284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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# DATA PACKAGE

## SEMI-VOLATILE ORGANICS

**PROJECT NAME : NWIRP BETHPAGE - RW5B CTO WE13 112G08005**

**TETRA TECH NUS, INC.**

**661 Andersen Drive**

**Suite 200**

**Pittsburgh, PA - 15220-2745**

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

**ORDER ID : Q1621**

**ATTENTION : Ernie Wu**

**Laboratory Certification ID # 20012**

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# Cover Page

**Order ID :** Q1621

**Project ID :** NWIRP Bethpage - RW5B CTO WE13 112G08005

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

| Lab Sample Number | Client Sample Number |
|---|---|
| Q1621-01 | RW5-SP100-20250320 |
| Q1621-02 | RW5-SP201-20250320 |
| Q1621-03 | RW5-SP303-20250320 |

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

Signature : **APPROVED** *By Nimisha Pandya, QA/QC Supervisor at 10:41 am, Apr 03, 2025*

Date: 4/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**Tetra Tech NUS, Inc.**
**Project Name: NWIRP Bethpage - RW5B CTO WE13 112G08005**
**Project Manager: Ernie Wu**
**Chemtech Project # Q1621**
**Test Name: SVOC-SIMGroup1**

**A. Number of Samples and Date of Receipt:**
3 Water samples were received on 03/21/2025.

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

**C. Analytical Techniques:**
The samples were analyzed on instrument BNA_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe 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 met the acceptable criteria except for PB167269BS [2-Fluorobiphenyl - 115%,], PB167269BSD [2-Fluorobiphenyl - 116% ]. The failure surrogates not associated with the Client parameters list, therefore no corrective action was taken.

The Internal Standards Areas met the acceptable requirements except for RW5-SP100-20250320, RW5-SP201-20250320 and RW5-SP303-20250320. The above failure of Internal Standards not associated with the client parameters list, therefore no corrective action was taken.

The Retention Times were acceptable for all samples.
The RPD met criteria.
The Blank Spike met requirements for all samples.
The Blank Spike Duplicate met requirements for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.
The Continuous Calibration File ID BN036757.D met the requirements except for Terphenyl-d14, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

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The Tuning criteria met requirements.

Sample RW5-SP100-20250320 was diluted due to high concentration.

**E. Additional Comments:**
The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.
The not QT review data is reported in the Miscellaneous.

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

**F. Manual Integration Comments:**
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

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

Signature_____ APPROVED
*By Nimisha Pandya, QA/QC Supervisor at 10:41 am, Apr 03, 2025*

284 Sheffield Street, Mountainside NJ 07092 Tel. 908-789-8900 Fax: 908-789-8922

# DATA REPORTING QUALIFIERS- ORGANIC

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

| | |
|---|---|
| Value | If the result is a value greater than or equal to the detection limit, report the value |
| **U** | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required. |
| **ND** | Indicates the analyte was analyzed for, but not detected |
| **J** | Indicates an estimated value. This flag is used:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others. |
| **B** | Indicates the analyte was found in the blank as well as the sample report as "12 B". |
| **E** | Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis. |
| **D** | This flag identifies all compounds identified in an analysis at a secondary dilution factor. |
| **P** | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P". |
| **N** | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used. |
| **A** | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product. |
| **Q** | Indicates the LCS did not meet the control limits requirements |

# 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

CHEMTECH PROJECT NUMBER: Q1621 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. (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 BN036757.D met the requirements except for Terphenyl-d14, The failure compound not associated with the client parameters list, therefore no corrective action was taken. | | | ✓ |
| 6. | Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 7. | Surrogate Recoveries Meet Criteria<br>If not met, list those compounds and their recoveries which fall outside the acceptable ranges.<br>The Surrogate recoveries met the acceptable criteria except for PB167269BS [2-Fluorobiphenyl - 115], PB167269BSD [2-Fluorobiphenyl - 116%]. The failure surrogates not associated with the client parameters list, therefore no corrective action was taken. | | ✓ | |
| 8. | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria<br>If not met, list those compounds and their recoveries which fall outside the acceptable range.<br>The Blank Spike met requirements for all samples .<br>The Blank Spike Duplicate met requirements for all samples . | | | ✓ |

## GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

| | | NA | NO | YES |
|---|---|---|---|---|
| 9. | Internal Standard Area/Retention Time Shift Meet Criteria | | ✓ | |
| | Comments: The Internal Standards Areas met the acceptable requirements except for RW5-SP100-20250320, RW5-SP201-20250320 and RW5-SP303-20250320. The above failure of Internal Standards not associated with the client parameters list, therefore no corrective action was taken. | | | |
| 10. | Extraction Holding Time Met | | | ✓ |
| | If not met, list number of days exceeded for each sample: | | | |
| 11. | Analysis Holding Time Met | | | ✓ |
| | If not met, list number of days exceeded for each sample: | | | |

ADDITIONAL COMMENTS:

Sample RW5-SP100-20250320 was diluted due to high concentration.

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

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

The not QT review data is reported in the Miscellaneous.

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

QA REVIEW

**APPROVED**
*By Nimisha Pandya, QA/QC Supervisor at 10:41 am, Apr 03, 2025*

Date

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## APPENDIX A

## QA REVIEW GENERAL DOCUMENTATION

**Project #:** Q1621

| | 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** | ✓ |

**QA Review Signature:** MOHAMMAD AHMED **Date:** 04/03/2025

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q1621 | **OrderDate:** | 3/21/2025 10:33:00 AM |
| **Client:** | Tetra Tech NUS, Inc. | **Project:** | NWIRP Bethpage - RW5B CTO WE13 112G08005 |
| **Contact:** | Ernie Wu | **Location:** | I31 |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q1621-01** | **RW5-SP100-20250320** | **Water** | | | **03/20/25** | | | **03/21/25** |
| | | | SVOC-SIMGroup1 | 8270-Modified | | 03/24/25 | 03/27/25 | |
| **Q1621-01DL** | **RW5-SP100-20250320DL** | **Water** | | | **03/20/25** | | | **03/21/25** |
| | | | SVOC-SIMGroup1 | 8270-Modified | | 03/24/25 | 03/27/25 | |
| **Q1621-02** | **RW5-SP201-20250320** | **Water** | | | **03/20/25** | | | **03/21/25** |
| | | | SVOC-SIMGroup1 | 8270-Modified | | 03/24/25 | 03/27/25 | |
| **Q1621-03** | **RW5-SP303-20250320** | **Water** | | | **03/20/25** | | | **03/21/25** |
| | | | SVOC-SIMGroup1 | 8270-Modified | | 03/24/25 | 03/27/25 | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** Q1621

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

| Sample ID | Client ID | | Parameter | Concentration | C | MDL | LOD | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| **Client ID : RW5-SP100-20250320** | | | | | | | | | |
| Q1621-01 | RW5-SP100-20250320 | WATER | 1,4-Dioxane | 7.200 | E | 0.07 | 0.2 | 0.2 | ug/L |
| | | | **Total Svoc :** | **7.20** | | | | | |
| | | | **Total Concentration:** | **7.20** | | | | | |
| **Client ID : RW5-SP100-20250320DL** | | | | | | | | | |
| Q1621-01DL | RW5-SP100-20250320DI | WATER | 1,4-Dioxane | 7.900 | D | 0.35 | 1 | 1 | ug/L |
| | | | **Total Svoc :** | **7.90** | | | | | |
| | | | **Total Concentration:** | **7.90** | | | | | |

# QC SUMMARY

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# Surrogate Summary

**SW-846**

**SDG No.:** Q1621

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

**Analytical Method:** 8270-Modified

| Lab Sample ID | Client ID | Parameter | Spike (PPM) | Result (PPM) | Recovery (%) | Qual | Limits (%) Low | Limits (%) High |
|---|---|---|---|---|---|---|---|---|
| PB167269BL | PB167269BL | 2-Methylnaphthalene-d10 | 0.4 | 0.33 | 83 | | 30 | 150 |
| | | Fluoranthene-d10 | 0.4 | 0.41 | 102 | | 30 | 150 |
| | | Nitrobenzene-d5 | 0.4 | 0.31 | 78 | | 55 | 111 |
| | | 2-Fluorobiphenyl | 0.4 | 0.29 | 73 | | 53 | 106 |
| | | Terphenyl-d14 | 0.4 | 0.39 | 98 | | 58 | 132 |
| PB167269BS | PB167269BS | 2-Methylnaphthalene-d10 | 0.4 | 0.40 | 101 | | 30 | 150 |
| | | Fluoranthene-d10 | 0.4 | 0.45 | 112 | | 30 | 150 |
| | | Nitrobenzene-d5 | 0.4 | 0.42 | 105 | | 55 | 111 |
| | | 2-Fluorobiphenyl | 0.4 | 0.46 | 115 | * | 53 | 106 |
| | | Terphenyl-d14 | 0.4 | 0.49 | 122 | | 58 | 132 |
| PB167269BSD | PB167269BSD | 2-Methylnaphthalene-d10 | 0.4 | 0.43 | 106 | | 30 | 150 |
| | | Fluoranthene-d10 | 0.4 | 0.43 | 108 | | 30 | 150 |
| | | Nitrobenzene-d5 | 0.4 | 0.44 | 109 | | 55 | 111 |
| | | 2-Fluorobiphenyl | 0.4 | 0.46 | 116 | * | 53 | 106 |
| | | Terphenyl-d14 | 0.4 | 0.52 | 131 | | 58 | 132 |
| Q1621-01 | RW5-SP100-20250320 | 2-Methylnaphthalene-d10 | 0.4 | 0.30 | 76 | | 30 | 150 |
| | | Fluoranthene-d10 | 0.4 | 0.44 | 110 | | 30 | 150 |
| | | Nitrobenzene-d5 | 0.4 | 0.30 | 75 | | 55 | 111 |
| | | 2-Fluorobiphenyl | 0.4 | 0.33 | 82 | | 53 | 106 |
| | | Terphenyl-d14 | 0.4 | 0.49 | 123 | | 58 | 132 |
| Q1621-01DL | RW5-SP100-20250320DL | 2-Methylnaphthalene-d10 | 0.4 | 0.28 | 70 | | 30 | 150 |
| | | Fluoranthene-d10 | 0.4 | 0.45 | 111 | | 30 | 150 |
| | | Nitrobenzene-d5 | 0.4 | 0.30 | 75 | | 55 | 111 |
| | | 2-Fluorobiphenyl | 0.4 | 0.28 | 69 | | 53 | 106 |
| | | Terphenyl-d14 | 0.4 | 0.48 | 120 | | 58 | 132 |
| Q1621-02 | RW5-SP201-20250320 | 2-Methylnaphthalene-d10 | 0.4 | 0.32 | 81 | | 30 | 150 |
| | | Fluoranthene-d10 | 0.4 | 0.44 | 110 | | 30 | 150 |
| | | Nitrobenzene-d5 | 0.4 | 0.31 | 78 | | 55 | 111 |
| | | 2-Fluorobiphenyl | 0.4 | 0.34 | 86 | | 53 | 106 |
| | | Terphenyl-d14 | 0.4 | 0.47 | 118 | | 58 | 132 |
| Q1621-03 | RW5-SP303-20250320 | 2-Methylnaphthalene-d10 | 0.4 | 0.31 | 79 | | 30 | 150 |
| | | Fluoranthene-d10 | 0.4 | 0.46 | 116 | | 30 | 150 |
| | | Nitrobenzene-d5 | 0.4 | 0.29 | 72 | | 55 | 111 |
| | | 2-Fluorobiphenyl | 0.4 | 0.34 | 84 | | 53 | 106 |
| | | Terphenyl-d14 | 0.4 | 0.46 | 115 | | 58 | 132 |

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# Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1621

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

**Analytical Method:** 8270-Modified **DataFile:** BN036806.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | RPD Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PB167269BS | 1,4-Dioxane | 0.4 | 0.38 | ug/L | 95 | | | | 70 | 130 | |

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# Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1621

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

**Analytical Method:** 8270-Modified **DataFile:** BN036814.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PB167269BSD | 1,4-Dioxane | 0.4 | 0.32 | ug/L | 80 | 17 | | | 70 | 130 | 20 |

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167269BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036758.D Lab Sample ID: PB167269BL

Instrument ID: BNA_N Date Extracted: 03/24/2025

Matrix: (soil/water) Water Date Analyzed: 03/28/2025

Level: (low/med) LOW Time Analyzed: 04:22

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| RW5-SP100-20250320 | Q1621-01 | BN036733.D | 03/27/2025 |
| RW5-SP201-20250320 | Q1621-02 | BN036740.D | 03/27/2025 |
| RW5-SP303-20250320 | Q1621-03 | BN036741.D | 03/27/2025 |
| PB167269BS | PB167269BS | BN036806.D | 03/29/2025 |
| PB167269BSD | PB167269BSD | BN036814.D | 03/31/2025 |

COMMENTS:

Alliance TECHNICAL GROUP
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036556.D DFTPP Injection Date: 03/10/2025

Instrument ID: BNA_N DFTPP Injection Time: 11:03

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 58.6 |
| 68 | Less than 2.0% of mass 69 | 0.0 ( 0.0 ) 1 |
| 69 | Mass 69 relative abundance | 52.3 |
| 70 | Less than 2.0% of mass 69 | 0.3 ( 0.7 ) 1 |
| 127 | 10.0 - 80.0% of mass 198 | 50.7 |
| 197 | Less than 2.0% of mass 198 | 0.0 |
| 198 | Base Peak, 100% relative abundance | 100 |
| 199 | 5.0 to 9.0% of mass 198 | 6.9 |
| 275 | 10.0 - 60.0% of mass 198 | 24.8 |
| 365 | Greater than 1% of mass 198 | 3.8 |
| 441 | Present, but less than mass 443 | 9.3 |
| 442 | Greater than 50% of mass 198 | 100.0 |
| 443 | 15.0 - 24.0% of mass 442 | 10.9 (19.6) 2 |

1-Value is % mass 69 2-Value is % mass 442

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| SSTDICC0.1 | SSTDICC0.1 | BN036557.D | 03/10/2025 | 11:42 |
| SSTDICC0.2 | SSTDICC0.2 | BN036558.D | 03/10/2025 | 12:18 |
| SSTDICCC0.4 | SSTDICCC0.4 | BN036559.D | 03/10/2025 | 12:54 |
| SSTDICC0.8 | SSTDICC0.8 | BN036560.D | 03/10/2025 | 13:31 |
| SSTDICC1.6 | SSTDICC1.6 | BN036561.D | 03/10/2025 | 14:07 |
| SSTDICC3.2 | SSTDICC3.2 | BN036562.D | 03/10/2025 | 14:43 |
| SSTDICC5.0 | SSTDICC5.0 | BN036563.D | 03/10/2025 | 15:19 |

Alliance TECHNICAL GROUP
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036728.D DFTPP Injection Date: 03/27/2025

Instrument ID: BNA_N DFTPP Injection Time: 09:10

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 67.4 |
| 68 | Less than 2.0% of mass 69 | 0.8 ( 1.4 ) 1 |
| 69 | Mass 69 relative abundance | 56.4 |
| 70 | Less than 2.0% of mass 69 | 0.8 ( 1.4 ) 1 |
| 127 | 10.0 - 80.0% of mass 198 | 52.6 |
| 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 | 6.6 |
| 275 | 10.0 - 60.0% of mass 198 | 24.3 |
| 365 | Greater than 1% of mass 198 | 3.8 |
| 441 | Present, but less than mass 443 | 7.8 |
| 442 | Greater than 50% of mass 198 | 100.0 |
| 443 | 15.0 - 24.0% of mass 442 | 9.3 (19.5) 2 |

1-Value is % mass 69

2-Value is % mass 442

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| SSTDCCC0.4 | SSTDCCC0.4 | BN036729.D | 03/27/2025 | 09:49 |
| RW5-SP100-20250320 | Q1621-01 | BN036733.D | 03/27/2025 | 12:14 |
| SSTDCCC0.4EC | SSTDCCC0.4 | BN036736.D | 03/27/2025 | 14:02 |

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036737.D DFTPP Injection Date: 03/27/2025

Instrument ID: BNA_N DFTPP Injection Time: 14:38

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 66.6 |
| 68 | Less than 2.0% of mass 69 | 0.8 ( 1.4 ) 1 |
| 69 | Mass 69 relative abundance | 56.1 |
| 70 | Less than 2.0% of mass 69 | 0.3 ( 0.6 ) 1 |
| 127 | 10.0 - 80.0% of mass 198 | 53 |
| 197 | Less than 2.0% of mass 198 | 0.0 |
| 198 | Base Peak, 100% relative abundance | 100 |
| 199 | 5.0 to 9.0% of mass 198 | 6.8 |
| 275 | 10.0 - 60.0% of mass 198 | 24 |
| 365 | Greater than 1% of mass 198 | 4 |
| 441 | Present, but less than mass 443 | 8.4 |
| 442 | Greater than 50% of mass 198 | 100.0 |
| 443 | 15.0 - 24.0% of mass 442 | 9.8 (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 SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| SSTDCCC0.4 | SSTDCCC0.4 | BN036738.D | 03/27/2025 | 15:38 |
| RW5-SP201-20250320 | Q1621-02 | BN036740.D | 03/27/2025 | 16:50 |
| RW5-SP303-20250320 | Q1621-03 | BN036741.D | 03/27/2025 | 17:26 |
| RW5-SP100-20250320DL | Q1621-01DL | BN036742.D | 03/27/2025 | 18:02 |
| SSTDCCC0.4EC | SSTDCCC0.4 | BN036755.D | 03/28/2025 | 01:52 |

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036756.D DFTPP Injection Date: 03/28/2025

Instrument ID: BNA_N DFTPP Injection Time: 03:07

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 67 |
| 68 | Less than 2.0% of mass 69 | 0.9 ( 1.5 ) 1 |
| 69 | Mass 69 relative abundance | 57.5 |
| 70 | Less than 2.0% of mass 69 | 0.3 ( 0.5 ) 1 |
| 127 | 10.0 - 80.0% of mass 198 | 53.9 |
| 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 | 7.1 |
| 275 | 10.0 - 60.0% of mass 198 | 24.9 |
| 365 | Greater than 1% of mass 198 | 4.1 |
| 441 | Present, but less than mass 443 | 8.9 |
| 442 | Greater than 50% of mass 198 | 100.0 |
| 443 | 15.0 - 24.0% of mass 442 | 10.3 (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 SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| SSTDCCC0.4 | SSTDCCC0.4 | BN036757.D | 03/28/2025 | 03:46 |
| PB167269BL | PB167269BL | BN036758.D | 03/28/2025 | 04:22 |
| SSTDCCC0.4EC | SSTDCCC0.4 | BN036771.D | 03/28/2025 | 13:58 |

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036790.D DFTPP Injection Date: 03/29/2025

Instrument ID: BNA_N DFTPP Injection Time: 01:26

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 71.7 |
| 68 | Less than 2.0% of mass 69 | 1.1 ( 1.9 ) 1 |
| 69 | Mass 69 relative abundance | 58.5 |
| 70 | Less than 2.0% of mass 69 | 0.3 ( 0.6 ) 1 |
| 127 | 10.0 - 80.0% of mass 198 | 52.7 |
| 197 | Less than 2.0% of mass 198 | 0.0 |
| 198 | Base Peak, 100% relative abundance | 100 |
| 199 | 5.0 to 9.0% of mass 198 | 6.8 |
| 275 | 10.0 - 60.0% of mass 198 | 22.7 |
| 365 | Greater than 1% of mass 198 | 3.9 |
| 441 | Present, but less than mass 443 | 8.2 |
| 442 | Greater than 50% of mass 198 | 100.0 |
| 443 | 15.0 - 24.0% of mass 442 | 10.1 (20.2) 2 |

1-Value is % mass 69 2-Value is % mass 442

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| SSTDCCC0.4 | SSTDCCC0.4 | BN036791.D | 03/29/2025 | 02:44 |
| PB167269BS | PB167269BS | BN036806.D | 03/29/2025 | 11:45 |
| SSTDCCC0.4EC | SSTDCCC0.4 | BN036807.D | 03/29/2025 | 12:21 |

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036808.D DFTPP Injection Date: 03/31/2025

Instrument ID: BNA_N DFTPP Injection Time: 10:00

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 70.2 |
| 68 | Less than 2.0% of mass 69 | 1 ( 1.8 ) 1 |
| 69 | Mass 69 relative abundance | 58.4 |
| 70 | Less than 2.0% of mass 69 | 0.4 ( 0.6 ) 1 |
| 127 | 10.0 - 80.0% of mass 198 | 54.1 |
| 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 | 7.2 |
| 275 | 10.0 - 60.0% of mass 198 | 23.4 |
| 365 | Greater than 1% of mass 198 | 4 |
| 441 | Present, but less than mass 443 | 8.3 |
| 442 | Greater than 50% of mass 198 | 100.0 |
| 443 | 15.0 - 24.0% of mass 442 | 10 (21.3) 2 |

1-Value is % mass 69 2-Value is % mass 442

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| SSTDCCC0.4 | SSTDCCC0.4 | BN036809.D | 03/31/2025 | 10:39 |
| PB167269BSD | PB167269BSD | BN036814.D | 03/31/2025 | 14:16 |
| SSTDCCC0.4EC | SSTDCCC0.4 | BN036815.D | 03/31/2025 | 15:08 |

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036729.D Time Analyzed: 09:49

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | | RT # | IS3 (ANT) AREA # | | RT # |
|---|---|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 2892 | 7.703 | 7150 | | 10.49 | 4255 | | 14.35 |
| | UPPER LIMIT | 5784 | 8.203 | 14300 | | 10.987 | 8510 | | 14.845 |
| | LOWER LIMIT | 1446 | 7.203 | 3575 | | 9.987 | 2127.5 | | 13.845 |
| | EPA SAMPLE NO. | | | | | | | | |
| 01 | RW5-SP100-20250320 | 1492 | 7.70 | 3351 | * | 10.49 | 2085 | * | 14.35 |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036729.D Time Analyzed: 09:49

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 8860 | 17.086 | 7759 | | 21.277 | 6723 | 23.522 |
| | UPPER LIMIT | 17720 | 17.586 | 15518 | | 21.777 | 13446 | 24.022 |
| | LOWER LIMIT | 4430 | 16.586 | 3879.5 | | 20.777 | 3361.5 | 23.022 |
| | EPA SAMPLE NO. | | | | | | | |
| 01 | RW5-SP100-20250320 | 4625 | 17.09 | 3861 | * | 21.28 | 3367 | 23.53 |

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036738.D Time Analyzed: 15:38

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 1523 | 7.703 | 3803 | 10.49 | 2348 | 14.35 |
| | UPPER LIMIT | 3046 | 8.203 | 7606 | 10.987 | 4696 | 14.845 |
| | LOWER LIMIT | 761.5 | 7.203 | 1901.5 | 9.987 | 1174 | 13.845 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | RW5-SP201-20250320 | 1438 | 7.70 | 3285 | 10.49 | 2042 | 14.35 |
| 02 | RW5-SP100-20250320DL | 1243 | 7.70 | 2699 | 10.50 | 1836 | 14.35 |
| 03 | RW5-SP303-20250320 | 1324 | 7.70 | 3208 | 10.49 | 2058 | 14.35 |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036738.D Time Analyzed: 15:38

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 4989 | 17.086 | 4385 | 21.277 | 4045 | 23.525 |
| | UPPER LIMIT | 9978 | 17.586 | 8770 | 21.777 | 8090 | 24.025 |
| | LOWER LIMIT | 2494.5 | 16.586 | 2192.5 | 20.777 | 2022.5 | 23.025 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | RW5-SP201-20250320 | 4646 | 17.09 | 3789 | 21.28 | 3230 | 23.53 |
| 02 | RW5-SP100-20250320DL | 4032 | 17.10 | 3349 | 21.29 | 2971 | 23.53 |
| 03 | RW5-SP303-20250320 | 4583 | 17.09 | 3932 | 21.28 | 3540 | 23.53 |

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/28/2025

Lab File ID: BN036757.D Time Analyzed: 03:46

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 1974 | 7.703 | 4607 | 10.49 | 2750 | 14.33 |
| | UPPER LIMIT | 3948 | 8.203 | 9214 | 10.988 | 5500 | 14.834 |
| | LOWER LIMIT | 987 | 7.203 | 2303.5 | 9.988 | 1375 | 13.834 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | PB167269BL | 2126 | 7.70 | 4744 | 10.50 | 2602 | 14.35 |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/28/2025

Lab File ID: BN036757.D Time Analyzed: 03:46

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | | RT # |
|---|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 5937 | 17.087 | 5680 | 21.277 | 5140 | | 23.519 |
| | UPPER LIMIT | 11874 | 17.587 | 11360 | 21.777 | 10280 | | 24.019 |
| | LOWER LIMIT | 2968.5 | 16.587 | 2840 | 20.777 | 2570 | | 23.019 |
| | EPA SAMPLE NO. | | | | | | | |
| 01 | PB167269BL | 5169 | 17.10 | 3967 | 21.28 | 2206 | * | 23.53 |

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/29/2025

Lab File ID: BN036791.D Time Analyzed: 02:44

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 1826 | 7.696 | 4490 | 10.48 | 2701 | 14.33 |
| | UPPER LIMIT | 3652 | 8.196 | 8980 | 10.977 | 5402 | 14.834 |
| | LOWER LIMIT | 913 | 7.196 | 2245 | 9.977 | 1350.5 | 13.834 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | PB167269BS | 1846 | 7.70 | 4665 | 10.48 | 2569 | 14.33 |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/29/2025

Lab File ID: BN036791.D Time Analyzed: 02:44

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | | RT # |
|---|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 5571 | 17.087 | 4634 | 21.268 | 4032 | | 23.516 |
| | UPPER LIMIT | 11142 | 17.587 | 9268 | 21.768 | 8064 | | 24.016 |
| | LOWER LIMIT | 2785.5 | 16.587 | 2317 | 20.768 | 2016 | | 23.016 |
| | EPA SAMPLE NO. | | | | | | | |
| 01 | PB167269BS | 5013 | 17.09 | 3219 | 21.28 | 1389 | * | 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 UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/31/2025

Lab File ID: BN036809.D Time Analyzed: 10:39

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 1888 | 7.695 | 4656 | 10.48 | 2798 | 14.33 |
| | UPPER LIMIT | 3776 | 8.195 | 9312 | 10.977 | 5596 | 14.834 |
| | LOWER LIMIT | 944 | 7.195 | 2328 | 9.977 | 1399 | 13.834 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | PB167269BSD | 2858 | 7.70 | 7352 | 10.48 | 4021 | 14.33 |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/31/2025

Lab File ID: BN036809.D Time Analyzed: 10:39

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | | RT # |
|---|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 5809 | 17.086 | 4586 | 21.277 | 3945 | | 23.522 |
| | UPPER LIMIT | 11618 | 17.586 | 9172 | 21.777 | 7890 | | 24.022 |
| | LOWER LIMIT | 2904.5 | 16.586 | 2293 | 20.777 | 1972.5 | | 23.022 |
| | EPA SAMPLE NO. | | | | | | | |
| 01 | PB167269BSD | 7787 | 17.09 | 4781 | 21.28 | 1670 | * | 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 UPPER LIMIT = -0.50 minutes of internal standard RT

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

# SAMPLE DATA

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Tetra Tech NUS, Inc. | Date Collected: | 03/20/25 |
| Project: | NWIRP Bethpage - RW5B CTO WE13 112G08005 | Date Received: | 03/21/25 |
| Client Sample ID: | RW5-SP100-20250320 | SDG No.: | Q1621 |
| Lab Sample ID: | Q1621-01 | Matrix: | Water |
| Analytical Method: | SW8270ESIM | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOC-SIMGroup1 |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BN036733.D | 1 | 03/24/25 08:15 | 03/27/25 12:14 | PB167269 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 123-91-1 | 1,4-Dioxane | 7.20 | E | 0.070 | 0.20 | 0.20 | ug/L |
| **SURROGATES** | | | | | | | |
| 7297-45-2 | 2-Methylnaphthalene-d10 | 0.30 | | 30 - 150 | | 76% | SPK: 0.4 |
| 93951-69-0 | Fluoranthene-d10 | 0.44 | | 30 - 150 | | 110% | SPK: 0.4 |
| 4165-60-0 | Nitrobenzene-d5 | 0.30 | | 55 - 111 | | 75% | SPK: 0.4 |
| 321-60-8 | 2-Fluorobiphenyl | 0.33 | | 53 - 106 | | 82% | SPK: 0.4 |
| 1718-51-0 | Terphenyl-d14 | 0.49 | | 58 - 132 | | 123% | SPK: 0.4 |
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 1490 | 7.703 | | | | |
| 1146-65-2 | Naphthalene-d8 | 3350 | 10.487 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 2090 | 14.345 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 4630 | 17.086 | | | | |
| 1719-03-5 | Chrysene-d12 | 3860 | 21.277 | | | | |
| 1520-96-3 | Perylene-d12 | 3370 | 23.528 | | | | |

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\BN032725\
Data File : BN036733.D
Acq On : 27 Mar 2025 12:14
Operator : RC/JU
Sample : Q1621-01
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Quant Time: Mar 27 12:54:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

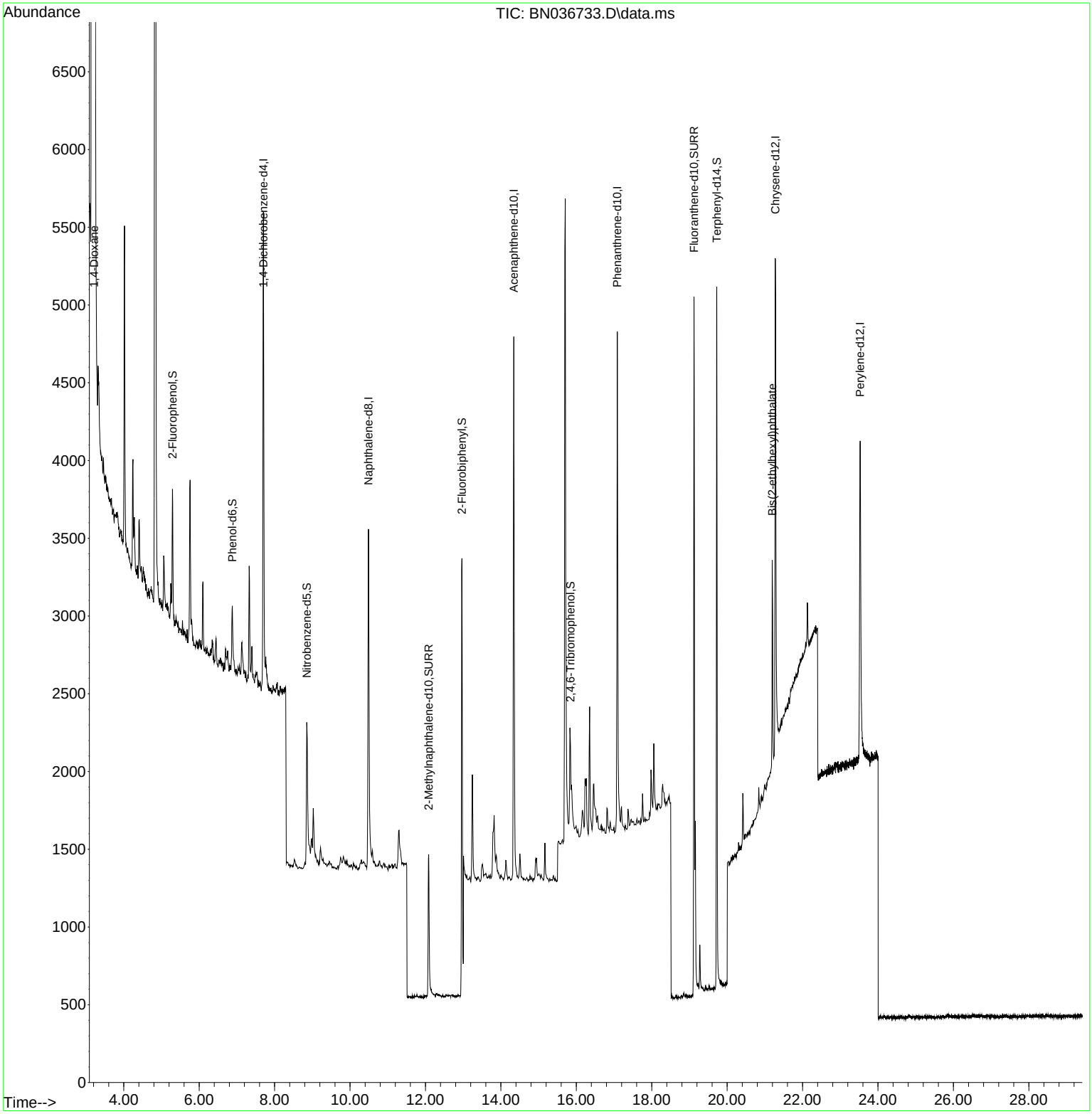
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1492 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 3351 | 0.400 | ng | -0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2085 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 4625 | 0.400 | ng | #-0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 3861 | 0.400 | ng | -0.02 |
| 35) Perylene-d12 | 23.528 | 264 | 3367 | 0.400 | ng | -0.03 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.298 | 112 | 612 | 0.176 | ng | -0.01 |
| 5) Phenol-d6 | 6.879 | 99 | 426 | 0.099 | ng | -0.02 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1085 | 0.298 | ng | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.086 | 152 | 1517 | 0.304 | ng | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.845 | 330 | 443 | 0.468 | ng | -0.01 |
| 15) 2-Fluorobiphenyl | 12.968 | 172 | 3963 | 0.327 | ng | -0.02 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 5217 | 0.440 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 4563 | 0.493 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.218 | 88 | 11914 | 7.198 | ng | 98 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 1392 | 0.146 | ng | 96 |

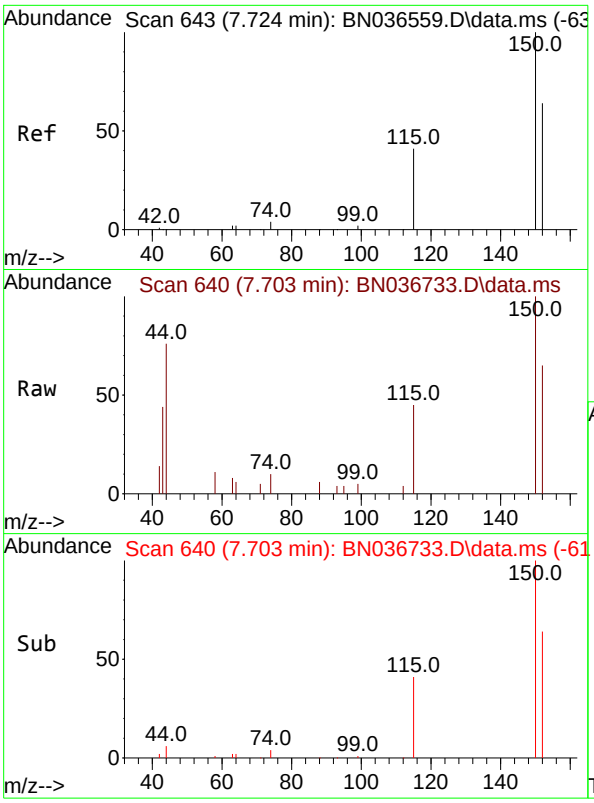
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036733.D
Acq On : 27 Mar 2025 12:14
Operator : RC/JU
Sample : Q1621-01
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Quant Time: Mar 27 12:54:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



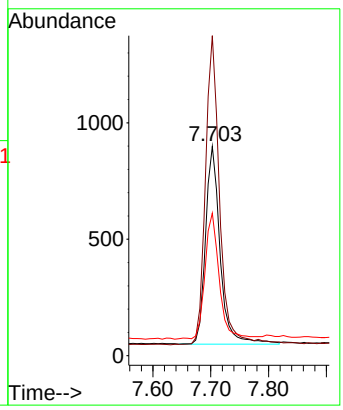


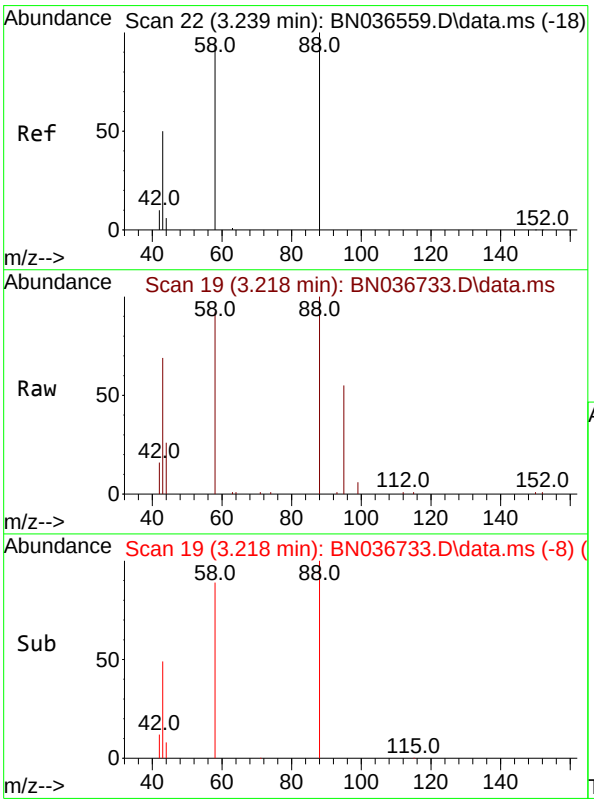

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:152 Resp: 1492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.8 | 123.7 | 185.5 |
| 115 | 68.1 | 54.3 | 81.5 |

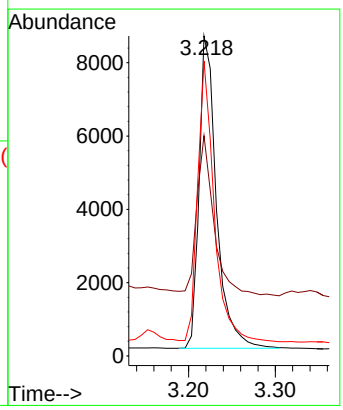


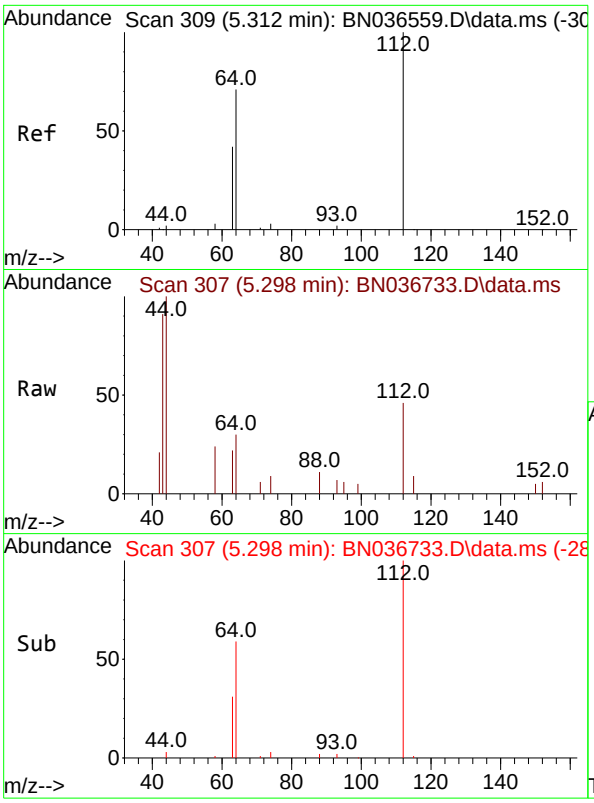




#2
1,4-Dioxane
Concen: 7.198 ng
RT: 3.218 min Scan# 19
Delta R.T. -0.021 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion: 88 Resp: 11914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 50.5 | 37.8 | 56.8 |
| 58 | 85.4 | 67.4 | 101.2 |



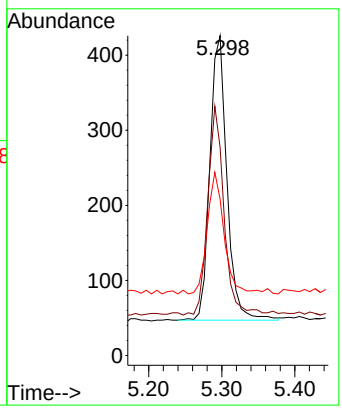


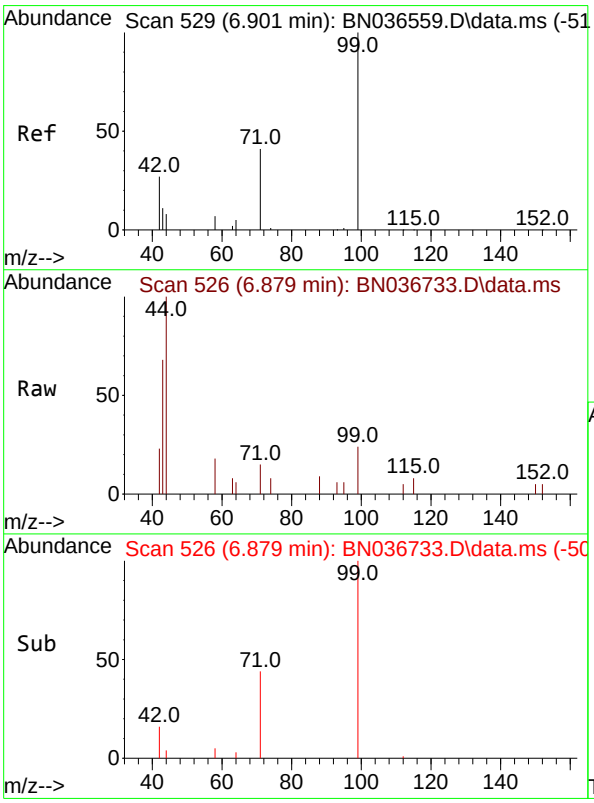

#4
2-Fluorophenol
Concen: 0.176 ng
RT: 5.298 min Scan# 3
Delta R.T. -0.014 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:112 Resp: 612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 70.1 | 53.1 | 79.7 |
| 63 | 41.8 | 31.8 | 47.8 |

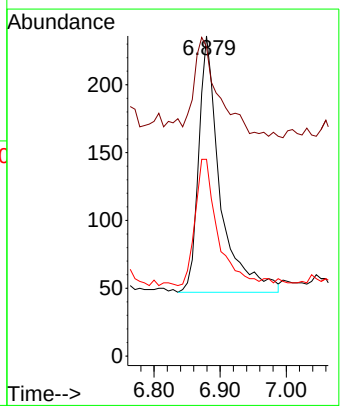


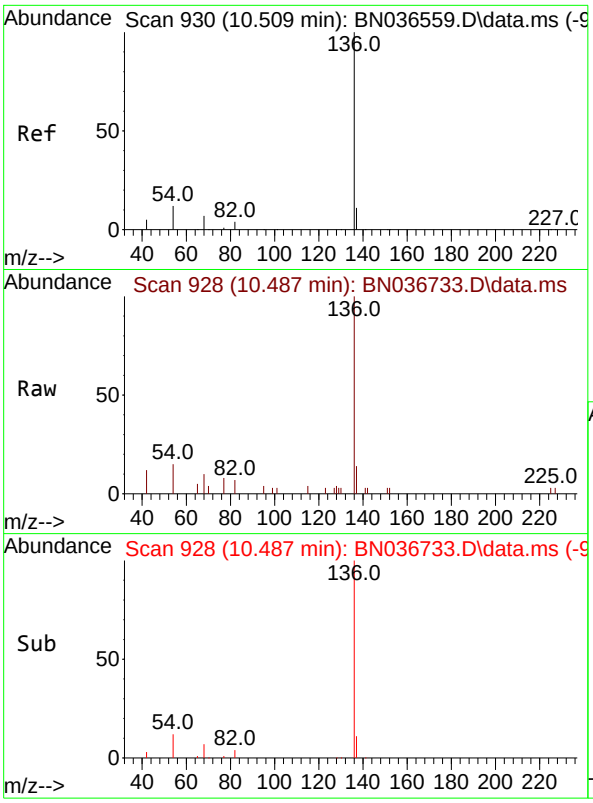




#5
Phenol-d6
Concen: 0.099 ng
RT: 6.879 min Scan# 526
Delta R.T. -0.022 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion: 99 Resp: 426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 46.2 | 26.5 | 39.7# |
| 71 | 51.4 | 34.1 | 51.1# |



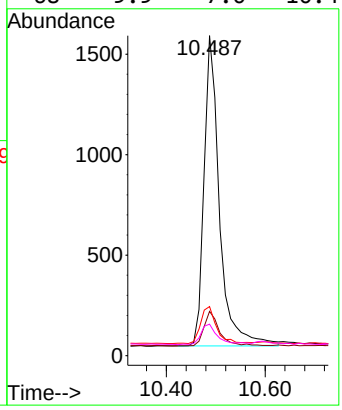


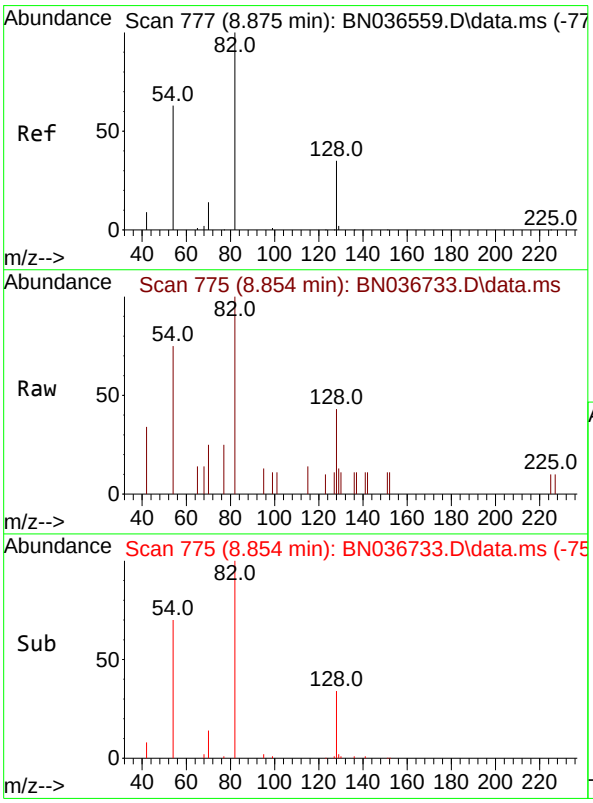

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:136 Resp: 3351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 13.8 | 10.3 | 15.5 |
| 54 | 15.3 | 11.5 | 17.3 |
| 68 | 9.9 | 7.0 | 10.4 |

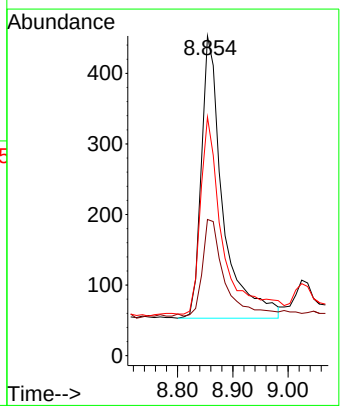


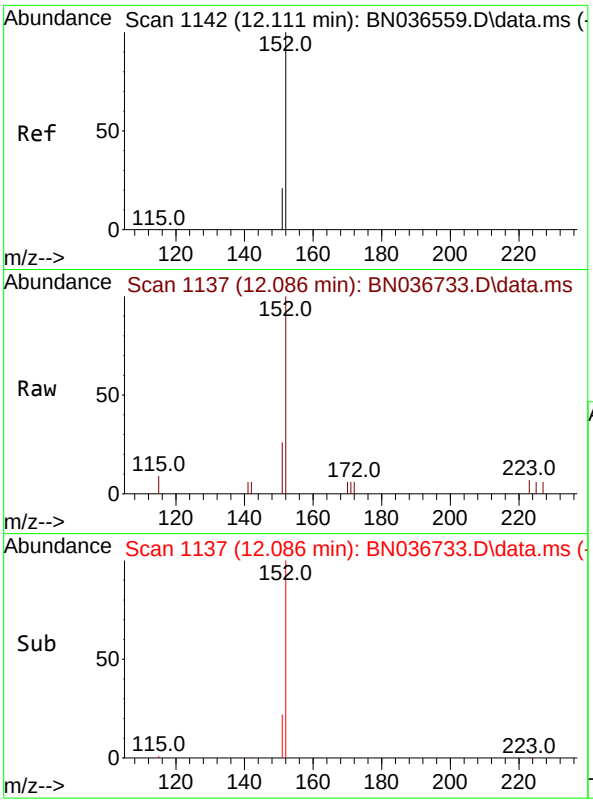




#8
Nitrobenzene-d5
Concen: 0.298 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion: 82 Resp: 1085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 42.6 | 30.6 | 45.8 |
| 54 | 74.6 | 52.2 | 78.4 |



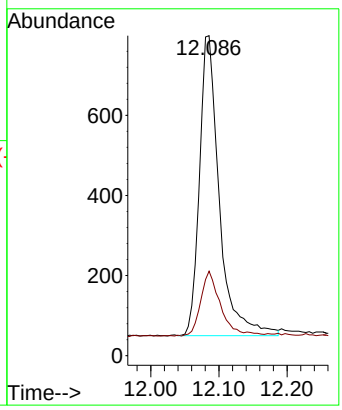


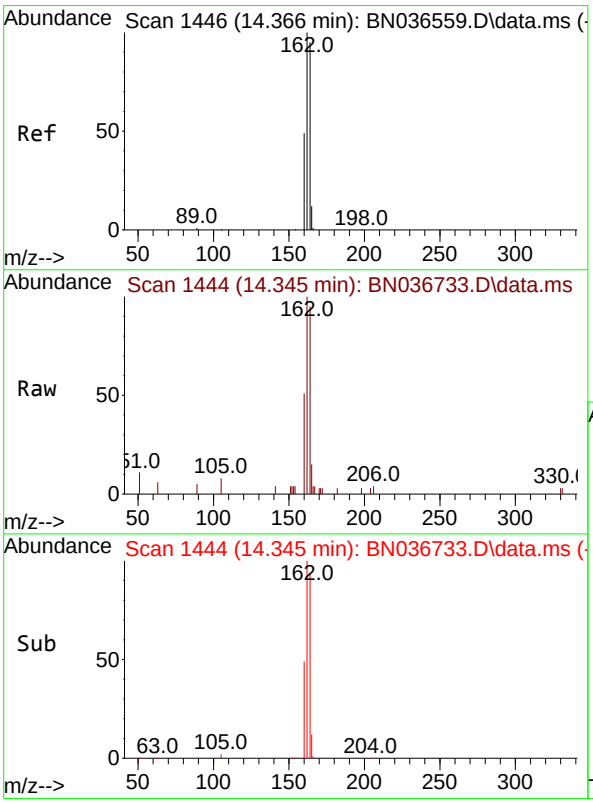

#11
2-Methylnaphthalene-d10
Concen: 0.304 ng
RT: 12.086 min Scan# 11
Delta R.T. -0.025 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:152 Resp: 1517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.8 | 17.0 | 25.6 |

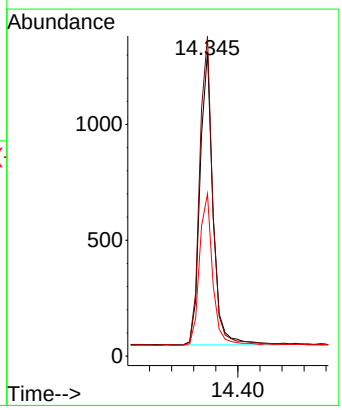


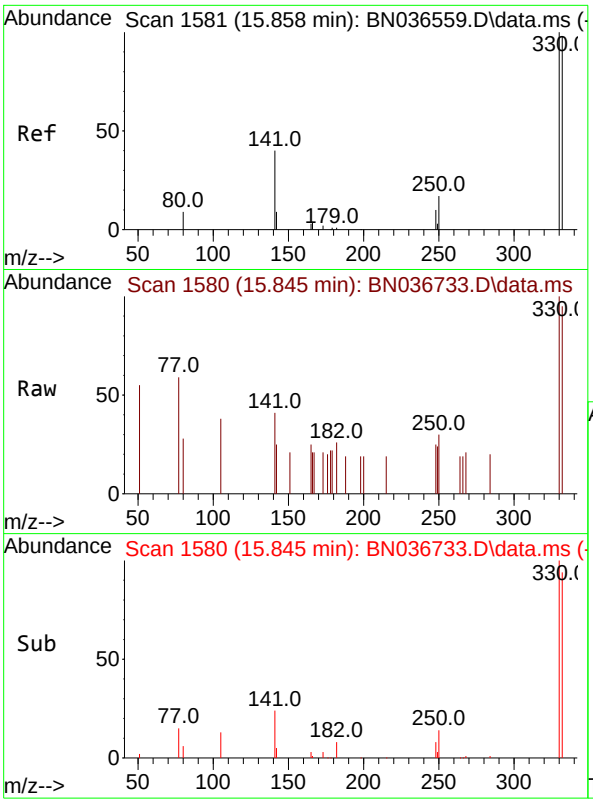




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 1444
Delta R.T. -0.021 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion:164 Resp: 2085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 105.3 | 84.2 | 126.2 |
| 160 | 53.3 | 42.2 | 63.2 |



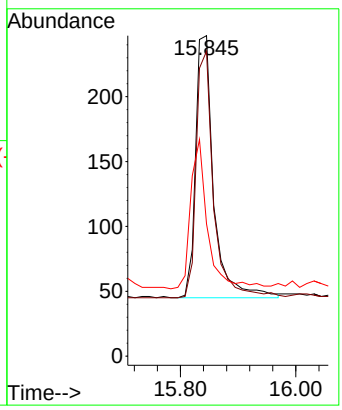


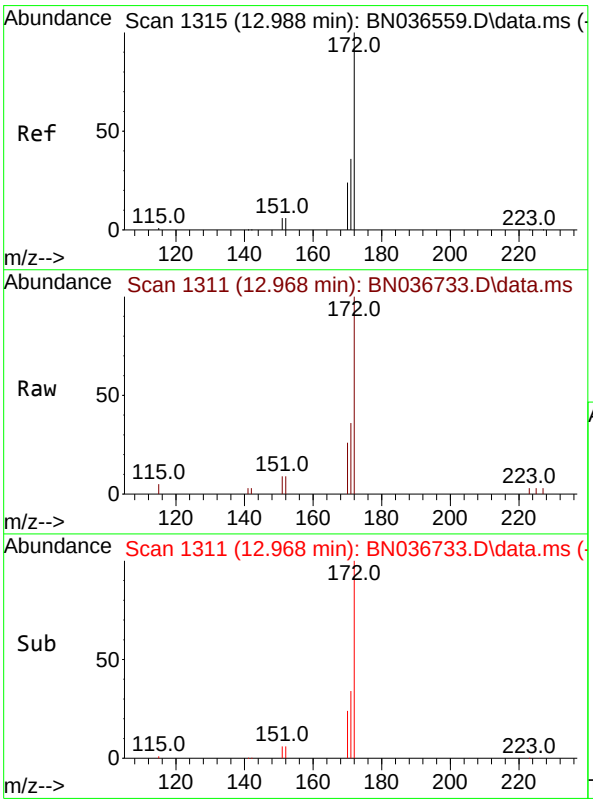

#14
2,4,6-Tribromophenol
Concen: 0.468 ng
RT: 15.845 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:330 Resp: 443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 90.3 | 75.2 | 112.8 |
| 141 | 53.5 | 43.4 | 65.2 |

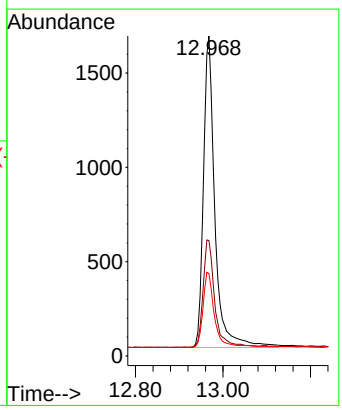


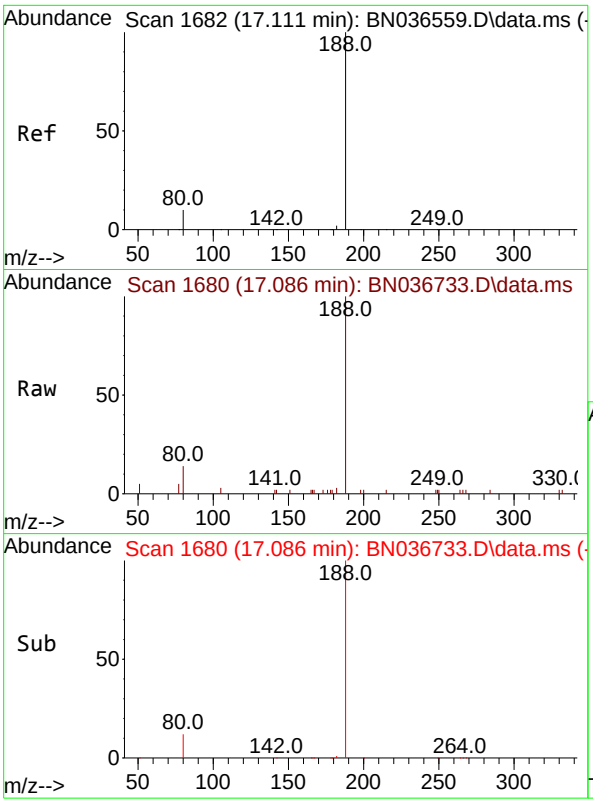




#15
2-Fluorobiphenyl
Concen: 0.327 ng
RT: 12.968 min Scan# 1311
Delta R.T. -0.020 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion:172 Resp: 3963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.1 | 29.5 | 44.3 |
| 170 | 25.8 | 20.2 | 30.4 |



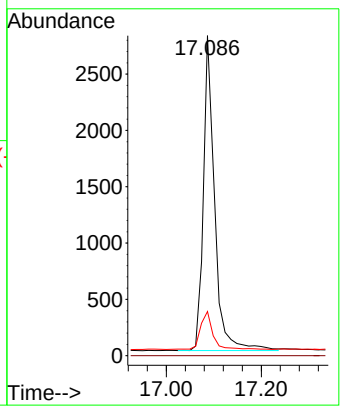


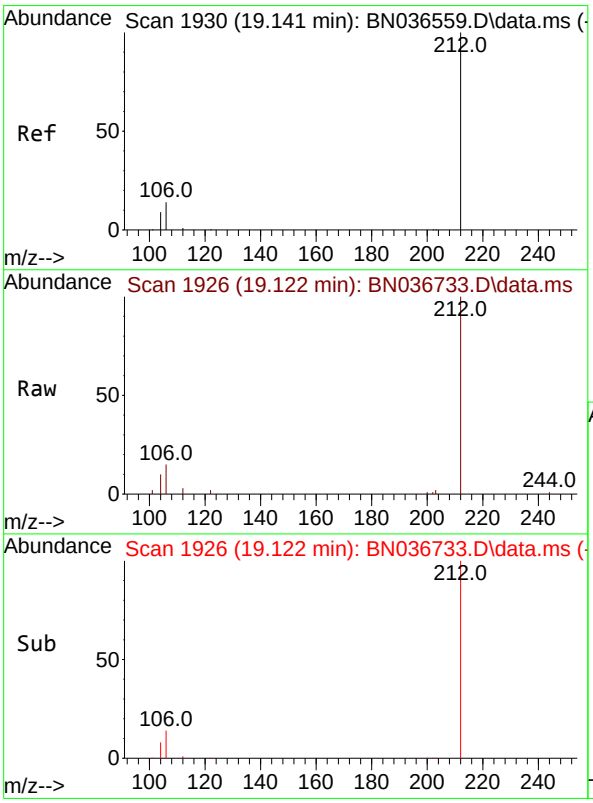

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:188 Resp: 4625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 13.8 | 8.8 | 13.2# |

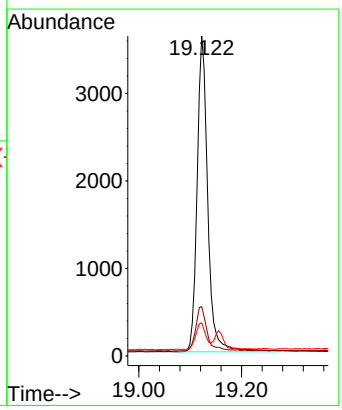


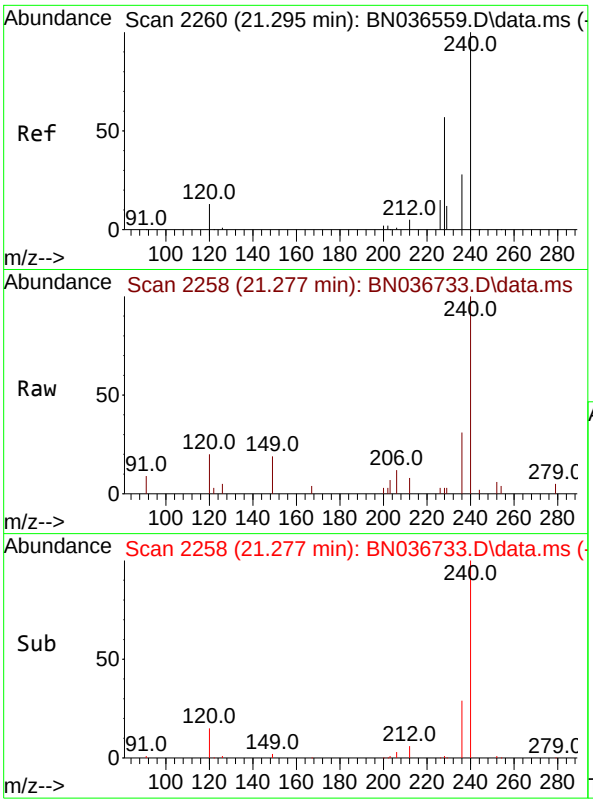




#27
Fluoranthene-d10
Concen: 0.440 ng
RT: 19.122 min Scan# 1926
Delta R.T. -0.018 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion:212 Resp: 5217

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.7 | 11.8 | 17.6 |
| 104 | 8.2 | 7.3 | 10.9 |



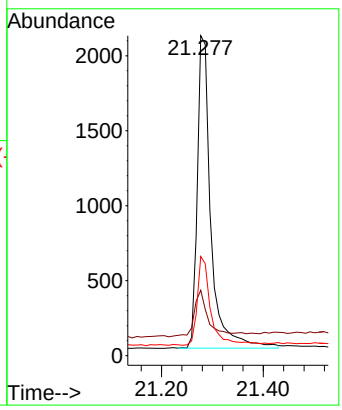


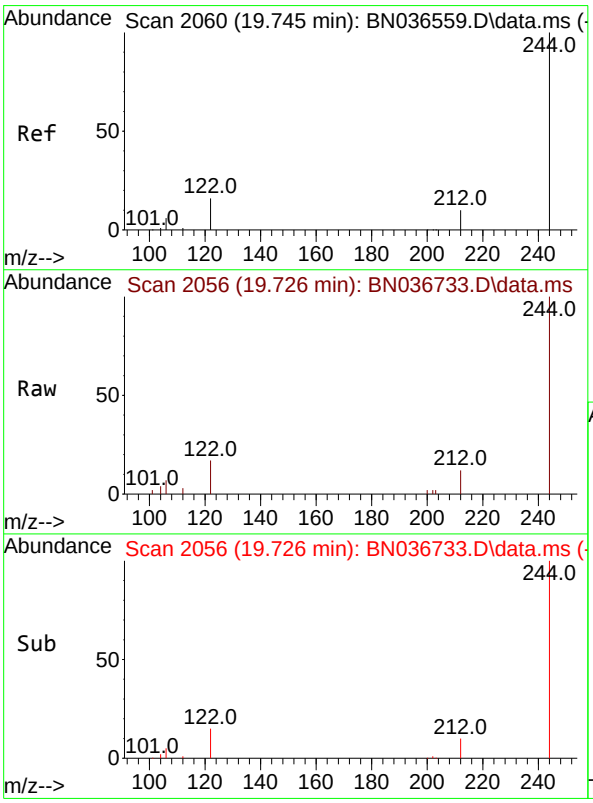

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:240 Resp: 3861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 20.4 | 14.6 | 22.0 |
| 236 | 31.0 | 24.1 | 36.1 |

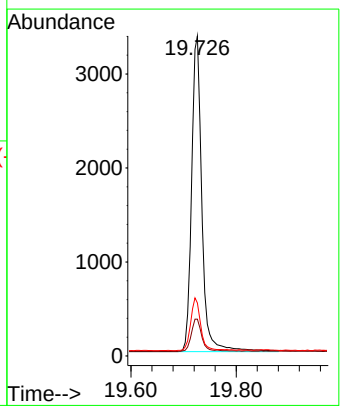


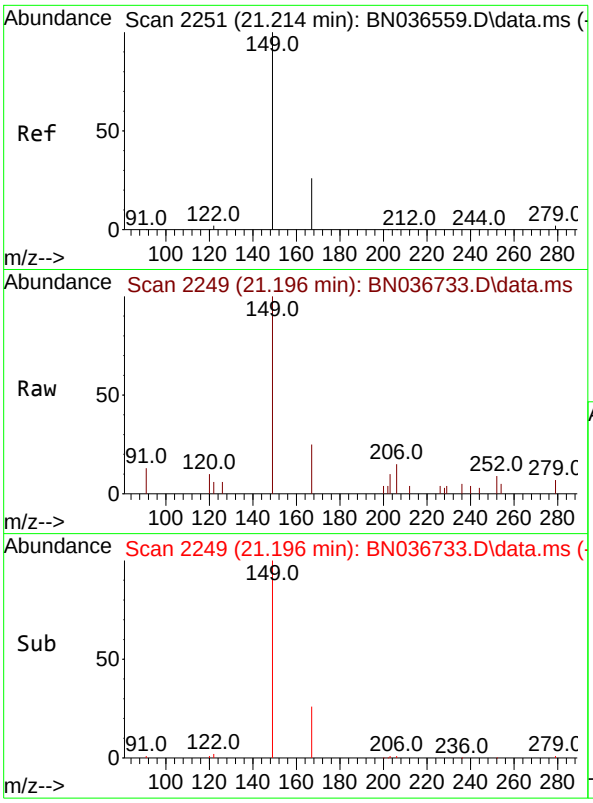




#31
Terphenyl-d14
Concen: 0.493 ng
RT: 19.726 min Scan# 2056
Delta R.T. -0.018 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion:244 Resp: 4563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.5 | 9.6 | 14.4 |
| 122 | 16.6 | 13.9 | 20.9 |



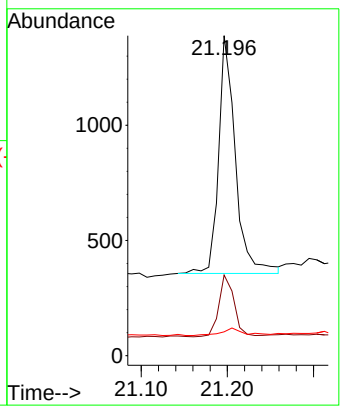


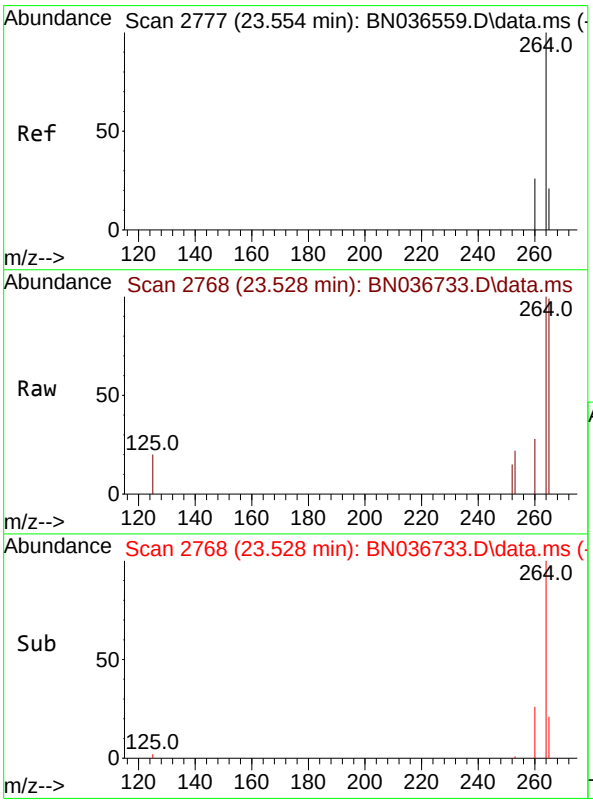

#34
Bis(2-ethylhexyl)phthalate
Concen: 0.146 ng
RT: 21.196 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320

Tgt Ion:149 Resp: 1392

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 23.7 | 20.7 | 31.1 |
| 279 | 4.3 | 3.6 | 5.4 |

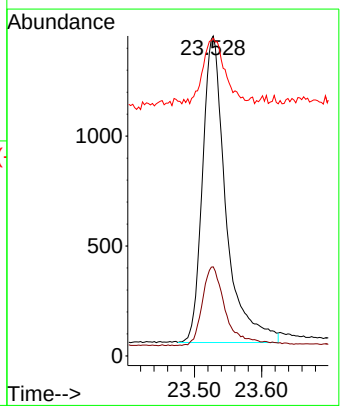



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.528 min Scan# 2768
Delta R.T. -0.026 min
Lab File: BN036733.D
Acq: 27 Mar 2025 12:14

Tgt Ion:264 Resp: 3367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.8 | 22.6 | 33.8 |
| 265 | 99.3 | 88.1 | 132.1 |



Alliance TECHNICAL GROUP
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: | 03/20/25 |
| Project: | NWIRP Bethpage - RW5B CTO WE13 112G08005 | Date Received: | 03/21/25 |
| Client Sample ID: | RW5-SP100-20250320DL | SDG No.: | Q1621 |
| Lab Sample ID: | Q1621-01DL | 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 |
|---|---|---|---|---|
| BN036742.D | 5 | 03/24/25 08:15 | 03/27/25 18:02 | PB167269 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 123-91-1 | 1,4-Dioxane | 7.90 | D | 0.35 | 1.00 | 1.00 | ug/L |
| **SURROGATES** | | | | | | | |
| 7297-45-2 | 2-Methylnaphthalene-d10 | 0.28 | | 30 - 150 | | 70% | SPK: 0.4 |
| 93951-69-0 | Fluoranthene-d10 | 0.45 | | 30 - 150 | | 111% | SPK: 0.4 |
| 4165-60-0 | Nitrobenzene-d5 | 0.30 | | 55 - 111 | | 75% | SPK: 0.4 |
| 321-60-8 | 2-Fluorobiphenyl | 0.28 | | 53 - 106 | | 69% | SPK: 0.4 |
| 1718-51-0 | Terphenyl-d14 | 0.48 | | 58 - 132 | | 120% | SPK: 0.4 |
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 1240 | 7.703 | | | | |
| 1146-65-2 | Naphthalene-d8 | 2700 | 10.498 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 1840 | 14.345 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 4030 | 17.099 | | | | |
| 1719-03-5 | Chrysene-d12 | 3350 | 21.286 | | | | |
| 1520-96-3 | Perylene-d12 | 2970 | 23.531 | | | | |

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\BN032725\
Data File : BN036742.D
Acq On : 27 Mar 2025 18:02
Operator : RC/JU
Sample : Q1621-01DL 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Quant Time: Mar 27 18:38:35 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

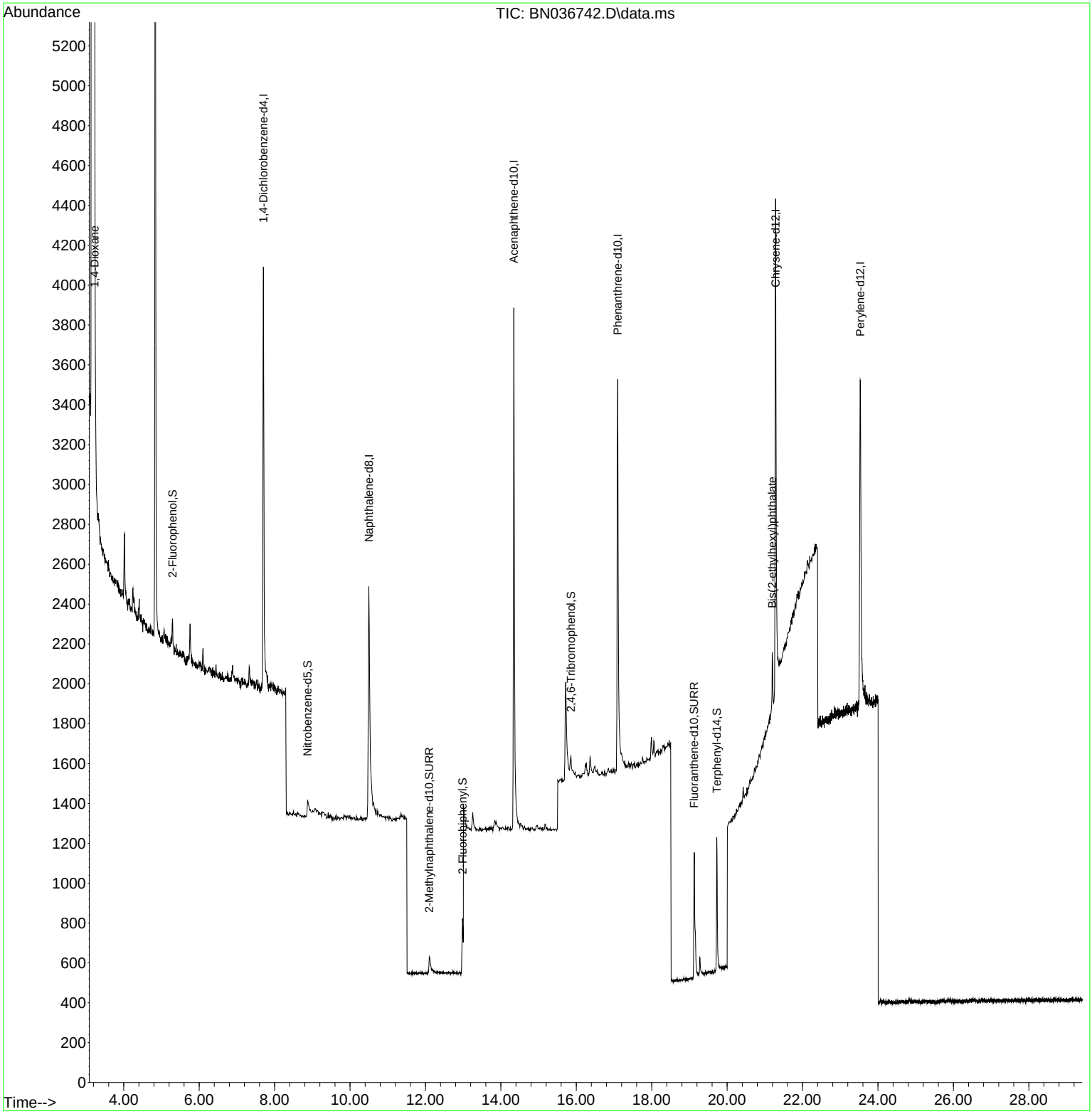
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1243 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.498 | 136 | 2699 | 0.400 | ng | #-0.01 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 1836 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.099 | 188 | 4032 | 0.400 | ng | -0.01 |
| 29) Chrysene-d12 | 21.286 | 240 | 3349 | 0.400 | ng | 0.00 |
| 35) Perylene-d12 | 23.531 | 264 | 2971 | 0.400 | ng | -0.02 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.298 | 112 | 114 | 0.039 | ng | -0.01 |
| 5) Phenol-d6 | 6.887 | 99 | 65 | 0.018 | ng | -0.01 |
| 8) Nitrobenzene-d5 | 8.875 | 82 | 177 | 0.060 | ng | 0.00 |
| 11) 2-Methylnaphthalene-d10 | 12.101 | 152 | 225 | 0.056 | ng | 0.00 |
| 14) 2,4,6-Tribromophenol | 15.858 | 330 | 71 | 0.085 | ng | 0.00 |
| 15) 2-Fluorobiphenyl | 12.983 | 172 | 587 | 0.055 | ng | 0.00 |
| 27) Fluoranthene-d10 | 19.127 | 212 | 918 | 0.089 | ng | -0.01 |
| 31) Terphenyl-d14 | 19.726 | 244 | 770 | 0.096 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 2189 | 1.588 | ng | 95 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 393 | 0.047 | ng | 95 |

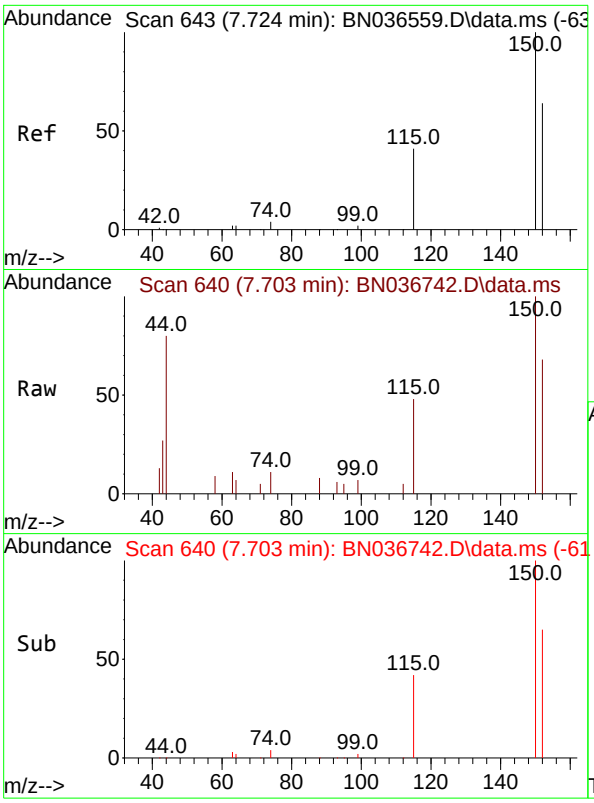
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036742.D
Acq On : 27 Mar 2025 18:02
Operator : RC/JU
Sample : Q1621-01DL 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Quant Time: Mar 27 18:38:35 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



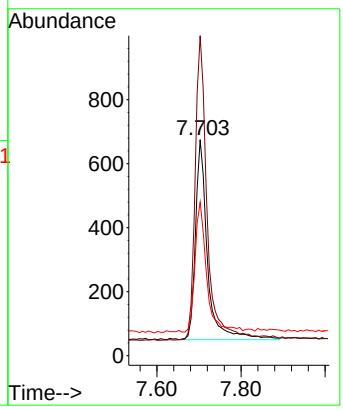


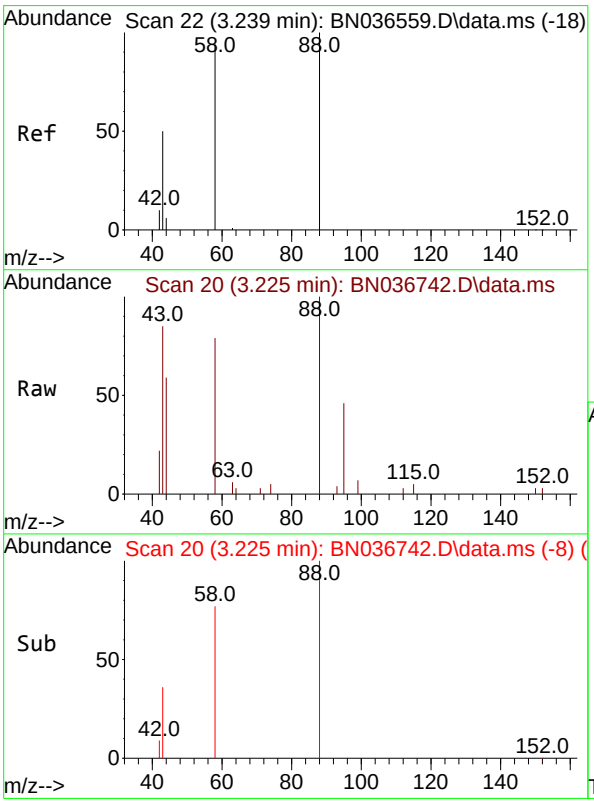

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:152 Resp: 1243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 148.1 | 123.7 | 185.5 |
| 115 | 71.1 | 54.3 | 81.5 |

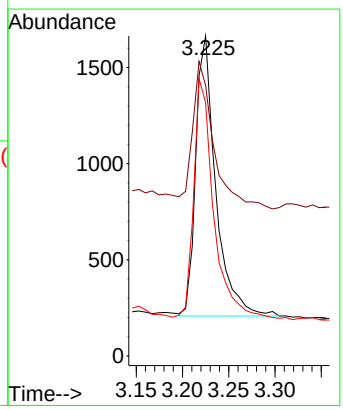


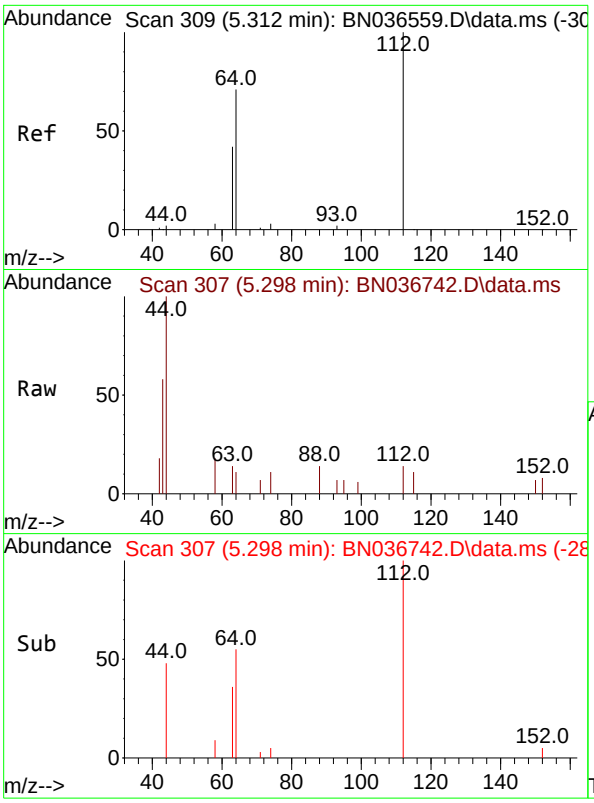




#2
1,4-Dioxane
Concen: 1.588 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion: 88 Resp: 2189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 55.9 | 37.8 | 56.8 |
| 58 | 85.1 | 67.4 | 101.2 |



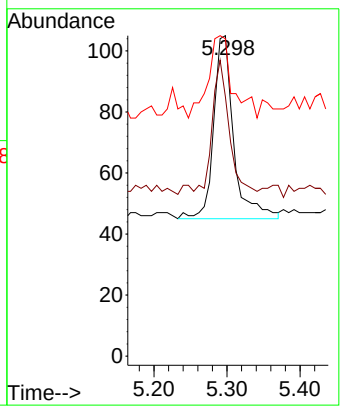


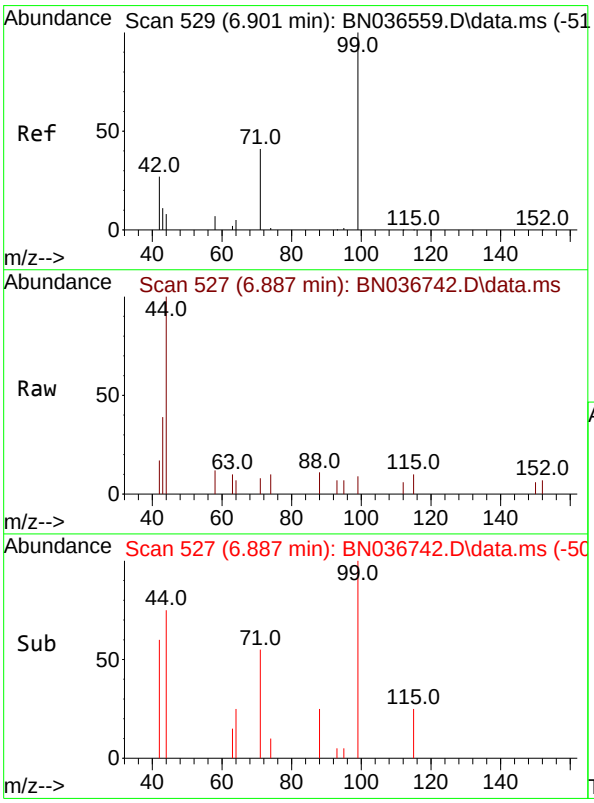

#4
2-Fluorophenol
Concen: 0.039 ng
RT: 5.298 min Scan# 3
Delta R.T. -0.014 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:112 Resp: 114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 61.4 | 53.1 | 79.7 |
| 63 | 54.4 | 31.8 | 47.8# |

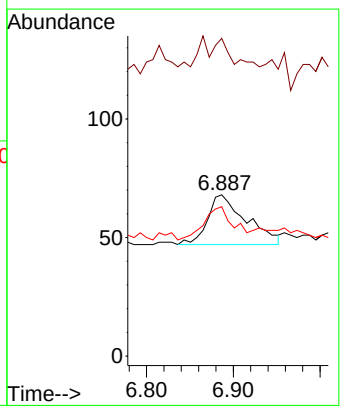


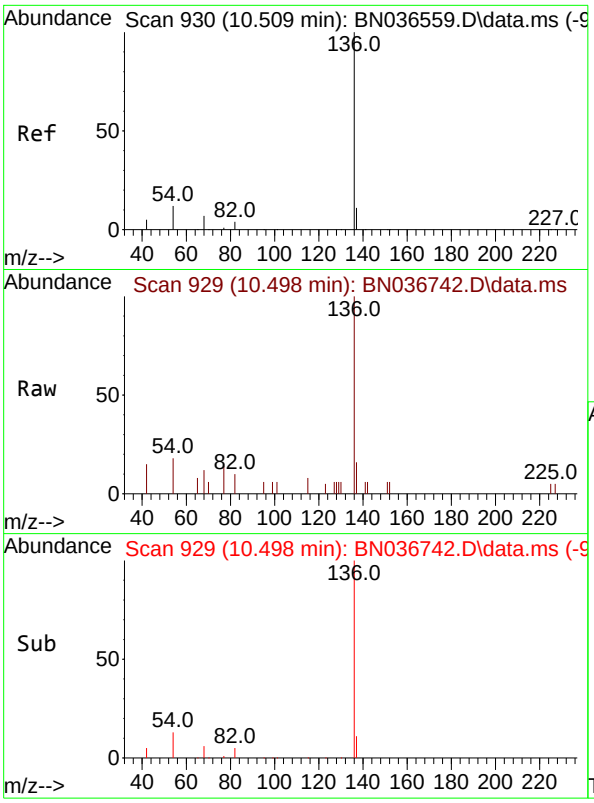




#5
Phenol-d6
Concen: 0.018 ng
RT: 6.887 min Scan# 527
Delta R.T. -0.014 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion: 99 Resp: 65

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 0.0 | 26.5 | 39.7# |
| 71 | 52.3 | 34.1 | 51.1# |



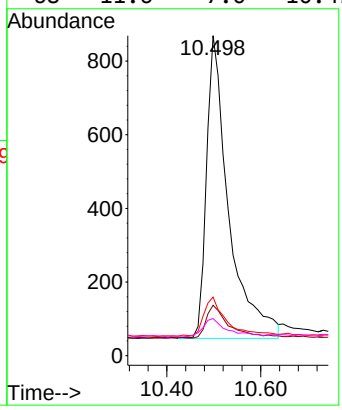


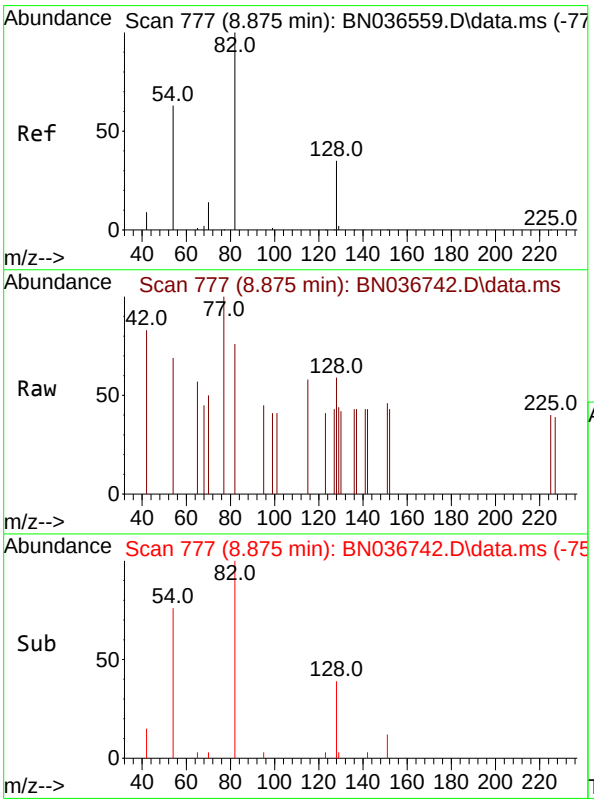

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:136 Resp: 2699

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 15.8 | 10.3 | 15.5# |
| 54 | 18.3 | 11.5 | 17.3# |
| 68 | 11.6 | 7.0 | 10.4# |

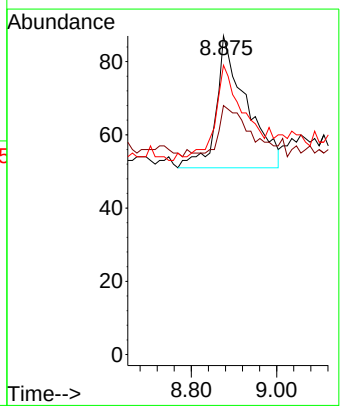


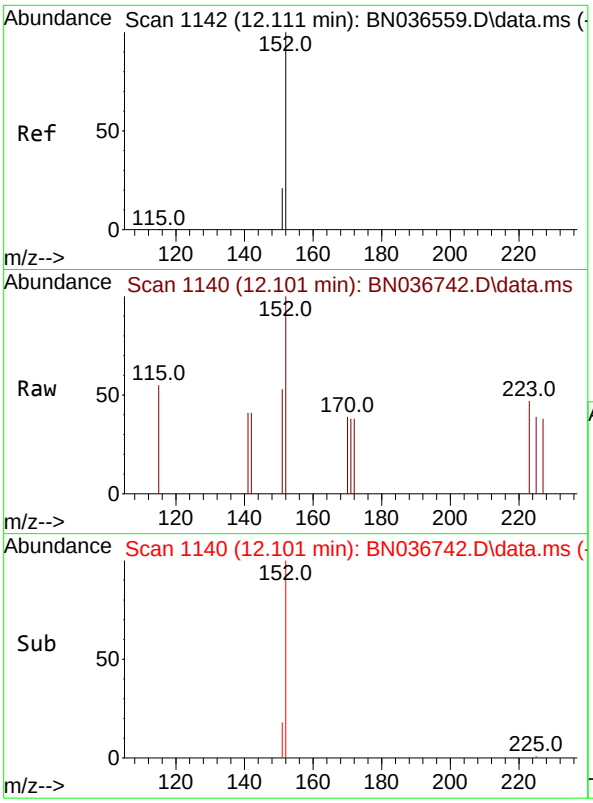




#8
Nitrobenzene-d5
Concen: 0.060 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion: 82 Resp: 177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 78.2 | 30.6 | 45.8# |
| 54 | 90.8 | 52.2 | 78.4# |



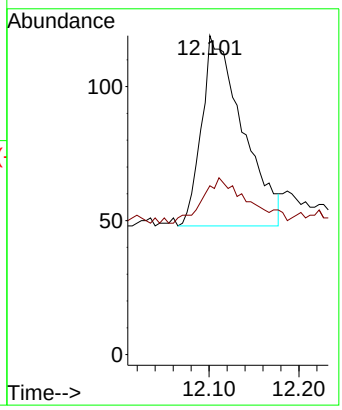


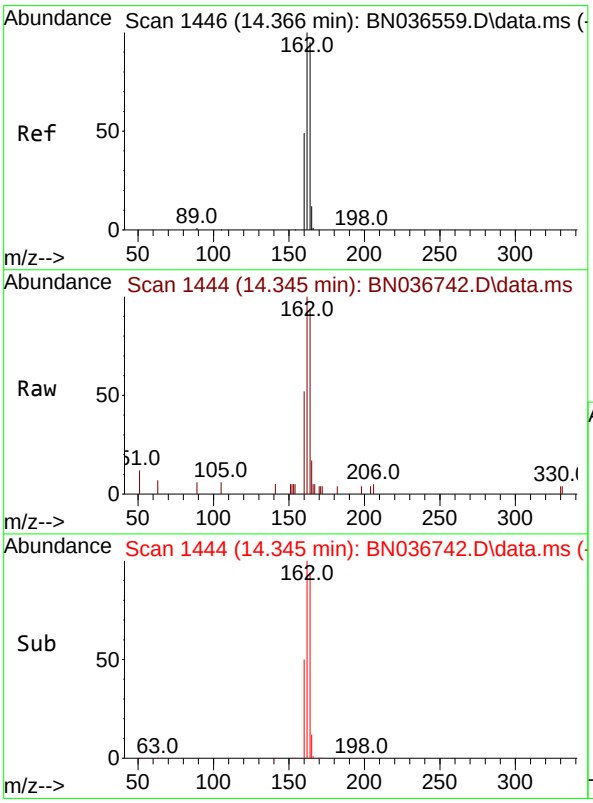

#11
2-Methylnaphthalene-d10
Concen: 0.056 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:152 Resp: 225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 24.4 | 17.0 | 25.6 |

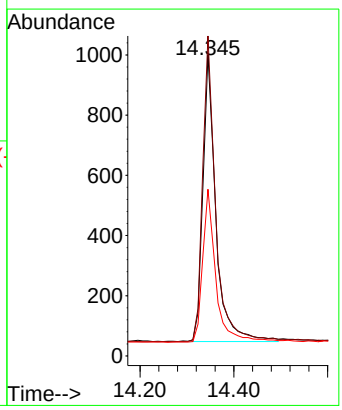


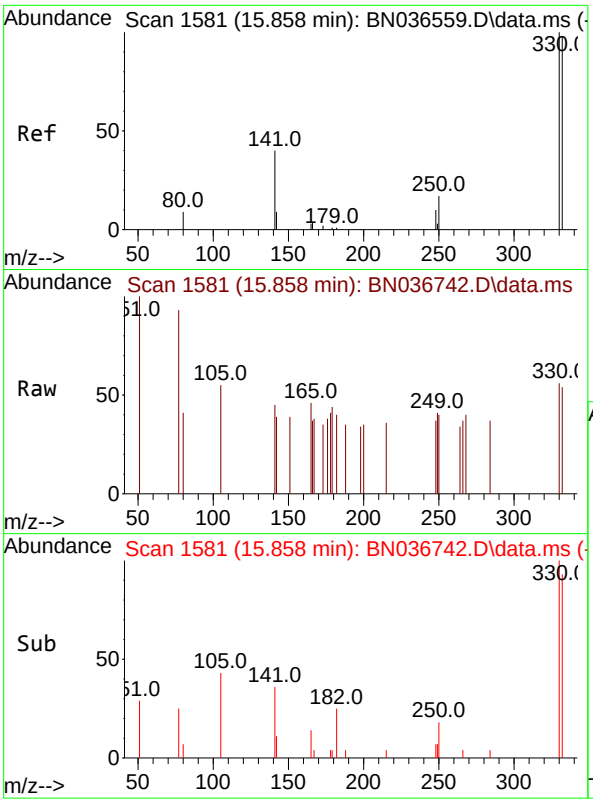




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 1444
Delta R.T. -0.021 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion:164 Resp: 1836

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 106.3 | 84.2 | 126.2 |
| 160 | 55.4 | 42.2 | 63.2 |



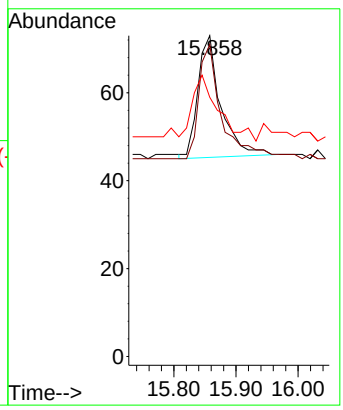


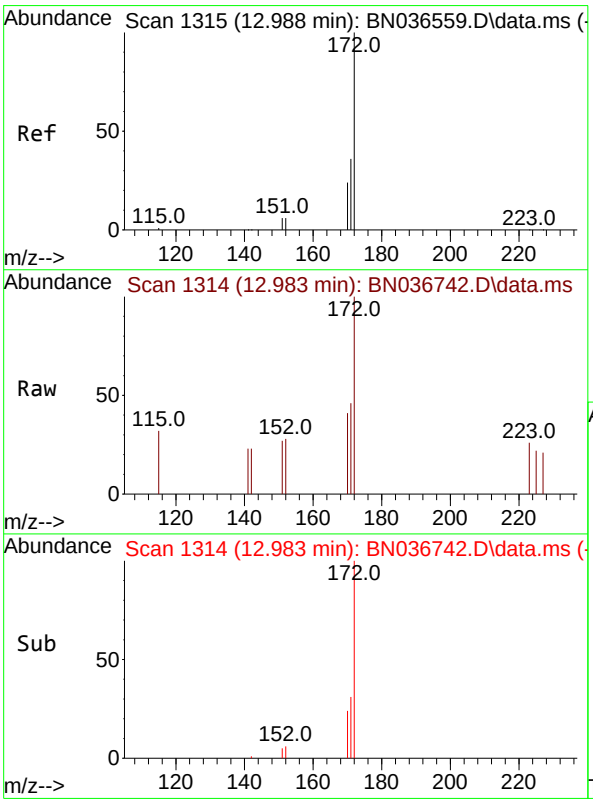

#14
2,4,6-Tribromophenol
Concen: 0.085 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:330 Resp: 71

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 93.0 | 75.2 | 112.8 |
| 141 | 52.1 | 43.4 | 65.2 |

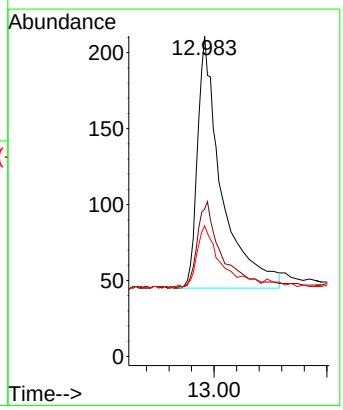


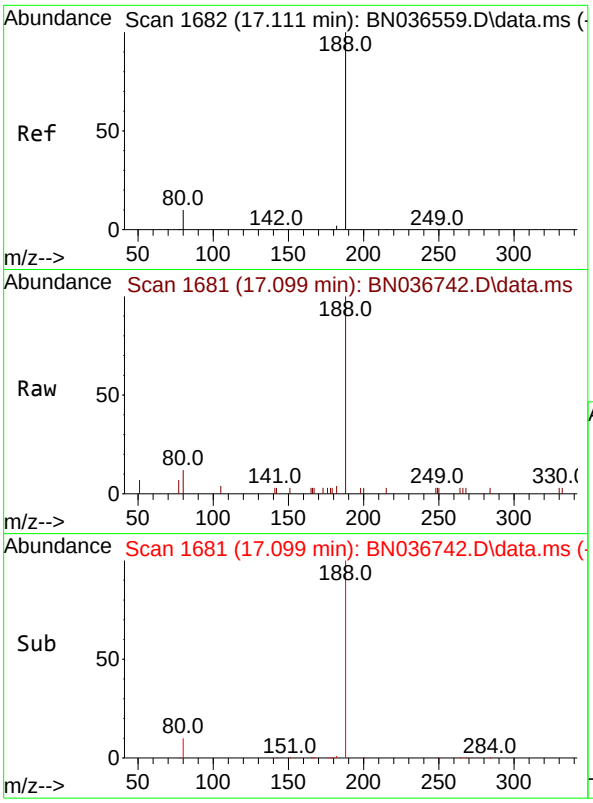




#15
2-Fluorobiphenyl
Concen: 0.055 ng
RT: 12.983 min Scan# 1314
Delta R.T. -0.005 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion:172 Resp: 587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 46.0 | 29.5 | 44.3# |
| 170 | 40.8 | 20.2 | 30.4# |



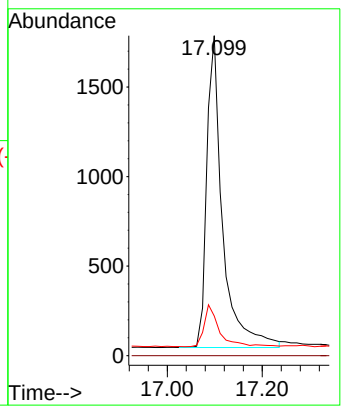


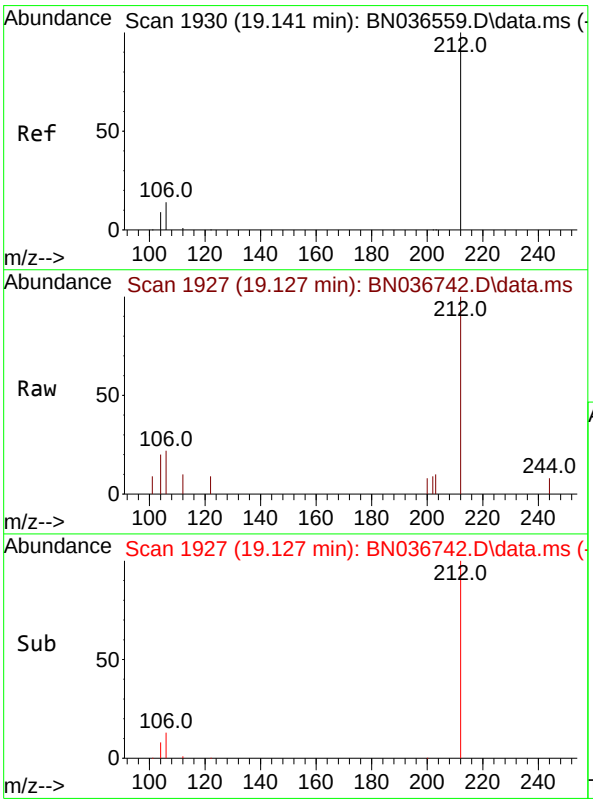

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:188 Resp: 4032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 12.4 | 8.8 | 13.2 |

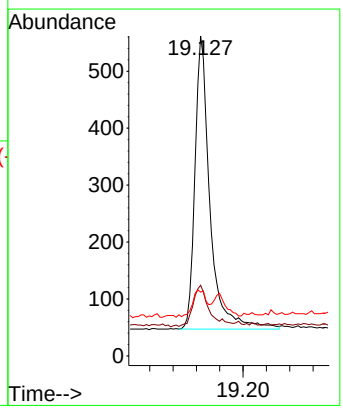


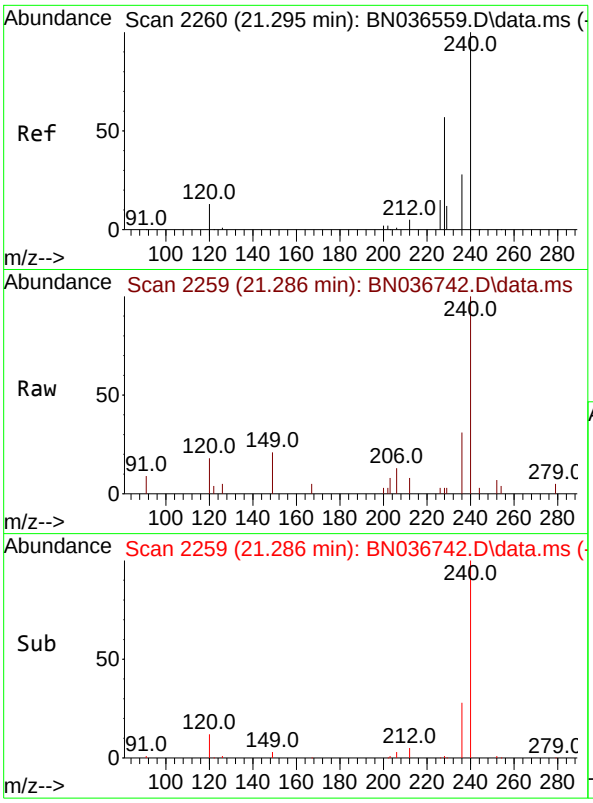




#27
Fluoranthene-d10
Concen: 0.089 ng
RT: 19.127 min Scan# 1927
Delta R.T. -0.014 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion:212 Resp: 918

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.5 | 11.8 | 17.6 |
| 104 | 8.4 | 7.3 | 10.9 |



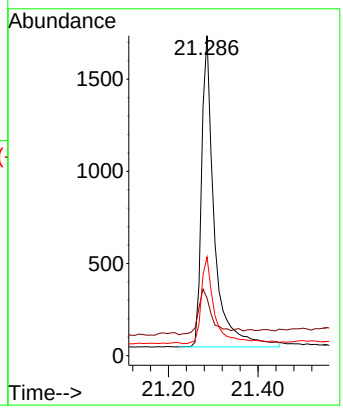


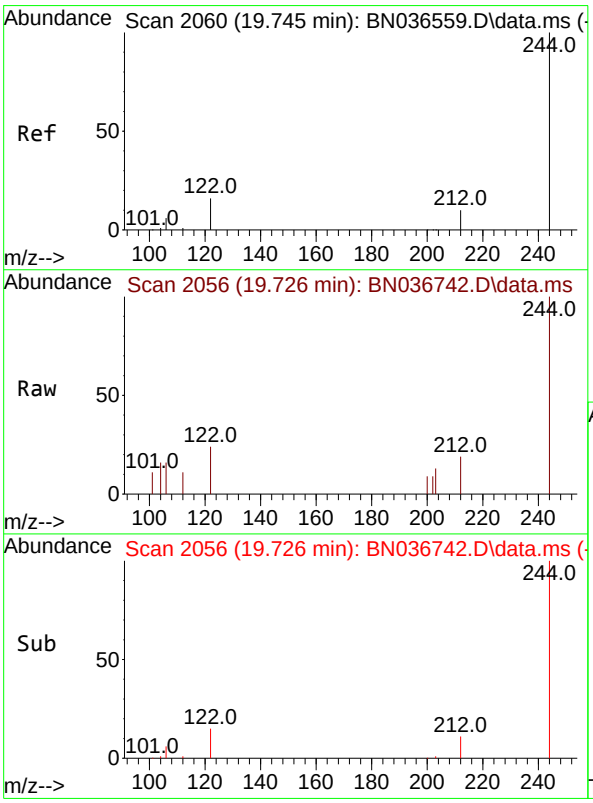

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.286 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:240 Resp: 3349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 18.0 | 14.6 | 22.0 |
| 236 | 30.9 | 24.1 | 36.1 |

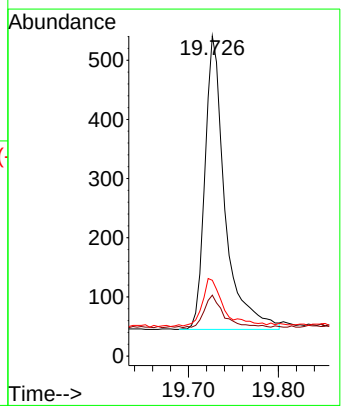


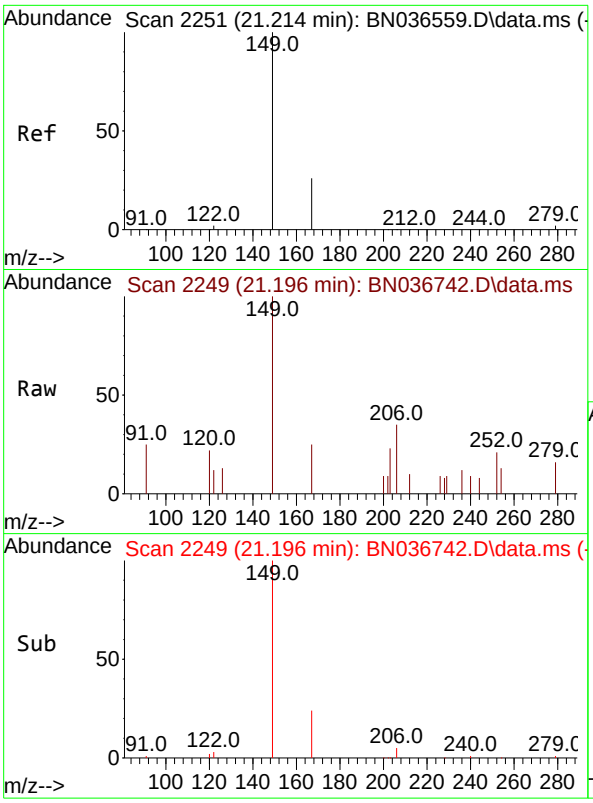




#31
Terphenyl-d14
Concen: 0.096 ng
RT: 19.726 min Scan# 2056
Delta R.T. -0.018 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion:244 Resp: 770

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 19.0 | 9.6 | 14.4# |
| 122 | 23.7 | 13.9 | 20.9# |



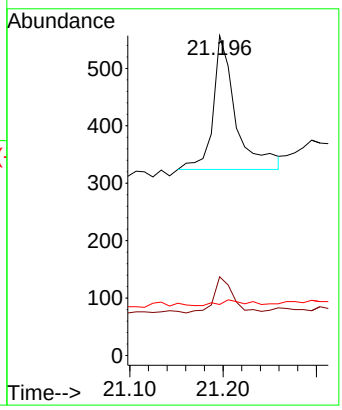


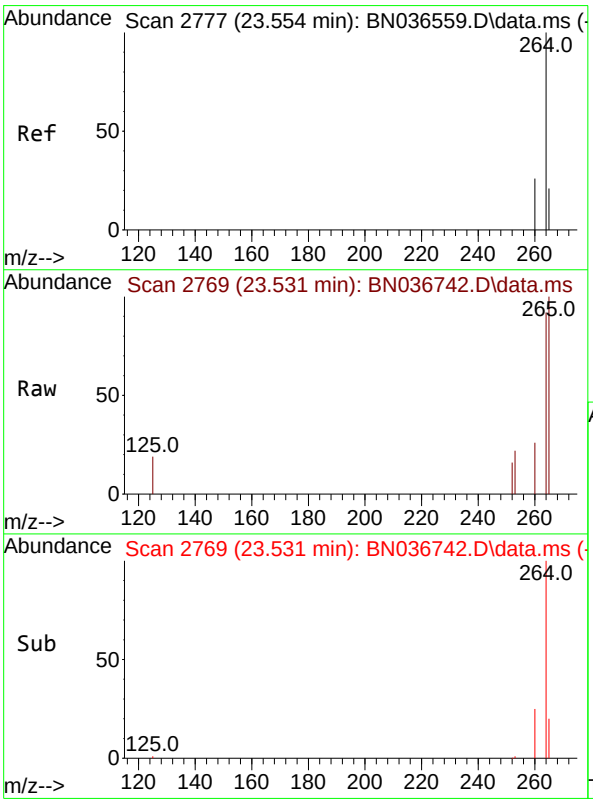

#34
Bis(2-ethylhexyl)phthalate
Concen: 0.047 ng
RT: 21.196 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP100-20250320DL

Tgt Ion:149 Resp: 393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 22.9 | 20.7 | 31.1 |
| 279 | 5.3 | 3.6 | 5.4 |

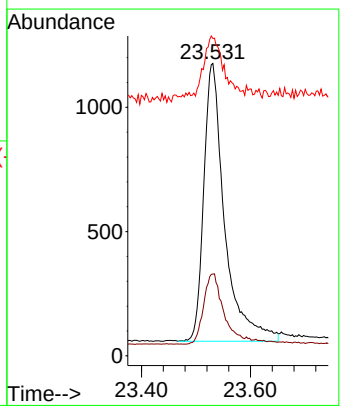



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.531 min Scan# 2769
Delta R.T. -0.023 min
Lab File: BN036742.D
Acq: 27 Mar 2025 18:02

Tgt Ion:264 Resp: 2971

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 28.0 | 22.6 | 33.8 |
| 265 | 108.6 | 88.1 | 132.1 |



Alliance TECHNICAL GROUP
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: | 03/20/25 |
| Project: | NWIRP Bethpage - RW5B CTO WE13 112G08005 | Date Received: | 03/21/25 |
| Client Sample ID: | RW5-SP201-20250320 | SDG No.: | Q1621 |
| Lab Sample ID: | Q1621-02 | Matrix: | Water |
| Analytical Method: | SW8270ESIM | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOC-SIMGroup1 |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BN036740.D | 1 | 03/24/25 08:15 | 03/27/25 16:50 | PB167269 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 123-91-1 | 1,4-Dioxane | 0.20 | U | 0.070 | 0.20 | 0.20 | ug/L |
| **SURROGATES** | | | | | | | |
| 7297-45-2 | 2-Methylnaphthalene-d10 | 0.32 | | 30 - 150 | | 81% | SPK: 0.4 |
| 93951-69-0 | Fluoranthene-d10 | 0.44 | | 30 - 150 | | 110% | 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 | | 86% | SPK: 0.4 |
| 1718-51-0 | Terphenyl-d14 | 0.47 | | 58 - 132 | | 118% | SPK: 0.4 |
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 1440 | 7.703 | | | | |
| 1146-65-2 | Naphthalene-d8 | 3290 | 10.487 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 2040 | 14.345 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 4650 | 17.086 | | | | |
| 1719-03-5 | Chrysene-d12 | 3790 | 21.277 | | | | |
| 1520-96-3 | Perylene-d12 | 3230 | 23.528 | | | | |

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\BN032725\
Data File : BN036740.D
Acq On : 27 Mar 2025 16:50
Operator : RC/JU
Sample : Q1621-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Quant Time: Mar 27 17:35:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

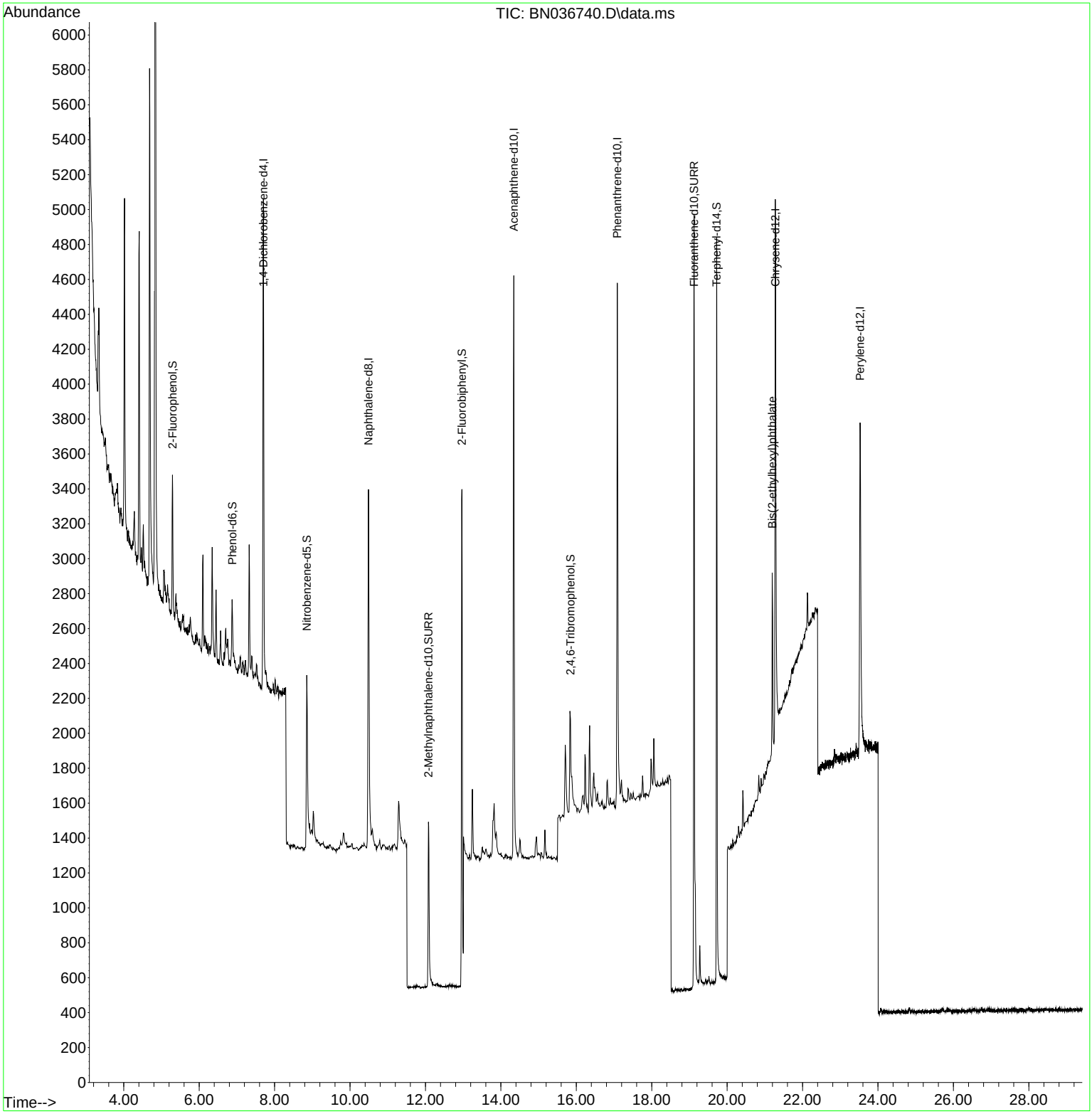
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1438 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 3285 | 0.400 | ng | -0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2042 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 4646 | 0.400 | ng | #-0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 3789 | 0.400 | ng | -0.02 |
| 35) Perylene-d12 | 23.528 | 264 | 3230 | 0.400 | ng | -0.03 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.298 | 112 | 589 | 0.176 | ng | -0.01 |
| 5) Phenol-d6 | 6.879 | 99 | 364 | 0.088 | ng | -0.02 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1117 | 0.313 | ng | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 1577 | 0.323 | ng | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.845 | 330 | 431 | 0.465 | ng | -0.01 |
| 15) 2-Fluorobiphenyl | 12.968 | 172 | 4062 | 0.342 | ng | -0.02 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 5256 | 0.441 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 4272 | 0.471 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 1129 | 0.120 | ng | 96 |

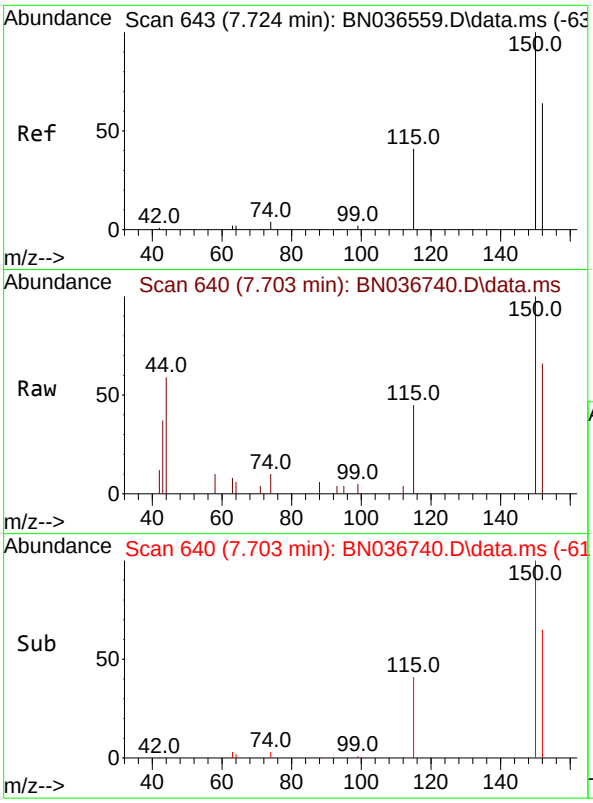
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036740.D
Acq On : 27 Mar 2025 16:50
Operator : RC/JU
Sample : Q1621-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Quant Time: Mar 27 17:35:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



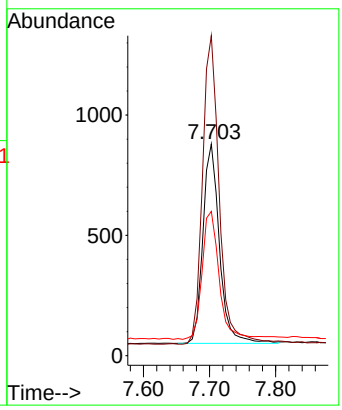


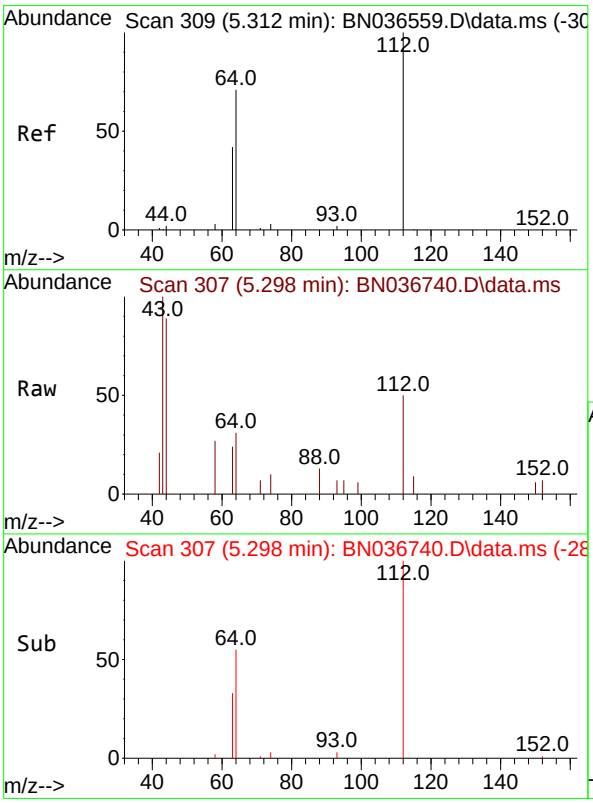

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion:152 Resp: 1438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 151.1 | 123.7 | 185.5 |
| 115 | 68.2 | 54.3 | 81.5 |

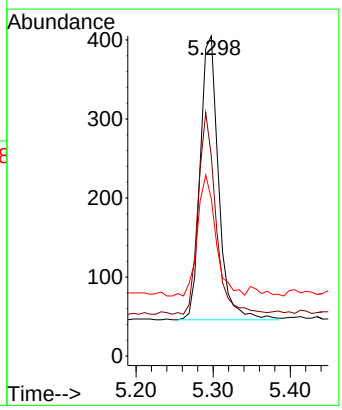


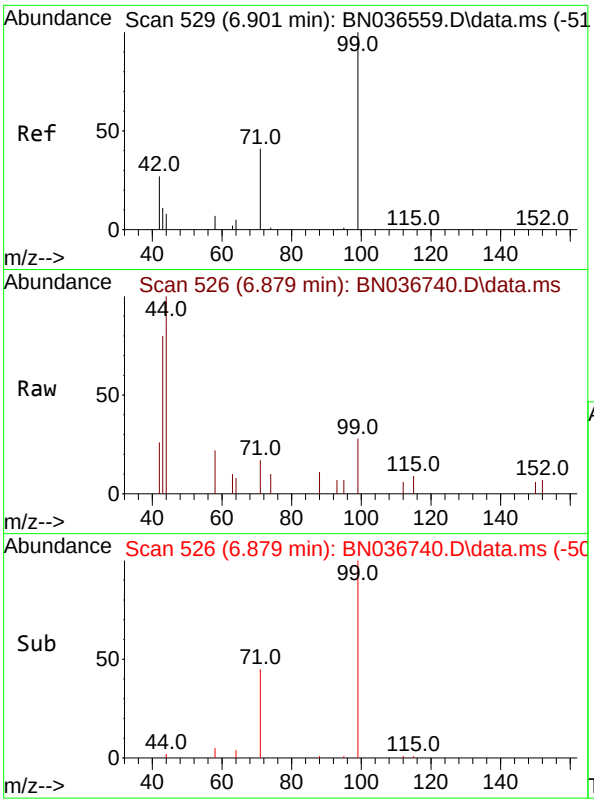




#4
2-Fluorophenol
Concen: 0.176 ng
RT: 5.298 min Scan# 307
Delta R.T. -0.014 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

Tgt Ion:112 Resp: 589

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.6 | 53.1 | 79.7 |
| 63 | 43.5 | 31.8 | 47.8 |



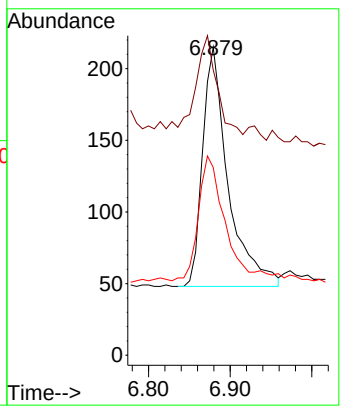


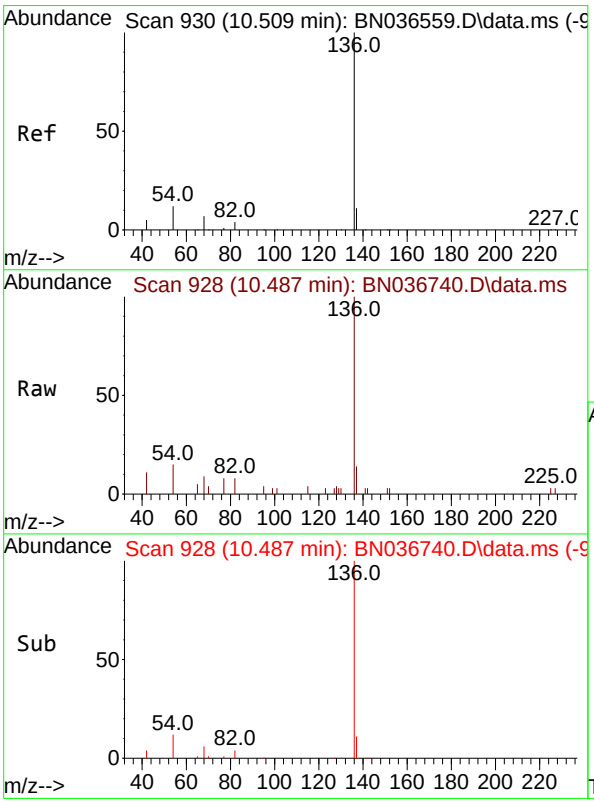

#5
Phenol-d6
Concen: 0.088 ng
RT: 6.879 min Scan# 5
Delta R.T. -0.022 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion: 99 Resp: 364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 33.0 | 26.5 | 39.7 |
| 71 | 58.8 | 34.1 | 51.1# |

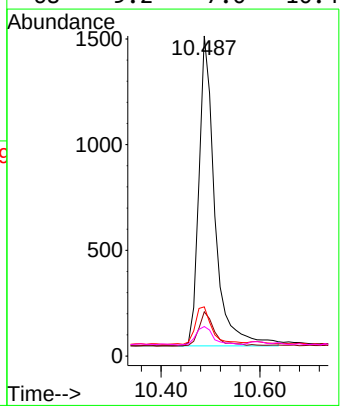


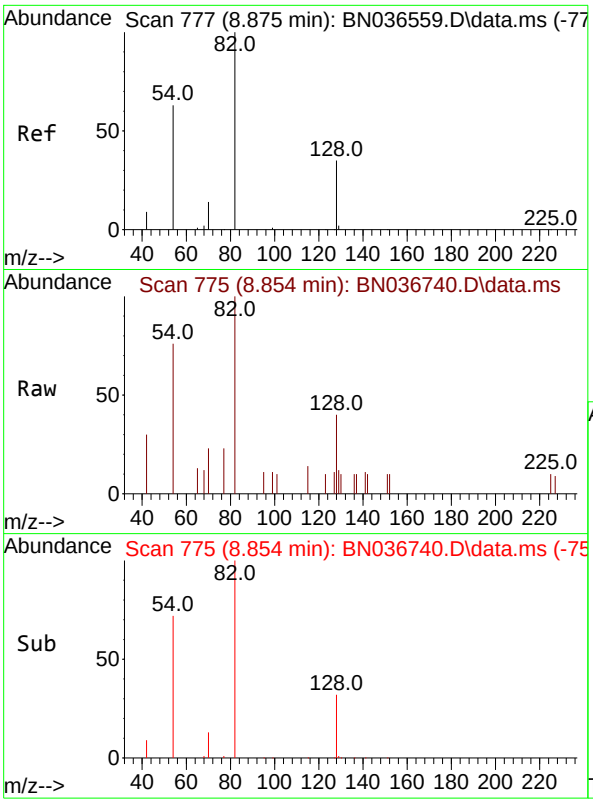




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 928
Delta R.T. -0.021 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

Tgt Ion:136 Resp: 3285

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 13.8 | 10.3 | 15.5 |
| 54 | 15.4 | 11.5 | 17.3 |
| 68 | 9.2 | 7.0 | 10.4 |



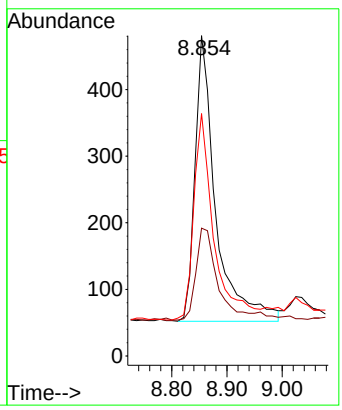


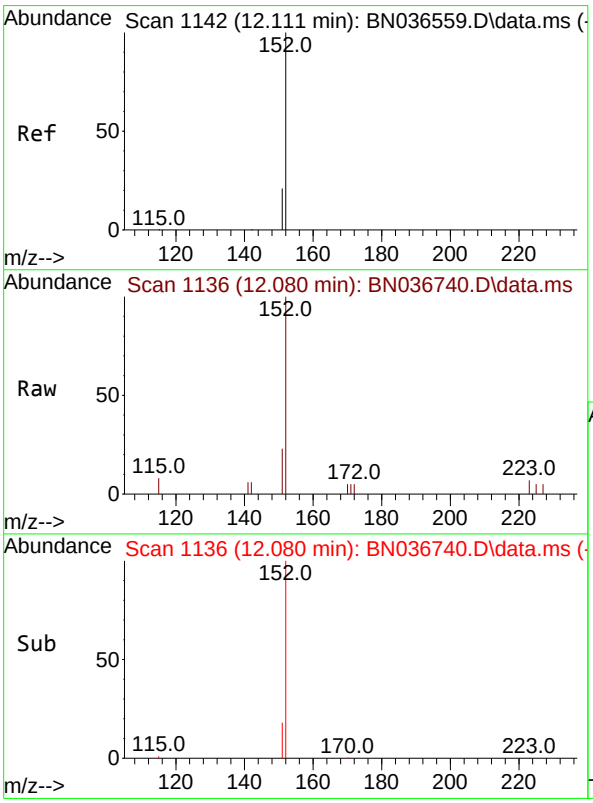

#8
Nitrobenzene-d5
Concen: 0.313 ng
RT: 8.854 min Scan# 7
Delta R.T. -0.021 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion: 82 Resp: 1117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 39.9 | 30.6 | 45.8 |
| 54 | 75.7 | 52.2 | 78.4 |

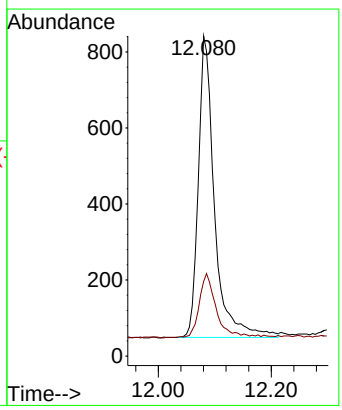


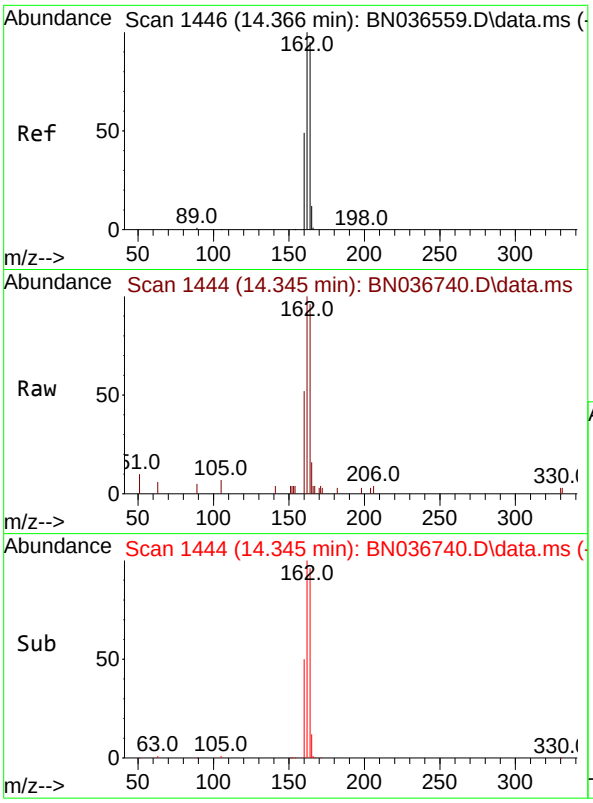




#11
2-Methylnaphthalene-d10
Concen: 0.323 ng
RT: 12.080 min Scan# 1136
Delta R.T. -0.030 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

Tgt Ion:152 Resp: 1577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 22.4 | 17.0 | 25.6 |



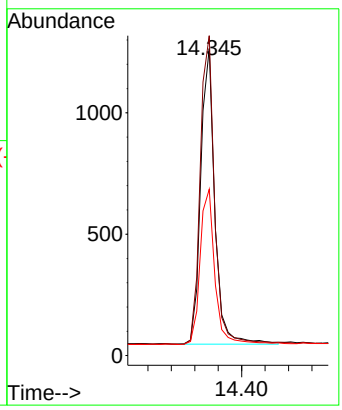


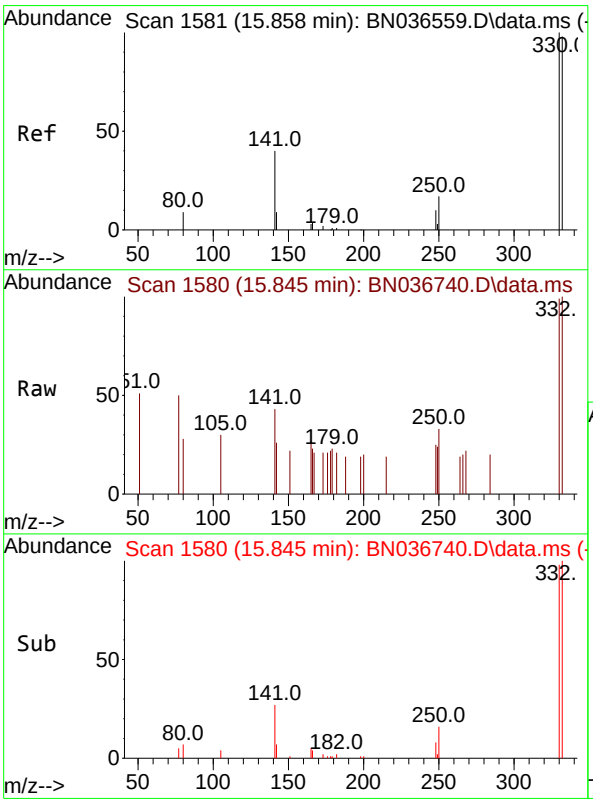

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion:164 Resp: 2042

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.2 | 84.2 | 126.2 |
| 160 | 54.2 | 42.2 | 63.2 |

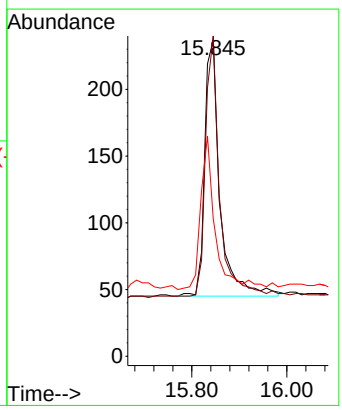


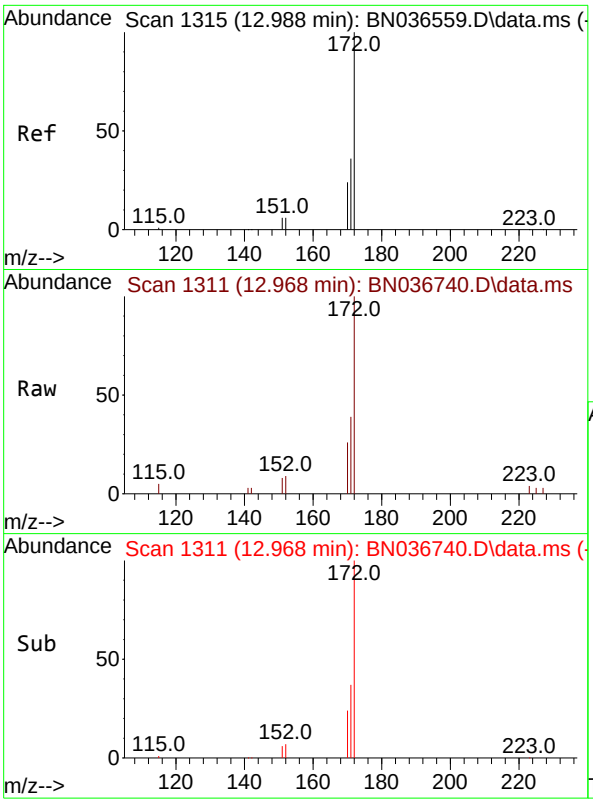




#14
2,4,6-Tribromophenol
Concen: 0.465 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.012 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

Tgt Ion:330 Resp: 431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 94.0 | 75.2 | 112.8 |
| 141 | 56.6 | 43.4 | 65.2 |



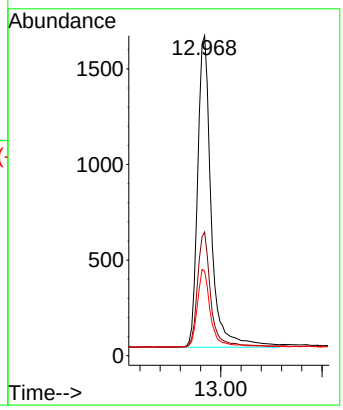


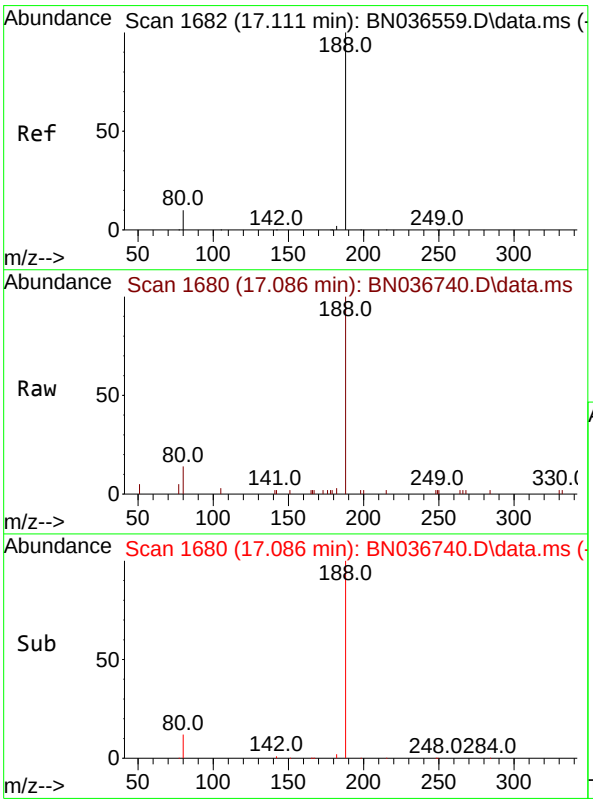

#15
2-Fluorobiphenyl
Concen: 0.342 ng
RT: 12.968 min Scan# 1
Delta R.T. -0.020 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion:172 Resp: 4062

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 38.6 | 29.5 | 44.3 |
| 170 | 26.4 | 20.2 | 30.4 |

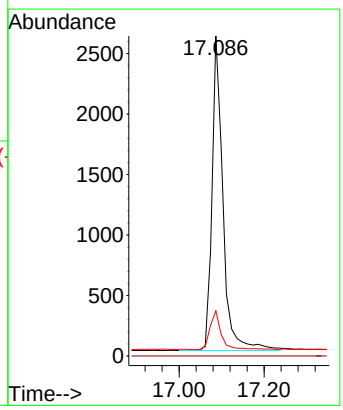


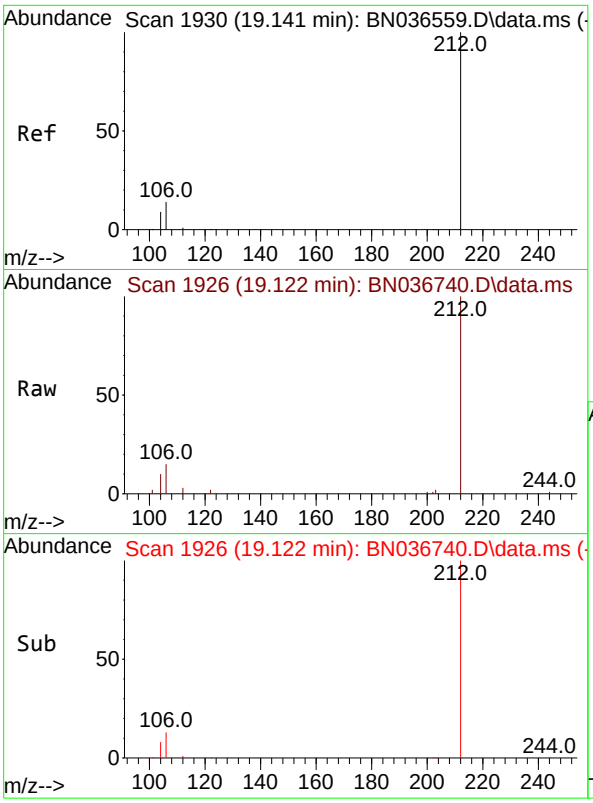




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1680
Delta R.T. -0.025 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

Tgt Ion:188 Resp: 4646

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 14.1 | 8.8 | 13.2# |



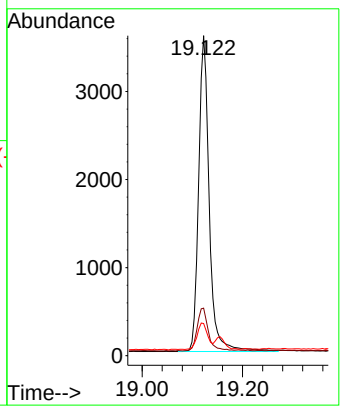


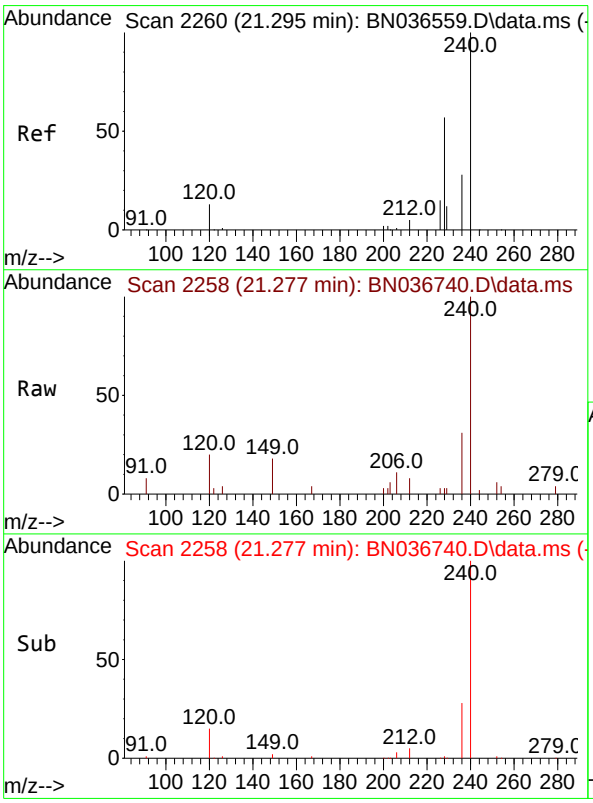

#27
Fluoranthene-d10
Concen: 0.441 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.019 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion:212 Resp: 5256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.2 | 11.8 | 17.6 |
| 104 | 8.3 | 7.3 | 10.9 |

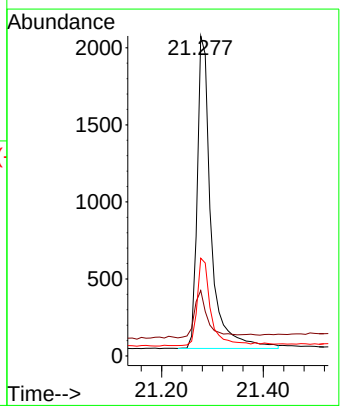


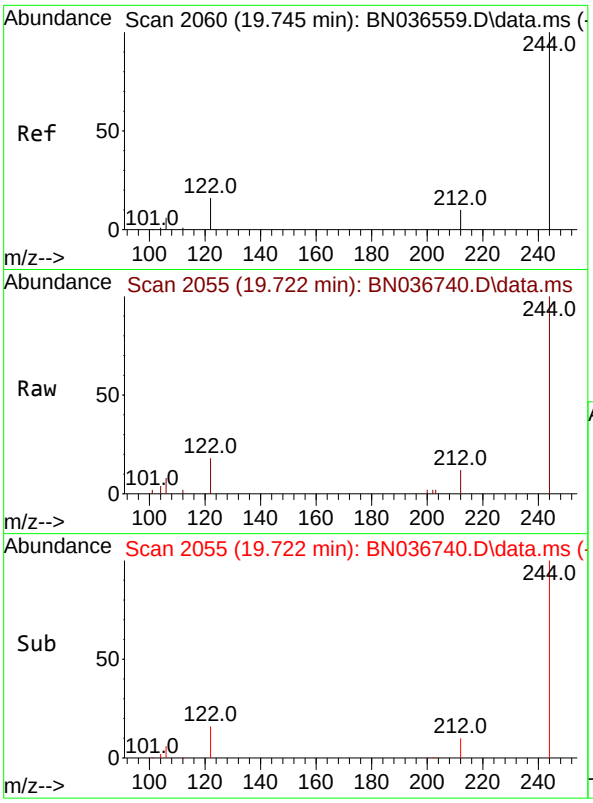




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.018 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

Tgt Ion:240 Resp: 3789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 20.5 | 14.6 | 22.0 |
| 236 | 30.6 | 24.1 | 36.1 |



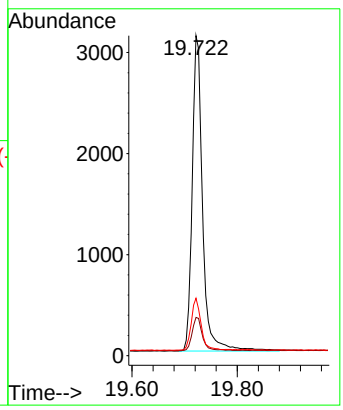


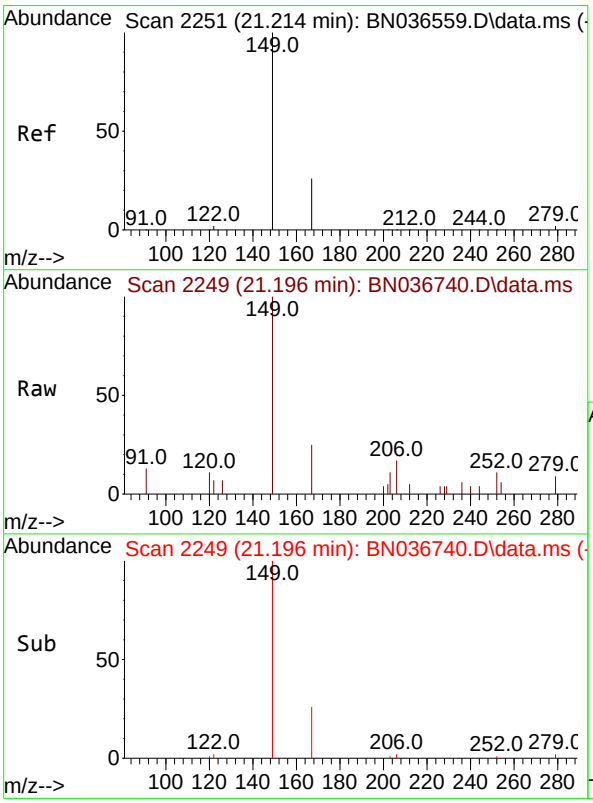

#31
Terphenyl-d14
Concen: 0.471 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion:244 Resp: 4272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.9 | 9.6 | 14.4 |
| 122 | 18.0 | 13.9 | 20.9 |

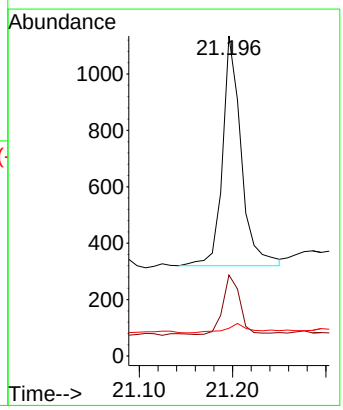


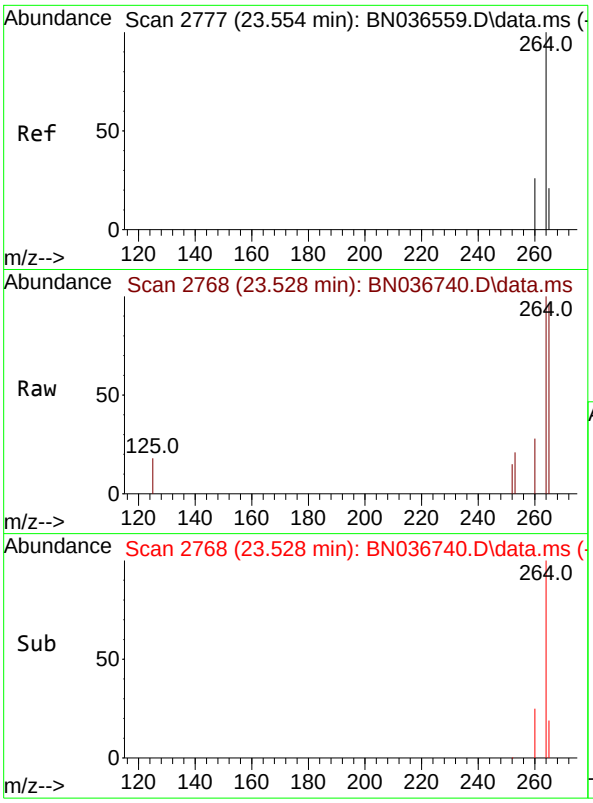




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.120 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

Tgt Ion:149 Resp: 1129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 23.7 | 20.7 | 31.1 |
| 279 | 4.8 | 3.6 | 5.4 |



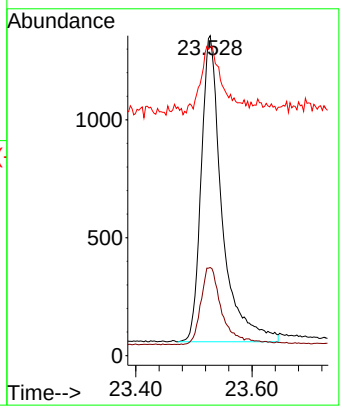



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.528 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036740.D
Acq: 27 Mar 2025 16:50

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP201-20250320

Tgt Ion:264 Resp: 3230

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.6 | 22.6 | 33.8 |
| 265 | 96.4 | 88.1 | 132.1 |



Alliance TECHNICAL GROUP
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: | 03/20/25 |
| Project: | NWIRP Bethpage - RW5B CTO WE13 112G08005 | Date Received: | 03/21/25 |
| Client Sample ID: | RW5-SP303-20250320 | SDG No.: | Q1621 |
| Lab Sample ID: | Q1621-03 | 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 |
|---|---|---|---|---|
| BN036741.D | 1 | 03/24/25 08:15 | 03/27/25 17:26 | PB167269 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 123-91-1 | 1,4-Dioxane | 0.20 | U | 0.070 | 0.20 | 0.20 | ug/L |
| **SURROGATES** | | | | | | | |
| 7297-45-2 | 2-Methylnaphthalene-d10 | 0.31 | | 30 - 150 | | 79% | SPK: 0.4 |
| 93951-69-0 | Fluoranthene-d10 | 0.46 | | 30 - 150 | | 116% | SPK: 0.4 |
| 4165-60-0 | Nitrobenzene-d5 | 0.29 | | 55 - 111 | | 72% | SPK: 0.4 |
| 321-60-8 | 2-Fluorobiphenyl | 0.34 | | 53 - 106 | | 84% | SPK: 0.4 |
| 1718-51-0 | Terphenyl-d14 | 0.46 | | 58 - 132 | | 115% | SPK: 0.4 |
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 1320 | 7.703 | | | | |
| 1146-65-2 | Naphthalene-d8 | 3210 | 10.487 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 2060 | 14.345 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 4580 | 17.086 | | | | |
| 1719-03-5 | Chrysene-d12 | 3930 | 21.277 | | | | |
| 1520-96-3 | Perylene-d12 | 3540 | 23.528 | | | | |

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\BN032725\
Data File : BN036741.D
Acq On : 27 Mar 2025 17:26
Operator : RC/JU
Sample : Q1621-03
Misc :
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Quant Time: Mar 27 18:12:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

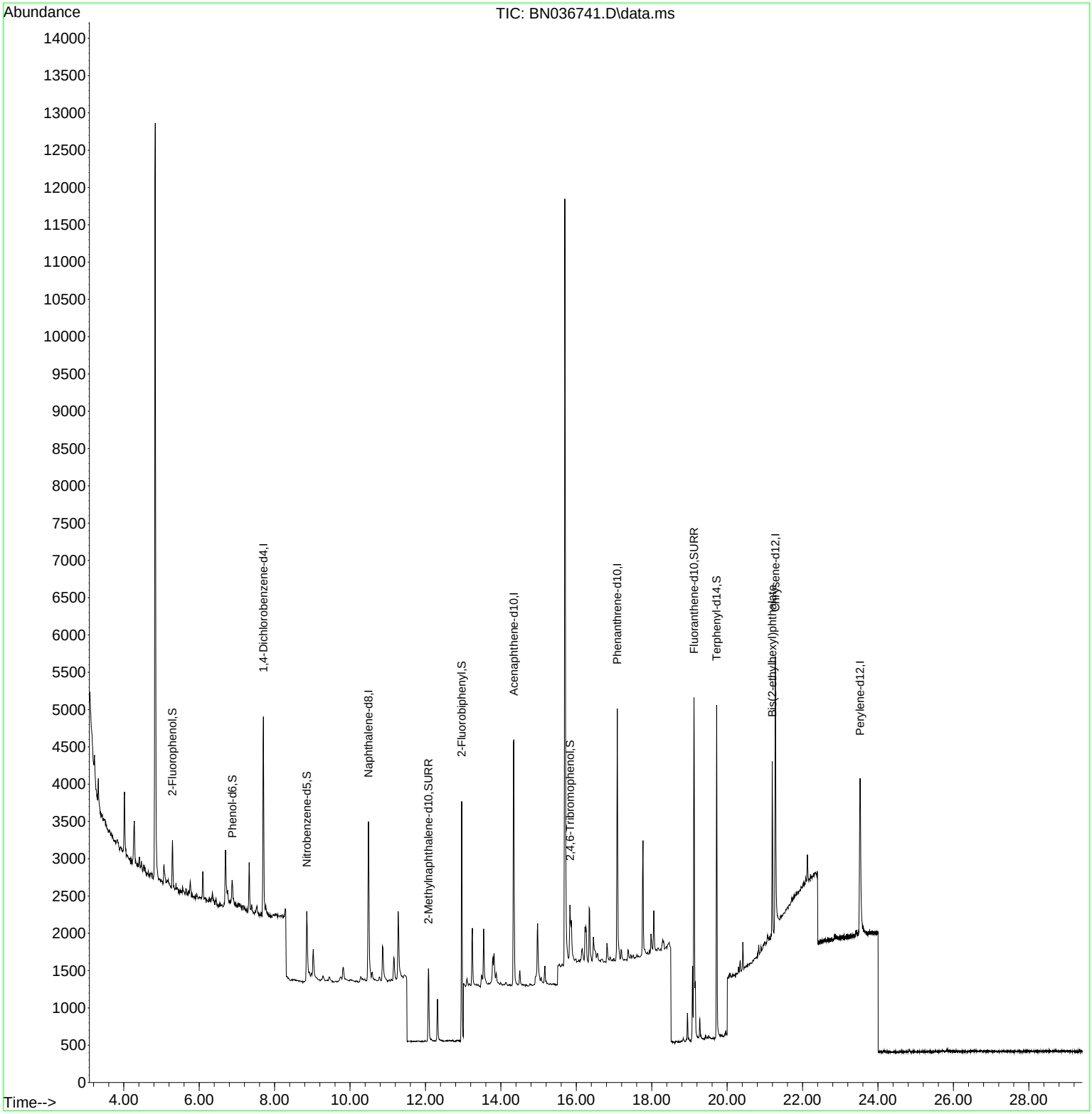
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1324 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 3208 | 0.400 | ng | -0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2058 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 4583 | 0.400 | ng | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 3932 | 0.400 | ng | -0.02 |
| 35) Perylene-d12 | 23.528 | 264 | 3540 | 0.400 | ng | -0.03 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 461 | 0.149 | ng | -0.02 |
| 5) Phenol-d6 | 6.879 | 99 | 302 | 0.079 | ng | -0.02 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 998 | 0.286 | ng | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 1497 | 0.314 | ng | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 448 | 0.480 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 4021 | 0.336 | ng | -0.03 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 5441 | 0.463 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 4322 | 0.459 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 2170 | 0.223 | ng | # 97 |

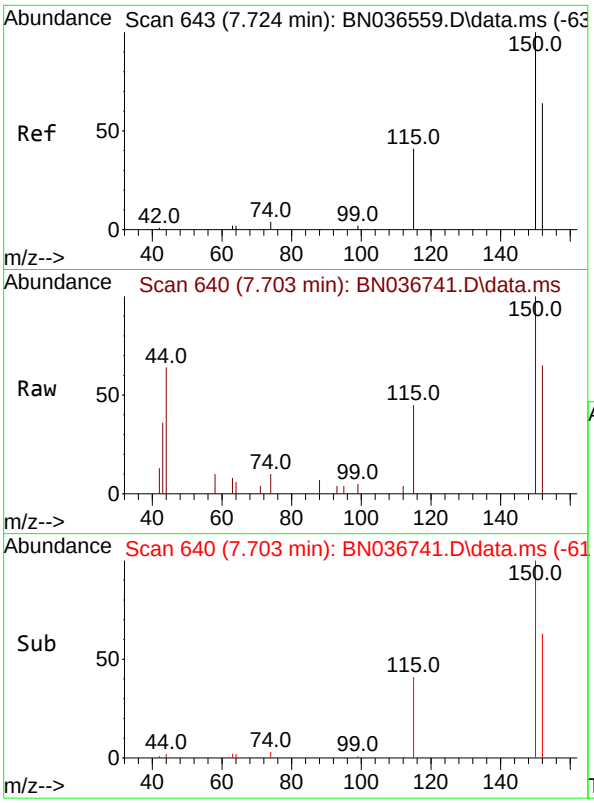
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036741.D
Acq On : 27 Mar 2025 17:26
Operator : RC/JU
Sample : Q1621-03
Misc :
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Quant Time: Mar 27 18:12:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



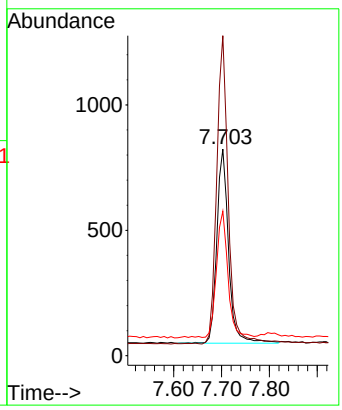


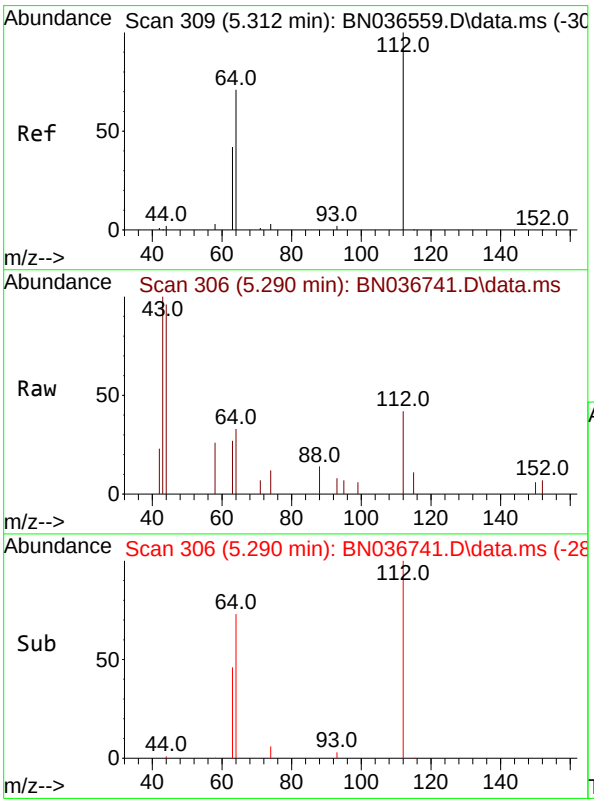

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion:152 Resp: 1324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.9 | 123.7 | 185.5 |
| 115 | 69.9 | 54.3 | 81.5 |

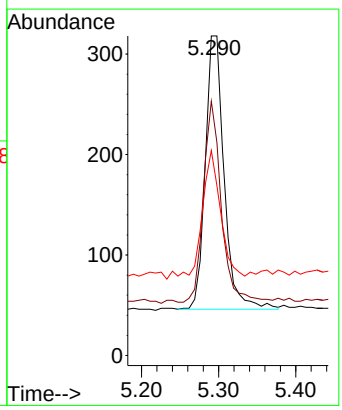


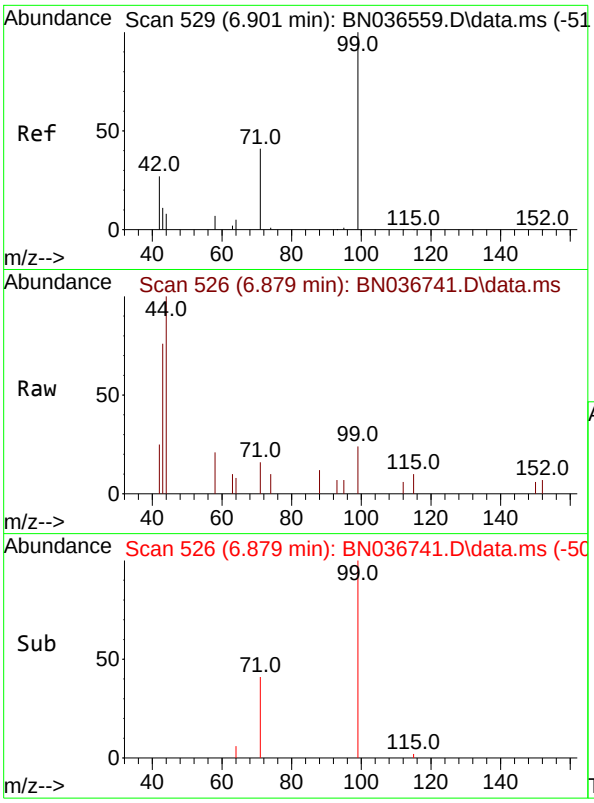




#4
2-Fluorophenol
Concen: 0.149 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

Tgt Ion:112 Resp: 461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.6 | 53.1 | 79.7 |
| 63 | 46.9 | 31.8 | 47.8 |



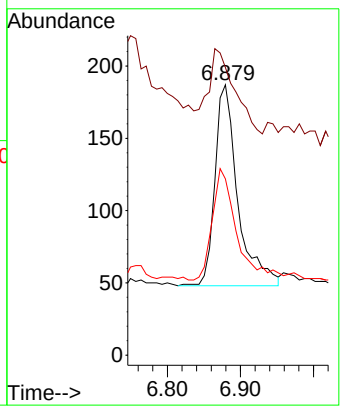


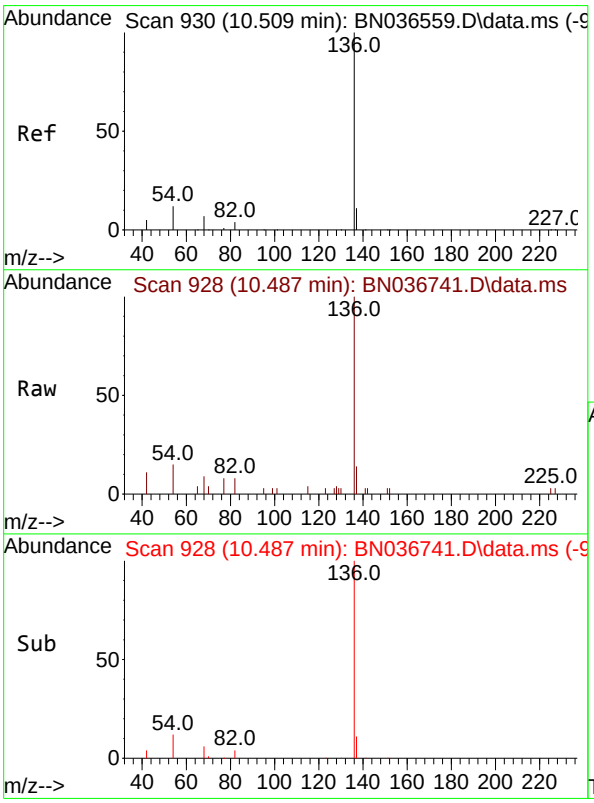

#5
Phenol-d6
Concen: 0.079 ng
RT: 6.879 min Scan# 5
Delta R.T. -0.022 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion: 99 Resp: 302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 50.0 | 26.5 | 39.7# |
| 71 | 58.6 | 34.1 | 51.1# |

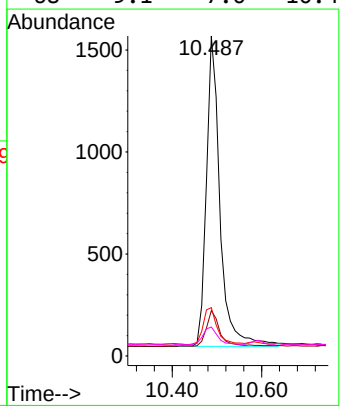


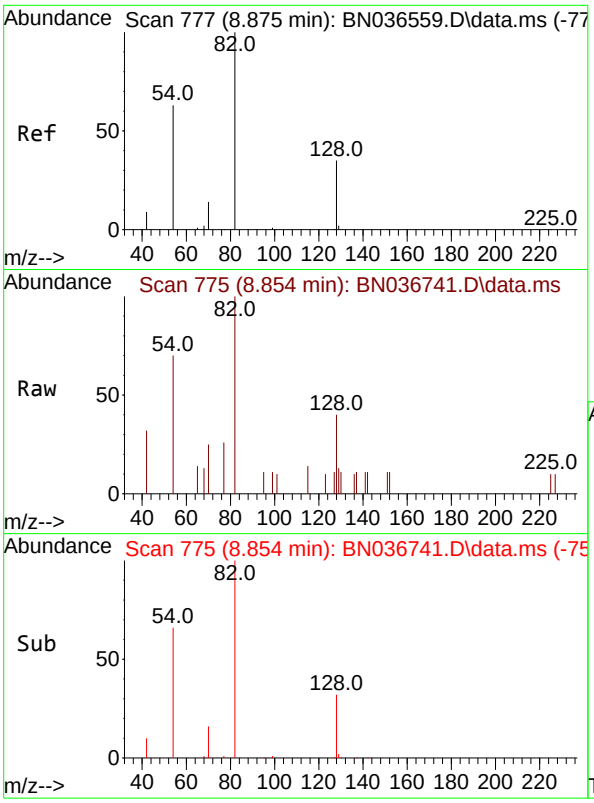




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 928
Delta R.T. -0.021 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

Tgt Ion:136 Resp: 3208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 14.1 | 10.3 | 15.5 |
| 54 | 15.1 | 11.5 | 17.3 |
| 68 | 9.1 | 7.0 | 10.4 |



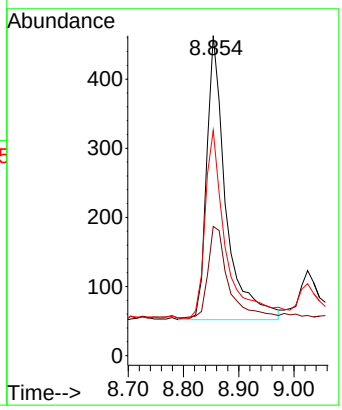


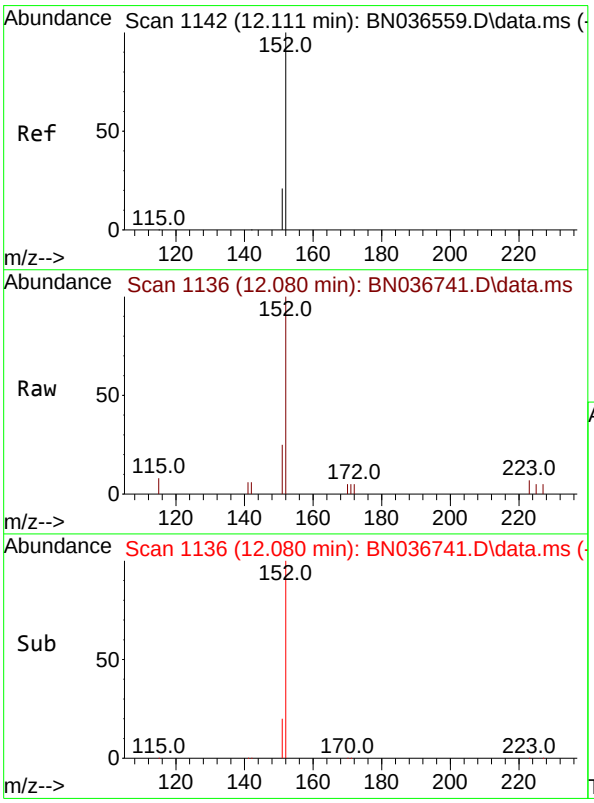

#8
Nitrobenzene-d5
Concen: 0.286 ng
RT: 8.854 min Scan# 7
Delta R.T. -0.021 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion: 82 Resp: 998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.4 | 30.6 | 45.8 |
| 54 | 70.4 | 52.2 | 78.4 |

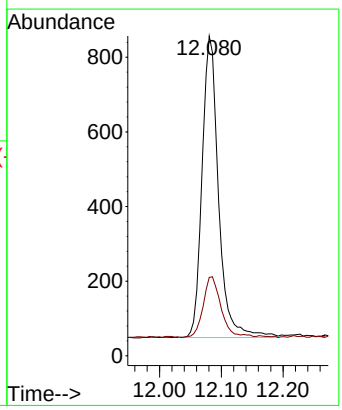


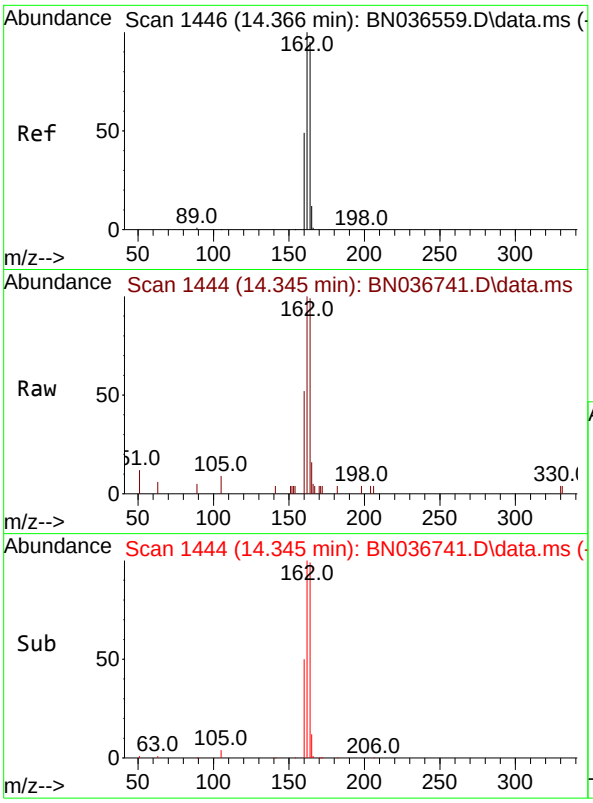




#11
2-Methylnaphthalene-d10
Concen: 0.314 ng
RT: 12.080 min Scan# 1136
Delta R.T. -0.030 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

Tgt Ion:152 Resp: 1497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 22.1 | 17.0 | 25.6 |



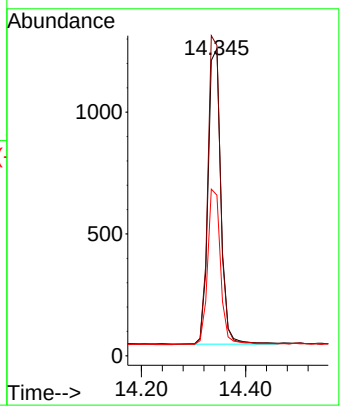


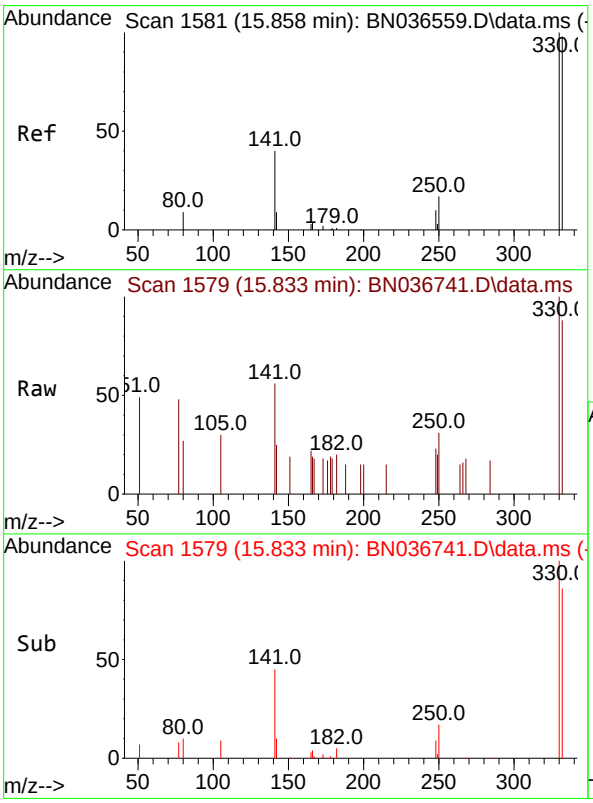

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion:164 Resp: 2058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 101.0 | 84.2 | 126.2 |
| 160 | 52.3 | 42.2 | 63.2 |

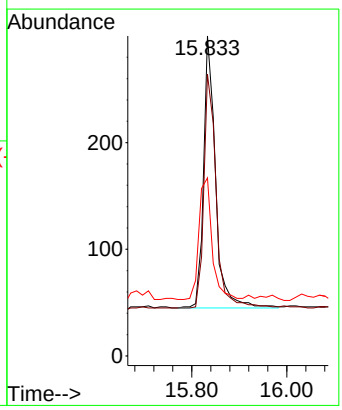


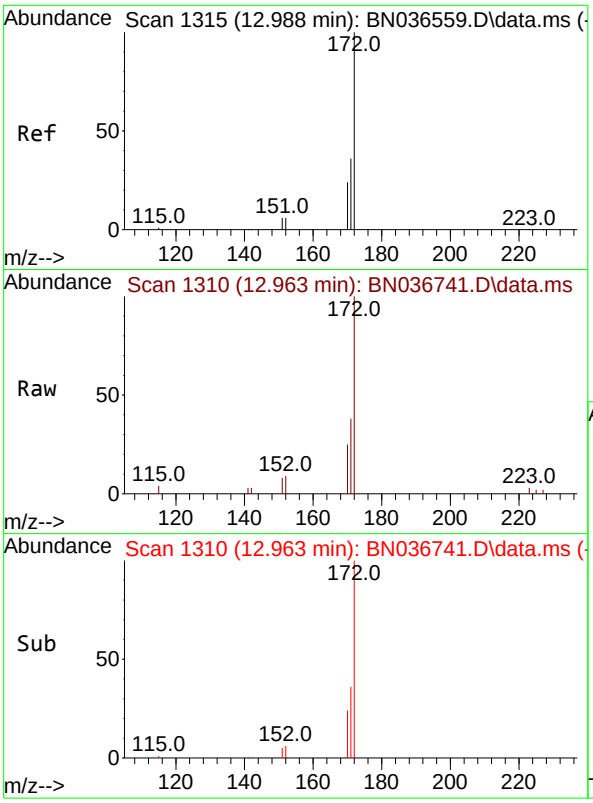




#14
2,4,6-Tribromophenol
Concen: 0.480 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

Tgt Ion:330 Resp: 448

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 88.2 | 75.2 | 112.8 |
| 141 | 49.1 | 43.4 | 65.2 |



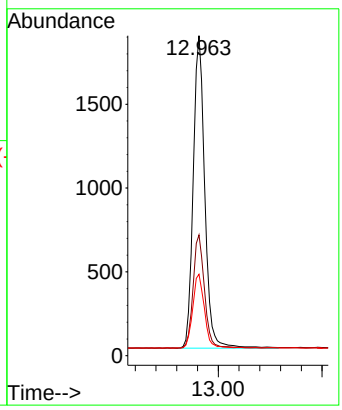


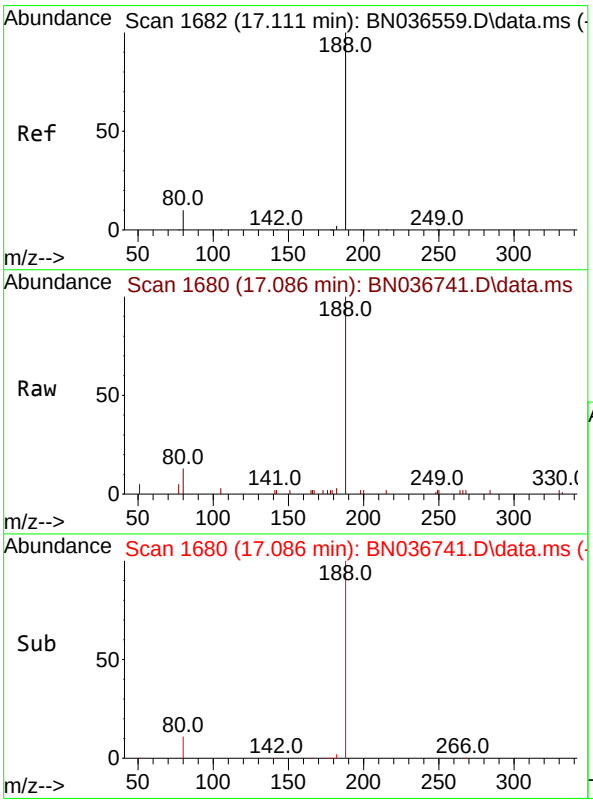

#15
2-Fluorobiphenyl
Concen: 0.336 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion:172 Resp: 4021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.8 | 29.5 | 44.3 |
| 170 | 25.5 | 20.2 | 30.4 |

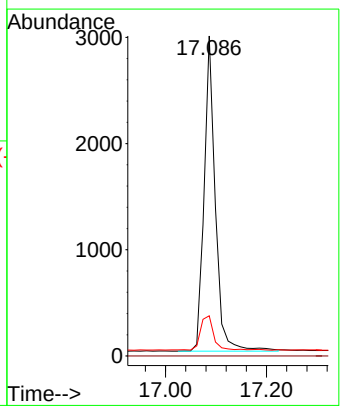


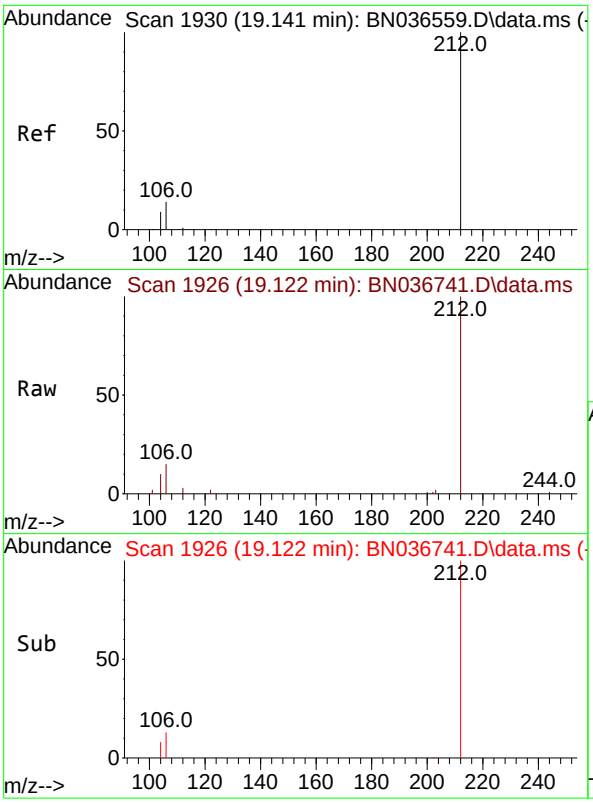




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1680
Delta R.T. -0.025 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

Tgt Ion:188 Resp: 4583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 12.5 | 8.8 | 13.2 |



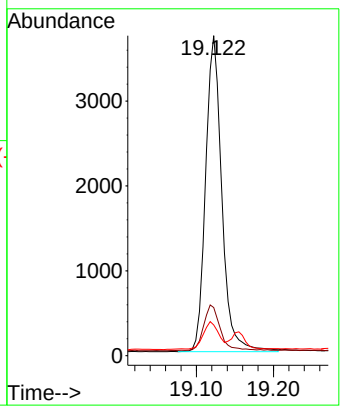


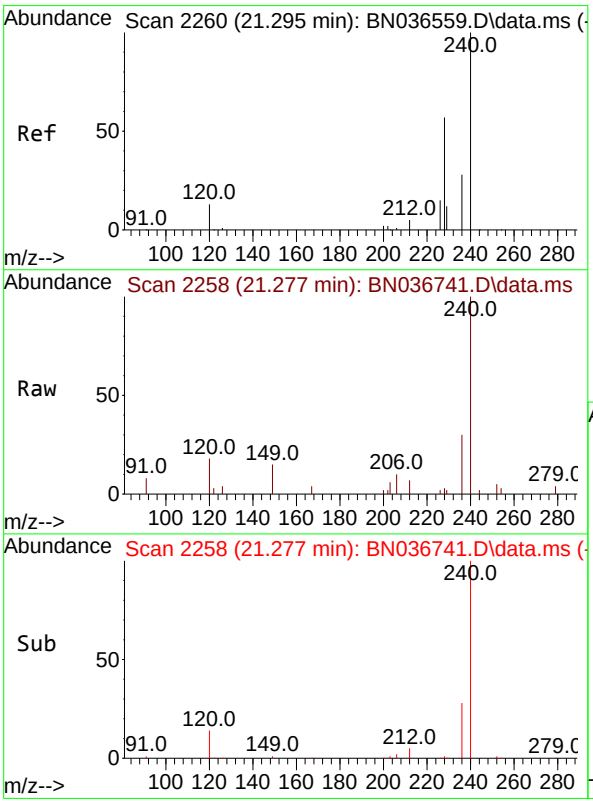

#27
Fluoranthene-d10
Concen: 0.463 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.018 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion:212 Resp: 5441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.2 | 11.8 | 17.6 |
| 104 | 8.7 | 7.3 | 10.9 |

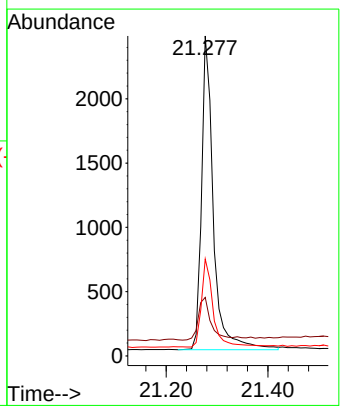


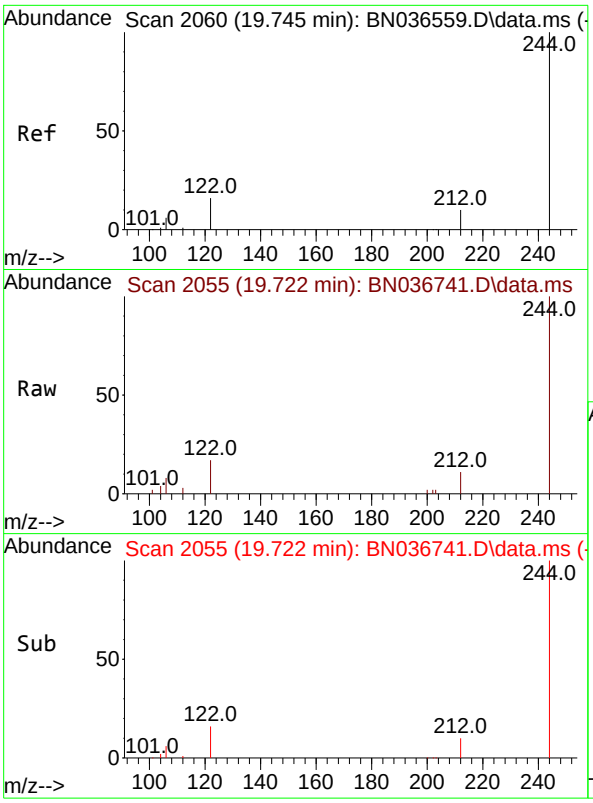




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.018 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

Tgt Ion:240 Resp: 3932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 18.3 | 14.6 | 22.0 |
| 236 | 30.3 | 24.1 | 36.1 |



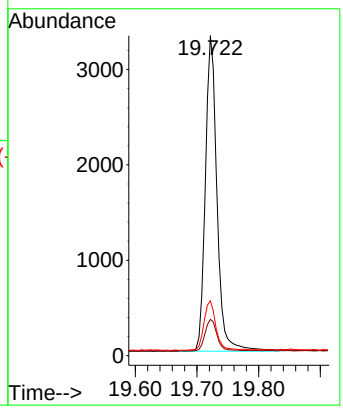


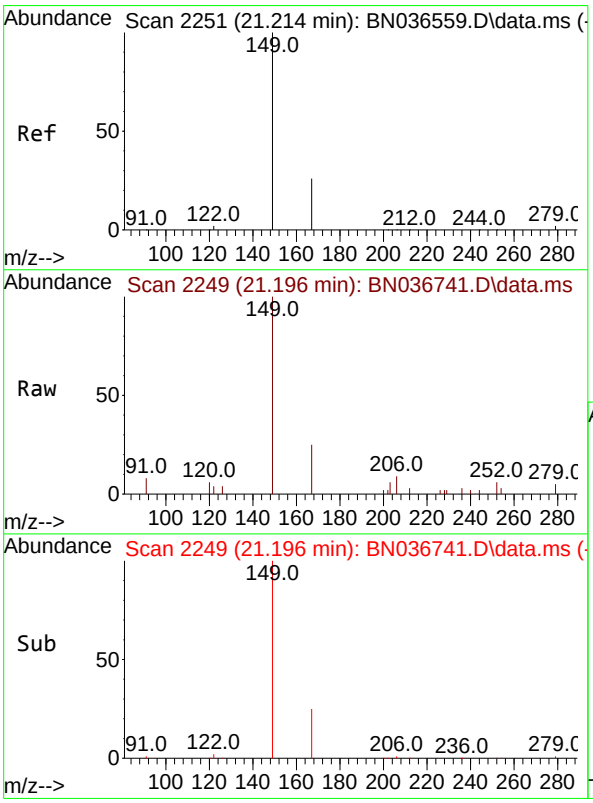

#31
Terphenyl-d14
Concen: 0.459 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion:244 Resp: 4322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.3 | 9.6 | 14.4 |
| 122 | 17.1 | 13.9 | 20.9 |

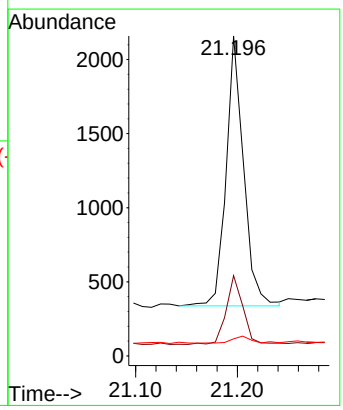


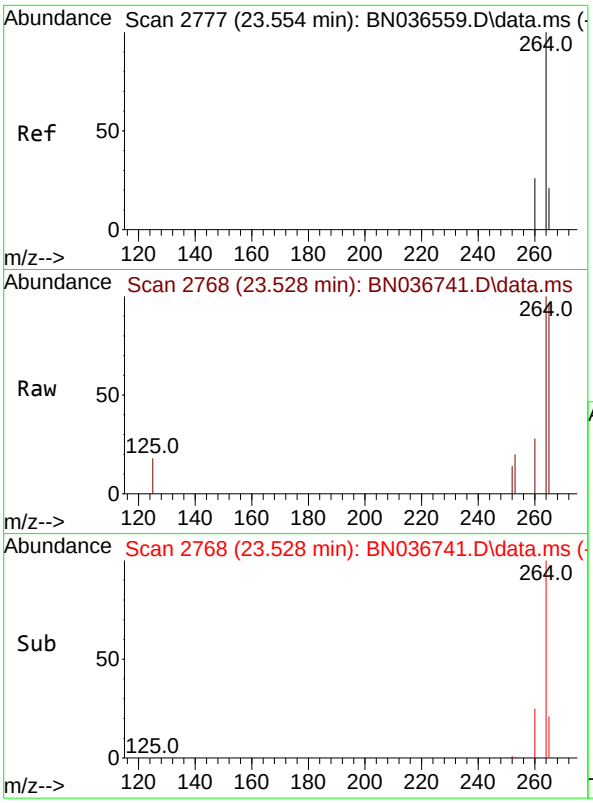




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.223 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

Tgt Ion:149 Resp: 2170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 24.7 | 20.7 | 31.1 |
| 279 | 2.9 | 3.6 | 5.4# |



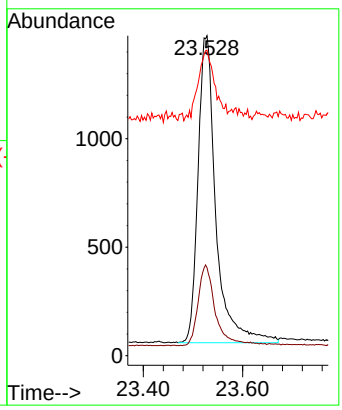



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.528 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036741.D
Acq: 27 Mar 2025 17:26

**Instrument :**
BNA_N
**ClientSampleId :**
RW5-SP303-20250320

Tgt Ion:264 Resp: 3540

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.5 | 22.6 | 33.8 |
| 265 | 95.5 | 88.1 | 132.1 |



# CALIBRATION SUMMARY

Response Factor Report BNA_N

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

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

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

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN031025.M

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

(#) = Out of Range

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

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations APPROVED**

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

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

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

ICAL Form

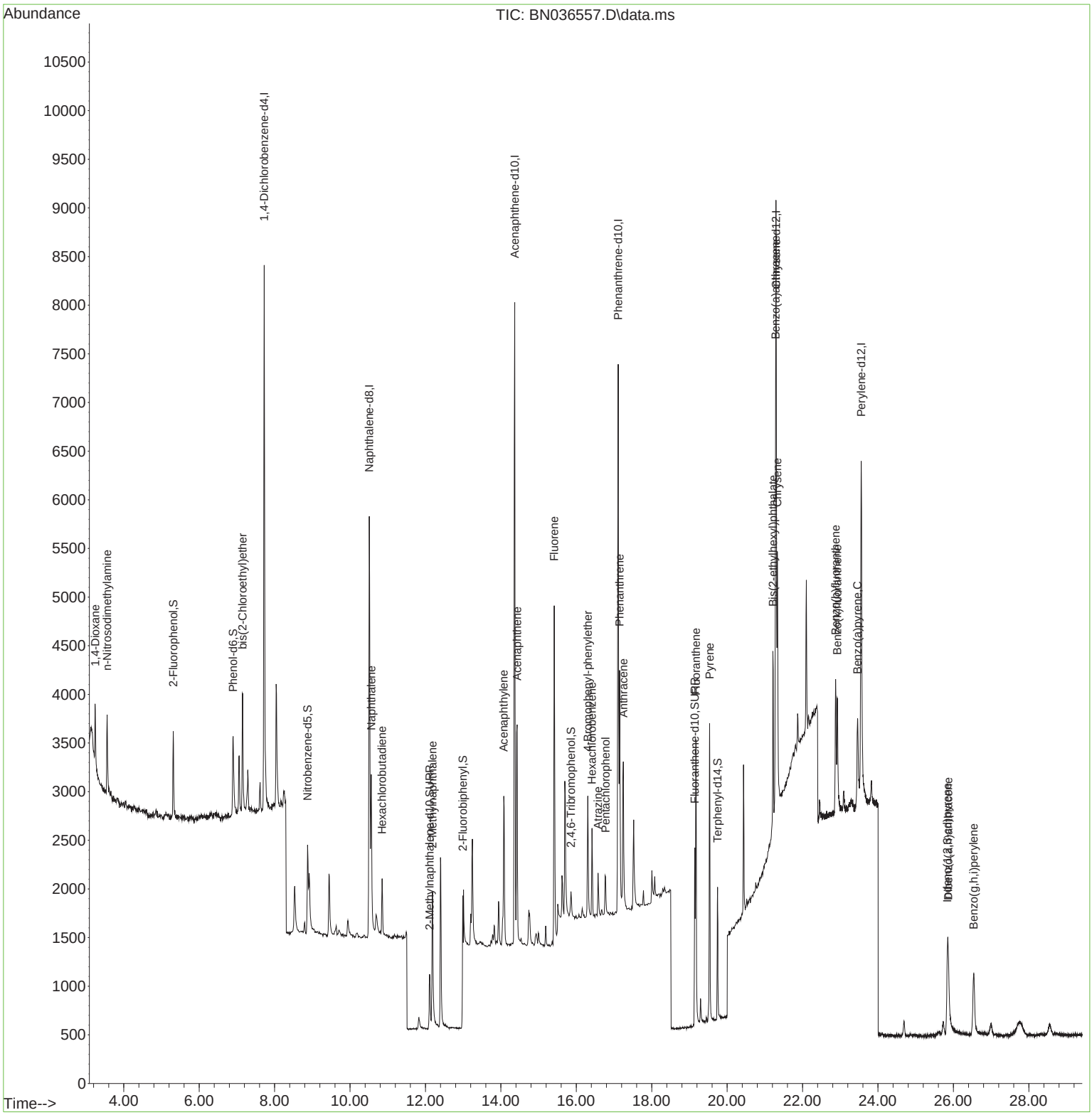
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036557.D
Acq On : 10 Mar 2025 11:42
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

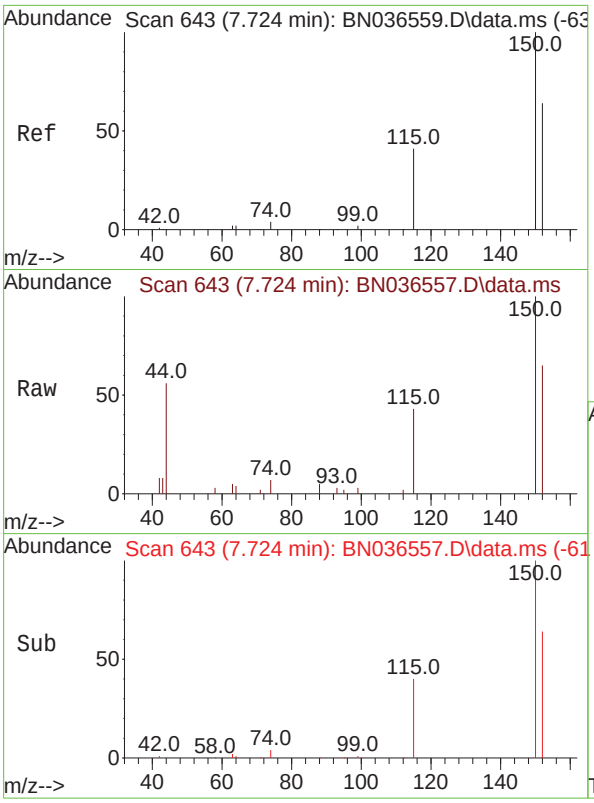
Quant Time: Mar 10 16:00:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations APPROVED**

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

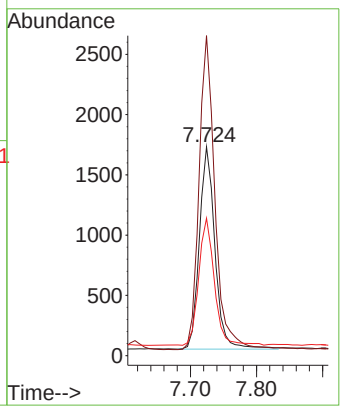





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:152 Resp: 275

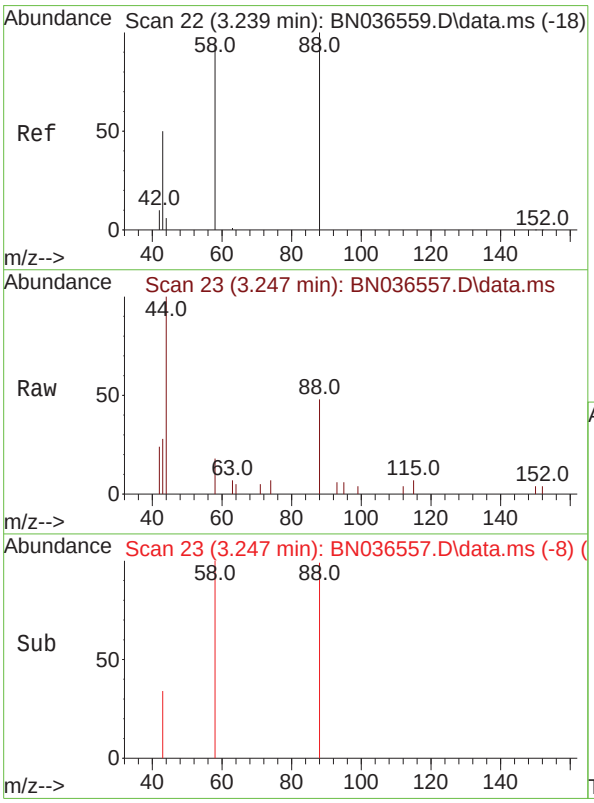
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 153.3 | 123.7 | 185.5 |
| 115 | 65.8 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
**APPROVED**

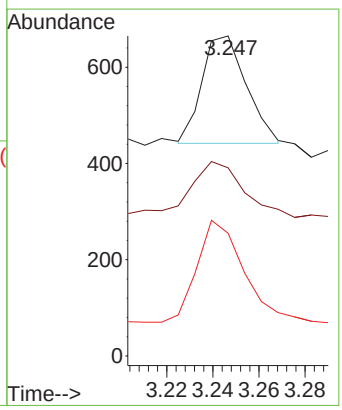
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

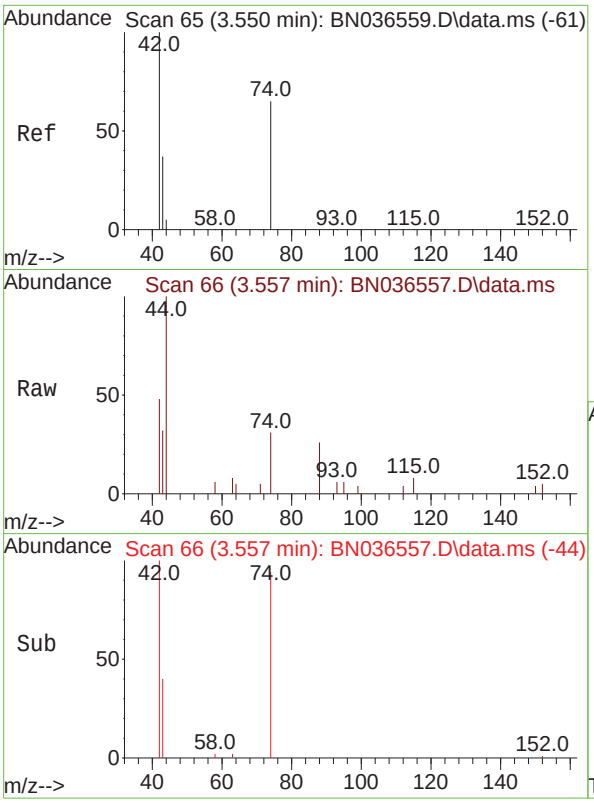



#2
1,4-Dioxane
Concen: 0.098 ng m
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 88 Resp: 299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 94.6 | 37.8 | 56.8# |
| 58 | 102.3 | 67.4 | 101.2# |

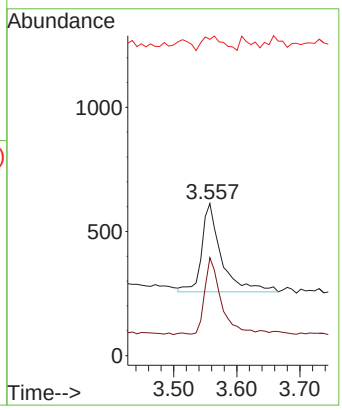





#3
n-Nitrosodimethylamine
Concen: 0.124 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 42 Resp: 76

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 73.0 | 60.6 | 90.8 |
| 44 | 16.6 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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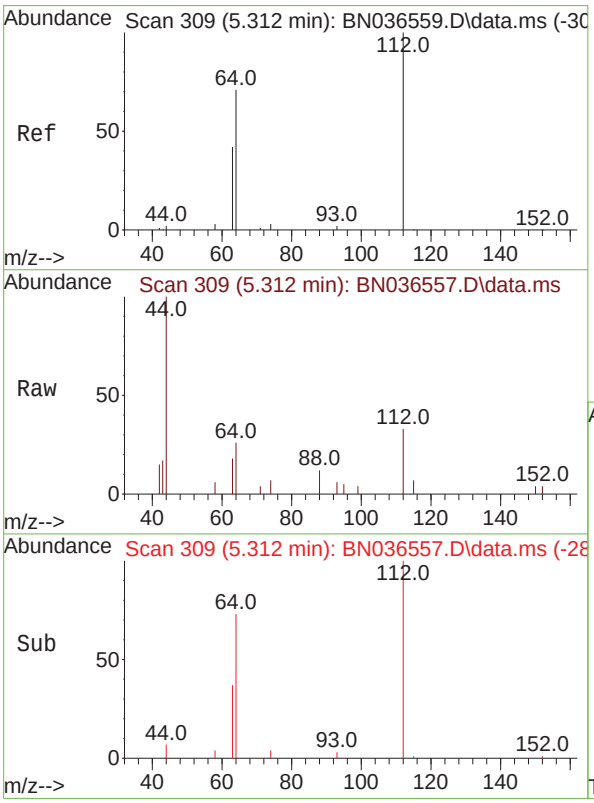
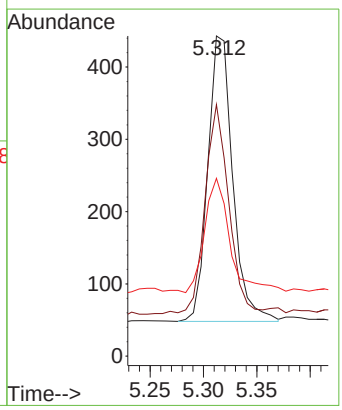
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

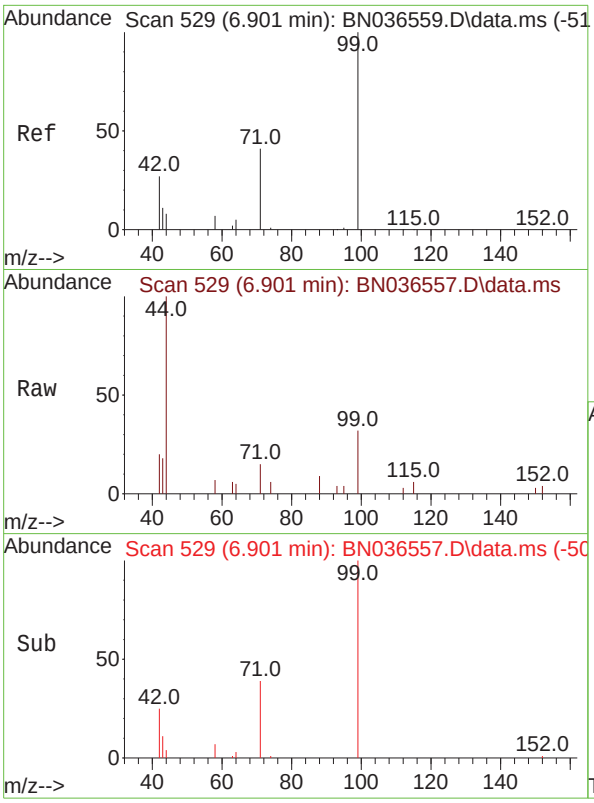



#4
2-Fluorophenol
Concen: 0.100 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:112 Resp: 641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 70.4 | 53.1 | 79.7 |
| 63 | 40.9 | 31.8 | 47.8 |

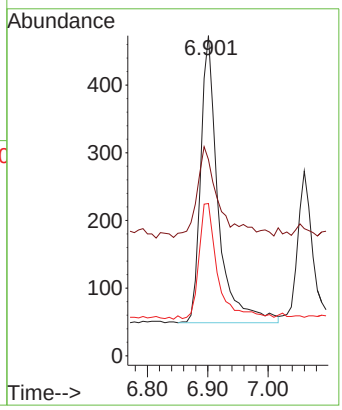





#5
Phenol-d6
Concen: 0.108 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 99 Resp: 85

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 39.8 | 26.5 | 39.7# |
| 71 | 42.8 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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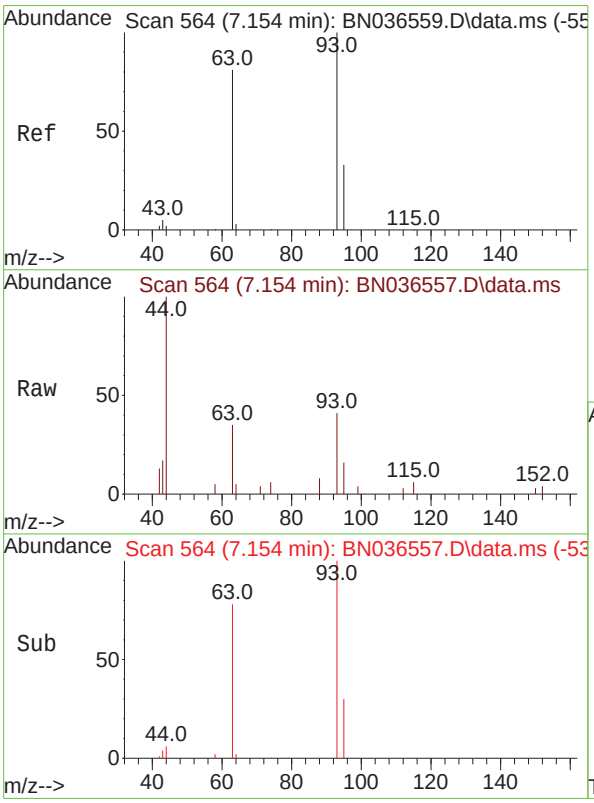
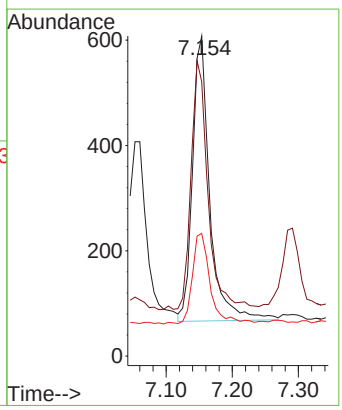
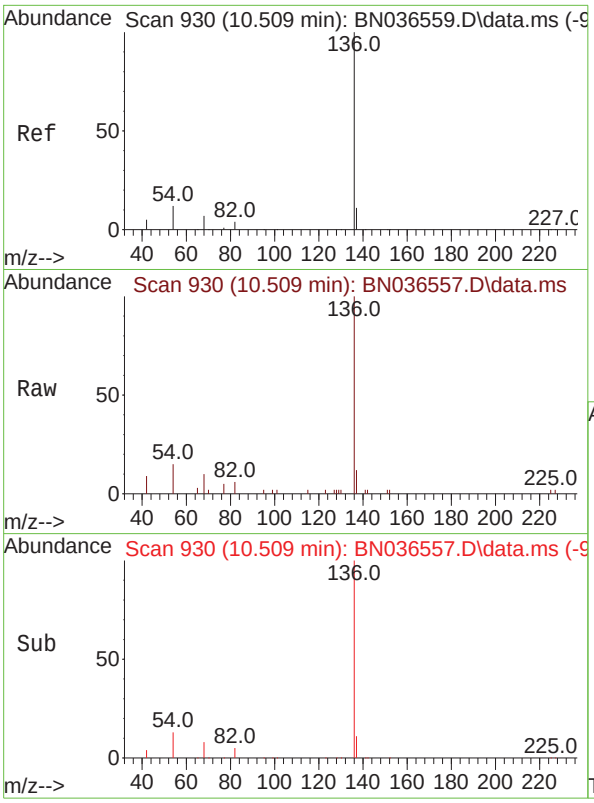



#6
bis(2-Chloroethyl)ether
Concen: 0.120 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 93 Resp: 982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 86.7 | 67.7 | 101.5 |
| 95 | 33.0 | 25.6 | 38.4 |

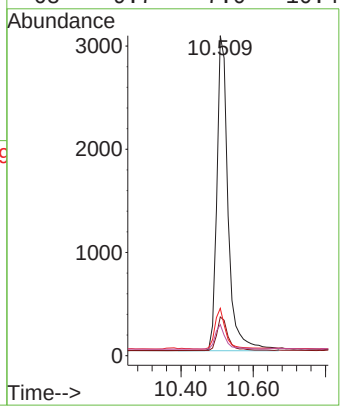





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:136 Resp: 657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.1 | 10.3 | 15.5 |
| 54 | 14.8 | 11.5 | 17.3 |
| 68 | 9.7 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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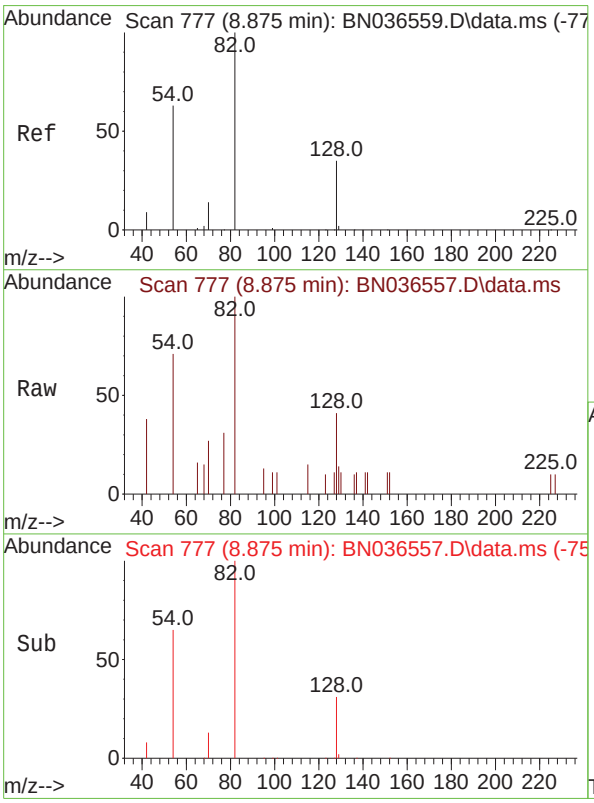
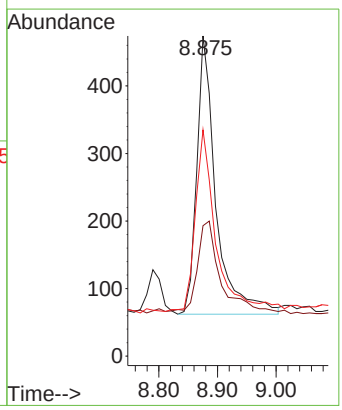
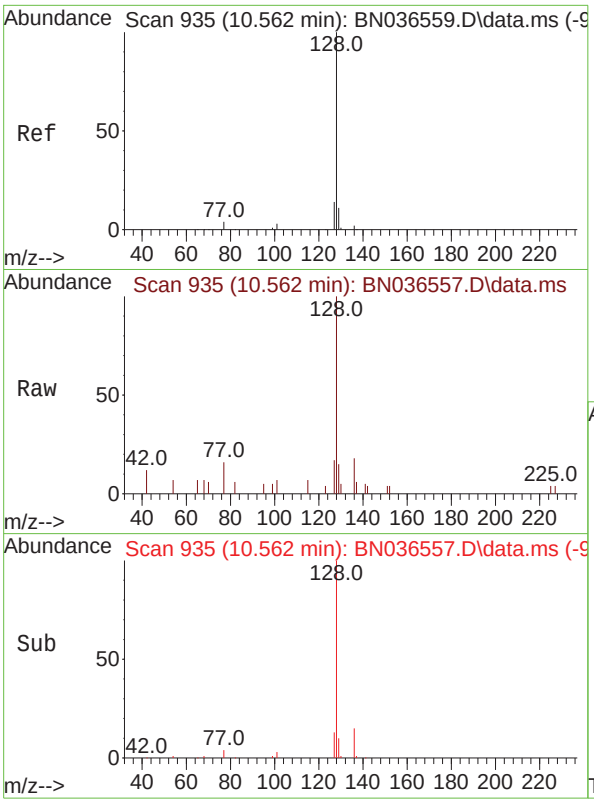



#8
Nitrobenzene-d5
Concen: 0.131 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 82 Resp: 940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.7 | 30.6 | 45.8 |
| 54 | 70.7 | 52.2 | 78.4 |

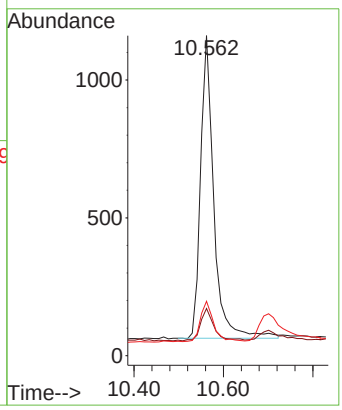





#9
Naphthalene
Concen: 0.117 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:128 Resp: 225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 14.7 | 9.8 | 14.6# |
| 127 | 17.0 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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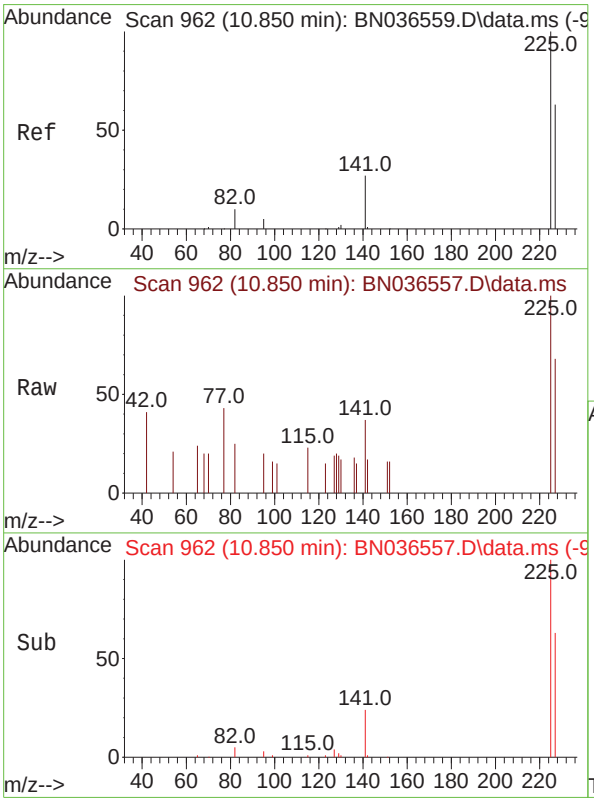
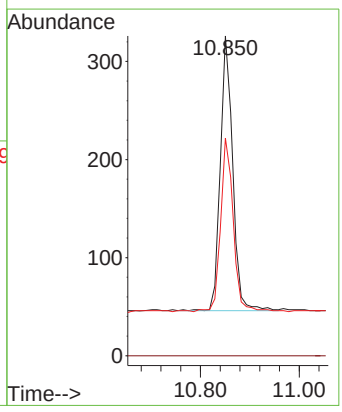
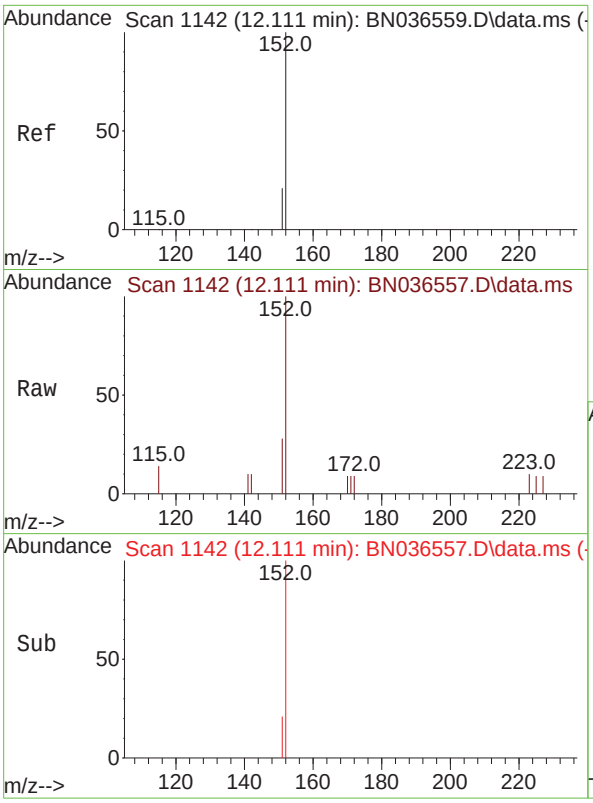



#10
Hexachlorobutadiene
Concen: 0.107 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:225 Resp: 486

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






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

Tgt Ion:152 Resp: 107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.5 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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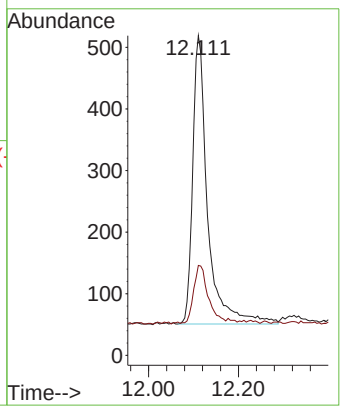
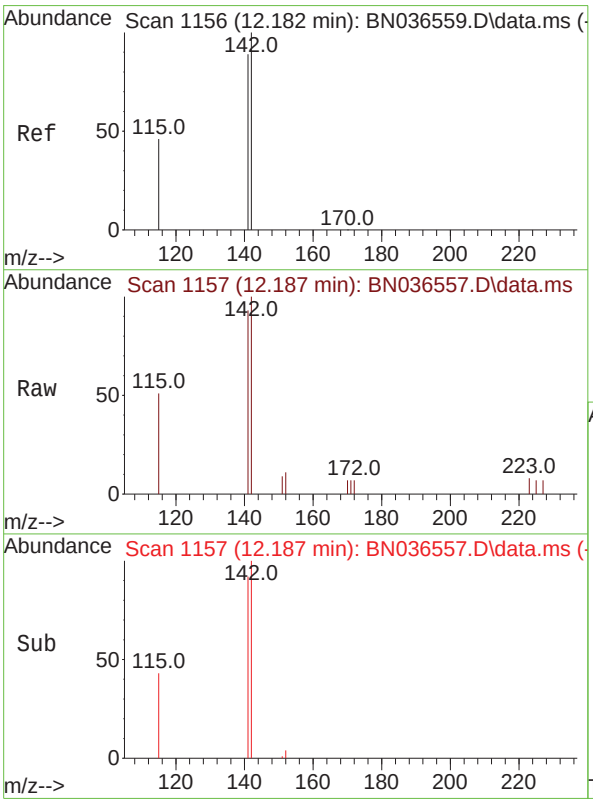
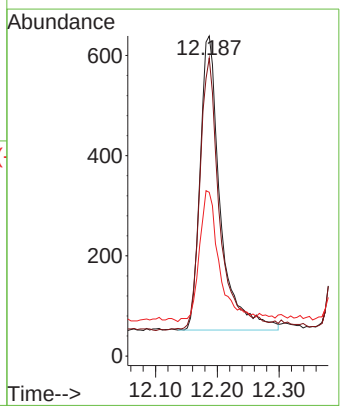


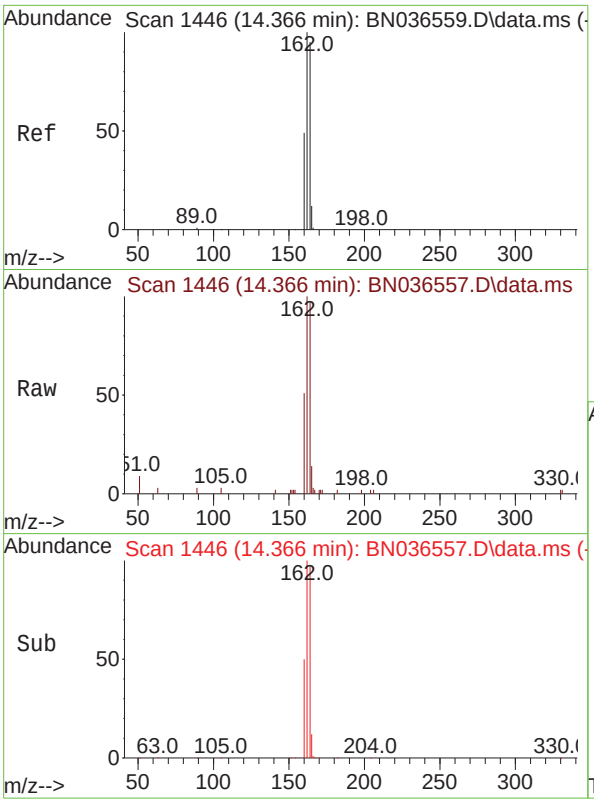




#12
2-Methylnaphthalene
Concen: 0.108 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:142 Resp: 1331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 93.1 | 71.7 | 107.5 |
| 115 | 51.2 | 38.3 | 57.5 |






#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:164 Resp: 395

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 103.3 | 84.2 | 126.2 |
| 160 | 53.0 | 42.2 | 63.2 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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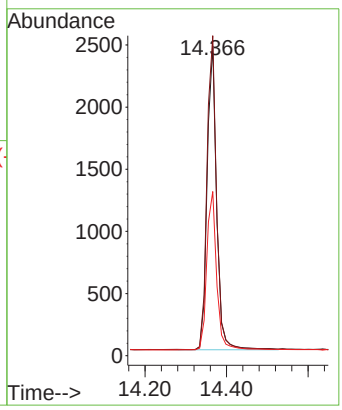
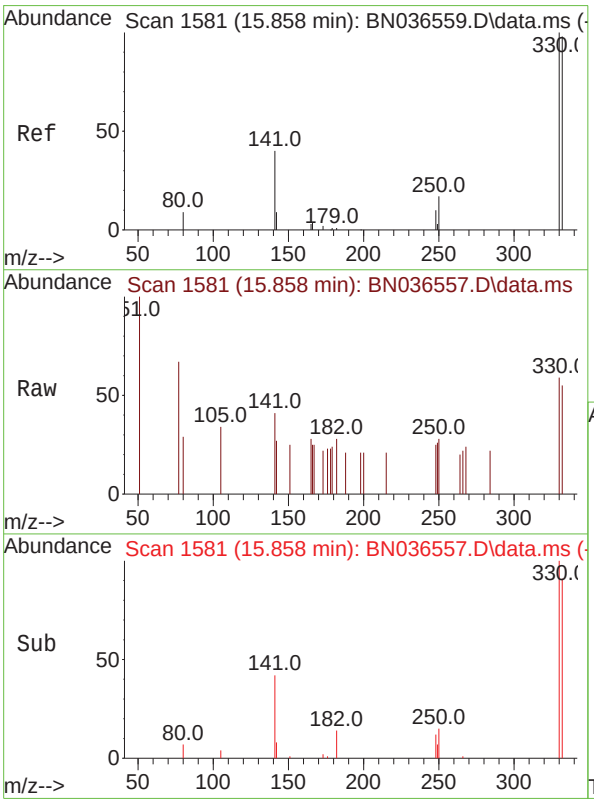
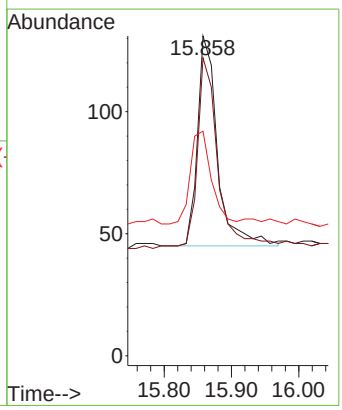


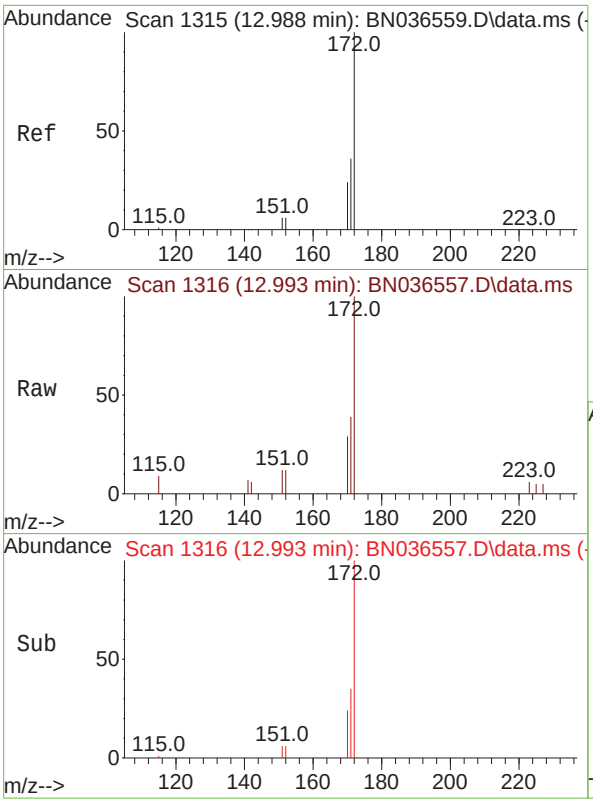




#14
2,4,6-Tribromophenol
Concen: 0.100 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:330 Resp: 179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 96.1 | 75.2 | 112.8 |
| 141 | 46.4 | 43.4 | 65.2 |

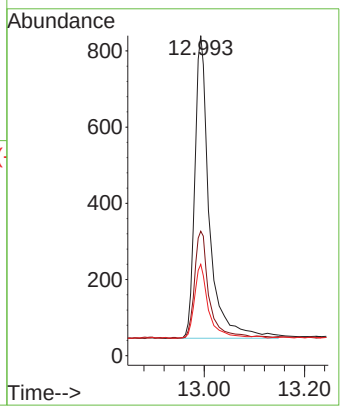





#15
2-Fluorobiphenyl
Concen: 0.095 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:172 Resp: 218

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 38.9 | 29.5 | 44.3 |
| 170 | 28.6 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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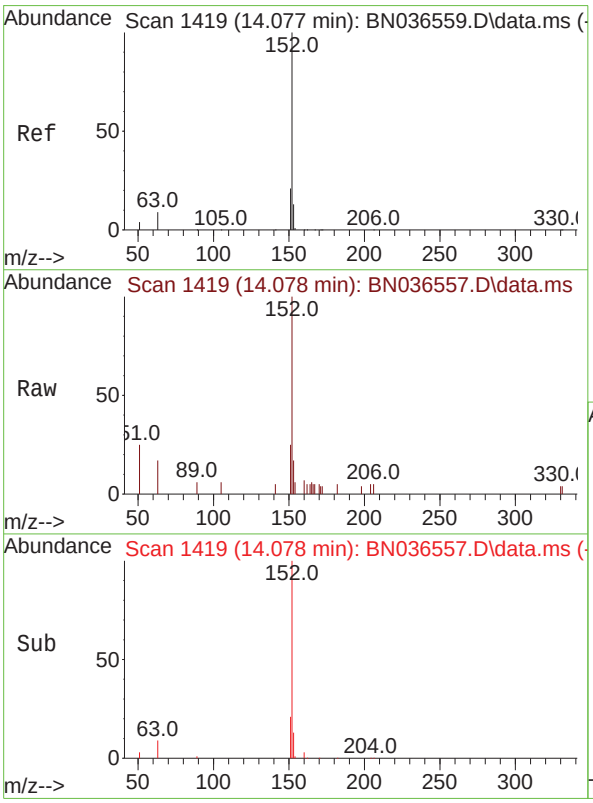
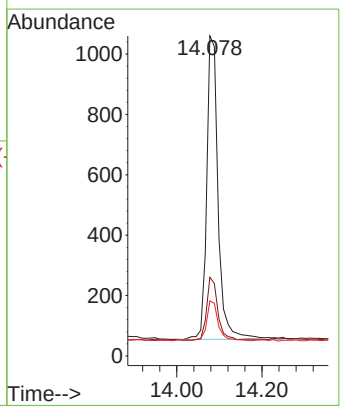
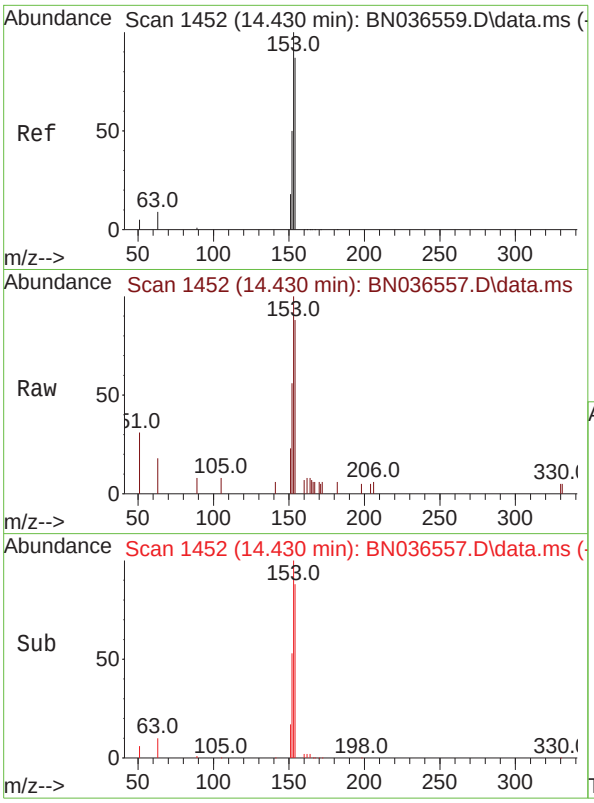



#16
Acenaphthylene
Concen: 0.100 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:152 Resp: 1862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.2 | 16.2 | 24.4 |
| 153 | 14.1 | 10.6 | 15.8 |

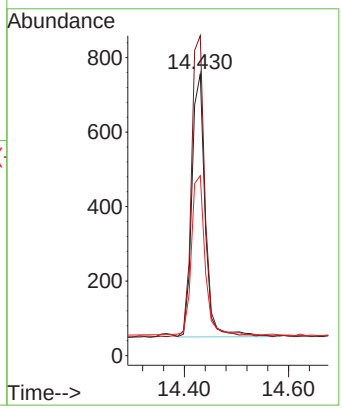





#17
Acenaphthene
Concen: 0.102 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:154 Resp: 124

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




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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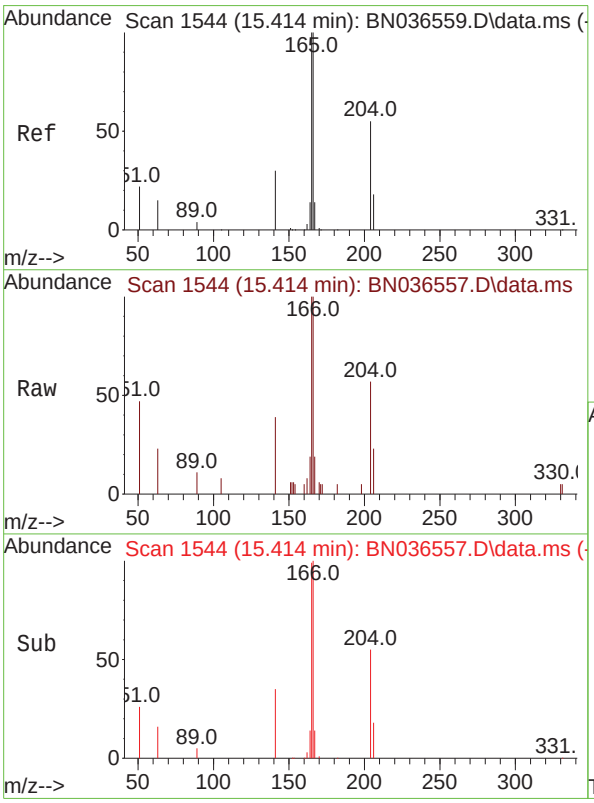
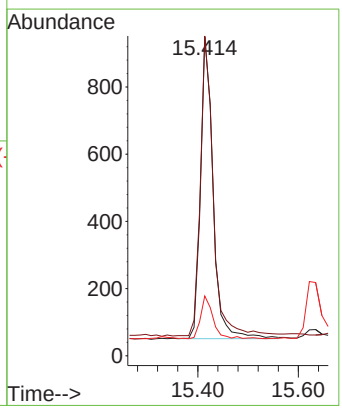
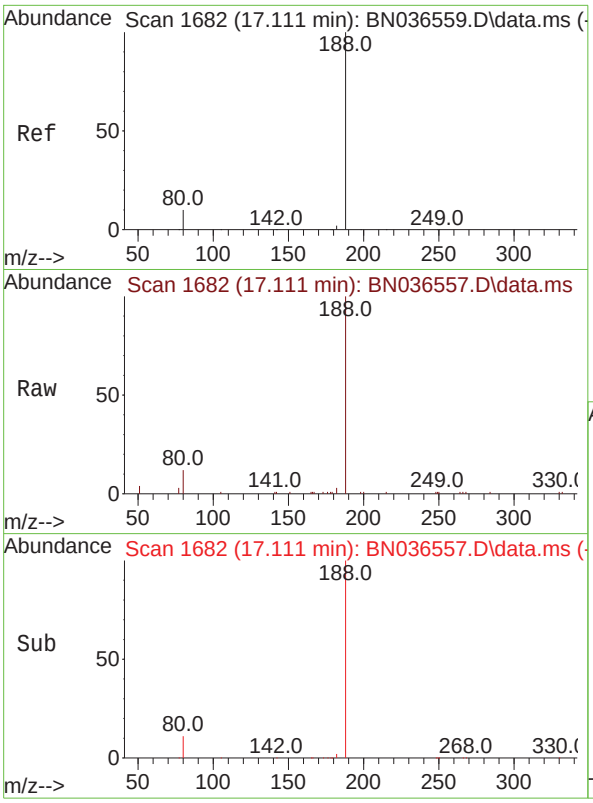



#18
Fluorene
Concen: 0.097 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:166 Resp: 1612

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

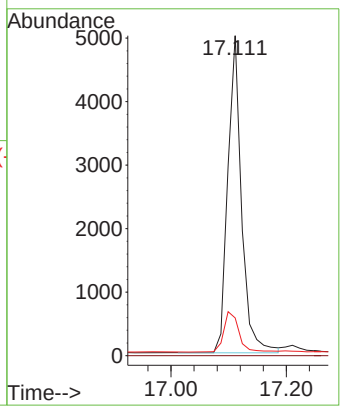





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:188 Resp: 826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.8 | 8.8 | 13.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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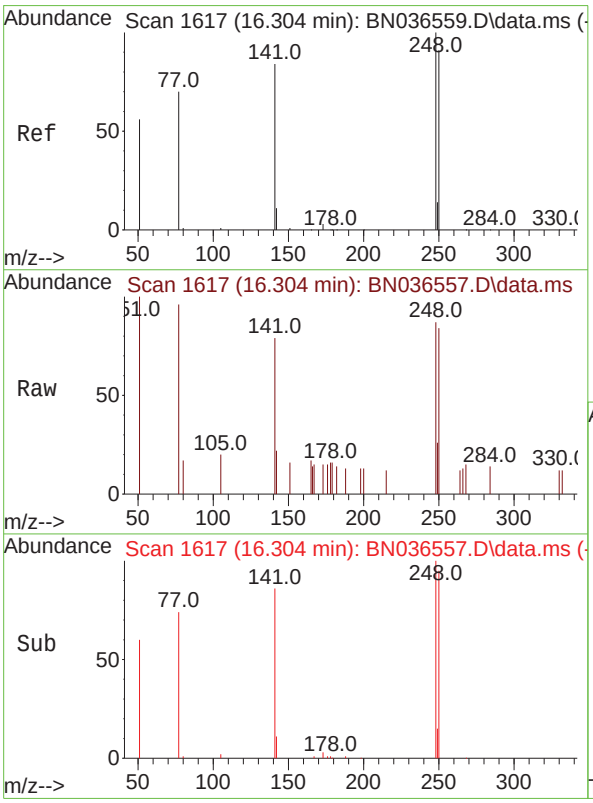
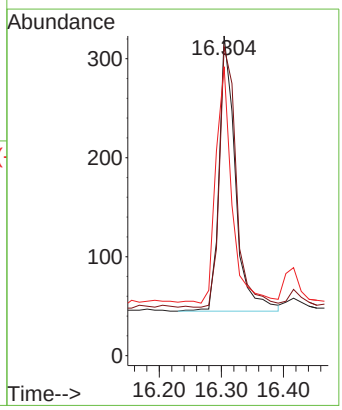
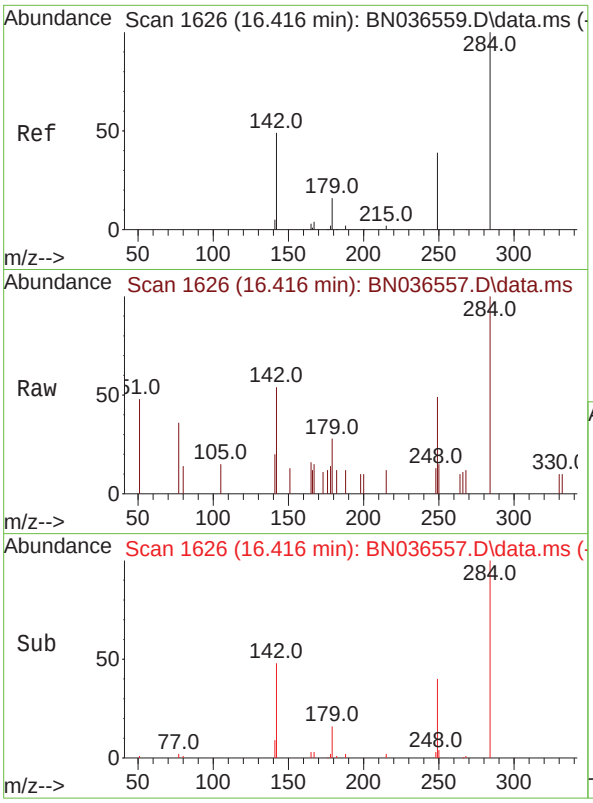



#21
4-Bromophenyl-phenylether
Concen: 0.097 ng
RT: 16.304 min Scan# 1617
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:248 Resp: 502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 96.6 | 73.0 | 109.6 |
| 141 | 90.4 | 68.6 | 103.0 |






#22
Hexachlorobenzene
Concen: 0.101 ng
RT: 16.416 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:284 Resp: 63

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 45.7 | 37.0 | 55.4 |
| 249 | 37.2 | 28.1 | 42.1 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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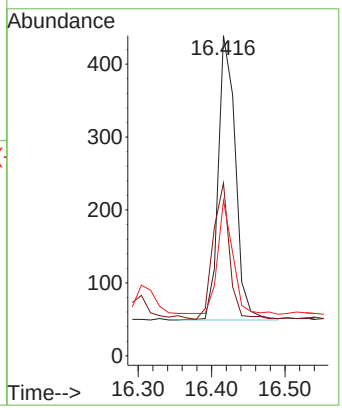
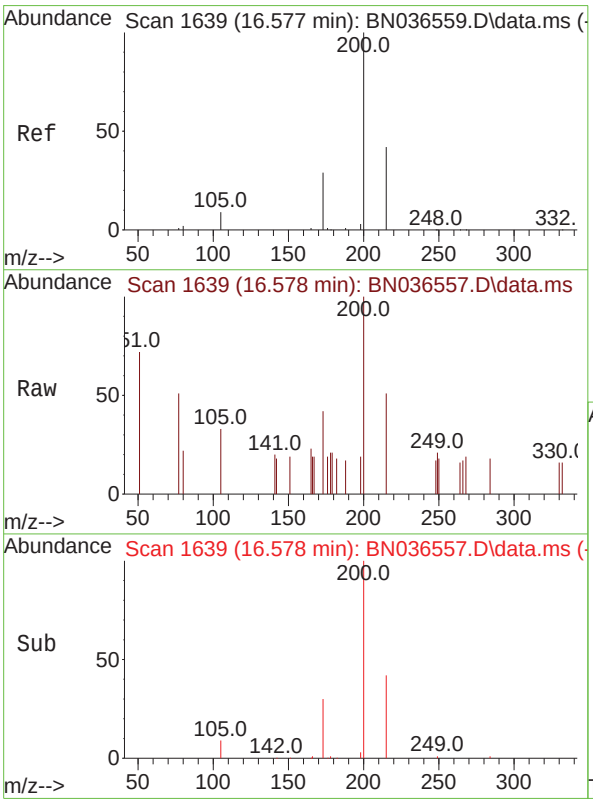
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

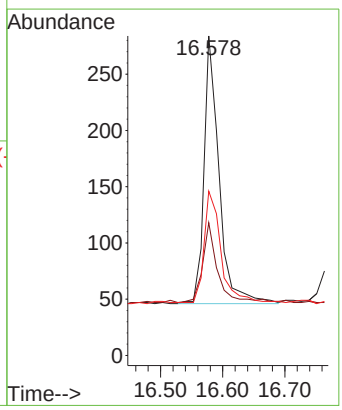


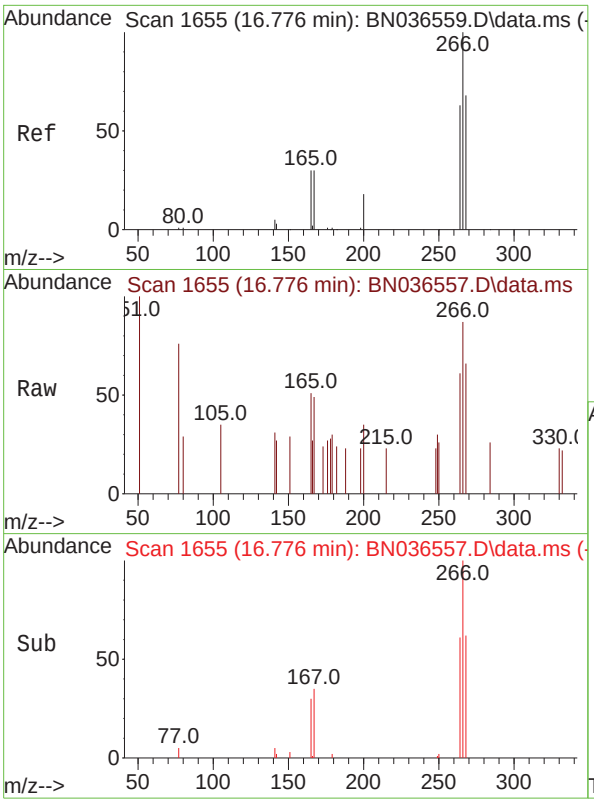




#23
Atrazine
Concen: 0.096 ng
RT: 16.578 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:200 Resp: 400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 41.5 | 27.3 | 40.9# |
| 215 | 51.4 | 36.8 | 55.2 |

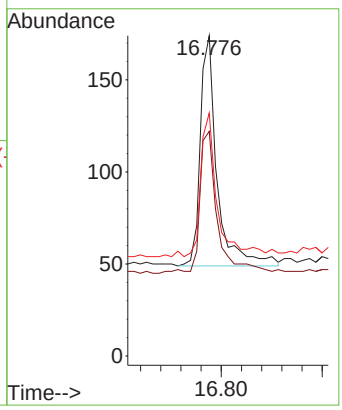





#24
Pentachlorophenol
Concen: 0.102 ng
RT: 16.776 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:266 Resp: 29

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




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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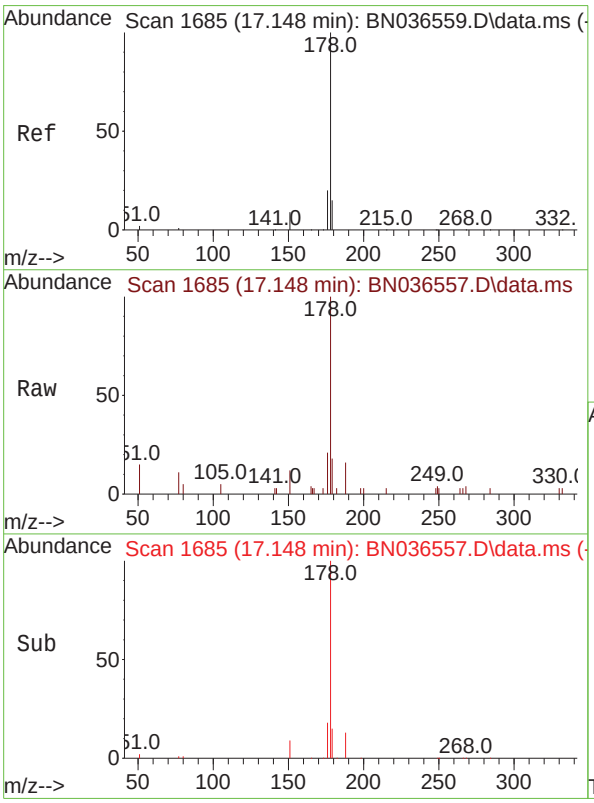
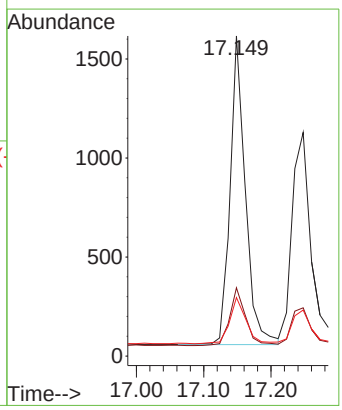
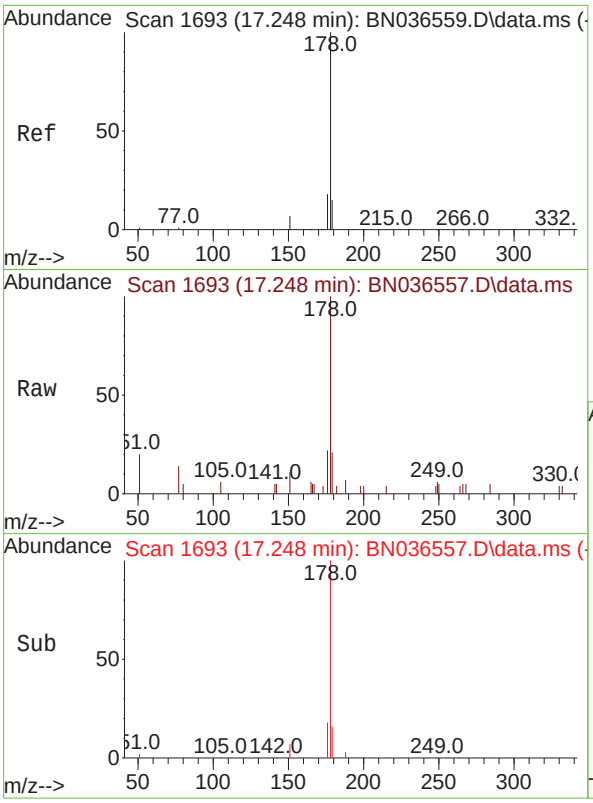



#25
Phenanthrene
Concen: 0.099 ng
RT: 17.148 min Scan# 1685
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:178 Resp: 2459

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

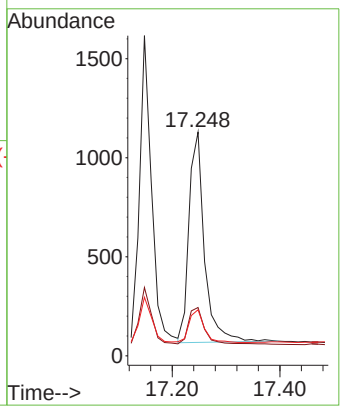





#26
Anthracene
Concen: 0.095 ng
RT: 17.248 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:178 Resp: 212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.4 | 23.2 |
| 179 | 15.7 | 12.6 | 18.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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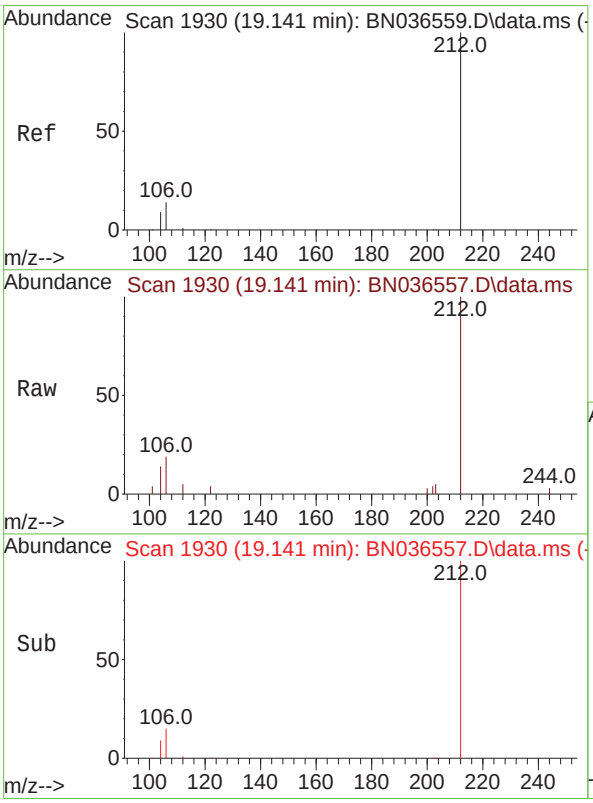
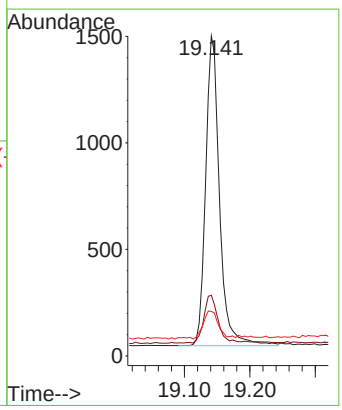
Supervised By :Jagrut Upadhyay 03/11/2025

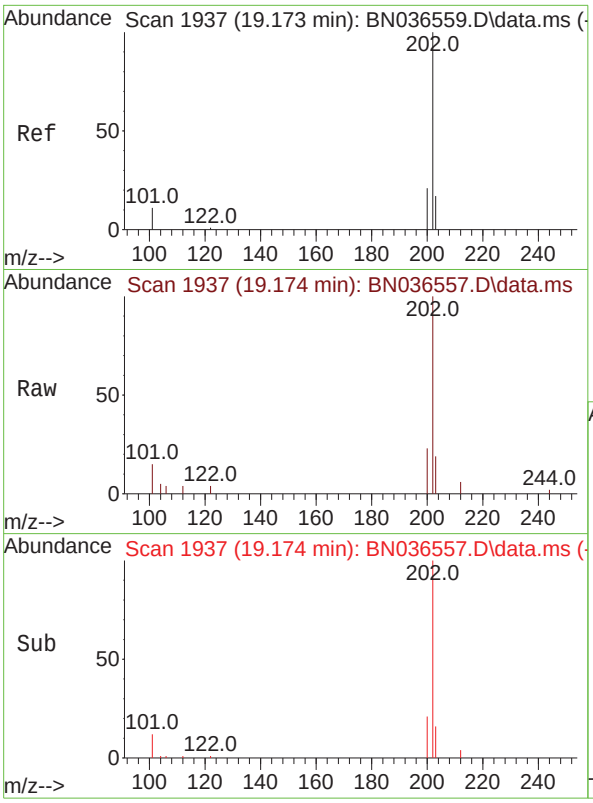



#27
Fluoranthene-d10
Concen: 0.101 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:212 Resp: 2144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.5 | 11.8 | 17.6 |
| 104 | 9.7 | 7.3 | 10.9 |

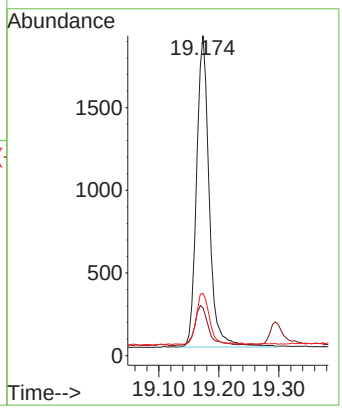





#28
Fluoranthene
Concen: 0.099 ng
RT: 19.174 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 277

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 14.0 | 9.4 | 14.0 |
| 203 | 17.0 | 13.5 | 20.3 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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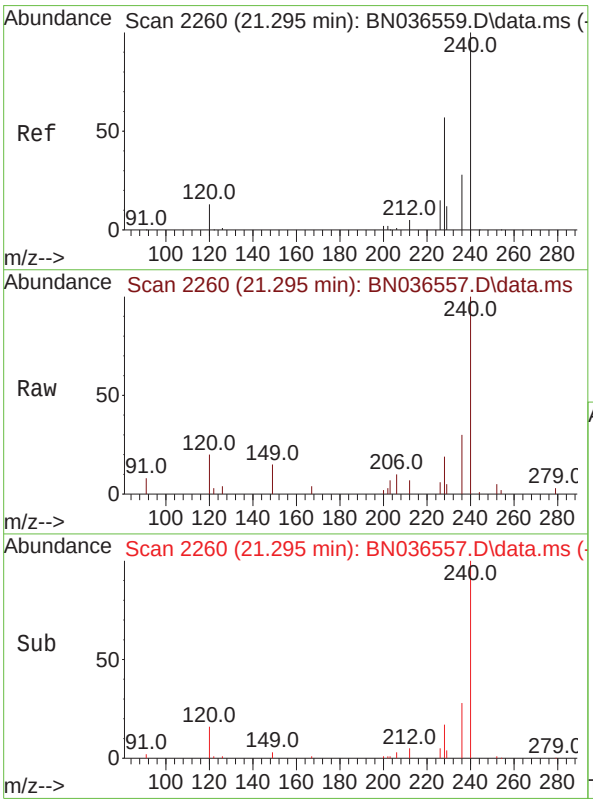
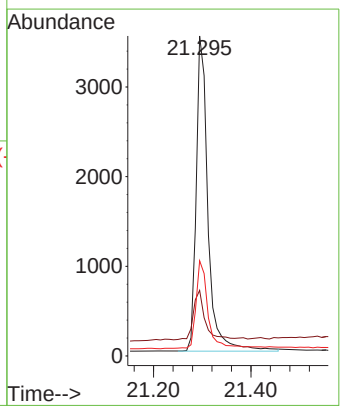
Supervised By :Jagrut Upadhyay 03/11/2025

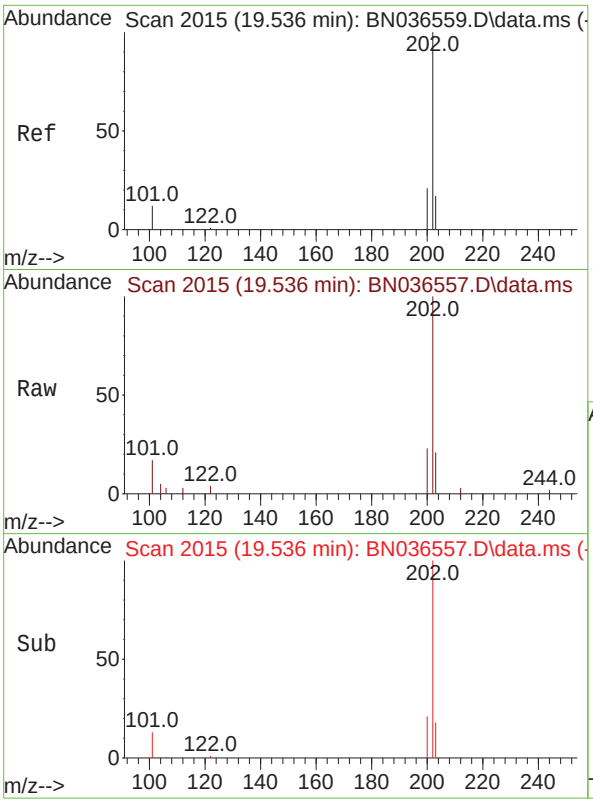



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:240 Resp: 5886

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

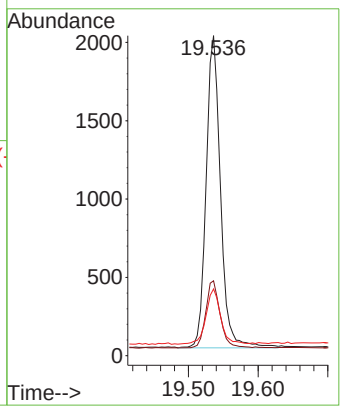





#30
Pyrene
Concen: 0.099 ng
RT: 19.536 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 286

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




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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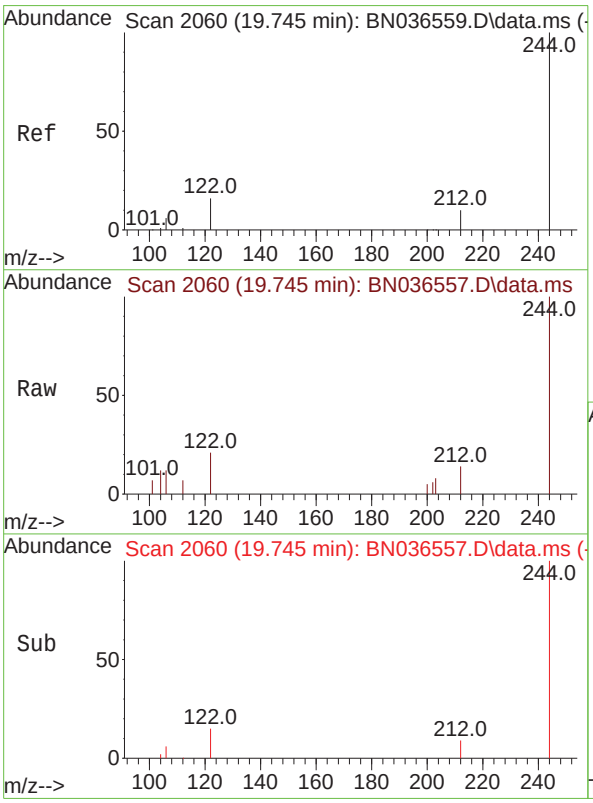
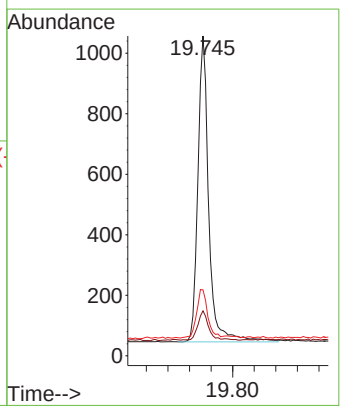
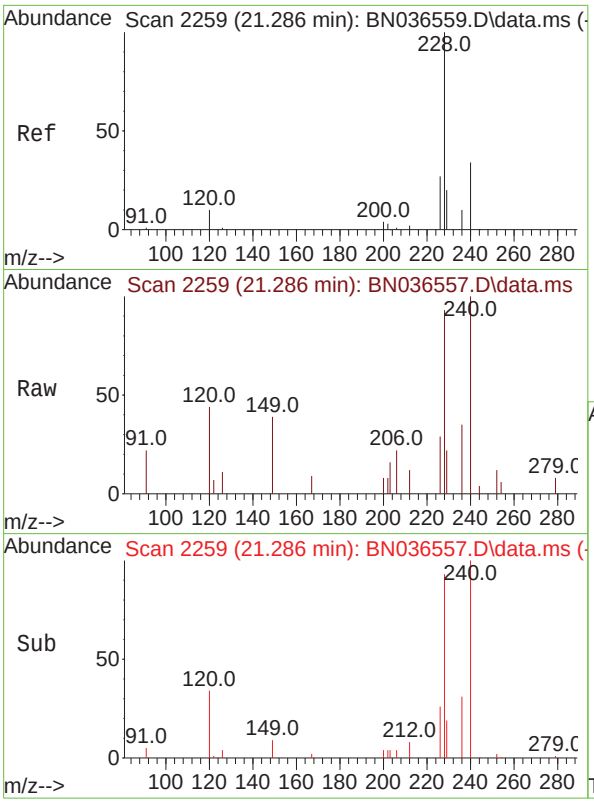



#31
Terphenyl-d14
Concen: 0.100 ng
RT: 19.745 min Scan# 2060
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:244 Resp: 1416

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






#32
Benzo(a)anthracene
Concen: 0.100 ng
RT: 21.286 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:228 Resp: 204

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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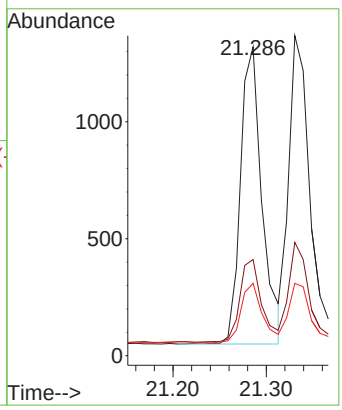
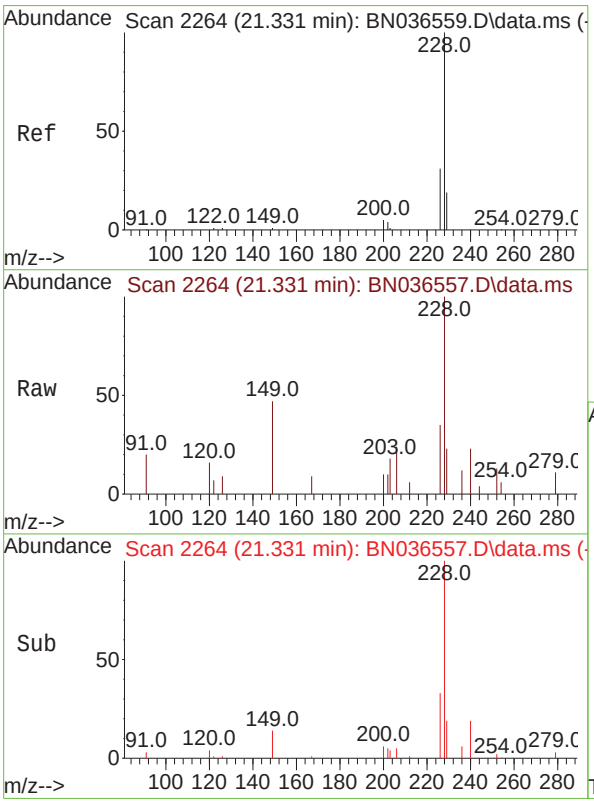
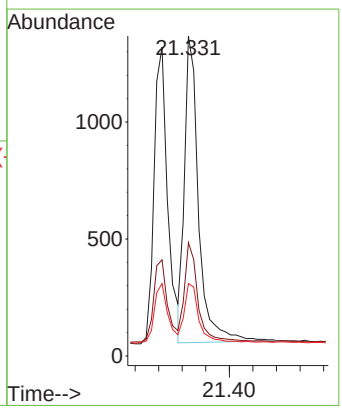


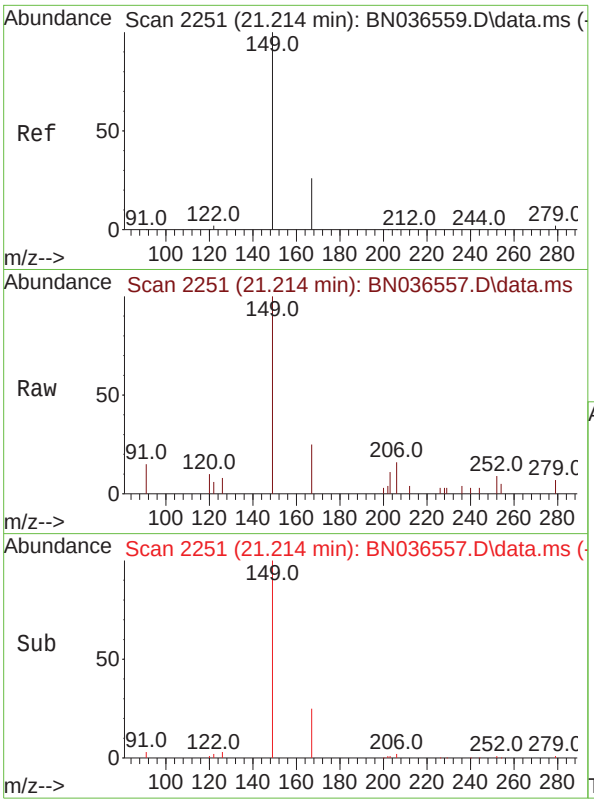




#33
Chrysene
Concen: 0.098 ng
RT: 21.331 min Scan# 2264
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:228 Resp: 2187

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






#34
Bis(2-ethylhexyl)phthalate
Concen: 0.121 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:149 Resp: 176

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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Reviewed By :Anahy Claudio 03/11/2025
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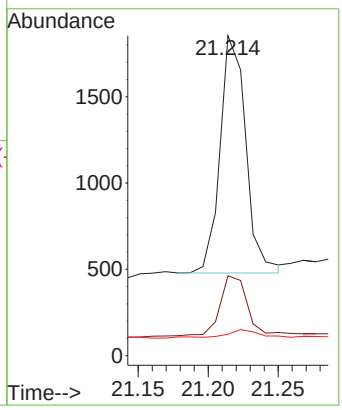
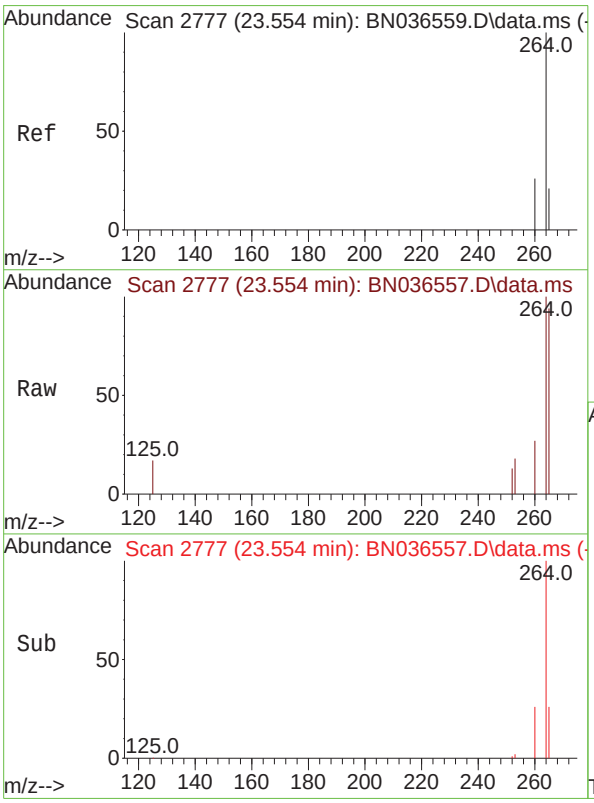
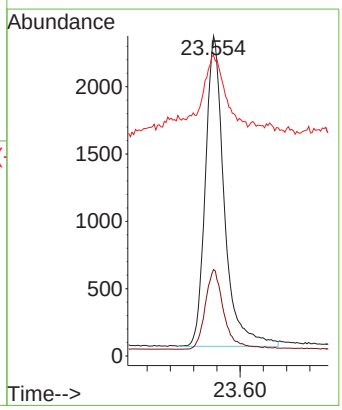


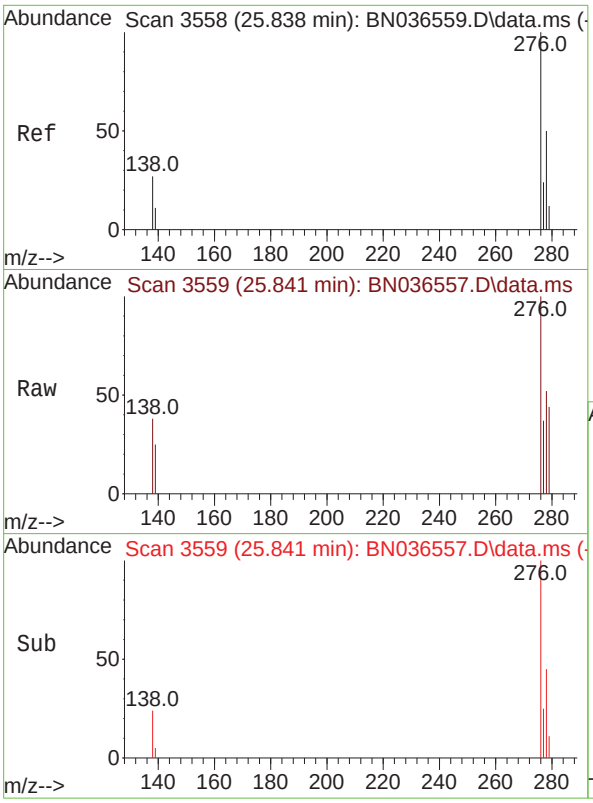




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2777
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:264 Resp: 5207

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

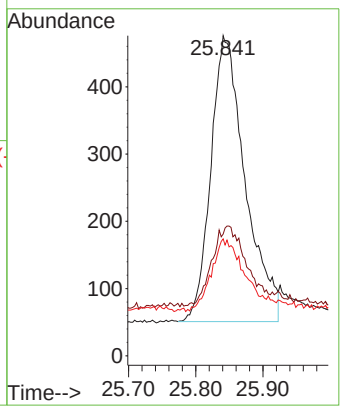





#36
Indeno(1,2,3-cd)pyrene
Concen: 0.080 ng
RT: 25.841 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:276 Resp: 151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.6 | 23.4 | 35.2 |
| 277 | 24.2 | 20.0 | 30.0 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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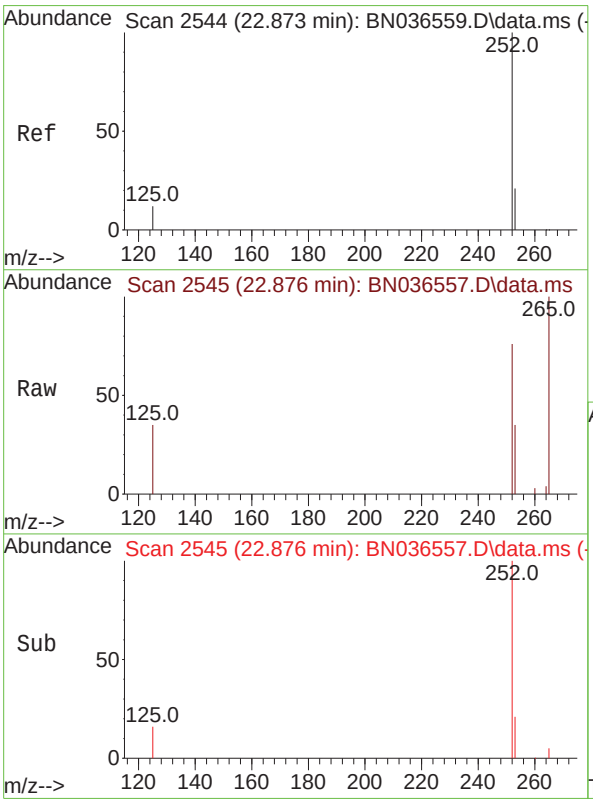
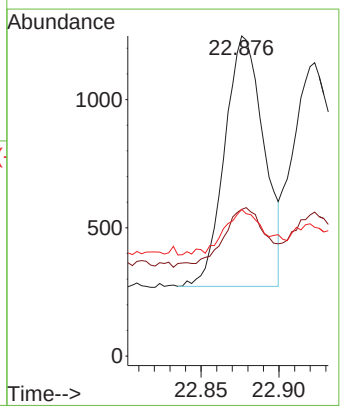
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

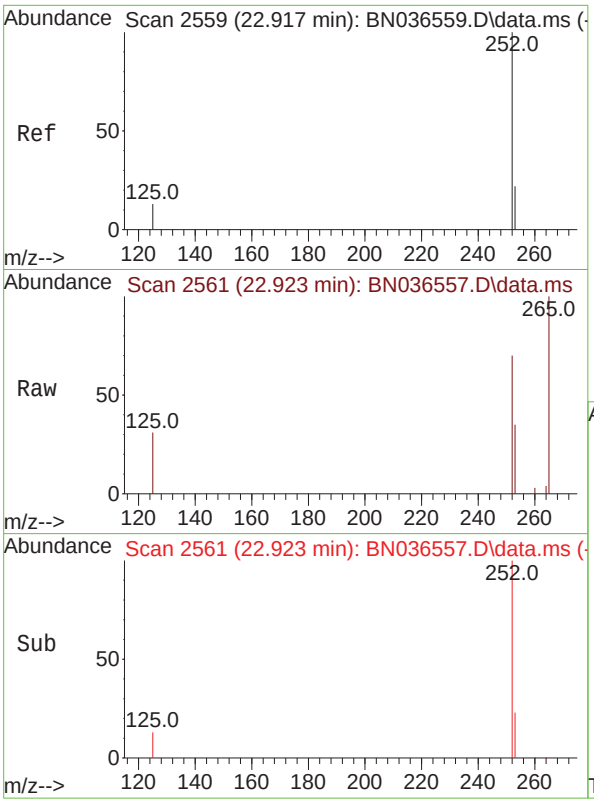



#37
Benzo(b)fluoranthene
Concen: 0.090 ng
RT: 22.876 min Scan# 2545
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 1707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 45.8 | 23.9 | 35.9# |
| 125 | 45.8 | 17.4 | 26.2# |






#38
Benzo(k)fluoranthene
Concen: 0.098 ng
RT: 22.923 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 195

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
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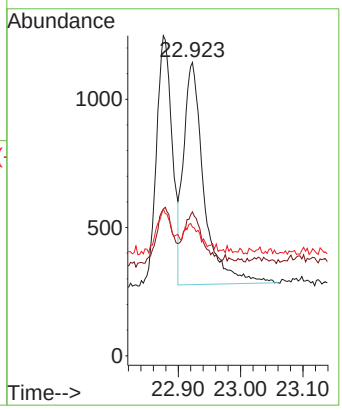
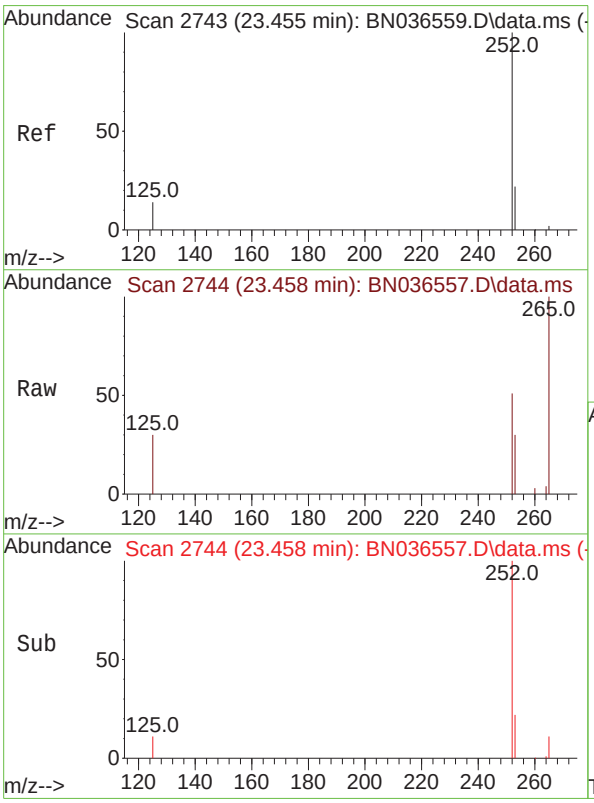
Supervised By :Jagrut Upadhyay 03/11/2025

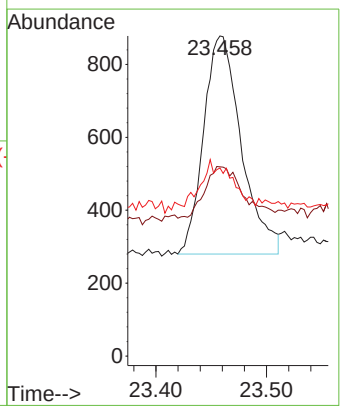


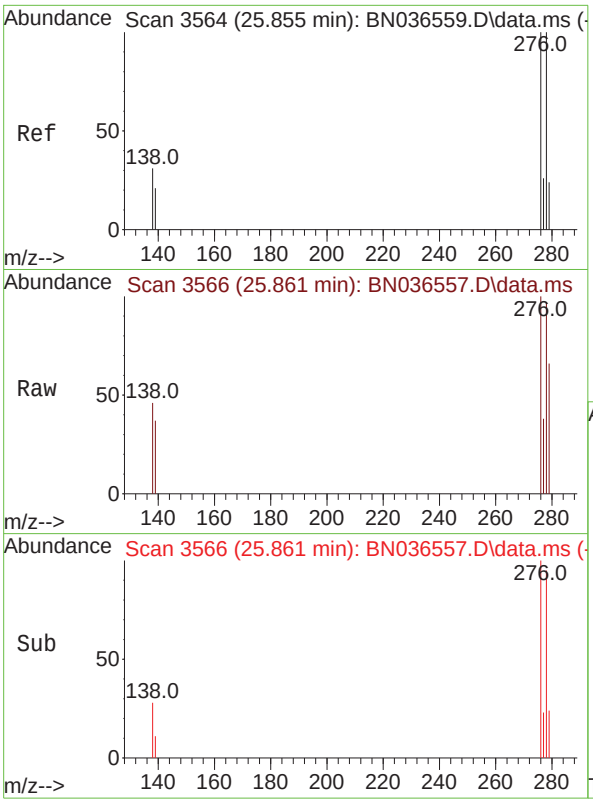




#39
Benzo(a)pyrene
Concen: 0.089 ng
RT: 23.458 min Scan# 2744
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 1419

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

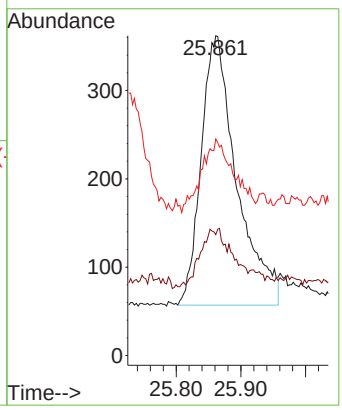





#40
Dibenzo(a,h)anthracene
Concen: 0.079 ng
RT: 25.861 min Scan# 3
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:278 Resp: 116

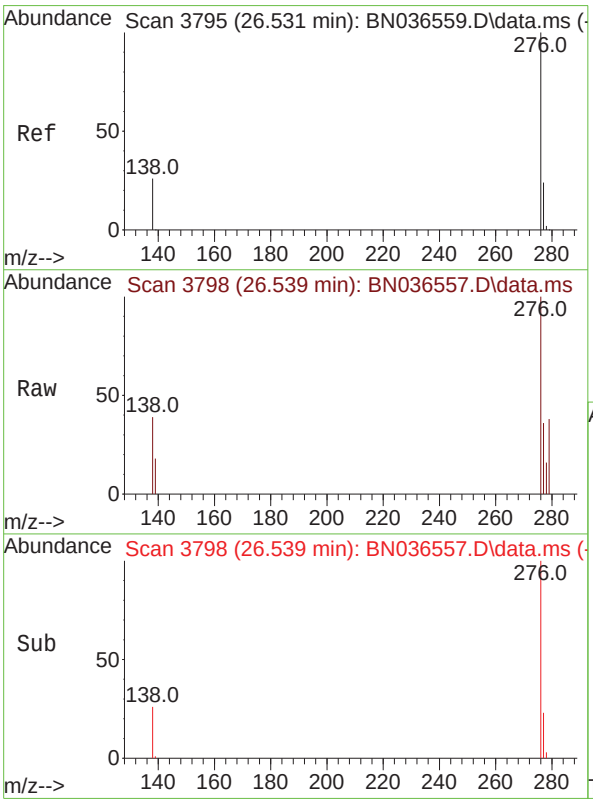
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 37.8 | 20.8 | 31.2# |
| 279 | 67.7 | 28.8 | 43.2# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

**Manual Integrations**
**APPROVED**

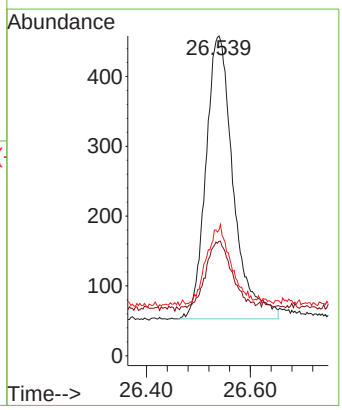
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025




#41
Benzo(g,h,i)perylene
Concen: 0.089 ng
RT: 26.539 min Scan# 3798
Delta R.T. 0.009 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:276 Resp: 1482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 35.8 | 22.2 | 33.4# |
| 138 | 39.3 | 24.1 | 36.1# |



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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

