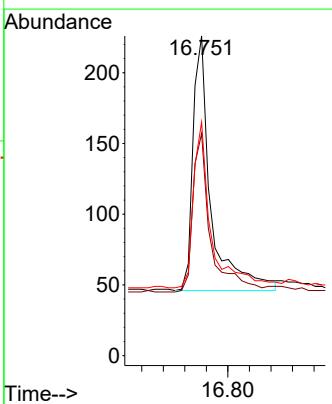
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

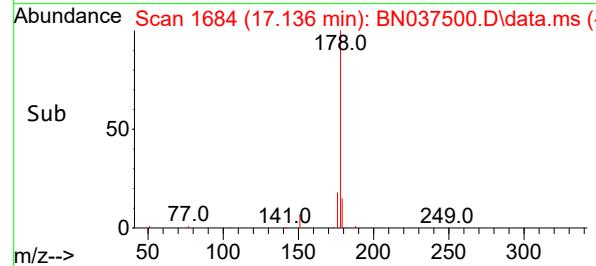
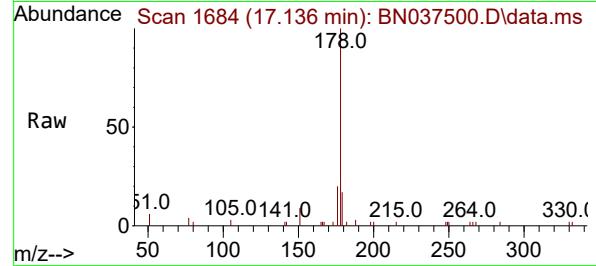
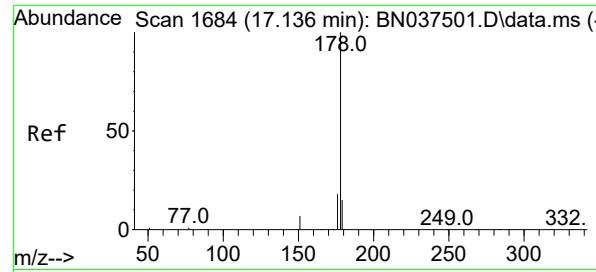
Tgt Ion:200 Resp: 515  
Ion Ratio Lower Upper  
200 100  
173 35.3 23.2 34.8#  
215 51.6 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.176 ng  
RT: 16.751 min Scan# 1653  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:266 Resp: 419  
Ion Ratio Lower Upper  
266 100  
264 60.9 49.3 73.9  
268 64.9 51.6 77.4





#25

Phenanthrene

Concen: 0.194 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

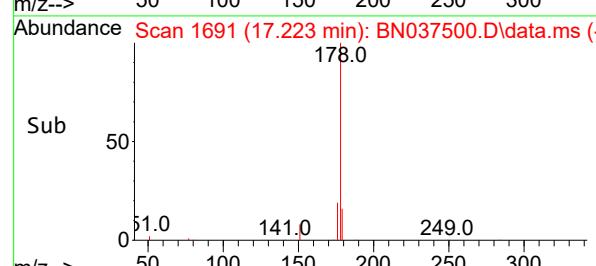
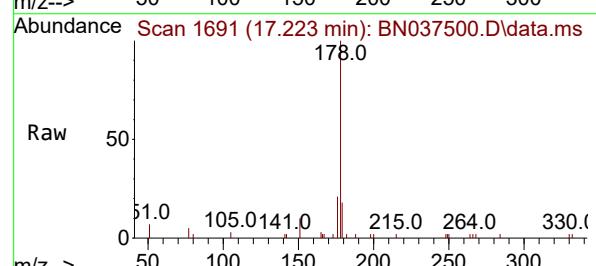
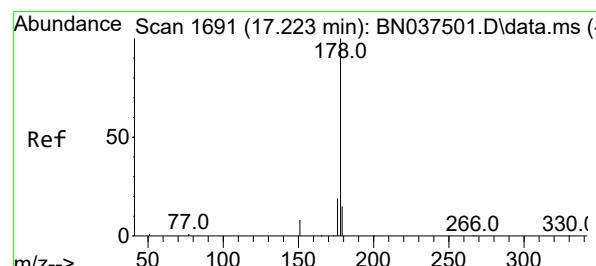
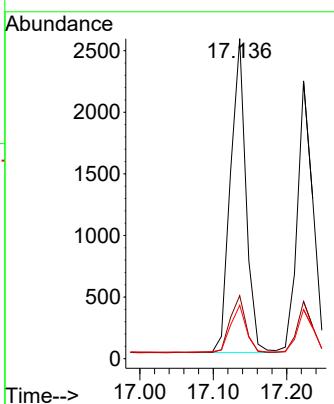
Tgt Ion:178 Resp: 3730

Ion Ratio Lower Upper

178 100

176 18.4 15.0 22.6

179 15.4 12.2 18.2



#26

Anthracene

Concen: 0.188 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

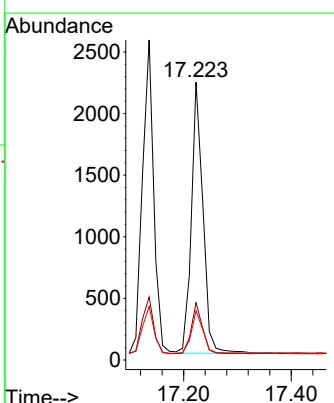
Tgt Ion:178 Resp: 3288

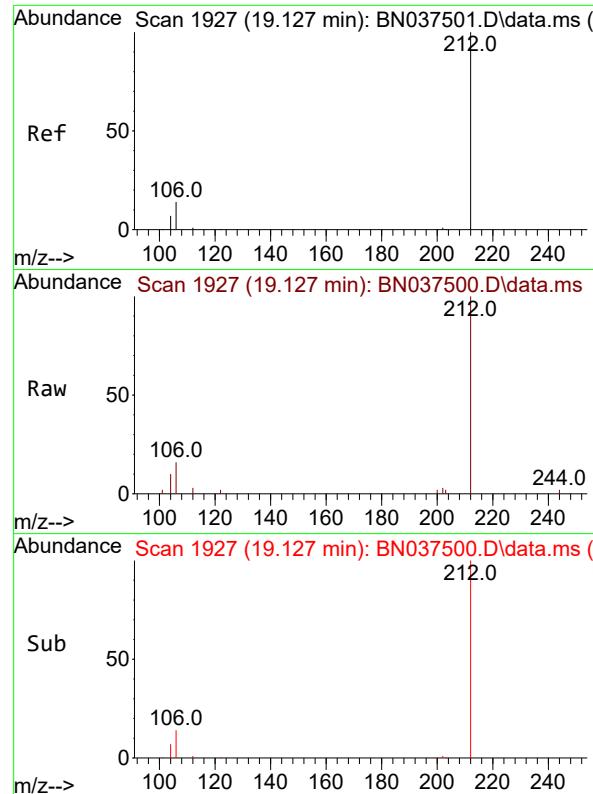
Ion Ratio Lower Upper

178 100

176 18.3 14.7 22.1

179 15.7 12.3 18.5

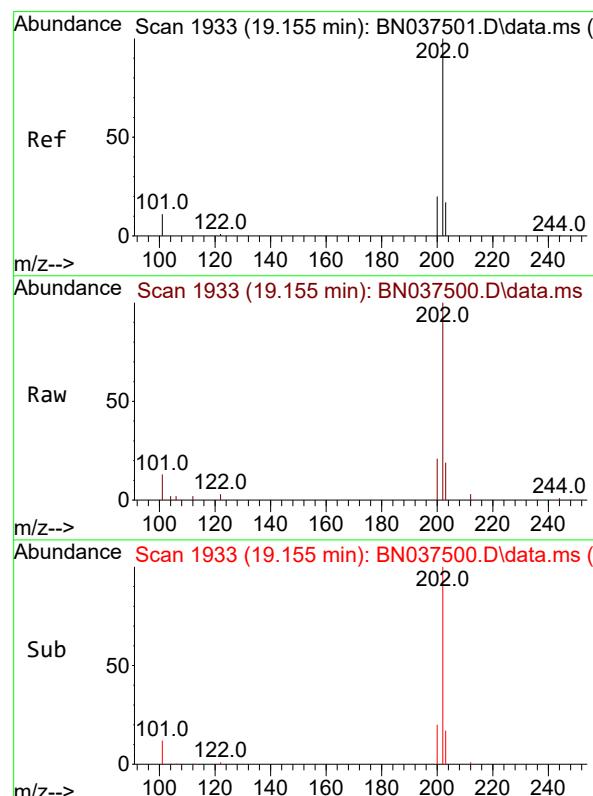
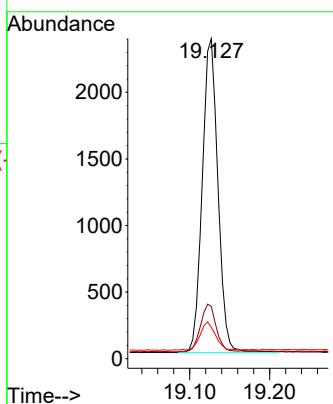




#27  
 Fluoranthene-d10  
 Concen: 0.188 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

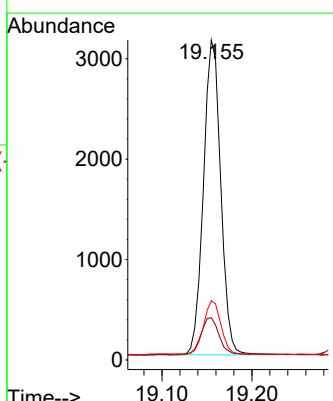
Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2

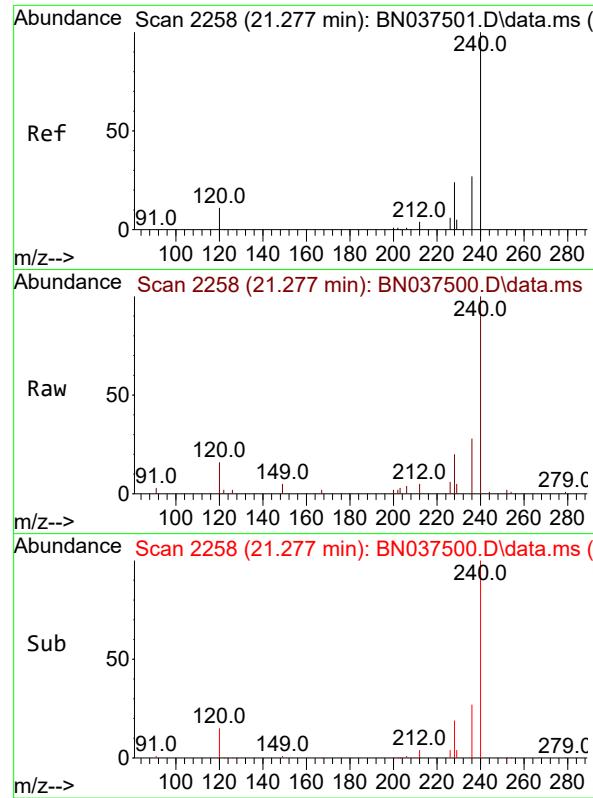
Tgt Ion:212 Resp: 3202  
 Ion Ratio Lower Upper  
 212 100  
 106 15.3 12.2 18.4  
 104 8.8 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.190 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Tgt Ion:202 Resp: 4200  
 Ion Ratio Lower Upper  
 202 100  
 101 12.1 9.8 14.6  
 203 16.9 13.6 20.4

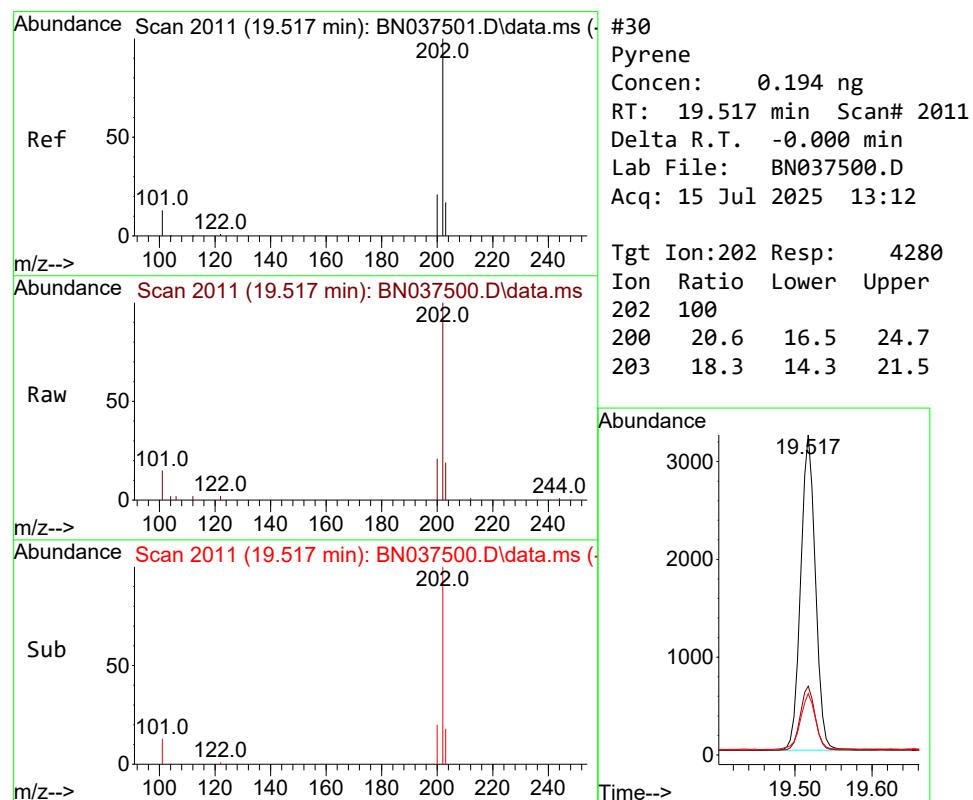
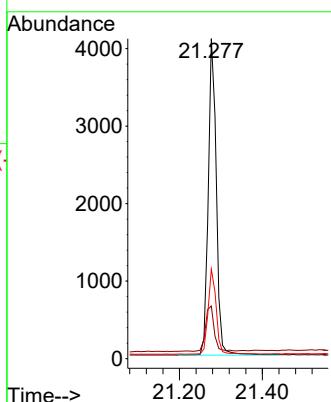




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

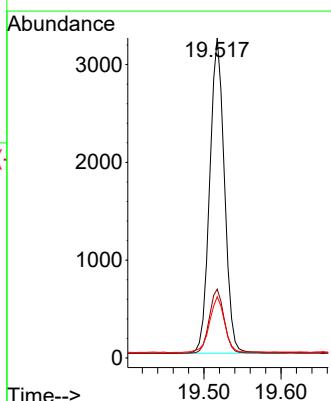
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

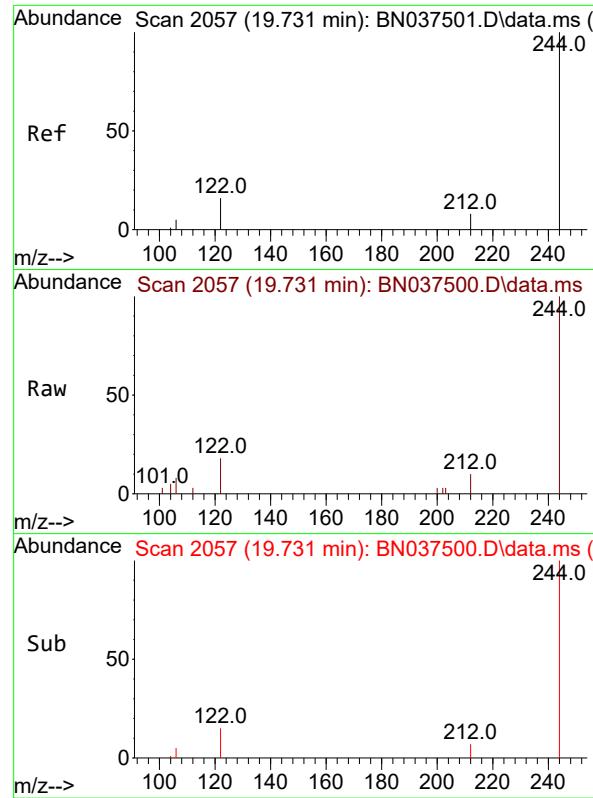
Tgt Ion:240 Resp: 5490  
Ion Ratio Lower Upper  
240 100  
120 16.5 10.7 16.1#  
236 28.0 22.6 33.8



#30  
Pyrene  
Concen: 0.194 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:202 Resp: 4280  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 18.3 14.3 21.5

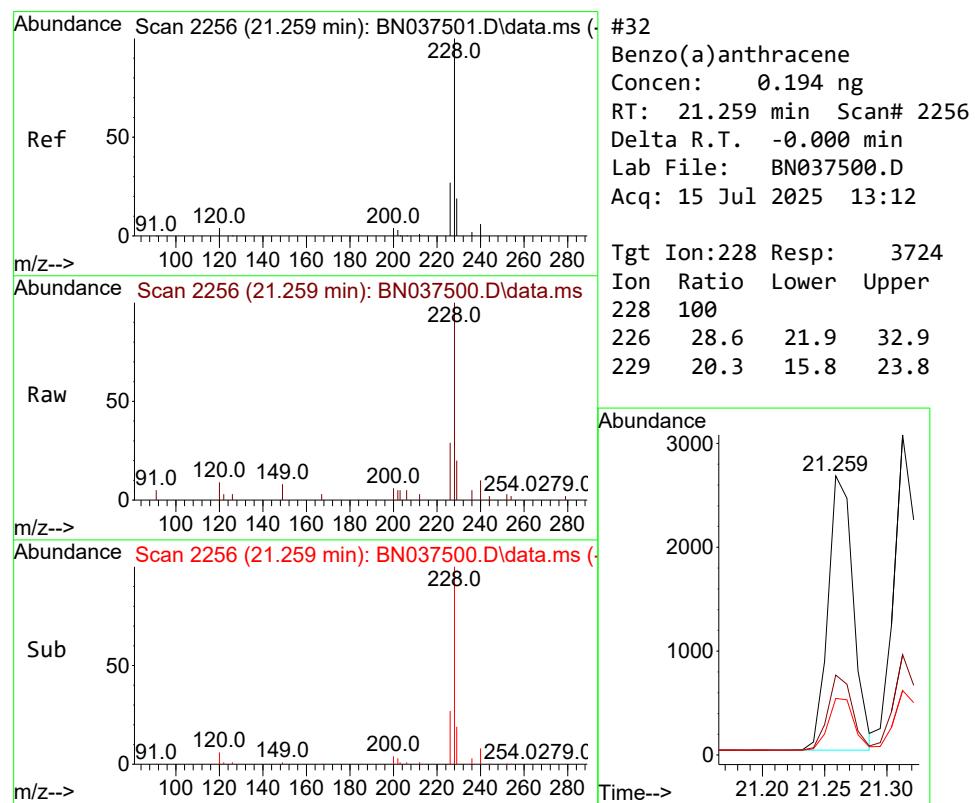
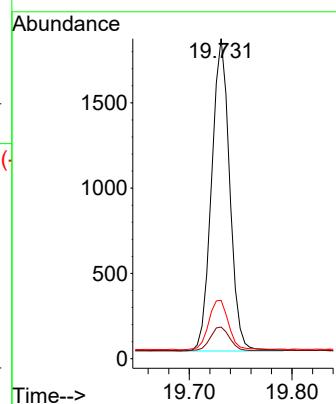




#31  
 Terphenyl-d14  
 Concen: 0.190 ng  
 RT: 19.731 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

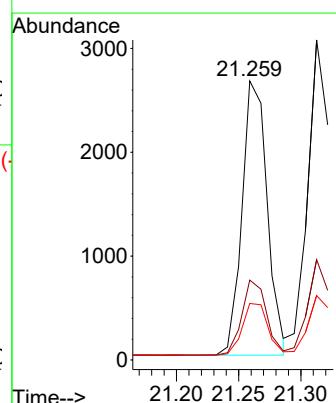
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

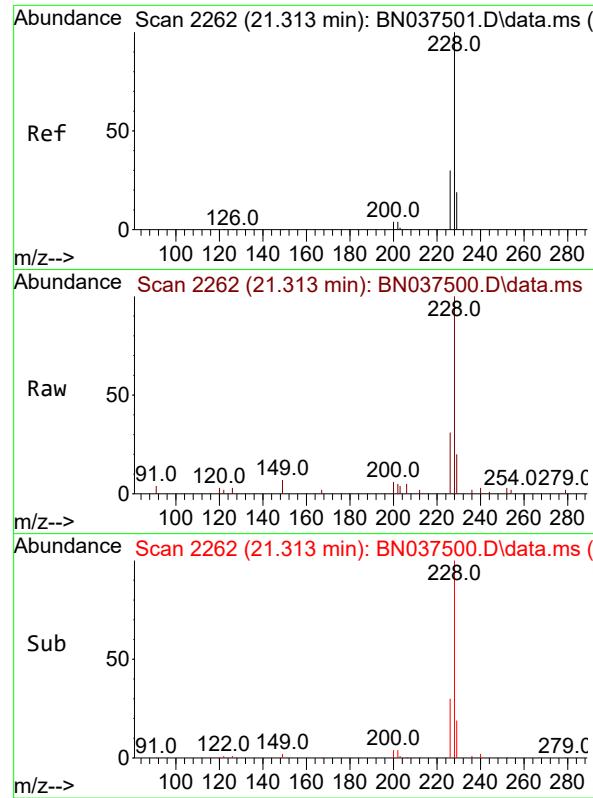
Tgt Ion:244 Resp: 2238  
 Ion Ratio Lower Upper  
 244 100  
 212 9.9 7.4 11.2  
 122 18.3 13.6 20.4



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

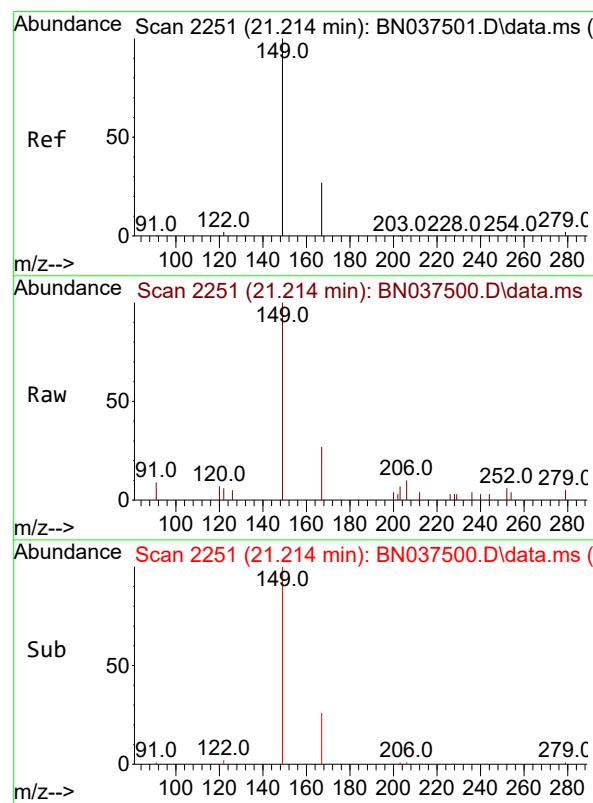
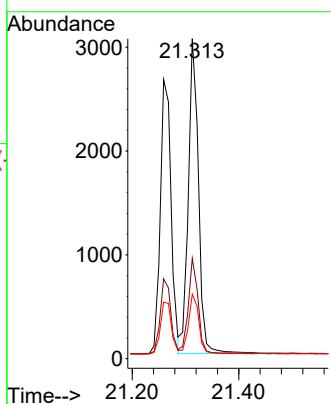
Tgt Ion:228 Resp: 3724  
 Ion Ratio Lower Upper  
 228 100  
 226 28.6 21.9 32.9  
 229 20.3 15.8 23.8





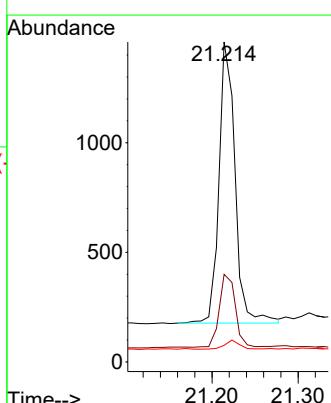
#33  
Chrysene  
Concen: 0.200 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12  
ClientSampleId : SSTDICCO.2

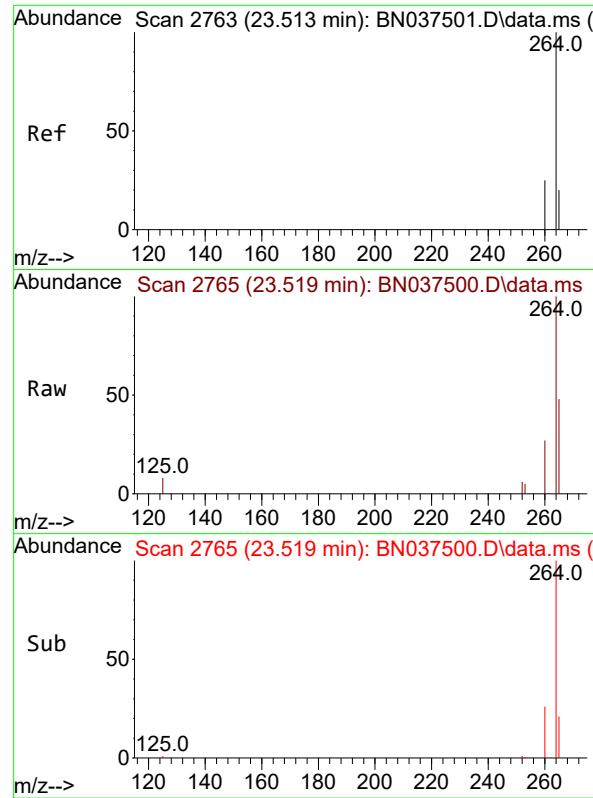
Tgt Ion:228 Resp: 4010  
Ion Ratio Lower Upper  
228 100  
226 31.3 24.2 36.4  
229 20.1 16.1 24.1



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

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

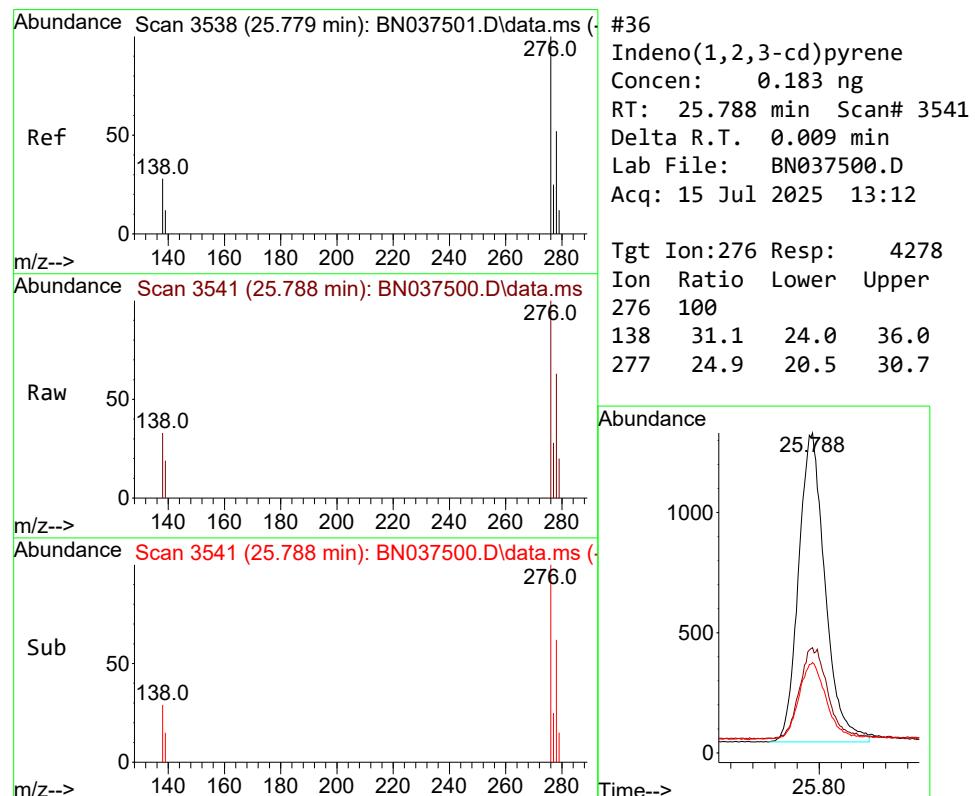
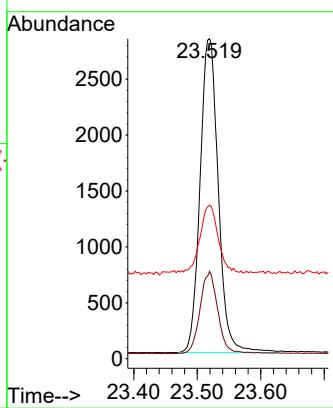




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.519 min Scan# 2  
 Delta R.T. 0.006 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

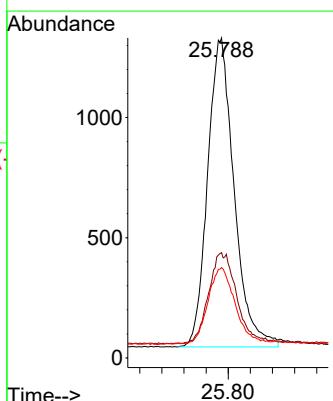
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

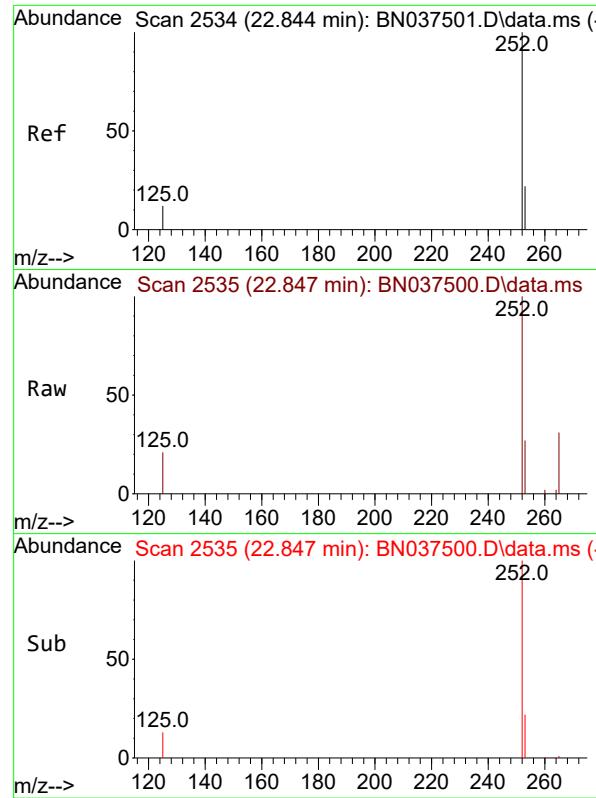
Tgt Ion:264 Resp: 5600  
 Ion Ratio Lower Upper  
 264 100  
 260 27.3 21.2 31.8  
 265 47.9 40.4 60.6



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.183 ng  
 RT: 25.788 min Scan# 3541  
 Delta R.T. 0.009 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Tgt Ion:276 Resp: 4278  
 Ion Ratio Lower Upper  
 276 100  
 138 31.1 24.0 36.0  
 277 24.9 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.181 ng

RT: 22.847 min Scan# 2

Delta R.T. 0.003 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

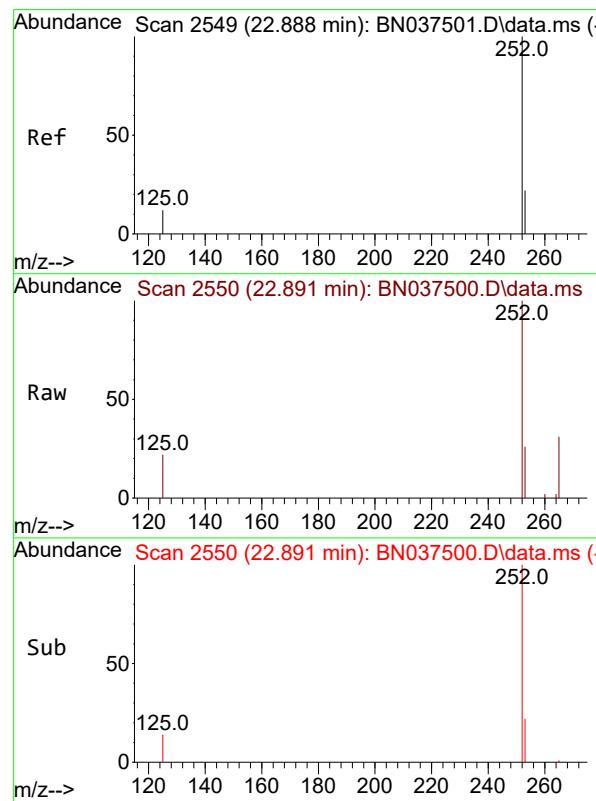
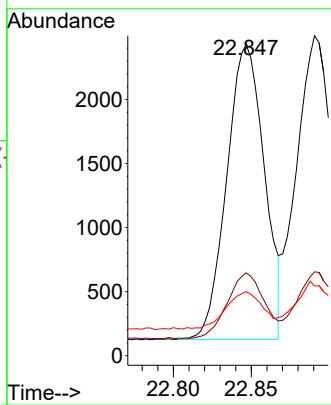
Tgt Ion:252 Resp: 3857

Ion Ratio Lower Upper

252 100

253 26.6 19.5 29.3

125 20.6 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 0.181 ng

RT: 22.891 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

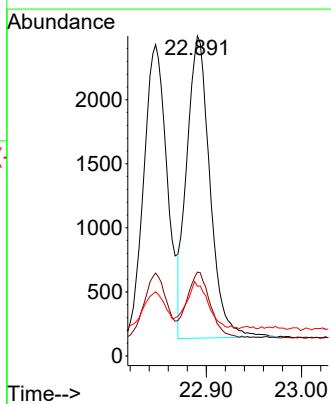
Tgt Ion:252 Resp: 3977

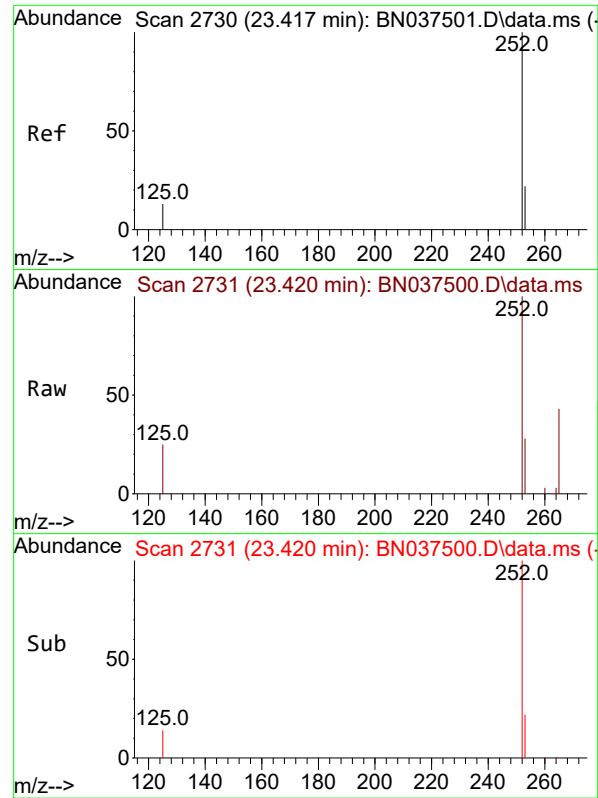
Ion Ratio Lower Upper

252 100

253 26.2 19.5 29.3

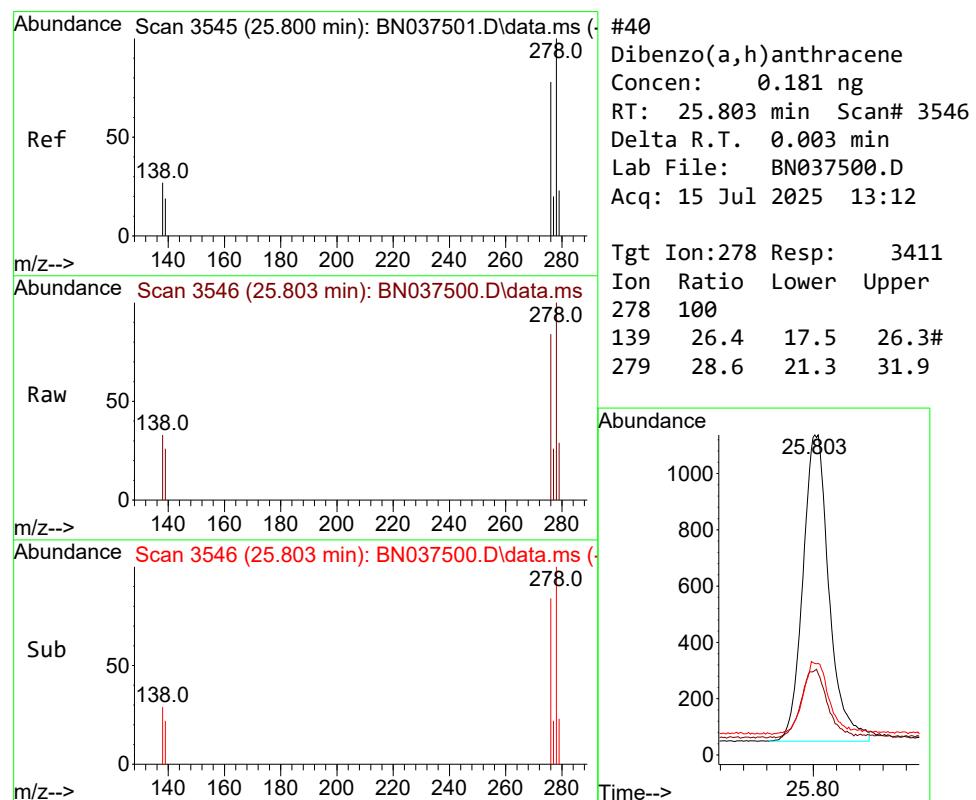
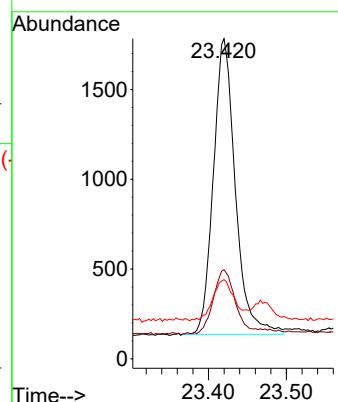
125 21.8 13.1 19.7#





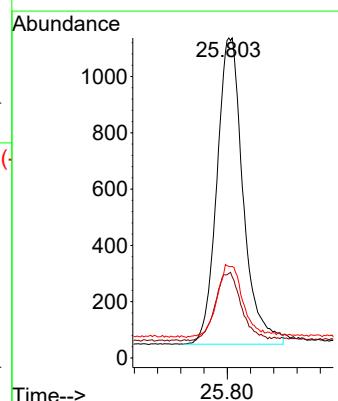
#39  
Benzo(a)pyrene  
Concen: 0.182 ng  
RT: 23.420 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.003 min  
Lab File: BN037500.D  
ClientSampleId : SSTDICCO.2  
Acq: 15 Jul 2025 13:12

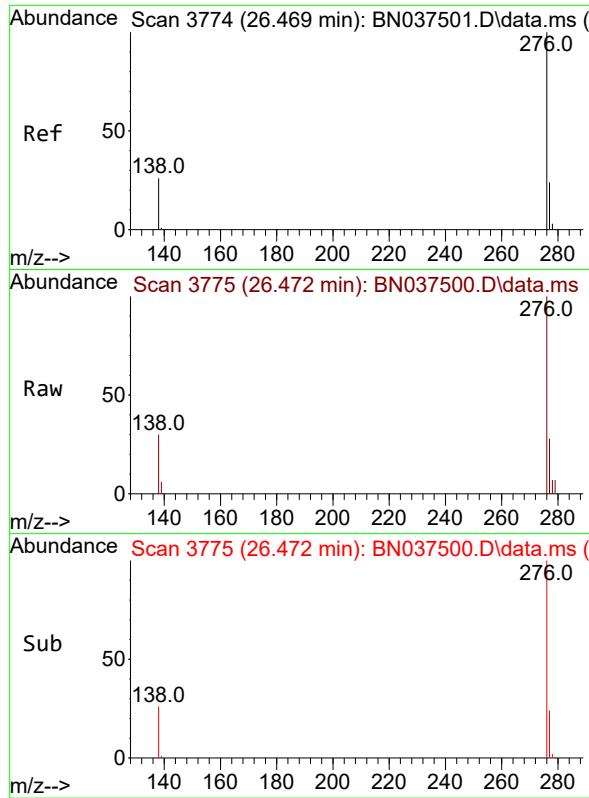
Tgt Ion:252 Resp: 3225  
Ion Ratio Lower Upper  
252 100  
253 27.8 19.9 29.9  
125 24.7 15.2 22.8#



#40  
Dibenzo(a,h)anthracene  
Concen: 0.181 ng  
RT: 25.803 min Scan# 3546  
Delta R.T. 0.003 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:278 Resp: 3411  
Ion Ratio Lower Upper  
278 100  
139 26.4 17.5 26.3#  
279 28.6 21.3 31.9

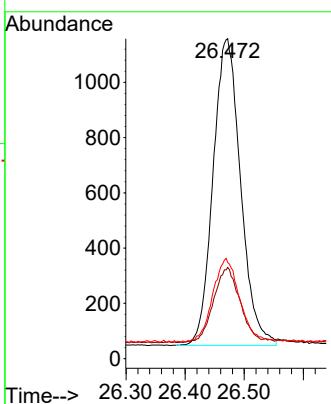




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.184 ng  
 RT: 26.472 min Scan# 3  
 Delta R.T. 0.003 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

Tgt Ion:276 Resp: 3591  
 Ion Ratio Lower Upper  
 276 100  
 277 28.5 20.9 31.3  
 138 30.1 22.6 33.8



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

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDICCC0.4**

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

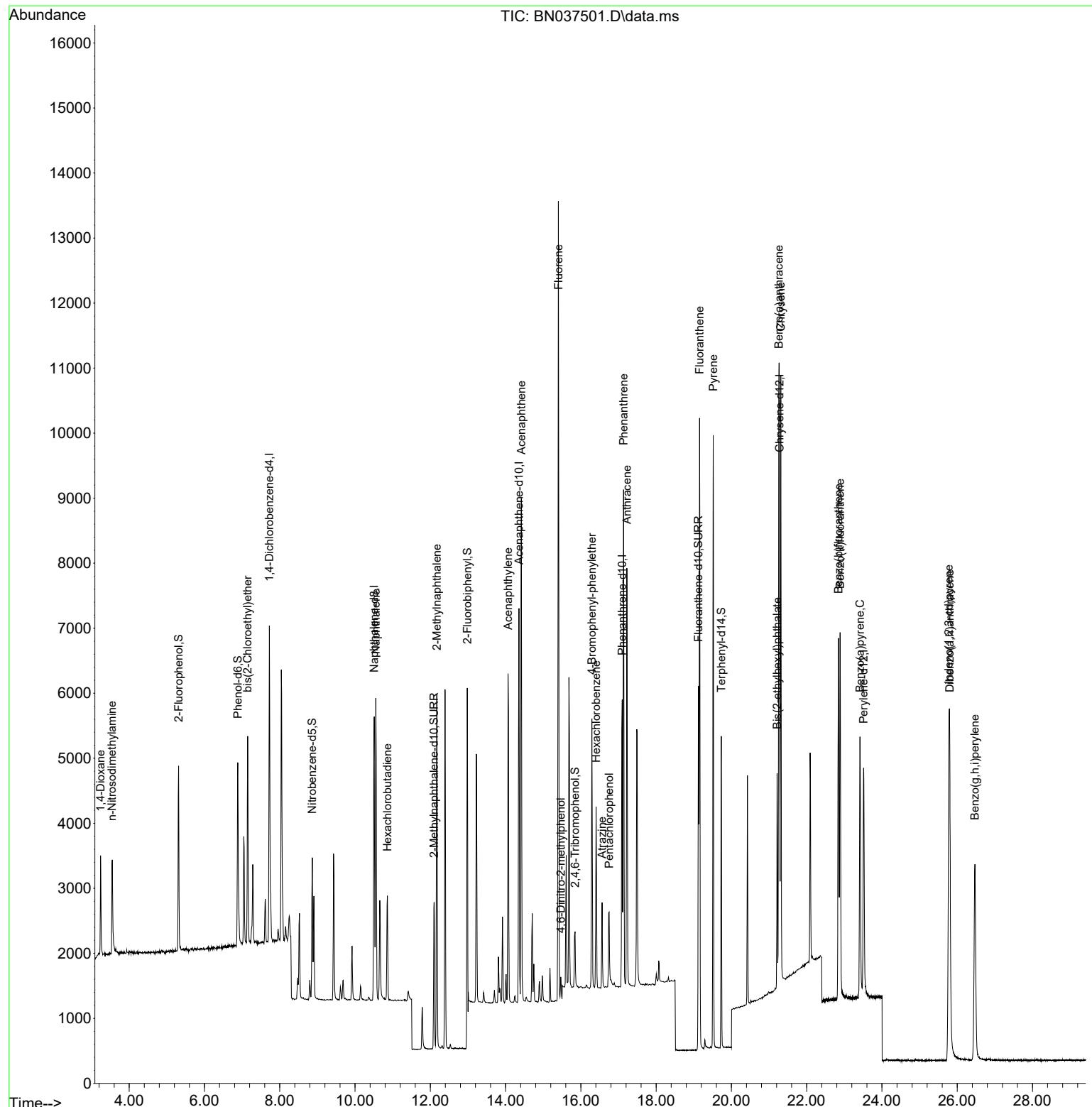
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4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

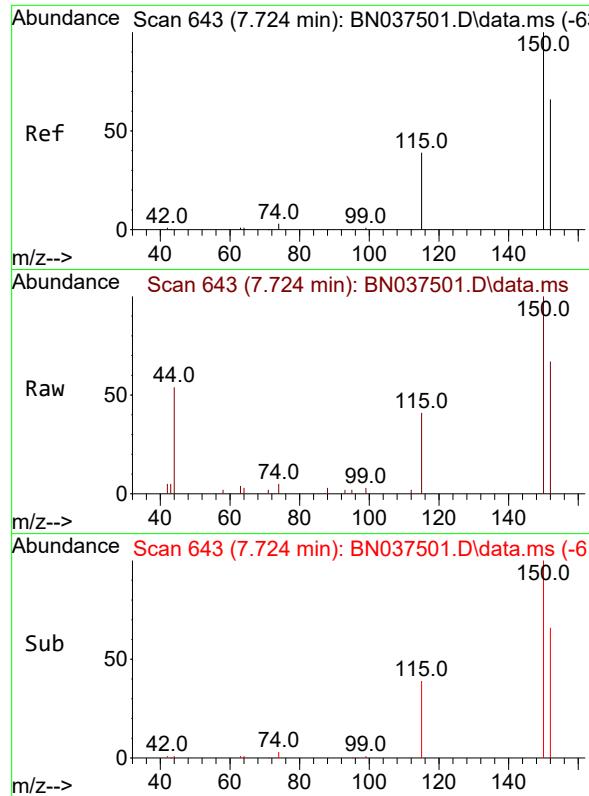
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

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

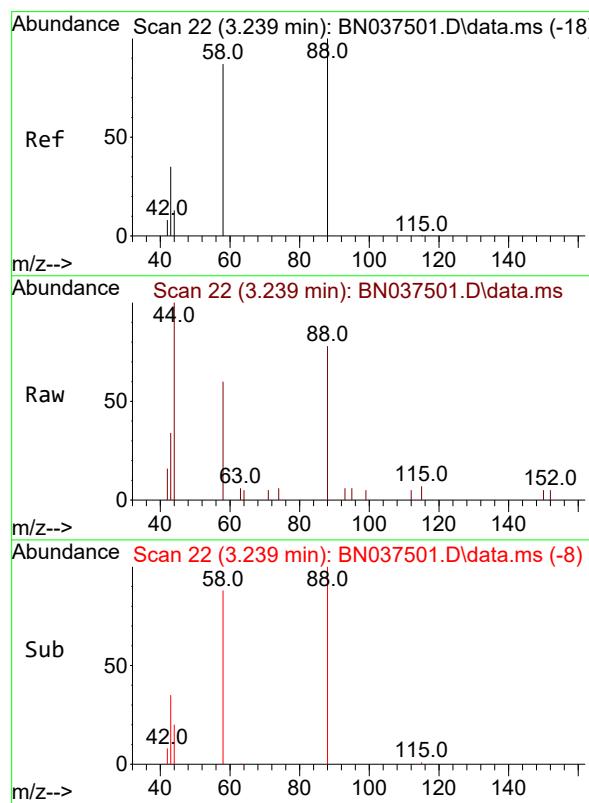
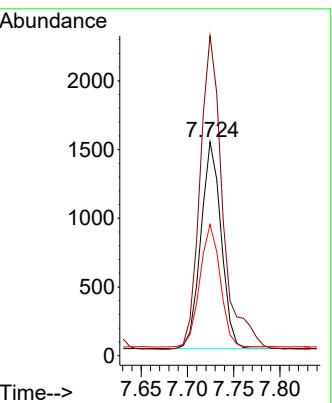




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

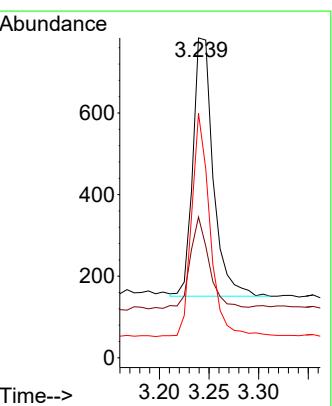
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

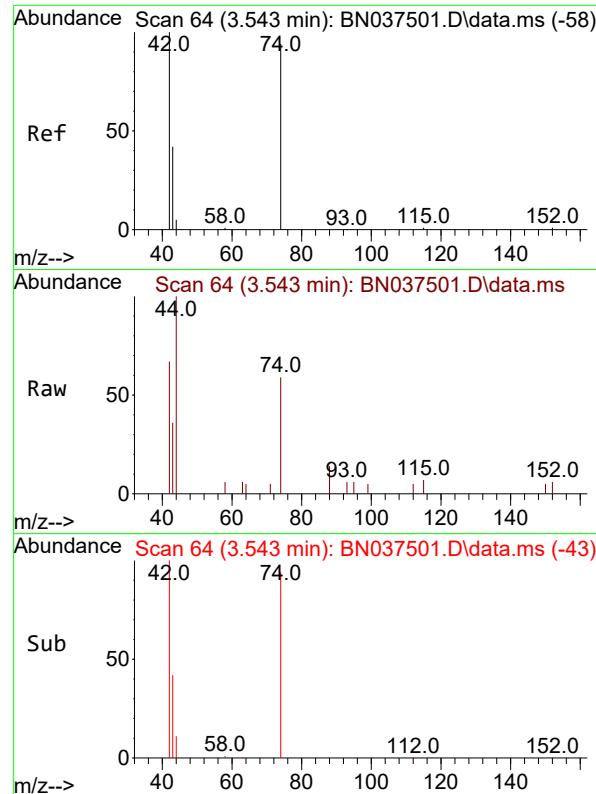
Tgt Ion:152 Resp: 2287  
Ion Ratio Lower Upper  
152 100  
150 149.8 119.8 179.8  
115 61.4 49.1 73.7



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

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

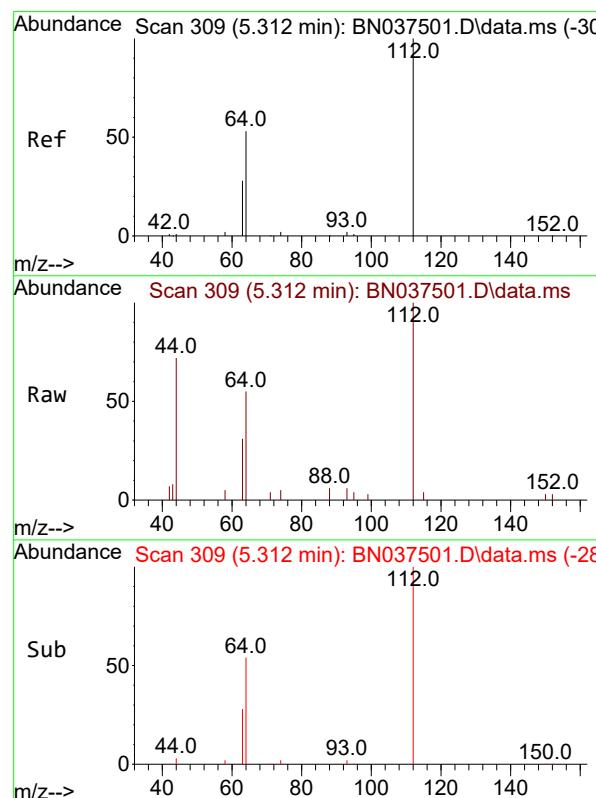
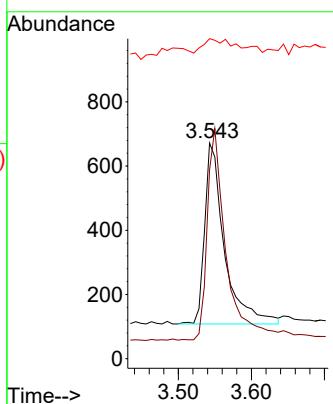




#3  
n-Nitrosodimethylamine  
Concen: 0.384 ng  
RT: 3.543 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

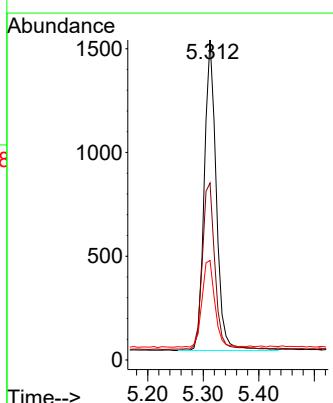
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

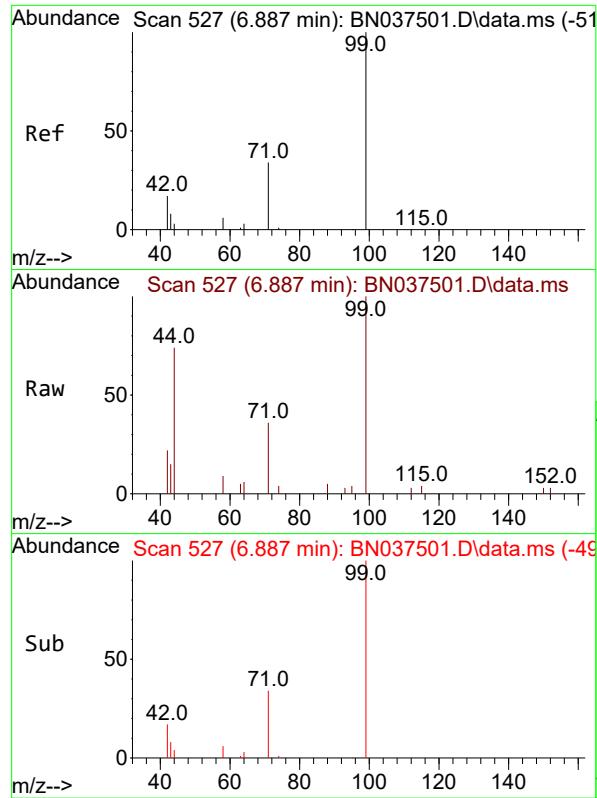
Tgt Ion: 42 Resp: 1061  
Ion Ratio Lower Upper  
42 100  
74 113.4 91.8 137.6  
44 18.8 15.0 22.6



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

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

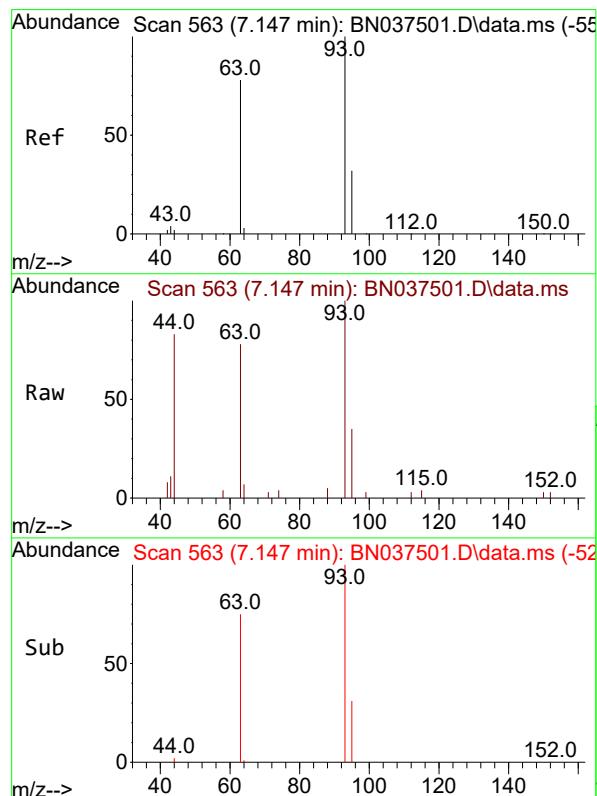
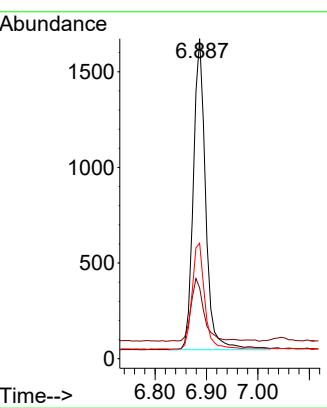




#5  
 Phenol-d6  
 Concen: 0.384 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

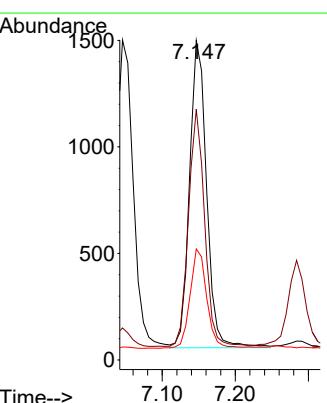
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 ClientSampleId : SSTDICCC0.4

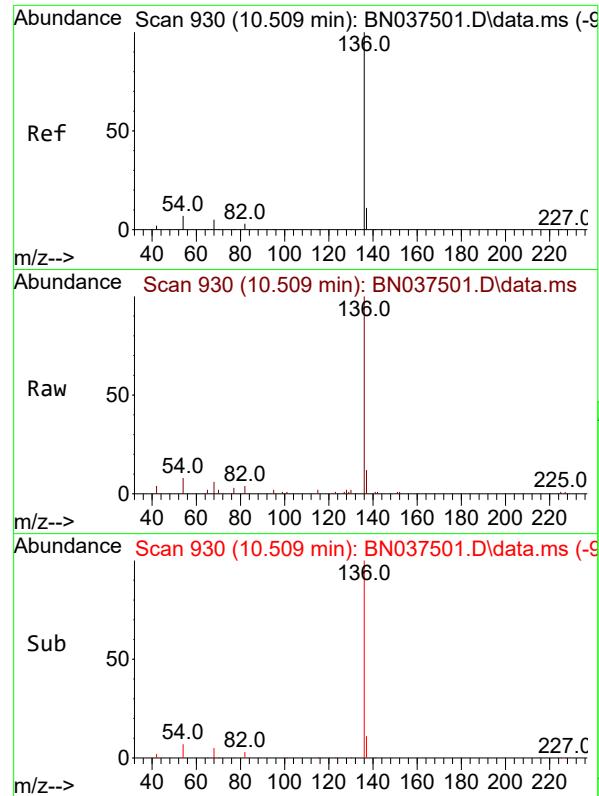
Tgt Ion: 99 Resp: 2721  
 Ion Ratio Lower Upper  
 99 100  
 42 21.4 17.1 25.7  
 71 34.8 27.8 41.8



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

Tgt Ion: 93 Resp: 2342  
 Ion Ratio Lower Upper  
 93 100  
 63 72.8 58.2 87.4  
 95 31.6 25.3 37.9





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

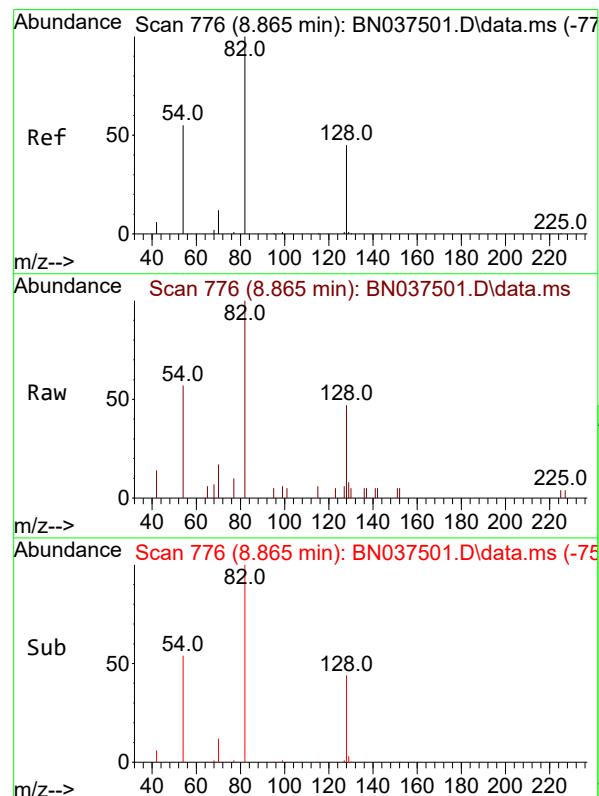
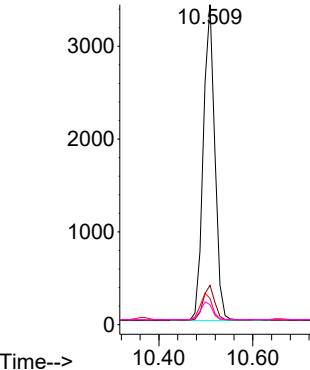
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

Tgt Ion:136 Resp: 5836

Ion Ratio Lower Upper

|     |      |     |      |
|-----|------|-----|------|
| 136 | 100  |     |      |
| 137 | 12.3 | 9.8 | 14.8 |
| 54  | 8.2  | 6.6 | 9.8  |
| 68  | 6.3  | 5.0 | 7.6  |

Abundance

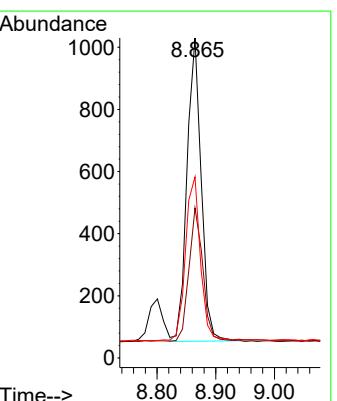


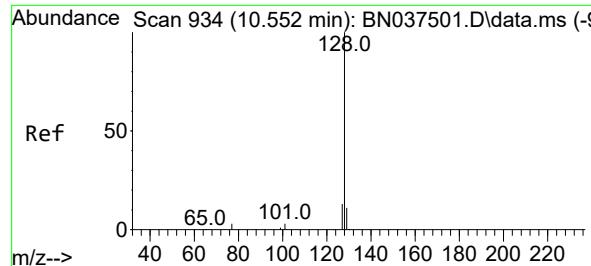
#8  
 Nitrobenzene-d5  
 Concen: 0.378 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Tgt Ion: 82 Resp: 1650

Ion Ratio Lower Upper

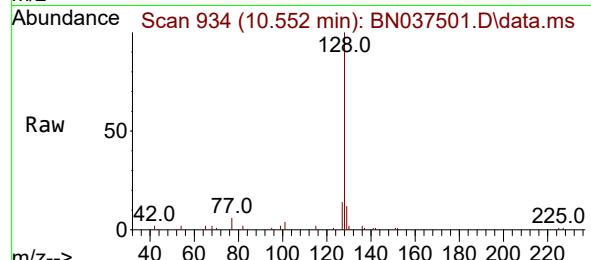
|     |      |      |      |
|-----|------|------|------|
| 82  | 100  |      |      |
| 128 | 46.9 | 37.5 | 56.3 |
| 54  | 56.6 | 45.3 | 67.9 |



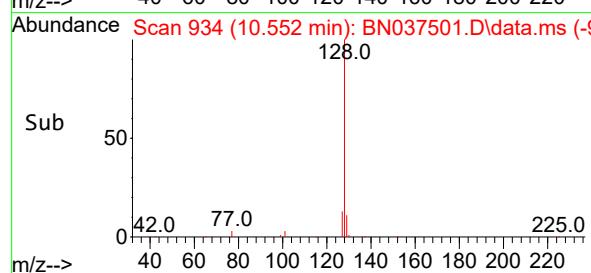
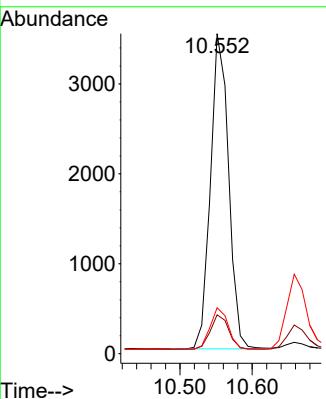


#9  
Naphthalene  
Concen: 0.392 ng  
RT: 10.552 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

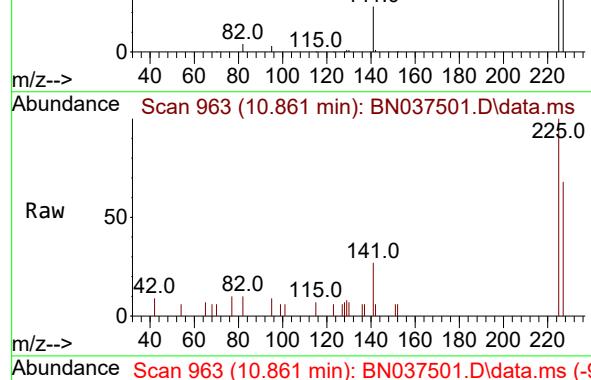
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4



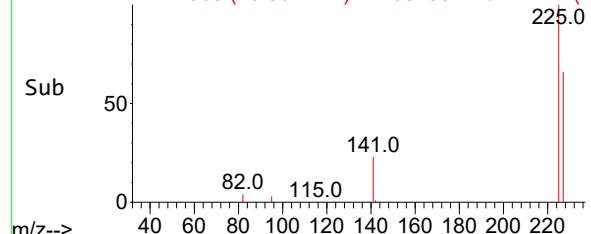
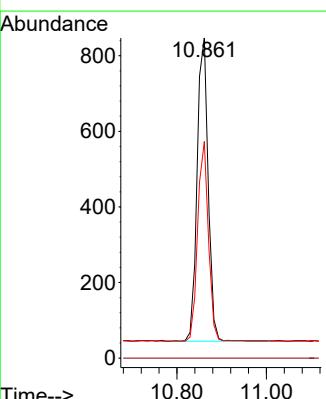
Tgt Ion:128 Resp: 6104  
Ion Ratio Lower Upper  
128 100  
129 12.1 9.7 14.5  
127 14.4 11.5 17.3

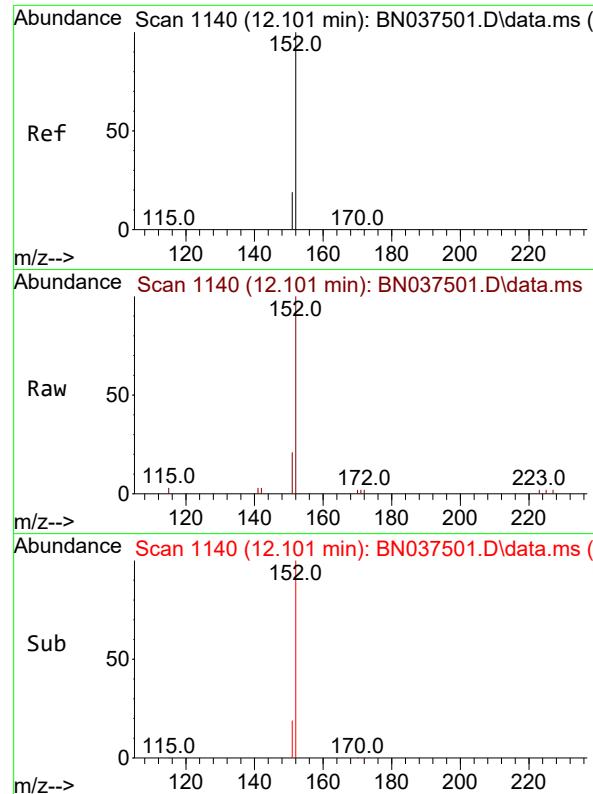


#10  
Hexachlorobutadiene  
Concen: 0.399 ng  
RT: 10.861 min Scan# 963  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49



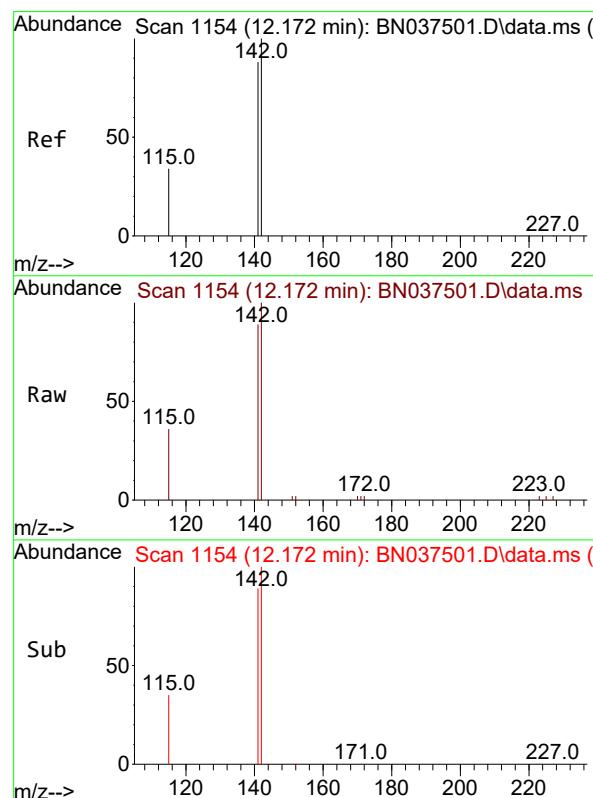
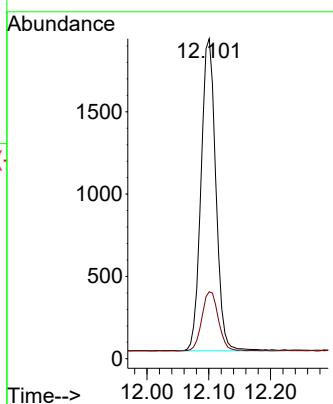
Tgt Ion:225 Resp: 1371  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.0 76.4





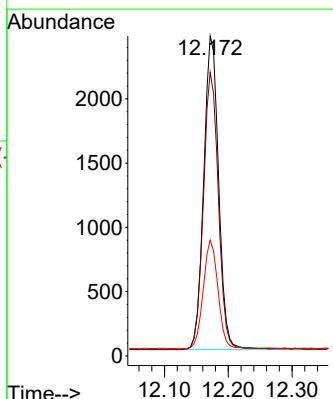
#11  
2-Methylnaphthalene-d10  
Concen: 0.377 ng  
RT: 12.101 min Scan# 1:Instrument :  
Delta R.T. 0.000 min BNA\_N  
Lab File: BN037501.D ClientSampleId :  
Acq: 15 Jul 2025 13:49 SSTDICCC0.4

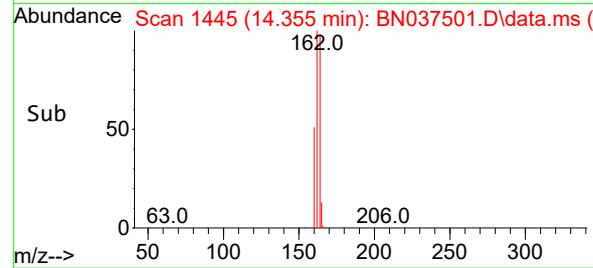
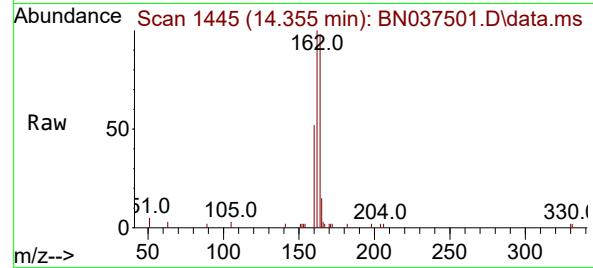
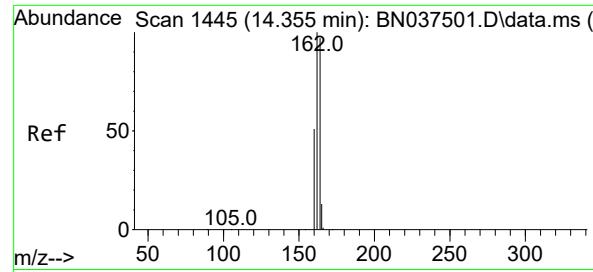
Tgt Ion:152 Resp: 3156  
Ion Ratio Lower Upper  
152 100  
151 21.0 16.8 25.2



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

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





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

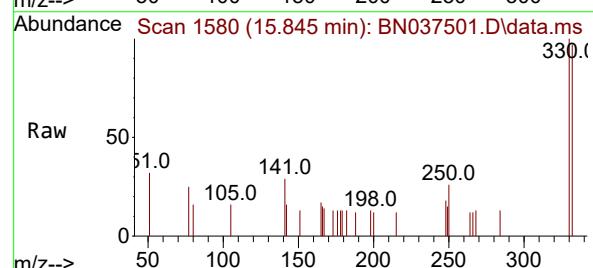
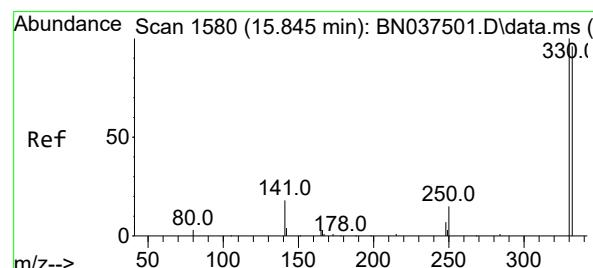
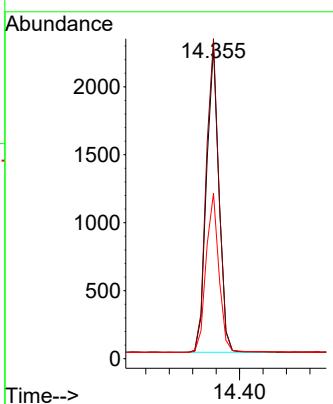
Tgt Ion:164 Resp: 3328

Ion Ratio Lower Upper

164 100

162 102.5 82.0 123.0

160 53.0 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.352 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

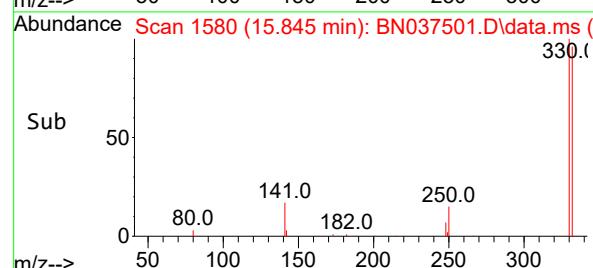
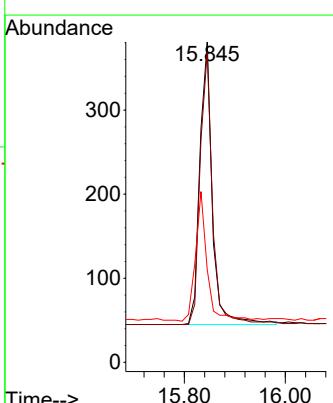
Tgt Ion:330 Resp: 576

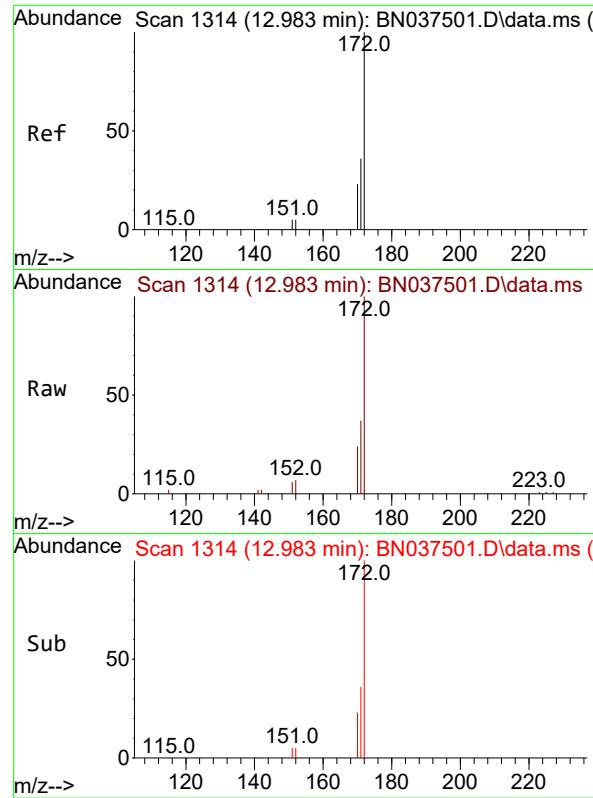
Ion Ratio Lower Upper

330 100

332 95.1 76.1 114.1

141 41.7 33.4 50.0

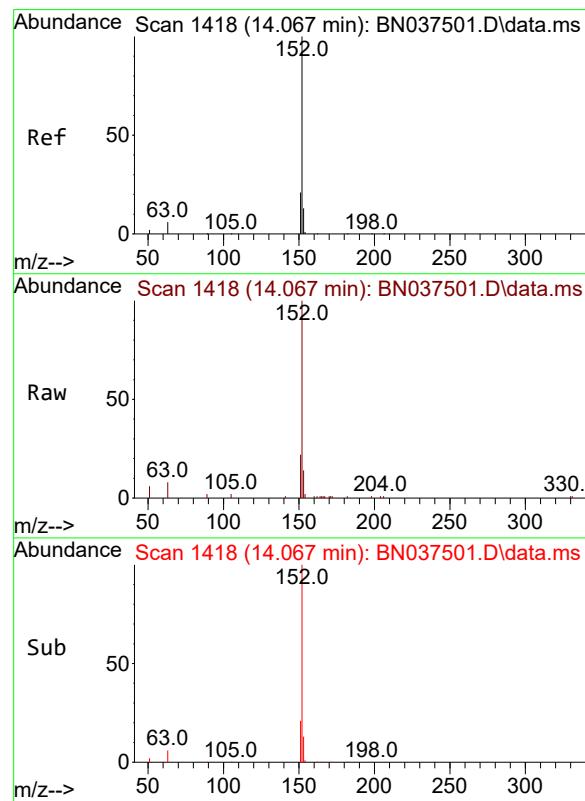
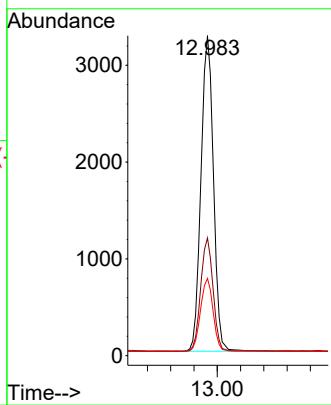




#15  
2-Fluorobiphenyl  
Concen: 0.393 ng  
RT: 12.983 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

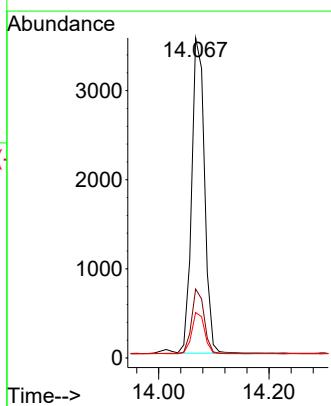
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

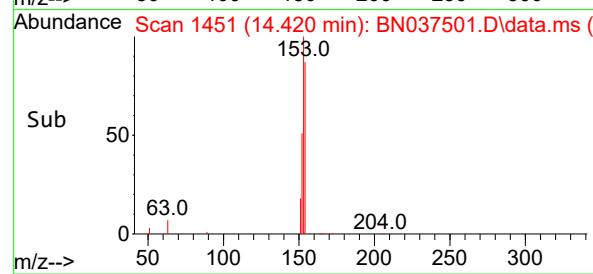
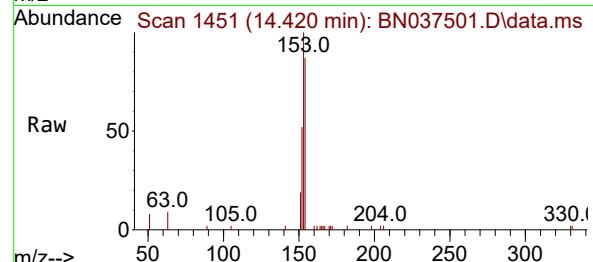
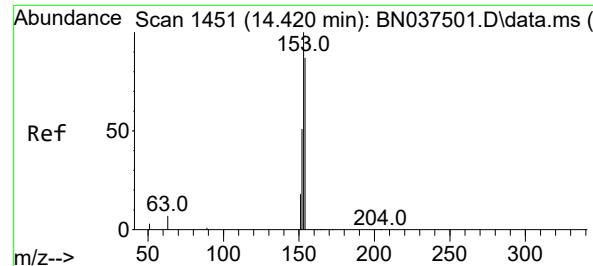
Tgt Ion:172 Resp: 6806  
Ion Ratio Lower Upper  
172 100  
171 36.8 29.4 44.2  
170 24.2 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.384 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:152 Resp: 5722  
Ion Ratio Lower Upper  
152 100  
151 19.9 15.9 23.9  
153 13.4 10.7 16.1





#17

Acenaphthene

Concen: 0.385 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

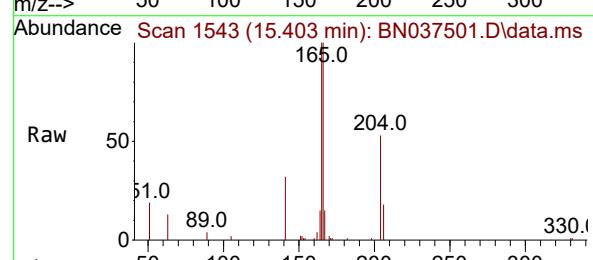
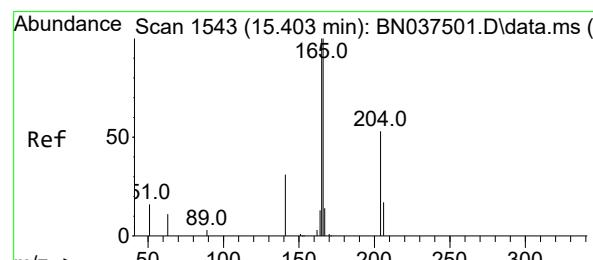
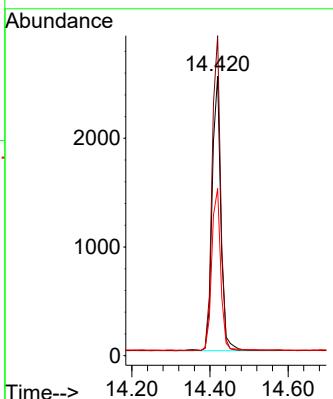
Tgt Ion:154 Resp: 3900

Ion Ratio Lower Upper

154 100

153 111.5 89.2 133.8

152 60.0 48.0 72.0



#18

Fluorene

Concen: 0.379 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

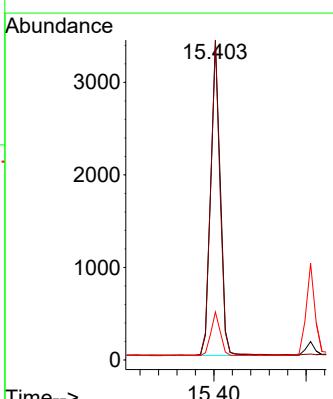
Tgt Ion:166 Resp: 4943

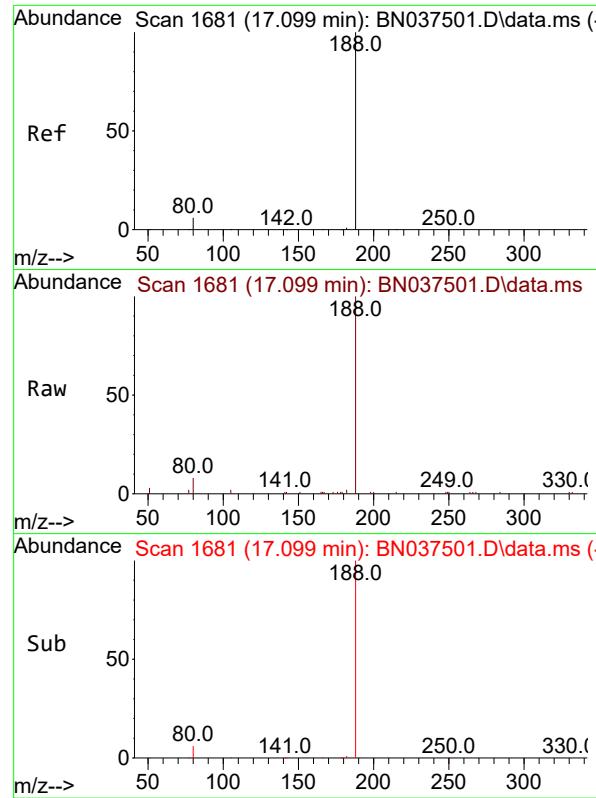
Ion Ratio Lower Upper

166 100

165 97.6 78.1 117.1

167 13.8 11.0 16.6

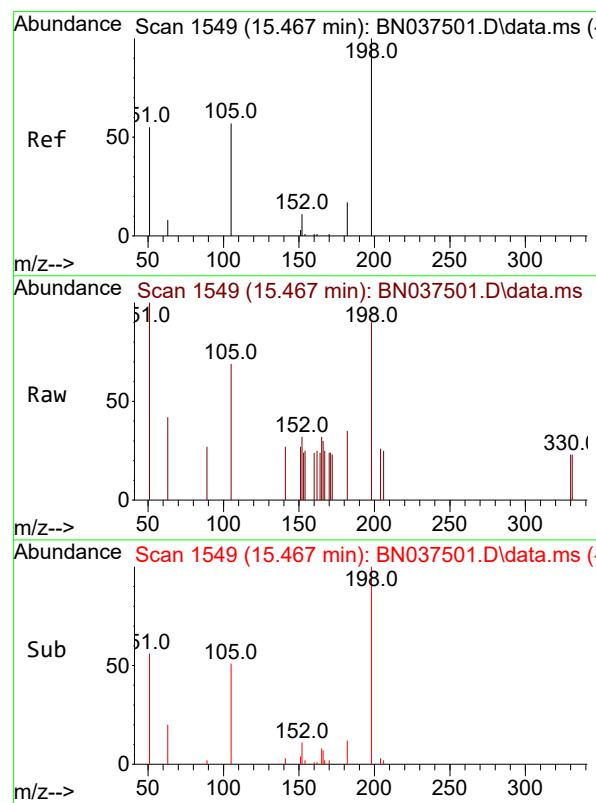
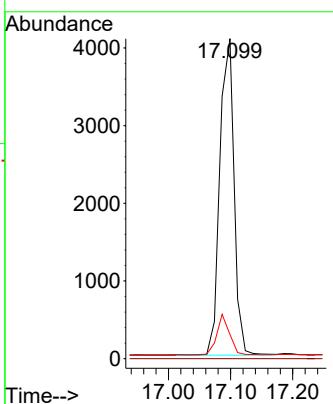




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.099 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

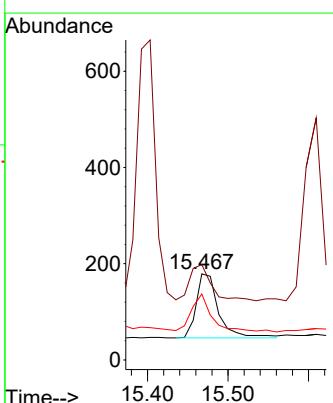
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

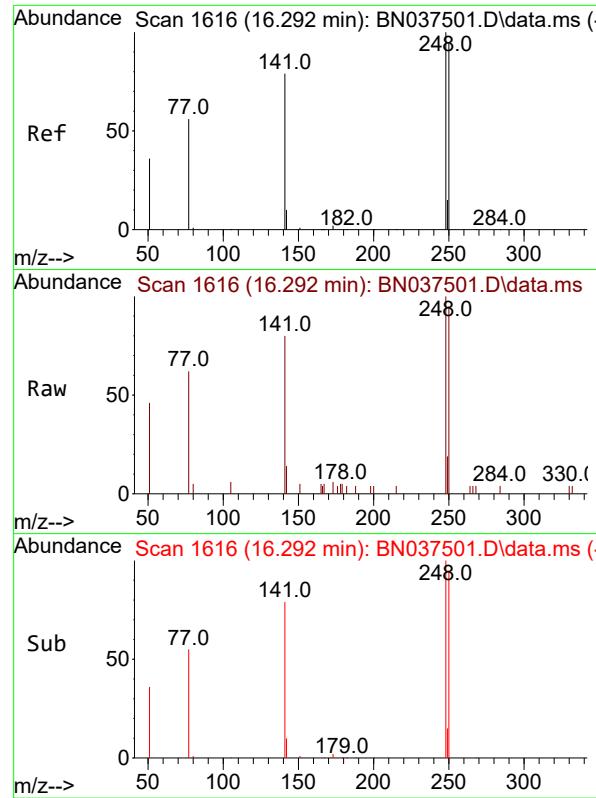
Tgt Ion:188 Resp: 6474  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 7.5 6.0 9.0



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.396 ng  
 RT: 15.467 min Scan# 1549  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Tgt Ion:198 Resp: 268  
 Ion Ratio Lower Upper  
 198 100  
 51 110.6 88.5 132.7  
 105 76.5 61.2 91.8





#21

4-Bromophenyl-phenylether

Concen: 0.379 ng

RT: 16.292 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

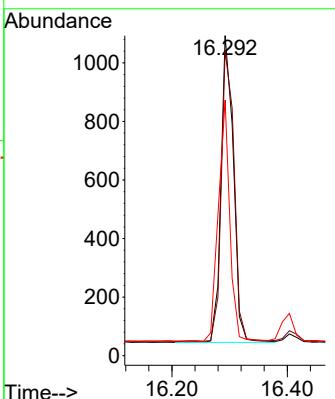
Tgt Ion:248 Resp: 1574

Ion Ratio Lower Upper

248 100

250 95.2 76.2 114.2

141 79.9 63.9 95.9



#22

Hexachlorobenzene

Concen: 0.397 ng

RT: 16.404 min Scan# 1625

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

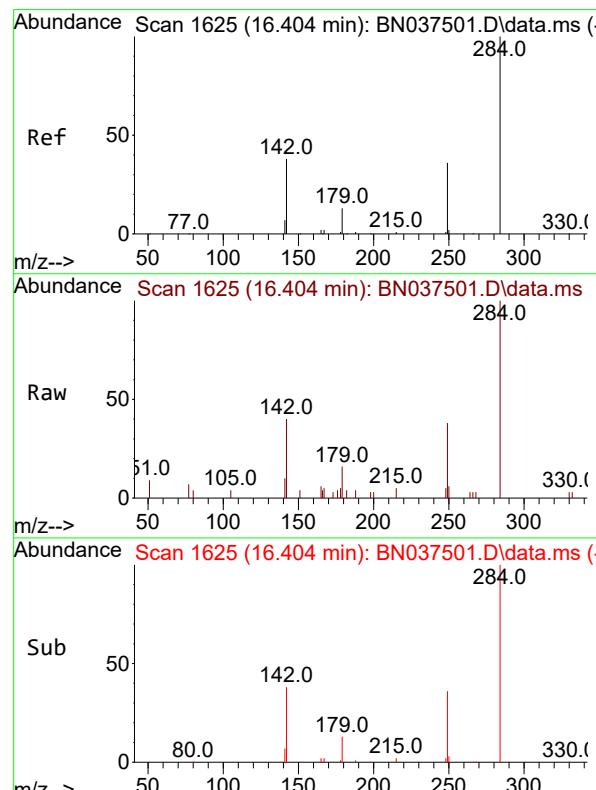
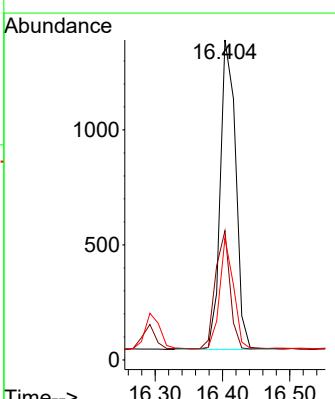
Tgt Ion:284 Resp: 2126

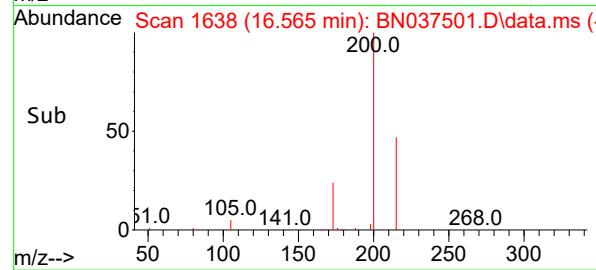
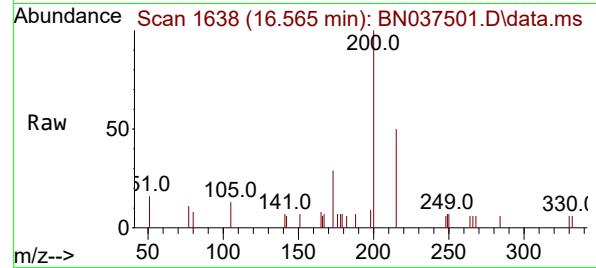
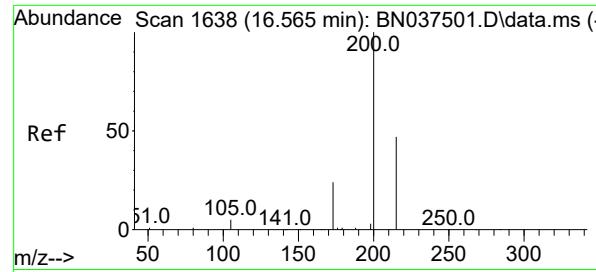
Ion Ratio Lower Upper

284 100

142 36.1 28.9 43.3

249 32.2 25.8 38.6





#23

Atrazine

Concen: 0.355 ng

RT: 16.565 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

Tgt Ion:200 Resp: 1027

Ion Ratio Lower Upper

200 100

173 29.0 23.2 34.8

215 50.3 40.2 60.4

Abundance

16.565

600

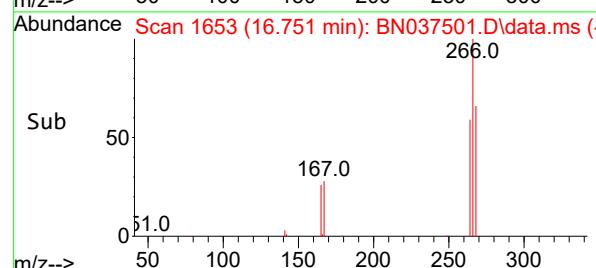
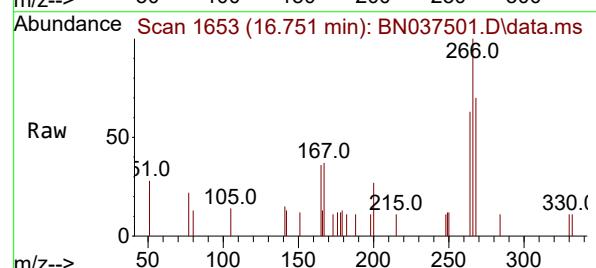
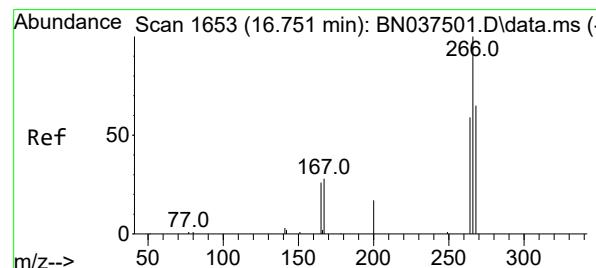
400

200

0

Time--&gt;

Time--&gt;



#24

Pentachlorophenol

Concen: 0.338 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Tgt Ion:266 Resp: 812

Ion Ratio Lower Upper

266 100

264 61.6 49.3 73.9

268 64.5 51.6 77.4

Abundance

16.751

400

300

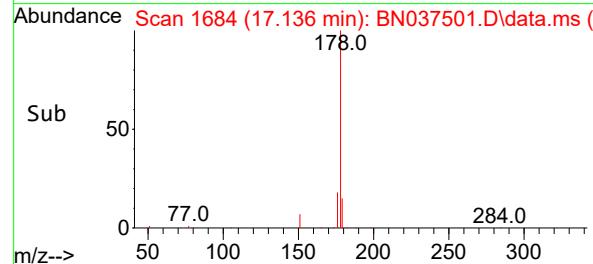
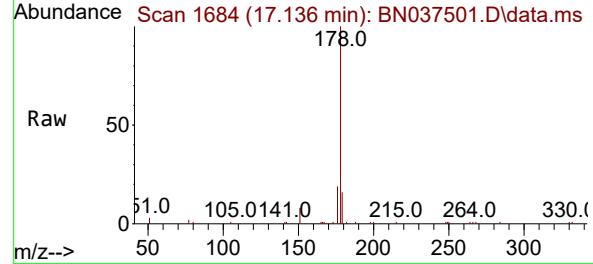
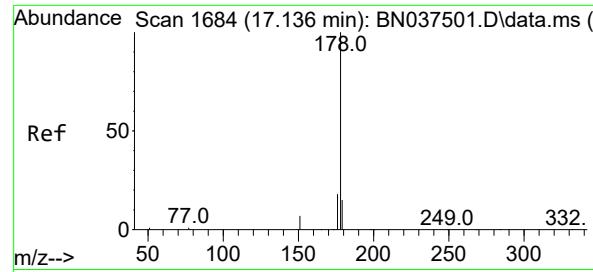
200

100

0

Time--&gt;

Time--&gt;



#25

Phenanthrene

Concen: 0.387 ng

RT: 17.136 min Scan# 1

Instrument:

Delta R.T. 0.000 min

BNA\_N

Lab File: BN037501.D

ClientSampleId :

Acq: 15 Jul 2025 13:49

SSTDICCC0.4

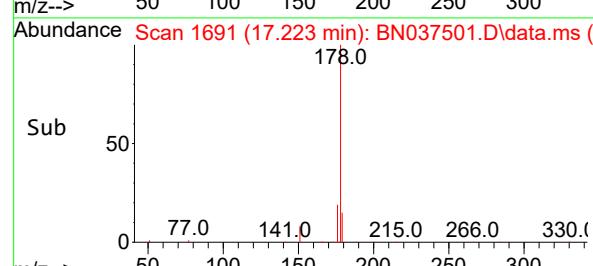
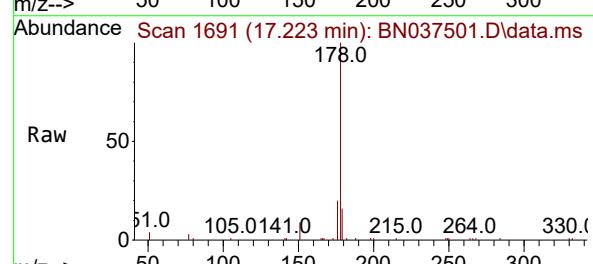
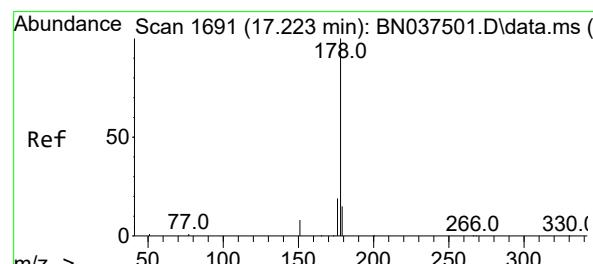
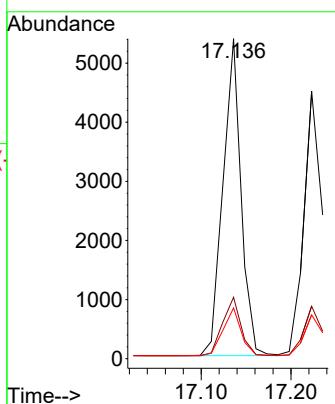
Tgt Ion:178 Resp: 7511

Ion Ratio Lower Upper

178 100

176 18.8 15.0 22.6

179 15.2 12.2 18.2



#26

Anthracene

Concen: 0.370 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

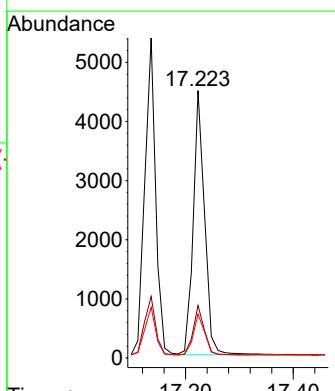
Tgt Ion:178 Resp: 6557

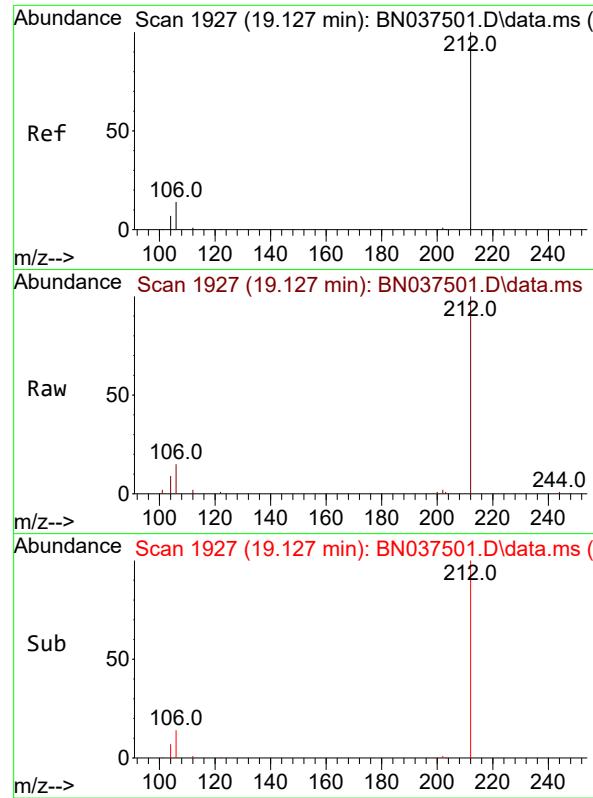
Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

179 15.4 12.3 18.5

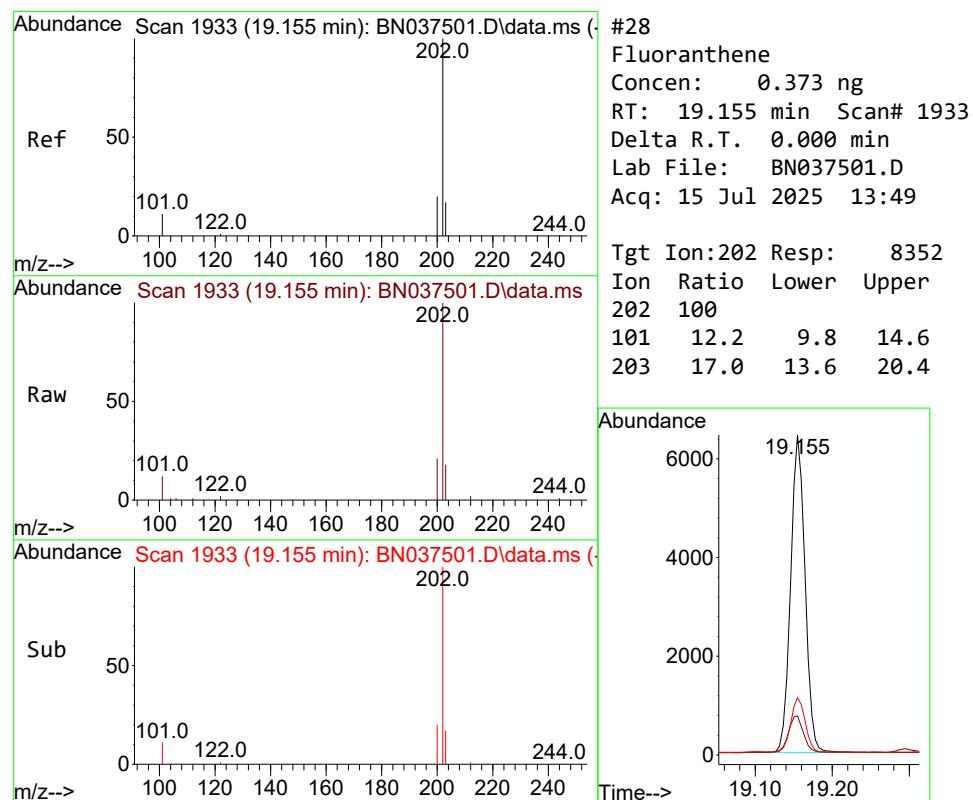
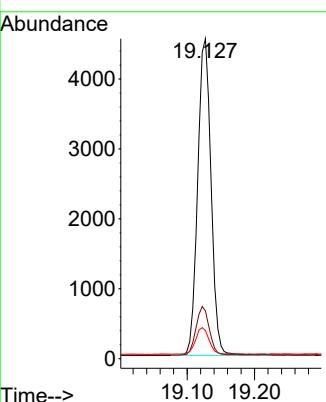




#27  
 Fluoranthene-d10  
 Concen: 0.363 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

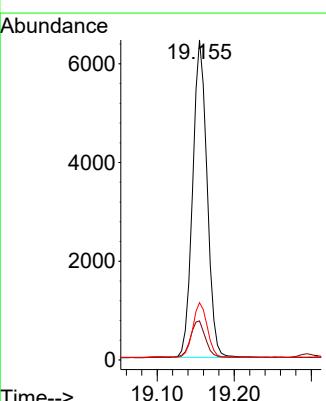
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

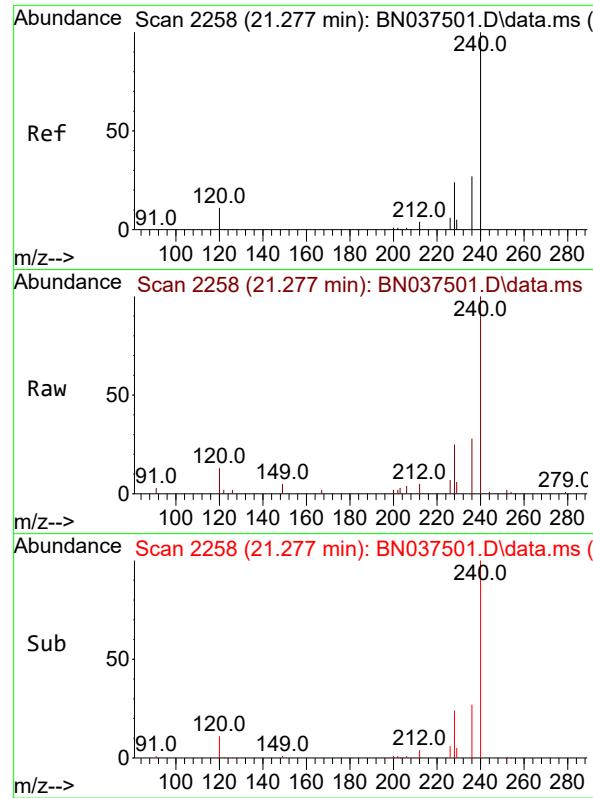
Tgt Ion:212 Resp: 6230  
 Ion Ratio Lower Upper  
 212 100  
 106 15.3 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.373 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Tgt Ion:202 Resp: 8352  
 Ion Ratio Lower Upper  
 202 100  
 101 12.2 9.8 14.6  
 203 17.0 13.6 20.4

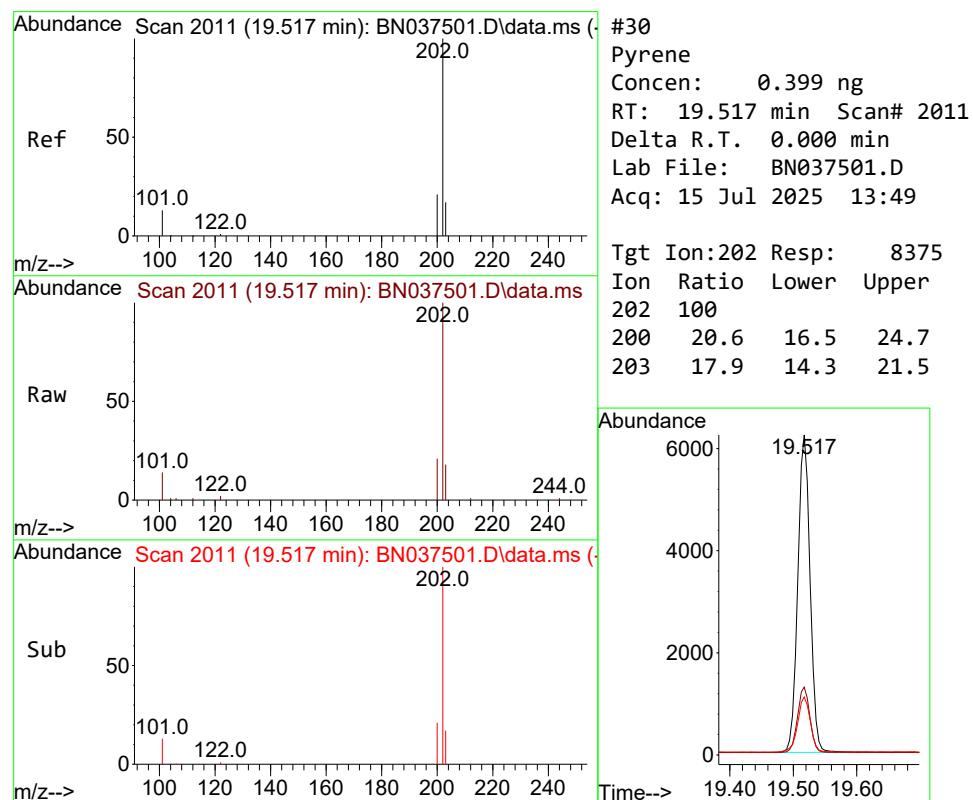
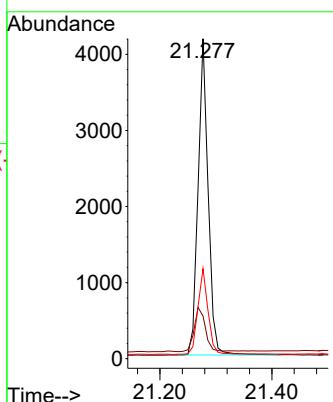




#29  
 Chrysene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

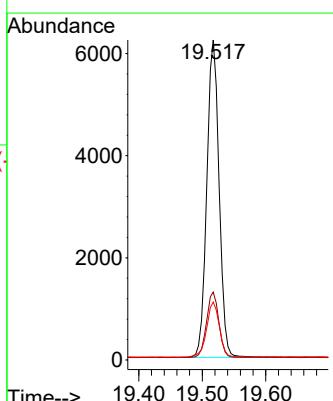
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

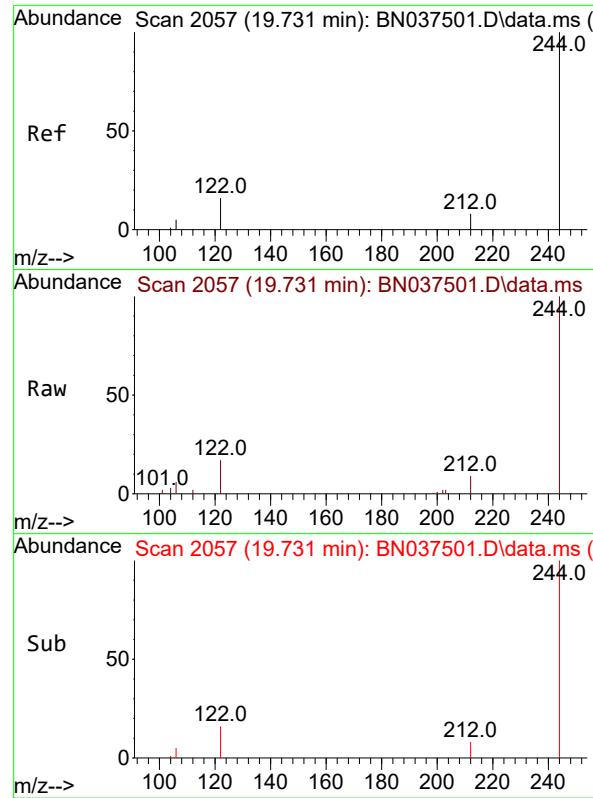
Tgt Ion:240 Resp: 5210  
 Ion Ratio Lower Upper  
 240 100  
 120 13.4 10.7 16.1  
 236 28.2 22.6 33.8



#30  
 Pyrene  
 Concen: 0.399 ng  
 RT: 19.517 min Scan# 2011  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Tgt Ion:202 Resp: 8375  
 Ion Ratio Lower Upper  
 202 100  
 200 20.6 16.5 24.7  
 203 17.9 14.3 21.5

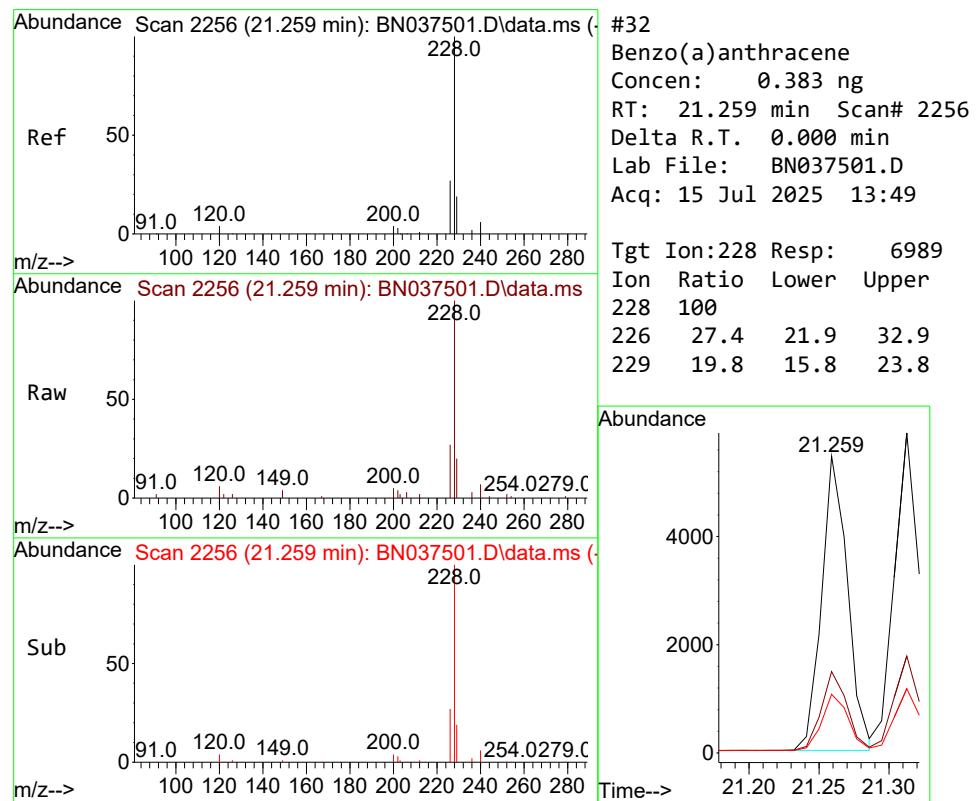
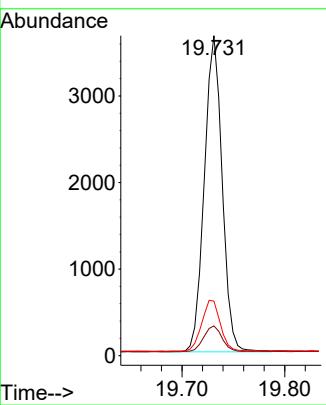




#31  
 Terphenyl-d14  
 Concen: 0.393 ng  
 RT: 19.731 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

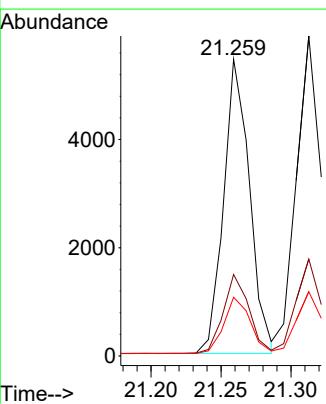
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

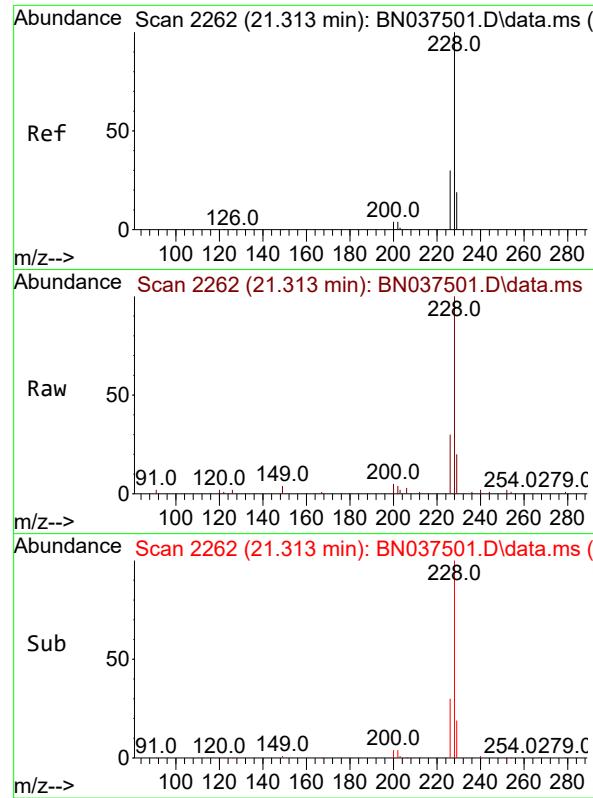
Tgt Ion:244 Resp: 4396  
 Ion Ratio Lower Upper  
 244 100  
 212 9.3 7.4 11.2  
 122 17.0 13.6 20.4



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

Tgt Ion:228 Resp: 6989  
 Ion Ratio Lower Upper  
 228 100  
 226 27.4 21.9 32.9  
 229 19.8 15.8 23.8

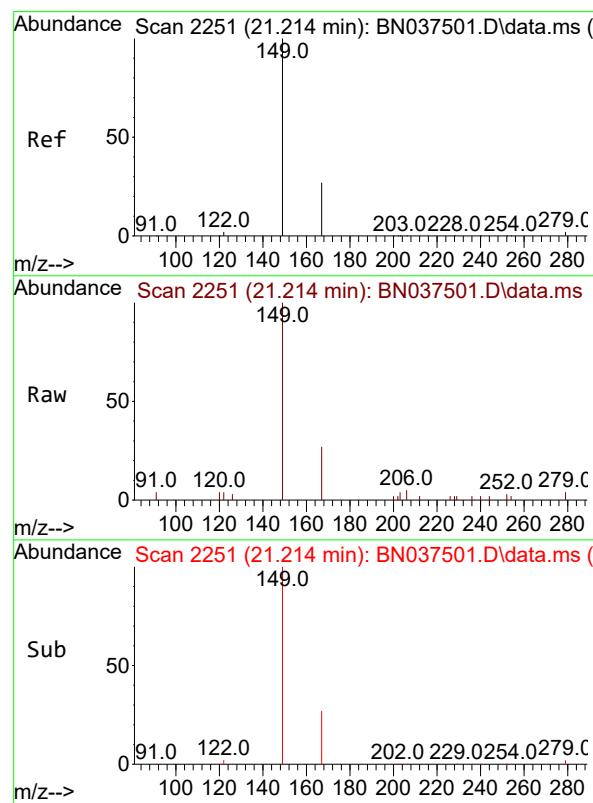
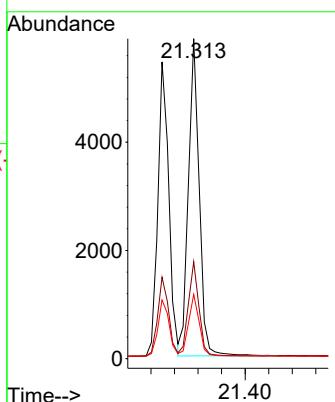




#33  
Chrysene  
Concen: 0.393 ng  
RT: 21.313 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

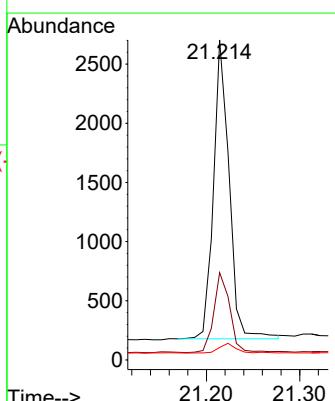
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

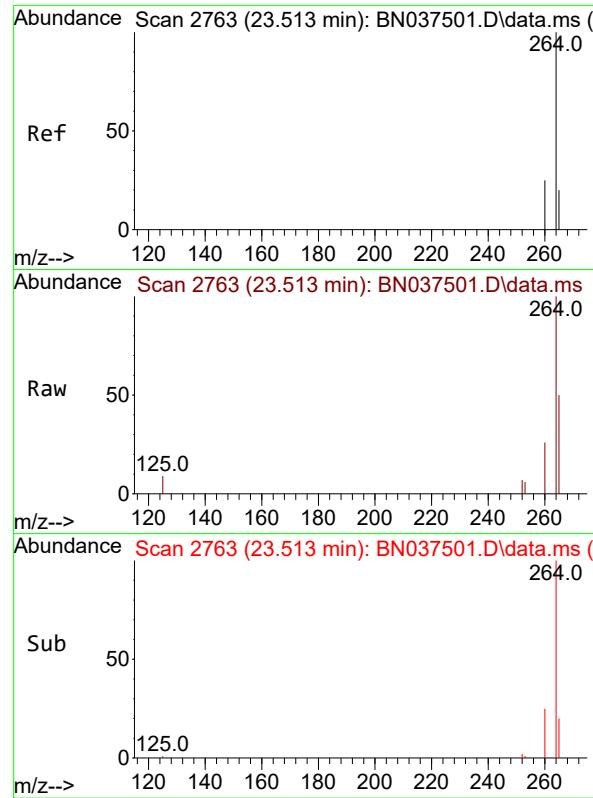
Tgt Ion:228 Resp: 7472  
Ion Ratio Lower Upper  
228 100  
226 30.3 24.2 36.4  
229 20.1 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.358 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:149 Resp: 2941  
Ion Ratio Lower Upper  
149 100  
167 27.3 21.8 32.8  
279 3.7 3.0 4.4

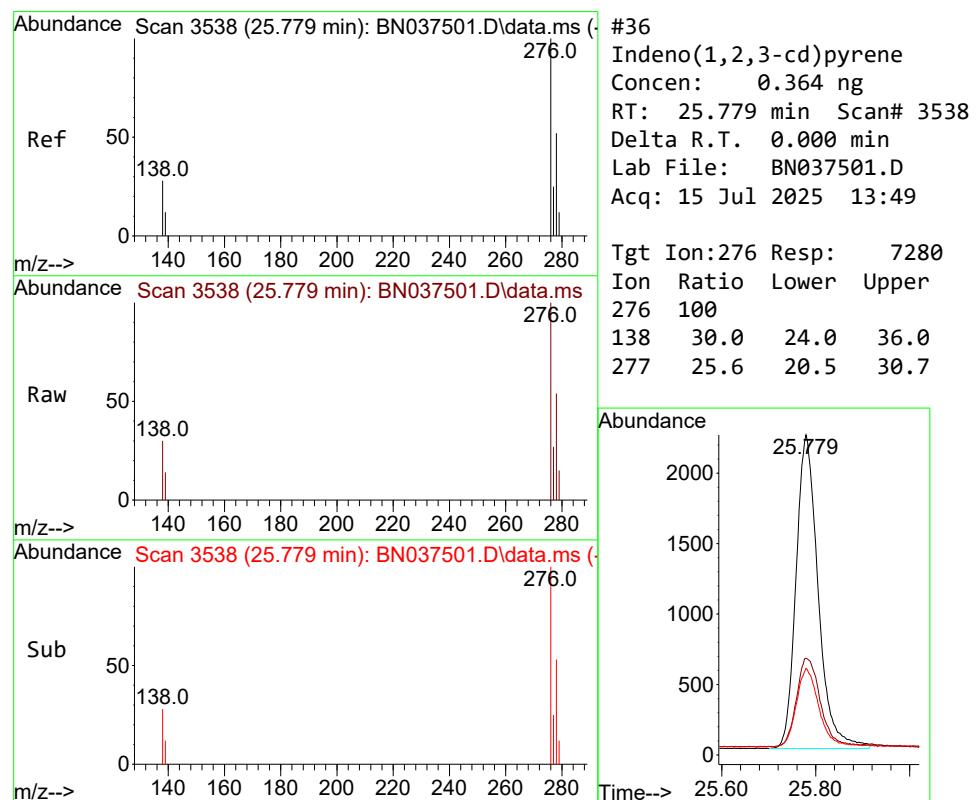
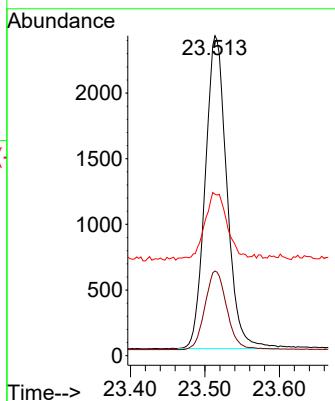




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.513 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

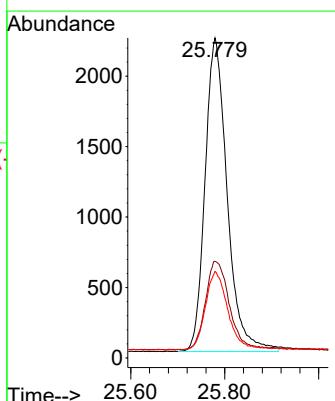
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

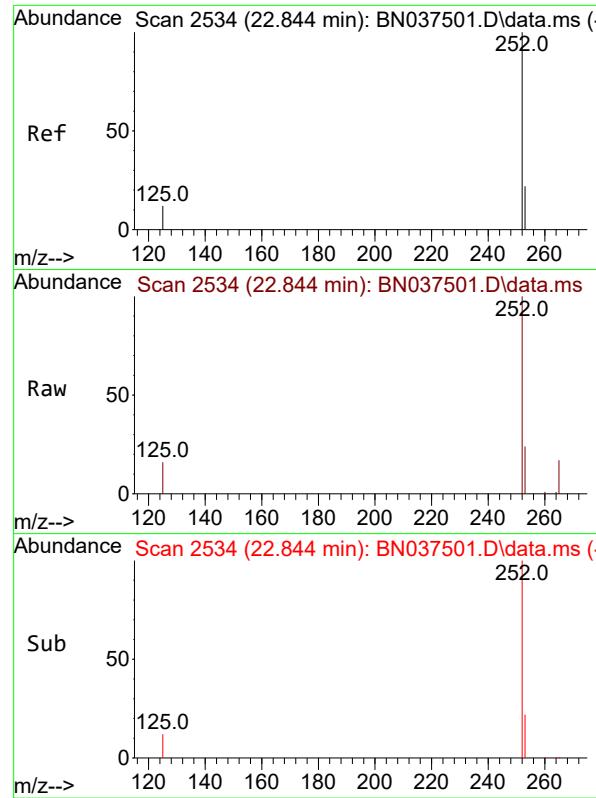
Tgt Ion:264 Resp: 4807  
 Ion Ratio Lower Upper  
 264 100  
 260 26.5 21.2 31.8  
 265 50.5 40.4 60.6



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.364 ng  
 RT: 25.779 min Scan# 3538  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Tgt Ion:276 Resp: 7280  
 Ion Ratio Lower Upper  
 276 100  
 138 30.0 24.0 36.0  
 277 25.6 20.5 30.7

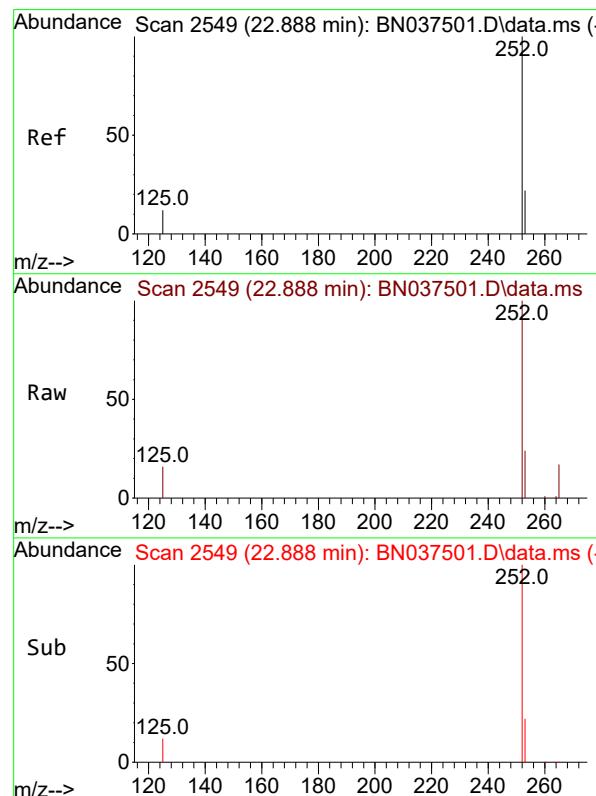
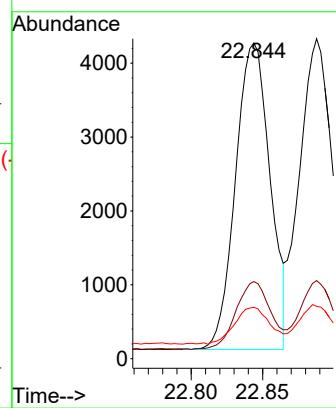




#37  
 Benzo(b)fluoranthene  
 Concen: 0.383 ng  
 RT: 22.844 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

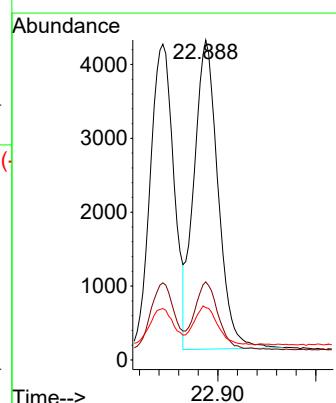
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

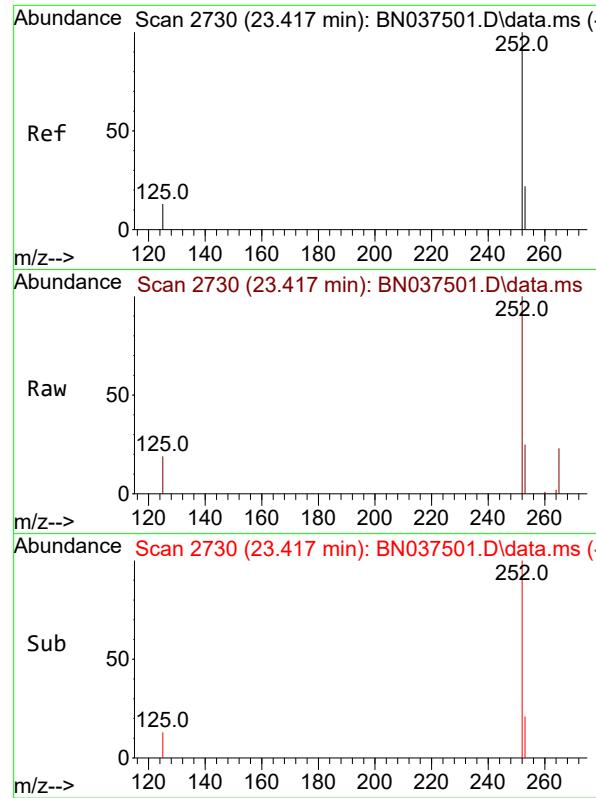
Tgt Ion:252 Resp: 6988  
 Ion Ratio Lower Upper  
 252 100  
 253 24.4 19.5 29.3  
 125 16.3 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.379 ng  
 RT: 22.888 min Scan# 2549  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

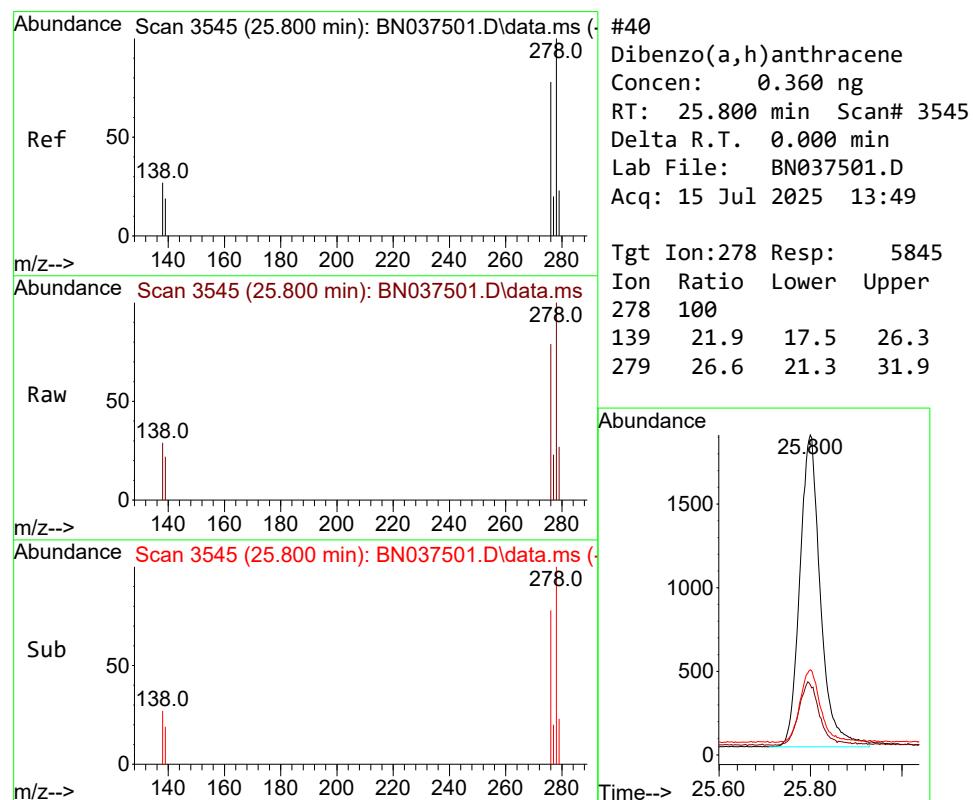
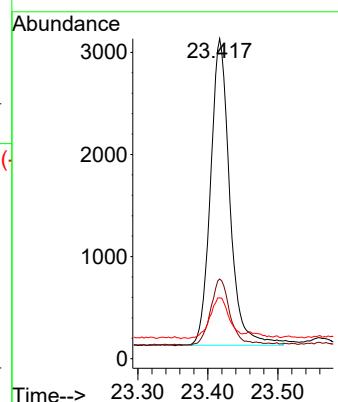
Tgt Ion:252 Resp: 7143  
 Ion Ratio Lower Upper  
 252 100  
 253 24.4 19.5 29.3  
 125 16.4 13.1 19.7





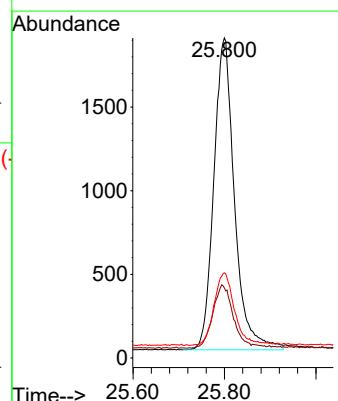
#39  
Benzo(a)pyrene  
Concen: 0.376 ng  
RT: 23.417 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49  
ClientSampleId : SSTDICCC0.4

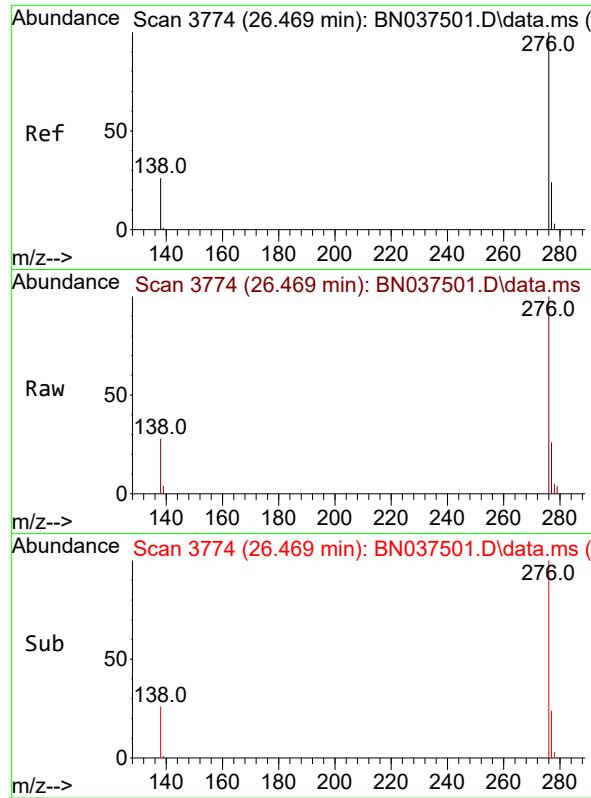
Tgt Ion:252 Resp: 5731  
Ion Ratio Lower Upper  
252 100  
253 24.9 19.9 29.9  
125 19.0 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.360 ng  
RT: 25.800 min Scan# 3545  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:278 Resp: 5845  
Ion Ratio Lower Upper  
278 100  
139 21.9 17.5 26.3  
279 26.6 21.3 31.9

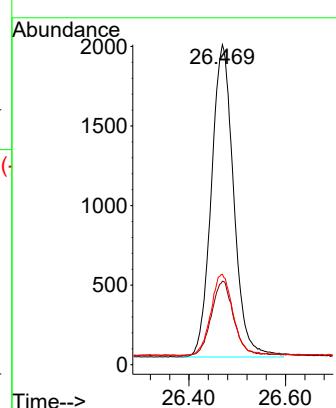




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.375 ng  
 RT: 26.469 min Scan# 3  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

Tgt Ion:276 Resp: 6293  
 Ion Ratio Lower Upper  
 276 100  
 277 26.1 20.9 31.3  
 138 28.2 22.6 33.8



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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.8

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

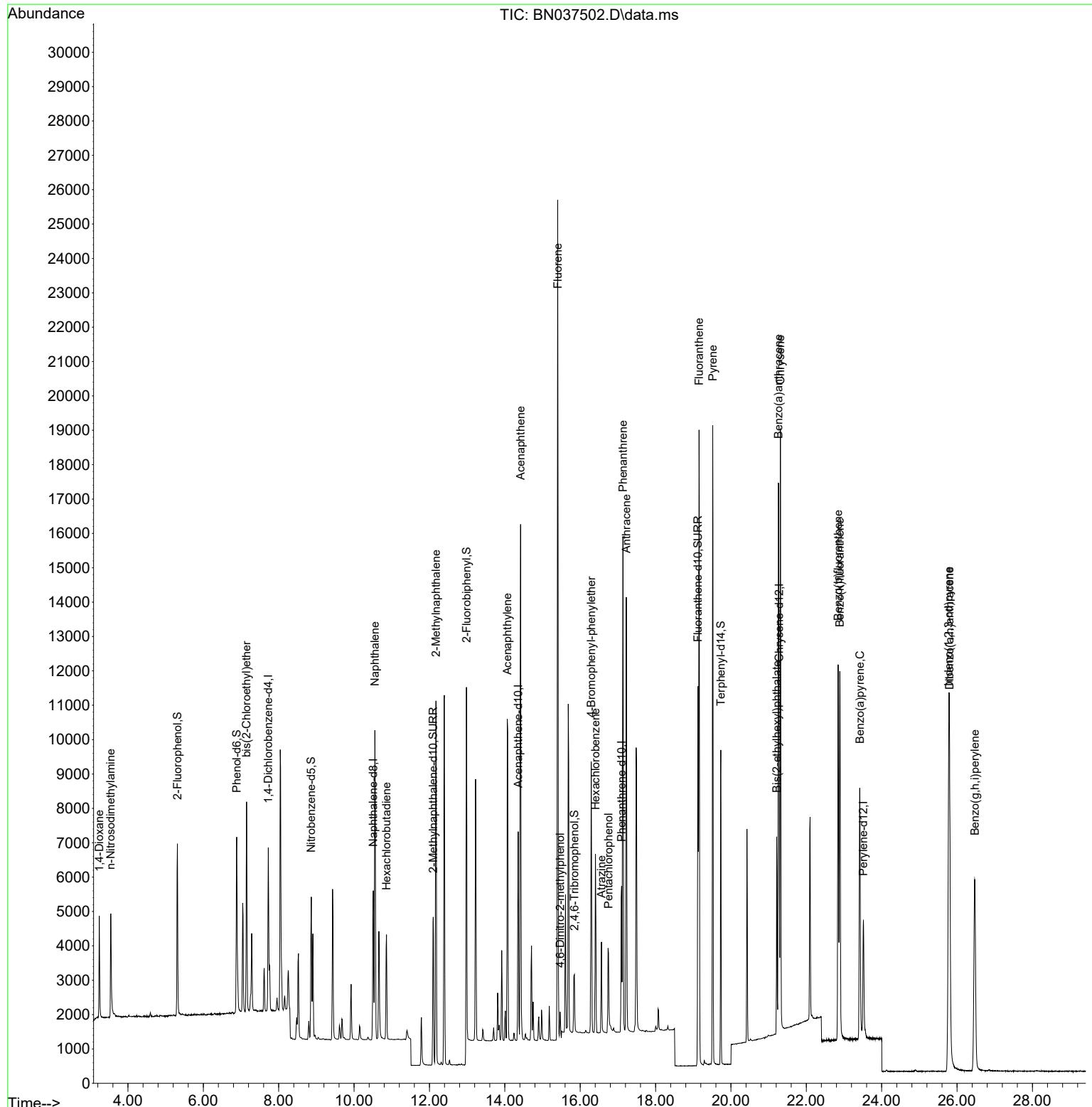
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4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

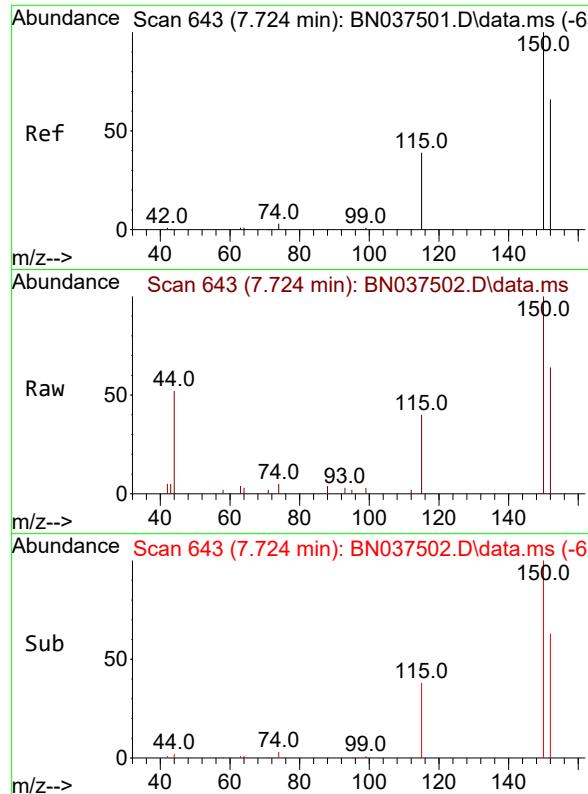
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.8

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

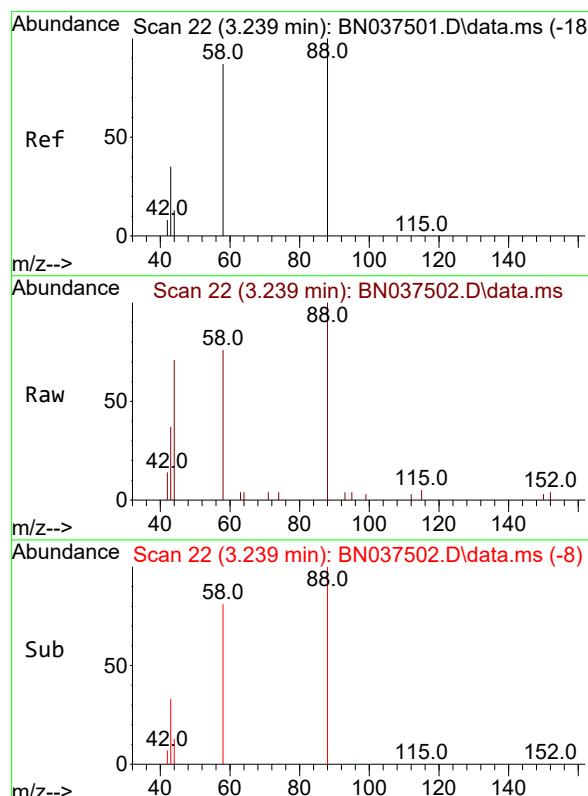
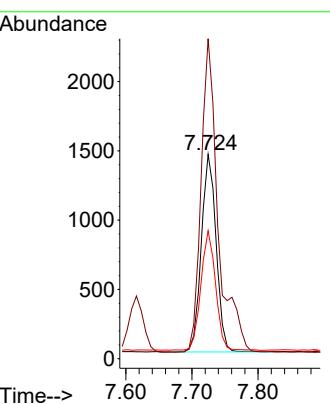
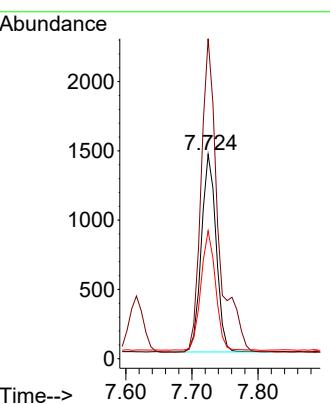




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

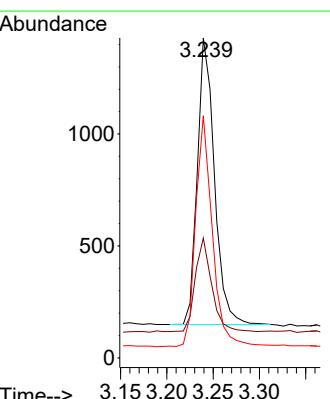
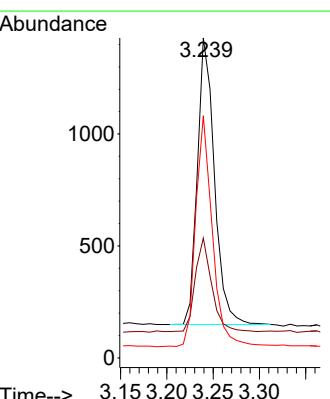
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

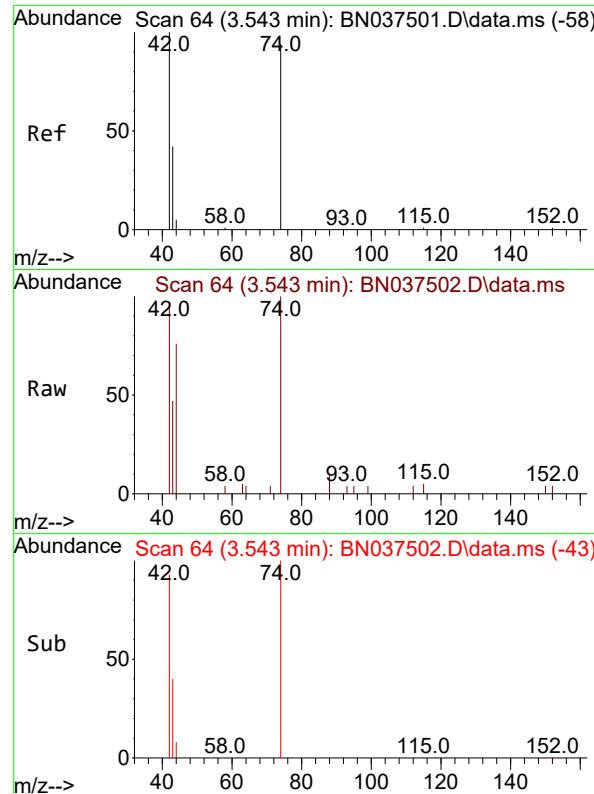
Tgt Ion:152 Resp: 2213  
Ion Ratio Lower Upper  
152 100  
150 156.6 119.8 179.8  
115 62.6 49.1 73.7



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

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

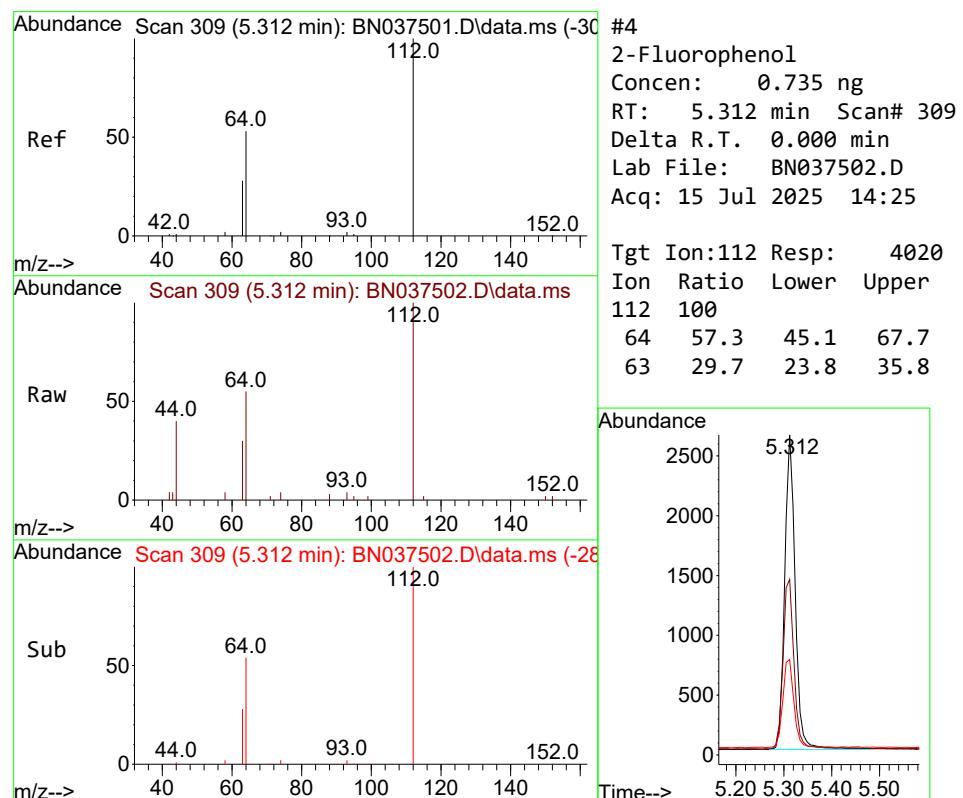
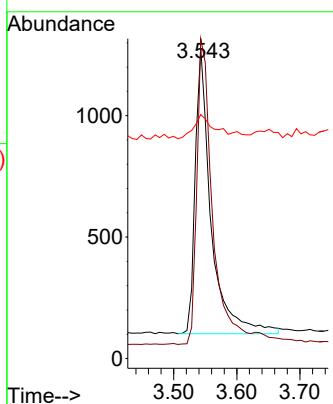