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

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

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

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

ICAL Form

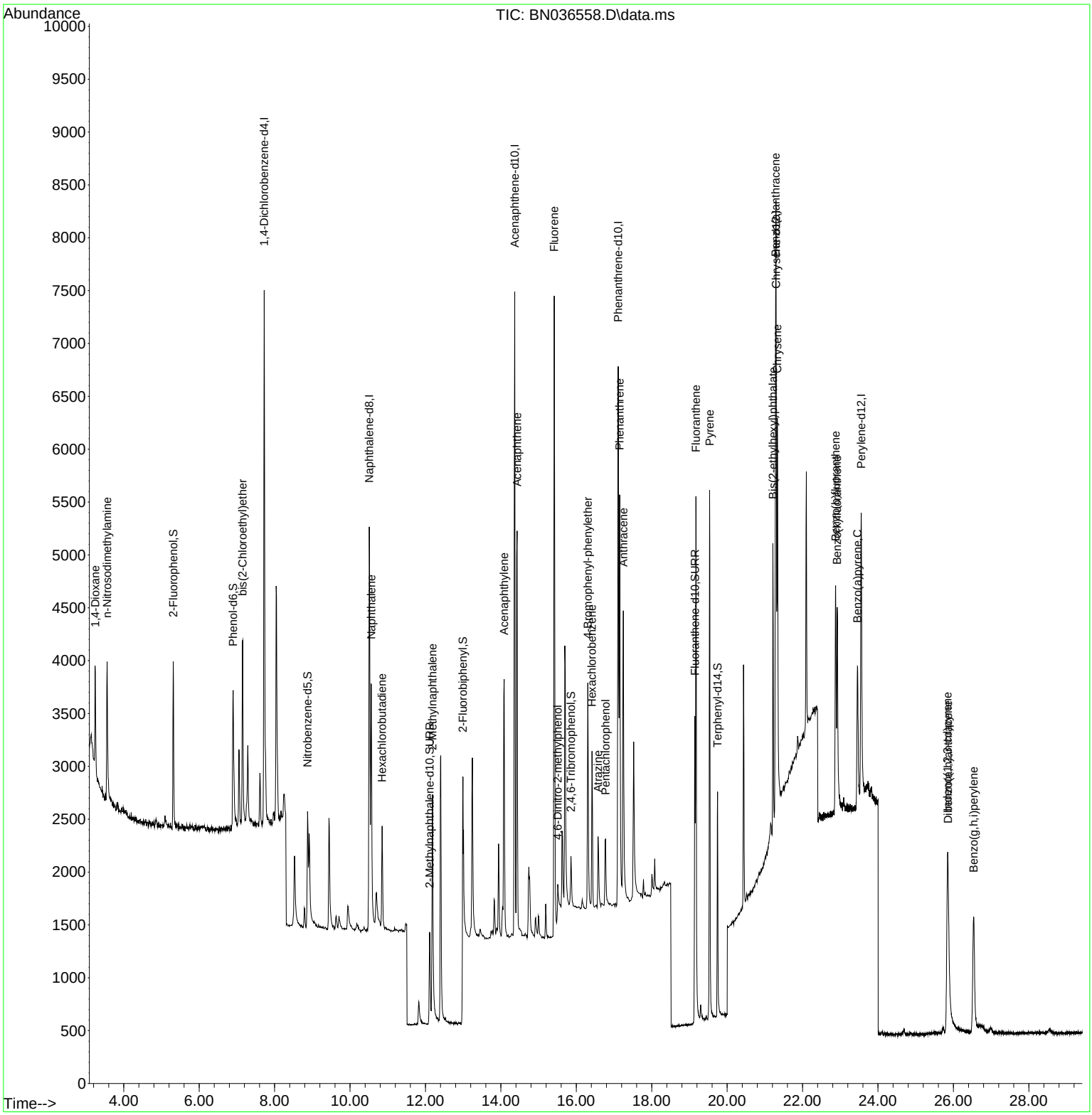
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036558.D
Acq On : 10 Mar 2025 12:18
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

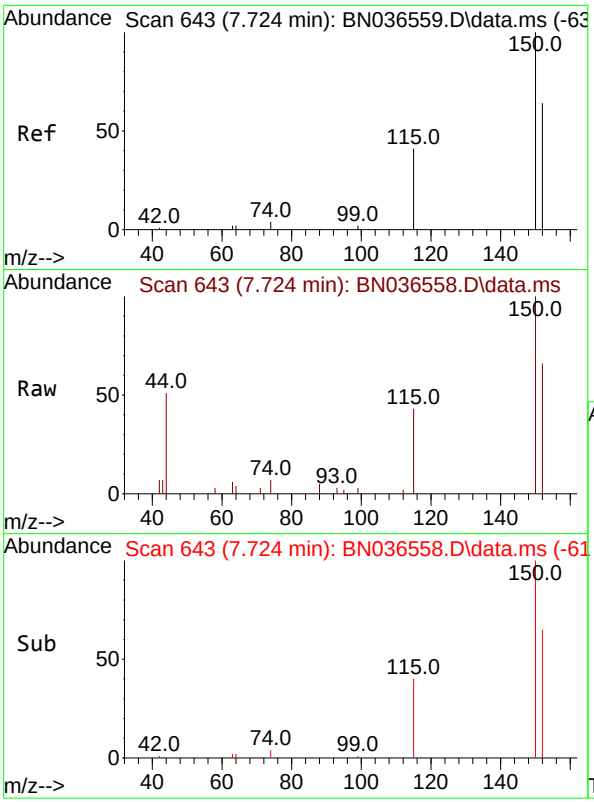
Quant Time: Mar 10 16:00:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations APPROVED**

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

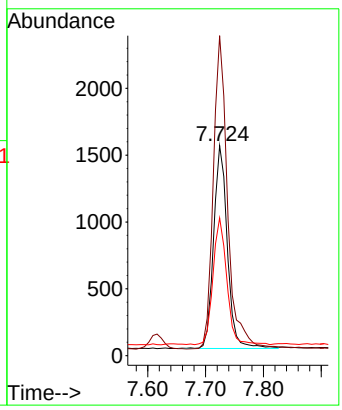





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 250

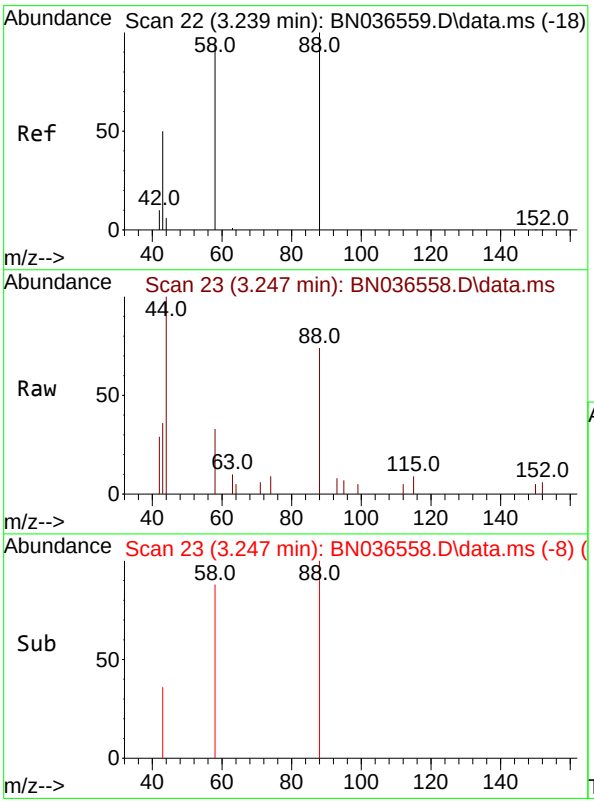
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.3 | 123.7 | 185.5 |
| 115 | 65.5 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

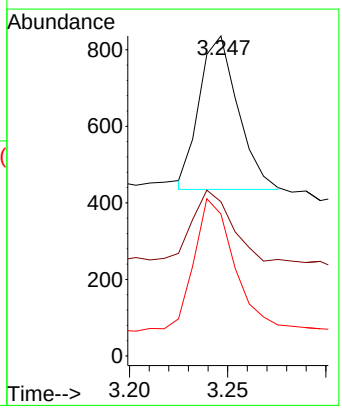
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

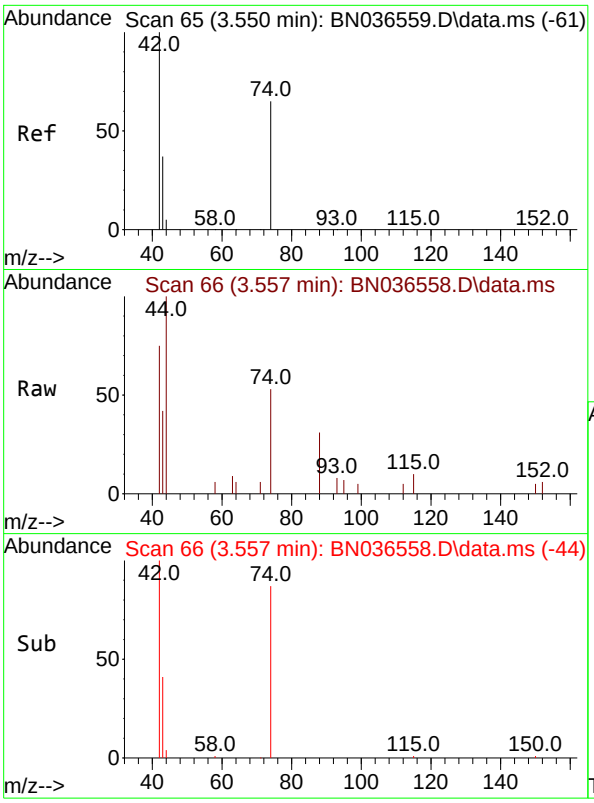



#2
1,4-Dioxane
Concen: 0.198 ng m
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 88 Resp: 550

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 56.5 | 37.8 | 56.8 |
| 58 | 93.8 | 67.4 | 101.2 |

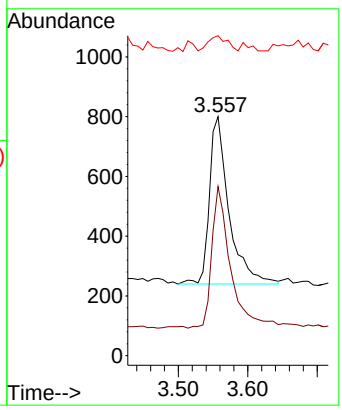





#3
n-Nitrosodimethylamine
Concen: 0.195 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 42 Resp: 109

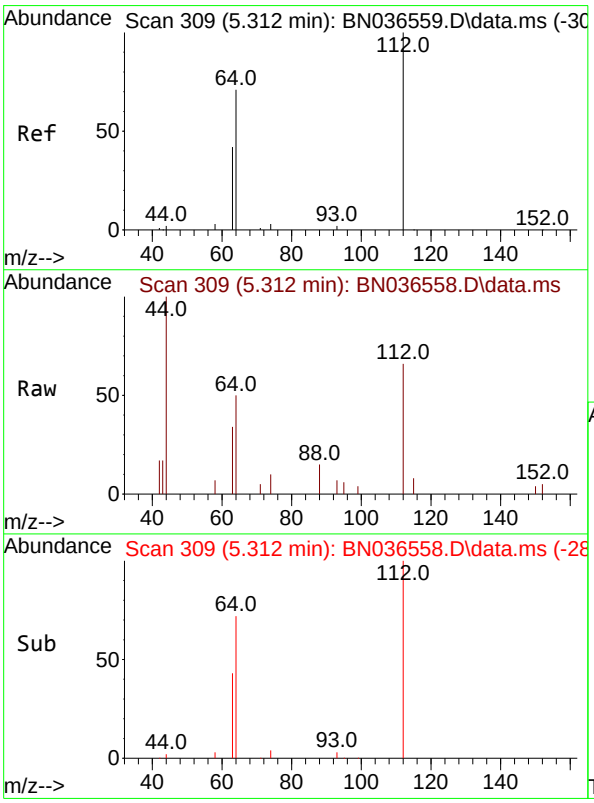
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 83.2 | 60.6 | 90.8 |
| 44 | 8.5 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations APPROVED**

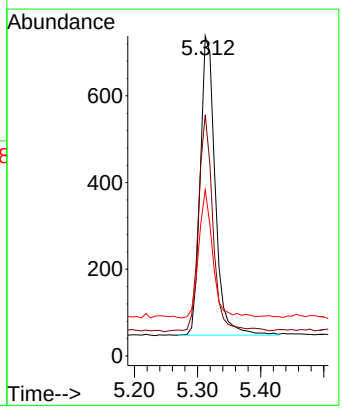
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

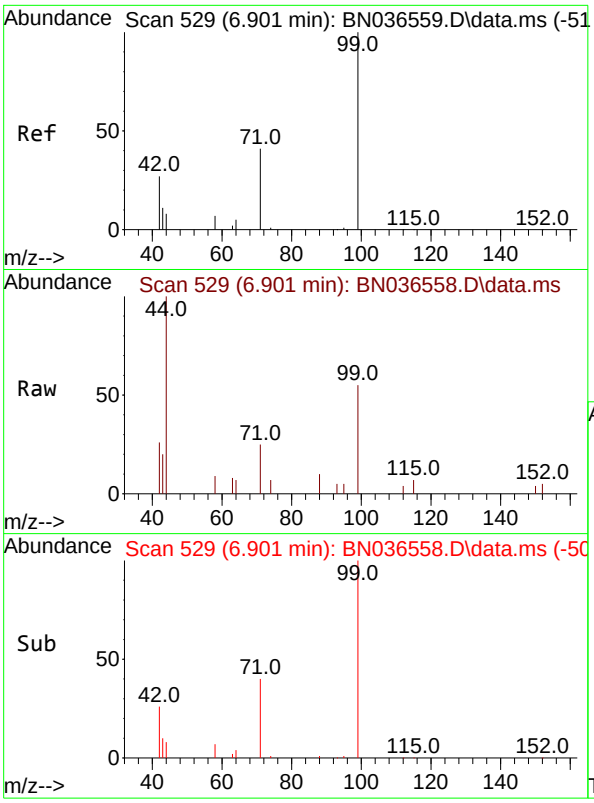



#4
2-Fluorophenol
Concen: 0.195 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:112 Resp: 1137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 70.6 | 53.1 | 79.7 |
| 63 | 40.3 | 31.8 | 47.8 |

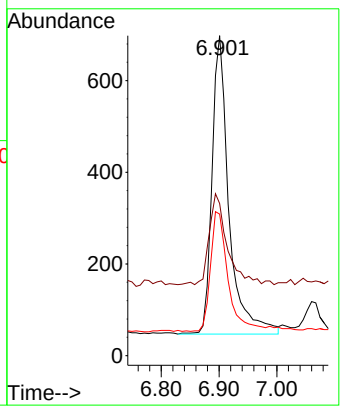





#5
Phenol-d6
Concen: 0.184 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 99 Resp: 132

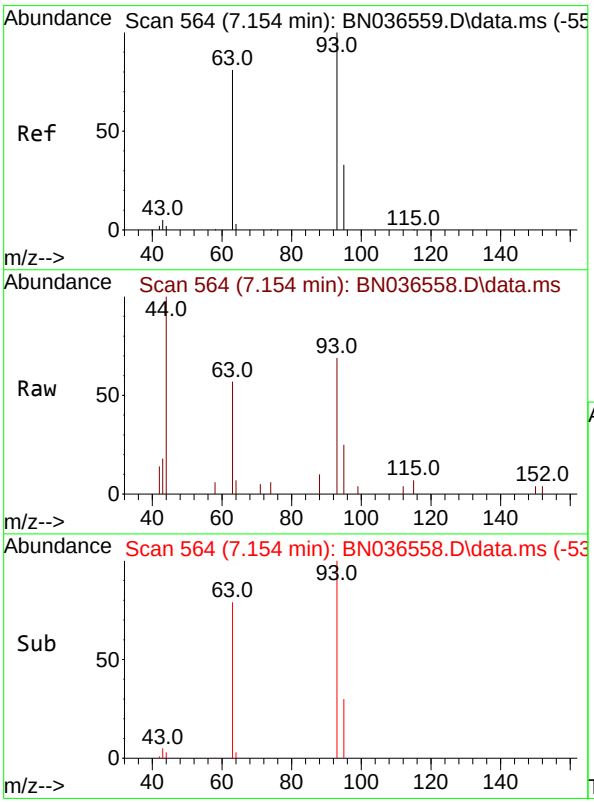
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 32.7 | 26.5 | 39.7 |
| 71 | 41.3 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

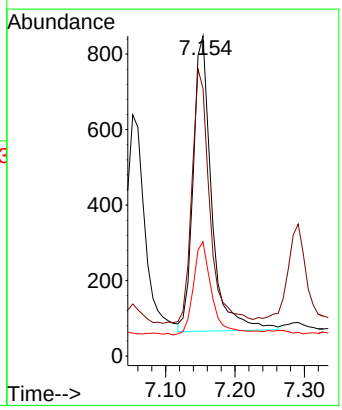
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

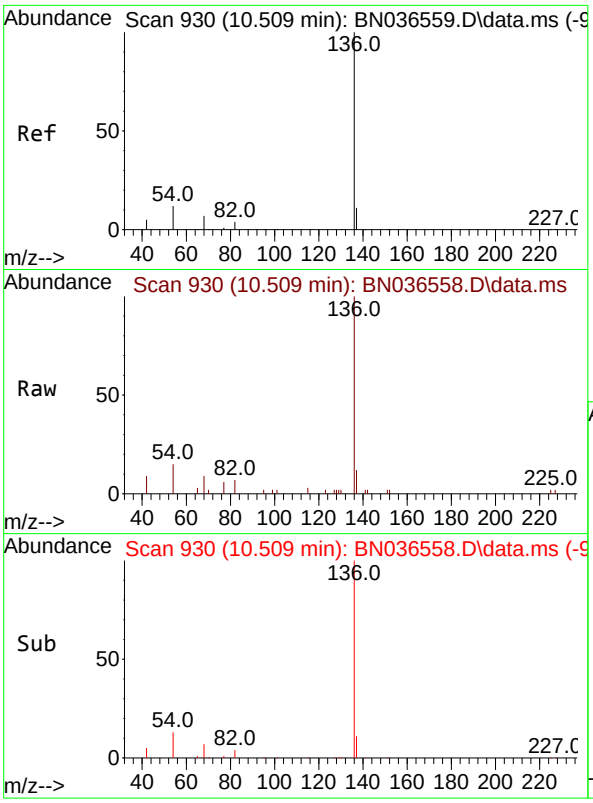



#6
bis(2-Chloroethyl)ether
Concen: 0.193 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 93 Resp: 1440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 82.9 | 67.7 | 101.5 |
| 95 | 31.9 | 25.6 | 38.4 |

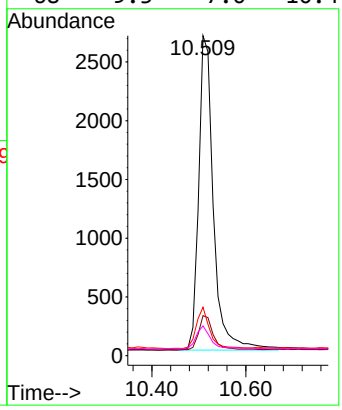





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:136 Resp: 584

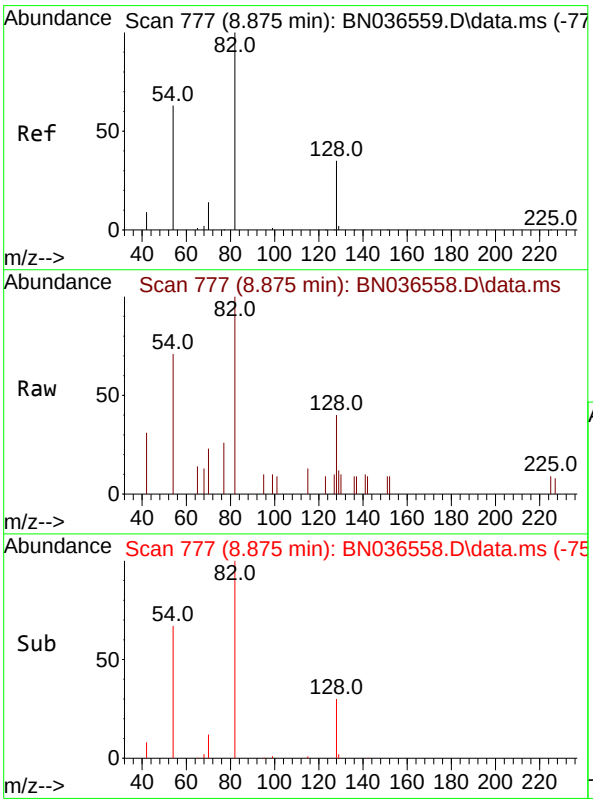
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.5 | 10.3 | 15.5 |
| 54 | 15.1 | 11.5 | 17.3 |
| 68 | 9.3 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

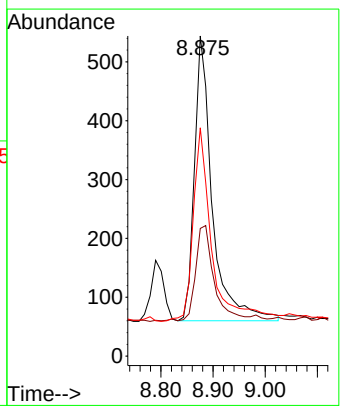
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

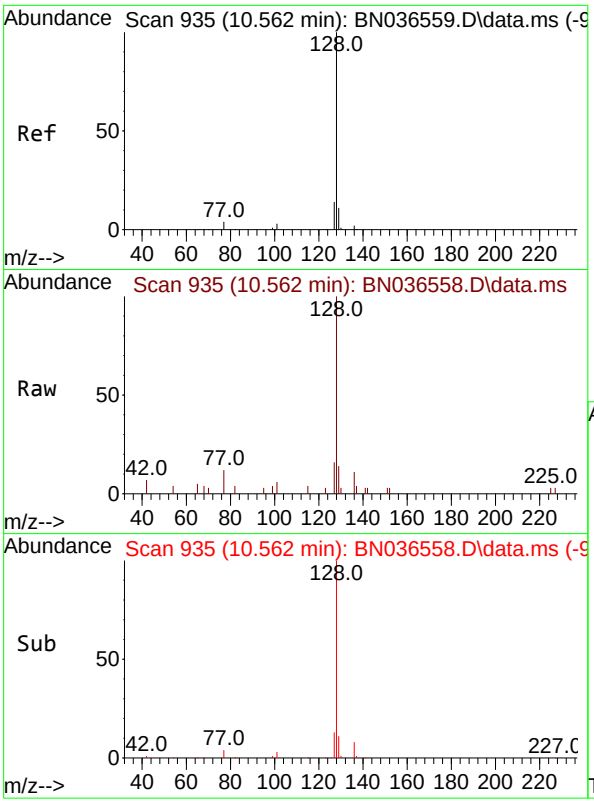



#8
Nitrobenzene-d5
Concen: 0.182 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 82 Resp: 1156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 39.9 | 30.6 | 45.8 |
| 54 | 71.3 | 52.2 | 78.4 |

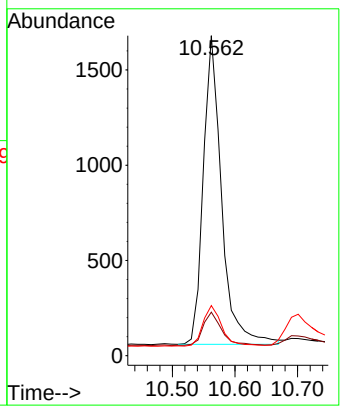





#9
Naphthalene
Concen: 0.191 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:128 Resp: 328

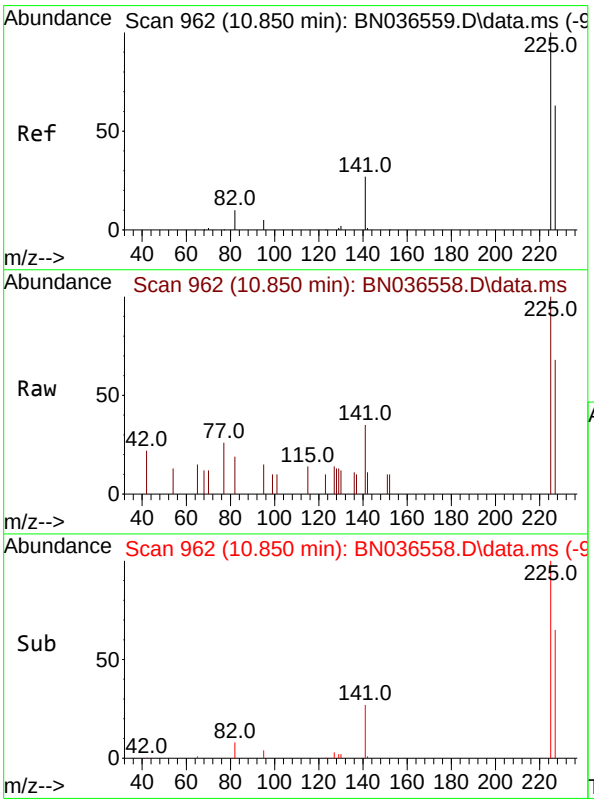
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 13.6 | 9.8 | 14.6 |
| 127 | 15.7 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

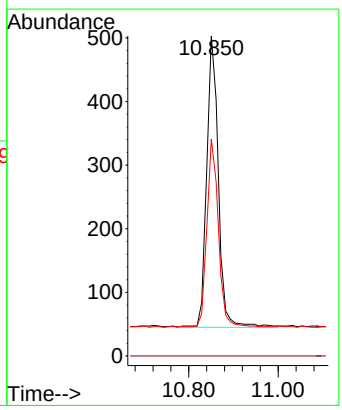
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

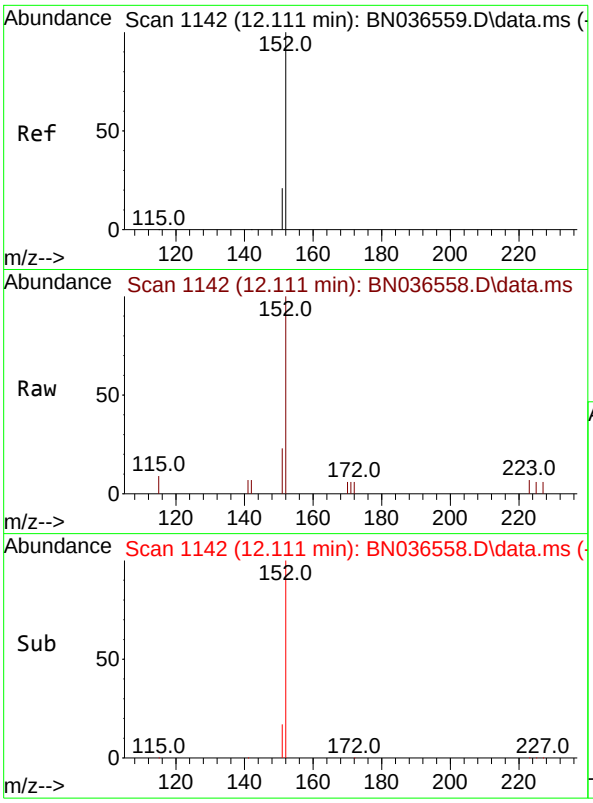



#10
Hexachlorobutadiene
Concen: 0.205 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:225 Resp: 828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 62.6 | 51.8 | 77.8 |

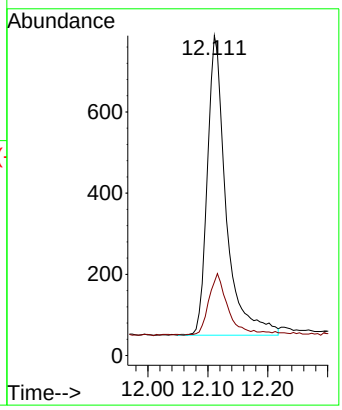





#11
2-Methylnaphthalene-d10
Concen: 0.184 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.0 | 17.0 | 25.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

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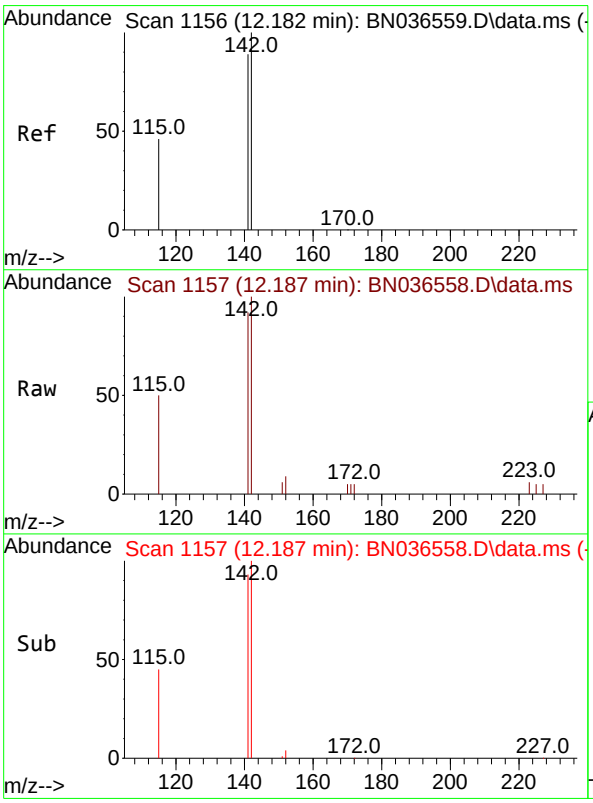
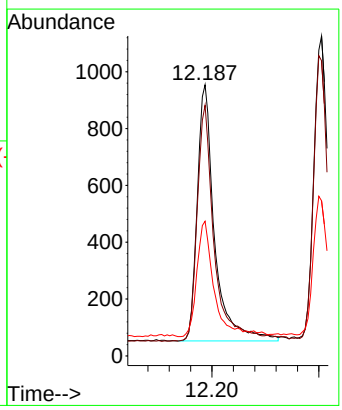
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

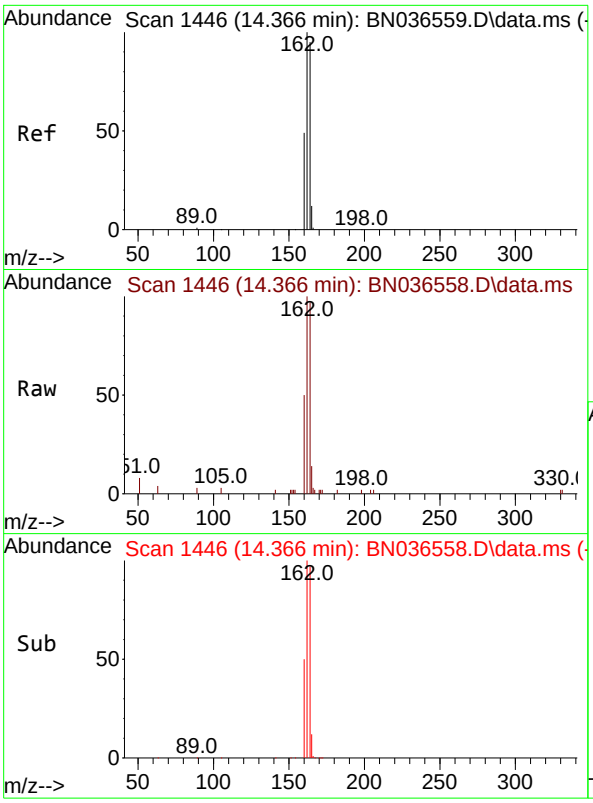



#12
2-Methylnaphthalene
Concen: 0.186 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:142 Resp: 2034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 92.5 | 71.7 | 107.5 |
| 115 | 49.7 | 38.3 | 57.5 |






#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

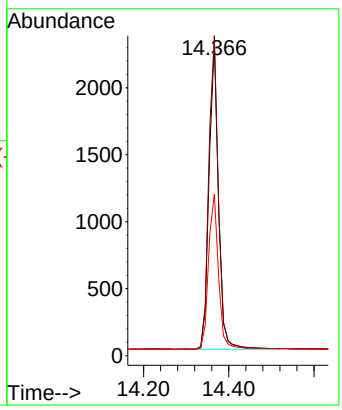
Tgt Ion:164 Resp: 351

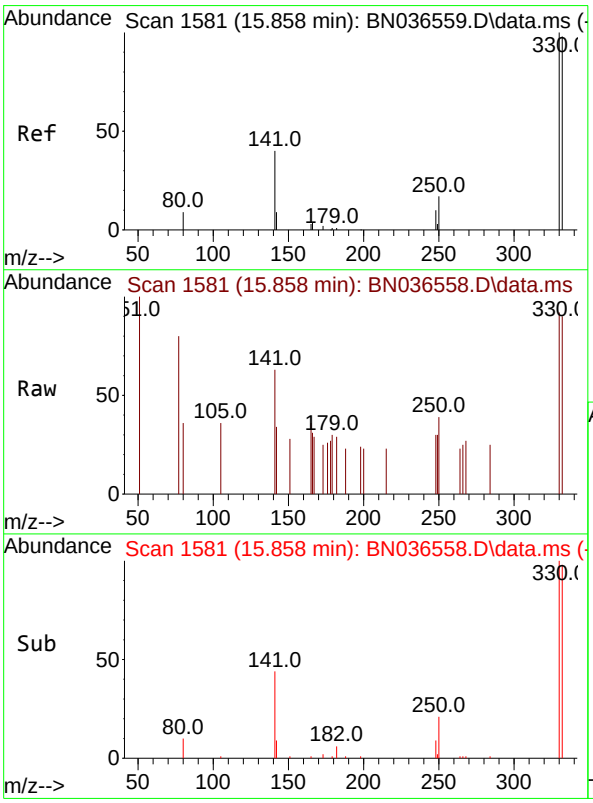
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 102.6 | 84.2 | 126.2 |
| 160 | 51.8 | 42.2 | 63.2 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations APPROVED**

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

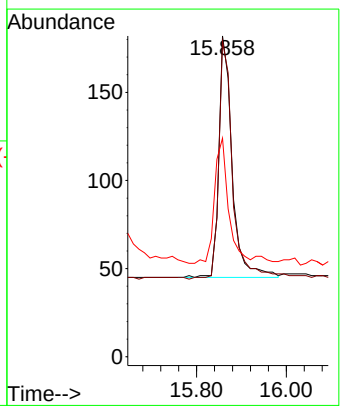


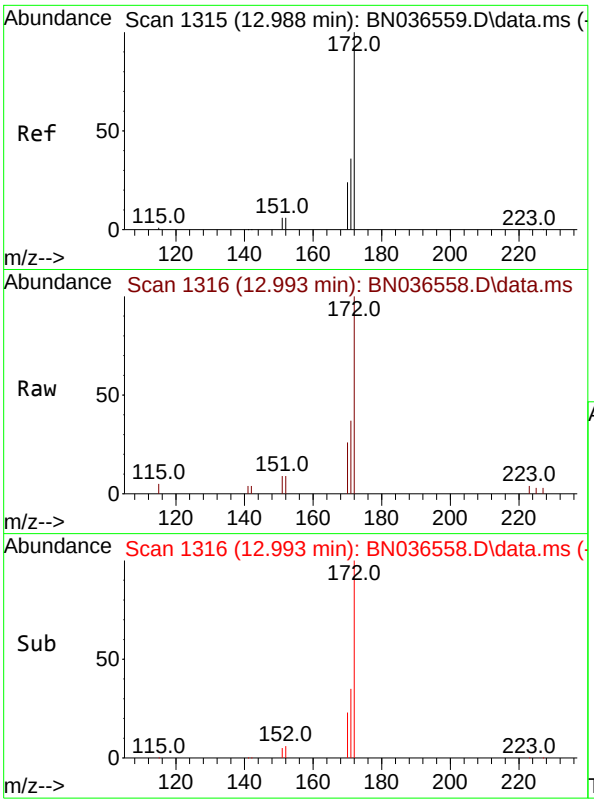




#14
2,4,6-Tribromophenol
Concen: 0.177 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:330 Resp: 282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 103.5 | 75.2 | 112.8 |
| 141 | 53.9 | 43.4 | 65.2 |

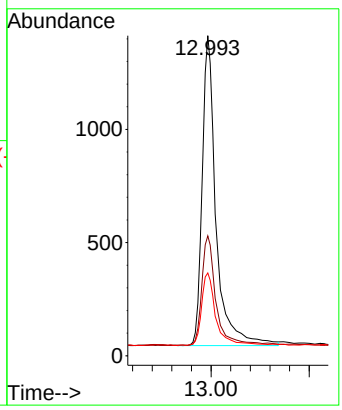





#15
2-Fluorobiphenyl
Concen: 0.170 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:172 Resp: 348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.5 | 29.5 | 44.3 |
| 170 | 25.9 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
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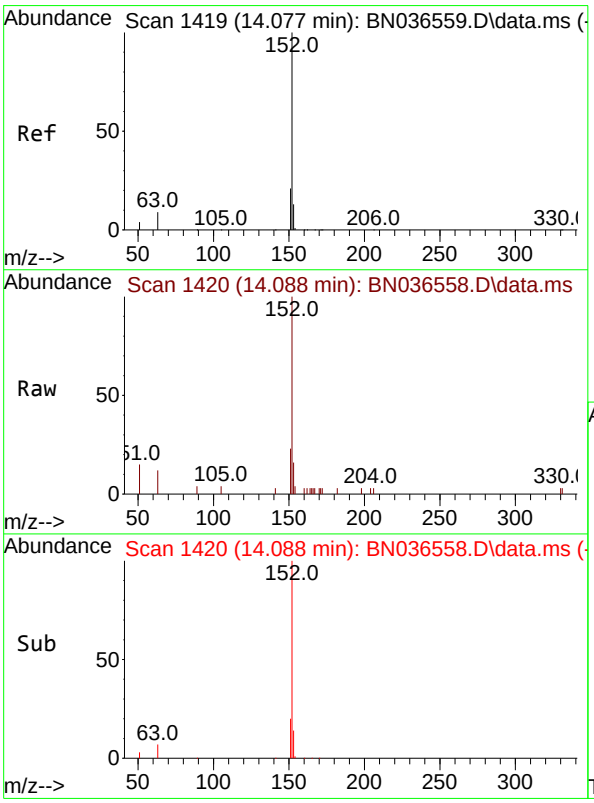
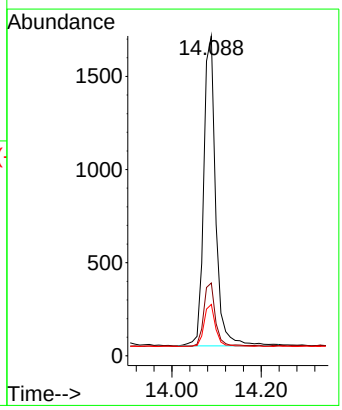
Supervised By :Jagrut Upadhyay 03/11/2025

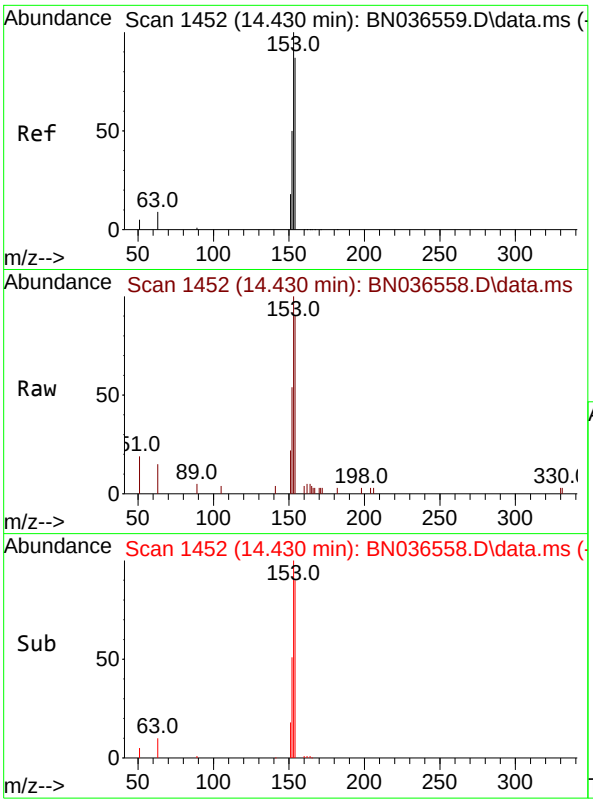



#16
Acenaphthylene
Concen: 0.186 ng
RT: 14.088 min Scan# 1420
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 3087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.4 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |

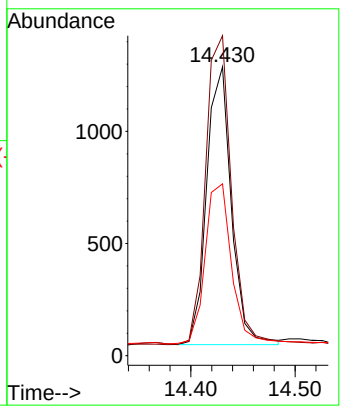





#17
Acenaphthene
Concen: 0.188 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:154 Resp: 203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.8 | 94.1 | 141.1 |
| 152 | 63.1 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

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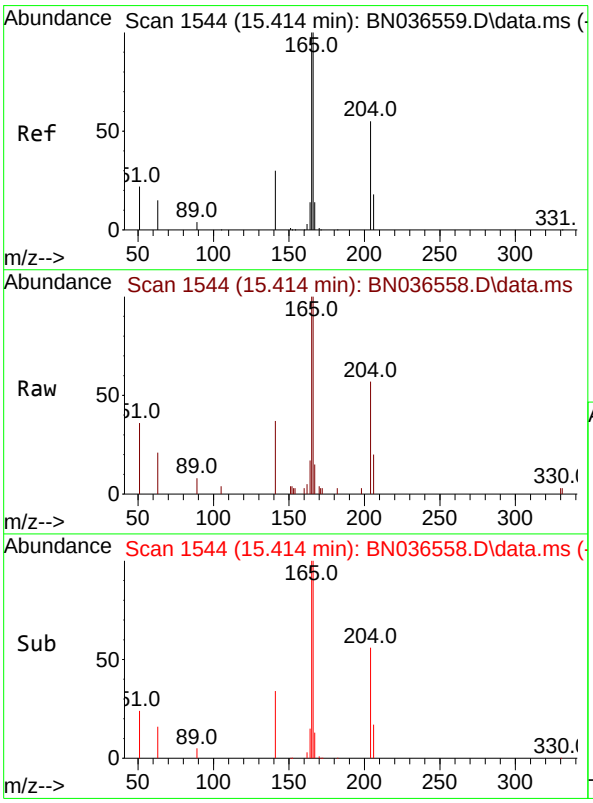
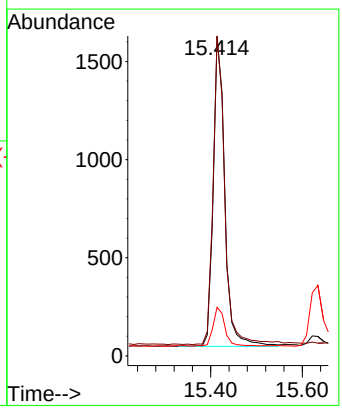
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

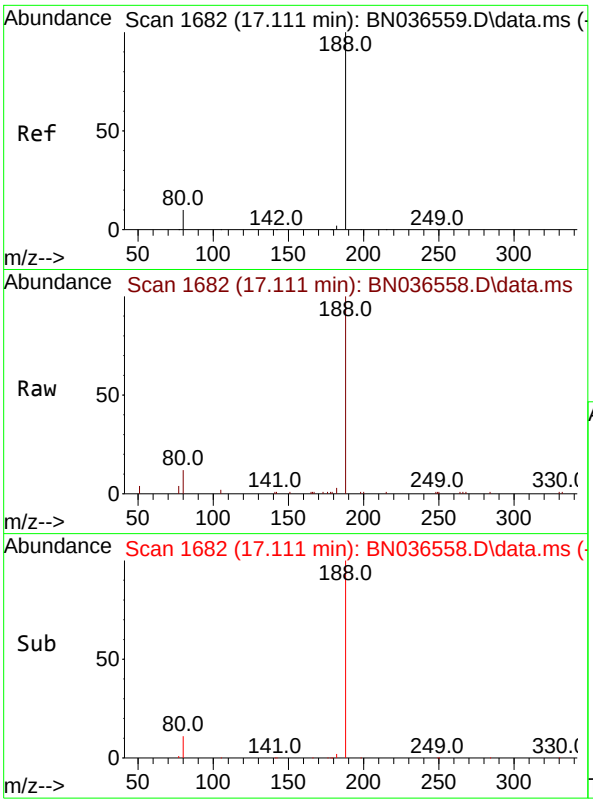



#18
Fluorene
Concen: 0.191 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:166 Resp: 2813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 101.1 | 79.8 | 119.8 |
| 167 | 12.6 | 10.6 | 15.8 |

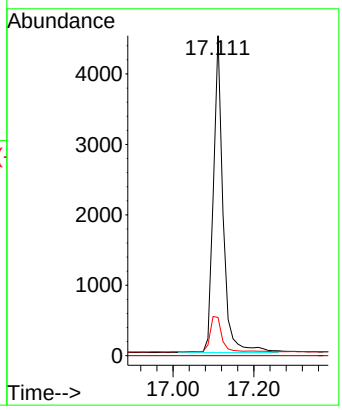





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:188 Resp: 750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.9 | 8.8 | 13.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/11/2025
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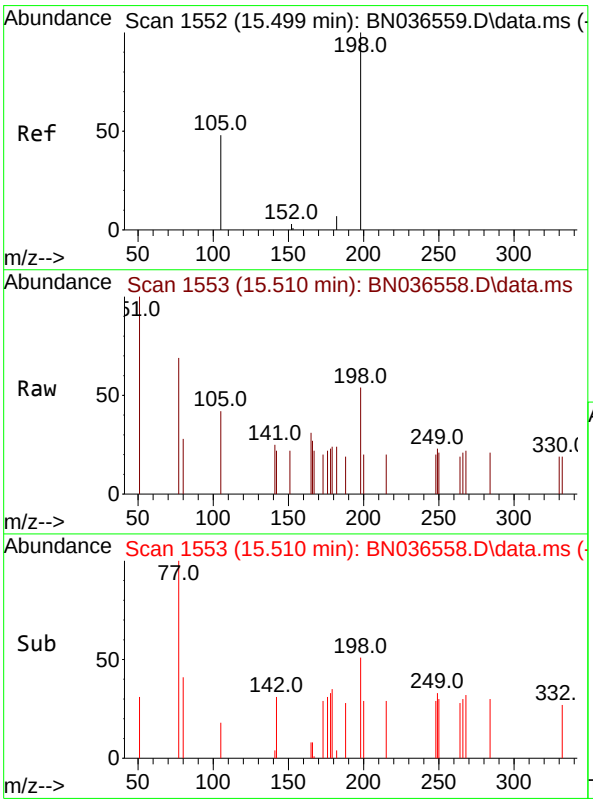
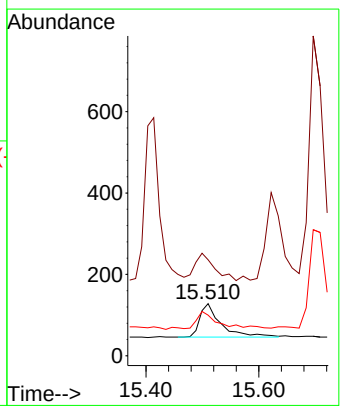
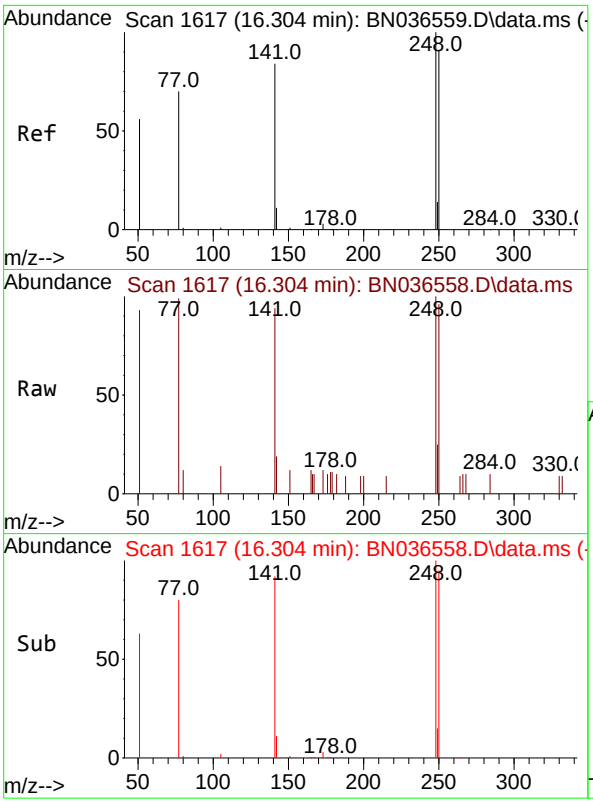



#20
4,6-Dinitro-2-methylphenol
Concen: 0.258 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:198 Resp: 214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 184.4 | 107.9 | 161.9# |
| 105 | 78.1 | 56.2 | 84.2 |






#21
4-Bromophenyl-phenylether
Concen: 0.181 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:248 Resp: 85

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 95.9 | 73.0 | 109.6 |
| 141 | 93.7 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
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Reviewed By :Anahy Claudio 03/11/2025
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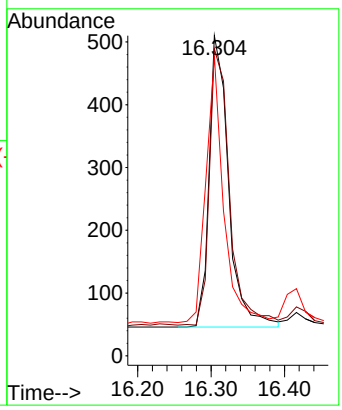
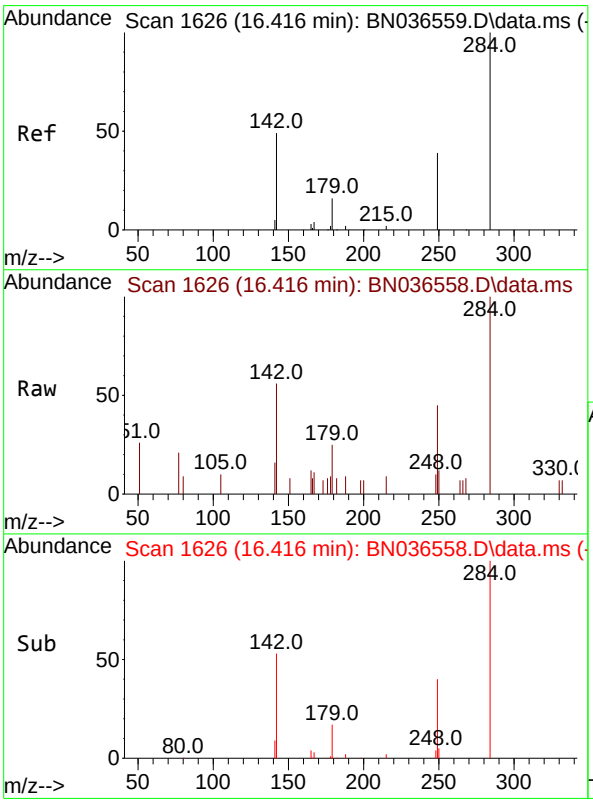
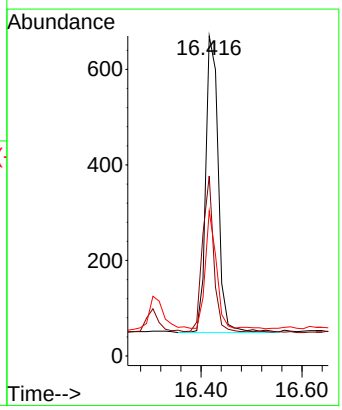


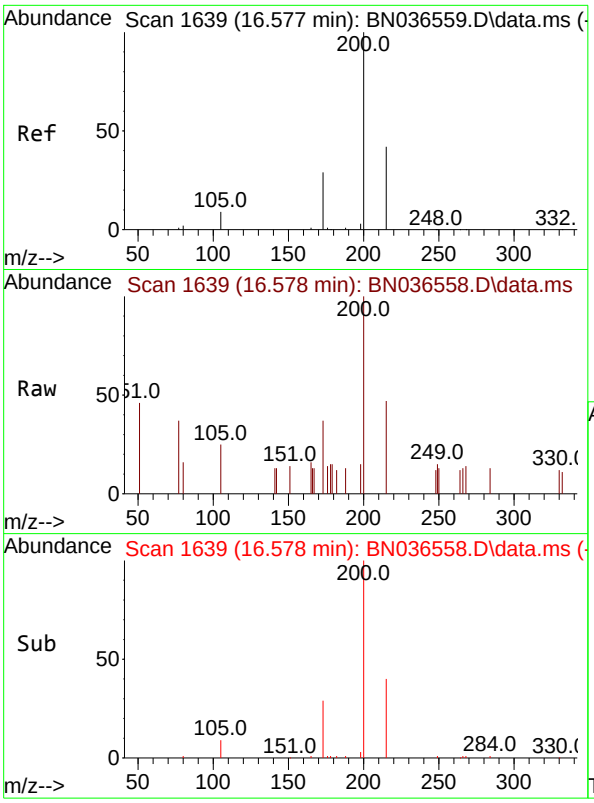




#22
Hexachlorobenzene
Concen: 0.190 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:284 Resp: 1079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 47.0 | 37.0 | 55.4 |
| 249 | 34.8 | 28.1 | 42.1 |

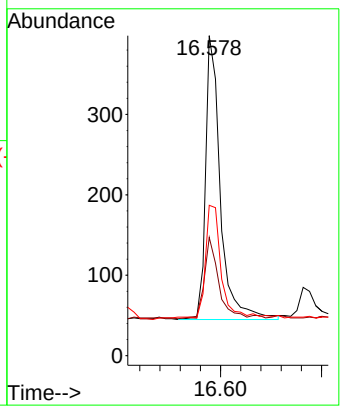





#23
Atrazine
Concen: 0.190 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:200 Resp: 71(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.9 | 27.3 | 40.9 |
| 215 | 47.0 | 36.8 | 55.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
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Reviewed By :Anahy Claudio 03/11/2025
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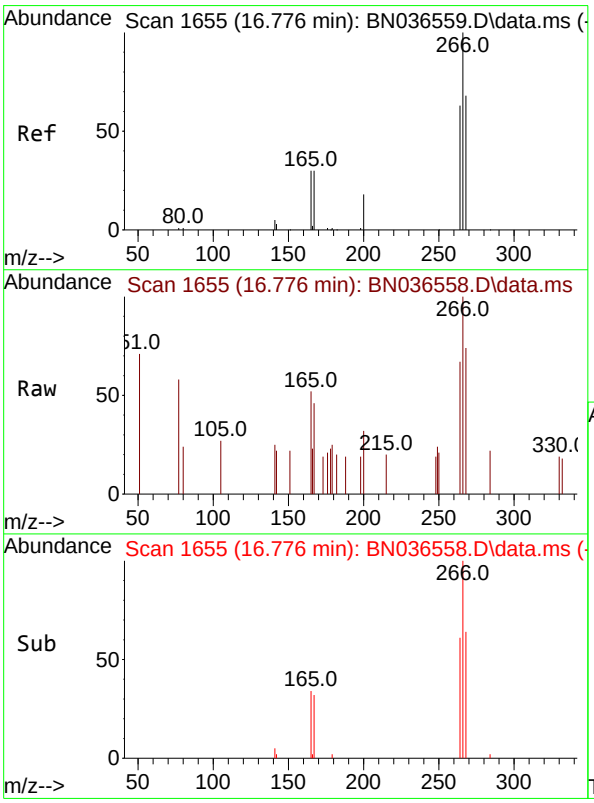
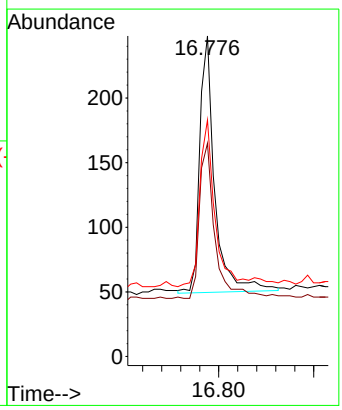
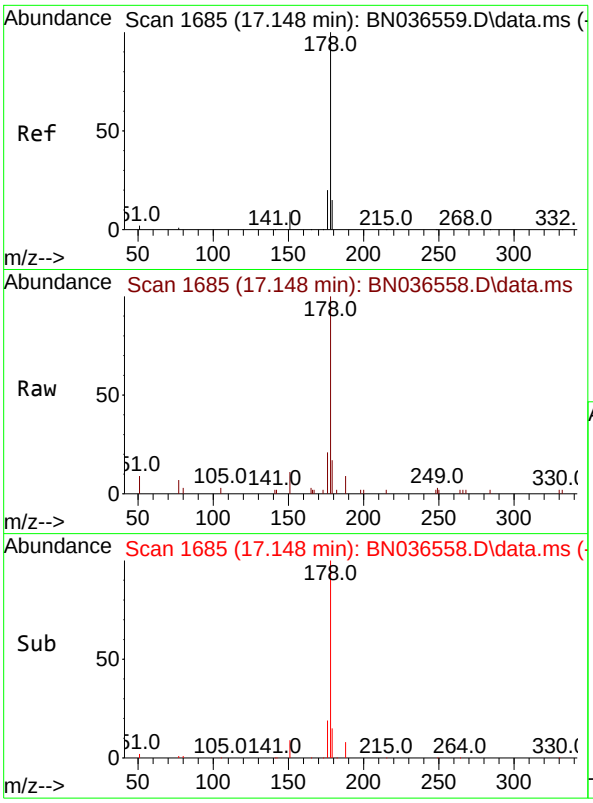



#24
Pentachlorophenol
Concen: 0.168 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:266 Resp: 435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.4 | 49.6 | 74.4 |
| 268 | 65.7 | 50.9 | 76.3 |

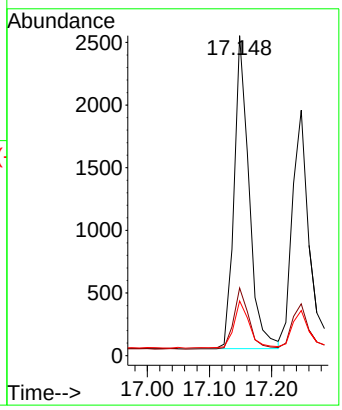





#25
Phenanthrene
Concen: 0.185 ng
RT: 17.148 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:178 Resp: 417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 20.0 | 15.9 | 23.9 |
| 179 | 15.5 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/11/2025
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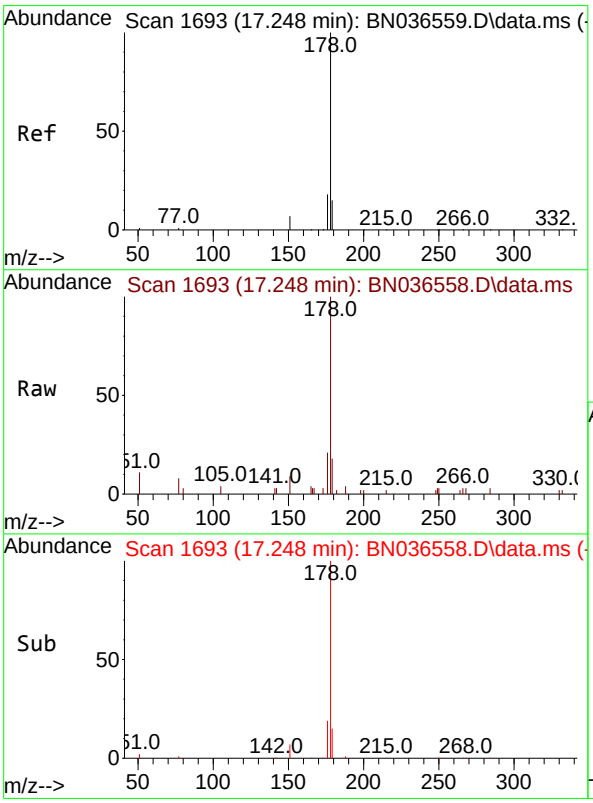
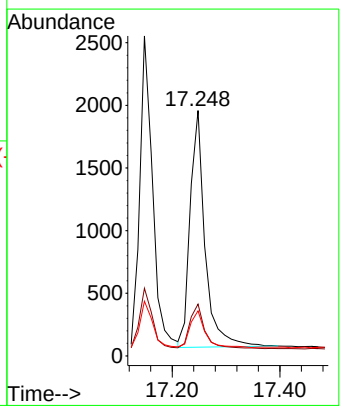
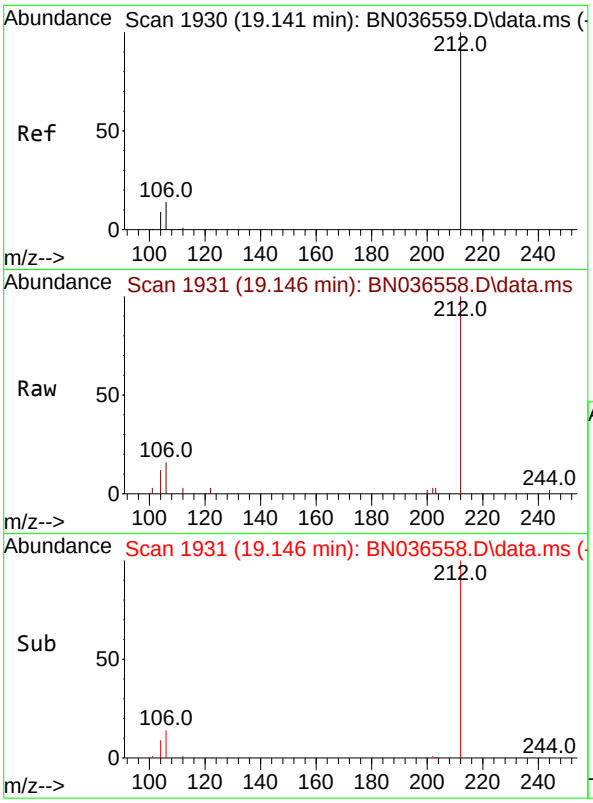



#26
Anthracene
Concen: 0.179 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:178 Resp: 3645

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.1 | 15.4 | 23.2 |
| 179 | 15.1 | 12.6 | 18.8 |

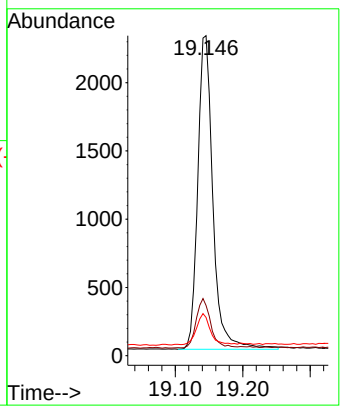





#27
Fluoranthene-d10
Concen: 0.186 ng
RT: 19.146 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:212 Resp: 358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.0 | 11.8 | 17.6 |
| 104 | 9.3 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
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Reviewed By :Anahy Claudio 03/11/2025
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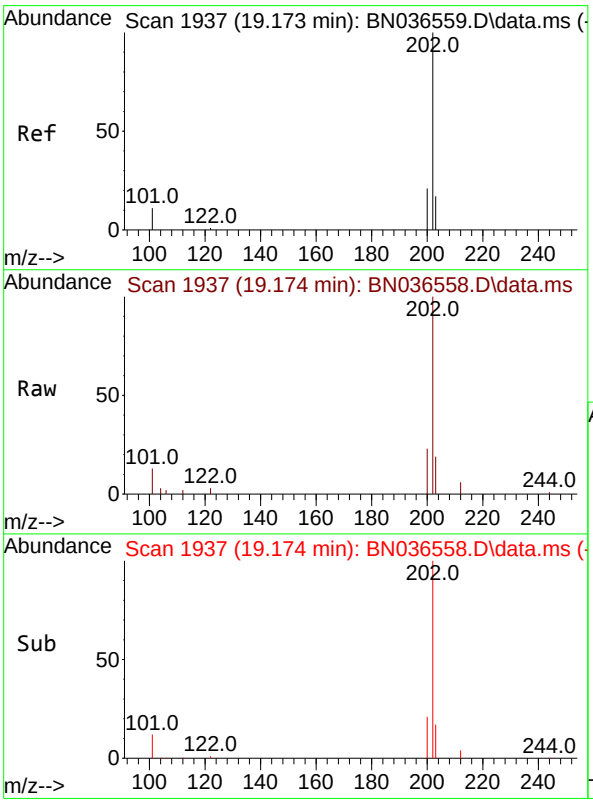
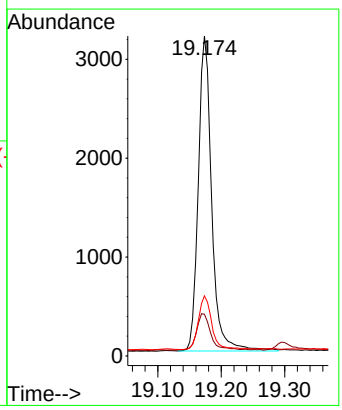
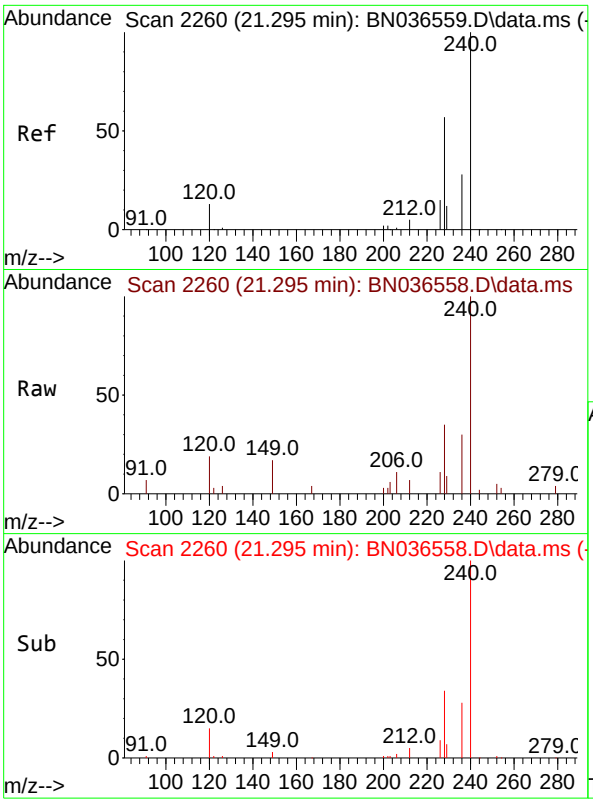



#28
Fluoranthene
Concen: 0.184 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4666

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.1 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |

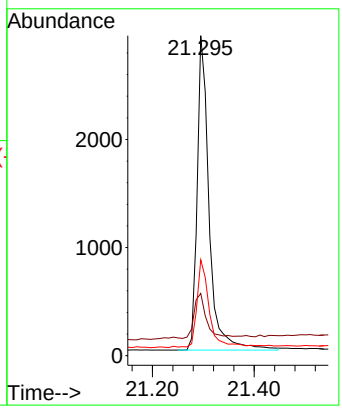





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:240 Resp: 473

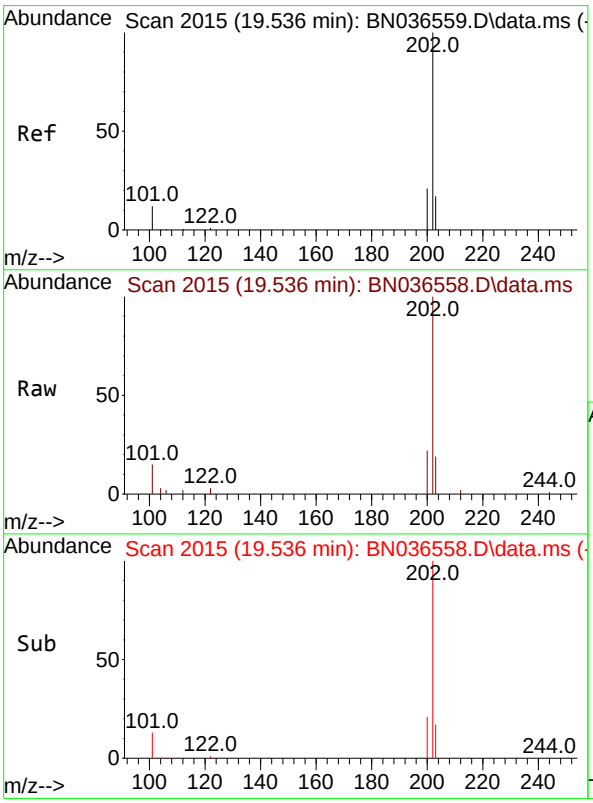
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 19.5 | 14.6 | 22.0 |
| 236 | 29.9 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

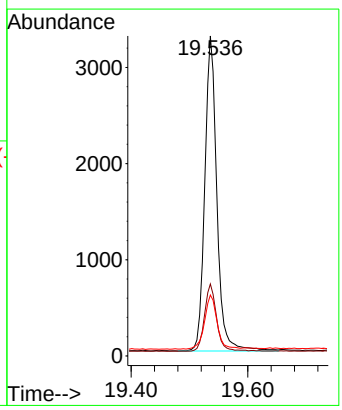
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

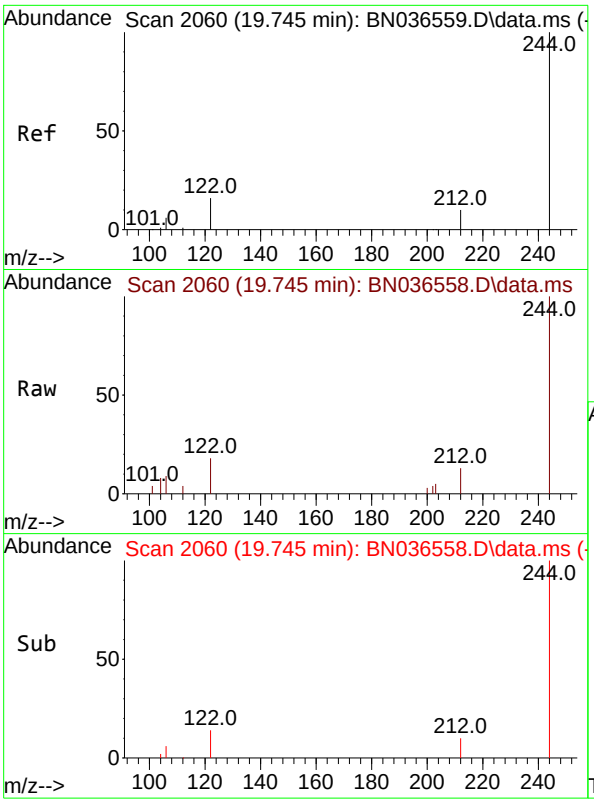



#30
Pyrene
Concen: 0.205 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4742

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.1 | 17.1 | 25.7 |
| 203 | 17.7 | 14.1 | 21.1 |

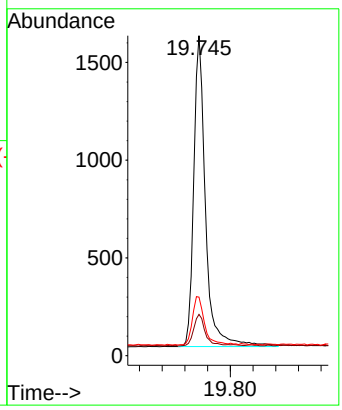





#31
Terphenyl-d14
Concen: 0.201 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:244 Resp: 228

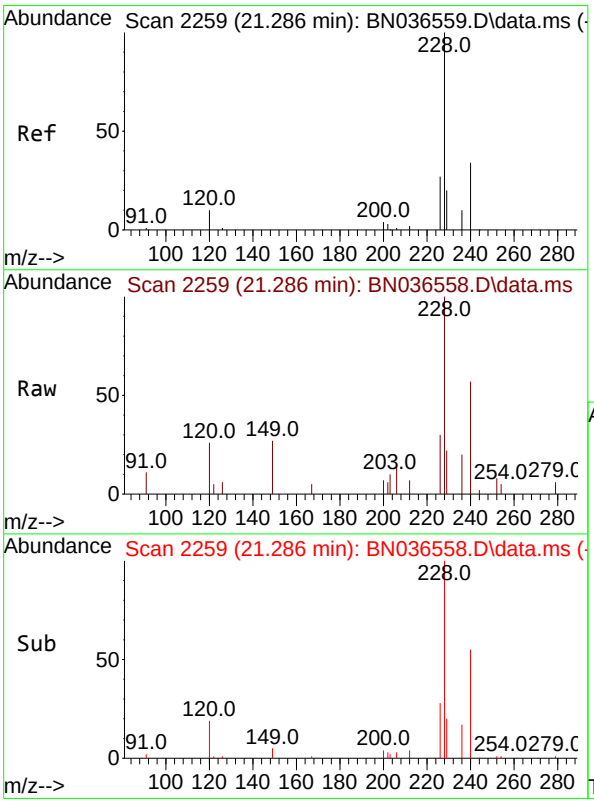
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.9 | 9.6 | 14.4 |
| 122 | 18.3 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

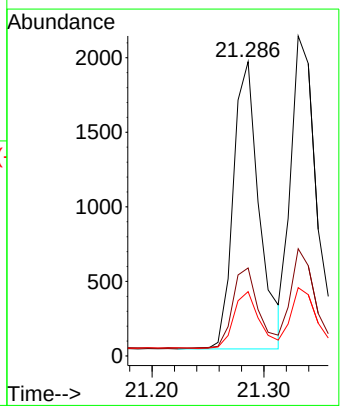
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

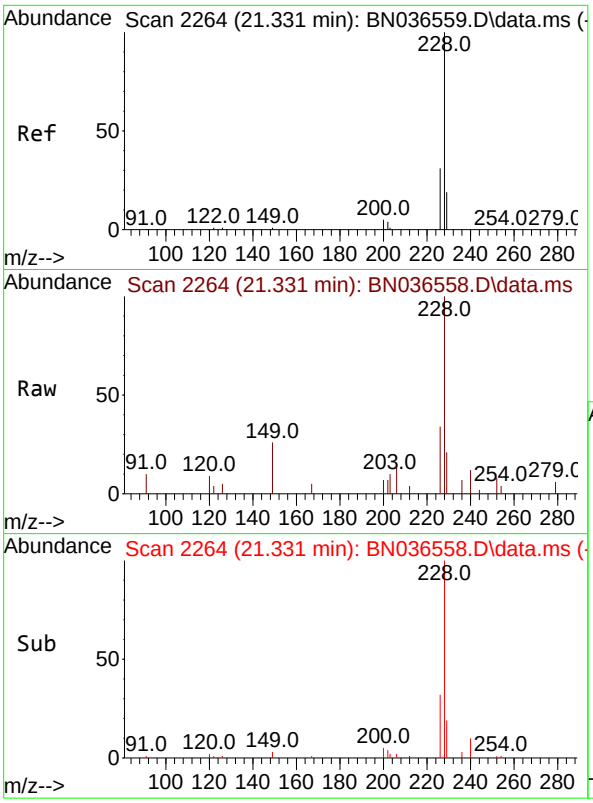



#32
Benzo(a)anthracene
Concen: 0.189 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:228 Resp: 3111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.9 | 22.5 | 33.7 |
| 229 | 21.9 | 16.6 | 25.0 |

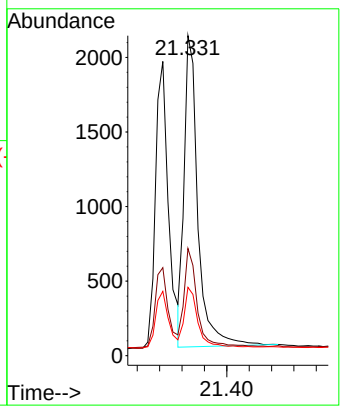





#33
Chrysene
Concen: 0.199 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:228 Resp: 356

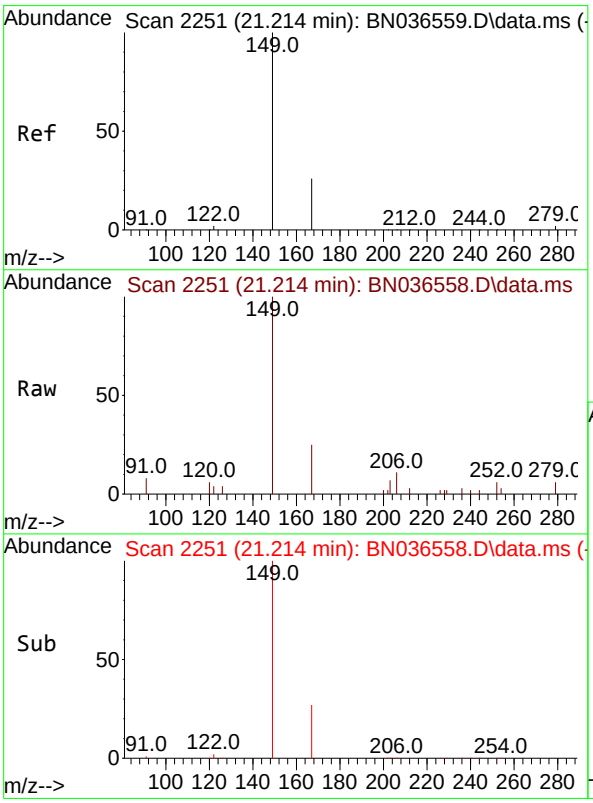
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 33.5 | 25.3 | 37.9 |
| 229 | 21.4 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations APPROVED**

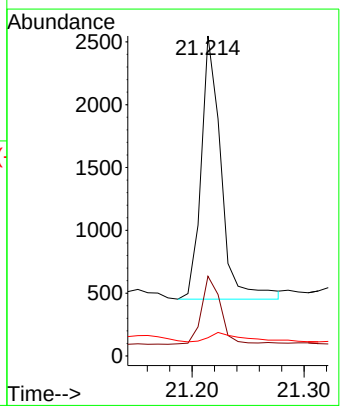
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

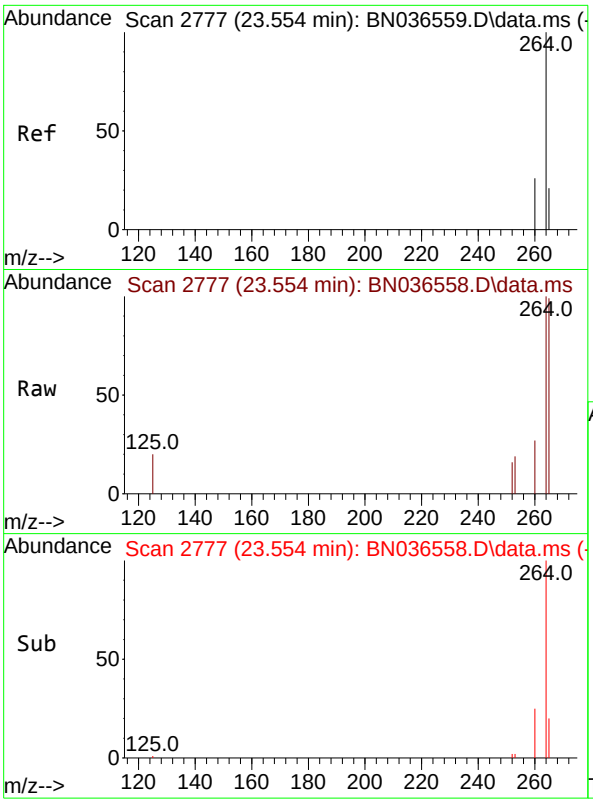



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.222 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:149 Resp: 2601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 24.7 | 20.7 | 31.1 |
| 279 | 5.7 | 3.6 | 5.4# |

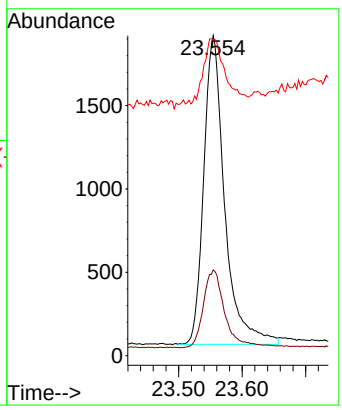





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:264 Resp: 424

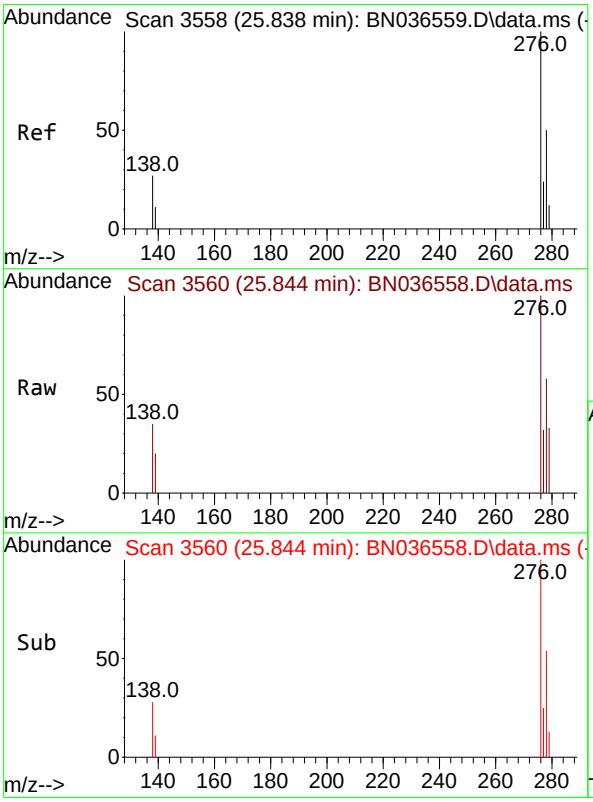
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.8 | 22.6 | 33.8 |
| 265 | 98.5 | 88.1 | 132.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

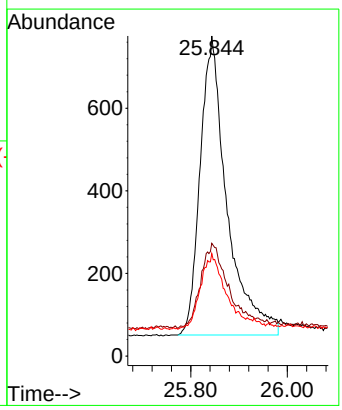
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

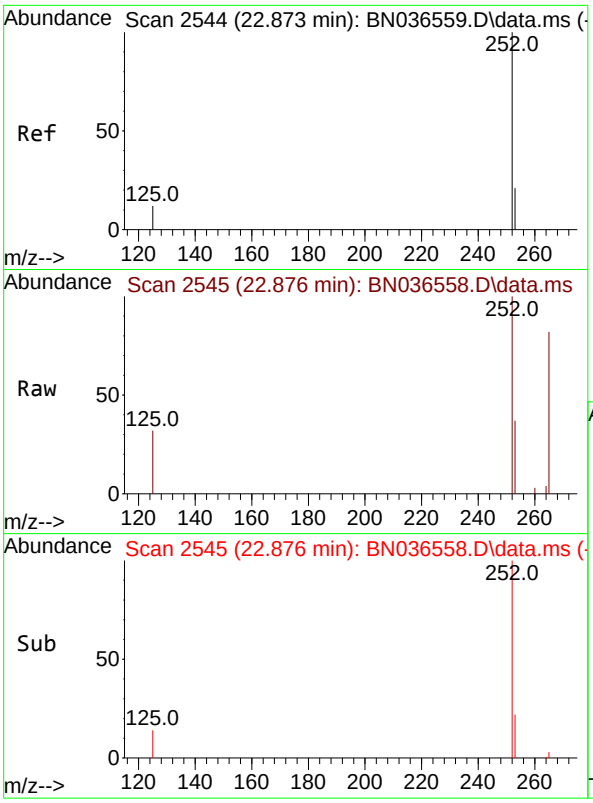



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.182 ng
RT: 25.844 min Scan# 3560
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:276 Resp: 2790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 29.1 | 23.4 | 35.2 |
| 277 | 23.4 | 20.0 | 30.0 |






#37
Benzo(b)fluoranthene
Concen: 0.187 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

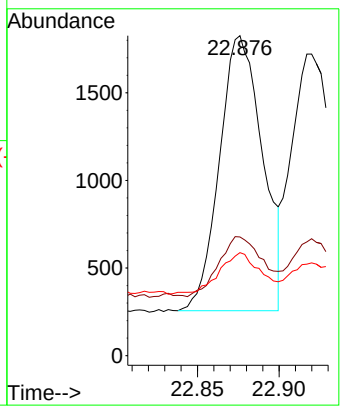
Tgt Ion:252 Resp: 288

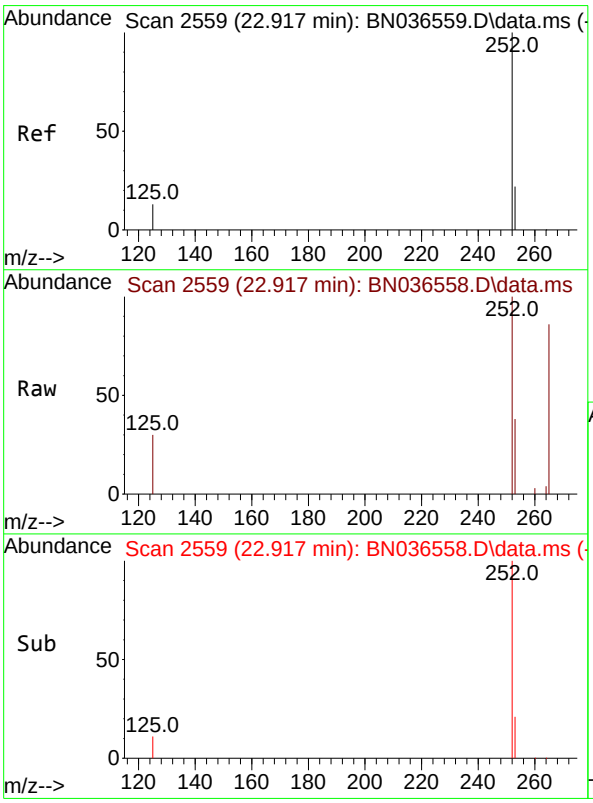
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 37.1 | 23.9 | 35.9# |
| 125 | 32.2 | 17.4 | 26.2# |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

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

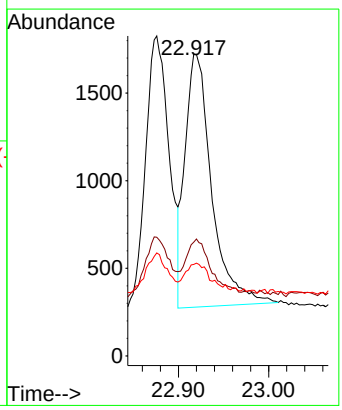


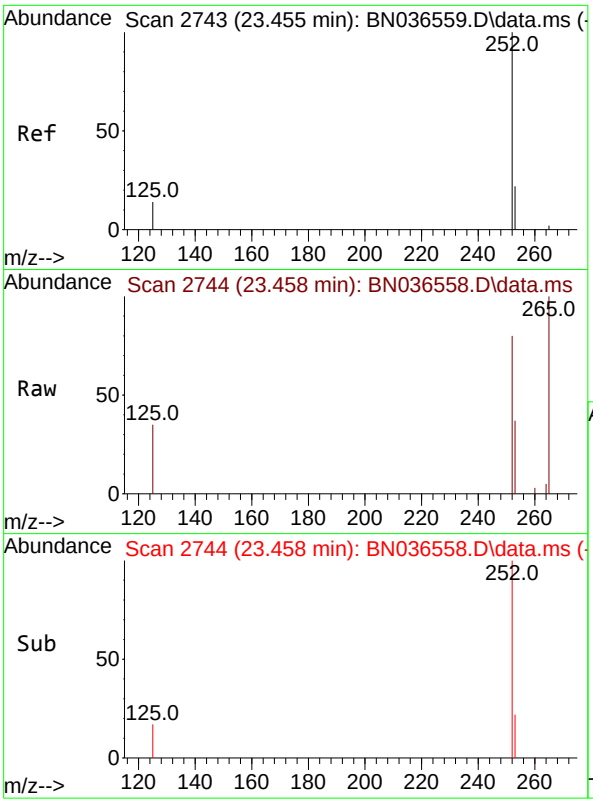




#38
Benzo(k)fluoranthene
Concen: 0.183 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:252 Resp: 2962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 37.7 | 24.6 | 36.8# |
| 125 | 30.3 | 17.8 | 26.8# |

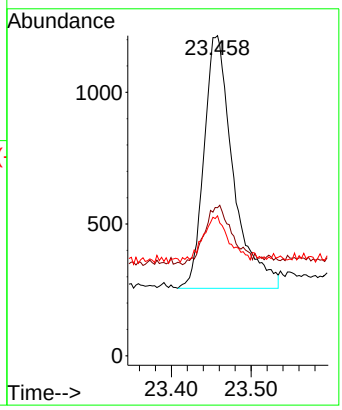





#39
Benzo(a)pyrene
Concen: 0.188 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:252 Resp: 244

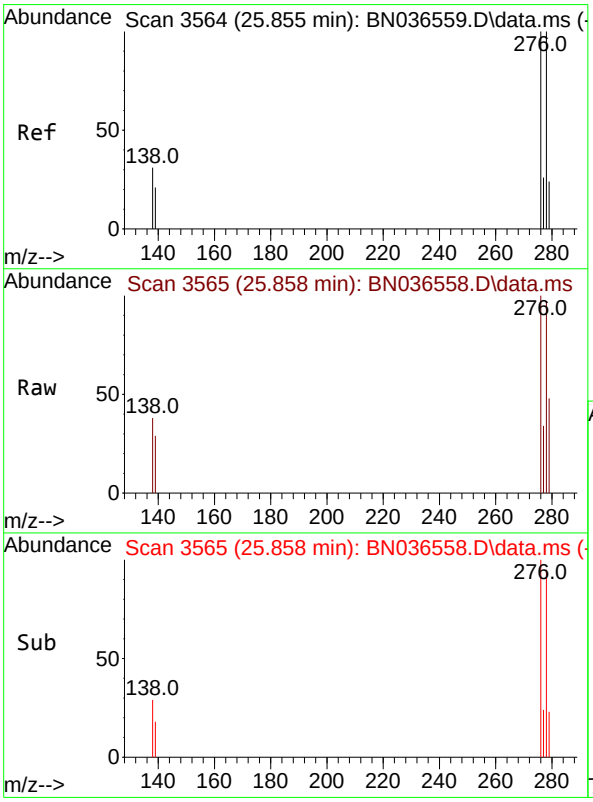
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 46.3 | 27.8 | 41.8# |
| 125 | 43.7 | 22.7 | 34.1# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

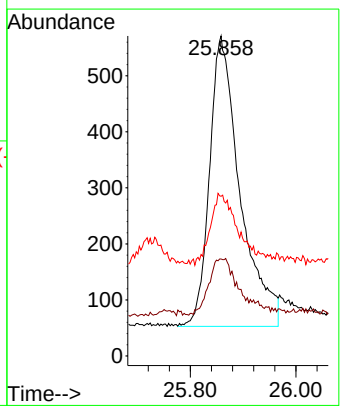
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

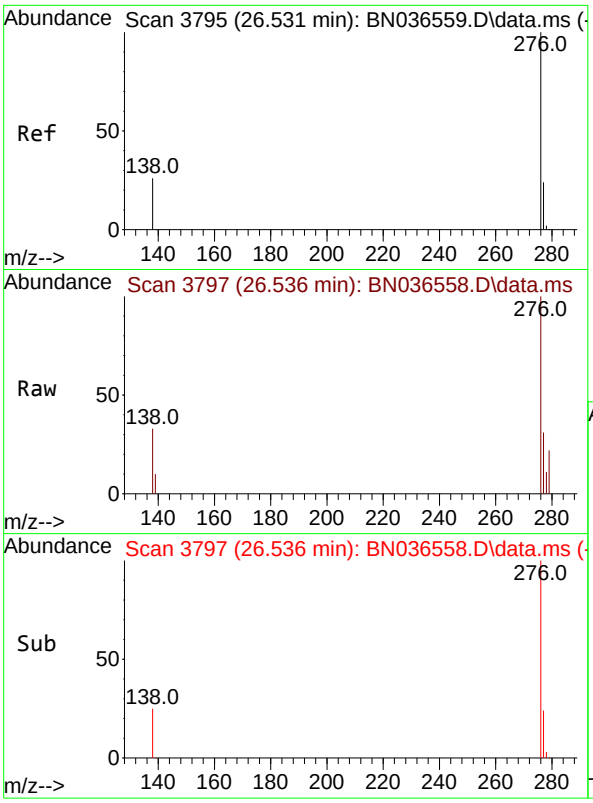



#40
Dibenzo(a,h)anthracene
Concen: 0.175 ng
RT: 25.858 min Scan# 3565
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:278 Resp: 2080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 30.3 | 20.8 | 31.2 |
| 279 | 49.9 | 28.8 | 43.2# |

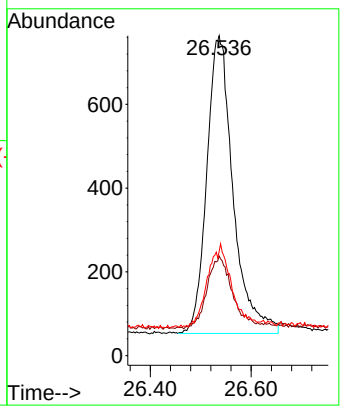





#41
Benzo(g,h,i)perylene
Concen: 0.189 ng
RT: 26.536 min Scan# 3
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:276 Resp: 257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 31.2 | 22.2 | 33.4 |
| 138 | 32.6 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

**Manual Integrations**
**APPROVED**

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

Quantitation Report (QT Reviewed)

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

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

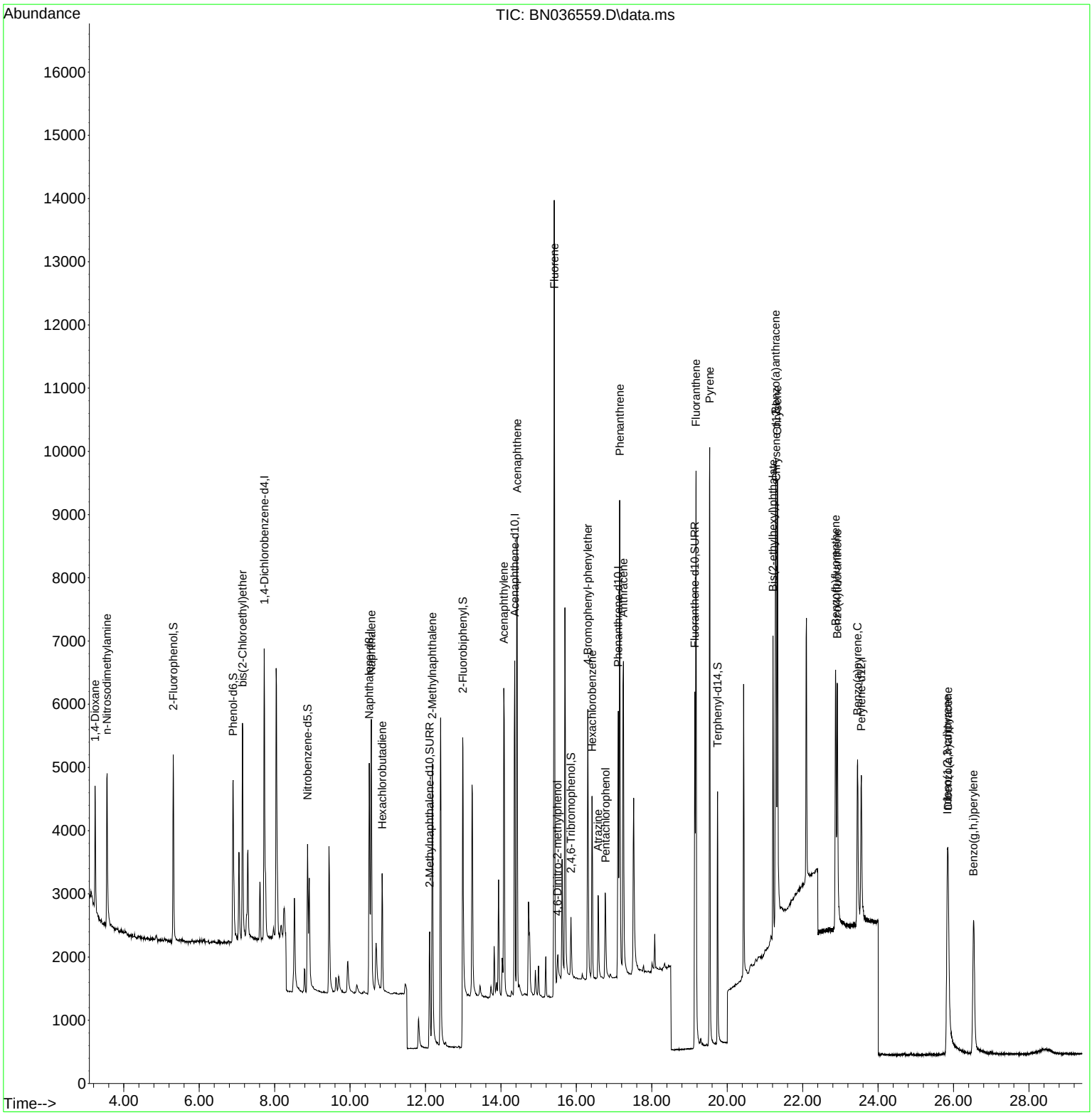
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 2207 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 5091 | 0.400 | ng | | 0.00 |
| 13) Acenaphthene-d10 |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

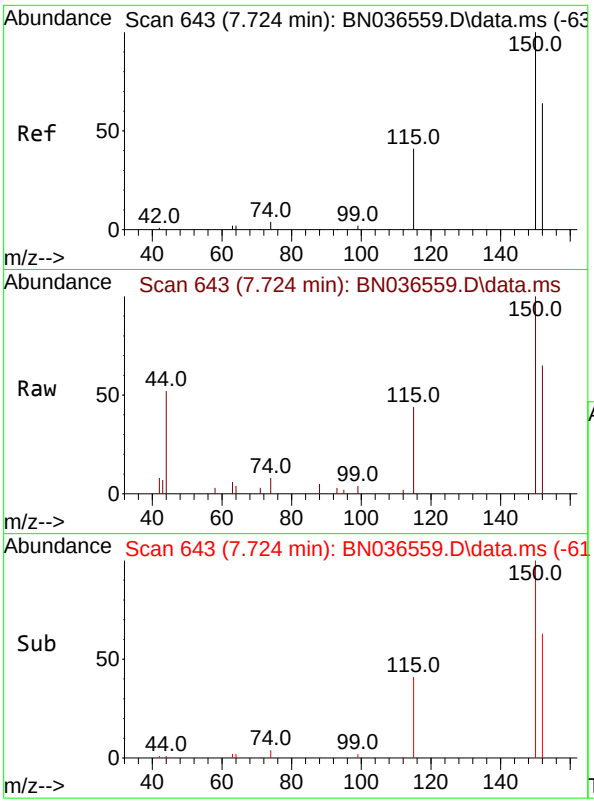
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

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



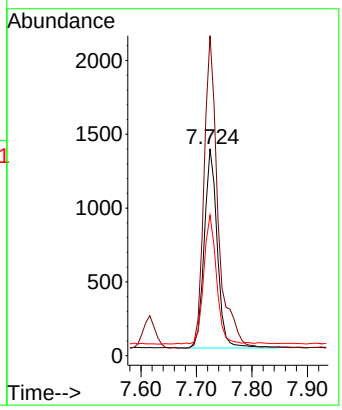


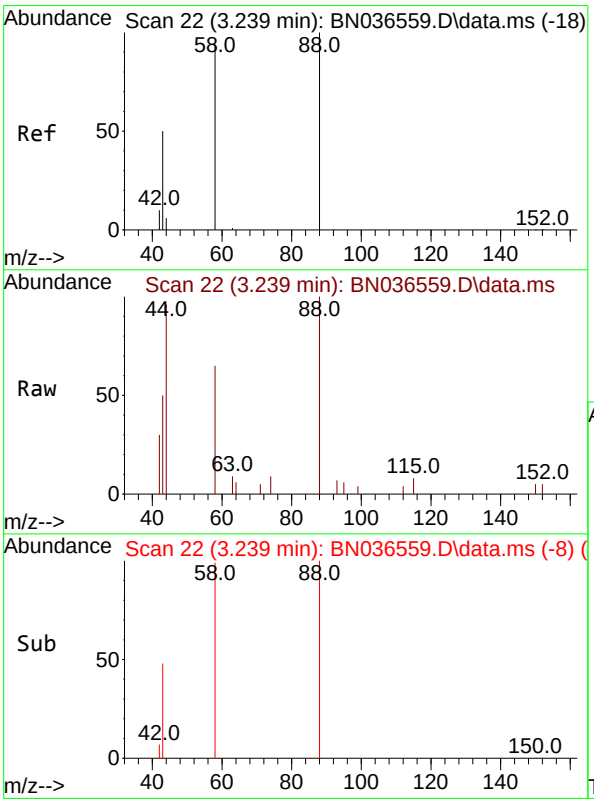

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:152 Resp: 2207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.6 | 123.7 | 185.5 |
| 115 | 67.9 | 54.3 | 81.5 |

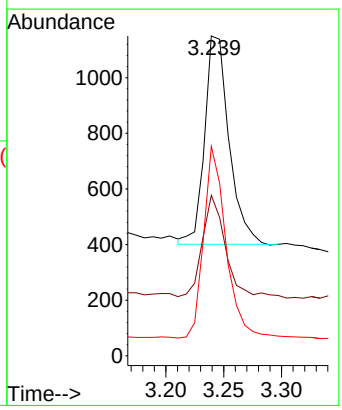


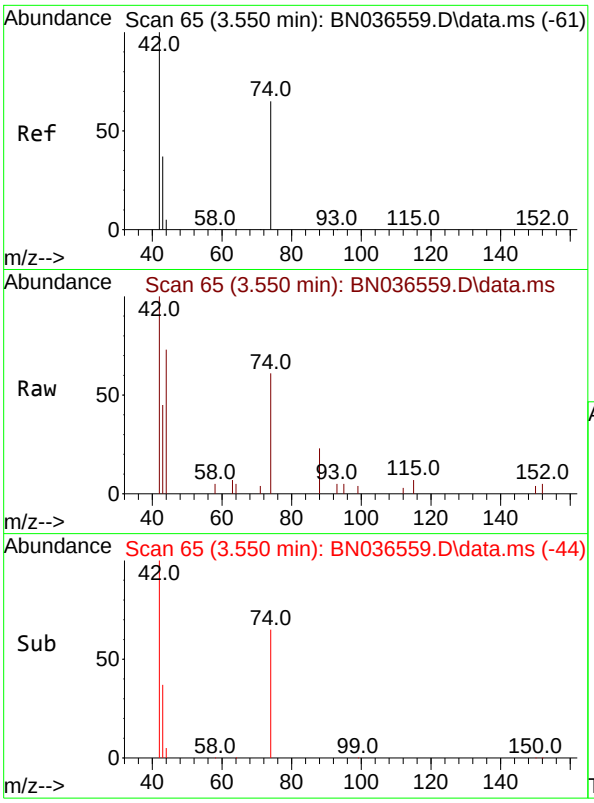




#2
1,4-Dioxane
Concen: 0.449 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion: 88 Resp: 1099

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 47.3 | 37.8 | 56.8 |
| 58 | 84.3 | 67.4 | 101.2 |



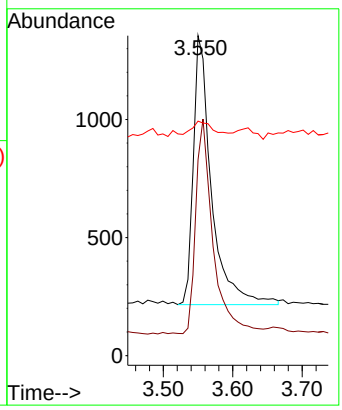


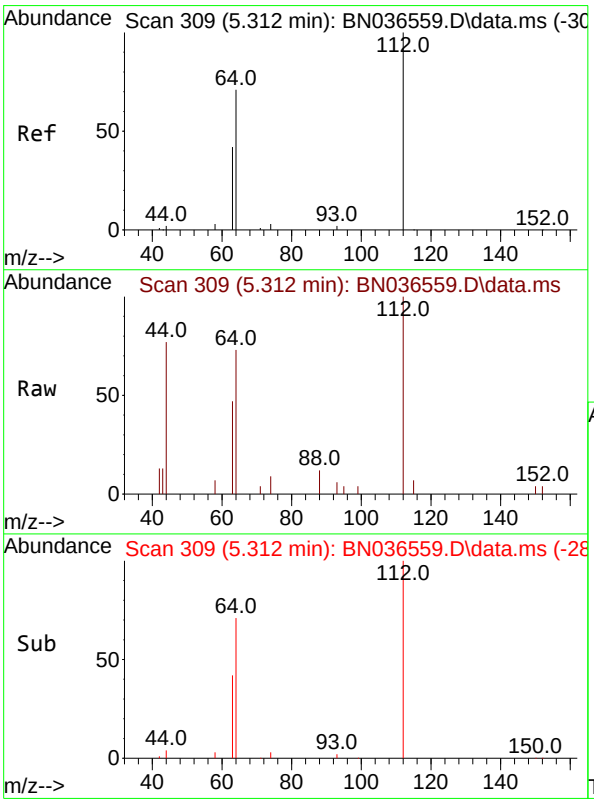

#3
n-Nitrosodimethylamine
Concen: 0.417 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion: 42 Resp: 2063

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 75.7 | 60.6 | 90.8 |
| 44 | 7.9 | 6.3 | 9.5 |

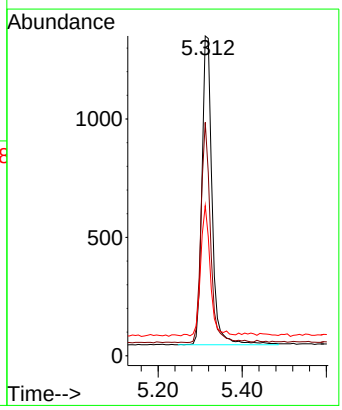


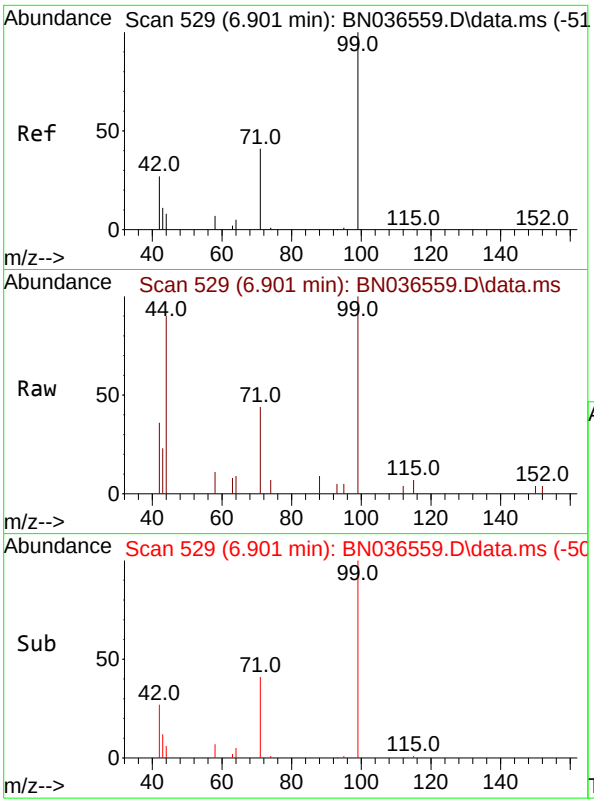




#4
2-Fluorophenol
Concen: 0.423 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:112 Resp: 2178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 66.4 | 53.1 | 79.7 |
| 63 | 39.8 | 31.8 | 47.8 |



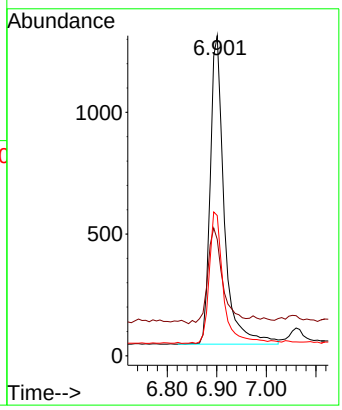


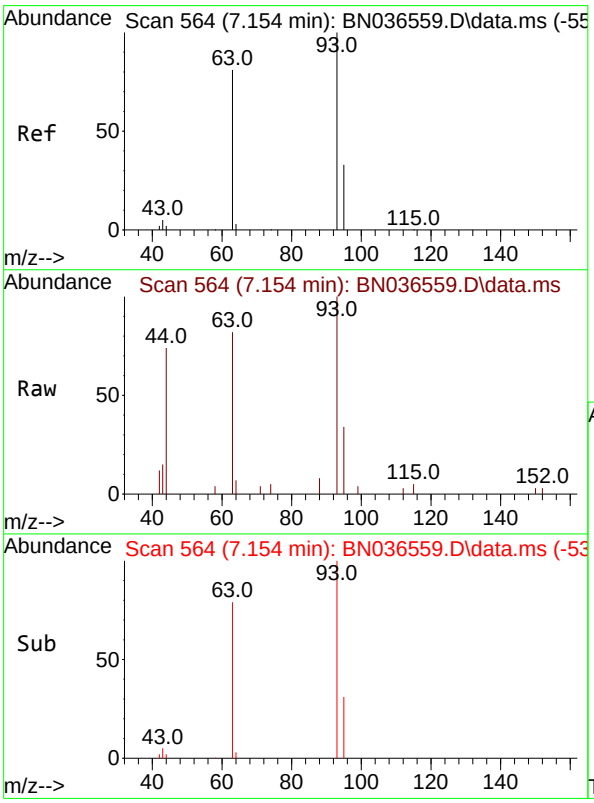

#5
Phenol-d6
Concen: 0.392 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion: 99 Resp: 2489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 33.1 | 26.5 | 39.7 |
| 71 | 42.6 | 34.1 | 51.1 |

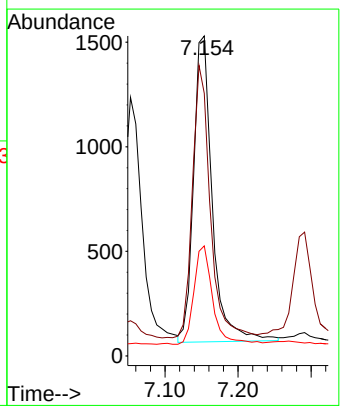


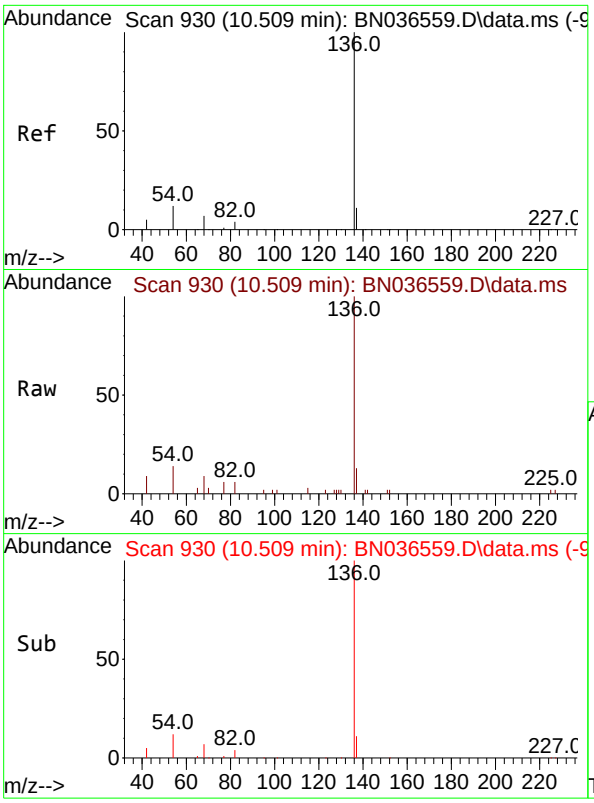




#6
bis(2-Chloroethyl)ether
Concen: 0.397 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion: 93 Resp: 2610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 84.6 | 67.7 | 101.5 |
| 95 | 32.0 | 25.6 | 38.4 |



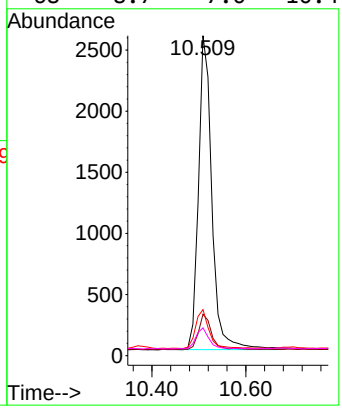


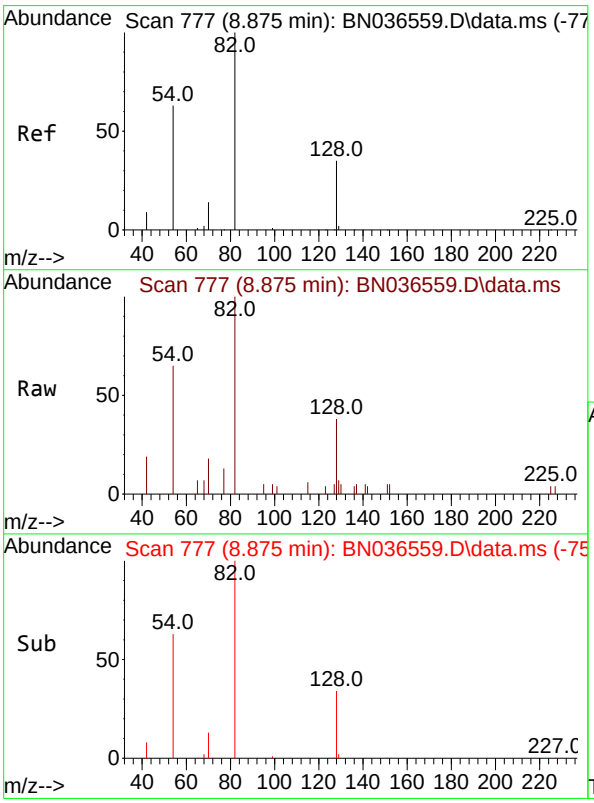

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:136 Resp: 5091

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

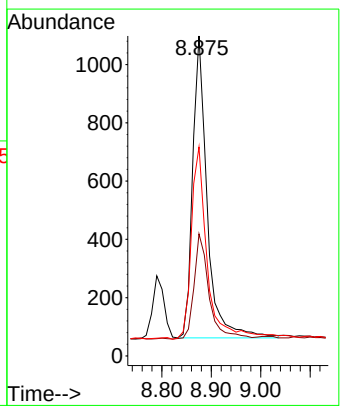


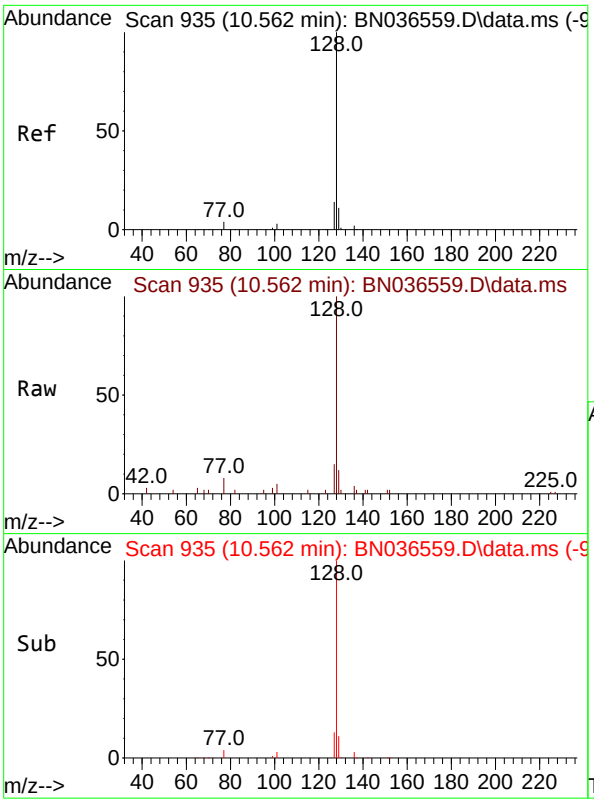




#8
Nitrobenzene-d5
Concen: 0.382 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion: 82 Resp: 2113

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



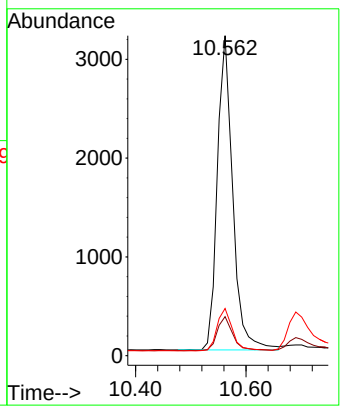


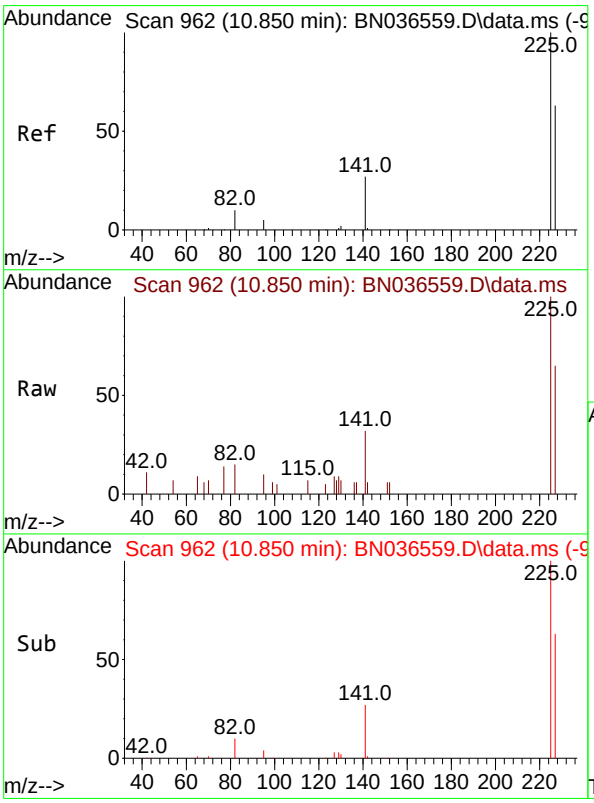

#9
Naphthalene
Concen: 0.410 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:128 Resp: 6139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.2 | 9.8 | 14.6 |
| 127 | 14.8 | 11.8 | 17.8 |

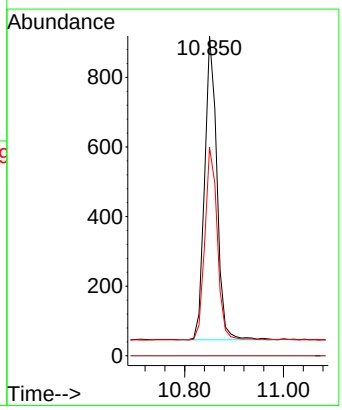


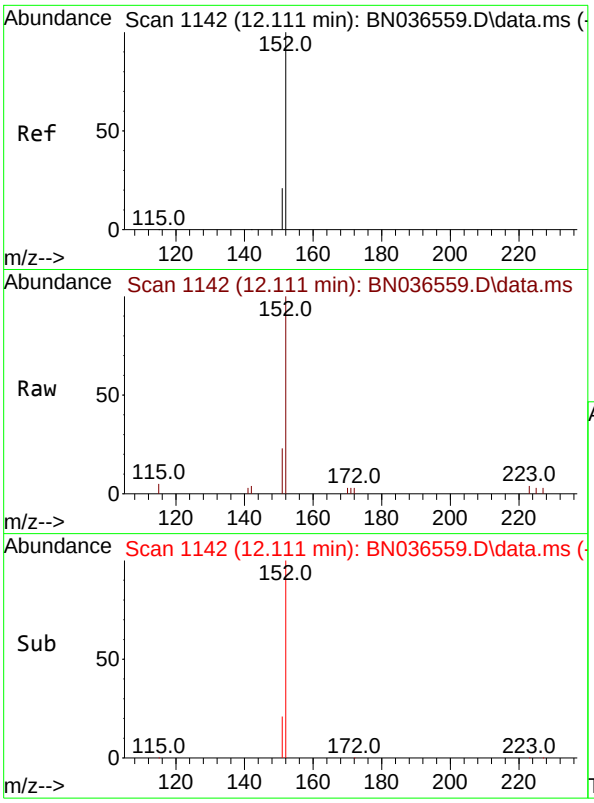




#10
Hexachlorobutadiene
Concen: 0.425 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:225 Resp: 1498

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



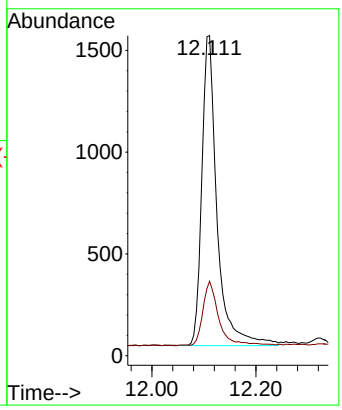


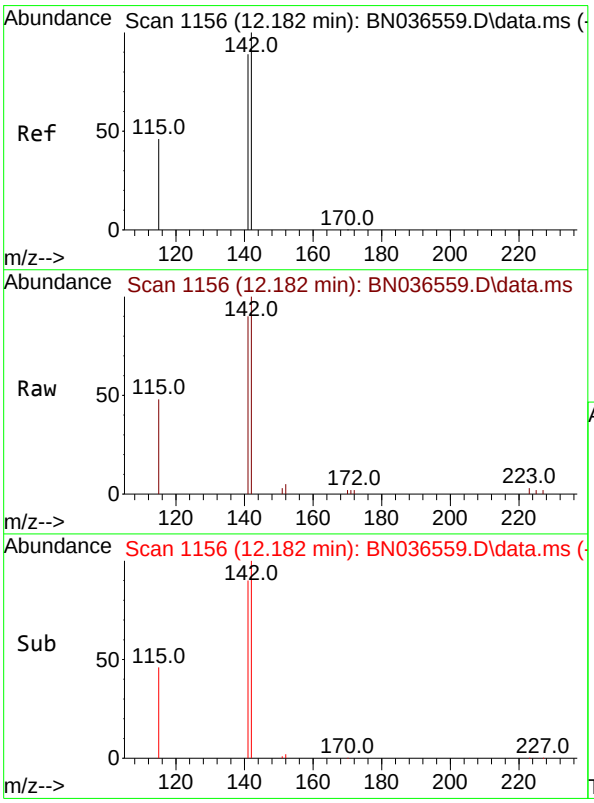

#11
2-Methylnaphthalene-d10
Concen: 0.407 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:152 Resp: 3085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.3 | 17.0 | 25.6 |

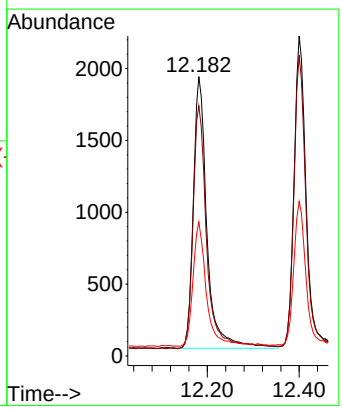


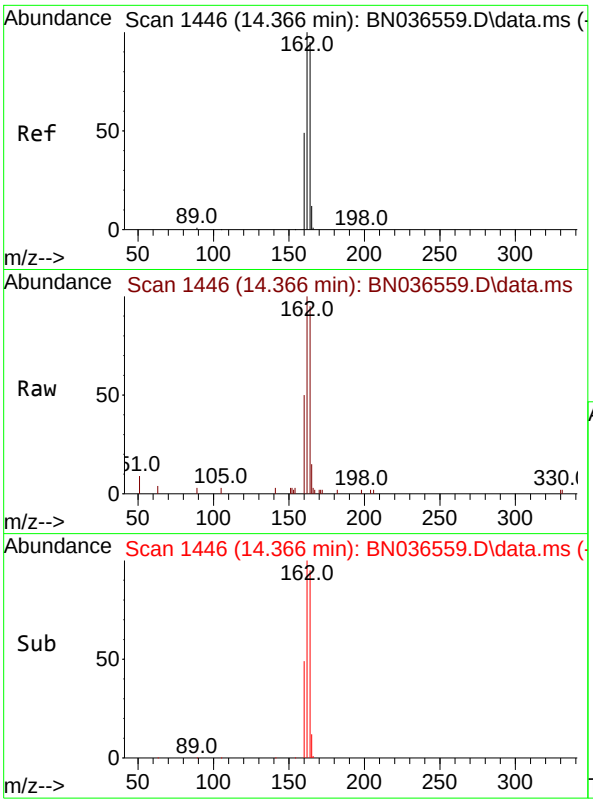




#12
2-Methylnaphthalene
Concen: 0.409 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:142 Resp: 3897

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 89.6 | 71.7 | 107.5 |
| 115 | 47.9 | 38.3 | 57.5 |



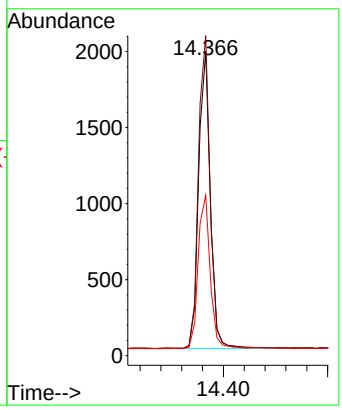


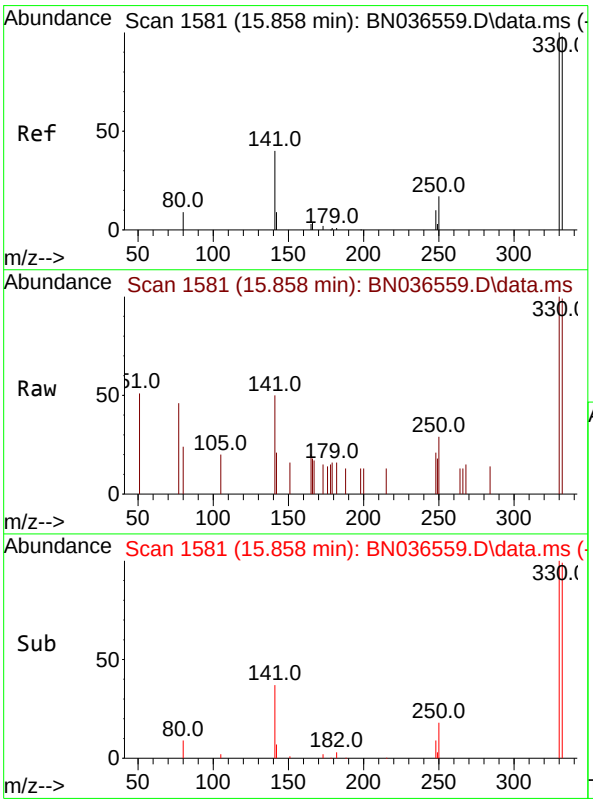

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:164 Resp: 3026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 105.2 | 84.2 | 126.2 |
| 160 | 52.7 | 42.2 | 63.2 |

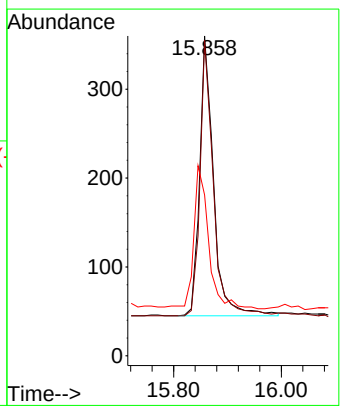


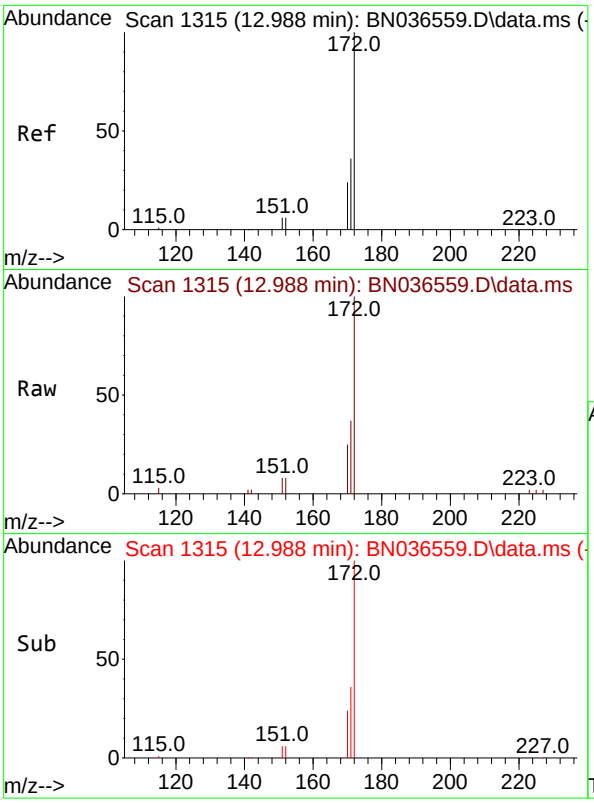




#14
2,4,6-Tribromophenol
Concen: 0.413 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:330 Resp: 567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 94.0 | 75.2 | 112.8 |
| 141 | 54.3 | 43.4 | 65.2 |



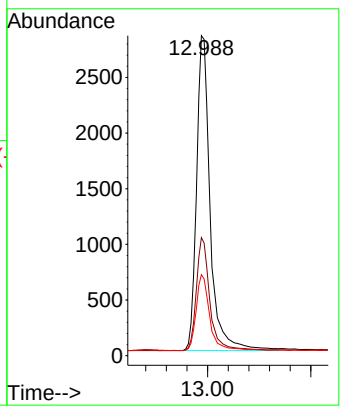


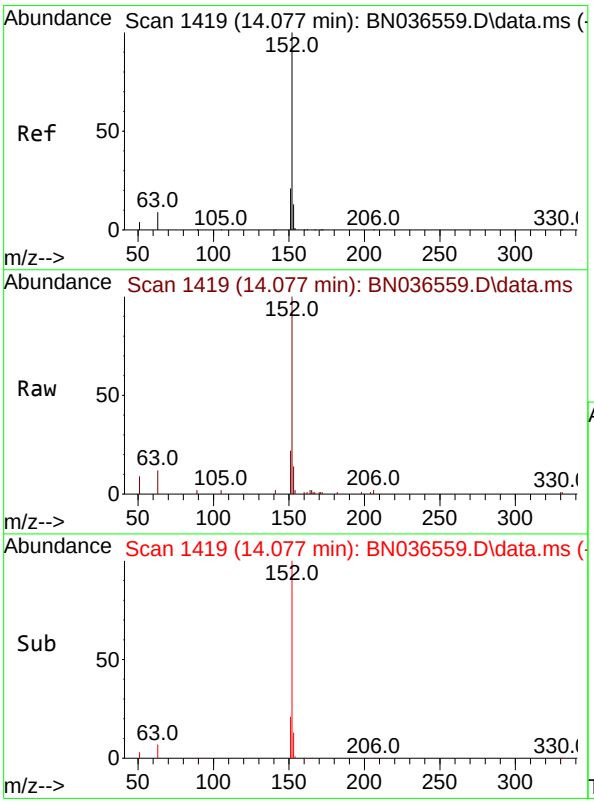

#15
2-Fluorobiphenyl
Concen: 0.412 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:172 Resp: 7257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.9 | 29.5 | 44.3 |
| 170 | 25.3 | 20.2 | 30.4 |

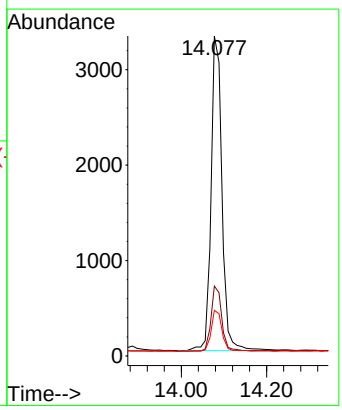


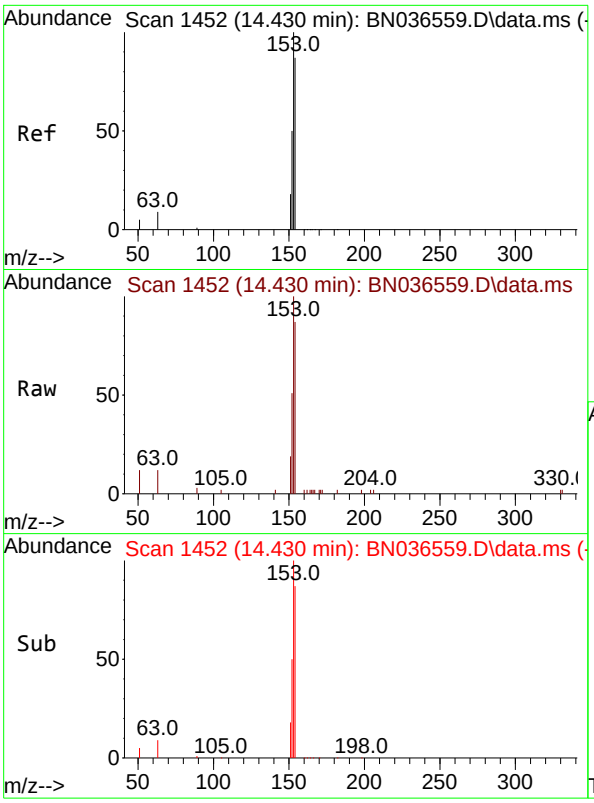




#16
Acenaphthylene
Concen: 0.411 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:152 Resp: 5865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.3 | 16.2 | 24.4 |
| 153 | 13.2 | 10.6 | 15.8 |



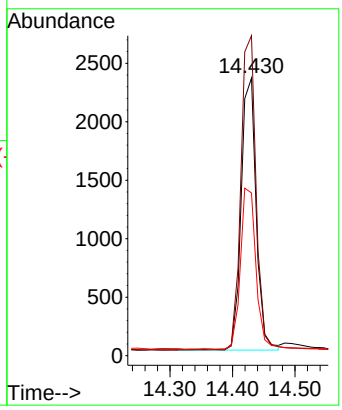


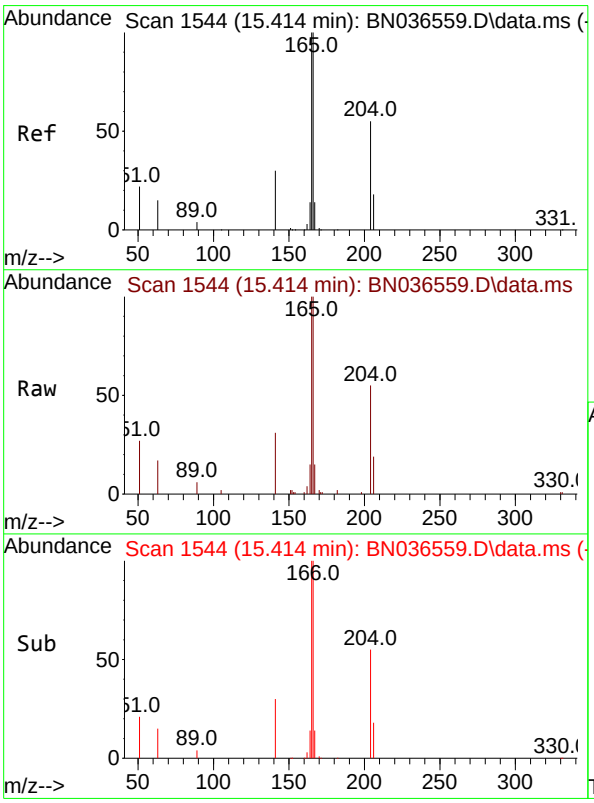

#17
Acenaphthene
Concen: 0.415 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:154 Resp: 3877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.6 | 94.1 | 141.1 |
| 152 | 62.2 | 49.8 | 74.6 |

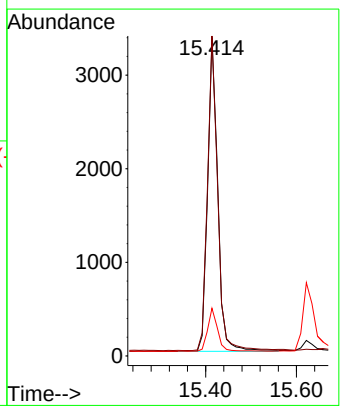


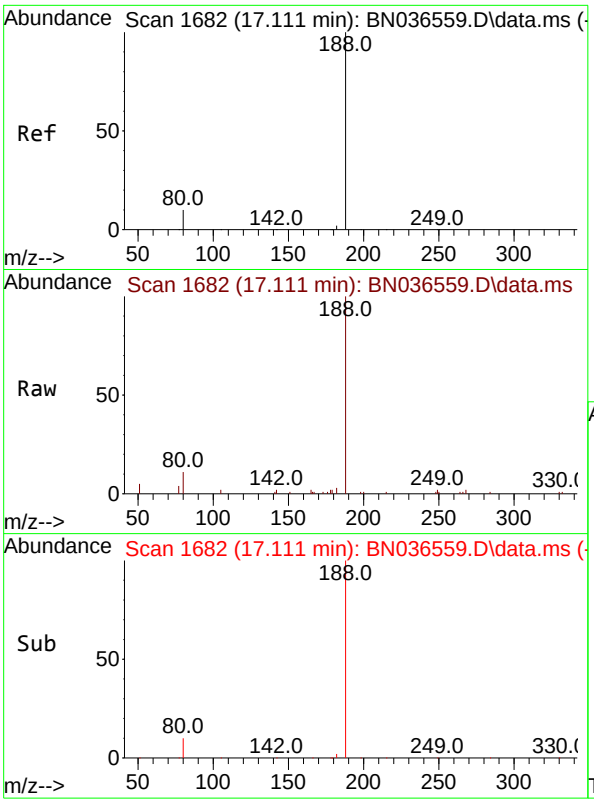




#18
Fluorene
Concen: 0.422 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:166 Resp: 5338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.8 | 79.8 | 119.8 |
| 167 | 13.2 | 10.6 | 15.8 |



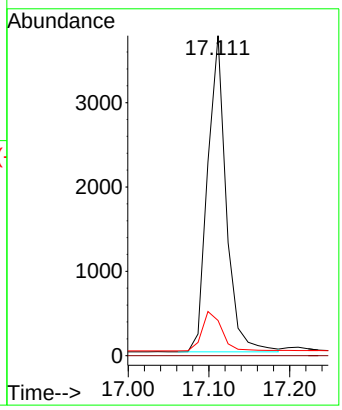


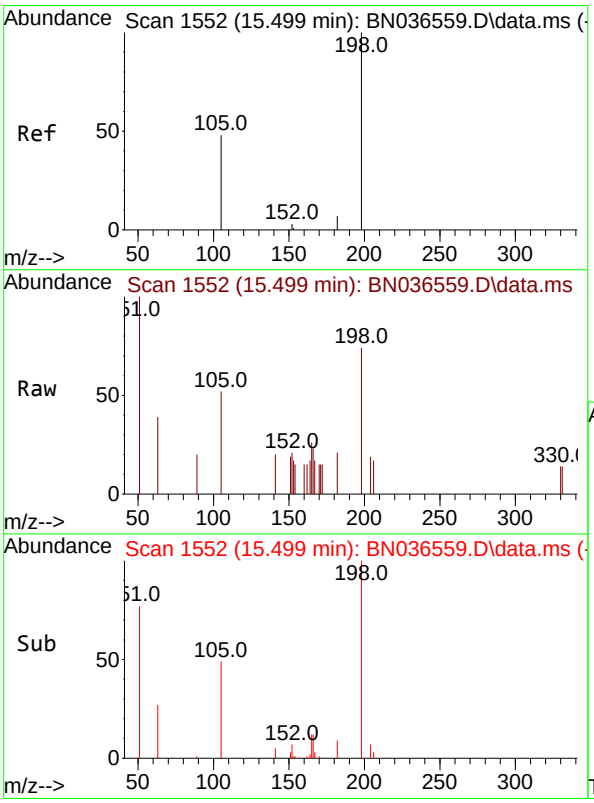

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:188 Resp: 6005

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.0 | 8.8 | 13.2 |

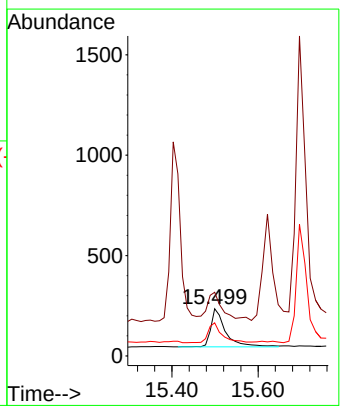


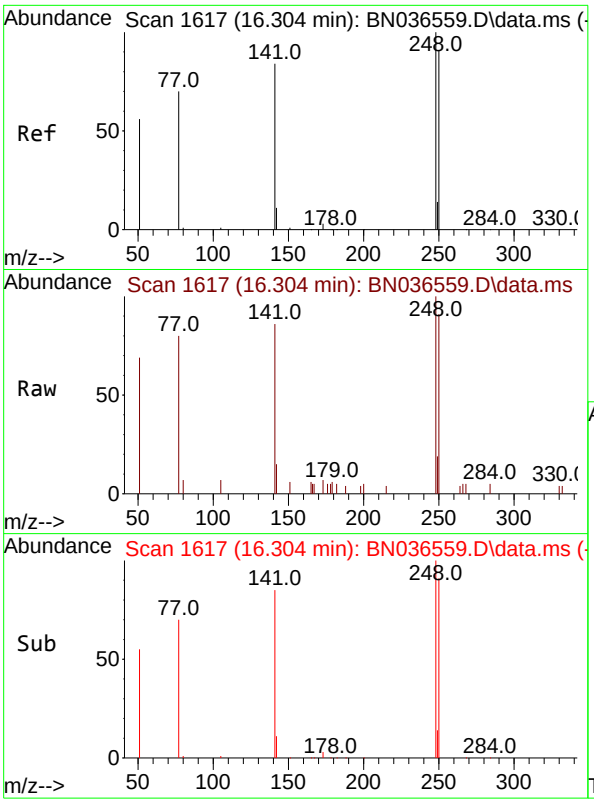




#20
4,6-Dinitro-2-methylphenol
Concen: 0.447 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:198 Resp: 462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 134.9 | 107.9 | 161.9 |
| 105 | 70.2 | 56.2 | 84.2 |



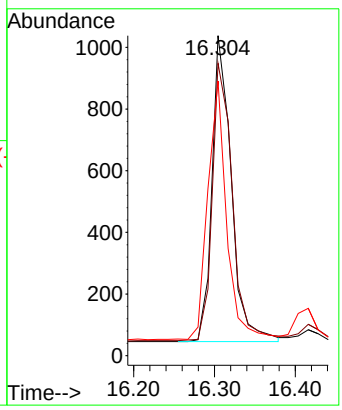


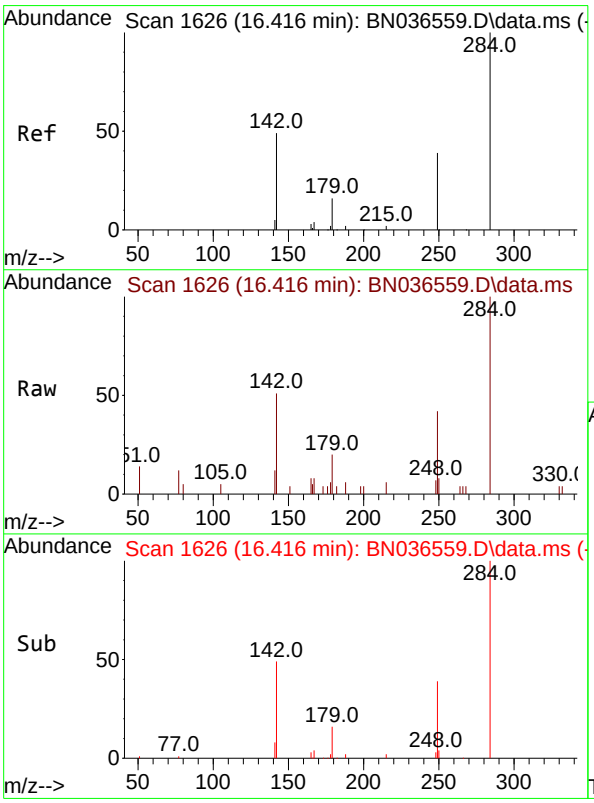

#21
4-Bromophenyl-phenylether
Concen: 0.437 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:248 Resp: 1644

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

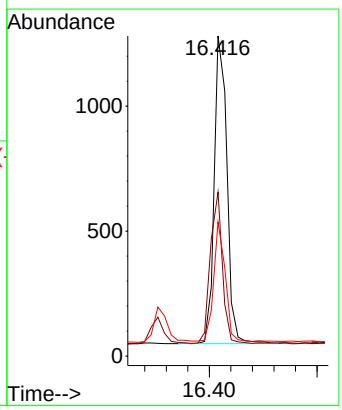


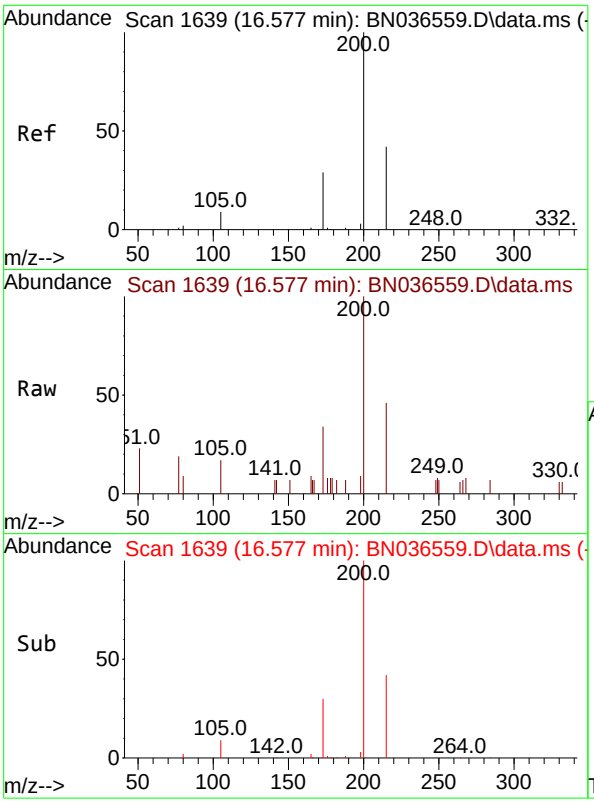




#22
Hexachlorobenzene
Concen: 0.444 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:284 Resp: 2018

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



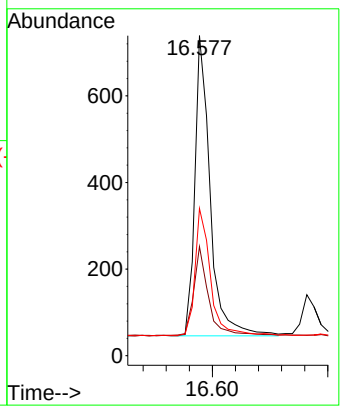


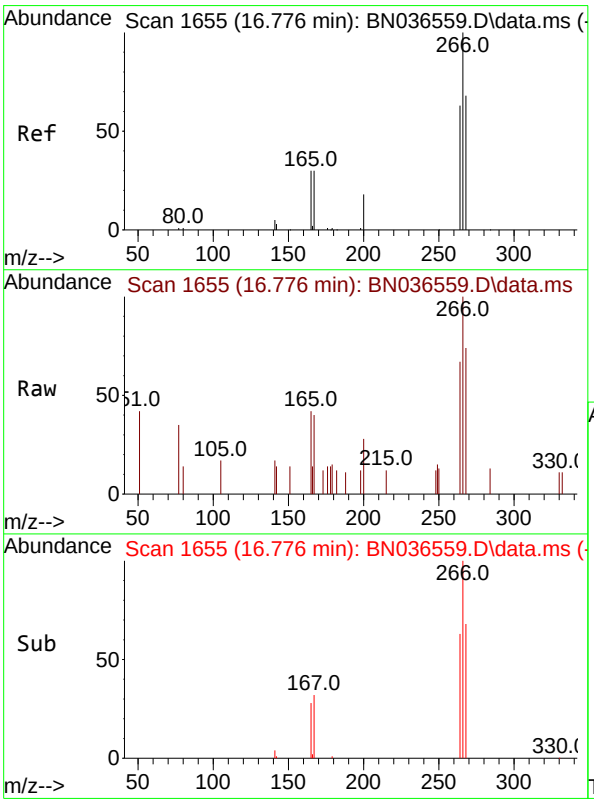

#23
Atrazine
Concen: 0.424 ng
RT: 16.577 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:200 Resp: 1279

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 34.1 | 27.3 | 40.9 |
| 215 | 46.0 | 36.8 | 55.2 |

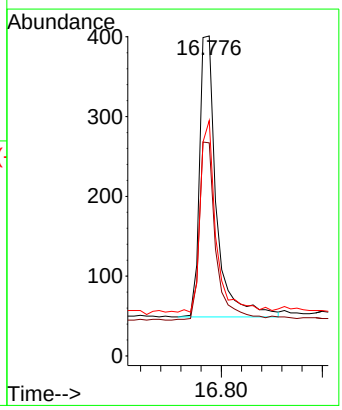


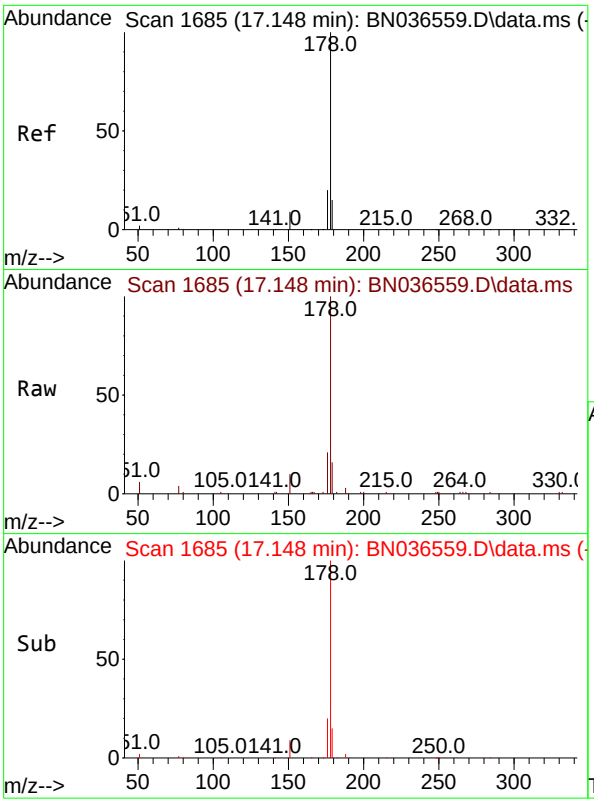




#24
Pentachlorophenol
Concen: 0.396 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:266 Resp: 821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.0 | 49.6 | 74.4 |
| 268 | 63.6 | 50.9 | 76.3 |



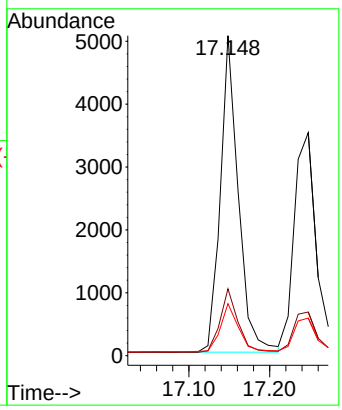


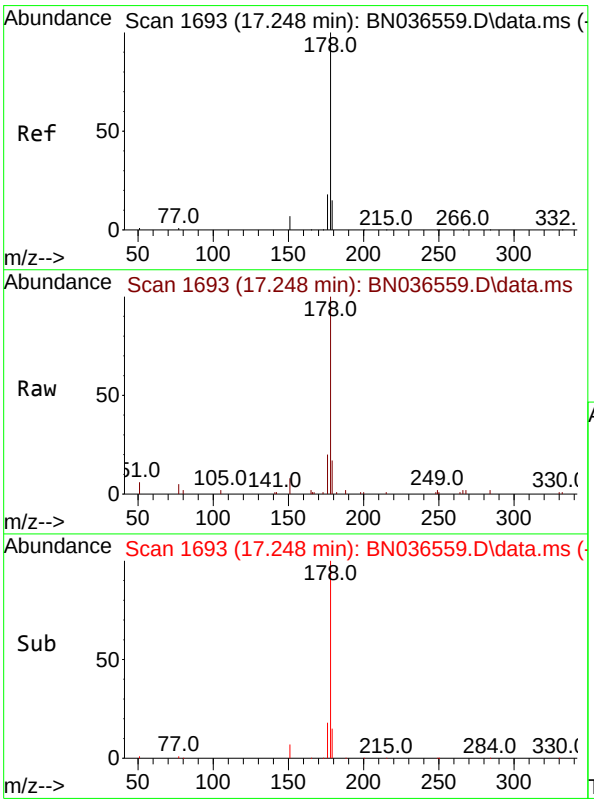

#25
Phenanthrene
Concen: 0.432 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:178 Resp: 7786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.3 | 12.2 | 18.4 |

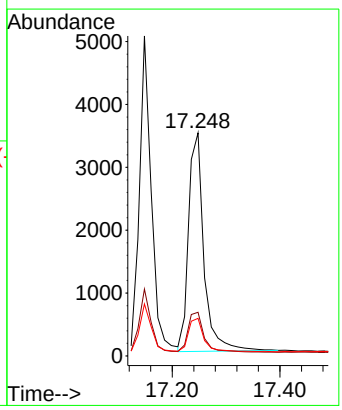


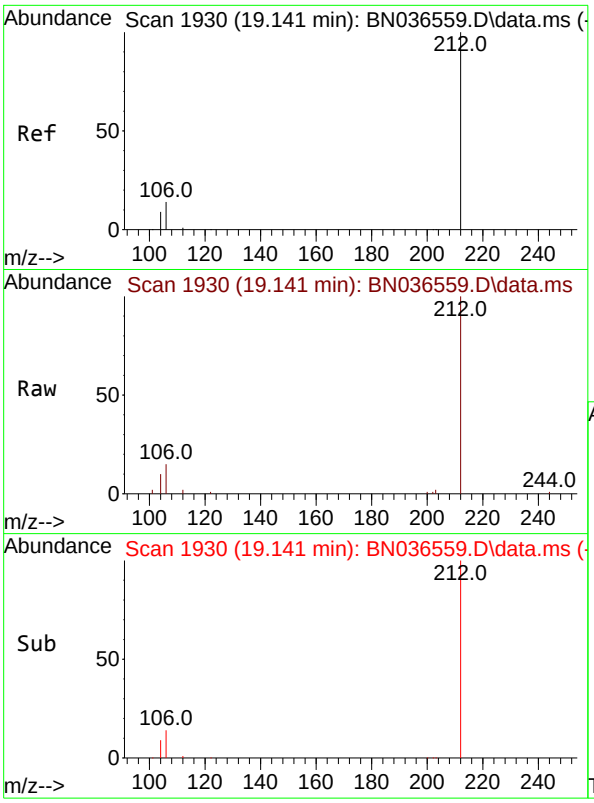




#26
Anthracene
Concen: 0.424 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:178 Resp: 6886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.4 | 23.2 |
| 179 | 15.7 | 12.6 | 18.8 |



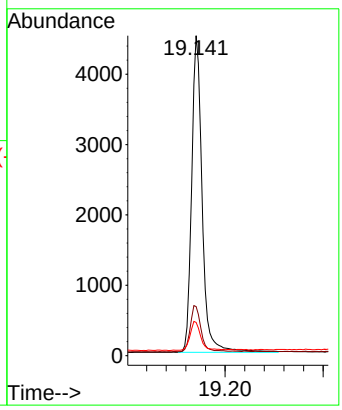


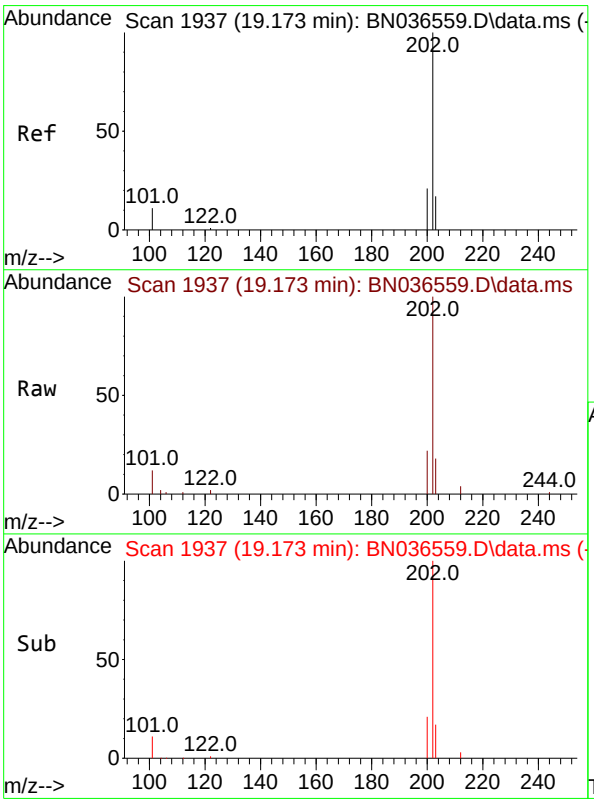

#27
Fluoranthene-d10
Concen: 0.435 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:212 Resp: 6699

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.7 | 11.8 | 17.6 |
| 104 | 9.1 | 7.3 | 10.9 |

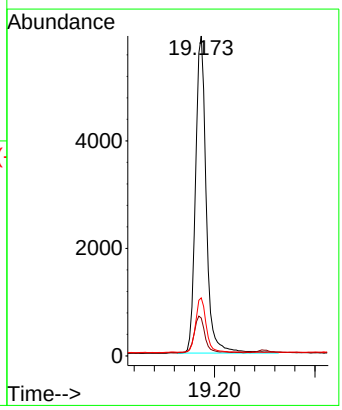


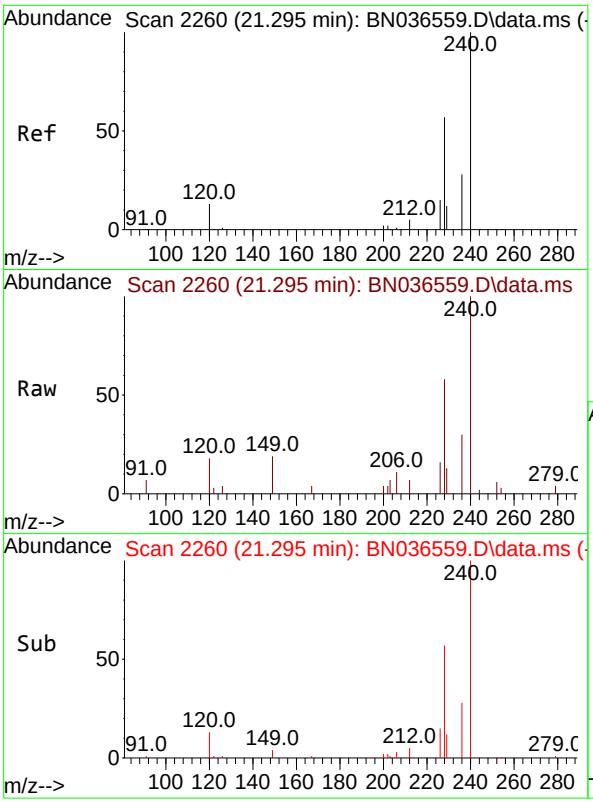




#28
Fluoranthene
Concen: 0.431 ng
RT: 19.173 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:202 Resp: 8717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.7 | 9.4 | 14.0 |
| 203 | 16.9 | 13.5 | 20.3 |



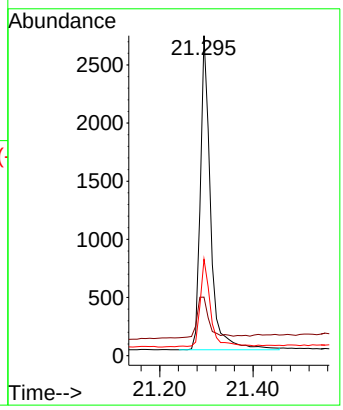


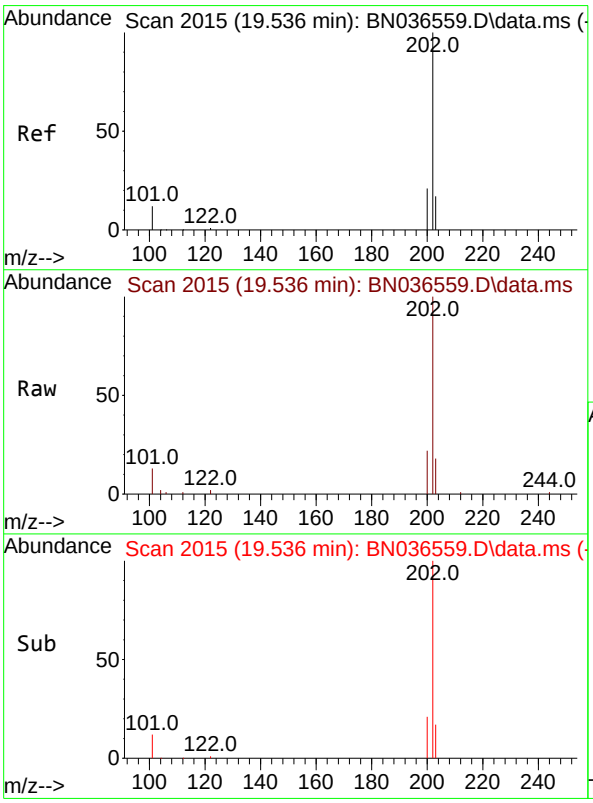

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:240 Resp: 4110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 18.3 | 14.6 | 22.0 |
| 236 | 30.1 | 24.1 | 36.1 |

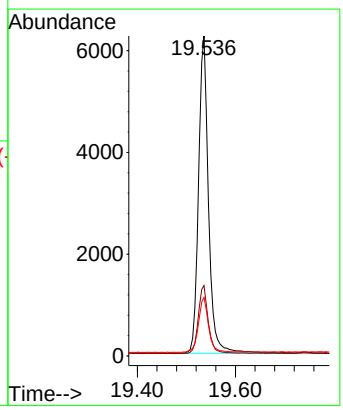


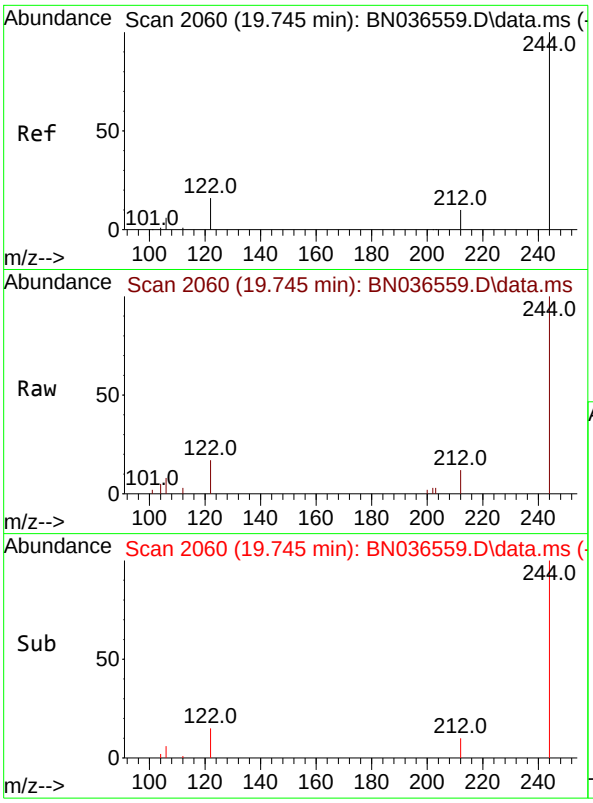




#30
Pyrene
Concen: 0.436 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:202 Resp: 8759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.6 | 14.1 | 21.1 |



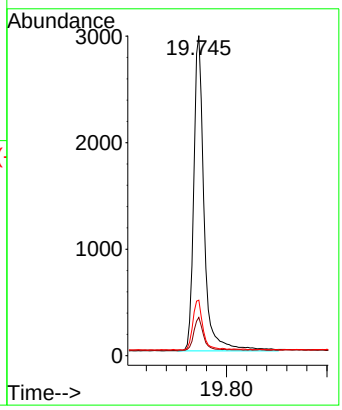


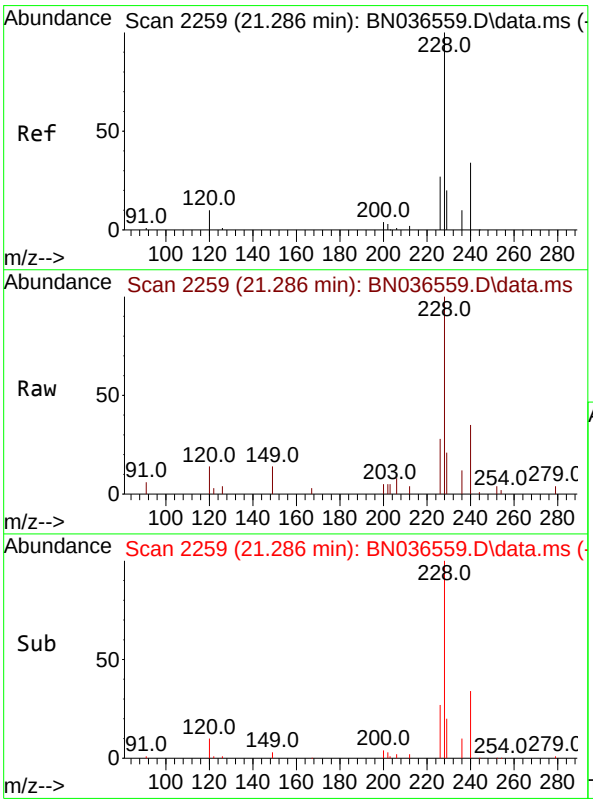

#31
Terphenyl-d14
Concen: 0.429 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:244 Resp: 4226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.0 | 9.6 | 14.4 |
| 122 | 17.4 | 13.9 | 20.9 |

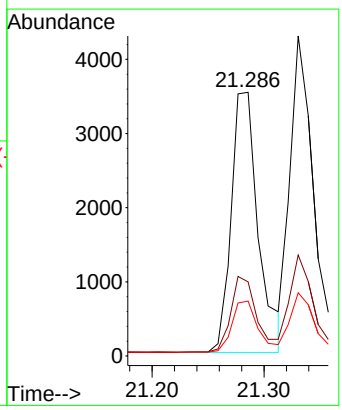


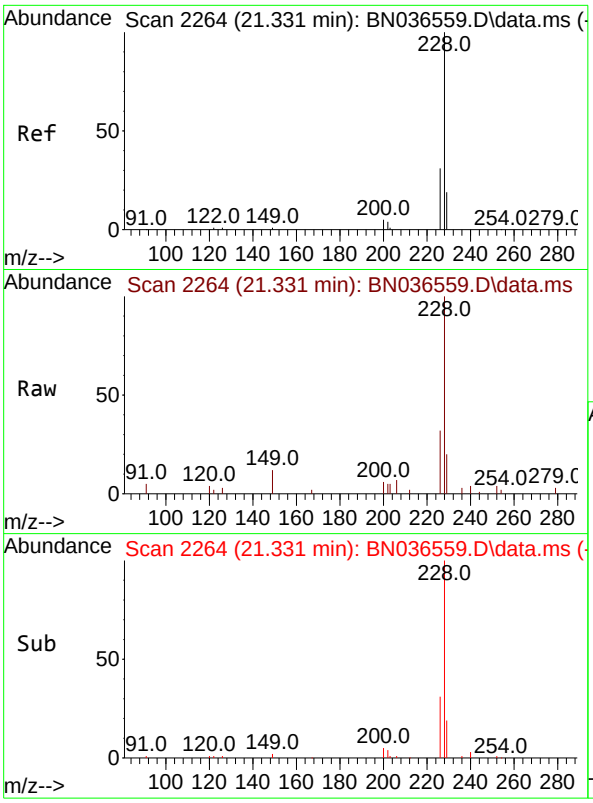




#32
Benzo(a)anthracene
Concen: 0.413 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:228 Resp: 5908

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.1 | 22.5 | 33.7 |
| 229 | 20.8 | 16.6 | 25.0 |



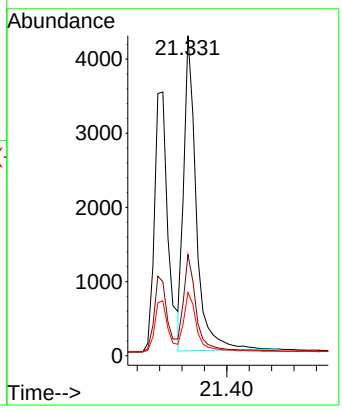


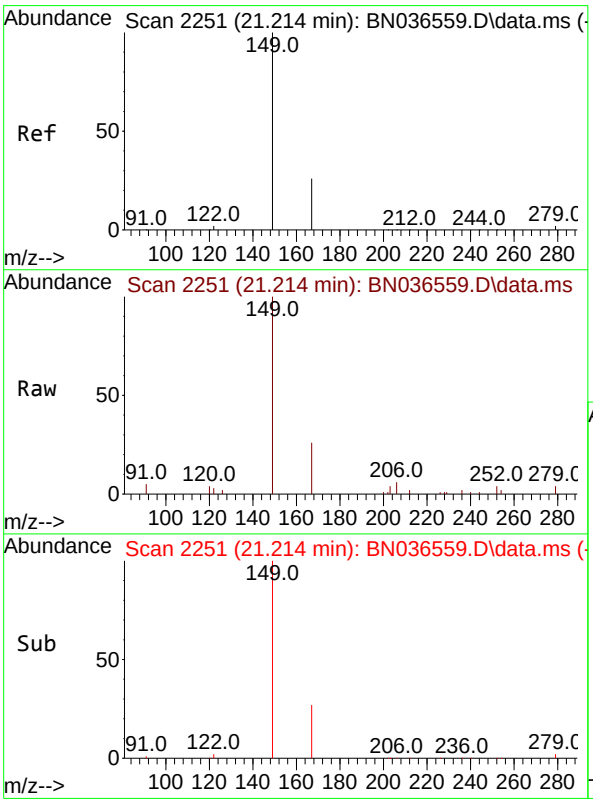

#33
Chrysene
Concen: 0.424 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:228 Resp: 6617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.6 | 25.3 | 37.9 |
| 229 | 19.8 | 15.8 | 23.8 |

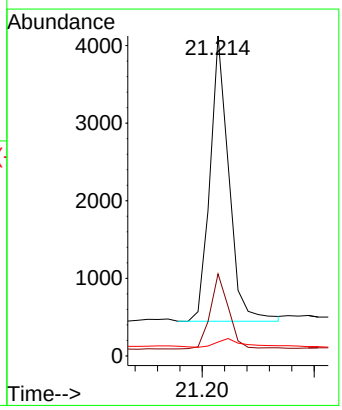


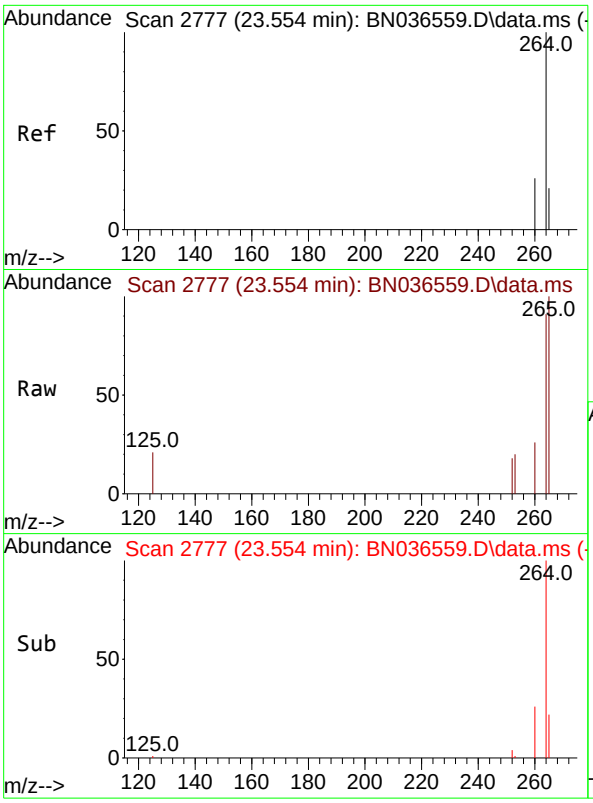




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.422 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:149 Resp: 4291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 25.9 | 20.7 | 31.1 |
| 279 | 4.5 | 3.6 | 5.4 |



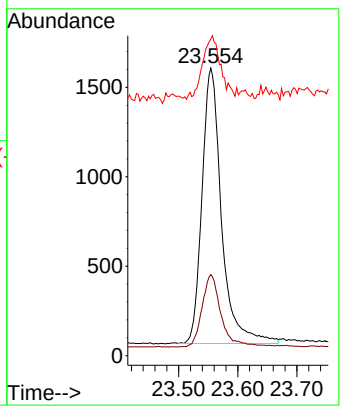


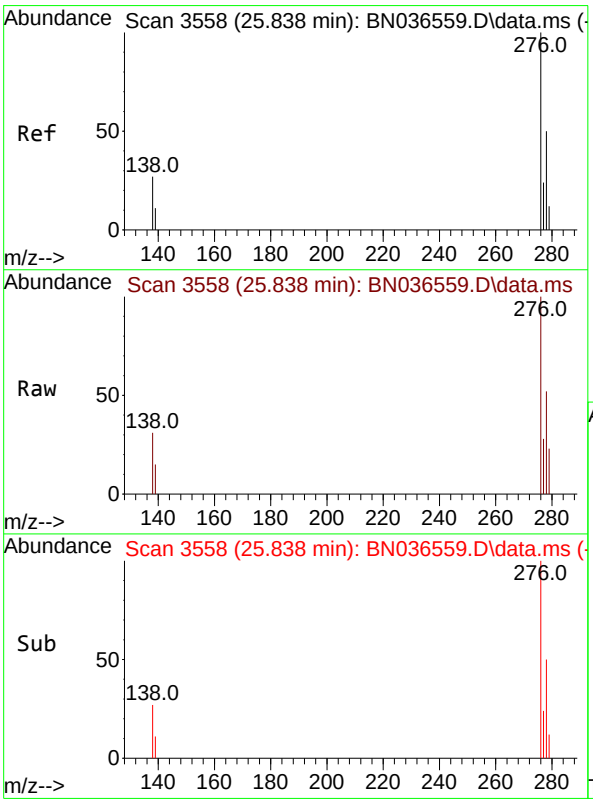

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:264 Resp: 3539

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 28.2 | 22.6 | 33.8 |
| 265 | 110.1 | 88.1 | 132.1 |

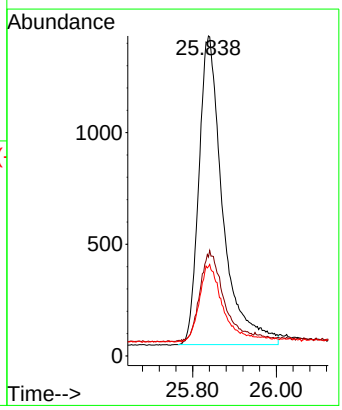


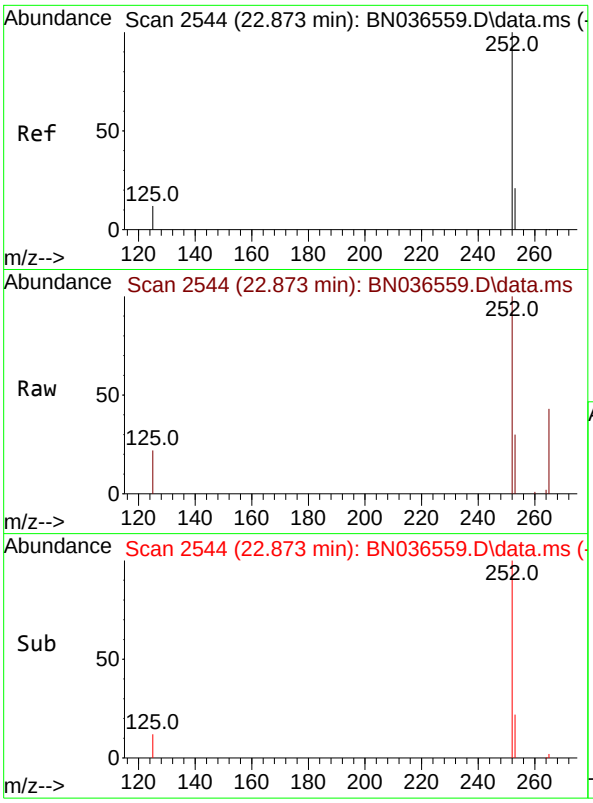




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.428 ng
RT: 25.838 min Scan# 3558
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:276 Resp: 5470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 29.3 | 23.4 | 35.2 |
| 277 | 25.0 | 20.0 | 30.0 |



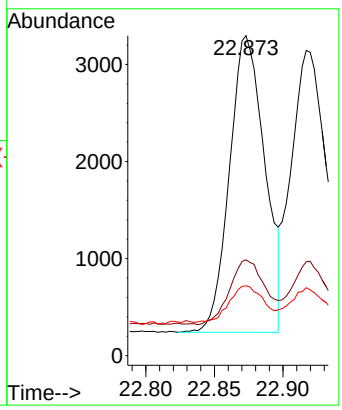


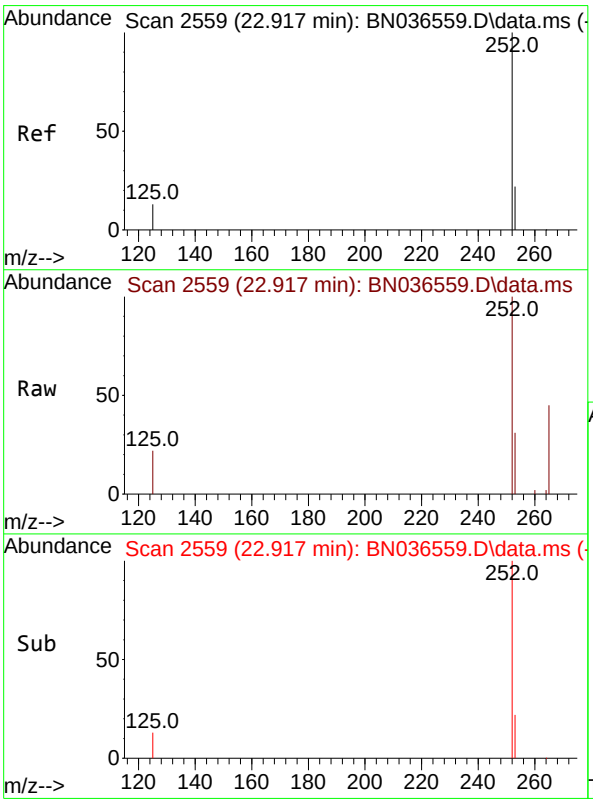

#37
Benzo(b)fluoranthene
Concen: 0.425 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:252 Resp: 5475

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.9 | 23.9 | 35.9 |
| 125 | 21.8 | 17.4 | 26.2 |

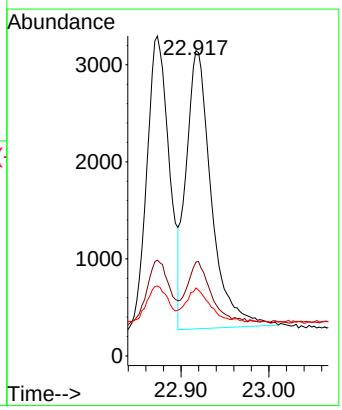


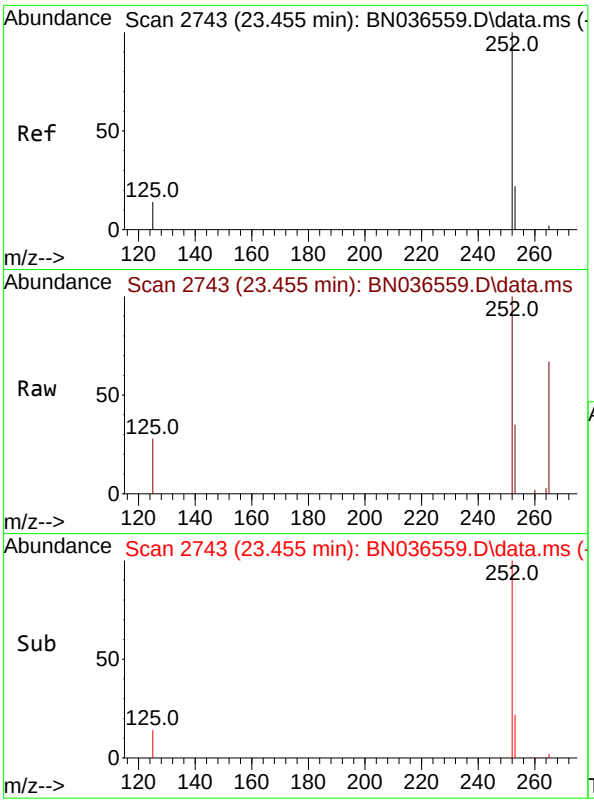




#38
Benzo(k)fluoranthene
Concen: 0.424 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:252 Resp: 5732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 30.7 | 24.6 | 36.8 |
| 125 | 22.3 | 17.8 | 26.8 |



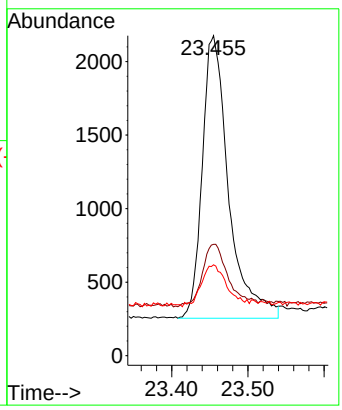


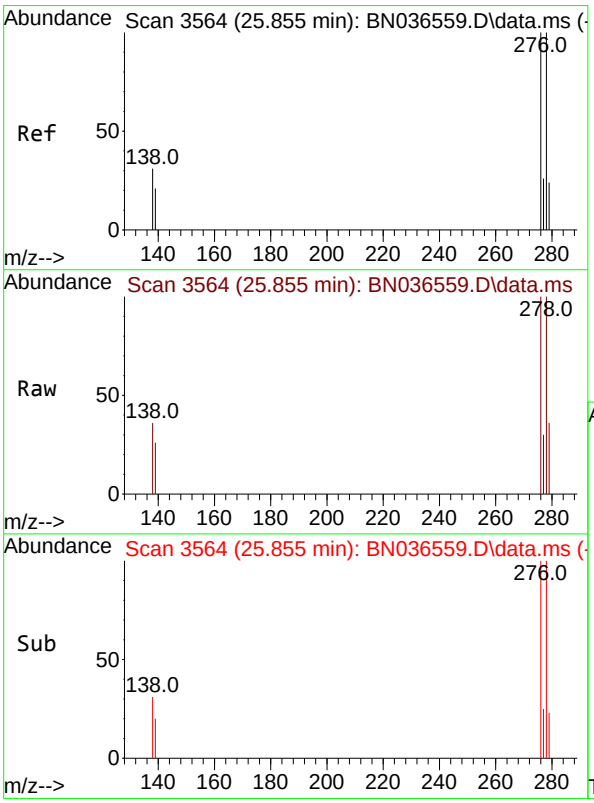

#39
Benzo(a)pyrene
Concen: 0.425 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:252 Resp: 4612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 34.8 | 27.8 | 41.8 |
| 125 | 28.4 | 22.7 | 34.1 |

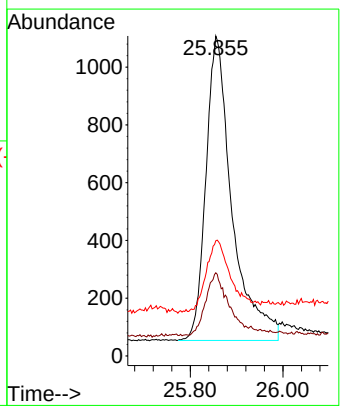


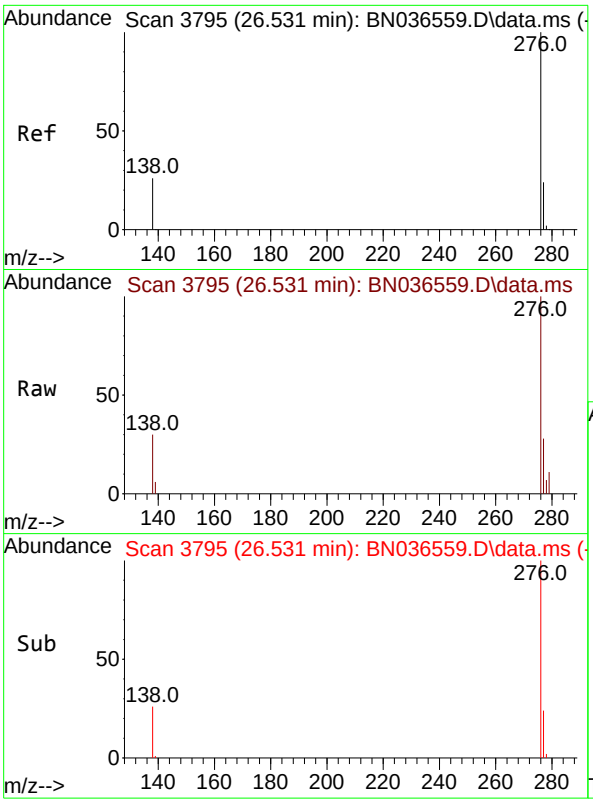




#40
Dibenzo(a,h)anthracene
Concen: 0.414 ng
RT: 25.855 min Scan# 3564
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:278 Resp: 4117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 26.0 | 20.8 | 31.2 |
| 279 | 36.0 | 28.8 | 43.2 |



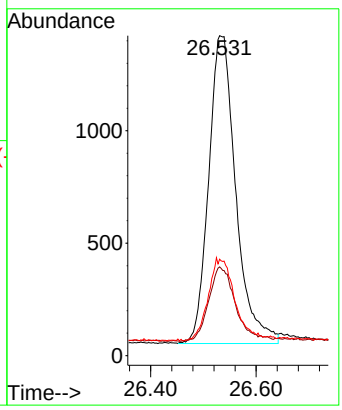



#41
Benzo(g,h,i)perylene
Concen: 0.430 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICCC0.4

Tgt Ion:276 Resp: 4891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 27.8 | 22.2 | 33.4 |
| 138 | 30.1 | 24.1 | 36.1 |



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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

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

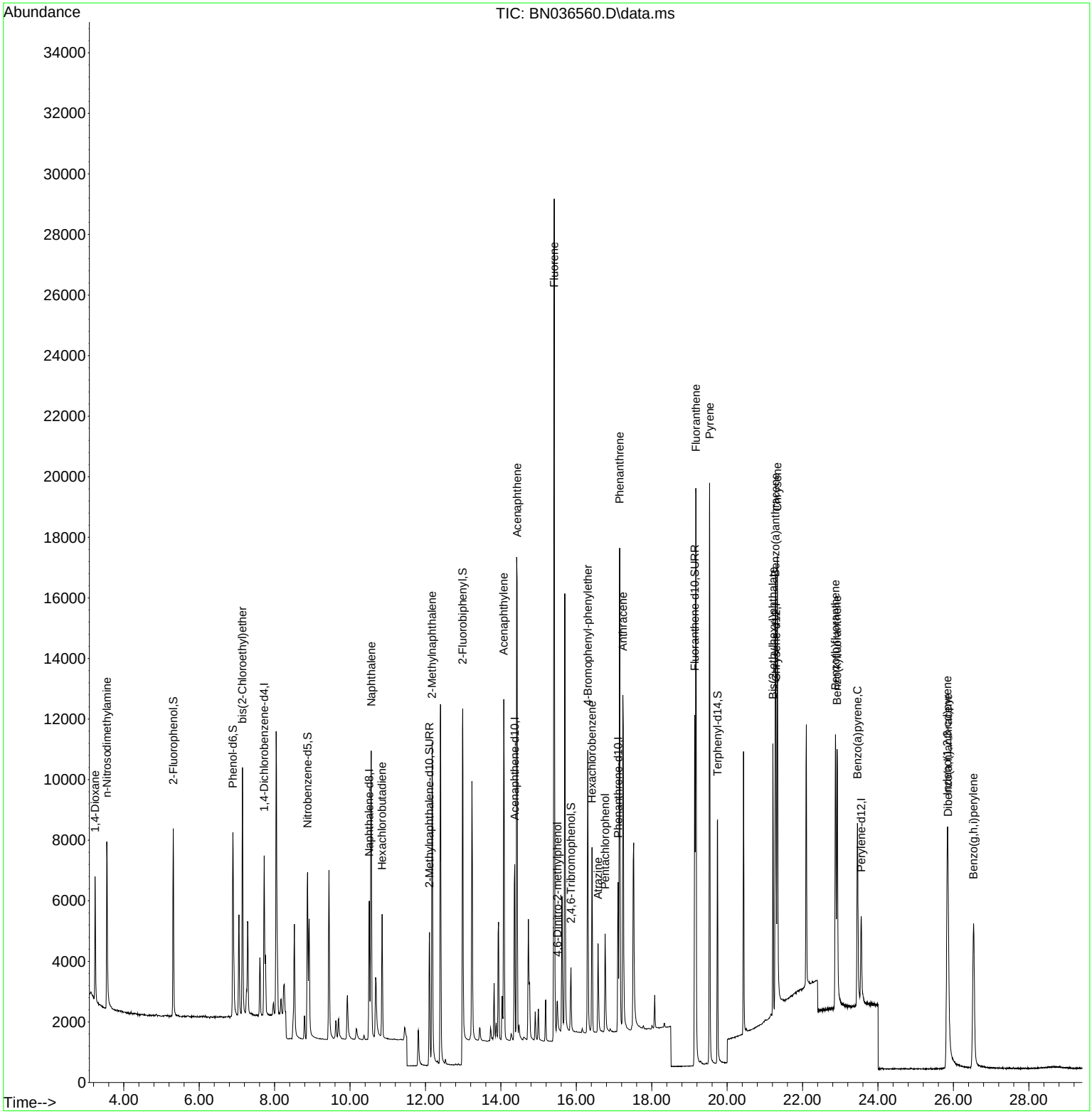
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 2495 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 5884 | 0.400 | ng | | 0.00 |
| 13) Acenaphthene-d10 |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

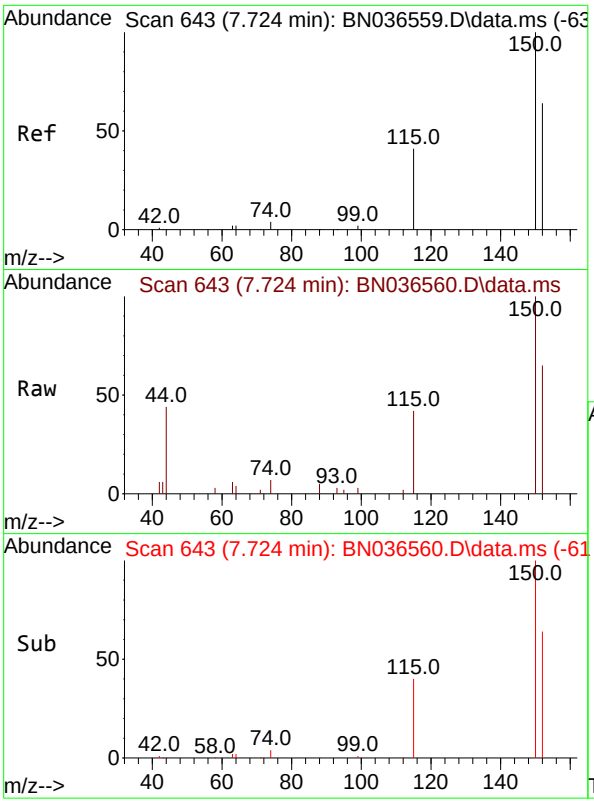
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

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



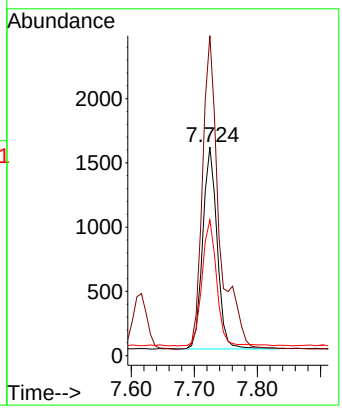


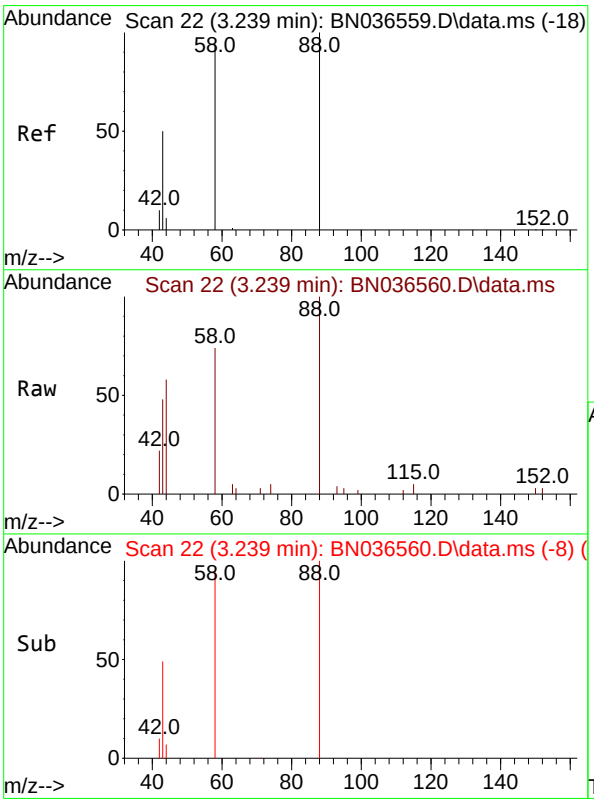

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:152 Resp: 2495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 153.3 | 123.7 | 185.5 |
| 115 | 65.1 | 54.3 | 81.5 |

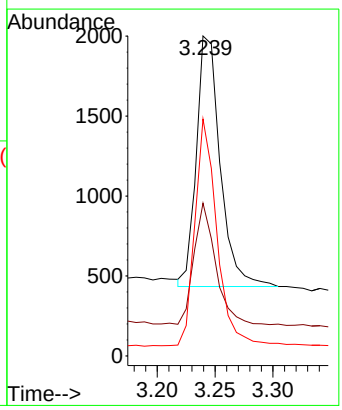


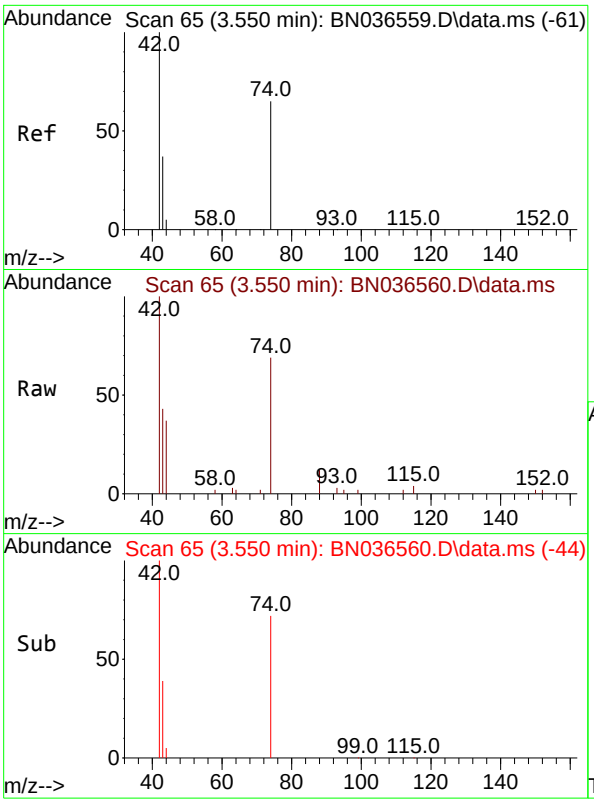




#2
1,4-Dioxane
Concen: 0.813 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion: 88 Resp: 2251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 45.6 | 37.8 | 56.8 |
| 58 | 84.5 | 67.4 | 101.2 |



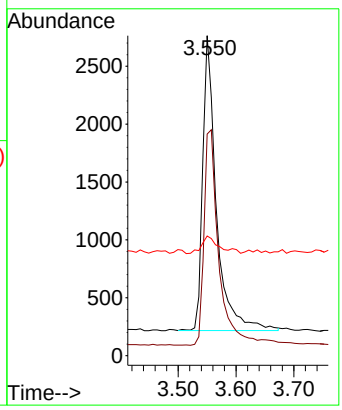


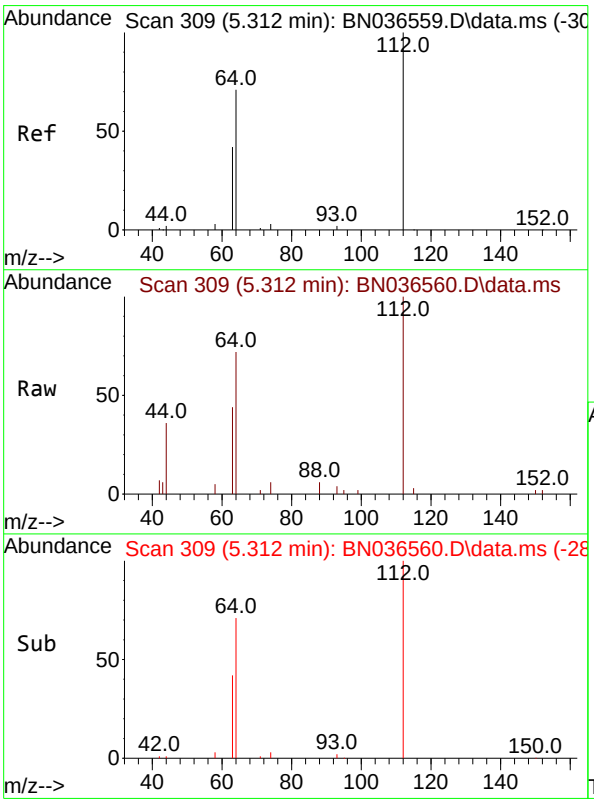

#3
n-Nitrosodimethylamine
Concen: 0.750 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion: 42 Resp: 4197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 79.3 | 60.6 | 90.8 |
| 44 | 7.4 | 6.3 | 9.5 |

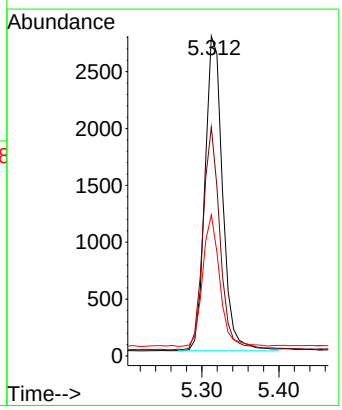


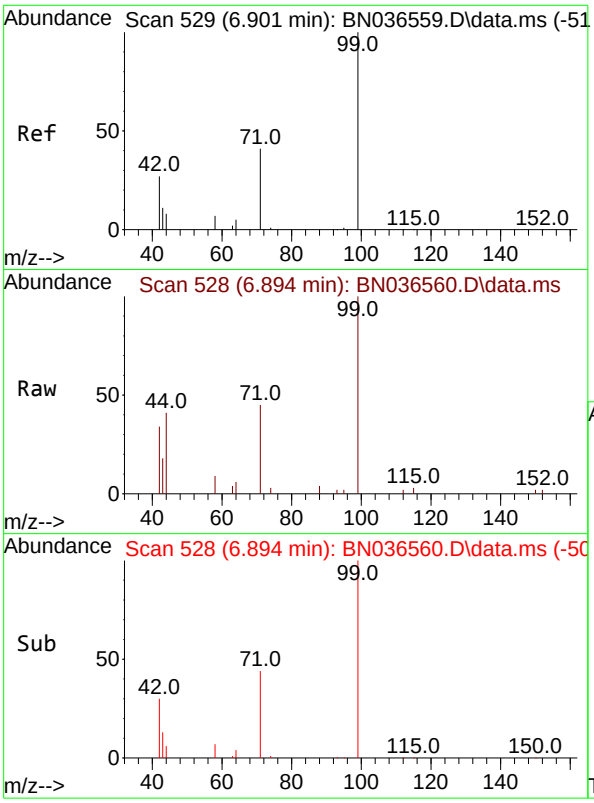




#4
2-Fluorophenol
Concen: 0.753 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:112 Resp: 4381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.8 | 53.1 | 79.7 |
| 63 | 40.4 | 31.8 | 47.8 |



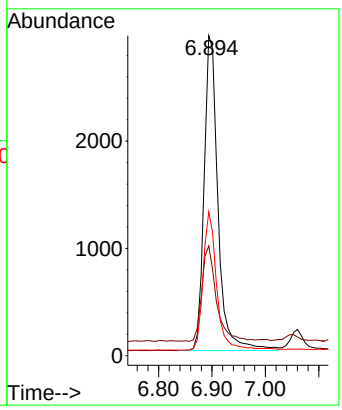


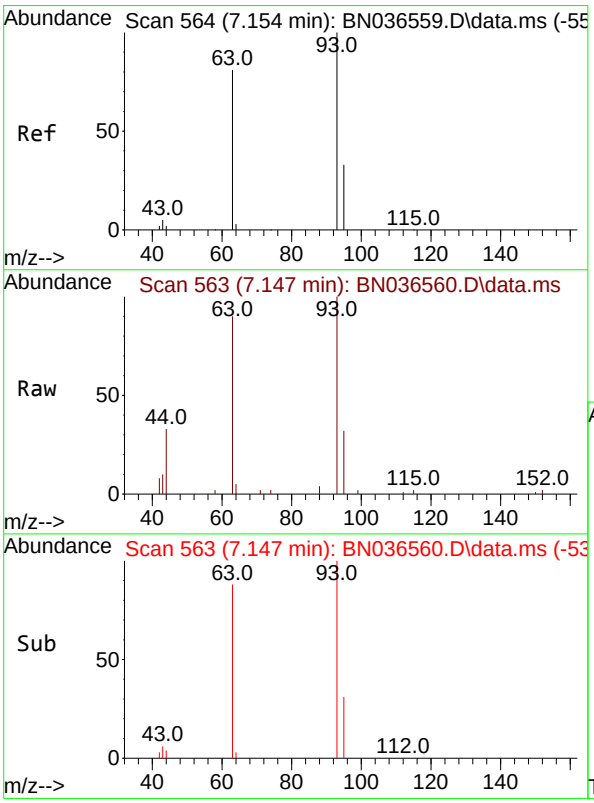

#5
Phenol-d6
Concen: 0.741 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion: 99 Resp: 5324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 31.3 | 26.5 | 39.7 |
| 71 | 42.6 | 34.1 | 51.1 |

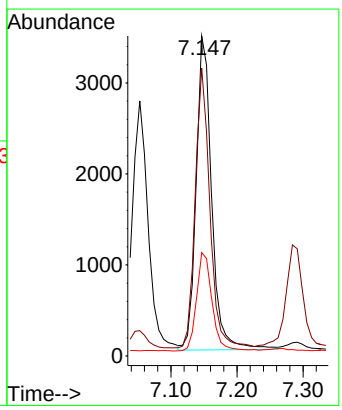


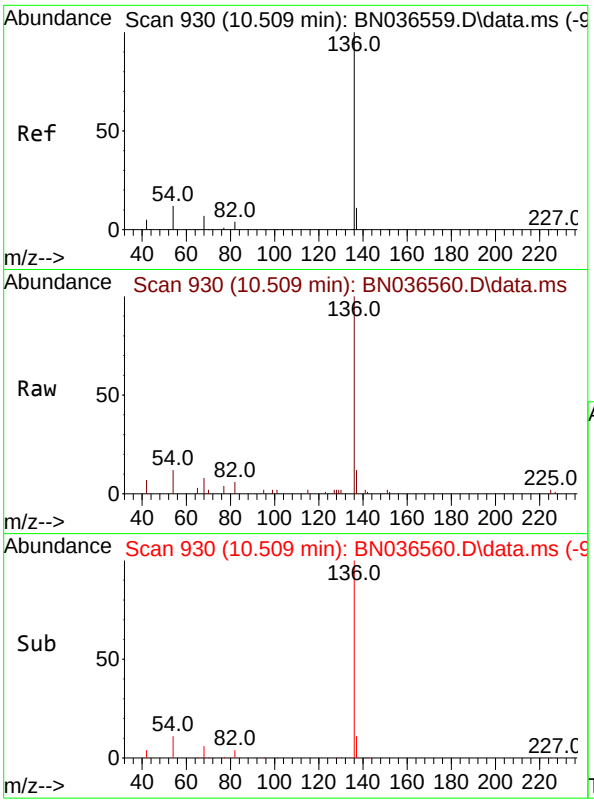




#6
bis(2-Chloroethyl)ether
Concen: 0.759 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion: 93 Resp: 5632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 84.0 | 67.7 | 101.5 |
| 95 | 31.6 | 25.6 | 38.4 |



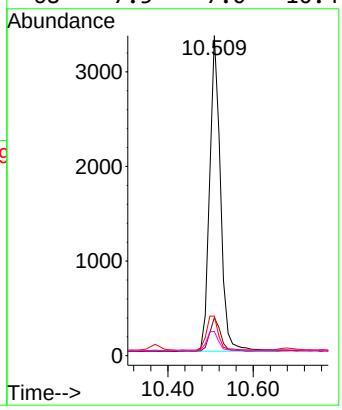


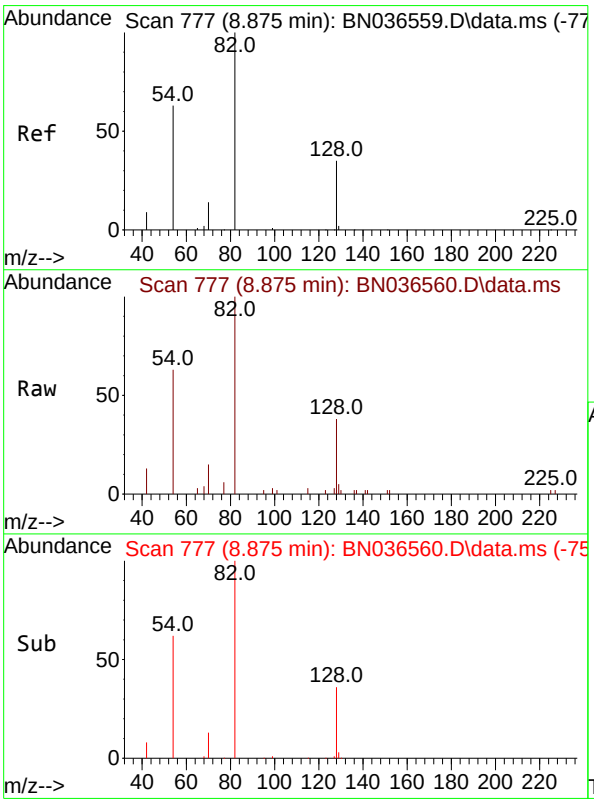

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:136 Resp: 5884

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

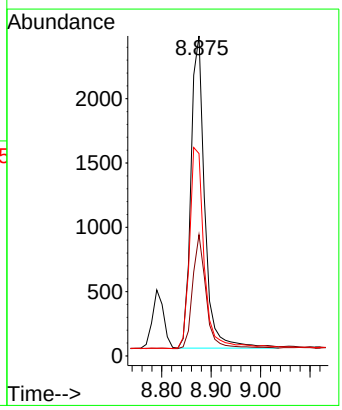


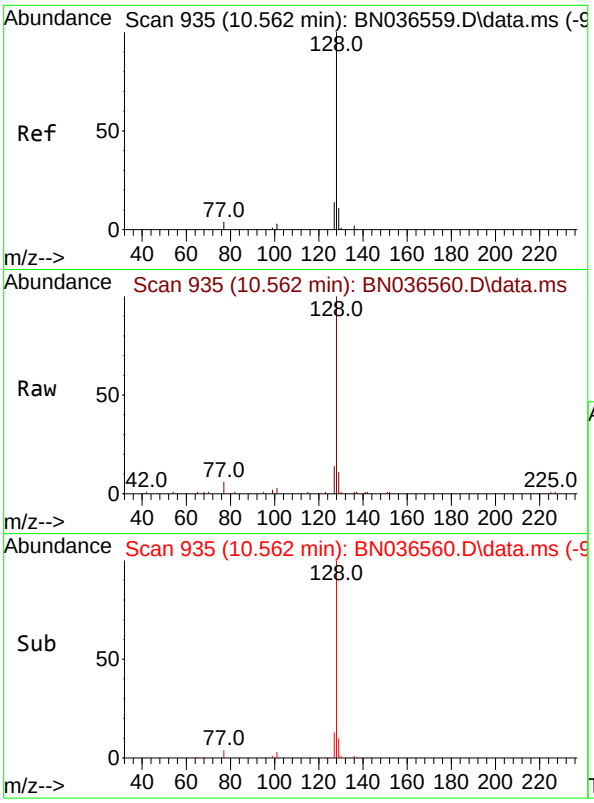




#8
Nitrobenzene-d5
Concen: 0.737 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion: 82 Resp: 4717

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



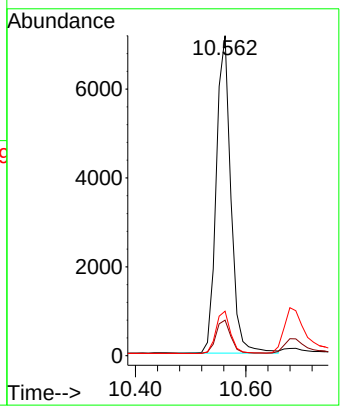


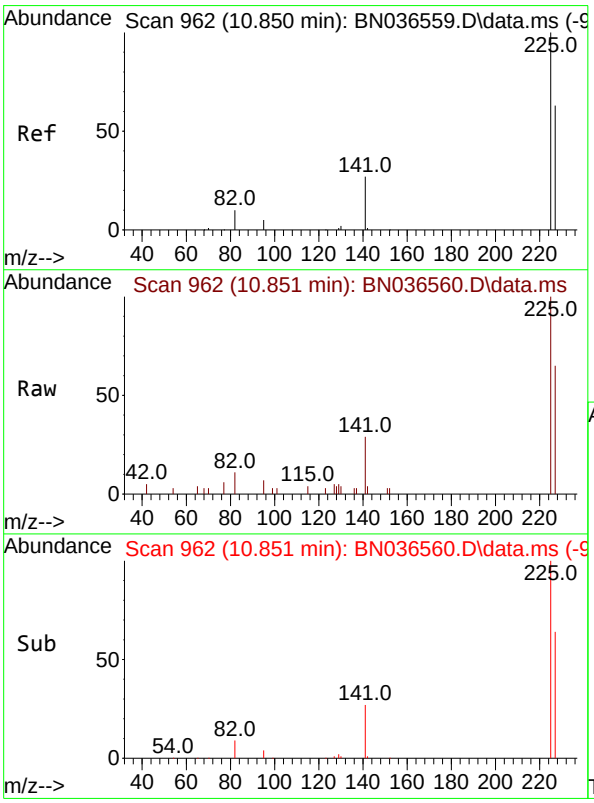

#9
Naphthalene
Concen: 0.756 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:128 Resp: 13078

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.1 | 9.8 | 14.6 |
| 127 | 13.9 | 11.8 | 17.8 |

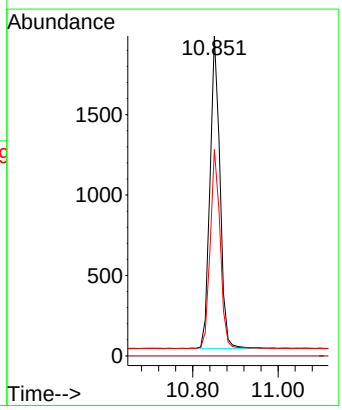


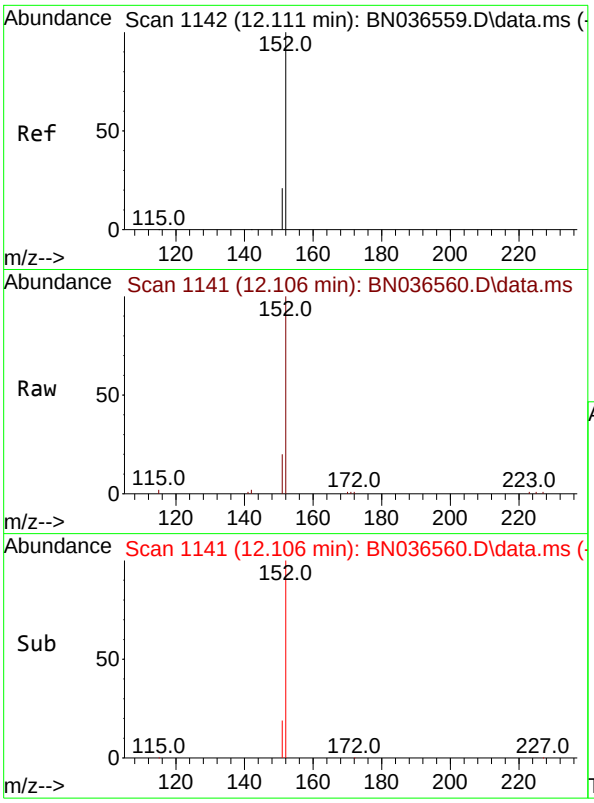




#10
Hexachlorobutadiene
Concen: 0.772 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:225 Resp: 3147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.7 | 51.8 | 77.8 |



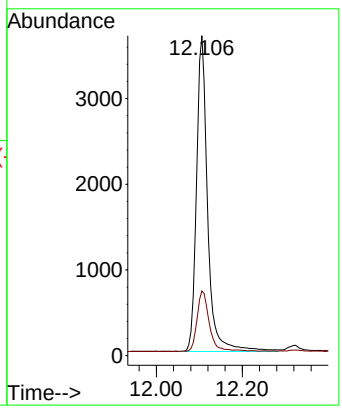


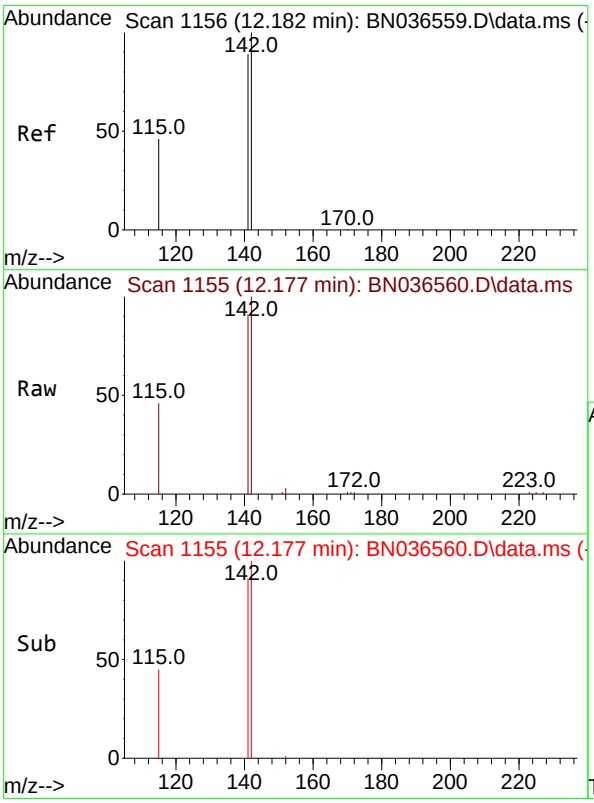

#11
2-Methylnaphthalene-d10
Concen: 0.756 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:152 Resp: 6616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.8 | 17.0 | 25.6 |

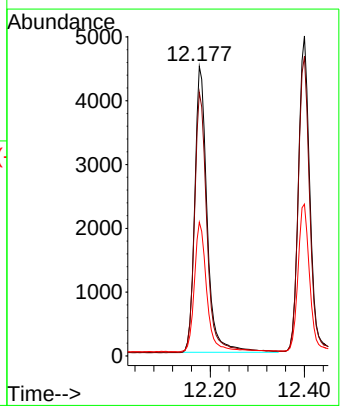


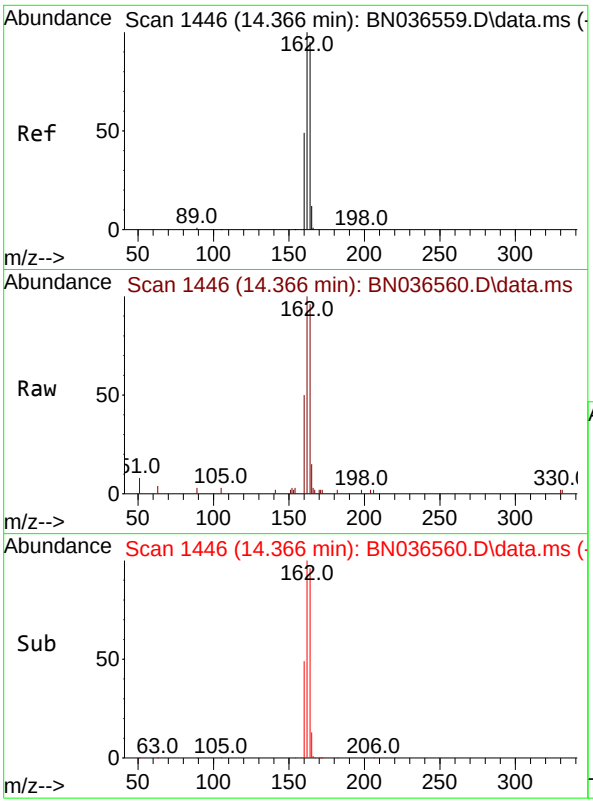




#12
2-Methylnaphthalene
Concen: 0.751 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:142 Resp: 8272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.0 | 71.7 | 107.5 |
| 115 | 46.2 | 38.3 | 57.5 |



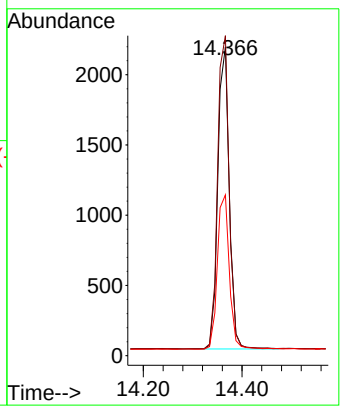


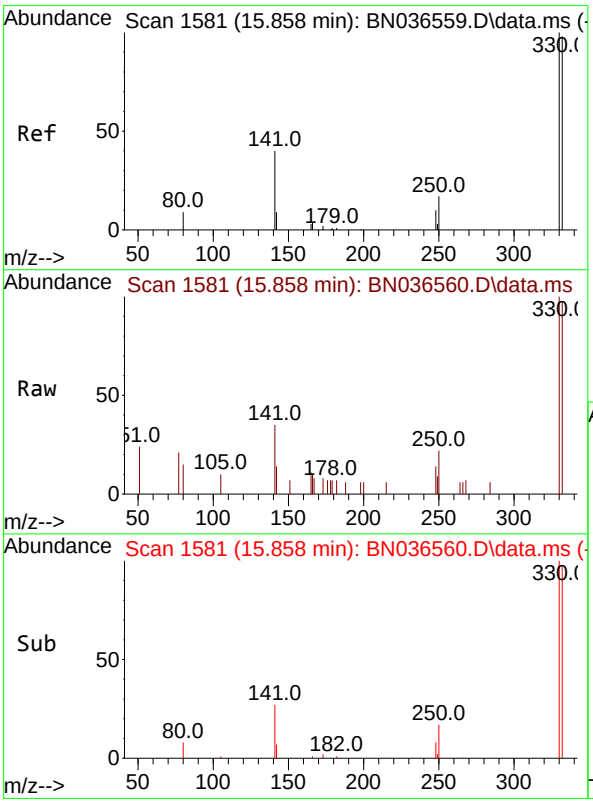

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:164 Resp: 3456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 103.6 | 84.2 | 126.2 |
| 160 | 52.1 | 42.2 | 63.2 |

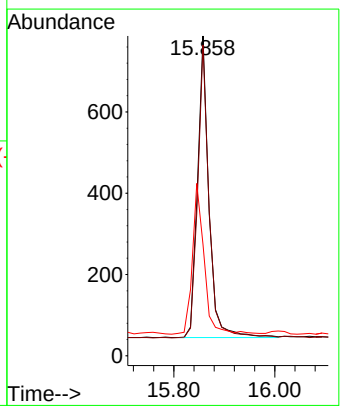


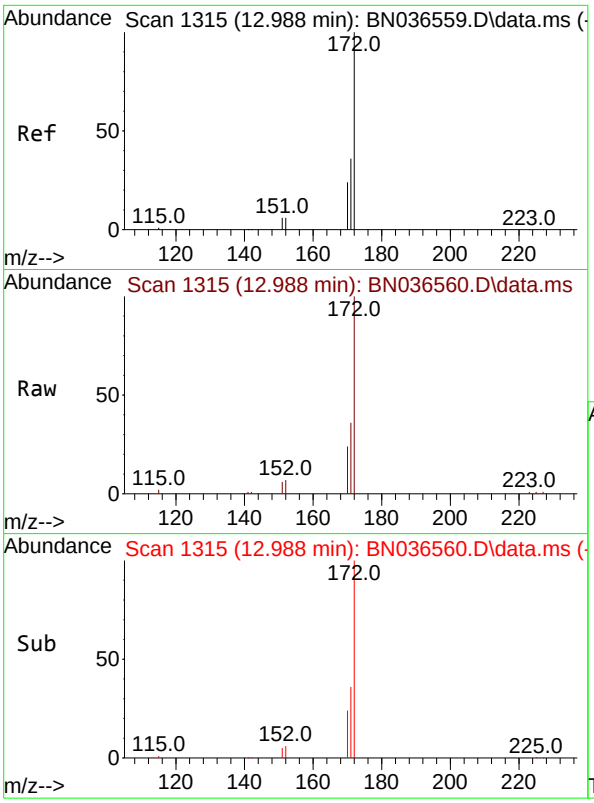




#14
2,4,6-Tribromophenol
Concen: 0.744 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:330 Resp: 1166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 97.6 | 75.2 | 112.8 |
| 141 | 51.8 | 43.4 | 65.2 |



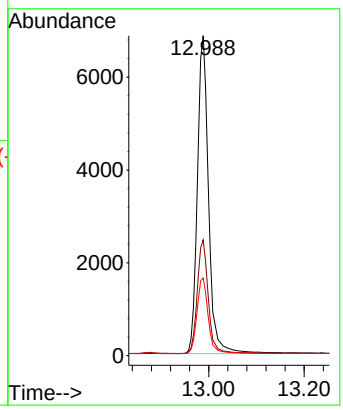


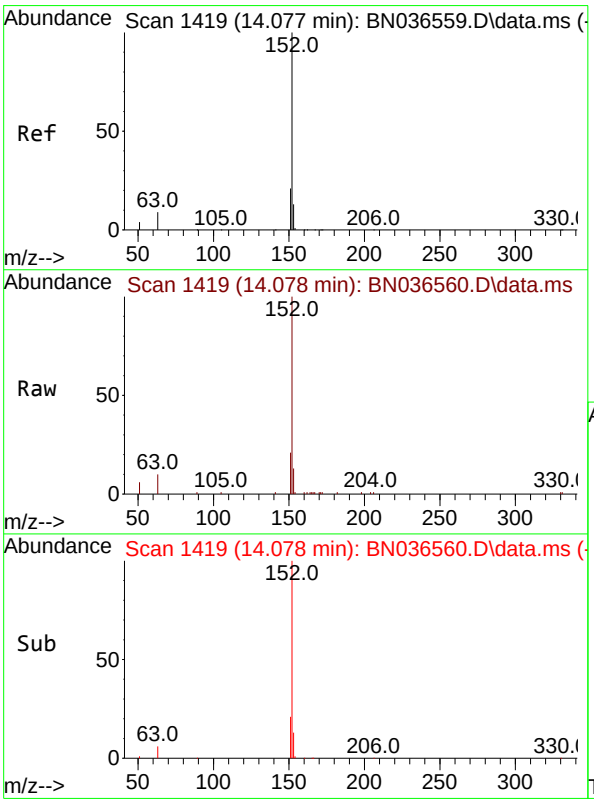

#15
2-Fluorobiphenyl
Concen: 0.808 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:172 Resp: 16243

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

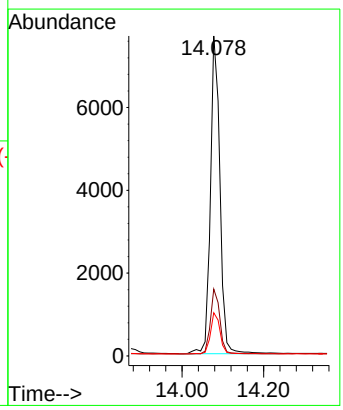


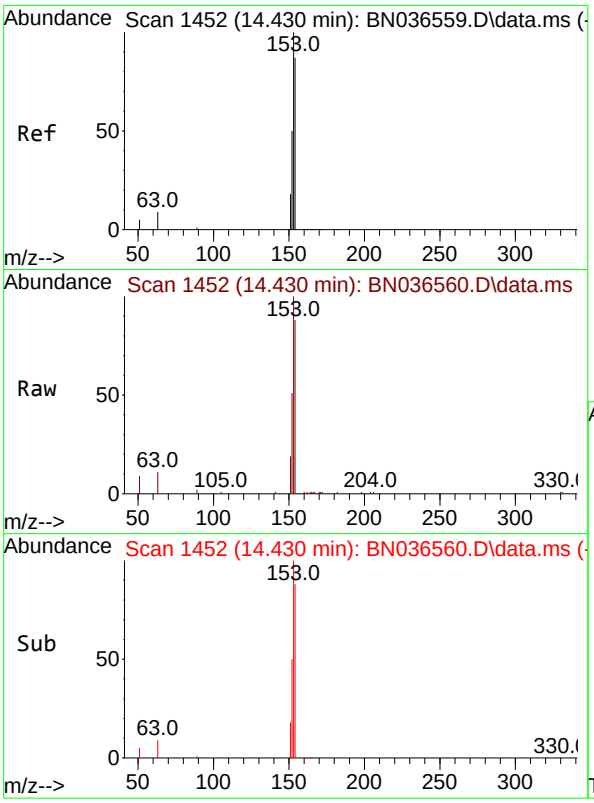




#16
Acenaphthylene
Concen: 0.760 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:152 Resp: 12403

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



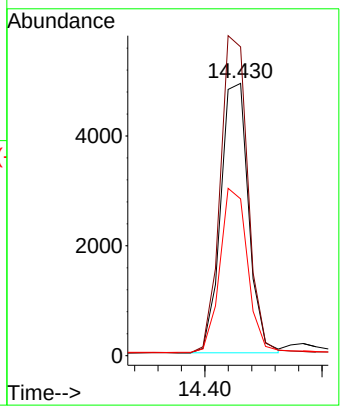


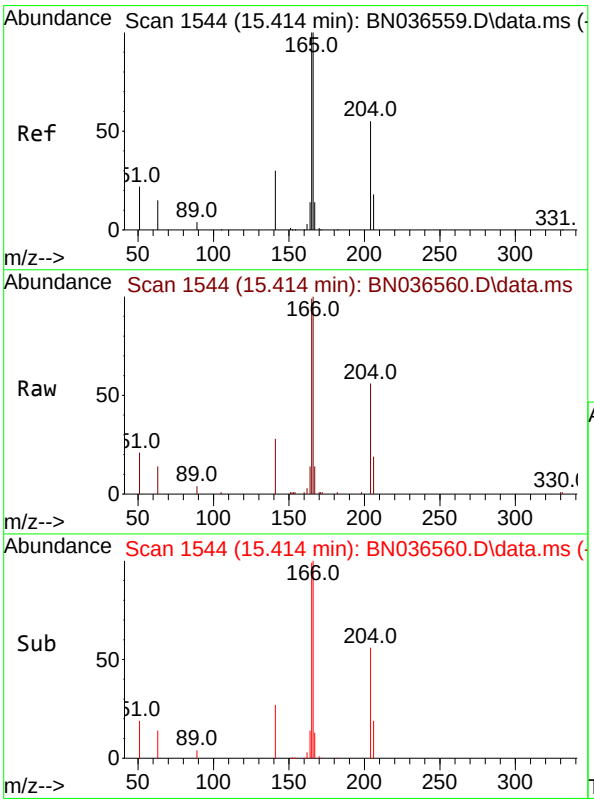

#17
Acenaphthene
Concen: 0.758 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:154 Resp: 8096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.8 | 94.1 | 141.1 |
| 152 | 60.9 | 49.8 | 74.6 |

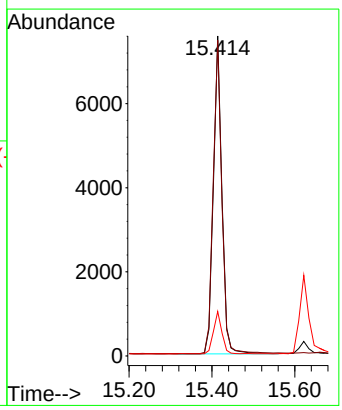


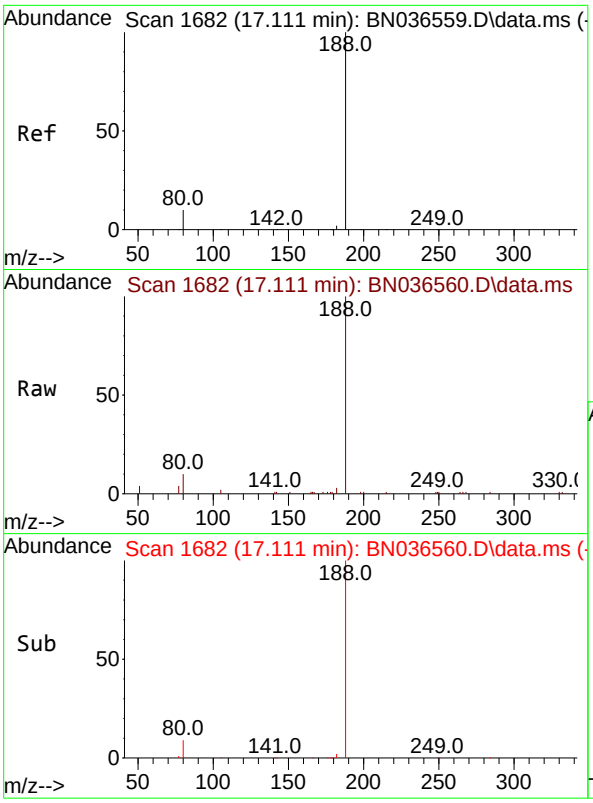




#18
Fluorene
Concen: 0.770 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:166 Resp: 11120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.8 | 79.8 | 119.8 |
| 167 | 13.3 | 10.6 | 15.8 |



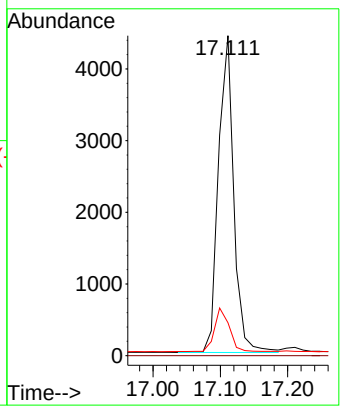


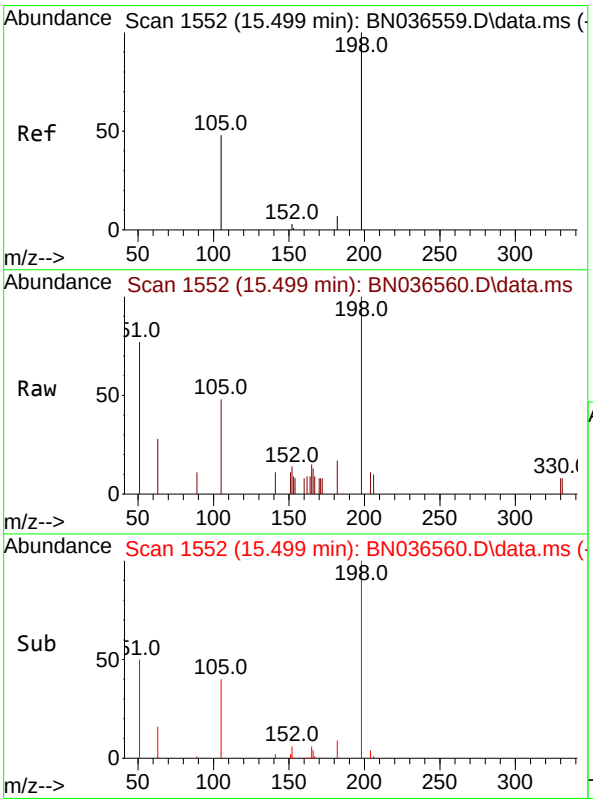

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:188 Resp: 6971

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 10.3 | 8.8 | 13.2 |

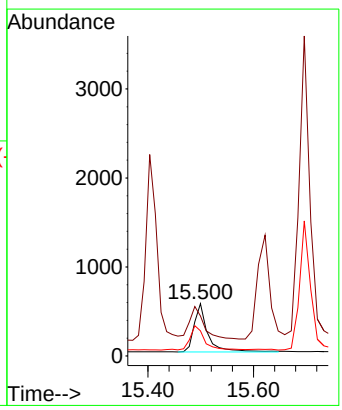


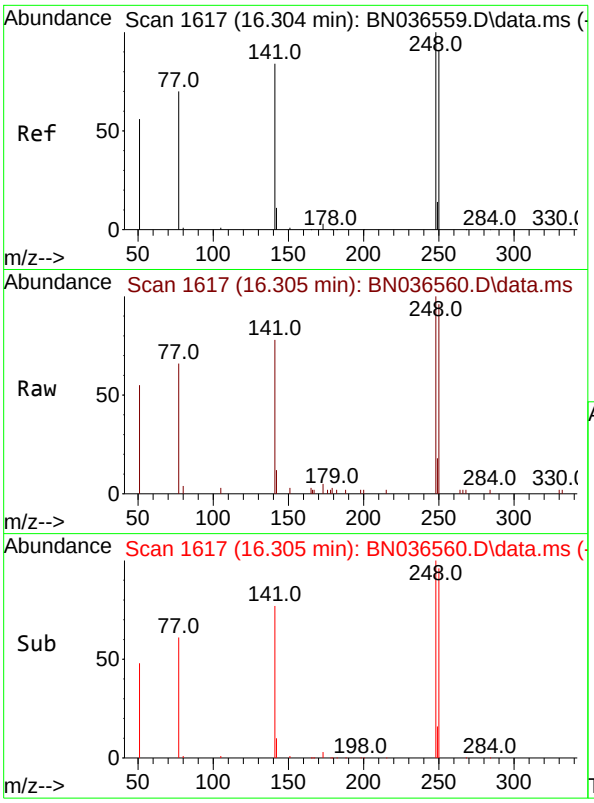




#20
4,6-Dinitro-2-methylphenol
Concen: 0.724 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:198 Resp: 1039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 76.5 | 107.9 | 161.9# |
| 105 | 48.1 | 56.2 | 84.2# |



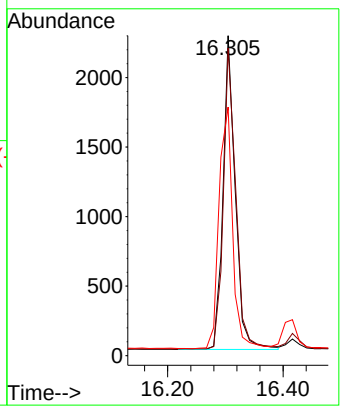


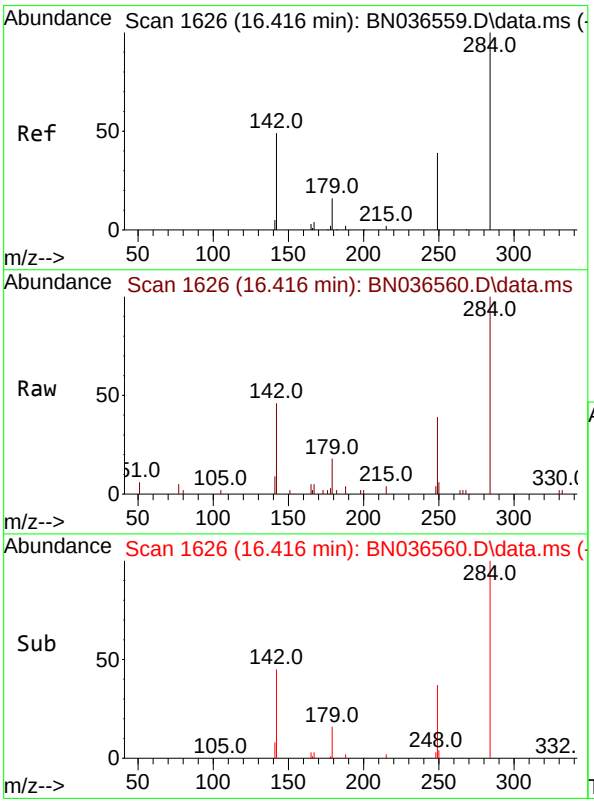

#21
4-Bromophenyl-phenylether
Concen: 0.761 ng
RT: 16.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:248 Resp: 3324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 96.2 | 73.0 | 109.6 |
| 141 | 77.7 | 68.6 | 103.0 |

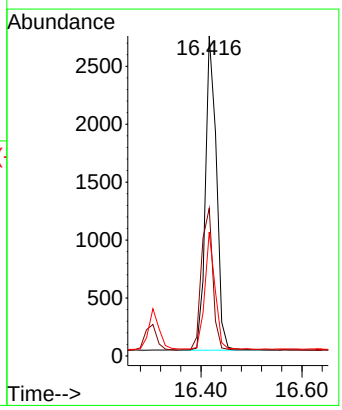


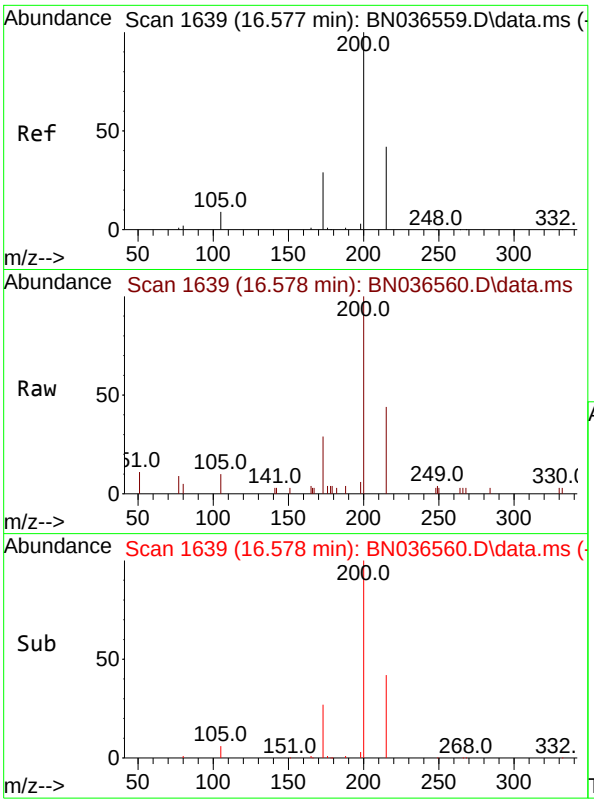




#22
Hexachlorobenzene
Concen: 0.780 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:284 Resp: 4115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 47.2 | 37.0 | 55.4 |
| 249 | 34.7 | 28.1 | 42.1 |



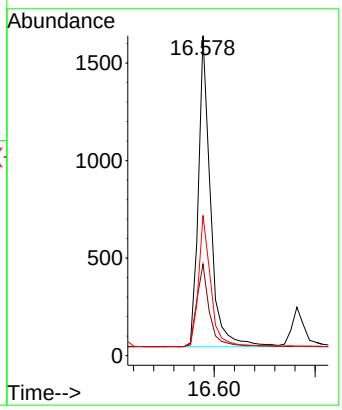


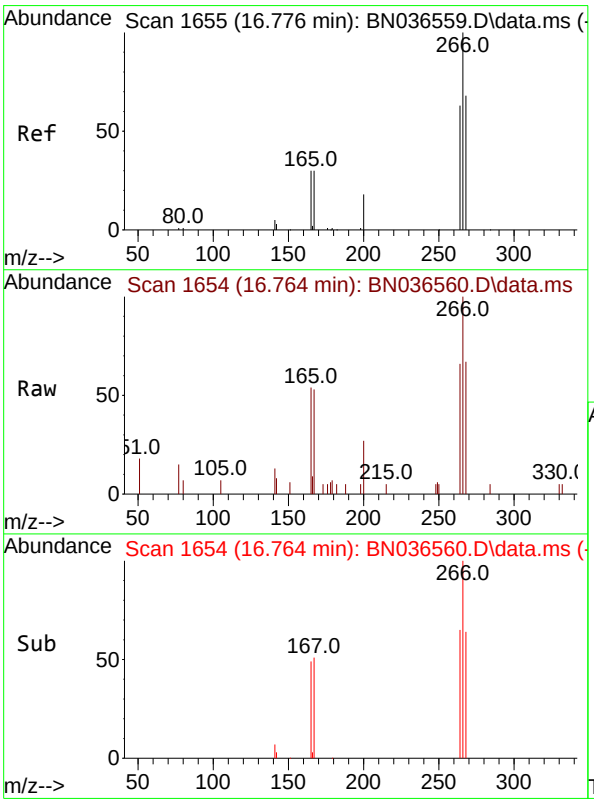

#23
Atrazine
Concen: 0.764 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:200 Resp: 2677

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

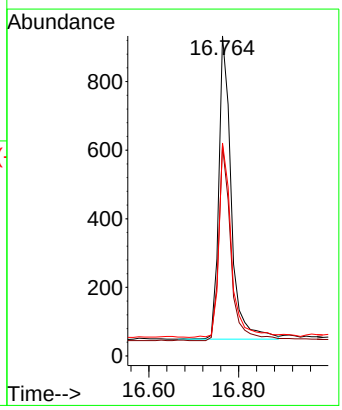


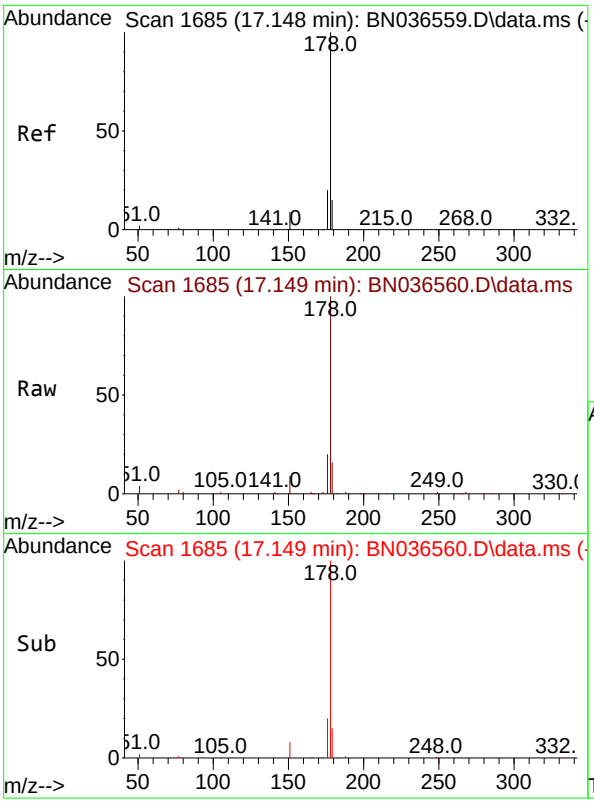




#24
Pentachlorophenol
Concen: 0.707 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:266 Resp: 1701

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



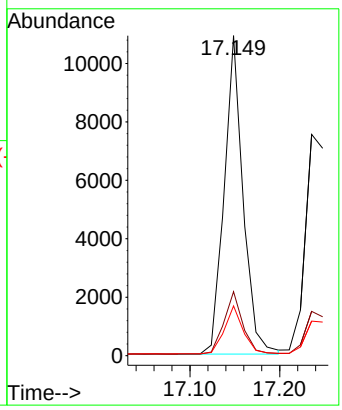


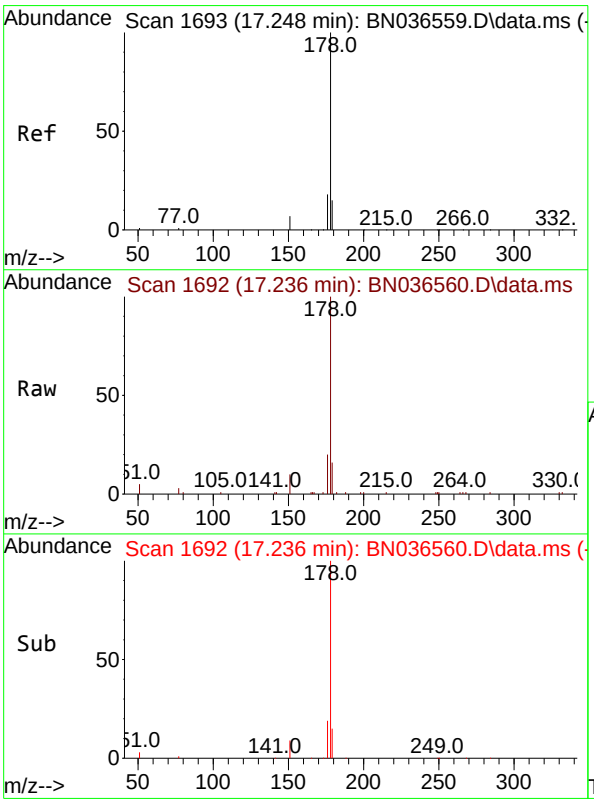

#25
Phenanthrene
Concen: 0.761 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:178 Resp: 15910

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.6 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |

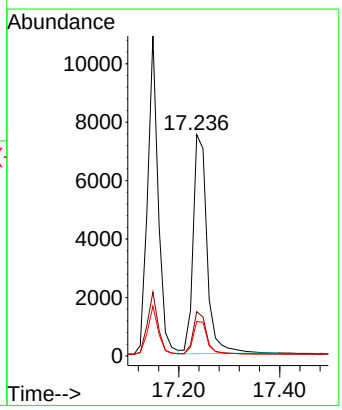


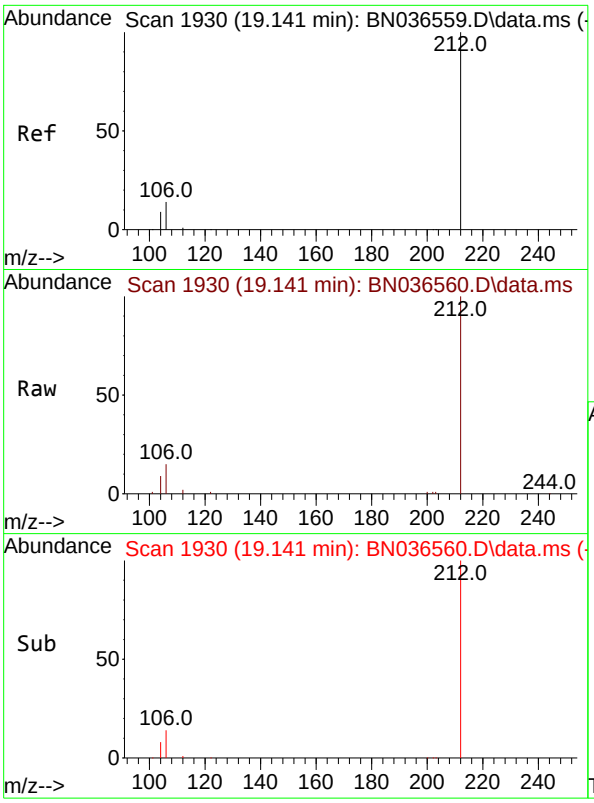




#26
Anthracene
Concen: 0.763 ng
RT: 17.236 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:178 Resp: 14403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.8 | 15.4 | 23.2 |
| 179 | 15.1 | 12.6 | 18.8 |



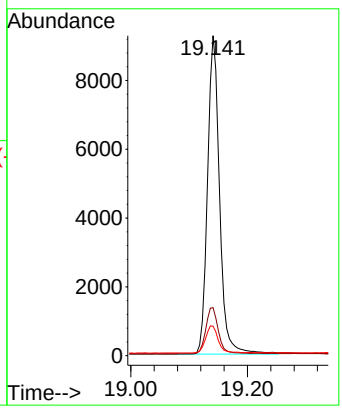


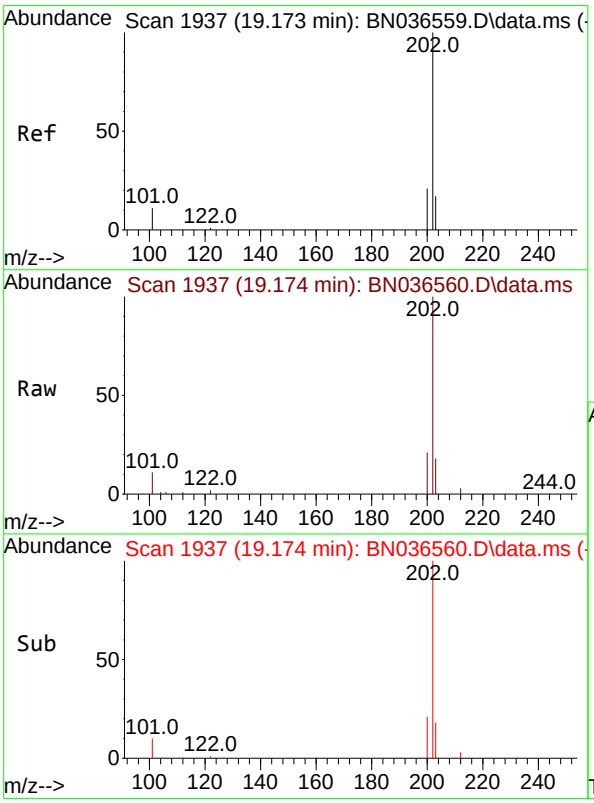

#27
Fluoranthene-d10
Concen: 0.746 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:212 Resp: 13330

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.2 | 11.8 | 17.6 |
| 104 | 8.9 | 7.3 | 10.9 |

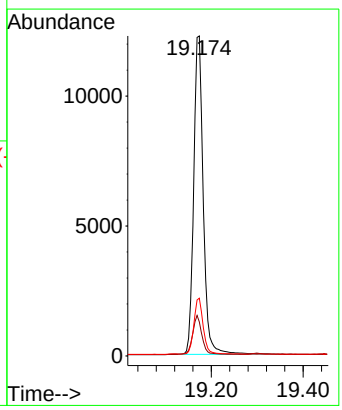


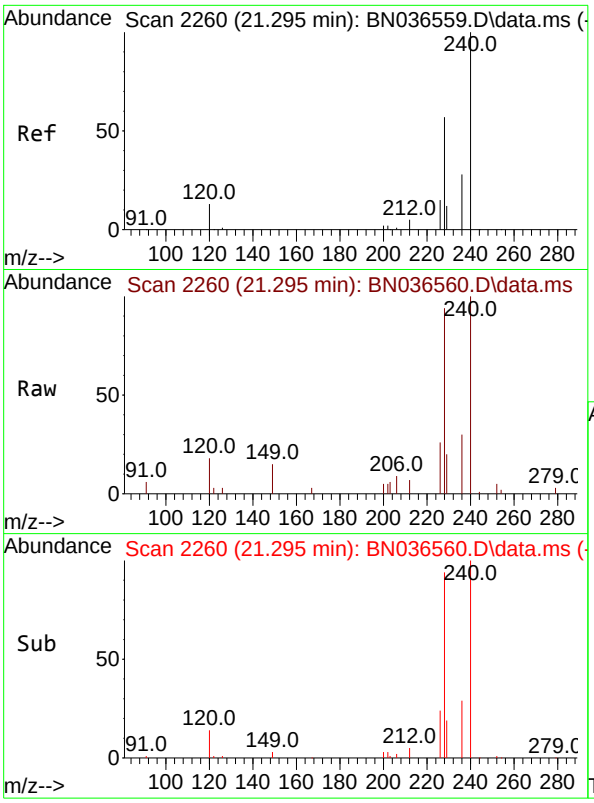




#28
Fluoranthene
Concen: 0.755 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:202 Resp: 17738

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.1 | 9.4 | 14.0 |
| 203 | 17.0 | 13.5 | 20.3 |



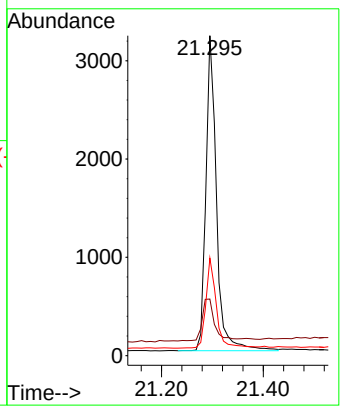


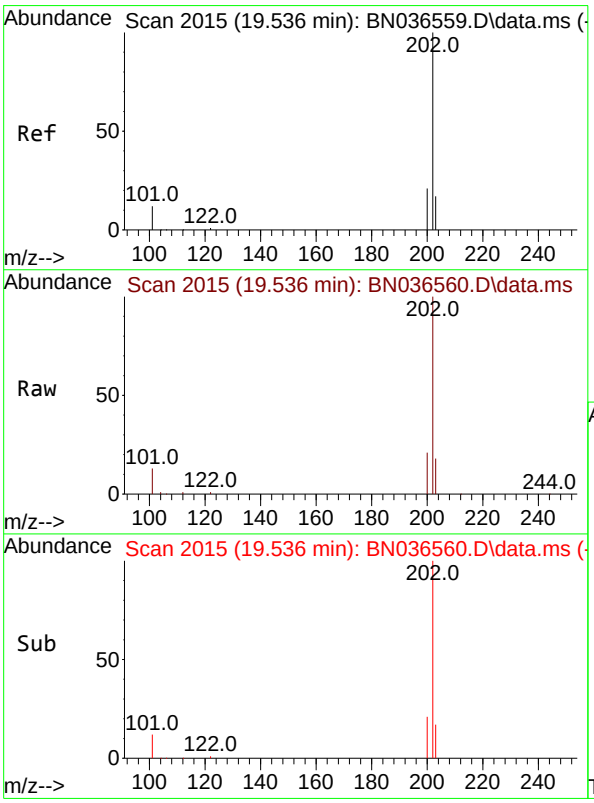

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:240 Resp: 4636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 17.7 | 14.6 | 22.0 |
| 236 | 30.5 | 24.1 | 36.1 |

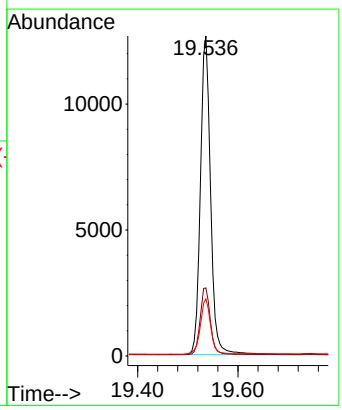


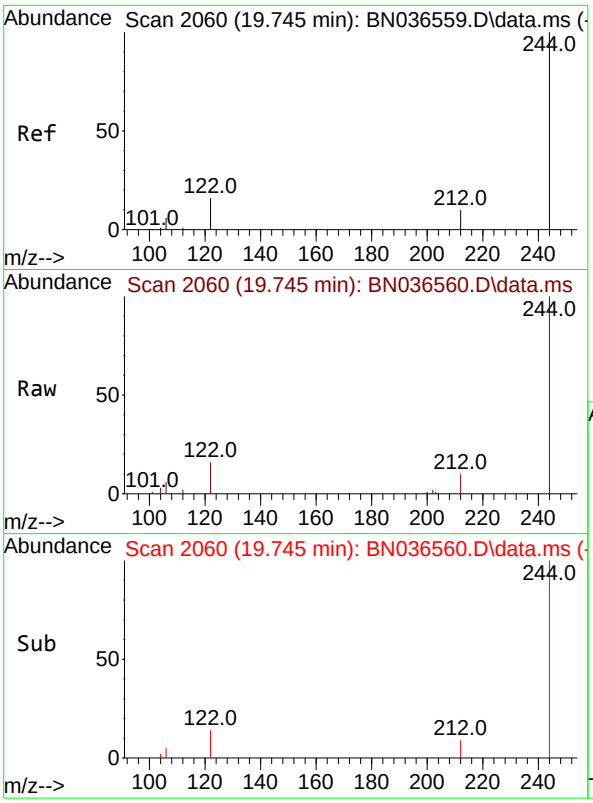




#30
Pyrene
Concen: 0.781 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:202 Resp: 17714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |



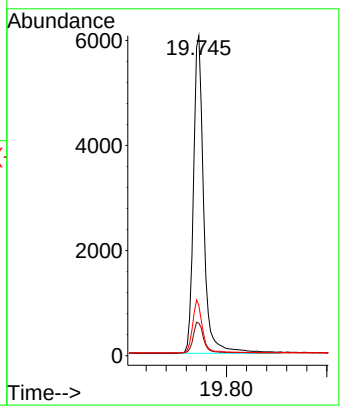


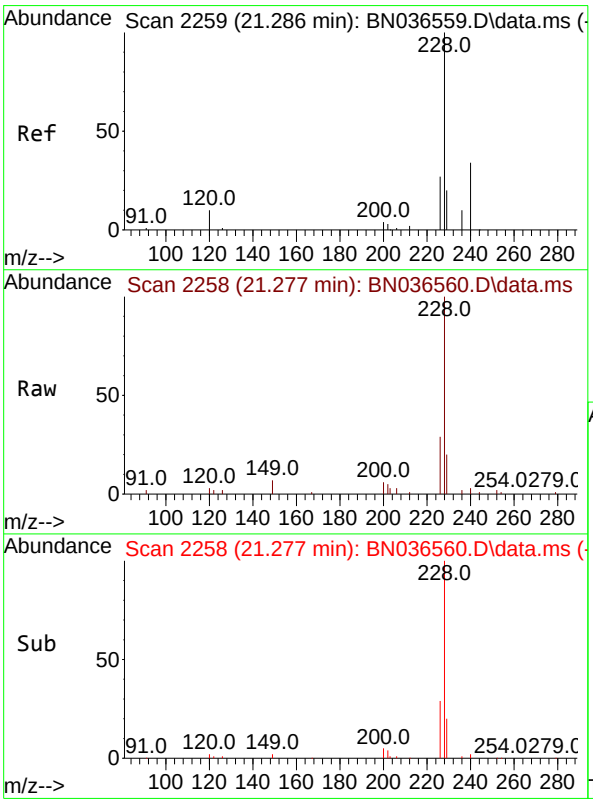

#31
Terphenyl-d14
Concen: 0.772 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:244 Resp: 8571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 10.1 | 9.6 | 14.4 |
| 122 | 15.8 | 13.9 | 20.9 |

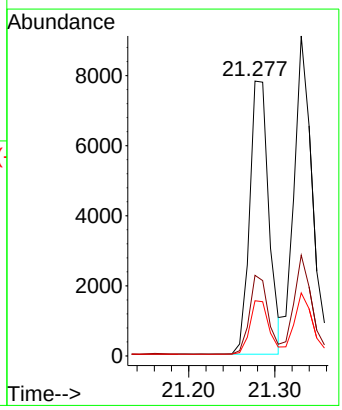


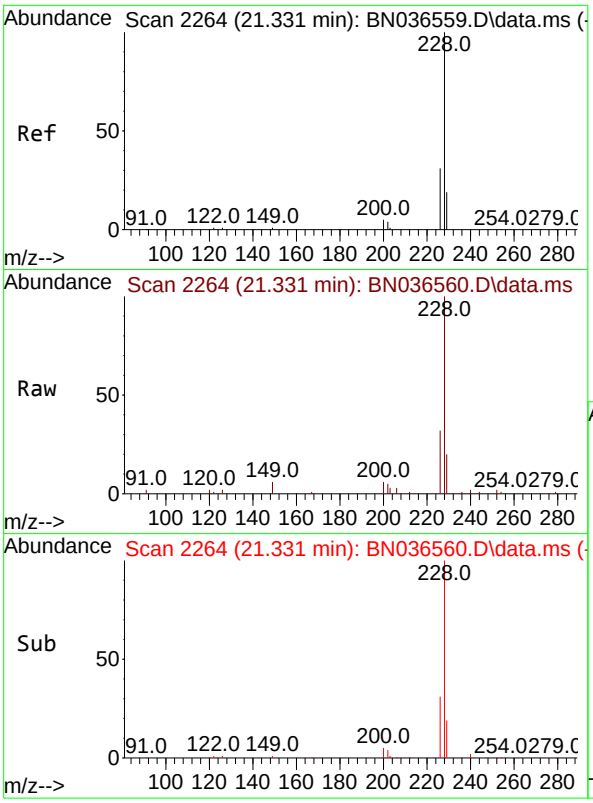




#32
Benzo(a)anthracene
Concen: 0.750 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:228 Resp: 12089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.3 | 22.5 | 33.7 |
| 229 | 20.1 | 16.6 | 25.0 |



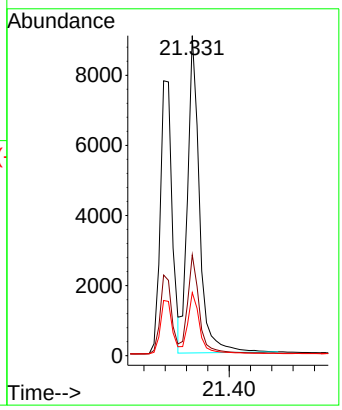


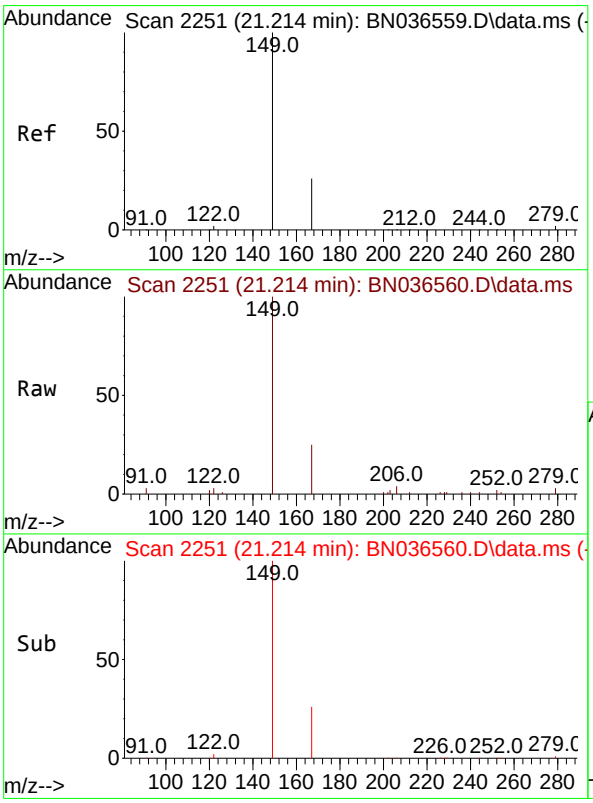

#33
Chrysene
Concen: 0.793 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:228 Resp: 13974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.5 | 25.3 | 37.9 |
| 229 | 19.7 | 15.8 | 23.8 |

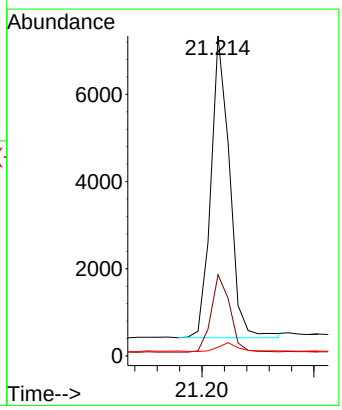


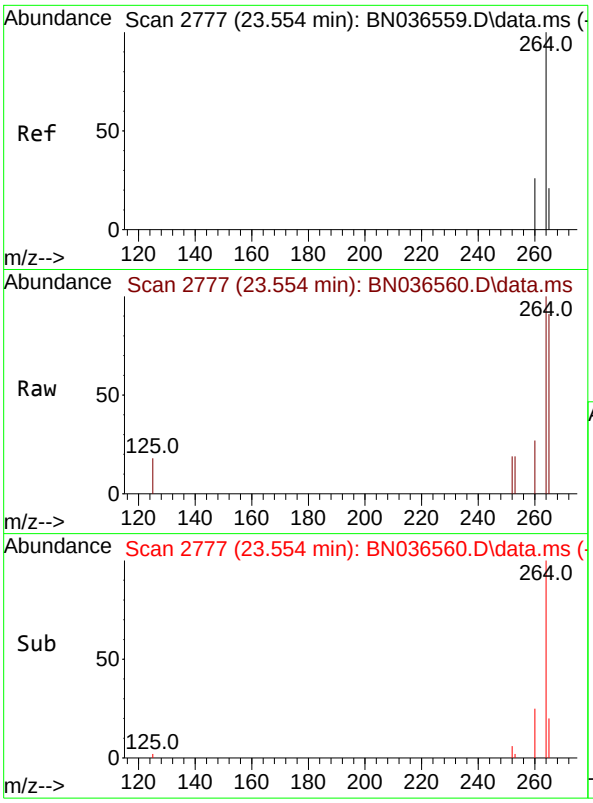




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.699 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:149 Resp: 8021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 25.9 | 20.7 | 31.1 |
| 279 | 3.2 | 3.6 | 5.4# |



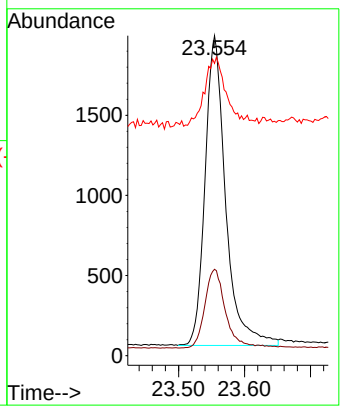


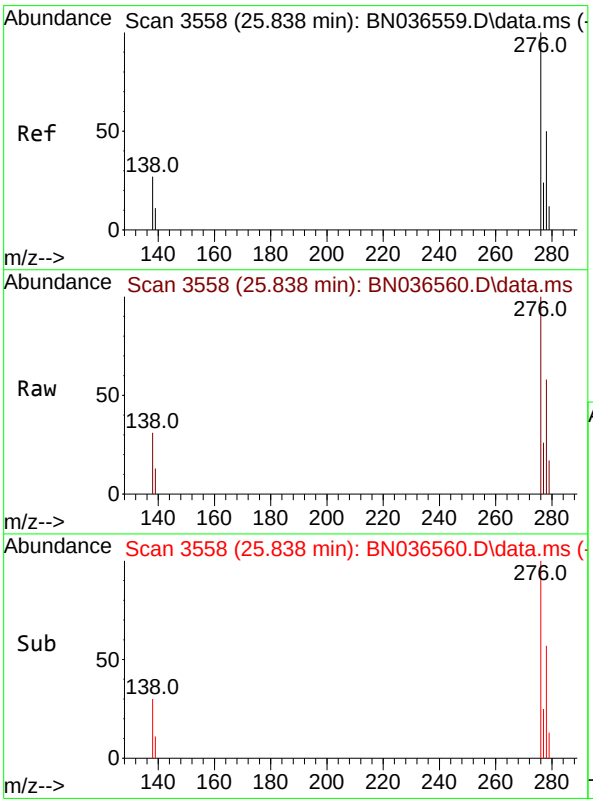

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:264 Resp: 4198

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.0 | 22.6 | 33.8 |
| 265 | 91.3 | 88.1 | 132.1 |

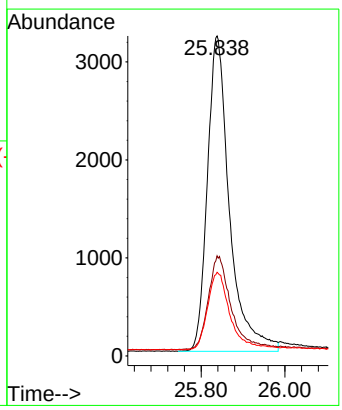


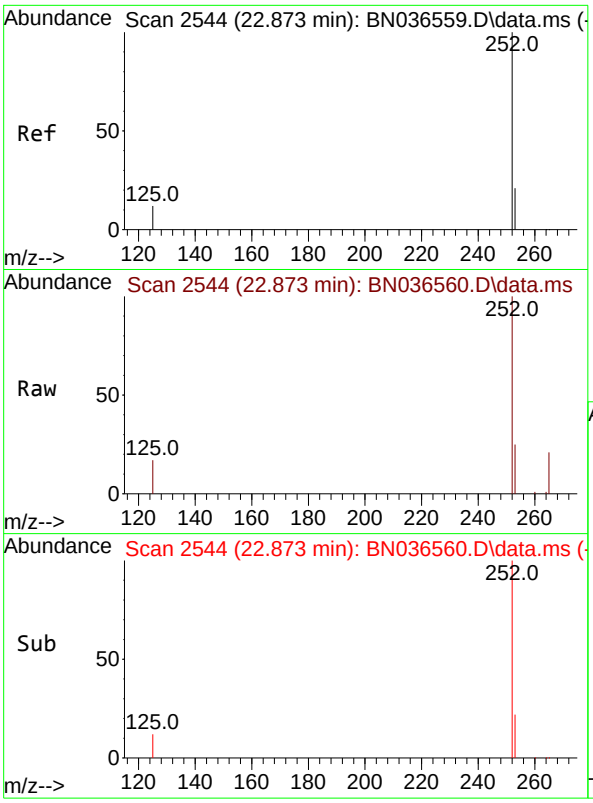




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.778 ng
RT: 25.838 min Scan# 3558
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:276 Resp: 11785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 29.6 | 23.4 | 35.2 |
| 277 | 24.7 | 20.0 | 30.0 |



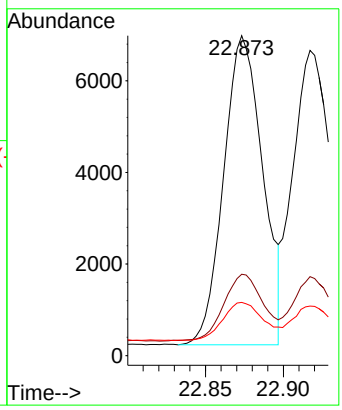


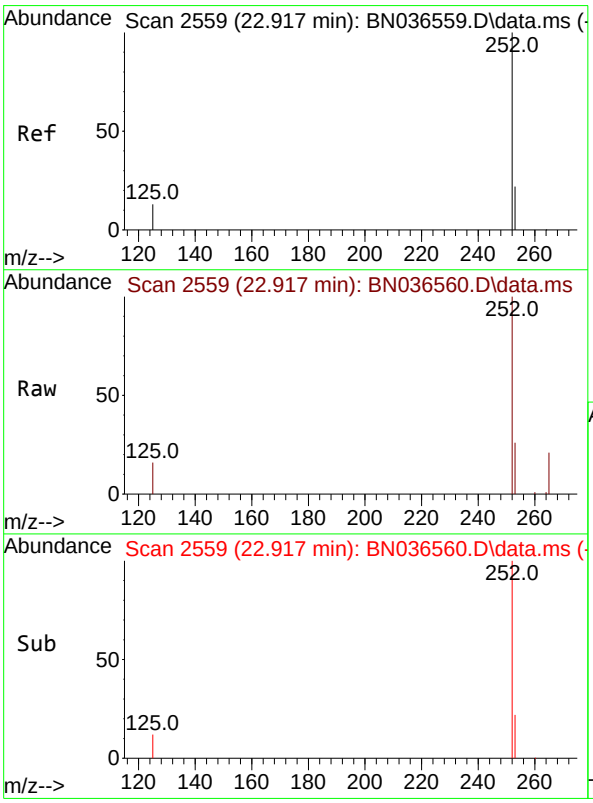

#37
Benzo(b)fluoranthene
Concen: 0.770 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:252 Resp: 11771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 25.5 | 23.9 | 35.9 |
| 125 | 16.7 | 17.4 | 26.2# |

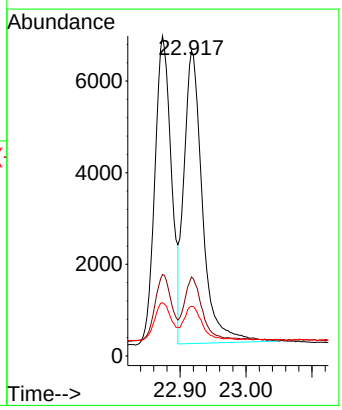


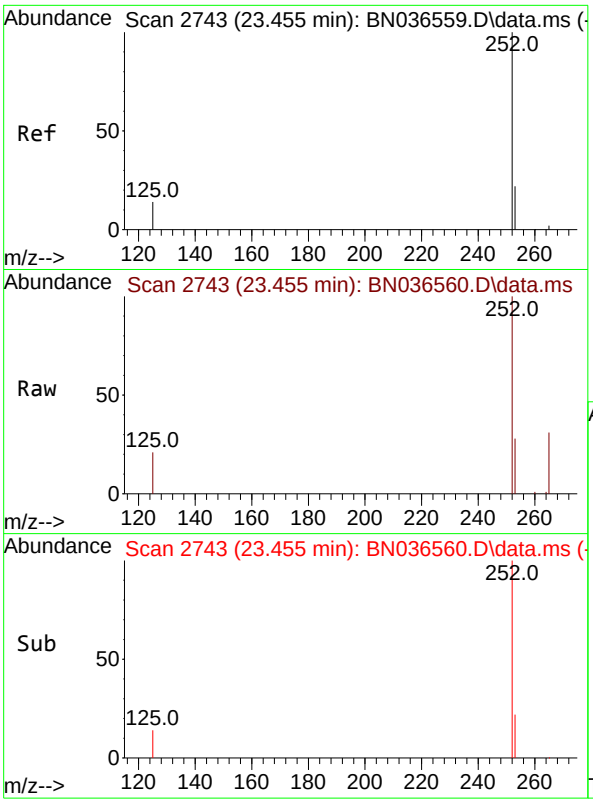




#38
Benzo(k)fluoranthene
Concen: 0.776 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:252 Resp: 12432

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 25.9 | 24.6 | 36.8 |
| 125 | 16.2 | 17.8 | 26.8# |



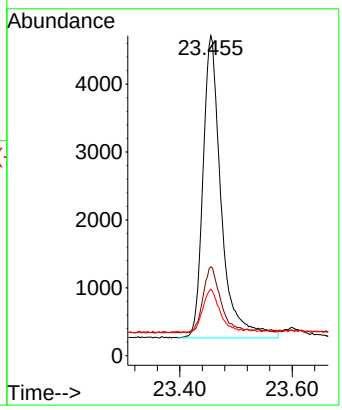


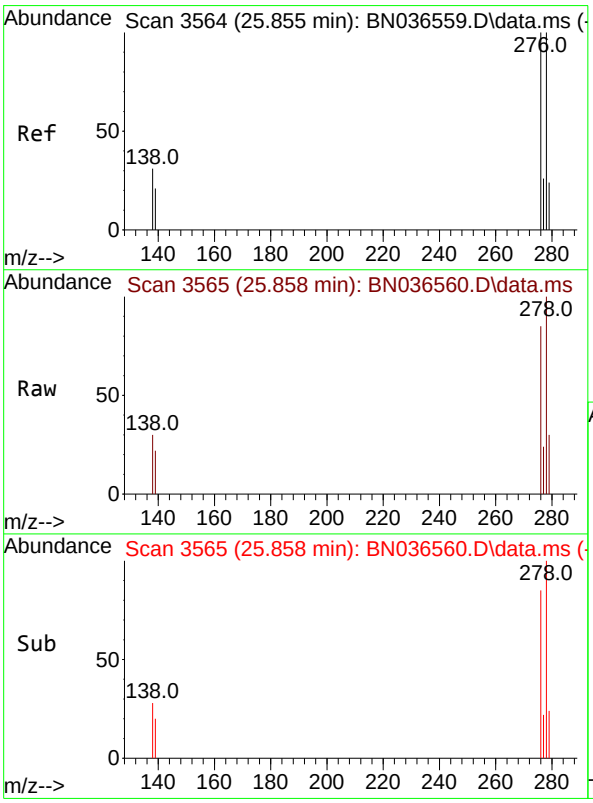

#39
Benzo(a)pyrene
Concen: 0.780 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:252 Resp: 10036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.8 | 27.8 | 41.8# |
| 125 | 20.7 | 22.7 | 34.1# |

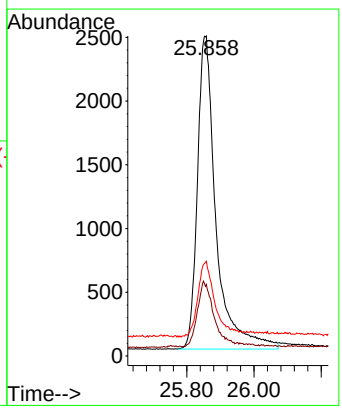


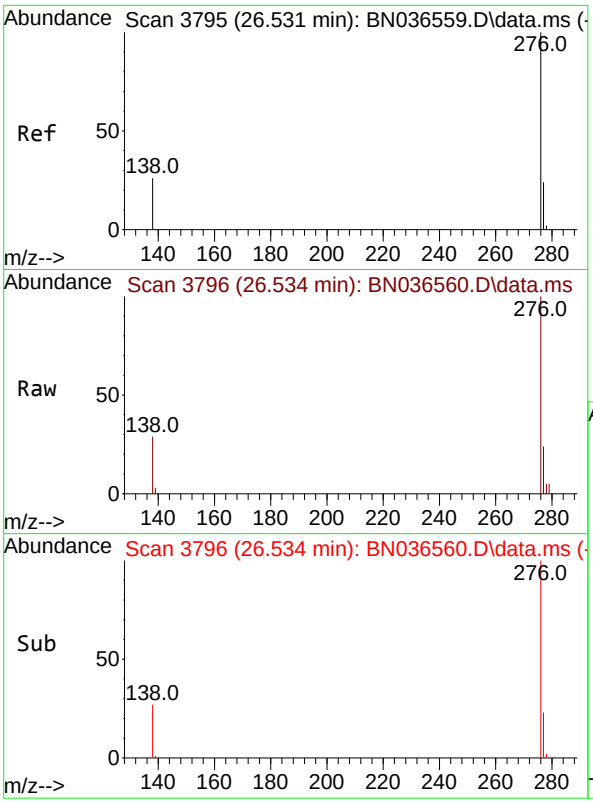




#40
Dibenzo(a,h)anthracene
Concen: 0.801 ng
RT: 25.858 min Scan# 3565
Delta R.T. 0.003 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:278 Resp: 9450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 22.3 | 20.8 | 31.2 |
| 279 | 29.6 | 28.8 | 43.2 |



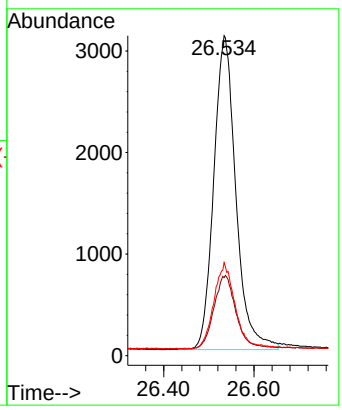



#41
Benzo(g,h,i)perylene
Concen: 0.778 ng
RT: 26.534 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.8

Tgt Ion:276 Resp: 10494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 24.4 | 22.2 | 33.4 |
| 138 | 29.1 | 24.1 | 36.1 |



Quantitation Report (QT Reviewed)

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

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

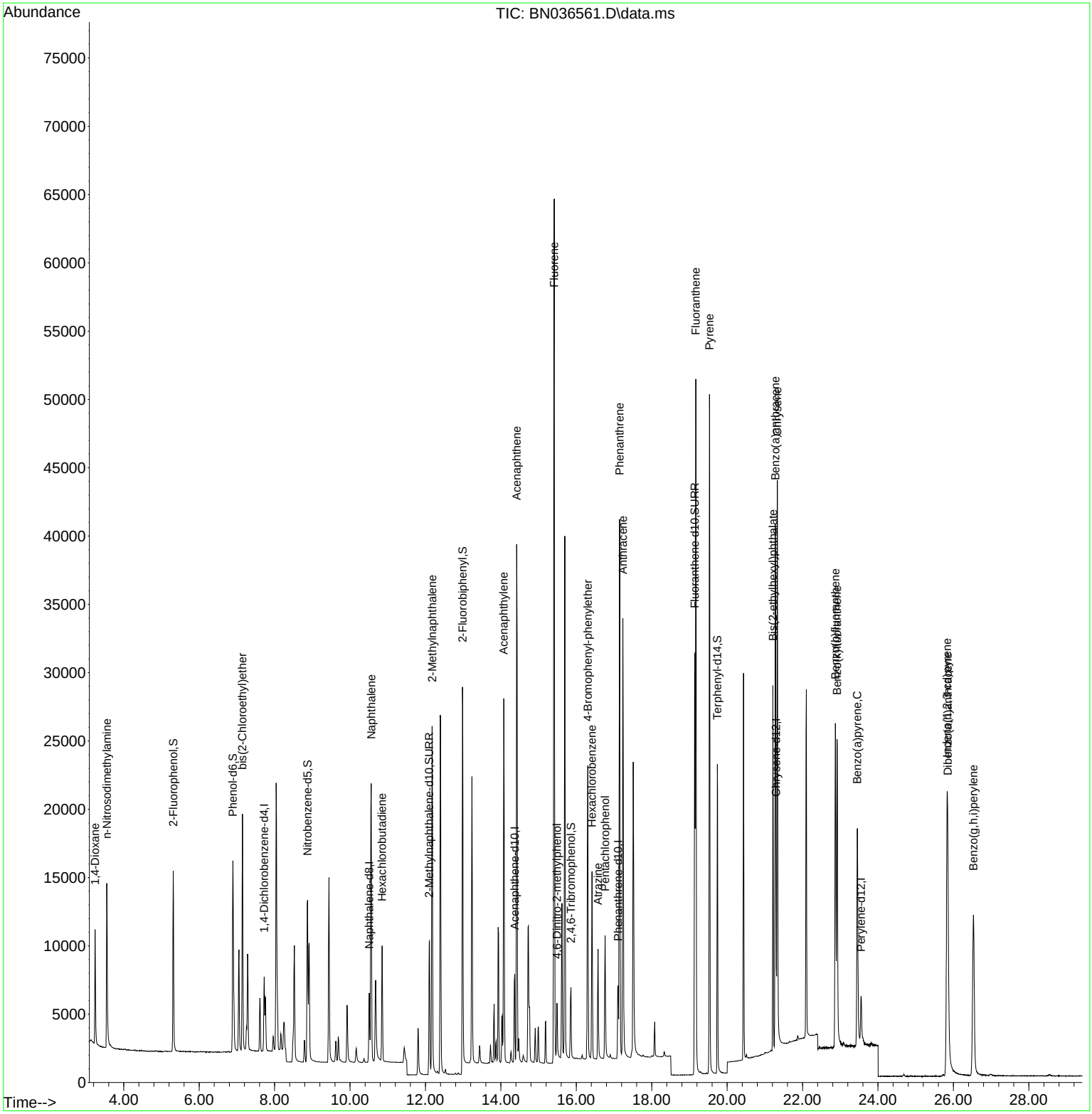
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 2537 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 6200 | 0.400 | ng | | 0.00 |
| 13) Acenaphthene-d10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

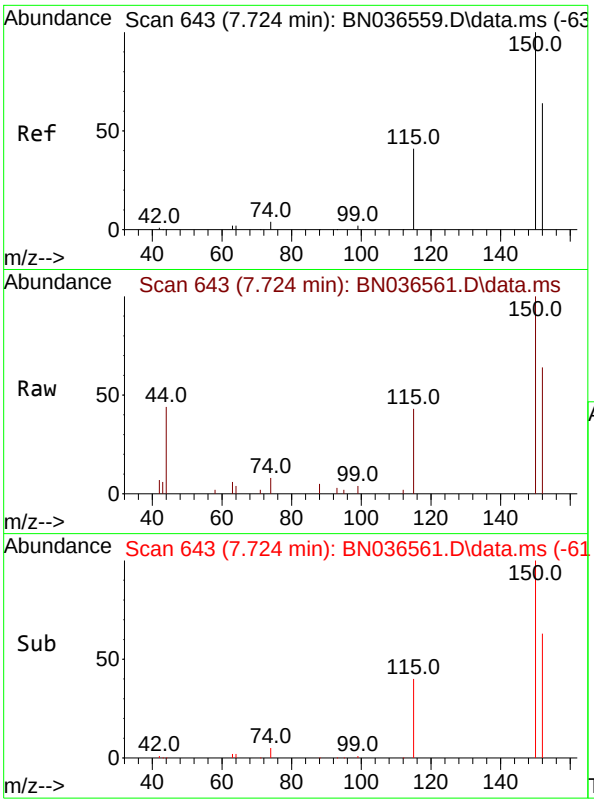
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

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



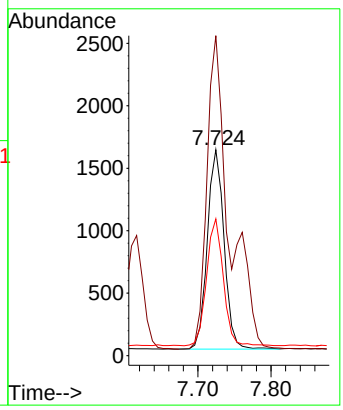


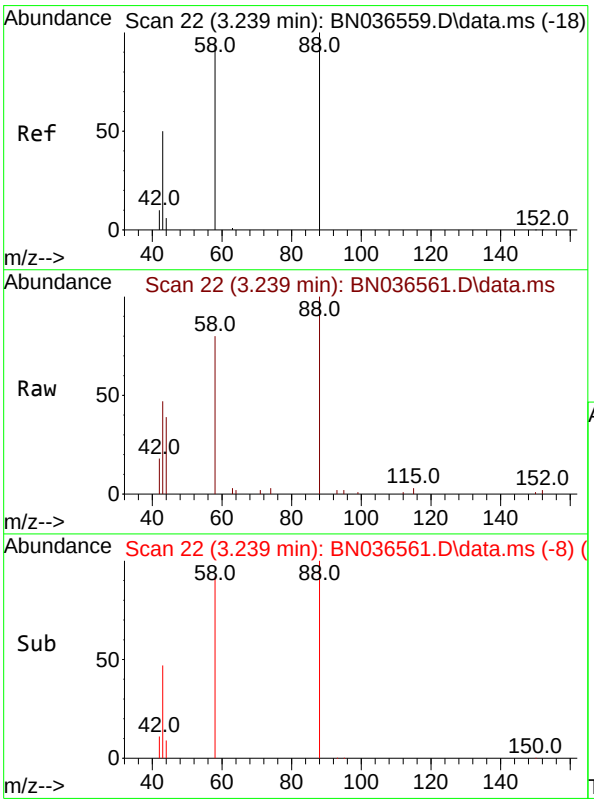

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:152 Resp: 2537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 155.4 | 123.7 | 185.5 |
| 115 | 66.4 | 54.3 | 81.5 |

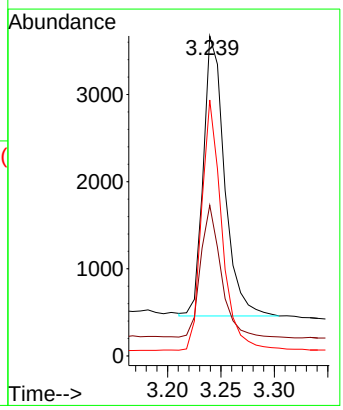


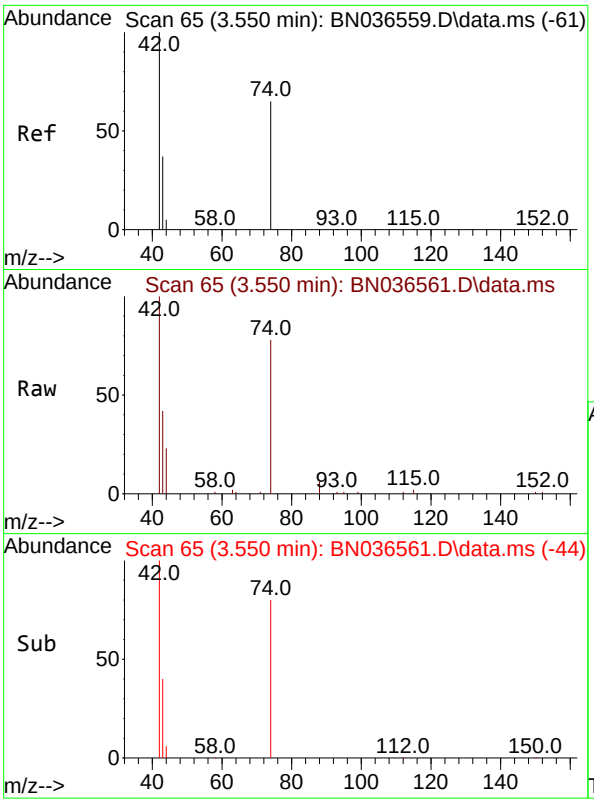




#2
1,4-Dioxane
Concen: 1.586 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion: 88 Resp: 4464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 45.1 | 37.8 | 56.8 |
| 58 | 85.6 | 67.4 | 101.2 |



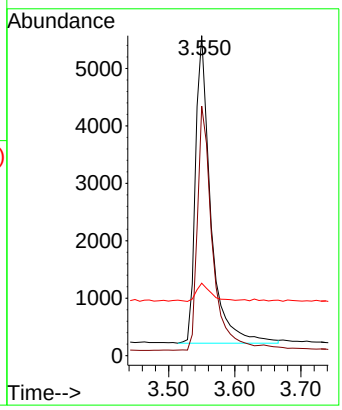


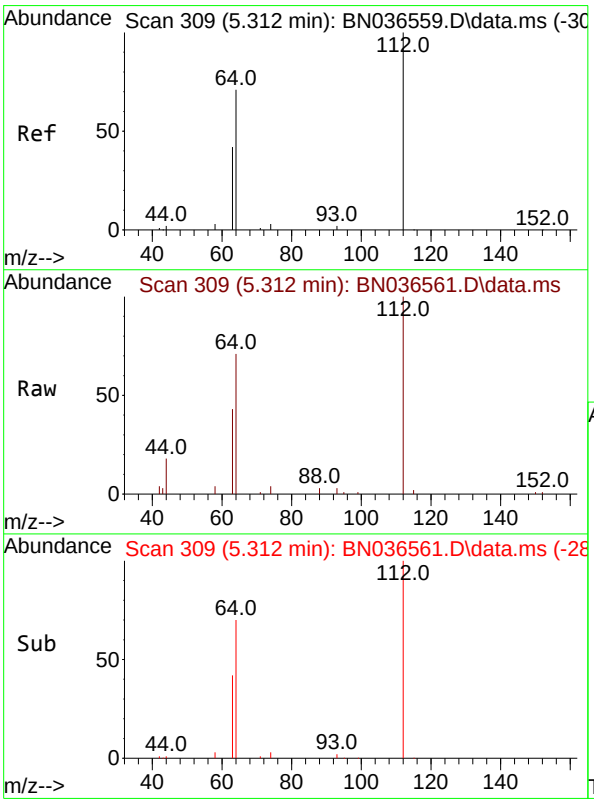

#3
n-Nitrosodimethylamine
Concen: 1.515 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion: 42 Resp: 8625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 79.2 | 60.6 | 90.8 |
| 44 | 5.8 | 6.3 | 9.5# |

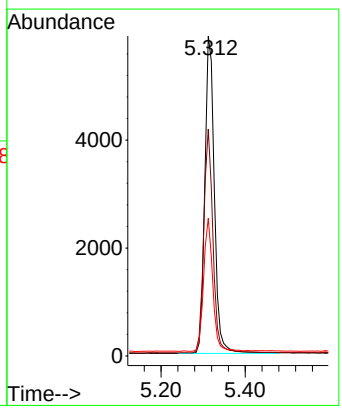


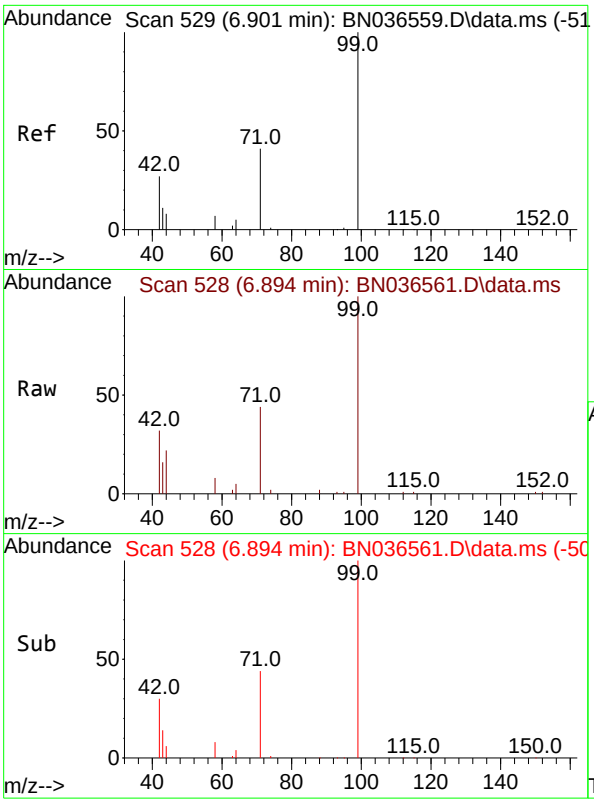




#4
2-Fluorophenol
Concen: 1.569 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:112 Resp: 9276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.3 | 53.1 | 79.7 |
| 63 | 40.1 | 31.8 | 47.8 |



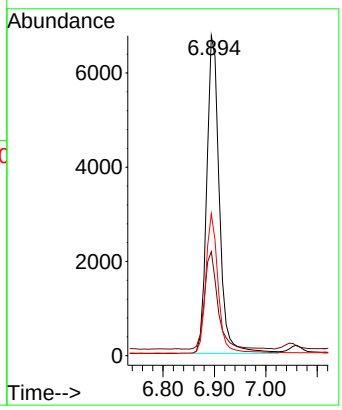


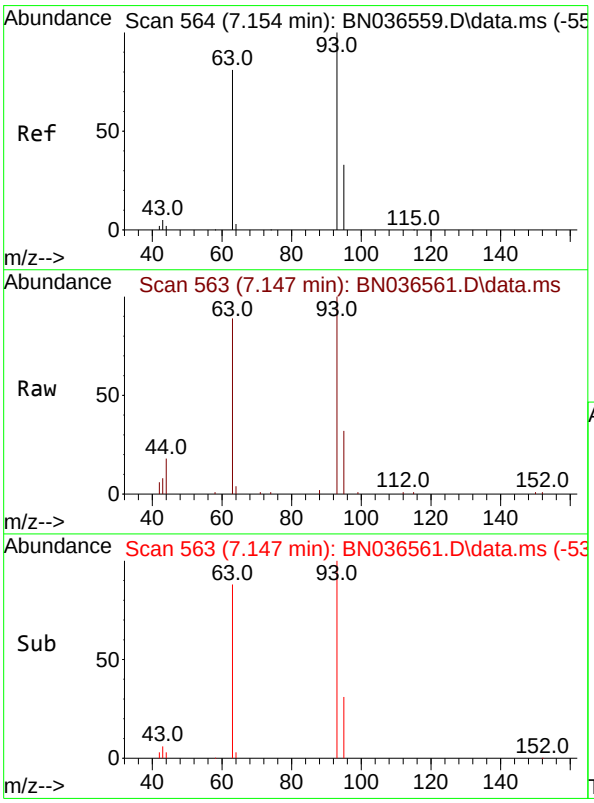

#5
Phenol-d6
Concen: 1.574 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion: 99 Resp: 11493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 32.6 | 26.5 | 39.7 |
| 71 | 43.3 | 34.1 | 51.1 |

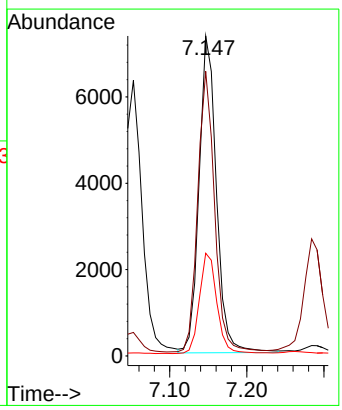


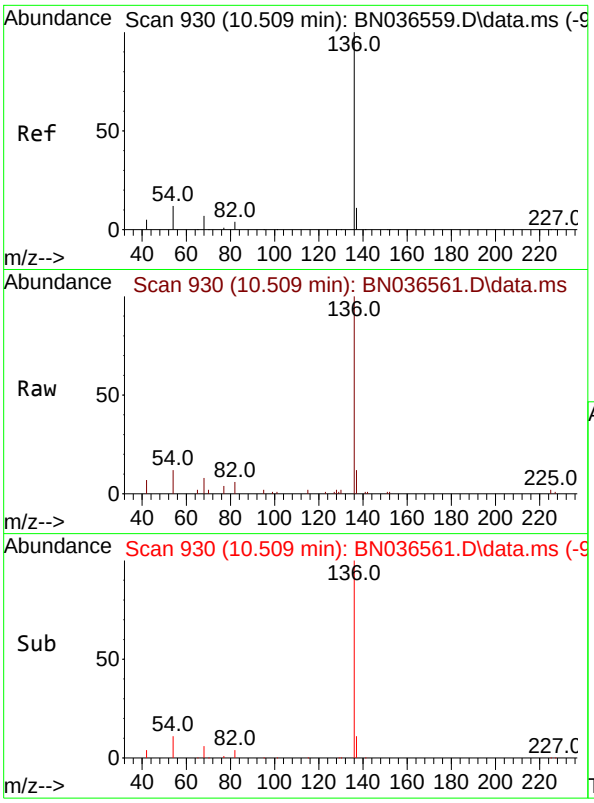




#6
bis(2-Chloroethyl)ether
Concen: 1.521 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion: 93 Resp: 11485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.8 | 67.7 | 101.5 |
| 95 | 31.8 | 25.6 | 38.4 |



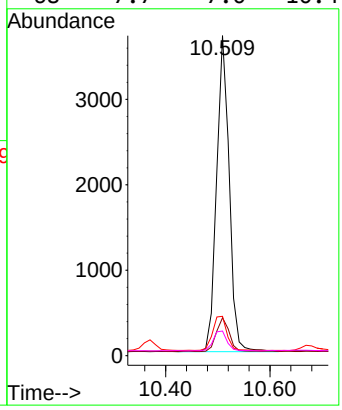


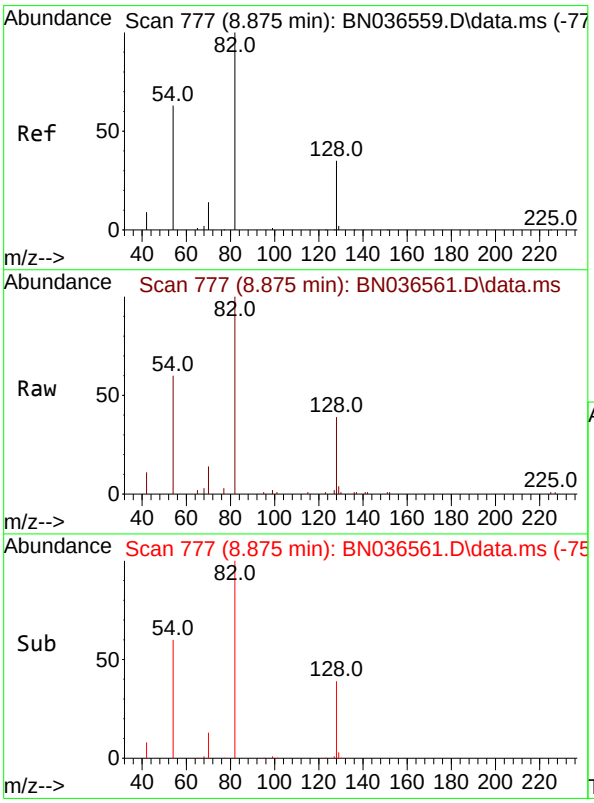

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:136 Resp: 6200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 11.9 | 10.3 | 15.5 |
| 54 | 12.3 | 11.5 | 17.3 |
| 68 | 7.7 | 7.0 | 10.4 |

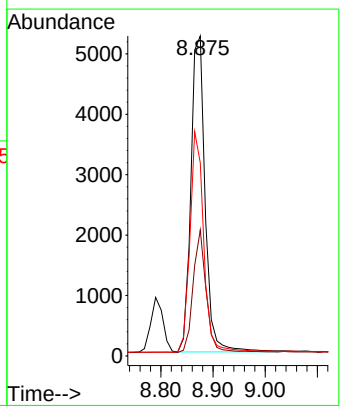


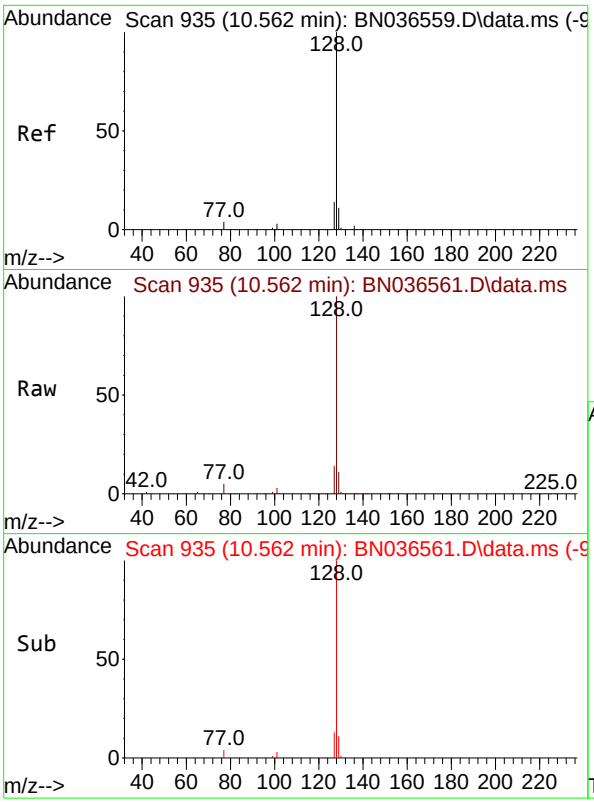




#8
Nitrobenzene-d5
Concen: 1.477 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion: 82 Resp: 9959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 39.4 | 30.6 | 45.8 |
| 54 | 60.4 | 52.2 | 78.4 |



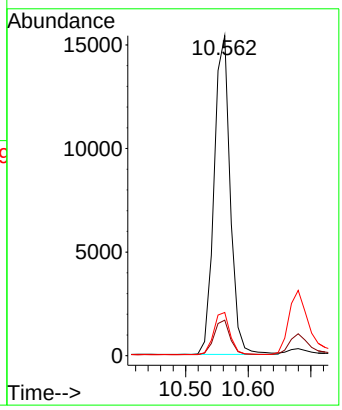


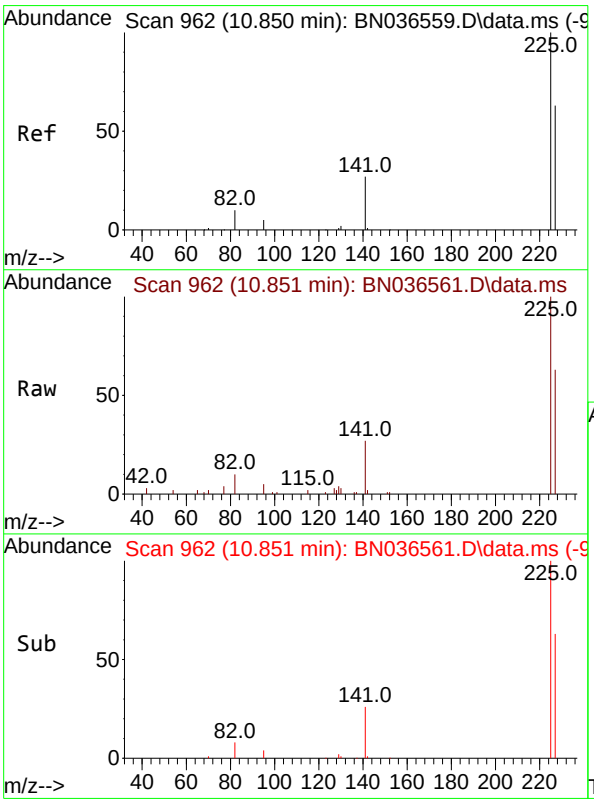

#9
Naphthalene
Concen: 1.506 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:128 Resp: 27473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.1 | 9.8 | 14.6 |
| 127 | 13.5 | 11.8 | 17.8 |

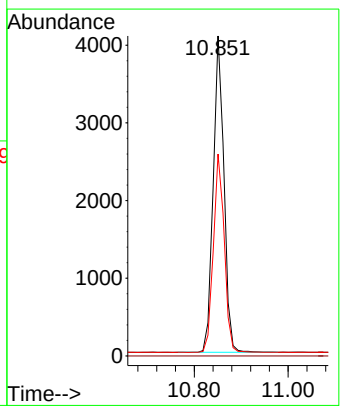


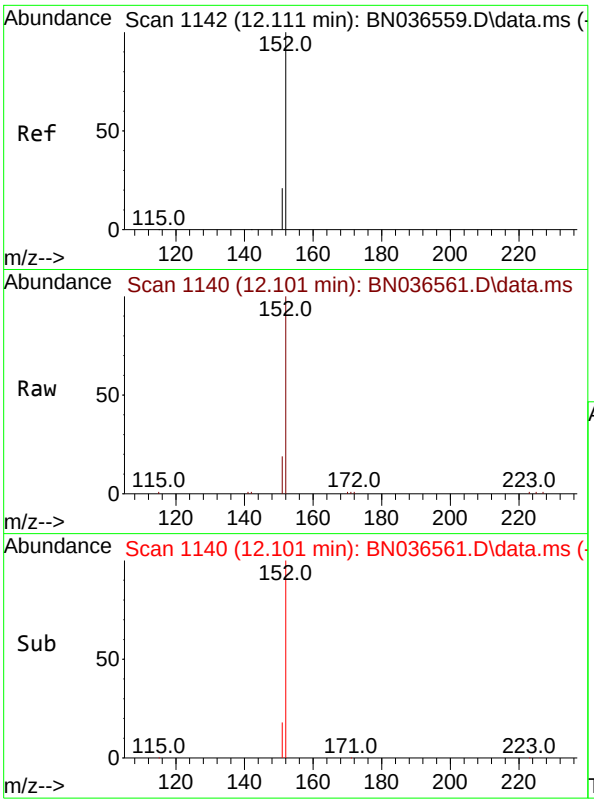




#10
Hexachlorobutadiene
Concen: 1.506 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:225 Resp: 6466

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.8 | 51.8 | 77.8 |



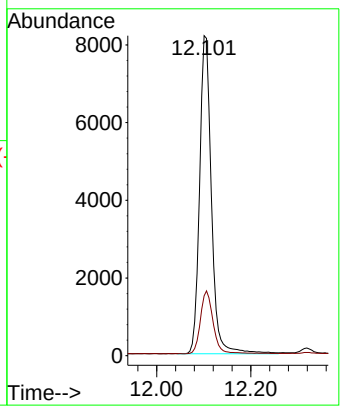


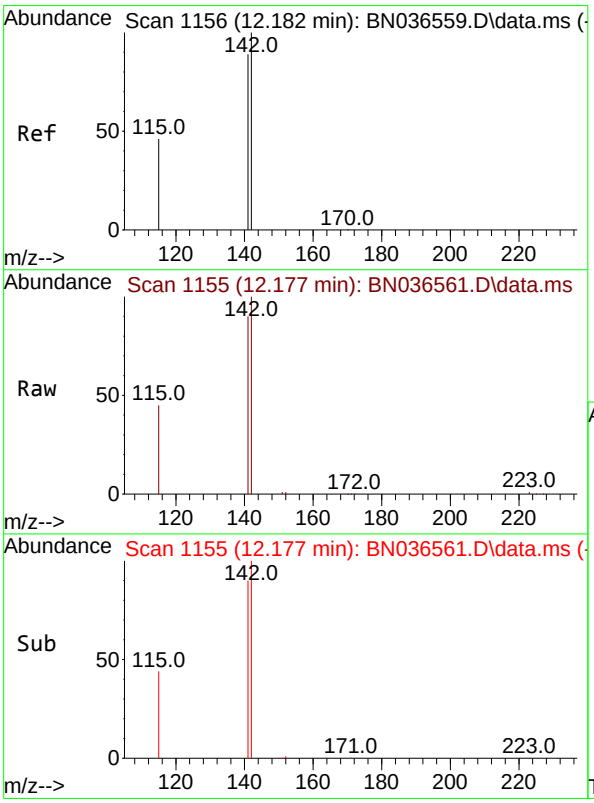

#11
2-Methylnaphthalene-d10
Concen: 1.553 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:152 Resp: 14319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.3 | 17.0 | 25.6 |

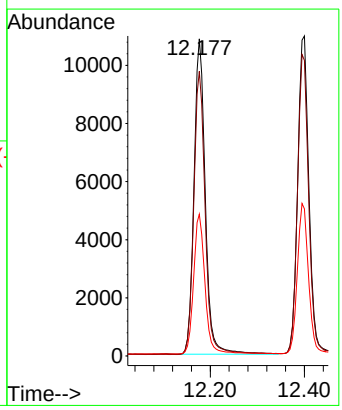


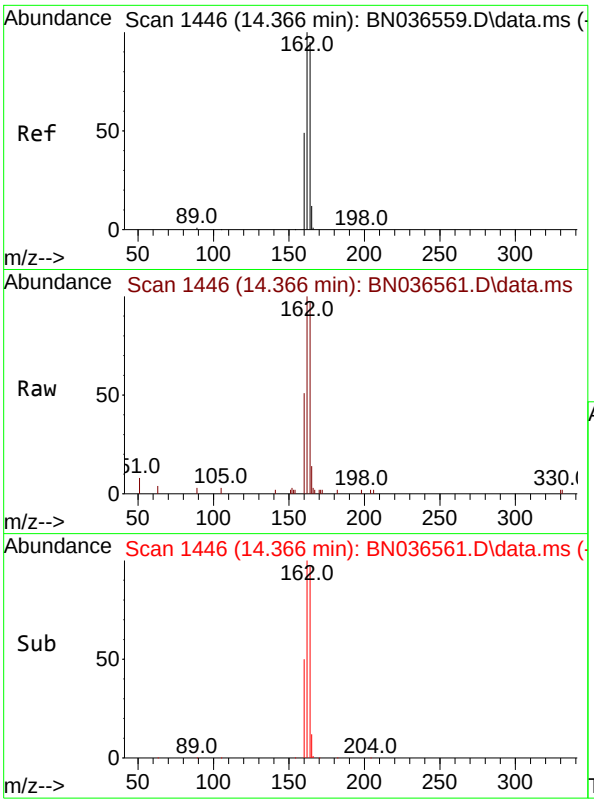




#12
2-Methylnaphthalene
Concen: 1.569 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:142 Resp: 18206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 89.7 | 71.7 | 107.5 |
| 115 | 44.7 | 38.3 | 57.5 |



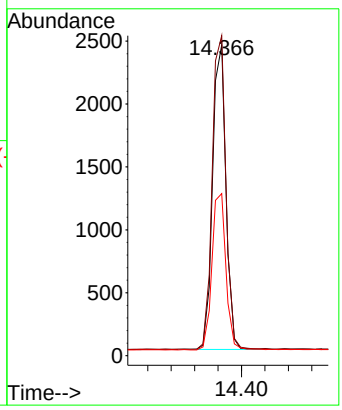


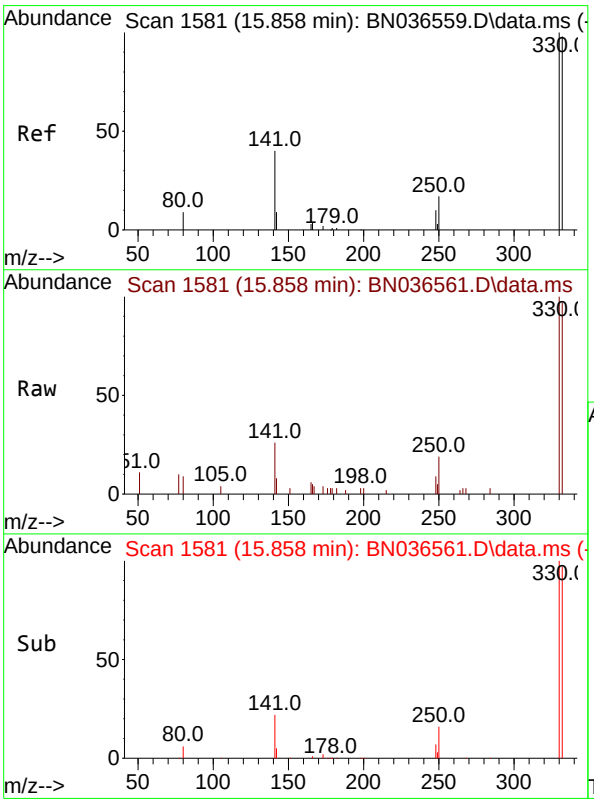

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:164 Resp: 3827

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

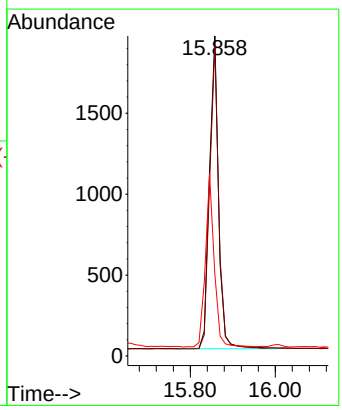


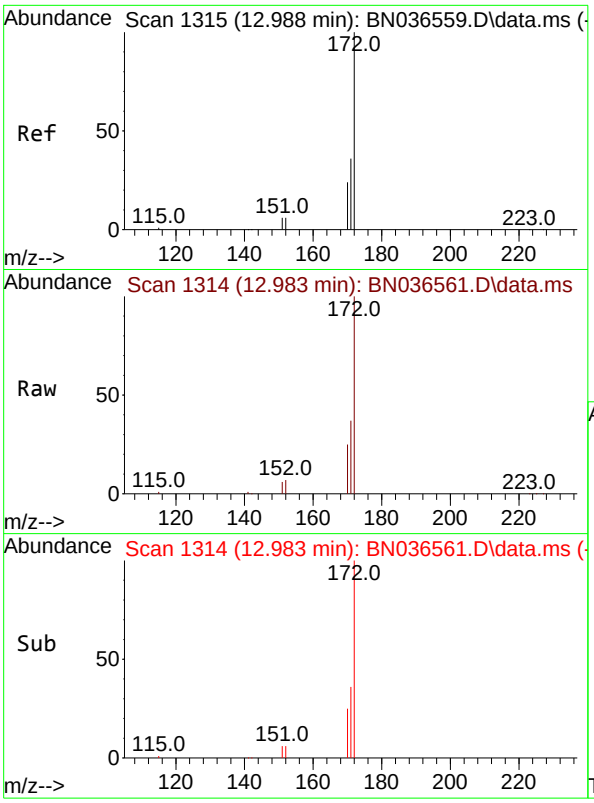




#14
2,4,6-Tribromophenol
Concen: 1.654 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:330 Resp: 2872

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



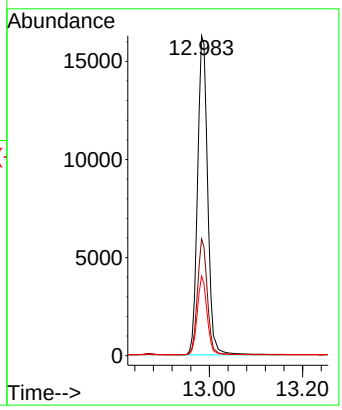


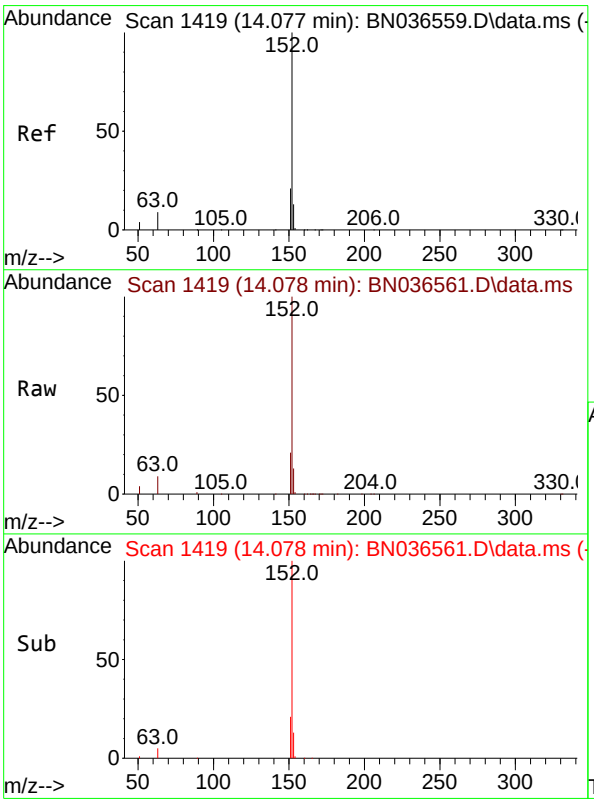

#15
2-Fluorobiphenyl
Concen: 1.626 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:172 Resp: 36192

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.5 | 29.5 | 44.3 |
| 170 | 24.9 | 20.2 | 30.4 |

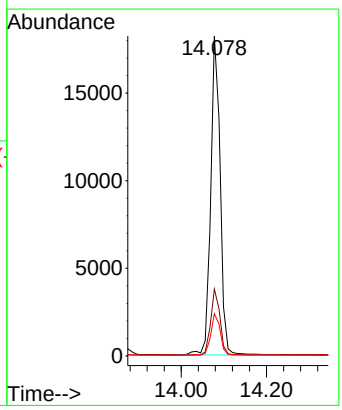


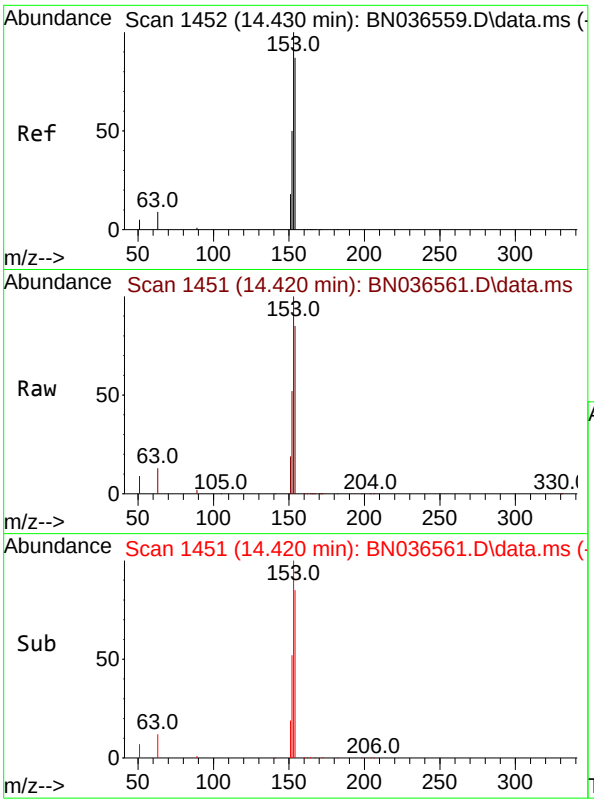




#16
Acenaphthylene
Concen: 1.555 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:152 Resp: 28080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.3 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |



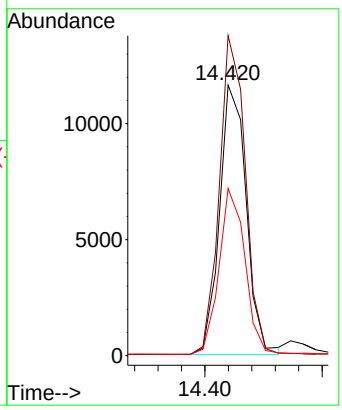


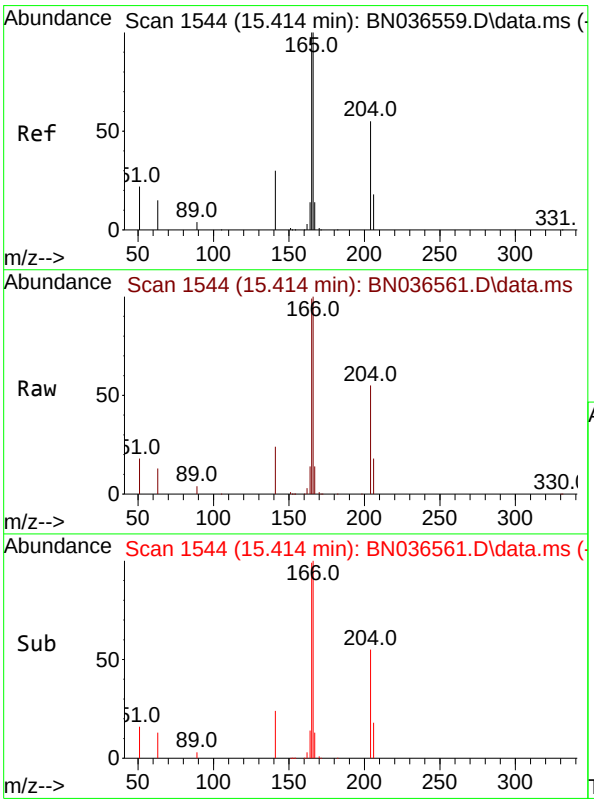

#17
Acenaphthene
Concen: 1.553 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:154 Resp: 18355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 115.7 | 94.1 | 141.1 |
| 152 | 60.3 | 49.8 | 74.6 |

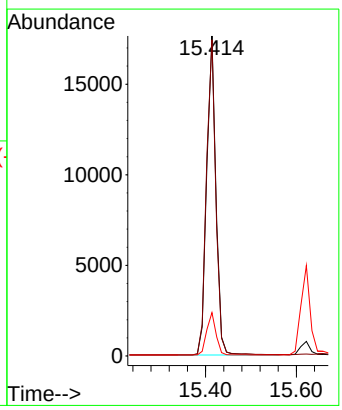


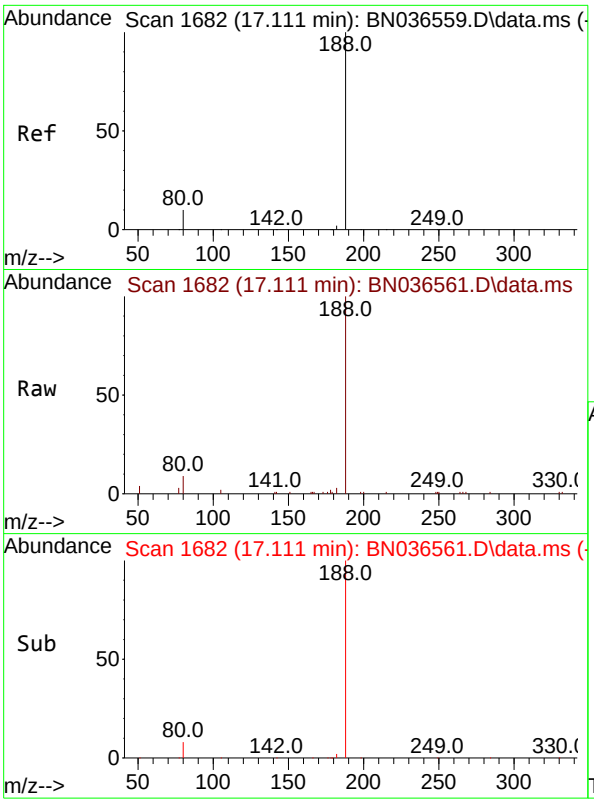




#18
Fluorene
Concen: 1.599 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:166 Resp: 25565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.5 | 79.8 | 119.8 |
| 167 | 13.1 | 10.6 | 15.8 |



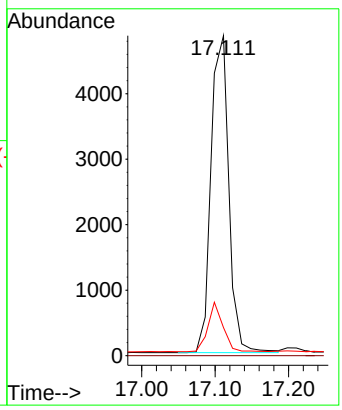


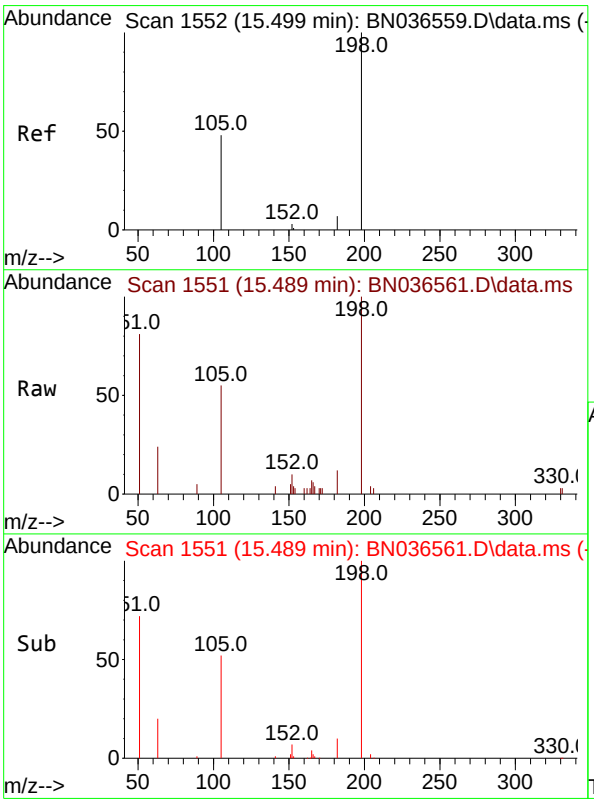

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:188 Resp: 8149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 8.8 | 8.8 | 13.2 |

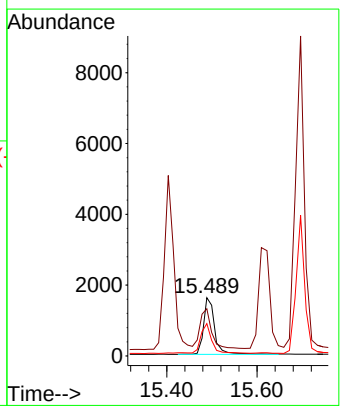


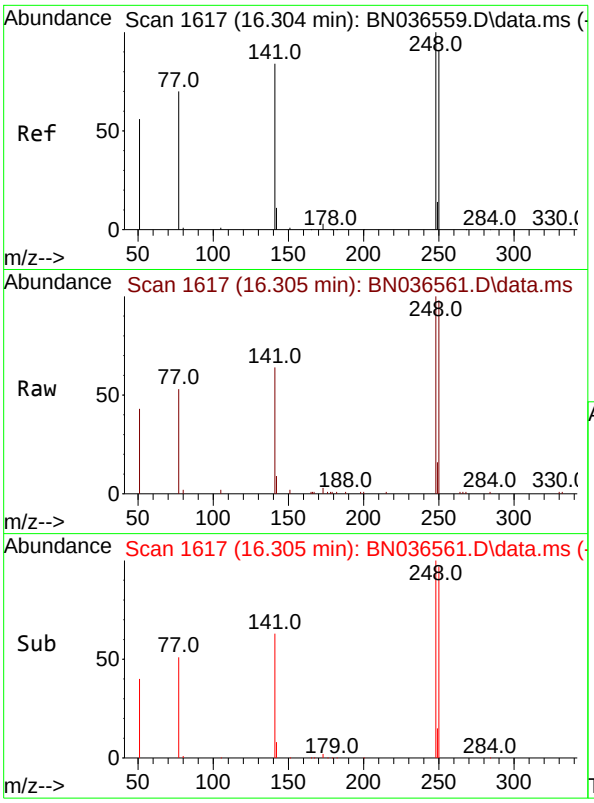




#20
4,6-Dinitro-2-methylphenol
Concen: 1.488 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:198 Resp: 2879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 81.2 | 107.9 | 161.9# |
| 105 | 55.5 | 56.2 | 84.2# |



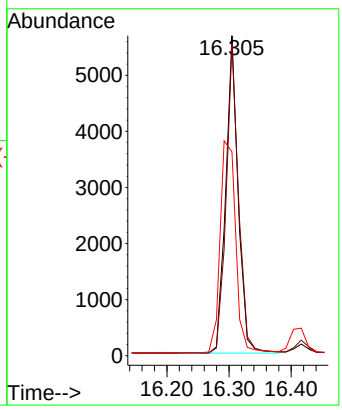


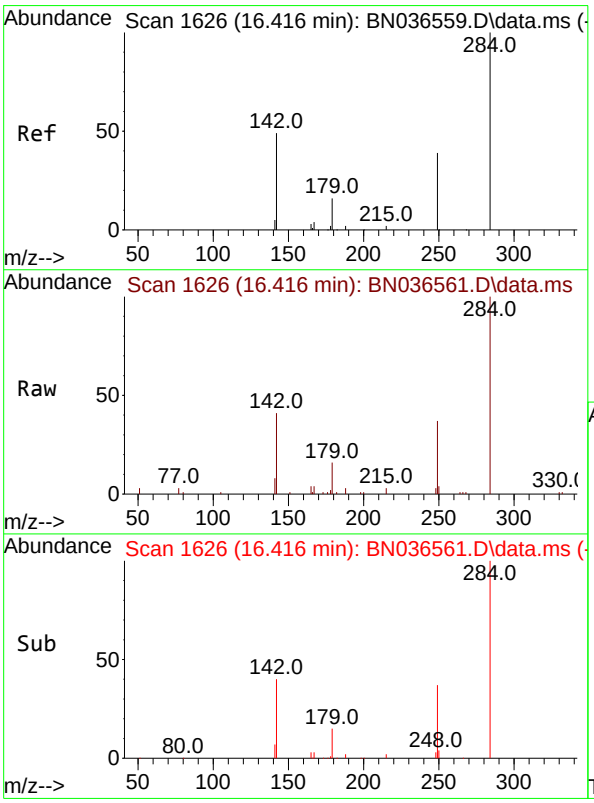

#21
4-Bromophenyl-phenylether
Concen: 1.539 ng
RT: 16.305 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:248 Resp: 7859

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

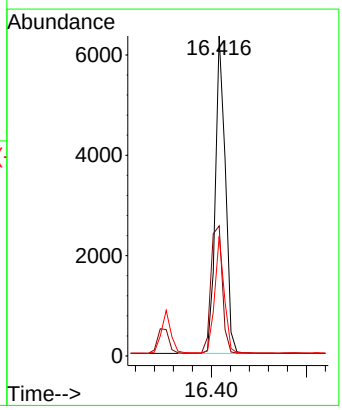


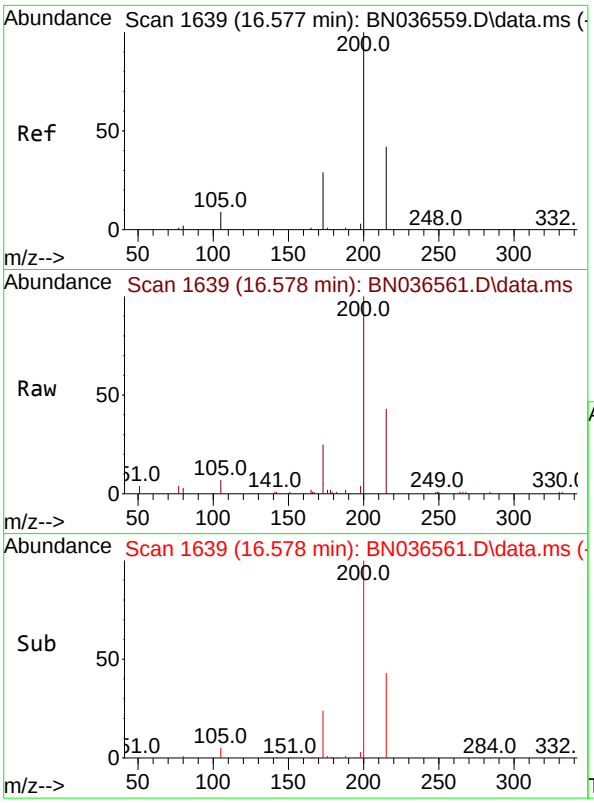




#22
Hexachlorobenzene
Concen: 1.495 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:284 Resp: 9216

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



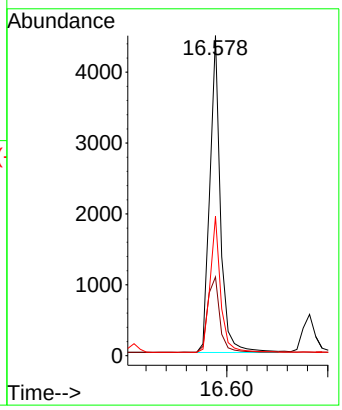


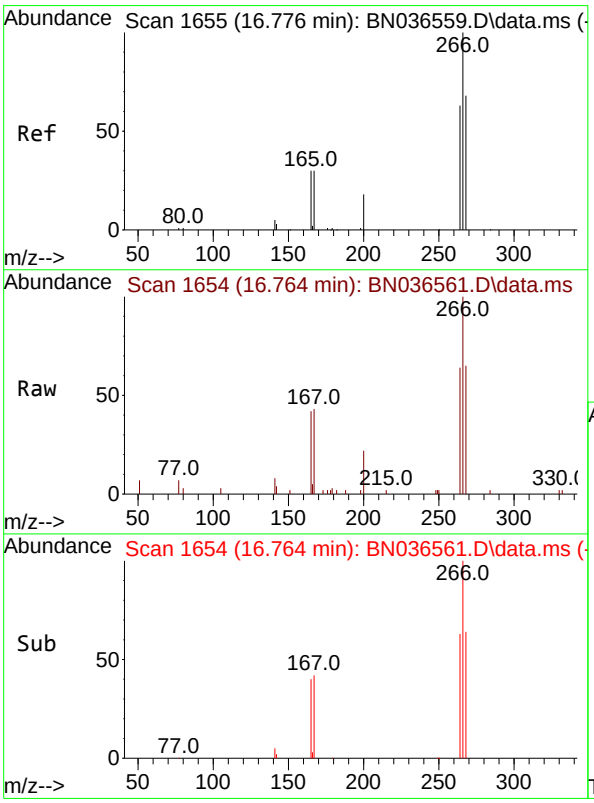

#23
Atrazine
Concen: 1.595 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:200 Resp: 6530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 24.6 | 27.3 | 40.9# |
| 215 | 43.5 | 36.8 | 55.2 |

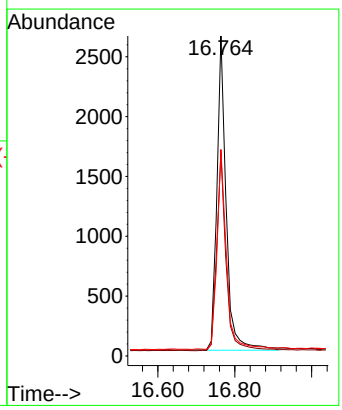


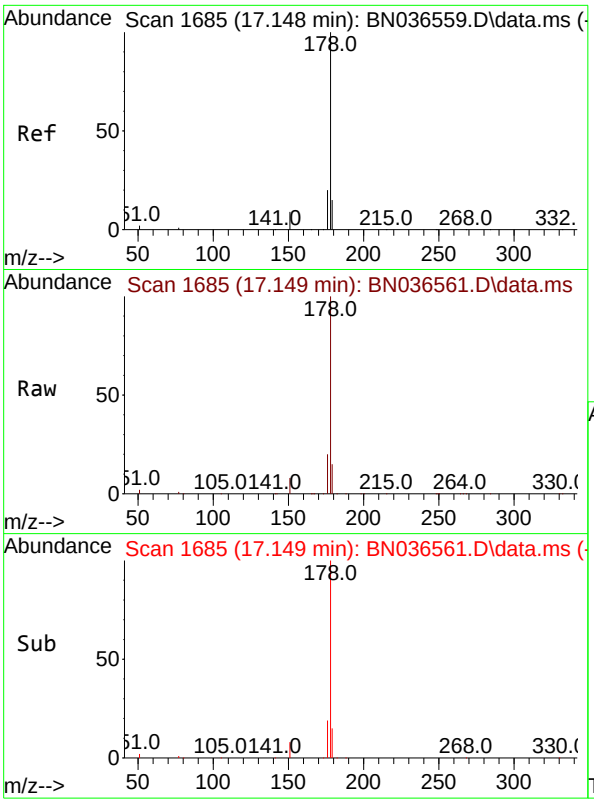




#24
Pentachlorophenol
Concen: 1.563 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:266 Resp: 4395

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.5 | 49.6 | 74.4 |
| 268 | 64.4 | 50.9 | 76.3 |



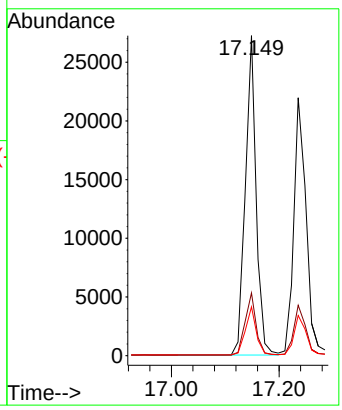


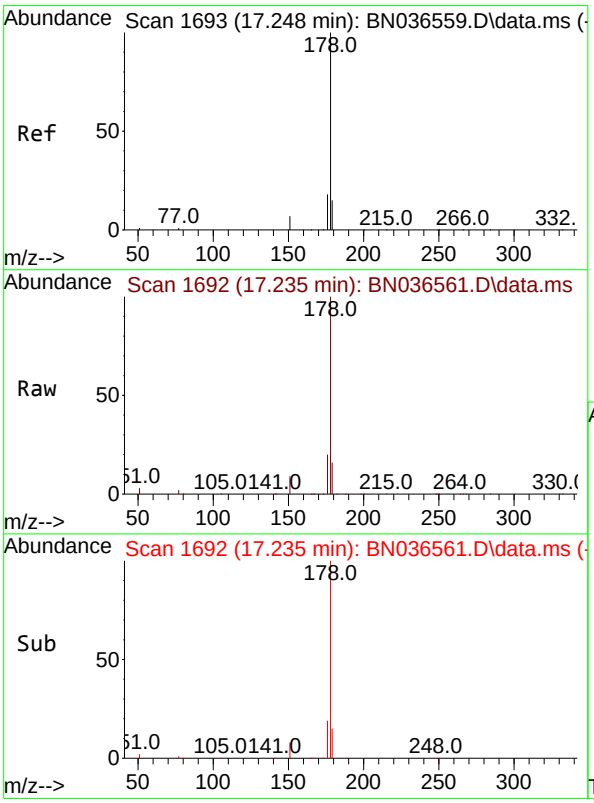

#25
Phenanthrene
Concen: 1.554 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:178 Resp: 37989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |

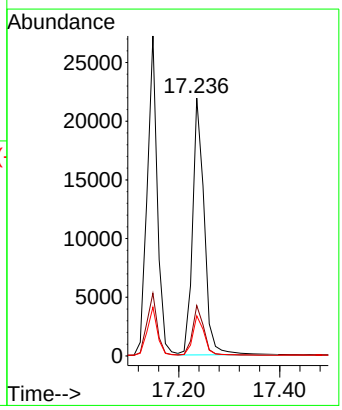


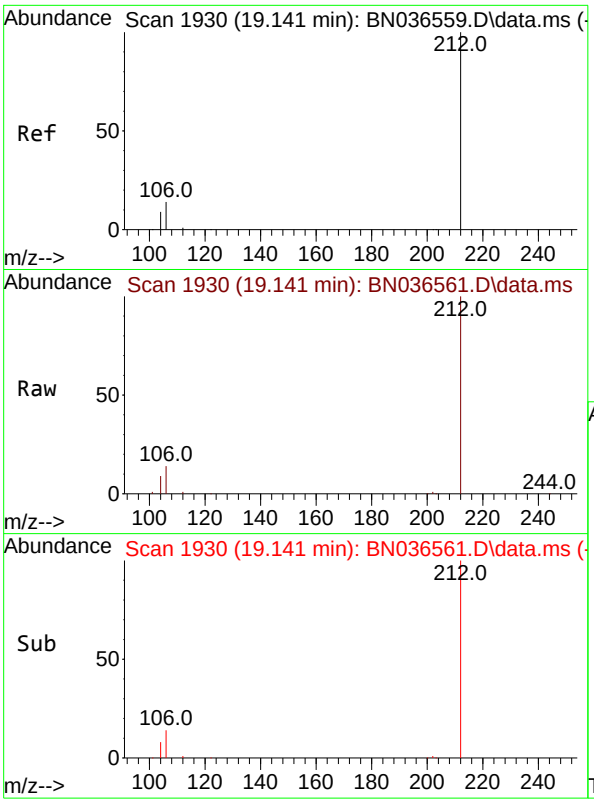




#26
Anthracene
Concen: 1.589 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:178 Resp: 35054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.0 | 15.4 | 23.2 |
| 179 | 15.3 | 12.6 | 18.8 |



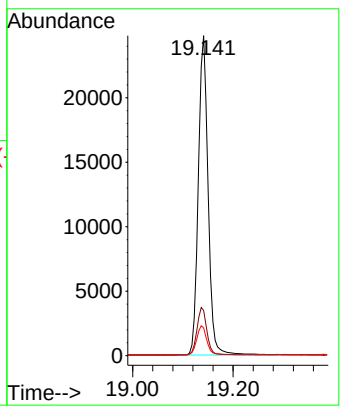


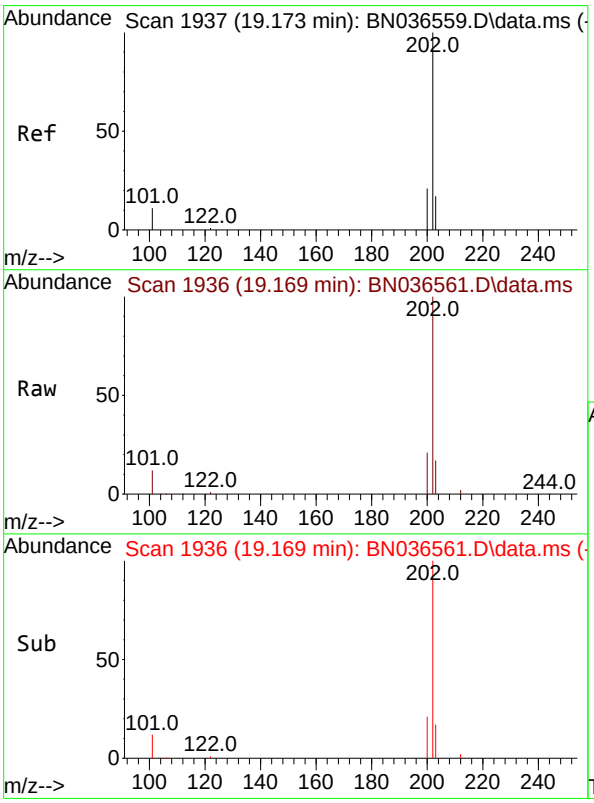

#27
Fluoranthene-d10
Concen: 1.600 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:212 Resp: 33414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.0 | 11.8 | 17.6 |
| 104 | 9.1 | 7.3 | 10.9 |

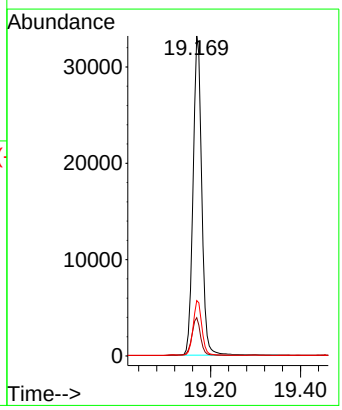


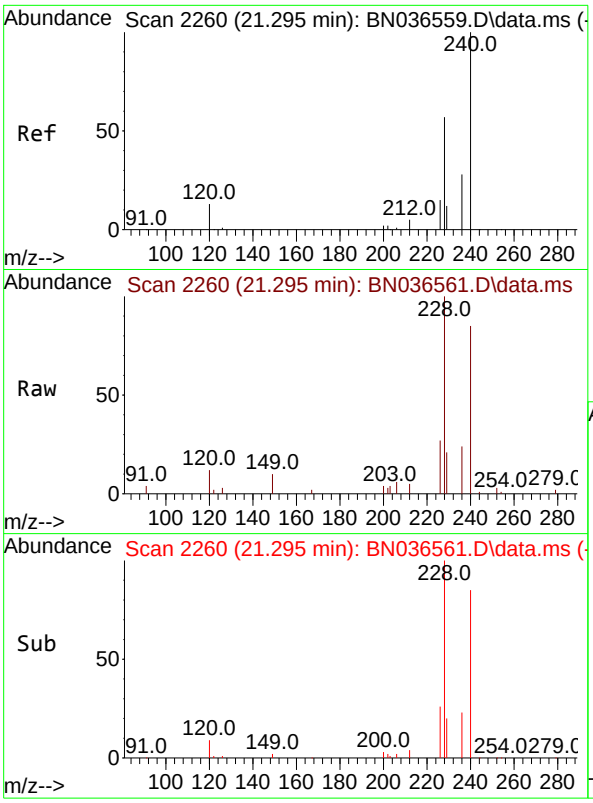




#28
Fluoranthene
Concen: 1.619 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.004 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:202 Resp: 44451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.0 | 9.4 | 14.0 |
| 203 | 17.2 | 13.5 | 20.3 |



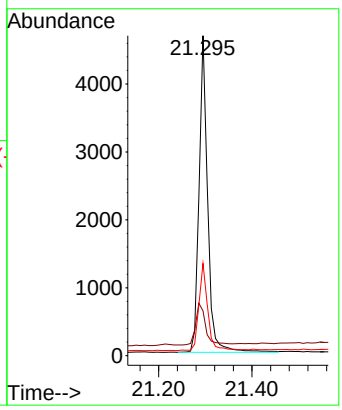


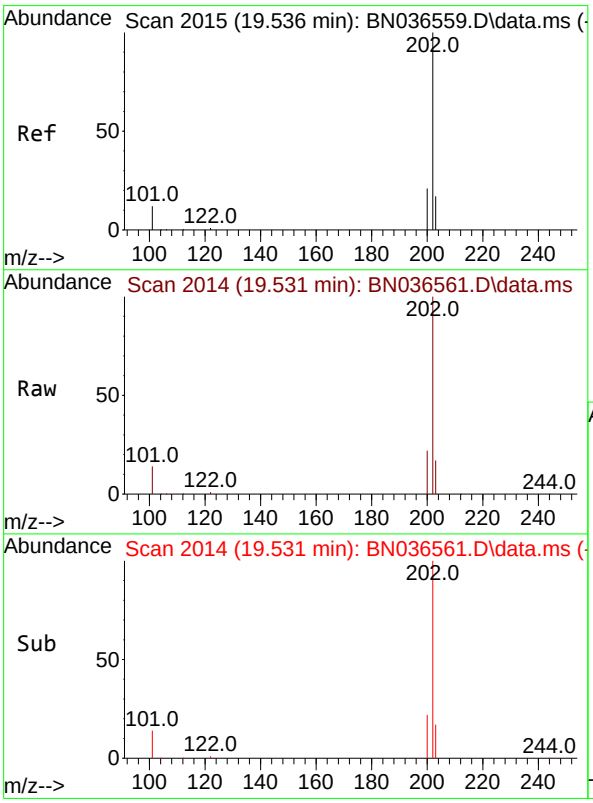

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:240 Resp: 5977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 14.0 | 14.6 | 22.0# |
| 236 | 28.9 | 24.1 | 36.1 |

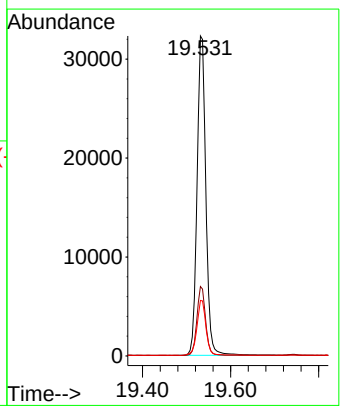


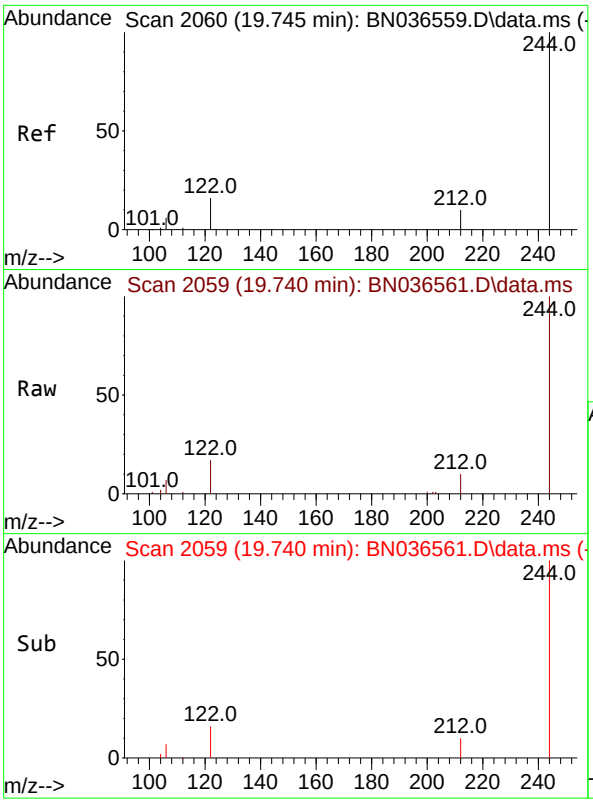




#30
Pyrene
Concen: 1.530 ng
RT: 19.531 min Scan# 2014
Delta R.T. -0.004 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:202 Resp: 44705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.3 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |



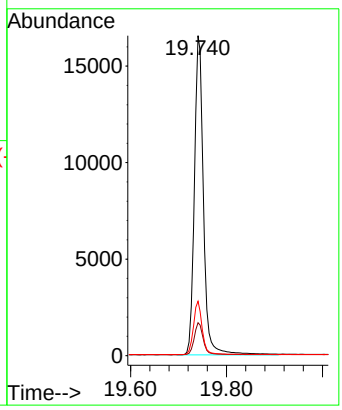


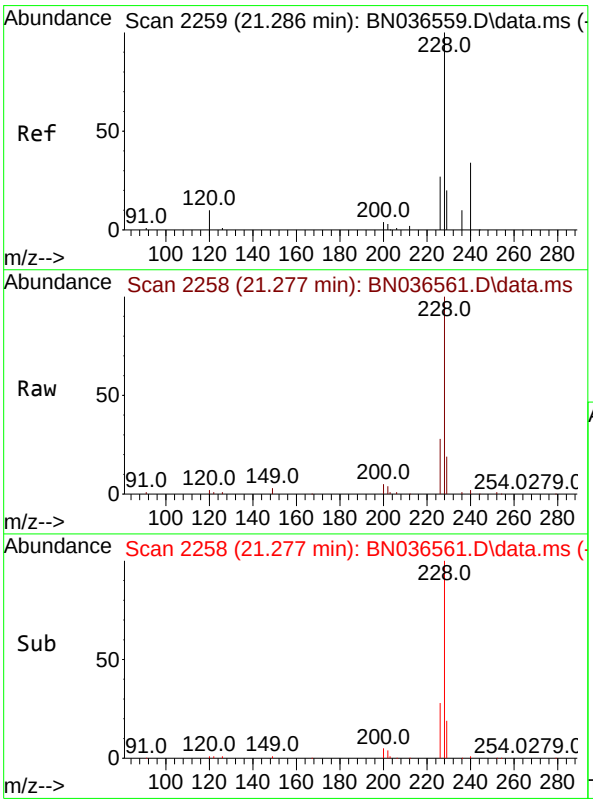

#31
Terphenyl-d14
Concen: 1.527 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:244 Resp: 21872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 10.3 | 9.6 | 14.4 |
| 122 | 17.0 | 13.9 | 20.9 |

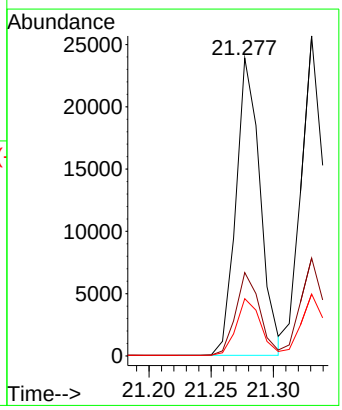


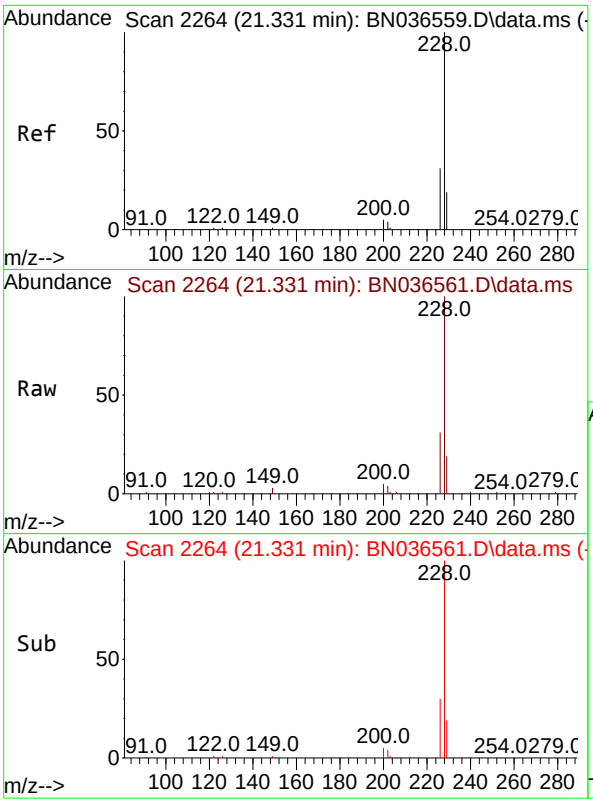




#32
Benzo(a)anthracene
Concen: 1.550 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:228 Resp: 32205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.0 | 22.5 | 33.7 |
| 229 | 19.2 | 16.6 | 25.0 |



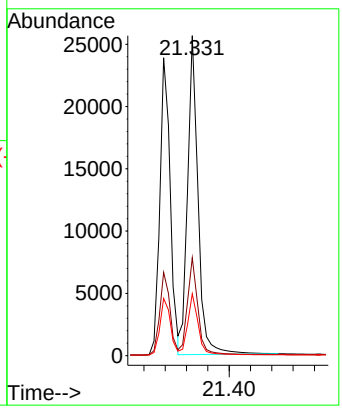


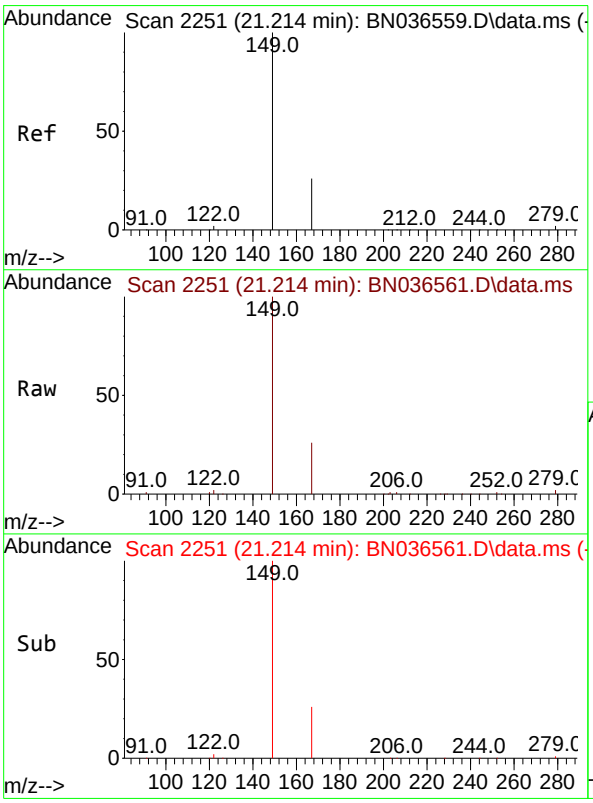

#33
Chrysene
Concen: 1.539 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:228 Resp: 34953

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.6 | 25.3 | 37.9 |
| 229 | 19.3 | 15.8 | 23.8 |

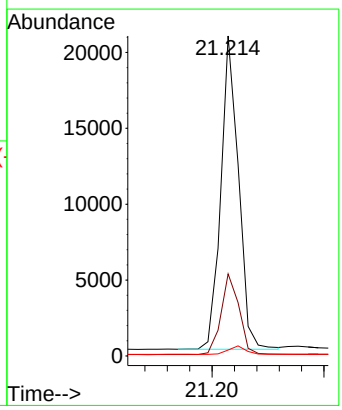


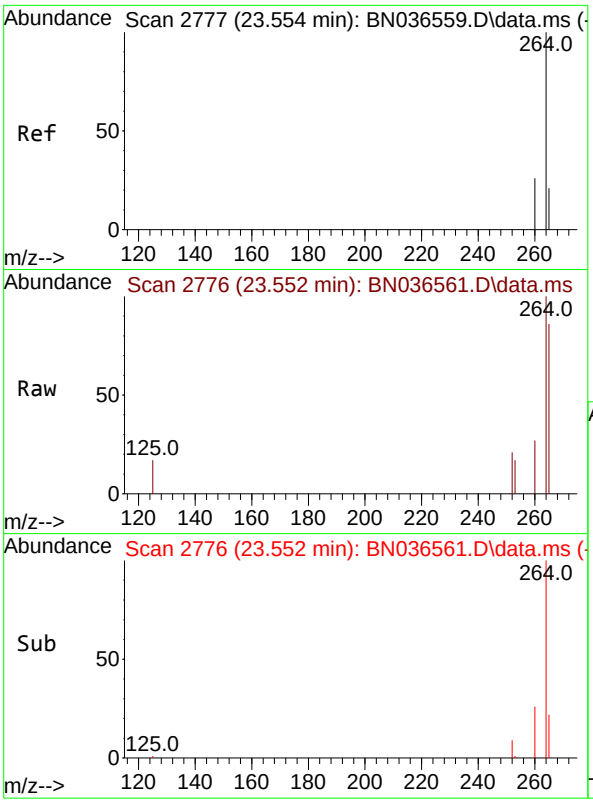




#34
Bis(2-ethylhexyl)phthalate
Concen: 1.529 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:149 Resp: 22621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.3 | 20.7 | 31.1 |
| 279 | 2.7 | 3.6 | 5.4# |



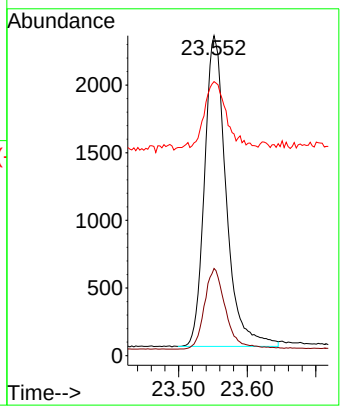


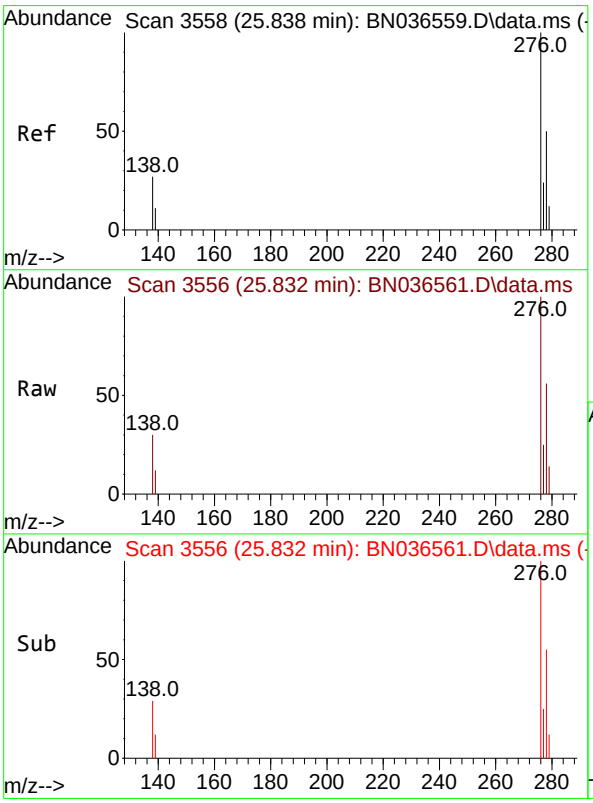

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.552 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:264 Resp: 5048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.2 | 22.6 | 33.8 |
| 265 | 85.7 | 88.1 | 132.1# |

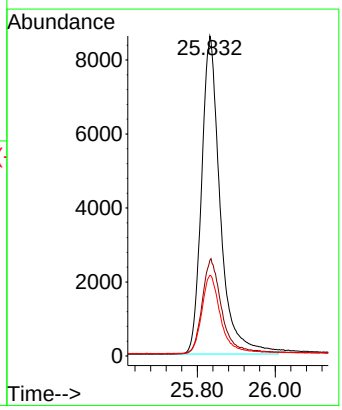


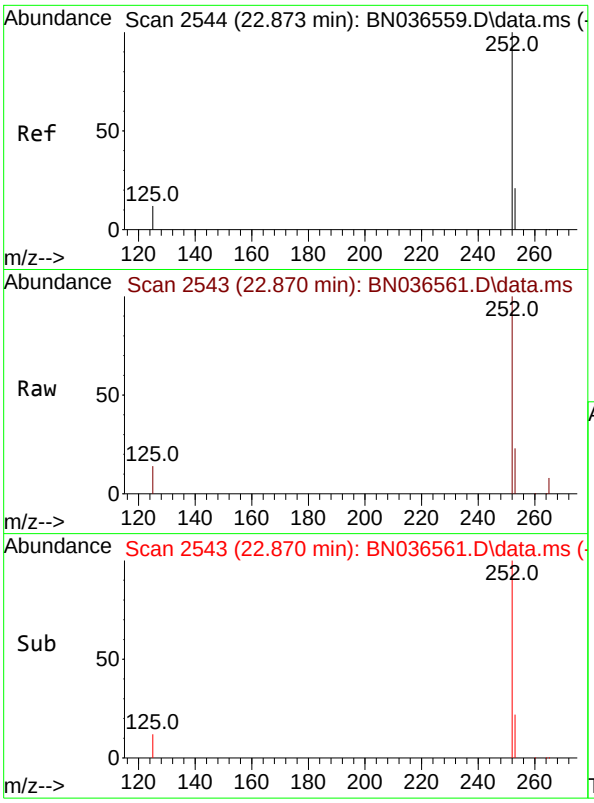




#36
Indeno(1,2,3-cd)pyrene
Concen: 1.570 ng
RT: 25.832 min Scan# 3556
Delta R.T. -0.006 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:276 Resp: 28605

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 30.4 | 23.4 | 35.2 |
| 277 | 24.9 | 20.0 | 30.0 |



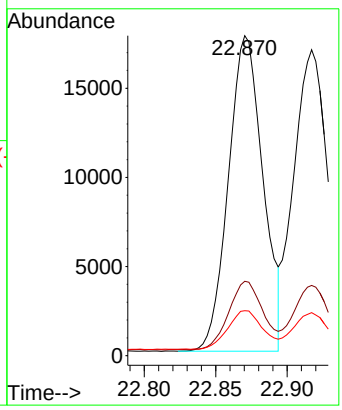


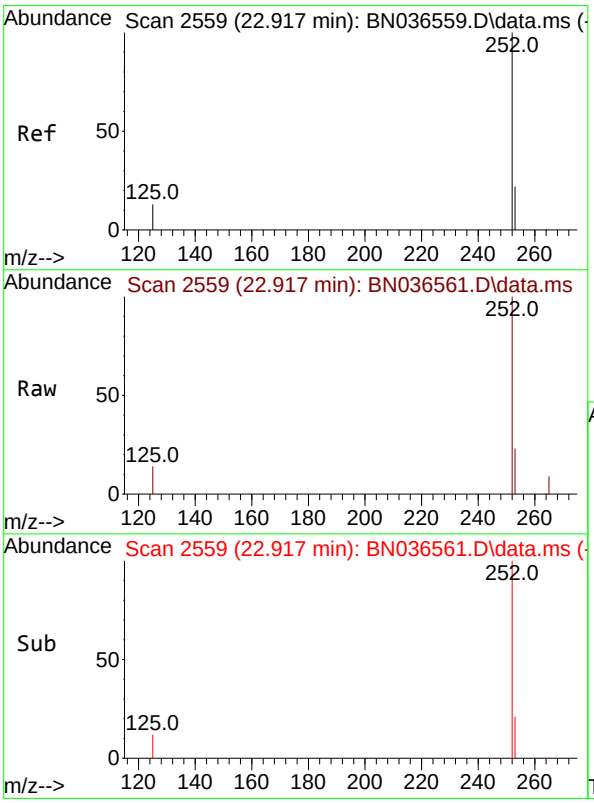

#37
Benzo(b)fluoranthene
Concen: 1.623 ng
RT: 22.870 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:252 Resp: 29819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.3 | 23.9 | 35.9# |
| 125 | 14.0 | 17.4 | 26.2# |

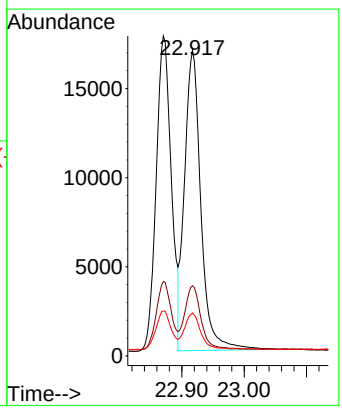


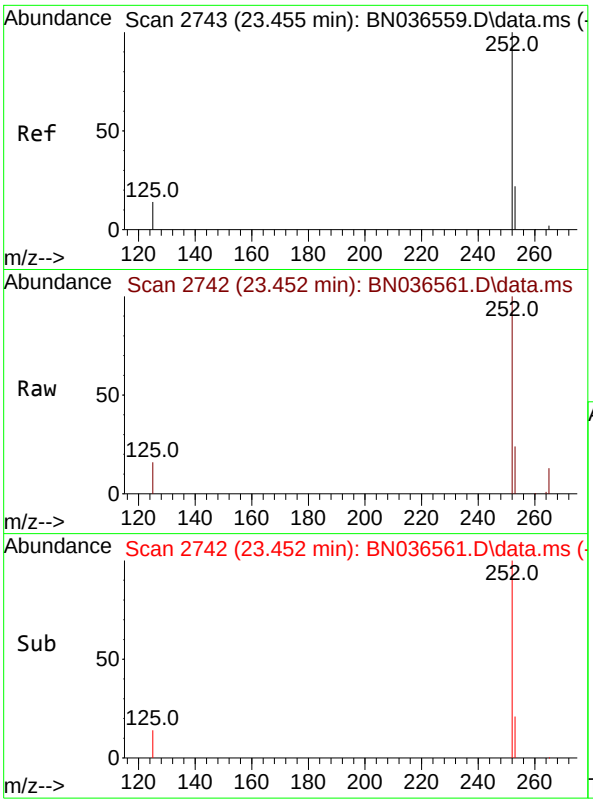




#38
Benzo(k)fluoranthene
Concen: 1.593 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:252 Resp: 30710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.0 | 24.6 | 36.8# |
| 125 | 14.1 | 17.8 | 26.8# |



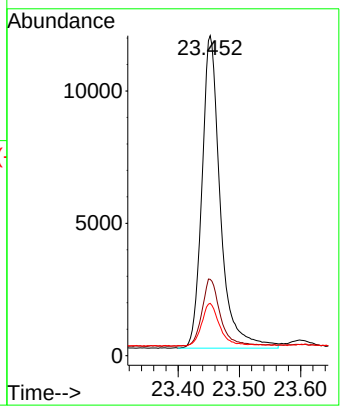


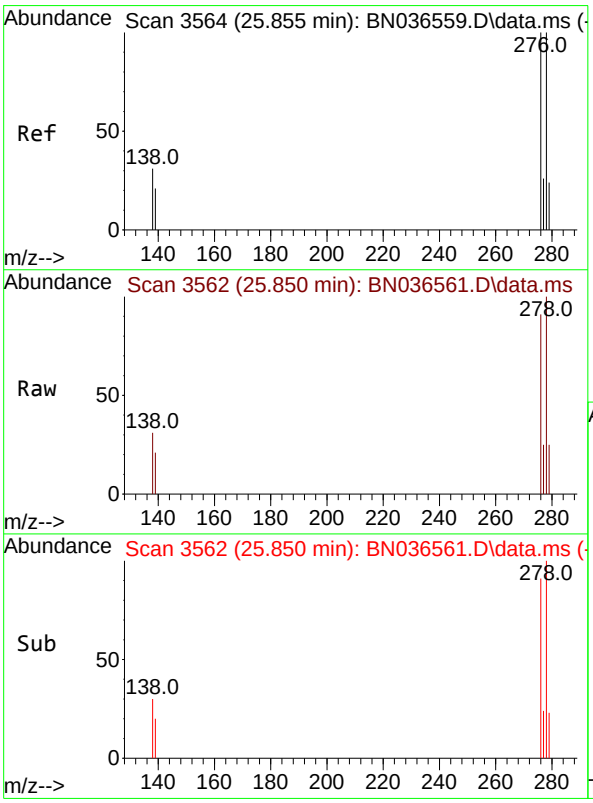

#39
Benzo(a)pyrene
Concen: 1.596 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:252 Resp: 24696

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

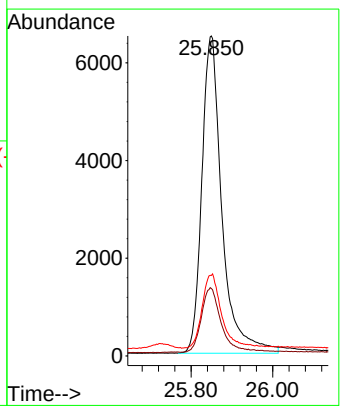


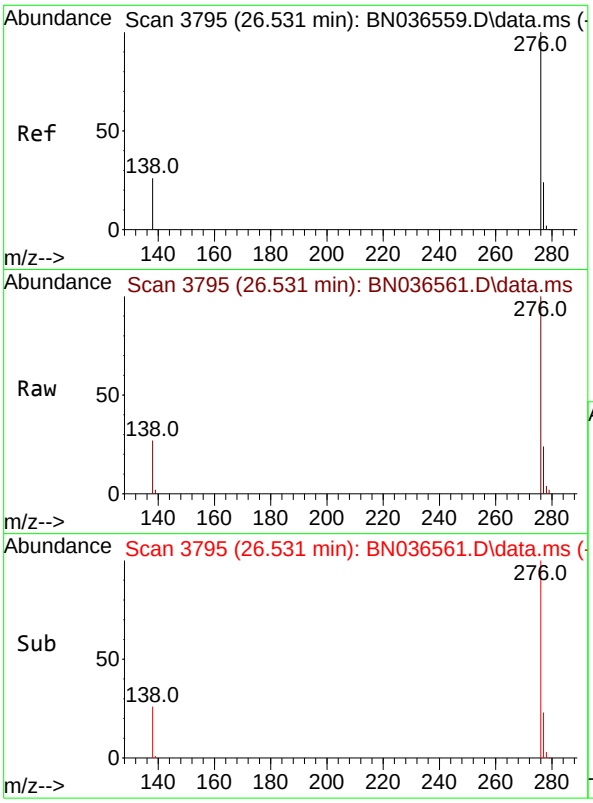




#40
Dibenzo(a,h)anthracene
Concen: 1.569 ng
RT: 25.850 min Scan# 3562
Delta R.T. -0.006 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:278 Resp: 22248

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



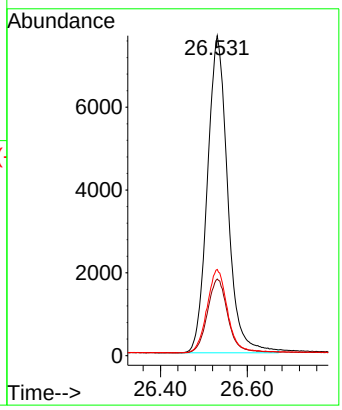



#41
Benzo(g,h,i)perylene
Concen: 1.535 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC1.6

Tgt Ion:276 Resp: 24906

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 23.9 | 22.2 | 33.4 |
| 138 | 26.9 | 24.1 | 36.1 |



Quantitation Report (QT Reviewed)

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

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

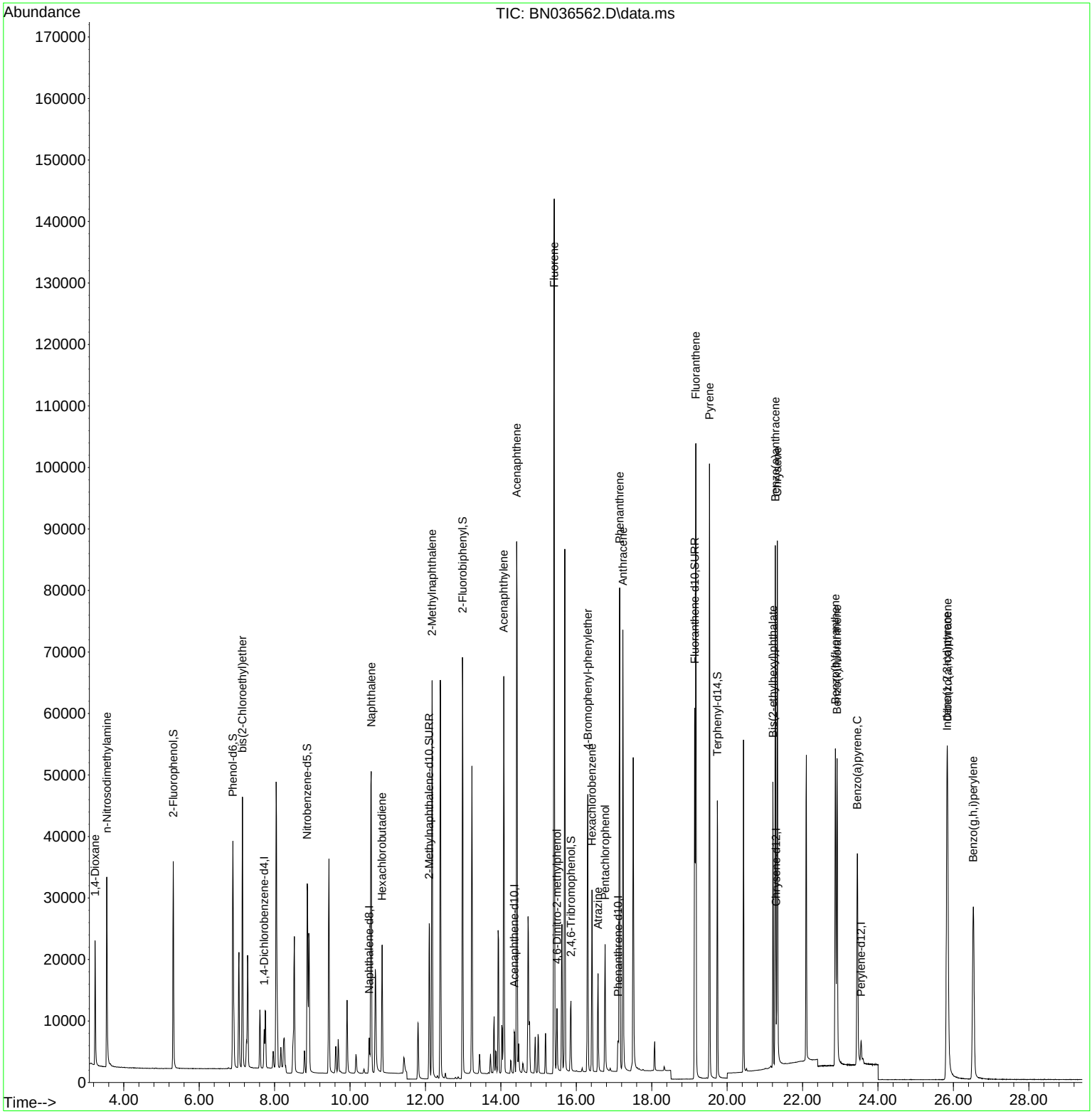
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 2890 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 6824 | 0.400 | ng | | 0.00 |
| 13) Acenaphthene-d10 |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

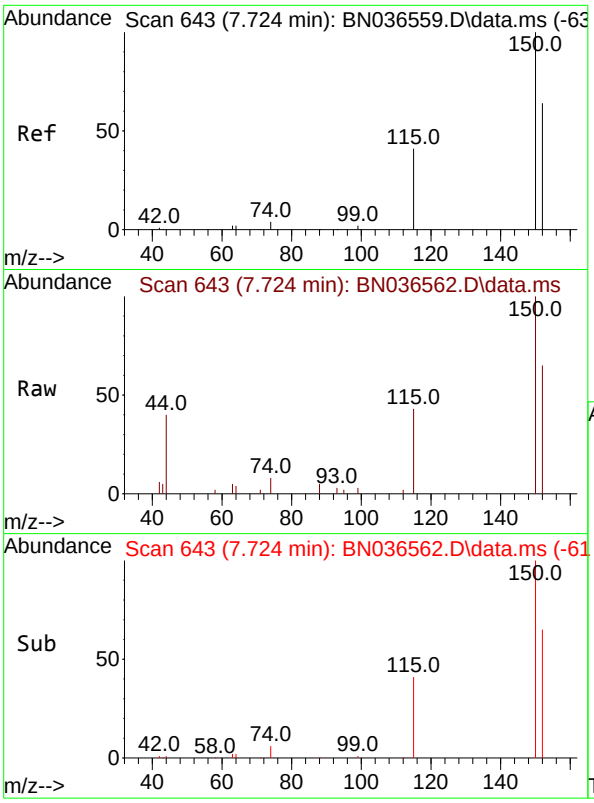
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

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



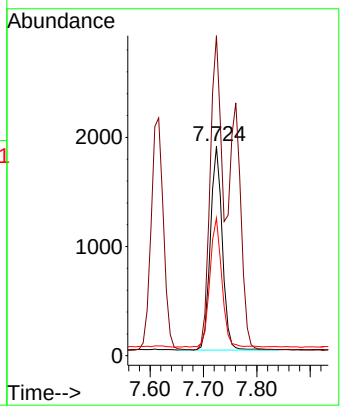


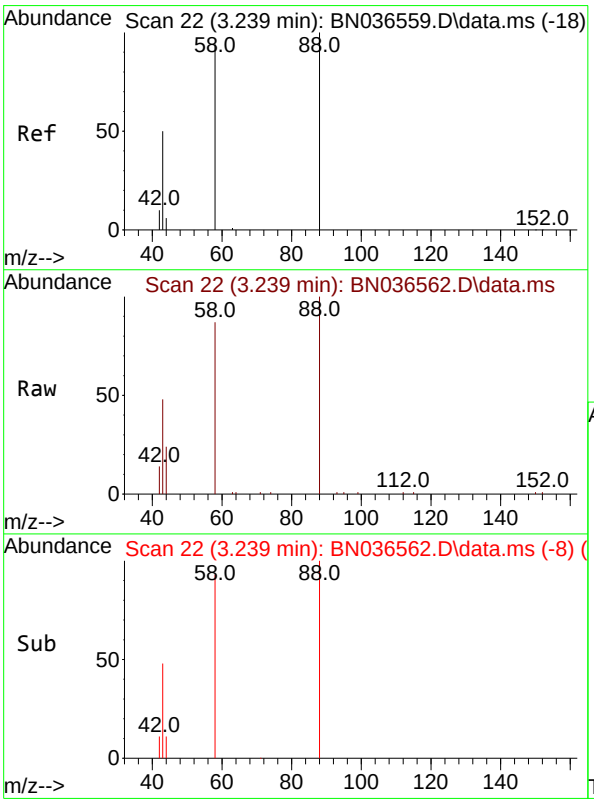

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:152 Resp: 2890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.9 | 123.7 | 185.5 |
| 115 | 65.7 | 54.3 | 81.5 |

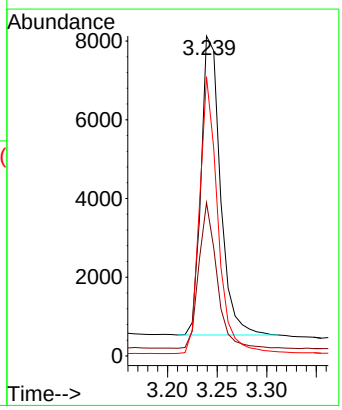


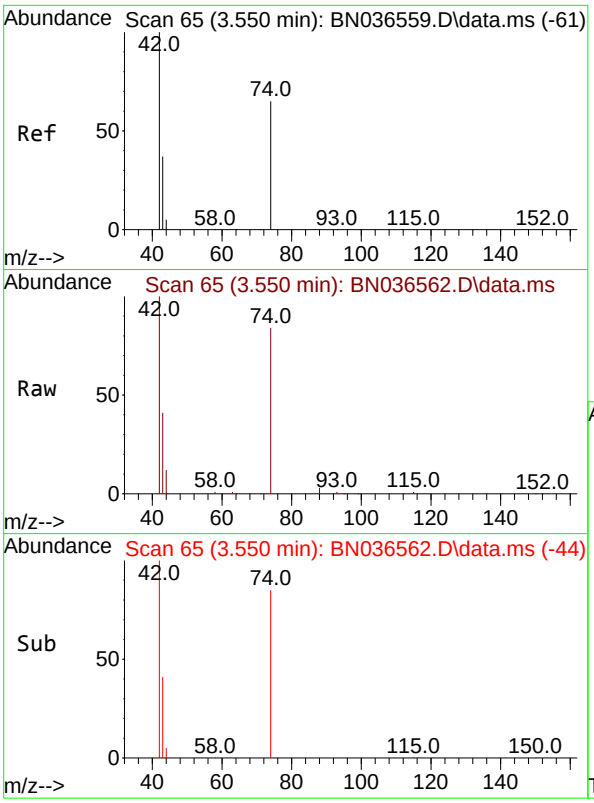




#2
1,4-Dioxane
Concen: 3.209 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion: 88 Resp: 10288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 45.2 | 37.8 | 56.8 |
| 58 | 87.2 | 67.4 | 101.2 |



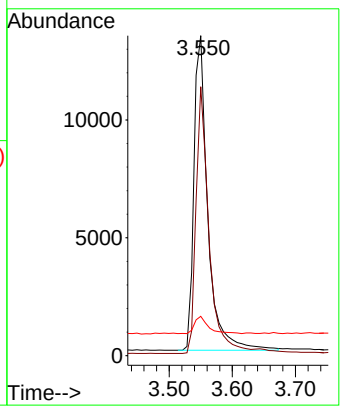


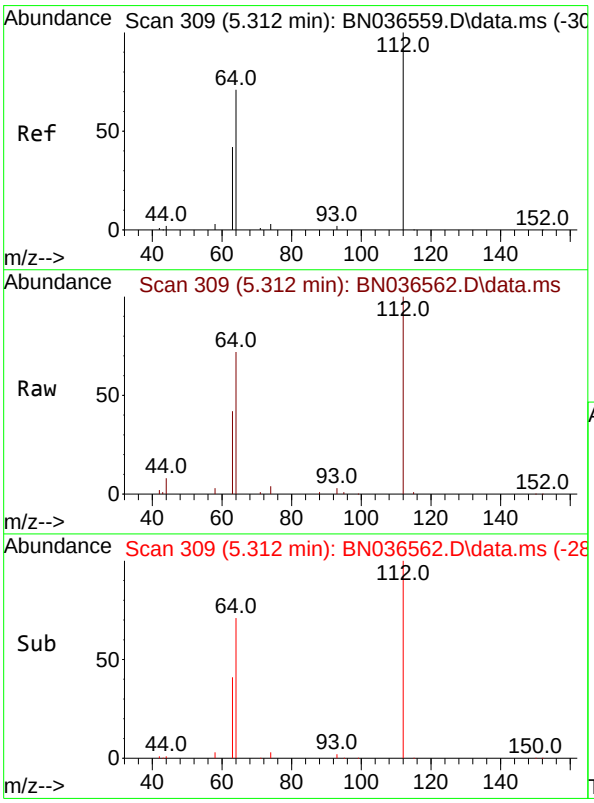

#3
n-Nitrosodimethylamine
Concen: 3.147 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion: 42 Resp: 20412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 78.8 | 60.6 | 90.8 |
| 44 | 5.5 | 6.3 | 9.5# |

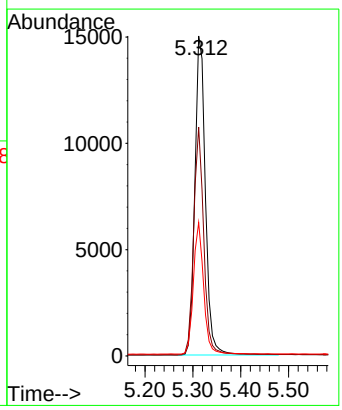


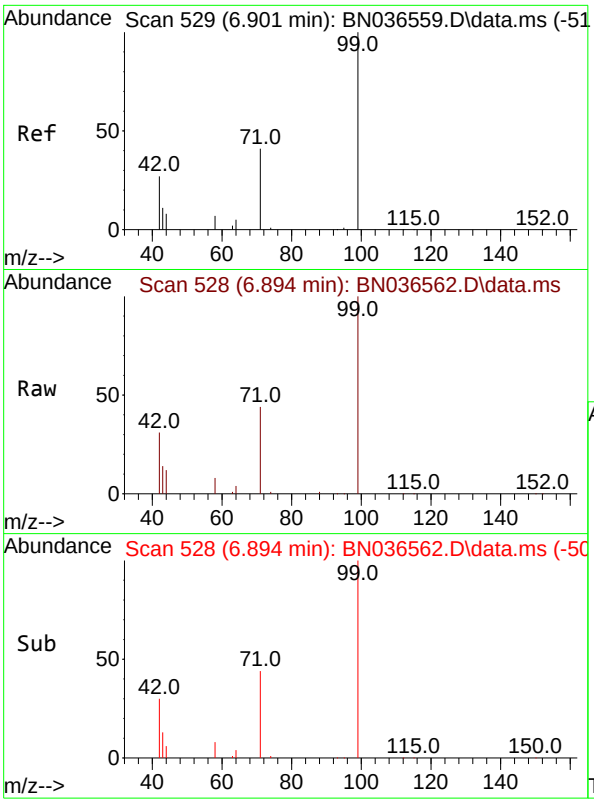




#4
2-Fluorophenol
Concen: 3.420 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:112 Resp: 23032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.4 | 53.1 | 79.7 |
| 63 | 39.8 | 31.8 | 47.8 |



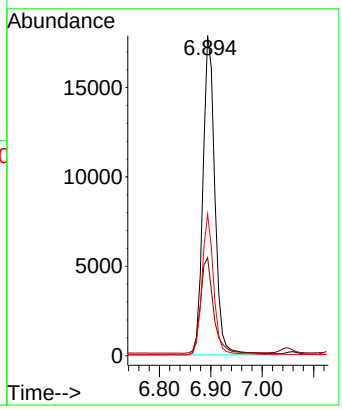


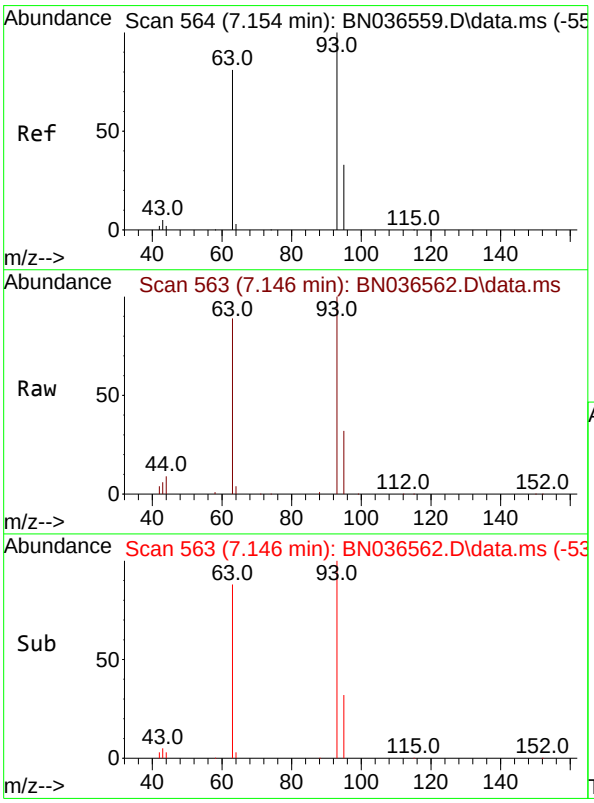

#5
Phenol-d6
Concen: 3.485 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion: 99 Resp: 28996

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 32.3 | 26.5 | 39.7 |
| 71 | 43.2 | 34.1 | 51.1 |

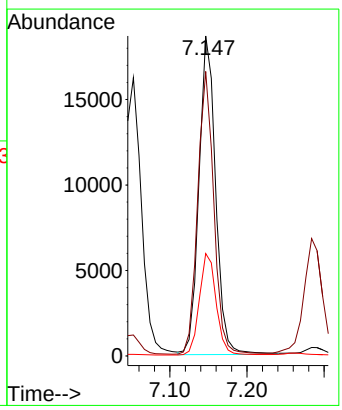


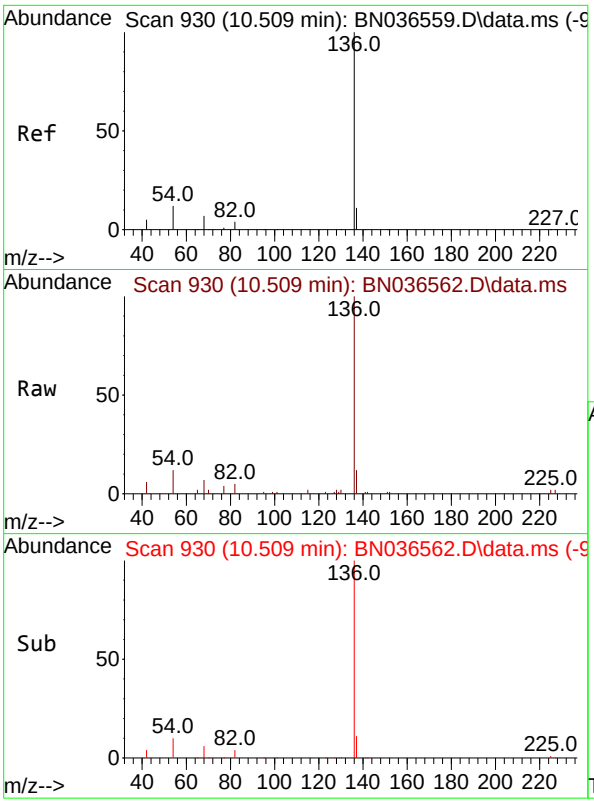




#6
bis(2-Chloroethyl)ether
Concen: 3.253 ng
RT: 7.146 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion: 93 Resp: 27978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.7 | 67.7 | 101.5 |
| 95 | 32.0 | 25.6 | 38.4 |



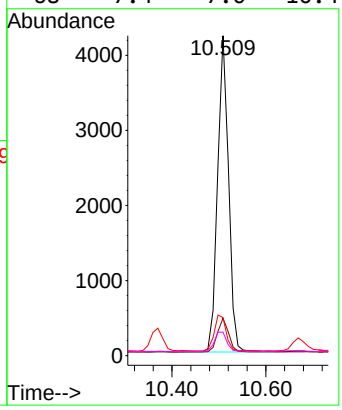


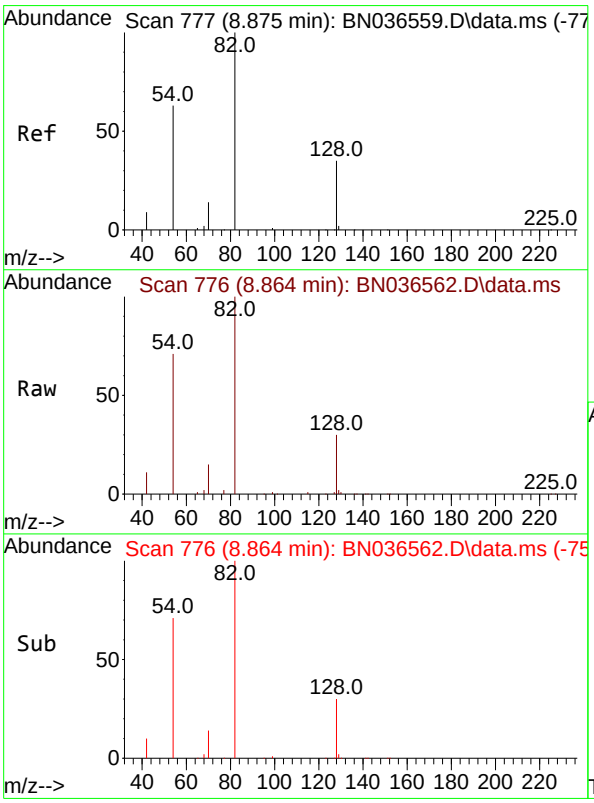

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:136 Resp: 6824

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

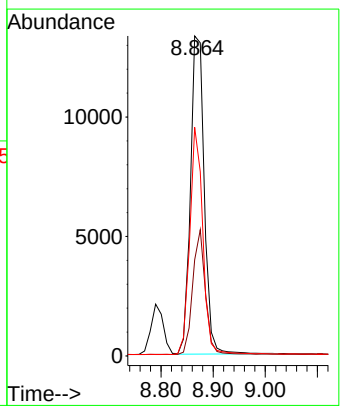


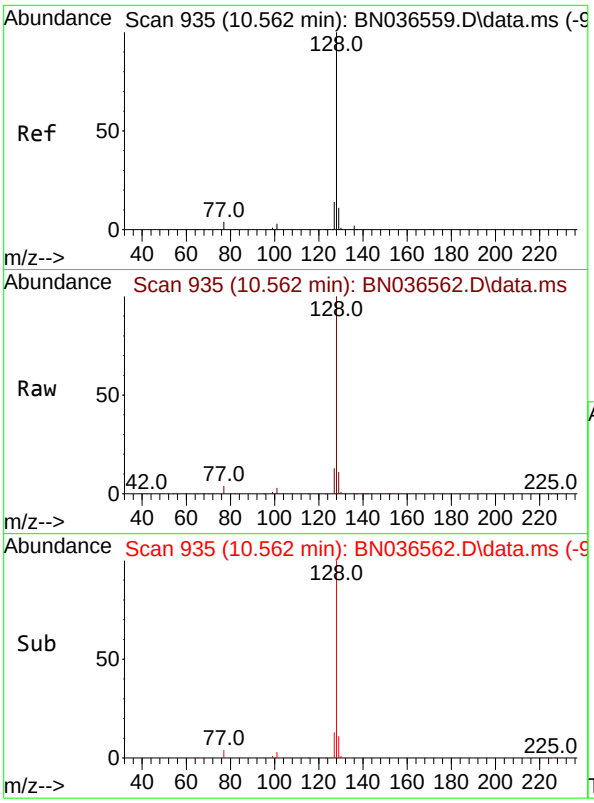




#8
Nitrobenzene-d5
Concen: 3.312 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.011 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion: 82 Resp: 24586

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



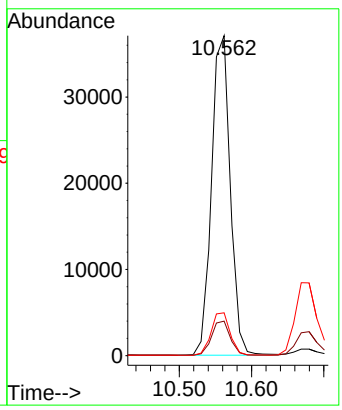


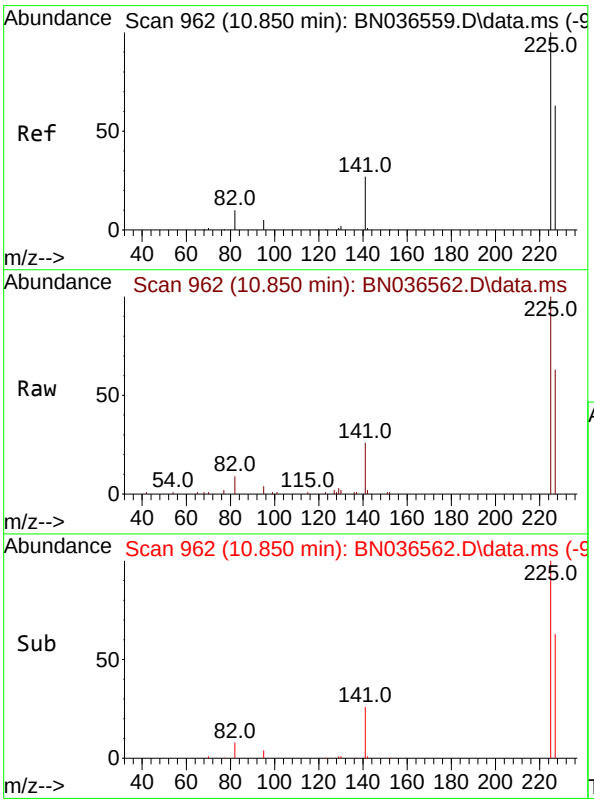

#9
Naphthalene
Concen: 3.323 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:128 Resp: 66694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.8 | 9.8 | 14.6 |
| 127 | 13.4 | 11.8 | 17.8 |

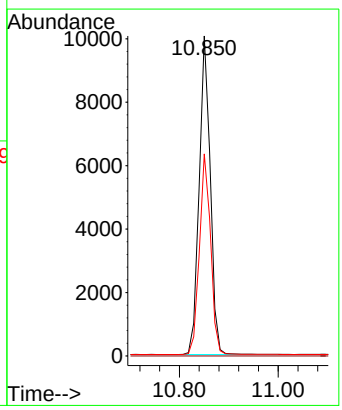


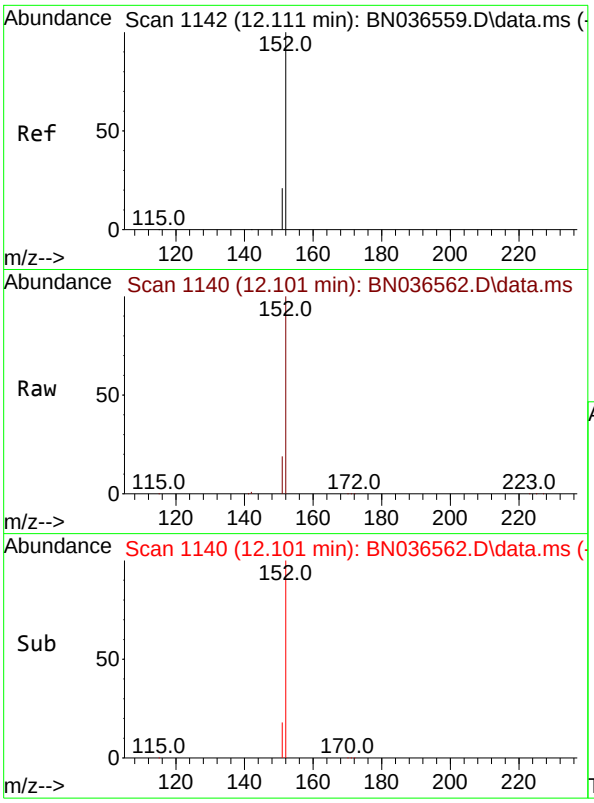




#10
Hexachlorobutadiene
Concen: 3.305 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:225 Resp: 15618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.6 | 51.8 | 77.8 |



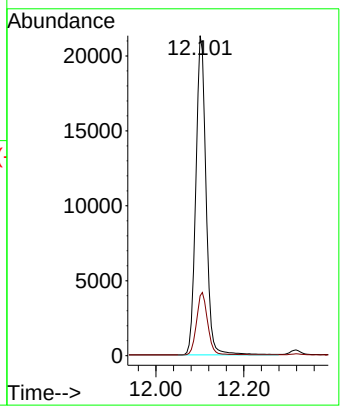


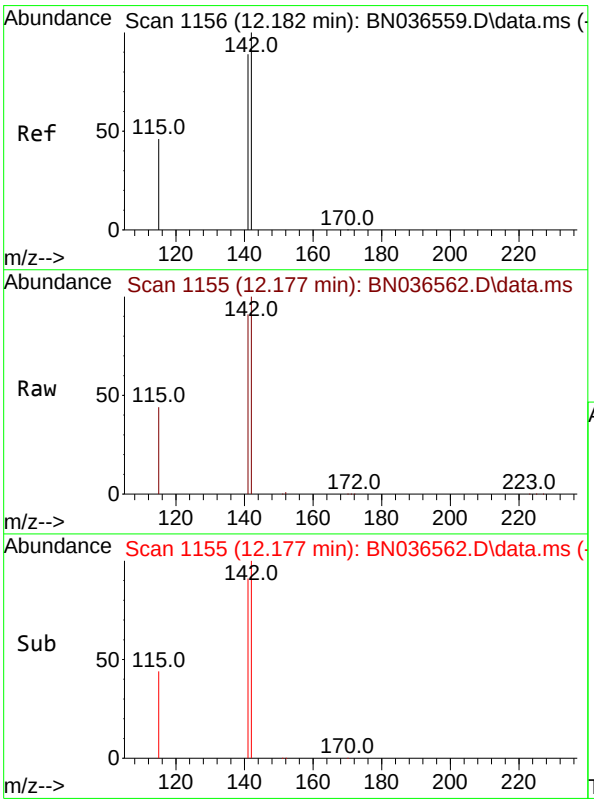

#11
2-Methylnaphthalene-d10
Concen: 3.407 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:152 Resp: 34578

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.2 | 17.0 | 25.6 |

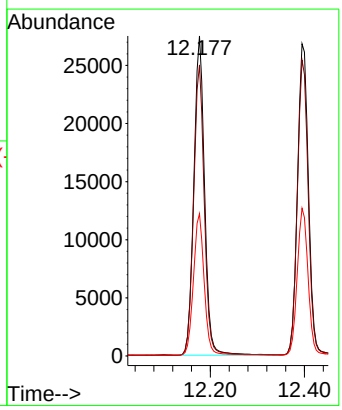


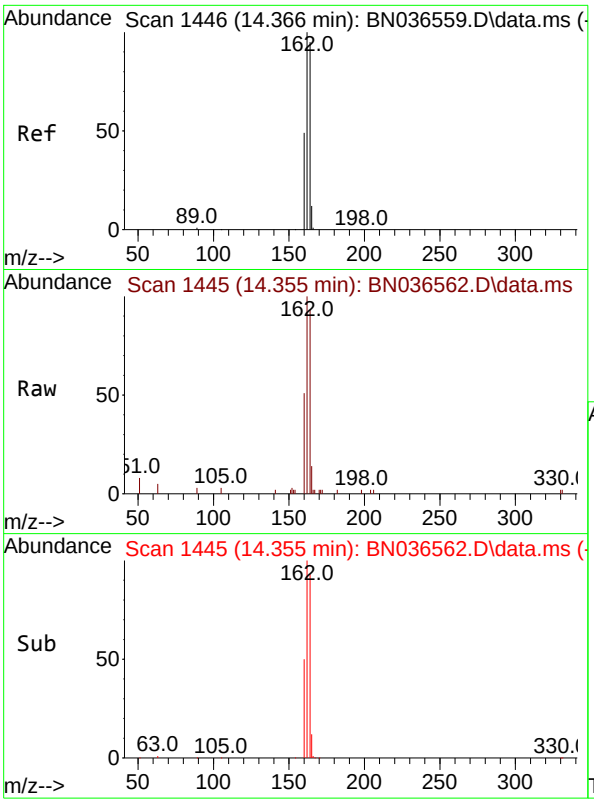




#12
2-Methylnaphthalene
Concen: 3.427 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:142 Resp: 43768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.9 | 71.7 | 107.5 |
| 115 | 44.5 | 38.3 | 57.5 |



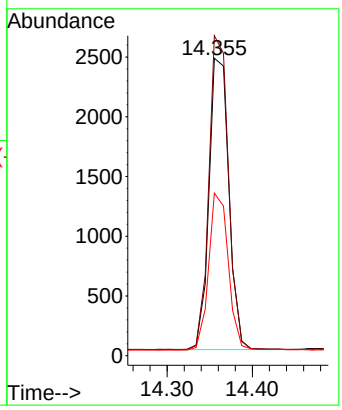


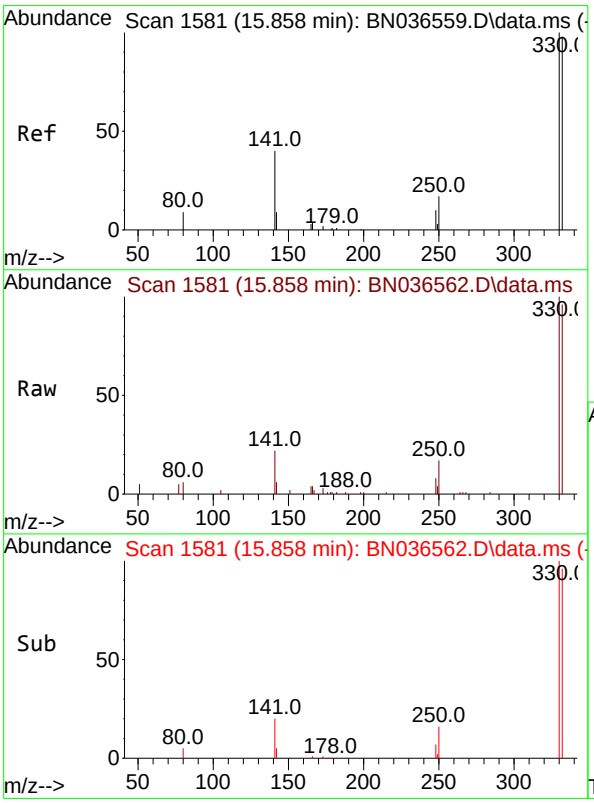

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:164 Resp: 3957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 107.6 | 84.2 | 126.2 |
| 160 | 54.7 | 42.2 | 63.2 |

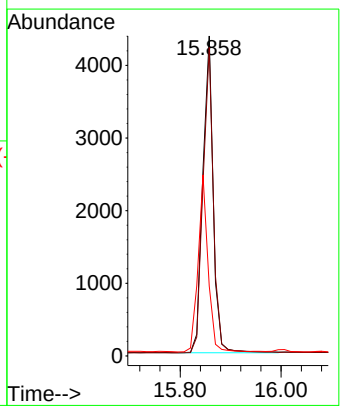


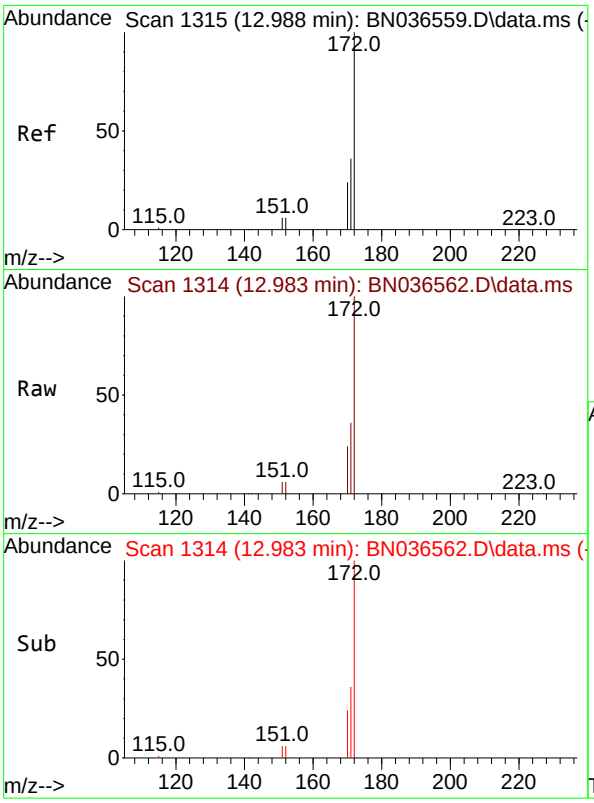




#14
2,4,6-Tribromophenol
Concen: 3.482 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:330 Resp: 6252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 96.1 | 75.2 | 112.8 |
| 141 | 53.7 | 43.4 | 65.2 |



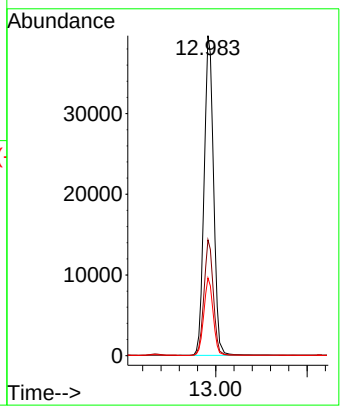


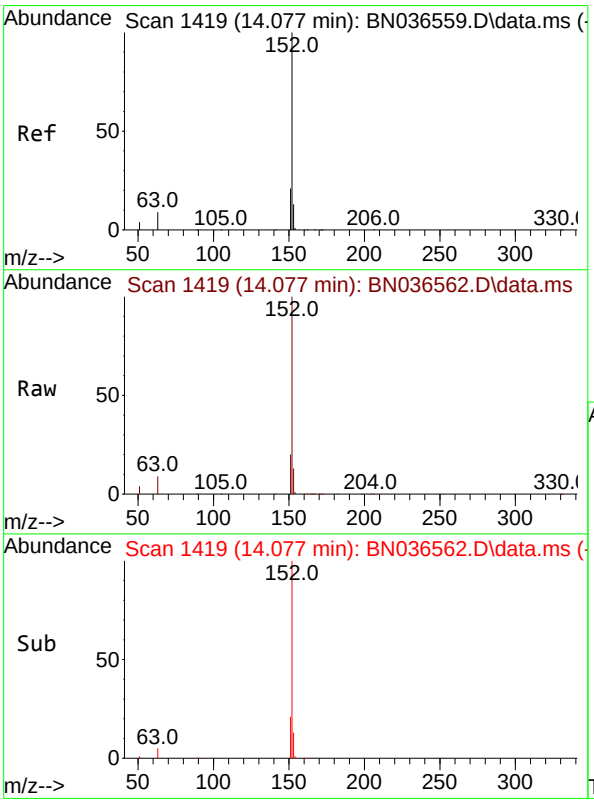

#15
2-Fluorobiphenyl
Concen: 3.529 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:172 Resp: 81236

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

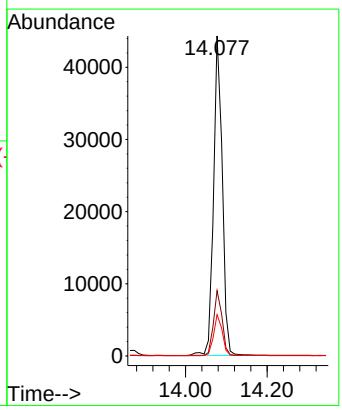


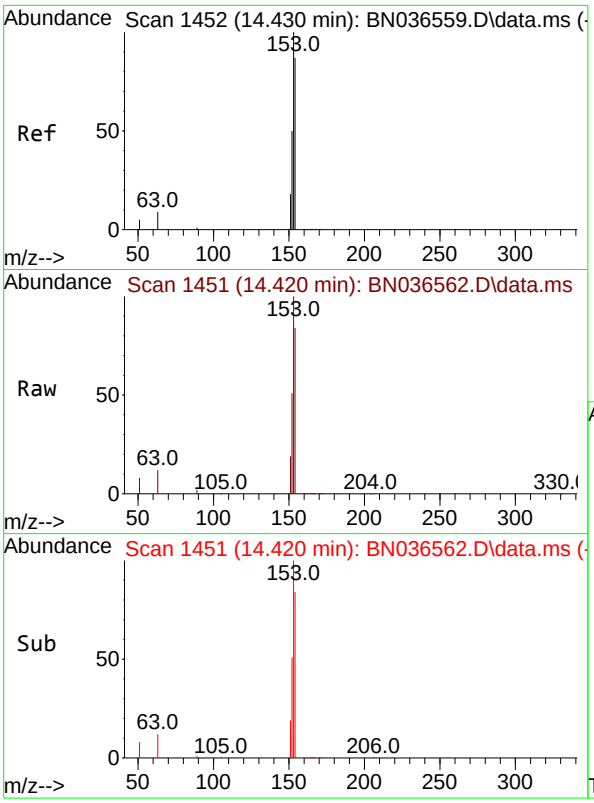




#16
Acenaphthylene
Concen: 3.516 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:152 Resp: 65654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.0 | 16.2 | 24.4 |
| 153 | 12.8 | 10.6 | 15.8 |



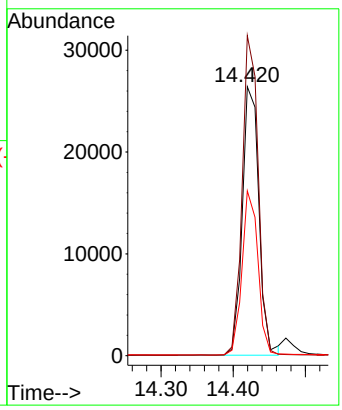


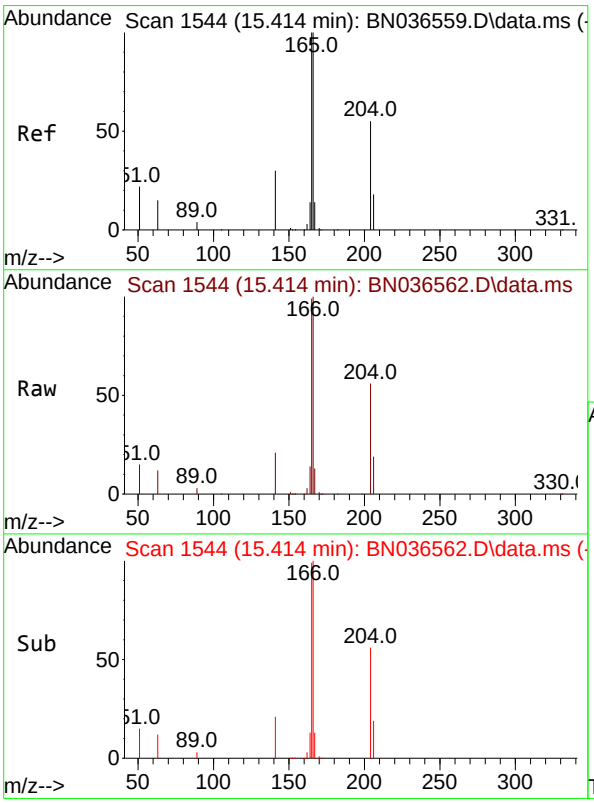

#17
Acenaphthene
Concen: 3.467 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:154 Resp: 42378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 114.6 | 94.1 | 141.1 |
| 152 | 58.9 | 49.8 | 74.6 |

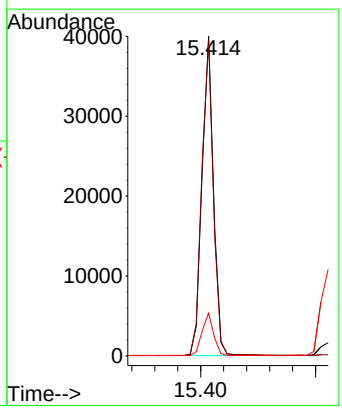


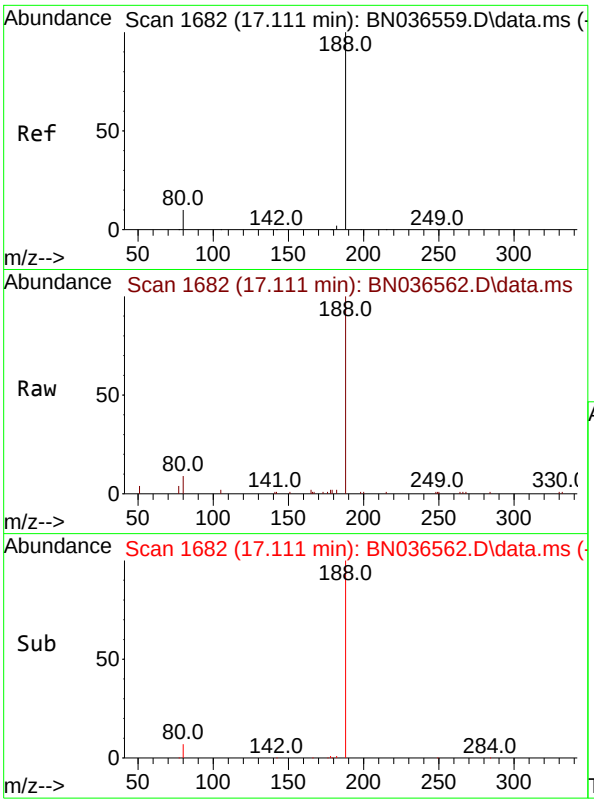




#18
Fluorene
Concen: 3.404 ng
RT: 15.414 min Scan# 1544
Delta R.T. -0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:166 Resp: 56295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.2 | 79.8 | 119.8 |
| 167 | 13.0 | 10.6 | 15.8 |



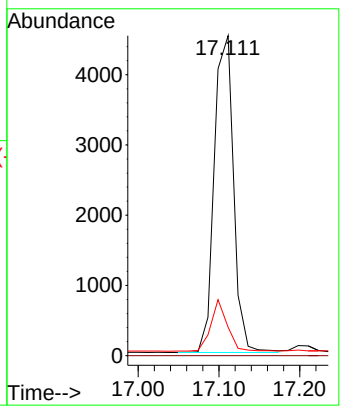


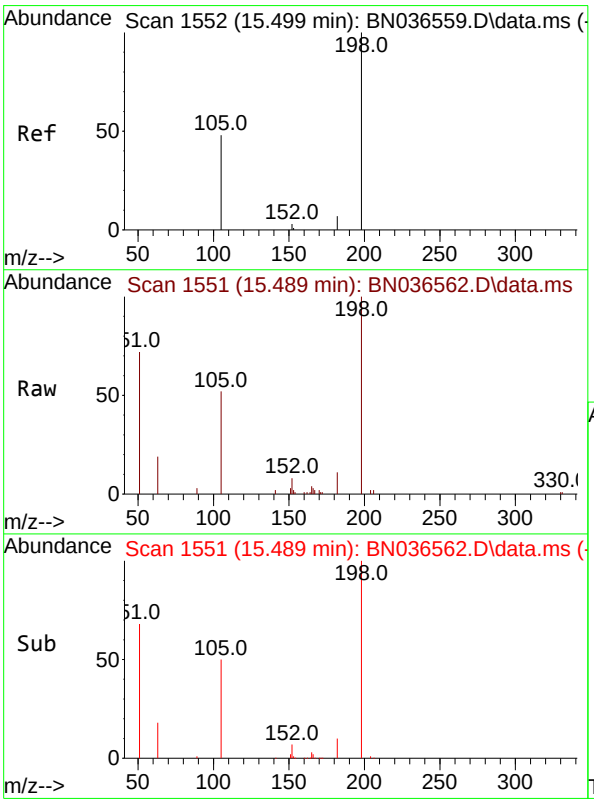

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:188 Resp: 7488

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 8.9 | 8.8 | 13.2 |

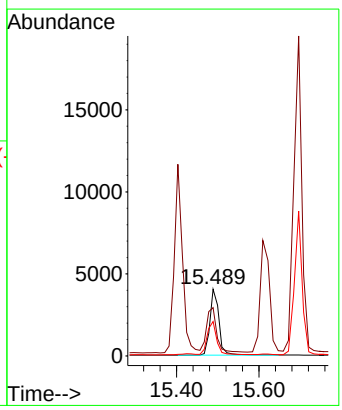


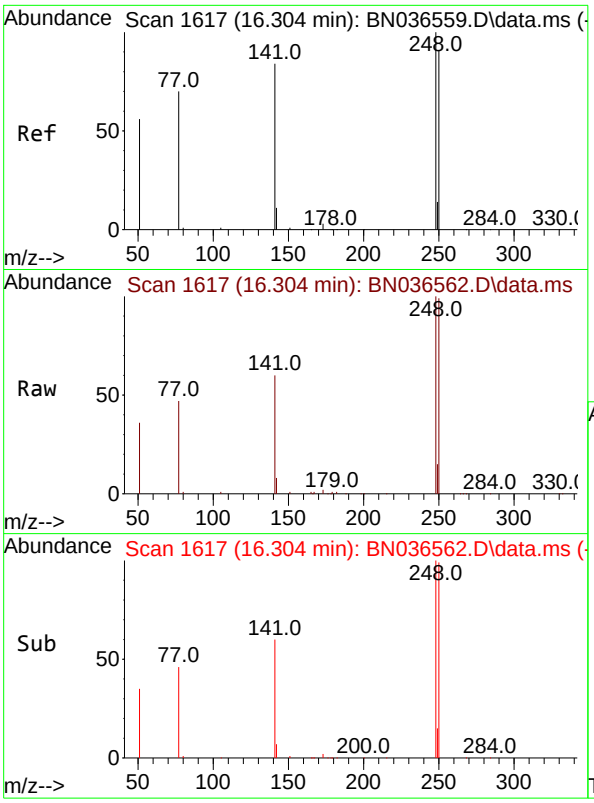




#20
4,6-Dinitro-2-methylphenol
Concen: 3.315 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:198 Resp: 6567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 72.3 | 107.9 | 161.9# |
| 105 | 51.5 | 56.2 | 84.2# |



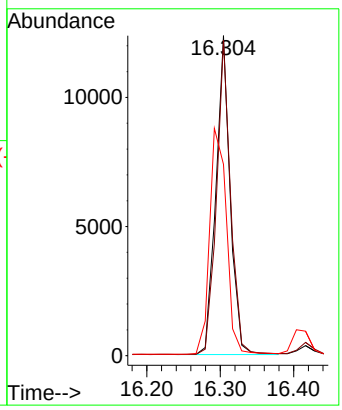


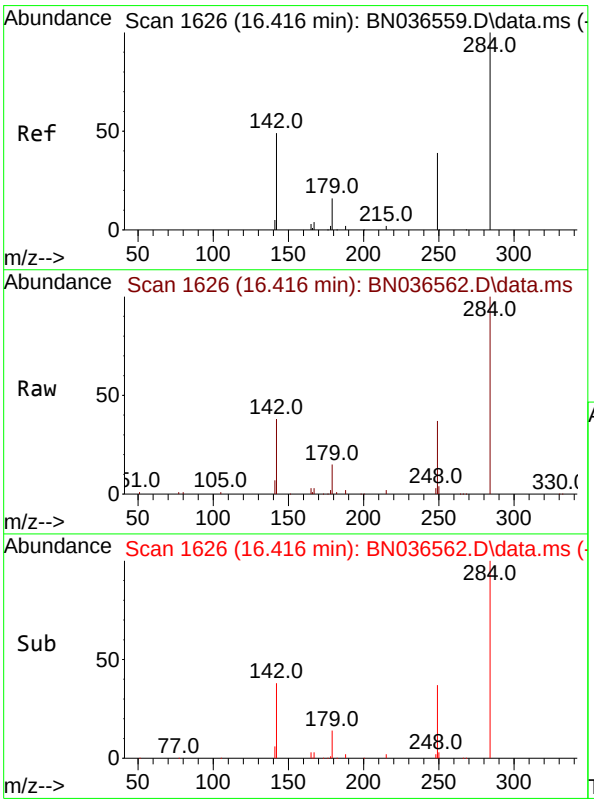

#21
4-Bromophenyl-phenylether
Concen: 3.549 ng
RT: 16.304 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:248 Resp: 16652

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

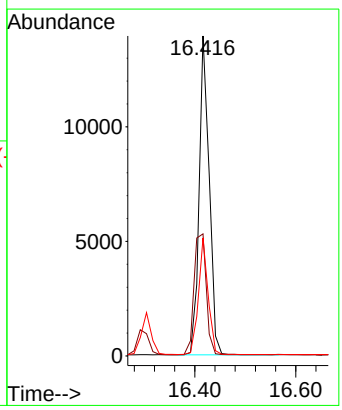


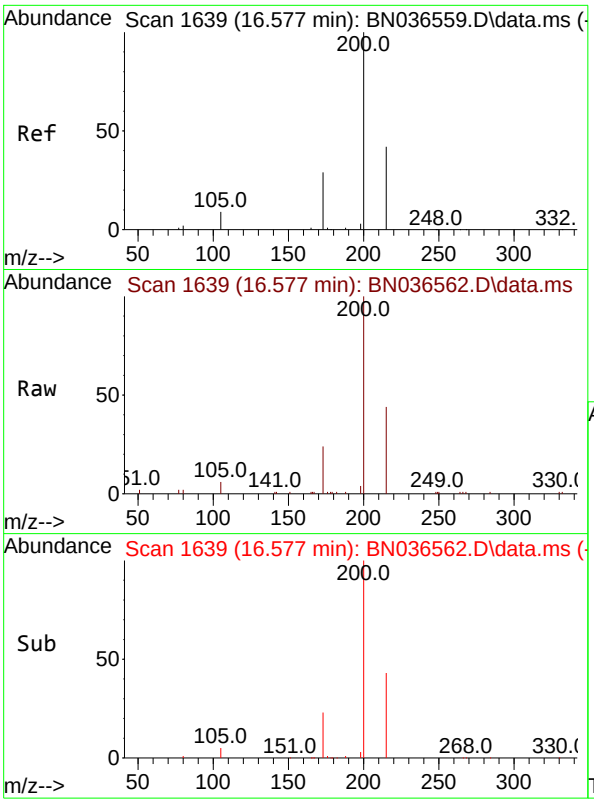




#22
Hexachlorobenzene
Concen: 3.406 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:284 Resp: 19287

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



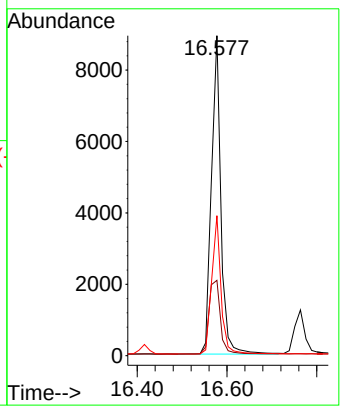


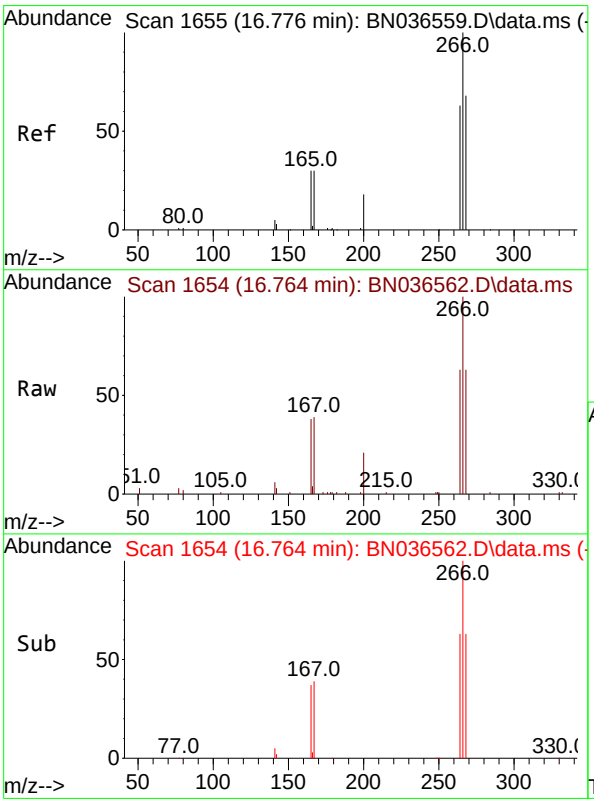

#23
Atrazine
Concen: 3.448 ng
RT: 16.577 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:200 Resp: 12969

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

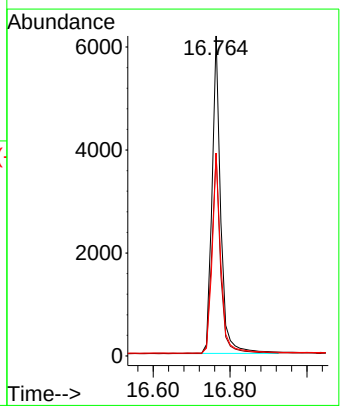


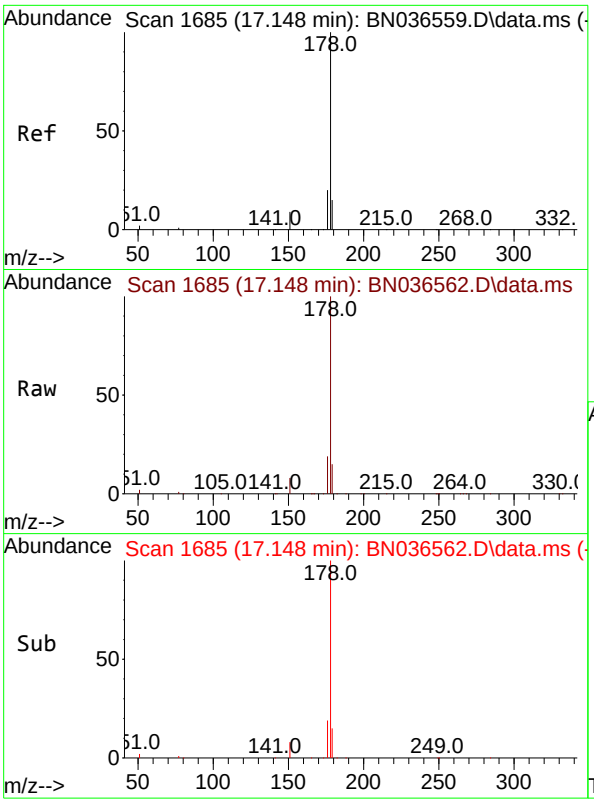




#24
Pentachlorophenol
Concen: 3.726 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:266 Resp: 9625

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



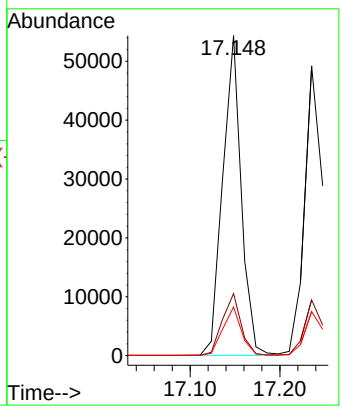


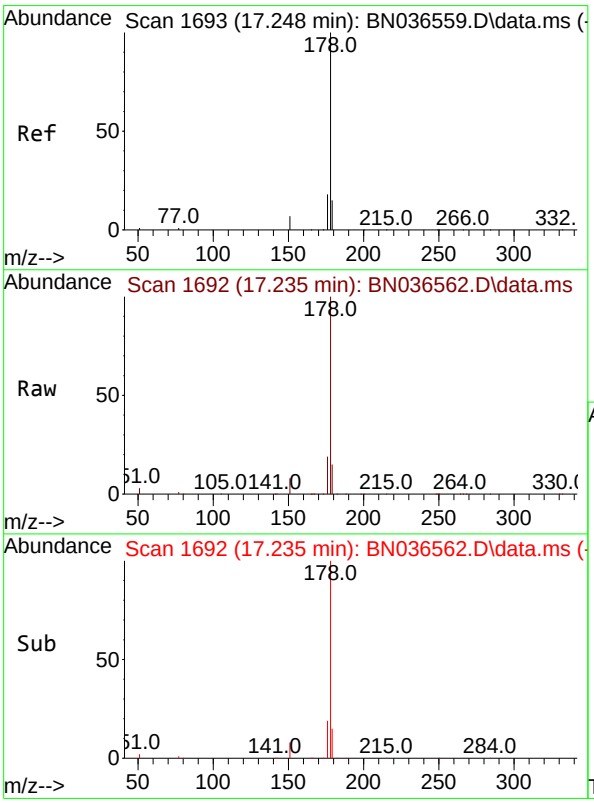

#25
Phenanthrene
Concen: 3.468 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:178 Resp: 77903

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.5 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |

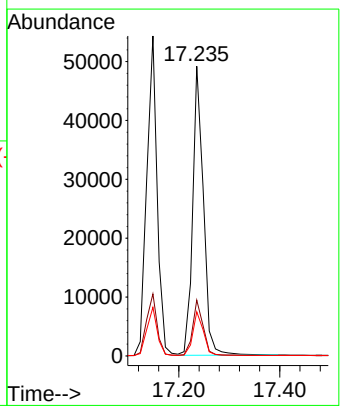


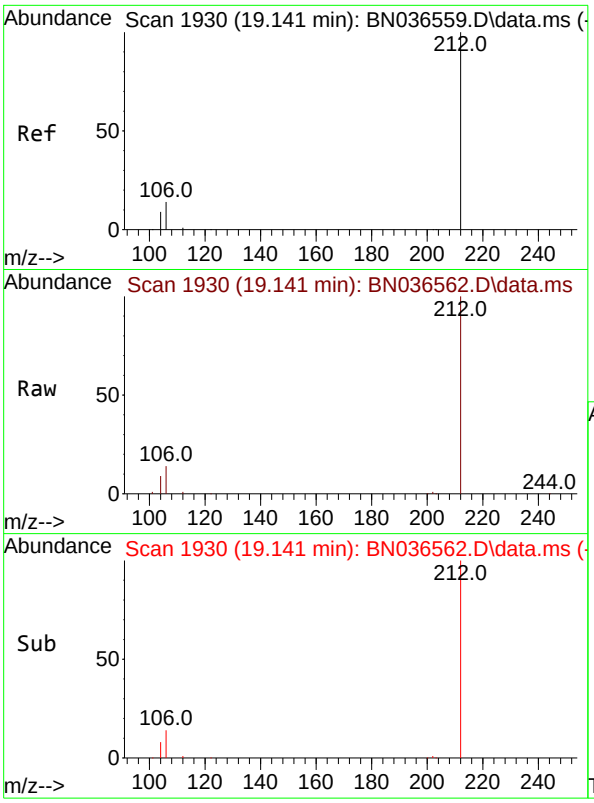




#26
Anthracene
Concen: 3.590 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:178 Resp: 72775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.9 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |



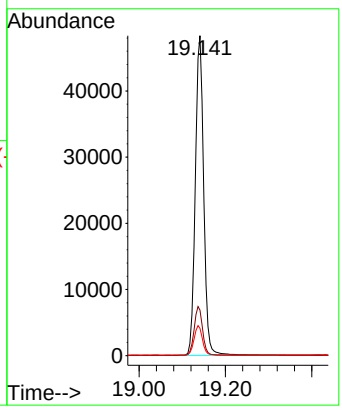


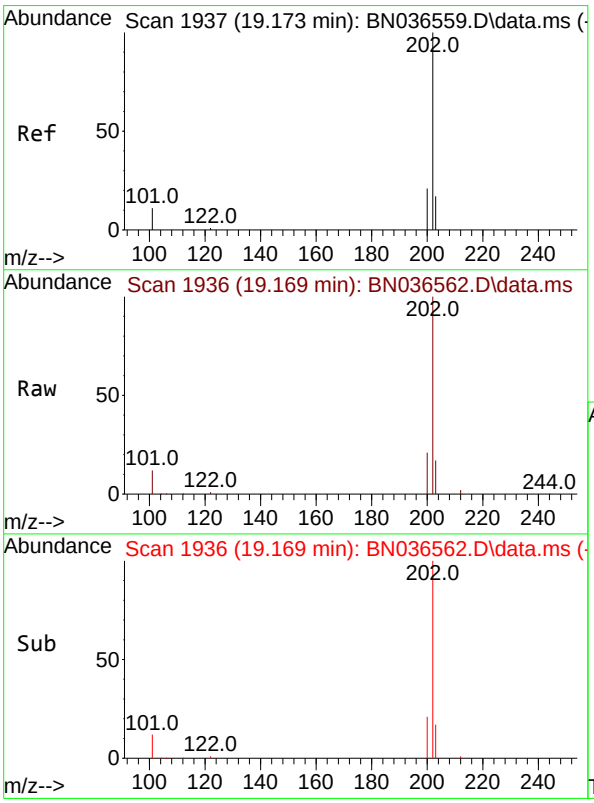

#27
Fluoranthene-d10
Concen: 3.394 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:212 Resp: 65134

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.4 | 11.8 | 17.6 |
| 104 | 9.2 | 7.3 | 10.9 |

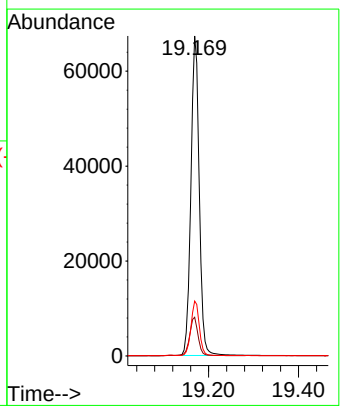


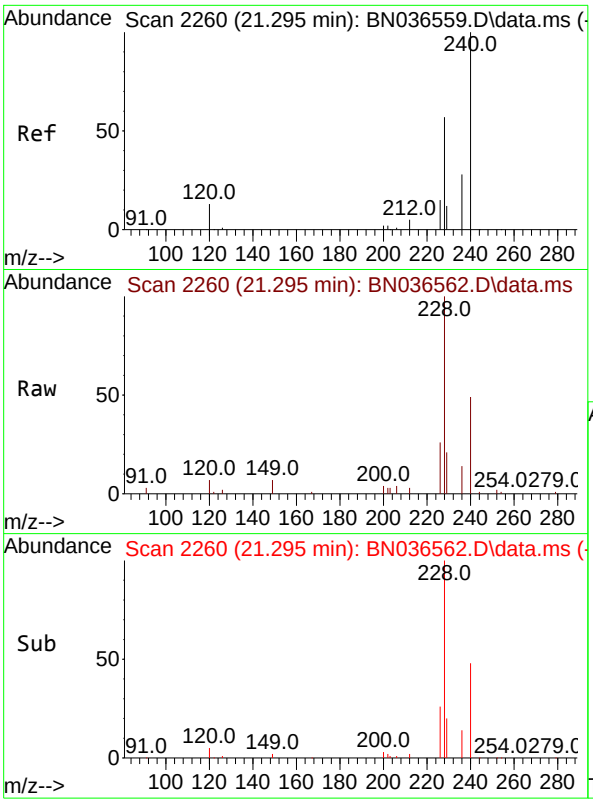




#28
Fluoranthene
Concen: 3.436 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:202 Resp: 86688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.3 | 9.4 | 14.0 |
| 203 | 17.0 | 13.5 | 20.3 |



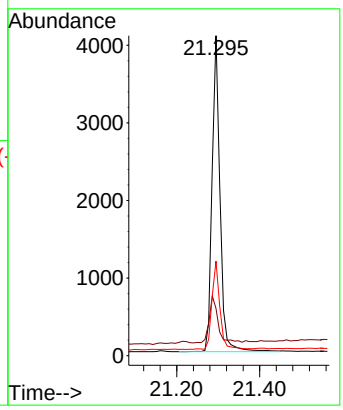


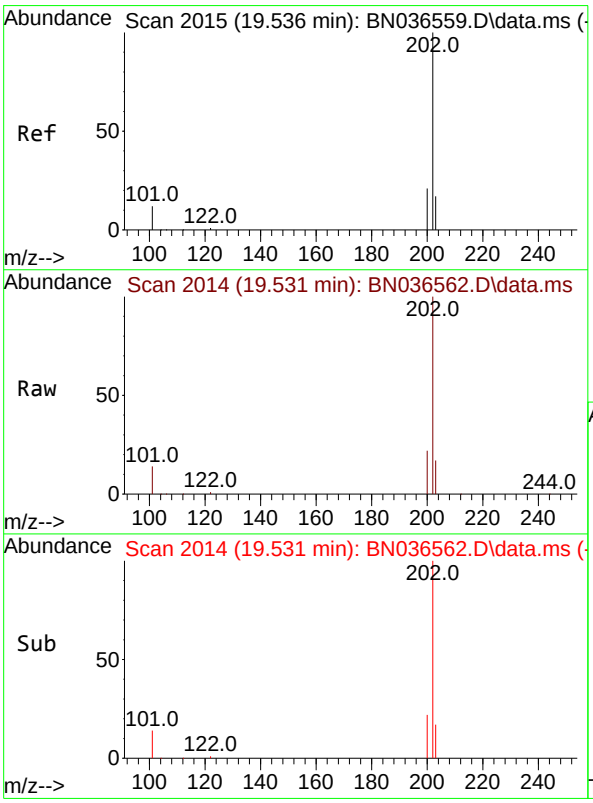

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:240 Resp: 5439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 14.8 | 14.6 | 22.0 |
| 236 | 29.5 | 24.1 | 36.1 |

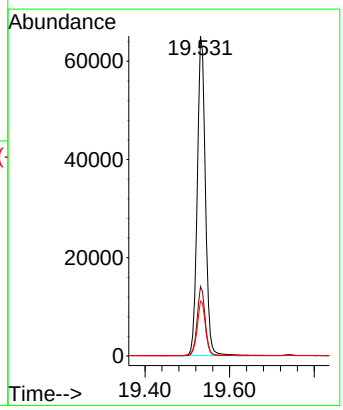


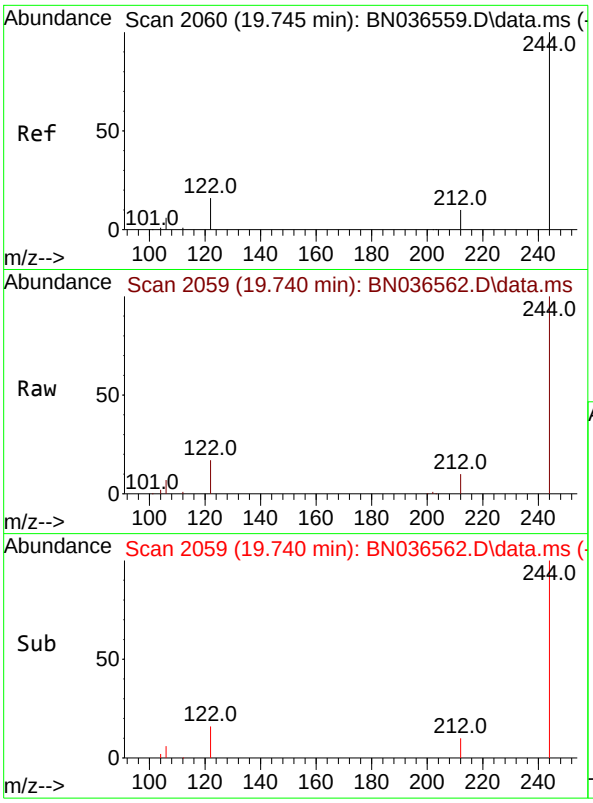




#30
Pyrene
Concen: 3.260 ng
RT: 19.531 min Scan# 2014
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:202 Resp: 86694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.6 | 14.1 | 21.1 |



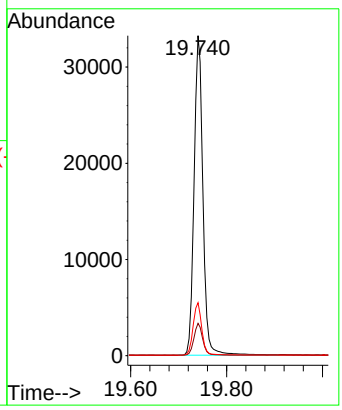


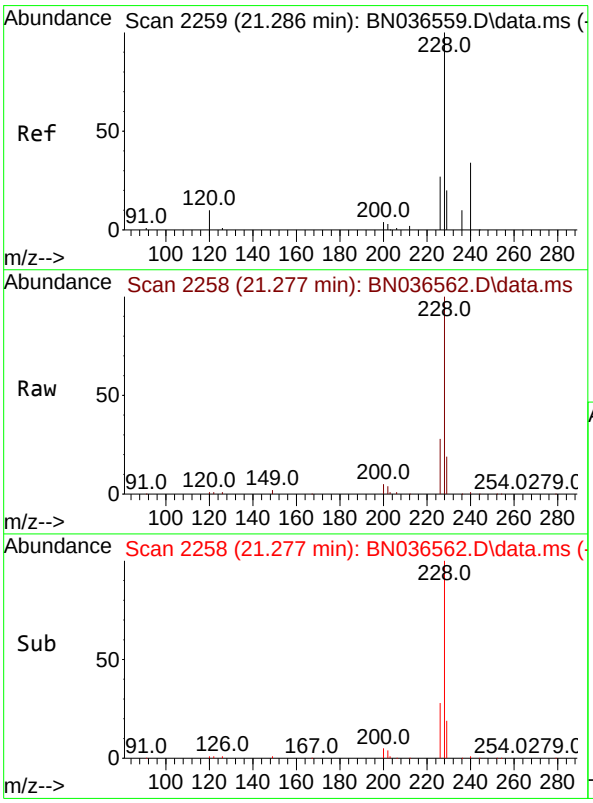

#31
Terphenyl-d14
Concen: 3.297 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:244 Resp: 42959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 10.1 | 9.6 | 14.4 |
| 122 | 16.6 | 13.9 | 20.9 |

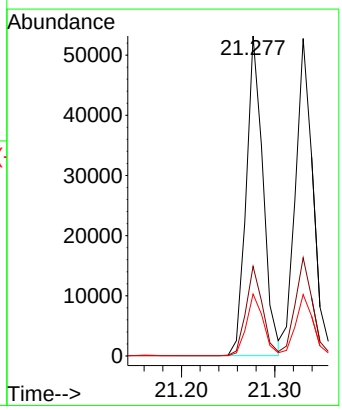


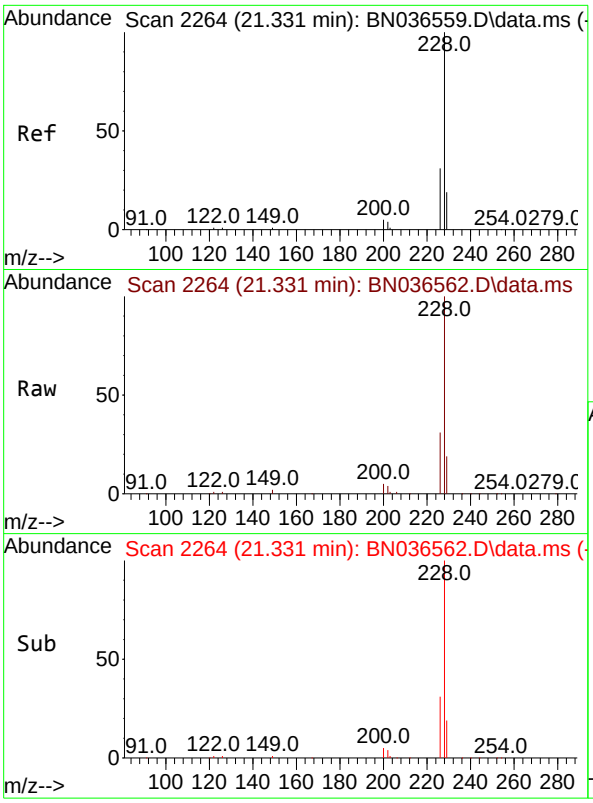




#32
Benzo(a)anthracene
Concen: 3.516 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:228 Resp: 66496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.0 | 22.5 | 33.7 |
| 229 | 19.4 | 16.6 | 25.0 |



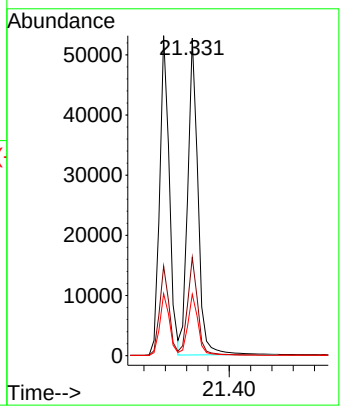


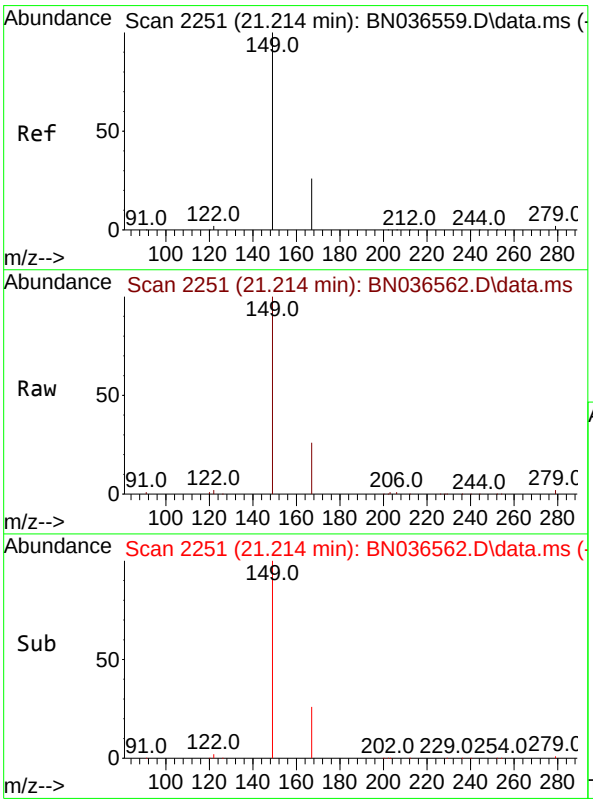

#33
Chrysene
Concen: 3.403 ng
RT: 21.331 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:228 Resp: 70334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.0 | 25.3 | 37.9 |
| 229 | 19.4 | 15.8 | 23.8 |

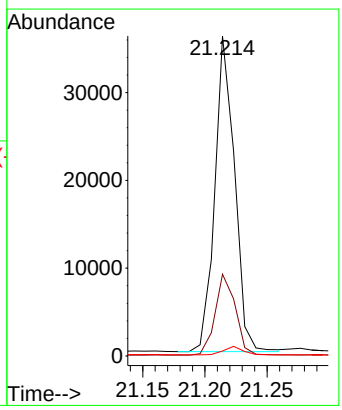


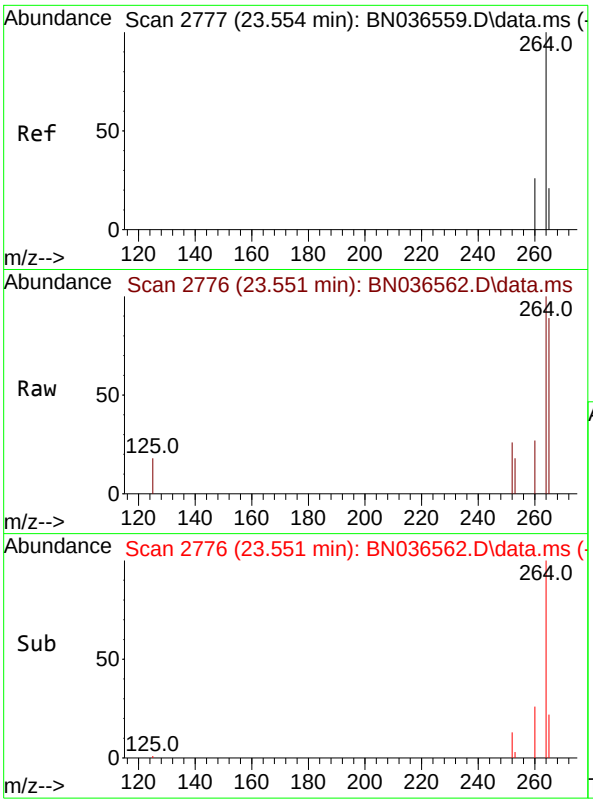




#34
Bis(2-ethylhexyl)phthalate
Concen: 2.947 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:149 Resp: 39682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.3 | 20.7 | 31.1 |
| 279 | 2.6 | 3.6 | 5.4# |



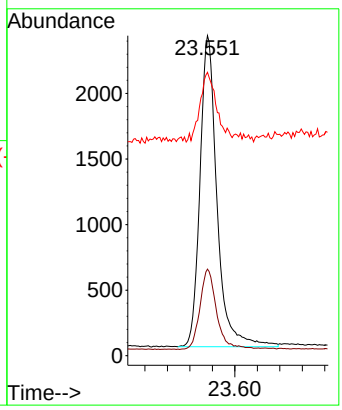


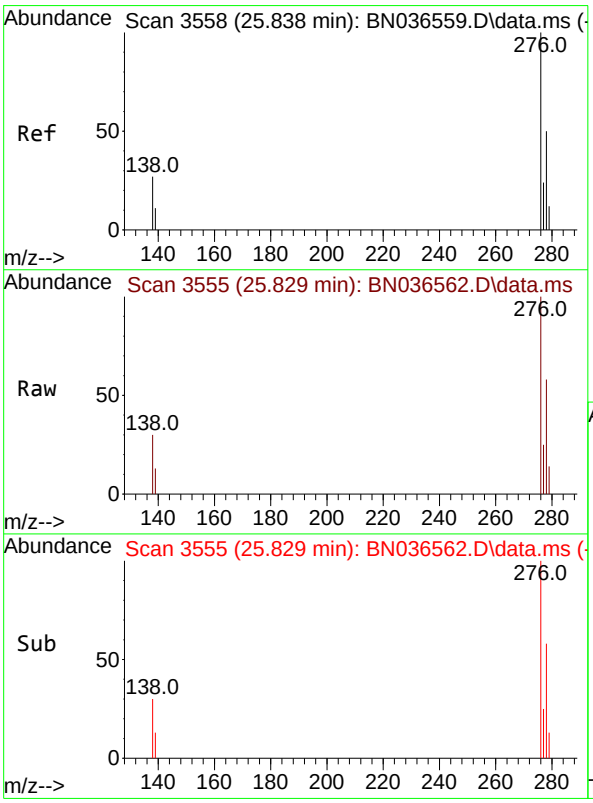

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:264 Resp: 5002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.0 | 22.6 | 33.8 |
| 265 | 88.6 | 88.1 | 132.1 |

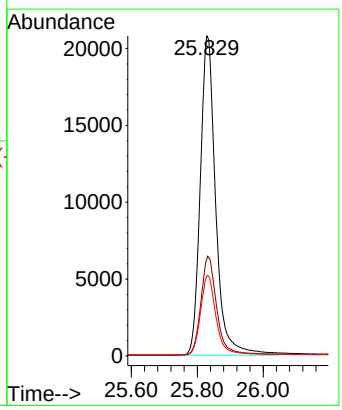


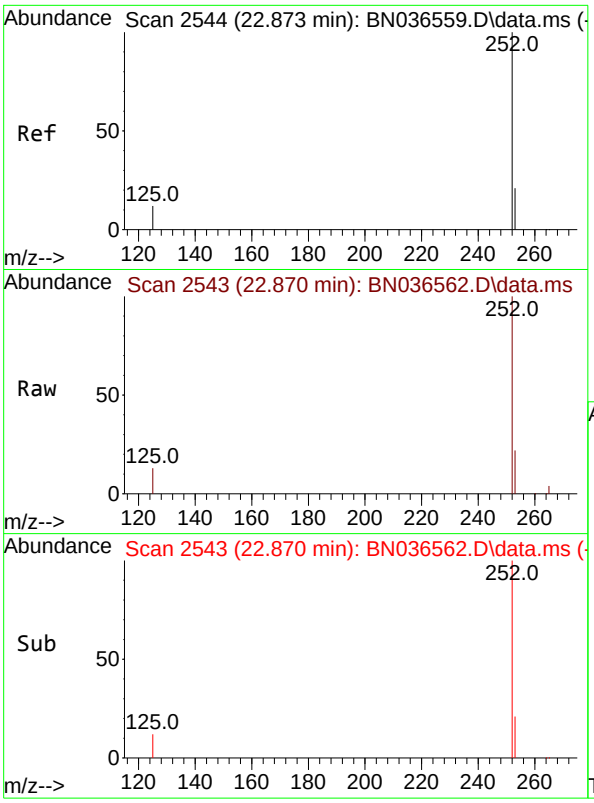




#36
Indeno(1,2,3-cd)pyrene
Concen: 3.754 ng
RT: 25.829 min Scan# 3555
Delta R.T. -0.009 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:276 Resp: 67767

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 31.3 | 23.4 | 35.2 |
| 277 | 24.8 | 20.0 | 30.0 |



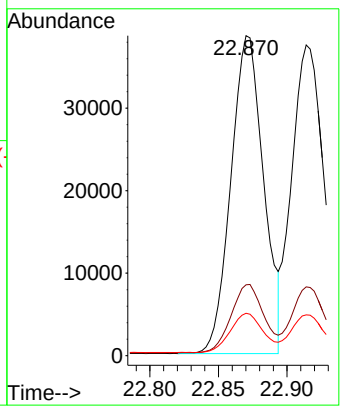


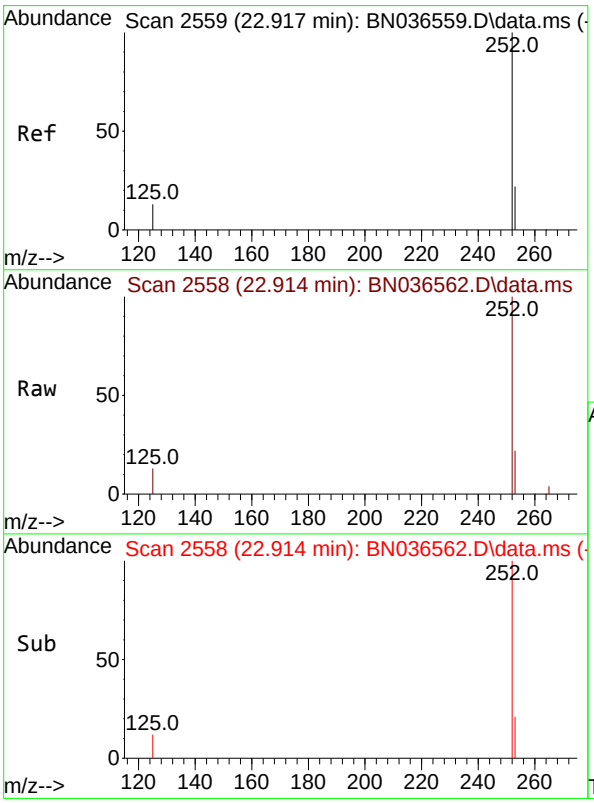

#37
Benzo(b)fluoranthene
Concen: 3.506 ng
RT: 22.870 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:252 Resp: 63823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.2 | 23.9 | 35.9# |
| 125 | 13.3 | 17.4 | 26.2# |

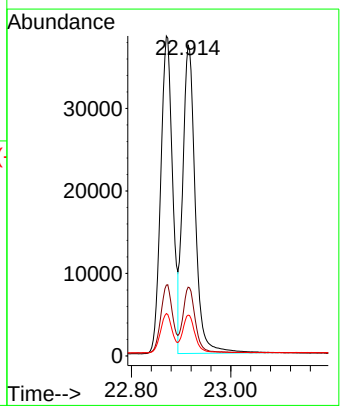


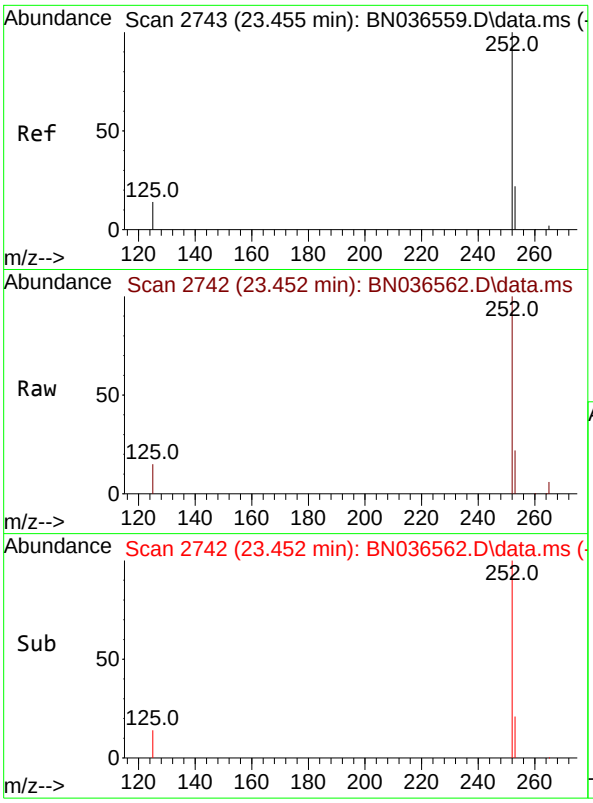




#38
Benzo(k)fluoranthene
Concen: 3.425 ng
RT: 22.914 min Scan# 2558
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:252 Resp: 65410

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.1 | 24.6 | 36.8# |
| 125 | 13.2 | 17.8 | 26.8# |



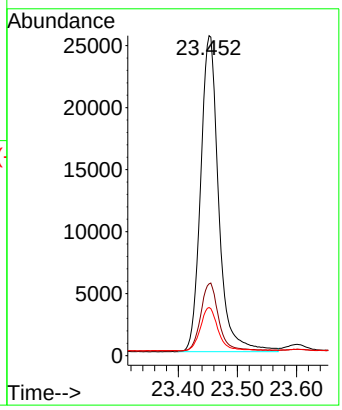


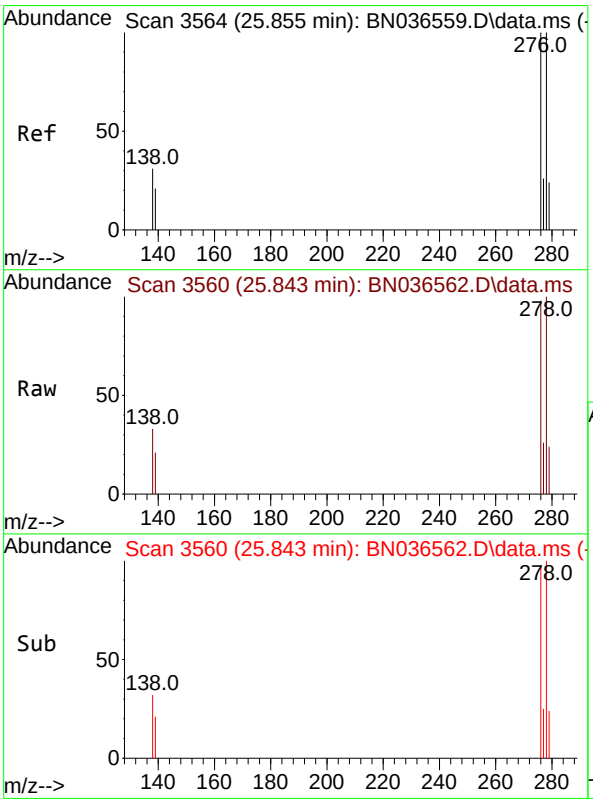

#39
Benzo(a)pyrene
Concen: 3.523 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:252 Resp: 54009

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.4 | 27.8 | 41.8# |
| 125 | 15.1 | 22.7 | 34.1# |

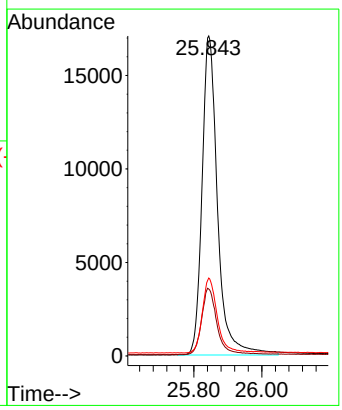


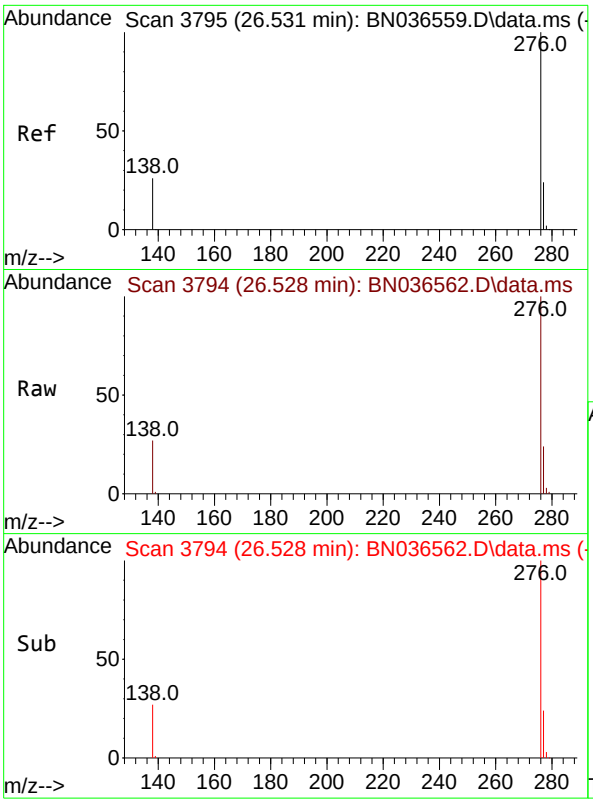




#40
Dibenzo(a,h)anthracene
Concen: 3.846 ng
RT: 25.843 min Scan# 3560
Delta R.T. -0.012 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:278 Resp: 54058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 20.9 | 20.8 | 31.2 |
| 279 | 24.4 | 28.8 | 43.2# |



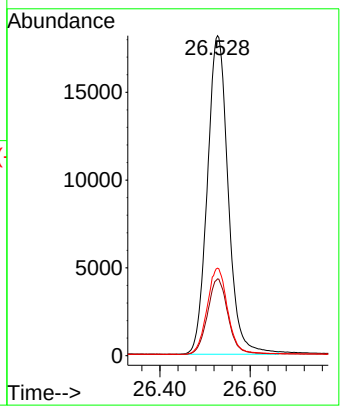



#41
Benzo(g,h,i)perylene
Concen: 3.606 ng
RT: 26.528 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC3.2

Tgt Ion:276 Resp: 57986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 24.0 | 22.2 | 33.4 |
| 138 | 27.4 | 24.1 | 36.1 |



Quantitation Report (QT Reviewed)

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

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

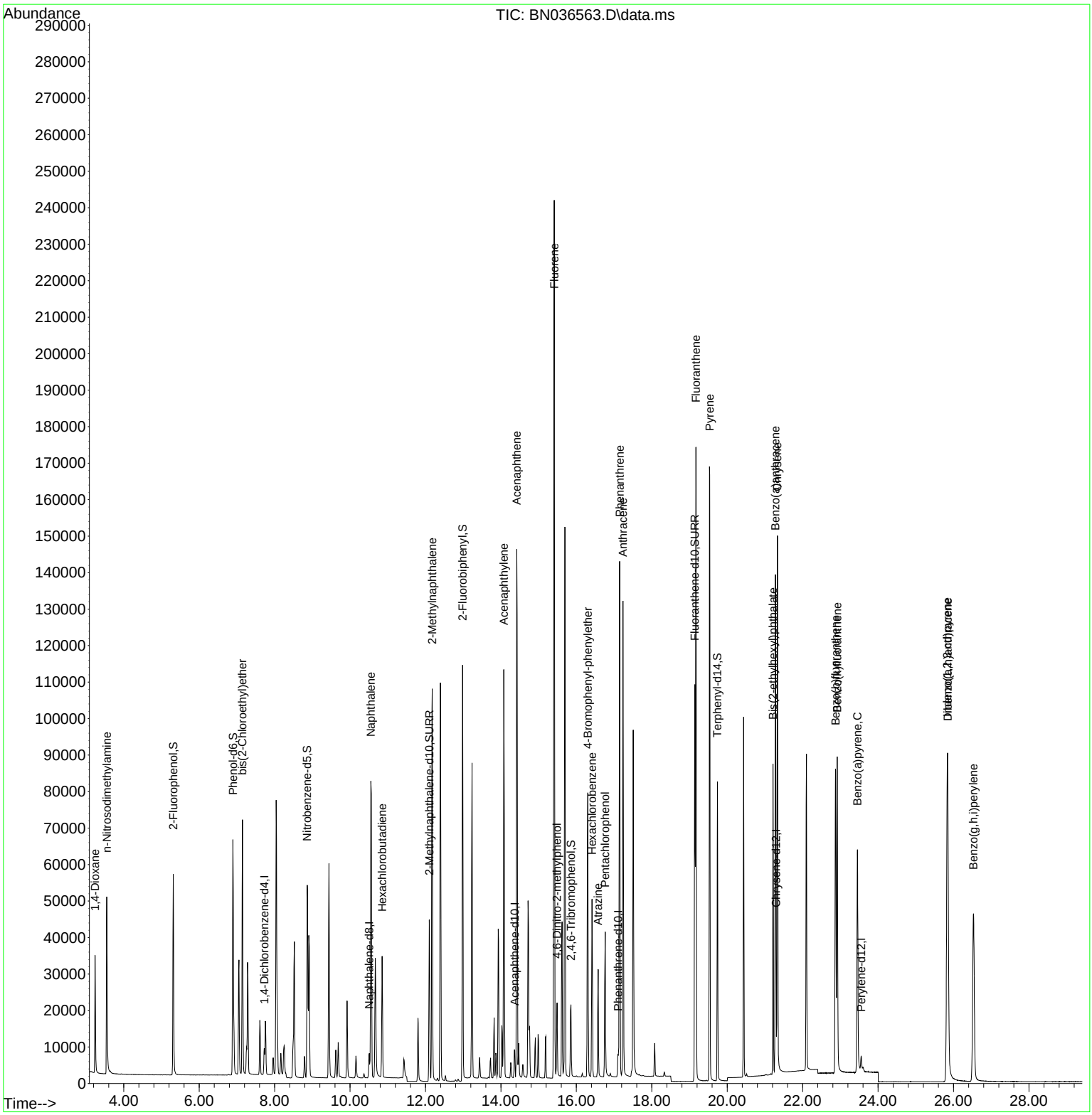
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 3261 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 7995 | 0.400 | ng | # | 0.00 |
| 13) Acenaphthene-d10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

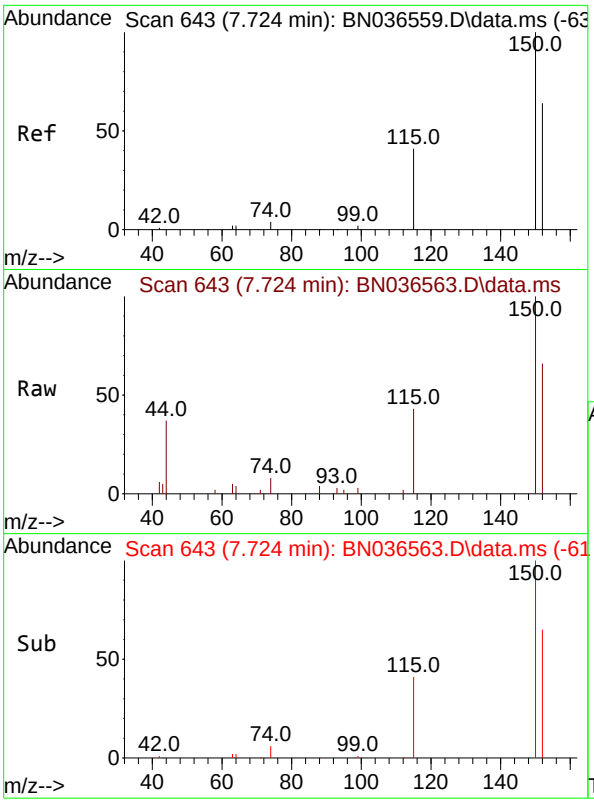
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

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



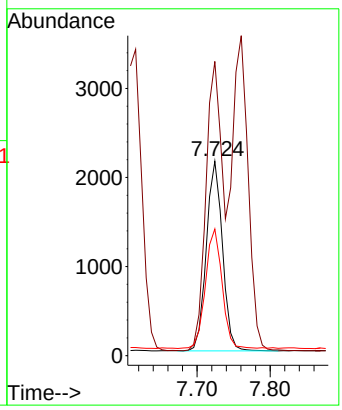


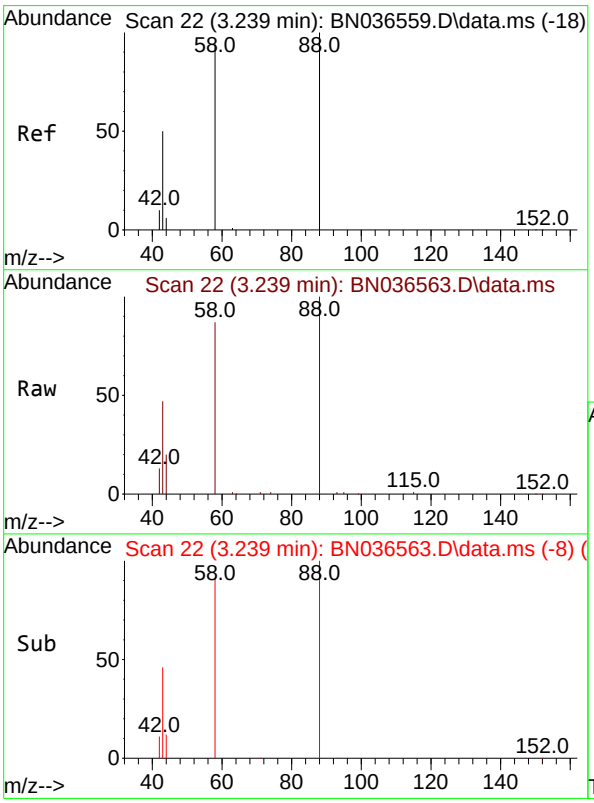

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:152 Resp: 3261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 151.3 | 123.7 | 185.5 |
| 115 | 65.2 | 54.3 | 81.5 |

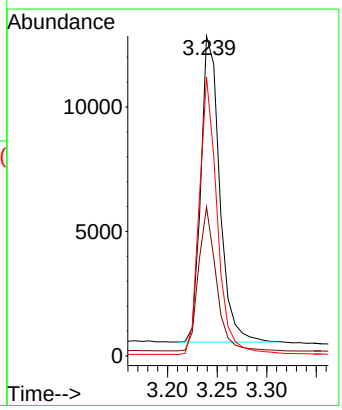


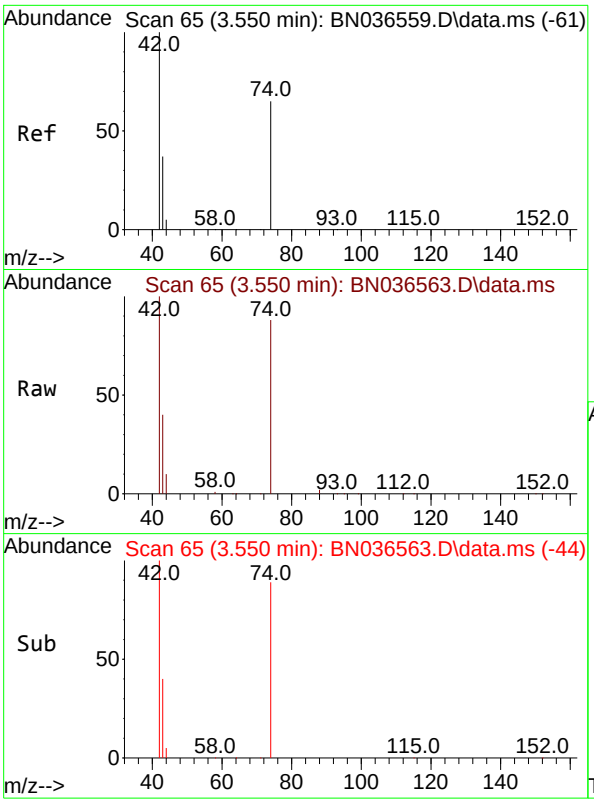




#2
1,4-Dioxane
Concen: 4.492 ng
RT: 3.239 min Scan# 22
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion: 88 Resp: 16253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 44.3 | 37.8 | 56.8 |
| 58 | 86.4 | 67.4 | 101.2 |



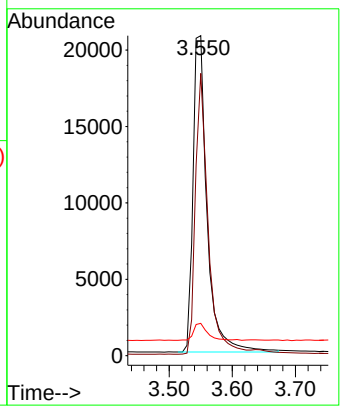


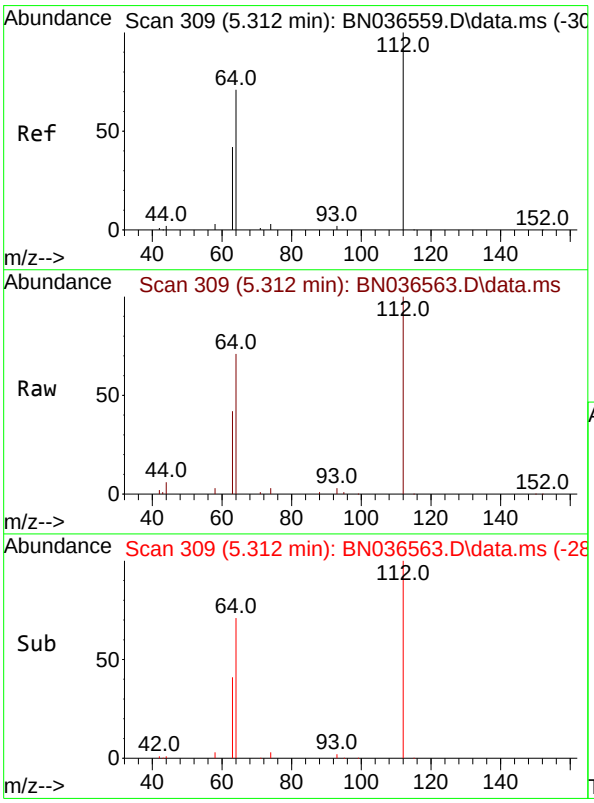

#3
n-Nitrosodimethylamine
Concen: 4.395 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion: 42 Resp: 32163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 79.9 | 60.6 | 90.8 |
| 44 | 5.3 | 6.3 | 9.5# |

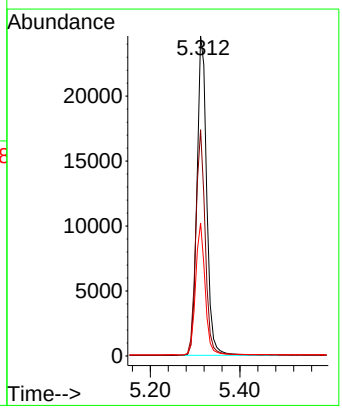


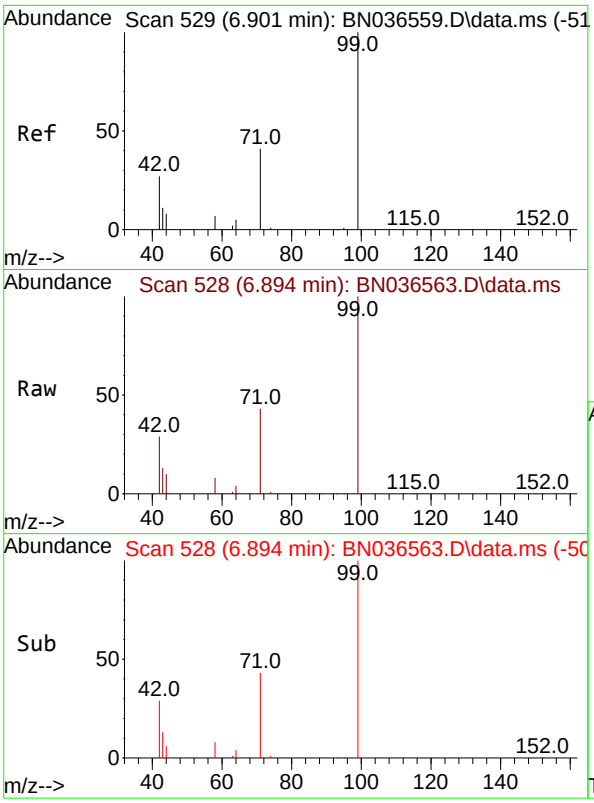




#4
2-Fluorophenol
Concen: 4.889 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:112 Resp: 37154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.5 | 53.1 | 79.7 |
| 63 | 40.1 | 31.8 | 47.8 |



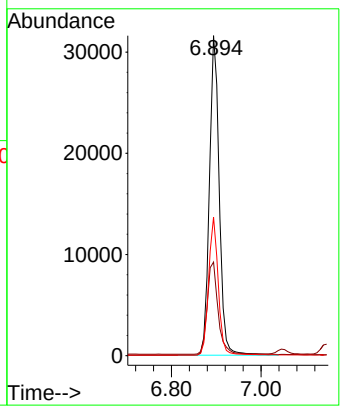


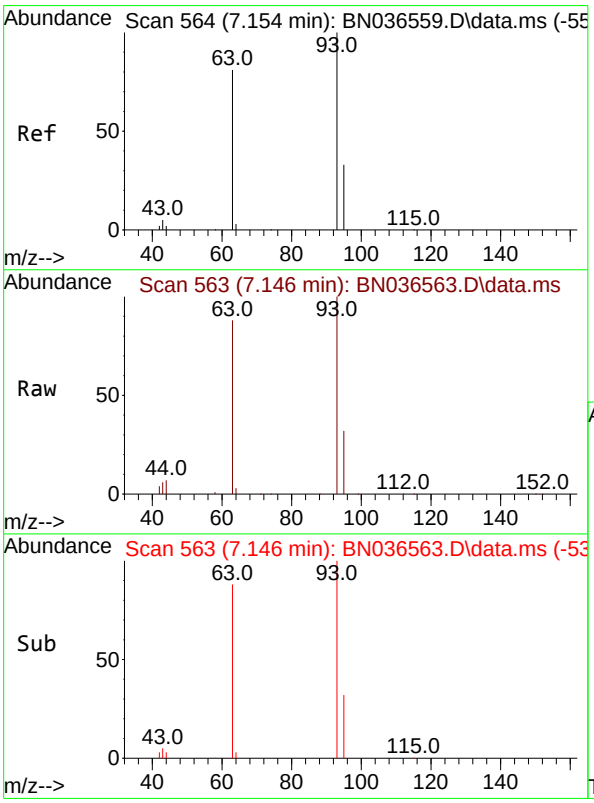

#5
Phenol-d6
Concen: 5.122 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion: 99 Resp: 48085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 31.8 | 26.5 | 39.7 |
| 71 | 42.6 | 34.1 | 51.1 |

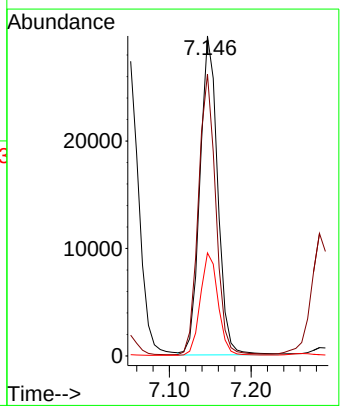


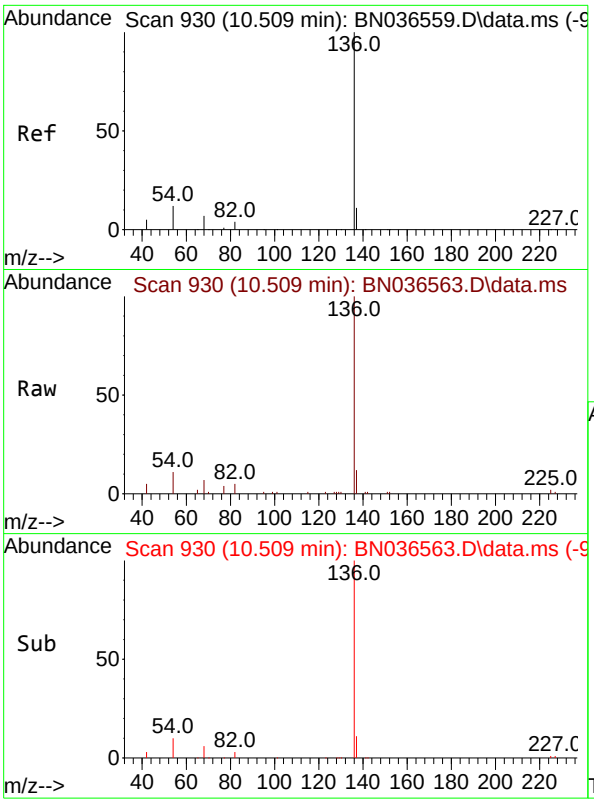




#6
bis(2-Chloroethyl)ether
Concen: 4.636 ng
RT: 7.146 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion: 93 Resp: 44986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.8 | 67.7 | 101.5 |
| 95 | 32.0 | 25.6 | 38.4 |



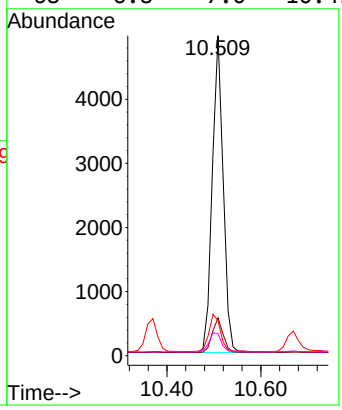


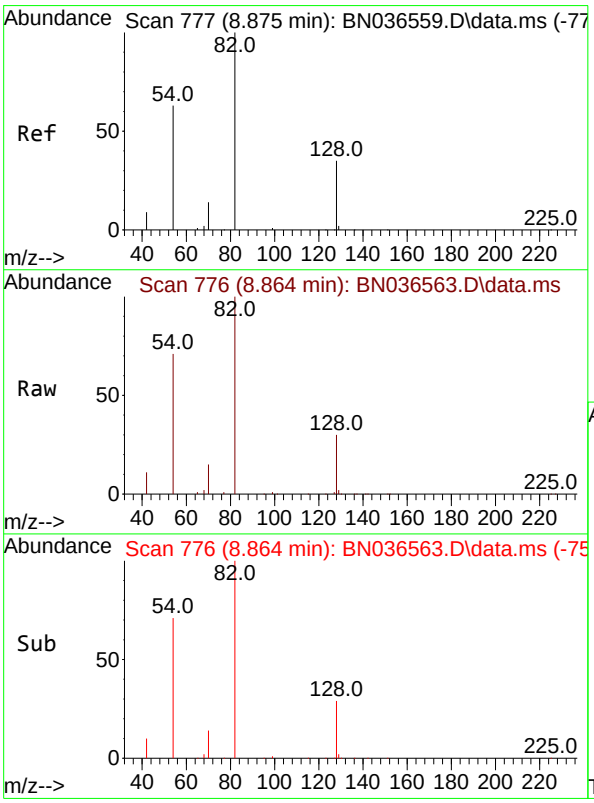

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:136 Resp: 7995

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

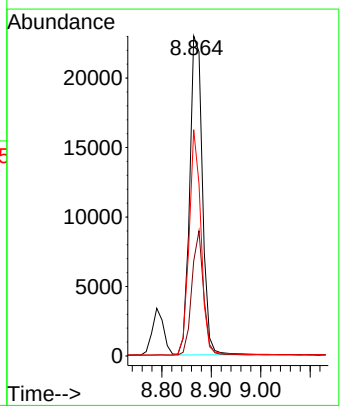


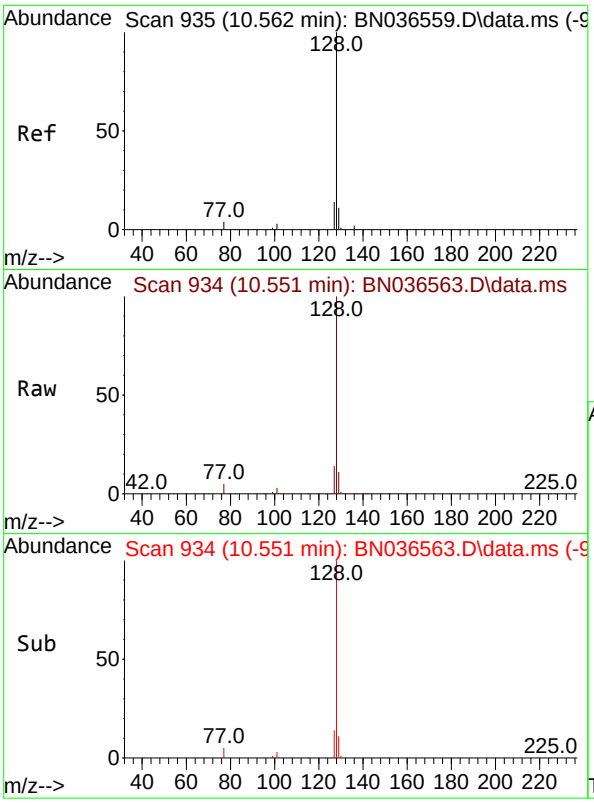




#8
Nitrobenzene-d5
Concen: 4.719 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.011 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion: 82 Resp: 41042

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



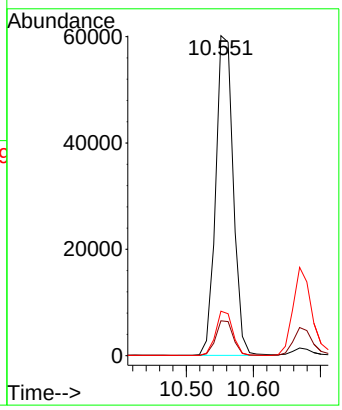


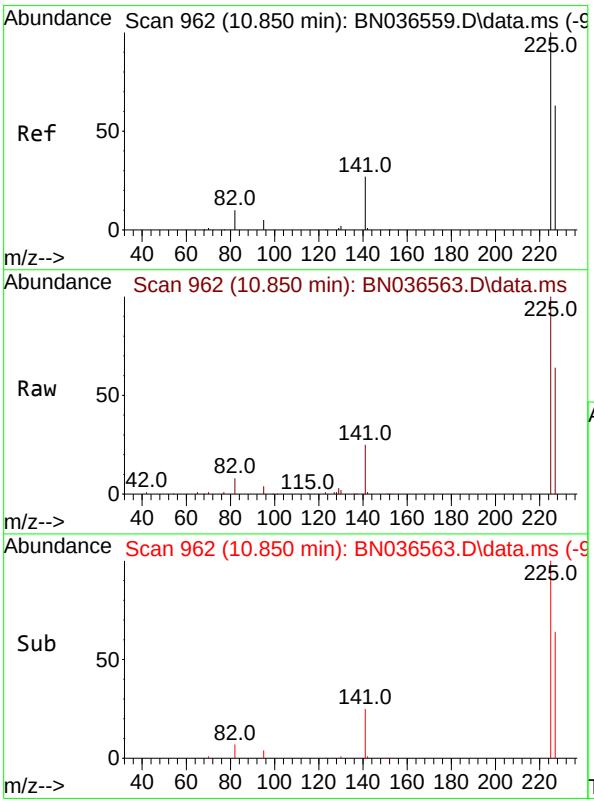

#9
Naphthalene
Concen: 4.647 ng
RT: 10.551 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:128 Resp: 109289

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.9 | 9.8 | 14.6 |
| 127 | 13.9 | 11.8 | 17.8 |

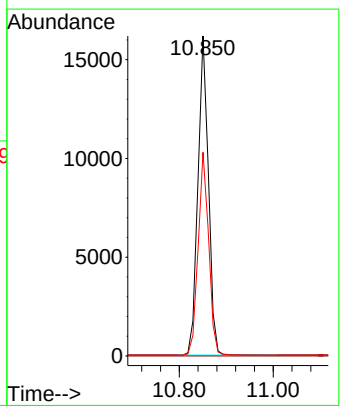


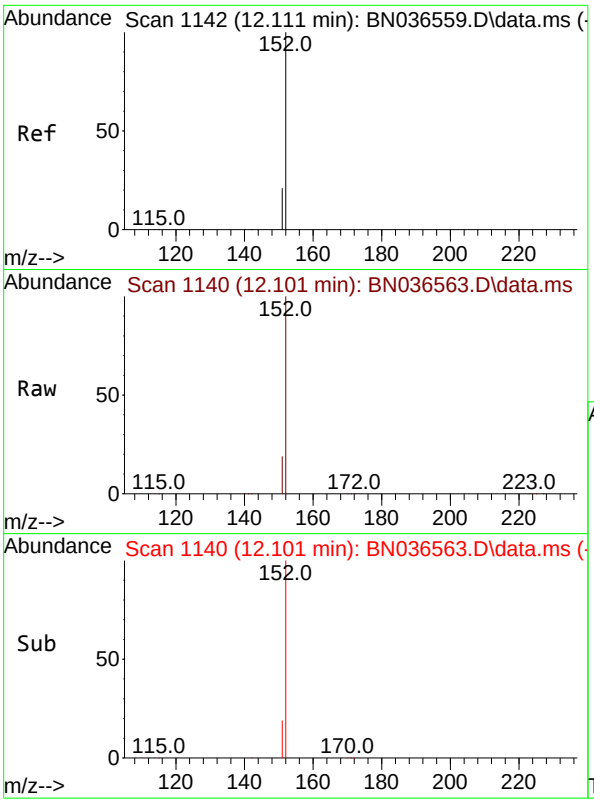




#10
Hexachlorobutadiene
Concen: 4.535 ng
RT: 10.850 min Scan# 962
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:225 Resp: 25105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.7 | 51.8 | 77.8 |



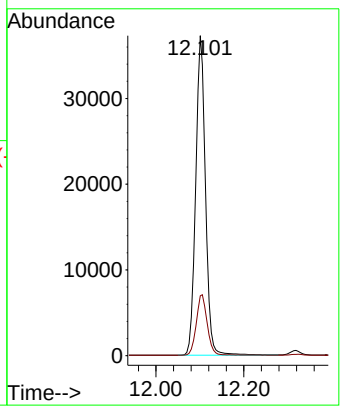


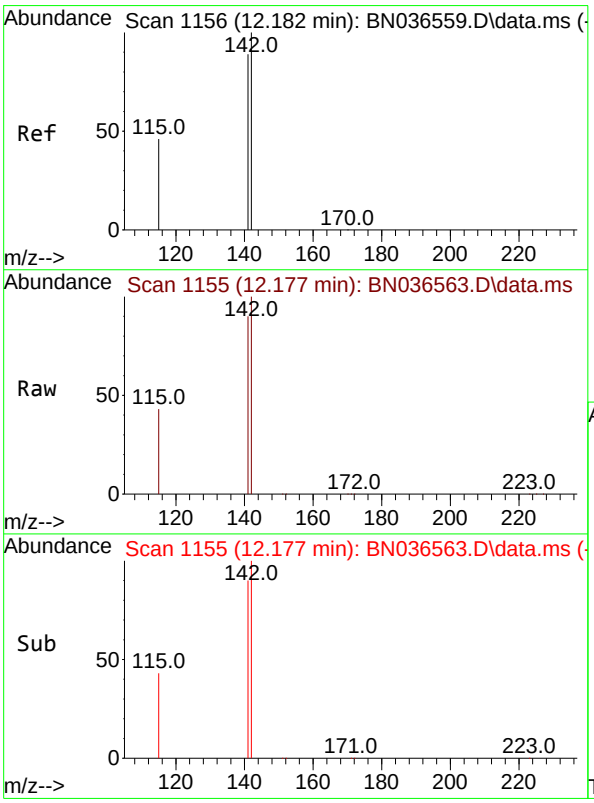

#11
2-Methylnaphthalene-d10
Concen: 4.881 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:152 Resp: 58048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.2 | 17.0 | 25.6 |

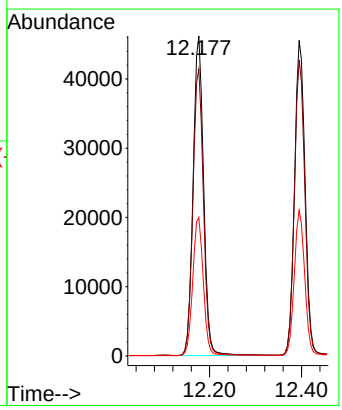


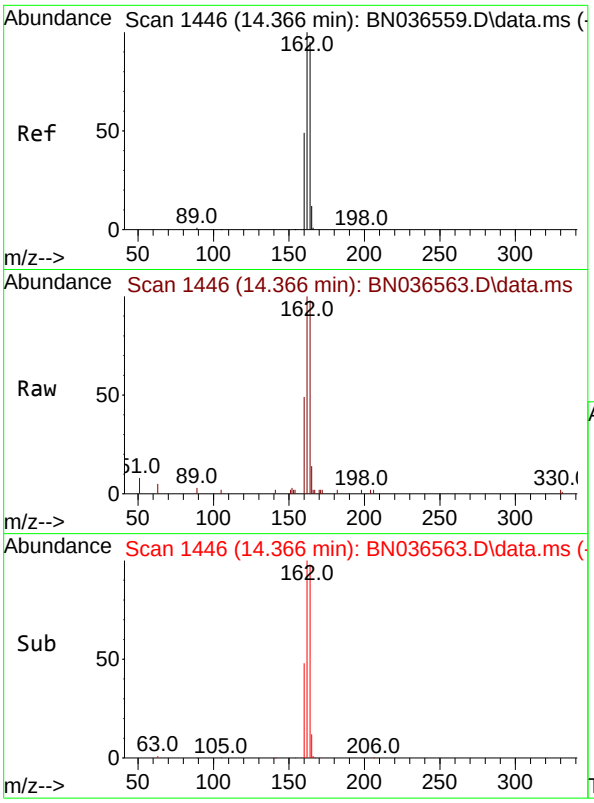




#12
2-Methylnaphthalene
Concen: 4.879 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:142 Resp: 73010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 89.6 | 71.7 | 107.5 |
| 115 | 43.2 | 38.3 | 57.5 |



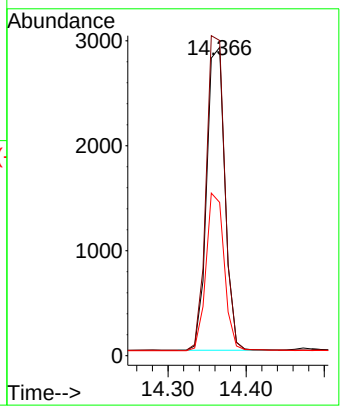


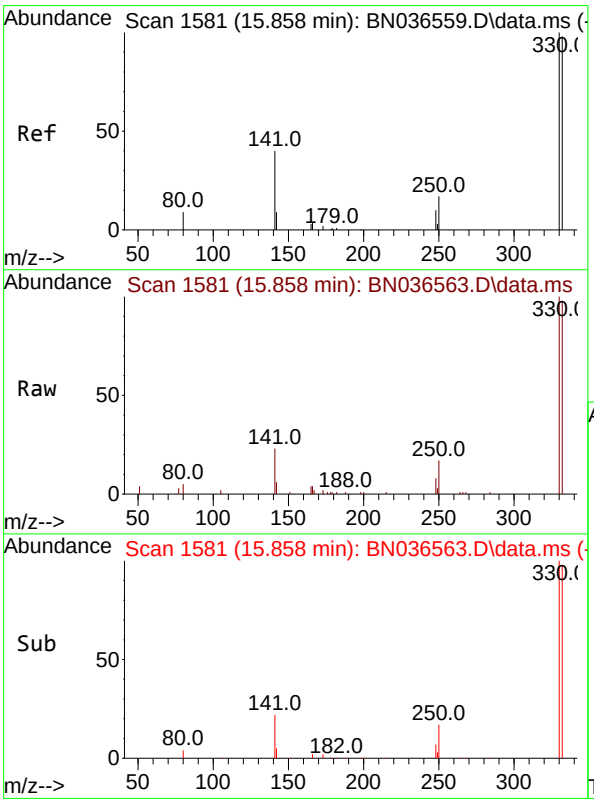

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:164 Resp: 4664

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 102.2 | 84.2 | 126.2 |
| 160 | 49.7 | 42.2 | 63.2 |

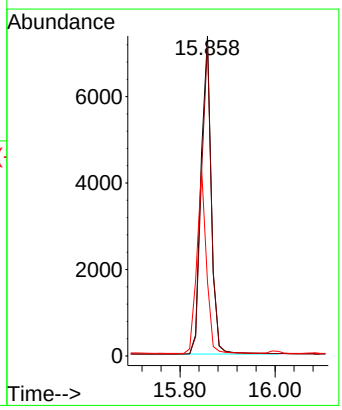


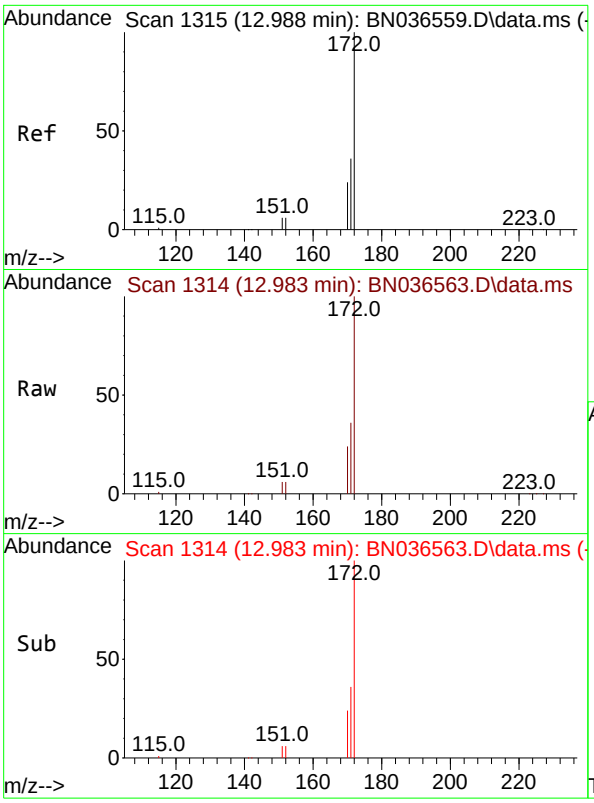




#14
2,4,6-Tribromophenol
Concen: 5.181 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:330 Resp: 10964

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 95.9 | 75.2 | 112.8 |
| 141 | 54.7 | 43.4 | 65.2 |



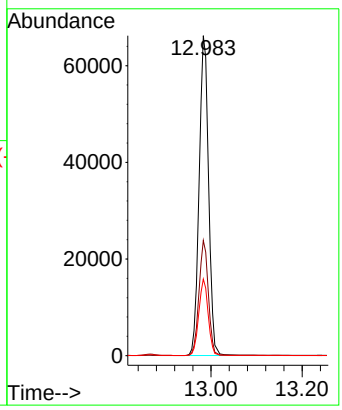


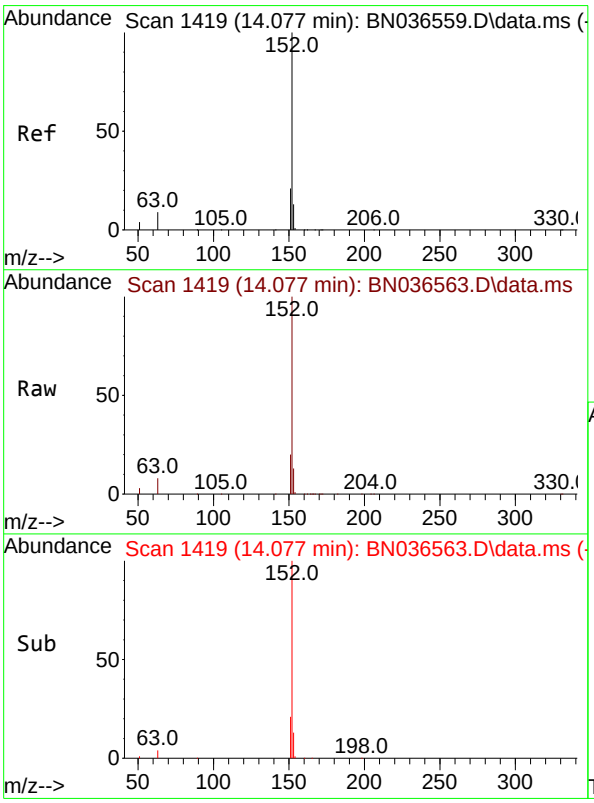

#15
2-Fluorobiphenyl
Concen: 5.199 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:172 Resp: 141052

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.0 | 29.5 | 44.3 |
| 170 | 24.0 | 20.2 | 30.4 |

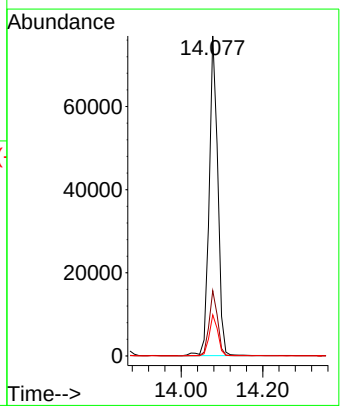


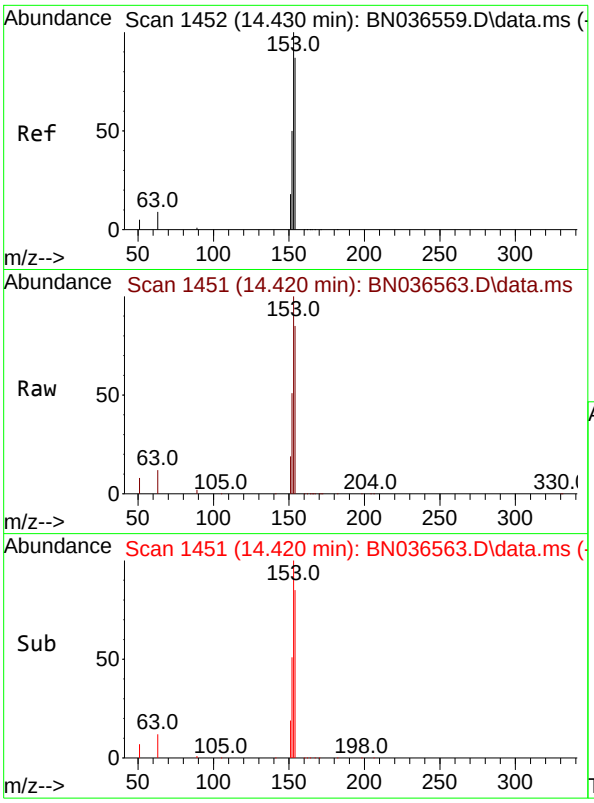




#16
Acenaphthylene
Concen: 5.125 ng
RT: 14.077 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:152 Resp: 112792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.0 | 16.2 | 24.4 |
| 153 | 12.8 | 10.6 | 15.8 |



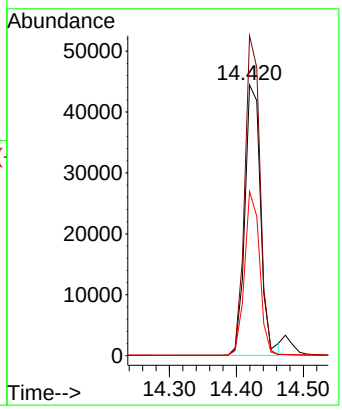


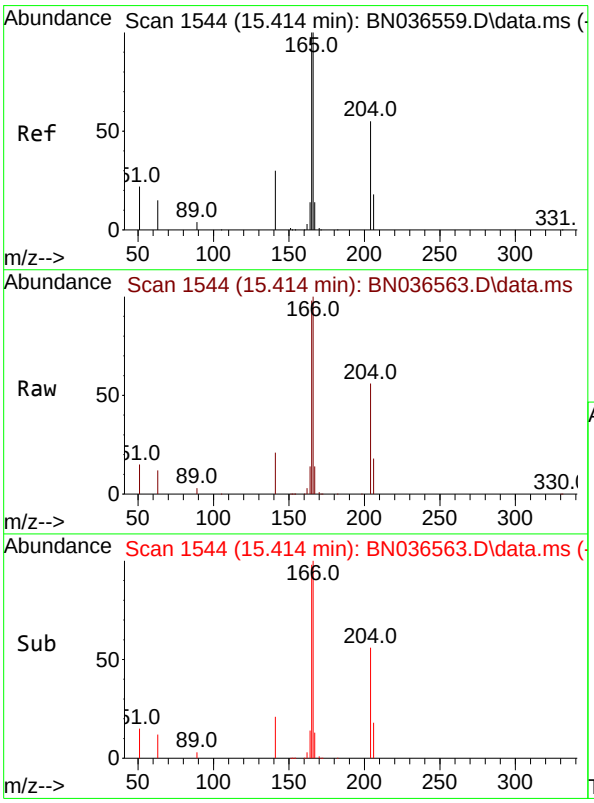

#17
Acenaphthene
Concen: 5.028 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:154 Resp: 72446

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 114.1 | 94.1 | 141.1 |
| 152 | 57.7 | 49.8 | 74.6 |

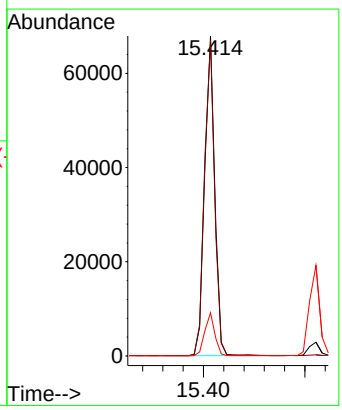


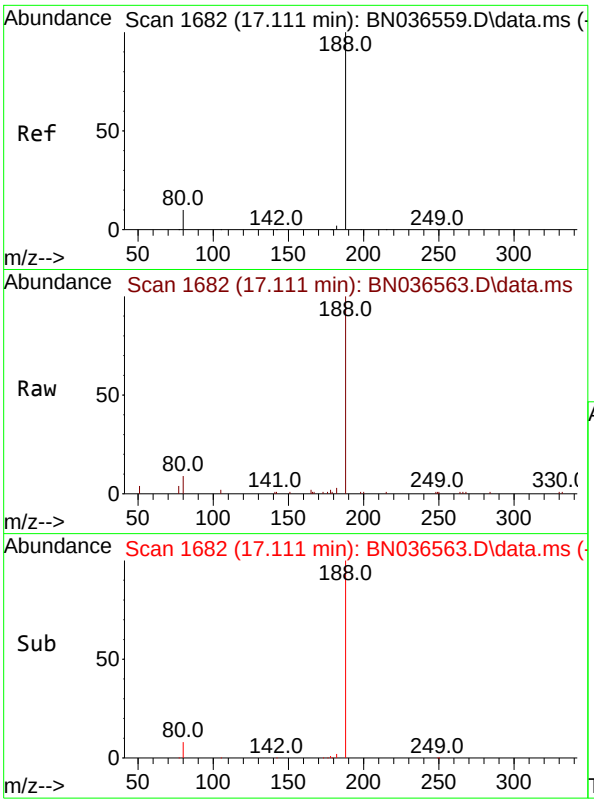




#18
Fluorene
Concen: 4.937 ng
RT: 15.414 min Scan# 1544
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:166 Resp: 96215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 96.5 | 79.8 | 119.8 |
| 167 | 13.0 | 10.6 | 15.8 |



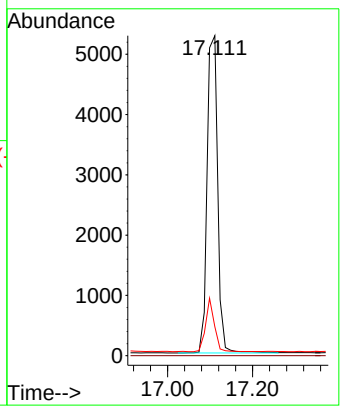


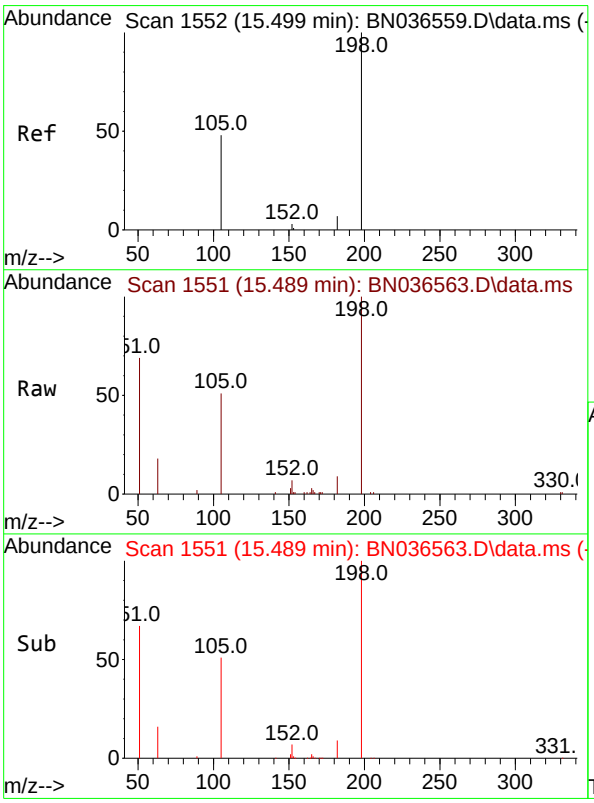

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:188 Resp: 9061

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 9.1 | 8.8 | 13.2 |

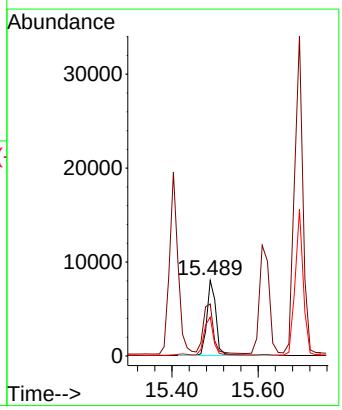


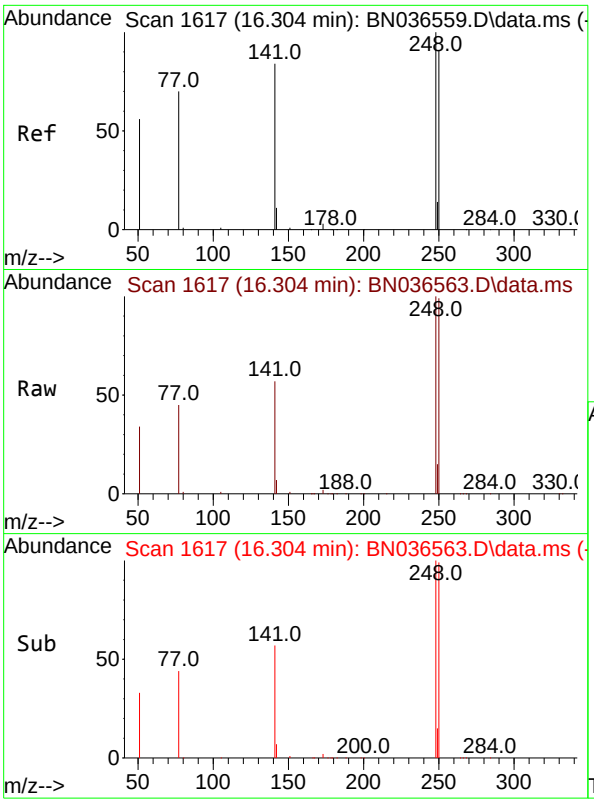




#20
4,6-Dinitro-2-methylphenol
Concen: 4.968 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:198 Resp: 12627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 68.9 | 107.9 | 161.9# |
| 105 | 51.3 | 56.2 | 84.2# |



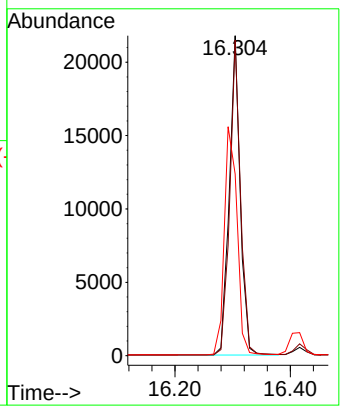


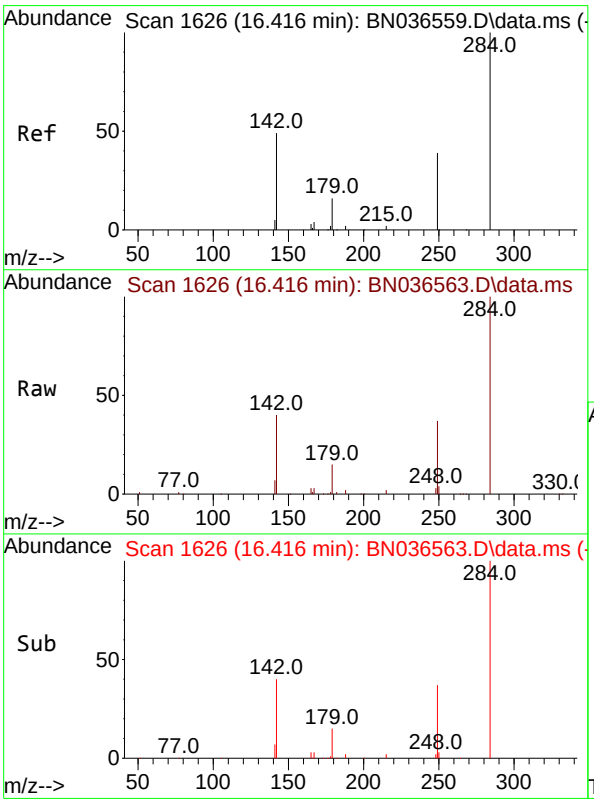

#21
4-Bromophenyl-phenylether
Concen: 5.048 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:248 Resp: 28657

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

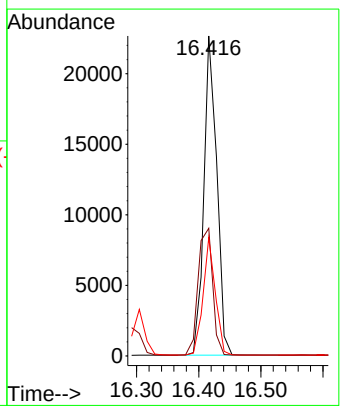


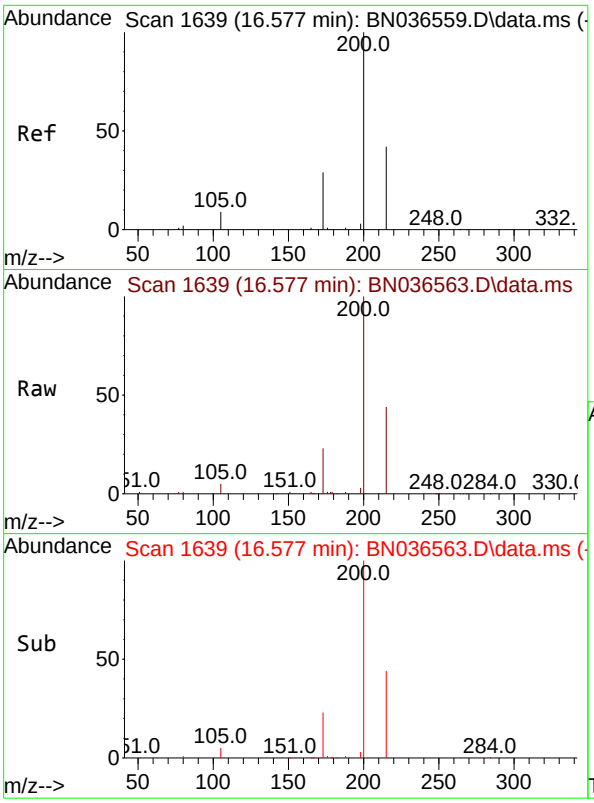




#22
Hexachlorobenzene
Concen: 4.770 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:284 Resp: 32686

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



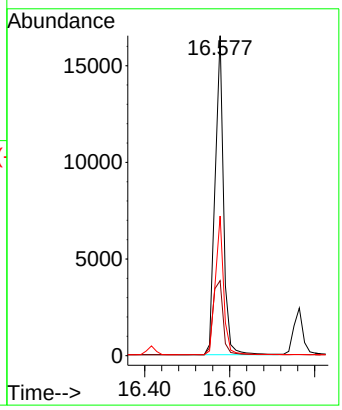


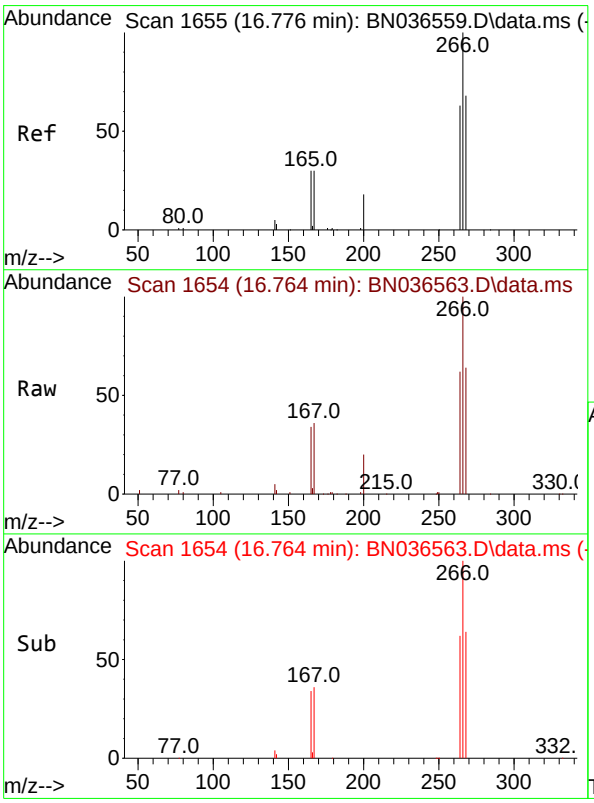

#23
Atrazine
Concen: 4.988 ng
RT: 16.577 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:200 Resp: 22705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 23.4 | 27.3 | 40.9# |
| 215 | 43.7 | 36.8 | 55.2 |

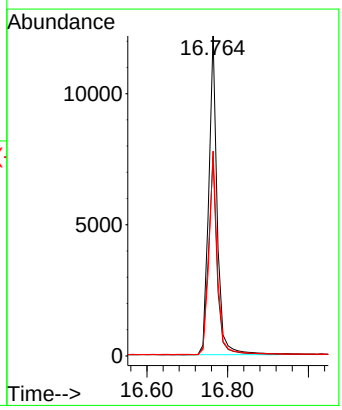


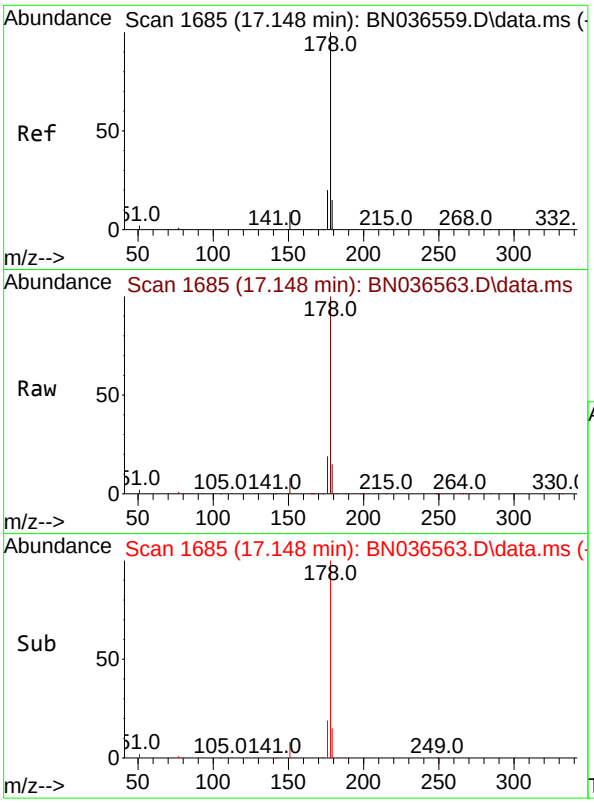




#24
Pentachlorophenol
Concen: 5.634 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:266 Resp: 17612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.1 | 49.6 | 74.4 |
| 268 | 63.7 | 50.9 | 76.3 |



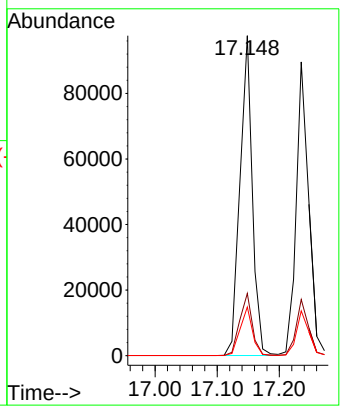


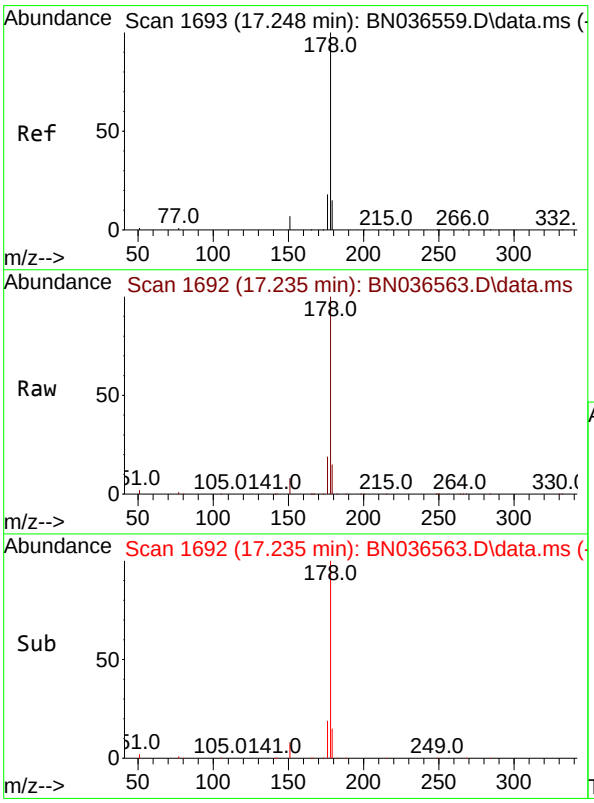

#25
Phenanthrene
Concen: 4.979 ng
RT: 17.148 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:178 Resp: 135347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.2 | 12.2 | 18.4 |

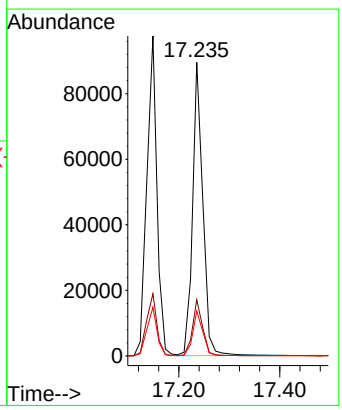


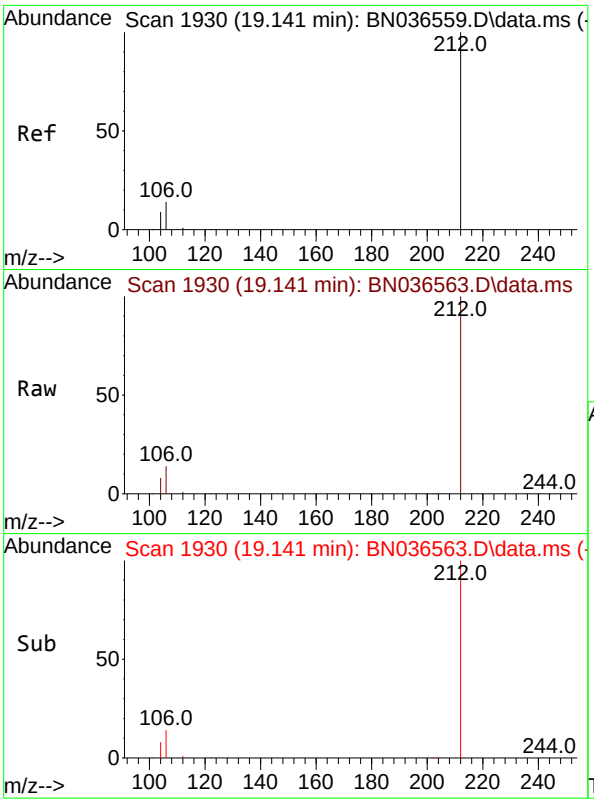




#26
Anthracene
Concen: 5.135 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:178 Resp: 125954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.0 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |



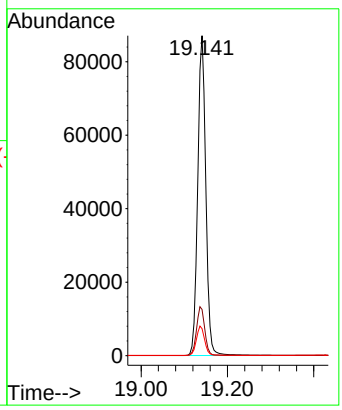


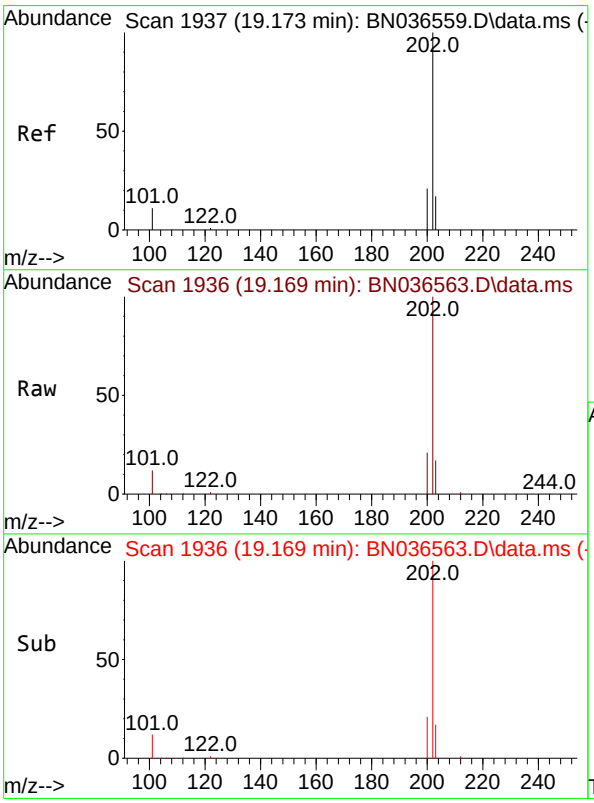

#27
Fluoranthene-d10
Concen: 4.879 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:212 Resp: 113317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.5 | 11.8 | 17.6 |
| 104 | 9.2 | 7.3 | 10.9 |

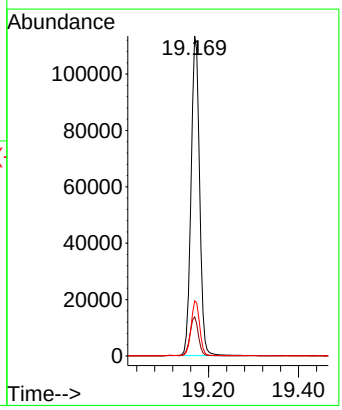


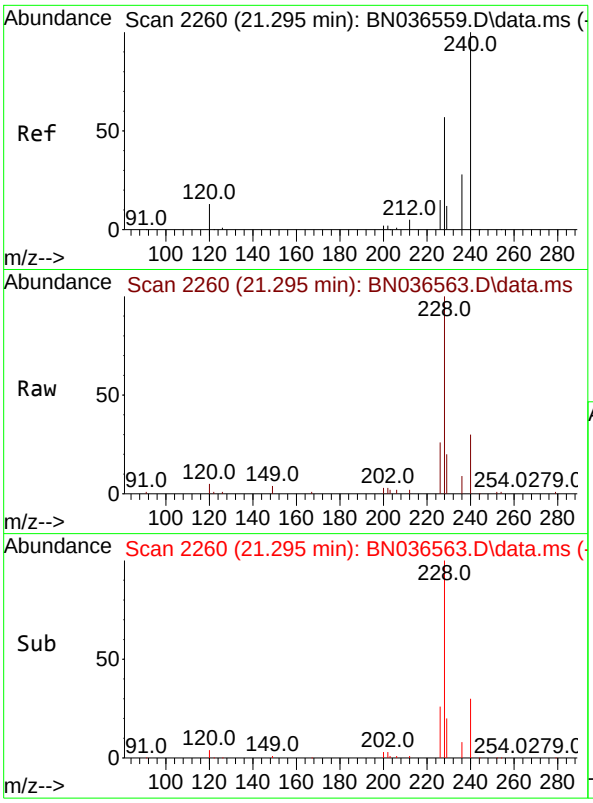




#28
Fluoranthene
Concen: 4.883 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:202 Resp: 149107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.3 | 9.4 | 14.0 |
| 203 | 17.3 | 13.5 | 20.3 |



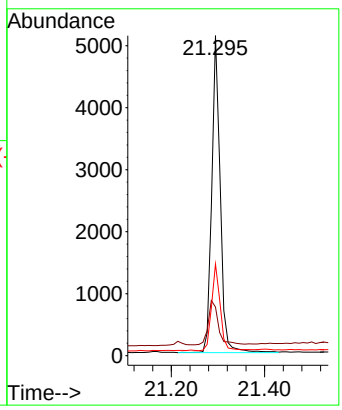


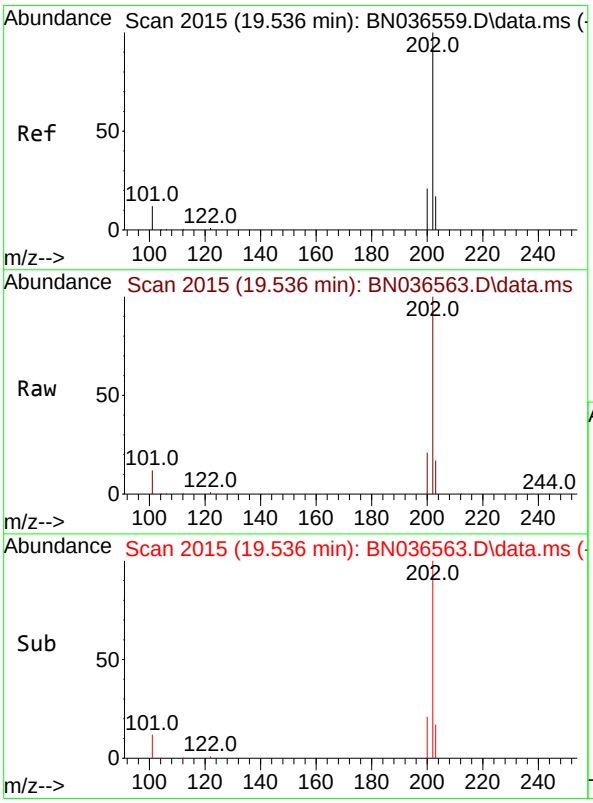

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:240 Resp: 6472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 15.2 | 14.6 | 22.0 |
| 236 | 28.7 | 24.1 | 36.1 |

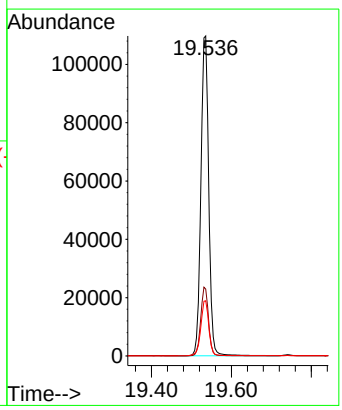


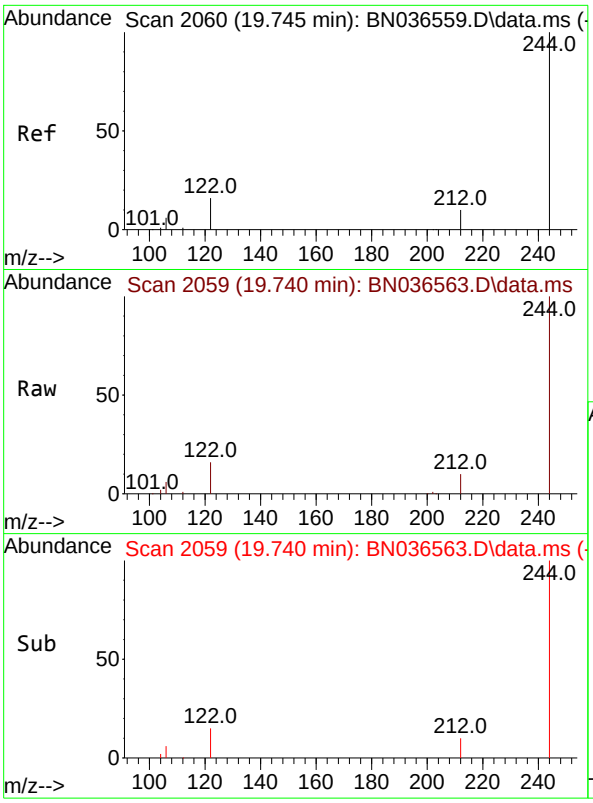




#30
Pyrene
Concen: 4.695 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:202 Resp: 148584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.7 | 14.1 | 21.1 |



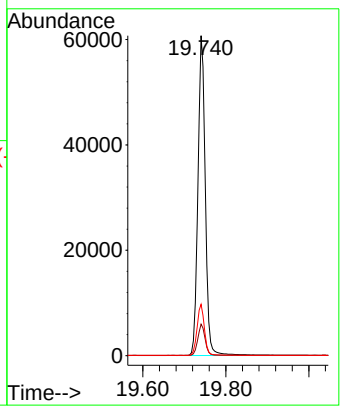


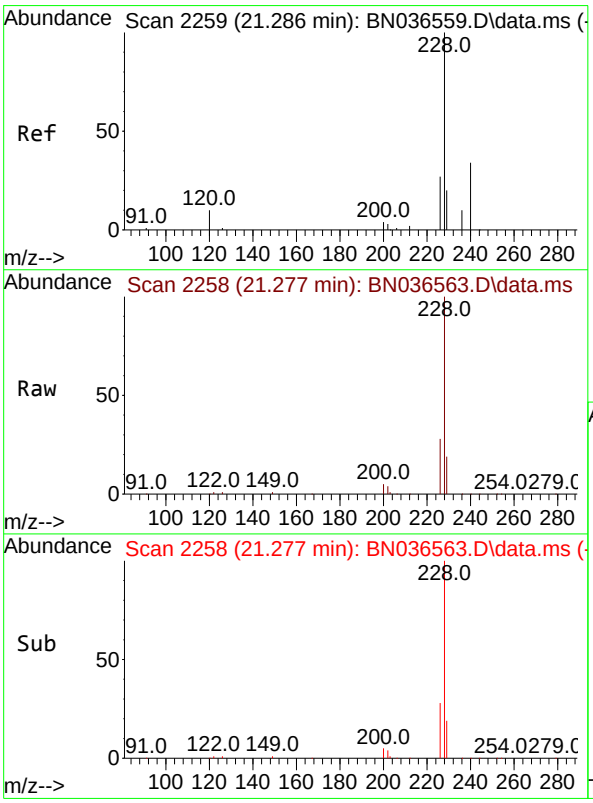

#31
Terphenyl-d14
Concen: 4.832 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:244 Resp: 74923

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 9.9 | 9.6 | 14.4 |
| 122 | 16.1 | 13.9 | 20.9 |

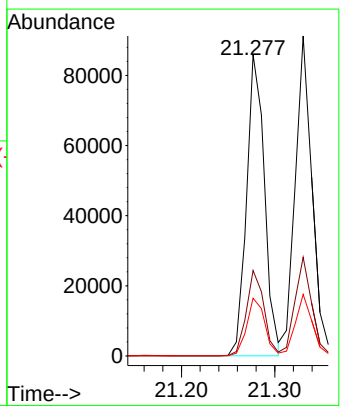


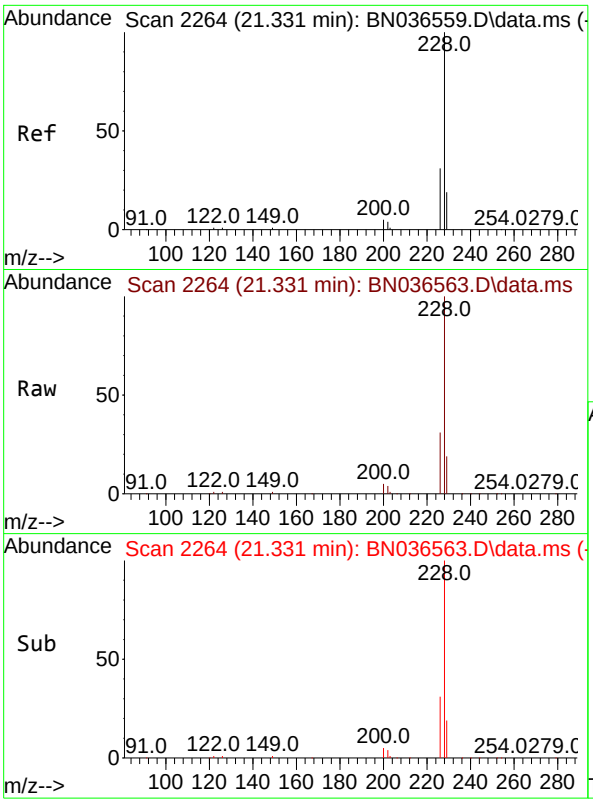




#32
Benzo(a)anthracene
Concen: 5.087 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:228 Resp: 114481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.3 | 22.5 | 33.7 |
| 229 | 19.2 | 16.6 | 25.0 |



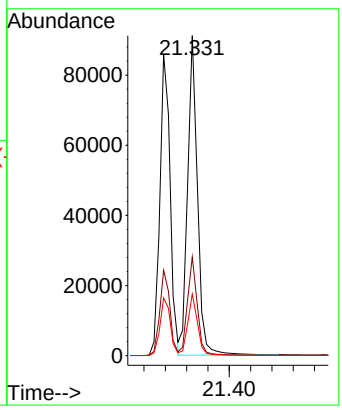


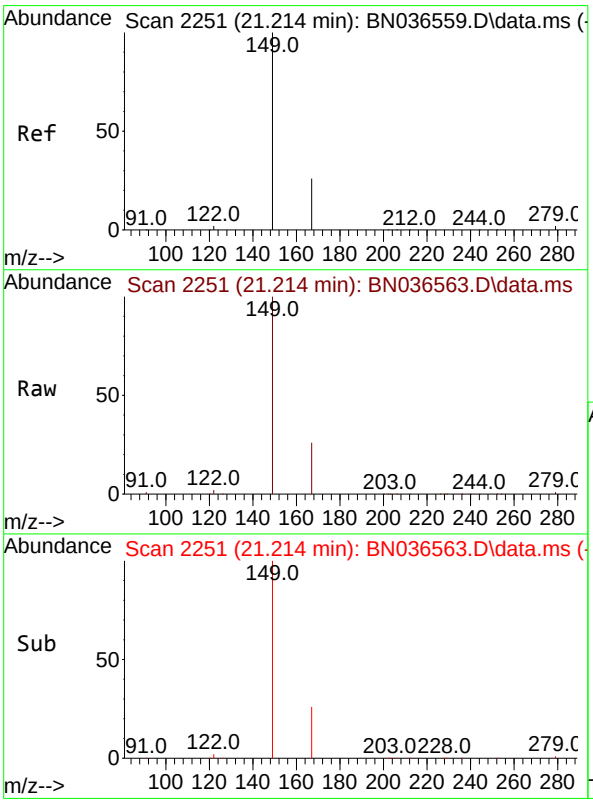

#33
Chrysene
Concen: 4.764 ng
RT: 21.331 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:228 Resp: 117149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.9 | 25.3 | 37.9 |
| 229 | 19.3 | 15.8 | 23.8 |

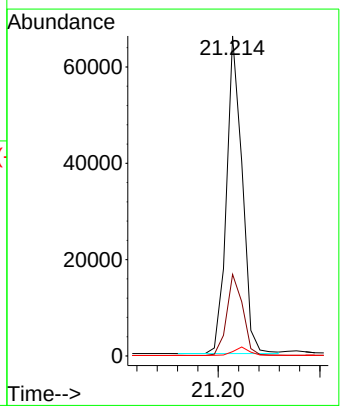


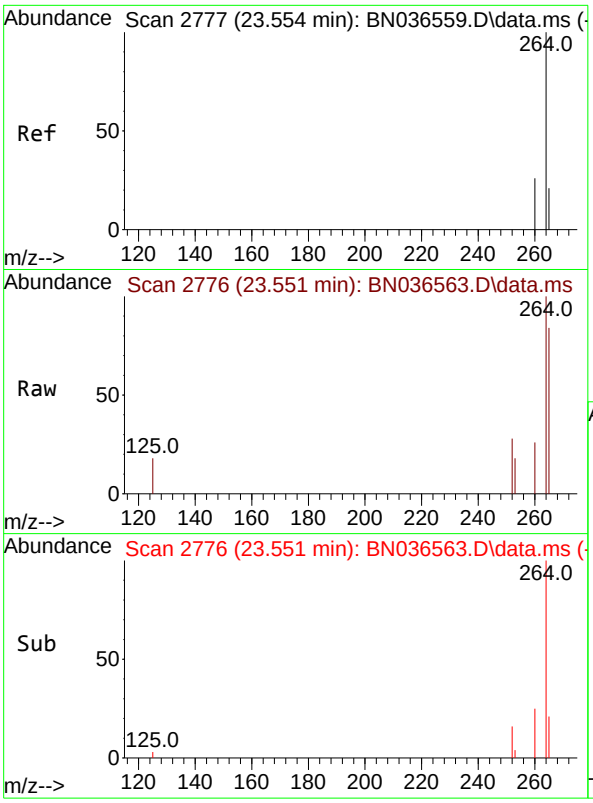




#34
Bis(2-ethylhexyl)phthalate
Concen: 4.390 ng
RT: 21.214 min Scan# 2251
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:149 Resp: 70345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.2 | 20.7 | 31.1 |
| 279 | 2.6 | 3.6 | 5.4# |



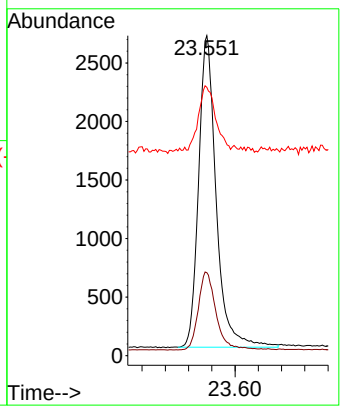


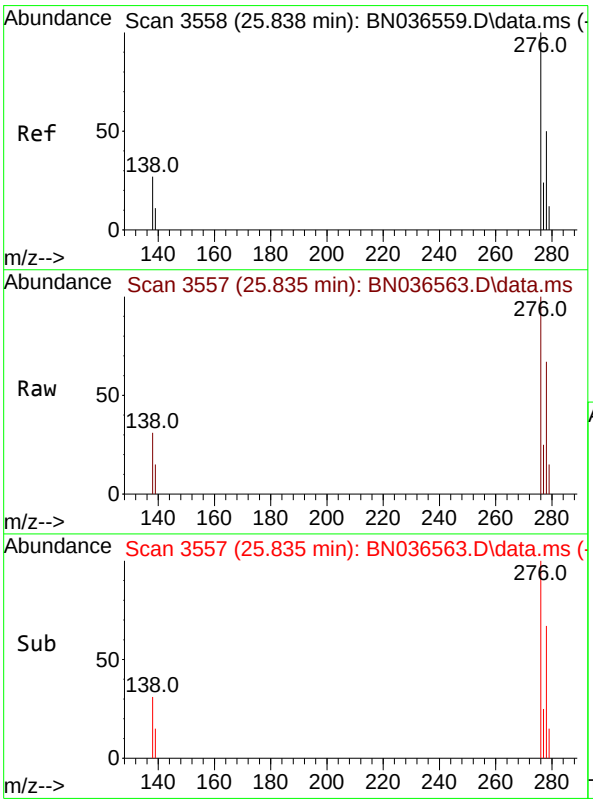

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:264 Resp: 5580

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 25.9 | 22.6 | 33.8 |
| 265 | 83.8 | 88.1 | 132.1# |

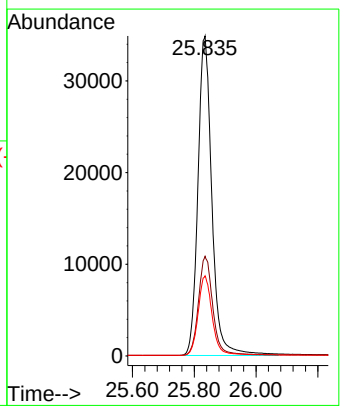


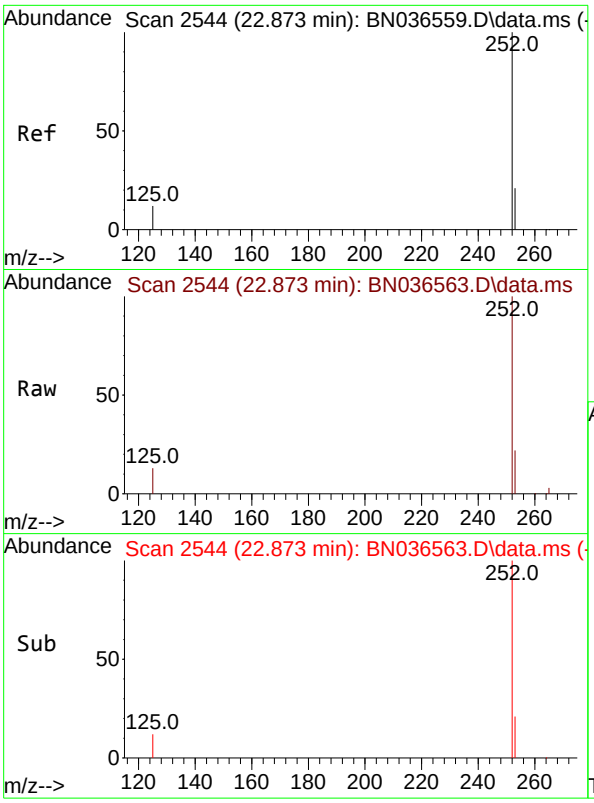




#36
Indeno(1,2,3-cd)pyrene
Concen: 5.440 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:276 Resp: 109561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 31.6 | 23.4 | 35.2 |
| 277 | 24.9 | 20.0 | 30.0 |



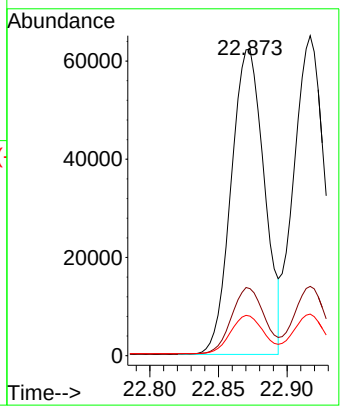


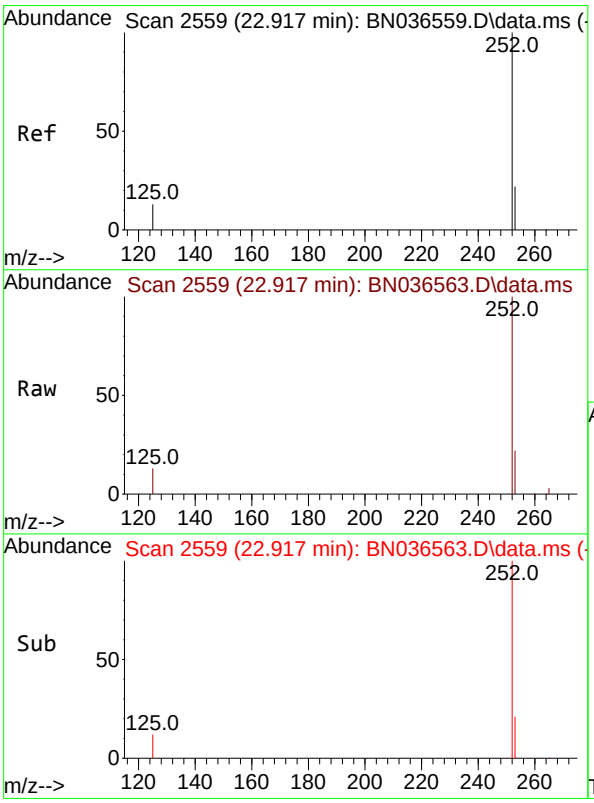

#37
Benzo(b)fluoranthene
Concen: 5.146 ng
RT: 22.873 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:252 Resp: 104498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.9 | 23.9 | 35.9# |
| 125 | 12.9 | 17.4 | 26.2# |

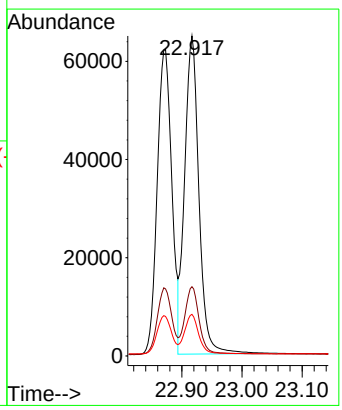


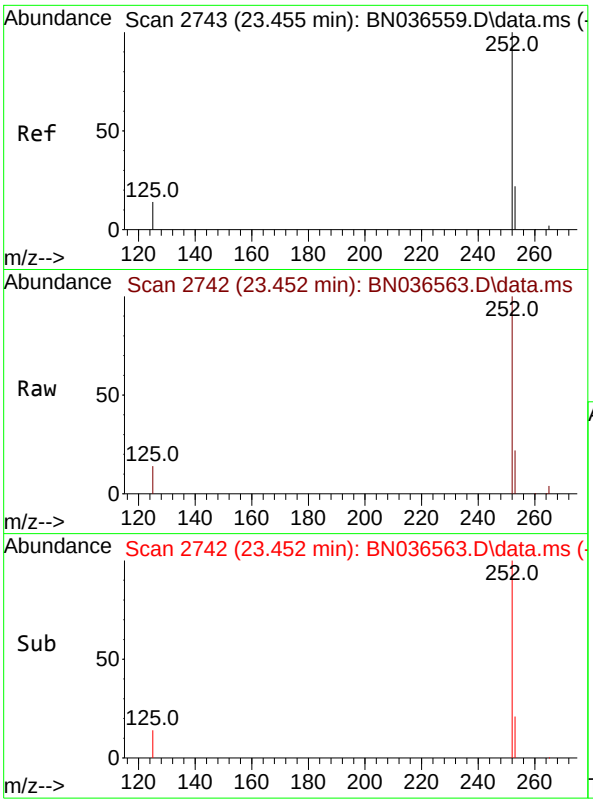




#38
Benzo(k)fluoranthene
Concen: 5.022 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:252 Resp: 106995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.6 | 24.6 | 36.8# |
| 125 | 13.0 | 17.8 | 26.8# |



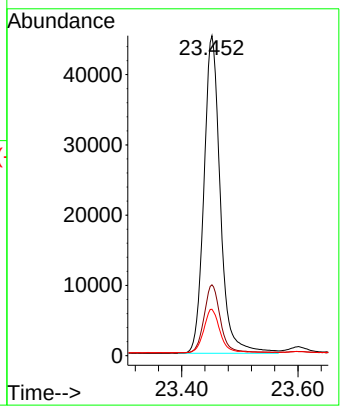


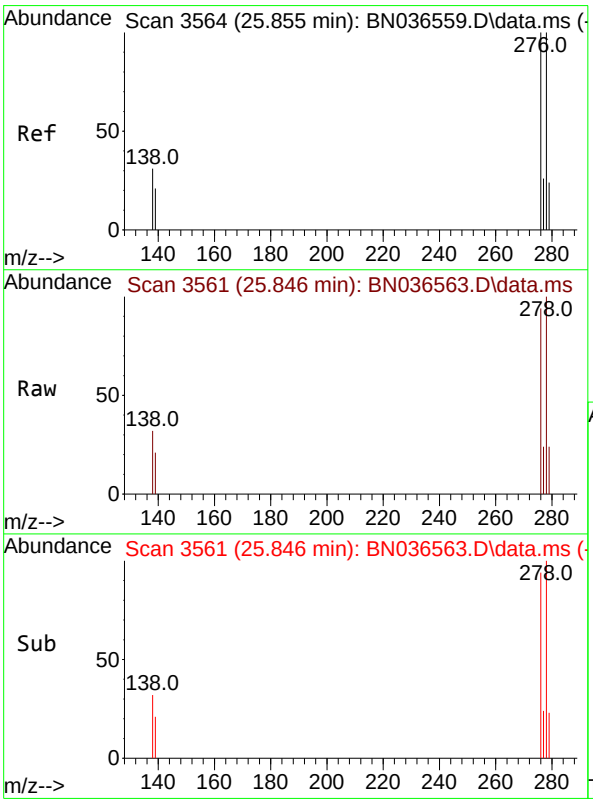

#39
Benzo(a)pyrene
Concen: 5.170 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:252 Resp: 88413

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.2 | 27.8 | 41.8# |
| 125 | 14.5 | 22.7 | 34.1# |

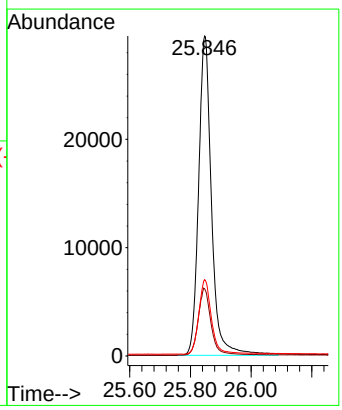


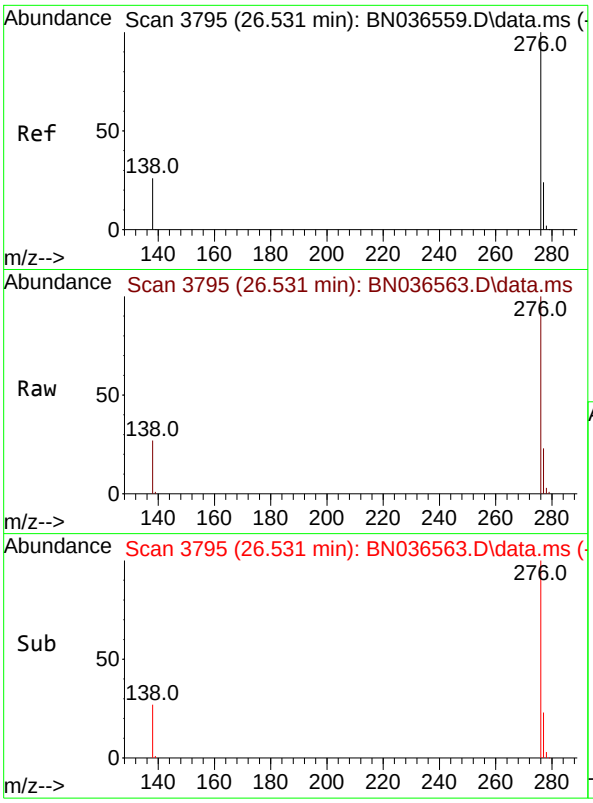




#40
Dibenzo(a,h)anthracene
Concen: 5.568 ng
RT: 25.846 min Scan# 3561
Delta R.T. -0.009 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:278 Resp: 87308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 21.0 | 20.8 | 31.2 |
| 279 | 23.9 | 28.8 | 43.2# |



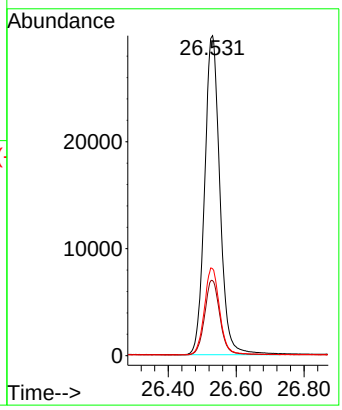



#41
Benzo(g,h,i)perylene
Concen: 5.189 ng
RT: 26.531 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC5.0

Tgt Ion:276 Resp: 93067

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 23.4 | 22.2 | 33.4 |
| 138 | 27.1 | 24.1 | 36.1 |



Quantitation Report (QT Reviewed)

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

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

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

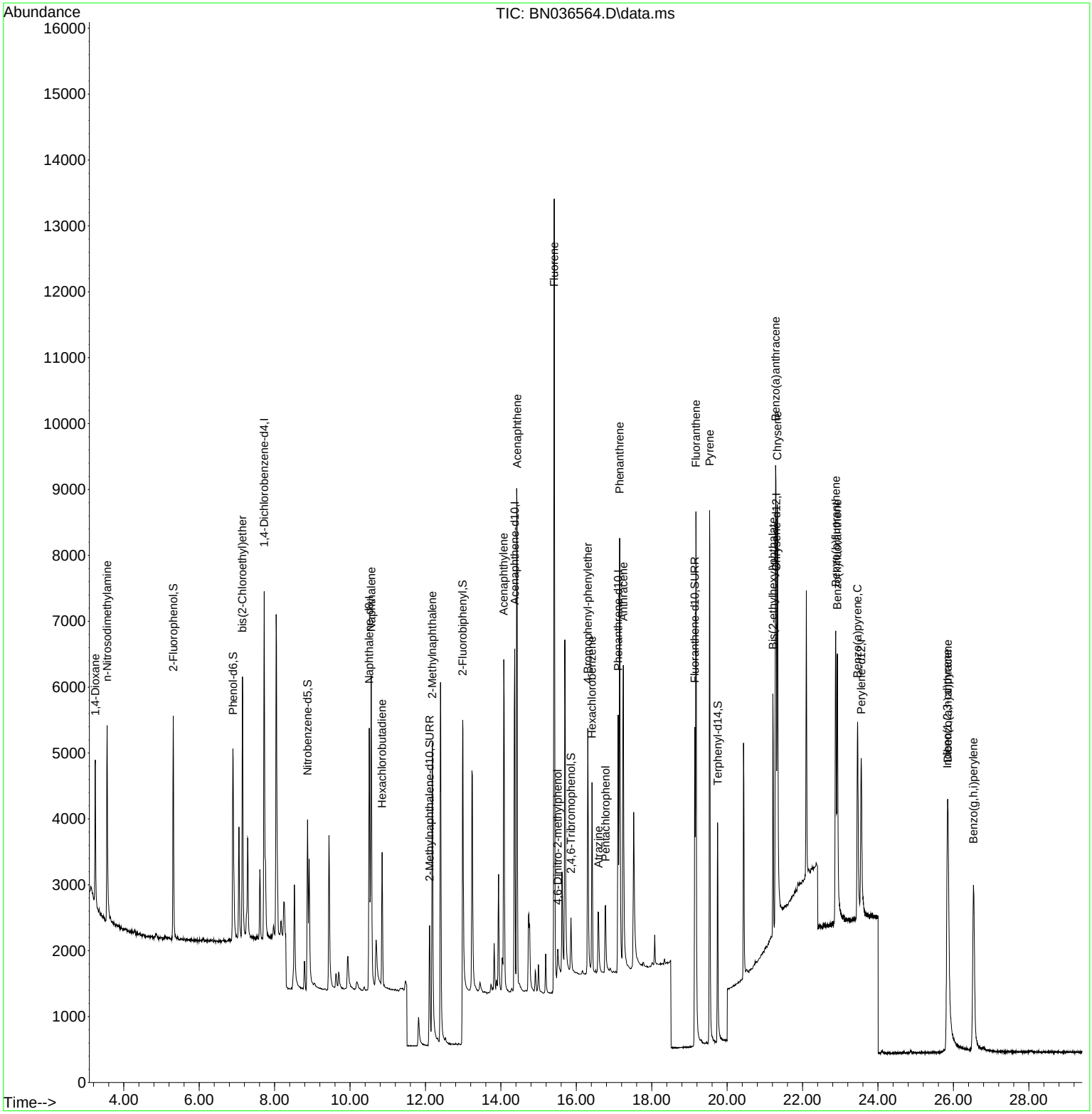
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 2488 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 5634 | 0.400 | ng | | 0.00 |
| 13) Acenaphthene-d10 |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

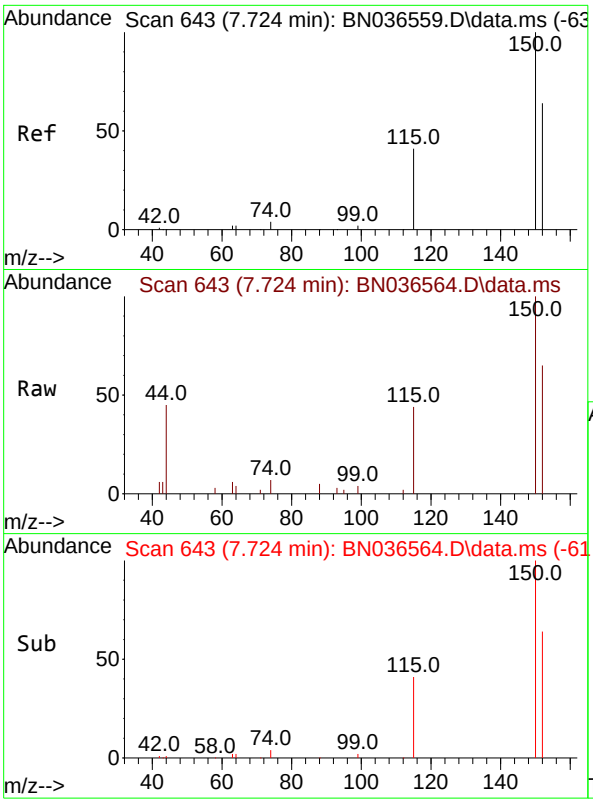
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

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



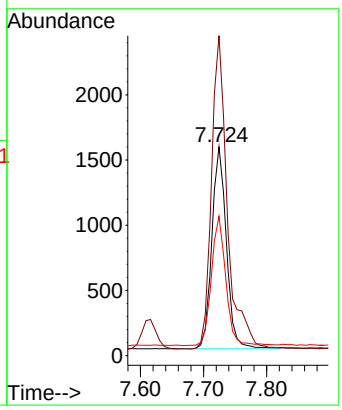


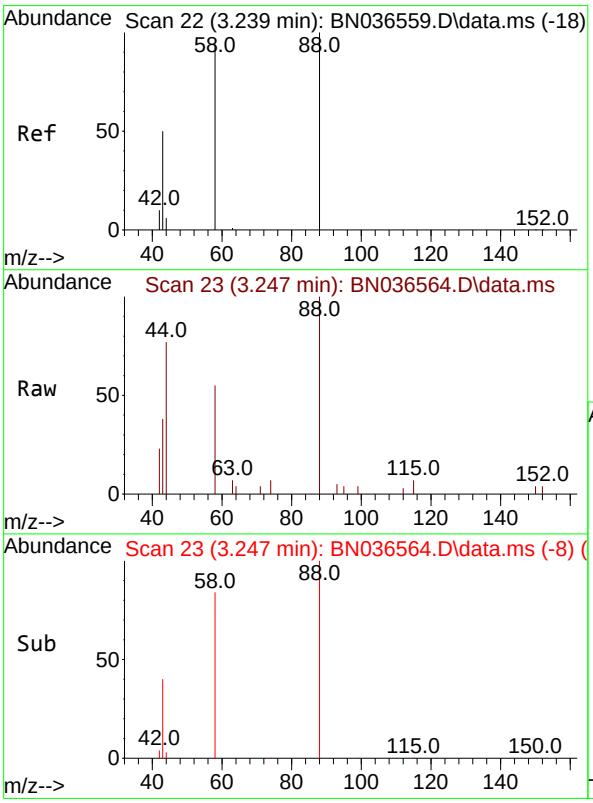

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:152 Resp: 2488

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 153.3 | 123.7 | 185.5 |
| 115 | 66.7 | 54.3 | 81.5 |