#3  
 n-Nitrosodimethylamine  
 Concen: 0.768 ng  
 RT: 3.543 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

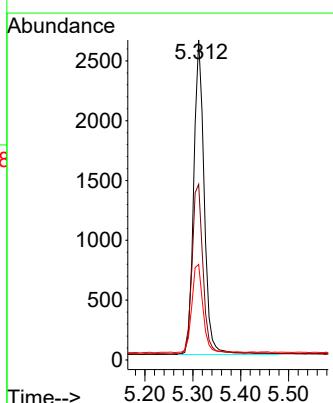
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 ClientSampleId : SSTDICCO.8

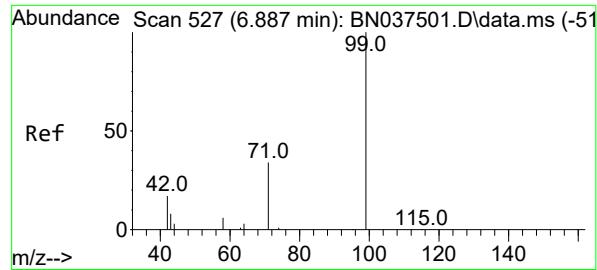
Tgt Ion: 42 Resp: 2056  
 Ion Ratio Lower Upper  
 42 100  
 74 110.1 91.8 137.6  
 44 12.3 15.0 22.6#



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

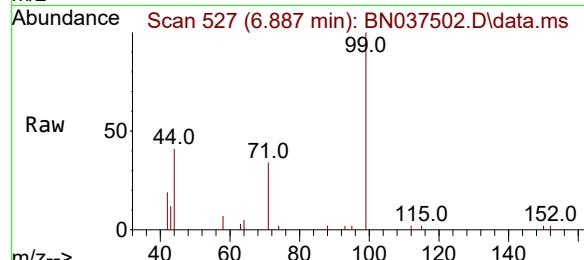
Tgt Ion:112 Resp: 4020  
 Ion Ratio Lower Upper  
 112 100  
 64 57.3 45.1 67.7  
 63 29.7 23.8 35.8



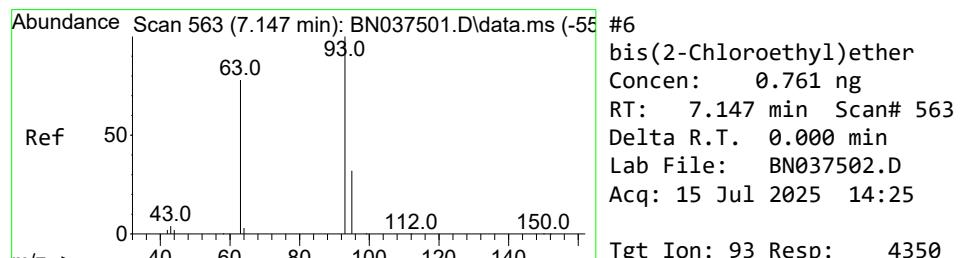
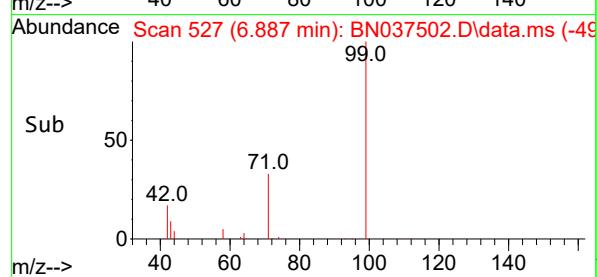
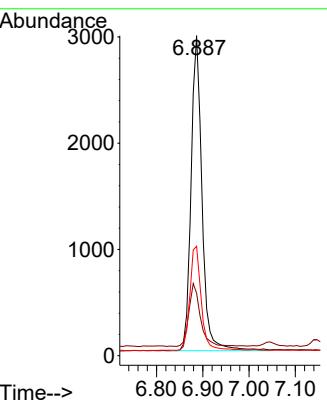


#5  
 Phenol-d6  
 Concen: 0.713 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

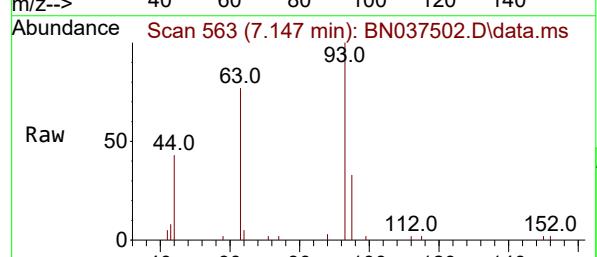
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8



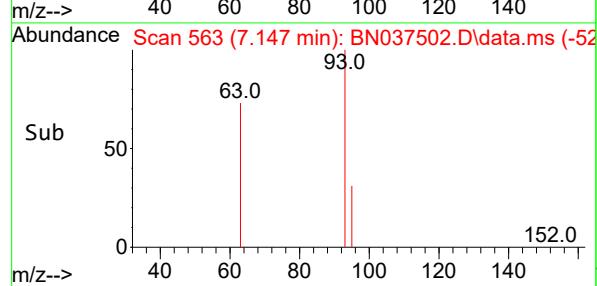
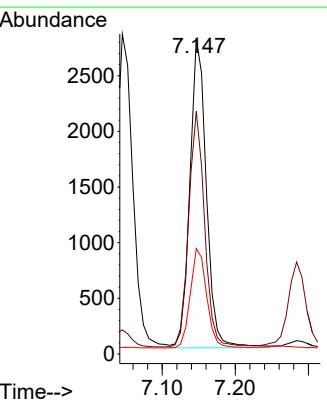
Tgt Ion: 99 Resp: 4891  
 Ion Ratio Lower Upper  
 99 100  
 42 20.9 17.1 25.7  
 71 34.1 27.8 41.8

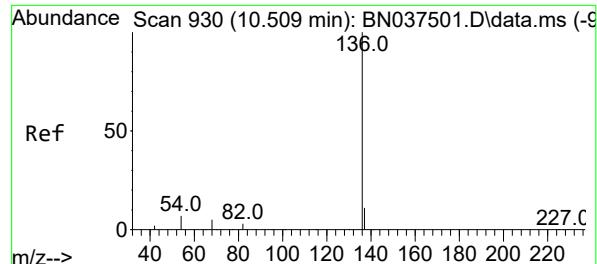


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.761 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25



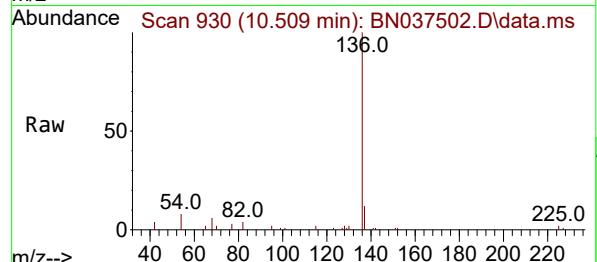
Tgt Ion: 93 Resp: 4350  
 Ion Ratio Lower Upper  
 93 100  
 63 73.6 58.2 87.4  
 95 32.3 25.3 37.9



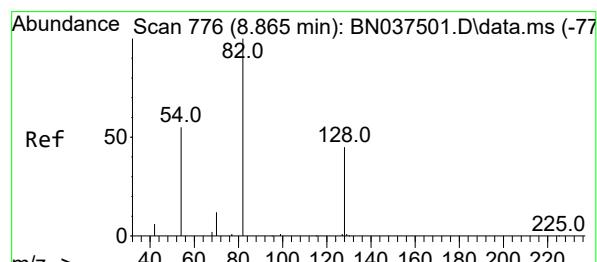
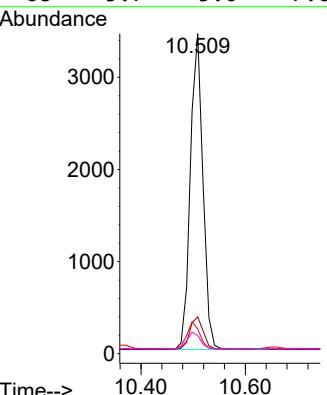
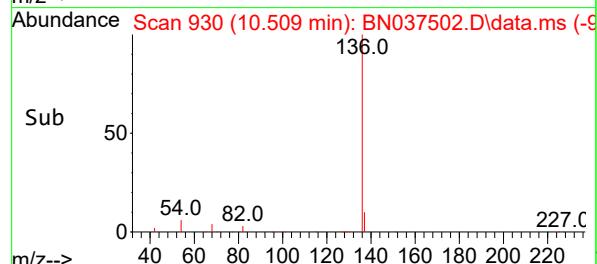


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

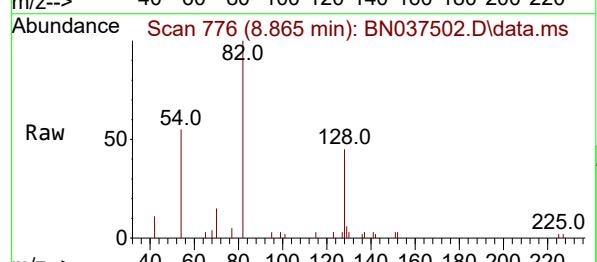
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8



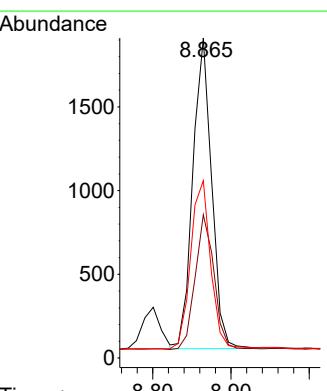
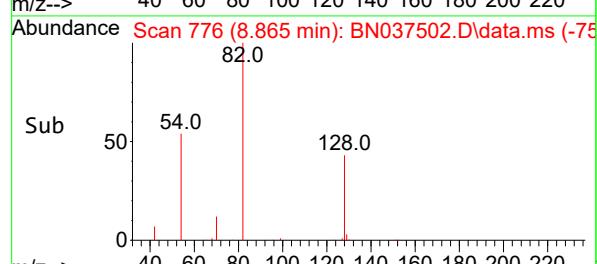
Tgt Ion:136 Resp: 5743  
 Ion Ratio Lower Upper  
 136 100  
 137 11.5 9.8 14.8  
 54 7.7 6.6 9.8  
 68 5.7 5.0 7.6

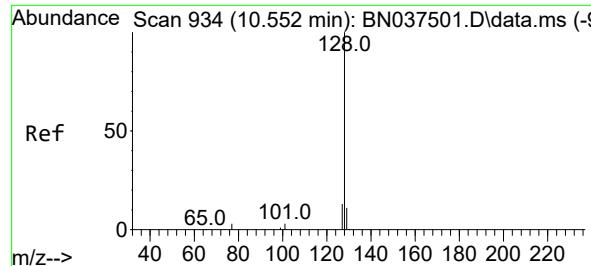


#8  
 Nitrobenzene-d5  
 Concen: 0.723 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25



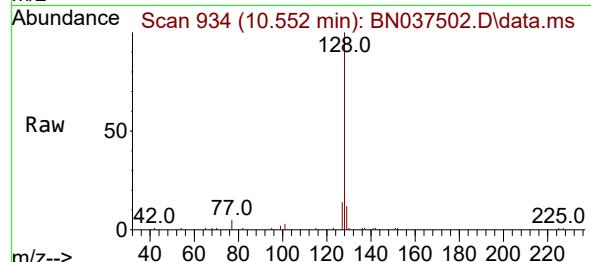
Tgt Ion: 82 Resp: 3103  
 Ion Ratio Lower Upper  
 82 100  
 128 44.8 37.5 56.3  
 54 55.4 45.3 67.9



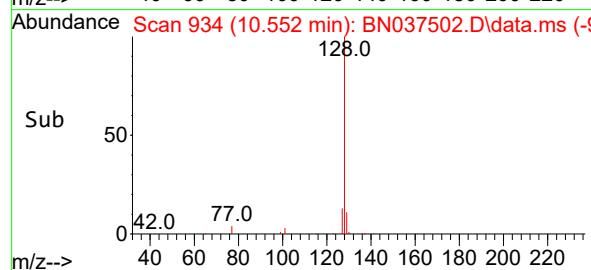
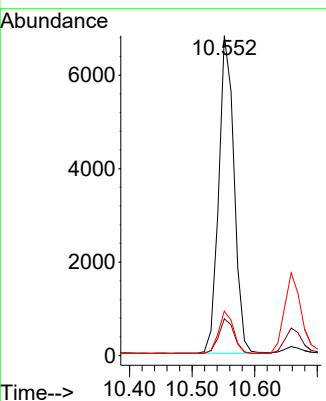


#9  
Naphthalene  
Concen: 0.756 ng  
RT: 10.552 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

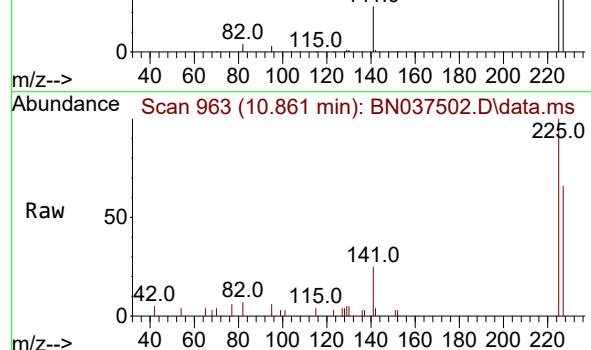
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8



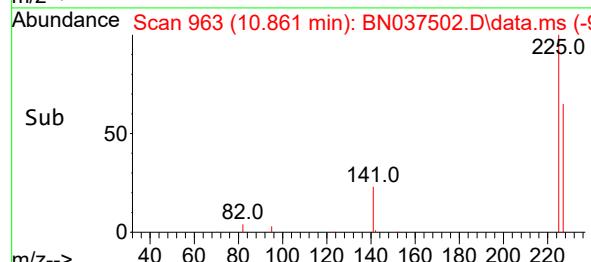
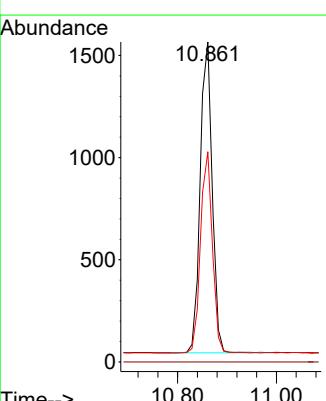
Tgt Ion:128 Resp: 11585  
Ion Ratio Lower Upper  
128 100  
129 11.6 9.7 14.5  
127 13.9 11.5 17.3



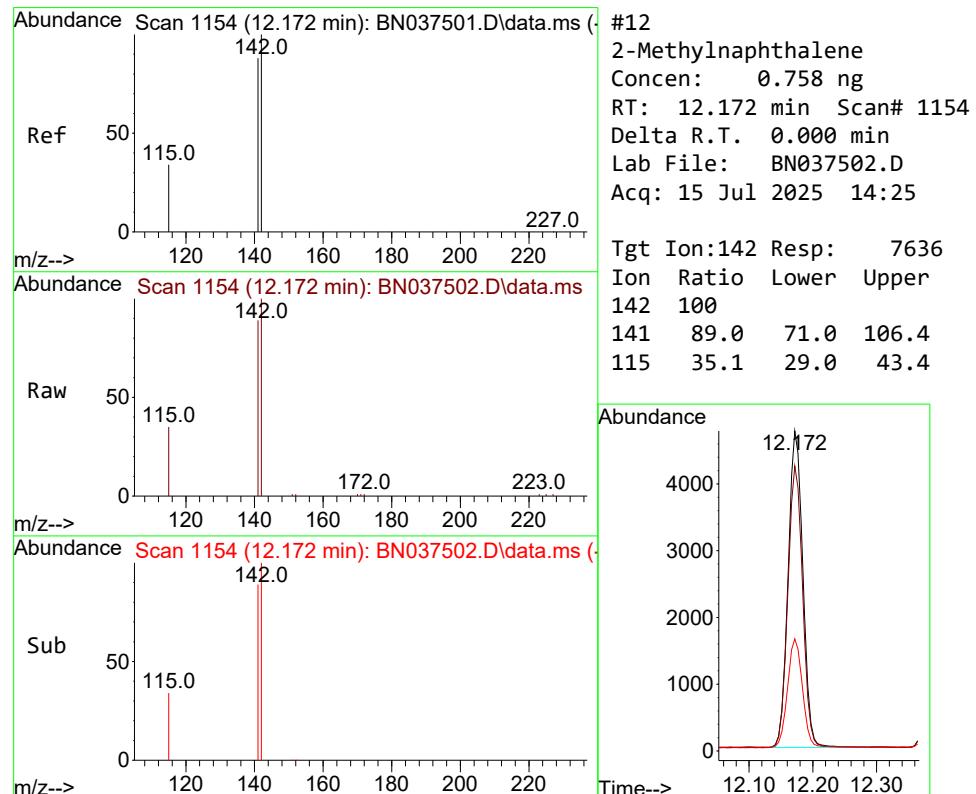
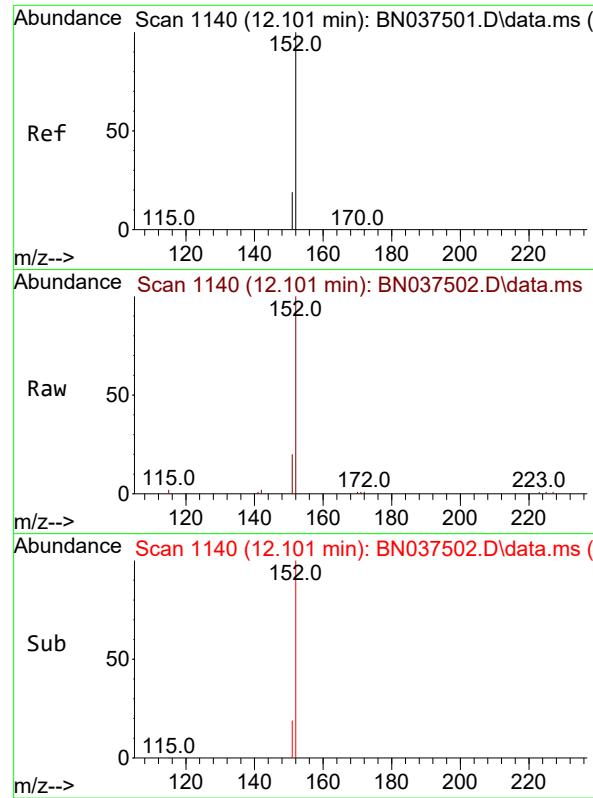
#10  
Hexachlorobutadiene  
Concen: 0.757 ng  
RT: 10.861 min Scan# 963  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

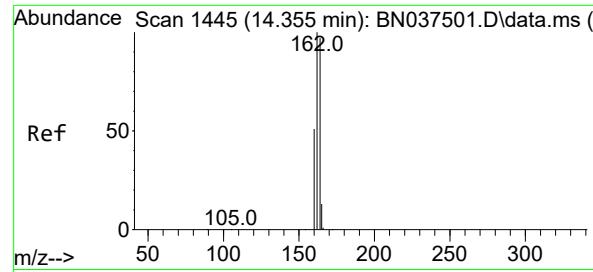


Tgt Ion:225 Resp: 2561  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.0 76.4

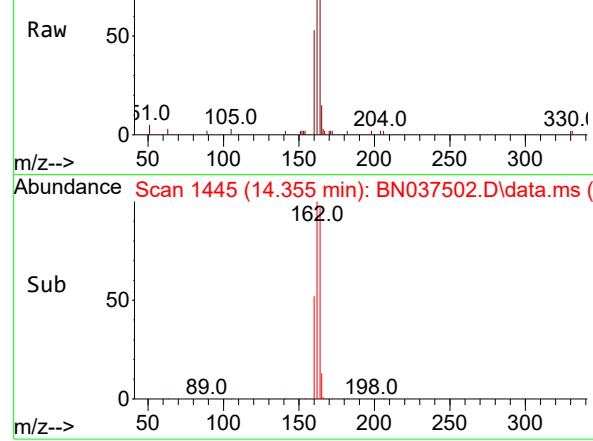


Sub 50





Abundance Scan 1445 (14.355 min): BN037502.D\data.ms (-)



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

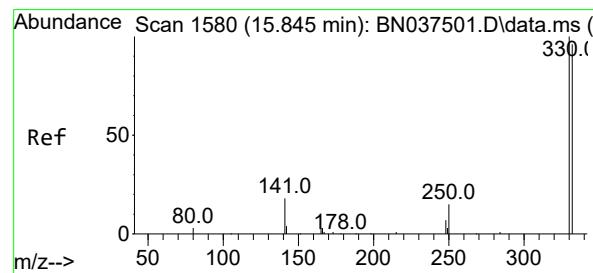
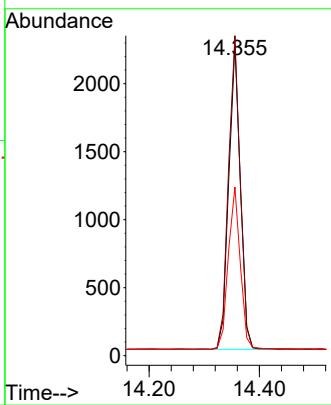
Tgt Ion:164 Resp: 3273

Ion Ratio Lower Upper

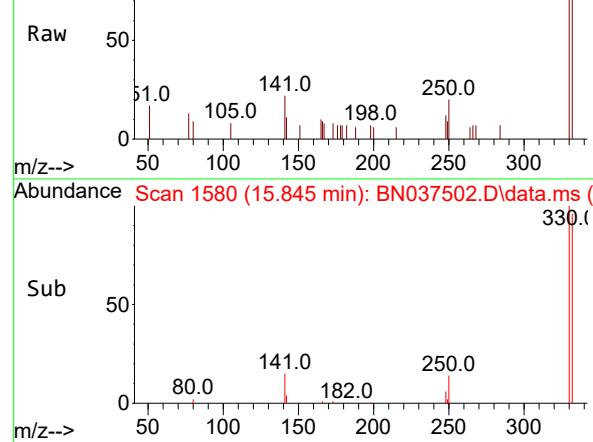
164 100

162 102.8 82.0 123.0

160 54.2 42.4 63.6



Abundance Scan 1580 (15.845 min): BN037502.D\data.ms (-)



#14

2,4,6-Tribromophenol

Concen: 0.718 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

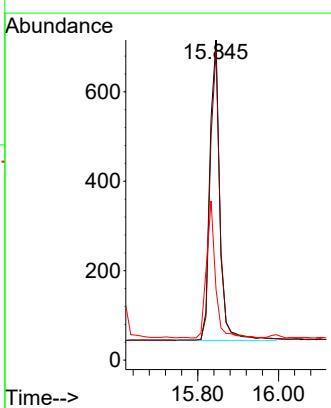
Tgt Ion:330 Resp: 1155

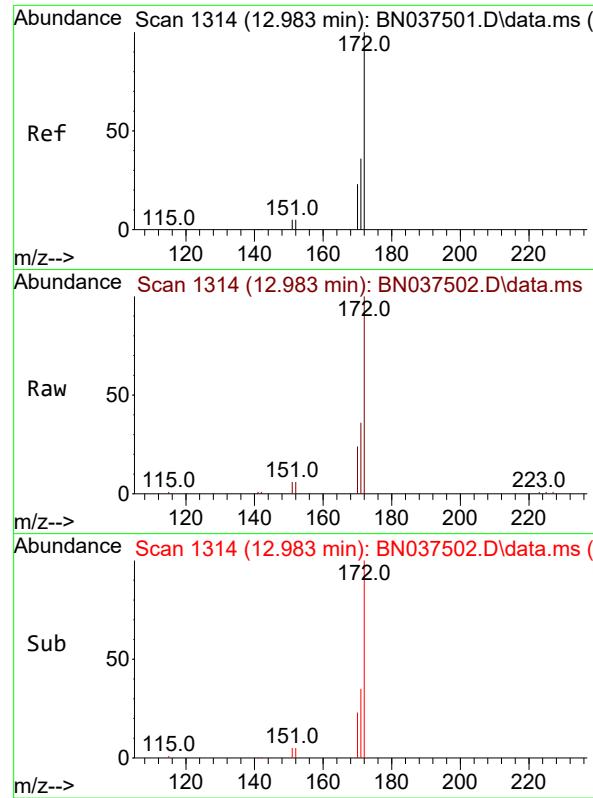
Ion Ratio Lower Upper

330 100

332 94.4 76.1 114.1

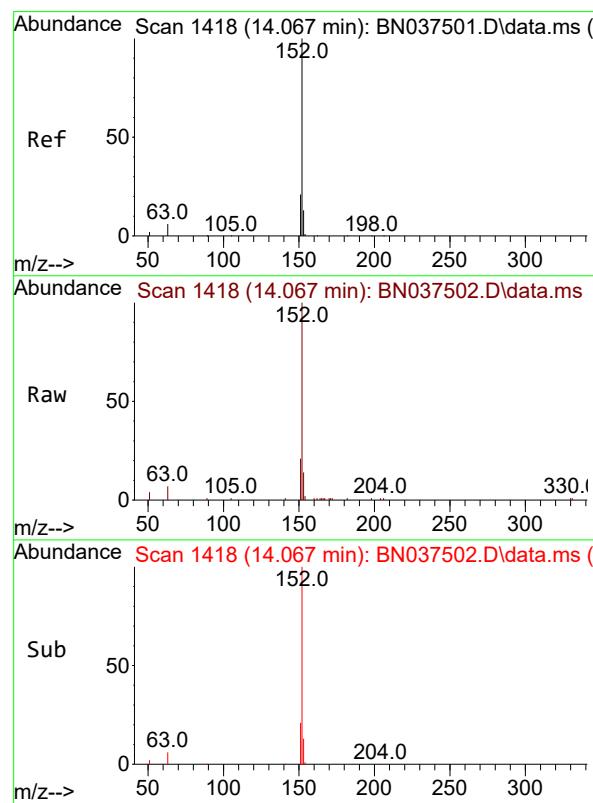
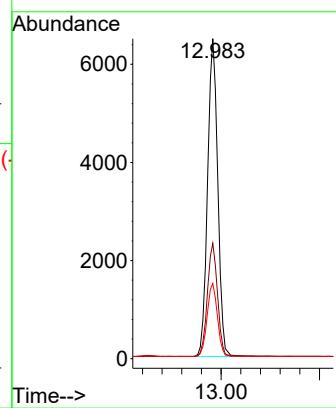
141 40.8 33.4 50.0





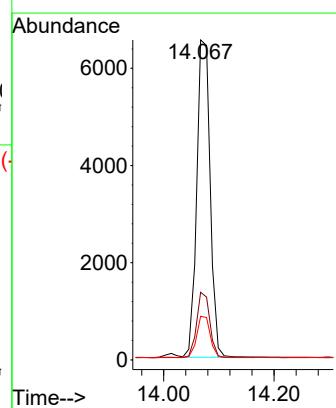
#15  
2-Fluorobiphenyl  
Concen: 0.778 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25  
ClientSampleId : SSTDICCO.8

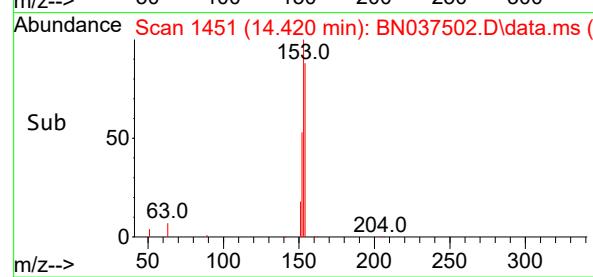
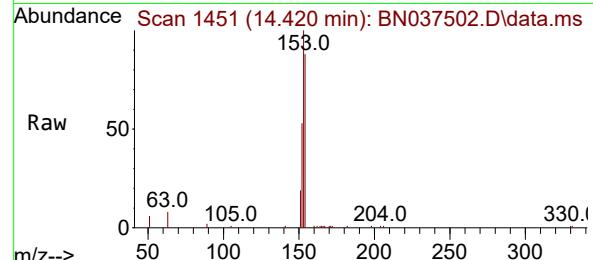
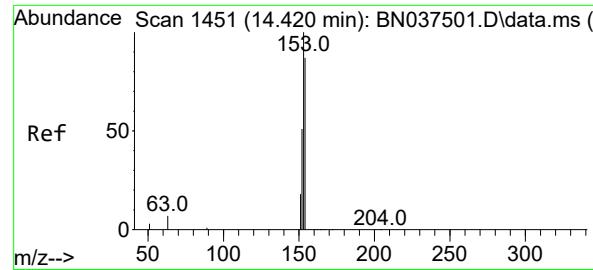
Tgt Ion:172 Resp: 13250  
Ion Ratio Lower Upper  
172 100  
171 36.1 29.4 44.2  
170 23.5 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.752 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:152 Resp: 11025  
Ion Ratio Lower Upper  
152 100  
151 20.3 15.9 23.9  
153 12.9 10.7 16.1





#17

Acenaphthene

Concen: 0.755 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

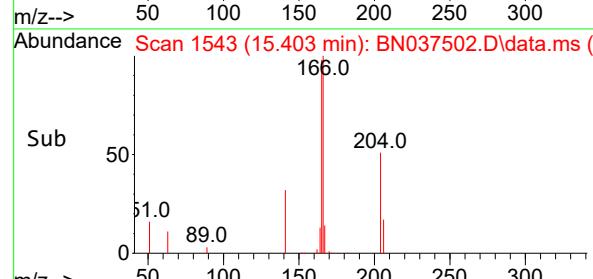
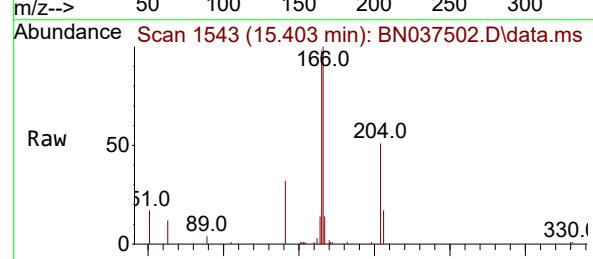
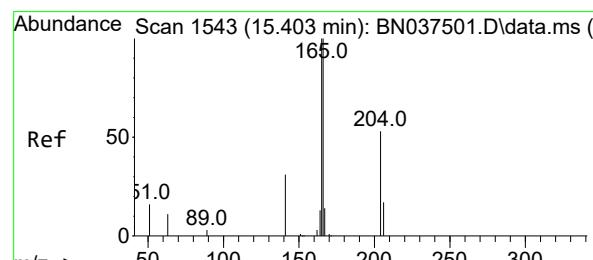
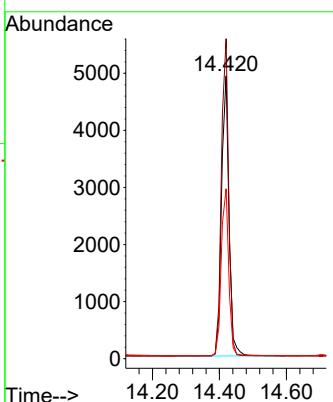
Tgt Ion:154 Resp: 7528

Ion Ratio Lower Upper

154 100

153 111.1 89.2 133.8

152 60.2 48.0 72.0



#18

Fluorene

Concen: 0.758 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

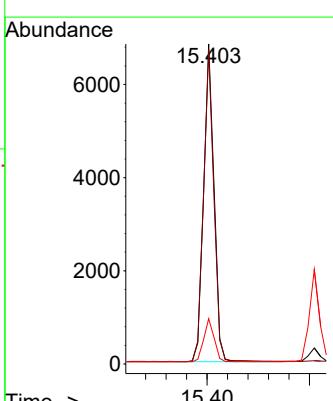
Tgt Ion:166 Resp: 9729

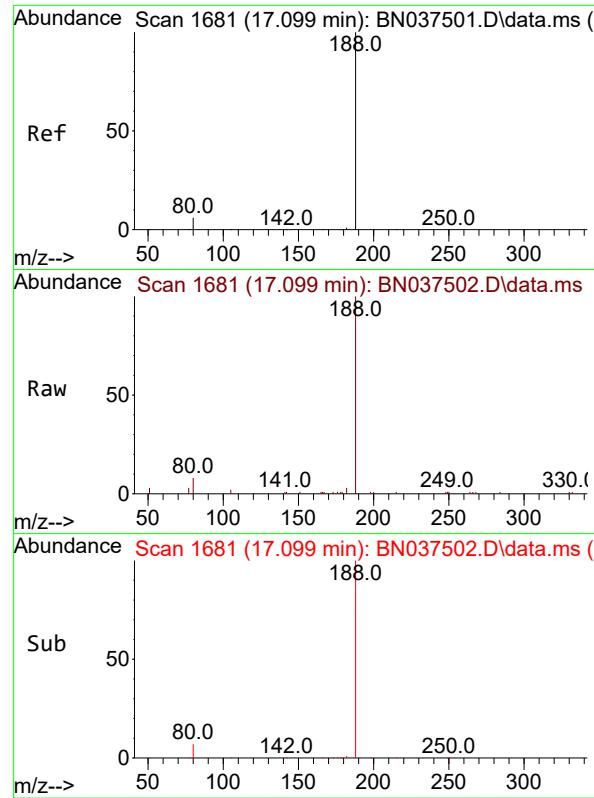
Ion Ratio Lower Upper

166 100

165 98.6 78.1 117.1

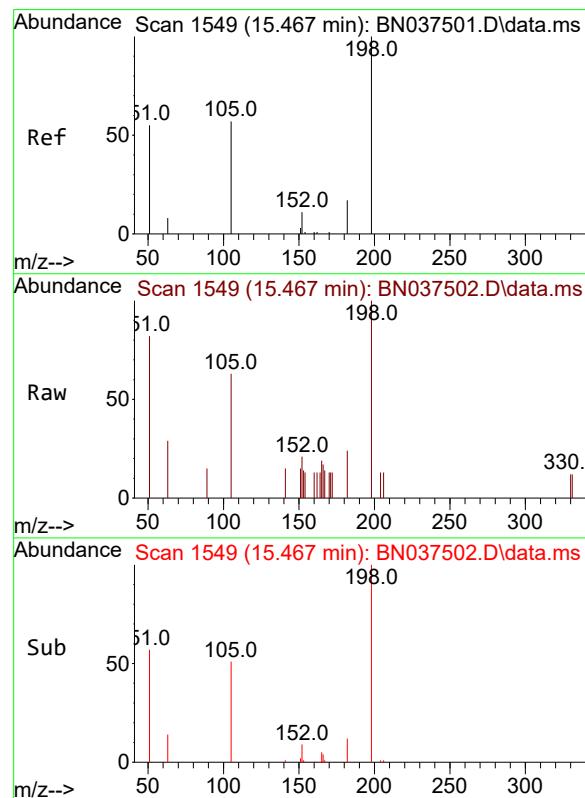
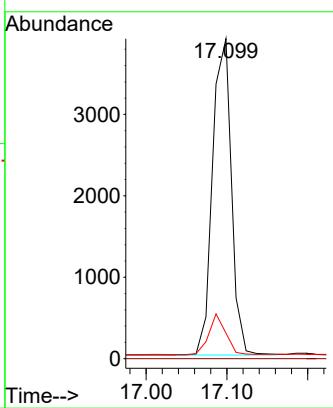
167 13.3 11.0 16.6





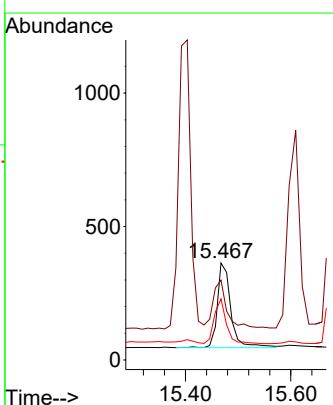
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.099 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037502.D ClientSampleId : SSTDICCO.8  
Acq: 15 Jul 2025 14:25

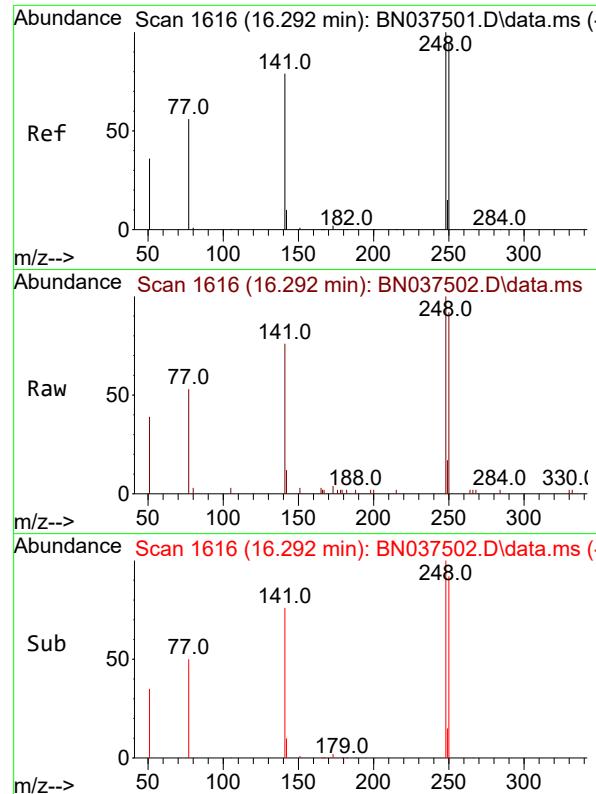
Tgt Ion:188 Resp: 6314  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 8.0 6.0 9.0



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.750 ng  
RT: 15.467 min Scan# 1549  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:198 Resp: 589  
Ion Ratio Lower Upper  
198 100  
51 82.4 88.5 132.7#  
105 63.1 61.2 91.8





#21

4-Bromophenyl-phenylether

Concen: 0.755 ng

RT: 16.292 min Scan# 1 Instrument :

Delta R.T. 0.000 min BNA\_N

Lab File: BN037502.D ClientSampleId :

Acq: 15 Jul 2025 14:25 SSTDICCO.8

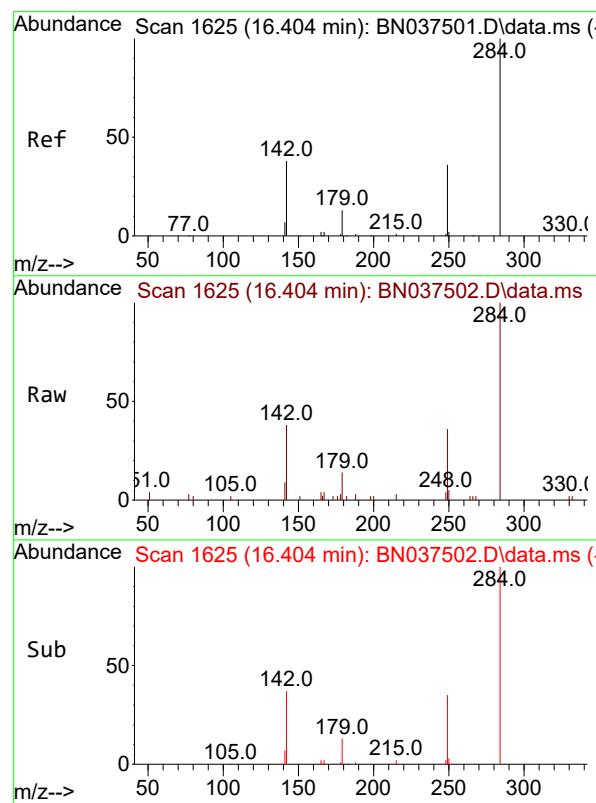
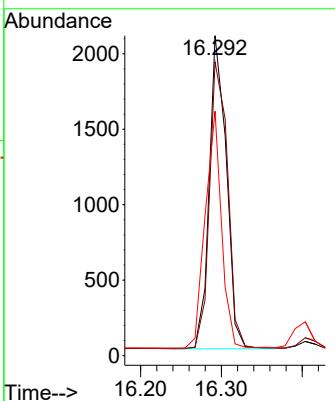
Tgt Ion:248 Resp: 3053

Ion Ratio Lower Upper

248 100

250 91.8 76.2 114.2

141 76.4 63.9 95.9



#22

Hexachlorobenzene

Concen: 0.775 ng

RT: 16.404 min Scan# 1625

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

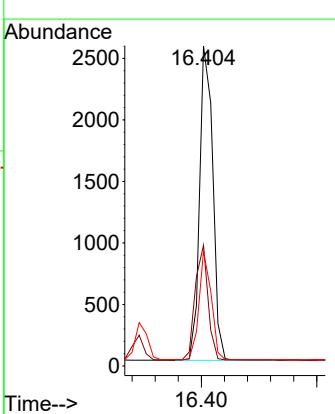
Tgt Ion:284 Resp: 4049

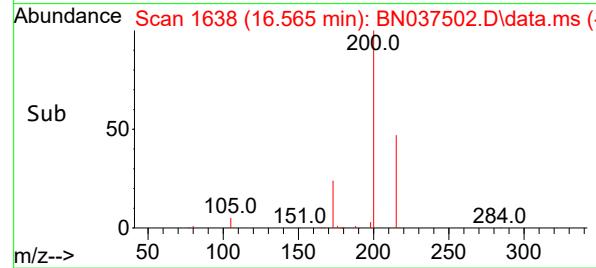
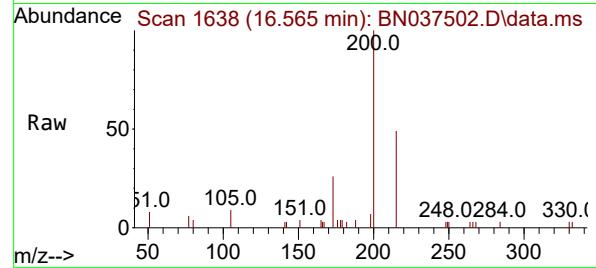
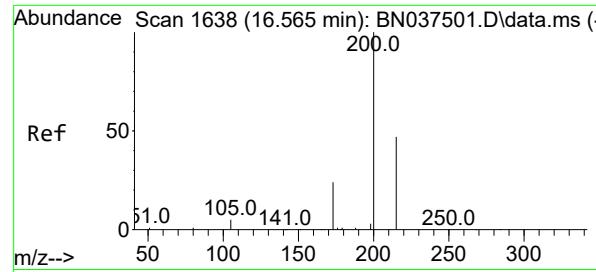
Ion Ratio Lower Upper

284 100

142 35.7 28.9 43.3

249 32.1 25.8 38.6





#23

Atrazine

Concen: 0.706 ng

RT: 16.565 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument : BNA\_N

ClientSampleId : SSTDICCO.8

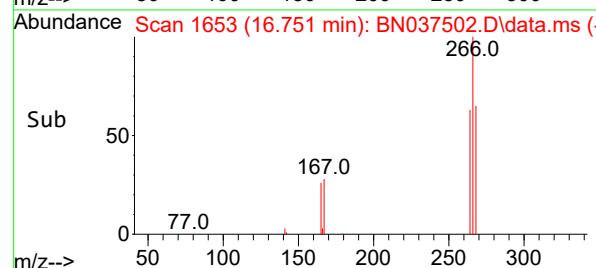
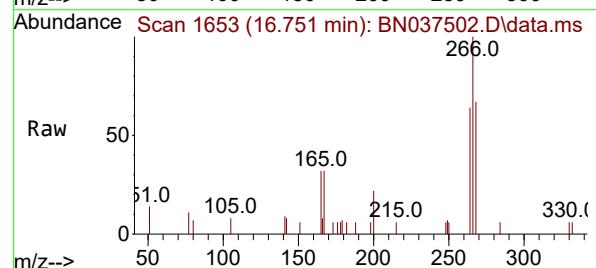
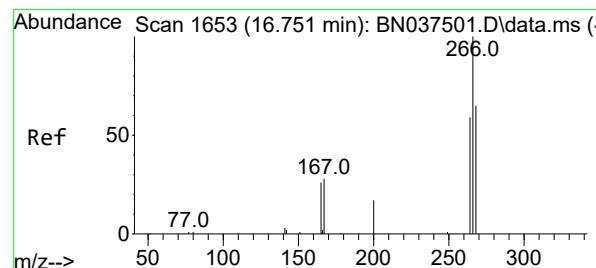
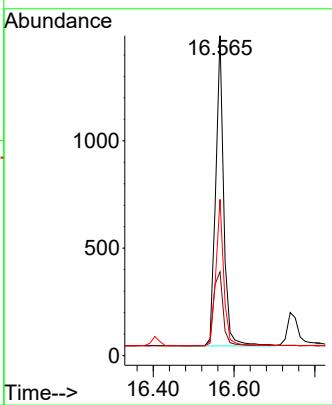
Tgt Ion:200 Resp: 1994

Ion Ratio Lower Upper

200 100

173 26.2 23.2 34.8

215 48.8 40.2 60.4



#24

Pentachlorophenol

Concen: 0.677 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

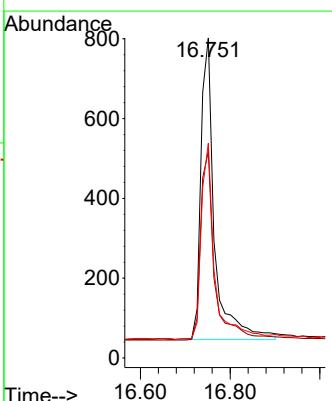
Tgt Ion:266 Resp: 1588

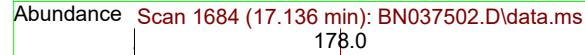
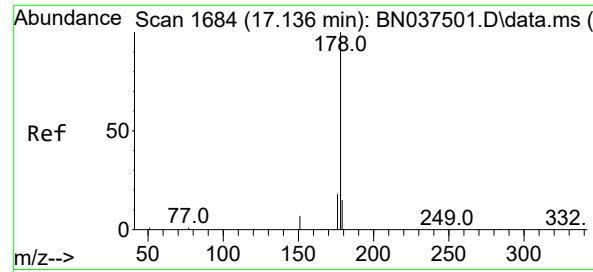
Ion Ratio Lower Upper

266 100

264 63.7 49.3 73.9

268 64.0 51.6 77.4





#25

Phenanthrene

Concen: 0.754 ng

RT: 17.136 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

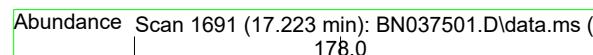
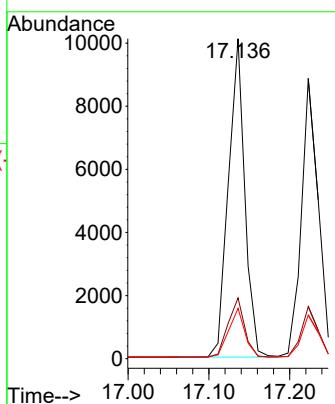
Tgt Ion:178 Resp: 14261

Ion Ratio Lower Upper

178 100

176 18.8 15.0 22.6

179 15.2 12.2 18.2



#26

Anthracene

Concen: 0.748 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

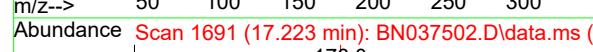
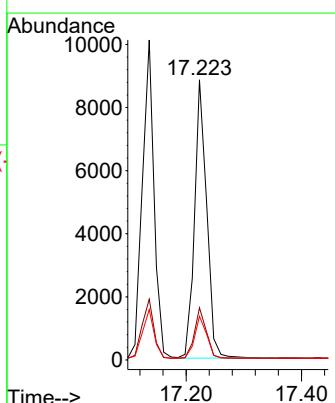
Tgt Ion:178 Resp: 12919

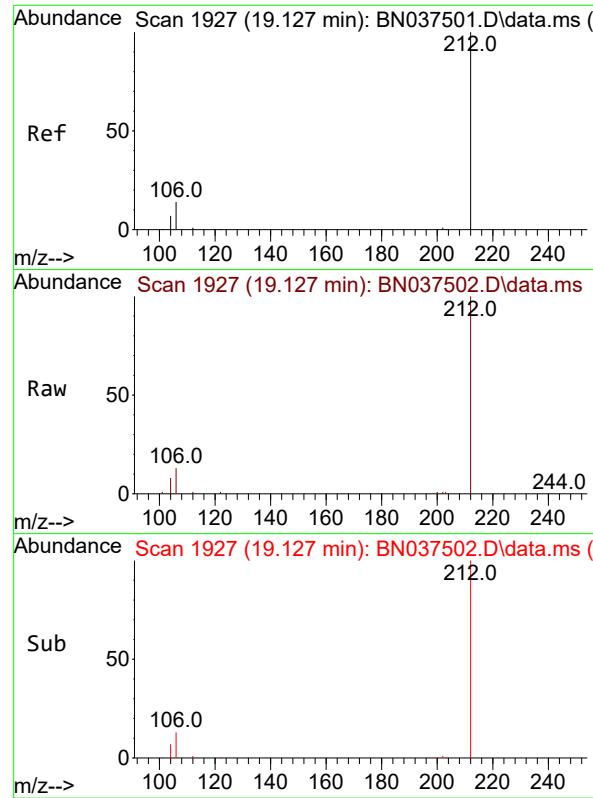
Ion Ratio Lower Upper

178 100

176 18.0 14.7 22.1

179 15.1 12.3 18.5

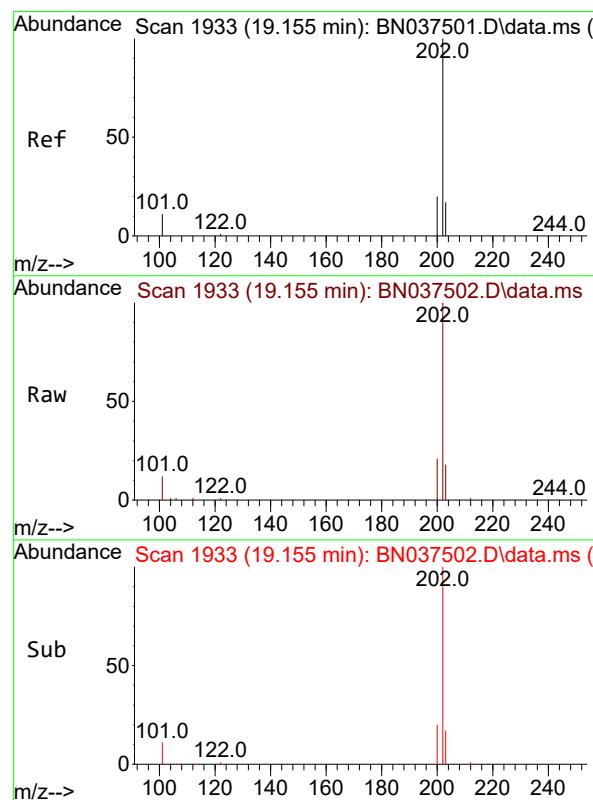
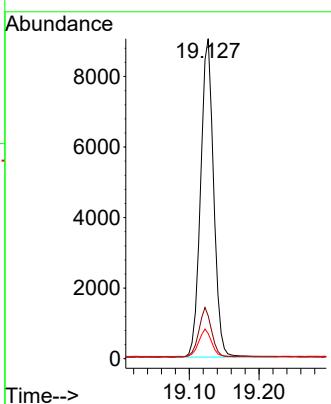




#27  
 Fluoranthene-d10  
 Concen: 0.701 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

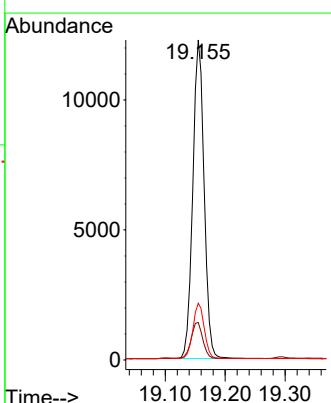
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

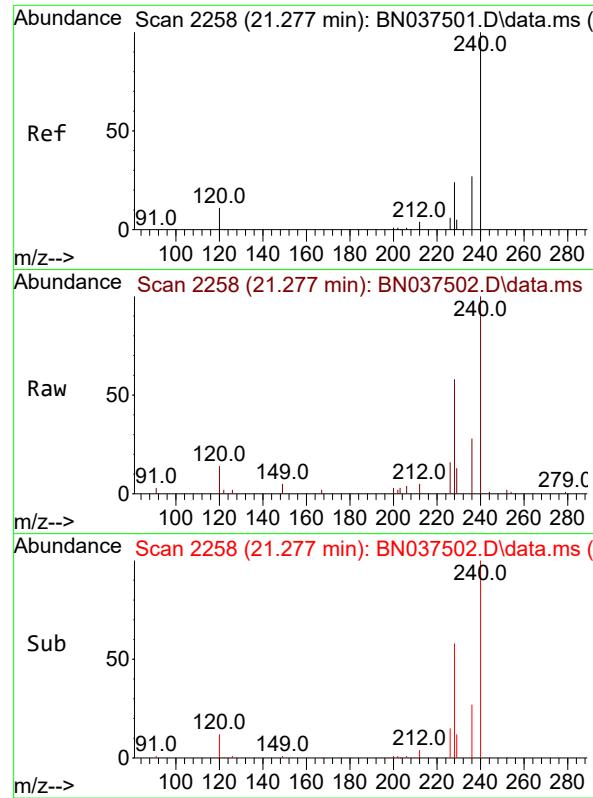
Tgt Ion:212 Resp: 11723  
 Ion Ratio Lower Upper  
 212 100  
 106 15.0 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.735 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

Tgt Ion:202 Resp: 16043  
 Ion Ratio Lower Upper  
 202 100  
 101 11.9 9.8 14.6  
 203 17.3 13.6 20.4

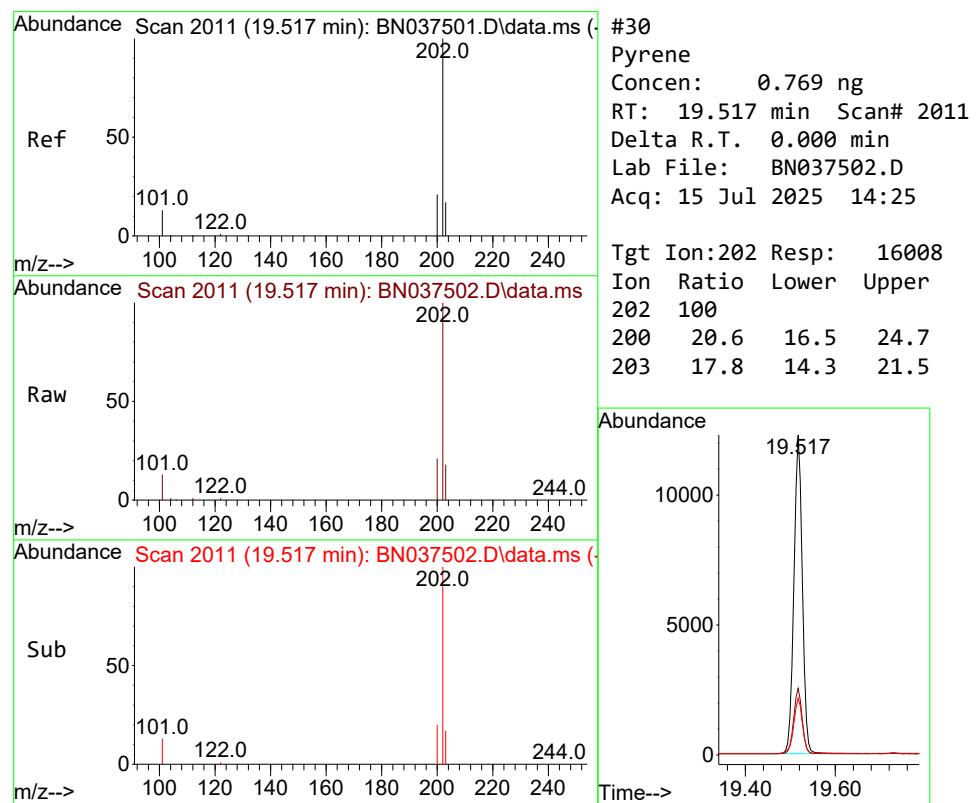
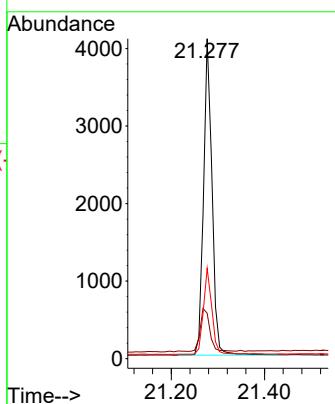




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

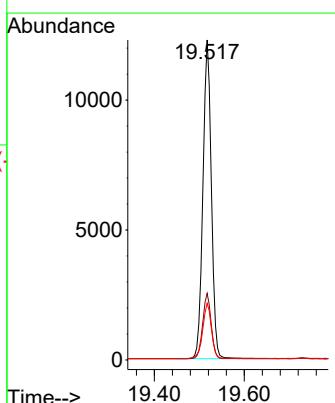
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

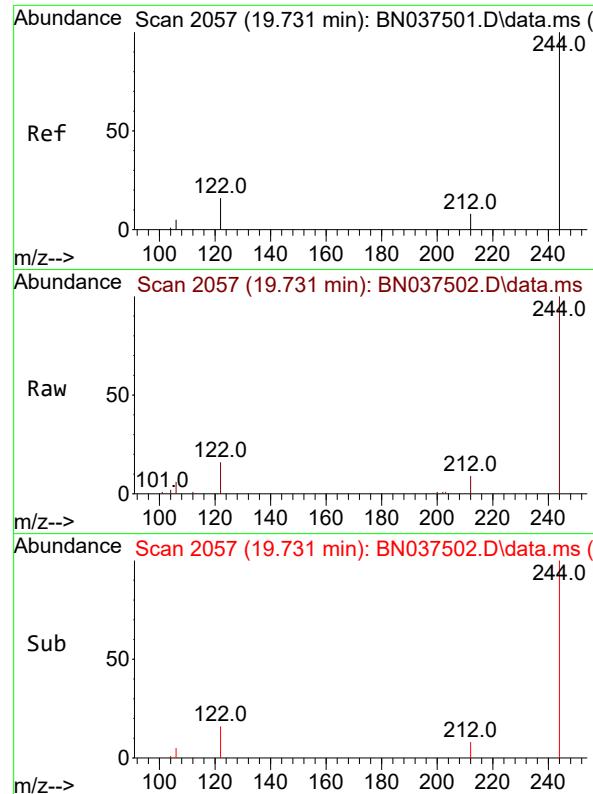
Tgt Ion:240 Resp: 5167  
Ion Ratio Lower Upper  
240 100  
120 14.2 10.7 16.1  
236 28.3 22.6 33.8



#30  
Pyrene  
Concen: 0.769 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:202 Resp: 16008  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 17.8 14.3 21.5

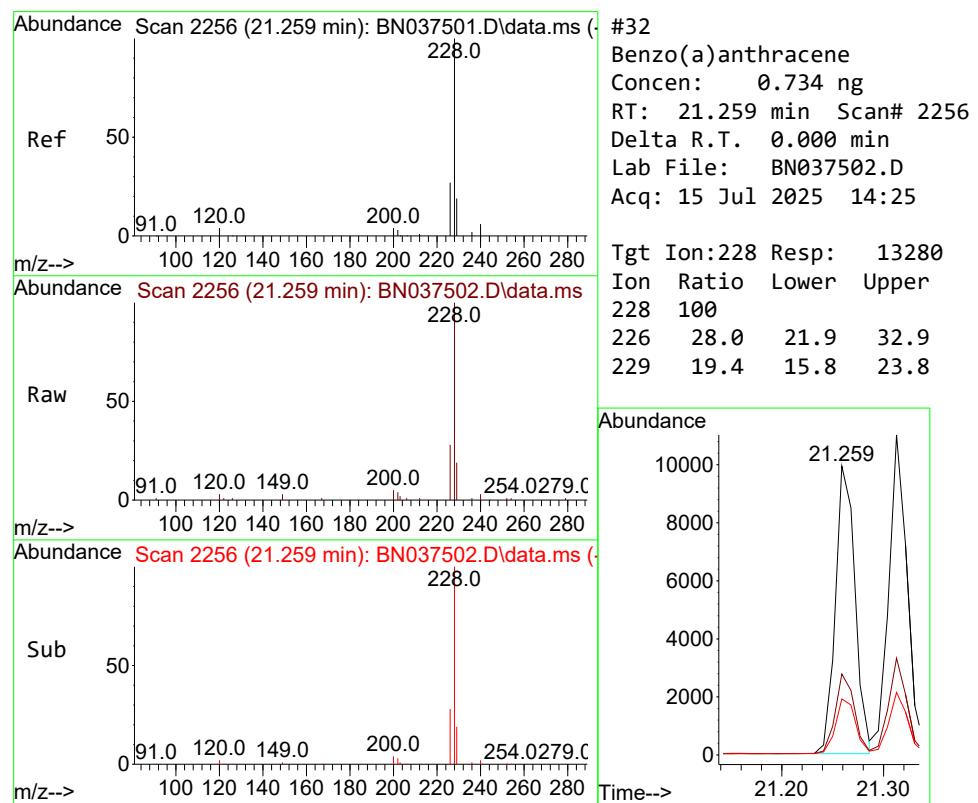
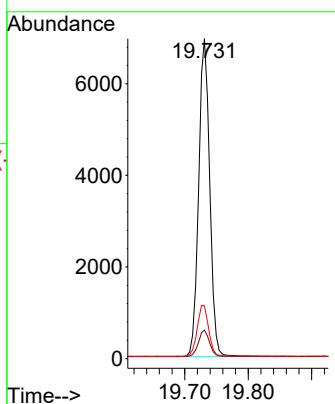




#31  
**Terphenyl-d14**  
Concen: 0.754 ng  
RT: 19.731 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

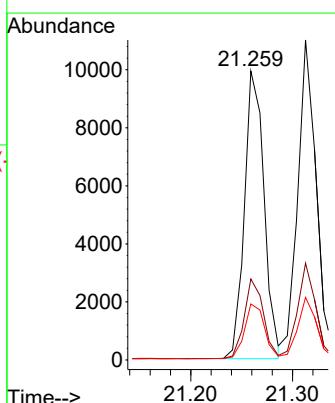
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

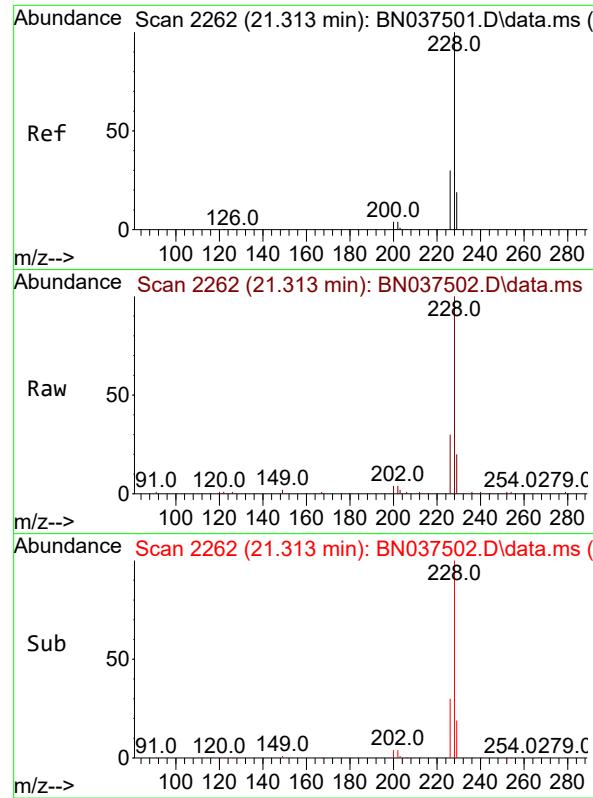
Tgt Ion:244 Resp: 8376  
Ion Ratio Lower Upper  
244 100  
212 8.9 7.4 11.2  
122 16.5 13.6 20.4



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

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

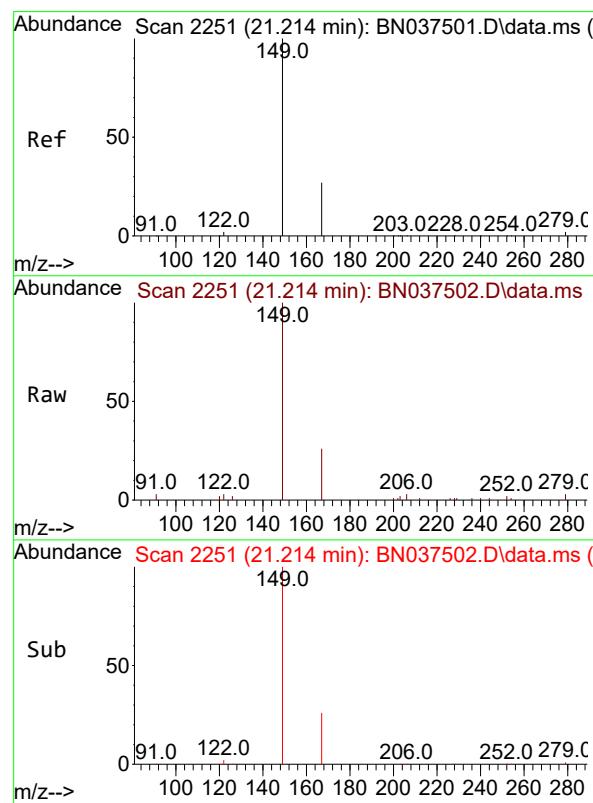
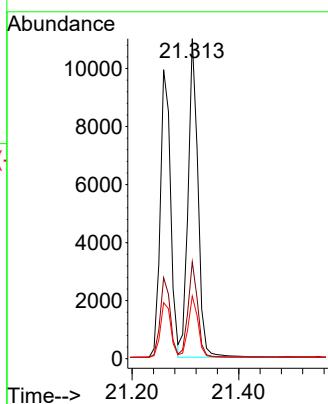




#33  
Chrysene  
Concen: 0.745 ng  
RT: 21.313 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

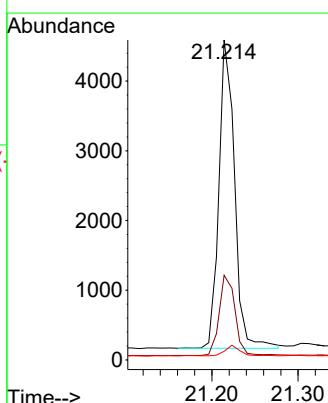
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

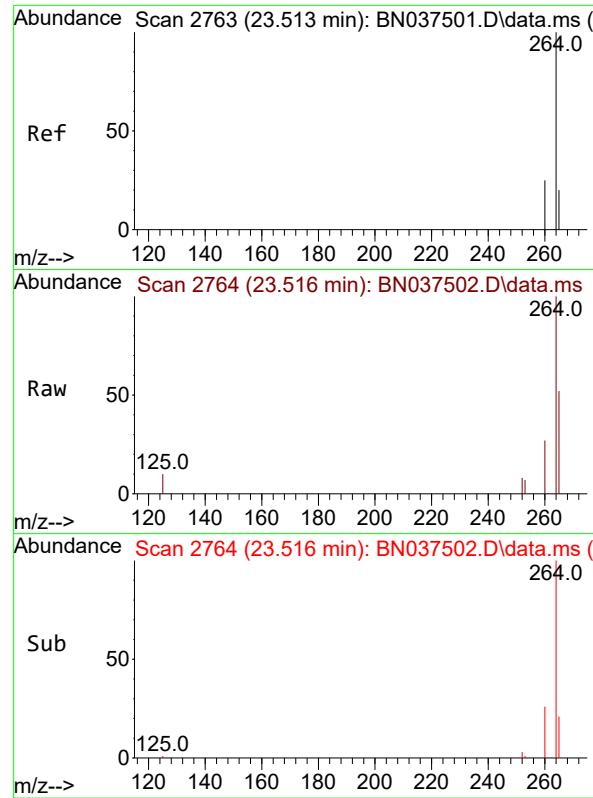
Tgt Ion:228 Resp: 14034  
Ion Ratio Lower Upper  
228 100  
226 30.3 24.2 36.4  
229 19.5 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.683 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:149 Resp: 5562  
Ion Ratio Lower Upper  
149 100  
167 26.4 21.8 32.8  
279 3.4 3.0 4.4

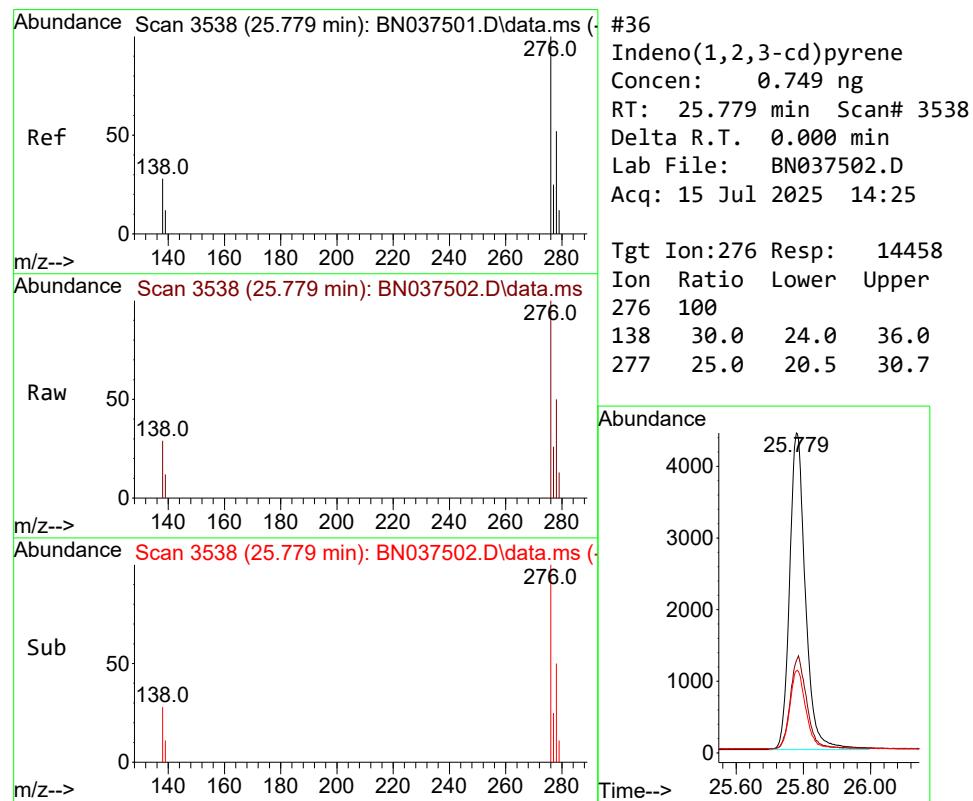
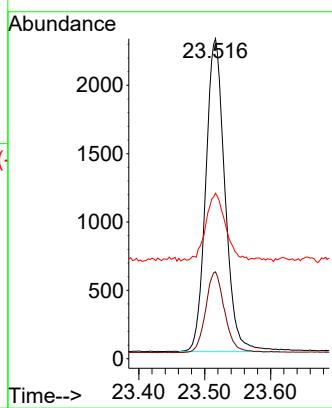




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.516 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

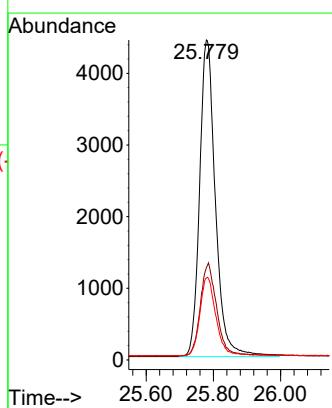
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

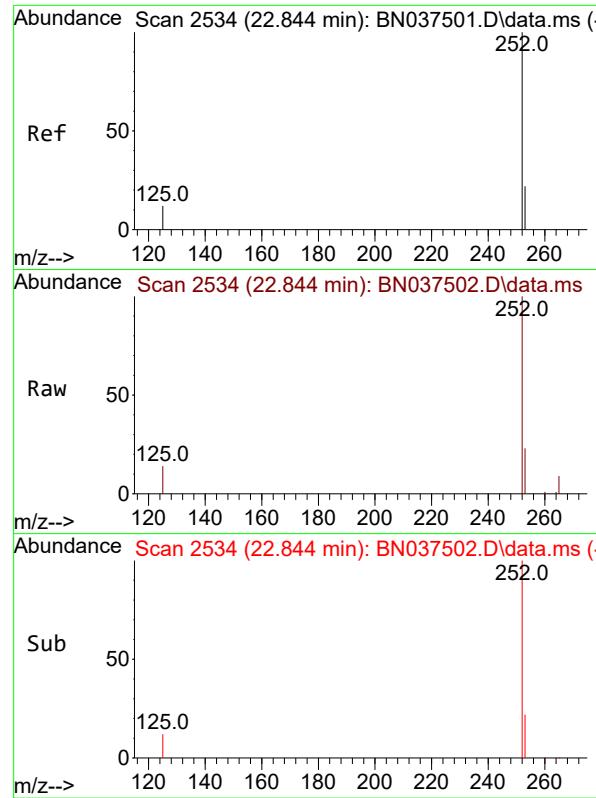
Tgt Ion:264 Resp: 4636  
 Ion Ratio Lower Upper  
 264 100  
 260 27.2 21.2 31.8  
 265 51.7 40.4 60.6



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.749 ng  
 RT: 25.779 min Scan# 3538  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

Tgt Ion:276 Resp: 14458  
 Ion Ratio Lower Upper  
 276 100  
 138 30.0 24.0 36.0  
 277 25.0 20.5 30.7

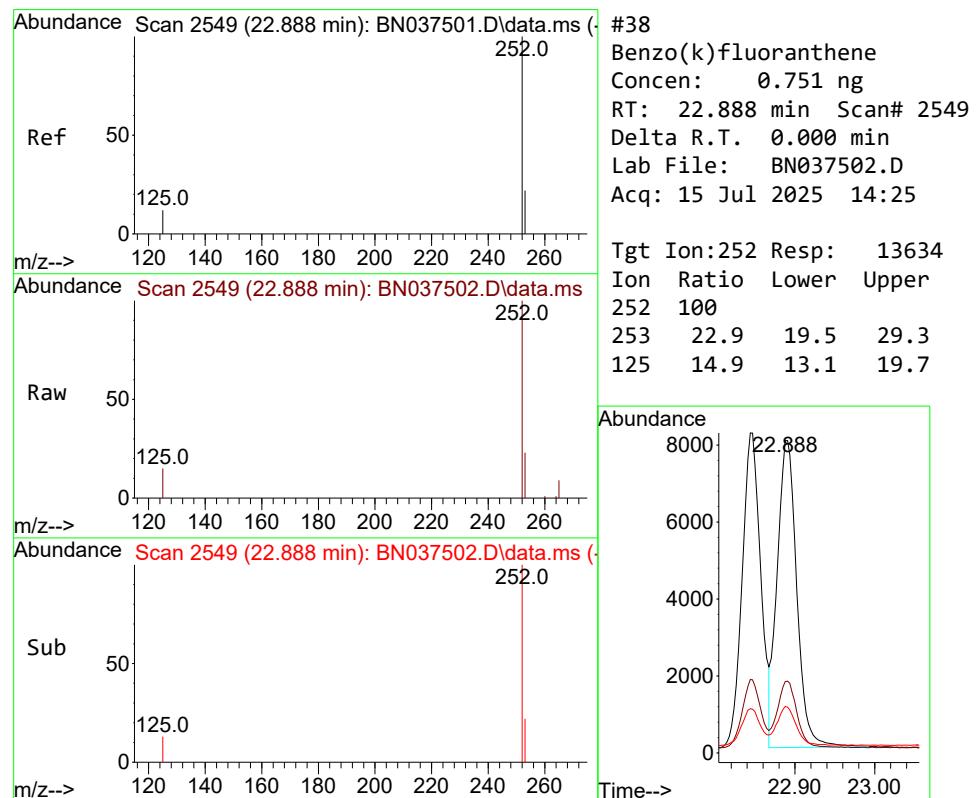
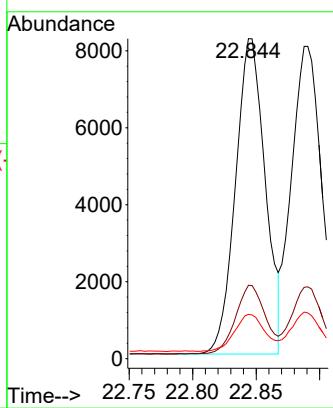




#37  
 Benzo(b)fluoranthene  
 Concen: 0.757 ng  
 RT: 22.844 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

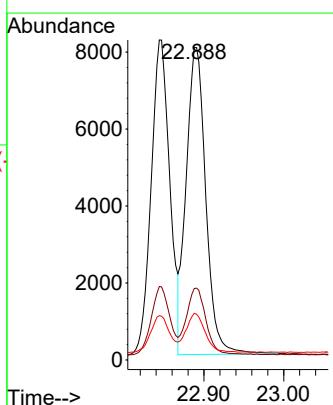
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

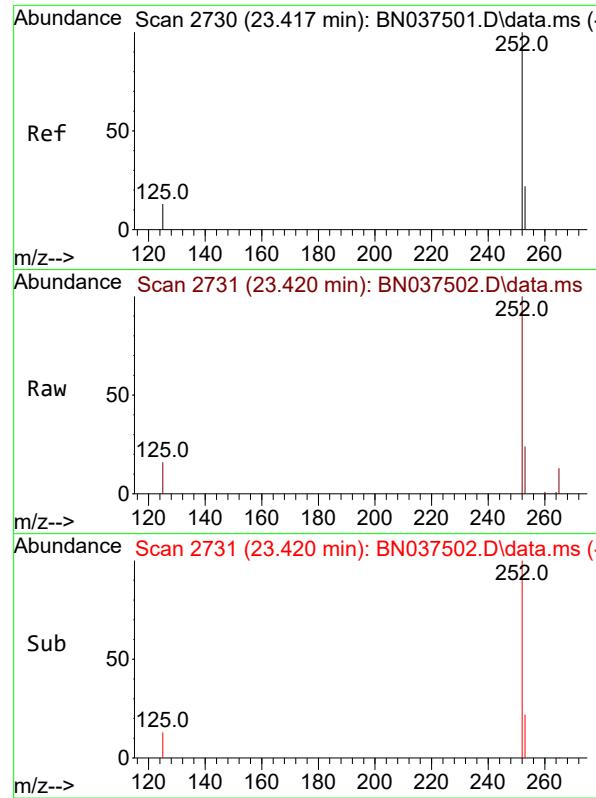
Tgt Ion:252 Resp: 13315  
 Ion Ratio Lower Upper  
 252 100  
 253 23.0 19.5 29.3  
 125 13.9 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.751 ng  
 RT: 22.888 min Scan# 2549  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

Tgt Ion:252 Resp: 13634  
 Ion Ratio Lower Upper  
 252 100  
 253 22.9 19.5 29.3  
 125 14.9 13.1 19.7

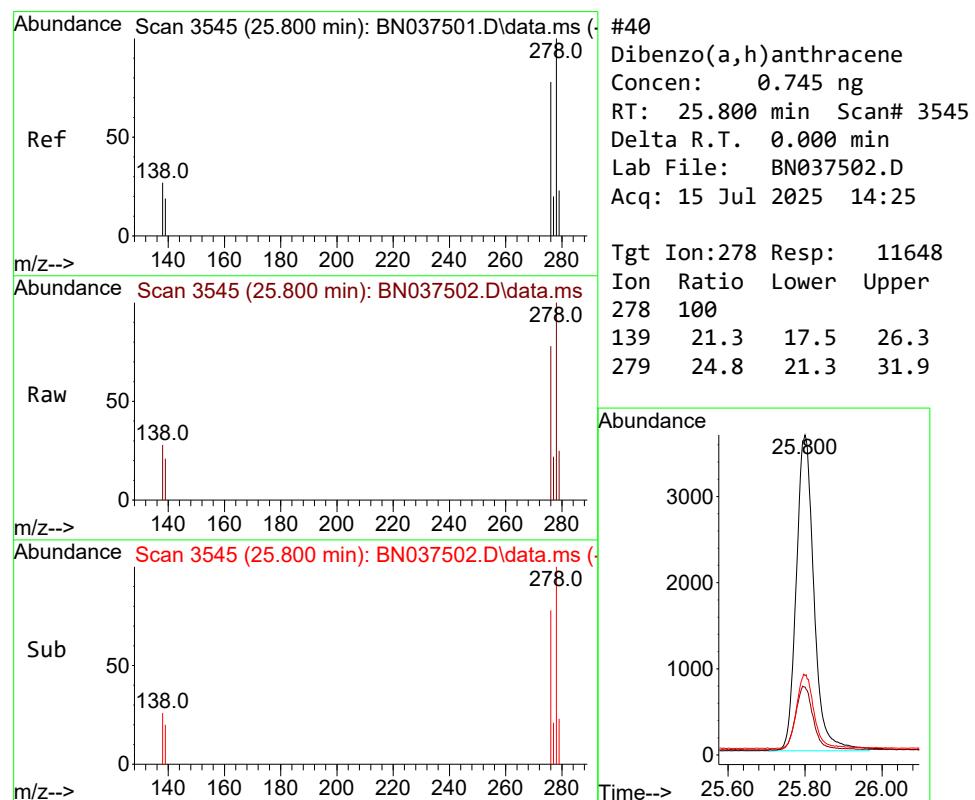
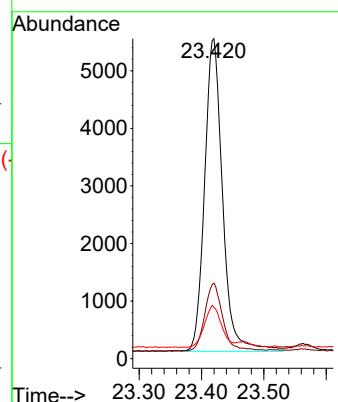




#39  
 Benzo(a)pyrene  
 Concen: 0.743 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

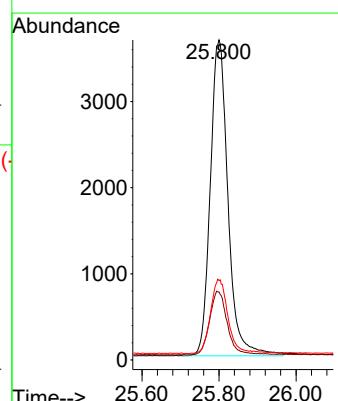
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

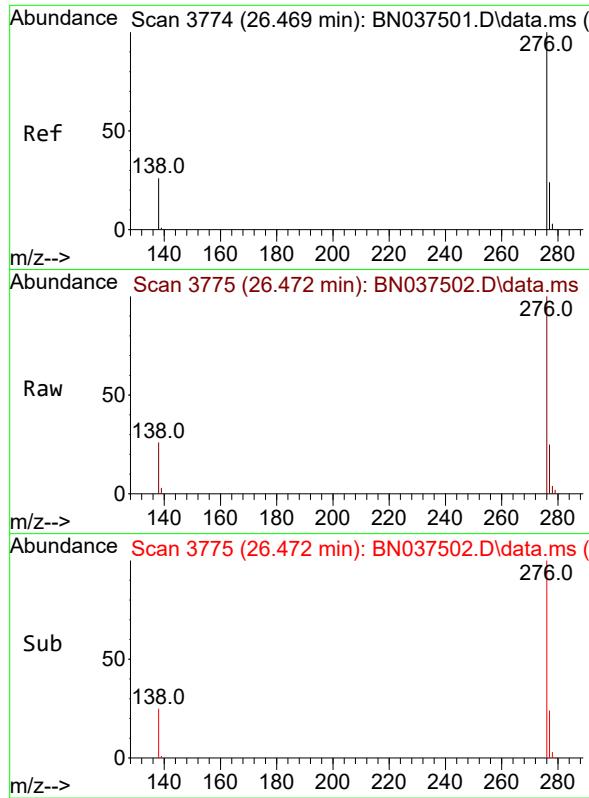
Tgt Ion:252 Resp: 10903  
 Ion Ratio Lower Upper  
 252 100  
 253 23.6 19.9 29.9  
 125 16.0 15.2 22.8



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.745 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

Tgt Ion:278 Resp: 11648  
 Ion Ratio Lower Upper  
 278 100  
 139 21.3 17.5 26.3  
 279 24.8 21.3 31.9

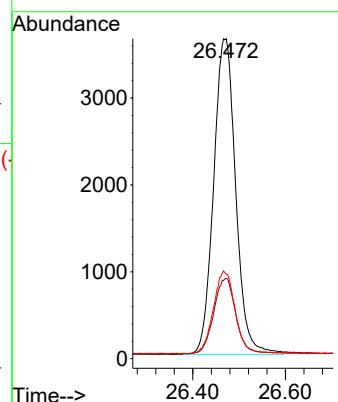




#41  
Benzo(g,h,i)perylene  
Concen: 0.743 ng  
RT: 26.472 min Scan# 3  
Delta R.T. 0.003 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

Tgt Ion:276 Resp: 12022  
Ion Ratio Lower Upper  
276 100  
277 25.1 20.9 31.3  
138 26.5 22.6 33.8



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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

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

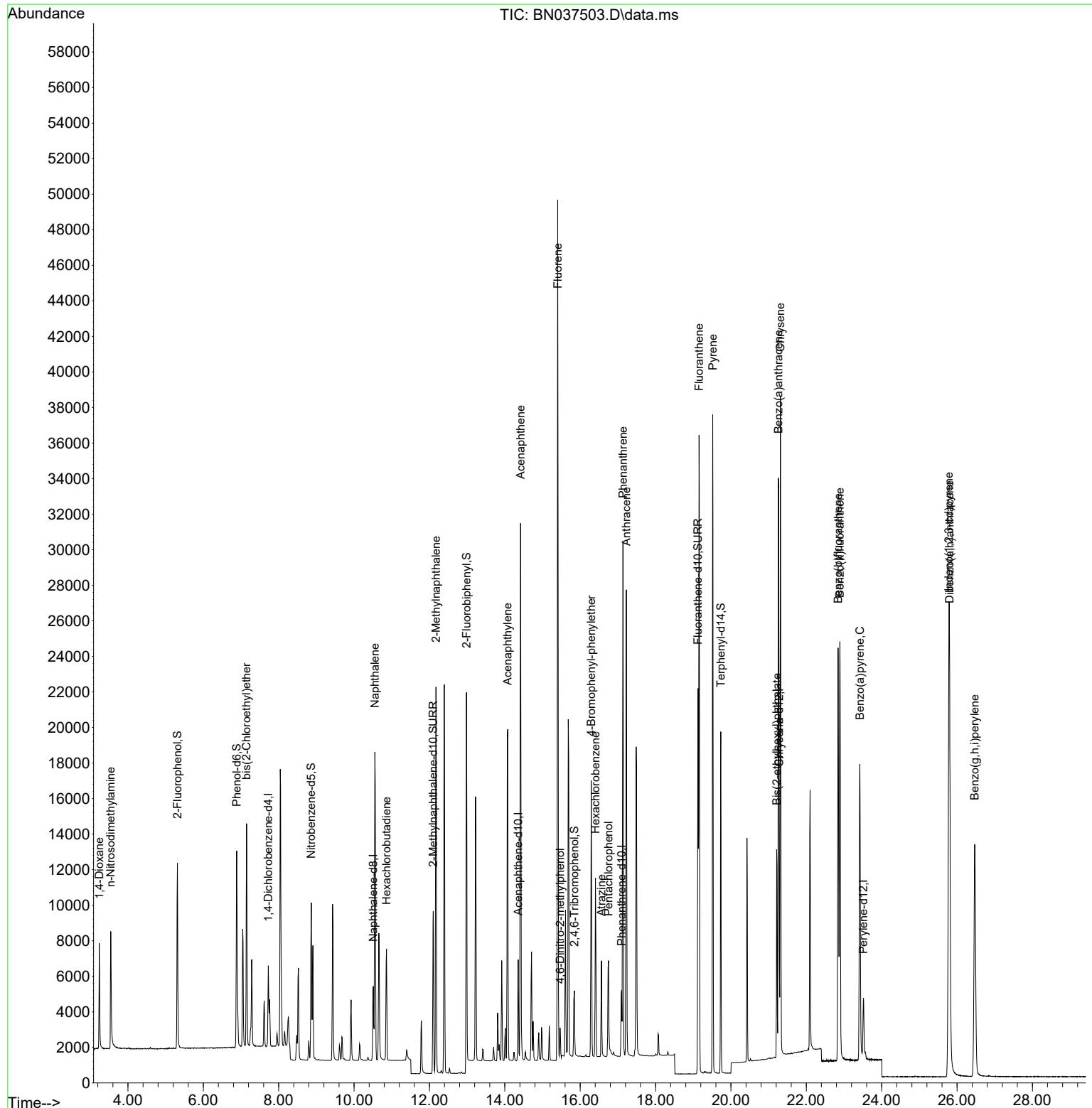
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4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

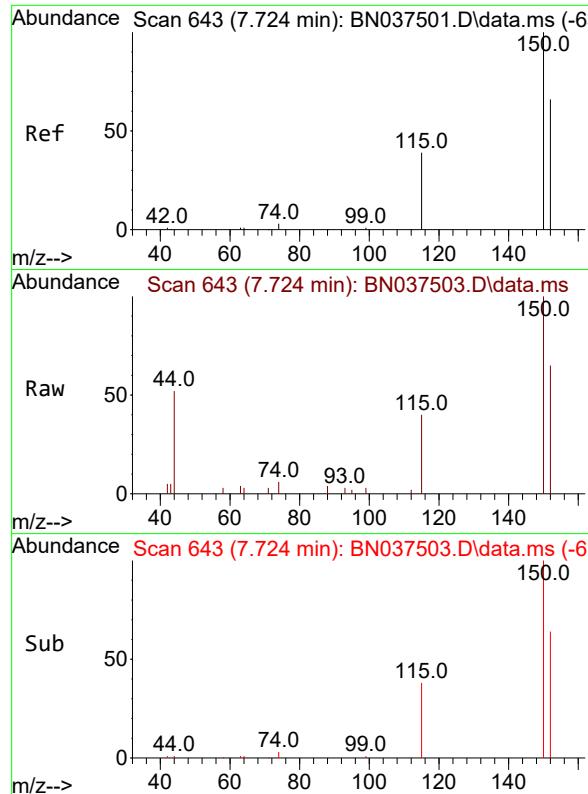
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

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

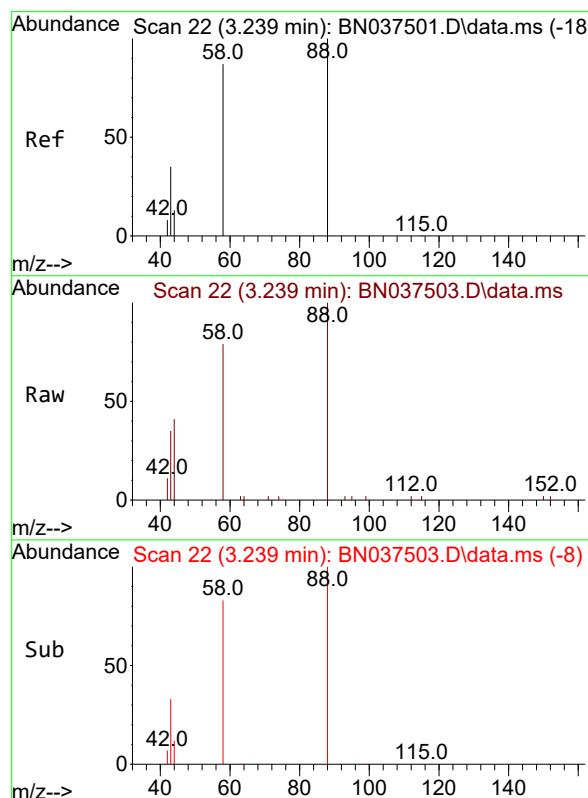
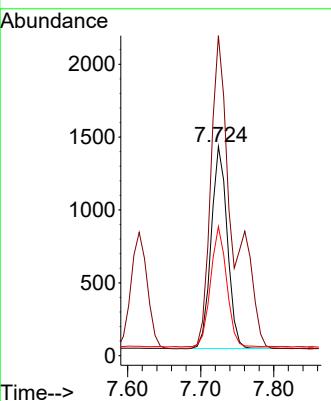




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

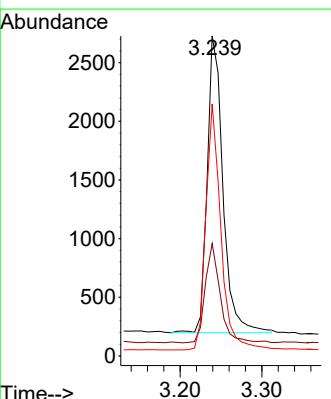
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

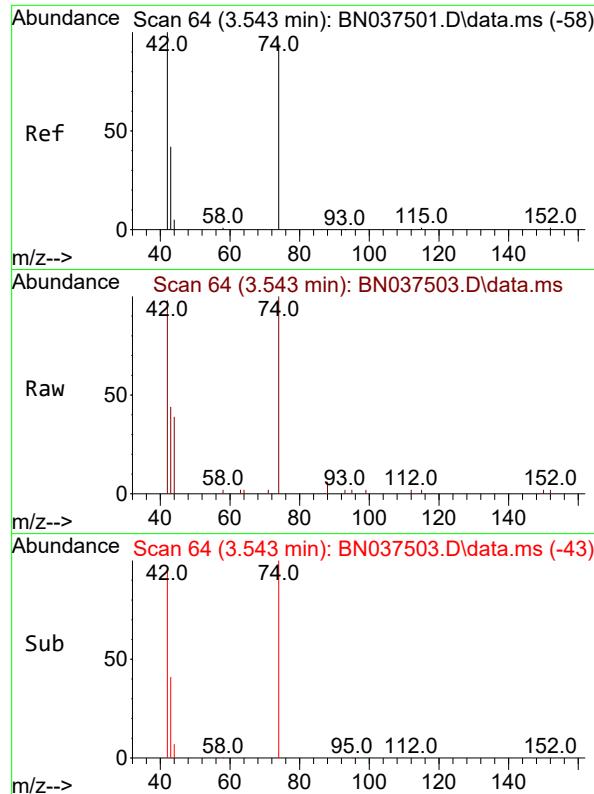
Tgt Ion:152 Resp: 2129  
Ion Ratio Lower Upper  
152 100  
150 152.9 119.8 179.8  
115 61.7 49.1 73.7



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

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

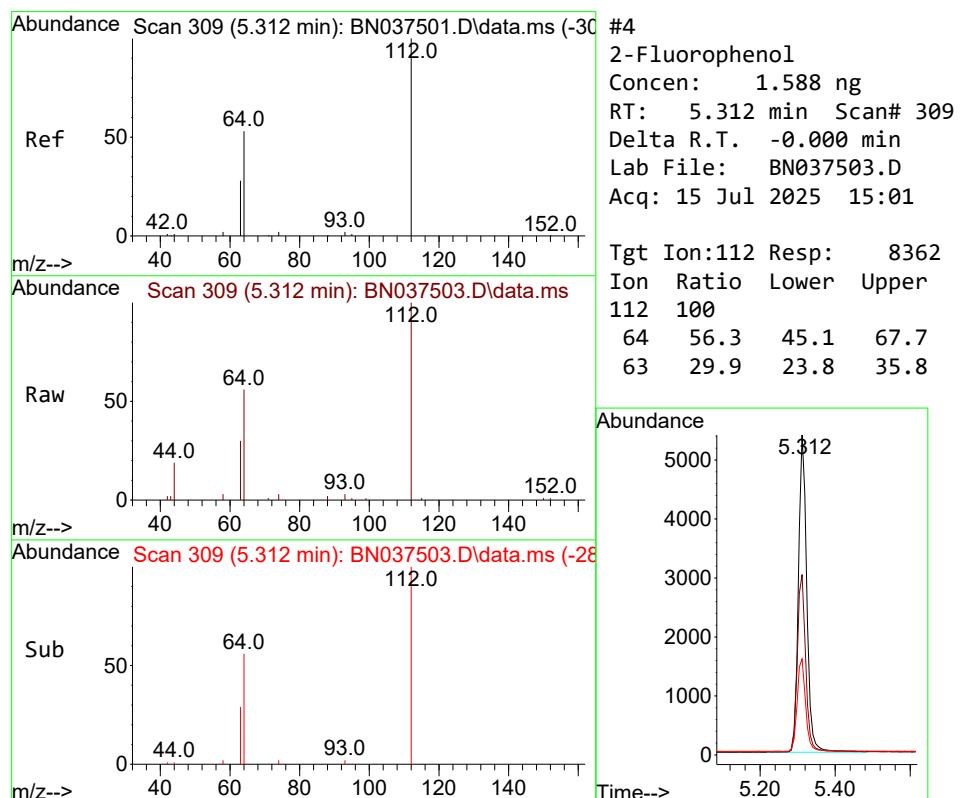
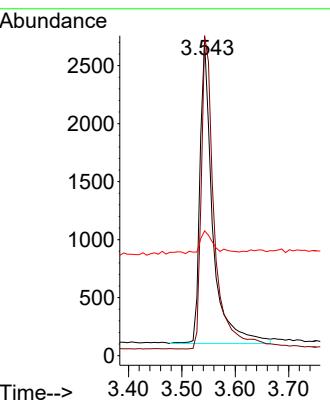




#3  
n-Nitrosodimethylamine  
Concen: 1.681 ng  
RT: 3.543 min Scan# 6  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

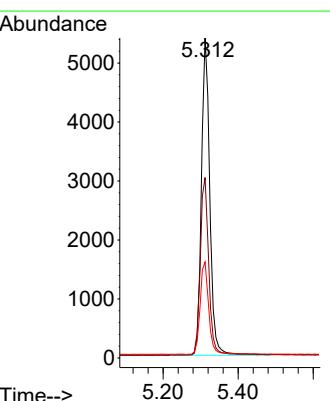
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ClientSampleId : SSTDICC1.6

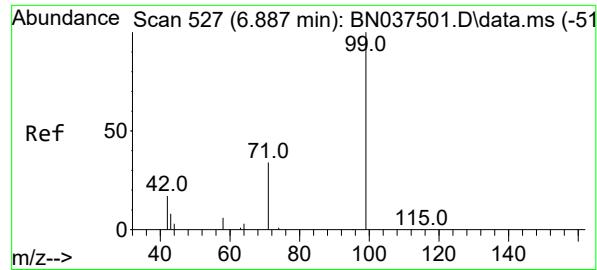
Tgt Ion: 42 Resp: 4327  
Ion Ratio Lower Upper  
42 100  
74 106.7 91.8 137.6  
44 8.3 15.0 22.6#



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

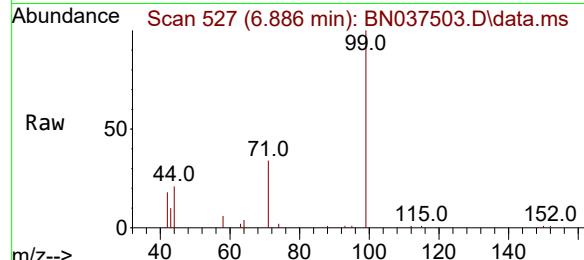
Tgt Ion:112 Resp: 8362  
Ion Ratio Lower Upper  
112 100  
64 56.3 45.1 67.7  
63 29.9 23.8 35.8



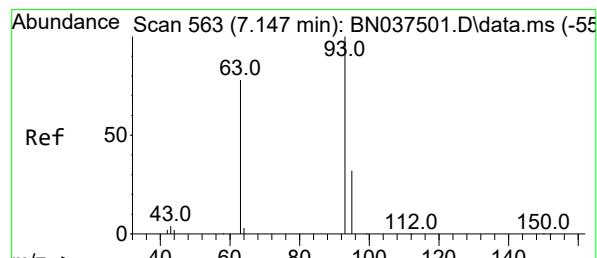
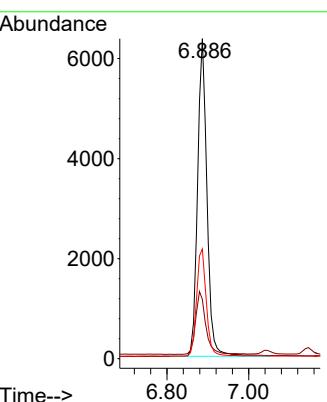
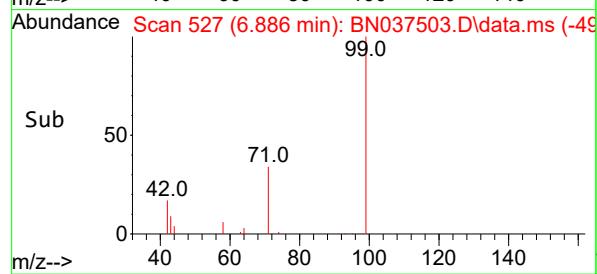


#5  
 Phenol-d6  
 Concen: 1.548 ng  
 RT: 6.886 min Scan# 5  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

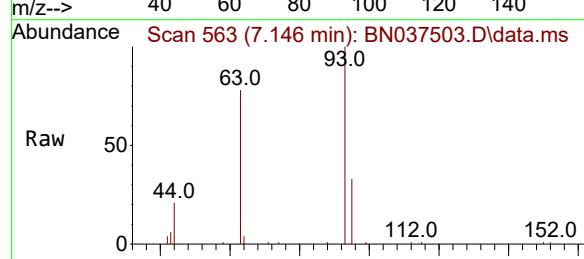
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6



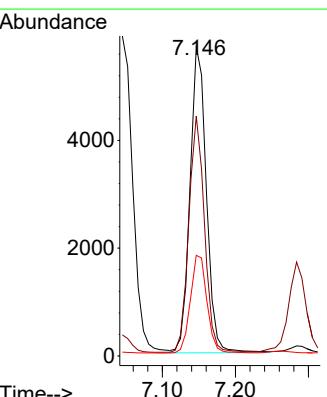
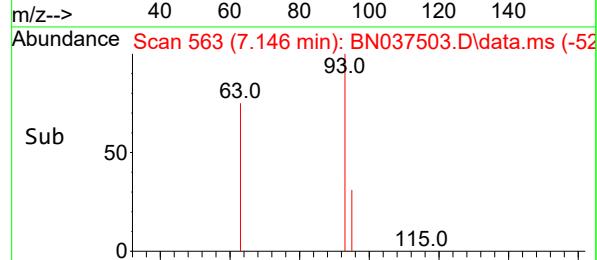
Tgt Ion: 99 Resp: 10225  
 Ion Ratio Lower Upper  
 99 100  
 42 21.6 17.1 25.7  
 71 34.7 27.8 41.8

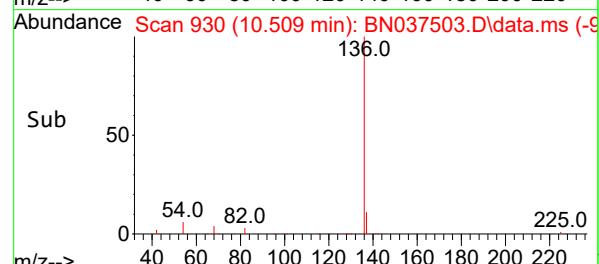
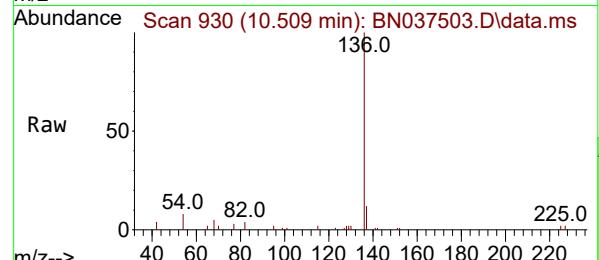
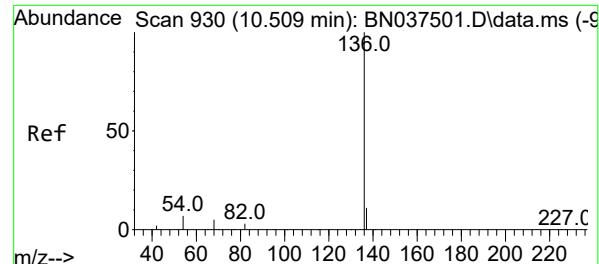


#6  
 bis(2-Chloroethyl)ether  
 Concen: 1.607 ng  
 RT: 7.146 min Scan# 563  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01



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



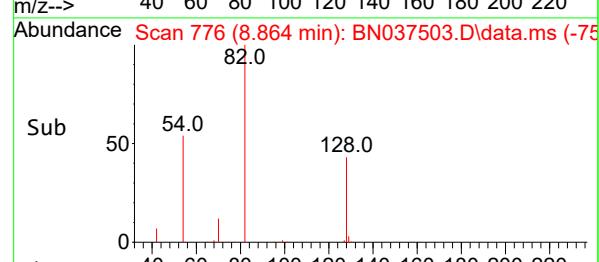
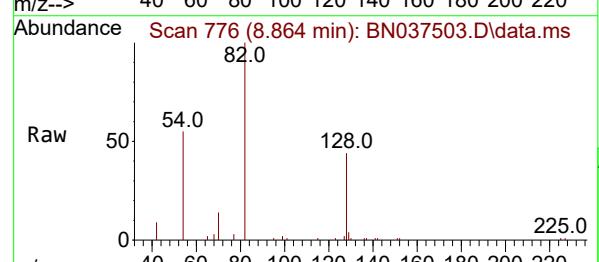
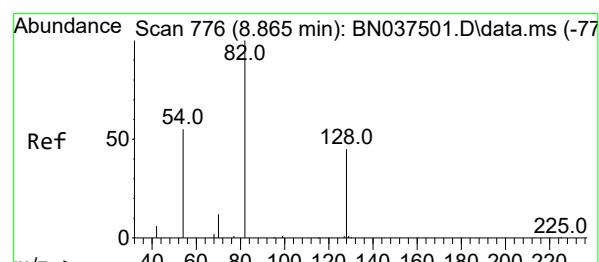
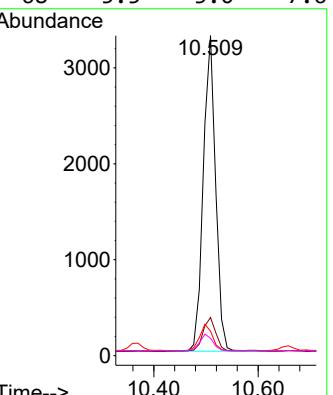


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Tgt Ion:136 Resp: 5384

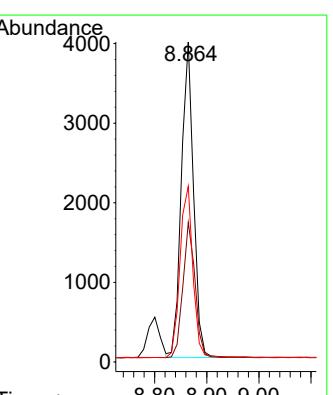
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 11.9  | 9.8   | 14.8  |
| 54  | 7.7   | 6.6   | 9.8   |
| 68  | 5.5   | 5.0   | 7.6   |

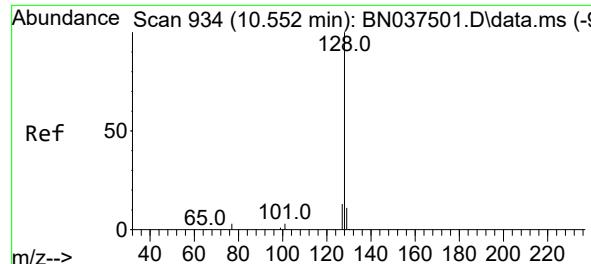


#8  
 Nitrobenzene-d5  
 Concen: 1.604 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

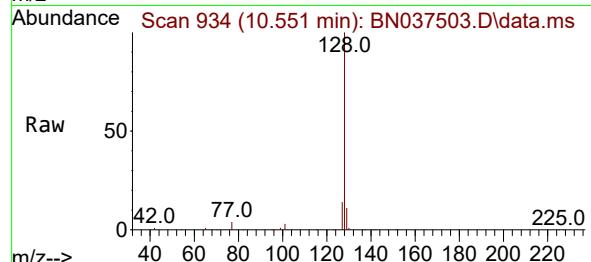
Tgt Ion: 82 Resp: 6457

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

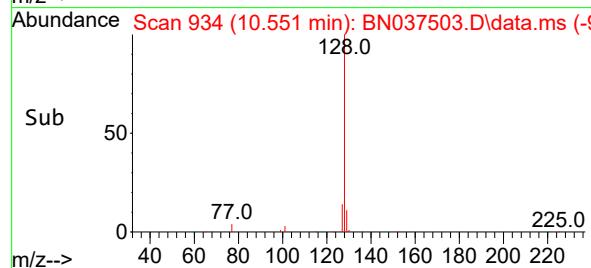
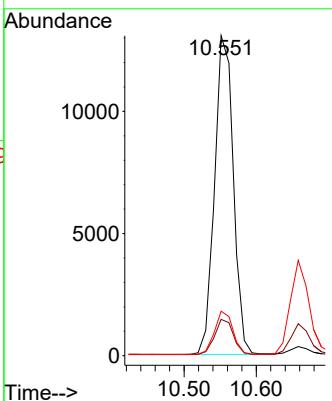




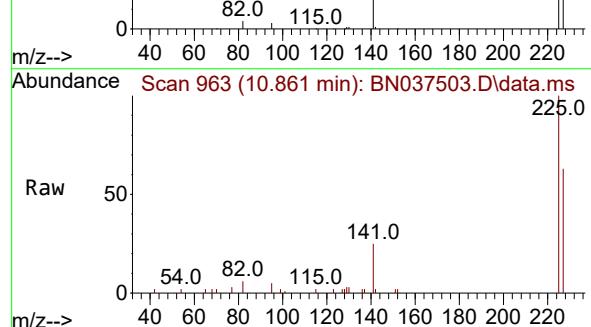
#9  
Naphthalene  
Concen: 1.636 ng  
RT: 10.551 min Scan# 9  
Instrument :  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01  
ClientSampleId : SSTDICC1.6



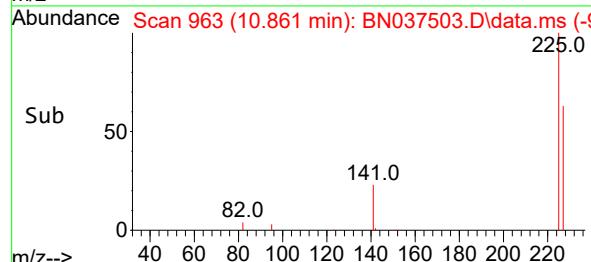
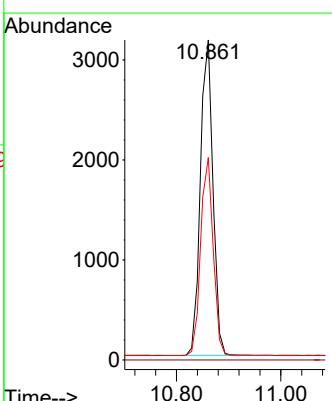
Tgt Ion:128 Resp: 23495  
Ion Ratio Lower Upper  
128 100  
129 11.3 9.7 14.5  
127 13.9 11.5 17.3



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

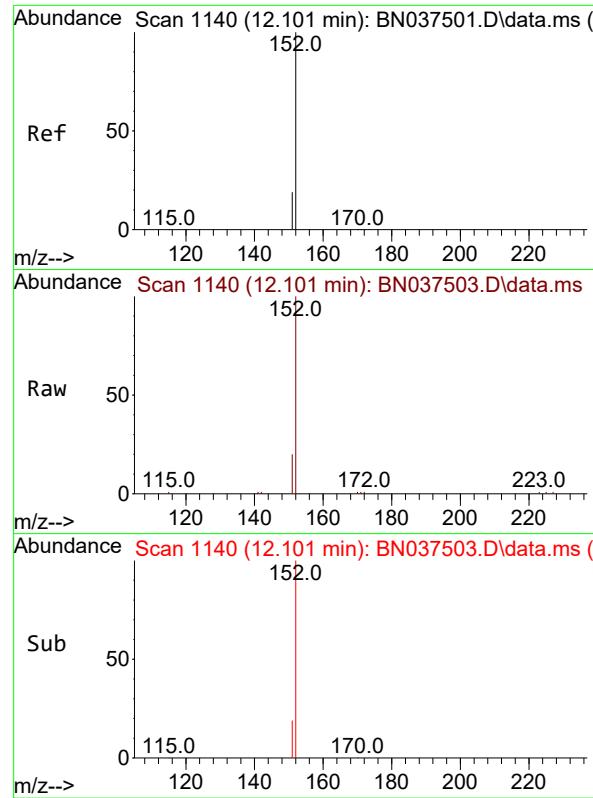


Tgt Ion:225 Resp: 5277  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.4 51.0 76.4



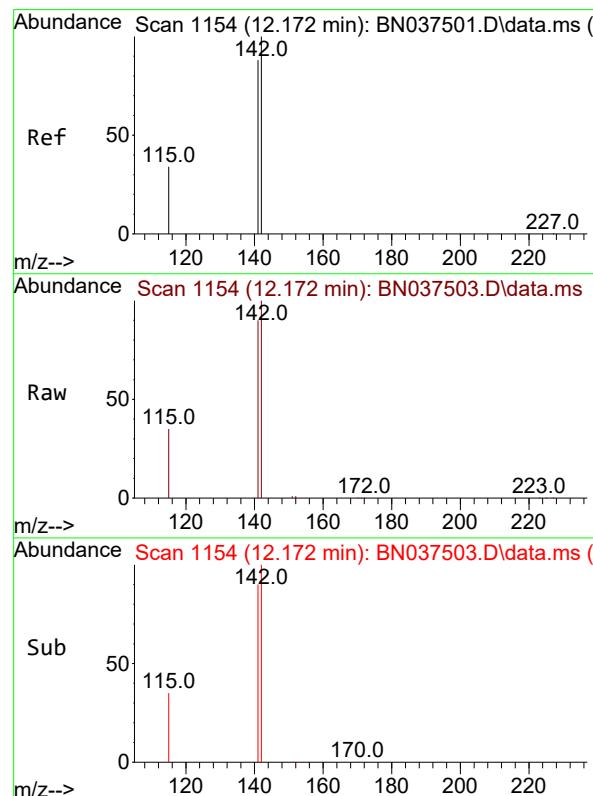
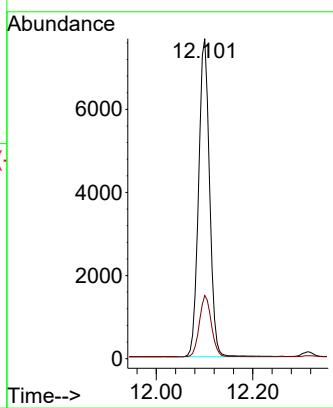
Sub 50

141.0



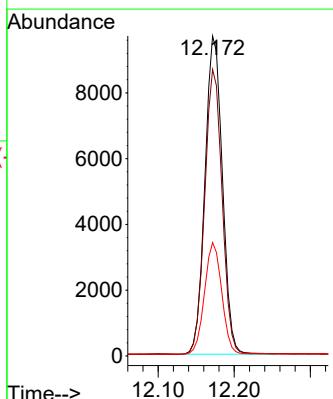
#11  
 2-Methylnaphthalene-d10  
 Concen: 1.566 ng  
 RT: 12.101 min Scan# 1:Instrument :  
 Delta R.T. -0.000 min BNA\_N  
 Lab File: BN037503.D ClientSampleId :  
 Acq: 15 Jul 2025 15:01 SSTDICC1.6

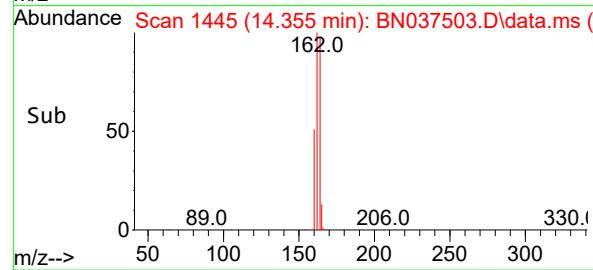
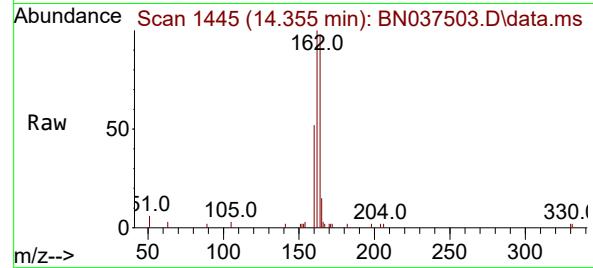
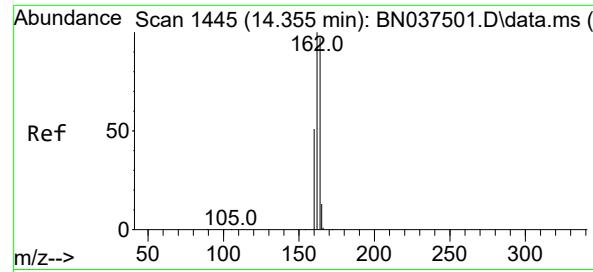
Tgt Ion:152 Resp: 12096  
 Ion Ratio Lower Upper  
 152 100  
 151 20.9 16.8 25.2



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

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





#13

Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.355 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Instrument :

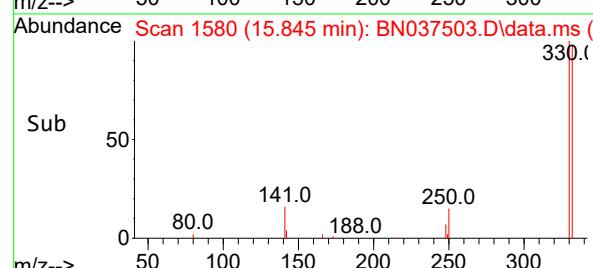
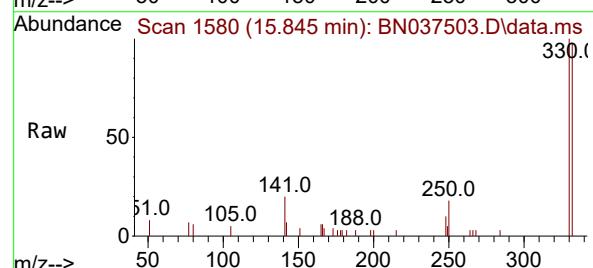
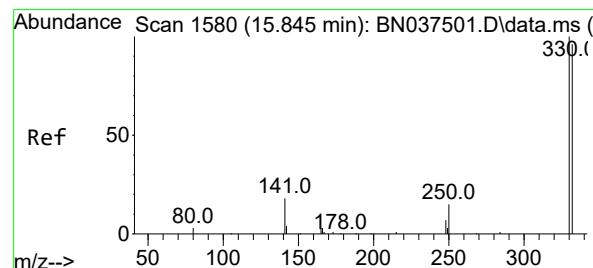
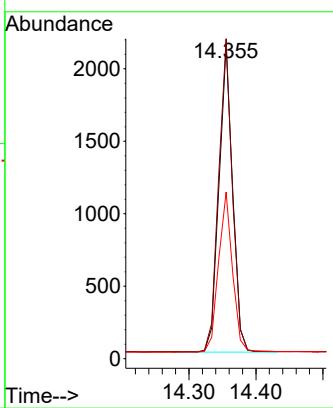
BNA\_N

ClientSampleId :

SSTDICC1.6

Tgt Ion:164 Resp: 3005

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 162 | 102.0 | 82.0  | 123.0 |
| 160 | 53.1  | 42.4  | 63.6  |

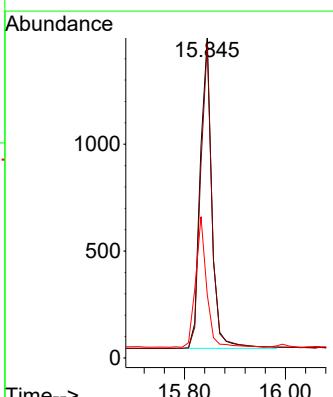


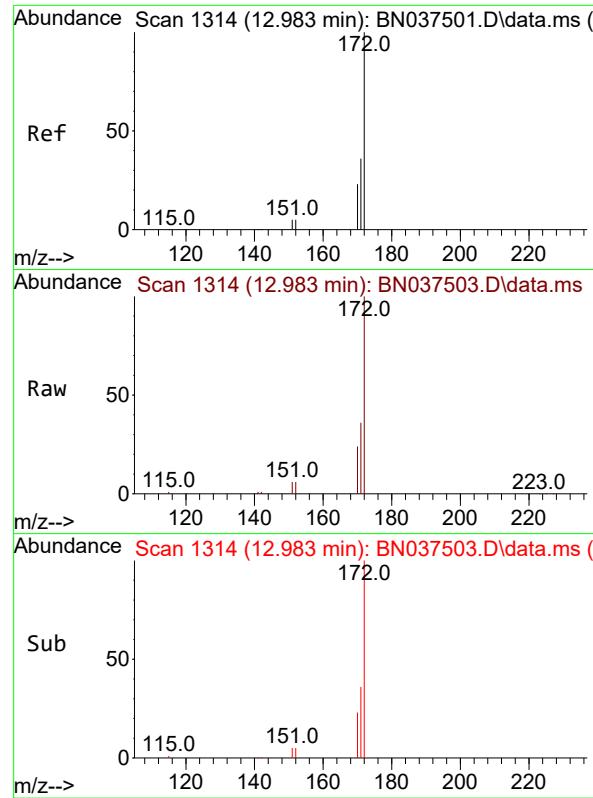
#14

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

Tgt Ion:330 Resp: 2331

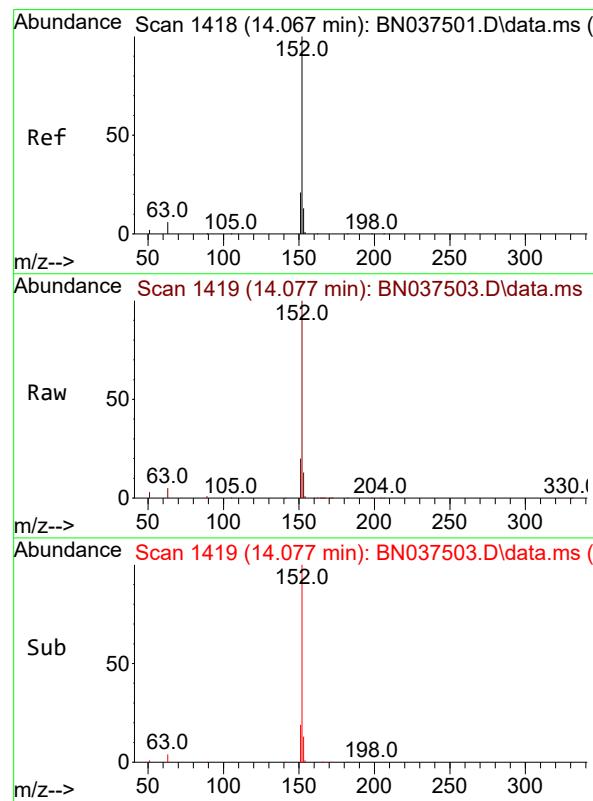
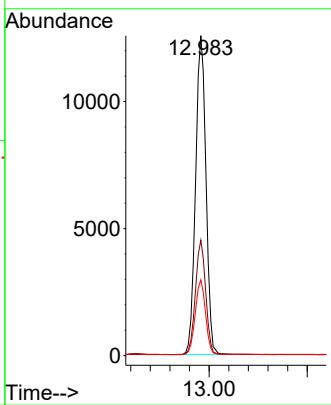
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 330 | 100   |       |       |
| 332 | 96.1  | 76.1  | 114.1 |
| 141 | 40.0  | 33.4  | 50.0  |





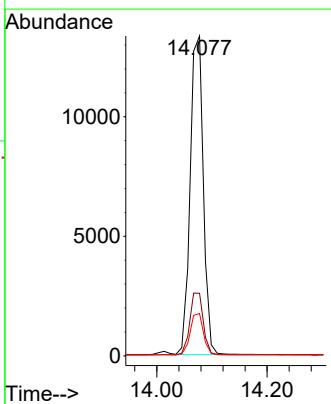
#15  
2-Fluorobiphenyl  
Concen: 1.751 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01  
ClientSampleId : SSTDICC1.6

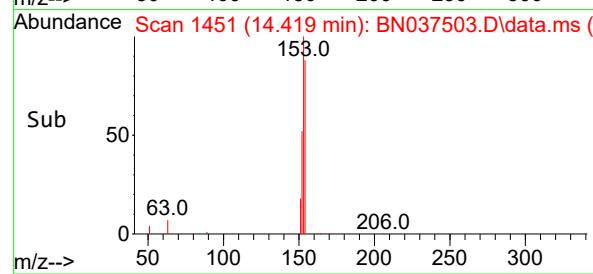
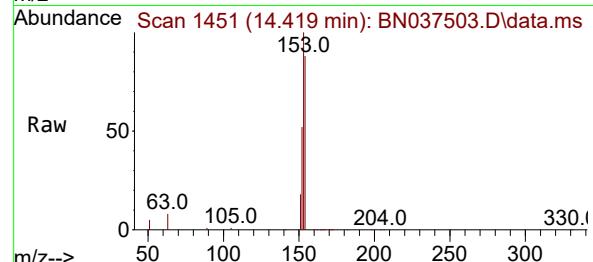
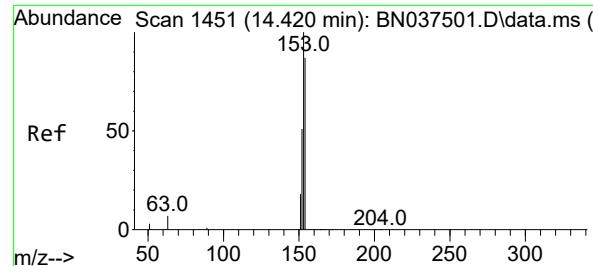
Tgt Ion:172 Resp: 27369  
Ion Ratio Lower Upper  
172 100  
171 36.1 29.4 44.2  
170 23.7 19.4 29.0



#16  
Acenaphthylene  
Concen: 1.635 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.011 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:152 Resp: 22002  
Ion Ratio Lower Upper  
152 100  
151 19.9 15.9 23.9  
153 13.2 10.7 16.1





#17

Acenaphthene

Concen: 1.625 ng

RT: 14.419 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

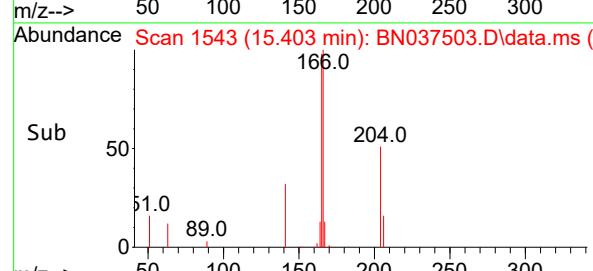
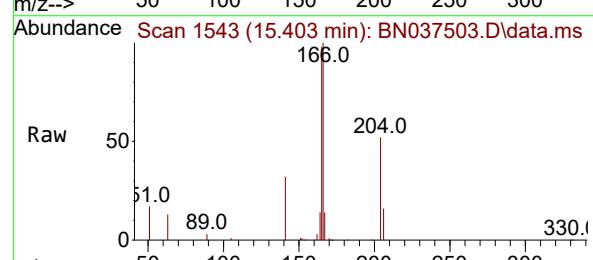
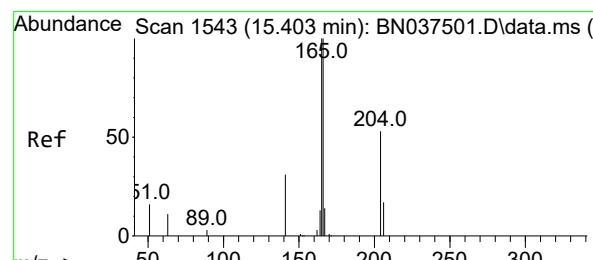
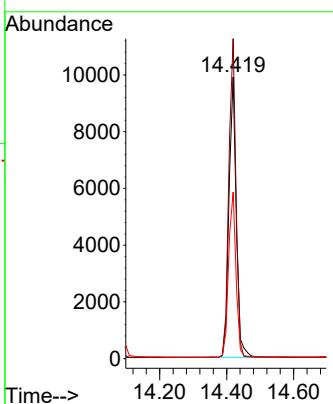
Tgt Ion:154 Resp: 14877

Ion Ratio Lower Upper

154 100

153 110.6 89.2 133.8

152 59.5 48.0 72.0



#18

Fluorene

Concen: 1.638 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

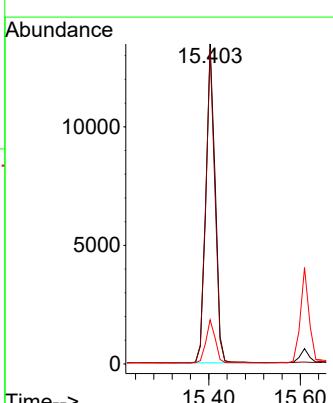
Tgt Ion:166 Resp: 19298

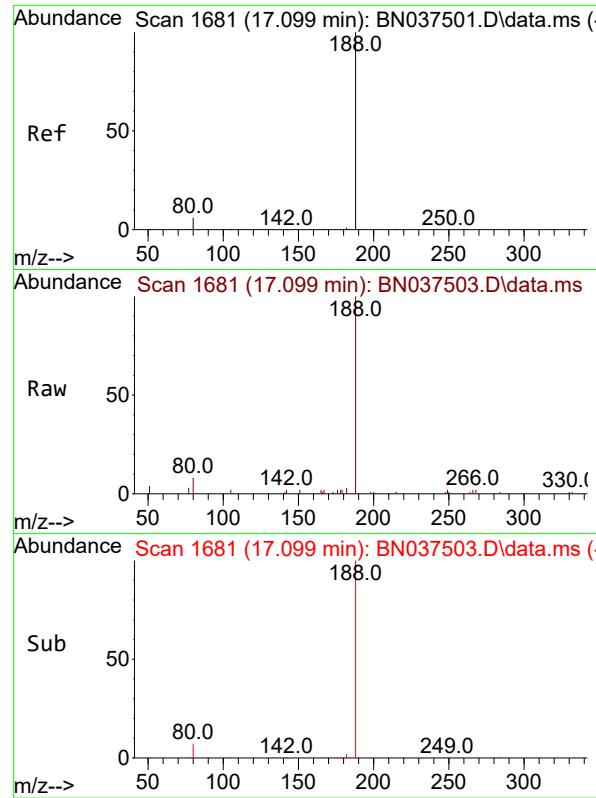
Ion Ratio Lower Upper

166 100

165 96.1 78.1 117.1

167 13.1 11.0 16.6

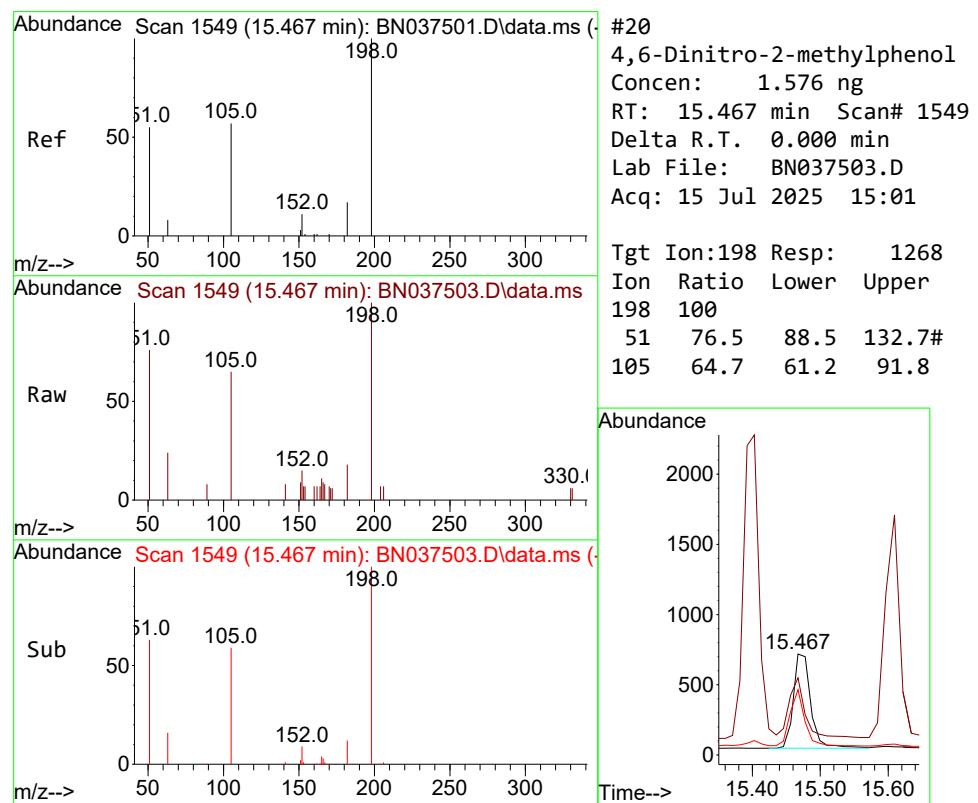
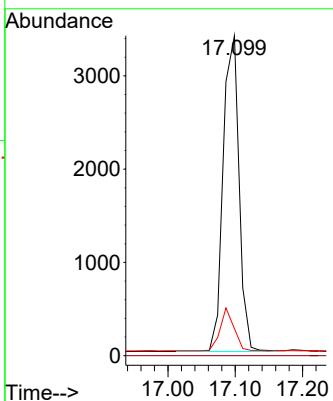




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.099 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

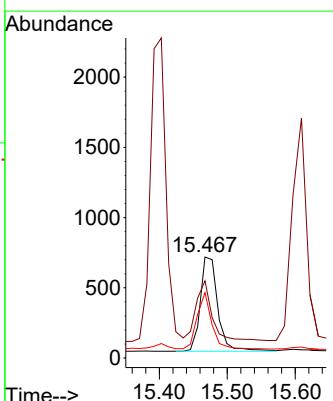
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

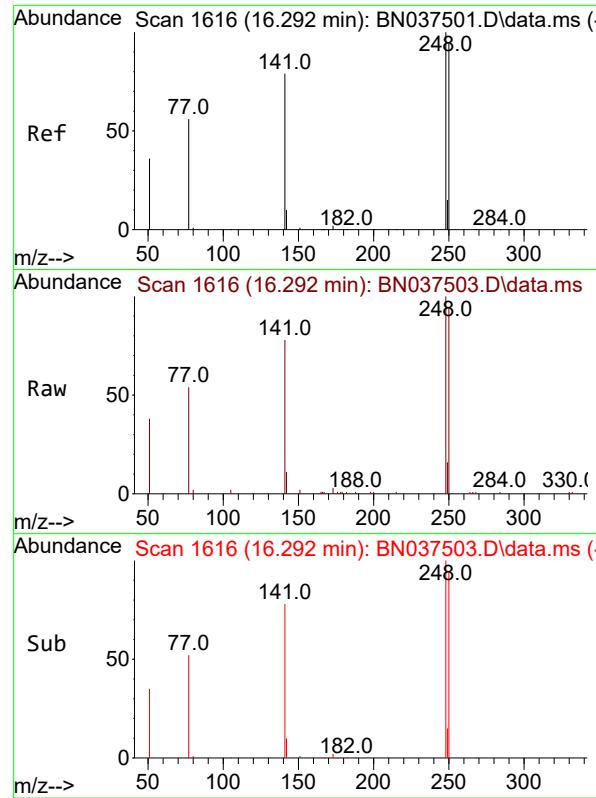
Tgt Ion:188 Resp: 5542  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 8.5 6.0 9.0



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 1.576 ng  
 RT: 15.467 min Scan# 1549  
 Delta R.T. 0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion:198 Resp: 1268  
 Ion Ratio Lower Upper  
 198 100  
 51 76.5 88.5 132.7#  
 105 64.7 61.2 91.8





#21

4-Bromophenyl-phenylether

Concen: 1.674 ng

RT: 16.292 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

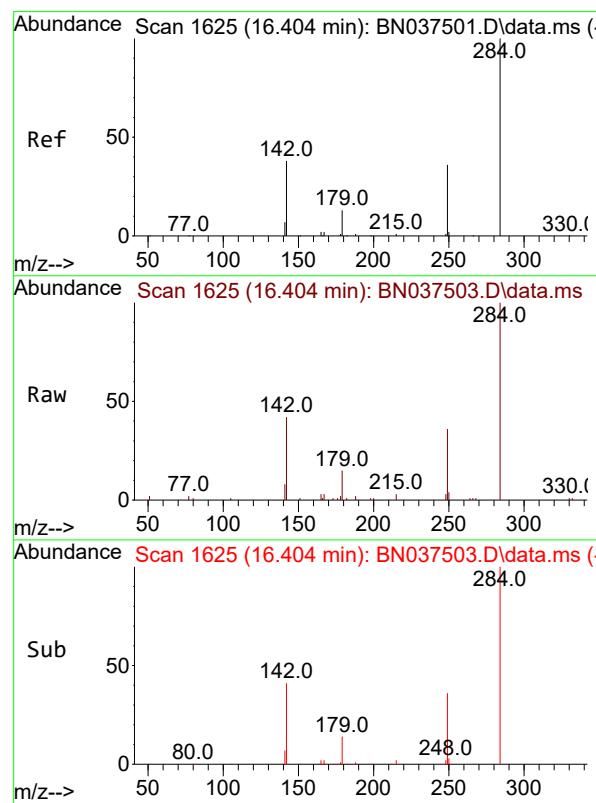
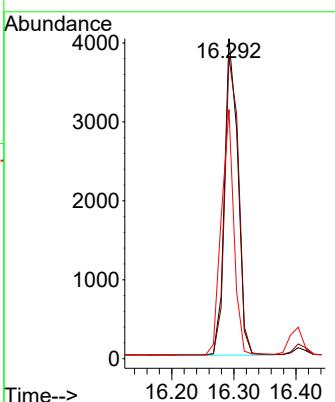
Tgt Ion:248 Resp: 5943

Ion Ratio Lower Upper

248 100

250 94.1 76.2 114.2

141 77.8 63.9 95.9



#22

Hexachlorobenzene

Concen: 1.668 ng

RT: 16.404 min Scan# 1625

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

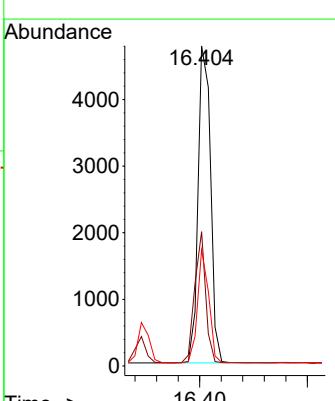
Tgt Ion:284 Resp: 7650

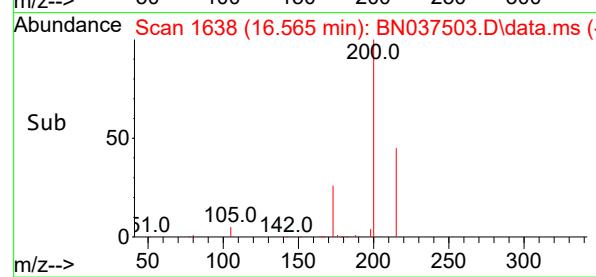
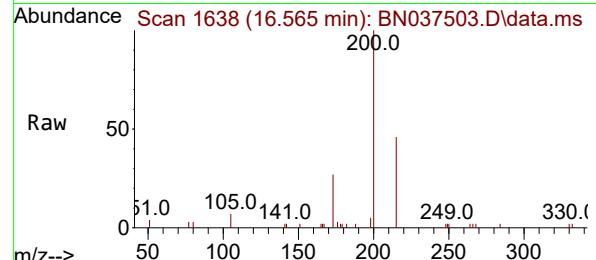
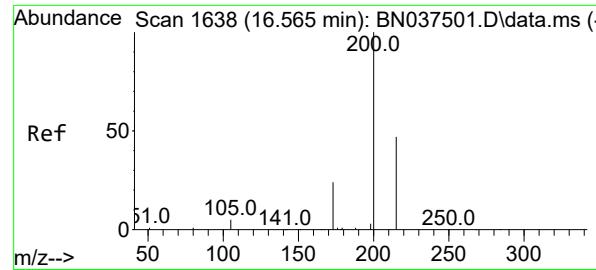
Ion Ratio Lower Upper

284 100

142 36.4 28.9 43.3

249 32.1 25.8 38.6

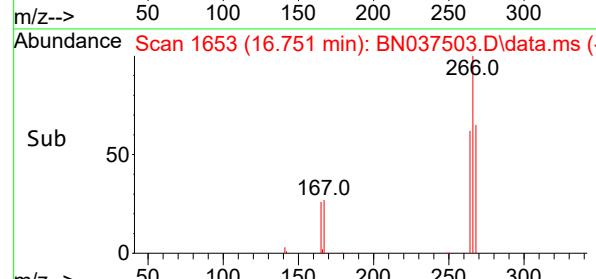
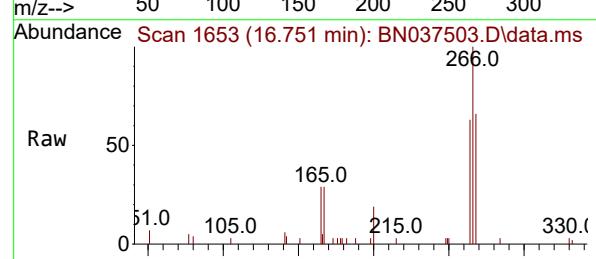
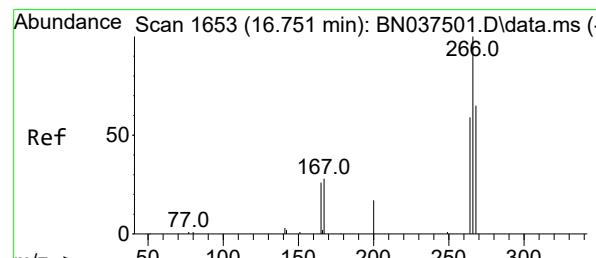
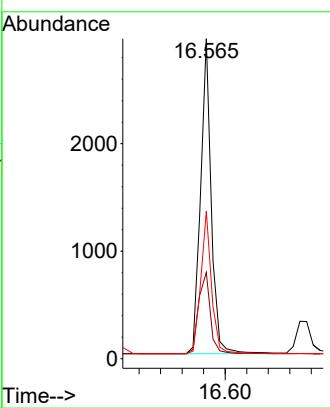




#23  
Atrazine  
Concen: 1.621 ng  
RT: 16.565 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

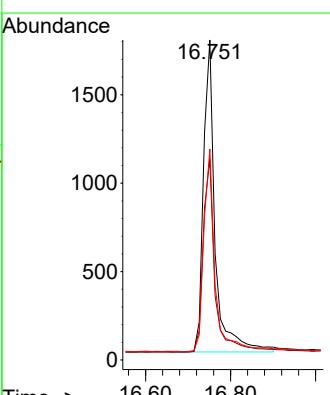
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

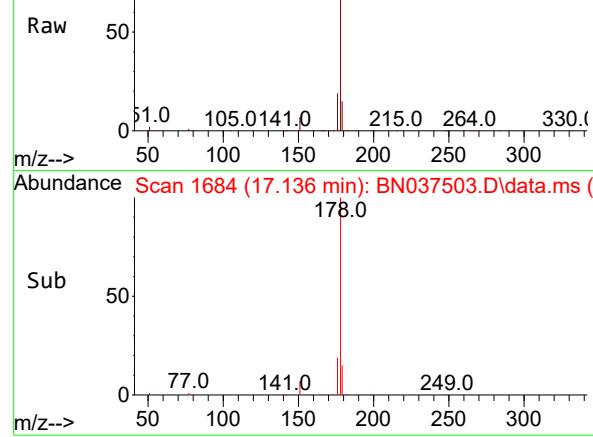
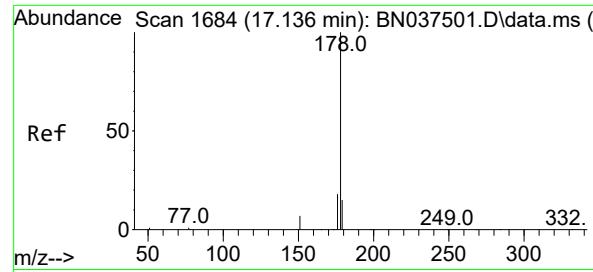
Tgt Ion:200 Resp: 4016  
Ion Ratio Lower Upper  
200 100  
173 27.0 23.2 34.8  
215 46.1 40.2 60.4



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

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





#25

Phenanthrene

Concen: 1.666 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

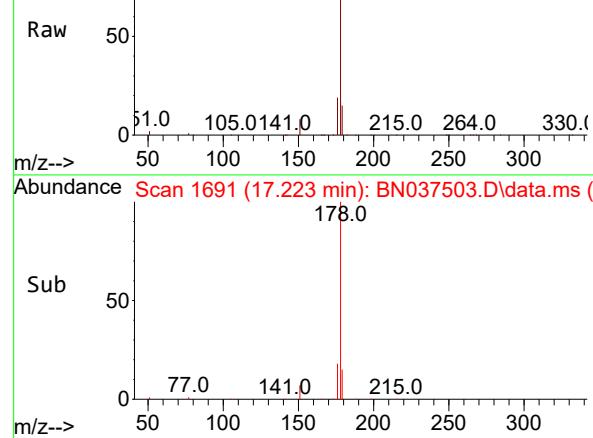
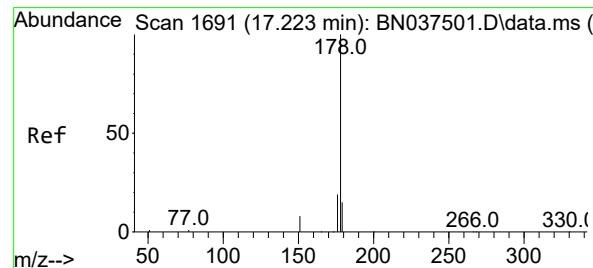
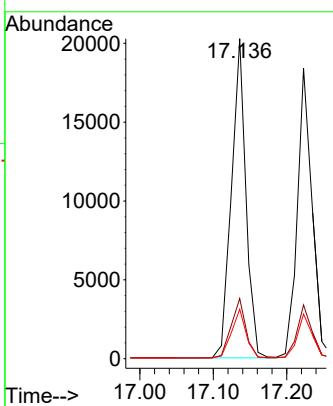
Tgt Ion:178 Resp: 27669

Ion Ratio Lower Upper

178 100

176 18.8 15.0 22.6

179 15.3 12.2 18.2



#26

Anthracene

Concen: 1.697 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

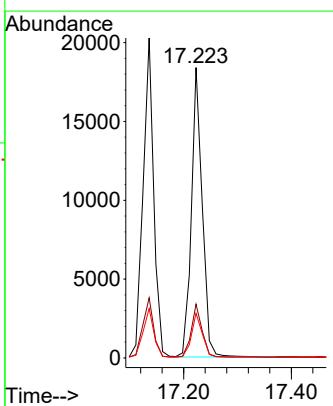
Tgt Ion:178 Resp: 25717

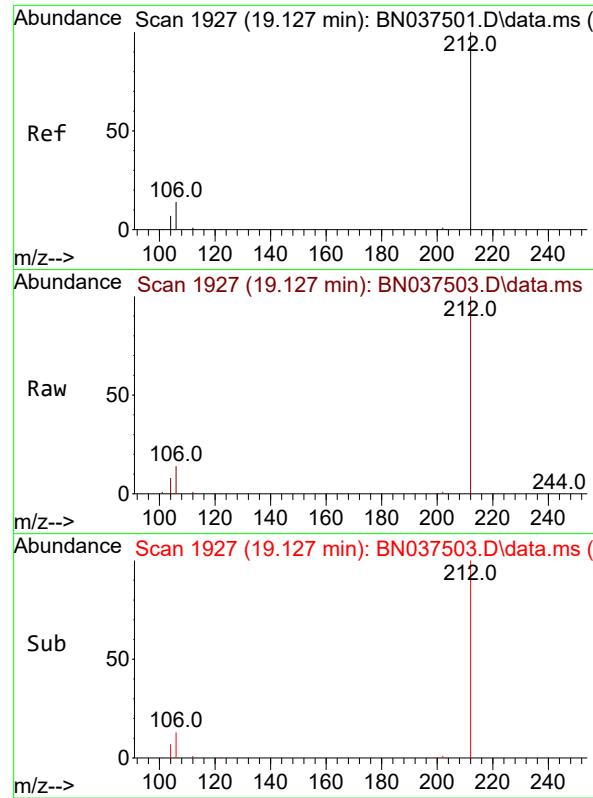
Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

179 15.3 12.3 18.5

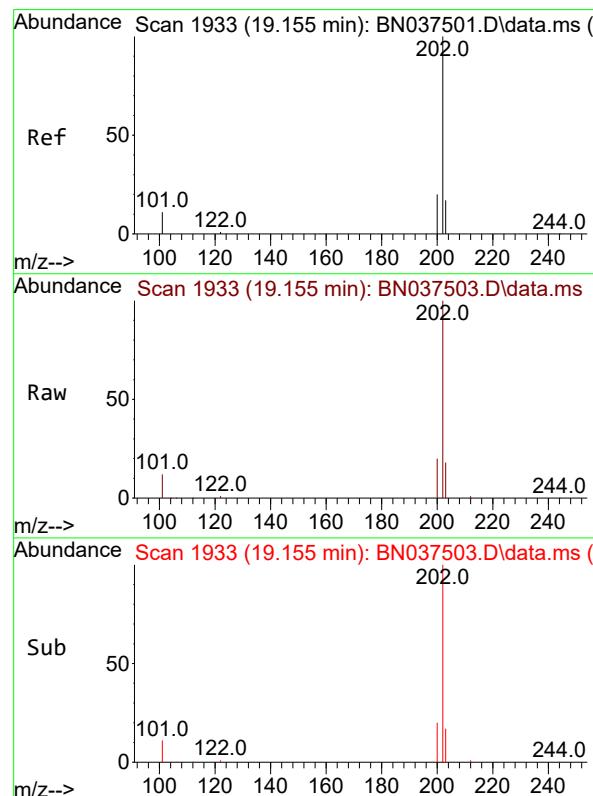
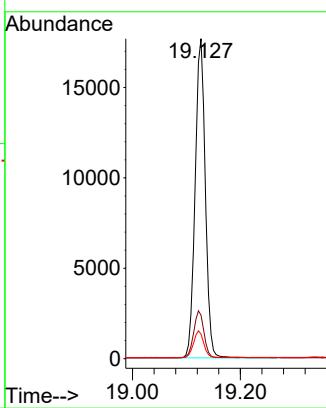




#27  
 Fluoranthene-d10  
 Concen: 1.572 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

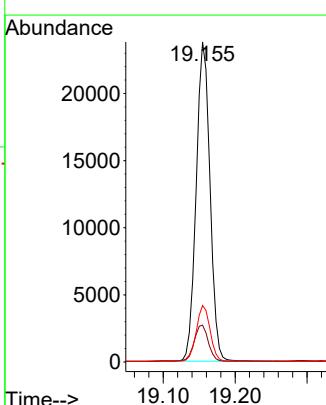
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

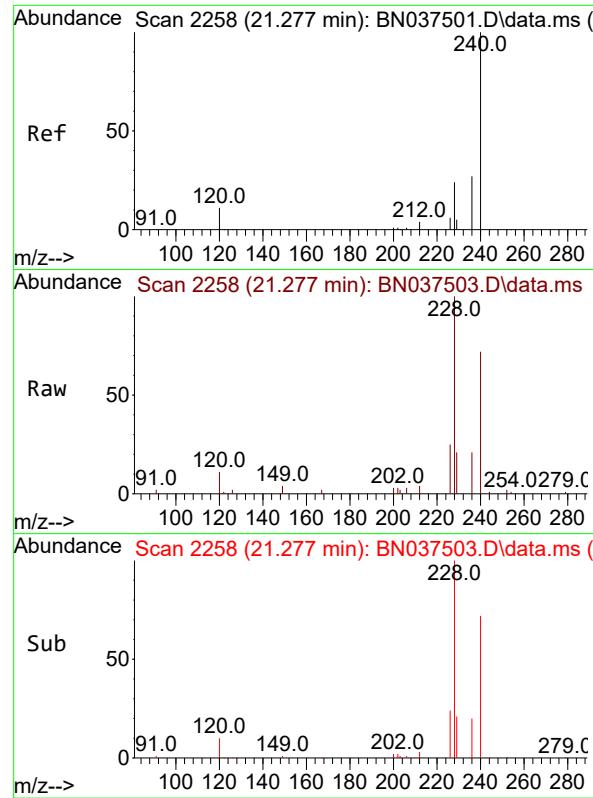
Tgt Ion:212 Resp: 23071  
 Ion Ratio Lower Upper  
 212 100  
 106 14.8 12.2 18.4  
 104 8.3 6.7 10.1



#28  
 Fluoranthene  
 Concen: 1.654 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion:202 Resp: 31674  
 Ion Ratio Lower Upper  
 202 100  
 101 11.7 9.8 14.6  
 203 17.3 13.6 20.4

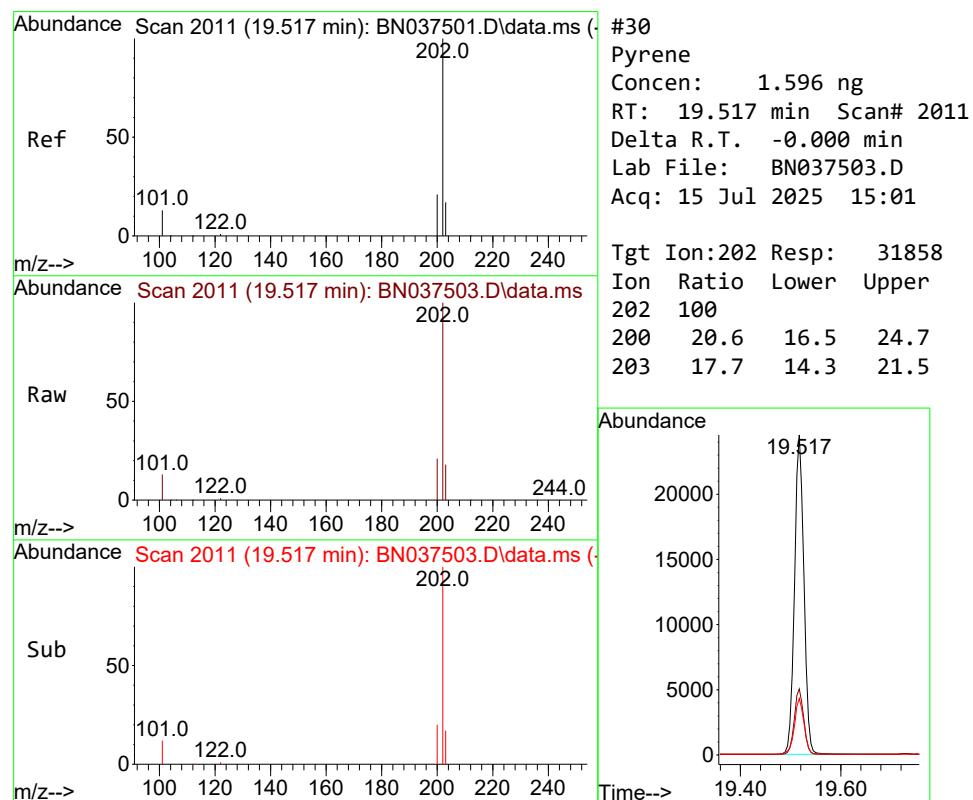
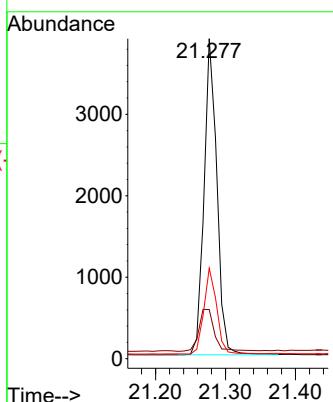




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

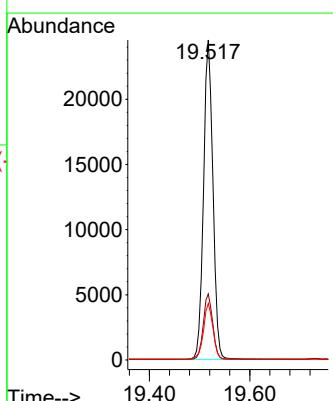
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

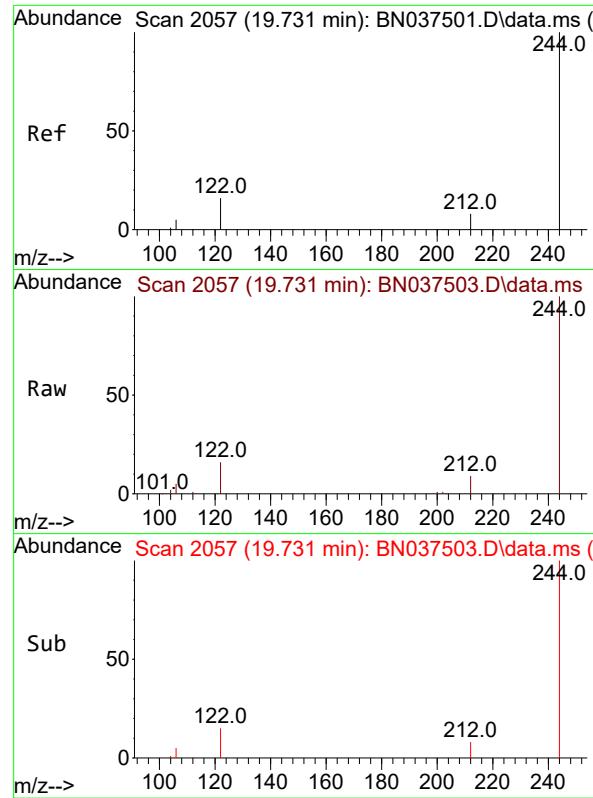
Tgt Ion:240 Resp: 4955  
 Ion Ratio Lower Upper  
 240 100  
 120 15.4 10.7 16.1  
 236 28.3 22.6 33.8



#30  
 Pyrene  
 Concen: 1.596 ng  
 RT: 19.517 min Scan# 2011  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion:202 Resp: 31858  
 Ion Ratio Lower Upper  
 202 100  
 200 20.6 16.5 24.7  
 203 17.7 14.3 21.5

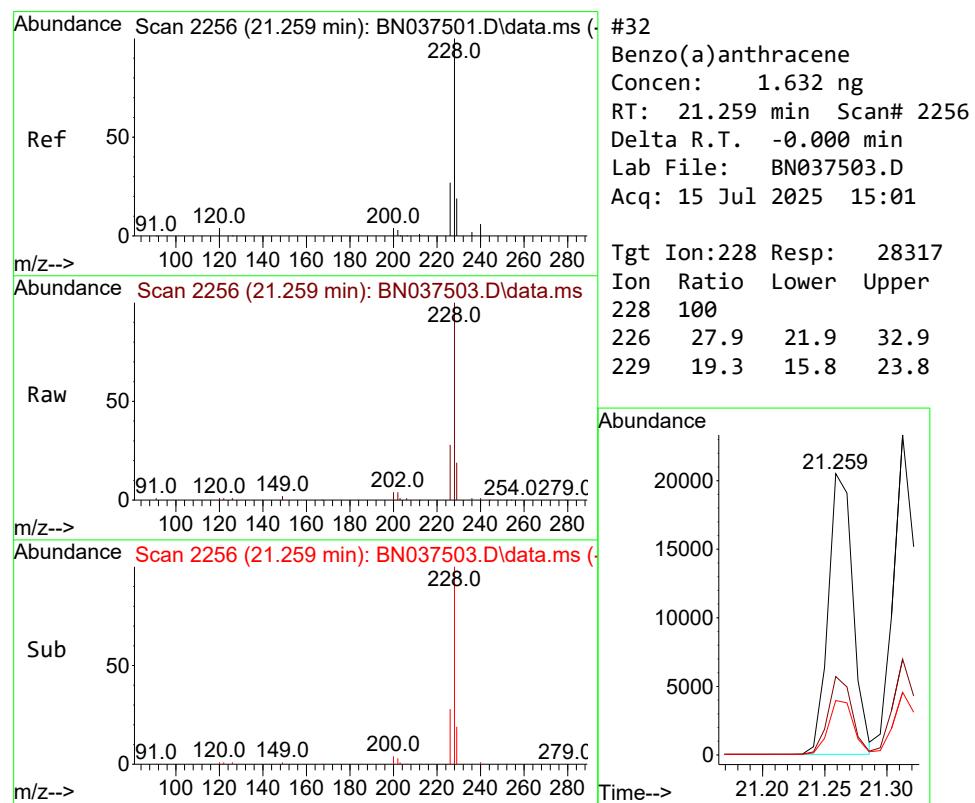
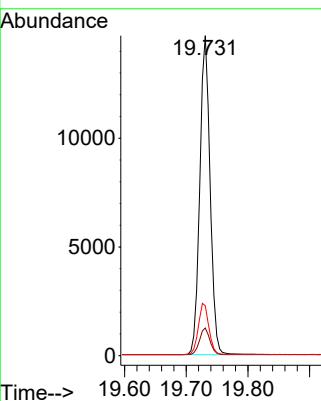




#31  
Terphenyl-d14  
Concen: 1.591 ng  
RT: 19.731 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

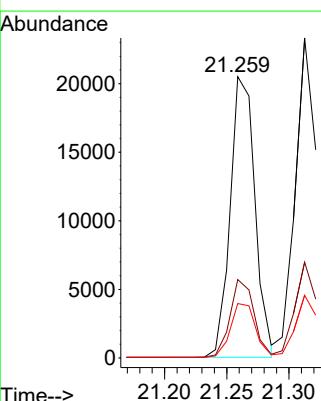
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

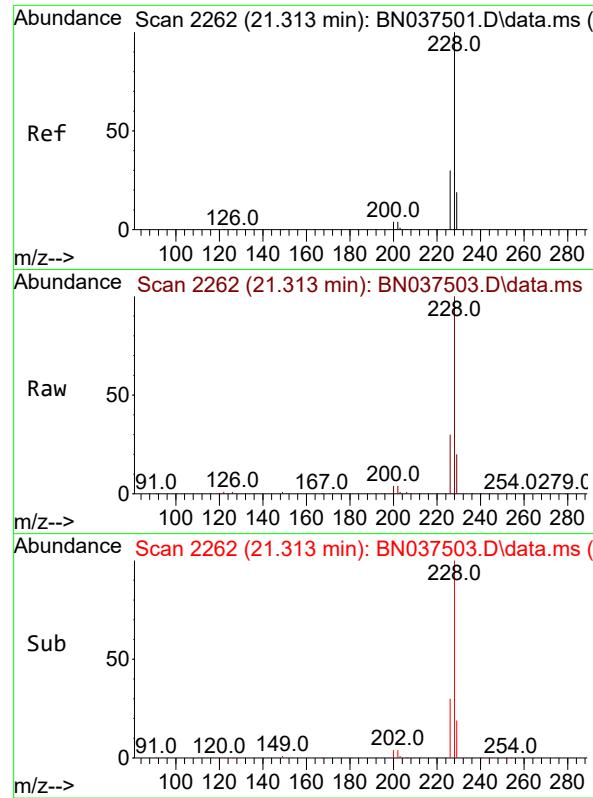
Tgt Ion:244 Resp: 16936  
Ion Ratio Lower Upper  
244 100  
212 8.6 7.4 11.2  
122 15.6 13.6 20.4



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

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

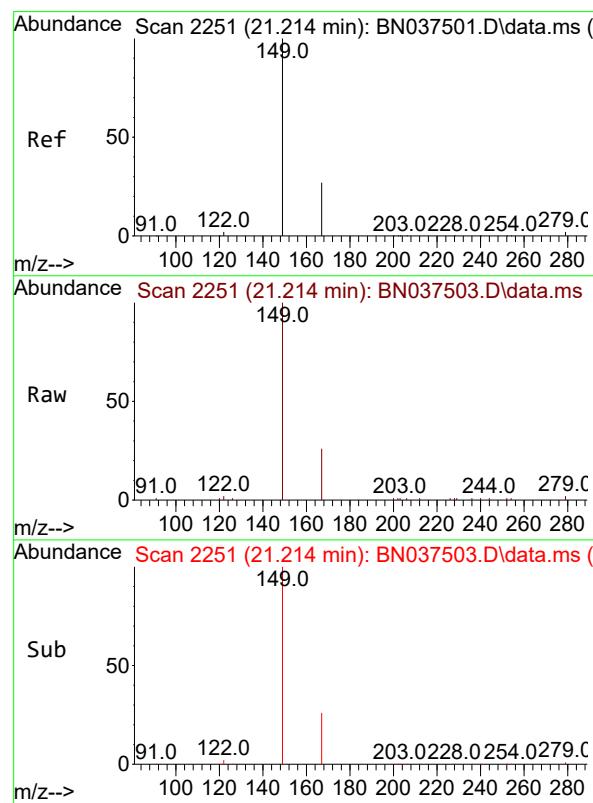
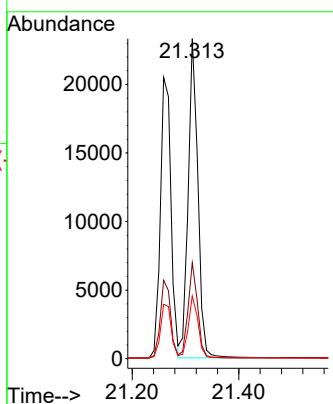




#33  
Chrysene  
Concen: 1.632 ng  
RT: 21.313 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

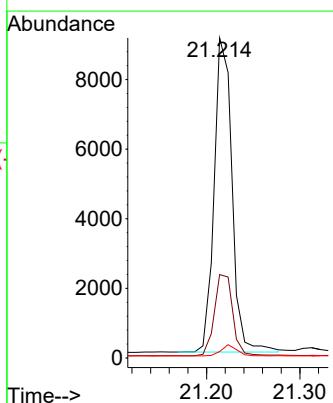
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

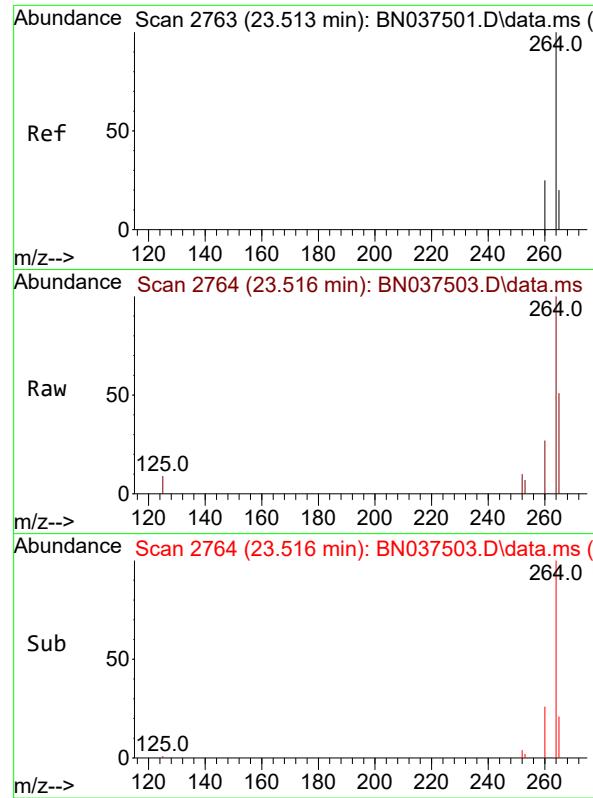
Tgt Ion:228 Resp: 29489  
Ion Ratio Lower Upper  
228 100  
226 30.0 24.2 36.4  
229 19.6 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 1.532 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:149 Resp: 11959  
Ion Ratio Lower Upper  
149 100  
167 26.5 21.8 32.8  
279 3.1 3.0 4.4

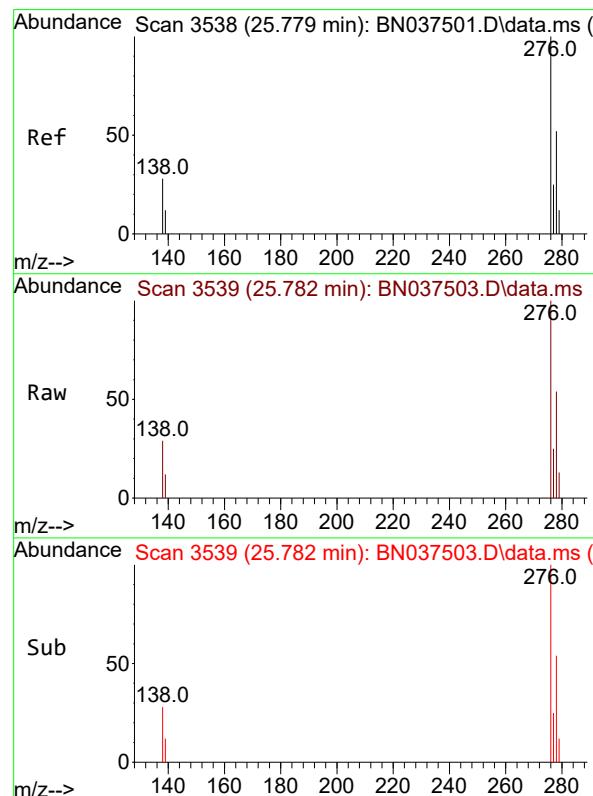
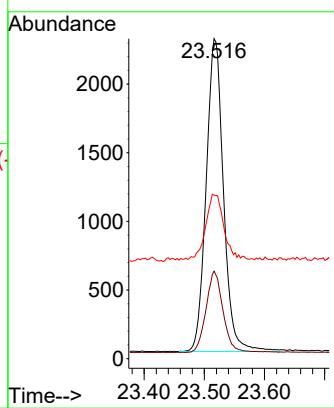




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

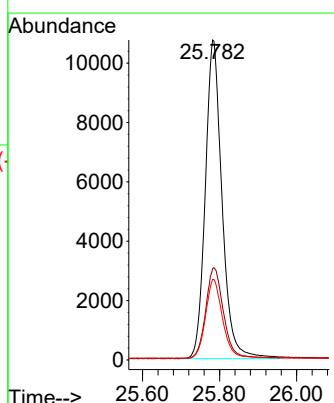
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

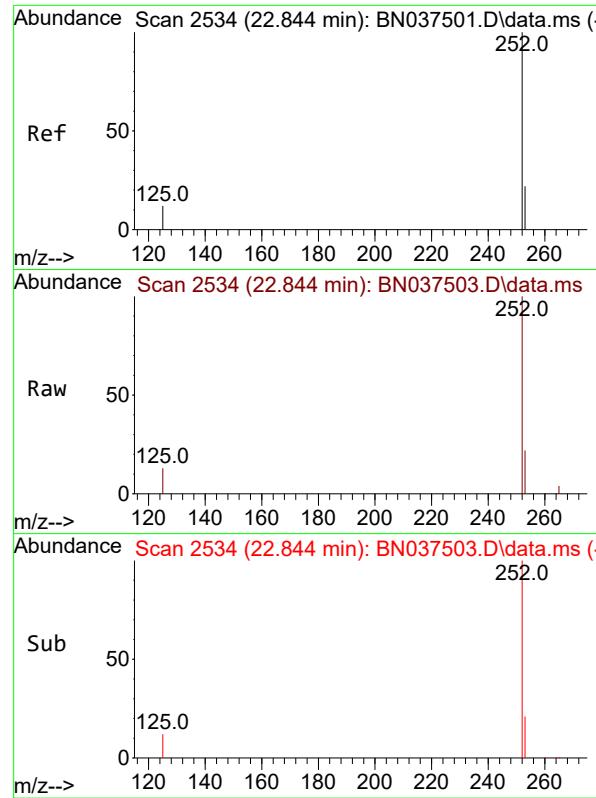
Tgt Ion:264 Resp: 4551  
Ion Ratio Lower Upper  
264 100  
260 27.3 21.2 31.8  
265 51.1 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 1.701 ng  
RT: 25.782 min Scan# 3539  
Delta R.T. 0.003 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:276 Resp: 32244  
Ion Ratio Lower Upper  
276 100  
138 30.1 24.0 36.0  
277 25.1 20.5 30.7

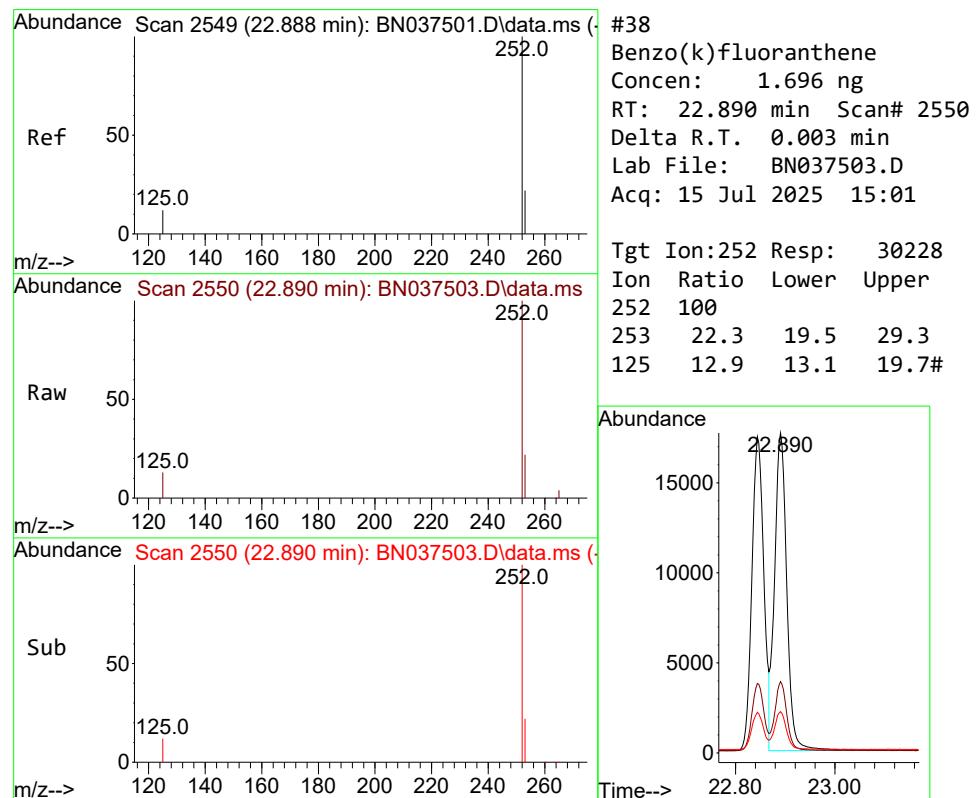
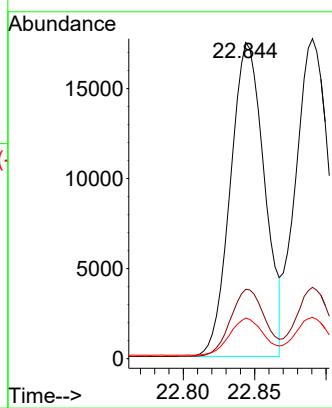




#37  
 Benzo(b)fluoranthene  
 Concen: 1.675 ng  
 RT: 22.844 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

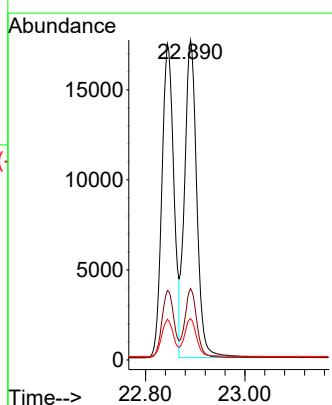
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

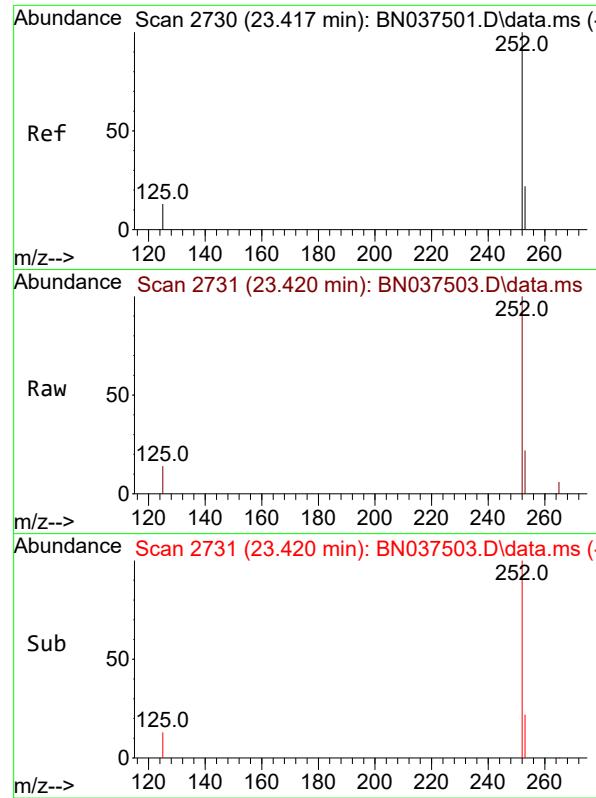
Tgt Ion:252 Resp: 28933  
 Ion Ratio Lower Upper  
 252 100  
 253 22.0 19.5 29.3  
 125 12.9 13.0 19.6#



#38  
 Benzo(k)fluoranthene  
 Concen: 1.696 ng  
 RT: 22.890 min Scan# 2550  
 Delta R.T. 0.003 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion:252 Resp: 30228  
 Ion Ratio Lower Upper  
 252 100  
 253 22.3 19.5 29.3  
 125 12.9 13.1 19.7#

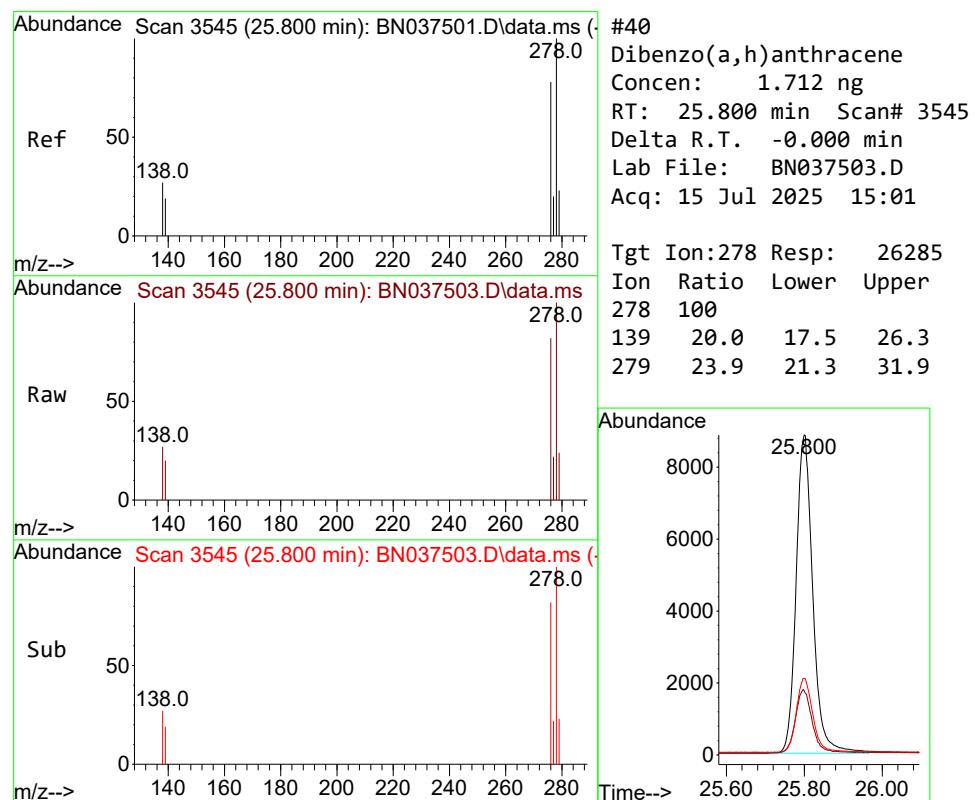
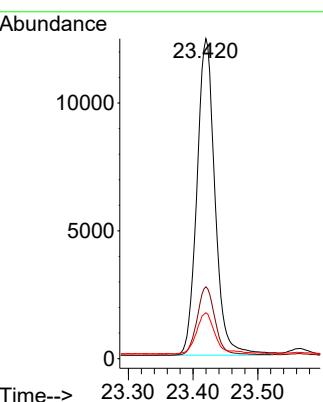




#39  
 Benzo(a)pyrene  
 Concen: 1.668 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

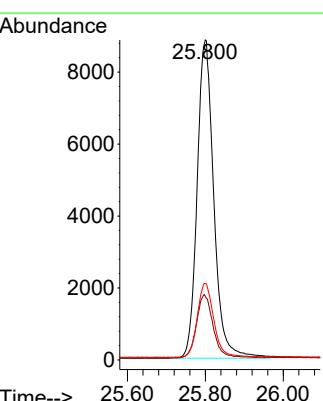
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

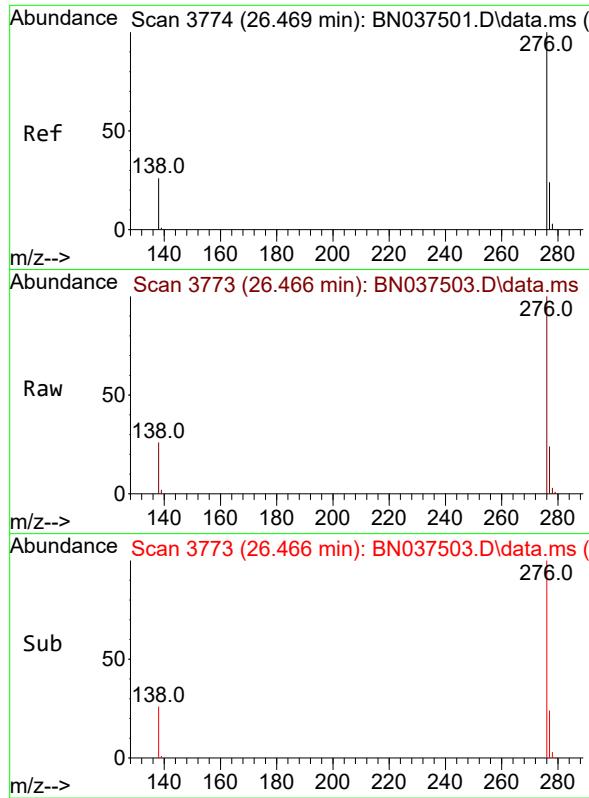
Tgt Ion:252 Resp: 24034  
 Ion Ratio Lower Upper  
 252 100  
 253 22.5 19.9 29.9  
 125 14.3 15.2 22.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 1.712 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

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

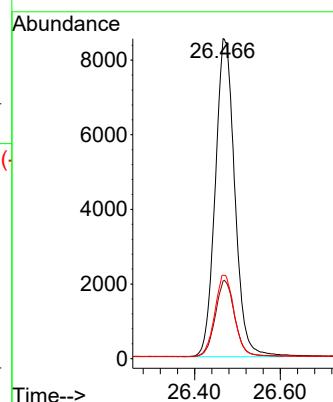




#41  
 Benzo(g,h,i)perylene  
 Concen: 1.697 ng  
 RT: 26.466 min Scan# 3  
 Delta R.T. -0.003 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

Tgt Ion:276 Resp: 26971  
 Ion Ratio Lower Upper  
 276 100  
 277 24.3 20.9 31.3  
 138 26.1 22.6 33.8



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

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDICC3.2**

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

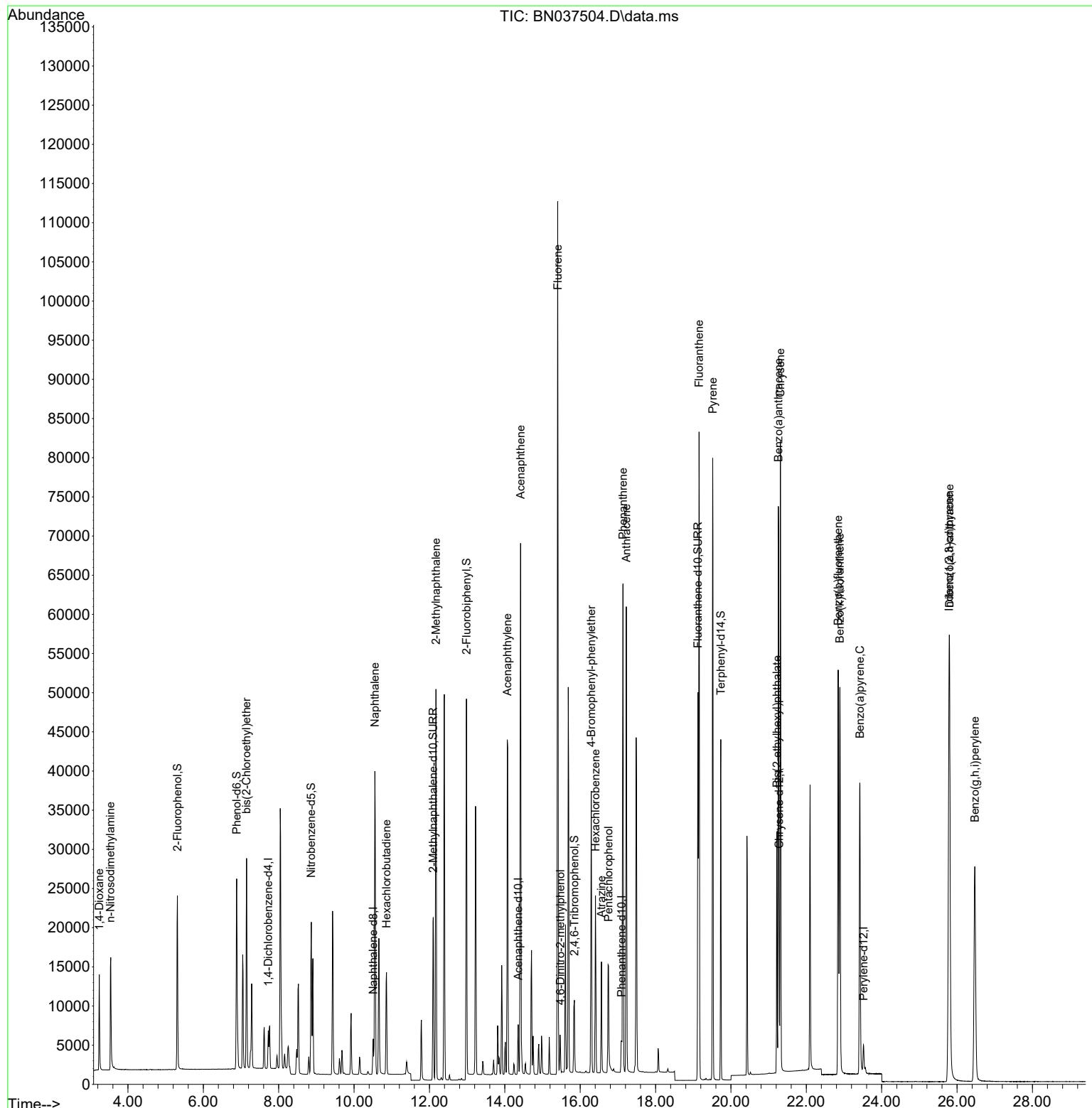
| Compound                           | R.T.   | QIon | Response | Conc          | Units | Dev(Min) |
|------------------------------------|--------|------|----------|---------------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |               |       |         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

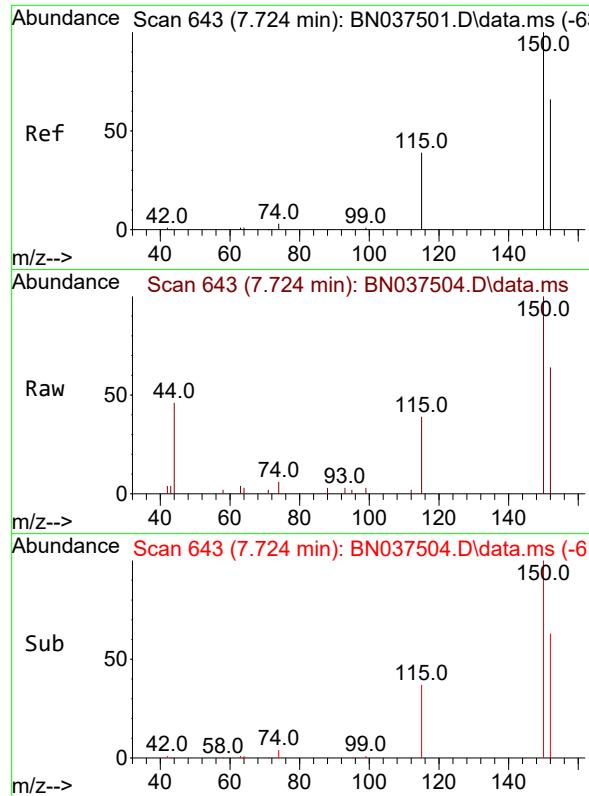
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

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

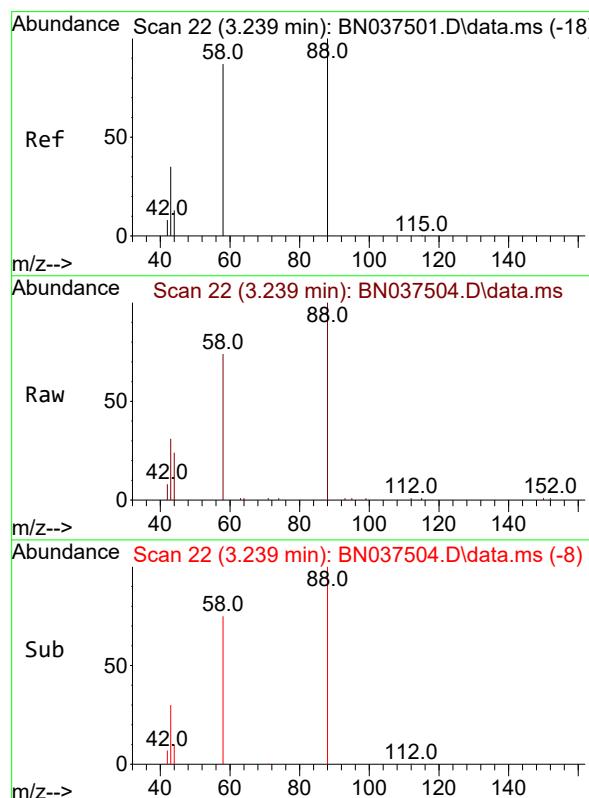
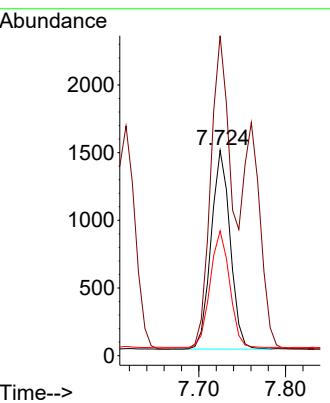




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

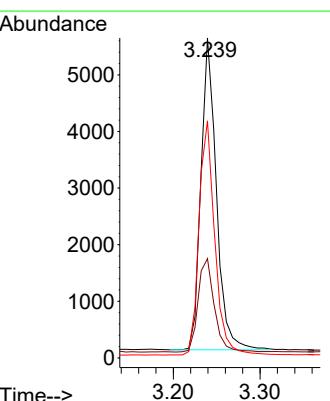
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

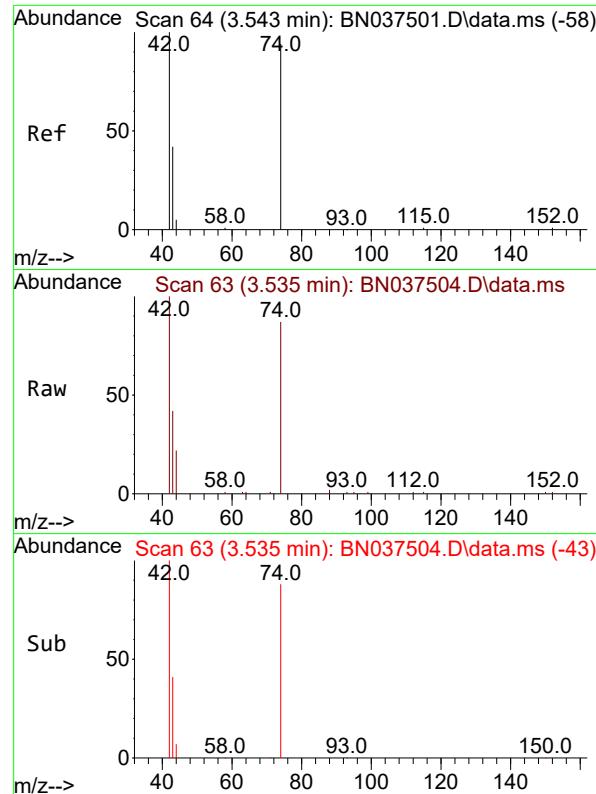
Tgt Ion:152 Resp: 2243  
Ion Ratio Lower Upper  
152 100  
150 155.8 119.8 179.8  
115 60.8 49.1 73.7



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

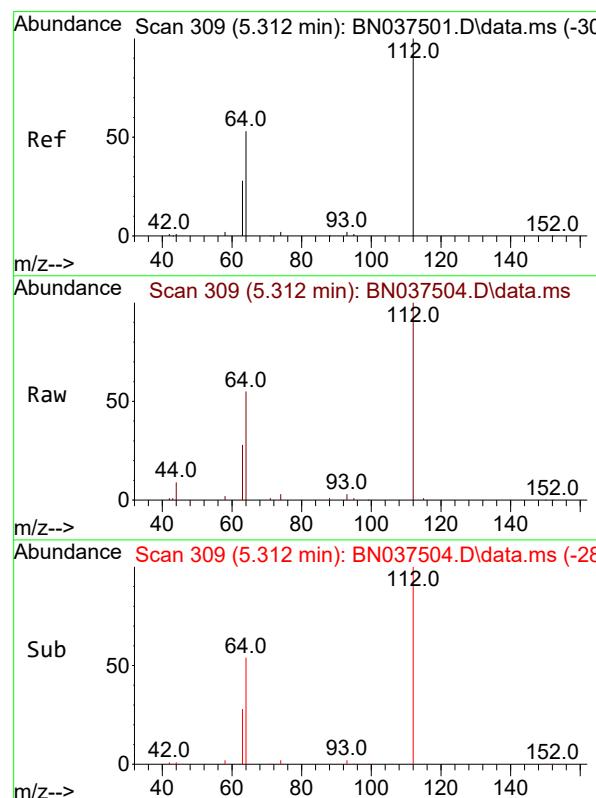
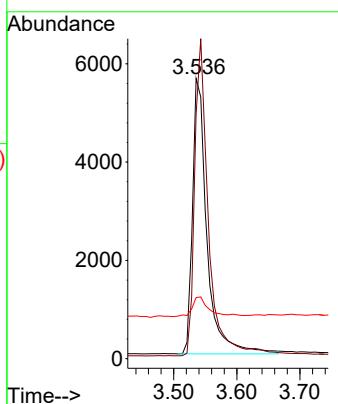
Tgt Ion: 88 Resp: 6815  
Ion Ratio Lower Upper  
88 100  
43 31.7 27.5 41.3  
58 77.1 62.7 94.1





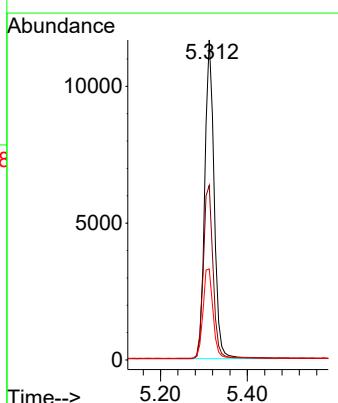
#3  
n-Nitrosodimethylamine  
Concen: 3.298 ng  
RT: 3.535 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.007 min  
Lab File: BN037504.D  
ClientSampleId : SSTDICC3.2  
Acq: 15 Jul 2025 15:38

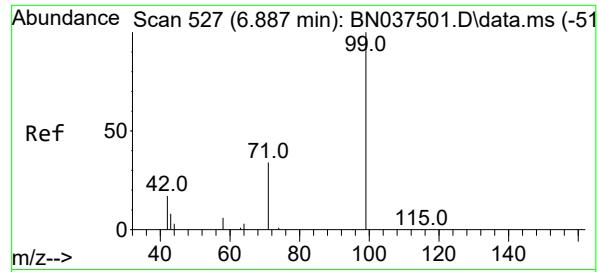
Tgt Ion: 42 Resp: 8946  
Ion Ratio Lower Upper  
42 100  
74 110.0 91.8 137.6  
44 8.4 15.0 22.6#



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

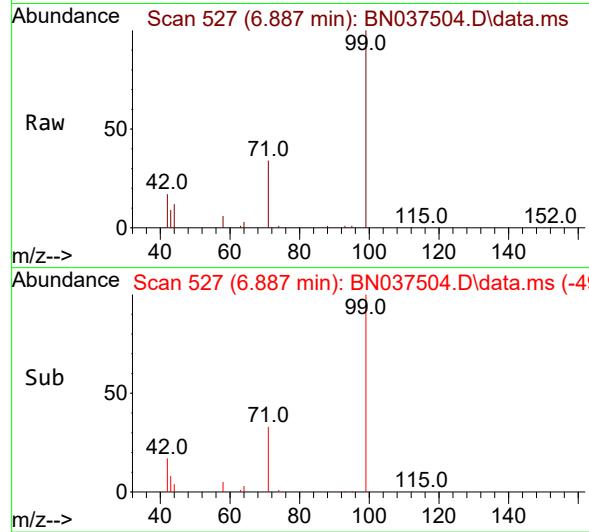
Tgt Ion: 112 Resp: 17416  
Ion Ratio Lower Upper  
112 100  
64 56.7 45.1 67.7  
63 29.6 23.8 35.8



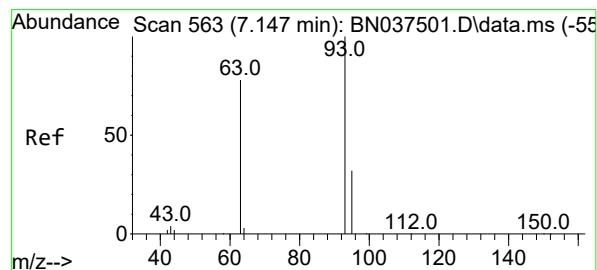
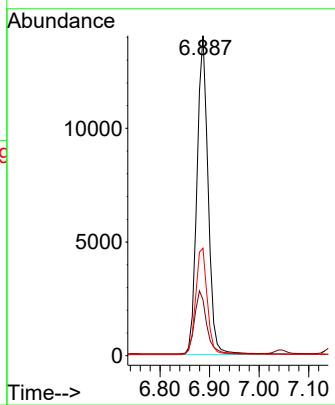


#5  
 Phenol-d6  
 Concen: 3.169 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

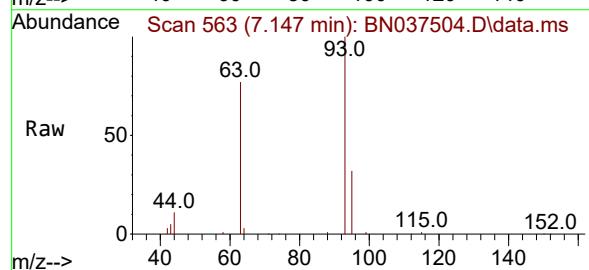
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2



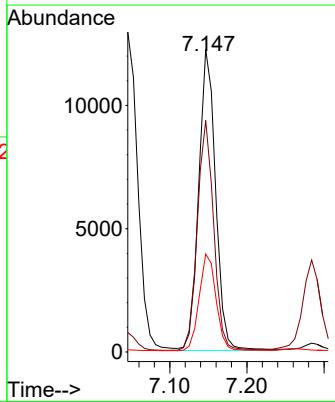
Tgt Ion: 99 Resp: 22047  
 Ion Ratio Lower Upper  
 99 100  
 42 21.2 17.1 25.7  
 71 34.8 27.8 41.8

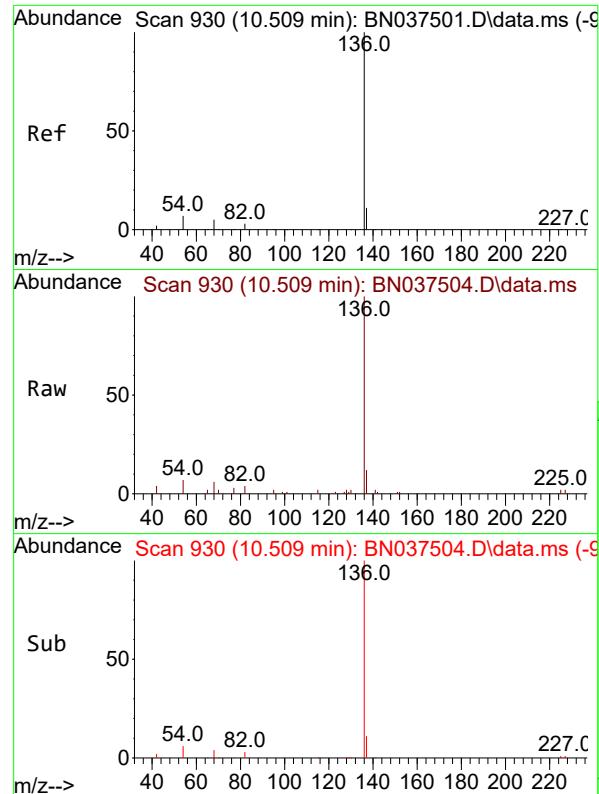


#6  
 bis(2-Chloroethyl)ether  
 Concen: 3.203 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38



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





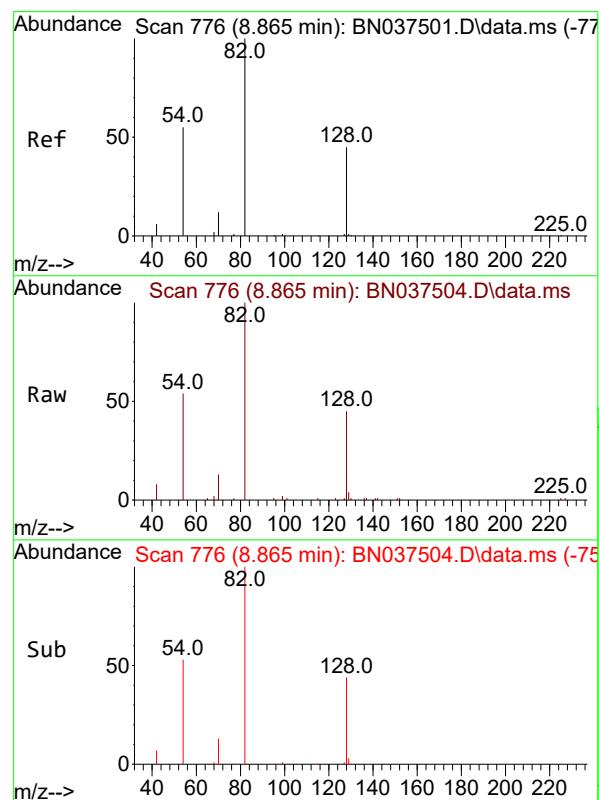
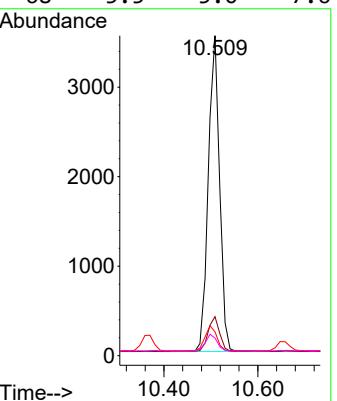
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

Tgt Ion:136 Resp: 5878

Ion Ratio Lower Upper

|     |      |     |      |
|-----|------|-----|------|
| 136 | 100  |     |      |
| 137 | 12.2 | 9.8 | 14.8 |
| 54  | 7.5  | 6.6 | 9.8  |
| 68  | 5.5  | 5.0 | 7.6  |

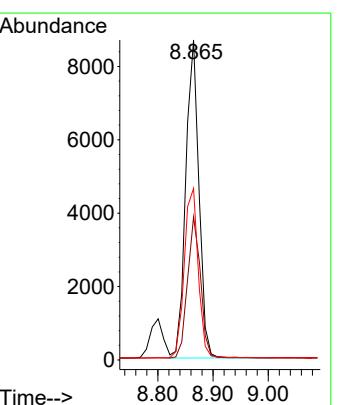


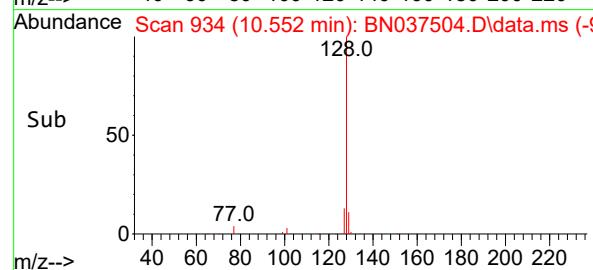
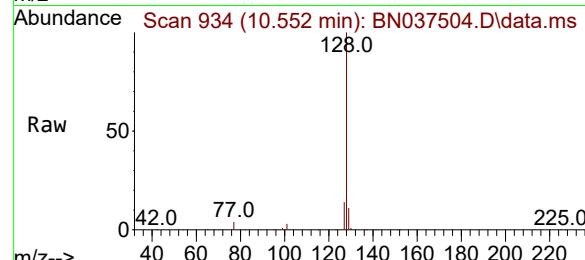
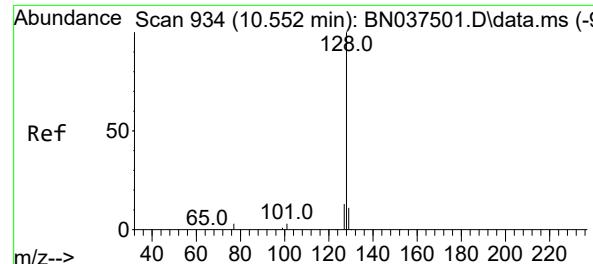
#8  
 Nitrobenzene-d5  
 Concen: 3.261 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Tgt Ion: 82 Resp: 14330

Ion Ratio Lower Upper

|     |      |      |      |
|-----|------|------|------|
| 82  | 100  |      |      |
| 128 | 44.7 | 37.5 | 56.3 |
| 54  | 53.6 | 45.3 | 67.9 |





#9

Naphthalene

Concen: 3.219 ng

RT: 10.552 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

Tgt Ion:128 Resp: 50467

Ion Ratio Lower Upper

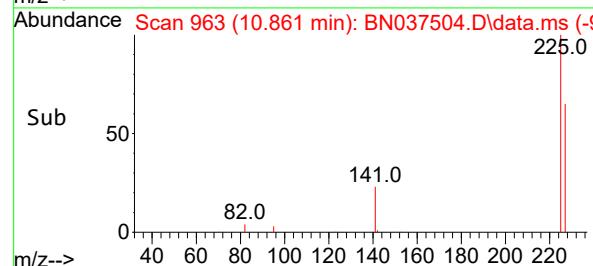
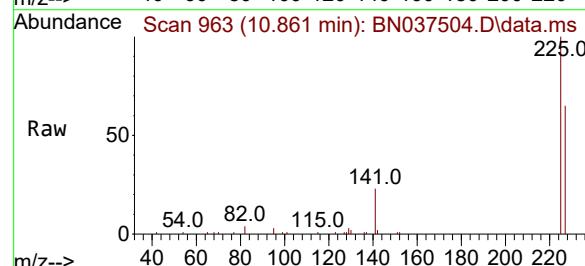
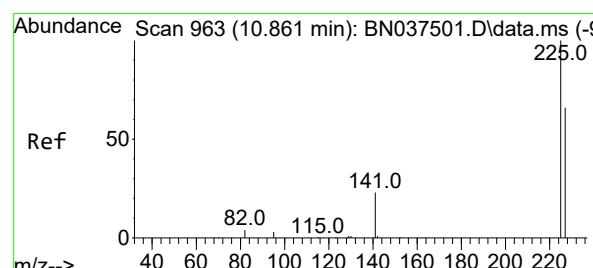
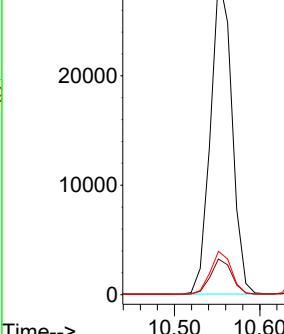
128 100

129 11.1 9.7 14.5

127 13.6 11.5 17.3

Abundance

10.552



#10

Hexachlorobutadiene

Concen: 3.206 ng

RT: 10.861 min Scan# 963

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Tgt Ion:225 Resp: 11106

Ion Ratio Lower Upper

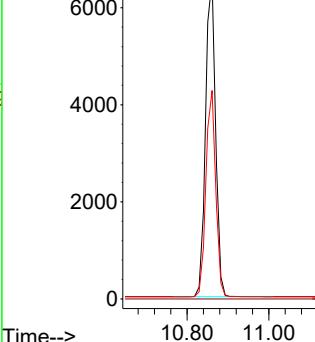
225 100

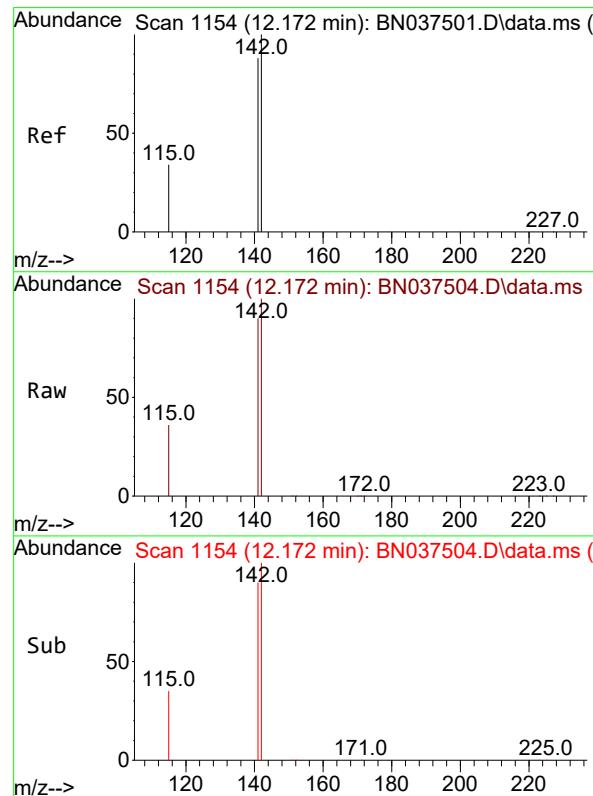
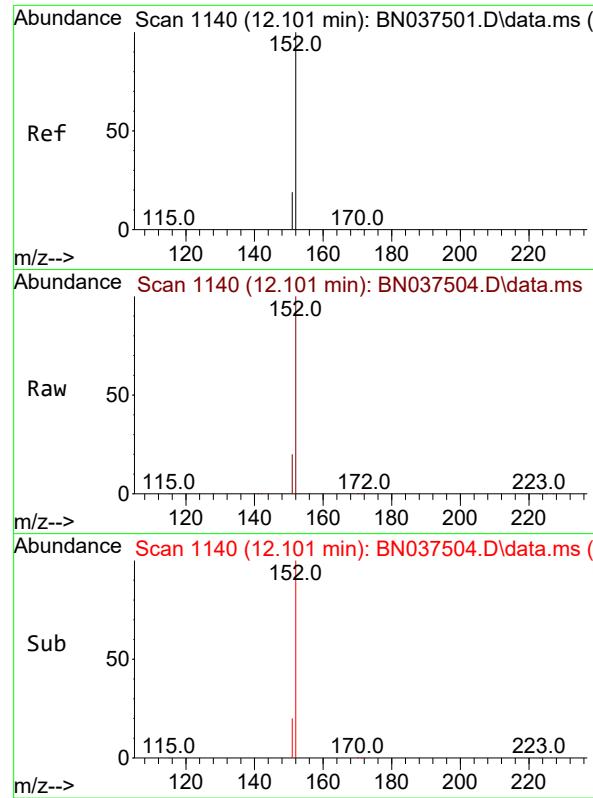
223 0.0 0.0 0.0

227 63.5 51.0 76.4

Abundance

10.861





#11

2-Methylnaphthalene-d10

Concen: 3.293 ng

RT: 12.101 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

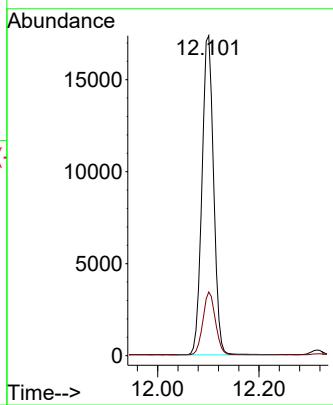
SSTDICC3.2

Tgt Ion:152 Resp: 27759

Ion Ratio Lower Upper

152 100

151 21.1 16.8 25.2



#12

2-Methylnaphthalene

Concen: 3.358 ng

RT: 12.172 min Scan# 1154

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

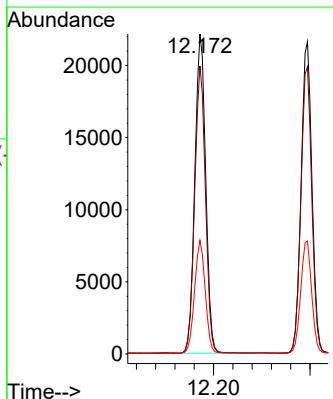
Tgt Ion:142 Resp: 34611

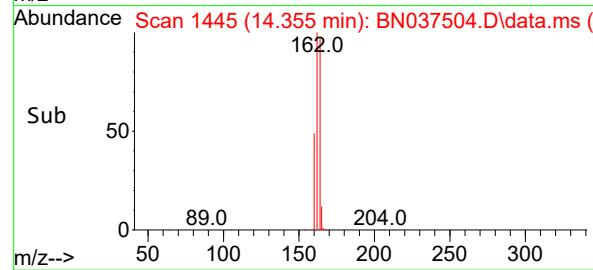
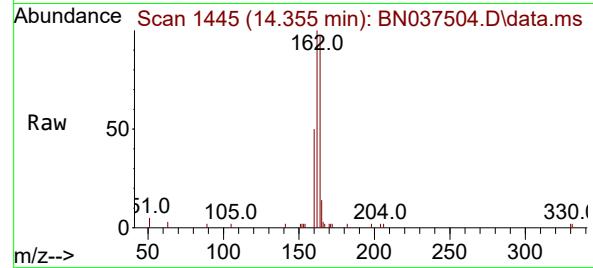
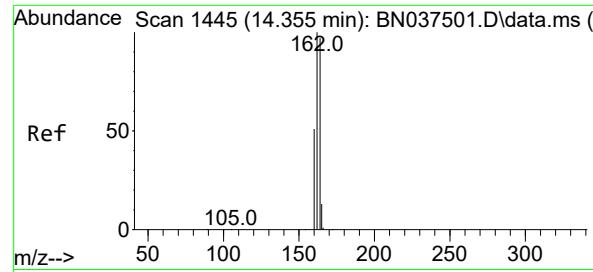
Ion Ratio Lower Upper

142 100

141 90.0 71.0 106.4

115 35.5 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

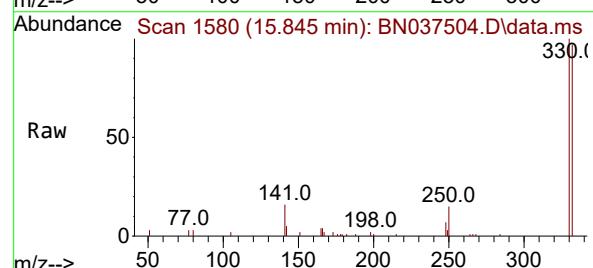
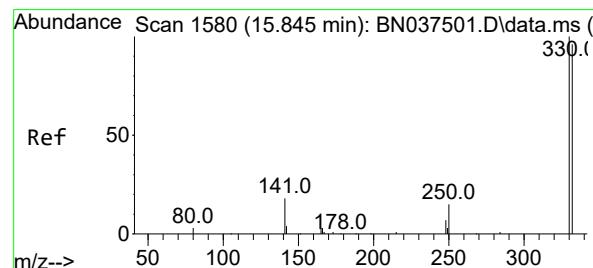
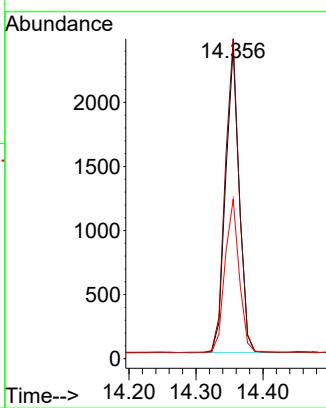
Tgt Ion:164 Resp: 3382

Ion Ratio Lower Upper

164 100

162 102.9 82.0 123.0

160 51.2 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 3.494 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

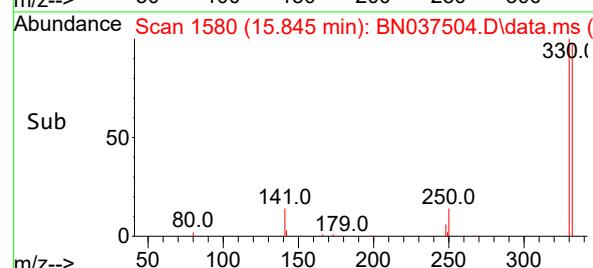
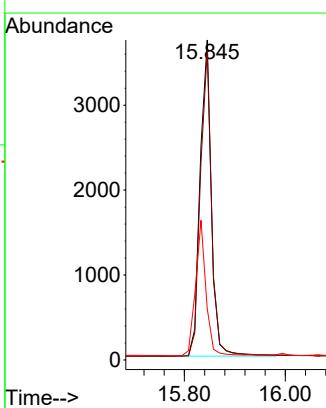
Tgt Ion:330 Resp: 5808

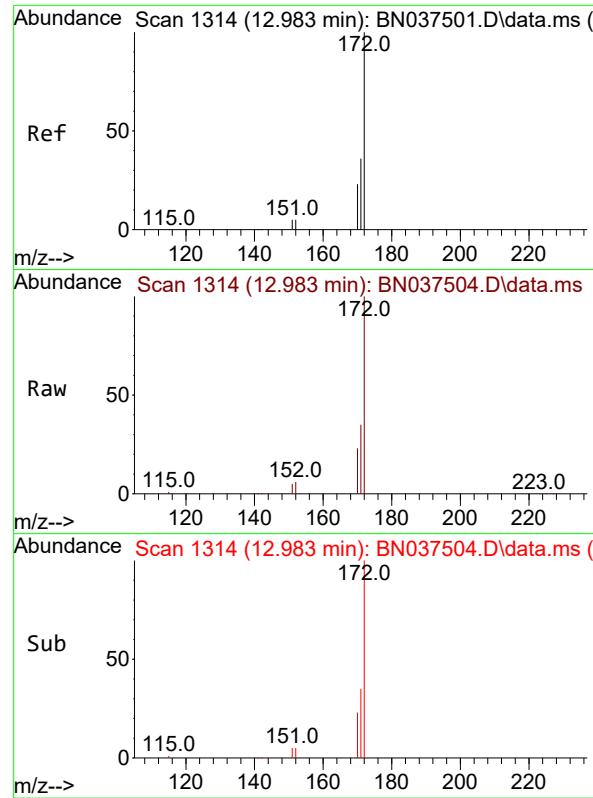
Ion Ratio Lower Upper

330 100

332 95.7 76.1 114.1

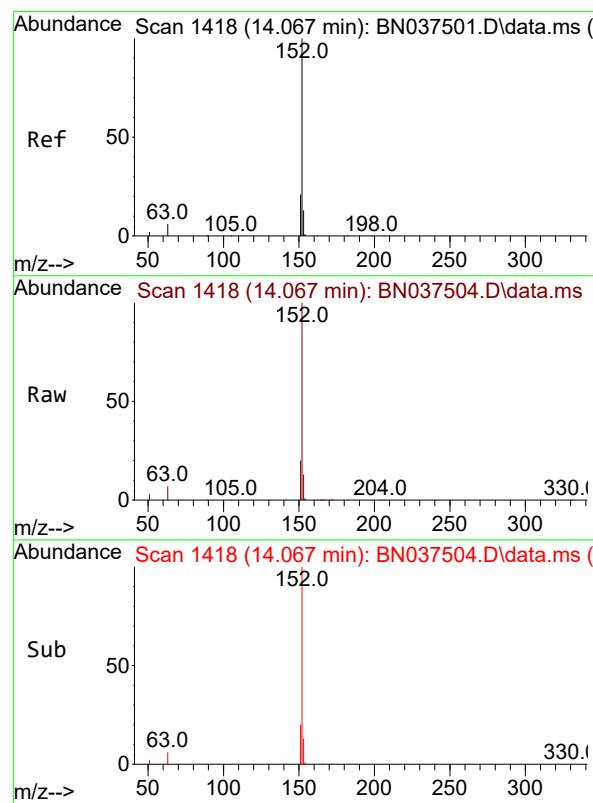
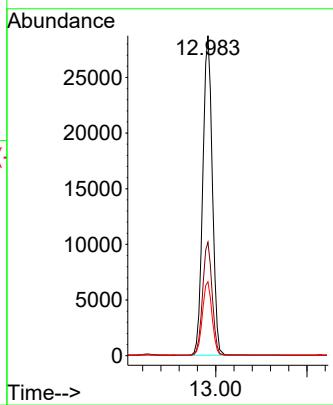
141 39.8 33.4 50.0





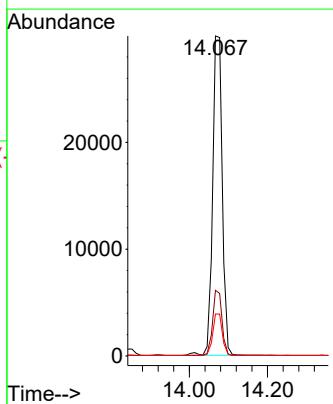
#15  
2-Fluorobiphenyl  
Concen: 3.393 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38  
ClientSampleId : SSTDICC3.2

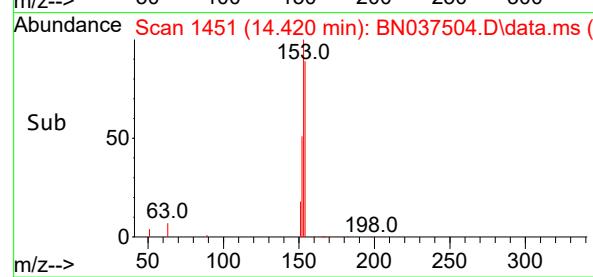
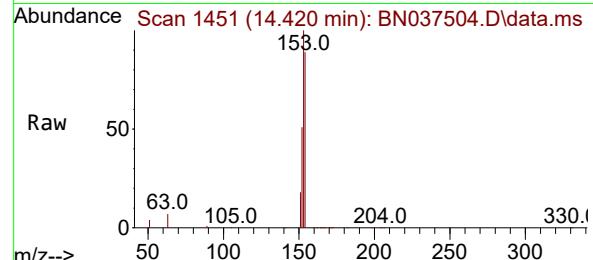
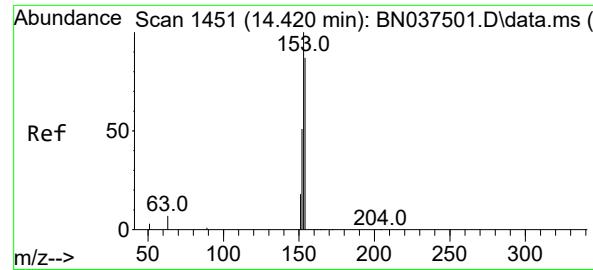
Tgt Ion:172 Resp: 59667  
Ion Ratio Lower Upper  
172 100  
171 35.4 29.4 44.2  
170 23.1 19.4 29.0



#16  
Acenaphthylene  
Concen: 3.385 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:152 Resp: 51277  
Ion Ratio Lower Upper  
152 100  
151 19.8 15.9 23.9  
153 13.0 10.7 16.1





#17

Acenaphthene

Concen: 3.286 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

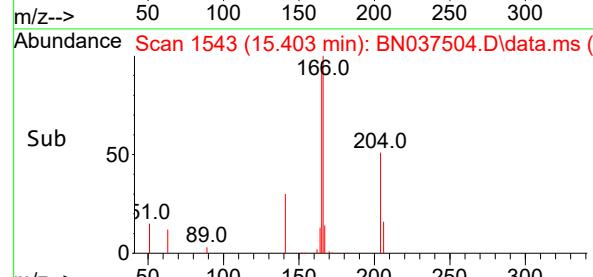
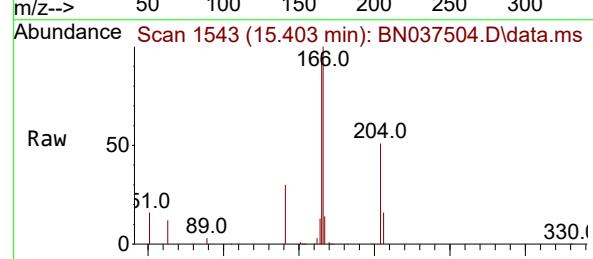
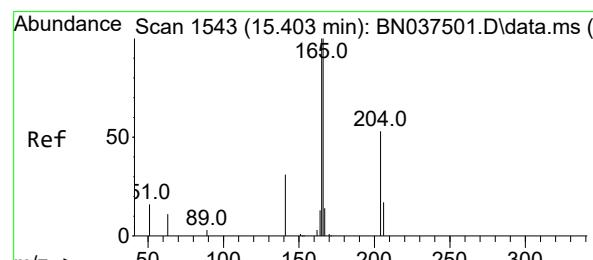
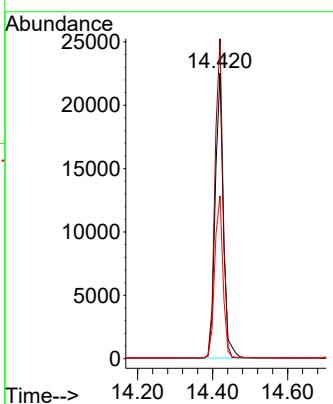
Tgt Ion:154 Resp: 33858

Ion Ratio Lower Upper

154 100

153 109.6 89.2 133.8

152 57.7 48.0 72.0



#18

Fluorene

Concen: 3.276 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

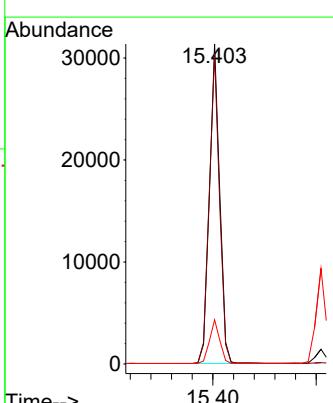
Tgt Ion:166 Resp: 43450

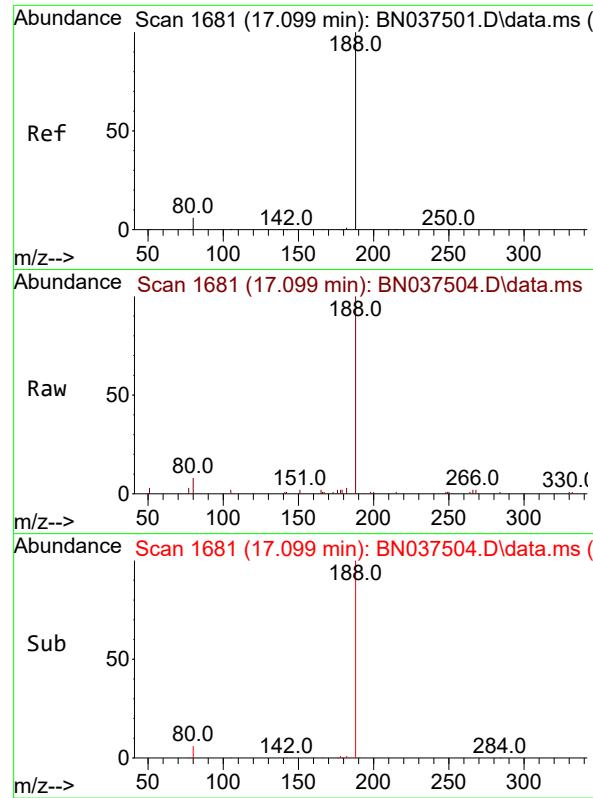
Ion Ratio Lower Upper

166 100

165 97.5 78.1 117.1

167 13.4 11.0 16.6



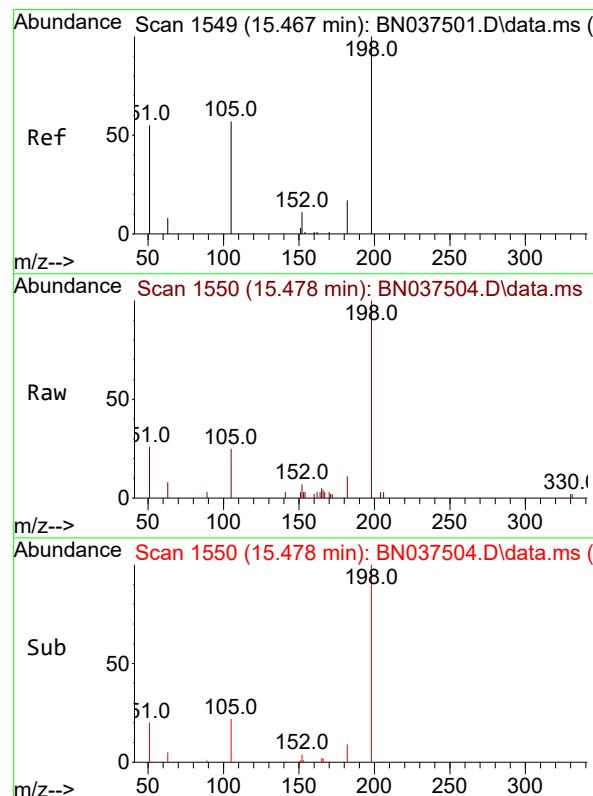
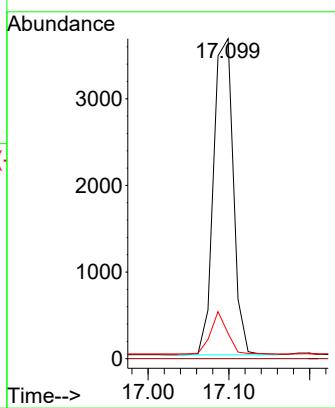


#19

Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.099 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

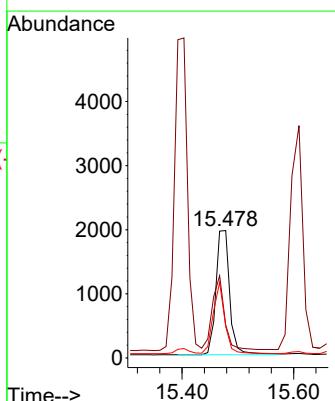
Tgt Ion:188 Resp: 6204  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 7.9 6.0 9.0

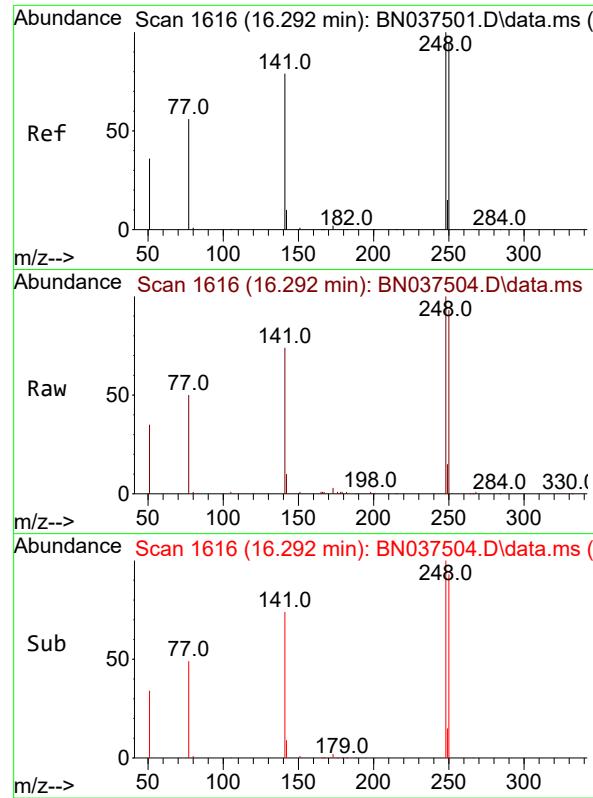


#20

4,6-Dinitro-2-methylphenol  
Concen: 3.233 ng  
RT: 15.478 min Scan# 1550  
Delta R.T. 0.011 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:198 Resp: 3484  
Ion Ratio Lower Upper  
198 100  
51 25.8 88.5 132.7#  
105 24.7 61.2 91.8#

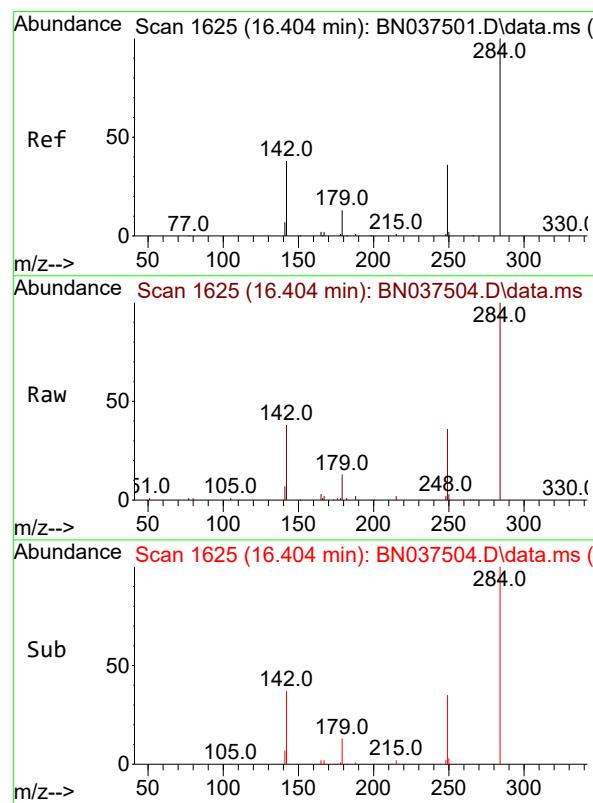
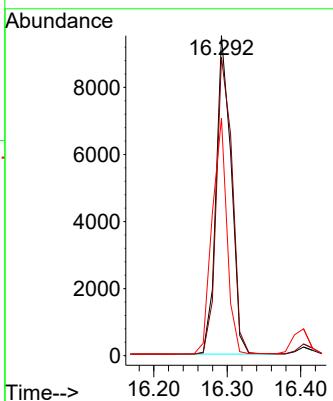




#21  
4-Bromophenyl-phenylether  
Concen: 3.395 ng  
RT: 16.292 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

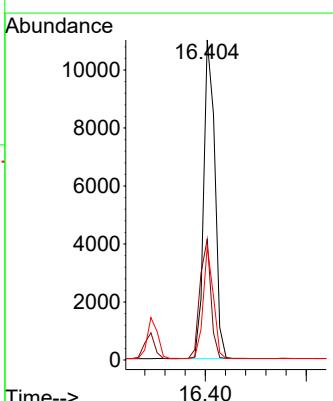
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

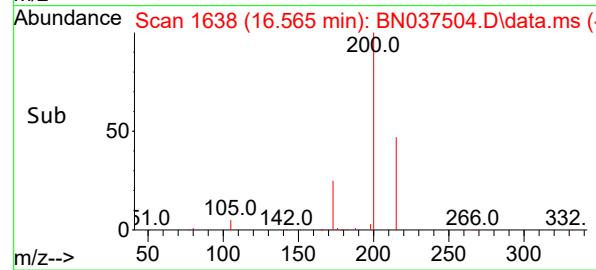
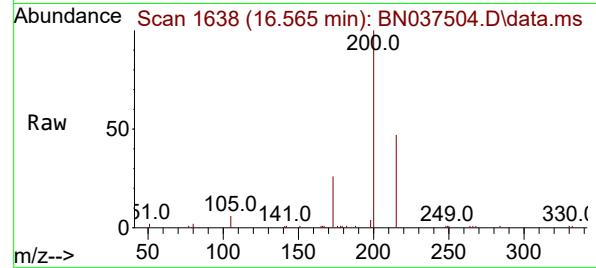
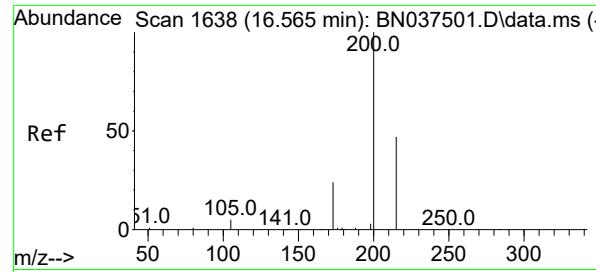
Tgt Ion:248 Resp: 13494  
Ion Ratio Lower Upper  
248 100  
250 93.3 76.2 114.2  
141 74.3 63.9 95.9



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

Tgt Ion:284 Resp: 16890  
Ion Ratio Lower Upper  
284 100  
142 36.7 28.9 43.3  
249 32.2 25.8 38.6

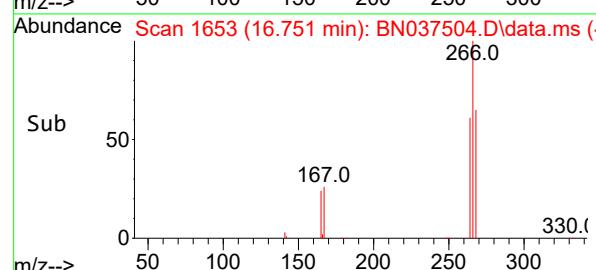
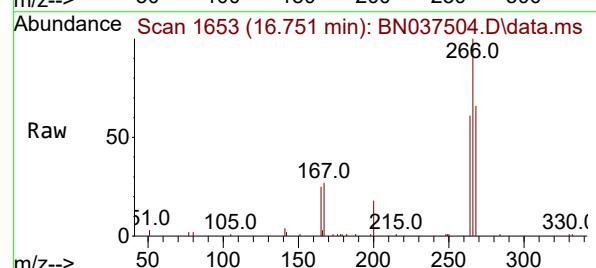
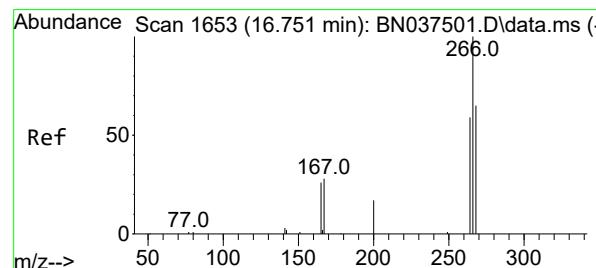
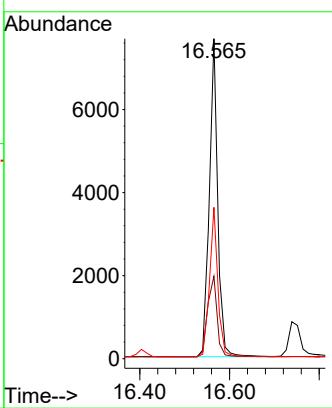




#23  
Atrazine  
Concen: 3.584 ng  
RT: 16.565 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

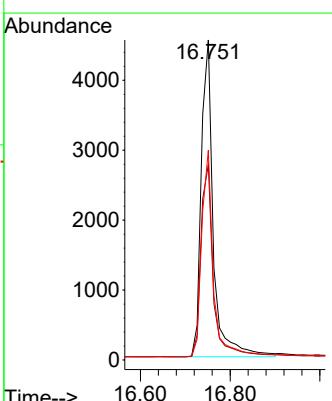
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

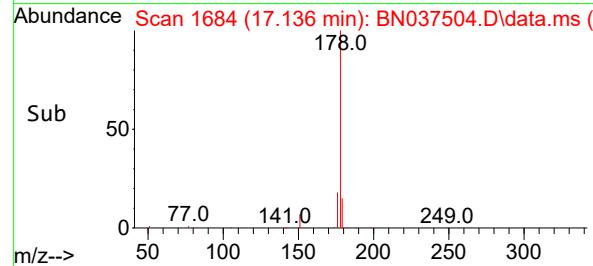
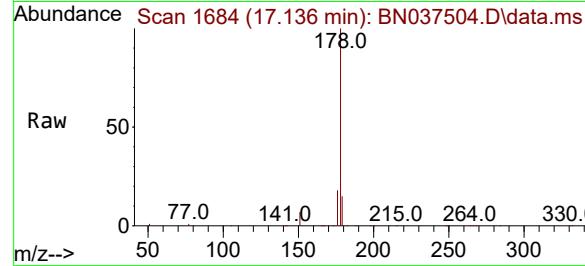
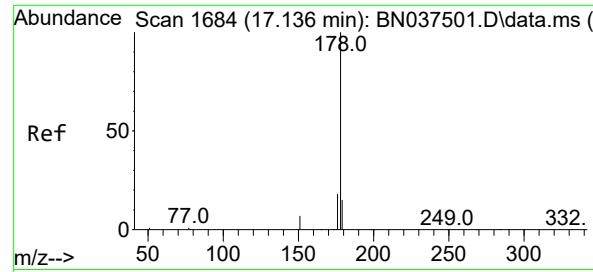
Tgt Ion:200 Resp: 9939  
Ion Ratio Lower Upper  
200 100  
173 25.8 23.2 34.8  
215 47.3 40.2 60.4



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

Tgt Ion:266 Resp: 8417  
Ion Ratio Lower Upper  
266 100  
264 62.4 49.3 73.9  
268 63.0 51.6 77.4





#25

Phenanthrene

Concen: 3.333 ng

RT: 17.136 min Scan# 1

Instrument:

BNA\_N

Delta R.T. 0.000 min

Lab File: BN037504.D

ClientSampleId :

Acq: 15 Jul 2025 15:38

SSTDICC3.2

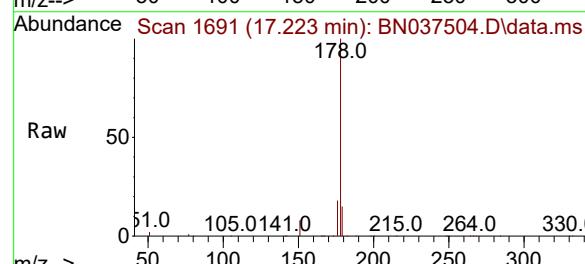
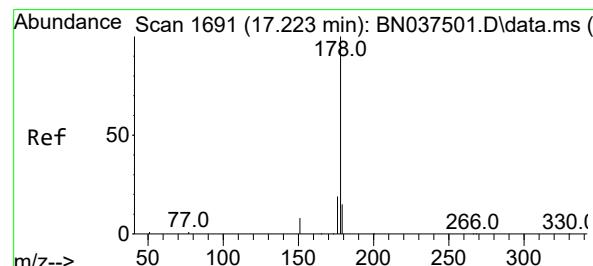
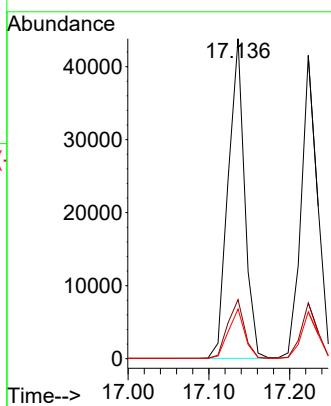
Tgt Ion:178 Resp: 61959

Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.6

179 15.3 12.2 18.2



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

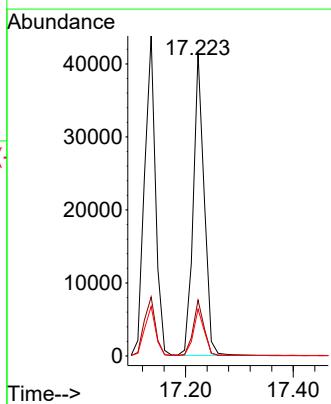
Tgt Ion:178 Resp: 58358

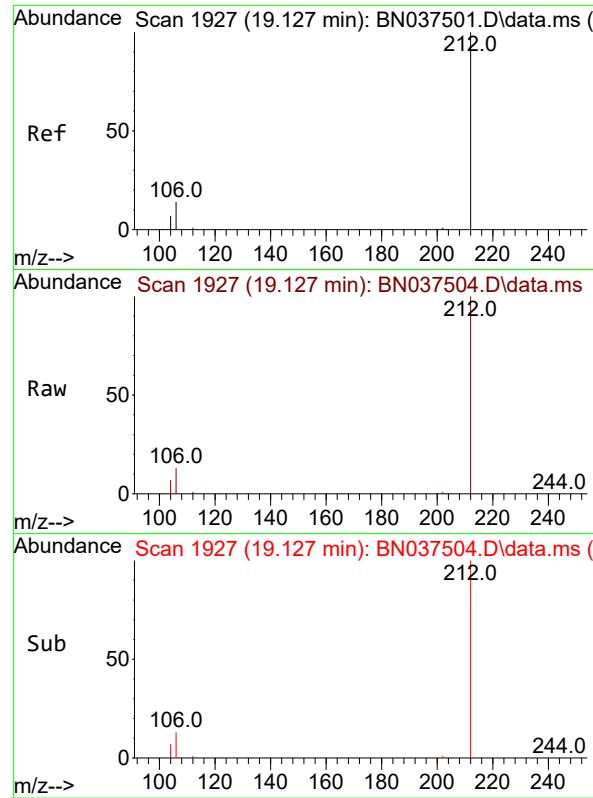
Ion Ratio Lower Upper

178 100

176 18.2 14.7 22.1

179 15.4 12.3 18.5

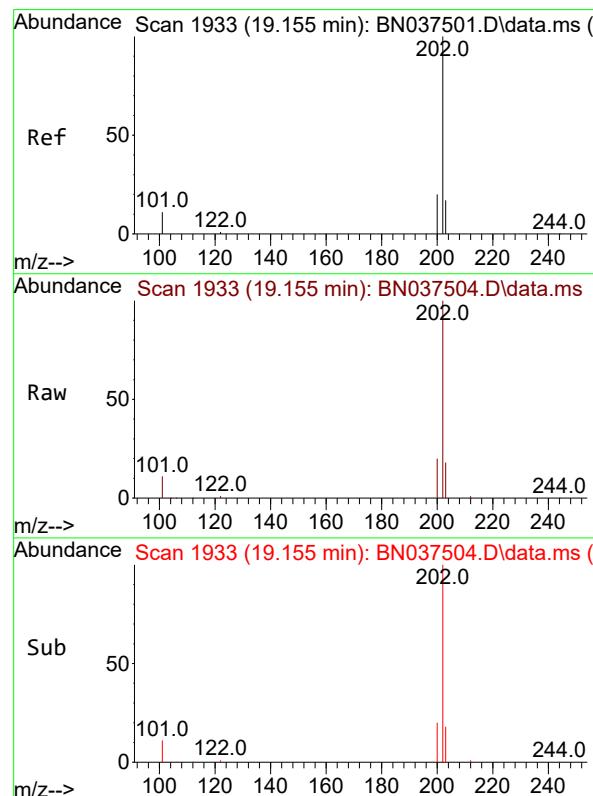
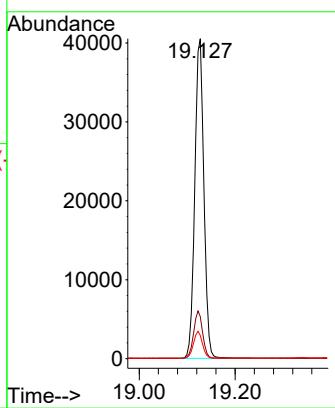




#27  
**Fluoranthene-d10**  
Concen: 3.257 ng  
RT: 19.127 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

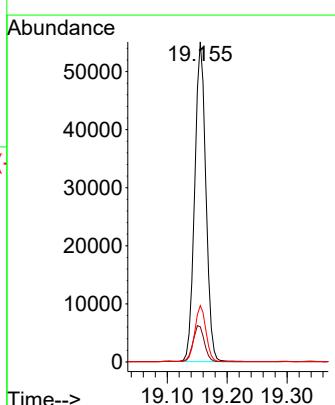
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

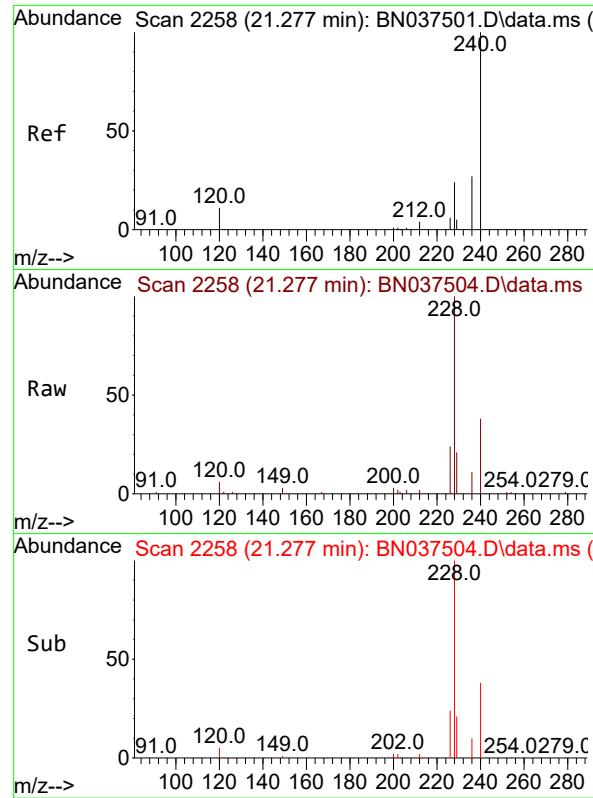
Tgt Ion:212 Resp: 53521  
Ion Ratio Lower Upper  
212 100  
106 14.6 12.2 18.4  
104 8.2 6.7 10.1



#28  
**Fluoranthene**  
Concen: 3.313 ng  
RT: 19.155 min Scan# 1933  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:202 Resp: 71018  
Ion Ratio Lower Upper  
202 100  
101 11.7 9.8 14.6  
203 17.4 13.6 20.4





#29

Chrysene-d<sub>12</sub>

Concen: 0.400 ng

RT: 21.277 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

Tgt Ion:240 Resp: 5331

Ion Ratio Lower Upper

240 100

120 14.9 10.7 16.1

236 28.6 22.6 33.8

Abundance

4000 21.277

3000

2000

1000

0

Time--&gt;

21.20 21.40

#30

Pyrene

Concen: 3.306 ng

RT: 19.517 min Scan# 2011

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Tgt Ion:202 Resp: 71002

Ion Ratio Lower Upper

202 100

200 20.5 16.5 24.7

203 17.8 14.3 21.5

Abundance

50000 19.517

40000

30000

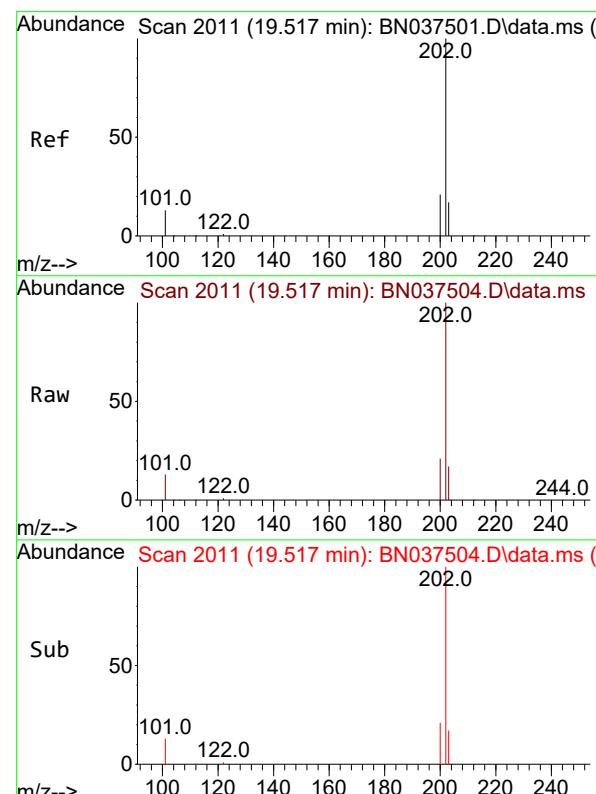
20000

10000

0

Time--&gt;

19.40 19.60



#30

Pyrene

Concen: 3.306 ng

RT: 19.517 min Scan# 2011

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Tgt Ion:202 Resp: 71002

Ion Ratio Lower Upper

202 100

200 20.5 16.5 24.7

203 17.8 14.3 21.5

Abundance

50000 19.517

40000

30000

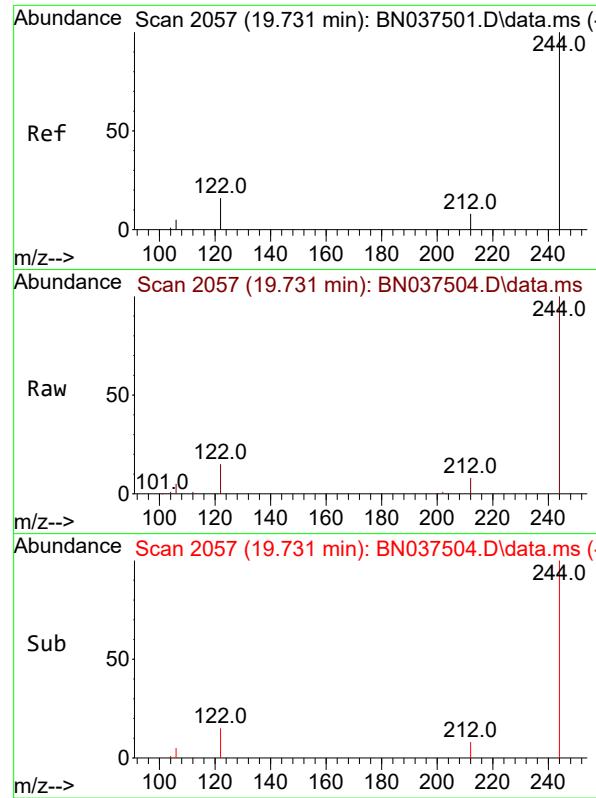
20000

10000

0

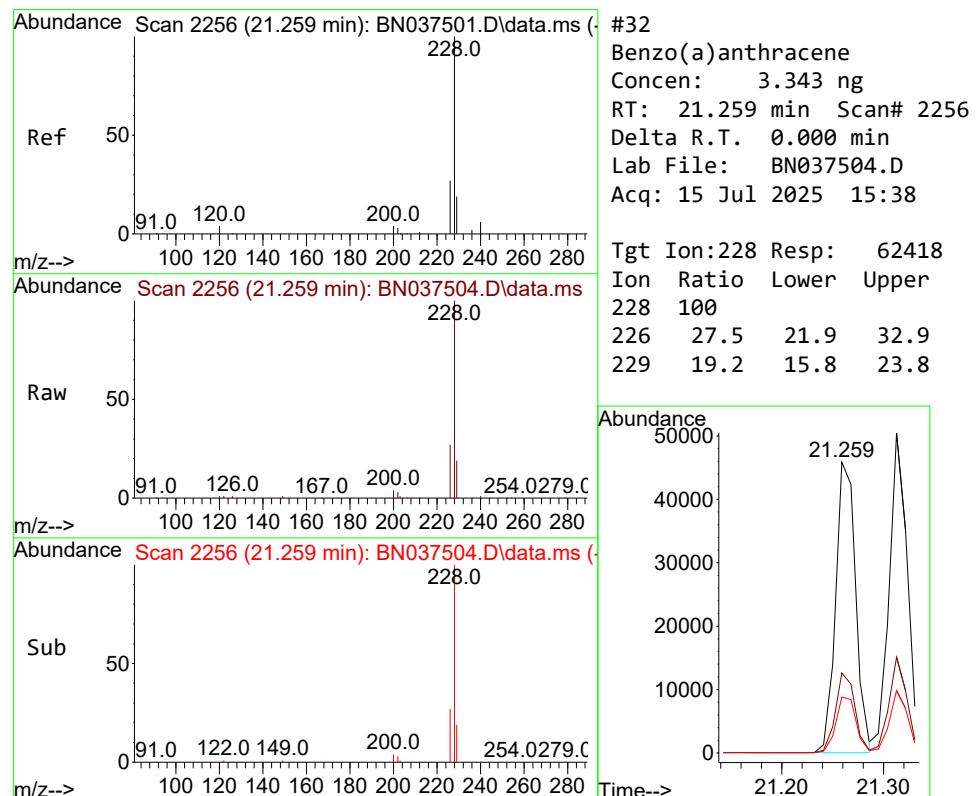
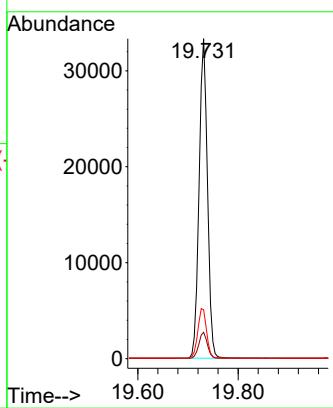
Time--&gt;

19.40 19.60



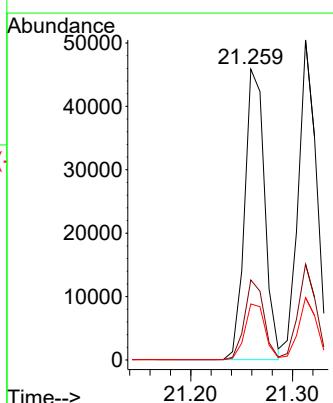
#31  
Terphenyl-d14  
Concen: 3.357 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38  
ClientSampleId : SSTDICC3.2

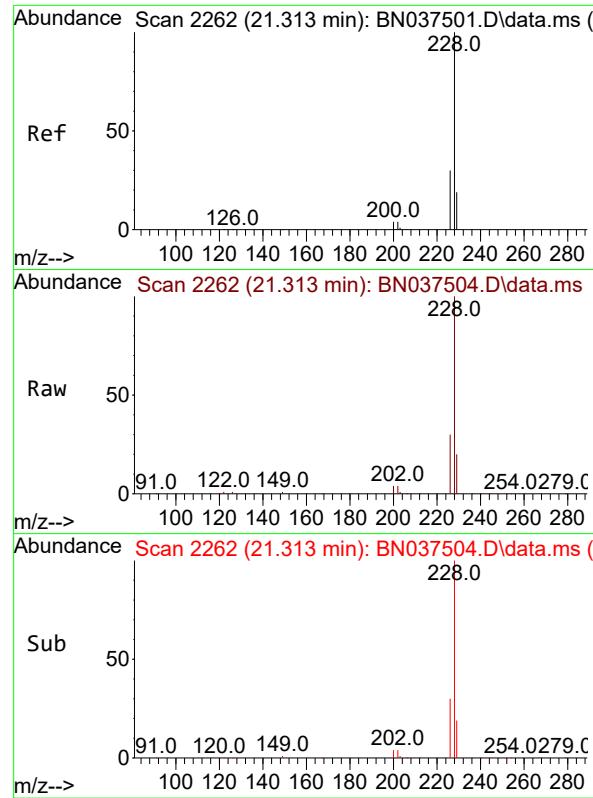
Tgt Ion:244 Resp: 38458  
Ion Ratio Lower Upper  
244 100  
212 8.3 7.4 11.2  
122 15.3 13.6 20.4



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

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

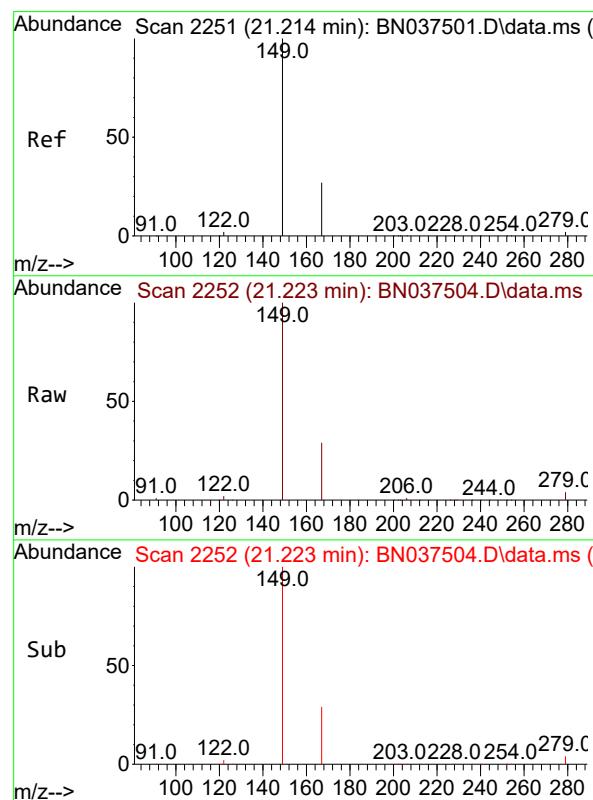
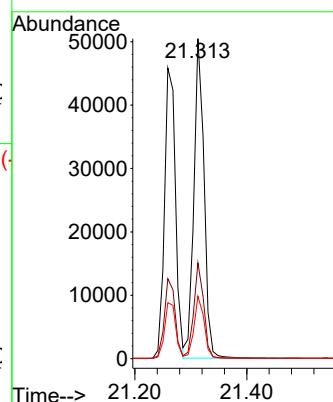




#33  
Chrysene  
Concen: 3.268 ng  
RT: 21.313 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

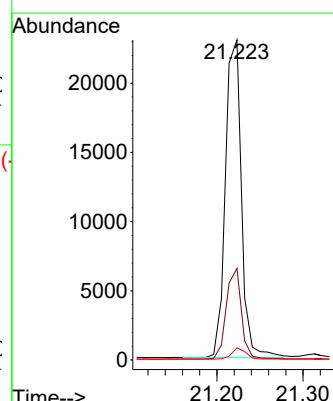
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

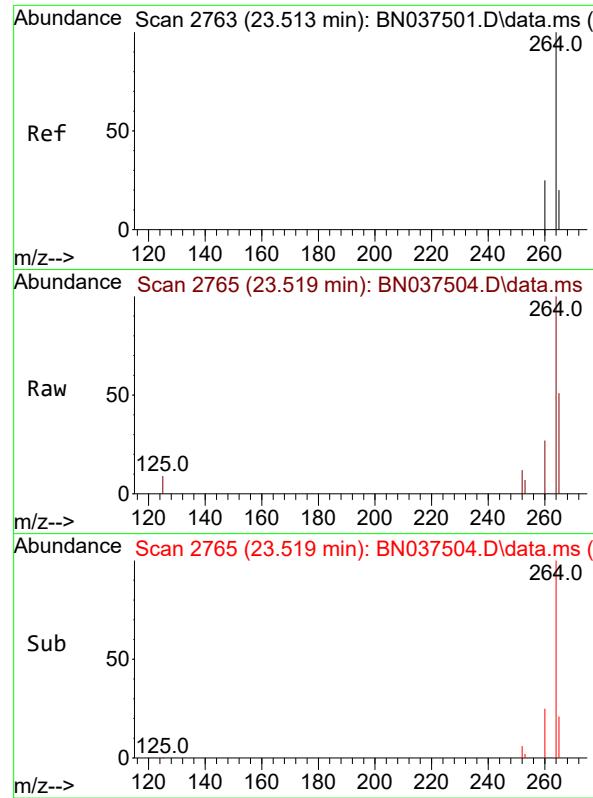
Tgt Ion:228 Resp: 63542  
Ion Ratio Lower Upper  
228 100  
226 30.0 24.2 36.4  
229 19.5 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 3.519 ng  
RT: 21.223 min Scan# 2252  
Delta R.T. 0.009 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:149 Resp: 29561  
Ion Ratio Lower Upper  
149 100  
167 27.0 21.8 32.8  
279 3.1 3.0 4.4

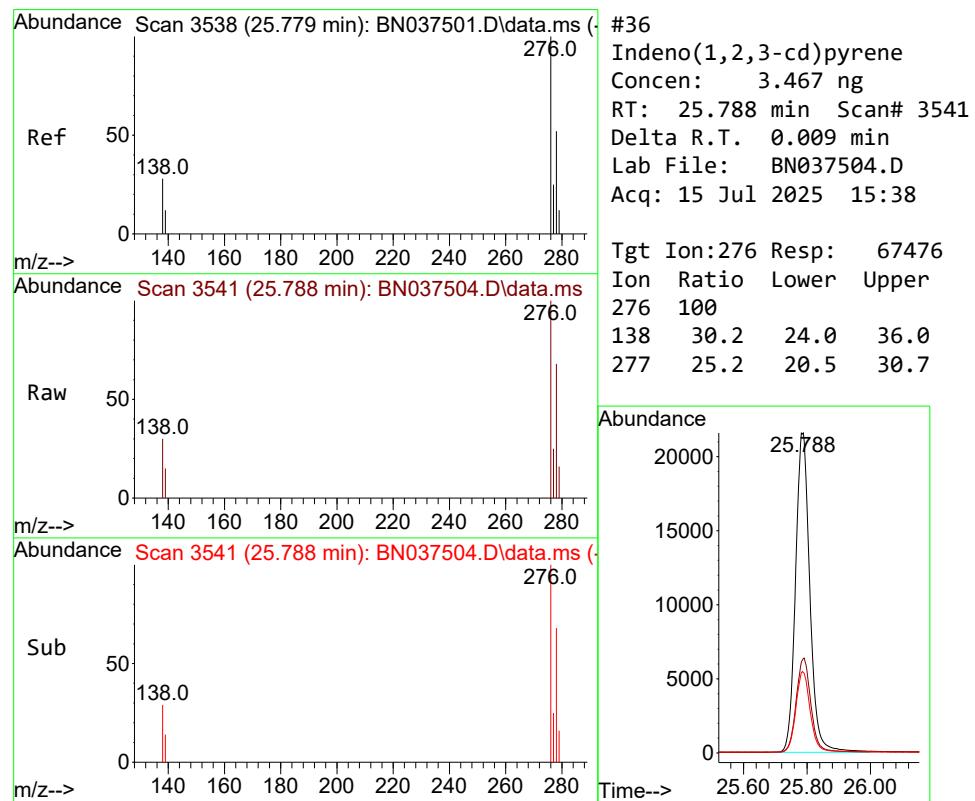
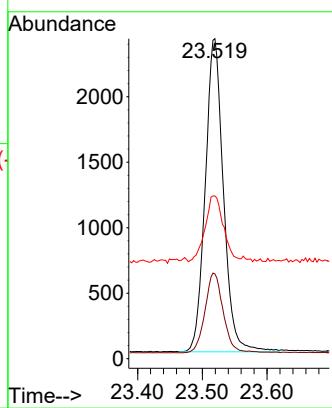




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.519 min Scan# 2  
Delta R.T. 0.006 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

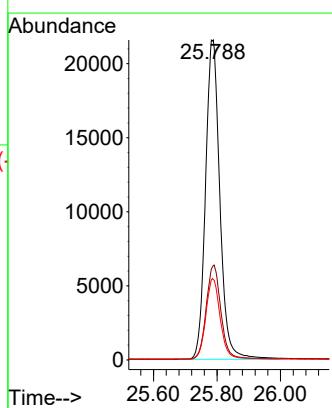
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

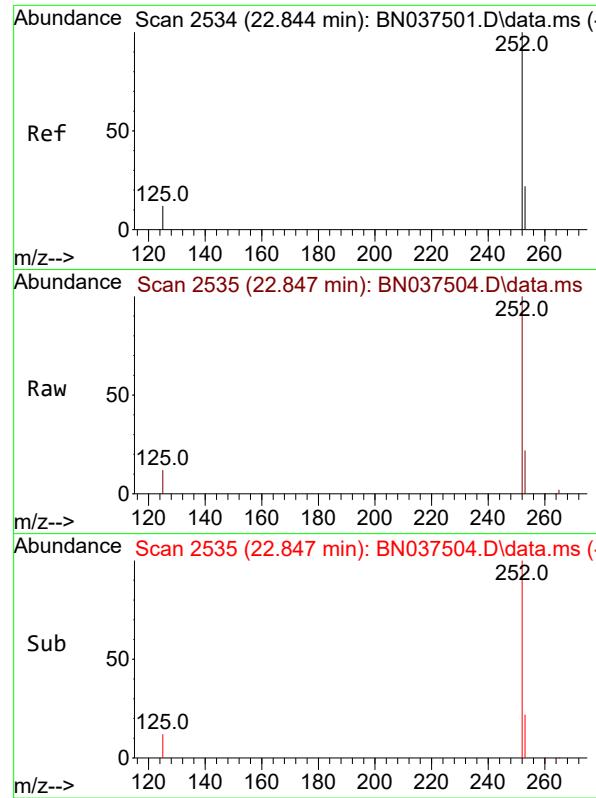
Tgt Ion:264 Resp: 4672  
Ion Ratio Lower Upper  
264 100  
260 26.5 21.2 31.8  
265 50.8 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 3.467 ng  
RT: 25.788 min Scan# 3541  
Delta R.T. 0.009 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:276 Resp: 67476  
Ion Ratio Lower Upper  
276 100  
138 30.2 24.0 36.0  
277 25.2 20.5 30.7

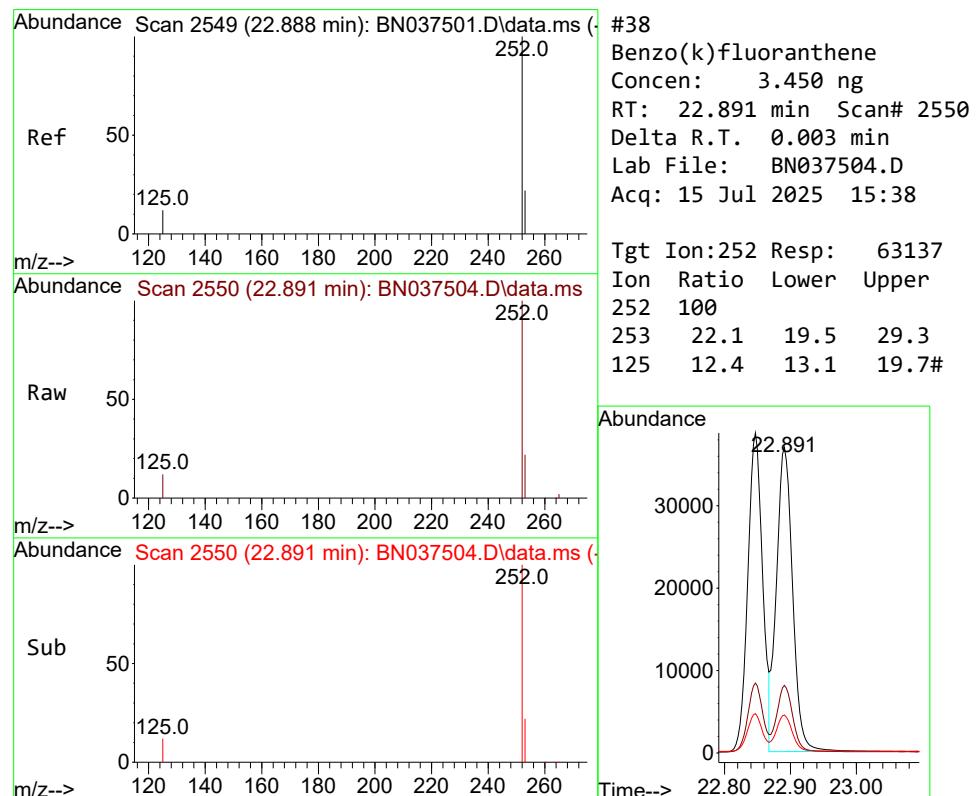
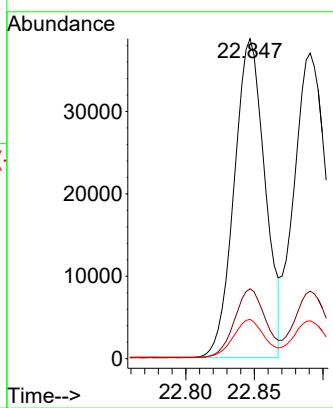




#37  
 Benzo(b)fluoranthene  
 Concen: 3.407 ng  
 RT: 22.847 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

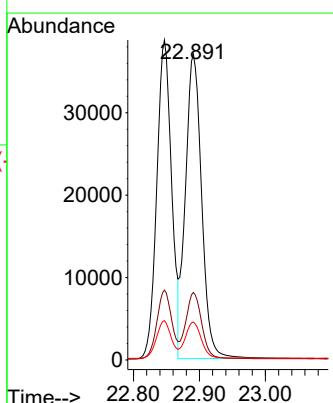
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

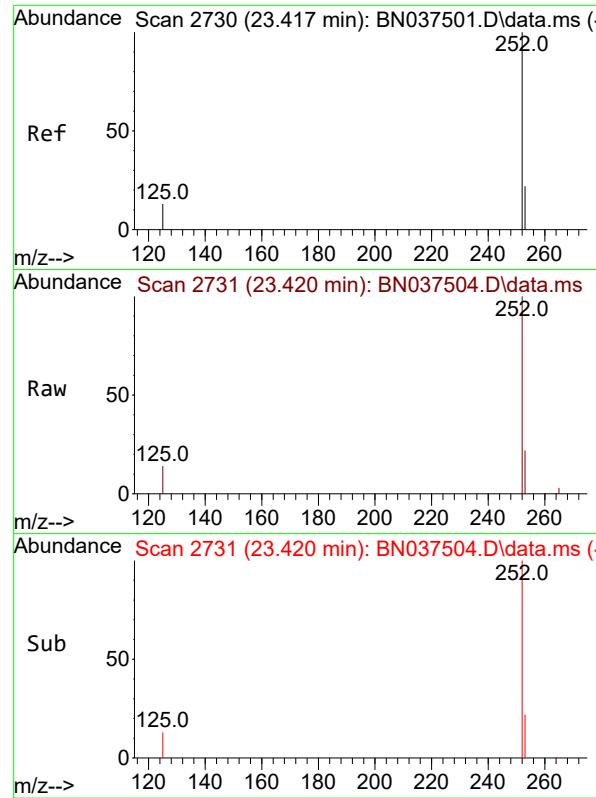
Tgt Ion:252 Resp: 60420  
 Ion Ratio Lower Upper  
 252 100  
 253 21.9 19.5 29.3  
 125 12.3 13.0 19.6#



#38  
 Benzo(k)fluoranthene  
 Concen: 3.450 ng  
 RT: 22.891 min Scan# 2550  
 Delta R.T. 0.003 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Tgt Ion:252 Resp: 63137  
 Ion Ratio Lower Upper  
 252 100  
 253 22.1 19.5 29.3  
 125 12.4 13.1 19.7#

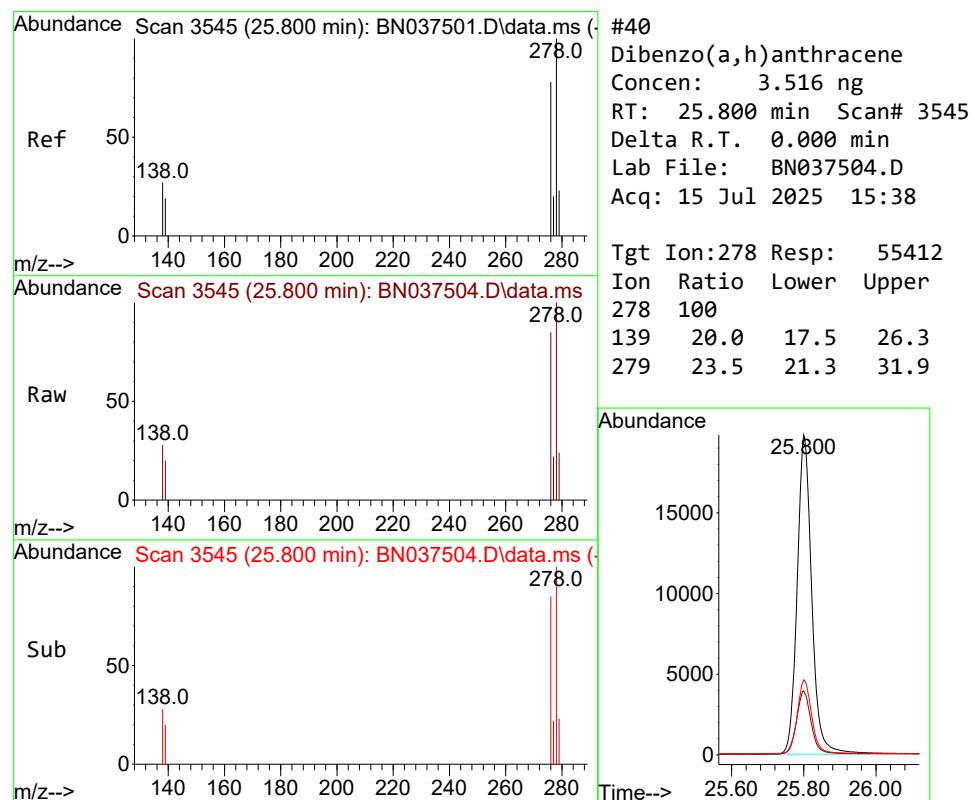
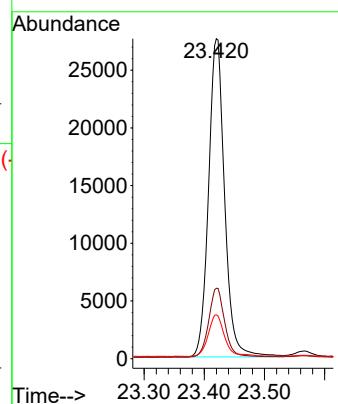




#39  
 Benzo(a)pyrene  
 Concen: 3.459 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

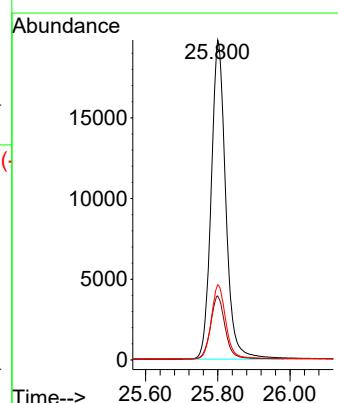
Instrument : BNA\_N  
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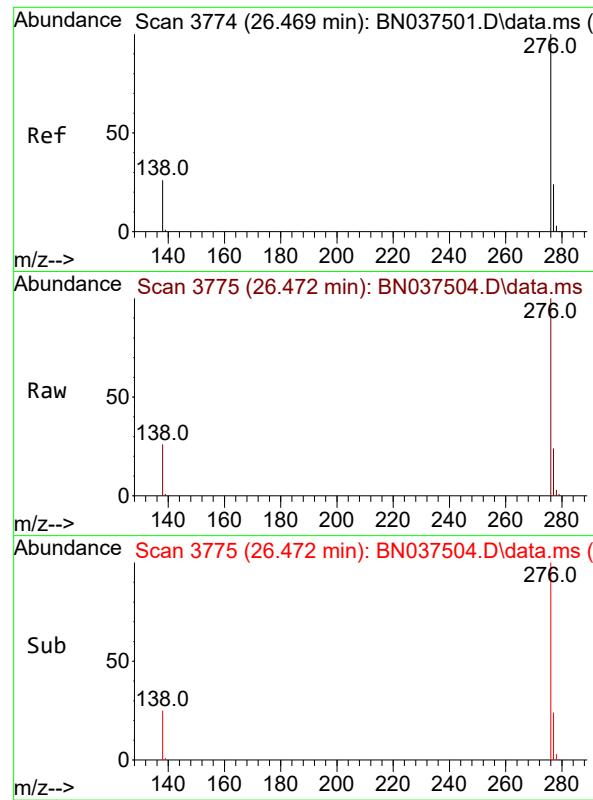
Tgt Ion:252 Resp: 51171  
 Ion Ratio Lower Upper  
 252 100  
 253 22.0 19.9 29.9  
 125 13.7 15.2 22.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 3.516 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Tgt Ion:278 Resp: 55412  
 Ion Ratio Lower Upper  
 278 100  
 139 20.0 17.5 26.3  
 279 23.5 21.3 31.9

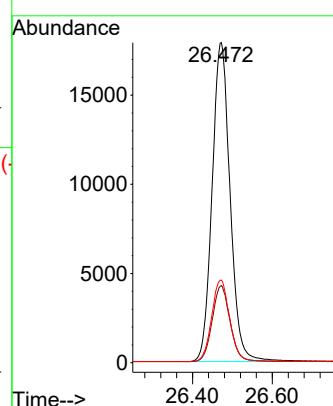




#41  
Benzo(g,h,i)perylene  
Concen: 3.430 ng  
RT: 26.472 min Scan# 3  
Delta R.T. 0.003 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

Tgt Ion:276 Resp: 55959  
Ion Ratio Lower Upper  
276 100  
277 24.1 20.9 31.3  
138 25.8 22.6 33.8



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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

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

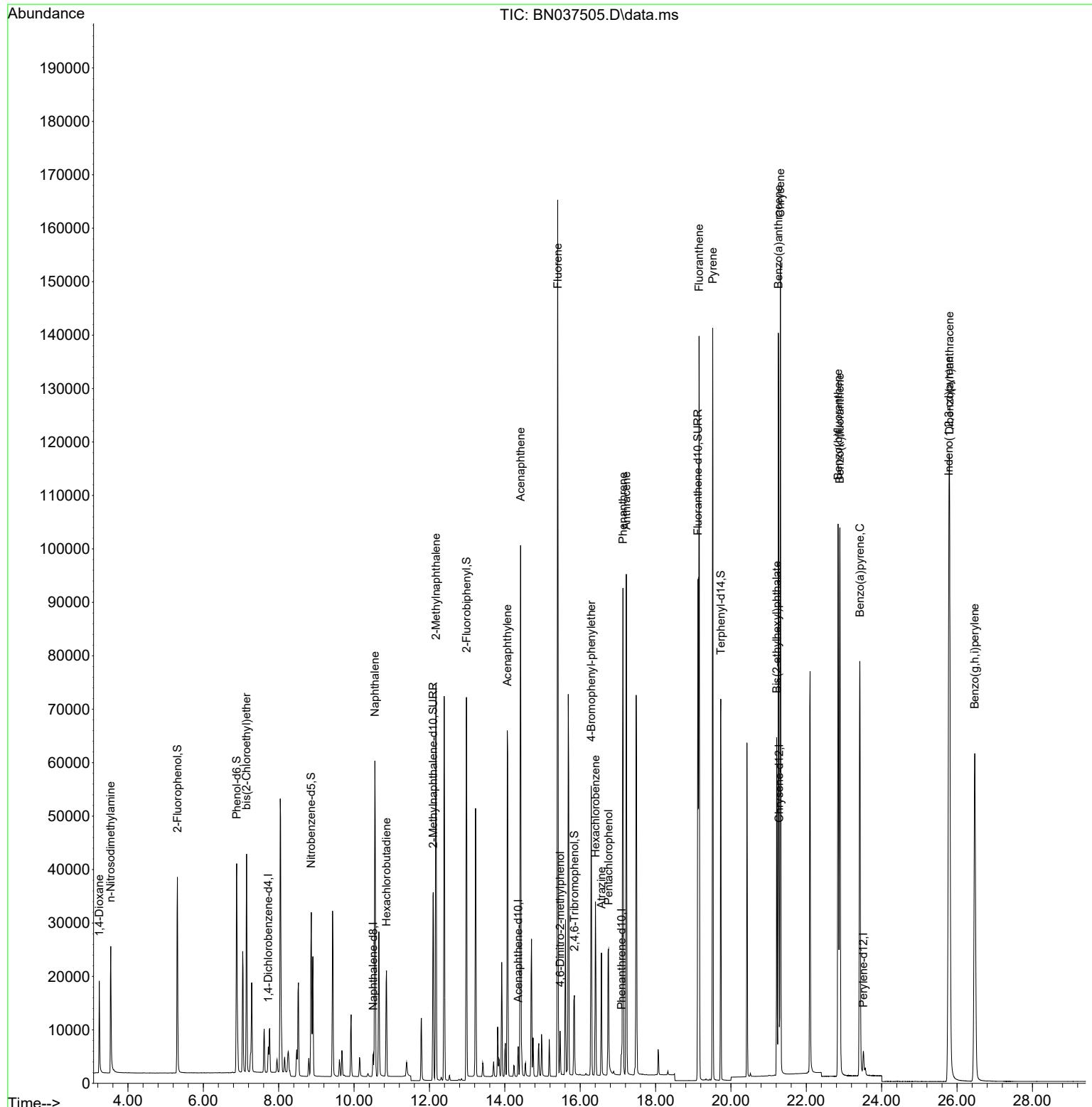
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4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

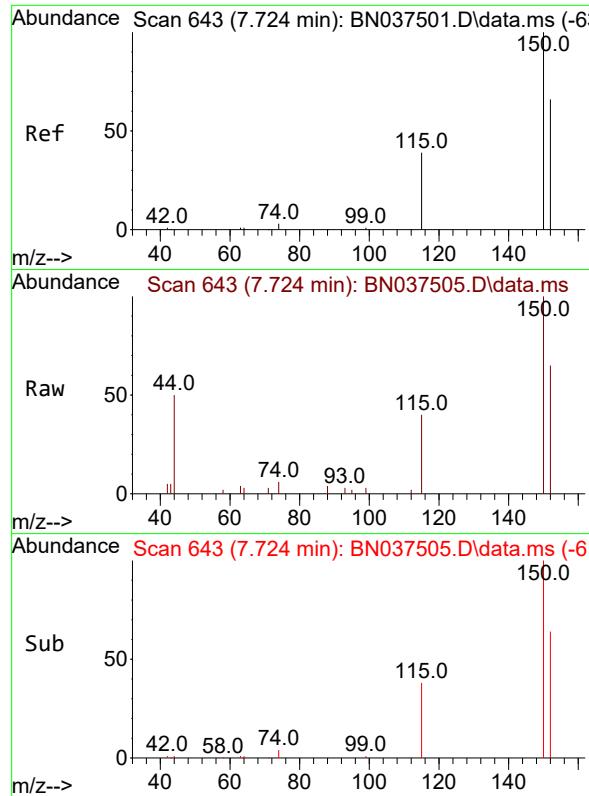
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

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

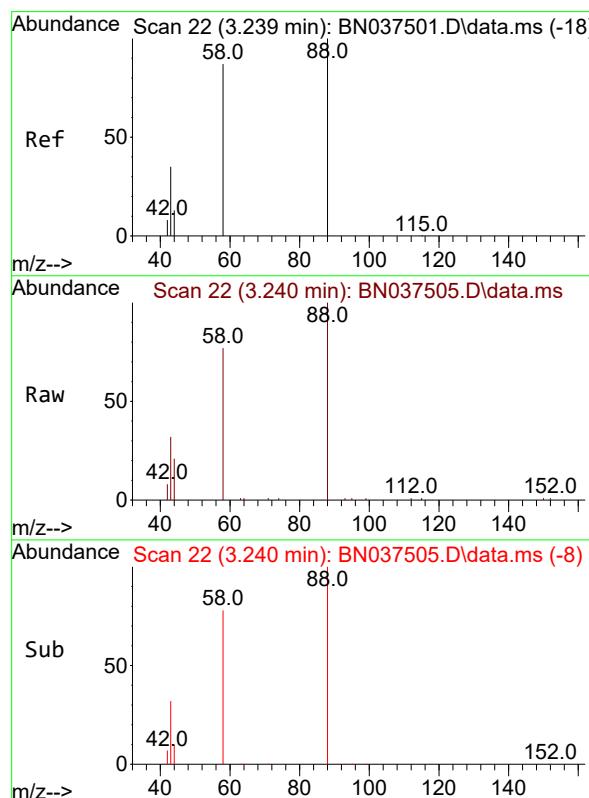
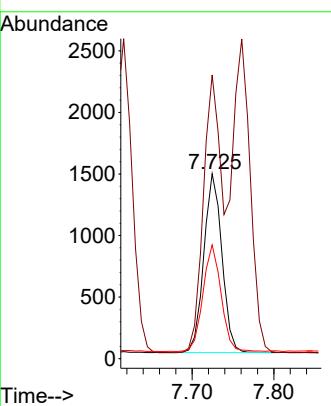




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

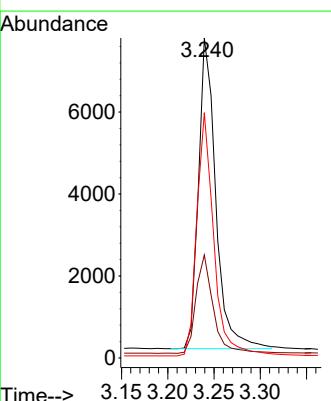
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ClientSampleId : SSTDICC5.0

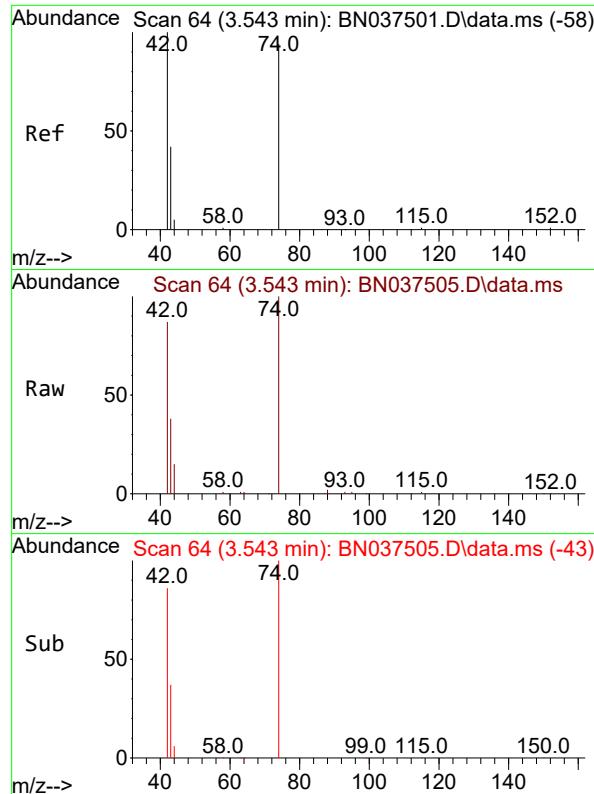
Tgt Ion:152 Resp: 2230  
Ion Ratio Lower Upper  
152 100  
150 153.4 119.8 179.8  
115 61.5 49.1 73.7



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

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

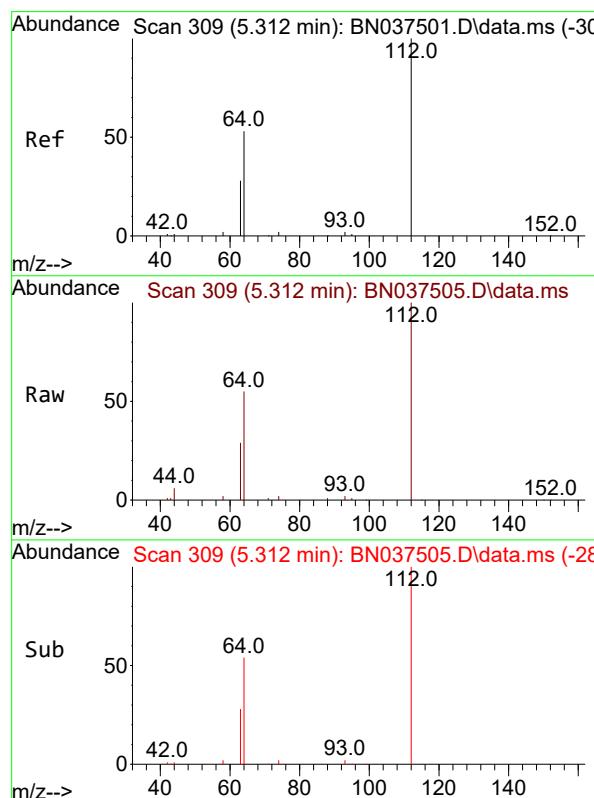
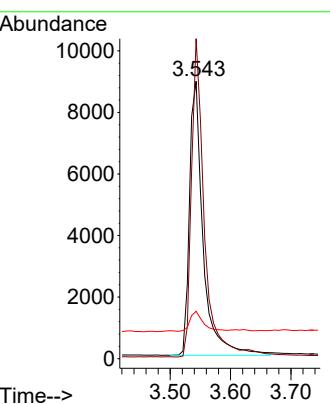




#3  
n-Nitrosodimethylamine  
Concen: 5.177 ng  
RT: 3.543 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

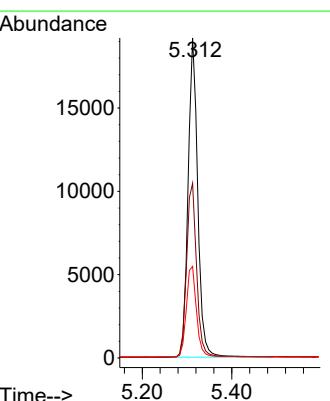
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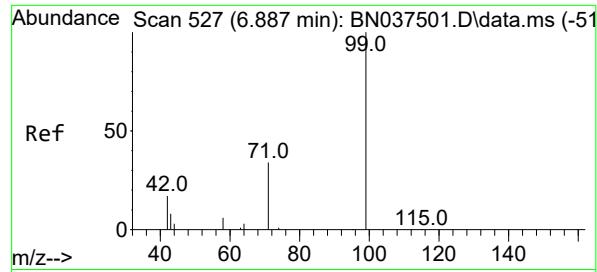
Tgt Ion: 42 Resp: 13961  
Ion Ratio Lower Upper  
42 100  
74 110.6 91.8 137.6  
44 7.0 15.0 22.6#



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

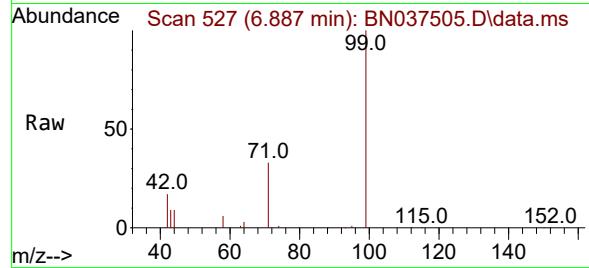
Tgt Ion: 112 Resp: 28715  
Ion Ratio Lower Upper  
112 100  
64 56.7 45.1 67.7  
63 29.7 23.8 35.8



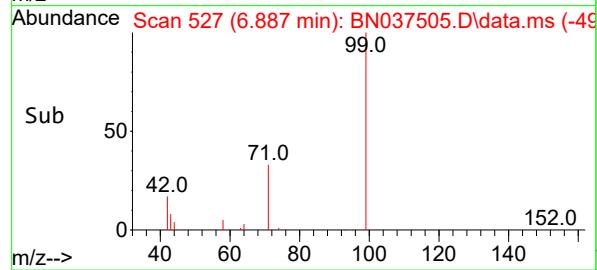
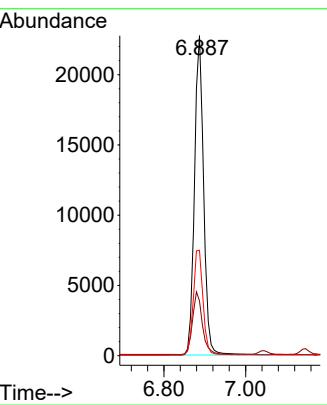


#5  
 Phenol-d6  
 Concen: 5.139 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

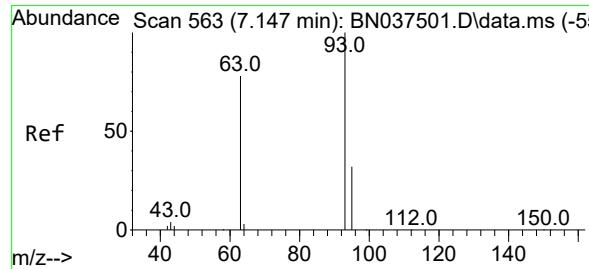
Instrument : BNA\_N  
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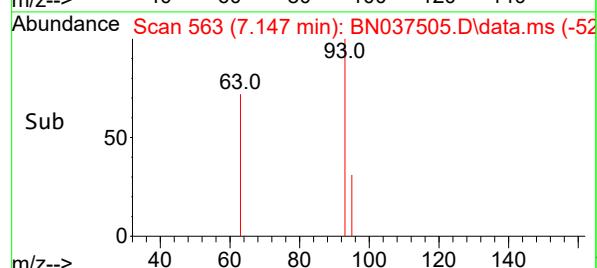
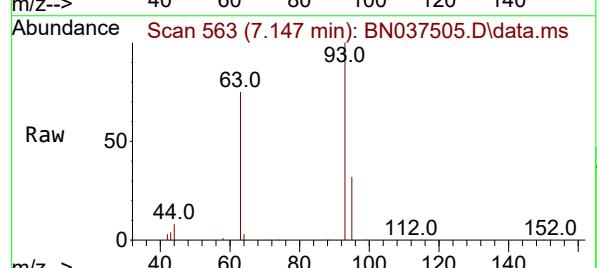
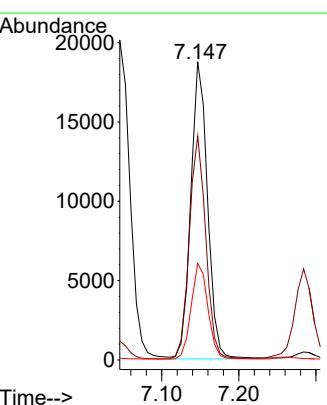
Tgt Ion: 99 Resp: 35549  
 Ion Ratio Lower Upper  
 99 100  
 42 21.0 17.1 25.7  
 71 34.9 27.8 41.8

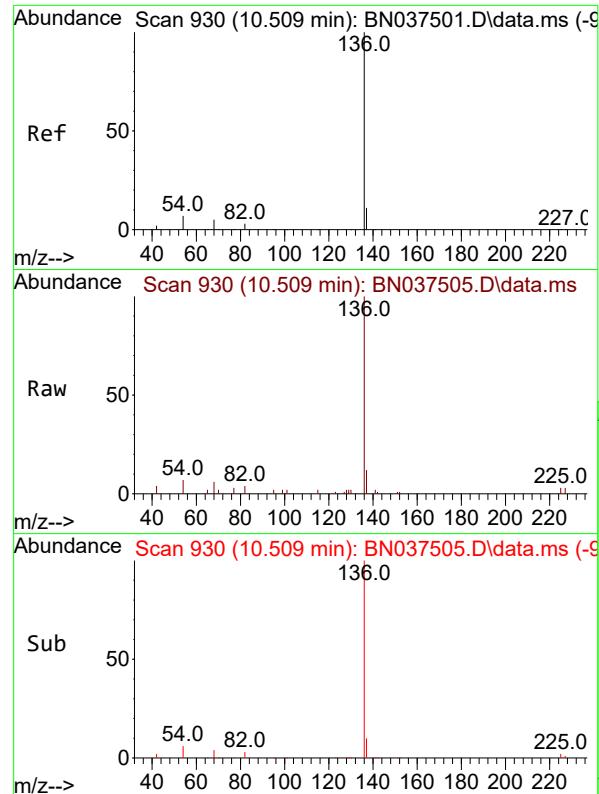


#6  
 bis(2-Chloroethyl)ether  
 Concen: 4.920 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14



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



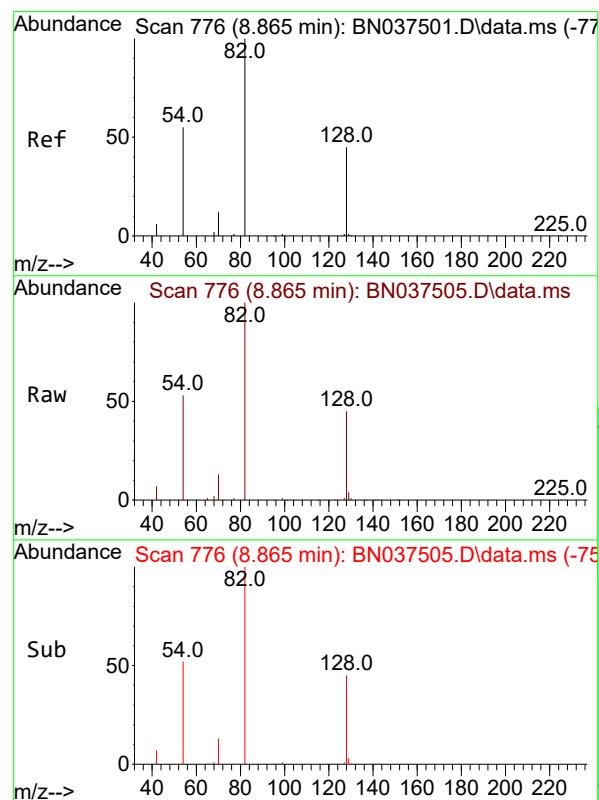
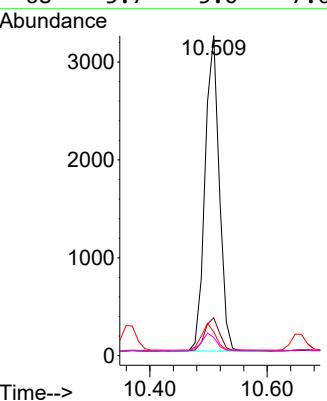


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

Tgt Ion:136 Resp: 5395

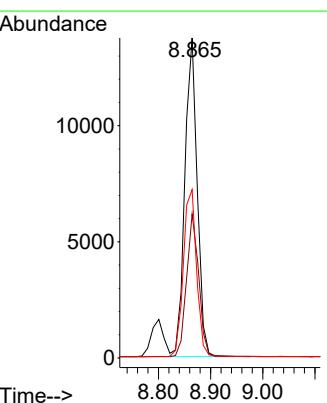
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 11.9  | 9.8   | 14.8  |
| 54  | 7.5   | 6.6   | 9.8   |
| 68  | 5.7   | 5.0   | 7.6   |

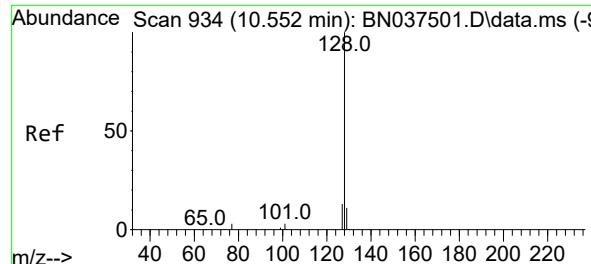


#8  
 Nitrobenzene-d5  
 Concen: 5.623 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion: 82 Resp: 22676

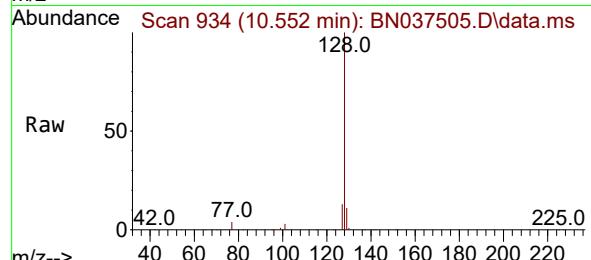
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 45.0  | 37.5  | 56.3  |
| 54  | 52.6  | 45.3  | 67.9  |