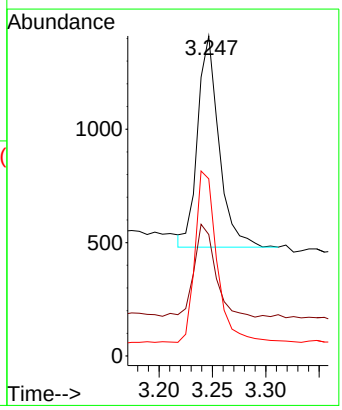


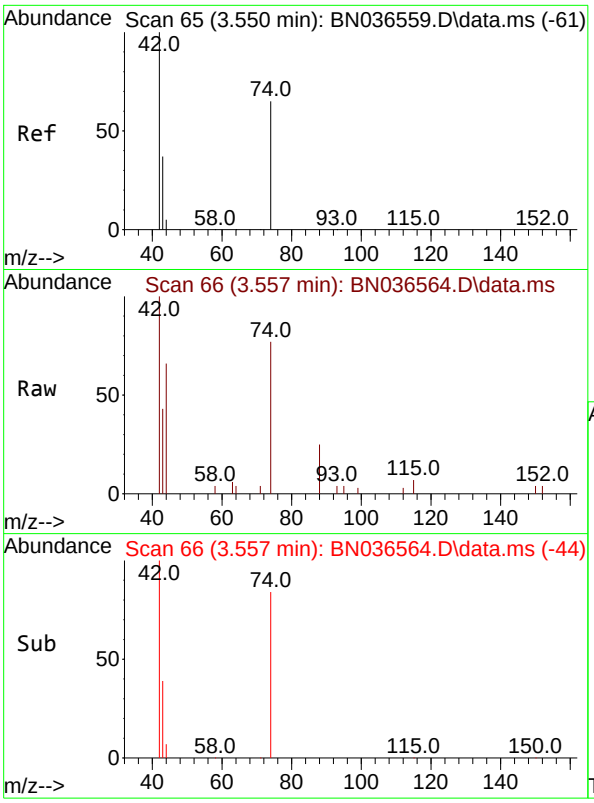




#2
1,4-Dioxane
Concen: 0.470 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.008 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion: 88 Resp: 1297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 44.1 | 37.8 | 56.8 |
| 58 | 82.4 | 67.4 | 101.2 |



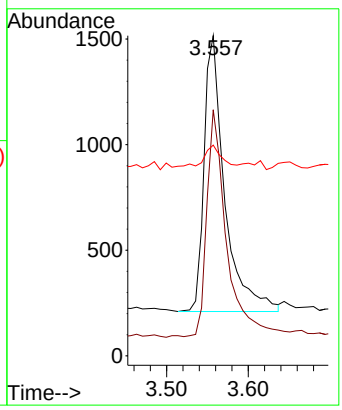


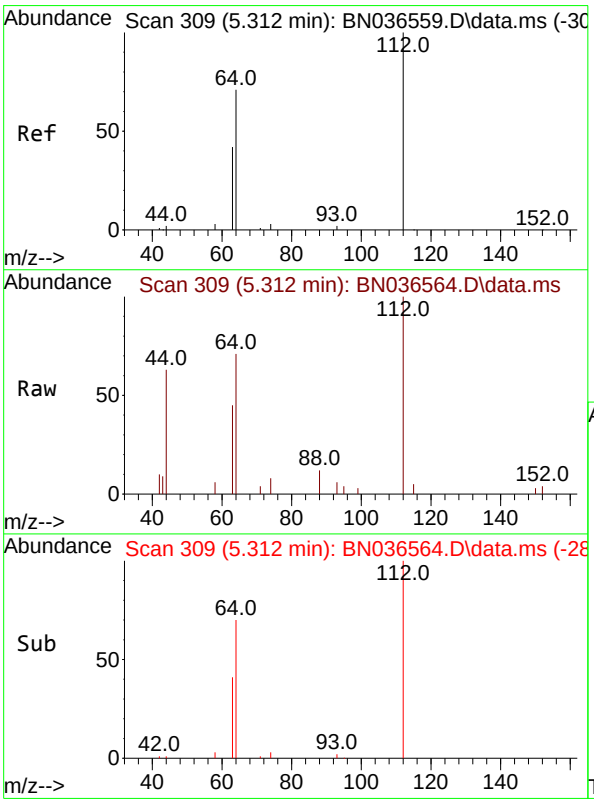

#3
n-Nitrosodimethylamine
Concen: 0.409 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion: 42 Resp: 2284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 79.2 | 60.6 | 90.8 |
| 44 | 8.2 | 6.3 | 9.5 |

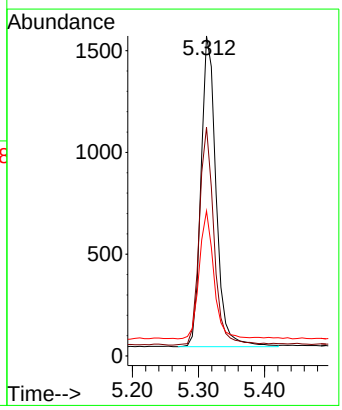


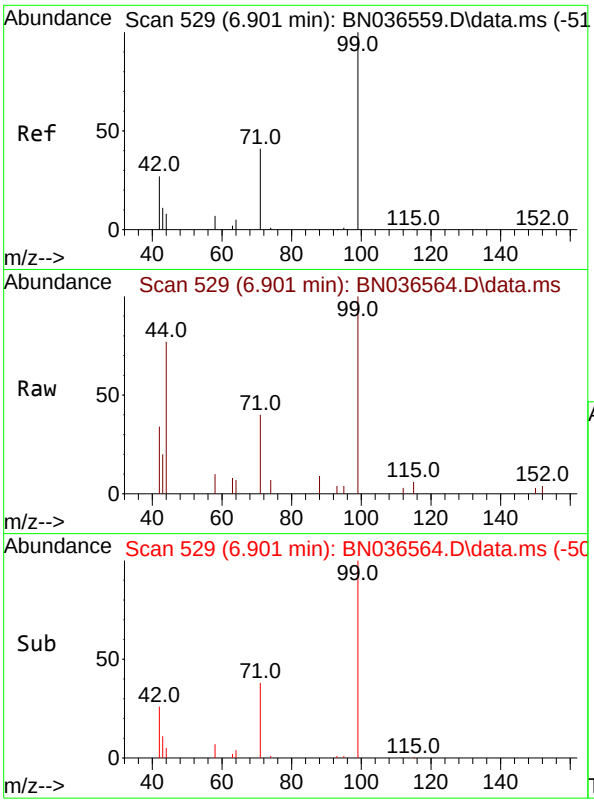




#4
2-Fluorophenol
Concen: 0.417 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:112 Resp: 2418

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.2 | 53.1 | 79.7 |
| 63 | 39.8 | 31.8 | 47.8 |



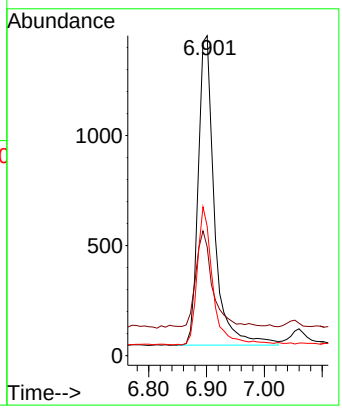


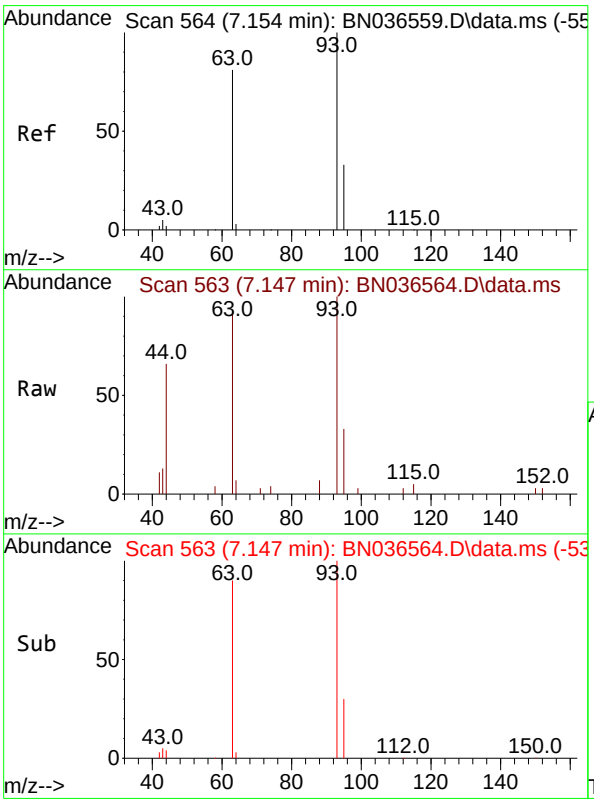

#5
Phenol-d6
Concen: 0.383 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion: 99 Resp: 2744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 32.1 | 26.5 | 39.7 |
| 71 | 42.9 | 34.1 | 51.1 |

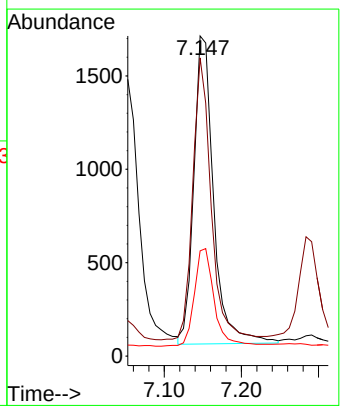


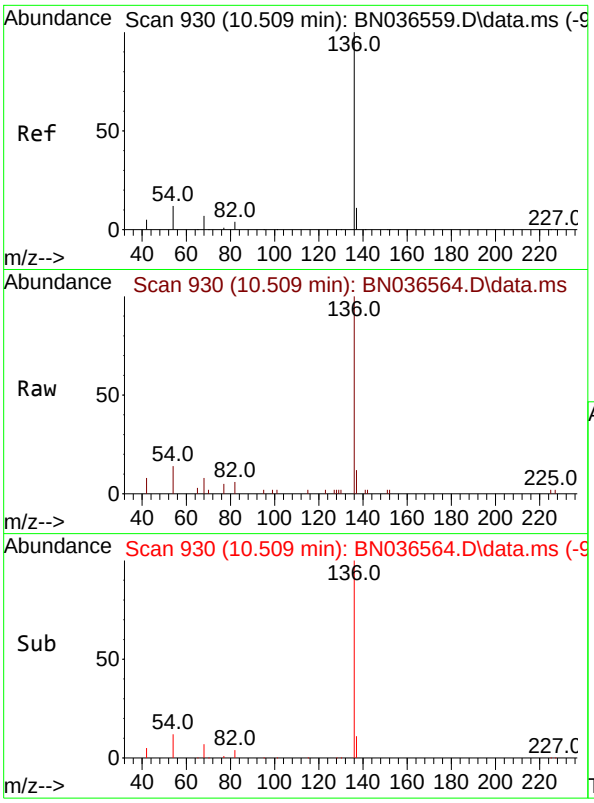




#6
bis(2-Chloroethyl)ether
Concen: 0.398 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion: 93 Resp: 2945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.1 | 67.7 | 101.5 |
| 95 | 31.7 | 25.6 | 38.4 |



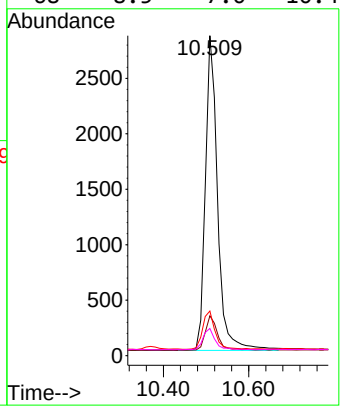


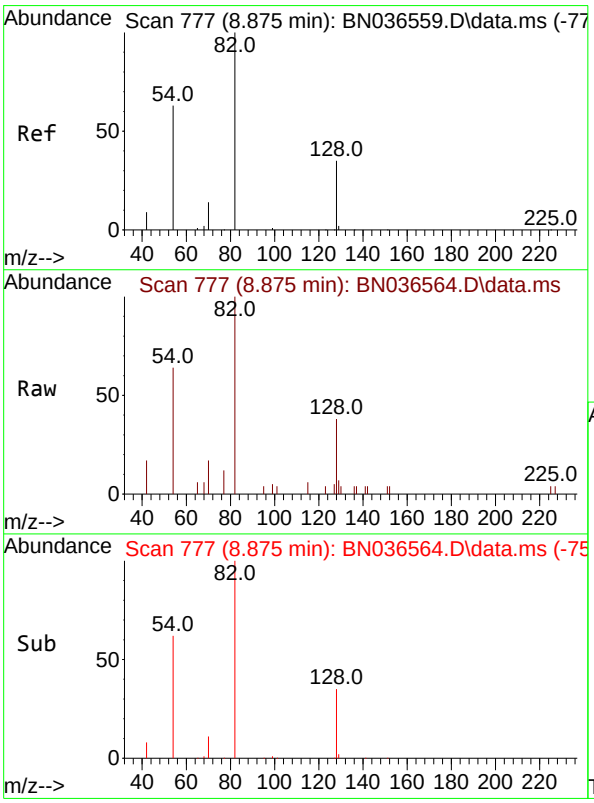

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:136 Resp: 5634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 13.9 | 11.5 | 17.3 |
| 68 | 8.5 | 7.0 | 10.4 |

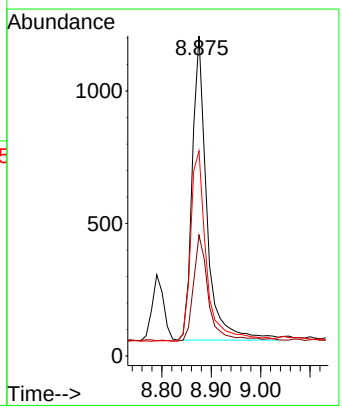


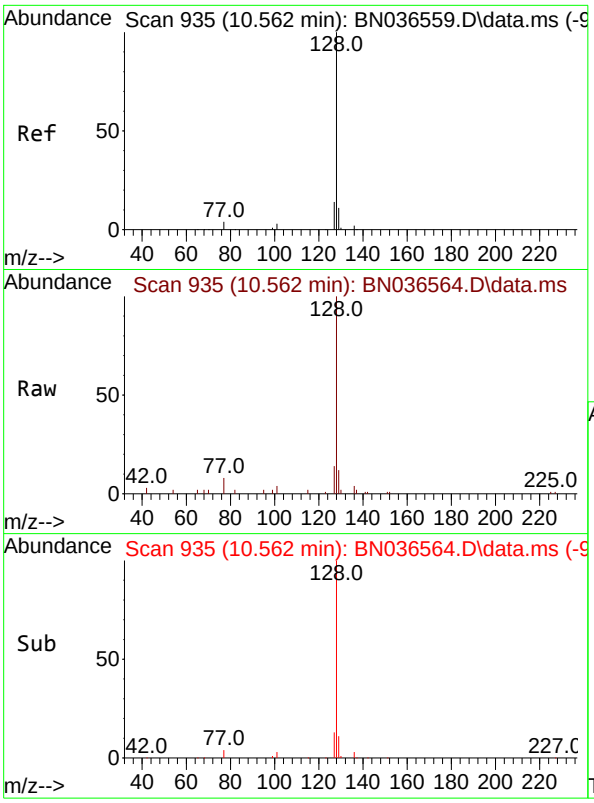




#8
Nitrobenzene-d5
Concen: 0.384 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion: 82 Resp: 2356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 37.7 | 30.6 | 45.8 |
| 54 | 64.1 | 52.2 | 78.4 |



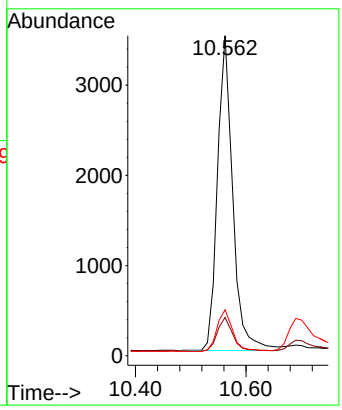


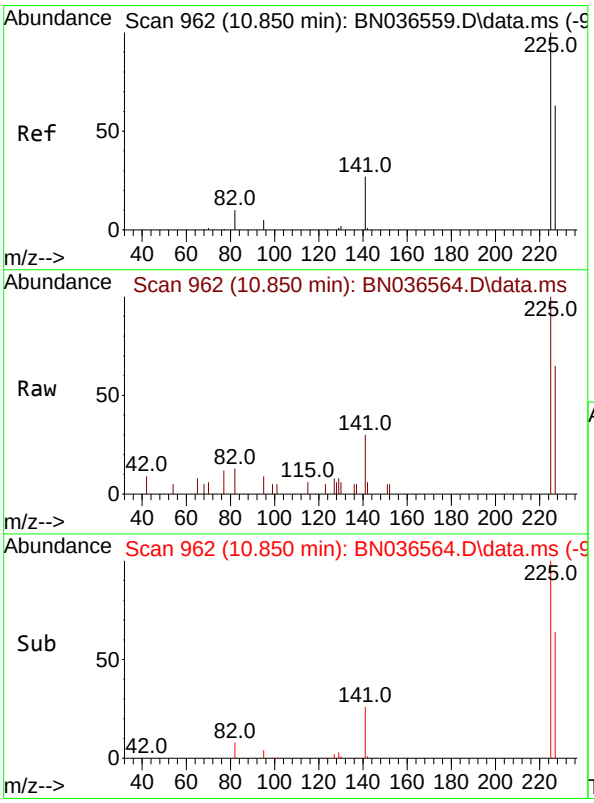

#9
Naphthalene
Concen: 0.405 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:128 Resp: 6710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.9 | 9.8 | 14.6 |
| 127 | 14.3 | 11.8 | 17.8 |

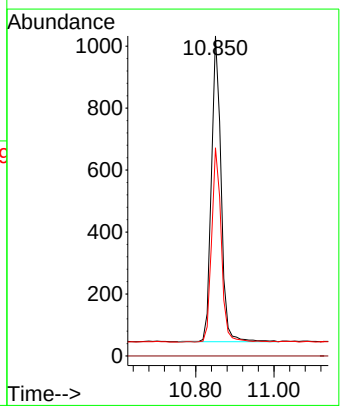


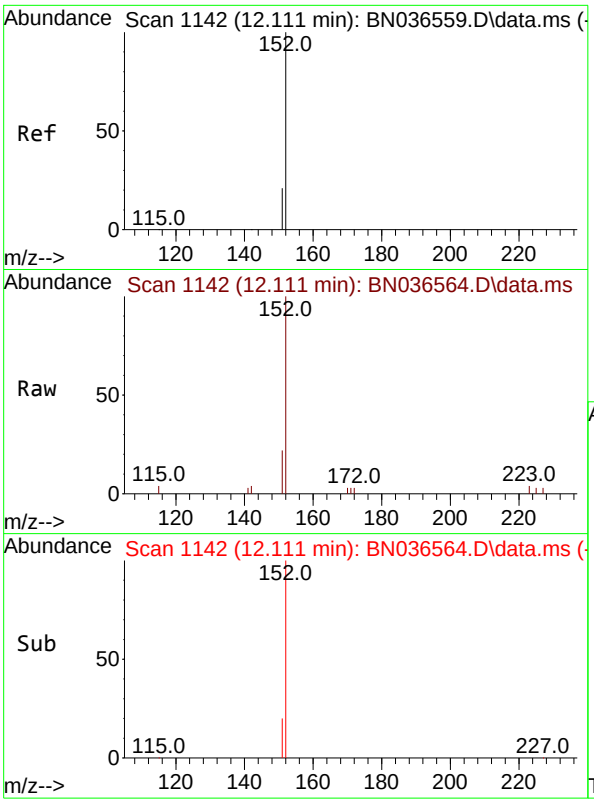




#10
Hexachlorobutadiene
Concen: 0.434 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:225 Resp: 1694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.5 | 51.8 | 77.8 |



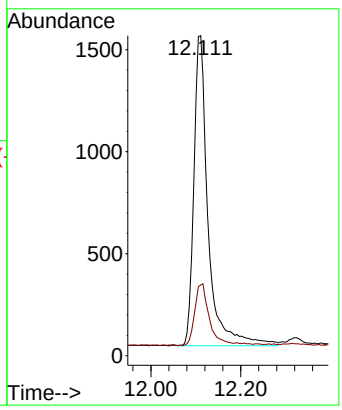


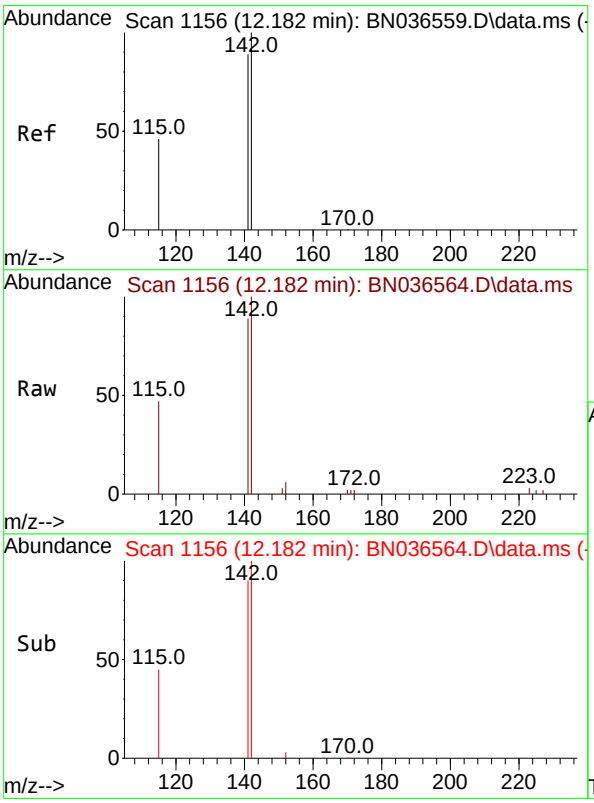

#11
2-Methylnaphthalene-d10
Concen: 0.399 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:152 Resp: 3345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.2 | 17.0 | 25.6 |

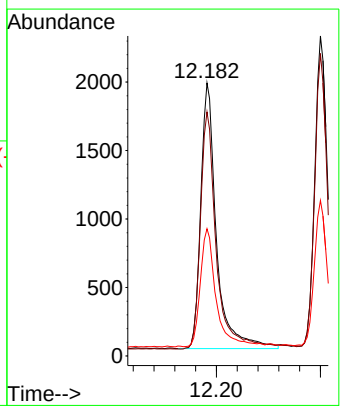


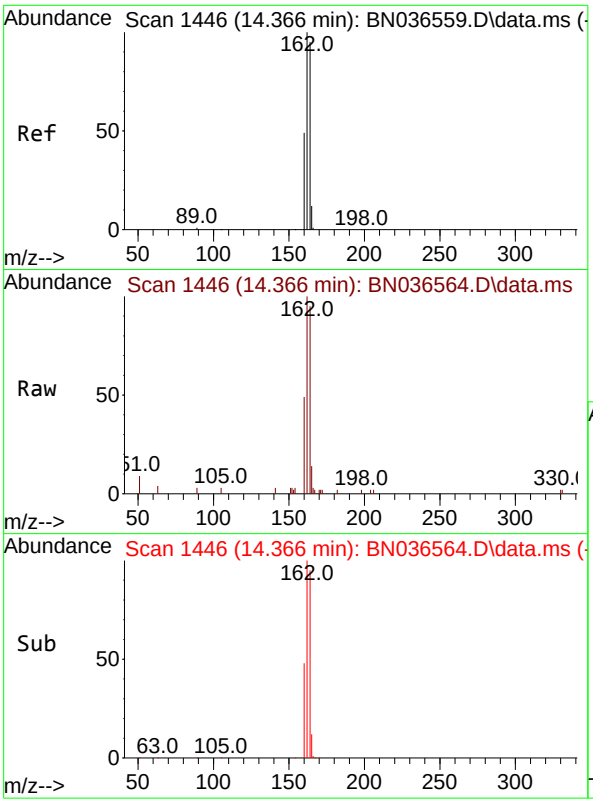




#12
2-Methylnaphthalene
Concen: 0.385 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:142 Resp: 4064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 89.4 | 71.7 | 107.5 |
| 115 | 46.6 | 38.3 | 57.5 |



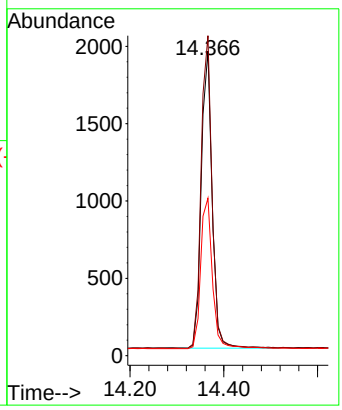


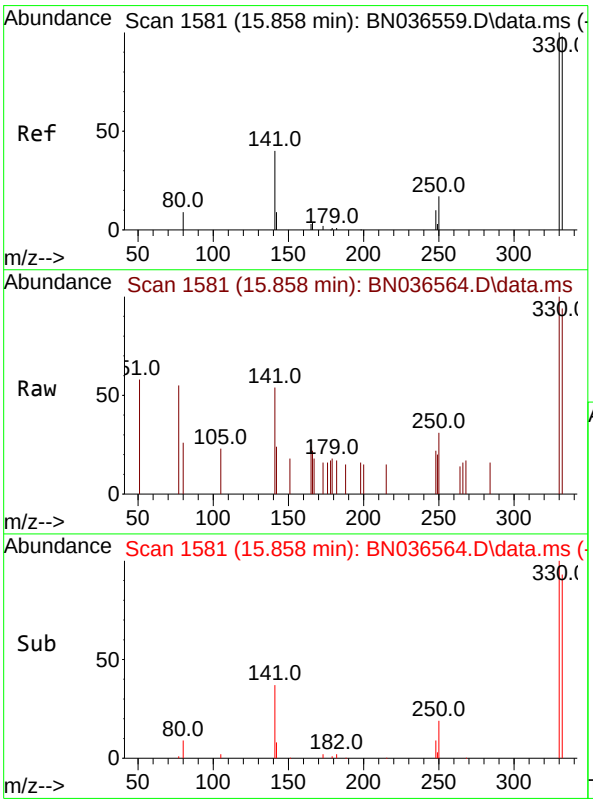

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:164 Resp: 3085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 105.0 | 84.2 | 126.2 |
| 160 | 51.7 | 42.2 | 63.2 |

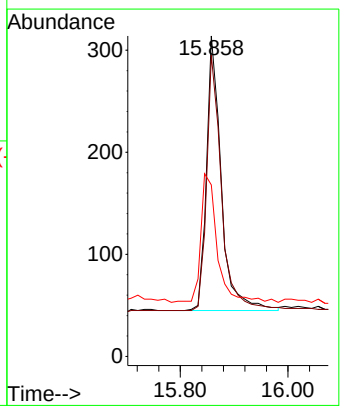


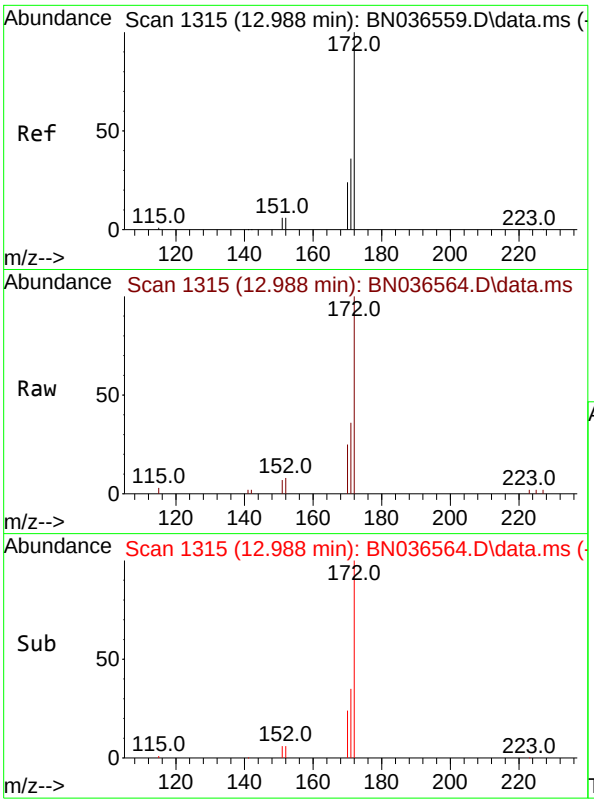




#14
2,4,6-Tribromophenol
Concen: 0.365 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:330 Resp: 511

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 93.9 | 75.2 | 112.8 |
| 141 | 51.5 | 43.4 | 65.2 |



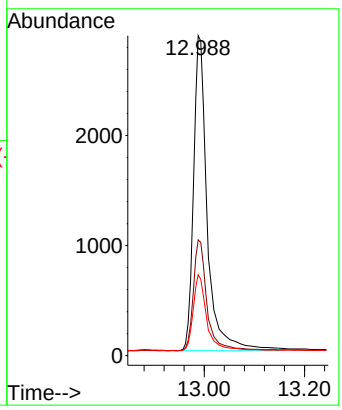


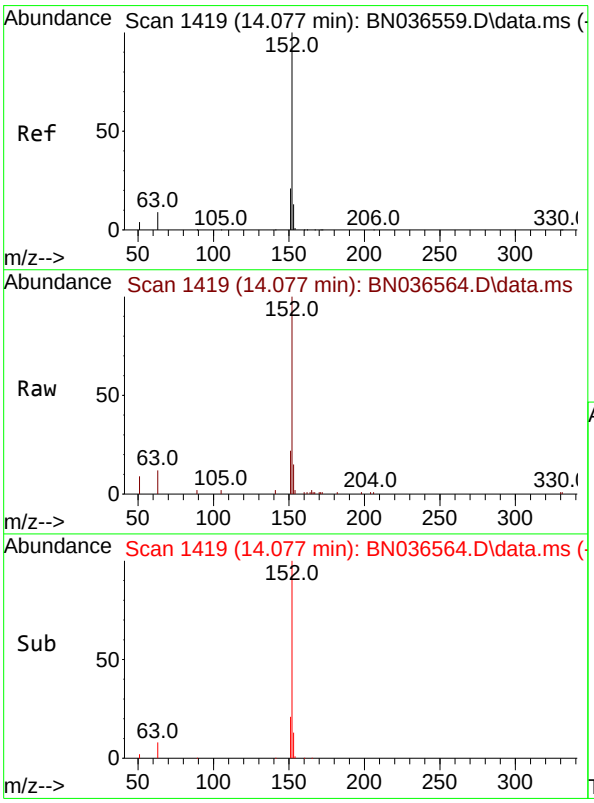

#15
2-Fluorobiphenyl
Concen: 0.432 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:172 Resp: 7753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.2 | 29.5 | 44.3 |
| 170 | 25.3 | 20.2 | 30.4 |

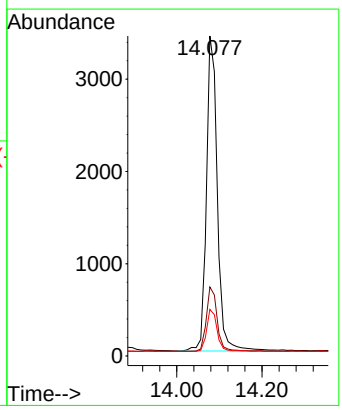


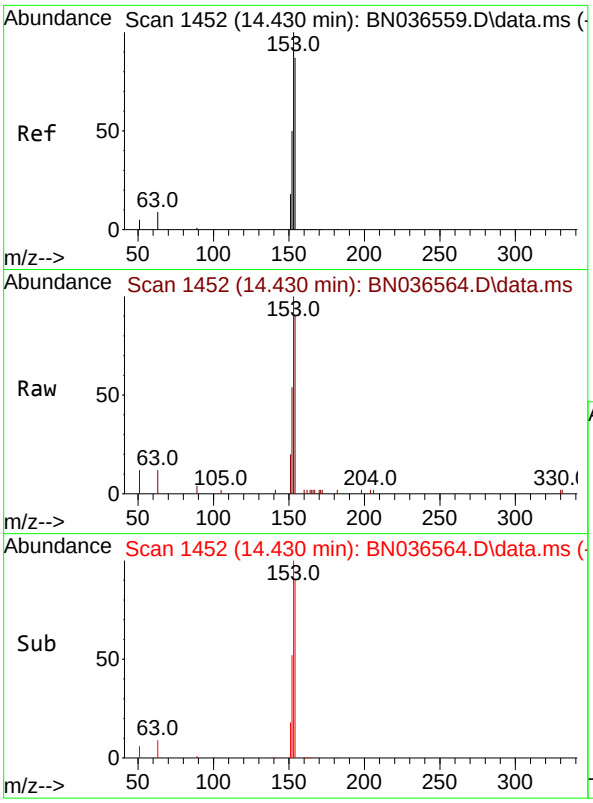




#16
Acenaphthylene
Concen: 0.416 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:152 Resp: 6059

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.1 | 16.2 | 24.4 |
| 153 | 12.9 | 10.6 | 15.8 |



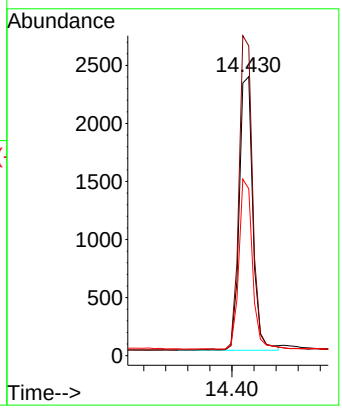


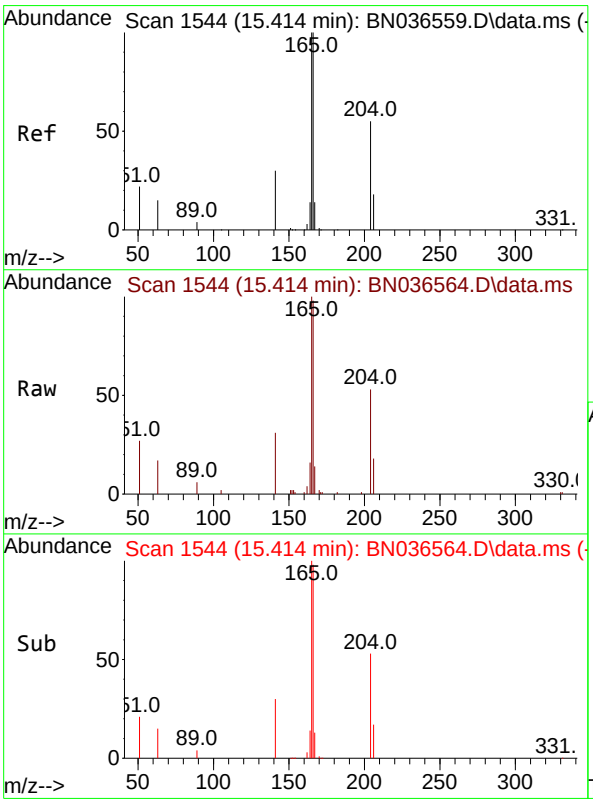

#17
Acenaphthene
Concen: 0.423 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:154 Resp: 4035

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 115.5 | 94.1 | 141.1 |
| 152 | 61.9 | 49.8 | 74.6 |

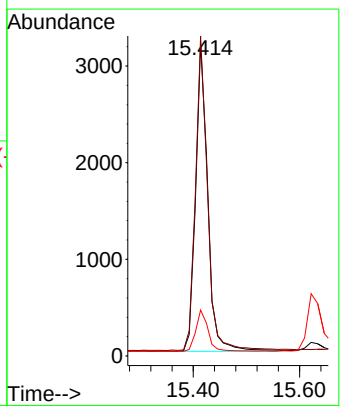


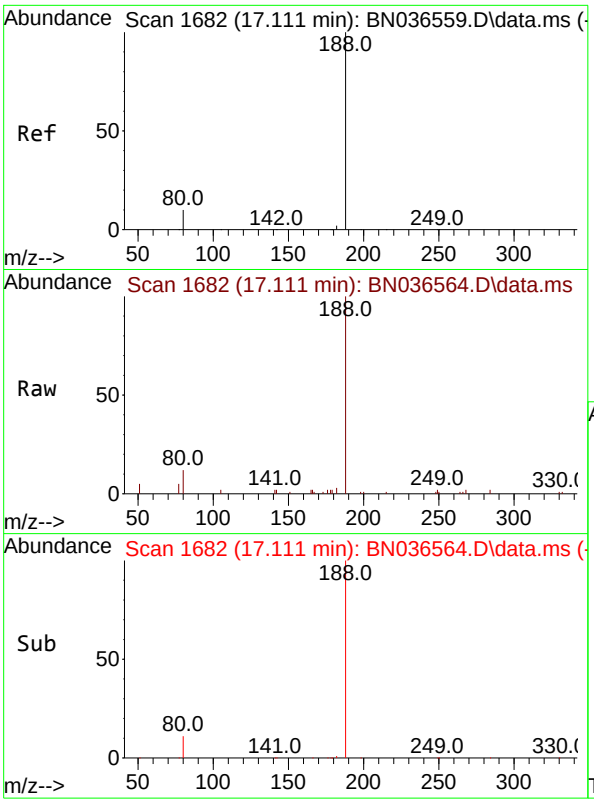




#18
Fluorene
Concen: 0.405 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:166 Resp: 5226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 101.1 | 79.8 | 119.8 |
| 167 | 13.1 | 10.6 | 15.8 |



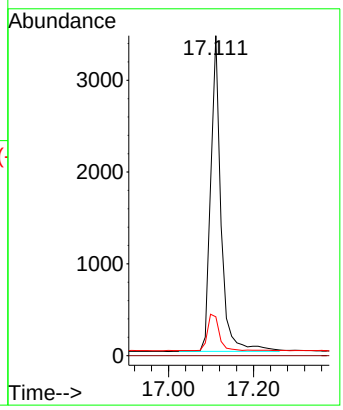


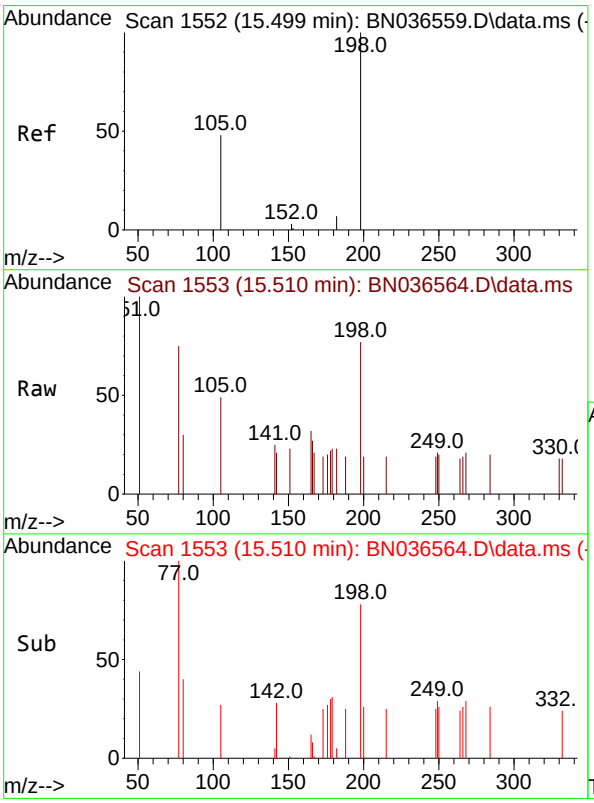

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:188 Resp: 5778

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 12.2 | 8.8 | 13.2 |

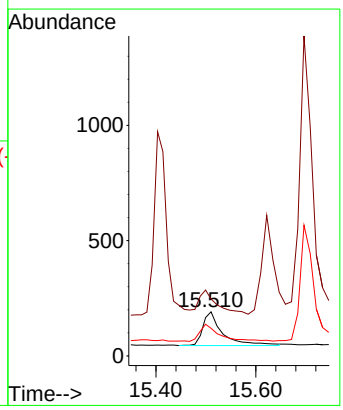


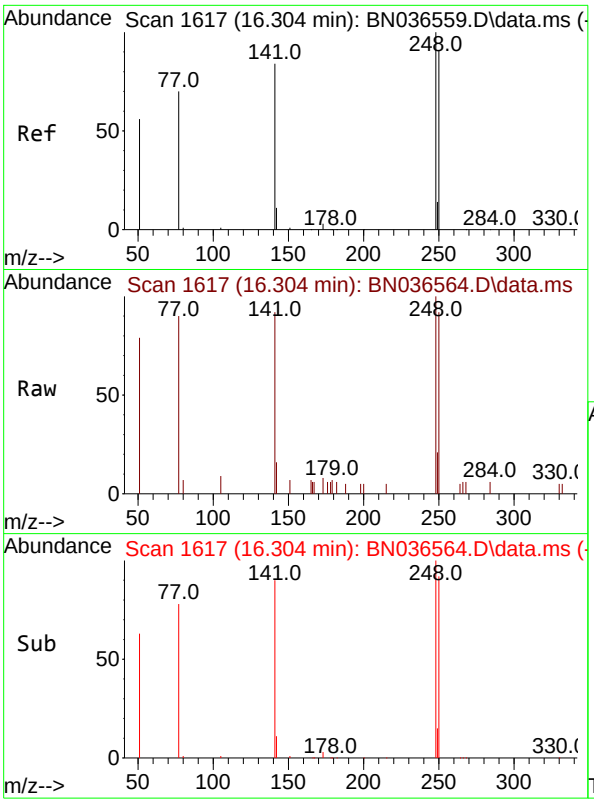




#20
4,6-Dinitro-2-methylphenol
Concen: 0.420 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:198 Resp: 404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 129.3 | 107.9 | 161.9 |
| 105 | 62.8 | 56.2 | 84.2 |



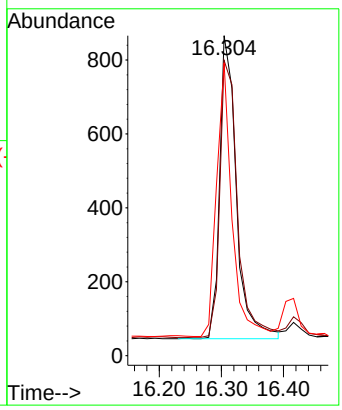


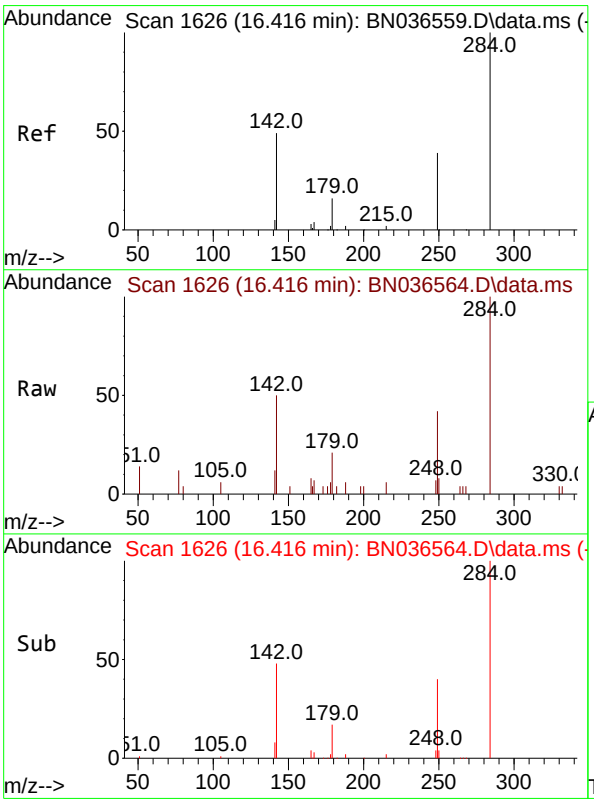

#21
4-Bromophenyl-phenylether
Concen: 0.421 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:248 Resp: 1524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 92.3 | 73.0 | 109.6 |
| 141 | 91.6 | 68.6 | 103.0 |

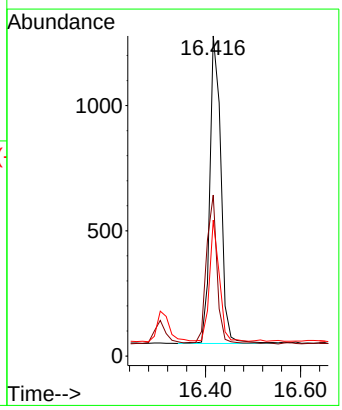


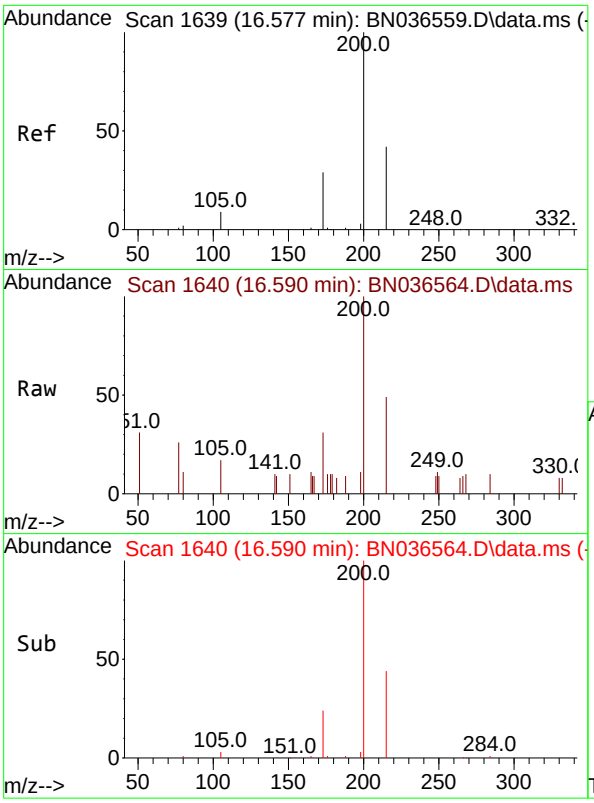




#22
Hexachlorobenzene
Concen: 0.455 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:284 Resp: 1987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 47.5 | 37.0 | 55.4 |
| 249 | 34.9 | 28.1 | 42.1 |



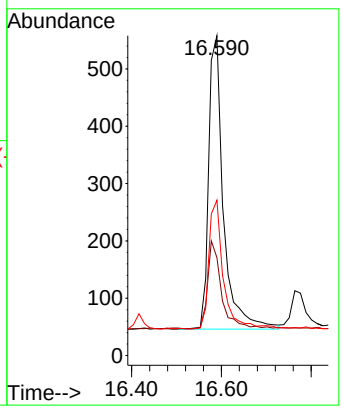


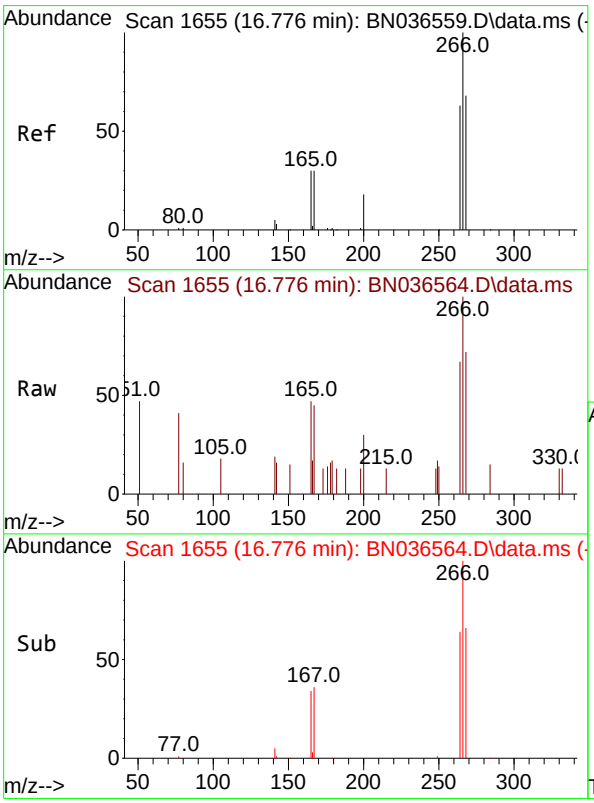

#23
Atrazine
Concen: 0.401 ng
RT: 16.590 min Scan# 1
Delta R.T. 0.012 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:200 Resp: 1165

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 30.6 | 27.3 | 40.9 |
| 215 | 48.6 | 36.8 | 55.2 |

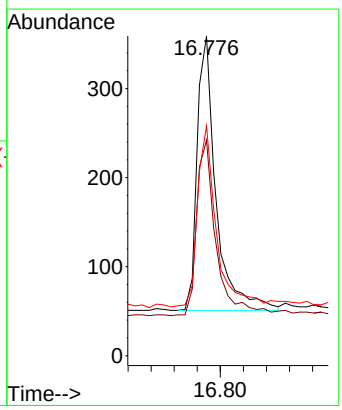


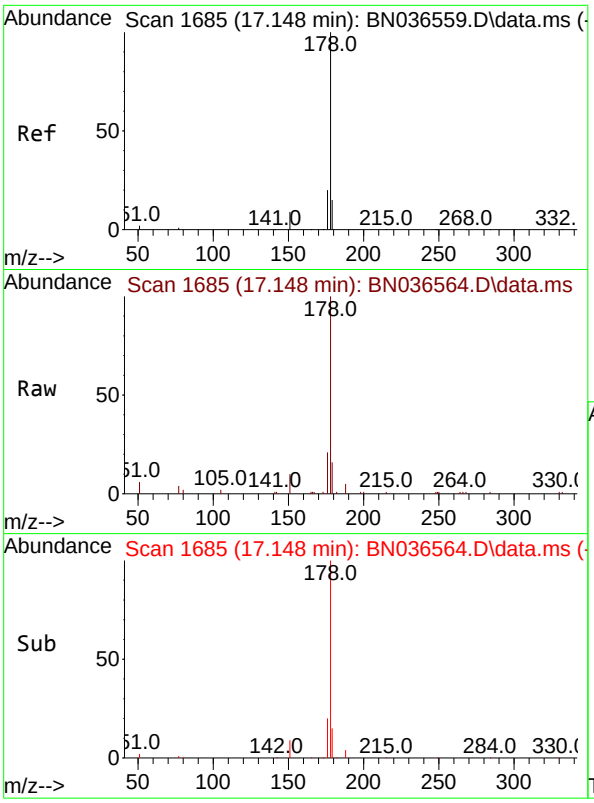




#24
Pentachlorophenol
Concen: 0.351 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:266 Resp: 699

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 67.1 | 49.6 | 74.4 |
| 268 | 66.7 | 50.9 | 76.3 |



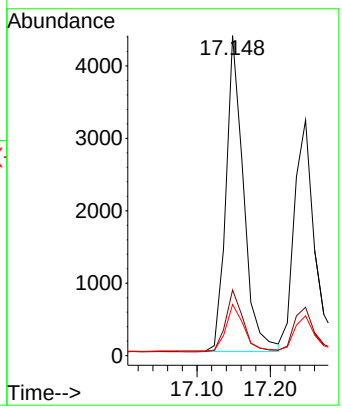


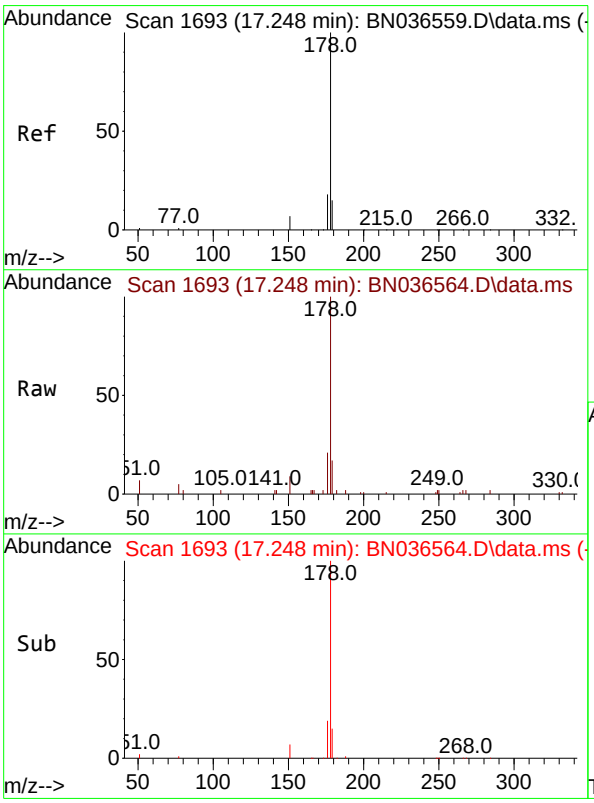

#25
Phenanthrene
Concen: 0.417 ng
RT: 17.148 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:178 Resp: 7229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.8 | 15.9 | 23.9 |
| 179 | 15.0 | 12.2 | 18.4 |

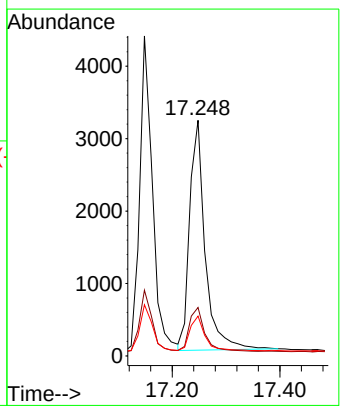


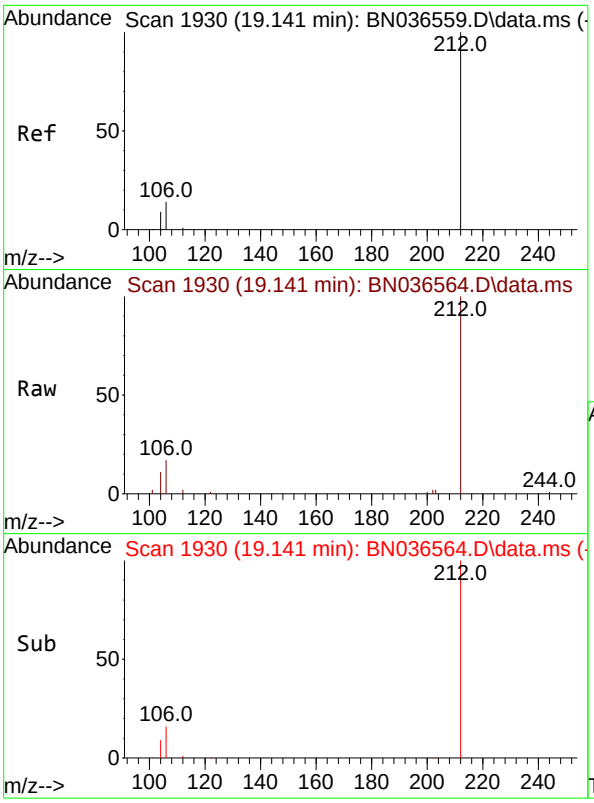




#26
Anthracene
Concen: 0.407 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:178 Resp: 6358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.2 | 15.4 | 23.2 |
| 179 | 14.8 | 12.6 | 18.8 |



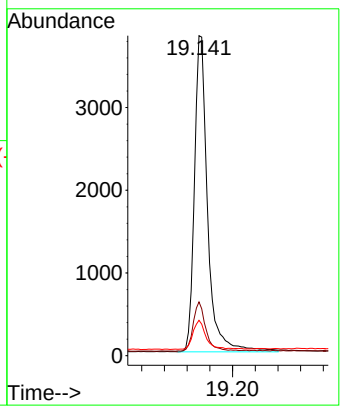


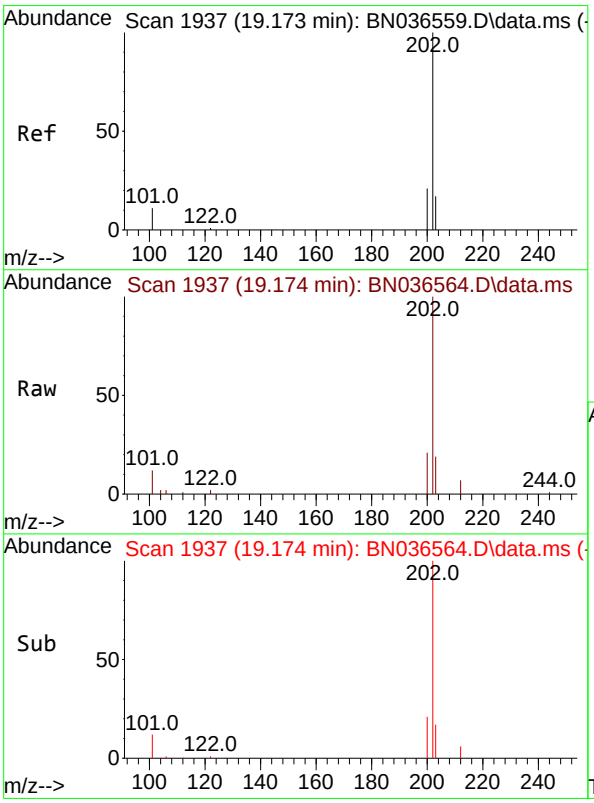

#27
Fluoranthene-d10
Concen: 0.415 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:212 Resp: 6152

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.8 | 11.8 | 17.6 |
| 104 | 8.8 | 7.3 | 10.9 |

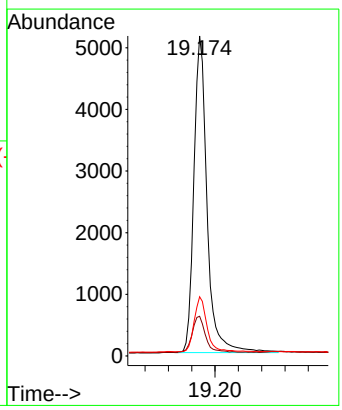


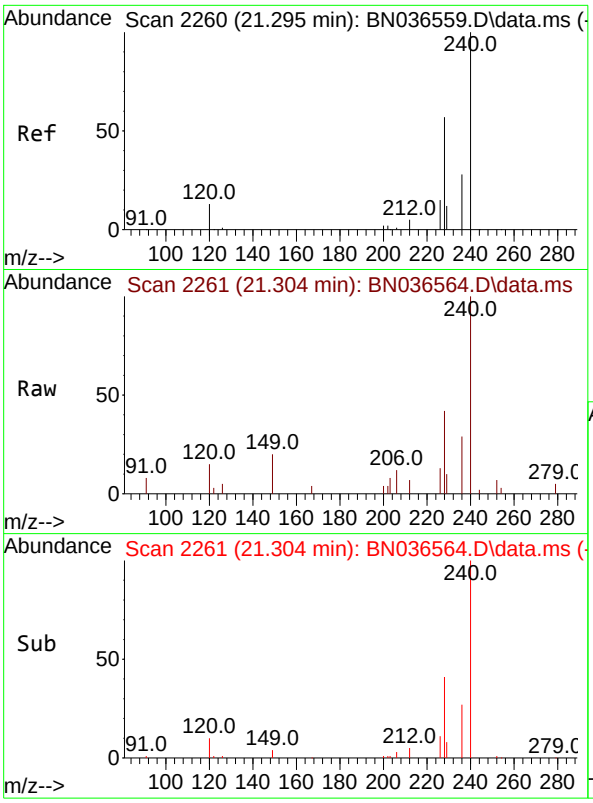




#28
Fluoranthene
Concen: 0.414 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:202 Resp: 8068

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.6 | 9.4 | 14.0 |
| 203 | 16.8 | 13.5 | 20.3 |



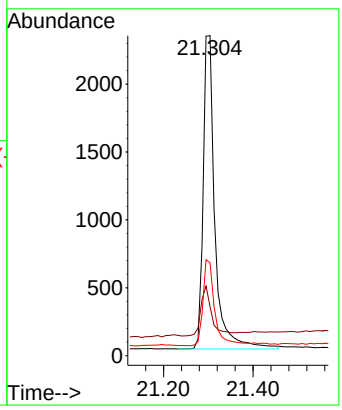


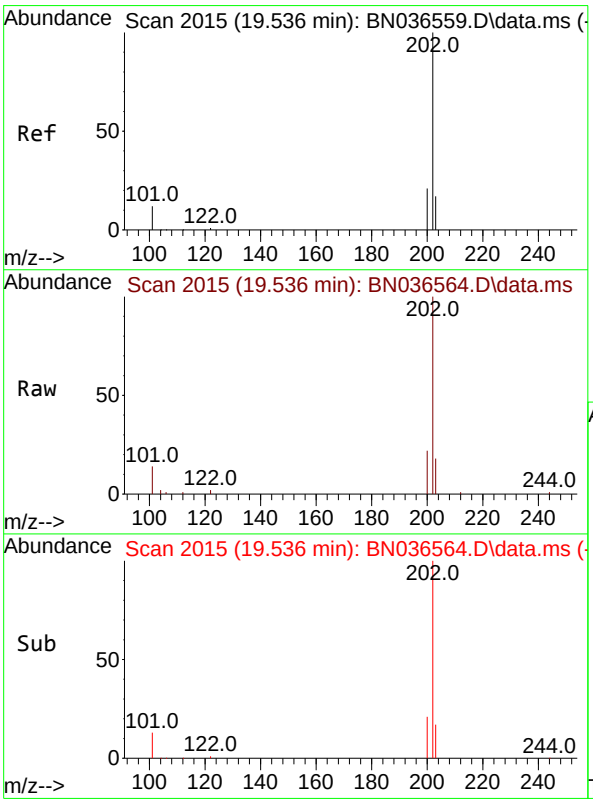

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:240 Resp: 4219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 15.4 | 14.6 | 22.0 |
| 236 | 29.1 | 24.1 | 36.1 |

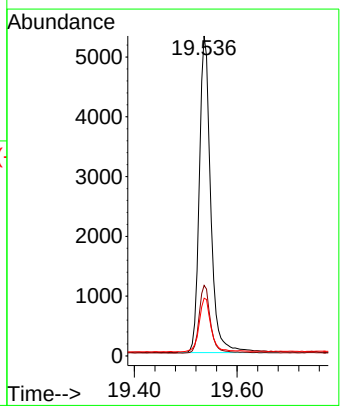


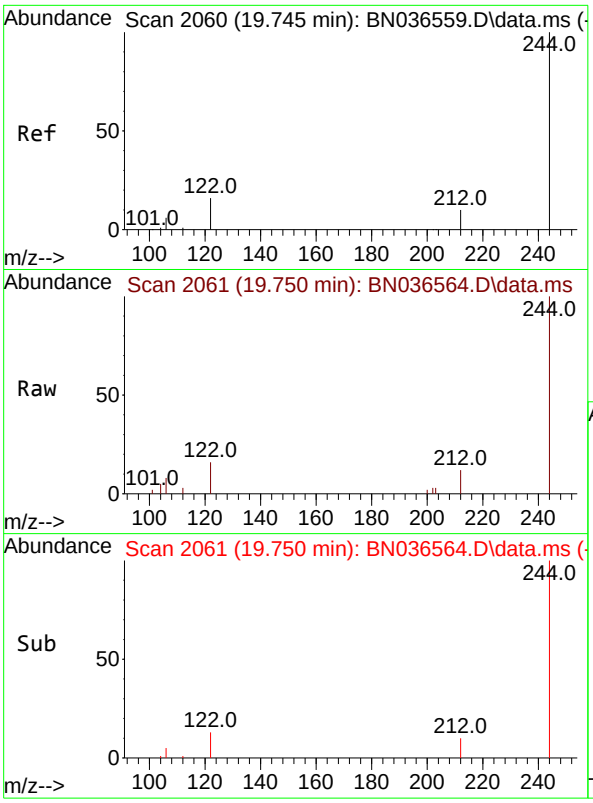




#30
Pyrene
Concen: 0.395 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:202 Resp: 8156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.4 | 14.1 | 21.1 |



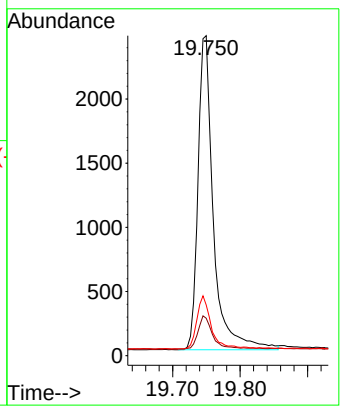


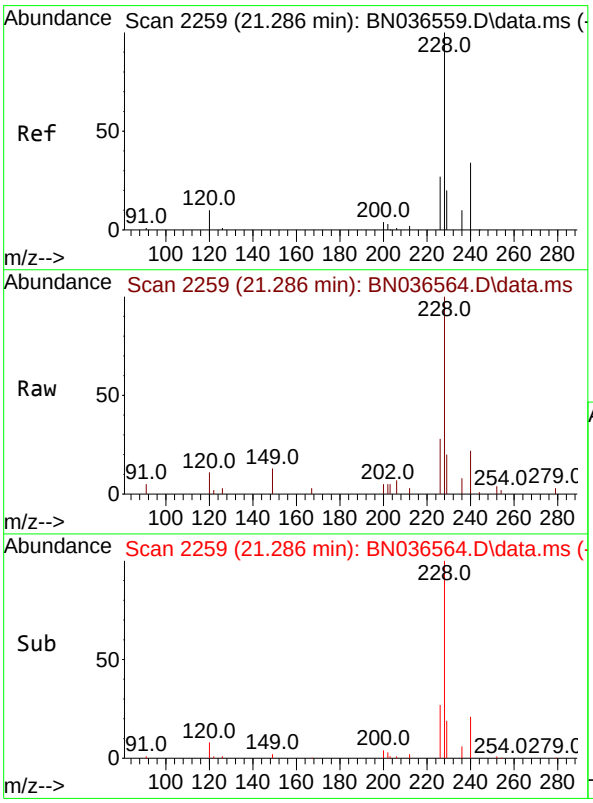

#31
Terphenyl-d14
Concen: 0.384 ng
RT: 19.750 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:244 Resp: 3880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.7 | 9.6 | 14.4 |
| 122 | 15.8 | 13.9 | 20.9 |

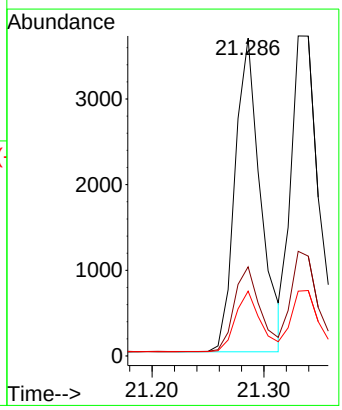


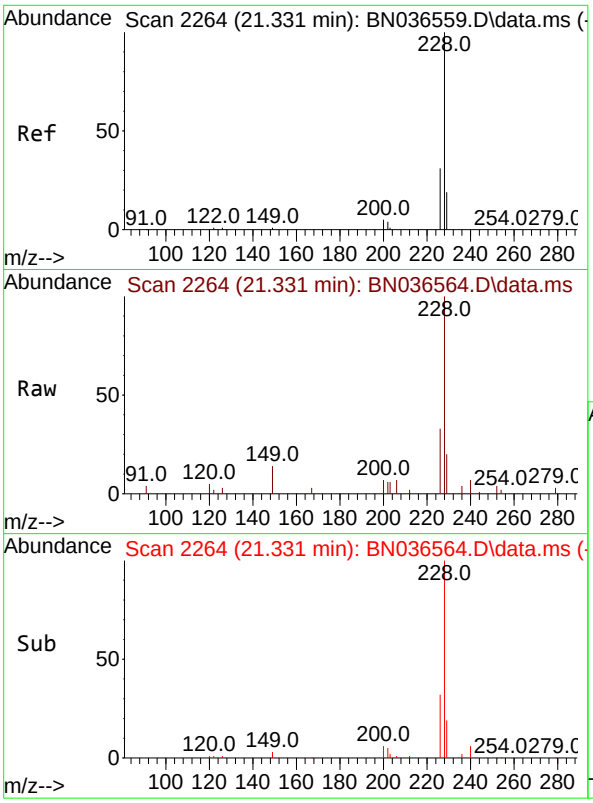




#32
Benzo(a)anthracene
Concen: 0.396 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:228 Resp: 5814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.1 | 22.5 | 33.7 |
| 229 | 20.4 | 16.6 | 25.0 |



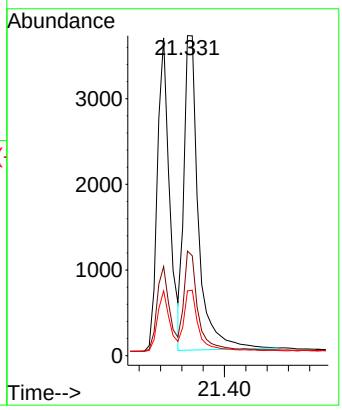


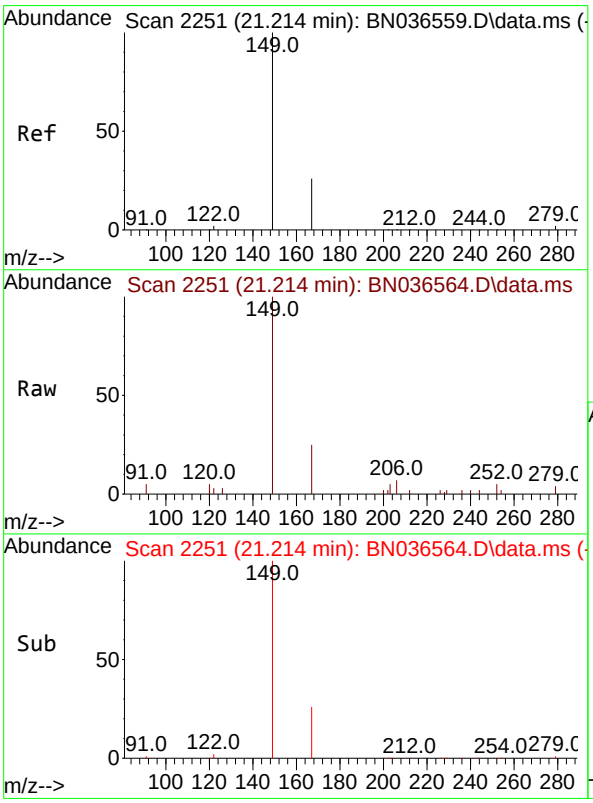

#33
Chrysene
Concen: 0.433 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:228 Resp: 6940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.7 | 25.3 | 37.9 |
| 229 | 20.3 | 15.8 | 23.8 |

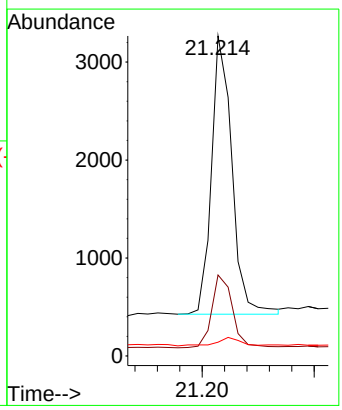


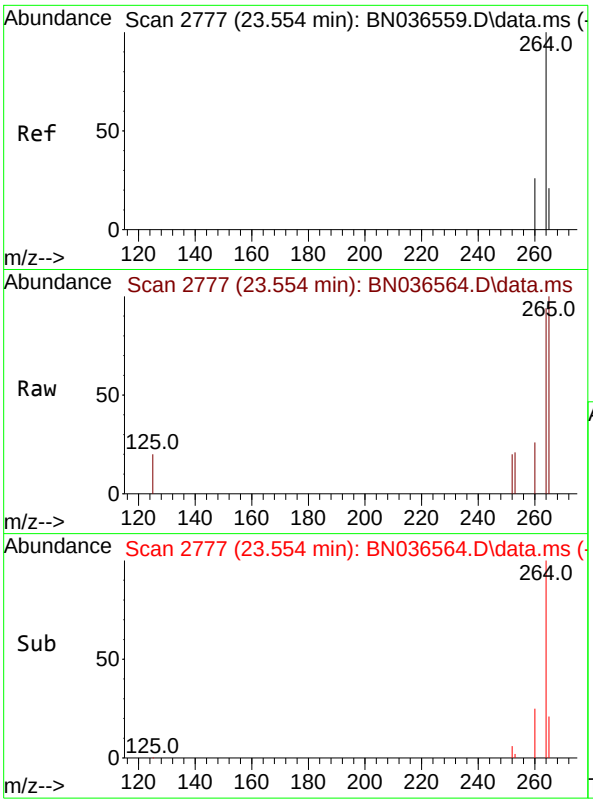




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.344 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:149 Resp: 3594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.6 | 20.7 | 31.1 |
| 279 | 3.7 | 3.6 | 5.4 |



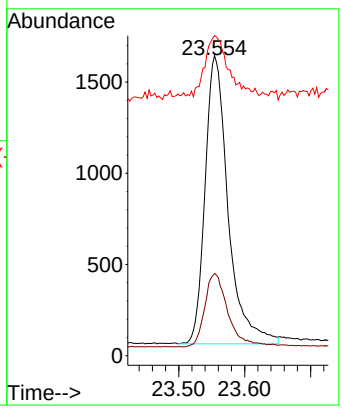


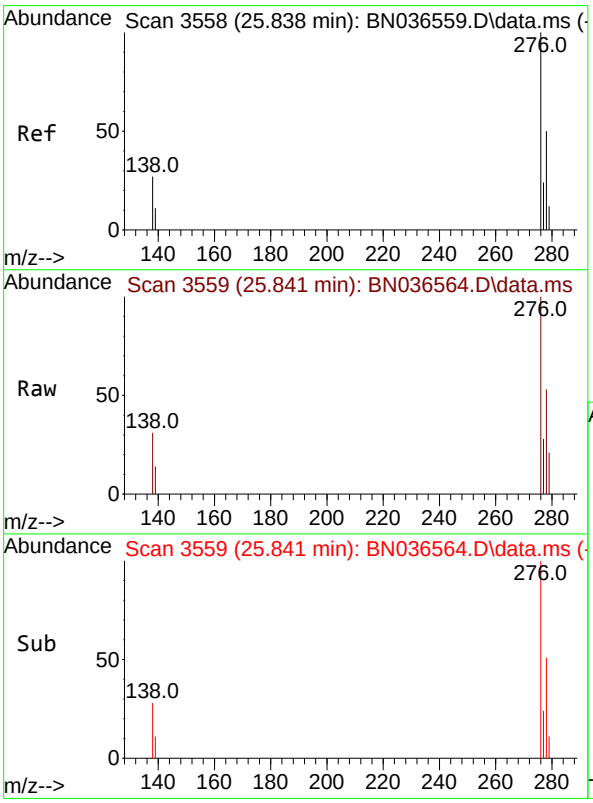

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:264 Resp: 3835

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.4 | 22.6 | 33.8 |
| 265 | 106.6 | 88.1 | 132.1 |

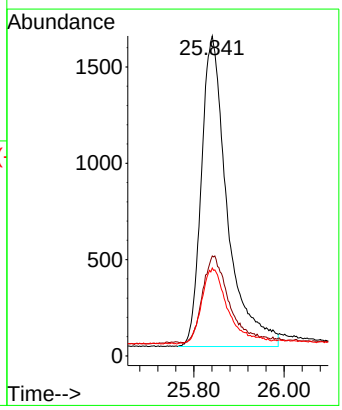


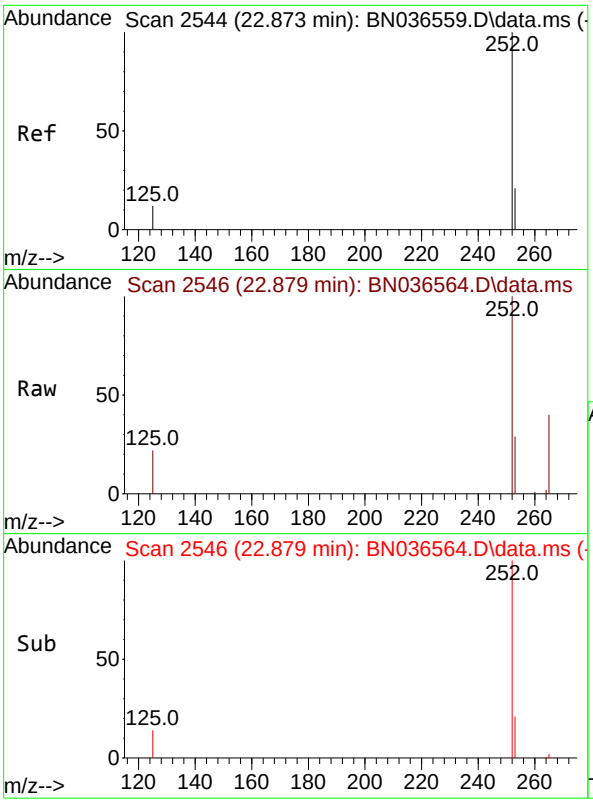




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.463 ng
RT: 25.841 min Scan# 3559
Delta R.T. 0.003 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:276 Resp: 6410

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 28.1 | 23.4 | 35.2 |
| 277 | 24.5 | 20.0 | 30.0 |



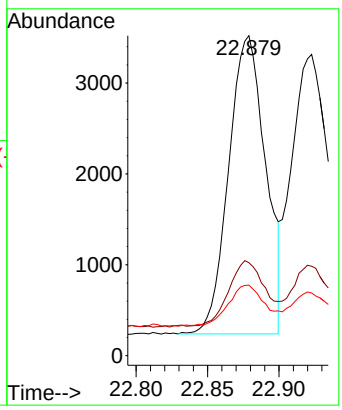


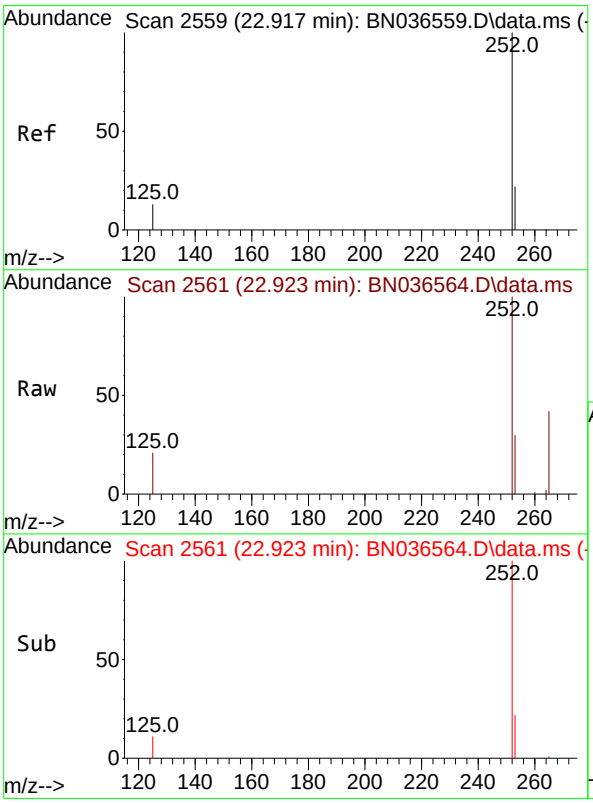

#37
Benzo(b)fluoranthene
Concen: 0.423 ng
RT: 22.879 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:252 Resp: 5902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.0 | 23.9 | 35.9 |
| 125 | 22.1 | 17.4 | 26.2 |

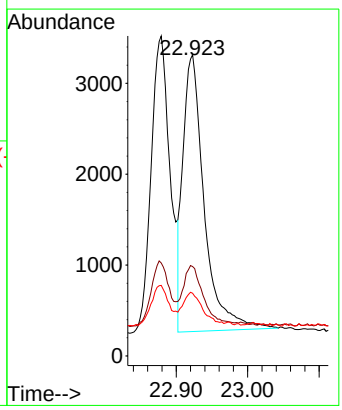


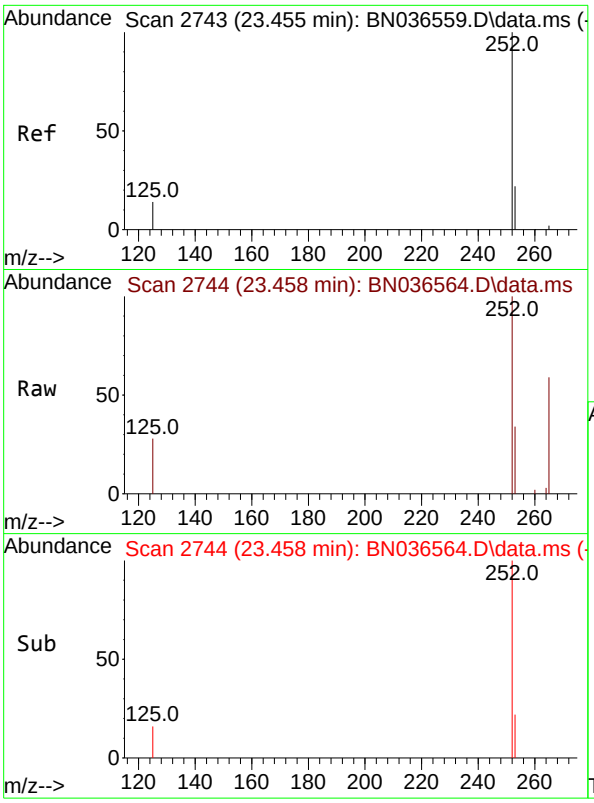




#38
Benzo(k)fluoranthene
Concen: 0.429 ng
RT: 22.923 min Scan# 2561
Delta R.T. 0.006 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:252 Resp: 6286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.7 | 24.6 | 36.8 |
| 125 | 20.8 | 17.8 | 26.8 |



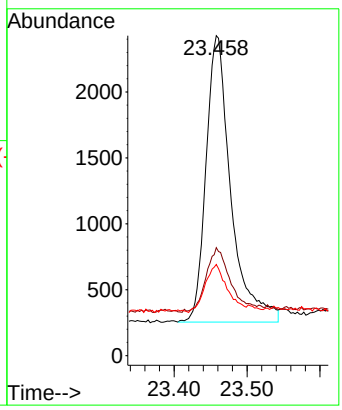


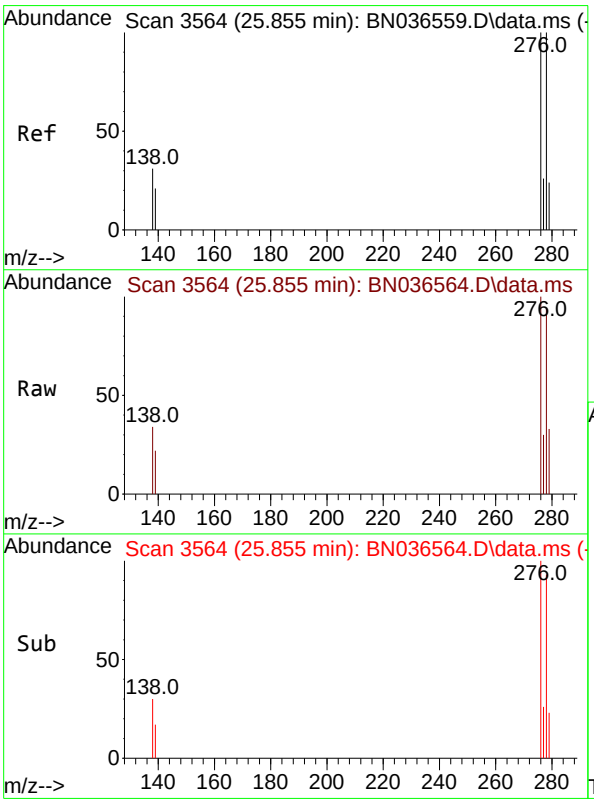

#39
Benzo(a)pyrene
Concen: 0.438 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:252 Resp: 5147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 33.7 | 27.8 | 41.8 |
| 125 | 28.5 | 22.7 | 34.1 |

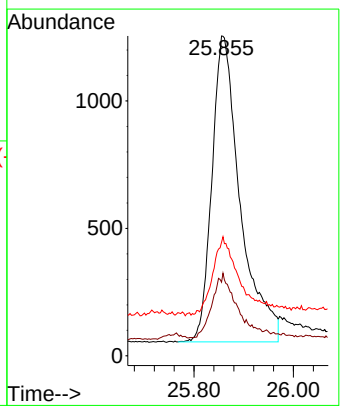


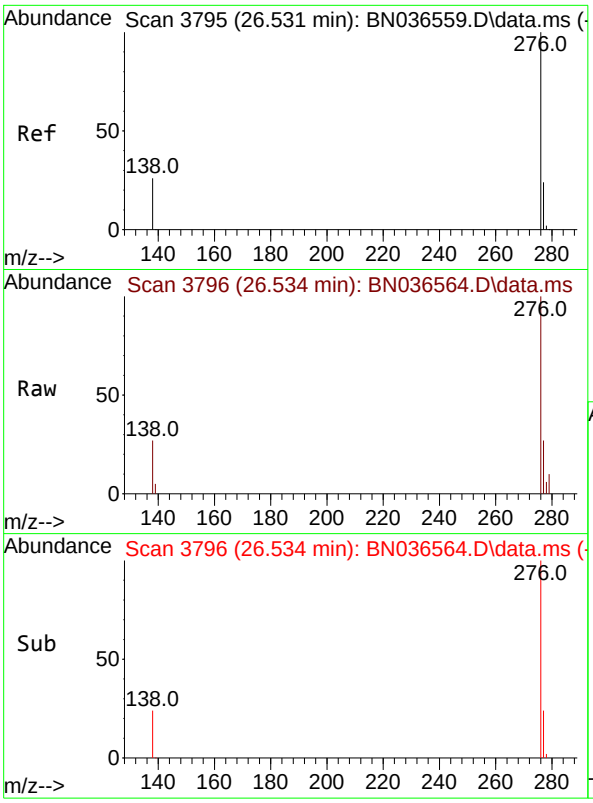




#40
Dibenzo(a,h)anthracene
Concen: 0.440 ng
RT: 25.855 min Scan# 3564
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:278 Resp: 4740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 23.0 | 20.8 | 31.2 |
| 279 | 35.5 | 28.8 | 43.2 |



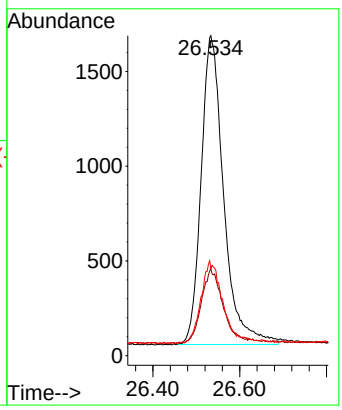



#41
Benzo(g,h,i)perylene
Concen: 0.477 ng
RT: 26.534 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

Tgt Ion:276 Resp: 5877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 27.2 | 22.2 | 33.4 |
| 138 | 27.2 | 24.1 | 36.1 |



# Evaluate Continuing Calibration Report

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

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

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

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 113 | 0.00 |
| 2 | | 1,4-Dioxane | 0.444 | 0.521 | -17.3 | 118 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.918 | -2.2 | 111 | 0.00 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.972 | -4.3 | 111 | 0.00 |
| 5 | S | Phenol-d6 | 1.152 | 1.103 | 4.3 | 110 | 0.00 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.184 | 0.5 | 113 | 0.00 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.418 | 3.9 | 112 | 0.00 |
| 9 | | Naphthalene | 1.177 | 1.191 | -1.2 | 109 | 0.00 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.301 | -8.7 | 113 | 0.00 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.594 | 0.2 | 108 | 0.00 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.721 | 3.7 | 104 | 0.00 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.166 | 8.8 | 90 | 0.00 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 2.513 | -8.0 | 107 | 0.00 |
| 16 | | Acenaphthylene | 1.888 | 1.964 | -4.0 | 103 | 0.00 |
| 17 | | Acenaphthene | 1.236 | 1.308 | -5.8 | 104 | 0.00 |
| 18 | | Fluorene | 1.672 | 1.694 | -1.3 | 98 | 0.00 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.070 | 18.6 | 87 | 0.01 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.264 | -5.2 | 93 | 0.00 |
| 22 | | Hexachlorobenzene | 0.303 | 0.344 | -13.5 | 98 | 0.00 |
| 23 | | Atrazine | 0.201 | 0.202 | -0.5 | 91 | 0.01 |
| 24 | | Pentachlorophenol | 0.138 | 0.121 | 12.3 | 85 | 0.00 |
| 25 | | Phenanthrene | 1.200 | 1.251 | -4.2 | 93 | 0.00 |
| 26 | | Anthracene | 1.083 | 1.100 | -1.6 | 92 | 0.00 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.065 | -3.9 | 92 | 0.00 |
| 28 | | Fluoranthene | 1.348 | 1.396 | -3.6 | 93 | 0.00 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 103 | 0.00 |
| 30 | | Pyrene | 1.956 | 1.933 | 1.2 | 93 | 0.00 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.920 | 4.0 | 92 | 0.00 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.378 | 0.9 | 98 | 0.00 |
| 33 | | Chrysene | 1.520 | 1.645 | -8.2 | 105 | 0.00 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.852 | 13.9 | 84 | 0.00 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.671 | -15.7 | 117 | 0.00 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.539 | -5.7 | 108 | 0.00 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.639 | -7.3 | 110 | 0.00 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.342 | -9.5 | 112 | 0.00 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 1.236 | -10.0 | 115 | 0.00 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.532 | -19.1 | 120 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

**Instrument :**
BNA_N
**ClientSampleId :**
ICVBN031025

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

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 113 | 0.00 |
| 2 | | 1,4-Dioxane | 0.400 | 0.470 | -17.5 | 118 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.409 | -2.2 | 111 | 0.00 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.417 | -4.2 | 111 | 0.00 |
| 5 | S | Phenol-d6 | 0.400 | 0.383 | 4.3 | 110 | 0.00 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.398 | 0.5 | 113 | 0.00 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 111 | 0.00 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.384 | 4.0 | 112 | 0.00 |
| 9 | | Naphthalene | 0.400 | 0.405 | -1.3 | 109 | 0.00 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.434 | -8.5 | 113 | 0.00 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.399 | 0.3 | 108 | 0.00 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.385 | 3.8 | 104 | 0.00 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 102 | 0.00 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.365 | 8.8 | 90 | 0.00 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.432 | -8.0 | 107 | 0.00 |
| 16 | | Acenaphthylene | 0.400 | 0.416 | -4.0 | 103 | 0.00 |
| 17 | | Acenaphthene | 0.400 | 0.423 | -5.7 | 104 | 0.00 |
| 18 | | Fluorene | 0.400 | 0.405 | -1.3 | 98 | 0.00 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 96 | 0.00 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.420 | -5.0 | 87 | 0.01 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.421 | -5.2 | 93 | 0.00 |
| 22 | | Hexachlorobenzene | 0.400 | 0.455 | -13.7 | 98 | 0.00 |
| 23 | | Atrazine | 0.400 | 0.401 | -0.3 | 91 | 0.01 |
| 24 | | Pentachlorophenol | 0.400 | 0.351 | 12.3 | 85 | 0.00 |
| 25 | | Phenanthrene | 0.400 | 0.417 | -4.2 | 93 | 0.00 |
| 26 | | Anthracene | 0.400 | 0.407 | -1.7 | 92 | 0.00 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.415 | -3.7 | 92 | 0.00 |
| 28 | | Fluoranthene | 0.400 | 0.414 | -3.5 | 93 | 0.00 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 103 | 0.00 |
| 30 | | Pyrene | 0.400 | 0.395 | 1.3 | 93 | 0.00 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.384 | 4.0 | 92 | 0.00 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.396 | 1.0 | 98 | 0.00 |
| 33 | | Chrysene | 0.400 | 0.433 | -8.2 | 105 | 0.00 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.344 | 14.0 | 84 | 0.00 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 108 | 0.00 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.463 | -15.8 | 117 | 0.00 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.423 | -5.7 | 108 | 0.00 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.429 | -7.2 | 110 | 0.00 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.438 | -9.5 | 112 | 0.00 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.440 | -10.0 | 115 | 0.00 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.477 | -19.2 | 120 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/27/2025 09:49

Lab File ID: BN036729.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.536 | | -9.9 | 20.0 |
| Fluoranthene-d10 | 1.025 | 1.110 | | 8.3 | 20.0 |
| 2-Fluorophenol | 0.932 | 0.879 | | -5.7 | 20.0 |
| Phenol-d6 | 1.152 | 1.073 | | -6.9 | 20.0 |
| Nitrobenzene-d5 | 0.435 | 0.371 | | -14.7 | 20.0 |
| 2-Fluorobiphenyl | 2.327 | 1.998 | | -14.1 | 20.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.167 | | -8.2 | 20.0 |
| Terphenyl-d14 | 0.958 | 0.820 | | -14.4 | 20.0 |
| 1,4-Dioxane | 0.444 | 0.426 | | -4.1 | 20.0 |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036729.D
Acq On : 27 Mar 2025 09:49
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 10:52:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

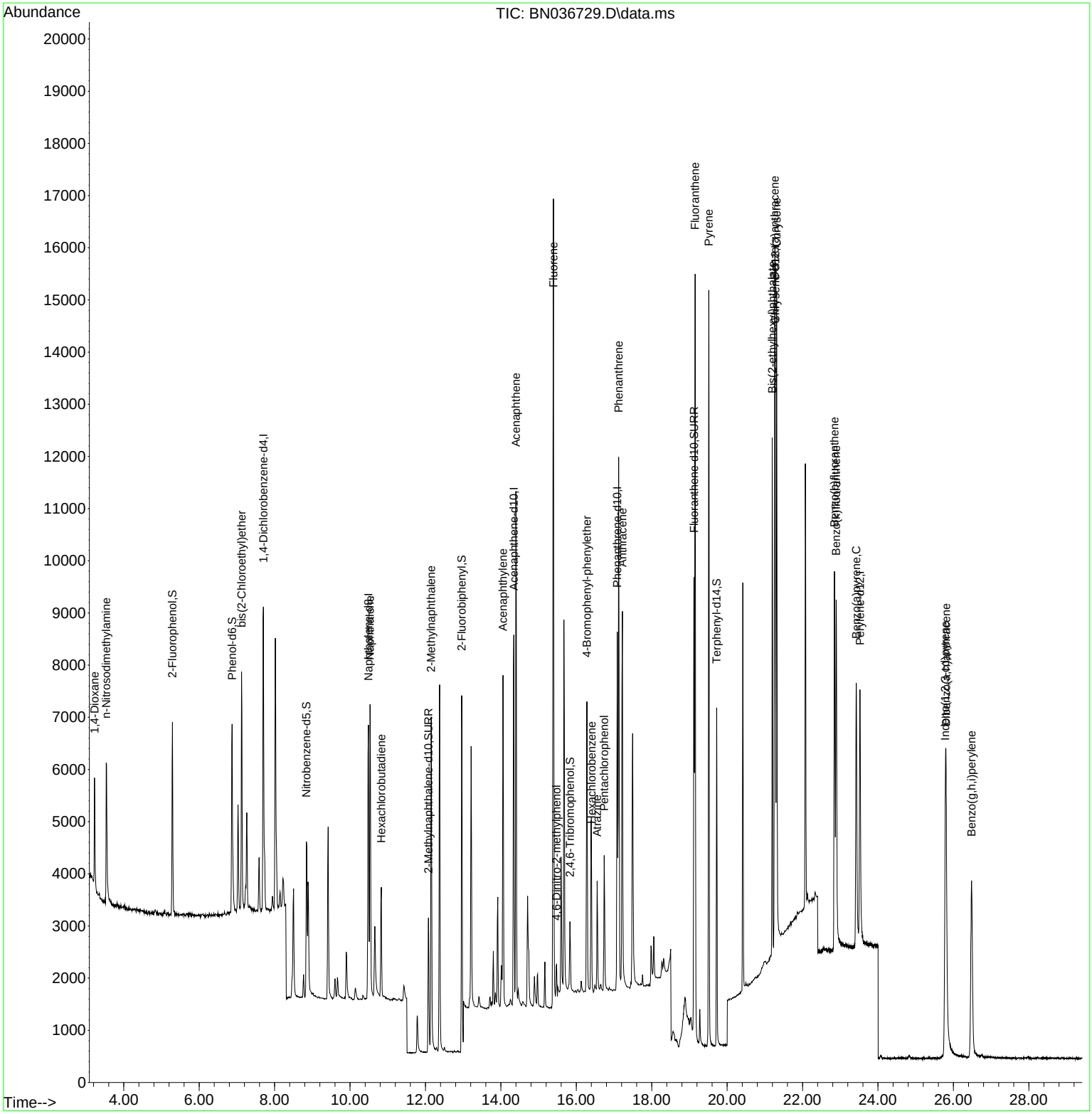
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 2892 | 0.400 | ng | | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 7150 | 0.400 | ng | | #-0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 4255 | 0.400 | ng | | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 8860 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 7759 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.522 | 264 | 6723 | 0.400 | ng | | #-0.03 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 2542 | 0.377 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 3104 | 0.373 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 2653 | 0.341 | ng | | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 3831 | 0.360 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 711 | 0.368 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 8502 | 0.343 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 9834 | 0.433 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 6361 | 0.342 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 1232 | 0.384 | ng | | 99 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 2246 | 0.346 | ng | | 91 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 3157 | 0.367 | ng | | 100 |
| 9) Naphthalene | 10.530 | 128 | 7512 | 0.357 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 1698 | 0.343 | ng | # | 98 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 4804 | 0.359 | ng | | 97 |
| 16) Acenaphthylene | 14.056 | 152 | 6856 | 0.341 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 4636 | 0.353 | ng | | 100 |
| 18) Fluorene | 15.392 | 166 | 6299 | 0.354 | ng | | 100 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 636 | 0.427 | ng | # | 74 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1998 | 0.360 | ng | | 99 |
| 22) Hexachlorobenzene | 16.404 | 284 | 2370 | 0.354 | ng | | 98 |
| 23) Atrazine | 16.553 | 200 | 1715 | 0.385 | ng | | 98 |
| 24) Pentachlorophenol | 16.739 | 266 | 1259 | 0.412 | ng | | 98 |
| 25) Phenanthrene | 17.124 | 178 | 10196 | 0.384 | ng | | 99 |
| 26) Anthracene | 17.223 | 178 | 8794 | 0.367 | ng | | 99 |
| 28) Fluoranthene | 19.150 | 202 | 12984 | 0.435 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 12887 | 0.340 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 9768 | 0.362 | ng | | 98 |
| 33) Chrysene | 21.313 | 228 | 10899 | 0.370 | ng | | 100 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 8379 | 0.436 | ng | # | 98 |
| 36) Indeno(1,2,3-cd)pyrene | 25.785 | 276 | 8360 | 0.345 | ng | | 99 |
| 37) Benzo(b)fluoranthene | 22.847 | 252 | 9234 | 0.377 | ng | | 96 |
| 38) Benzo(k)fluoranthene | 22.891 | 252 | 8958 | 0.349 | ng | | 94 |
| 39) Benzo(a)pyrene | 23.426 | 252 | 7680 | 0.373 | ng | | 93 |
| 40) Dibenzo(a,h)anthracene | 25.806 | 278 | 6473 | 0.343 | ng | | 93 |
| 41) Benzo(g,h,i)perylene | 26.481 | 276 | 7201 | 0.333 | ng | | 98 |

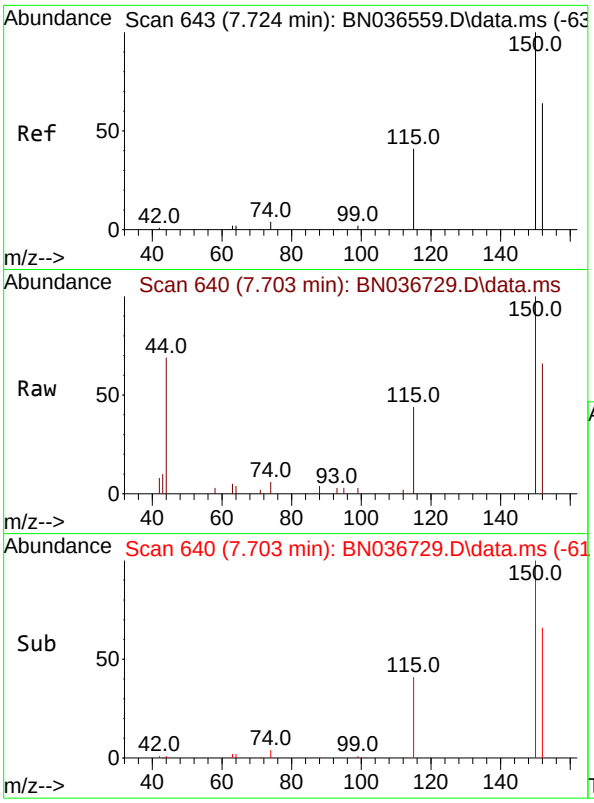
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036729.D
Acq On : 27 Mar 2025 09:49
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 10:52:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



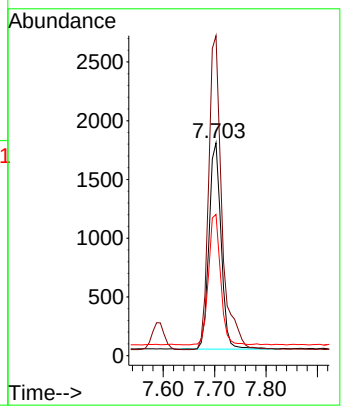


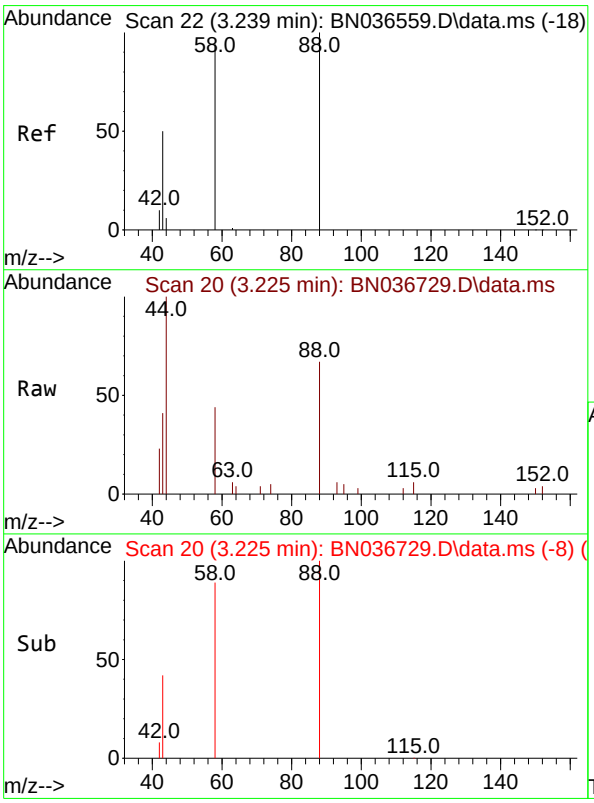

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 2892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 150.4 | 123.7 | 185.5 |
| 115 | 66.4 | 54.3 | 81.5 |

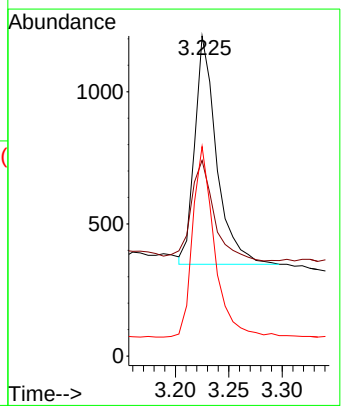


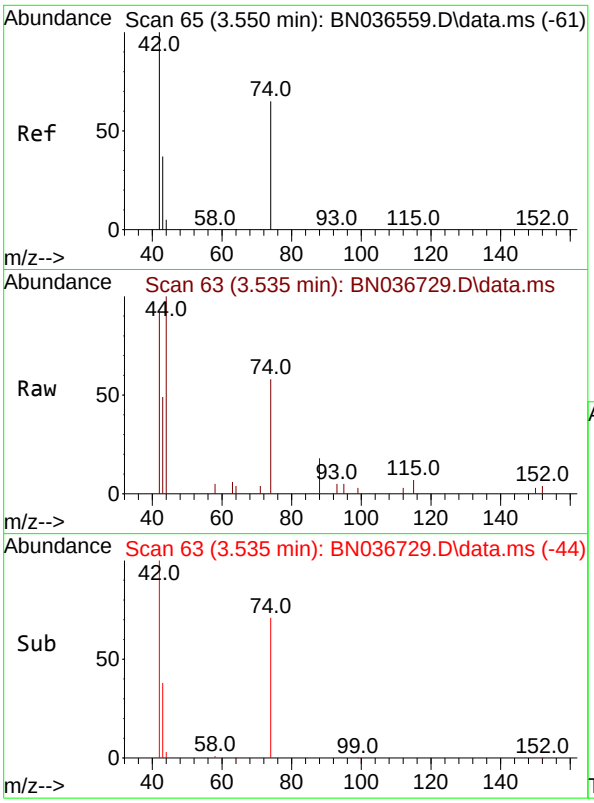




#2
1,4-Dioxane
Concen: 0.384 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion: 88 Resp: 1232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 47.5 | 37.8 | 56.8 |
| 58 | 83.5 | 67.4 | 101.2 |



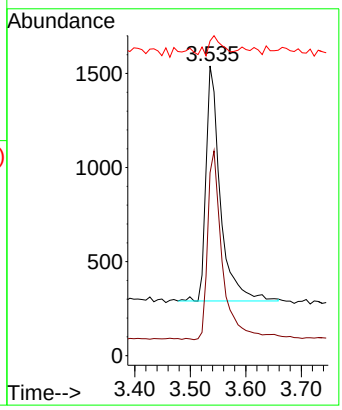


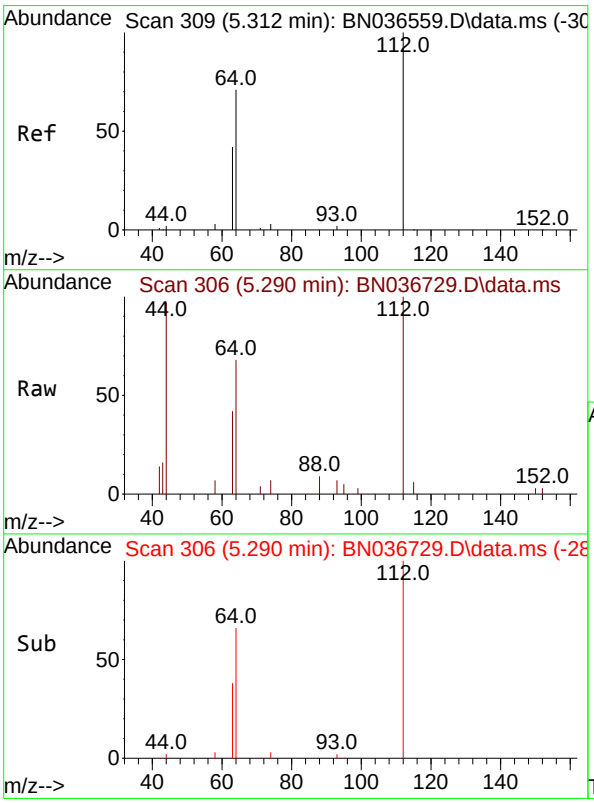

#3
n-Nitrosodimethylamine
Concen: 0.346 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 42 Resp: 2246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 83.6 | 60.6 | 90.8 |
| 44 | 7.1 | 6.3 | 9.5 |

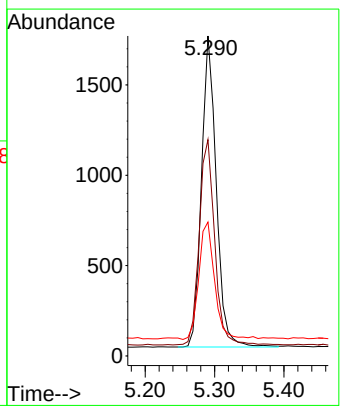


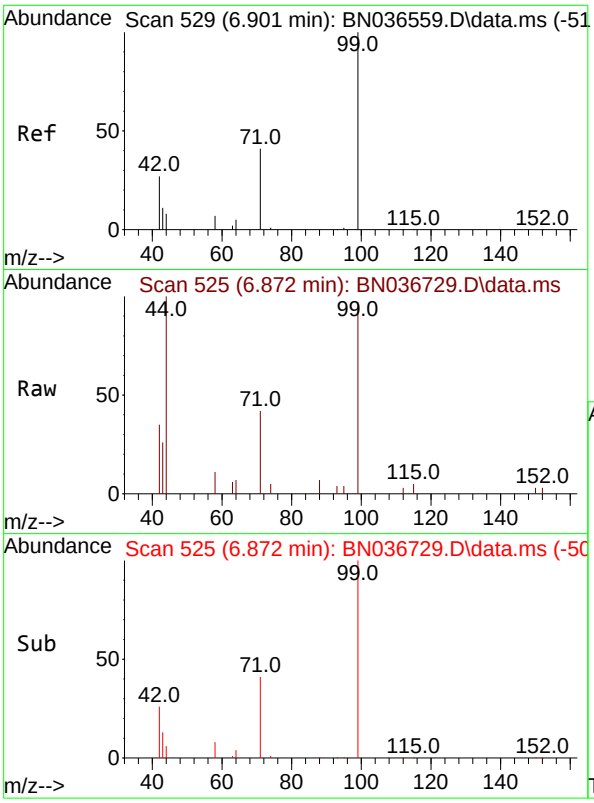




#4
2-Fluorophenol
Concen: 0.377 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:112 Resp: 2542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.3 | 53.1 | 79.7 |
| 63 | 41.4 | 31.8 | 47.8 |



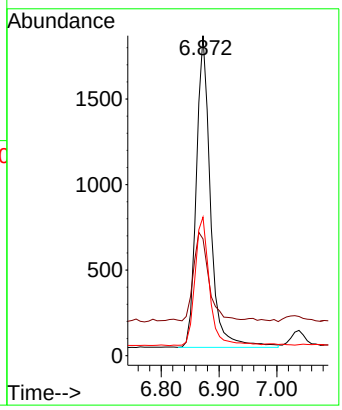


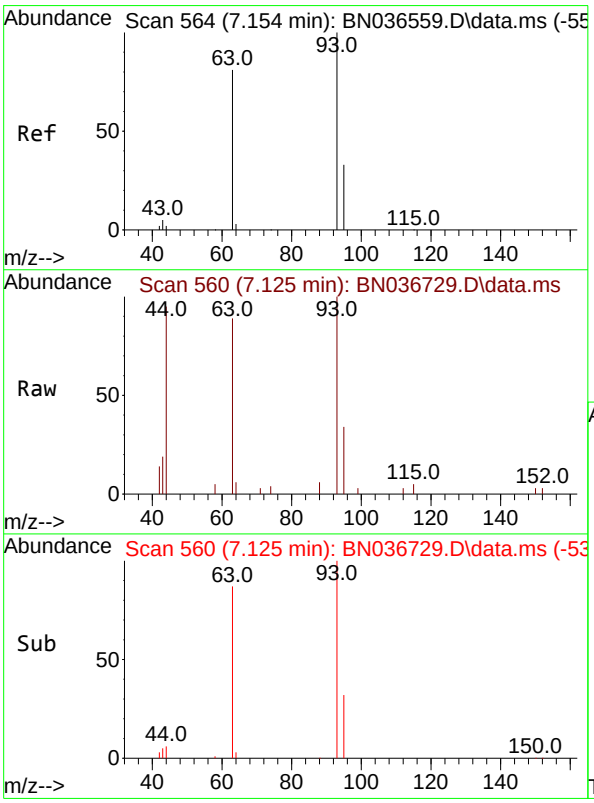

#5
Phenol-d6
Concen: 0.373 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 99 Resp: 3104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 30.5 | 26.5 | 39.7 |
| 71 | 42.2 | 34.1 | 51.1 |

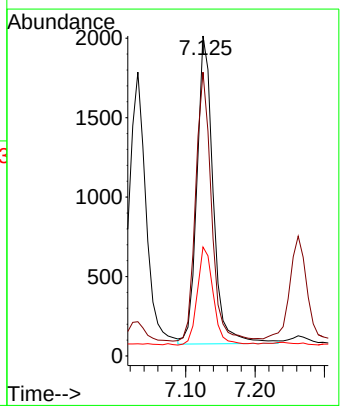


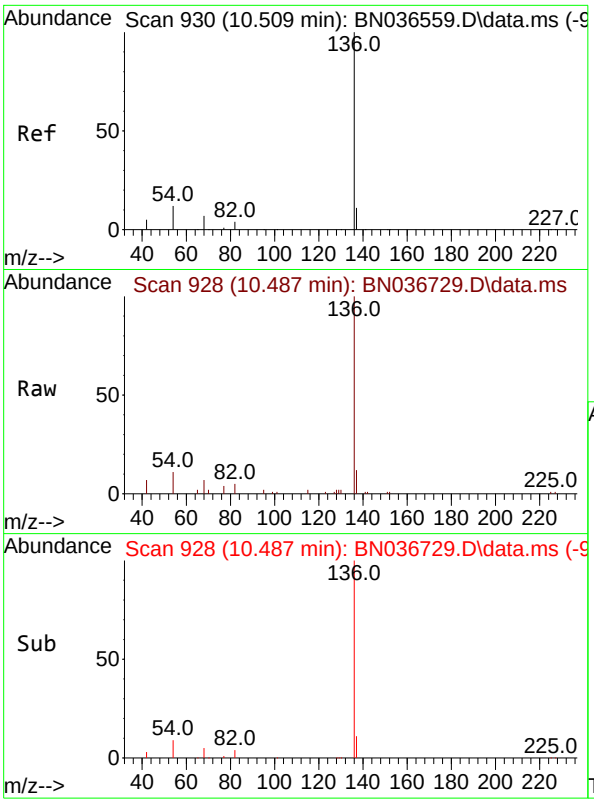




#6
bis(2-Chloroethyl)ether
Concen: 0.367 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion: 93 Resp: 3157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 84.6 | 67.7 | 101.5 |
| 95 | 31.4 | 25.6 | 38.4 |



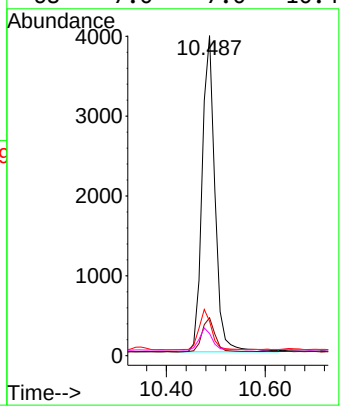


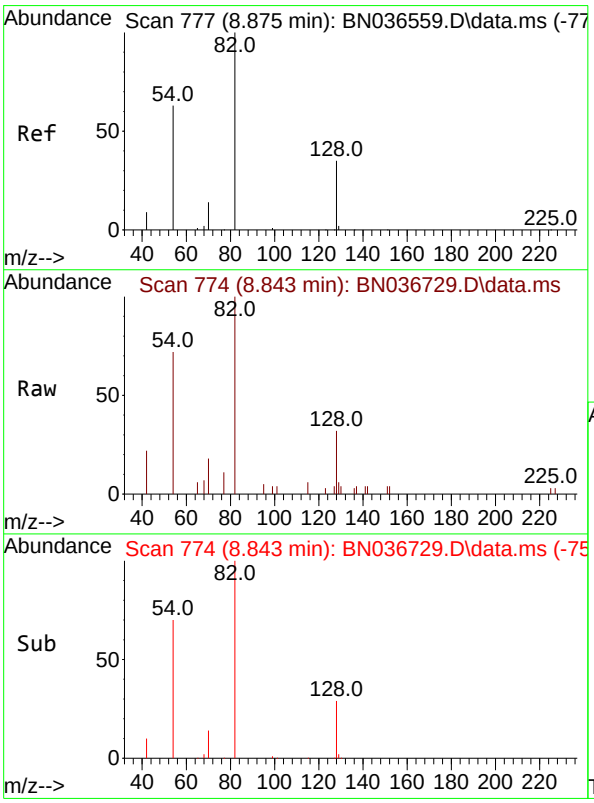

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:136 Resp: 7150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 11.9 | 10.3 | 15.5 |
| 54 | 10.8 | 11.5 | 17.3# |
| 68 | 7.0 | 7.0 | 10.4 |

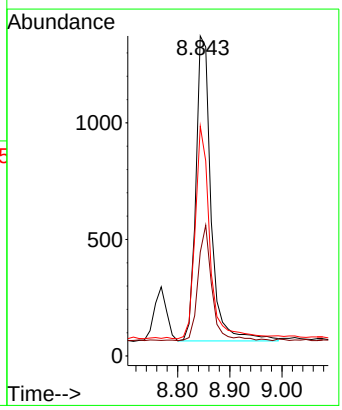


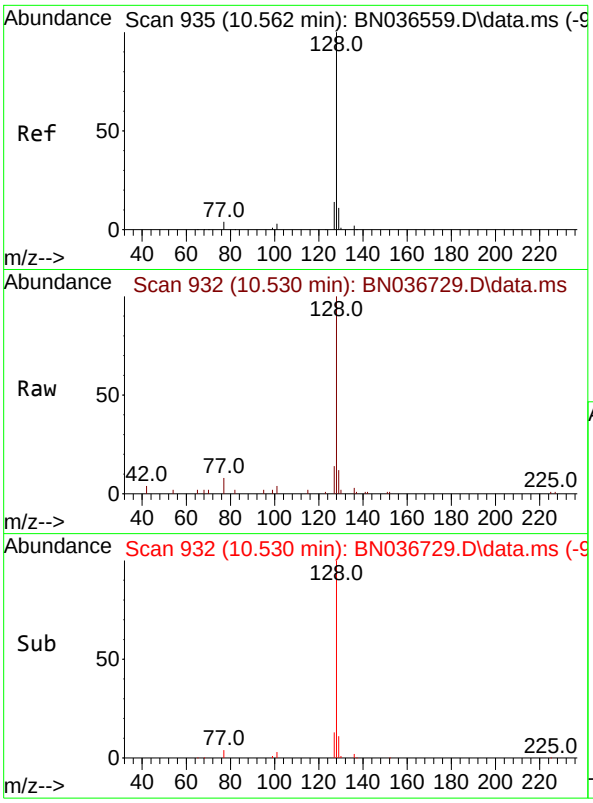




#8
Nitrobenzene-d5
Concen: 0.341 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion: 82 Resp: 2653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 32.5 | 30.6 | 45.8 |
| 54 | 71.8 | 52.2 | 78.4 |



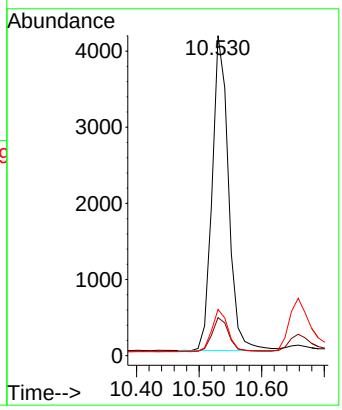


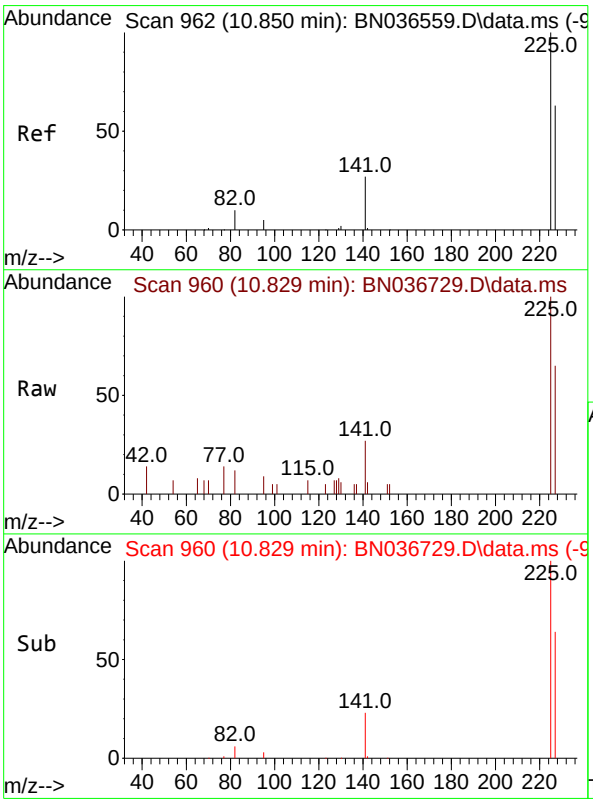

#9
Naphthalene
Concen: 0.357 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:128 Resp: 7512

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.9 | 9.8 | 14.6 |
| 127 | 14.4 | 11.8 | 17.8 |

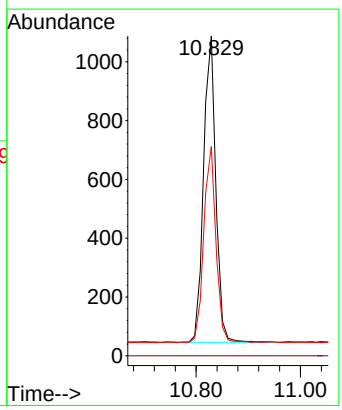


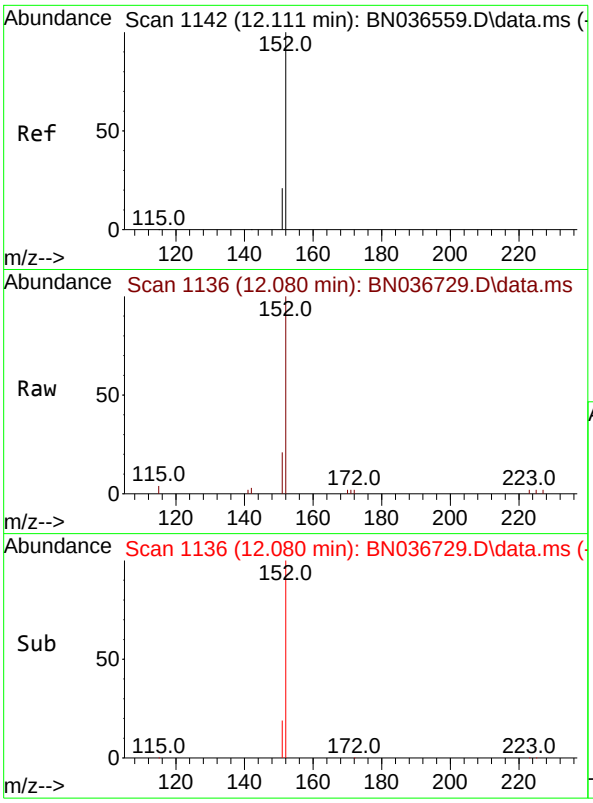




#10
Hexachlorobutadiene
Concen: 0.343 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:225 Resp: 1698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.4 | 51.8 | 77.8 |



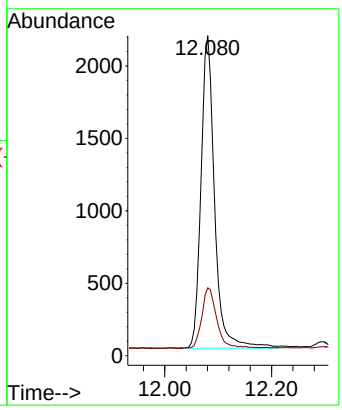


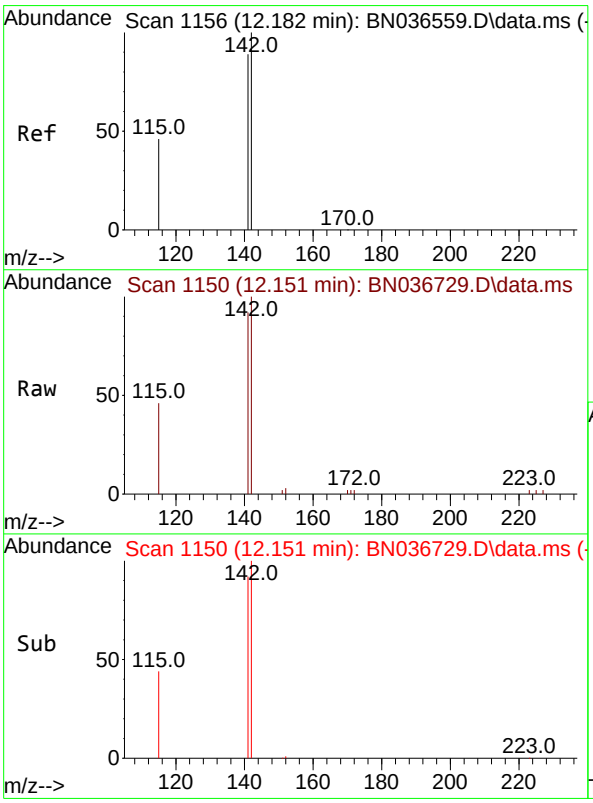

#11
2-Methylnaphthalene-d10
Concen: 0.360 ng
RT: 12.080 min Scan# 11
Delta R.T. -0.030 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 3831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.6 | 17.0 | 25.6 |

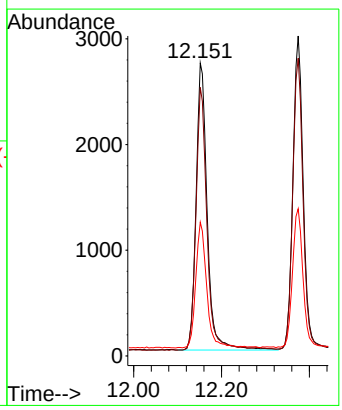


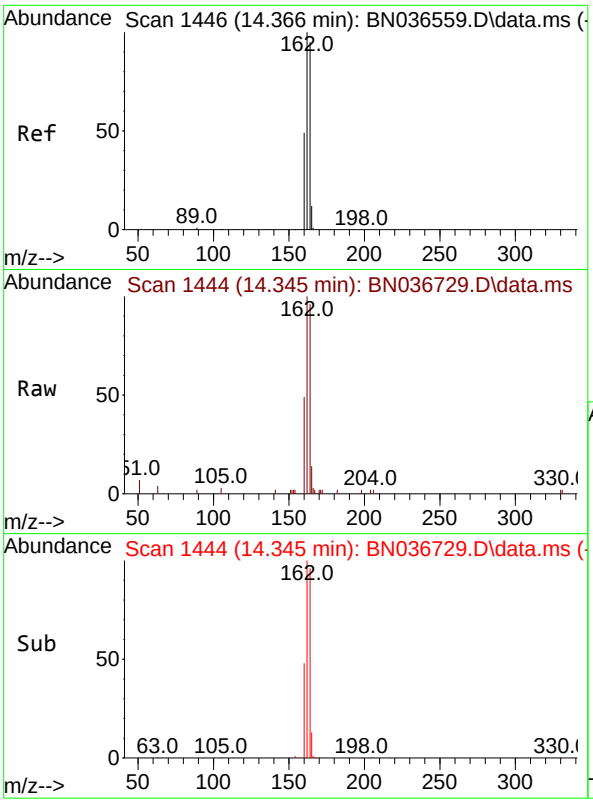




#12
2-Methylnaphthalene
Concen: 0.359 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:142 Resp: 4804

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.7 | 71.7 | 107.5 |
| 115 | 45.7 | 38.3 | 57.5 |



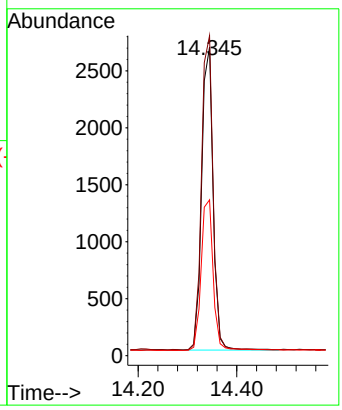


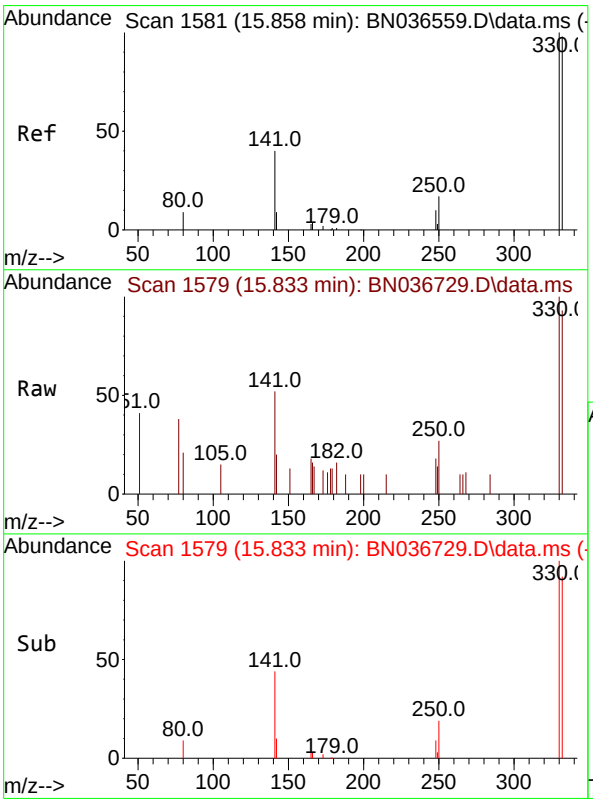

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:164 Resp: 4255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 103.7 | 84.2 | 126.2 |
| 160 | 50.5 | 42.2 | 63.2 |

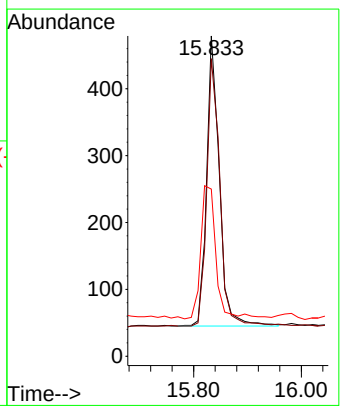


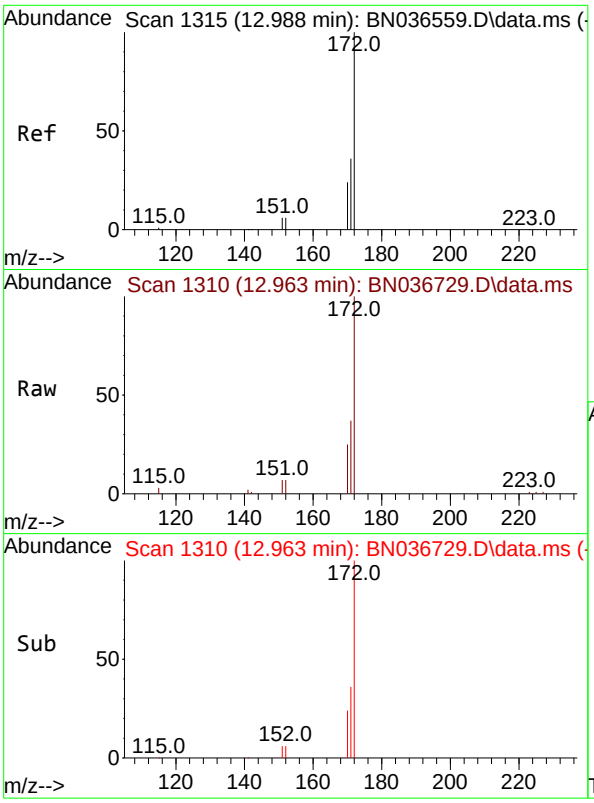




#14
2,4,6-Tribromophenol
Concen: 0.368 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:330 Resp: 711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 95.2 | 75.2 | 112.8 |
| 141 | 55.1 | 43.4 | 65.2 |



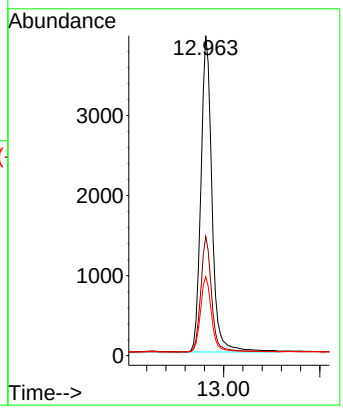


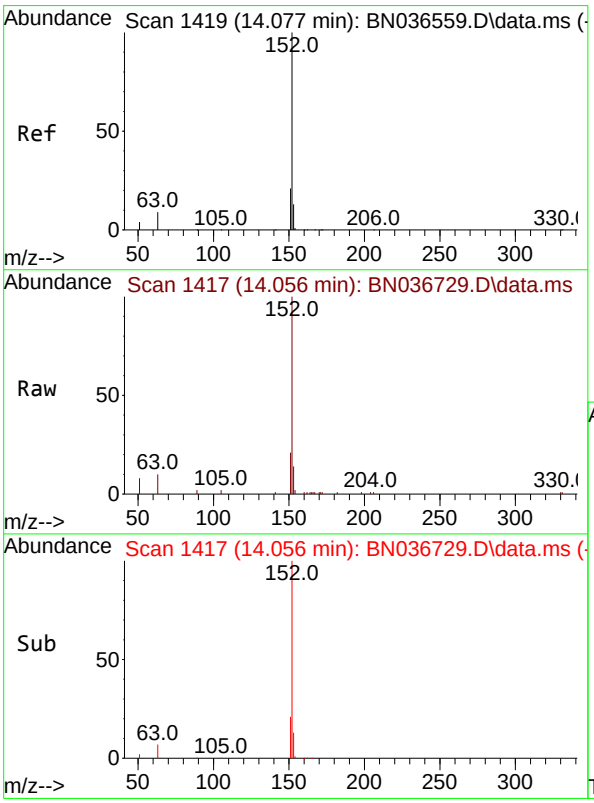

#15
2-Fluorobiphenyl
Concen: 0.343 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:172 Resp: 8502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.2 | 29.5 | 44.3 |
| 170 | 24.7 | 20.2 | 30.4 |

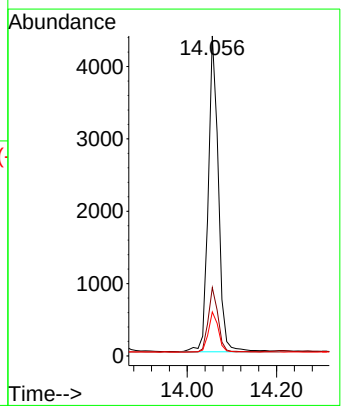


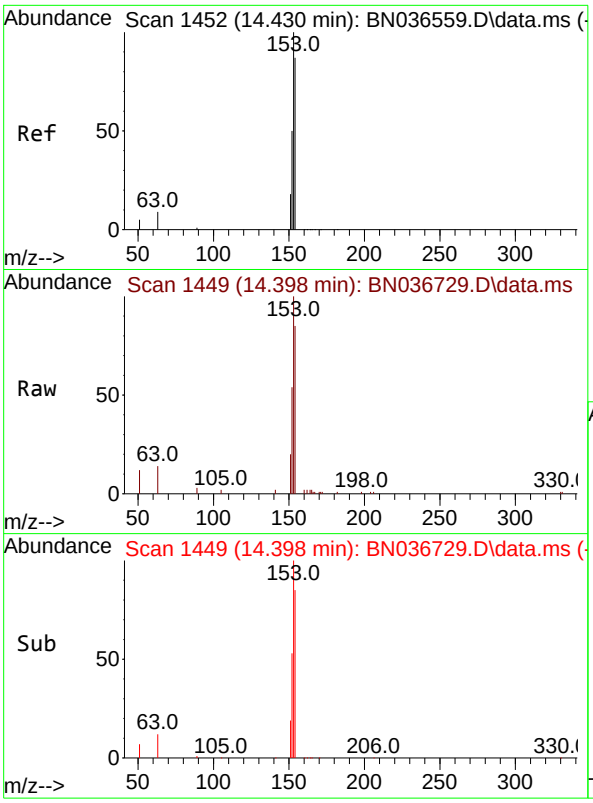




#16
Acenaphthylene
Concen: 0.341 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:152 Resp: 6856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.7 | 16.2 | 24.4 |
| 153 | 12.8 | 10.6 | 15.8 |



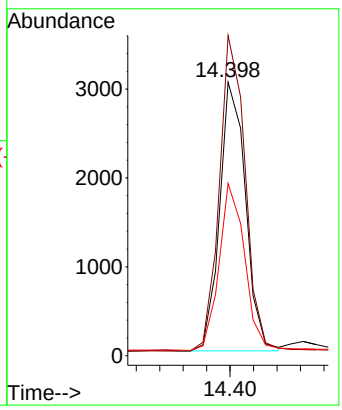


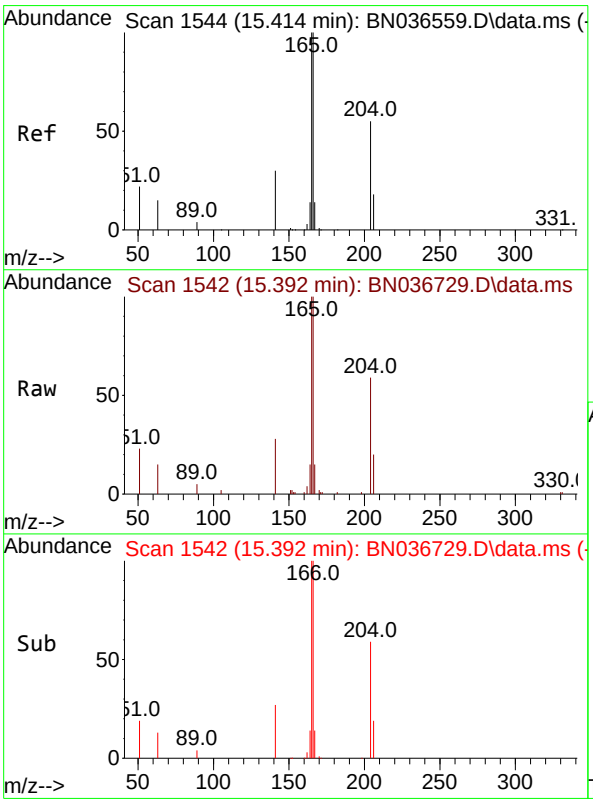

#17
Acenaphthene
Concen: 0.353 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:154 Resp: 4636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.1 | 94.1 | 141.1 |
| 152 | 62.4 | 49.8 | 74.6 |

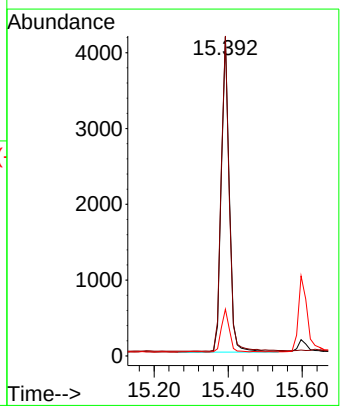


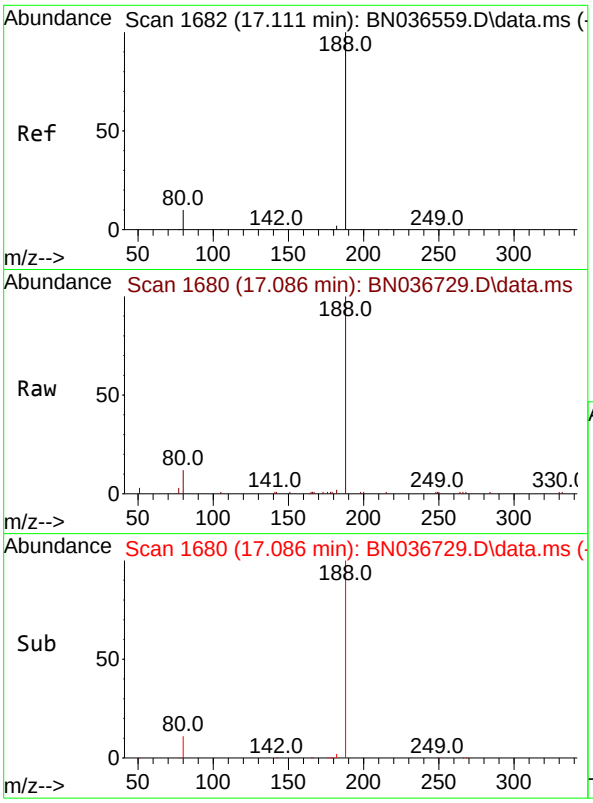




#18
Fluorene
Concen: 0.354 ng
RT: 15.392 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:166 Resp: 6299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.8 | 79.8 | 119.8 |
| 167 | 13.4 | 10.6 | 15.8 |



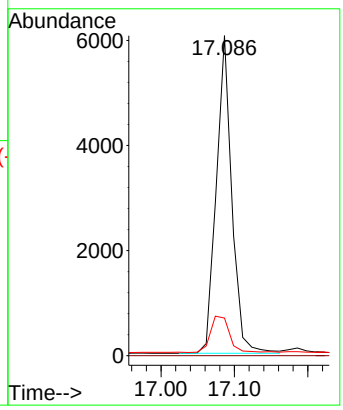


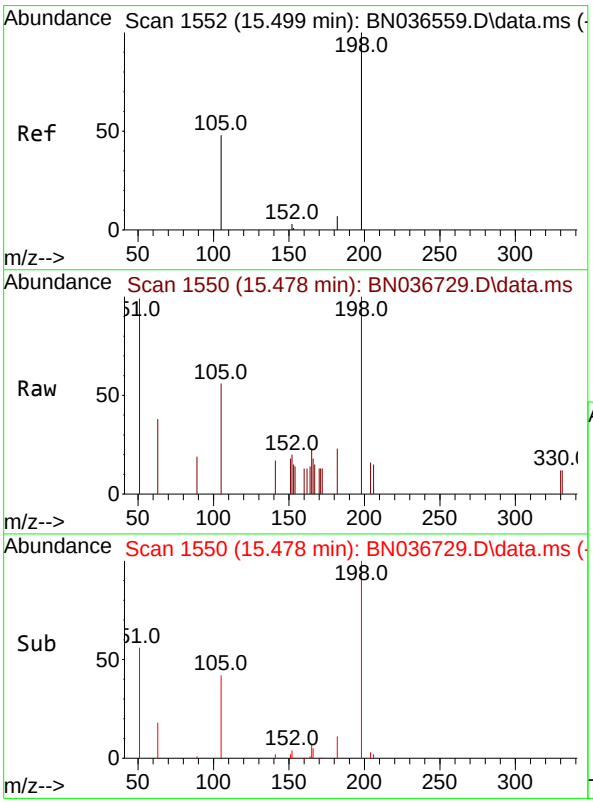

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:188 Resp: 8860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.8 | 8.8 | 13.2 |

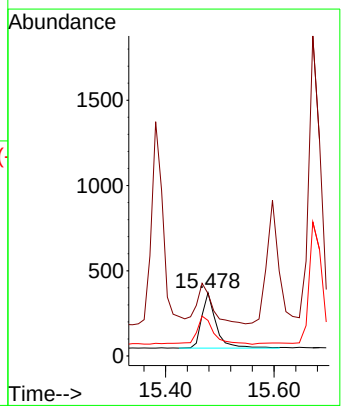


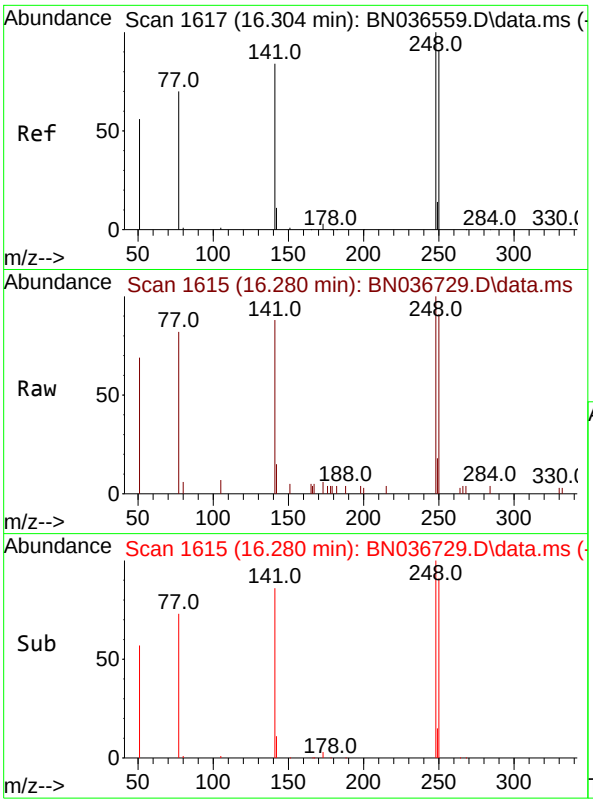




#20
4,6-Dinitro-2-methylphenol
Concen: 0.427 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:198 Resp: 636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 98.7 | 107.9 | 161.9# |
| 105 | 56.3 | 56.2 | 84.2 |



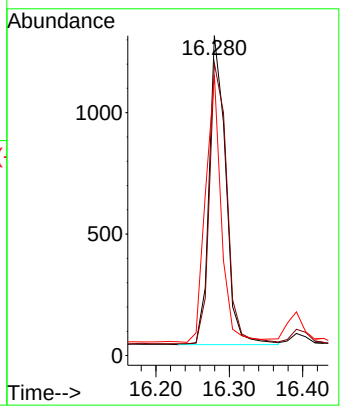


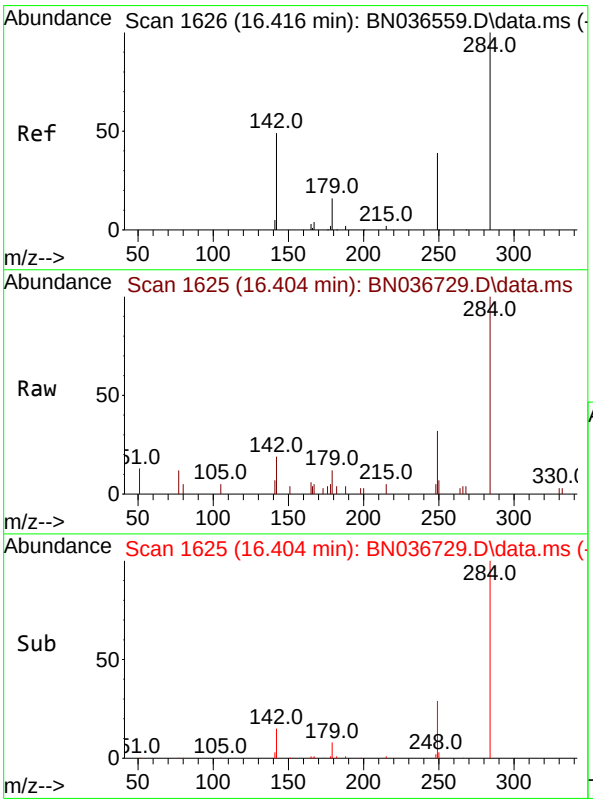

#21
4-Bromophenyl-phenylether
Concen: 0.360 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:248 Resp: 1998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 91.4 | 73.0 | 109.6 |
| 141 | 87.8 | 68.6 | 103.0 |

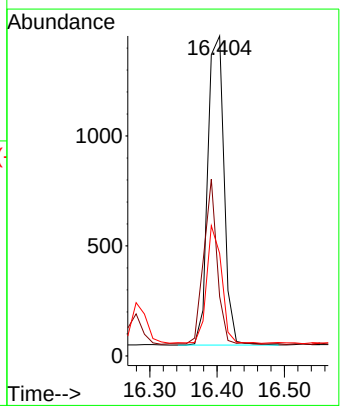


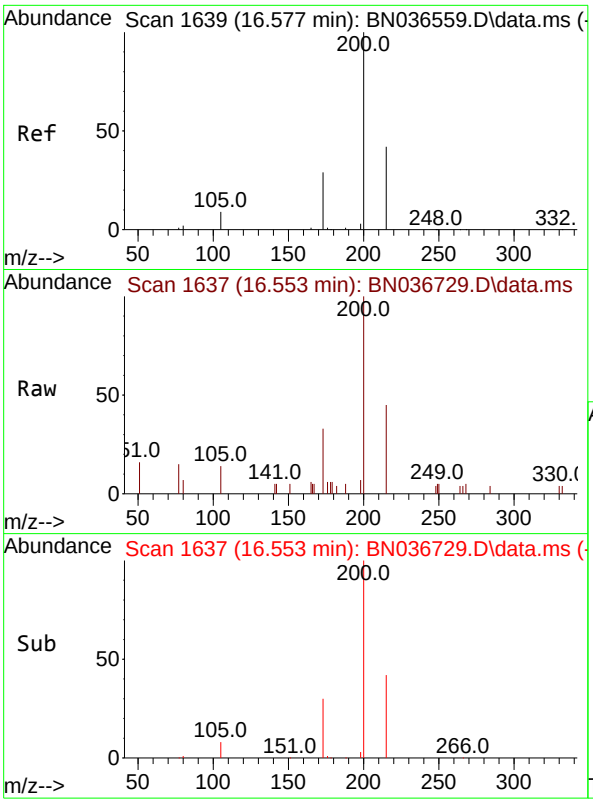




#22
Hexachlorobenzene
Concen: 0.354 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.012 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:284 Resp: 2370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 44.0 | 37.0 | 55.4 |
| 249 | 35.1 | 28.1 | 42.1 |



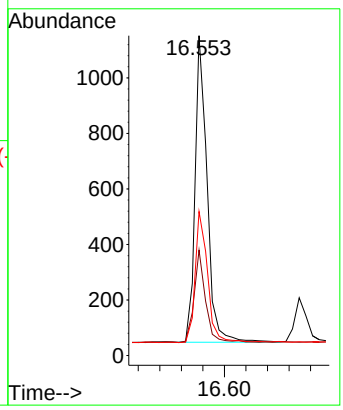


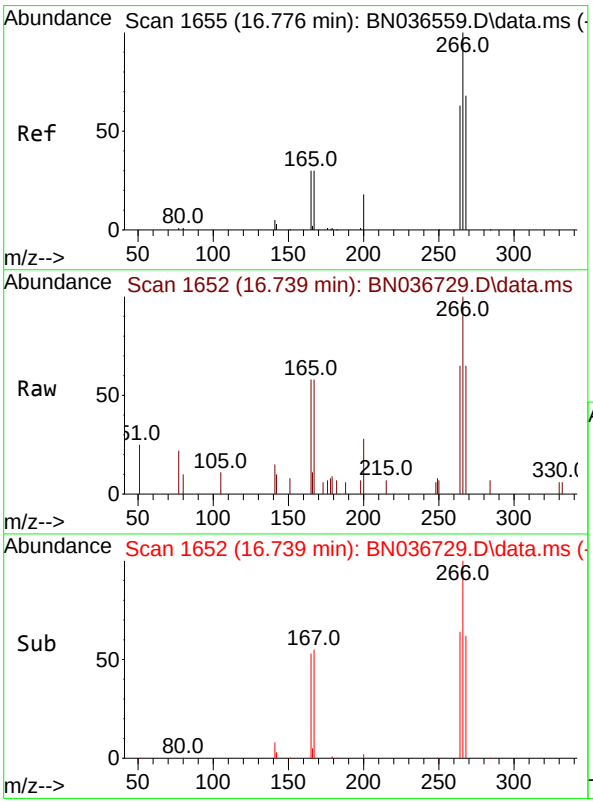

#23
Atrazine
Concen: 0.385 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:200 Resp: 1715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 33.0 | 27.3 | 40.9 |
| 215 | 45.1 | 36.8 | 55.2 |

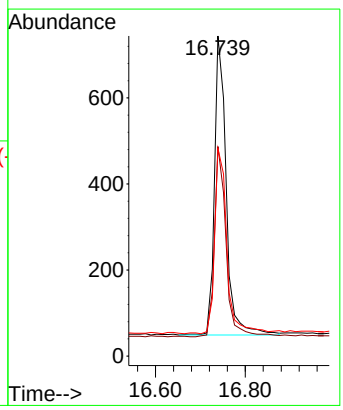


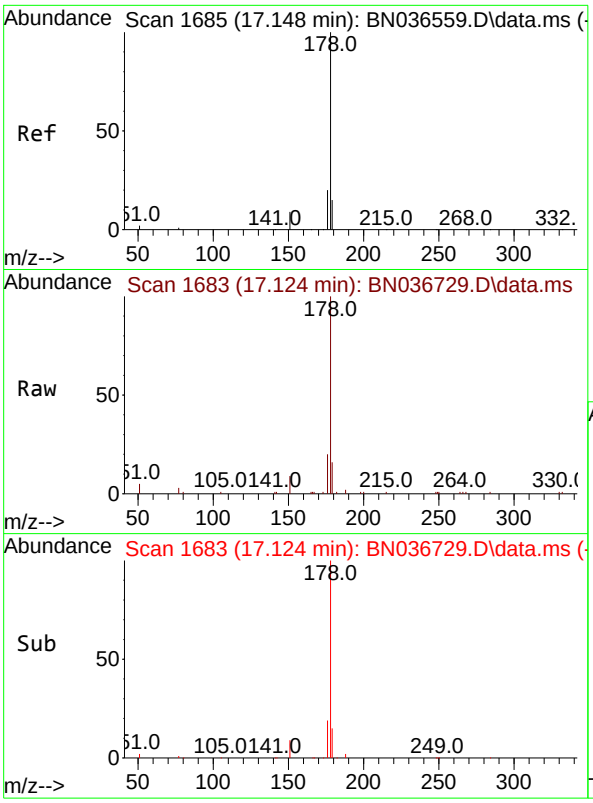




#24
Pentachlorophenol
Concen: 0.412 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:266 Resp: 1259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.4 | 49.6 | 74.4 |
| 268 | 65.0 | 50.9 | 76.3 |



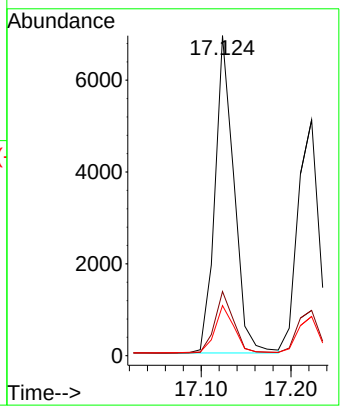


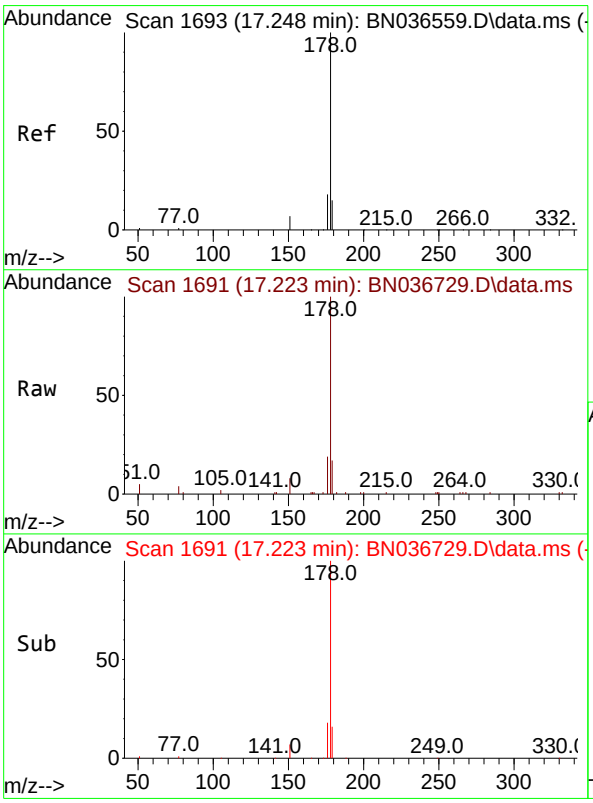

#25
Phenanthrene
Concen: 0.384 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:178 Resp: 10196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.4 | 15.9 | 23.9 |
| 179 | 15.0 | 12.2 | 18.4 |

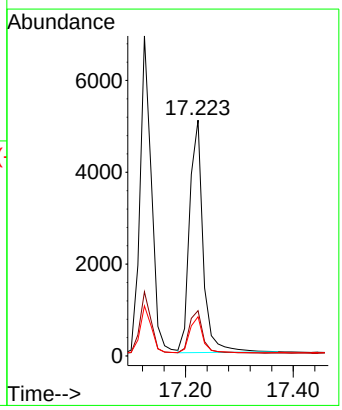


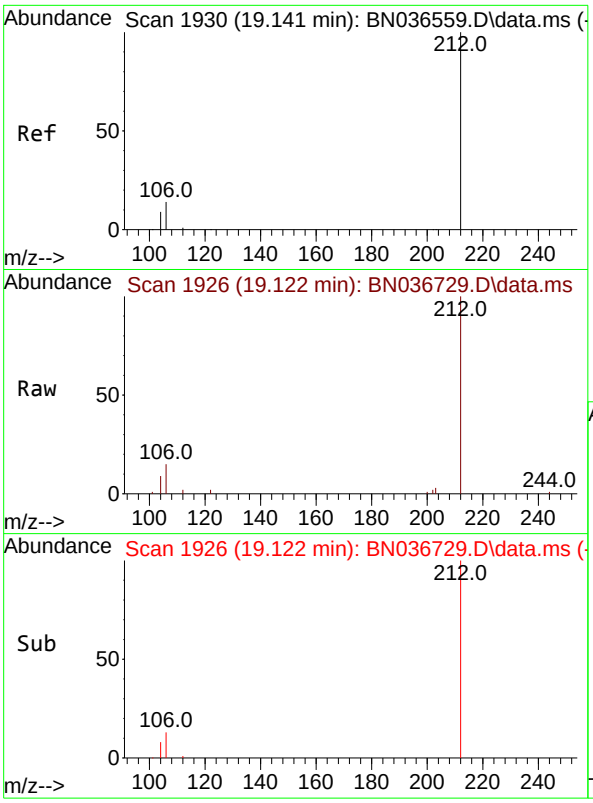




#26
Anthracene
Concen: 0.367 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:178 Resp: 8794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.7 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |



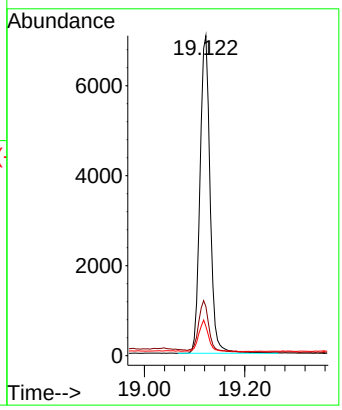


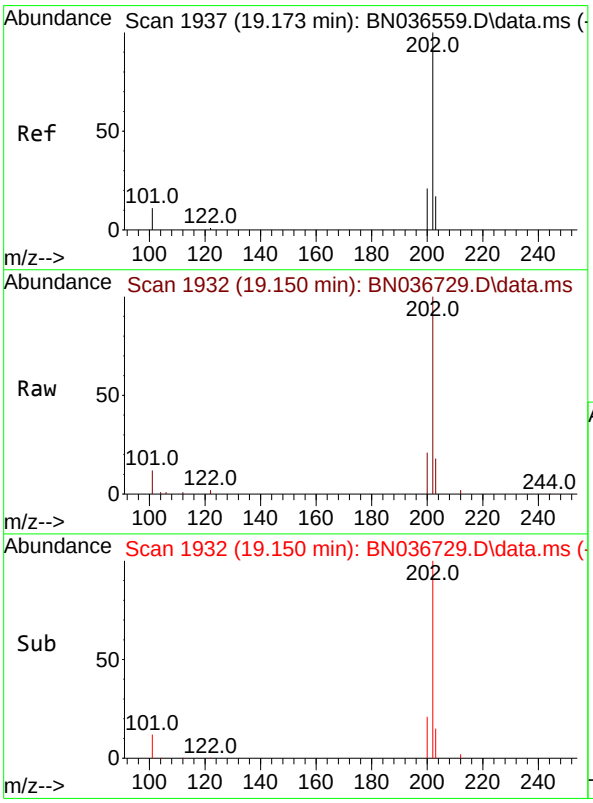

#27
Fluoranthene-d10
Concen: 0.433 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.019 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:212 Resp: 9834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 16.6 | 11.8 | 17.6 |
| 104 | 9.6 | 7.3 | 10.9 |

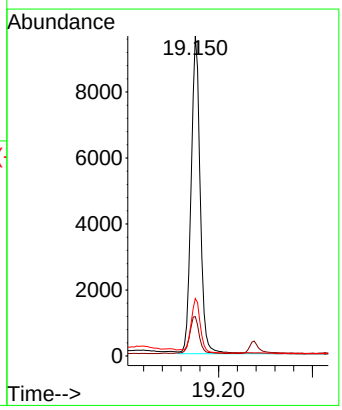


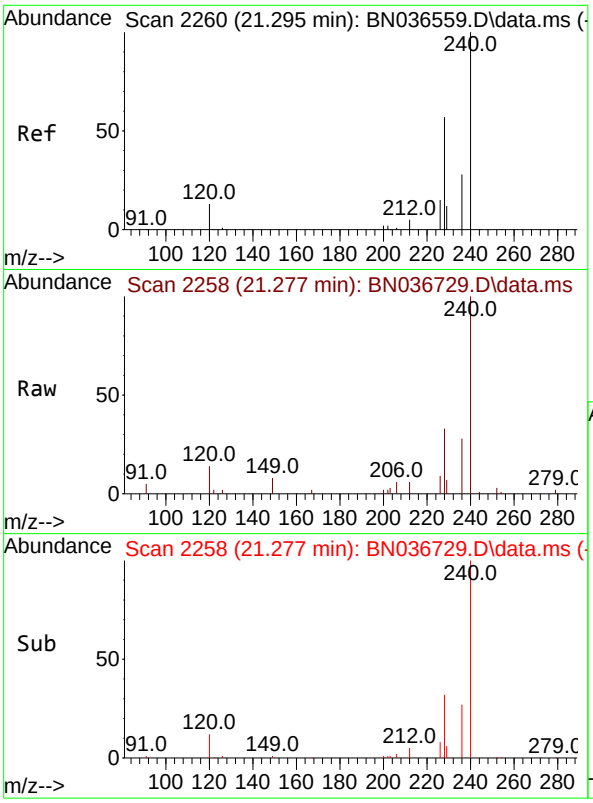




#28
Fluoranthene
Concen: 0.435 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:202 Resp: 12984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.1 | 9.4 | 14.0 |
| 203 | 17.4 | 13.5 | 20.3 |



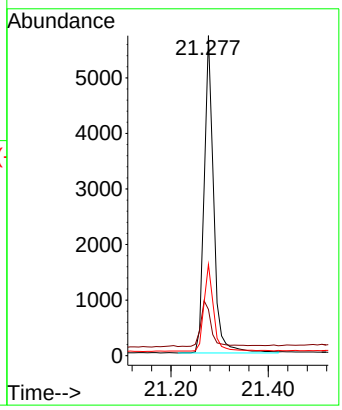


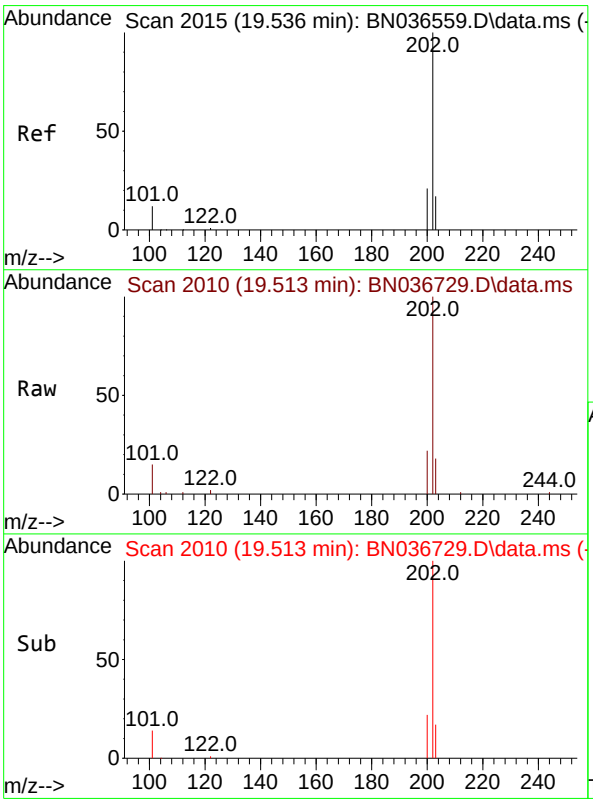

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:240 Resp: 7759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 14.5 | 14.6 | 22.0# |
| 236 | 28.5 | 24.1 | 36.1 |

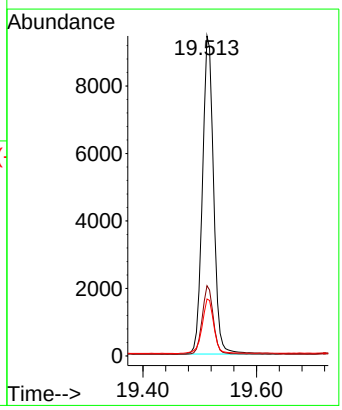


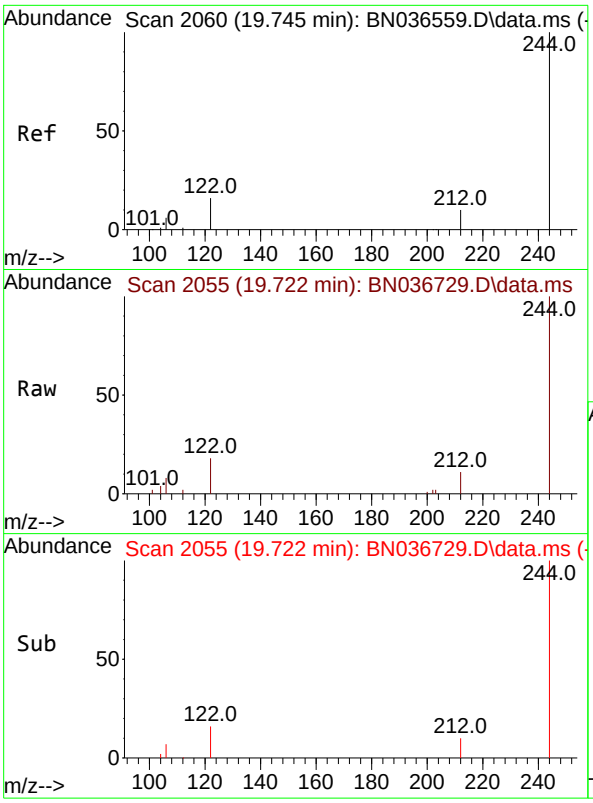




#30
Pyrene
Concen: 0.340 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:202 Resp: 12887

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.5 | 17.1 | 25.7 |
| 203 | 17.9 | 14.1 | 21.1 |



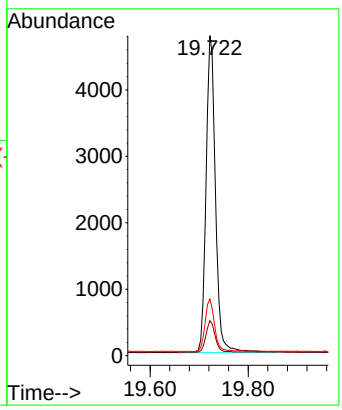


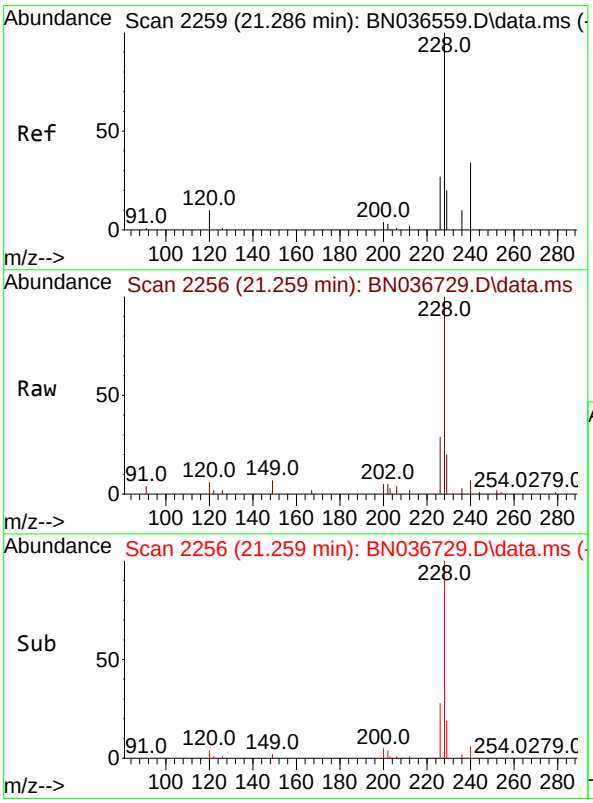

#31
Terphenyl-d14
Concen: 0.342 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:244 Resp: 6361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 10.9 | 9.6 | 14.4 |
| 122 | 17.7 | 13.9 | 20.9 |

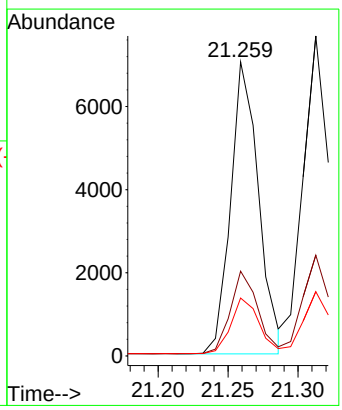


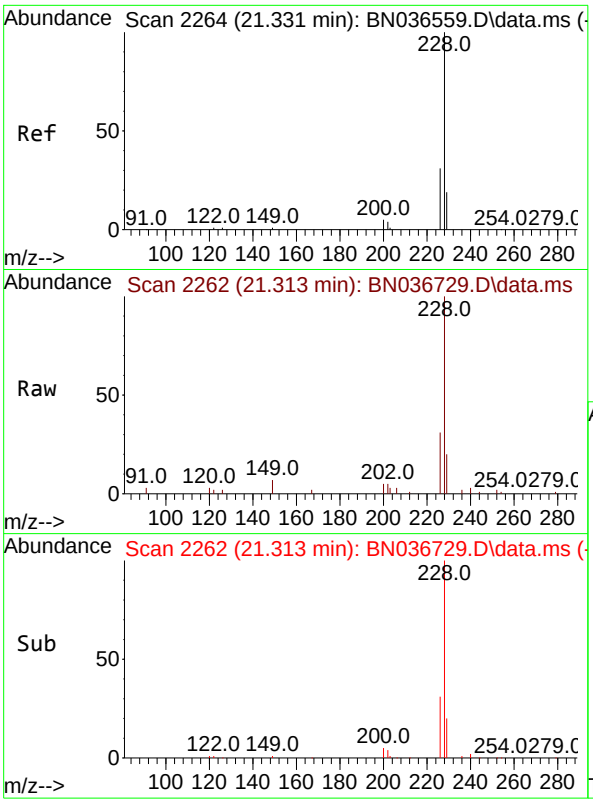




#32
Benzo(a)anthracene
Concen: 0.362 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:228 Resp: 9768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.8 | 22.5 | 33.7 |
| 229 | 19.7 | 16.6 | 25.0 |



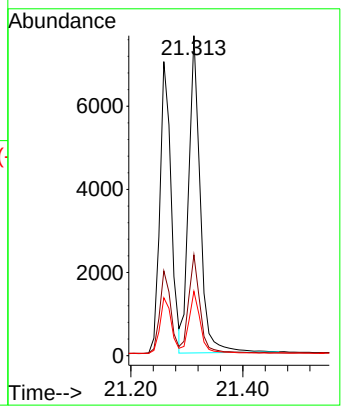


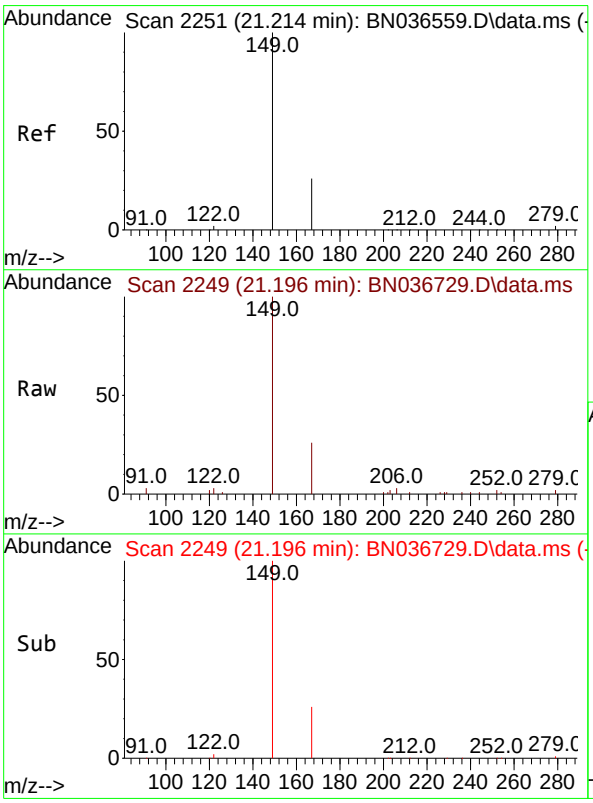

#33
Chrysene
Concen: 0.370 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:228 Resp: 10899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.5 | 25.3 | 37.9 |
| 229 | 20.1 | 15.8 | 23.8 |

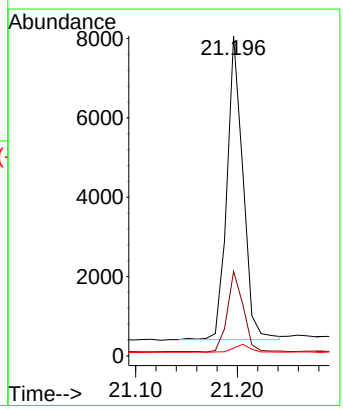


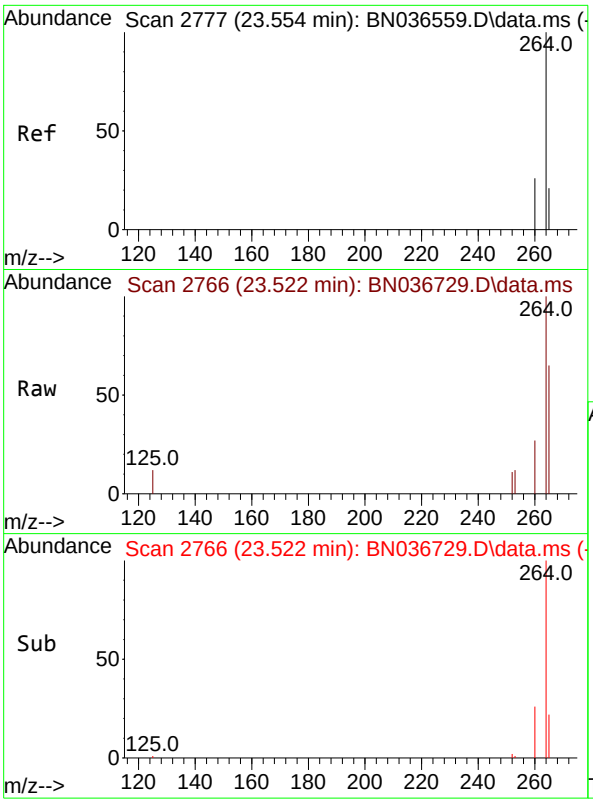




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.436 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:149 Resp: 8379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.5 | 20.7 | 31.1 |
| 279 | 2.8 | 3.6 | 5.4# |



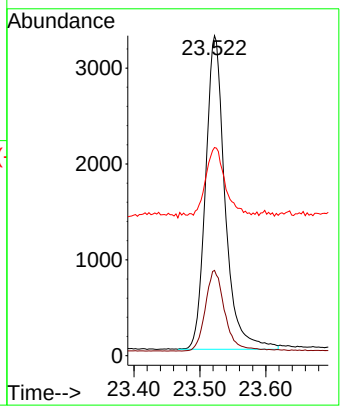


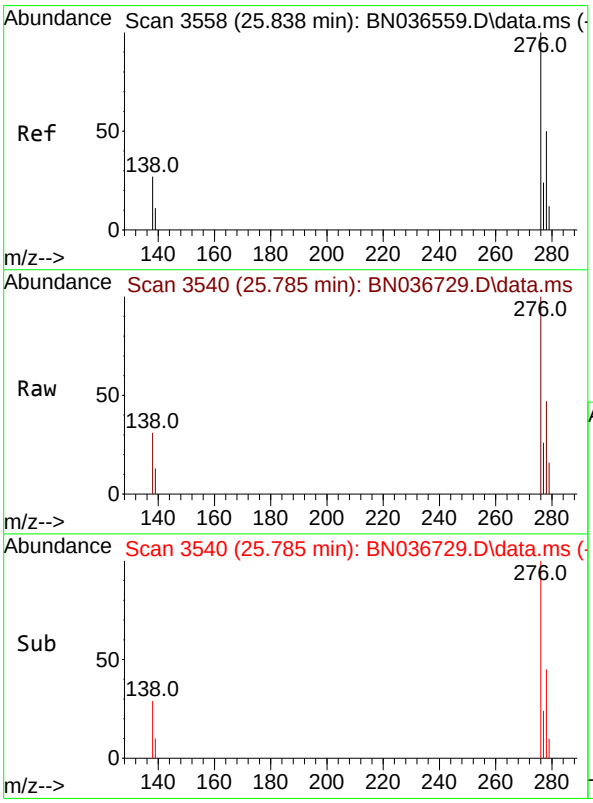

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.522 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:264 Resp: 6723

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.6 | 22.6 | 33.8 |
| 265 | 65.0 | 88.1 | 132.1# |

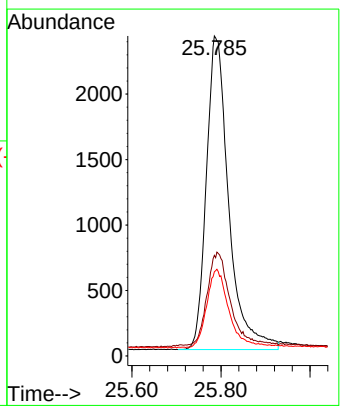


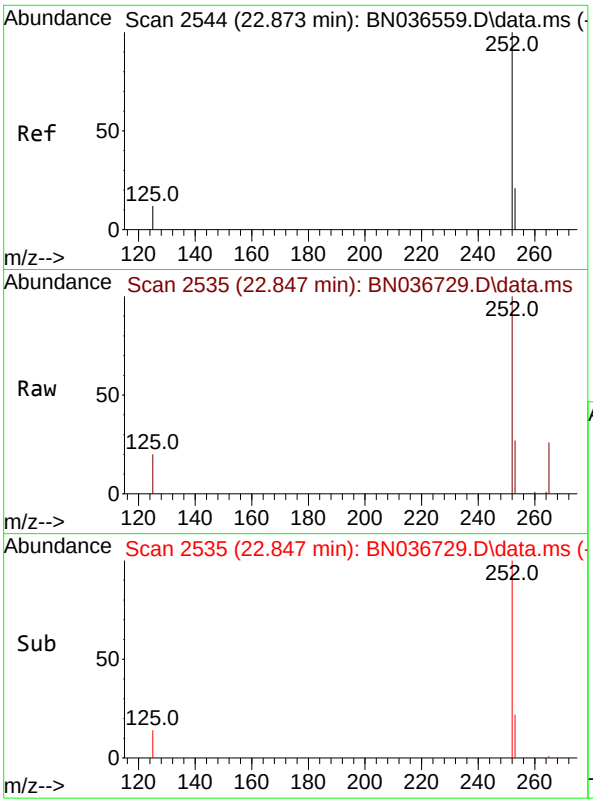




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.345 ng
RT: 25.785 min Scan# 3540
Delta R.T. -0.053 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:276 Resp: 8360

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 29.6 | 23.4 | 35.2 |
| 277 | 24.6 | 20.0 | 30.0 |



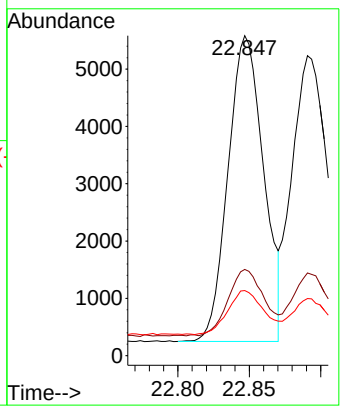


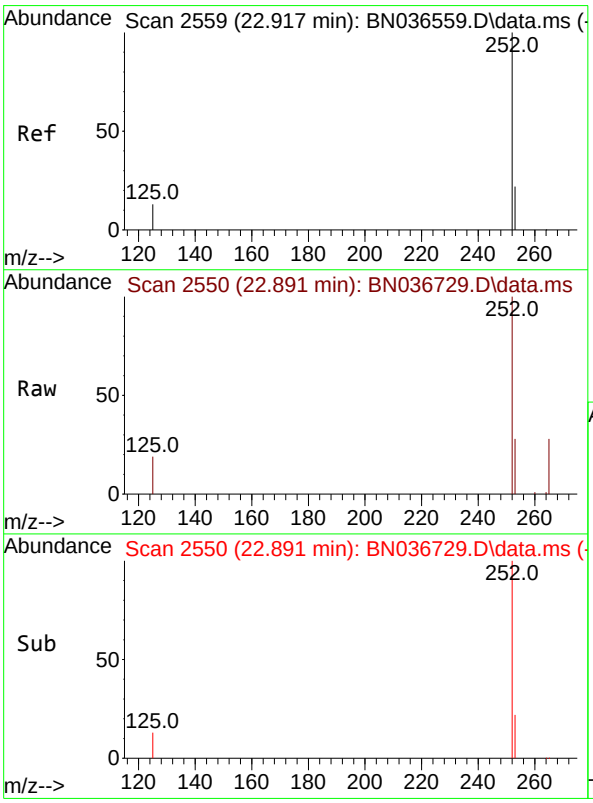

#37
Benzo(b)fluoranthene
Concen: 0.377 ng
RT: 22.847 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 9234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.0 | 23.9 | 35.9 |
| 125 | 20.3 | 17.4 | 26.2 |

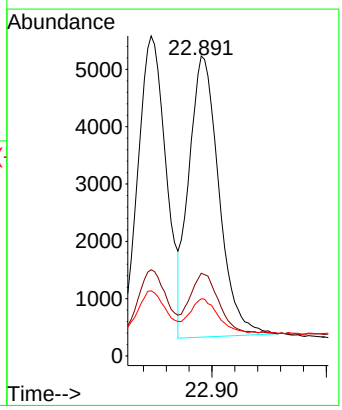


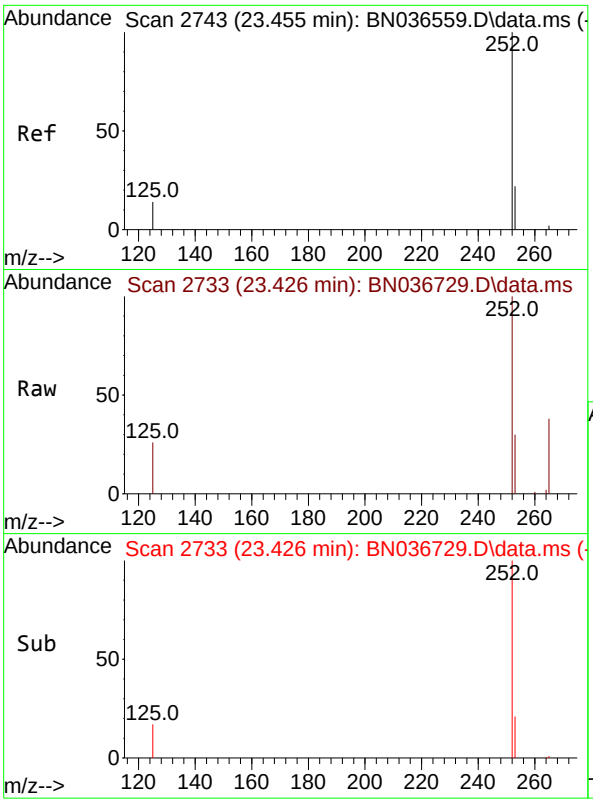




#38
Benzo(k)fluoranthene
Concen: 0.349 ng
RT: 22.891 min Scan# 2550
Delta R.T. -0.026 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:252 Resp: 8958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.6 | 24.6 | 36.8 |
| 125 | 19.0 | 17.8 | 26.8 |



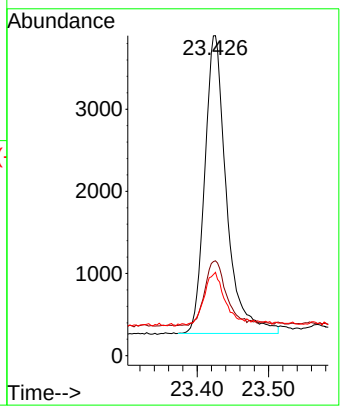


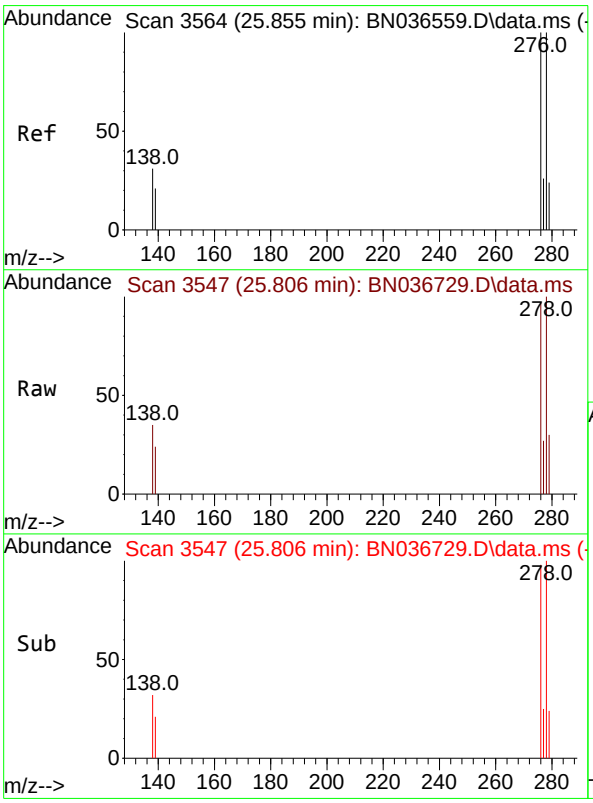

#39
Benzo(a)pyrene
Concen: 0.373 ng
RT: 23.426 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 7680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.7 | 27.8 | 41.8 |
| 125 | 26.0 | 22.7 | 34.1 |

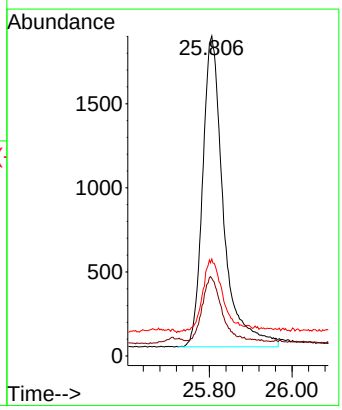


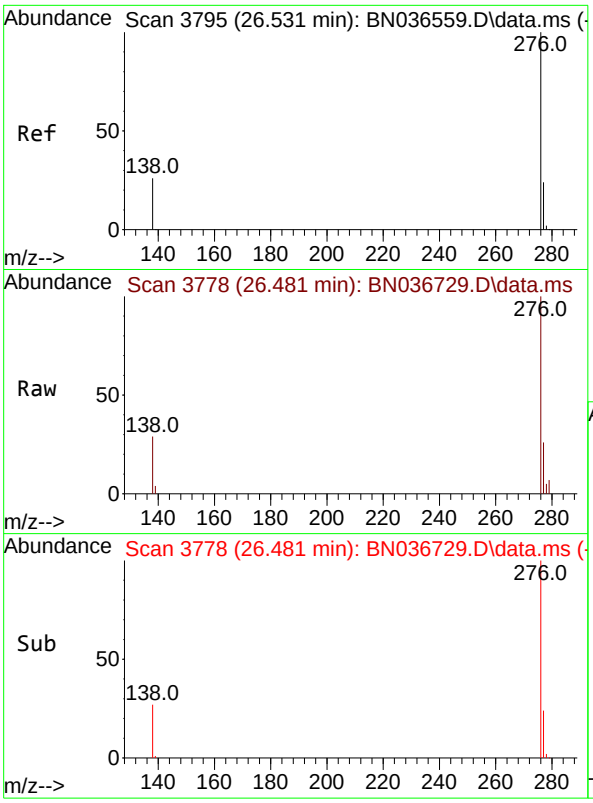




#40
Dibenzo(a,h)anthracene
Concen: 0.343 ng
RT: 25.806 min Scan# 3547
Delta R.T. -0.050 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

Tgt Ion:278 Resp: 6473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 24.3 | 20.8 | 31.2 |
| 279 | 30.3 | 28.8 | 43.2 |



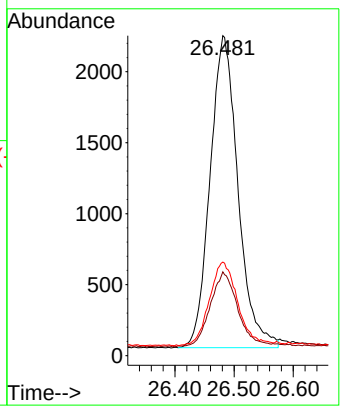



#41
Benzo(g,h,i)perylene
Concen: 0.333 ng
RT: 26.481 min Scan# 3
Delta R.T. -0.050 min
Lab File: BN036729.D
Acq: 27 Mar 2025 09:49

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:276 Resp: 7201

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.2 | 22.2 | 33.4 |
| 138 | 29.2 | 24.1 | 36.1 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036729.D
Acq On : 27 Mar 2025 09:49
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 10:52:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 131 | -0.02 |
| 2 | | 1,4-Dioxane | 0.444 | 0.426 | 4.1 | 112 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.777 | 13.5 | 109 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.879 | 5.7 | 117 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 1.073 | 6.9 | 125 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.092 | 8.2 | 121 | -0.03 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 140 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.371 | 14.7 | 126 | -0.03 |
| 9 | | Naphthalene | 1.177 | 1.051 | 10.7 | 122 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.237 | 14.4 | 113 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.536 | 9.9 | 124 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.672 | 10.3 | 123 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 141 | -0.02 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.167 | 8.2 | 125 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 1.998 | 14.1 | 117 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.611 | 14.7 | 117 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.090 | 11.8 | 120 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.480 | 11.5 | 118 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 148 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.072 | 16.3 | 138 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.226 | 10.0 | 122 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.267 | 11.9 | 117 | -0.01 |
| 23 | | Atrazine | 0.201 | 0.194 | 3.5 | 134 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.142 | -2.9 | 153# | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.151 | 4.1 | 131 | -0.02 |
| 26 | | Anthracene | 1.083 | 0.993 | 8.3 | 128 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.110 | -8.3 | 147 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.465 | -8.7 | 149 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 189# | -0.02 |
| 30 | | Pyrene | 1.956 | 1.661 | 15.1 | 147 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.820 | 14.4 | 151# | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.259 | 9.5 | 165# | -0.03 |
| 33 | | Chrysene | 1.520 | 1.405 | 7.6 | 165# | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 1.080 | -9.1 | 195# | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 190# | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.243 | 13.9 | 153# | -0.05 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.373 | 5.7 | 169# | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.332 | 12.8 | 156# | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.142 | 6.9 | 167# | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 0.963 | 14.3 | 157# | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.071 | 16.7 | 147 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036729.D
Acq On : 27 Mar 2025 09:49
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 10:52:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 131 | -0.02 |
| 2 | | 1,4-Dioxane | 0.400 | 0.384 | 4.0 | 112 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.346 | 13.5 | 109 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.377 | 5.8 | 117 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.373 | 6.8 | 125 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.367 | 8.3 | 121 | -0.03 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 140 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.341 | 14.8 | 126 | -0.03 |
| 9 | | Naphthalene | 0.400 | 0.357 | 10.8 | 122 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.343 | 14.2 | 113 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.360 | 10.0 | 124 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.359 | 10.3 | 123 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 141 | -0.02 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.368 | 8.0 | 125 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.343 | 14.2 | 117 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.341 | 14.8 | 117 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.353 | 11.8 | 120 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.354 | 11.5 | 118 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 148 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.427 | -6.7 | 138 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.360 | 10.0 | 122 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.354 | 11.5 | 117 | -0.01 |
| 23 | | Atrazine | 0.400 | 0.385 | 3.8 | 134 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.412 | -3.0 | 153 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.384 | 4.0 | 131 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.367 | 8.3 | 128 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.433 | -8.2 | 147 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.435 | -8.7 | 149 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 189 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.340 | 15.0 | 147 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.342 | 14.5 | 151 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.362 | 9.5 | 165 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.370 | 7.5 | 165 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.436 | -9.0 | 195 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 190 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.345 | 13.8 | 153 | -0.05 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.377 | 5.8 | 169 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.349 | 12.8 | 156 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.373 | 6.8 | 167 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.343 | 14.2 | 157 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.333 | 16.8 | 147 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/27/2025 14:02

Lab File ID: BN036736.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.530 | | -10.9 | 50.0 |
| Fluoranthene-d10 | 1.025 | 1.022 | | -0.3 | 50.0 |
| 2-Fluorophenol | 0.932 | 0.868 | | -6.9 | 50.0 |
| Phenol-d6 | 1.152 | 1.008 | | -12.5 | 50.0 |
| Nitrobenzene-d5 | 0.435 | 0.361 | | -17.0 | 50.0 |
| 2-Fluorobiphenyl | 2.327 | 2.004 | | -13.9 | 50.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.174 | | -4.4 | 50.0 |
| Terphenyl-d14 | 0.958 | 0.810 | | -15.4 | 50.0 |
| 1,4-Dioxane | 0.444 | 0.491 | | 10.6 | 50.0 |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036736.D
Acq On : 27 Mar 2025 14:02
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 27 14:28:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1995 | 0.400 | ng | | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 4873 | 0.400 | ng | | -0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2980 | 0.400 | ng | | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 6276 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 5211 | 0.400 | ng | | -0.02 |
| 35) Perylene-d12 | 23.525 | 264 | 4739 | 0.400 | ng | | #-0.03 |
| **System Monitoring Compounds** | | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1732 | 0.373 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 2011 | 0.350 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1760 | 0.332 | ng | | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.085 | 152 | 2584 | 0.356 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 518 | 0.383 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.968 | 172 | 5972 | 0.344 | ng | | -0.02 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 6412 | 0.399 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 4220 | 0.338 | ng | | -0.02 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 979 | 0.442 | ng | | 93 |
| 3) n-Nitrosodimethylamine | 3.543 | 42 | 1688 | 0.377 | ng | | 98 |
| 6) bis(2-Chloroethyl)ether | 7.132 | 93 | 2087 | 0.352 | ng | | 99 |
| 9) Naphthalene | 10.530 | 128 | 5118 | 0.357 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 1232 | 0.365 | ng | # | 96 |
| 12) 2-Methylnaphthalene | 12.156 | 142 | 3238 | 0.355 | ng | | 99 |
| 16) Acenaphthylene | 14.056 | 152 | 4782 | 0.340 | ng | | 100 |
| 17) Acenaphthene | 14.398 | 154 | 3313 | 0.360 | ng | | 100 |
| 18) Fluorene | 15.392 | 166 | 4544 | 0.365 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.489 | 198 | 478 | 0.444 | ng | # | 75 |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248 | 1431 | 0.364 | ng | # | 76 |
| 22) Hexachlorobenzene | 16.404 | 284 | 1682 | 0.354 | ng | | 96 |
| 23) Atrazine | 16.565 | 200 | 1221 | 0.387 | ng | | 95 |
| 24) Pentachlorophenol | 16.751 | 266 | 801 | 0.370 | ng | | 98 |
| 25) Phenanthrene | 17.124 | 178 | 7195 | 0.382 | ng | | 100 |
| 26) Anthracene | 17.223 | 178 | 6283 | 0.370 | ng | | 100 |
| 28) Fluoranthene | 19.150 | 202 | 8617 | 0.407 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 8868 | 0.348 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 6412 | 0.354 | ng | | 98 |
| 33) Chrysene | 21.313 | 228 | 7670 | 0.387 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4505 | 0.349 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.791 | 276 | 6199 | 0.362 | ng | | 98 |
| 37) Benzo(b)fluoranthene | 22.847 | 252 | 6514 | 0.378 | ng | | 95 |
| 38) Benzo(k)fluoranthene | 22.891 | 252 | 7579m | 0.419 | ng | | |
| 39) Benzo(a)pyrene | 23.426 | 252 | 5338 | 0.368 | ng | | 94 |
| 40) Dibenzo(a,h)anthracene | 25.808 | 278 | 4803 | 0.361 | ng | | 95 |
| 41) Benzo(g,h,i)perylene | 26.481 | 276 | 5667 | 0.372 | ng | | 98 |

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

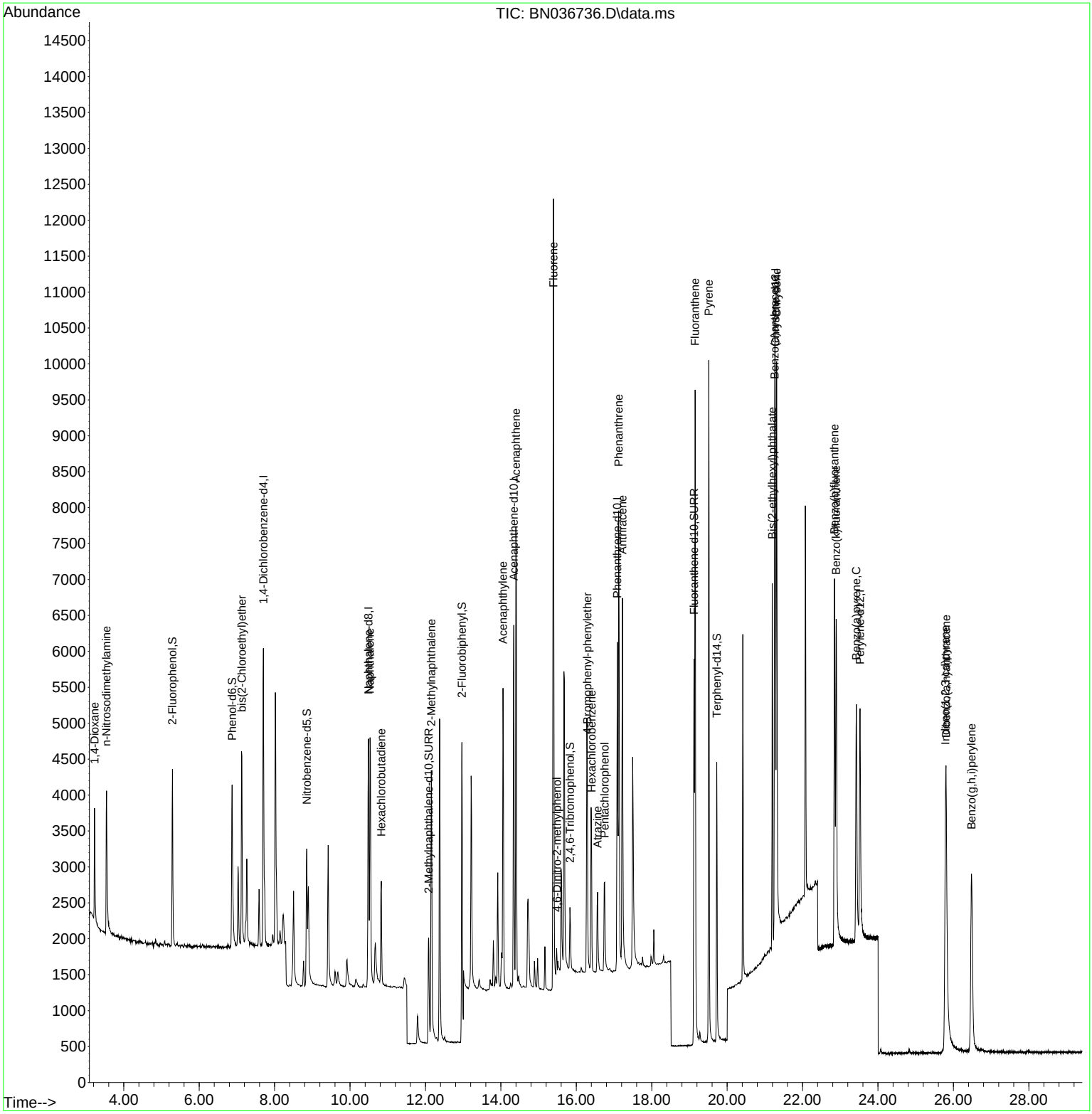
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036736.D
Acq On : 27 Mar 2025 14:02
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

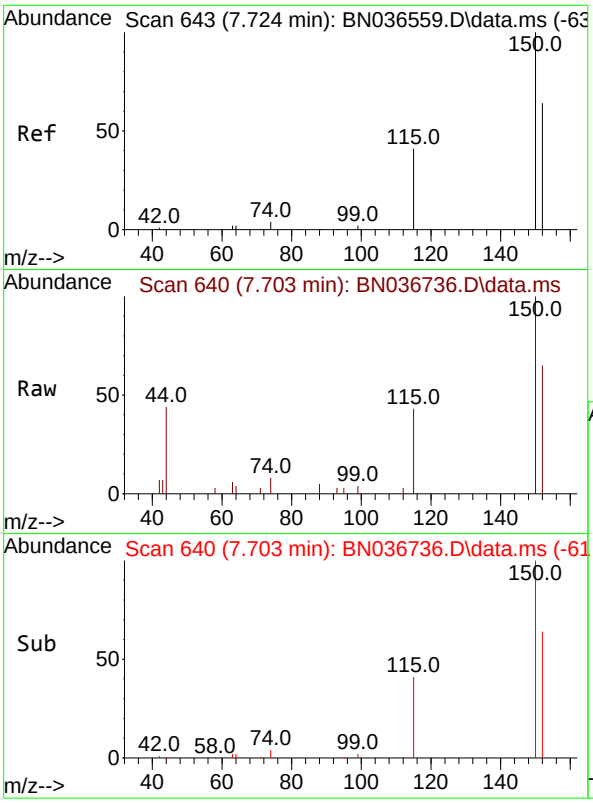
Quant Time: Mar 27 14:28:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

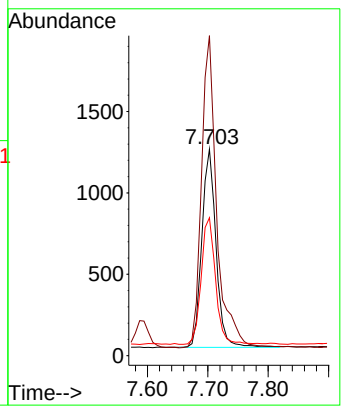





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:152 Resp: 199

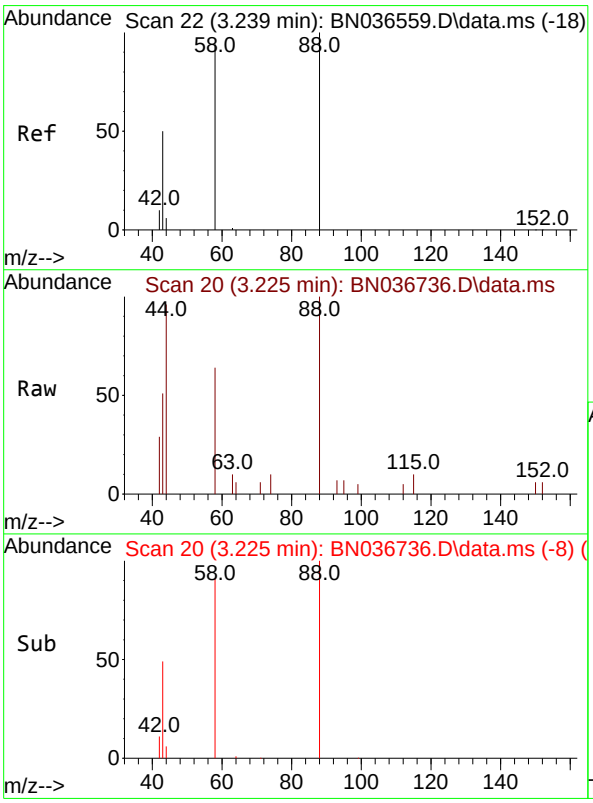
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.9 | 123.7 | 185.5 |
| 115 | 66.7 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

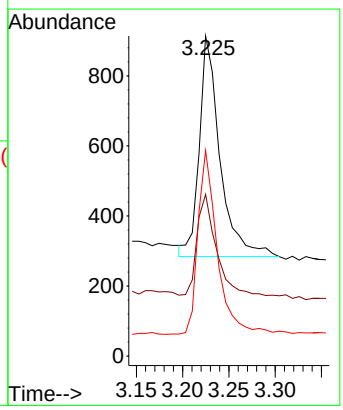
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

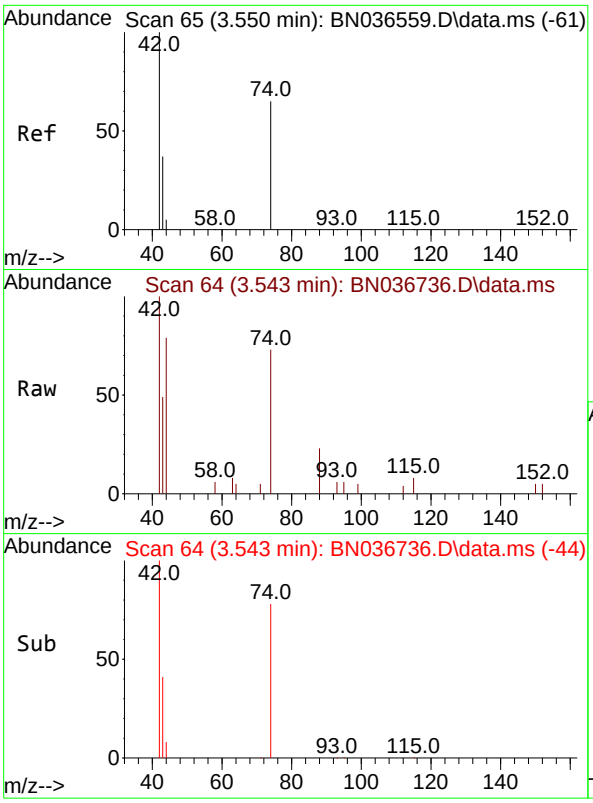



#2
1,4-Dioxane
Concen: 0.442 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 88 Resp: 979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 43.0 | 37.8 | 56.8 |
| 58 | 77.9 | 67.4 | 101.2 |

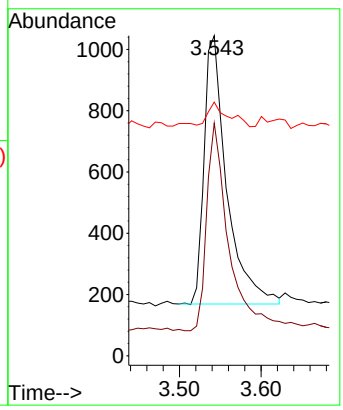





#3
n-Nitrosodimethylamine
Concen: 0.377 ng
RT: 3.543 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 42 Resp: 168

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 77.4 | 60.6 | 90.8 |
| 44 | 7.9 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
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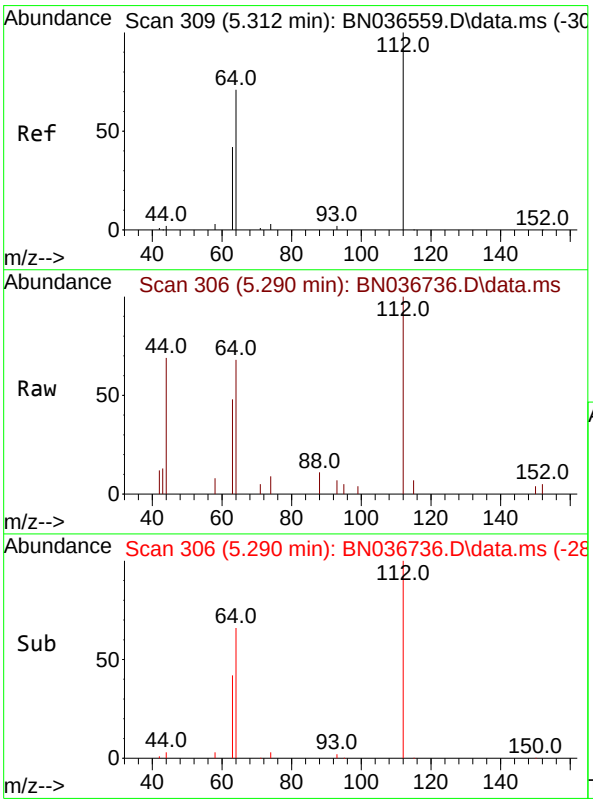
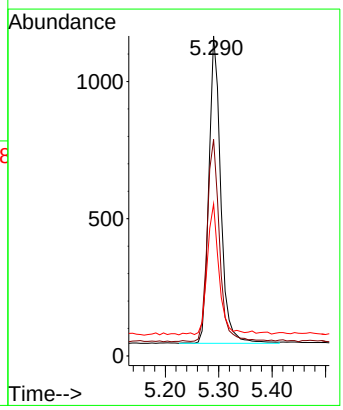
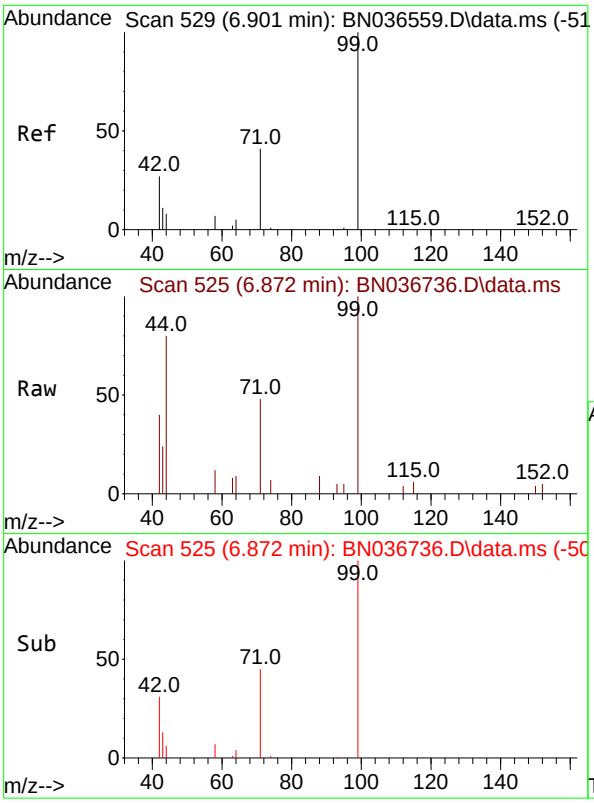



#4
2-Fluorophenol
Concen: 0.373 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:112 Resp: 1732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 67.9 | 53.1 | 79.7 |
| 63 | 42.6 | 31.8 | 47.8 |






#5
Phenol-d6
Concen: 0.350 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 99 Resp: 201

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.9 | 26.5 | 39.7 |
| 71 | 45.0 | 34.1 | 51.1 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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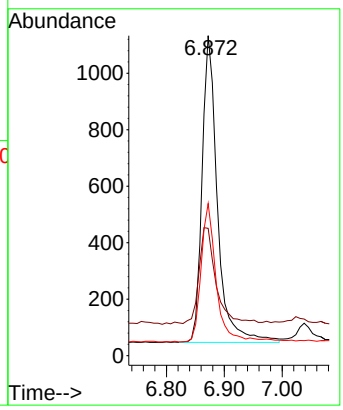
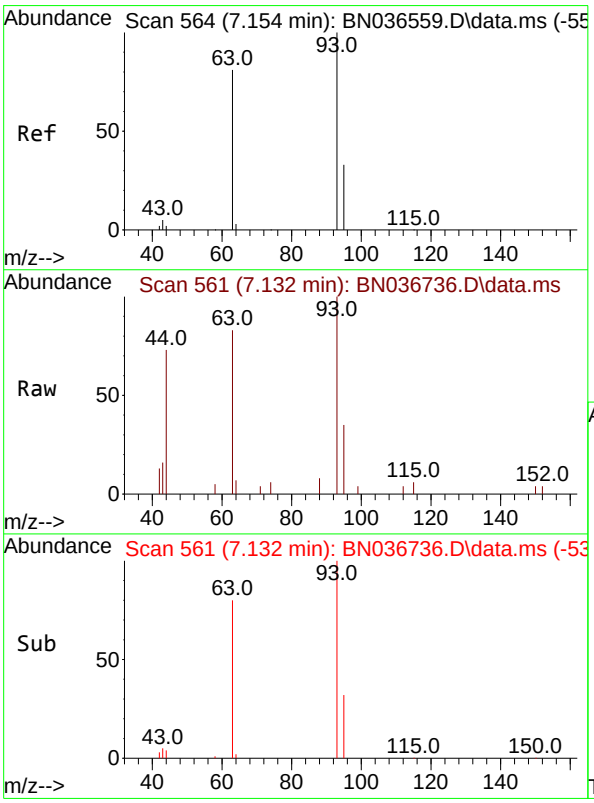
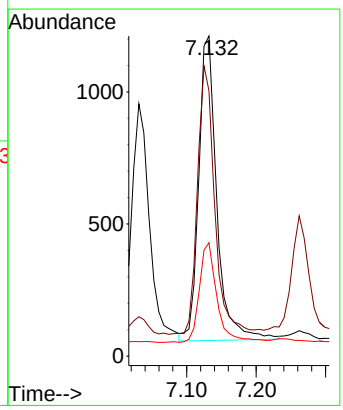


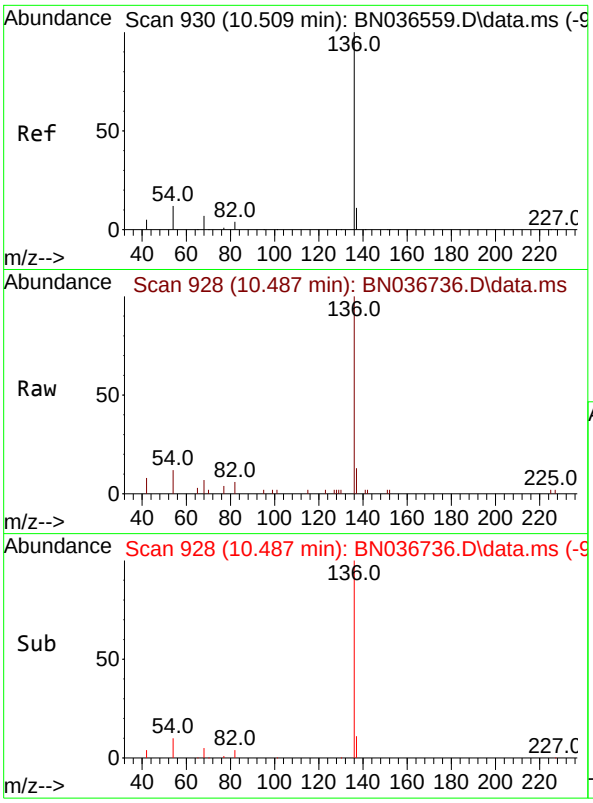




#6
bis(2-Chloroethyl)ether
Concen: 0.352 ng
RT: 7.132 min Scan# 561
Delta R.T. -0.022 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 93 Resp: 2087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 83.9 | 67.7 | 101.5 |
| 95 | 32.0 | 25.6 | 38.4 |

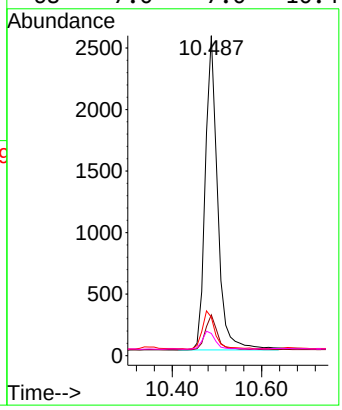





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:136 Resp: 487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.8 | 10.3 | 15.5 |
| 54 | 12.0 | 11.5 | 17.3 |
| 68 | 7.0 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
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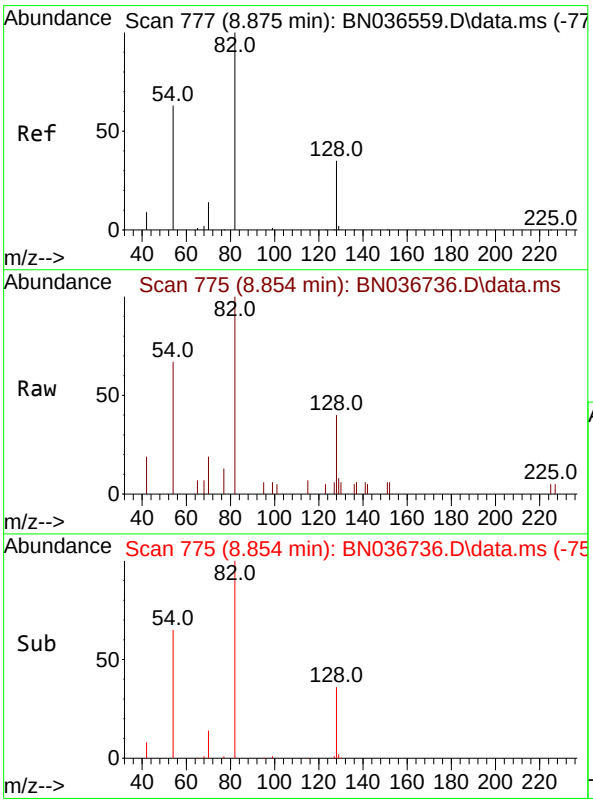
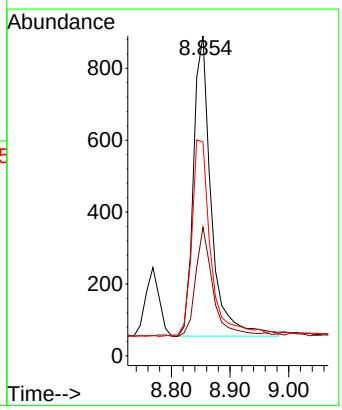
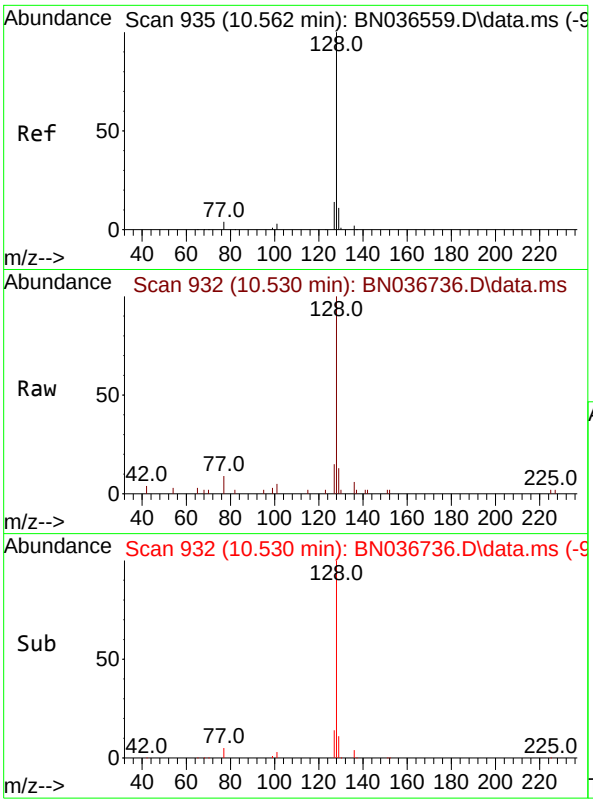



#8
Nitrobenzene-d5
Concen: 0.332 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 82 Resp: 1760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.2 | 30.6 | 45.8 |
| 54 | 66.9 | 52.2 | 78.4 |

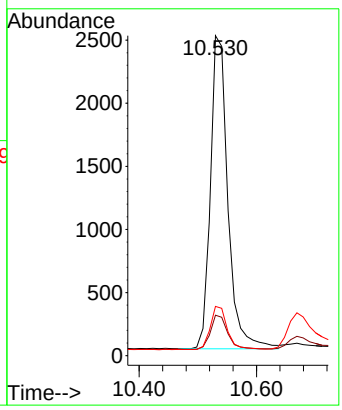





#9
Naphthalene
Concen: 0.357 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:128 Resp: 511

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.7 | 9.8 | 14.6 |
| 127 | 15.4 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
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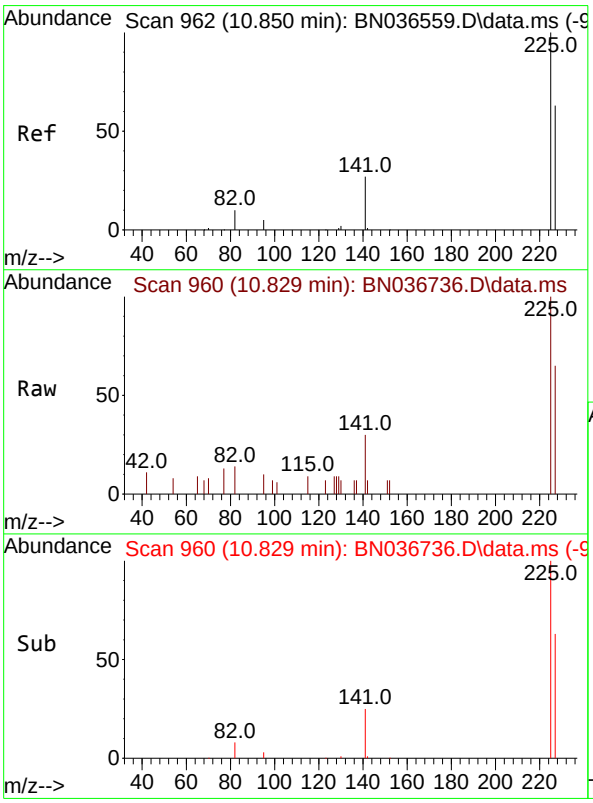
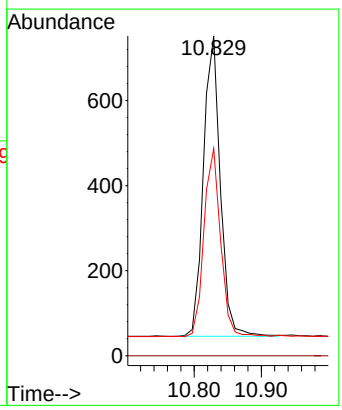
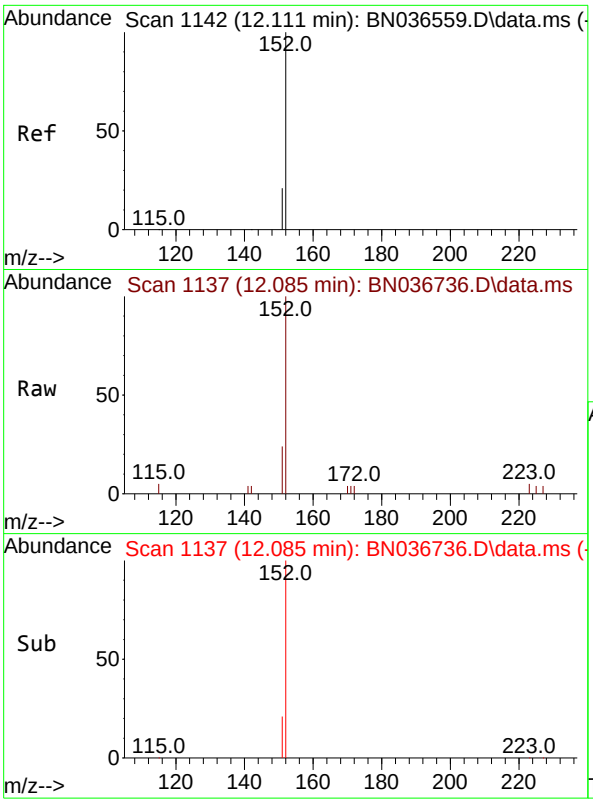



#10
Hexachlorobutadiene
Concen: 0.365 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:225 Resp: 1232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 61.7 | 51.8 | 77.8 |

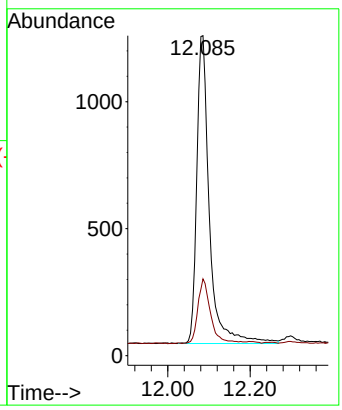





#11
2-Methylnaphthalene-d10
Concen: 0.356 ng
RT: 12.085 min Scan# 11
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:152 Resp: 258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.2 | 17.0 | 25.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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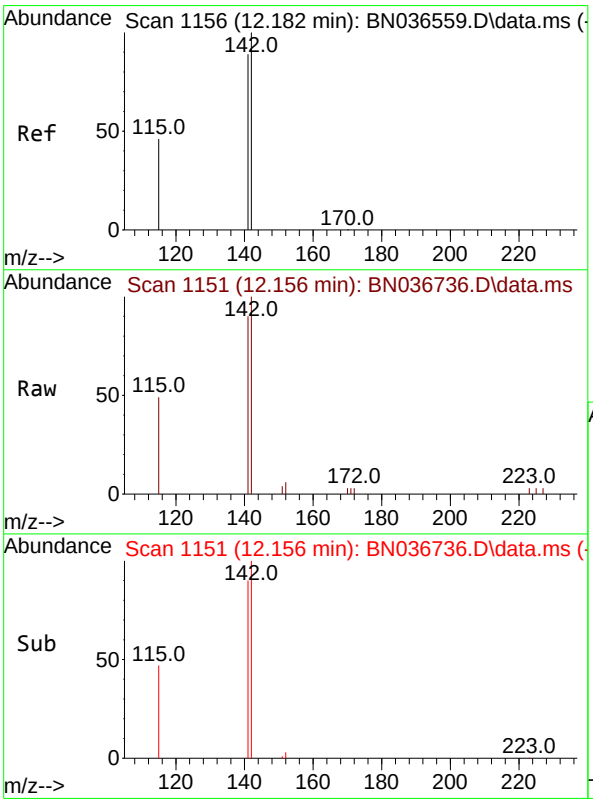
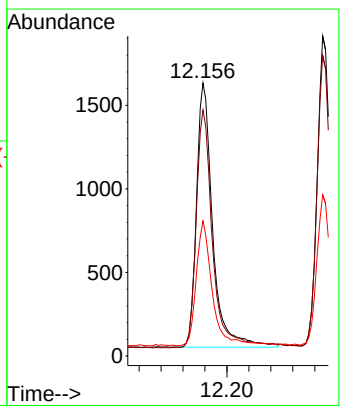
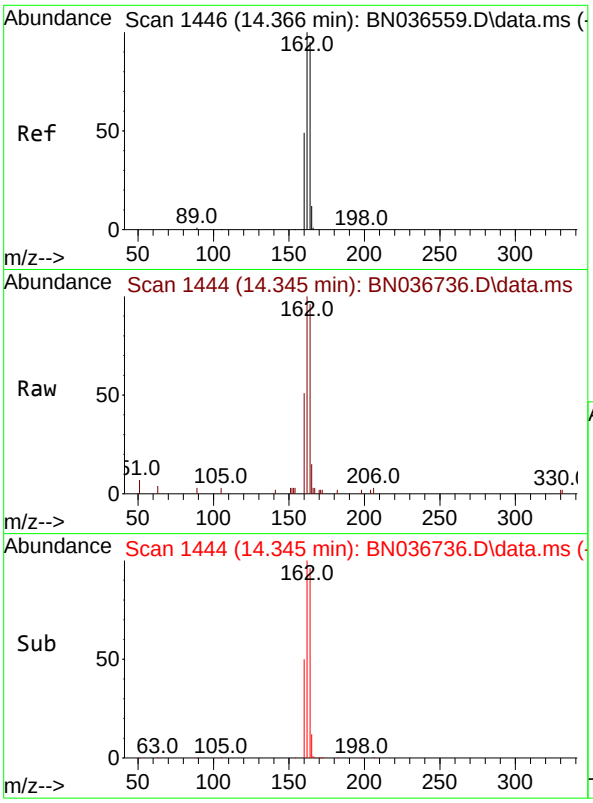



#12
2-Methylnaphthalene
Concen: 0.355 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:142 Resp: 3238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.1 | 71.7 | 107.5 |
| 115 | 49.4 | 38.3 | 57.5 |

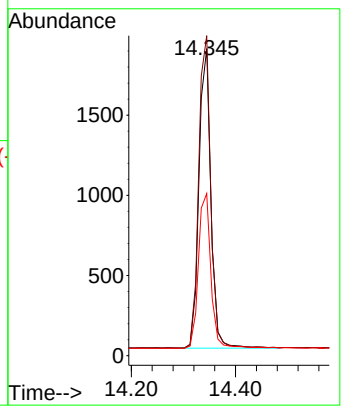





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:164 Resp: 298

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.2 | 84.2 | 126.2 |
| 160 | 52.8 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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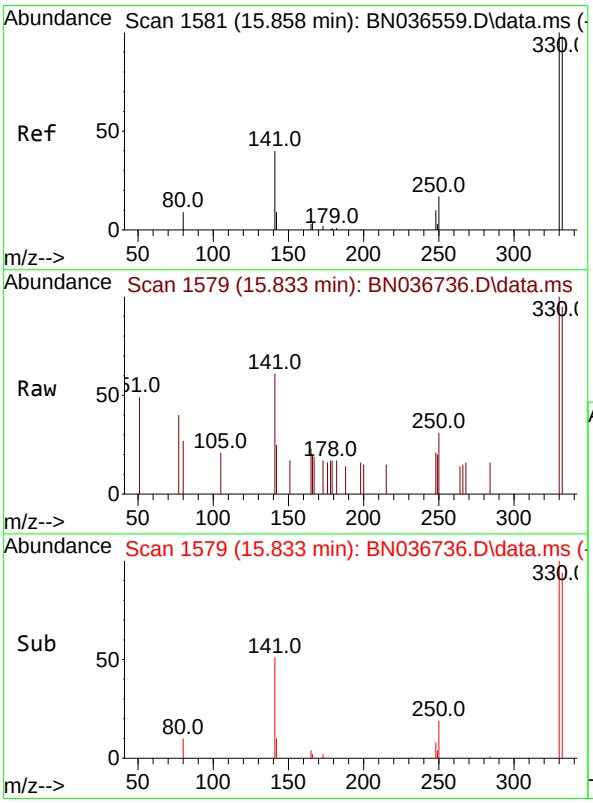
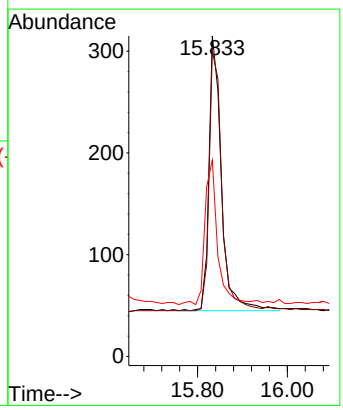
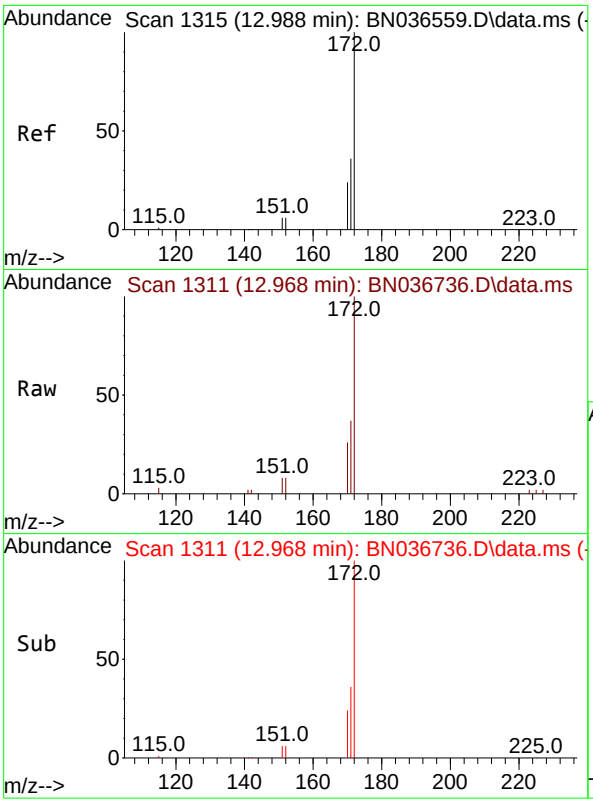



#14
2,4,6-Tribromophenol
Concen: 0.383 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:330 Resp: 518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 95.4 | 75.2 | 112.8 |
| 141 | 53.3 | 43.4 | 65.2 |

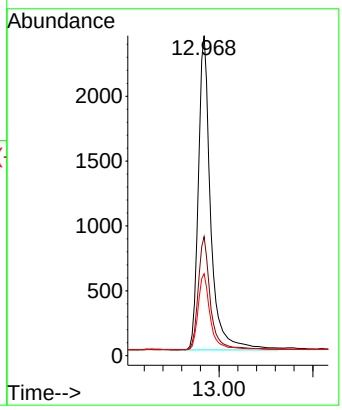





#15
2-Fluorobiphenyl
Concen: 0.344 ng
RT: 12.968 min Scan# 1
Delta R.T. -0.020 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:172 Resp: 597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.2 | 29.5 | 44.3 |
| 170 | 25.6 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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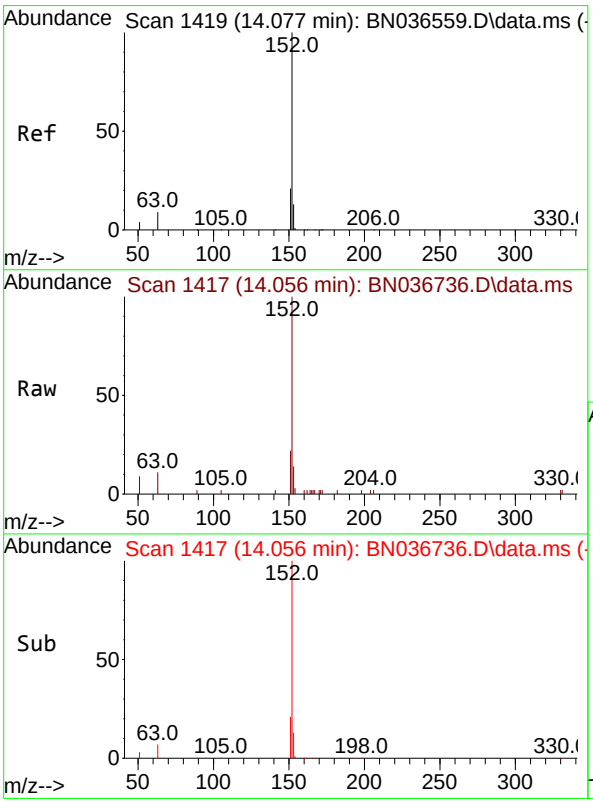
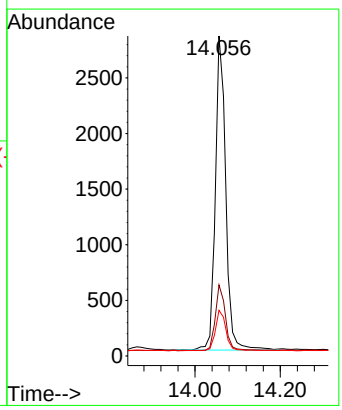
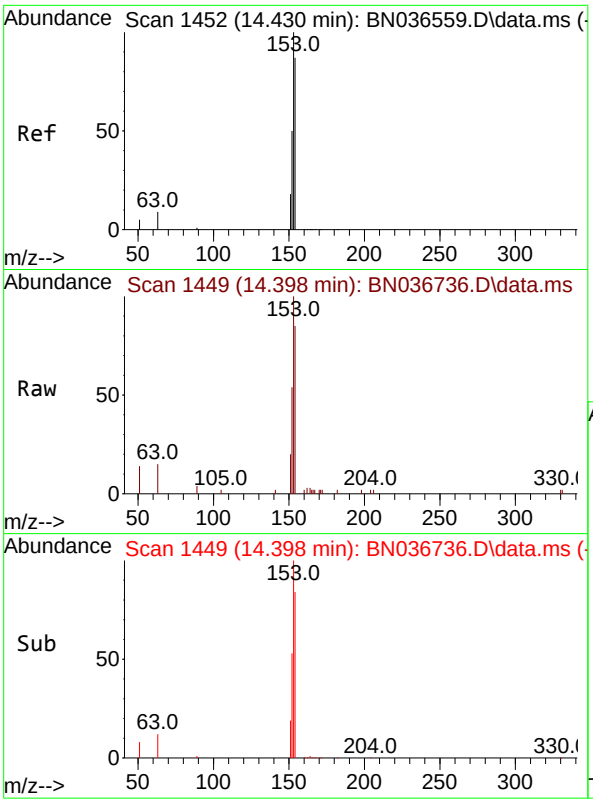



#16
Acenaphthylene
Concen: 0.340 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:152 Resp: 4782

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.5 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |






#17
Acenaphthene
Concen: 0.360 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:154 Resp: 331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.1 | 94.1 | 141.1 |
| 152 | 62.4 | 49.8 | 74.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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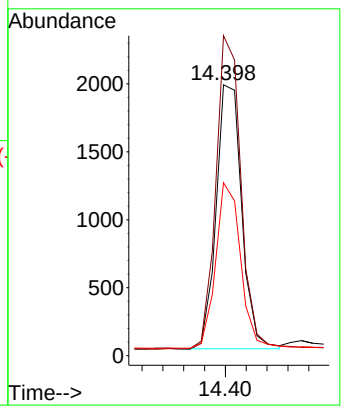
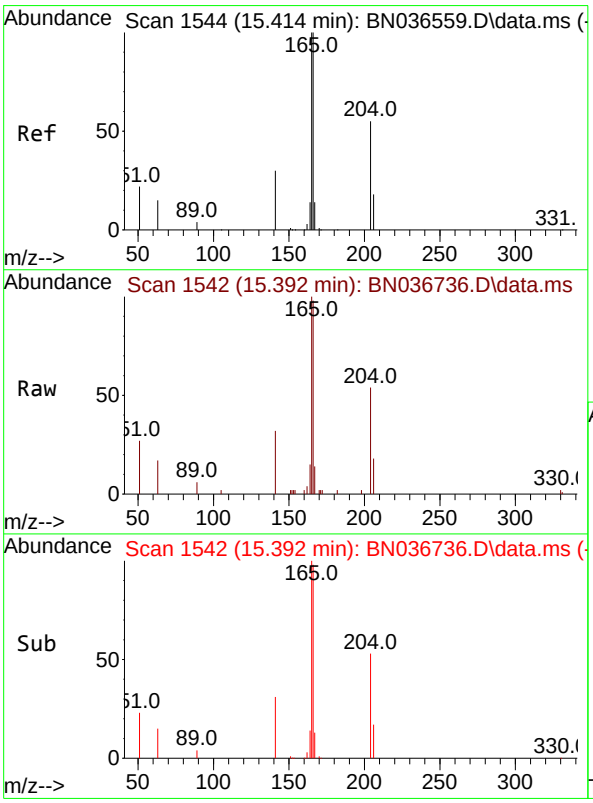
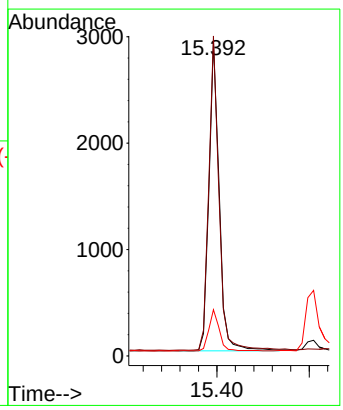


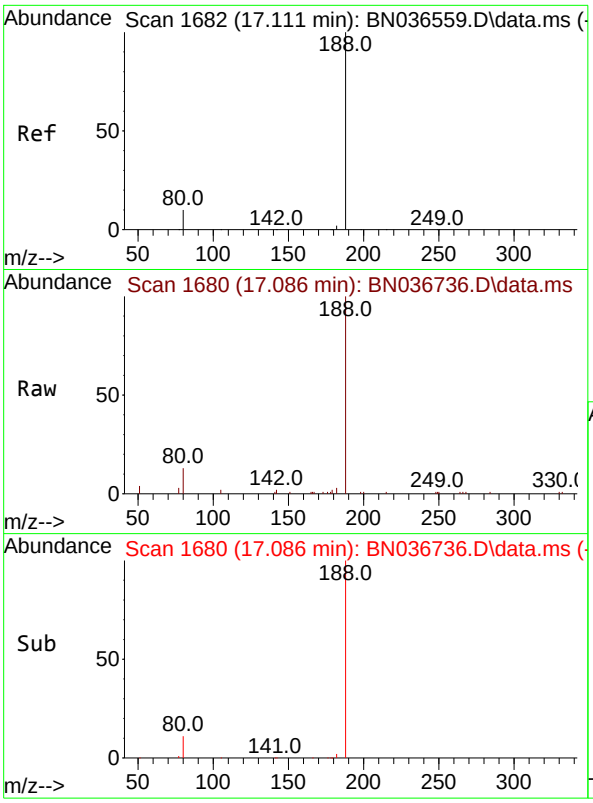




#18
Fluorene
Concen: 0.365 ng
RT: 15.392 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:166 Resp: 4544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.6 | 79.8 | 119.8 |
| 167 | 13.2 | 10.6 | 15.8 |

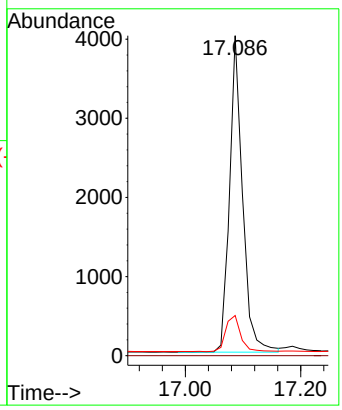





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:188 Resp: 627(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 12.6 | 8.8 | 13.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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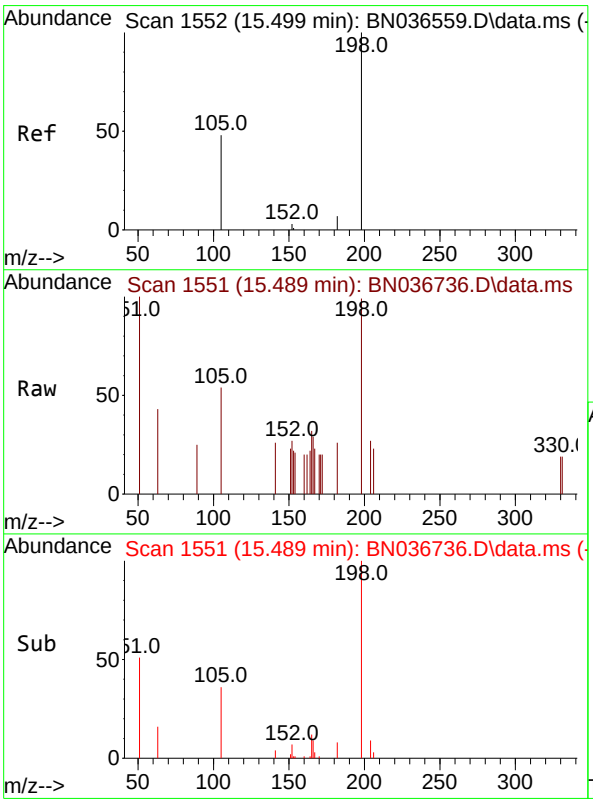
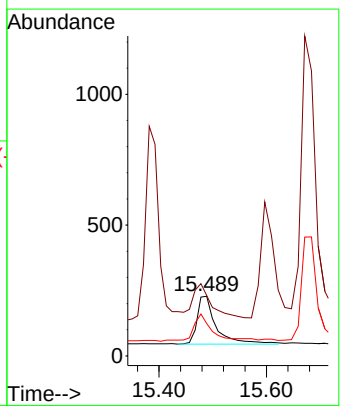
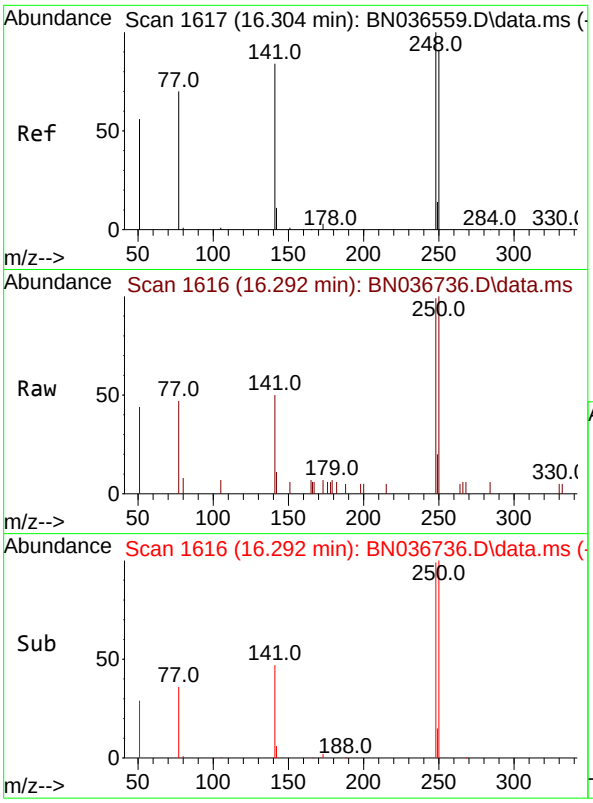



#20
4,6-Dinitro-2-methylphenol
Concen: 0.444 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:198 Resp: 478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 101.3 | 107.9 | 161.9# |
| 105 | 54.4 | 56.2 | 84.2# |

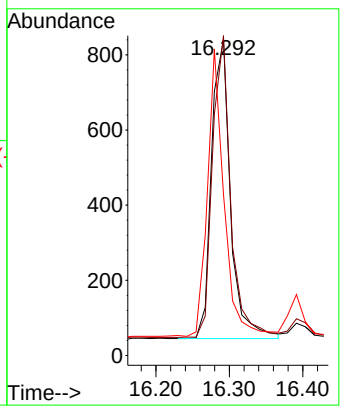





#21
4-Bromophenyl-phenylether
Concen: 0.364 ng
RT: 16.292 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:248 Resp: 143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 101.2 | 73.0 | 109.6 |
| 141 | 51.0 | 68.6 | 103.0# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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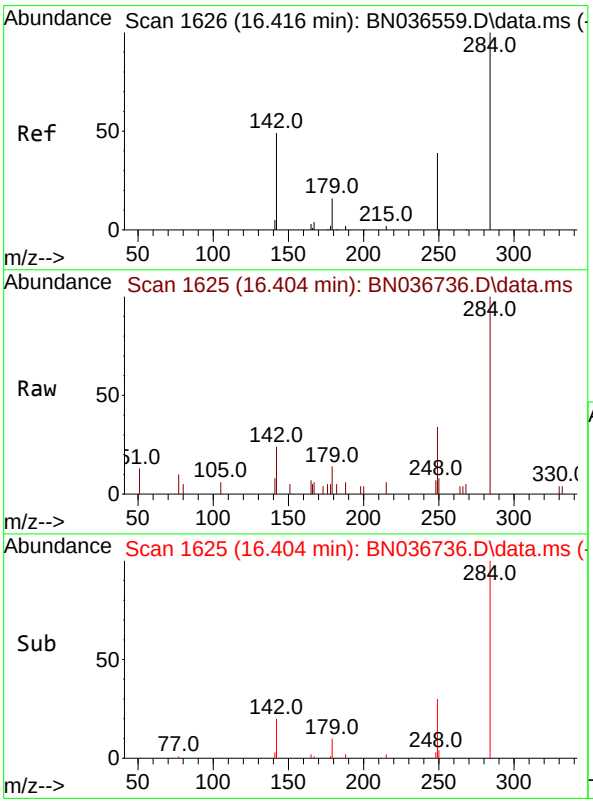
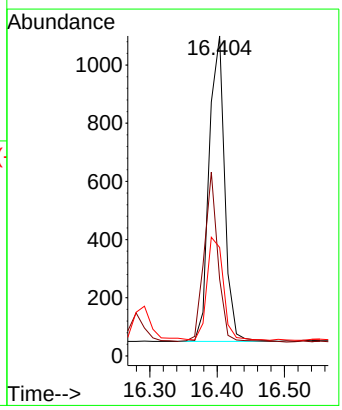
Supervised By :Jagrut Upadhyay 04/01/2025

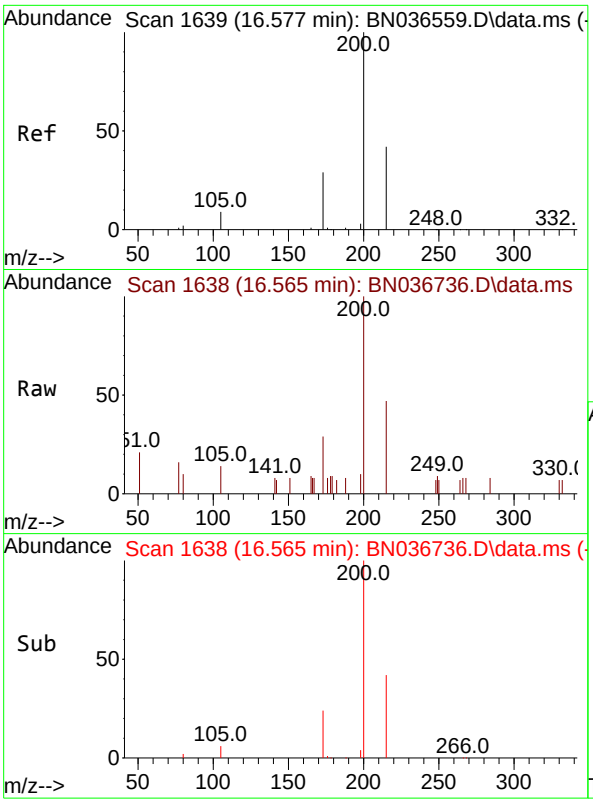



#22
Hexachlorobenzene
Concen: 0.354 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.012 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:284 Resp: 1682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 50.2 | 37.0 | 55.4 |
| 249 | 35.7 | 28.1 | 42.1 |






#23
Atrazine
Concen: 0.387 ng
RT: 16.565 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:200 Resp: 122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 28.9 | 27.3 | 40.9 |
| 215 | 47.0 | 36.8 | 55.2 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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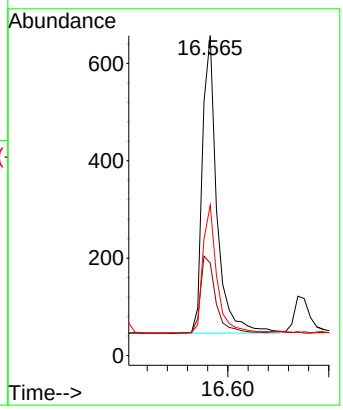
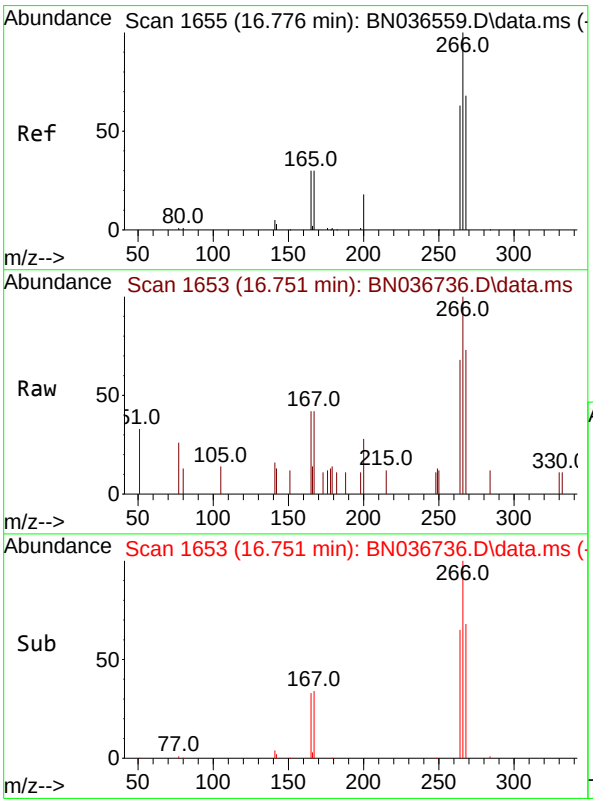
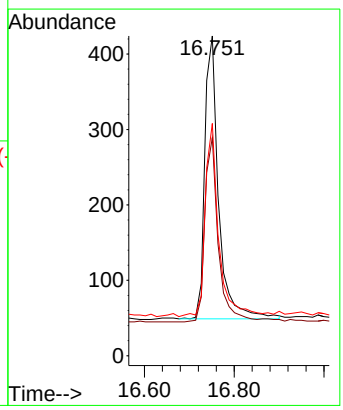


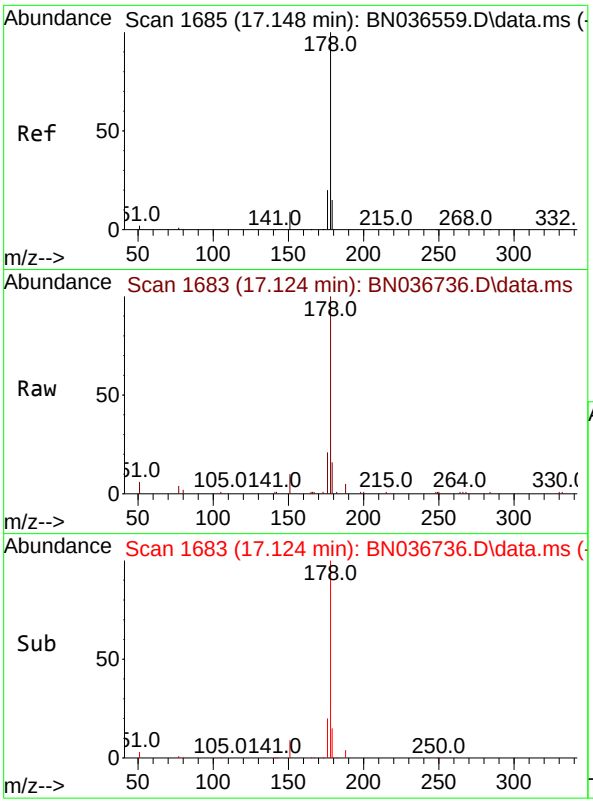




#24
Pentachlorophenol
Concen: 0.370 ng
RT: 16.751 min Scan# 1653
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:266 Resp: 801

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.7 | 49.6 | 74.4 |
| 268 | 66.5 | 50.9 | 76.3 |

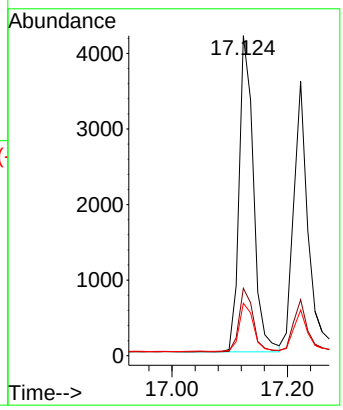





#25
Phenanthrene
Concen: 0.382 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:178 Resp: 719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.8 | 15.9 | 23.9 |
| 179 | 15.3 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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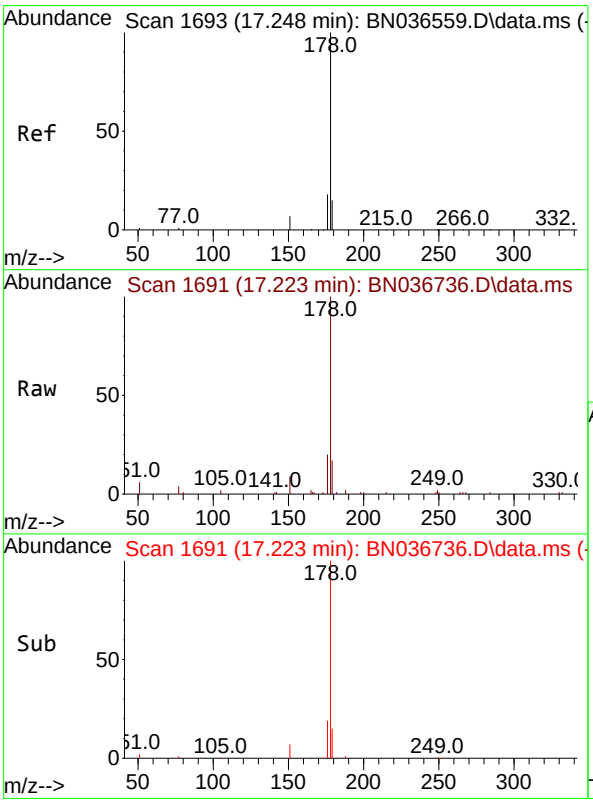
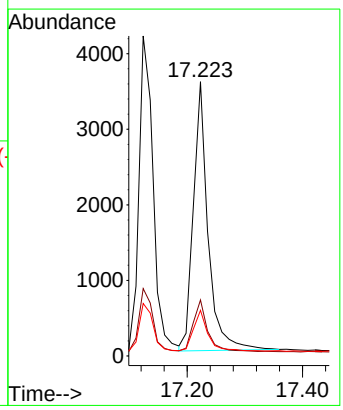
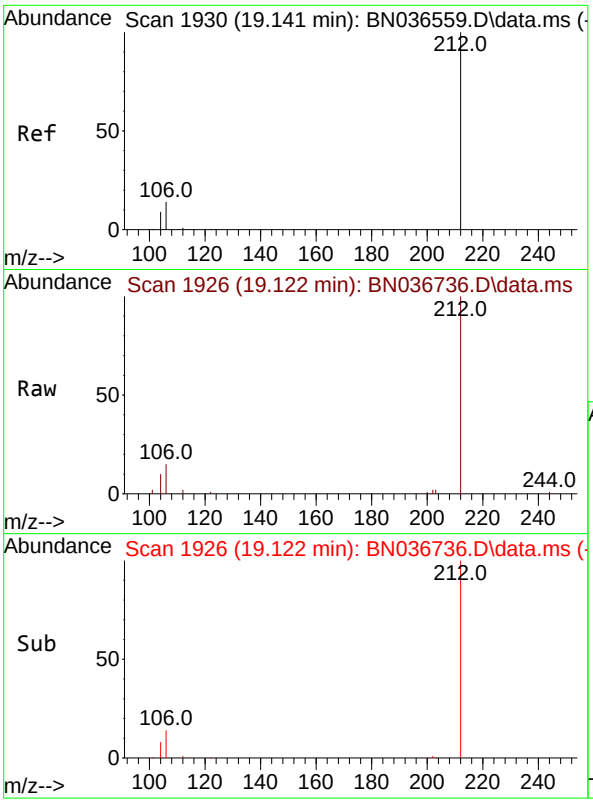



#26
Anthracene
Concen: 0.370 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:178 Resp: 6283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.2 | 15.4 | 23.2 |
| 179 | 15.8 | 12.6 | 18.8 |

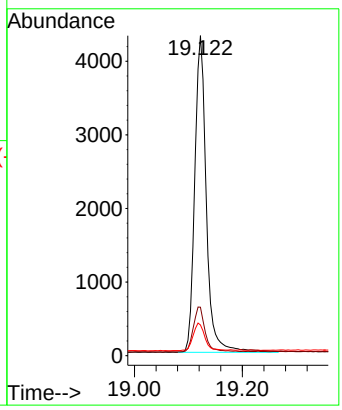





#27
Fluoranthene-d10
Concen: 0.399 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.019 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:212 Resp: 641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.4 | 11.8 | 17.6 |
| 104 | 8.9 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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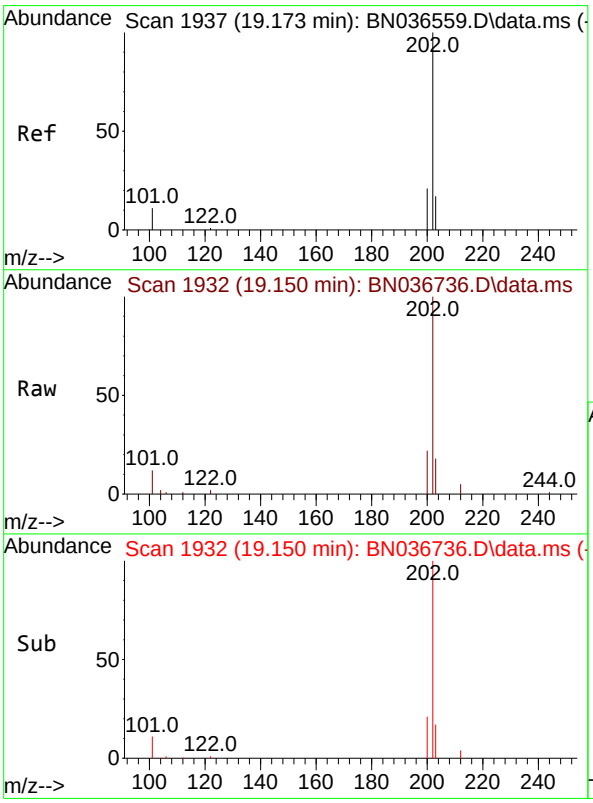
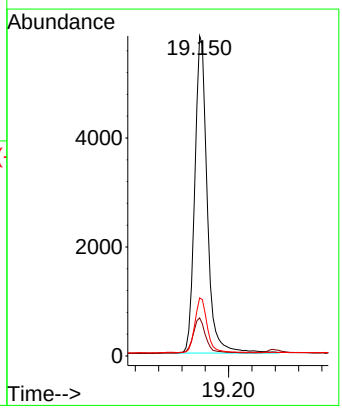
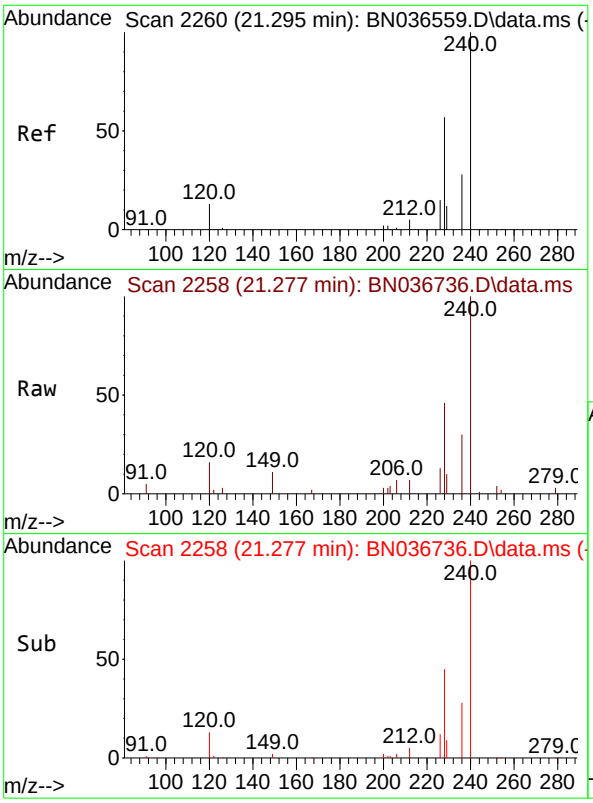



#28
Fluoranthene
Concen: 0.407 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:202 Resp: 8617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.2 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |






#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:240 Resp: 521

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 15.6 | 14.6 | 22.0 |
| 236 | 29.6 | 24.1 | 36.1 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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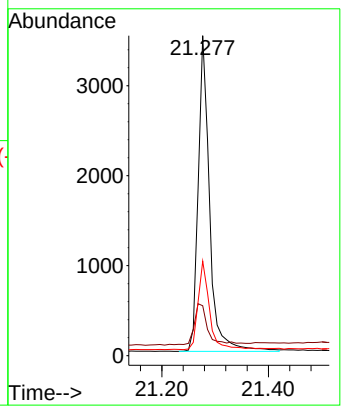
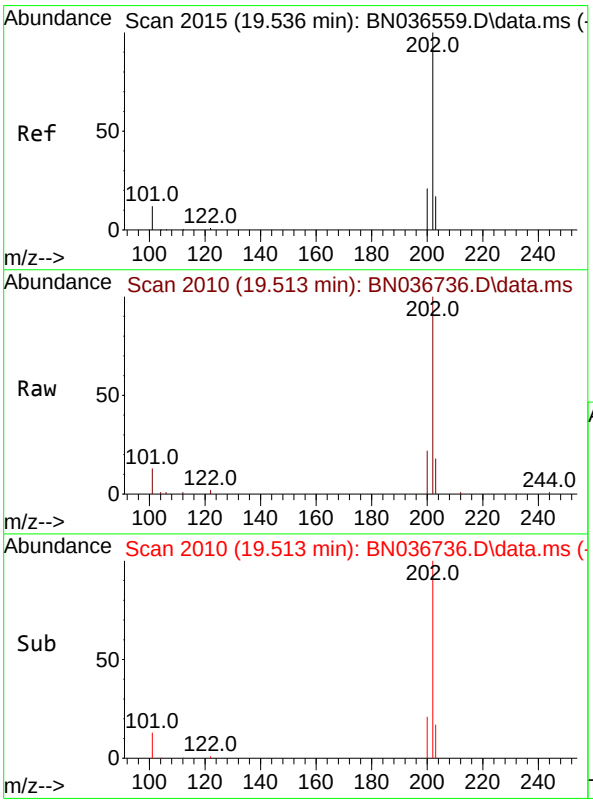
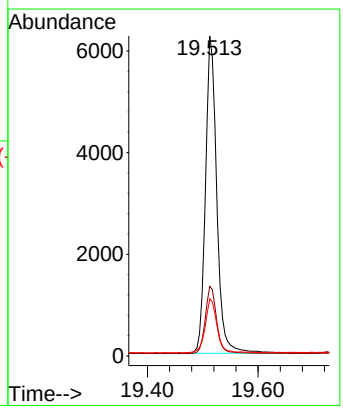


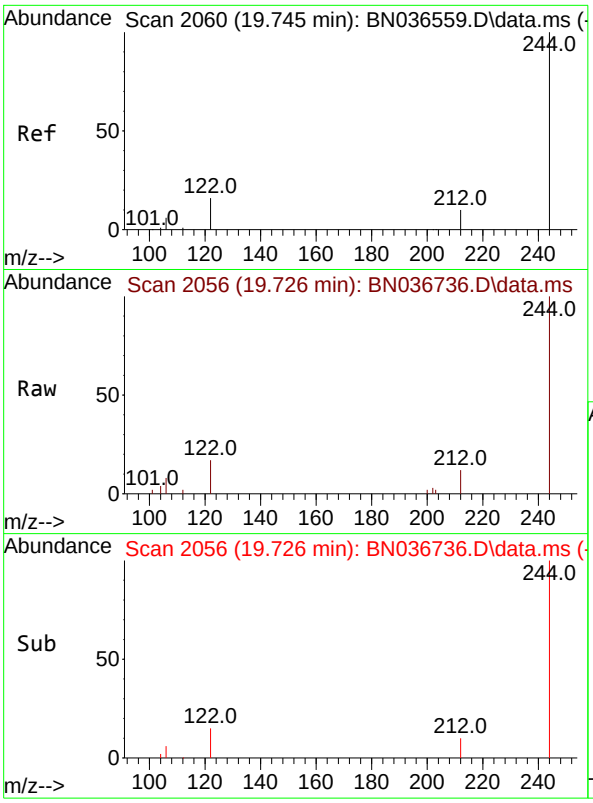




#30
Pyrene
Concen: 0.348 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:202 Resp: 8868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.3 | 17.1 | 25.7 |
| 203 | 17.4 | 14.1 | 21.1 |

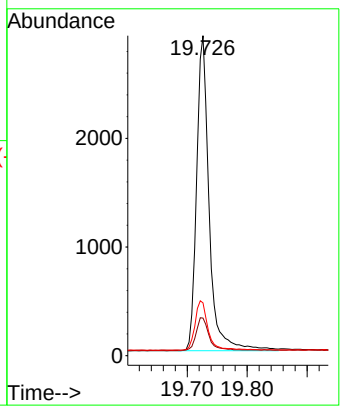





#31
Terphenyl-d14
Concen: 0.338 ng
RT: 19.726 min Scan# 2(
Delta R.T. -0.019 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:244 Resp: 422(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.7 | 9.6 | 14.4 |
| 122 | 16.5 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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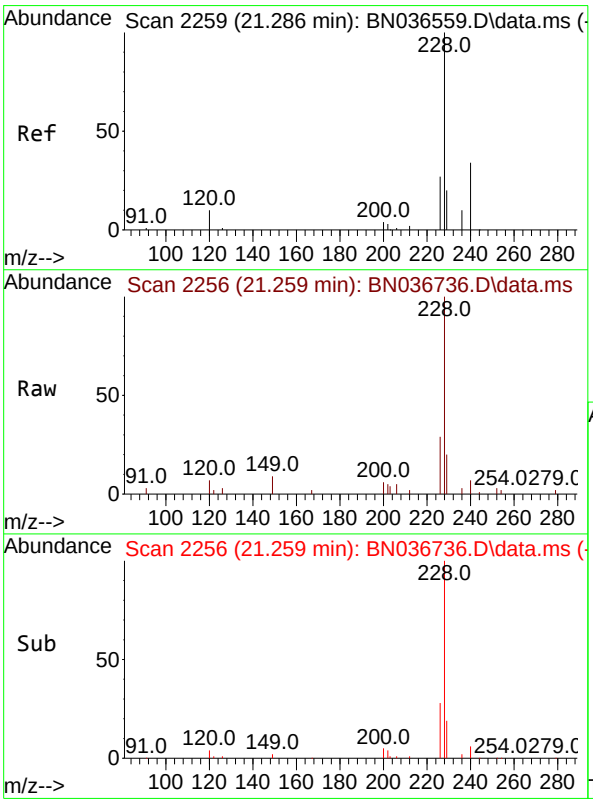
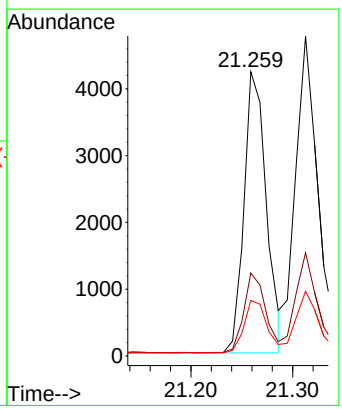
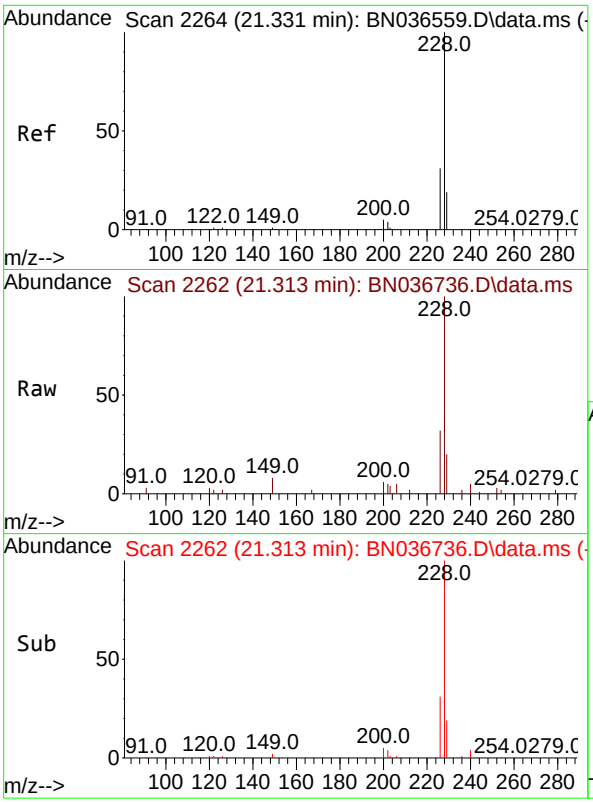



#32
Benzo(a)anthracene
Concen: 0.354 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:228 Resp: 6412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.2 | 22.5 | 33.7 |
| 229 | 19.5 | 16.6 | 25.0 |

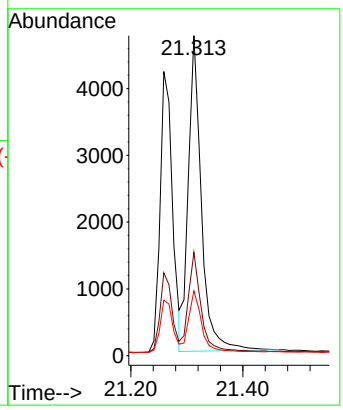





#33
Chrysene
Concen: 0.387 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:228 Resp: 767

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.3 | 25.3 | 37.9 |
| 229 | 20.2 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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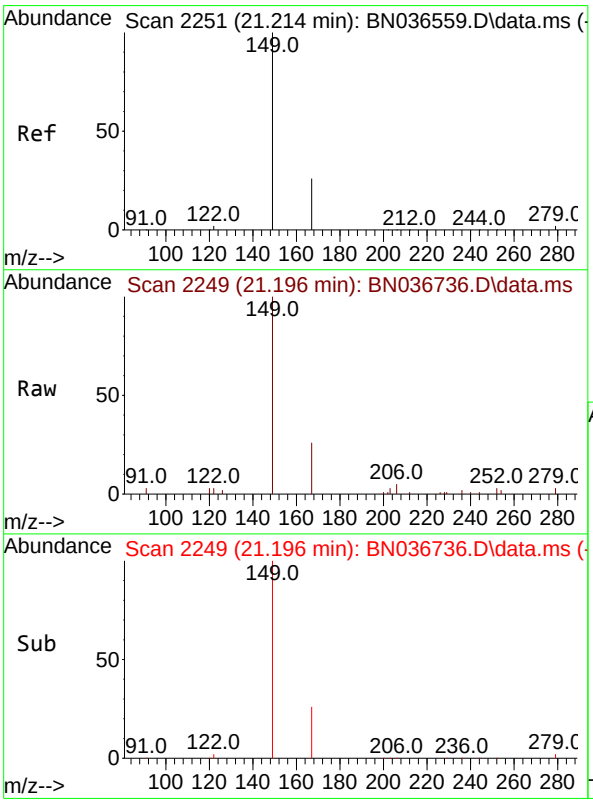
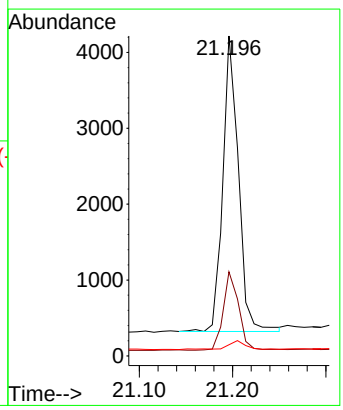
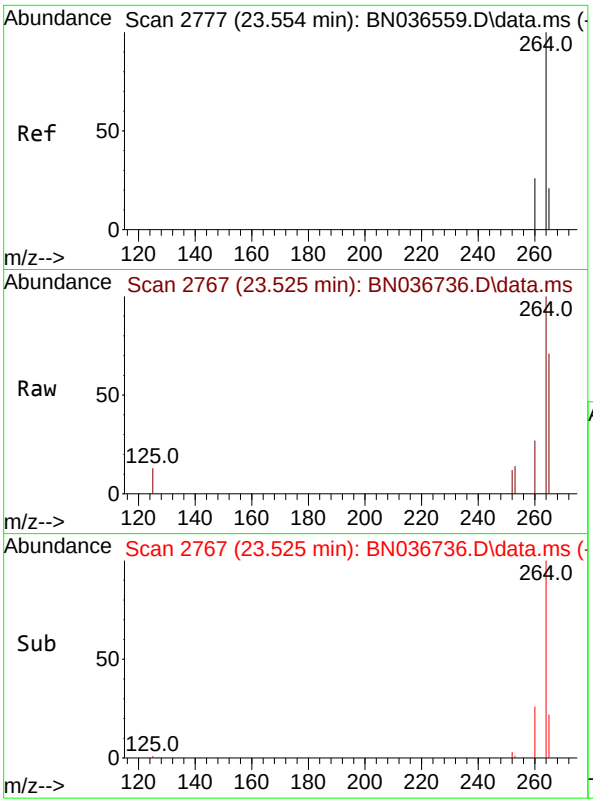



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.349 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:149 Resp: 4505

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.3 | 20.7 | 31.1 |
| 279 | 2.9 | 3.6 | 5.4# |

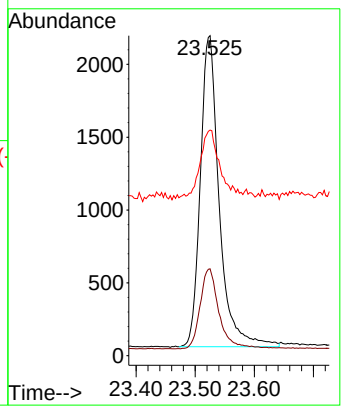





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:264 Resp: 473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.1 | 22.6 | 33.8 |
| 265 | 70.5 | 88.1 | 132.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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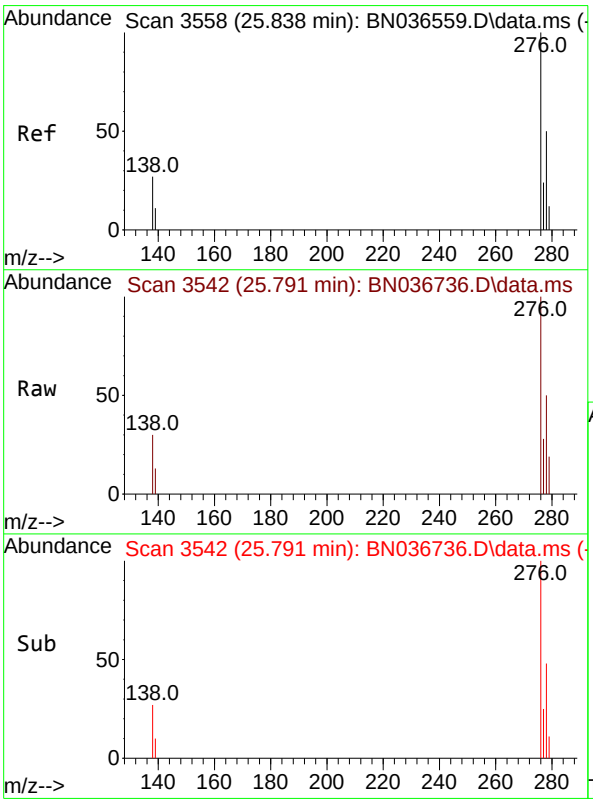
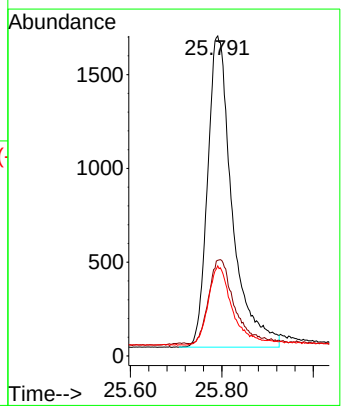
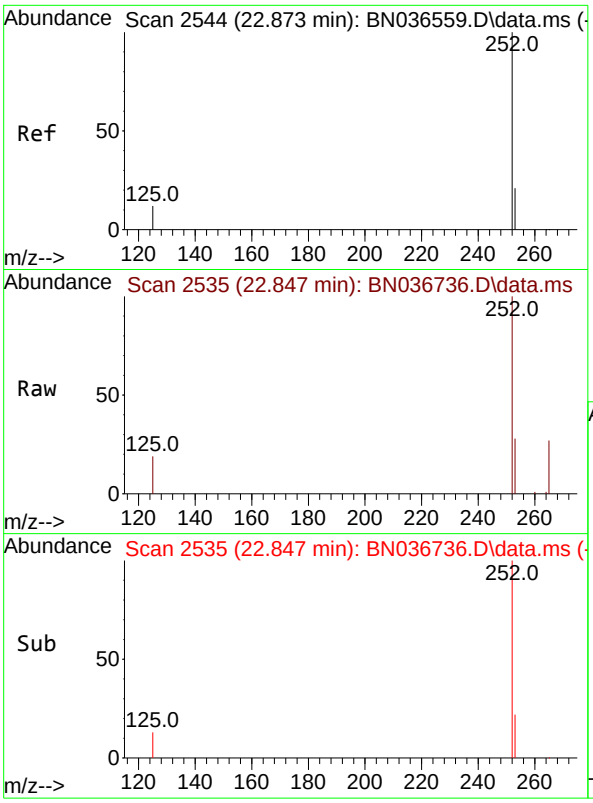



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.362 ng
RT: 25.791 min Scan# 3542
Delta R.T. -0.047 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:276 Resp: 6199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.5 | 23.4 | 35.2 |
| 277 | 24.9 | 20.0 | 30.0 |

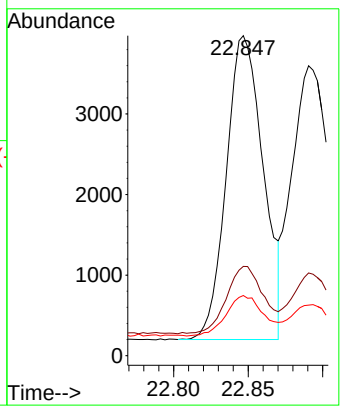





#37
Benzo(b)fluoranthene
Concen: 0.378 ng
RT: 22.847 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:252 Resp: 651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.9 | 23.9 | 35.9 |
| 125 | 18.8 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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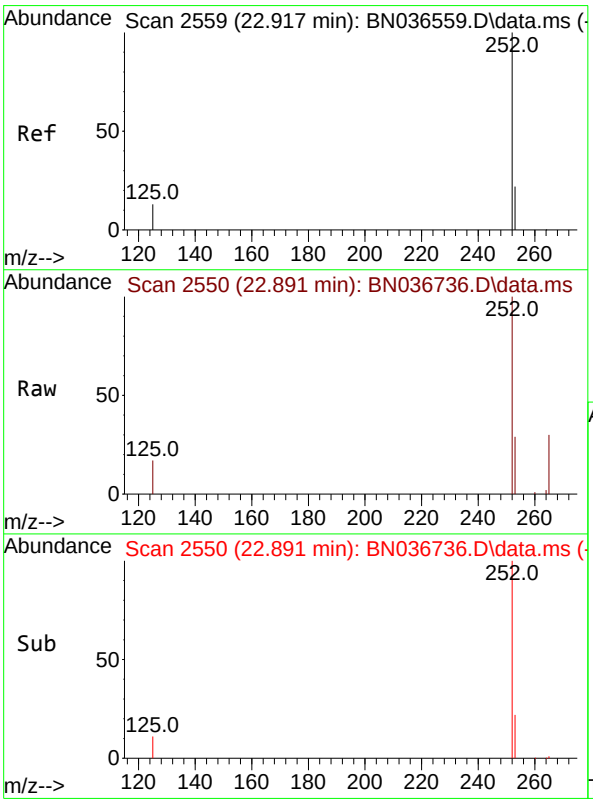
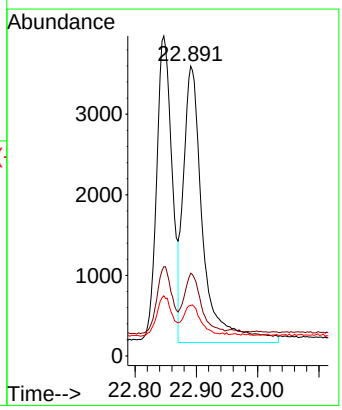
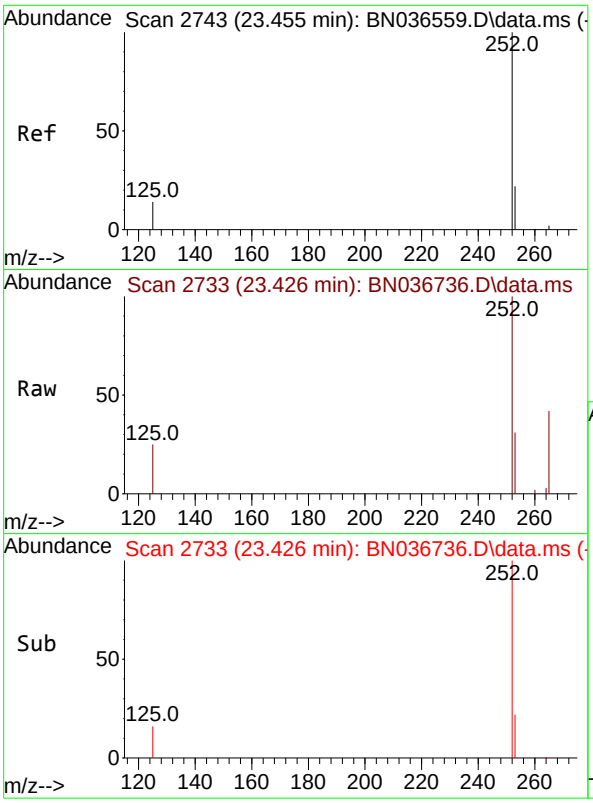



#38
Benzo(k)fluoranthene
Concen: 0.419 ng m
RT: 22.891 min Scan# 2550
Delta R.T. -0.026 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:252 Resp: 7579