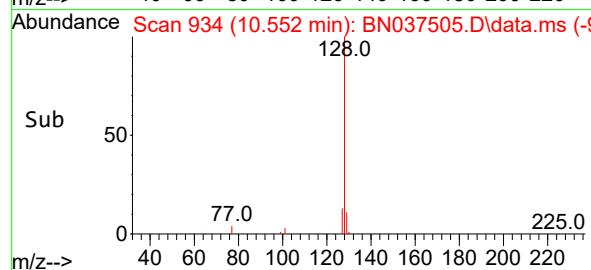
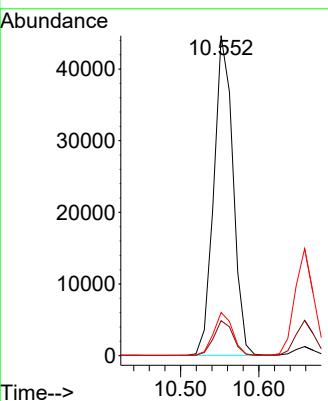


#9  
Naphthalene  
Concen: 5.279 ng  
RT: 10.552 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

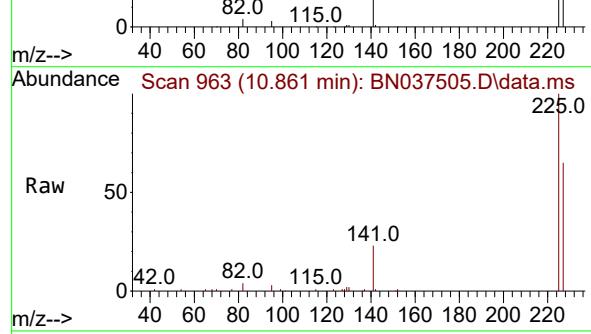
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0



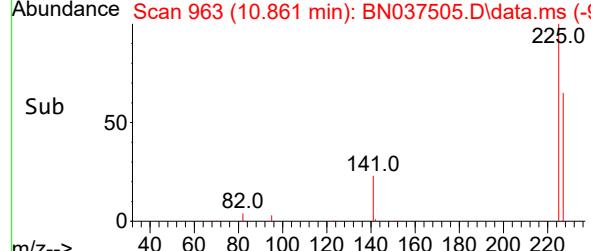
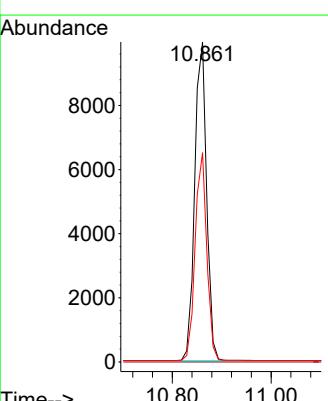
Tgt Ion:128 Resp: 75946  
Ion Ratio Lower Upper  
128 100  
129 11.0 9.7 14.5  
127 13.5 11.5 17.3



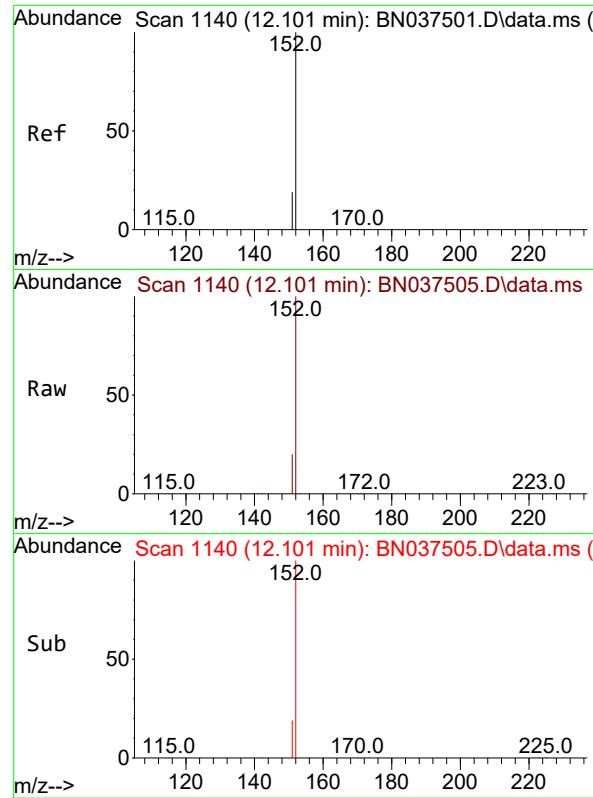
#10  
Hexachlorobutadiene  
Concen: 5.208 ng  
RT: 10.861 min Scan# 963  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14



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

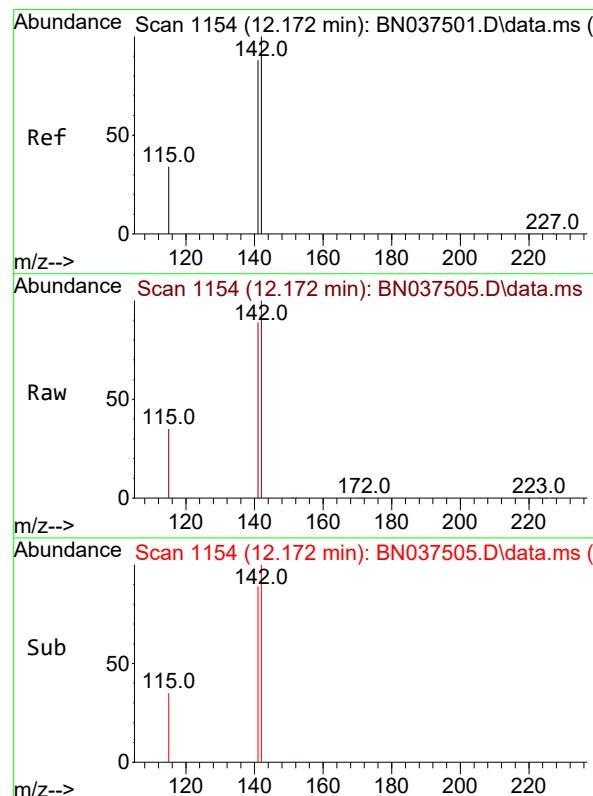
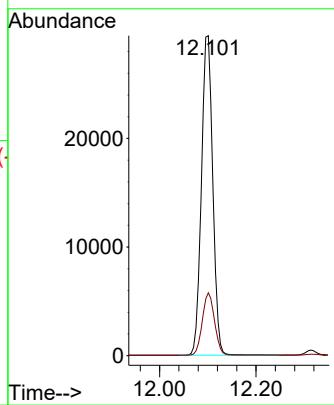


Sub 50



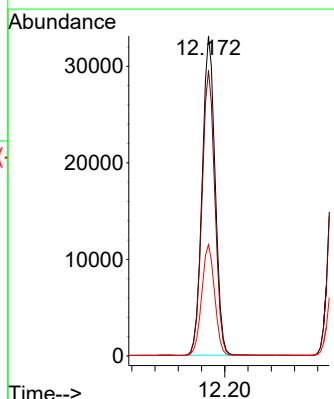
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2-Methylnaphthalene-d10  
Concen: 6.198 ng  
RT: 12.101 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037505.D ClientSampleId : SSTDICC5.0  
Acq: 15 Jul 2025 16:14

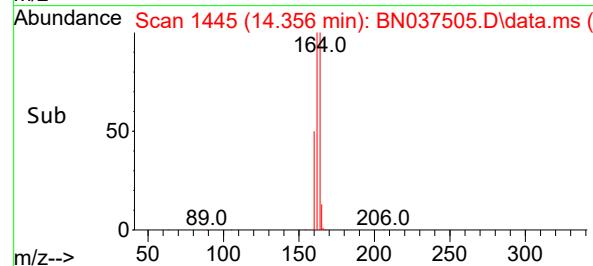
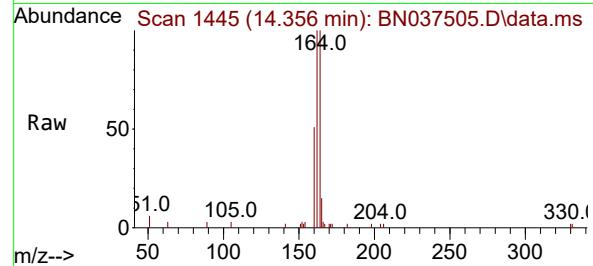
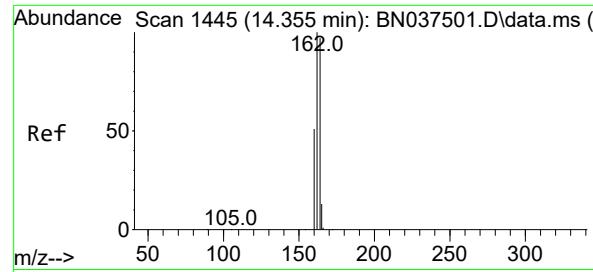
Tgt Ion:152 Resp: 47958  
Ion Ratio Lower Upper  
152 100  
151 20.9 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 5.388 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:142 Resp: 50973  
Ion Ratio Lower Upper  
142 100  
141 89.2 71.0 106.4  
115 34.8 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.356 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

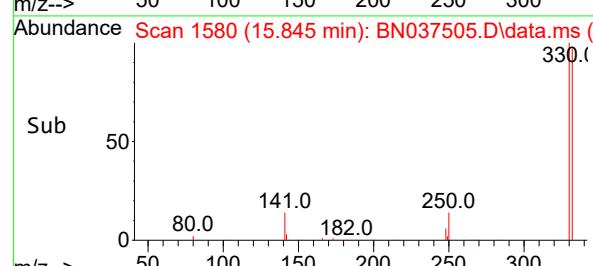
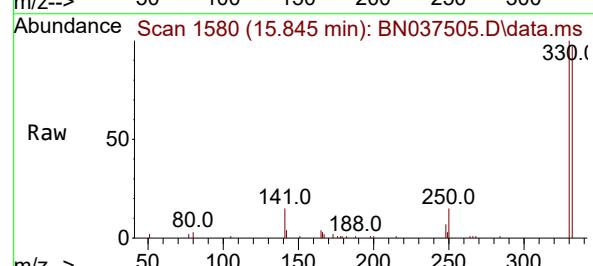
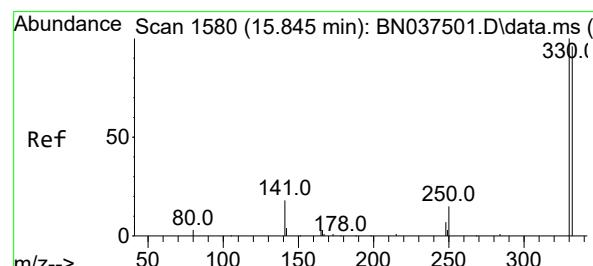
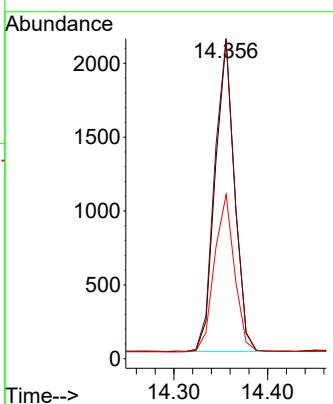
Tgt Ion:164 Resp: 3026

Ion Ratio Lower Upper

164 100

162 100.1 82.0 123.0

160 51.4 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 6.319 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

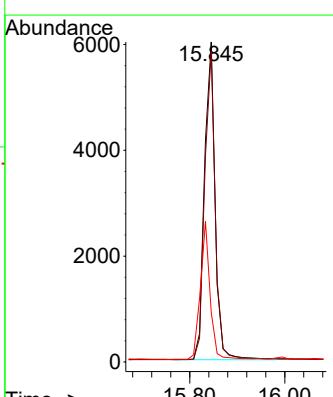
Tgt Ion:330 Resp: 9399

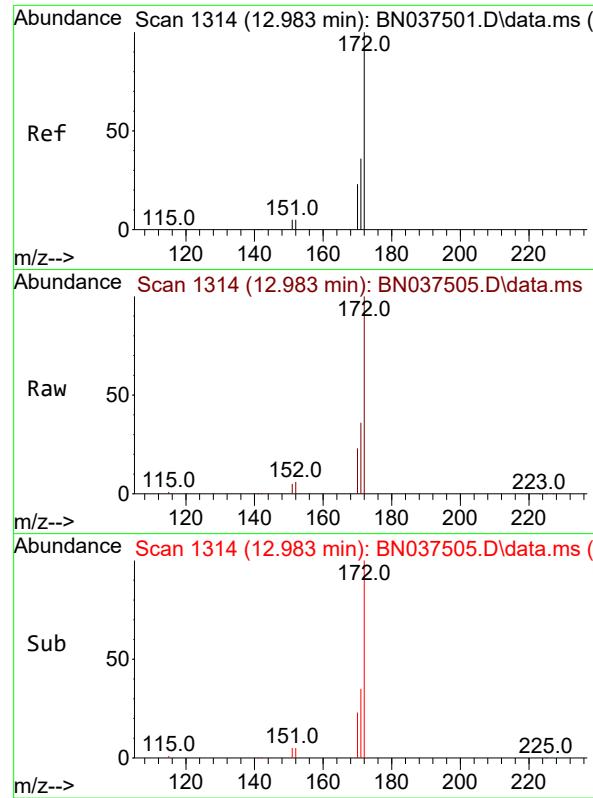
Ion Ratio Lower Upper

330 100

332 95.9 76.1 114.1

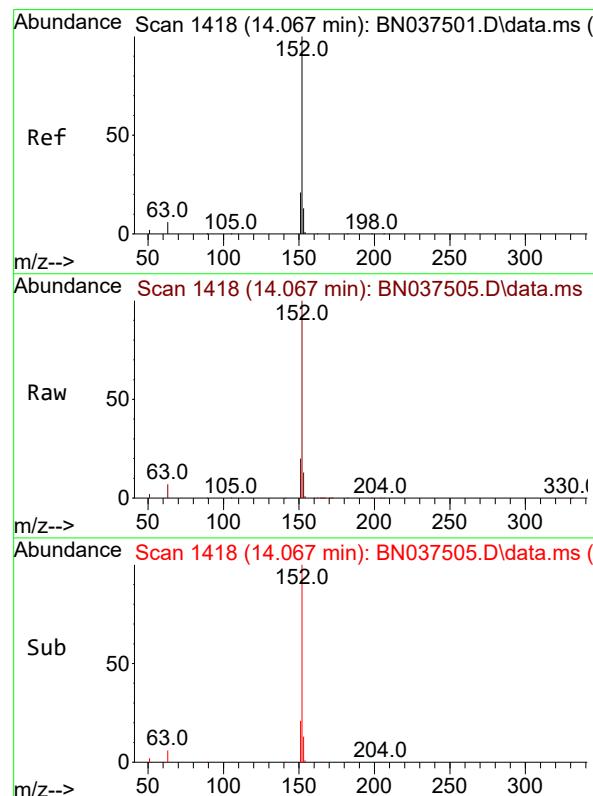
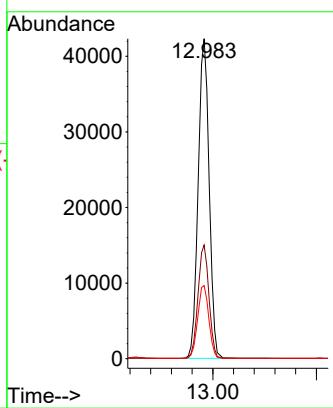
141 39.7 33.4 50.0





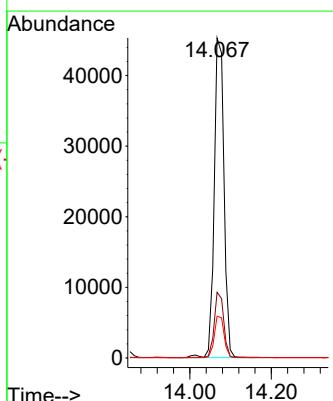
#15  
2-Fluorobiphenyl  
Concen: 5.761 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037505.D ClientSampleId : SSTDICC5.0  
Acq: 15 Jul 2025 16:14

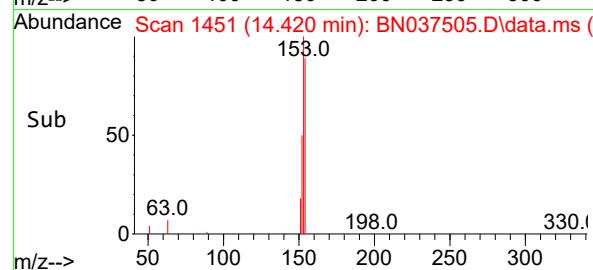
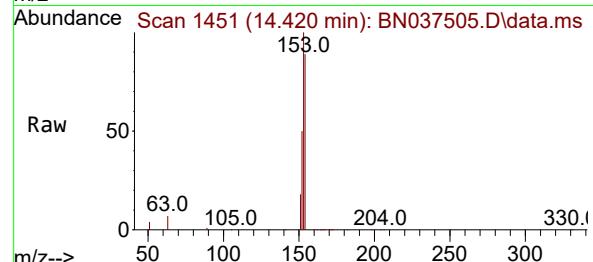
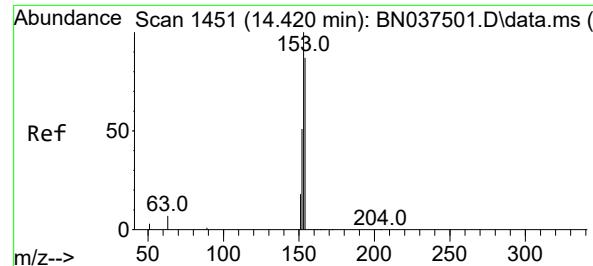
Tgt Ion:172 Resp: 90652  
Ion Ratio Lower Upper  
172 100  
171 35.5 29.4 44.2  
170 22.9 19.4 29.0



#16  
Acenaphthylene  
Concen: 5.528 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:152 Resp: 74932  
Ion Ratio Lower Upper  
152 100  
151 19.7 15.9 23.9  
153 13.0 10.7 16.1





#17

Acenaphthene

Concen: 5.417 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

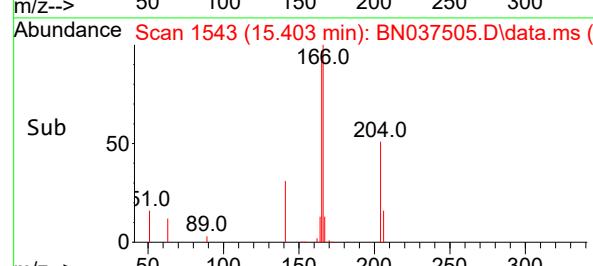
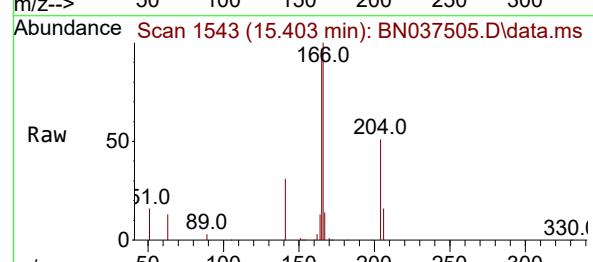
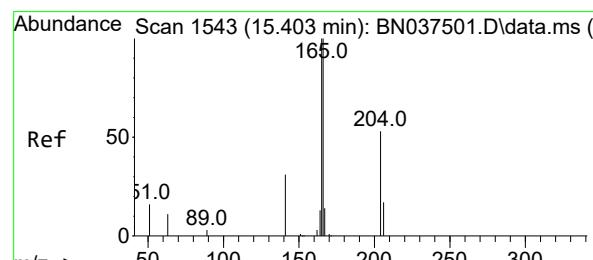
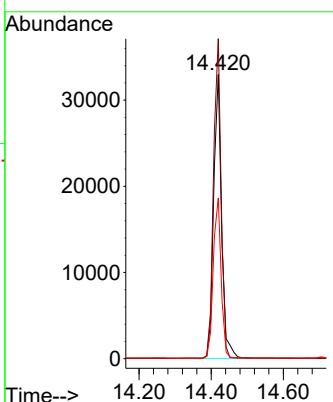
Tgt Ion:154 Resp: 49935

Ion Ratio Lower Upper

154 100

153 108.5 89.2 133.8

152 56.3 48.0 72.0



#18

Fluorene

Concen: 5.474 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

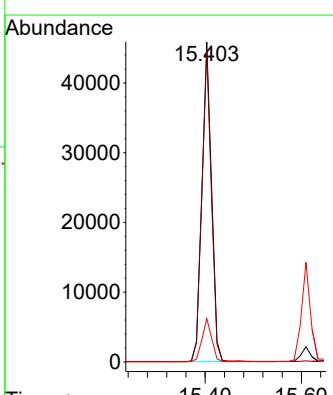
Tgt Ion:166 Resp: 64957

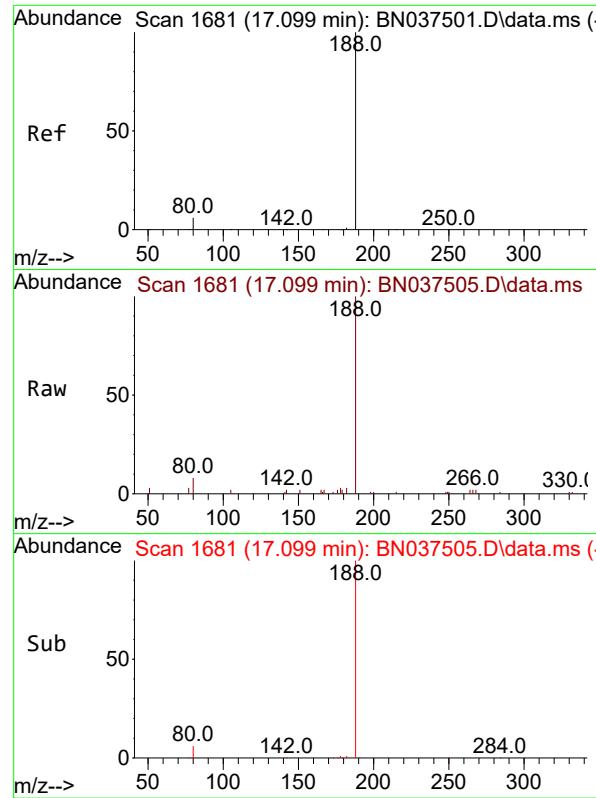
Ion Ratio Lower Upper

166 100

165 95.0 78.1 117.1

167 13.1 11.0 16.6

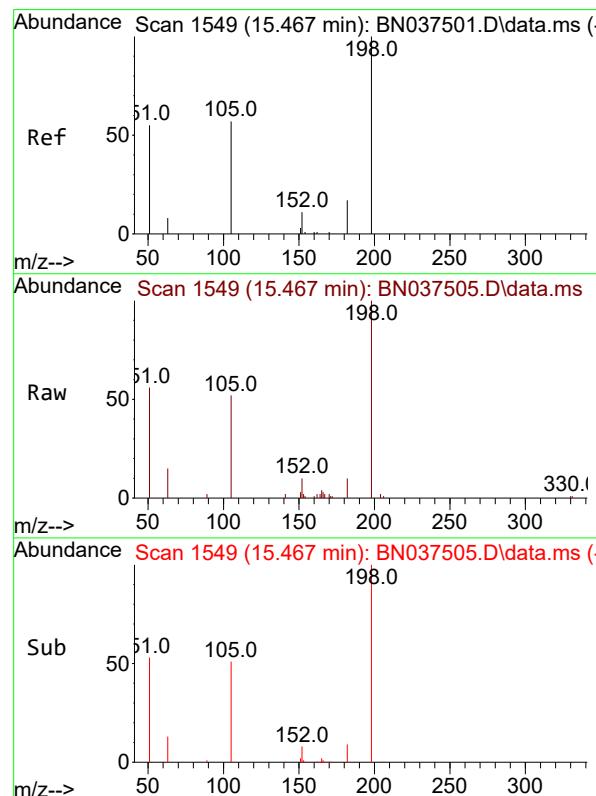
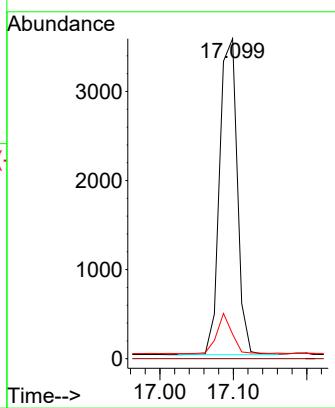




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.099 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

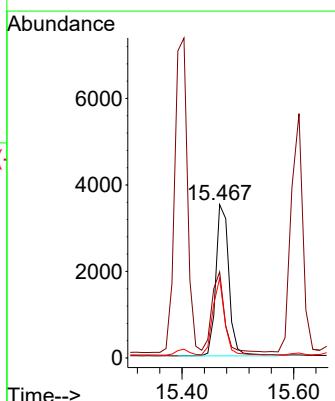
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

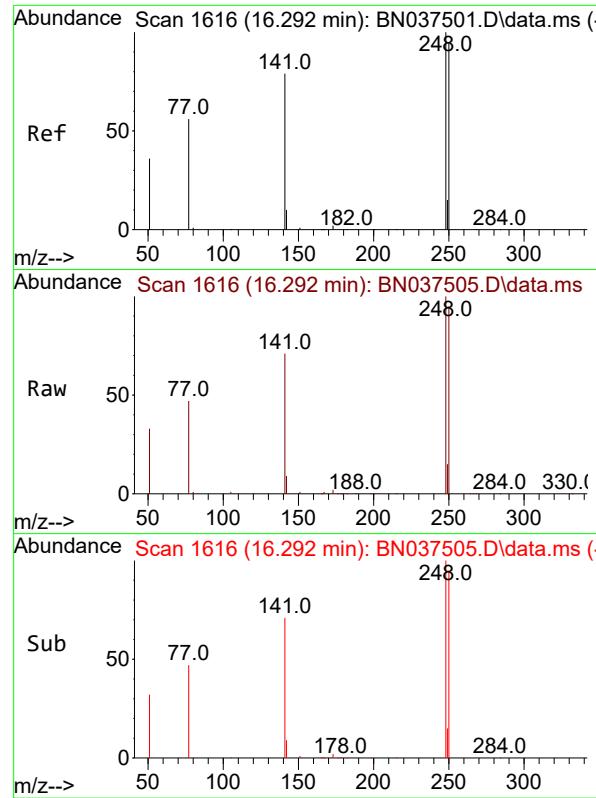
Tgt Ion:188 Resp: 5918  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 7.6 6.0 9.0



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 4.991 ng  
 RT: 15.467 min Scan# 1549  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion:198 Resp: 5939  
 Ion Ratio Lower Upper  
 198 100  
 51 56.1 88.5 132.7#  
 105 52.0 61.2 91.8#





#21

4-Bromophenyl-phenylether

Concen: 5.344 ng

RT: 16.292 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

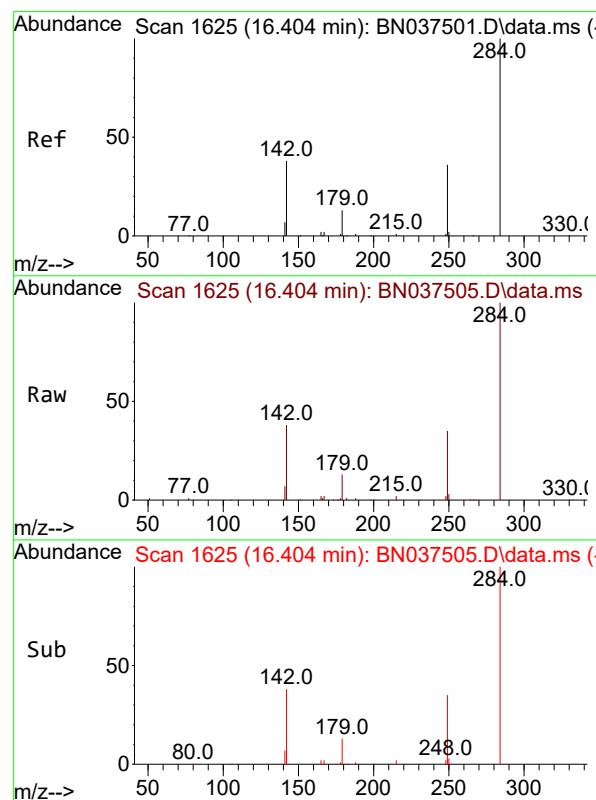
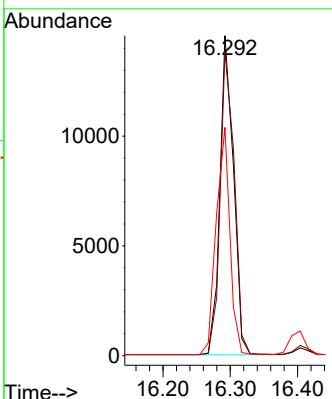
Tgt Ion:248 Resp: 20263

Ion Ratio Lower Upper

248 100

250 95.0 76.2 114.2

141 71.4 63.9 95.9



#22

Hexachlorobenzene

Concen: 5.106 ng

RT: 16.404 min Scan# 1625

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

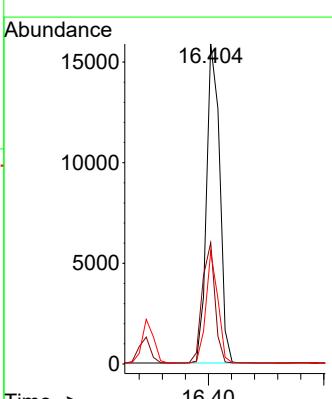
Tgt Ion:284 Resp: 25010

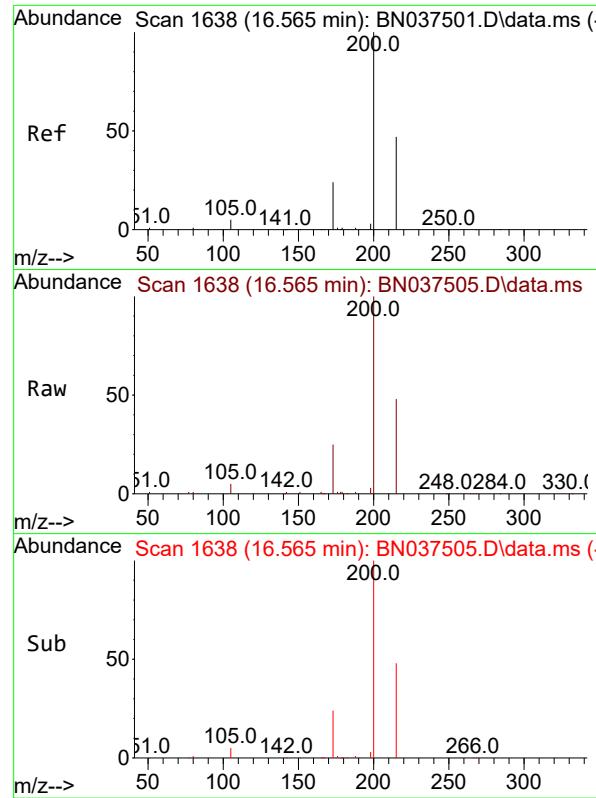
Ion Ratio Lower Upper

284 100

142 36.4 28.9 43.3

249 31.8 25.8 38.6





#23

Atrazine

Concen: 6.150 ng

RT: 16.565 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:200 Resp: 16269

Ion Ratio Lower Upper

200 100

173 24.7 23.2 34.8

215 47.7 40.2 60.4

Abundance

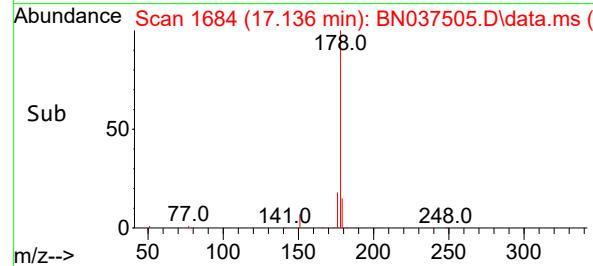
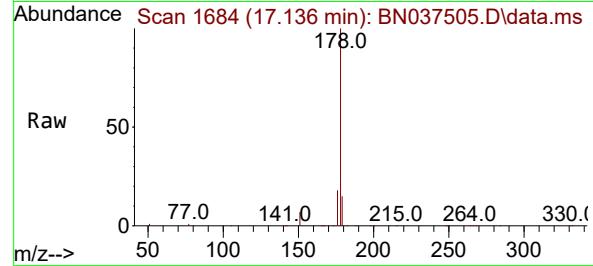
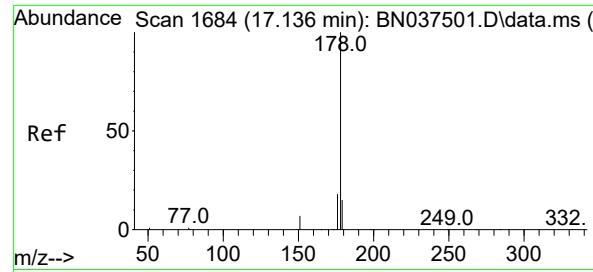
16.565

10000

5000

0

Time--&gt; 16.40 16.60



#25

Phenanthrene

Concen: 5.312 ng

RT: 17.136 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

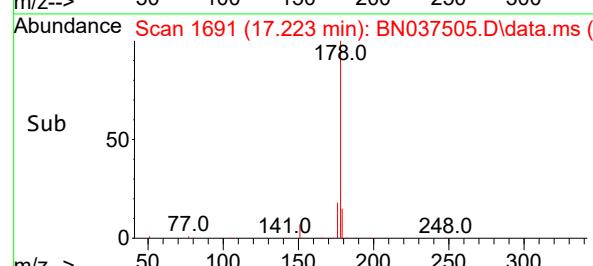
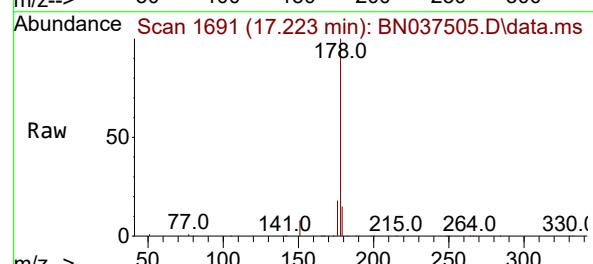
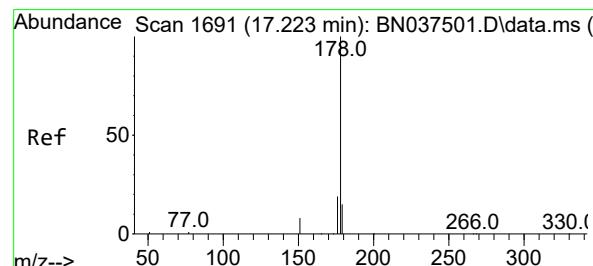
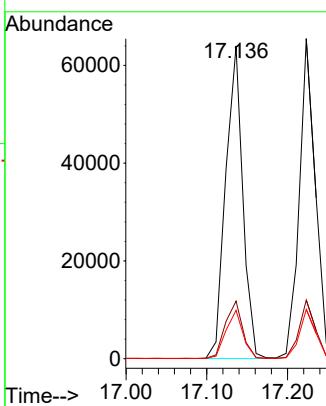
Tgt Ion:178 Resp: 94181

Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.6

179 15.3 12.2 18.2



#26

Anthracene

Concen: 5.634 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

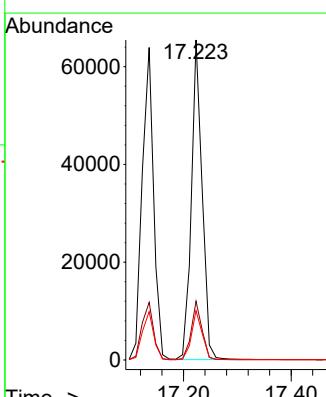
Tgt Ion:178 Resp: 91147

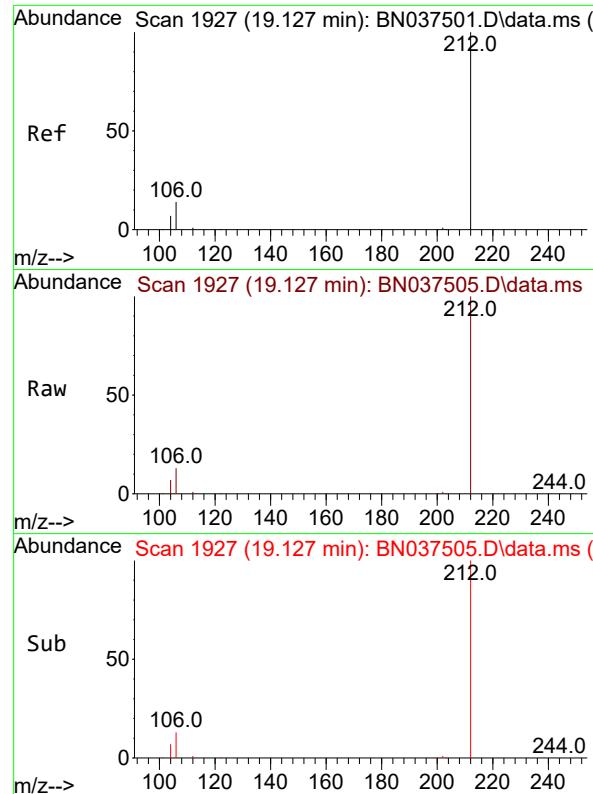
Ion Ratio Lower Upper

178 100

176 18.2 14.7 22.1

179 15.3 12.3 18.5

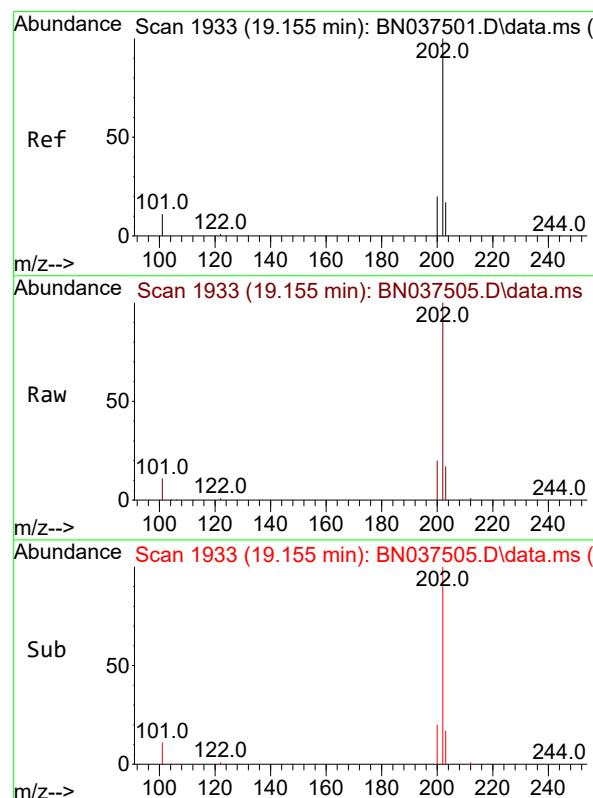
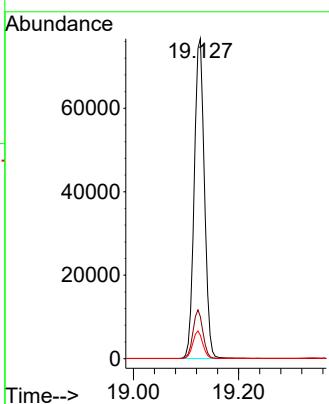




#27  
 Fluoranthene-d10  
 Concen: 6.537 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

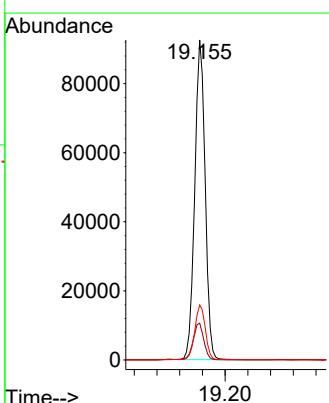
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

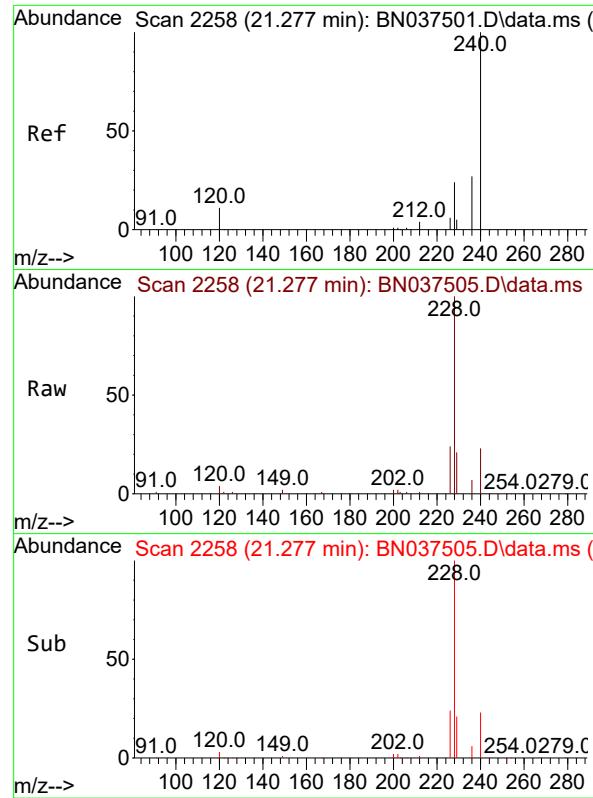
Tgt Ion:212 Resp: 102473  
 Ion Ratio Lower Upper  
 212 100  
 106 14.8 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 5.736 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion:202 Resp: 117280  
 Ion Ratio Lower Upper  
 202 100  
 101 11.8 9.8 14.6  
 203 17.3 13.6 20.4

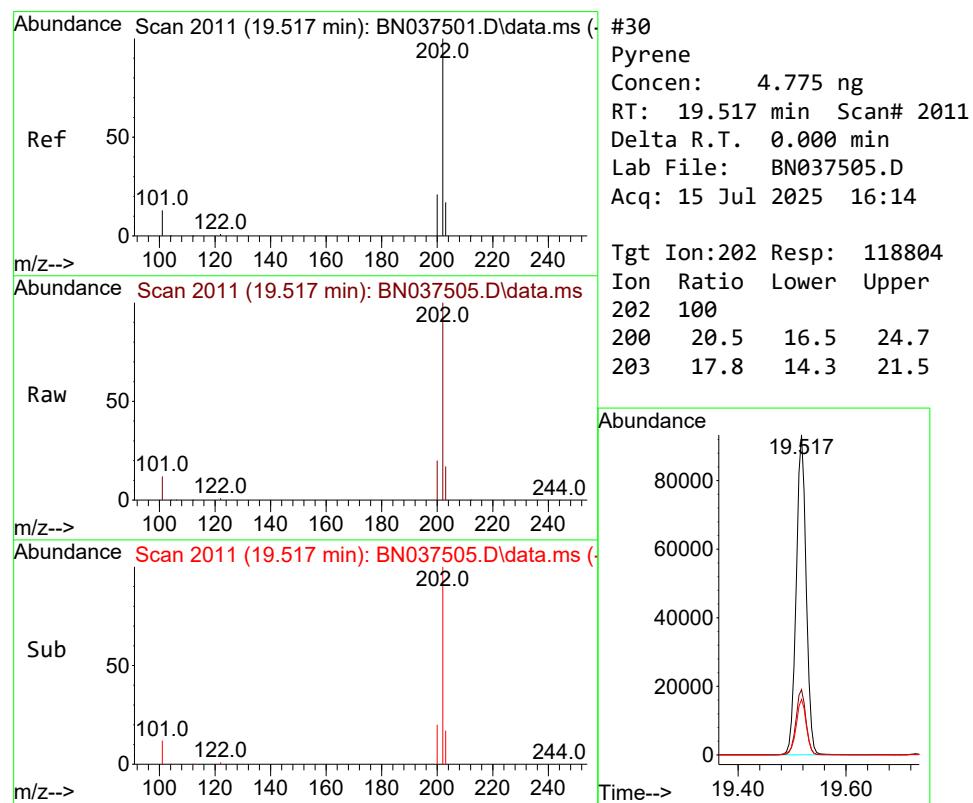
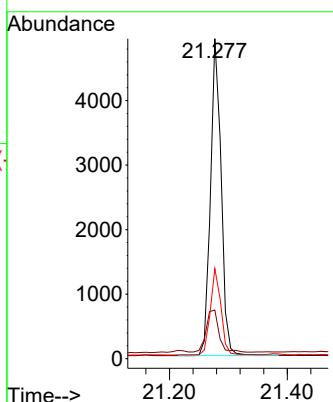




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2  
 Delta R.T. 0.000 min Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

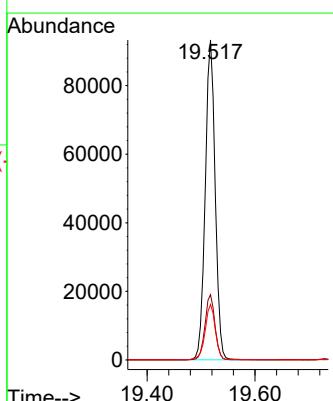
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

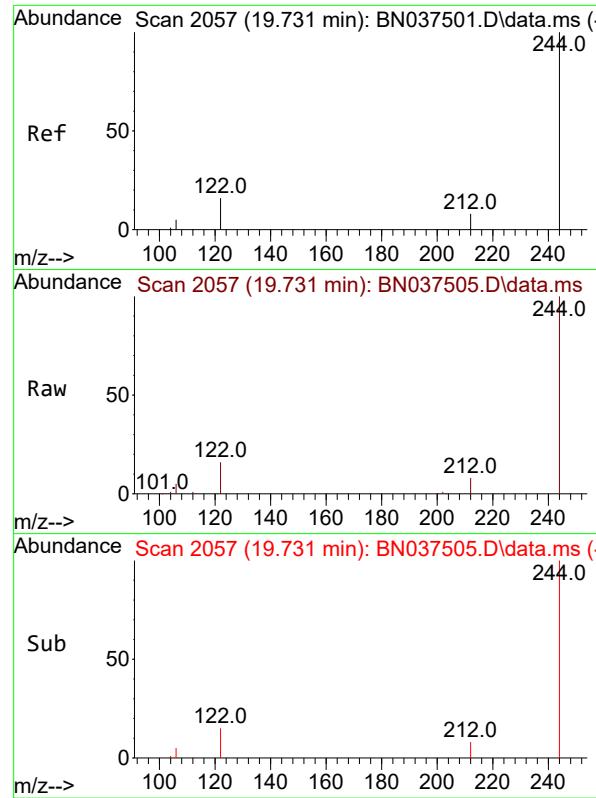
Tgt Ion:240 Resp: 6176  
 Ion Ratio Lower Upper  
 240 100  
 120 15.2 10.7 16.1  
 236 28.1 22.6 33.8



#30  
 Pyrene  
 Concen: 4.775 ng  
 RT: 19.517 min Scan# 2011  
 Delta R.T. 0.000 min Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

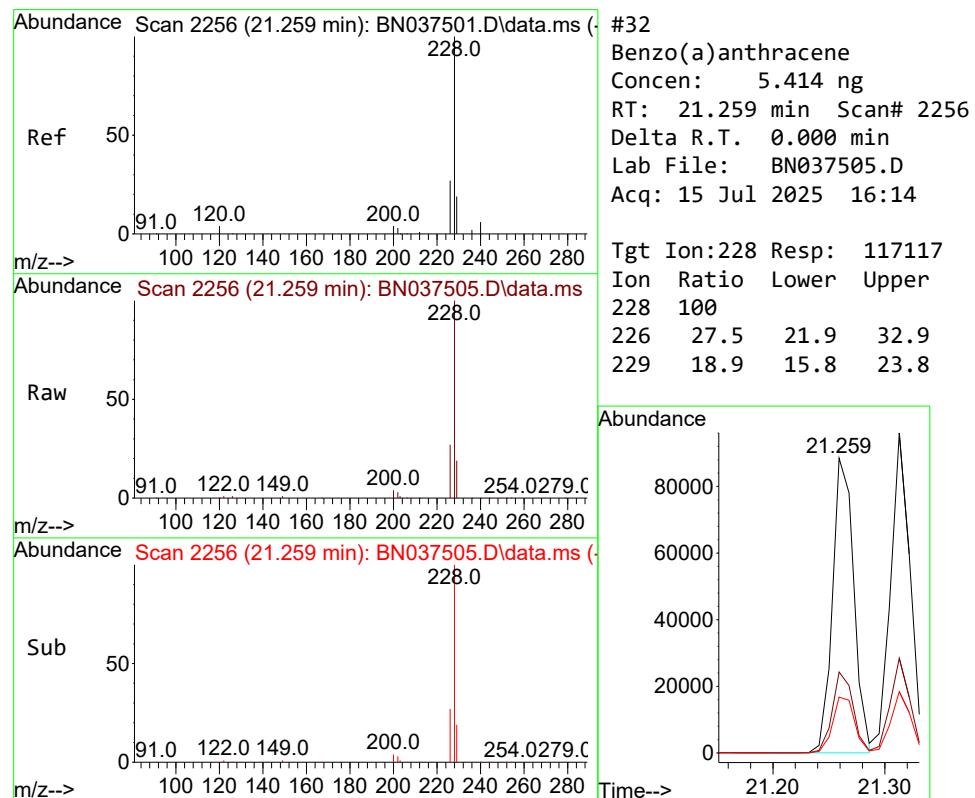
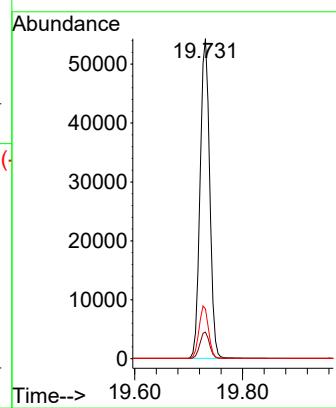
Tgt Ion:202 Resp: 118804  
 Ion Ratio Lower Upper  
 202 100  
 200 20.5 16.5 24.7  
 203 17.8 14.3 21.5





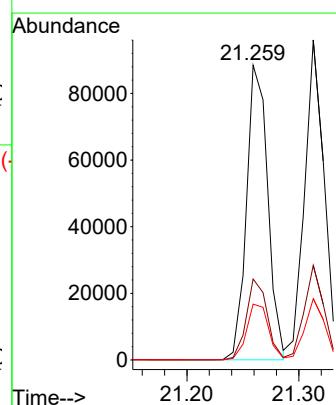
#31  
Terphenyl-d14  
Concen: 5.031 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14  
ClientSampleId : SSTDICC5.0

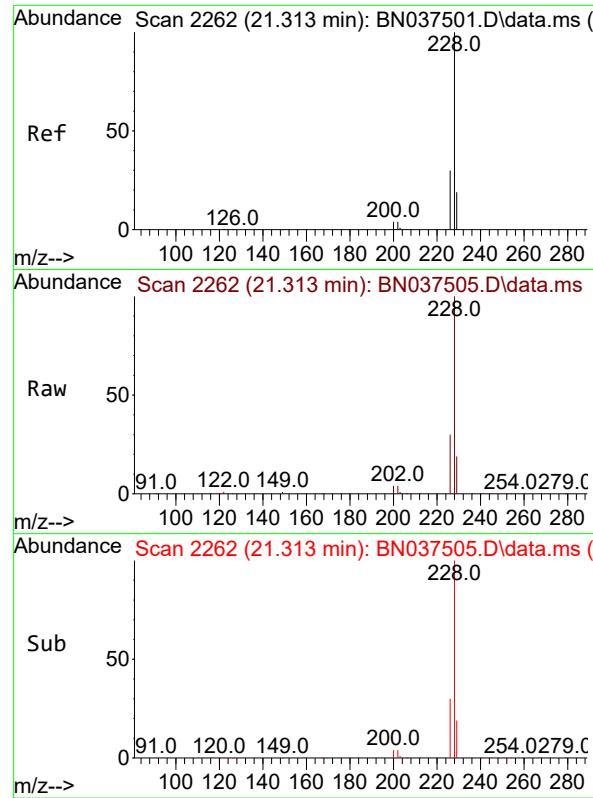
Tgt Ion:244 Resp: 66764  
Ion Ratio Lower Upper  
244 100  
212 8.3 7.4 11.2  
122 15.6 13.6 20.4



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

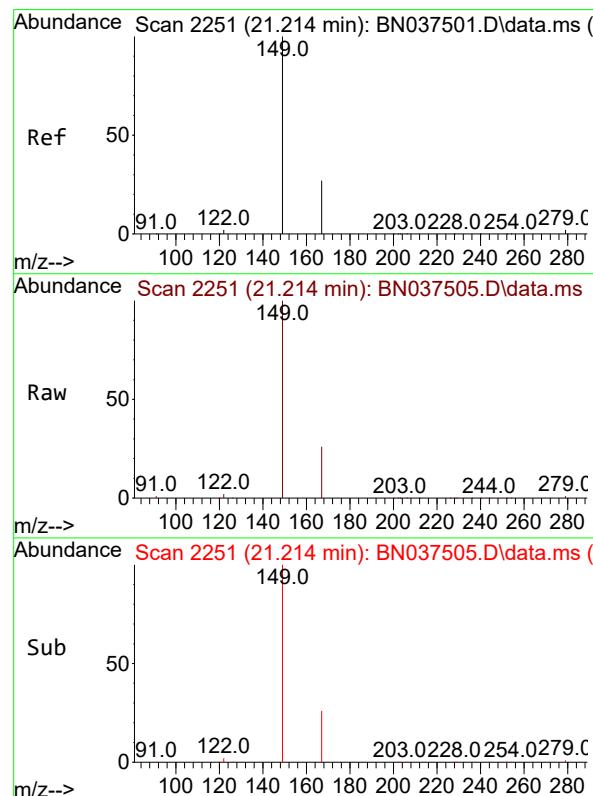
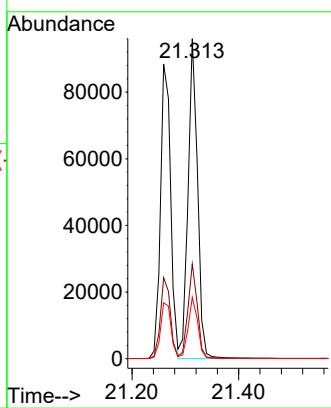
Tgt Ion:228 Resp: 117117  
Ion Ratio Lower Upper  
228 100  
226 27.5 21.9 32.9  
229 18.9 15.8 23.8





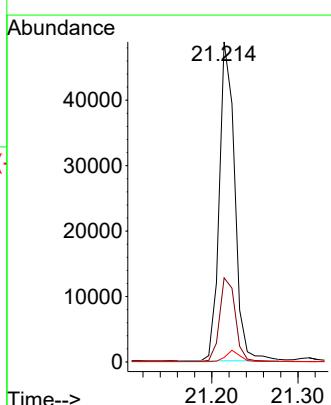
#33  
Chrysene  
Concen: 5.239 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037505.D ClientSampleId : SSTDICC5.0  
Acq: 15 Jul 2025 16:14

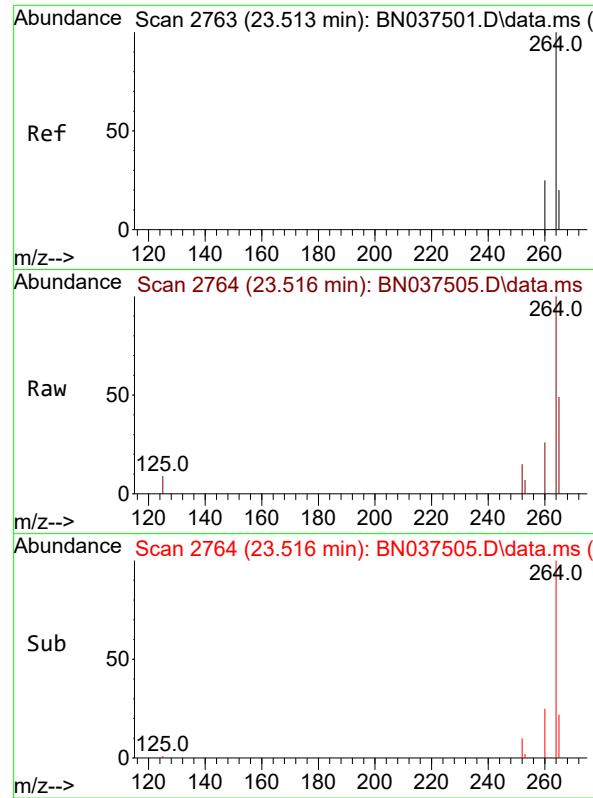
Tgt Ion:228 Resp: 117985  
Ion Ratio Lower Upper  
228 100  
226 29.6 24.2 36.4  
229 19.2 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 6.181 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:149 Resp: 60154  
Ion Ratio Lower Upper  
149 100  
167 26.9 21.8 32.8  
279 3.2 3.0 4.4

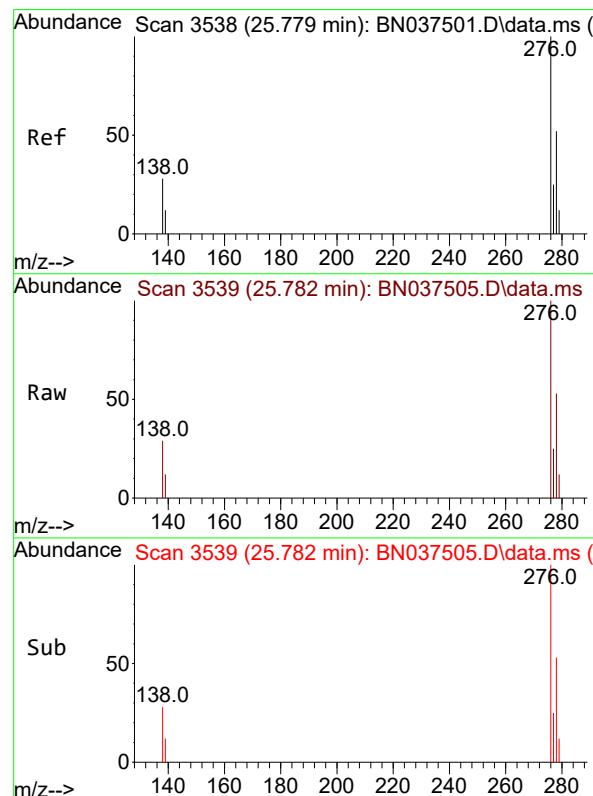
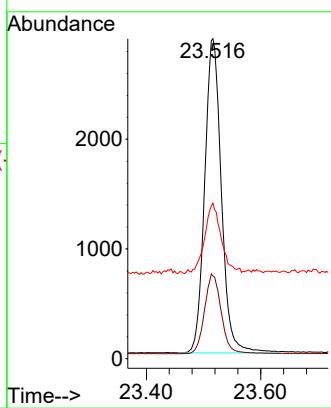




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.516 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

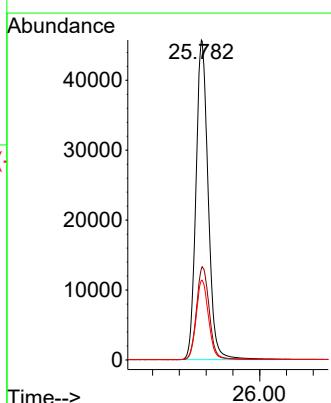
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

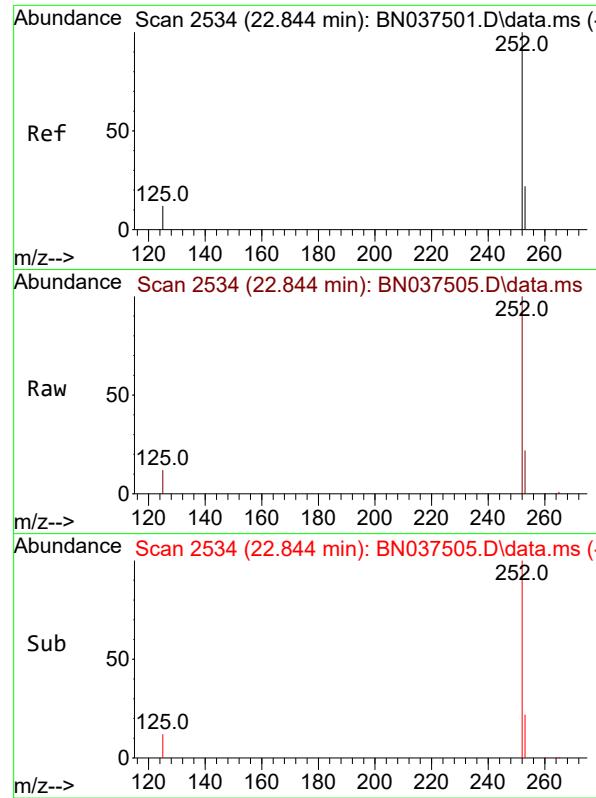
Tgt Ion:264 Resp: 5810  
 Ion Ratio Lower Upper  
 264 100  
 260 25.9 21.2 31.8  
 265 48.6 40.4 60.6



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 5.975 ng  
 RT: 25.782 min Scan# 3539  
 Delta R.T. 0.003 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion:276 Resp: 144593  
 Ion Ratio Lower Upper  
 276 100  
 138 30.3 24.0 36.0  
 277 25.2 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 5.570 ng

RT: 22.844 min Scan# 2

Instrument : BNA\_N

Delta R.T. 0.000 min

Lab File: BN037505.D

ClientSampleId : SSTDICC5.0

Acq: 15 Jul 2025 16:14

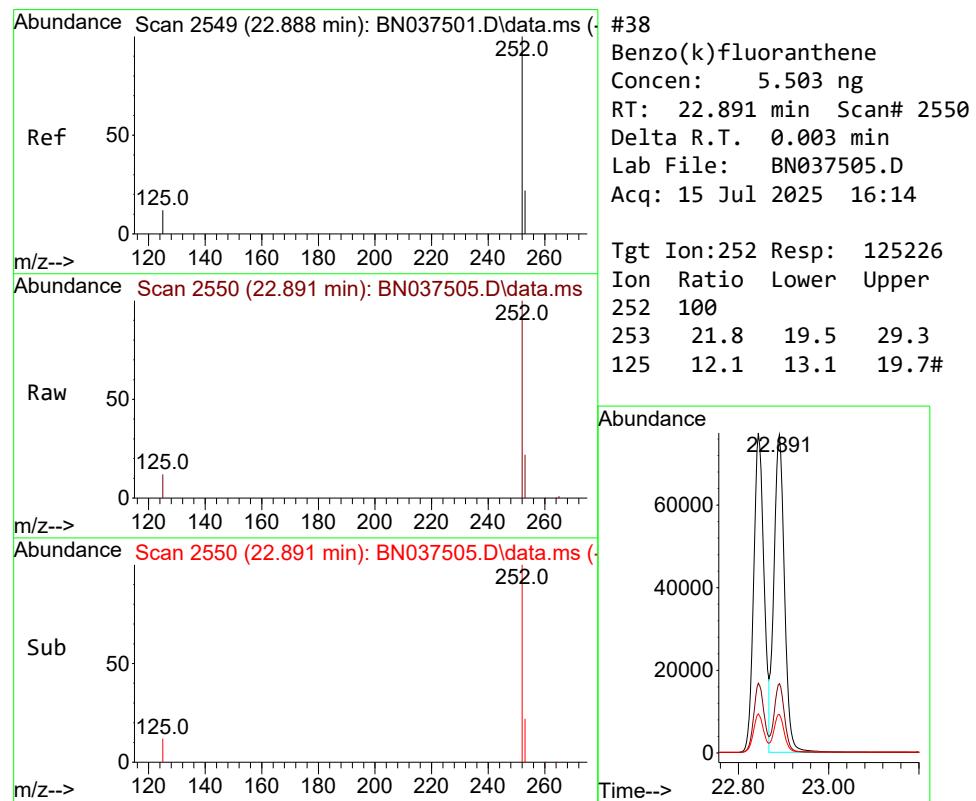
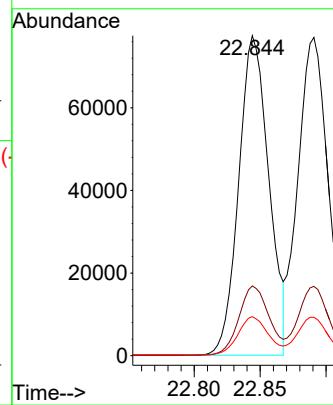
Tgt Ion:252 Resp: 122848

Ion Ratio Lower Upper

252 100

253 21.8 19.5 29.3

125 12.2 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 5.503 ng

RT: 22.891 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

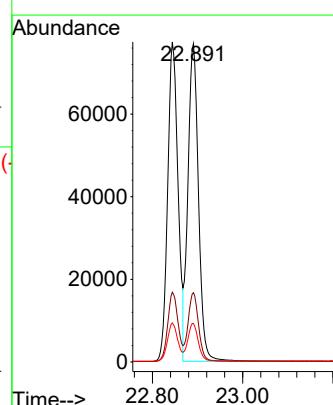
Tgt Ion:252 Resp: 125226

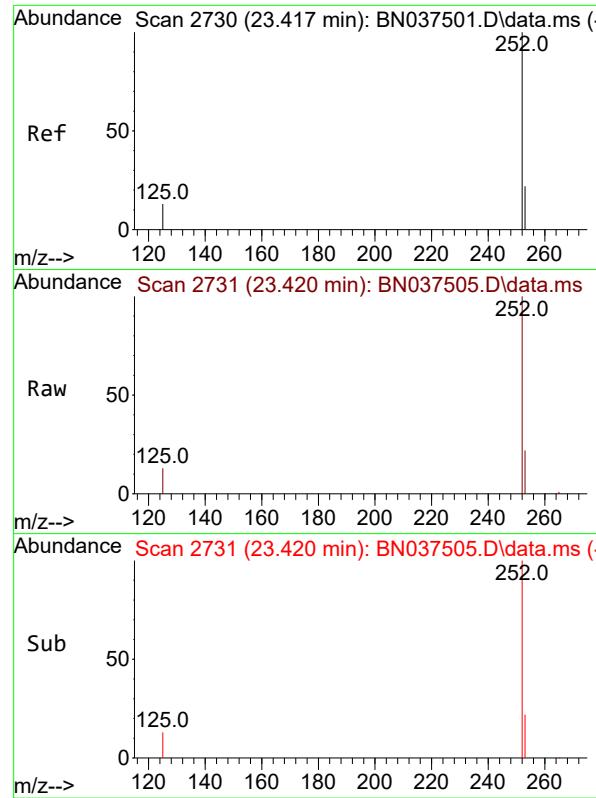
Ion Ratio Lower Upper

252 100

253 21.8 19.5 29.3

125 12.1 13.1 19.7#

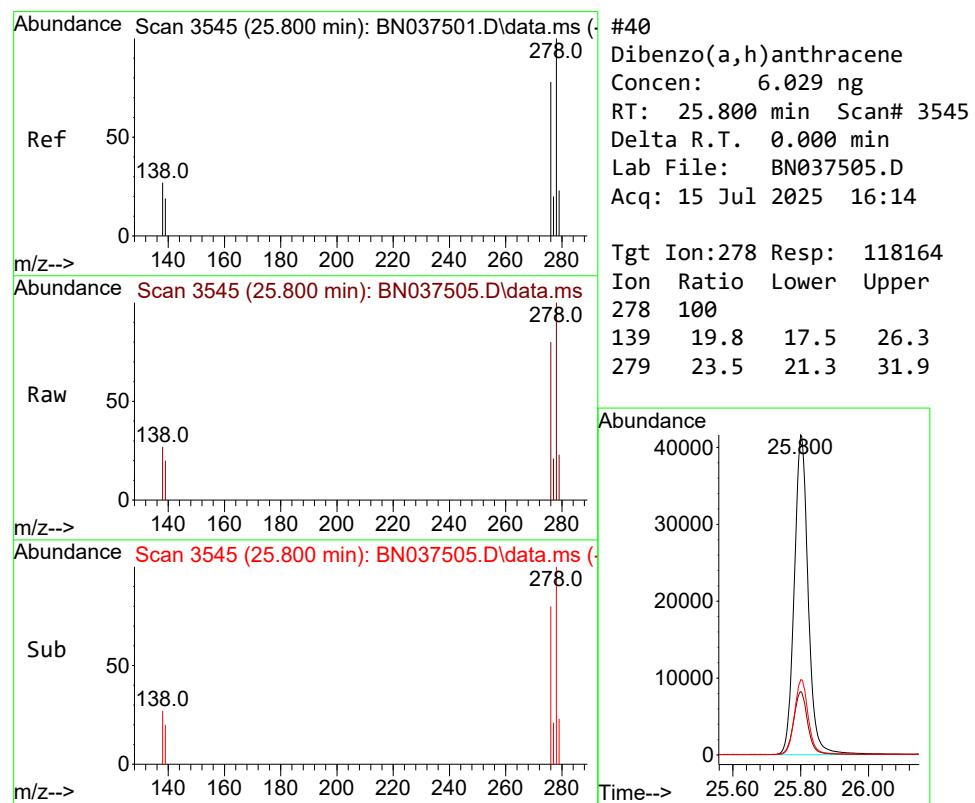
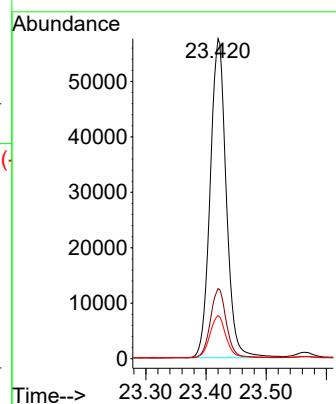




#39  
 Benzo(a)pyrene  
 Concen: 5.797 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

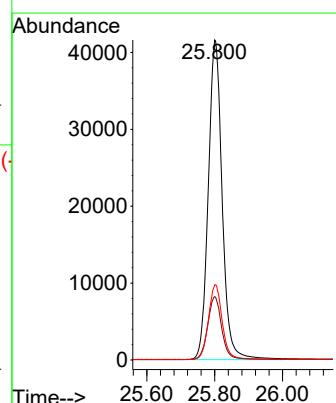
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

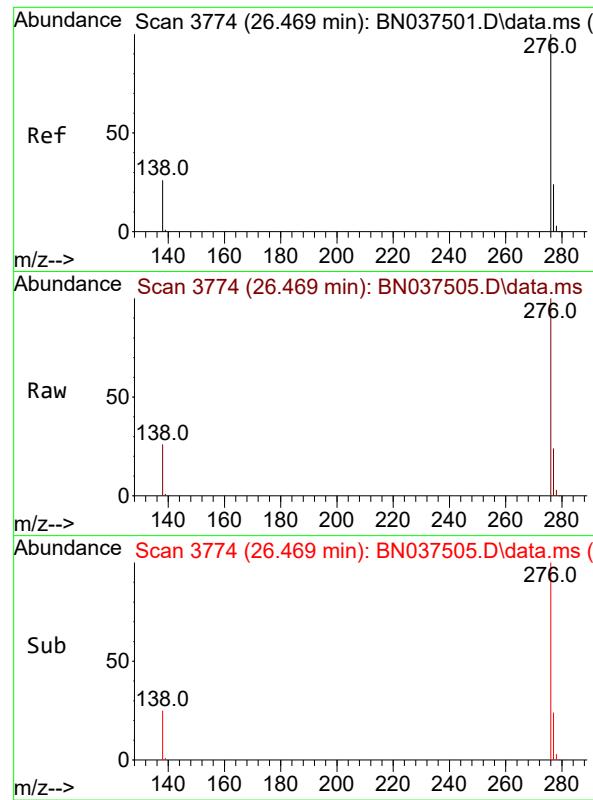
Tgt Ion:252 Resp: 106654  
 Ion Ratio Lower Upper  
 252 100  
 253 21.9 19.9 29.9  
 125 13.5 15.2 22.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 6.029 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion:278 Resp: 118164  
 Ion Ratio Lower Upper  
 278 100  
 139 19.8 17.5 26.3  
 279 23.5 21.3 31.9

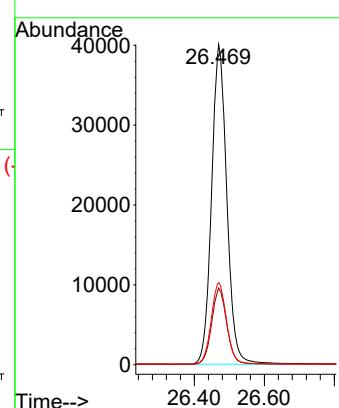




#41  
 Benzo(g,h,i)perylene  
 Concen: 5.952 ng  
 RT: 26.469 min Scan# 3  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

Tgt Ion:276 Resp: 120757  
 Ion Ratio Lower Upper  
 276 100  
 277 24.0 20.9 31.3  
 138 25.6 22.6 33.8



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

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

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

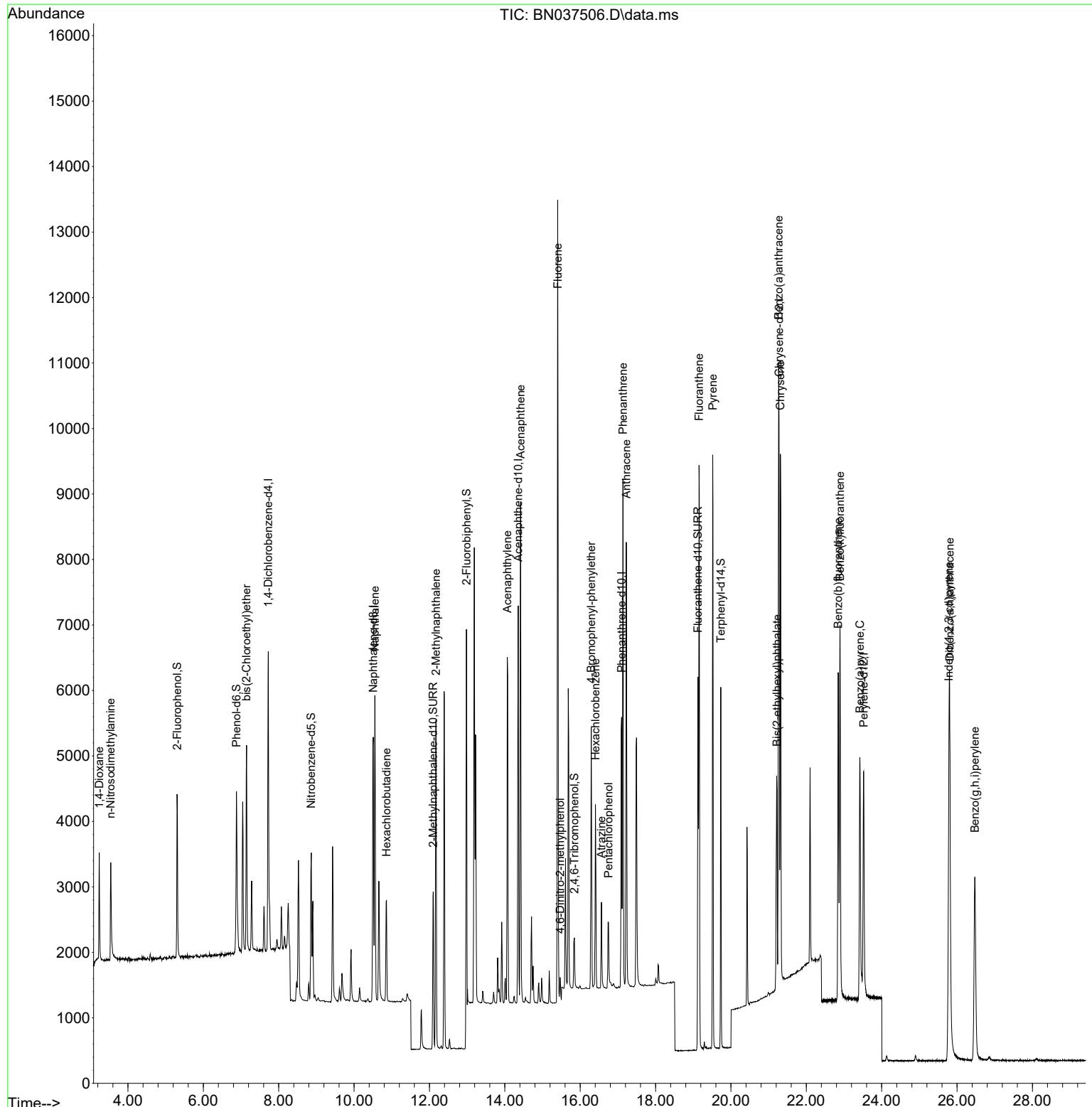
| Compound                           | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|------------------------------------|--------|------|----------|-------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4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

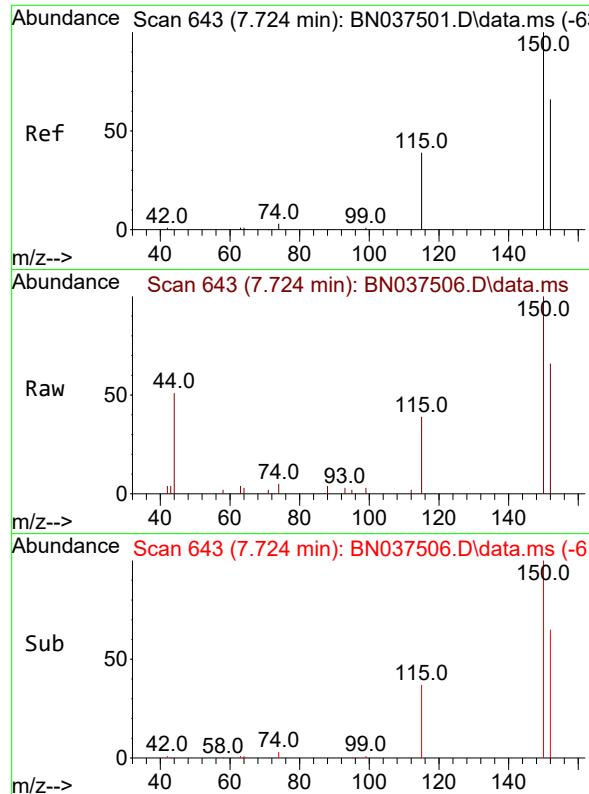
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN071525

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

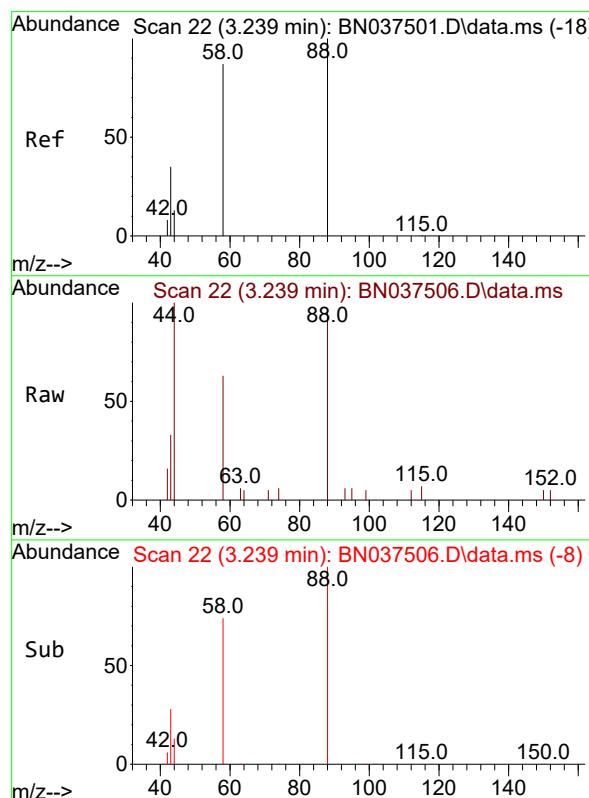
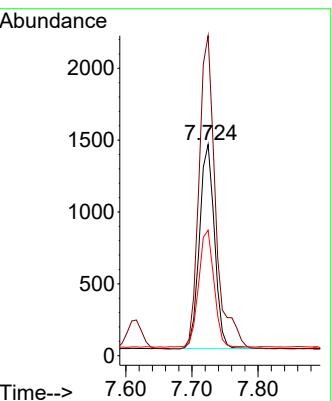




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

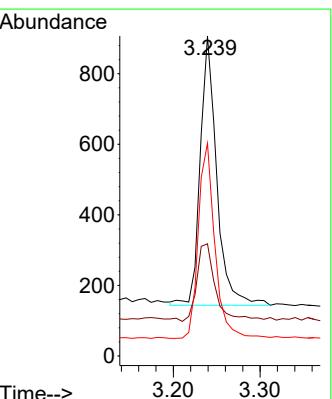
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ClientSampleId : ICVBN071525

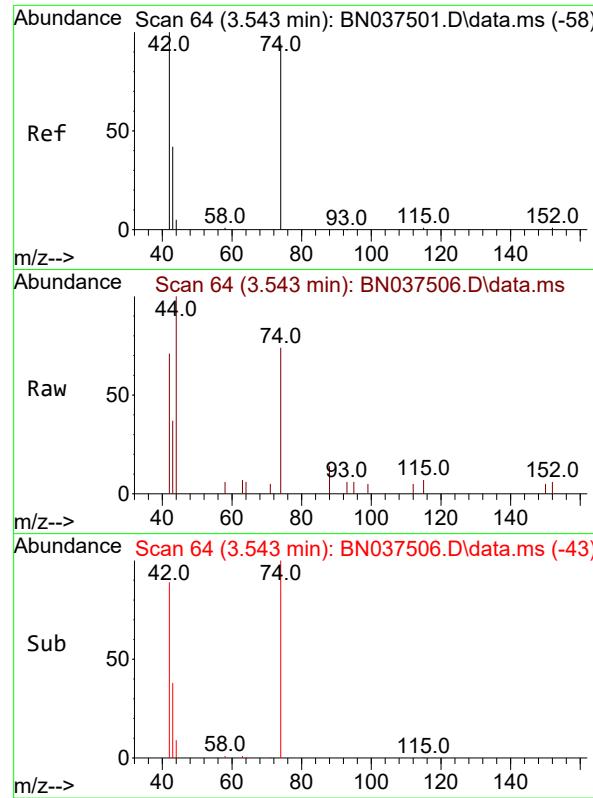
Tgt Ion:152 Resp: 2236  
Ion Ratio Lower Upper  
152 100  
150 151.5 119.8 179.8  
115 59.4 49.1 73.7



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

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

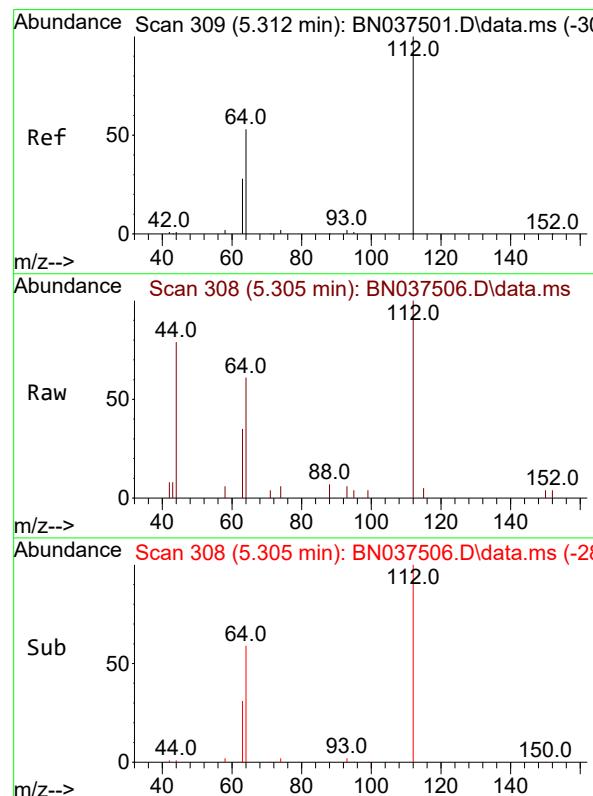
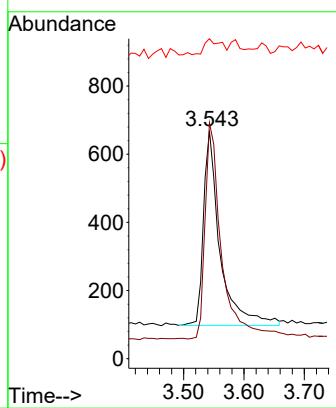




#3  
n-Nitrosodimethylamine  
Concen: 0.401 ng  
RT: 3.543 min Scan# 6  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

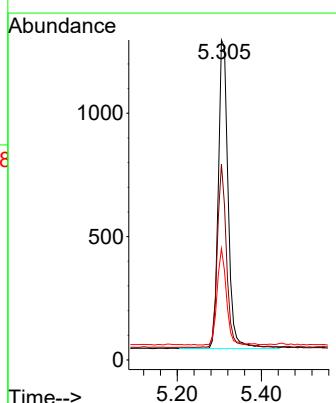
Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN071525

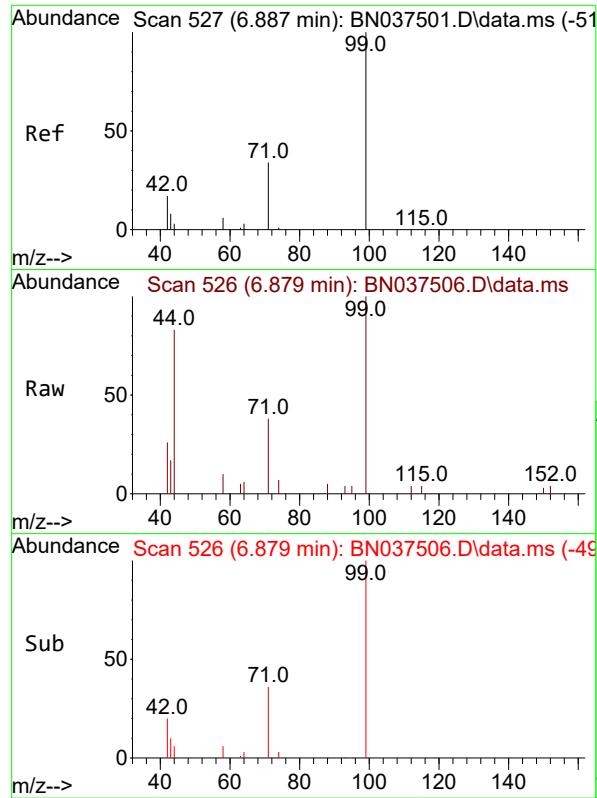
Tgt Ion: 42 Resp: 1083  
Ion Ratio Lower Upper  
42 100  
74 112.8 91.8 137.6  
44 8.5 15.0 22.6#



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

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

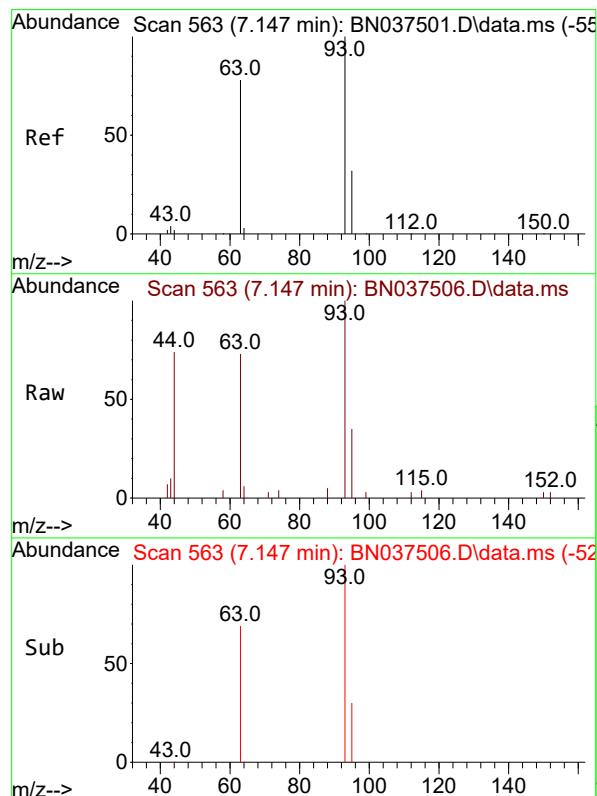
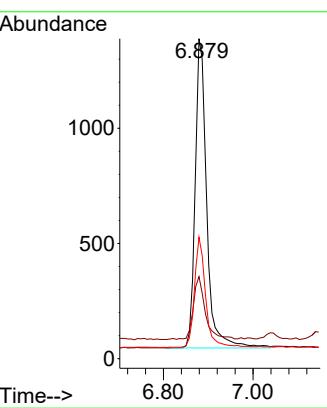




#5  
 Phenol-d6  
 Concen: 0.347 ng  
 RT: 6.879 min Scan# 5  
 Delta R.T. -0.007 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

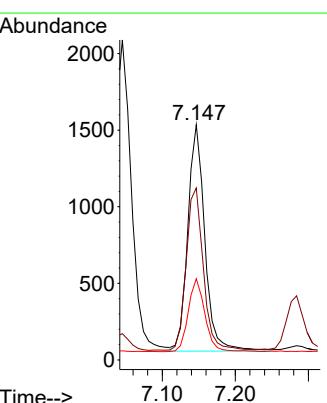
Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

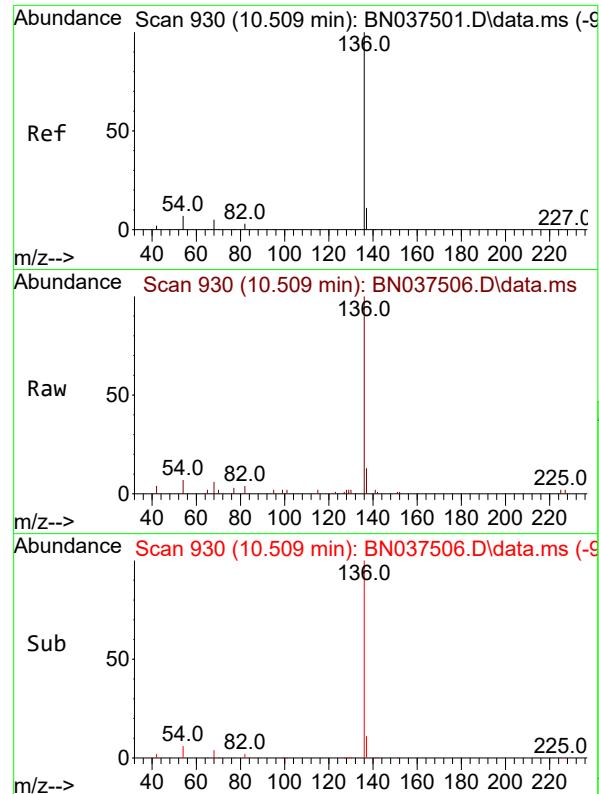
Tgt Ion: 99 Resp: 2407  
 Ion Ratio Lower Upper  
 99 100  
 42 20.7 17.1 25.7  
 71 34.6 27.8 41.8



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

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



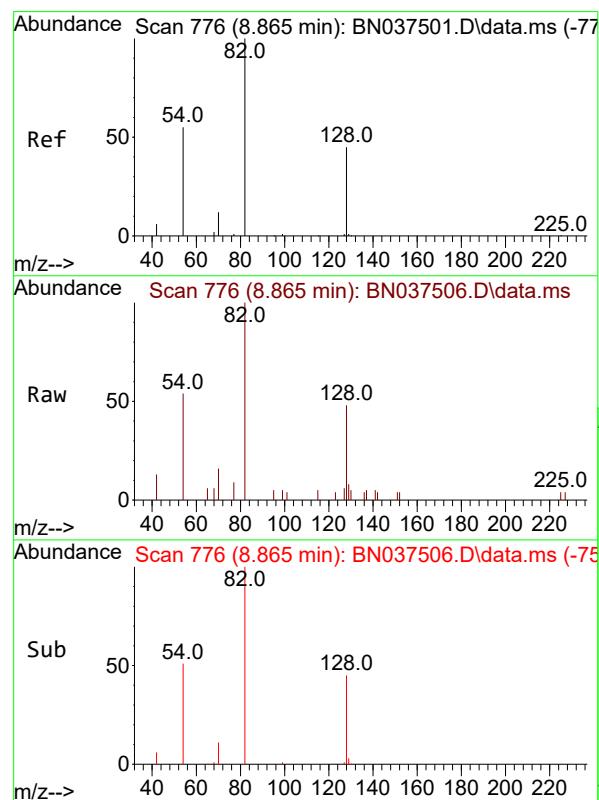
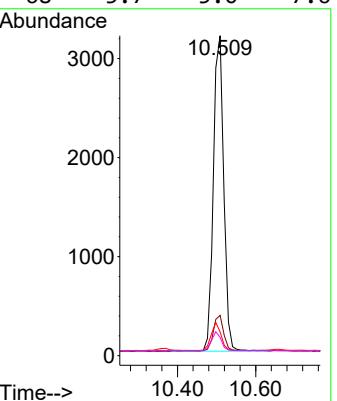


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

Tgt Ion:136 Resp: 5813

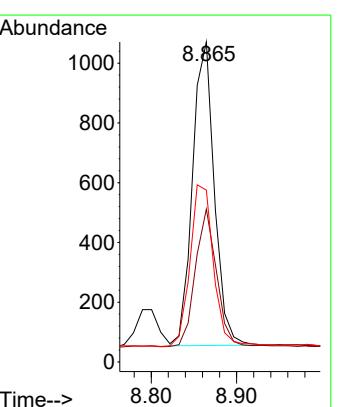
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 12.6  | 9.8   | 14.8  |
| 54  | 7.4   | 6.6   | 9.8   |
| 68  | 5.7   | 5.0   | 7.6   |

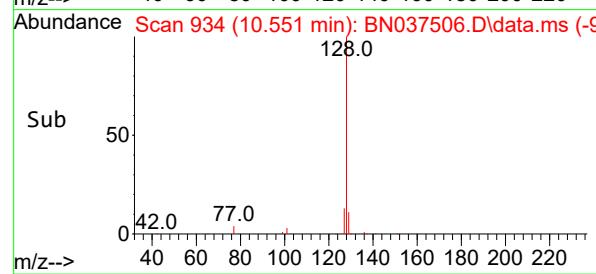
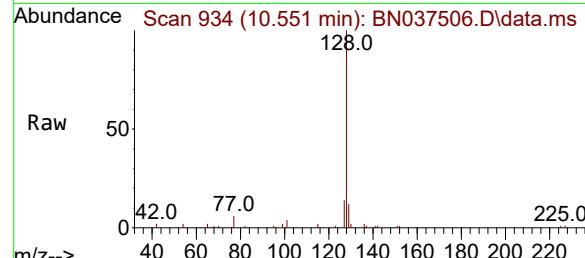
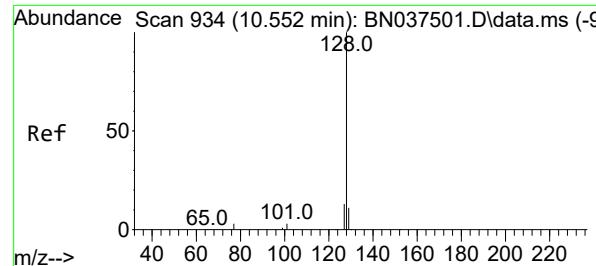


#8  
 Nitrobenzene-d5  
 Concen: 0.415 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Tgt Ion: 82 Resp: 1802

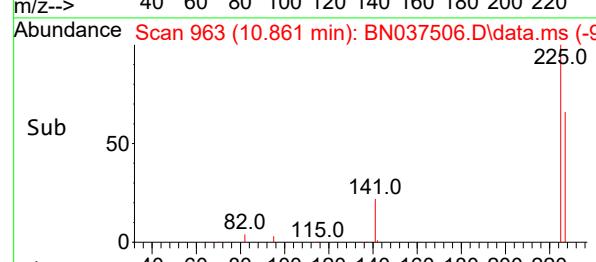
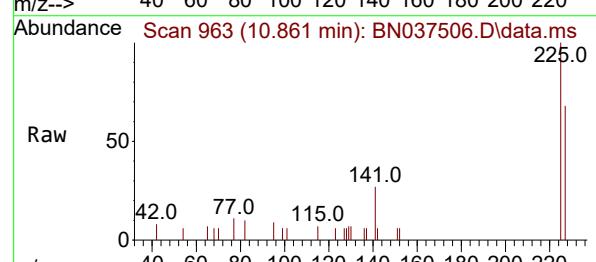
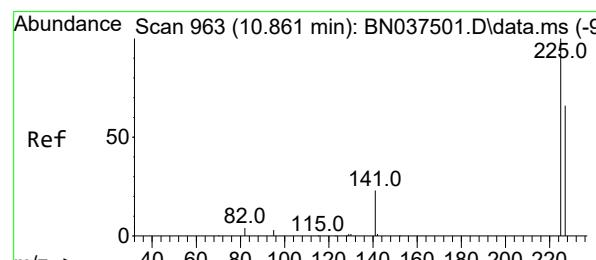
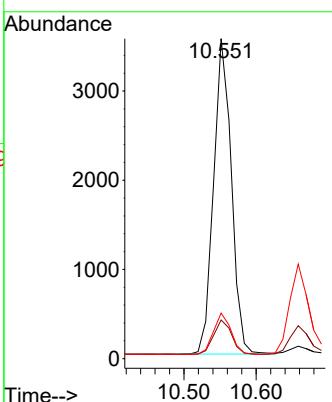
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 47.8  | 37.5  | 56.3  |
| 54  | 53.7  | 45.3  | 67.9  |





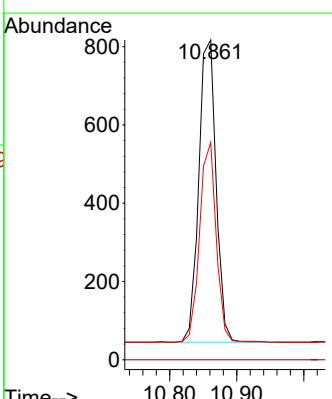
#9  
Naphthalene  
Concen: 0.389 ng  
RT: 10.551 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
ClientSampleId : ICVBN071525  
Acq: 15 Jul 2025 16:58

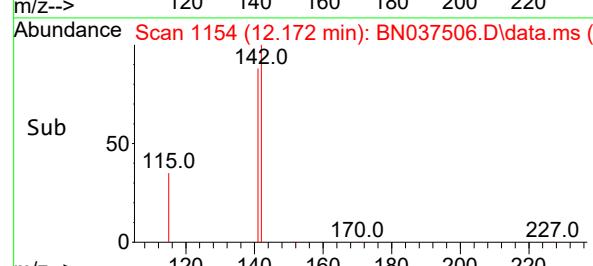
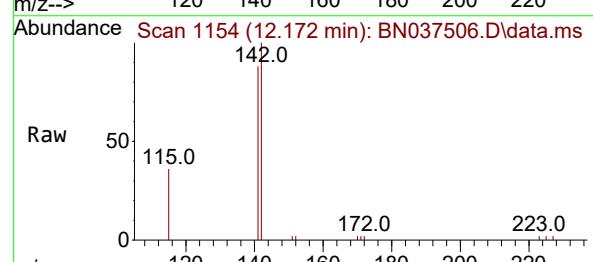
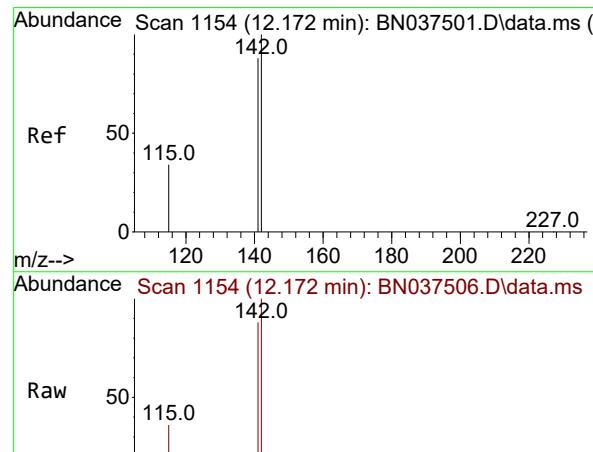
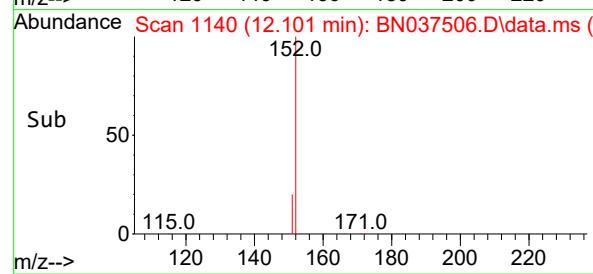
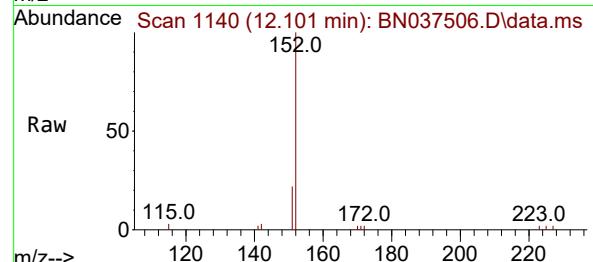
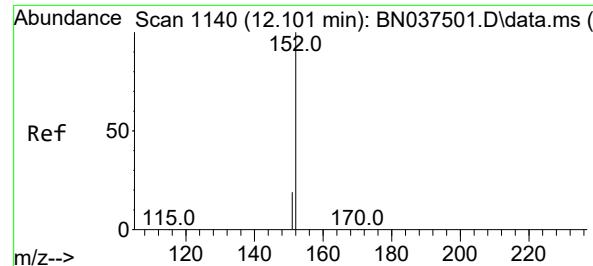
Tgt Ion:128 Resp: 6033  
Ion Ratio Lower Upper  
128 100  
129 12.1 9.7 14.5  
127 14.2 11.5 17.3



#10  
Hexachlorobutadiene  
Concen: 0.405 ng  
RT: 10.861 min Scan# 963  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:225 Resp: 1386  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.2 51.0 76.4





#11

2-Methylnaphthalene-d10

Concen: 0.405 ng

RT: 12.101 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

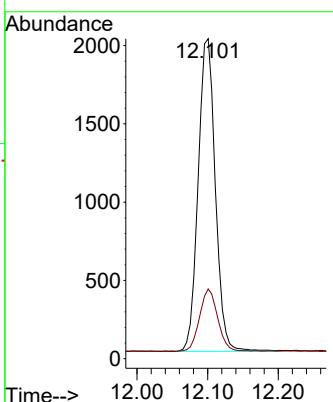
ICVBN071525

Tgt Ion:152 Resp: 3375

Ion Ratio Lower Upper

152 100

151 21.1 16.8 25.2



#12

2-Methylnaphthalene

Concen: 0.353 ng

RT: 12.172 min Scan# 1154

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

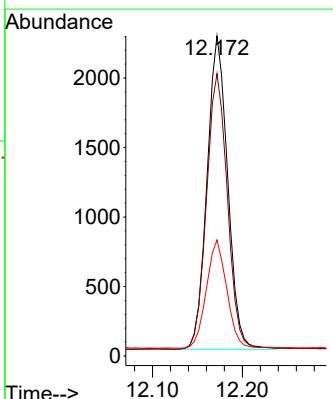
Tgt Ion:142 Resp: 3595

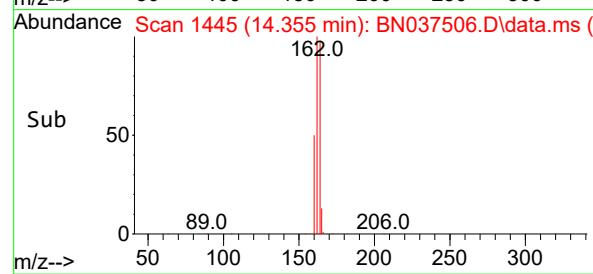
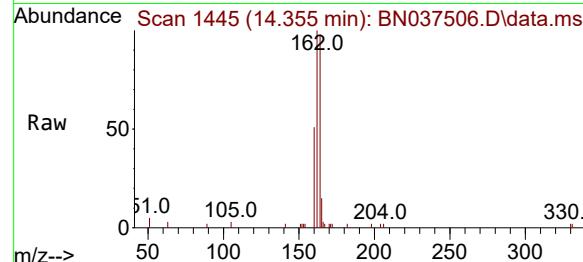
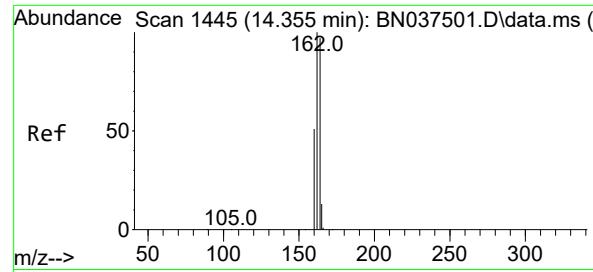
Ion Ratio Lower Upper

142 100

141 88.2 71.0 106.4

115 36.3 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

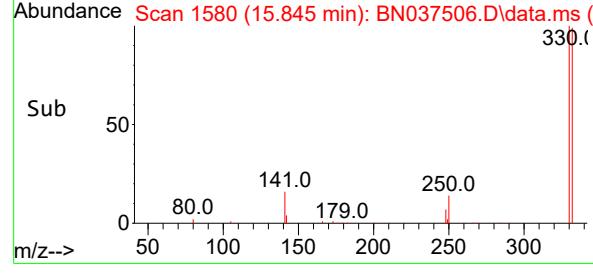
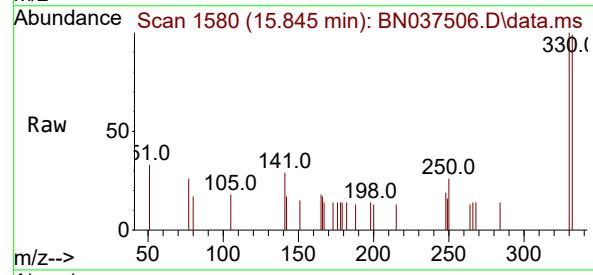
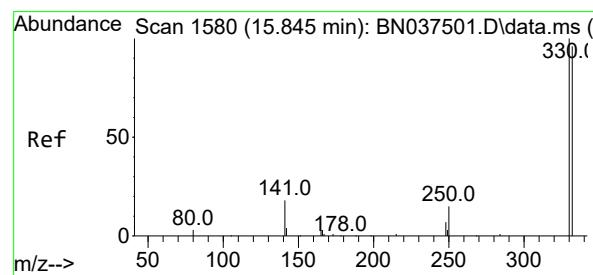
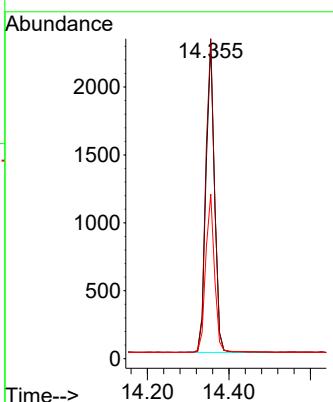
Tgt Ion:164 Resp: 3335

Ion Ratio Lower Upper

164 100

162 101.6 82.0 123.0

160 52.2 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.324 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

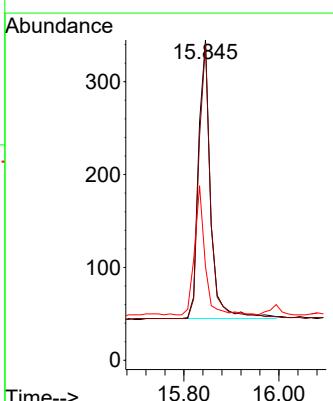
Tgt Ion:330 Resp: 531

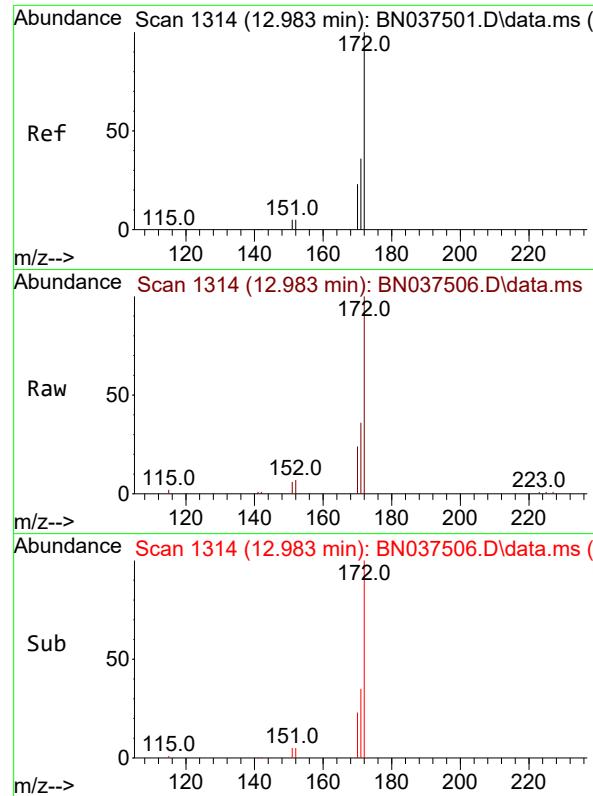
Ion Ratio Lower Upper

330 100

332 95.9 76.1 114.1

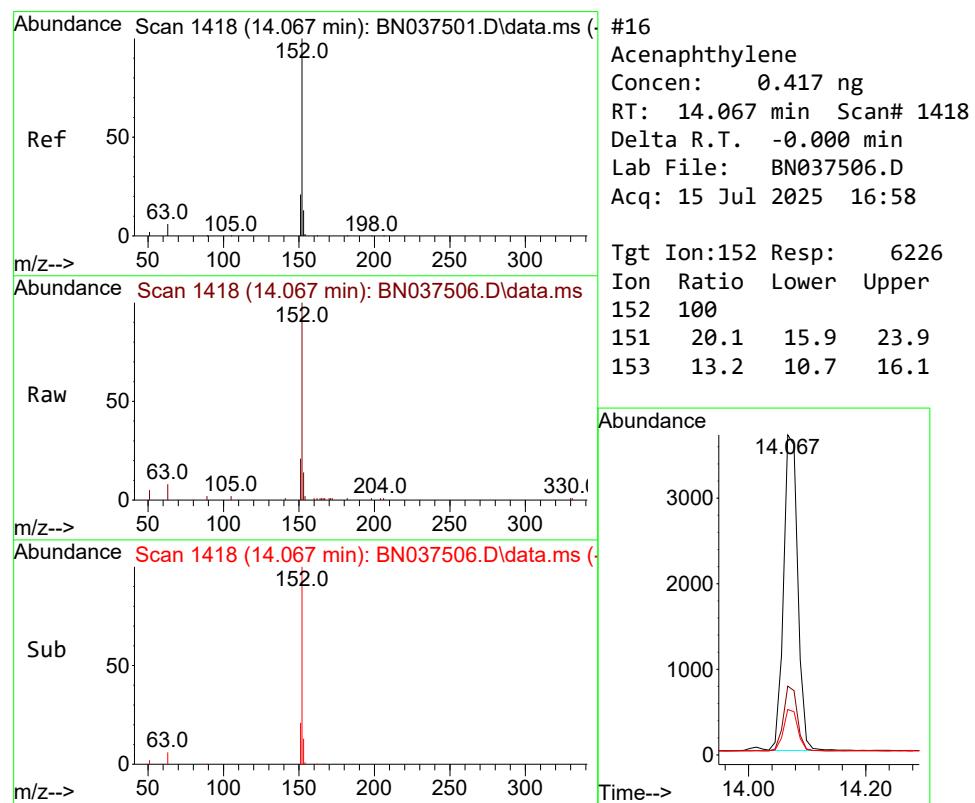
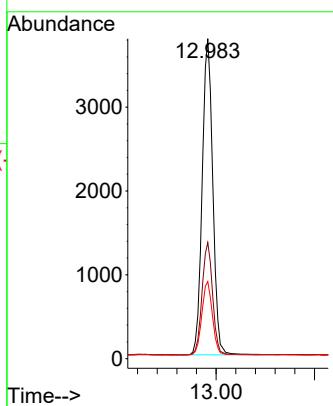
141 39.9 33.4 50.0





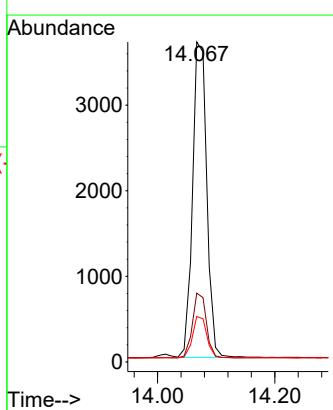
#15  
2-Fluorobiphenyl  
Concen: 0.461 ng  
RT: 12.983 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58  
ClientSampleId : ICVBN071525

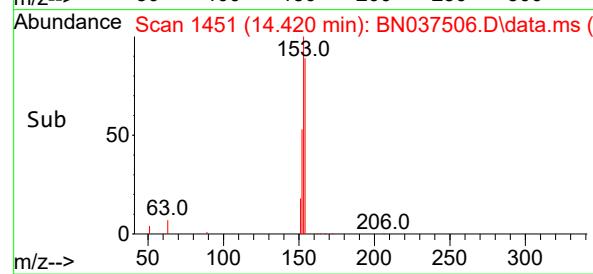
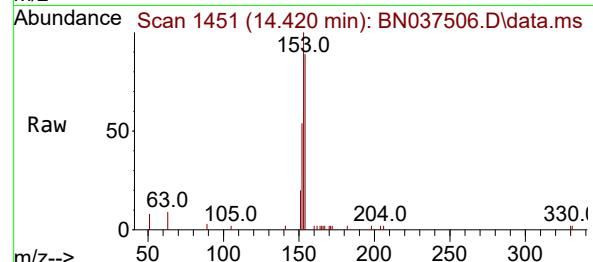
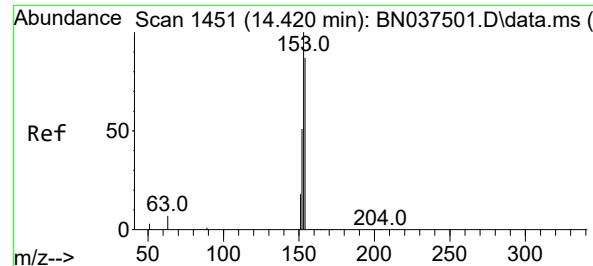
Tgt Ion:172 Resp: 8001  
Ion Ratio Lower Upper  
172 100  
171 36.3 29.4 44.2  
170 24.1 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.417 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:152 Resp: 6226  
Ion Ratio Lower Upper  
152 100  
151 20.1 15.9 23.9  
153 13.2 10.7 16.1





#17

Acenaphthene

Concen: 0.377 ng

RT: 14.420 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

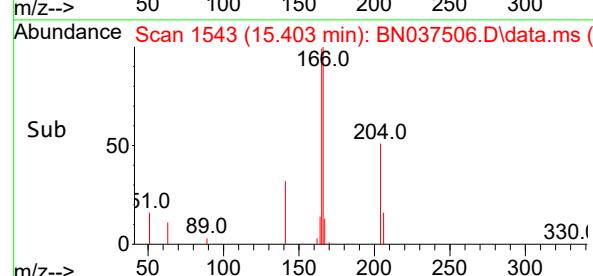
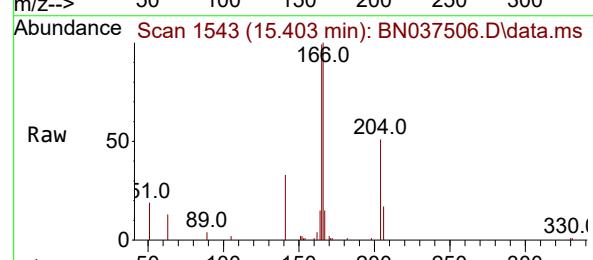
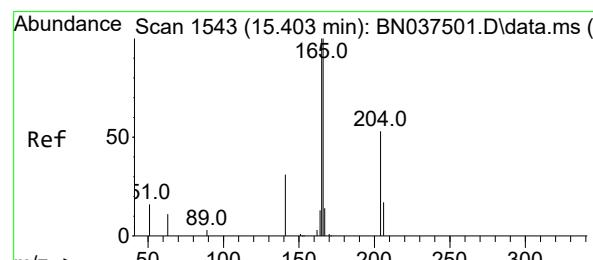
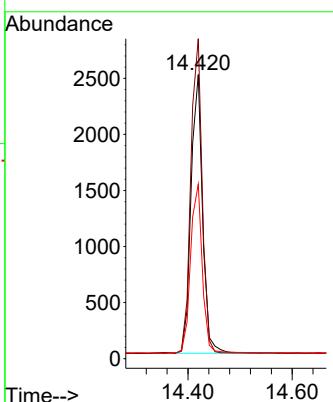
Tgt Ion:154 Resp: 3826

Ion Ratio Lower Upper

154 100

153 111.6 89.2 133.8

152 61.6 48.0 72.0



#18

Fluorene

Concen: 0.384 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

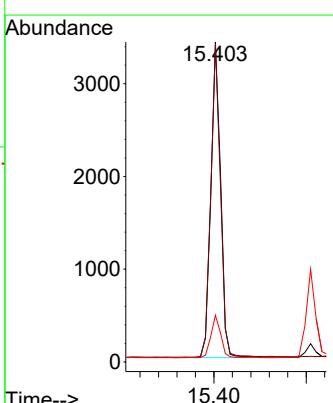
Tgt Ion:166 Resp: 5028

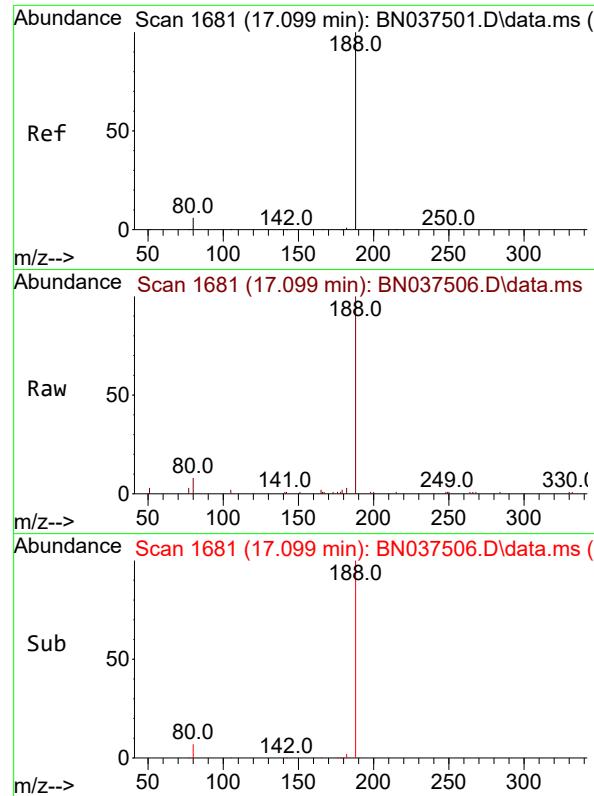
Ion Ratio Lower Upper

166 100

165 96.8 78.1 117.1

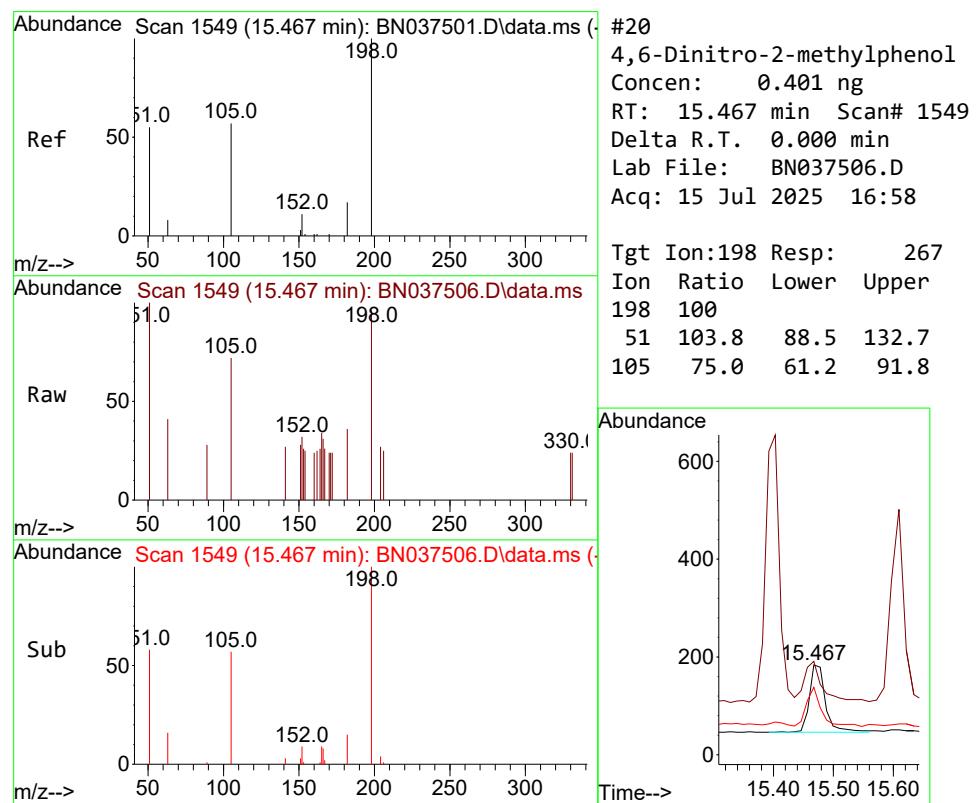
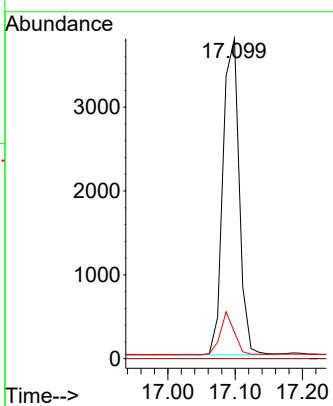
167 13.2 11.0 16.6





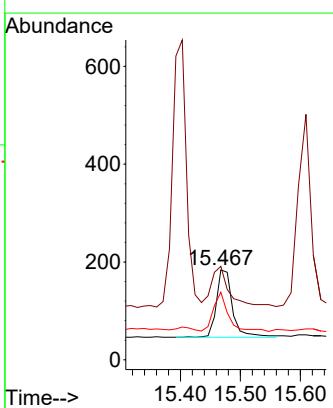
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.099 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
ClientSampleId : ICVBN071525  
Acq: 15 Jul 2025 16:58

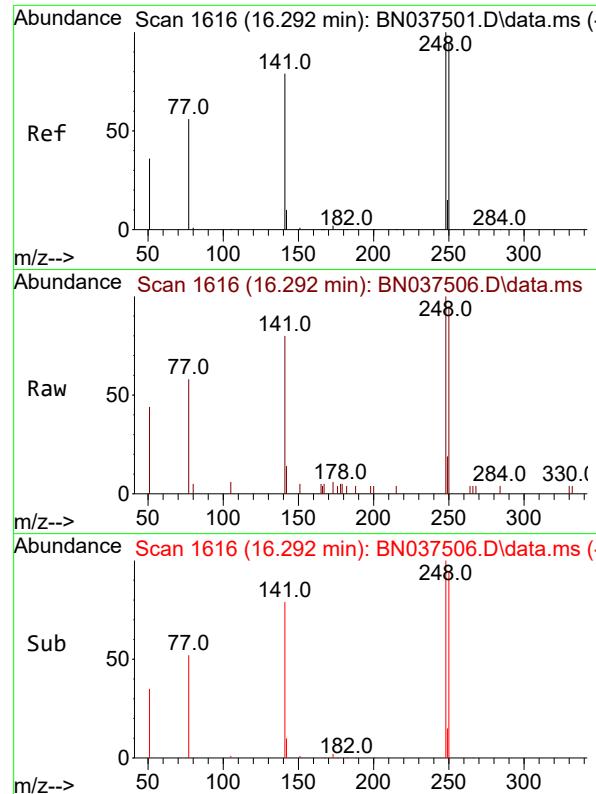
Tgt Ion:188 Resp: 6334  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 8.2 6.0 9.0



#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.401 ng  
RT: 15.467 min Scan# 1549  
Delta R.T. 0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:198 Resp: 267  
Ion Ratio Lower Upper  
198 100  
51 103.8 88.5 132.7  
105 75.0 61.2 91.8





#21

4-Bromophenyl-phenylether

Concen: 0.385 ng

RT: 16.292 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

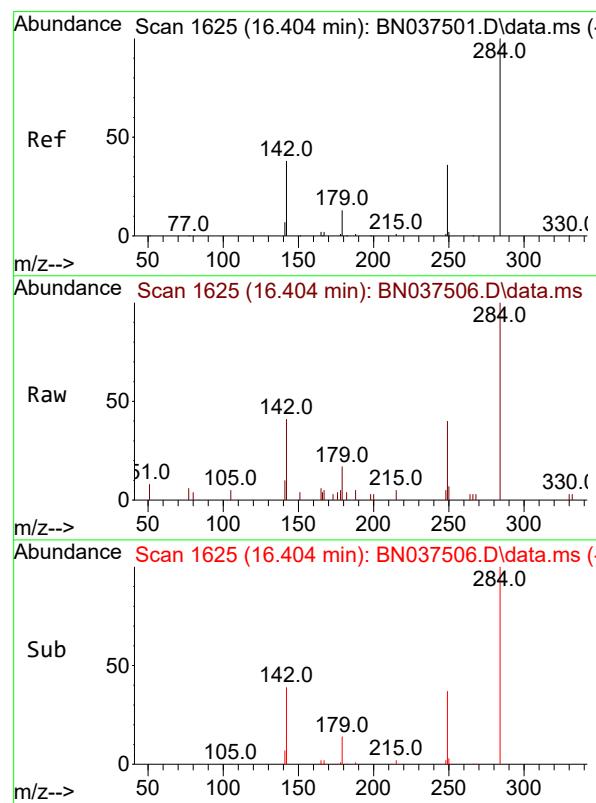
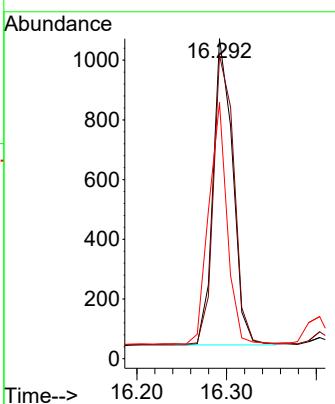
Tgt Ion:248 Resp: 1563

Ion Ratio Lower Upper

248 100

250 94.9 76.2 114.2

141 80.0 63.9 95.9



#22

Hexachlorobenzene

Concen: 0.412 ng

RT: 16.404 min Scan# 1625

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

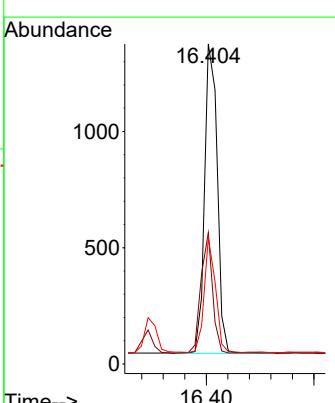
Tgt Ion:284 Resp: 2158

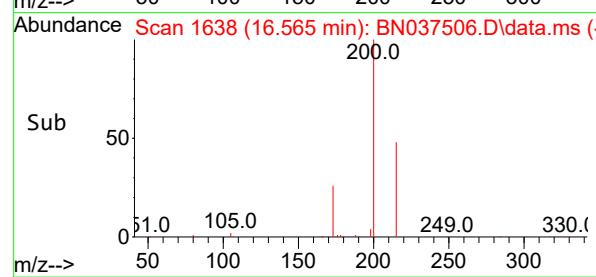
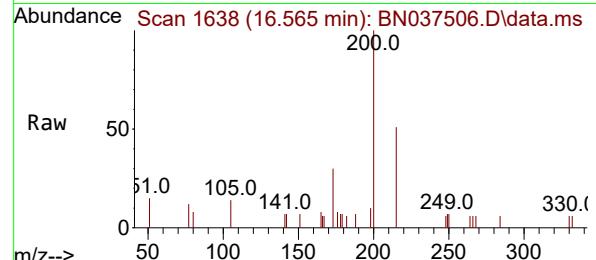
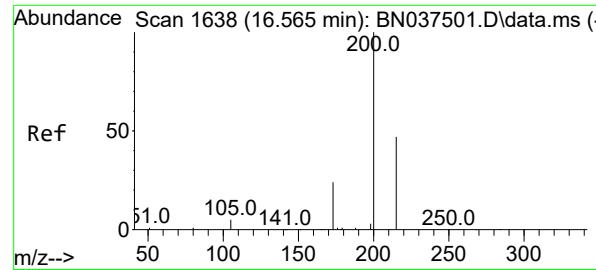
Ion Ratio Lower Upper

284 100

142 35.9 28.9 43.3

249 33.0 25.8 38.6





#23

Atrazine

Concen: 0.371 ng

RT: 16.565 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument:

BNA\_N

ClientSampleId :

ICVBN071525

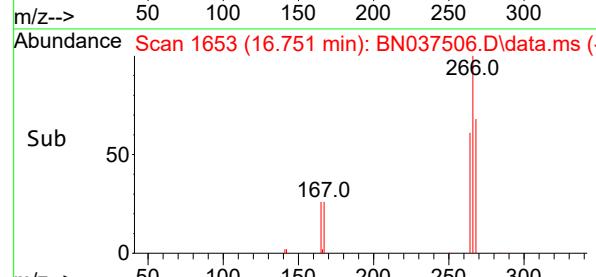
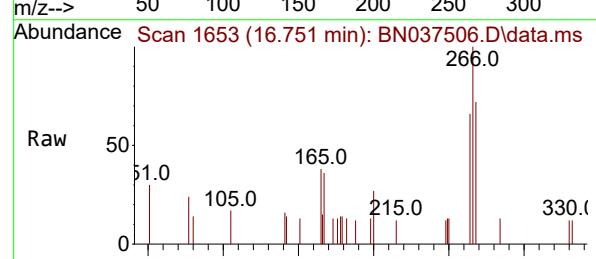
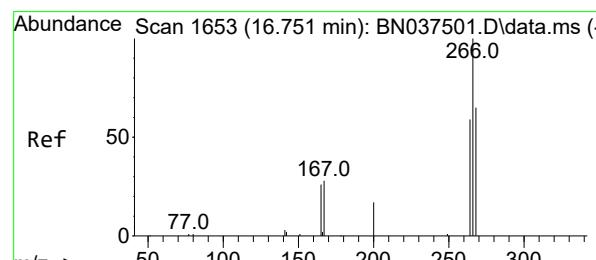
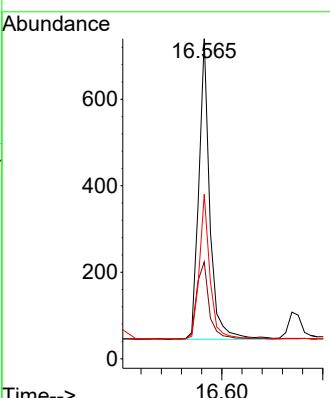
Tgt Ion:200 Resp: 1050

Ion Ratio Lower Upper

200 100

173 30.3 23.2 34.8

215 51.4 40.2 60.4



#24

Pentachlorophenol

Concen: 0.289 ng

RT: 16.751 min Scan# 1653

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

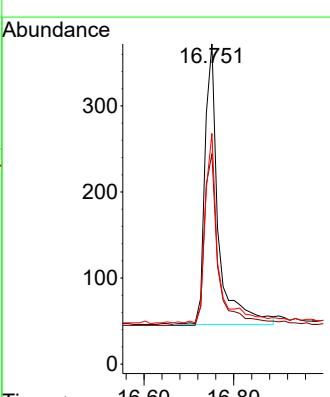
Tgt Ion:266 Resp: 679

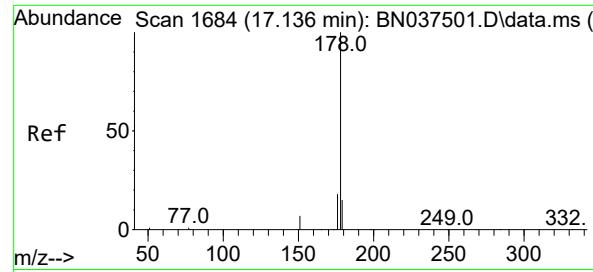
Ion Ratio Lower Upper

266 100

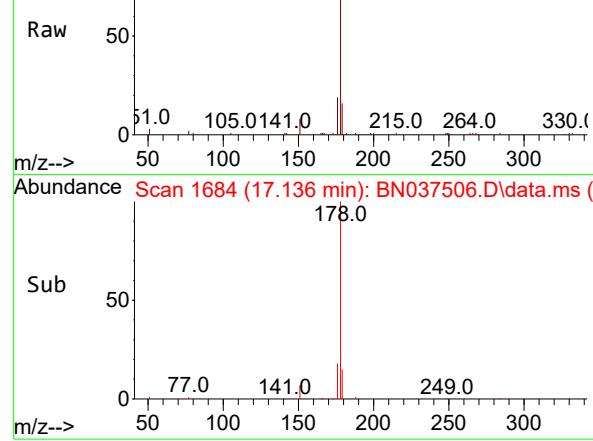
264 62.9 49.3 73.9

268 65.2 51.6 77.4





Abundance Scan 1684 (17.136 min): BN037506.D\data.ms (-)



#25

Phenanthrene

Concen: 0.403 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

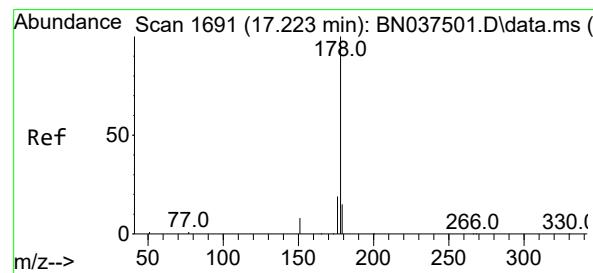
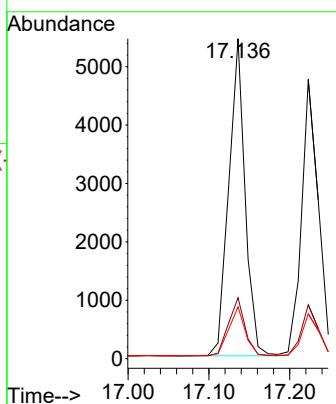
Tgt Ion:178 Resp: 7640

Ion Ratio Lower Upper

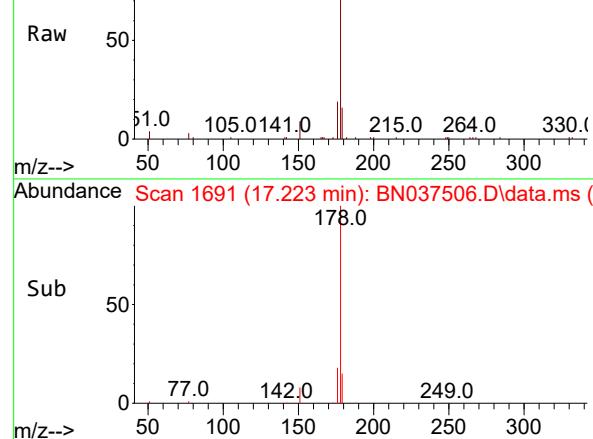
178 100

176 18.6 15.0 22.6

179 15.6 12.2 18.2



Abundance Scan 1691 (17.223 min): BN037506.D\data.ms (-)



#26

Anthracene

Concen: 0.400 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

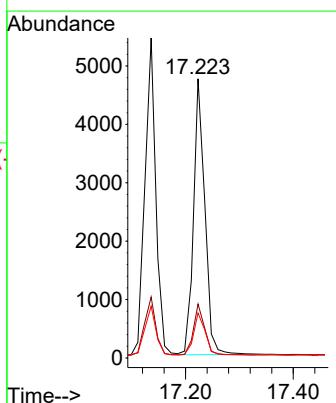
Tgt Ion:178 Resp: 6928

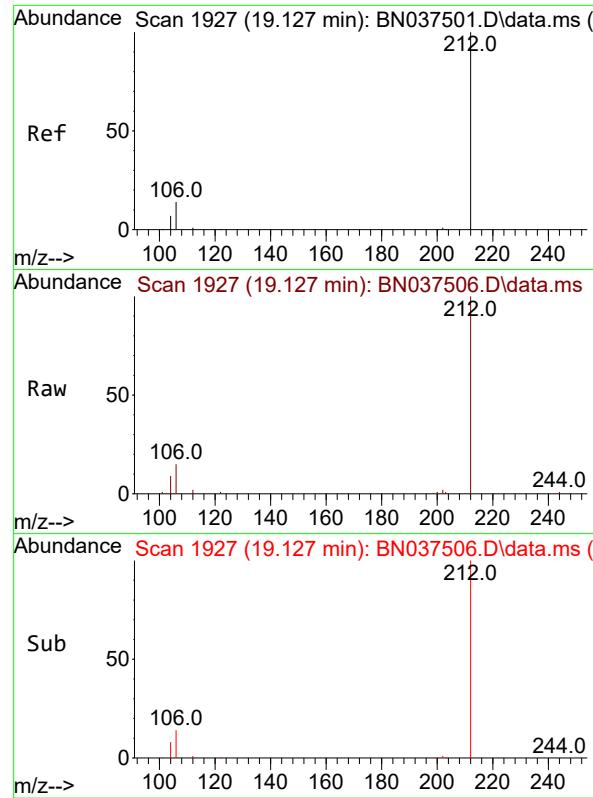
Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

179 15.4 12.3 18.5

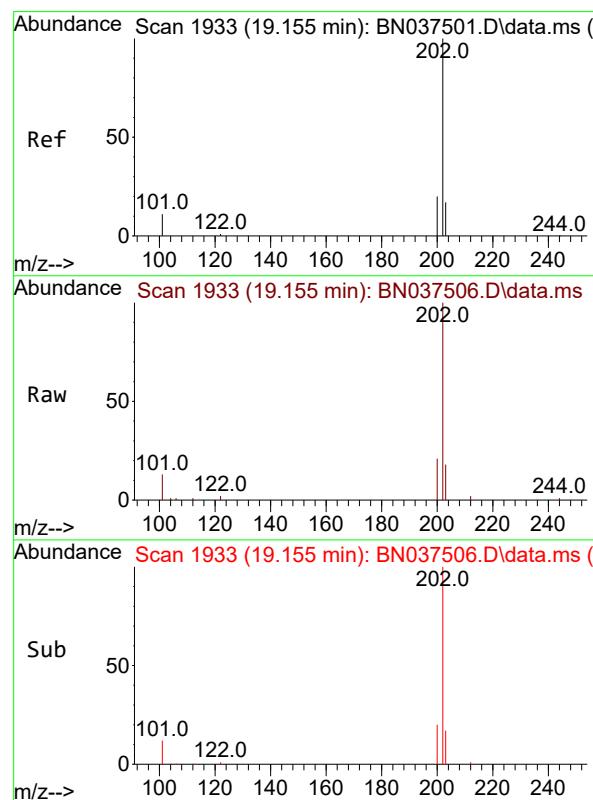
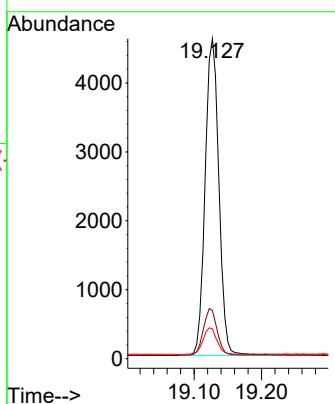




#27  
 Fluoranthene-d10  
 Concen: 0.387 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

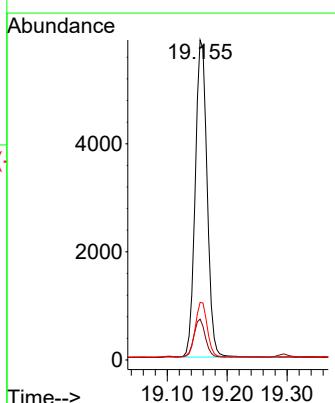
Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

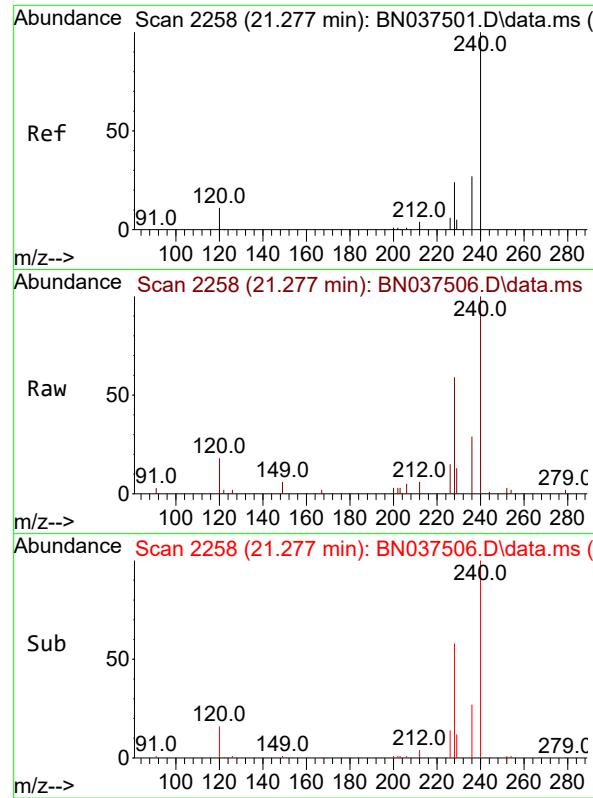
Tgt Ion:212 Resp: 6495  
 Ion Ratio Lower Upper  
 212 100  
 106 14.6 12.2 18.4  
 104 8.6 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.368 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Tgt Ion:202 Resp: 8063  
 Ion Ratio Lower Upper  
 202 100  
 101 12.0 9.8 14.6  
 203 17.2 13.6 20.4





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.277 min Scan# 2

Instrument : BNA\_N

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

ClientSampleId : ICVBN071525

Tgt Ion:240 Resp: 5040

Ion Ratio Lower Upper

240 100

120 18.1 10.7 16.1#

236 28.5 22.6 33.8

Abundance

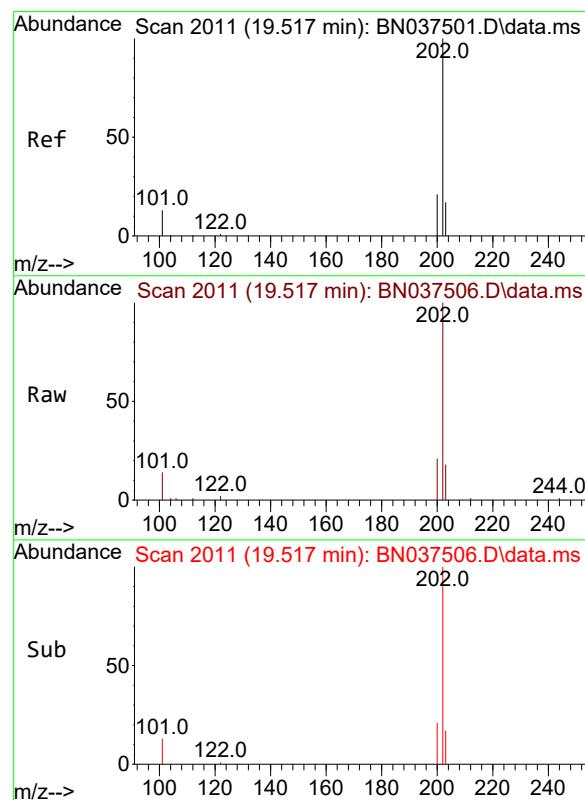
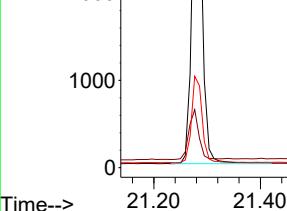
21.277

3000

2000

1000

0



#30

Pyrene

Concen: 0.394 ng

RT: 19.517 min Scan# 2011

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Tgt Ion:202 Resp: 8002

Ion Ratio Lower Upper

202 100

200 20.4 16.5 24.7

203 17.7 14.3 21.5

Abundance

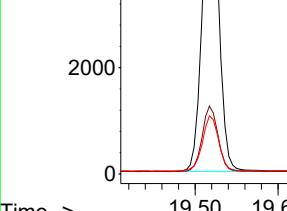
19.517

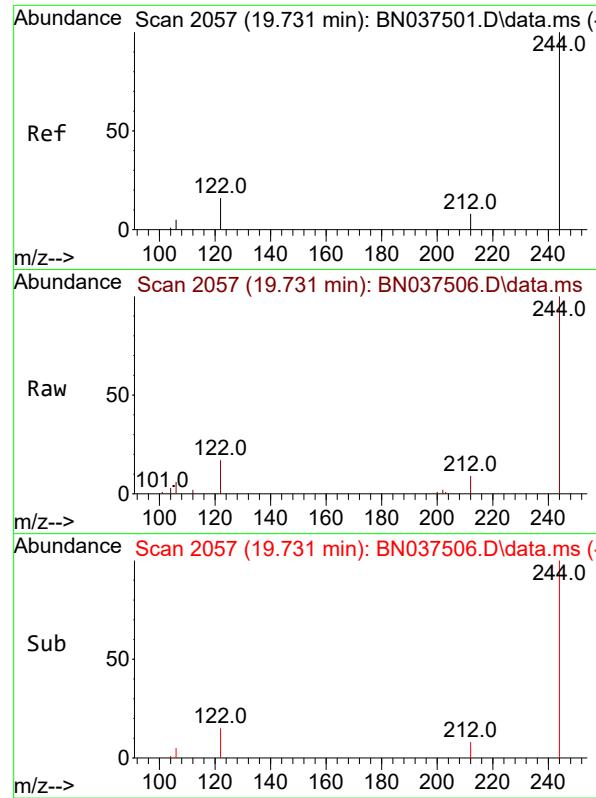
6000

4000

2000

0

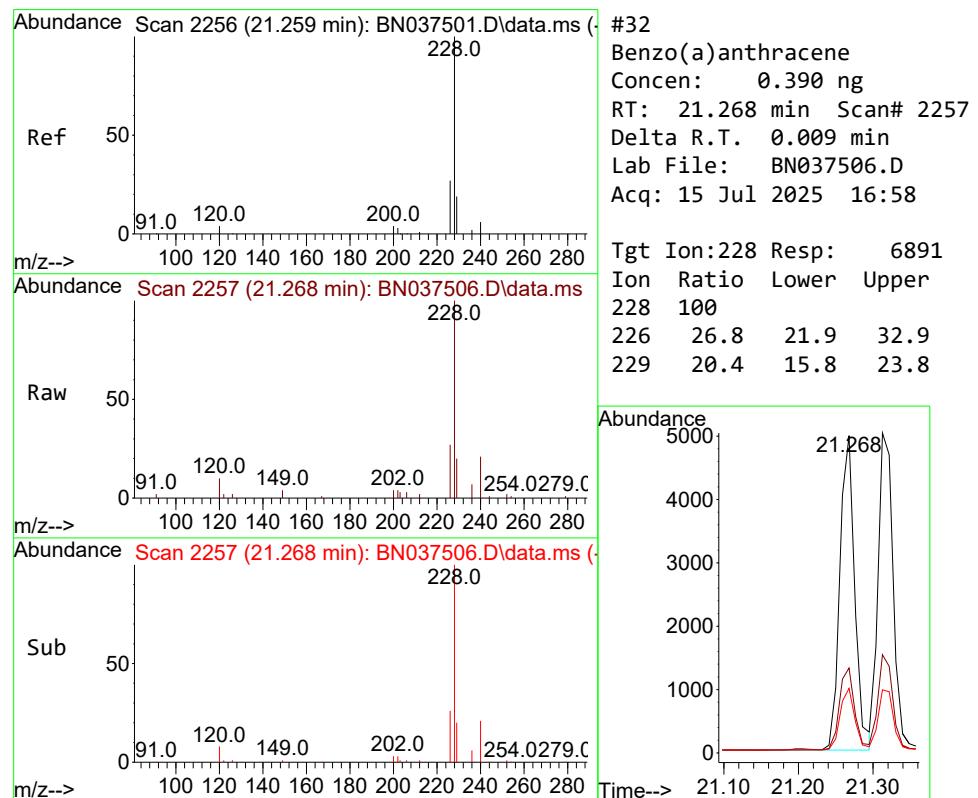
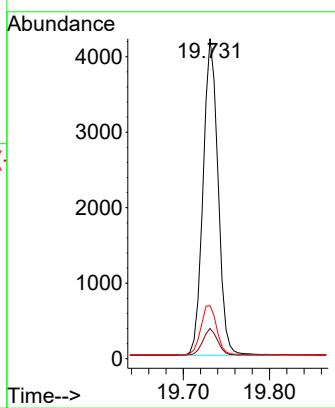




#31  
 Terphenyl-d14  
 Concen: 0.467 ng  
 RT: 19.731 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

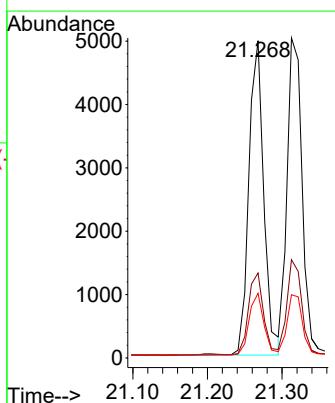
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN071525

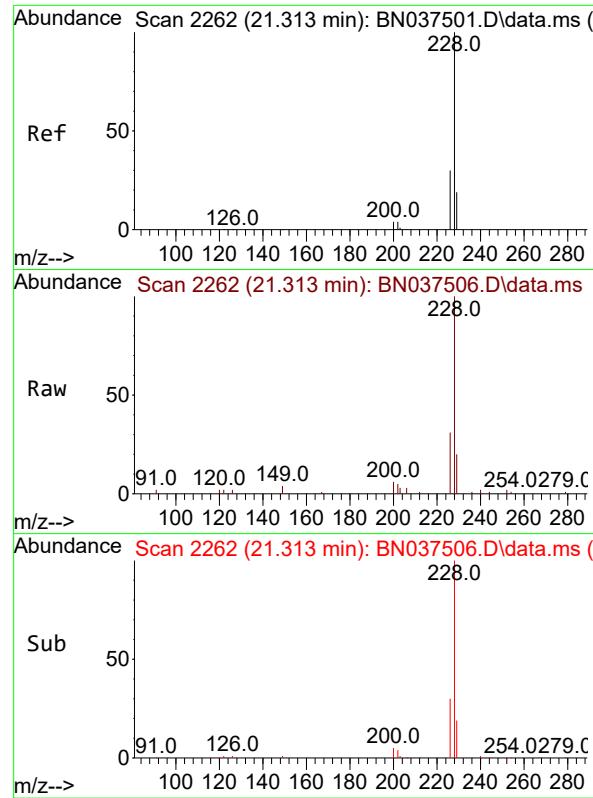
Tgt Ion:244 Resp: 5056  
 Ion Ratio Lower Upper  
 244 100  
 212 9.4 7.4 11.2  
 122 16.6 13.6 20.4



#32  
 Benzo(a)anthracene  
 Concen: 0.390 ng  
 RT: 21.268 min Scan# 2257  
 Delta R.T. 0.009 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

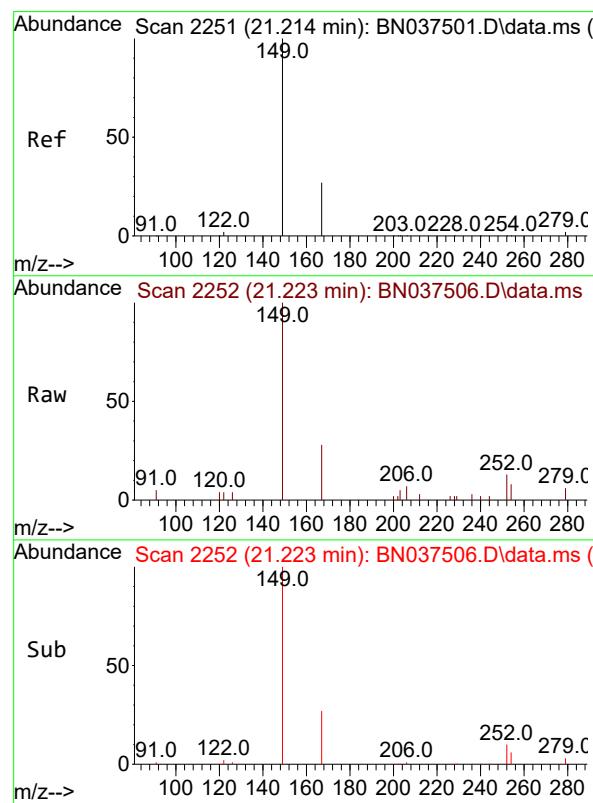
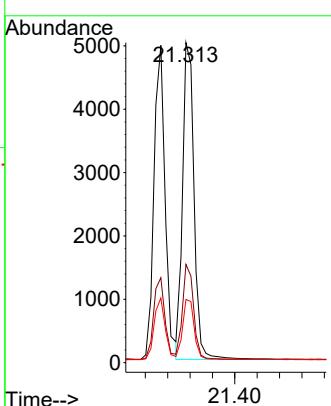
Tgt Ion:228 Resp: 6891  
 Ion Ratio Lower Upper  
 228 100  
 226 26.8 21.9 32.9  
 229 20.4 15.8 23.8





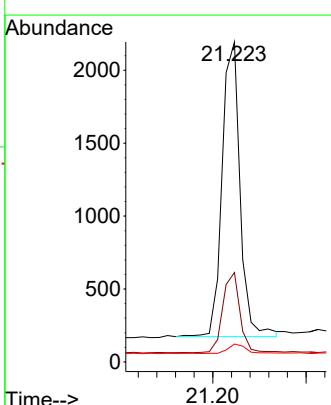
#33  
Chrysene  
Concen: 0.388 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58  
ClientSampleId : ICVBN071525

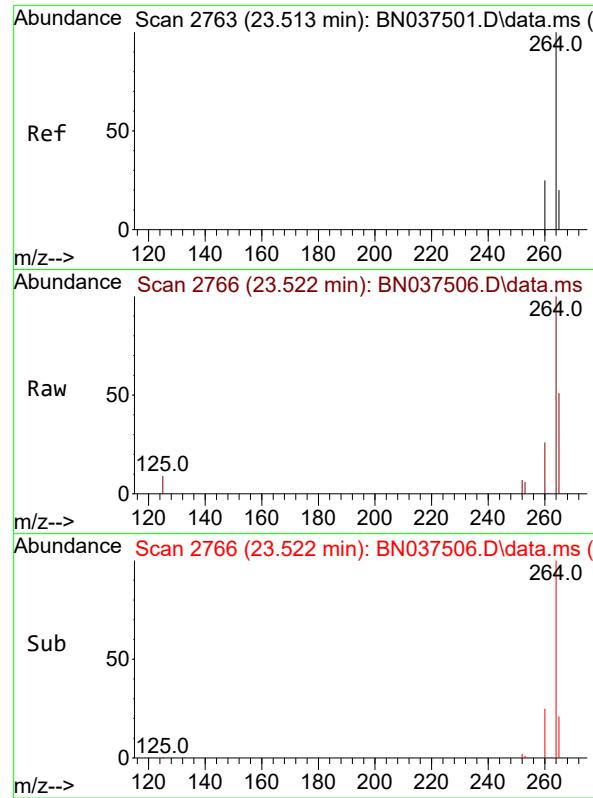
Tgt Ion:228 Resp: 7126  
Ion Ratio Lower Upper  
228 100  
226 30.7 24.2 36.4  
229 19.8 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.341 ng  
RT: 21.223 min Scan# 2252  
Delta R.T. 0.009 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:149 Resp: 2705  
Ion Ratio Lower Upper  
149 100  
167 26.0 21.8 32.8  
279 3.2 3.0 4.4

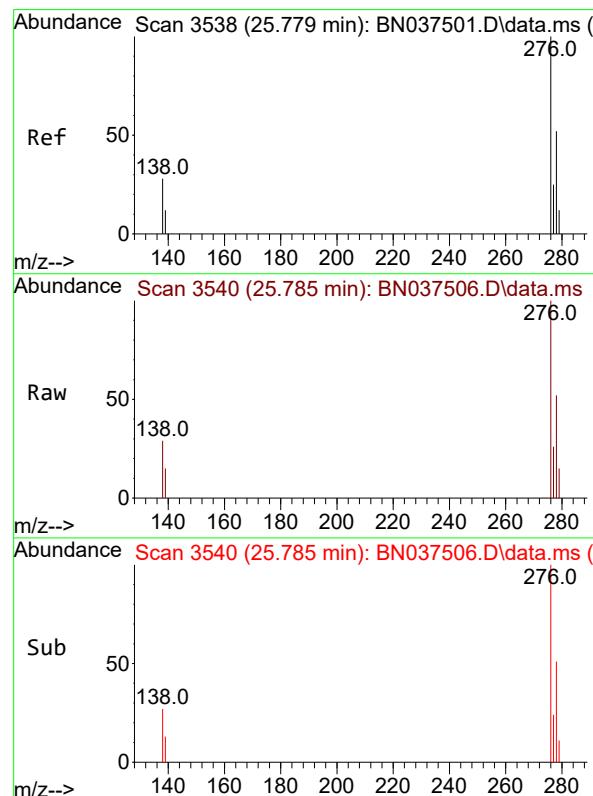
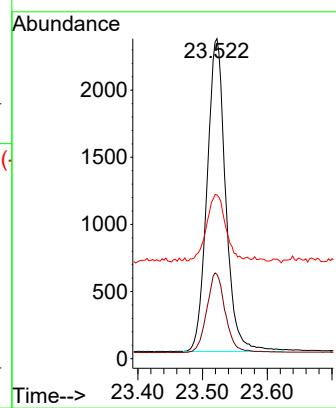




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.522 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

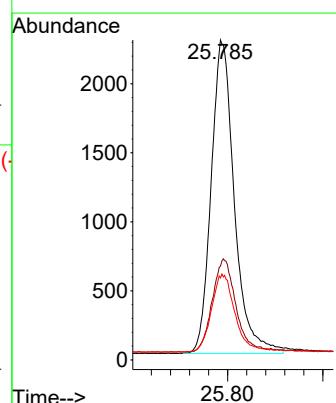
Instrument : BNA\_N  
ClientSampleId : ICVBN071525

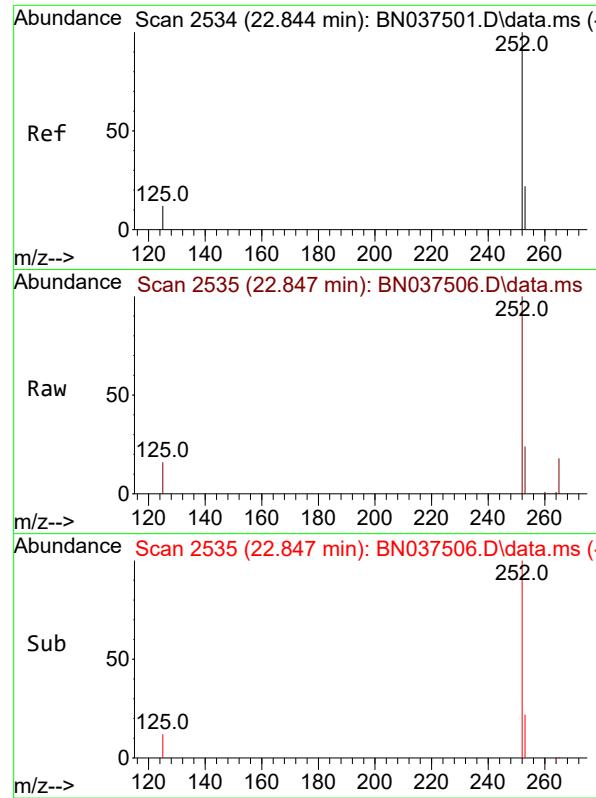
Tgt Ion:264 Resp: 4669  
Ion Ratio Lower Upper  
264 100  
260 26.3 21.2 31.8  
265 51.2 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.394 ng  
RT: 25.785 min Scan# 3540  
Delta R.T. 0.006 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:276 Resp: 7666  
Ion Ratio Lower Upper  
276 100  
138 30.2 24.0 36.0  
277 25.0 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.363 ng

RT: 22.847 min Scan# 2

Delta R.T. 0.003 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

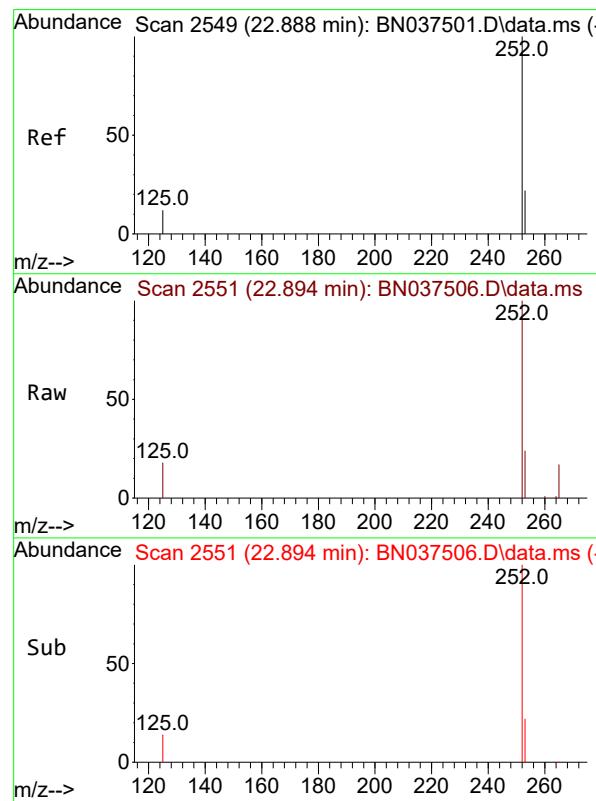
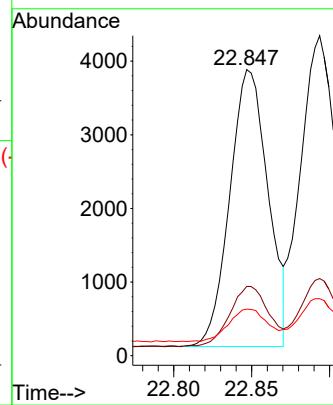
Tgt Ion:252 Resp: 6430

Ion Ratio Lower Upper

252 100

253 24.2 19.5 29.3

125 16.3 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.397 ng

RT: 22.894 min Scan# 2551

Delta R.T. 0.006 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

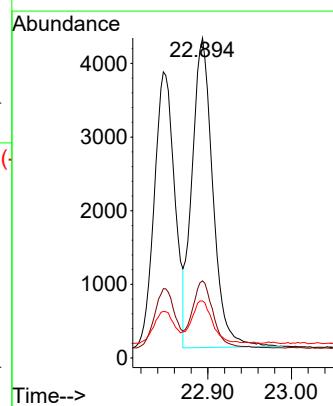
Tgt Ion:252 Resp: 7254

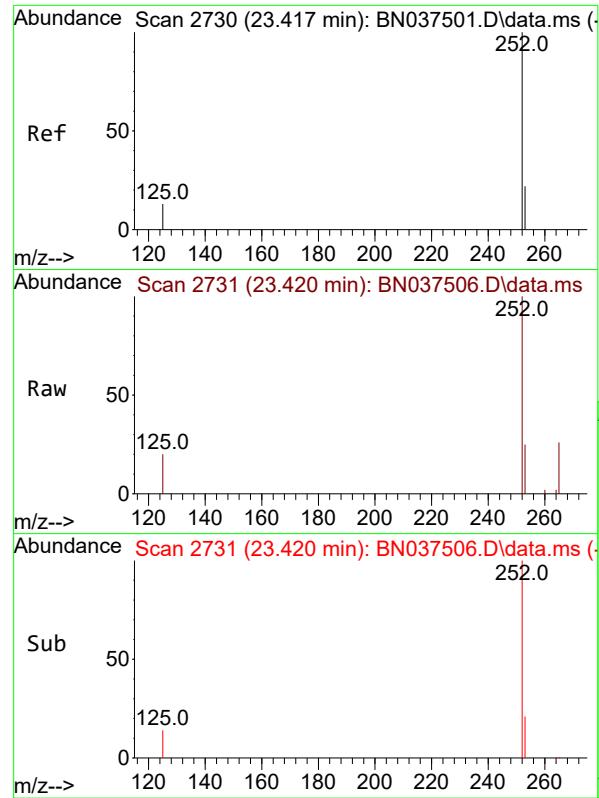
Ion Ratio Lower Upper

252 100

253 24.1 19.5 29.3

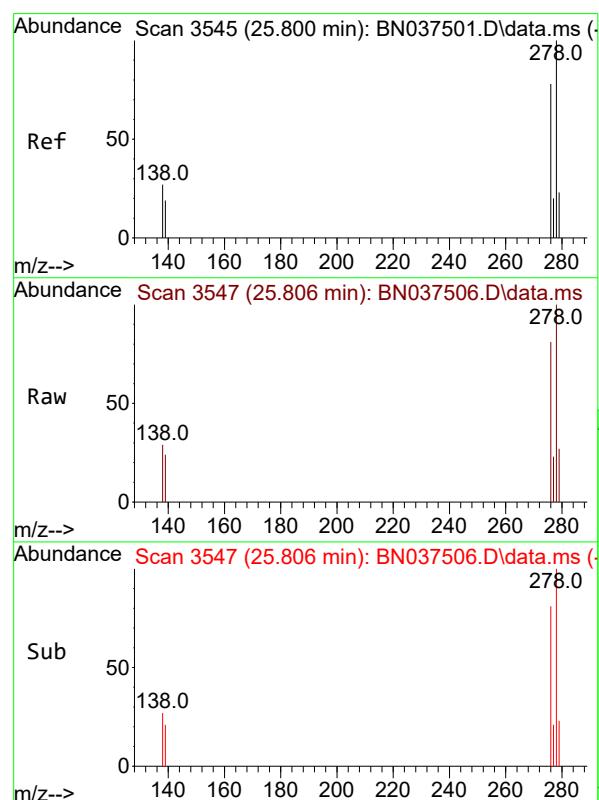
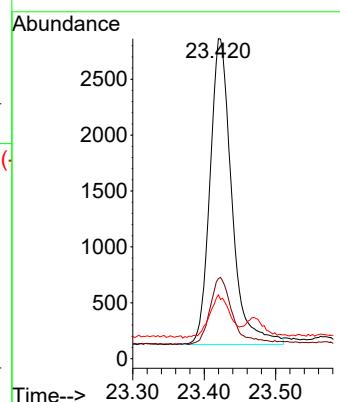
125 17.8 13.1 19.7





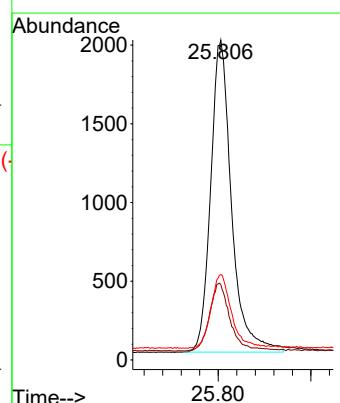
#39  
Benzo(a)pyrene  
Concen: 0.392 ng  
RT: 23.420 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.003 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58  
ClientSampleId : ICVBN071525

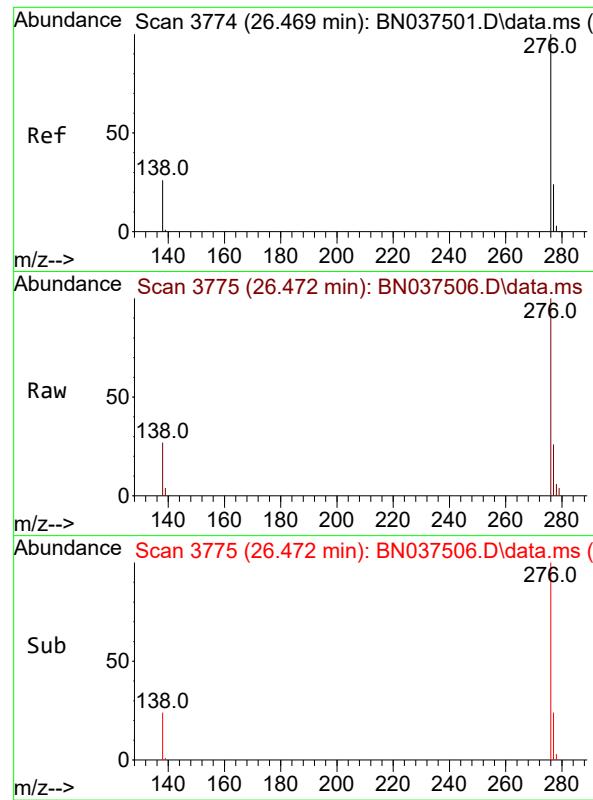
Tgt Ion:252 Resp: 5792  
Ion Ratio Lower Upper  
252 100  
253 25.0 19.9 29.9  
125 19.9 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.394 ng  
RT: 25.806 min Scan# 3547  
Delta R.T. 0.006 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:278 Resp: 6203  
Ion Ratio Lower Upper  
278 100  
139 23.6 17.5 26.3  
279 26.7 21.3 31.9

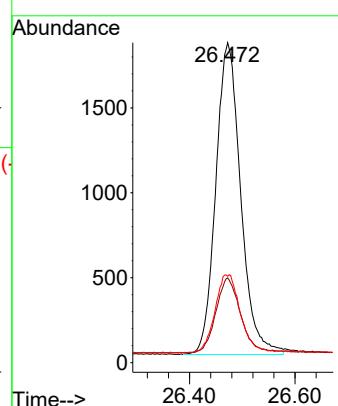




#41  
Benzo(g,h,i)perylene  
Concen: 0.369 ng  
RT: 26.472 min Scan# 3  
Delta R.T. 0.003 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Instrument : BNA\_N  
ClientSampleId : ICVBN071525

Tgt Ion:276 Resp: 6018  
Ion Ratio Lower Upper  
276 100  
277 26.5 20.9 31.3  
138 27.0 22.6 33.8



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

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

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

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|---------|----------------------------|-------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 1.000 | 1.000 | 0.0   | 98    | 0.00     |
| 2       | 1,4-Dioxane                | 0.385 | 0.452 | -17.4 | 112   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.484 | 0.484 | 0.0   | 102   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.989 | 0.908 | 8.2   | 90    | 0.00     |
| 5 S     | Phenol-d6                  | 1.241 | 1.076 | 13.3  | 88    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.033 | 1.072 | -3.8  | 102   | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 100   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.299 | 0.310 | -3.7  | 109   | 0.00     |
| 9       | Naphthalene                | 1.067 | 1.038 | 2.7   | 99    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.236 | 0.238 | -0.8  | 101   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.574 | 0.581 | -1.2  | 107   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.701 | 0.618 | 11.8  | 91    | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 100   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.197 | 0.159 | 19.3  | 92    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 2.080 | 2.399 | -15.3 | 118   | 0.00     |
| 16      | Acenaphthylene             | 1.792 | 1.867 | -4.2  | 109   | 0.00     |
| 17      | Acenaphthene               | 1.218 | 1.147 | 5.8   | 98    | 0.00     |
| 18      | Fluorene                   | 1.569 | 1.508 | 3.9   | 102   | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 98    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.057 | 0.042 | 26.3# | 100   | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.256 | 0.247 | 3.5   | 99    | 0.00     |
| 22      | Hexachlorobenzene          | 0.331 | 0.341 | -3.0  | 102   | 0.00     |
| 23      | Atrazine                   | 0.179 | 0.166 | 7.3   | 102   | 0.00     |
| 24      | Pentachlorophenol          | 0.149 | 0.107 | 28.2# | 84    | 0.00     |
| 25      | Phenanthrene               | 1.198 | 1.206 | -0.7  | 102   | 0.00     |
| 26      | Anthracene                 | 1.093 | 1.094 | -0.1  | 106   | 0.00     |
| 27 SURR | Fluoranthene-d10           | 1.060 | 1.025 | 3.3   | 104   | 0.00     |
| 28      | Fluoranthene               | 1.382 | 1.273 | 7.9   | 97    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 97    | 0.00     |
| 30      | Pyrene                     | 1.612 | 1.588 | 1.5   | 96    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.859 | 1.003 | -16.8 | 115   | 0.00     |
| 32      | Benzo(a)anthracene         | 1.401 | 1.367 | 2.4   | 99    | 0.00     |
| 33      | Chrysene                   | 1.459 | 1.414 | 3.1   | 95    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.630 | 0.537 | 14.8  | 92    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 97    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.666 | 1.642 | 1.4   | 105   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.518 | 1.377 | 9.3   | 92    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.567 | 1.554 | 0.8   | 102   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.267 | 1.241 | 2.1   | 101   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.349 | 1.329 | 1.5   | 106   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.397 | 1.289 | 7.7   | 96    | 0.00     |

(#) = Out of Range

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

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

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

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

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | Amount | Calc. | %Dev  | Area% | Dev(min) |
|---------|----------------------------|--------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 0.400  | 0.400 | 0.0   | 98    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.470 | -17.5 | 112   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.401 | -0.3  | 102   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.367 | 8.3   | 90    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.347 | 13.3  | 88    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.415 | -3.7  | 102   | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 100   | 0.00     |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.415 | -3.7  | 109   | 0.00     |
| 9       | Naphthalene                | 0.400  | 0.389 | 2.8   | 99    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.405 | -1.3  | 101   | 0.00     |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.405 | -1.3  | 107   | 0.00     |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.353 | 11.8  | 91    | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 100   | 0.00     |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.324 | 19.0  | 92    | 0.00     |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.461 | -15.3 | 118   | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.417 | -4.2  | 109   | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.377 | 5.8   | 98    | 0.00     |
| 18      | Fluorene                   | 0.400  | 0.384 | 4.0   | 102   | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 98    | 0.00     |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.401 | -0.3  | 100   | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.385 | 3.8   | 99    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.412 | -3.0  | 102   | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.371 | 7.3   | 102   | 0.00     |
| 24      | Pentachlorophenol          | 0.400  | 0.289 | 27.8# | 84    | 0.00     |
| 25      | Phenanthrene               | 0.400  | 0.403 | -0.8  | 102   | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.400 | 0.0   | 106   | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.387 | 3.3   | 104   | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.368 | 8.0   | 97    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 97    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.394 | 1.5   | 96    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.467 | -16.8 | 115   | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.390 | 2.5   | 99    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.388 | 3.0   | 95    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.341 | 14.8  | 92    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 97    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.394 | 1.5   | 105   | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.363 | 9.3   | 92    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.397 | 0.8   | 102   | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.392 | 2.0   | 101   | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.394 | 1.5   | 106   | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.369 | 7.8   | 96    | 0.00     |

(#) = Out of Range

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



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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

|                 |             |                        |                       |
|-----------------|-------------|------------------------|-----------------------|
| Lab Name:       | Alliance    | Contract:              | TETR06                |
| Lab Code:       | ACE         | SDG No.:               | Q2696                 |
| Instrument ID:  | BNA_N       | Calibration Date/Time: | 07/30/2025 09:38      |
| Lab File ID:    | BN037548.D  | Init. Calib. Date(s):  | 07/15/2025 07/15/2025 |
| EPA Sample No.: | SSTDCCCC0.4 | Init. Calib. Time(s) : | 12:36 16:14           |
| GC Column:      | ZB-GR       | ID:                    | 0.25 (mm)             |

| COMPOUND                | RRF   | RRF0.4 | MIN RRF | %D    | MAX%D |
|-------------------------|-------|--------|---------|-------|-------|
| 2-Methylnaphthalene-d10 | 0.574 | 0.520  |         | -9.4  | 20.0  |
| Fluoranthene-d10        | 1.060 | 0.900  |         | -15.1 | 20.0  |
| 2-Fluorophenol          | 0.989 | 0.916  |         | -7.4  | 20.0  |
| Phenol-d6               | 1.241 | 1.129  |         | -9.0  | 20.0  |
| Nitrobenzene-d5         | 0.299 | 0.272  |         | -9.0  | 20.0  |
| 2-Fluorobiphenyl        | 2.080 | 2.204  |         | 6.0   | 20.0  |
| 2,4,6-Tribromophenol    | 0.197 | 0.139  |         | -29.4 | 20.0  |
| Terphenyl-d14           | 0.859 | 0.751  |         | -12.6 | 20.0  |
| 1,4-Dioxane             | 0.385 | 0.392  |         | 1.8   | 20.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037548.D  
 Acq On : 30 Jul 2025 09:38  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Jul 30 10:39:47 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

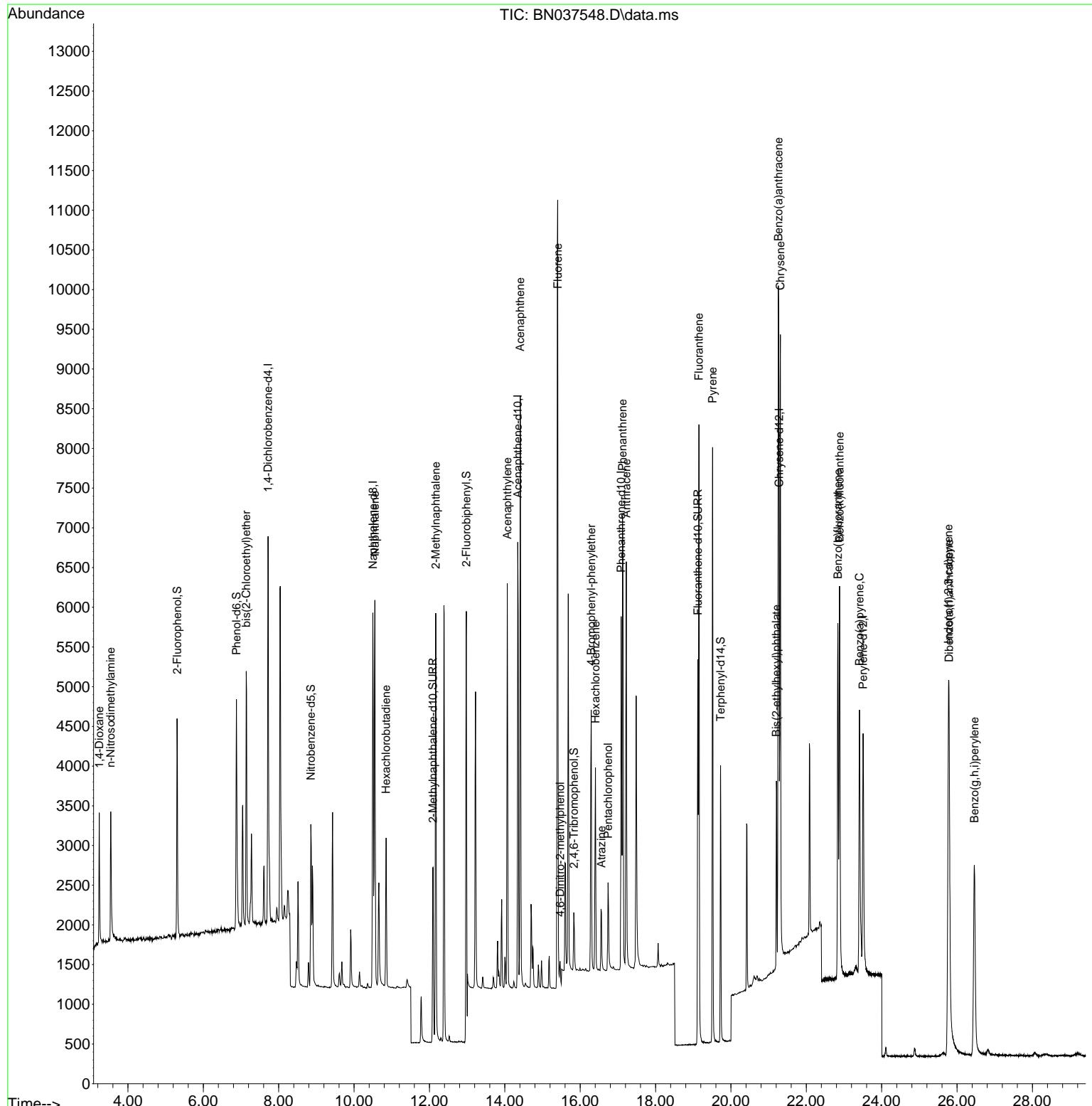
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4          | 7.717  | 152  | 2372     | 0.400  | ng    | 0.00     |
| 7) Naphthalene-d8                  | 10.498 | 136  | 6287     | 0.400  | ng    | -0.01    |
| 13) Acenaphthene-d10               | 14.345 | 164  | 3213     | 0.400  | ng    | -0.01    |
| 19) Phenanthrene-d10               | 17.087 | 188  | 5852     | 0.400  | ng    | #-0.01   |
| 29) Chrysene-d12                   | 21.277 | 240  | 4832     | 0.400  | ng    | 0.00     |
| 35) Perylene-d12                   | 23.508 | 264  | 4297     | 0.400  | ng    | 0.00     |
| <b>System Monitoring Compounds</b> |        |      |          |        |       |          |
| 4) 2-Fluorophenol                  | 5.305  | 112  | 2173     | 0.370  | ng    | 0.00     |
| 5) Phenol-d6                       | 6.879  | 99   | 2677     | 0.364  | ng    | 0.00     |
| 8) Nitrobenzene-d5                 | 8.854  | 82   | 1712     | 0.364  | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10        | 12.091 | 152  | 3267     | 0.362  | ng    | -0.01    |
| 14) 2,4,6-Tribromophenol           | 15.833 | 330  | 448      | 0.284  | ng    | -0.01    |
| 15) 2-Fluorobiphenyl               | 12.978 | 172  | 7081     | 0.424  | ng    | 0.00     |
| 27) Fluoranthene-d10               | 19.123 | 212  | 5269     | 0.340  | ng    | 0.00     |
| 31) Terphenyl-d14                  | 19.726 | 244  | 3631     | 0.350  | ng    | 0.00     |
| <b>Target Compounds</b>            |        |      |          |        |       |          |
|                                    |        |      |          | Qvalue |       |          |
| 2) 1,4-Dioxane                     | 3.239  | 88   | 929      | 0.407  | ng    | 98       |
| 3) n-Nitrosodimethylamine          | 3.543  | 42   | 1212     | 0.423  | ng    | # 87     |
| 6) bis(2-Chloroethyl)ether         | 7.139  | 93   | 2421     | 0.395  | ng    | 99       |
| 9) Naphthalene                     | 10.552 | 128  | 6463     | 0.385  | ng    | 100      |
| 10) Hexachlorobutadiene            | 10.851 | 225  | 1485     | 0.401  | ng    | # 99     |
| 12) 2-Methylnaphthalene            | 12.167 | 142  | 4048     | 0.367  | ng    | 98       |
| 16) Acenaphthylene                 | 14.067 | 152  | 5361     | 0.373  | ng    | 99       |
| 17) Acenaphthene                   | 14.409 | 154  | 3669     | 0.375  | ng    | 97       |
| 18) Fluorene                       | 15.403 | 166  | 4643     | 0.368  | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph...      | 15.467 | 198  | 240      | 0.393  | ng    | 88       |
| 21) 4-Bromophenyl-phenylether      | 16.292 | 248  | 1410     | 0.376  | ng    | # 85     |
| 22) Hexachlorobenzene              | 16.404 | 284  | 1994     | 0.412  | ng    | 99       |
| 23) Atrazine                       | 16.565 | 200  | 792      | 0.303  | ng    | 95       |
| 24) Pentachlorophenol              | 16.739 | 266  | 625      | 0.288  | ng    | 98       |
| 25) Phenanthrene                   | 17.124 | 178  | 6761     | 0.386  | ng    | 99       |
| 26) Anthracene                     | 17.223 | 178  | 5726     | 0.358  | ng    | 100      |
| 28) Fluoranthene                   | 19.150 | 202  | 7073     | 0.350  | ng    | 99       |
| 30) Pyrene                         | 19.513 | 202  | 6876     | 0.353  | ng    | 100      |
| 32) Benzo(a)anthracene             | 21.259 | 228  | 6334     | 0.374  | ng    | 99       |
| 33) Chrysene                       | 21.313 | 228  | 7209     | 0.409  | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha...      | 21.205 | 149  | 2435     | 0.320  | ng    | 98       |
| 36) Indeno(1,2,3-cd)pyrene         | 25.773 | 276  | 6740     | 0.377  | ng    | 97       |
| 37) Benzo(b)fluoranthene           | 22.838 | 252  | 5742     | 0.352  | ng    | 99       |
| 38) Benzo(k)fluoranthene           | 22.882 | 252  | 6561     | 0.390  | ng    | 98       |
| 39) Benzo(a)pyrene                 | 23.411 | 252  | 5218     | 0.383  | ng    | 98       |
| 40) Dibenzo(a,h)anthracene         | 25.788 | 278  | 5076     | 0.350  | ng    | 96       |
| 41) Benzo(g,h,i)perylene           | 26.461 | 276  | 5409     | 0.361  | ng    | 98       |

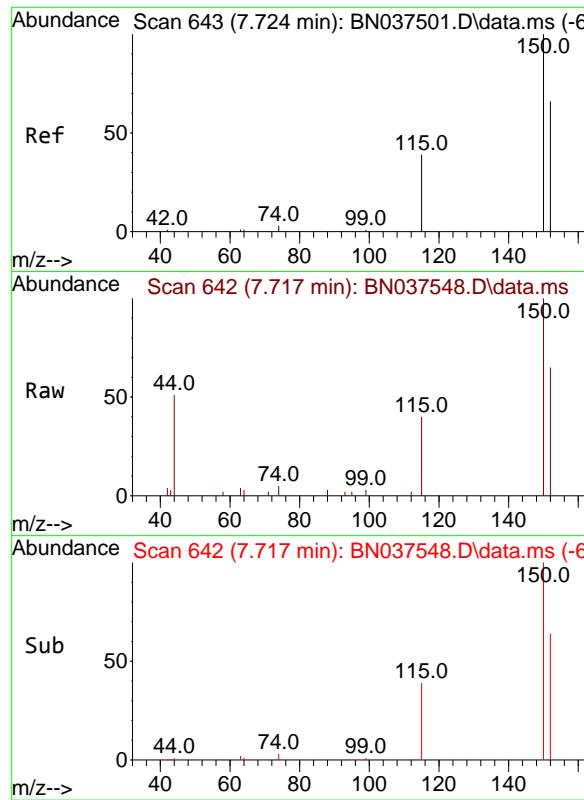
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037548.D  
 Acq On : 30 Jul 2025 09:38  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Jul 30 10:39:47 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

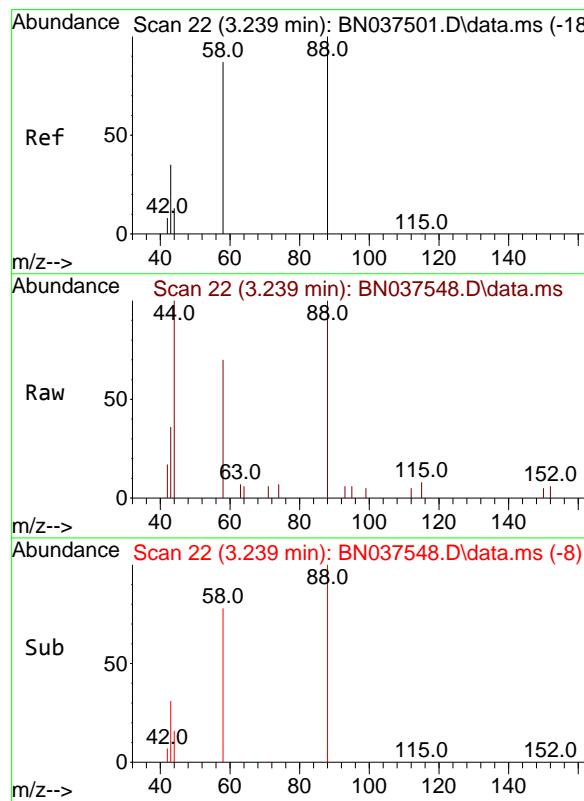
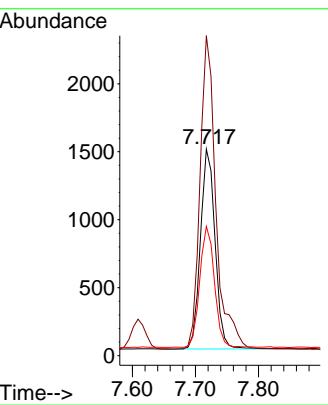




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.717 min Scan# 6  
 Delta R.T. -0.007 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

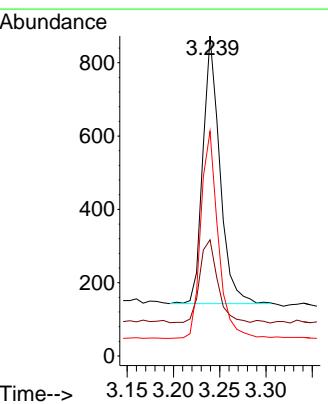
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

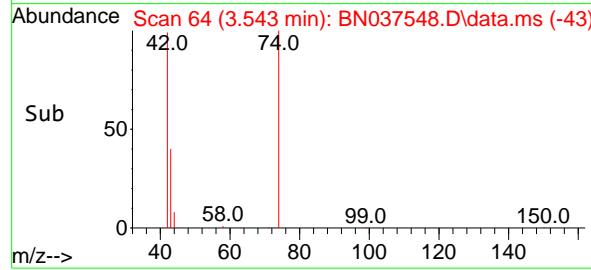
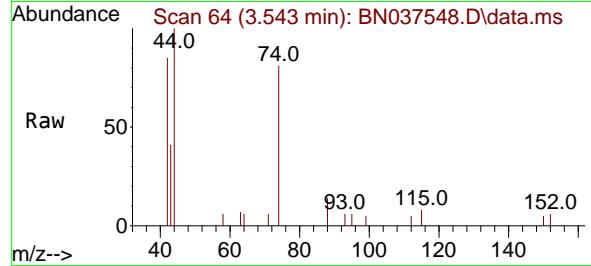
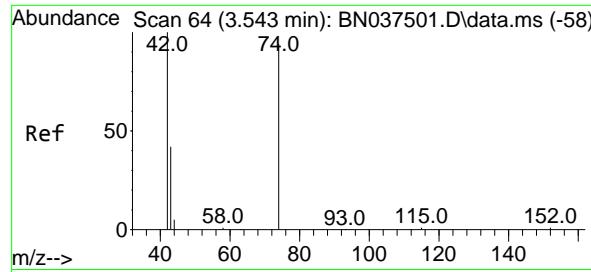
Tgt Ion:152 Resp: 2372  
 Ion Ratio Lower Upper  
 152 100  
 150 154.9 119.8 179.8  
 115 62.6 49.1 73.7



#2  
 1,4-Dioxane  
 Concen: 0.407 ng  
 RT: 3.239 min Scan# 22  
 Delta R.T. 0.000 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

Tgt Ion: 88 Resp: 929  
 Ion Ratio Lower Upper  
 88 100  
 43 32.8 27.5 41.3  
 58 79.5 62.7 94.1





#3

n-Nitrosodimethylamine

Concen: 0.423 ng

RT: 3.543 min Scan# 6

Delta R.T. 0.000 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

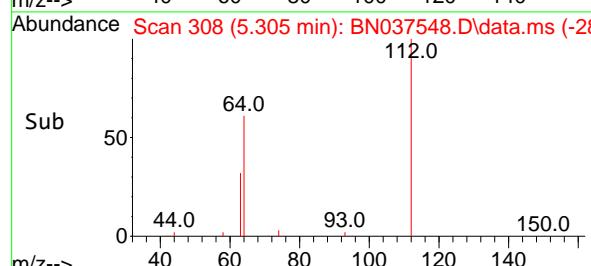
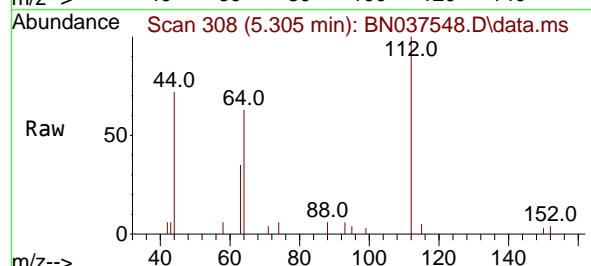
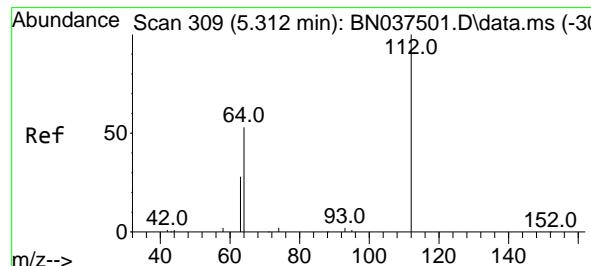
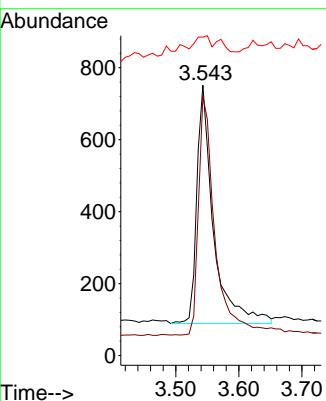
Tgt Ion: 42 Resp: 1212

Ion Ratio Lower Upper

42 100

74 100.6 91.8 137.6

44 13.0 15.0 22.6#



#4

2-Fluorophenol

Concen: 0.370 ng

RT: 5.305 min Scan# 308

Delta R.T. -0.007 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

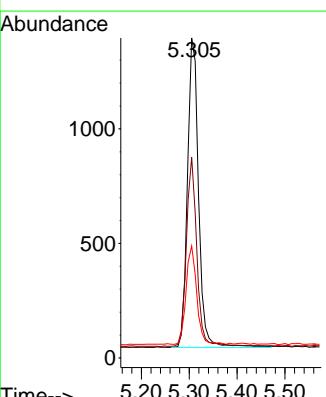
Tgt Ion: 112 Resp: 2173

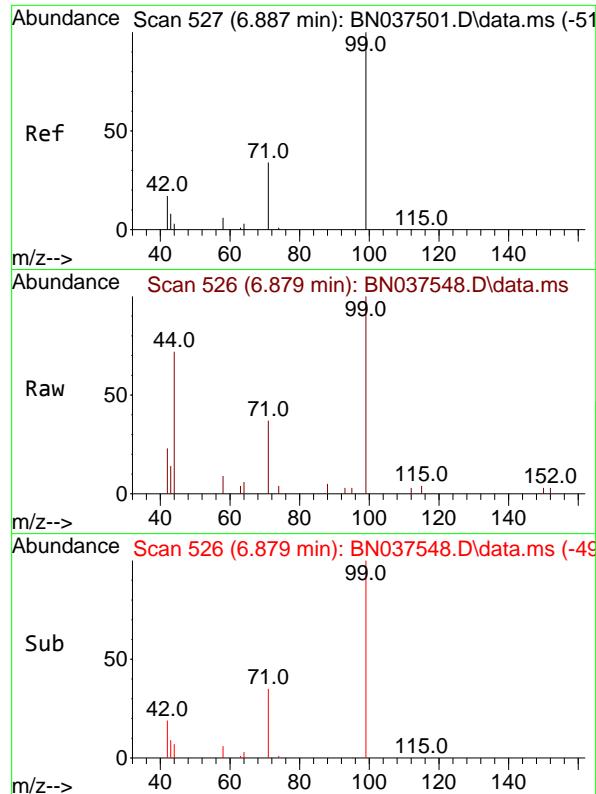
Ion Ratio Lower Upper

112 100

64 58.2 45.1 67.7

63 30.5 23.8 35.8

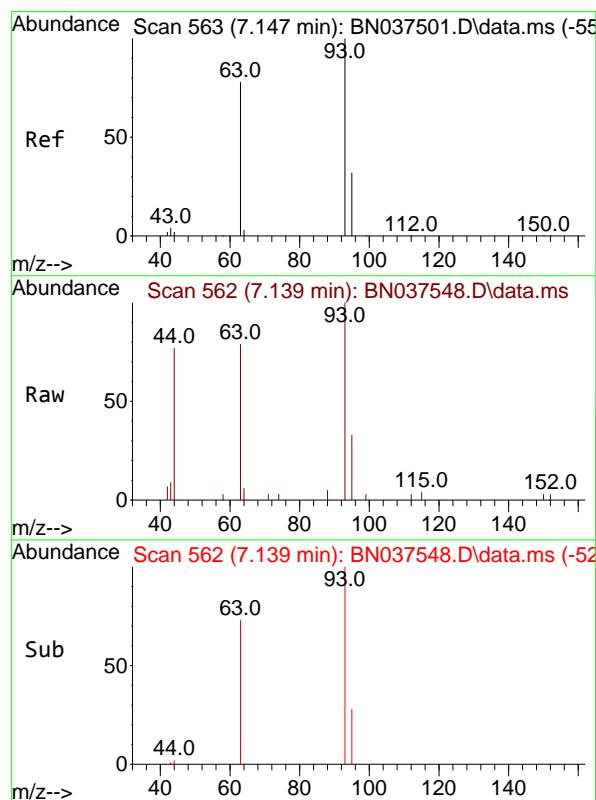
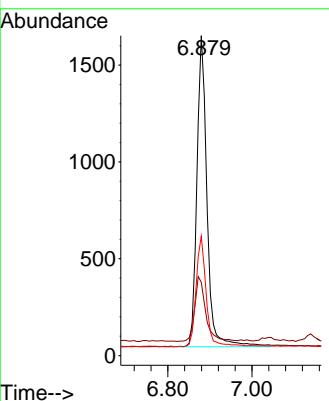




#5  
 Phenol-d6  
 Concen: 0.364 ng  
 RT: 6.879 min Scan# 5  
 Delta R.T. -0.007 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

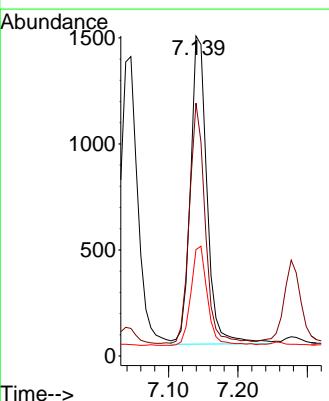
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

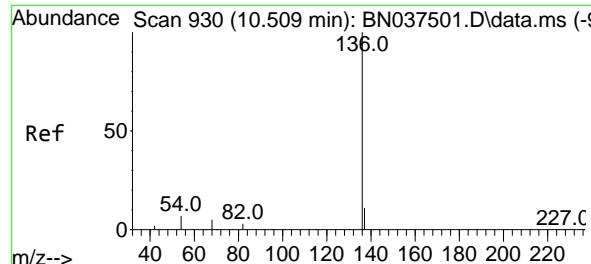
Tgt Ion: 99 Resp: 2677  
 Ion Ratio Lower Upper  
 99 100  
 42 22.6 17.1 25.7  
 71 35.3 27.8 41.8



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.395 ng  
 RT: 7.139 min Scan# 562  
 Delta R.T. -0.007 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

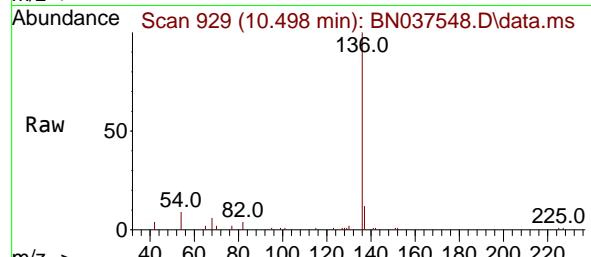
Tgt Ion: 93 Resp: 2421  
 Ion Ratio Lower Upper  
 93 100  
 63 74.3 58.2 87.4  
 95 32.1 25.3 37.9



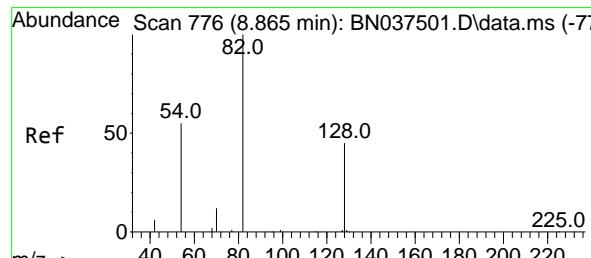
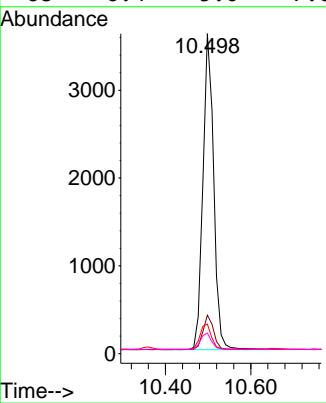
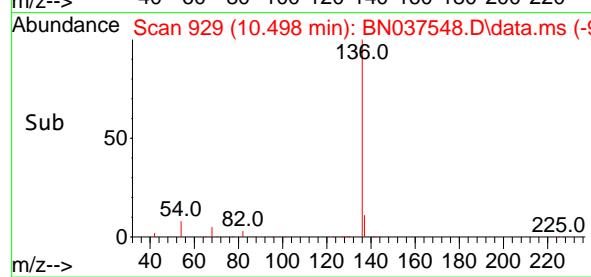


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

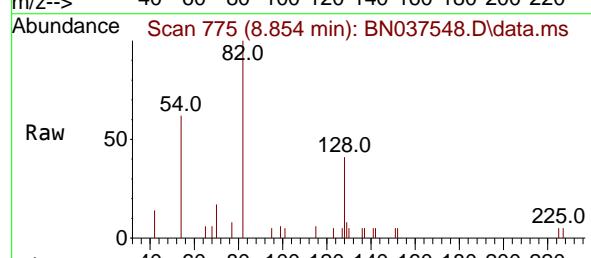
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4



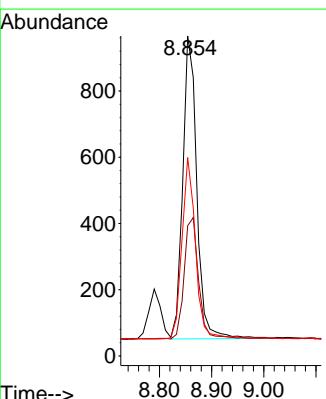
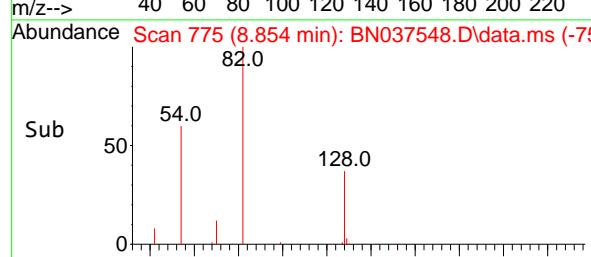
Tgt Ion:136 Resp: 6287  
 Ion Ratio Lower Upper  
 136 100  
 137 12.1 9.8 14.8  
 54 9.3 6.6 9.8  
 68 6.4 5.0 7.6

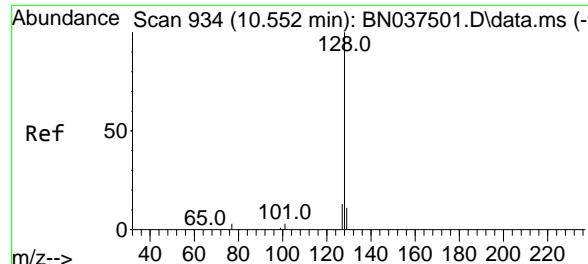


#8  
 Nitrobenzene-d5  
 Concen: 0.364 ng  
 RT: 8.854 min Scan# 775  
 Delta R.T. -0.011 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

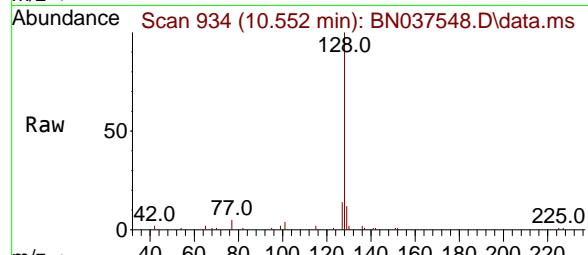


Tgt Ion: 82 Resp: 1712  
 Ion Ratio Lower Upper  
 82 100  
 128 40.7 37.5 56.3  
 54 62.0 45.3 67.9

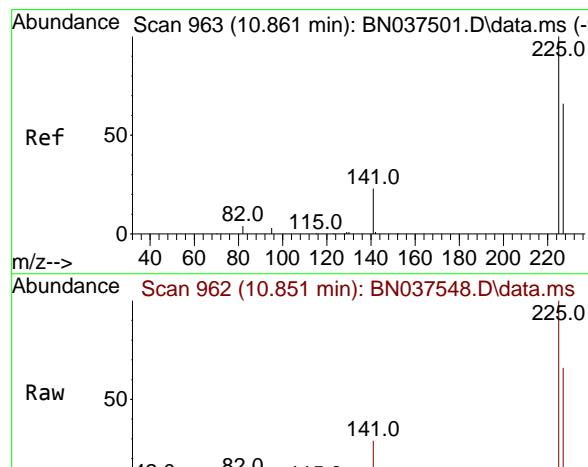
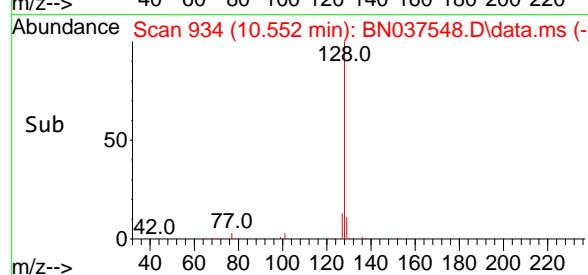
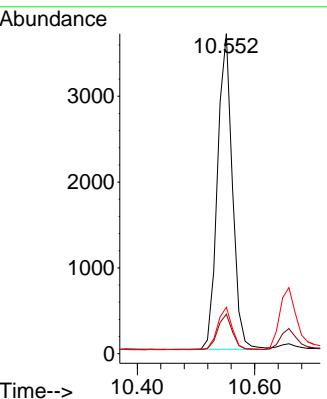




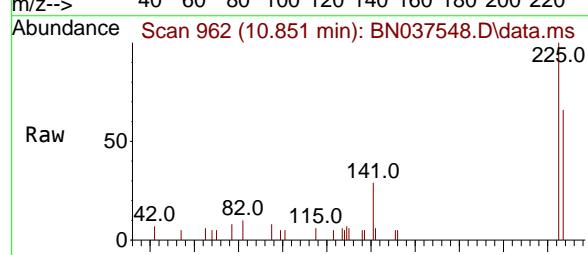
#9  
Naphthalene  
Concen: 0.385 ng  
RT: 10.552 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38  
ClientSampleId : SSTDCCC0.4



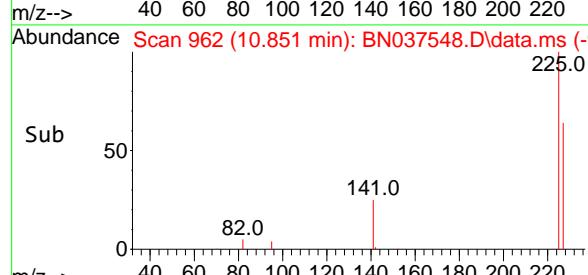
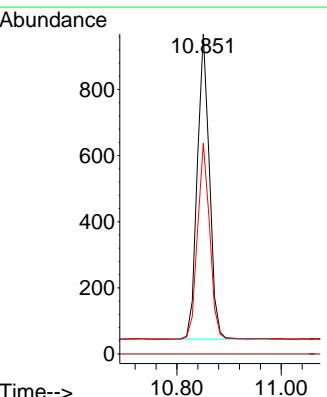
Tgt Ion:128 Resp: 6463  
Ion Ratio Lower Upper  
128 100  
129 12.3 9.7 14.5  
127 14.5 11.5 17.3

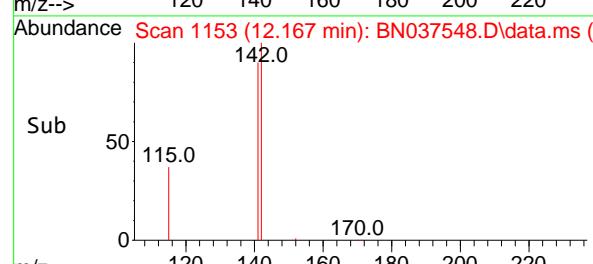
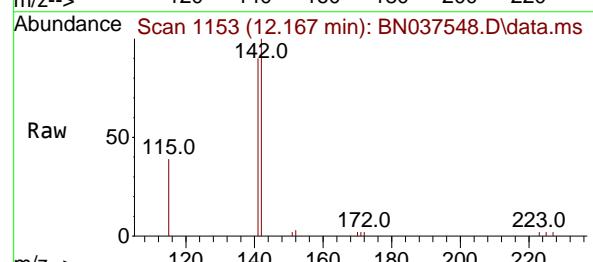
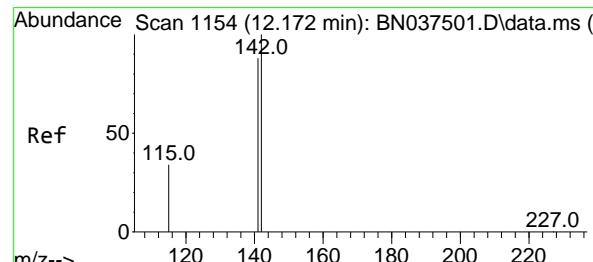
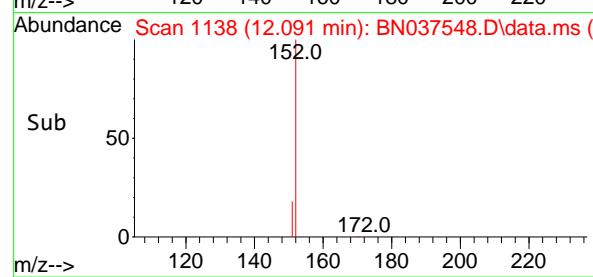
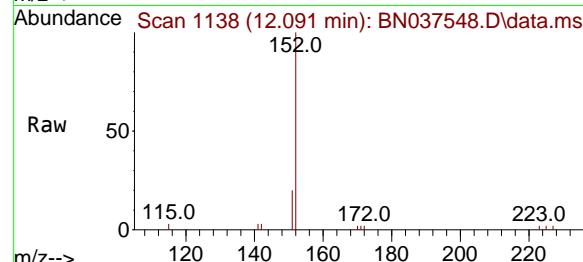
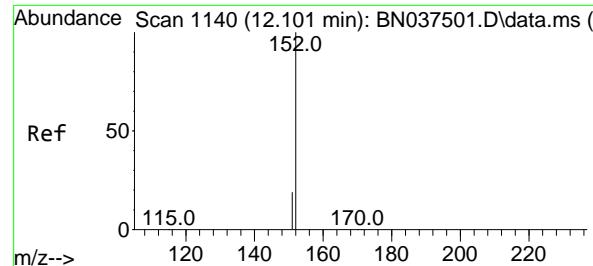


#10  
Hexachlorobutadiene  
Concen: 0.401 ng  
RT: 10.851 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38



Tgt Ion:225 Resp: 1485  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.4 51.0 76.4





#11

2-Methylnaphthalene-d10

Concen: 0.362 ng

RT: 12.091 min Scan# 1

Delta R.T. -0.010 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

Instrument :

BNA\_N

ClientSampleId :

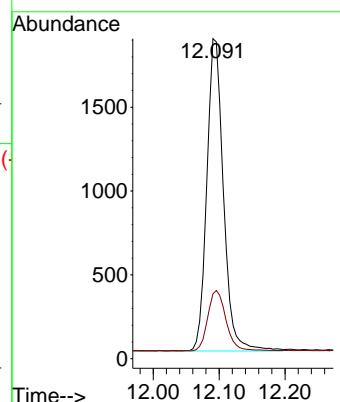
SSTDCCC0.4

Tgt Ion:152 Resp: 3267

Ion Ratio Lower Upper

152 100

151 21.5 16.8 25.2



#12

2-Methylnaphthalene

Concen: 0.367 ng

RT: 12.167 min Scan# 1153

Delta R.T. -0.005 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

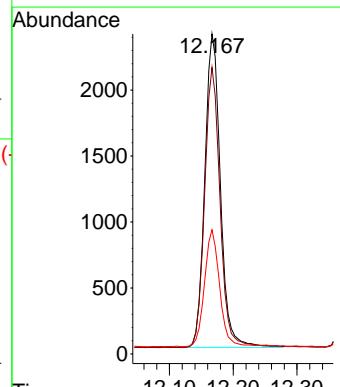
Tgt Ion:142 Resp: 4048

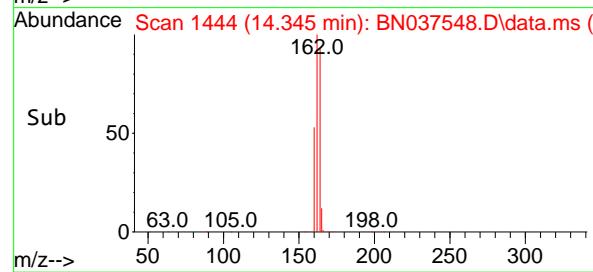
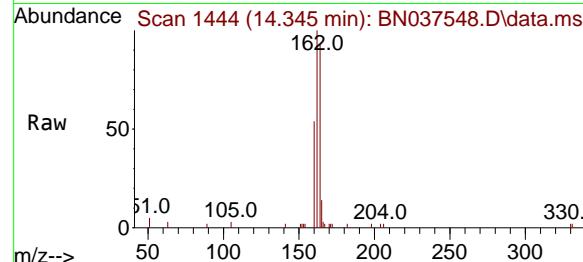
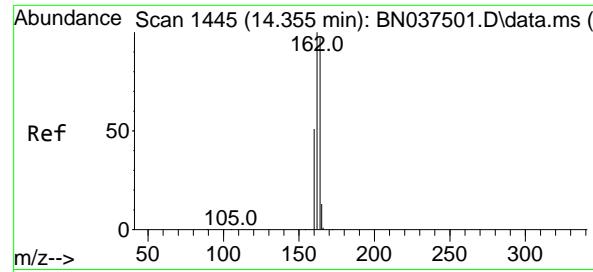
Ion Ratio Lower Upper

142 100

141 89.6 71.0 106.4

115 38.8 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.345 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

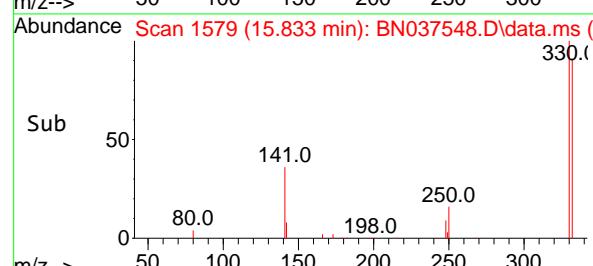
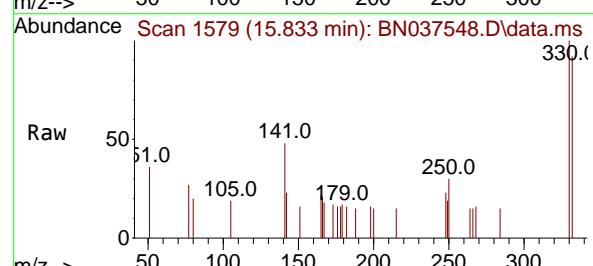
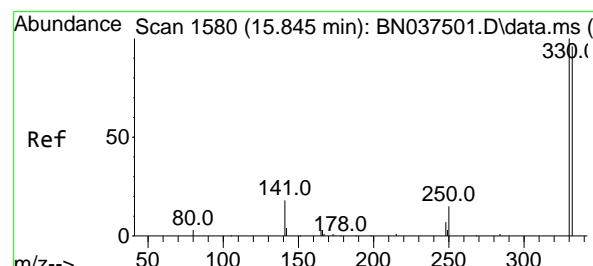
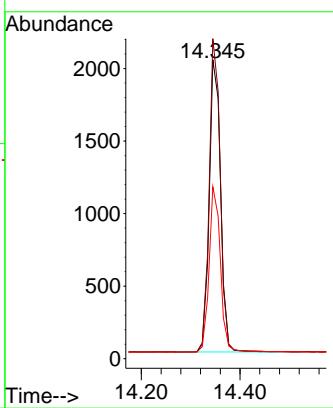
Tgt Ion:164 Resp: 3213

Ion Ratio Lower Upper

164 100

162 107.0 82.0 123.0

160 57.5 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.284 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.012 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

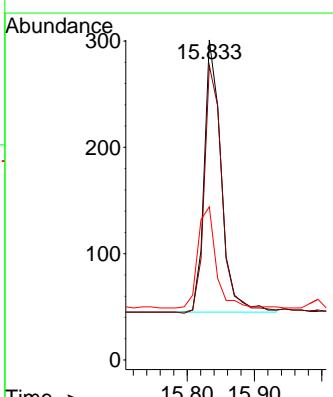
Tgt Ion:330 Resp: 448

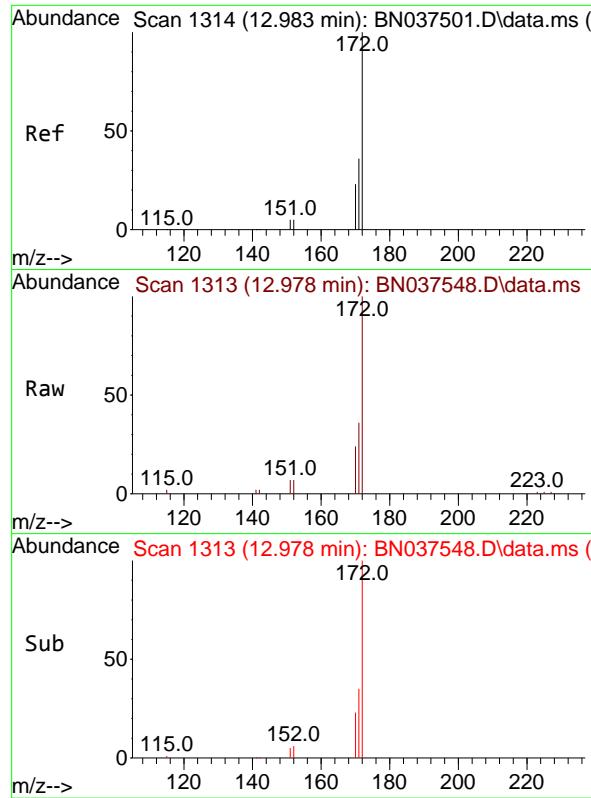
Ion Ratio Lower Upper

330 100

332 98.0 76.1 114.1

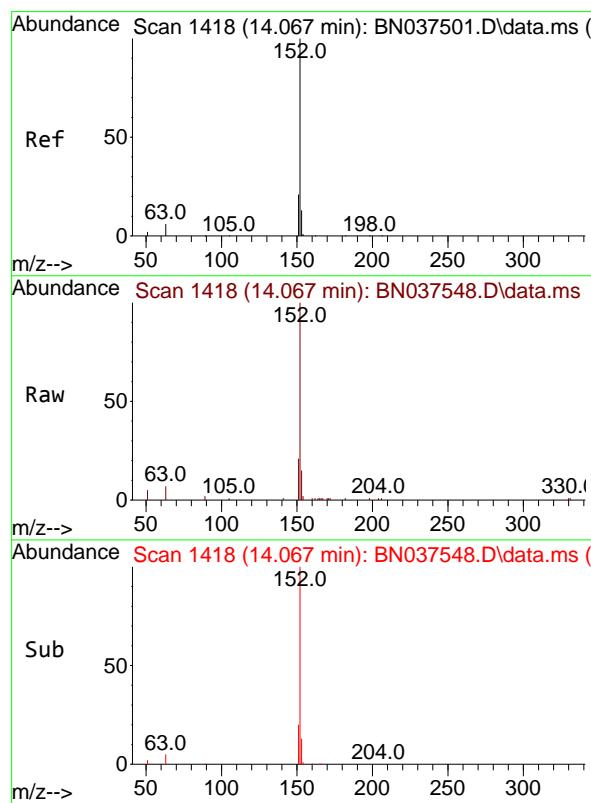
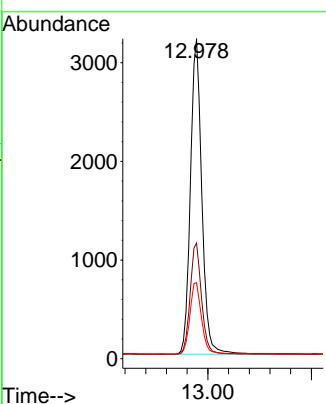
141 40.0 33.4 50.0





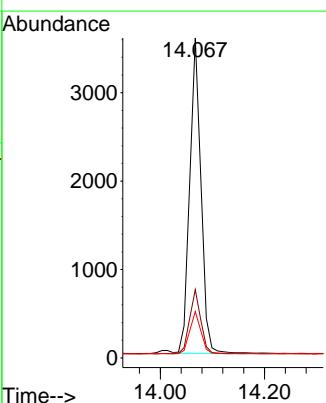
#15  
2-Fluorobiphenyl  
Concen: 0.424 ng  
RT: 12.978 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38  
ClientSampleId : SSTDCCC0.4

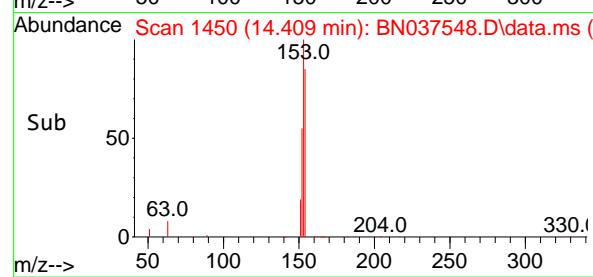
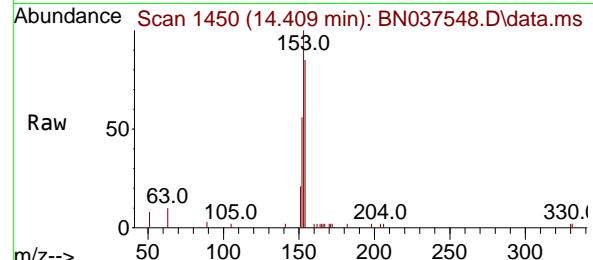
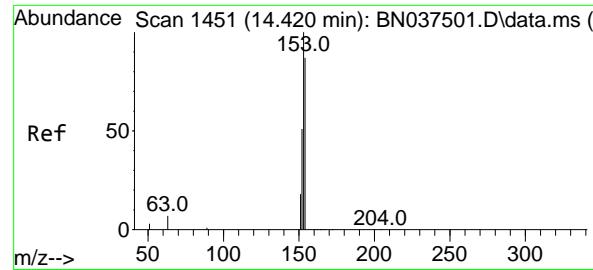
Tgt Ion:172 Resp: 7081  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.4 44.2  
170 23.7 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.373 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Tgt Ion:152 Resp: 5361  
Ion Ratio Lower Upper  
152 100  
151 20.4 15.9 23.9  
153 13.2 10.7 16.1





#17

Acenaphthene

Concen: 0.375 ng

RT: 14.409 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

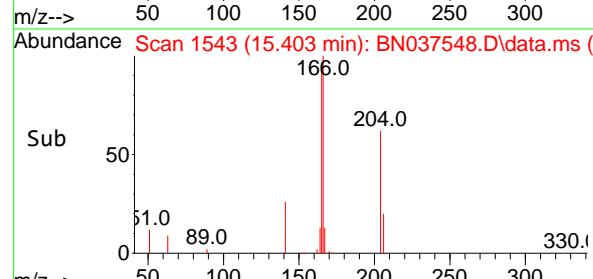
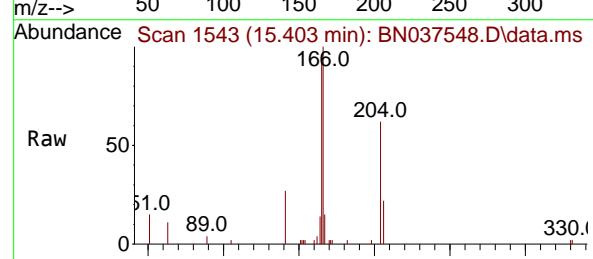
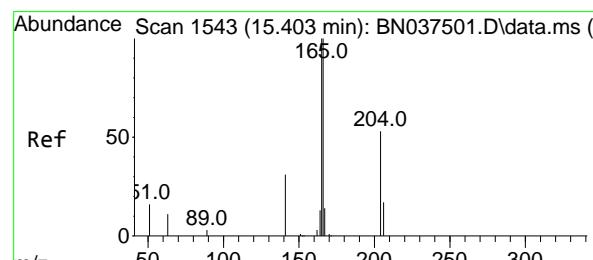
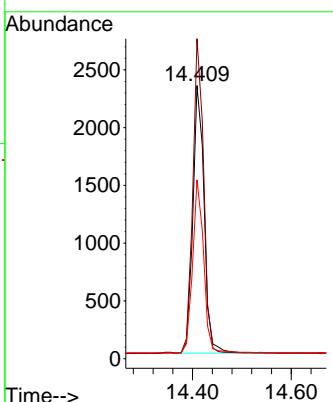
Tgt Ion:154 Resp: 3669

Ion Ratio Lower Upper

154 100

153 113.2 89.2 133.8

152 63.5 48.0 72.0



#18

Fluorene

Concen: 0.368 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

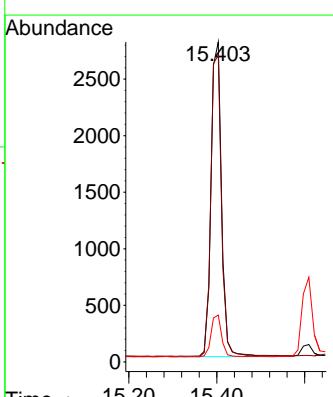
Tgt Ion:166 Resp: 4643

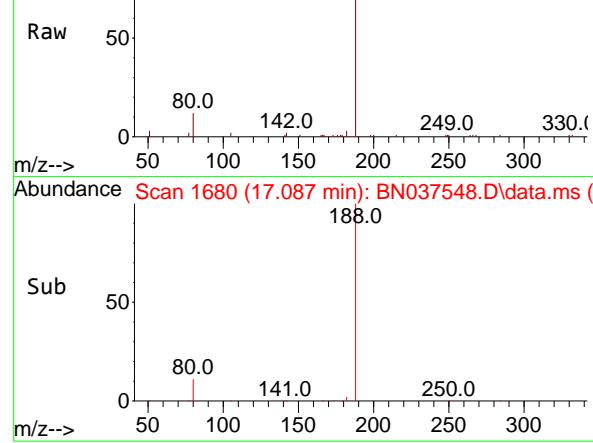
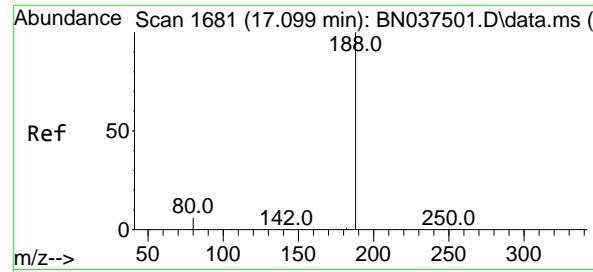
Ion Ratio Lower Upper

166 100

165 98.8 78.1 117.1

167 13.2 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.087 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4

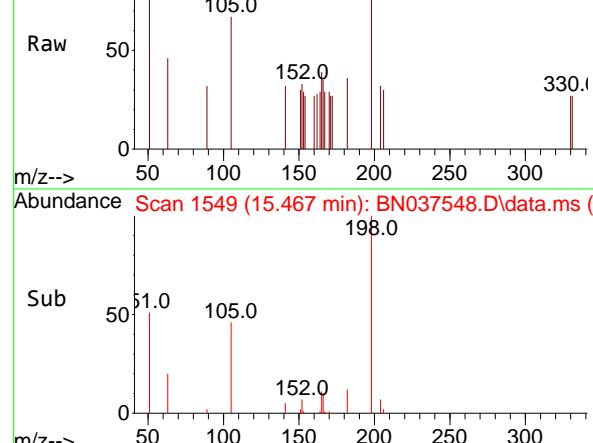
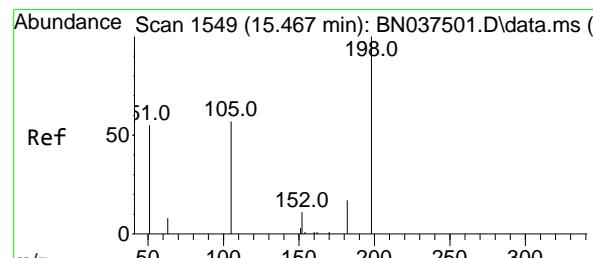
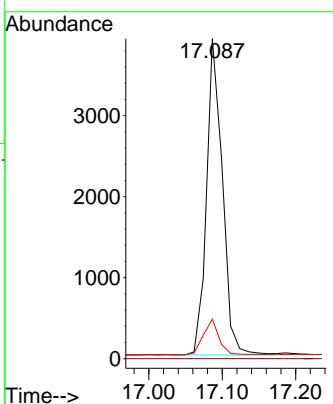
Tgt Ion:188 Resp: 5852

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.3 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.393 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

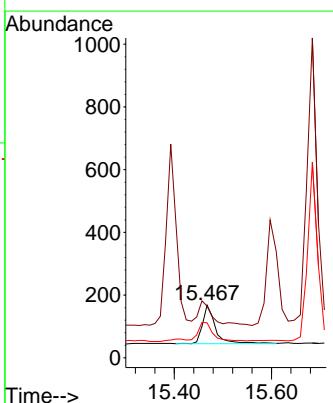
Tgt Ion:198 Resp: 240

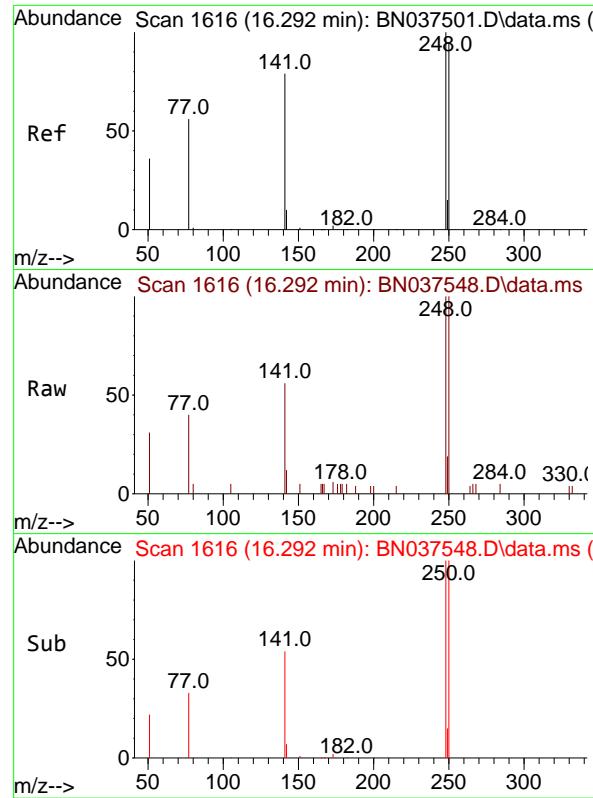
Ion Ratio Lower Upper

198 100

51 98.2 88.5 132.7

105 66.7 61.2 91.8

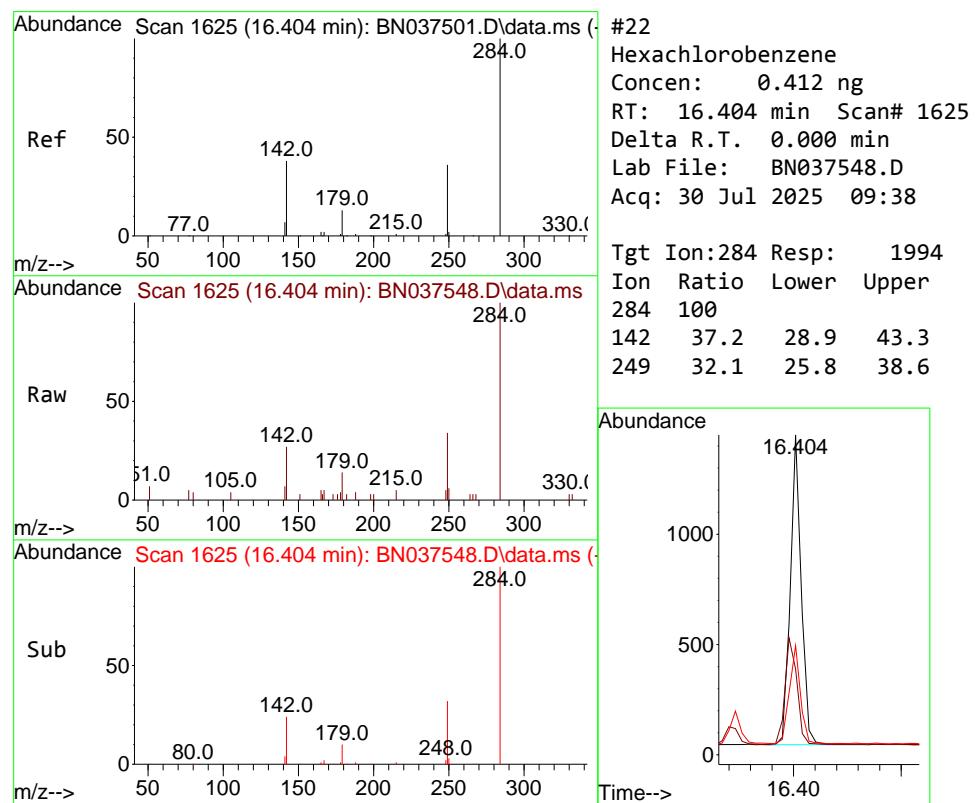
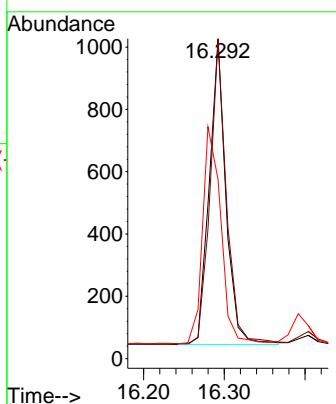




#21  
4-Bromophenyl-phenylether  
Concen: 0.376 ng  
RT: 16.292 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

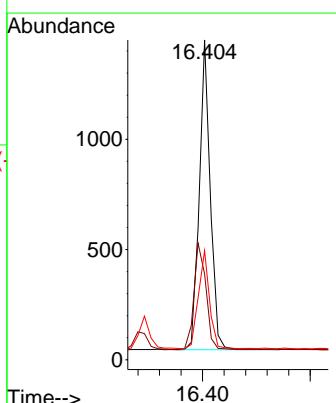
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

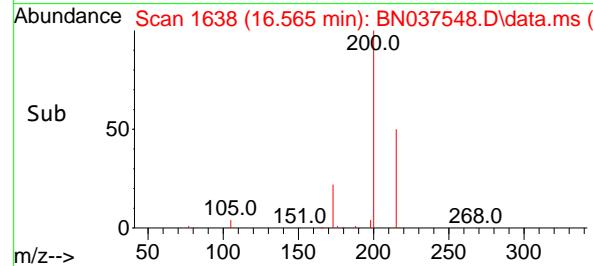
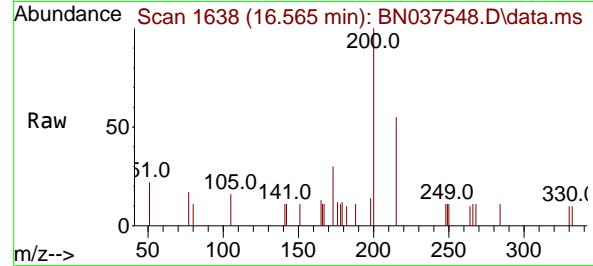
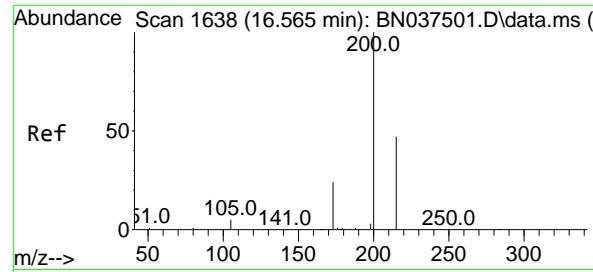
Tgt Ion:248 Resp: 1410  
Ion Ratio Lower Upper  
248 100  
250 99.9 76.2 114.2  
141 56.0 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.412 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Tgt Ion:284 Resp: 1994  
Ion Ratio Lower Upper  
284 100  
142 37.2 28.9 43.3  
249 32.1 25.8 38.6



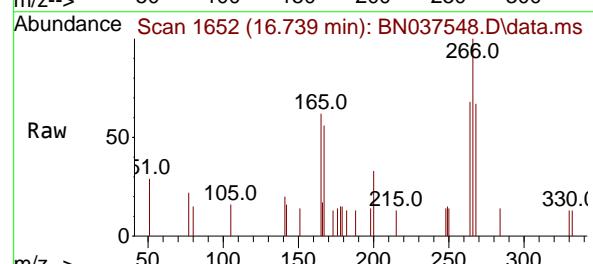
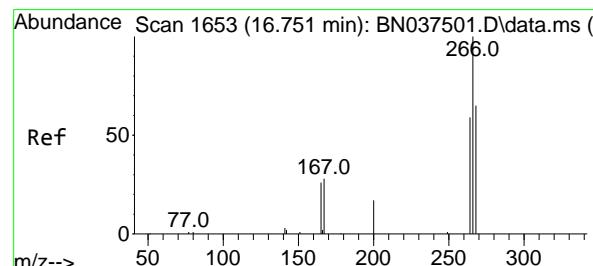
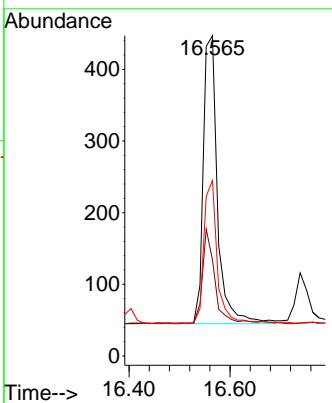


#23

Atrazine  
Concen: 0.303 ng  
RT: 16.565 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

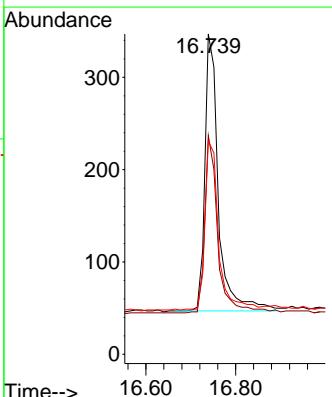
Tgt Ion:200 Resp: 792  
Ion Ratio Lower Upper  
200 100  
173 30.0 23.2 34.8  
215 54.8 40.2 60.4

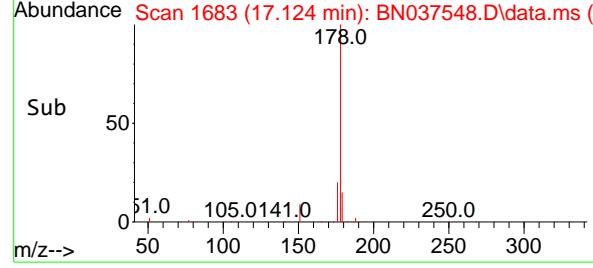
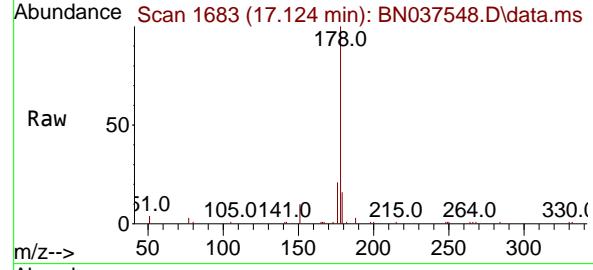
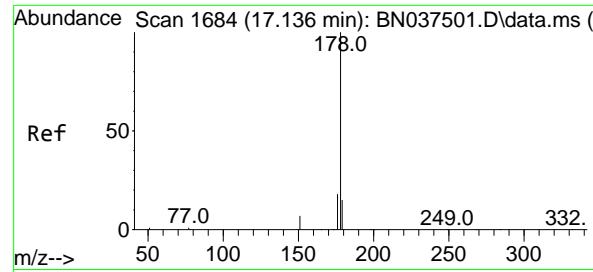


#24

Pentachlorophenol  
Concen: 0.288 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.012 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Tgt Ion:266 Resp: 625  
Ion Ratio Lower Upper  
266 100  
264 61.1 49.3 73.9  
268 62.1 51.6 77.4





#25

Phenanthrene

Concen: 0.386 ng

RT: 17.124 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4

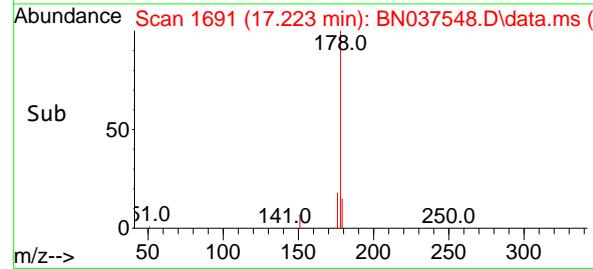
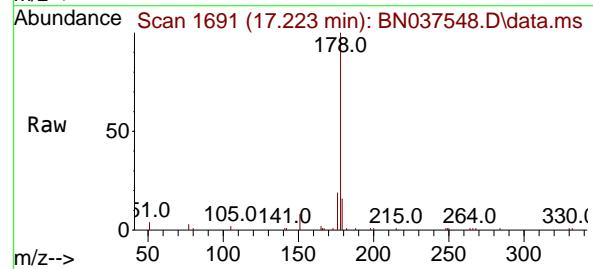
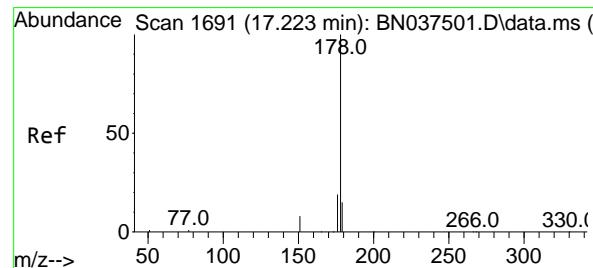
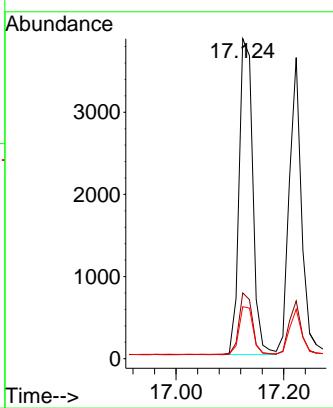
Tgt Ion:178 Resp: 6761

Ion Ratio Lower Upper

178 100

176 19.1 15.0 22.6

179 15.6 12.2 18.2



#26

Anthracene

Concen: 0.358 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

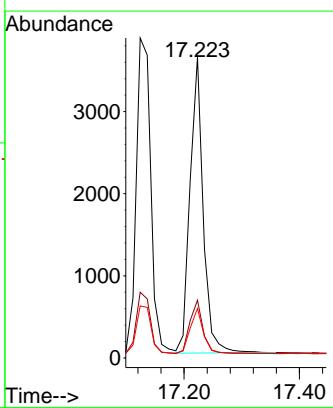
Tgt Ion:178 Resp: 5726

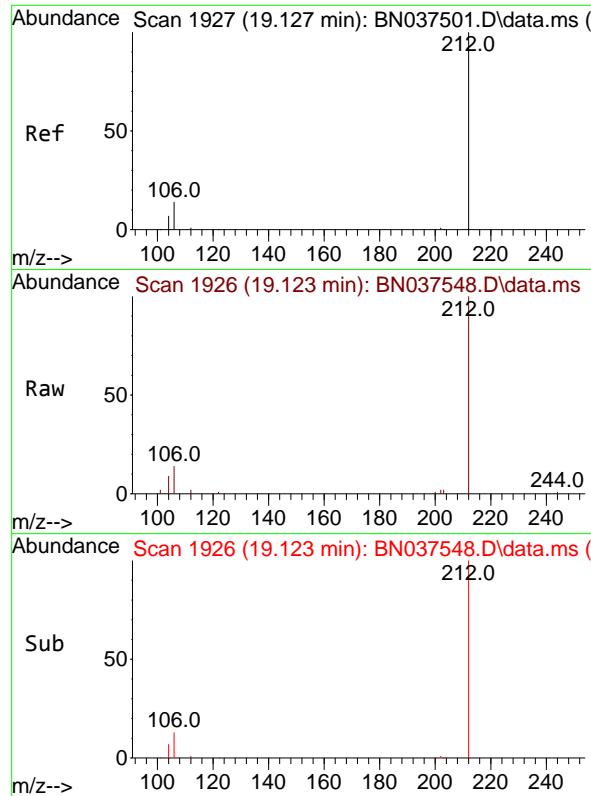
Ion Ratio Lower Upper

178 100

176 18.3 14.7 22.1

179 15.3 12.3 18.5

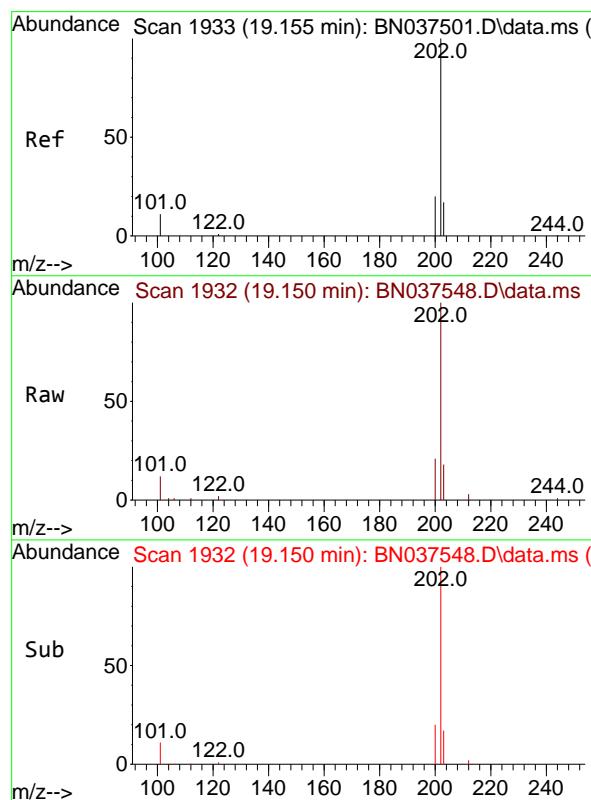
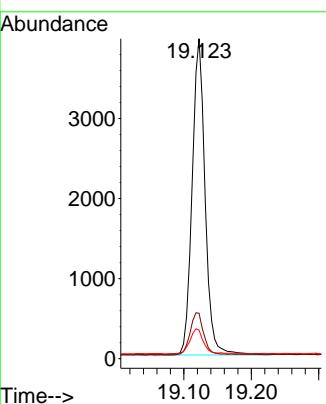




#27  
 Fluoranthene-d10  
 Concen: 0.340 ng  
 RT: 19.123 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

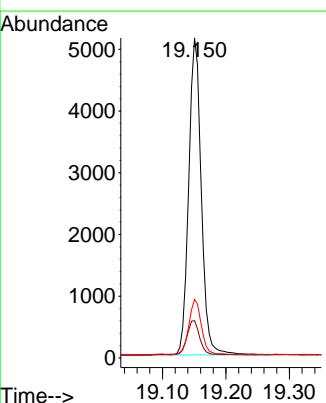
Instrument : BNA\_N  
 ClientSampleId : SSTDCCCC0.4

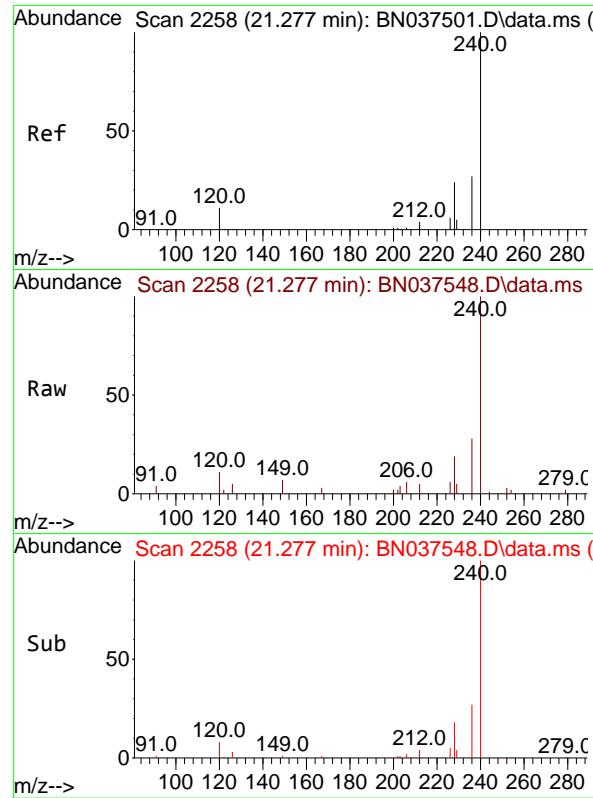
Tgt Ion:212 Resp: 5269  
 Ion Ratio Lower Upper  
 212 100  
 106 13.8 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.350 ng  
 RT: 19.150 min Scan# 1932  
 Delta R.T. -0.005 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

Tgt Ion:202 Resp: 7073  
 Ion Ratio Lower Upper  
 202 100  
 101 11.2 9.8 14.6  
 203 17.1 13.6 20.4

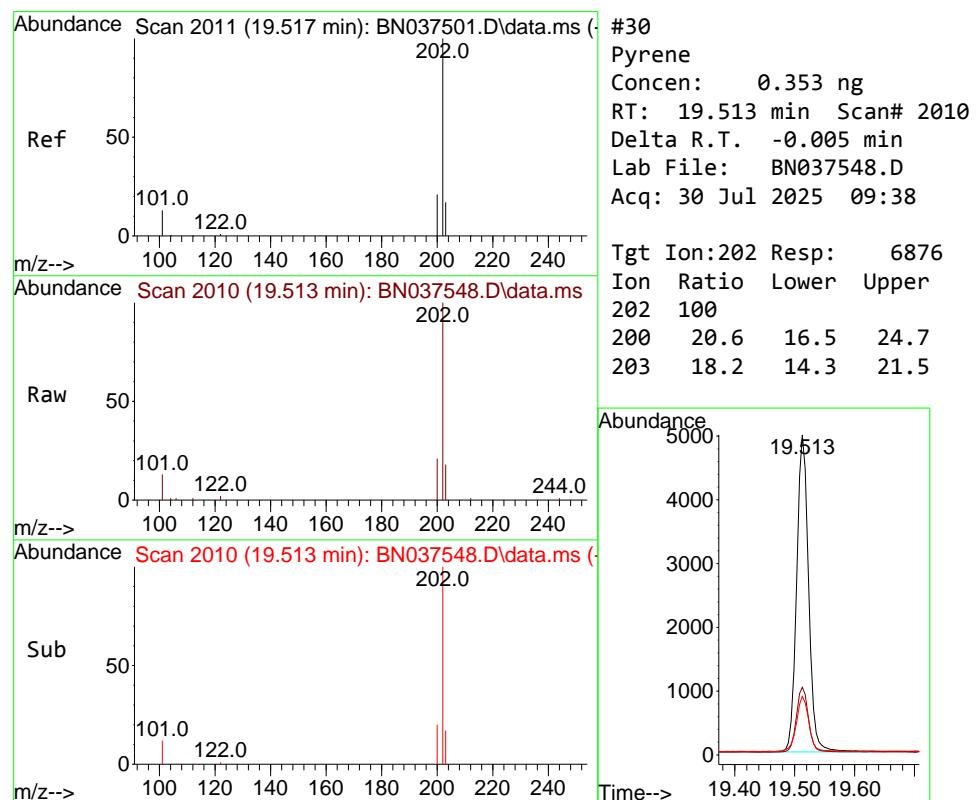
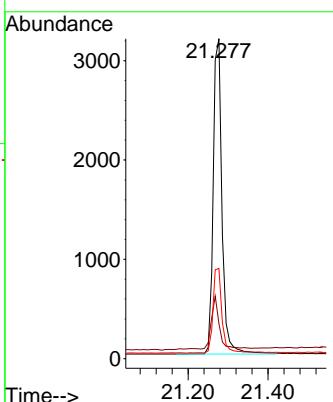




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

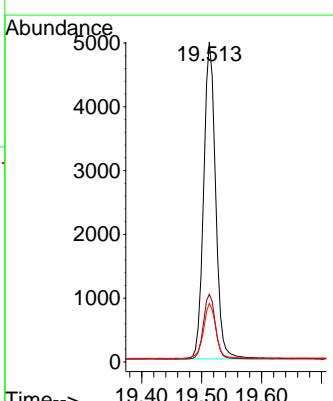
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

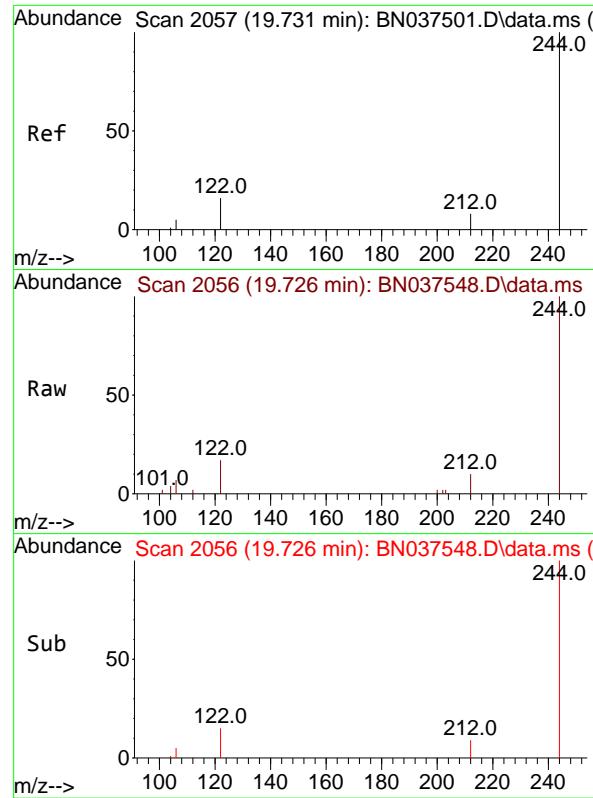
Tgt Ion:240 Resp: 4832  
Ion Ratio Lower Upper  
240 100  
120 11.0 10.7 16.1  
236 28.2 22.6 33.8



#30  
Pyrene  
Concen: 0.353 ng  
RT: 19.513 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Tgt Ion:202 Resp: 6876  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 18.2 14.3 21.5

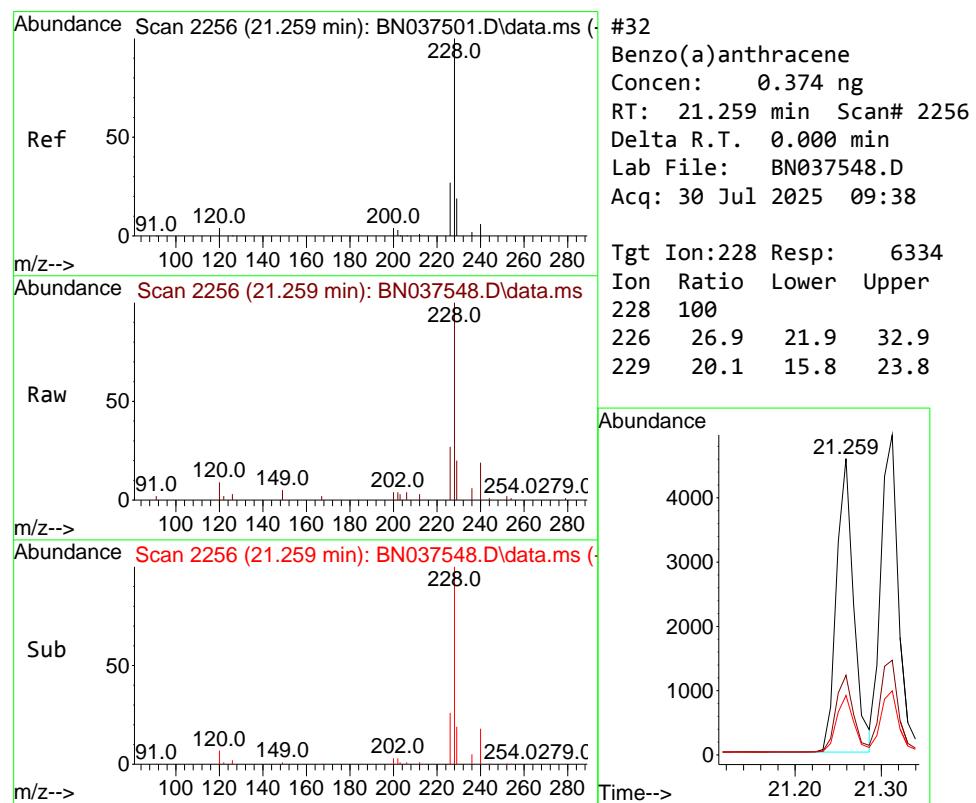
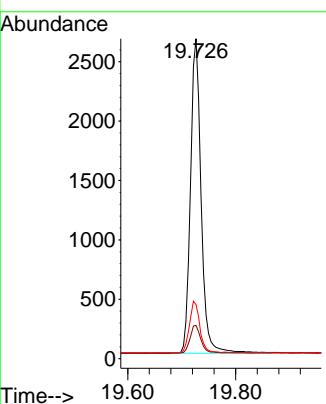




#31  
 Terphenyl-d14  
 Concen: 0.350 ng  
 RT: 19.726 min Scan# 2  
 Delta R.T. -0.005 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

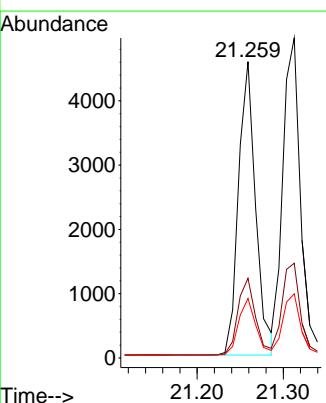
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

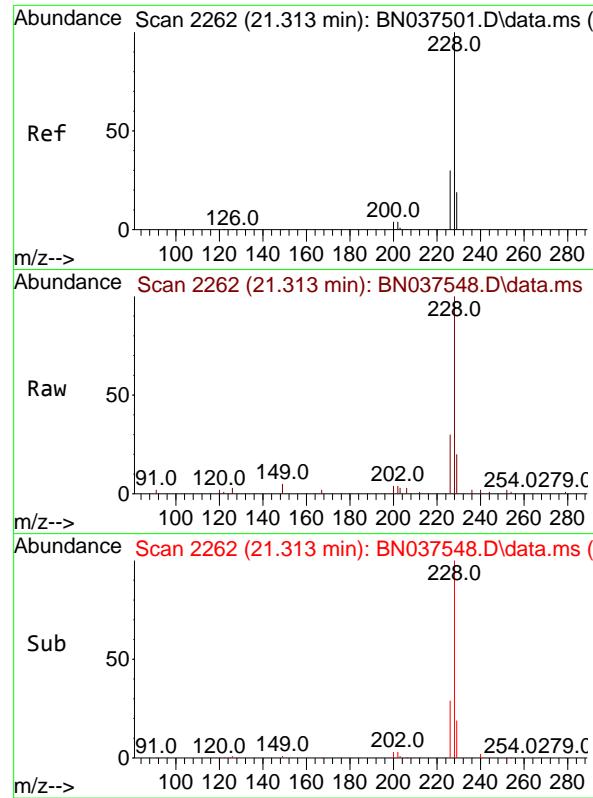
Tgt Ion:244 Resp: 3631  
 Ion Ratio Lower Upper  
 244 100  
 212 10.4 7.4 11.2  
 122 16.9 13.6 20.4



#32  
 Benzo(a)anthracene  
 Concen: 0.374 ng  
 RT: 21.259 min Scan# 2256  
 Delta R.T. 0.000 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

Tgt Ion:228 Resp: 6334  
 Ion Ratio Lower Upper  
 228 100  
 226 26.9 21.9 32.9  
 229 20.1 15.8 23.8

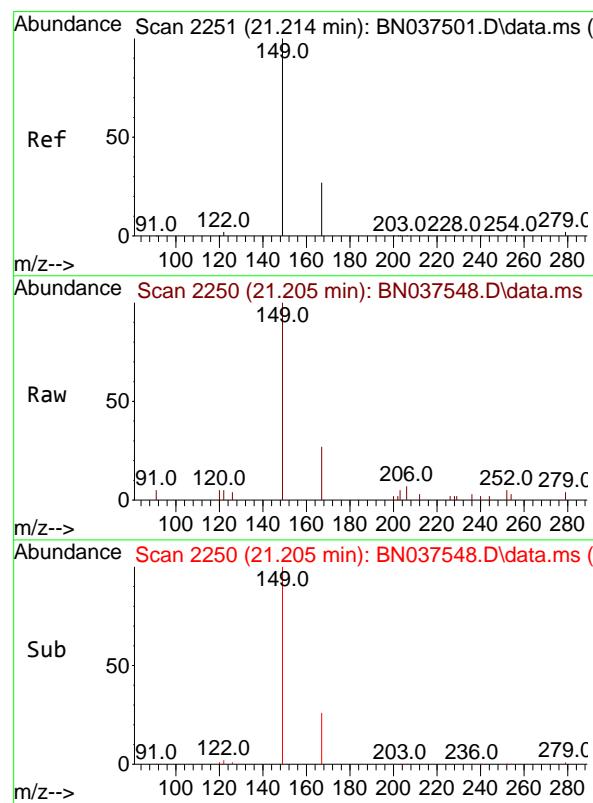
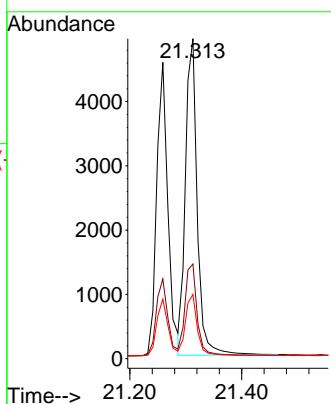




#33  
Chrysene  
Concen: 0.409 ng  
RT: 21.313 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

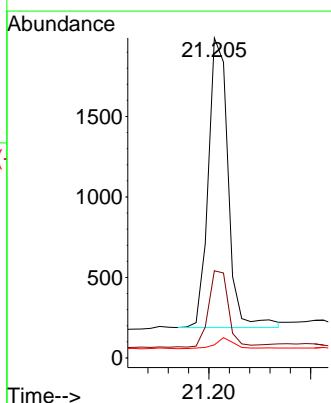
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

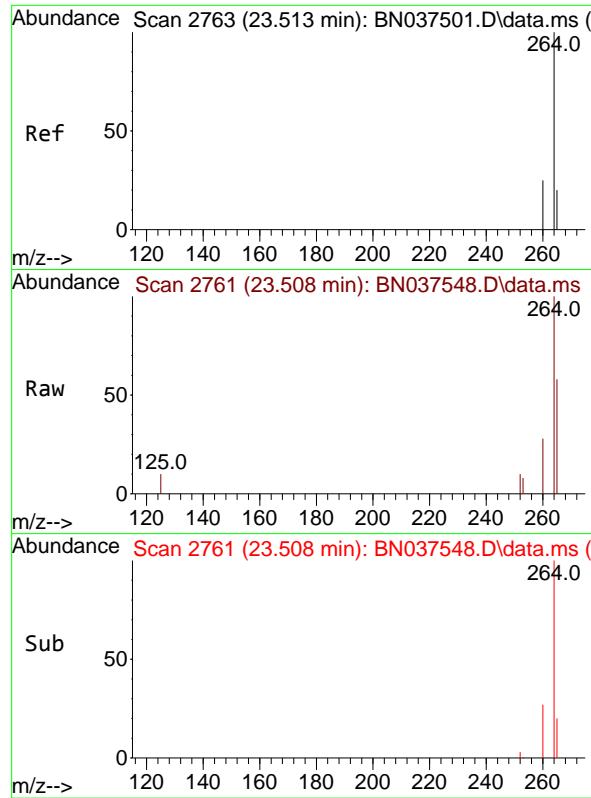
Tgt Ion:228 Resp: 7209  
Ion Ratio Lower Upper  
228 100  
226 29.6 24.2 36.4  
229 20.1 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.320 ng  
RT: 21.205 min Scan# 2250  
Delta R.T. -0.009 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Tgt Ion:149 Resp: 2435  
Ion Ratio Lower Upper  
149 100  
167 26.4 21.8 32.8  
279 3.6 3.0 4.4

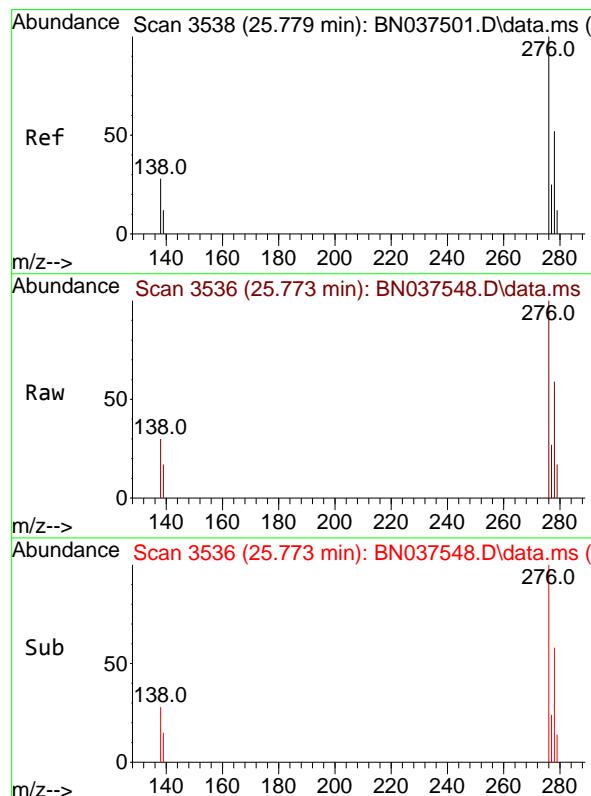
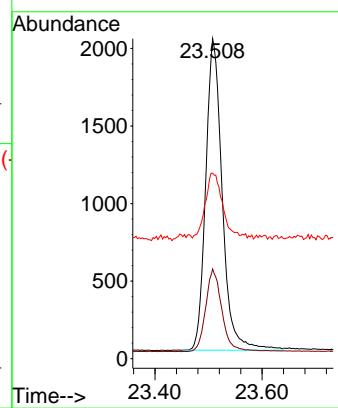




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.508 min Scan# 2  
Delta R.T. -0.006 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

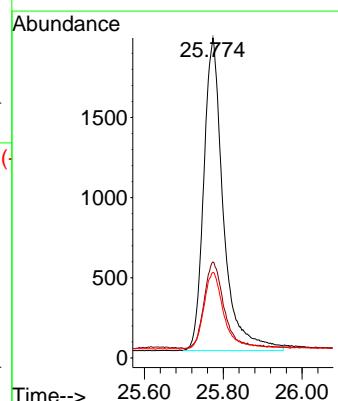
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

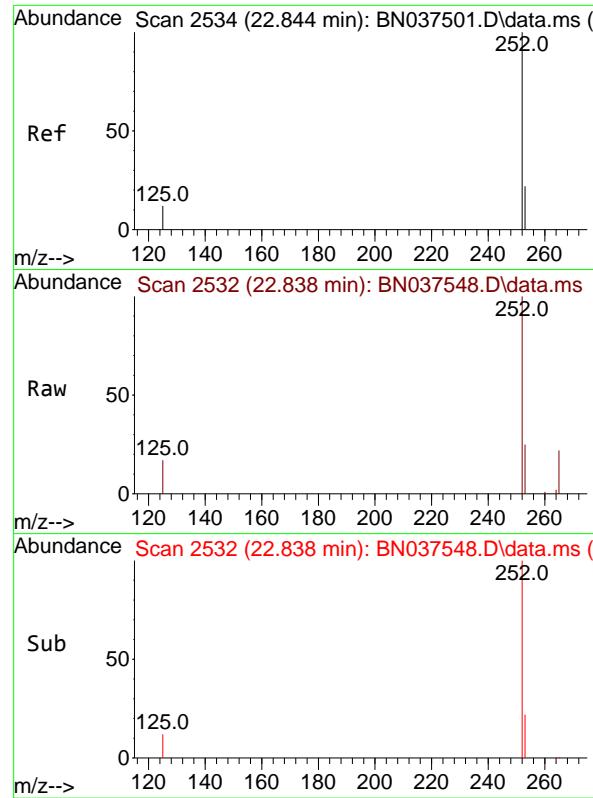
Tgt Ion:264 Resp: 4297  
Ion Ratio Lower Upper  
264 100  
260 28.1 21.2 31.8  
265 58.0 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.377 ng  
RT: 25.773 min Scan# 3536  
Delta R.T. -0.006 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Tgt Ion:276 Resp: 6740  
Ion Ratio Lower Upper  
276 100  
138 28.1 24.0 36.0  
277 24.9 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.352 ng

RT: 22.838 min Scan# 2

Instrument :

BNA\_N

Delta R.T. -0.006 min

Lab File: BN037548.D

ClientSampleId :

Acq: 30 Jul 2025 09:38

SSTDCCC0.4

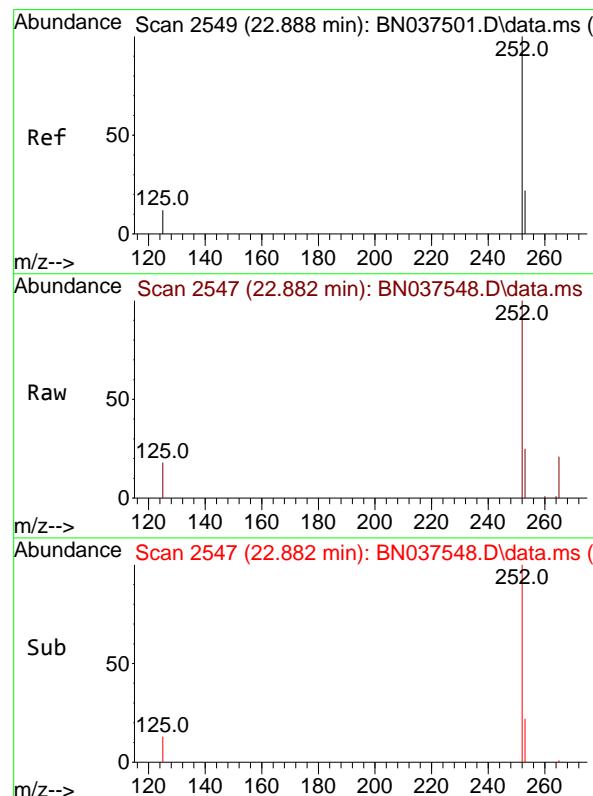
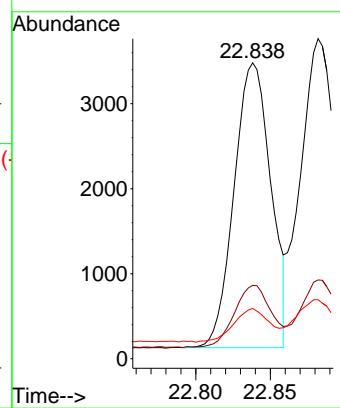
Tgt Ion:252 Resp: 5742

Ion Ratio Lower Upper

252 100

253 24.8 19.5 29.3

125 17.0 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.390 ng

RT: 22.882 min Scan# 2547

Delta R.T. -0.006 min

Lab File: BN037548.D

Acq: 30 Jul 2025 09:38

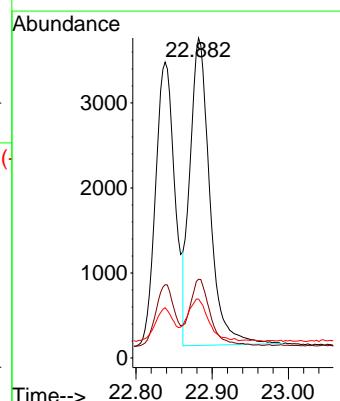
Tgt Ion:252 Resp: 6561

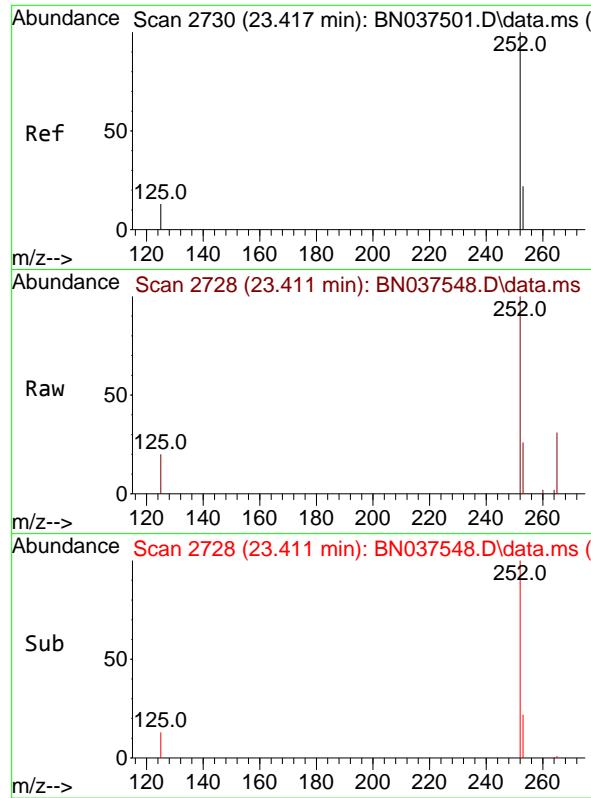
Ion Ratio Lower Upper

252 100

253 24.6 19.5 29.3

125 18.4 13.1 19.7

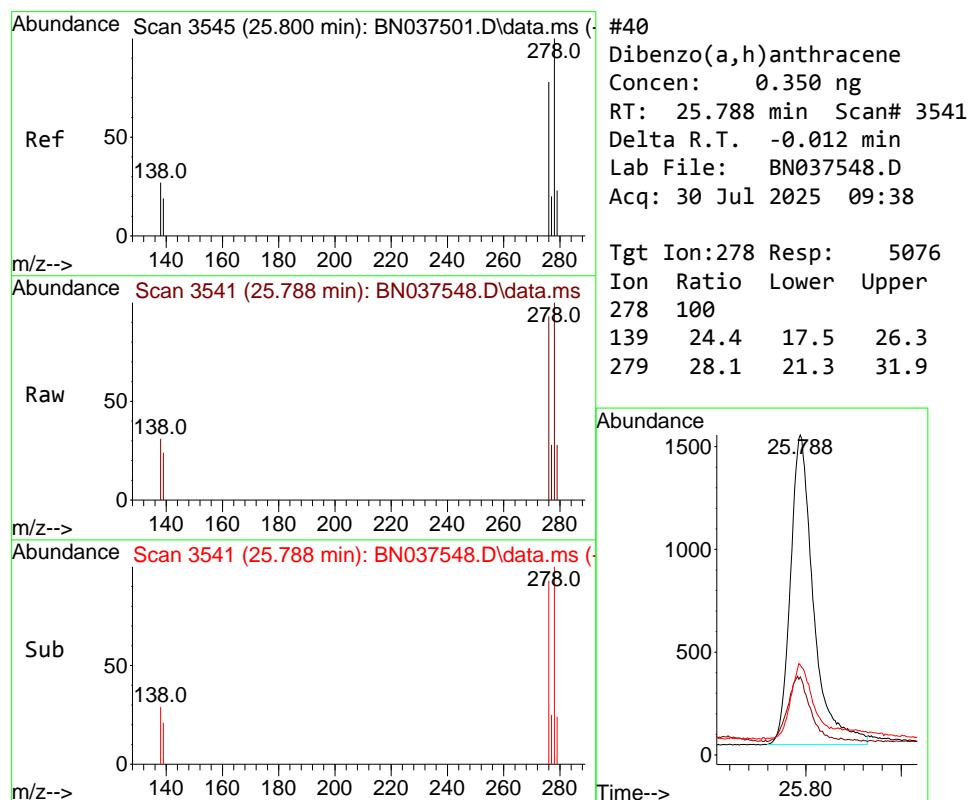
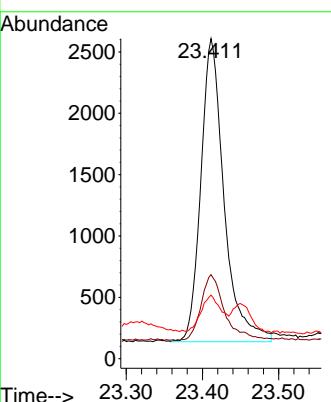




#39  
 Benzo(a)pyrene  
 Concen: 0.383 ng  
 RT: 23.411 min Scan# 2  
 Delta R.T. -0.006 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

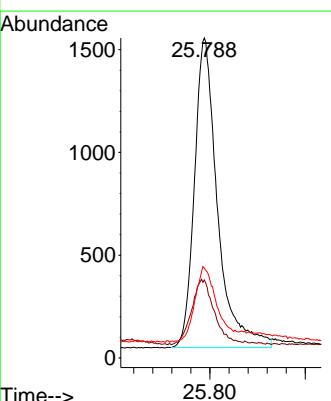
Instrument : BNA\_N  
 ClientSampleId : SSTDCCCC0.4

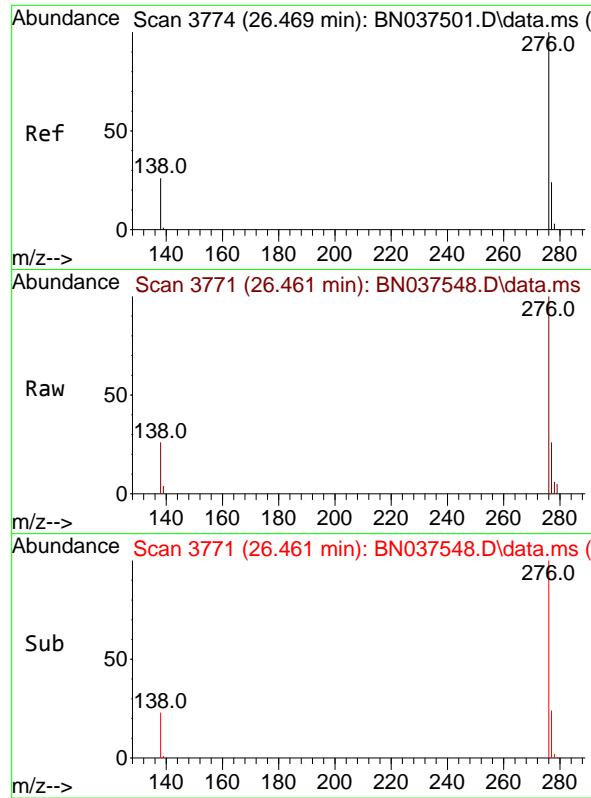
Tgt Ion:252 Resp: 5218  
 Ion Ratio Lower Upper  
 252 100  
 253 26.3 19.9 29.9  
 125 19.9 15.2 22.8



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.350 ng  
 RT: 25.788 min Scan# 3541  
 Delta R.T. -0.012 min  
 Lab File: BN037548.D  
 Acq: 30 Jul 2025 09:38

Tgt Ion:278 Resp: 5076  
 Ion Ratio Lower Upper  
 278 100  
 139 24.4 17.5 26.3  
 279 28.1 21.3 31.9

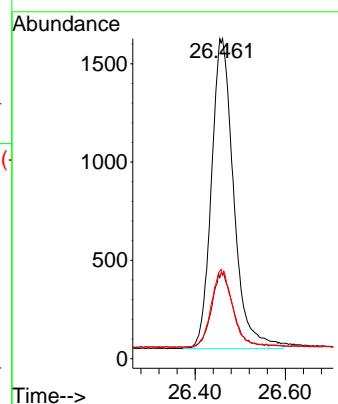




#41  
Benzo(g,h,i)perylene  
Concen: 0.361 ng  
RT: 26.461 min Scan# 3  
Delta R.T. -0.009 min  
Lab File: BN037548.D  
Acq: 30 Jul 2025 09:38

Instrument : BNA\_N  
ClientSampleId : SSTDCCCC0.4

Tgt Ion:276 Resp: 5409  
Ion Ratio Lower Upper  
276 100  
277 26.4 20.9 31.3  
138 26.0 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037548.D  
 Acq On : 30 Jul 2025 09:38  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jul 30 10:39:47 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|---------|----------------------------|-------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 1.000 | 1.000 | 0.0   | 104   | 0.00     |
| 2       | 1,4-Dioxane                | 0.385 | 0.392 | -1.8  | 103   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.484 | 0.511 | -5.6  | 114   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.989 | 0.916 | 7.4   | 96    | 0.00     |
| 5 S     | Phenol-d6                  | 1.241 | 1.129 | 9.0   | 98    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.033 | 1.021 | 1.2   | 103   | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 108   | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.299 | 0.272 | 9.0   | 104   | -0.01    |
| 9       | Naphthalene                | 1.067 | 1.028 | 3.7   | 106   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.236 | 0.236 | 0.0   | 108   | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.574 | 0.520 | 9.4   | 104   | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.701 | 0.644 | 8.1   | 102   | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 97    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.197 | 0.139 | 29.4# | 78    | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 2.080 | 2.204 | -6.0  | 104   | 0.00     |
| 16      | Acenaphthylene             | 1.792 | 1.669 | 6.9   | 94    | 0.00     |
| 17      | Acenaphthene               | 1.218 | 1.142 | 6.2   | 94    | -0.01    |
| 18      | Fluorene                   | 1.569 | 1.445 | 7.9   | 94    | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 90    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.057 | 0.041 | 28.1# | 90    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.256 | 0.241 | 5.9   | 90    | 0.00     |
| 22      | Hexachlorobenzene          | 0.331 | 0.341 | -3.0  | 94    | 0.00     |
| 23      | Atrazine                   | 0.179 | 0.135 | 24.6  | 77    | 0.00     |
| 24      | Pentachlorophenol          | 0.149 | 0.107 | 28.2# | 77    | -0.01    |
| 25      | Phenanthrene               | 1.198 | 1.155 | 3.6   | 90    | -0.01    |
| 26      | Anthracene                 | 1.093 | 0.978 | 10.5  | 87    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 1.060 | 0.900 | 15.1  | 85    | 0.00     |
| 28      | Fluoranthene               | 1.382 | 1.209 | 12.5  | 85    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 93    | 0.00     |
| 30      | Pyrene                     | 1.612 | 1.423 | 11.7  | 82    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.859 | 0.751 | 12.6  | 83    | 0.00     |
| 32      | Benzo(a)anthracene         | 1.401 | 1.311 | 6.4   | 91    | 0.00     |
| 33      | Chrysene                   | 1.459 | 1.492 | -2.3  | 96    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.630 | 0.504 | 20.0  | 83    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 89    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.666 | 1.569 | 5.8   | 93    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.518 | 1.336 | 12.0  | 82    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.567 | 1.527 | 2.6   | 92    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.267 | 1.214 | 4.2   | 91    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.349 | 1.181 | 12.5  | 87    | -0.01    |
| 41      | Benzo(g,h,i)perylene       | 1.397 | 1.259 | 9.9   | 86    | 0.00     |

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037548.D  
 Acq On : 30 Jul 2025 09:38  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jul 30 10:39:47 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | Amount | Calc. | %Dev  | Area% | Dev(min) |
|---------|----------------------------|--------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 0.400  | 0.400 | 0.0   | 104   | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.407 | -1.7  | 103   | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.423 | -5.7  | 114   | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.370 | 7.5   | 96    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.364 | 9.0   | 98    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.395 | 1.3   | 103   | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 108   | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.364 | 9.0   | 104   | -0.01    |
| 9       | Naphthalene                | 0.400  | 0.385 | 3.8   | 106   | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.401 | -0.3  | 108   | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.362 | 9.5   | 104   | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.367 | 8.3   | 102   | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 97    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.284 | 29.0# | 78    | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.424 | -6.0  | 104   | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.373 | 6.8   | 94    | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.375 | 6.3   | 94    | -0.01    |
| 18      | Fluorene                   | 0.400  | 0.368 | 8.0   | 94    | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 90    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.393 | 1.8   | 90    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.376 | 6.0   | 90    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.412 | -3.0  | 94    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.303 | 24.3  | 77    | 0.00     |
| 24      | Pentachlorophenol          | 0.400  | 0.288 | 28.0# | 77    | -0.01    |
| 25      | Phenanthrene               | 0.400  | 0.386 | 3.5   | 90    | -0.01    |
| 26      | Anthracene                 | 0.400  | 0.358 | 10.5  | 87    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.340 | 15.0  | 85    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.350 | 12.5  | 85    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 93    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.353 | 11.8  | 82    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.350 | 12.5  | 83    | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.374 | 6.5   | 91    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.409 | -2.2  | 96    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.320 | 20.0  | 83    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 89    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.377 | 5.8   | 93    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.352 | 12.0  | 82    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.390 | 2.5   | 92    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.383 | 4.3   | 91    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.350 | 12.5  | 87    | -0.01    |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.361 | 9.8   | 86    | 0.00     |

(#) = Out of Range

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



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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

|                 |              |                        |                       |
|-----------------|--------------|------------------------|-----------------------|
| Lab Name:       | Alliance     | Contract:              | TETR06                |
| Lab Code:       | ACE          | SDG No.:               | Q2696                 |
| Instrument ID:  | BNA_N        | Calibration Date/Time: | 07/30/2025 15:16      |
| Lab File ID:    | BN037557.D   | Init. Calib. Date(s):  | 07/15/2025 07/15/2025 |
| EPA Sample No.: | SSTDCCC0.4EC | Init. Calib. Time(s):  | 12:36 16:14           |
| GC Column:      | ZB-GR        | ID:                    | 0.25 (mm)             |

| COMPOUND                | RRF   | RRF0.4 | MIN RRF | %D    | MAX%D |
|-------------------------|-------|--------|---------|-------|-------|
| 2-Methylnaphthalene-d10 | 0.574 | 0.502  |         | -12.5 | 50.0  |
| Fluoranthene-d10        | 1.060 | 0.915  |         | -13.7 | 50.0  |
| 2-Fluorophenol          | 0.989 | 0.855  |         | -13.5 | 50.0  |
| Phenol-d6               | 1.241 | 1.046  |         | -15.7 | 50.0  |
| Nitrobenzene-d5         | 0.299 | 0.277  |         | -7.4  | 50.0  |
| 2-Fluorobiphenyl        | 2.080 | 2.179  |         | 4.8   | 50.0  |
| 2,4,6-Tribromophenol    | 0.197 | 0.143  |         | -27.4 | 50.0  |
| Terphenyl-d14           | 0.859 | 0.818  |         | -4.8  | 50.0  |
| 1,4-Dioxane             | 0.385 | 0.375  |         | -2.6  | 50.0  |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037557.D  
 Acq On : 30 Jul 2025 15:16  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Jul 30 15:38:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

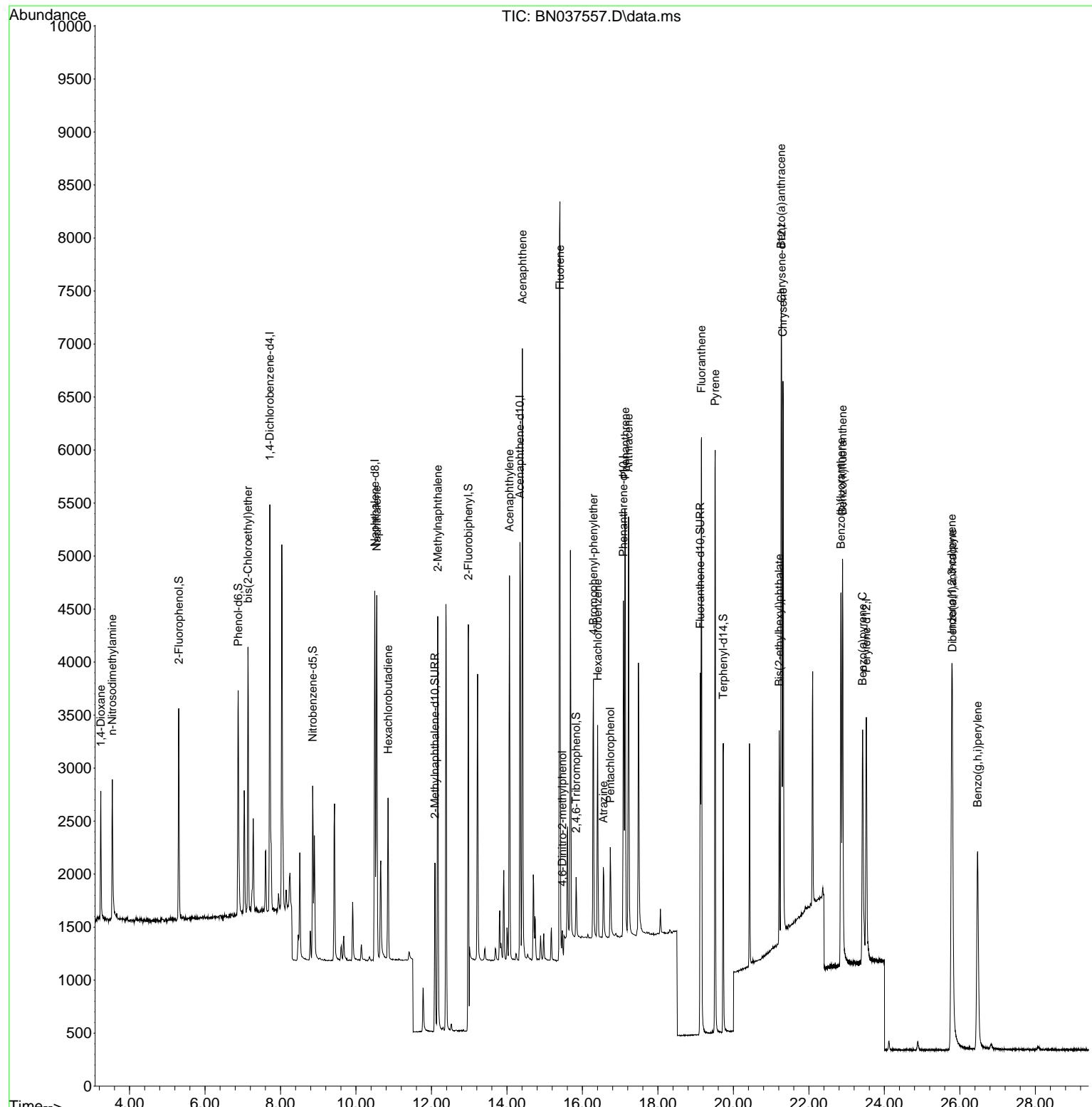
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4          | 7.717  | 152  | 1845     | 0.400  | ng    | 0.00     |
| 7) Naphthalene-d8                  | 10.498 | 136  | 4602     | 0.400  | ng    | -0.01    |
| 13) Acenaphthene-d10               | 14.345 | 164  | 2311     | 0.400  | ng    | -0.01    |
| 19) Phenanthrene-d10               | 17.086 | 188  | 4367     | 0.400  | ng    | #-0.01   |
| 29) Chrysene-d12                   | 21.277 | 240  | 3426     | 0.400  | ng    | # 0.00   |
| 35) Perylene-d12                   | 23.522 | 264  | 3201     | 0.400  | ng    | # 0.00   |
| <b>System Monitoring Compounds</b> |        |      |          |        |       |          |
| 4) 2-Fluorophenol                  | 5.305  | 112  | 1578     | 0.346  | ng    | 0.00     |
| 5) Phenol-d6                       | 6.879  | 99   | 1930     | 0.337  | ng    | 0.00     |
| 8) Nitrobenzene-d5                 | 8.854  | 82   | 1276     | 0.371  | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10        | 12.091 | 152  | 2309     | 0.350  | ng    | -0.01    |
| 14) 2,4,6-Tribromophenol           | 15.833 | 330  | 330      | 0.290  | ng    | -0.01    |
| 15) 2-Fluorobiphenyl               | 12.978 | 172  | 5035     | 0.419  | ng    | 0.00     |
| 27) Fluoranthene-d10               | 19.122 | 212  | 3994     | 0.345  | ng    | 0.00     |
| 31) Terphenyl-d14                  | 19.731 | 244  | 2801     | 0.380  | ng    | 0.00     |
| <b>Target Compounds</b>            |        |      |          |        |       |          |
|                                    |        |      |          | Qvalue |       |          |
| 2) 1,4-Dioxane                     | 3.239  | 88   | 692      | 0.390  | ng    | 95       |
| 3) n-Nitrosodimethylamine          | 3.543  | 42   | 988      | 0.443  | ng    | # 78     |
| 6) bis(2-Chloroethyl)ether         | 7.139  | 93   | 1783     | 0.374  | ng    | 99       |
| 9) Naphthalene                     | 10.551 | 128  | 4654     | 0.379  | ng    | 100      |
| 10) Hexachlorobutadiene            | 10.850 | 225  | 1239     | 0.457  | ng    | # 99     |
| 12) 2-Methylnaphthalene            | 12.167 | 142  | 2862     | 0.355  | ng    | 96       |
| 16) Acenaphthylene                 | 14.067 | 152  | 3886     | 0.375  | ng    | 99       |
| 17) Acenaphthene                   | 14.409 | 154  | 2672     | 0.380  | ng    | 95       |
| 18) Fluorene                       | 15.403 | 166  | 3321     | 0.366  | ng    | 97       |
| 20) 4,6-Dinitro-2-methylph...      | 15.467 | 198  | 190      | 0.411  | ng    | 86       |
| 21) 4-Bromophenyl-phenylether      | 16.292 | 248  | 1020     | 0.365  | ng    | # 88     |
| 22) Hexachlorobenzene              | 16.404 | 284  | 1490     | 0.412  | ng    | 95       |
| 23) Atrazine                       | 16.553 | 200  | 655      | 0.336  | ng    | # 92     |
| 24) Pentachlorophenol              | 16.739 | 266  | 464      | 0.286  | ng    | 99       |
| 25) Phenanthrene                   | 17.136 | 178  | 4934     | 0.377  | ng    | 99       |
| 26) Anthracene                     | 17.223 | 178  | 4201     | 0.352  | ng    | 100      |
| 28) Fluoranthene                   | 19.155 | 202  | 5332     | 0.353  | ng    | 98       |
| 30) Pyrene                         | 19.517 | 202  | 5170     | 0.375  | ng    | 100      |
| 32) Benzo(a)anthracene             | 21.268 | 228  | 4356     | 0.363  | ng    | 99       |
| 33) Chrysene                       | 21.313 | 228  | 4922     | 0.394  | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha...      | 21.214 | 149  | 1967     | 0.364  | ng    | 96       |
| 36) Indeno(1,2,3-cd)pyrene         | 25.785 | 276  | 5062     | 0.380  | ng    | 97       |
| 37) Benzo(b)fluoranthene           | 22.850 | 252  | 4531     | 0.373  | ng    | 98       |
| 38) Benzo(k)fluoranthene           | 22.891 | 252  | 5005     | 0.399  | ng    | 95       |
| 39) Benzo(a)pyrene                 | 23.423 | 252  | 3657     | 0.361  | ng    | 96       |
| 40) Dibenzo(a,h)anthracene         | 25.803 | 278  | 3969     | 0.368  | ng    | 97       |
| 41) Benzo(g,h,i)perylene           | 26.472 | 276  | 4130     | 0.370  | ng    | 97       |

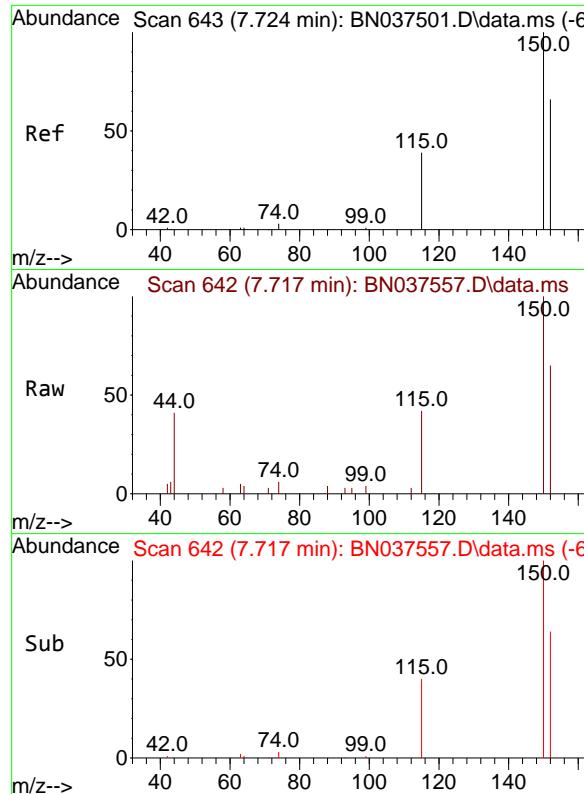
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037557.D  
 Acq On : 30 Jul 2025 15:16  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Jul 30 15:38:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

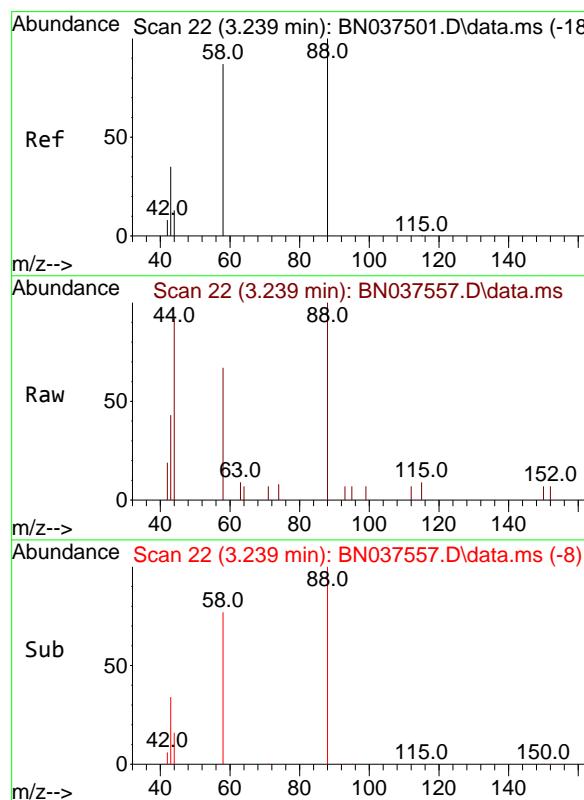
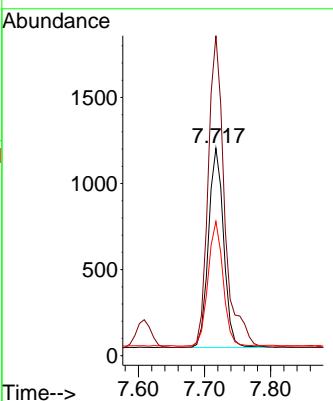




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 6  
Delta R.T. -0.007 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

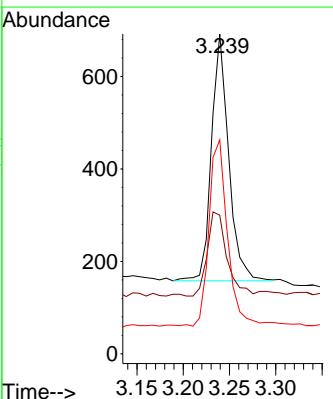
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

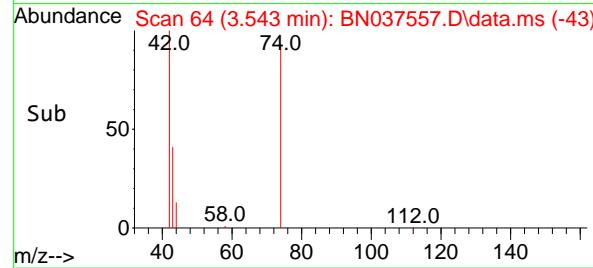
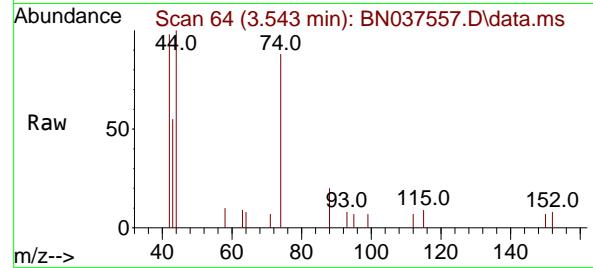
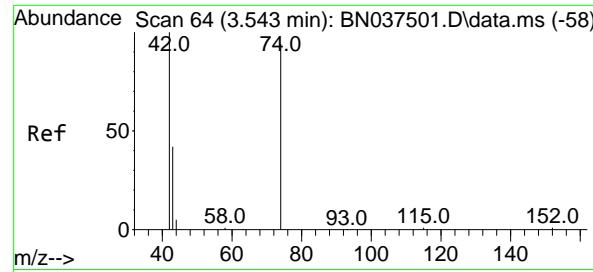
Tgt Ion:152 Resp: 1845  
Ion Ratio Lower Upper  
152 100  
150 154.3 119.8 179.8  
115 64.7 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.390 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

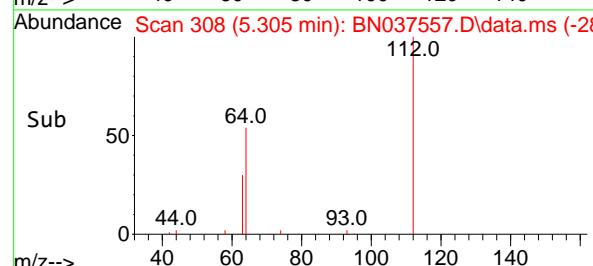
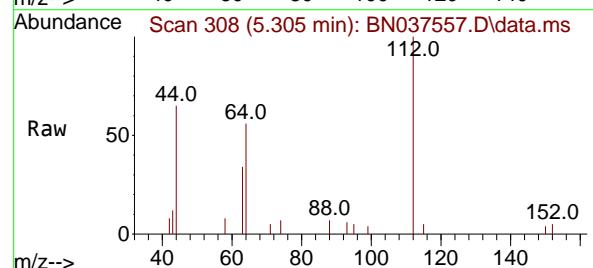
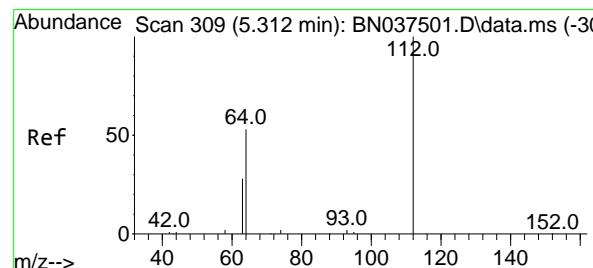
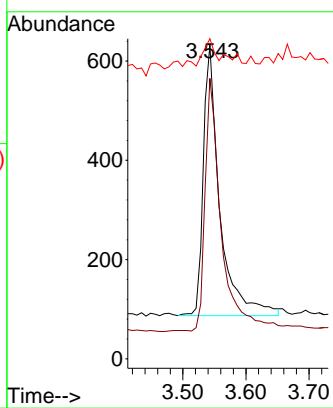
Tgt Ion: 88 Resp: 692  
Ion Ratio Lower Upper  
88 100  
43 39.5 27.5 41.3  
58 81.1 62.7 94.1