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.5 | 24.6 | 36.8 |
| 125 | 17.5 | 17.8 | 26.8# |

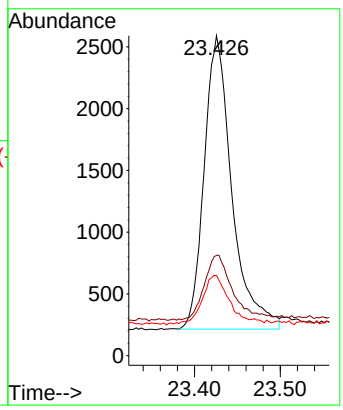





#39
Benzo(a)pyrene
Concen: 0.368 ng
RT: 23.426 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:252 Resp: 533

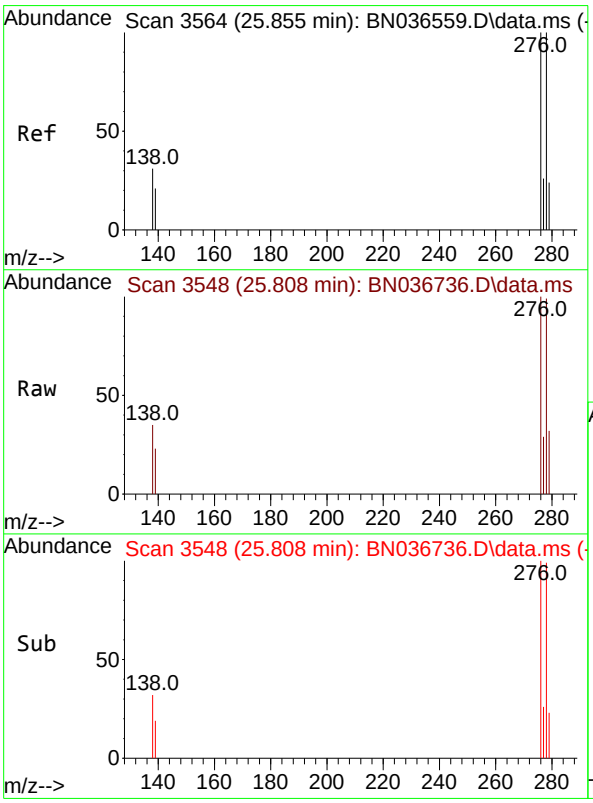
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 31.3 | 27.8 | 41.8 |
| 125 | 25.1 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

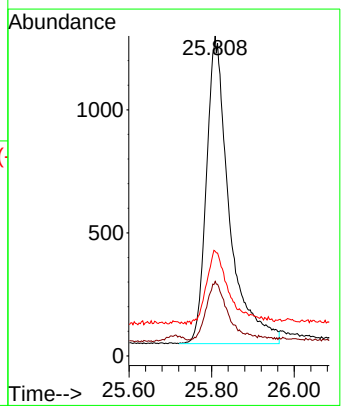
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

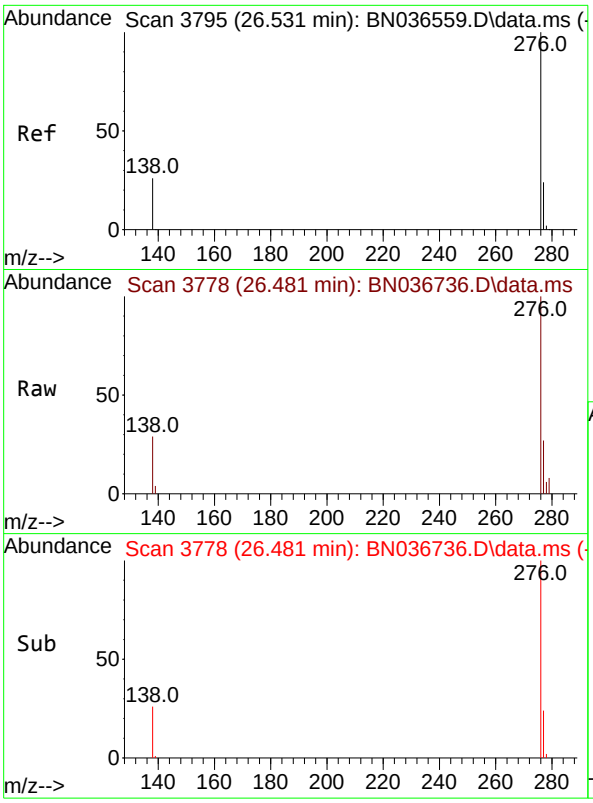



#40
Dibenzo(a,h)anthracene
Concen: 0.361 ng
RT: 25.808 min Scan# 3548
Delta R.T. -0.047 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:278 Resp: 4803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 23.3 | 20.8 | 31.2 |
| 279 | 32.7 | 28.8 | 43.2 |

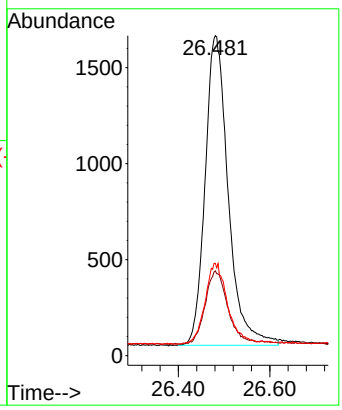





#41
Benzo(g,h,i)perylene
Concen: 0.372 ng
RT: 26.481 min Scan# 3
Delta R.T. -0.050 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:276 Resp: 566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.5 | 22.2 | 33.4 |
| 138 | 28.9 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036736.D
Acq On : 27 Mar 2025 14:02
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 14:28:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 90 | -0.02 |
| 2 | | 1,4-Dioxane | 0.444 | 0.491 | -10.6 | 89 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.846 | 5.8 | 82 | 0.00 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.868 | 6.9 | 80 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 1.008 | 12.5 | 81 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.046 | 12.1 | 80 | -0.02 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 96 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.361 | 17.0 | 83 | -0.02 |
| 9 | | Naphthalene | 1.177 | 1.050 | 10.8 | 83 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.253 | 8.7 | 82 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.530 | 10.9 | 84 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.664 | 11.3 | 83 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 98 | -0.02 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.174 | 4.4 | 91 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 2.004 | 13.9 | 82 | -0.02 |
| 16 | | Acenaphthylene | 1.888 | 1.605 | 15.0 | 82 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.112 | 10.0 | 85 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.525 | 8.8 | 85 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 105 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.076 | 11.6 | 103 | -0.01 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.228 | 9.2 | 87 | -0.01 |
| 22 | | Hexachlorobenzene | 0.303 | 0.268 | 11.6 | 83 | -0.01 |
| 23 | | Atrazine | 0.201 | 0.195 | 3.0 | 95 | -0.01 |
| 24 | | Pentachlorophenol | 0.138 | 0.128 | 7.2 | 98 | -0.02 |
| 25 | | Phenanthrene | 1.200 | 1.146 | 4.5 | 92 | -0.02 |
| 26 | | Anthracene | 1.083 | 1.001 | 7.6 | 91 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.022 | 0.3 | 96 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.373 | -1.9 | 99 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 127 | -0.02 |
| 30 | | Pyrene | 1.956 | 1.702 | 13.0 | 101 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.810 | 15.4 | 100 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.230 | 11.6 | 109 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.472 | 3.2 | 116 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.865 | 12.6 | 105 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 134 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.308 | 9.4 | 113 | -0.05 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.375 | 5.6 | 119 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.599 | -4.7 | 132 | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.126 | 8.2 | 116 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 1.014 | 9.8 | 117 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.196 | 7.0 | 116 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036736.D
Acq On : 27 Mar 2025 14:02
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 14:28:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 90 | -0.02 |
| 2 | | 1,4-Dioxane | 0.400 | 0.442 | -10.5 | 89 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.377 | 5.8 | 82 | 0.00 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.373 | 6.8 | 80 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.350 | 12.5 | 81 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.352 | 12.0 | 80 | -0.02 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 96 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.332 | 17.0 | 83 | -0.02 |
| 9 | | Naphthalene | 0.400 | 0.357 | 10.8 | 83 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.365 | 8.8 | 82 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.356 | 11.0 | 84 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.355 | 11.3 | 83 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 98 | -0.02 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.383 | 4.3 | 91 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.344 | 14.0 | 82 | -0.02 |
| 16 | | Acenaphthylene | 0.400 | 0.340 | 15.0 | 82 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.360 | 10.0 | 85 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.365 | 8.8 | 85 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 105 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.444 | -11.0 | 103 | -0.01 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.364 | 9.0 | 87 | -0.01 |
| 22 | | Hexachlorobenzene | 0.400 | 0.354 | 11.5 | 83 | -0.01 |
| 23 | | Atrazine | 0.400 | 0.387 | 3.3 | 95 | -0.01 |
| 24 | | Pentachlorophenol | 0.400 | 0.370 | 7.5 | 98 | -0.02 |
| 25 | | Phenanthrene | 0.400 | 0.382 | 4.5 | 92 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.370 | 7.5 | 91 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.399 | 0.3 | 96 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.407 | -1.7 | 99 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 127 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.348 | 13.0 | 101 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.338 | 15.5 | 100 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.354 | 11.5 | 109 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.387 | 3.3 | 116 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.349 | 12.8 | 105 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 134 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.362 | 9.5 | 113 | -0.05 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.378 | 5.5 | 119 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.419 | -4.7 | 132 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.368 | 8.0 | 116 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.361 | 9.8 | 117 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.372 | 7.0 | 116 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/27/2025 15:38

Lab File ID: BN036738.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.535 | | -10.1 | 20.0 |
| Fluoranthene-d10 | 1.025 | 1.046 | | 2.0 | 20.0 |
| 2-Fluorophenol | 0.932 | 0.850 | | -8.8 | 20.0 |
| Phenol-d6 | 1.152 | 1.009 | | -12.4 | 20.0 |
| Nitrobenzene-d5 | 0.435 | 0.358 | | -17.7 | 20.0 |
| 2-Fluorobiphenyl | 2.327 | 2.012 | | -13.5 | 20.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.176 | | -3.3 | 20.0 |
| Terphenyl-d14 | 0.958 | 0.790 | | -17.5 | 20.0 |
| 1,4-Dioxane | 0.444 | 0.473 | | 6.5 | 20.0 |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036738.D
Acq On : 27 Mar 2025 15:38
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 27 16:33:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1523 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 3803 | 0.400 | ng | -0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2348 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 4989 | 0.400 | ng | #-0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 4385 | 0.400 | ng | -0.02 |
| 35) Perylene-d12 | 23.525 | 264 | 4045 | 0.400 | ng | #-0.03 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1294 | 0.365 | ng | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1536 | 0.350 | ng | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1363 | 0.329 | ng | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.085 | 152 | 2034 | 0.360 | ng | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 414 | 0.389 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.968 | 172 | 4725 | 0.346 | ng | -0.02 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 5220 | 0.408 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 3465 | 0.330 | ng | -0.02 |
| **Target Compounds** | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 721 | 0.427 | ng | 93 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1301 | 0.381 | ng | # 99 |
| 6) bis(2-Chloroethyl)ether | 7.132 | 93 | 1533 | 0.338 | ng | 95 |
| 9) Naphthalene | 10.541 | 128 | 4045 | 0.362 | ng | 98 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 955 | 0.363 | ng | # 98 |
| 12) 2-Methylnaphthalene | 12.156 | 142 | 2514 | 0.353 | ng | 96 |
| 16) Acenaphthylene | 14.056 | 152 | 3861 | 0.348 | ng | 100 |
| 17) Acenaphthene | 14.398 | 154 | 2582 | 0.356 | ng | 99 |
| 18) Fluorene | 15.392 | 166 | 3631 | 0.370 | ng | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.489 | 198 | 370 | 0.436 | ng | 81 |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248 | 1147 | 0.367 | ng | # 80 |
| 22) Hexachlorobenzene | 16.404 | 284 | 1358 | 0.360 | ng | 97 |
| 23) Atrazine | 16.565 | 200 | 991 | 0.395 | ng | 95 |
| 24) Pentachlorophenol | 16.751 | 266 | 662 | 0.385 | ng | 95 |
| 25) Phenanthrene | 17.124 | 178 | 5704 | 0.381 | ng | 100 |
| 26) Anthracene | 17.223 | 178 | 4989 | 0.369 | ng | 99 |
| 28) Fluoranthene | 19.150 | 202 | 6959 | 0.414 | ng | 99 |
| 30) Pyrene | 19.517 | 202 | 7305 | 0.341 | ng | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5558 | 0.365 | ng | 98 |
| 33) Chrysene | 21.313 | 228 | 6163 | 0.370 | ng | 100 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 3633 | 0.335 | ng | # 98 |
| 36) Indeno(1,2,3-cd)pyrene | 25.791 | 276 | 5346 | 0.366 | ng | 98 |
| 37) Benzo(b)fluoranthene | 22.850 | 252 | 5508 | 0.374 | ng | 97 |
| 38) Benzo(k)fluoranthene | 22.893 | 252 | 5730m | 0.371 | ng | |
| 39) Benzo(a)pyrene | 23.426 | 252 | 4841 | 0.391 | ng | 96 |
| 40) Dibenzo(a,h)anthracene | 25.814 | 278 | 4114 | 0.362 | ng | 95 |
| 41) Benzo(g,h,i)perylene | 26.481 | 276 | 4859 | 0.374 | ng | 97 |

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

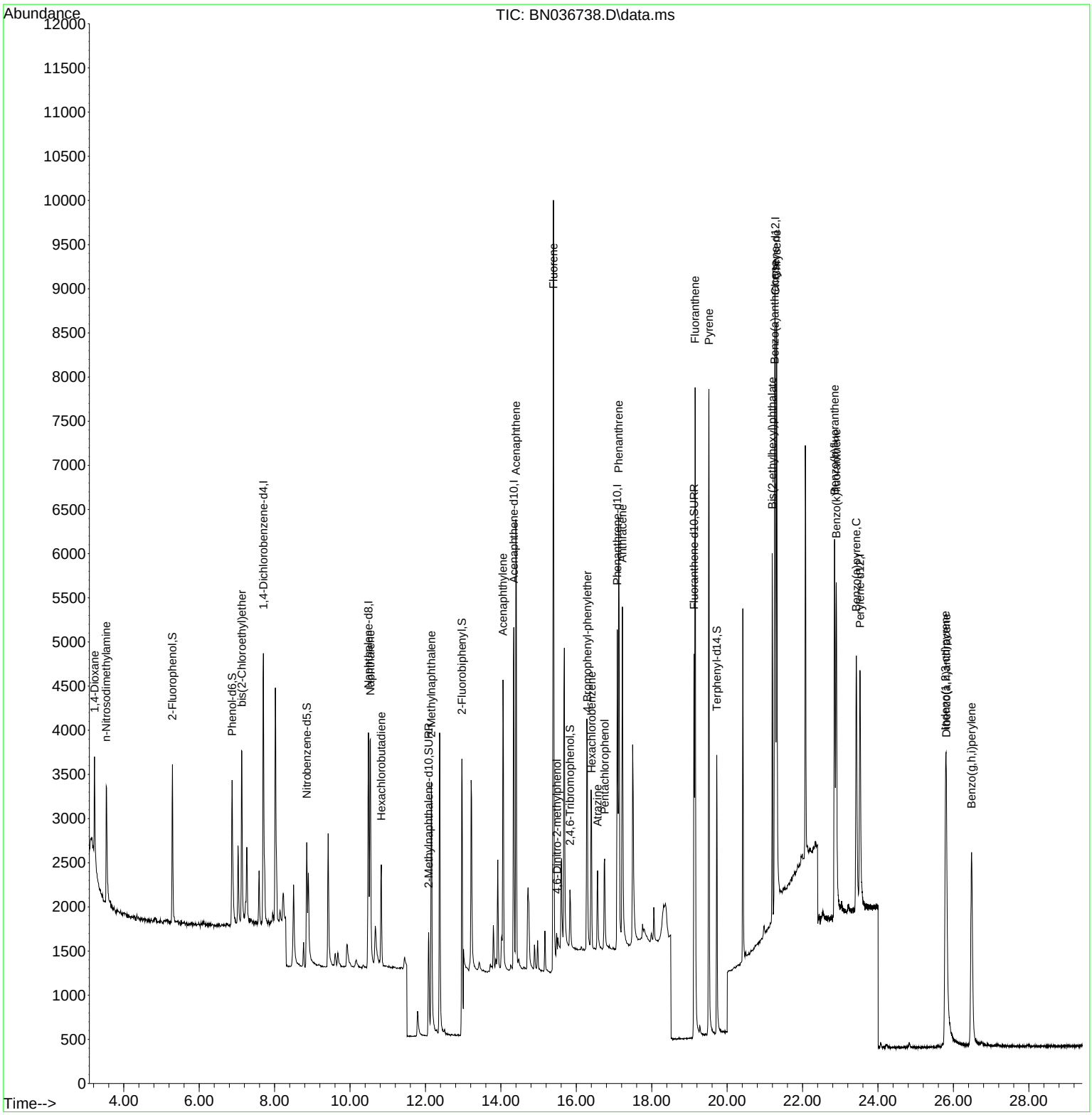
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036738.D
Acq On : 27 Mar 2025 15:38
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

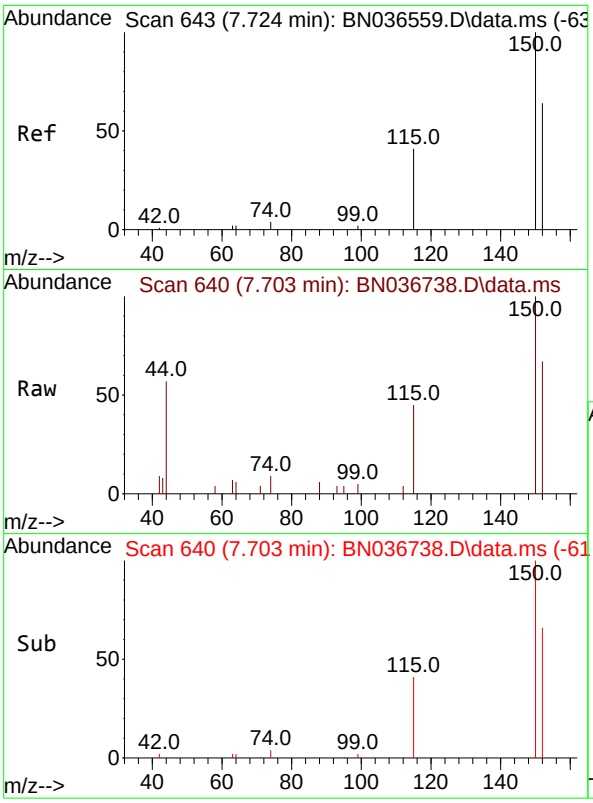
Quant Time: Mar 27 16:33:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

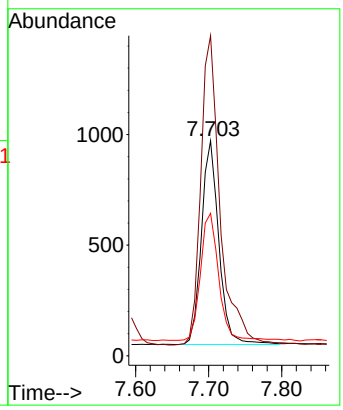





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:152 Resp: 152

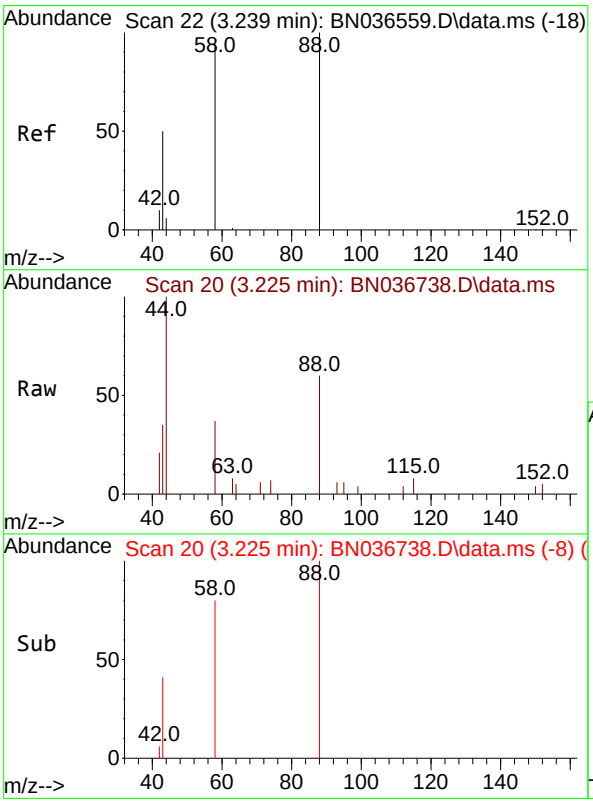
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 148.9 | 123.7 | 185.5 |
| 115 | 66.3 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

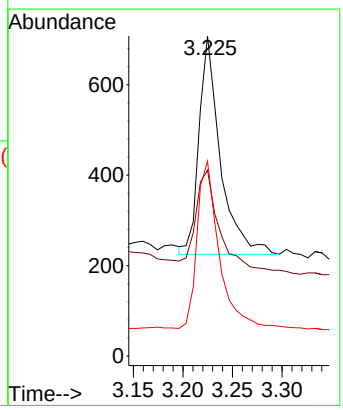
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

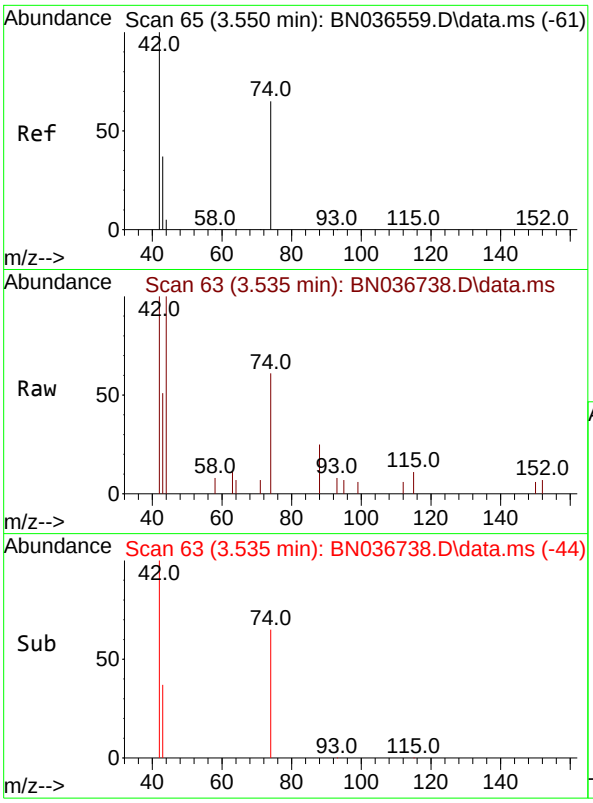



#2
1,4-Dioxane
Concen: 0.427 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 88 Resp: 721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 52.3 | 37.8 | 56.8 |
| 58 | 78.6 | 67.4 | 101.2 |

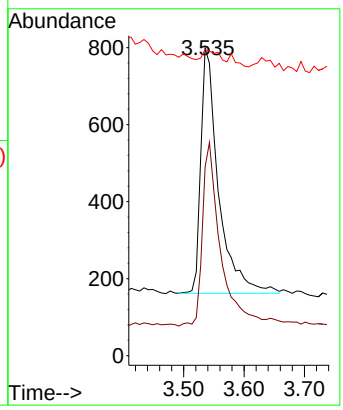





#3
n-Nitrosodimethylamine
Concen: 0.381 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 42 Resp: 130

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 75.9 | 60.6 | 90.8 |
| 44 | 4.1 | 6.3 | 9.5# |




**Instrument :**
BNA_N
**ClientSampleId :**
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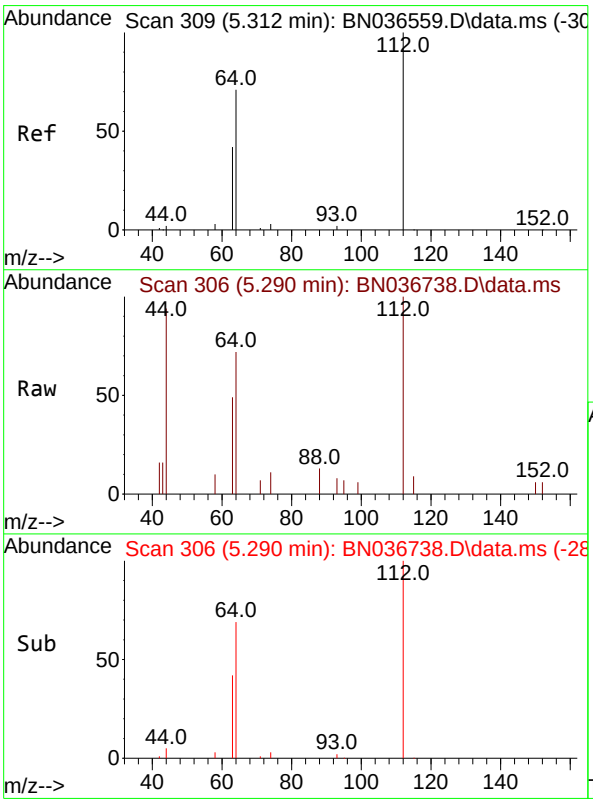
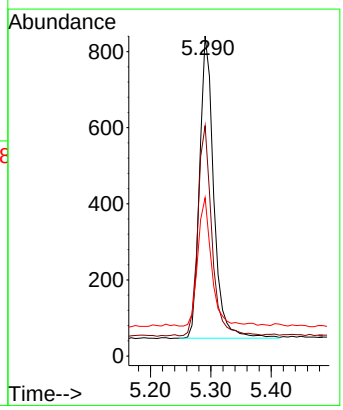
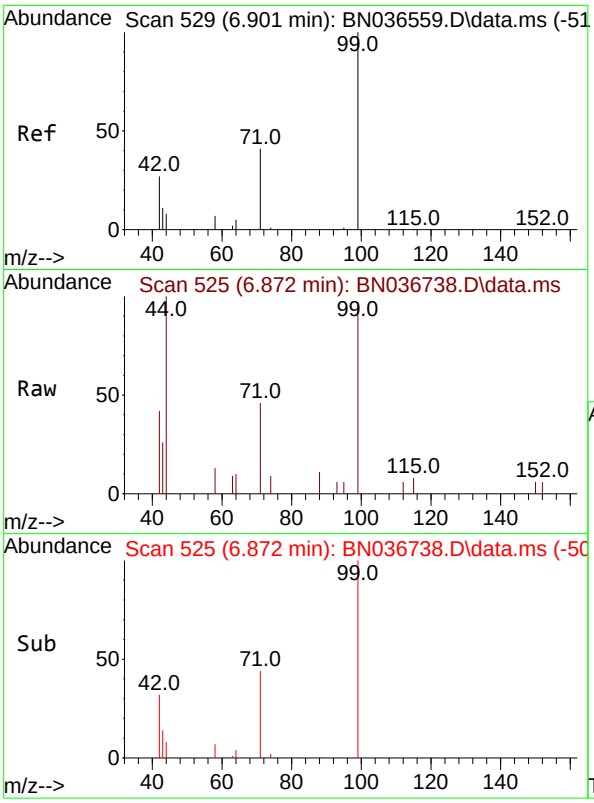



#4
2-Fluorophenol
Concen: 0.365 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:112 Resp: 1294

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.9 | 53.1 | 79.7 |
| 63 | 40.8 | 31.8 | 47.8 |

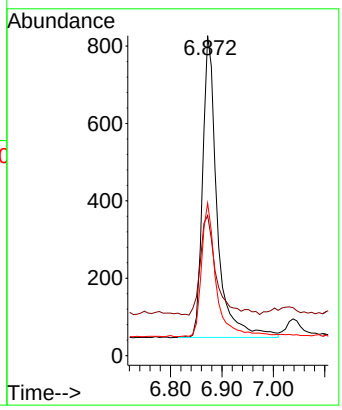





#5
Phenol-d6
Concen: 0.350 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 99 Resp: 153

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.2 | 26.5 | 39.7 |
| 71 | 44.3 | 34.1 | 51.1 |

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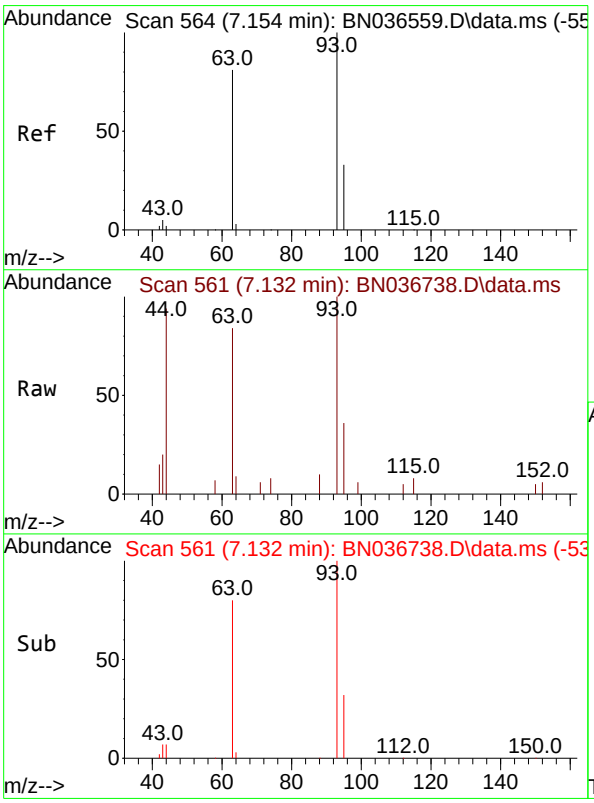
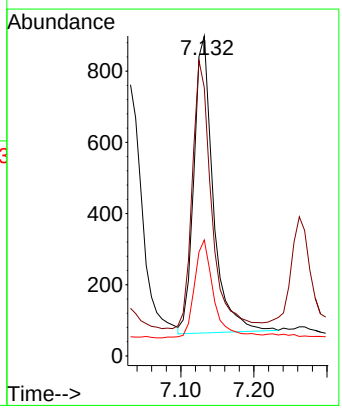
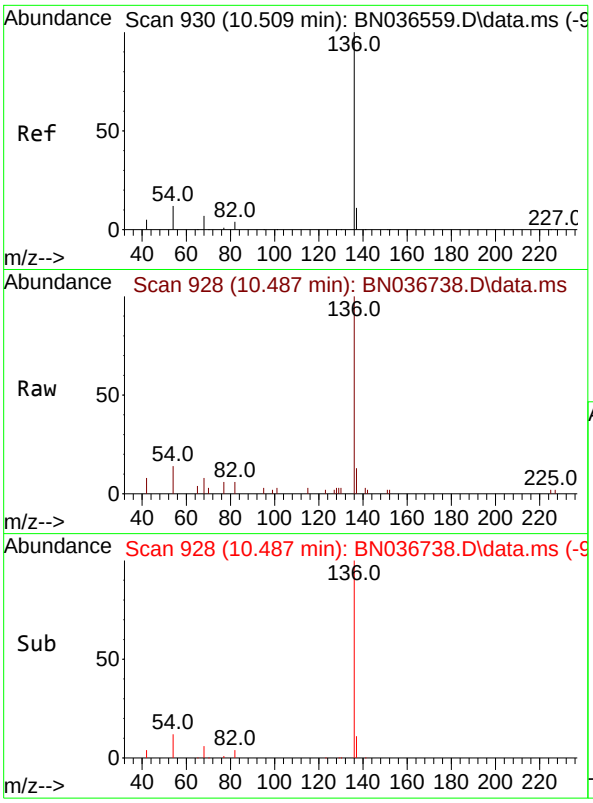



#6
bis(2-Chloroethyl)ether
Concen: 0.338 ng
RT: 7.132 min Scan# 561
Delta R.T. -0.022 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 93 Resp: 1533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 90.0 | 67.7 | 101.5 |
| 95 | 33.1 | 25.6 | 38.4 |

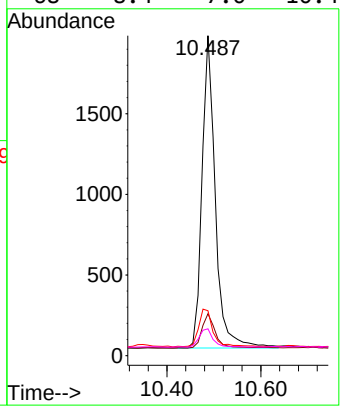





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:136 Resp: 380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 13.1 | 10.3 | 15.5 |
| 54 | 14.0 | 11.5 | 17.3 |
| 68 | 8.4 | 7.0 | 10.4 |




**Instrument :**
BNA_N
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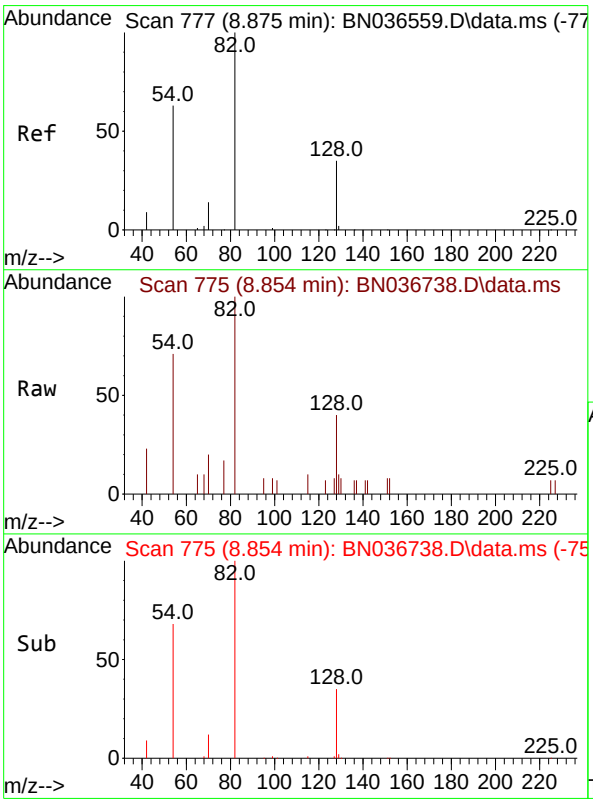
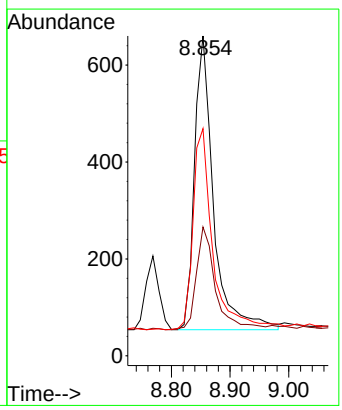
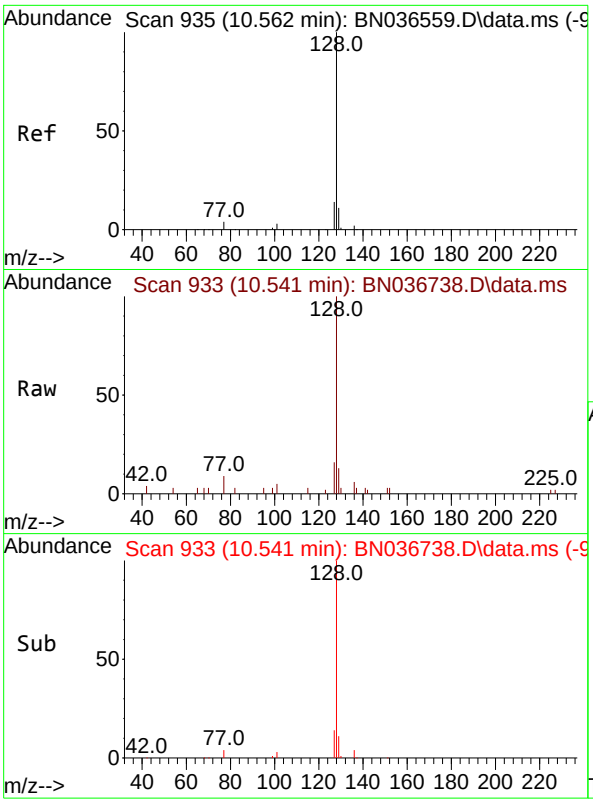



#8
Nitrobenzene-d5
Concen: 0.329 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 82 Resp: 1363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.3 | 30.6 | 45.8 |
| 54 | 71.1 | 52.2 | 78.4 |

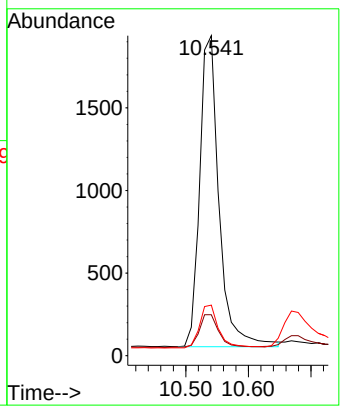





#9
Naphthalene
Concen: 0.362 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:128 Resp: 404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.8 | 9.8 | 14.6 |
| 127 | 15.8 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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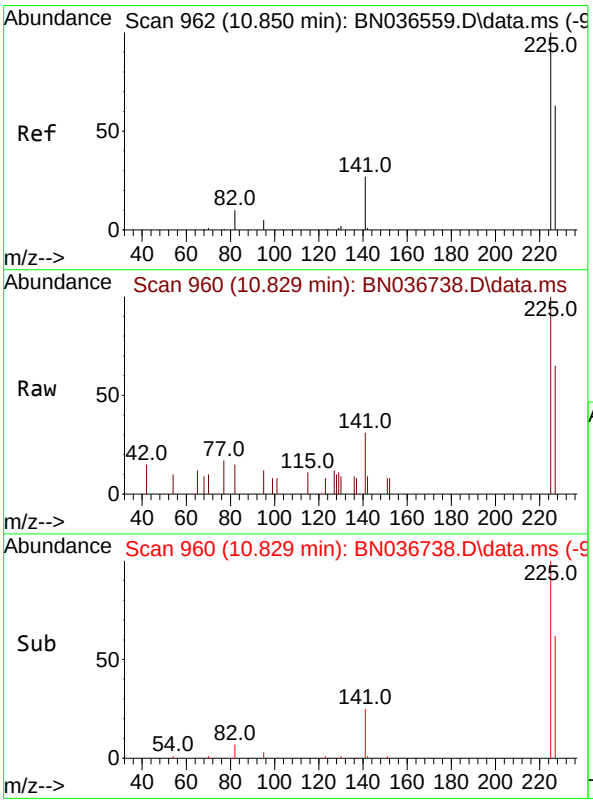
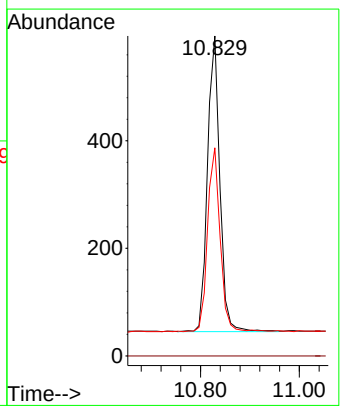
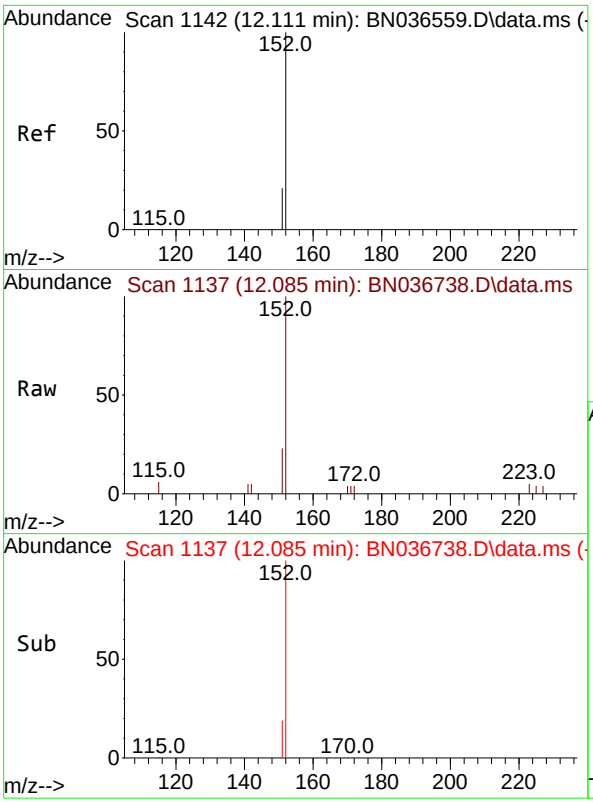



#10
Hexachlorobutadiene
Concen: 0.363 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:225 Resp: 955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.4 | 51.8 | 77.8 |






#11
2-Methylnaphthalene-d10
Concen: 0.360 ng
RT: 12.085 min Scan# 11
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:152 Resp: 203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.9 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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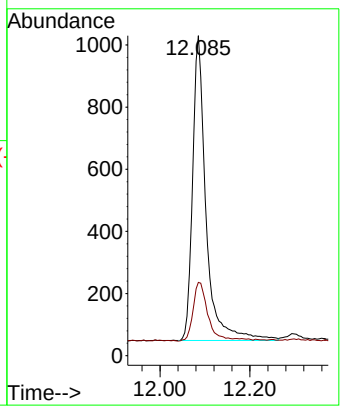
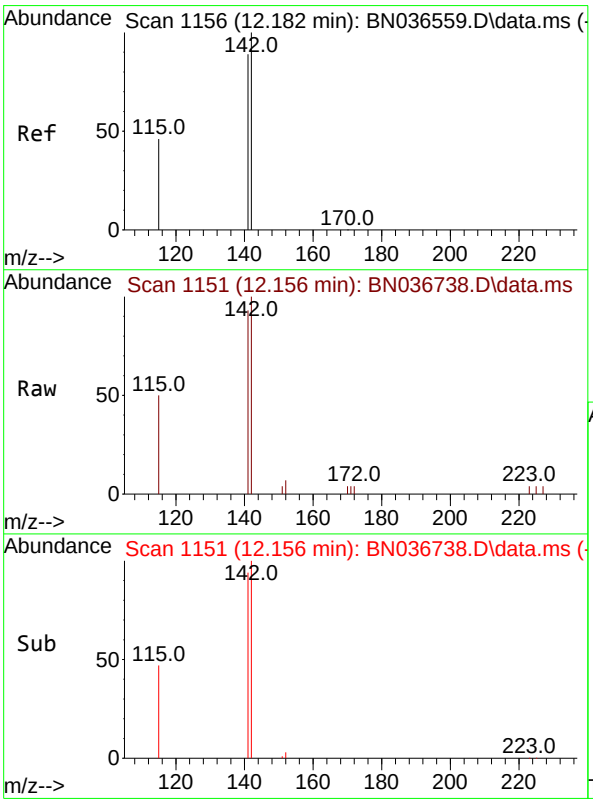
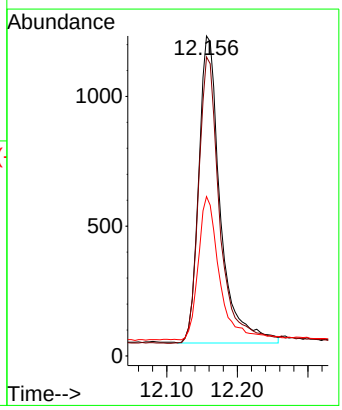


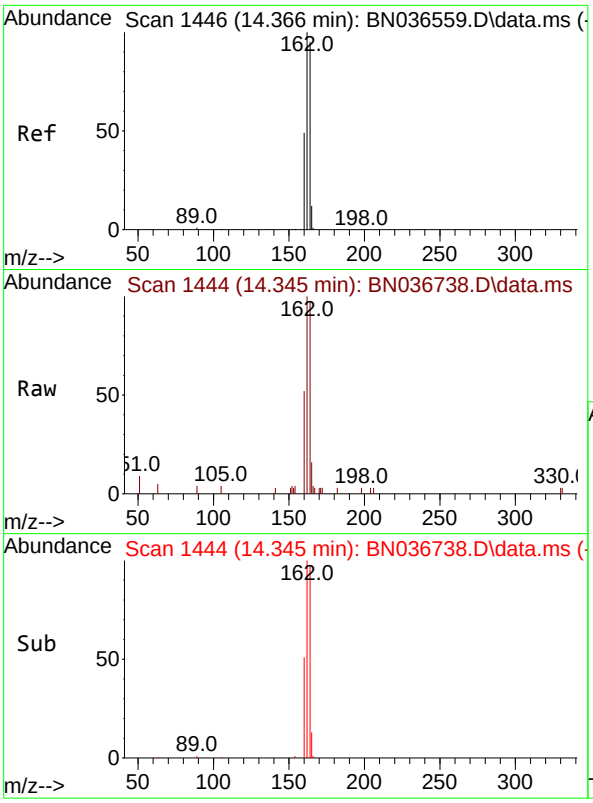




#12
2-Methylnaphthalene
Concen: 0.353 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:142 Resp: 2514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 93.4 | 71.7 | 107.5 |
| 115 | 49.8 | 38.3 | 57.5 |

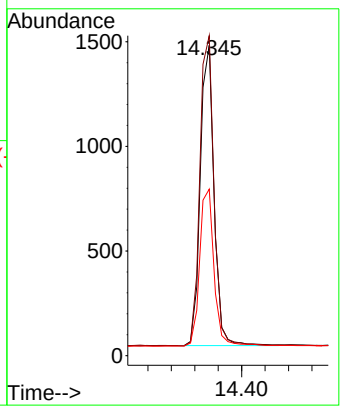





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:164 Resp: 234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 103.1 | 84.2 | 126.2 |
| 160 | 53.7 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
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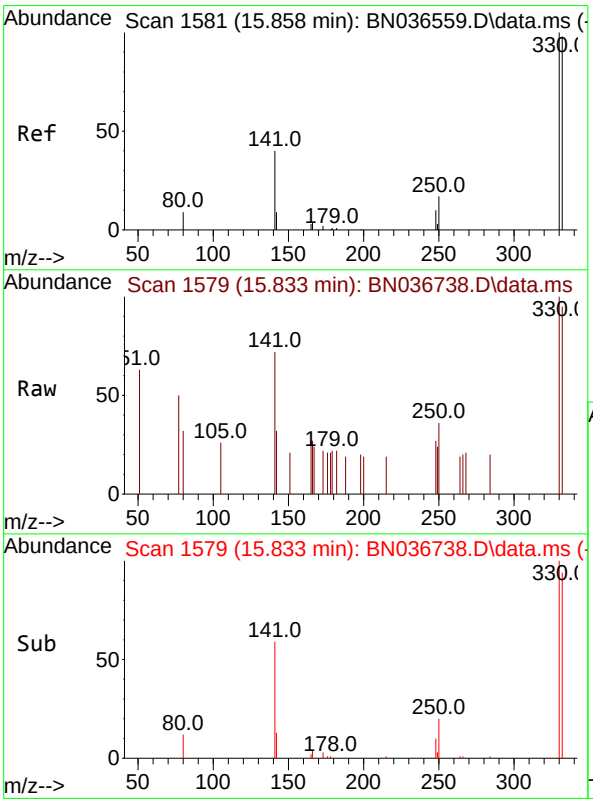
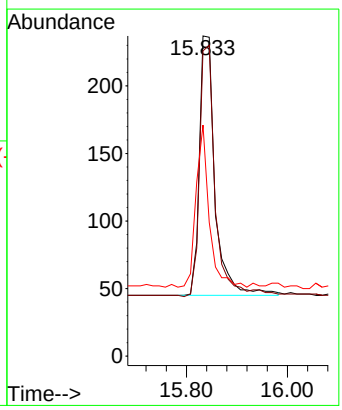
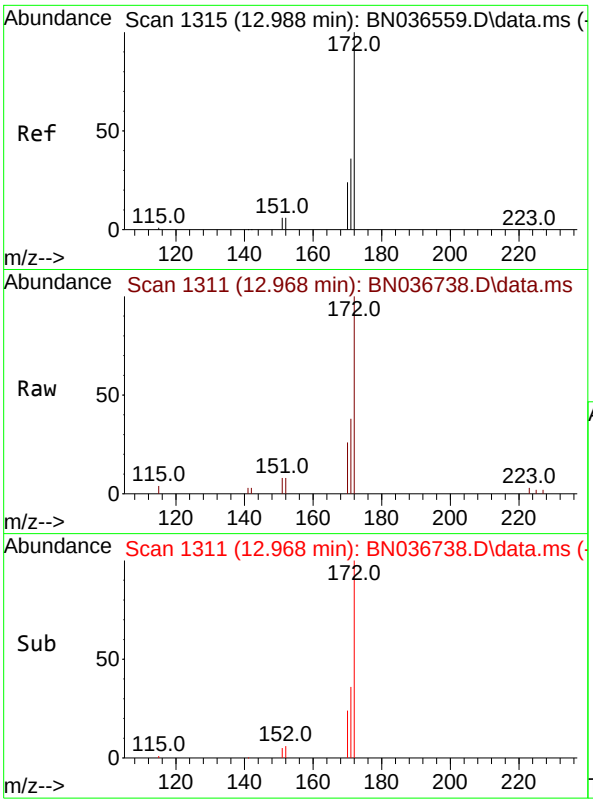



#14
2,4,6-Tribromophenol
Concen: 0.389 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:330 Resp: 414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 97.6 | 75.2 | 112.8 |
| 141 | 52.7 | 43.4 | 65.2 |

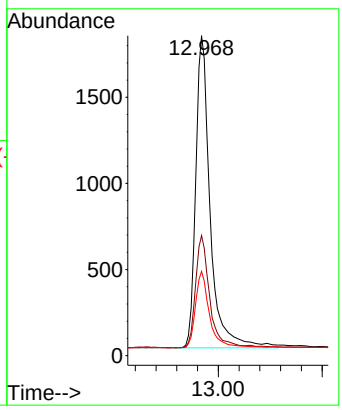





#15
2-Fluorobiphenyl
Concen: 0.346 ng
RT: 12.968 min Scan# 1
Delta R.T. -0.020 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:172 Resp: 472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.6 | 29.5 | 44.3 |
| 170 | 26.3 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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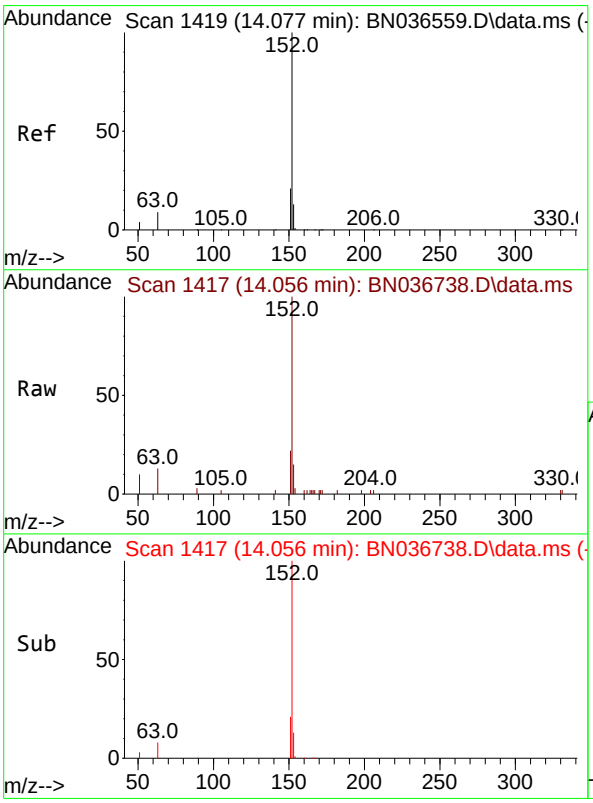
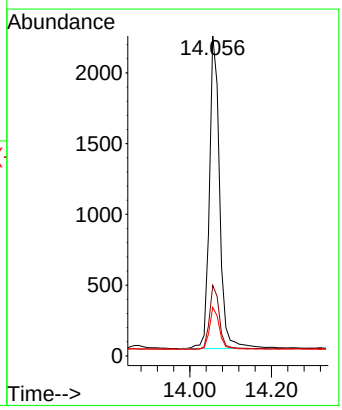
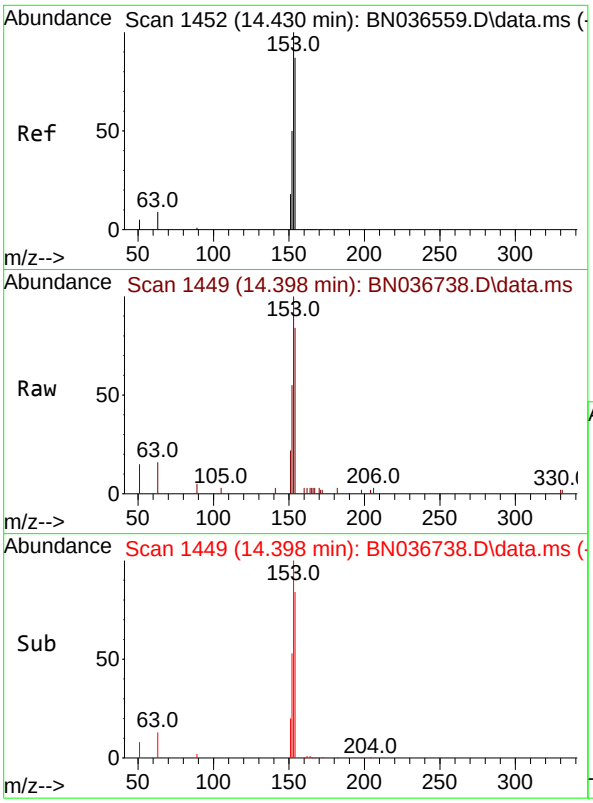



#16
Acenaphthylene
Concen: 0.348 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:152 Resp: 3861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.0 | 16.2 | 24.4 |
| 153 | 13.1 | 10.6 | 15.8 |

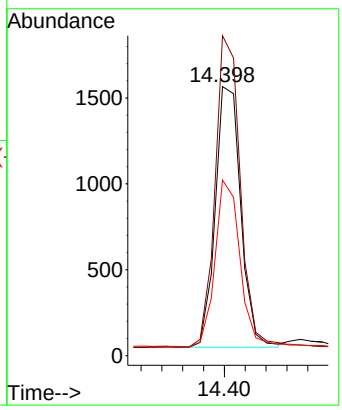





#17
Acenaphthene
Concen: 0.356 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:154 Resp: 258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 119.8 | 94.1 | 141.1 |
| 152 | 62.5 | 49.8 | 74.6 |

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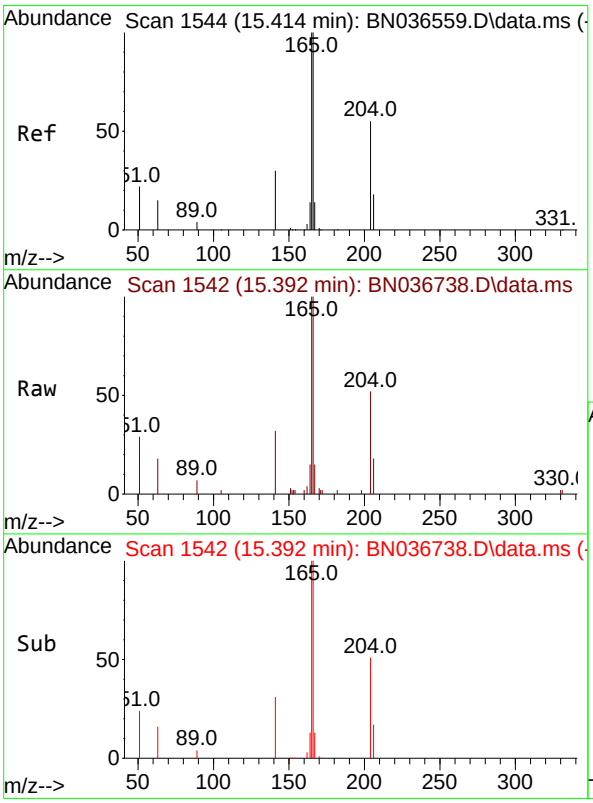
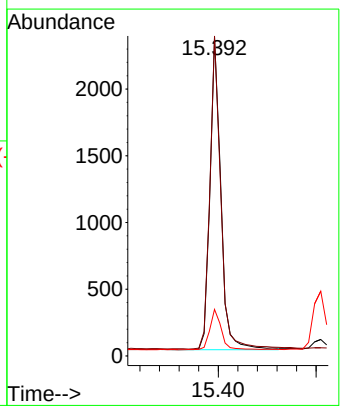
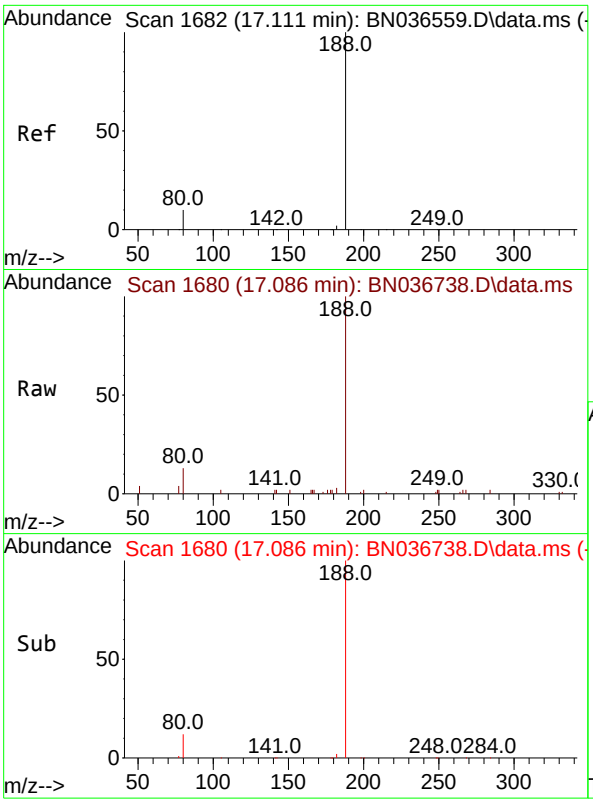



#18
Fluorene
Concen: 0.370 ng
RT: 15.392 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:166 Resp: 3631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.9 | 79.8 | 119.8 |
| 167 | 13.7 | 10.6 | 15.8 |

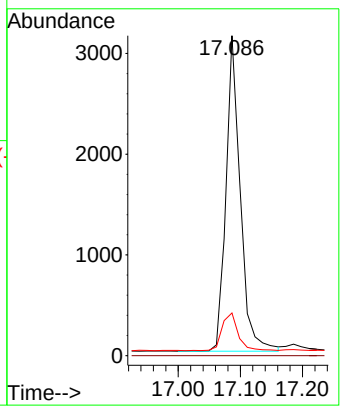





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:188 Resp: 498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 13.4 | 8.8 | 13.2# |

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BNA_N
**ClientSampleId :**
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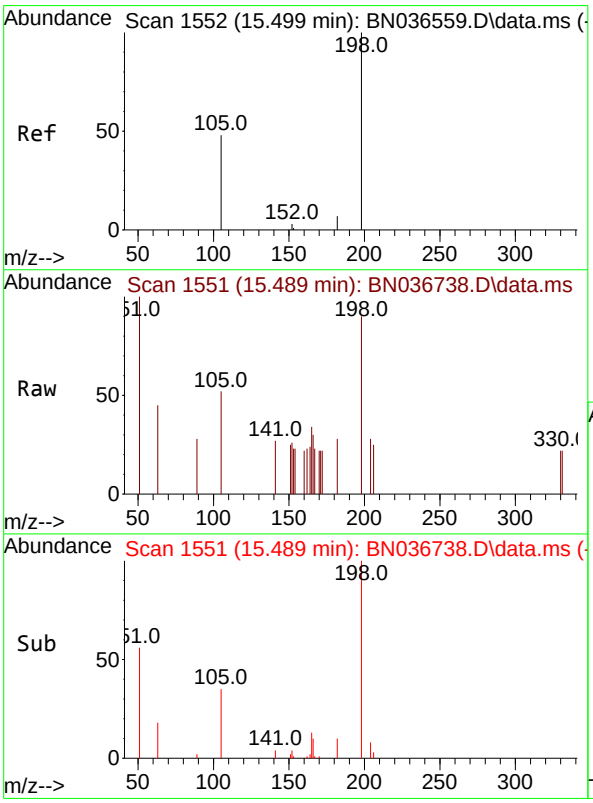
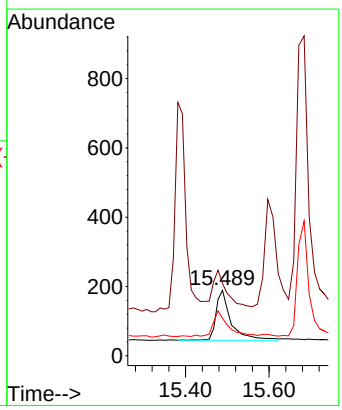
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

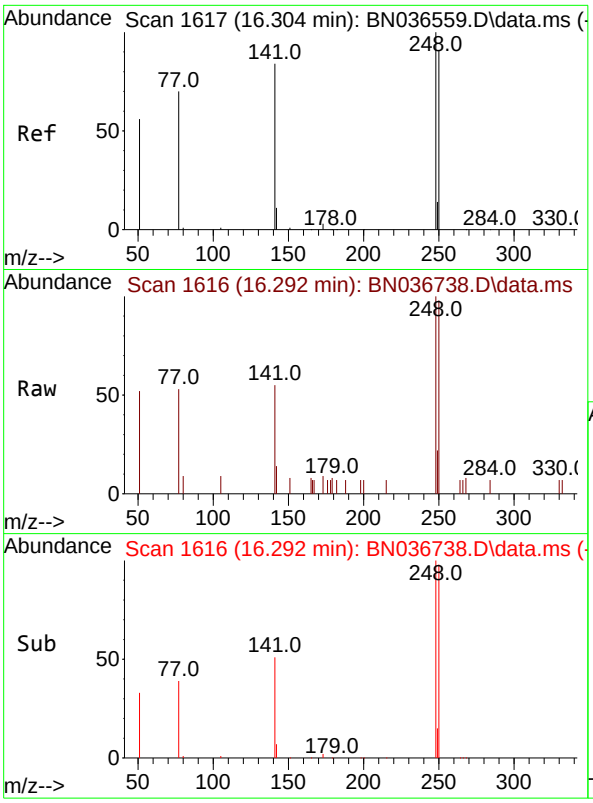



#20
4,6-Dinitro-2-methylphenol
Concen: 0.436 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:198 Resp: 370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 110.6 | 107.9 | 161.9 |
| 105 | 57.1 | 56.2 | 84.2 |

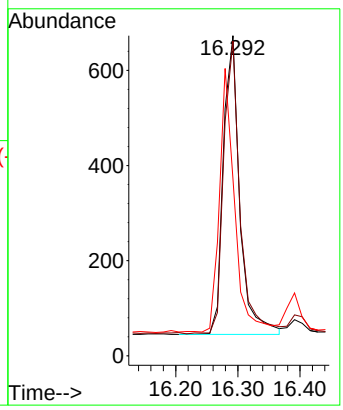





#21
4-Bromophenyl-phenylether
Concen: 0.367 ng
RT: 16.292 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:248 Resp: 114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 98.4 | 73.0 | 109.6 |
| 141 | 55.3 | 68.6 | 103.0# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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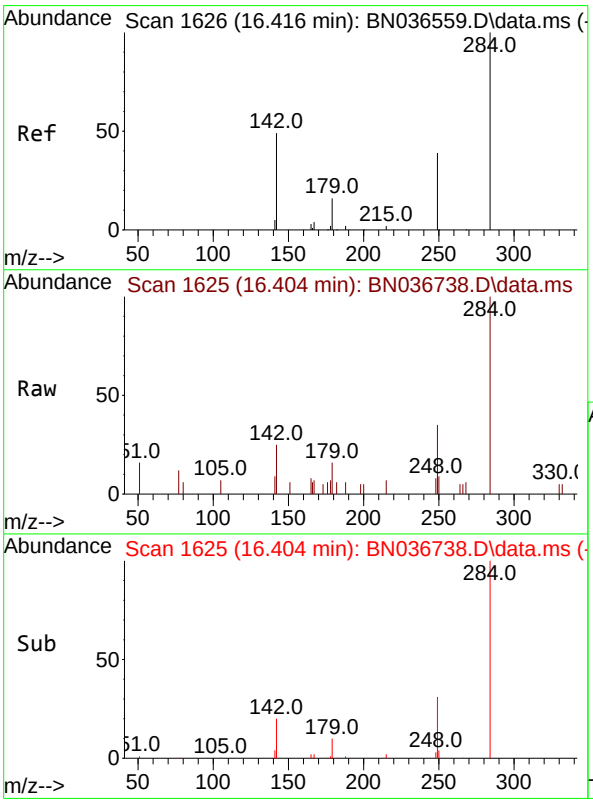
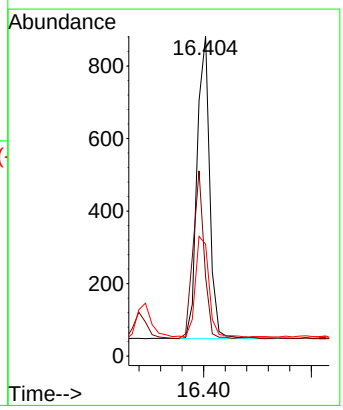
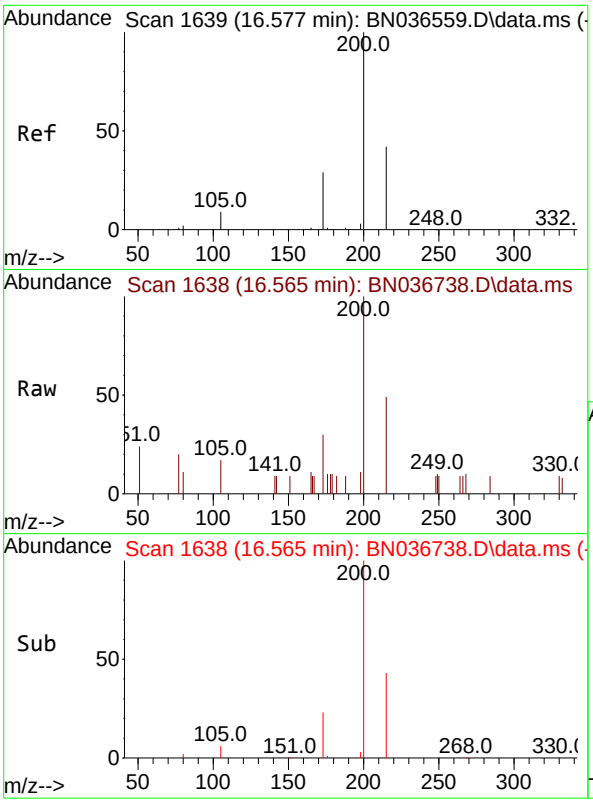



#22
Hexachlorobenzene
Concen: 0.360 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.012 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:284 Resp: 1358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 48.9 | 37.0 | 55.4 |
| 249 | 36.3 | 28.1 | 42.1 |

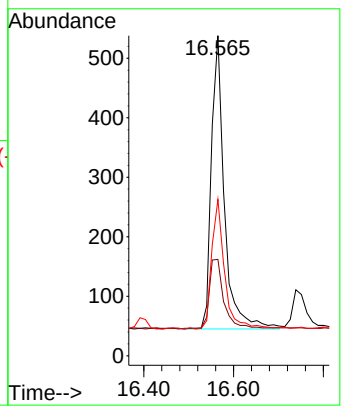





#23
Atrazine
Concen: 0.395 ng
RT: 16.565 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:200 Resp: 99

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 30.1 | 27.3 | 40.9 |
| 215 | 48.9 | 36.8 | 55.2 |

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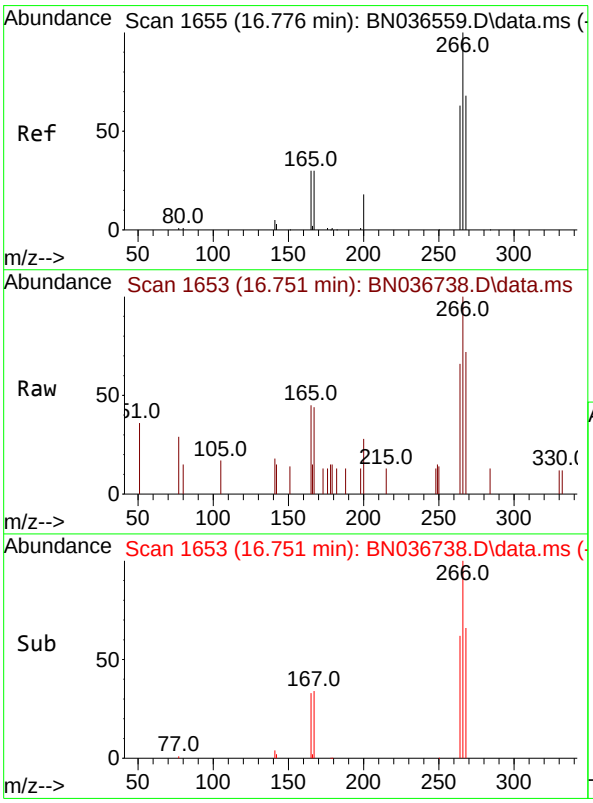
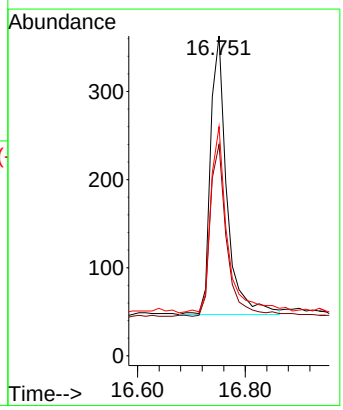
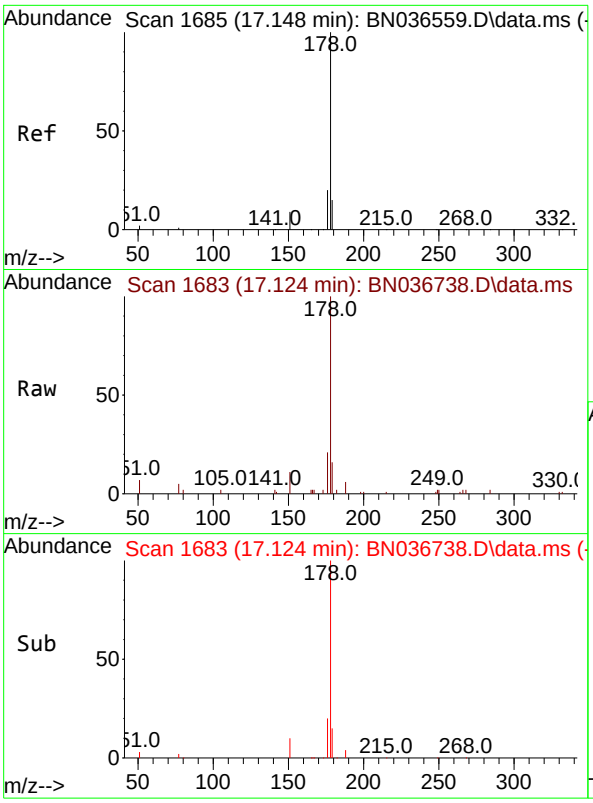



#24
Pentachlorophenol
Concen: 0.385 ng
RT: 16.751 min Scan# 1653
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:266 Resp: 662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.6 | 49.6 | 74.4 |
| 268 | 69.5 | 50.9 | 76.3 |

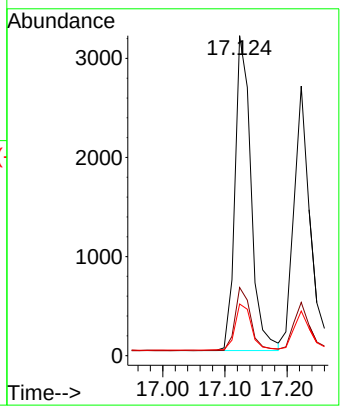





#25
Phenanthrene
Concen: 0.381 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:178 Resp: 570

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |




**Instrument :**
BNA_N
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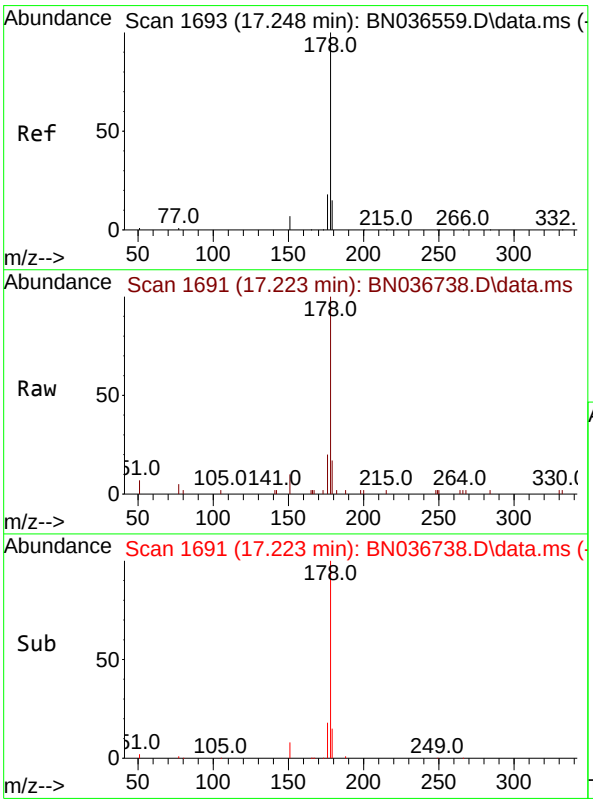
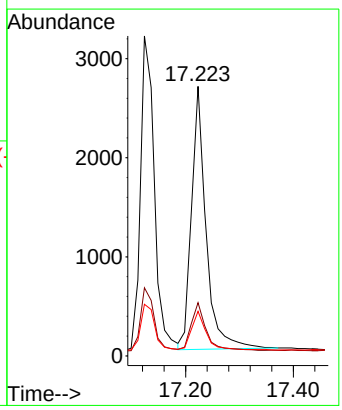
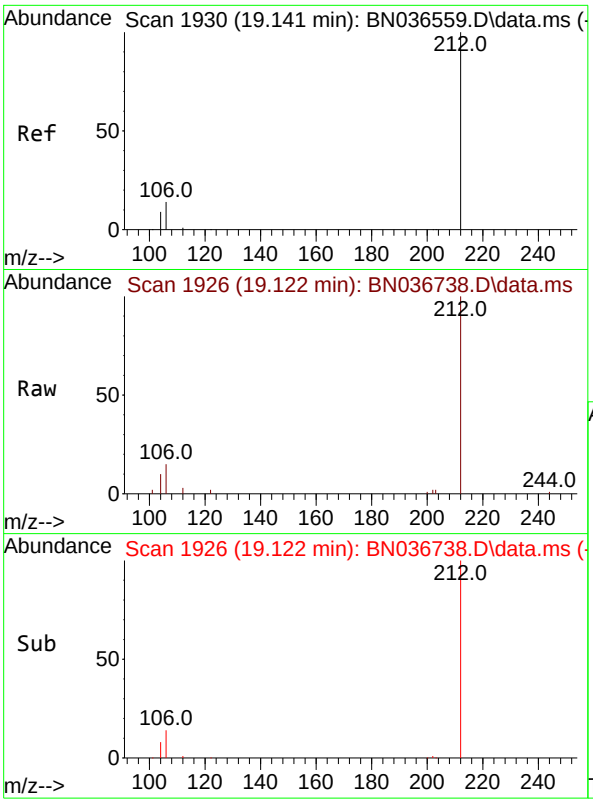



#26
Anthracene
Concen: 0.369 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:178 Resp: 4989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.6 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |

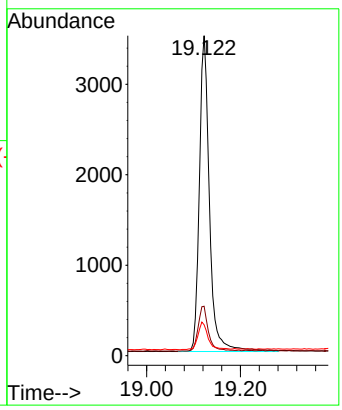





#27
Fluoranthene-d10
Concen: 0.408 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.019 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:212 Resp: 522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.4 | 11.8 | 17.6 |
| 104 | 8.9 | 7.3 | 10.9 |




**Instrument :**
BNA_N
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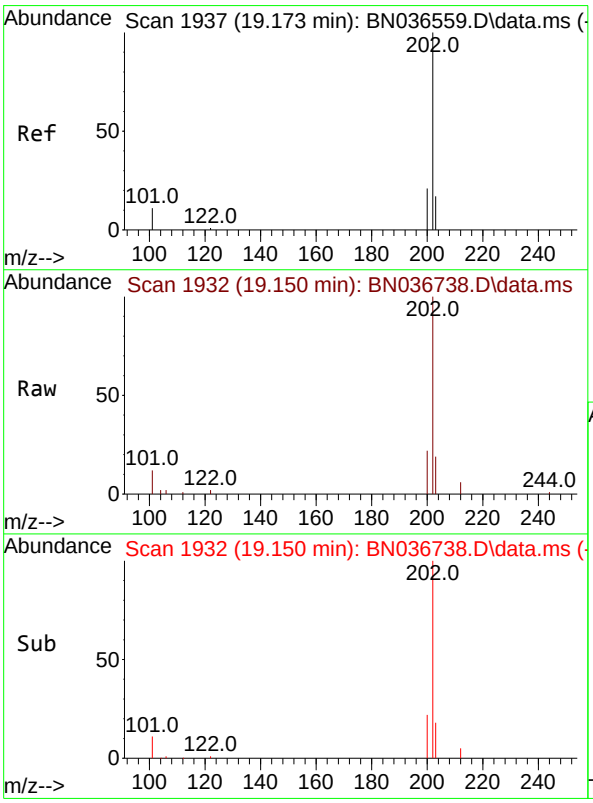
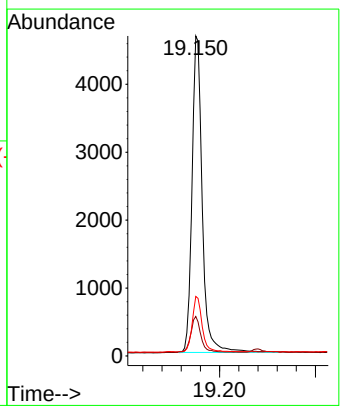
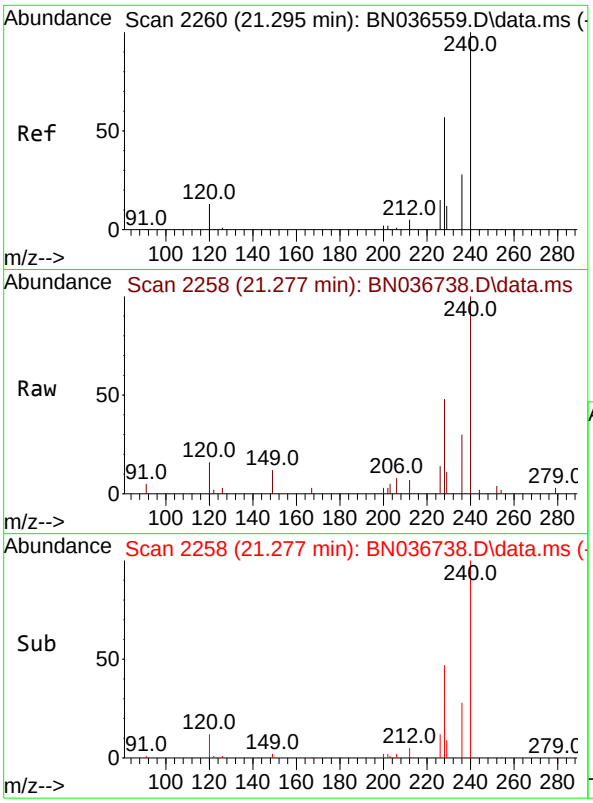



#28
Fluoranthene
Concen: 0.414 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:202 Resp: 6959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.2 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |

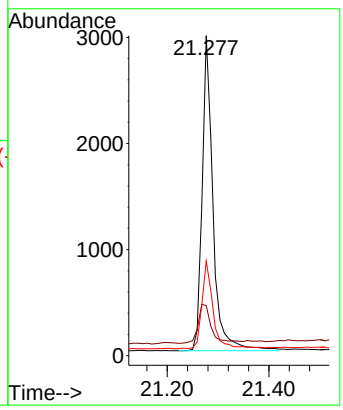





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:240 Resp: 438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 15.7 | 14.6 | 22.0 |
| 236 | 29.5 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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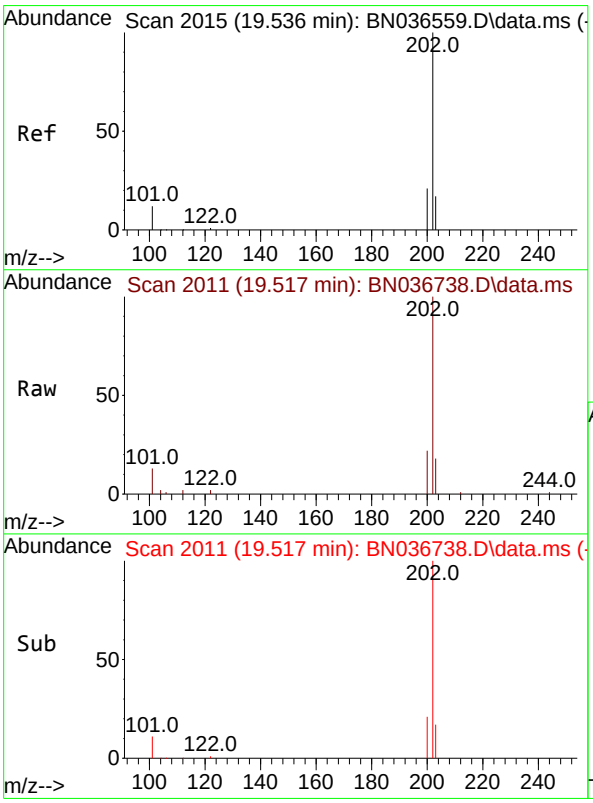
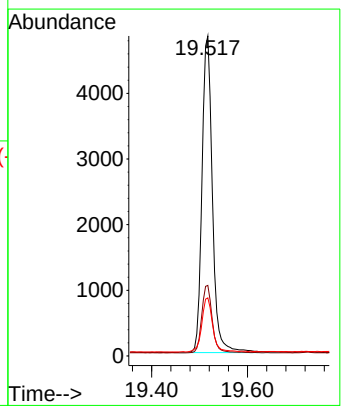
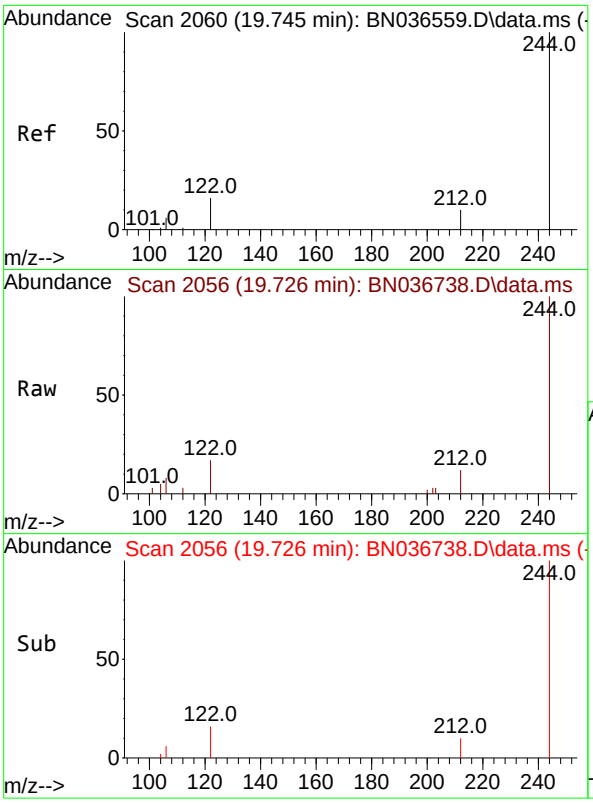



#30
Pyrene
Concen: 0.341 ng
RT: 19.517 min Scan# 2011
Delta R.T. -0.019 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:202 Resp: 7305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.8 | 14.1 | 21.1 |

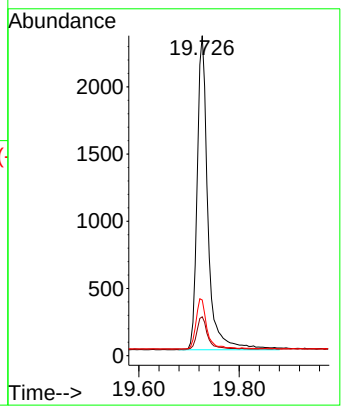





#31
Terphenyl-d14
Concen: 0.330 ng
RT: 19.726 min Scan# 2
Delta R.T. -0.019 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:244 Resp: 346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.2 | 9.6 | 14.4 |
| 122 | 17.4 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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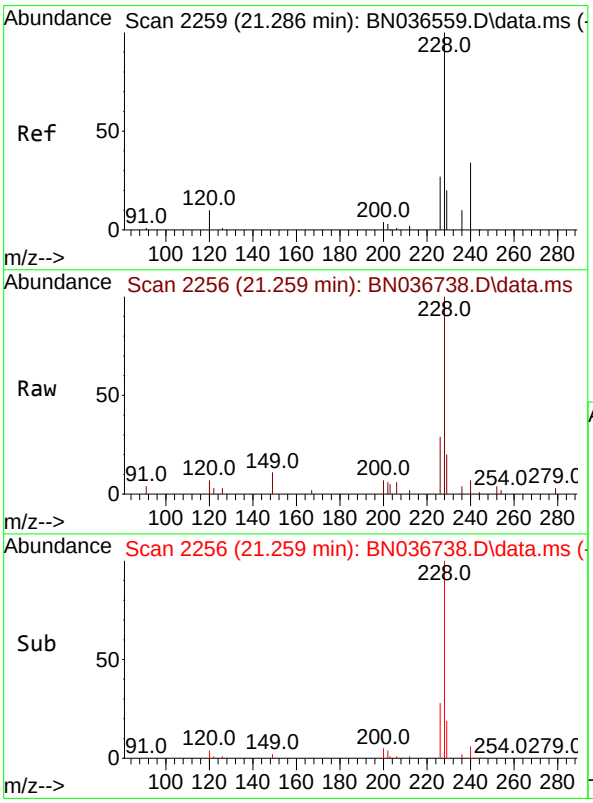
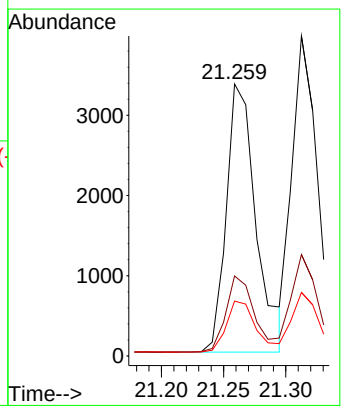
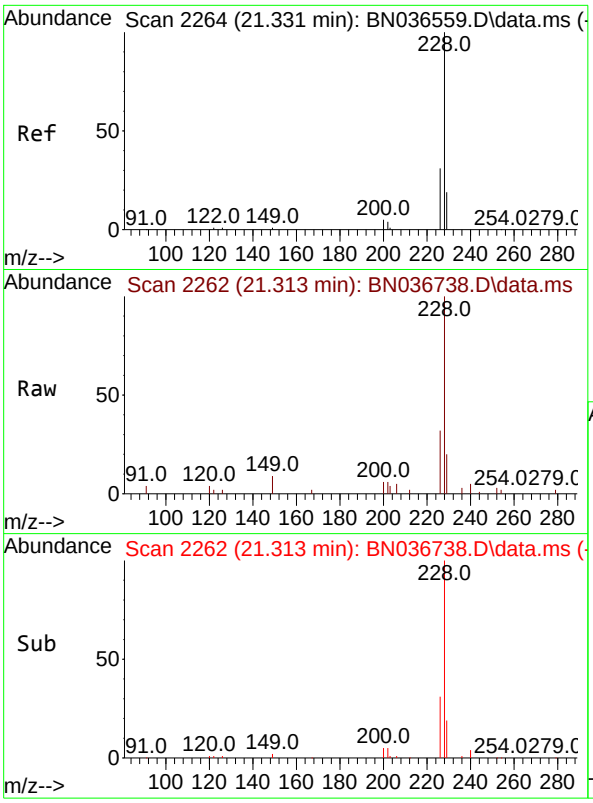



#32
Benzo(a)anthracene
Concen: 0.365 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:228 Resp: 5558

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.4 | 22.5 | 33.7 |
| 229 | 20.2 | 16.6 | 25.0 |






#33
Chrysene
Concen: 0.370 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:228 Resp: 616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.7 | 25.3 | 37.9 |
| 229 | 19.8 | 15.8 | 23.8 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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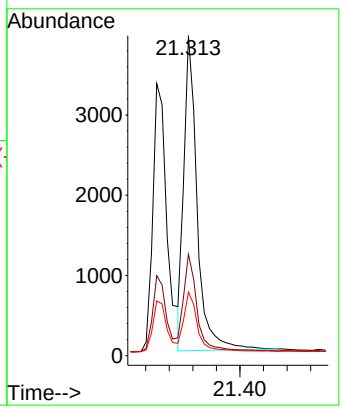
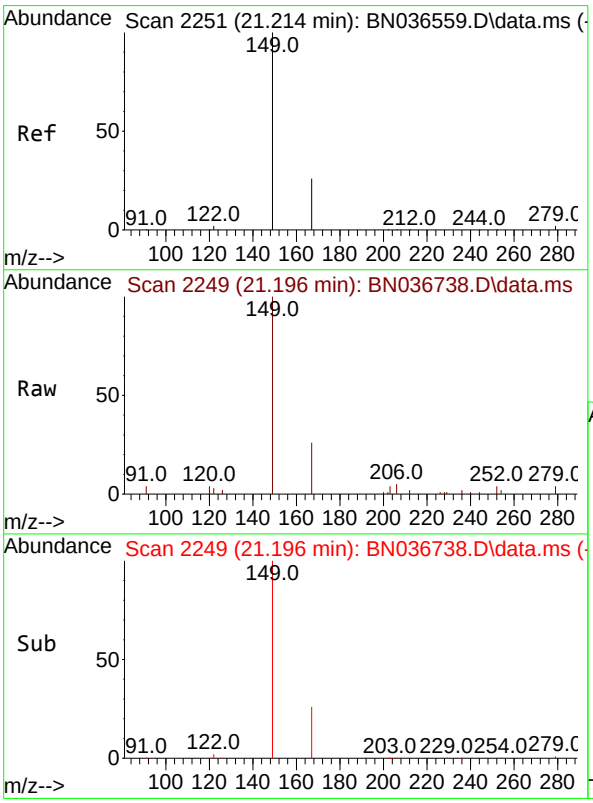
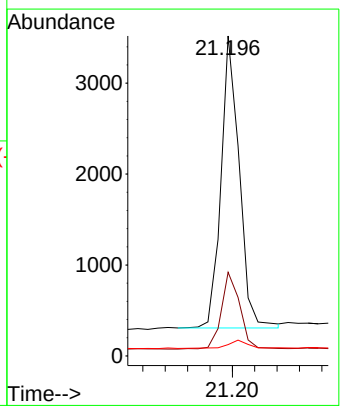


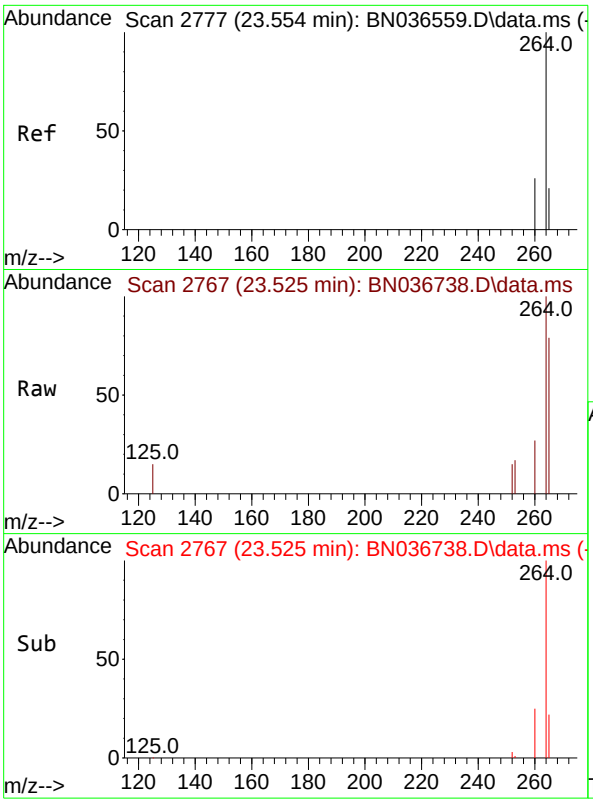




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.335 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:149 Resp: 3633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.6 | 20.7 | 31.1 |
| 279 | 3.2 | 3.6 | 5.4# |

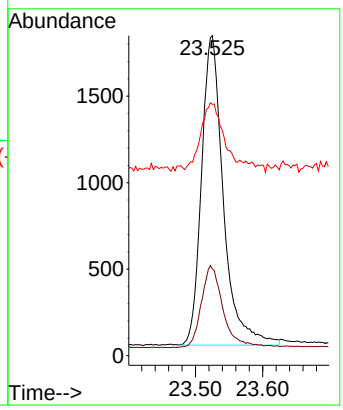





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:264 Resp: 404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.1 | 22.6 | 33.8 |
| 265 | 78.5 | 88.1 | 132.1# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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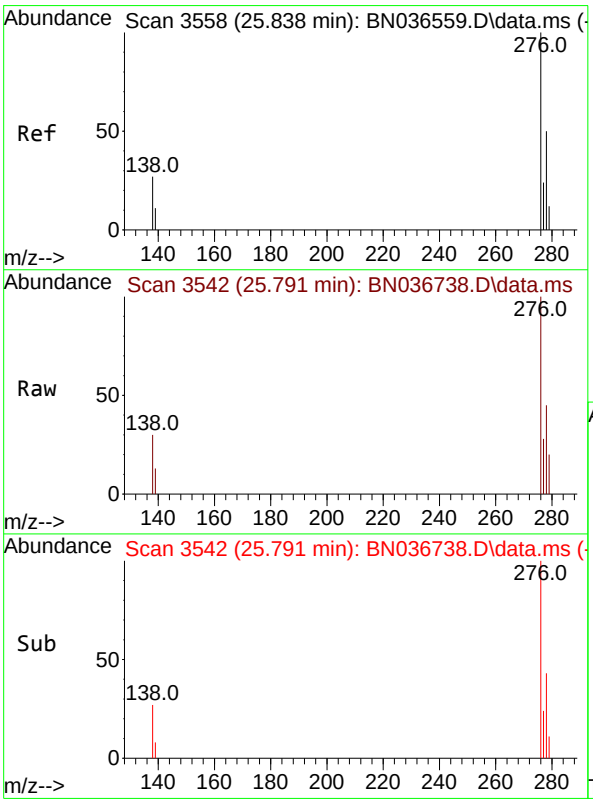
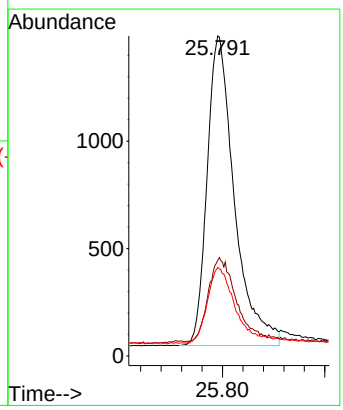
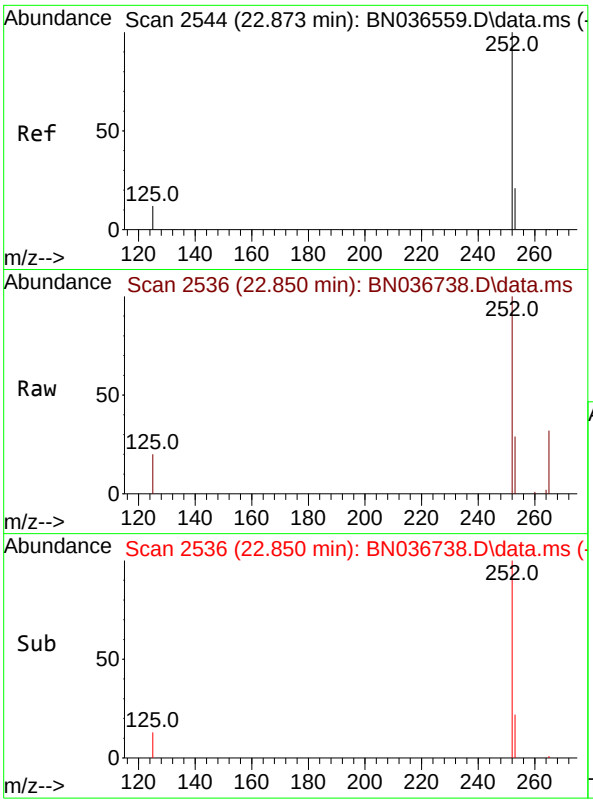



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.366 ng
RT: 25.791 min Scan# 3542
Delta R.T. -0.047 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:276 Resp: 5346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.7 | 23.4 | 35.2 |
| 277 | 24.9 | 20.0 | 30.0 |

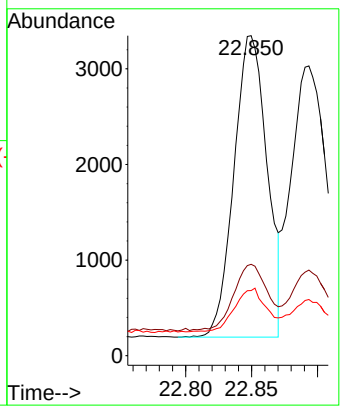





#37
Benzo(b)fluoranthene
Concen: 0.374 ng
RT: 22.850 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:252 Resp: 550

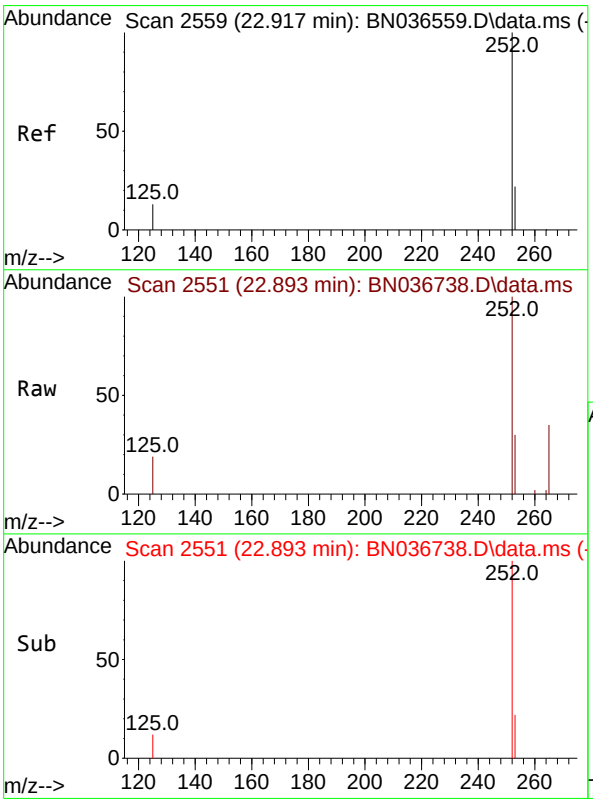
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.6 | 23.9 | 35.9 |
| 125 | 20.3 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

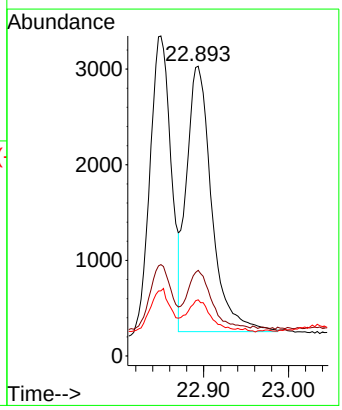
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

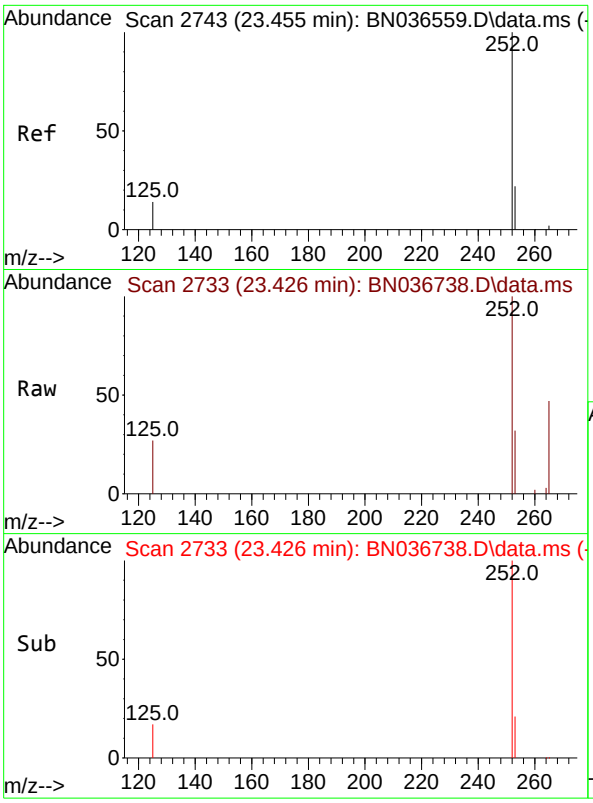



#38
Benzo(k)fluoranthene
Concen: 0.371 ng m
RT: 22.893 min Scan# 2551
Delta R.T. -0.023 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:252 Resp: 5730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.6 | 24.6 | 36.8 |
| 125 | 19.4 | 17.8 | 26.8 |

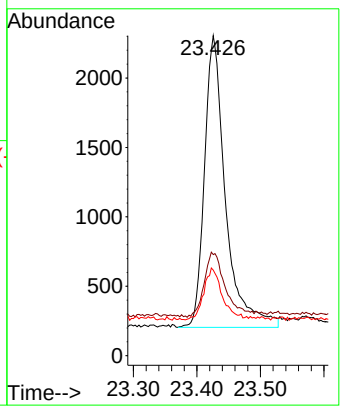





#39
Benzo(a)pyrene
Concen: 0.391 ng
RT: 23.426 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:252 Resp: 484

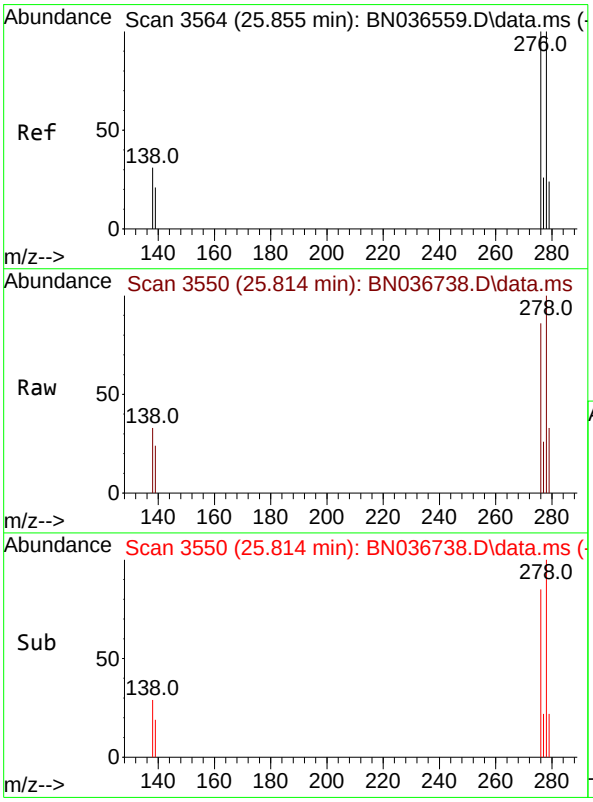
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 31.6 | 27.8 | 41.8 |
| 125 | 26.8 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

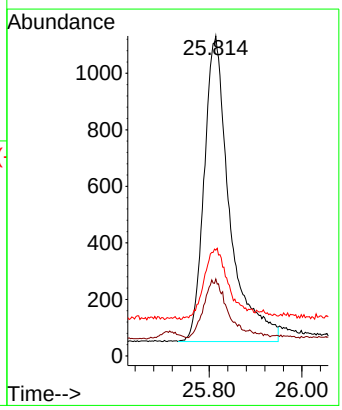
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

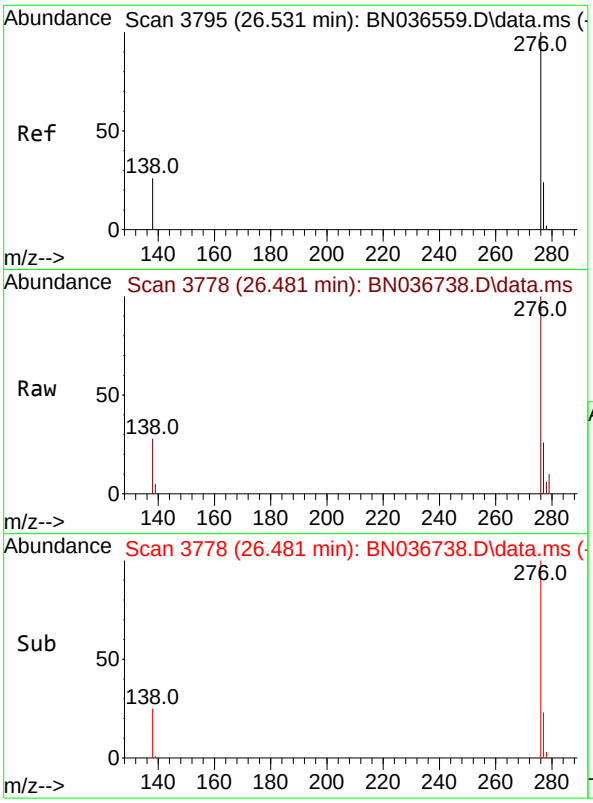



#40
Dibenzo(a,h)anthracene
Concen: 0.362 ng
RT: 25.814 min Scan# 3550
Delta R.T. -0.041 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:278 Resp: 4114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 24.0 | 20.8 | 31.2 |
| 279 | 33.0 | 28.8 | 43.2 |

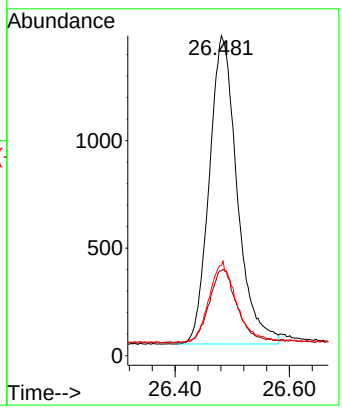





#41
Benzo(g,h,i)perylene
Concen: 0.374 ng
RT: 26.481 min Scan# 3
Delta R.T. -0.050 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:276 Resp: 485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.5 | 22.2 | 33.4 |
| 138 | 28.2 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036738.D
Acq On : 27 Mar 2025 15:38
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 16:33:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 69 | -0.02 |
| 2 | | 1,4-Dioxane | 0.444 | 0.473 | -6.5 | 66 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.854 | 4.9 | 63 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.850 | 8.8 | 59 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 1.009 | 12.4 | 62 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.007 | 15.4 | 59 | -0.02 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 75 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.358 | 17.7 | 65 | -0.02 |
| 9 | | Naphthalene | 1.177 | 1.064 | 9.6 | 66 | -0.02 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.251 | 9.4 | 64 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.535 | 10.1 | 66 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.661 | 11.7 | 65 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 78 | -0.02 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.176 | 3.3 | 73 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 2.012 | 13.5 | 65 | -0.02 |
| 16 | | Acenaphthylene | 1.888 | 1.644 | 12.9 | 66 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.100 | 11.0 | 67 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.546 | 7.5 | 68 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 83 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.074 | 14.0 | 80 | -0.01 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.230 | 8.4 | 70 | -0.01 |
| 22 | | Hexachlorobenzene | 0.303 | 0.272 | 10.2 | 67 | -0.01 |
| 23 | | Atrazine | 0.201 | 0.199 | 1.0 | 77 | -0.01 |
| 24 | | Pentachlorophenol | 0.138 | 0.133 | 3.6 | 81 | -0.02 |
| 25 | | Phenanthrene | 1.200 | 1.143 | 4.7 | 73 | -0.02 |
| 26 | | Anthracene | 1.083 | 1.000 | 7.7 | 72 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.046 | -2.0 | 78 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.395 | -3.5 | 80 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 107 | -0.02 |
| 30 | | Pyrene | 1.956 | 1.666 | 14.8 | 83 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.790 | 17.5 | 82 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.268 | 8.8 | 94 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.405 | 7.6 | 93 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.829 | 16.3 | 85 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 114 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.322 | 8.4 | 98 | -0.05 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.362 | 6.5 | 101 | -0.02 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.417 | 7.2 | 100 | -0.02 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.197 | 2.4 | 105 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 1.017 | 9.5 | 100 | -0.04 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.201 | 6.6 | 99 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036738.D
Acq On : 27 Mar 2025 15:38
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 16:33:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 69 | -0.02 |
| 2 | | 1,4-Dioxane | 0.400 | 0.427 | -6.7 | 66 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.381 | 4.8 | 63 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.365 | 8.8 | 59 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.350 | 12.5 | 62 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.338 | 15.5 | 59 | -0.02 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 75 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.329 | 17.8 | 65 | -0.02 |
| 9 | | Naphthalene | 0.400 | 0.362 | 9.5 | 66 | -0.02 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.363 | 9.3 | 64 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.360 | 10.0 | 66 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.353 | 11.8 | 65 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 78 | -0.02 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.389 | 2.8 | 73 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.346 | 13.5 | 65 | -0.02 |
| 16 | | Acenaphthylene | 0.400 | 0.348 | 13.0 | 66 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.356 | 11.0 | 67 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.370 | 7.5 | 68 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 83 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.436 | -9.0 | 80 | -0.01 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.367 | 8.3 | 70 | -0.01 |
| 22 | | Hexachlorobenzene | 0.400 | 0.360 | 10.0 | 67 | -0.01 |
| 23 | | Atrazine | 0.400 | 0.395 | 1.3 | 77 | -0.01 |
| 24 | | Pentachlorophenol | 0.400 | 0.385 | 3.8 | 81 | -0.02 |
| 25 | | Phenanthrene | 0.400 | 0.381 | 4.8 | 73 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.369 | 7.8 | 72 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.408 | -2.0 | 78 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.414 | -3.5 | 80 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 107 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.341 | 14.8 | 83 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.330 | 17.5 | 82 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.365 | 8.8 | 94 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.370 | 7.5 | 93 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.335 | 16.3 | 85 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 114 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.366 | 8.5 | 98 | -0.05 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.374 | 6.5 | 101 | -0.02 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.371 | 7.3 | 100 | -0.02 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.391 | 2.3 | 105 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.362 | 9.5 | 100 | -0.04 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.374 | 6.5 | 99 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 01:52

Lab File ID: BN036755.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.516 | | -13.3 | 50.0 |
| Fluoranthene-d10 | 1.025 | 1.003 | | -2.1 | 50.0 |
| 2-Fluorophenol | 0.932 | 0.839 | | -10.0 | 50.0 |
| Phenol-d6 | 1.152 | 1.005 | | -12.8 | 50.0 |
| Nitrobenzene-d5 | 0.435 | 0.357 | | -17.9 | 50.0 |
| 2-Fluorobiphenyl | 2.327 | 1.853 | | -20.4 | 50.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.170 | | -6.6 | 50.0 |
| Terphenyl-d14 | 0.958 | 0.759 | | -20.8 | 50.0 |
| 1,4-Dioxane | 0.444 | 0.464 | | 4.5 | 50.0 |

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036755.D
Acq On : 28 Mar 2025 01:52
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 28 05:36:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1902 | 0.400 | ng | | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 4724 | 0.400 | ng | | #-0.02 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 3073 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 6417 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 5861 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.519 | 264 | 5647 | 0.400 | ng | | #-0.03 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.291 | 112 | 1596 | 0.360 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1912 | 0.349 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1688 | 0.328 | ng | | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 2439 | 0.347 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 523 | 0.375 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5695 | 0.319 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 6435 | 0.391 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 4447 | 0.317 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 882 | 0.418 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.536 | 42 | 1688 | 0.395 | ng | | 93 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1966 | 0.347 | ng | | 99 |
| 9) Naphthalene | 10.530 | 128 | 4933 | 0.355 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 1194 | 0.365 | ng | # | 100 |
| 12) 2-Methylnaphthalene | 12.157 | 142 | 3191 | 0.361 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 5054 | 0.349 | ng | | 100 |
| 17) Acenaphthene | 14.398 | 154 | 3383 | 0.356 | ng | | 99 |
| 18) Fluorene | 15.393 | 166 | 4678 | 0.364 | ng | | 100 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 489 | 0.444 | ng | | 88 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1456 | 0.362 | ng | | 93 |
| 22) Hexachlorobenzene | 16.404 | 284 | 1743 | 0.359 | ng | | 98 |
| 23) Atrazine | 16.553 | 200 | 1231 | 0.382 | ng | | 96 |
| 24) Pentachlorophenol | 16.739 | 266 | 837 | 0.378 | ng | | 96 |
| 25) Phenanthrene | 17.124 | 178 | 7451 | 0.387 | ng | | 100 |
| 26) Anthracene | 17.223 | 178 | 6503 | 0.374 | ng | | 99 |
| 28) Fluoranthene | 19.150 | 202 | 8702 | 0.402 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 9138 | 0.319 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 7209 | 0.354 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 8619 | 0.387 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 5036 | 0.347 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.785 | 276 | 7554 | 0.371 | ng | | 98 |
| 37) Benzo(b)fluoranthene | 22.847 | 252 | 7851 | 0.382 | ng | | 97 |
| 38) Benzo(k)fluoranthene | 22.888 | 252 | 8148m | 0.378 | ng | | |
| 39) Benzo(a)pyrene | 23.420 | 252 | 6760 | 0.391 | ng | | 95 |
| 40) Dibenzo(a,h)anthracene | 25.806 | 278 | 5864 | 0.370 | ng | | 90 |
| 41) Benzo(g,h,i)perylene | 26.475 | 276 | 6890m | 0.380 | ng | | |

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

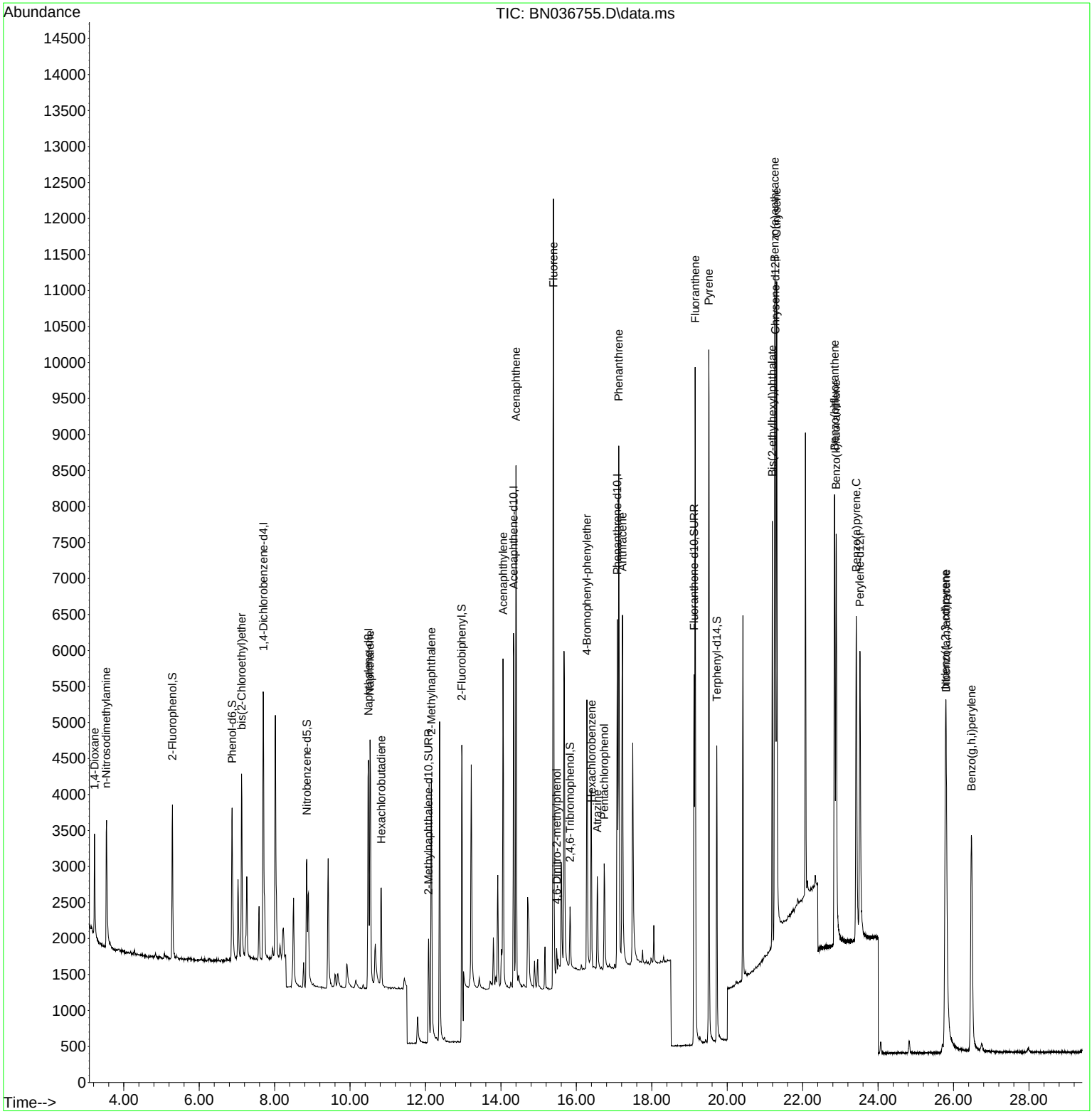
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036755.D
Acq On : 28 Mar 2025 01:52
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 19 Sample Multiplier: 1

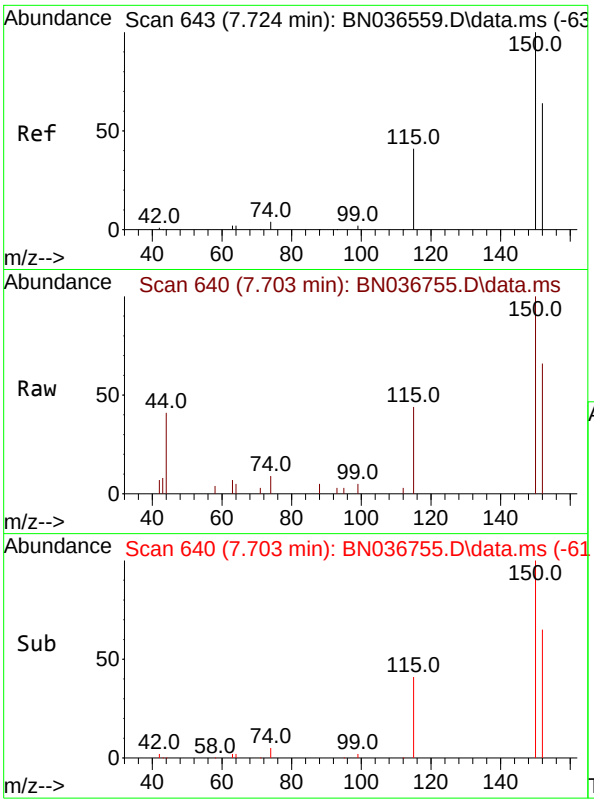
Quant Time: Mar 28 05:36:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

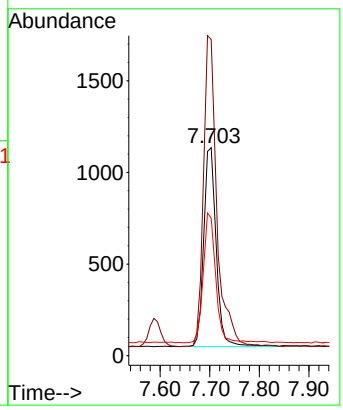





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:152 Resp: 190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.1 | 123.7 | 185.5 |
| 115 | 66.2 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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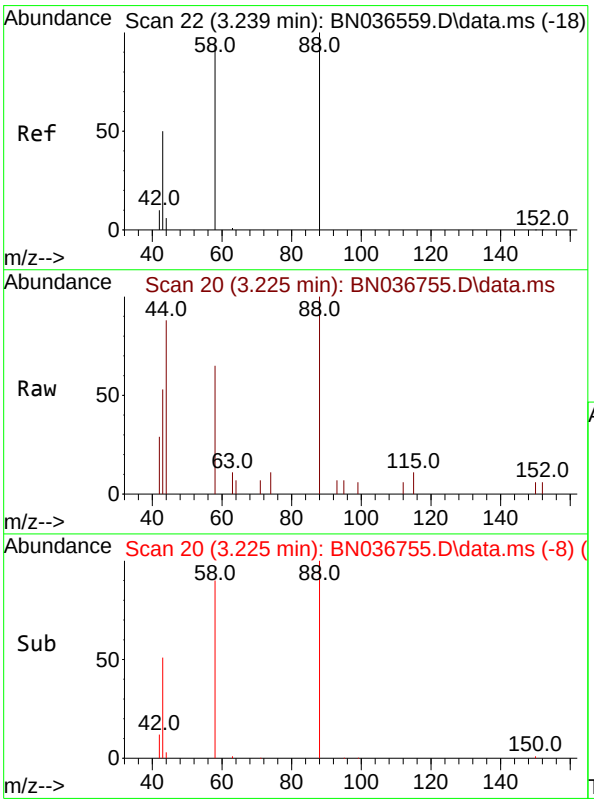
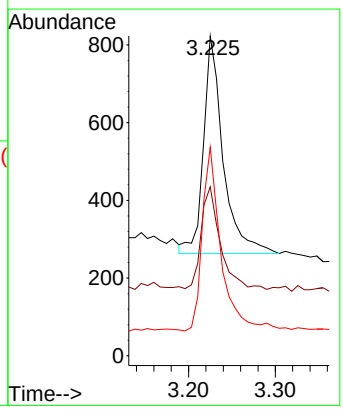
Supervised By :Jagrut Upadhyay 04/01/2025

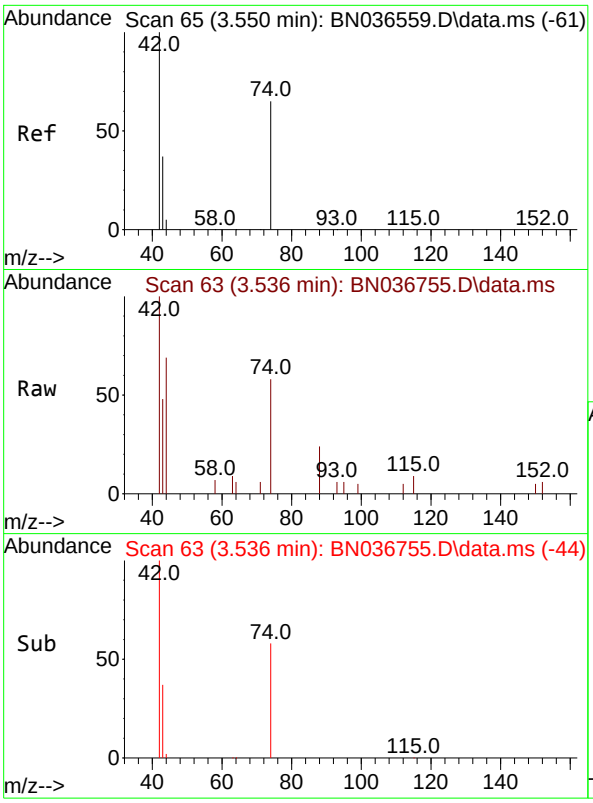



#2
1,4-Dioxane
Concen: 0.418 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 88 Resp: 882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 45.9 | 37.8 | 56.8 |
| 58 | 81.1 | 67.4 | 101.2 |

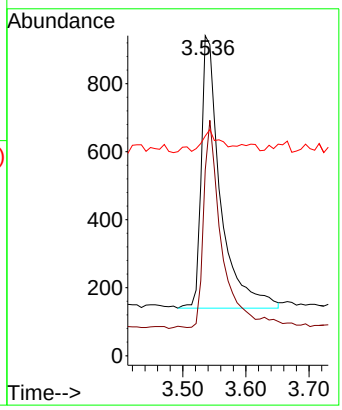





#3
n-Nitrosodimethylamine
Concen: 0.395 ng
RT: 3.536 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 42 Resp: 168

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 68.9 | 60.6 | 90.8 |
| 44 | 7.1 | 6.3 | 9.5 |




**Instrument :**
BNA_N
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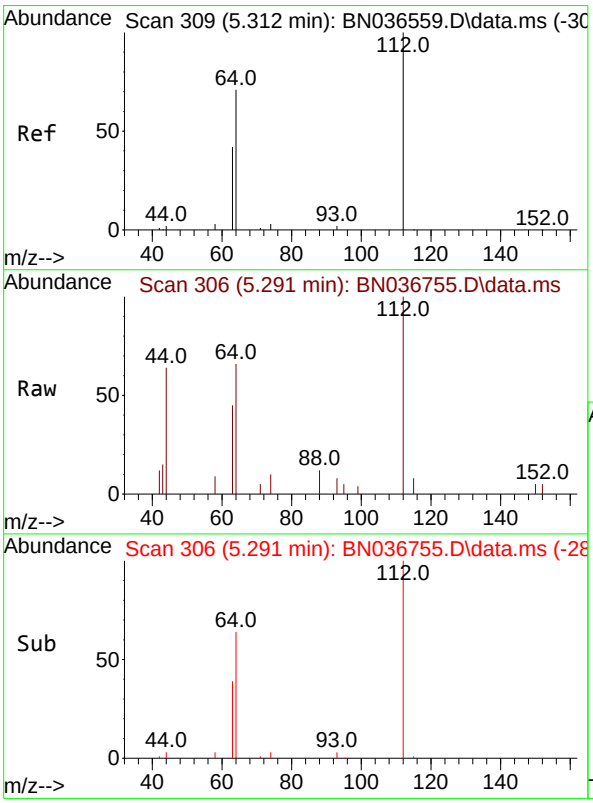
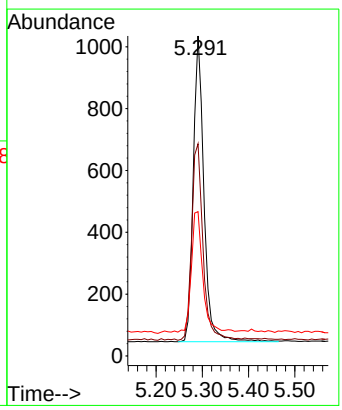
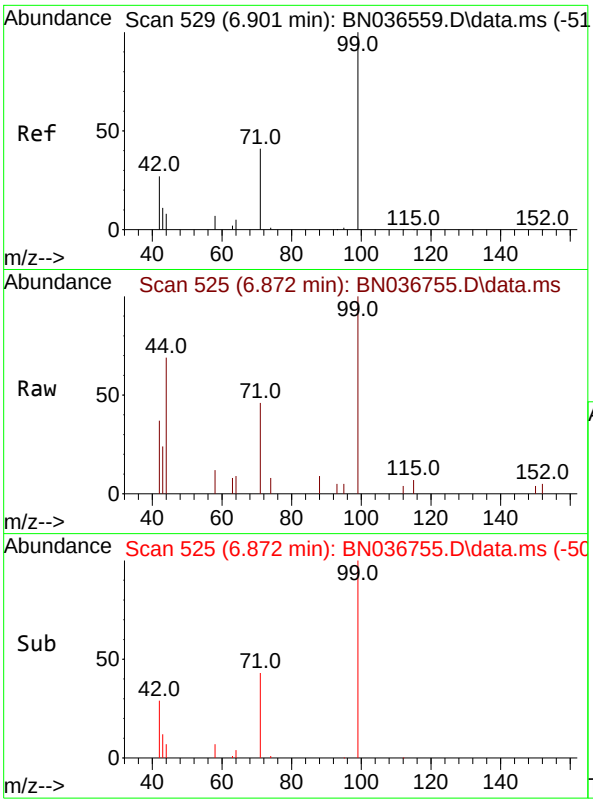



#4
2-Fluorophenol
Concen: 0.360 ng
RT: 5.291 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:112 Resp: 1596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.2 | 53.1 | 79.7 |
| 63 | 41.4 | 31.8 | 47.8 |

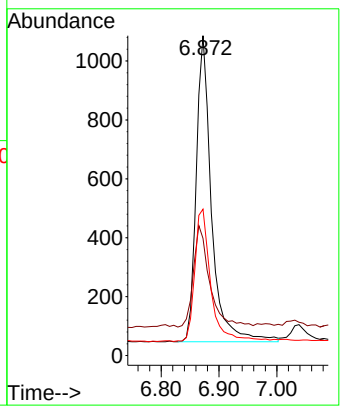





#5
Phenol-d6
Concen: 0.349 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 99 Resp: 191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.4 | 26.5 | 39.7 |
| 71 | 45.3 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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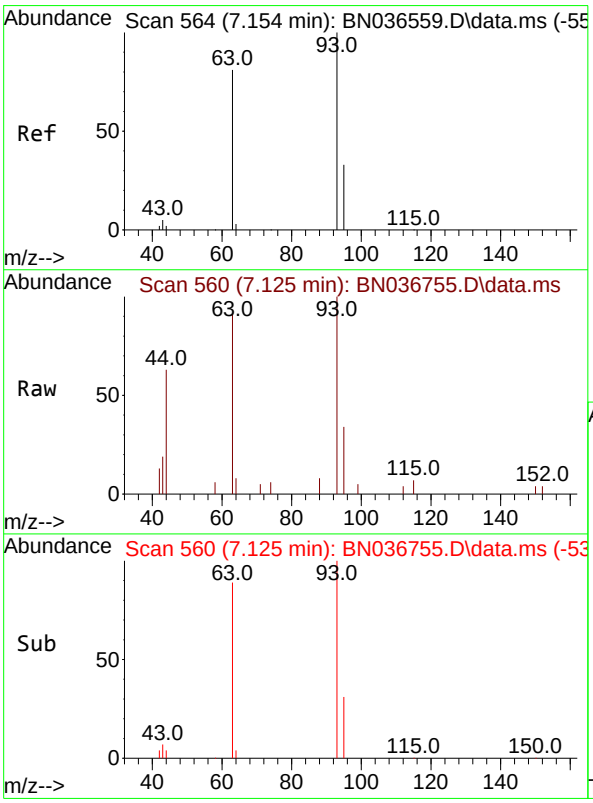
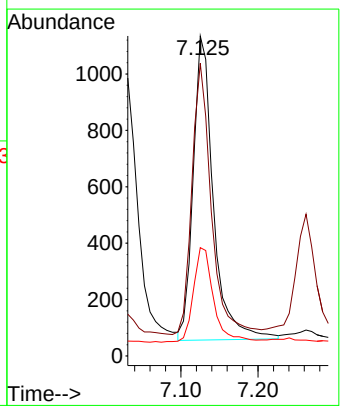
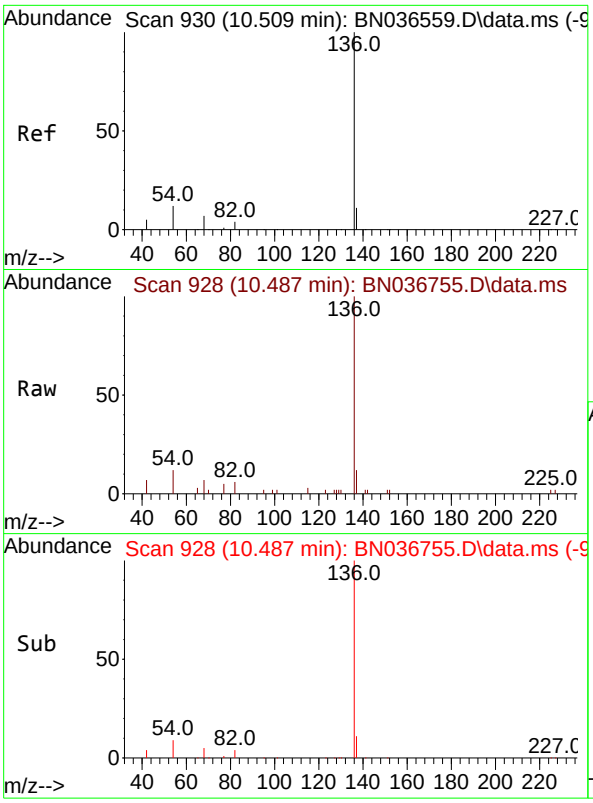



#6
bis(2-Chloroethyl)ether
Concen: 0.347 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 93 Resp: 1966

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.6 | 67.7 | 101.5 |
| 95 | 31.0 | 25.6 | 38.4 |

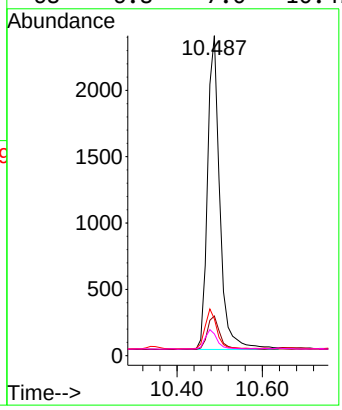





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:136 Resp: 472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 11.5 | 11.5 | 17.3 |
| 68 | 6.8 | 7.0 | 10.4# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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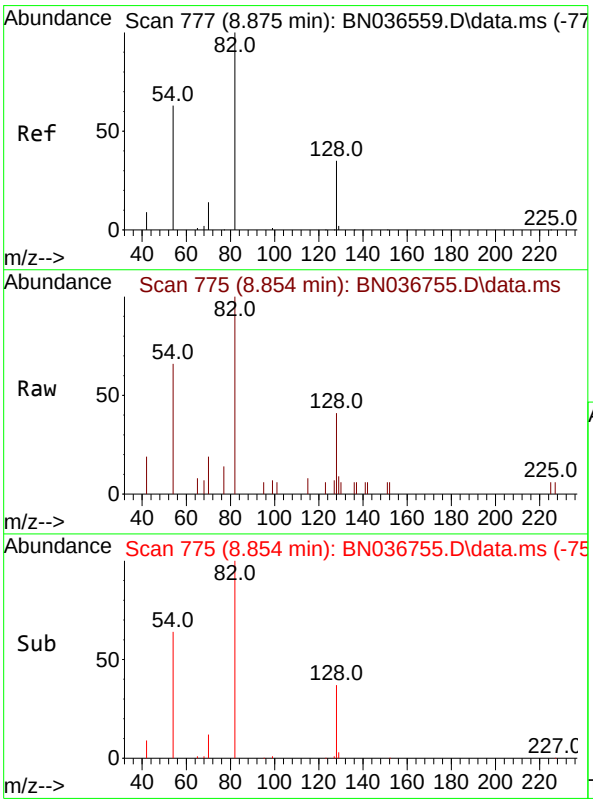
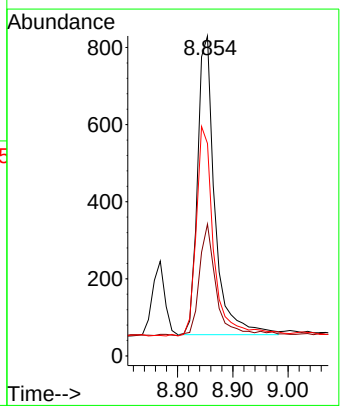
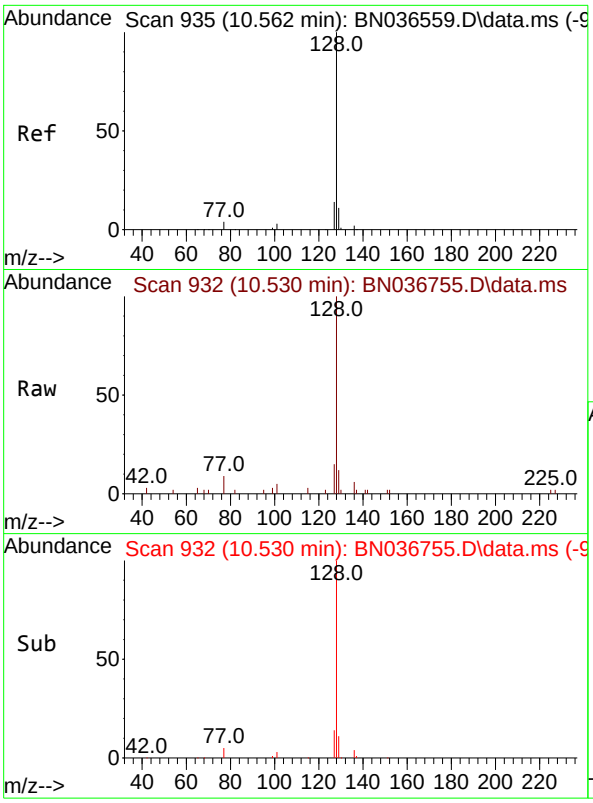



#8
Nitrobenzene-d5
Concen: 0.328 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 82 Resp: 1688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 41.2 | 30.6 | 45.8 |
| 54 | 66.4 | 52.2 | 78.4 |

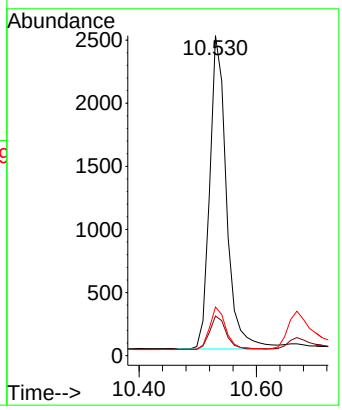





#9
Naphthalene
Concen: 0.355 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:128 Resp: 493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.4 | 9.8 | 14.6 |
| 127 | 15.2 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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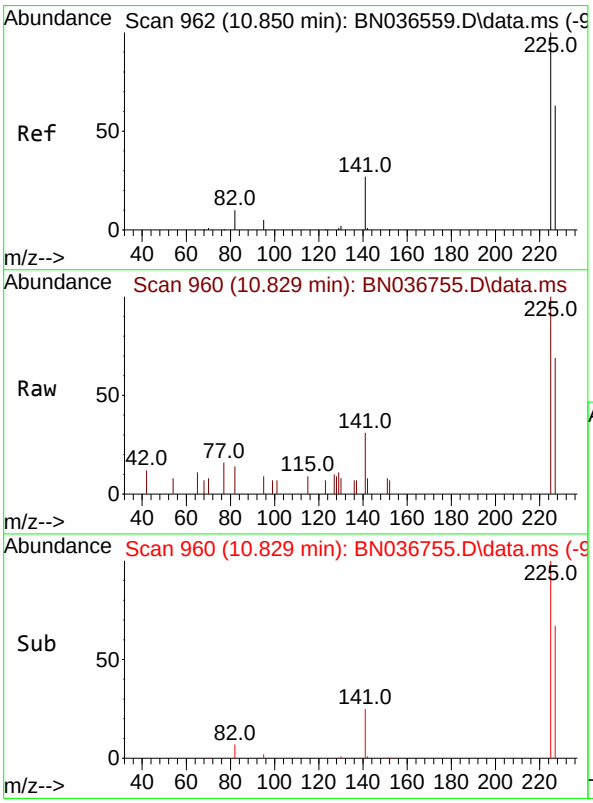
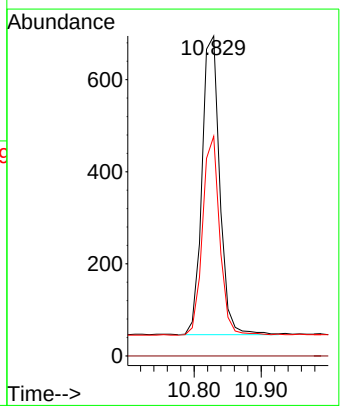
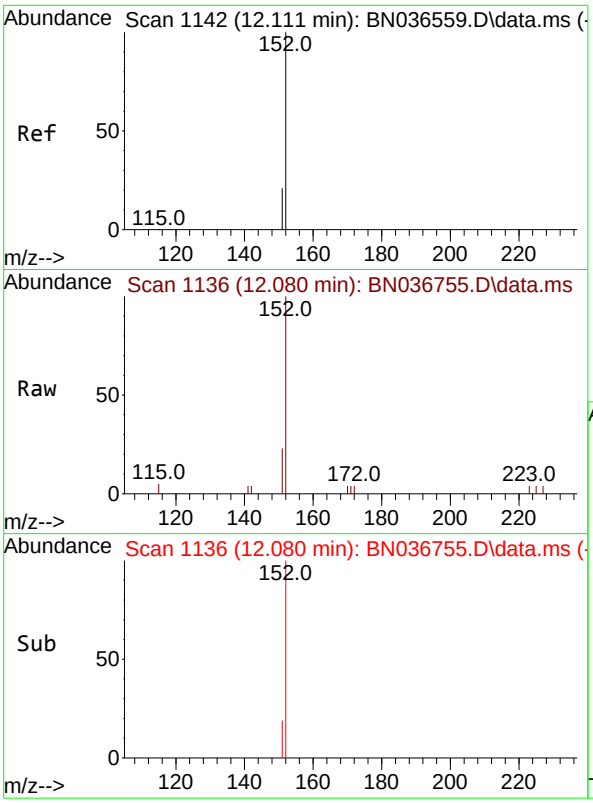



#10
Hexachlorobutadiene
Concen: 0.365 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:225 Resp: 1194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.6 | 51.8 | 77.8 |






#11
2-Methylnaphthalene-d10
Concen: 0.347 ng
RT: 12.080 min Scan# 11
Delta R.T. -0.030 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:152 Resp: 243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 22.1 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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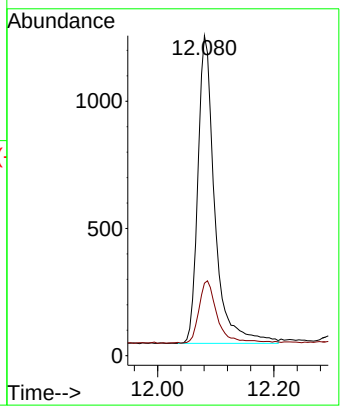
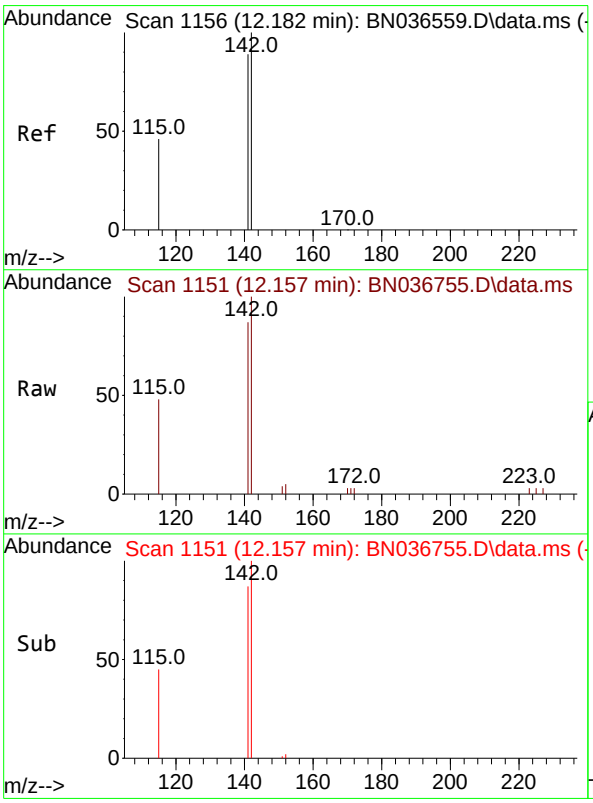
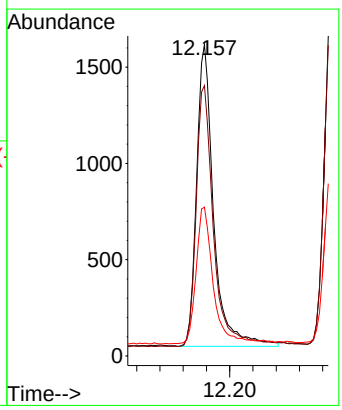


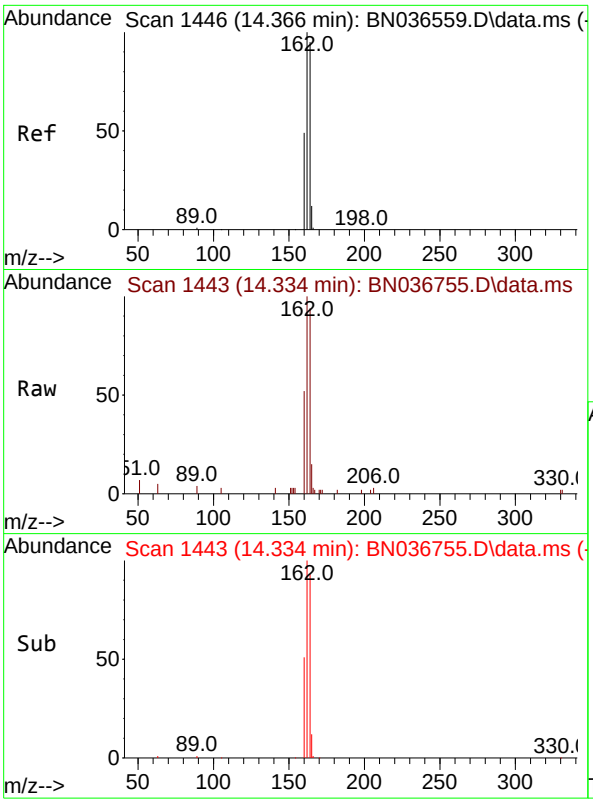




#12
2-Methylnaphthalene
Concen: 0.361 ng
RT: 12.157 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:142 Resp: 3191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 86.8 | 71.7 | 107.5 |
| 115 | 47.8 | 38.3 | 57.5 |

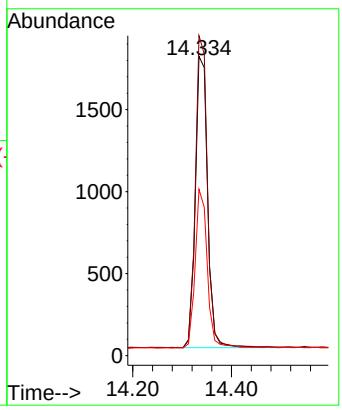





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:164 Resp: 307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 106.9 | 84.2 | 126.2 |
| 160 | 55.6 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
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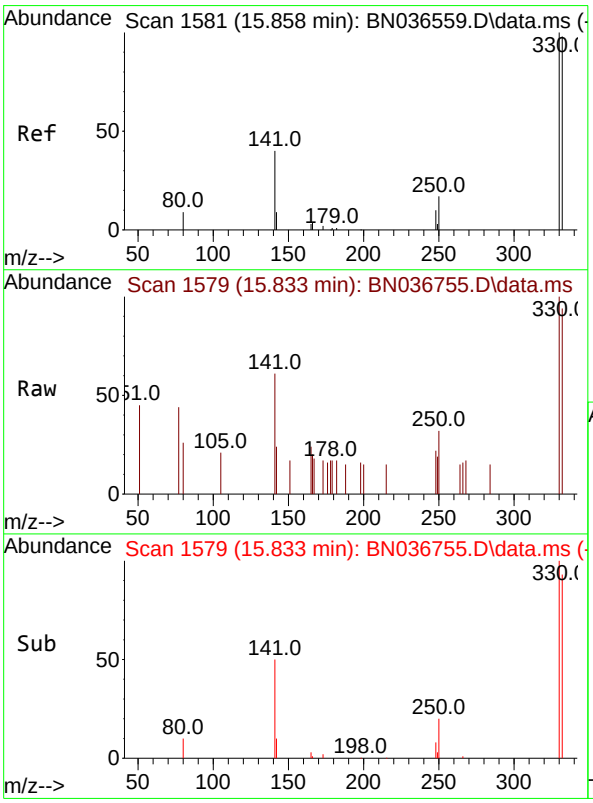
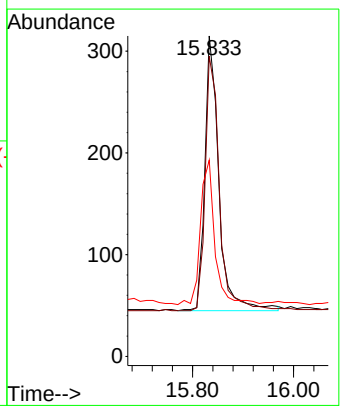
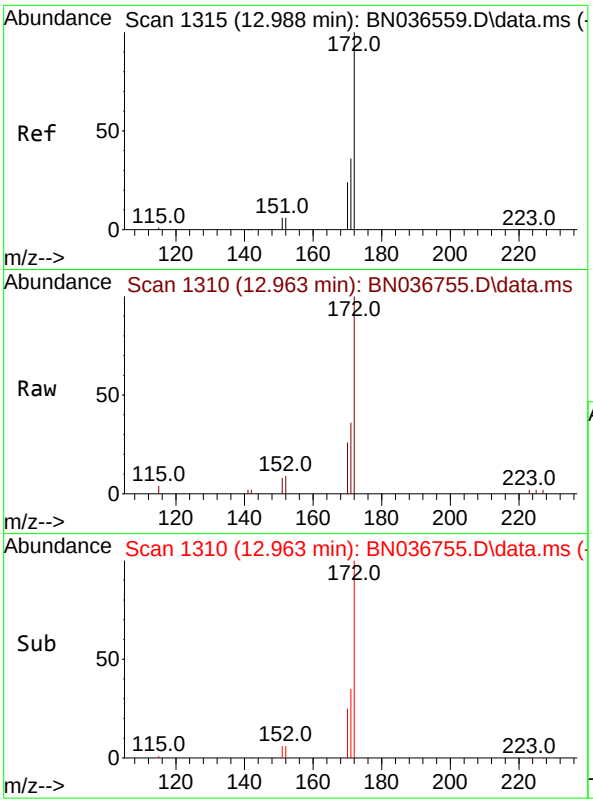



#14
2,4,6-Tribromophenol
Concen: 0.375 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:330 Resp: 523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 93.7 | 75.2 | 112.8 |
| 141 | 53.5 | 43.4 | 65.2 |

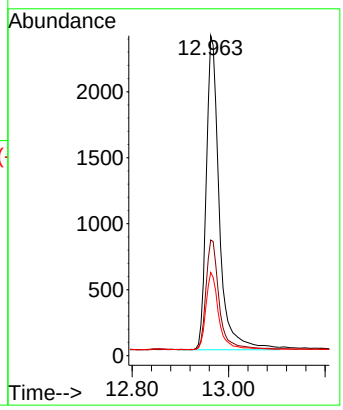





#15
2-Fluorobiphenyl
Concen: 0.319 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:172 Resp: 569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.2 | 29.5 | 44.3 |
| 170 | 26.0 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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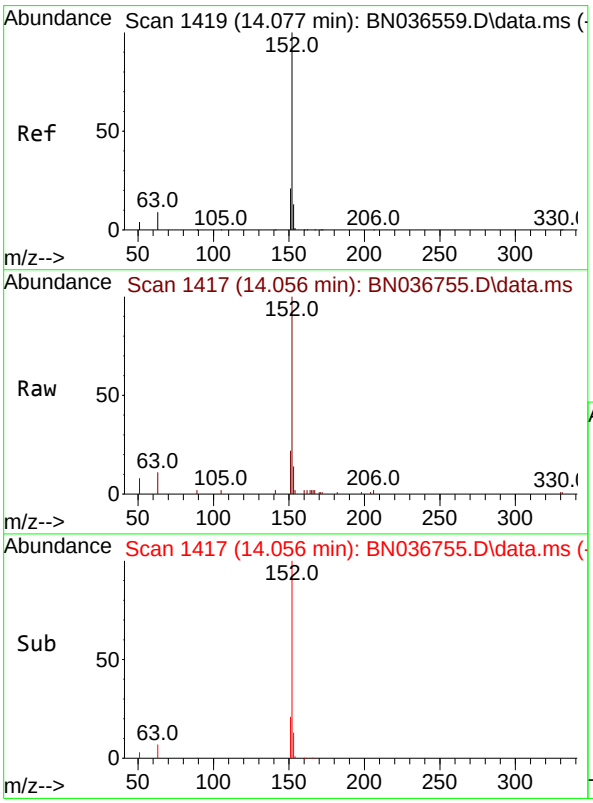
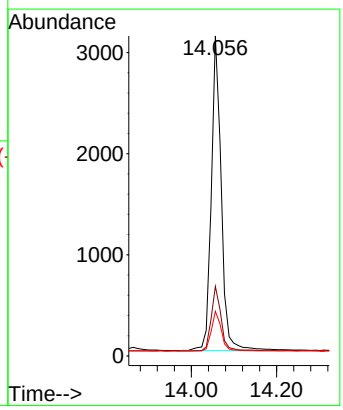
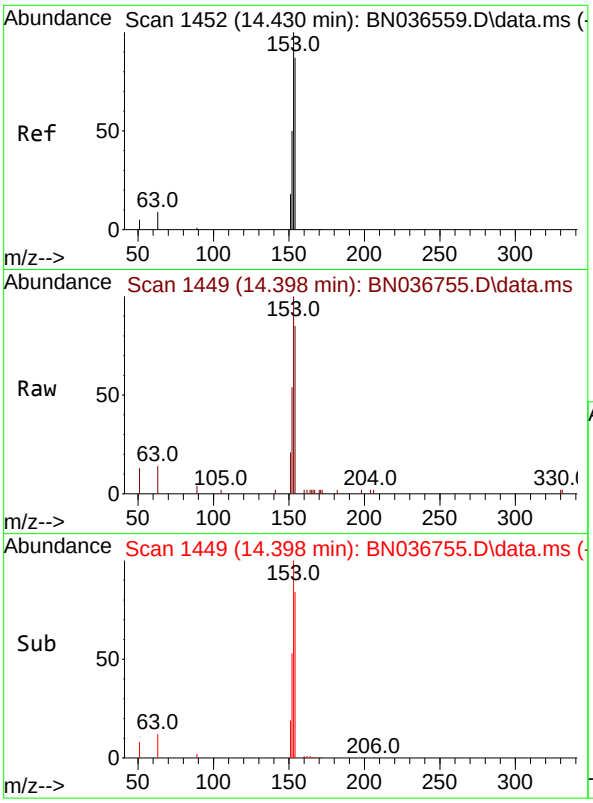



#16
Acenaphthylene
Concen: 0.349 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:152 Resp: 5054

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

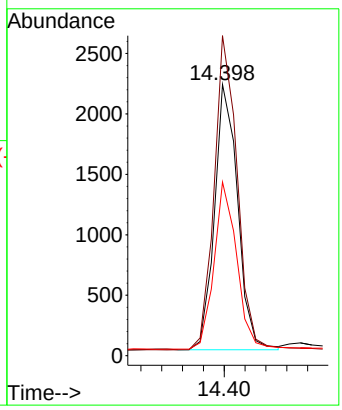





#17
Acenaphthene
Concen: 0.356 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:154 Resp: 338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 119.0 | 94.1 | 141.1 |
| 152 | 62.7 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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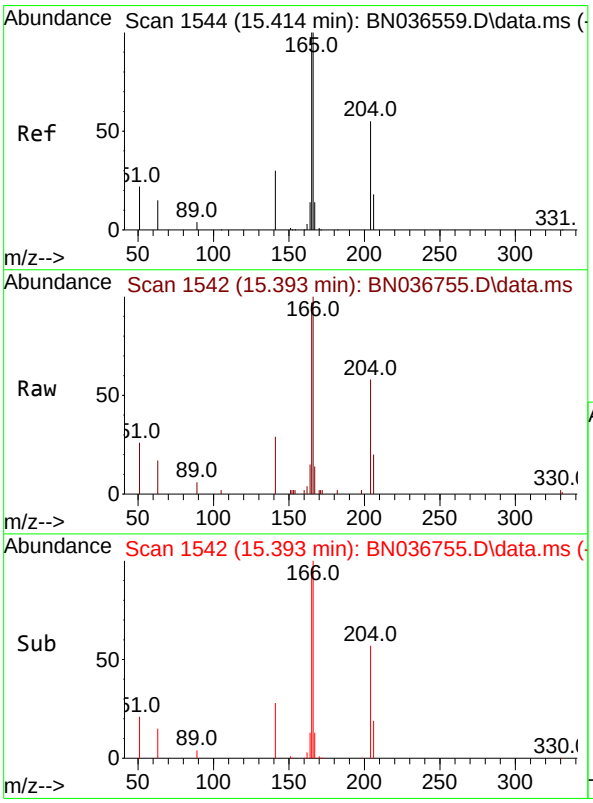
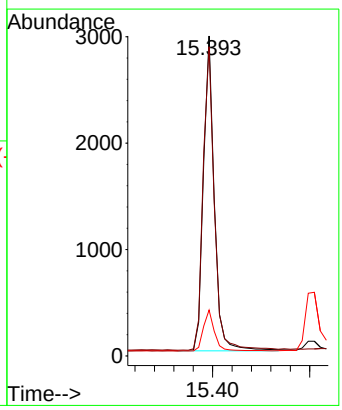
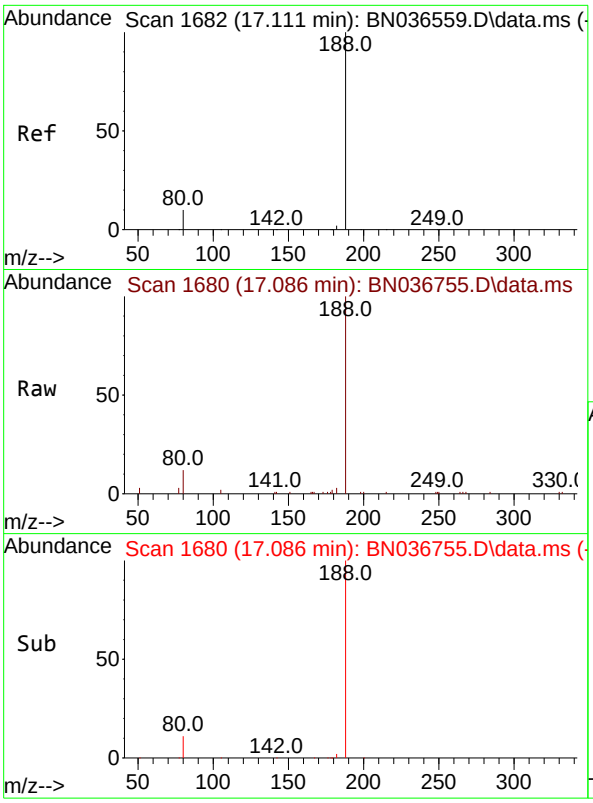



#18
Fluorene
Concen: 0.364 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:166 Resp: 4678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.5 | 79.8 | 119.8 |
| 167 | 13.0 | 10.6 | 15.8 |






#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:188 Resp: 641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.6 | 8.8 | 13.2 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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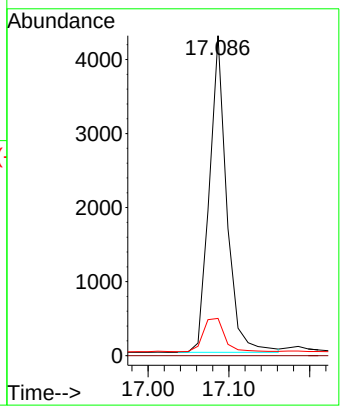
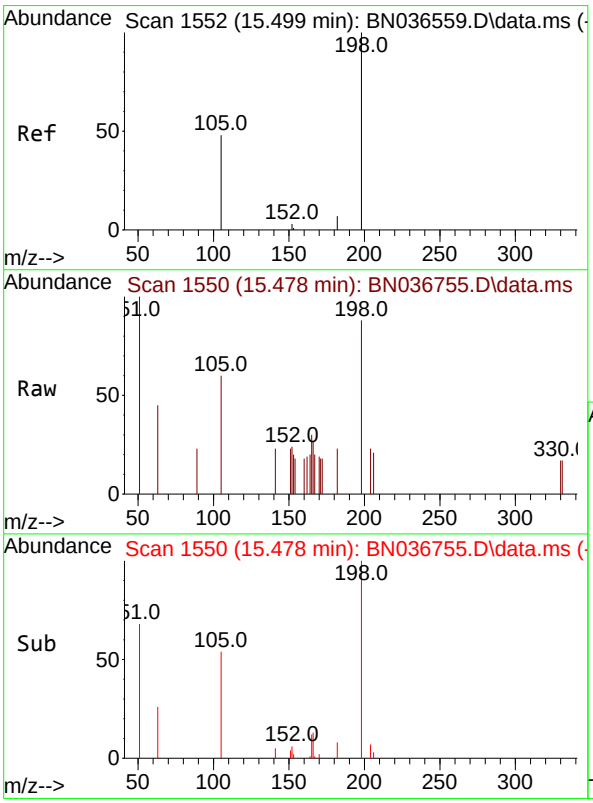
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

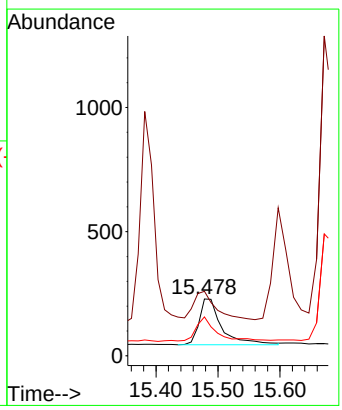


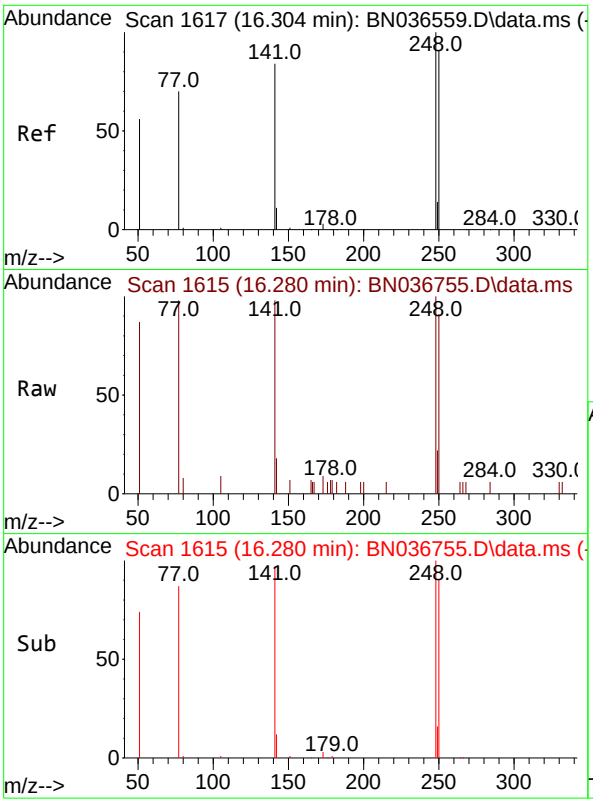




#20
4,6-Dinitro-2-methylphenol
Concen: 0.444 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:198 Resp: 489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 113.5 | 107.9 | 161.9 |
| 105 | 68.6 | 56.2 | 84.2 |






#21
4-Bromophenyl-phenylether
Concen: 0.362 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:248 Resp: 145(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 91.0 | 73.0 | 109.6 |
| 141 | 98.2 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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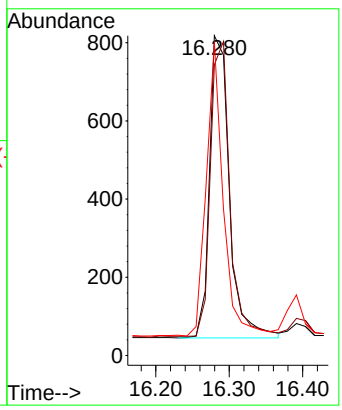
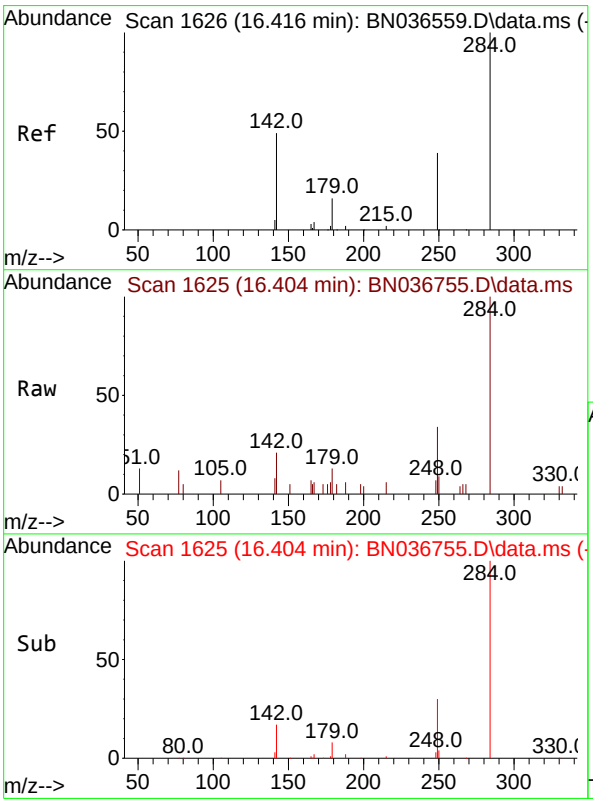
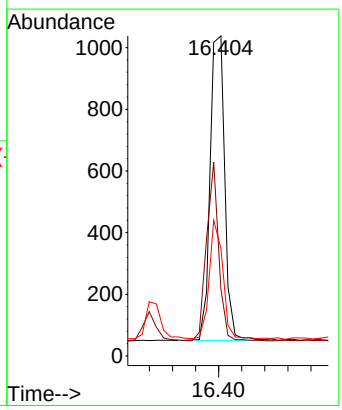


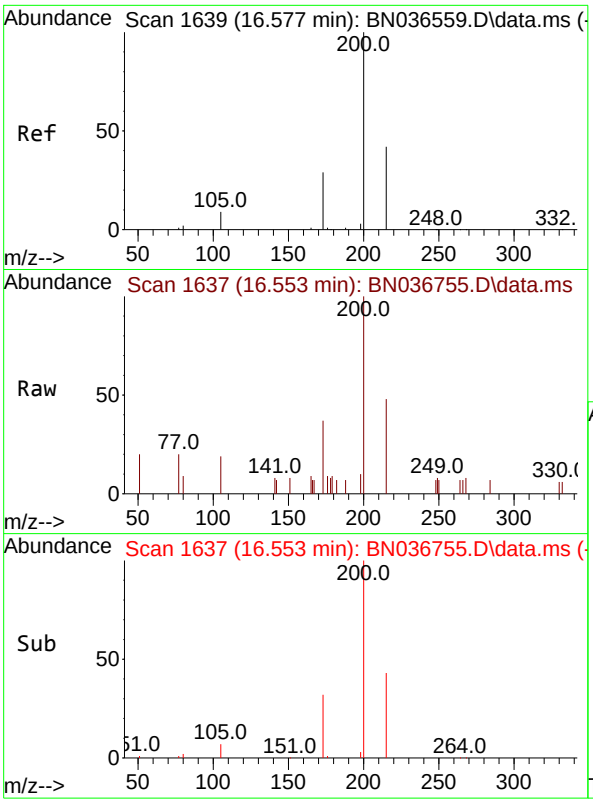




#22
Hexachlorobenzene
Concen: 0.359 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.012 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:284 Resp: 1743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 48.7 | 37.0 | 55.4 |
| 249 | 35.6 | 28.1 | 42.1 |






#23
Atrazine
Concen: 0.382 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:200 Resp: 123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.9 | 27.3 | 40.9 |
| 215 | 47.8 | 36.8 | 55.2 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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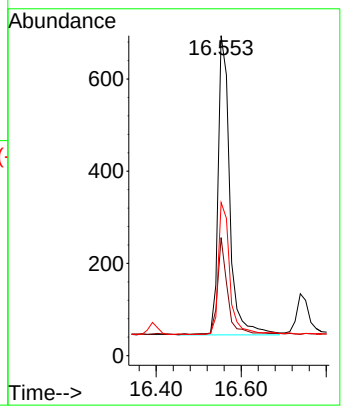
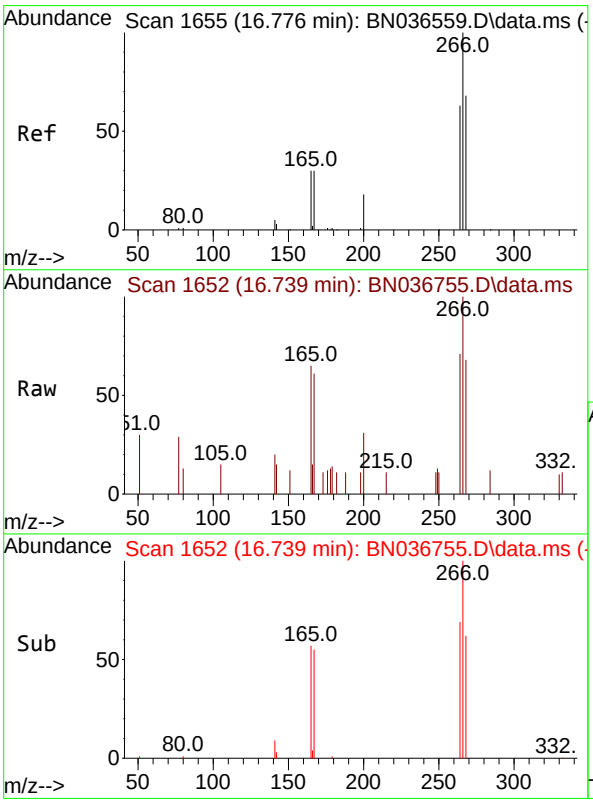
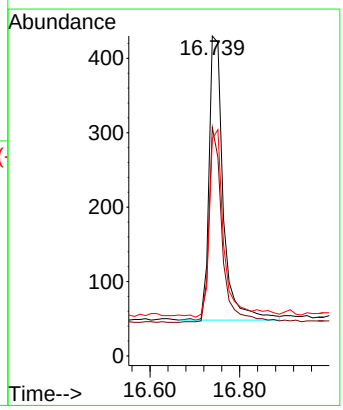


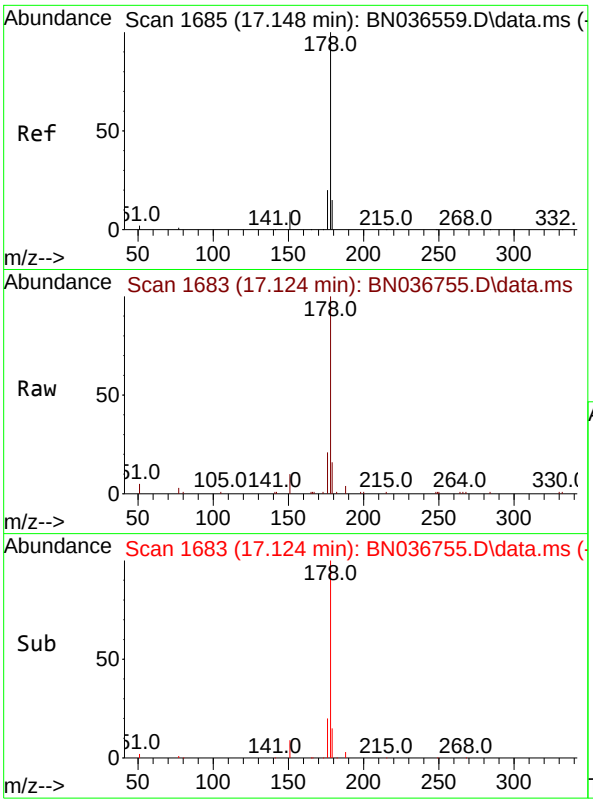




#24
Pentachlorophenol
Concen: 0.378 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:266 Resp: 837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.9 | 49.6 | 74.4 |
| 268 | 67.6 | 50.9 | 76.3 |

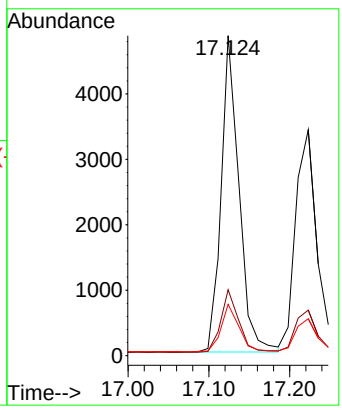





#25
Phenanthrene
Concen: 0.387 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:178 Resp: 745

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.4 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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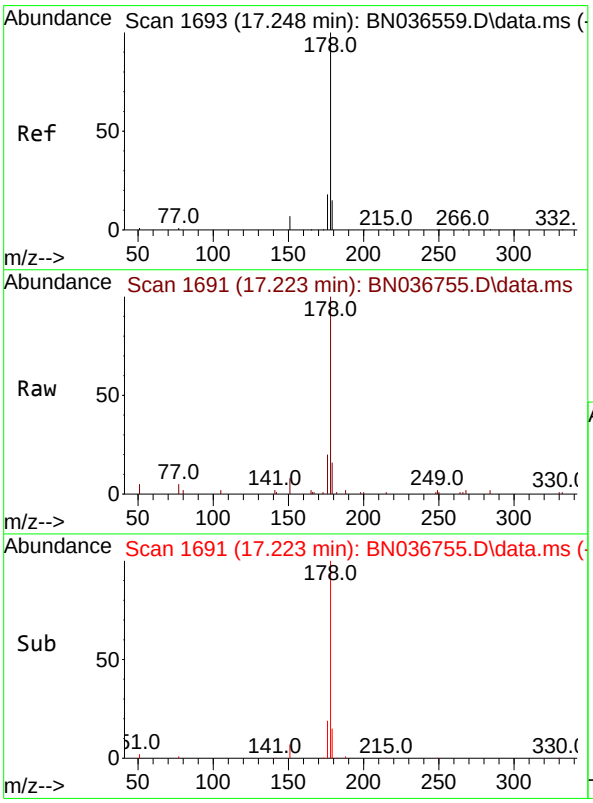
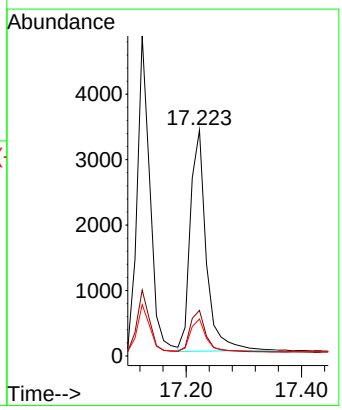
Supervised By :Jagrut Upadhyay 04/01/2025

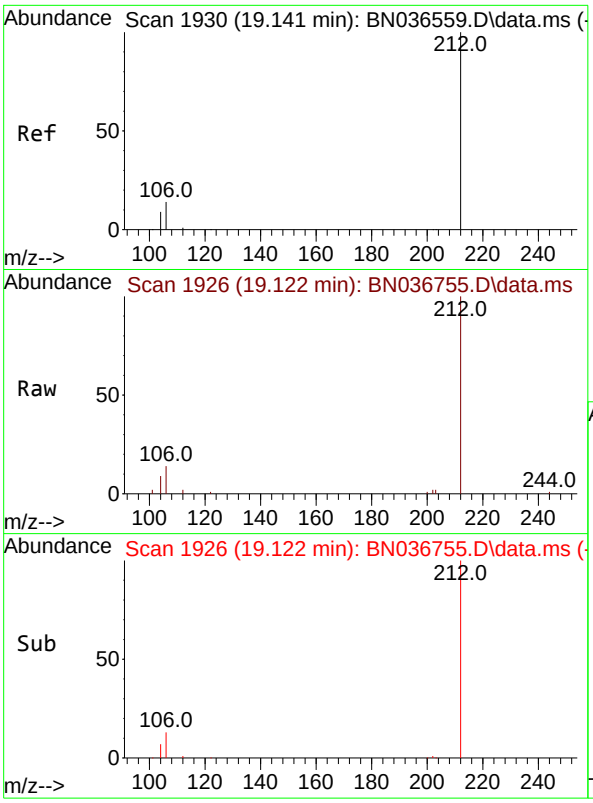



#26
Anthracene
Concen: 0.374 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:178 Resp: 6503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |

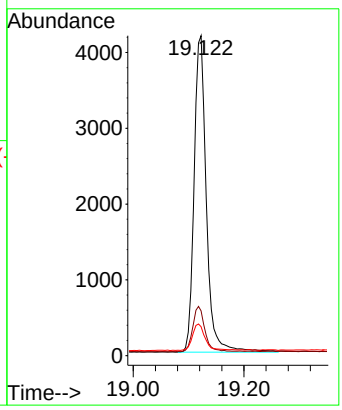





#27
Fluoranthene-d10
Concen: 0.391 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:212 Resp: 643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.1 | 11.8 | 17.6 |
| 104 | 8.9 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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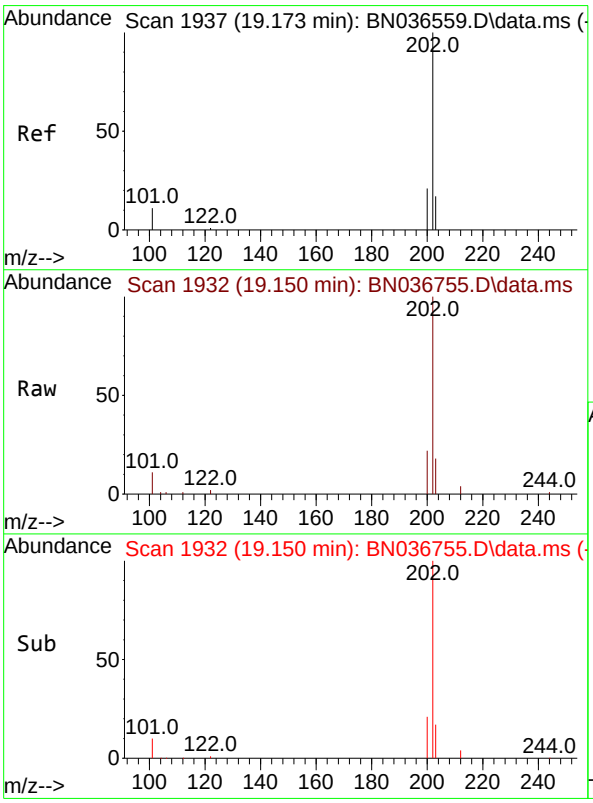
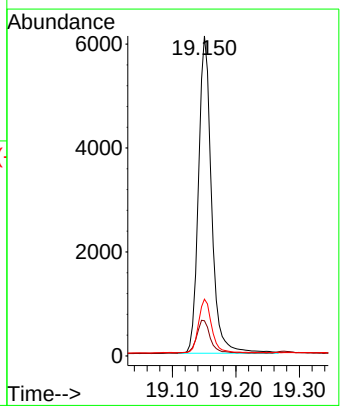
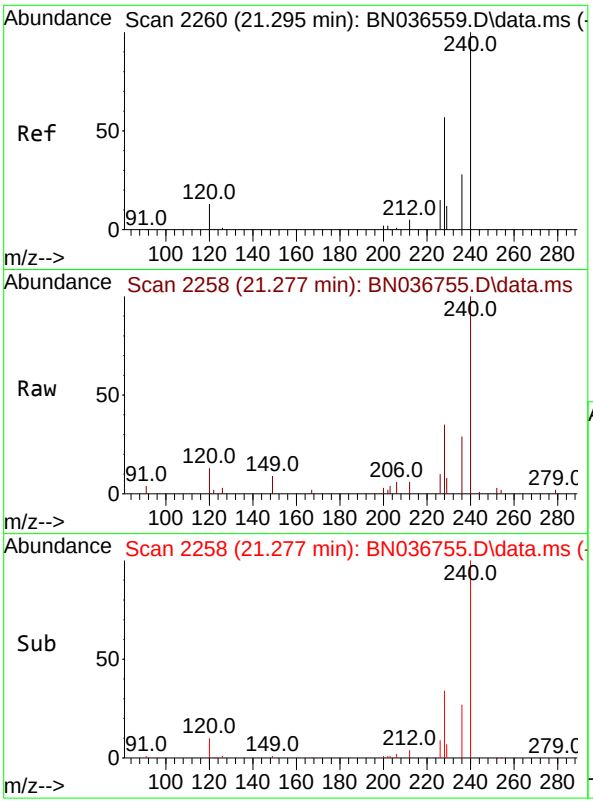



#28
Fluoranthene
Concen: 0.402 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:202 Resp: 8702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.8 | 9.4 | 14.0 |
| 203 | 17.0 | 13.5 | 20.3 |

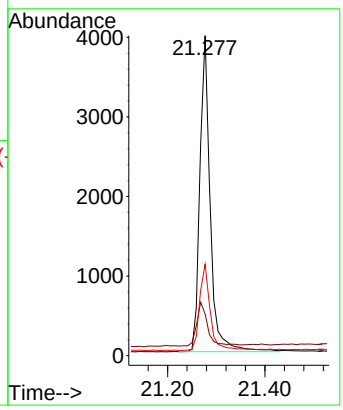





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:240 Resp: 586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 13.0 | 14.6 | 22.0# |
| 236 | 28.6 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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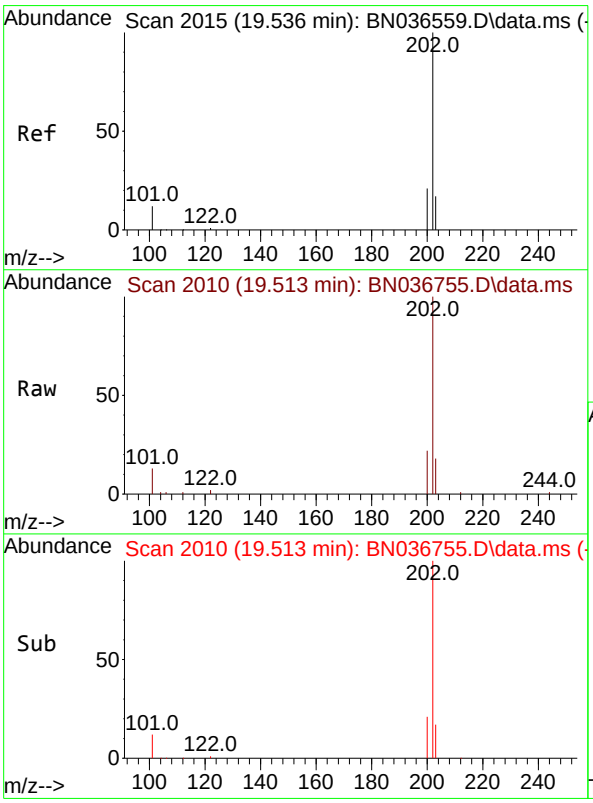
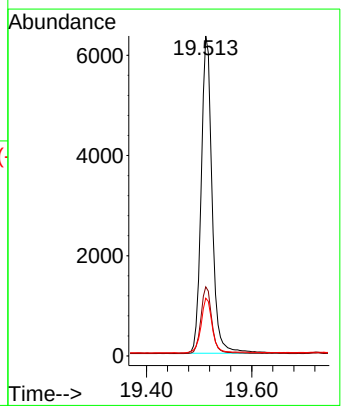
Supervised By :Jagrut Upadhyay 04/01/2025

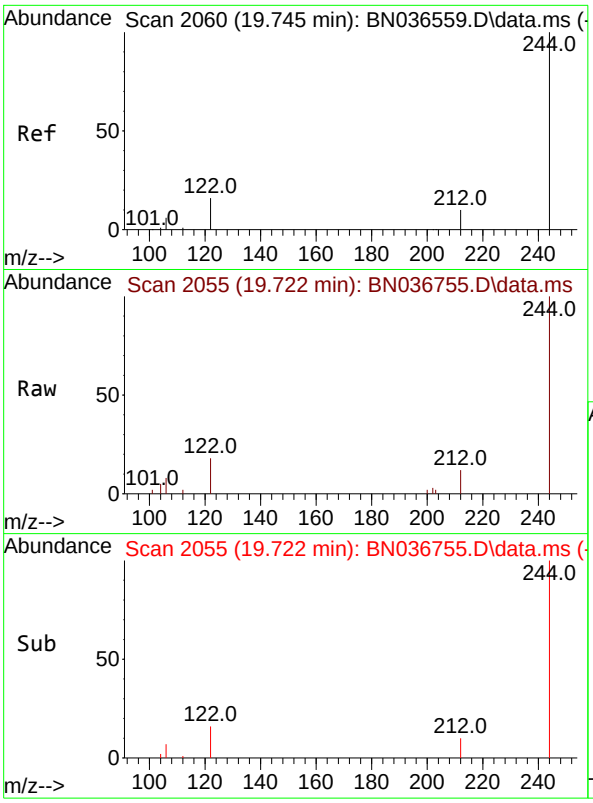



#30
Pyrene
Concen: 0.319 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:202 Resp: 9138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.3 | 17.1 | 25.7 |
| 203 | 17.8 | 14.1 | 21.1 |

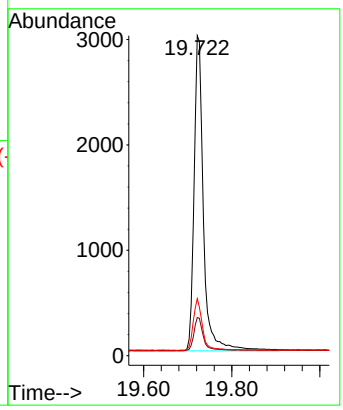





#31
Terphenyl-d14
Concen: 0.317 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:244 Resp: 444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.9 | 9.6 | 14.4 |
| 122 | 17.8 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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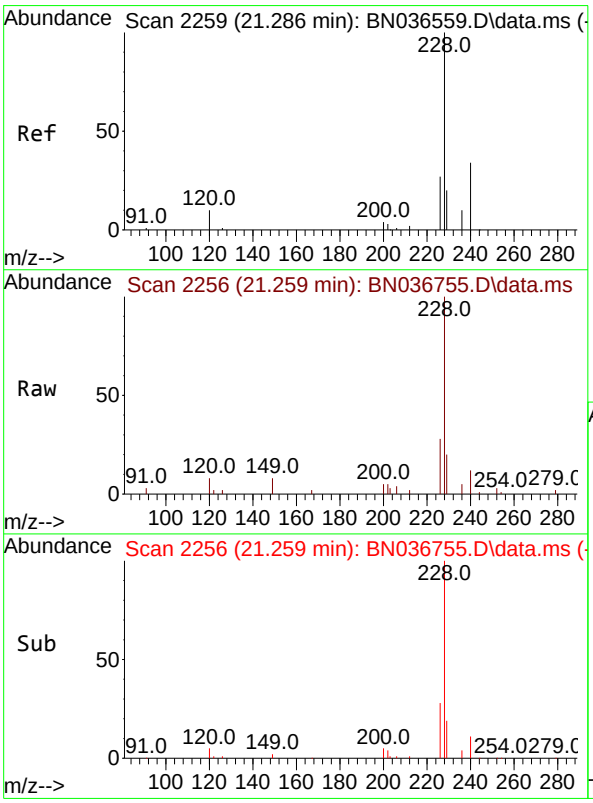
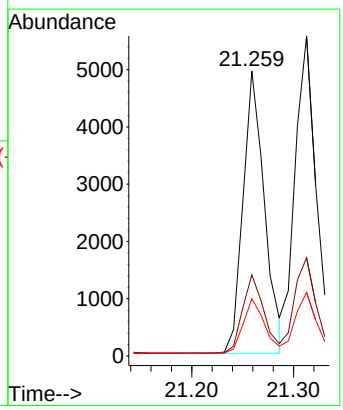
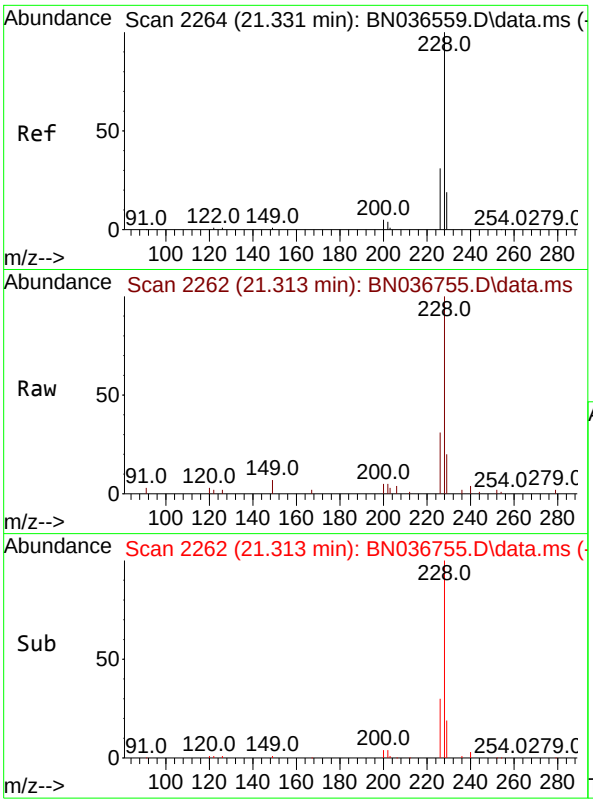



#32
Benzo(a)anthracene
Concen: 0.354 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:228 Resp: 7209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.5 | 22.5 | 33.7 |
| 229 | 20.1 | 16.6 | 25.0 |






#33
Chrysene
Concen: 0.387 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:228 Resp: 861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.7 | 25.3 | 37.9 |
| 229 | 19.8 | 15.8 | 23.8 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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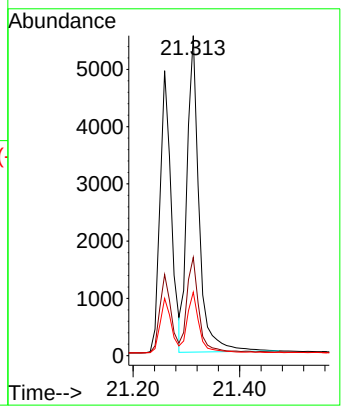
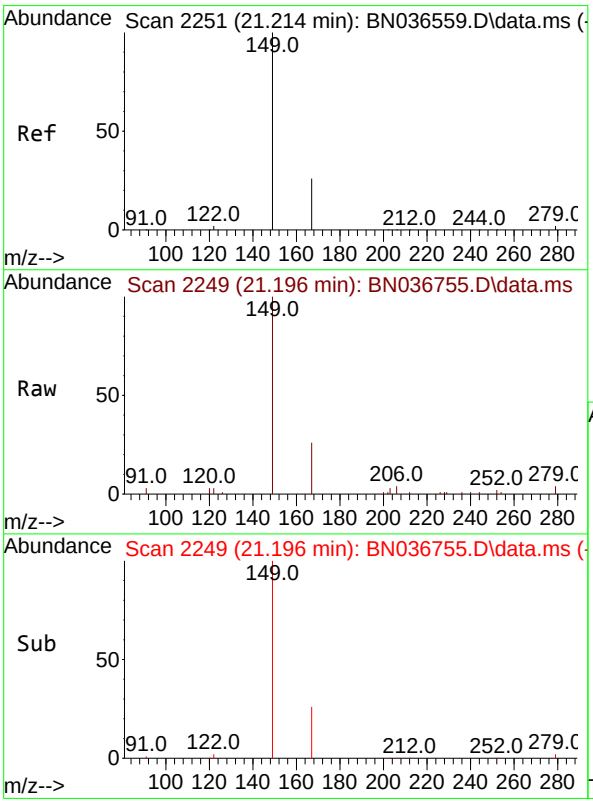
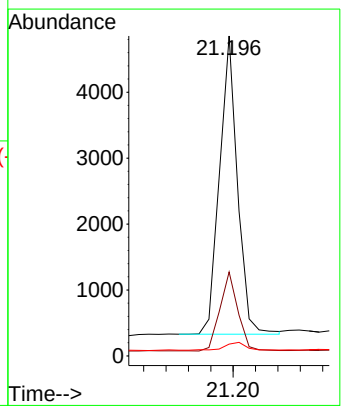


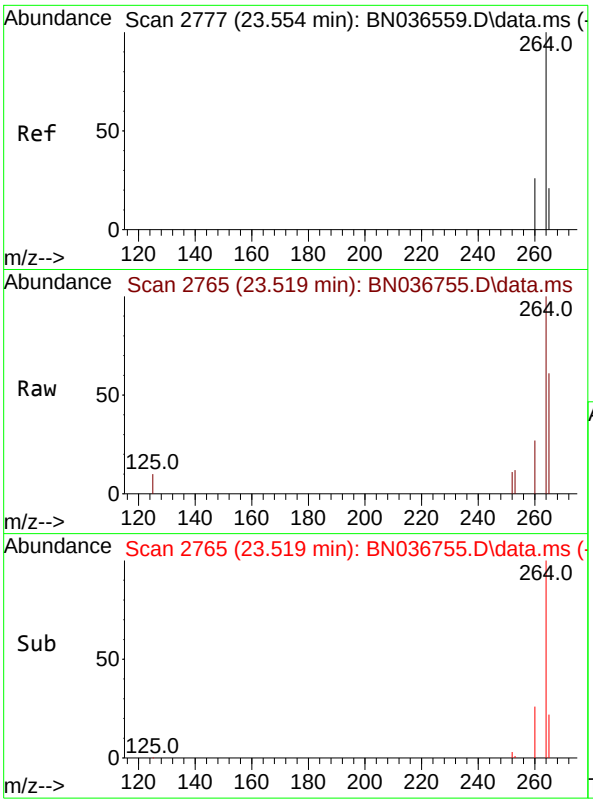




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.347 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:149 Resp: 5036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.3 | 20.7 | 31.1 |
| 279 | 2.9 | 3.6 | 5.4# |






#35
Perylene-d12
Concen: 0.400 ng
RT: 23.519 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:264 Resp: 564

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.7 | 22.6 | 33.8 |
| 265 | 61.3 | 88.1 | 132.1# |

**Manual Integrations**
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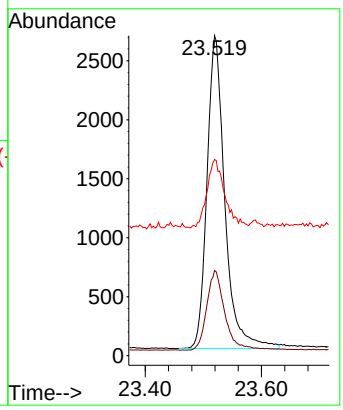
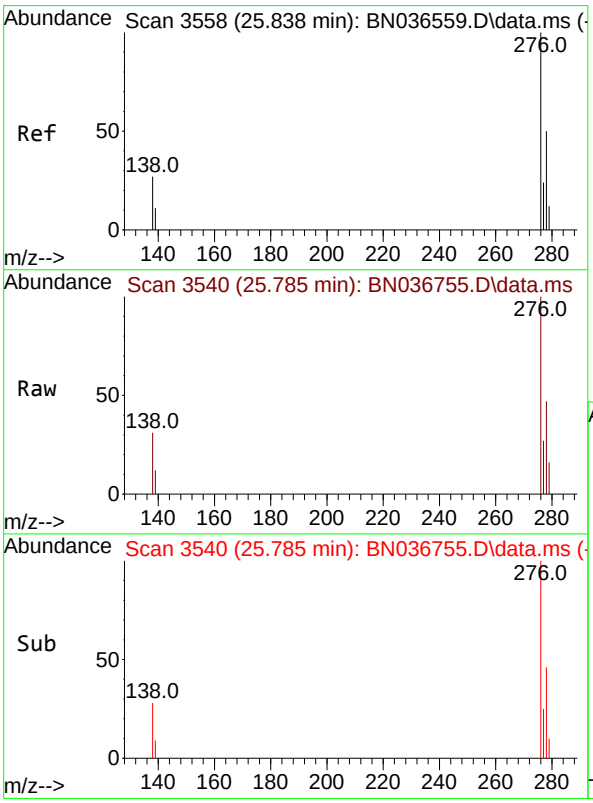
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

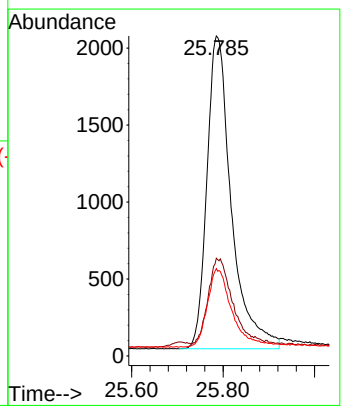


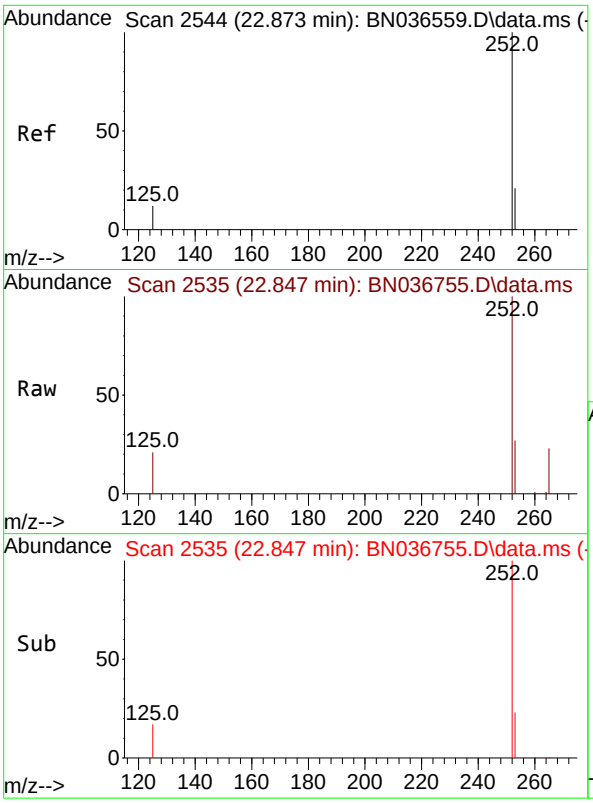




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.371 ng
RT: 25.785 min Scan# 3540
Delta R.T. -0.052 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:276 Resp: 7554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.5 | 23.4 | 35.2 |
| 277 | 24.8 | 20.0 | 30.0 |

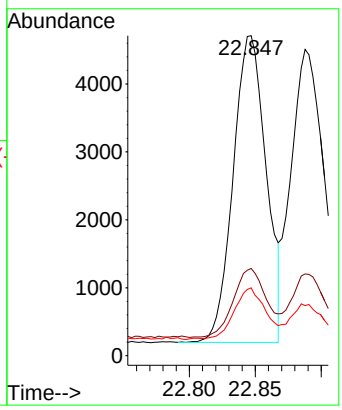





#37
Benzo(b)fluoranthene
Concen: 0.382 ng
RT: 22.847 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:252 Resp: 785

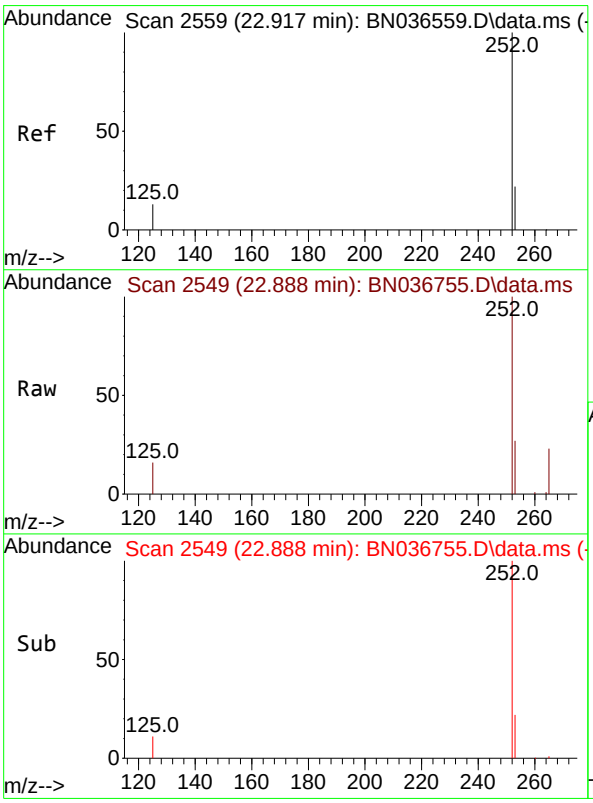
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.3 | 23.9 | 35.9 |
| 125 | 21.2 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

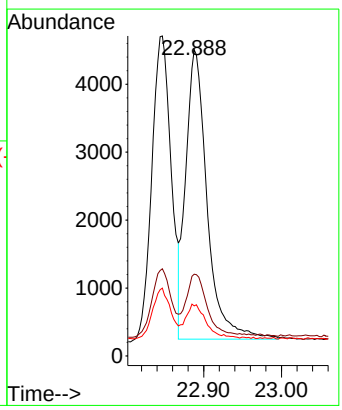
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

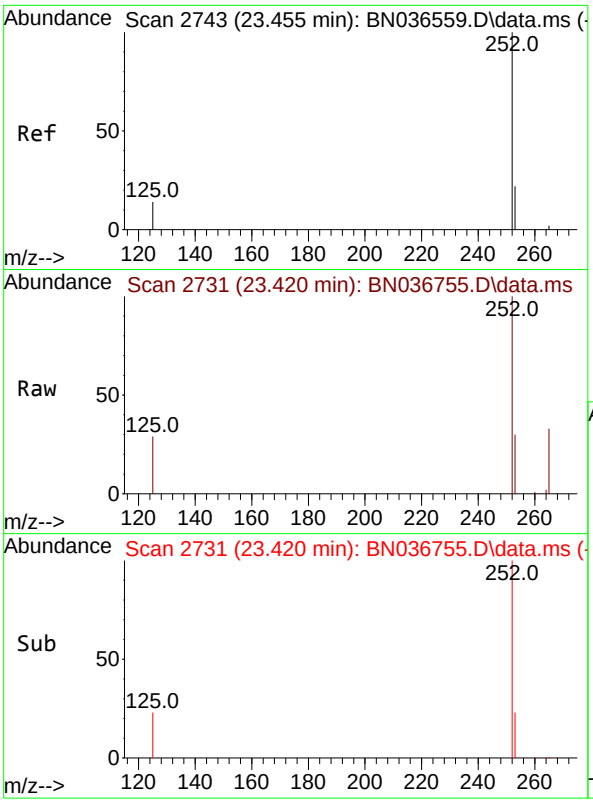



#38
Benzo(k)fluoranthene
Concen: 0.378 ng m
RT: 22.888 min Scan# 2549
Delta R.T. -0.029 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:252 Resp: 8148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 26.7 | 24.6 | 36.8 |
| 125 | 16.3 | 17.8 | 26.8# |

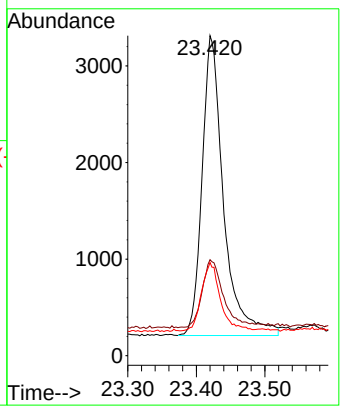





#39
Benzo(a)pyrene
Concen: 0.391 ng
RT: 23.420 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:252 Resp: 676

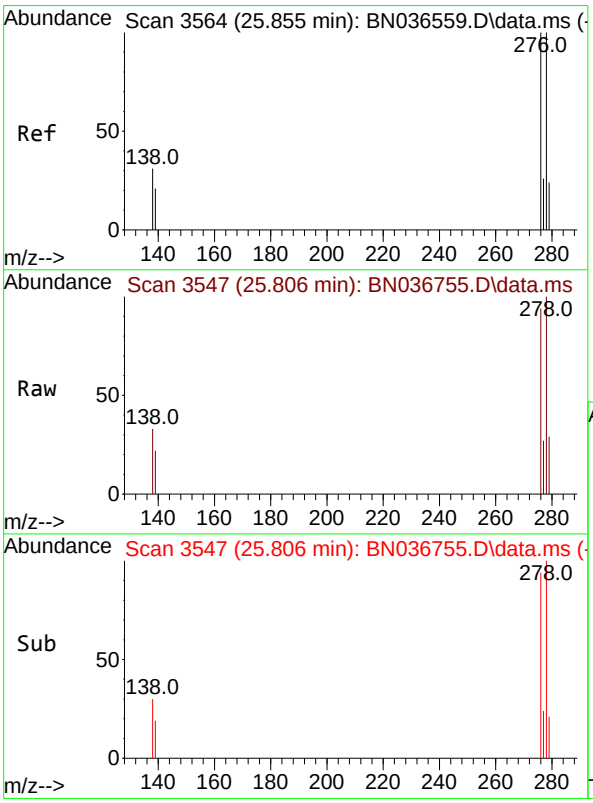
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 30.0 | 27.8 | 41.8 |
| 125 | 29.1 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

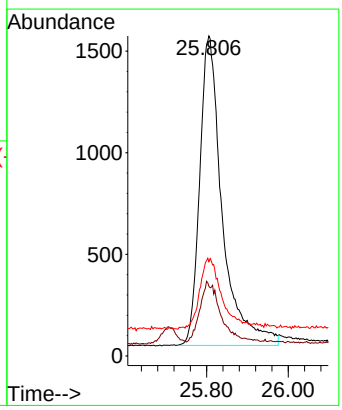
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

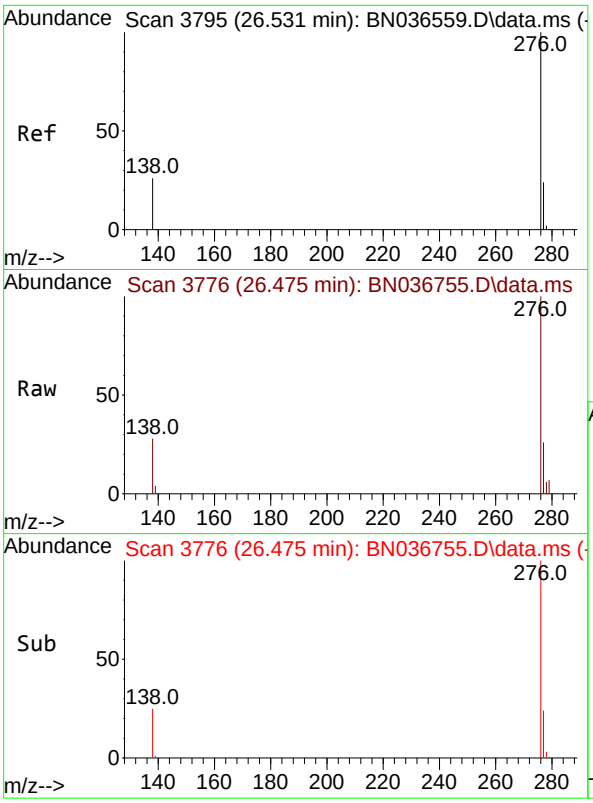



#40
Dibenzo(a,h)anthracene
Concen: 0.370 ng
RT: 25.806 min Scan# 3547
Delta R.T. -0.050 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:278 Resp: 5864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 21.8 | 20.8 | 31.2 |
| 279 | 29.5 | 28.8 | 43.2 |

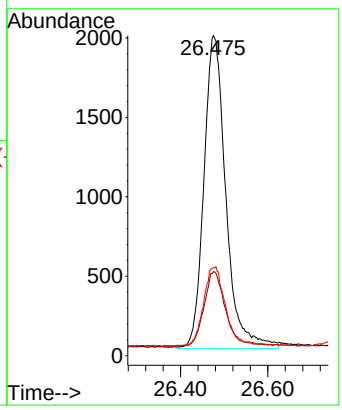





#41
Benzo(g,h,i)perylene
Concen: 0.380 ng m
RT: 26.475 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:276 Resp: 689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.3 | 22.2 | 33.4 |
| 138 | 27.5 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036755.D
Acq On : 28 Mar 2025 01:52
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 05:36:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 86 | -0.02 |
| 2 | | 1,4-Dioxane | 0.444 | 0.464 | -4.5 | 80 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.887 | 1.2 | 82 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.839 | 10.0 | 73 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 1.005 | 12.8 | 77 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.034 | 13.1 | 75 | -0.03 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 93 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.357 | 17.9 | 80 | -0.02 |
| 9 | | Naphthalene | 1.177 | 1.044 | 11.3 | 80 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.253 | 8.7 | 80 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.516 | 13.3 | 79 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.675 | 9.9 | 82 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 102 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.170 | 6.6 | 92 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 1.853 | 20.4 | 78 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.645 | 12.9 | 86 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.101 | 10.9 | 87 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.522 | 9.0 | 88 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 107 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.076 | 11.6 | 106 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.227 | 9.6 | 89 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.272 | 10.2 | 86 | -0.01 |
| 23 | | Atrazine | 0.201 | 0.192 | 4.5 | 96 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.130 | 5.8 | 102 | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.161 | 3.2 | 96 | -0.02 |
| 26 | | Anthracene | 1.083 | 1.013 | 6.5 | 94 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.003 | 2.1 | 96 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.356 | -0.6 | 100 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 143 | -0.02 |
| 30 | | Pyrene | 1.956 | 1.559 | 20.3 | 104 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.759 | 20.8 | 105 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.230 | 11.6 | 122 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.471 | 3.2 | 130 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.859 | 13.2 | 117 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 160# | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.338 | 7.3 | 138 | -0.05 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.390 | 4.5 | 143 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.443 | 5.5 | 142 | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.197 | 2.4 | 147 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 1.038 | 7.7 | 142 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.220 | 5.1 | 141 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036755.D
Acq On : 28 Mar 2025 01:52
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 05:36:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 86 | -0.02 |
| 2 | | 1,4-Dioxane | 0.400 | 0.418 | -4.5 | 80 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.395 | 1.3 | 82 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.360 | 10.0 | 73 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.349 | 12.8 | 77 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.347 | 13.3 | 75 | -0.03 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 93 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.328 | 18.0 | 80 | -0.02 |
| 9 | | Naphthalene | 0.400 | 0.355 | 11.3 | 80 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.365 | 8.8 | 80 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.347 | 13.3 | 79 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.361 | 9.8 | 82 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 102 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.375 | 6.3 | 92 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.319 | 20.3 | 78 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.349 | 12.8 | 86 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.356 | 11.0 | 87 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.364 | 9.0 | 88 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 107 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.444 | -11.0 | 106 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.362 | 9.5 | 89 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.359 | 10.3 | 86 | -0.01 |
| 23 | | Atrazine | 0.400 | 0.382 | 4.5 | 96 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.378 | 5.5 | 102 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.387 | 3.3 | 96 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.374 | 6.5 | 94 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.391 | 2.3 | 96 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.402 | -0.5 | 100 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 143 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.319 | 20.3 | 104 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.317 | 20.8 | 105 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.354 | 11.5 | 122 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.387 | 3.3 | 130 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.347 | 13.3 | 117 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 160 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.371 | 7.3 | 138 | -0.05 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.382 | 4.5 | 143 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.378 | 5.5 | 142 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.391 | 2.3 | 147 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.370 | 7.5 | 142 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.380 | 5.0 | 141 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 03:46

Lab File ID: BN036757.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.509 | | -14.5 | 20.0 |
| Fluoranthene-d10 | 1.025 | 1.053 | | 2.7 | 20.0 |
| 2-Fluorophenol | 0.932 | 0.782 | | -16.1 | 20.0 |
| Phenol-d6 | 1.152 | 0.986 | | -14.4 | 20.0 |
| Nitrobenzene-d5 | 0.435 | 0.370 | | -14.9 | 20.0 |
| 2-Fluorobiphenyl | 2.327 | 2.013 | | -13.5 | 20.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.184 | | 1.1 | 20.0 |
| Terphenyl-d14 | 0.958 | 0.749 | | -21.8 | 20.0 |
| 1,4-Dioxane | 0.444 | 0.442 | | -0.4 | 20.0 |

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036757.D
Acq On : 28 Mar 2025 03:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 28 05:36:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1974 | 0.400 | ng | | -0.02 |
| 7) Naphthalene-d8 | 10.488 | 136 | 4607 | 0.400 | ng | | -0.02 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2750 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.087 | 188 | 5937 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 5680 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.519 | 264 | 5140 | 0.400 | ng | | #-0.03 |
| **System Monitoring Compounds** | | | | | | | |
| 4) 2-Fluorophenol | 5.291 | 112 | 1543 | 0.335 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1947 | 0.343 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1705 | 0.340 | ng | | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 2347 | 0.342 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 507 | 0.406 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5537 | 0.346 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 6252 | 0.411 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 4254 | 0.313 | ng | | -0.02 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 873 | 0.399 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.536 | 42 | 1735 | 0.392 | ng | | 95 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 2072 | 0.353 | ng | | 98 |
| 9) Naphthalene | 10.530 | 128 | 4865 | 0.359 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 1140 | 0.357 | ng | # | 99 |
| 12) 2-Methylnaphthalene | 12.157 | 142 | 3049 | 0.354 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 4680 | 0.361 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3124 | 0.368 | ng | | 100 |
| 18) Fluorene | 15.393 | 166 | 4263 | 0.371 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 472 | 0.457 | ng | | 83 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1382 | 0.372 | ng | | 91 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1636 | 0.364 | ng | | 97 |
| 23) Atrazine | 16.553 | 200 | 1154 | 0.387 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 868 | 0.424 | ng | | 97 |
| 25) Phenanthrene | 17.124 | 178 | 6866 | 0.386 | ng | | 100 |
| 26) Anthracene | 17.223 | 178 | 6014 | 0.374 | ng | | 99 |
| 28) Fluoranthene | 19.150 | 202 | 8476 | 0.424 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 9024 | 0.325 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 7146 | 0.362 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 8272 | 0.383 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 5431 | 0.386 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.782 | 276 | 7314 | 0.394 | ng | | 95 |
| 37) Benzo(b)fluoranthene | 22.841 | 252 | 7293 | 0.390 | ng | | 95 |
| 38) Benzo(k)fluoranthene | 22.888 | 252 | 7751m | 0.395 | ng | | |
| 39) Benzo(a)pyrene | 23.420 | 252 | 6291 | 0.399 | ng | | 95 |
| 40) Dibenzo(a,h)anthracene | 25.803 | 278 | 5522 | 0.382 | ng | | 91 |
| 41) Benzo(g,h,i)perylene | 26.475 | 276 | 6376 | 0.386 | ng | | 94 |

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

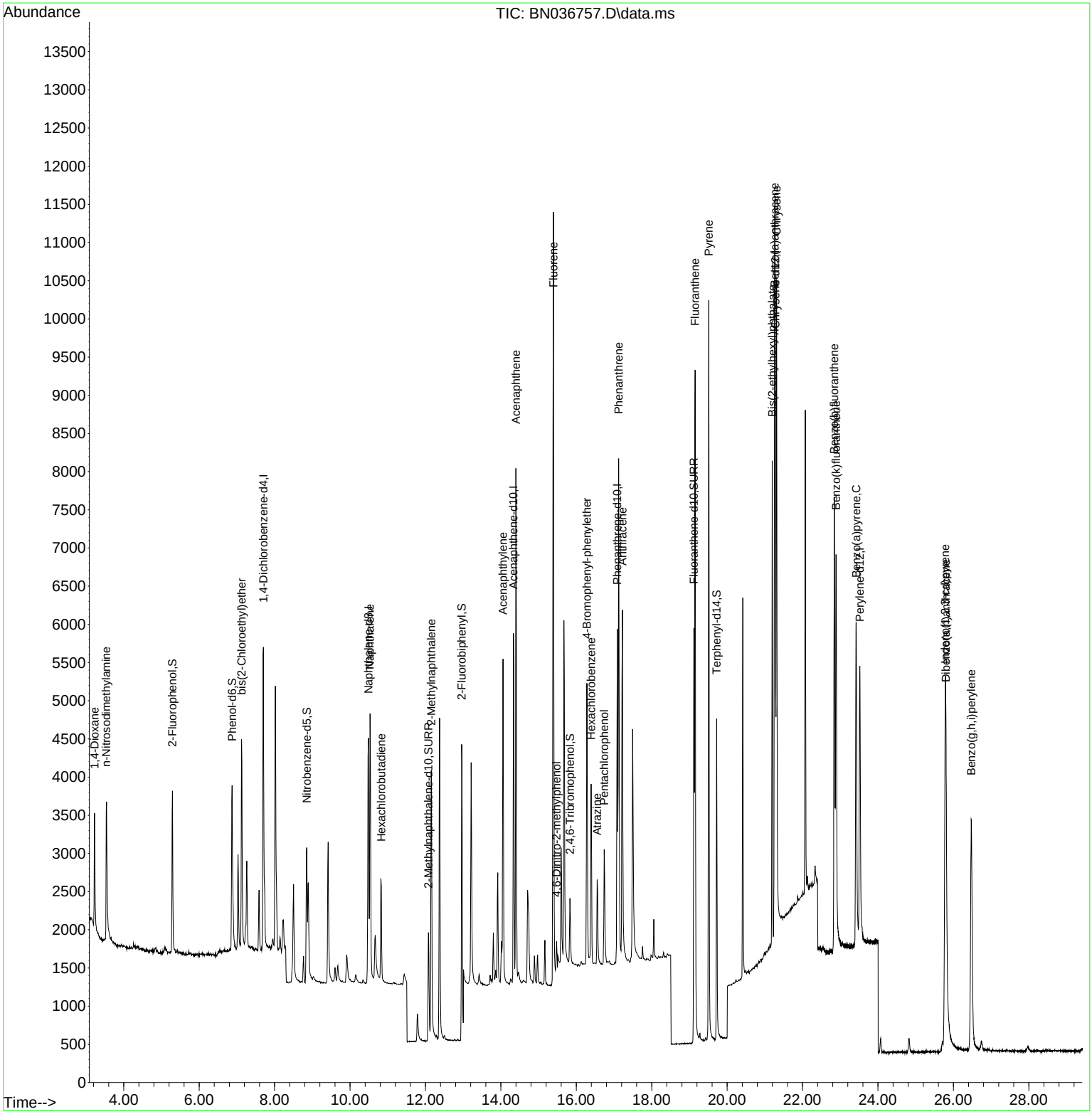
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036757.D
Acq On : 28 Mar 2025 03:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

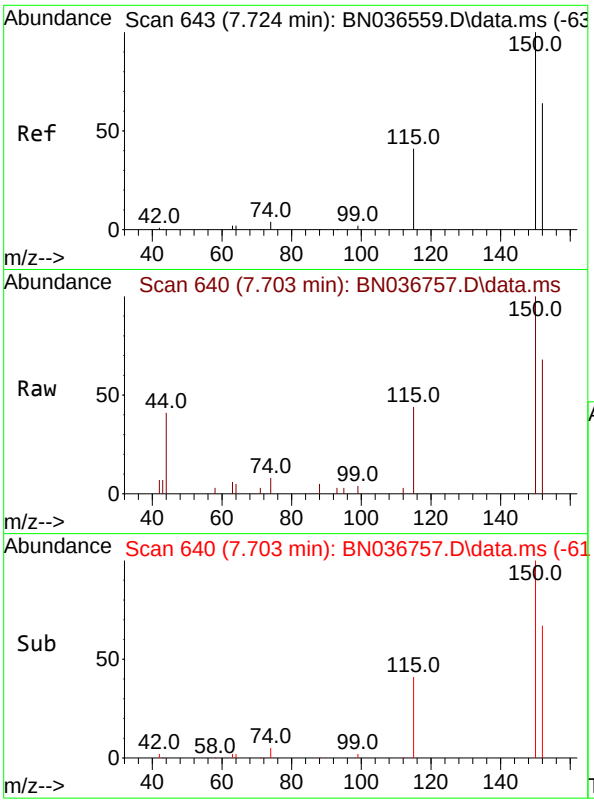
Quant Time: Mar 28 05:36:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

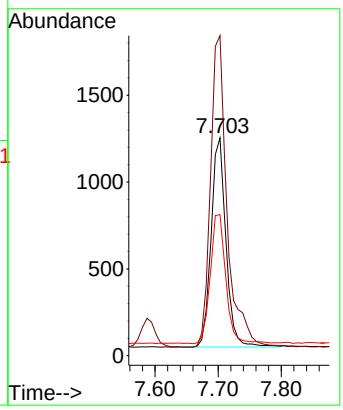





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:152 Resp: 197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 147.0 | 123.7 | 185.5 |
| 115 | 64.8 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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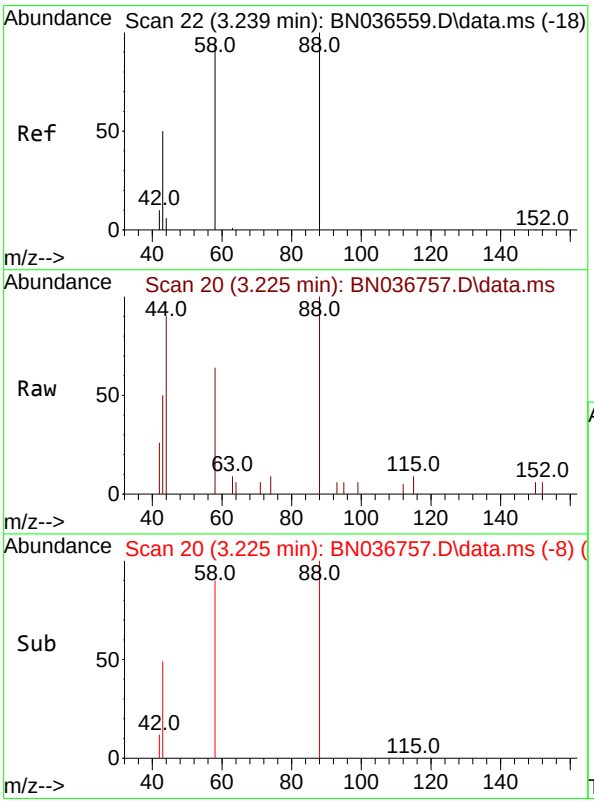
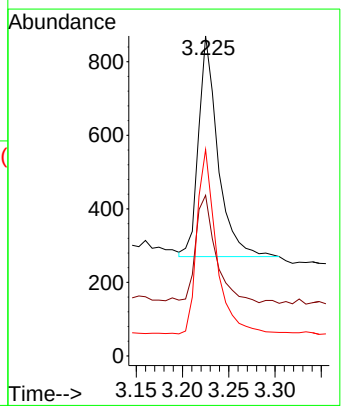
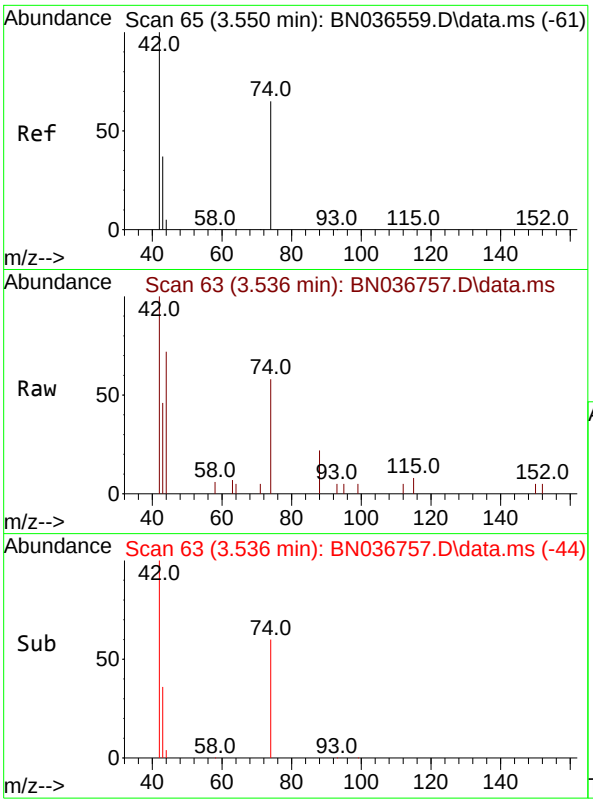



#2
1,4-Dioxane
Concen: 0.399 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 88 Resp: 873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 51.8 | 37.8 | 56.8 |
| 58 | 83.6 | 67.4 | 101.2 |

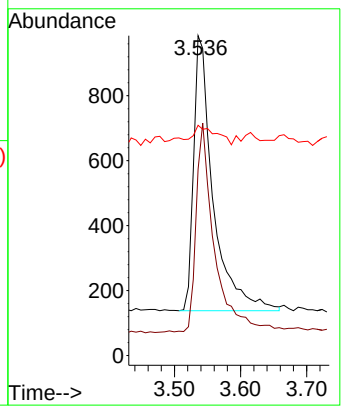





#3
n-Nitrosodimethylamine
Concen: 0.392 ng
RT: 3.536 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 42 Resp: 173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 70.8 | 60.6 | 90.8 |
| 44 | 8.1 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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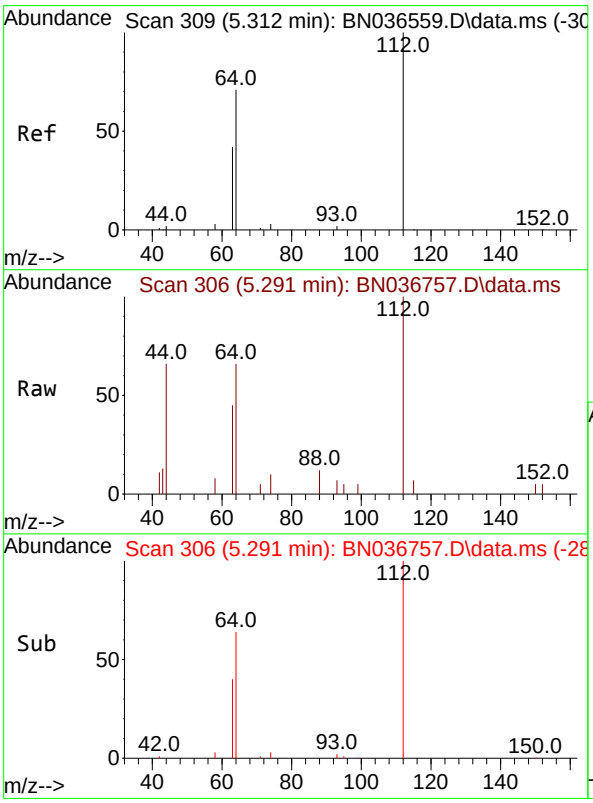
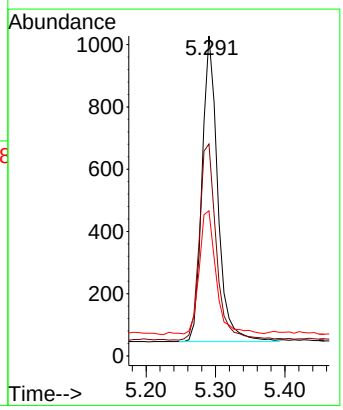
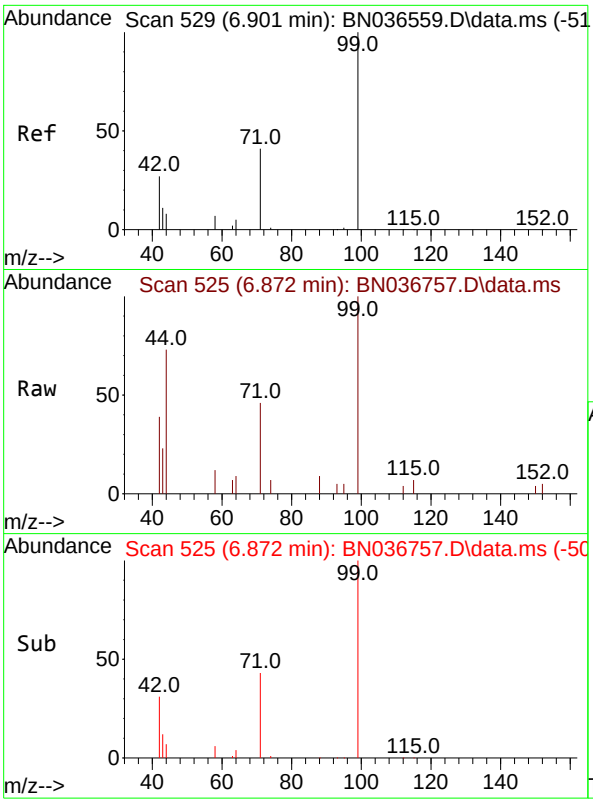



#4
2-Fluorophenol
Concen: 0.335 ng
RT: 5.291 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:112 Resp: 1543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.8 | 53.1 | 79.7 |
| 63 | 43.0 | 31.8 | 47.8 |

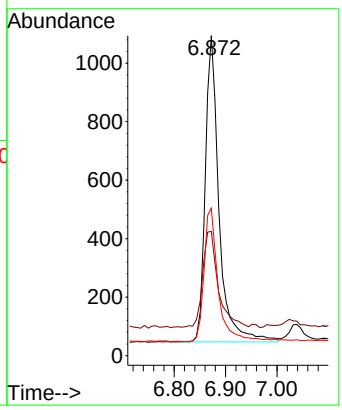





#5
Phenol-d6
Concen: 0.343 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 99 Resp: 194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.4 | 26.5 | 39.7 |
| 71 | 46.1 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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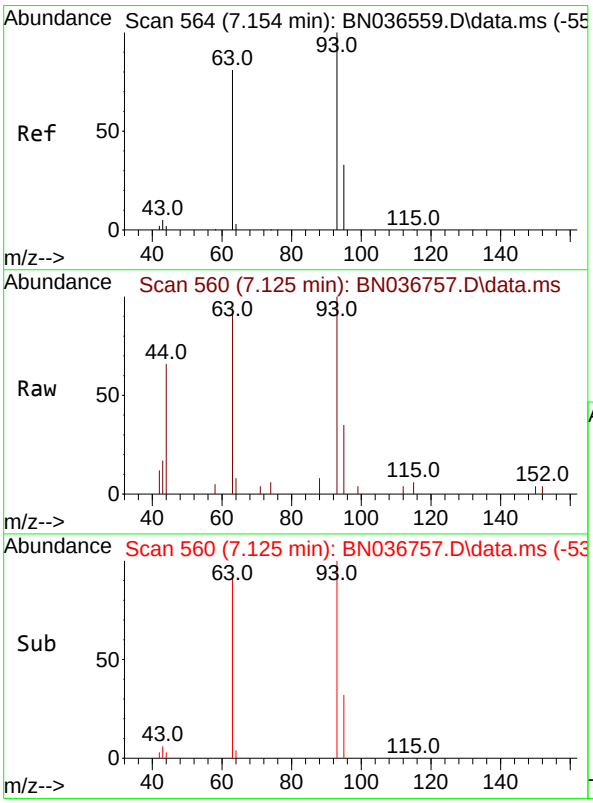
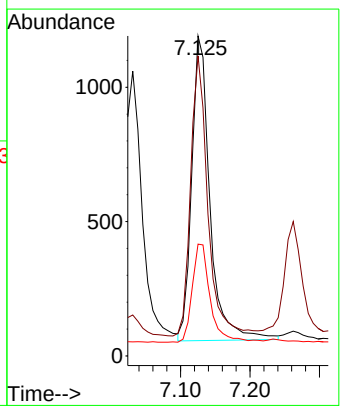
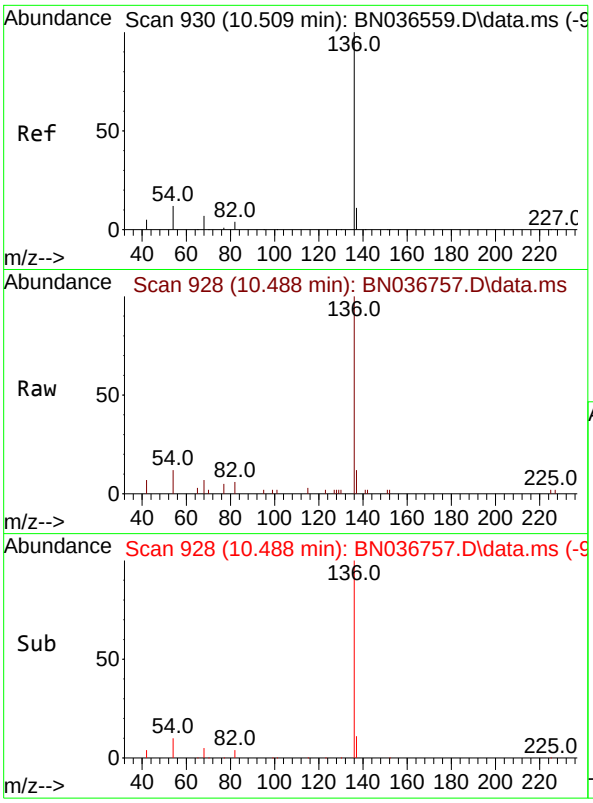



#6
bis(2-Chloroethyl)ether
Concen: 0.353 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 93 Resp: 2072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 86.9 | 67.7 | 101.5 |
| 95 | 31.7 | 25.6 | 38.4 |

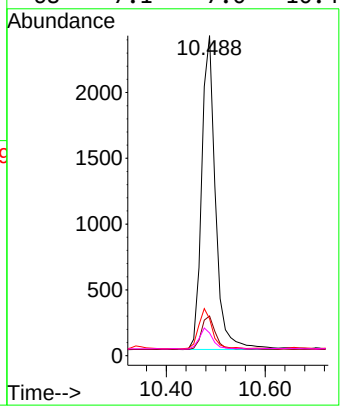





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.488 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:136 Resp: 460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 11.6 | 11.5 | 17.3 |
| 68 | 7.1 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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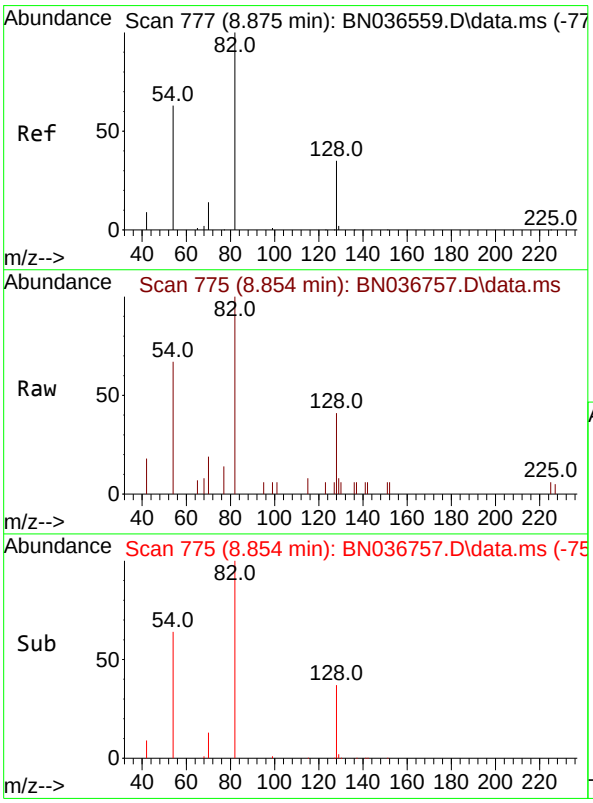
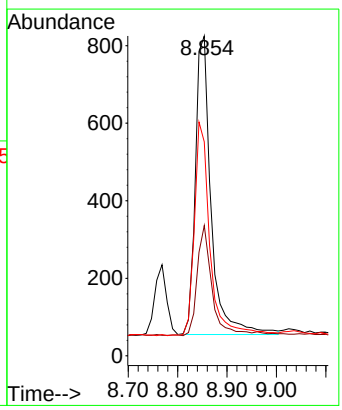
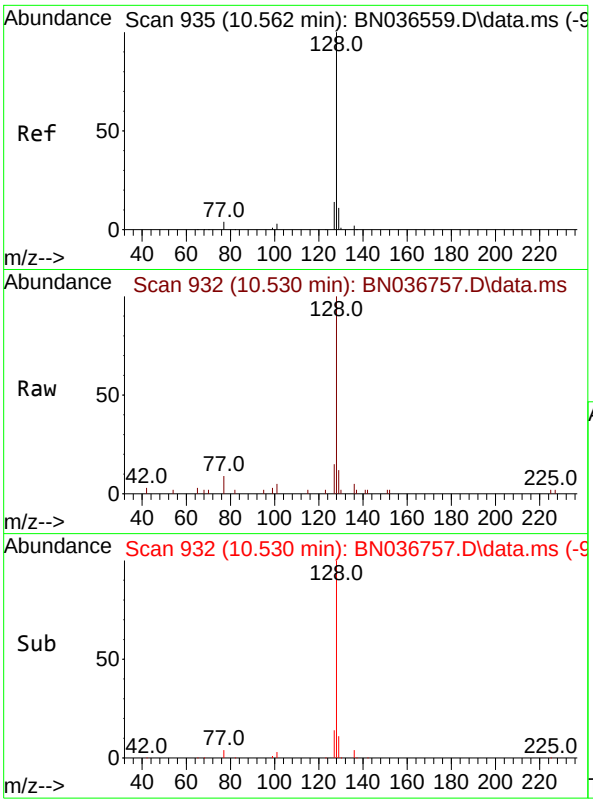



#8
Nitrobenzene-d5
Concen: 0.340 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 82 Resp: 1705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.7 | 30.6 | 45.8 |
| 54 | 66.9 | 52.2 | 78.4 |

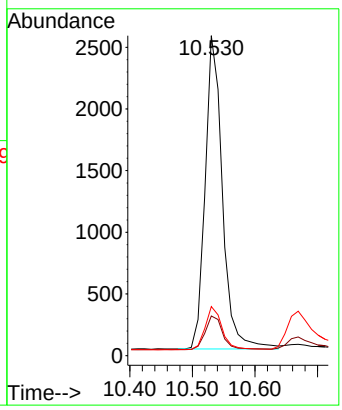





#9
Naphthalene
Concen: 0.359 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:128 Resp: 486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.4 | 9.8 | 14.6 |
| 127 | 15.3 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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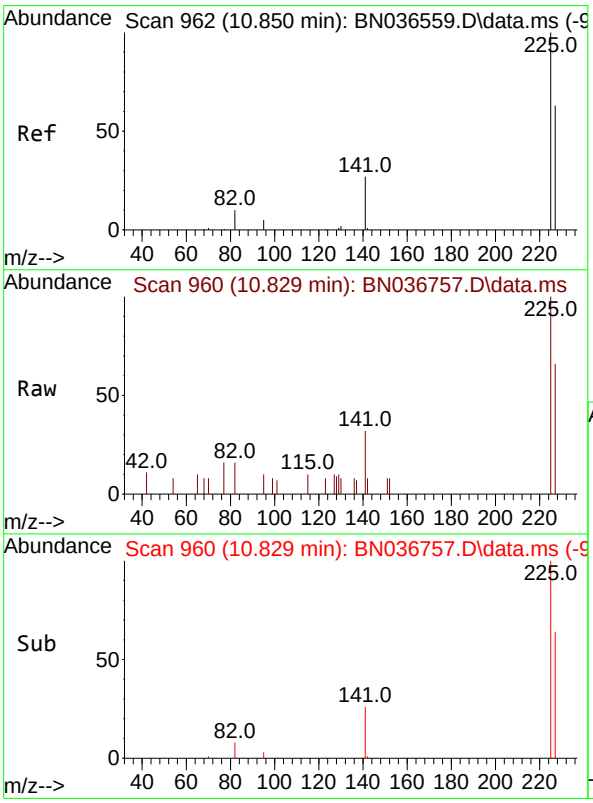
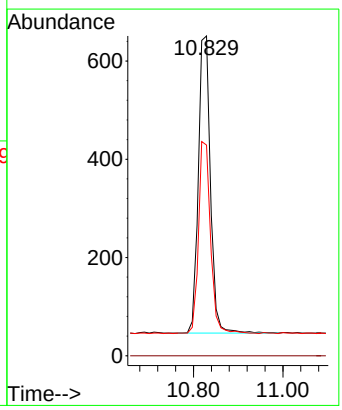
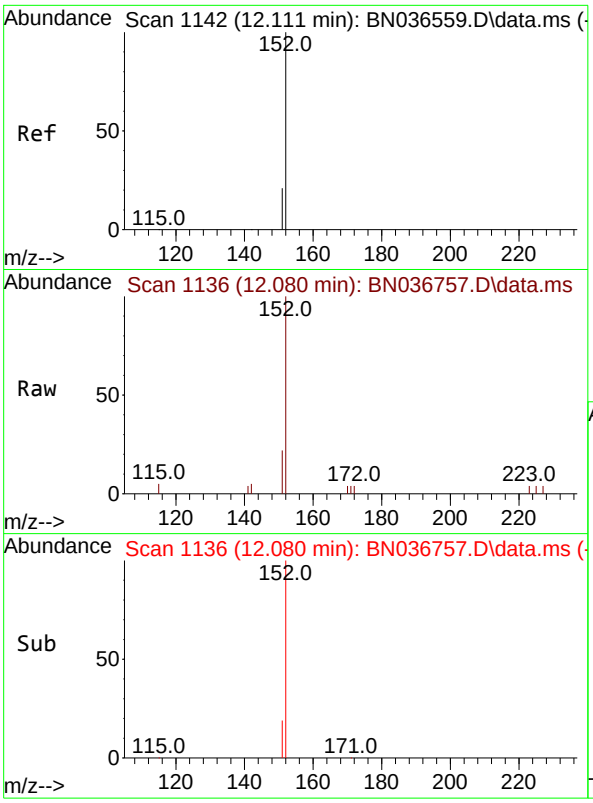



#10
Hexachlorobutadiene
Concen: 0.357 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:225 Resp: 1140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.3 | 51.8 | 77.8 |






#11
2-Methylnaphthalene-d10
Concen: 0.342 ng
RT: 12.080 min Scan# 1
Delta R.T. -0.030 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:152 Resp: 234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.6 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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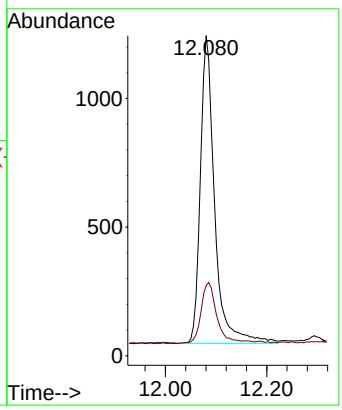
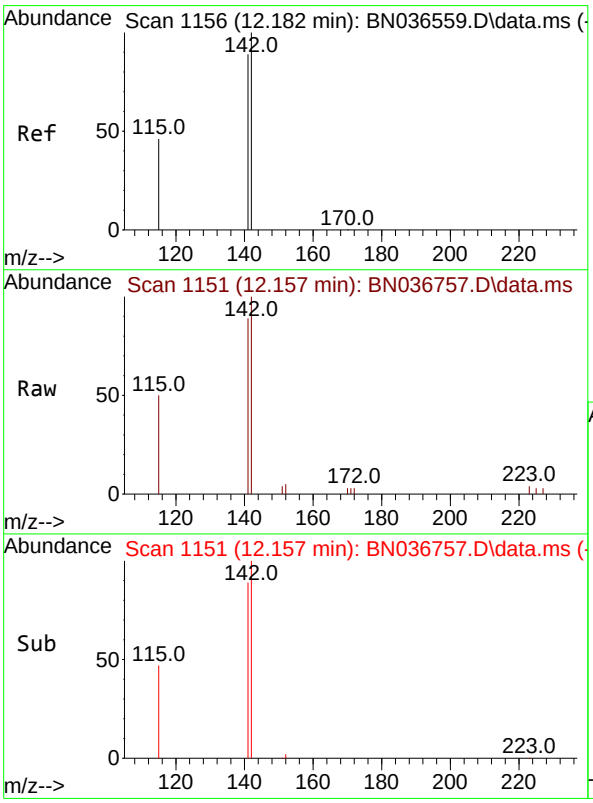
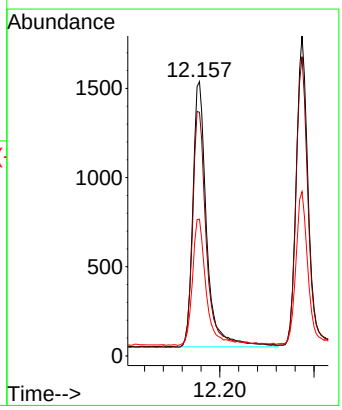


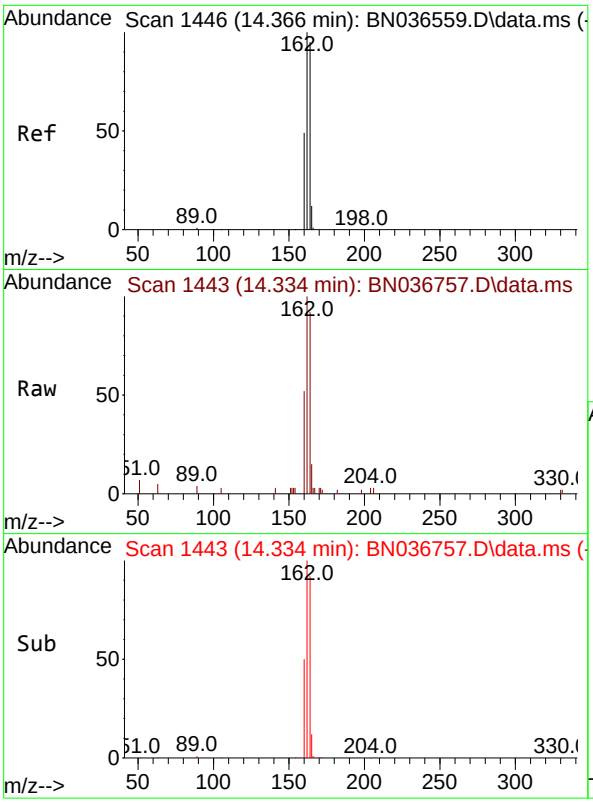




#12
2-Methylnaphthalene
Concen: 0.354 ng
RT: 12.157 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:142 Resp: 3049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 88.8 | 71.7 | 107.5 |
| 115 | 49.9 | 38.3 | 57.5 |

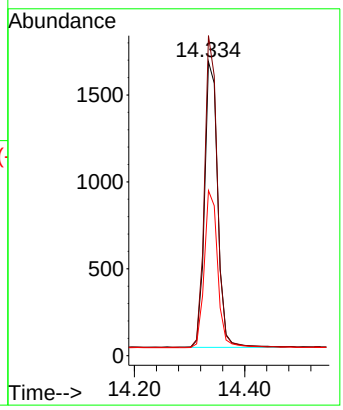





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:164 Resp: 275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 108.9 | 84.2 | 126.2 |
| 160 | 56.2 | 42.2 | 63.2 |




**Instrument :**
BNA_N
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SSTDCCC0.4

**Manual Integrations**
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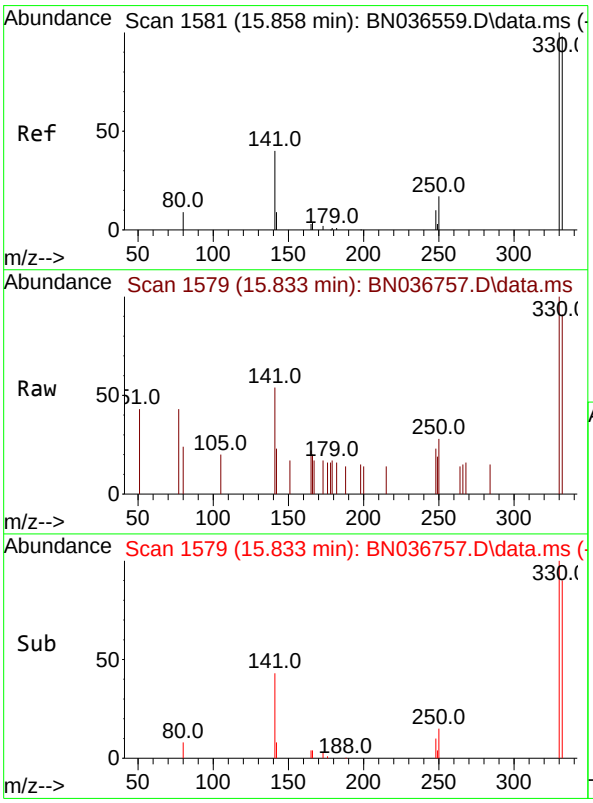
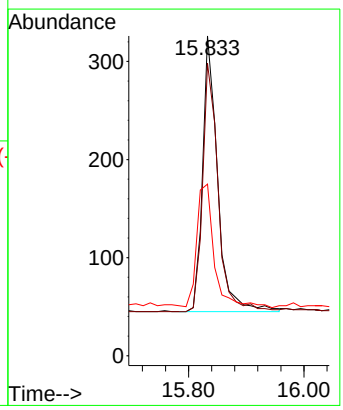
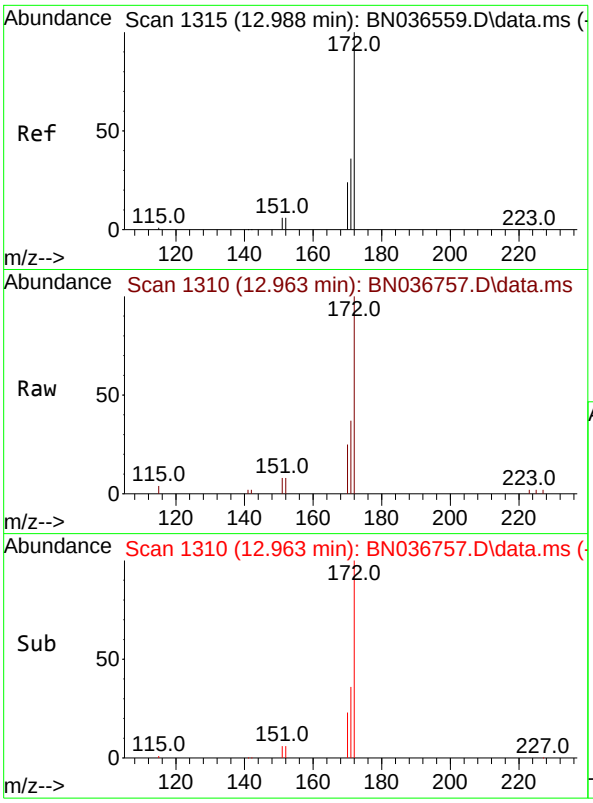



#14
2,4,6-Tribromophenol
Concen: 0.406 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:330 Resp: 507

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 92.9 | 75.2 | 112.8 |
| 141 | 52.3 | 43.4 | 65.2 |

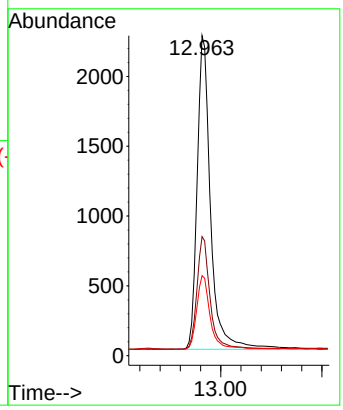





#15
2-Fluorobiphenyl
Concen: 0.346 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:172 Resp: 553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.2 | 29.5 | 44.3 |
| 170 | 25.0 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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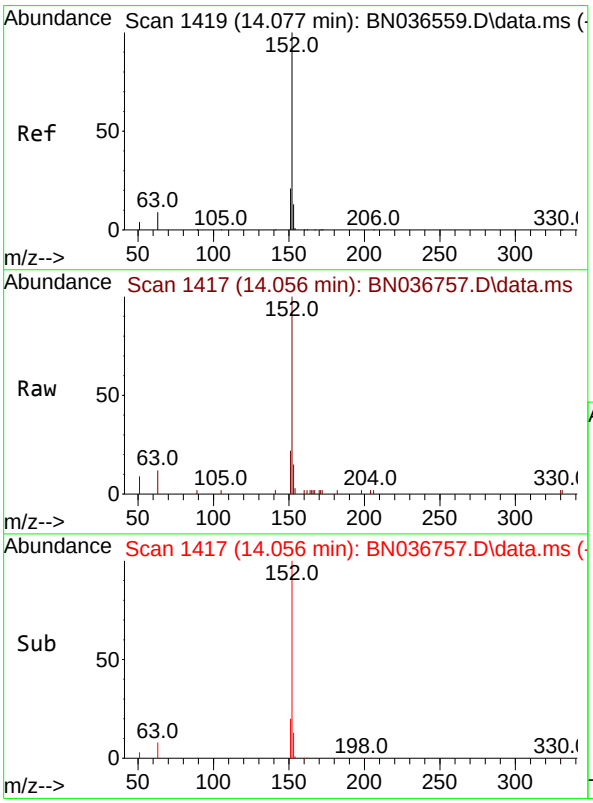
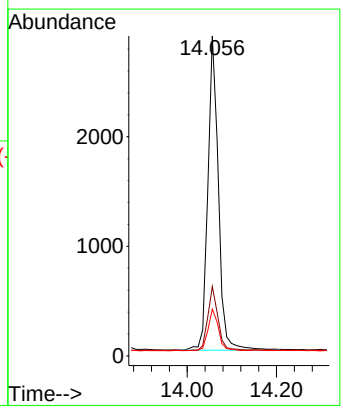
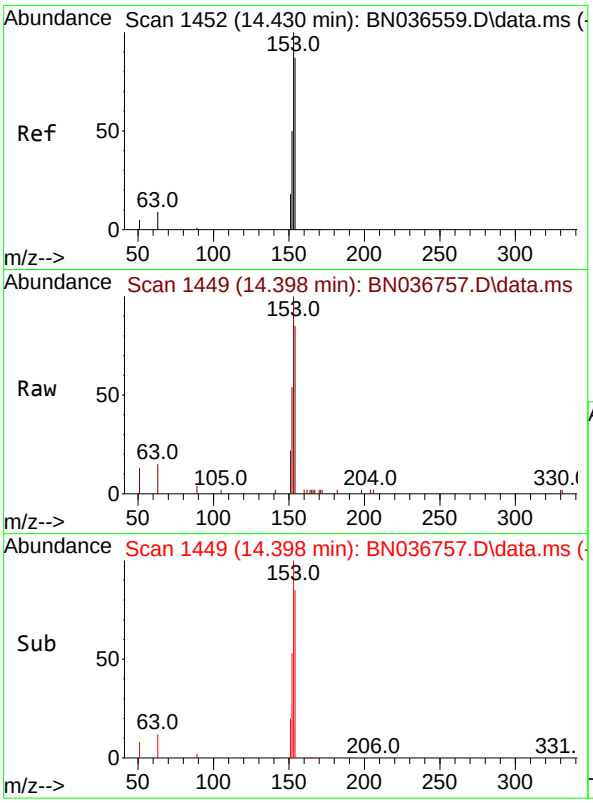



#16
Acenaphthylene
Concen: 0.361 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:152 Resp: 4680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.7 | 16.2 | 24.4 |
| 153 | 13.4 | 10.6 | 15.8 |

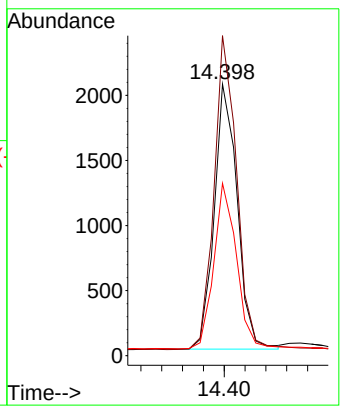





#17
Acenaphthene
Concen: 0.368 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:154 Resp: 312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.8 | 94.1 | 141.1 |
| 152 | 62.6 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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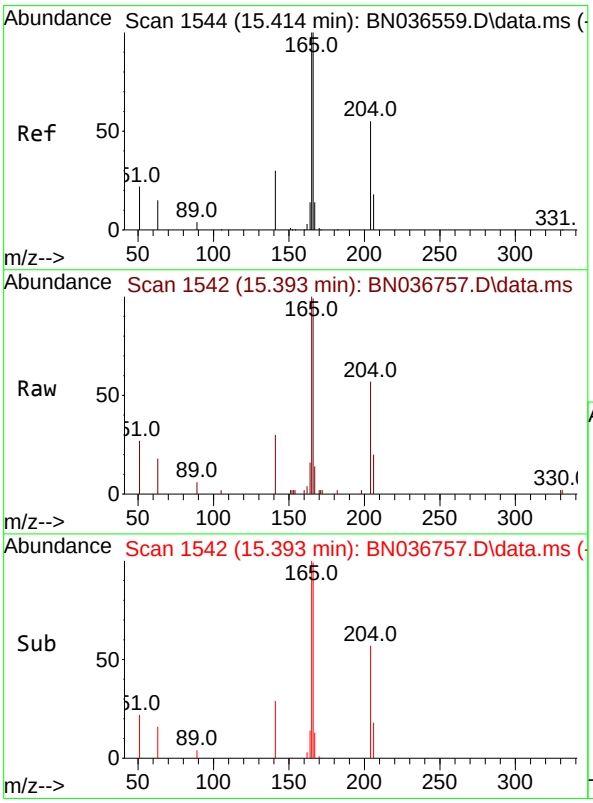
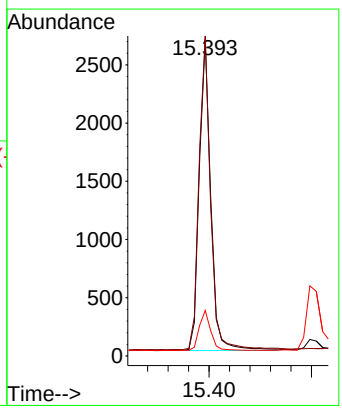
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

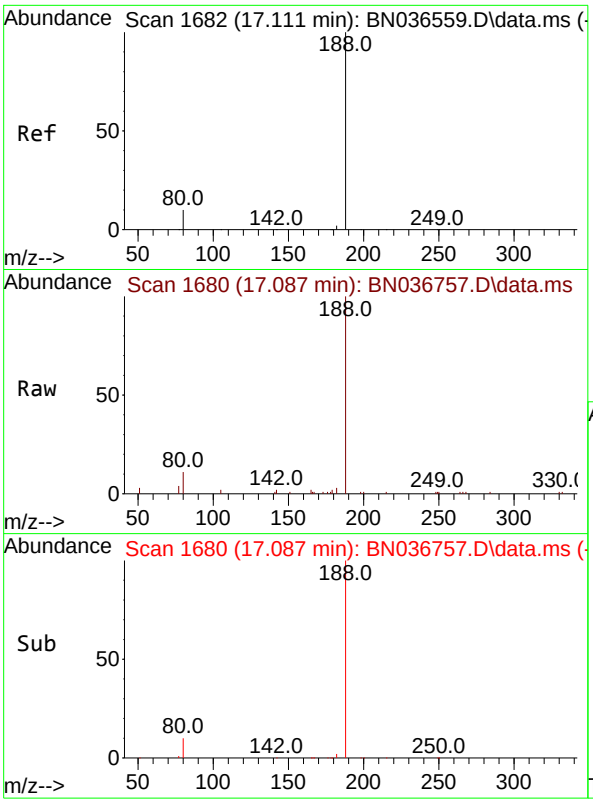



#18
Fluorene
Concen: 0.371 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:166 Resp: 4263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.3 | 79.8 | 119.8 |
| 167 | 12.7 | 10.6 | 15.8 |






#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:188 Resp: 593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 10.8 | 8.8 | 13.2 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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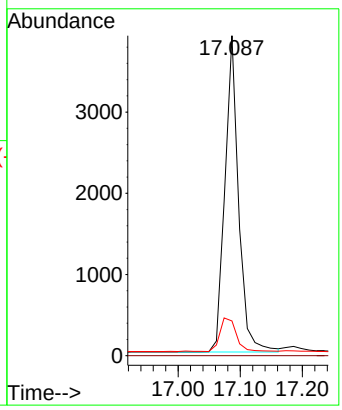
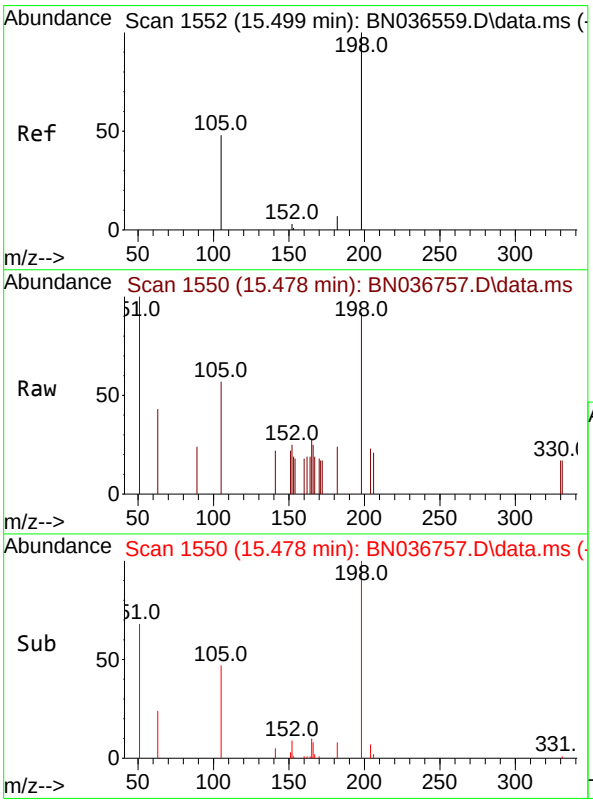
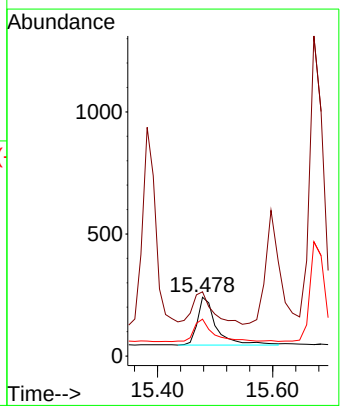


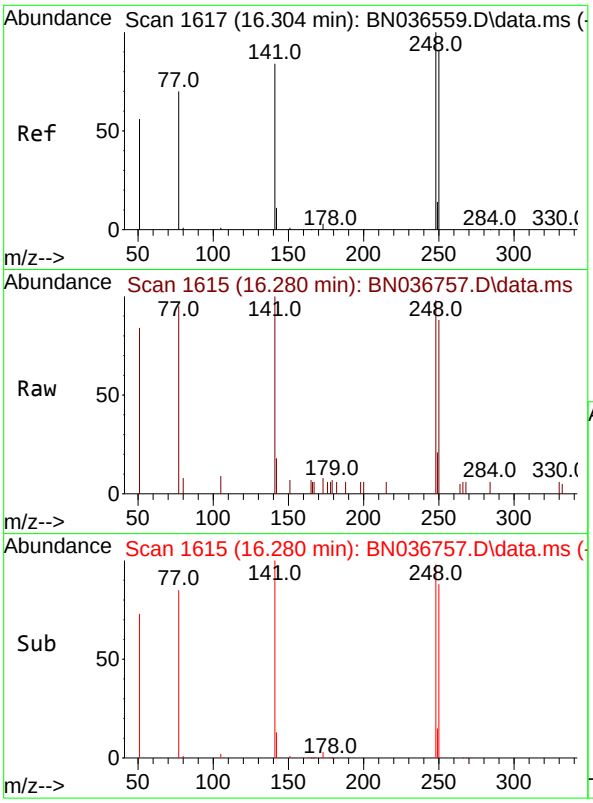




#20
4,6-Dinitro-2-methylphenol
Concen: 0.457 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:198 Resp: 472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 109.1 | 107.9 | 161.9 |
| 105 | 62.7 | 56.2 | 84.2 |






#21
4-Bromophenyl-phenylether
Concen: 0.372 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:248 Resp: 138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 90.2 | 73.0 | 109.6 |
| 141 | 102.0 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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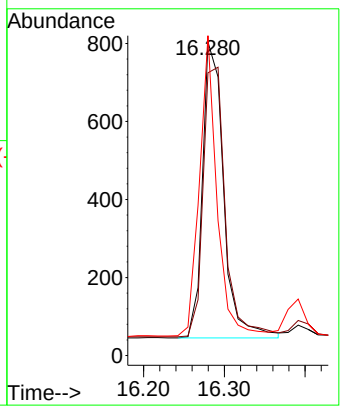
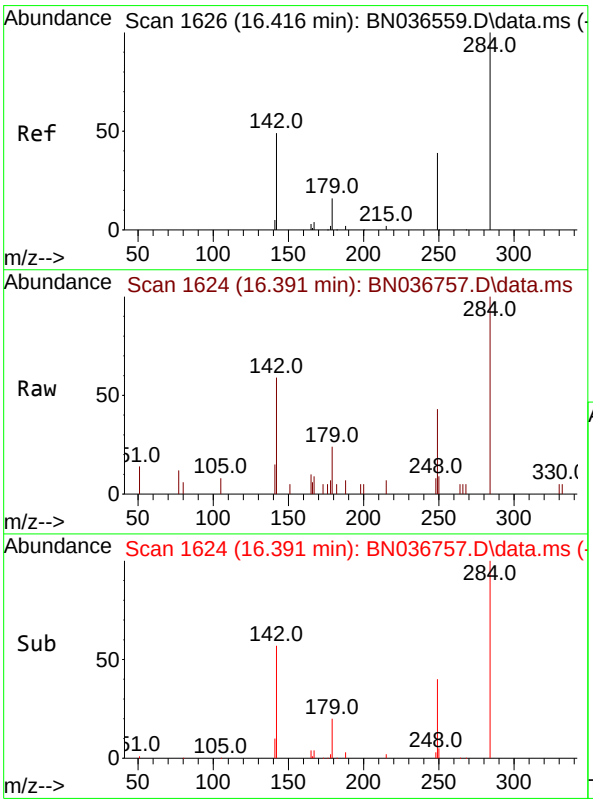
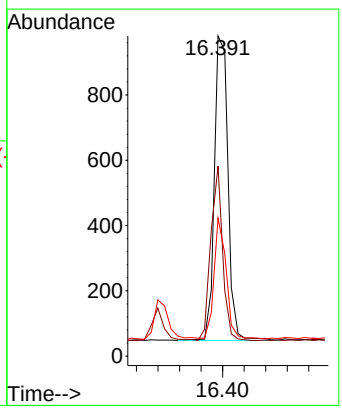


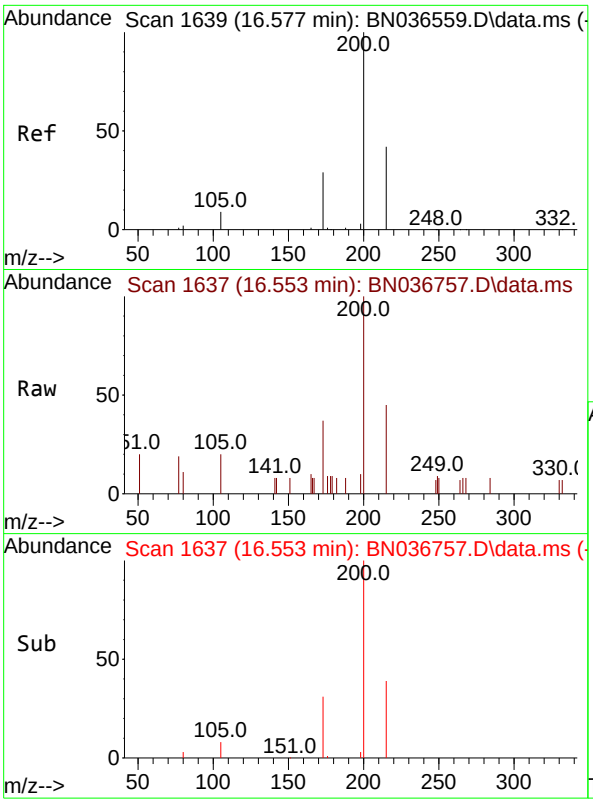




#22
Hexachlorobenzene
Concen: 0.364 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:284 Resp: 1636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.6 | 37.0 | 55.4 |
| 249 | 35.2 | 28.1 | 42.1 |

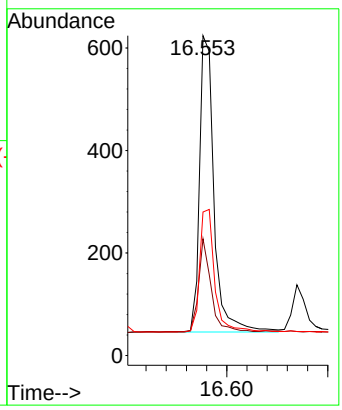





#23
Atrazine
Concen: 0.387 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:200 Resp: 115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.5 | 27.3 | 40.9 |
| 215 | 44.9 | 36.8 | 55.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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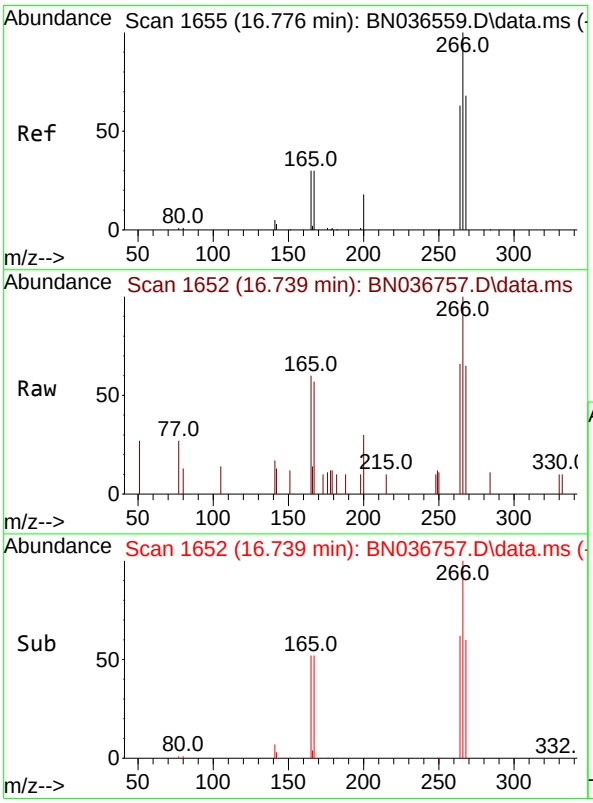
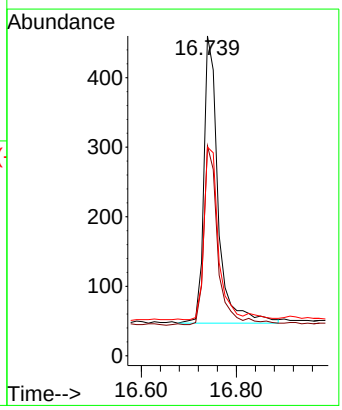
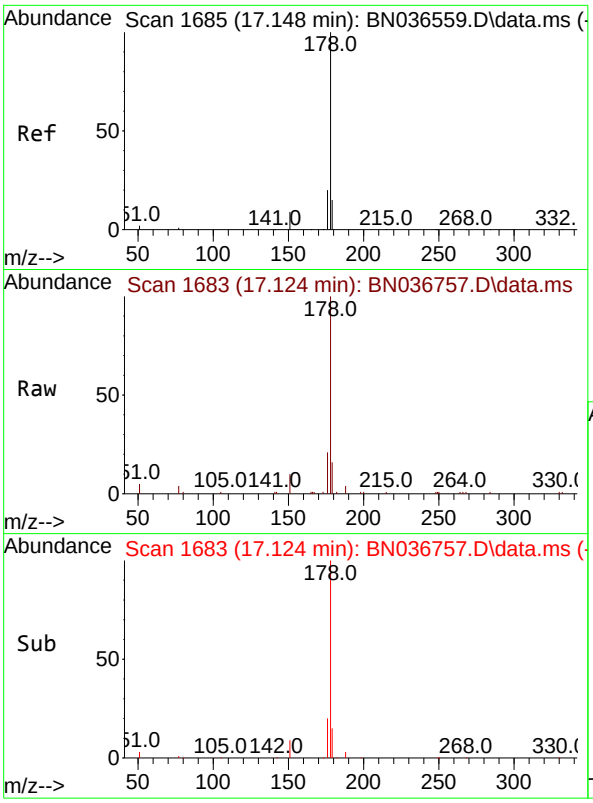



#24
Pentachlorophenol
Concen: 0.424 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:266 Resp: 868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.2 | 49.6 | 74.4 |
| 268 | 59.4 | 50.9 | 76.3 |

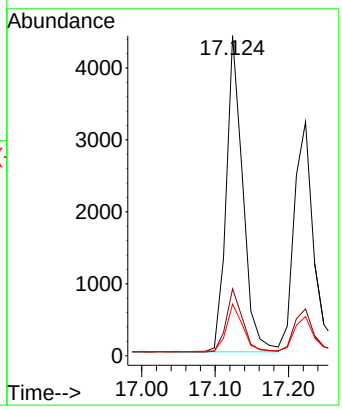





#25
Phenanthrene
Concen: 0.386 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:178 Resp: 686(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.3 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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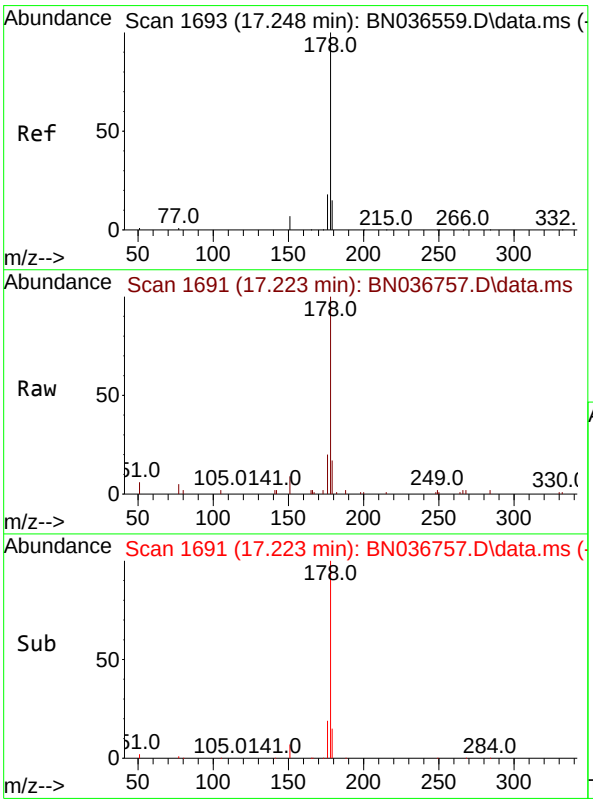
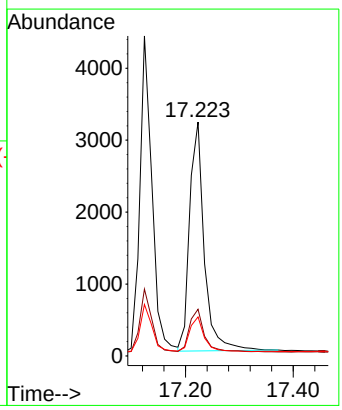
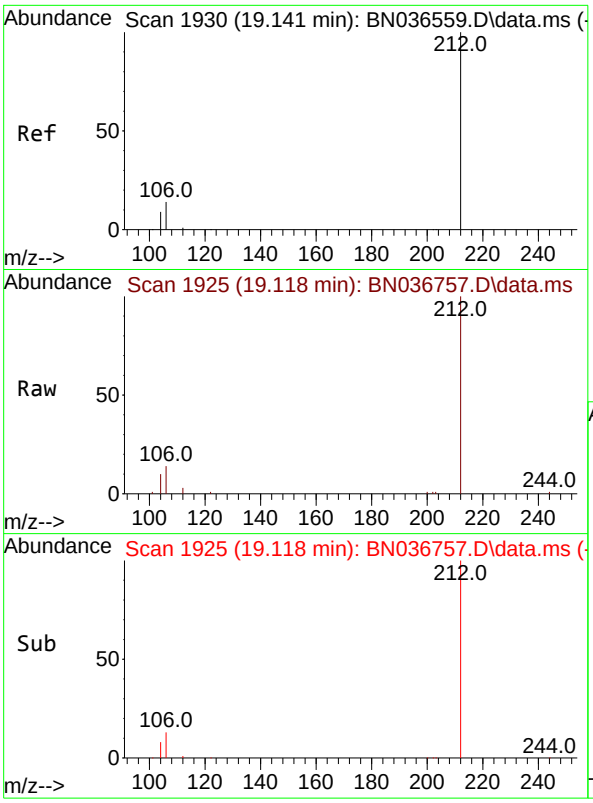



#26
Anthracene
Concen: 0.374 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:178 Resp: 6014

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.1 | 15.4 | 23.2 |
| 179 | 15.0 | 12.6 | 18.8 |

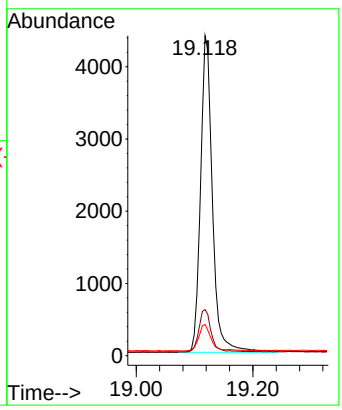





#27
Fluoranthene-d10
Concen: 0.411 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:212 Resp: 625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.6 | 11.8 | 17.6 |
| 104 | 8.6 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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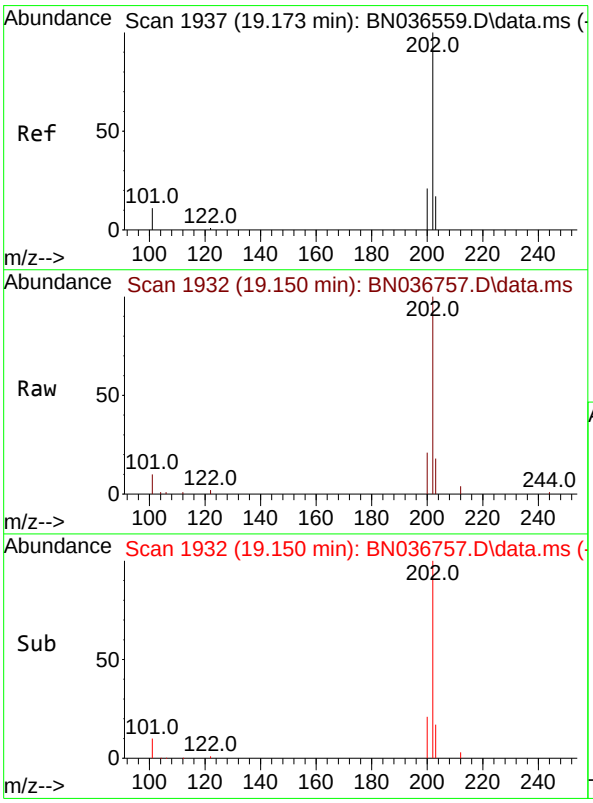
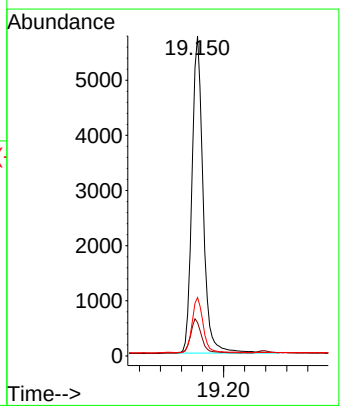
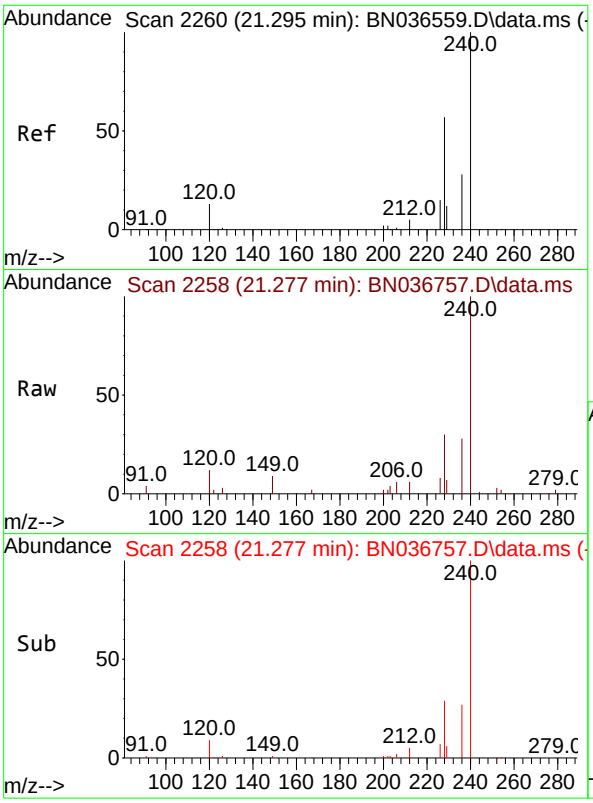



#28
Fluoranthene
Concen: 0.424 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:202 Resp: 8476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.0 | 9.4 | 14.0 |
| 203 | 17.2 | 13.5 | 20.3 |

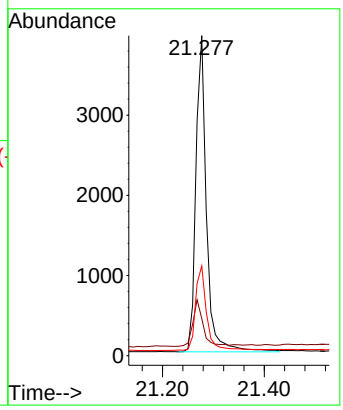





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:240 Resp: 568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 11.6 | 14.6 | 22.0 |
| 236 | 28.0 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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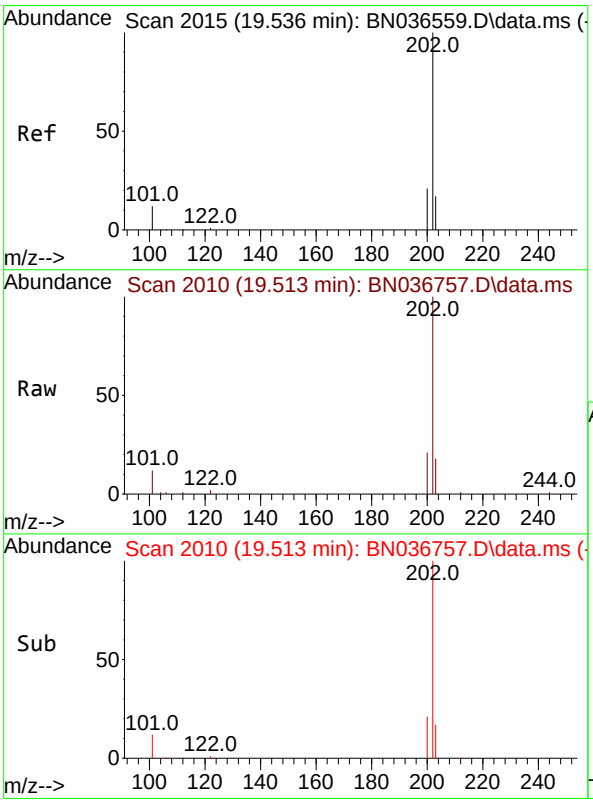
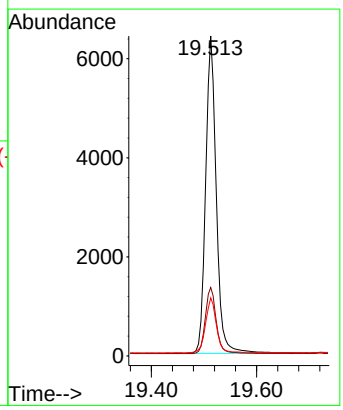
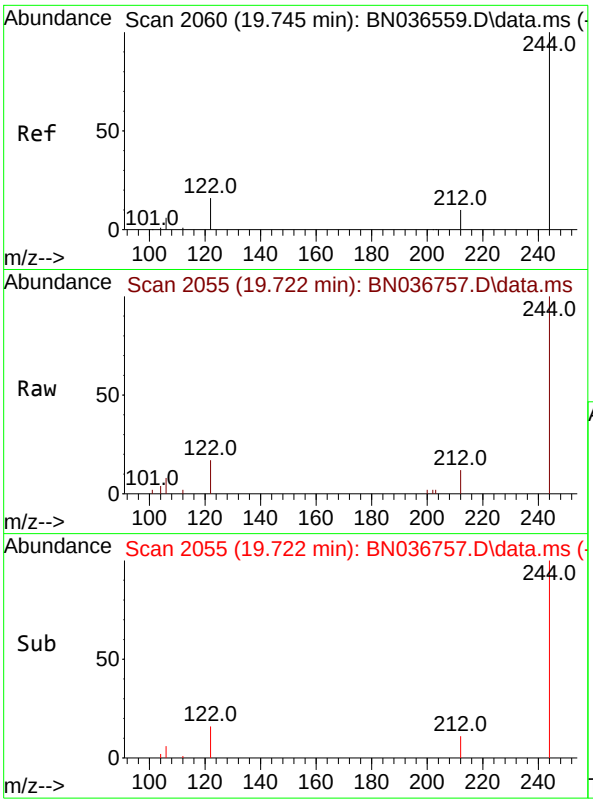