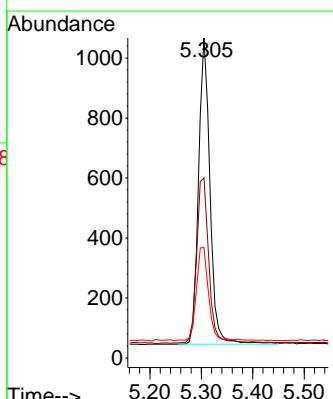
#3  
n-Nitrosodimethylamine  
Concen: 0.443 ng  
RT: 3.543 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16  
ClientSampleId : SSTDCCC0.4EC

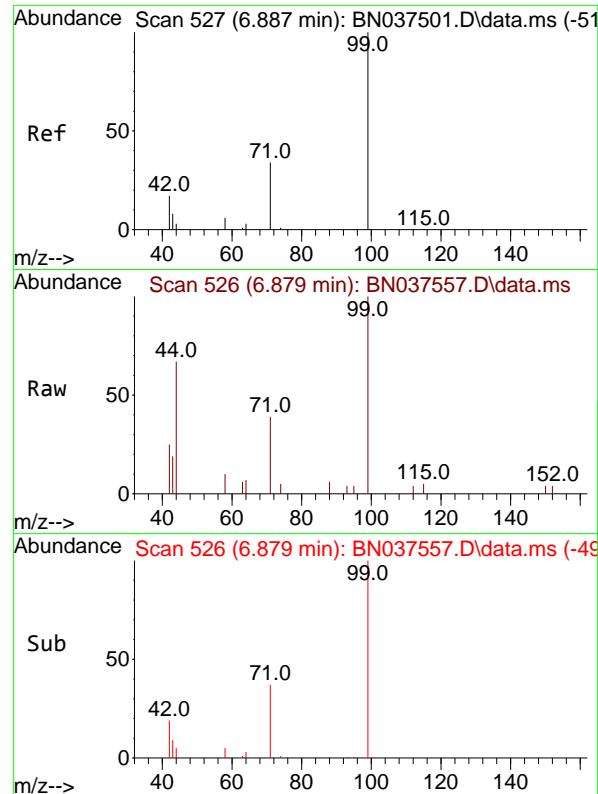
Tgt Ion: 42 Resp: 988  
Ion Ratio Lower Upper  
42 100  
74 91.5 91.8 137.6#  
44 6.5 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.346 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion: 112 Resp: 1578  
Ion Ratio Lower Upper  
112 100  
64 57.3 45.1 67.7  
63 32.4 23.8 35.8

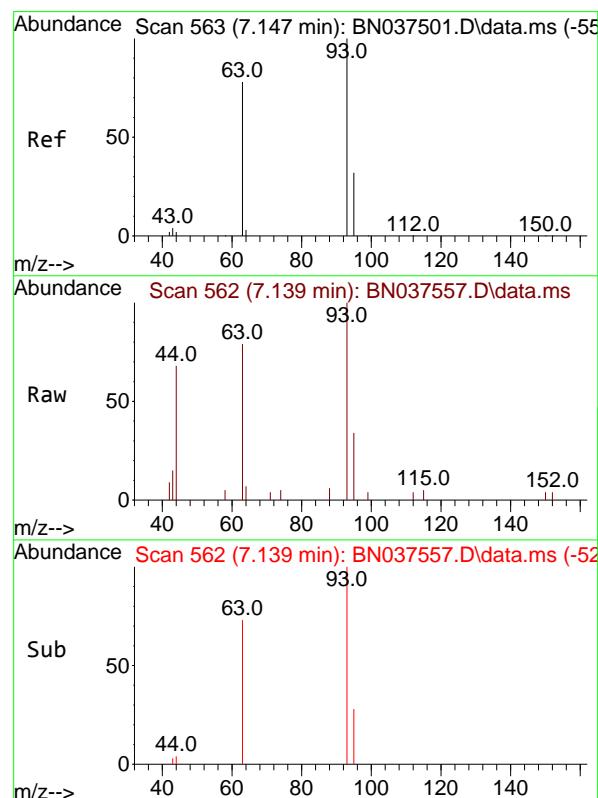
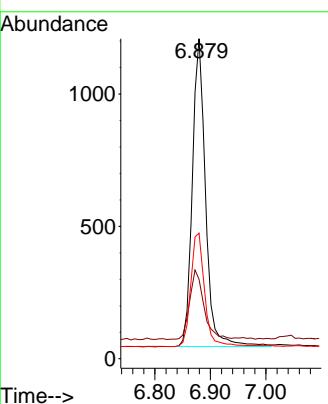




#5  
 Phenol-d6  
 Concen: 0.337 ng  
 RT: 6.879 min Scan# 5  
 Delta R.T. -0.007 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

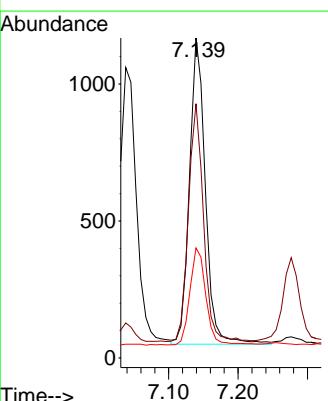
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

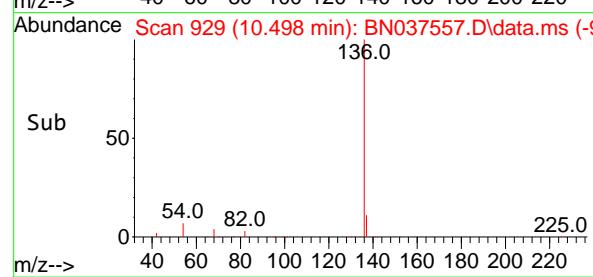
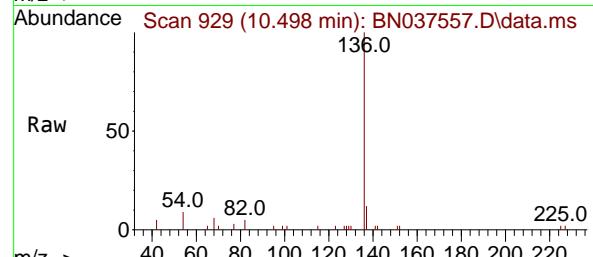
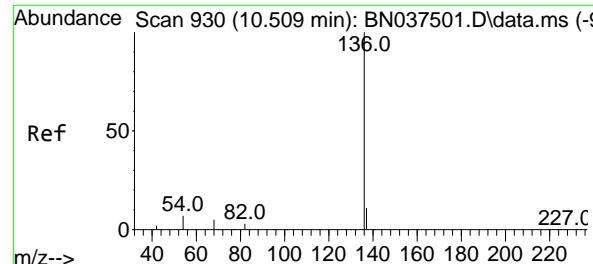
Tgt Ion: 99 Resp: 1930  
 Ion Ratio Lower Upper  
 99 100  
 42 23.8 17.1 25.7  
 71 38.8 27.8 41.8



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.374 ng  
 RT: 7.139 min Scan# 562  
 Delta R.T. -0.007 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

Tgt Ion: 93 Resp: 1783  
 Ion Ratio Lower Upper  
 93 100  
 63 73.5 58.2 87.4  
 95 31.6 25.3 37.9



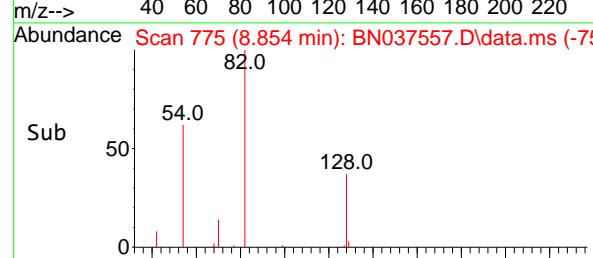
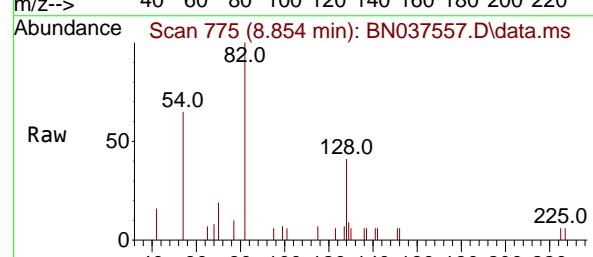
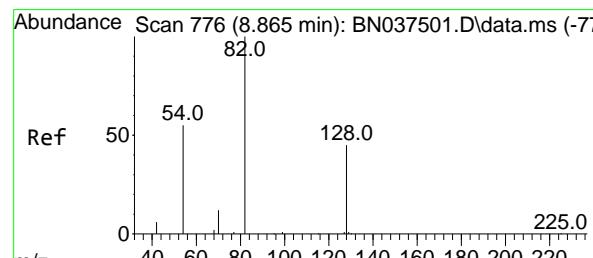
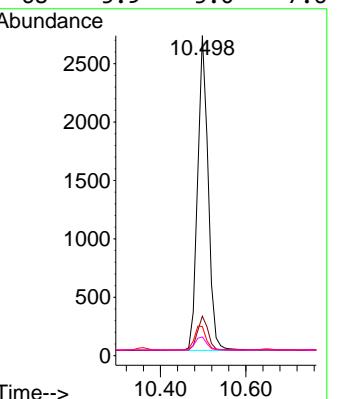


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Tgt Ion:136 Resp: 4602

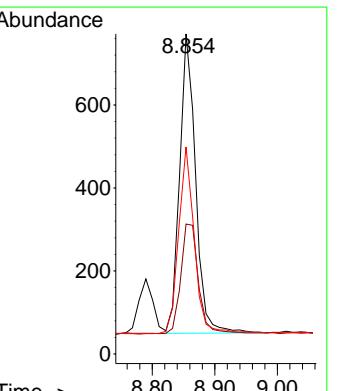
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 12.4  | 9.8   | 14.8  |
| 54  | 9.1   | 6.6   | 9.8   |
| 68  | 5.9   | 5.0   | 7.6   |

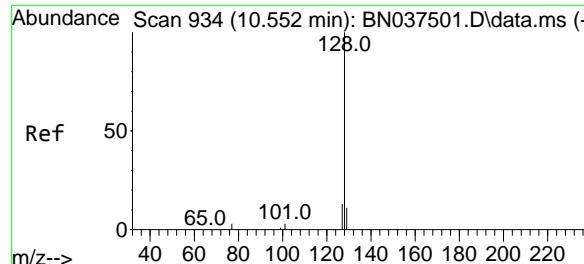


#8  
 Nitrobenzene-d5  
 Concen: 0.371 ng  
 RT: 8.854 min Scan# 775  
 Delta R.T. -0.011 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

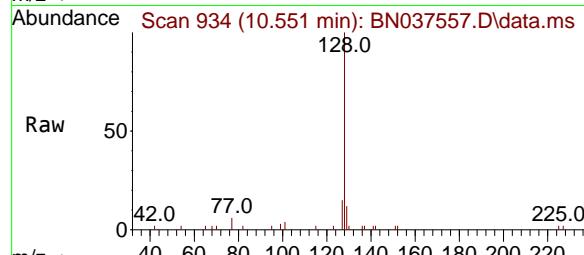
Tgt Ion: 82 Resp: 1276

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 40.6  | 37.5  | 56.3  |
| 54  | 64.7  | 45.3  | 67.9  |

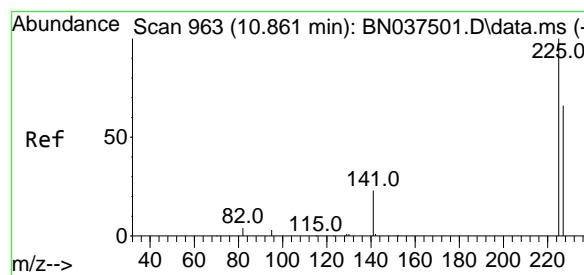
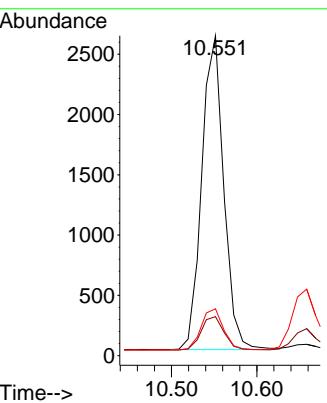
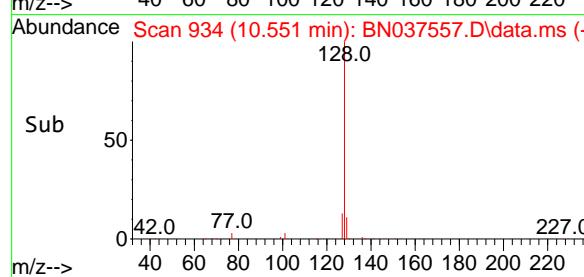




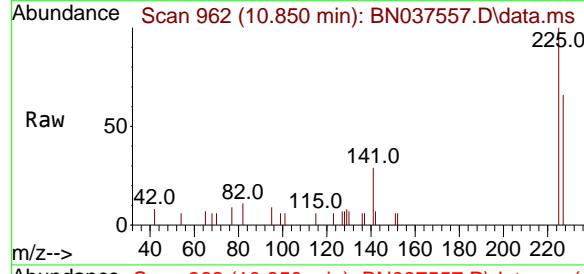
#9  
Naphthalene  
Concen: 0.379 ng  
RT: 10.551 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
ClientSampleId : SSTDCCC0.4EC  
Acq: 30 Jul 2025 15:16



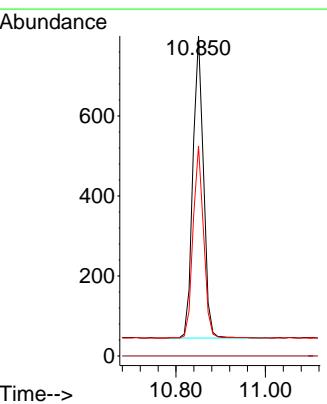
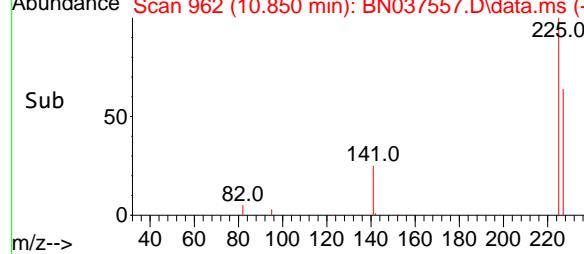
Tgt Ion:128 Resp: 4654  
Ion Ratio Lower Upper  
128 100  
129 12.2 9.7 14.5  
127 14.6 11.5 17.3

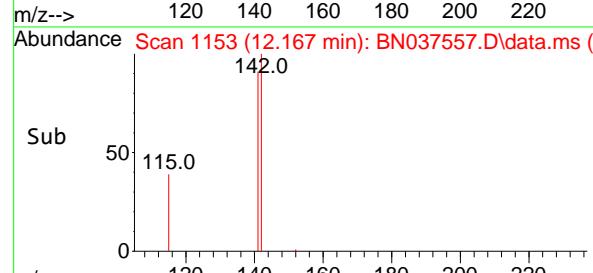
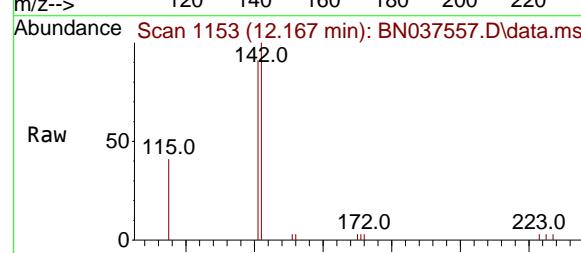
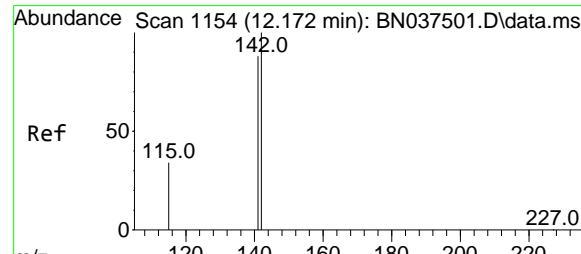
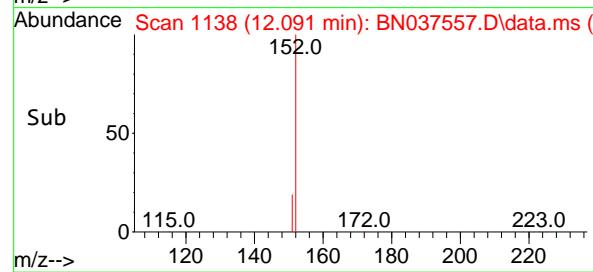
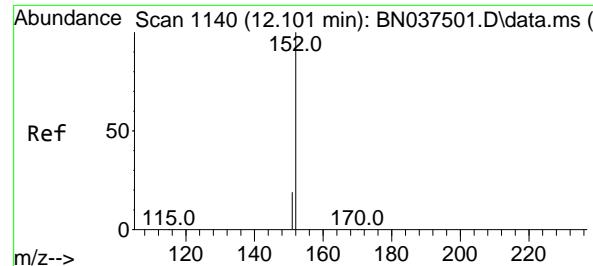


#10  
Hexachlorobutadiene  
Concen: 0.457 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16



Tgt Ion:225 Resp: 1239  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.1 51.0 76.4





#11

2-Methylnaphthalene-d10

Concen: 0.350 ng

RT: 12.091 min Scan# 1140

Delta R.T. -0.010 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

Instrument :

BNA\_N

ClientSampleId :

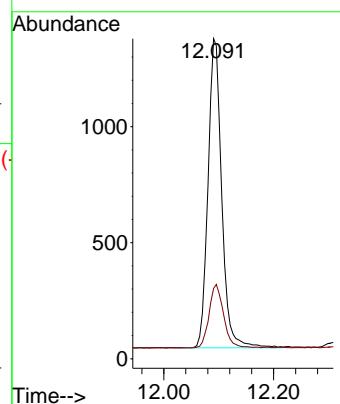
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2309

Ion Ratio Lower Upper

152 100

151 21.7 16.8 25.2



#12

2-Methylnaphthalene

Concen: 0.355 ng

RT: 12.167 min Scan# 1153

Delta R.T. -0.005 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

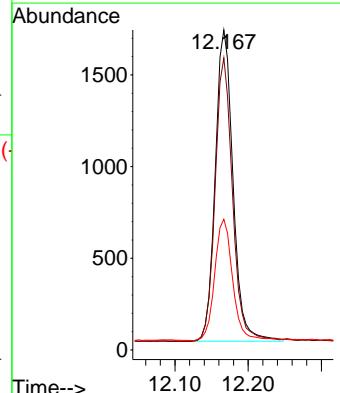
Tgt Ion:142 Resp: 2862

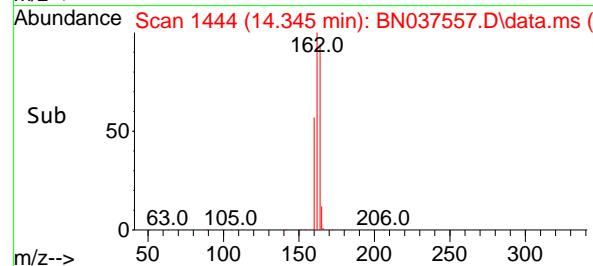
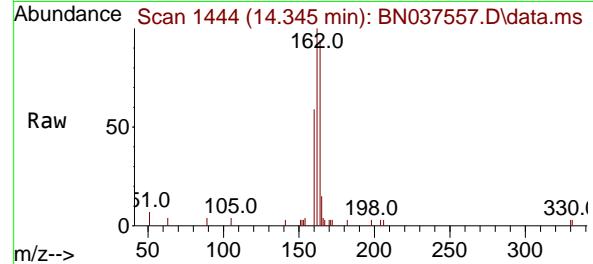
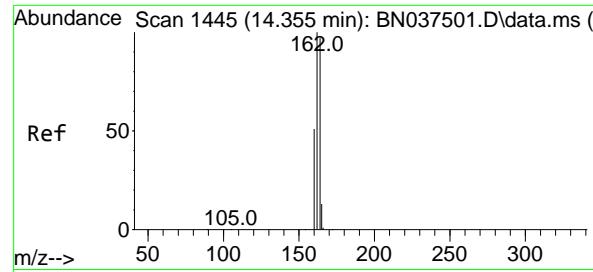
Ion Ratio Lower Upper

142 100

141 91.2 71.0 106.4

115 40.9 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.345 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

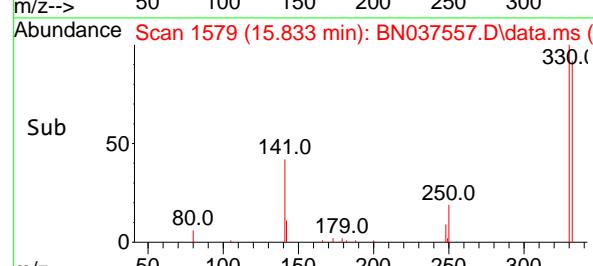
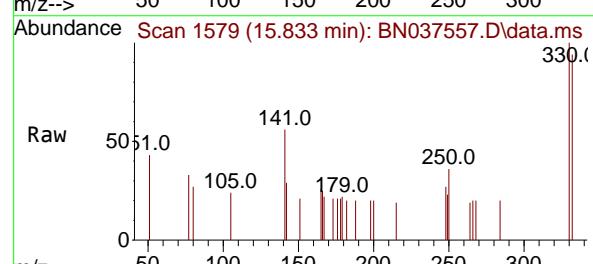
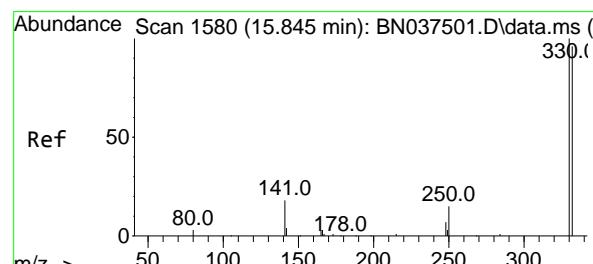
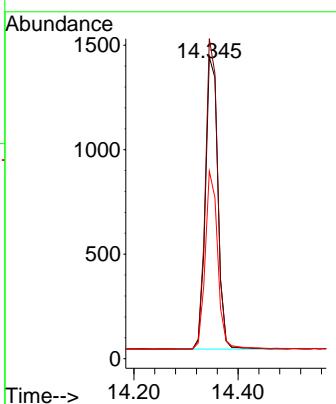
Tgt Ion:164 Resp: 2311

Ion Ratio Lower Upper

164 100

162 106.1 82.0 123.0

160 62.2 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.290 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.012 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

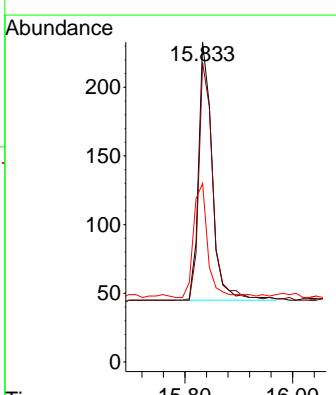
Tgt Ion:330 Resp: 330

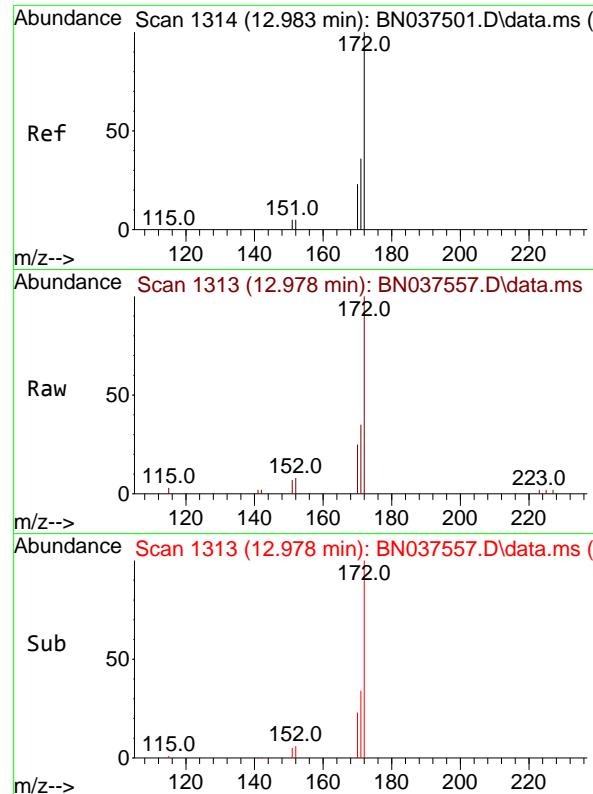
Ion Ratio Lower Upper

330 100

332 95.2 76.1 114.1

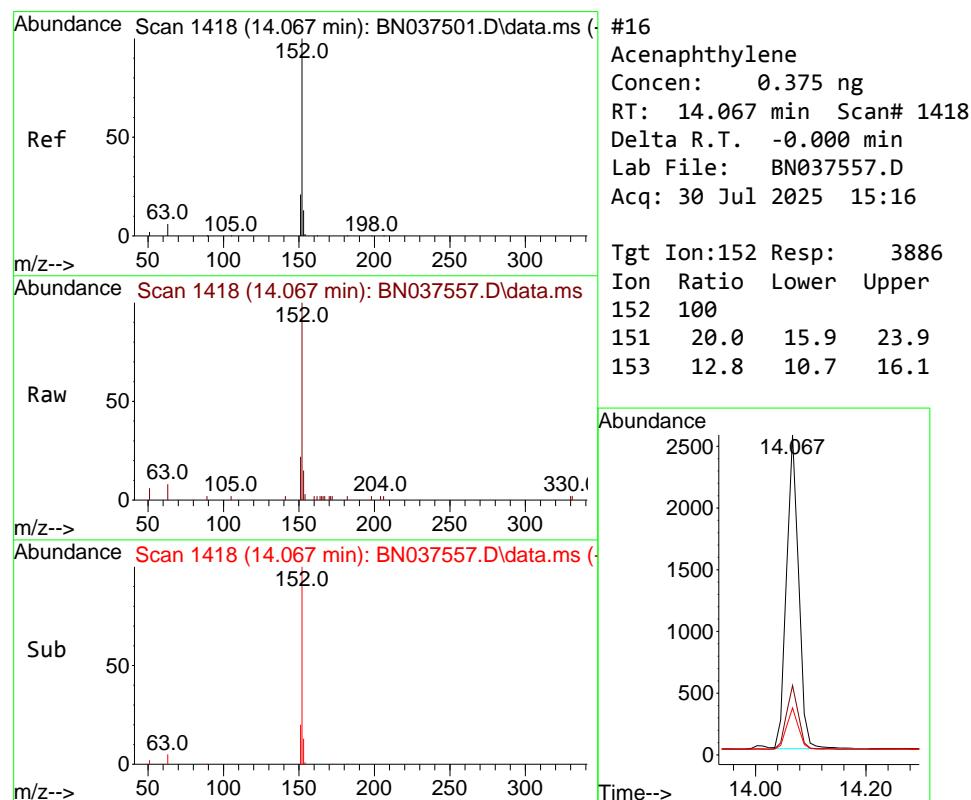
141 47.0 33.4 50.0





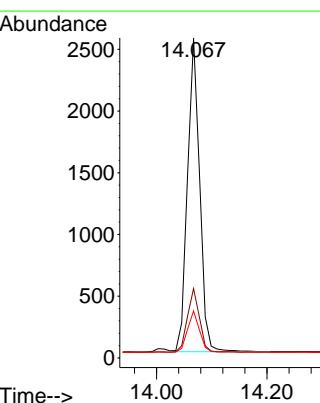
#15  
2-Fluorobiphenyl  
Concen: 0.419 ng  
RT: 12.978 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

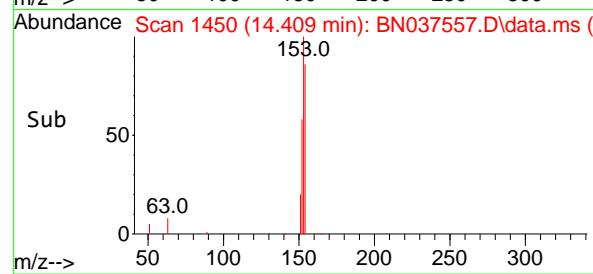
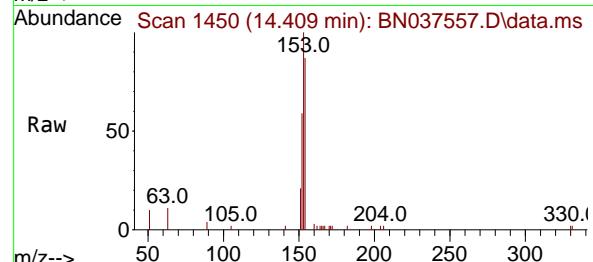
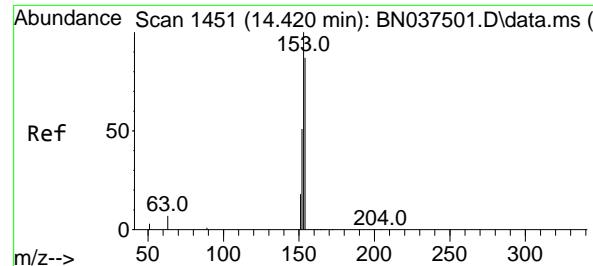
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC



#16  
Acenaphthylene  
Concen: 0.375 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion:152 Resp: 3886  
Ion Ratio Lower Upper  
152 100  
151 20.0 15.9 23.9  
153 12.8 10.7 16.1





#17

Acenaphthene

Concen: 0.380 ng

RT: 14.409 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

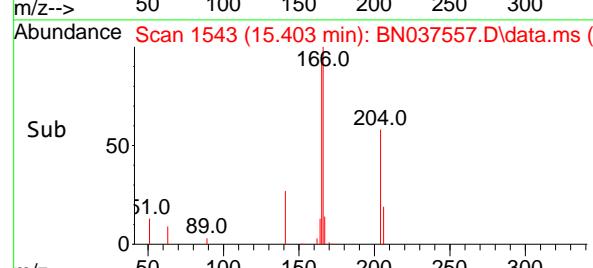
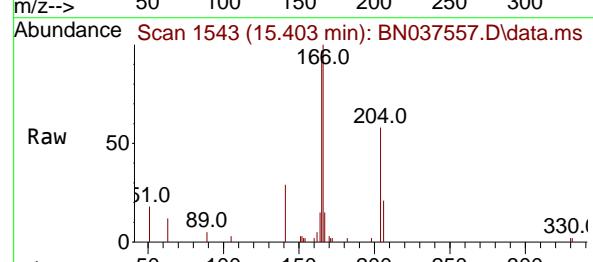
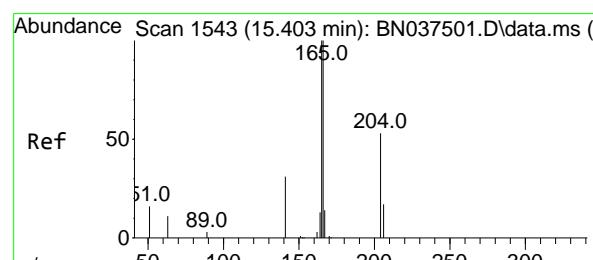
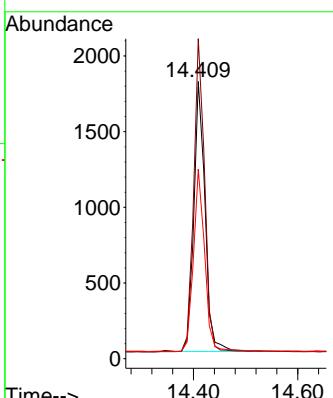
Tgt Ion:154 Resp: 2672

Ion Ratio Lower Upper

154 100

153 113.6 89.2 133.8

152 68.3 48.0 72.0



#18

Fluorene

Concen: 0.366 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

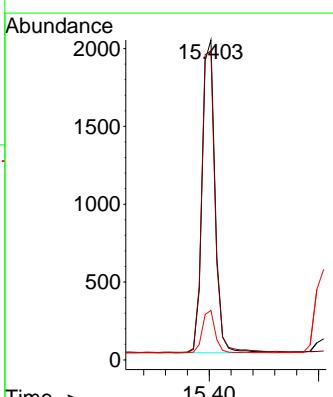
Tgt Ion:166 Resp: 3321

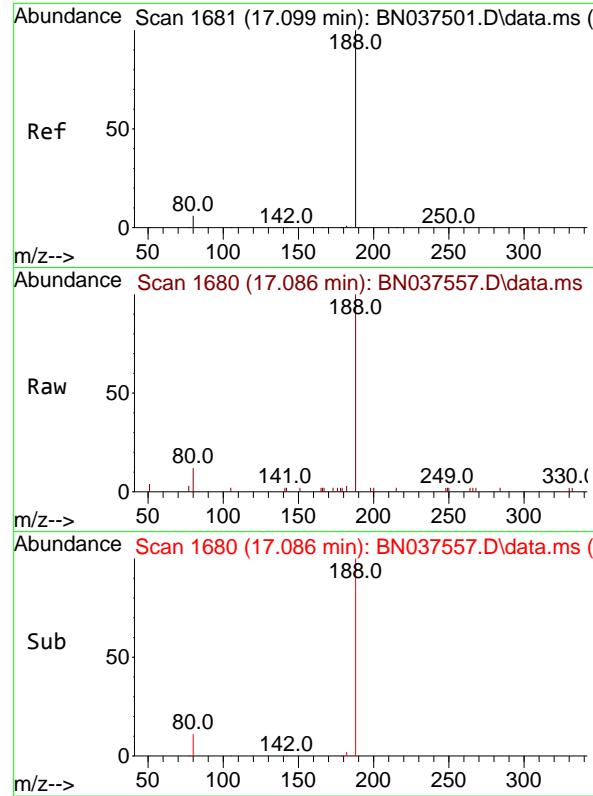
Ion Ratio Lower Upper

166 100

165 101.2 78.1 117.1

167 13.5 11.0 16.6





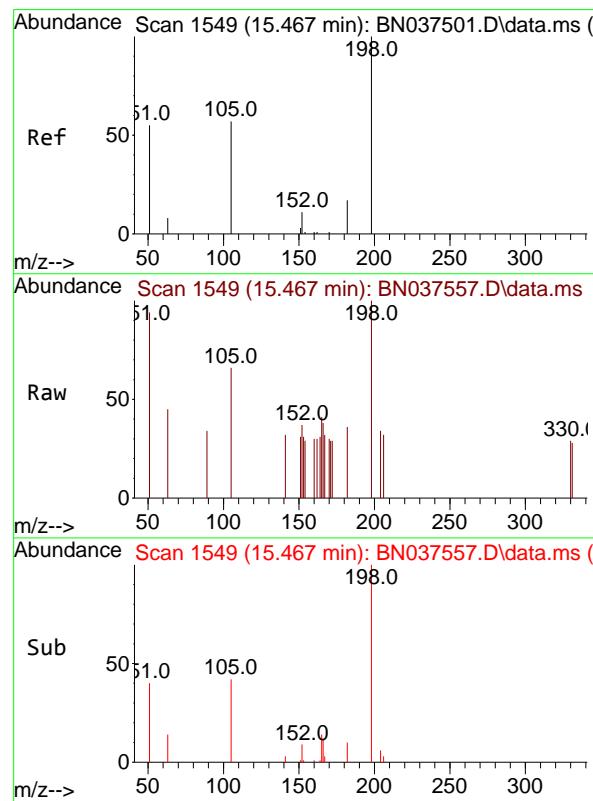
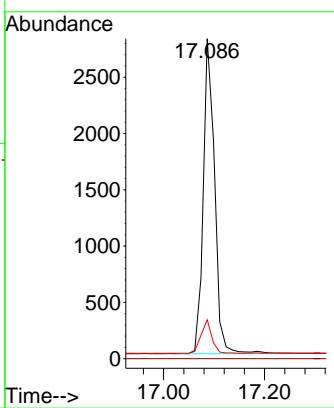
#19

Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1  
Delta R.T. -0.012 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

Tgt Ion:188 Resp: 4367

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 188 | 100   |       |       |
| 94  | 0.0   | 0.0   | 0.0   |
| 80  | 12.2  | 6.0   | 9.0#  |

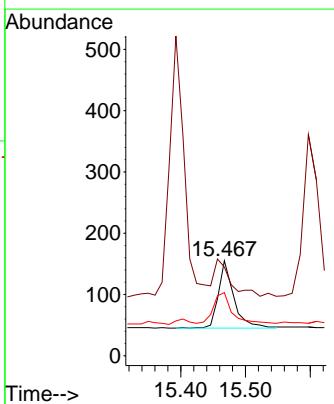


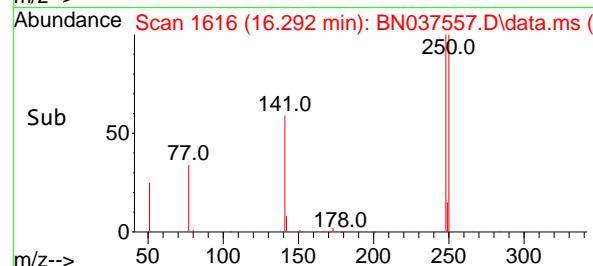
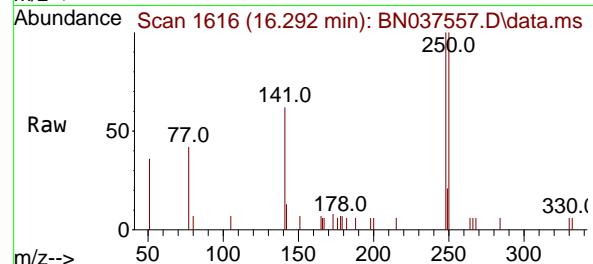
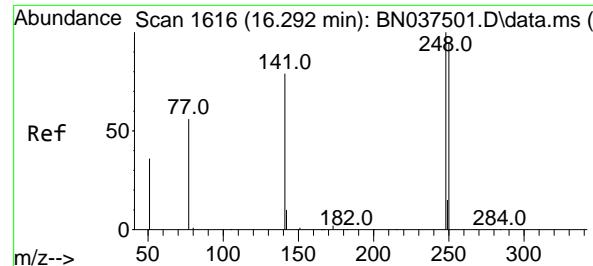
#20

4,6-Dinitro-2-methylphenol  
Concen: 0.411 ng  
RT: 15.467 min Scan# 1549  
Delta R.T. 0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion:198 Resp: 190

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 198 | 100   |       |       |
| 51  | 93.5  | 88.5  | 132.7 |
| 105 | 66.5  | 61.2  | 91.8  |

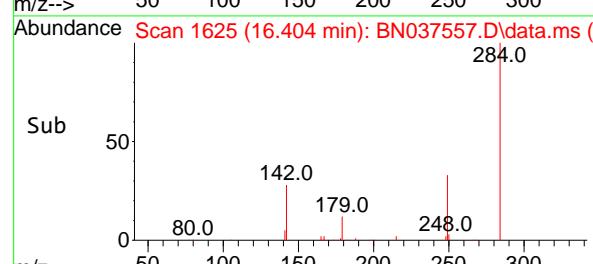
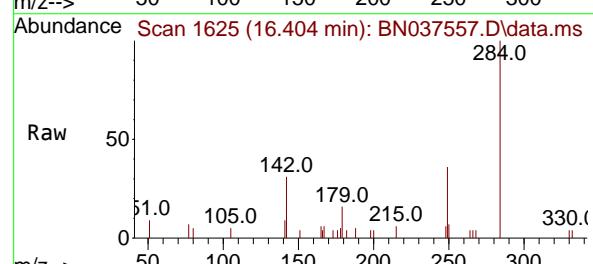
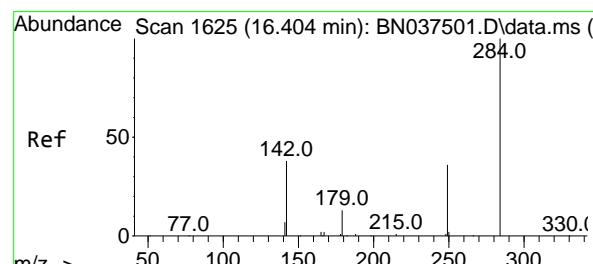
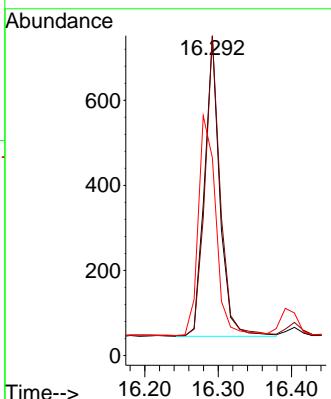




#21  
4-Bromophenyl-phenylether  
Concen: 0.365 ng  
RT: 16.292 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

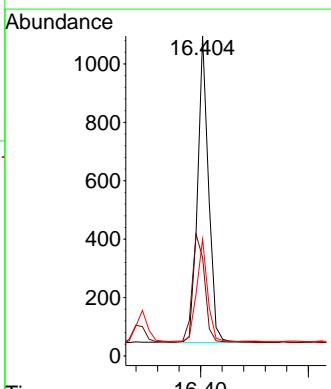
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

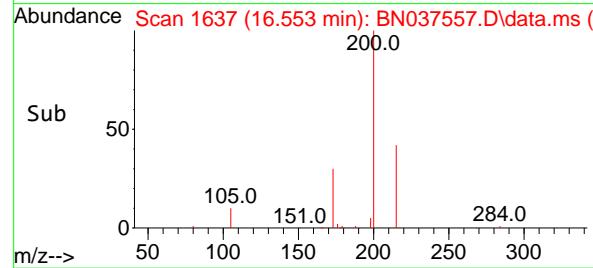
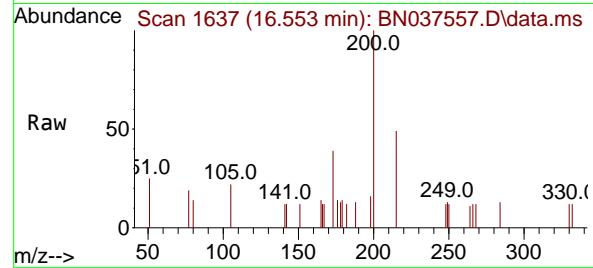
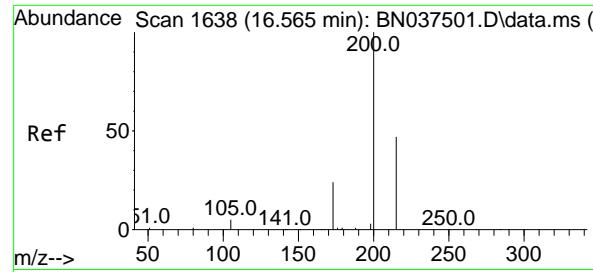
Tgt Ion:248 Resp: 1020  
Ion Ratio Lower Upper  
248 100  
250 100.3 76.2 114.2  
141 62.0 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.412 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion:284 Resp: 1490  
Ion Ratio Lower Upper  
284 100  
142 40.1 28.9 43.3  
249 33.3 25.8 38.6

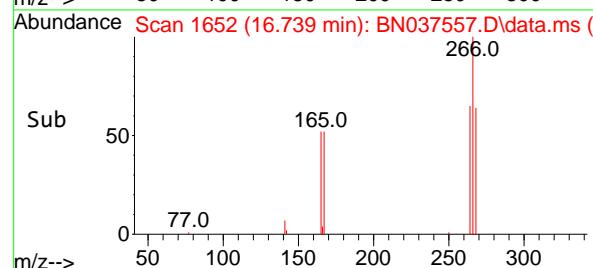
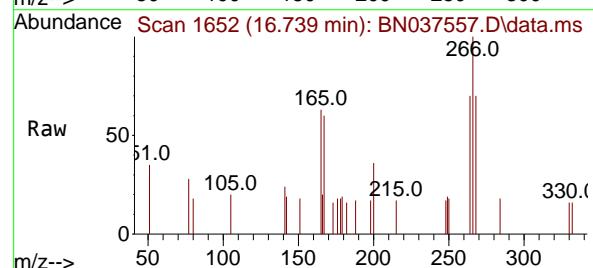
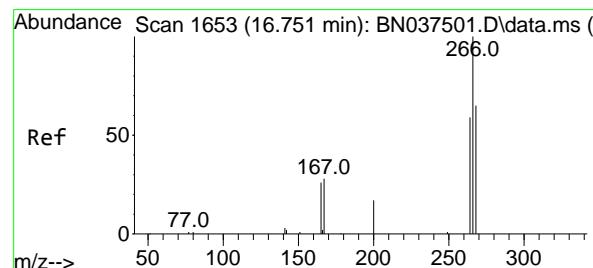
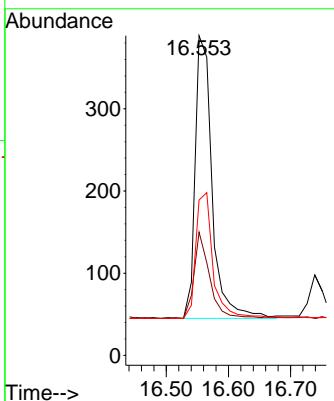




#23  
Atrazine  
Concen: 0.336 ng  
RT: 16.553 min Scan# 1  
Delta R.T. -0.012 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

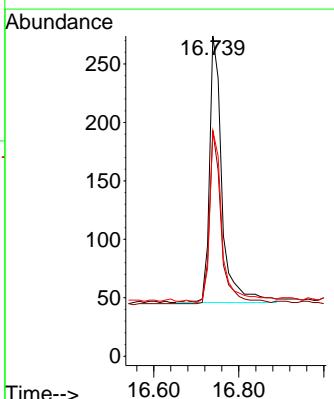
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

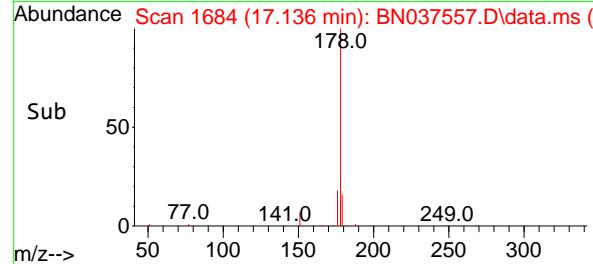
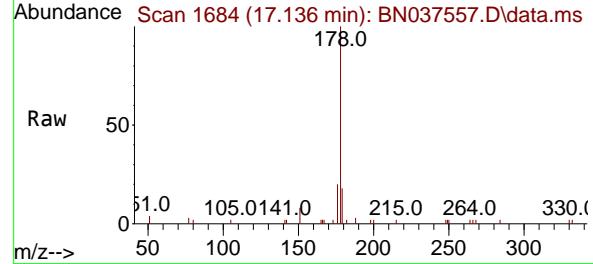
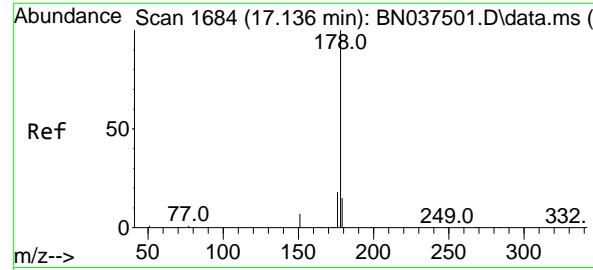
Tgt Ion:200 Resp: 655  
Ion Ratio Lower Upper  
200 100  
173 38.6 23.2 34.8#  
215 48.6 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.286 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.012 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion:266 Resp: 464  
Ion Ratio Lower Upper  
266 100  
264 61.2 49.3 73.9  
268 65.3 51.6 77.4





#25

Phenanthrene

Concen: 0.377 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

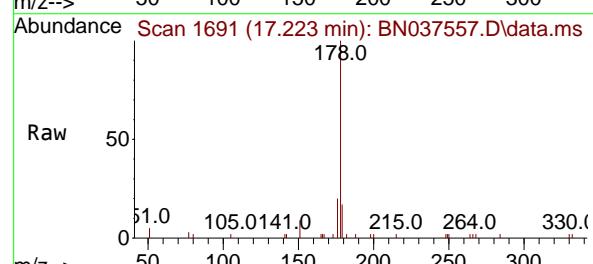
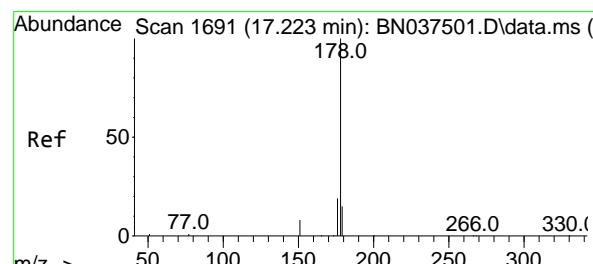
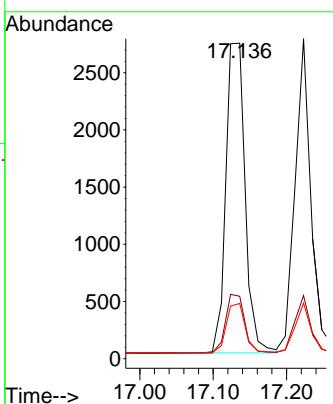
Tgt Ion:178 Resp: 4934

Ion Ratio Lower Upper

178 100

176 19.1 15.0 22.6

179 15.4 12.2 18.2



#26  
Anthracene  
Concen: 0.352 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

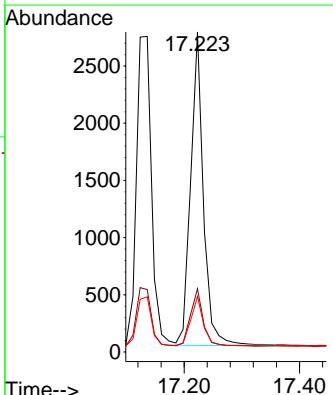
Tgt Ion:178 Resp: 4201

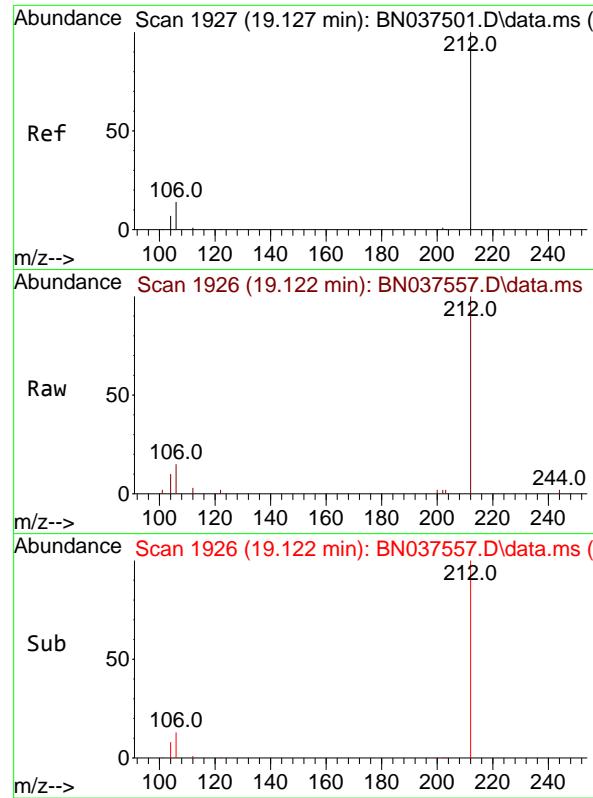
Ion Ratio Lower Upper

178 100

176 18.3 14.7 22.1

179 15.7 12.3 18.5

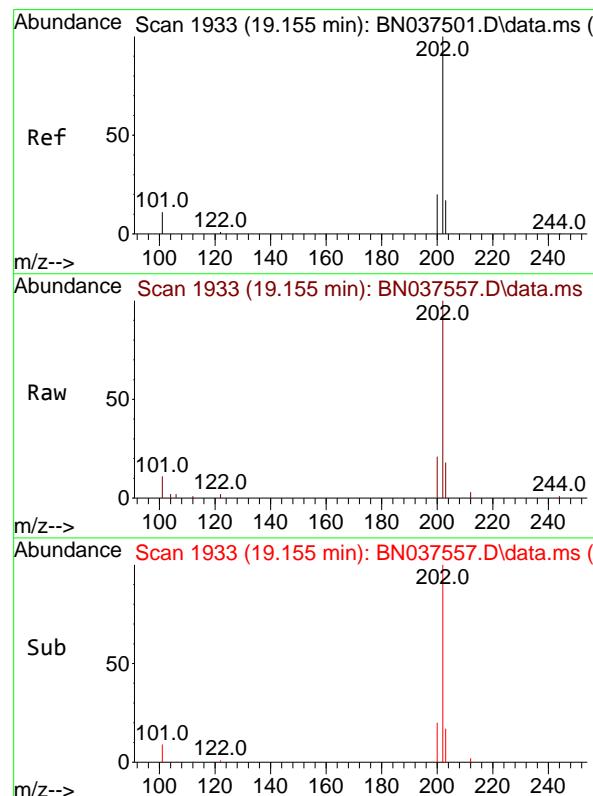
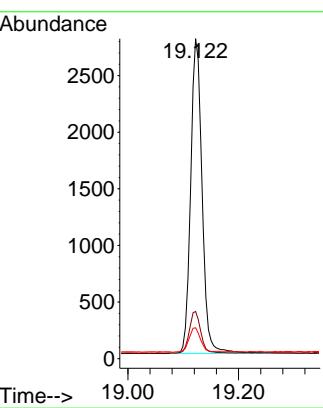




#27  
 Fluoranthene-d10  
 Concen: 0.345 ng  
 RT: 19.122 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

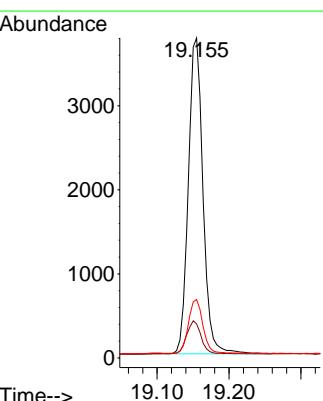
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

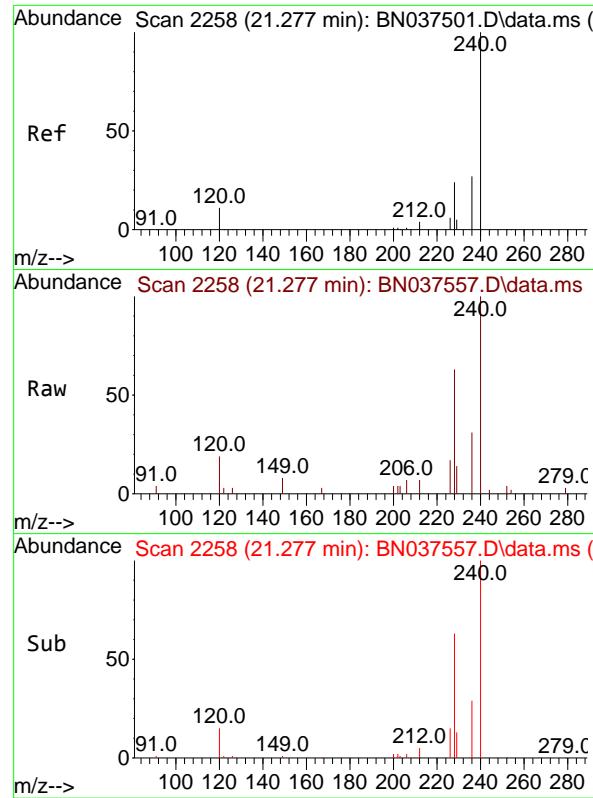
Tgt Ion:212 Resp: 3994  
 Ion Ratio Lower Upper  
 212 100  
 106 13.2 12.2 18.4  
 104 7.9 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.353 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

Tgt Ion:202 Resp: 5332  
 Ion Ratio Lower Upper  
 202 100  
 101 10.5 9.8 14.6  
 203 16.8 13.6 20.4

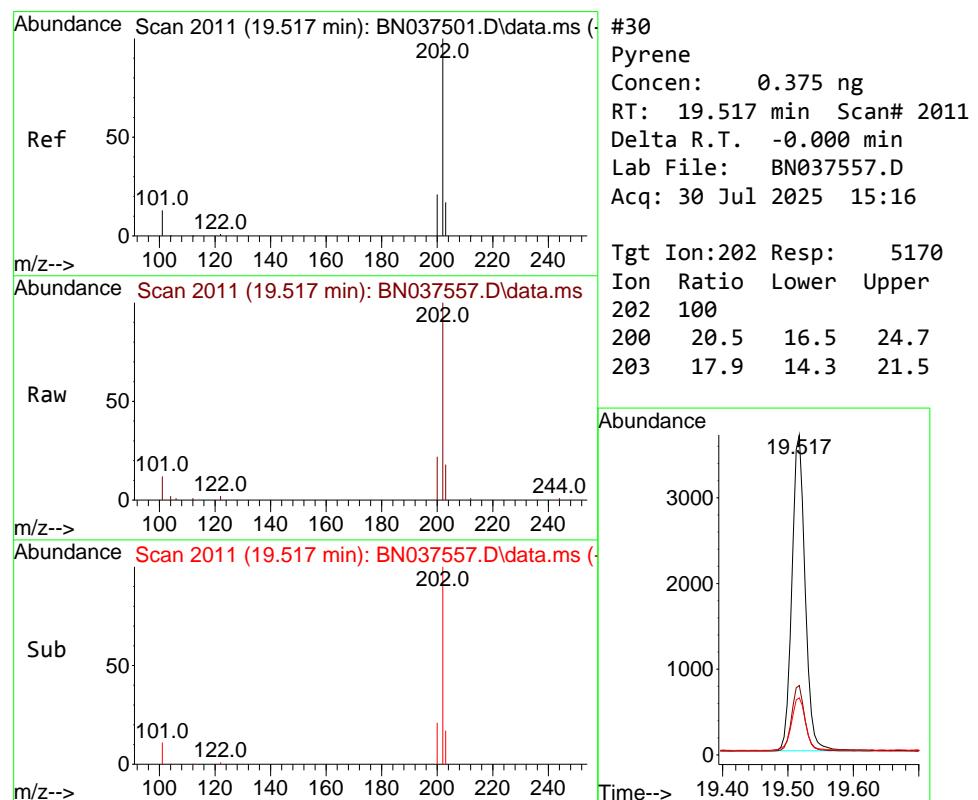
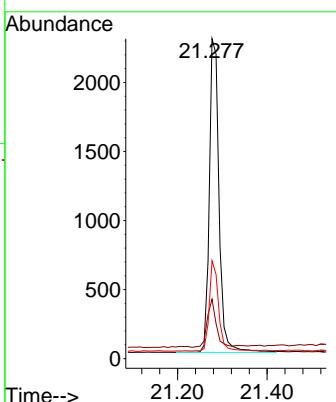




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

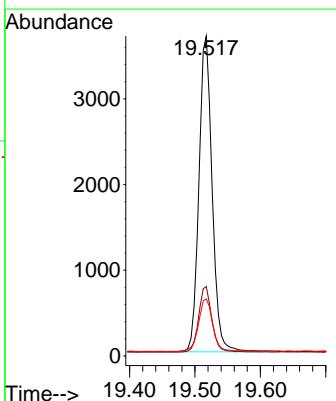
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

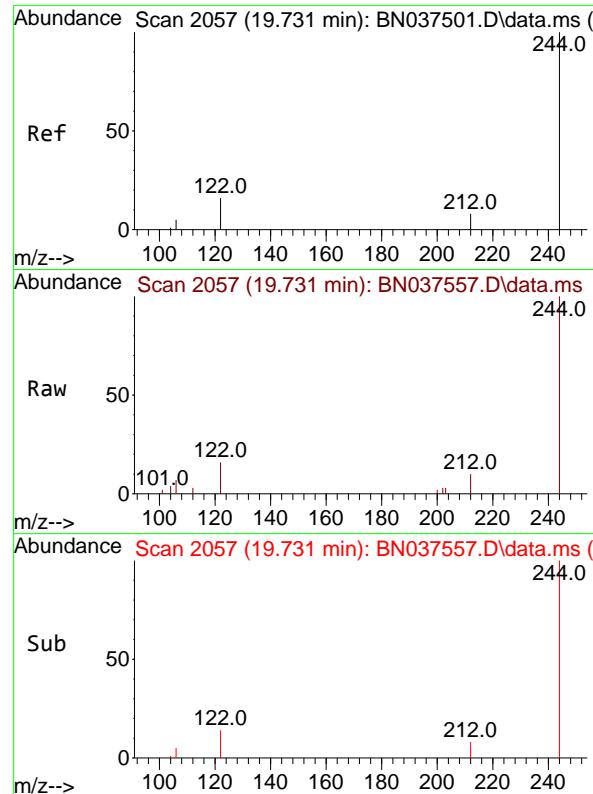
Tgt Ion:240 Resp: 3426  
Ion Ratio Lower Upper  
240 100  
120 18.6 10.7 16.1#  
236 30.6 22.6 33.8



#30  
Pyrene  
Concen: 0.375 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion:202 Resp: 5170  
Ion Ratio Lower Upper  
202 100  
200 20.5 16.5 24.7  
203 17.9 14.3 21.5

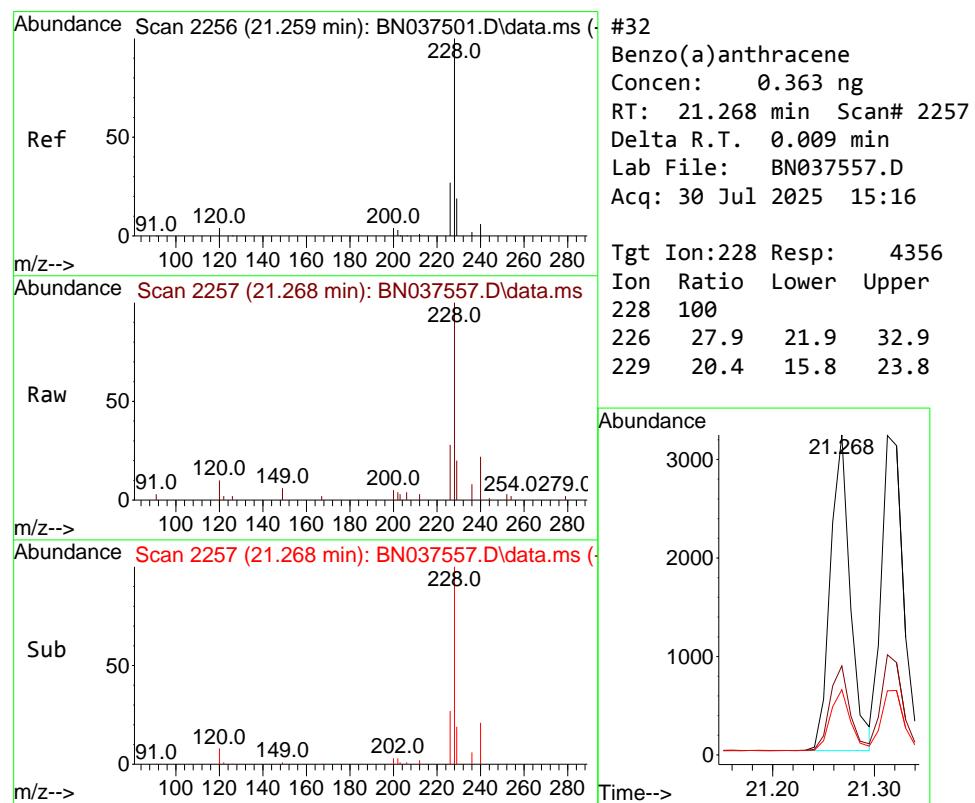
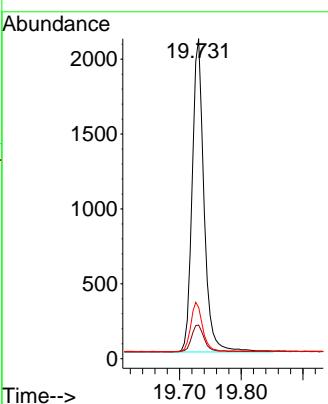




#31  
 Terphenyl-d14  
 Concen: 0.380 ng  
 RT: 19.731 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

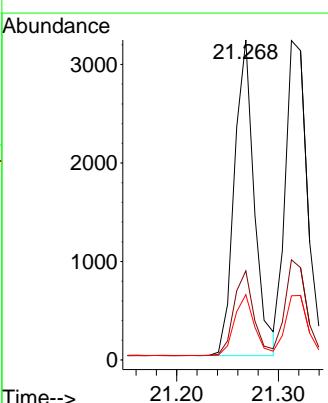
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

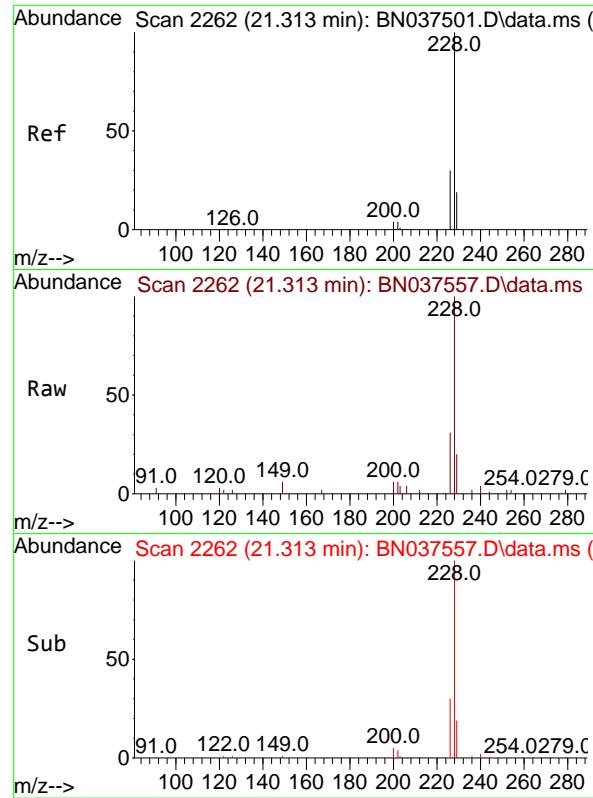
Tgt Ion:244 Resp: 2801  
 Ion Ratio Lower Upper  
 244 100  
 212 10.5 7.4 11.2  
 122 16.1 13.6 20.4



#32  
 Benzo(a)anthracene  
 Concen: 0.363 ng  
 RT: 21.268 min Scan# 2257  
 Delta R.T. 0.009 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

Tgt Ion:228 Resp: 4356  
 Ion Ratio Lower Upper  
 228 100  
 226 27.9 21.9 32.9  
 229 20.4 15.8 23.8

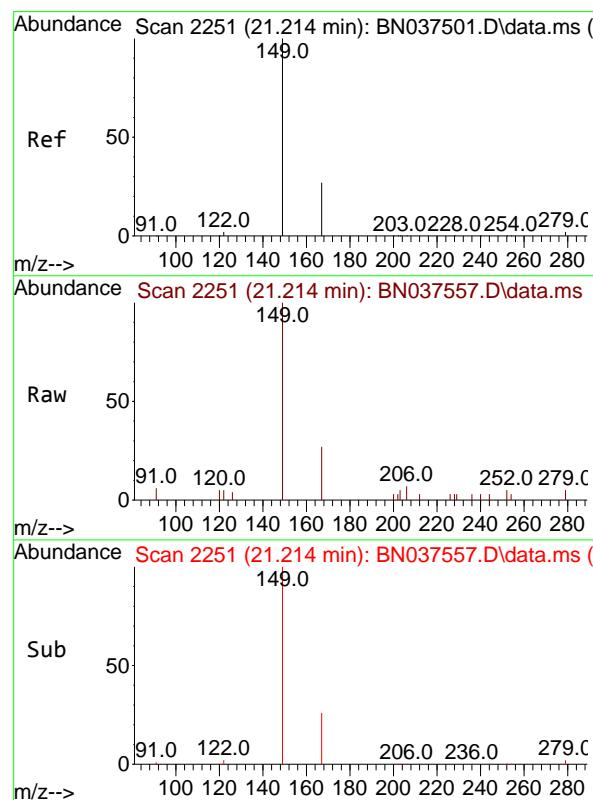
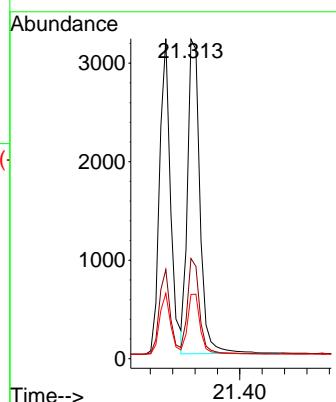




#33  
Chrysene  
Concen: 0.394 ng  
RT: 21.313 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

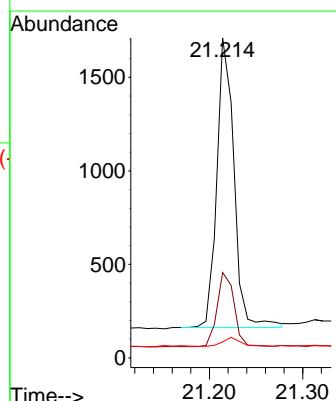
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

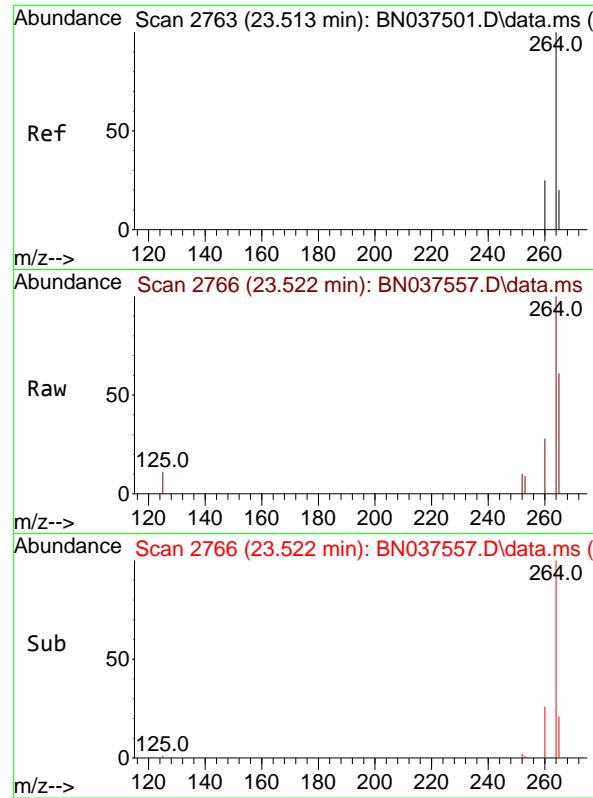
Tgt Ion:228 Resp: 4922  
Ion Ratio Lower Upper  
228 100  
226 31.4 24.2 36.4  
229 20.1 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.364 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion:149 Resp: 1967  
Ion Ratio Lower Upper  
149 100  
167 25.3 21.8 32.8  
279 3.1 3.0 4.4

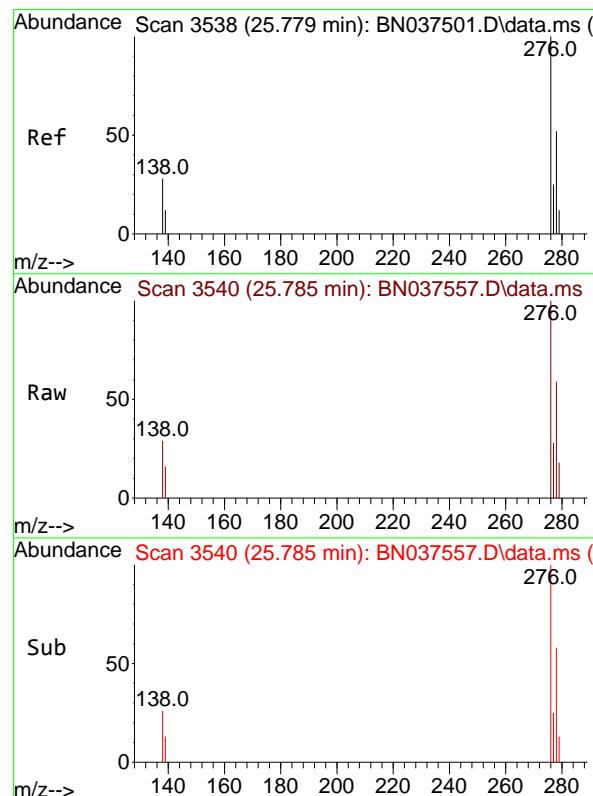
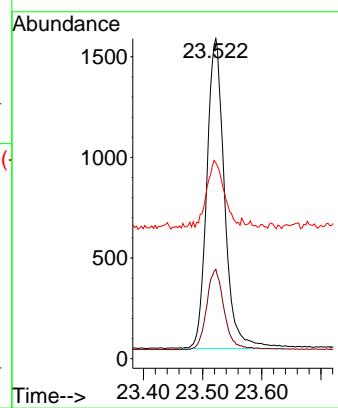




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.522 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

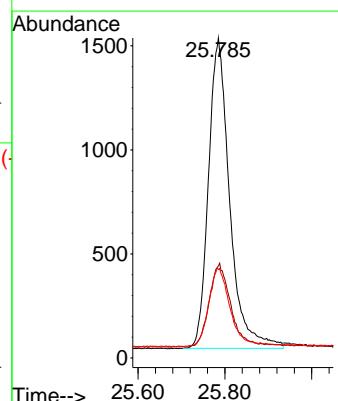
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

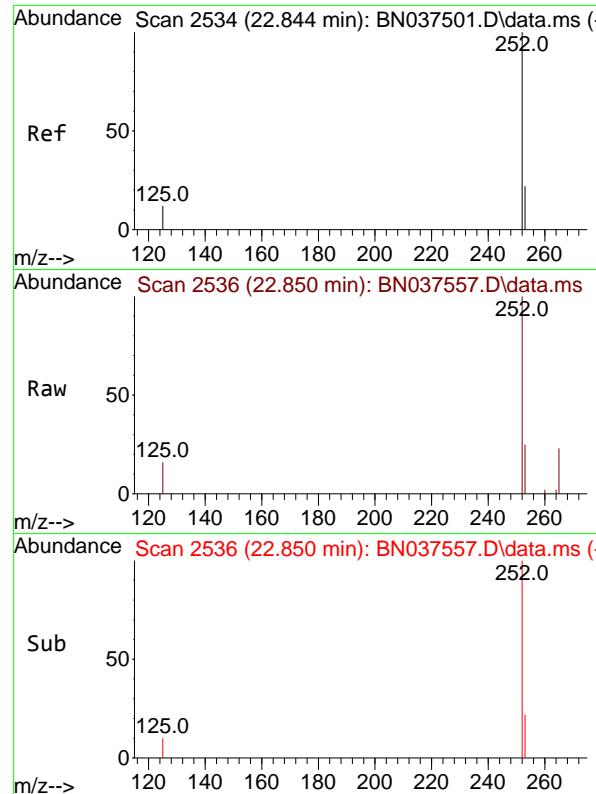
Tgt Ion:264 Resp: 3201  
Ion Ratio Lower Upper  
264 100  
260 27.9 21.2 31.8  
265 61.1 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.380 ng  
RT: 25.785 min Scan# 3540  
Delta R.T. 0.006 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Tgt Ion:276 Resp: 5062  
Ion Ratio Lower Upper  
276 100  
138 27.3 24.0 36.0  
277 25.2 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 0.373 ng

RT: 22.850 min Scan# 2

Delta R.T. 0.006 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

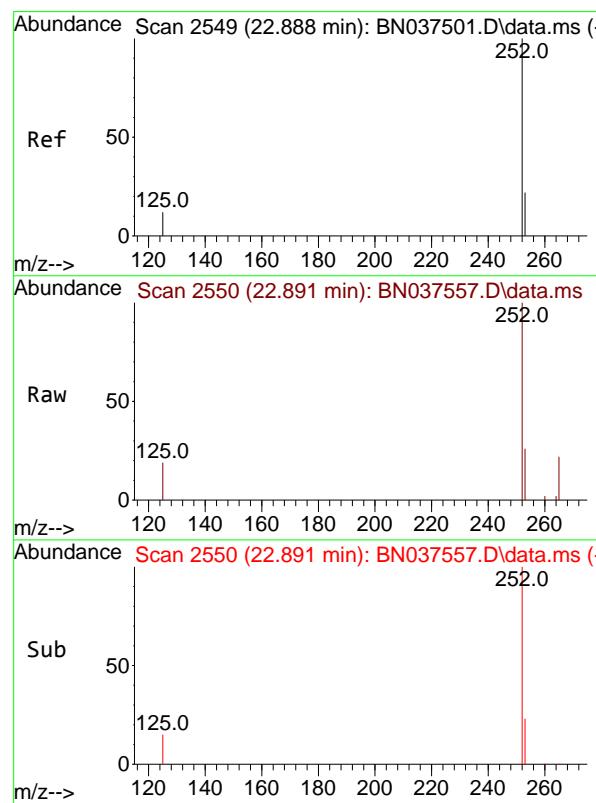
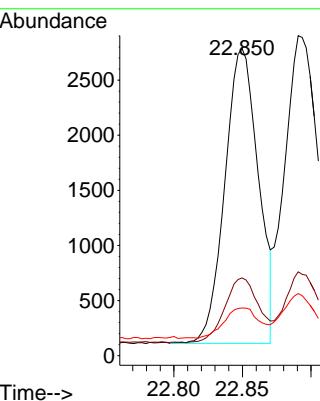
Tgt Ion:252 Resp: 4531

Ion Ratio Lower Upper

252 100

253 25.3 19.5 29.3

125 15.5 13.0 19.6



#38

Benzo(k)fluoranthene

Concen: 0.399 ng

RT: 22.891 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037557.D

Acq: 30 Jul 2025 15:16

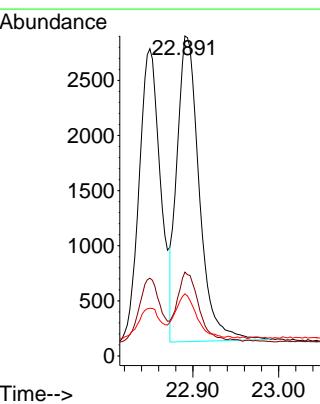
Tgt Ion:252 Resp: 5005

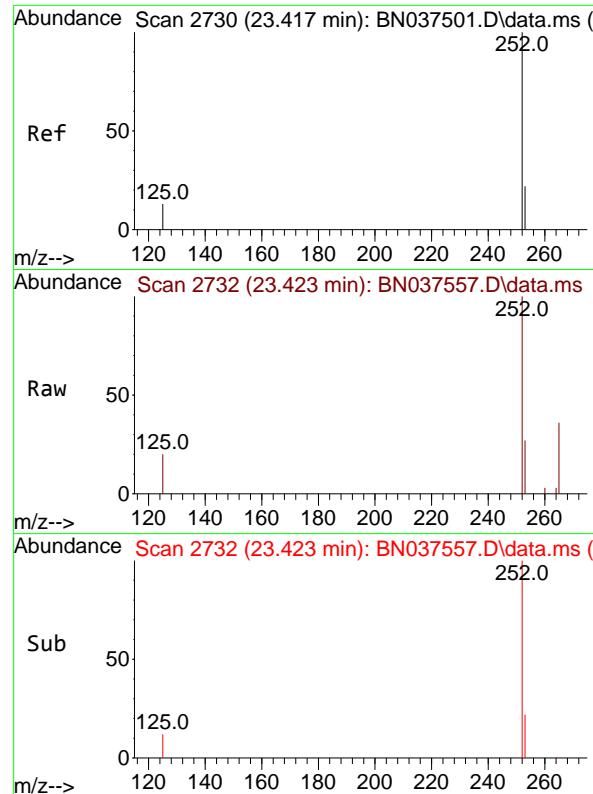
Ion Ratio Lower Upper

252 100

253 26.2 19.5 29.3

125 19.4 13.1 19.7

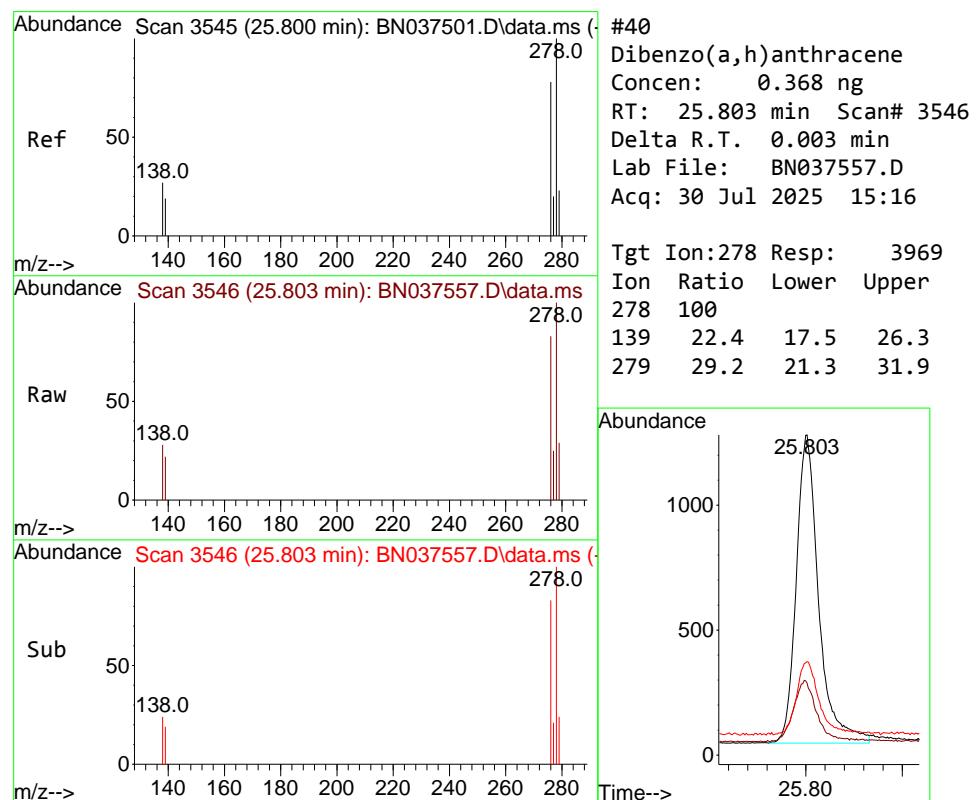
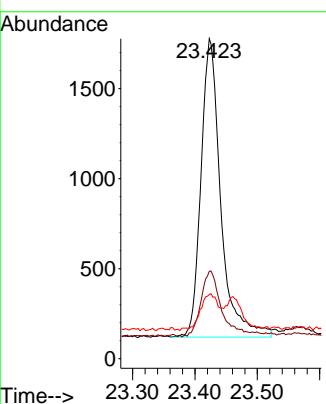




#39  
 Benzo(a)pyrene  
 Concen: 0.361 ng  
 RT: 23.423 min Scan# 2  
 Delta R.T. 0.006 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

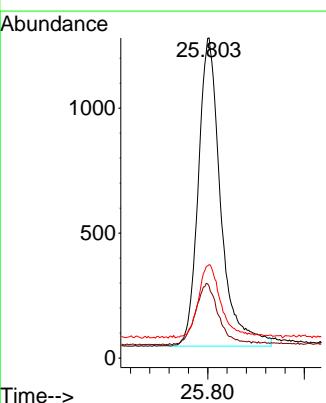
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

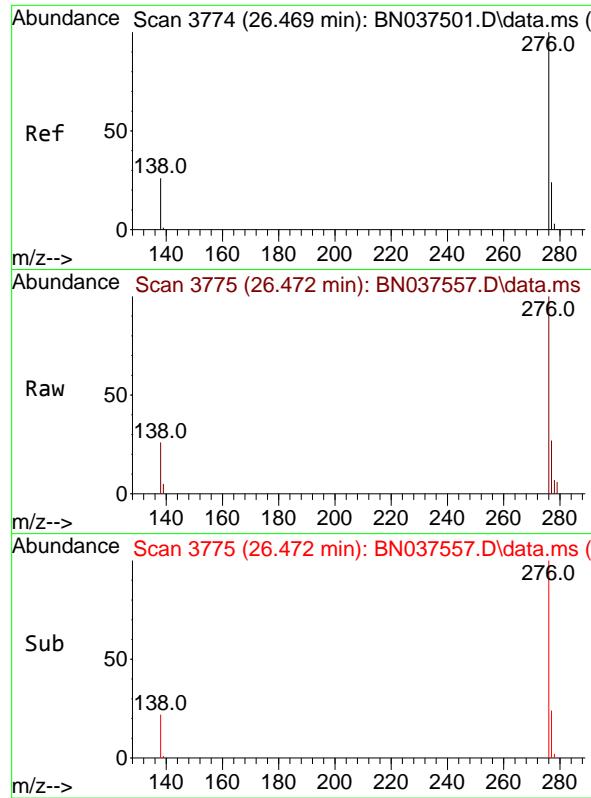
Tgt Ion:252 Resp: 3657  
 Ion Ratio Lower Upper  
 252 100  
 253 27.3 19.9 29.9  
 125 20.1 15.2 22.8



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.368 ng  
 RT: 25.803 min Scan# 3546  
 Delta R.T. 0.003 min  
 Lab File: BN037557.D  
 Acq: 30 Jul 2025 15:16

Tgt Ion:278 Resp: 3969  
 Ion Ratio Lower Upper  
 278 100  
 139 22.4 17.5 26.3  
 279 29.2 21.3 31.9

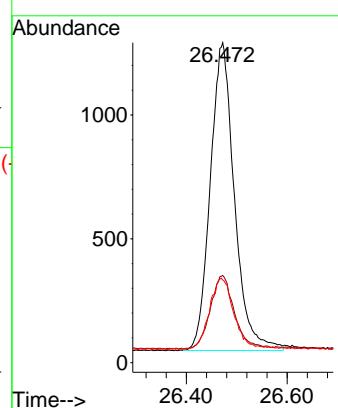




#41  
Benzo(g,h,i)perylene  
Concen: 0.370 ng  
RT: 26.472 min Scan# 3  
Delta R.T. 0.003 min  
Lab File: BN037557.D  
Acq: 30 Jul 2025 15:16

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

Tgt Ion:276 Resp: 4130  
Ion Ratio Lower Upper  
276 100  
277 27.2 20.9 31.3  
138 25.9 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037557.D  
 Acq On : 30 Jul 2025 15:16  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jul 30 15:38:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|---------|----------------------------|-------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 1.000 | 1.000 | 0.0   | 81    | 0.00     |
| 2       | 1,4-Dioxane                | 0.385 | 0.375 | 2.6   | 77    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.484 | 0.536 | -10.7 | 93    | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.989 | 0.855 | 13.5  | 70    | 0.00     |
| 5 S     | Phenol-d6                  | 1.241 | 1.046 | 15.7  | 71    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 1.033 | 0.966 | 6.5   | 76    | 0.00     |
| 7 I     | Naphthalene-d8             | 1.000 | 1.000 | 0.0   | 79    | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.299 | 0.277 | 7.4   | 77    | -0.01    |
| 9       | Naphthalene                | 1.067 | 1.011 | 5.2   | 76    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.236 | 0.269 | -14.0 | 90    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.574 | 0.502 | 12.5  | 73    | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.701 | 0.622 | 11.3  | 72    | 0.00     |
| 13 I    | Acenaphthene-d10           | 1.000 | 1.000 | 0.0   | 69    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.197 | 0.143 | 27.4# | 57    | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 2.080 | 2.179 | -4.8  | 74    | 0.00     |
| 16      | Acenaphthylene             | 1.792 | 1.682 | 6.1   | 68    | 0.00     |
| 17      | Acenaphthene               | 1.218 | 1.156 | 5.1   | 69    | -0.01    |
| 18      | Fluorene                   | 1.569 | 1.437 | 8.4   | 67    | 0.00     |
| 19 I    | Phenanthrene-d10           | 1.000 | 1.000 | 0.0   | 67    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.057 | 0.044 | 22.8  | 71    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.256 | 0.234 | 8.6   | 65    | 0.00     |
| 22      | Hexachlorobenzene          | 0.331 | 0.341 | -3.0  | 70    | 0.00     |
| 23      | Atrazine                   | 0.179 | 0.150 | 16.2  | 64    | -0.01    |
| 24      | Pentachlorophenol          | 0.149 | 0.106 | 28.9# | 57    | -0.01    |
| 25      | Phenanthrene               | 1.198 | 1.130 | 5.7   | 66    | 0.00     |
| 26      | Anthracene                 | 1.093 | 0.962 | 12.0  | 64    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 1.060 | 0.915 | 13.7  | 64    | 0.00     |
| 28      | Fluoranthene               | 1.382 | 1.221 | 11.6  | 64    | 0.00     |
| 29 I    | Chrysene-d12               | 1.000 | 1.000 | 0.0   | 66    | 0.00     |
| 30      | Pyrene                     | 1.612 | 1.509 | 6.4   | 62    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.859 | 0.818 | 4.8   | 64    | 0.00     |
| 32      | Benzo(a)anthracene         | 1.401 | 1.271 | 9.3   | 62    | 0.00     |
| 33      | Chrysene                   | 1.459 | 1.437 | 1.5   | 66    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.630 | 0.574 | 8.9   | 67    | 0.00     |
| 35 I    | Perylene-d12               | 1.000 | 1.000 | 0.0   | 67    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 1.666 | 1.581 | 5.1   | 70    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 1.518 | 1.415 | 6.8   | 65    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 1.567 | 1.564 | 0.2   | 70    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 1.267 | 1.142 | 9.9   | 64    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 1.349 | 1.240 | 8.1   | 68    | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 1.397 | 1.290 | 7.7   | 66    | 0.00     |

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037557.D  
 Acq On : 30 Jul 2025 15:16  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jul 30 15:38:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|         | Compound                   | Amount | Calc. | %Dev  | Area% | Dev(min) |
|---------|----------------------------|--------|-------|-------|-------|----------|
| 1 I     | 1,4-Dichlorobenzene-d4     | 0.400  | 0.400 | 0.0   | 81    | 0.00     |
| 2       | 1,4-Dioxane                | 0.400  | 0.390 | 2.5   | 77    | 0.00     |
| 3       | n-Nitrosodimethylamine     | 0.400  | 0.443 | -10.7 | 93    | 0.00     |
| 4 S     | 2-Fluorophenol             | 0.400  | 0.346 | 13.5  | 70    | 0.00     |
| 5 S     | Phenol-d6                  | 0.400  | 0.337 | 15.8  | 71    | 0.00     |
| 6       | bis(2-Chloroethyl)ether    | 0.400  | 0.374 | 6.5   | 76    | 0.00     |
| 7 I     | Naphthalene-d8             | 0.400  | 0.400 | 0.0   | 79    | -0.01    |
| 8 S     | Nitrobenzene-d5            | 0.400  | 0.371 | 7.3   | 77    | -0.01    |
| 9       | Naphthalene                | 0.400  | 0.379 | 5.3   | 76    | 0.00     |
| 10      | Hexachlorobutadiene        | 0.400  | 0.457 | -14.2 | 90    | -0.01    |
| 11 SURR | 2-Methylnaphthalene-d10    | 0.400  | 0.350 | 12.5  | 73    | -0.01    |
| 12      | 2-Methylnaphthalene        | 0.400  | 0.355 | 11.3  | 72    | 0.00     |
| 13 I    | Acenaphthene-d10           | 0.400  | 0.400 | 0.0   | 69    | -0.01    |
| 14 S    | 2,4,6-Tribromophenol       | 0.400  | 0.290 | 27.5# | 57    | -0.01    |
| 15 S    | 2-Fluorobiphenyl           | 0.400  | 0.419 | -4.7  | 74    | 0.00     |
| 16      | Acenaphthylene             | 0.400  | 0.375 | 6.3   | 68    | 0.00     |
| 17      | Acenaphthene               | 0.400  | 0.380 | 5.0   | 69    | -0.01    |
| 18      | Fluorene                   | 0.400  | 0.366 | 8.5   | 67    | 0.00     |
| 19 I    | Phenanthrene-d10           | 0.400  | 0.400 | 0.0   | 67    | -0.01    |
| 20      | 4,6-Dinitro-2-methylphenol | 0.400  | 0.411 | -2.7  | 71    | 0.00     |
| 21      | 4-Bromophenyl-phenylether  | 0.400  | 0.365 | 8.8   | 65    | 0.00     |
| 22      | Hexachlorobenzene          | 0.400  | 0.412 | -3.0  | 70    | 0.00     |
| 23      | Atrazine                   | 0.400  | 0.336 | 16.0  | 64    | -0.01    |
| 24      | Pentachlorophenol          | 0.400  | 0.286 | 28.5# | 57    | -0.01    |
| 25      | Phenanthrene               | 0.400  | 0.377 | 5.8   | 66    | 0.00     |
| 26      | Anthracene                 | 0.400  | 0.352 | 12.0  | 64    | 0.00     |
| 27 SURR | Fluoranthene-d10           | 0.400  | 0.345 | 13.8  | 64    | 0.00     |
| 28      | Fluoranthene               | 0.400  | 0.353 | 11.8  | 64    | 0.00     |
| 29 I    | Chrysene-d12               | 0.400  | 0.400 | 0.0   | 66    | 0.00     |
| 30      | Pyrene                     | 0.400  | 0.375 | 6.3   | 62    | 0.00     |
| 31 S    | Terphenyl-d14              | 0.400  | 0.380 | 5.0   | 64    | 0.00     |
| 32      | Benzo(a)anthracene         | 0.400  | 0.363 | 9.3   | 62    | 0.00     |
| 33      | Chrysene                   | 0.400  | 0.394 | 1.5   | 66    | 0.00     |
| 34      | Bis(2-ethylhexyl)phthalate | 0.400  | 0.364 | 9.0   | 67    | 0.00     |
| 35 I    | Perylene-d12               | 0.400  | 0.400 | 0.0   | 67    | 0.00     |
| 36      | Indeno(1,2,3-cd)pyrene     | 0.400  | 0.380 | 5.0   | 70    | 0.00     |
| 37      | Benzo(b)fluoranthene       | 0.400  | 0.373 | 6.8   | 65    | 0.00     |
| 38      | Benzo(k)fluoranthene       | 0.400  | 0.399 | 0.3   | 70    | 0.00     |
| 39 C    | Benzo(a)pyrene             | 0.400  | 0.361 | 9.8   | 64    | 0.00     |
| 40      | Dibenzo(a,h)anthracene     | 0.400  | 0.368 | 8.0   | 68    | 0.00     |
| 41      | Benzo(g,h,i)perylene       | 0.400  | 0.370 | 7.5   | 66    | 0.00     |

(#) = Out of Range

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



# QC SAMPLE

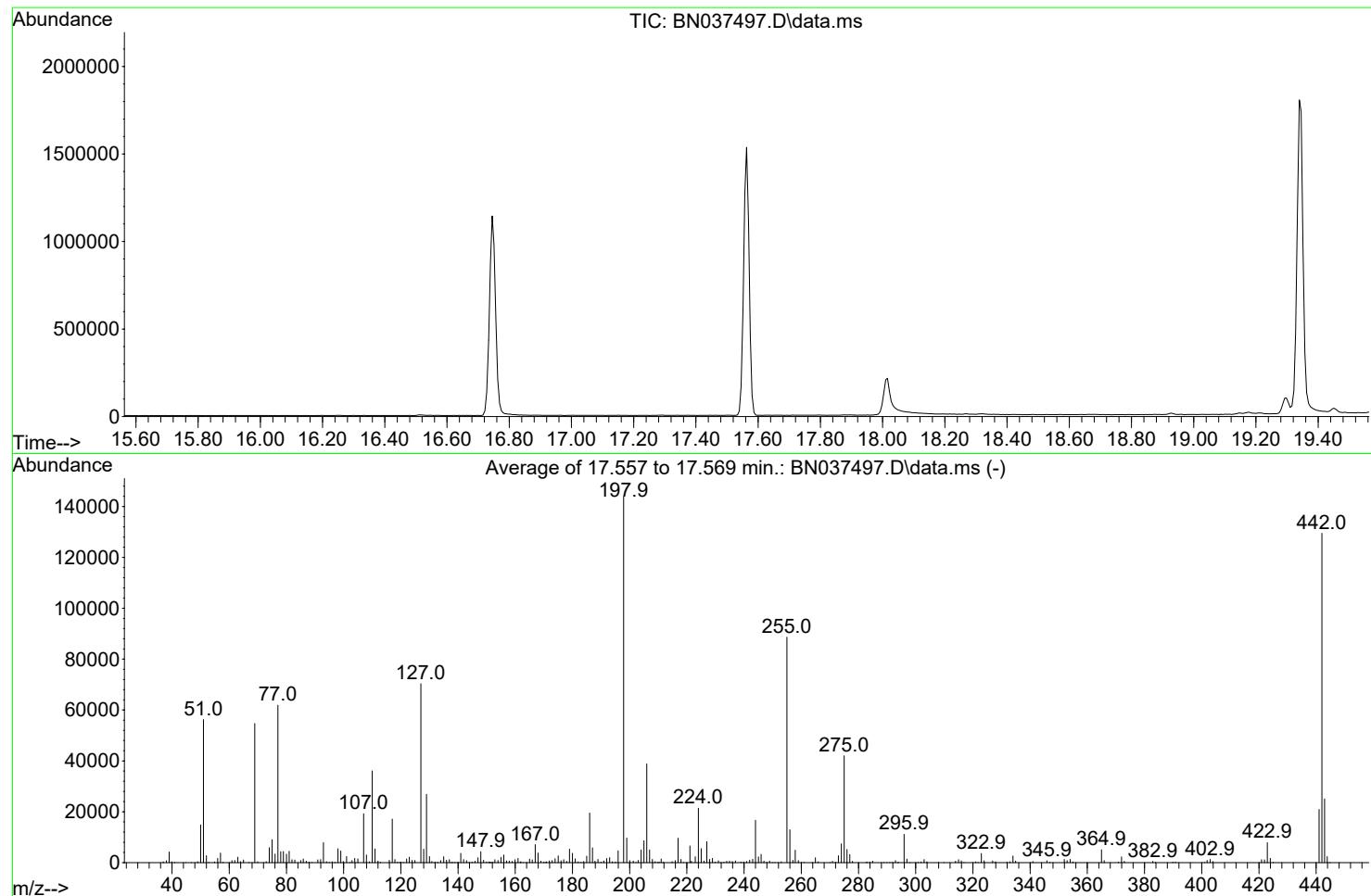
# DATA

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Wed Jul 16 01:39:21 2025



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

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

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

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

Abundance

Ion 265.70 (265.40 to 266.40): BN037497.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN037497.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN037497.D\data.ms

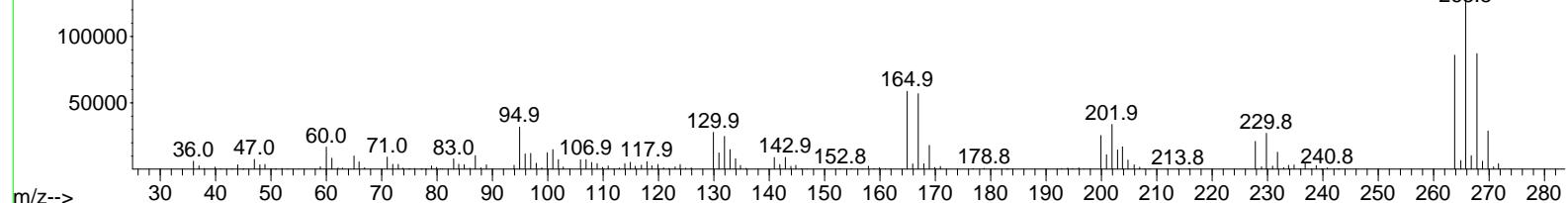
16.745 Tailing = 1.28

S E

Time--> Abundance

Scan 2322 (16.745 min): BN037497.D\data.ms

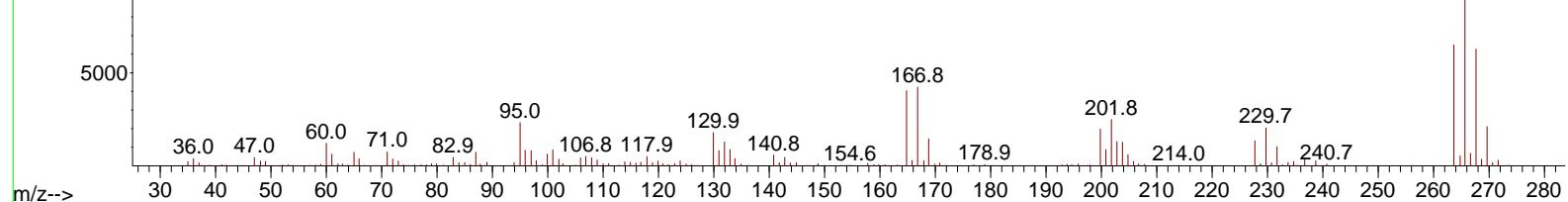
265.8



Abundance

Scan 2390 (17.130 min): BG046684.D\data.ms (-2383) (-)

265.6



TIC: BN037497.D\data.ms

(70) Pentachlorophenol (C)

16.745min (-0.001) 31259.96 ng

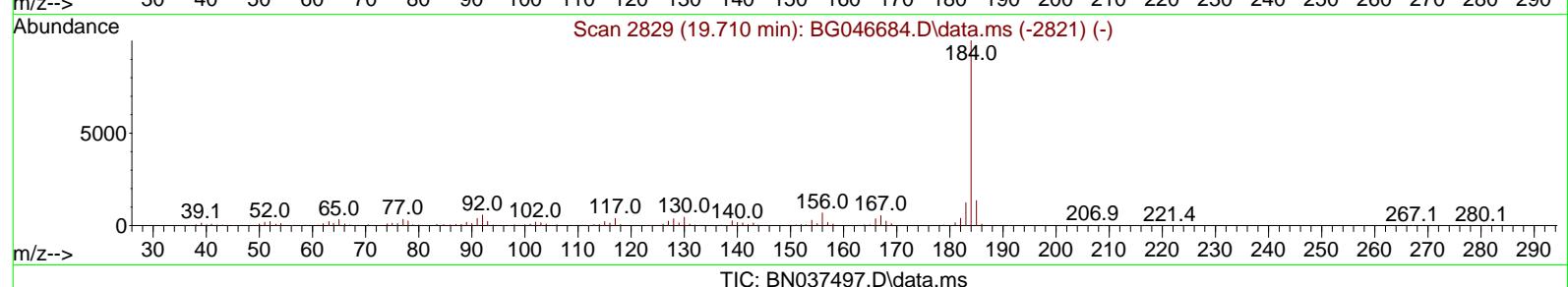
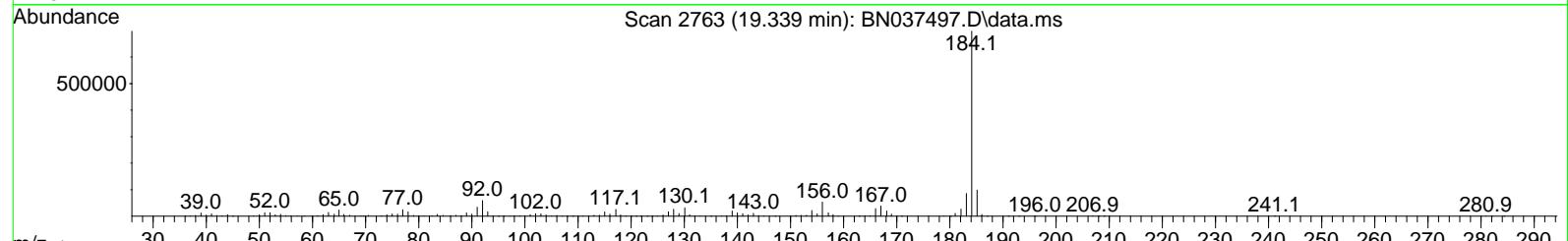
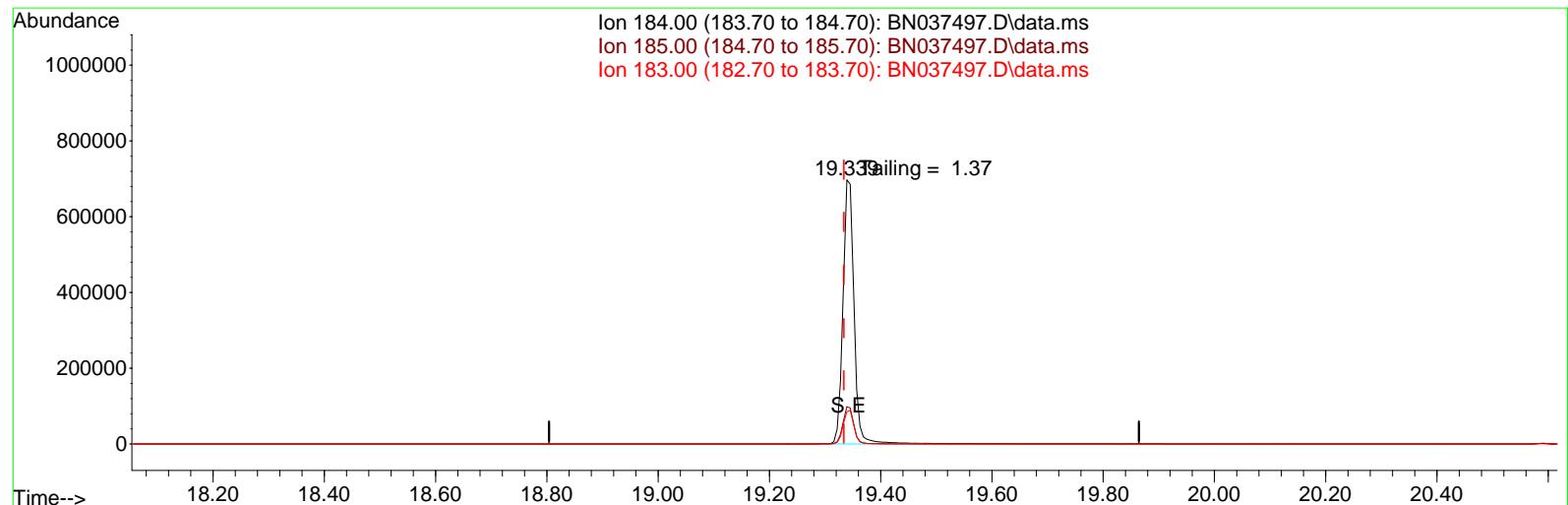
response 194539

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

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

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



## (77) Benzidine

19.339min (+ 0.005) 0.00 ng

response 963155

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

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
DFTPP

**DDT Breakdown**

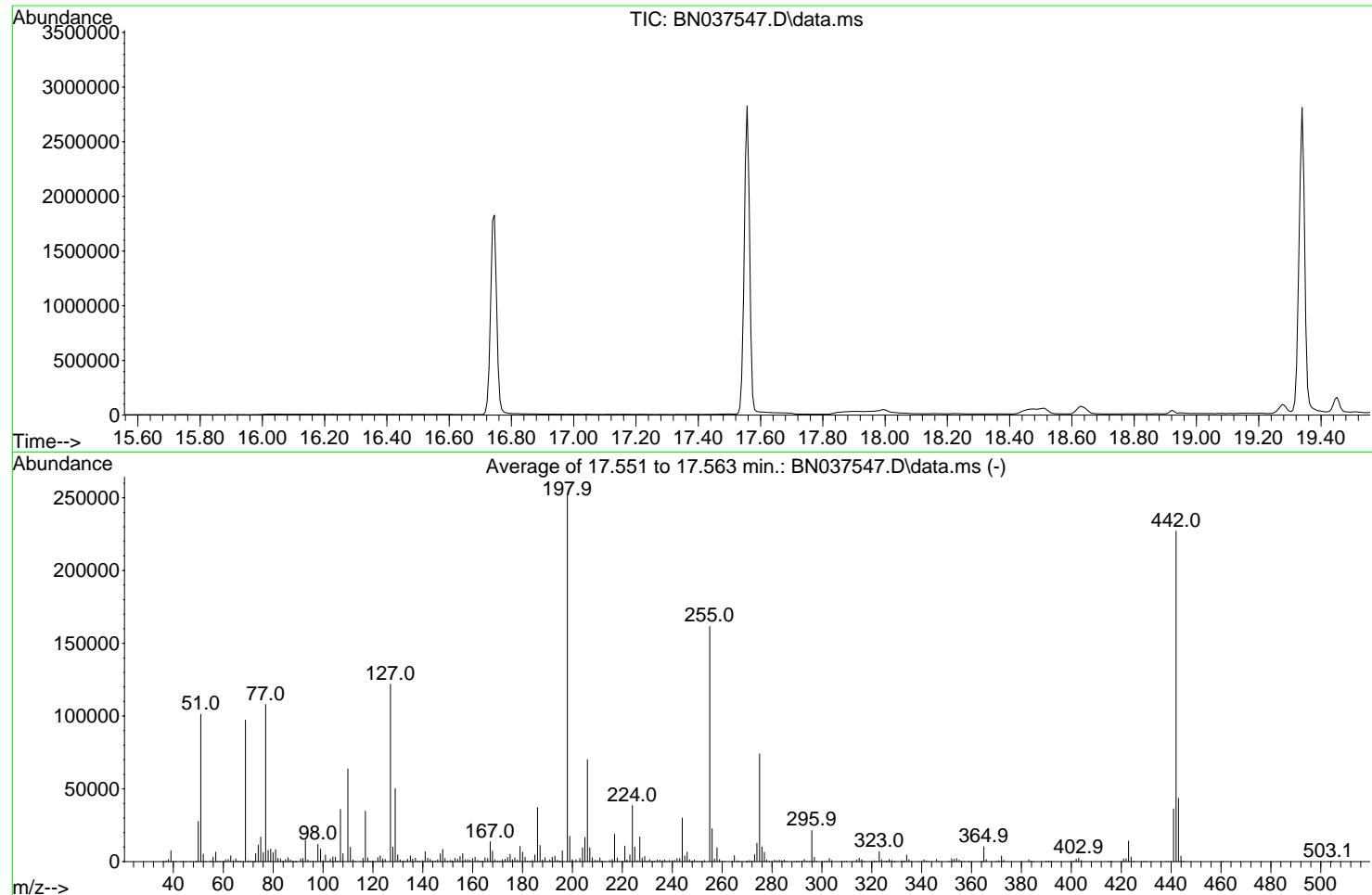
| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 7/15/2025     | BNA_N            | BN037497.D         |
| Compound Name | Response         | Retention Time     |
| DDT           | 478094           | 20.592             |
| DDD     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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037547.D  
 Acq On : 30 Jul 2025 08:59  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Sat Jul 19 01:46:16 2025



AutoFind: Scans 2459, 2460, 2461; Background Corrected with Scan 2452

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|-------------|--------------|--------------|--------------|-----------|---------|------------------|
| 68          | 69           | 0.00         | 2            | 0.0       | 0       | PASS             |
| 69          | 69           | 100          | 100          | 100.0     | 97318   | PASS             |
| 70          | 69           | 0.00         | 2            | 0.6       | 593     | PASS             |
| 197         | 198          | 0.00         | 2            | 0.0       | 0       | PASS             |
| 198         | 198          | 100          | 100          | 100.0     | 251584  | PASS             |
| 199         | 198          | 5            | 9            | 6.9       | 17470   | PASS             |
| 365         | 198          | 1            | 100          | 4.1       | 10254   | PASS             |
| 441         | 443          | 0.01         | 150          | 83.3      | 36269   | PASS             |
| 442         | 442          | 100          | 100          | 100.0     | 227008  | PASS             |
| 443         | 442          | 15           | 24           | 19.2      | 43515   | PASS             |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037547.D  
 Acq On : 30 Jul 2025 08:59  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jul 30 11:16:19 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jul 10 02:20:59 2025  
 Response via : Initial Calibration

Abundance

Ion 265.70 (265.40 to 266.40): BN037547.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN037547.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN037547.D\data.ms

16.74 Tailing = 0.80

S E

Time--> 15.60 15.80 16.00 16.20 16.40 16.60 16.80 17.00 17.20 17.40 17.60 17.80

Abundance

Scan 2322 (16.745 min): BN037547.D\data.ms

265.8

m/z--> 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280

Abundance

Scan 2390 (17.130 min): BG046684.D\data.ms (-2383) (-)

265.6

m/z--> 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280

TIC: BN037547.D\data.ms

(70) Pentachlorophenol (C)

16.745min (-0.001) 22431.87 ng

response 279375

| Ion | Exp% | Act% |
|-----|------|------|
|-----|------|------|

|        |        |        |
|--------|--------|--------|
| 265.70 | 100.00 | 100.00 |
|--------|--------|--------|

|        |       |       |
|--------|-------|-------|
| 268.00 | 62.20 | 63.41 |
|--------|-------|-------|

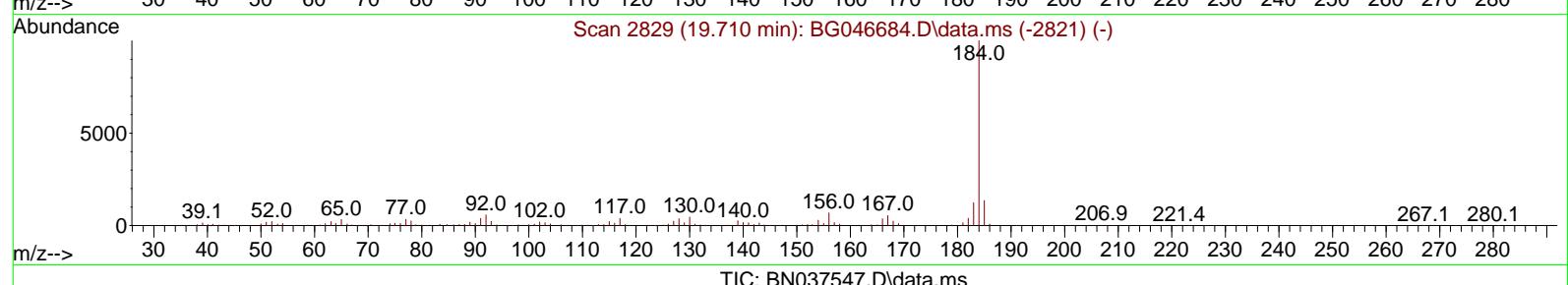
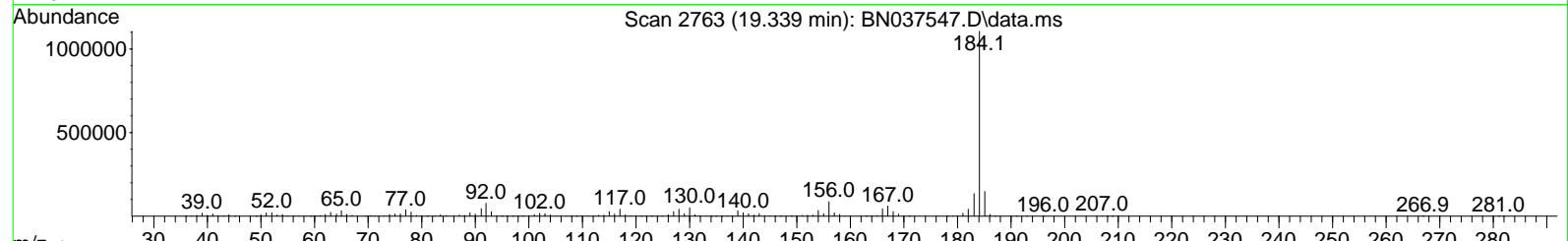
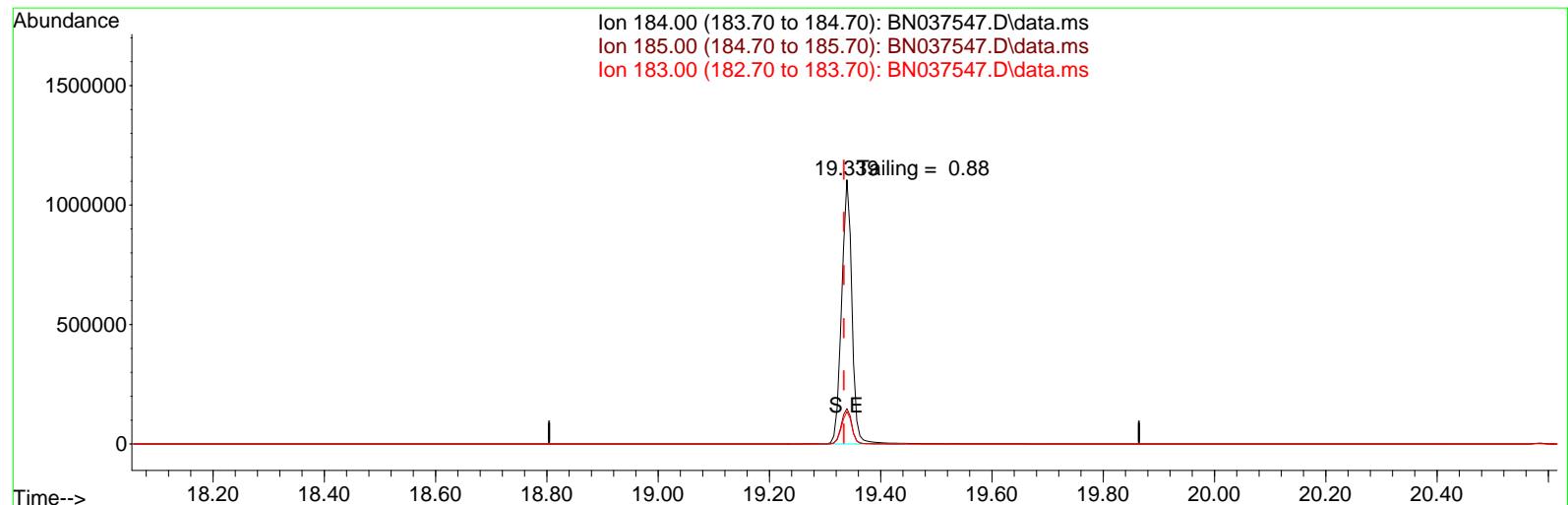
|        |       |       |
|--------|-------|-------|
| 264.00 | 61.60 | 64.48 |
|--------|-------|-------|

|      |      |      |
|------|------|------|
| 0.00 | 0.00 | 0.00 |
|------|------|------|

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037547.D  
 Acq On : 30 Jul 2025 08:59  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jul 30 11:16:19 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jul 10 02:20:59 2025  
 Response via : Initial Calibration



## (77) Benzidine

19.339min (+ 0.005) 0.00 ng

response 1419194

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50  | 13.39  |
| 183.00 | 13.20  | 12.21  |
| 0.00   | 0.00   | 0.00   |

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**DFTPP**

### DDT Breakdown

| Date          | Instrument Name  | DFTPP Data File    |
|---------------|------------------|--------------------|
| 7/30/2025     | BNA_N            | <u>BN037547.D</u>  |
| Compound Name | Response         | Retention Time     |
| DDT           | 694938           | 20.586             |
| DDD           | 7839             | 20.192             |
| DDE           | 238              | 19.633             |
| SUM(DDD+DDE)  | SUM(DDT+DDD+DDE) | % Breakdown Of DDT |
| 8077          | 703015           | 1.15               |



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

## Report of Analysis

|                    |                               |        |    |                 |                |
|--------------------|-------------------------------|--------|----|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.          |        |    | Date Collected: |                |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |    | Date Received:  |                |
| Client Sample ID:  | PB169039BL                    |        |    | SDG No.:        | Q2696          |
| Lab Sample ID:     | PB169039BL                    |        |    | 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 |
|-------------------|-----------|----------------|----------------|---------------|
| BN037549.D        | 1         | 07/29/25 08:49 | 07/30/25 10:14 | PB169039      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.20  | U         | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.33  |           | 30 - 150 |      | 83%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.34  |           | 30 - 150 |      | 86%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.36  |           | 55 - 111 |      | 89%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.38  |           | 53 - 106 |      | 96%        | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.40  |           | 58 - 132 |      | 100%       | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 2230  | 7.724     |          |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 5450  | 10.498    |          |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2590  | 14.356    |          |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 4580  | 17.087    |          |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 3450  | 21.277    |          |      |            |          |
| 1520-96-3                 | Perylene-d12            | 3080  | 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\BN073025\  
 Data File : BN037549.D  
 Acq On : 30 Jul 2025 10:14  
 Operator : RC/JU  
 Sample : PB169039BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BL

Quant Time: Jul 30 10:40:15 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

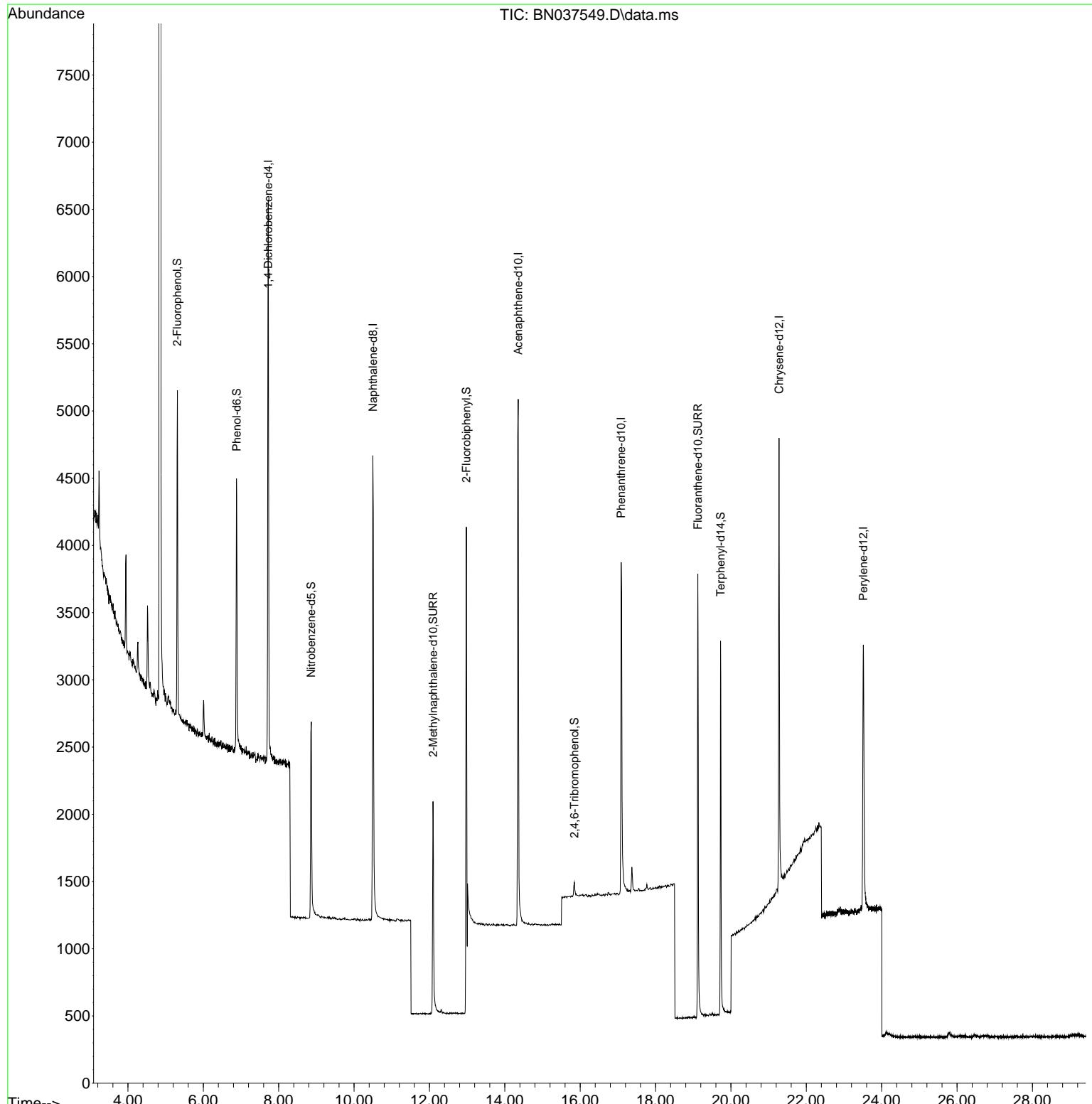
| Compound                           | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|------------------------------------|--------|------|----------|-------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |       |       |          |
| 1) 1,4-Dichlorobenzene-d4          | 7.724  | 152  | 2234     | 0.400 | ng    | 0.00     |
| 7) Naphthalene-d8                  | 10.498 | 136  | 5448     | 0.400 | ng    | #-0.01   |
| 13) Acenaphthene-d10               | 14.356 | 164  | 2592     | 0.400 | ng    | 0.00     |
| 19) Phenanthrene-d10               | 17.087 | 188  | 4582     | 0.400 | ng    | #-0.01   |
| 29) Chrysene-d12                   | 21.277 | 240  | 3451     | 0.400 | ng    | 0.00     |
| 35) Perylene-d12                   | 23.513 | 264  | 3078     | 0.400 | ng    | # 0.00   |
| <b>System Monitoring Compounds</b> |        |      |          |       |       |          |
| 4) 2-Fluorophenol                  | 5.312  | 112  | 1854     | 0.336 | ng    | 0.00     |
| 5) Phenol-d6                       | 6.887  | 99   | 2058     | 0.297 | ng    | 0.00     |
| 8) Nitrobenzene-d5                 | 8.865  | 82   | 1449     | 0.356 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10        | 12.096 | 152  | 2579     | 0.330 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol           | 15.845 | 330  | 86       | 0.067 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl               | 12.978 | 172  | 5158     | 0.383 | ng    | 0.00     |
| 27) Fluoranthene-d10               | 19.122 | 212  | 4163     | 0.343 | ng    | 0.00     |
| 31) Terphenyl-d14                  | 19.726 | 244  | 2950     | 0.398 | ng    | 0.00     |

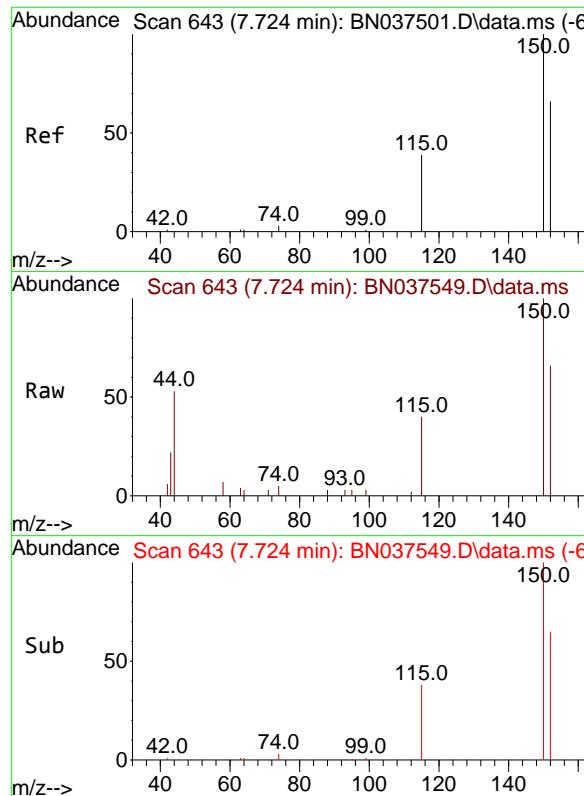
| Target Compounds   | Qvalue |
|--|--------|
| (#= qualifier out of range (m) = manual integration (+) = signals summed |        |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037549.D  
 Acq On : 30 Jul 2025 10:14  
 Operator : RC/JU  
 Sample : PB169039BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BL

Quant Time: Jul 30 10:40:15 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

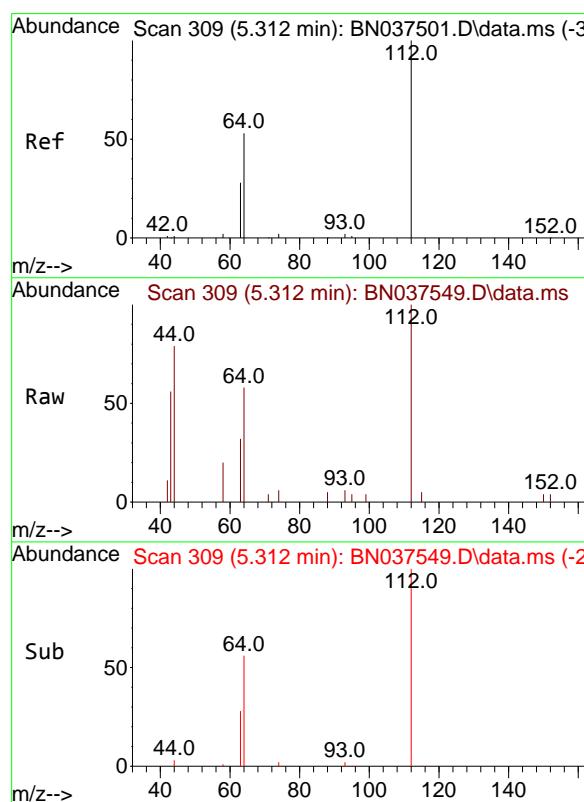
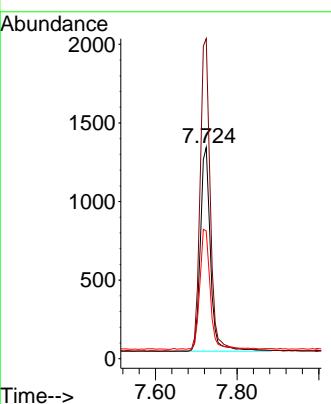




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14

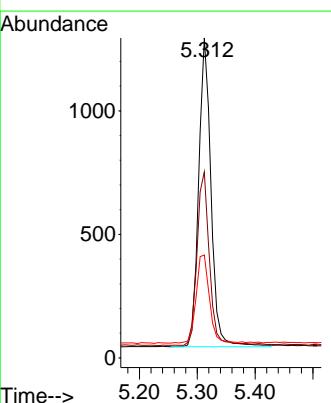
Instrument : BNA\_N  
ClientSampleId : PB169039BL

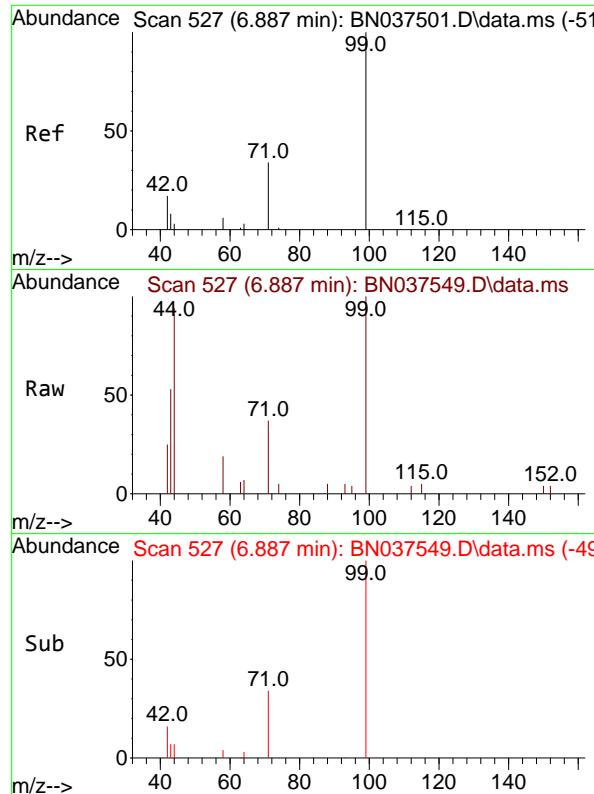
Tgt Ion:152 Resp: 2234  
Ion Ratio Lower Upper  
152 100  
150 151.5 119.8 179.8  
115 60.4 49.1 73.7



#4  
2-Fluorophenol  
Concen: 0.336 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14

Tgt Ion:112 Resp: 1854  
Ion Ratio Lower Upper  
112 100  
64 56.6 45.1 67.7  
63 30.6 23.8 35.8

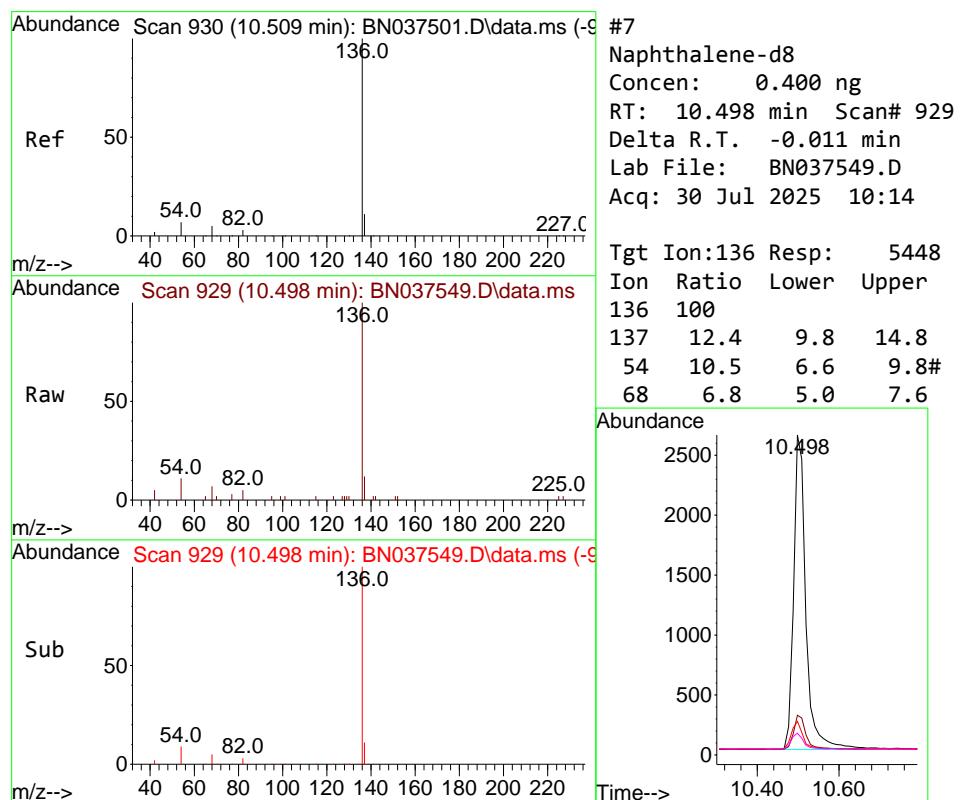
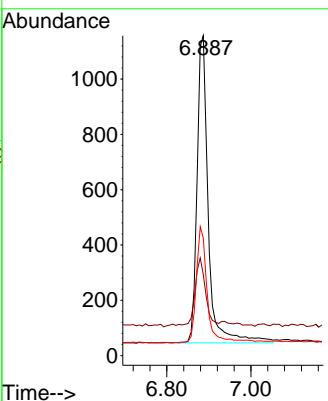




#5  
 Phenol-d6  
 Concen: 0.297 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037549.D  
 Acq: 30 Jul 2025 10:14

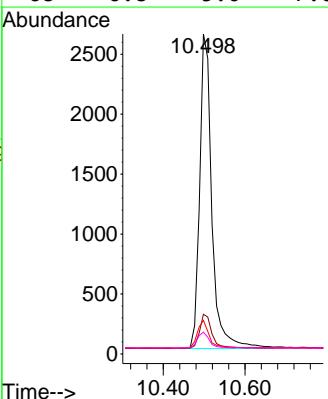
Instrument : BNA\_N  
 ClientSampleId : PB169039BL

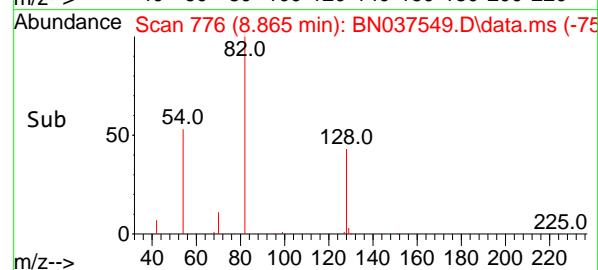
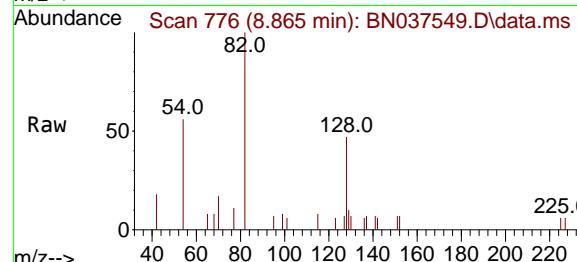
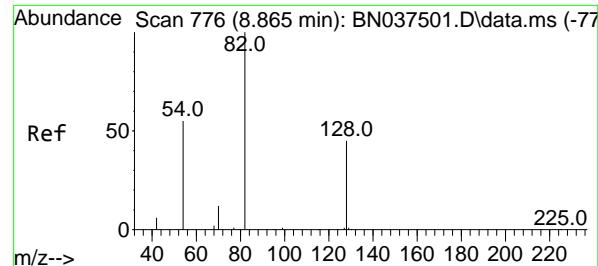
Tgt Ion: 99 Resp: 2058  
 Ion Ratio Lower Upper  
 99 100  
 42 20.7 17.1 25.7  
 71 37.0 27.8 41.8



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 929  
 Delta R.T. -0.011 min  
 Lab File: BN037549.D  
 Acq: 30 Jul 2025 10:14

Tgt Ion:136 Resp: 5448  
 Ion Ratio Lower Upper  
 136 100  
 137 12.4 9.8 14.8  
 54 10.5 6.6 9.8#  
 68 6.8 5.0 7.6





#8

Nitrobenzene-d5

Concen: 0.356 ng

RT: 8.865 min Scan# 7

Instrument:

BNA\_N

Delta R.T. 0.000 min

Lab File: BN037549.D

ClientSampleId :

Acq: 30 Jul 2025 10:14

PB169039BL

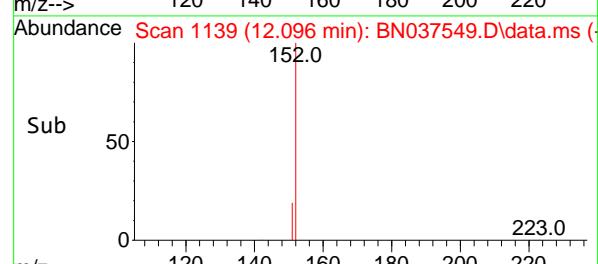
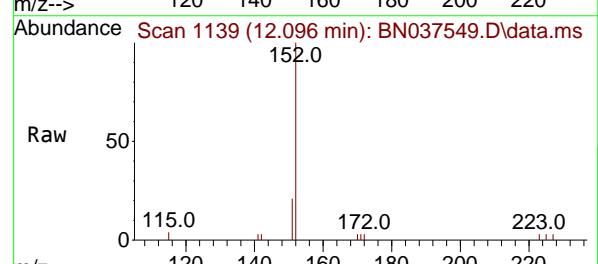
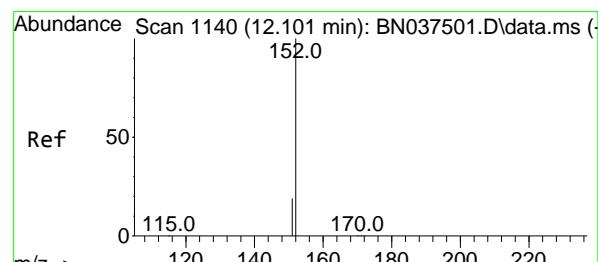
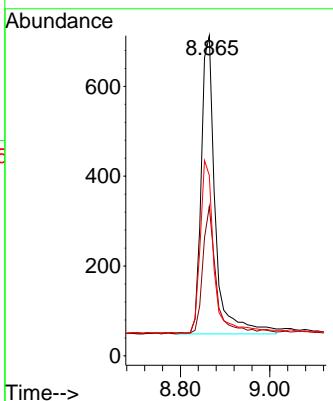
Tgt Ion: 82 Resp: 1449

Ion Ratio Lower Upper

82 100

128 46.7 37.5 56.3

54 56.4 45.3 67.9



#11

2-Methylnaphthalene-d10

Concen: 0.330 ng

RT: 12.096 min Scan# 1139

Delta R.T. -0.005 min

Lab File: BN037549.D

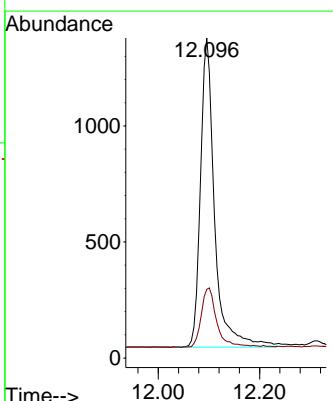
Acq: 30 Jul 2025 10:14

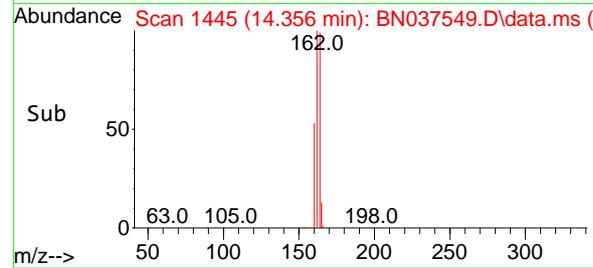
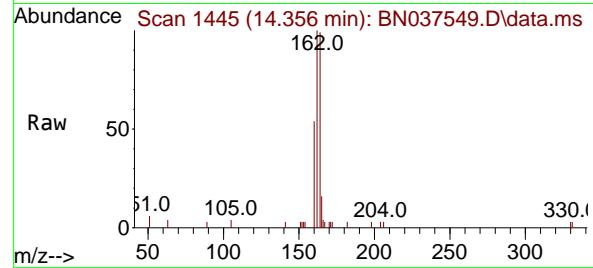
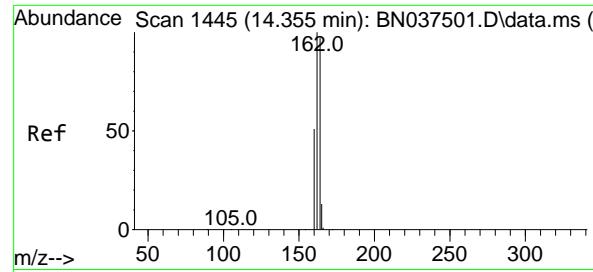
Tgt Ion: 152 Resp: 2579

Ion Ratio Lower Upper

152 100

151 21.4 16.8 25.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.356 min Scan# 1445

Delta R.T. 0.000 min

Lab File: BN037549.D

Acq: 30 Jul 2025 10:14

Instrument :

BNA\_N

ClientSampleId :

PB169039BL

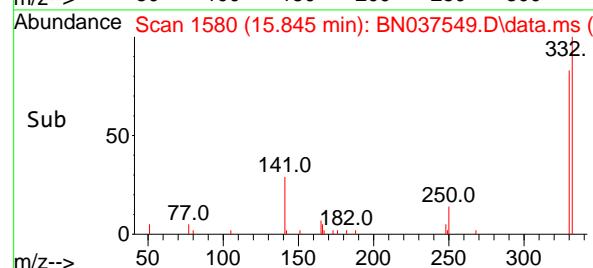
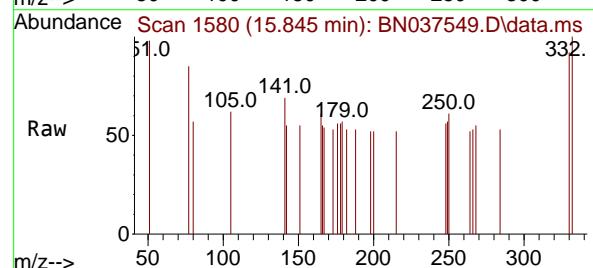
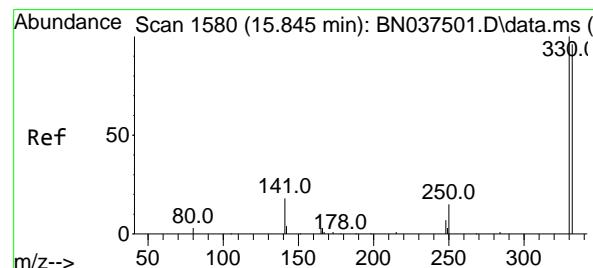
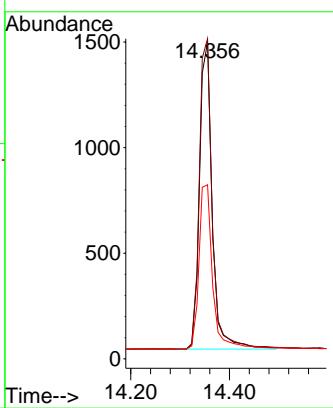
Tgt Ion:164 Resp: 2592

Ion Ratio Lower Upper

164 100

162 101.1 82.0 123.0

160 54.9 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.067 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037549.D

Acq: 30 Jul 2025 10:14

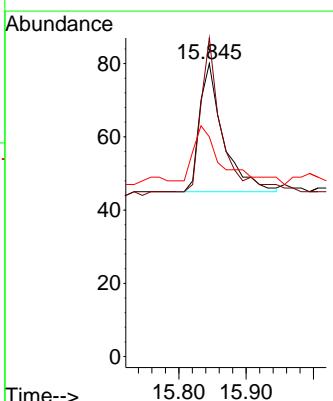
Tgt Ion:330 Resp: 86

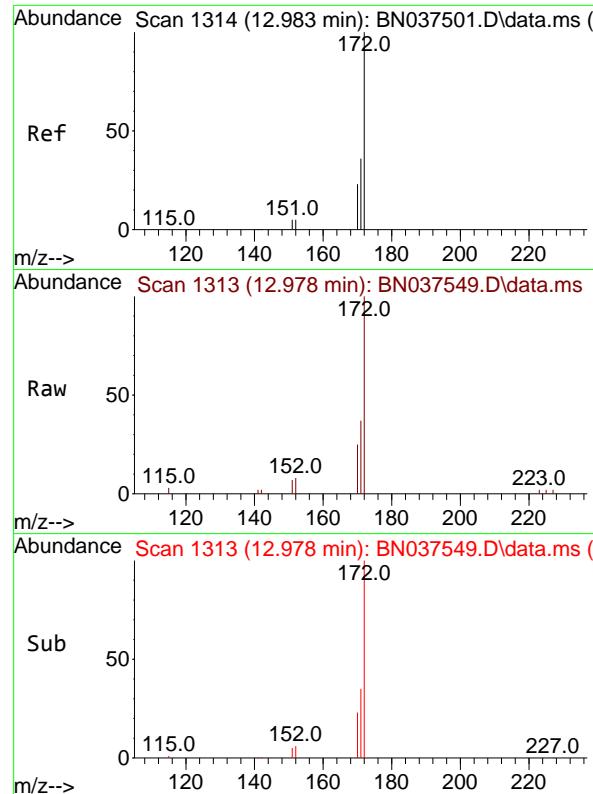
Ion Ratio Lower Upper

330 100

332 104.7 76.1 114.1

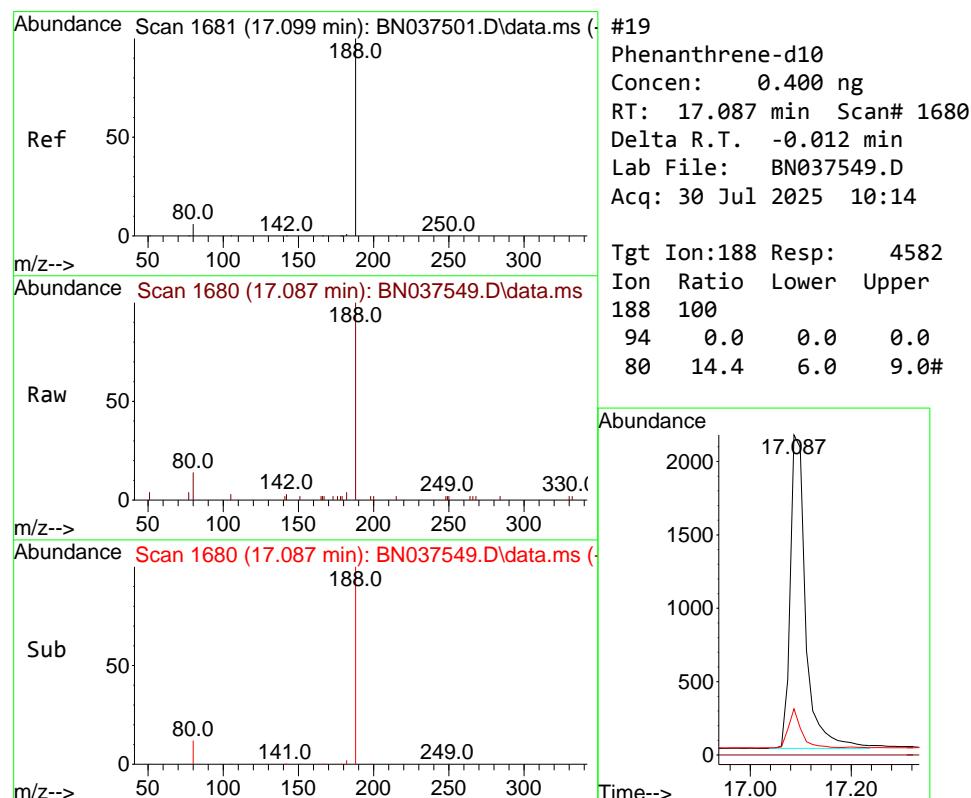
141 55.8 33.4 50.0#





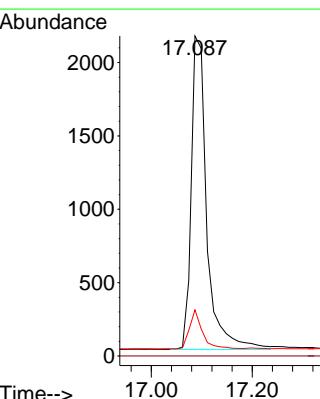
#15  
2-Fluorobiphenyl  
Concen: 0.383 ng  
RT: 12.978 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14

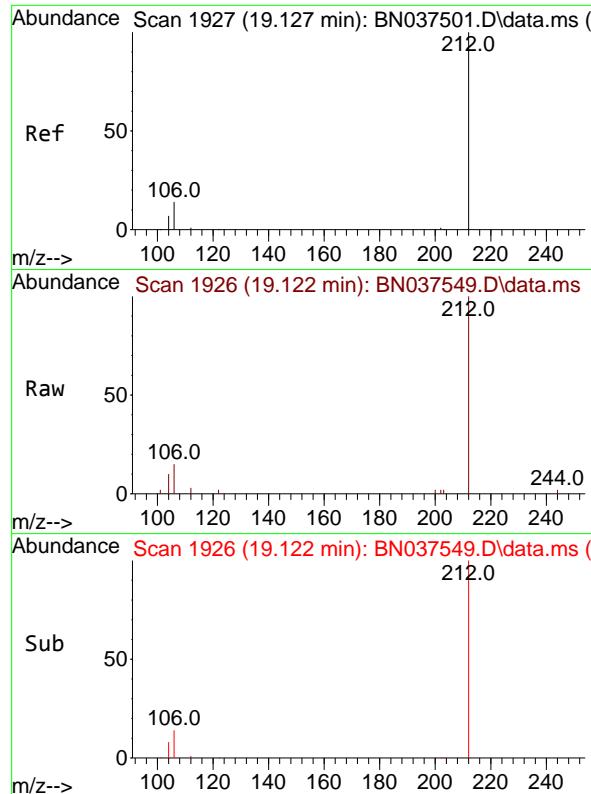
Instrument : BNA\_N  
ClientSampleId : PB169039BL



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.087 min Scan# 1680  
Delta R.T. -0.012 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14

Tgt Ion:188 Resp: 4582  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 14.4 6.0 9.0#