#30
Pyrene
Concen: 0.325 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:202 Resp: 9024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |

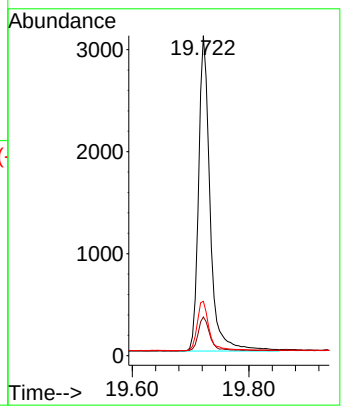





#31
Terphenyl-d14
Concen: 0.313 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:244 Resp: 425

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.1 | 9.6 | 14.4 |
| 122 | 17.0 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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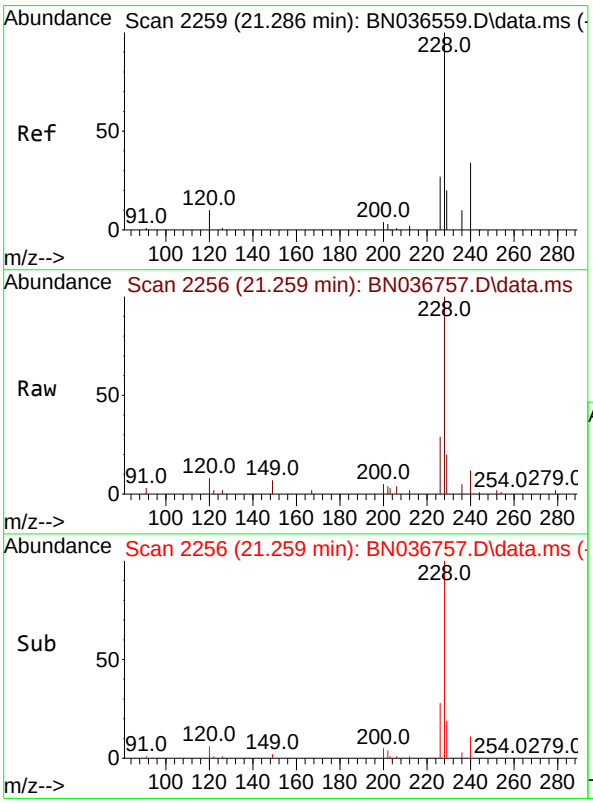
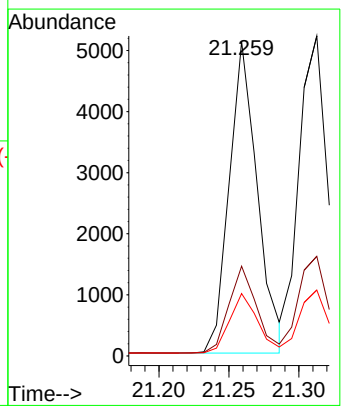
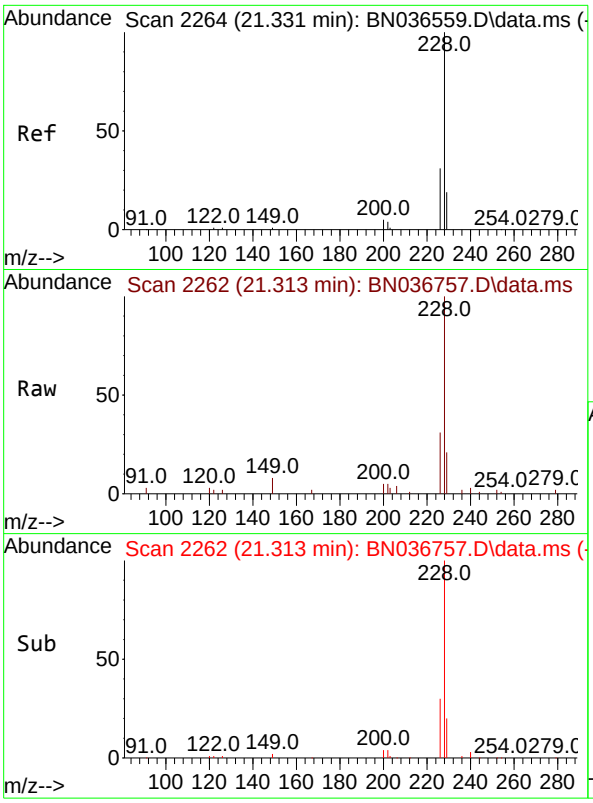



#32
Benzo(a)anthracene
Concen: 0.362 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:228 Resp: 7146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.5 | 22.5 | 33.7 |
| 229 | 19.8 | 16.6 | 25.0 |

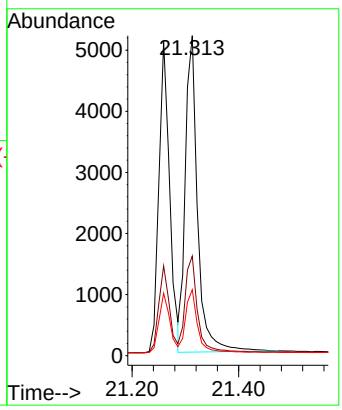





#33
Chrysene
Concen: 0.383 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:228 Resp: 827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.1 | 25.3 | 37.9 |
| 229 | 20.6 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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Reviewed By :Anahy Claudio 03/28/2025
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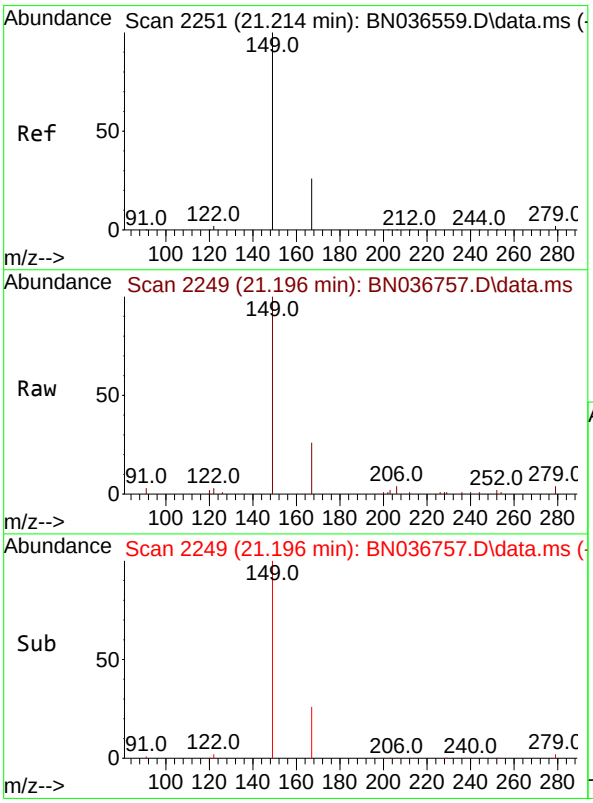
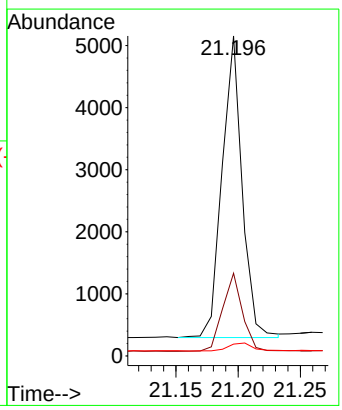
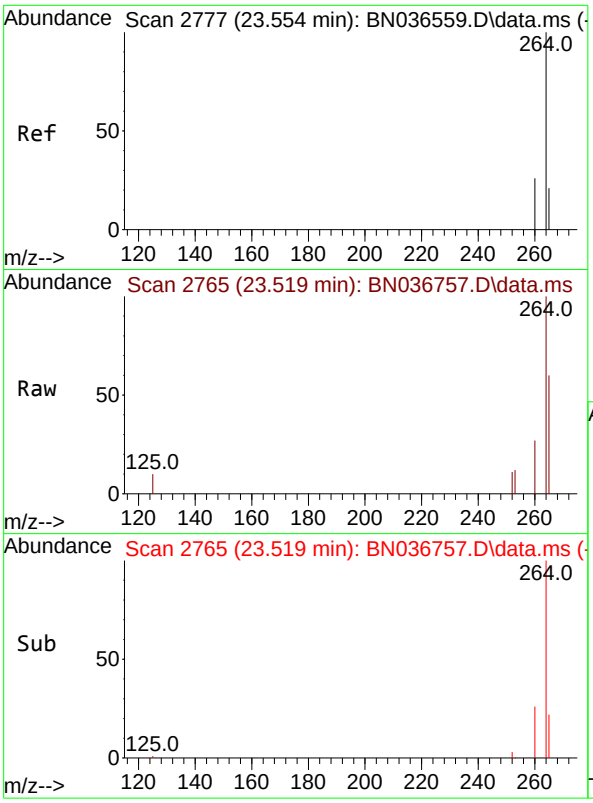



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.386 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:149 Resp: 5431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 25.8 | 20.7 | 31.1 |
| 279 | 3.4 | 3.6 | 5.4# |

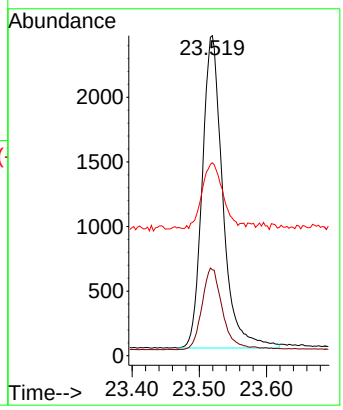





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.519 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:264 Resp: 514

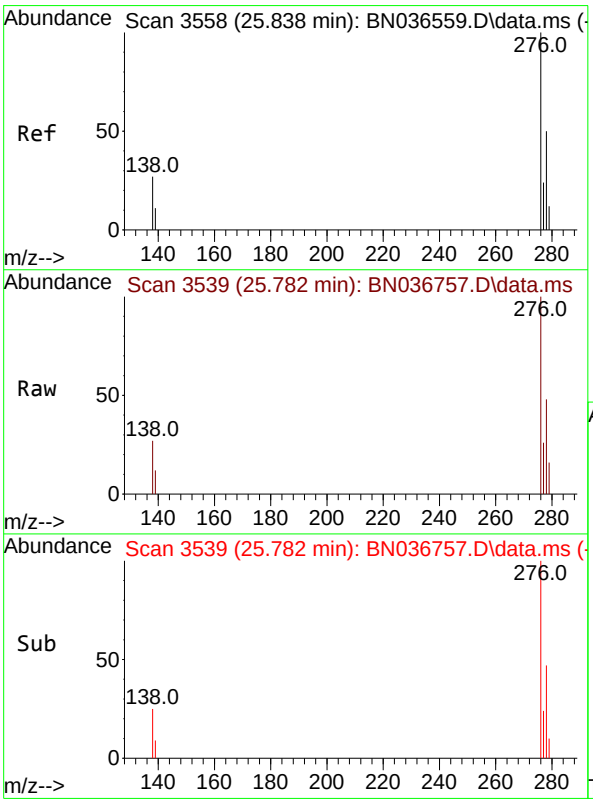
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.8 | 22.6 | 33.8 |
| 265 | 60.3 | 88.1 | 132.1# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

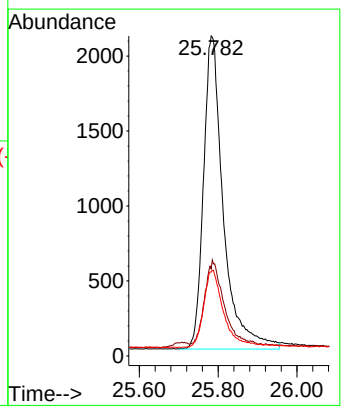
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

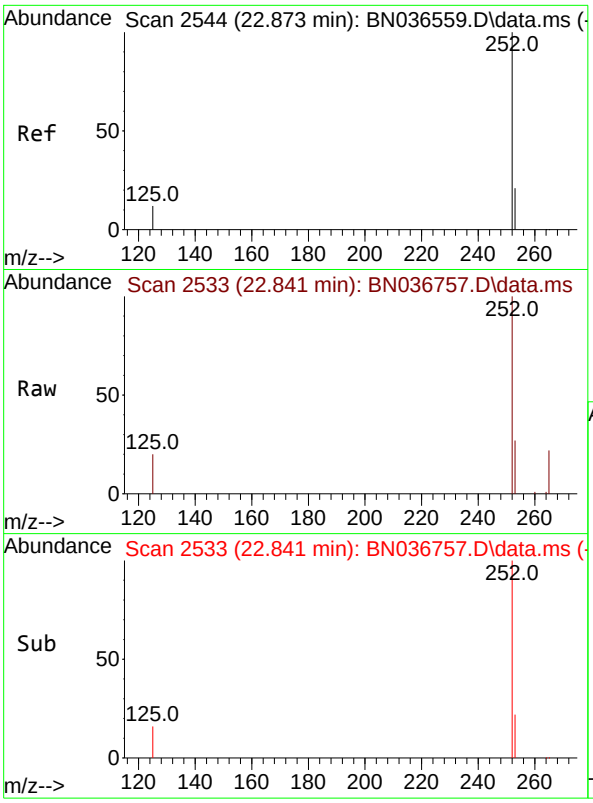



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.394 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.055 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:276 Resp: 7314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.9 | 23.4 | 35.2 |
| 277 | 24.6 | 20.0 | 30.0 |

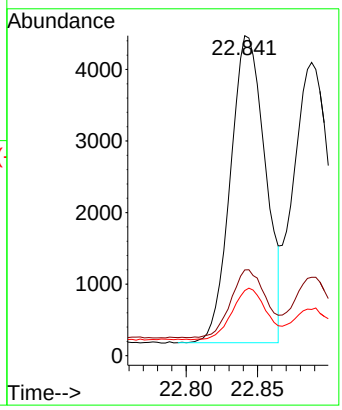





#37
Benzo(b)fluoranthene
Concen: 0.390 ng
RT: 22.841 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:252 Resp: 729

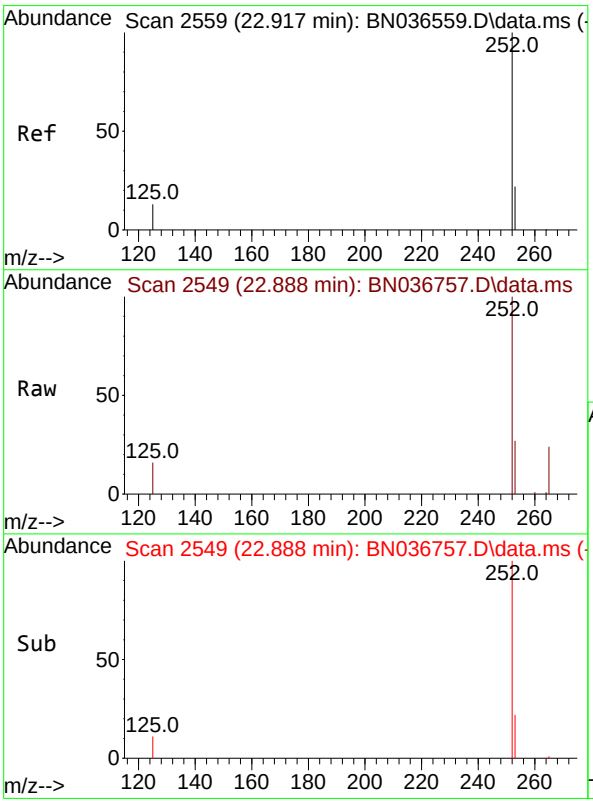
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 26.8 | 23.9 | 35.9 |
| 125 | 20.4 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

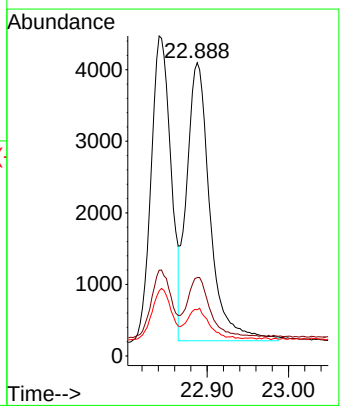
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

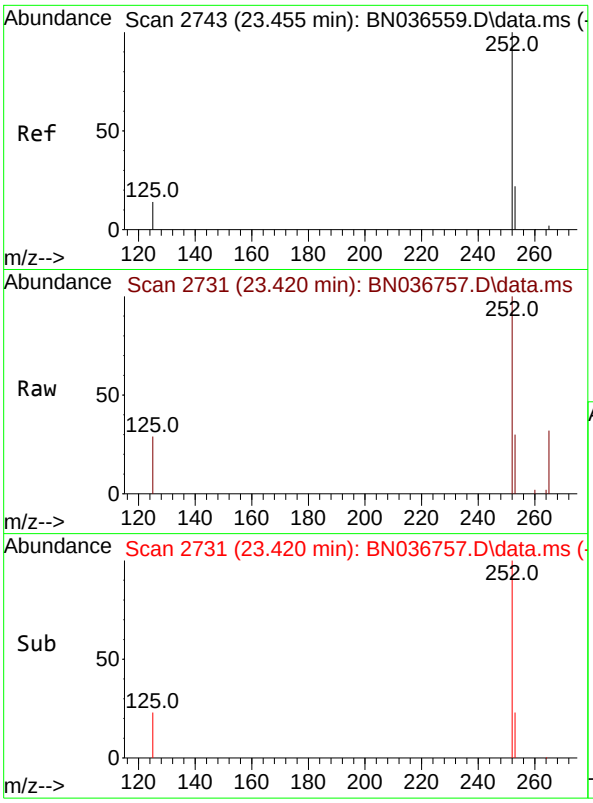



#38
Benzo(k)fluoranthene
Concen: 0.395 ng m
RT: 22.888 min Scan# 2549
Delta R.T. -0.029 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:252 Resp: 7751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 26.7 | 24.6 | 36.8 |
| 125 | 15.8 | 17.8 | 26.8# |

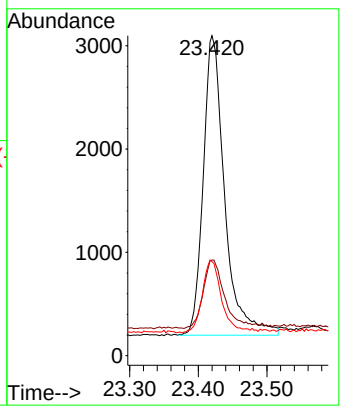





#39
Benzo(a)pyrene
Concen: 0.399 ng
RT: 23.420 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:252 Resp: 629

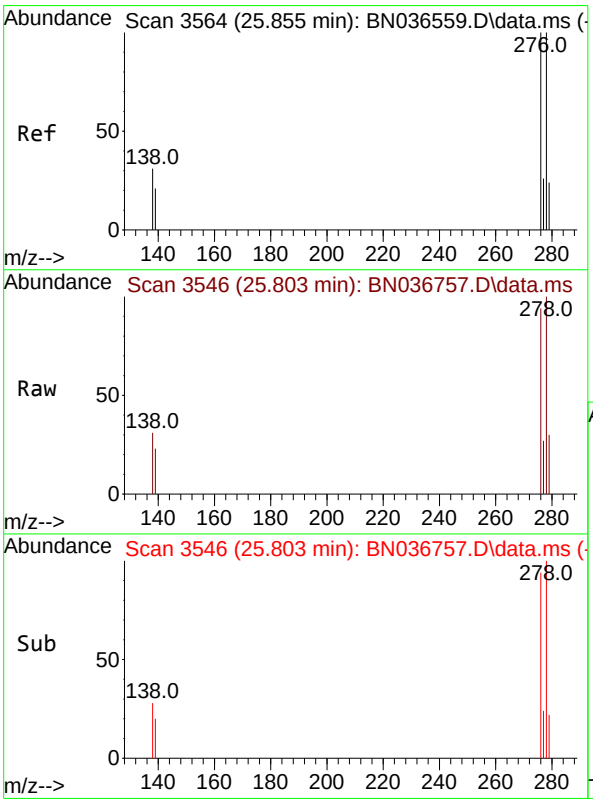
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.9 | 27.8 | 41.8 |
| 125 | 29.4 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

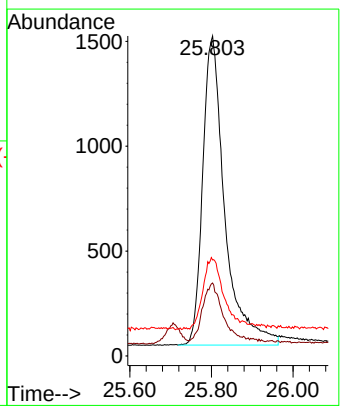
Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

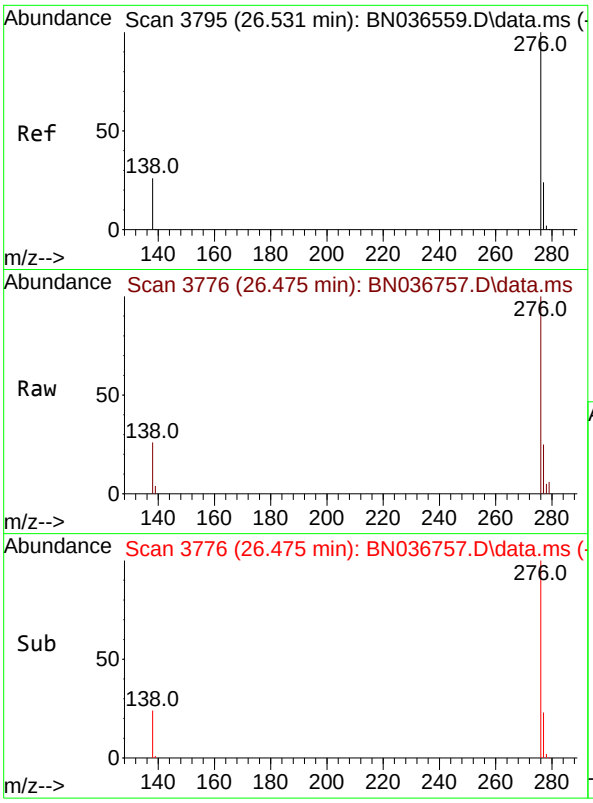



#40
Dibenzo(a,h)anthracene
Concen: 0.382 ng
RT: 25.803 min Scan# 3546
Delta R.T. -0.052 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:278 Resp: 5522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 22.8 | 20.8 | 31.2 |
| 279 | 30.0 | 28.8 | 43.2 |

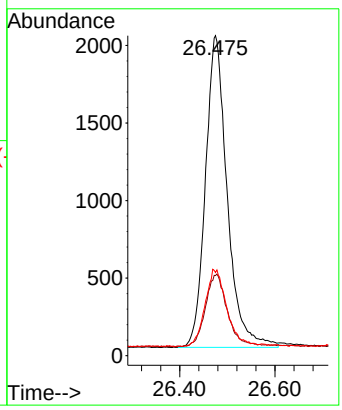





#41
Benzo(g,h,i)perylene
Concen: 0.386 ng
RT: 26.475 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:276 Resp: 637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.1 | 22.2 | 33.4 |
| 138 | 26.0 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/28/2025
Supervised By :Jagrut Upadhyay 04/01/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036757.D
Acq On : 28 Mar 2025 03:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 05:36:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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 | 89 | -0.02 |
| 2 | | 1,4-Dioxane | 0.444 | 0.442 | 0.5 | 79 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.879 | 2.1 | 84 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.782 | 16.1 | 71 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 0.986 | 14.4 | 78 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.050 | 11.8 | 79 | -0.03 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 90 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.370 | 14.9 | 81 | -0.02 |
| 9 | | Naphthalene | 1.177 | 1.056 | 10.3 | 79 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.247 | 10.8 | 76 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.509 | 14.5 | 76 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.662 | 11.6 | 78 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 91 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.184 | -1.1 | 89 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 2.013 | 13.5 | 76 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.702 | 9.9 | 80 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.136 | 8.1 | 81 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.550 | 7.3 | 80 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 99 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.080 | 7.0 | 102 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.233 | 7.2 | 84 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.276 | 8.9 | 81 | -0.02 |
| 23 | | Atrazine | 0.201 | 0.194 | 3.5 | 90 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.146 | -5.8 | 106 | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.156 | 3.7 | 88 | -0.02 |
| 26 | | Anthracene | 1.083 | 1.013 | 6.5 | 87 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.053 | -2.7 | 93 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.428 | -5.9 | 97 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 138 | -0.02 |
| 30 | | Pyrene | 1.956 | 1.589 | 18.8 | 103 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.749 | 21.8 | 101 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.258 | 9.6 | 121 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.456 | 4.2 | 125 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.956 | 3.4 | 127 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 145 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.423 | 1.5 | 134 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.419 | 2.5 | 133 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.508 | 1.2 | 135 | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.224 | 0.2 | 136 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 1.074 | 4.4 | 134 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.240 | 3.6 | 130 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036757.D
Acq On : 28 Mar 2025 03:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 05:36:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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 | 89 | -0.02 |
| 2 | | 1,4-Dioxane | 0.400 | 0.399 | 0.3 | 79 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.392 | 2.0 | 84 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.335 | 16.3 | 71 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.343 | 14.2 | 78 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.353 | 11.8 | 79 | -0.03 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 90 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.340 | 15.0 | 81 | -0.02 |
| 9 | | Naphthalene | 0.400 | 0.359 | 10.3 | 79 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.357 | 10.8 | 76 | -0.02 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.342 | 14.5 | 76 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.354 | 11.5 | 78 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 91 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.406 | -1.5 | 89 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.346 | 13.5 | 76 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.361 | 9.8 | 80 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.368 | 8.0 | 81 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.371 | 7.3 | 80 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 99 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.457 | -14.2 | 102 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.372 | 7.0 | 84 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.364 | 9.0 | 81 | -0.02 |
| 23 | | Atrazine | 0.400 | 0.387 | 3.3 | 90 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.424 | -6.0 | 106 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.386 | 3.5 | 88 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.374 | 6.5 | 87 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.411 | -2.7 | 93 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.424 | -6.0 | 97 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 138 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.325 | 18.8 | 103 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.313 | 21.8 | 101 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.362 | 9.5 | 121 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.383 | 4.3 | 125 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.386 | 3.5 | 127 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 145 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.394 | 1.5 | 134 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.390 | 2.5 | 133 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.395 | 1.3 | 135 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.399 | 0.3 | 136 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.382 | 4.5 | 134 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.386 | 3.5 | 130 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 13:58

Lab File ID: BN036771.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.540 | | -9.2 | 50.0 |
| Fluoranthene-d10 | 1.025 | 1.012 | | -1.3 | 50.0 |
| 2-Fluorophenol | 0.932 | 0.846 | | -9.2 | 50.0 |
| Phenol-d6 | 1.152 | 1.010 | | -12.3 | 50.0 |
| Nitrobenzene-d5 | 0.435 | 0.354 | | -18.6 | 50.0 |
| 2-Fluorobiphenyl | 2.327 | 2.021 | | -13.1 | 50.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.177 | | -2.7 | 50.0 |
| Terphenyl-d14 | 0.958 | 0.816 | | -14.8 | 50.0 |
| 1,4-Dioxane | 0.444 | 0.460 | | 3.6 | 50.0 |

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036771.D
Acq On : 28 Mar 2025 13:58
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 28 14:23:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.695 | 152 | 1636 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.487 | 136 | 4177 | 0.400 | ng | | #-0.02 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2615 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 5571 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 4555 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.516 | 264 | 4167 | 0.400 | ng | | #-0.04 |
| **System Monitoring Compounds** | | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1384 | 0.363 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1653 | 0.351 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1480 | 0.326 | ng | | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 2256 | 0.363 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 464 | 0.391 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5285 | 0.347 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5637 | 0.395 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3716 | 0.341 | ng | | -0.02 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 752 | 0.414 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1423 | 0.388 | ng | | 97 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1671 | 0.343 | ng | | 98 |
| 9) Naphthalene | 10.530 | 128 | 4359 | 0.355 | ng | | 98 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 1044 | 0.361 | ng | # | 99 |
| 12) 2-Methylnaphthalene | 12.156 | 142 | 2874 | 0.368 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 4358 | 0.353 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 2946 | 0.365 | ng | | 100 |
| 18) Fluorene | 15.393 | 166 | 4111 | 0.376 | ng | | 98 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 428 | 0.446 | ng | | 87 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1300 | 0.372 | ng | | 96 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1537 | 0.365 | ng | | 96 |
| 23) Atrazine | 16.553 | 200 | 1063 | 0.380 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 702 | 0.365 | ng | | 95 |
| 25) Phenanthrene | 17.124 | 178 | 6367 | 0.381 | ng | | 99 |
| 26) Anthracene | 17.223 | 178 | 5569 | 0.369 | ng | | 100 |
| 28) Fluoranthene | 19.150 | 202 | 7617 | 0.406 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 7795 | 0.350 | ng | | 99 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5566 | 0.351 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 6726 | 0.389 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 3968 | 0.352 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.782 | 276 | 5233 | 0.348 | ng | | 96 |
| 37) Benzo(b)fluoranthene | 22.844 | 252 | 5720 | 0.377 | ng | | 97 |
| 38) Benzo(k)fluoranthene | 22.888 | 252 | 5791m | 0.364 | ng | | |
| 39) Benzo(a)pyrene | 23.420 | 252 | 4867 | 0.381 | ng | | 96 |
| 40) Dibenzo(a,h)anthracene | 25.800 | 278 | 3914 | 0.334 | ng | | 96 |
| 41) Benzo(g,h,i)perylene | 26.475 | 276 | 4758 | 0.355 | ng | | 95 |

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

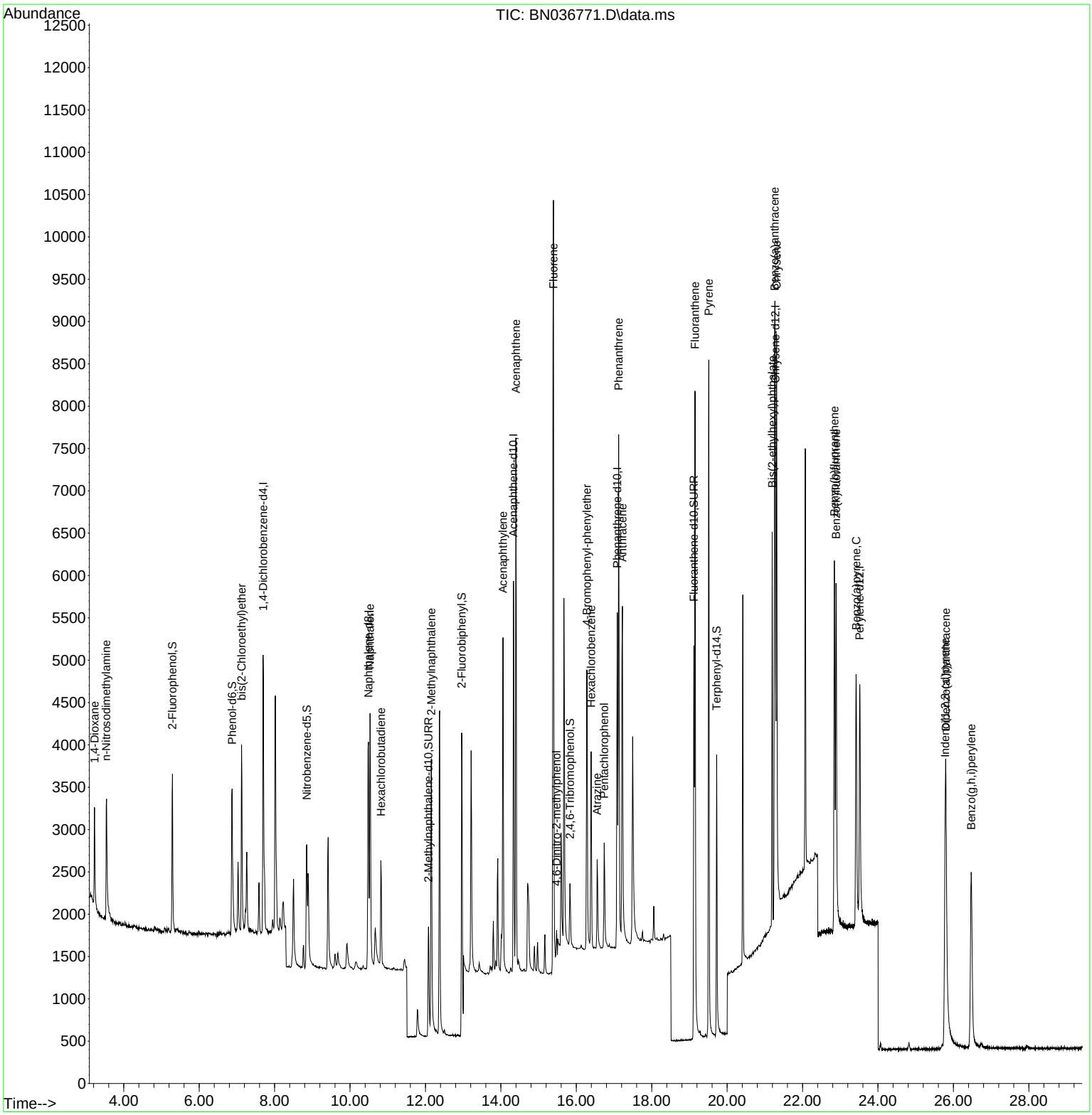
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036771.D
Acq On : 28 Mar 2025 13:58
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

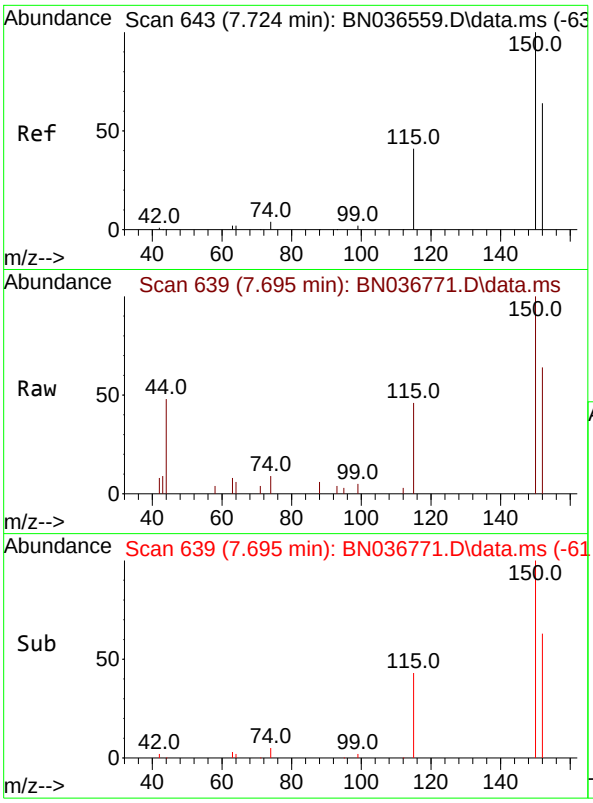
Quant Time: Mar 28 14:23:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

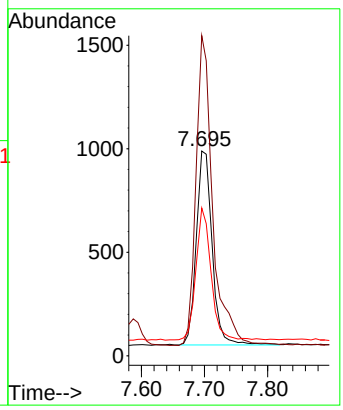





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.695 min Scan# 6
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:152 Resp: 163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 156.3 | 123.7 | 185.5 |
| 115 | 72.2 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/31/2025
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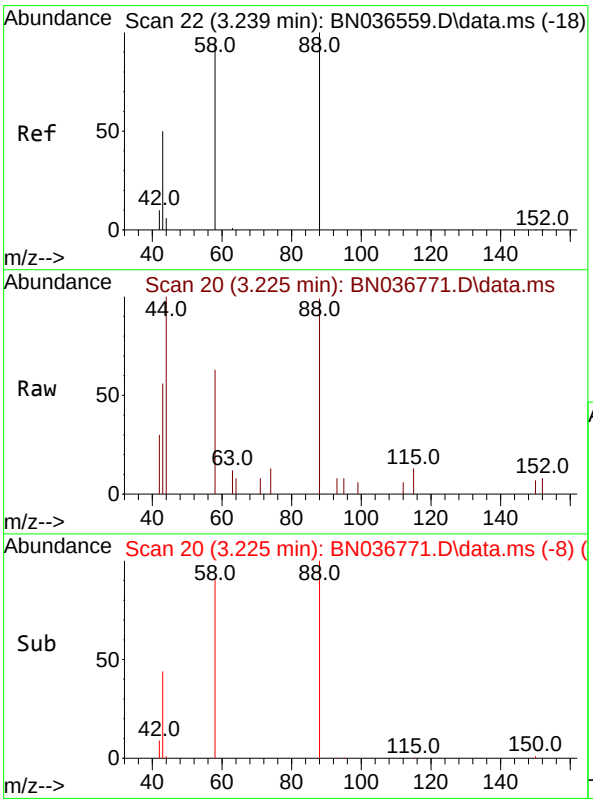
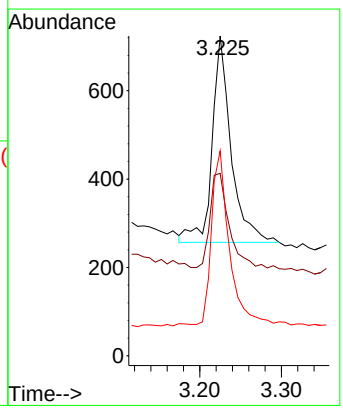
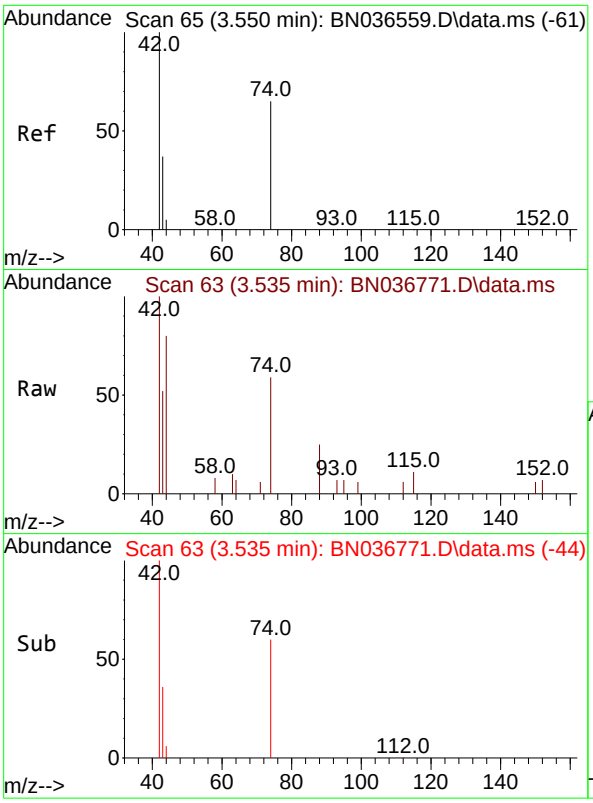



#2
1,4-Dioxane
Concen: 0.414 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 88 Resp: 752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 47.5 | 37.8 | 56.8 |
| 58 | 80.9 | 67.4 | 101.2 |

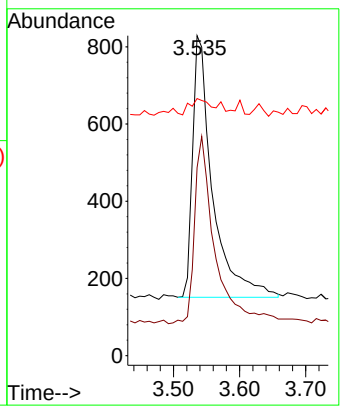





#3
n-Nitrosodimethylamine
Concen: 0.388 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 42 Resp: 142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 72.9 | 60.6 | 90.8 |
| 44 | 6.7 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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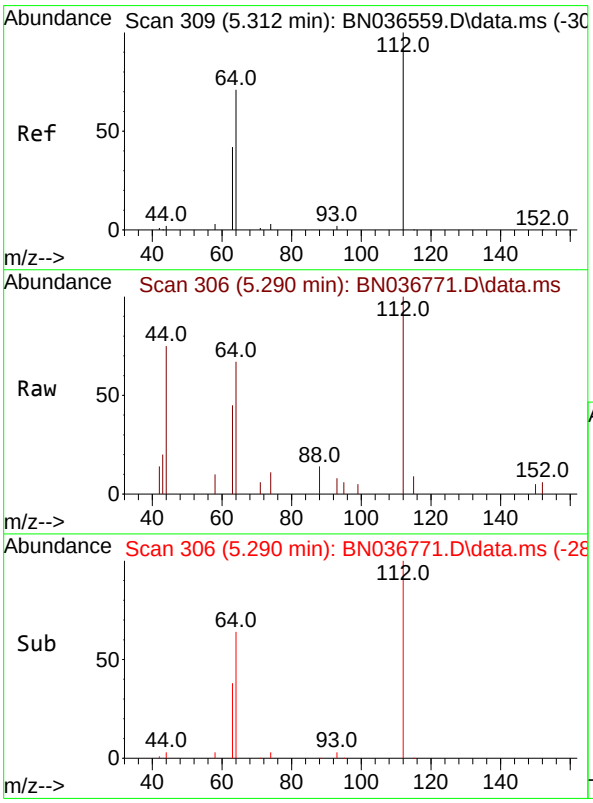
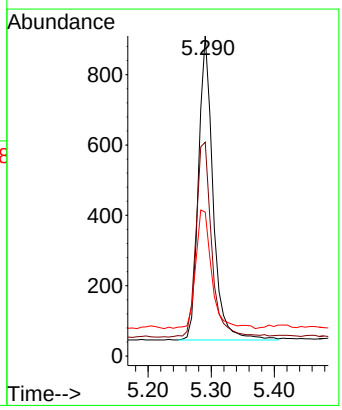
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

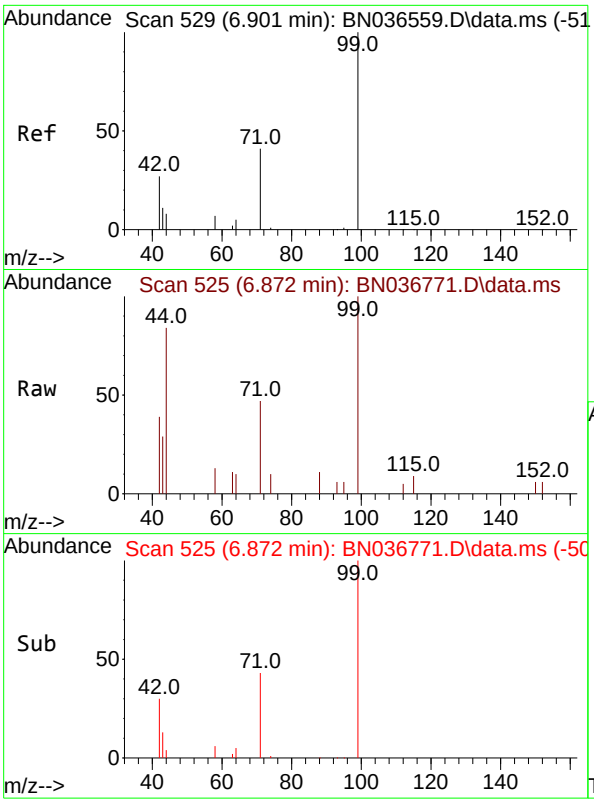



#4
2-Fluorophenol
Concen: 0.363 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:112 Resp: 1384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.4 | 53.1 | 79.7 |
| 63 | 42.8 | 31.8 | 47.8 |

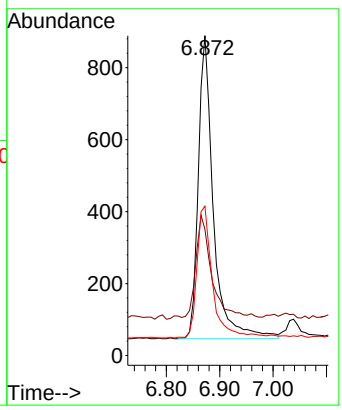





#5
Phenol-d6
Concen: 0.351 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 99 Resp: 165

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 37.9 | 26.5 | 39.7 |
| 71 | 45.1 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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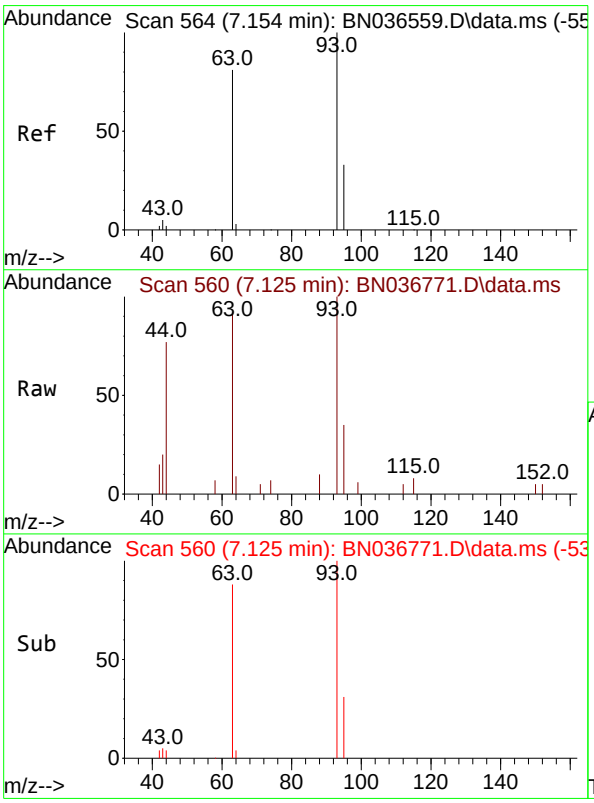
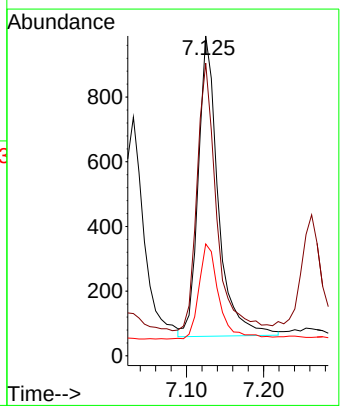
Supervised By :Jagrut Upadhyay 04/01/2025

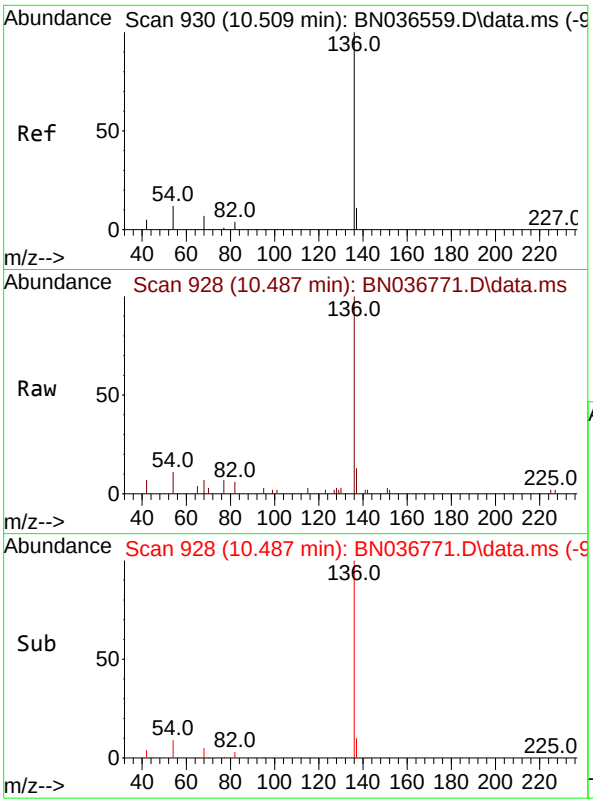



#6
bis(2-Chloroethyl)ether
Concen: 0.343 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 93 Resp: 1671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 87.3 | 67.7 | 101.5 |
| 95 | 31.8 | 25.6 | 38.4 |

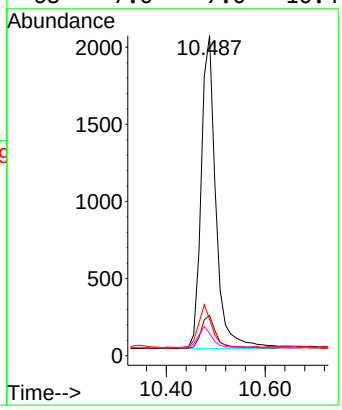





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:136 Resp: 417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.6 | 10.3 | 15.5 |
| 54 | 11.4 | 11.5 | 17.3# |
| 68 | 7.0 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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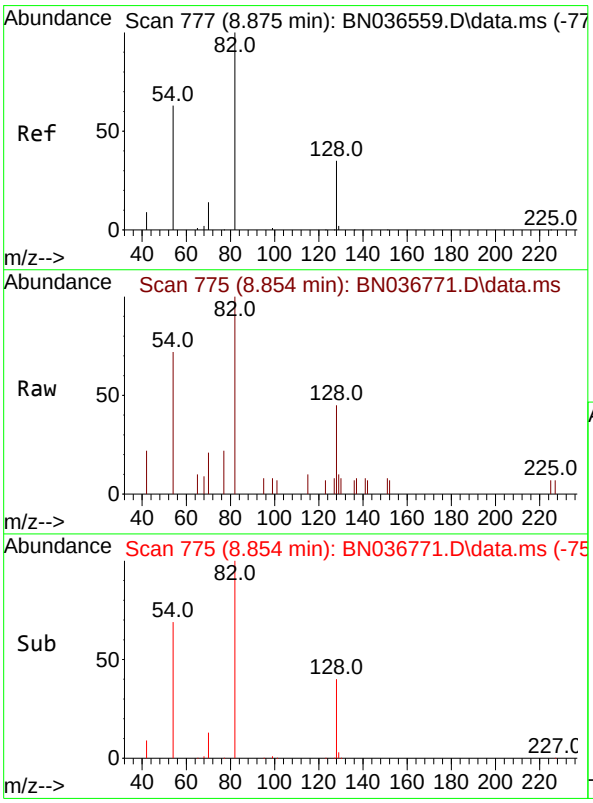
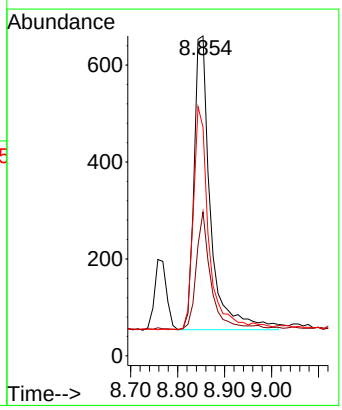
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

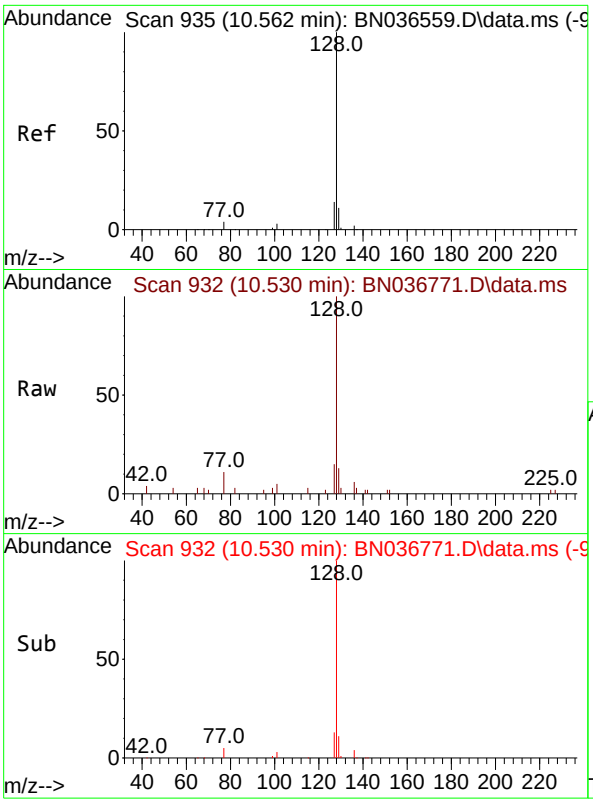



#8
Nitrobenzene-d5
Concen: 0.326 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 82 Resp: 1480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 45.0 | 30.6 | 45.8 |
| 54 | 71.5 | 52.2 | 78.4 |

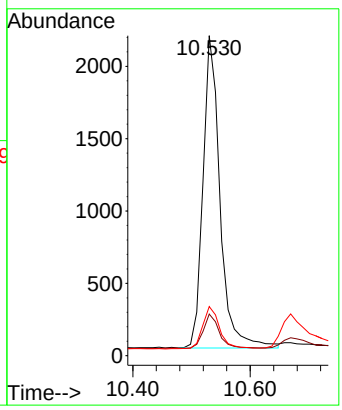





#9
Naphthalene
Concen: 0.355 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:128 Resp: 435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 13.0 | 9.8 | 14.6 |
| 127 | 15.4 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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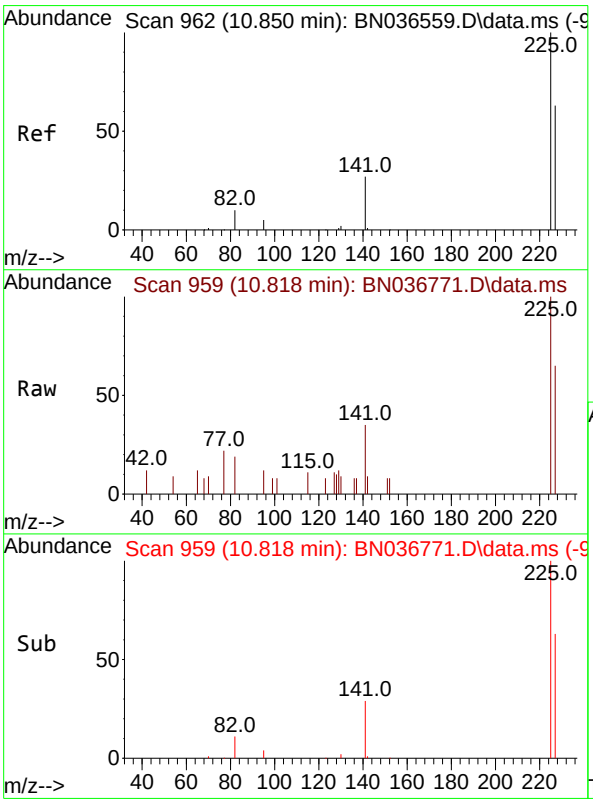
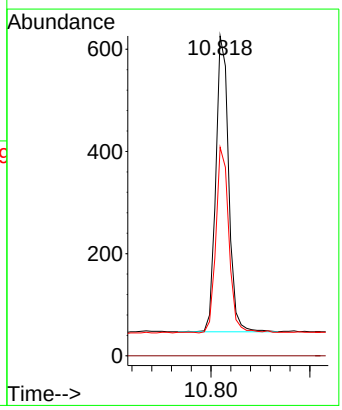
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

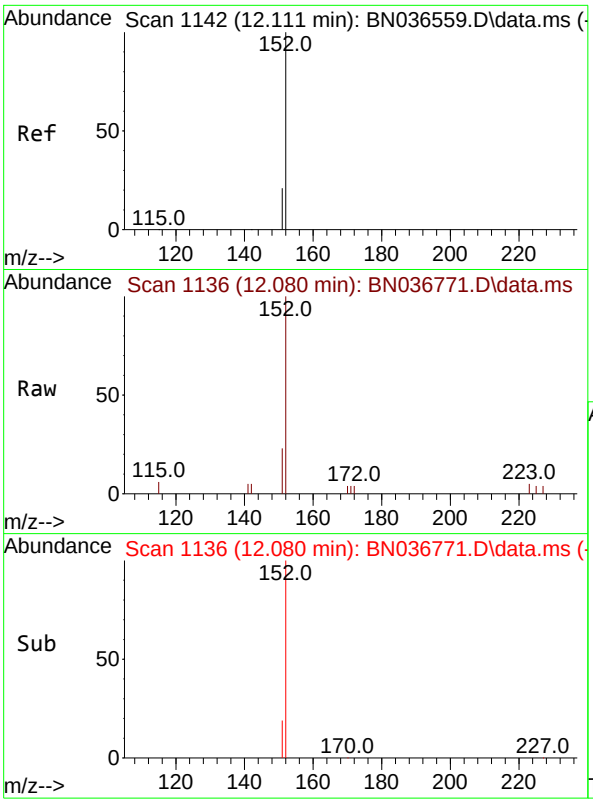



#10
Hexachlorobutadiene
Concen: 0.361 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:225 Resp: 1044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.8 | 51.8 | 77.8 |

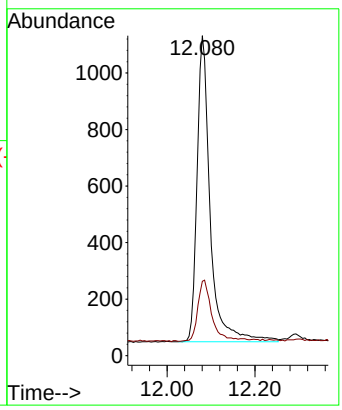





#11
2-Methylnaphthalene-d10
Concen: 0.363 ng
RT: 12.080 min Scan# 11
Delta R.T. -0.030 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:152 Resp: 225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.0 | 17.0 | 25.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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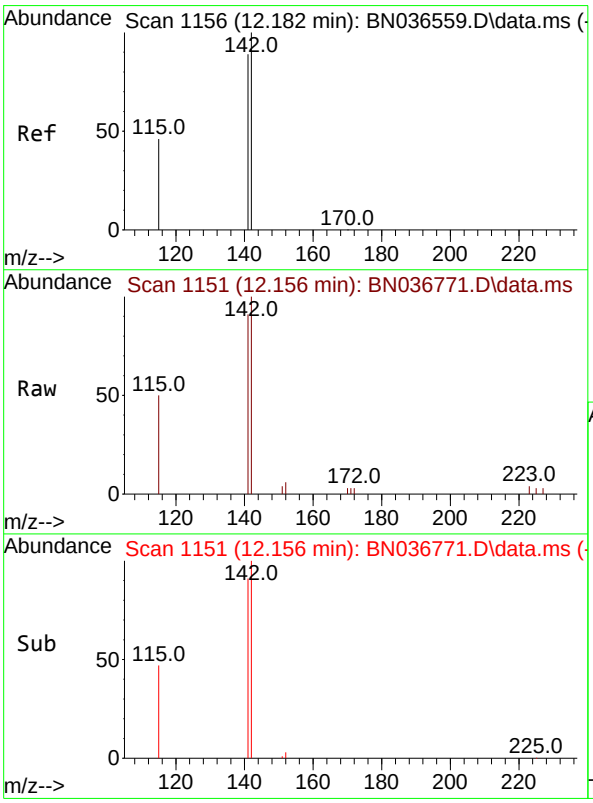
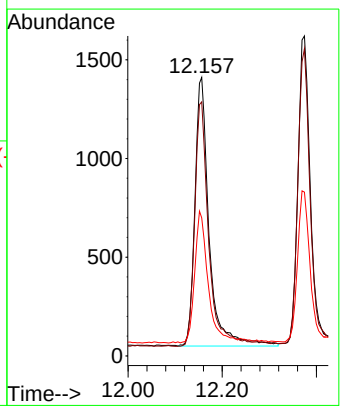
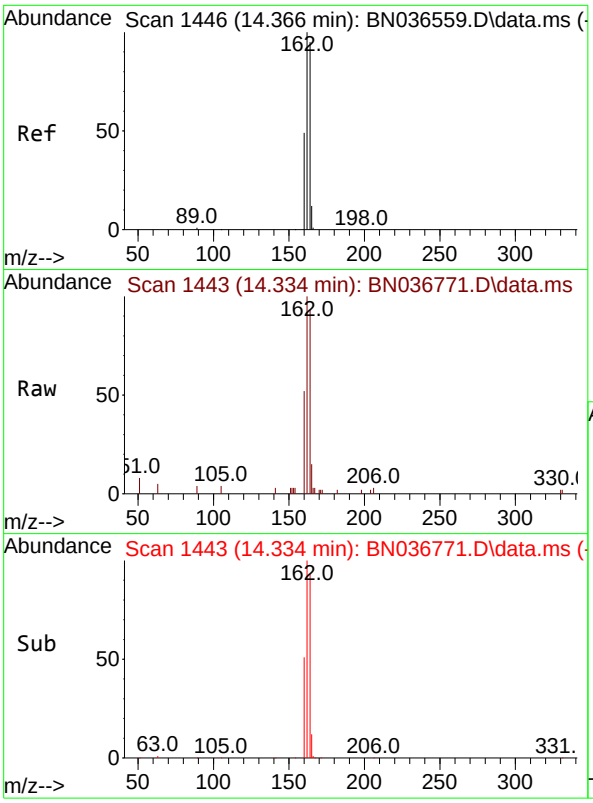



#12
2-Methylnaphthalene
Concen: 0.368 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:142 Resp: 2874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.2 | 71.7 | 107.5 |
| 115 | 49.5 | 38.3 | 57.5 |

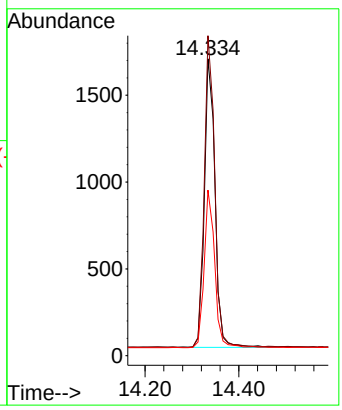





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:164 Resp: 261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 107.8 | 84.2 | 126.2 |
| 160 | 55.8 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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Reviewed By :Anahy Claudio 03/31/2025
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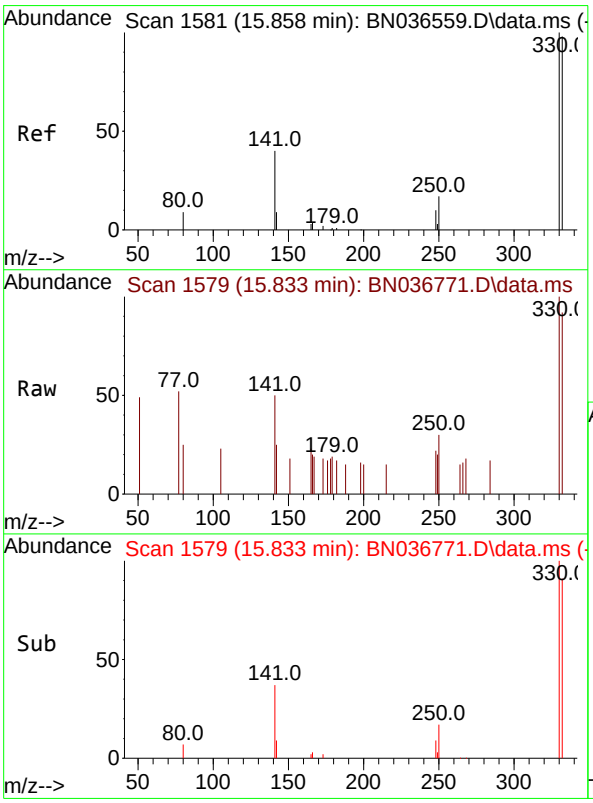
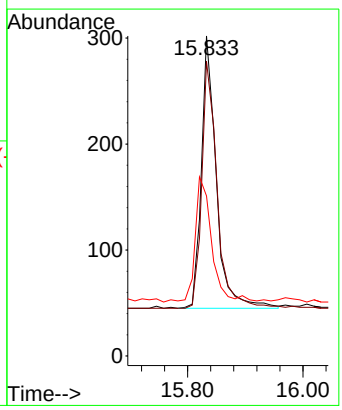
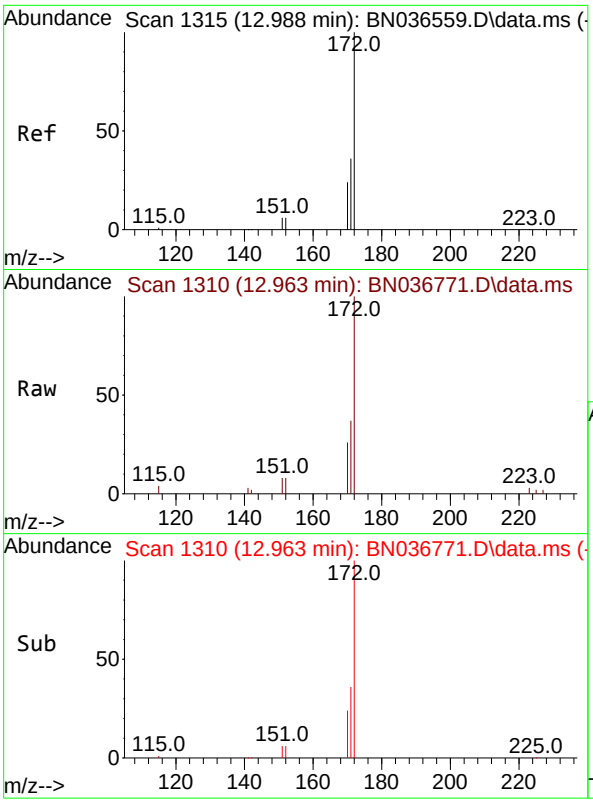



#14
2,4,6-Tribromophenol
Concen: 0.391 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:330 Resp: 464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 93.3 | 75.2 | 112.8 |
| 141 | 49.1 | 43.4 | 65.2 |

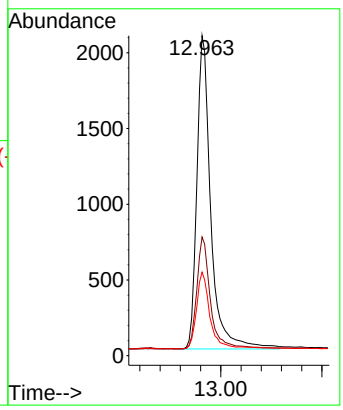





#15
2-Fluorobiphenyl
Concen: 0.347 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:172 Resp: 528

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.1 | 29.5 | 44.3 |
| 170 | 26.1 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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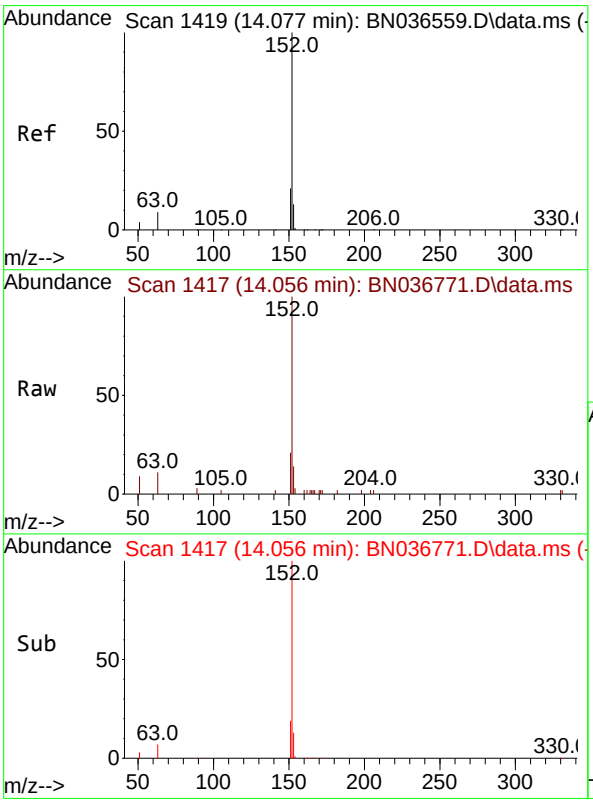
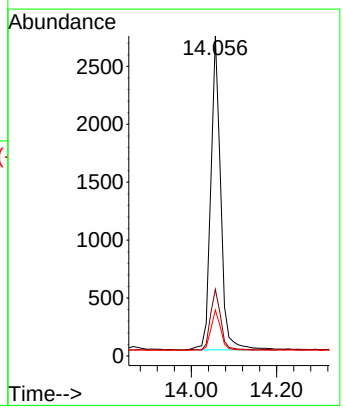
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

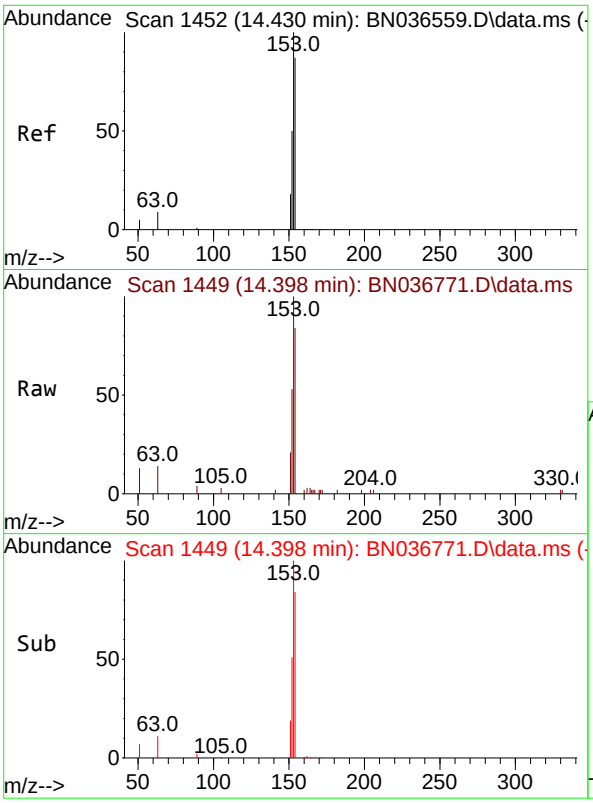



#16
Acenaphthylene
Concen: 0.353 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:152 Resp: 4358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.5 | 16.2 | 24.4 |
| 153 | 13.1 | 10.6 | 15.8 |

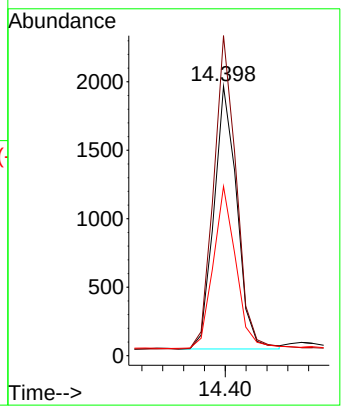





#17
Acenaphthene
Concen: 0.365 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:154 Resp: 294

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.7 | 94.1 | 141.1 |
| 152 | 61.6 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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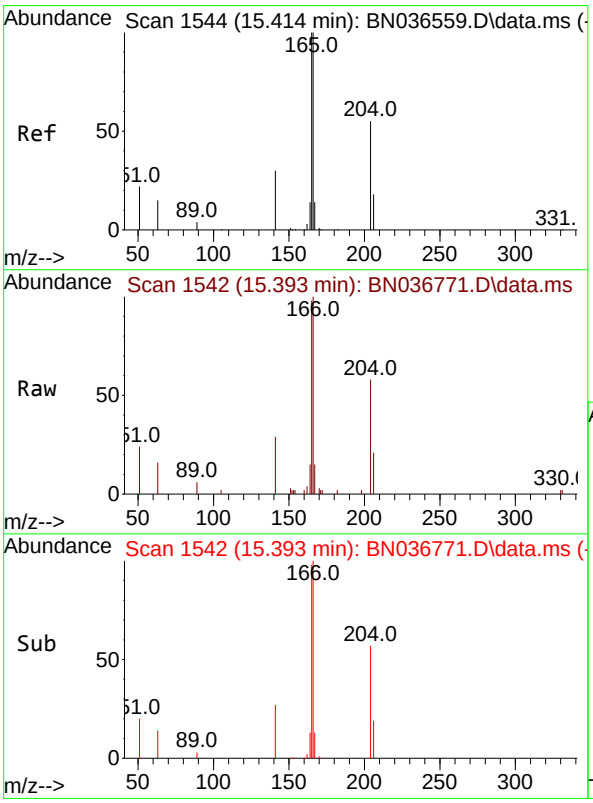
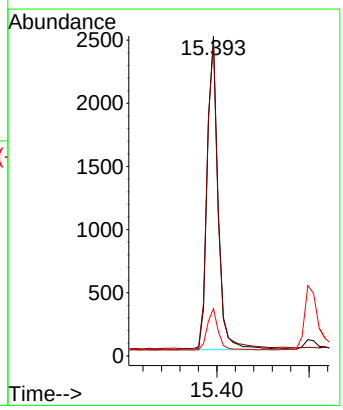
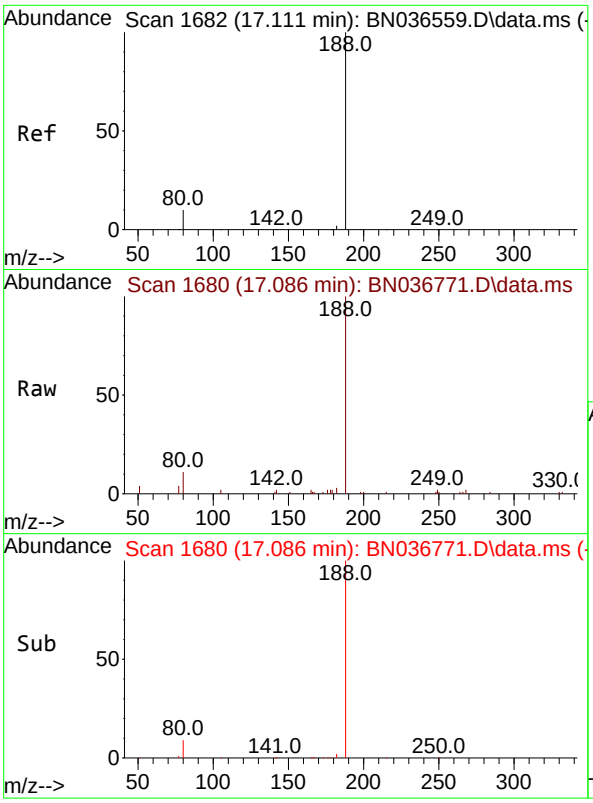



#18
Fluorene
Concen: 0.376 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:166 Resp: 4111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 97.9 | 79.8 | 119.8 |
| 167 | 13.4 | 10.6 | 15.8 |

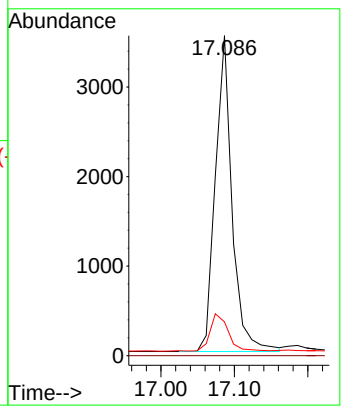





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:188 Resp: 557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 10.6 | 8.8 | 13.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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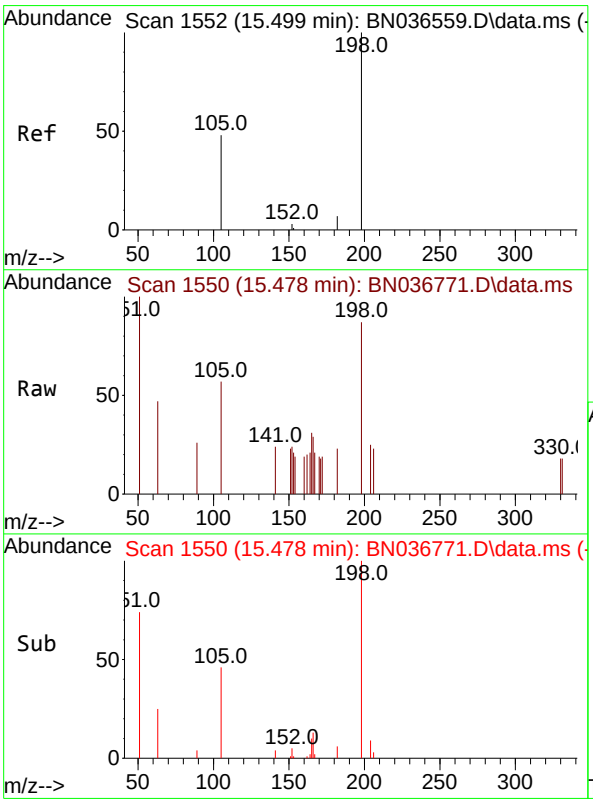
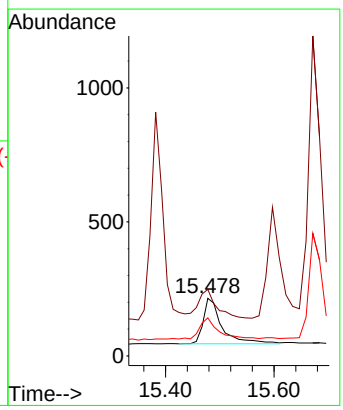
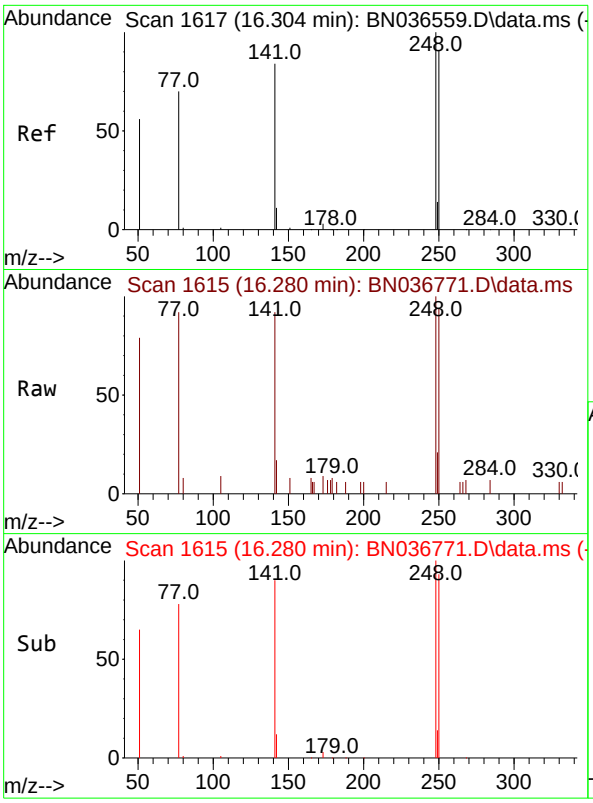



#20
4,6-Dinitro-2-methylphenol
Concen: 0.446 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:198 Resp: 428

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 115.3 | 107.9 | 161.9 |
| 105 | 66.0 | 56.2 | 84.2 |






#21
4-Bromophenyl-phenylether
Concen: 0.372 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:248 Resp: 130(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 93.6 | 73.0 | 109.6 |
| 141 | 91.8 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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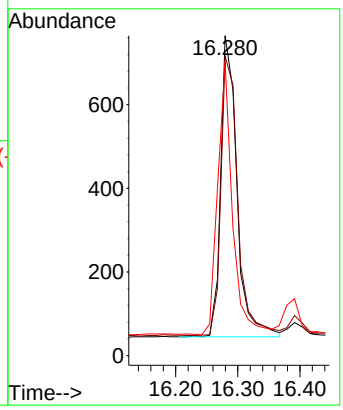
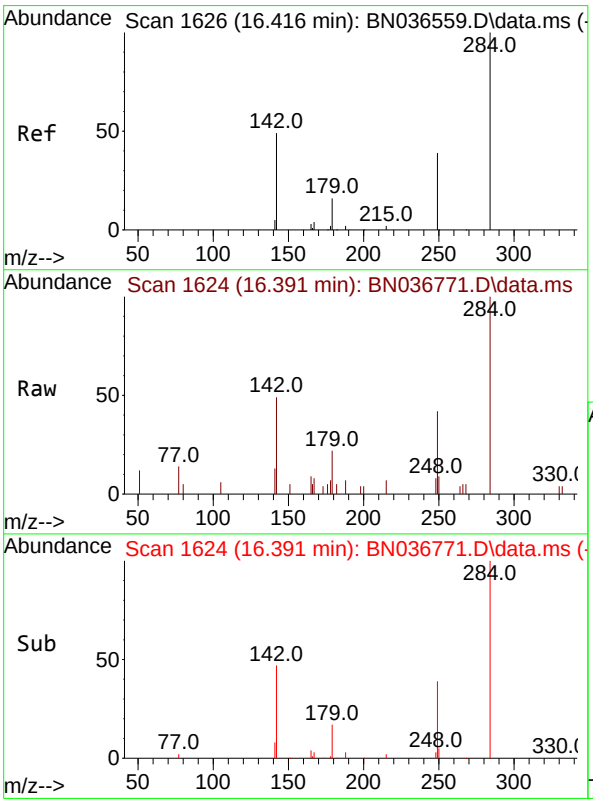
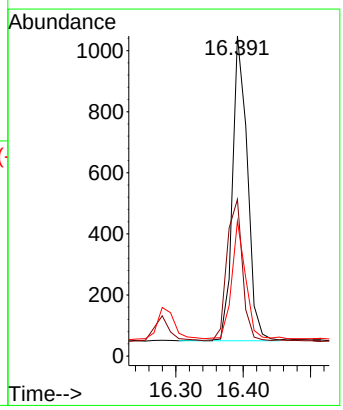


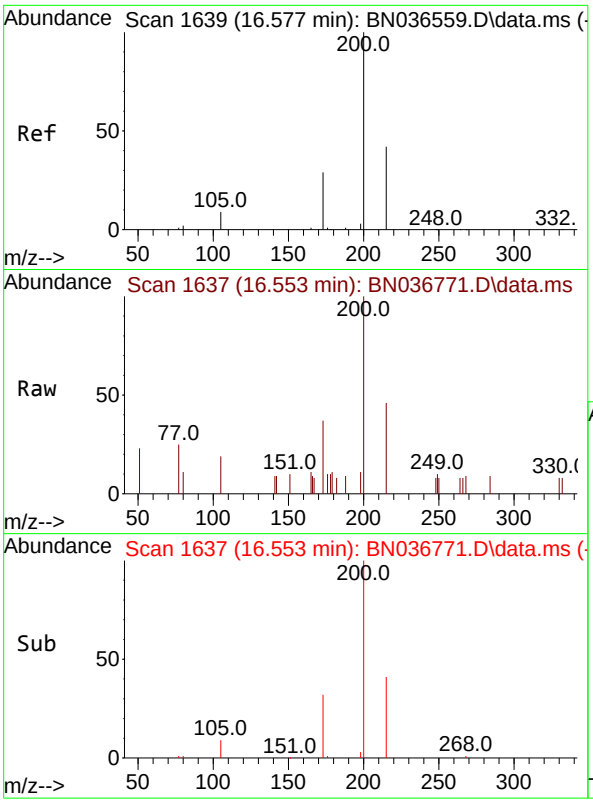




#22
Hexachlorobenzene
Concen: 0.365 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:284 Resp: 1537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.5 | 37.0 | 55.4 |
| 249 | 36.2 | 28.1 | 42.1 |

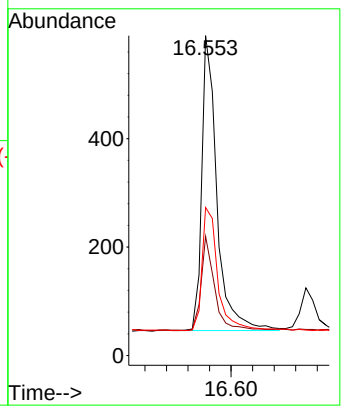





#23
Atrazine
Concen: 0.380 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:200 Resp: 106

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 37.3 | 27.3 | 40.9 |
| 215 | 46.3 | 36.8 | 55.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
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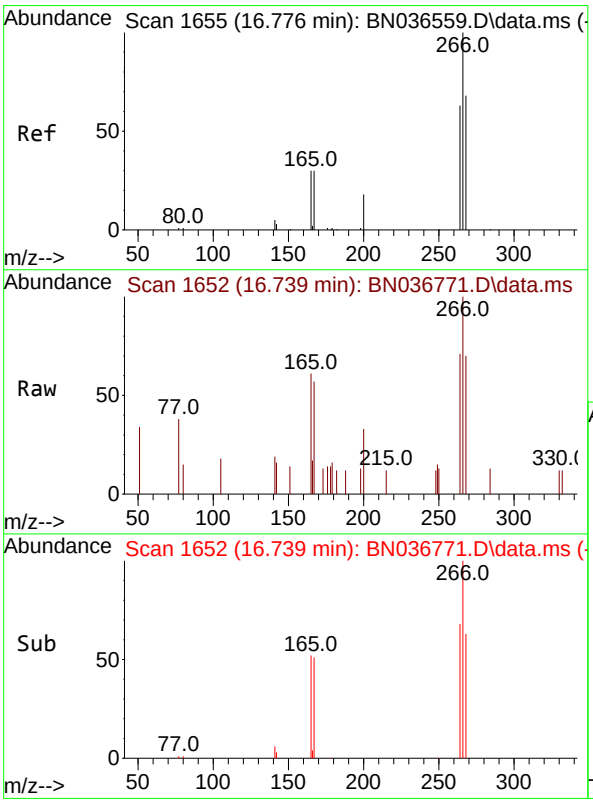
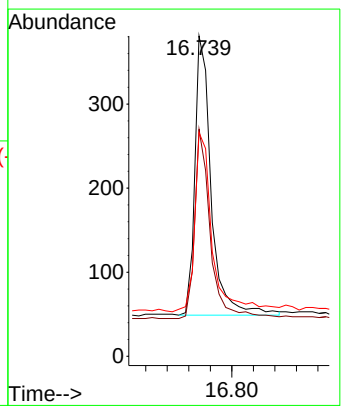
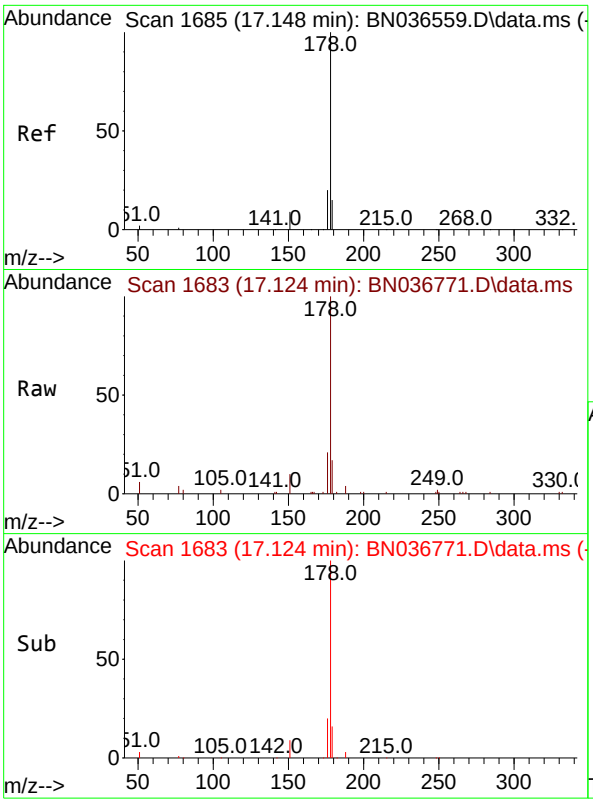



#24
Pentachlorophenol
Concen: 0.365 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:266 Resp: 702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 64.8 | 49.6 | 74.4 |
| 268 | 69.2 | 50.9 | 76.3 |

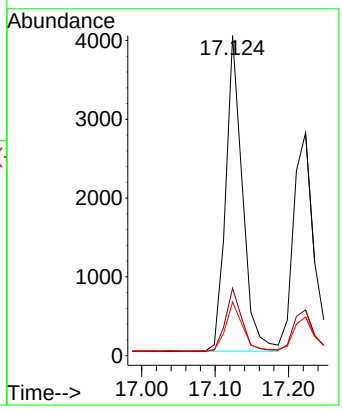





#25
Phenanthrene
Concen: 0.381 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:178 Resp: 636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 20.0 | 15.9 | 23.9 |
| 179 | 15.8 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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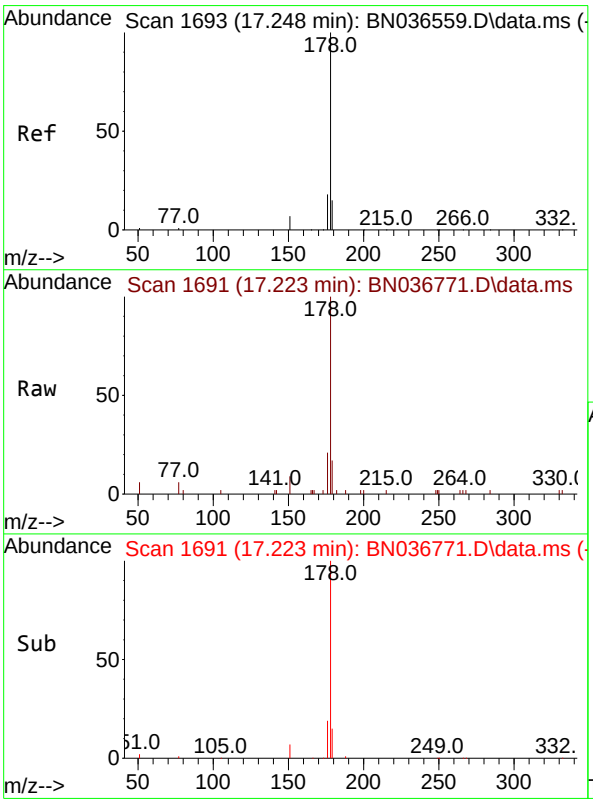
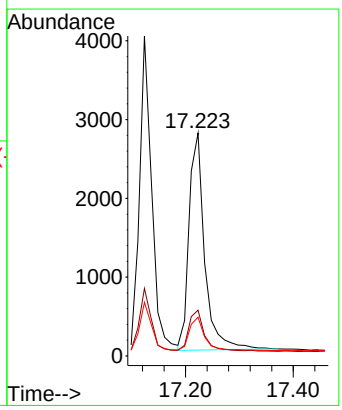
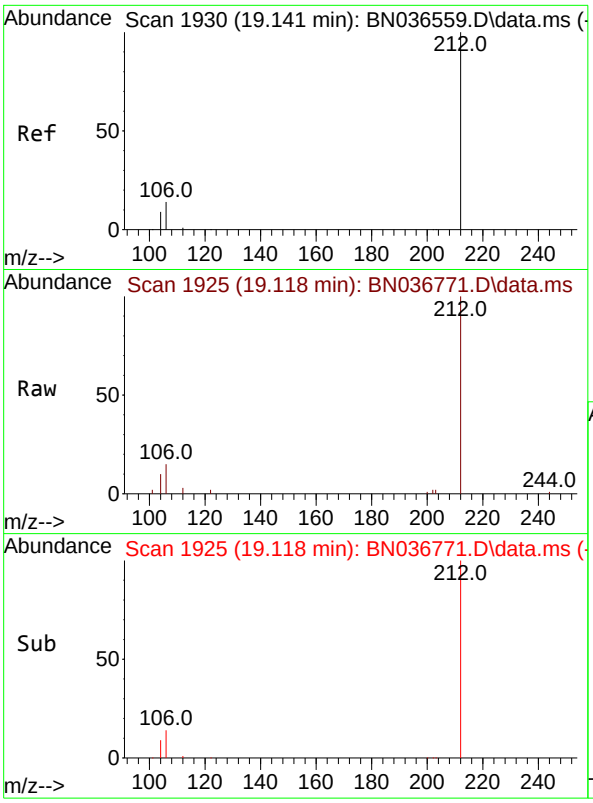



#26
Anthracene
Concen: 0.369 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:178 Resp: 5569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.4 | 15.4 | 23.2 |
| 179 | 15.4 | 12.6 | 18.8 |

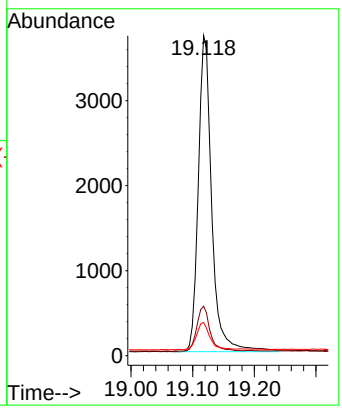





#27
Fluoranthene-d10
Concen: 0.395 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:212 Resp: 563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.8 | 11.8 | 17.6 |
| 104 | 8.6 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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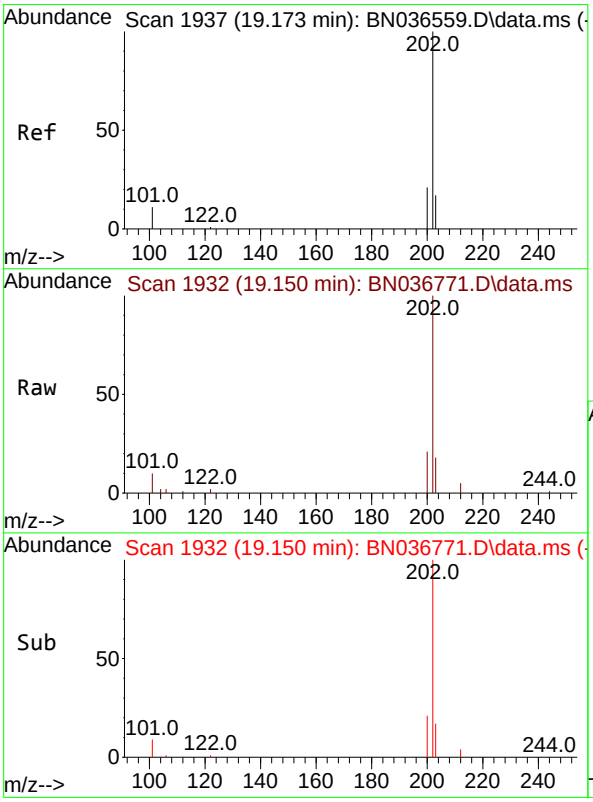
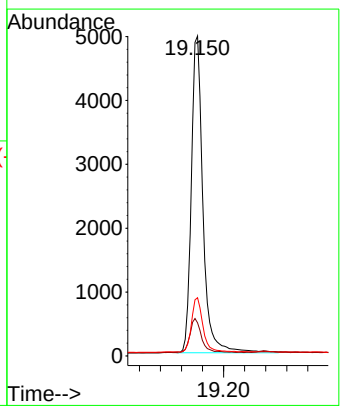
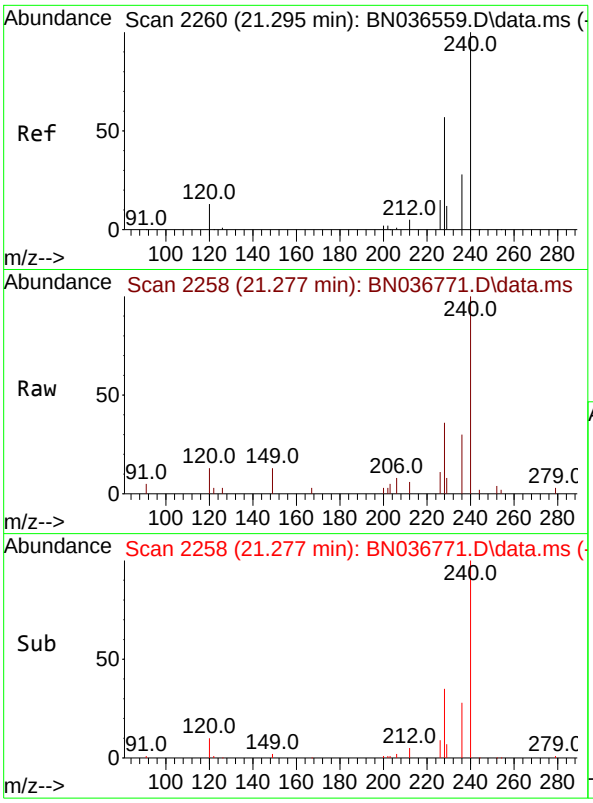



#28
Fluoranthene
Concen: 0.406 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:202 Resp: 7617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.0 | 9.4 | 14.0 |
| 203 | 16.8 | 13.5 | 20.3 |

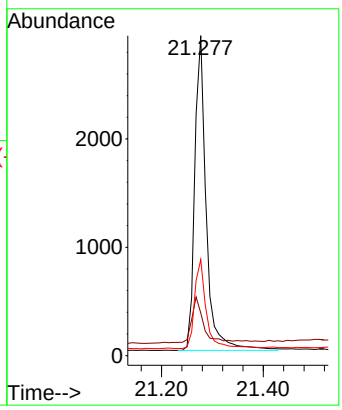





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:240 Resp: 455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 13.3 | 14.6 | 22.0 |
| 236 | 30.0 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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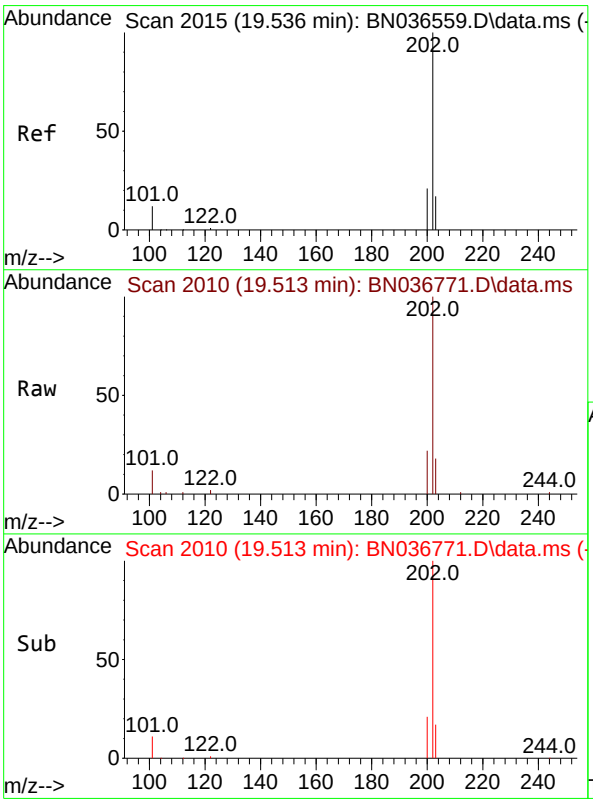
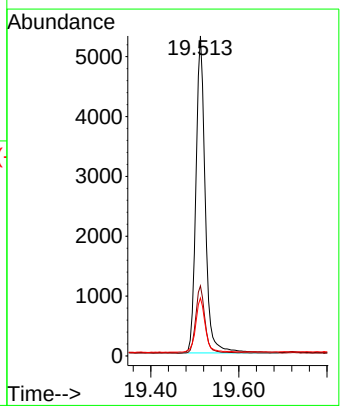
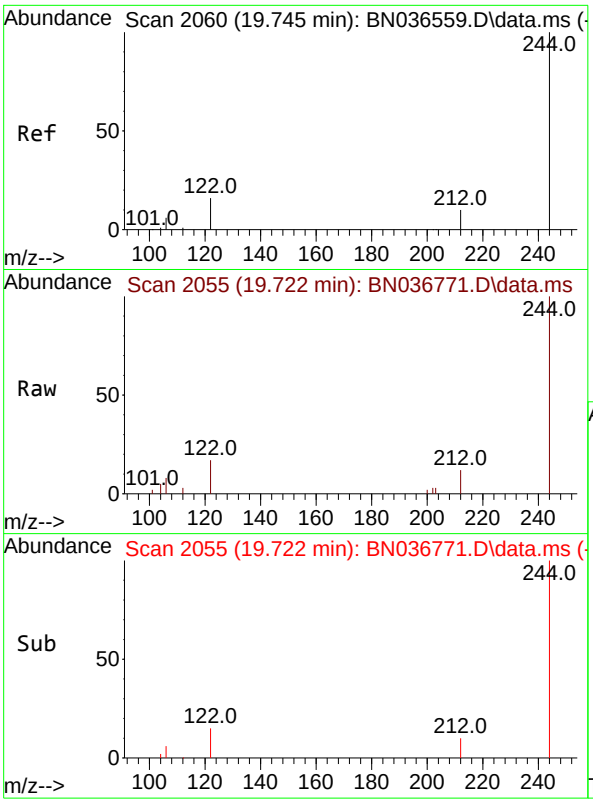



#30
Pyrene
Concen: 0.350 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:202 Resp: 7795

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 17.1 | 25.7 |
| 203 | 17.3 | 14.1 | 21.1 |

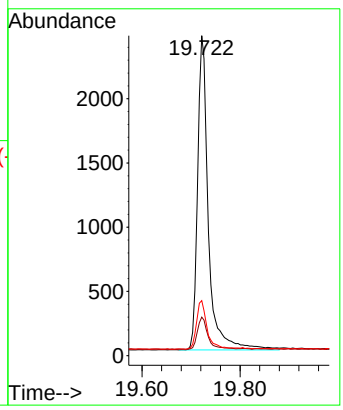





#31
Terphenyl-d14
Concen: 0.341 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:244 Resp: 371

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.0 | 9.6 | 14.4 |
| 122 | 17.2 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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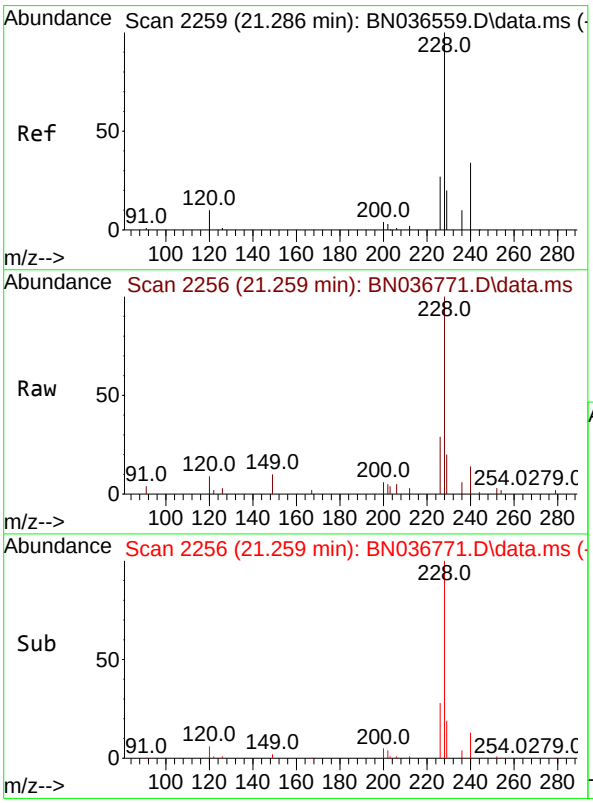
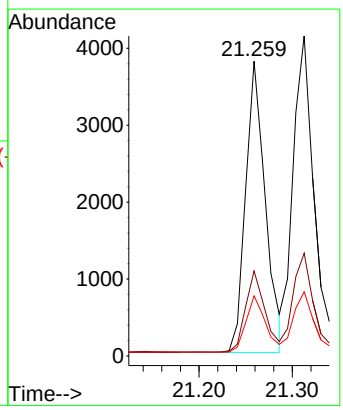
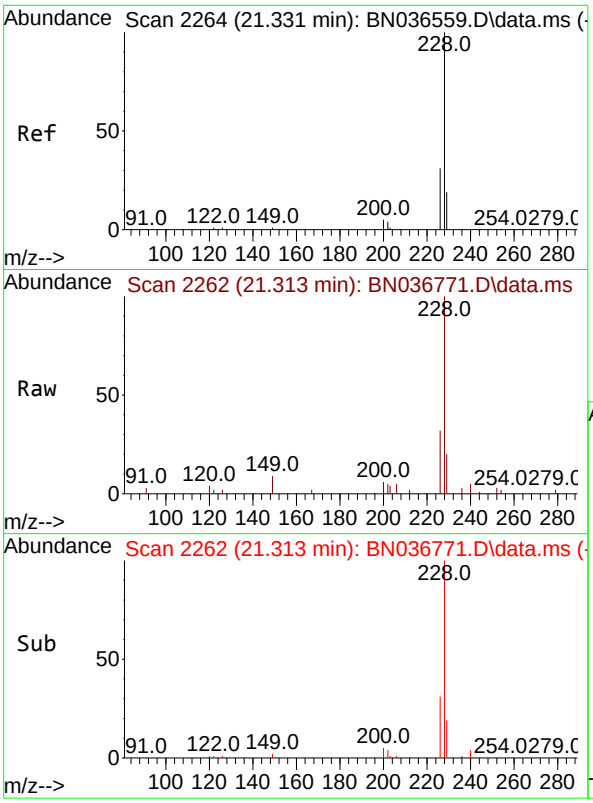



#32
Benzo(a)anthracene
Concen: 0.351 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:228 Resp: 5566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.8 | 22.5 | 33.7 |
| 229 | 20.4 | 16.6 | 25.0 |

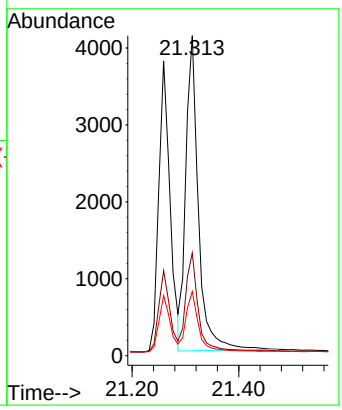





#33
Chrysene
Concen: 0.389 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:228 Resp: 672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.1 | 25.3 | 37.9 |
| 229 | 20.0 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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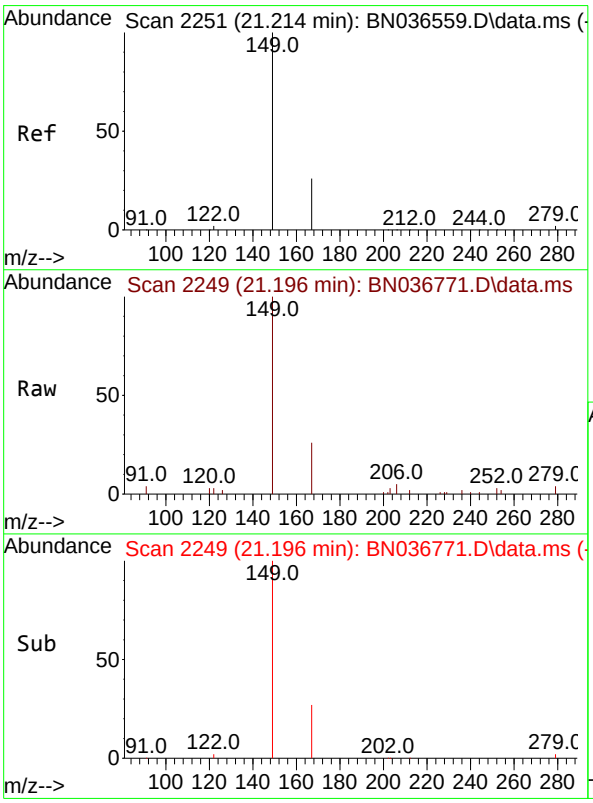
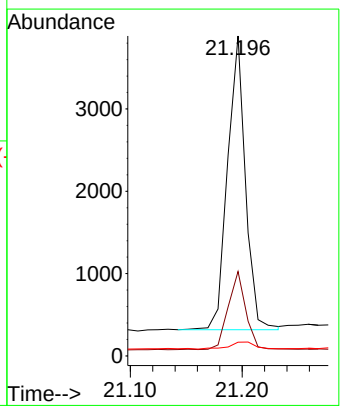
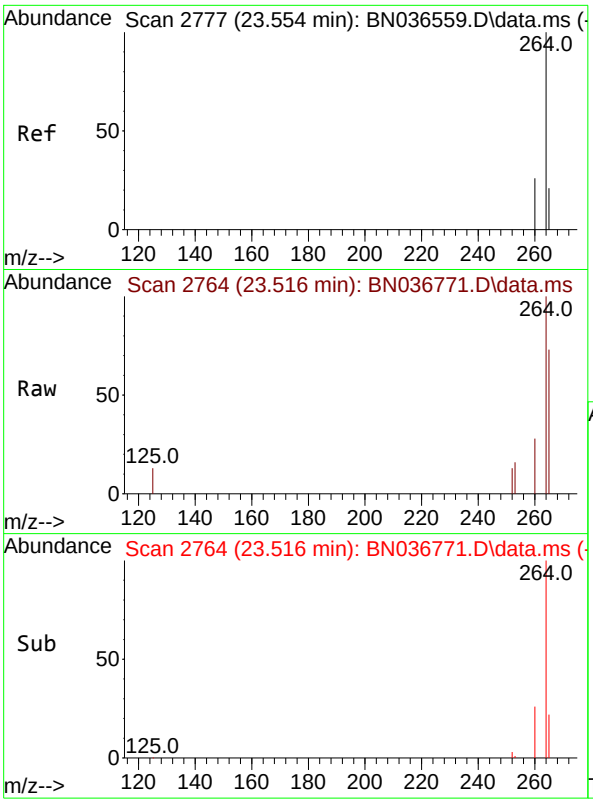



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.352 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:149 Resp: 3968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.1 | 20.7 | 31.1 |
| 279 | 3.3 | 3.6 | 5.4# |

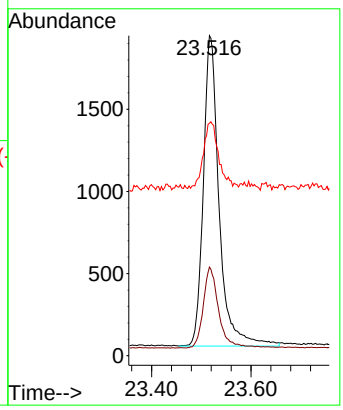





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.516 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:264 Resp: 416

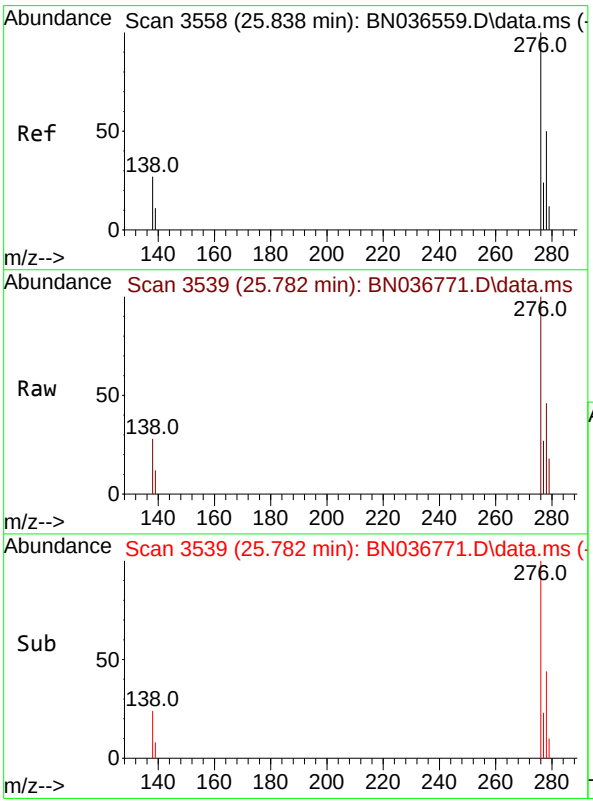
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.7 | 22.6 | 33.8 |
| 265 | 72.6 | 88.1 | 132.1# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

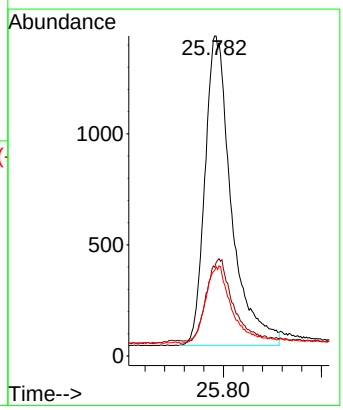
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

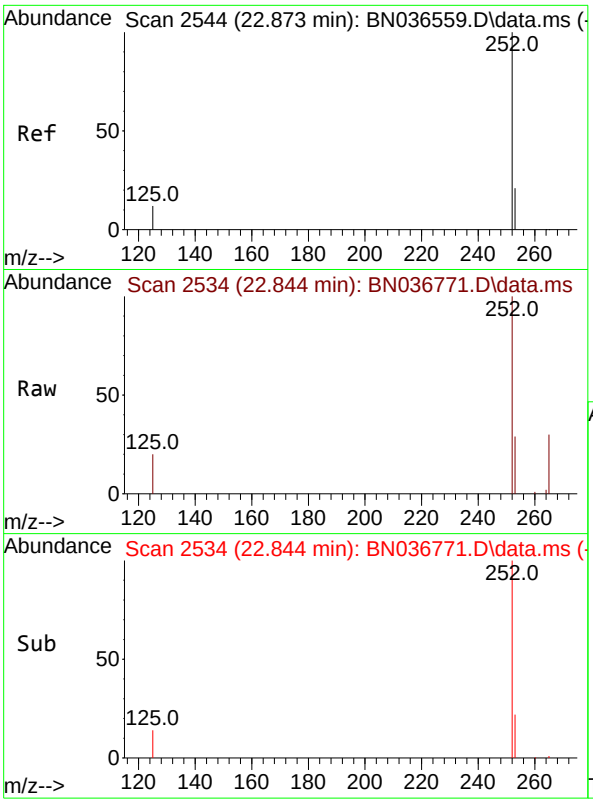



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.348 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.055 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:276 Resp: 5233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 25.8 | 23.4 | 35.2 |
| 277 | 25.2 | 20.0 | 30.0 |

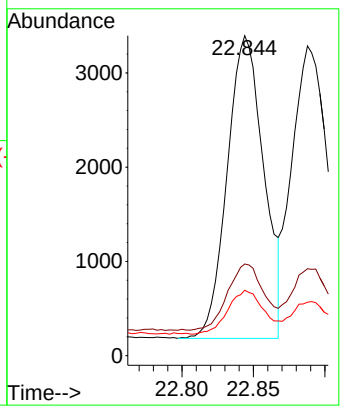





#37
Benzo(b)fluoranthene
Concen: 0.377 ng
RT: 22.844 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:252 Resp: 572

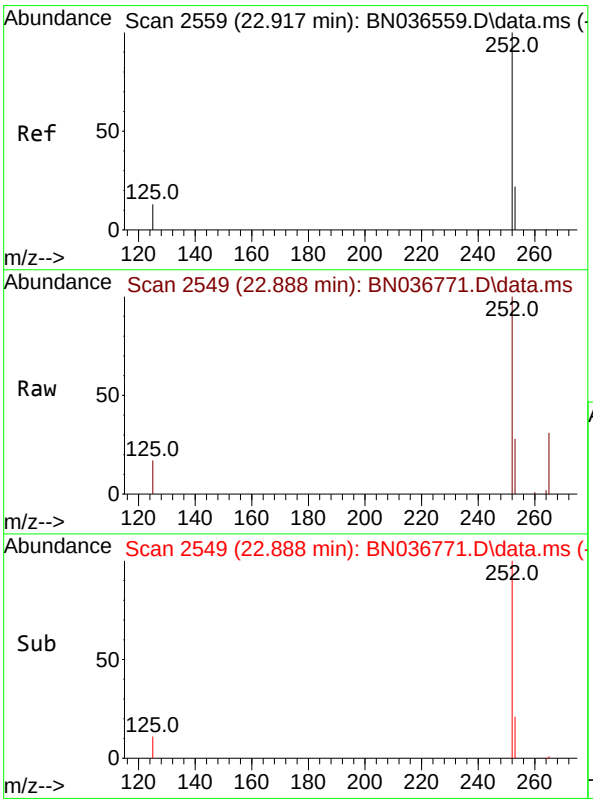
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.6 | 23.9 | 35.9 |
| 125 | 20.5 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

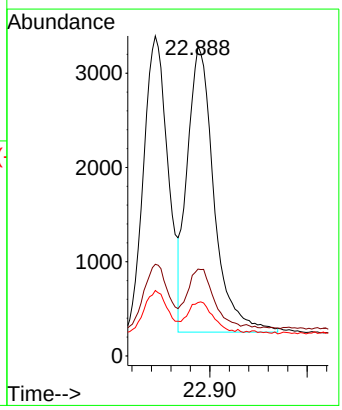
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

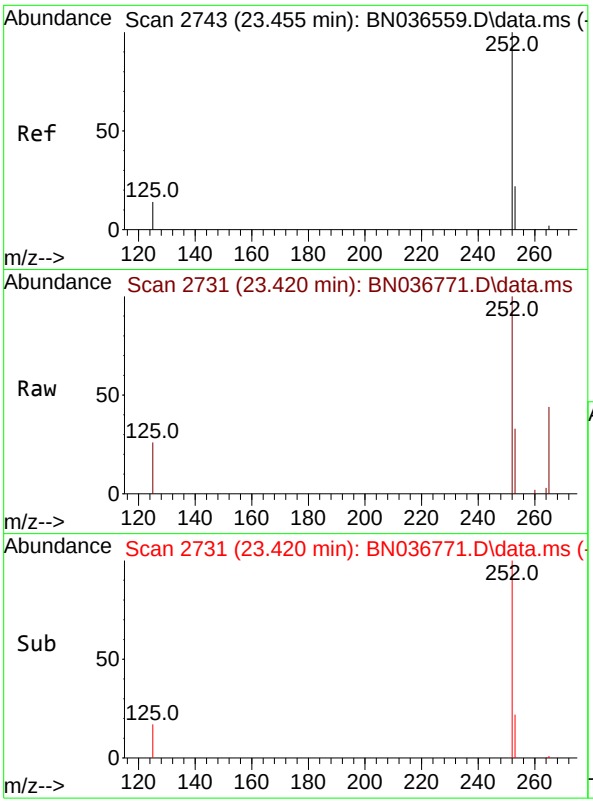



#38
Benzo(k)fluoranthene
Concen: 0.364 ng m
RT: 22.888 min Scan# 2549
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:252 Resp: 5791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.0 | 24.6 | 36.8 |
| 125 | 17.2 | 17.8 | 26.8# |

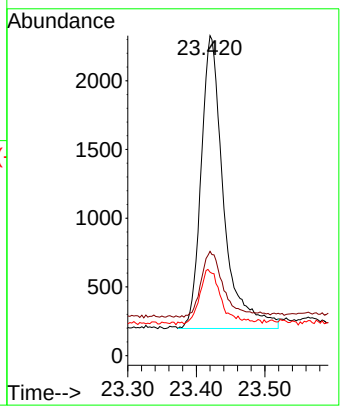





#39
Benzo(a)pyrene
Concen: 0.381 ng
RT: 23.420 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:252 Resp: 486

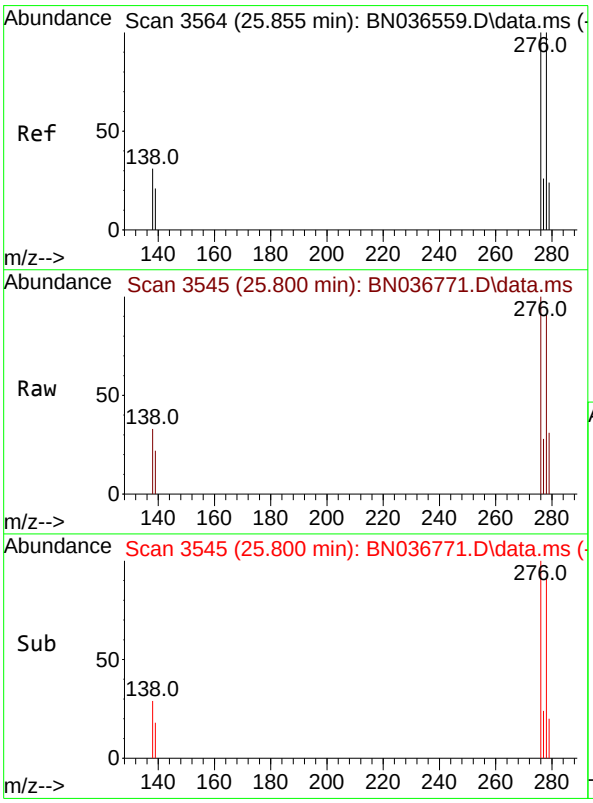
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 32.6 | 27.8 | 41.8 |
| 125 | 26.1 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

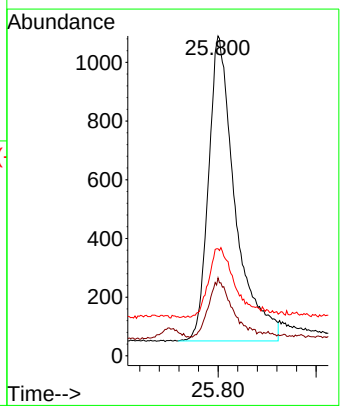
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

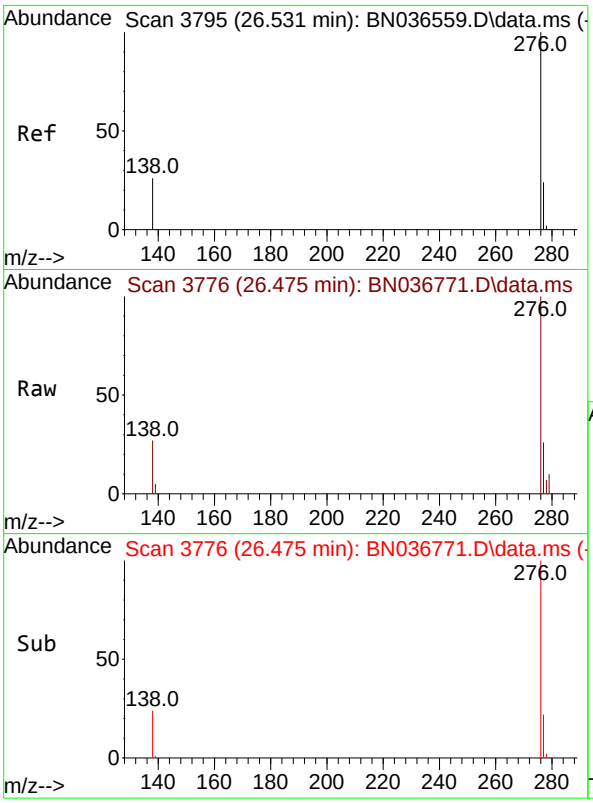



#40
Dibenzo(a,h)anthracene
Concen: 0.334 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.055 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:278 Resp: 3914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 24.4 | 20.8 | 31.2 |
| 279 | 33.5 | 28.8 | 43.2 |

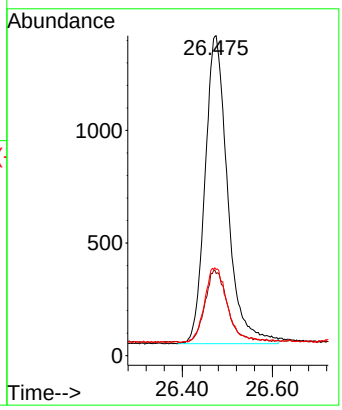





#41
Benzo(g,h,i)perylene
Concen: 0.355 ng
RT: 26.475 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:276 Resp: 475

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.7 | 22.2 | 33.4 |
| 138 | 27.0 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036771.D
Acq On : 28 Mar 2025 13:58
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 14:23:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 74 | -0.03 |
| 2 | | 1,4-Dioxane | 0.444 | 0.460 | -3.6 | 68 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.870 | 3.1 | 69 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.846 | 9.2 | 64 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 1.010 | 12.3 | 66 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.021 | 14.2 | 64 | -0.03 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 82 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.354 | 18.6 | 70 | -0.02 |
| 9 | | Naphthalene | 1.177 | 1.044 | 11.3 | 71 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.250 | 9.7 | 70 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.540 | 9.2 | 73 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.688 | 8.1 | 74 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 86 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.177 | 2.7 | 82 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 2.021 | 13.1 | 73 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.667 | 11.7 | 74 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.127 | 8.8 | 76 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.572 | 6.0 | 77 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 93 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.077 | 10.5 | 93 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.233 | 7.2 | 79 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.276 | 8.9 | 76 | -0.02 |
| 23 | | Atrazine | 0.201 | 0.191 | 5.0 | 83 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.126 | 8.7 | 86 | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.143 | 4.7 | 82 | -0.02 |
| 26 | | Anthracene | 1.083 | 1.000 | 7.7 | 81 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.012 | 1.3 | 84 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.367 | -1.4 | 87 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 111 | -0.02 |
| 30 | | Pyrene | 1.956 | 1.711 | 12.5 | 89 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.816 | 14.8 | 88 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.222 | 12.1 | 94 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.477 | 2.8 | 102 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.871 | 12.0 | 92 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 118 | -0.04 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.256 | 13.0 | 96 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.373 | 5.7 | 104 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.390 | 9.0 | 101 | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.168 | 4.7 | 106 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 0.939 | 16.5 | 95 | -0.06 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.142 | 11.2 | 97 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036771.D
Acq On : 28 Mar 2025 13:58
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 14:23:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 74 | -0.03 |
| 2 | | 1,4-Dioxane | 0.400 | 0.414 | -3.5 | 68 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.388 | 3.0 | 69 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.363 | 9.3 | 64 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.351 | 12.3 | 66 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.343 | 14.2 | 64 | -0.03 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 82 | -0.02 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.326 | 18.5 | 70 | -0.02 |
| 9 | | Naphthalene | 0.400 | 0.355 | 11.3 | 71 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.361 | 9.8 | 70 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.363 | 9.3 | 73 | -0.03 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.368 | 8.0 | 74 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 86 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.391 | 2.3 | 82 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.347 | 13.3 | 73 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.353 | 11.8 | 74 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.365 | 8.8 | 76 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.376 | 6.0 | 77 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 93 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.446 | -11.5 | 93 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.372 | 7.0 | 79 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.365 | 8.8 | 76 | -0.02 |
| 23 | | Atrazine | 0.400 | 0.380 | 5.0 | 83 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.365 | 8.8 | 86 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.381 | 4.8 | 82 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.369 | 7.8 | 81 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.395 | 1.3 | 84 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.406 | -1.5 | 87 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 111 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.350 | 12.5 | 89 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.341 | 14.8 | 88 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.351 | 12.3 | 94 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.389 | 2.8 | 102 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.352 | 12.0 | 92 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 118 | -0.04 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.348 | 13.0 | 96 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.377 | 5.8 | 104 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.364 | 9.0 | 101 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.381 | 4.8 | 106 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.334 | 16.5 | 95 | -0.06 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.355 | 11.3 | 97 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/29/2025 02:44

Lab File ID: BN036791.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.526 | | -11.6 | 20.0 |
| Fluoranthene-d10 | 1.025 | 1.032 | | 0.7 | 20.0 |
| 2-Fluorophenol | 0.932 | 0.833 | | -10.6 | 20.0 |
| Phenol-d6 | 1.152 | 1.007 | | -12.6 | 20.0 |
| Nitrobenzene-d5 | 0.435 | 0.376 | | -13.6 | 20.0 |
| 2-Fluorobiphenyl | 2.327 | 2.041 | | -12.3 | 20.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.178 | | -2.2 | 20.0 |
| Terphenyl-d14 | 0.958 | 0.782 | | -18.4 | 20.0 |
| 1,4-Dioxane | 0.444 | 0.453 | | 2.0 | 20.0 |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036791.D
Acq On : 29 Mar 2025 02:44
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 29 04:28:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.696 | 152 | 1826 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4490 | 0.400 | ng | | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2701 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.087 | 188 | 5571 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.268 | 240 | 4634 | 0.400 | ng | | -0.03 |
| 35) Perylene-d12 | 23.516 | 264 | 4032 | 0.400 | ng | | #-0.04 |
| **System Monitoring Compounds** | | | | | | | |
| 4) 2-Fluorophenol | 5.291 | 112 | 1521 | 0.357 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1838 | 0.350 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1689 | 0.346 | ng | | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2363 | 0.354 | ng | | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 481 | 0.392 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5513 | 0.351 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5751 | 0.403 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3623 | 0.326 | ng | | -0.02 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 827 | 0.408 | ng | | 98 |
| 3) n-Nitrosodimethylamine | 3.543 | 42 | 1757 | 0.429 | ng | | 91 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1880 | 0.346 | ng | | 99 |
| 9) Naphthalene | 10.530 | 128 | 4740 | 0.359 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.819 | 225 | 1160 | 0.373 | ng | # | 98 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 3044 | 0.362 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 4532 | 0.356 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3064 | 0.367 | ng | | 99 |
| 18) Fluorene | 15.393 | 166 | 4209 | 0.373 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 395 | 0.423 | ng | # | 76 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1353 | 0.388 | ng | | 96 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1582 | 0.375 | ng | | 97 |
| 23) Atrazine | 16.553 | 200 | 1090 | 0.389 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 740 | 0.385 | ng | | 98 |
| 25) Phenanthrene | 17.124 | 178 | 6416 | 0.384 | ng | | 99 |
| 26) Anthracene | 17.223 | 178 | 5669 | 0.376 | ng | | 100 |
| 28) Fluoranthene | 19.146 | 202 | 7784 | 0.415 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 7947 | 0.351 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5842 | 0.363 | ng | | 100 |
| 33) Chrysene | 21.304 | 228 | 6781 | 0.385 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4355 | 0.380 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.779 | 276 | 5407 | 0.372 | ng | | 94 |
| 37) Benzo(b)fluoranthene | 22.841 | 252 | 5627 | 0.383 | ng | | 97 |
| 38) Benzo(k)fluoranthene | 22.885 | 252 | 6157m | 0.400 | ng | | |
| 39) Benzo(a)pyrene | 23.417 | 252 | 4993 | 0.404 | ng | | 95 |
| 40) Dibenzo(a,h)anthracene | 25.800 | 278 | 4150 | 0.366 | ng | | 93 |
| 41) Benzo(g,h,i)perylene | 26.469 | 276 | 4876 | 0.376 | ng | | 95 |

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

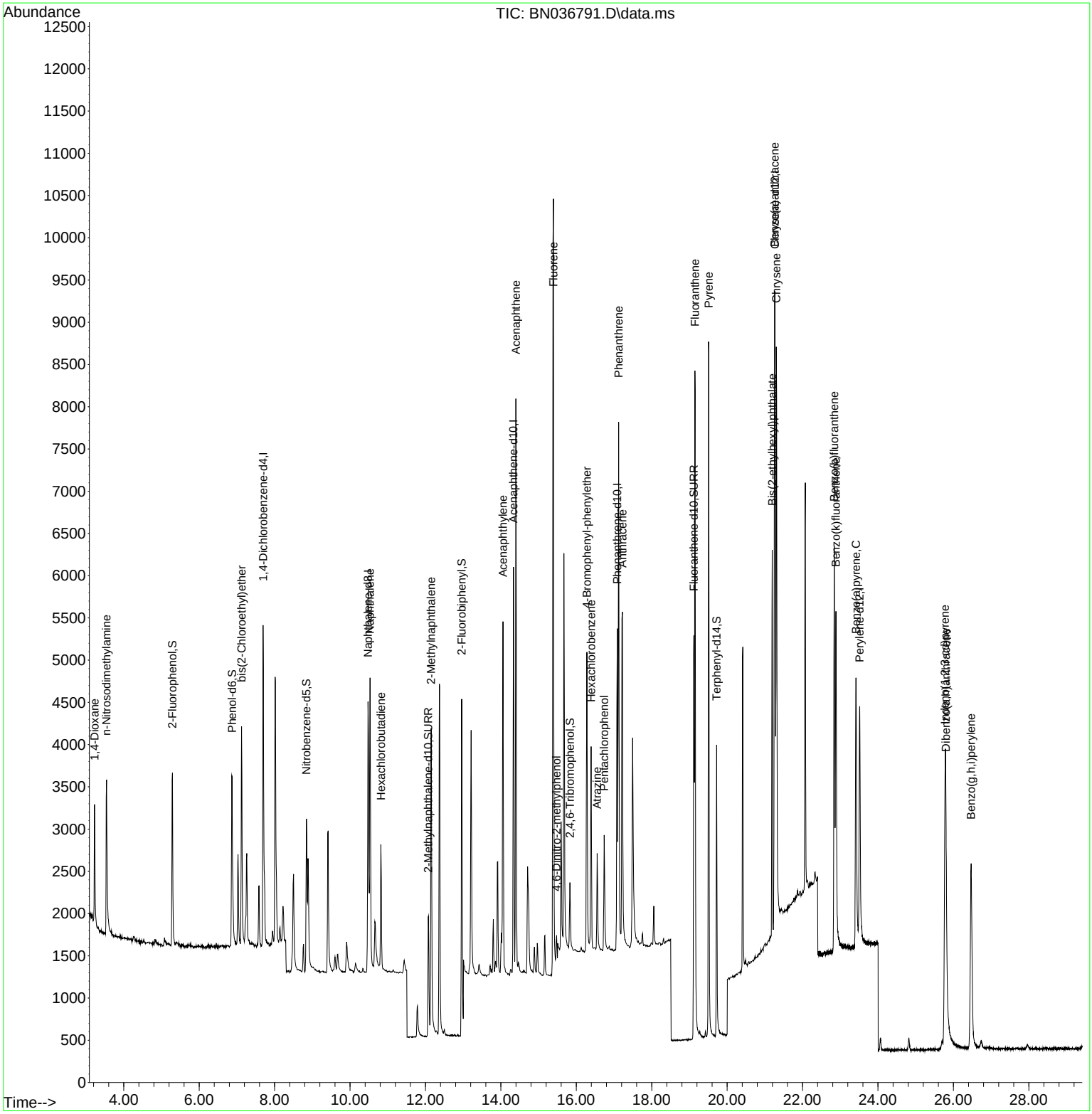
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036791.D
Acq On : 29 Mar 2025 02:44
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

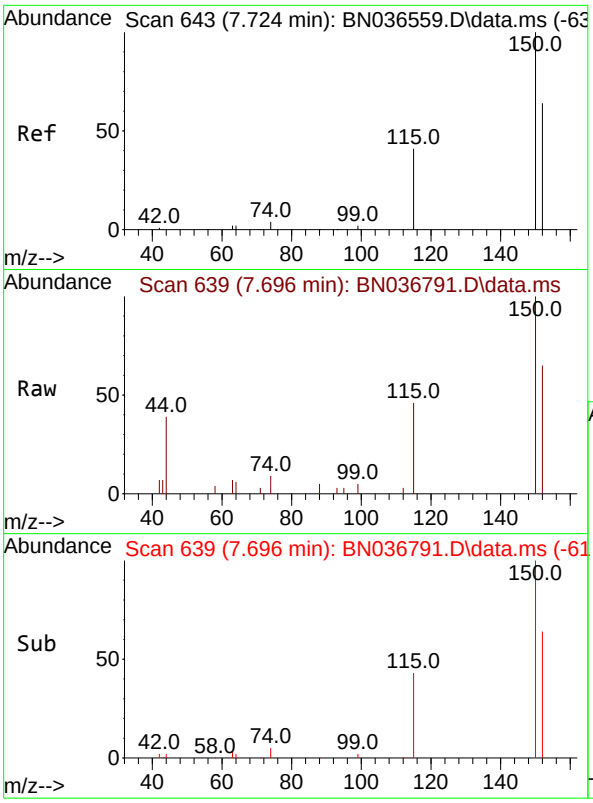
Quant Time: Mar 29 04:28:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

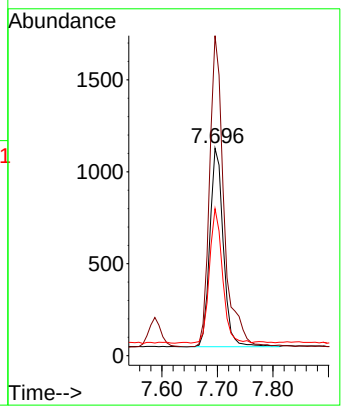





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.696 min Scan# 6
Delta R.T. -0.028 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:152 Resp: 182

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.3 | 123.7 | 185.5 |
| 115 | 70.9 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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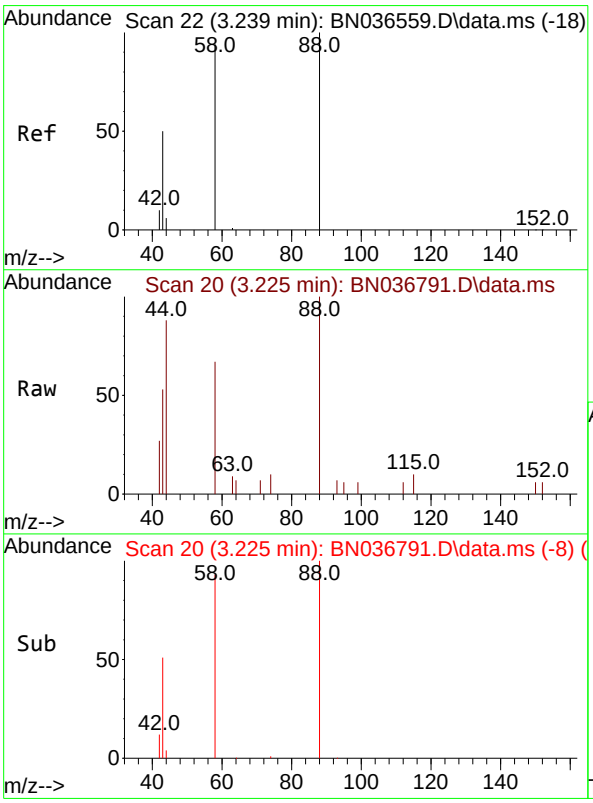
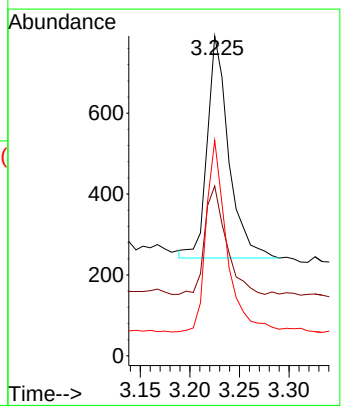
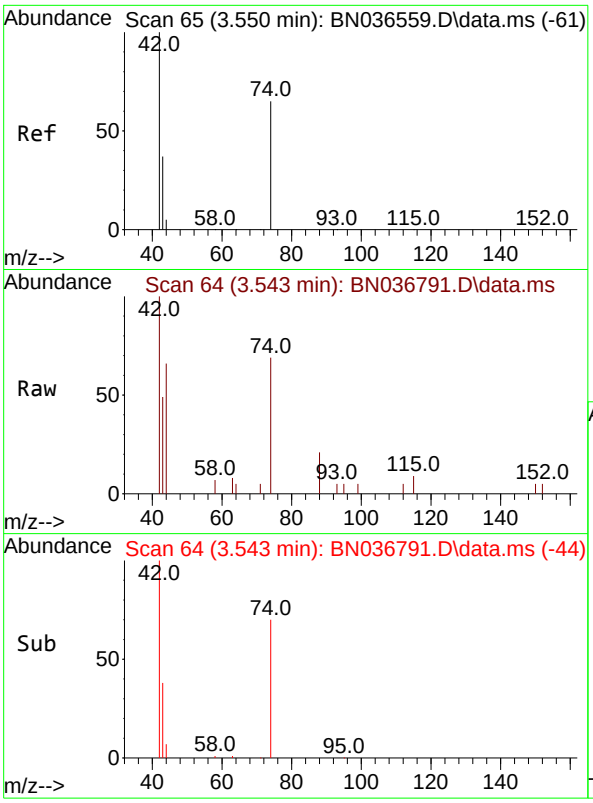



#2
1,4-Dioxane
Concen: 0.408 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 88 Resp: 827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 48.5 | 37.8 | 56.8 |
| 58 | 83.0 | 67.4 | 101.2 |

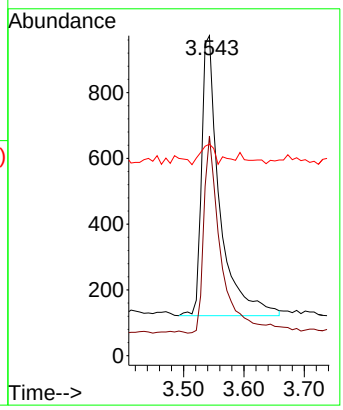





#3
n-Nitrosodimethylamine
Concen: 0.429 ng
RT: 3.543 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 42 Resp: 175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 67.4 | 60.6 | 90.8 |
| 44 | 6.6 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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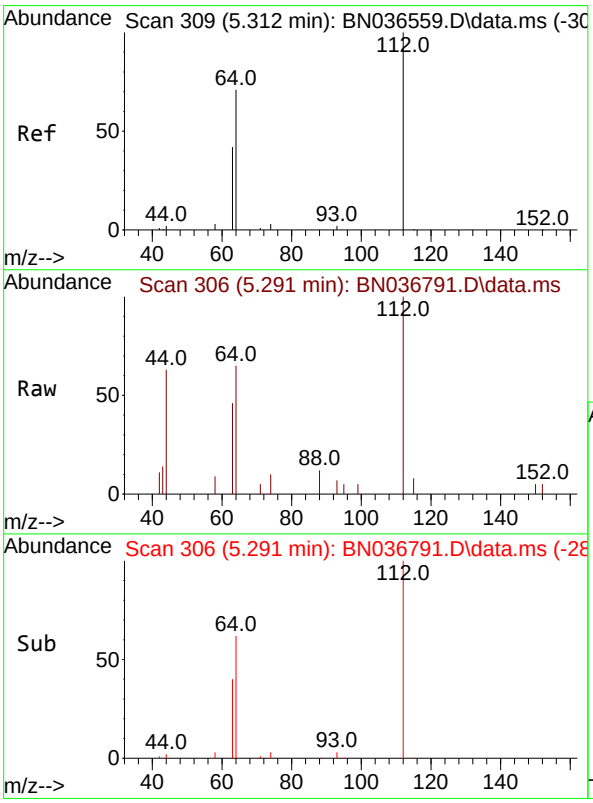
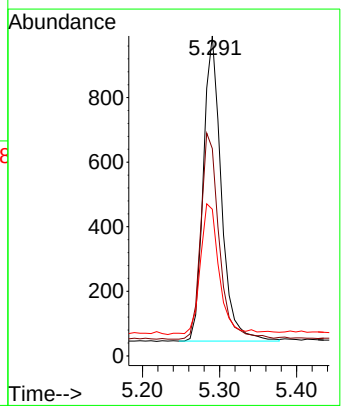
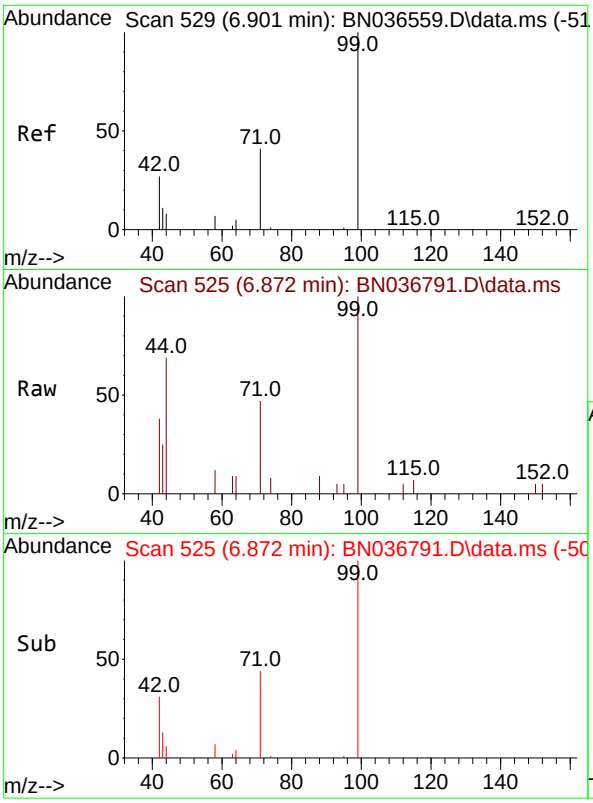



#4
2-Fluorophenol
Concen: 0.357 ng
RT: 5.291 min Scan# 306
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:112 Resp: 1521

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.8 | 53.1 | 79.7 |
| 63 | 46.2 | 31.8 | 47.8 |

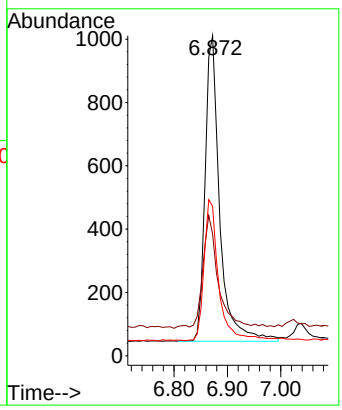





#5
Phenol-d6
Concen: 0.350 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 99 Resp: 183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 38.7 | 26.5 | 39.7 |
| 71 | 46.1 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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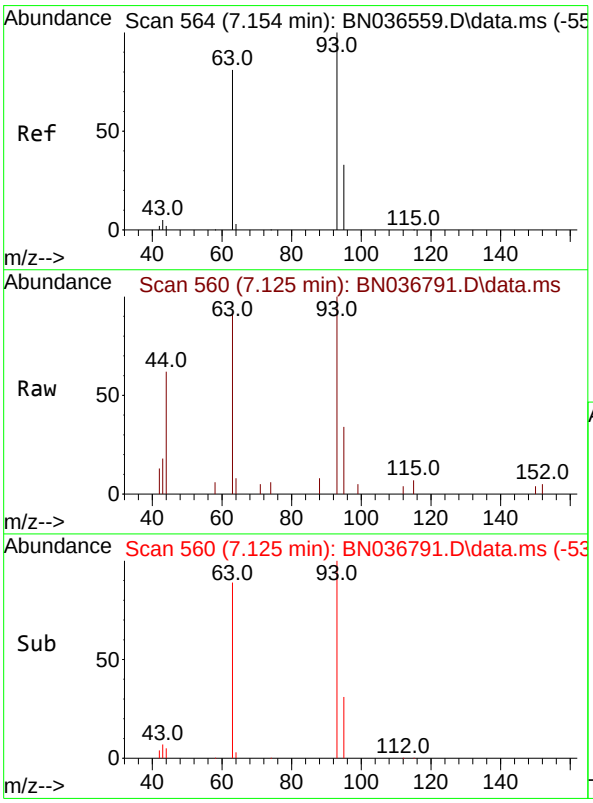
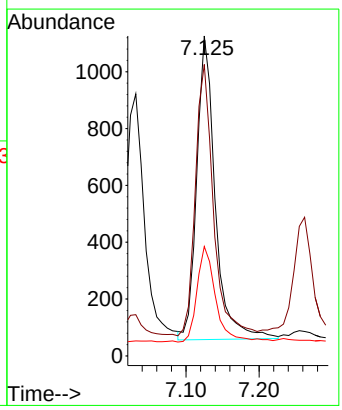
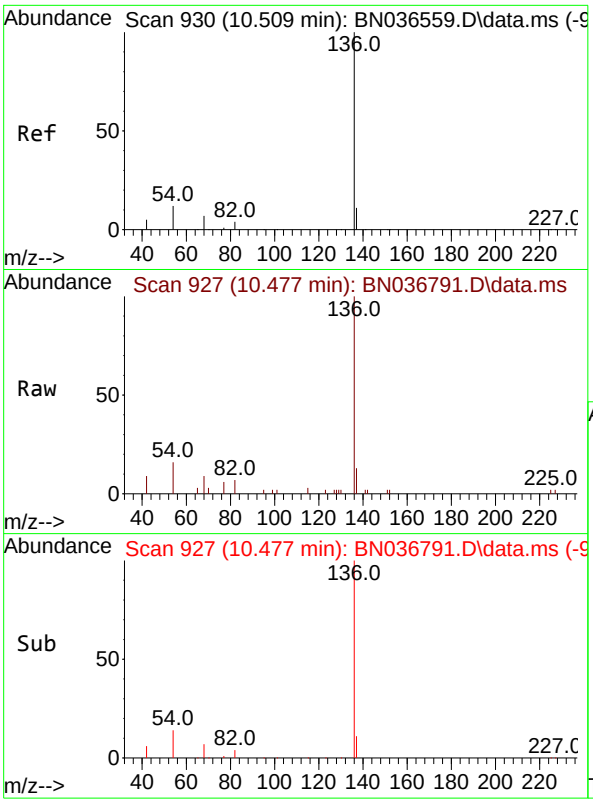



#6
bis(2-Chloroethyl)ether
Concen: 0.346 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 93 Resp: 1880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.9 | 67.7 | 101.5 |
| 95 | 31.5 | 25.6 | 38.4 |

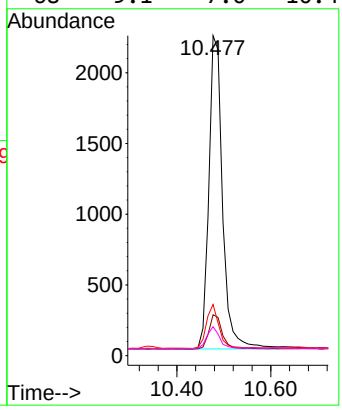





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:136 Resp: 449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.8 | 10.3 | 15.5 |
| 54 | 16.0 | 11.5 | 17.3 |
| 68 | 9.1 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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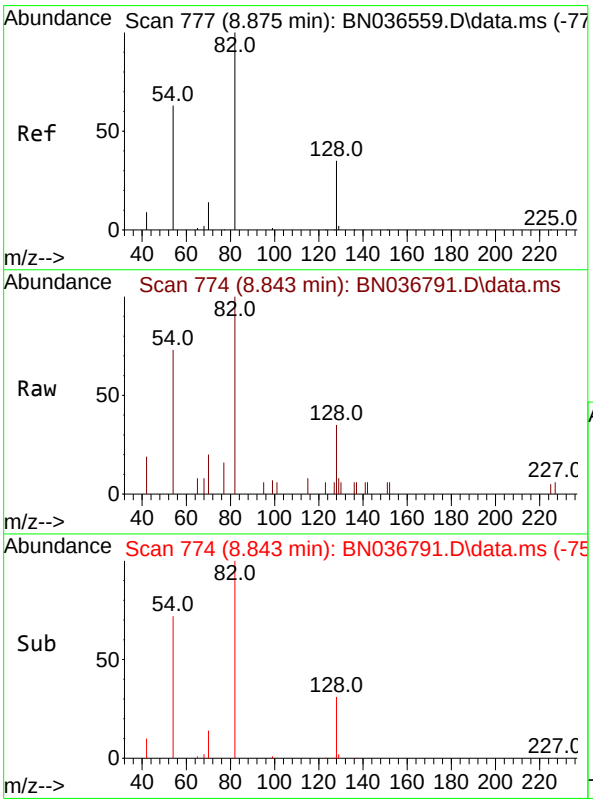
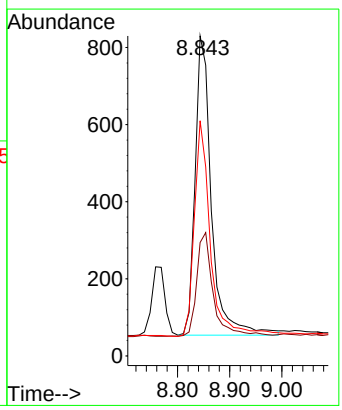
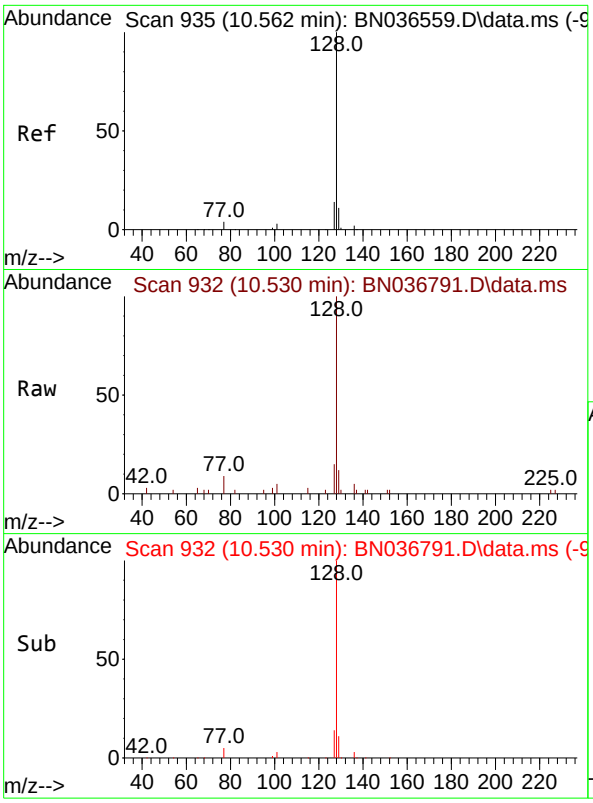



#8
Nitrobenzene-d5
Concen: 0.346 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 82 Resp: 1689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 35.4 | 30.6 | 45.8 |
| 54 | 73.5 | 52.2 | 78.4 |

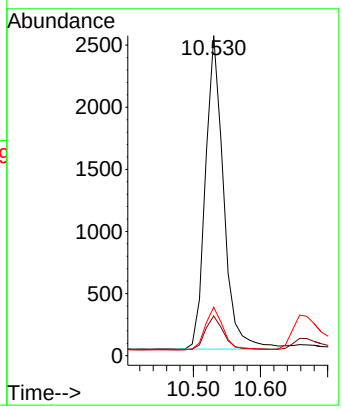





#9
Naphthalene
Concen: 0.359 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:128 Resp: 474

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.4 | 9.8 | 14.6 |
| 127 | 15.2 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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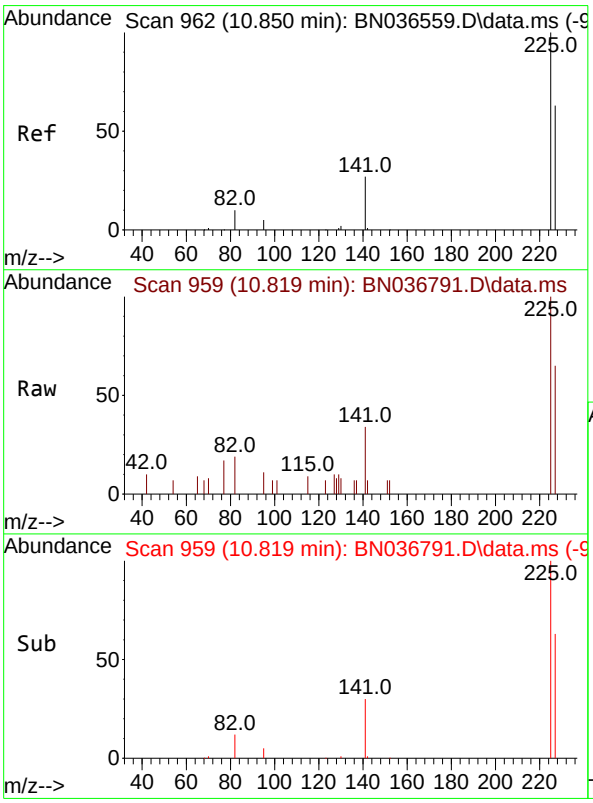
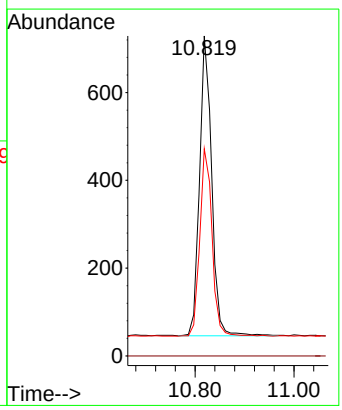
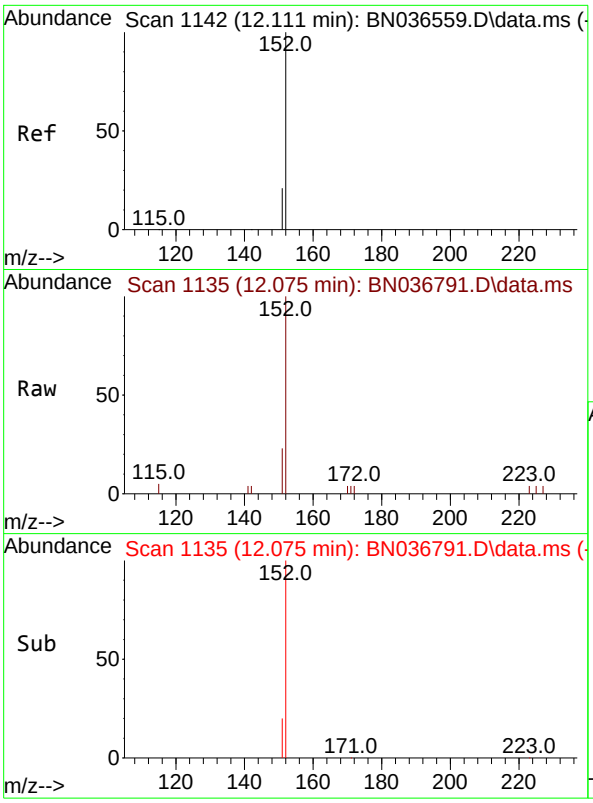



#10
Hexachlorobutadiene
Concen: 0.373 ng
RT: 10.819 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:225 Resp: 1160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.4 | 51.8 | 77.8 |






#11
2-Methylnaphthalene-d10
Concen: 0.354 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:152 Resp: 236

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.9 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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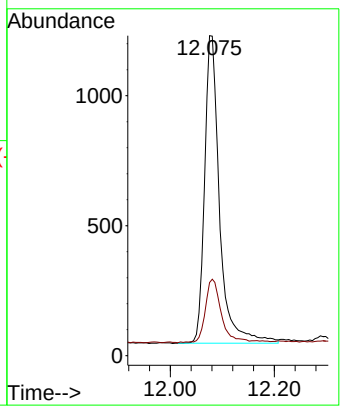
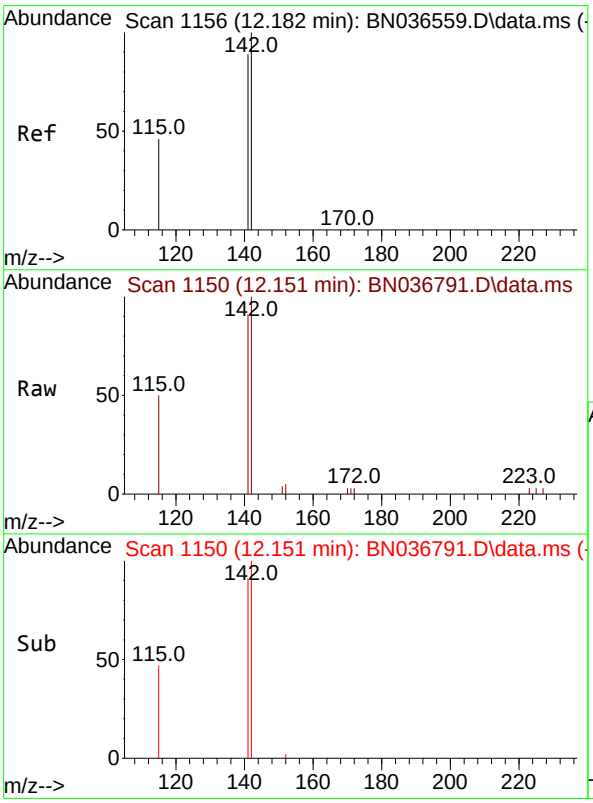
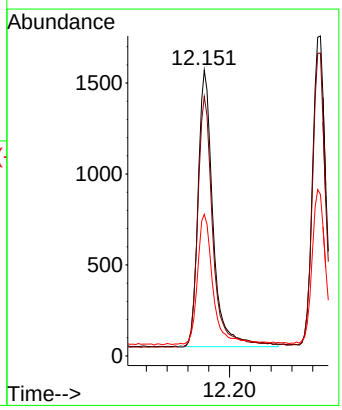


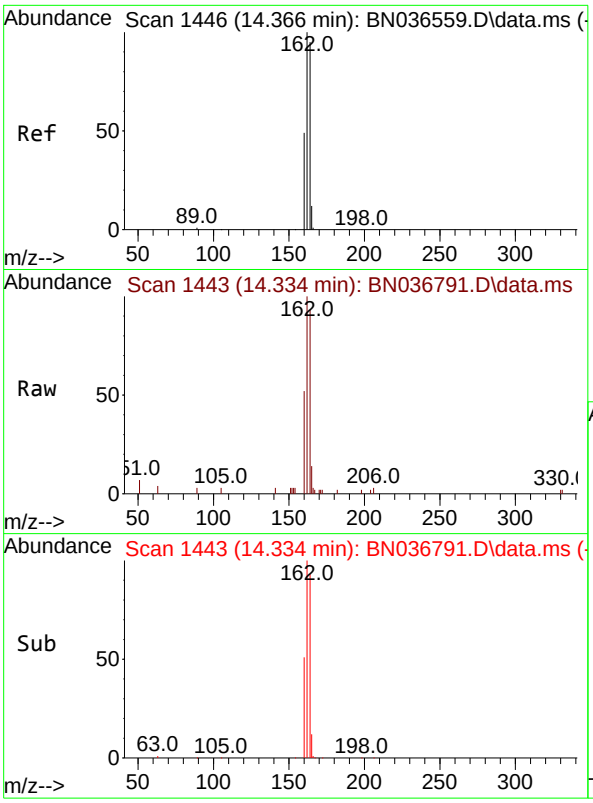




#12
2-Methylnaphthalene
Concen: 0.362 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:142 Resp: 3044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.8 | 71.7 | 107.5 |
| 115 | 49.5 | 38.3 | 57.5 |

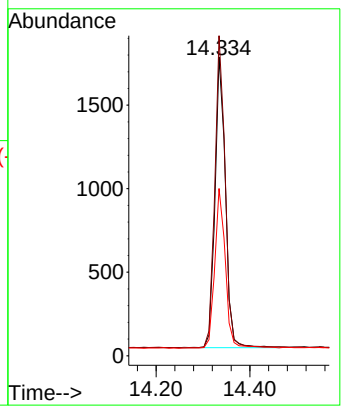





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:164 Resp: 270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 107.1 | 84.2 | 126.2 |
| 160 | 56.0 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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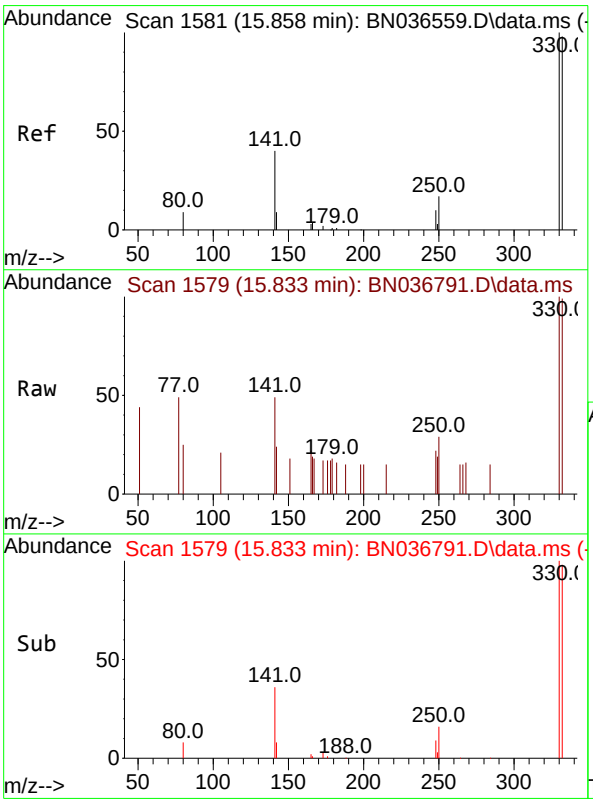
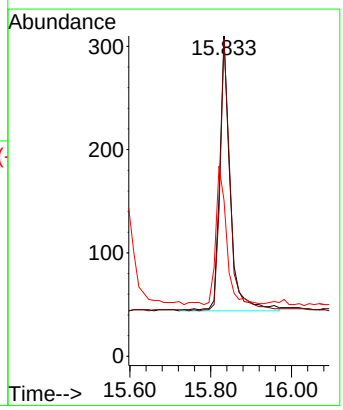
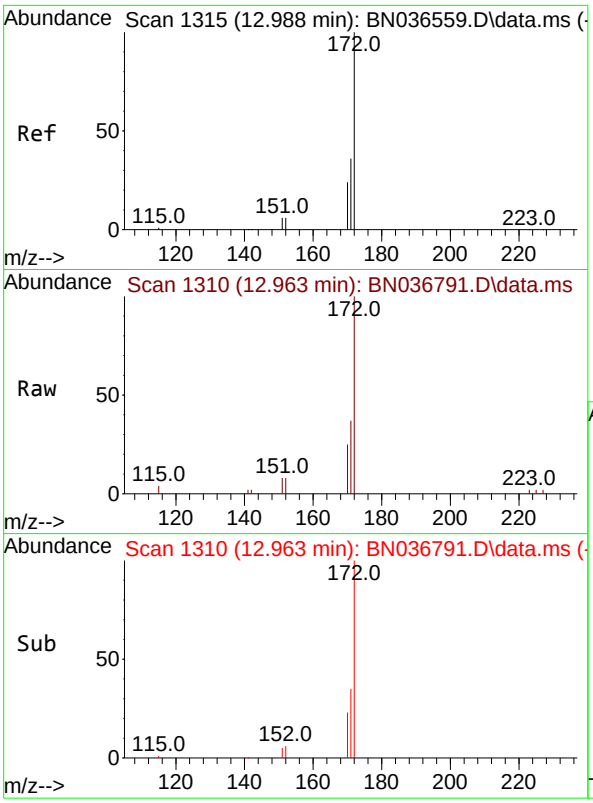



#14
2,4,6-Tribromophenol
Concen: 0.392 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:330 Resp: 481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 94.4 | 75.2 | 112.8 |
| 141 | 51.4 | 43.4 | 65.2 |

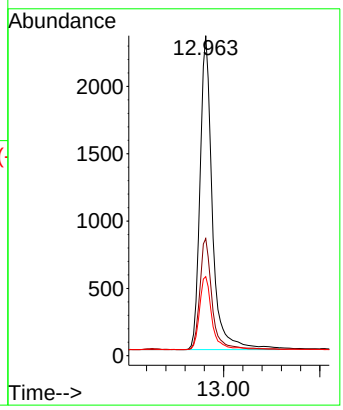





#15
2-Fluorobiphenyl
Concen: 0.351 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:172 Resp: 551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.6 | 29.5 | 44.3 |
| 170 | 24.7 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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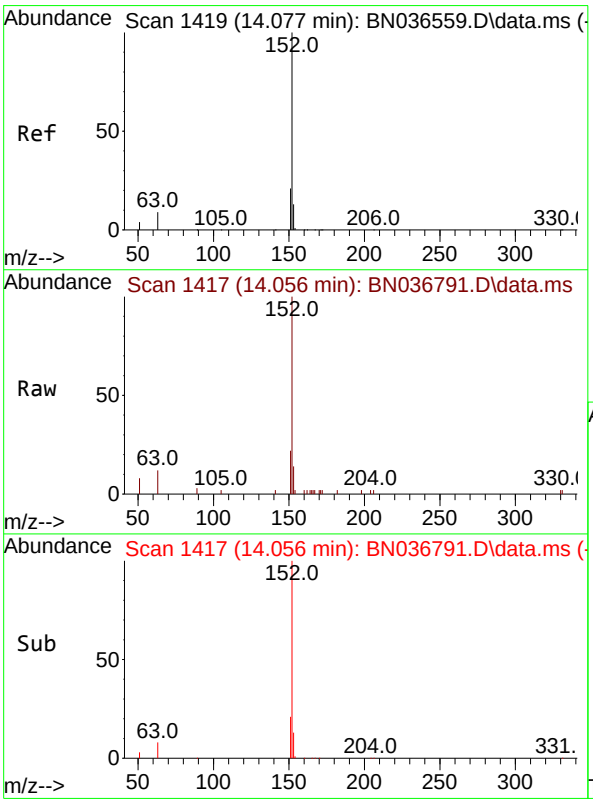
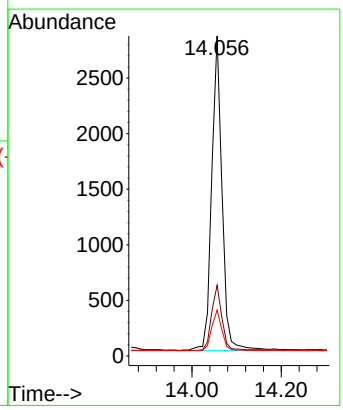
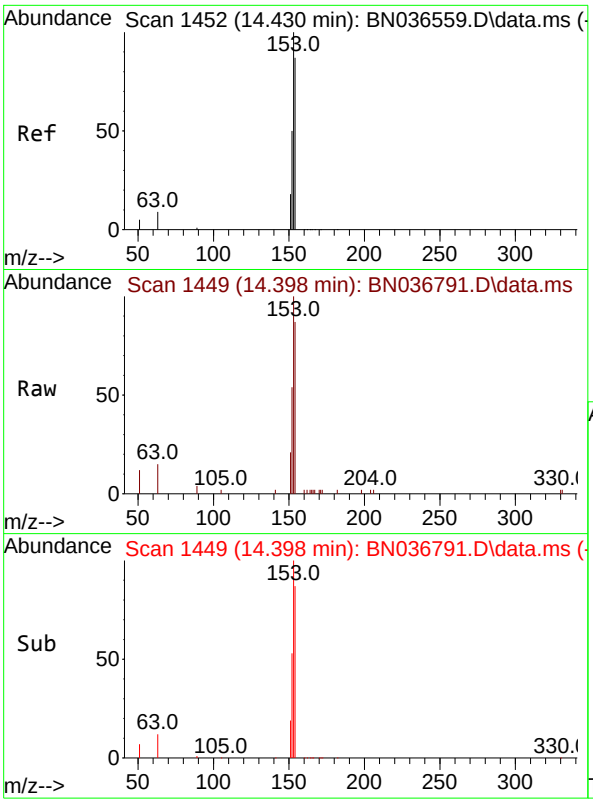



#16
Acenaphthylene
Concen: 0.356 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:152 Resp: 4532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.1 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |

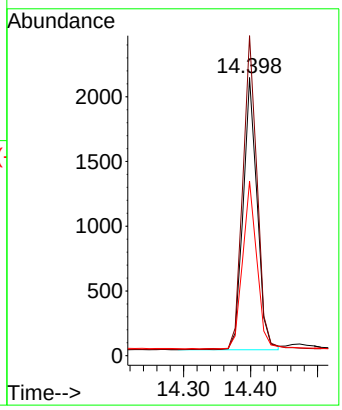





#17
Acenaphthene
Concen: 0.367 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:154 Resp: 3064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.0 | 94.1 | 141.1 |
| 152 | 62.9 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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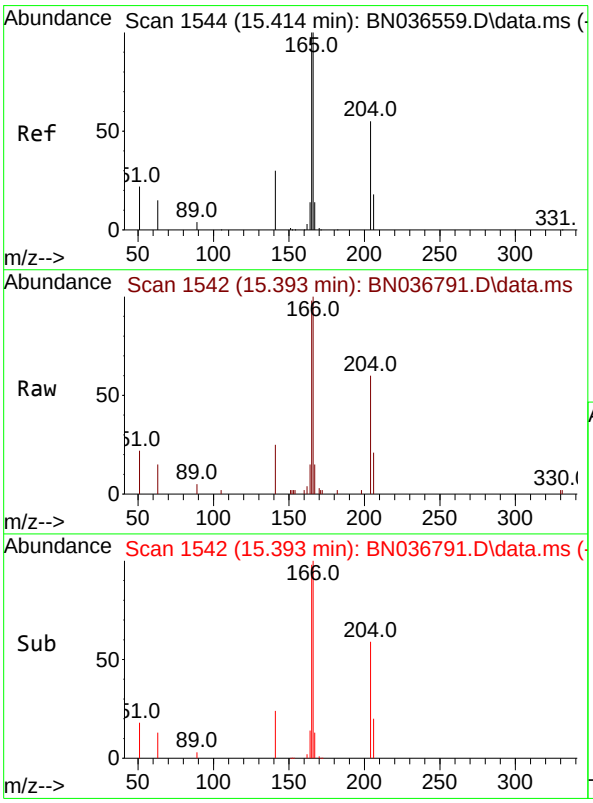
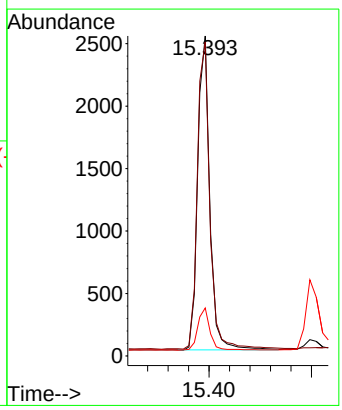
Supervised By :Jagrut Upadhyay 03/31/2025

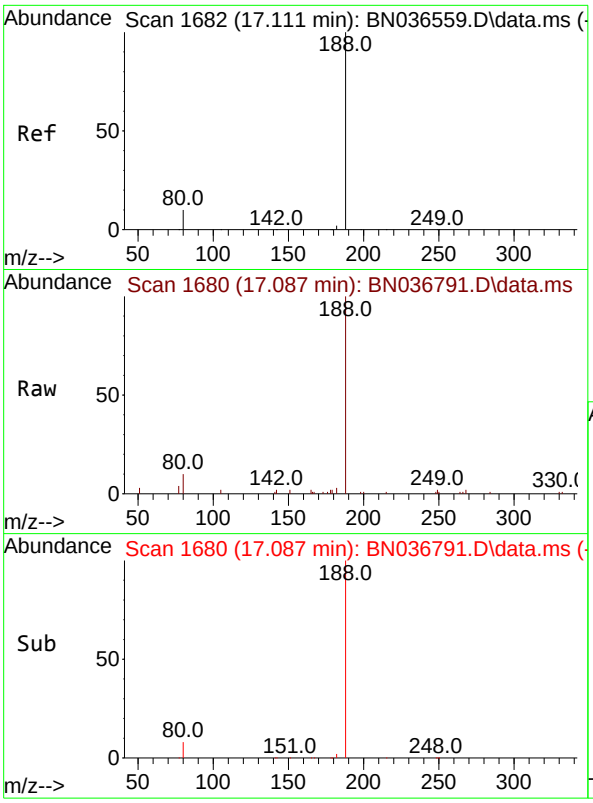



#18
Fluorene
Concen: 0.373 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:166 Resp: 4209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 101.0 | 79.8 | 119.8 |
| 167 | 13.4 | 10.6 | 15.8 |

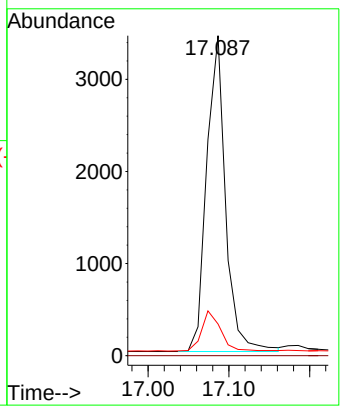





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:188 Resp: 557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 9.9 | 8.8 | 13.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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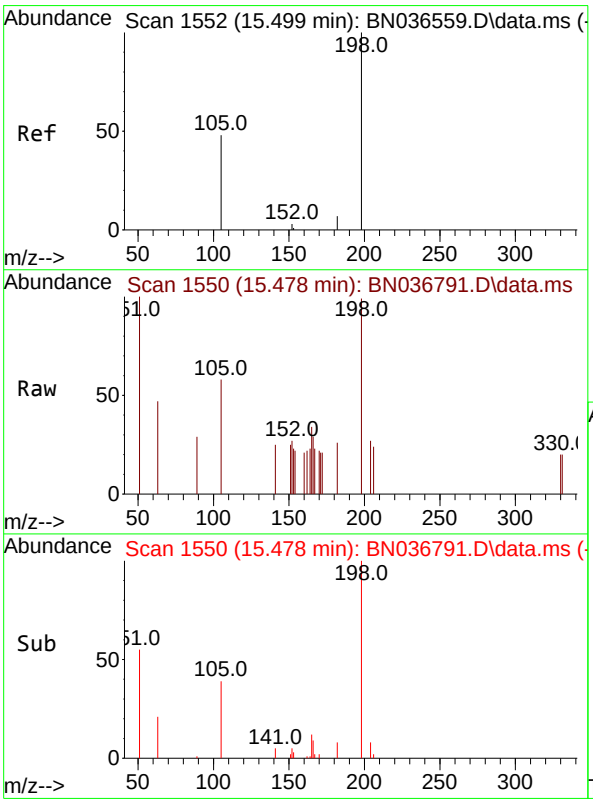
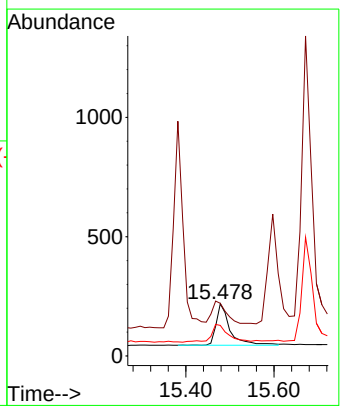
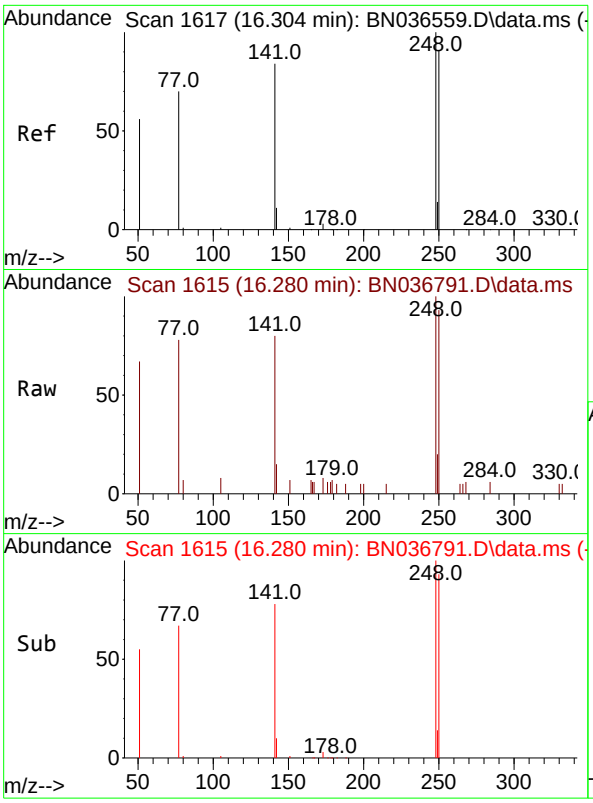



#20
4,6-Dinitro-2-methylphenol
Concen: 0.423 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:198 Resp: 395

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 100.9 | 107.9 | 161.9# |
| 105 | 58.4 | 56.2 | 84.2 |






#21
4-Bromophenyl-phenylether
Concen: 0.388 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:248 Resp: 135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 93.4 | 73.0 | 109.6 |
| 141 | 80.0 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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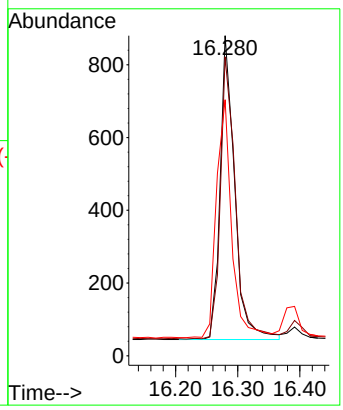
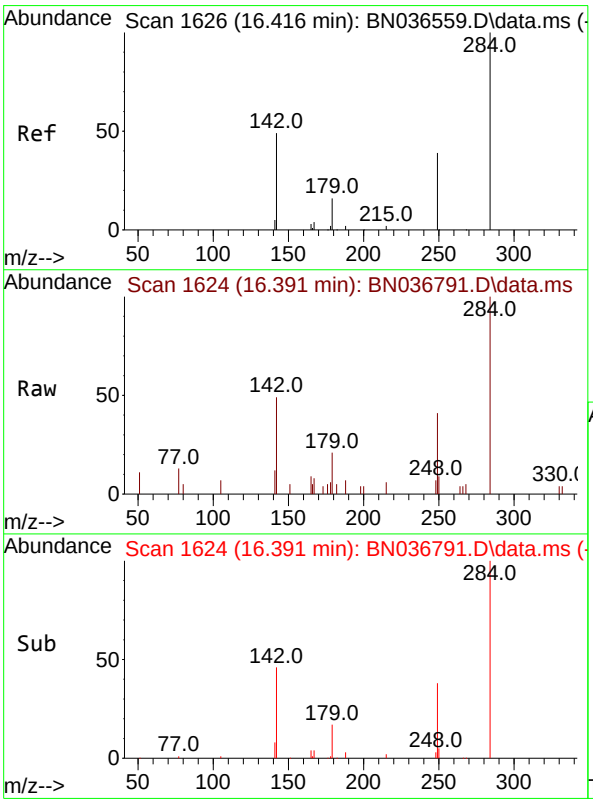
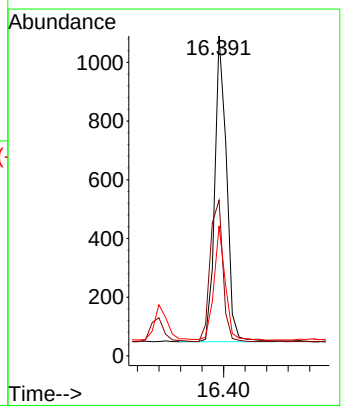


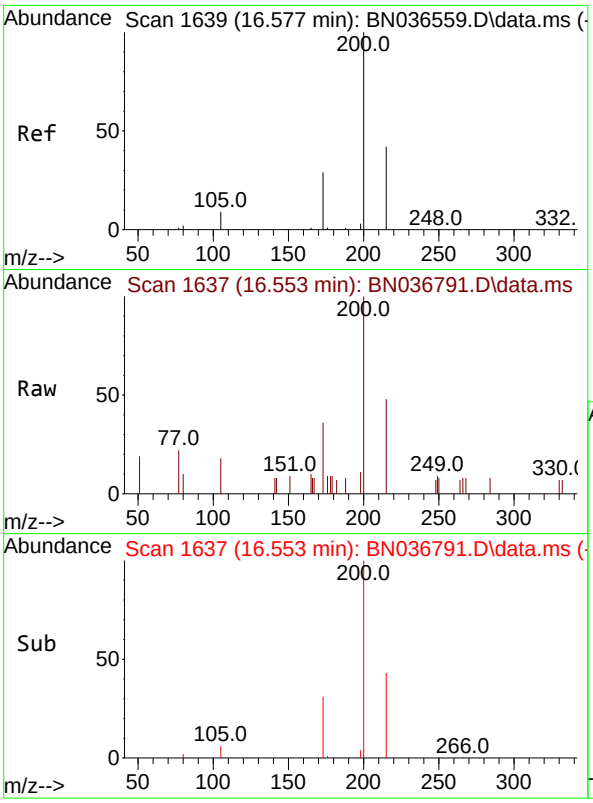




#22
Hexachlorobenzene
Concen: 0.375 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:284 Resp: 1582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.7 | 37.0 | 55.4 |
| 249 | 35.6 | 28.1 | 42.1 |

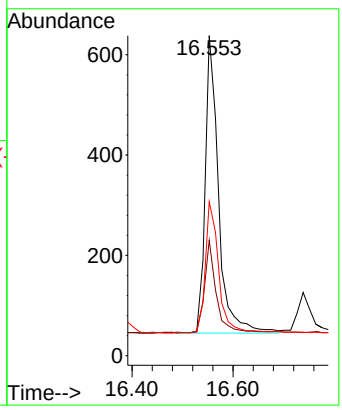





#23
Atrazine
Concen: 0.389 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:200 Resp: 109(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.1 | 27.3 | 40.9 |
| 215 | 48.1 | 36.8 | 55.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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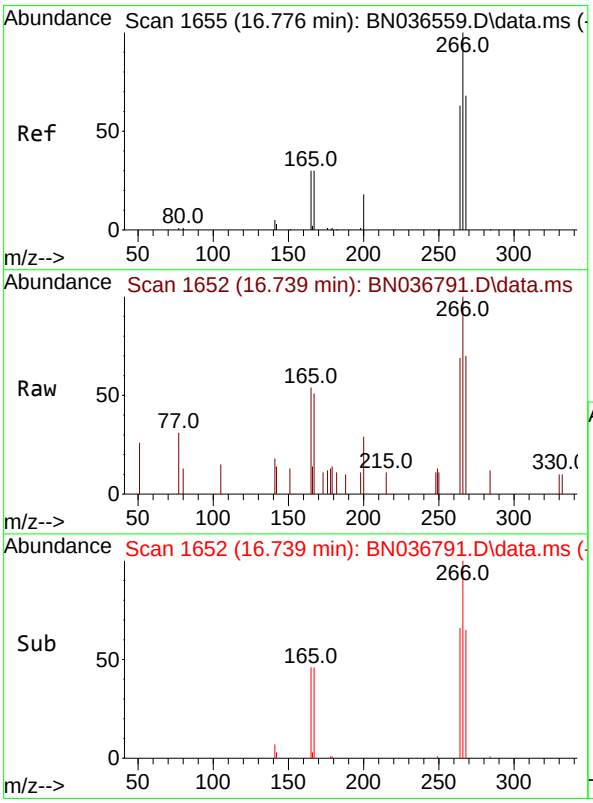
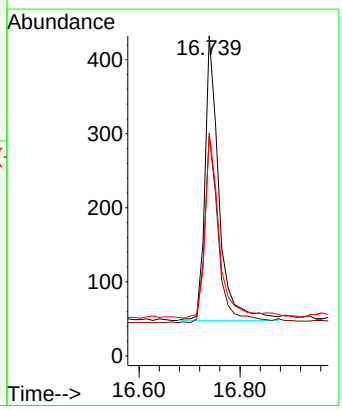
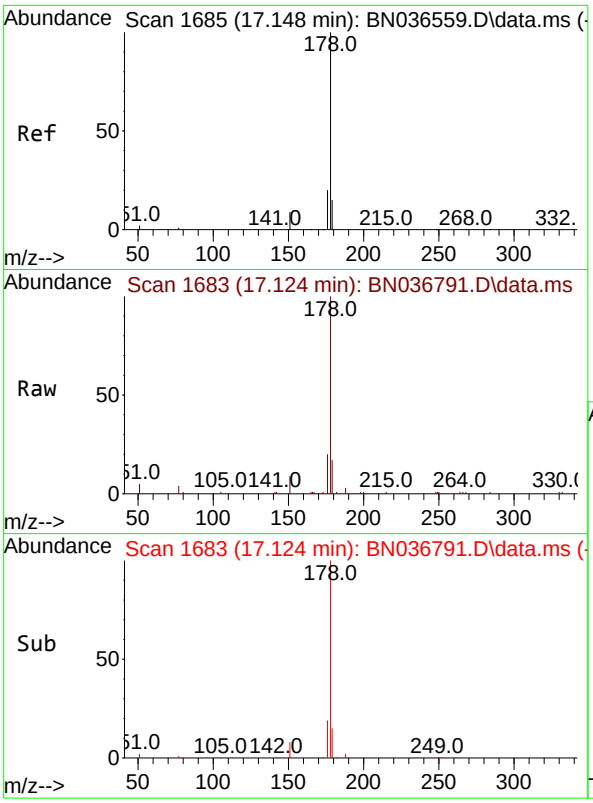



#24
Pentachlorophenol
Concen: 0.385 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:266 Resp: 740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 64.5 | 49.6 | 74.4 |
| 268 | 64.9 | 50.9 | 76.3 |

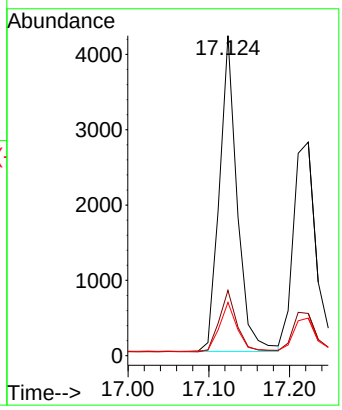





#25
Phenanthrene
Concen: 0.384 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:178 Resp: 641(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.9 | 23.9 |
| 179 | 16.0 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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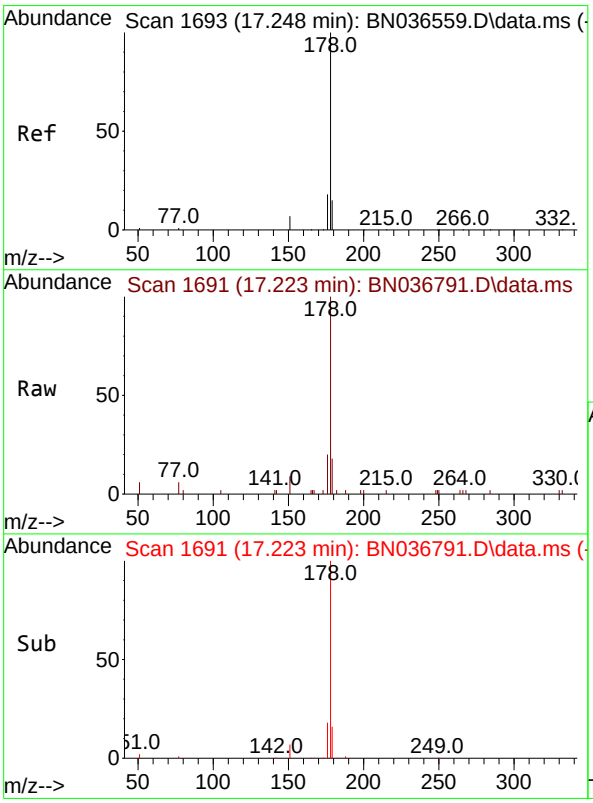
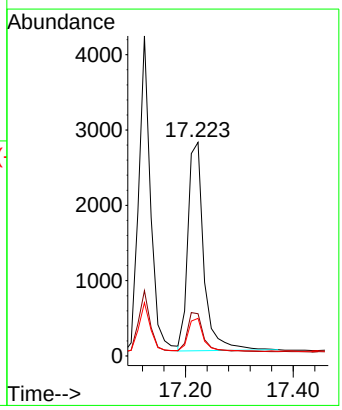
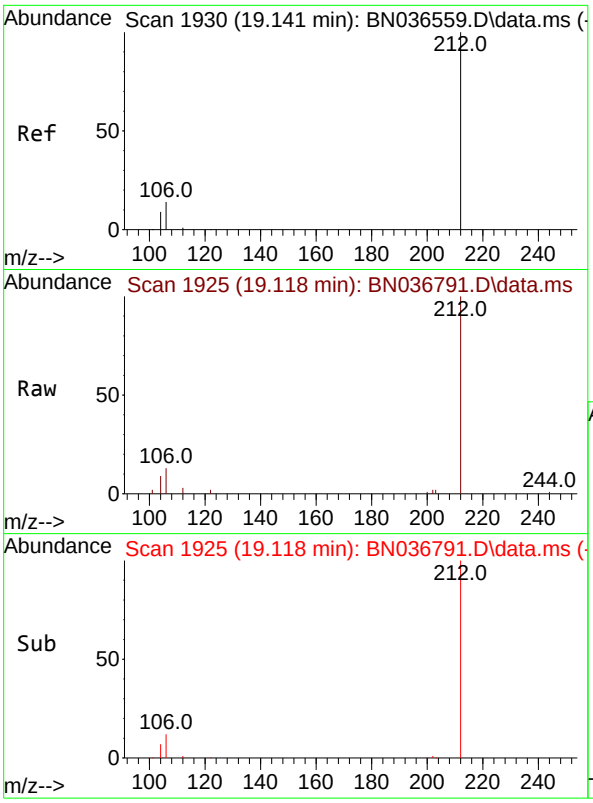



#26
Anthracene
Concen: 0.376 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:178 Resp: 5669

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.2 | 15.4 | 23.2 |
| 179 | 15.5 | 12.6 | 18.8 |

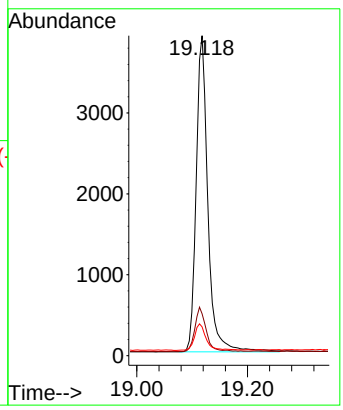





#27
Fluoranthene-d10
Concen: 0.403 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:212 Resp: 575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.2 | 11.8 | 17.6 |
| 104 | 8.6 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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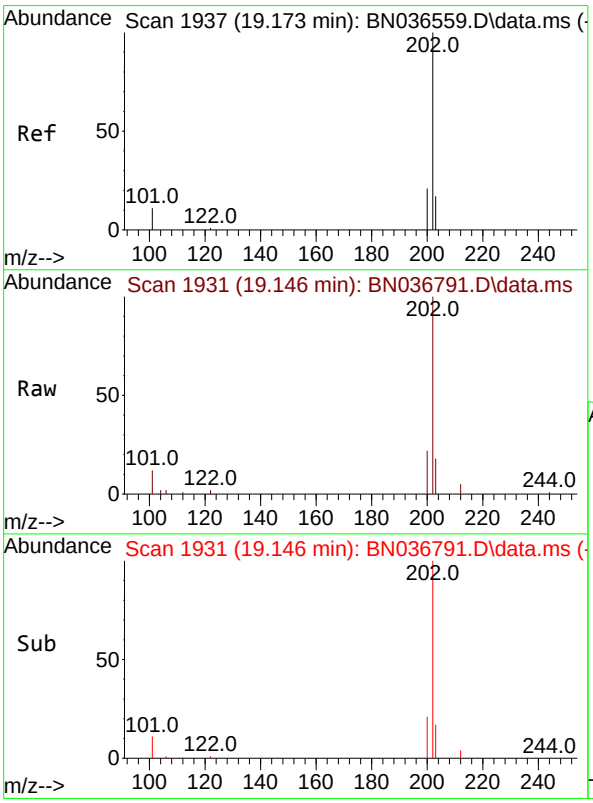
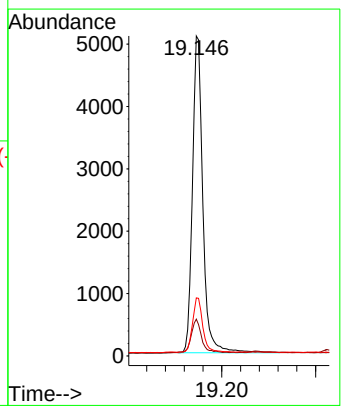
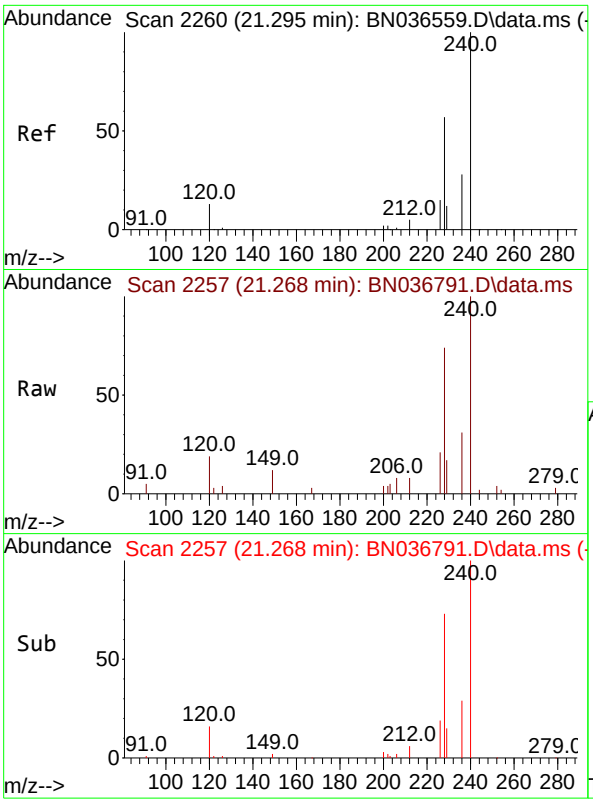



#28
Fluoranthene
Concen: 0.415 ng
RT: 19.146 min Scan# 1931
Delta R.T. -0.028 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:202 Resp: 7784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.4 | 9.4 | 14.0 |
| 203 | 16.9 | 13.5 | 20.3 |

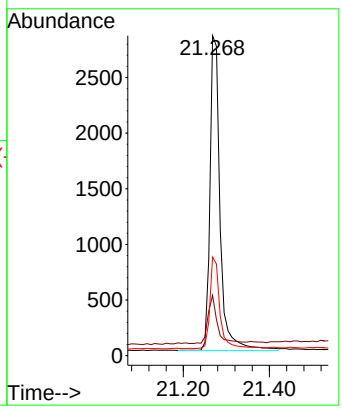





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:240 Resp: 463

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 18.8 | 14.6 | 22.0 |
| 236 | 30.8 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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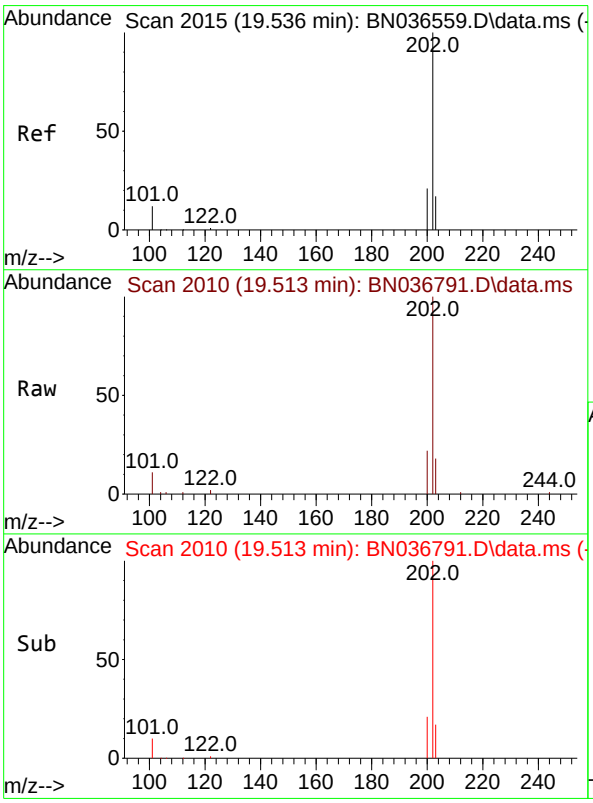
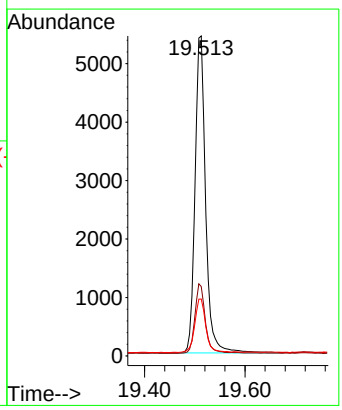
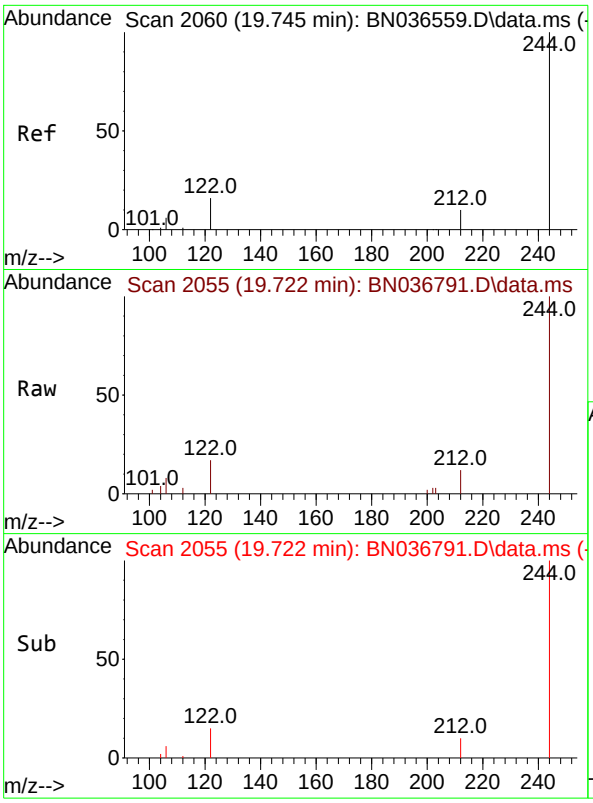



#30
Pyrene
Concen: 0.351 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:202 Resp: 7947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |






#31
Terphenyl-d14
Concen: 0.326 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:244 Resp: 362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.2 | 9.6 | 14.4 |
| 122 | 17.0 | 13.9 | 20.9 |

**Manual Integrations**
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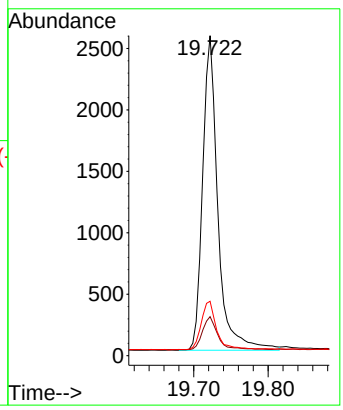
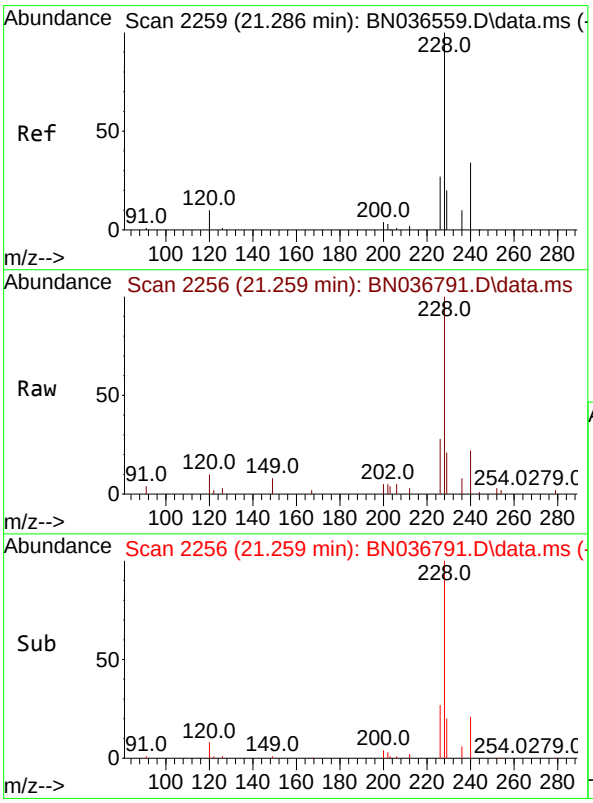
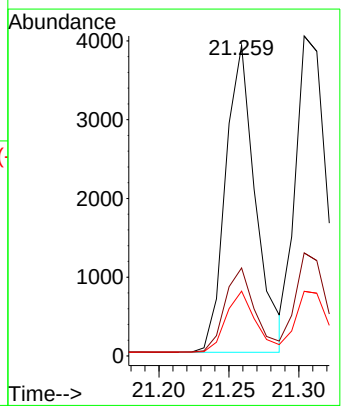


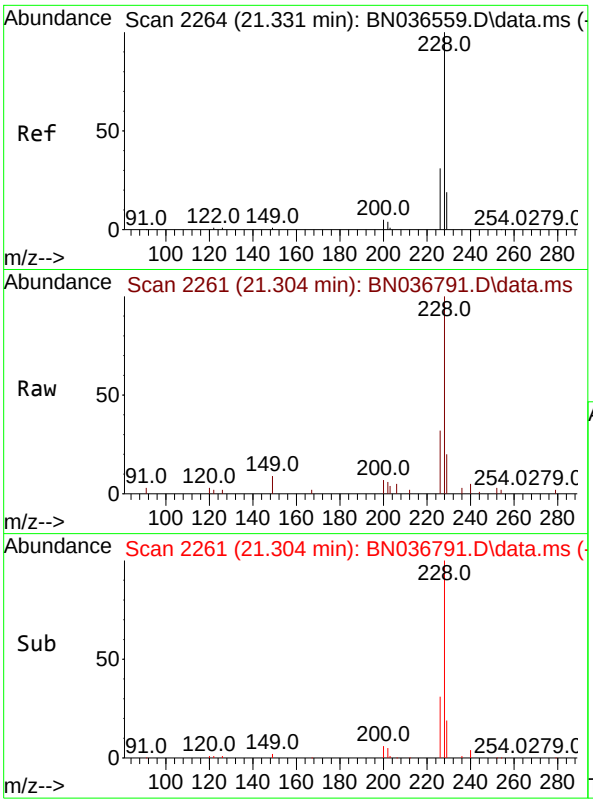




#32
Benzo(a)anthracene
Concen: 0.363 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:228 Resp: 5842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.3 | 22.5 | 33.7 |
| 229 | 20.9 | 16.6 | 25.0 |

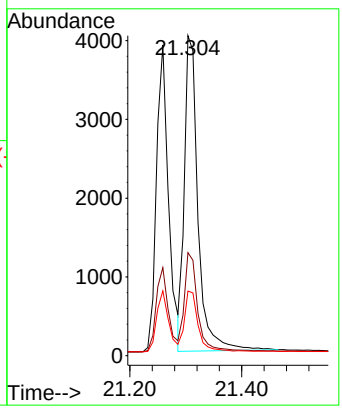





#33
Chrysene
Concen: 0.385 ng
RT: 21.304 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:228 Resp: 678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.2 | 25.3 | 37.9 |
| 229 | 20.2 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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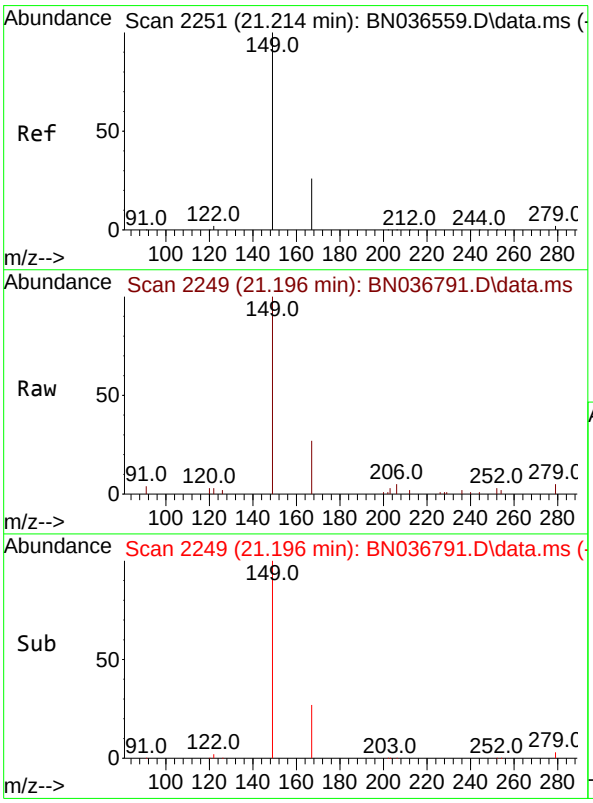
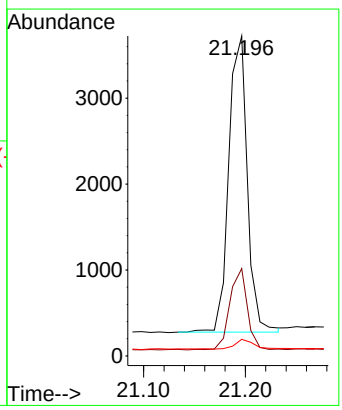
Supervised By :Jagrut Upadhyay 03/31/2025

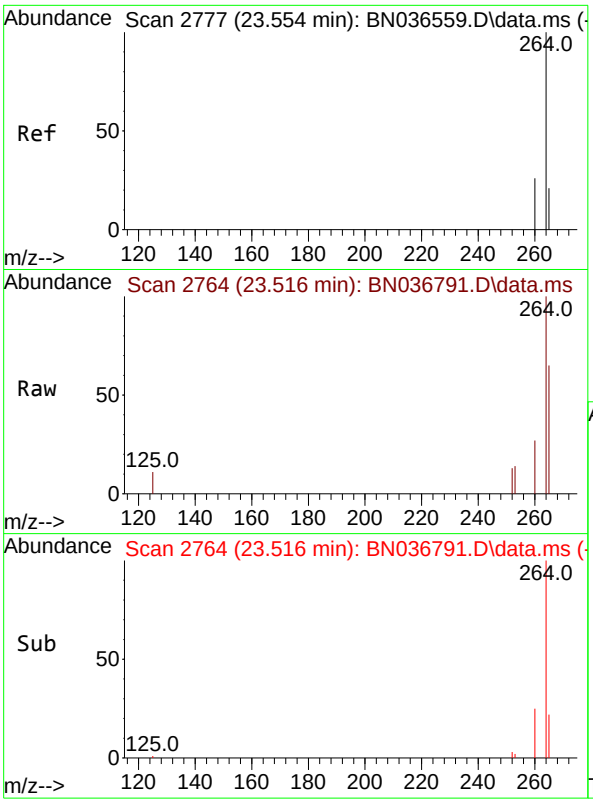



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.380 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:149 Resp: 4355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 25.9 | 20.7 | 31.1 |
| 279 | 3.3 | 3.6 | 5.4# |

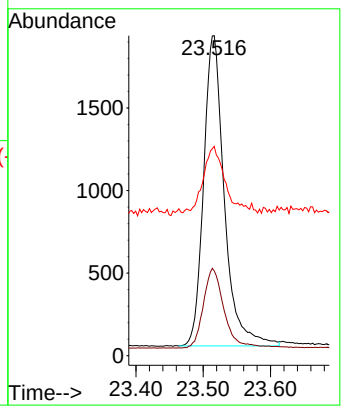





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.516 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:264 Resp: 403

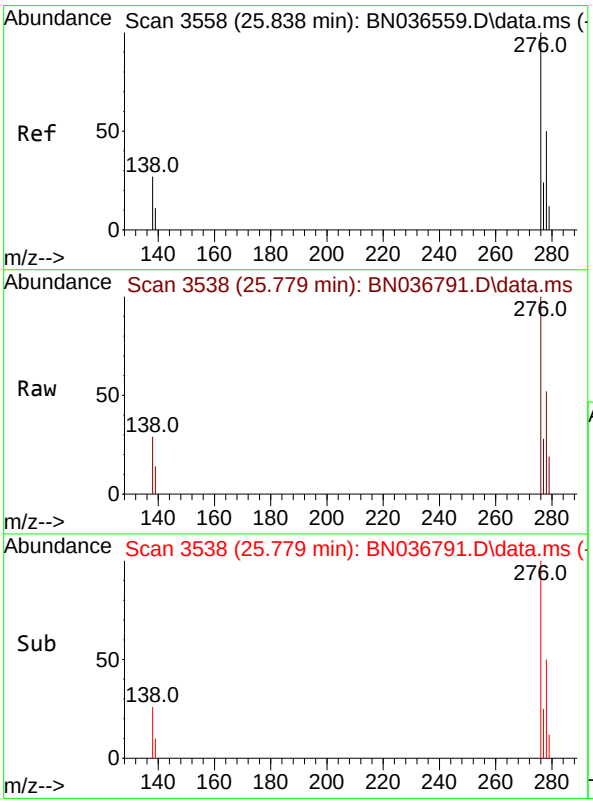
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.5 | 22.6 | 33.8 |
| 265 | 65.4 | 88.1 | 132.1# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

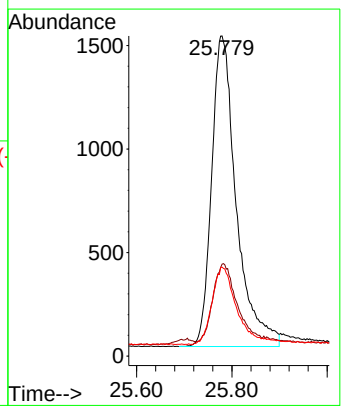
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

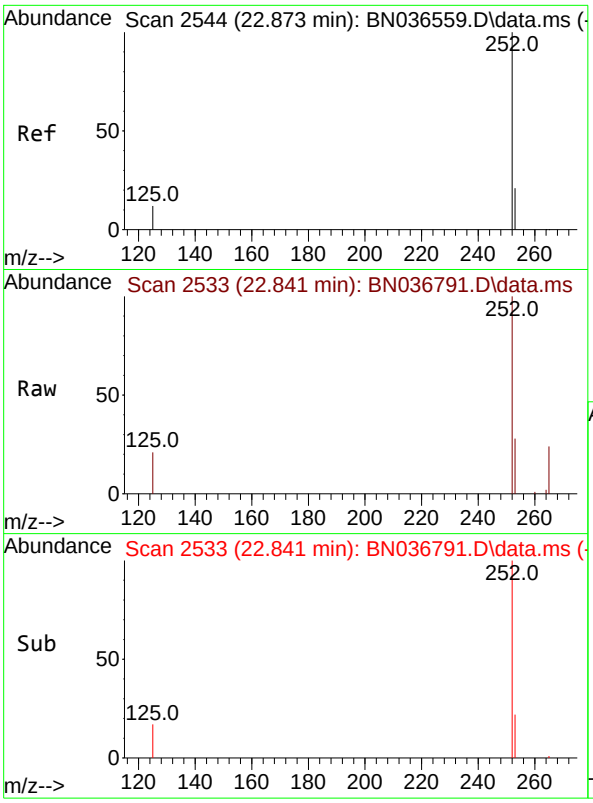



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.372 ng
RT: 25.779 min Scan# 3538
Delta R.T. -0.058 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:276 Resp: 5407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.1 | 23.4 | 35.2 |
| 277 | 25.4 | 20.0 | 30.0 |

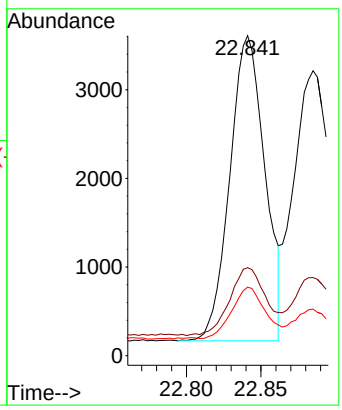





#37
Benzo(b)fluoranthene
Concen: 0.383 ng
RT: 22.841 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:252 Resp: 562

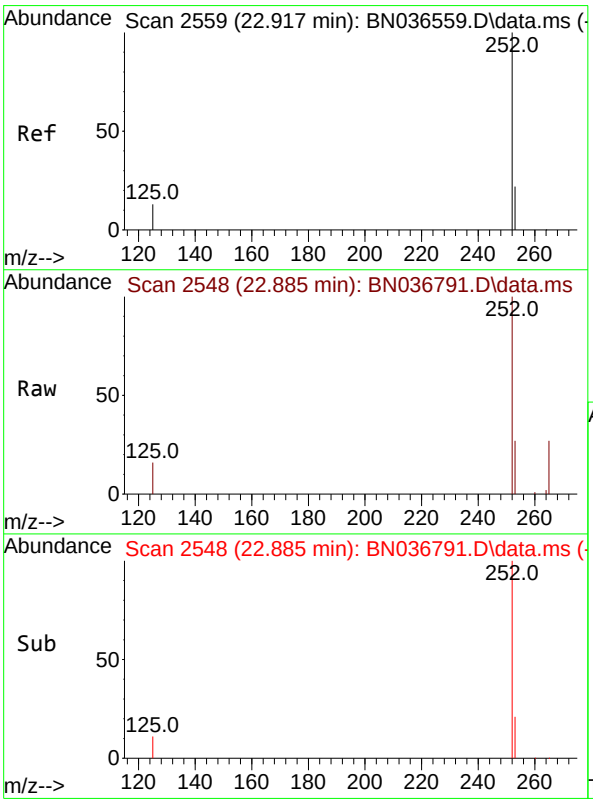
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.5 | 23.9 | 35.9 |
| 125 | 21.4 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

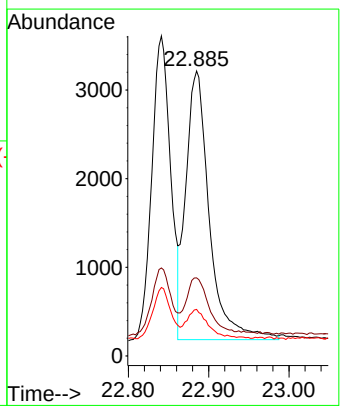
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

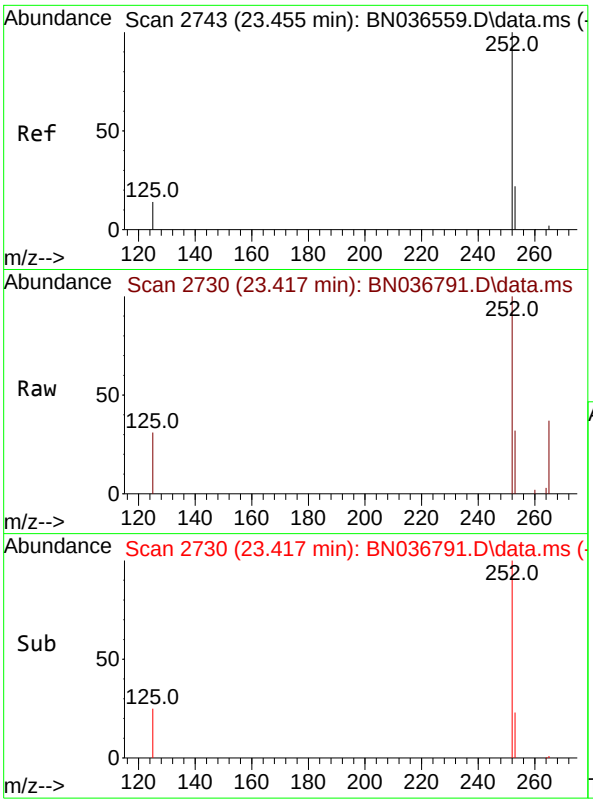



#38
Benzo(k)fluoranthene
Concen: 0.400 ng m
RT: 22.885 min Scan# 2548
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:252 Resp: 6157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.4 | 24.6 | 36.8 |
| 125 | 16.4 | 17.8 | 26.8# |

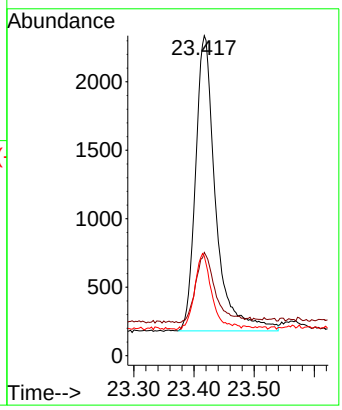





#39
Benzo(a)pyrene
Concen: 0.404 ng
RT: 23.417 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:252 Resp: 499

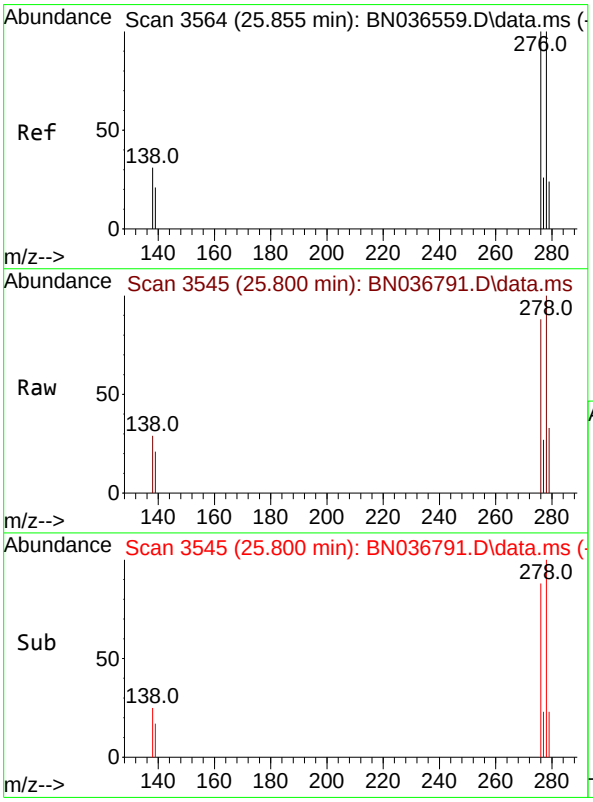
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 32.3 | 27.8 | 41.8 |
| 125 | 31.1 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

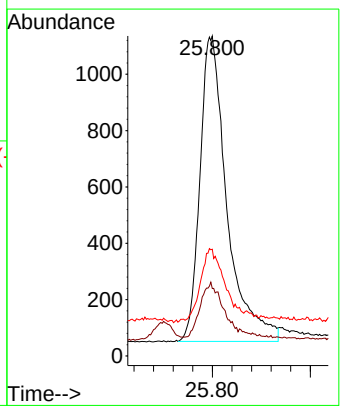
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

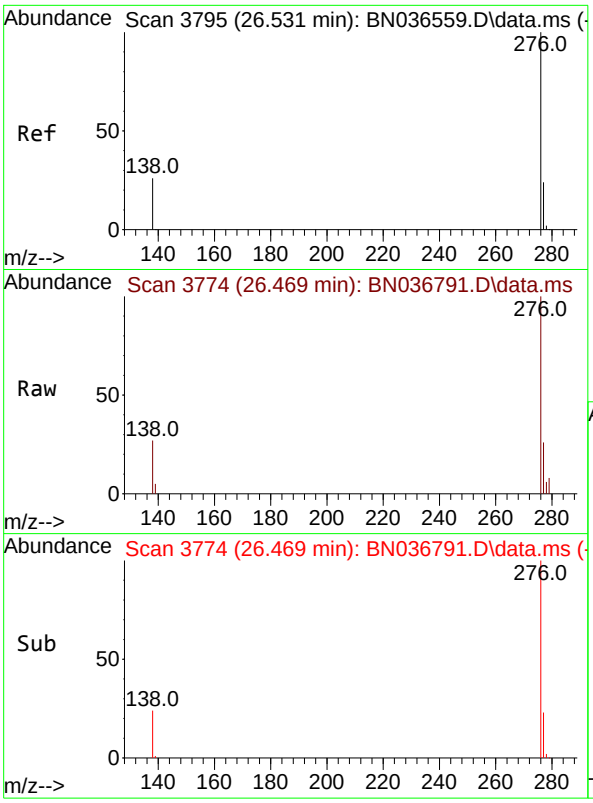



#40
Dibenzo(a,h)anthracene
Concen: 0.366 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.055 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:278 Resp: 4150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 21.1 | 20.8 | 31.2 |
| 279 | 33.4 | 28.8 | 43.2 |

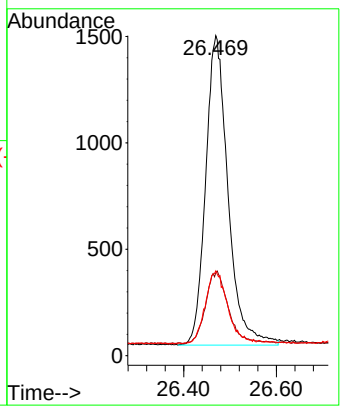





#41
Benzo(g,h,i)perylene
Concen: 0.376 ng
RT: 26.469 min Scan# 3
Delta R.T. -0.061 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:276 Resp: 487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.9 | 22.2 | 33.4 |
| 138 | 26.5 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036791.D
Acq On : 29 Mar 2025 02:44
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 29 04:28:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 83 | -0.03 |
| 2 | | 1,4-Dioxane | 0.444 | 0.453 | -2.0 | 75 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.962 | -7.1 | 85 | 0.00 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.833 | 10.6 | 70 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 1.007 | 12.6 | 74 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.030 | 13.4 | 72 | -0.03 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 88 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.376 | 13.6 | 80 | -0.03 |
| 9 | | Naphthalene | 1.177 | 1.056 | 10.3 | 77 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.258 | 6.9 | 77 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.526 | 11.6 | 77 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.678 | 9.5 | 78 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 89 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.178 | 2.2 | 85 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 2.041 | 12.3 | 76 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.678 | 11.1 | 77 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.134 | 8.3 | 79 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.558 | 6.8 | 79 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 93 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.071 | 17.4 | 85 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.243 | 3.2 | 82 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.284 | 6.3 | 78 | -0.02 |
| 23 | | Atrazine | 0.201 | 0.196 | 2.5 | 85 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.133 | 3.6 | 90 | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.152 | 4.0 | 82 | -0.02 |
| 26 | | Anthracene | 1.083 | 1.018 | 6.0 | 82 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 1.032 | -0.7 | 86 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.397 | -3.6 | 89 | -0.03 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 113 | -0.03 |
| 30 | | Pyrene | 1.956 | 1.715 | 12.3 | 91 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.782 | 18.4 | 86 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.261 | 9.3 | 99 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.463 | 3.7 | 102 | -0.03 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.940 | 5.1 | 101 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 114 | -0.04 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.341 | 7.1 | 99 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.396 | 4.1 | 103 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.527 | 0.0 | 107 | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.238 | -1.0 | 108 | -0.04 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 1.029 | 8.5 | 101 | -0.06 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.209 | 6.0 | 100 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036791.D
Acq On : 29 Mar 2025 02:44
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 29 04:28:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 83 | -0.03 |
| 2 | | 1,4-Dioxane | 0.400 | 0.408 | -2.0 | 75 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.429 | -7.2 | 85 | 0.00 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.357 | 10.8 | 70 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.350 | 12.5 | 74 | -0.03 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.346 | 13.5 | 72 | -0.03 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 88 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.346 | 13.5 | 80 | -0.03 |
| 9 | | Naphthalene | 0.400 | 0.359 | 10.3 | 77 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.373 | 6.8 | 77 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.354 | 11.5 | 77 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.362 | 9.5 | 78 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 89 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.392 | 2.0 | 85 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.351 | 12.3 | 76 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.356 | 11.0 | 77 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.367 | 8.3 | 79 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.373 | 6.8 | 79 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 93 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.423 | -5.7 | 85 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.388 | 3.0 | 82 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.375 | 6.3 | 78 | -0.02 |
| 23 | | Atrazine | 0.400 | 0.389 | 2.8 | 85 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.385 | 3.8 | 90 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.384 | 4.0 | 82 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.376 | 6.0 | 82 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.403 | -0.8 | 86 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.415 | -3.7 | 89 | -0.03 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 113 | -0.03 |
| 30 | | Pyrene | 0.400 | 0.351 | 12.3 | 91 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.326 | 18.5 | 86 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.363 | 9.3 | 99 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.385 | 3.8 | 102 | -0.03 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.380 | 5.0 | 101 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 114 | -0.04 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.372 | 7.0 | 99 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.383 | 4.3 | 103 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.400 | 0.0 | 107 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.404 | -1.0 | 108 | -0.04 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.366 | 8.5 | 101 | -0.06 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.376 | 6.0 | 100 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/29/2025 12:21

Lab File ID: BN036807.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.526 | | -11.6 | 50.0 |
| Fluoranthene-d10 | 1.025 | 0.985 | | -3.9 | 50.0 |
| 2-Fluorophenol | 0.932 | 0.835 | | -10.4 | 50.0 |
| Phenol-d6 | 1.152 | 0.978 | | -15.1 | 50.0 |
| Nitrobenzene-d5 | 0.435 | 0.364 | | -16.3 | 50.0 |
| 2-Fluorobiphenyl | 2.327 | 1.915 | | -17.7 | 50.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.169 | | -7.1 | 50.0 |
| Terphenyl-d14 | 0.958 | 0.875 | | -8.7 | 50.0 |
| 1,4-Dioxane | 0.444 | 0.456 | | 2.7 | 50.0 |

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036807.D
Acq On : 29 Mar 2025 12:21
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 31 02:01:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.695 | 152 | 1976 | 0.400 | ng | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4956 | 0.400 | ng | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 3044 | 0.400 | ng | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 6169 | 0.400 | ng | #-0.02 |
| 29) Chrysene-d12 | 21.268 | 240 | 4366 | 0.400 | ng | -0.03 |
| 35) Perylene-d12 | 23.516 | 264 | 3818 | 0.400 | ng | #-0.04 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1649 | 0.358 | ng | -0.02 |
| 5) Phenol-d6 | 6.865 | 99 | 1932 | 0.340 | ng | -0.04 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1802 | 0.334 | ng | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2608 | 0.354 | ng | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 513 | 0.371 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.958 | 172 | 5830 | 0.329 | ng | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 6077 | 0.384 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3821 | 0.365 | ng | -0.02 |
| **Target Compounds** | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 902 | 0.411 | ng | 97 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1839 | 0.415 | ng | 92 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1990 | 0.338 | ng | 99 |
| 9) Naphthalene | 10.530 | 128 | 5183 | 0.356 | ng | 99 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 1228 | 0.358 | ng | # 100 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 3312 | 0.357 | ng | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 5001 | 0.348 | ng | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3395 | 0.361 | ng | 99 |
| 18) Fluorene | 15.382 | 166 | 4624 | 0.364 | ng | 100 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 475 | 0.447 | ng | # 73 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1424 | 0.368 | ng | 93 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1729 | 0.371 | ng | 97 |
| 23) Atrazine | 16.553 | 200 | 1168 | 0.377 | ng | 96 |
| 24) Pentachlorophenol | 16.739 | 266 | 792 | 0.372 | ng | 99 |
| 25) Phenanthrene | 17.124 | 178 | 6985 | 0.377 | ng | 100 |
| 26) Anthracene | 17.211 | 178 | 6251 | 0.374 | ng | 98 |
| 28) Fluoranthene | 19.146 | 202 | 8157 | 0.392 | ng | 98 |
| 30) Pyrene | 19.508 | 202 | 8270 | 0.387 | ng | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5377 | 0.354 | ng | 100 |
| 33) Chrysene | 21.304 | 228 | 6263 | 0.378 | ng | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4162 | 0.385 | ng | # 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.779 | 276 | 5188 | 0.376 | ng | 93 |
| 37) Benzo(b)fluoranthene | 22.841 | 252 | 5191 | 0.374 | ng | 98 |
| 38) Benzo(k)fluoranthene | 22.885 | 252 | 5835m | 0.400 | ng | |
| 39) Benzo(a)pyrene | 23.417 | 252 | 4547 | 0.389 | ng | 96 |
| 40) Dibenzo(a,h)anthracene | 25.800 | 278 | 4113m | 0.383 | ng | |
| 41) Benzo(g,h,i)perylene | 26.472 | 276 | 4558 | 0.371 | ng | 95 |

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

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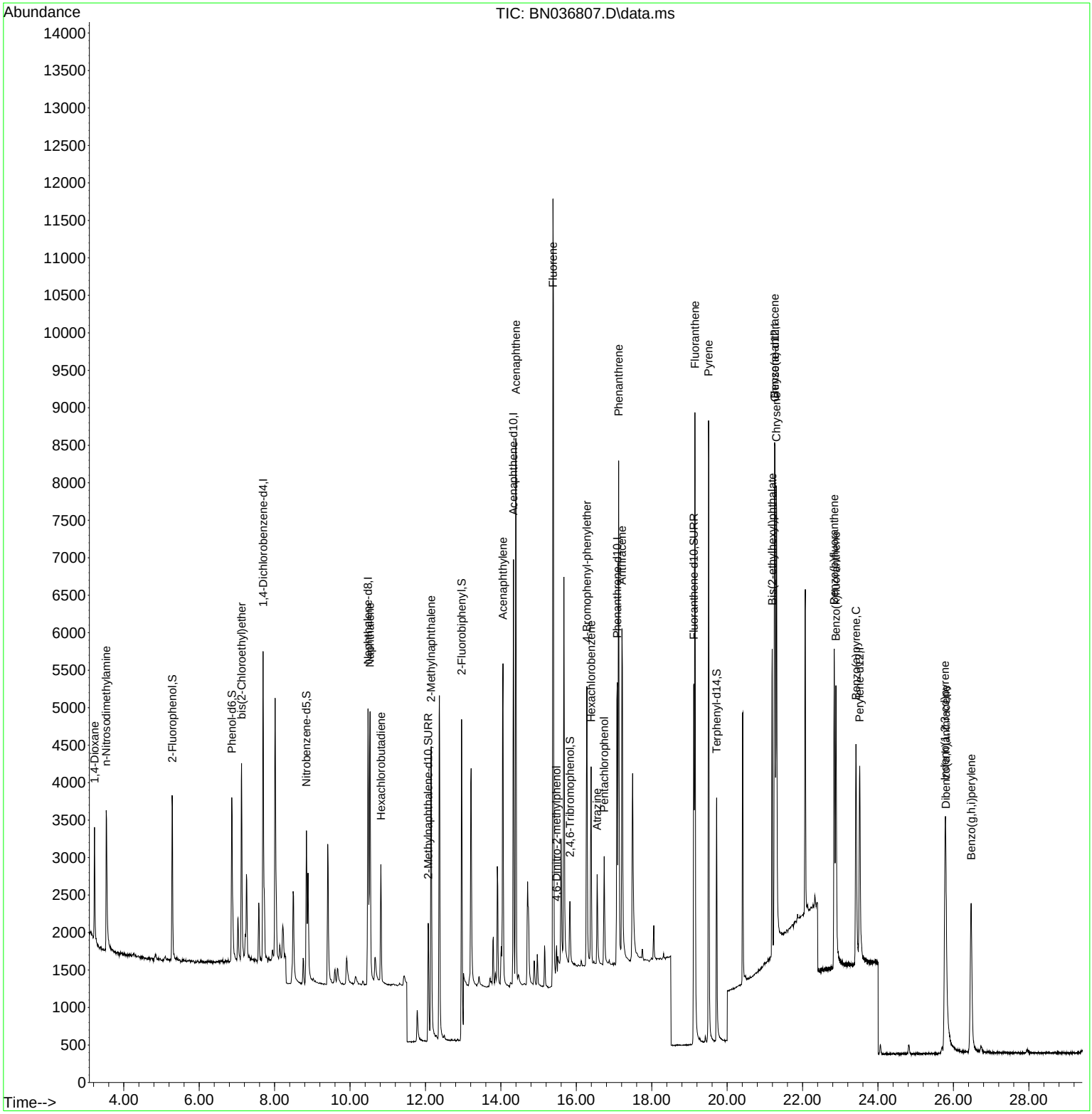
Data File : BN036807.D
Acq On : 29 Mar 2025 12:21
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 38 Sample Multiplier: 1

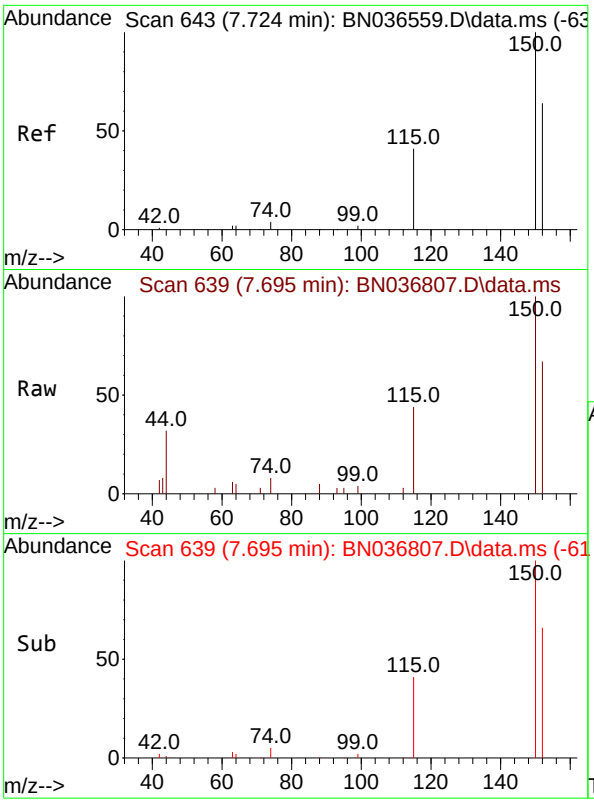
Quant Time: Mar 31 02:01:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**

Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

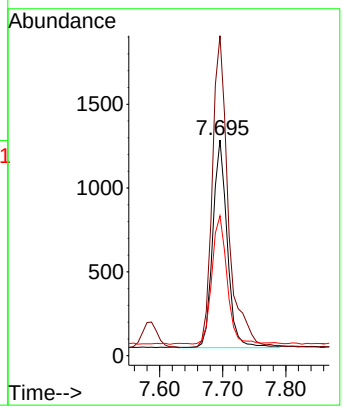





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.695 min Scan# 6
Delta R.T. -0.029 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:152 Resp: 197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 148.3 | 123.7 | 185.5 |
| 115 | 64.8 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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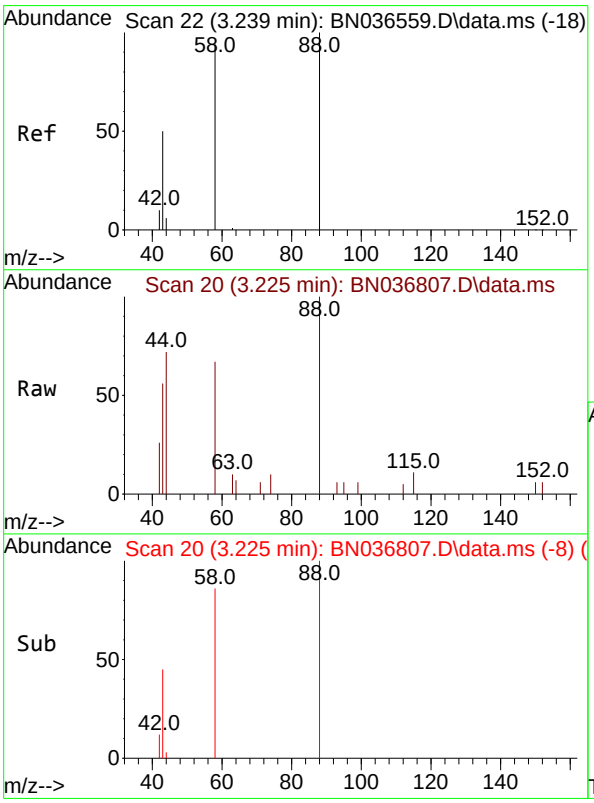
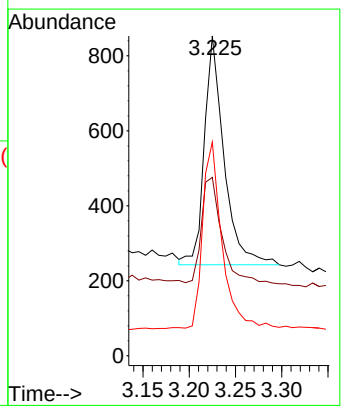
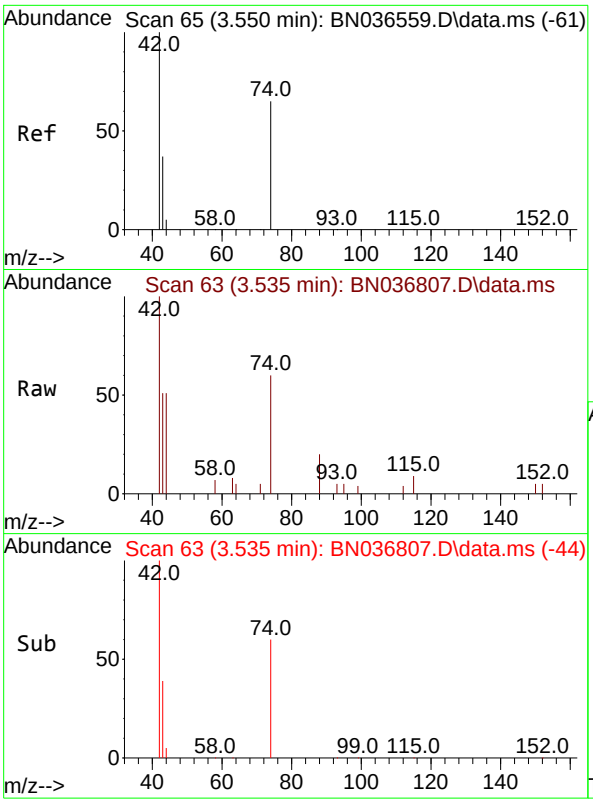



#2
1,4-Dioxane
Concen: 0.411 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 88 Resp: 902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 48.6 | 37.8 | 56.8 |
| 58 | 81.3 | 67.4 | 101.2 |

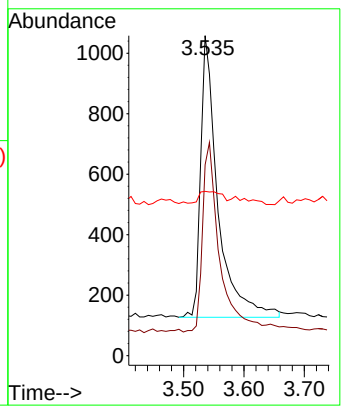





#3
n-Nitrosodimethylamine
Concen: 0.415 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 42 Resp: 183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 68.4 | 60.6 | 90.8 |
| 44 | 6.7 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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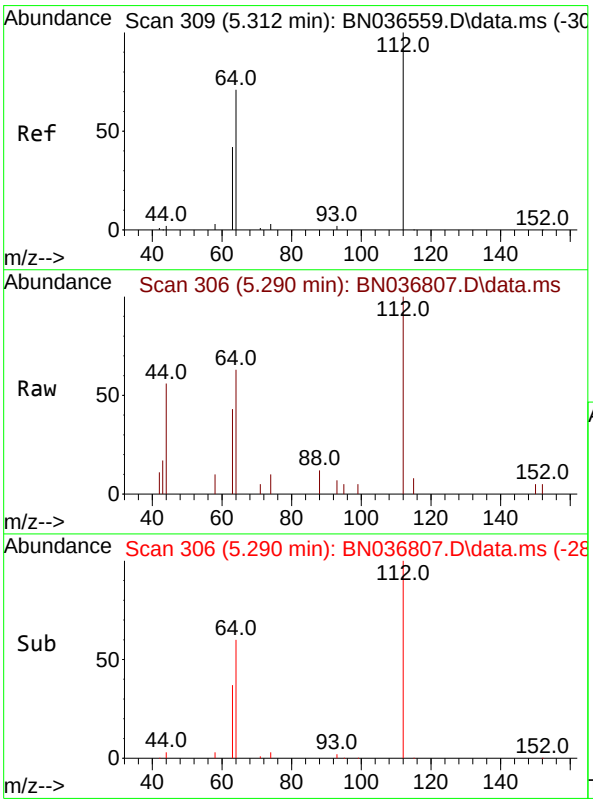
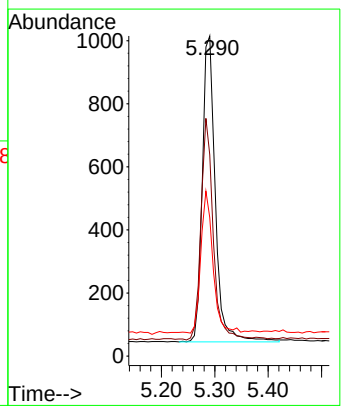
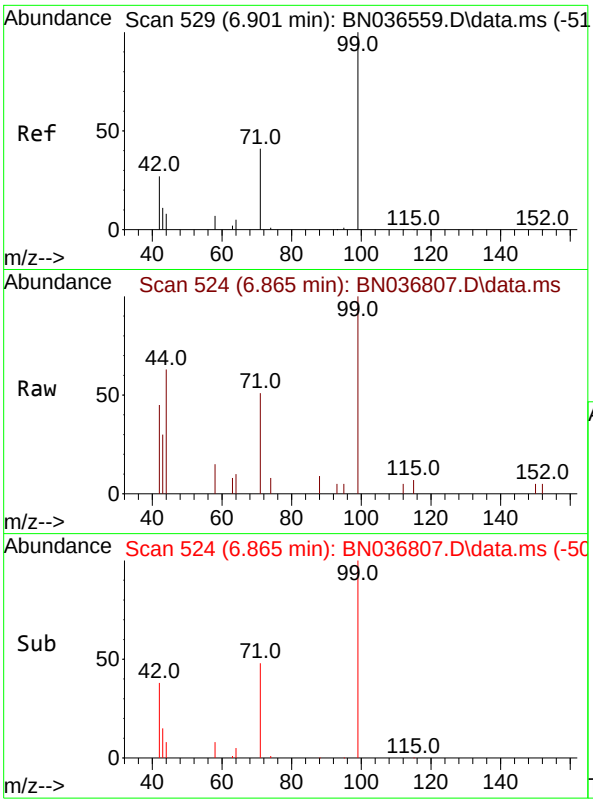



#4
2-Fluorophenol
Concen: 0.358 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:112 Resp: 1649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.3 | 53.1 | 79.7 |
| 63 | 42.4 | 31.8 | 47.8 |






#5
Phenol-d6
Concen: 0.340 ng
RT: 6.865 min Scan# 5
Delta R.T. -0.036 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 99 Resp: 193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 39.4 | 26.5 | 39.7 |
| 71 | 46.4 | 34.1 | 51.1 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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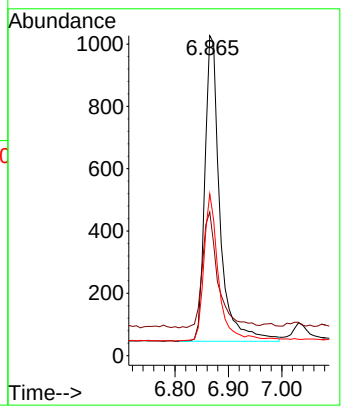
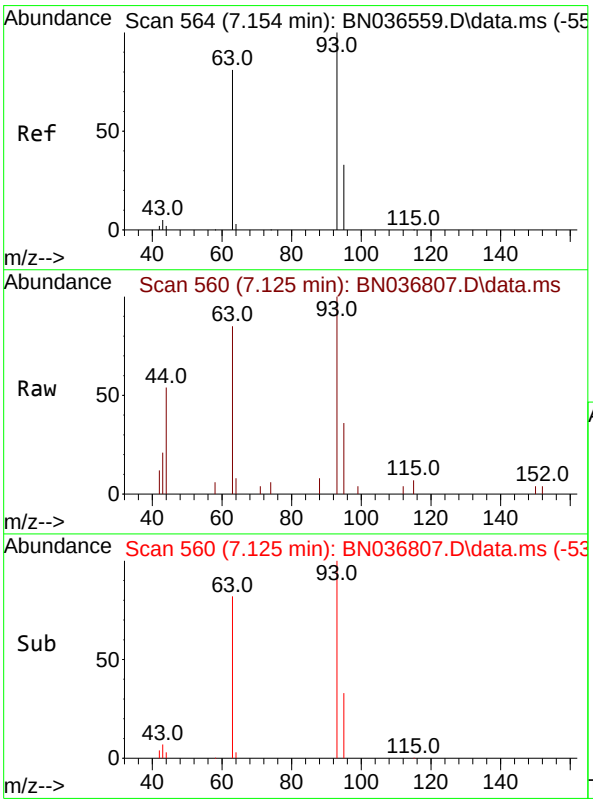
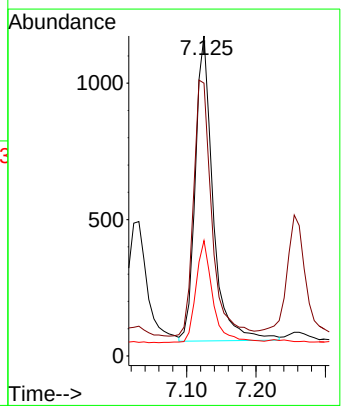


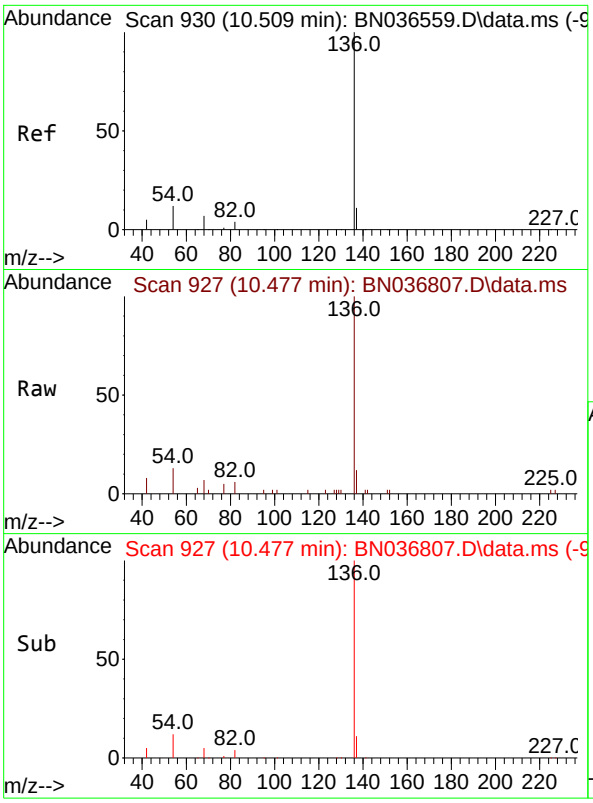




#6
bis(2-Chloroethyl)ether
Concen: 0.338 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 93 Resp: 1990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 86.3 | 67.7 | 101.5 |
| 95 | 31.9 | 25.6 | 38.4 |

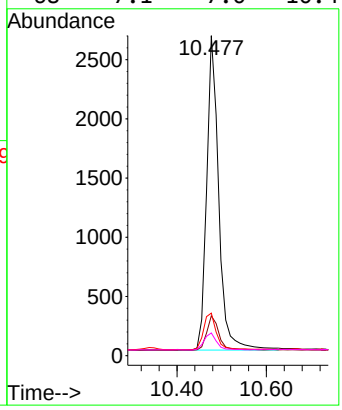





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:136 Resp: 495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 13.3 | 11.5 | 17.3 |
| 68 | 7.1 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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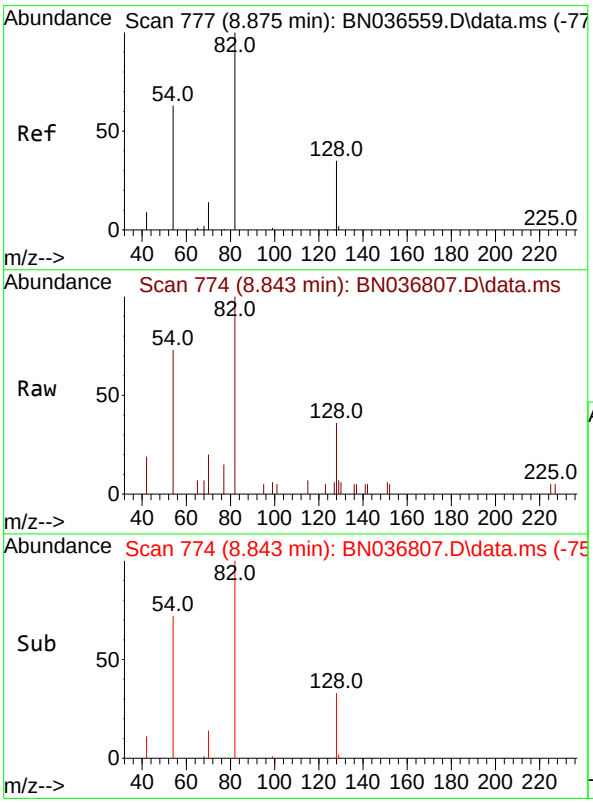
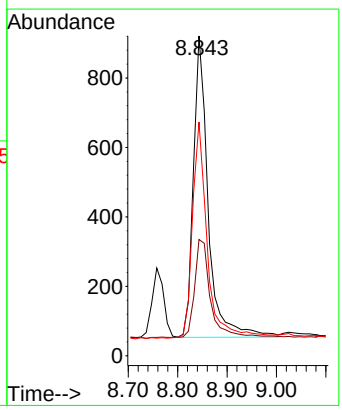
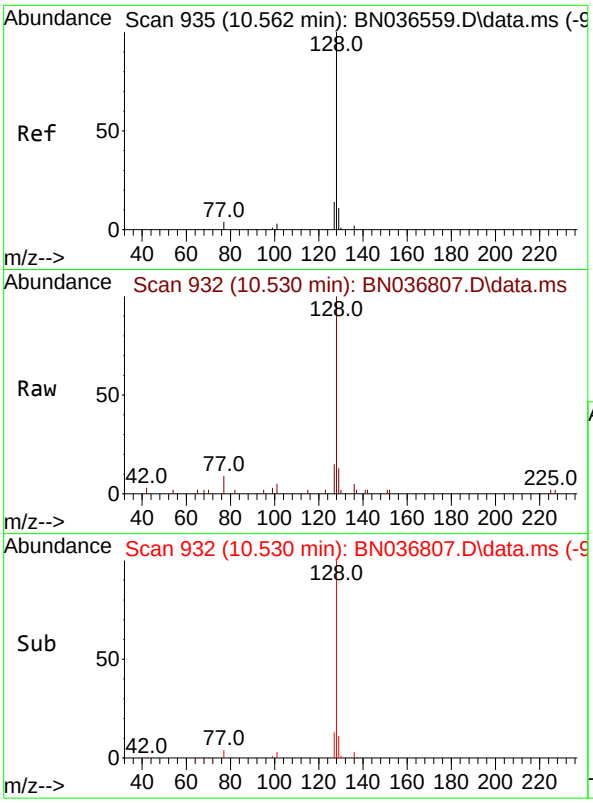



#8
Nitrobenzene-d5
Concen: 0.334 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 82 Resp: 1802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 36.4 | 30.6 | 45.8 |
| 54 | 73.1 | 52.2 | 78.4 |

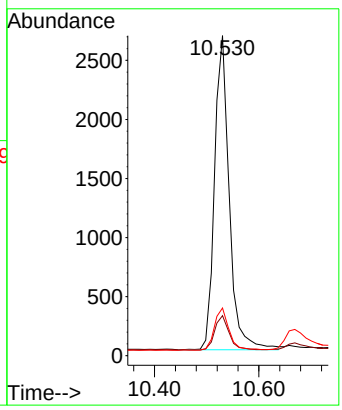





#9
Naphthalene
Concen: 0.356 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:128 Resp: 518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.5 | 9.8 | 14.6 |
| 127 | 14.9 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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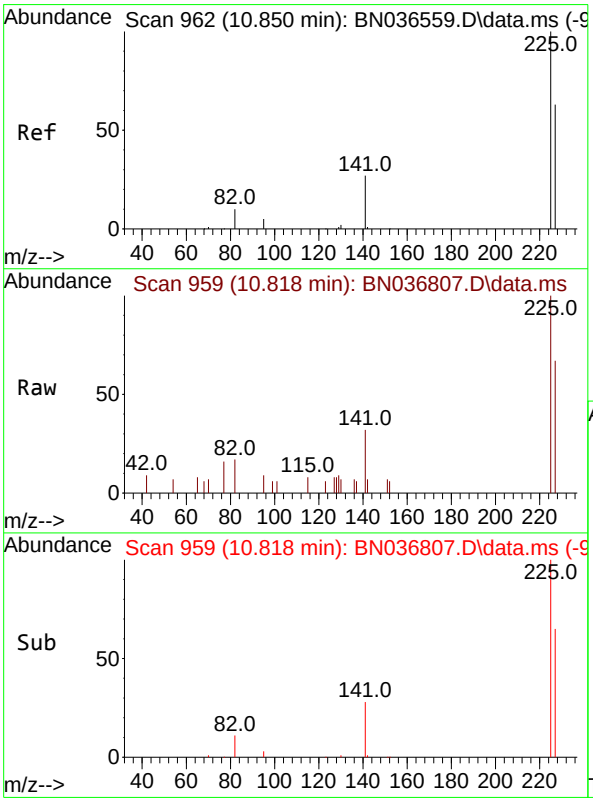
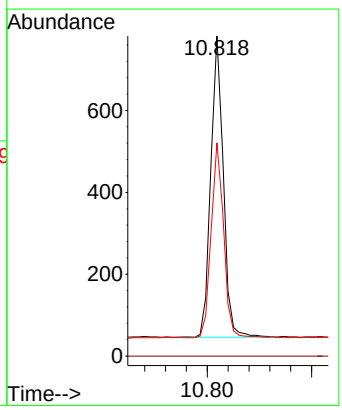
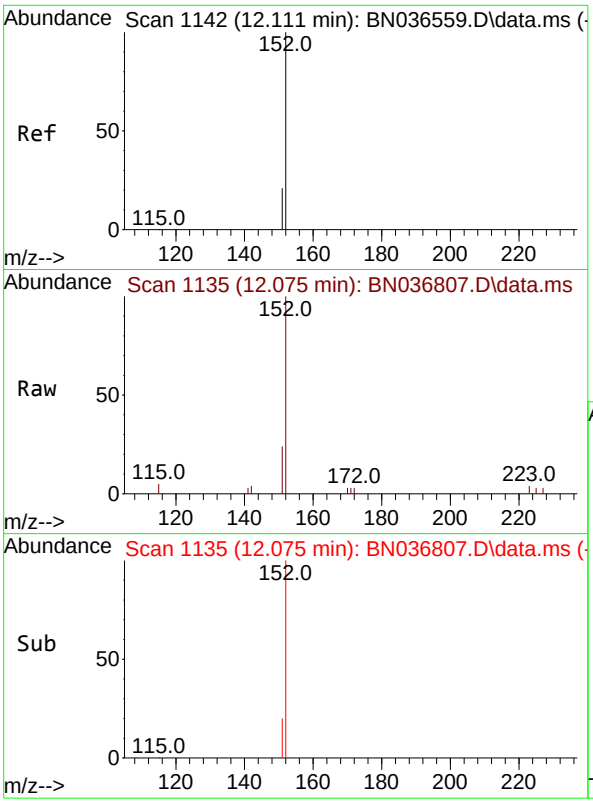



#10
Hexachlorobutadiene
Concen: 0.358 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:225 Resp: 1228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.7 | 51.8 | 77.8 |






#11
2-Methylnaphthalene-d10
Concen: 0.354 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:152 Resp: 260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.6 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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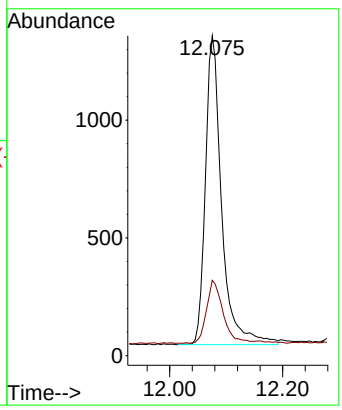
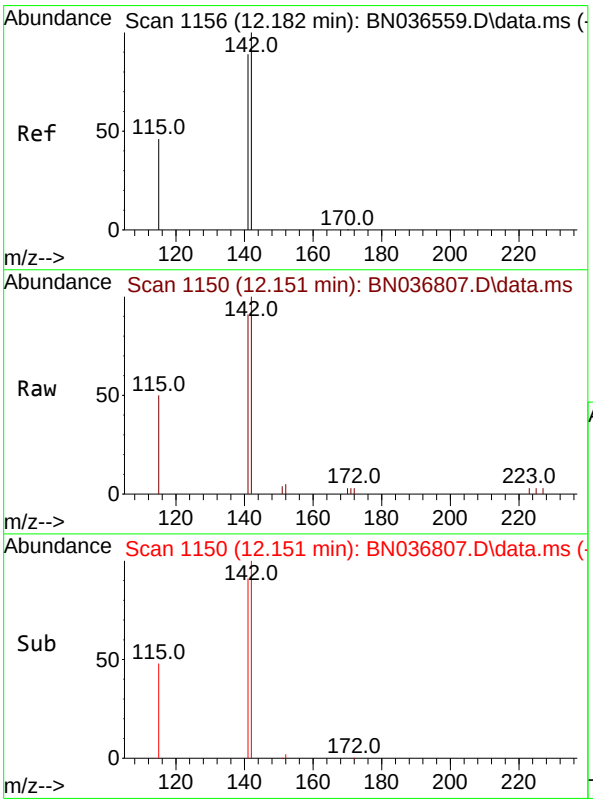
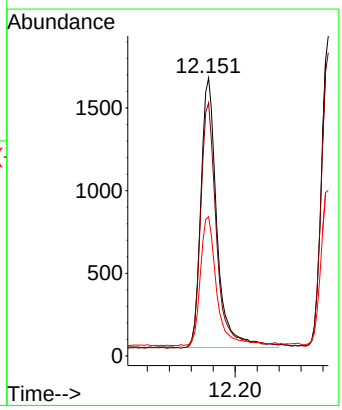


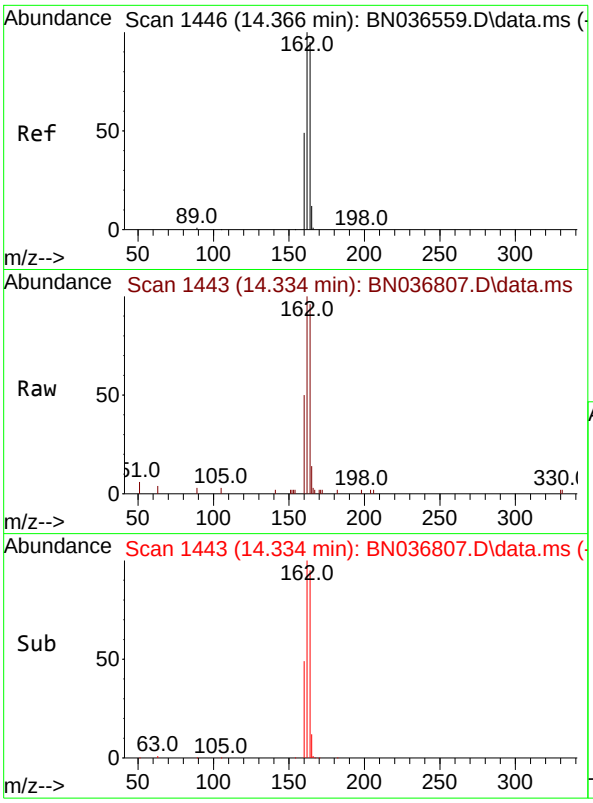




#12
2-Methylnaphthalene
Concen: 0.357 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:142 Resp: 3312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.0 | 71.7 | 107.5 |
| 115 | 50.1 | 38.3 | 57.5 |

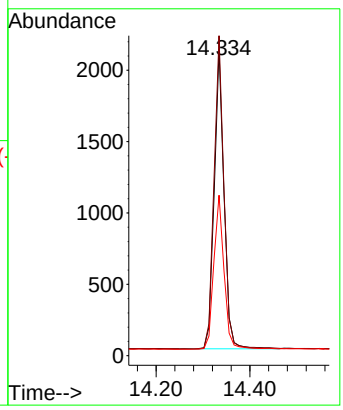





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:164 Resp: 3044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.5 | 84.2 | 126.2 |
| 160 | 52.4 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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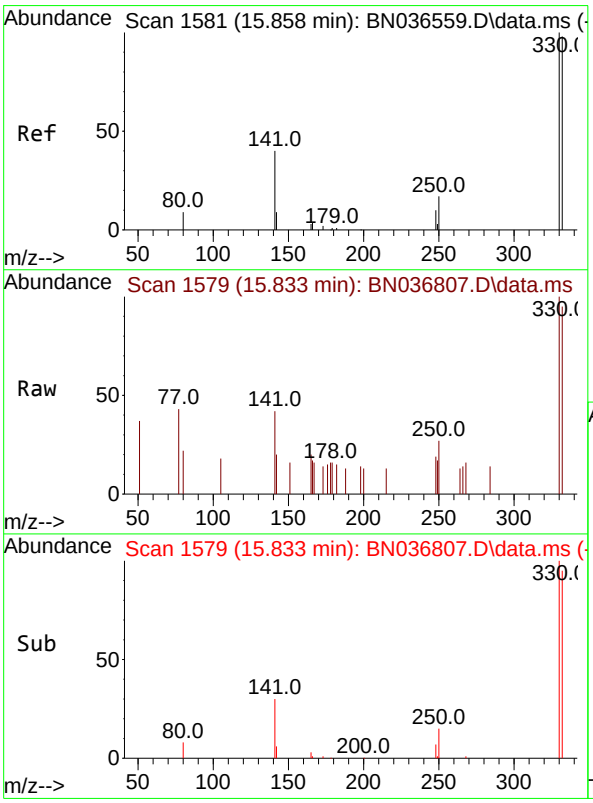
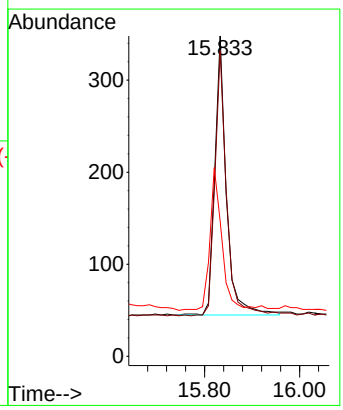
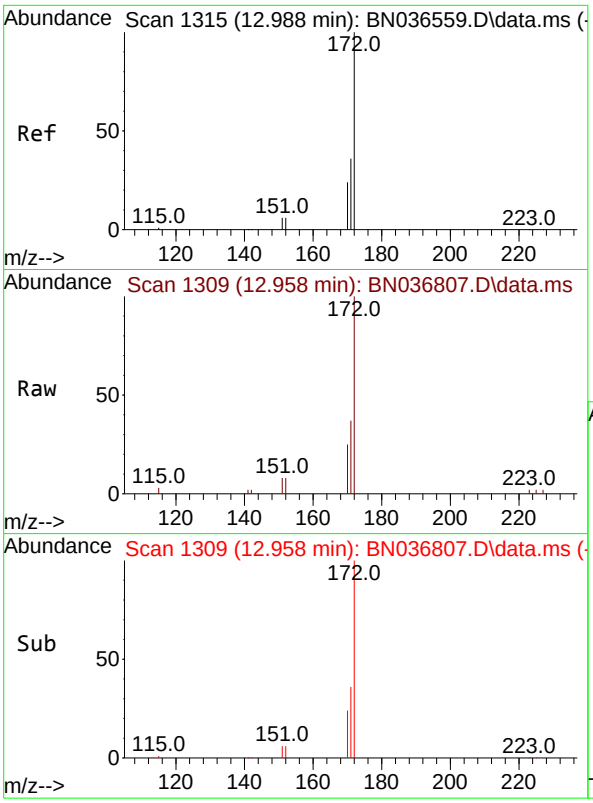



#14
2,4,6-Tribromophenol
Concen: 0.371 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:330 Resp: 513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 96.9 | 75.2 | 112.8 |
| 141 | 52.4 | 43.4 | 65.2 |

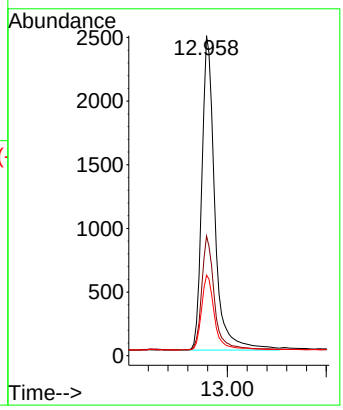





#15
2-Fluorobiphenyl
Concen: 0.329 ng
RT: 12.958 min Scan# 1
Delta R.T. -0.030 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:172 Resp: 583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.4 | 29.5 | 44.3 |
| 170 | 25.2 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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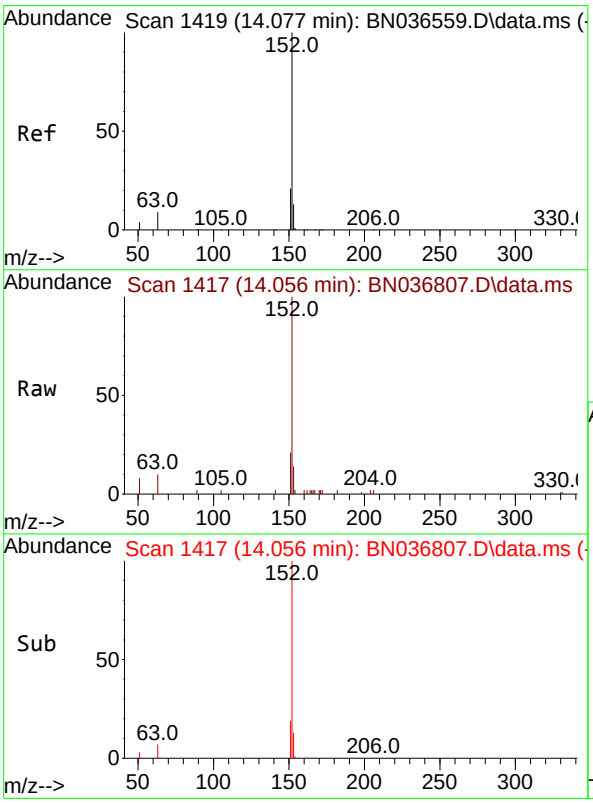
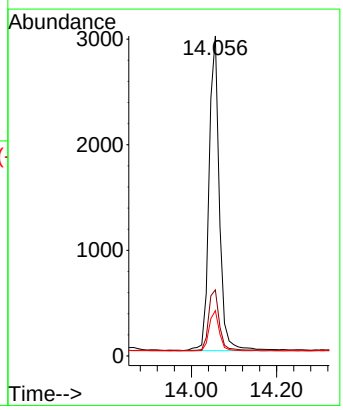
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

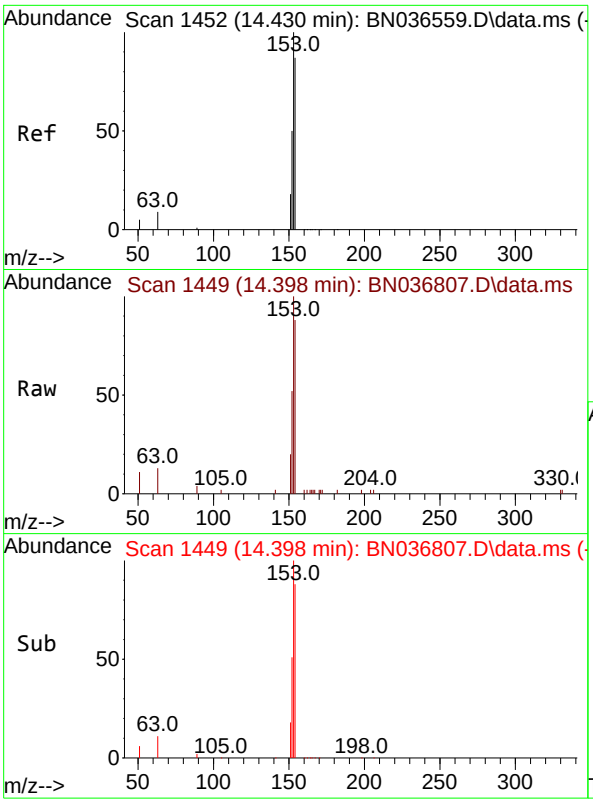



#16
Acenaphthylene
Concen: 0.348 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:152 Resp: 5001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.7 | 16.2 | 24.4 |
| 153 | 12.6 | 10.6 | 15.8 |

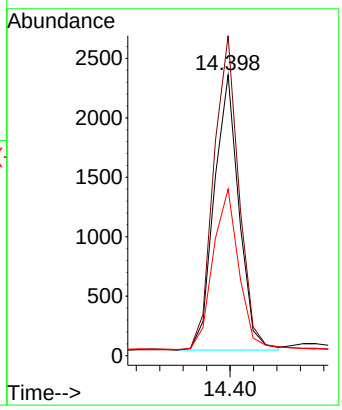





#17
Acenaphthene
Concen: 0.361 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:154 Resp: 339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 116.8 | 94.1 | 141.1 |
| 152 | 61.6 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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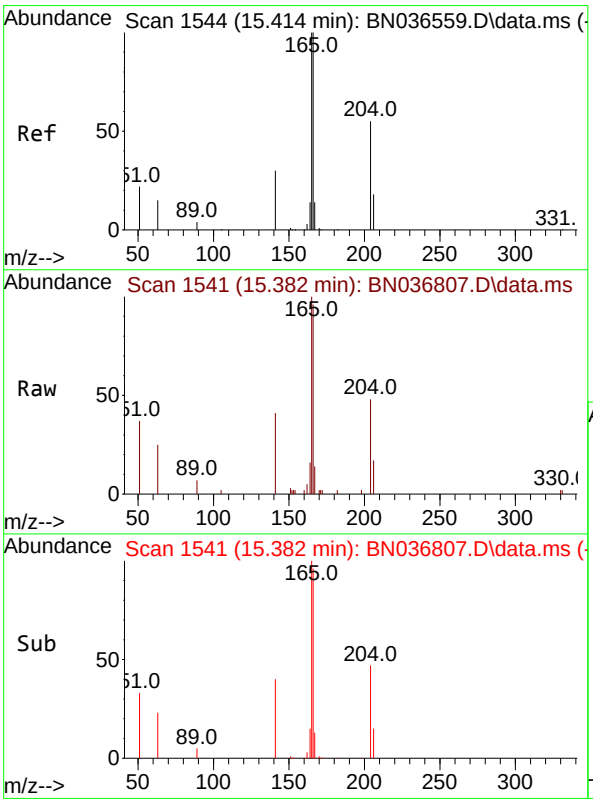
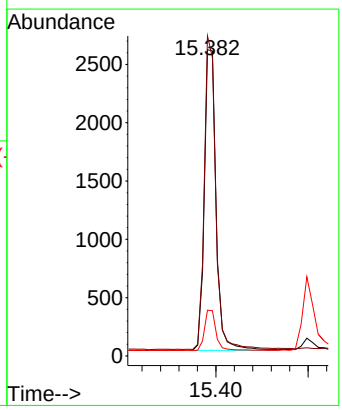
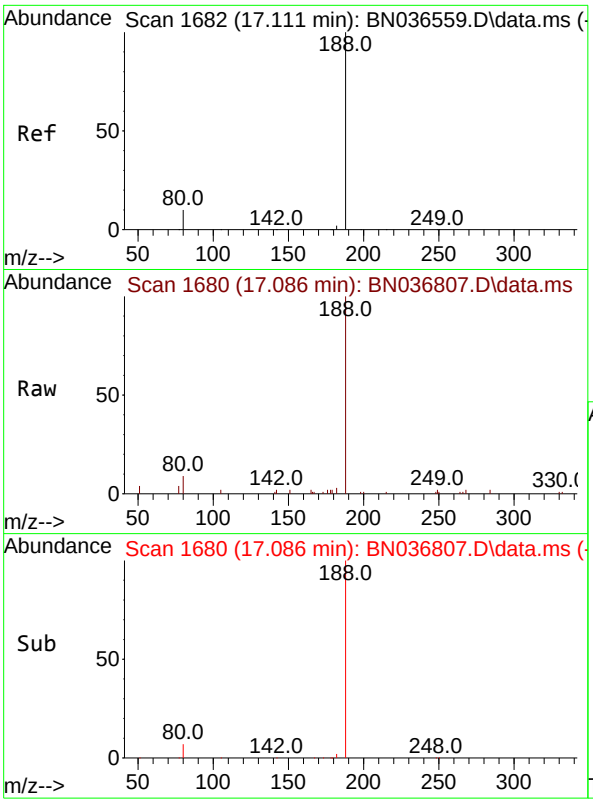



#18
Fluorene
Concen: 0.364 ng
RT: 15.382 min Scan# 1541
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:166 Resp: 4624

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.9 | 79.8 | 119.8 |
| 167 | 13.3 | 10.6 | 15.8 |






#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:188 Resp: 616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 8.7 | 8.8 | 13.2# |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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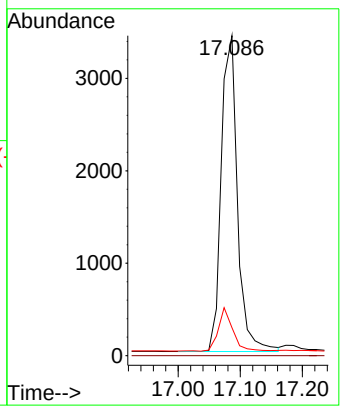
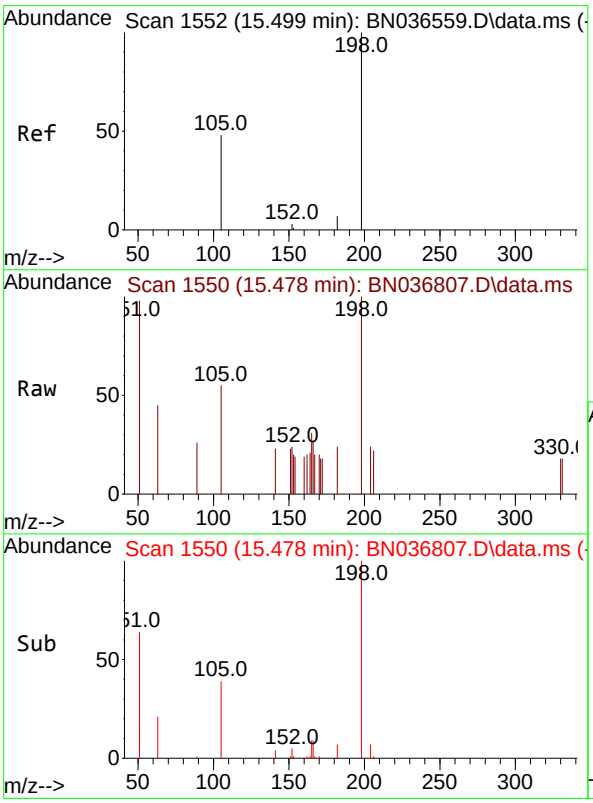
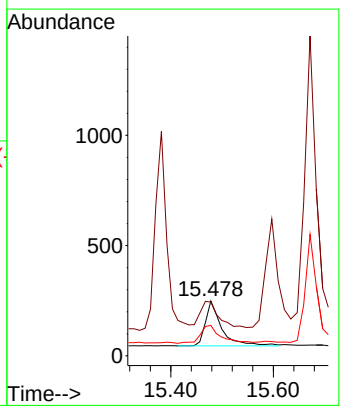


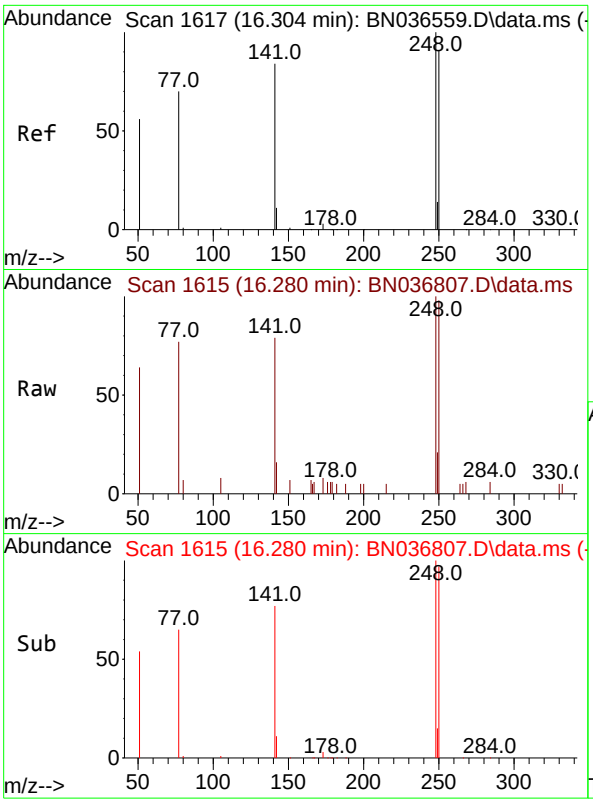




#20
4,6-Dinitro-2-methylphenol
Concen: 0.447 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:198 Resp: 475

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 98.0 | 107.9 | 161.9# |
| 105 | 55.4 | 56.2 | 84.2# |






#21
4-Bromophenyl-phenylether
Concen: 0.368 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:248 Resp: 142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 97.7 | 73.0 | 109.6 |
| 141 | 79.1 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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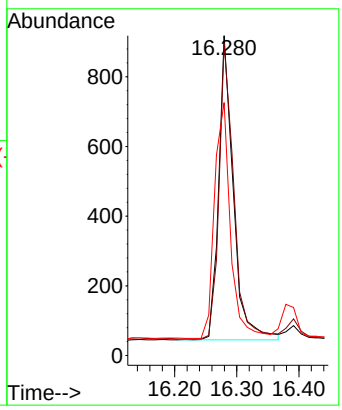
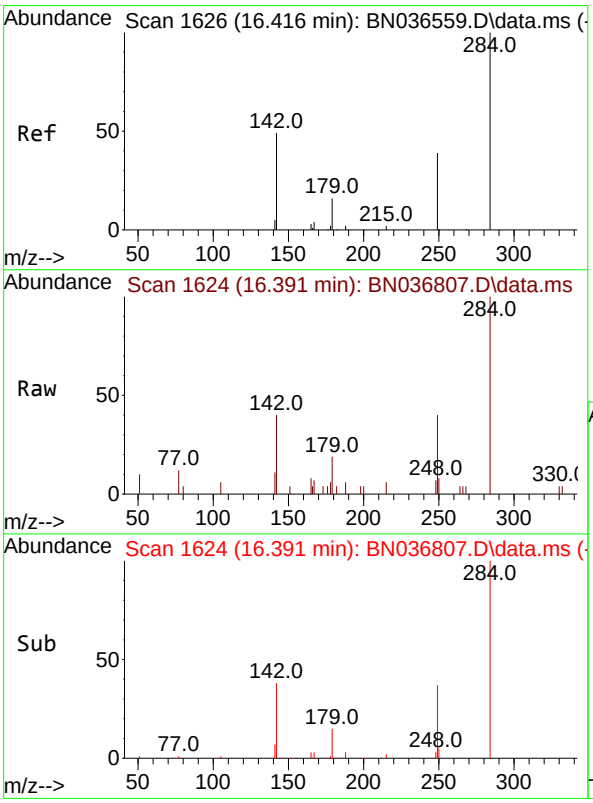
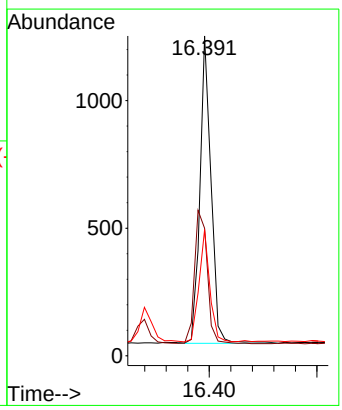


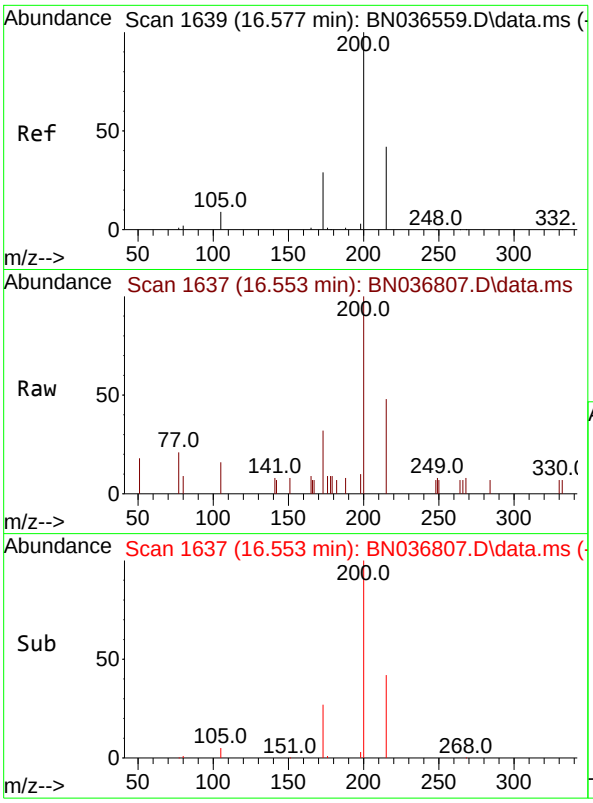




#22
Hexachlorobenzene
Concen: 0.371 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:284 Resp: 1729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.7 | 37.0 | 55.4 |
| 249 | 35.3 | 28.1 | 42.1 |

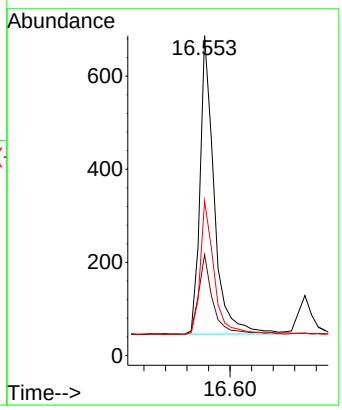





#23
Atrazine
Concen: 0.377 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:200 Resp: 116

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 31.6 | 27.3 | 40.9 |
| 215 | 48.3 | 36.8 | 55.2 |




**Instrument :**
BNA_N
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SSTDCCC0.4EC

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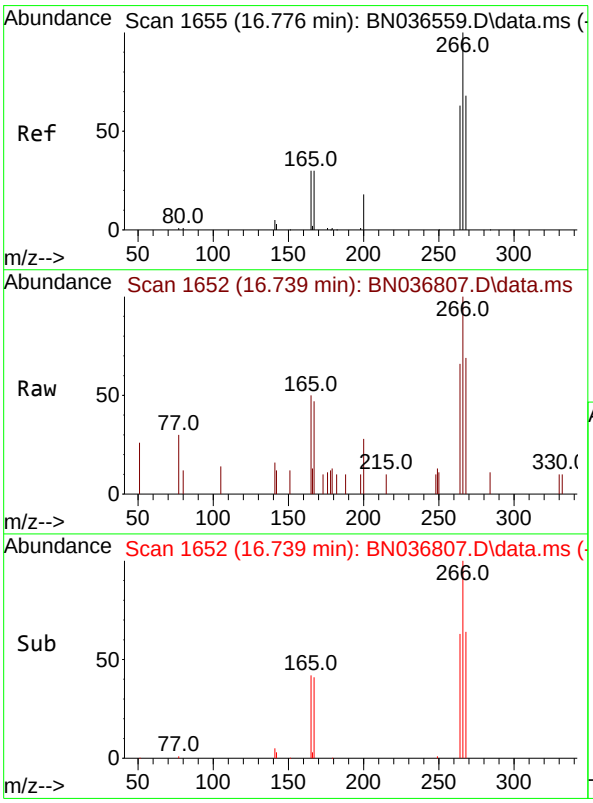
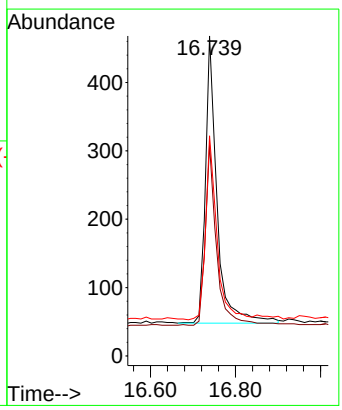
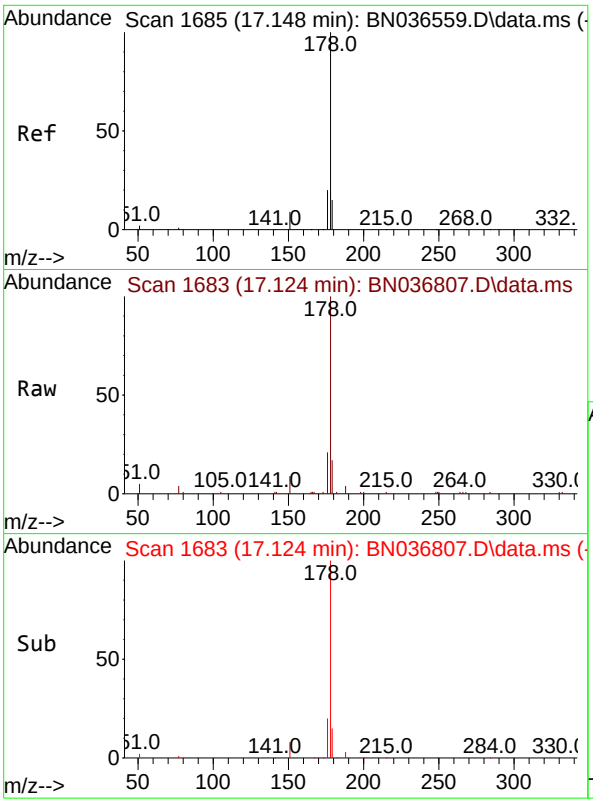



#24
Pentachlorophenol
Concen: 0.372 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:266 Resp: 792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 61.1 | 49.6 | 74.4 |
| 268 | 62.4 | 50.9 | 76.3 |

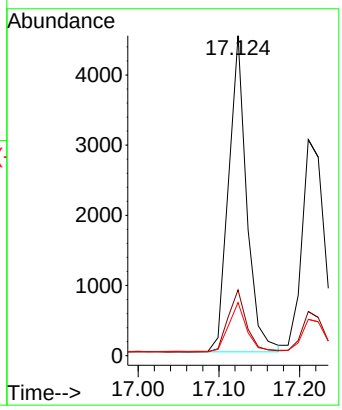





#25
Phenanthrene
Concen: 0.377 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:178 Resp: 698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.3 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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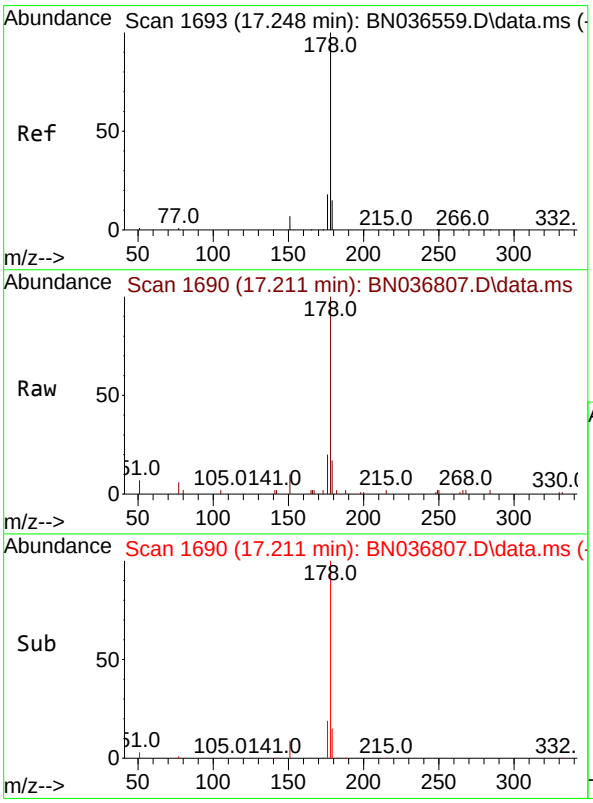
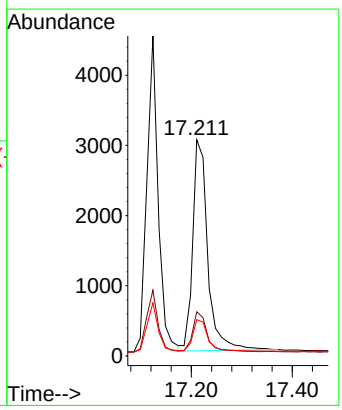
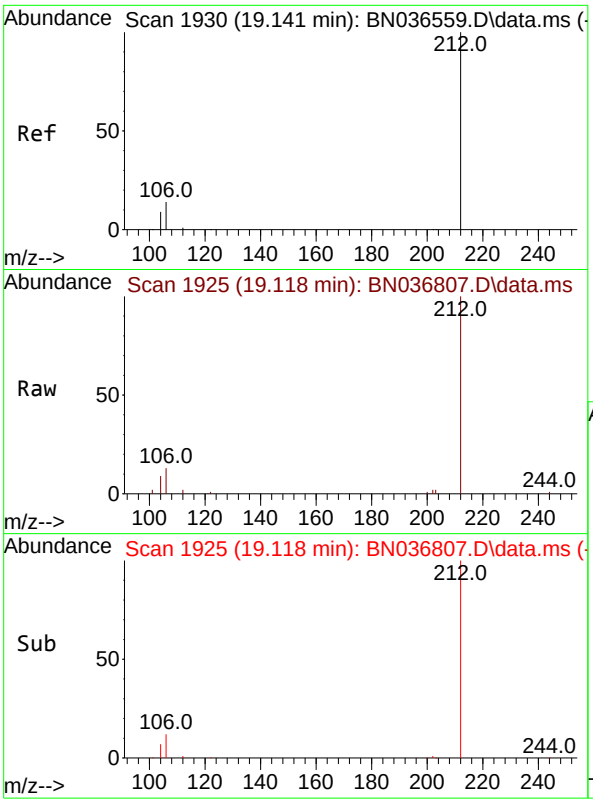



#26
Anthracene
Concen: 0.374 ng
RT: 17.211 min Scan# 1690
Delta R.T. -0.037 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:178 Resp: 6251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.3 | 15.4 | 23.2 |
| 179 | 15.1 | 12.6 | 18.8 |

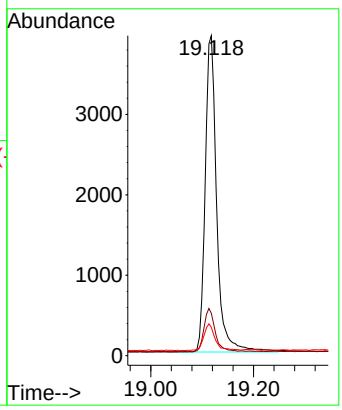





#27
Fluoranthene-d10
Concen: 0.384 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:212 Resp: 607

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.2 | 11.8 | 17.6 |
| 104 | 8.4 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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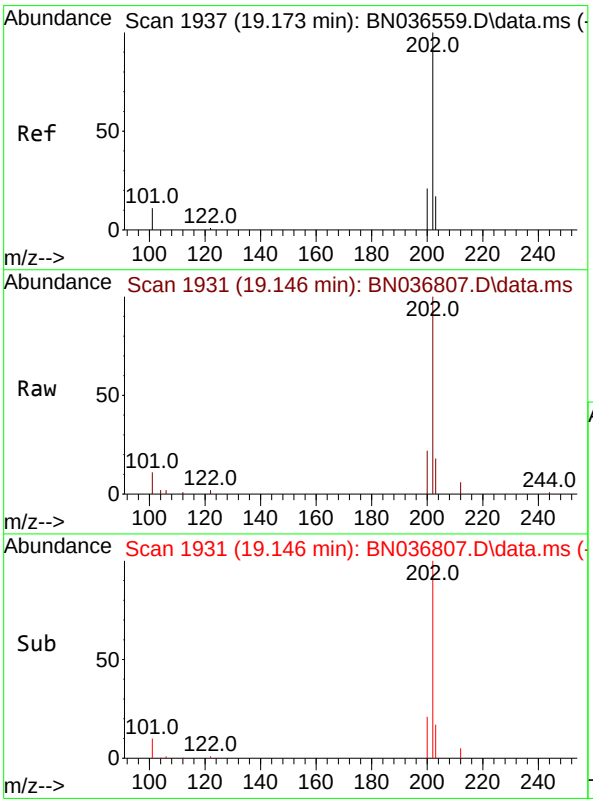
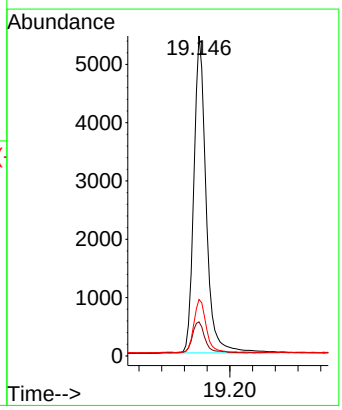
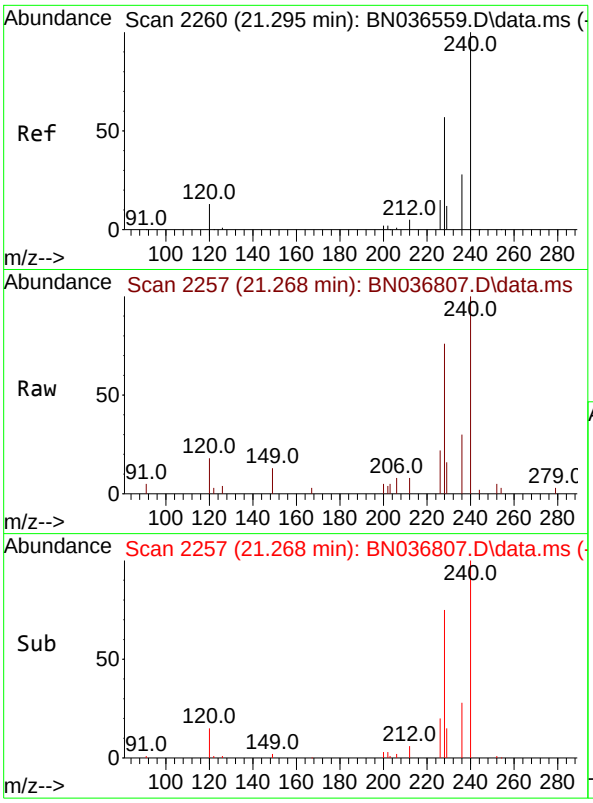



#28
Fluoranthene
Concen: 0.392 ng
RT: 19.146 min Scan# 1931
Delta R.T. -0.028 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:202 Resp: 8157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.2 | 9.4 | 14.0 |
| 203 | 16.8 | 13.5 | 20.3 |

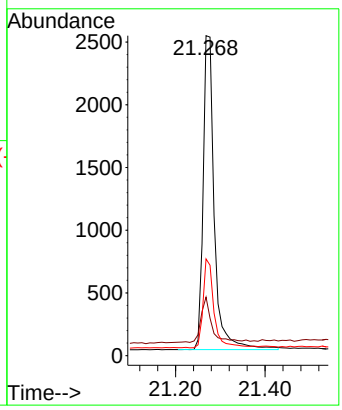





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:240 Resp: 436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 18.3 | 14.6 | 22.0 |
| 236 | 30.3 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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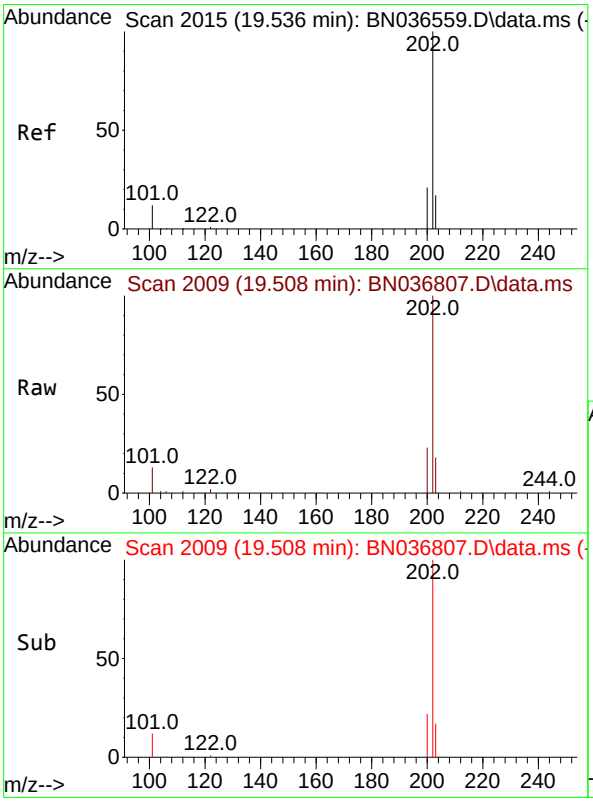
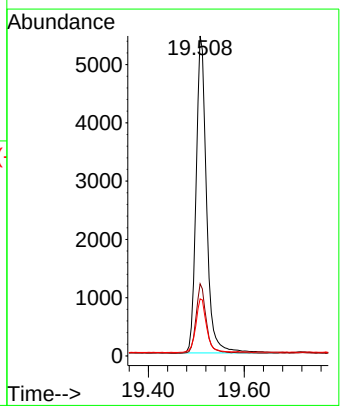
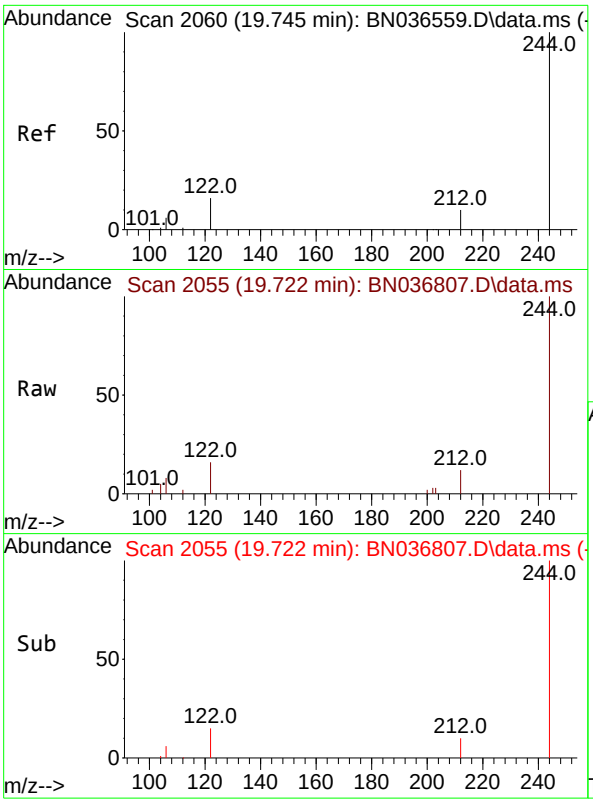



#30
Pyrene
Concen: 0.387 ng
RT: 19.508 min Scan# 2009
Delta R.T. -0.028 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:202 Resp: 8270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 17.1 | 25.7 |
| 203 | 17.4 | 14.1 | 21.1 |

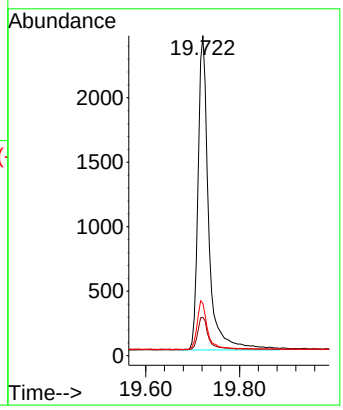





#31
Terphenyl-d14
Concen: 0.365 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:244 Resp: 382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.0 | 9.6 | 14.4 |
| 122 | 16.4 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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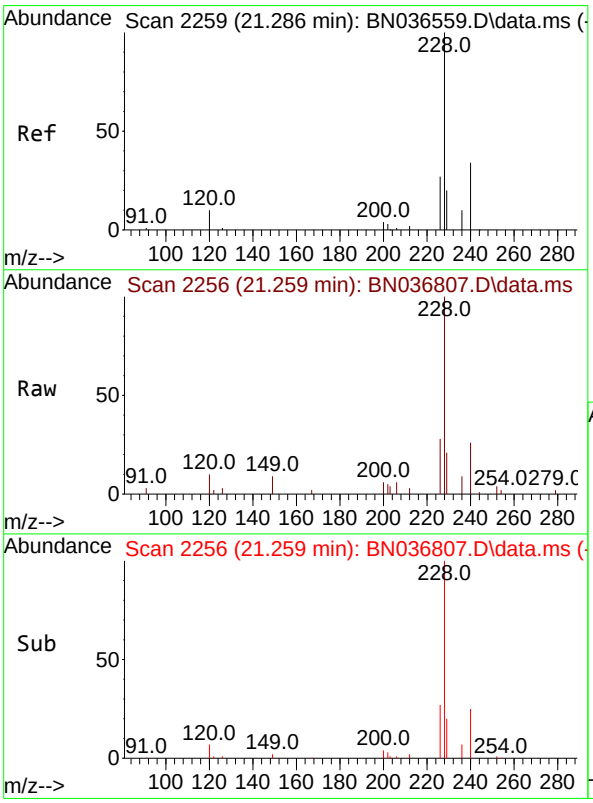
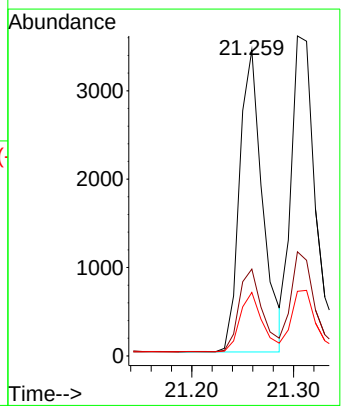
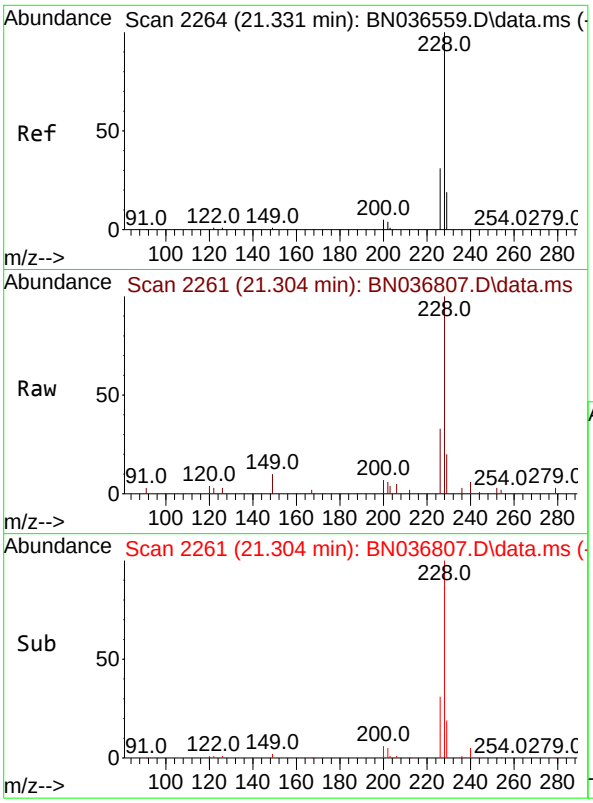



#32
Benzo(a)anthracene
Concen: 0.354 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:228 Resp: 5377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.4 | 22.5 | 33.7 |
| 229 | 20.8 | 16.6 | 25.0 |

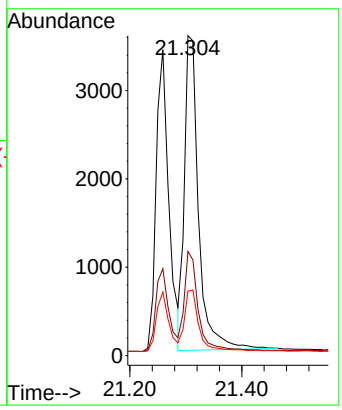





#33
Chrysene
Concen: 0.378 ng
RT: 21.304 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:228 Resp: 626

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.6 | 25.3 | 37.9 |
| 229 | 20.2 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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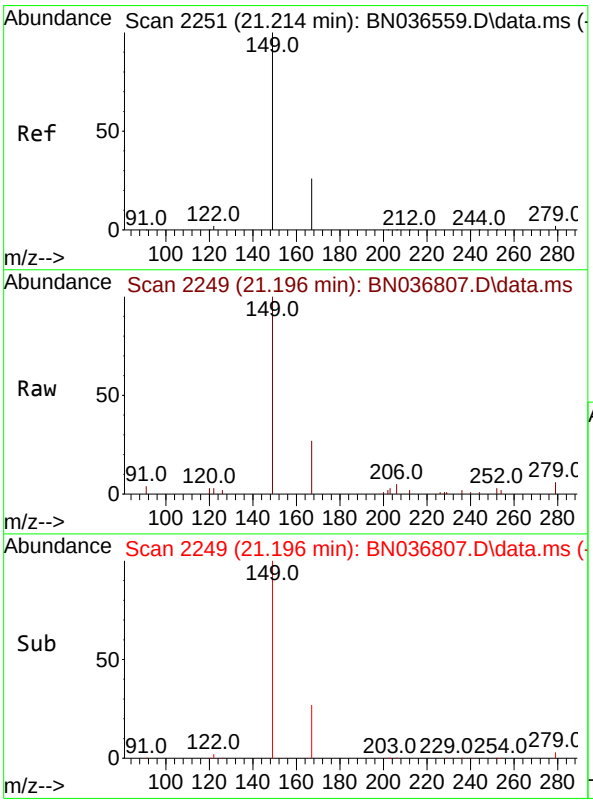
**APPROVED**

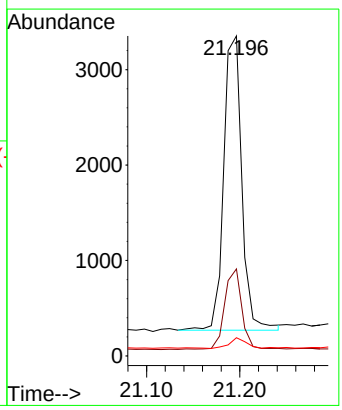
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

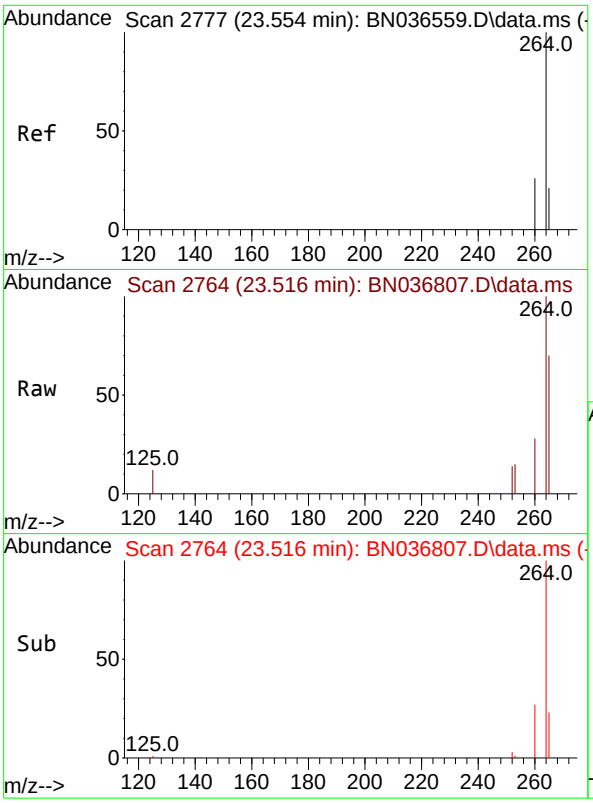



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.385 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:149 Resp: 4162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.1 | 20.7 | 31.1 |
| 279 | 3.6 | 3.6 | 5.4# |

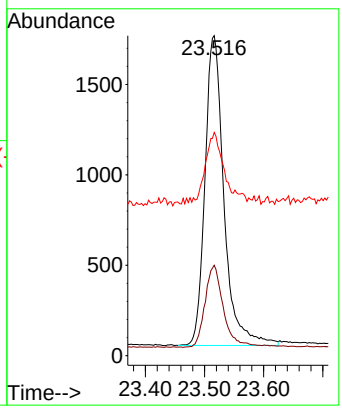





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.516 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:264 Resp: 381

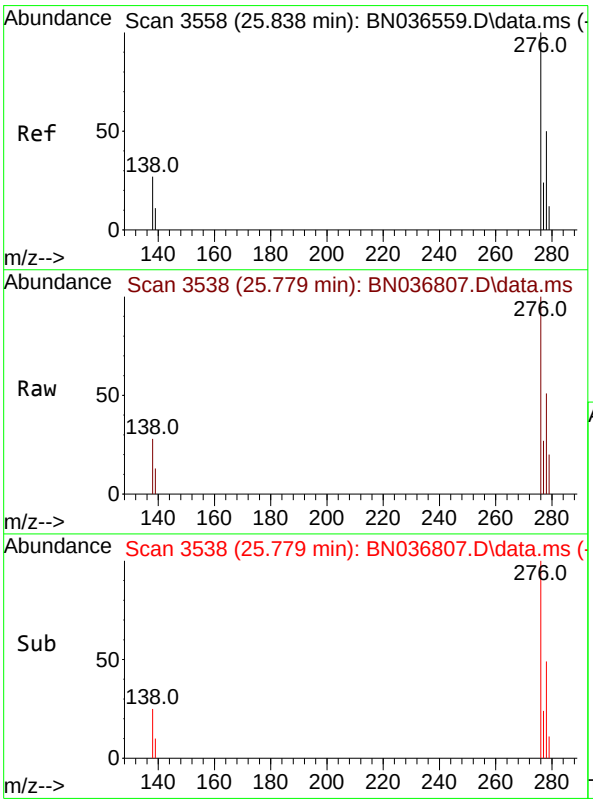
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 28.2 | 22.6 | 33.8 |
| 265 | 69.8 | 88.1 | 132.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

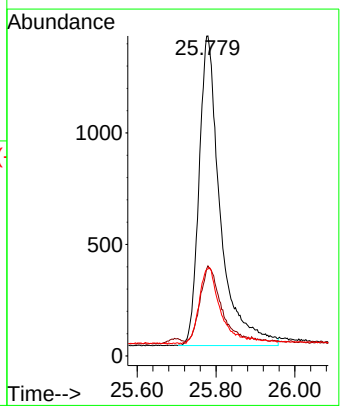
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

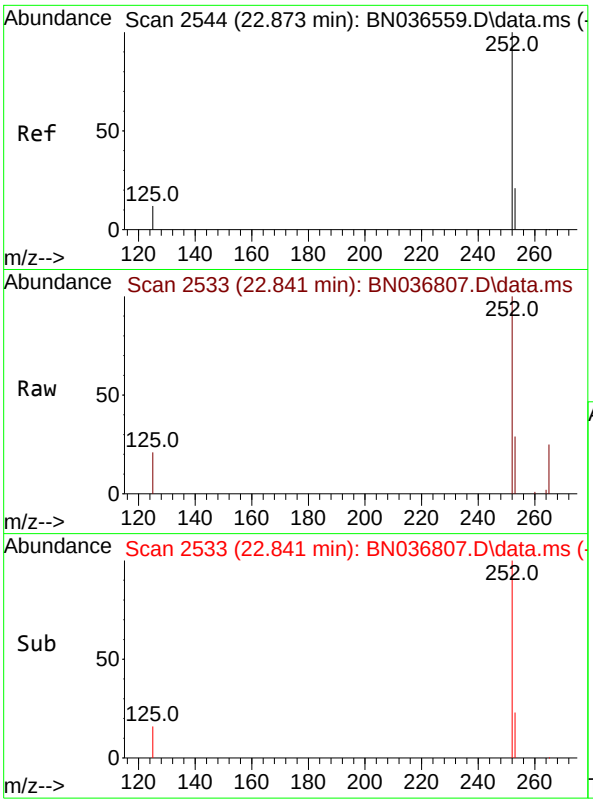



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.376 ng
RT: 25.779 min Scan# 3538
Delta R.T. -0.058 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:276 Resp: 5188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.1 | 23.4 | 35.2 |
| 277 | 23.0 | 20.0 | 30.0 |

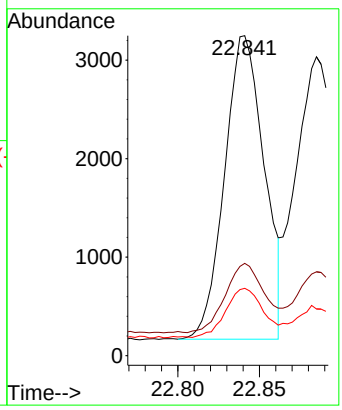





#37
Benzo(b)fluoranthene
Concen: 0.374 ng
RT: 22.841 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:252 Resp: 519

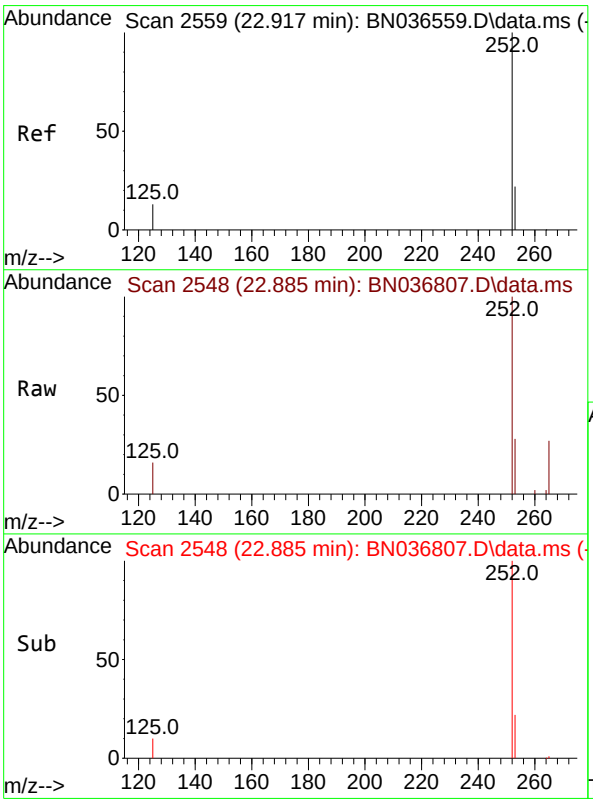
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.9 | 23.9 | 35.9 |
| 125 | 21.1 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

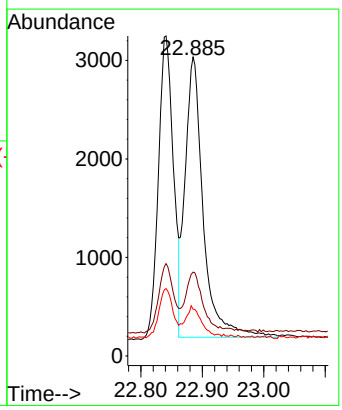
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

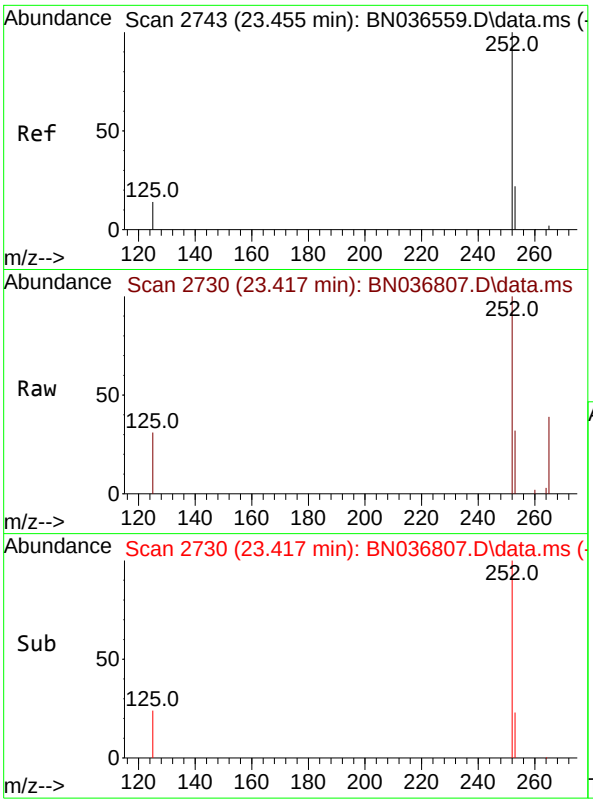



#38
Benzo(k)fluoranthene
Concen: 0.400 ng m
RT: 22.885 min Scan# 2548
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:252 Resp: 5835

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.1 | 24.6 | 36.8 |
| 125 | 15.7 | 17.8 | 26.8# |

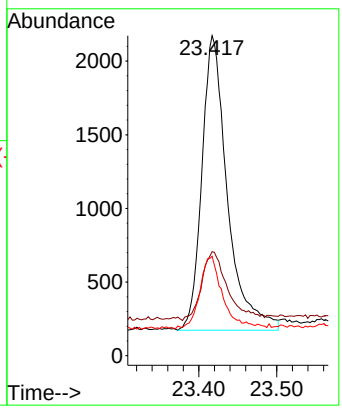





#39
Benzo(a)pyrene
Concen: 0.389 ng
RT: 23.417 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:252 Resp: 454

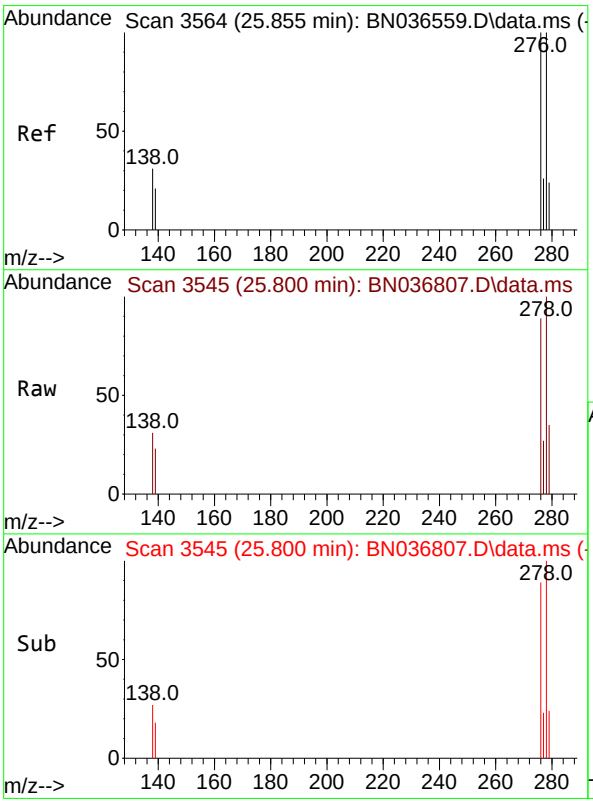
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 32.5 | 27.8 | 41.8 |
| 125 | 31.1 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

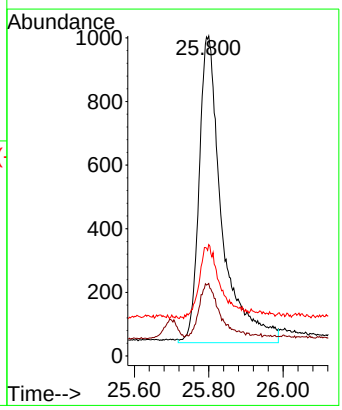
Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

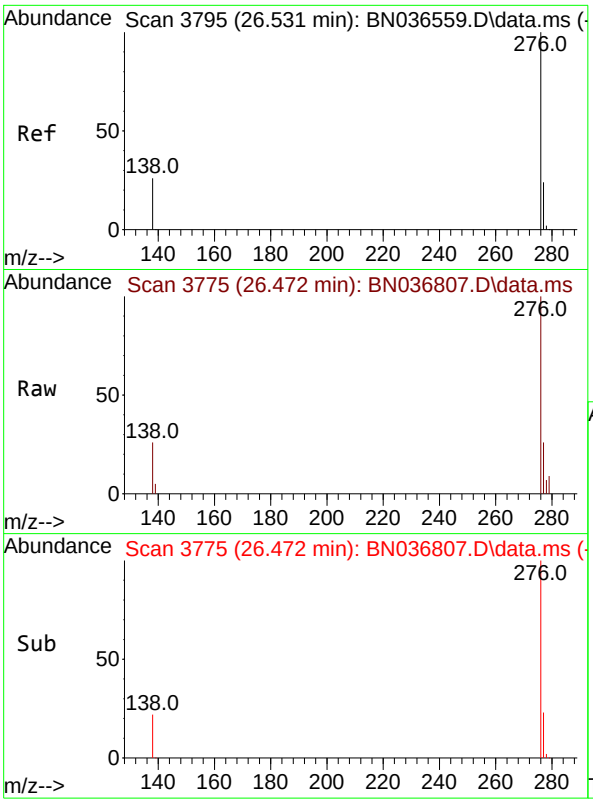



#40
Dibenzo(a,h)anthracene
Concen: 0.383 ng m
RT: 25.800 min Scan# 3545
Delta R.T. -0.055 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:278 Resp: 4113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 22.7 | 20.8 | 31.2 |
| 279 | 34.8 | 28.8 | 43.2 |

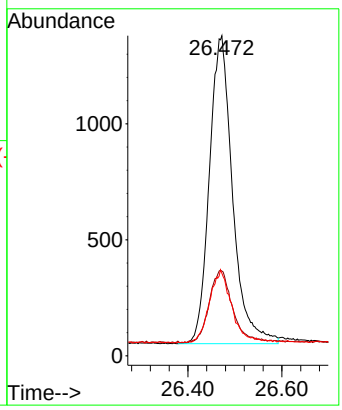





#41
Benzo(g,h,i)perylene
Concen: 0.371 ng
RT: 26.472 min Scan# 3
Delta R.T. -0.058 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:276 Resp: 455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.4 | 22.2 | 33.4 |
| 138 | 25.8 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

Reviewed By :Anahy Claudio 03/31/2025
Supervised By :Jagrut Upadhyay 03/31/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036807.D
Acq On : 29 Mar 2025 12:21
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 02:01:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 90 | -0.03 |
| 2 | | 1,4-Dioxane | 0.444 | 0.456 | -2.7 | 82 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.931 | -3.7 | 89 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.835 | 10.4 | 76 | -0.02 |
| 5 | S | Phenol-d6 | 1.152 | 0.978 | 15.1 | 78 | -0.04 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.007 | 15.4 | 76 | -0.03 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 97 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.364 | 16.3 | 85 | -0.03 |
| 9 | | Naphthalene | 1.177 | 1.046 | 11.1 | 84 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.248 | 10.5 | 82 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.526 | 11.6 | 85 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.668 | 10.8 | 85 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 101 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.169 | 7.1 | 90 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 1.915 | 17.7 | 80 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.643 | 13.0 | 85 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.115 | 9.8 | 88 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.519 | 9.2 | 87 | -0.03 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 103 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.077 | 10.5 | 103 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.231 | 8.0 | 87 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.280 | 7.6 | 86 | -0.02 |
| 23 | | Atrazine | 0.201 | 0.189 | 6.0 | 91 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.128 | 7.2 | 96 | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.132 | 5.7 | 90 | -0.02 |
| 26 | | Anthracene | 1.083 | 1.013 | 6.5 | 91 | -0.04 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 0.985 | 3.9 | 91 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.322 | 1.9 | 94 | -0.03 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 106 | -0.03 |
| 30 | | Pyrene | 1.956 | 1.894 | 3.2 | 94 | -0.03 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.875 | 8.7 | 90 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.232 | 11.4 | 91 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.434 | 5.7 | 95 | -0.03 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.953 | 3.7 | 97 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 108 | -0.04 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.359 | 5.9 | 95 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.360 | 6.6 | 95 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.528 | -0.1 | 102 | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.191 | 2.9 | 99 | -0.04 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 1.077 | 4.2 | 100 | -0.06 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.194 | 7.2 | 93 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036807.D
Acq On : 29 Mar 2025 12:21
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 02:01:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 90 | -0.03 |
| 2 | | 1,4-Dioxane | 0.400 | 0.411 | -2.7 | 82 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.415 | -3.7 | 89 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.358 | 10.5 | 76 | -0.02 |
| 5 | S | Phenol-d6 | 0.400 | 0.340 | 15.0 | 78 | -0.04 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.338 | 15.5 | 76 | -0.03 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 97 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.334 | 16.5 | 85 | -0.03 |
| 9 | | Naphthalene | 0.400 | 0.356 | 11.0 | 84 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.358 | 10.5 | 82 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.354 | 11.5 | 85 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.357 | 10.8 | 85 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 101 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.371 | 7.3 | 90 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.329 | 17.8 | 80 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.348 | 13.0 | 85 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.361 | 9.8 | 88 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.364 | 9.0 | 87 | -0.03 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 103 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.447 | -11.7 | 103 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.368 | 8.0 | 87 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.371 | 7.3 | 86 | -0.02 |
| 23 | | Atrazine | 0.400 | 0.377 | 5.8 | 91 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.372 | 7.0 | 96 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.377 | 5.8 | 90 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.374 | 6.5 | 91 | -0.04 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.384 | 4.0 | 91 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.392 | 2.0 | 94 | -0.03 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 106 | -0.03 |
| 30 | | Pyrene | 0.400 | 0.387 | 3.3 | 94 | -0.03 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.365 | 8.8 | 90 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.354 | 11.5 | 91 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.378 | 5.5 | 95 | -0.03 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.385 | 3.8 | 97 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 108 | -0.04 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.376 | 6.0 | 95 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.374 | 6.5 | 95 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.400 | 0.0 | 102 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.389 | 2.8 | 99 | -0.04 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.383 | 4.3 | 100 | -0.06 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.371 | 7.3 | 93 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/31/2025 10:39

Lab File ID: BN036809.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.537 | | -9.7 | 20.0 |
| Fluoranthene-d10 | 1.025 | 0.990 | | -3.4 | 20.0 |
| 2-Fluorophenol | 0.932 | 0.818 | | -12.2 | 20.0 |
| Phenol-d6 | 1.152 | 0.953 | | -17.3 | 20.0 |
| Nitrobenzene-d5 | 0.435 | 0.363 | | -16.6 | 20.0 |
| 2-Fluorobiphenyl | 2.327 | 1.979 | | -15.0 | 20.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.161 | | -11.5 | 20.0 |
| Terphenyl-d14 | 0.958 | 0.798 | | -16.7 | 20.0 |
| 1,4-Dioxane | 0.444 | 0.454 | | 2.3 | 20.0 |

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036809.D
Acq On : 31 Mar 2025 10:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:10:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.695 | 152 | 1888 | 0.400 | ng | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4656 | 0.400 | ng | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2798 | 0.400 | ng | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 5809 | 0.400 | ng | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 4586 | 0.400 | ng | #-0.02 |
| 35) Perylene-d12 | 23.522 | 264 | 3945 | 0.400 | ng | #-0.03 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 5.283 | 112 | 1544 | 0.351 | ng | -0.03 |
| 5) Phenol-d6 | 6.865 | 99 | 1799 | 0.331 | ng | -0.04 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1689 | 0.333 | ng | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2501 | 0.361 | ng | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 451 | 0.355 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.958 | 172 | 5537 | 0.340 | ng | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5750 | 0.386 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3660 | 0.333 | ng | -0.02 |
| **Target Compounds** | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 857 | 0.409 | ng | 96 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1677 | 0.396 | ng | 93 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1889 | 0.336 | ng | 98 |
| 9) Naphthalene | 10.530 | 128 | 4851 | 0.354 | ng | 99 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 1142 | 0.354 | ng | # 98 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 3144 | 0.361 | ng | 99 |
| 16) Acenaphthylene | 14.056 | 152 | 4617 | 0.350 | ng | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3162 | 0.366 | ng | 99 |
| 18) Fluorene | 15.382 | 166 | 4232 | 0.362 | ng | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 405 | 0.419 | ng | 86 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1292 | 0.355 | ng | 93 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1587 | 0.361 | ng | 97 |
| 23) Atrazine | 16.553 | 200 | 1096 | 0.376 | ng | 98 |
| 24) Pentachlorophenol | 16.739 | 266 | 743 | 0.371 | ng | 98 |
| 25) Phenanthrene | 17.124 | 178 | 6581 | 0.378 | ng | 100 |
| 26) Anthracene | 17.211 | 178 | 5583 | 0.355 | ng | 100 |
| 28) Fluoranthene | 19.150 | 202 | 7591 | 0.388 | ng | 99 |
| 30) Pyrene | 19.513 | 202 | 7799 | 0.348 | ng | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5377 | 0.337 | ng | 98 |
| 33) Chrysene | 21.313 | 228 | 6640 | 0.381 | ng | 98 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4143 | 0.365 | ng | # 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.782 | 276 | 5019 | 0.352 | ng | 94 |
| 37) Benzo(b)fluoranthene | 22.844 | 252 | 5495 | 0.383 | ng | 98 |
| 38) Benzo(k)fluoranthene | 22.888 | 252 | 5737m | 0.381 | ng | |
| 39) Benzo(a)pyrene | 23.423 | 252 | 4679 | 0.387 | ng | 96 |
| 40) Dibenzo(a,h)anthracene | 25.805 | 278 | 3655 | 0.330 | ng | 99 |
| 41) Benzo(g,h,i)perylene | 26.472 | 276 | 4543 | 0.358 | ng | 97 |

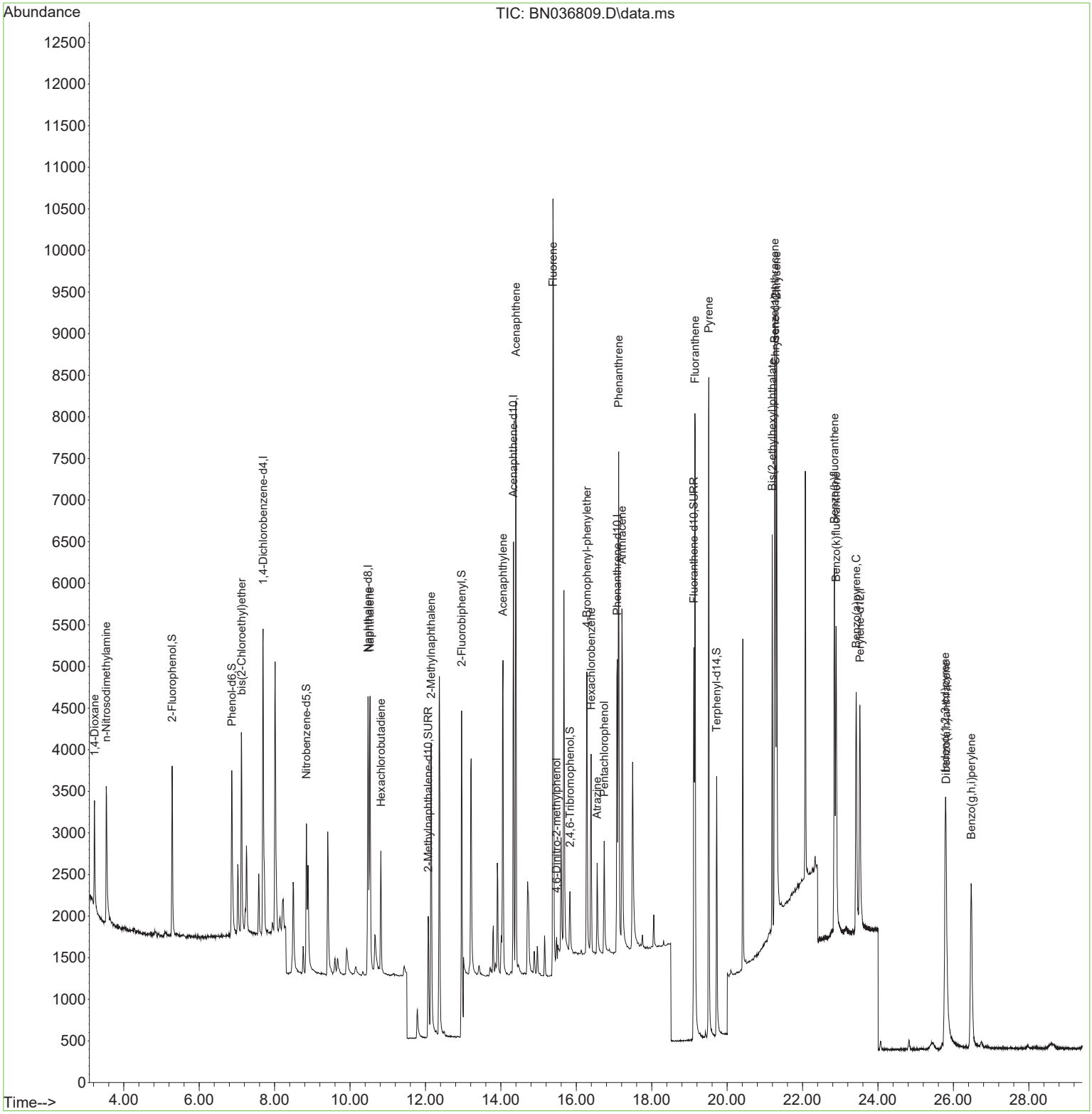
(#) = qualifier out of range (m) = manual integration (+) = signals summed

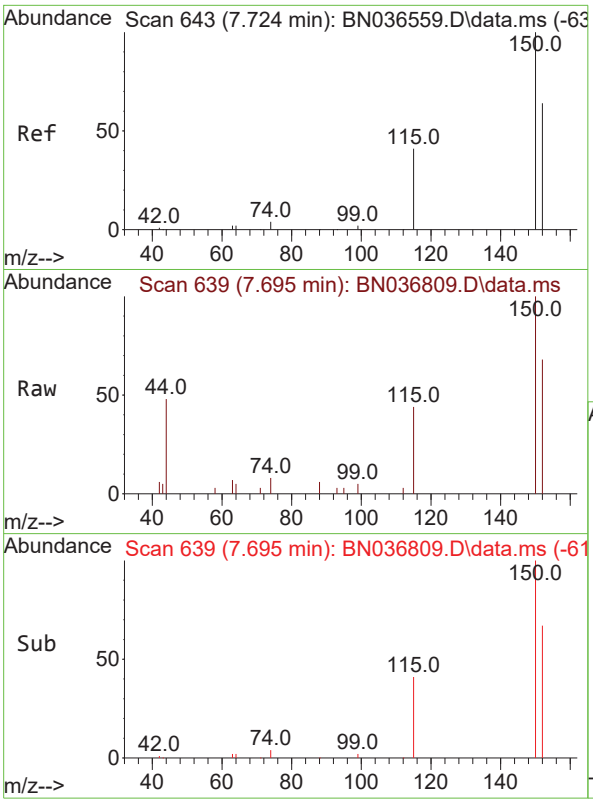
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036809.D
Acq On : 31 Mar 2025 10:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:10:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

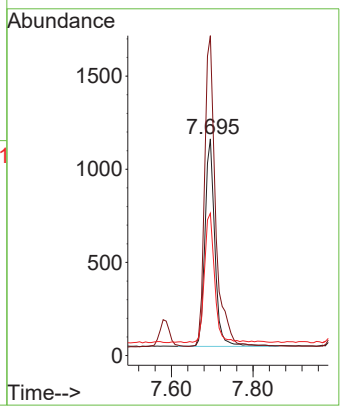





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.695 min Scan# 6
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:152 Resp: 188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 147.6 | 123.7 | 185.5 |
| 115 | 65.7 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

Reviewed By :Rahul Chavli 03/31/2025
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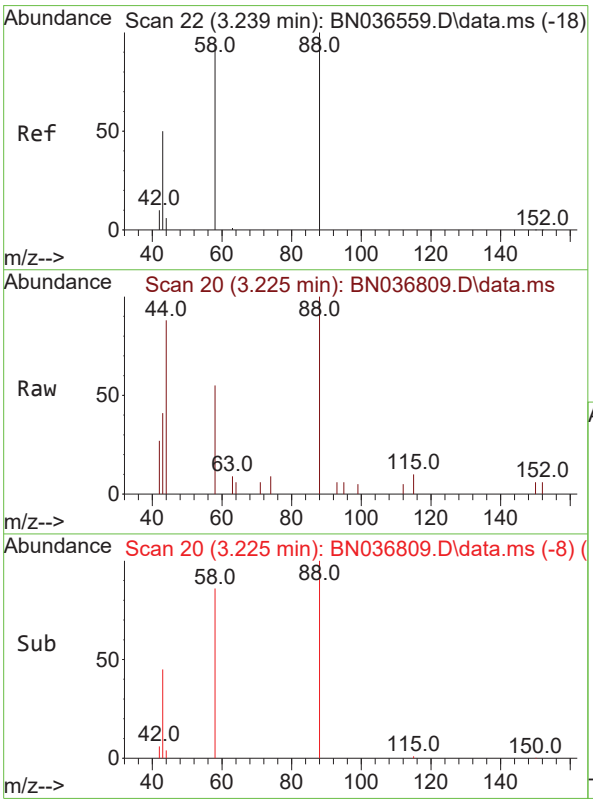
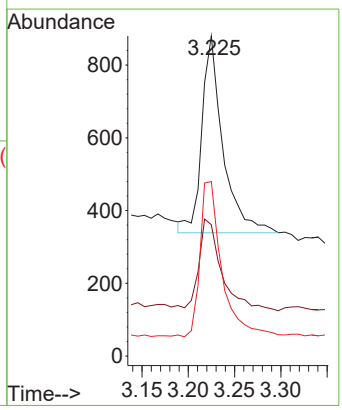
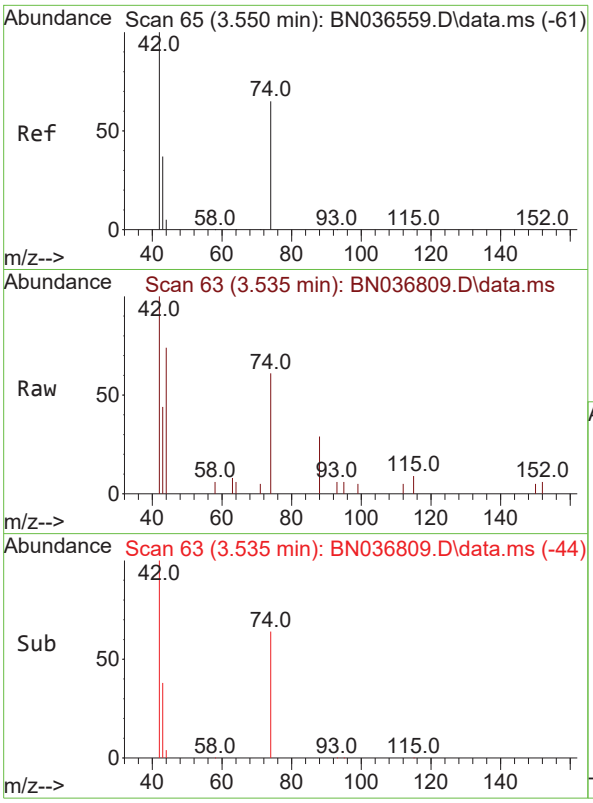



#2
1,4-Dioxane
Concen: 0.409 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 88 Resp: 857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 50.1 | 37.8 | 56.8 |
| 58 | 80.6 | 67.4 | 101.2 |

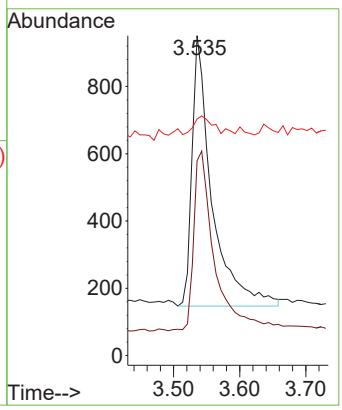





#3
n-Nitrosodimethylamine
Concen: 0.396 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 42 Resp: 167

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 69.2 | 60.6 | 90.8 |
| 44 | 8.2 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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Reviewed By :Rahul Chavli 03/31/2025
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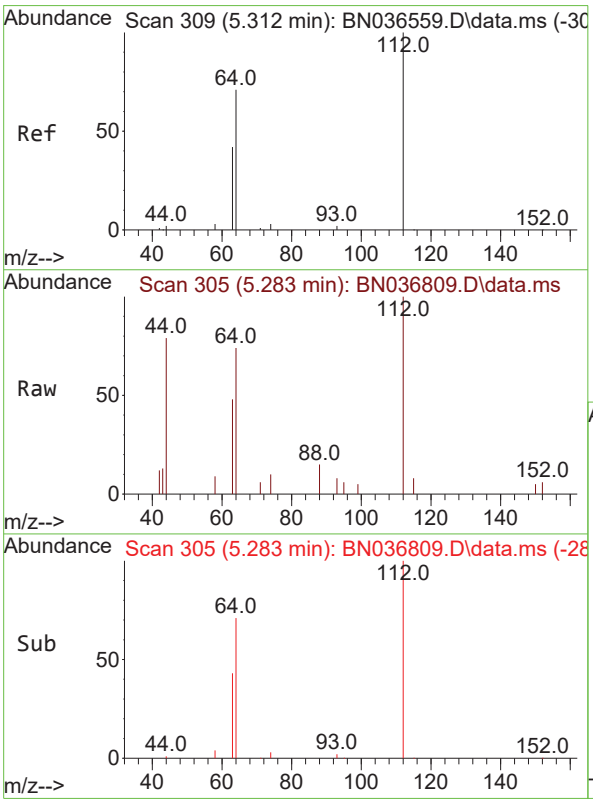
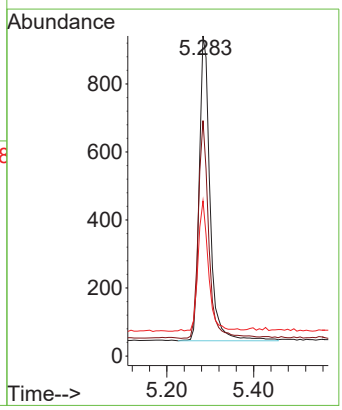
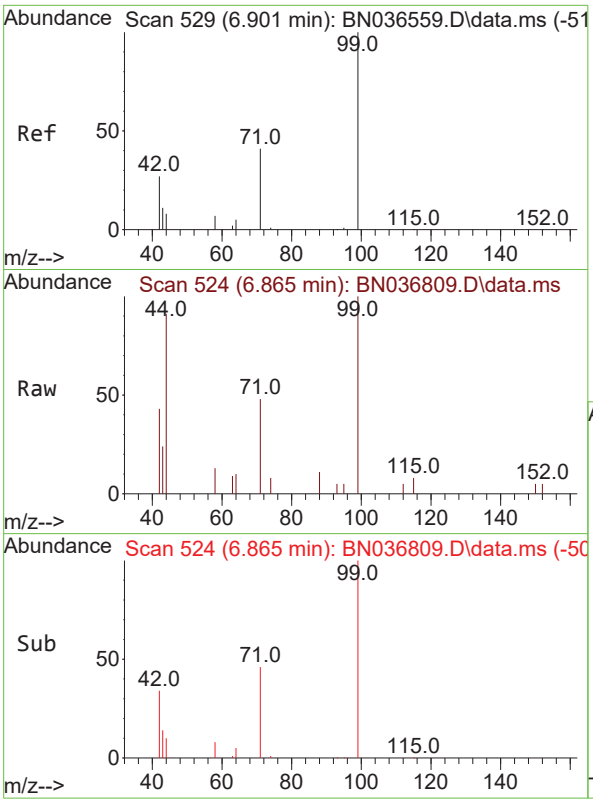



#4
2-Fluorophenol
Concen: 0.351 ng
RT: 5.283 min Scan# 305
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:112 Resp: 1544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.6 | 53.1 | 79.7 |
| 63 | 40.8 | 31.8 | 47.8 |

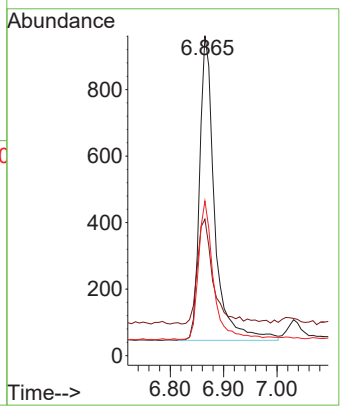





#5
Phenol-d6
Concen: 0.331 ng
RT: 6.865 min Scan# 5
Delta R.T. -0.036 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 99 Resp: 179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 37.9 | 26.5 | 39.7 |
| 71 | 44.8 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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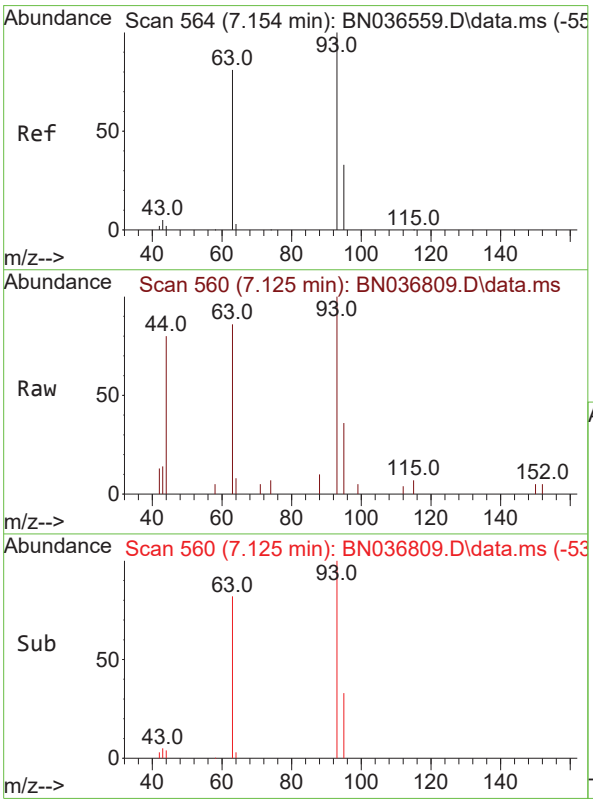
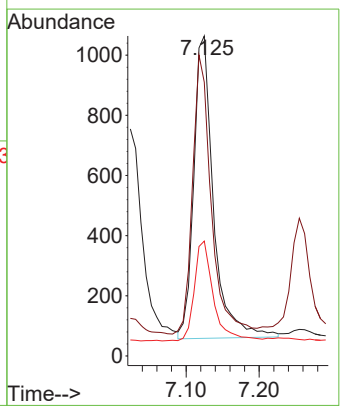
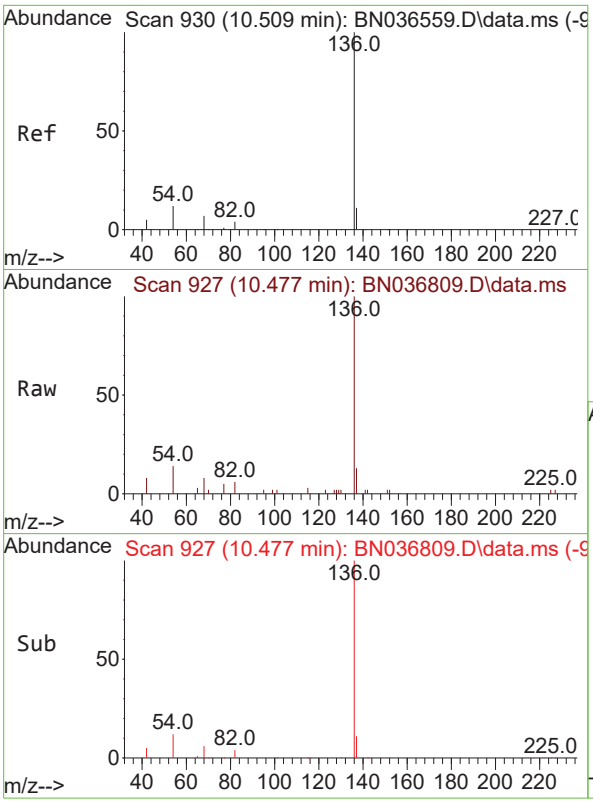



#6
bis(2-Chloroethyl)ether
Concen: 0.336 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 93 Resp: 1889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 87.3 | 67.7 | 101.5 |
| 95 | 31.9 | 25.6 | 38.4 |

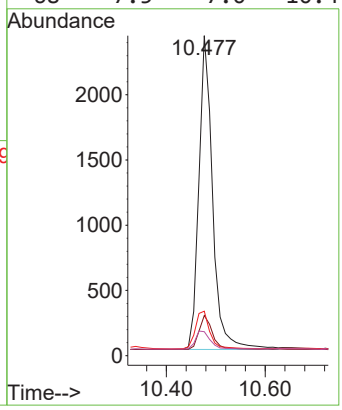





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:136 Resp: 465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.5 | 10.3 | 15.5 |
| 54 | 13.9 | 11.5 | 17.3 |
| 68 | 7.5 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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Reviewed By :Rahul Chavli 03/31/2025
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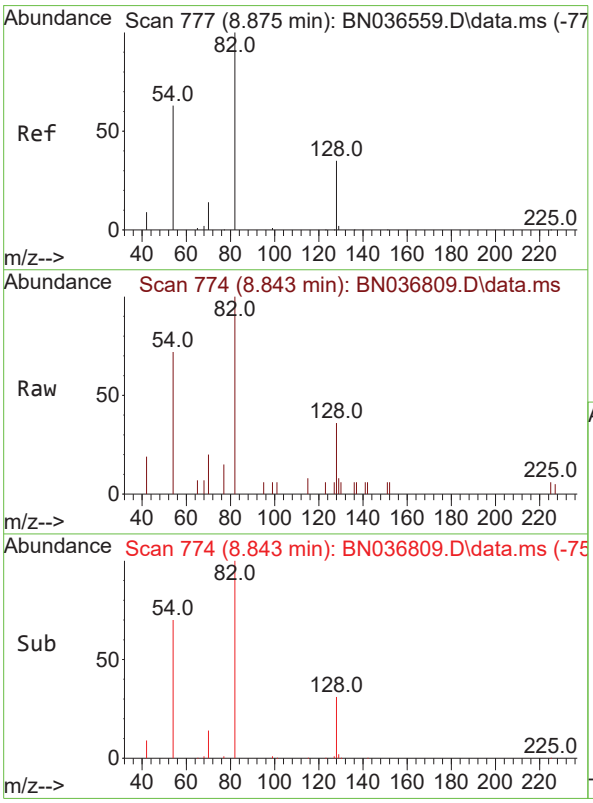
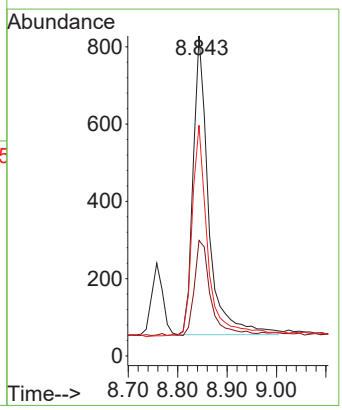
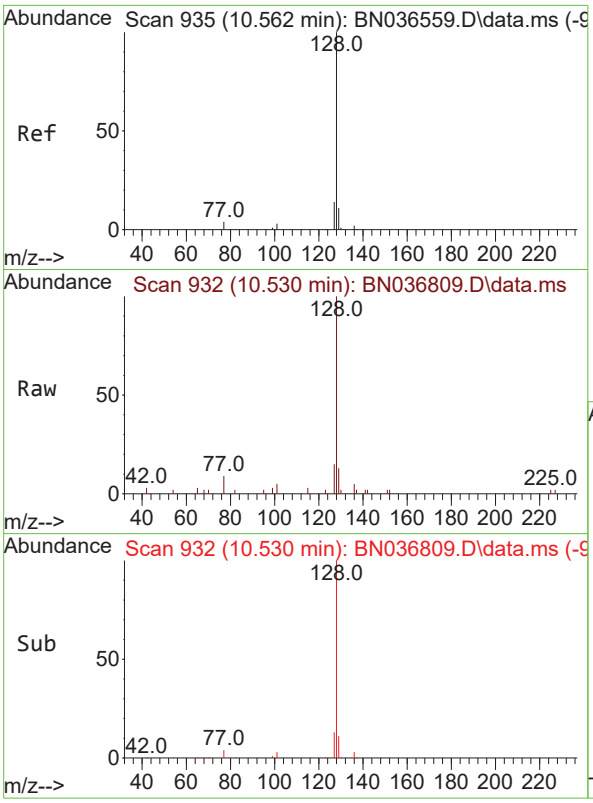



#8
Nitrobenzene-d5
Concen: 0.333 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 82 Resp: 1689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 36.1 | 30.6 | 45.8 |
| 54 | 72.1 | 52.2 | 78.4 |

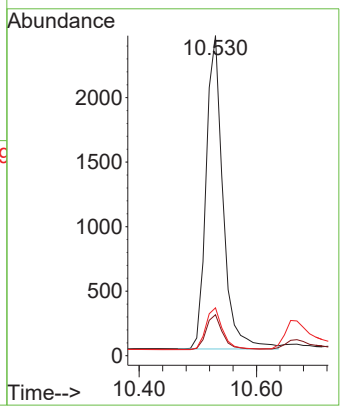





#9
Naphthalene
Concen: 0.354 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:128 Resp: 485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.8 | 9.8 | 14.6 |
| 127 | 15.0 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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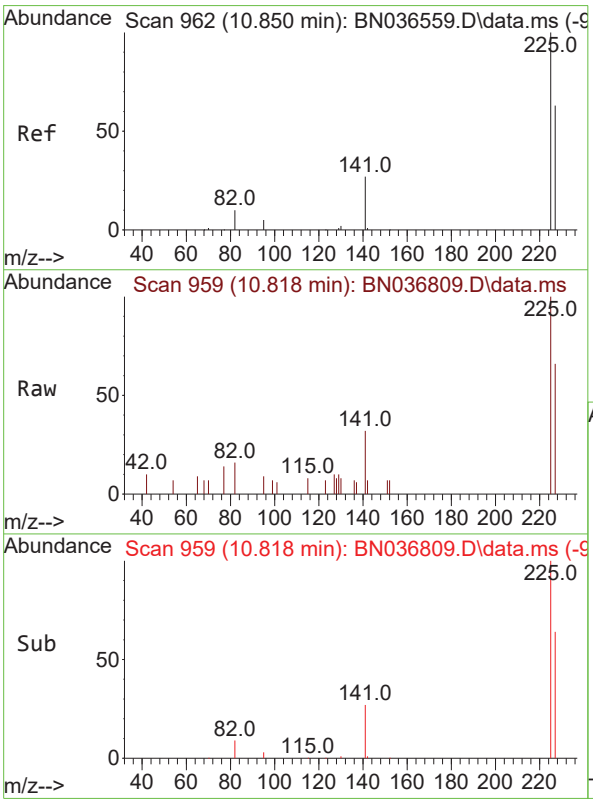
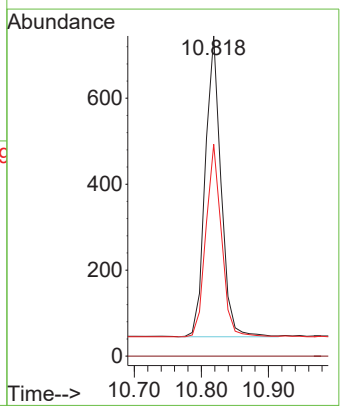
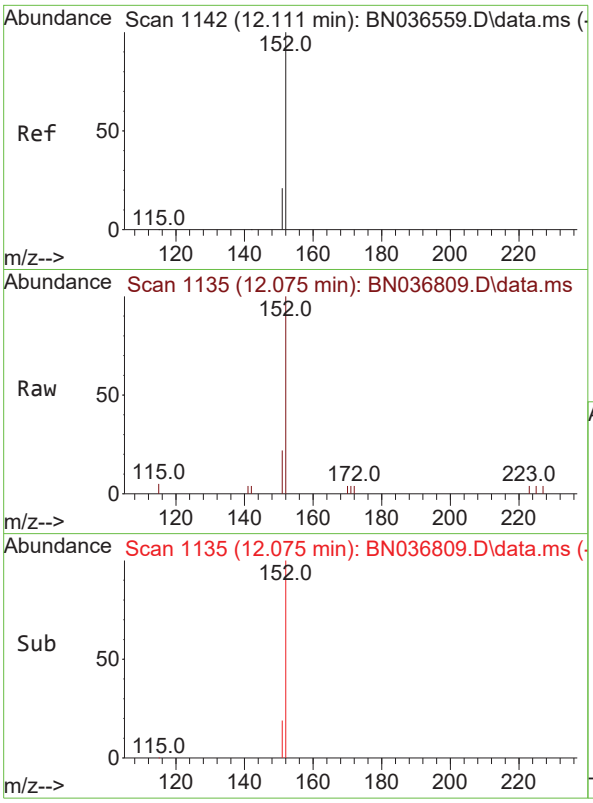



#10
Hexachlorobutadiene
Concen: 0.354 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:225 Resp: 1142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.1 | 51.8 | 77.8 |






#11
2-Methylnaphthalene-d10
Concen: 0.361 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:152 Resp: 250

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.8 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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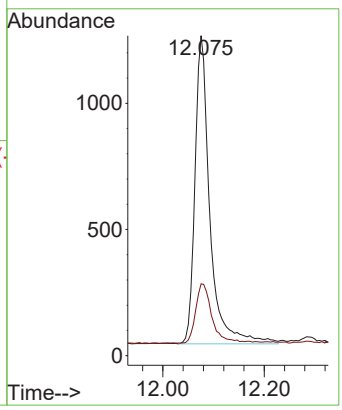
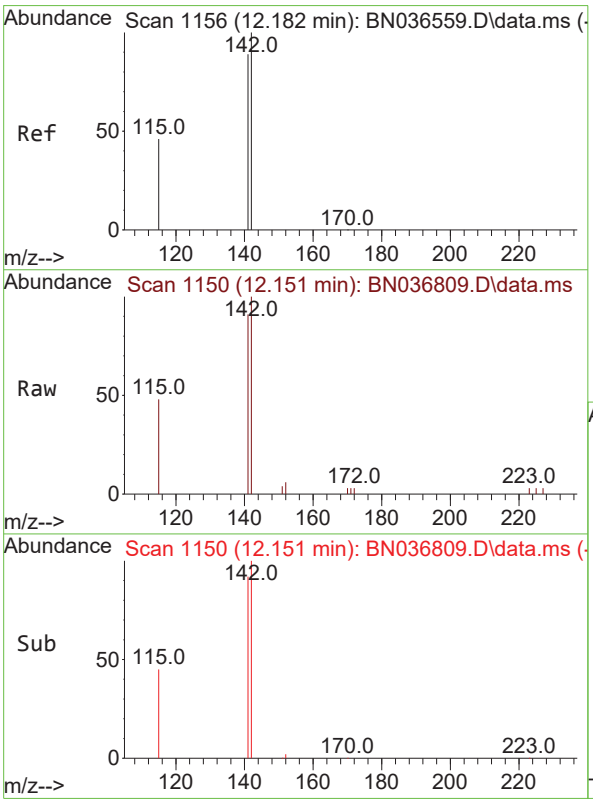
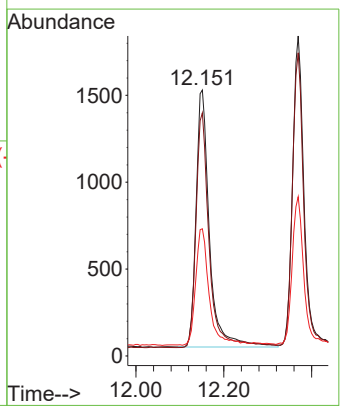


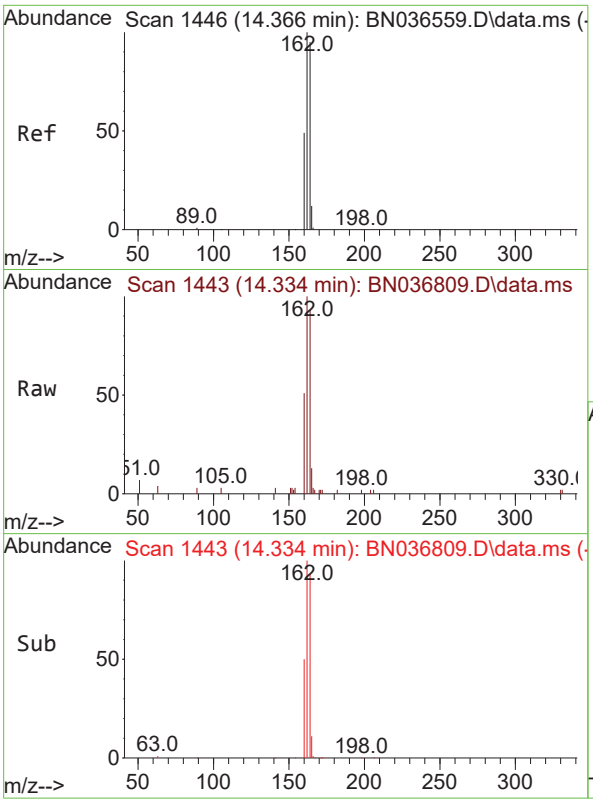




#12
2-Methylnaphthalene
Concen: 0.361 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:142 Resp: 3144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.4 | 71.7 | 107.5 |
| 115 | 47.8 | 38.3 | 57.5 |

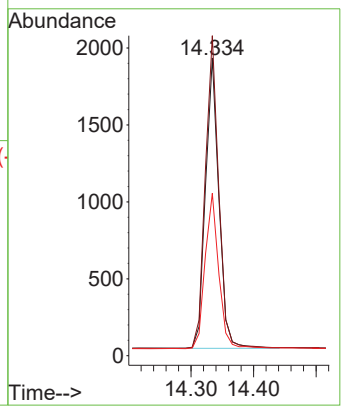





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:164 Resp: 279

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 107.5 | 84.2 | 126.2 |
| 160 | 54.6 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

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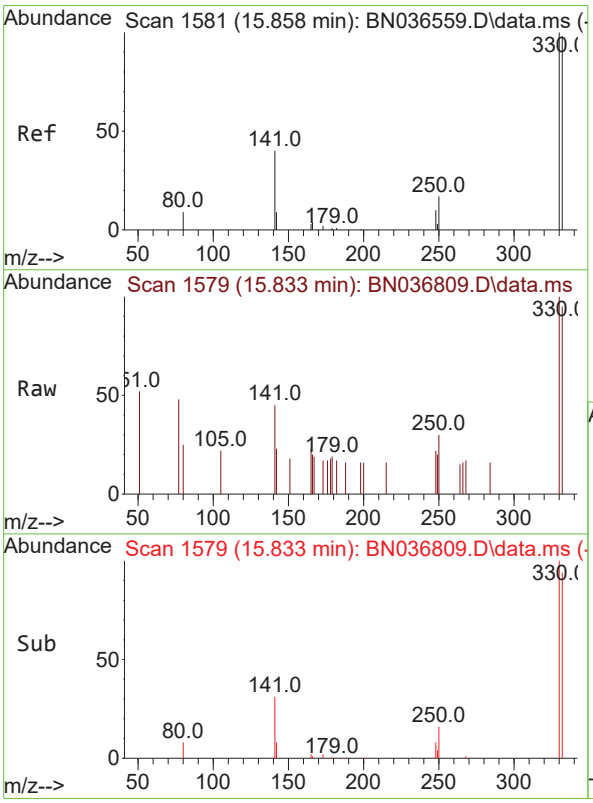
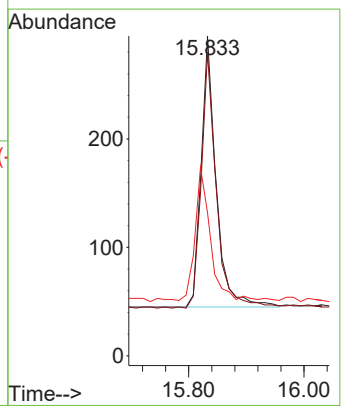
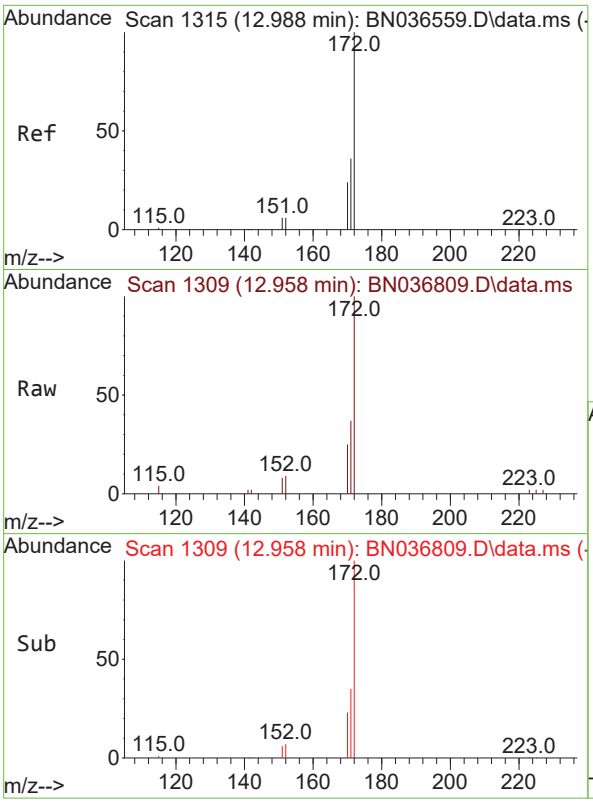



#14
2,4,6-Tribromophenol
Concen: 0.355 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:330 Resp: 451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 95.3 | 75.2 | 112.8 |
| 141 | 53.9 | 43.4 | 65.2 |






#15
2-Fluorobiphenyl
Concen: 0.340 ng
RT: 12.958 min Scan# 1
Delta R.T. -0.030 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:172 Resp: 553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.6 | 29.5 | 44.3 |
| 170 | 24.8 | 20.2 | 30.4 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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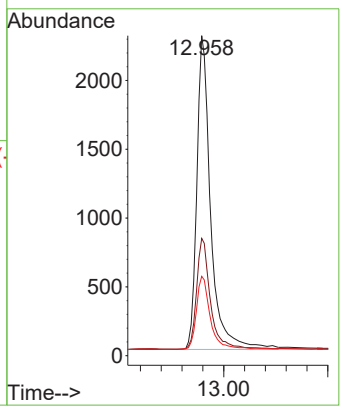
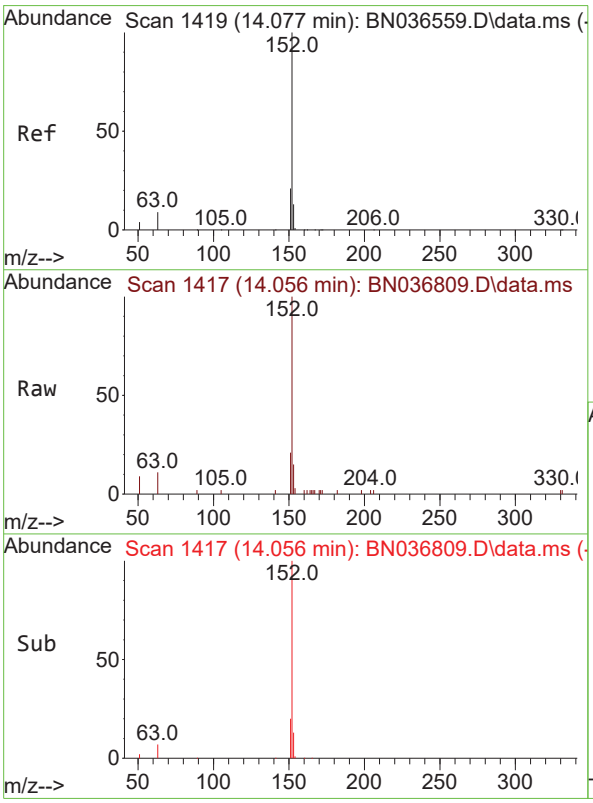
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

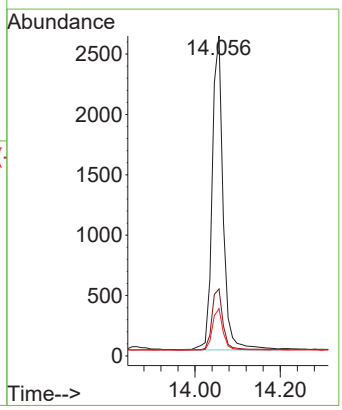


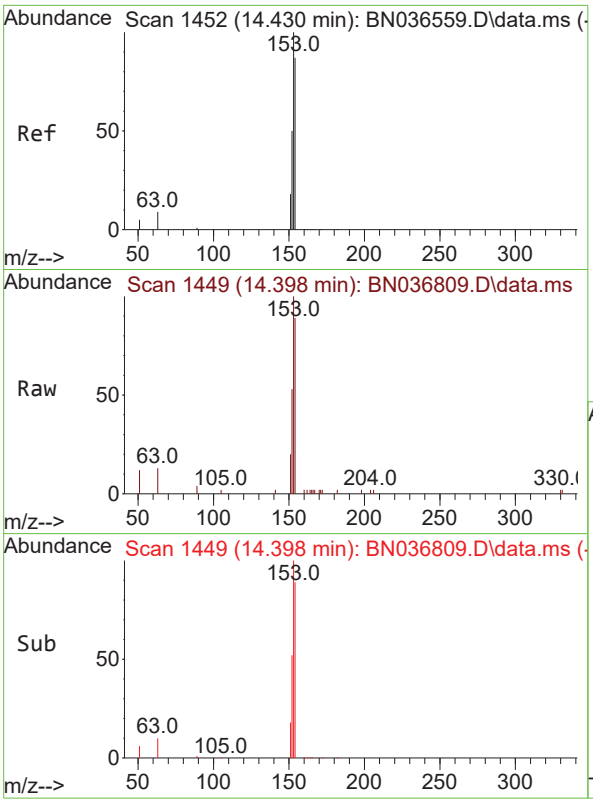




#16
Acenaphthylene
Concen: 0.350 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:152 Resp: 4617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.5 | 16.2 | 24.4 |
| 153 | 13.2 | 10.6 | 15.8 |

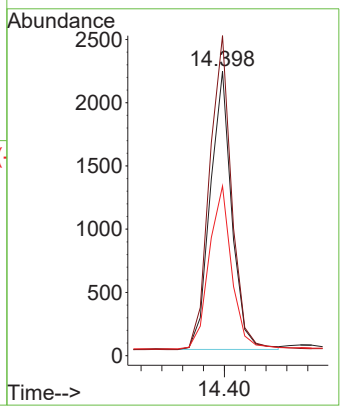





#17
Acenaphthene
Concen: 0.366 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:154 Resp: 316

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 116.9 | 94.1 | 141.1 |
| 152 | 62.4 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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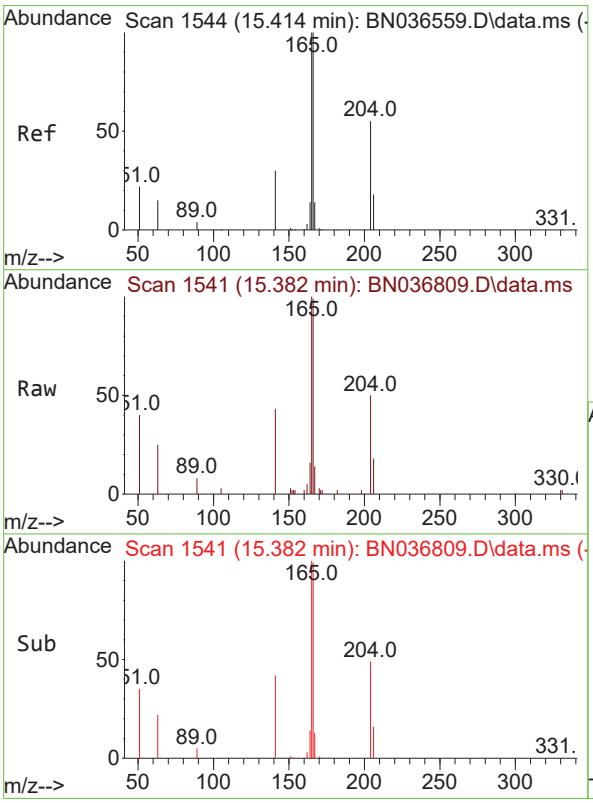
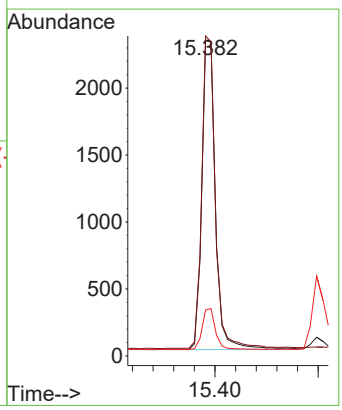
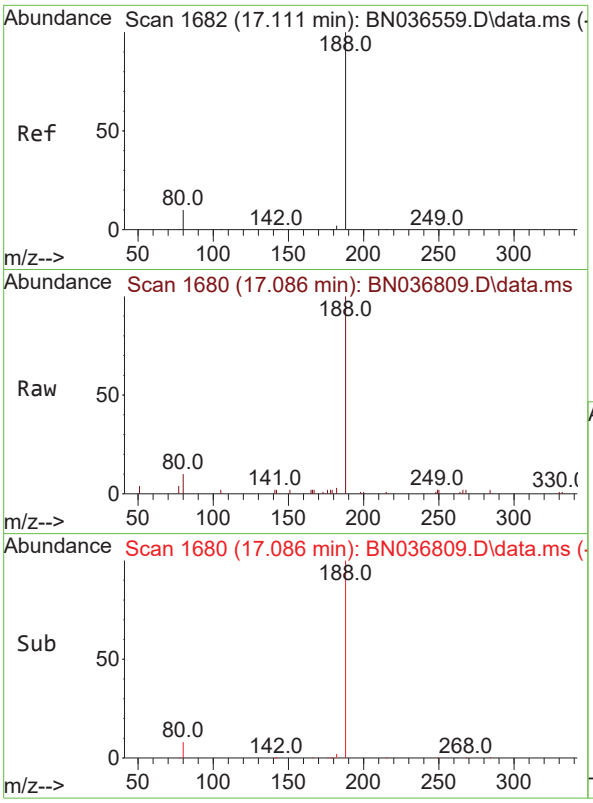



#18
Fluorene
Concen: 0.362 ng
RT: 15.382 min Scan# 1541
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:166 Resp: 4232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.4 | 79.8 | 119.8 |
| 167 | 13.2 | 10.6 | 15.8 |

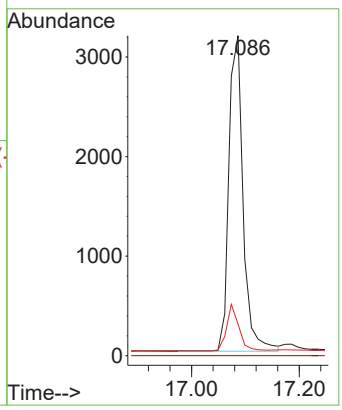





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:188 Resp: 580

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 9.9 | 8.8 | 13.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

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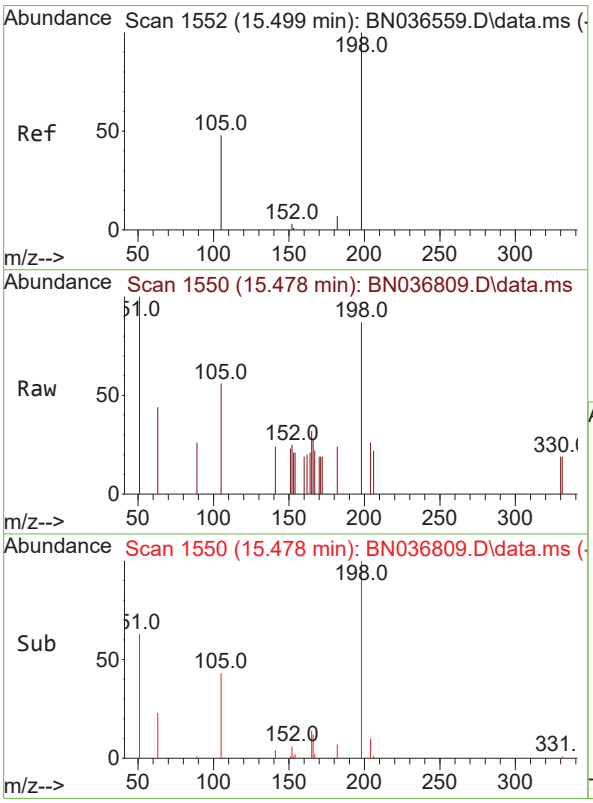
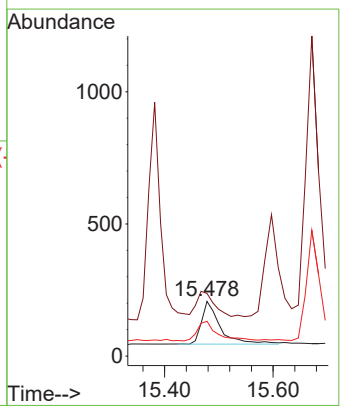
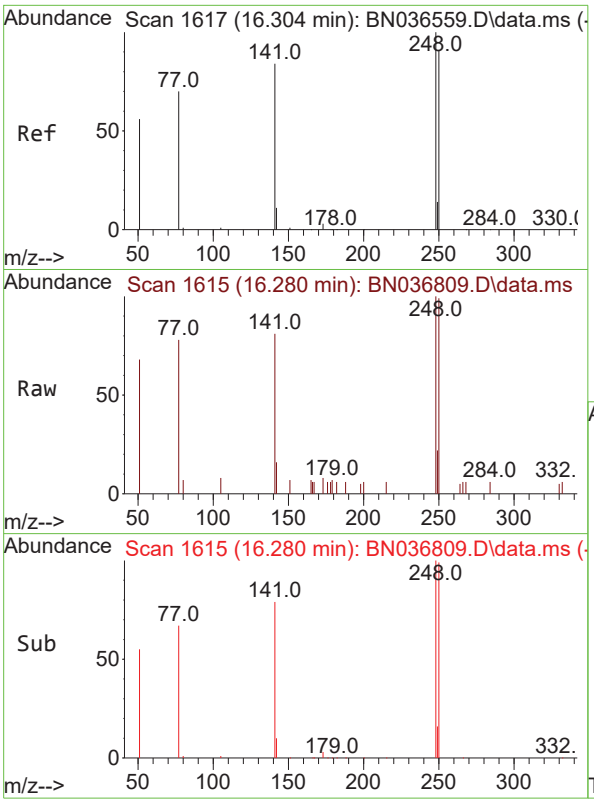



#20
4,6-Dinitro-2-methylphenol
Concen: 0.419 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:198 Resp: 405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 114.5 | 107.9 | 161.9 |
| 105 | 63.8 | 56.2 | 84.2 |






#21
4-Bromophenyl-phenylether
Concen: 0.355 ng
RT: 16.280 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:248 Resp: 129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 99.2 | 73.0 | 109.6 |
| 141 | 80.5 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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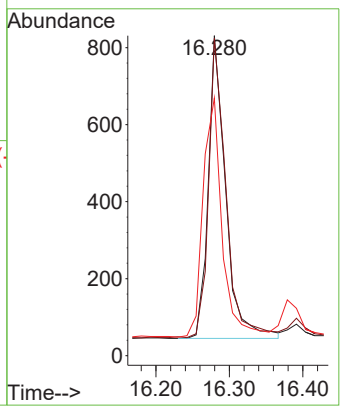
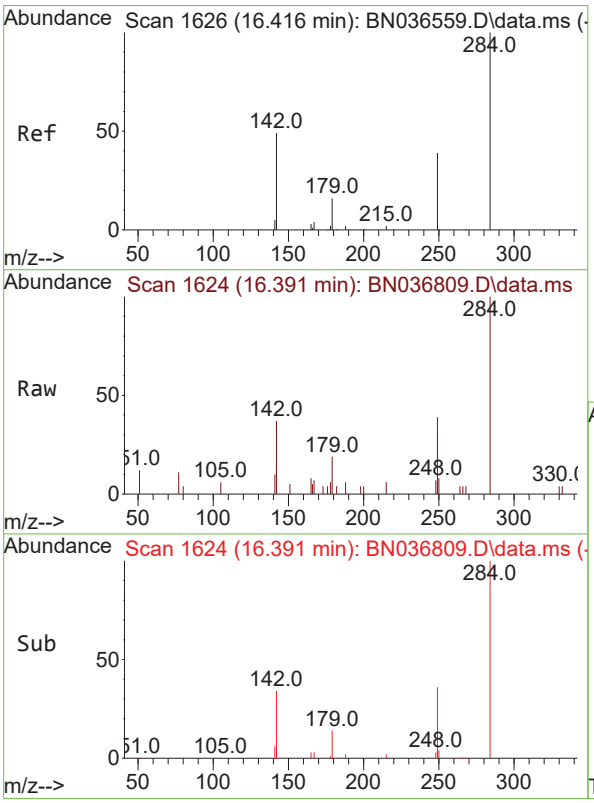
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

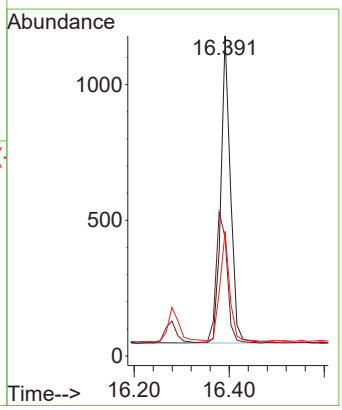


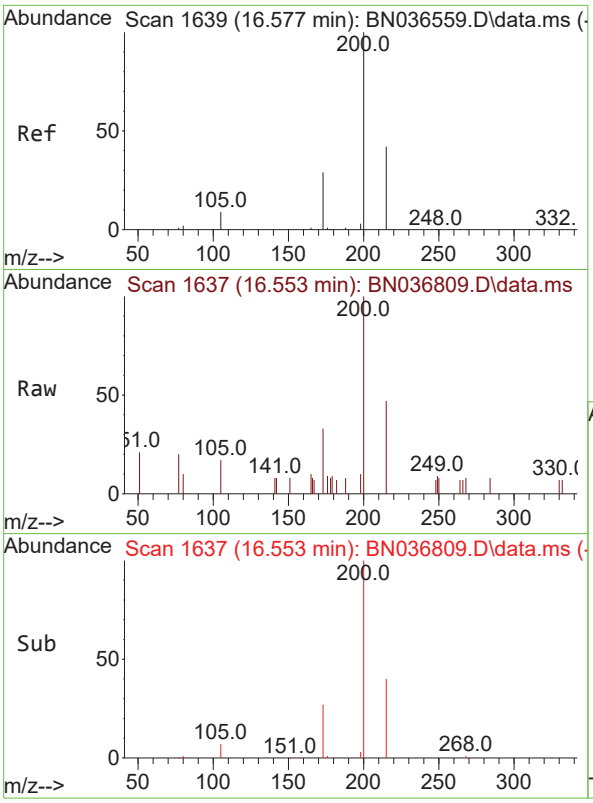




#22
Hexachlorobenzene
Concen: 0.361 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:284 Resp: 1587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.0 | 37.0 | 55.4 |
| 249 | 35.5 | 28.1 | 42.1 |

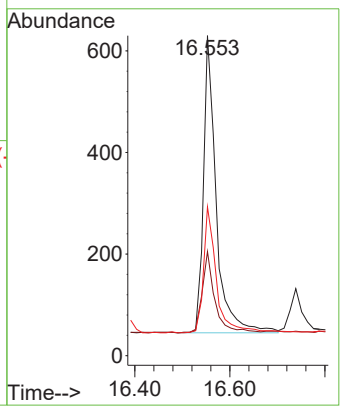





#23
Atrazine
Concen: 0.376 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:200 Resp: 109(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 32.5 | 27.3 | 40.9 |
| 215 | 46.5 | 36.8 | 55.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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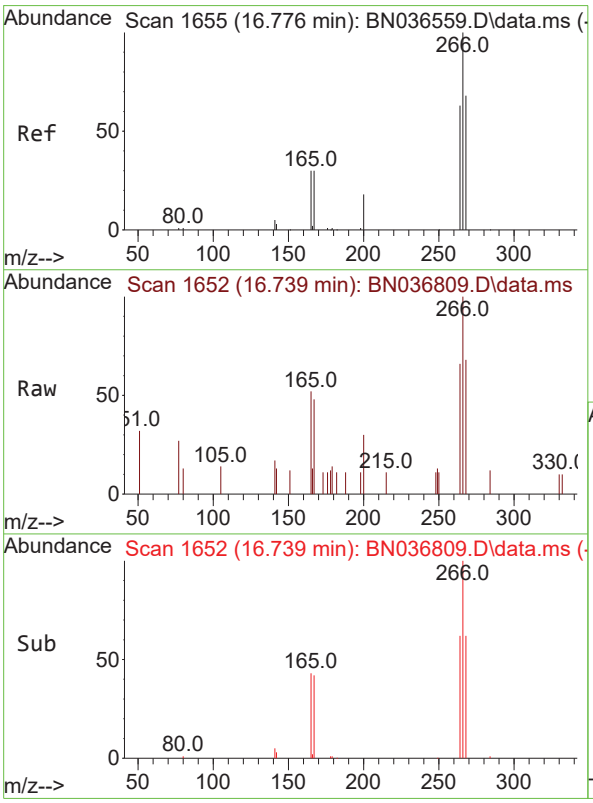
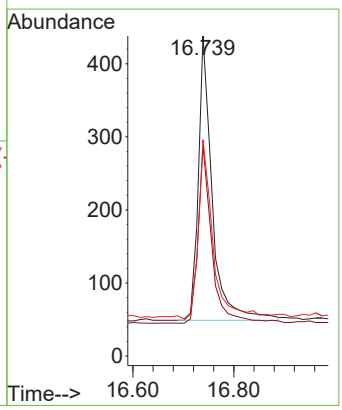
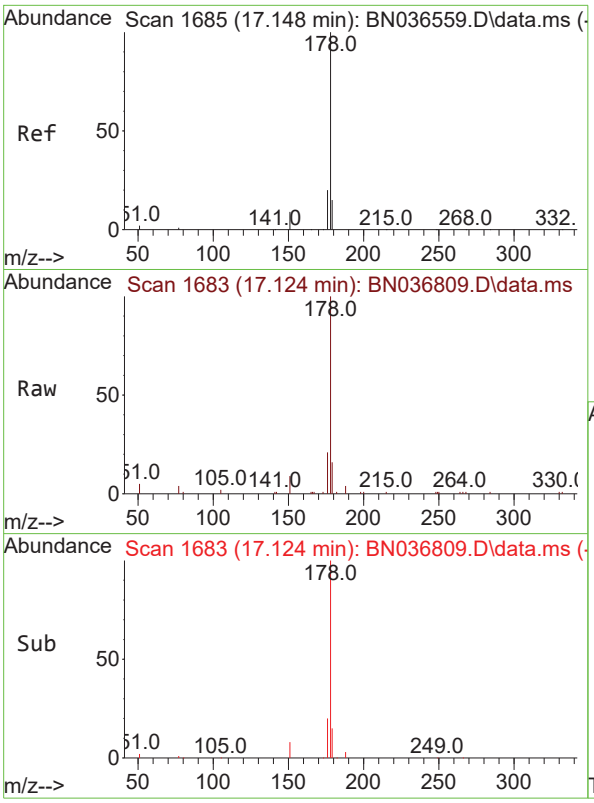



#24
Pentachlorophenol
Concen: 0.371 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:266 Resp: 743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 61.8 | 49.6 | 74.4 |
| 268 | 66.6 | 50.9 | 76.3 |

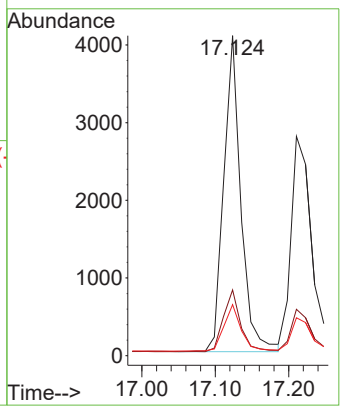





#25
Phenanthrene
Concen: 0.378 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:178 Resp: 658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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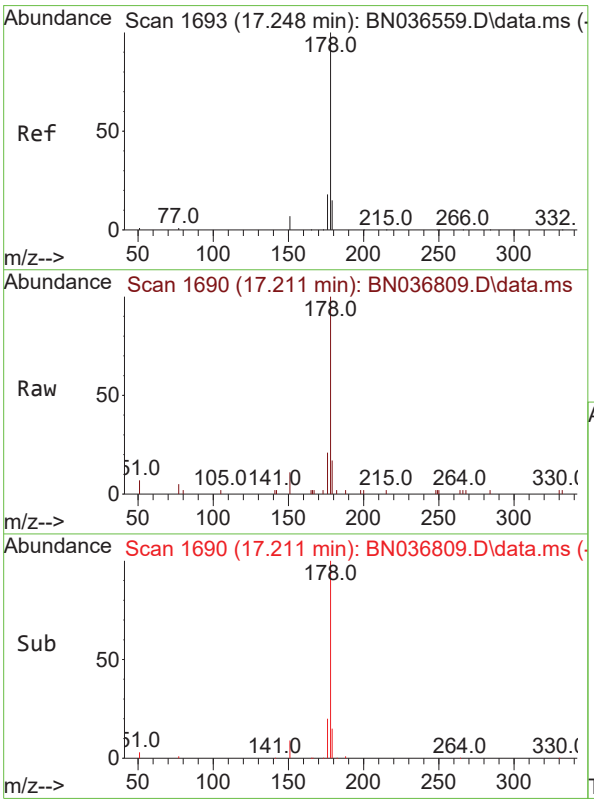
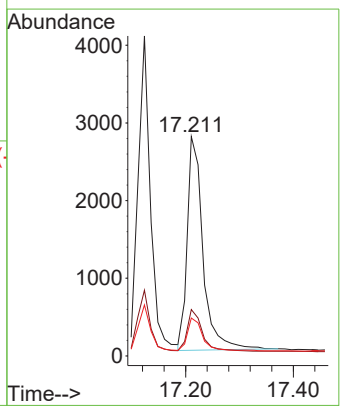
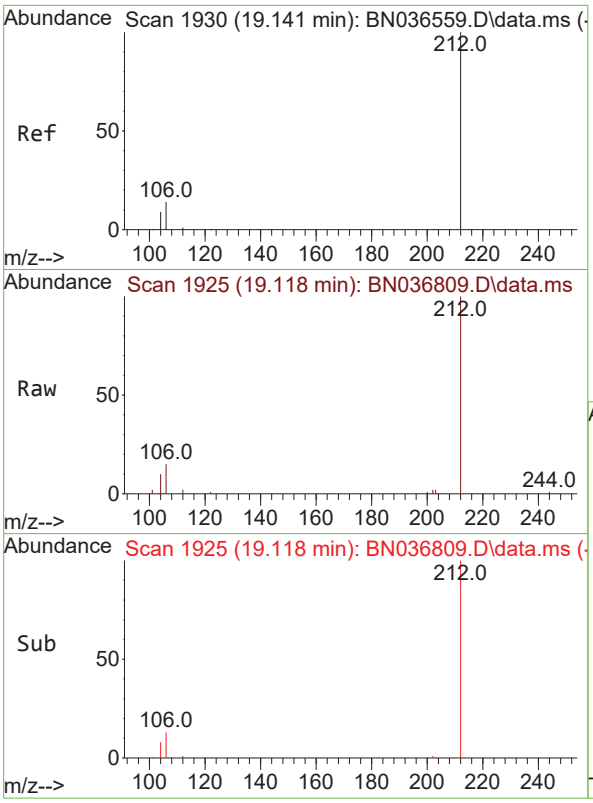



#26
Anthracene
Concen: 0.355 ng
RT: 17.211 min Scan# 1690
Delta R.T. -0.037 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:178 Resp: 5583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.4 | 23.2 |
| 179 | 15.3 | 12.6 | 18.8 |

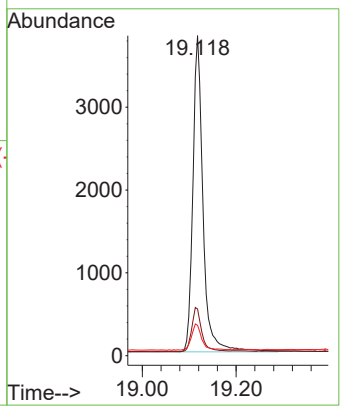





#27
Fluoranthene-d10
Concen: 0.386 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:212 Resp: 575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.6 | 11.8 | 17.6 |
| 104 | 8.5 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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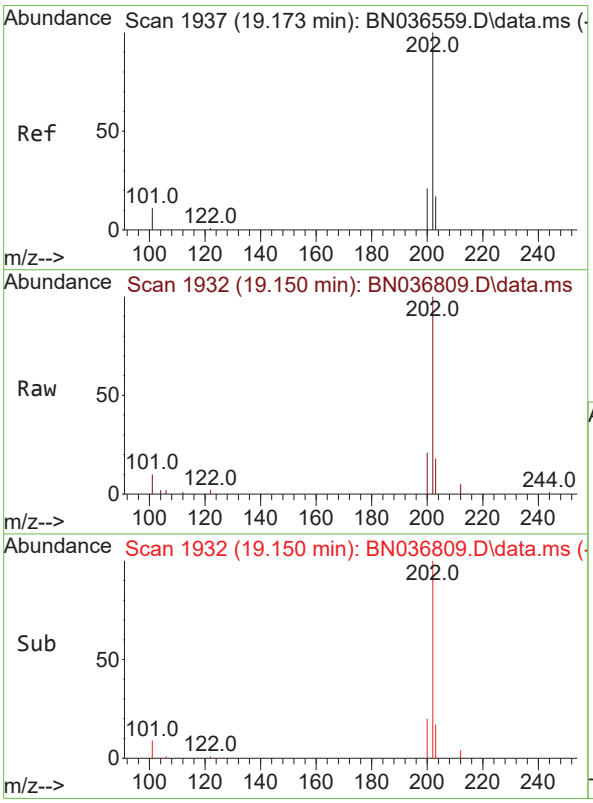
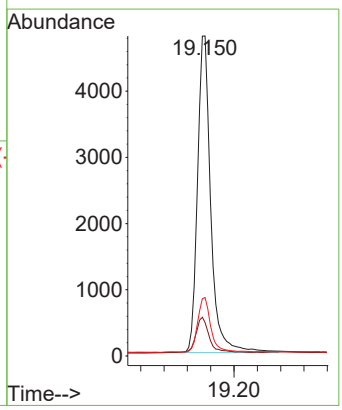
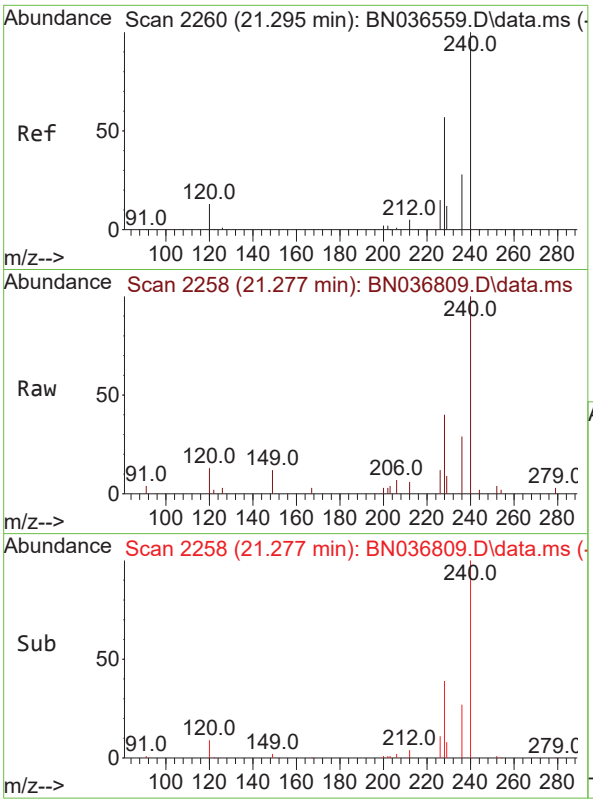



#28
Fluoranthene
Concen: 0.388 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:202 Resp: 7591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.2 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |

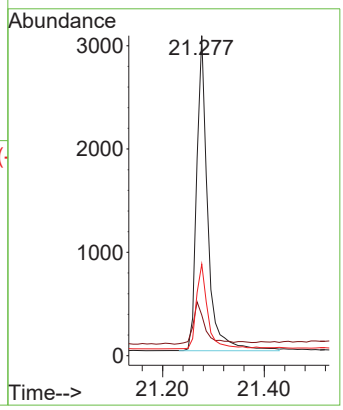





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:240 Resp: 458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 12.7 | 14.6 | 22.0# |
| 236 | 28.6 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
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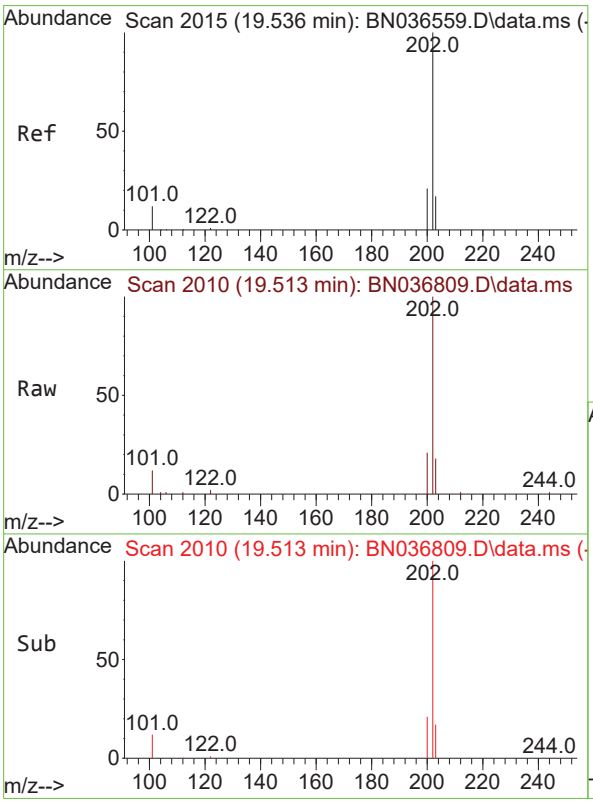
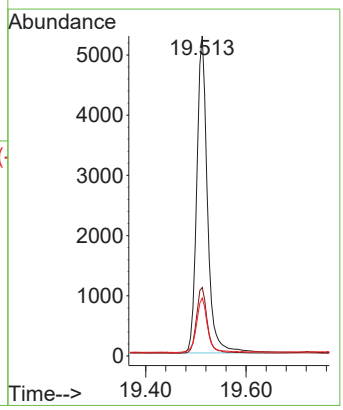
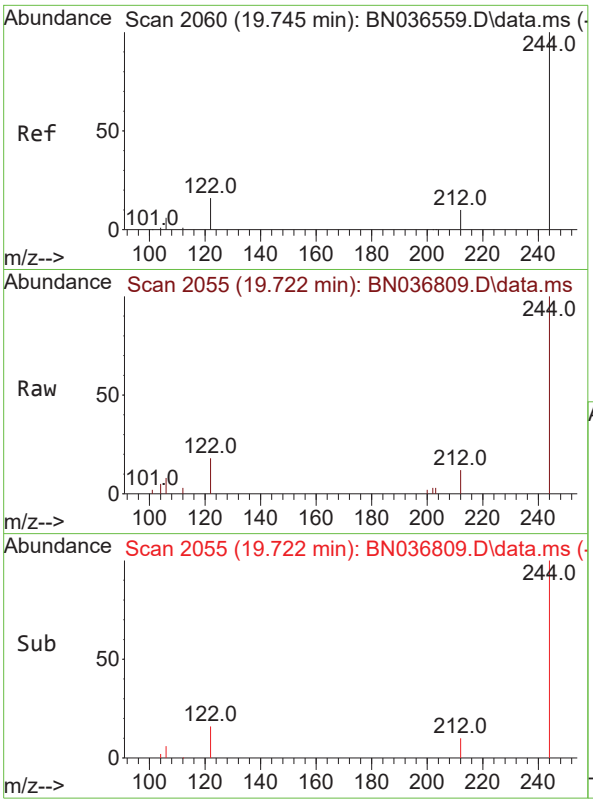



#30
Pyrene
Concen: 0.348 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:202 Resp: 7799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.1 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |

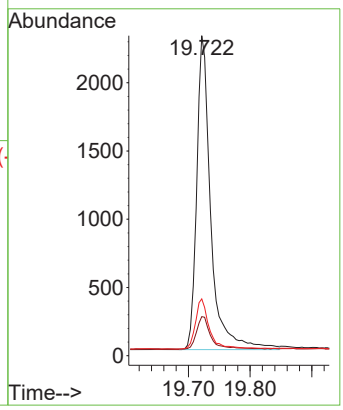





#31
Terphenyl-d14
Concen: 0.333 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

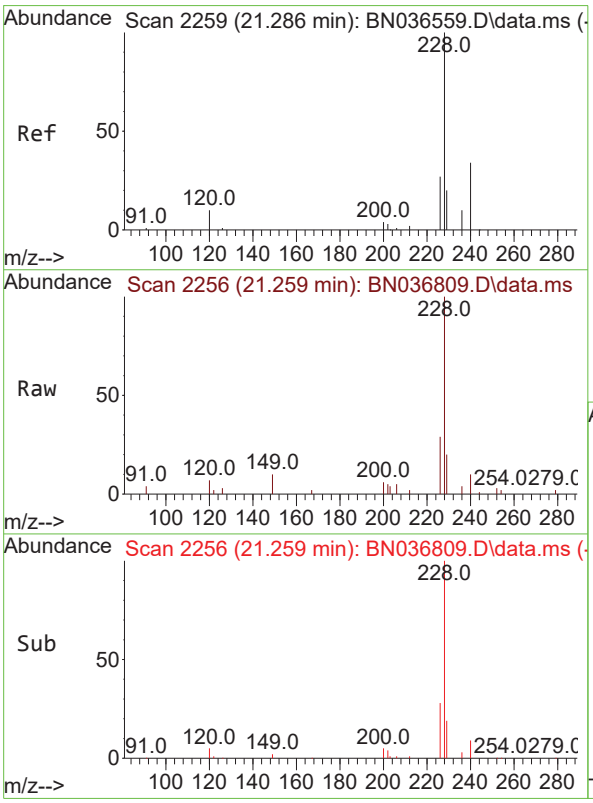
Tgt Ion:244 Resp: 366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.2 | 9.6 | 14.4 |
| 122 | 17.7 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

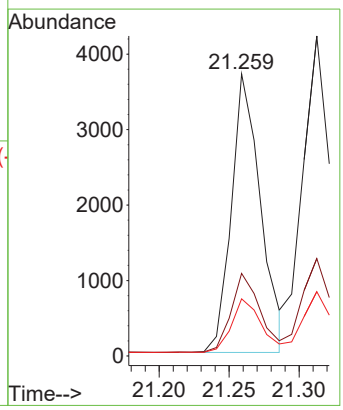
**Manual Integrations APPROVED**
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

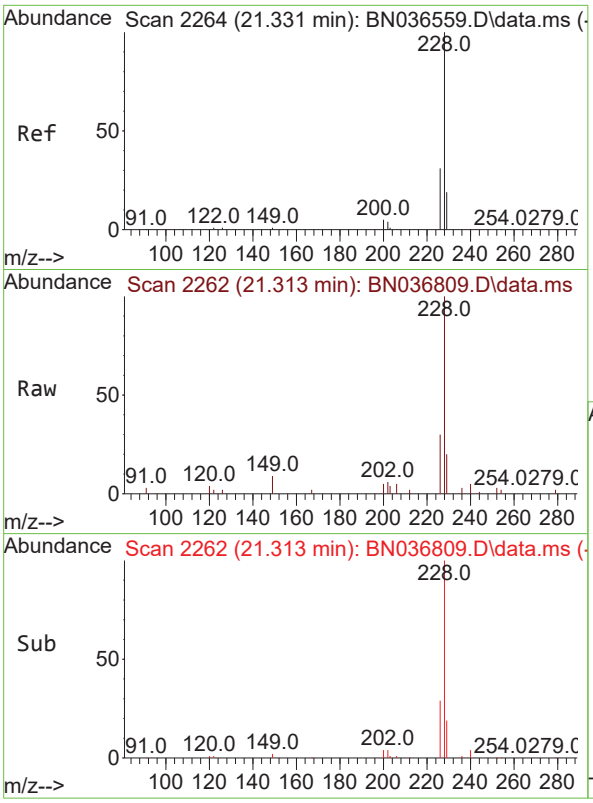



#32
Benzo(a)anthracene
Concen: 0.337 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:228 Resp: 5377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.3 | 22.5 | 33.7 |
| 229 | 20.2 | 16.6 | 25.0 |

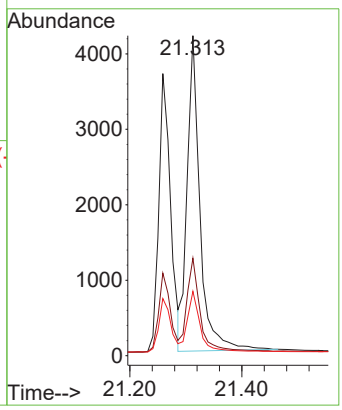





#33
Chrysene
Concen: 0.381 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:228 Resp: 664

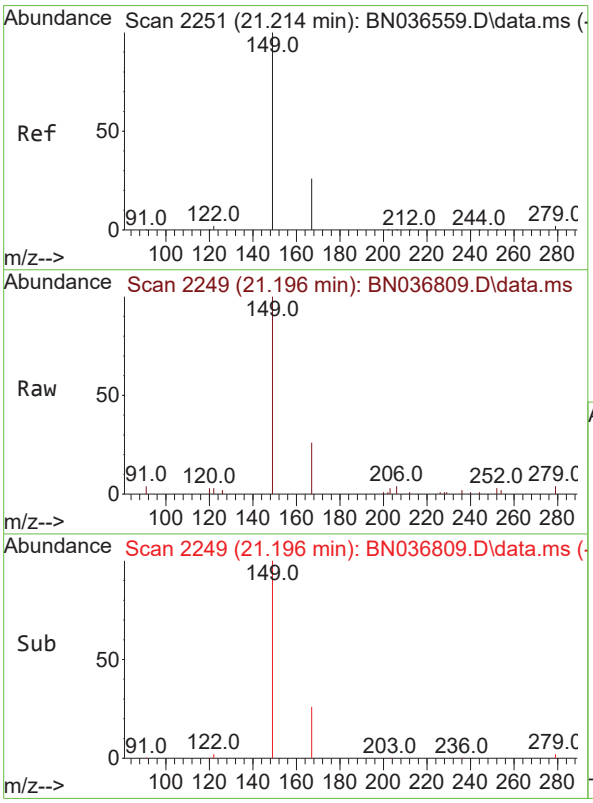
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.4 | 25.3 | 37.9 |
| 229 | 20.1 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations APPROVED**

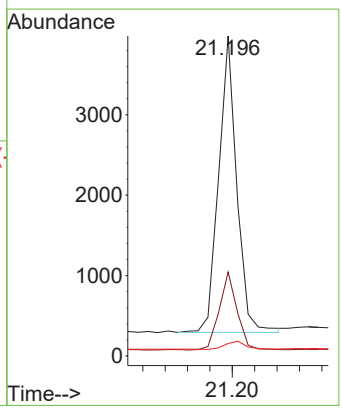
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

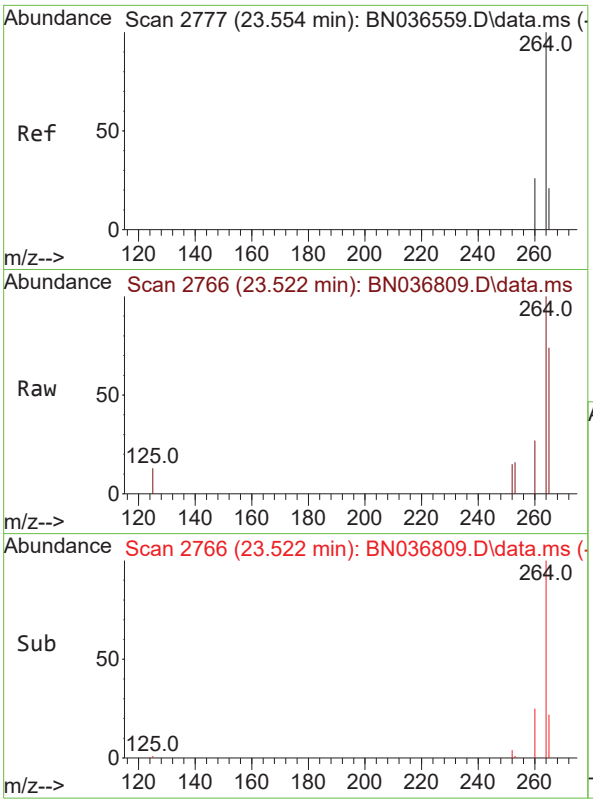



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.365 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:149 Resp: 4143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.0 | 20.7 | 31.1 |
| 279 | 3.0 | 3.6 | 5.4# |

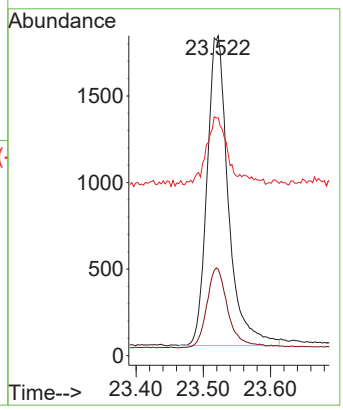





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.522 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:264 Resp: 394

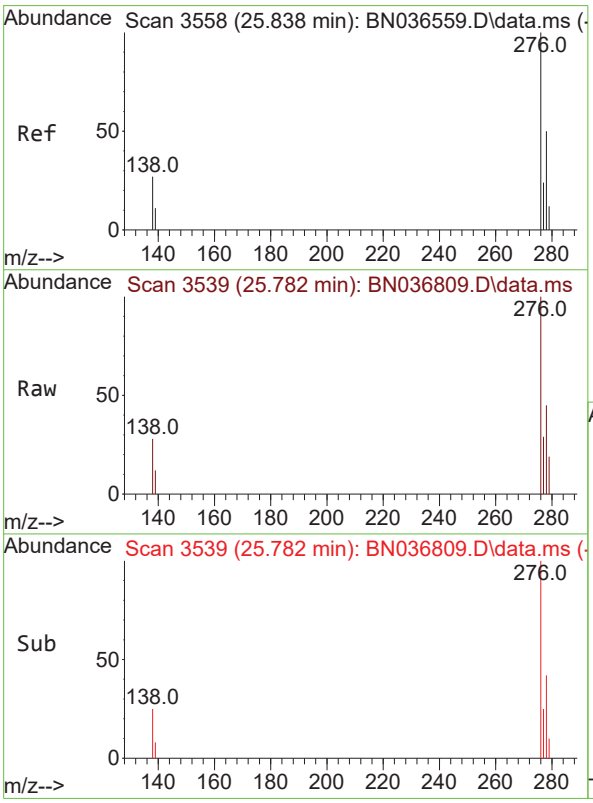
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.0 | 22.6 | 33.8 |
| 265 | 74.3 | 88.1 | 132.1# |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

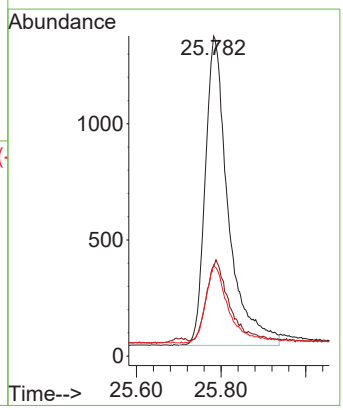
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

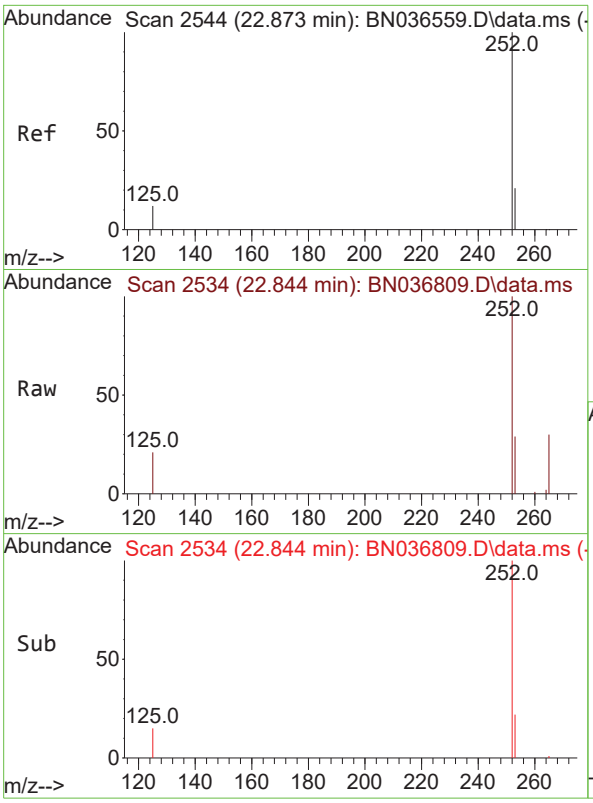



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.352 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.056 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:276 Resp: 5019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.2 | 23.4 | 35.2 |
| 277 | 24.6 | 20.0 | 30.0 |

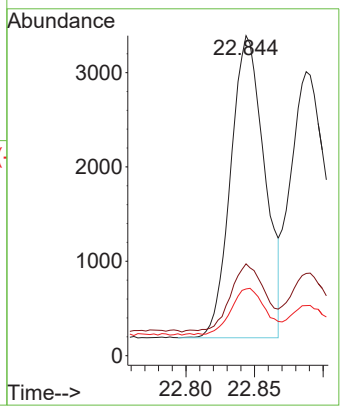





#37
Benzo(b)fluoranthene
Concen: 0.383 ng
RT: 22.844 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:252 Resp: 549

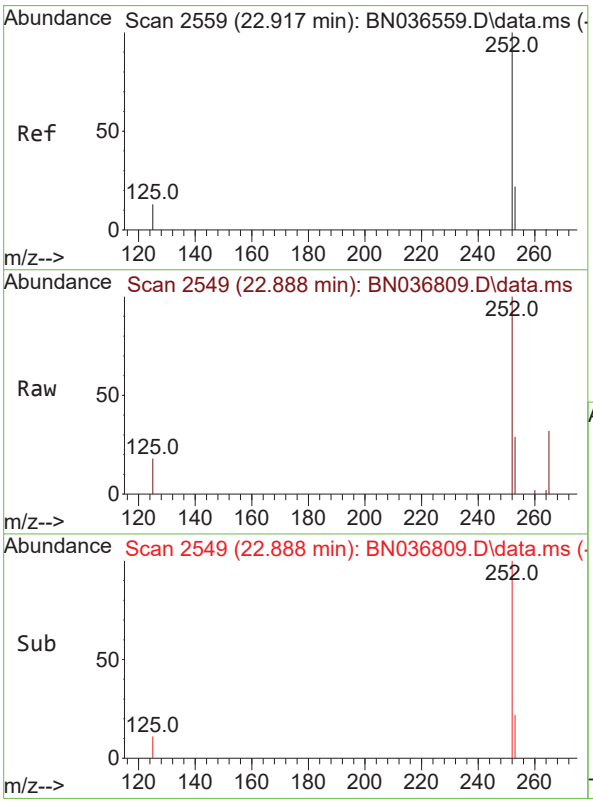
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.7 | 23.9 | 35.9 |
| 125 | 20.8 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

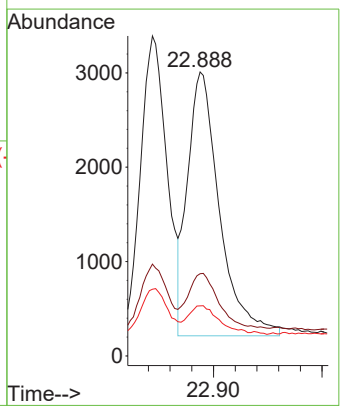
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

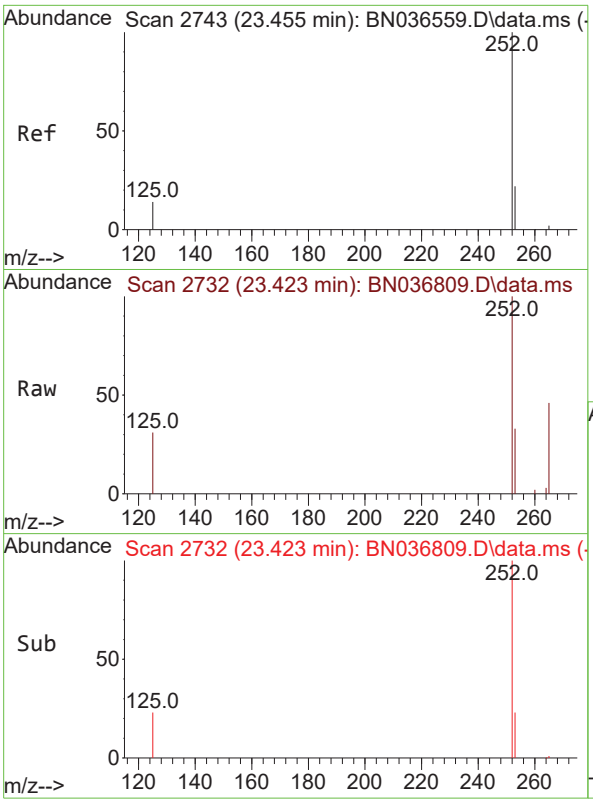



#38
Benzo(k)fluoranthene
Concen: 0.381 ng m
RT: 22.888 min Scan# 2549
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:252 Resp: 5737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.9 | 24.6 | 36.8 |
| 125 | 17.6 | 17.8 | 26.8# |

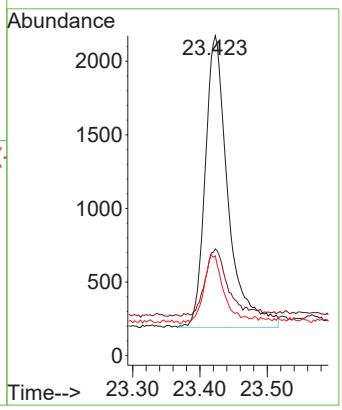





#39
Benzo(a)pyrene
Concen: 0.387 ng
RT: 23.423 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:252 Resp: 467

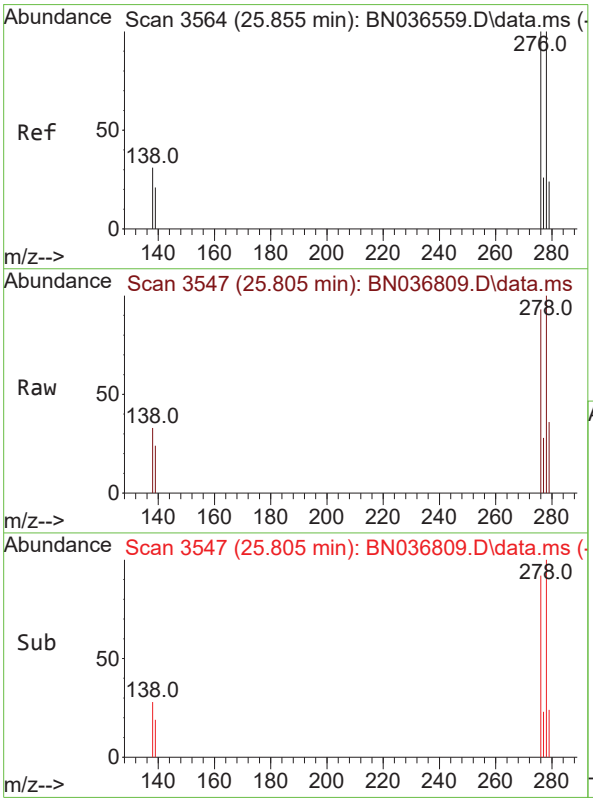
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 33.3 | 27.8 | 41.8 |
| 125 | 31.2 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

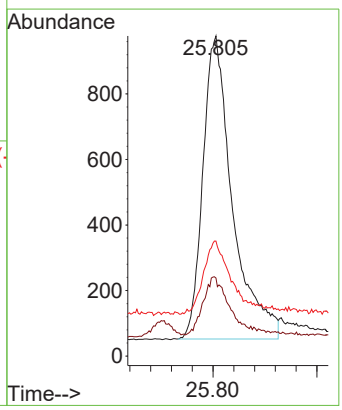
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

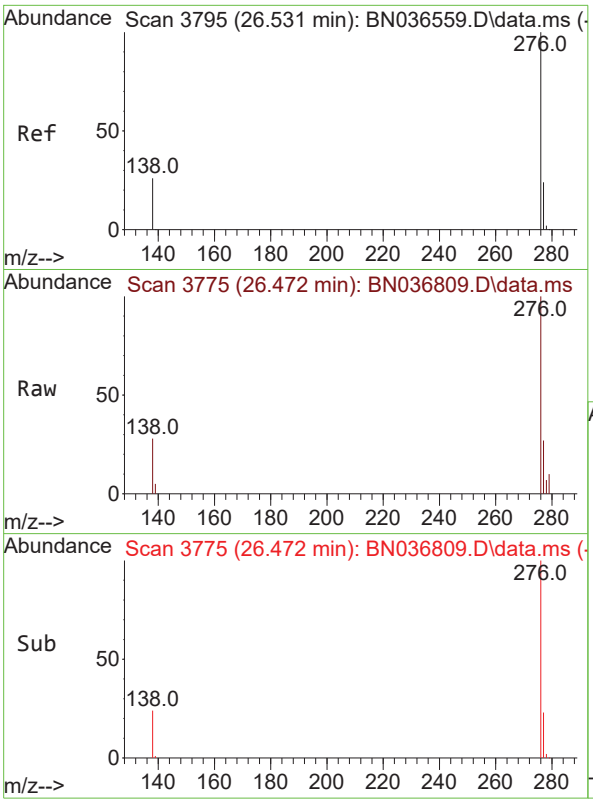



#40
Dibenzo(a,h)anthracene
Concen: 0.330 ng
RT: 25.805 min Scan# 3547
Delta R.T. -0.050 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:278 Resp: 3655

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 24.4 | 20.8 | 31.2 |
| 279 | 35.9 | 28.8 | 43.2 |

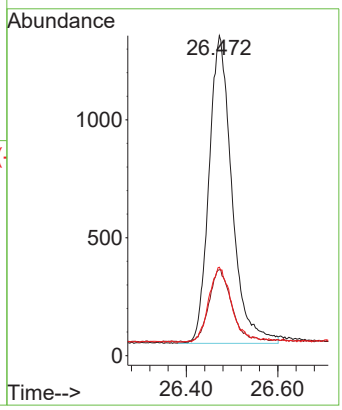





#41
Benzo(g,h,i)perylene
Concen: 0.358 ng
RT: 26.472 min Scan# 3
Delta R.T. -0.058 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:276 Resp: 454

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.8 | 22.2 | 33.4 |
| 138 | 27.6 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

**Manual Integrations**
**APPROVED**

Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036809.D
Acq On : 31 Mar 2025 10:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 12:10:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 86 | -0.03 |
| 2 | | 1,4-Dioxane | 0.444 | 0.454 | -2.3 | 78 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.888 | 1.1 | 81 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.818 | 12.2 | 71 | -0.03 |
| 5 | S | Phenol-d6 | 1.152 | 0.953 | 17.3 | 72 | -0.04 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.001 | 15.9 | 72 | -0.03 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 91 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.363 | 16.6 | 80 | -0.03 |
| 9 | | Naphthalene | 1.177 | 1.042 | 11.5 | 79 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.245 | 11.6 | 76 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.537 | 9.7 | 81 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.675 | 9.9 | 81 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 92 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.161 | 11.5 | 80 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 1.979 | 15.0 | 76 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.650 | 12.6 | 79 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.130 | 8.6 | 82 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.513 | 9.5 | 79 | -0.03 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 97 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.070 | 18.6 | 88 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.222 | 11.6 | 79 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.273 | 9.9 | 79 | -0.02 |
| 23 | | Atrazine | 0.201 | 0.189 | 6.0 | 86 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.128 | 7.2 | 90 | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.133 | 5.6 | 85 | -0.02 |
| 26 | | Anthracene | 1.083 | 0.961 | 11.3 | 81 | -0.04 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 0.990 | 3.4 | 86 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.307 | 3.0 | 87 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 112 | -0.02 |
| 30 | | Pyrene | 1.956 | 1.701 | 13.0 | 89 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.798 | 16.7 | 87 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.172 | 15.7 | 91 | -0.03 |
| 33 | | Chrysene | 1.520 | 1.448 | 4.7 | 100 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.903 | 8.8 | 97 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 111 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.272 | 11.9 | 92 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.393 | 4.3 | 100 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.454 | 4.8 | 100 | -0.03 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.186 | 3.3 | 101 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 0.926 | 17.6 | 89 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.152 | 10.4 | 93 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036809.D
Acq On : 31 Mar 2025 10:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 12:10:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 86 | -0.03 |
| 2 | | 1,4-Dioxane | 0.400 | 0.409 | -2.2 | 78 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.396 | 1.0 | 81 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.351 | 12.3 | 71 | -0.03 |
| 5 | S | Phenol-d6 | 0.400 | 0.331 | 17.3 | 72 | -0.04 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.336 | 16.0 | 72 | -0.03 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 91 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.333 | 16.8 | 80 | -0.03 |
| 9 | | Naphthalene | 0.400 | 0.354 | 11.5 | 79 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.354 | 11.5 | 76 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.361 | 9.8 | 81 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.361 | 9.8 | 81 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 92 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.355 | 11.3 | 80 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.340 | 15.0 | 76 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.350 | 12.5 | 79 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.366 | 8.5 | 82 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.362 | 9.5 | 79 | -0.03 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 97 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.419 | -4.7 | 88 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.355 | 11.3 | 79 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.361 | 9.8 | 79 | -0.02 |
| 23 | | Atrazine | 0.400 | 0.376 | 6.0 | 86 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.371 | 7.3 | 90 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.378 | 5.5 | 85 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.355 | 11.3 | 81 | -0.04 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.386 | 3.5 | 86 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.388 | 3.0 | 87 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 112 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.348 | 13.0 | 89 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.333 | 16.8 | 87 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.337 | 15.8 | 91 | -0.03 |
| 33 | | Chrysene | 0.400 | 0.381 | 4.8 | 100 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.365 | 8.8 | 97 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 111 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.352 | 12.0 | 92 | -0.06 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.383 | 4.3 | 100 | -0.03 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.381 | 4.8 | 100 | -0.03 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.387 | 3.3 | 101 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.330 | 17.5 | 89 | -0.05 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.358 | 10.5 | 93 | -0.06 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/31/2025 15:08

Lab File ID: BN036815.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

GC Column: ZB-GR ID: 0.25 (mm)

| COMPOUND | RRF | RRF0.4 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| 2-Methylnaphthalene-d10 | 0.595 | 0.543 | | -8.7 | 50.0 |
| Fluoranthene-d10 | 1.025 | 0.994 | | -3.0 | 50.0 |
| 2-Fluorophenol | 0.932 | 0.839 | | -10.0 | 50.0 |
| Phenol-d6 | 1.152 | 0.976 | | -15.3 | 50.0 |
| Nitrobenzene-d5 | 0.435 | 0.348 | | -20.0 | 50.0 |
| 2-Fluorobiphenyl | 2.327 | 1.957 | | -15.9 | 50.0 |
| 2,4,6-Tribromophenol | 0.182 | 0.159 | | -12.6 | 50.0 |
| Terphenyl-d14 | 0.958 | 0.842 | | -12.1 | 50.0 |
| 1,4-Dioxane | 0.444 | 0.447 | | 0.7 | 50.0 |

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036815.D
Acq On : 31 Mar 2025 15:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 15:30:13 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.696 | 152 | 1563 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4089 | 0.400 | ng | | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2524 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.087 | 188 | 5032 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 3863 | 0.400 | ng | | -0.02 |
| 35) Perylene-d12 | 23.525 | 264 | 3435 | 0.400 | ng | | #-0.03 |
| **System Monitoring Compounds** | | | | | | | |
| 4) 2-Fluorophenol | 5.283 | 112 | 1311 | 0.360 | ng | | -0.03 |
| 5) Phenol-d6 | 6.865 | 99 | 1525 | 0.339 | ng | | -0.04 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1424 | 0.320 | ng | | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2219 | 0.365 | ng | | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 402 | 0.351 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 4939 | 0.336 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5000 | 0.388 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 3254 | 0.352 | ng | | -0.02 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 698 | 0.403 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.536 | 42 | 1430 | 0.408 | ng | | 93 |
| 6) bis(2-Chloroethyl)ether | 7.118 | 93 | 1597 | 0.343 | ng | | 98 |
| 9) Naphthalene | 10.530 | 128 | 4210 | 0.350 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 998 | 0.352 | ng | # | 99 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 2722 | 0.356 | ng | | 99 |
| 16) Acenaphthylene | 14.056 | 152 | 4054 | 0.340 | ng | | 100 |
| 17) Acenaphthene | 14.398 | 154 | 2777 | 0.356 | ng | | 99 |
| 18) Fluorene | 15.393 | 166 | 3732 | 0.354 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 396 | 0.454 | ng | | 85 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1144 | 0.363 | ng | | 94 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1380 | 0.363 | ng | | 95 |
| 23) Atrazine | 16.553 | 200 | 954 | 0.377 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 651 | 0.375 | ng | | 97 |
| 25) Phenanthrene | 17.124 | 178 | 5703 | 0.378 | ng | | 100 |
| 26) Anthracene | 17.223 | 178 | 4933 | 0.362 | ng | | 99 |
| 28) Fluoranthene | 19.150 | 202 | 6761 | 0.399 | ng | | 98 |
| 30) Pyrene | 19.513 | 202 | 6826 | 0.361 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.268 | 228 | 4715 | 0.351 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 5650 | 0.385 | ng | | 100 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 3477 | 0.364 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.800 | 276 | 4428 | 0.357 | ng | | 94 |
| 37) Benzo(b)fluoranthene | 22.850 | 252 | 4732 | 0.379 | ng | | 98 |
| 38) Benzo(k)fluoranthene | 22.897 | 252 | 5156m | 0.393 | ng | | |
| 39) Benzo(a)pyrene | 23.429 | 252 | 4200 | 0.399 | ng | | 97 |
| 40) Dibenzo(a,h)anthracene | 25.811 | 278 | 3277 | 0.340 | ng | | 97 |
| 41) Benzo(g,h,i)perylene | 26.484 | 276 | 4006 | 0.363 | ng | | 97 |

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

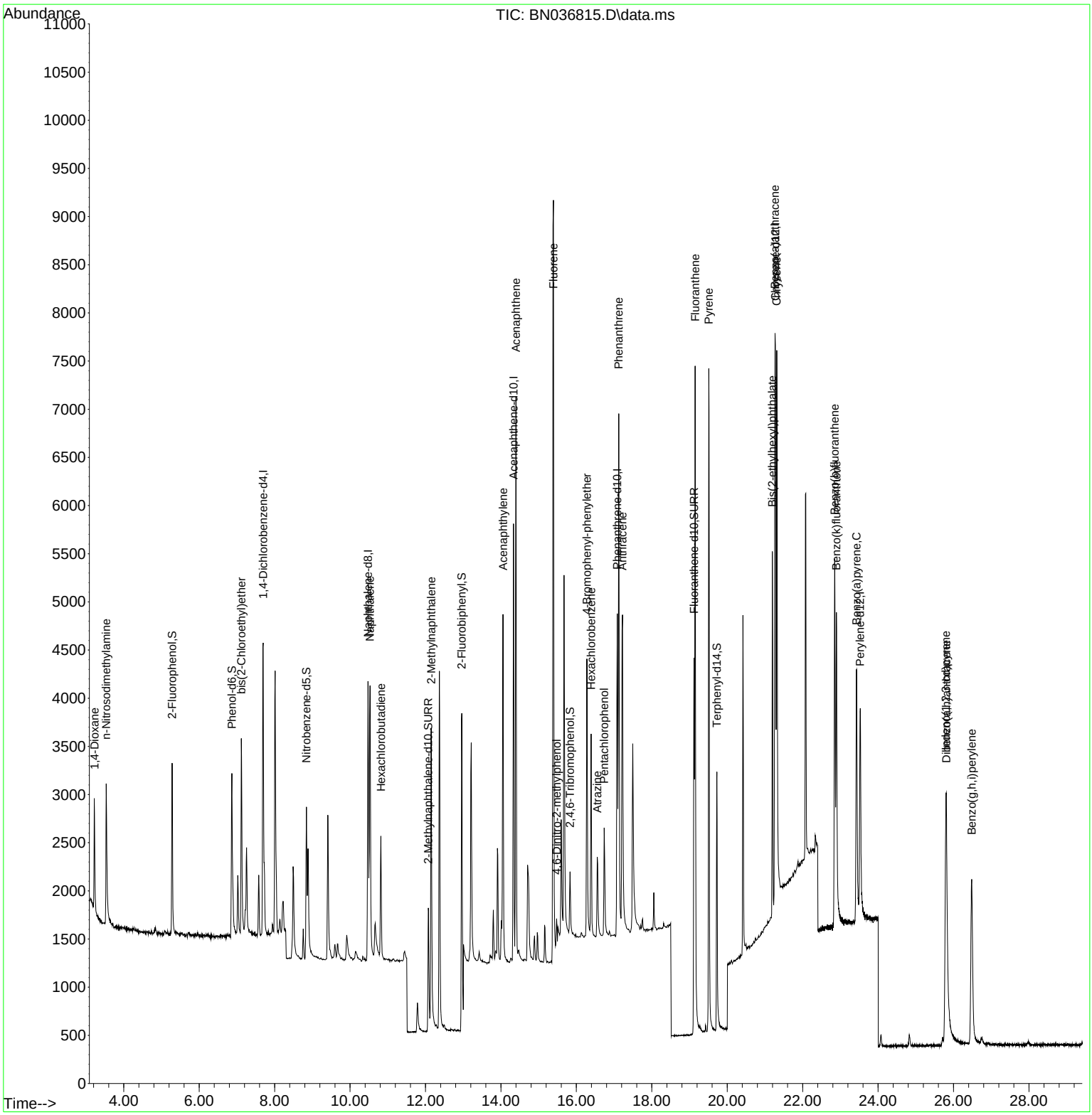
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036815.D
Acq On : 31 Mar 2025 15:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

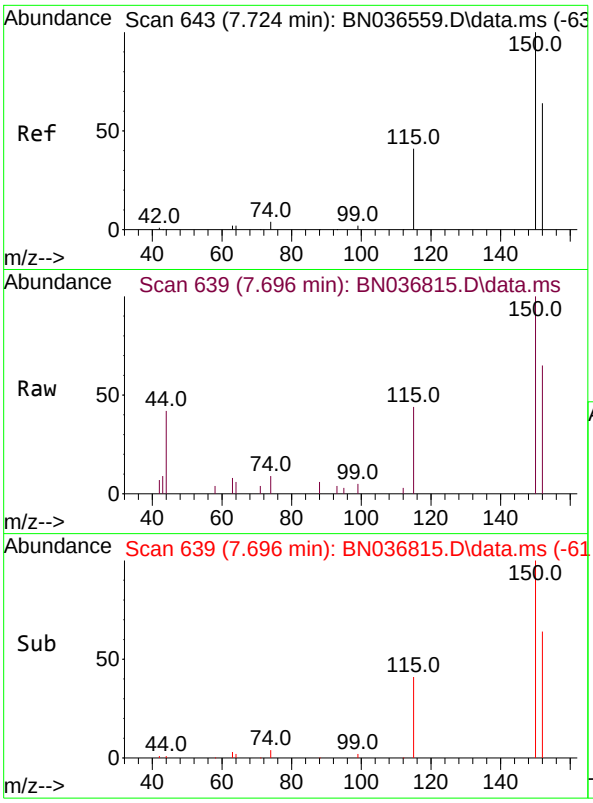
Quant Time: Mar 31 15:30:13 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**

Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

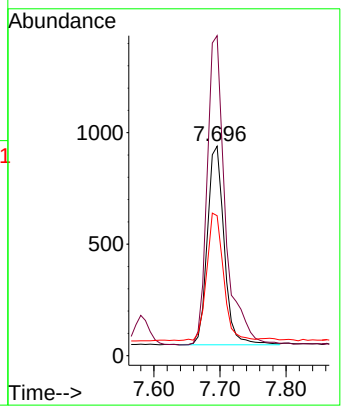





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.696 min Scan# 6
Delta R.T. -0.028 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:152 Resp: 156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.8 | 123.7 | 185.5 |
| 115 | 66.9 | 54.3 | 81.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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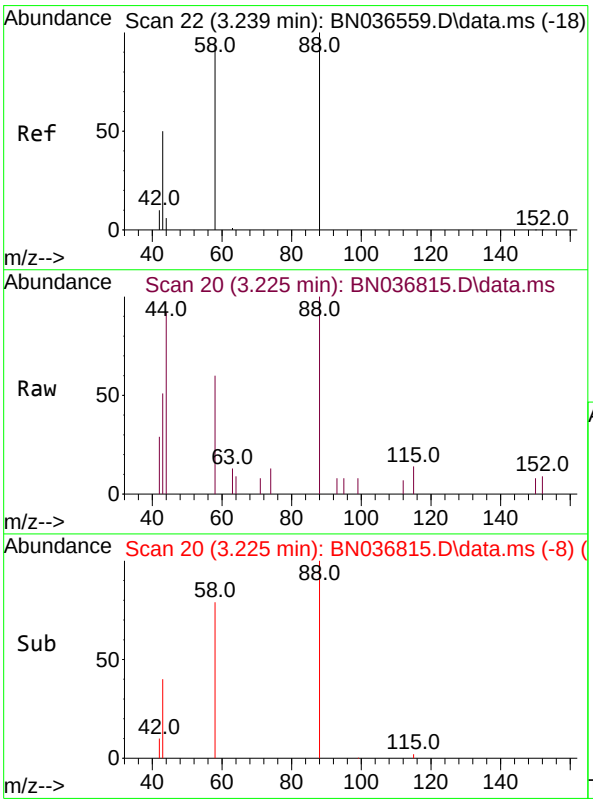
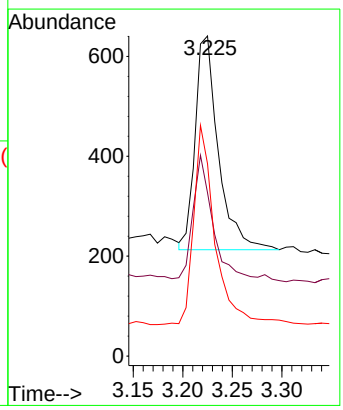
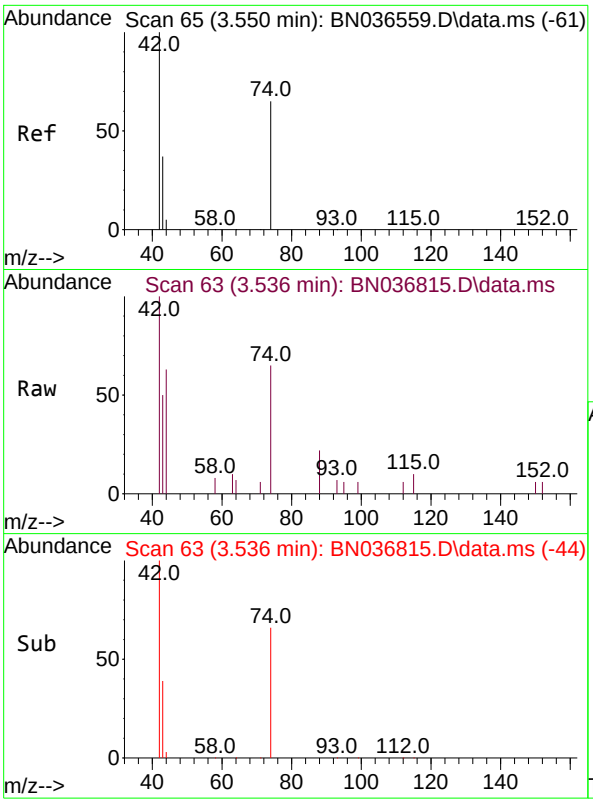



#2
1,4-Dioxane
Concen: 0.403 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 88 Resp: 698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 51.7 | 37.8 | 56.8 |
| 58 | 85.5 | 67.4 | 101.2 |

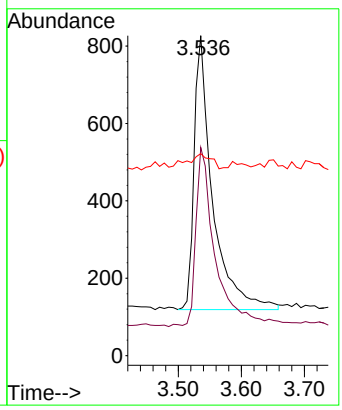





#3
n-Nitrosodimethylamine
Concen: 0.408 ng
RT: 3.536 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 42 Resp: 143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 69.3 | 60.6 | 90.8 |
| 44 | 6.6 | 6.3 | 9.5 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations APPROVED**

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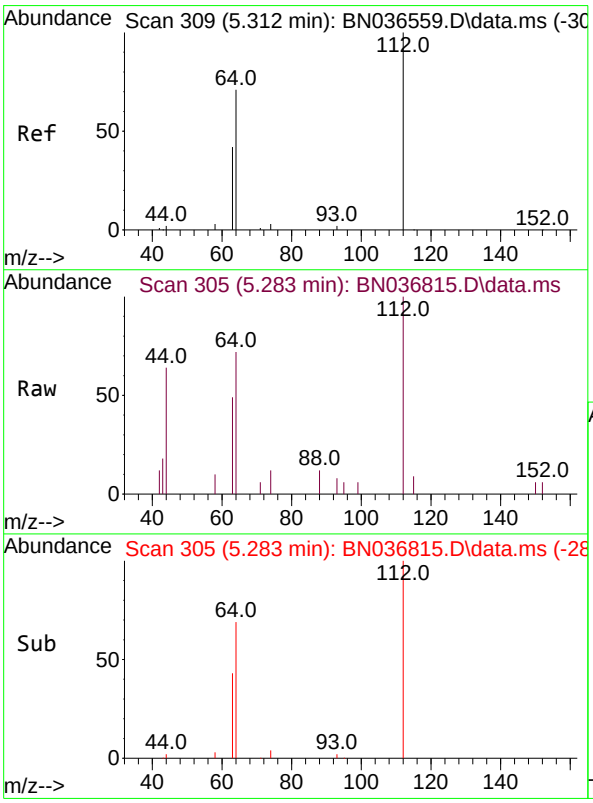
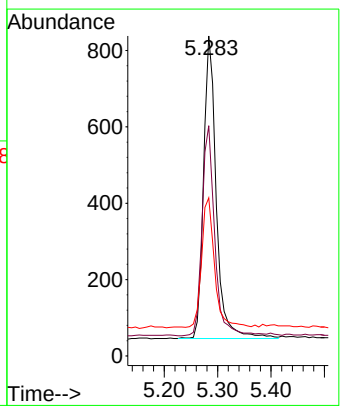
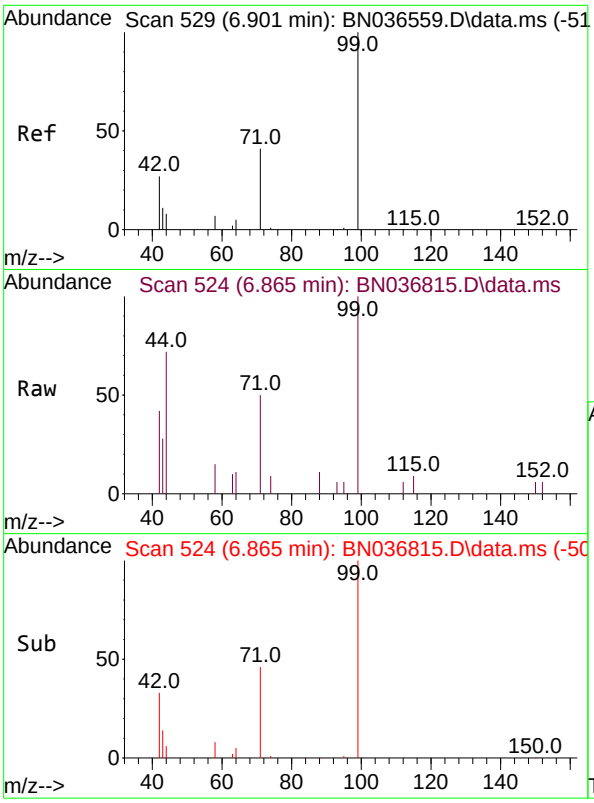



#4
2-Fluorophenol
Concen: 0.360 ng
RT: 5.283 min Scan# 305
Delta R.T. -0.029 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:112 Resp: 1311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.4 | 53.1 | 79.7 |
| 63 | 43.9 | 31.8 | 47.8 |

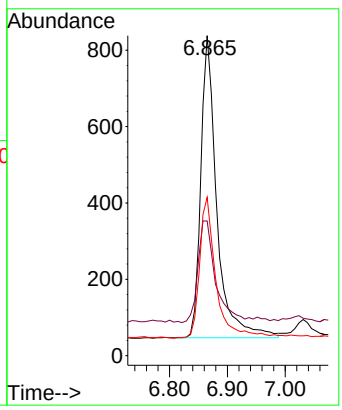





#5
Phenol-d6
Concen: 0.339 ng
RT: 6.865 min Scan# 5
Delta R.T. -0.036 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 99 Resp: 152

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 37.5 | 26.5 | 39.7 |
| 71 | 48.4 | 34.1 | 51.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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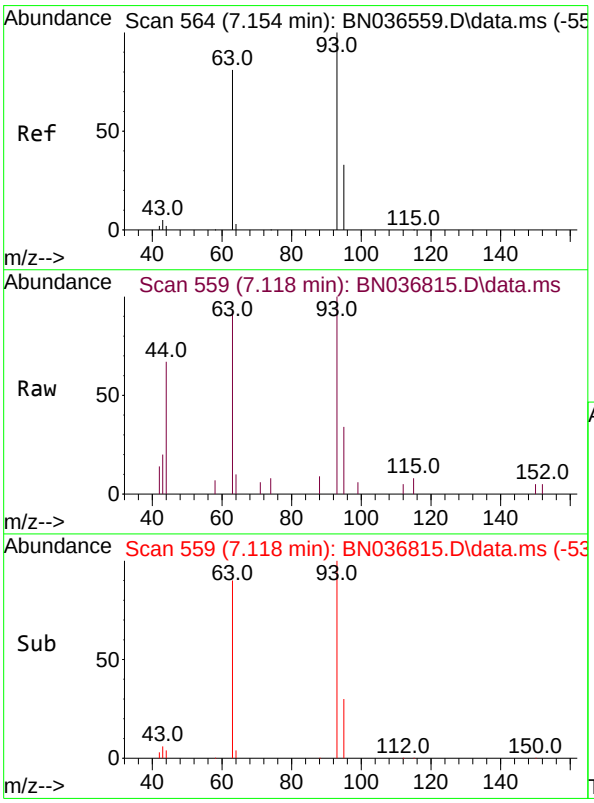
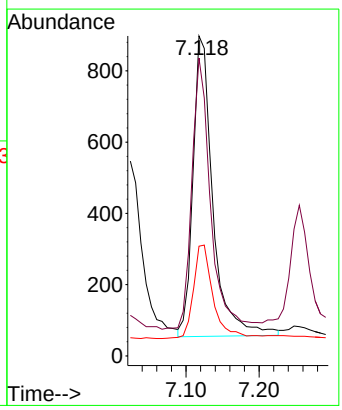
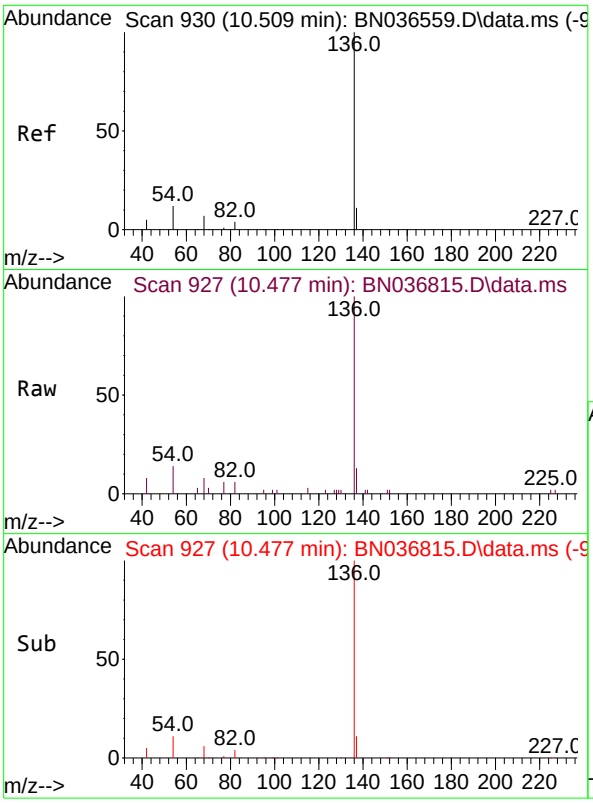



#6
bis(2-Chloroethyl)ether
Concen: 0.343 ng
RT: 7.118 min Scan# 559
Delta R.T. -0.036 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 93 Resp: 1597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 82.9 | 67.7 | 101.5 |
| 95 | 30.6 | 25.6 | 38.4 |

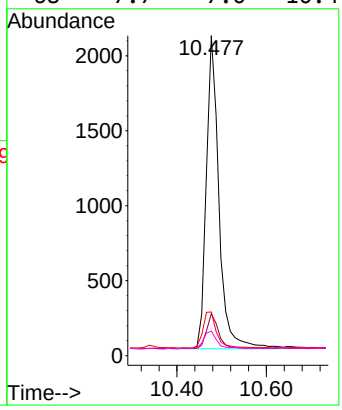





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:136 Resp: 408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 13.1 | 10.3 | 15.5 |
| 54 | 13.6 | 11.5 | 17.3 |
| 68 | 7.7 | 7.0 | 10.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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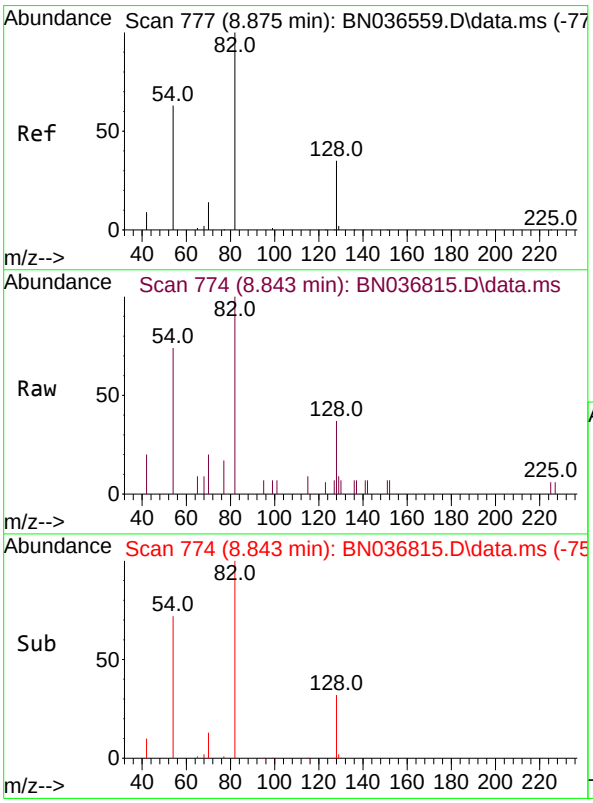
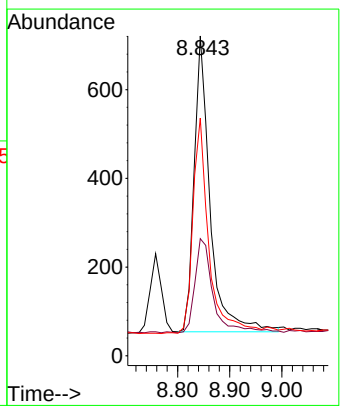
Supervised By :Jagrut Upadhyay 04/01/2025

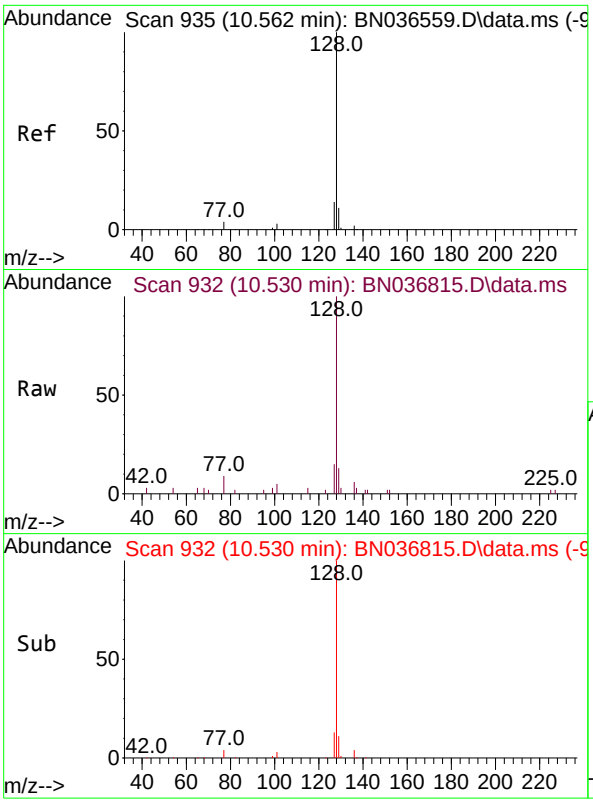



#8
Nitrobenzene-d5
Concen: 0.320 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 82 Resp: 1424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 36.6 | 30.6 | 45.8 |
| 54 | 74.3 | 52.2 | 78.4 |

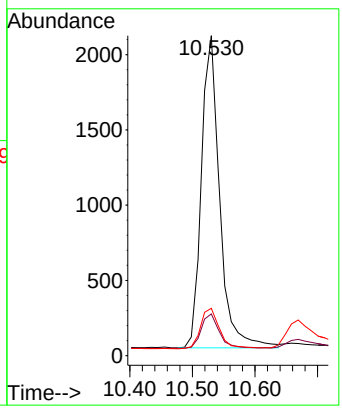





#9
Naphthalene
Concen: 0.350 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:128 Resp: 421

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 13.0 | 9.8 | 14.6 |
| 127 | 14.8 | 11.8 | 17.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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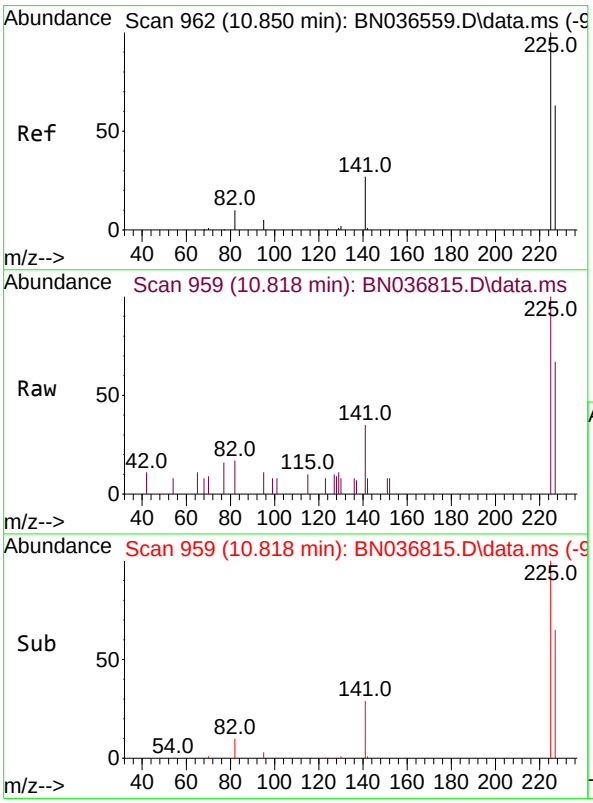
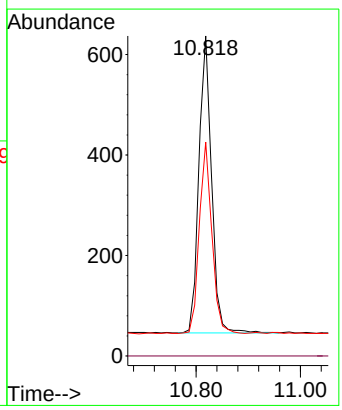
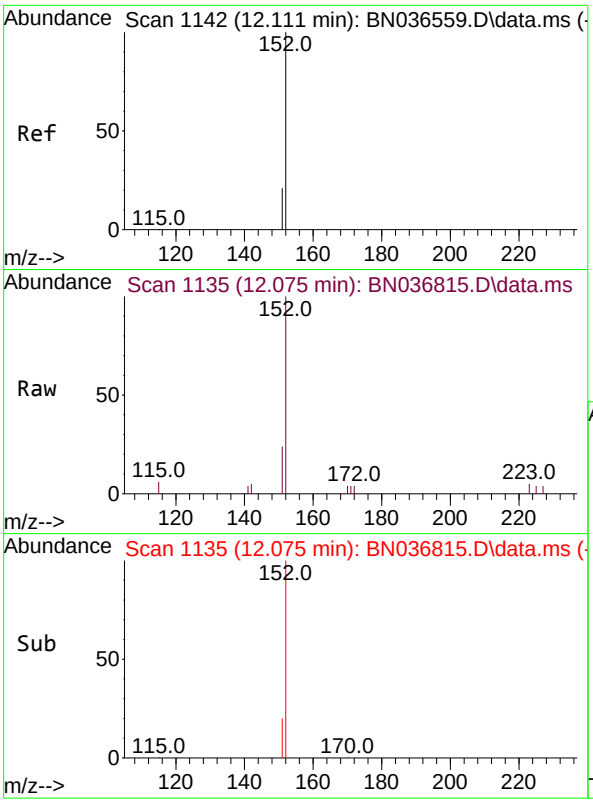



#10
Hexachlorobutadiene
Concen: 0.352 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:225 Resp: 998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.0 | 51.8 | 77.8 |






#11
2-Methylnaphthalene-d10
Concen: 0.365 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:152 Resp: 221

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.2 | 17.0 | 25.6 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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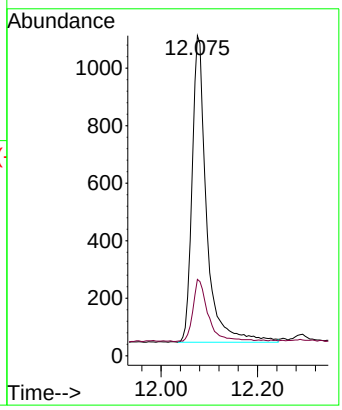
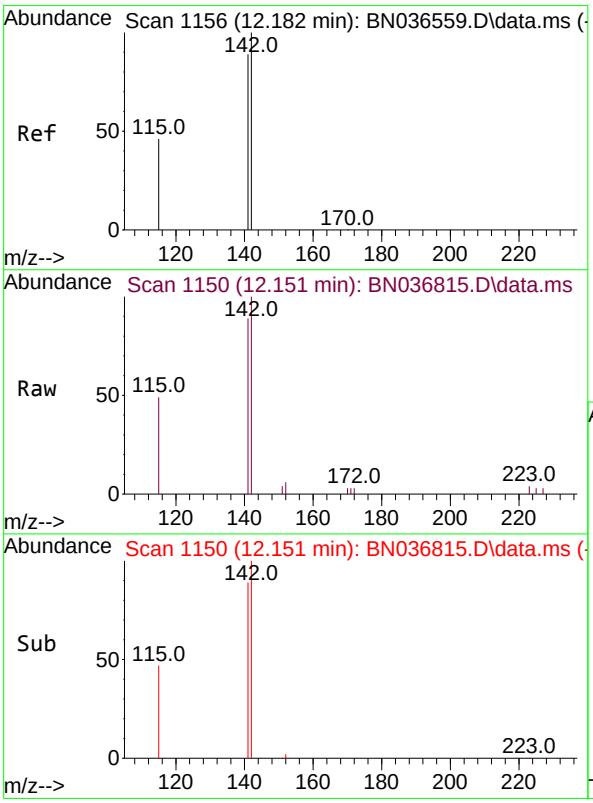
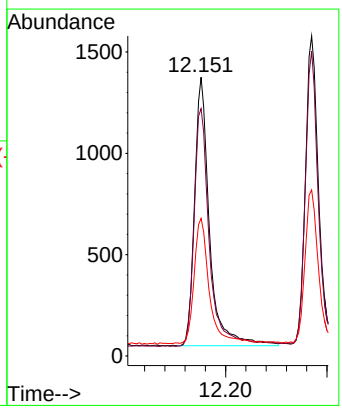


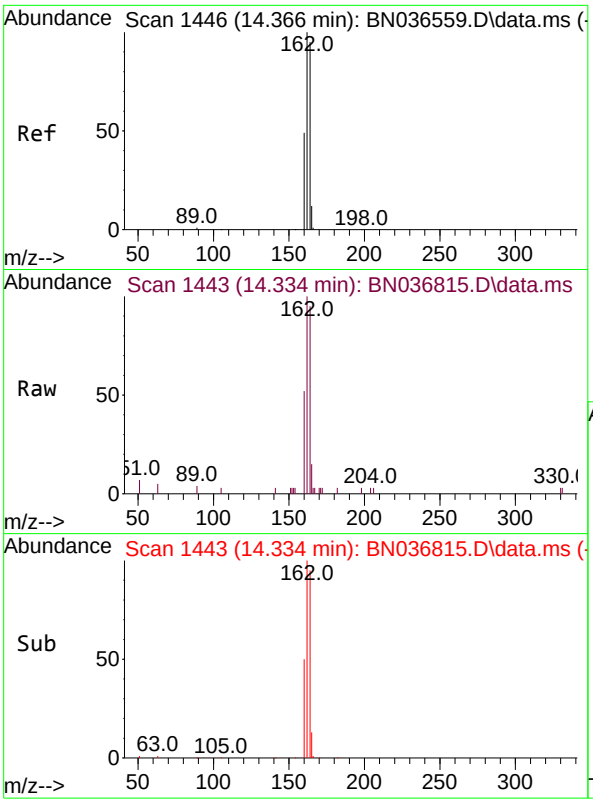




#12
2-Methylnaphthalene
Concen: 0.356 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:142 Resp: 2722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 88.8 | 71.7 | 107.5 |
| 115 | 49.4 | 38.3 | 57.5 |

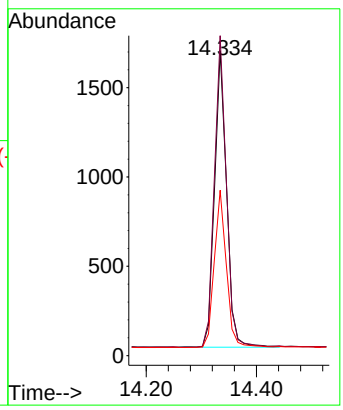





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:164 Resp: 252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.9 | 84.2 | 126.2 |
| 160 | 54.2 | 42.2 | 63.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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Reviewed By :Rahul Chavli 03/31/2025
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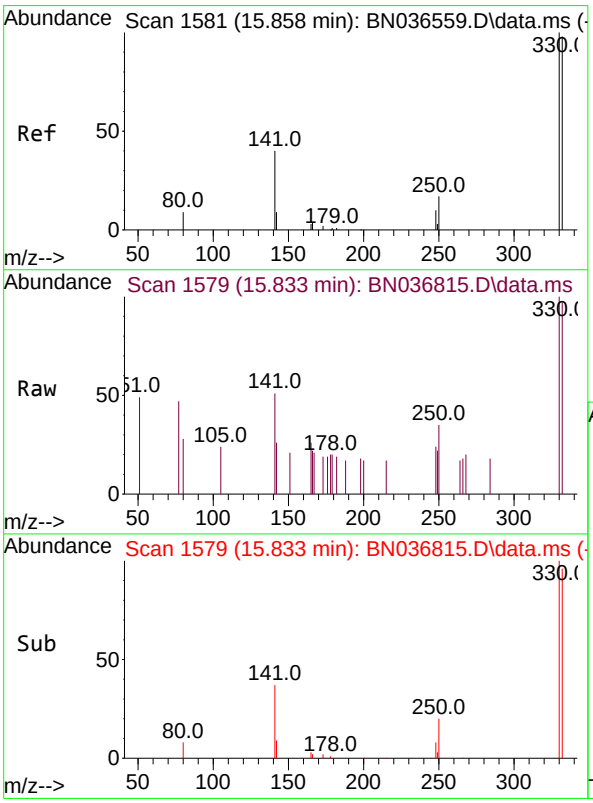
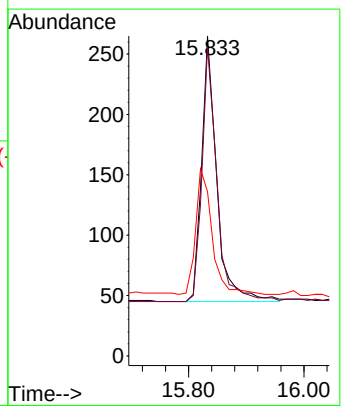
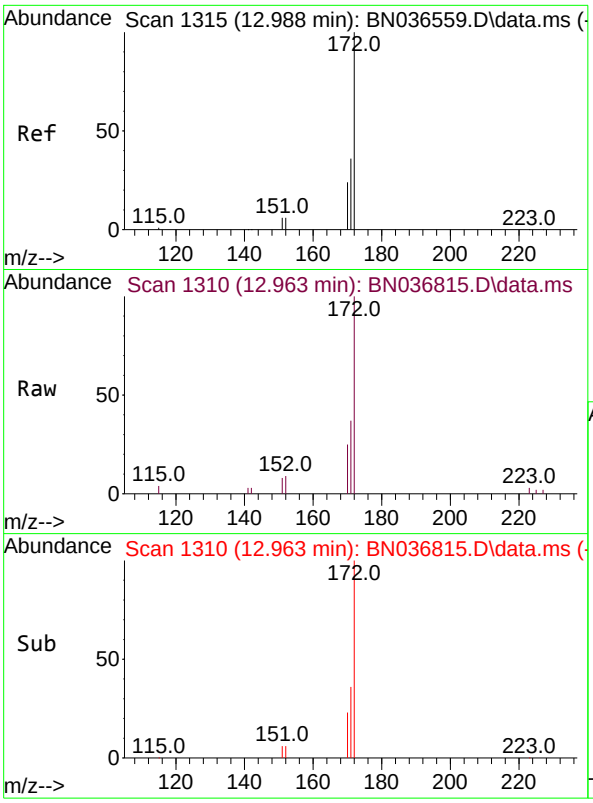



#14
2,4,6-Tribromophenol
Concen: 0.351 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:330 Resp: 402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 94.8 | 75.2 | 112.8 |
| 141 | 51.0 | 43.4 | 65.2 |

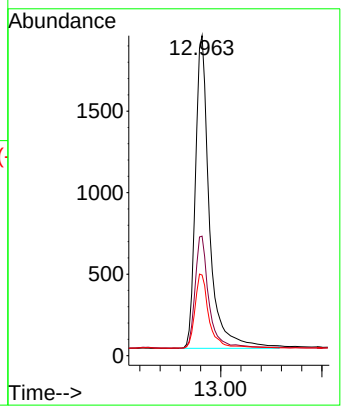





#15
2-Fluorobiphenyl
Concen: 0.336 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:172 Resp: 493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.3 | 29.5 | 44.3 |
| 170 | 25.2 | 20.2 | 30.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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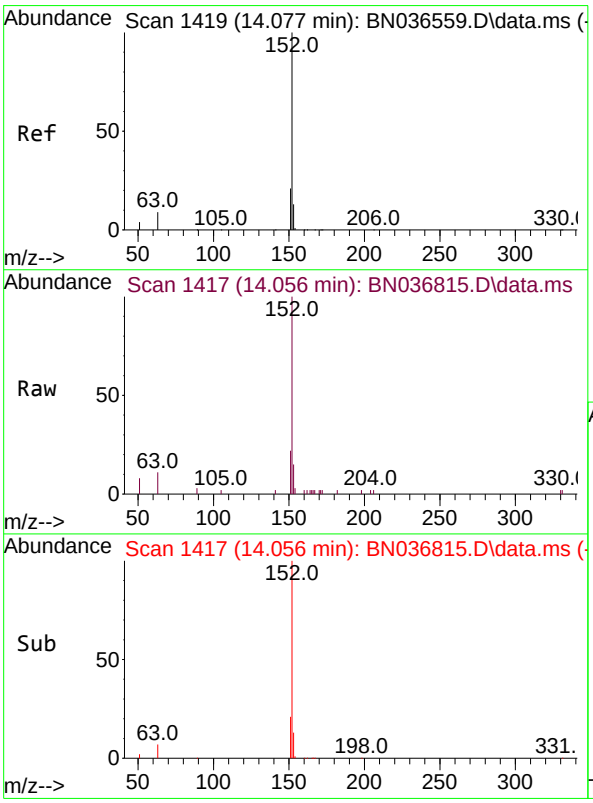
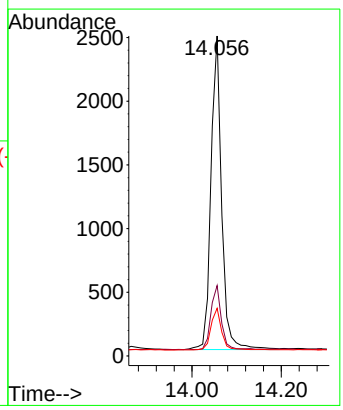
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

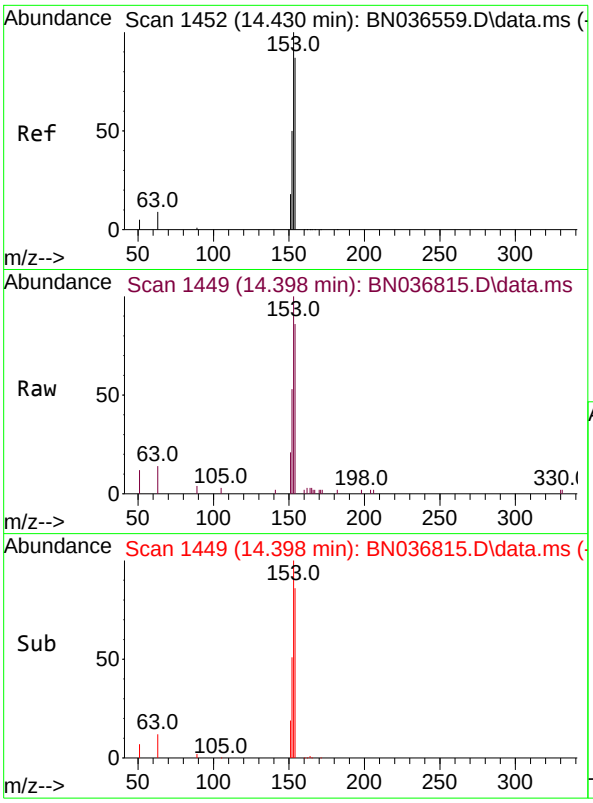



#16
Acenaphthylene
Concen: 0.340 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:152 Resp: 4054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.2 | 16.2 | 24.4 |
| 153 | 13.5 | 10.6 | 15.8 |

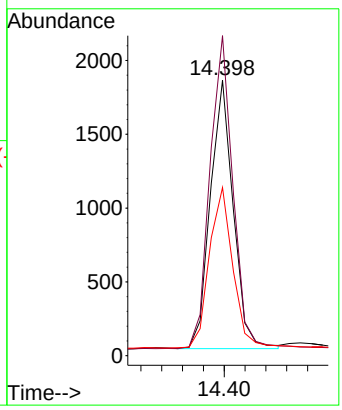





#17
Acenaphthene
Concen: 0.356 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:154 Resp: 277

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.7 | 94.1 | 141.1 |
| 152 | 62.5 | 49.8 | 74.6 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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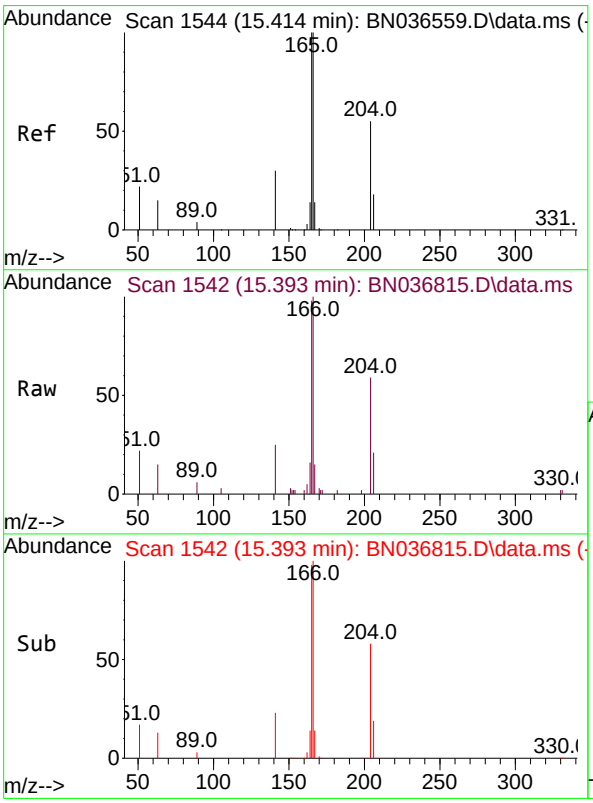
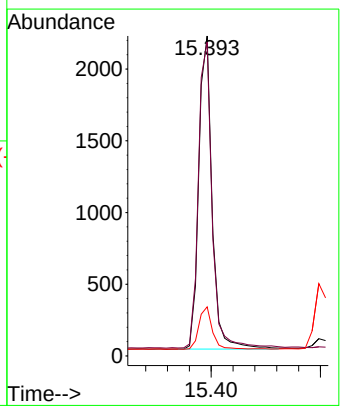
Supervised By :Jagrut Upadhyay 04/01/2025

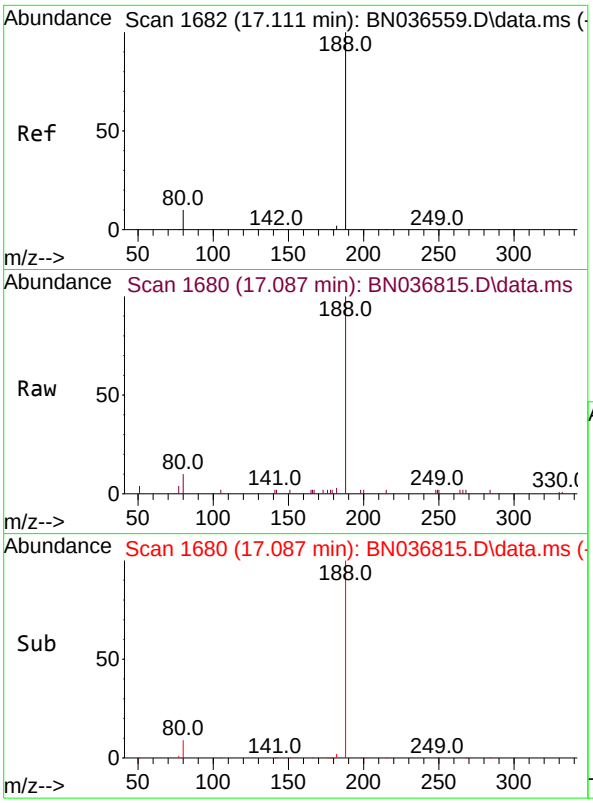



#18
Fluorene
Concen: 0.354 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:166 Resp: 3732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.8 | 79.8 | 119.8 |
| 167 | 13.4 | 10.6 | 15.8 |

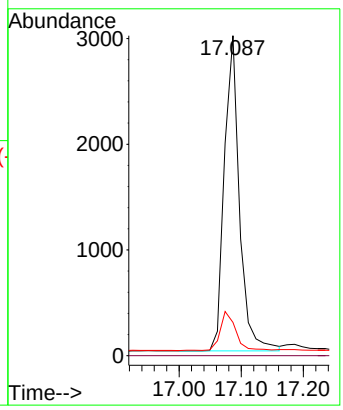





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:188 Resp: 503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 10.4 | 8.8 | 13.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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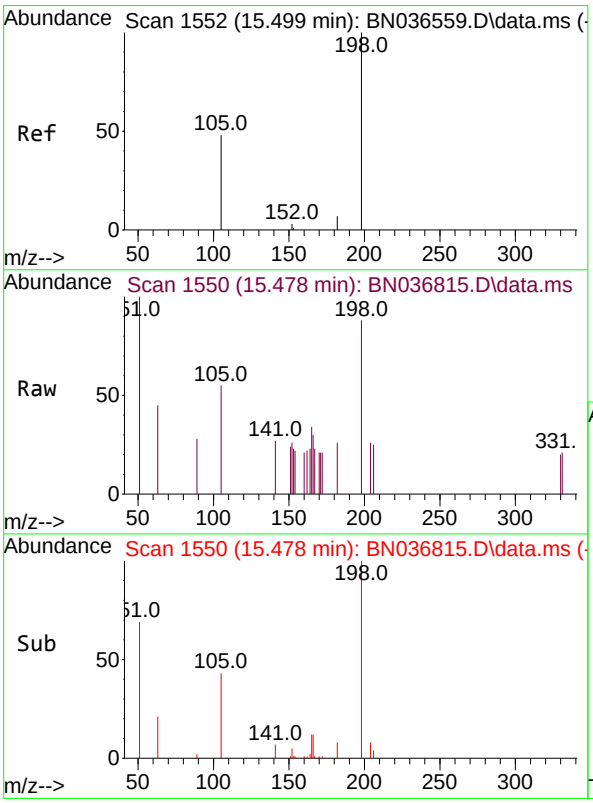
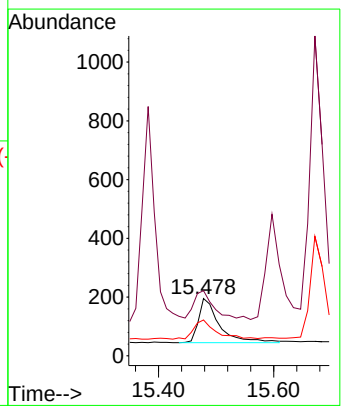
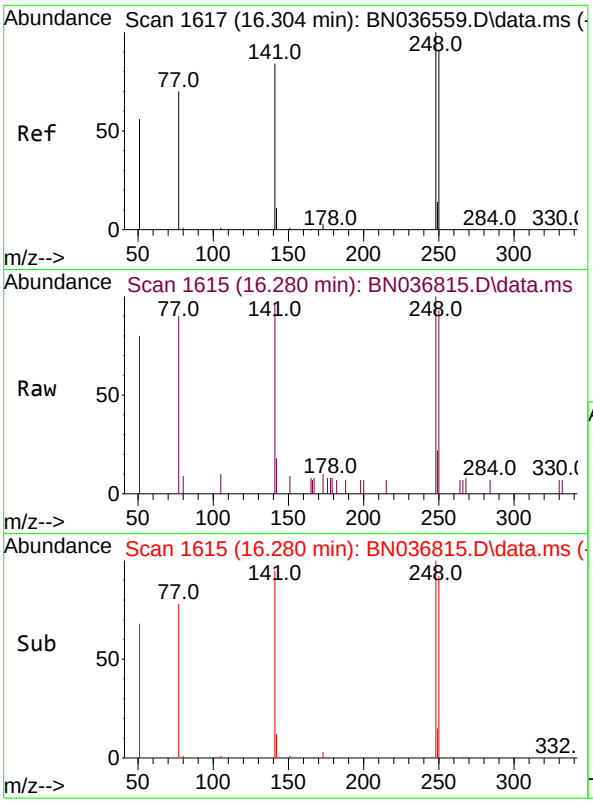



#20
4,6-Dinitro-2-methylphenol
Concen: 0.454 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:198 Resp: 396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 113.8 | 107.9 | 161.9 |
| 105 | 62.6 | 56.2 | 84.2 |






#21
4-Bromophenyl-phenylether
Concen: 0.363 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:248 Resp: 114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 93.1 | 73.0 | 109.6 |
| 141 | 95.8 | 68.6 | 103.0 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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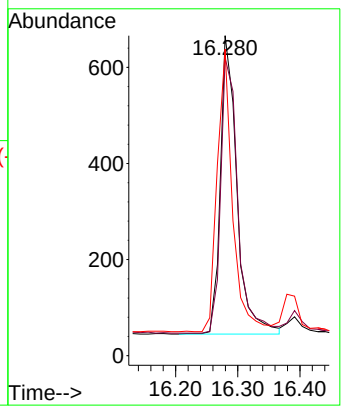
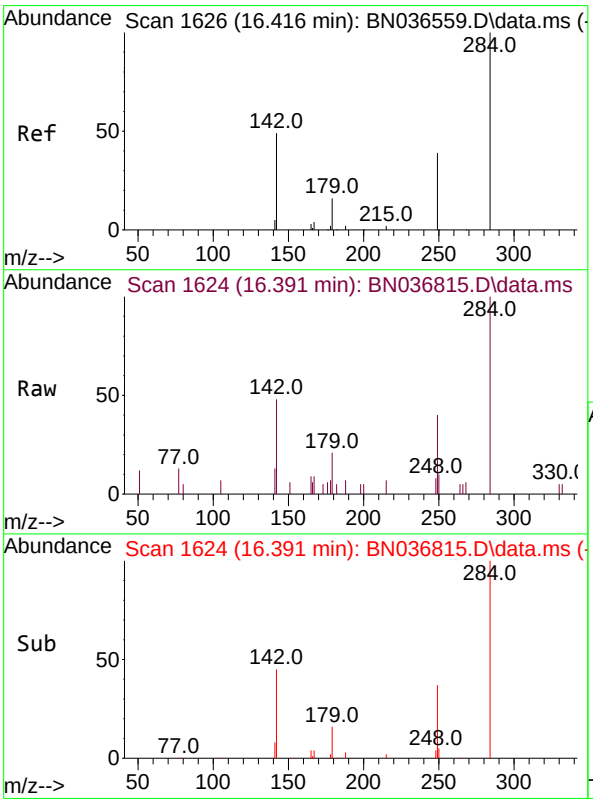
Supervised By :Jagrut Upadhyay 04/01/2025

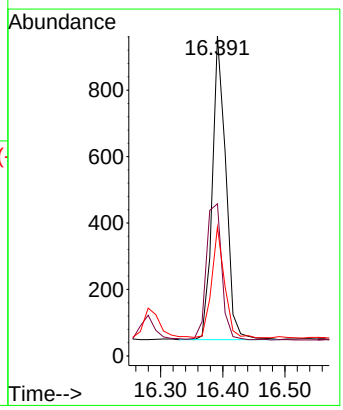


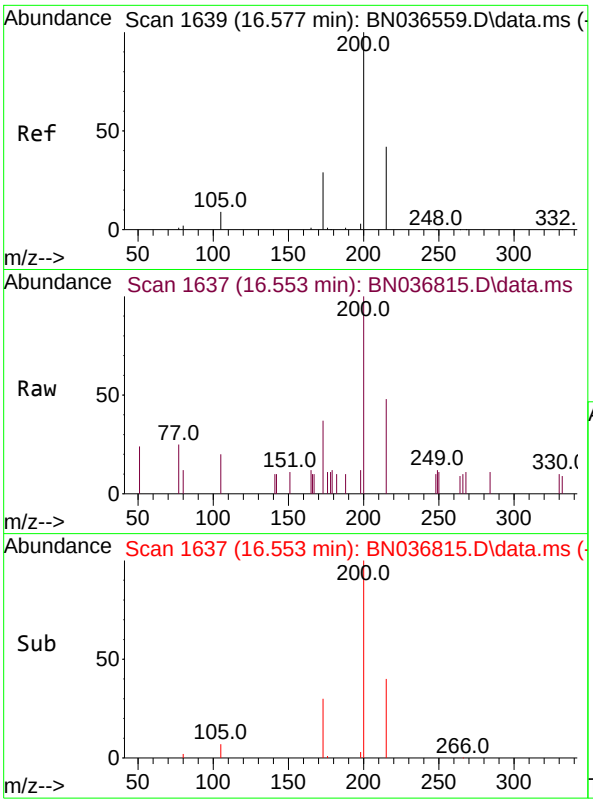




#22
Hexachlorobenzene
Concen: 0.363 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:284 Resp: 1380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 51.9 | 37.0 | 55.4 |
| 249 | 34.7 | 28.1 | 42.1 |

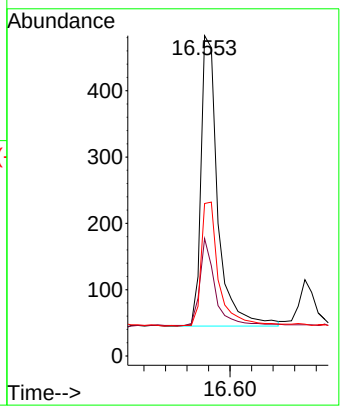





#23
Atrazine
Concen: 0.377 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:200 Resp: 954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.6 | 27.3 | 40.9 |
| 215 | 47.6 | 36.8 | 55.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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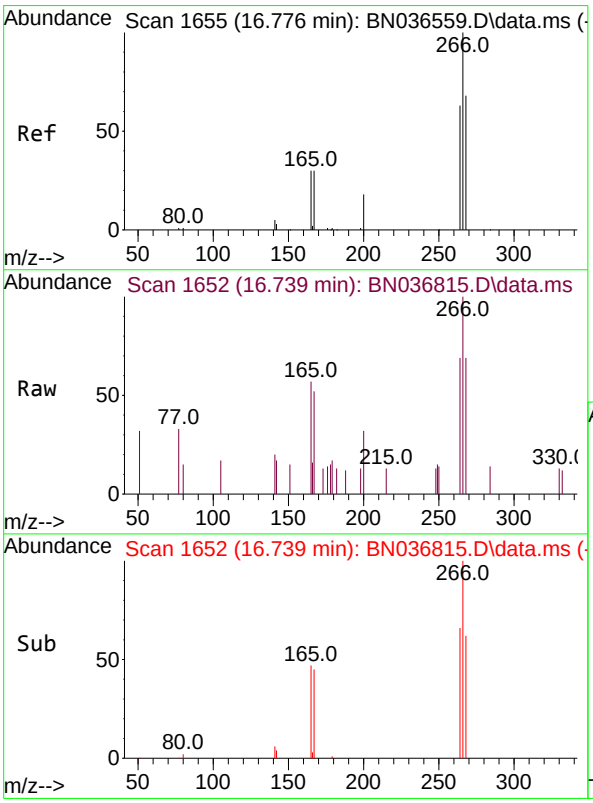
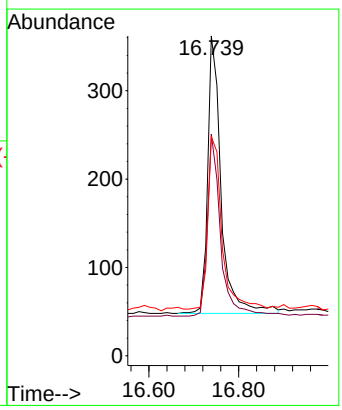
Supervised By :Jagrut Upadhyay 04/01/2025

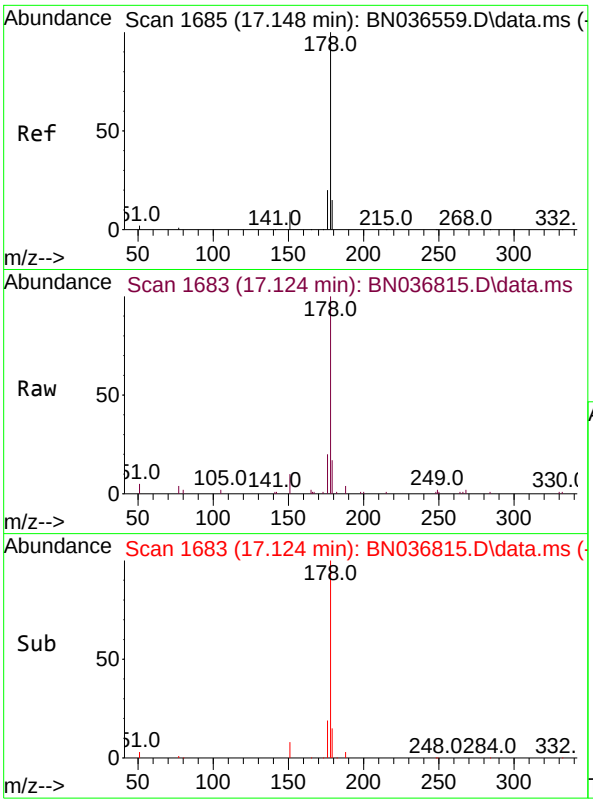



#24
Pentachlorophenol
Concen: 0.375 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:266 Resp: 651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 64.8 | 49.6 | 74.4 |
| 268 | 65.4 | 50.9 | 76.3 |

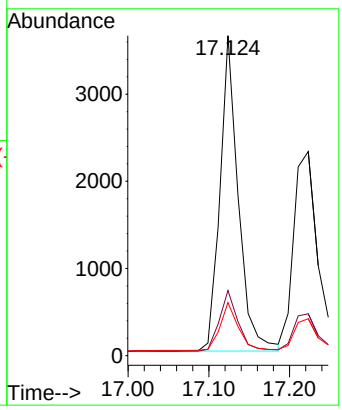





#25
Phenanthrene
Concen: 0.378 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:178 Resp: 570

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.7 | 12.2 | 18.4 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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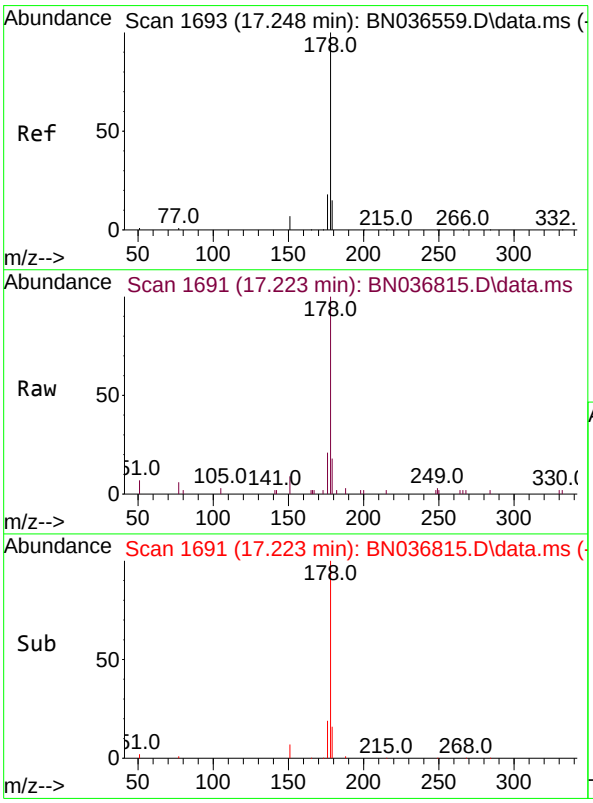
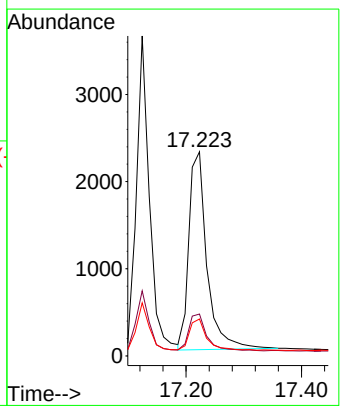
Supervised By :Jagrut Upadhyay 04/01/2025

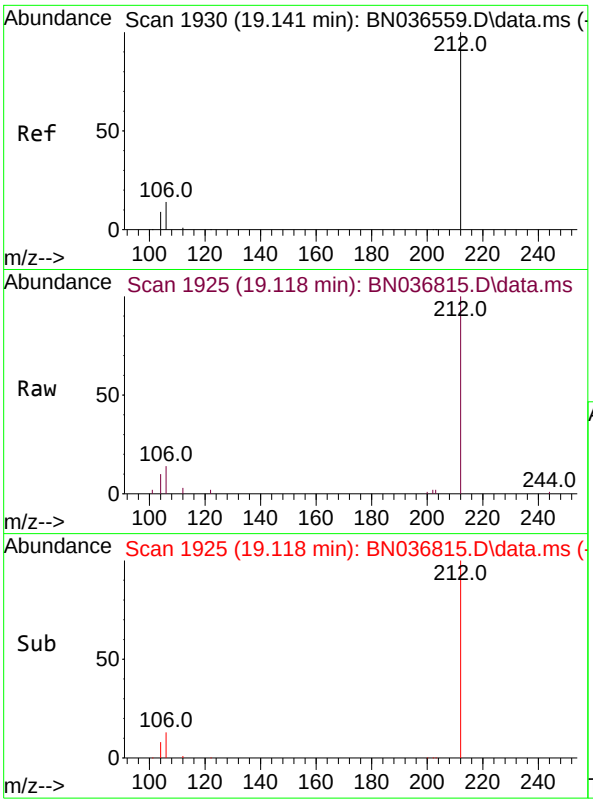



#26
Anthracene
Concen: 0.362 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:178 Resp: 4933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.9 | 15.4 | 23.2 |
| 179 | 15.6 | 12.6 | 18.8 |

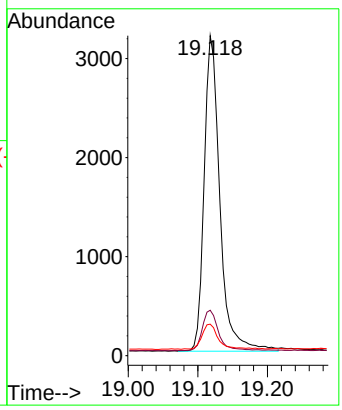





#27
Fluoranthene-d10
Concen: 0.388 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:212 Resp: 500

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.2 | 11.8 | 17.6 |
| 104 | 8.4 | 7.3 | 10.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
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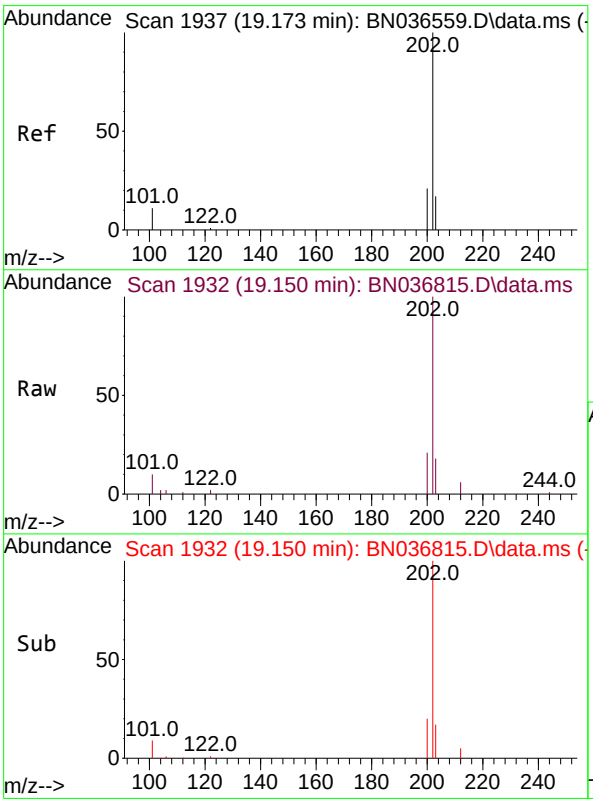
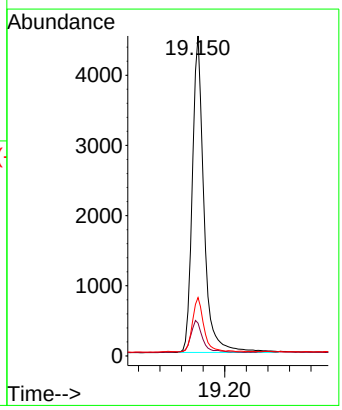
Supervised By :Jagrut Upadhyay 04/01/2025

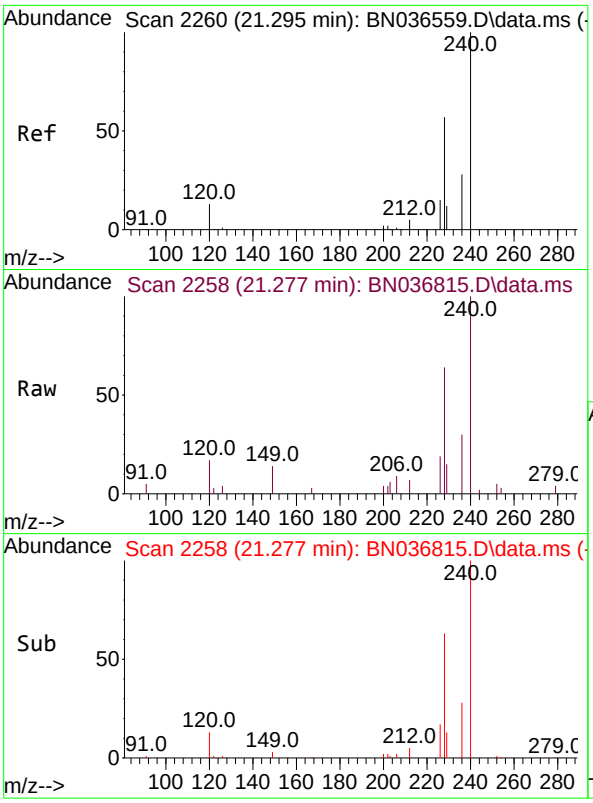



#28
Fluoranthene
Concen: 0.399 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:202 Resp: 6761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.4 | 9.4 | 14.0 |
| 203 | 16.5 | 13.5 | 20.3 |






#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:240 Resp: 386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 17.3 | 14.6 | 22.0 |
| 236 | 30.2 | 24.1 | 36.1 |

**Manual Integrations**
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Reviewed By :Rahul Chavli 03/31/2025
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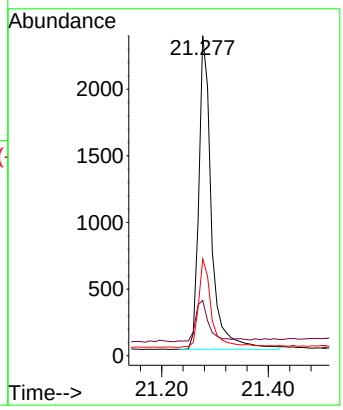
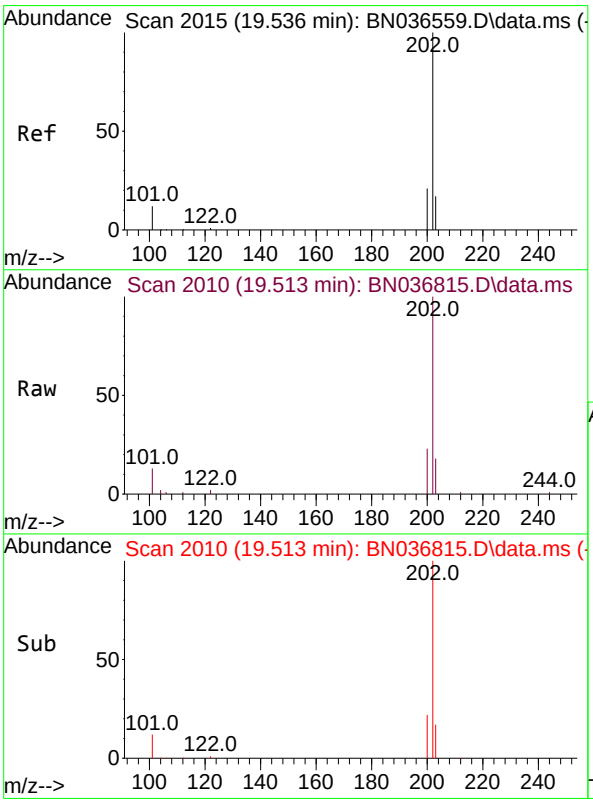
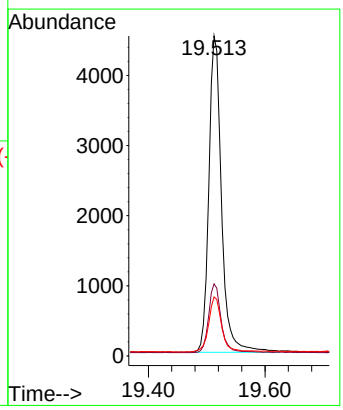


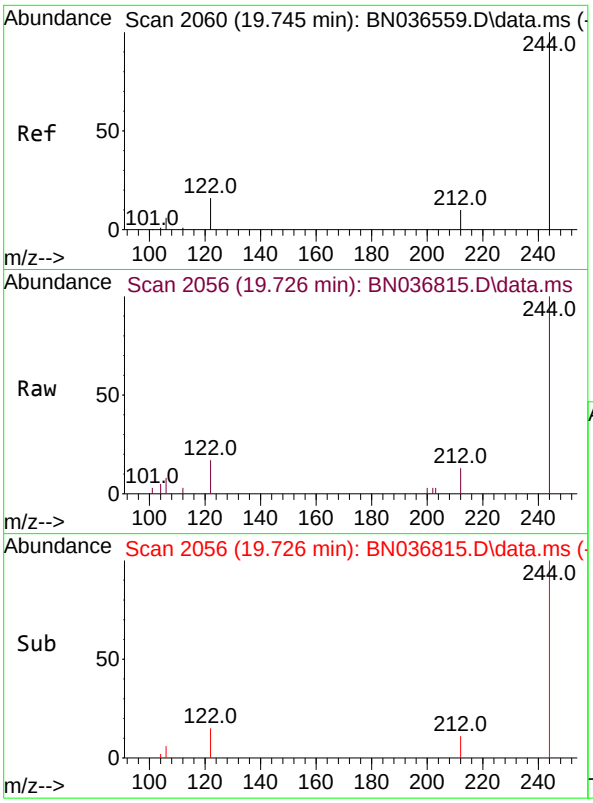




#30
Pyrene
Concen: 0.361 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:202 Resp: 6826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.6 | 17.1 | 25.7 |
| 203 | 17.8 | 14.1 | 21.1 |

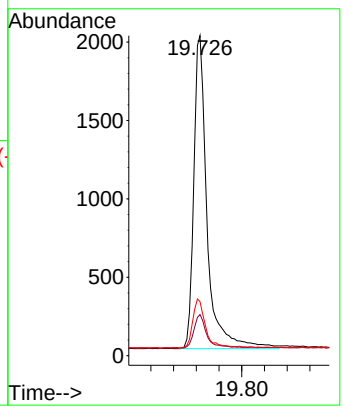





#31
Terphenyl-d14
Concen: 0.352 ng
RT: 19.726 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:244 Resp: 325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.9 | 9.6 | 14.4 |
| 122 | 16.9 | 13.9 | 20.9 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

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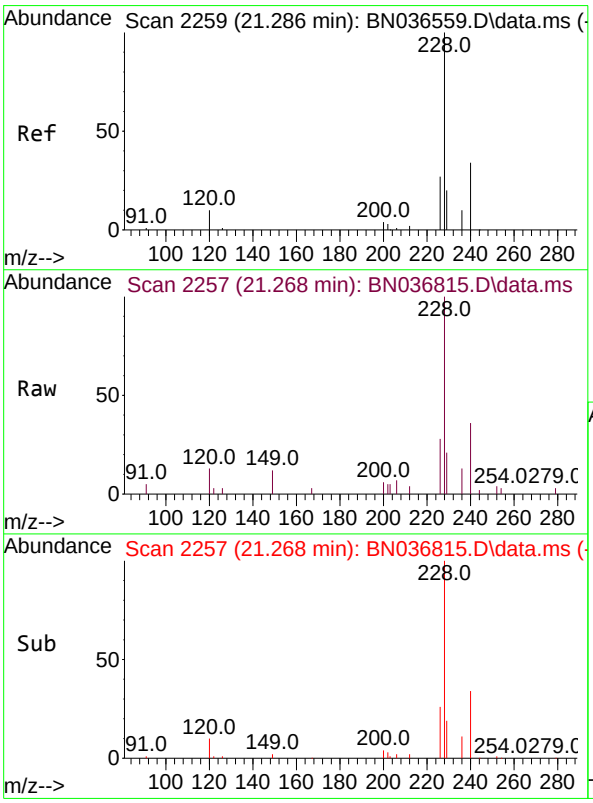
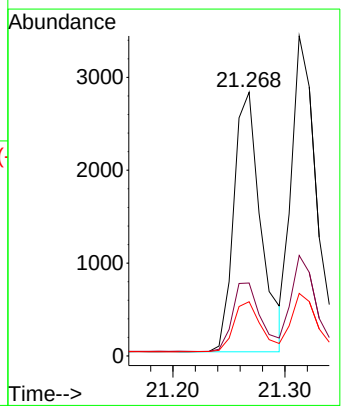
Supervised By :Jagrut Upadhyay 04/01/2025

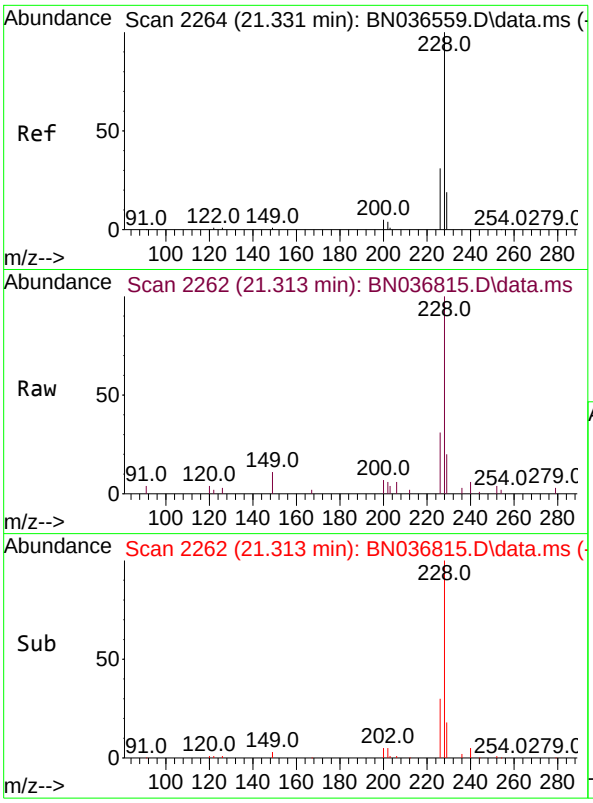



#32
Benzo(a)anthracene
Concen: 0.351 ng
RT: 21.268 min Scan# 2257
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:228 Resp: 4715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 27.7 | 22.5 | 33.7 |
| 229 | 20.6 | 16.6 | 25.0 |

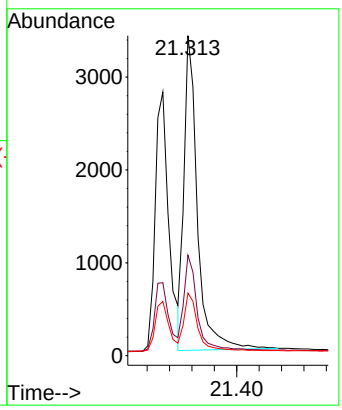





#33
Chrysene
Concen: 0.385 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:228 Resp: 565

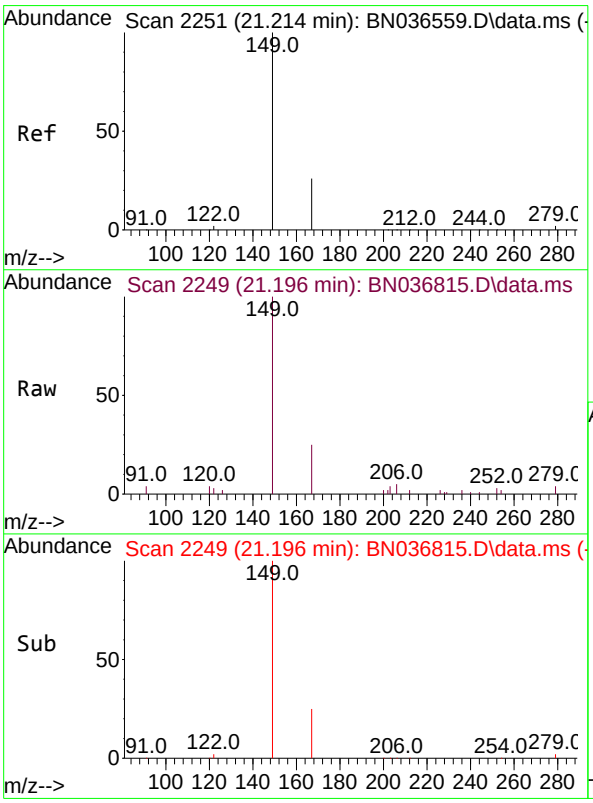
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.4 | 25.3 | 37.9 |
| 229 | 19.6 | 15.8 | 23.8 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

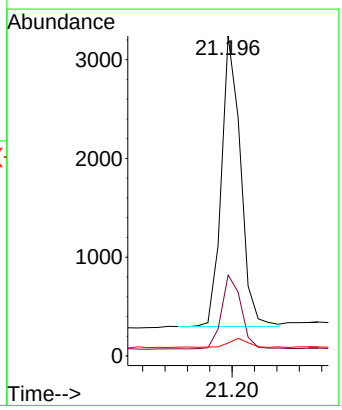
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

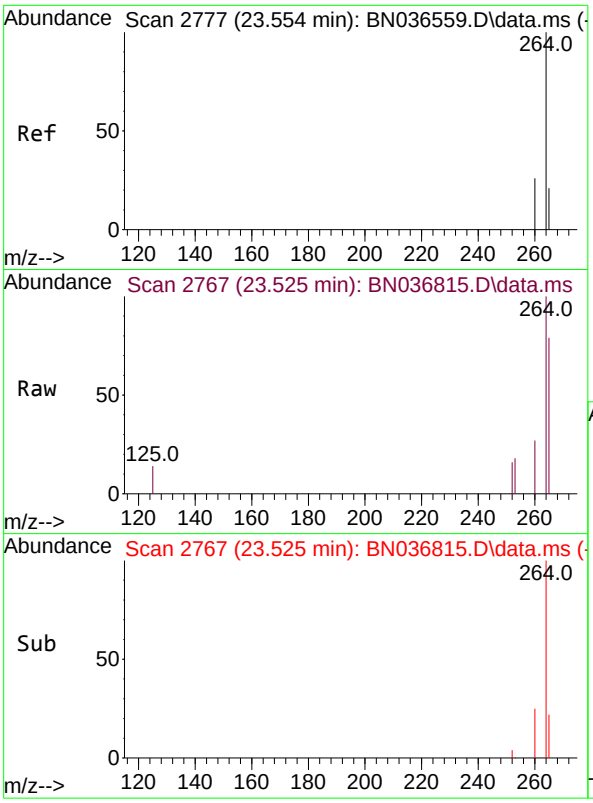



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.364 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:149 Resp: 3477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.4 | 20.7 | 31.1 |
| 279 | 3.1 | 3.6 | 5.4# |






#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

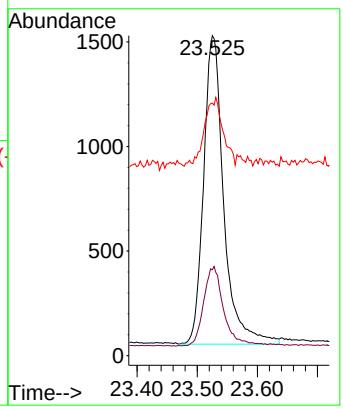
Tgt Ion:264 Resp: 343

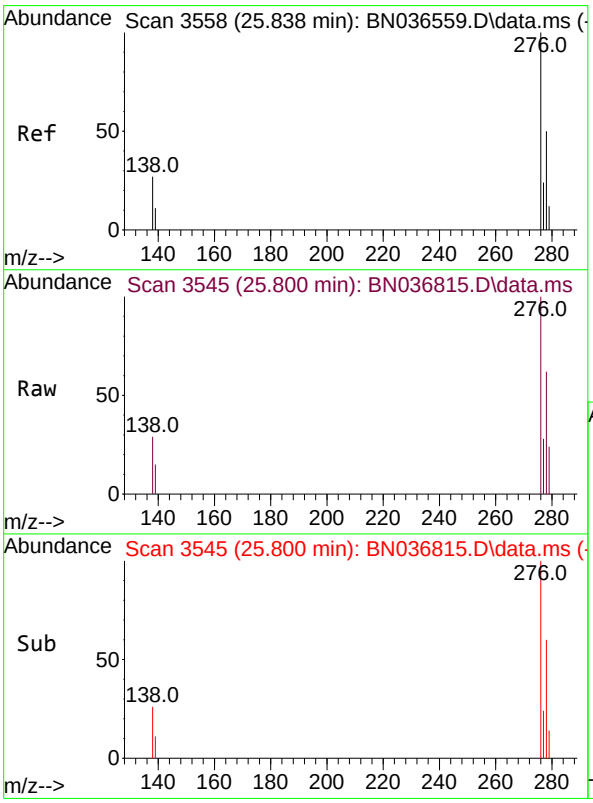
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.9 | 22.6 | 33.8 |
| 265 | 79.0 | 88.1 | 132.1 |

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

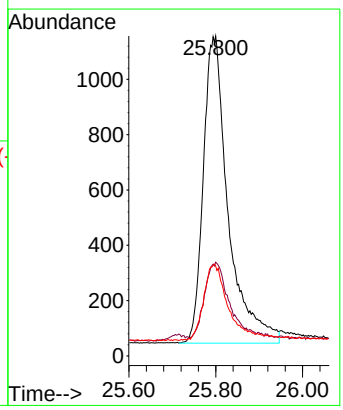


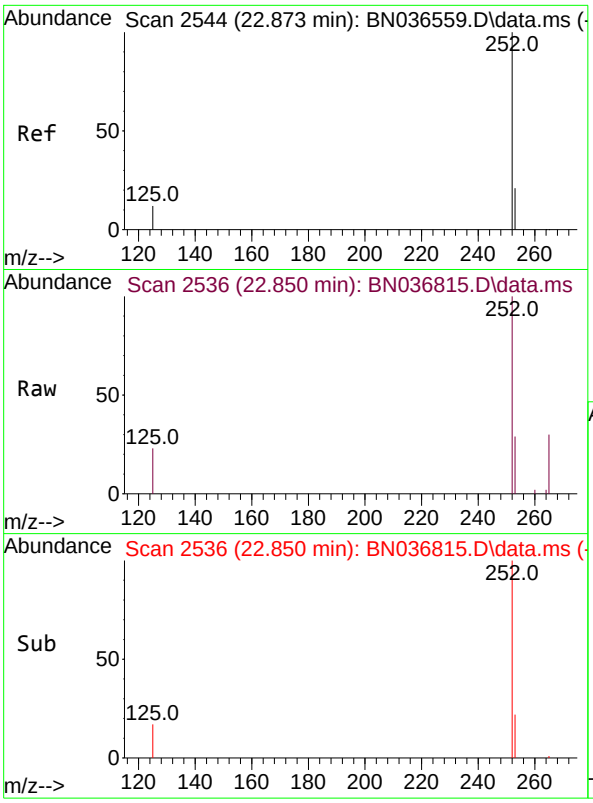




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.357 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.038 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:276 Resp: 4428

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.1 | 23.4 | 35.2 |
| 277 | 23.9 | 20.0 | 30.0 |

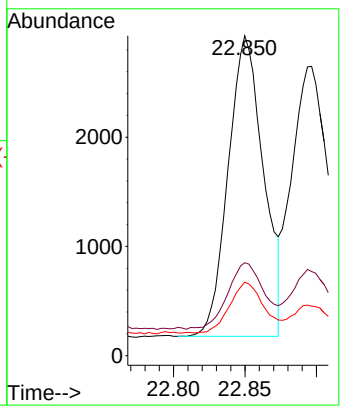





#37
Benzo(b)fluoranthene
Concen: 0.379 ng
RT: 22.850 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:252 Resp: 473

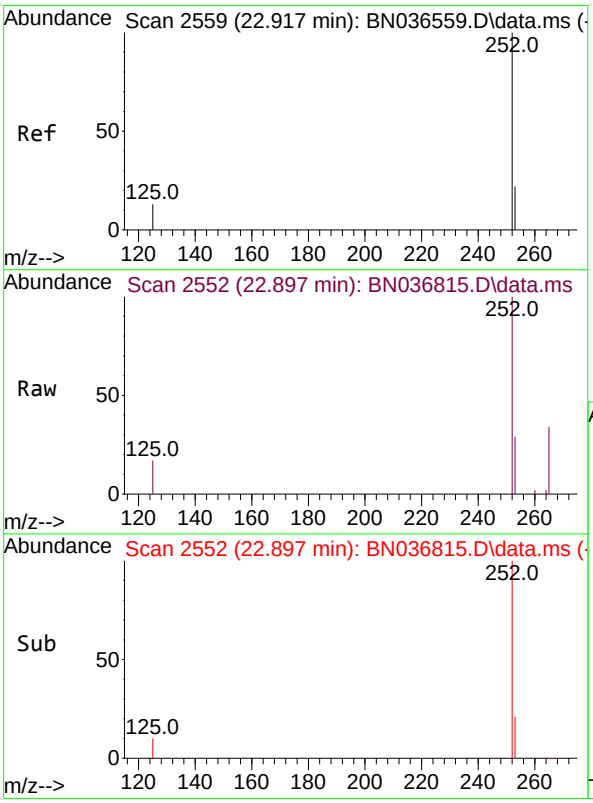
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.0 | 23.9 | 35.9 |
| 125 | 22.9 | 17.4 | 26.2 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

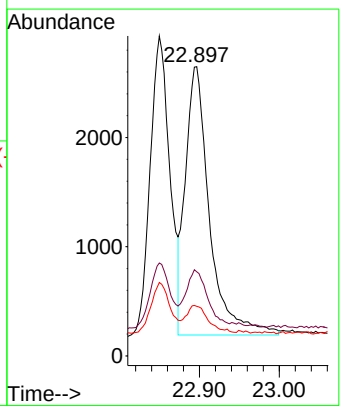
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

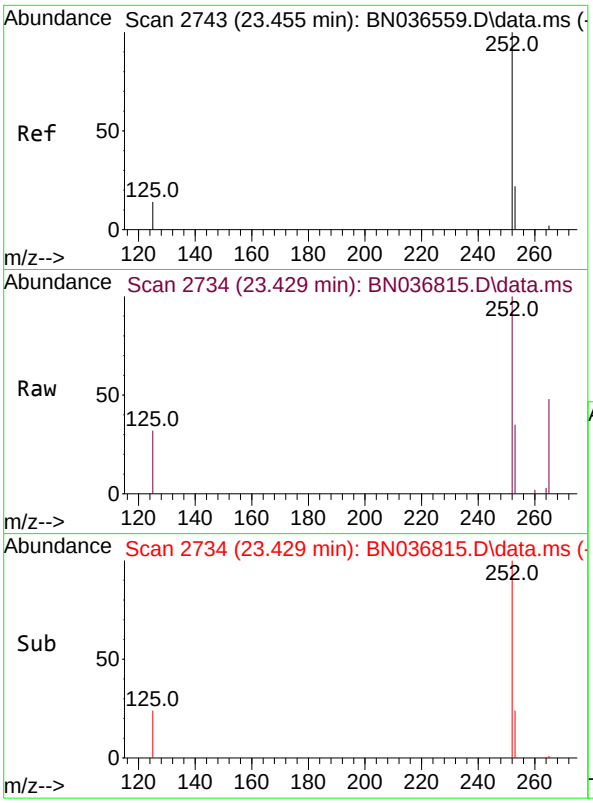



#38
Benzo(k)fluoranthene
Concen: 0.393 ng m
RT: 22.897 min Scan# 2552
Delta R.T. -0.020 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:252 Resp: 5156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.1 | 24.6 | 36.8 |
| 125 | 17.1 | 17.8 | 26.8# |

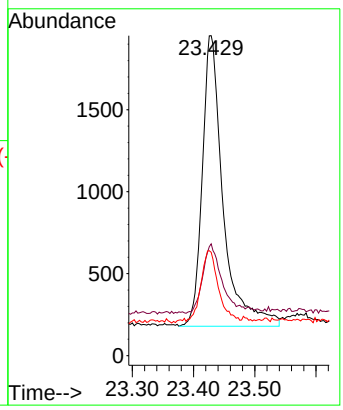





#39
Benzo(a)pyrene
Concen: 0.399 ng
RT: 23.429 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:252 Resp: 420

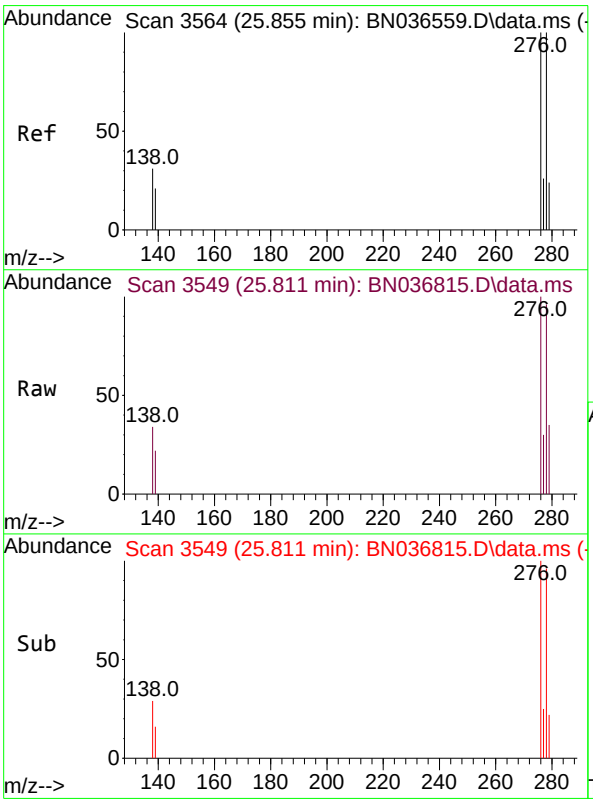
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 34.9 | 27.8 | 41.8 |
| 125 | 32.3 | 22.7 | 34.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

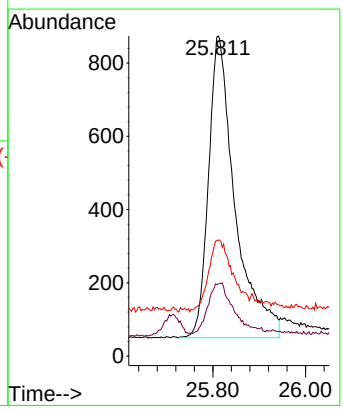
Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

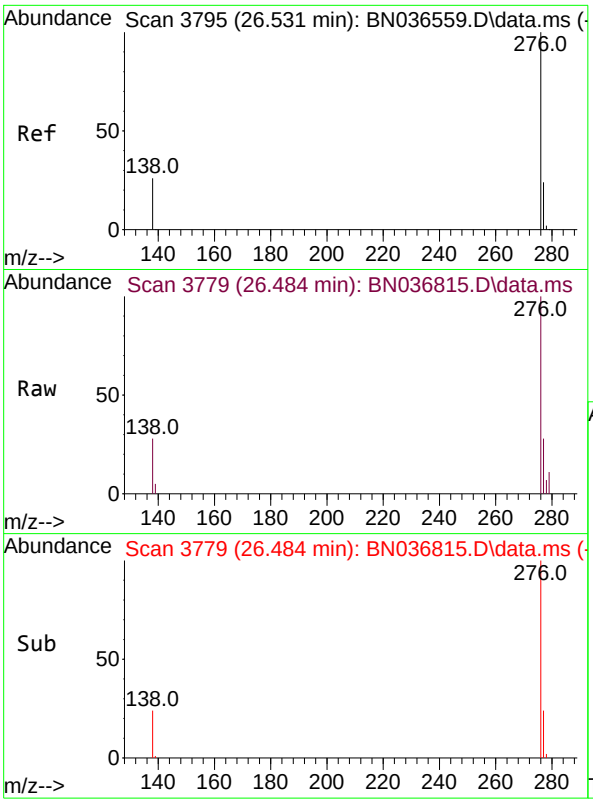



#40
Dibenzo(a,h)anthracene
Concen: 0.340 ng
RT: 25.811 min Scan# 3549
Delta R.T. -0.044 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:278 Resp: 3277

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 22.5 | 20.8 | 31.2 |
| 279 | 36.2 | 28.8 | 43.2 |

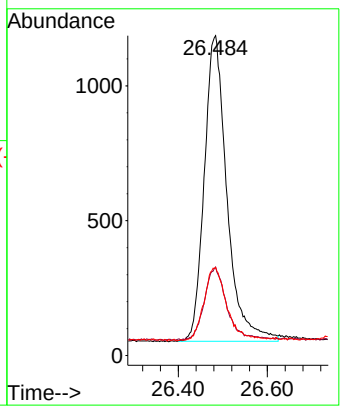





#41
Benzo(g,h,i)perylene
Concen: 0.363 ng
RT: 26.484 min Scan# 3
Delta R.T. -0.047 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:276 Resp: 400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 27.7 | 22.2 | 33.4 |
| 138 | 27.6 | 24.1 | 36.1 |




**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

**Manual Integrations**
**APPROVED**

Reviewed By :Rahul Chavli 03/31/2025
Supervised By :Jagrut Upadhyay 04/01/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036815.D
Acq On : 31 Mar 2025 15:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 15:30:13 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 71 | -0.03 |
| 2 | | 1,4-Dioxane | 0.444 | 0.447 | -0.7 | 64 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.898 | 0.915 | -1.9 | 69 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.932 | 0.839 | 10.0 | 60 | -0.03 |
| 5 | S | Phenol-d6 | 1.152 | 0.976 | 15.3 | 61 | -0.04 |
| 6 | | bis(2-Chloroethyl)ether | 1.190 | 1.022 | 14.1 | 61 | -0.04 |
| 7 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 80 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.435 | 0.348 | 20.0 | 67 | -0.03 |
| 9 | | Naphthalene | 1.177 | 1.030 | 12.5 | 69 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.277 | 0.244 | 11.9 | 67 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.595 | 0.543 | 8.7 | 72 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.749 | 0.666 | 11.1 | 70 | -0.03 |
| 13 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 83 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.182 | 0.159 | 12.6 | 71 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 2.327 | 1.957 | 15.9 | 68 | -0.03 |
| 16 | | Acenaphthylene | 1.888 | 1.606 | 14.9 | 69 | -0.02 |
| 17 | | Acenaphthene | 1.236 | 1.100 | 11.0 | 72 | -0.03 |
| 18 | | Fluorene | 1.672 | 1.479 | 11.5 | 70 | -0.02 |
| 19 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 84 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.086 | 0.079 | 8.1 | 86 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.251 | 0.227 | 9.6 | 70 | -0.02 |
| 22 | | Hexachlorobenzene | 0.303 | 0.274 | 9.6 | 68 | -0.02 |
| 23 | | Atrazine | 0.201 | 0.190 | 5.5 | 75 | -0.02 |
| 24 | | Pentachlorophenol | 0.138 | 0.129 | 6.5 | 79 | -0.04 |
| 25 | | Phenanthrene | 1.200 | 1.133 | 5.6 | 73 | -0.02 |
| 26 | | Anthracene | 1.083 | 0.980 | 9.5 | 72 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 1.025 | 0.994 | 3.0 | 75 | -0.02 |
| 28 | | Fluoranthene | 1.348 | 1.344 | 0.3 | 78 | -0.02 |
| 29 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 94 | -0.02 |
| 30 | | Pyrene | 1.956 | 1.767 | 9.7 | 78 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.958 | 0.842 | 12.1 | 77 | -0.02 |
| 32 | | Benzo(a)anthracene | 1.391 | 1.221 | 12.2 | 80 | -0.02 |
| 33 | | Chrysene | 1.520 | 1.463 | 3.7 | 85 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.990 | 0.900 | 9.1 | 81 | -0.02 |
| 35 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 97 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 1.444 | 1.289 | 10.7 | 81 | -0.04 |
| 37 | | Benzo(b)fluoranthene | 1.456 | 1.378 | 5.4 | 86 | -0.02 |
| 38 | | Benzo(k)fluoranthene | 1.527 | 1.501 | 1.7 | 90 | -0.02 |
| 39 | C | Benzo(a)pyrene | 1.226 | 1.223 | 0.2 | 91 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 1.124 | 0.954 | 15.1 | 80 | -0.04 |
| 41 | | Benzo(g,h,i)perylene | 1.286 | 1.166 | 9.3 | 82 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036815.D
Acq On : 31 Mar 2025 15:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**LabSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 15:30:13 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 0.400 | 0.400 | 0.0 | 71 | -0.03 |
| 2 | | 1,4-Dioxane | 0.400 | 0.403 | -0.8 | 64 | -0.01 |
| 3 | | n-Nitrosodimethylamine | 0.400 | 0.408 | -2.0 | 69 | -0.01 |
| 4 | S | 2-Fluorophenol | 0.400 | 0.360 | 10.0 | 60 | -0.03 |
| 5 | S | Phenol-d6 | 0.400 | 0.339 | 15.3 | 61 | -0.04 |
| 6 | | bis(2-Chloroethyl)ether | 0.400 | 0.343 | 14.2 | 61 | -0.04 |
| 7 | I | Naphthalene-d8 | 0.400 | 0.400 | 0.0 | 80 | -0.03 |
| 8 | S | Nitrobenzene-d5 | 0.400 | 0.320 | 20.0 | 67 | -0.03 |
| 9 | | Naphthalene | 0.400 | 0.350 | 12.5 | 69 | -0.03 |
| 10 | | Hexachlorobutadiene | 0.400 | 0.352 | 12.0 | 67 | -0.03 |
| 11 | SURR | 2-Methylnaphthalene-d10 | 0.400 | 0.365 | 8.8 | 72 | -0.04 |
| 12 | | 2-Methylnaphthalene | 0.400 | 0.356 | 11.0 | 70 | -0.03 |
| 13 | I | Acenaphthene-d10 | 0.400 | 0.400 | 0.0 | 83 | -0.03 |
| 14 | S | 2,4,6-Tribromophenol | 0.400 | 0.351 | 12.3 | 71 | -0.02 |
| 15 | S | 2-Fluorobiphenyl | 0.400 | 0.336 | 16.0 | 68 | -0.03 |
| 16 | | Acenaphthylene | 0.400 | 0.340 | 15.0 | 69 | -0.02 |
| 17 | | Acenaphthene | 0.400 | 0.356 | 11.0 | 72 | -0.03 |
| 18 | | Fluorene | 0.400 | 0.354 | 11.5 | 70 | -0.02 |
| 19 | I | Phenanthrene-d10 | 0.400 | 0.400 | 0.0 | 84 | -0.02 |
| 20 | | 4,6-Dinitro-2-methylphenol | 0.400 | 0.454 | -13.5 | 86 | -0.02 |
| 21 | | 4-Bromophenyl-phenylether | 0.400 | 0.363 | 9.3 | 70 | -0.02 |
| 22 | | Hexachlorobenzene | 0.400 | 0.363 | 9.3 | 68 | -0.02 |
| 23 | | Atrazine | 0.400 | 0.377 | 5.8 | 75 | -0.02 |
| 24 | | Pentachlorophenol | 0.400 | 0.375 | 6.3 | 79 | -0.04 |
| 25 | | Phenanthrene | 0.400 | 0.378 | 5.5 | 73 | -0.02 |
| 26 | | Anthracene | 0.400 | 0.362 | 9.5 | 72 | -0.02 |
| 27 | SURR | Fluoranthene-d10 | 0.400 | 0.388 | 3.0 | 75 | -0.02 |
| 28 | | Fluoranthene | 0.400 | 0.399 | 0.3 | 78 | -0.02 |
| 29 | I | Chrysene-d12 | 0.400 | 0.400 | 0.0 | 94 | -0.02 |
| 30 | | Pyrene | 0.400 | 0.361 | 9.8 | 78 | -0.02 |
| 31 | S | Terphenyl-d14 | 0.400 | 0.352 | 12.0 | 77 | -0.02 |
| 32 | | Benzo(a)anthracene | 0.400 | 0.351 | 12.3 | 80 | -0.02 |
| 33 | | Chrysene | 0.400 | 0.385 | 3.8 | 85 | -0.02 |
| 34 | | Bis(2-ethylhexyl)phthalate | 0.400 | 0.364 | 9.0 | 81 | -0.02 |
| 35 | I | Perylene-d12 | 0.400 | 0.400 | 0.0 | 97 | -0.03 |
| 36 | | Indeno(1,2,3-cd)pyrene | 0.400 | 0.357 | 10.8 | 81 | -0.04 |
| 37 | | Benzo(b)fluoranthene | 0.400 | 0.379 | 5.3 | 86 | -0.02 |
| 38 | | Benzo(k)fluoranthene | 0.400 | 0.393 | 1.8 | 90 | -0.02 |
| 39 | C | Benzo(a)pyrene | 0.400 | 0.399 | 0.3 | 91 | -0.03 |
| 40 | | Dibenzo(a,h)anthracene | 0.400 | 0.340 | 15.0 | 80 | -0.04 |
| 41 | | Benzo(g,h,i)perylene | 0.400 | 0.363 | 9.3 | 82 | -0.05 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

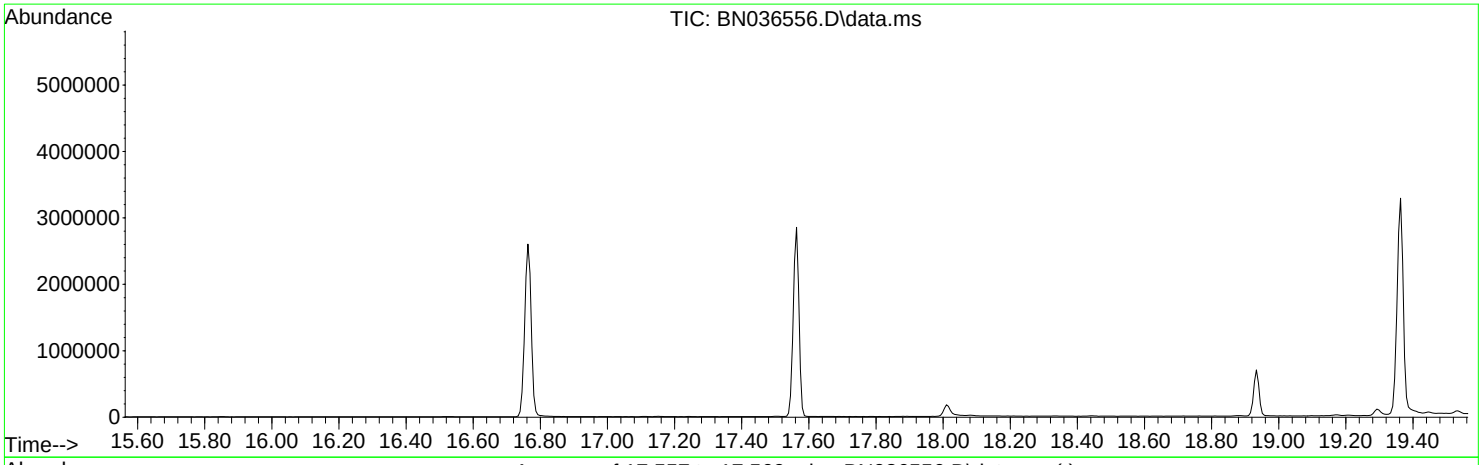
# QC SAMPLE DATA

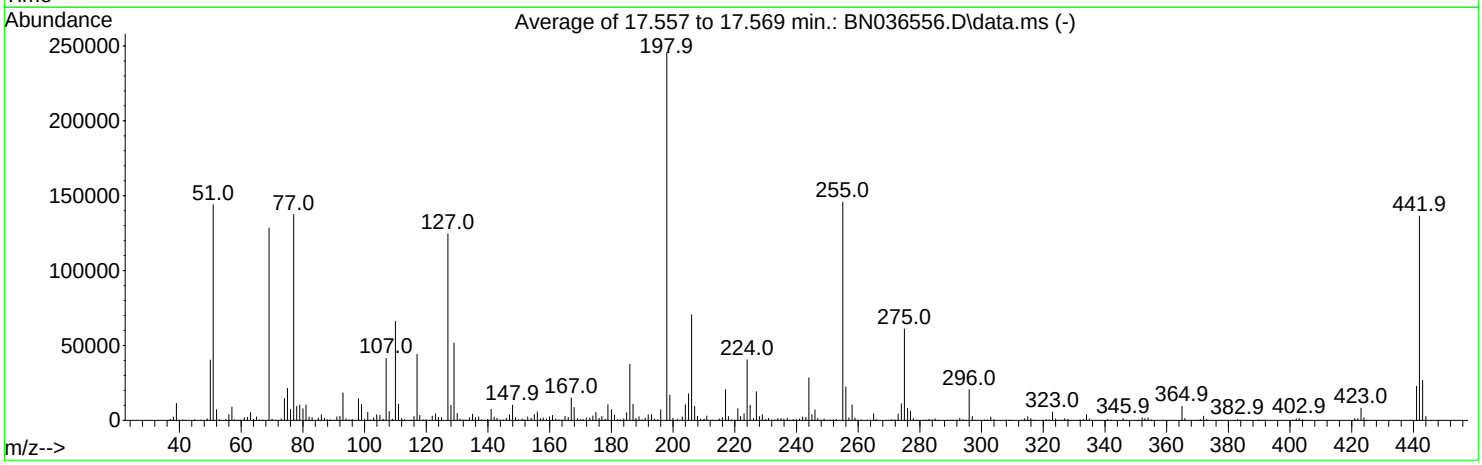
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036556.D
Acq On : 10 Mar 2025 11:03
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



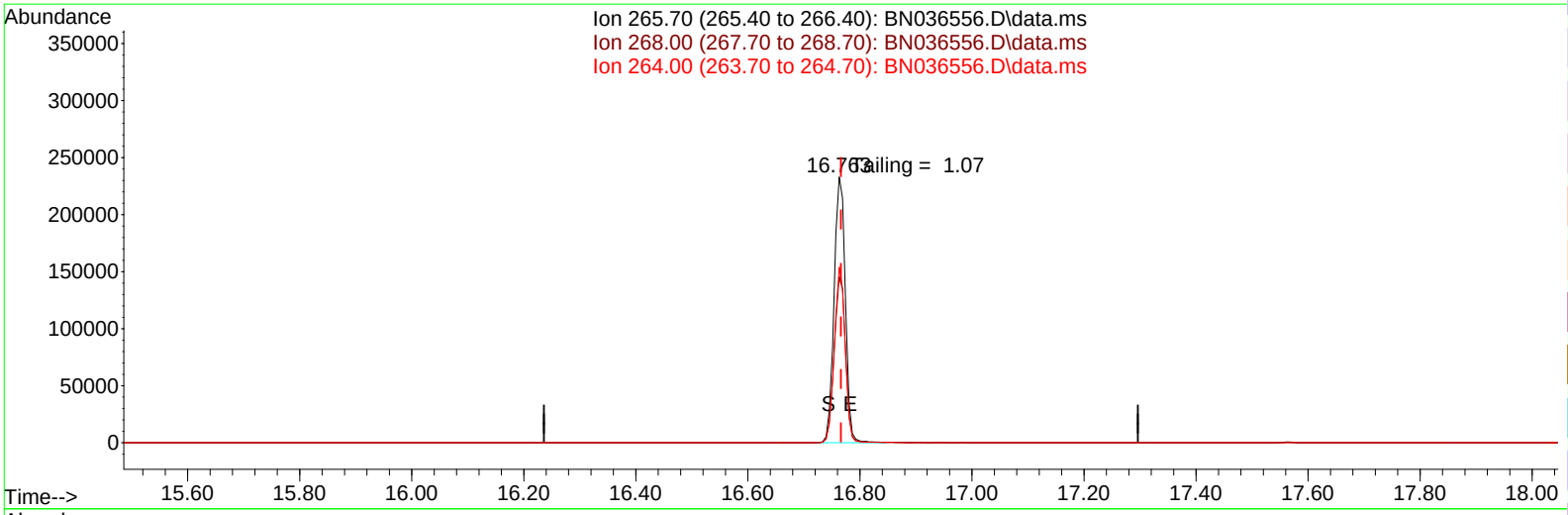

AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2453

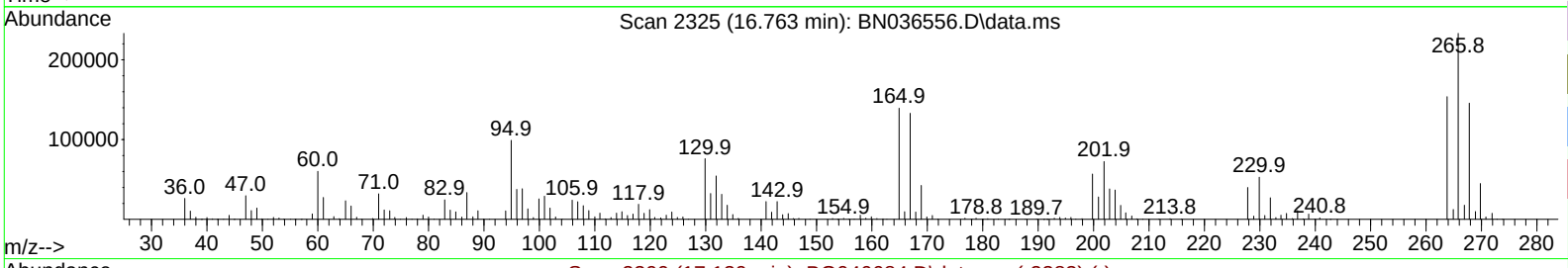
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 58.6 | 144050 | PASS |
| 68 | 69 | 0.00 | 2 | 0.0 | 0 | PASS |
| 69 | 198 | 0.00 | 100 | 52.3 | 128410 | PASS |
| 70 | 69 | 0.00 | 2 | 0.7 | 835 | PASS |
| 127 | 198 | 10 | 80 | 50.7 | 124576 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 245632 | PASS |
| 199 | 198 | 5 | 9 | 6.9 | 16887 | PASS |
| 275 | 198 | 10 | 60 | 24.8 | 60997 | PASS |
| 365 | 198 | 1 | 100 | 3.8 | 9349 | PASS |
| 441 | 198 | 0.01 | 100 | 9.3 | 22761 | PASS |
| 442 | 442 | 50 | 100 | 100.0 | 136488 | PASS |
| 443 | 442 | 15 | 24 | 19.6 | 26765 | PASS |

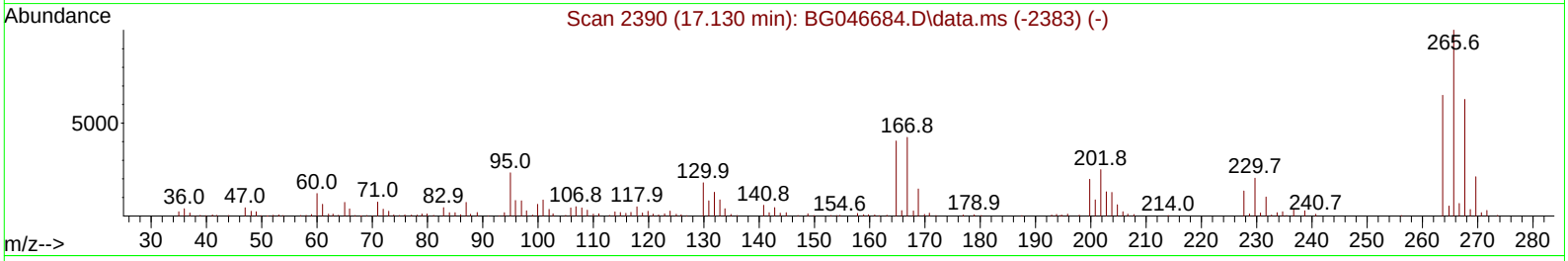
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036556.D
Acq On : 10 Mar 2025 11:03
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 10 17:07:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration




TIC: BN036556.D\data.ms

**(70) Pentachlorophenol (C)**

**16.763min (-0.003) 23577.14 ng**

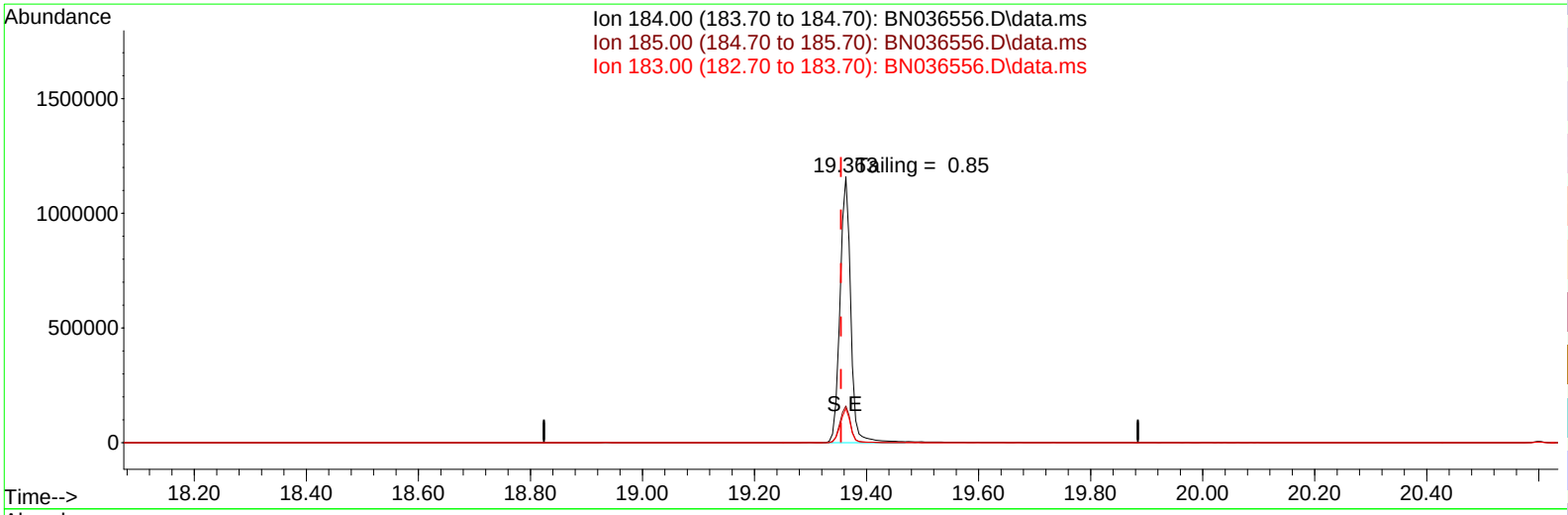
**response 323613**

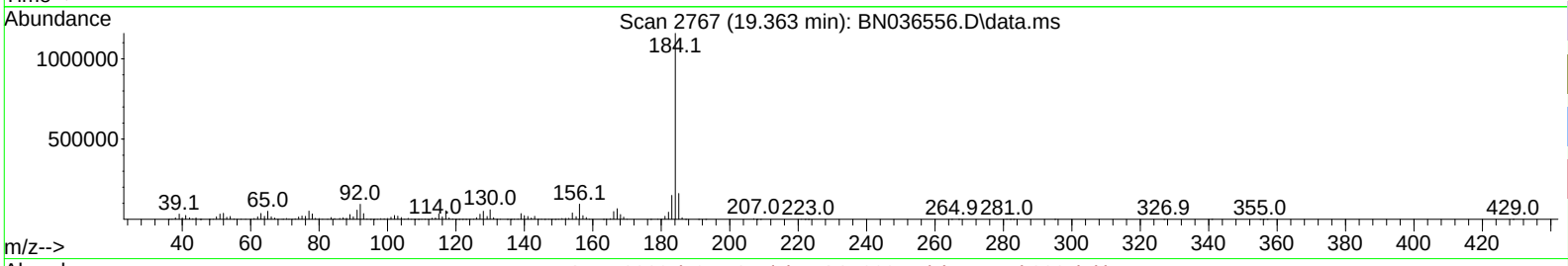
| Ion | Exp% | Act% |
|---|---|---|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20 | 62.52 |
| 264.00 | 61.60 | 66.01 |
| 0.00 | 0.00 | 0.00 |

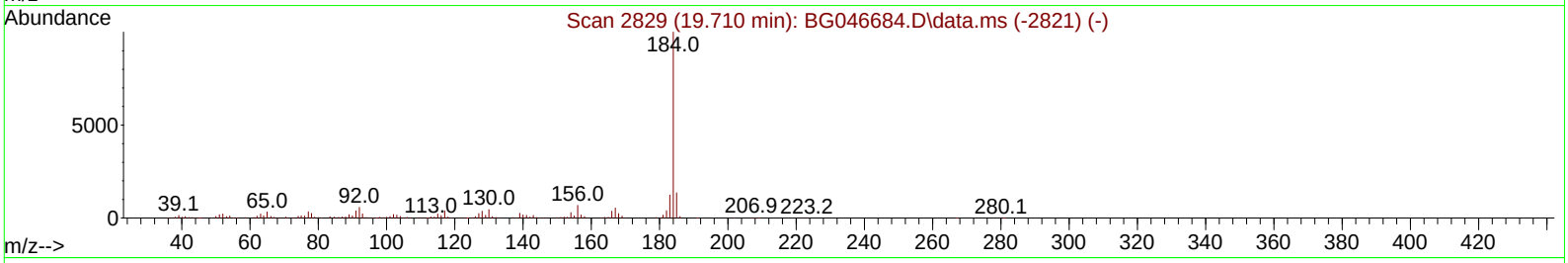
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036556.D
Acq On : 10 Mar 2025 11:03
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 10 17:07:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration




TIC: BN036556.D\data.ms

**(77) Benzidine**

**19.363min (+ 0.009) 0.00 ng**

**response 1553313**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50 | 13.86 |
| 183.00 | 13.20 | 12.85 |
| 0.00 | 0.00 | 0.00 |

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

## DDT Breakdown

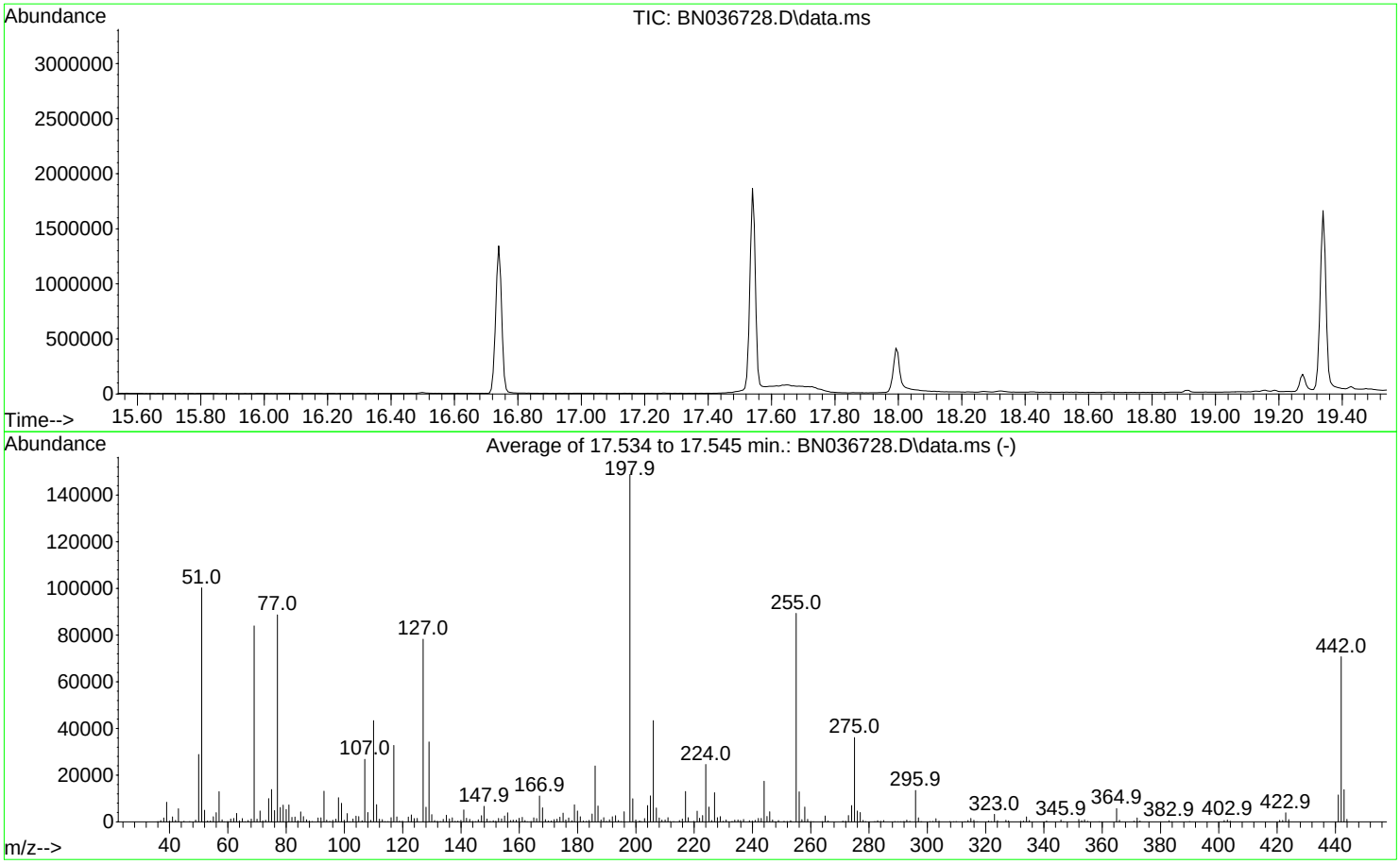
| Date | Instrument Name | DFTPP Data File |
|---|---|---|
| 3/10/2025 | BNA_N | BN036556.D |
| | | |
| | | |
| **Compound Name** | **Response** | **Retention Time** |
| | | |
| DDT | 1110406 | 20.598 |
| DDD | 11596 | 20.21 |
| DDE | 530 | 19.645 |
| | | |
| | | |
| **SUM(DDD+DDE)** | **SUM(DDT+DDD+DDE)** | **% Breakdown Of DDT** |
| | | |
| 12126 | 1122532 | 1.08 |
| | | |

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036728.D
Acq On : 27 Mar 2025 09:10
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



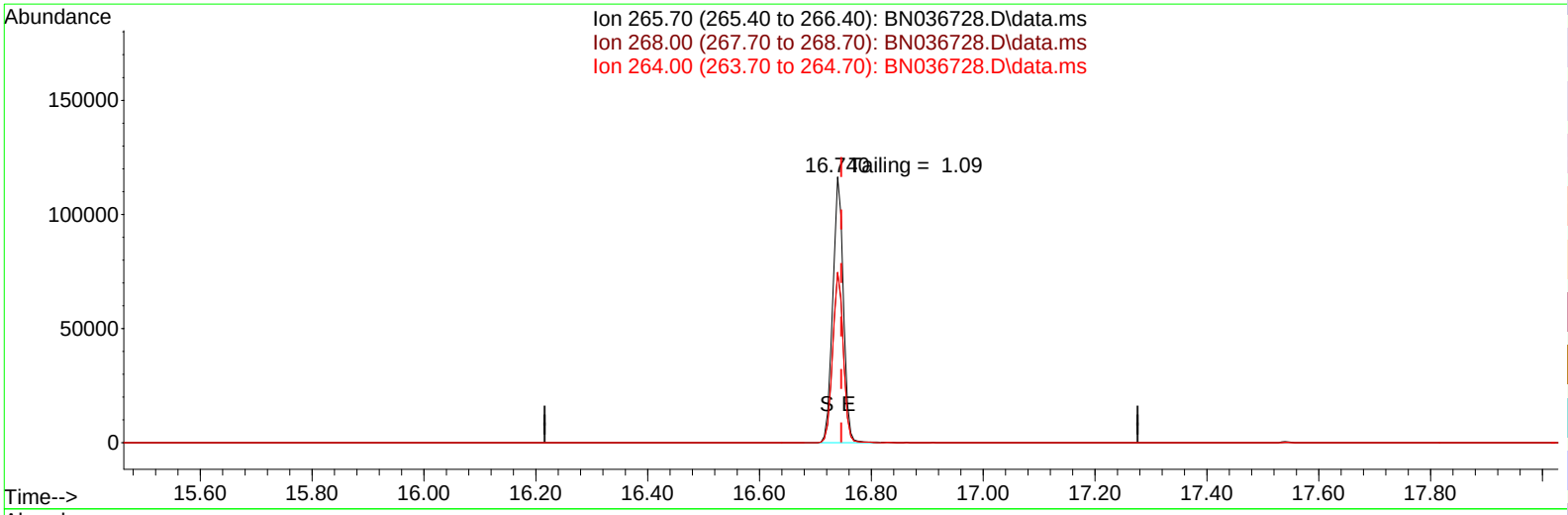

AutoFind: Scans 2456, 2457, 2458; Background Corrected with Scan 2449

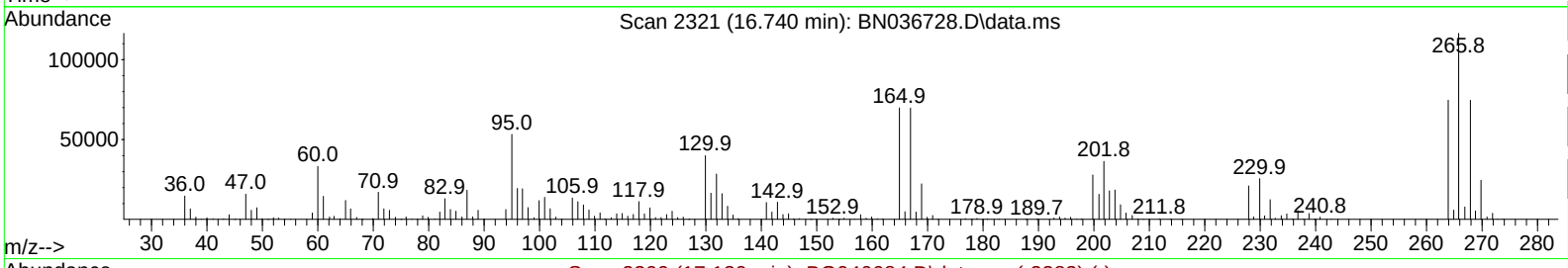
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 67.4 | 100301 | PASS |
| 68 | 69 | 0.00 | 2 | 1.4 | 1200 | PASS |
| 69 | 198 | 0.00 | 100 | 56.4 | 83945 | PASS |
| 70 | 69 | 0.00 | 2 | 1.4 | 1186 | PASS |
| 127 | 198 | 10 | 80 | 52.6 | 78248 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 148824 | PASS |
| 199 | 198 | 5 | 9 | 6.6 | 9881 | PASS |
| 275 | 198 | 10 | 60 | 24.3 | 36125 | PASS |
| 365 | 198 | 1 | 100 | 3.8 | 5714 | PASS |
| 441 | 198 | 0.01 | 100 | 7.8 | 11555 | PASS |
| 442 | 442 | 50 | 100 | 100.0 | 70779 | PASS |
| 443 | 442 | 15 | 24 | 19.5 | 13814 | PASS |

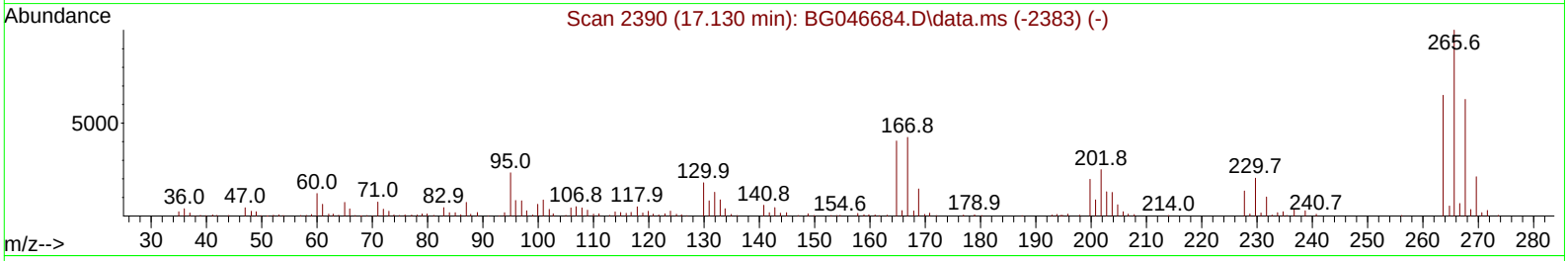
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036728.D
Acq On : 27 Mar 2025 09:10
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 27 16:00:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Mar 18 01:27:23 2025
Response via : Initial Calibration




TIC: BN036728.D\data.ms

**(70) Pentachlorophenol (C)**

**16.740min (-0.006) 17975.64 ng**

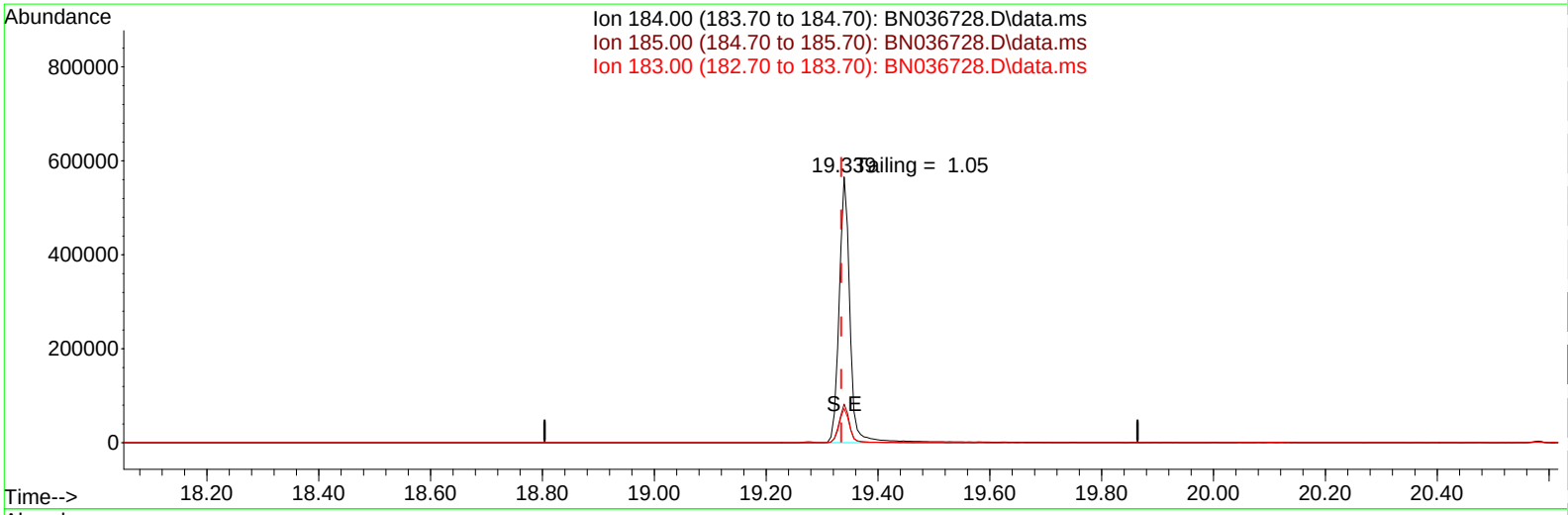
**response 152777**

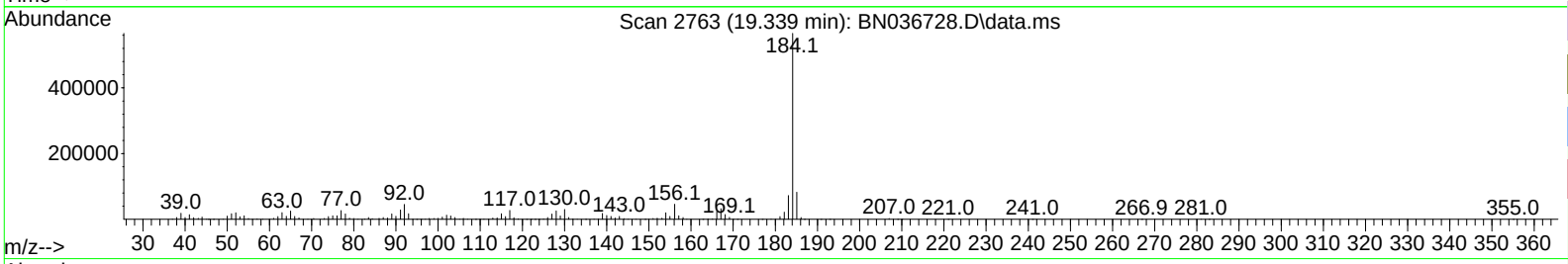
| Ion | Exp% | Act% |
|---|---|---|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20 | 64.09 |
| 264.00 | 61.60 | 64.12 |
| 0.00 | 0.00 | 0.00 |