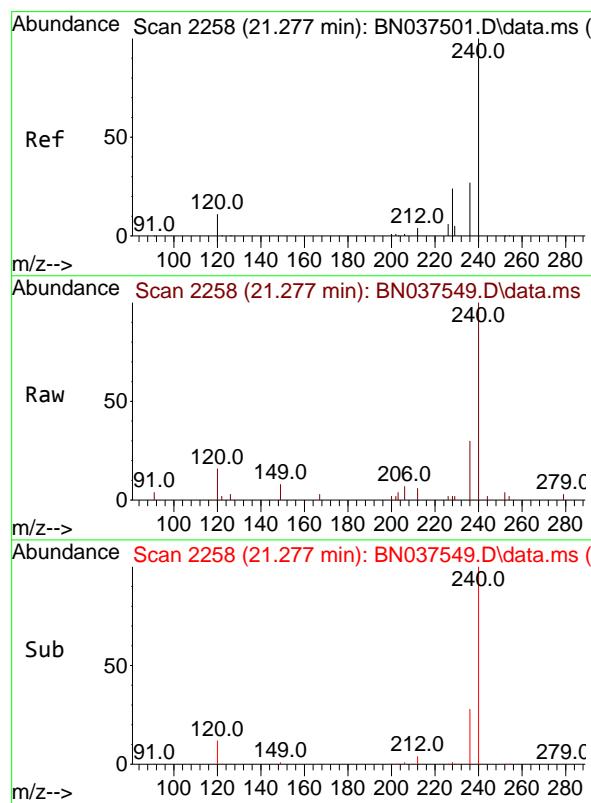
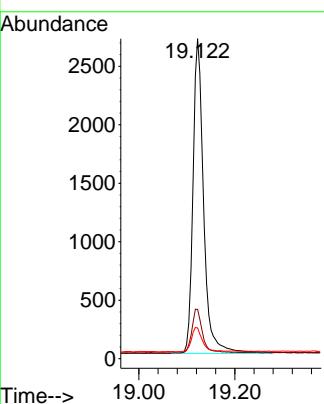




#27  
Fluoranthene-d10  
Concen: 0.343 ng  
RT: 19.122 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14

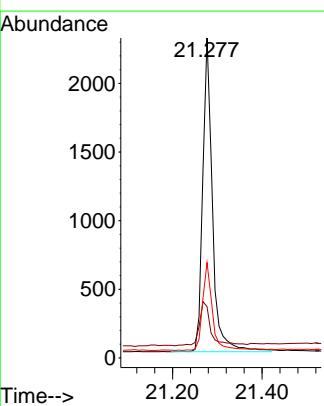
Instrument : BNA\_N  
ClientSampleId : PB169039BL

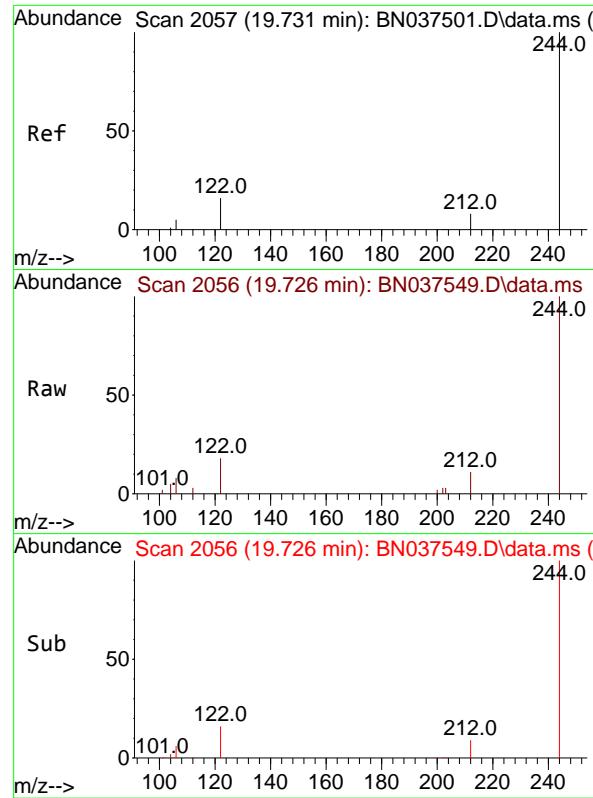
Tgt Ion:212 Resp: 4163  
Ion Ratio Lower Upper  
212 100  
106 14.0 12.2 18.4  
104 8.0 6.7 10.1



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. 0.000 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14

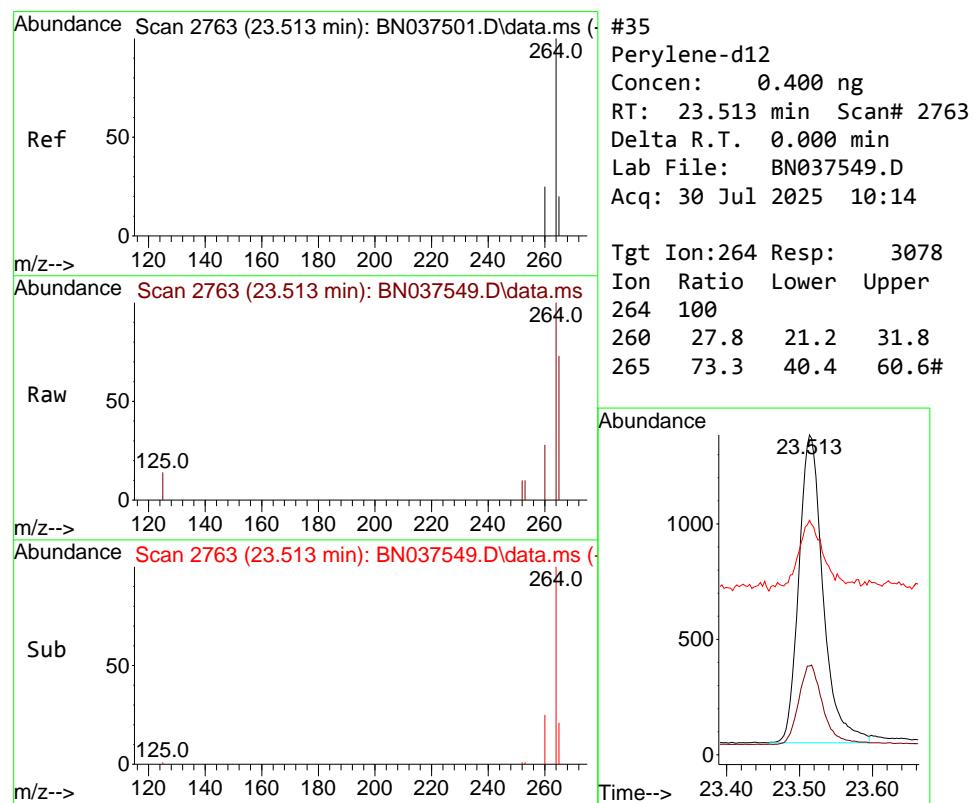
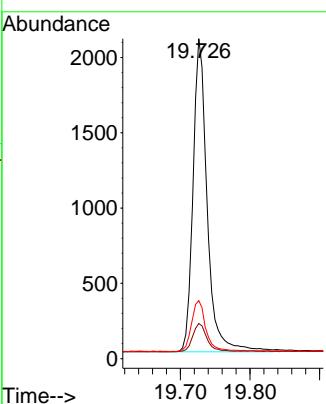
Tgt Ion:240 Resp: 3451  
Ion Ratio Lower Upper  
240 100  
120 16.0 10.7 16.1  
236 29.8 22.6 33.8





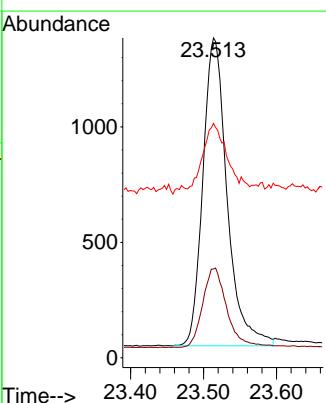
#31  
Terphenyl-d14  
Concen: 0.398 ng  
RT: 19.726 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14  
ClientSampleId : PB169039BL

Tgt Ion:244 Resp: 2950  
Ion Ratio Lower Upper  
244 100  
212 11.0 7.4 11.2  
122 18.2 13.6 20.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2763  
Delta R.T. 0.000 min  
Lab File: BN037549.D  
Acq: 30 Jul 2025 10:14

Tgt Ion:264 Resp: 3078  
Ion Ratio Lower Upper  
264 100  
260 27.8 21.2 31.8  
265 73.3 40.4 60.6#





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

## Report of Analysis

|                    |                               |        |    |                 |                |
|--------------------|-------------------------------|--------|----|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.          |        |    | Date Collected: |                |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |    | Date Received:  |                |
| Client Sample ID:  | PB169039BS                    |        |    | SDG No.:        | Q2696          |
| Lab Sample ID:     | PB169039BS                    |        |    | 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 |
|-------------------|-----------|----------------|----------------|---------------|
| BN037555.D        | 1         | 07/29/25 08:49 | 07/30/25 13:52 | PB169039      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.31  |           | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.34  |           | 30 - 150 |      | 85%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.31  |           | 30 - 150 |      | 77%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.36  |           | 55 - 111 |      | 89%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.40  |           | 53 - 106 |      | 100%       | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.37  |           | 58 - 132 |      | 93%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 1870  |           | 7.724    |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4500  |           | 10.498   |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2150  |           | 14.345   |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 3850  |           | 17.087   |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 2870  |           | 21.277   |      |            |          |
| 1520-96-3                 | Perylene-d12            | 2420  |           | 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\BN073025\  
 Data File : BN037555.D  
 Acq On : 30 Jul 2025 13:52  
 Operator : RC/JU  
 Sample : PB169039BS  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BS

Quant Time: Jul 30 15:06:08 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

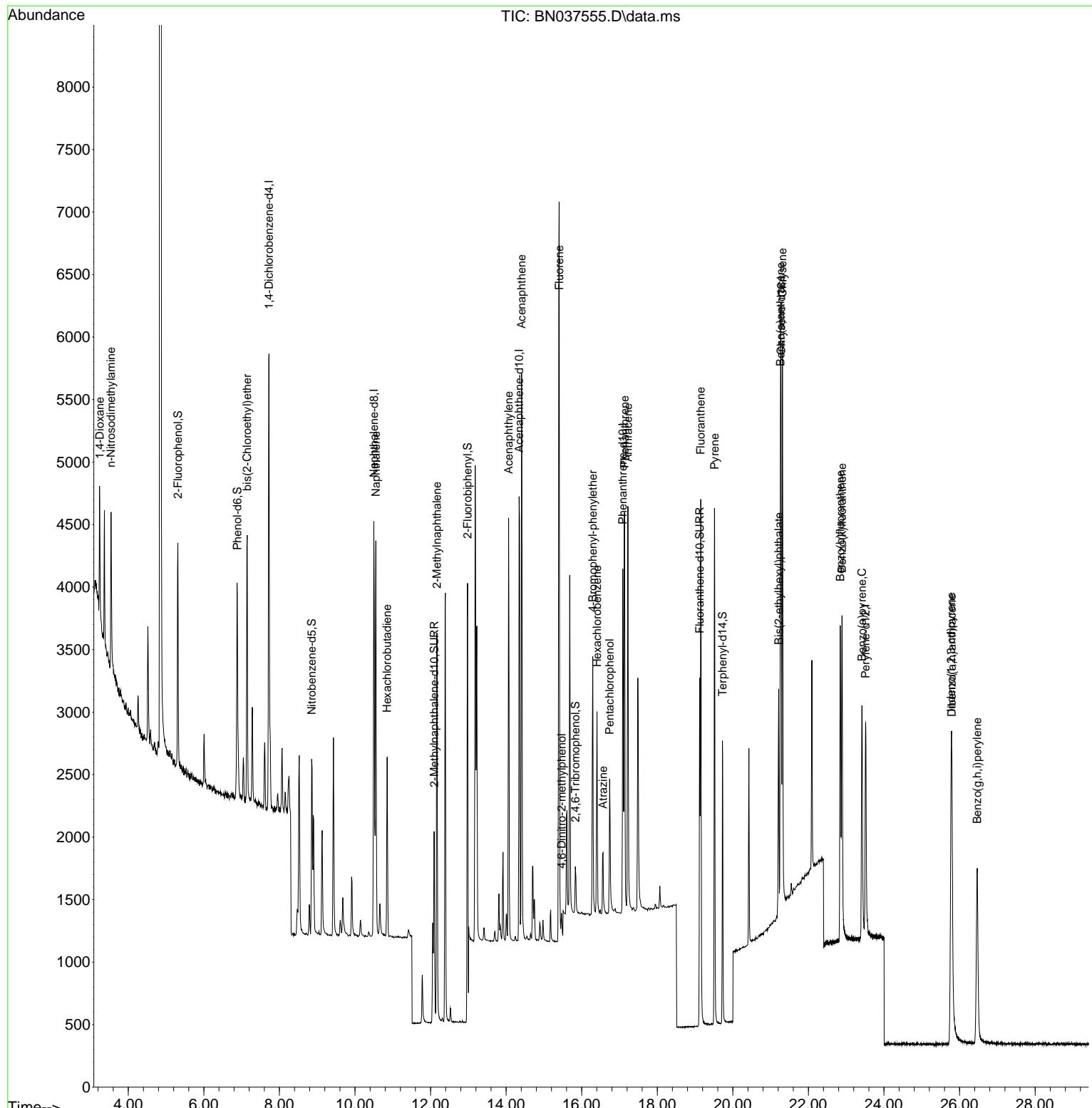
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4          | 7.724  | 152  | 1872     | 0.400  | ng    | 0.00     |
| 7) Naphthalene-d8                  | 10.498 | 136  | 4499     | 0.400  | ng    | #-0.01   |
| 13) Acenaphthene-d10               | 14.345 | 164  | 2146     | 0.400  | ng    | -0.01    |
| 19) Phenanthrene-d10               | 17.087 | 188  | 3846     | 0.400  | ng    | #-0.01   |
| 29) Chrysene-d12                   | 21.277 | 240  | 2873     | 0.400  | ng    | 0.00     |
| 35) Perylene-d12                   | 23.516 | 264  | 2422     | 0.400  | ng    | # 0.00   |
| <b>System Monitoring Compounds</b> |        |      |          |        |       |          |
| 4) 2-Fluorophenol                  | 5.312  | 112  | 1412     | 0.305  | ng    | 0.00     |
| 5) Phenol-d6                       | 6.887  | 99   | 1610     | 0.277  | ng    | 0.00     |
| 8) Nitrobenzene-d5                 | 8.854  | 82   | 1197     | 0.356  | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10        | 12.096 | 152  | 2195     | 0.340  | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol           | 15.833 | 330  | 243      | 0.230  | ng    | -0.01    |
| 15) 2-Fluorobiphenyl               | 12.978 | 172  | 4443     | 0.398  | ng    | 0.00     |
| 27) Fluoranthene-d10               | 19.123 | 212  | 3150     | 0.309  | ng    | 0.00     |
| 31) Terphenyl-d14                  | 19.726 | 244  | 2289     | 0.371  | ng    | 0.00     |
| <b>Target Compounds</b>            |        |      |          |        |       |          |
|                                    |        |      |          | Qvalue |       |          |
| 2) 1,4-Dioxane                     | 3.247  | 88   | 564      | 0.313  | ng    | # 63     |
| 3) n-Nitrosodimethylamine          | 3.543  | 42   | 845      | 0.373  | ng    | 83       |
| 6) bis(2-Chloroethyl)ether         | 7.147  | 93   | 1598     | 0.331  | ng    | 97       |
| 9) Naphthalene                     | 10.552 | 128  | 4093     | 0.341  | ng    | 98       |
| 10) Hexachlorobutadiene            | 10.851 | 225  | 1120     | 0.422  | ng    | # 98     |
| 12) 2-Methylnaphthalene            | 12.167 | 142  | 2325     | 0.295  | ng    | 96       |
| 16) Acenaphthylene                 | 14.067 | 152  | 3643     | 0.379  | ng    | 99       |
| 17) Acenaphthene                   | 14.409 | 154  | 2201     | 0.337  | ng    | 97       |
| 18) Fluorene                       | 15.403 | 166  | 2802     | 0.333  | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph...      | 15.467 | 198  | 156      | 0.390  | ng    | 94       |
| 21) 4-Bromophenyl-phenylether      | 16.292 | 248  | 853      | 0.346  | ng    | 92       |
| 22) Hexachlorobenzene              | 16.404 | 284  | 1203     | 0.378  | ng    | 95       |
| 23) Atrazine                       | 16.565 | 200  | 524      | 0.305  | ng    | 93       |
| 24) Pentachlorophenol              | 16.739 | 266  | 596      | 0.417  | ng    | 98       |
| 25) Phenanthrene                   | 17.136 | 178  | 3996     | 0.347  | ng    | 99       |
| 26) Anthracene                     | 17.223 | 178  | 3562     | 0.339  | ng    | 100      |
| 28) Fluoranthene                   | 19.150 | 202  | 4008     | 0.302  | ng    | 98       |
| 30) Pyrene                         | 19.517 | 202  | 3947     | 0.341  | ng    | 100      |
| 32) Benzo(a)anthracene             | 21.259 | 228  | 3375     | 0.335  | ng    | 97       |
| 33) Chrysene                       | 21.313 | 228  | 3867     | 0.369  | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha...      | 21.214 | 149  | 1424     | 0.315  | ng    | 98       |
| 36) Indeno(1,2,3-cd)pyrene         | 25.776 | 276  | 3608     | 0.358  | ng    | 95       |
| 37) Benzo(b)fluoranthene           | 22.844 | 252  | 3411     | 0.371  | ng    | 95       |
| 38) Benzo(k)fluoranthene           | 22.891 | 252  | 3546     | 0.374  | ng    | 96       |
| 39) Benzo(a)pyrene                 | 23.417 | 252  | 2937     | 0.383  | ng    | 93       |
| 40) Dibenzo(a,h)anthracene         | 25.797 | 278  | 2665     | 0.326  | ng    | 92       |
| 41) Benzo(g,h,i)perylene           | 26.466 | 276  | 3077     | 0.364  | ng    | 98       |

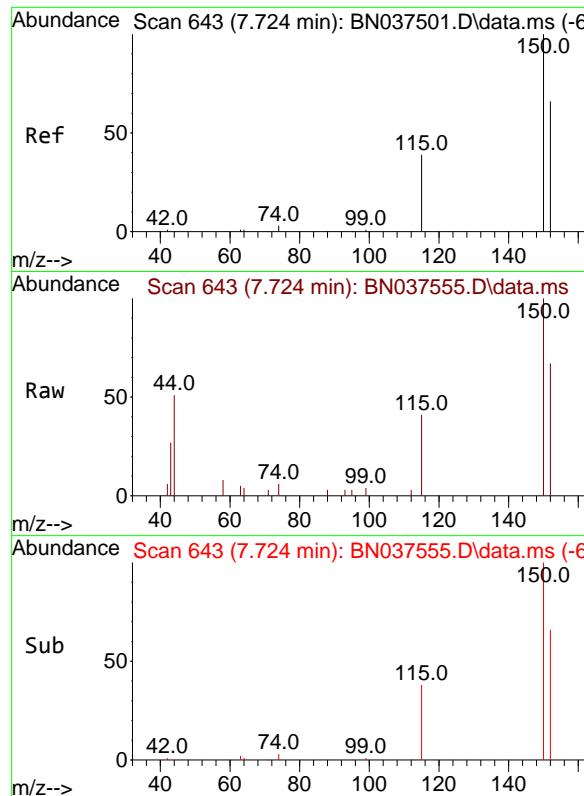
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037555.D  
 Acq On : 30 Jul 2025 13:52  
 Operator : RC/JU  
 Sample : PB169039BS  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BS

Quant Time: Jul 30 15:06:08 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

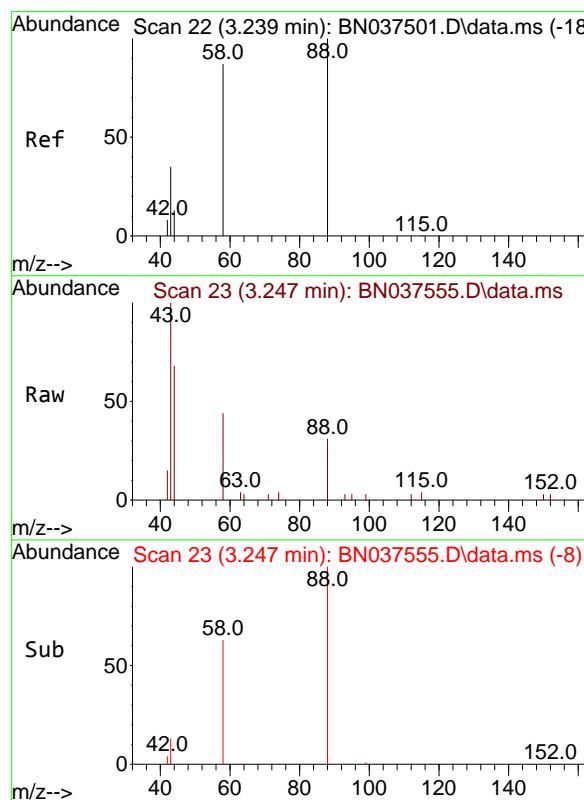
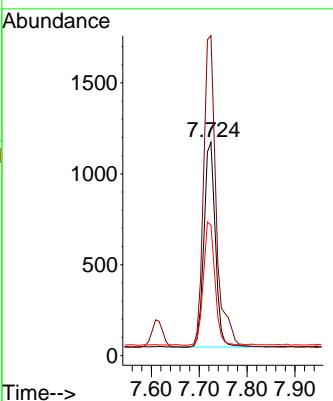




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

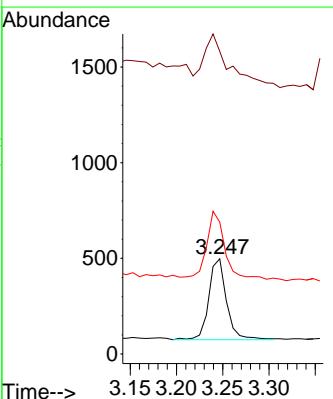
Instrument : BNA\_N  
ClientSampleId : PB169039BS

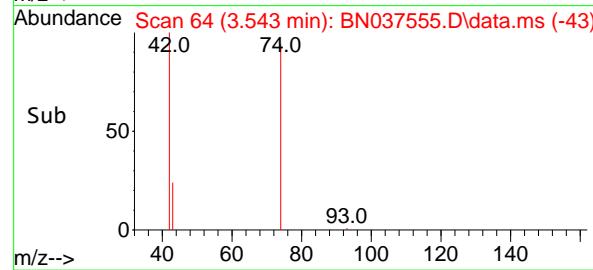
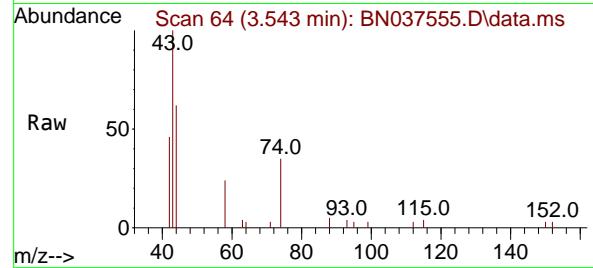
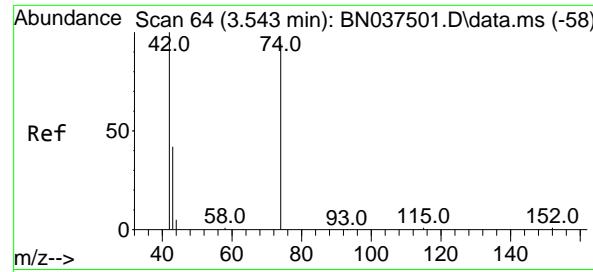
Tgt Ion:152 Resp: 1872  
Ion Ratio Lower Upper  
152 100  
150 150.0 119.8 179.8  
115 61.2 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.313 ng  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

Tgt Ion: 88 Resp: 564  
Ion Ratio Lower Upper  
88 100  
43 95.4 27.5 41.3#  
58 84.8 62.7 94.1





#3

n-Nitrosodimethylamine

Concen: 0.373 ng

RT: 3.543 min Scan# 6

Delta R.T. 0.000 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

Instrument :

BNA\_N

ClientSampleId :

PB169039BS

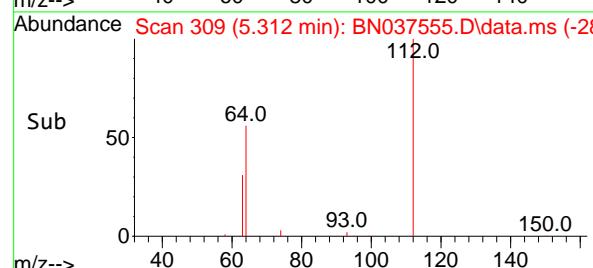
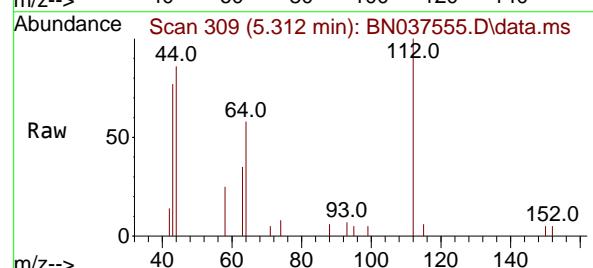
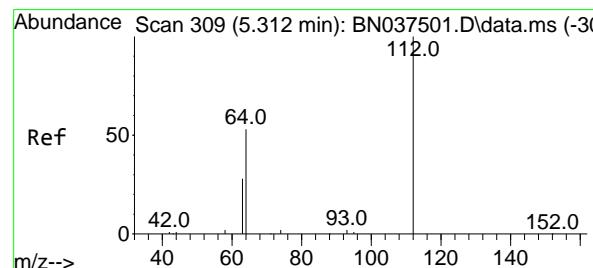
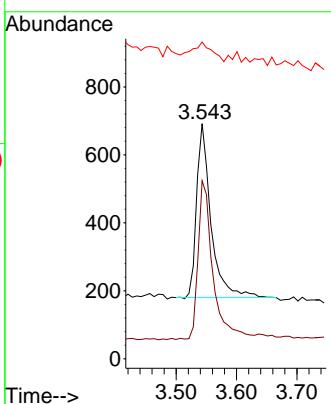
Tgt Ion: 42 Resp: 845

Ion Ratio Lower Upper

42 100

74 94.0 91.8 137.6

44 16.1 15.0 22.6



#4

2-Fluorophenol

Concen: 0.305 ng

RT: 5.312 min Scan# 309

Delta R.T. 0.000 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

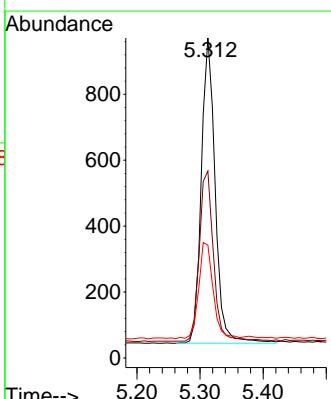
Tgt Ion: 112 Resp: 1412

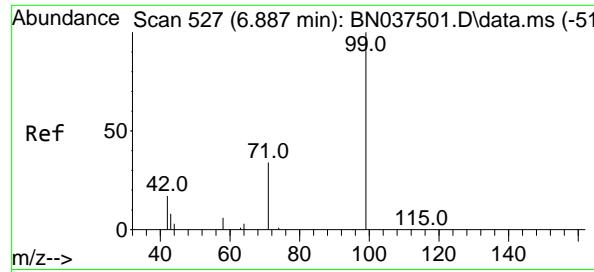
Ion Ratio Lower Upper

112 100

64 57.2 45.1 67.7

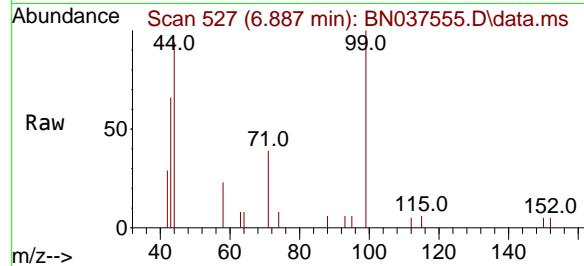
63 32.6 23.8 35.8



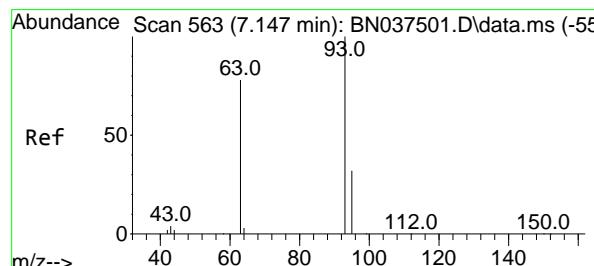
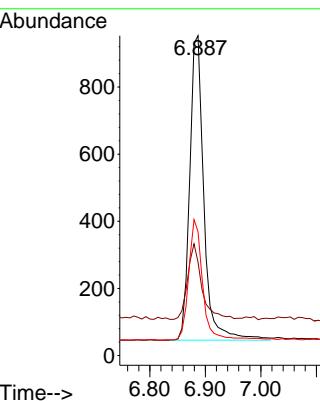
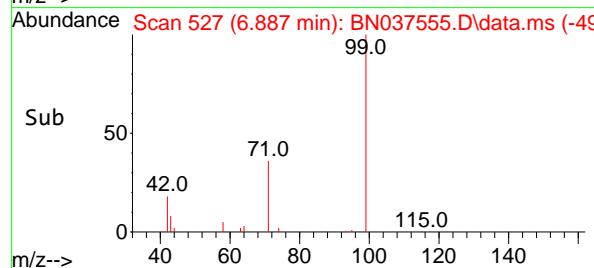


#5  
 Phenol-d6  
 Concen: 0.277 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

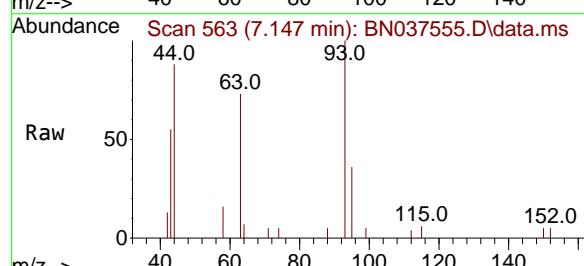
Instrument : BNA\_N  
 ClientSampleId : PB169039BS



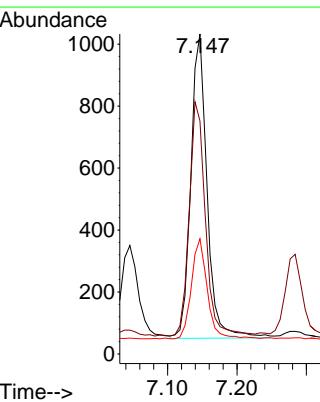
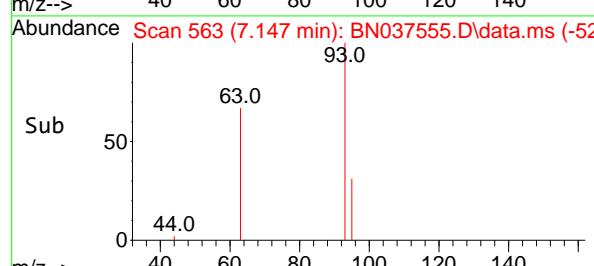
Tgt Ion: 99 Resp: 1610  
 Ion Ratio Lower Upper  
 99 100  
 42 24.7 17.1 25.7  
 71 39.7 27.8 41.8

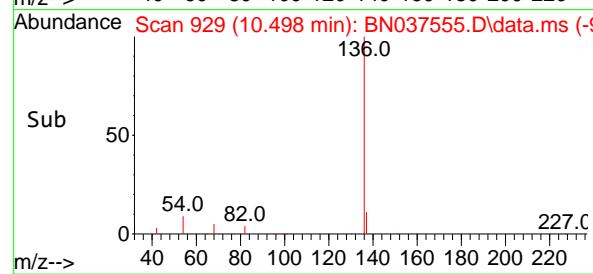
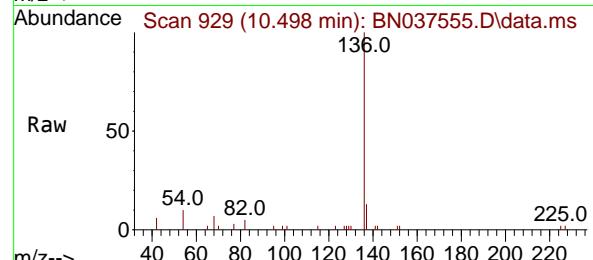
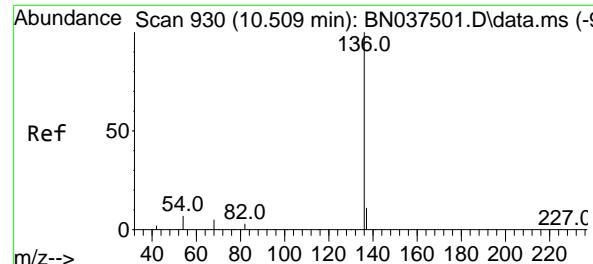


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.331 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. 0.000 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52



Tgt Ion: 93 Resp: 1598  
 Ion Ratio Lower Upper  
 93 100  
 63 76.6 58.2 87.4  
 95 32.2 25.3 37.9





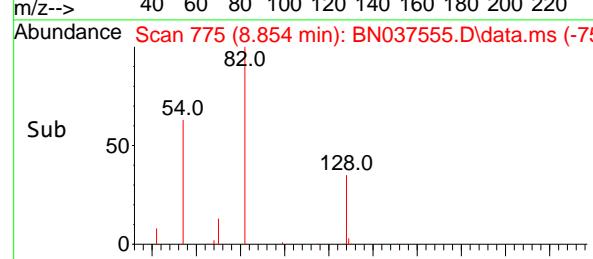
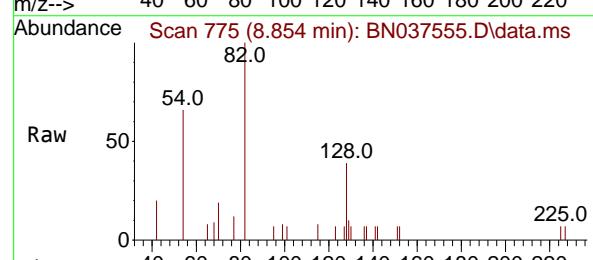
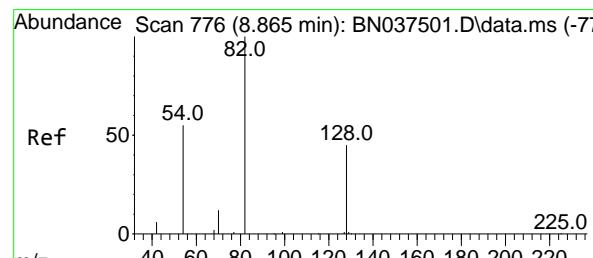
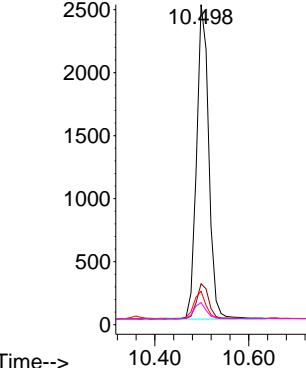
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BS

Tgt Ion:136 Resp: 4499

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 12.8  | 9.8   | 14.8  |
| 54  | 10.5  | 6.6   | 9.8#  |
| 68  | 6.9   | 5.0   | 7.6   |

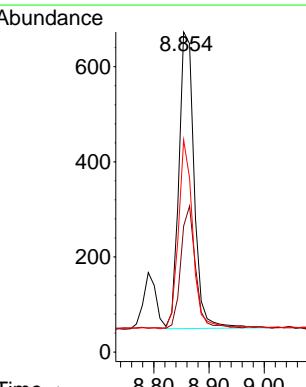
Abundance

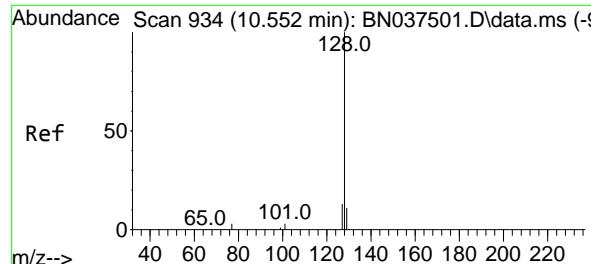


#8  
 Nitrobenzene-d5  
 Concen: 0.356 ng  
 RT: 8.854 min Scan# 775  
 Delta R.T. -0.011 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

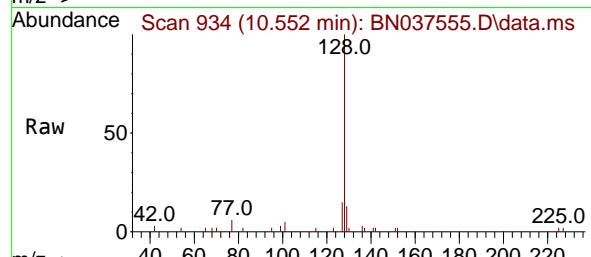
Tgt Ion: 82 Resp: 1197

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 39.4  | 37.5  | 56.3  |
| 54  | 66.3  | 45.3  | 67.9  |

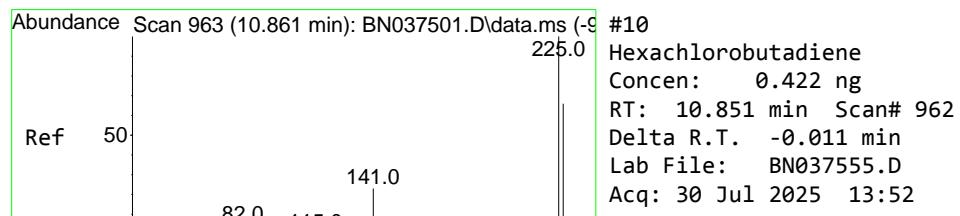
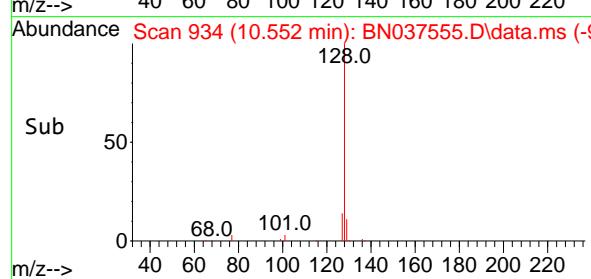
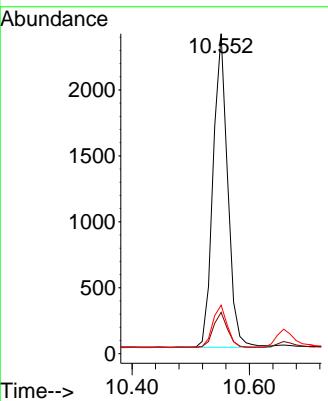




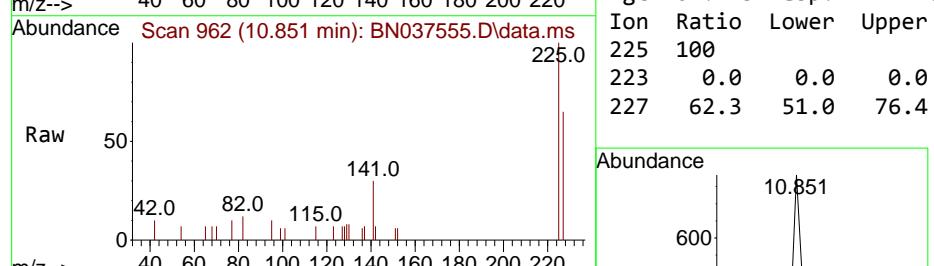
#9  
Naphthalene  
Concen: 0.341 ng  
RT: 10.552 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52  
ClientSampleId : PB169039BS



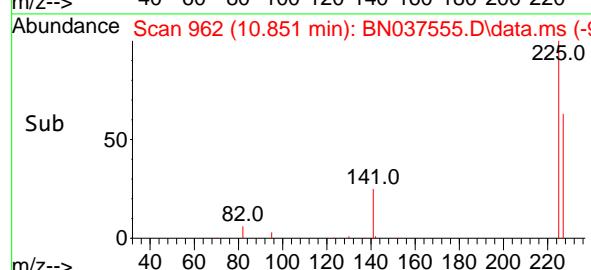
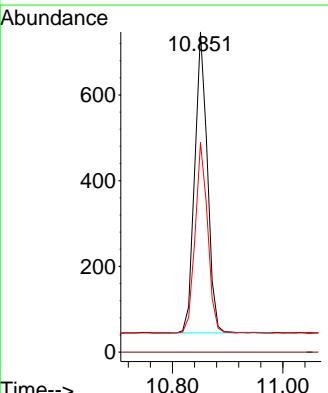
Tgt Ion:128 Resp: 4093  
Ion Ratio Lower Upper  
128 100  
129 12.9 9.7 14.5  
127 15.1 11.5 17.3

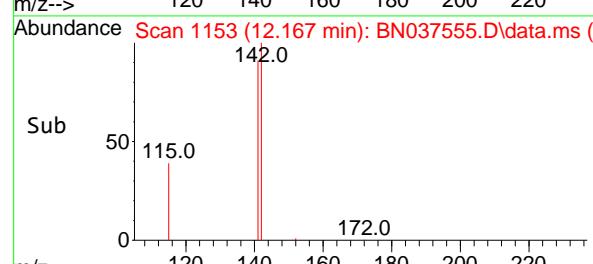
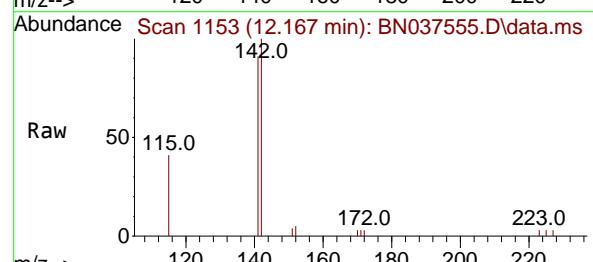
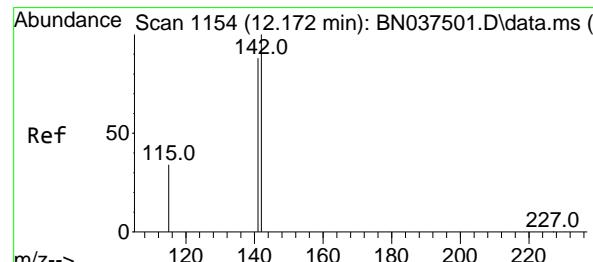
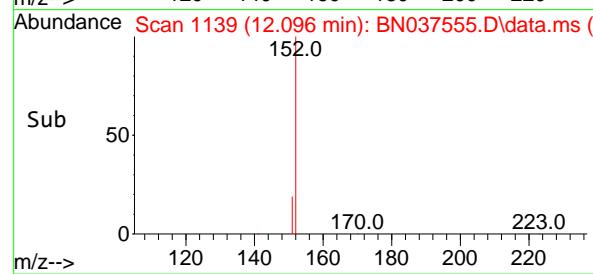
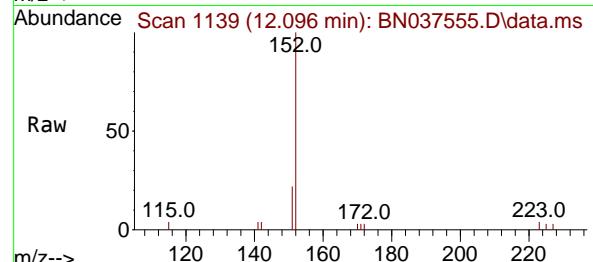
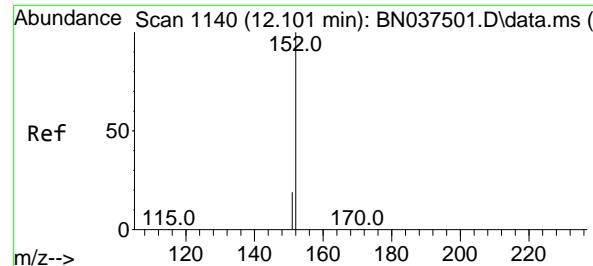


#10  
Hexachlorobutadiene  
Concen: 0.422 ng  
RT: 10.851 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52



Tgt Ion:225 Resp: 1120  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.3 51.0 76.4





#11

2-Methylnaphthalene-d10

Concen: 0.340 ng

RT: 12.096 min Scan# 1139

Delta R.T. -0.005 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

Instrument :

BNA\_N

ClientSampleId :

PB169039BS

Tgt Ion:152 Resp: 2195

Ion Ratio Lower Upper

152 100

151 21.7 16.8 25.2

Abundance

12.096

1000

500

0

Time--&gt;

12.00 12.05 12.10 12.15 12.20

#12

2-Methylnaphthalene

Concen: 0.295 ng

RT: 12.167 min Scan# 1153

Delta R.T. -0.005 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

Tgt Ion:142 Resp: 2325

Ion Ratio Lower Upper

142 100

141 90.8 71.0 106.4

115 41.5 29.0 43.4

Abundance

12.167

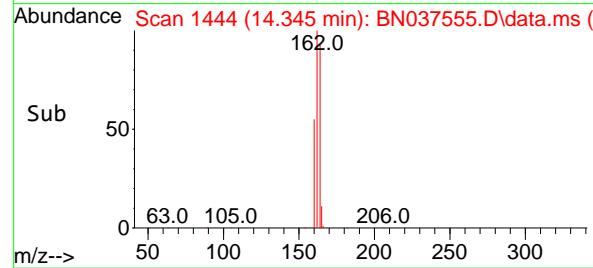
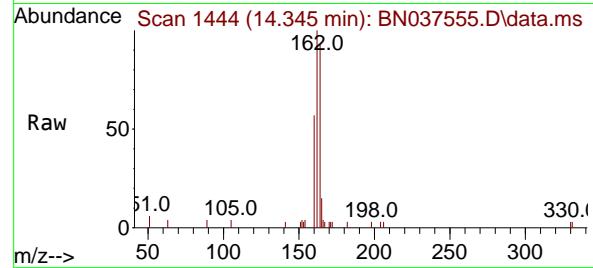
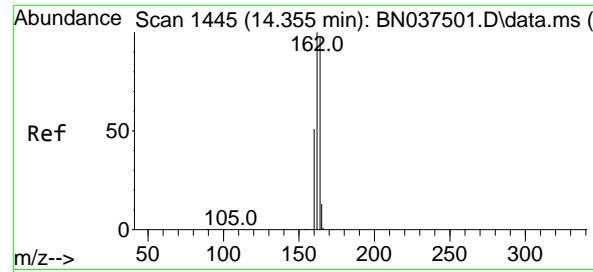
1000

500

0

Time--&gt;

12.10 12.15 12.20 12.25



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.345 min Scan# 1444

Delta R.T. -0.011 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

Instrument :

BNA\_N

ClientSampleId :

PB169039BS

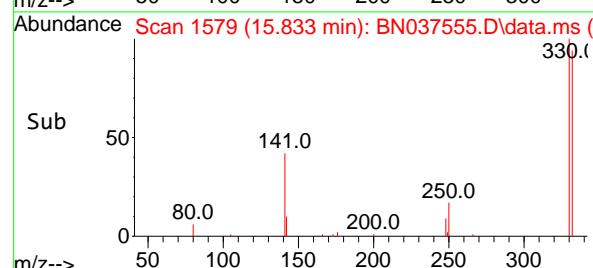
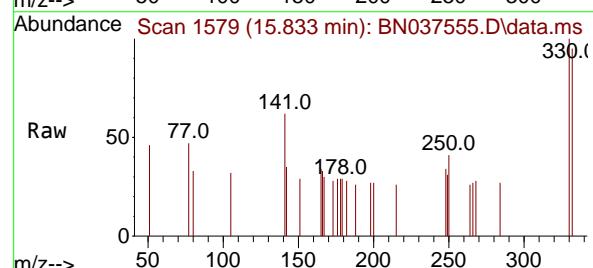
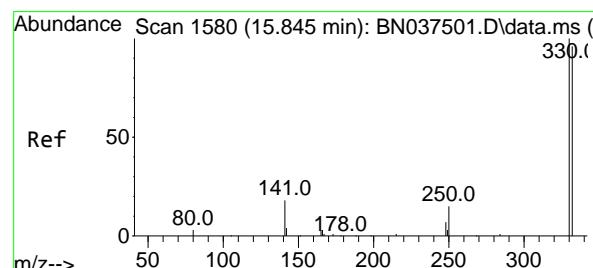
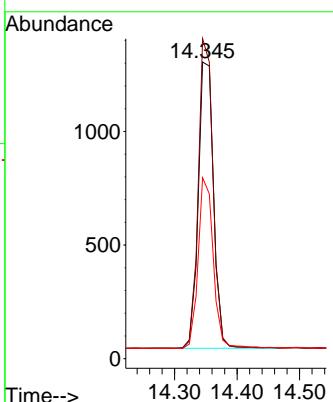
Tgt Ion:164 Resp: 2146

Ion Ratio Lower Upper

164 100

162 107.9 82.0 123.0

160 61.0 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.230 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.012 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

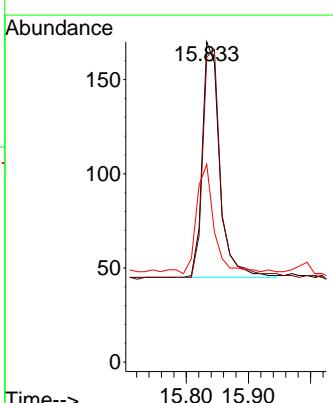
Tgt Ion:330 Resp: 243

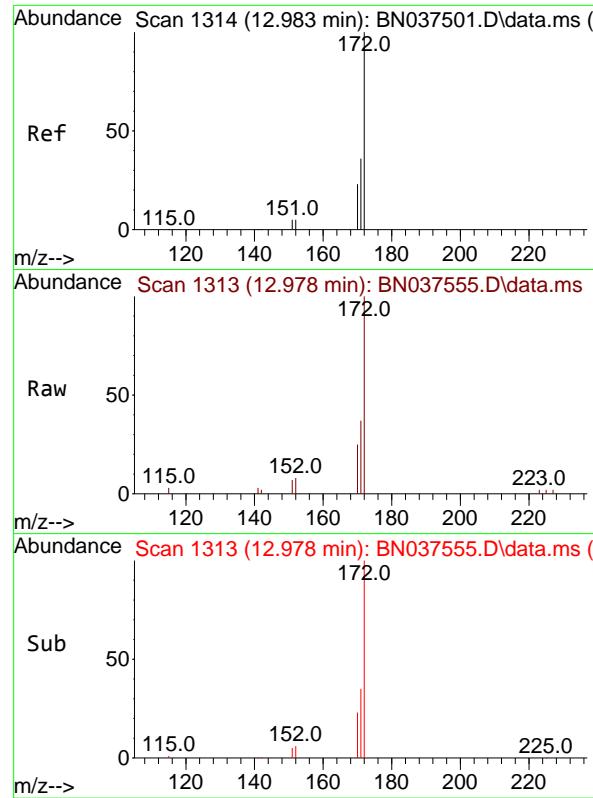
Ion Ratio Lower Upper

330 100

332 100.4 76.1 114.1

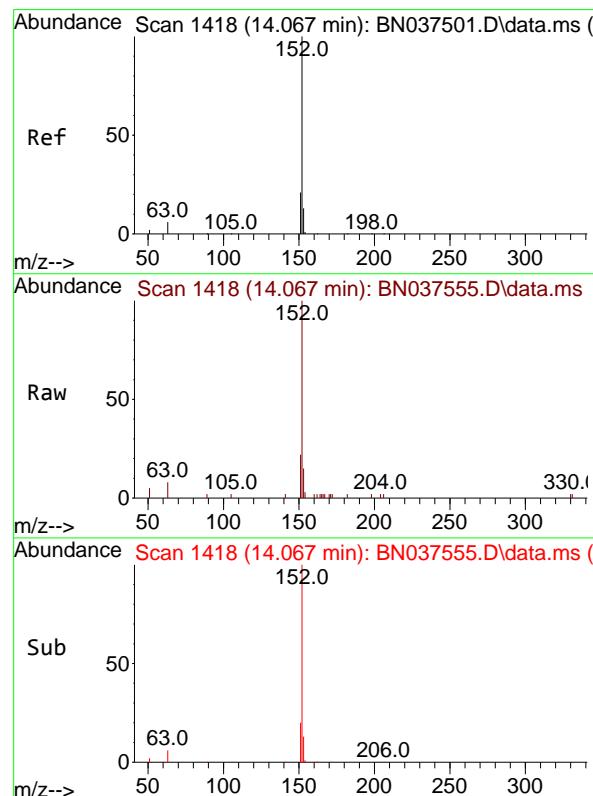
141 44.9 33.4 50.0





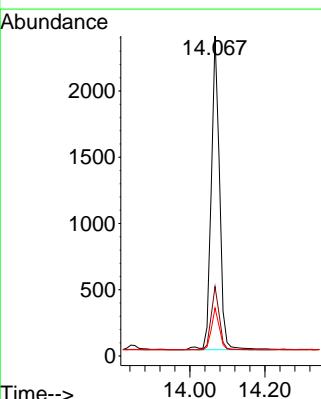
#15  
2-Fluorobiphenyl  
Concen: 0.398 ng  
RT: 12.978 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

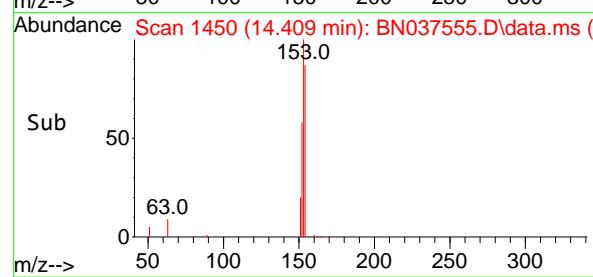
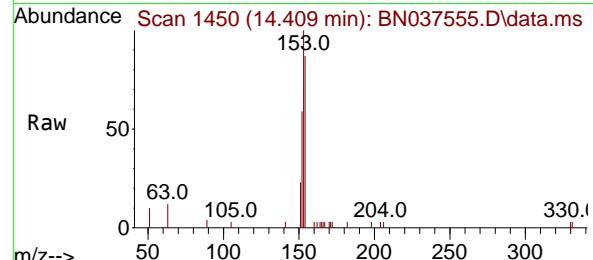
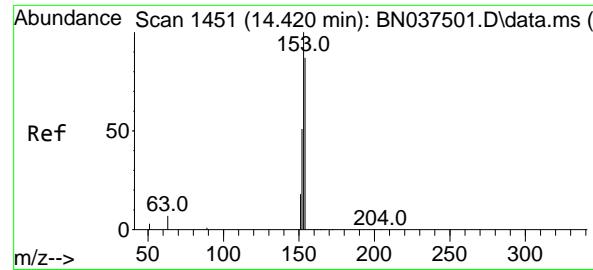
Instrument : BNA\_N  
ClientSampleId : PB169039BS



#16  
Acenaphthylene  
Concen: 0.379 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

Tgt Ion:152 Resp: 3643  
Ion Ratio Lower Upper  
152 100  
151 19.9 15.9 23.9  
153 12.7 10.7 16.1





#17

Acenaphthene

Concen: 0.337 ng

RT: 14.409 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

Instrument :

BNA\_N

ClientSampleId :

PB169039BS

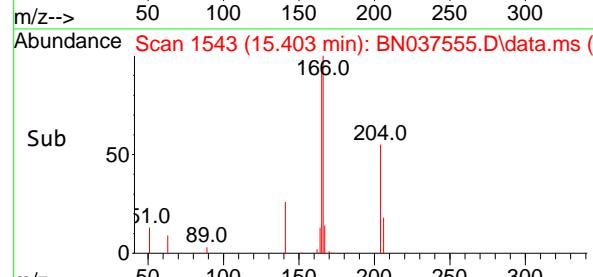
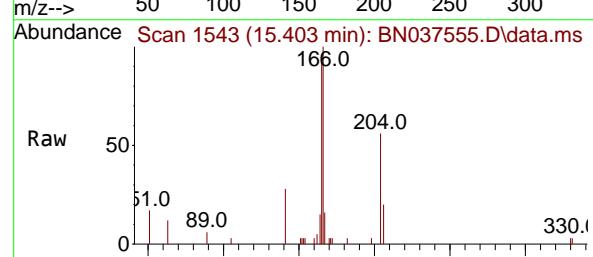
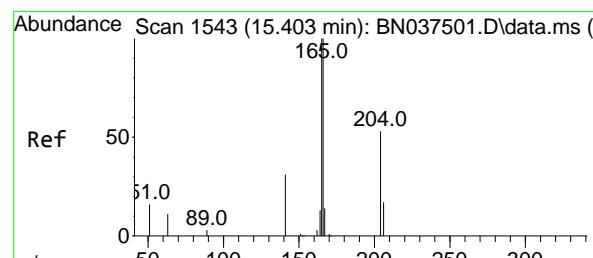
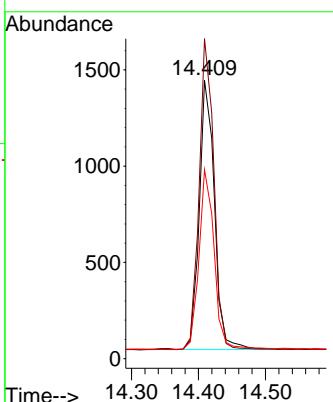
Tgt Ion:154 Resp: 2201

Ion Ratio Lower Upper

154 100

153 112.2 89.2 133.8

152 66.5 48.0 72.0



#18

Fluorene

Concen: 0.333 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

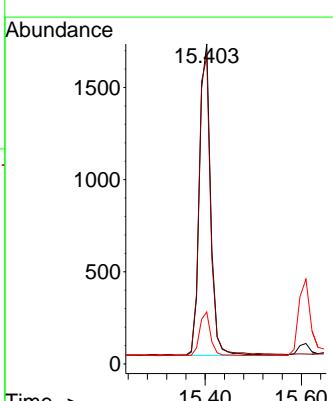
Tgt Ion:166 Resp: 2802

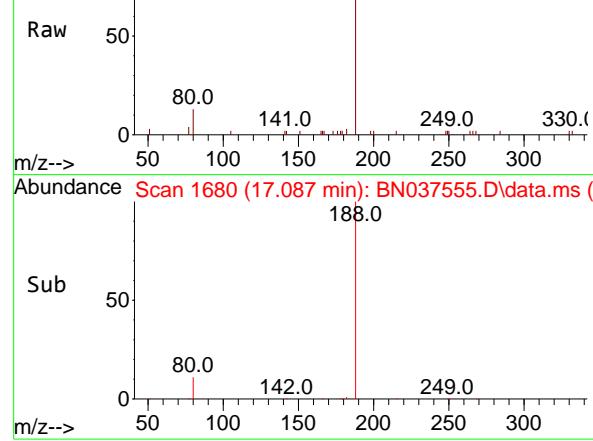
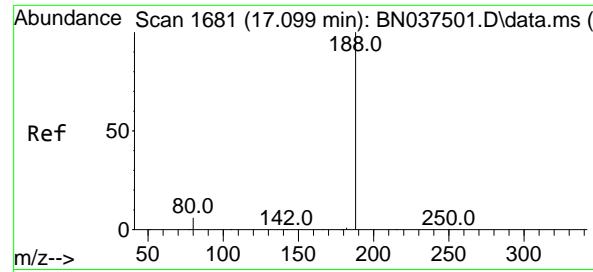
Ion Ratio Lower Upper

166 100

165 98.5 78.1 117.1

167 13.2 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.087 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

Instrument :

BNA\_N

ClientSampleId :

PB169039BS

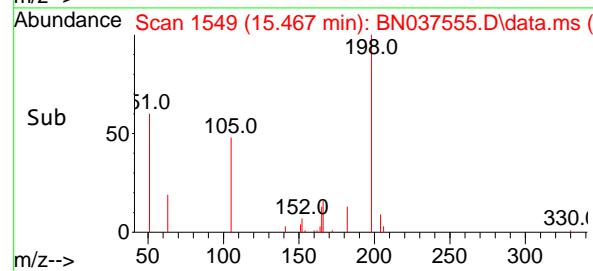
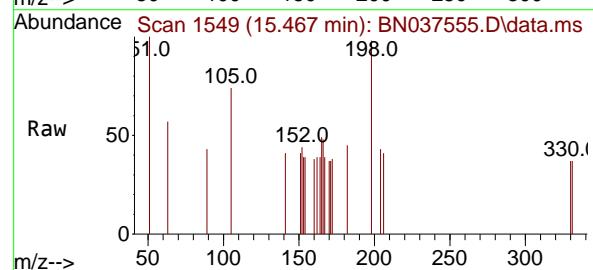
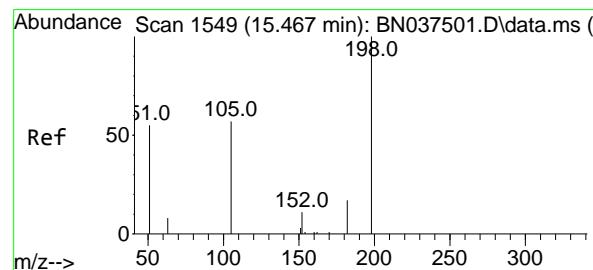
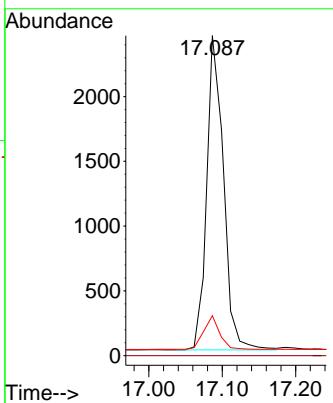
Tgt Ion:188 Resp: 3846

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.5 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.390 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

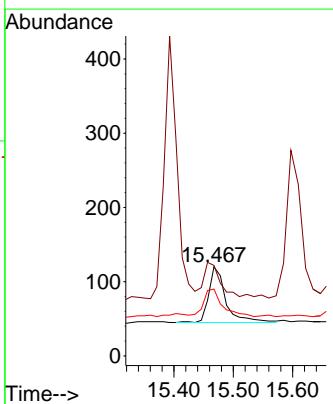
Tgt Ion:198 Resp: 156

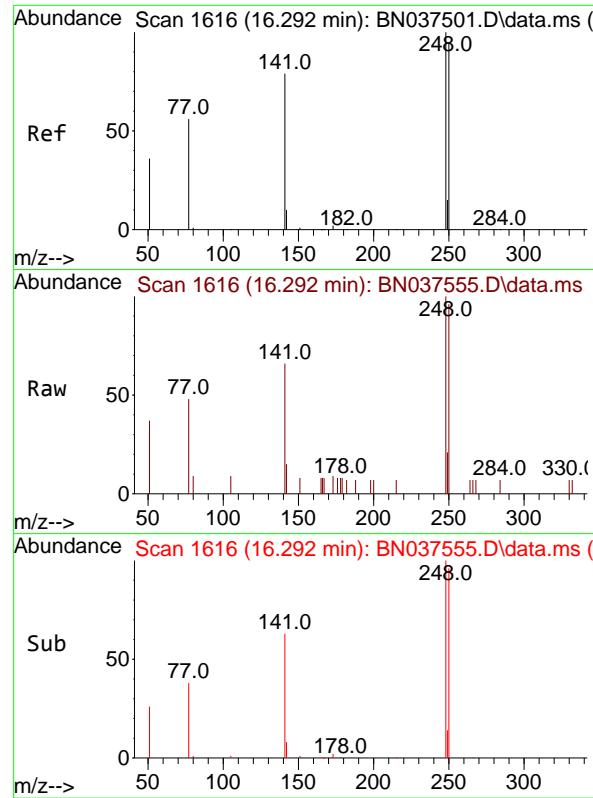
Ion Ratio Lower Upper

198 100

51 101.7 88.5 132.7

105 75.0 61.2 91.8

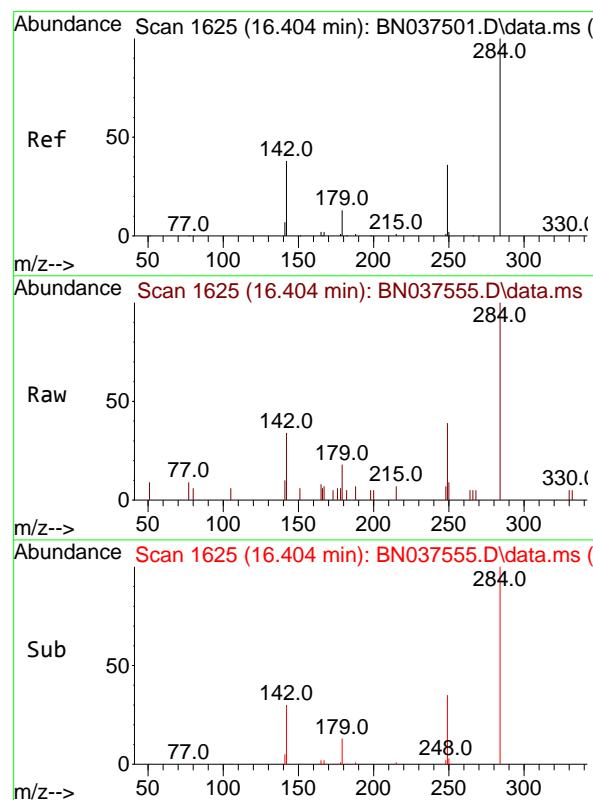
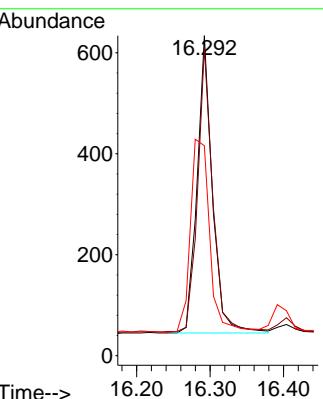




#21  
4-Bromophenyl-phenylether  
Concen: 0.346 ng  
RT: 16.292 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

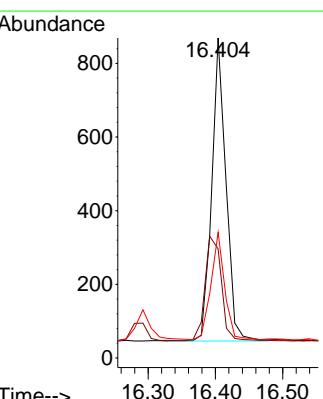
Instrument :  
BNA\_N  
ClientSampleId :  
PB169039BS

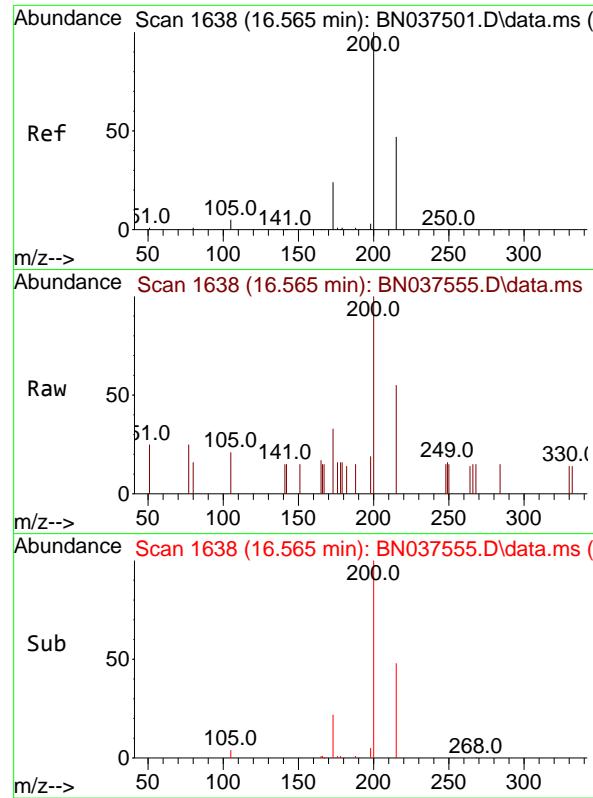
Tgt Ion:248 Resp: 853  
Ion Ratio Lower Upper  
248 100  
250 96.2 76.2 114.2  
141 65.6 63.9 95.9



#22  
Hexachlorobenzene  
Concen: 0.378 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

Tgt Ion:284 Resp: 1203  
Ion Ratio Lower Upper  
284 100  
142 40.0 28.9 43.3  
249 34.2 25.8 38.6

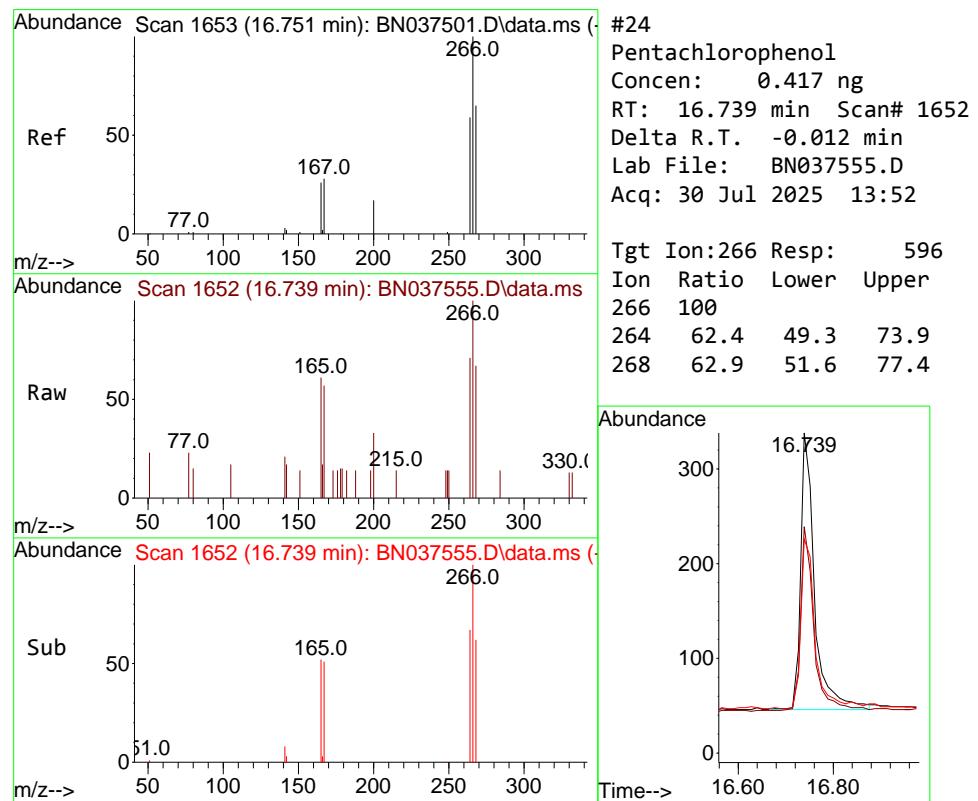
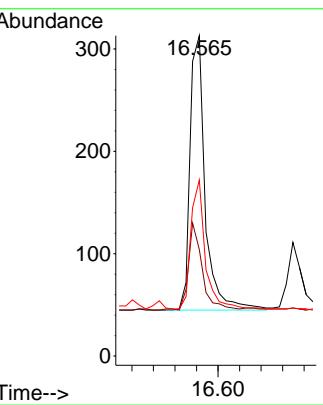




#23  
Atrazine  
Concen: 0.305 ng  
RT: 16.565 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

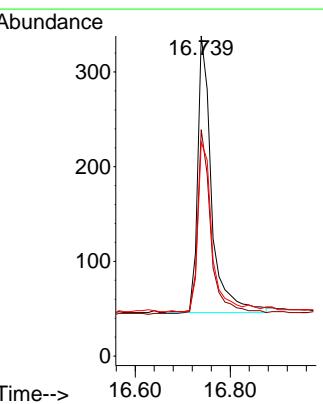
Instrument : BNA\_N  
ClientSampleId : PB169039BS

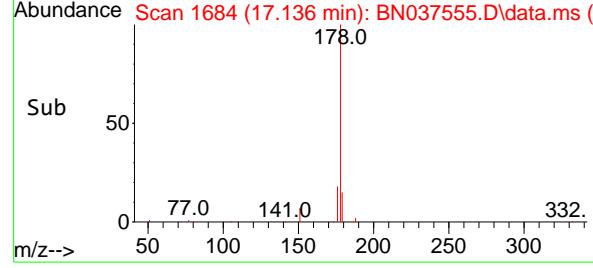
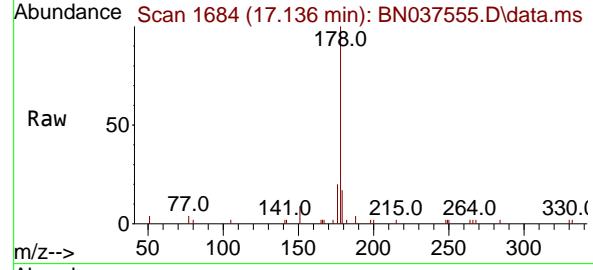
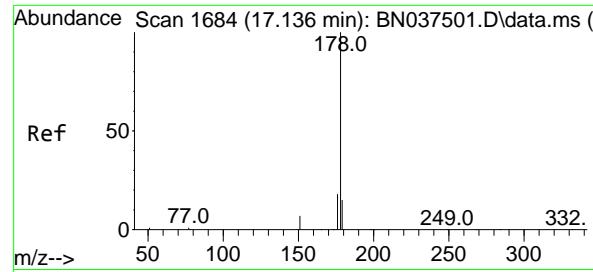
Tgt Ion:200 Resp: 524  
Ion Ratio Lower Upper  
200 100  
173 33.2 23.2 34.8  
215 55.0 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.417 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.012 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

Tgt Ion:266 Resp: 596  
Ion Ratio Lower Upper  
266 100  
264 62.4 49.3 73.9  
268 62.9 51.6 77.4





#25

Phenanthrene

Concen: 0.347 ng

RT: 17.136 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

Instrument:

BNA\_N

ClientSampleId :

PB169039BS

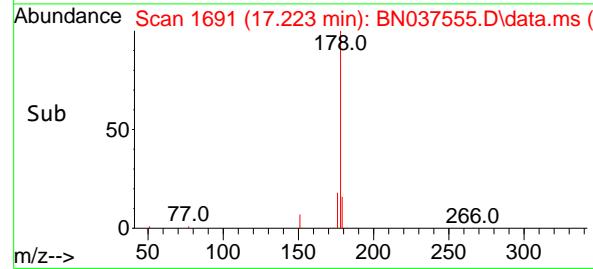
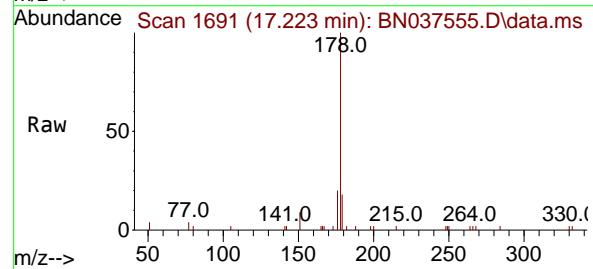
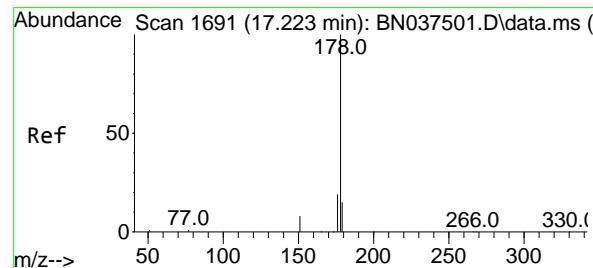
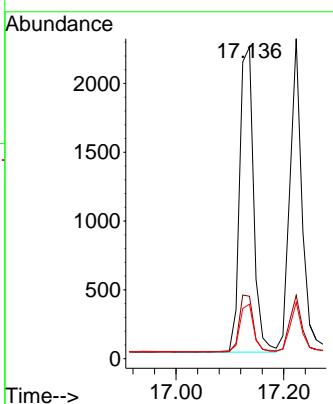
Tgt Ion:178 Resp: 3996

Ion Ratio Lower Upper

178 100

176 18.9 15.0 22.6

179 15.6 12.2 18.2



#26

Anthracene

Concen: 0.339 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037555.D

Acq: 30 Jul 2025 13:52

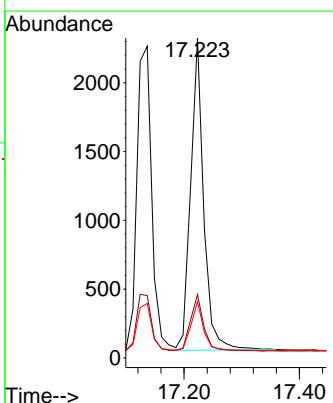
Tgt Ion:178 Resp: 3562

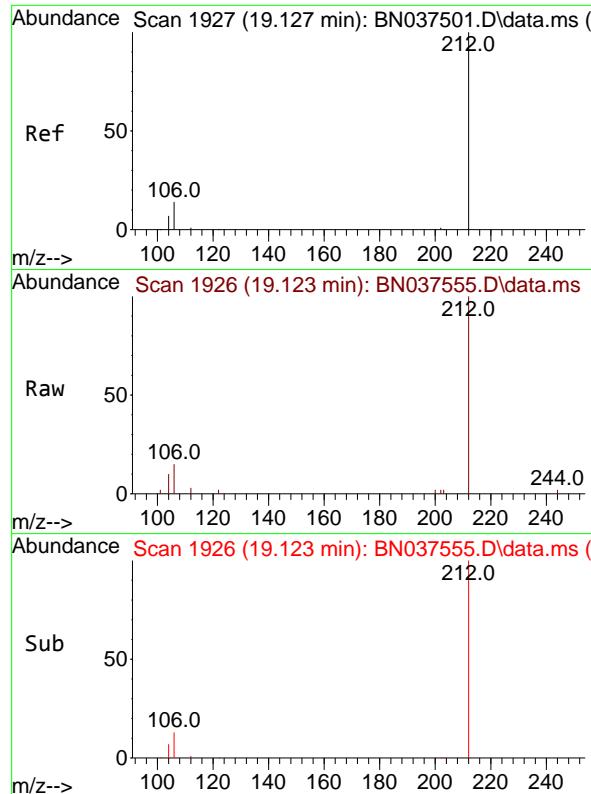
Ion Ratio Lower Upper

178 100

176 18.5 14.7 22.1

179 15.1 12.3 18.5

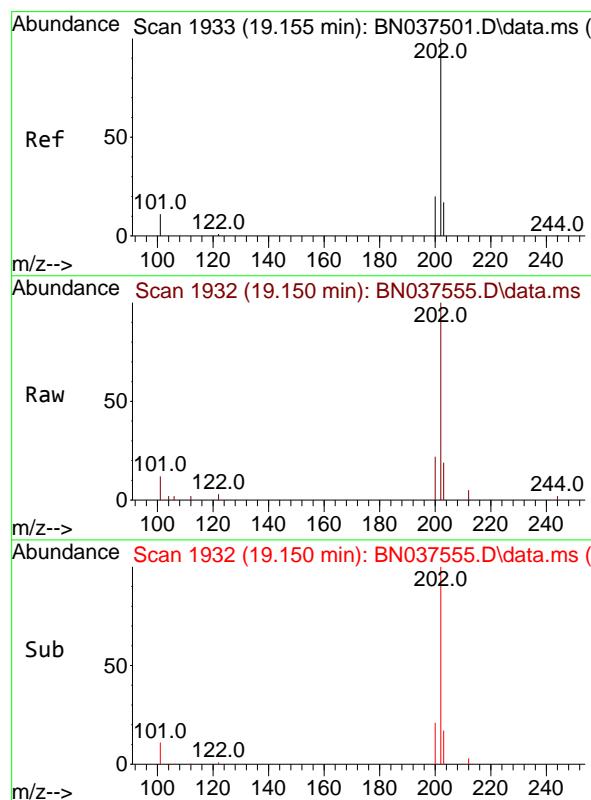
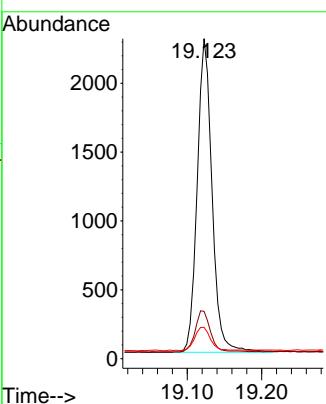




#27  
 Fluoranthene-d10  
 Concen: 0.309 ng  
 RT: 19.123 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

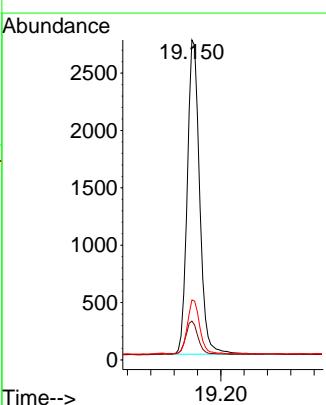
Instrument : BNA\_N  
 ClientSampleId : PB169039BS

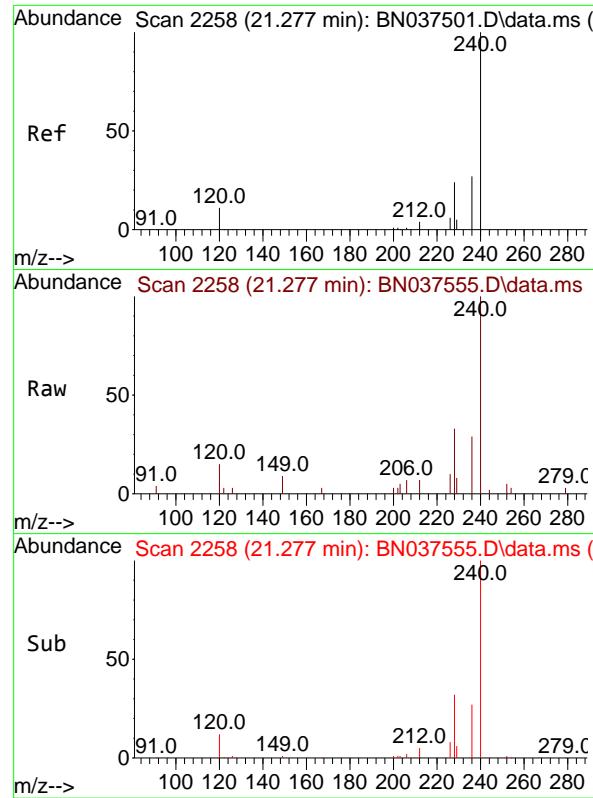
Tgt Ion:212 Resp: 3150  
 Ion Ratio Lower Upper  
 212 100  
 106 13.5 12.2 18.4  
 104 7.9 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.302 ng  
 RT: 19.150 min Scan# 1932  
 Delta R.T. -0.005 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

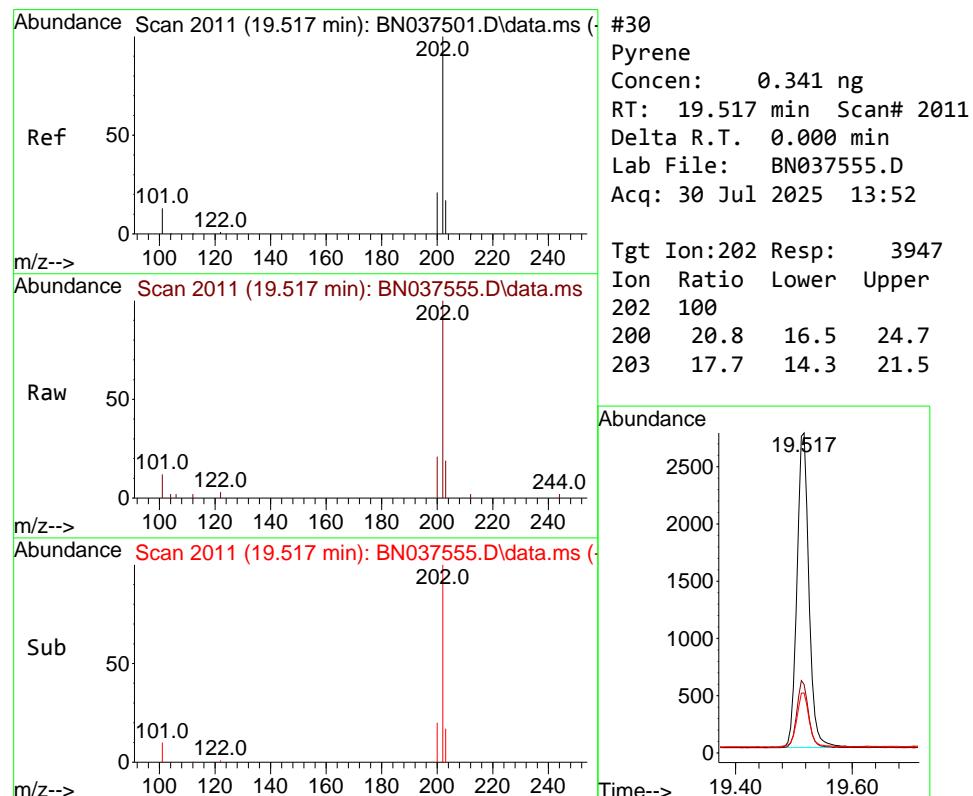
Tgt Ion:202 Resp: 4008  
 Ion Ratio Lower Upper  
 202 100  
 101 10.6 9.8 14.6  
 203 17.1 13.6 20.4

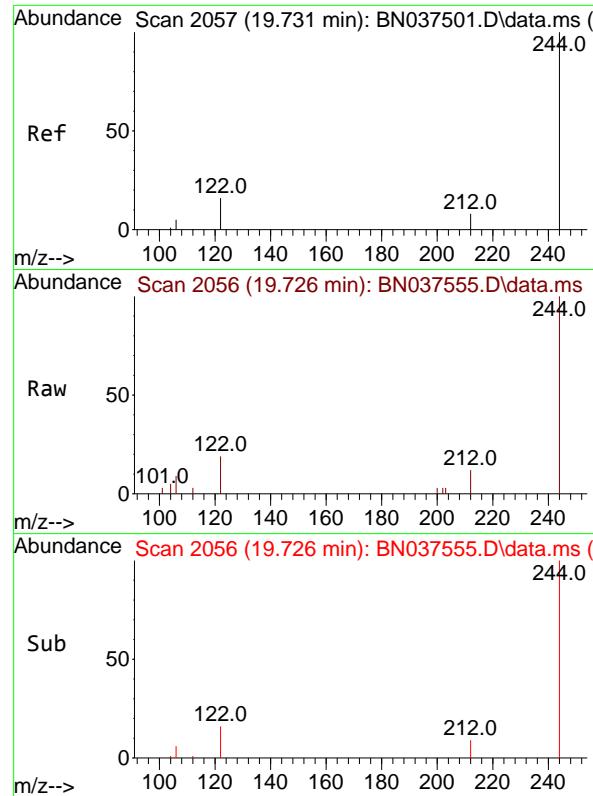




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

Instrument : BNA\_N  
ClientSampleId : PB169039BS

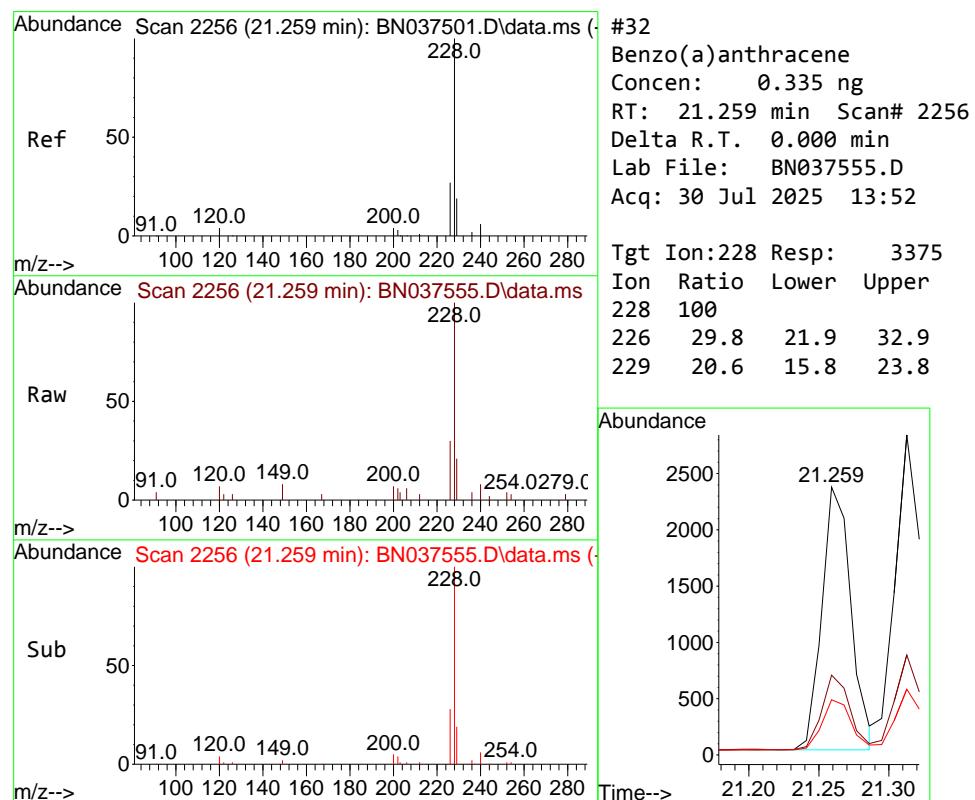
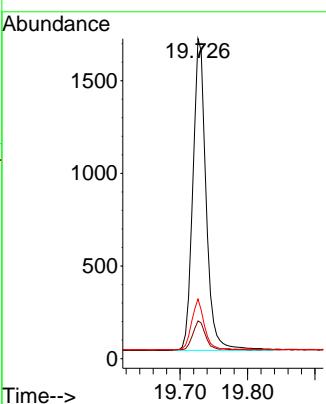




#31  
 Terphenyl-d14  
 Concen: 0.371 ng  
 RT: 19.726 min Scan# 2  
 Delta R.T. -0.005 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

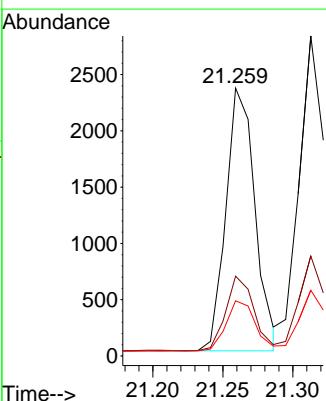
Instrument : BNA\_N  
 ClientSampleId : PB169039BS

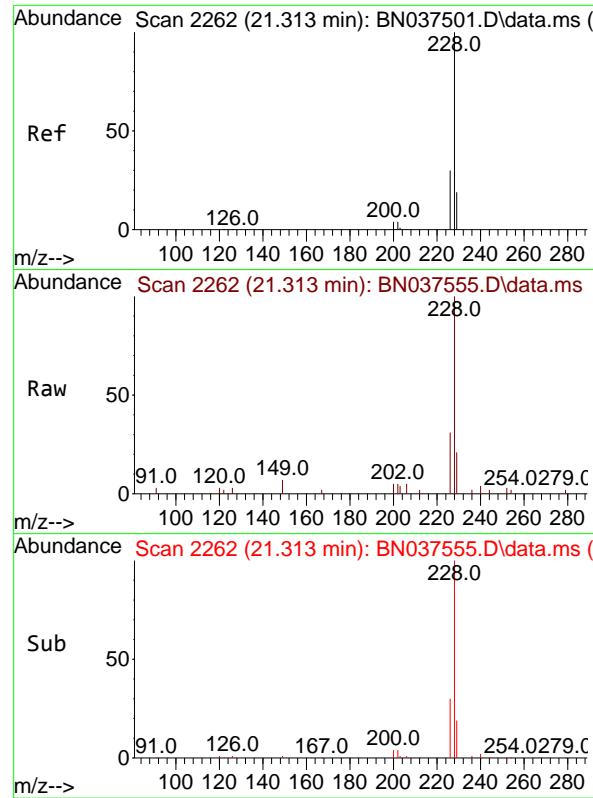
Tgt Ion:244 Resp: 2289  
 Ion Ratio Lower Upper  
 244 100  
 212 11.8 7.4 11.2#  
 122 18.6 13.6 20.4



#32  
 Benzo(a)anthracene  
 Concen: 0.335 ng  
 RT: 21.259 min Scan# 2256  
 Delta R.T. 0.000 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

Tgt Ion:228 Resp: 3375  
 Ion Ratio Lower Upper  
 228 100  
 226 29.8 21.9 32.9  
 229 20.6 15.8 23.8

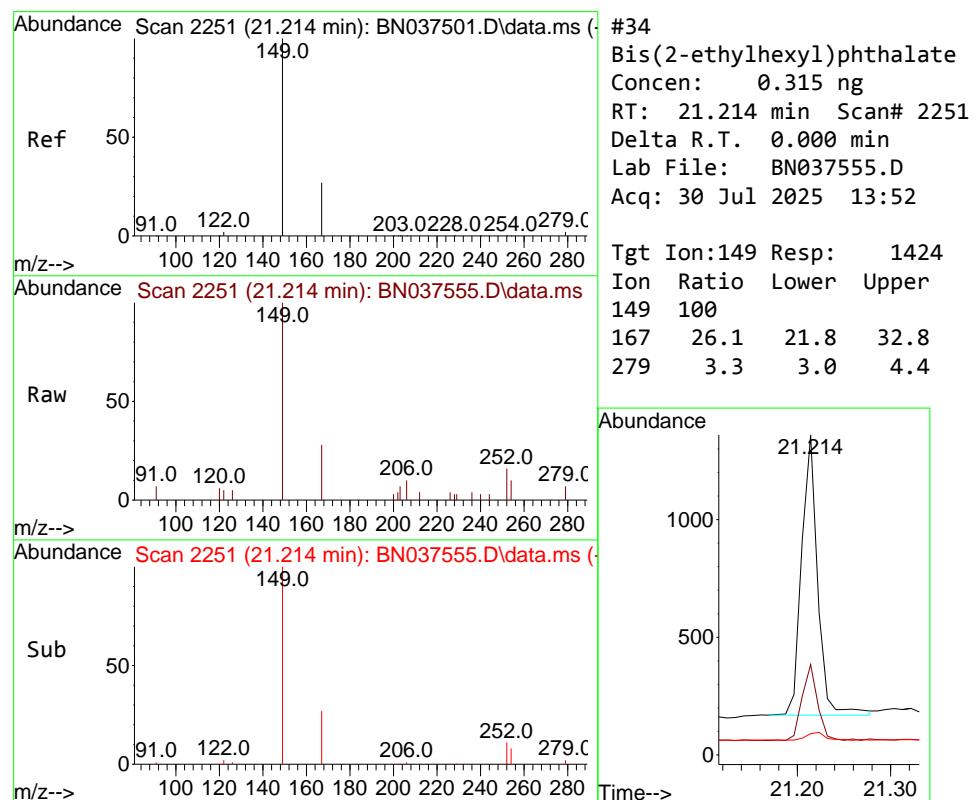
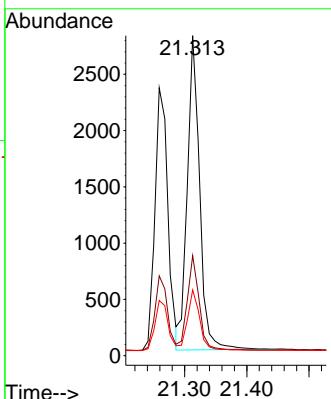




#33  
 Chrysene  
 Concen: 0.369 ng  
 RT: 21.313 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

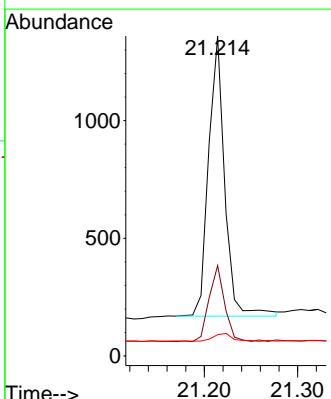
Instrument : BNA\_N  
 ClientSampleId : PB169039BS

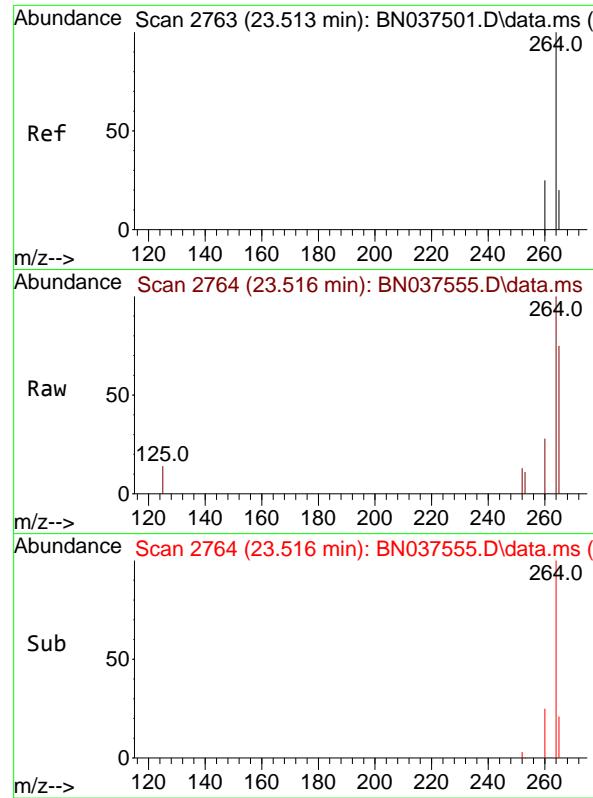
Tgt Ion:228 Resp: 3867  
 Ion Ratio Lower Upper  
 228 100  
 226 31.2 24.2 36.4  
 229 20.6 16.1 24.1



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.315 ng  
 RT: 21.214 min Scan# 2251  
 Delta R.T. 0.000 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

Tgt Ion:149 Resp: 1424  
 Ion Ratio Lower Upper  
 149 100  
 167 26.1 21.8 32.8  
 279 3.3 3.0 4.4

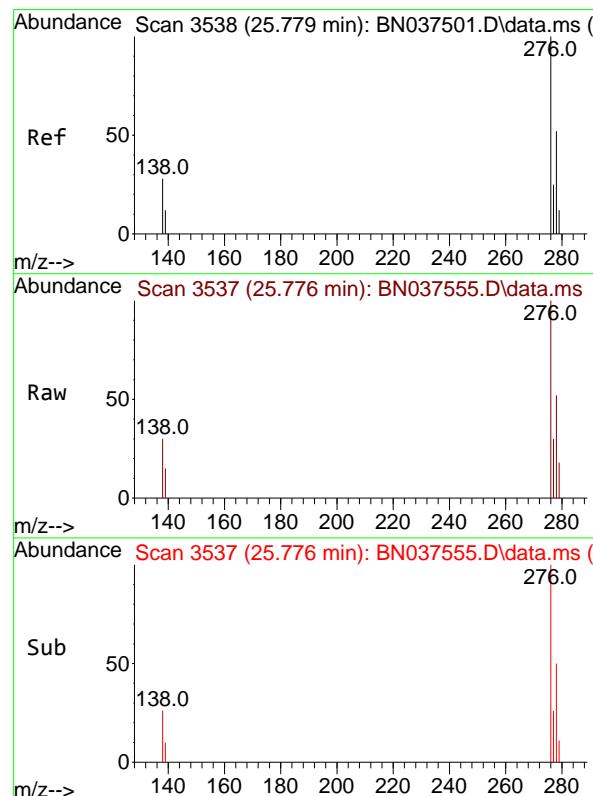
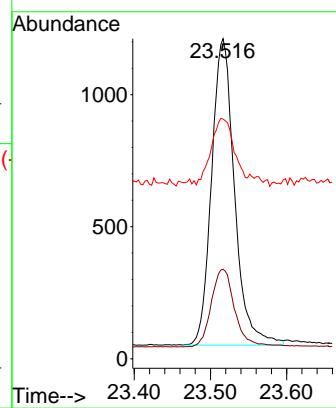




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

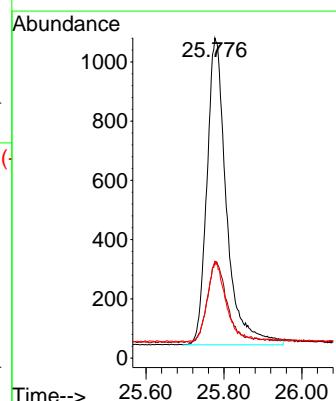
Instrument : BNA\_N  
ClientSampleId : PB169039BS

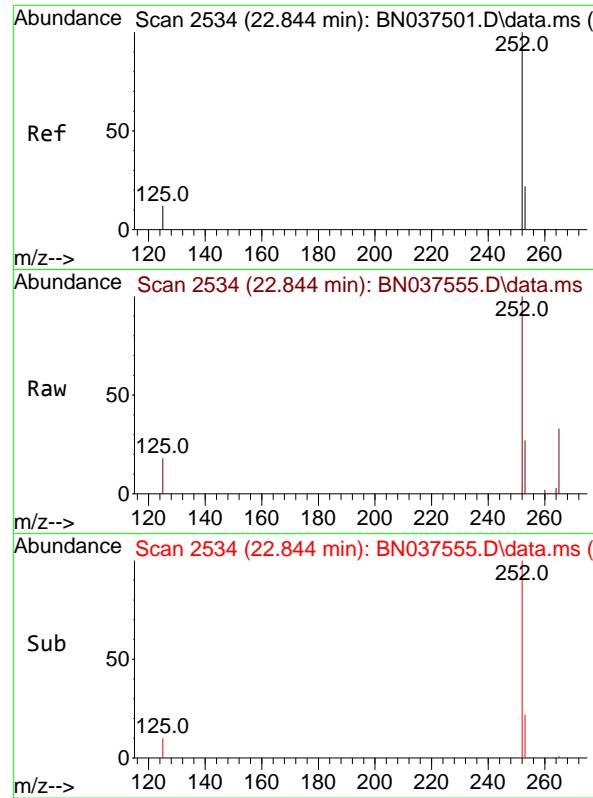
Tgt Ion:264 Resp: 2422  
Ion Ratio Lower Upper  
264 100  
260 28.0 21.2 31.8  
265 74.9 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.358 ng  
RT: 25.776 min Scan# 3537  
Delta R.T. -0.003 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

Tgt Ion:276 Resp: 3608  
Ion Ratio Lower Upper  
276 100  
138 26.0 24.0 36.0  
277 24.9 20.5 30.7

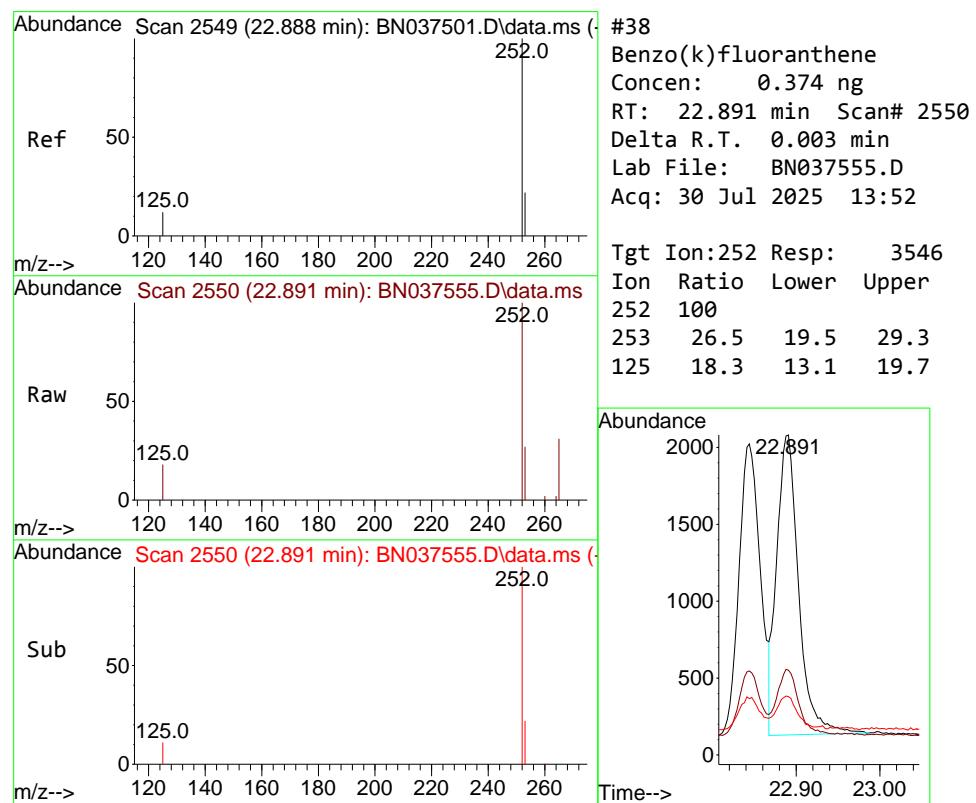
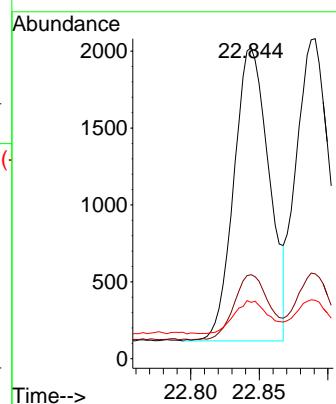




#37  
 Benzo(b)fluoranthene  
 Concen: 0.371 ng  
 RT: 22.844 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

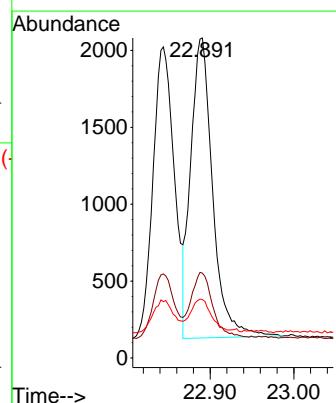
Instrument : BNA\_N  
 ClientSampleId : PB169039BS

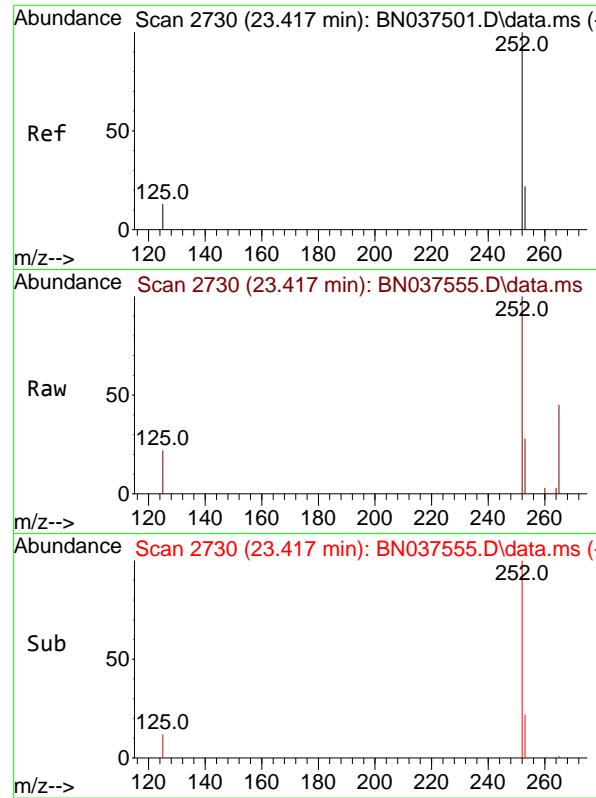
Tgt Ion:252 Resp: 3411  
 Ion Ratio Lower Upper  
 252 100  
 253 27.0 19.5 29.3  
 125 18.1 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.374 ng  
 RT: 22.891 min Scan# 2550  
 Delta R.T. 0.003 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

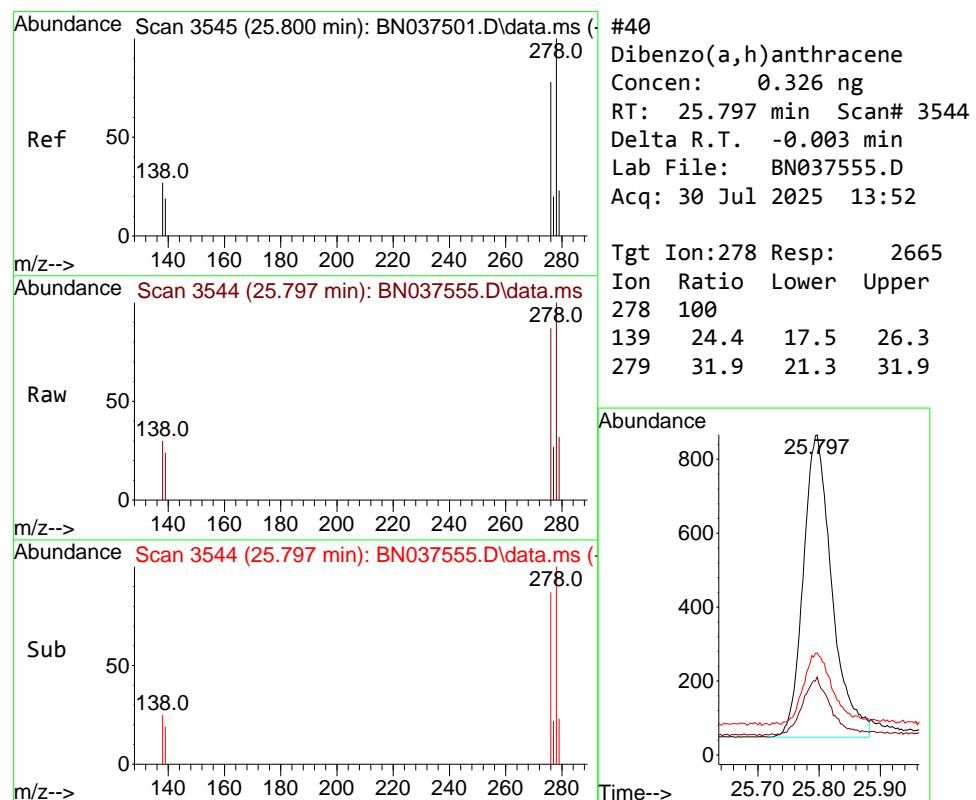
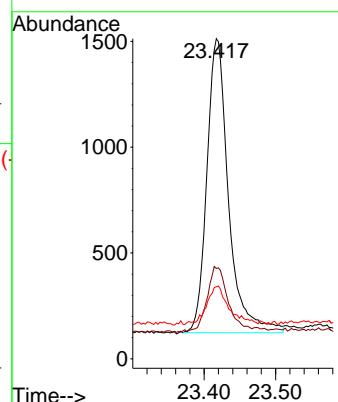
Tgt Ion:252 Resp: 3546  
 Ion Ratio Lower Upper  
 252 100  
 253 26.5 19.5 29.3  
 125 18.3 13.1 19.7





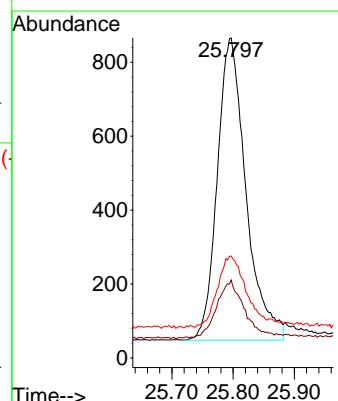
#39  
Benzo(a)pyrene  
Concen: 0.383 ng  
RT: 23.417 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52  
ClientSampleId : PB169039BS

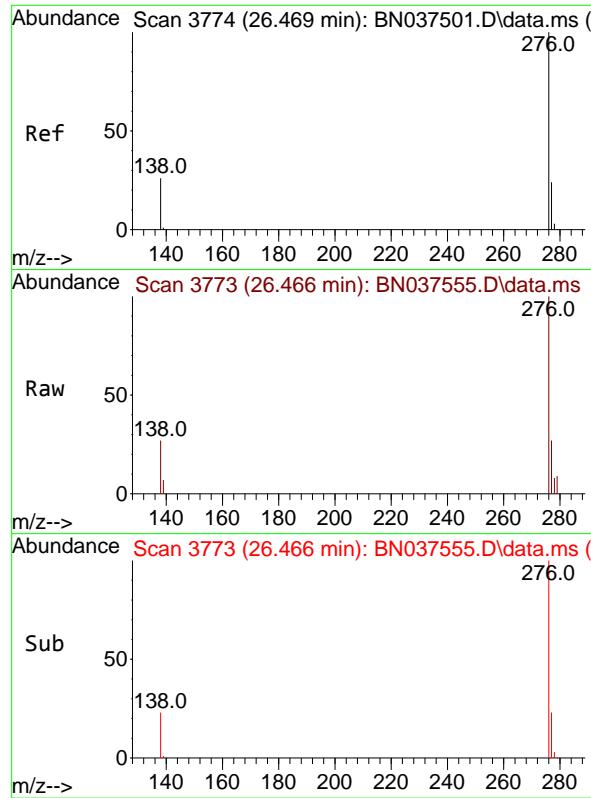
Tgt Ion:252 Resp: 2937  
Ion Ratio Lower Upper  
252 100  
253 28.2 19.9 29.9  
125 22.5 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.326 ng  
RT: 25.797 min Scan# 3544  
Delta R.T. -0.003 min  
Lab File: BN037555.D  
Acq: 30 Jul 2025 13:52

Tgt Ion:278 Resp: 2665  
Ion Ratio Lower Upper  
278 100  
139 24.4 17.5 26.3  
279 31.9 21.3 31.9

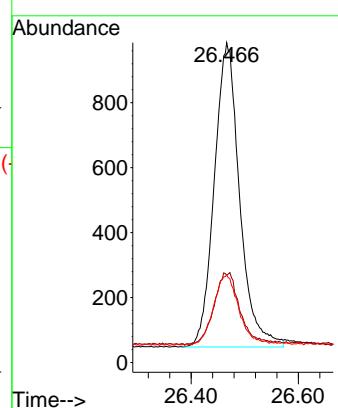




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.364 ng  
 RT: 26.466 min Scan# 3  
 Delta R.T. -0.003 min  
 Lab File: BN037555.D  
 Acq: 30 Jul 2025 13:52

Instrument : BNA\_N  
 ClientSampleId : PB169039BS

Tgt Ion:276 Resp: 3077  
 Ion Ratio Lower Upper  
 276 100  
 277 27.2 20.9 31.3  
 138 27.3 22.6 33.8





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

## Report of Analysis

|                    |                               |        |    |                 |                |
|--------------------|-------------------------------|--------|----|-----------------|----------------|
| Client:            | Tetra Tech NUS, Inc.          |        |    | Date Collected: |                |
| Project:           | NWIRP Bethpage 112G08005-WE13 |        |    | Date Received:  |                |
| Client Sample ID:  | PB169039BSD                   |        |    | SDG No.:        | Q2696          |
| Lab Sample ID:     | PB169039BSD                   |        |    | 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 |
|-------------------|-----------|----------------|----------------|---------------|
| BN037556.D        | 1         | 07/29/25 08:49 | 07/30/25 14:28 | PB169039      |

| CAS Number                | Parameter               | Conc. | Qualifier | MDL      | LOD  | LOQ / CRQL | Units    |
|---------------------------|-------------------------|-------|-----------|----------|------|------------|----------|
| <b>TARGETS</b>            |                         |       |           |          |      |            |          |
| 123-91-1                  | 1,4-Dioxane             | 0.30  |           | 0.070    | 0.20 | 0.20       | ug/L     |
| <b>SURROGATES</b>         |                         |       |           |          |      |            |          |
| 7297-45-2                 | 2-Methylnaphthalene-d10 | 0.33  |           | 30 - 150 |      | 83%        | SPK: 0.4 |
| 93951-69-0                | Fluoranthene-d10        | 0.31  |           | 30 - 150 |      | 77%        | SPK: 0.4 |
| 4165-60-0                 | Nitrobenzene-d5         | 0.34  |           | 55 - 111 |      | 86%        | SPK: 0.4 |
| 321-60-8                  | 2-Fluorobiphenyl        | 0.41  |           | 53 - 106 |      | 102%       | SPK: 0.4 |
| 1718-51-0                 | Terphenyl-d14           | 0.37  |           | 58 - 132 |      | 93%        | SPK: 0.4 |
| <b>INTERNAL STANDARDS</b> |                         |       |           |          |      |            |          |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4  | 1860  |           | 7.724    |      |            |          |
| 1146-65-2                 | Naphthalene-d8          | 4470  |           | 10.498   |      |            |          |
| 15067-26-2                | Acenaphthene-d10        | 2110  |           | 14.355   |      |            |          |
| 1517-22-2                 | Phenanthrene-d10        | 3780  |           | 17.086   |      |            |          |
| 1719-03-5                 | Chrysene-d12            | 2830  |           | 21.277   |      |            |          |
| 1520-96-3                 | Perylene-d12            | 2420  |           | 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\BN073025\  
 Data File : BN037556.D  
 Acq On : 30 Jul 2025 14:28  
 Operator : RC/JU  
 Sample : PB169039BSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BSD

Quant Time: Jul 30 15:06:35 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

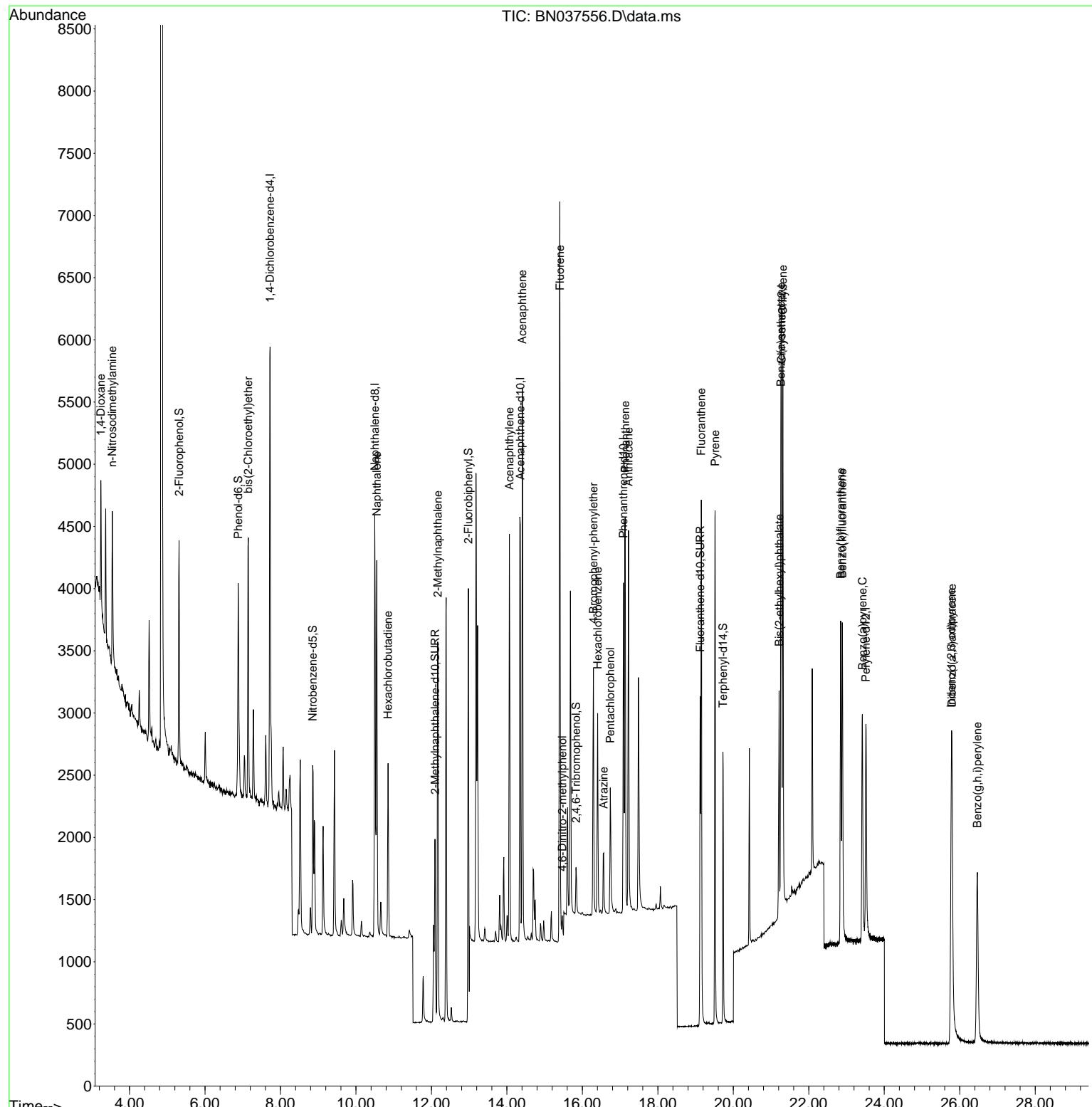
| Compound                           | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|------------------------------------|--------|------|----------|--------|-------|----------|
| <b>Internal Standards</b>          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4          | 7.724  | 152  | 1856     | 0.400  | ng    | 0.00     |
| 7) Naphthalene-d8                  | 10.498 | 136  | 4469     | 0.400  | ng    | #-0.01   |
| 13) Acenaphthene-d10               | 14.355 | 164  | 2108     | 0.400  | ng    | 0.00     |
| 19) Phenanthrene-d10               | 17.086 | 188  | 3782     | 0.400  | ng    | #-0.01   |
| 29) Chrysene-d12                   | 21.277 | 240  | 2830     | 0.400  | ng    | 0.00     |
| 35) Perylene-d12                   | 23.516 | 264  | 2422     | 0.400  | ng    | # 0.00   |
| <b>System Monitoring Compounds</b> |        |      |          |        |       |          |
| 4) 2-Fluorophenol                  | 5.312  | 112  | 1388     | 0.302  | ng    | 0.00     |
| 5) Phenol-d6                       | 6.879  | 99   | 1545     | 0.268  | ng    | 0.00     |
| 8) Nitrobenzene-d5                 | 8.854  | 82   | 1150     | 0.344  | ng    | -0.01    |
| 11) 2-Methylnaphthalene-d10        | 12.096 | 152  | 2118     | 0.330  | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol           | 15.833 | 330  | 235      | 0.227  | ng    | -0.01    |
| 15) 2-Fluorobiphenyl               | 12.978 | 172  | 4468     | 0.408  | ng    | 0.00     |
| 27) Fluoranthene-d10               | 19.122 | 212  | 3082     | 0.308  | ng    | 0.00     |
| 31) Terphenyl-d14                  | 19.726 | 244  | 2251     | 0.370  | ng    | 0.00     |
| <b>Target Compounds</b>            |        |      |          |        |       |          |
|                                    |        |      |          | Qvalue |       |          |
| 2) 1,4-Dioxane                     | 3.239  | 88   | 527      | 0.295  | ng    | # 73     |
| 3) n-Nitrosodimethylamine          | 3.543  | 42   | 855      | 0.381  | ng    | # 81     |
| 6) bis(2-Chloroethyl)ether         | 7.147  | 93   | 1583     | 0.330  | ng    | 98       |
| 9) Naphthalene                     | 10.552 | 128  | 3998     | 0.335  | ng    | 99       |
| 10) Hexachlorobutadiene            | 10.850 | 225  | 1113     | 0.423  | ng    | # 99     |
| 12) 2-Methylnaphthalene            | 12.167 | 142  | 2263     | 0.289  | ng    | 96       |
| 16) Acenaphthylene                 | 14.067 | 152  | 3562     | 0.377  | ng    | 99       |
| 17) Acenaphthene                   | 14.409 | 154  | 2159     | 0.336  | ng    | 95       |
| 18) Fluorene                       | 15.403 | 166  | 2741     | 0.332  | ng    | 99       |
| 20) 4,6-Dinitro-2-methylph...      | 15.467 | 198  | 151      | 0.385  | ng    | 94       |
| 21) 4-Bromophenyl-phenylether      | 16.292 | 248  | 816      | 0.337  | ng    | # 88     |
| 22) Hexachlorobenzene              | 16.404 | 284  | 1200     | 0.383  | ng    | 95       |
| 23) Atrazine                       | 16.565 | 200  | 527      | 0.312  | ng    | 93       |
| 24) Pentachlorophenol              | 16.739 | 266  | 570      | 0.406  | ng    | 99       |
| 25) Phenanthrene                   | 17.136 | 178  | 3927     | 0.347  | ng    | 99       |
| 26) Anthracene                     | 17.223 | 178  | 3415     | 0.330  | ng    | 99       |
| 28) Fluoranthene                   | 19.150 | 202  | 3929     | 0.301  | ng    | 98       |
| 30) Pyrene                         | 19.517 | 202  | 3878     | 0.340  | ng    | 100      |
| 32) Benzo(a)anthracene             | 21.259 | 228  | 3302     | 0.333  | ng    | 97       |
| 33) Chrysene                       | 21.313 | 228  | 3804     | 0.369  | ng    | 99       |
| 34) Bis(2-ethylhexyl)phtha...      | 21.214 | 149  | 1364     | 0.306  | ng    | # 99     |
| 36) Indeno(1,2,3-cd)pyrene         | 25.779 | 276  | 3550     | 0.352  | ng    | 95       |
| 37) Benzo(b)fluoranthene           | 22.844 | 252  | 3360     | 0.365  | ng    | 97       |
| 38) Benzo(k)fluoranthene           | 22.888 | 252  | 3552     | 0.374  | ng    | 94       |
| 39) Benzo(a)pyrene                 | 23.420 | 252  | 2889     | 0.377  | ng    | 93       |
| 40) Dibenzo(a,h)anthracene         | 25.794 | 278  | 2711     | 0.332  | ng    | # 93     |
| 41) Benzo(g,h,i)perylene           | 26.466 | 276  | 3061     | 0.362  | ng    | 97       |

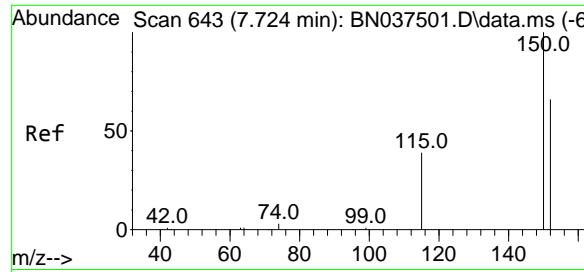
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN073025\  
 Data File : BN037556.D  
 Acq On : 30 Jul 2025 14:28  
 Operator : RC/JU  
 Sample : PB169039BSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BSD

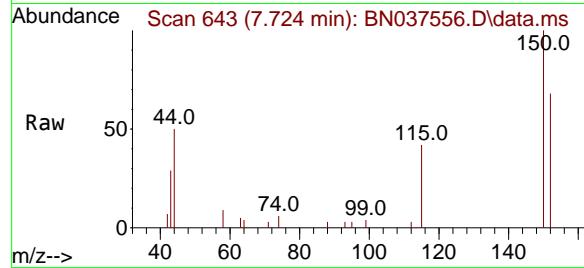
Quant Time: Jul 30 15:06:35 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration



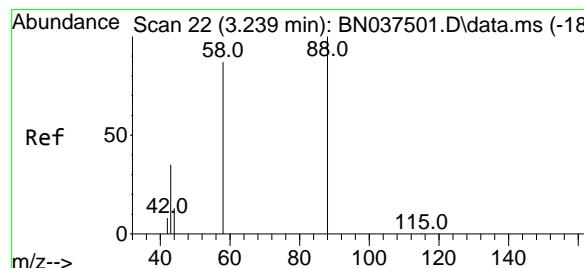
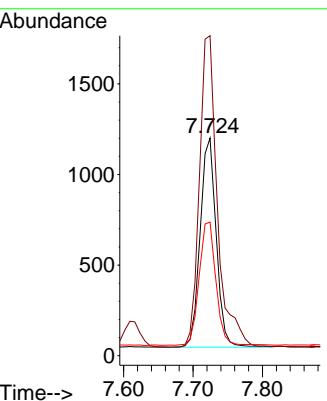
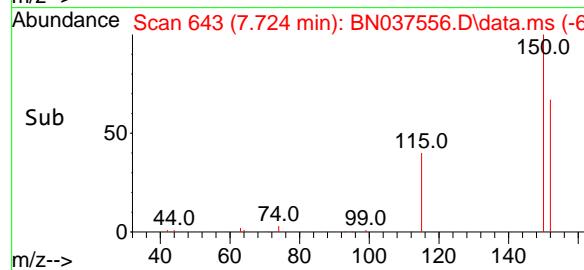


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

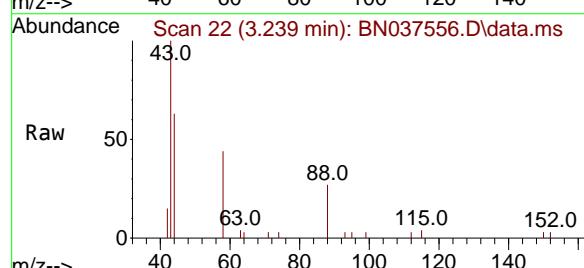
Instrument :  
BNA\_N  
ClientSampleId :  
PB169039BSD



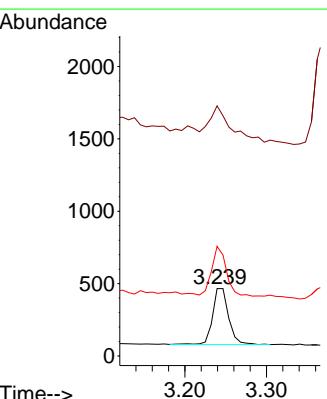
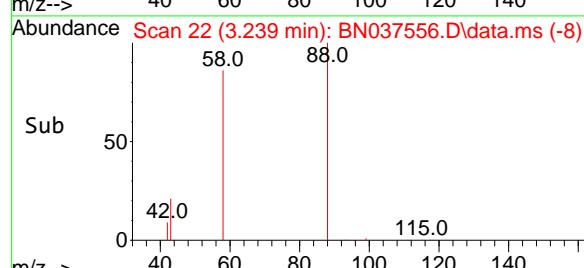
Tgt Ion:152 Resp: 1856  
Ion Ratio Lower Upper  
152 100  
150 147.0 119.8 179.8  
115 61.4 49.1 73.7

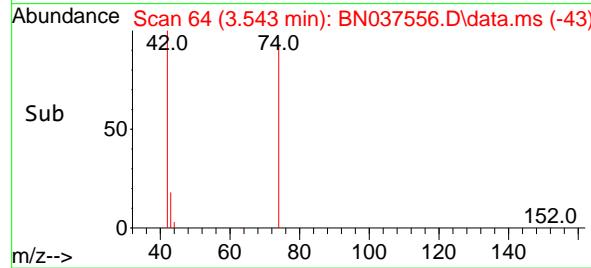
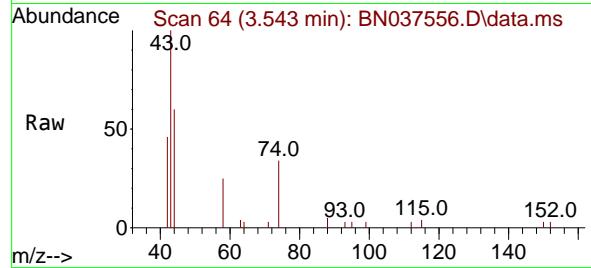
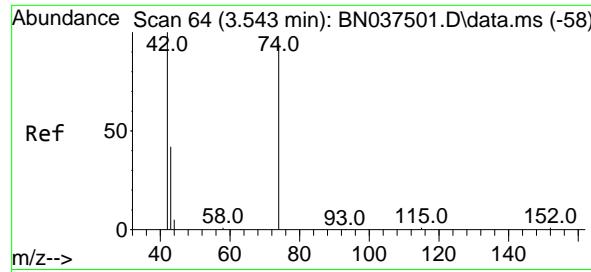


#2  
1,4-Dioxane  
Concen: 0.295 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28



Tgt Ion: 88 Resp: 527  
Ion Ratio Lower Upper  
88 100  
43 83.1 27.5 41.3#  
58 80.3 62.7 94.1





#3

n-Nitrosodimethylamine

Concen: 0.381 ng

RT: 3.543 min Scan# 6

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Instrument :

BNA\_N

ClientSampleId :

PB169039BSD

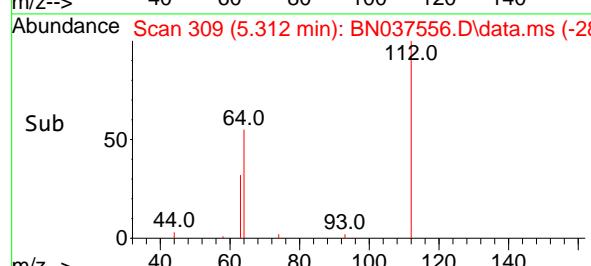
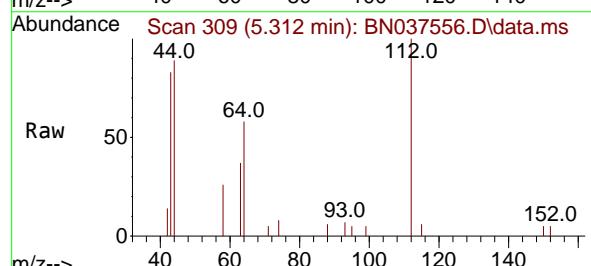
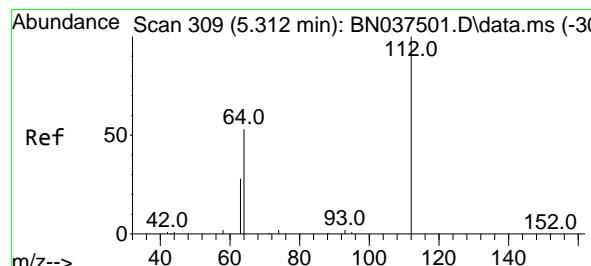
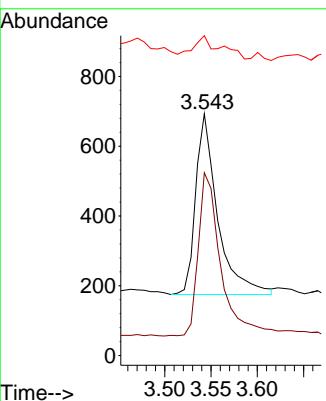
Tgt Ion: 42 Resp: 855

Ion Ratio Lower Upper

42 100

74 95.9 91.8 137.6

44 6.9 15.0 22.6#



#4

2-Fluorophenol

Concen: 0.302 ng

RT: 5.312 min Scan# 309

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

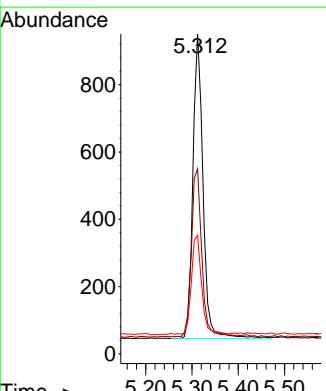
Tgt Ion: 112 Resp: 1388

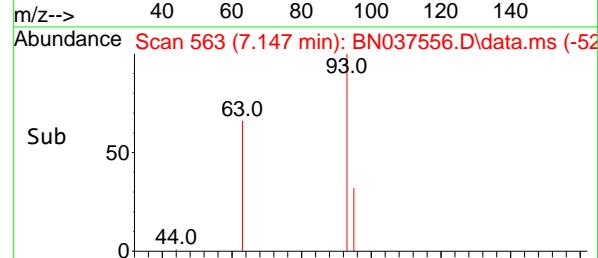
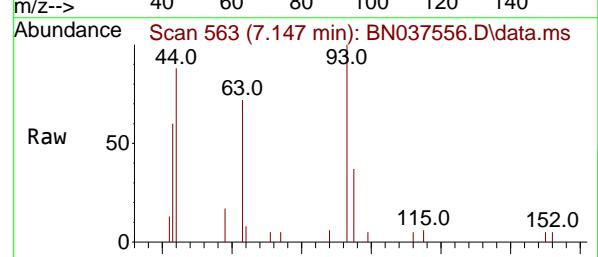
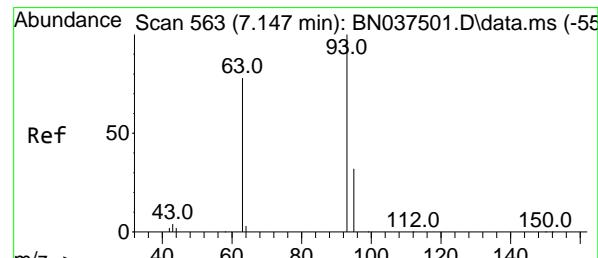
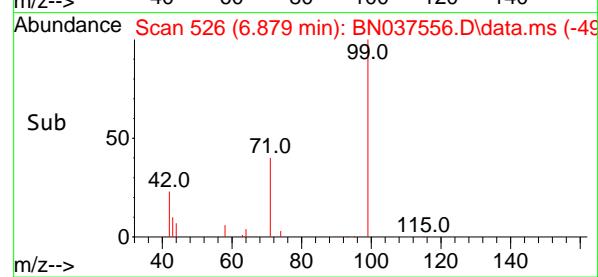
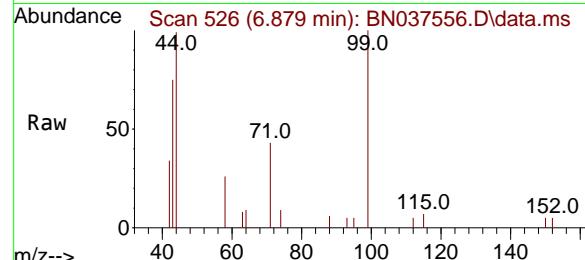
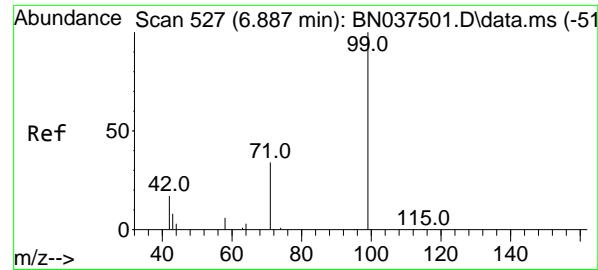
Ion Ratio Lower Upper

112 100

64 56.0 45.1 67.7

63 32.7 23.8 35.8





#5

Phenol-d6

Concen: 0.268 ng

RT: 6.879 min Scan# 5

Delta R.T. -0.007 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Instrument :

BNA\_N

ClientSampleId :

PB169039BSD

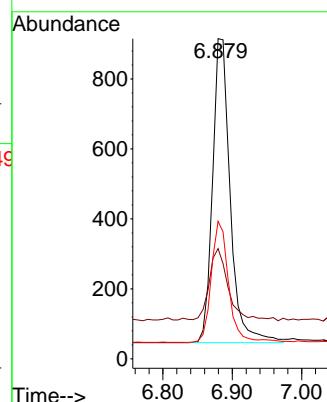
Tgt Ion: 99 Resp: 1545

Ion Ratio Lower Upper

99 100

42 25.6 17.1 25.7

71 39.2 27.8 41.8



#6

bis(2-Chloroethyl)ether

Concen: 0.330 ng

RT: 7.147 min Scan# 563

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

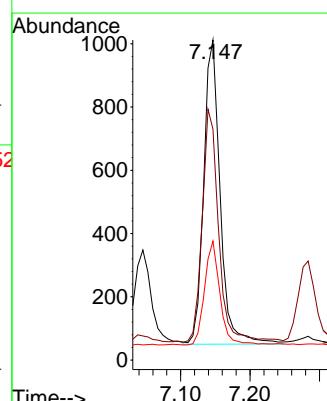
Tgt Ion: 93 Resp: 1583

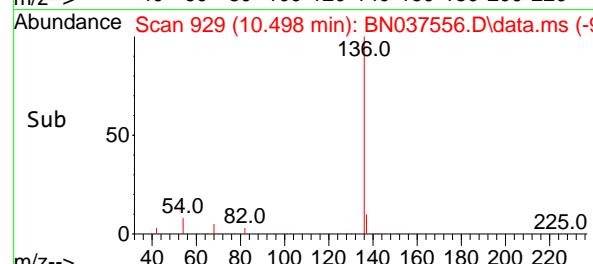
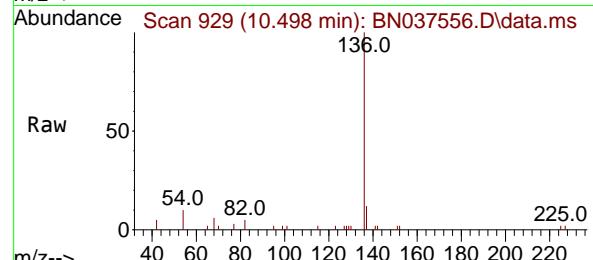
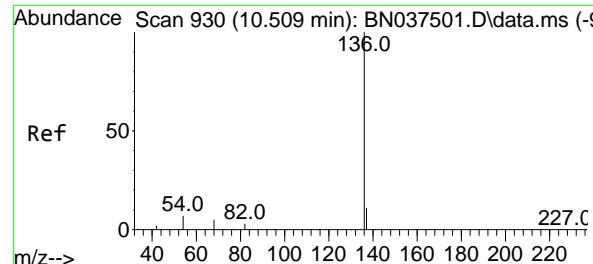
Ion Ratio Lower Upper

93 100

63 75.6 58.2 87.4

95 32.0 25.3 37.9



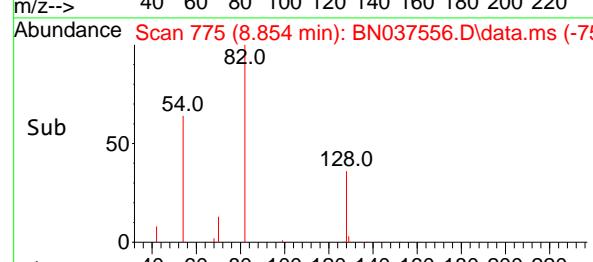
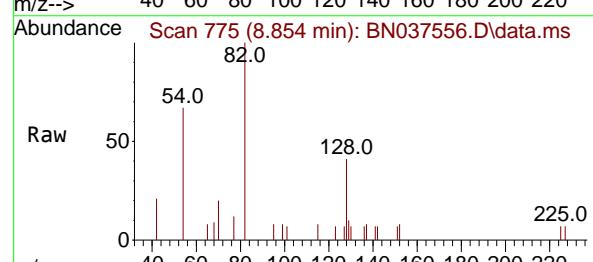
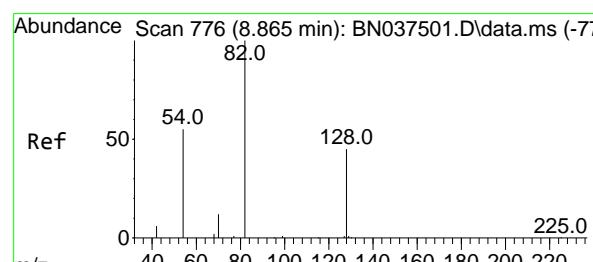
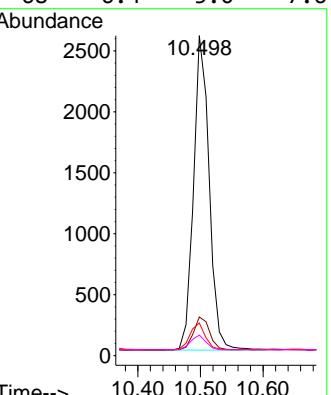


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BSD

Tgt Ion:136 Resp: 4469

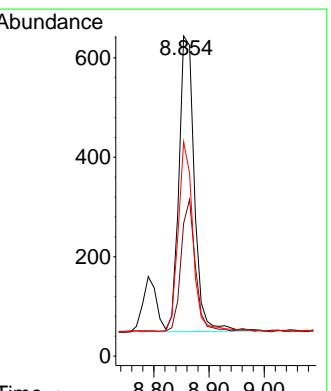
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 12.1  | 9.8   | 14.8  |
| 54  | 10.2  | 6.6   | 9.8#  |
| 68  | 6.4   | 5.0   | 7.6   |

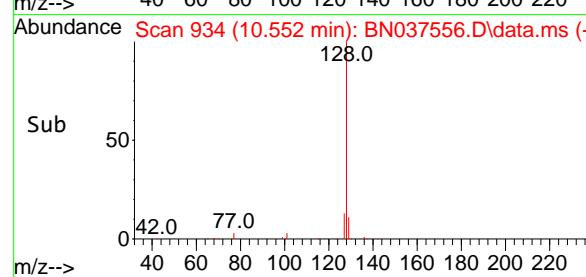
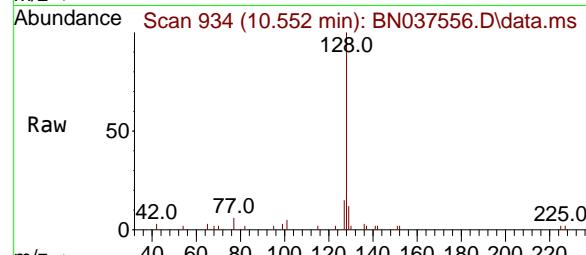
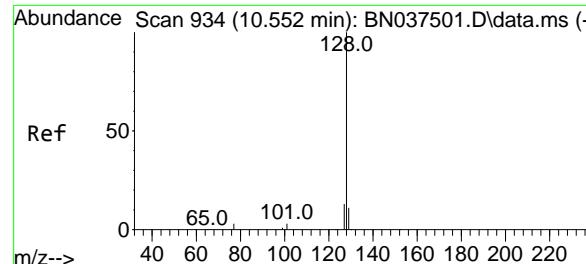


#8  
 Nitrobenzene-d5  
 Concen: 0.344 ng  
 RT: 8.854 min Scan# 775  
 Delta R.T. -0.011 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

Tgt Ion: 82 Resp: 1150

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 41.5  | 37.5  | 56.3  |
| 54  | 66.9  | 45.3  | 67.9  |





#9

Naphthalene

Concen: 0.335 ng

RT: 10.552 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Instrument :

BNA\_N

ClientSampleId :

PB169039BSD

Tgt Ion:128 Resp: 3998

Ion Ratio Lower Upper

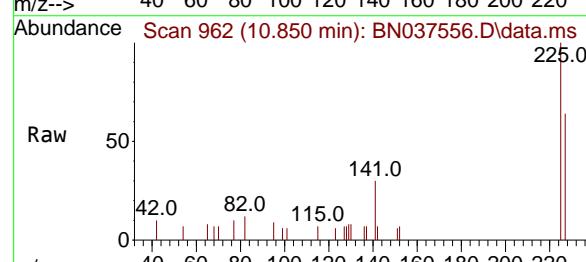
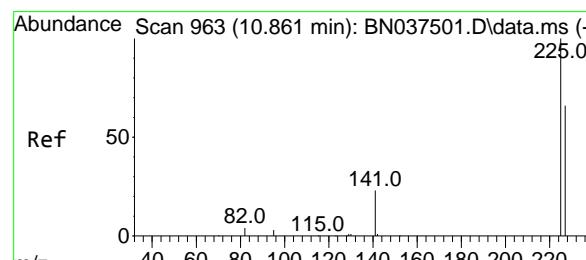
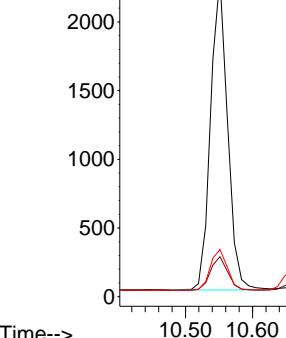
128 100

129 12.5 9.7 14.5

127 14.8 11.5 17.3

Abundance

10.552



#10

Hexachlorobutadiene

Concen: 0.423 ng

RT: 10.850 min Scan# 962

Delta R.T. -0.011 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Tgt Ion:225 Resp: 1113

Ion Ratio Lower Upper

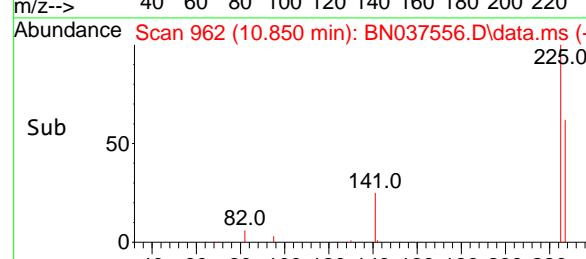
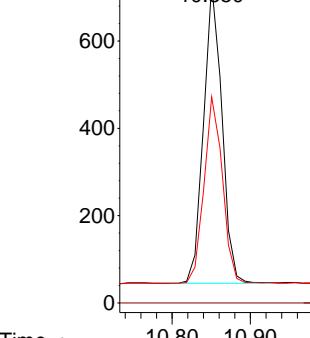
225 100

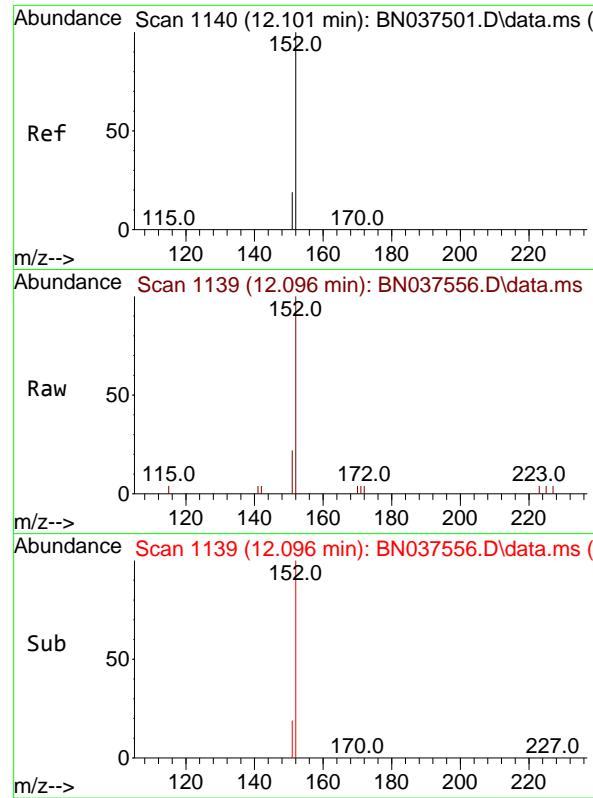
223 0.0 0.0 0.0

227 62.7 51.0 76.4

Abundance

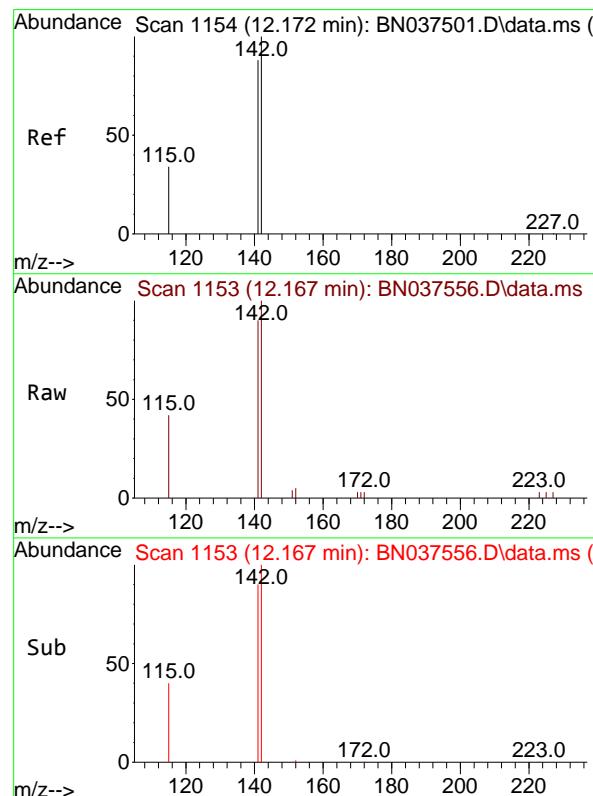
10.850





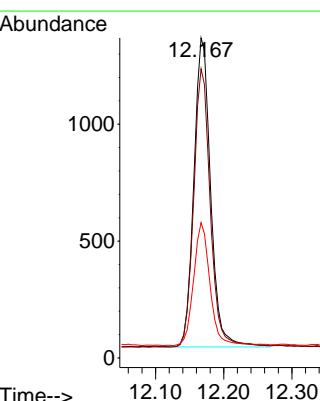
#11  
2-Methylnaphthalene-d10  
Concen: 0.330 ng  
RT: 12.096 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

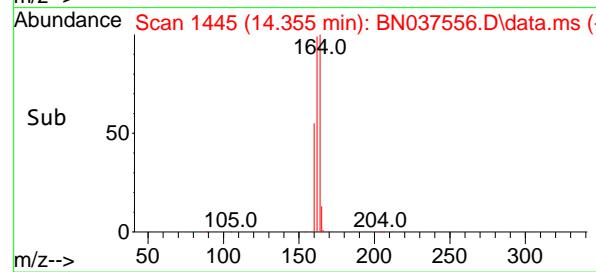
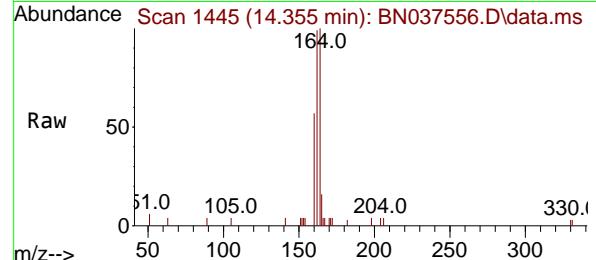
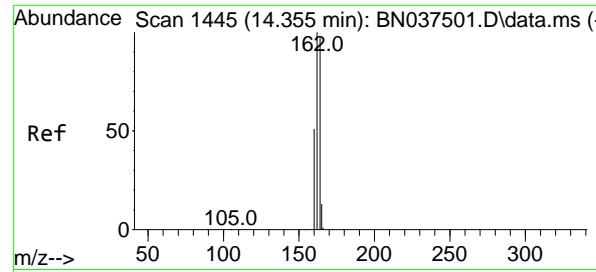
Instrument : BNA\_N  
ClientSampleId : PB169039BSD



#12  
2-Methylnaphthalene  
Concen: 0.289 ng  
RT: 12.167 min Scan# 1153  
Delta R.T. -0.005 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Tgt Ion:142 Resp: 2263  
Ion Ratio Lower Upper  
142 100  
141 90.4 71.0 106.4  
115 42.3 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Instrument :

BNA\_N

ClientSampleId :

PB169039BSD

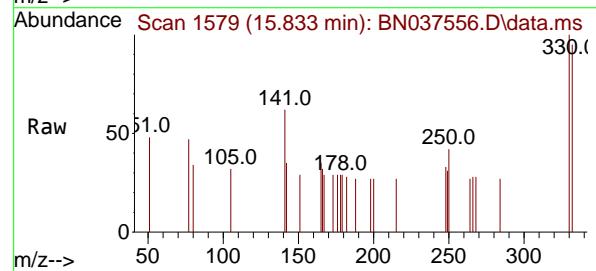
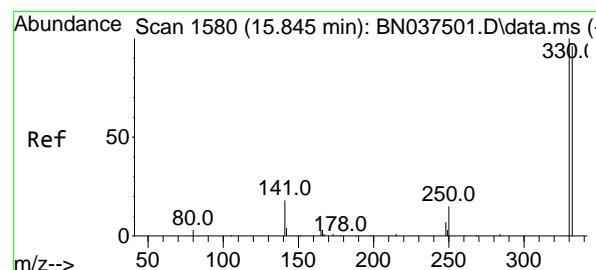
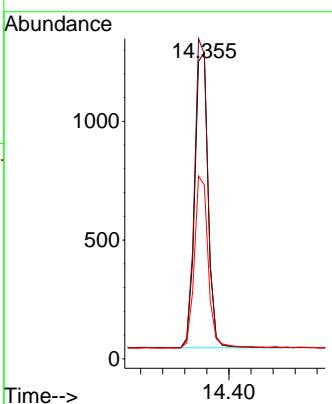
Tgt Ion:164 Resp: 2108

Ion Ratio Lower Upper

164 100

162 99.5 82.0 123.0

160 56.7 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.227 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.012 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

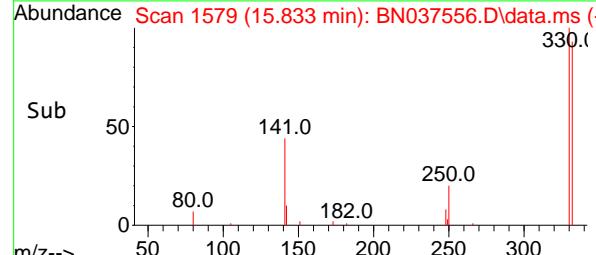
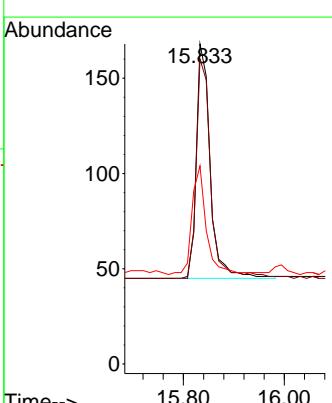
Tgt Ion:330 Resp: 235

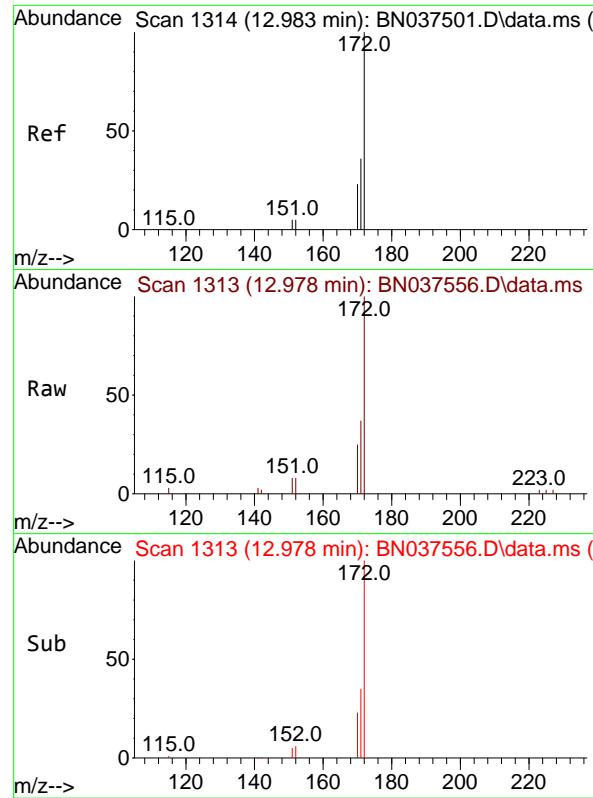
Ion Ratio Lower Upper

330 100

332 97.4 76.1 114.1

141 47.7 33.4 50.0

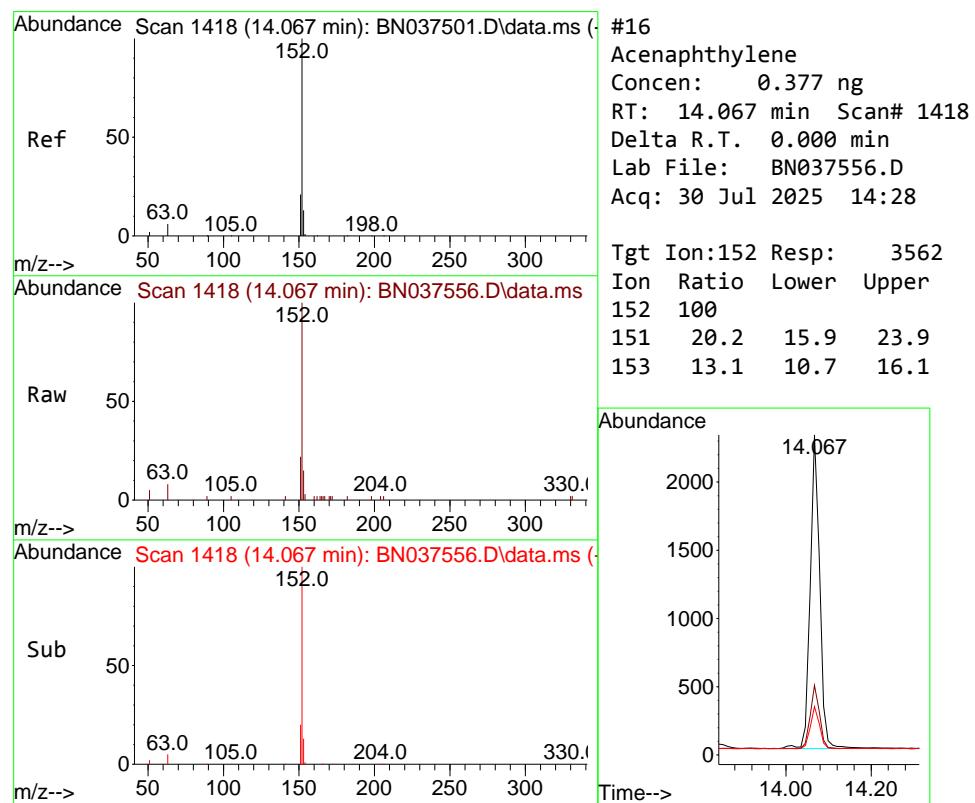
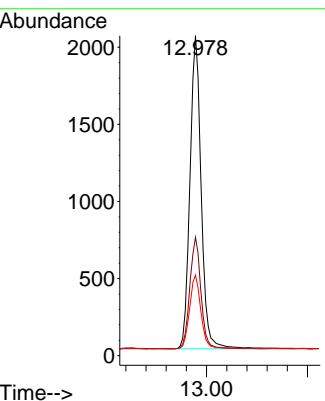




#15  
2-Fluorobiphenyl  
Concen: 0.408 ng  
RT: 12.978 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

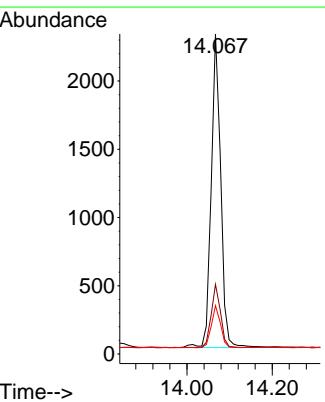
Instrument : BNA\_N  
ClientSampleId : PB169039BSD

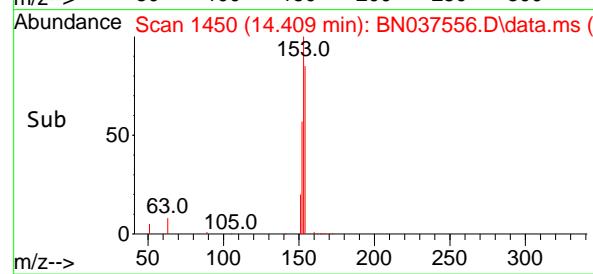
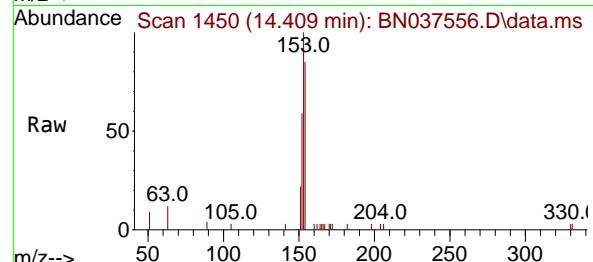
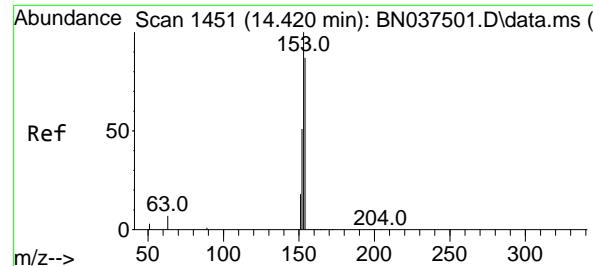
Tgt Ion:172 Resp: 4468  
Ion Ratio Lower Upper  
172 100  
171 37.0 29.4 44.2  
170 25.2 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.377 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Tgt Ion:152 Resp: 3562  
Ion Ratio Lower Upper  
152 100  
151 20.2 15.9 23.9  
153 13.1 10.7 16.1





#17

Acenaphthene

Concen: 0.336 ng

RT: 14.409 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Instrument :

BNA\_N

ClientSampleId :

PB169039BSD

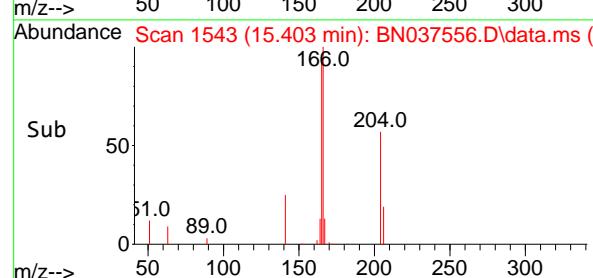
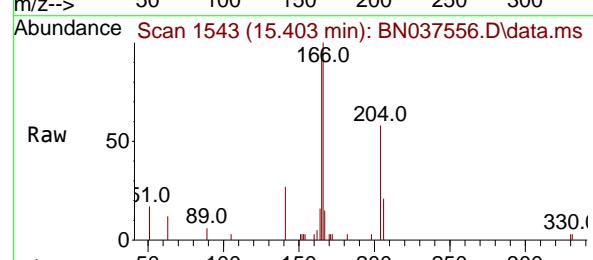
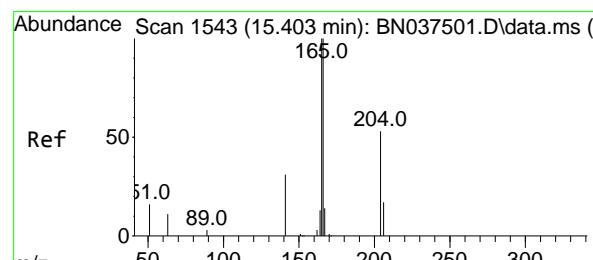
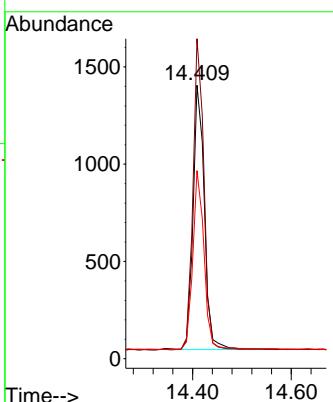
Tgt Ion:154 Resp: 2159

Ion Ratio Lower Upper

154 100

153 113.6 89.2 133.8

152 67.7 48.0 72.0



#18

Fluorene

Concen: 0.332 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

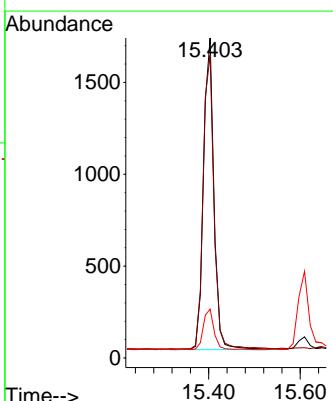
Tgt Ion:166 Resp: 2741

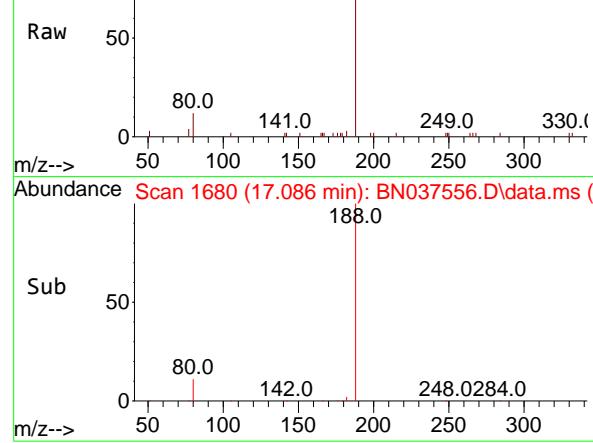
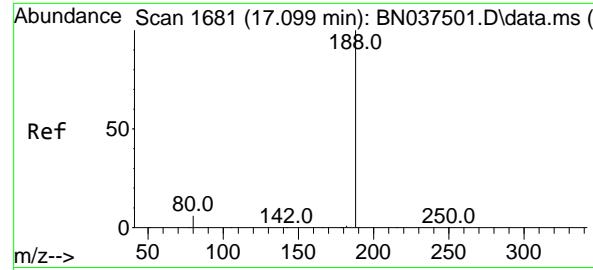
Ion Ratio Lower Upper

166 100

165 98.1 78.1 117.1

167 12.8 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Instrument :

BNA\_N

ClientSampleId :

PB169039BSD

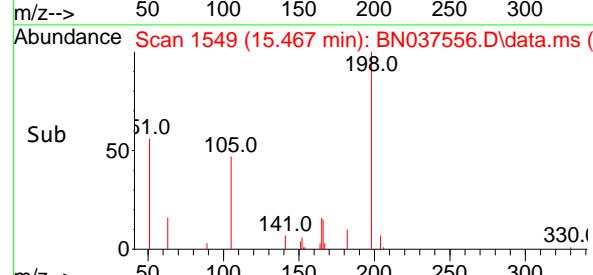
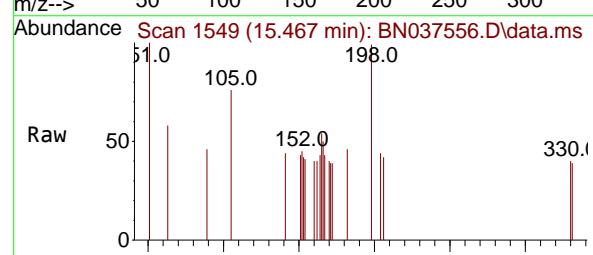
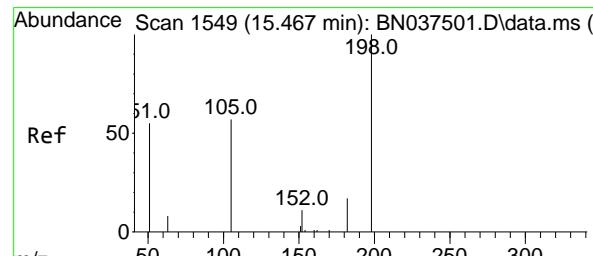
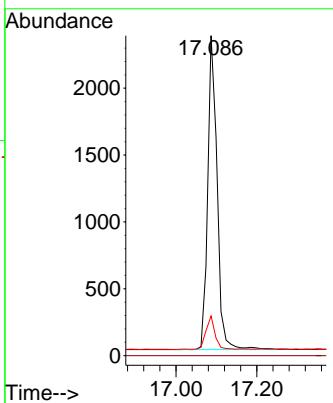
Tgt Ion:188 Resp: 3782

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.4 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.385 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

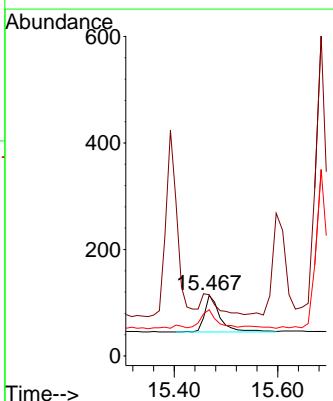
Tgt Ion:198 Resp: 151

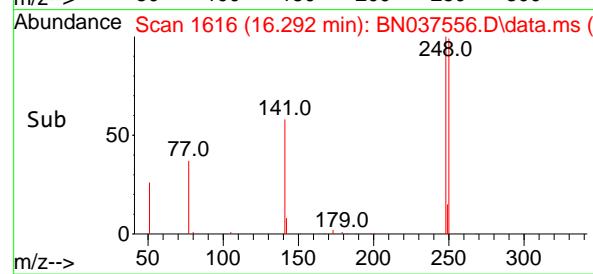
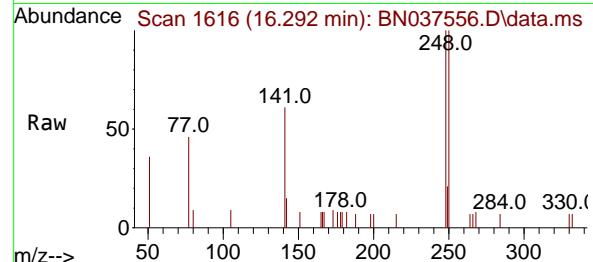
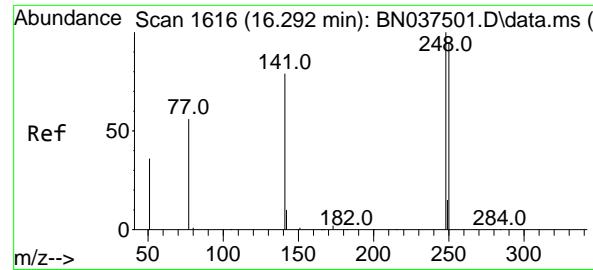
Ion Ratio Lower Upper

198 100

51 100.9 88.5 132.7

105 76.3 61.2 91.8

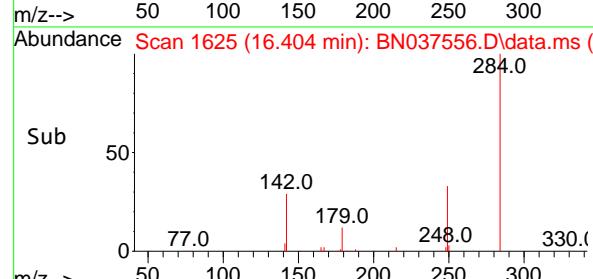
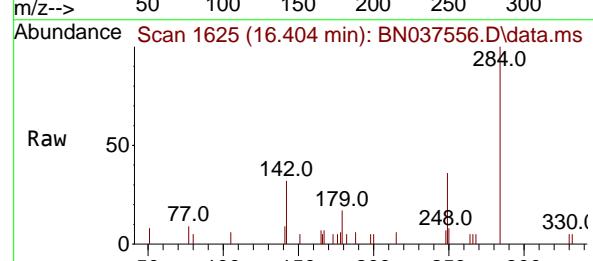
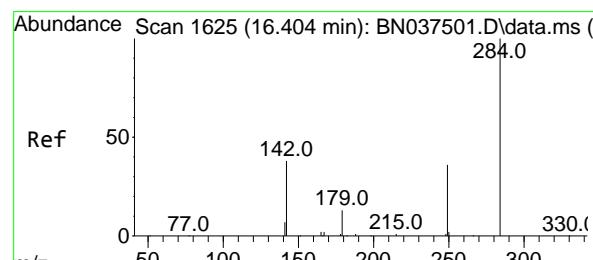
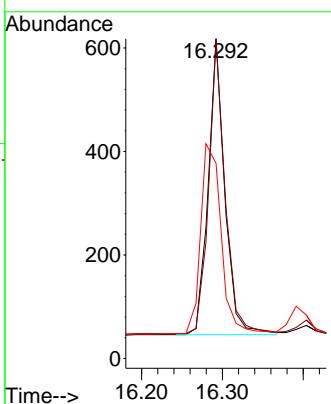




#21  
4-Bromophenyl-phenylether  
Concen: 0.337 ng  
RT: 16.292 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

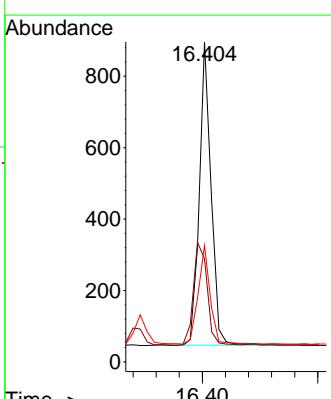
Instrument : BNA\_N  
ClientSampleId : PB169039BSD

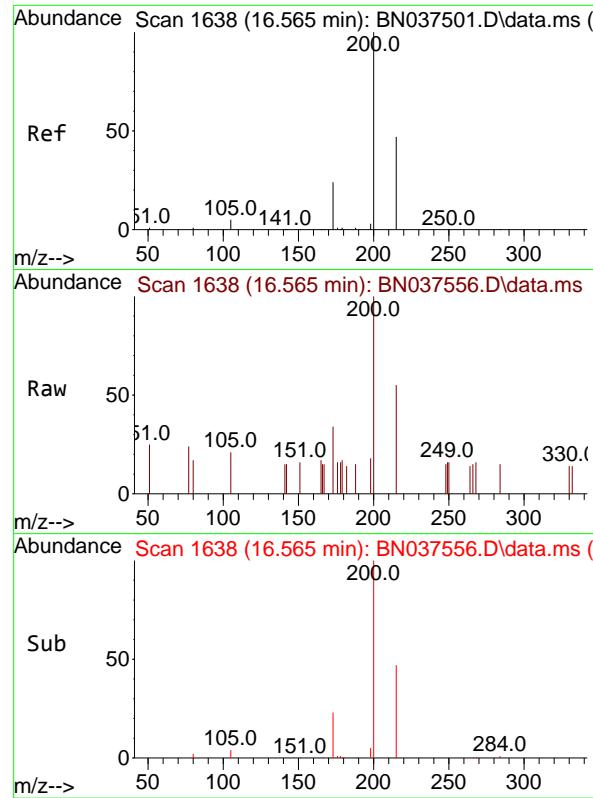
Tgt Ion:248 Resp: 816  
Ion Ratio Lower Upper  
248 100  
250 99.8 76.2 114.2  
141 61.0 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.383 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Tgt Ion:284 Resp: 1200  
Ion Ratio Lower Upper  
284 100  
142 40.3 28.9 43.3  
249 33.4 25.8 38.6

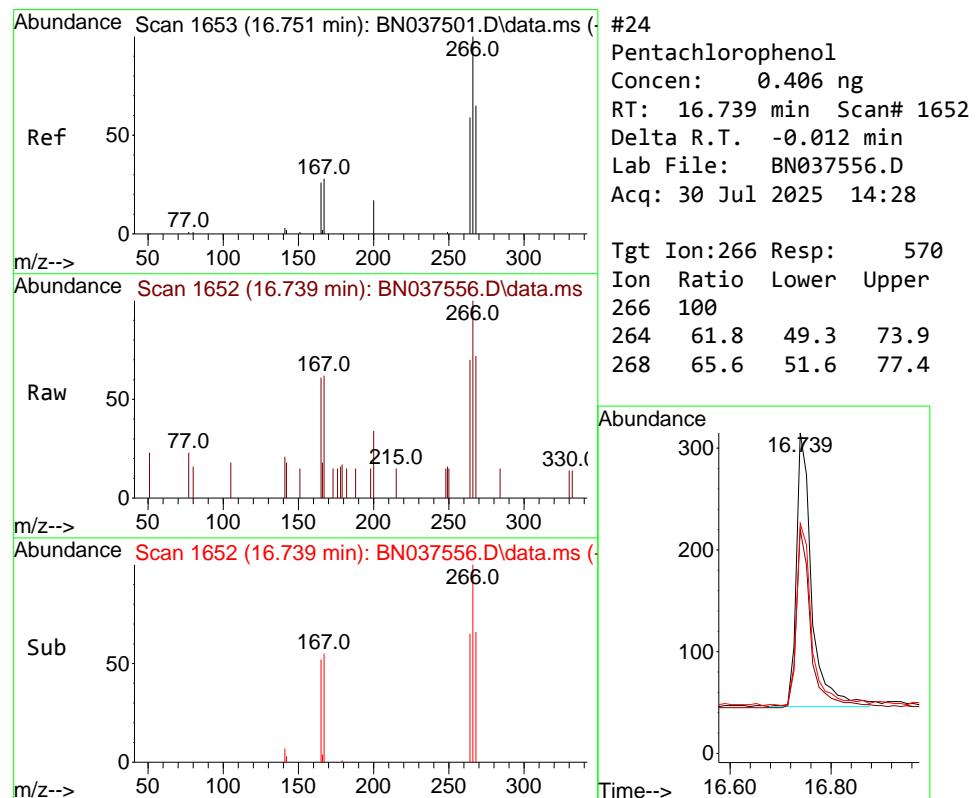
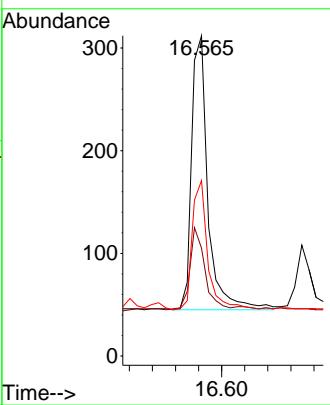




#23  
 Atrazine  
 Concen: 0.312 ng  
 RT: 16.565 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

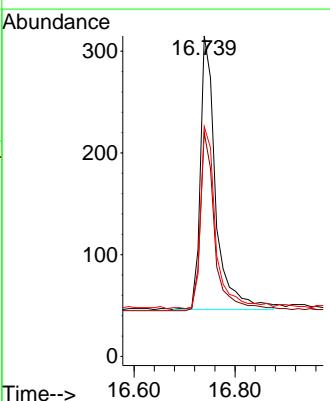
Instrument : BNA\_N  
 ClientSampleId : PB169039BSD

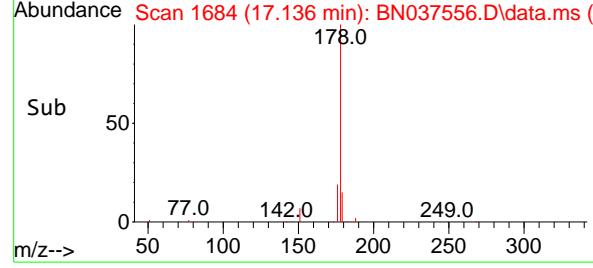
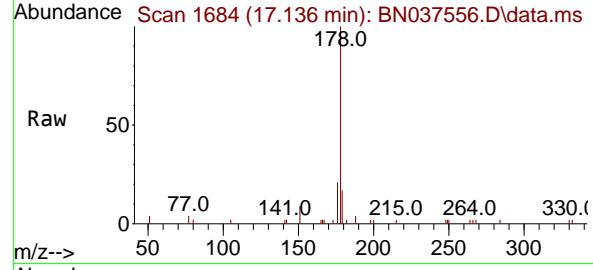
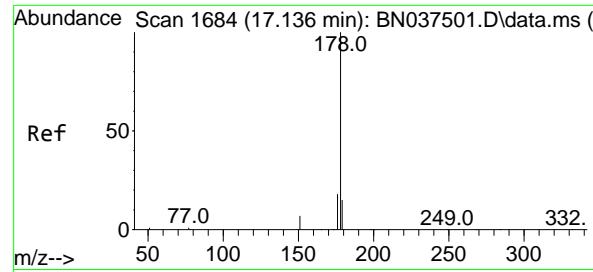
Tgt Ion:200 Resp: 527  
 Ion Ratio Lower Upper  
 200 100  
 173 33.7 23.2 34.8  
 215 54.8 40.2 60.4



#24  
 Pentachlorophenol  
 Concen: 0.406 ng  
 RT: 16.739 min Scan# 1652  
 Delta R.T. -0.012 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

Tgt Ion:266 Resp: 570  
 Ion Ratio Lower Upper  
 266 100  
 264 61.8 49.3 73.9  
 268 65.6 51.6 77.4





#25

Phenanthrene

Concen: 0.347 ng

RT: 17.136 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

Instrument:

BNA\_N

ClientSampleId :

PB169039BSD

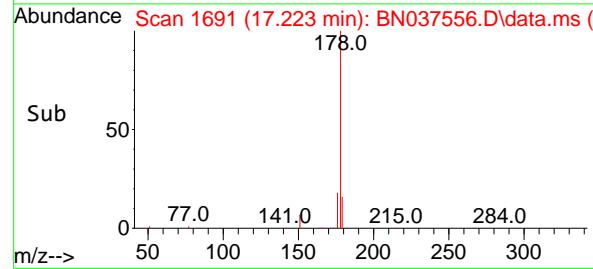
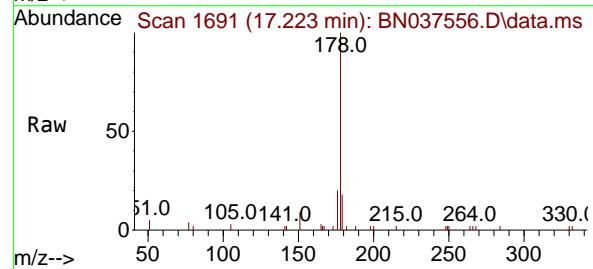
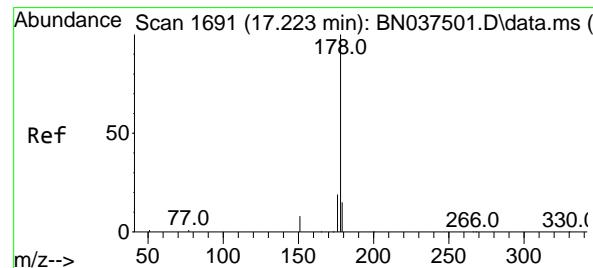
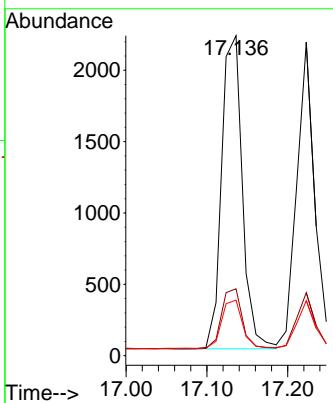
Tgt Ion:178 Resp: 3927

Ion Ratio Lower Upper

178 100

176 19.4 15.0 22.6

179 15.8 12.2 18.2



#26

Anthracene

Concen: 0.330 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037556.D

Acq: 30 Jul 2025 14:28

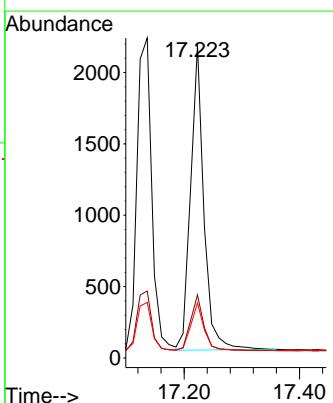
Tgt Ion:178 Resp: 3415

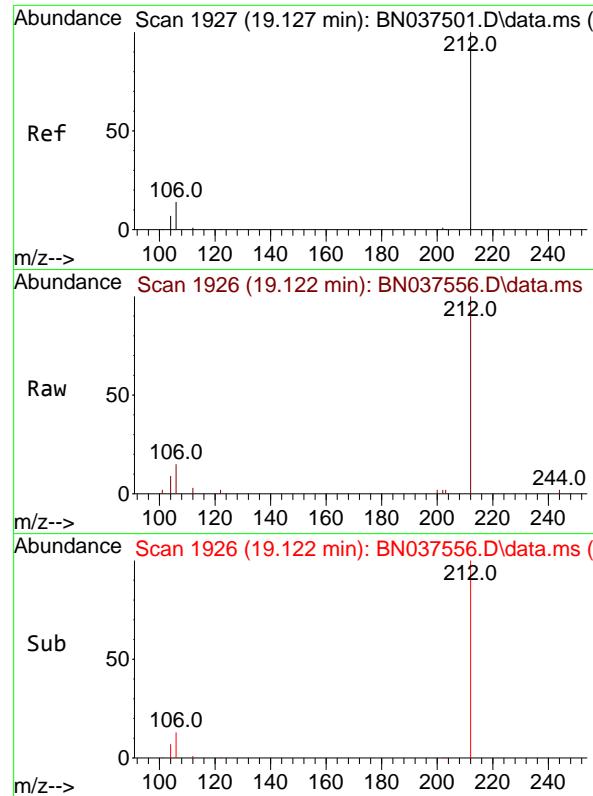
Ion Ratio Lower Upper

178 100

176 18.6 14.7 22.1

179 16.2 12.3 18.5

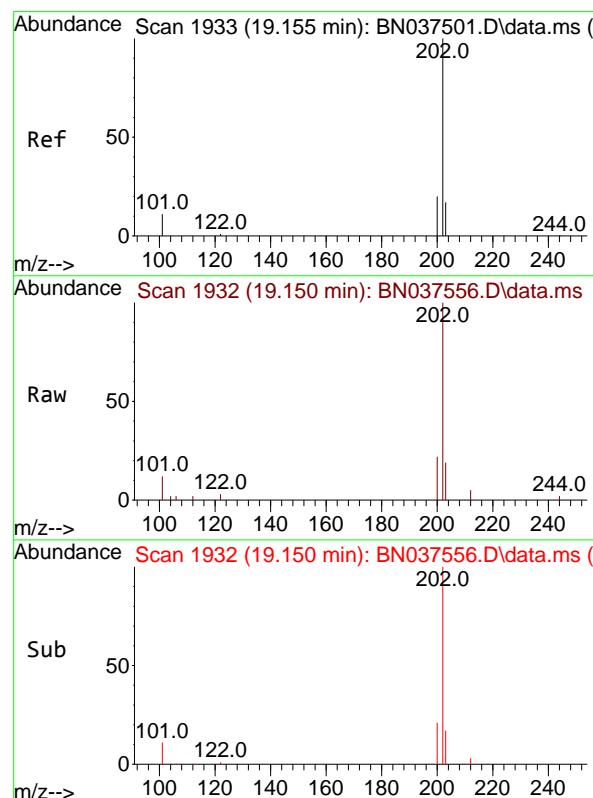
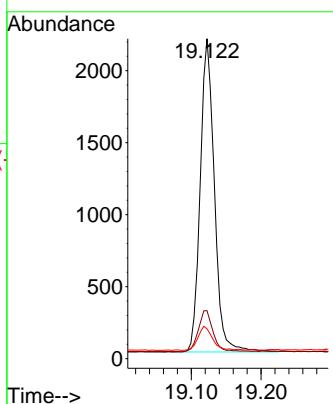




#27  
 Fluoranthene-d10  
 Concen: 0.308 ng  
 RT: 19.122 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

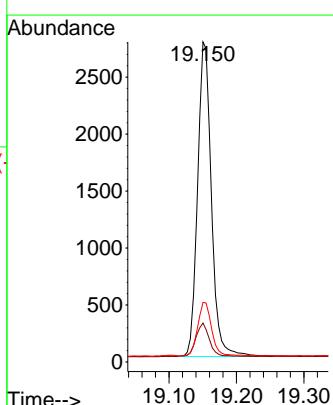
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BSD

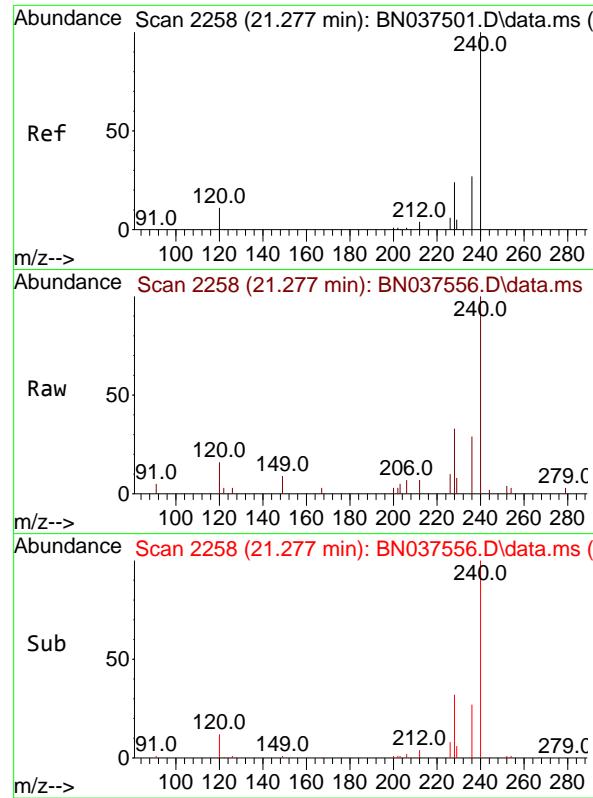
Tgt Ion:212 Resp: 3082  
 Ion Ratio Lower Upper  
 212 100  
 106 13.6 12.2 18.4  
 104 7.8 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.301 ng  
 RT: 19.150 min Scan# 1932  
 Delta R.T. -0.005 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

Tgt Ion:202 Resp: 3929  
 Ion Ratio Lower Upper  
 202 100  
 101 10.5 9.8 14.6  
 203 16.9 13.6 20.4

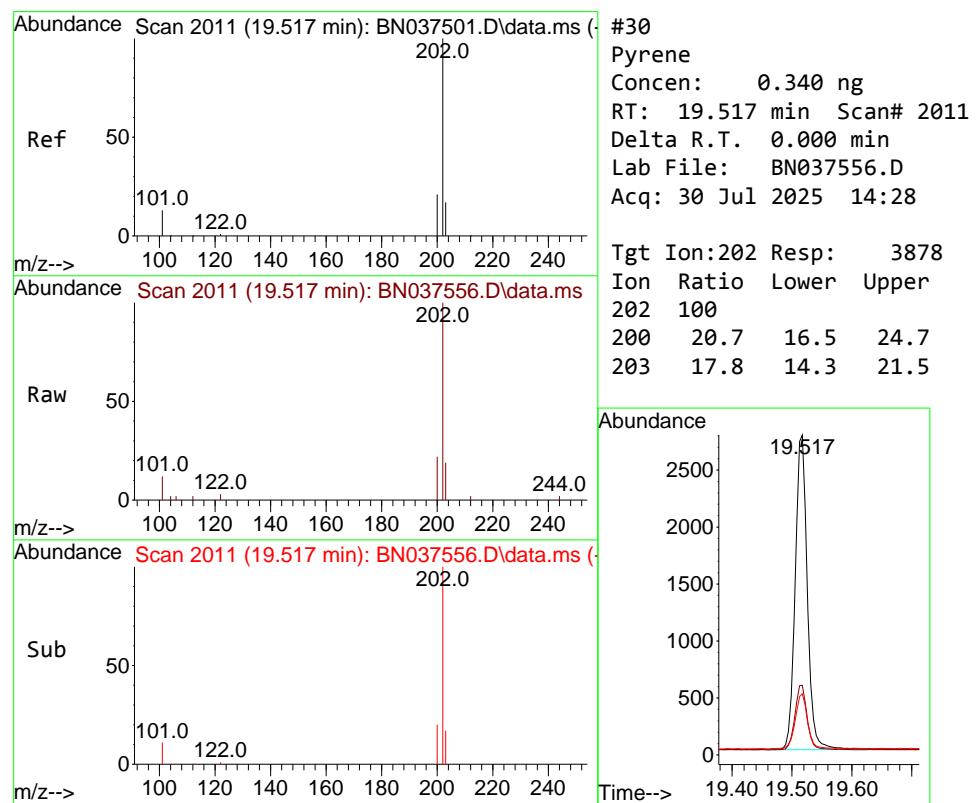
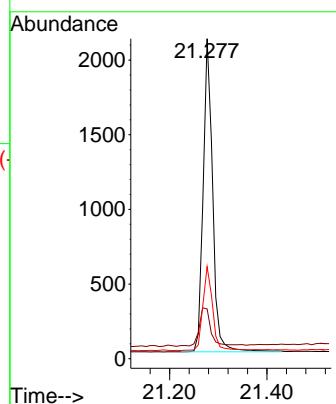




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

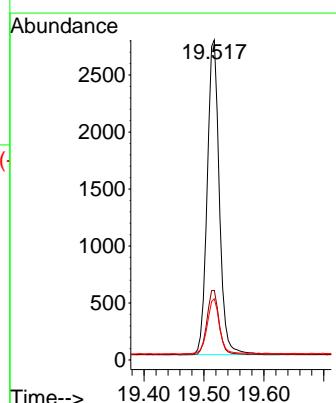
Instrument : BNA\_N  
ClientSampleId : PB169039BSD

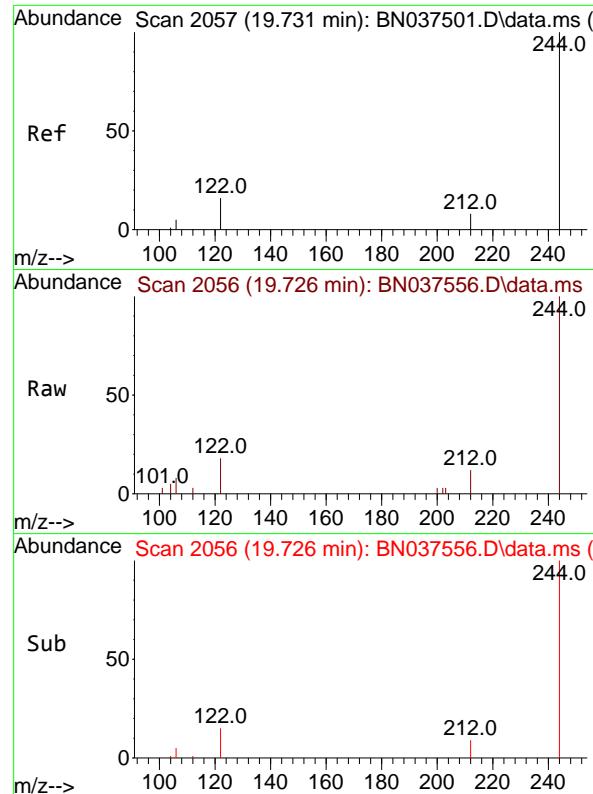
Tgt Ion:240 Resp: 2830  
Ion Ratio Lower Upper  
240 100  
120 15.5 10.7 16.1  
236 28.7 22.6 33.8



#30  
Pyrene  
Concen: 0.340 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Tgt Ion:202 Resp: 3878  
Ion Ratio Lower Upper  
202 100  
200 20.7 16.5 24.7  
203 17.8 14.3 21.5

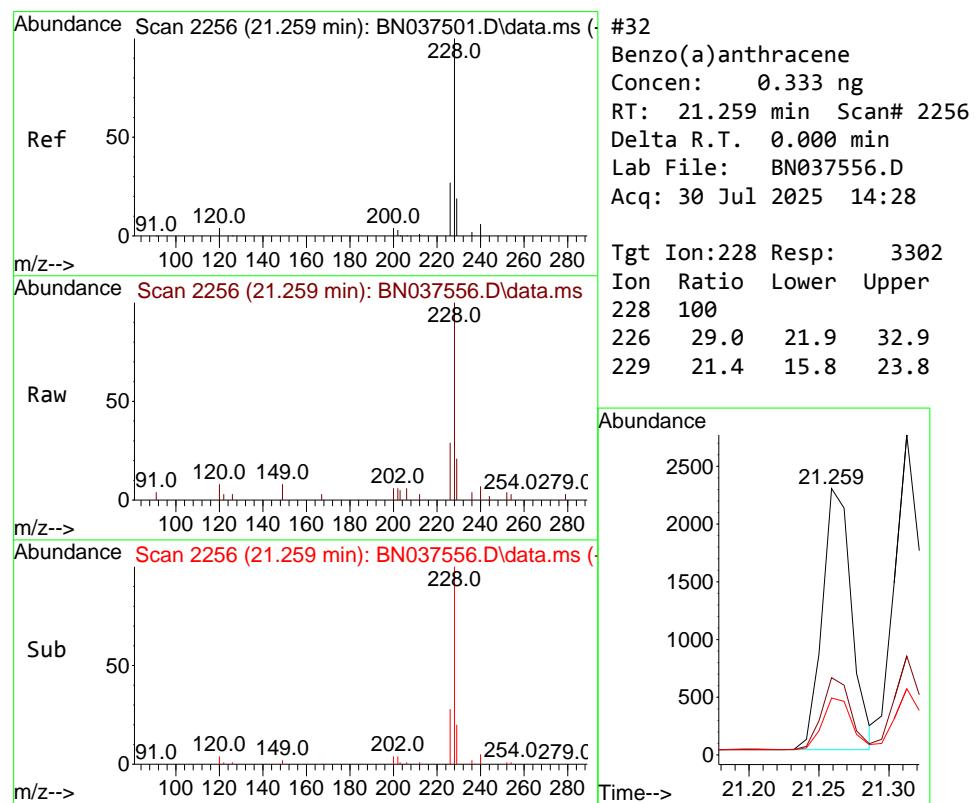
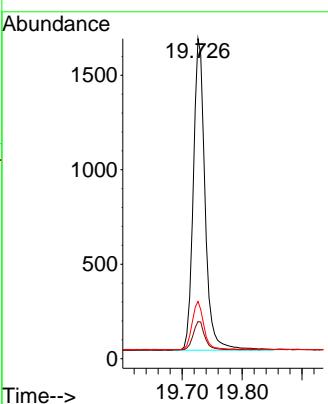




#31  
 Terphenyl-d14  
 Concen: 0.370 ng  
 RT: 19.726 min Scan# 2  
 Delta R.T. -0.005 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

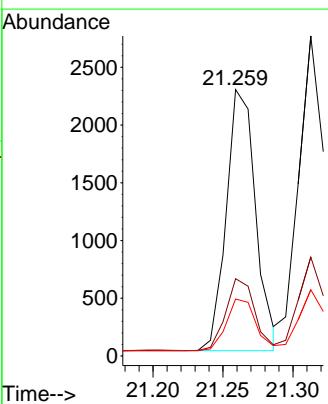
Instrument : BNA\_N  
 ClientSampleId : PB169039BSD

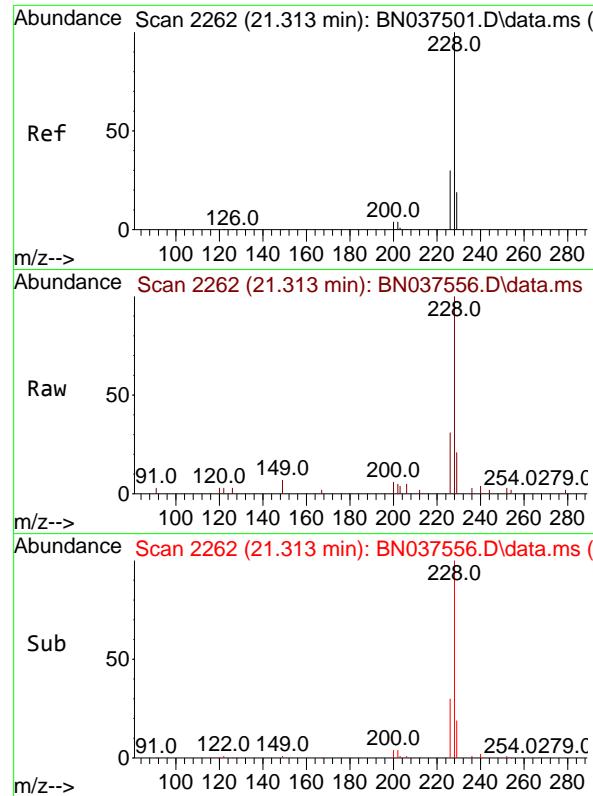
Tgt Ion:244 Resp: 2251  
 Ion Ratio Lower Upper  
 244 100  
 212 11.6 7.4 11.2#  
 122 17.9 13.6 20.4



#32  
 Benzo(a)anthracene  
 Concen: 0.333 ng  
 RT: 21.259 min Scan# 2256  
 Delta R.T. 0.000 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

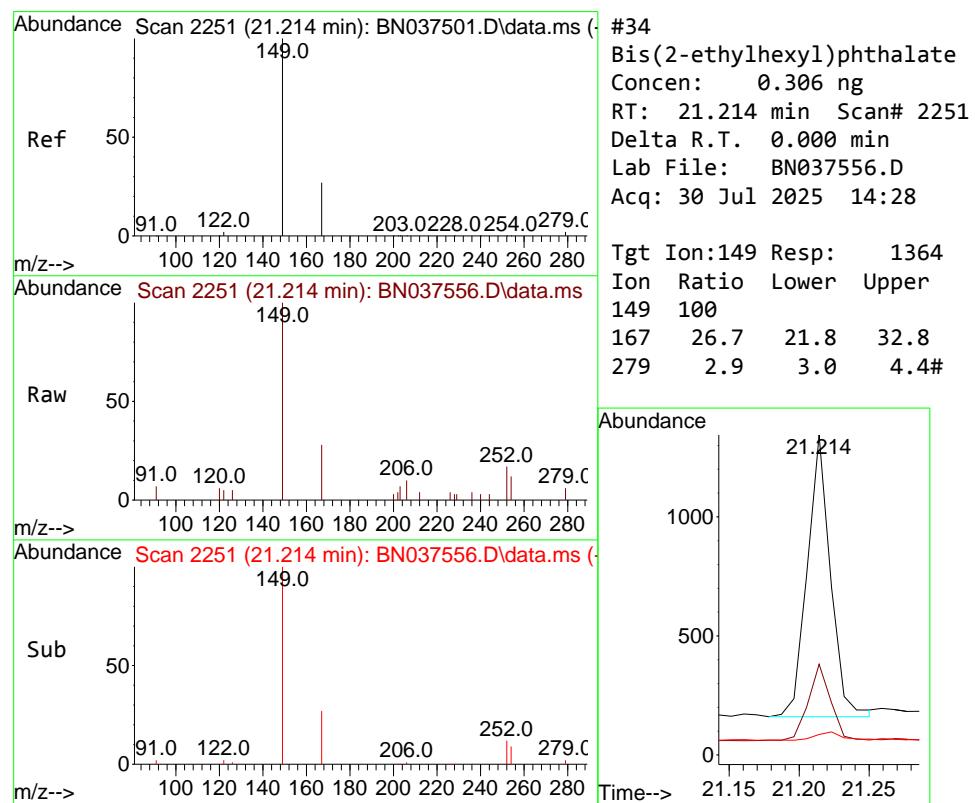
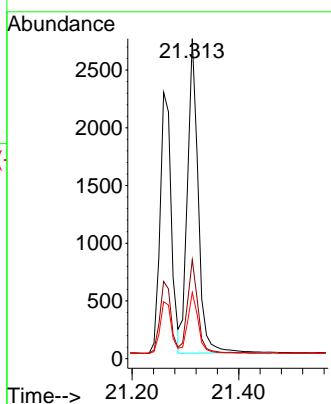
Tgt Ion:228 Resp: 3302  
 Ion Ratio Lower Upper  
 228 100  
 226 29.0 21.9 32.9  
 229 21.4 15.8 23.8





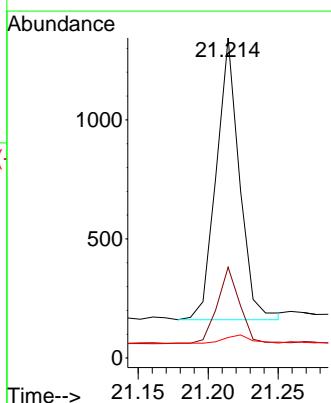
#33  
Chrysene  
Concen: 0.369 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037556.D ClientSampleId :  
Acq: 30 Jul 2025 14:28 PB169039BSD

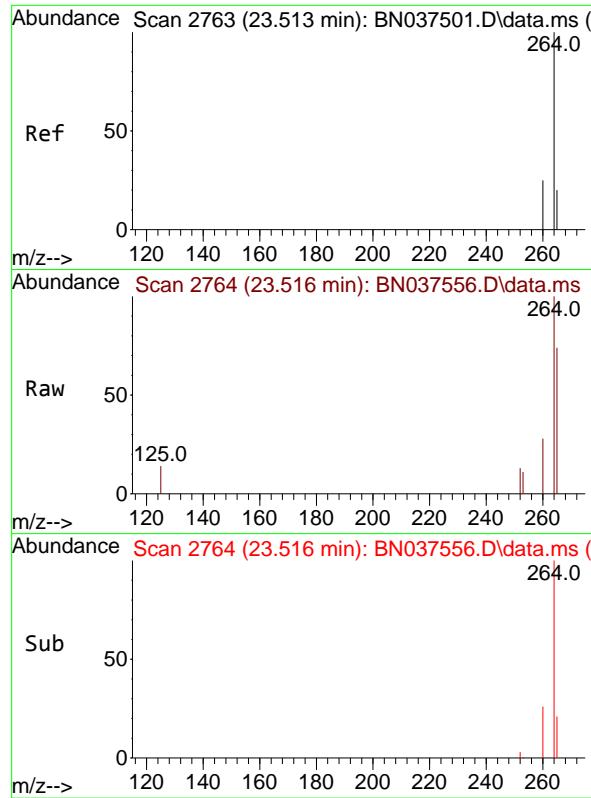
Tgt Ion:228 Resp: 3804  
Ion Ratio Lower Upper  
228 100  
226 30.9 24.2 36.4  
229 20.7 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.306 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Tgt Ion:149 Resp: 1364  
Ion Ratio Lower Upper  
149 100  
167 26.7 21.8 32.8  
279 2.9 3.0 4.4#

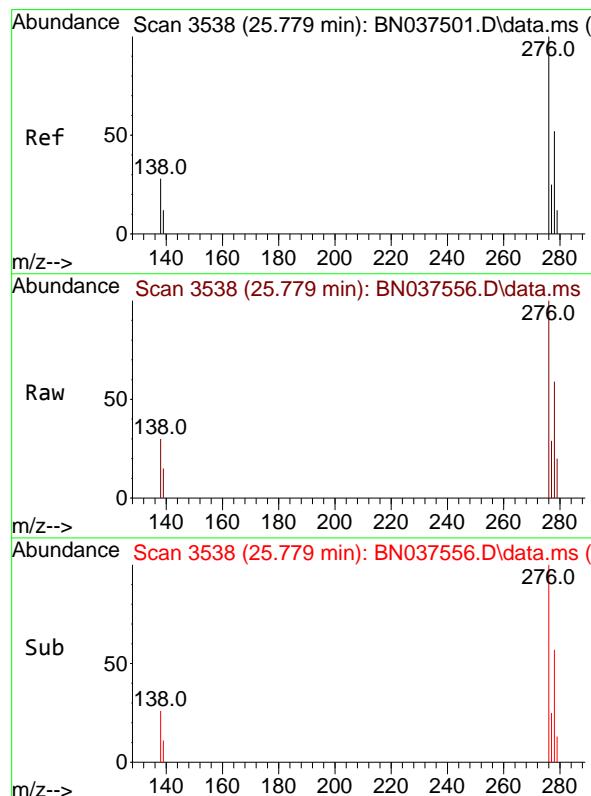
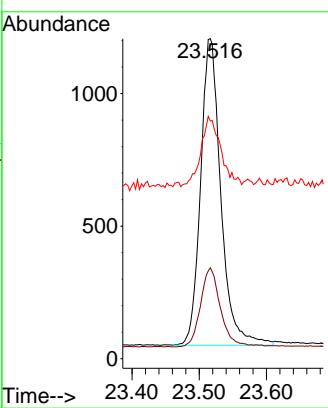




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

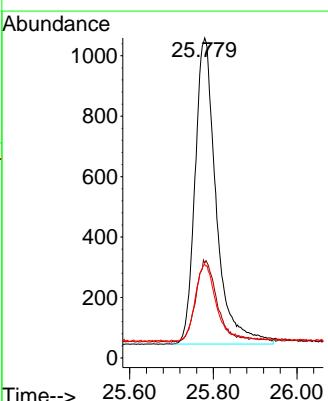
Instrument : BNA\_N  
ClientSampleId : PB169039BSD

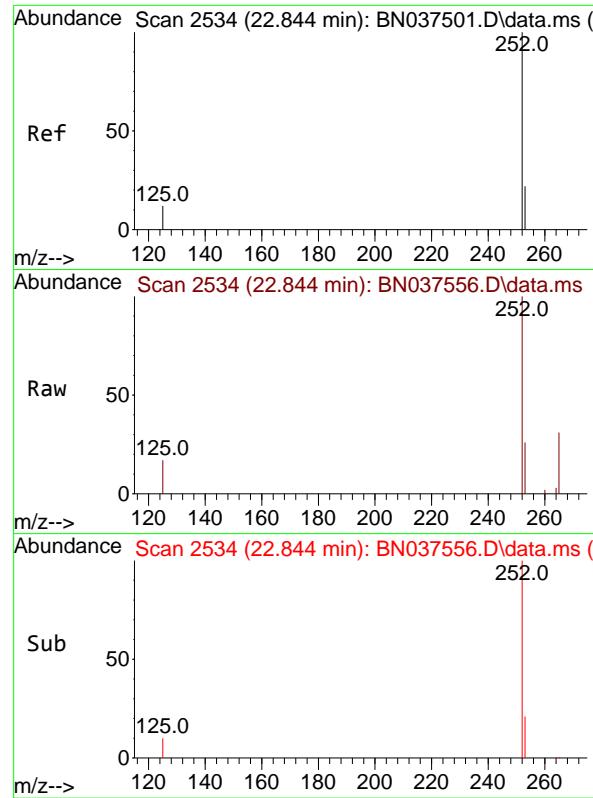
Tgt Ion:264 Resp: 2422  
Ion Ratio Lower Upper  
264 100  
260 28.4 21.2 31.8  
265 74.3 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.352 ng  
RT: 25.779 min Scan# 3538  
Delta R.T. 0.000 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Tgt Ion:276 Resp: 3550  
Ion Ratio Lower Upper  
276 100  
138 26.9 24.0 36.0  
277 24.0 20.5 30.7

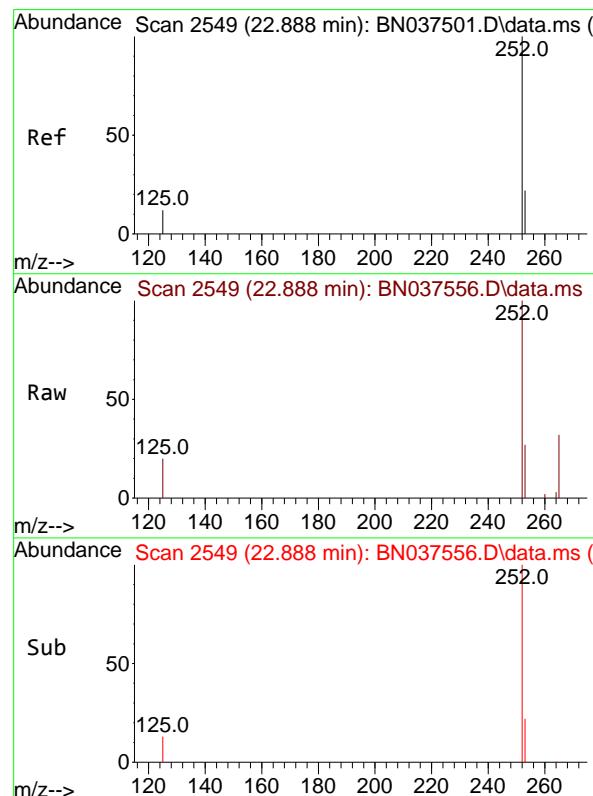
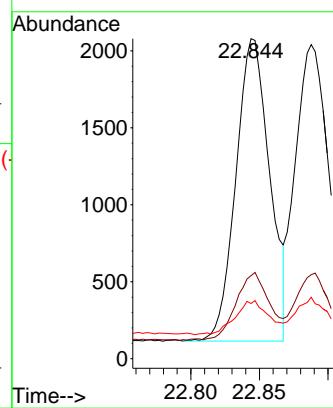




#37  
 Benzo(b)fluoranthene  
 Concen: 0.365 ng  
 RT: 22.844 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

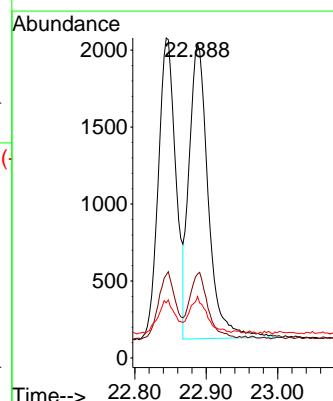
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB169039BSD

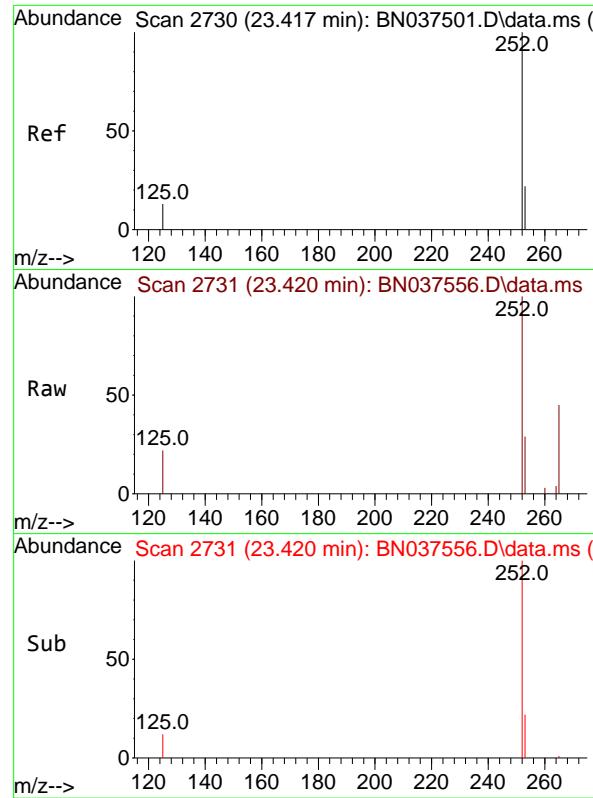
Tgt Ion:252 Resp: 3360  
 Ion Ratio Lower Upper  
 252 100  
 253 26.0 19.5 29.3  
 125 17.3 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.374 ng  
 RT: 22.888 min Scan# 2549  
 Delta R.T. 0.000 min  
 Lab File: BN037556.D  
 Acq: 30 Jul 2025 14:28

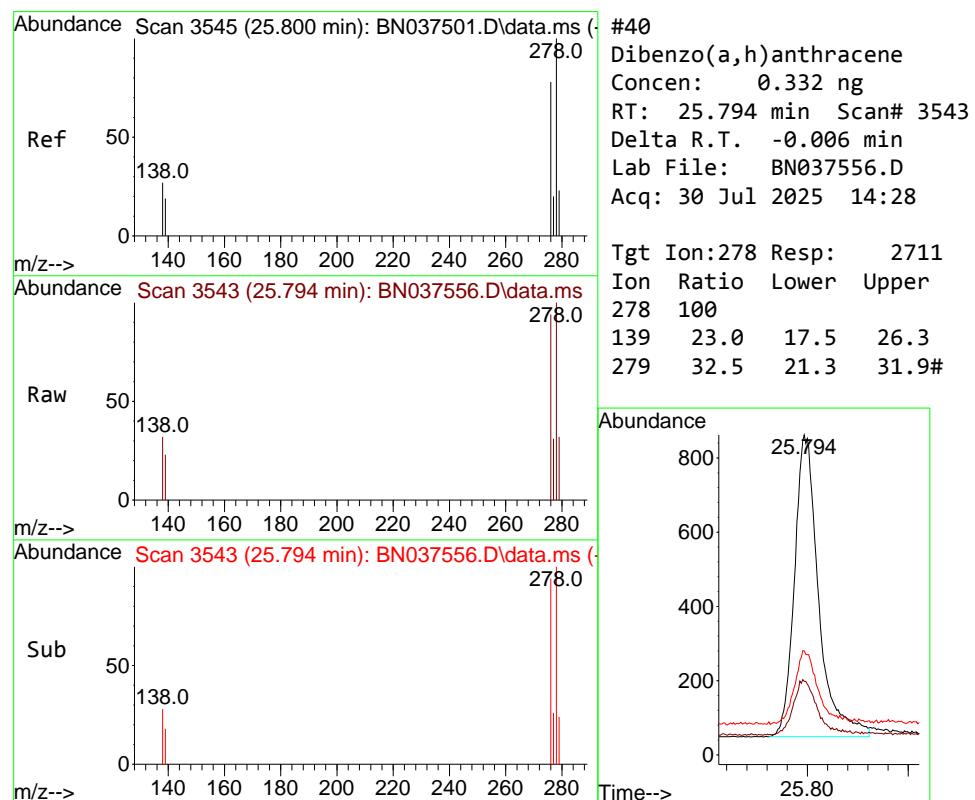
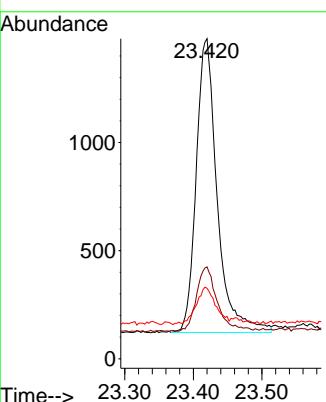
Tgt Ion:252 Resp: 3552  
 Ion Ratio Lower Upper  
 252 100  
 253 26.8 19.5 29.3  
 125 19.6 13.1 19.7





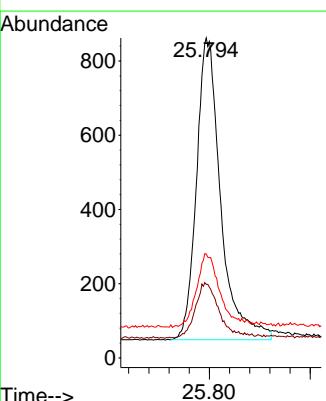
#39  
Benzo(a)pyrene  
Concen: 0.377 ng  
RT: 23.420 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.003 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28  
ClientSampleId : PB169039BSD

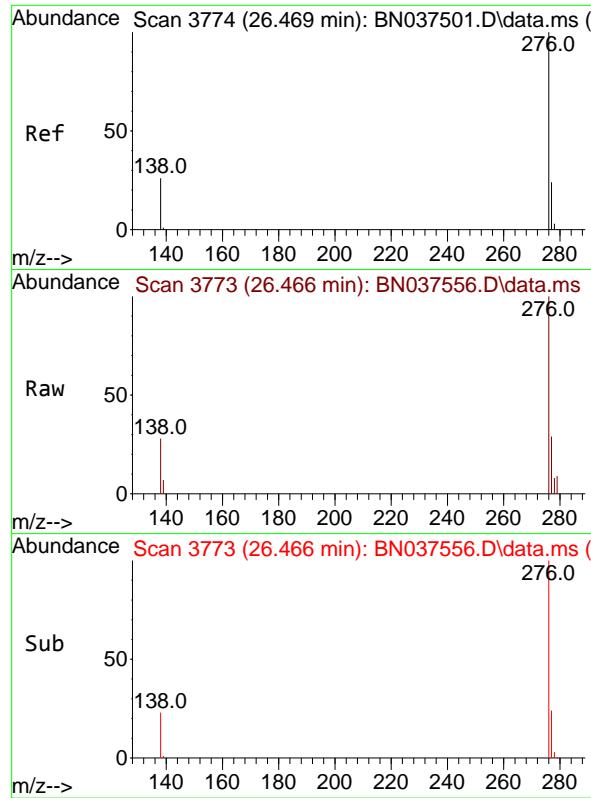
Tgt Ion:252 Resp: 2889  
Ion Ratio Lower Upper  
252 100  
253 28.7 19.9 29.9  
125 22.0 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.332 ng  
RT: 25.794 min Scan# 3543  
Delta R.T. -0.006 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Tgt Ion:278 Resp: 2711  
Ion Ratio Lower Upper  
278 100  
139 23.0 17.5 26.3  
279 32.5 21.3 31.9#

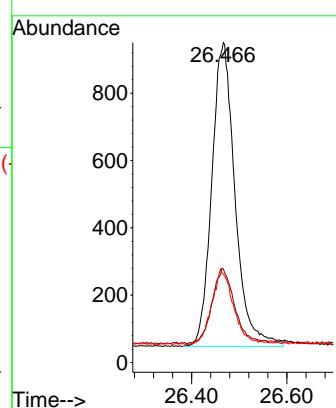




#41  
Benzo(g,h,i)perylene  
Concen: 0.362 ng  
RT: 26.466 min Scan# 3  
Delta R.T. -0.003 min  
Lab File: BN037556.D  
Acq: 30 Jul 2025 14:28

Instrument : BNA\_N  
ClientSampleId : PB169039BSD

Tgt Ion:276 Resp: 3061  
Ion Ratio Lower Upper  
276 100  
277 29.3 20.9 31.3  
138 27.7 22.6 33.8





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

## Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN071525 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|
|           |         |           |           |           |               |               |        |



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### Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | BN073025 | Instrument | BNA_n |
|-----------|----------|------------|-------|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|-----------|---------|-----------|-----------|-----------|---------------|---------------|--------|
|           |         |           |           |           |               |               |        |



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Fax : 908 789 8922

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN071525**

| Review By  | Rahul  | Review On         | 7/16/2025 11:47:41 AM                         |
|--|--|-------------------|---|
| Supervise By   | Jagrut   | Supervise On      | 7/16/2025 12:31:26 PM                         |
| SubDirectory   | BN071525   | HP Acquire Method | BNA_N, 8270_SIM HP Processing Method BN071525 |
| STD. NAME  | STD REF.#  |                   |   |
| Tune/Reschk<br>Initial Calibration Stds  | SP6757<br>SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848 |                   |   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | SP6846<br>SP6740,1ul/100ul sample<br>SP6854                |                   |   |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | DFTPP       | BN037497.D     | 15 Jul 2025 10:57 | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | BN037498.D     | 15 Jul 2025 11:37 | RC/JU    | Not Ok |
| 3   | SSTDICC0.1  | BN037499.D     | 15 Jul 2025 12:36 | RC/JU    | Ok     |
| 4   | SSTDICC0.2  | BN037500.D     | 15 Jul 2025 13:12 | RC/JU    | Ok     |
| 5   | SSTDICCC0.4 | BN037501.D     | 15 Jul 2025 13:49 | RC/JU    | Ok     |
| 6   | SSTDICC0.8  | BN037502.D     | 15 Jul 2025 14:25 | RC/JU    | Ok     |
| 7   | SSTDICC1.6  | BN037503.D     | 15 Jul 2025 15:01 | RC/JU    | Ok     |
| 8   | SSTDICC3.2  | BN037504.D     | 15 Jul 2025 15:38 | RC/JU    | Ok     |
| 9   | SSTDICC5.0  | BN037505.D     | 15 Jul 2025 16:14 | RC/JU    | Ok     |
| 10  | SSTDICV0.4  | BN037506.D     | 15 Jul 2025 16:58 | RC/JU    | Ok     |
| 11  | PB168696BL  | BN037507.D     | 15 Jul 2025 17:34 | RC/JU    | Ok     |
| 12  | SSTDCCC0.4  | BN037508.D     | 15 Jul 2025 18:11 | RC/JU    | Ok     |

M : Manual Integration



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Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN073025**

| Review By  | Rahul  | Review On         | 7/30/2025 3:55:41 PM                          |
|--|--|-------------------|---|
| Supervise By   | Jagrut   | Supervise On      | 7/30/2025 3:55:49 PM                          |
| SubDirectory   | BN073025   | HP Acquire Method | BNA_N, 8270_SIM HP Processing Method BN071525 |
| STD. NAME  | STD REF.#  |                   |   |
| Tune/Reschk<br>Initial Calibration Stds  | SP6757<br>SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848 |                   |   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | SP6846<br>SP6830,1ul/100ul sample<br>SP6854                |                   |   |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | DFTPP       | BN037547.D     | 30 Jul 2025 08:59 | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | BN037548.D     | 30 Jul 2025 09:38 | RC/JU    | Ok     |
| 3   | PB169039BL  | BN037549.D     | 30 Jul 2025 10:14 | RC/JU    | Ok     |
| 4   | Q2696-01    | BN037550.D     | 30 Jul 2025 10:51 | RC/JU    | Ok     |
| 5   | Q2696-02    | BN037551.D     | 30 Jul 2025 11:27 | RC/JU    | Ok     |
| 6   | Q2697-01    | BN037552.D     | 30 Jul 2025 12:03 | RC/JU    | Ok     |
| 7   | Q2697-02    | BN037553.D     | 30 Jul 2025 12:39 | RC/JU    | Ok     |
| 8   | Q2697-03    | BN037554.D     | 30 Jul 2025 13:16 | RC/JU    | Ok     |
| 9   | PB169039BS  | BN037555.D     | 30 Jul 2025 13:52 | RC/JU    | Ok     |
| 10  | PB169039BSD | BN037556.D     | 30 Jul 2025 14:28 | RC/JU    | Ok     |
| 11  | SSTDCCC0.4  | BN037557.D     | 30 Jul 2025 15:16 | RC/JU    | Ok     |

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Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN071525**

| Review By                | Rahul  | Review On         | 7/16/2025 11:47:41 AM                     |
|--------------------------|--|-------------------|---|
| Supervise By             | Jagrut   | Supervise On      | 7/16/2025 12:31:26 PM                     |
| SubDirectory             | BN071525   | HP Acquire Method | BNA_N, 8270_HP Processing Method BN071525 |
| STD. NAME                | STD REF.#  |                   |   |
| Tune/Reschk              | SP6757   |                   |   |
| Initial Calibration Stds | SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848 |                   |   |
| CCC                      | SP6846   |                   |   |
| Internal Standard/PEM    | SP6740,1ul/100ul sample                          |                   |   |
| ICV/I.BLK                | SP6854   |                   |   |
| Surrogate Standard       |  |                   |   |
| MS/MSD Standard          |  |                   |   |
| LCS Standard             |  |                   |   |

| Sr# | SampleId    | ClientID     | Data File Name | Date-Time         | Comment                          | Operator | Status |
|-----|-------------|--------------|----------------|-------------------|----------------------------------|----------|--------|
| 1   | DFTPP       | DFTPP        | BN037497.D     | 15 Jul 2025 10:57 |                                  | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | SSTDCCC0.4   | BN037498.D     | 15 Jul 2025 11:37 | A Fresh Calibration is required. | RC/JU    | Not Ok |
| 3   | SSTDICC0.1  | SSTDICC0.1   | BN037499.D     | 15 Jul 2025 12:36 |                                  | RC/JU    | Ok     |
| 4   | SSTDICC0.2  | SSTDICC0.2   | BN037500.D     | 15 Jul 2025 13:12 |                                  | RC/JU    | Ok     |
| 5   | SSTDICCC0.4 | SSTDICCC0.4  | BN037501.D     | 15 Jul 2025 13:49 | Compound #20 kept on QR          | RC/JU    | Ok     |
| 6   | SSTDICC0.8  | SSTDICC0.8   | BN037502.D     | 15 Jul 2025 14:25 |                                  | RC/JU    | Ok     |
| 7   | SSTDICC1.6  | SSTDICC1.6   | BN037503.D     | 15 Jul 2025 15:01 |                                  | RC/JU    | Ok     |
| 8   | SSTDICC3.2  | SSTDICC3.2   | BN037504.D     | 15 Jul 2025 15:38 |                                  | RC/JU    | Ok     |
| 9   | SSTDICC5.0  | SSTDICC5.0   | BN037505.D     | 15 Jul 2025 16:14 |                                  | RC/JU    | Ok     |
| 10  | SSTDICV0.4  | ICVBN071525  | BN037506.D     | 15 Jul 2025 16:58 |                                  | RC/JU    | Ok     |
| 11  | PB168696BL  | PB168696BL   | BN037507.D     | 15 Jul 2025 17:34 |                                  | RC/JU    | Ok     |
| 12  | SSTDCCC0.4  | SSTDCCC0.4EC | BN037508.D     | 15 Jul 2025 18:11 |                                  | RC/JU    | Ok     |

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Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN073025**

| Review By                | Rahul  | Review On         | 7/30/2025 3:55:41 PM                      |
|--------------------------|--|-------------------|---|
| Supervise By             | Jagrut   | Supervise On      | 7/30/2025 3:55:49 PM                      |
| SubDirectory             | BN073025   | HP Acquire Method | BNA_N, 8270_HP Processing Method BN071525 |
| STD. NAME                | STD REF.#  |                   |   |
| Tune/Reschk              | SP6757   |                   |   |
| Initial Calibration Stds | SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848 |                   |   |
| CCC                      | SP6846   |                   |   |
| Internal Standard/PEM    | SP6830,1ul/100ul sample                          |                   |   |
| ICV/I.BLK                | SP6854   |                   |   |
| Surrogate Standard       |  |                   |   |
| MS/MSD Standard          |  |                   |   |
| LCS Standard             |  |                   |   |

| Sr# | SampleId    | ClientID           | Data File Name | Date-Time         | Comment | Operator | Status |
|-----|-------------|--------------------|----------------|-------------------|---------|----------|--------|
| 1   | DFTPP       | DFTPP              | BN037547.D     | 30 Jul 2025 08:59 |         | RC/JU    | Ok     |
| 2   | SSTDCCC0.4  | SSTDCCC0.4         | BN037548.D     | 30 Jul 2025 09:38 |         | RC/JU    | Ok     |
| 3   | PB169039BL  | PB169039BL         | BN037549.D     | 30 Jul 2025 10:14 |         | RC/JU    | Ok     |
| 4   | Q2696-01    | RW8-SP100-20250724 | BN037550.D     | 30 Jul 2025 10:51 |         | RC/JU    | Ok     |
| 5   | Q2696-02    | RW8-SP303-20250724 | BN037551.D     | 30 Jul 2025 11:27 |         | RC/JU    | Ok     |
| 6   | Q2697-01    | RW7-SP100-20250724 | BN037552.D     | 30 Jul 2025 12:03 |         | RC/JU    | Ok     |
| 7   | Q2697-02    | RW7-SP201-20250724 | BN037553.D     | 30 Jul 2025 12:39 |         | RC/JU    | Ok     |
| 8   | Q2697-03    | RW7-SP303-20250724 | BN037554.D     | 30 Jul 2025 13:16 |         | RC/JU    | Ok     |
| 9   | PB169039BS  | PB169039BS         | BN037555.D     | 30 Jul 2025 13:52 |         | RC/JU    | Ok     |
| 10  | PB169039BSD | PB169039BSD        | BN037556.D     | 30 Jul 2025 14:28 |         | RC/JU    | Ok     |
| 11  | SSTDCCC0.4  | SSTDCCC0.4EC       | BN037557.D     | 30 Jul 2025 15:16 |         | RC/JU    | Ok     |

M : Manual Integration

|                    |   |                         |            |
|--------------------|---|-------------------------|------------|
| SOP ID:            | M3510C,3580A-Extraction SVOC-21   |                         |            |
| Clean Up SOP #:    | N/A   | Extraction Start Date : | 07/29/2025 |
| Matrix :           | Water   | Extraction Start Time : | 08:49      |
| Weigh By:          | N/A   | Extraction End Date :   | 07/29/2025 |
| Balance check:     | N/A   | Extraction End Time :   | 13:50      |
| Balance ID:        | N/A   | pH Meter ID:            | N/A        |
| pH Strip Lot#:     | E3880   | Hood ID:                | 4,6,7      |
| Extraction Method: | <input checked="" type="checkbox"/> Separatory Funnel <input type="checkbox"/> Continous Liquid/Liquid <input type="checkbox"/> Sonication <input type="checkbox"/> Waste Dilution <input type="checkbox"/> Soxhlet |                         |            |

| Standard Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---------------|----------|---------------------|---------------------|
| Spike Sol 1   | 1.0ML    | 0.4 PPM             | SP6756              |
| Surrogate     | 1.0ML    | 0.4 PPM             | SP6831              |
| N/A           | N/A      | N/A                 | N/A                 |
| N/A           | N/A      | N/A                 | N/A                 |
| N/A           | N/A      | N/A                 | N/A                 |

| Chemical Used      | ML/SAMPLE USED | Lot Number |
|--------------------|----------------|------------|
| Methylene Chloride | N/A            | E3954      |
| Baked Na2SO4       | N/A            | EP2629     |
| 10N NaOH           | N/A            | EP2609     |
| H2SO4 1:1          | N/A            | EP2610     |
| N/A                | N/A            | N/A        |

**Extraction Conformance/Non-Conformance Comments:**

1.5 ML Vial lot# 2210443. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

|                      |                |                    |          |
|----------------------|----------------|--------------------|----------|
| KD Bath ID:          | WATER BATH-1,2 | Envap ID:          | NEVAP-02 |
| KD Bath Temperature: | 60 °C          | Envap Temperature: | 40 °C    |

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|-------------|---|----------------------|
| 7/29/25     | RS (Out-Lab)                            | RCSVOC               |
| 13:55       | Preparation Group                       | Analysis Group       |

Analytical Method: M3510C,3580A-Extraction SVOC-21

Concentration Date: 07/29/2025

| Sample ID   | Client Sample ID   | Test            | g / mL | pH | Surr/Spike By: |            | Final Vol. (mL) | JarID | Comments | Prep Pos |
|-------------|--------------------|-----------------|--------|----|----------------|------------|-----------------|-------|----------|----------|
|             |                    |                 |        |    | AddedBy        | VerifiedBy |                 |       |          |          |
| PB169039BL  | SBLK039            | SVOC-SIMGrou p1 | 1000   | 6  | RUPESH         | ritesh     | 1               |       |          | SEP-1    |
| PB169039BS  | SLCS039            | SVOC-SIMGrou p1 | 1000   | 6  | RUPESH         | ritesh     | 1               |       |          | 2        |
| PB169039BSD | SLCSD039           | SVOC-SIMGrou p1 | 1000   | 6  | RUPESH         | ritesh     | 1               |       |          | 3        |
| Q2696-01    | RW8-SP100-20250724 | SVOC-SIMGrou p1 | 990    | 6  | RUPESH         | ritesh     | 1               | C     |          | 4        |
| Q2696-02    | RW8-SP303-20250724 | SVOC-SIMGrou p1 | 990    | 6  | RUPESH         | ritesh     | 1               | D     |          | 5        |
| Q2697-01    | RW7-SP100-20250724 | SVOC-SIMGrou p1 | 1000   | 6  | RUPESH         | ritesh     | 1               | B     |          | 6        |
| Q2697-02    | RW7-SP201-20250724 | SVOC-SIMGrou p1 | 990    | 6  | RUPESH         | ritesh     | 1               |       |          | 7        |
| Q2697-03    | RW7-SP303-20250724 | SVOC-SIMGrou p1 | 910    | 6  | RUPESH         | ritesh     | 1               |       |          | 8        |

 RS  
7/29

169051  
8-19

## WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2696

WorkList ID : 190998

Department : Extraction

Date : 07-29-2025 08:42:29

| Sample   | Customer Sample    | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method        |
|----------|--------------------|--------|----------------|--------------|----------|-----------------------------|--------------|---------------|
| Q2696-01 | RW8-SP100-20250724 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | D31                         | 07/24/2025   | 8270-Modified |
| Q2696-02 | RW8-SP303-20250724 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | D31                         | 07/24/2025   | 8270-Modified |
| Q2697-01 | RW7-SP100-20250724 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | D51                         | 07/24/2025   | 8270-Modified |
| Q2697-02 | RW7-SP201-20250724 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | D51                         | 07/24/2025   | 8270-Modified |
| Q2697-03 | RW7-SP303-20250724 | Water  | SVOC-SIMGroup1 | Cool 4 deg C | TETR06   | D51                         | 07/24/2025   | 8270-Modified |

Date/Time 7/29/25 8:42  
Raw Sample Received by: RS (Ext-Lab)  
Raw Sample Relinquished by: DS

Page 1 of 1

Date/Time 7/29/25 9:15  
Raw Sample Received by: DS  
Raw Sample Relinquished by: RS (Ext-Lab)



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## Prep Standard - Chemical Standard Summary

**Order ID :** Q2696

**Test :** SVOC-SIMGroup1

**Prepbatch ID :** PB169039,

**Sequence ID/Qc Batch ID:** BN073025,

**Standard ID :**

EP2609,EP2610,EP2629,SP6756,SP6757,SP6830,SP6831,SP6841,SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848,SP6853,SP6854,

**Chemical ID :**

1ul/100ul

sample,E3657,E3875,E3902,E3904,E3940,E3942,E3943,E3954,M6157,S10105,S11073,S11496,S11650,S11788,S11828,S12115,S12195,S12197,S12216,S12220,S12273,S12486,S12499,S12533,S12552,S12577,S12670,S12974,S12986,S13058,W3112,

## Extractions STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>                   | <u>PipetteID</u> | <u>Supervised By</u>            |
|------------------|----------------------------|------------------------|------------------|------------------------|--------------------|----------------------------------|------------------|---------------------------------|
| 1874             | 10 N SODIUM HYDROXIDE SOLN | <a href="#">EP2609</a> | 05/07/2025       | 11/07/2025             | RUPESHKUMA R SHAH  | Extraction_SC ALE_2<br>(EX-SC-2) | None             | Riteshkumar Patel<br>05/07/2025 |

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml

| <u>Recipe ID</u> | <u>NAME</u>    | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>                   | <u>PipetteID</u> | <u>Supervised By</u>            |
|------------------|----------------|------------------------|------------------|------------------------|--------------------|----------------------------------|------------------|---------------------------------|
| 314              | 1.1 H2SO4 SOLN | <a href="#">EP2610</a> | 05/07/2025       | 11/07/2025             | RUPESHKUMA R SHAH  | Extraction_SC ALE_2<br>(EX-SC-2) | None             | Riteshkumar Patel<br>05/07/2025 |

FROM 1000.00000ml of M6157 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

## Extractions STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>                   | <u>PipetteID</u> | <u>Supervised By</u>            |
|------------------|----------------------|------------------------|------------------|------------------------|--------------------|----------------------------------|------------------|---------------------------------|
| 3923             | Baked Sodium Sulfate | <a href="#">EP2629</a> | 07/28/2025       | 01/28/2026             | RUPESHKUMA R SHAH  | Extraction_SC ALE_2<br>(EX-SC-2) | None             | Riteshkumar Patel<br>07/28/2025 |

FROM 4000.00000gram of E3875 = Final Quantity: 4000.000 gram

| <u>Recipe ID</u> | <u>NAME</u>            | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>         |
|------------------|------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|------------------------------|
| 3492             | 8270-SIM-Spike 0.4 PPM | <a href="#">SP6756</a> | 03/24/2025       | 07/29/2025             | Rahul Chavli       | None           | None             | mohammad ahmed<br>04/07/2025 |

FROM 0.00160ml of S11650 + 0.02000ml of S11788 + 0.04000ml of S12486 + 0.04000ml of S12533 + 0.04000ml of S12974 + 99.85840ml of E3902 = Final Quantity: 100.000 ml



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## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>          |
|------------------|----------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|-------------------------------|
| 3895             | 50 ug/ml DFTPP 8270E | <a href="#">SP6757</a> | 03/31/2025       | 09/30/2025             | Rahul Chavli       | None           | None             | Jagrut Upadhyay<br>04/01/2025 |

FROM 1.00000ml of S12577 + 19.00000ml of E3904 = Final Quantity: 20.000 ml

| <u>Recipe ID</u> | <u>NAME</u>               | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|---------------------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3493             | Internal Standard 0.4 PPM | <a href="#">SP6830</a> | 06/17/2025       | 12/13/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/19/2025 |

FROM 0.10000ml of S12670 + 4.90000ml of E3942 = Final Quantity: 5.000 ml



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# **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="#">SP6831</a> | 06/18/2025       | 09/18/2025             | Rahul Chavli       | None           | None             | Jagrut Upadhyay<br>06/18/2025 |

**FROM** 0.00800ml of S12195 + 0.01600ml of S12216 + 0.04000ml of S11828 + 199.93600ml of E3940 = Final Quantity: 200.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                            | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3339             | 8270 sim calibration stock 10ppm (CPI) | <a href="#">SP6841</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/25/2025 |

**FROM** 0.03350ml of S10105 + 0.05000ml of S11496 + 0.12500ml of S11828 + 0.12500ml of S12115 + 0.25000ml of S12273 + 0.25000ml of S13058 + 24.16650ml of E3943 = Final Quantity: 25.000 ml

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                            | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3361             | 8270-SIM MDL-5PPM CALIBRATION SOLUTION | <a href="#">SP6842</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/25/2025 |

FROM 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6841 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3341             | 8270-SIM MDL-3.2PPM CALIBRATION SOLUTION | <a href="#">SP6843</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/25/2025 |

FROM 0.68000ml of E3943 + 0.01000ml of SP6830 + 0.32000ml of SP6841 = Final Quantity: 1.010 ml



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## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3344             | 8270-SIM MDL-1.6PPM CALIBRATION SOLUTION | <a href="#">SP6844</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/25/2025 |

FROM 0.84000ml of E3943 + 0.01000ml of SP6830 + 0.16000ml of SP6841 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3342             | 8270-SIM MDL-0.8PPM CALIBRATION SOLUTION | <a href="#">SP6845</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/25/2025 |

FROM 0.92000ml of E3943 + 0.01000ml of SP6830 + 0.08000ml of SP6841 = Final Quantity: 1.010 ml



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Fax : 908 789 8922

## SVOC STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3343             | 8270-SIM MDL-0.4PPM CALIBRATION SOLUTION | <a href="#">SP6846</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/25/2025 |

FROM 0.96000ml of E3943 + 0.01000ml of SP6830 + 0.04000ml of SP6841 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>                              | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3345             | 8270-SIM MDL-0.2PPM CALIBRATION SOLUTION | <a href="#">SP6847</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>06/25/2025 |

FROM 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6846 = Final Quantity: 1.010 ml



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# **SVOC STANDARD PREPARATION LOG**

| <u>Recipe</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> |
|---------------|---|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| <u>ID</u>     | 8270-SIM MDL-0.1PPM<br>CALIBRATION SOLUTION | <a href="#">SP6848</a> | 06/25/2025       | 10/28/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli         |

**FROM** 0.75000ml of E3943 + 0.01000ml of SP6830 + 0.25000ml of SP6846 = Final Quantity: 1.010 ml

| <u>Recipe ID</u> | <u>NAME</u>  | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|--|------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 3355             | 8270-SIM MDL-3.2PPM<br>CALIBRATION STOCK SOL- 2ND SOURCE | <a href="#">SP6853</a> | 07/02/2025       | 09/30/2025             | Jagrut Upadhyay    | None           | None             | Rahul Chavli<br>07/08/2025 |

**FROM** 0.00630ml of S12197 + 0.01280ml of S12220 + 0.03200ml of S11073 + 0.03200ml of S11828 + 0.06400ml of S12499 + 0.06400ml of S12552 + 0.06400ml of S12986 + 19.72490ml of F3943 = Final Quantity: 20.000 ml



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# **SVOC STANDARD PREPARATION LOG**



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Fax : 908 789 8922

### CHEMICAL RECEIPT LOG BOOK

| Supplier                    | ItemCode / ItemName   | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-----------------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| PCI Scientific Supply, Inc. | PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4        | 23B1556310 | 12/31/2025      | 12/04/2023 / Rajesh     | 12/01/2023 / Rajesh         | E3657          |
| PCI Scientific Supply, Inc. | PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1      | 417203     | 01/28/2026      | 07/28/2025 / RUPESH     | 01/29/2025 / Rajesh         | E3875          |
| Seidler Chemical            | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)                  | 24H2762008 | 09/18/2025      | 03/18/2025 / RUPESH     | 02/12/2025 / RUPESH         | E3902          |
| Seidler Chemical            | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24K1762005 | 01/07/2026      | 03/13/2025 / RUPESH     | 12/27/2024 / RUPESH         | E3904          |
| Seidler Chemical            | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)                  | 24H1462005 | 12/11/2025      | 06/11/2025 / Rajesh     | 06/04/2025 / Rajesh         | E3940          |
| Seidler Chemical            | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 25A2862010 | 12/13/2025      | 06/13/2025 / Rajesh     | 02/28/2025 / Rajesh         | E3942          |

### CHEMICAL RECEIPT LOG BOOK

| <b>Supplier</b>   | <b>ItemCode / ItemName</b>  | <b>Lot #</b> | <b>Expiration Date</b> | <b>Date Opened / Opened By</b> | <b>Received Date / Received By</b> | <b>Chemtech Lot #</b> |
|-------------------|---|--------------|------------------------|--------------------------------|------------------------------------|-----------------------|
| Seidler Chemical  | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)       | 25A2862010   | 12/13/2025             | 06/13/2025 / Rajesh            | 02/28/2025 / Rajesh                | E3943                 |
| Seidler Chemical  | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)       | 25B1862001   | 03/19/2026             | 07/14/2025 / RUPESH            | 06/11/2025 / RUPESH                | E3954                 |
| Seidler Chemical  | BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)           | 24i1262013   | 11/07/2025             | 05/07/2025 / RUPESH            | 02/18/2025 / Mohan                 | M6157                 |
| CPI International | Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml         | 440246       | 12/19/2025             | 06/19/2025 / Jagrut            | 12/09/2021 / Christian             | S10105                |
| Restek            | 31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride     | A0187043     | 11/16/2025             | 05/16/2025 / Jagrut            | 02/06/2023 / Christian             | S11073                |
| CPI International | Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml | 506889       | 10/28/2025             | 04/28/2025 / Jagrut            | 08/11/2023 / Yogesh                | S11496                |

### CHEMICAL RECEIPT LOG BOOK

| <b>Supplier</b>   | <b>ItemCode / ItemName</b>                                    | <b>Lot #</b> | <b>Expiration Date</b> | <b>Date Opened / Opened By</b> | <b>Received Date / Received By</b> | <b>Chemtech Lot #</b> |
|-------------------|---|--------------|------------------------|--------------------------------|------------------------------------|-----------------------|
| Restek            | 555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]   | A0201728     | 07/29/2025             | 01/29/2025 / anahy             | 11/09/2023 / Yogesh                | S11650                |
| Restek            | 31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride | A0196453     | 09/10/2025             | 03/10/2025 / anahy             | 11/21/2023 / Rahul                 | S11788                |
| Restek            | 33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM   | A0201976     | 12/09/2025             | 06/09/2025 / Jagrut            | 11/21/2023 / rahul                 | S11828                |
| CPI International | z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml            | 454157       | 10/28/2025             | 04/28/2025 / Jagrut            | 03/08/2024 / Rahul                 | S12115                |
| Restek            | 31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ampul         | A0206206     | 09/18/2025             | 03/18/2025 / anahy             | 03/15/2024 / Rahul                 | S12195                |
| Restek            | 31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ampul         | A0206206     | 01/02/2026             | 07/02/2025 / Jagrut            | 03/15/2024 / Rahul                 | S12197                |

### CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                 | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml | A0206381 | 09/18/2025      | 03/18/2025 / anahy      | 03/15/2024 / Rahul          | S12216         |

| Supplier | ItemCode / ItemName                                 | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml | A0206381 | 01/02/2026      | 07/02/2025 / Jagrut     | 03/15/2024 / Rahul          | S12220         |

| Supplier          | ItemCode / ItemName  | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|--|--------|-----------------|-------------------------|-----------------------------|----------------|
| CPI International | z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml | 520963 | 12/25/2025      | 06/25/2025 / Jagrut     | 05/24/2024 / Rahul          | S12273         |

| Supplier | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request] | A0214021 | 09/10/2025      | 03/10/2025 / anahy      | 07/23/2024 / RAHUL          | S12486         |

[CS 4978-1]

| Supplier | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request] | A0214021 | 01/01/2026      | 07/01/2025 / Rahul      | 07/23/2024 / RAHUL          | S12499         |

[CS 4978-1]

| Supplier | ItemCode / ItemName  | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request] | A0214017 | 09/10/2025      | 03/10/2025 / anahy      | 07/23/2024 / RAHUL          | S12533         |

[CS 4978-2]



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### CHEMICAL RECEIPT LOG BOOK

| Supplier          | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-------------------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek            | 555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]<br>[CS 4978-2] | A0214017 | 01/01/2026      | 07/01/2025 / Rahul      | 07/23/2024 / RAHUL          | S12552         |
|                   |   |          |                 |                         |                             |                |
| Supplier          | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
| Restek            | 31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL,  | A0212955 | 06/30/2027      | 03/31/2025 / Rahul      | 08/01/2024 / Rahul          | S12577         |
| Supplier          | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
| Restek            | 31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL  | A0212266 | 12/16/2025      | 06/16/2025 / anahy      | 09/20/2024 / anahy          | S12670         |
| Supplier          | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
| Restek            | 31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]                                 | A0219438 | 09/10/2025      | 03/10/2025 / anahy      | 12/11/2024 / anahy          | S12974         |
| 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, CH2Cl2 [New Solvent 100% CH2Cl2]                                 | A0219438 | 09/30/2025      | 06/04/2025 / Jagrut     | 12/11/2024 / anahy          | S12986         |
| Supplier          | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
| CPI International | Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)                                | 531243   | 12/25/2025      | 06/25/2025 / Jagrut     | 01/16/2025 / anahy          | S13058         |



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### CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName | Lot #               | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---------------------|---------------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | DIW / DI Water      | Daily Lab-Certified | 07/03/2029      | 07/03/2024 / Iwona      | 07/03/2024 / Iwona          | W3112          |



5580 Skylane Blvd  
Santa Rosa, CA 95403

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:  
Z-112090 440246  $\leq -10^{\circ}\text{C}$  Methylene Chloride 2/16/2026 CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL  
-04

| Compound                      | CAS No.    | Purity (%) | Compound Lot No. | Concentration, mg/L |
|-------------------------------|------------|------------|------------------|---------------------|
| 2-chlorophenol-d <sub>4</sub> | 93951-73-6 | 99.3       | 248.12.7P        | 7487 $\pm$ 17.2     |
| 2-fluorophenol                | 367-12-4   | 99.8       | 10.7.3.3P        | 7513 $\pm$ 17.26    |
| phenol-d <sub>6</sub>         | 13127-88-3 | 99.9       | 949.120.8P       | 7481 $\pm$ 17.19    |
| 2,4,6-tribromophenol          | 118-79-6   | 99.8       | 12.1.6P          | 7469 $\pm$ 17.17    |

Received on

02/25/21

by  
CG

S9236  
+0

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](http://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  
02/06/23

b1

CG

S 11/071

to

S 11/075

Catalog No. : 31853

Lot No.: A0187043

Description : 1,4-dioxane

1,4-Dioxane 2,000 $\mu$ g/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

### C E R T I F I E D   V A L U E S

| Elution Order | Compound                                    | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty<br>(95% C.L.; K=2) |                        |                        |
|---------------|---|--------------------------------|---|------------------------|------------------------|
| 1             | 1,4-Dioxane<br>CAS # 123-91-1<br>Purity 99% | 2,019.0 $\mu$ g/mL             | +/- 11.8486 $\mu$ g/mL                  | +/- 43.2570 $\mu$ g/mL | +/- 44.5129 $\mu$ g/mL |

Solvent: Methylene chloride  
CAS # 75-09-2  
Purity 99%

**Column:**

105m x 0.53mm x 3.0 $\mu$ m  
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:**

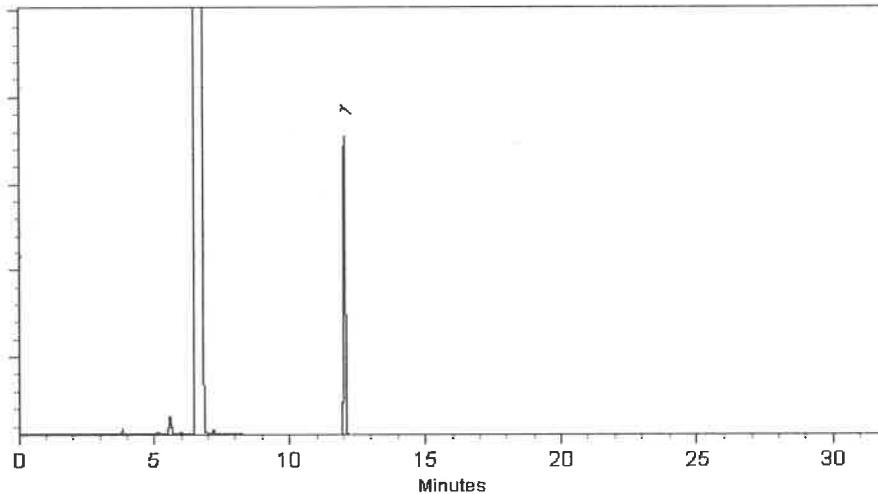
200°C

**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

  
Mariana Cowan - Operations Tech II ARM QC

Date Passed: 12-Jul-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



# Certificate of Analysis

## Sodium Hydroxide (Pellets)

**Material:** 0583  
**Grade:** ACS GRADE  
**Batch Number:** 23B1556310

Chemical Formula: NaOH  
Molecular Weight: 40  
CAS #: 1310-73-2  
Appearance:  
Pellets

Manufacture Date: 12/14/2022  
Expiration Date: 12/31/2025  
Storage: Room Temperature

| TEST               | SPECIFICATION | ANALYSIS | DISPOSITION |
|--------------------|---------------|----------|-------------|
| Calcium            | <= 0.005 %    | <0.005 % | PASS        |
| Chloride           | <= 0.005 %    | 0.002 %  | PASS        |
| Heavy Metals       | <= 0.002 %    | <0.002 % | PASS        |
| Iron               | <= 0.001 %    | <0.001 % | PASS        |
| Magnesium          | <= 0.002 %    | <0.002 % | PASS        |
| Mercury            | <= 0.1 ppm    | <0.1 ppm | PASS        |
| Nickel             | <= 0.001 %    | <0.001 % | PASS        |
| Nitrogen Compounds | <= 0.001 %    | <0.001 % | PASS        |
| Phosphate          | <= 0.001 %    | <0.001 % | PASS        |
| Potassium          | <= 0.02 %     | <0.02 %  | PASS        |
| Purity             | >= 97.0 %     | 99.2 %   | PASS        |
| Sodium Carbonate   | <= 1.0 %      | 0.5 %    | PASS        |
| Sulfate            | <= 0.003 %    | <0.003 % | PASS        |

Internal ID #: 710

Signature

Additional Information

We certify that this batch conforms to the specifications listed.

Analysis may have been rounded to significant digits in specification limits.

This document has been electronically produced and is valid without a signature.

Product meets analytical specifications of the grades listed.

Leona Edwardson, Quality Control Sr. Manager - Solon  
VWR Chemicals, LLC.  
28600 Fountain Parkway, Solon OH 44139 USA

E 3657 E 3659  
E 3654 E 3660



PRODUCTOS  
QUÍMICOS  
MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR  
MONTERREY, N.L. MÉXICO  
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: | MAY/23/2024                     |
| LOT NUMBER :          | 417203                            |               |                                 |

| TEST                                     | SPECIFICATIONS | LOT VALUES  |
|--|----------------|-------------|
| Assay (Na <sub>2</sub> SO <sub>4</sub> ) | Min. 99.0%     | 99.8 %      |
| pH of a 5% solution at 25°C              | 5.2 - 9.2      | 6.2         |
| Insoluble matter                         | Max. 0.01%     | 0.001 %     |
| Loss on ignition                         | Max. 0.5%      | 0.1 %       |
| Chloride (Cl)                            | Max. 0.001%    | <0.001 %    |
| Nitrogen compounds (as N)                | Max. 5 ppm     | <5 ppm      |
| Phosphate (PO <sub>4</sub> )             | Max. 0.001%    | <0.001 %    |
| Heavy metals (as Pb)                     | Max. 5 ppm     | <5 ppm      |
| Iron (Fe)                                | Max. 0.001%    | <0.001 %    |
| Calcium (Ca)                             | Max. 0.01%     | 0.001 %     |
| Magnesium (Mg)                           | Max. 0.005%    | 0.001 %     |
| Potassium (K)                            | Max. 0.008%    | 0.001 %     |
| Extraction-concentration suitability     | Passes test    | Passes test |
| Appearance                               | Passes test    | Passes test |
| Identification                           | Passes test    | Passes test |
| Solubility and foreign matter            | Passes test    | Passes test |
| Retained on US Standard No. 10 sieve     | Max. 1%        | 0.2 %       |
| Retained on US Standard No. 60 sieve     | Min. 94%       | 96.2 %      |
| Through US Standard No. 60 sieve         | Max. 5%        | 3.5 %       |
| Through US Standard No. 100 sieve        | Max. 10%       | 0.1 %       |
| COMMENTS                                 |                |             |
|  |                |             |
| QC: PhC Irma Belmares                    |                |             |

If you need further details, please call our factory or contact our local distributor.

RE-02-01, Ed. 3

E 3875

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis



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 |
| Titrable Acid (μeq/g)   | <= 0.3        | 0.2         |
| Titrable 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 HeptachlorEpoxide) 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

E 3902

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.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

## Certificate of Analysis

| Test  | Specification | Result      |
|---|---------------|-------------|
| Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water) | >= 99.4 %     | 99.8 %      |
| Color (APHA)  | <= 10         | 5           |
| Residue after Evaporation   | <= 1.0 ppm    | 0.2 ppm     |
| Substances Reducing Permanganate  | Passes Test   | Passes Test |
| Titrable Acid (μeq/g)   | <= 0.3        | 0.2         |
| Titrable Base (μeq/g)   | <= 0.6        | <0.1        |
| Water (H <sub>2</sub> O)  | <= 0.5 %      | 0.2 %       |
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)    | <= 5          | <1          |
| ECD Sensitive Impurities (as HeptachlorEpoxide) 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 6/11/25

E 3940

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 25A2862010  
Manufactured Date: 2024-12-18  
Expiration Date: 2026-03-19  
Revision No.: 0

## Certificate of Analysis

| Test   | Specification | Result  |
|--|---------------|---------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                       | <= 5          | <1      |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)                        | <= 10         | 2       |
| Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water) | >= 99.8 %     | 99.9 %  |
| Color (APHA)   | <= 10         | 5       |
| Residue after Evaporation  | <= 1.0 ppm    | 0.3 ppm |
| Titrable Acid ( $\mu\text{eq/g}$ )   | <= 0.3        | <0.1    |
| Chloride (Cl)  | <= 10 ppm     | <5 ppm  |
| Water (by KF, coulometric)   | <= 0.02 %     | <0.01 % |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3942

A handwritten signature in black ink that reads "Jamie Croak".

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 25A2862010  
Manufactured Date: 2024-12-18  
Expiration Date: 2026-03-19  
Revision No.: 0

## Certificate of Analysis

| Test   | Specification | Result  |
|--|---------------|---------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                       | <= 5          | <1      |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)                        | <= 10         | 2       |
| Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water) | >= 99.8 %     | 99.9 %  |
| Color (APHA)   | <= 10         | 5       |
| Residue after Evaporation  | <= 1.0 ppm    | 0.3 ppm |
| Titrable Acid ( $\mu\text{eq/g}$ )   | <= 0.3        | <0.1    |
| Chloride (Cl)  | <= 10 ppm     | <5 ppm  |
| Water (by KF, coulometric)   | <= 0.02 %     | <0.01 % |

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3942

A handwritten signature in black ink that reads "Jamie Croak".

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 25B1862001  
Manufactured Date: 2024-12-18  
Expiration Date: 2026-03-19  
Revision No.: 0

## Certificate of Analysis

| Test   | Specification | Result  |
|--|---------------|---------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)                             | <= 5          | <1      |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)                              | <= 10         | 2       |
| Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water) | >= 99.8 %     | 99.9 %  |
| Color (APHA)   | <= 10         | 5       |
| Residue after Evaporation  | <= 1.0 ppm    | 0.3 ppm |
| Titrable Acid (μeq/g)  | <= 0.3        | <0.1    |
| Chloride (Cl)  | <= 10 ppm     | <5 ppm  |
| Water (by KF, coulometric)   | <= 0.02 %     | <0.01 % |

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

RS  
7/14/25

E3954

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Sulfuric Acid  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis  
Low Selenium



M6157  
B

Material No.: 9673-33

Batch No.: 24I1262013

Manufactured Date: 2024-08-07

Retest Date: 2029-08-06

Revision No.: 0

## Certificate of Analysis

| Test  | Specification | Result      |
|---|---------------|-------------|
| ACS - Assay (H <sub>2</sub> SO <sub>4</sub> )               | 95.0 – 98.0 % | 96.2 %      |
| Appearance  | Passes Test   | Passes Test |
| ACS - Color (APHA)  | <= 10         | 5           |
| ACS - Residue after Ignition                                | <= 3 ppm      | <1 ppm      |
| ACS - Substances Reducing Permanganate(as SO <sub>2</sub> ) | <= 2 ppm      | <2 ppm      |
| Ammonium (NH <sub>4</sub> )                                 | <= 1 ppm      | <1 ppm      |
| Chloride (Cl)   | <= 0.1 ppm    | <0.1 ppm    |
| Nitrate (NO <sub>3</sub> )                                  | <= 0.2 ppm    | 0.1 ppm     |
| Phosphate (PO <sub>4</sub> )                                | <= 0.5 ppm    | <0.1 ppm    |
| Trace Impurities - Aluminum (Al)                            | <= 30.0 ppb   | <5.0 ppb    |
| Arsenic & Antimony (as As)                                  | <= 4.0 ppb    | <2.0 ppb    |
| Trace Impurities - Boron (B)                                | <= 10.0 ppb   | <5.0 ppb    |
| Trace Impurities - Cadmium (Cd)                             | <= 2.0 ppb    | <1.0 ppb    |
| Trace Impurities - Chromium (Cr)                            | <= 6.0 ppb    | <1.0 ppb    |
| Trace Impurities - Cobalt (Co)                              | <= 0.5 ppb    | <0.3 ppb    |
| Trace Impurities - Copper (Cu)                              | <= 1.0 ppb    | <1.0 ppb    |
| Trace Impurities - Gold (Au)                                | <= 10.0 ppb   | <5.0 ppb    |
| Heavy Metals (as Pb)  | <= 500.0 ppb  | <100.0 ppb  |
| Trace Impurities - Iron (Fe)                                | <= 50.0 ppb   | <1.0 ppb    |
| Trace Impurities - Lead (Pb)                                | <= 0.5 ppb    | <0.5 ppb    |
| Trace Impurities - Magnesium (Mg)                           | <= 7.0 ppb    | <1.0 ppb    |
| Trace Impurities - Manganese (Mn)                           | <= 1.0 ppb    | <1.0 ppb    |
| Trace Impurities - Mercury (Hg)                             | <= 0.5 ppb    | <0.1 ppb    |
| Trace Impurities - Nickel (Ni)                              | <= 2.0 ppb    | <0.3 ppb    |
| Trace Impurities - Potassium (K)                            | <= 500.0 ppb  | <10.0 ppb   |
| Trace Impurities - Selenium (Se)                            | <= 50.0 ppb   | 7.2 ppb     |
| Trace Impurities - Silicon (Si)                             | <= 100.0 ppb  | 12.8 ppb    |
| Trace Impurities - Silver (Ag)                              | <= 1.0 ppb    | <1.0 ppb    |

Sulfuric Acid  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis  
Low Selenium



Material No.: 9673-33  
Batch No.: 24I1262013

| Test                              | Specification | Result   |
|-----------------------------------|---------------|----------|
| Trace Impurities – Sodium (Na)    | <= 500.0 ppb  | <5.0 ppb |
| Trace Impurities – Strontium (Sr) | <= 5.0 ppb    | <1.0 ppb |
| Trace Impurities – Tin (Sn)       | <= 5.0 ppb    | 1.1 ppb  |
| Trace Impurities – Zinc (Zn)      | <= 5.0 ppb    | <1.0 ppb |

For Laboratory, Research, or Manufacturing Use

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

A handwritten signature in black ink that reads "Jamie Croak".

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700



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-110094-02 506889    | ≤ -10 °C | Methylene Chloride | 7/25/2028  | CLP Base/Neutral Surrogate Solution, 5,000 mg/L, 1 ml |

| Compound                           | CAS No.   | Purity (%) | Compound Lot No. | Concentration, mg/L |
|------------------------------------|-----------|------------|------------------|---------------------|
| 1,2-dichlorobenzene-d <sub>4</sub> | 2199-69-1 | 99.7       | 247.29.3P        | 5035 ± 28.02        |
| 2-fluorobiphenyl                   | 321-60-8  | 99.69      | 8.286.1.1P       | 4999 ± 103.66       |
| nitrobenzene-d <sub>5</sub>        | 4165-60-0 | 99.67      | 7.9.3P           | 4988 ± 27.32        |
| p-terphenyl-d <sub>14</sub>        | 1718-51-0 | 99.3       | 9.120.8P         | 5005 ± 27.85        |

511494 } Y.P.  
↓ } 08/11/2023  
511498

\*Not a certified value

Certified By: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "Thomas C. Tipton".

Clint Tipton  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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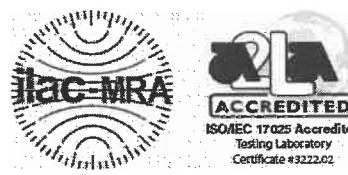
## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*gravimetric*



ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555872

**Lot No.:** A0201728

**Description :** Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000 $\mu$ g/mL, Methanol,  
1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

S11649  
↓  
S11658 } Y.P.  
} 11/13/23

### C E R T I F I E D V A L U E S

| 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 $\mu$ g/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/ $\mu$ ECD, 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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

$k$  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](http://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 2,000 $\mu$ g/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

511749  
↓ { RC /  
511794 } 11/30/23

### C E R T I F I E D   V A L U E S

| 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 $\mu$ g/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 0.25 $\mu$ m  
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:**

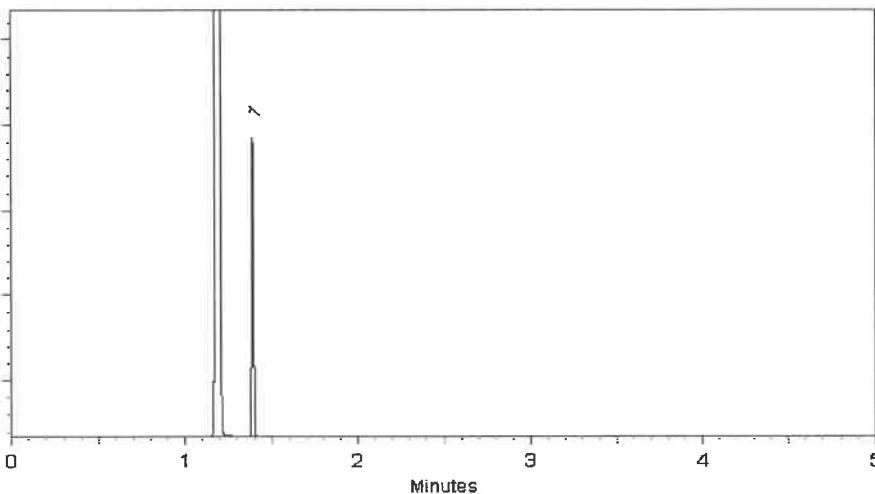
FID

**Split Vent:**

100 mL/min.

**Inj. Vol**

1 $\mu$ L



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 Moodier*  
Sam Moodier - 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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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

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## CERTIFIED REFERENCE MATERIAL



ILAC  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



ILAC  
ACCREDITED  
ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

## 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 2000 $\mu$ g/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

511828  
↓  
511832 } RC/  
11/30/23 }

### C E R T I F I E D V A L U E S

| Elution Order | Compound                | CAS #      | Lot #    | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(95% C.L.; K=2) |
|---------------|-------------------------|------------|----------|--------|--------------------------------|---|
| 1             | 2-Methylnaphthalene-d10 | 7297-45-2  | EF-135   | 98%    | 2,015.9 $\mu$ g/mL             | +/- 90.8098                               |
| 2             | Fluoranthene-d10        | 93951-69-0 | PR-32557 | 99%    | 2,020.0 $\mu$ g/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 0.25 $\mu$ m

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:**

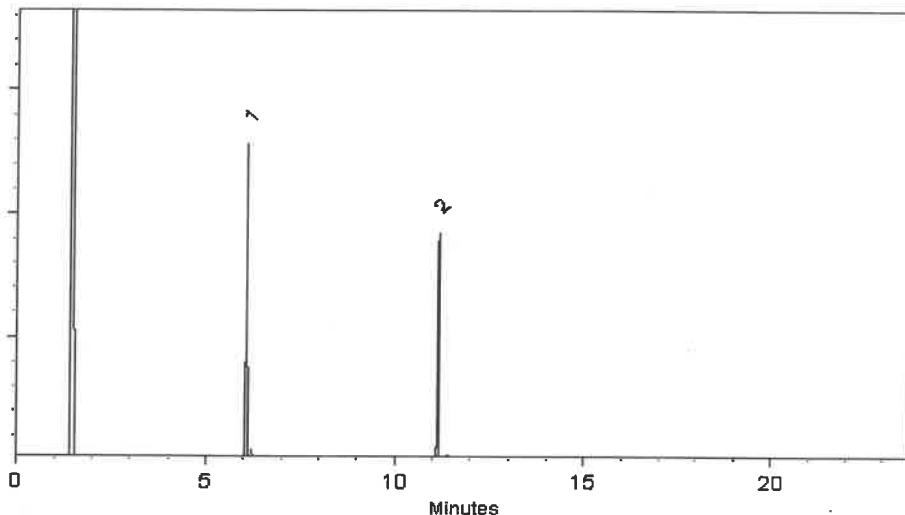
330°C

**Det. Type:**

FID

**Split Vent:**

10 ml/min.

**Inj. Vol**1 $\mu$ l

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/ $\mu$ ECD, 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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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  
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(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<br>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 /  
↓  
512116 } 03/08/24

\*Not a certified value

Certified By:

Melissa Workoff  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



110 Benner Circle  
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## CERTIFIED REFERENCE MATERIAL



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Certificate #3222.01



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ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

## 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

512187 } RC/  
↓ } 03/18/24  
512206 }

**Description :** Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10,000 $\mu$ g/mL, Methanol, 5mL/ampul

**Container Size :** 5 mL

**Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2032

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

| Elution Order | Compound             | CAS #      | Lot #       | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(95% C.L.; K=2) |
|---------------|----------------------|------------|-------------|--------|--------------------------------|---|
| 1             | 2-Fluorophenol       | 367-12-4   | STBK1705    | 99%    | 10,005.3 $\mu$ g/mL            | +/- 302.5390                              |
| 2             | Phenol-d6            | 13127-88-3 | PR-33287A   | 99%    | 10,005.5 $\mu$ g/mL            | +/- 302.5475                              |
| 3             | 2,4,6-Tribromophenol | 118-79-6   | RP230831RSR | 99%    | 10,006.6 $\mu$ g/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 0.25 $\mu$ m  
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:**

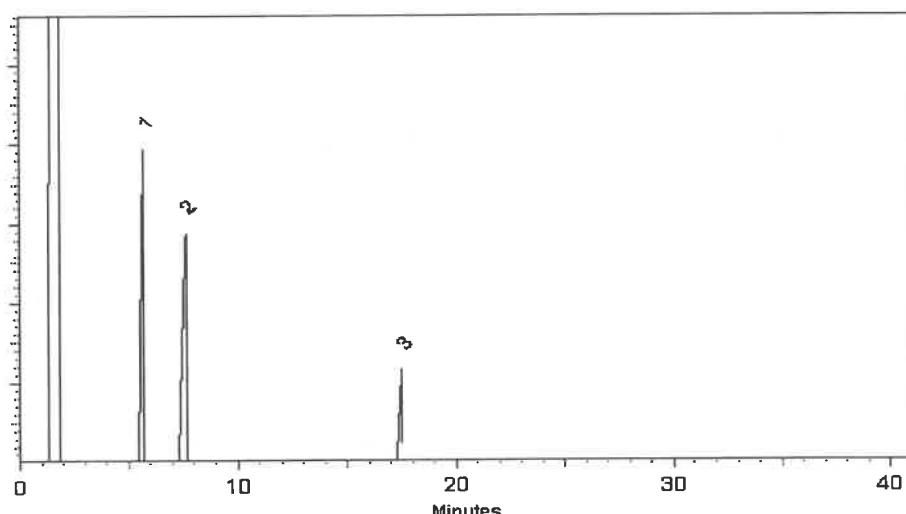
FID

**Split Vent:**

2 mL/min.

**Inj. Vol**

1 $\mu$ L



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 Regin - Operations Tech |

Date Mixed: 04-Jan-2024      Balance Serial #: 1128360905

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



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Certificate #3222.02

## 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

512187 } RC/  
↓ } 03/18/24  
512206 }

**Description :** Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10,000 $\mu$ g/mL, Methanol, 5mL/ampul

**Container Size :** 5 mL

**Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2032

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

| Elution Order | Compound             | CAS #      | Lot #       | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(95% C.L.; K=2) |
|---------------|----------------------|------------|-------------|--------|--------------------------------|---|
| 1             | 2-Fluorophenol       | 367-12-4   | STBK1705    | 99%    | 10,005.3 $\mu$ g/mL            | +/- 302.5390                              |
| 2             | Phenol-d6            | 13127-88-3 | PR-33287A   | 99%    | 10,005.5 $\mu$ g/mL            | +/- 302.5475                              |
| 3             | 2,4,6-Tribromophenol | 118-79-6   | RP230831RSR | 99%    | 10,006.6 $\mu$ g/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 0.25 $\mu$ m  
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:**

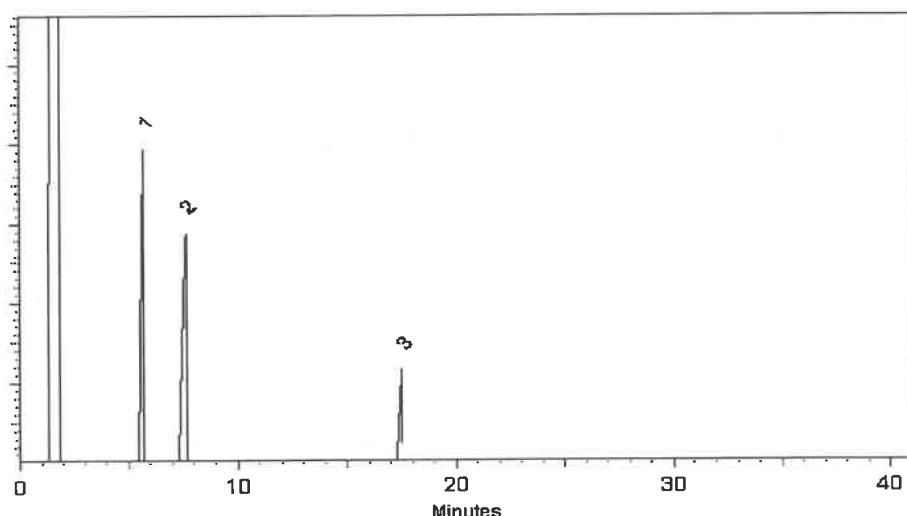
FID

**Split Vent:**

2 mL/min.

**Inj. Vol**

1 $\mu$ L



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 Regin - Operations Tech |

Date Mixed: 04-Jan-2024      Balance Serial #: 1128360905

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



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Certificate #3222.01



## 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 5000 $\mu$ g/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 /  
↓      } 03/18/24  
S12221 }

### C E R T I F I E D   V A L U E S

| Elution Order | Compound         | CAS #     | Lot #    | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(95% C.L.; K=2) |
|---------------|------------------|-----------|----------|--------|--------------------------------|---|
| 1             | Nitrobenzene-d5  | 4165-60-0 | I-25158  | 99%    | 5,029.3 $\mu$ g/mL             | +/- 226.5204                              |
| 2             | 2-Fluorobiphenyl | 321-60-8  | 00021384 | 99%    | 5,030.9 $\mu$ g/mL             | +/- 226.5936                              |
| 3             | p-Terphenyl-d14  | 1718-51-0 | PR-32599 | 99%    | 5,026.4 $\mu$ g/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 0.25 $\mu$ m  
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:**

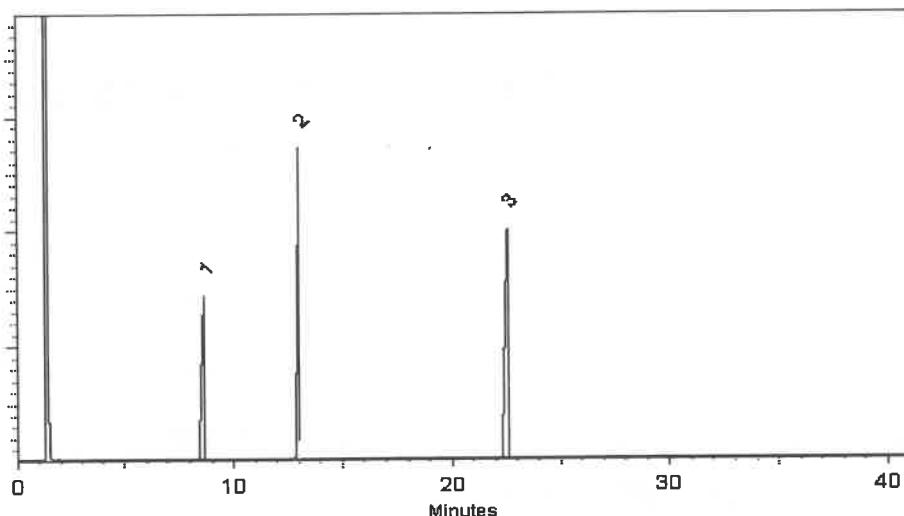
FID

**Split Vent:**

2 mL/min.

**Inj. Vol**

1 $\mu$ L



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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Certificate #3222.01



## 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 5000 $\mu$ g/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 /  
↓      } 03/18/24  
S12221 }

### C E R T I F I E D   V A L U E S

| Elution Order | Compound         | CAS #     | Lot #    | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(95% C.L.; K=2) |
|---------------|------------------|-----------|----------|--------|--------------------------------|---|
| 1             | Nitrobenzene-d5  | 4165-60-0 | I-25158  | 99%    | 5,029.3 $\mu$ g/mL             | +/- 226.5204                              |
| 2             | 2-Fluorobiphenyl | 321-60-8  | 00021384 | 99%    | 5,030.9 $\mu$ g/mL             | +/- 226.5936                              |
| 3             | p-Terphenyl-d14  | 1718-51-0 | PR-32599 | 99%    | 5,026.4 $\mu$ g/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 0.25 $\mu$ m  
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:**

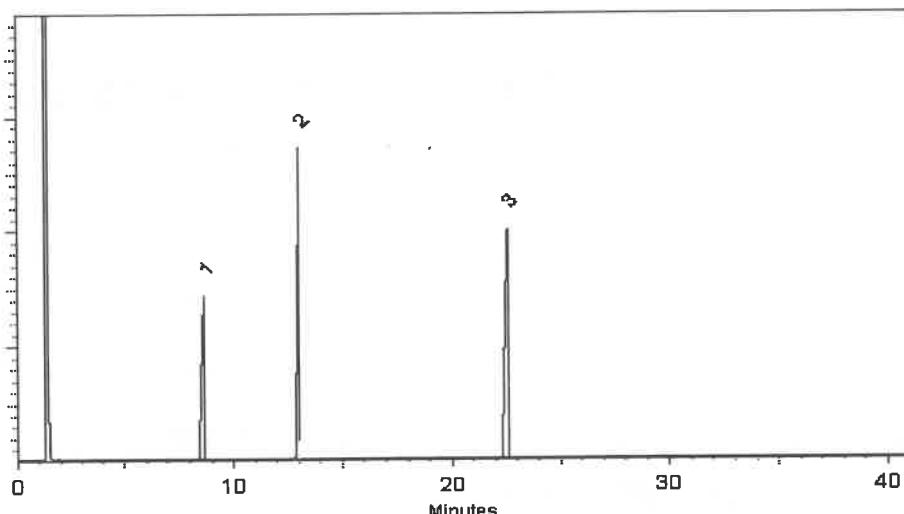
FID

**Split Vent:**

2 mL/min.

**Inj. Vol**

1 $\mu$ L



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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Santa Rosa, CA 95403

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Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 4

| Catalog No.: Lot No.: | Storage: | Solvent:           | Exp. Date: | Description:   |
|-----------------------|----------|--------------------|------------|--|
| 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          |

512270 } Rcf  
↓ 512274 } 05/24/24

\*Not a certified value

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.

Kerry Kane

Certified By:

Kerry Kane  
Chemist

# Certificate of Analysis

Page 2 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

| Compound                   | CAS No.   | Purity (%) | Compound Lot No. | Concentration, mg/L |
|----------------------------|-----------|------------|------------------|---------------------|
| 4-chloroaniline            | 106-47-8  | 100        | 66.7.1P          | 1000 ± 9.79         |
| 4-chlorophenylphenyl ether | 7005-72-3 | 98         | 37.158.2P        | 1001 ± 17.07        |
| 4-chloro-3-methylphenol    | 59-50-7   | 99         | 102.1.2P         | 1006 ± 17.16        |
| 2-chloronaphthalene        | 91-58-7   | 99.9       | 42.7.6P          | 1000 ± 9.79         |
| 2-chlorophenol             | 95-57-8   | 99.8       | 103.7.1P         | 1007 ± 13.96        |
| chrysene                   | 218-01-9  | 96         | 21.286.2P        | 998.4 ± 12.85       |
| dibenz[a,h]anthracene      | 53-70-3   | 99.44      | 22.286.3P        | 1000 ± 9.74         |
| dibenzofuran               | 132-64-9  | 100        | 67.7.2.1P        | 1002 ± 9.77         |
| di-n-butyl phthalate       | 84-74-2   | 99.84      | 40.286.1P        | 1007 ± 24.48        |
| 1,2-dichlorobenzene        | 95-50-1   | 99.8       | 43.7.1P          | 1000 ± 9.79         |
| 1,3-dichlorobenzene        | 541-73-1  | 99.5       | 44.1.3P          | 999.4 ± 9.79        |
| 1,4-dichlorobenzene        | 106-46-7  | 99.9       | 45.29.2P         | 1000 ± 9.79         |
| 2,4-dichlorophenol         | 120-83-2  | 99.6       | 104.7.1.1P       | 1005 ± 13.93        |
| diethyl phthalate          | 84-66-2   | 99.8       | 38.7.1P          | 1011 ± 14           |
| 2,4-dimethylphenol         | 105-67-9  | 99.6       | 105.7.1.1P       | 1009 ± 13.98        |
| dimethyl phthalate         | 131-11-3  | 99.9       | 39.9.2P          | 996.5 ± 13.8        |
| 1,2-dinitrobenzene         | 528-29-0  | 99.86      | 86.7.3.1P        | 999.5 ± 9.75        |
| 1,3-dinitrobenzene         | 99-65-0   | 100        | 313.7.2P         | 998 ± 9.79          |
| 1,4-dinitrobenzene         | 100-25-4  | 100        | 907.7.1P         | 999.5 ± 9.8         |
| 2,4-dinitrophenol          | 51-28-5   | 99.9       | 106.1.6DP        | 1002 ± 13.89        |
| 2,4-dinitrotoluene         | 121-14-2  | 100        | 87.7.3P          | 999.8 ± 13.85       |
| 2,6-dinitrotoluene         | 606-20-2  | 99.4       | 88.7.2.1P        | 999.6 ± 13.85       |
| di-n-octyl phthalate       | 117-84-0  | 99.1       | 41.7.5P          | 991.6 ± 13.74       |
| diphenylamine              | 122-39-4  | 100        | 78.1.6P          | 998 ± 13.79         |
| 2,3,5,6-tetrachlorophenol  | 935-95-5  | 97         | 1112.286.1P      | 1004 ± 14.02        |
| fluoranthene               | 206-44-0  | 98.6       | 23.7.4P          | 999.6 ± 9.79        |
| fluorene                   | 86-73-7   | 98.4       | 24.7.1P          | 999.7 ± 9.79        |

\*Not a certified value

Certified By:

Kerry Kane  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# Certificate of Analysis

Page 3 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

| Compound                   | CAS No.  | Purity (%) | Compound Lot No. | Concentration, mg/L |
|----------------------------|----------|------------|------------------|---------------------|
| hexachlorobenzene          | 118-74-1 | 99         | 46.158.4P        | 999.9 ± 13.96       |
| hexachlorobutadiene        | 87-68-3  | 97.4       | 47.1.4P          | 1000 ± 9.79         |
| hexachlorocyclopentadiene  | 77-47-4  | 99.2       | 48.2.2P          | 1001 ± 9.8          |
| hexachloroethane           | 67-72-1  | 99.9       | 49.1.4P          | 1003 ± 9.82         |
| indeno[1,2,3-cd]pyrene     | 193-39-5 | 98         | 25.286.4P        | 999.4 ± 22.23       |
| isophorone                 | 78-59-1  | 98.9       | 90.1.4P          | 999.9 ± 13.85       |
| 2-methyl-4,6-dinitrophenol | 534-52-1 | 99.6       | 107.421.2DP      | 991 ± 24.09         |
| 1-methylnaphthalene        | 90-12-0  | 97.1       | 249.7.5P         | 999.2 ± 13.95       |
| 2-methylnaphthalene        | 91-57-6  | 97.4       | 68.7.2P          | 1006 ± 22.38        |
| 2-methylphenol             | 95-48-7  | 99.6       | 114.7.3P         | 1001 ± 13.87        |
| 3-methylphenol             | 108-39-4 | 99.1       | 115.7.4P         | 499.7 ± 6.92        |
| 4-methylphenol             | 106-44-5 | 99.5       | 116.7.1P         | 501.2 ± 6.94        |
| naphthalene                | 91-20-3  | 99.8       | 26.9.1P          | 1018 ± 9.97         |
| 2-nitroaniline             | 88-74-4  | 99.7       | 69.29.1P         | 999.6 ± 9.79        |
| 3-nitroaniline             | 99-09-2  | 100        | 70.7.3P          | 1000 ± 9.74         |
| 4-nitroaniline             | 100-01-6 | 99.7       | 71.29.1P         | 1001 ± 9.8          |
| nitrobenzene               | 98-95-3  | 100        | 94.7.1P          | 1000 ± 13.85        |
| 2-nitrophenol              | 88-75-5  | 99.1       | 108.29.1P        | 996.5 ± 13.81       |
| 4-nitrophenol              | 100-02-7 | 100        | 109.7.1P         | 1000 ± 13.82        |
| N-nitrosodimethylamine     | 62-75-9  | 99.5       | 57.3.19P         | 998.5 ± 14.67       |
| N-nitrosodi-n-propylamine  | 621-64-7 | 99.8       | 59.286.1P        | 996.8 ± 17          |
| pentachlorophenol          | 87-86-5  | 99         | 110.1.7P         | 1004 ± 13.92        |
| phenanthrene               | 85-01-8  | 99.7       | 27.1.5P          | 999 ± 12.87         |
| phenol                     | 108-95-2 | 100        | 112.7.1P         | 998.5 ± 13.8        |
| pyrene                     | 129-00-0 | 99.2       | 28.9.2P          | 998.9 ± 9.78        |
| pyridine                   | 110-86-1 | 100        | 101.24.1P        | 999 ± 9.73          |
| 2,3,4,6-Tetrachlorophenol  | 58-90-2  | 91.8       | 120.421.1P       | 996.5 ± 13.92       |

\*Not a certified value

Certified By:

Kerry Kane  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

| Compound               | CAS No.  | Purity (%) | Compound Lot No. | Concentration, mg/L |
|------------------------|----------|------------|------------------|---------------------|
| 1,2,4-trichlorobenzene | 120-82-1 | 99.6       | 54.29.1P         | 999.6 ± 9.79        |
| 2,4,5-trichlorophenol  | 95-95-4  | 96.5       | 121.7.1.1P       | 999.5 ± 13.85       |
| 2,4,6-trichlorophenol  | 88-06-2  | 99.6       | 113.7.1P         | 996 ± 13.8          |

\*Not a certified value

Certified By:

Kerry Kane  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



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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. :** 555223 **Lot No.:** A0214021

**Description :** Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000 $\mu$ g/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

### C E R T I F I E D V A L U E S

| Component # | Compound               | CAS #     | Lot #      | Purity | Grav. Conc.<br>(weight/volume) | Expanded<br>Uncertainty *<br>(95% C.L.; K=2) |
|-------------|------------------------|-----------|------------|--------|--------------------------------|--|
| 1           | 3,3'-Dichlorobenzidine | 91-94-1   | S240326RSR | 99%    | 1,004.0 $\mu$ g/mL             | +/- 23.0487                                  |
| 2           | Atrazine               | 1912-24-9 | 5FYWL      | 99%    | 1,005.0 $\mu$ g/mL             | +/- 23.0717                                  |
| 3           | Benzidine              | 92-87-5   | S240430RSR | 99%    | 1,006.0 $\mu$ g/mL             | +/- 23.0947                                  |
| 4           | epsilon-Caprolactam    | 105-60-2  | Y16H012    | 99%    | 1,000.0 $\mu$ g/mL             | +/- 22.9569                                  |

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12449 } RC/  
↓ } 7/24/24  
S12508 }

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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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 1,000 $\mu$ g/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

### C E R T I F I E D   V A L U E S

| Component # | Compound               | CAS #     | Lot #      | Purity | Grav. Conc.<br>(weight/volume) | Expanded<br>Uncertainty *<br>(95% C.L.; K=2) |
|-------------|------------------------|-----------|------------|--------|--------------------------------|--|
| 1           | 3,3'-Dichlorobenzidine | 91-94-1   | S240326RSR | 99%    | 1,004.0 $\mu$ g/mL             | +/- 23.0487                                  |
| 2           | Atrazine               | 1912-24-9 | 5FYWL      | 99%    | 1,005.0 $\mu$ g/mL             | +/- 23.0717                                  |
| 3           | Benzidine              | 92-87-5   | S240430RSR | 99%    | 1,006.0 $\mu$ g/mL             | +/- 23.0947                                  |
| 4           | epsilon-Caprolactam    | 105-60-2  | Y16H012    | 99%    | 1,000.0 $\mu$ g/mL             | +/- 22.9569                                  |

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12449 } RC/  
↓ } 7/24/24  
S12508 }

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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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



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**ILAC**  
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Testing Laboratory  
Certificate #3222.02

## 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

### C E R T I F I E D   V A L U E S

| Component # | Compound                   | CAS #    | Lot #        | Purity | Grav. Conc.<br>(weight/volume) | Expanded<br>Uncertainty *<br>(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%

512509  
↓  
512568 } RC / 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.
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- 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:

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*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:

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## 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

### C E R T I F I E D   V A L U E S

| Component # | Compound                   | CAS #    | Lot #        | Purity | Grav. Conc.<br>(weight/volume) | Expanded<br>Uncertainty *<br>(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%

512509  
↓  
512568 } RC / 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:

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- 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:

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*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:

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Certificate #3222.02

## 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 1,000 $\mu$ g/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

### C E R T I F I E D   V A L U E S

| Elution Order | Compound                             | CAS #     | Lot #       | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(95% C.L.; K=2) |
|---------------|--------------------------------------|-----------|-------------|--------|--------------------------------|---|
| 1             | Pentachlorophenol                    | 87-86-5   | RP240517RSR | 99%    | 1,004.5 $\mu$ g/mL             | +/- 44.8902                               |
| 2             | DFTPP (Decafluorotriphenylphosphine) | 5074-71-5 | Q117-147    | 99%    | 1,004.5 $\mu$ g/mL             | +/- 44.8902                               |
| 3             | Benzidine                            | 92-87-5   | S240430RSR  | 99%    | 1,006.0 $\mu$ g/mL             | +/- 44.9572                               |
| 4             | 4,4'-DDT                             | 50-29-3   | S240530RSR  | 97%    | 1,000.1 $\mu$ g/mL             | +/- 44.6922                               |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12577  
↓  
S12579 } 8/2/24

# Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25 $\mu$ m  
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:**

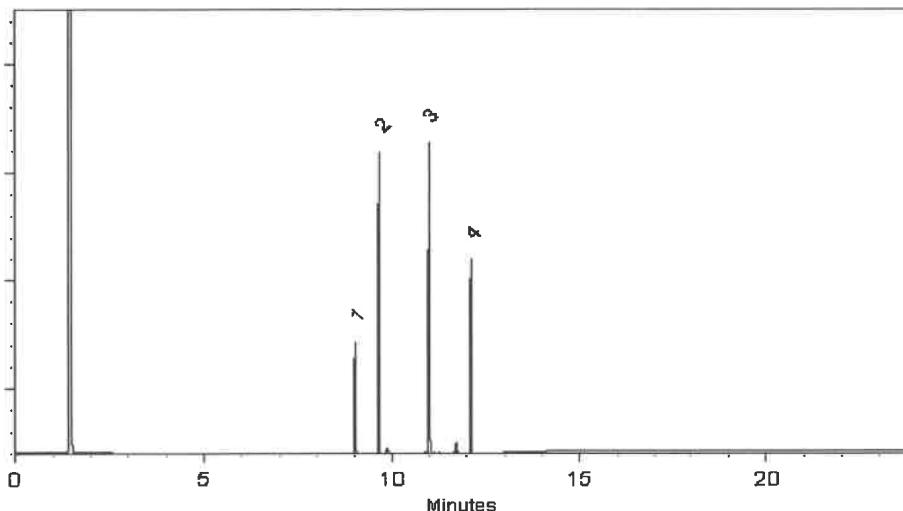
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

1 $\mu$ l



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*  
Ethan Winiarski - Operations Tech I

Date Mixed: 19-Jun-2024 Balance Serial #: 1128353505

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 26-Jun-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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## CERTIFIED REFERENCE MATERIAL



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Reference Material Producer  
Certificate #3222.01



ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

## 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

### C E R T I F I E D V A L U E S

| Elution Order | Compound               | CAS #      | Lot #    | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(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%

512645 } AC  
↓  
512674 } ID/1/24



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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850

**Lot No.:** A0219438

**Description :** 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive.

**Ship:** Ambient

S12963 }  
↓ AC  
S12992 } 12/17/24

### C E R T I F I E D V A L U E S

| Elution Order | Compound                     | CAS #    | Lot #       | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(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  | BCCK6969         | 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 | BCCK0887     | 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 | BCCK2592     | 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.



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. :** 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 }  
↓ AC  
S12992 } 12/17/24

### C E R T I F I E D V A L U E S

| Elution Order | Compound                     | CAS #    | Lot #       | Purity | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty *<br>(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  | BCCK6969         | 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 | BCCK0887     | 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 | BCCK2592     | 99% | 1,002.0 | µg/mL | +/- | 36.4575 |
| 65 | Benzyl butyl phthalate     | 85-68-7  | X12I018      | 99% | 1,007.5 | µg/mL | +/- | 36.6576 |
| 66 | Bis(2-ethylhexyl)adipate   | 103-23-1 | MKCM1988     | 99% | 1,005.9 | µg/mL | +/- | 36.5984 |
| 67 | Benz(a)anthracene          | 56-55-3  | I70012022BAA | 99% | 1,005.5 | µg/mL | +/- | 36.5848 |
| 68 | Chrysene                   | 218-01-9 | RP241007RSR  | 99% | 1,005.3 | µg/mL | +/- | 36.5757 |
| 69 | Bis(2-ethylhexyl)phthalate | 117-81-7 | MKCS8065     | 99% | 1,007.5 | µg/mL | +/- | 36.6576 |
| 70 | Di-n-octyl phthalate       | 117-84-0 | 15566400     | 99% | 1,002.3 | µg/mL | +/- | 36.4666 |
| 71 | Benzo(b)fluoranthene       | 205-99-2 | 052013B      | 99% | 1,004.1 | µg/mL | +/- | 36.5348 |
| 72 | Benzo(k)fluoranthene       | 207-08-9 | 012022K      | 99% | 1,002.8 | µg/mL | +/- | 36.4847 |
| 73 | Benzo(a)pyrene             | 50-32-8  | NQLXA        | 98% | 1,006.2 | µg/mL | +/- | 36.6108 |
| 74 | Indeno(1,2,3-cd)pyrene     | 193-39-5 | 12-JKL-118-9 | 97% | 1,001.8 | µg/mL | +/- | 36.4490 |
| 75 | Dibenz(a,h)anthracene      | 53-70-3  | 2-ASA-59-1   | 99% | 1,003.3 | µg/mL | +/- | 36.5029 |
| 76 | Benzo(g,h,i)perylene       | 191-24-2 | RP241014RSR  | 98% | 1,003.8 | µg/mL | +/- | 36.5217 |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

#### Tech Tips:

N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.



5580 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 531243    | ≤ -10 °C | Methylene Chloride | 1/2/2030   | Custom 8270 Mix, 4-79,<br>1000 mg/L, 1 mL |                     |
| Compound              |          | CAS No.            | Purity (%) | Compound Lot No.                          | Concentration, mg/L |
| atrazine              |          | 1912-24-9          | 99.5       | 337.7.4P                                  | 997 ± 5.81          |
| benzidine             |          | 92-87-5            | 99.9       | 124.18.6.2P                               | 993.8 ± 5.78        |
| caprolactam           |          | 105-60-2           | 99.9       | 271.1.6P                                  | 999 ± 5.82          |

SI3057 }  
↓ AC  
SI3061 } 1/16/25

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

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:

Melissa Workoff

Chemist



# SHIPPING DOCUMENTS

**CHEMTECH**

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 Fax: (908) 78-8922

www.chemtech.net

Chemtech Project Number:

Q2696

COC Number:

**CLIENT INFORMATION****PROJECT INFORMATION****BILLING INFORMATION**

COMPANY: Tetra Tech

ADDRESS: 4433 Corporation Ln, Suite 300

CITY: Virginia Beach STATE: VA ZIP: 23462

ATTENTION: Ernie Wu

PHONE: 757-466-4901 FAX: 757-461-4148

PROJECT NAME: NWIRP Bethpage

PROJECT #: 112G08005-WE13 LOCATION: RW8

PROJECT MANAGER: Ernie Wu

E-MAIL: ernie.wu@tetrach.com

BILL TO: PO#

ADDRESS:

CITY: STATE: ZIP:

ATTENTION: PHONE:

**DATA TURNAROUND INFORMATION****DATA DELIVERABLE INFORMATION**

FAX: 10 DAYS\*

HARD COPY: 10 DAYS\*

EDD 10 DAYS\*

\* TO BE APPROVED BY CHEMTECH  
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

- RESULTS ONLY       USEPA CLP  
 RESULTS + QC       New York State ASP "B"  
 New Jersey REDUCED       New York State ASP "A"  
 New Jersey CLP       Other \_\_\_\_\_  
 EDD Format

| 1,4-Dioxane SW846 8270<br>SIM | Iron, Total | TSS | TDS | Nitrate, Nitrite |   |   |   |   |   |
|-------------------------------|-------------|-----|-----|------------------|---|---|---|---|---|
|                               |             |     |     |                  | 1 | 2 | 3 | 4 | 5 |
|                               |             |     |     |                  |   |   |   |   |   |

**PRESERVATIVES****COMMENTS**

<- Specify Preservatives  
A-HCl      B-HNO3  
C-H2SO4      D-NaOH  
E-ICE      F-Other

| CHEMTECH<br>SAMPLE<br>ID | PROJECT<br>SAMPLE IDENTIFICATION | SAMPLE<br>MATRIX | SAMPLE<br>TYPE |      | SAMPLE<br>COLLECTION |       | # of Bottles | B |   |   |   |   |   |   |   |   | Comments |        |
|--------------------------|----------------------------------|------------------|----------------|------|----------------------|-------|--------------|---|---|---|---|---|---|---|---|---|----------|--------|
|                          |                                  |                  | COMP           | GRAB | DATE                 | TIME  |              | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |          |        |
| 1.                       | RW8-SP100-20250724               | GW               |                | X    | 7/24/25              | 13:05 | 3            | X | X |   |   | X |   |   |   |   |          | pH 1.3 |
| 2.                       | RW8-SP303-20250724               | GW               |                | X    | 7/24/25              | 13:13 | 4            | X | X | X | X |   |   |   |   |   |          | pH 1.3 |
| 3.                       |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |
| 4.                       |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |
| 5.                       |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |
| 6.                       |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |
| 7.                       |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |
| 8.                       |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |
| 9.                       |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |
| 10.                      |                                  |                  |                |      |                      |       |              |   |   |   |   |   |   |   |   |   |          |        |

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY**

|   |                            |  |   |
|---|----------------------------|--|---|
| RELINQUISHED BY SAMPLER<br>1. <i>U.H.</i> | DATE/TIME<br>7/24/25-14:00 | RECEIVED BY<br>1. <i>[Signature]</i>         | Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp 23. <input type="checkbox"/> Ice in Cooler? yes |
| RELINQUISHED BY<br>2. <i>[Signature]</i>  | DATE/TIME<br>7/25/25 10:10 | RECEIVED BY<br>2. <i>[Signature]</i>         | Comments: <i>J.R. Guntt 1</i>   |
| RELINQUISHED BY<br>3. <i>[Signature]</i>  | DATE/TIME                  | RECEIVED FOR LAB BY<br>3. <i>[Signature]</i> | SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight<br>CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight                          |

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT    YELLOW - CHEMTECH COPY    PINK - SAMPLER COPY

**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       |