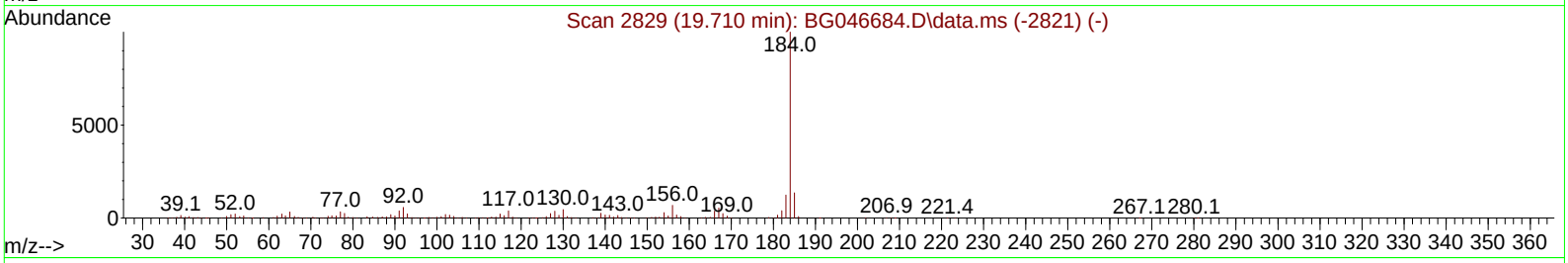
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036728.D
Acq On : 27 Mar 2025 09:10
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 27 16:00:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Mar 18 01:27:23 2025
Response via : Initial Calibration




TIC: BN036728.D\data.ms

**(77) Benzidine**

**19.339min (+ 0.005) 0.00 ng**

**response 768035**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50 | 14.55 |
| 183.00 | 13.20 | 12.81 |
| 0.00 | 0.00 | 0.00 |

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

## DDT Breakdown

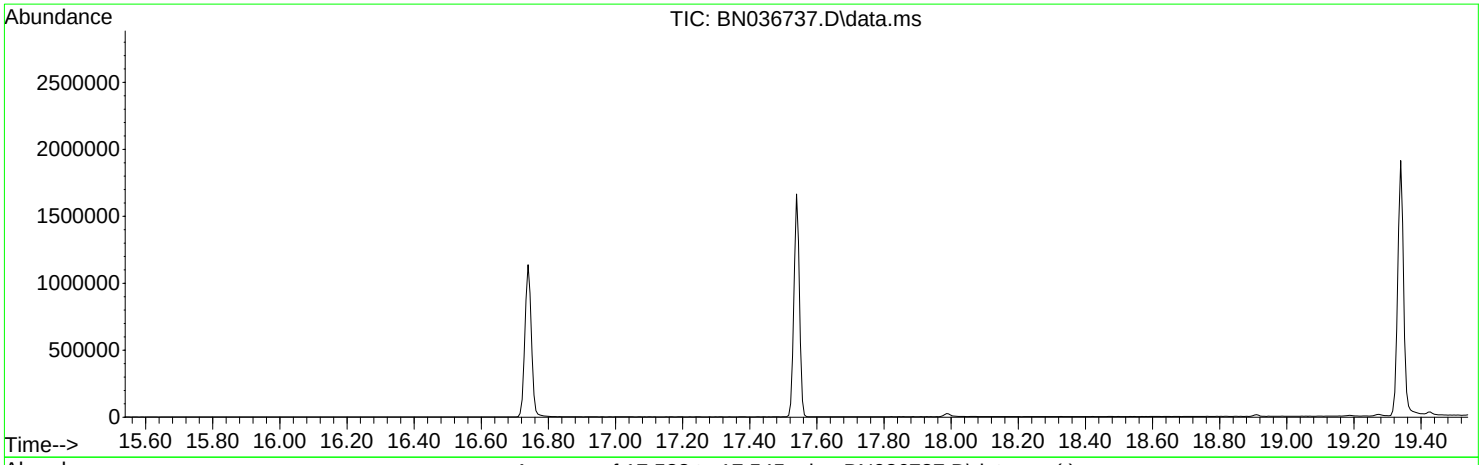
| Date | Instrument Name | DFTPP Data File |
|---|---|---|
| 3/27/2025 | BNA_N | BN036728.D |
| | | |
| | | |
| **Compound Name** | **Response** | **Retention Time** |
| | | |
| DDT | 567441 | 20.581 |
| DDD | 8560 | 20.192 |
| DDE | 316 | 19.634 |
| | | |
| | | |
| **SUM(DDD+DDE)** | **SUM(DDT+DDD+DDE)** | **% Breakdown Of DDT** |
| | | |
| 8876 | 576317 | 1.54 |
| | | |

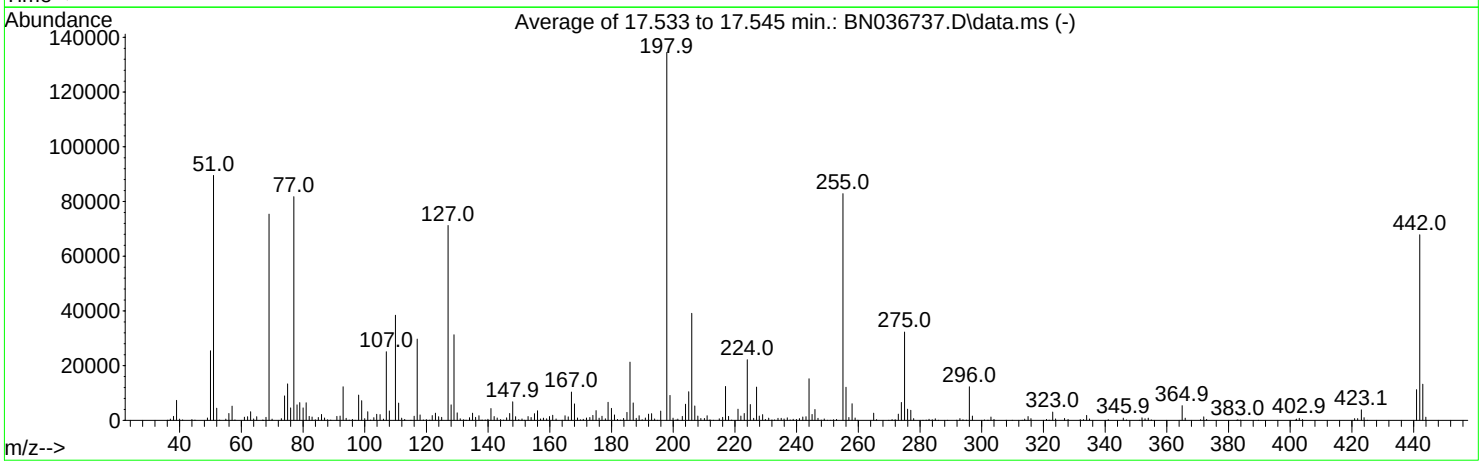
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036737.D
Acq On : 27 Mar 2025 14:38
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



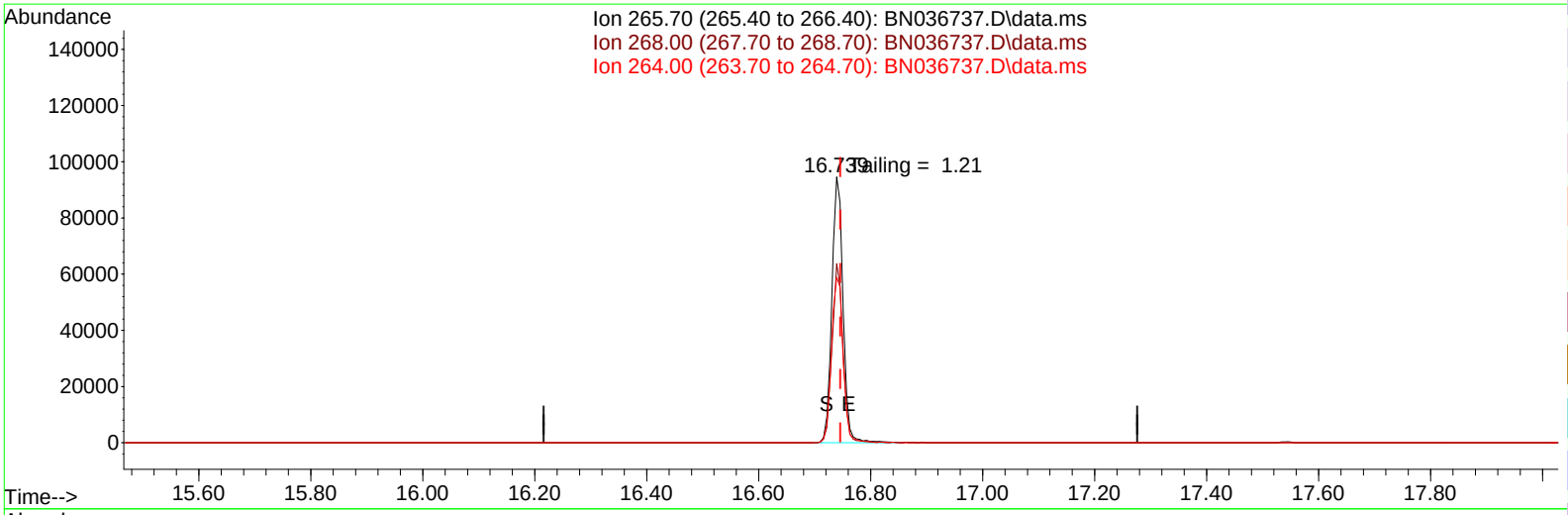

AutoFind: Scans 2456, 2457, 2458; Background Corrected with Scan 2450

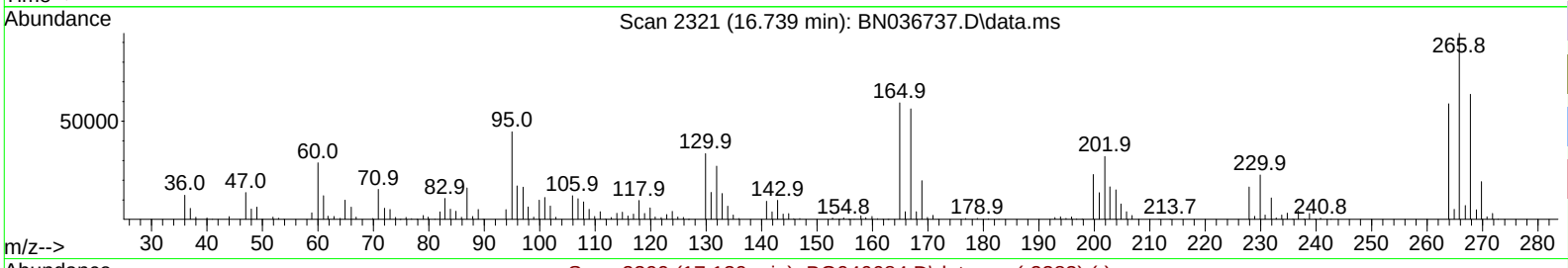
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 66.6 | 89520 | PASS |
| 68 | 69 | 0.00 | 2 | 1.4 | 1090 | PASS |
| 69 | 198 | 0.00 | 100 | 56.1 | 75413 | PASS |
| 70 | 69 | 0.00 | 2 | 0.6 | 451 | PASS |
| 127 | 198 | 10 | 80 | 53.0 | 71267 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 134472 | PASS |
| 199 | 198 | 5 | 9 | 6.8 | 9111 | PASS |
| 275 | 198 | 10 | 60 | 24.0 | 32293 | PASS |
| 365 | 198 | 1 | 100 | 4.0 | 5411 | PASS |
| 441 | 198 | 0.01 | 100 | 8.4 | 11249 | PASS |
| 442 | 442 | 50 | 100 | 100.0 | 67867 | PASS |
| 443 | 442 | 15 | 24 | 19.4 | 13200 | PASS |

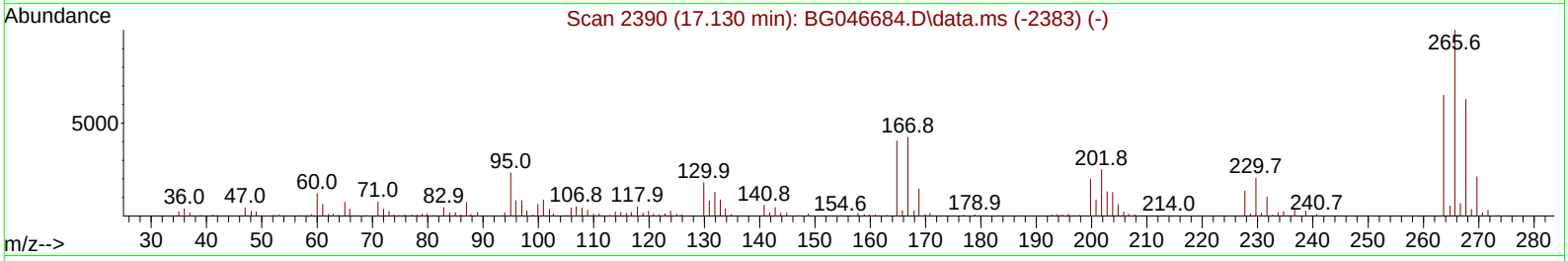
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036737.D
Acq On : 27 Mar 2025 14:38
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 27 16:20:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Mar 18 01:27:23 2025
Response via : Initial Calibration




TIC: BN036737.D\data.ms

**(70) Pentachlorophenol (C)**

**16.739min (-0.007) 15615.32 ng**

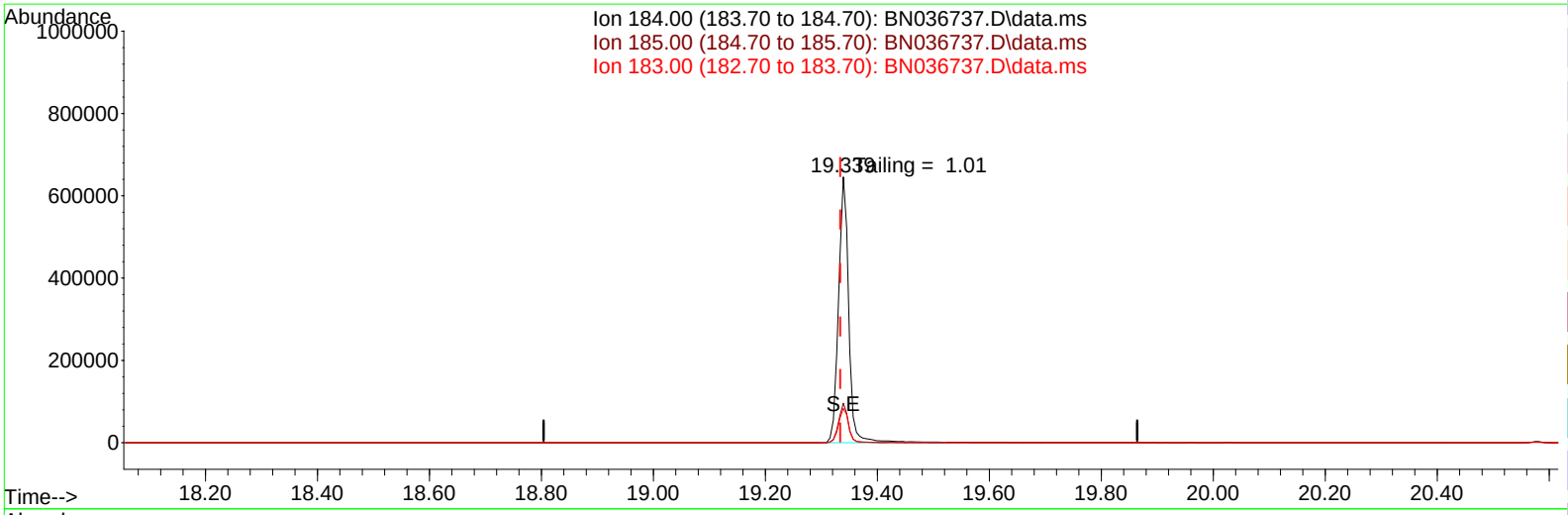
**response 130388**

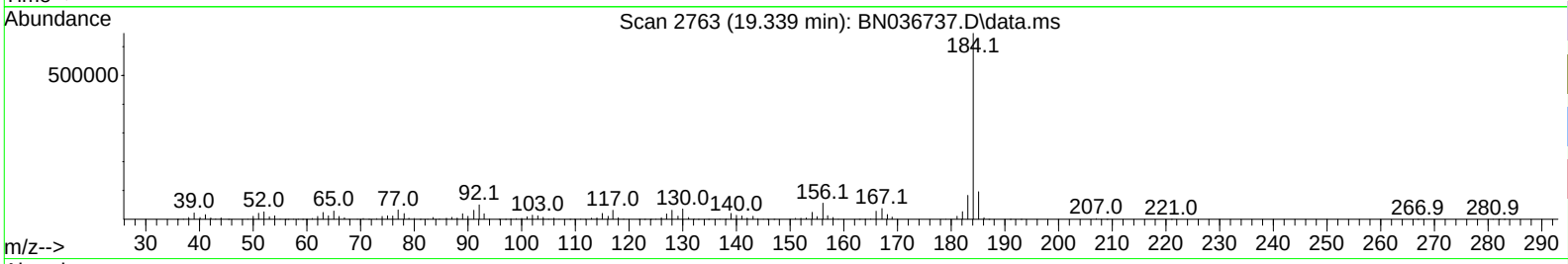
| Ion | Exp% | Act% |
|---|---|---|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20 | 67.33 |
| 264.00 | 61.60 | 62.20 |
| 0.00 | 0.00 | 0.00 |

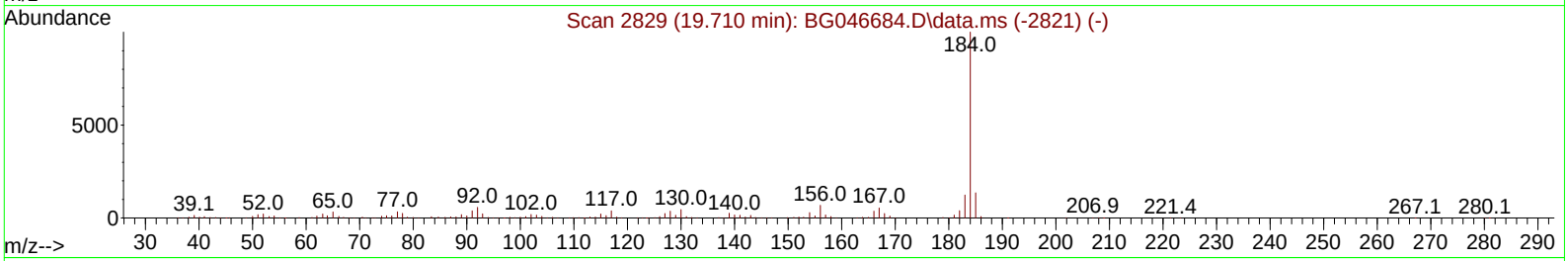
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036737.D
Acq On : 27 Mar 2025 14:38
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 27 16:20:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Mar 18 01:27:23 2025
Response via : Initial Calibration




TIC: BN036737.D\data.ms

**(77) Benzidine**

**19.339min (+ 0.005) 0.00 ng**

**response 821801**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50 | 14.84 |
| 183.00 | 13.20 | 12.88 |
| 0.00 | 0.00 | 0.00 |

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

## DDT Breakdown

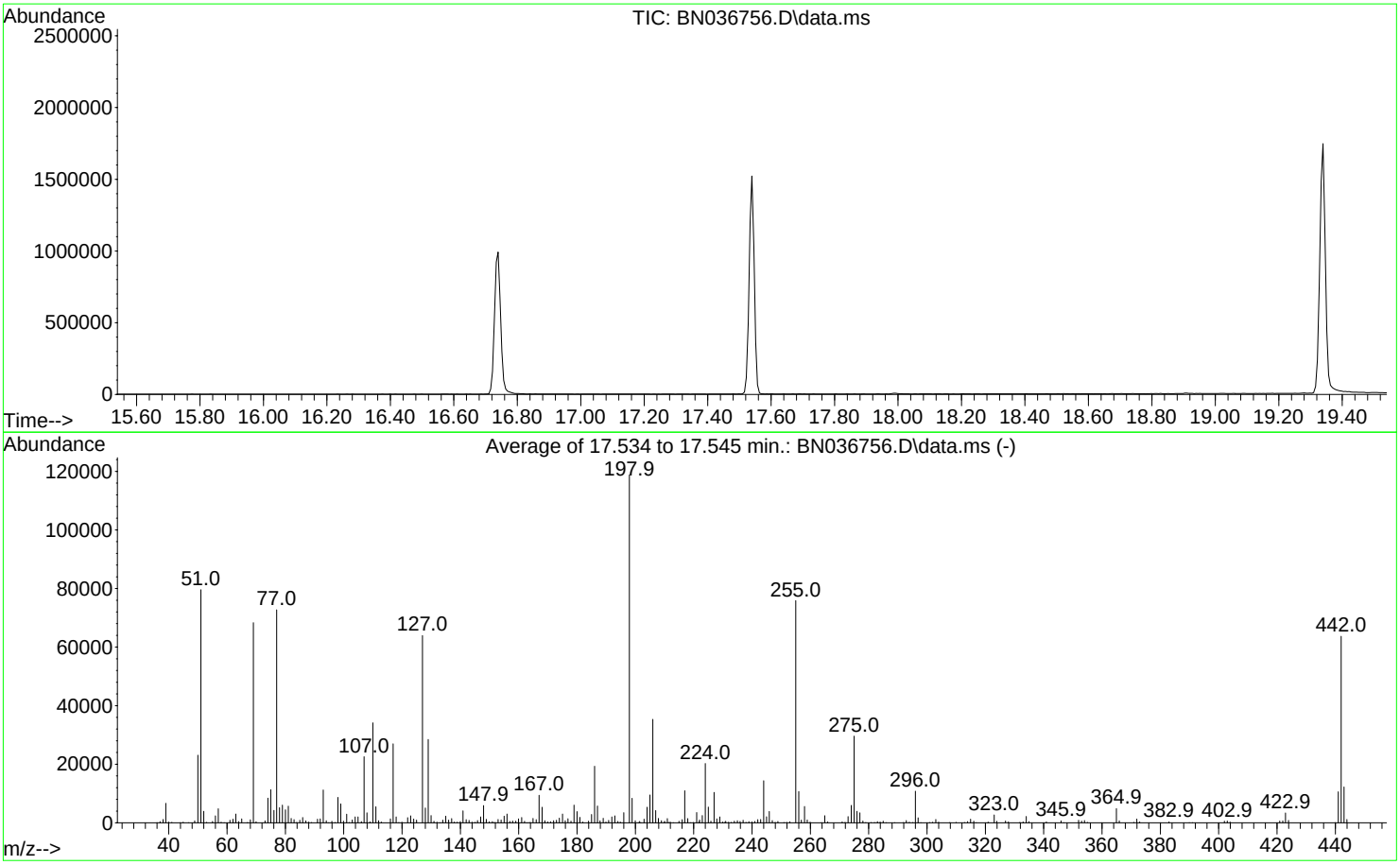
| Date | Instrument Name | DFTPP Data File |
|---|---|---|
| 3/27/2025 | BNA_N | BN036737.D |
| | | |
| | | |
| **Compound Name** | **Response** | **Retention Time** |
| | | |
| DDT | 502438 | 20.58 |
| DDD | 5610 | 20.186 |
| DDE | 360 | 19.627 |
| | | |
| | | |
| **SUM(DDD+DDE)** | **SUM(DDT+DDD+DDE)** | **% Breakdown Of DDT** |
| | | |
| 5970 | 508408 | 1.17 |
| | | |

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036756.D
Acq On : 28 Mar 2025 03:07
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



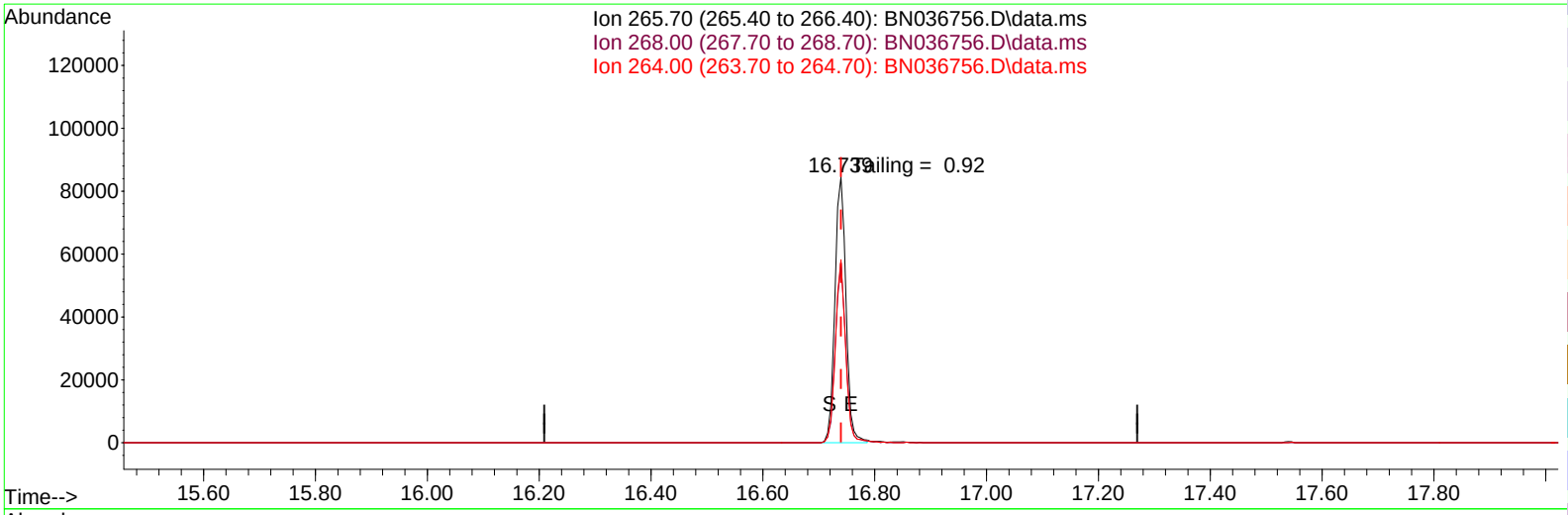

AutoFind: Scans 2456, 2457, 2458; Background Corrected with Scan 2450

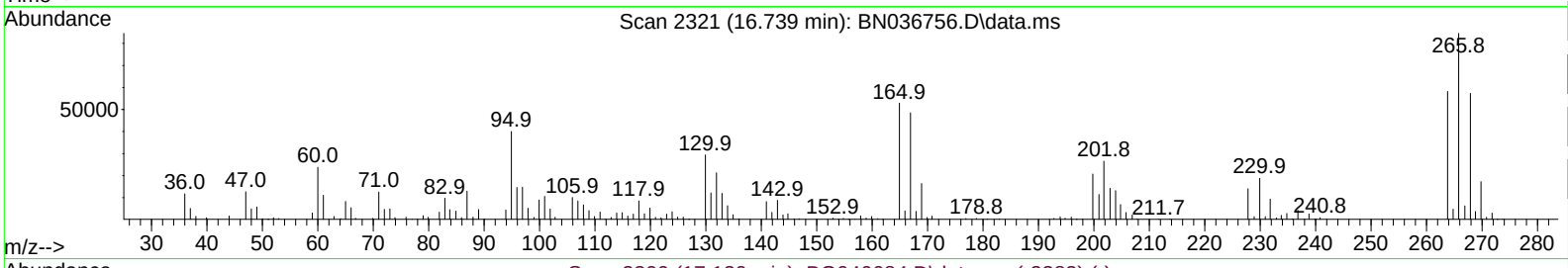
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 67.0 | 79608 | PASS |
| 68 | 69 | 0.00 | 2 | 1.5 | 1020 | PASS |
| 69 | 198 | 0.00 | 100 | 57.5 | 68325 | PASS |
| 70 | 69 | 0.00 | 2 | 0.5 | 357 | PASS |
| 127 | 198 | 10 | 80 | 53.9 | 63944 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 118744 | PASS |
| 199 | 198 | 5 | 9 | 7.1 | 8386 | PASS |
| 275 | 198 | 10 | 60 | 24.9 | 29595 | PASS |
| 365 | 198 | 1 | 100 | 4.1 | 4858 | PASS |
| 441 | 198 | 0.01 | 100 | 8.9 | 10582 | PASS |
| 442 | 442 | 50 | 100 | 100.0 | 63691 | PASS |
| 443 | 442 | 15 | 24 | 19.2 | 12256 | PASS |

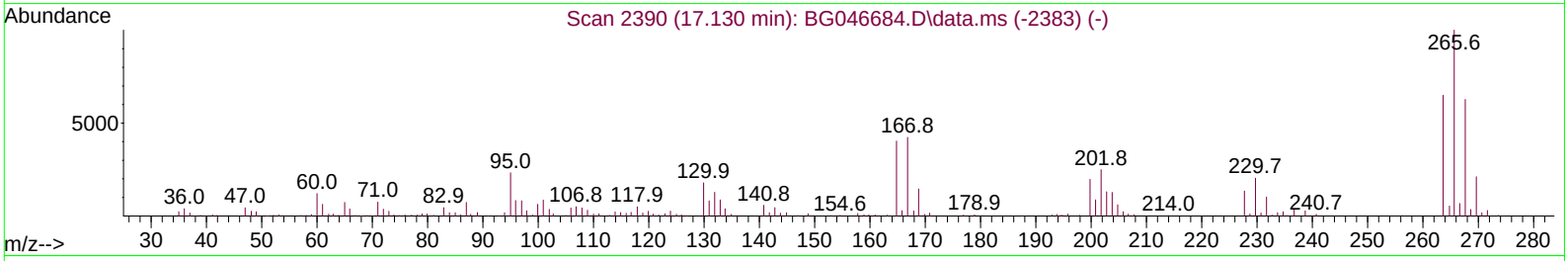
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036756.D
Acq On : 28 Mar 2025 03:07
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 28 05:40:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 28 05:40:24 2025
Response via : Initial Calibration




TIC: BN036756.D\data.ms

**(70) Pentachlorophenol (C)**

**16.739min ( 0.000) 15913.57 ng**

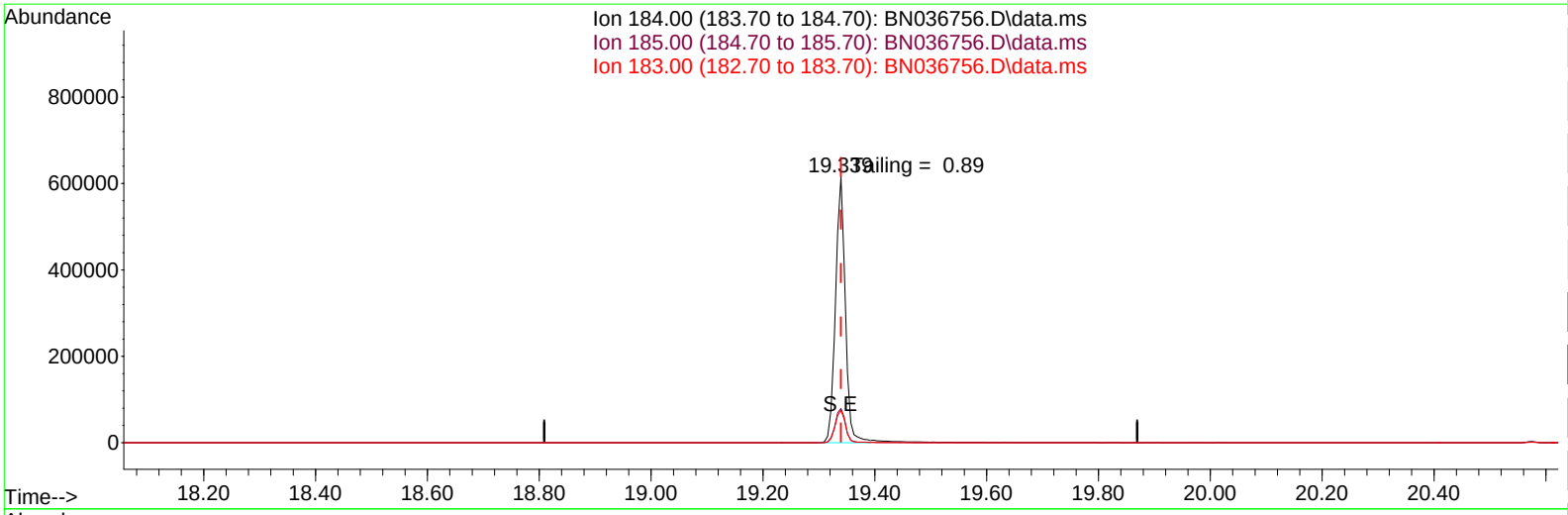
**response 116893**

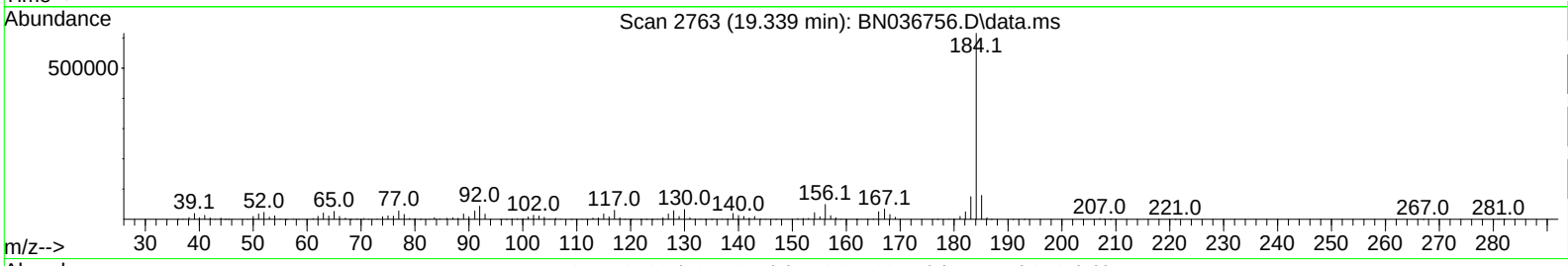
| Ion | Exp% | Act% |
|---|---|---|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20 | 67.77 |
| 264.00 | 61.60 | 68.86 |
| 0.00 | 0.00 | 0.00 |

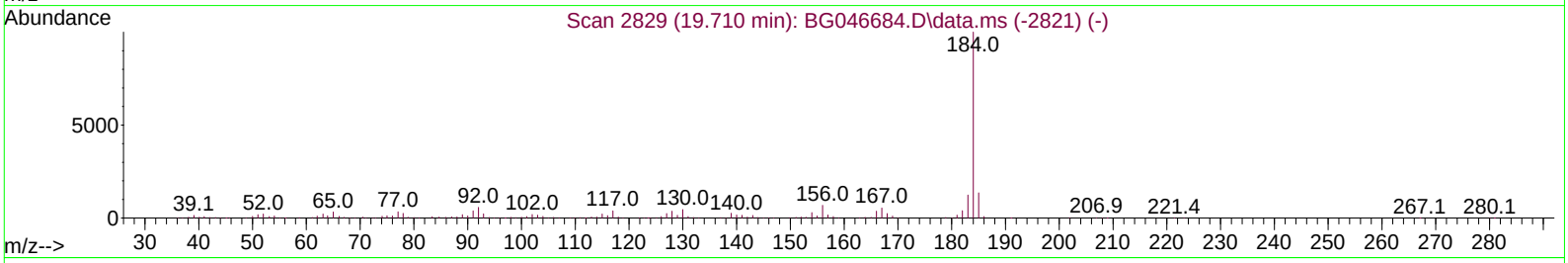
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036756.D
Acq On : 28 Mar 2025 03:07
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 28 05:40:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 28 05:40:24 2025
Response via : Initial Calibration




TIC: BN036756.D\data.ms

**(77) Benzidine**

**19.339min ( 0.000) 0.00 ng**

**response 762967**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50 | 12.92 |
| 183.00 | 13.20 | 12.18 |
| 0.00 | 0.00 | 0.00 |

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

## DDT Breakdown

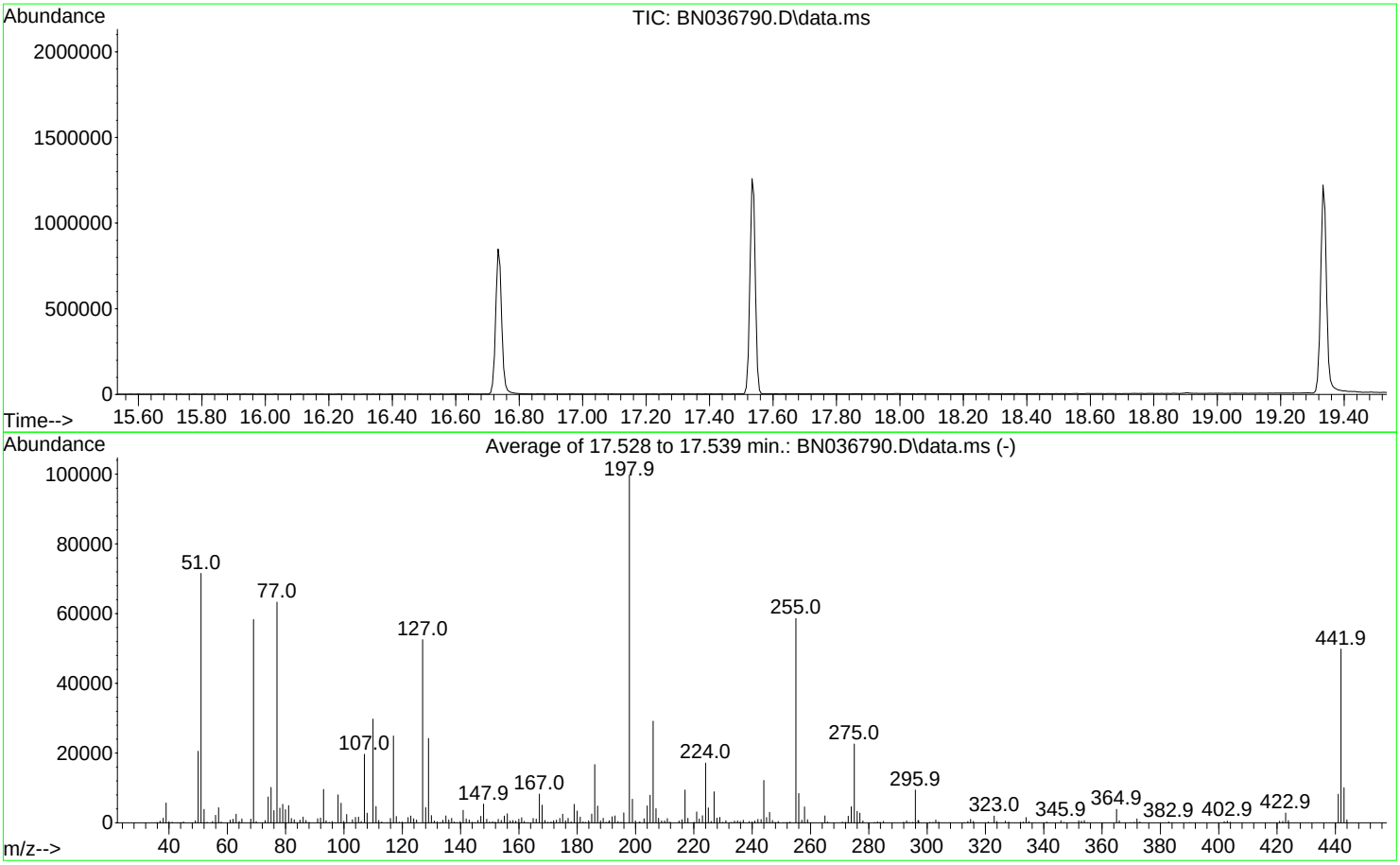
| Date | Instrument Name | DFTPP Data File |
|---|---|---|
| 3/27/2025 | BNA_N | BN036756.D |
| | | |
| | | |
| **Compound Name** | **Response** | **Retention Time** |
| | | |
| DDT | 412653 | 20.575 |
| DDD | 5613 | 20.186 |
| DDE | 207 | 19.633 |
| | | |
| | | |
| **SUM(DDD+DDE)** | **SUM(DDT+DDD+DDE)** | **% Breakdown Of DDT** |
| | | |
| 5820 | 418473 | 1.39 |
| | | |

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036790.D
Acq On : 29 Mar 2025 01:26
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



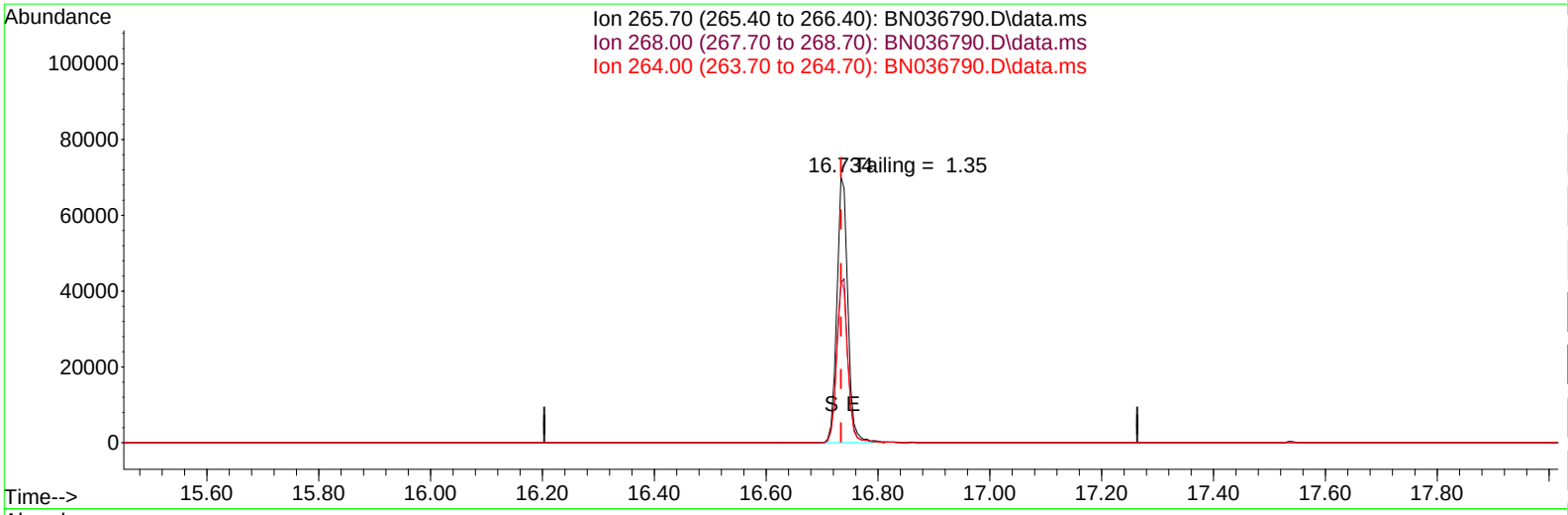

AutoFind: Scans 2455, 2456, 2457; Background Corrected with Scan 2449

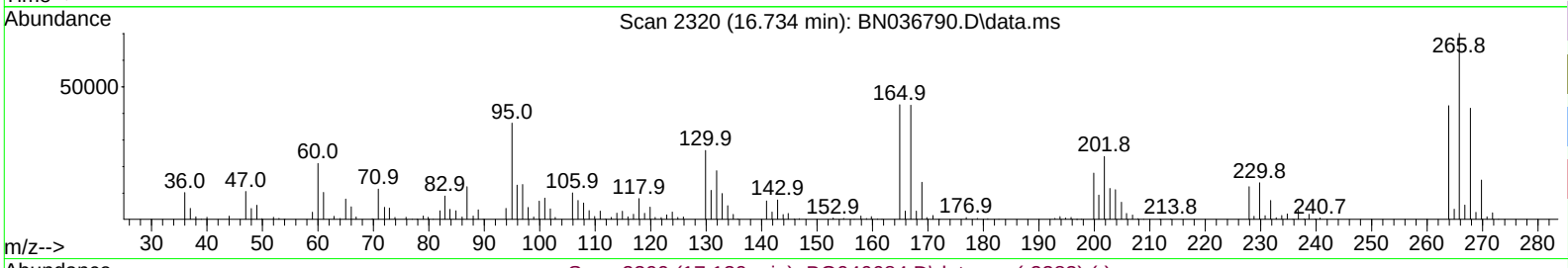
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 71.7 | 71579 | PASS |
| 68 | 69 | 0.00 | 2 | 1.9 | 1100 | PASS |
| 69 | 198 | 0.00 | 100 | 58.5 | 58331 | PASS |
| 70 | 69 | 0.00 | 2 | 0.6 | 333 | PASS |
| 127 | 198 | 10 | 80 | 52.7 | 52565 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 99763 | PASS |
| 199 | 198 | 5 | 9 | 6.8 | 6769 | PASS |
| 275 | 198 | 10 | 60 | 22.7 | 22601 | PASS |
| 365 | 198 | 1 | 100 | 3.9 | 3887 | PASS |
| 441 | 198 | 0.01 | 100 | 8.2 | 8219 | PASS |
| 442 | 442 | 50 | 100 | 100.0 | 49867 | PASS |
| 443 | 442 | 15 | 24 | 20.2 | 10070 | PASS |

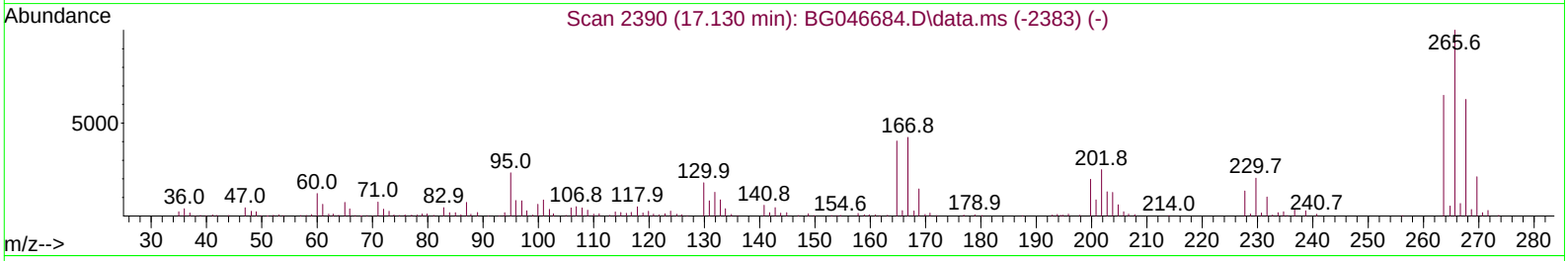
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036790.D
Acq On : 29 Mar 2025 01:26
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Apr 01 00:17:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Apr 01 00:16:52 2025
Response via : Initial Calibration




TIC: BN036790.D\data.ms

**(70) Pentachlorophenol (C)**

**16.734min ( 0.000) 16501.63 ng**

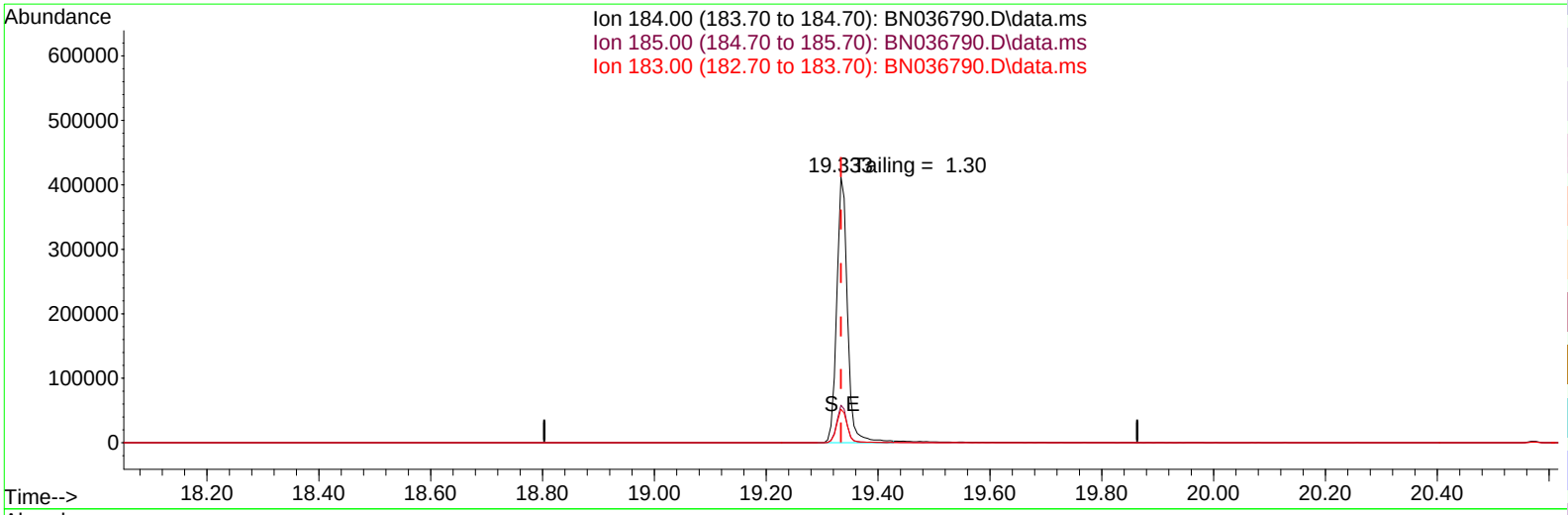
**response 96219**

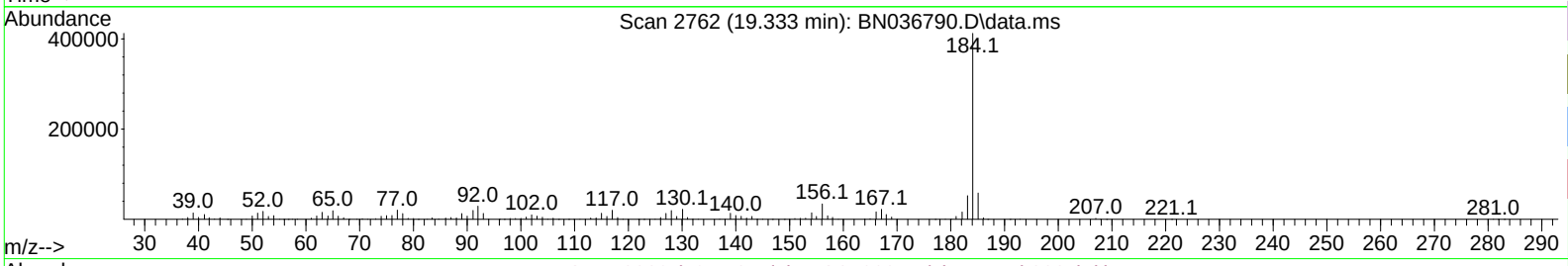
| Ion | Exp% | Act% |
|---|---|---|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20 | 59.83 |
| 264.00 | 61.60 | 61.22 |
| 0.00 | 0.00 | 0.00 |

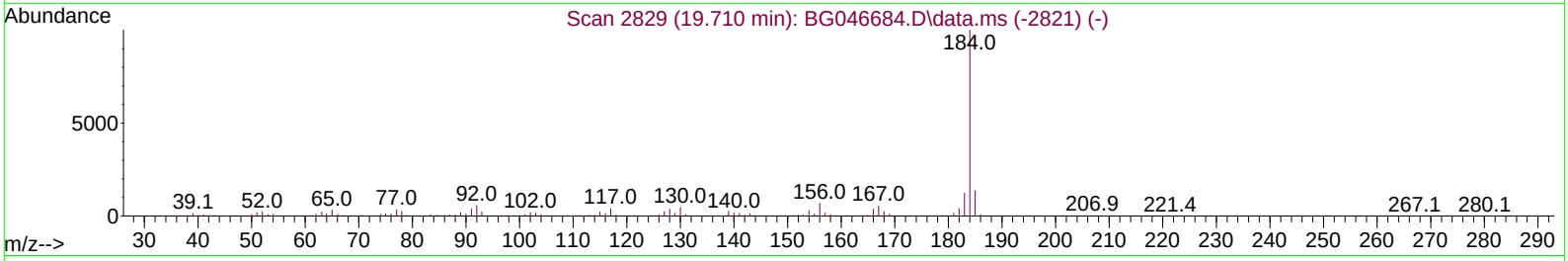
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036790.D
Acq On : 29 Mar 2025 01:26
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Apr 01 00:17:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Apr 01 00:16:52 2025
Response via : Initial Calibration




TIC: BN036790.D\data.ms

**(77) Benzidine**

**19.333min ( 0.000) 0.00 ng**

**response 556362**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50 | 14.17 |
| 183.00 | 13.20 | 12.68 |
| 0.00 | 0.00 | 0.00 |

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

## DDT Breakdown

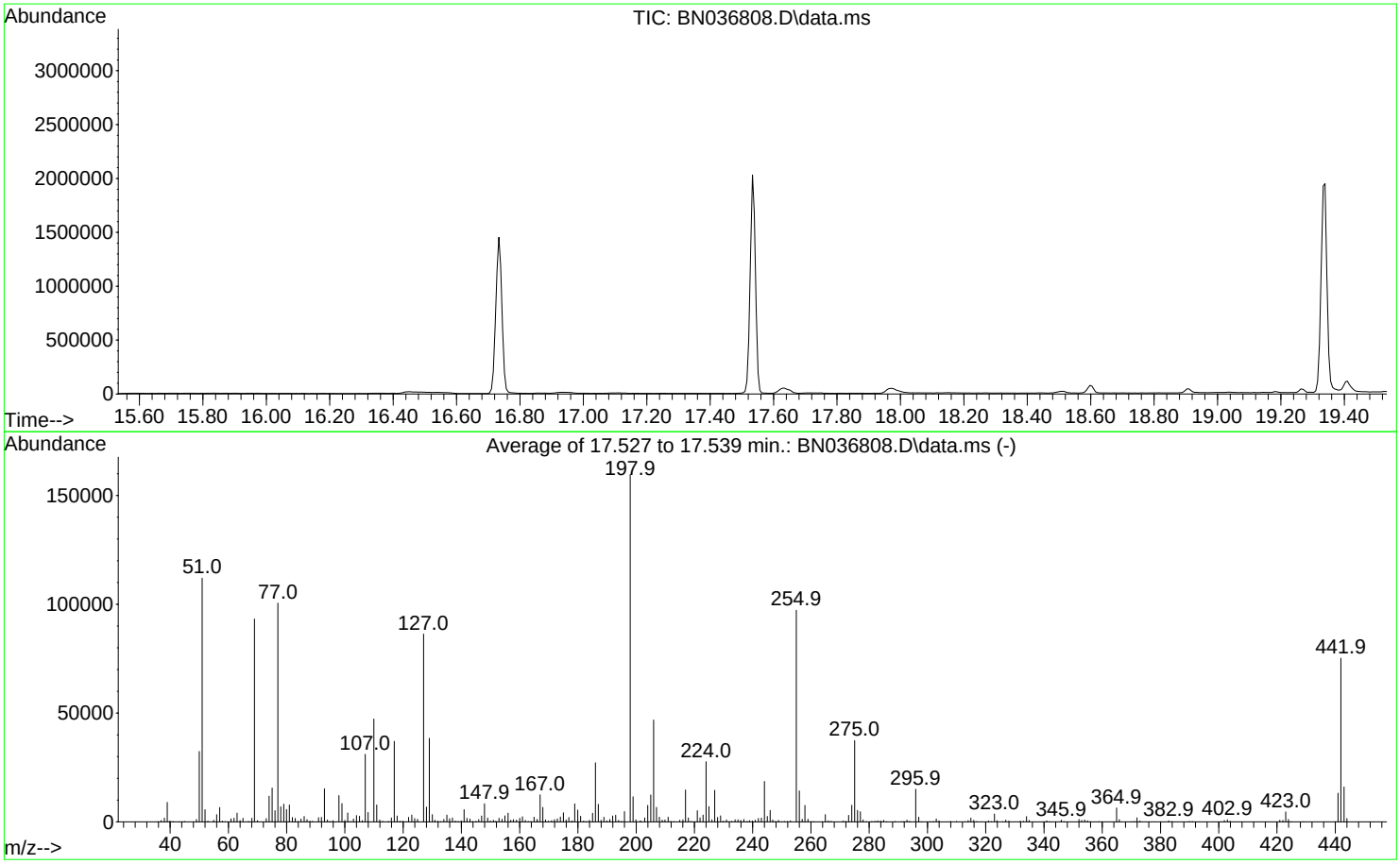
| Date | Instrument Name | DFTPP Data File |
|---|---|---|
| 3/28/2025 | BNA_N | BN036790.D |
| | | |
| | | |
| **Compound Name** | **Response** | **Retention Time** |
| | | |
| DDT | 356014 | 20.575 |
| DDD | 5380 | 20.133 |
| DDE | 263 | 19.628 |
| | | |
| | | |
| **SUM(DDD+DDE)** | **SUM(DDT+DDD+DDE)** | **% Breakdown Of DDT** |
| | | |
| 5643 | 361657 | 1.56 |
| | | |

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036808.D
Acq On : 31 Mar 2025 10:00
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



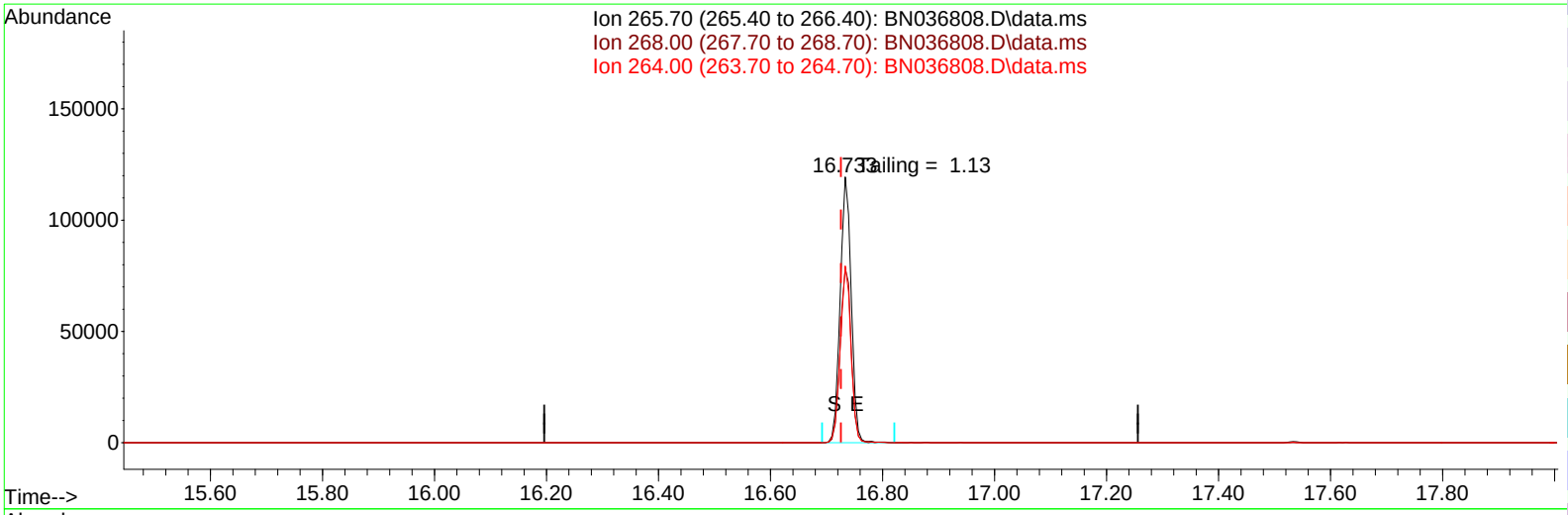

AutoFind: Scans 2455, 2456, 2457; Background Corrected with Scan 2449

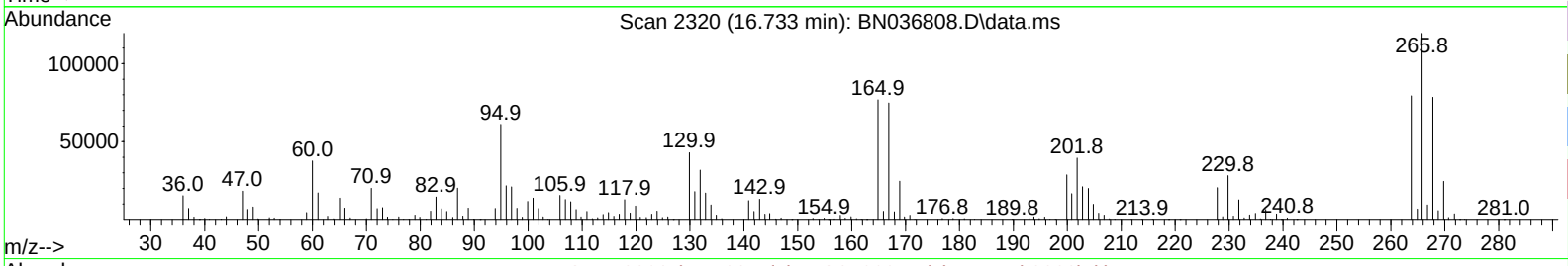
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 70.2 | 112056 | PASS |
| 68 | 69 | 0.00 | 2 | 1.8 | 1674 | PASS |
| 69 | 198 | 0.00 | 100 | 58.4 | 93275 | PASS |
| 70 | 69 | 0.00 | 2 | 0.6 | 564 | PASS |
| 127 | 198 | 10 | 80 | 54.1 | 86363 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 159677 | PASS |
| 199 | 198 | 5 | 9 | 7.2 | 11540 | PASS |
| 275 | 198 | 10 | 60 | 23.4 | 37339 | PASS |
| 365 | 198 | 1 | 100 | 4.0 | 6395 | PASS |
| 441 | 198 | 0.01 | 100 | 8.3 | 13207 | PASS |
| 442 | 442 | 50 | 100 | 100.0 | 75192 | PASS |
| 443 | 442 | 15 | 24 | 21.3 | 16045 | PASS |

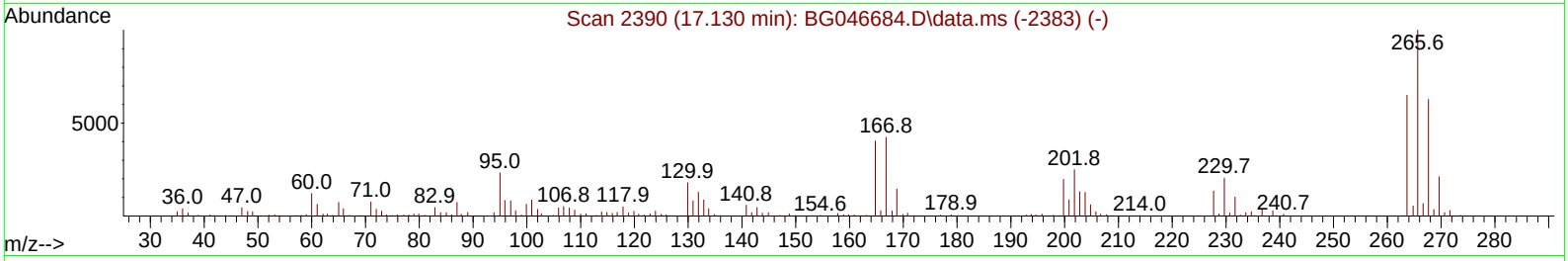
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036808.D
Acq On : 31 Mar 2025 10:00
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 31 12:42:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Mar 29 04:33:53 2025
Response via : Initial Calibration




TIC: BN036808.D\data.ms

**(70) Pentachlorophenol (C)**

**16.733min (+ 0.007) 18057.26 ng**

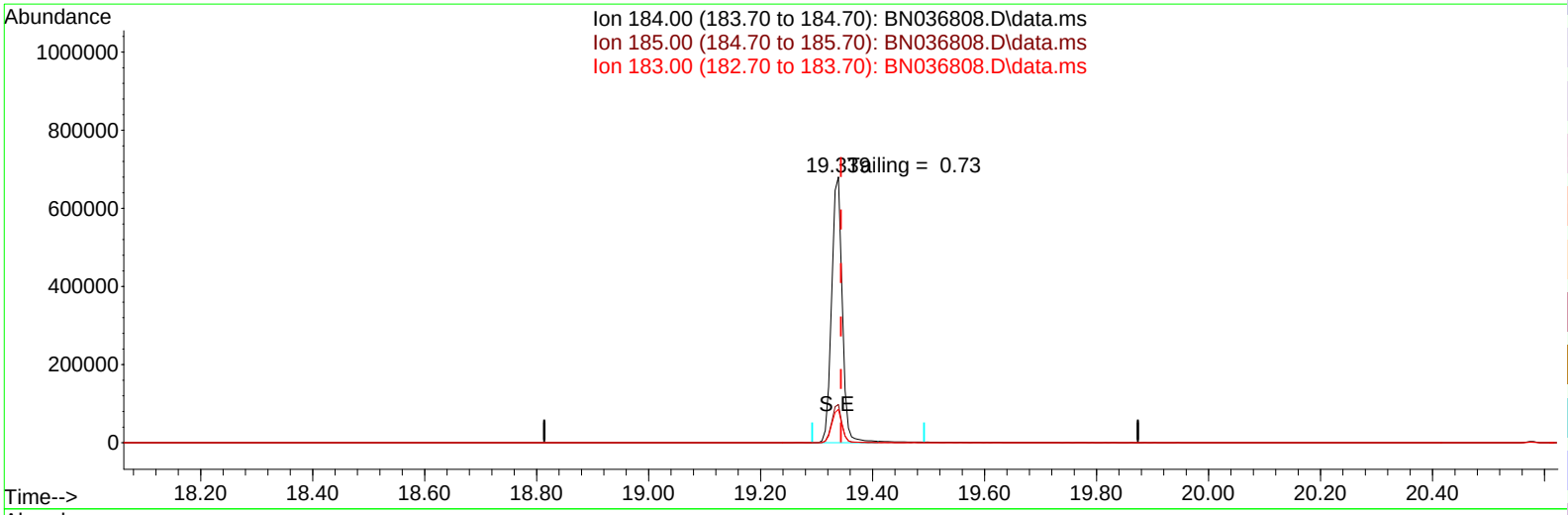
**response 163532**

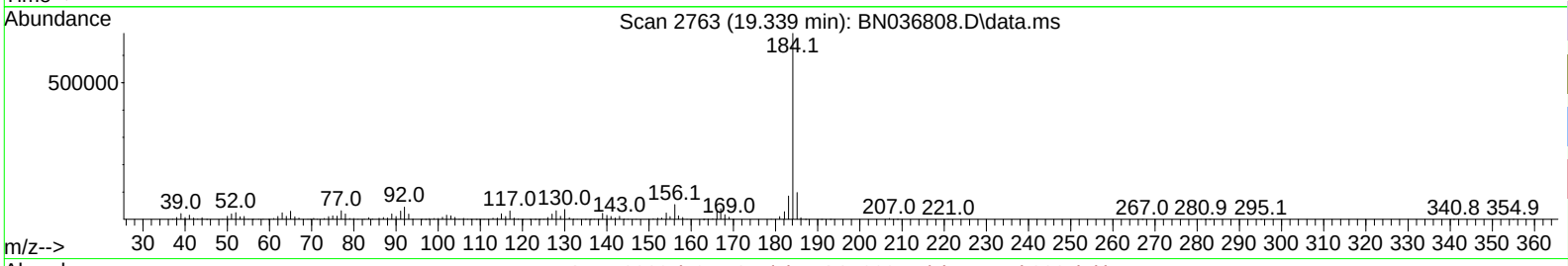
| Ion | Exp% | Act% |
|---|---|---|
| 265.70 | 100.00 | 100.00 |
| 268.00 | 62.20 | 65.65 |
| 264.00 | 61.60 | 66.47 |
| 0.00 | 0.00 | 0.00 |

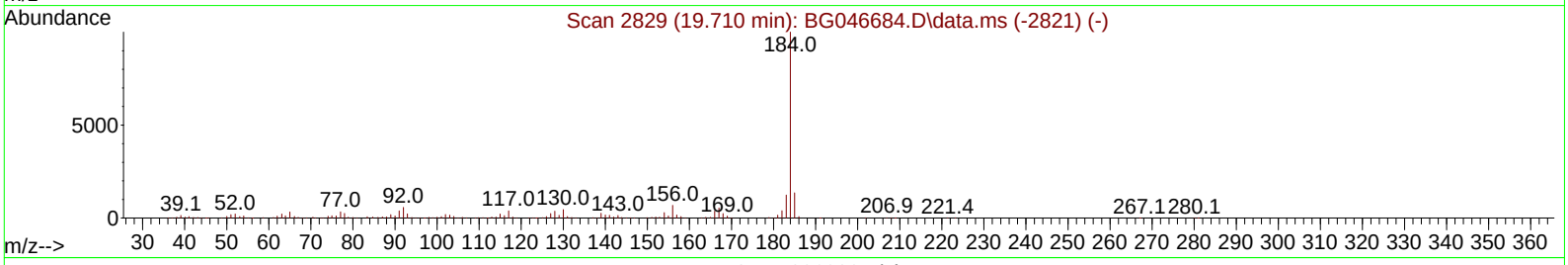
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036808.D
Acq On : 31 Mar 2025 10:00
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

Quant Time: Mar 31 12:45:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Mar 29 04:33:53 2025
Response via : Initial Calibration




TIC: BN036808.D\data.ms

**(77) Benzidine**

**19.339min (-0.005) 0.00 ng**

**response 903894**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 185.00 | 15.50 | 14.38 |
| 183.00 | 13.20 | 12.51 |
| 0.00 | 0.00 | 0.00 |

**Instrument :**
BNA_N
**ClientSampleId :**
DFTPP

## DDT Breakdown

| Date | Instrument Name | DFTPP Data File |
|---|---|---|
| 3/31/2025 | BNA_N | BN036808.D |
| | | |
| | | |
| **Compound Name** | **Response** | **Retention Time** |
| | | |
| DDT | 562026 | 20.58 |
| DDD | 7640 | 20.186 |
| DDE | 699 | 19.627 |
| | | |
| | | |
| **SUM(DDD+DDE)** | **SUM(DDT+DDD+DDE)** | **% Breakdown Of DDT** |
| | | |
| 8339 | 570365 | 1.46 |
| | | |

Alliance TECHNICAL GROUP
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 - RW5B CTO WE13 112G08005 | Date Received: | |
| Client Sample ID: | PB167269BL | SDG No.: | Q1621 |
| Lab Sample ID: | PB167269BL | 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 |
|---|---|---|---|---|
| BN036758.D | 1 | 03/24/25 08:15 | 03/28/25 04:22 | PB167269 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 123-91-1 | 1,4-Dioxane | 0.20 | U | 0.070 | 0.20 | 0.20 | ug/L |
| **SURROGATES** | | | | | | | |
| 7297-45-2 | 2-Methylnaphthalene-d10 | 0.33 | | 30 - 150 | | 83% | SPK: 0.4 |
| 93951-69-0 | Fluoranthene-d10 | 0.41 | | 30 - 150 | | 102% | SPK: 0.4 |
| 4165-60-0 | Nitrobenzene-d5 | 0.31 | | 55 - 111 | | 78% | SPK: 0.4 |
| 321-60-8 | 2-Fluorobiphenyl | 0.29 | | 53 - 106 | | 73% | SPK: 0.4 |
| 1718-51-0 | Terphenyl-d14 | 0.39 | | 58 - 132 | | 98% | SPK: 0.4 |
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 2130 | 7.703 | | | | |
| 1146-65-2 | Naphthalene-d8 | 4740 | 10.498 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 2600 | 14.345 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 5170 | 17.099 | | | | |
| 1719-03-5 | Chrysene-d12 | 3970 | 21.277 | | | | |
| 1520-96-3 | Perylene-d12 | 2210 | 23.528 | | | | |

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\BN032725\
Data File : BN036758.D
Acq On : 28 Mar 2025 04:22
Operator : RC/JU
Sample : PB167269BL
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Quant Time: Mar 28 05:37:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

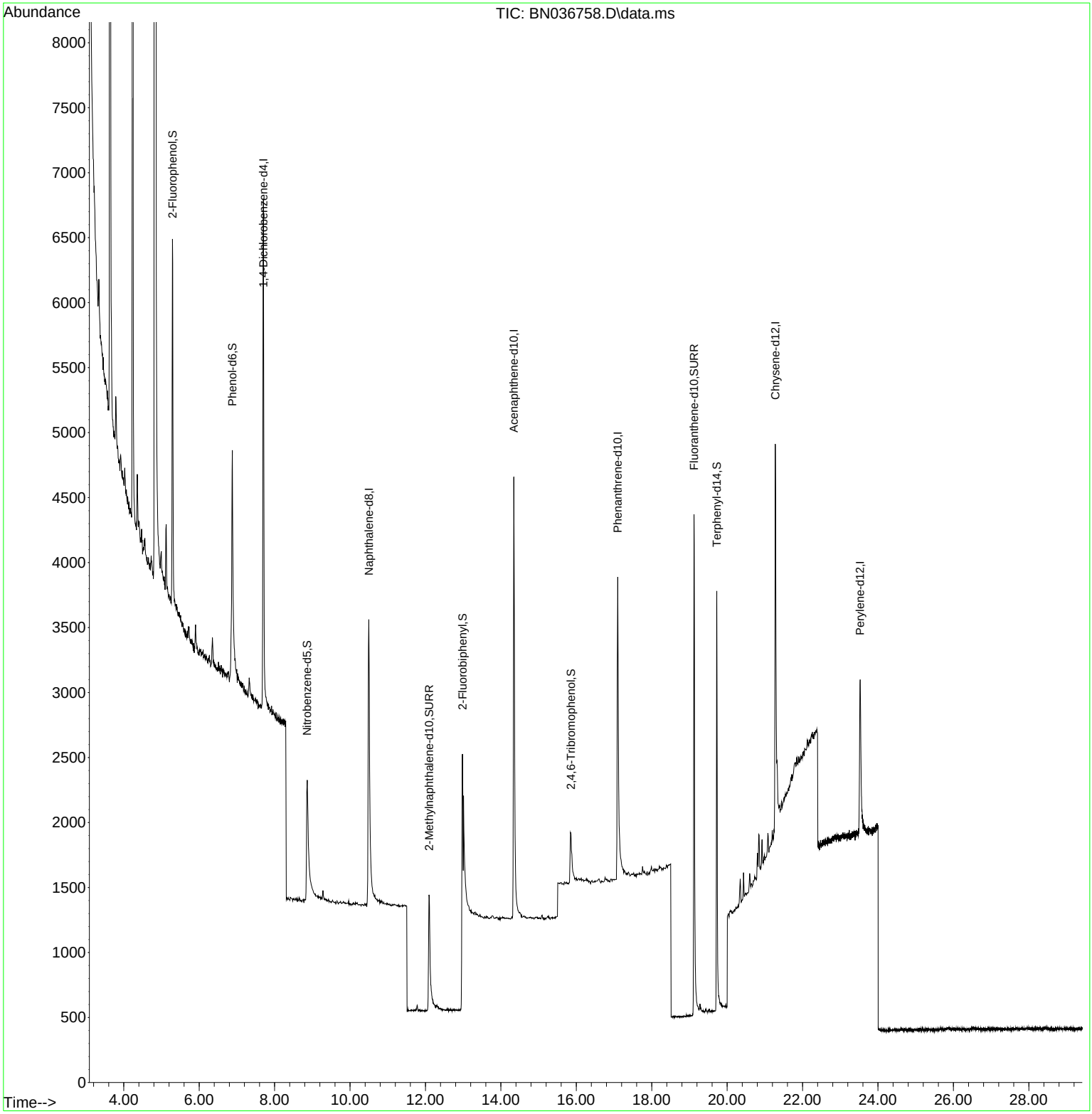
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 2126 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.498 | 136 | 4744 | 0.400 | ng | -0.01 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2602 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.099 | 188 | 5169 | 0.400 | ng | #-0.01 |
| 29) Chrysene-d12 | 21.277 | 240 | 3967 | 0.400 | ng | -0.02 |
| 35) Perylene-d12 | 23.528 | 264 | 2206 | 0.400 | ng | #-0.03 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.298 | 112 | 2117 | 0.427 | ng | -0.01 |
| 5) Phenol-d6 | 6.879 | 99 | 2225 | 0.364 | ng | -0.02 |
| 8) Nitrobenzene-d5 | 8.864 | 82 | 1610 | 0.312 | ng | -0.01 |
| 11) 2-Methylnaphthalene-d10 | 12.095 | 152 | 2360 | 0.334 | ng | -0.02 |
| 14) 2,4,6-Tribromophenol | 15.857 | 330 | 426 | 0.361 | ng | 0.00 |
| 15) 2-Fluorobiphenyl | 12.983 | 172 | 4427 | 0.292 | ng | 0.00 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 5420 | 0.409 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 3725 | 0.392 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |

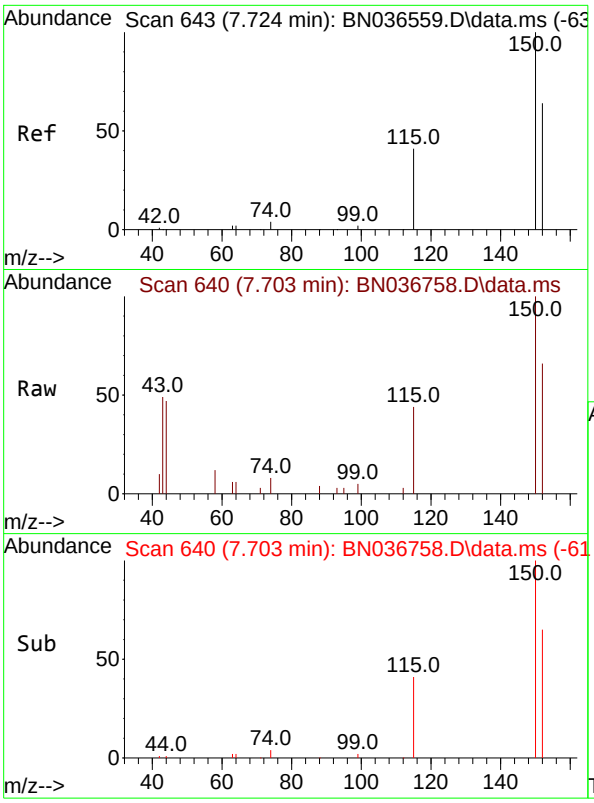
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036758.D
Acq On : 28 Mar 2025 04:22
Operator : RC/JU
Sample : PB167269BL
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Quant Time: Mar 28 05:37:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



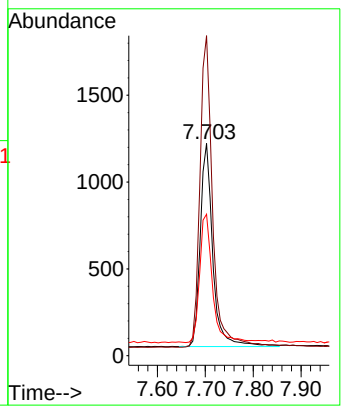


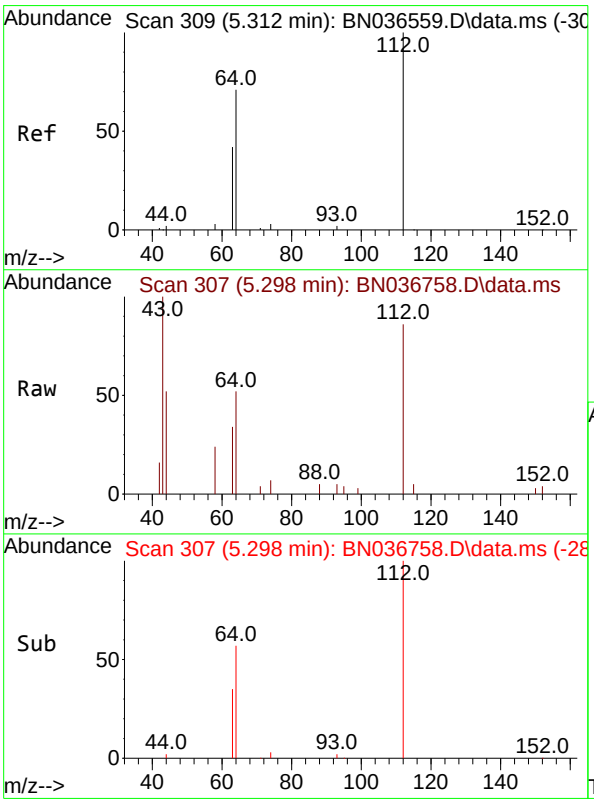

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Tgt Ion:152 Resp: 2126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 150.8 | 123.7 | 185.5 |
| 115 | 66.7 | 54.3 | 81.5 |

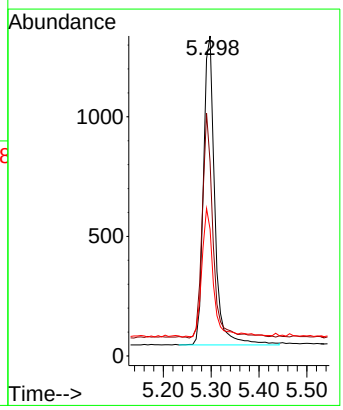


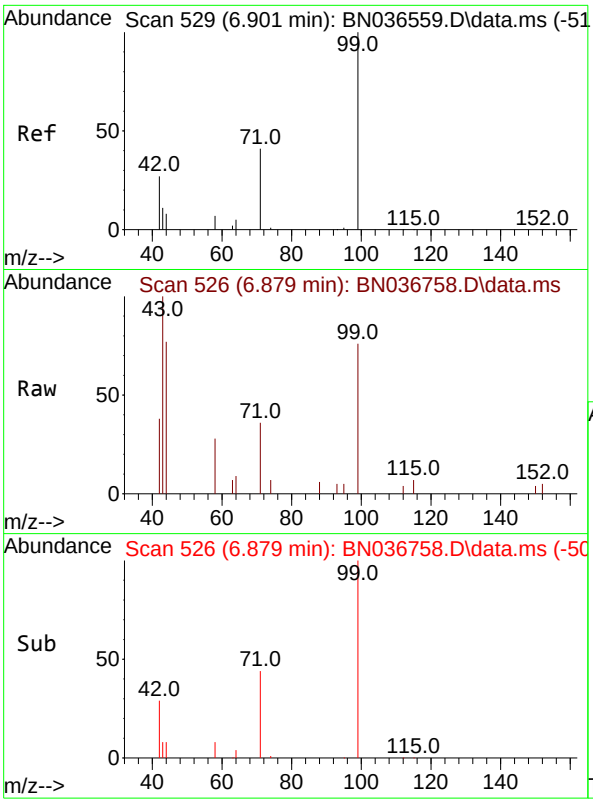




#4
2-Fluorophenol
Concen: 0.427 ng
RT: 5.298 min Scan# 307
Delta R.T. -0.014 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

Tgt Ion:112 Resp: 2117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.8 | 53.1 | 79.7 |
| 63 | 42.0 | 31.8 | 47.8 |



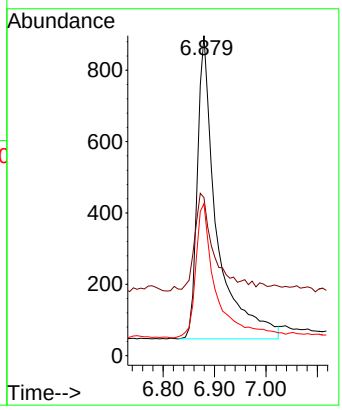


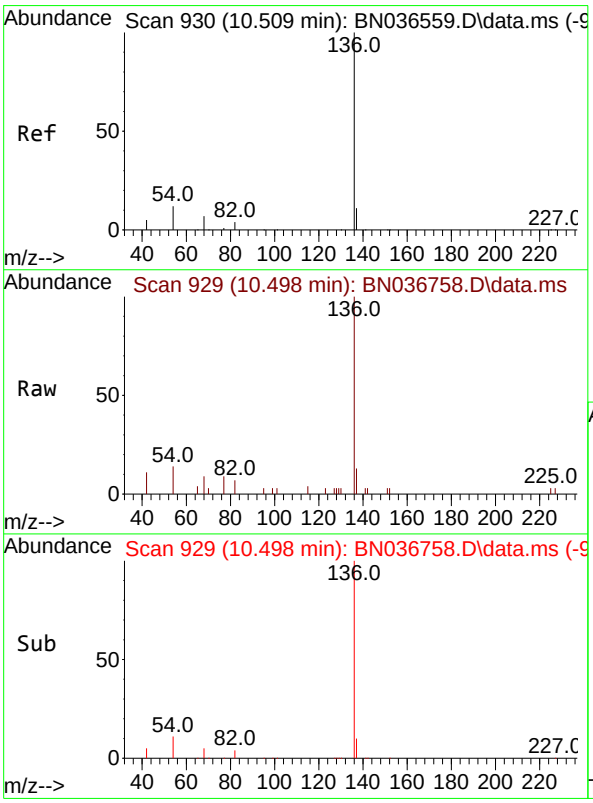

#5
Phenol-d6
Concen: 0.364 ng
RT: 6.879 min Scan# 5
Delta R.T. -0.022 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Tgt Ion: 99 Resp: 2225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 33.1 | 26.5 | 39.7 |
| 71 | 46.4 | 34.1 | 51.1 |

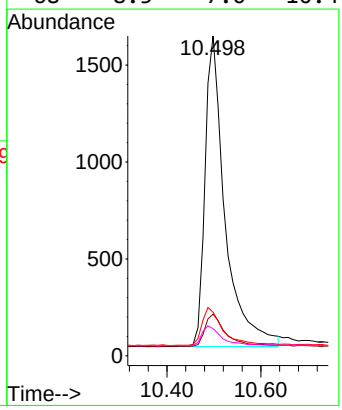


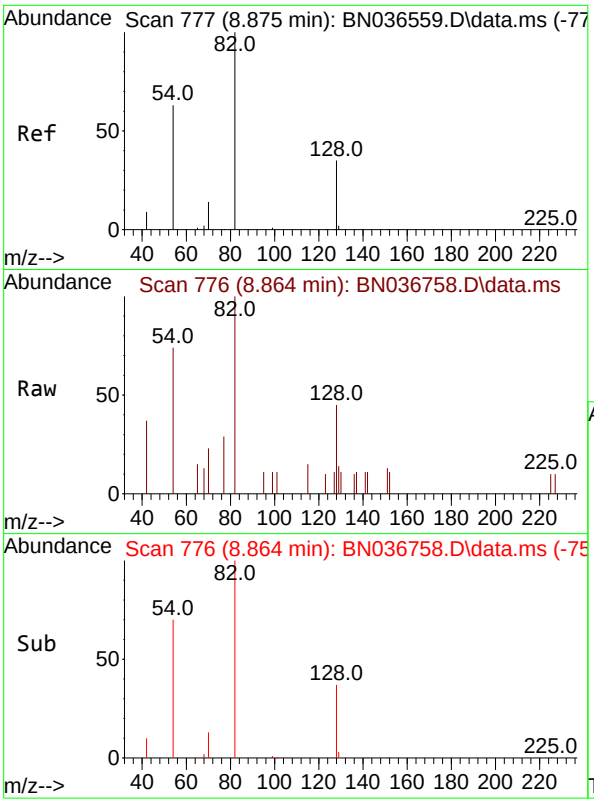




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 929
Delta R.T. -0.011 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

Tgt Ion:136 Resp: 4744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 13.0 | 10.3 | 15.5 |
| 54 | 13.6 | 11.5 | 17.3 |
| 68 | 8.5 | 7.0 | 10.4 |



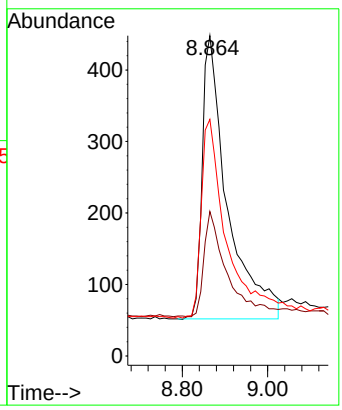


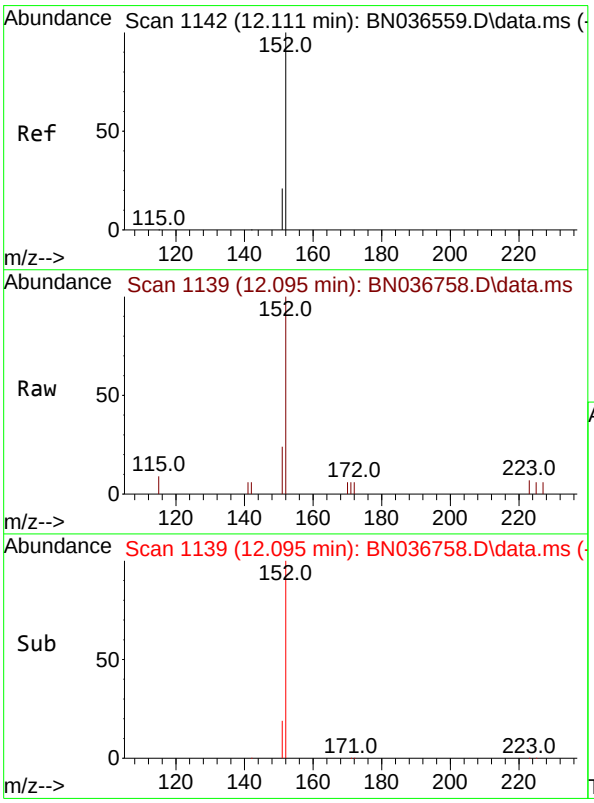

#8
Nitrobenzene-d5
Concen: 0.312 ng
RT: 8.864 min Scan# 7
Delta R.T. -0.011 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Tgt Ion: 82 Resp: 1610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 45.1 | 30.6 | 45.8 |
| 54 | 73.9 | 52.2 | 78.4 |

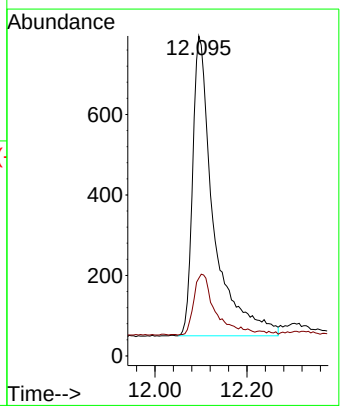


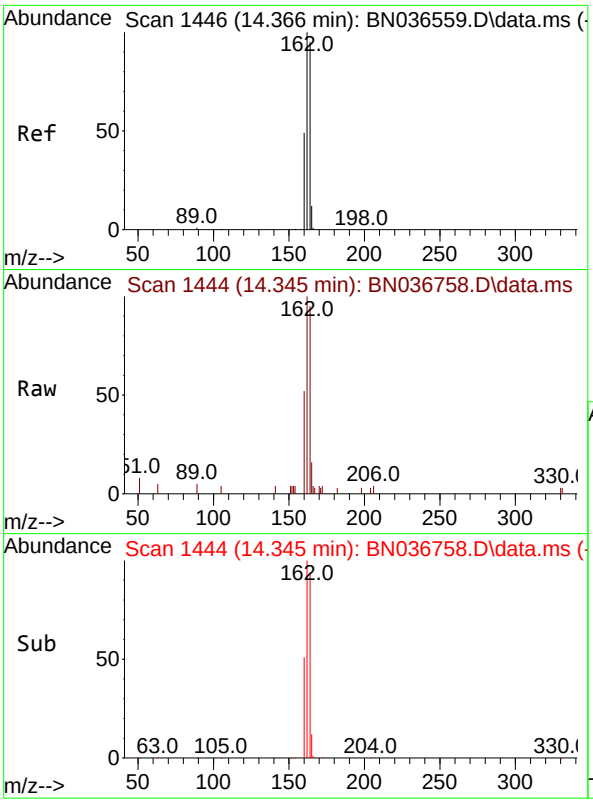




#11
2-Methylnaphthalene-d10
Concen: 0.334 ng
RT: 12.095 min Scan# 1139
Delta R.T. -0.015 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

Tgt Ion:152 Resp: 2360

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.8 | 17.0 | 25.6 |



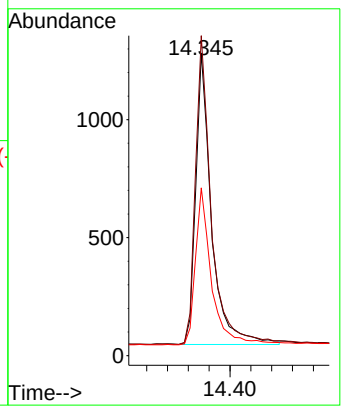


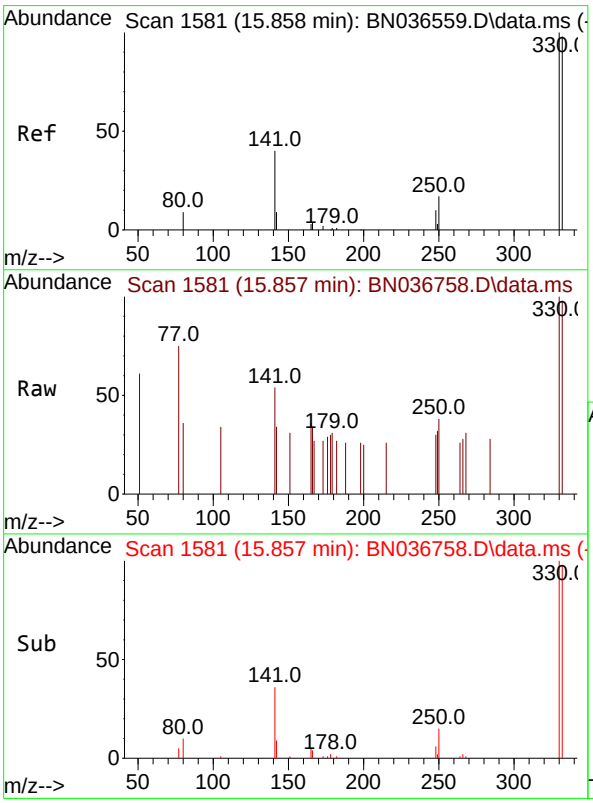

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Tgt Ion:164 Resp: 2602

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 105.7 | 84.2 | 126.2 |
| 160 | 55.4 | 42.2 | 63.2 |

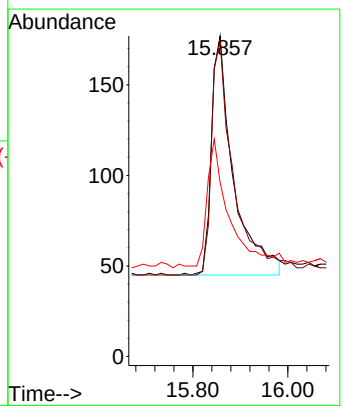


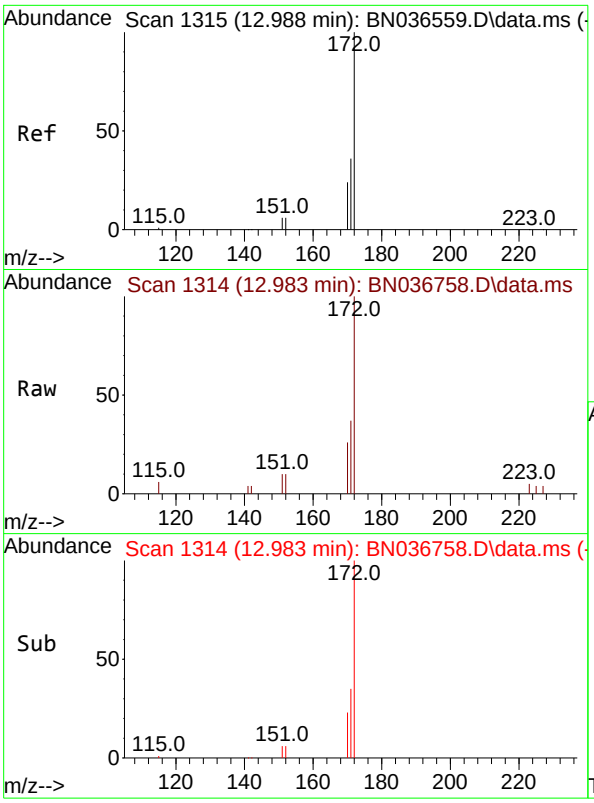




#14
2,4,6-Tribromophenol
Concen: 0.361 ng
RT: 15.857 min Scan# 1581
Delta R.T. -0.000 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

Tgt Ion:330 Resp: 426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 96.9 | 75.2 | 112.8 |
| 141 | 50.7 | 43.4 | 65.2 |



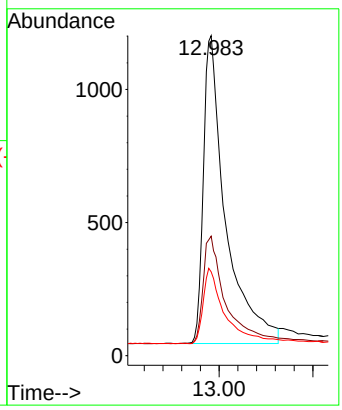


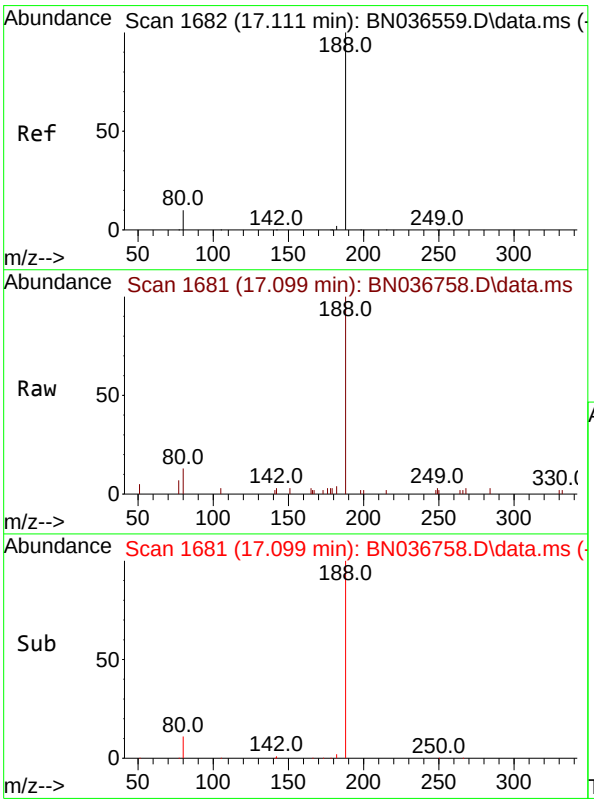

#15
2-Fluorobiphenyl
Concen: 0.292 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Tgt Ion:172 Resp: 4427

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.4 | 29.5 | 44.3 |
| 170 | 26.2 | 20.2 | 30.4 |

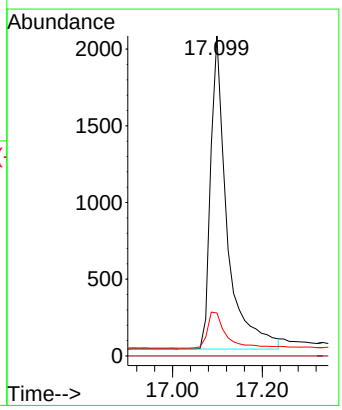


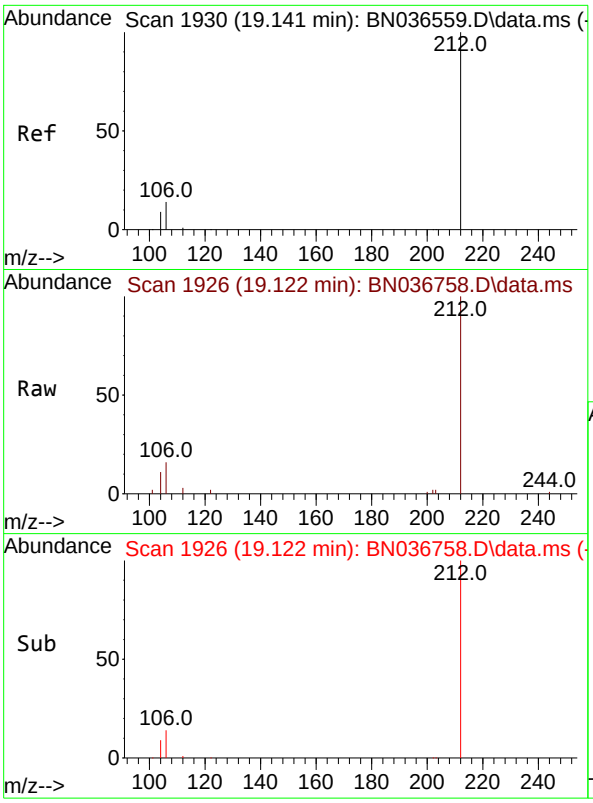




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1681
Delta R.T. -0.012 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

Tgt Ion:188 Resp: 5169

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 13.4 | 8.8 | 13.2# |



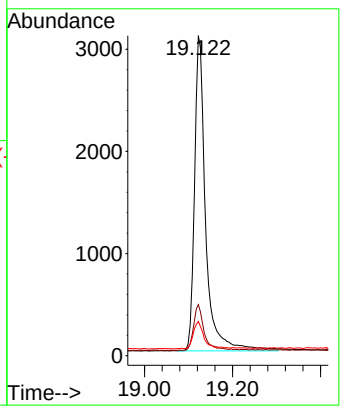


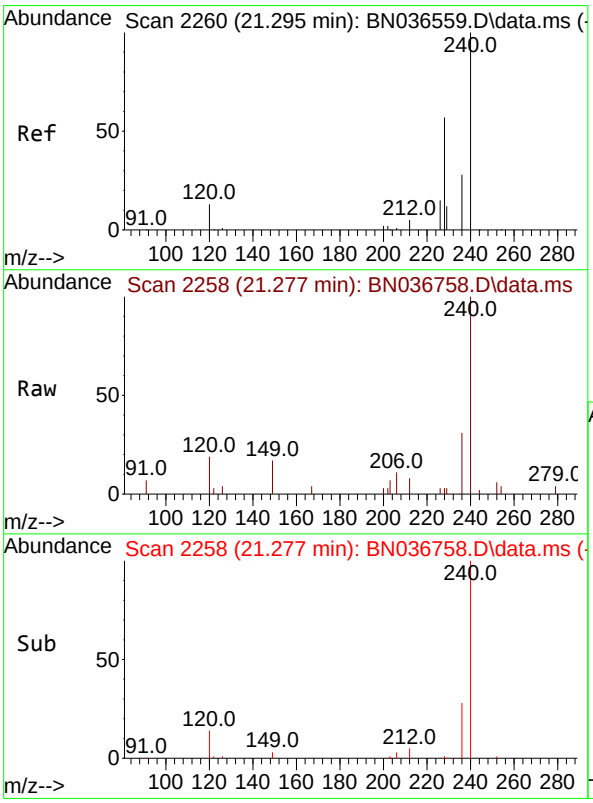

#27
Fluoranthene-d10
Concen: 0.409 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.019 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Tgt Ion:212 Resp: 5420

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.5 | 11.8 | 17.6 |
| 104 | 8.5 | 7.3 | 10.9 |

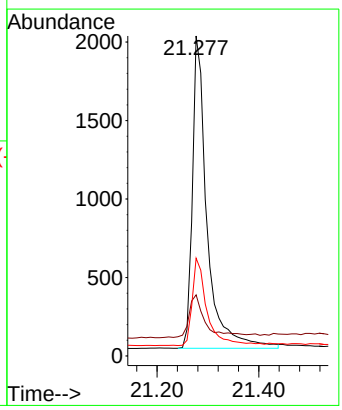


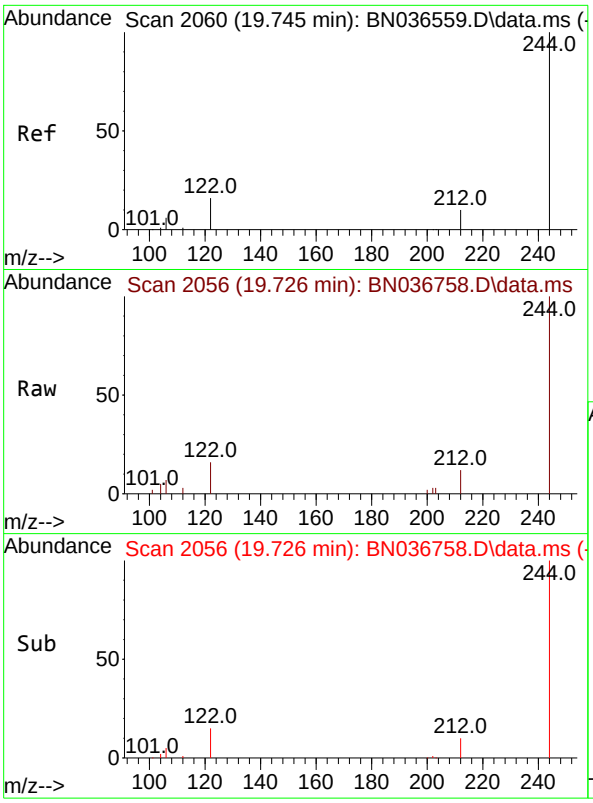




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.018 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

Tgt Ion:240 Resp: 3967

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 19.1 | 14.6 | 22.0 |
| 236 | 30.6 | 24.1 | 36.1 |



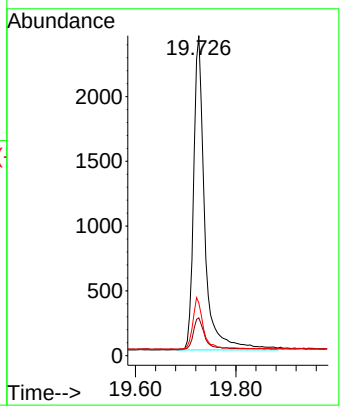


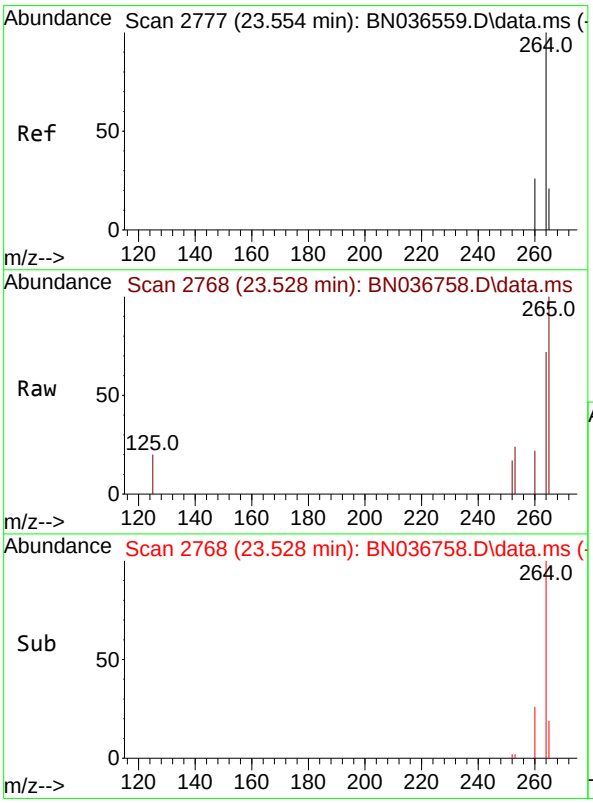

#31
Terphenyl-d14
Concen: 0.392 ng
RT: 19.726 min Scan# 2
Delta R.T. -0.019 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BL

Tgt Ion:244 Resp: 3725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.8 | 9.6 | 14.4 |
| 122 | 16.4 | 13.9 | 20.9 |

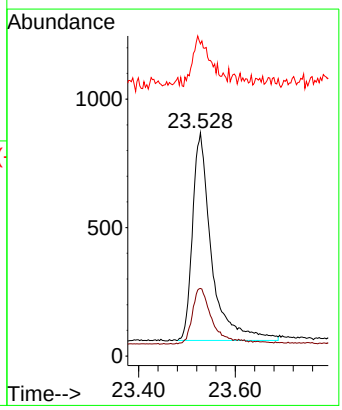



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.528 min Scan# 2768
Delta R.T. -0.026 min
Lab File: BN036758.D
Acq: 28 Mar 2025 04:22

Tgt Ion:264 Resp: 2206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 30.3 | 22.6 | 33.8 |
| 265 | 139.8 | 88.1 | 132.1# |



Alliance TECHNICAL GROUP
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 - RW5B CTO WE13 112G08005 | Date Received: | |
| Client Sample ID: | PB167269BS | SDG No.: | Q1621 |
| Lab Sample ID: | PB167269BS | 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 |
|---|---|---|---|---|
| BN036806.D | 1 | 03/24/25 08:15 | 03/29/25 11:45 | PB167269 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 123-91-1 | 1,4-Dioxane | 0.38 | | 0.070 | 0.20 | 0.20 | ug/L |
| **SURROGATES** | | | | | | | |
| 7297-45-2 | 2-Methylnaphthalene-d10 | 0.40 | | 30 - 150 | | 101% | SPK: 0.4 |
| 93951-69-0 | Fluoranthene-d10 | 0.45 | | 30 - 150 | | 112% | SPK: 0.4 |
| 4165-60-0 | Nitrobenzene-d5 | 0.42 | | 55 - 111 | | 105% | SPK: 0.4 |
| 321-60-8 | 2-Fluorobiphenyl | 0.46 | * | 53 - 106 | | 115% | SPK: 0.4 |
| 1718-51-0 | Terphenyl-d14 | 0.49 | | 58 - 132 | | 122% | SPK: 0.4 |
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 1850 | 7.696 | | | | |
| 1146-65-2 | Naphthalene-d8 | 4670 | 10.477 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 2570 | 14.334 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 5010 | 17.087 | | | | |
| 1719-03-5 | Chrysene-d12 | 3220 | 21.277 | | | | |
| 1520-96-3 | Perylene-d12 | 1390 | 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\BN032825\
Data File : BN036806.D
Acq On : 29 Mar 2025 11:45
Operator : RC/JU
Sample : PB167269BS
Misc :
ALS Vial : 37 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Quant Time: Mar 31 02:00:49 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

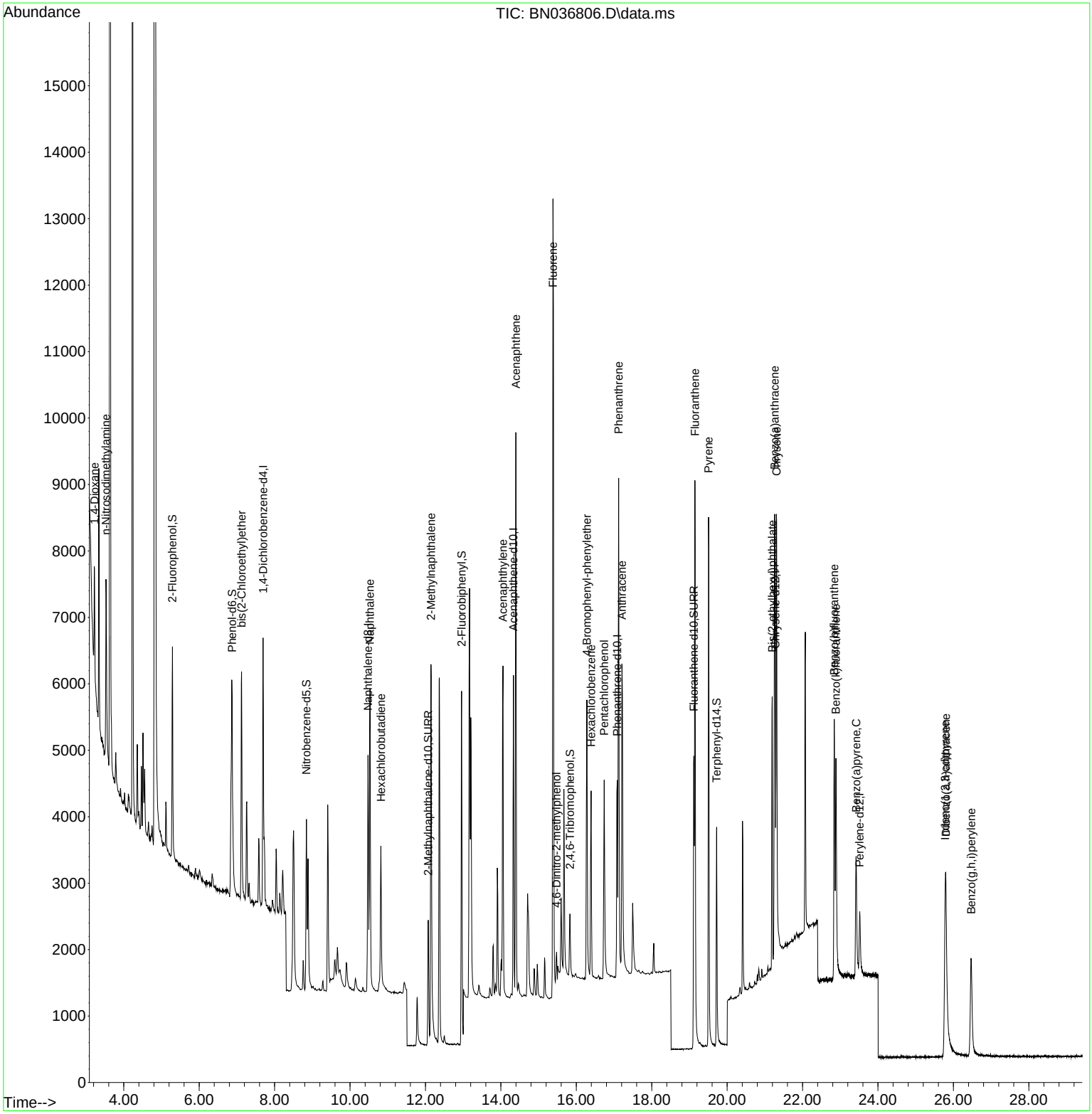
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.696 | 152 | 1846 | 0.400 | ng | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4665 | 0.400 | ng | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2569 | 0.400 | ng | -0.03 |
| 19) Phenanthrene-d10 | 17.087 | 188 | 5013 | 0.400 | ng | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 3219 | 0.400 | ng | #-0.02 |
| 35) Perylene-d12 | 23.516 | 264 | 1389 | 0.400 | ng | #-0.04 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.291 | 112 | 2250 | 0.523 | ng | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 2724 | 0.513 | ng | -0.03 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 2129 | 0.420 | ng | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2800 | 0.404 | ng | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 579 | 0.497 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.958 | 172 | 6897 | 0.461 | ng | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5761 | 0.448 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3774 | 0.489 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 783 | 0.382 | ng | # 17 |
| 3) n-Nitrosodimethylamine | 3.528 | 42 | 2291 | 0.553 | ng | # 90 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 2493 | 0.454 | ng | 96 |
| 9) Naphthalene | 10.530 | 128 | 6375 | 0.465 | ng | 99 |
| 10) Hexachlorobutadiene | 10.819 | 225 | 1506 | 0.466 | ng | # 99 |
| 12) 2-Methylnaphthalene | 12.146 | 142 | 4161 | 0.477 | ng | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 5803 | 0.479 | ng | 100 |
| 17) Acenaphthene | 14.398 | 154 | 3970 | 0.500 | ng | 100 |
| 18) Fluorene | 15.382 | 166 | 5559 | 0.518 | ng | 97 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 574 | 0.592 | ng | # 65 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1618 | 0.515 | ng | 93 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1869 | 0.493 | ng | 95 |
| 24) Pentachlorophenol | 16.739 | 266 | 1681 | 0.972 | ng | 99 |
| 25) Phenanthrene | 17.124 | 178 | 7972 | 0.530 | ng | 99 |
| 26) Anthracene | 17.211 | 178 | 7103 | 0.523 | ng | 99 |
| 28) Fluoranthene | 19.146 | 202 | 8378 | 0.496 | ng | 98 |
| 30) Pyrene | 19.508 | 202 | 7829 | 0.497 | ng | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5730 | 0.512 | ng | 99 |
| 33) Chrysene | 21.313 | 228 | 7035 | 0.575 | ng | 100 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4222 | 0.530 | ng | # 98 |
| 36) Indeno(1,2,3-cd)pyrene | 25.782 | 276 | 4352 | 0.868 | ng | # 82 |
| 37) Benzo(b)fluoranthene | 22.841 | 252 | 5186 | 1.026 | ng | # 92 |
| 38) Benzo(k)fluoranthene | 22.885 | 252 | 5229 | 0.986 | ng | # 94 |
| 39) Benzo(a)pyrene | 23.420 | 252 | 3277 | 0.770 | ng | 95 |
| 40) Dibenzo(a,h)anthracene | 25.800 | 278 | 3999 | 1.025 | ng | 94 |
| 41) Benzo(g,h,i)perylene | 26.472 | 276 | 3464 | 0.776 | ng | 97 |

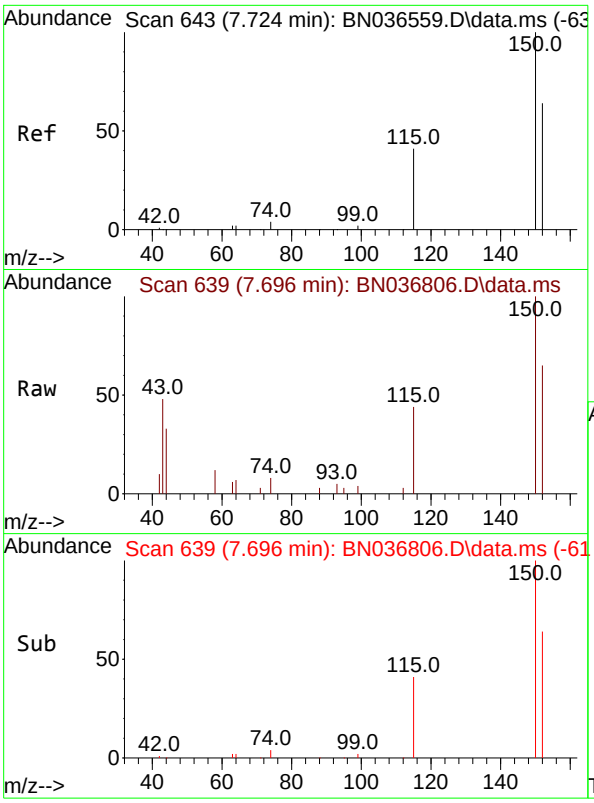
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036806.D
Acq On : 29 Mar 2025 11:45
Operator : RC/JU
Sample : PB167269BS
Misc :
ALS Vial : 37 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Quant Time: Mar 31 02:00:49 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



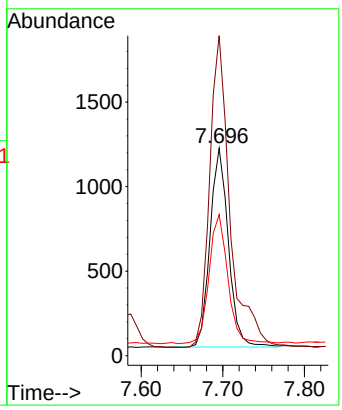


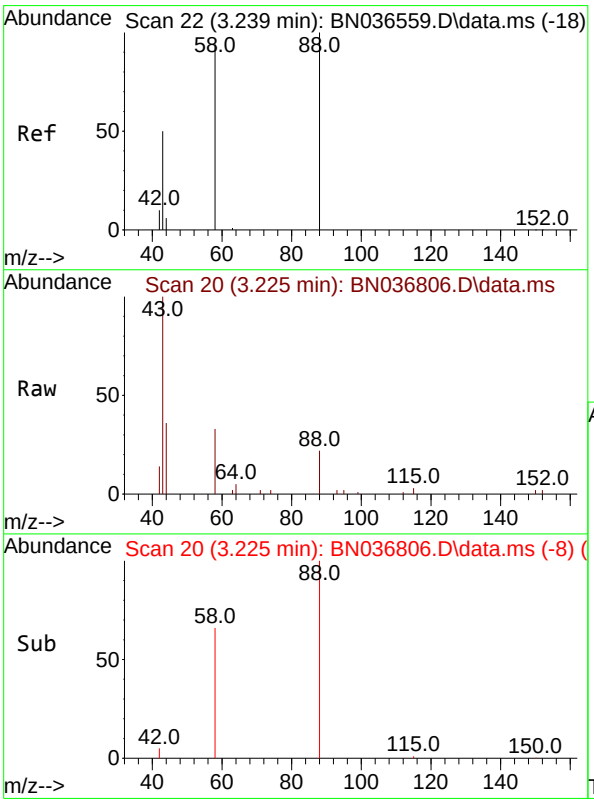

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.696 min Scan# 6
Delta R.T. -0.028 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:152 Resp: 1846

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.3 | 123.7 | 185.5 |
| 115 | 68.1 | 54.3 | 81.5 |

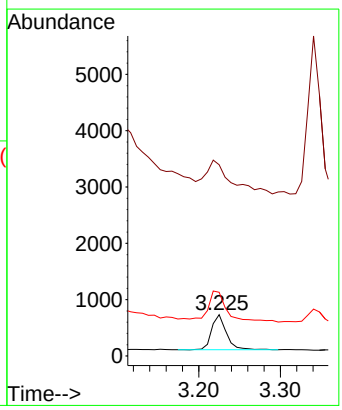


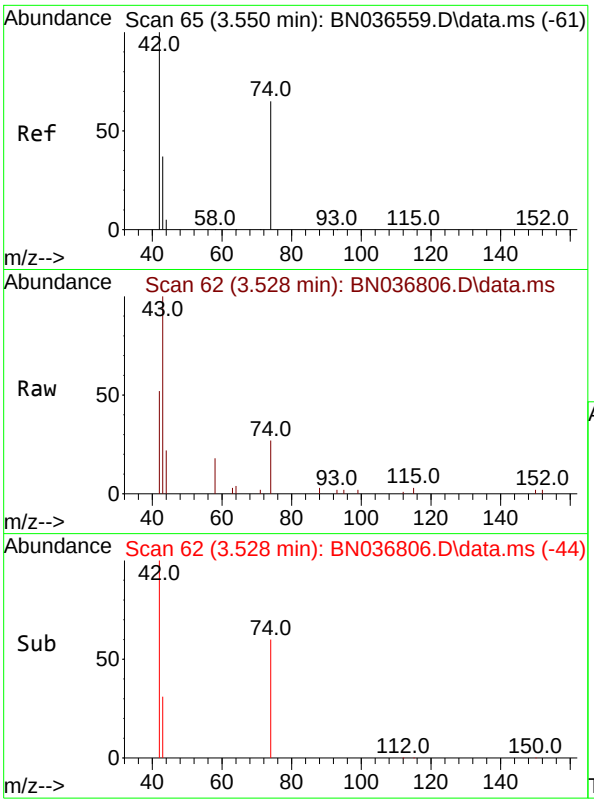




#2
1,4-Dioxane
Concen: 0.382 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion: 88 Resp: 783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 163.5 | 37.8 | 56.8# |
| 58 | 113.8 | 67.4 | 101.2# |



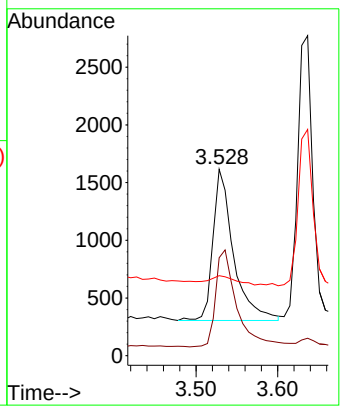


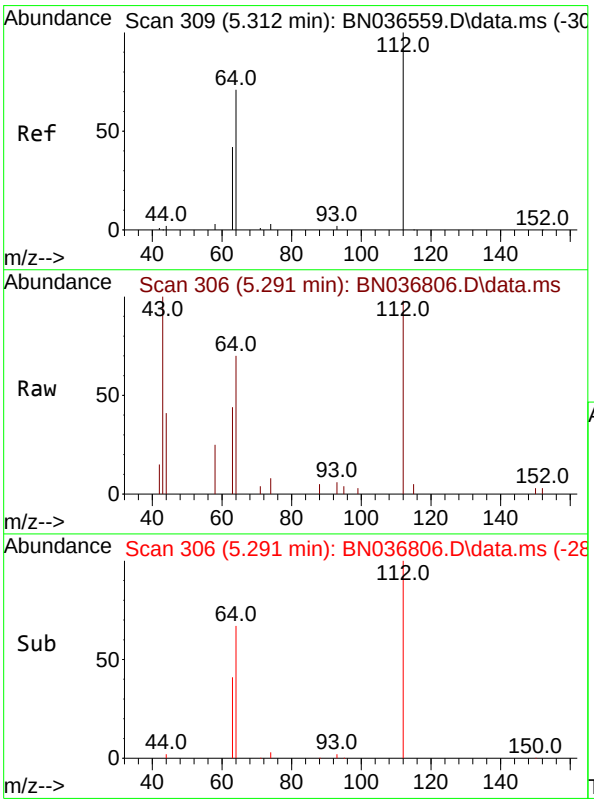

#3
n-Nitrosodimethylamine
Concen: 0.553 ng
RT: 3.528 min Scan# 6
Delta R.T. -0.022 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion: 42 Resp: 2291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 66.4 | 60.6 | 90.8 |
| 44 | 9.8 | 6.3 | 9.5# |

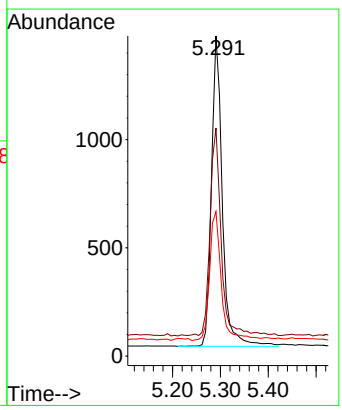


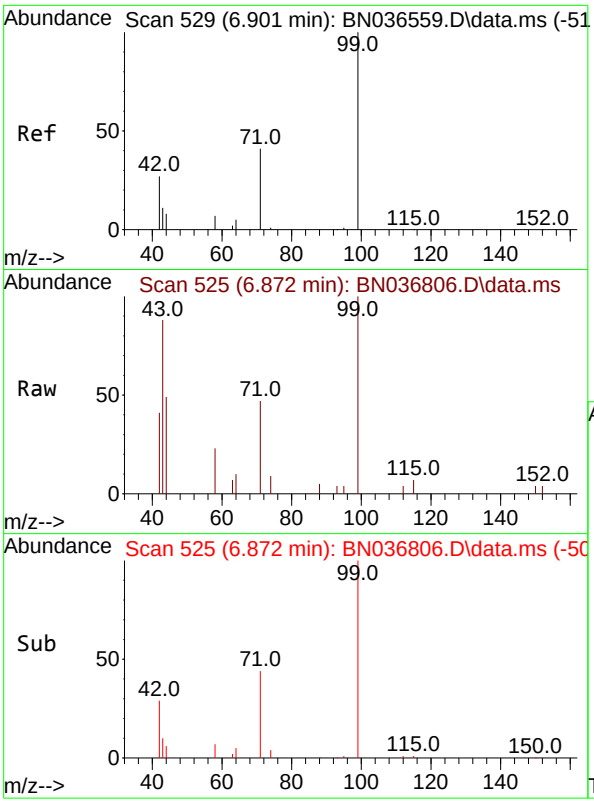




#4
2-Fluorophenol
Concen: 0.523 ng
RT: 5.291 min Scan# 306
Delta R.T. -0.021 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:112 Resp: 2250

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.4 | 53.1 | 79.7 |
| 63 | 45.2 | 31.8 | 47.8 |



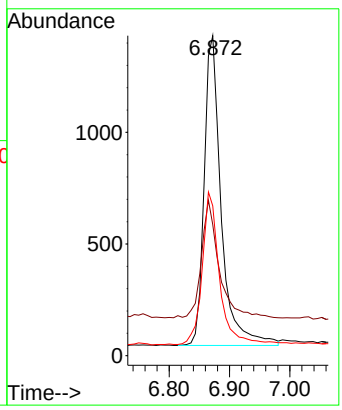


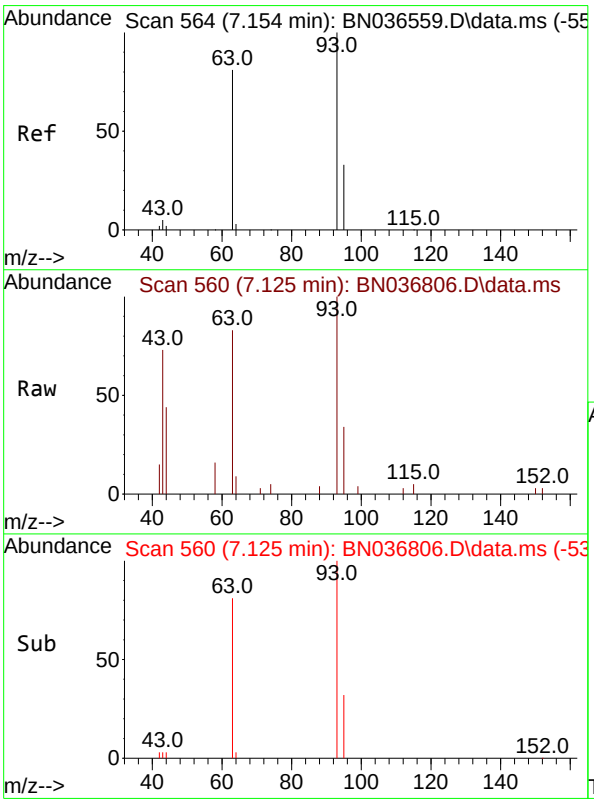

#5
Phenol-d6
Concen: 0.513 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion: 99 Resp: 2724

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 39.3 | 26.5 | 39.7 |
| 71 | 50.7 | 34.1 | 51.1 |

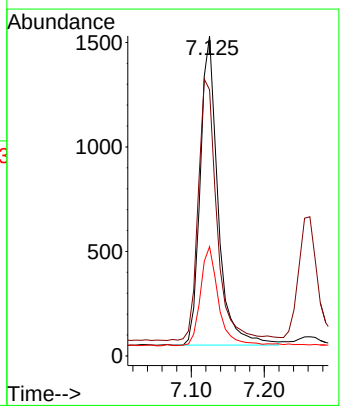


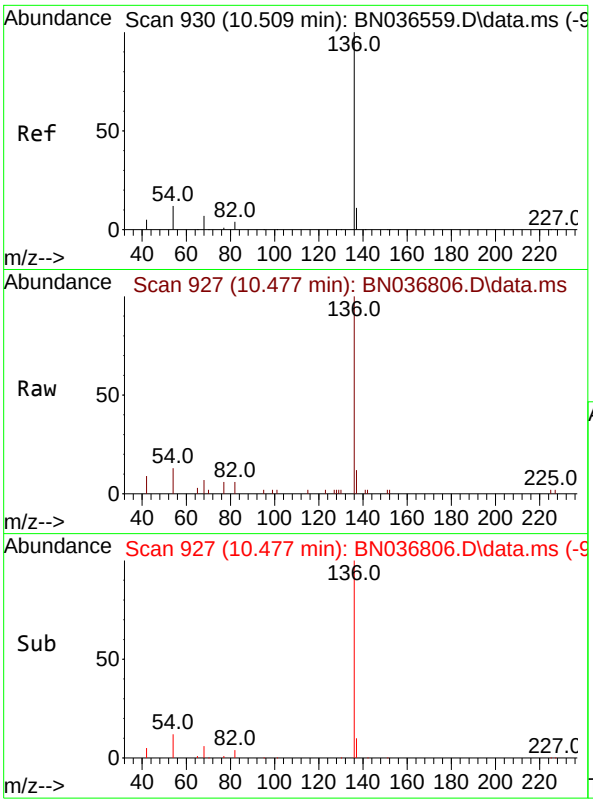




#6
bis(2-Chloroethyl)ether
Concen: 0.454 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion: 93 Resp: 2493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 88.8 | 67.7 | 101.5 |
| 95 | 32.9 | 25.6 | 38.4 |



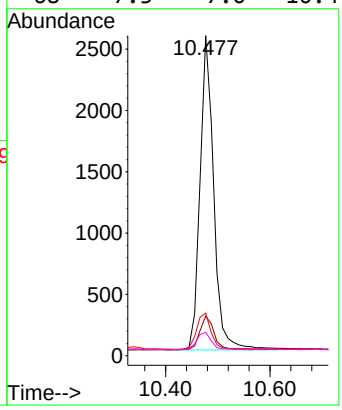


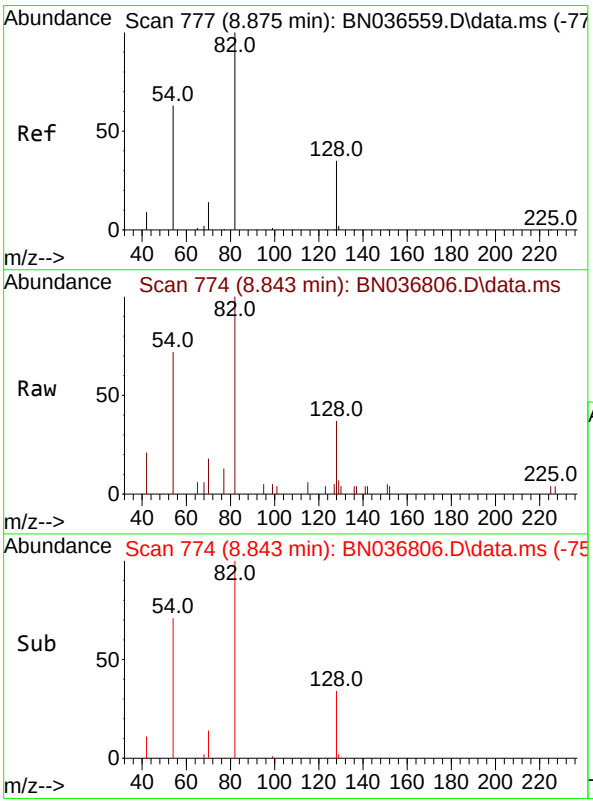

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:136 Resp: 4665

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 13.3 | 11.5 | 17.3 |
| 68 | 7.3 | 7.0 | 10.4 |

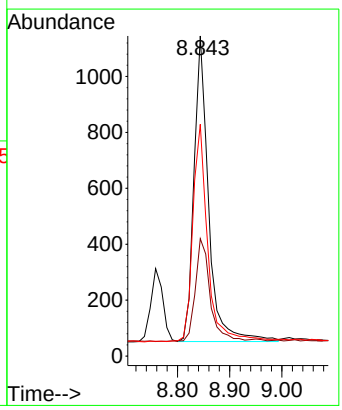


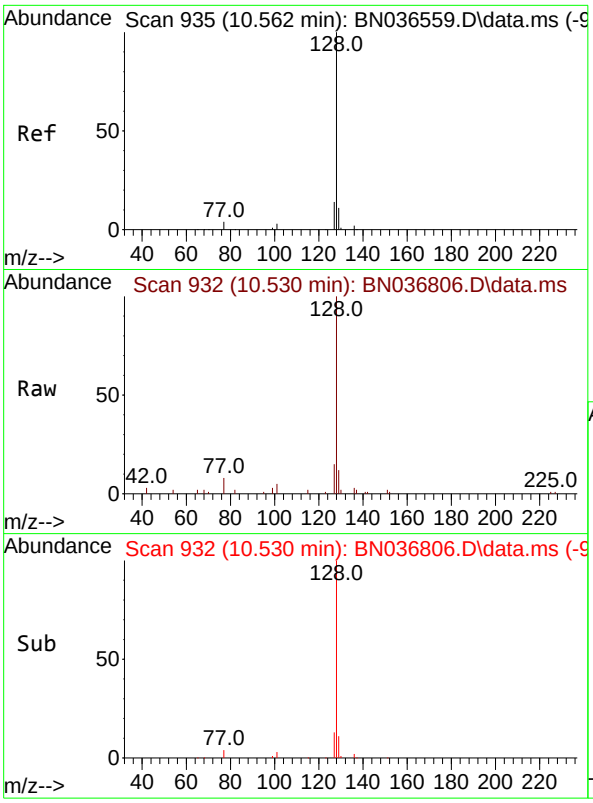




#8
Nitrobenzene-d5
Concen: 0.420 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion: 82 Resp: 2129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 36.7 | 30.6 | 45.8 |
| 54 | 72.4 | 52.2 | 78.4 |



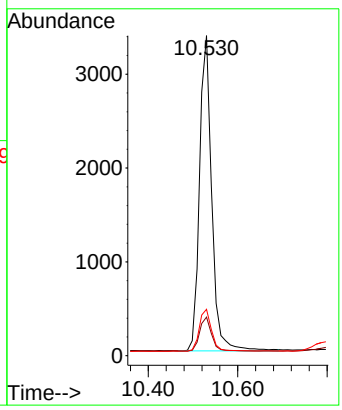


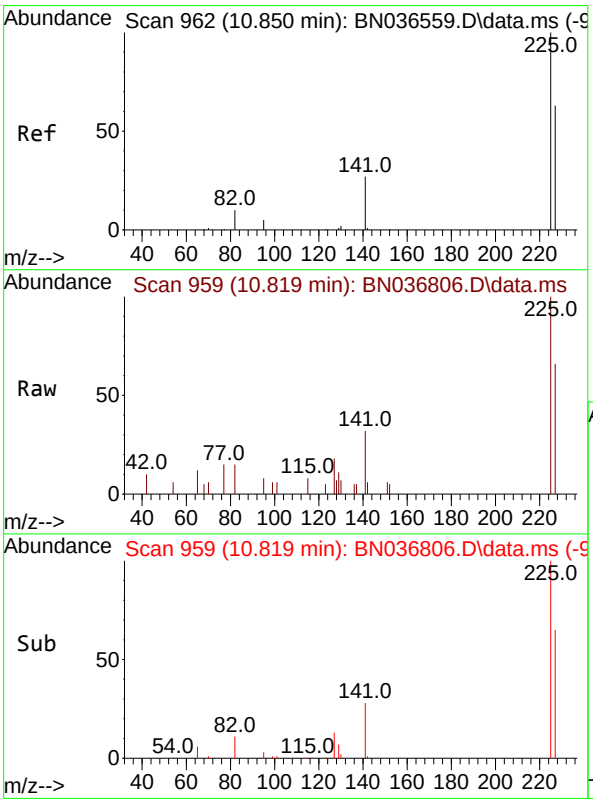

#9
Naphthalene
Concen: 0.465 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:128 Resp: 6375

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.1 | 9.8 | 14.6 |
| 127 | 14.5 | 11.8 | 17.8 |

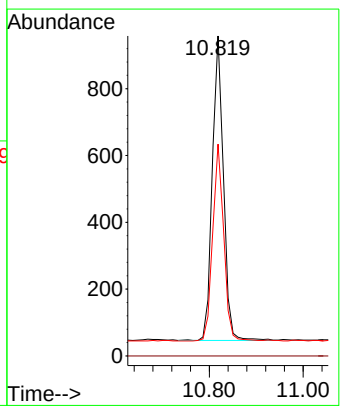


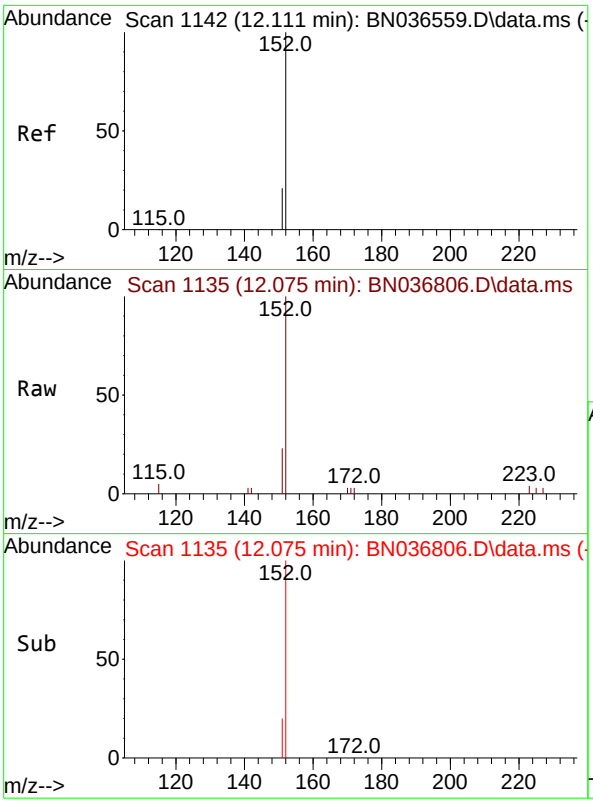




#10
Hexachlorobutadiene
Concen: 0.466 ng
RT: 10.819 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:225 Resp: 1506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.8 | 51.8 | 77.8 |



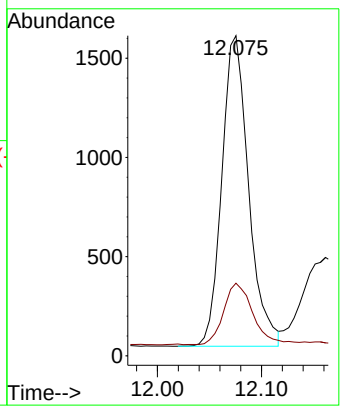


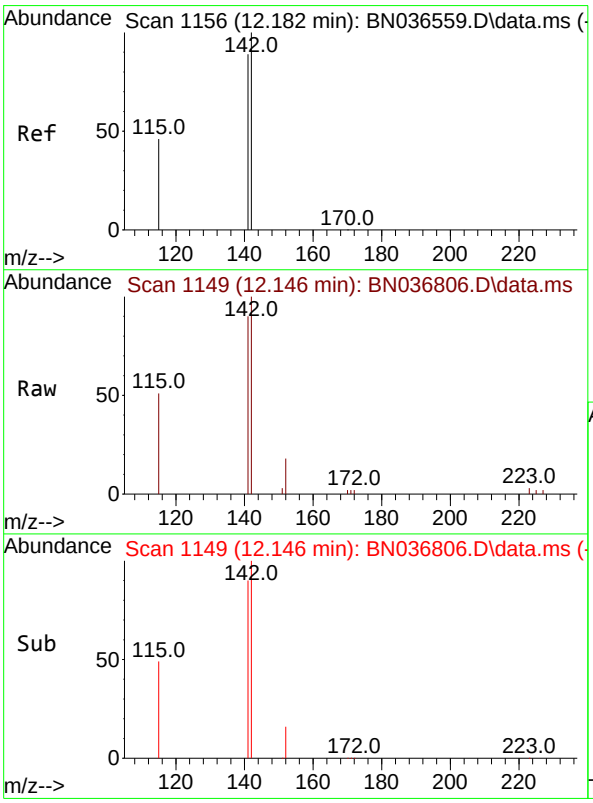

#11
2-Methylnaphthalene-d10
Concen: 0.404 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:152 Resp: 2800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.5 | 17.0 | 25.6 |

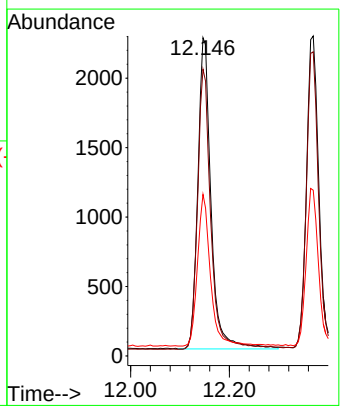


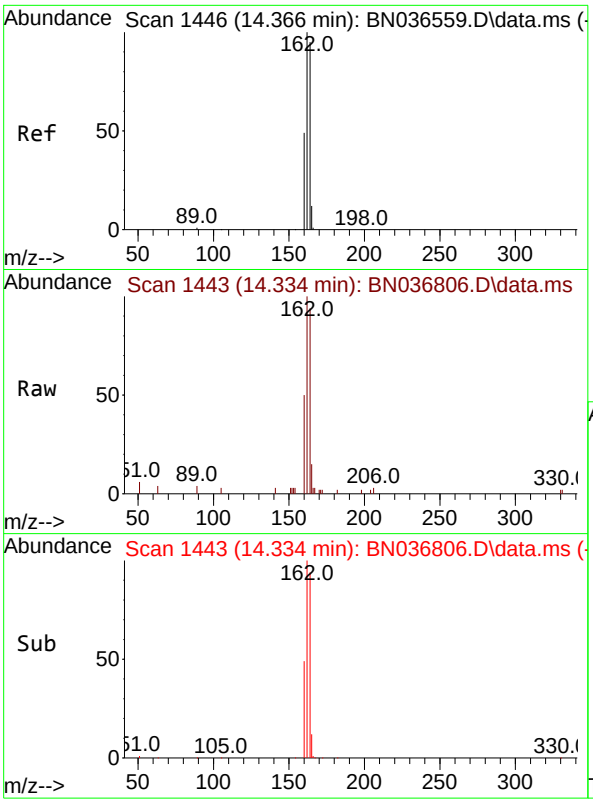




#12
2-Methylnaphthalene
Concen: 0.477 ng
RT: 12.146 min Scan# 1149
Delta R.T. -0.035 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:142 Resp: 4161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.1 | 71.7 | 107.5 |
| 115 | 50.8 | 38.3 | 57.5 |



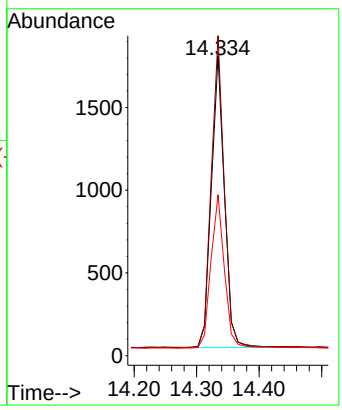


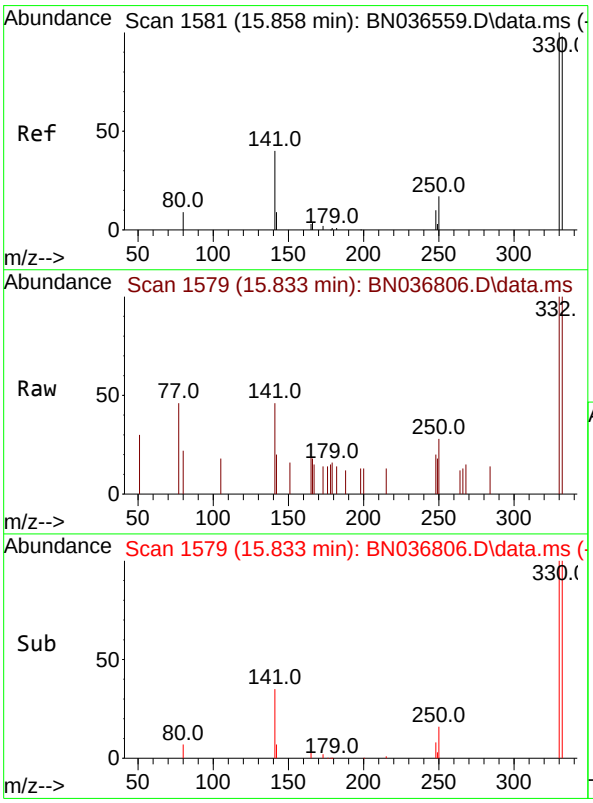

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:164 Resp: 2569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 106.6 | 84.2 | 126.2 |
| 160 | 53.6 | 42.2 | 63.2 |

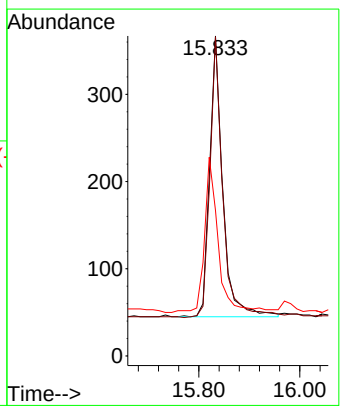


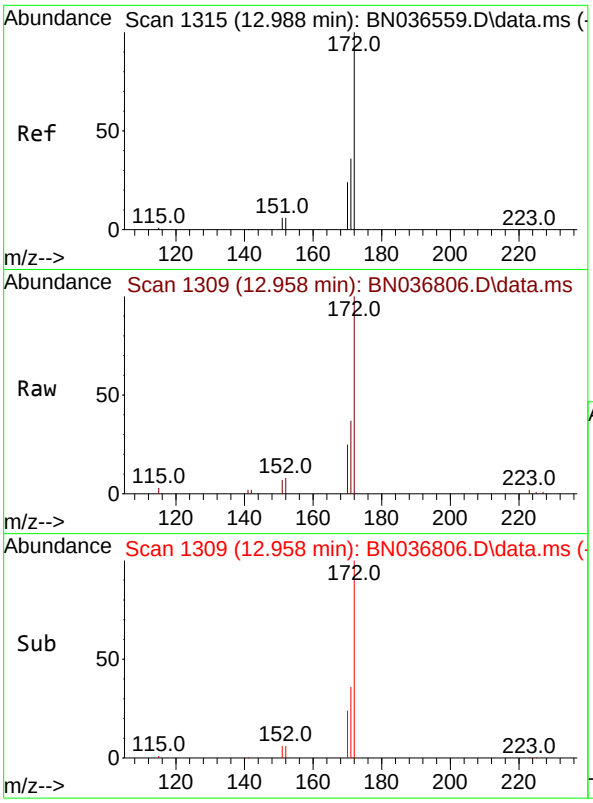




#14
2,4,6-Tribromophenol
Concen: 0.497 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:330 Resp: 579

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 99.1 | 75.2 | 112.8 |
| 141 | 57.2 | 43.4 | 65.2 |



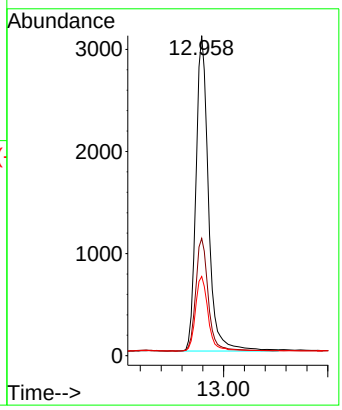


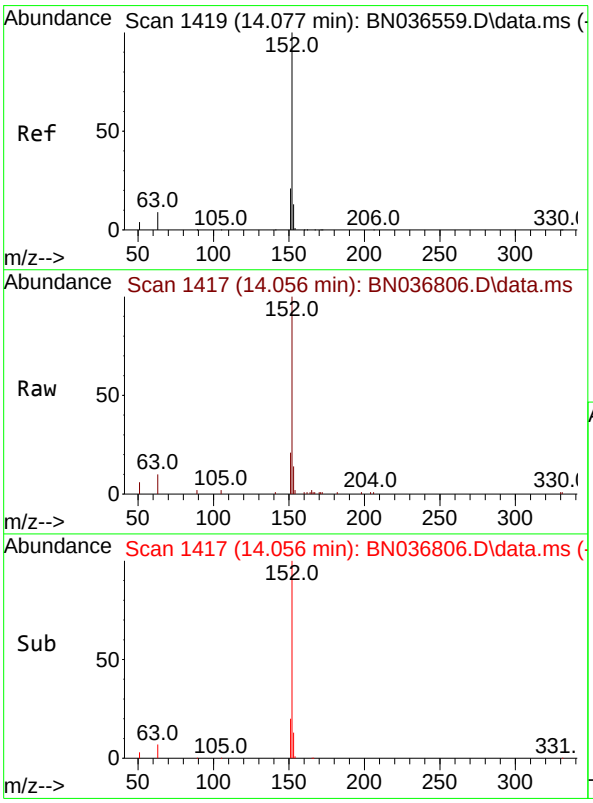

#15
2-Fluorobiphenyl
Concen: 0.461 ng
RT: 12.958 min Scan# 1
Delta R.T. -0.030 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:172 Resp: 6897

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.7 | 29.5 | 44.3 |
| 170 | 24.7 | 20.2 | 30.4 |

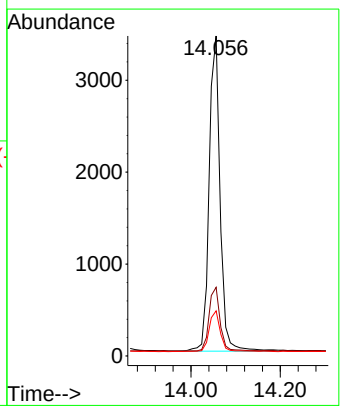


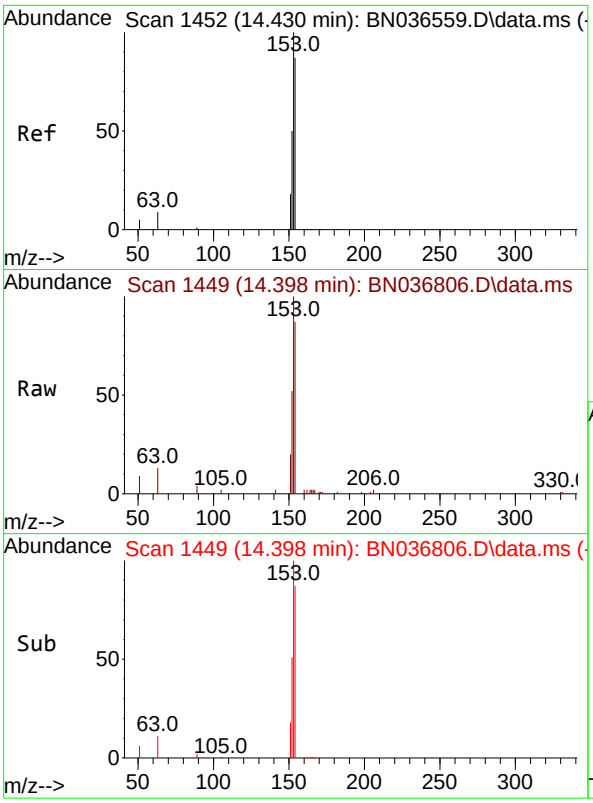




#16
Acenaphthylene
Concen: 0.479 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:152 Resp: 5803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.2 | 16.2 | 24.4 |
| 153 | 13.4 | 10.6 | 15.8 |



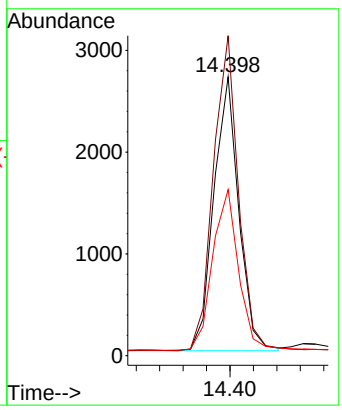


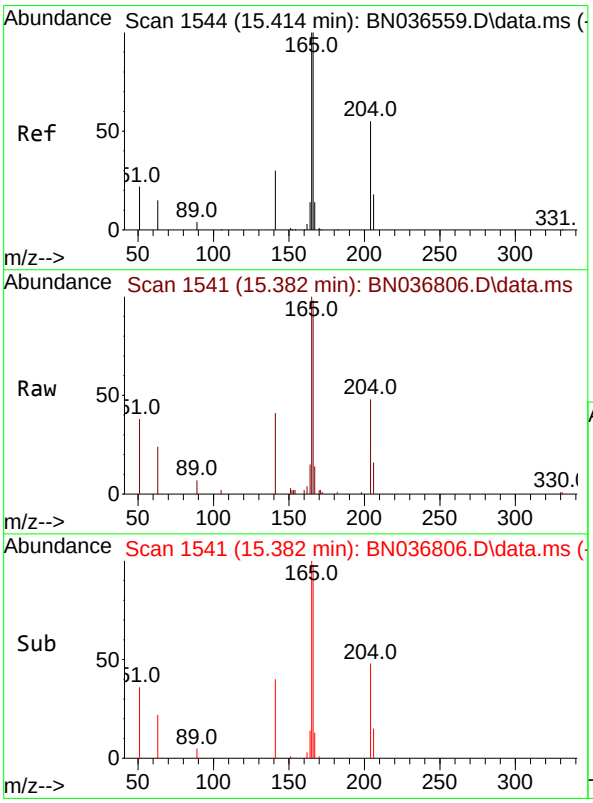

#17
Acenaphthene
Concen: 0.500 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:154 Resp: 3970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.1 | 94.1 | 141.1 |
| 152 | 61.8 | 49.8 | 74.6 |

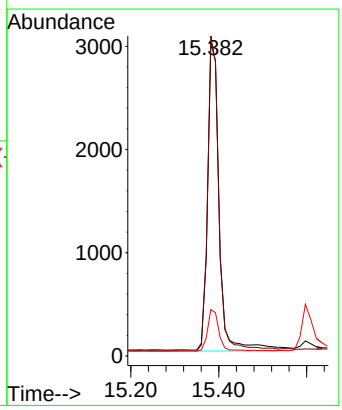


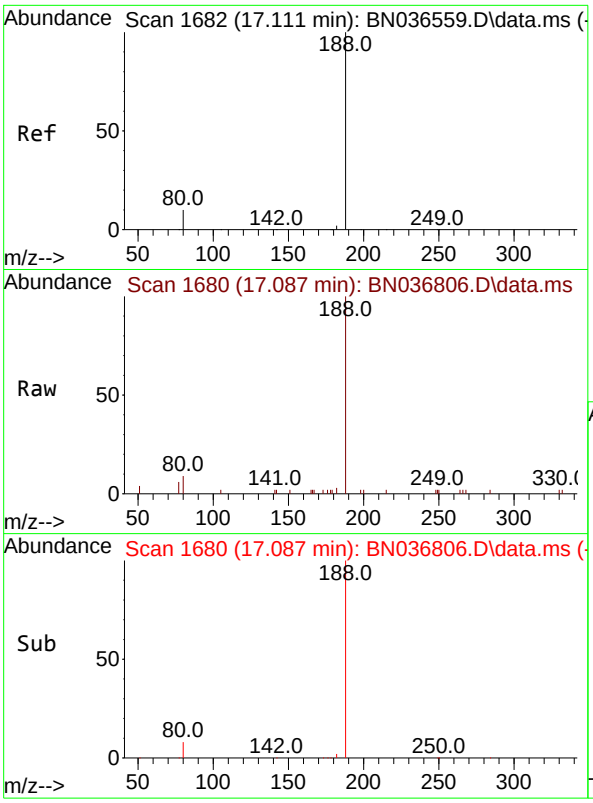




#18
Fluorene
Concen: 0.518 ng
RT: 15.382 min Scan# 1541
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:166 Resp: 5559

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 96.7 | 79.8 | 119.8 |
| 167 | 12.6 | 10.6 | 15.8 |



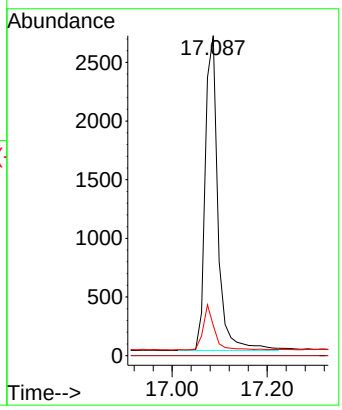


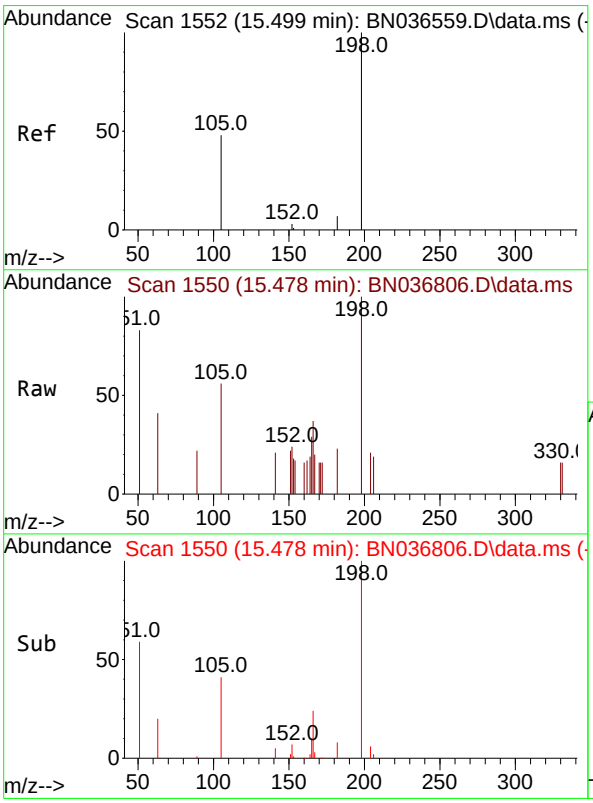

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:188 Resp: 5013

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 9.5 | 8.8 | 13.2 |

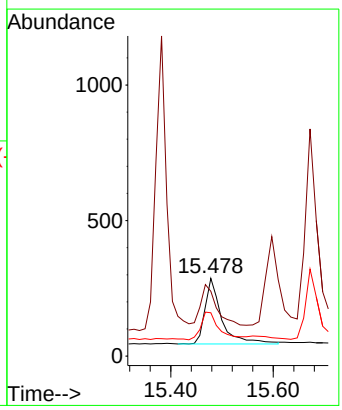


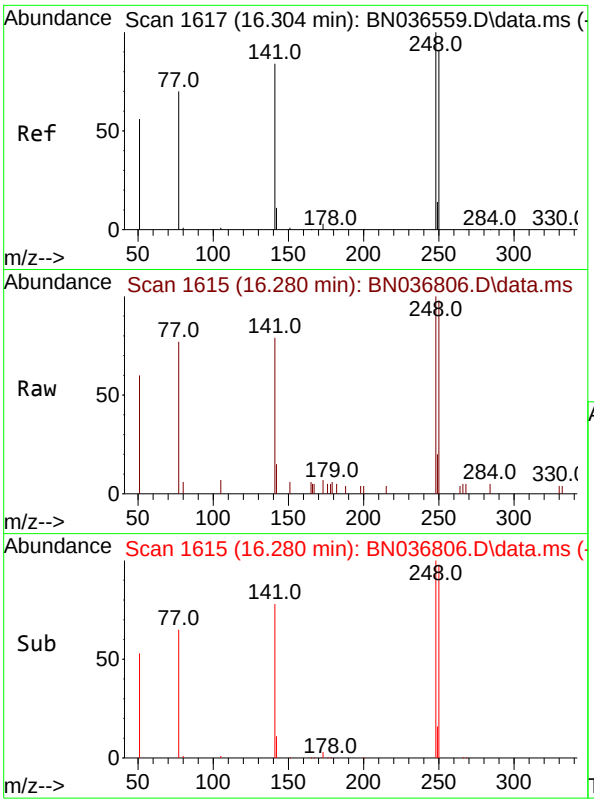




#20
4,6-Dinitro-2-methylphenol
Concen: 0.592 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:198 Resp: 574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 83.3 | 107.9 | 161.9# |
| 105 | 55.7 | 56.2 | 84.2# |



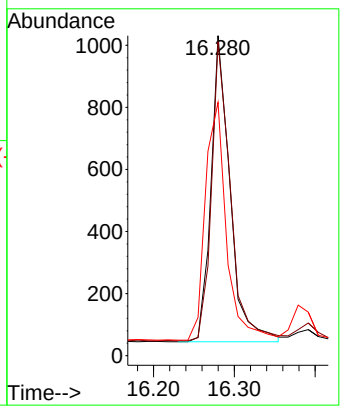


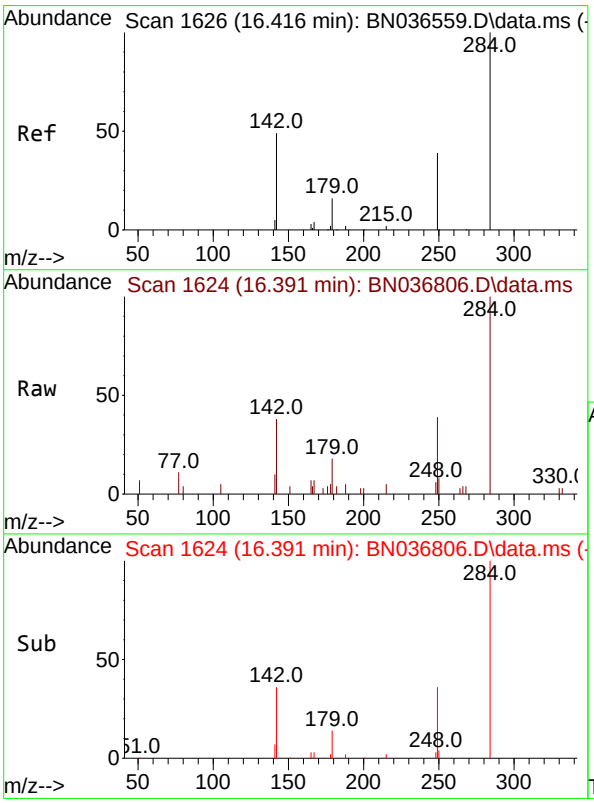

#21
4-Bromophenyl-phenylether
Concen: 0.515 ng
RT: 16.280 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:248 Resp: 1618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 98.2 | 73.0 | 109.6 |
| 141 | 79.1 | 68.6 | 103.0 |

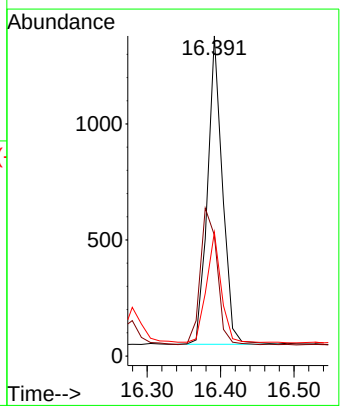


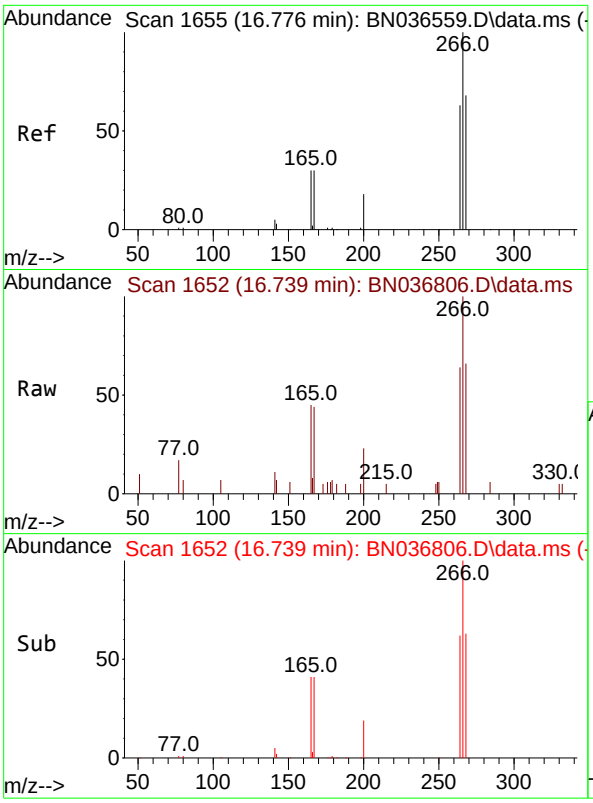




#22
Hexachlorobenzene
Concen: 0.493 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:284 Resp: 1869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 50.5 | 37.0 | 55.4 |
| 249 | 36.4 | 28.1 | 42.1 |



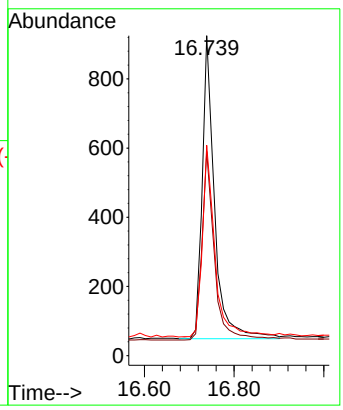


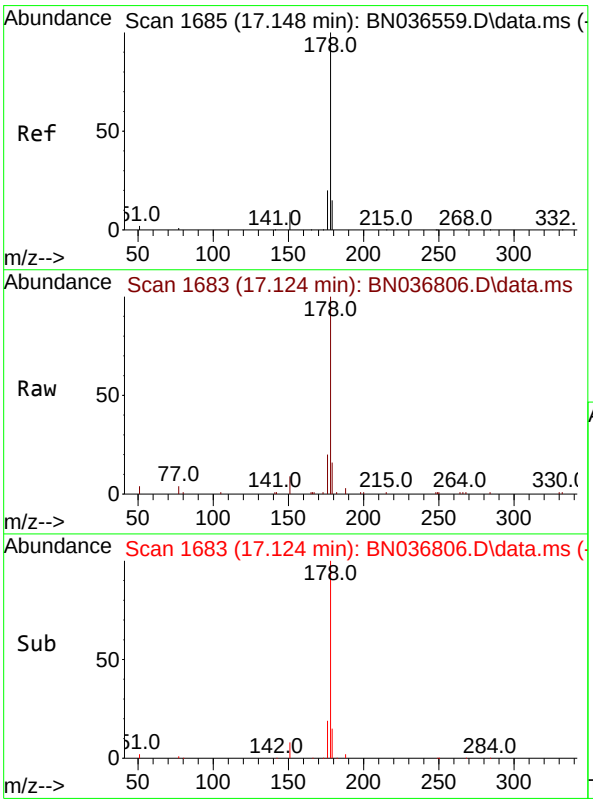

#24
Pentachlorophenol
Concen: 0.972 ng
RT: 16.739 min Scan# 1(
Delta R.T. -0.037 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:266 Resp: 1681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.5 | 49.6 | 74.4 |
| 268 | 64.7 | 50.9 | 76.3 |

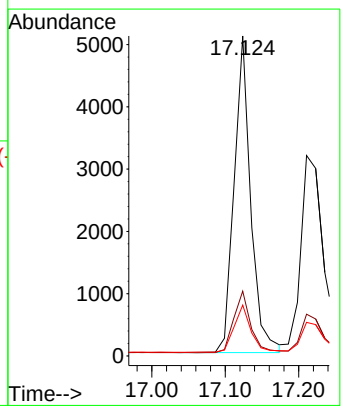


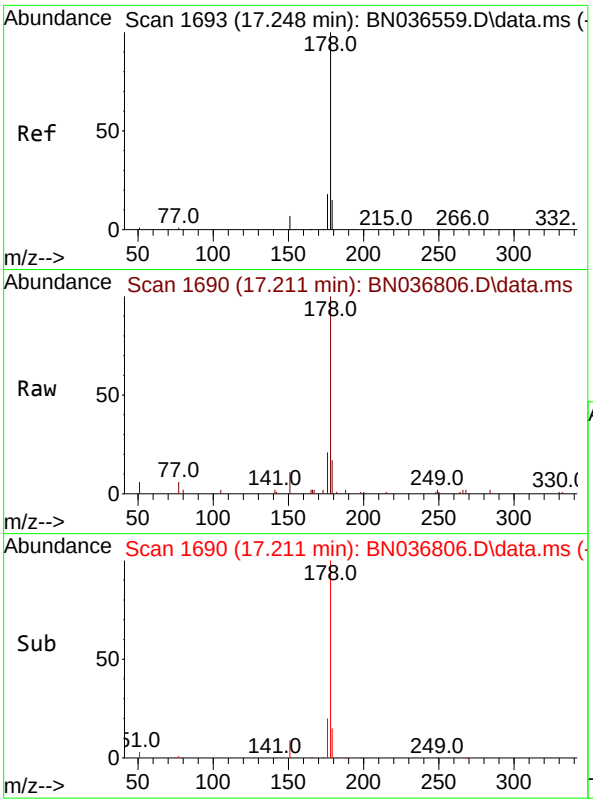




#25
Phenanthrene
Concen: 0.530 ng
RT: 17.124 min Scan# 1683
Delta R.T. -0.025 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:178 Resp: 7972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 20.2 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |



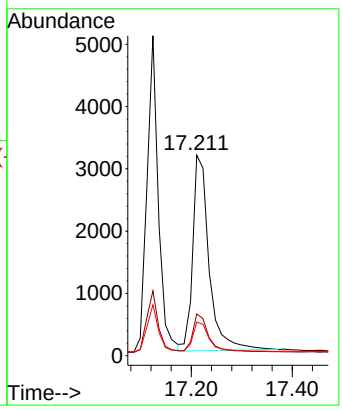


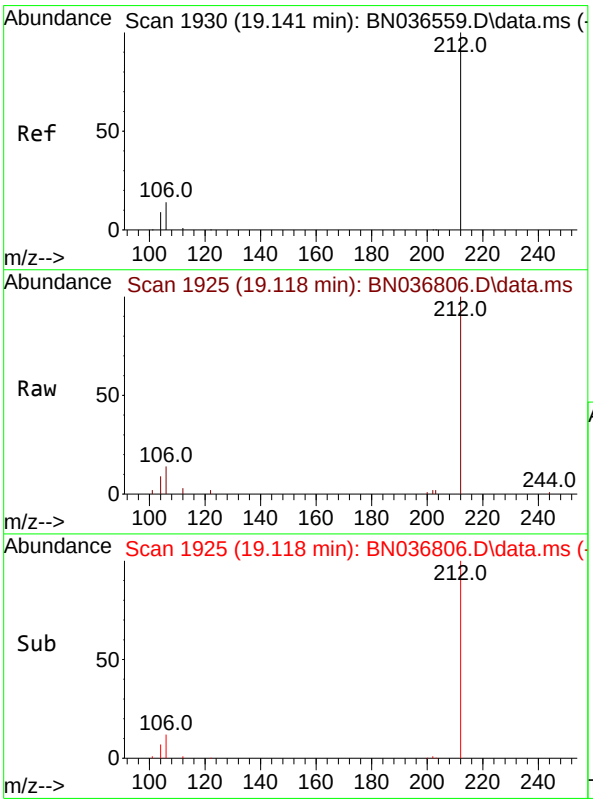

#26
Anthracene
Concen: 0.523 ng
RT: 17.211 min Scan# 1
Delta R.T. -0.037 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:178 Resp: 7103

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.6 | 15.4 | 23.2 |
| 179 | 15.1 | 12.6 | 18.8 |

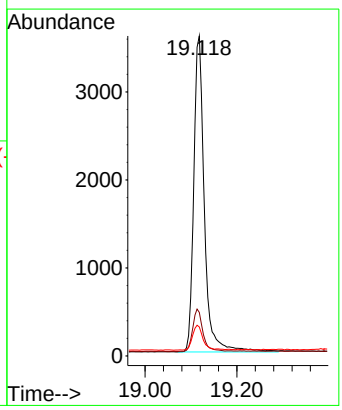


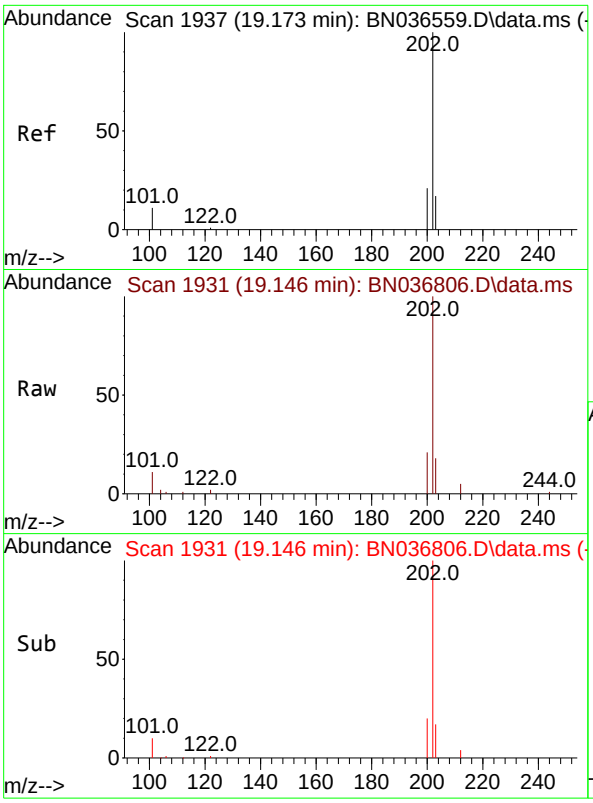




#27
Fluoranthene-d10
Concen: 0.448 ng
RT: 19.118 min Scan# 1925
Delta R.T. -0.023 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:212 Resp: 5761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 12.8 | 11.8 | 17.6 |
| 104 | 8.0 | 7.3 | 10.9 |



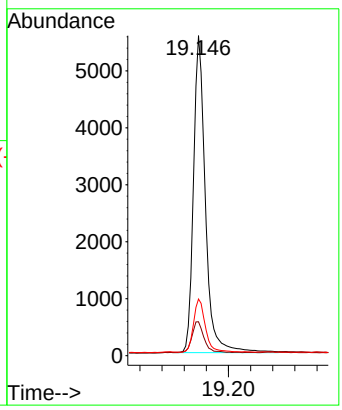


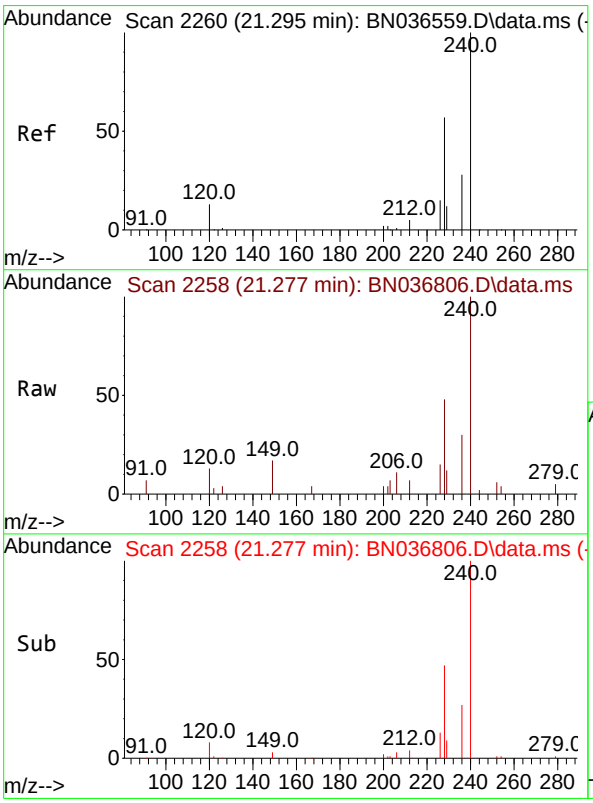

#28
Fluoranthene
Concen: 0.496 ng
RT: 19.146 min Scan# 1
Delta R.T. -0.028 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:202 Resp: 8378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 9.7 | 9.4 | 14.0 |
| 203 | 16.7 | 13.5 | 20.3 |

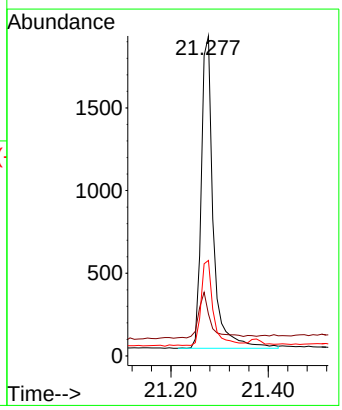


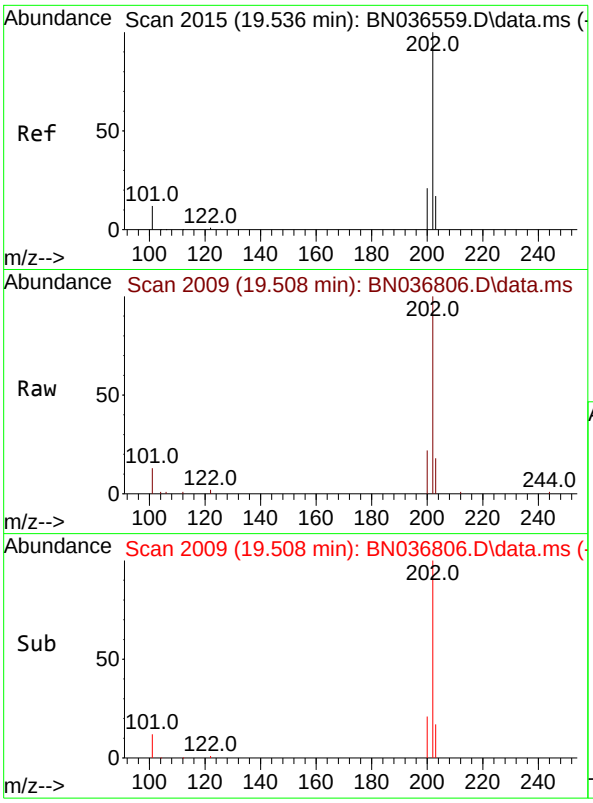




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.018 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:240 Resp: 3219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 13.1 | 14.6 | 22.0# |
| 236 | 29.9 | 24.1 | 36.1 |



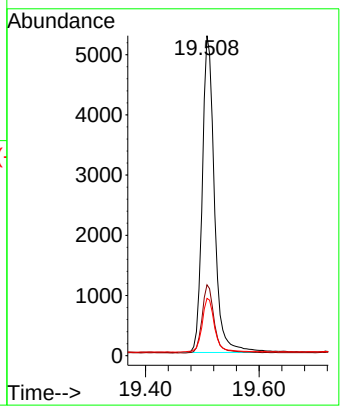


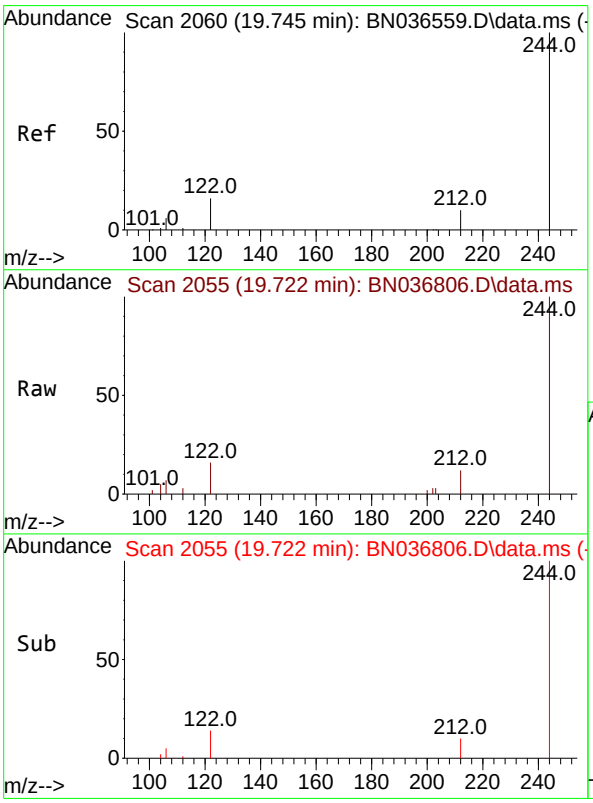

#30
Pyrene
Concen: 0.497 ng
RT: 19.508 min Scan# 2
Delta R.T. -0.028 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:202 Resp: 7829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.6 | 14.1 | 21.1 |

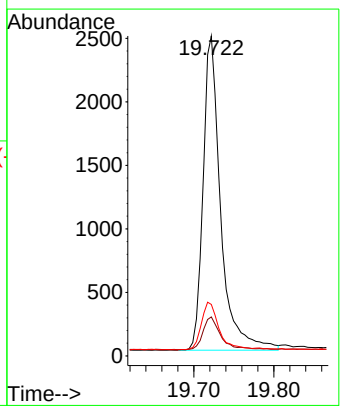


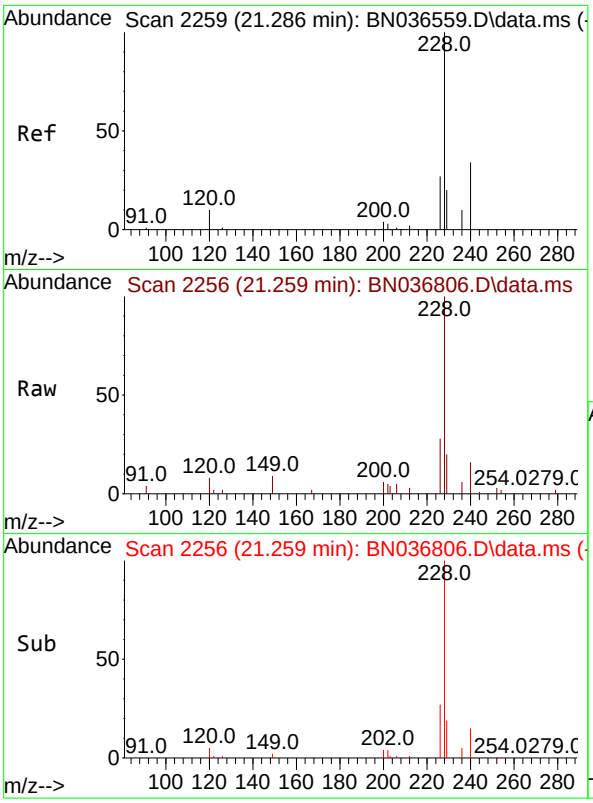




#31
Terphenyl-d14
Concen: 0.489 ng
RT: 19.722 min Scan# 2055
Delta R.T. -0.023 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:244 Resp: 3774

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.2 | 9.6 | 14.4 |
| 122 | 16.1 | 13.9 | 20.9 |



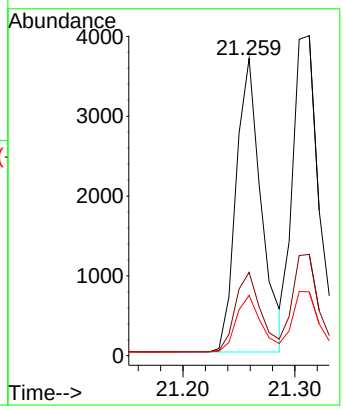


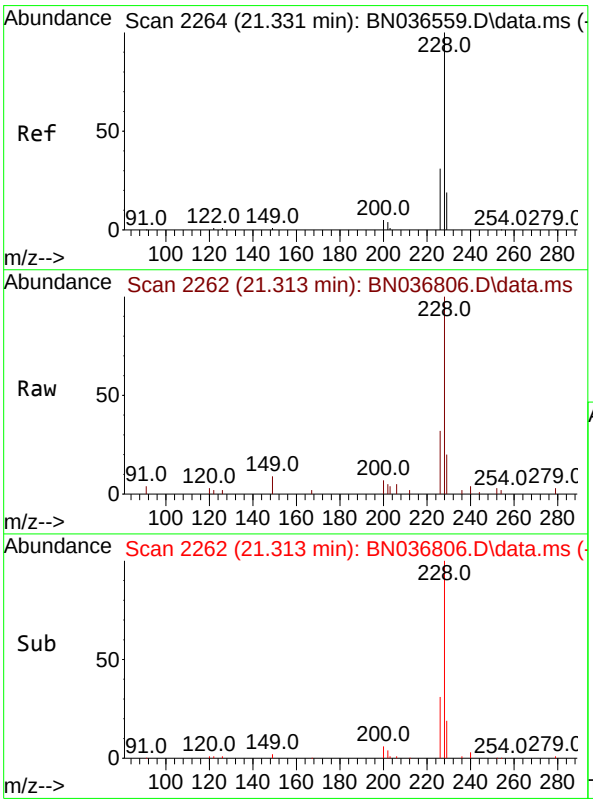

#32
Benzo(a)anthracene
Concen: 0.512 ng
RT: 21.259 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:228 Resp: 5730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.1 | 22.5 | 33.7 |
| 229 | 20.3 | 16.6 | 25.0 |

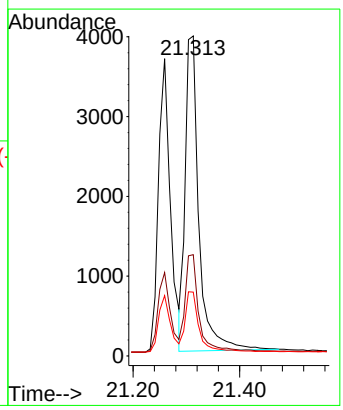


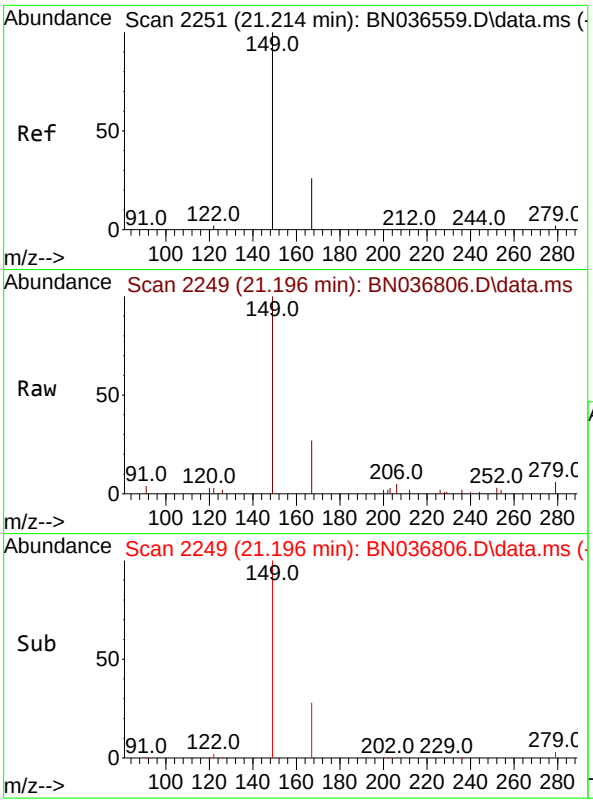




#33
Chrysene
Concen: 0.575 ng
RT: 21.313 min Scan# 2262
Delta R.T. -0.018 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:228 Resp: 7035

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.6 | 25.3 | 37.9 |
| 229 | 20.0 | 15.8 | 23.8 |



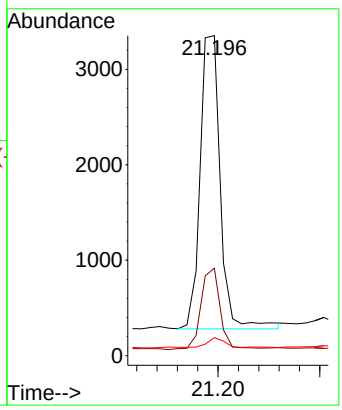


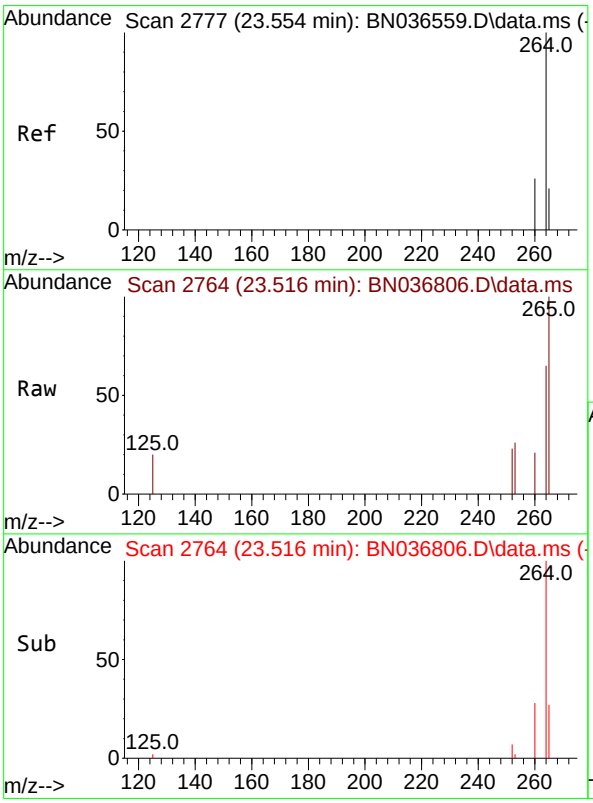

#34
Bis(2-ethylhexyl)phthalate
Concen: 0.530 ng
RT: 21.196 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:149 Resp: 4222

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.5 | 20.7 | 31.1 |
| 279 | 2.7 | 3.6 | 5.4# |

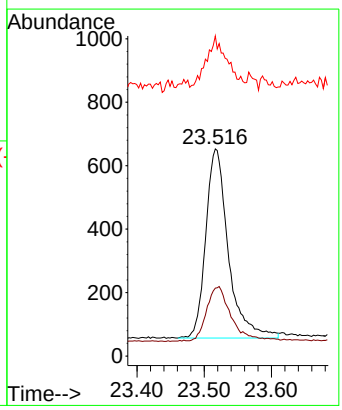


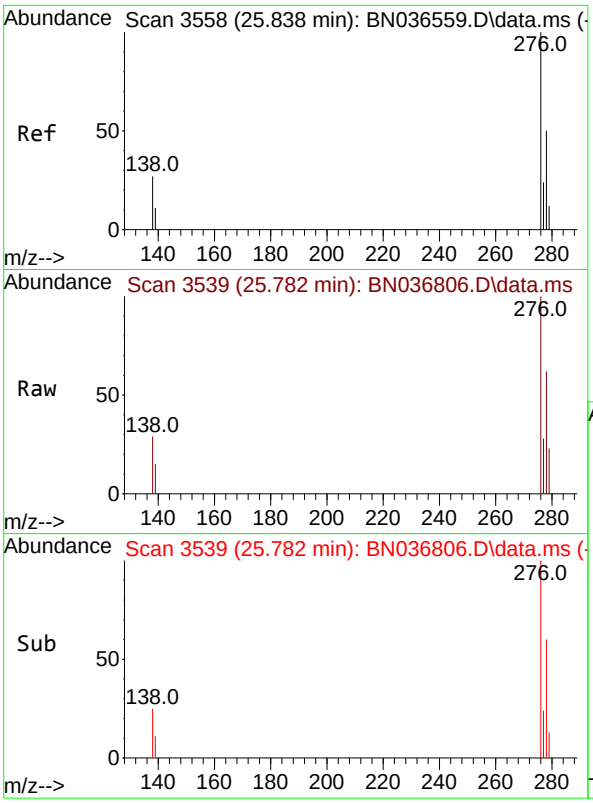




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.516 min Scan# 2764
Delta R.T. -0.038 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:264 Resp: 1389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 32.8 | 22.6 | 33.8 |
| 265 | 154.5 | 88.1 | 132.1# |



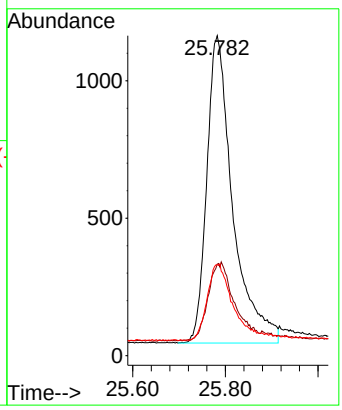


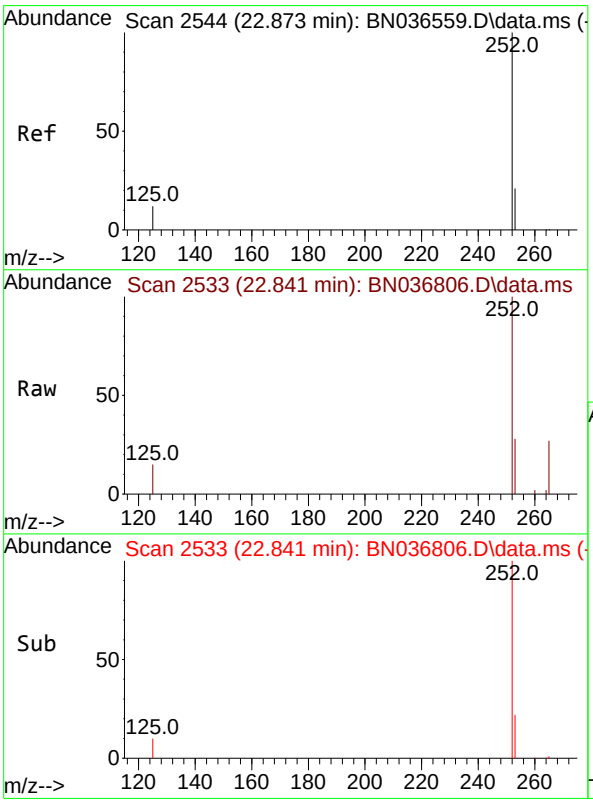

#36
Indeno(1,2,3-cd)pyrene
Concen: 0.868 ng
RT: 25.782 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:276 Resp: 4352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 11.9 | 23.4 | 35.2# |
| 277 | 24.8 | 20.0 | 30.0 |

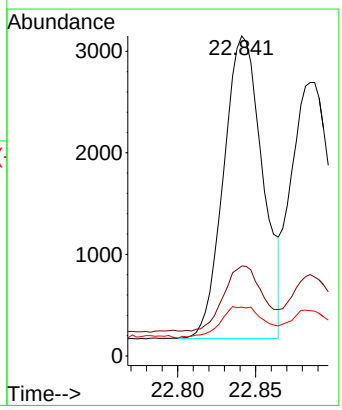


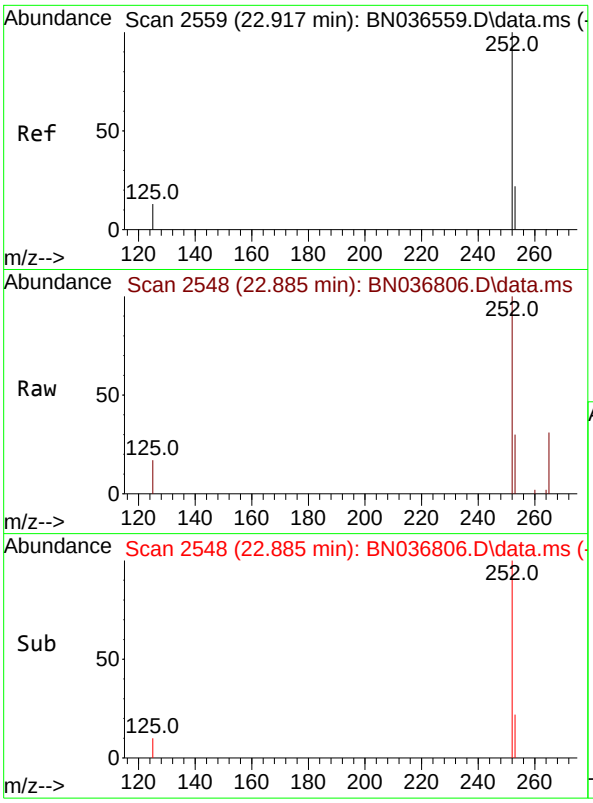




#37
Benzo(b)fluoranthene
Concen: 1.026 ng
RT: 22.841 min Scan# 2533
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:252 Resp: 5186

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.1 | 23.9 | 35.9 |
| 125 | 15.2 | 17.4 | 26.2# |



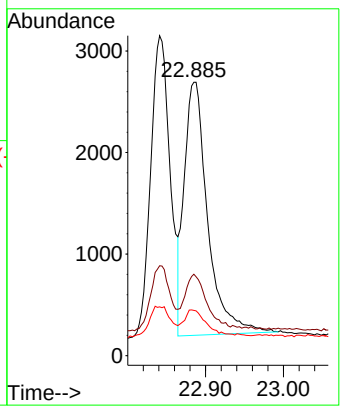


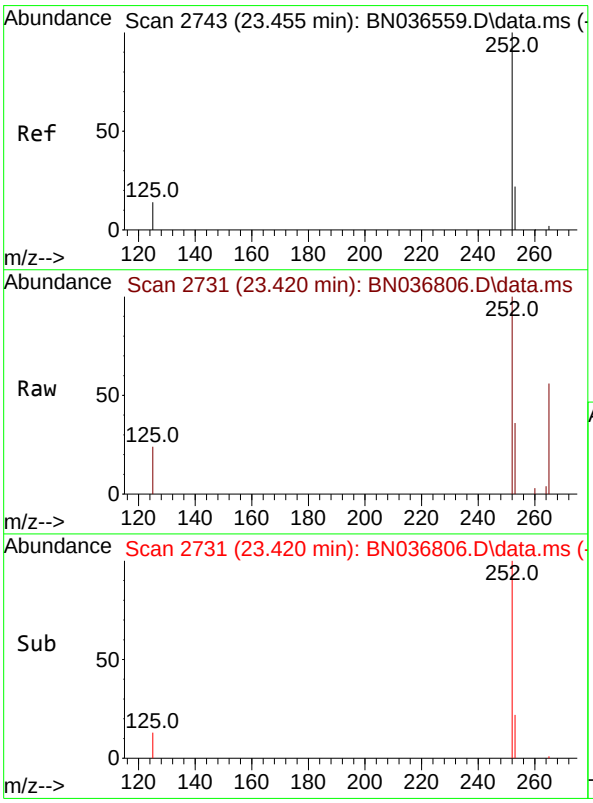

#38
Benzo(k)fluoranthene
Concen: 0.986 ng
RT: 22.885 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:252 Resp: 5229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.8 | 24.6 | 36.8 |
| 125 | 16.6 | 17.8 | 26.8# |

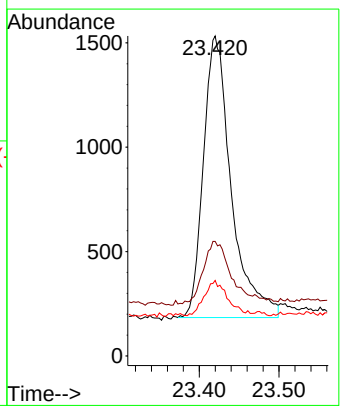


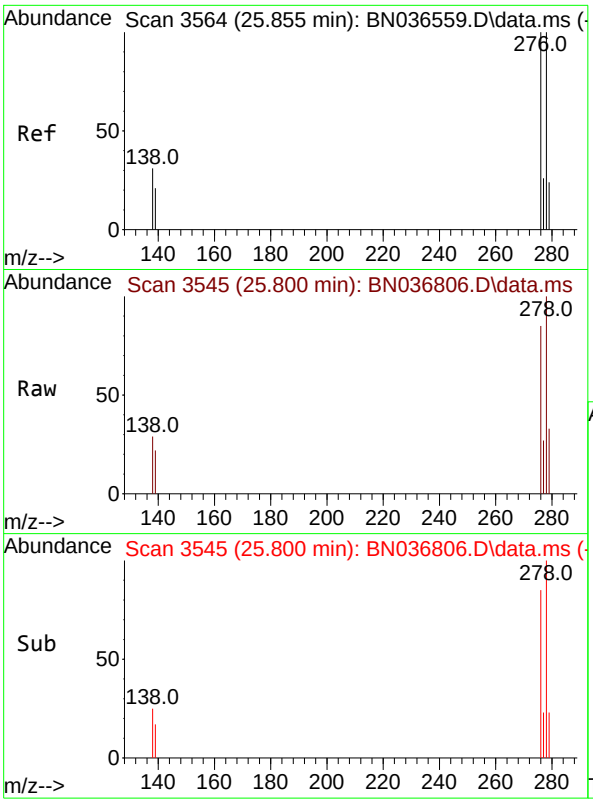




#39
Benzo(a)pyrene
Concen: 0.770 ng
RT: 23.420 min Scan# 2731
Delta R.T. -0.035 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:252 Resp: 3277

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 35.8 | 27.8 | 41.8 |
| 125 | 23.6 | 22.7 | 34.1 |



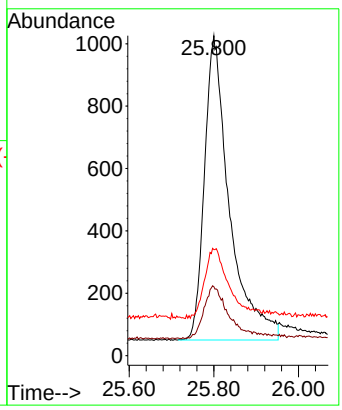


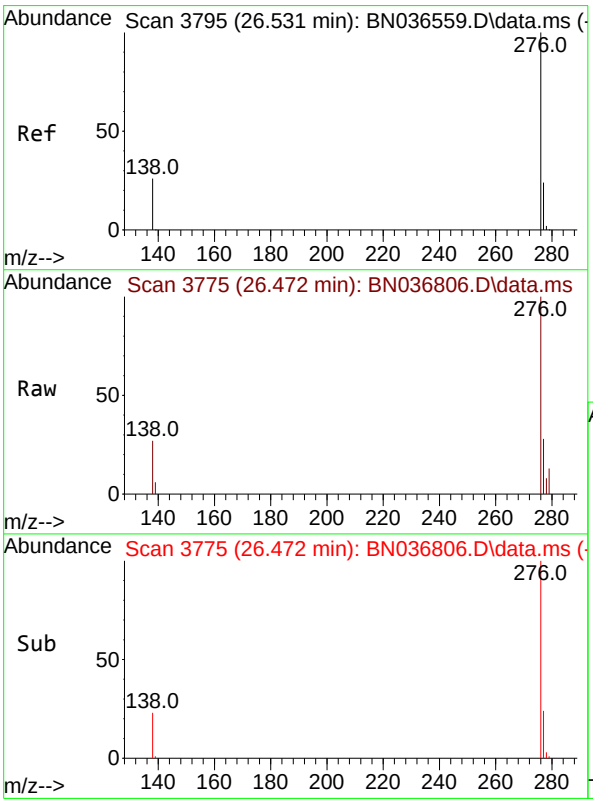

#40
Dibenzo(a,h)anthracene
Concen: 1.025 ng
RT: 25.800 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BS

Tgt Ion:278 Resp: 3999

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 21.5 | 20.8 | 31.2 |
| 279 | 33.1 | 28.8 | 43.2 |

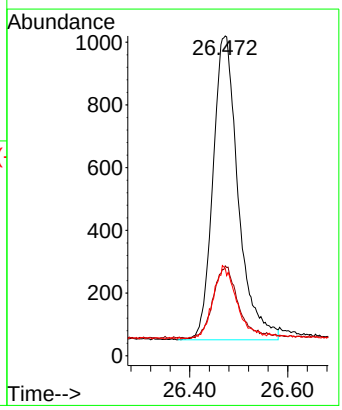



#41
Benzo(g,h,i)perylene
Concen: 0.776 ng
RT: 26.472 min Scan# 3775
Delta R.T. -0.058 min
Lab File: BN036806.D
Acq: 29 Mar 2025 11:45

Tgt Ion:276 Resp: 3464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 28.1 | 22.2 | 33.4 |
| 138 | 27.4 | 24.1 | 36.1 |



Alliance TECHNICAL GROUP
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 - RW5B CTO WE13 112G08005 | Date Received: | |
| Client Sample ID: | PB167269BSD | SDG No.: | Q1621 |
| Lab Sample ID: | PB167269BSD | 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 |
|---|---|---|---|---|
| BN036814.D | 1 | 03/24/25 08:15 | 03/31/25 14:16 | PB167269 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 123-91-1 | 1,4-Dioxane | 0.32 | | 0.070 | 0.20 | 0.20 | ug/L |
| **SURROGATES** | | | | | | | |
| 7297-45-2 | 2-Methylnaphthalene-d10 | 0.43 | | 30 - 150 | | 106% | SPK: 0.4 |
| 93951-69-0 | Fluoranthene-d10 | 0.43 | | 30 - 150 | | 108% | SPK: 0.4 |
| 4165-60-0 | Nitrobenzene-d5 | 0.44 | | 55 - 111 | | 109% | SPK: 0.4 |
| 321-60-8 | 2-Fluorobiphenyl | 0.46 | * | 53 - 106 | | 116% | SPK: 0.4 |
| 1718-51-0 | Terphenyl-d14 | 0.52 | | 58 - 132 | | 131% | SPK: 0.4 |
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 2860 | 7.695 | | | | |
| 1146-65-2 | Naphthalene-d8 | 7350 | 10.477 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 4020 | 14.334 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 7790 | 17.086 | | | | |
| 1719-03-5 | Chrysene-d12 | 4780 | 21.277 | | | | |
| 1520-96-3 | Perylene-d12 | 1670 | 23.519 | | | | |

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\BN033125\
Data File : BN036814.D
Acq On : 31 Mar 2025 14:16
Operator : RC/JU
Sample : PB167269BSD
Misc :
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Quant Time: Mar 31 14:40:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

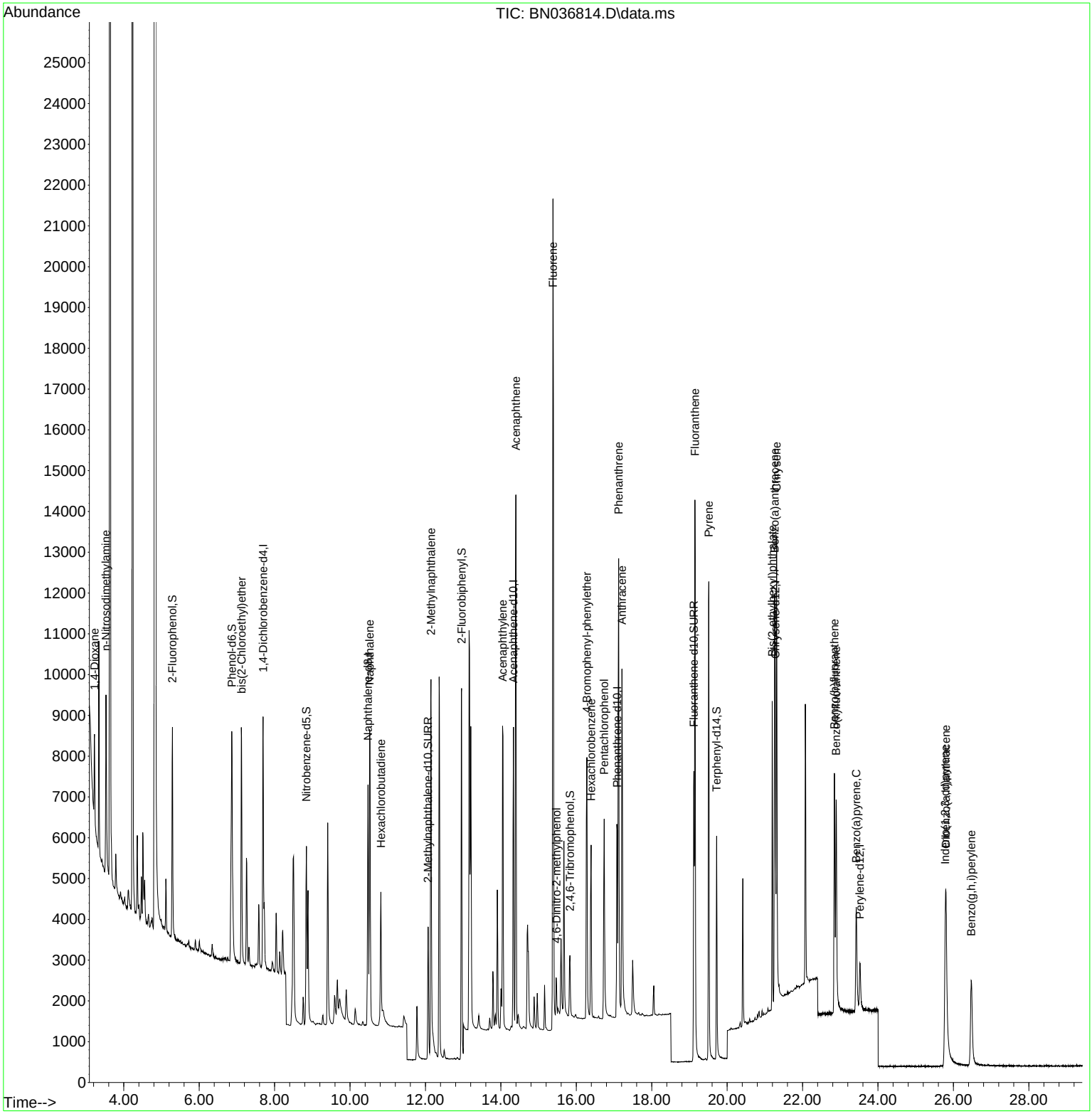
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.695 | 152 | 2858 | 0.400 | ng | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 7352 | 0.400 | ng | #-0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 4021 | 0.400 | ng | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 7787 | 0.400 | ng | #-0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 4781 | 0.400 | ng | #-0.02 |
| 35) Perylene-d12 | 23.519 | 264 | 1670 | 0.400 | ng | #-0.04 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 3663 | 0.550 | ng | -0.02 |
| 5) Phenol-d6 | 6.865 | 99 | 4565 | 0.555 | ng | -0.04 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 3491 | 0.436 | ng | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.070 | 152 | 4651 | 0.425 | ng | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 932 | 0.511 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.958 | 172 | 10822 | 0.463 | ng | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 8631 | 0.432 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 5990 | 0.523 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 1028 | 0.324 | ng | # 56 |
| 3) n-Nitrosodimethylamine | 3.528 | 42 | 3407 | 0.531 | ng | 88 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 4084 | 0.480 | ng | 96 |
| 9) Naphthalene | 10.519 | 128 | 10220 | 0.473 | ng | 100 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 2311 | 0.454 | ng | # 98 |
| 12) 2-Methylnaphthalene | 12.146 | 142 | 6715 | 0.488 | ng | 99 |
| 16) Acenaphthylene | 14.045 | 152 | 8923 | 0.470 | ng | 99 |
| 17) Acenaphthene | 14.398 | 154 | 6339 | 0.510 | ng | 99 |
| 18) Fluorene | 15.382 | 166 | 8375 | 0.498 | ng | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 952 | 0.622 | ng | # 52 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 2507 | 0.514 | ng | 88 |
| 22) Hexachlorobenzene | 16.391 | 284 | 2869 | 0.487 | ng | 96 |
| 24) Pentachlorophenol | 16.739 | 266 | 2659 | 0.990 | ng | 99 |
| 25) Phenanthrene | 17.124 | 178 | 12206 | 0.523 | ng | 100 |
| 26) Anthracene | 17.211 | 178 | 10876 | 0.516 | ng | 99 |
| 28) Fluoranthene | 19.146 | 202 | 12865 | 0.490 | ng | 99 |
| 30) Pyrene | 19.513 | 202 | 11729 | 0.502 | ng | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 8542 | 0.514 | ng | 99 |
| 33) Chrysene | 21.313 | 228 | 10531 | 0.580 | ng | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 6222 | 0.526 | ng | # 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.785 | 276 | 6515 | 1.081 | ng | 97 |
| 37) Benzo(b)fluoranthene | 22.844 | 252 | 7608 | 1.252 | ng | # 90 |
| 38) Benzo(k)fluoranthene | 22.891 | 252 | 7777 | 1.220 | ng | # 90 |
| 39) Benzo(a)pyrene | 23.423 | 252 | 4618 | 0.902 | ng | # 93 |
| 40) Dibenzo(a,h)anthracene | 25.803 | 278 | 6002 | 1.279 | ng | # 90 |
| 41) Benzo(g,h,i)perylene | 26.475 | 276 | 4911 | 0.915 | ng | 96 |

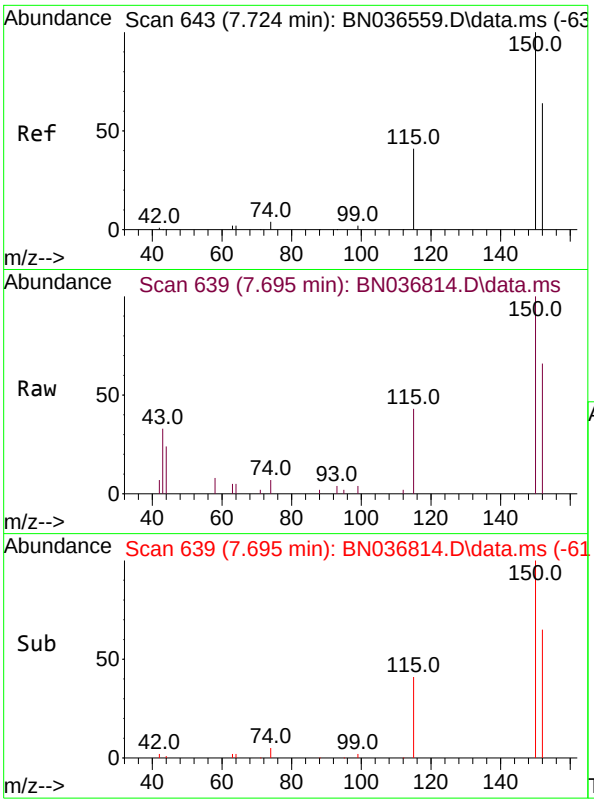
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036814.D
Acq On : 31 Mar 2025 14:16
Operator : RC/JU
Sample : PB167269BSD
Misc :
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Quant Time: Mar 31 14:40:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



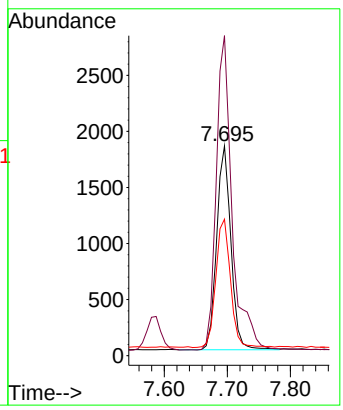


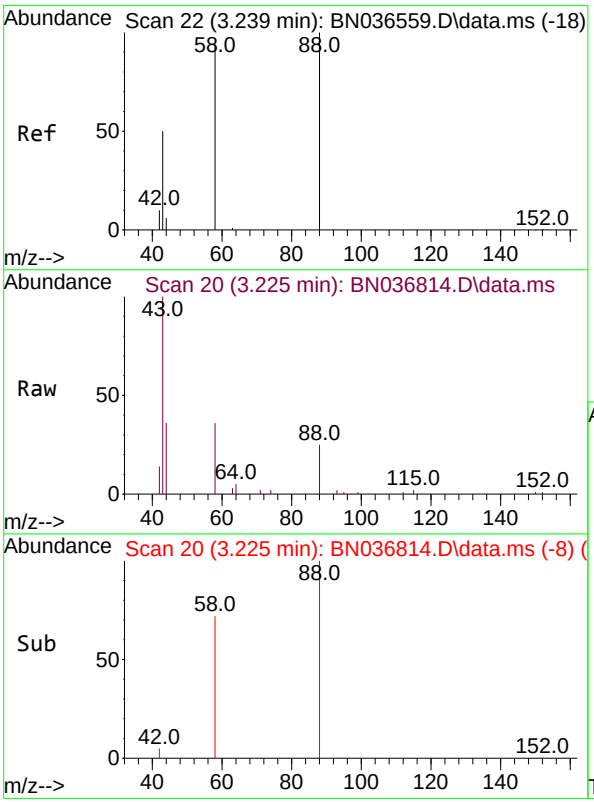

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.695 min Scan# 6
Delta R.T. -0.029 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:152 Resp: 2858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.5 | 123.7 | 185.5 |
| 115 | 65.0 | 54.3 | 81.5 |

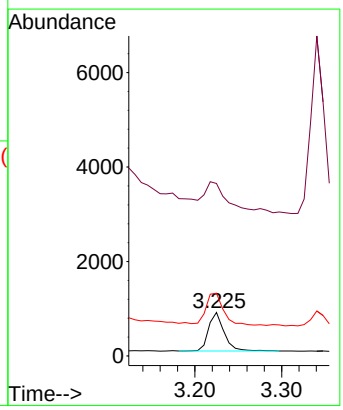


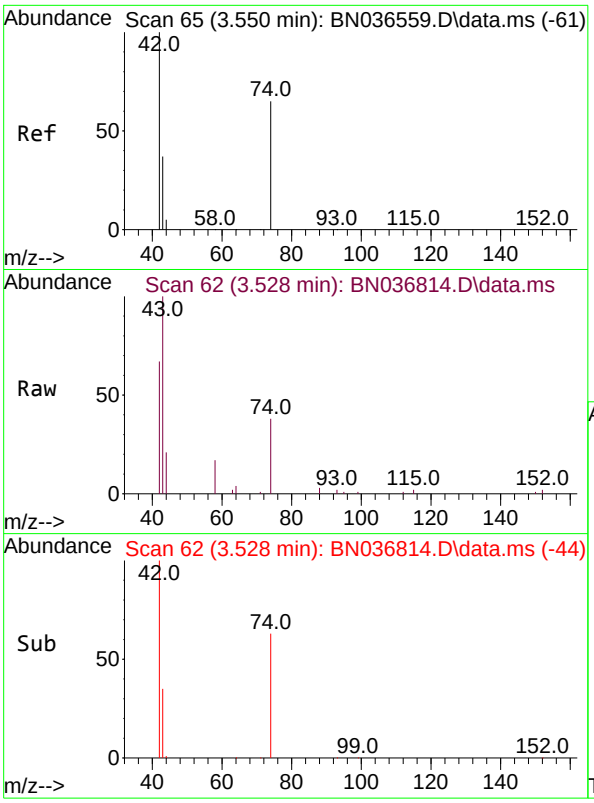




#2
1,4-Dioxane
Concen: 0.324 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion: 88 Resp: 1028

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 116.9 | 37.8 | 56.8# |
| 58 | 93.3 | 67.4 | 101.2 |



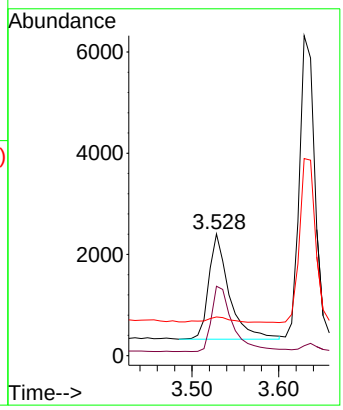


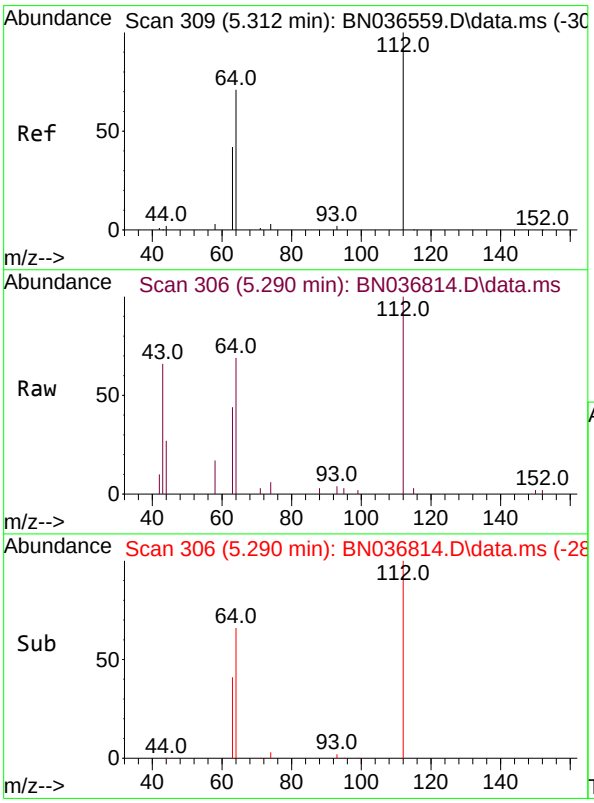

#3
n-Nitrosodimethylamine
Concen: 0.531 ng
RT: 3.528 min Scan# 6
Delta R.T. -0.022 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion: 42 Resp: 3407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 65.1 | 60.6 | 90.8 |
| 44 | 6.7 | 6.3 | 9.5 |

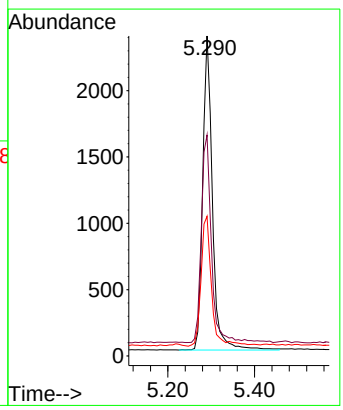


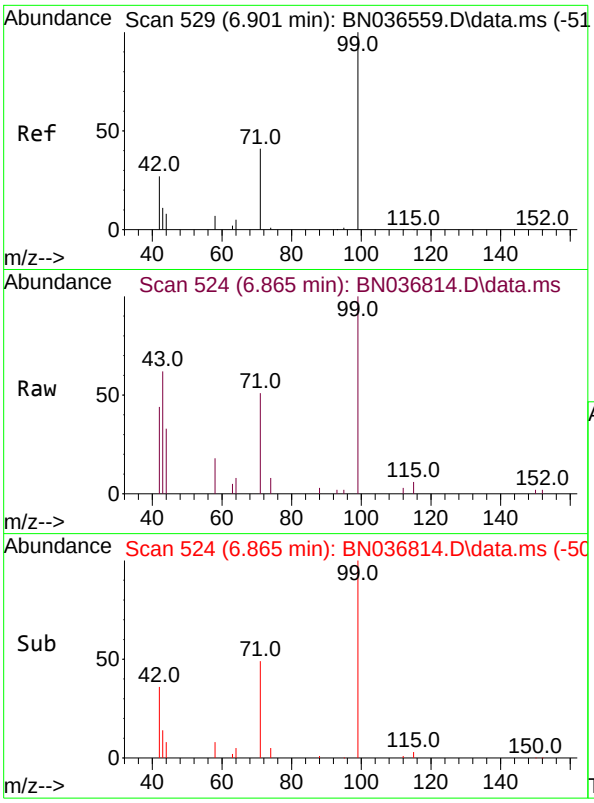




#4
2-Fluorophenol
Concen: 0.550 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:112 Resp: 3663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 67.9 | 53.1 | 79.7 |
| 63 | 44.7 | 31.8 | 47.8 |



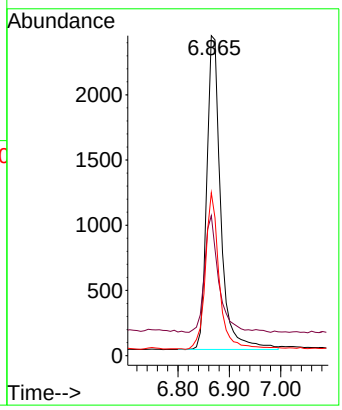


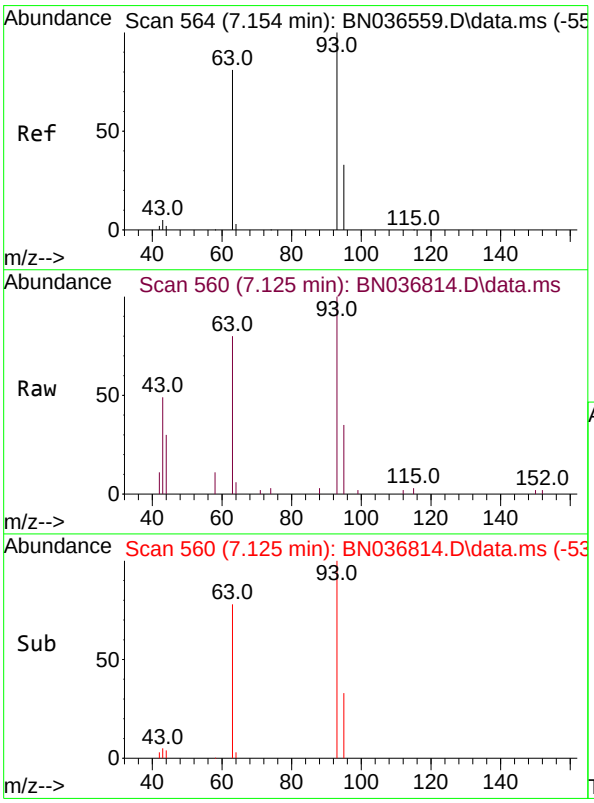

#5
Phenol-d6
Concen: 0.555 ng
RT: 6.865 min Scan# 5
Delta R.T. -0.036 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion: 99 Resp: 4565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 37.6 | 26.5 | 39.7 |
| 71 | 49.9 | 34.1 | 51.1 |

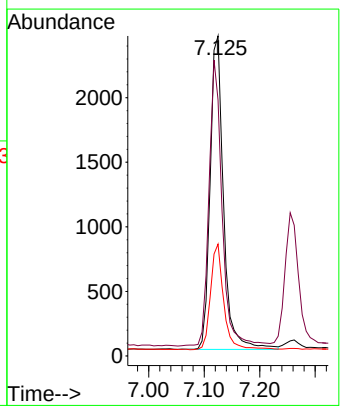


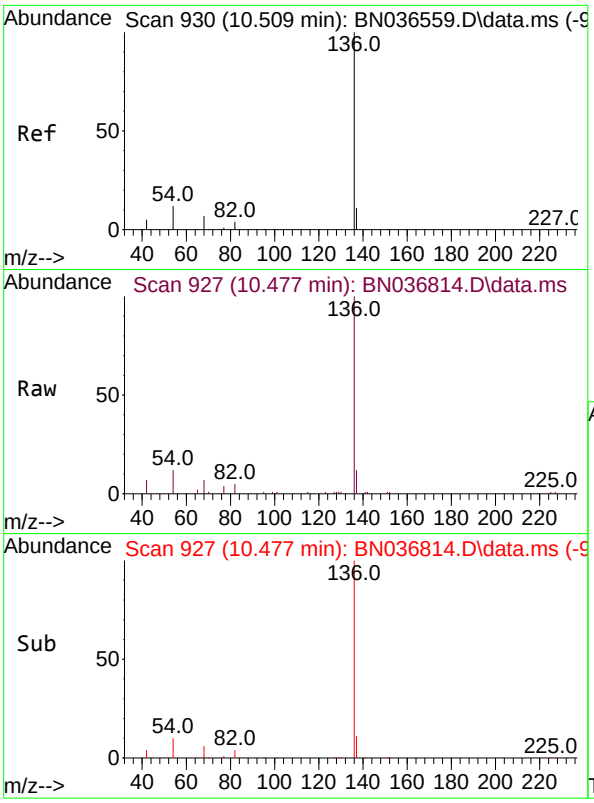




#6
bis(2-Chloroethyl)ether
Concen: 0.480 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion: 93 Resp: 4084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 88.9 | 67.7 | 101.5 |
| 95 | 33.1 | 25.6 | 38.4 |



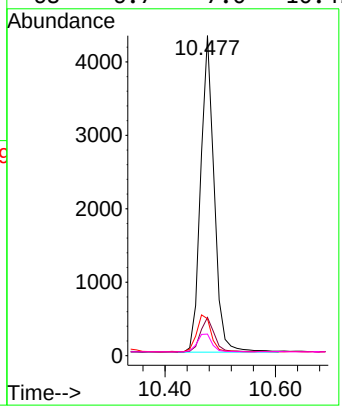


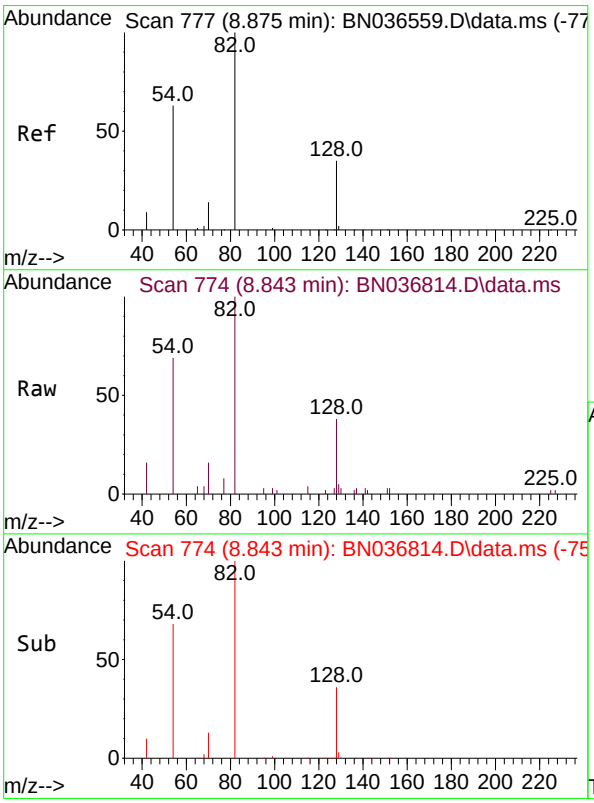

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:136 Resp: 7352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 11.9 | 10.3 | 15.5 |
| 54 | 11.5 | 11.5 | 17.3 |
| 68 | 6.7 | 7.0 | 10.4# |

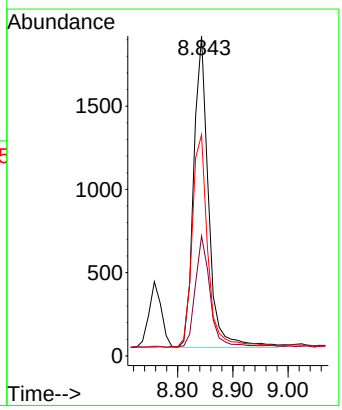


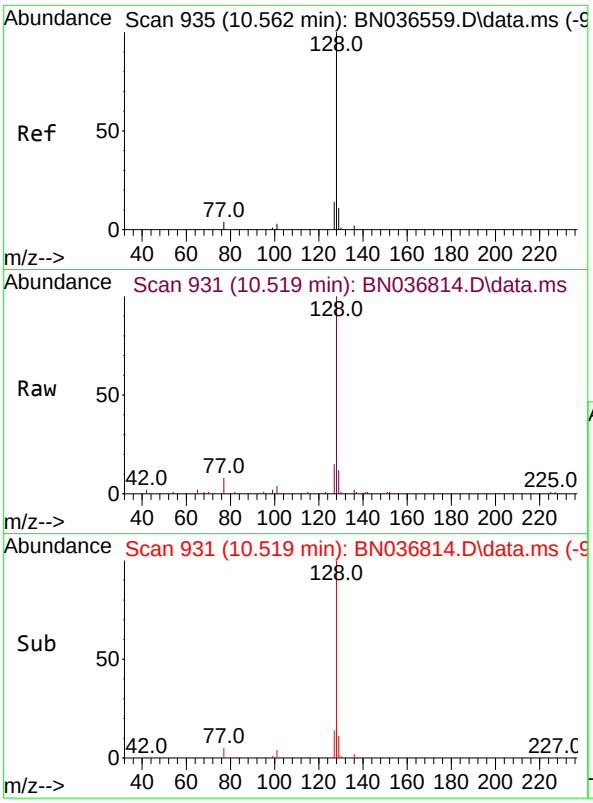




#8
Nitrobenzene-d5
Concen: 0.436 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion: 82 Resp: 3491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 37.5 | 30.6 | 45.8 |
| 54 | 69.1 | 52.2 | 78.4 |



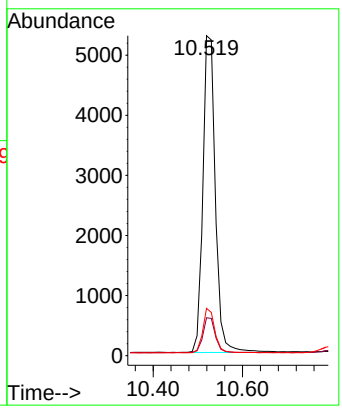


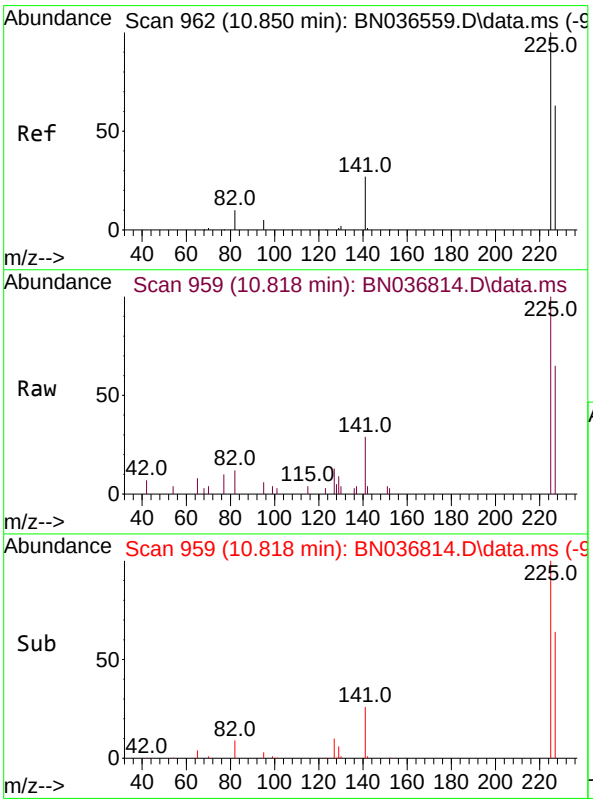

#9
Naphthalene
Concen: 0.473 ng
RT: 10.519 min Scan# 9
Delta R.T. -0.043 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:128 Resp: 10220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.8 | 9.8 | 14.6 |
| 127 | 14.8 | 11.8 | 17.8 |

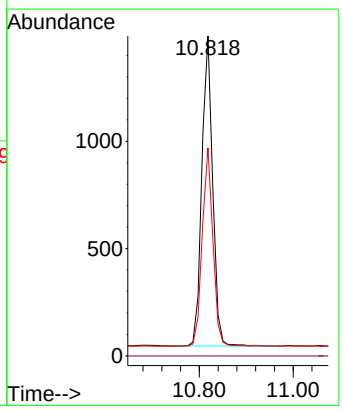


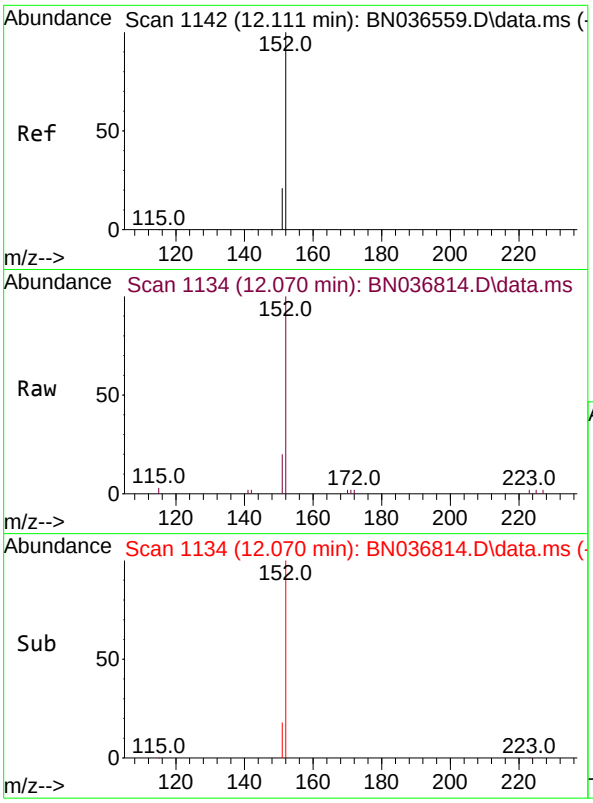




#10
Hexachlorobutadiene
Concen: 0.454 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:225 Resp: 2311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.4 | 51.8 | 77.8 |



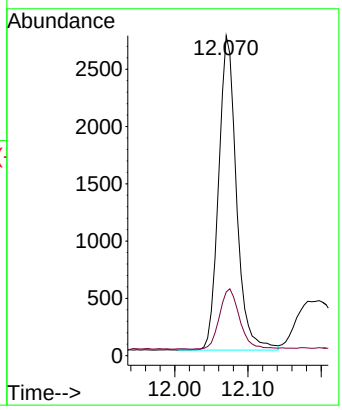


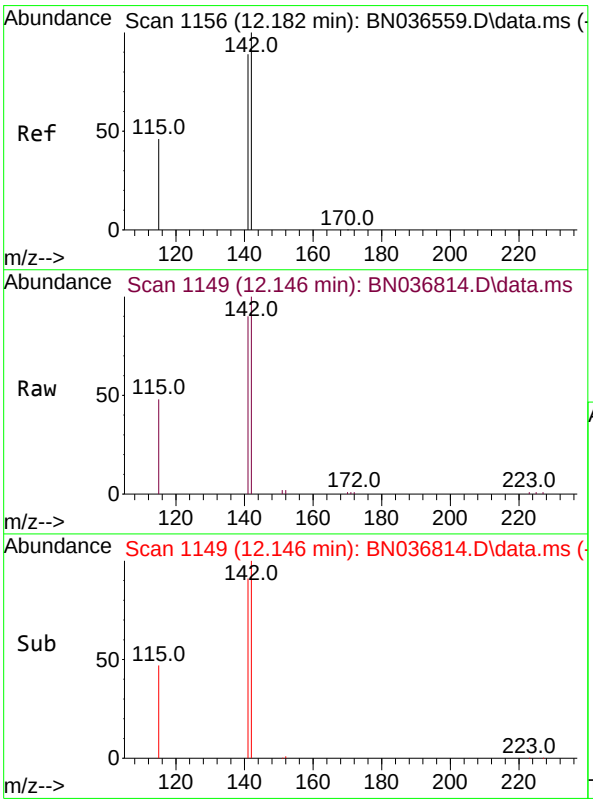

#11
2-Methylnaphthalene-d10
Concen: 0.425 ng
RT: 12.070 min Scan# 11
Delta R.T. -0.041 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:152 Resp: 4651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.6 | 17.0 | 25.6 |

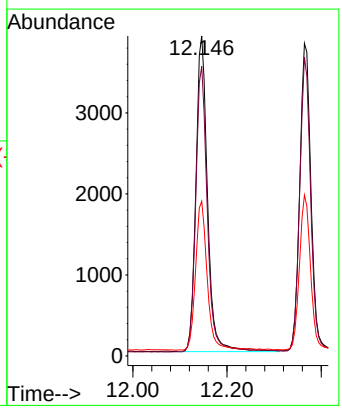


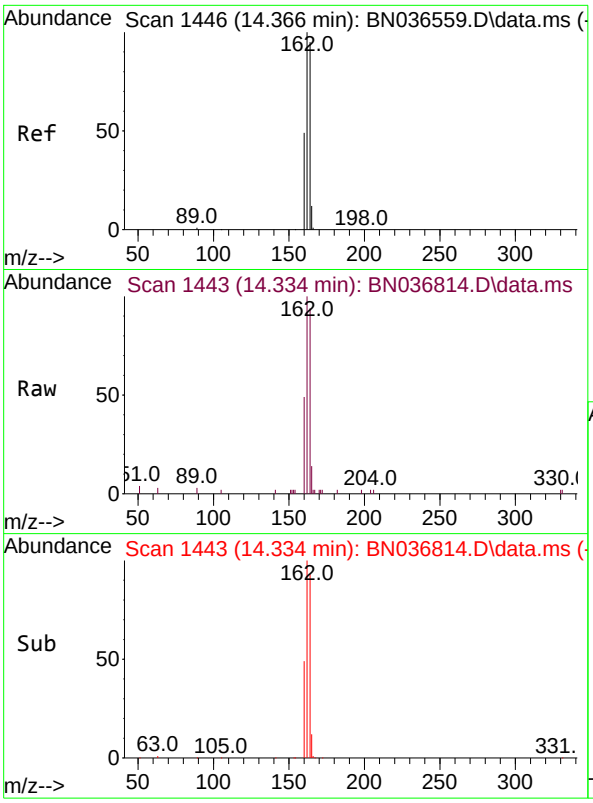




#12
2-Methylnaphthalene
Concen: 0.488 ng
RT: 12.146 min Scan# 1149
Delta R.T. -0.035 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:142 Resp: 6715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.5 | 71.7 | 107.5 |
| 115 | 48.3 | 38.3 | 57.5 |



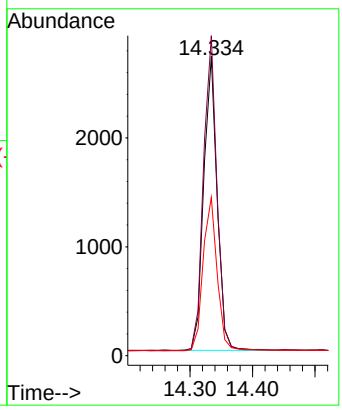


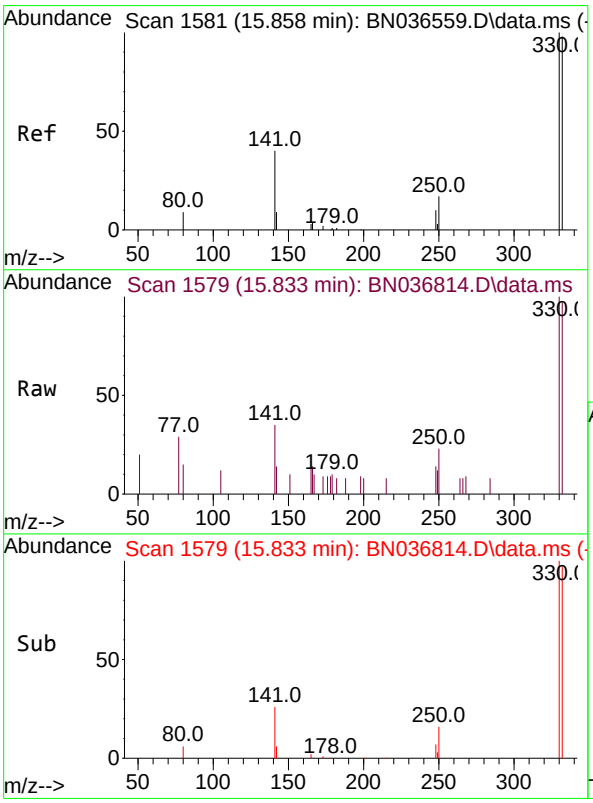

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:164 Resp: 4021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 106.9 | 84.2 | 126.2 |
| 160 | 52.9 | 42.2 | 63.2 |

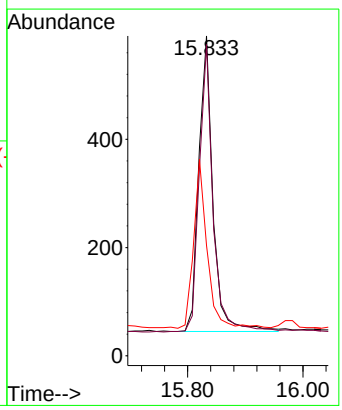


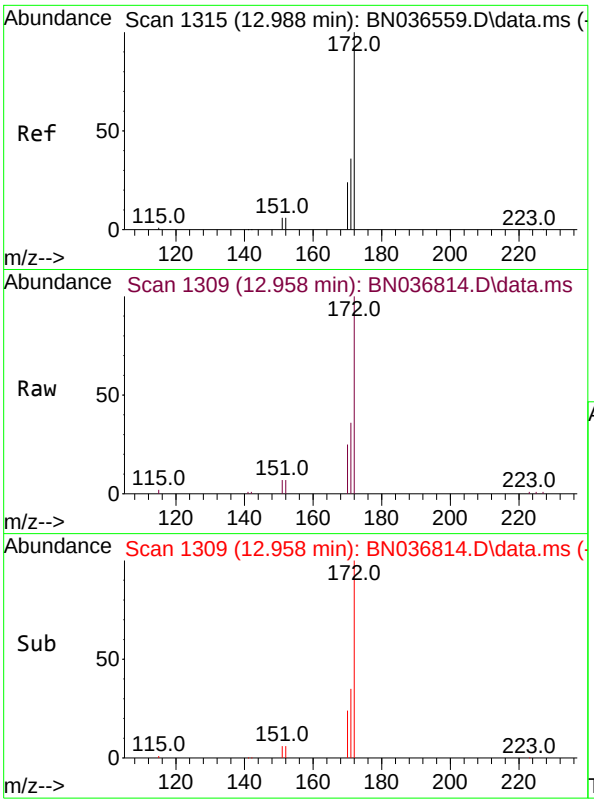




#14
2,4,6-Tribromophenol
Concen: 0.511 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:330 Resp: 932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 95.0 | 75.2 | 112.8 |
| 141 | 53.5 | 43.4 | 65.2 |



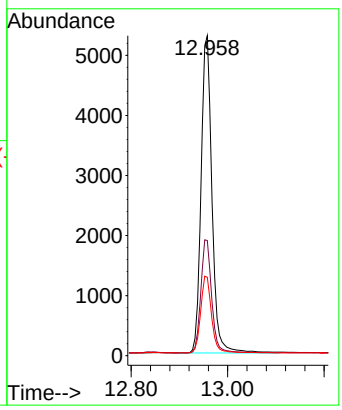


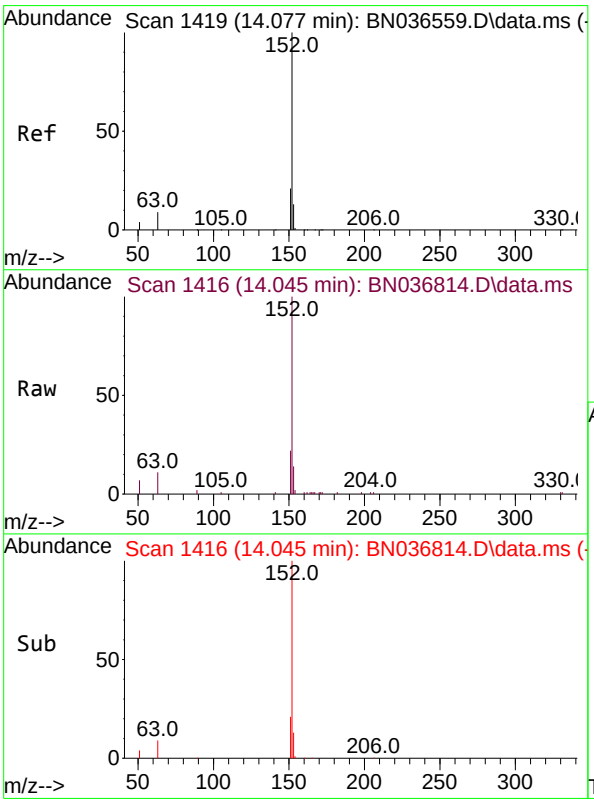

#15
2-Fluorobiphenyl
Concen: 0.463 ng
RT: 12.958 min Scan# 1
Delta R.T. -0.030 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:172 Resp: 10822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.0 | 29.5 | 44.3 |
| 170 | 24.5 | 20.2 | 30.4 |

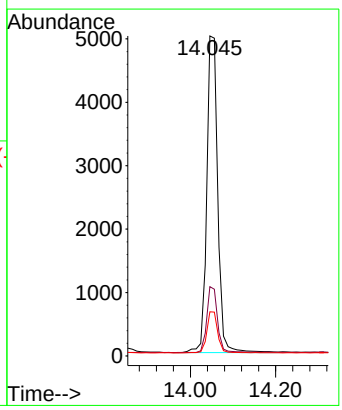


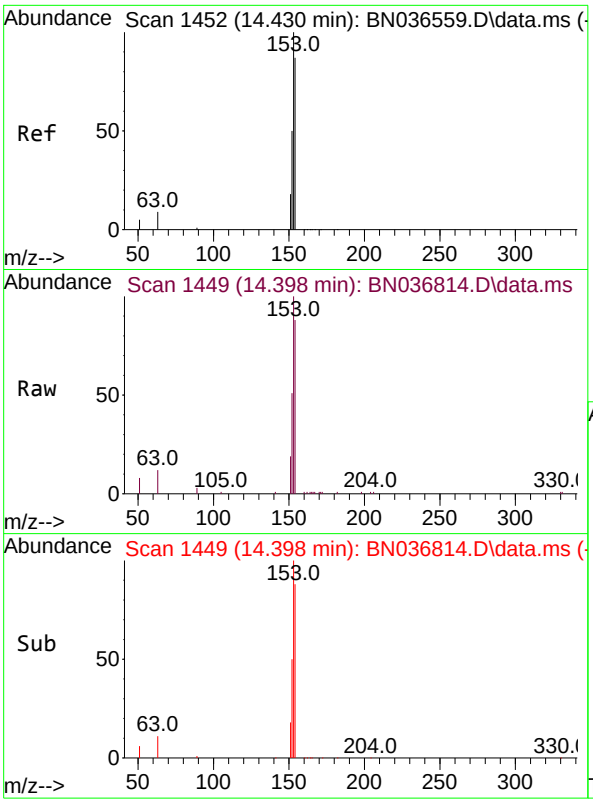




#16
Acenaphthylene
Concen: 0.470 ng
RT: 14.045 min Scan# 1416
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:152 Resp: 8923

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.0 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |



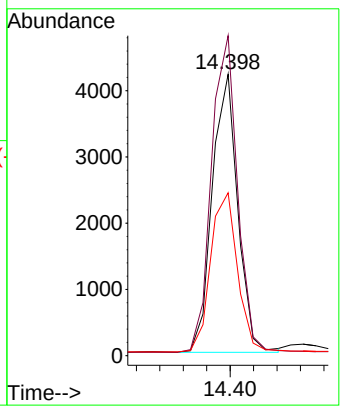


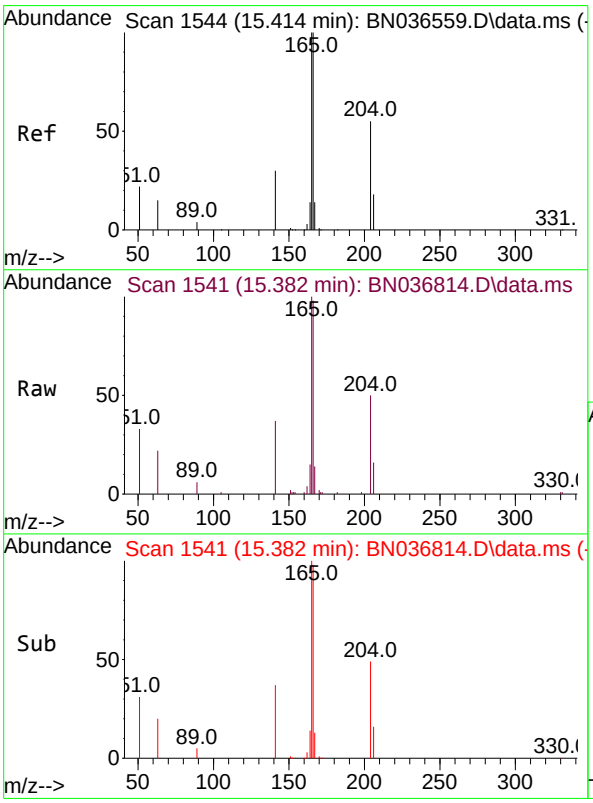

#17
Acenaphthene
Concen: 0.510 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:154 Resp: 6339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 116.7 | 94.1 | 141.1 |
| 152 | 60.9 | 49.8 | 74.6 |

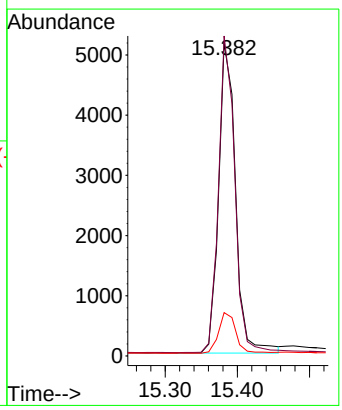


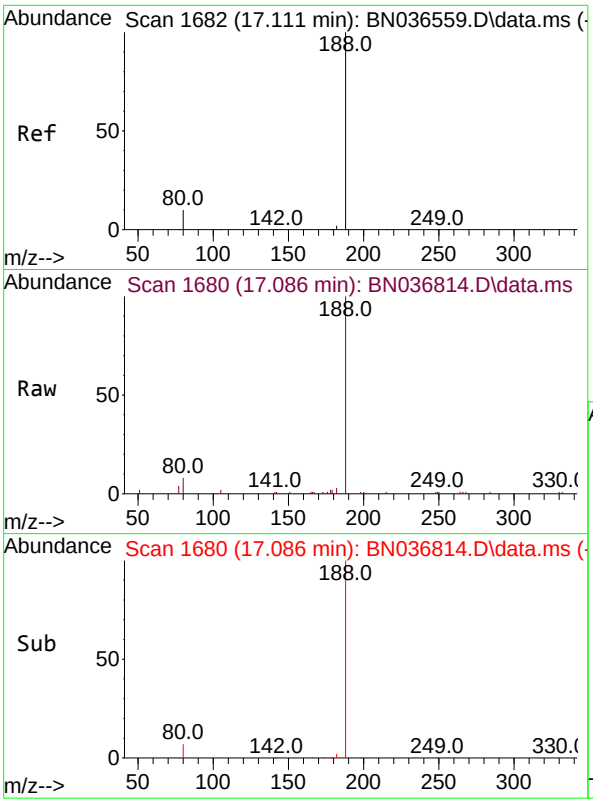




#18
Fluorene
Concen: 0.498 ng
RT: 15.382 min Scan# 1541
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:166 Resp: 8375

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.4 | 79.8 | 119.8 |
| 167 | 13.3 | 10.6 | 15.8 |



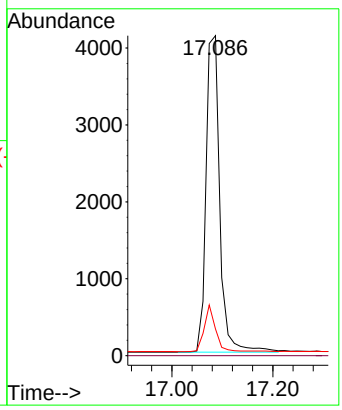


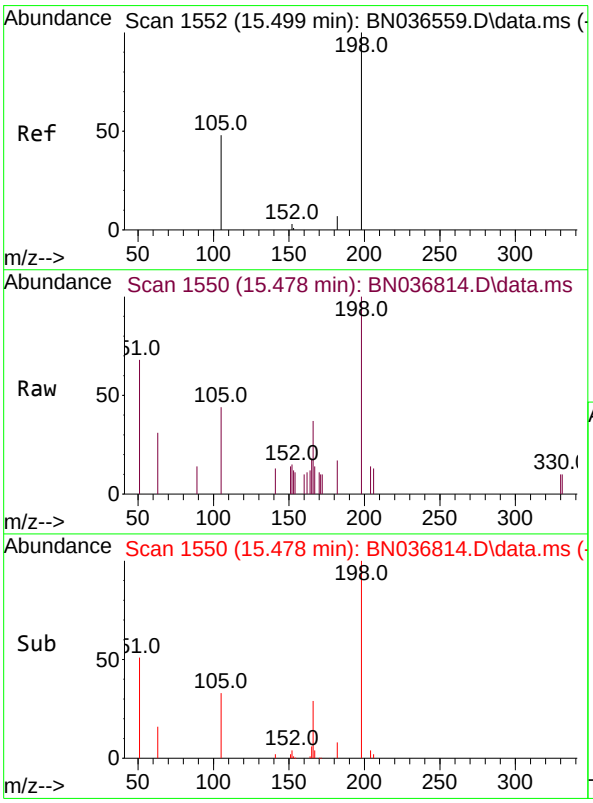

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:188 Resp: 7787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 8.4 | 8.8 | 13.2# |

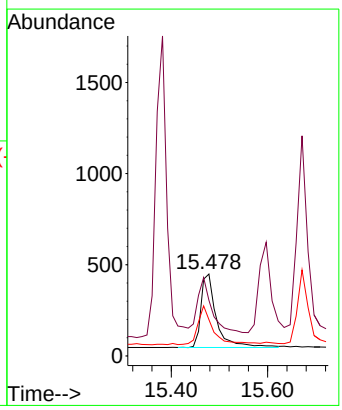


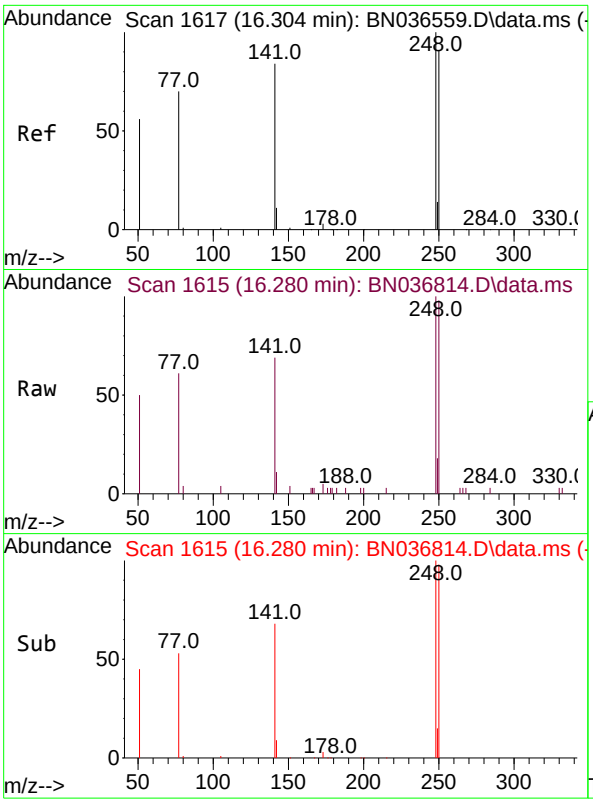




#20
4,6-Dinitro-2-methylphenol
Concen: 0.622 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:198 Resp: 952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 67.9 | 107.9 | 161.9# |
| 105 | 44.3 | 56.2 | 84.2# |



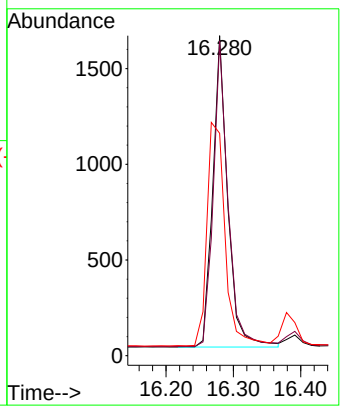


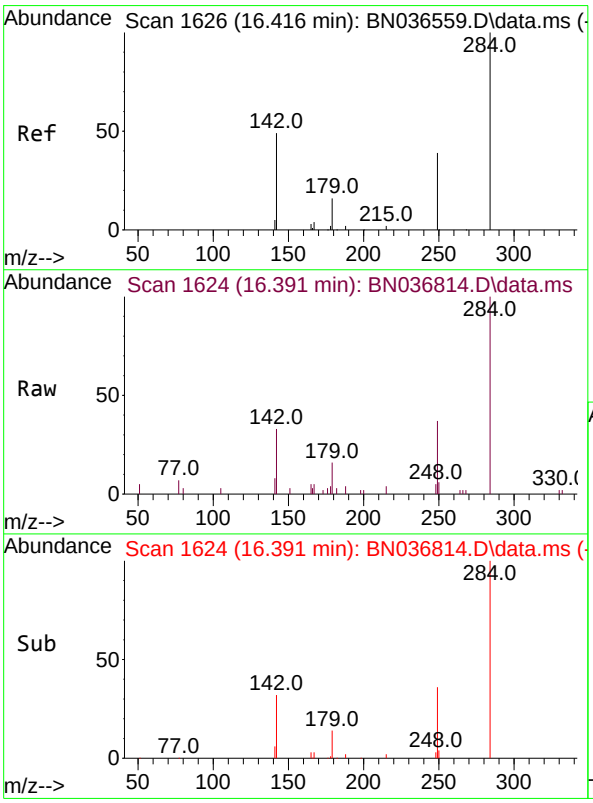

#21
4-Bromophenyl-phenylether
Concen: 0.514 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:248 Resp: 2507

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 98.4 | 73.0 | 109.6 |
| 141 | 69.5 | 68.6 | 103.0 |

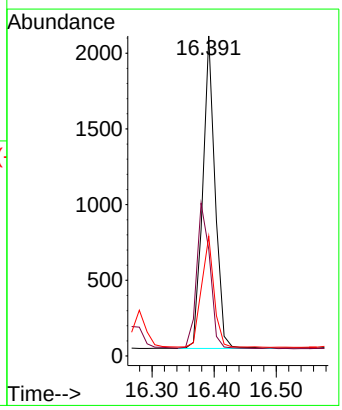


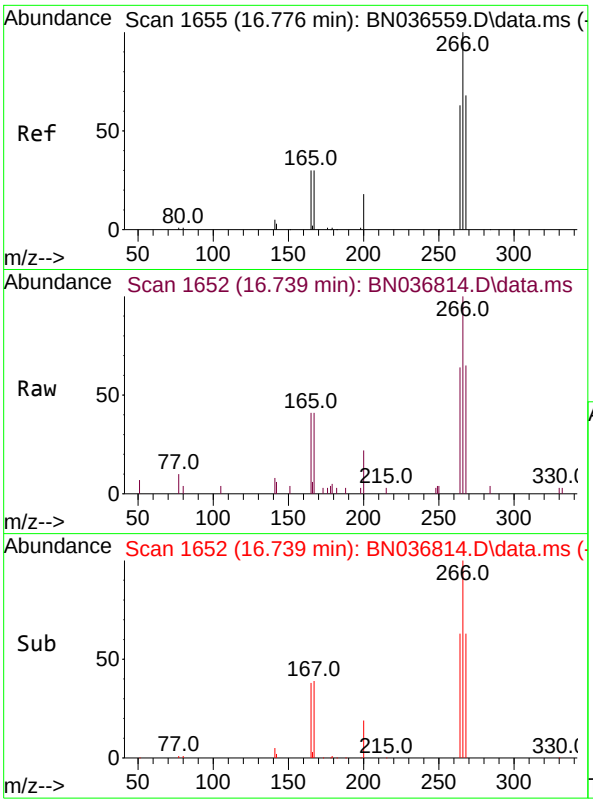




#22
Hexachlorobenzene
Concen: 0.487 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:284 Resp: 2869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.9 | 37.0 | 55.4 |
| 249 | 36.4 | 28.1 | 42.1 |



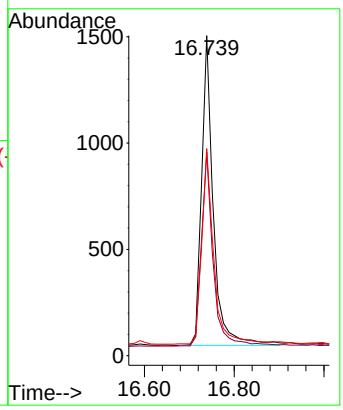


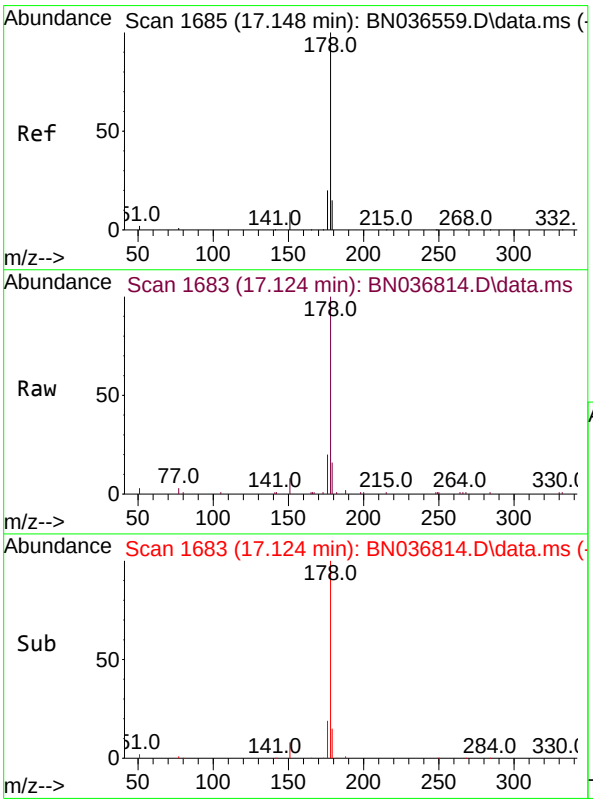

#24
Pentachlorophenol
Concen: 0.990 ng
RT: 16.739 min Scan# 1
Delta R.T. -0.037 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:266 Resp: 2659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.7 | 49.6 | 74.4 |
| 268 | 64.3 | 50.9 | 76.3 |

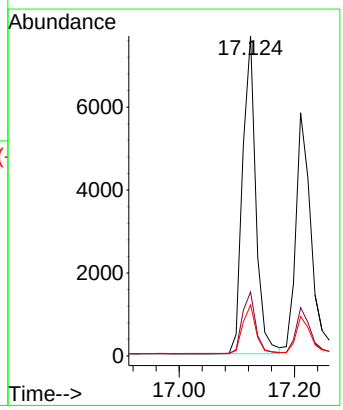


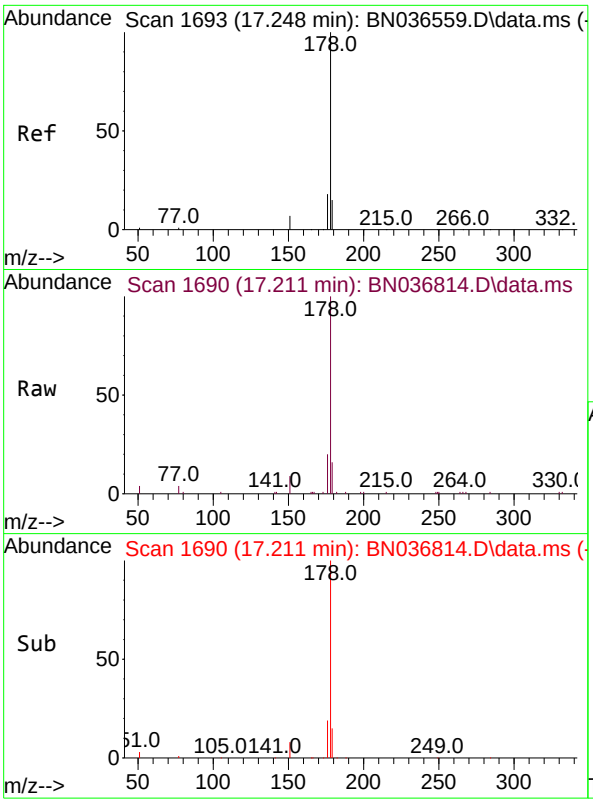




#25
Phenanthrene
Concen: 0.523 ng
RT: 17.124 min Scan# 1683
Delta R.T. -0.025 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:178 Resp: 12206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 20.0 | 15.9 | 23.9 |
| 179 | 15.4 | 12.2 | 18.4 |



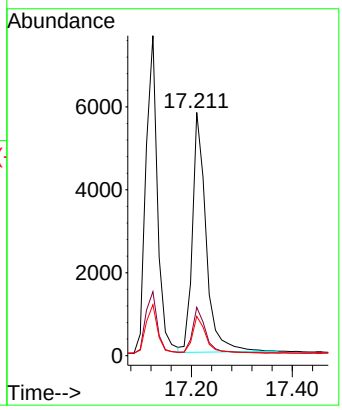


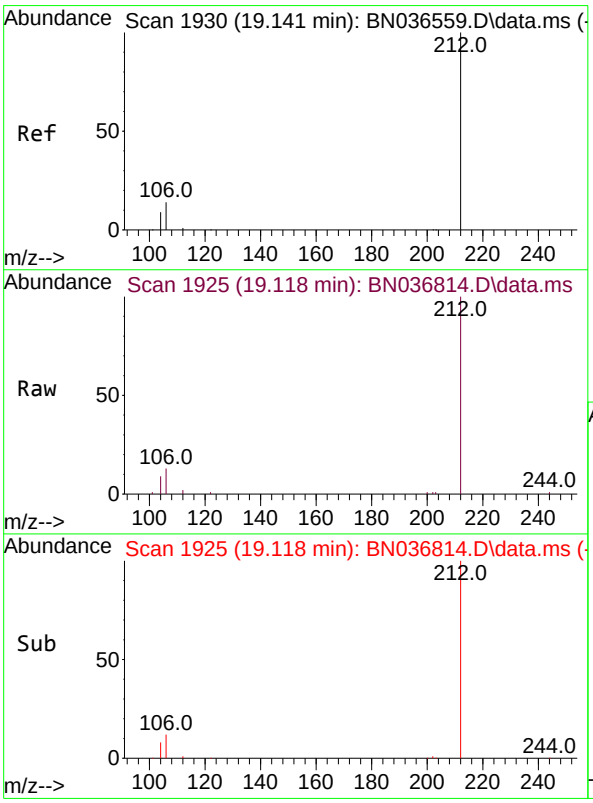

#26
Anthracene
Concen: 0.516 ng
RT: 17.211 min Scan# 1
Delta R.T. -0.037 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:178 Resp: 10876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.1 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |

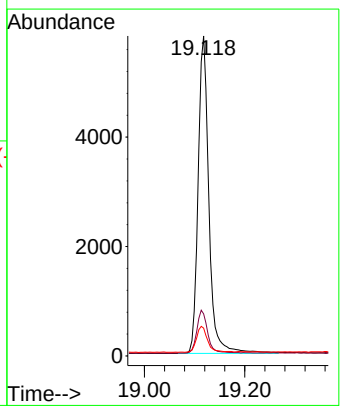


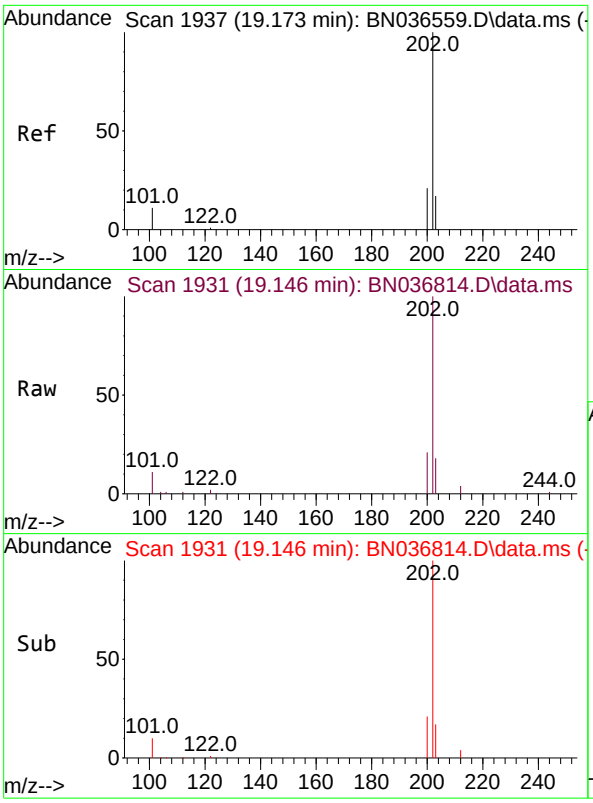




#27
Fluoranthene-d10
Concen: 0.432 ng
RT: 19.118 min Scan# 1925
Delta R.T. -0.023 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:212 Resp: 8631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.5 | 11.8 | 17.6 |
| 104 | 8.4 | 7.3 | 10.9 |



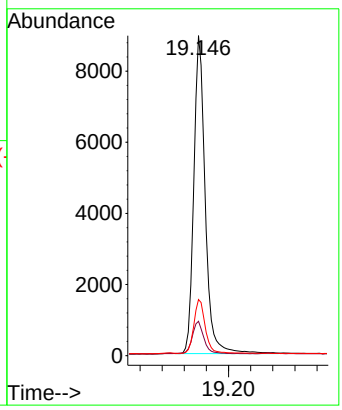


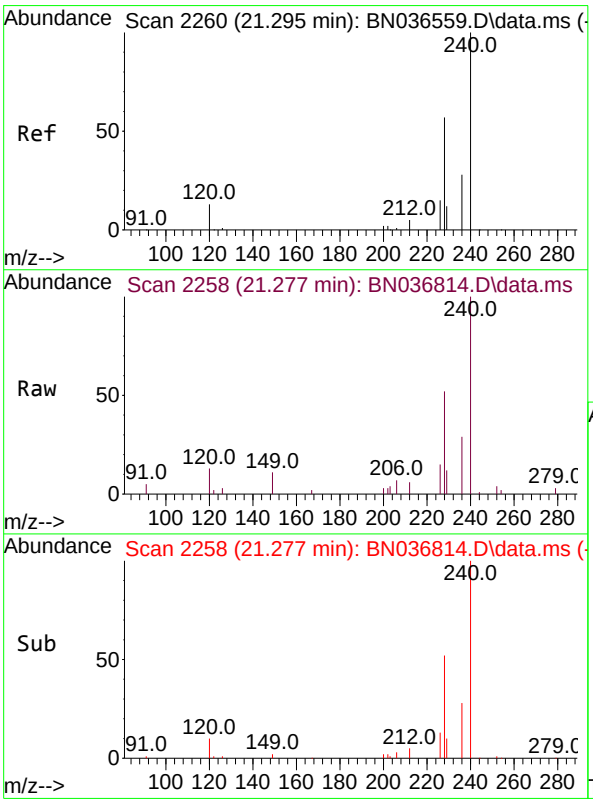

#28
Fluoranthene
Concen: 0.490 ng
RT: 19.146 min Scan# 1
Delta R.T. -0.028 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:202 Resp: 12865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.8 | 9.4 | 14.0 |
| 203 | 16.8 | 13.5 | 20.3 |

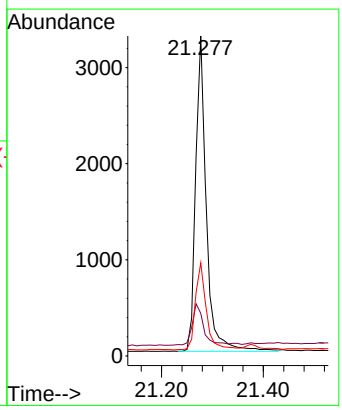


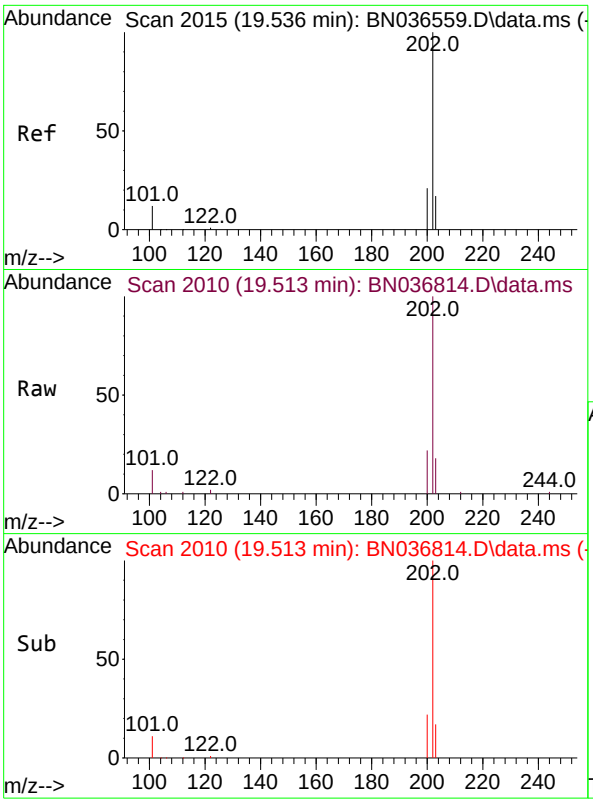




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.018 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:240 Resp: 4781

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 13.3 | 14.6 | 22.0# |
| 236 | 29.1 | 24.1 | 36.1 |



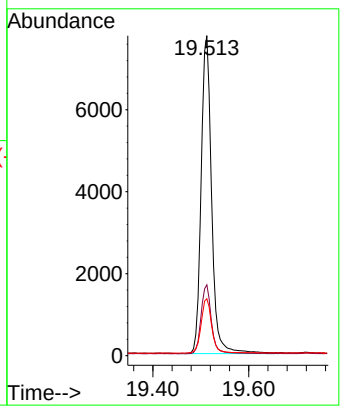


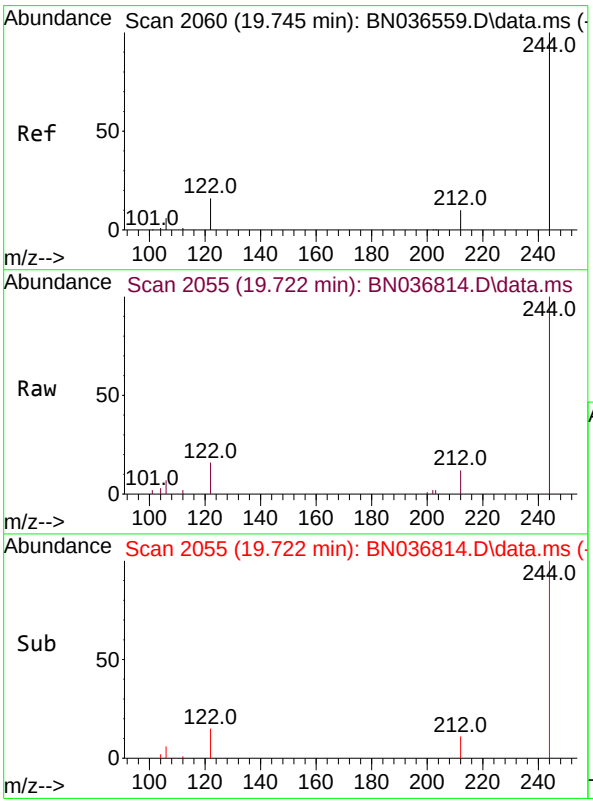

#30
Pyrene
Concen: 0.502 ng
RT: 19.513 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:202 Resp: 11729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.5 | 17.1 | 25.7 |
| 203 | 17.3 | 14.1 | 21.1 |

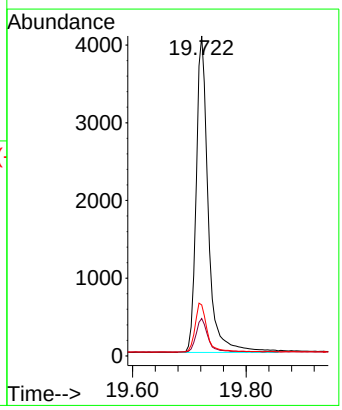


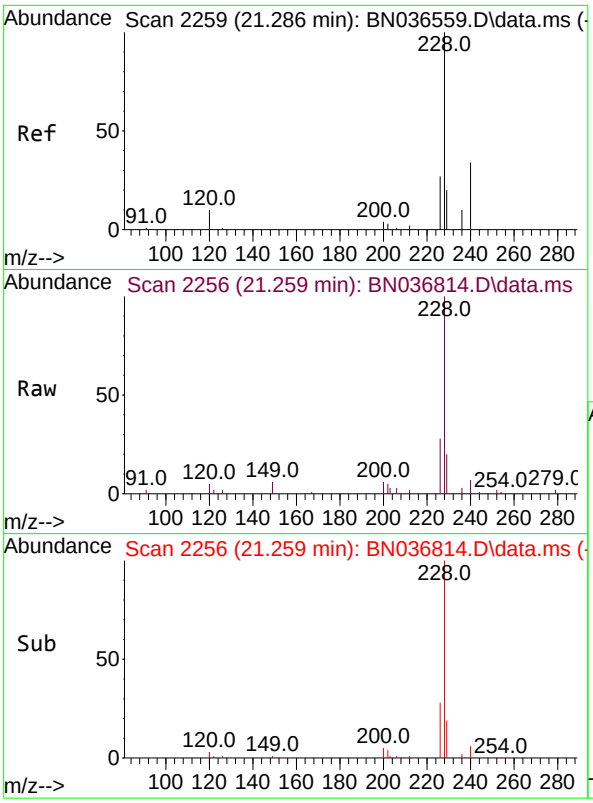




#31
Terphenyl-d14
Concen: 0.523 ng
RT: 19.722 min Scan# 2055
Delta R.T. -0.023 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:244 Resp: 5990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.7 | 9.6 | 14.4 |
| 122 | 15.9 | 13.9 | 20.9 |



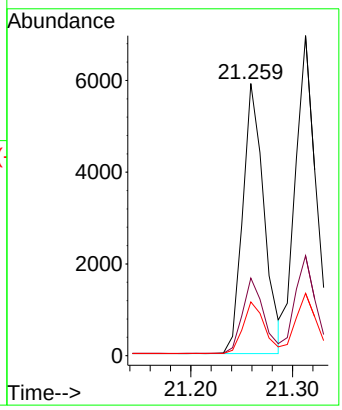


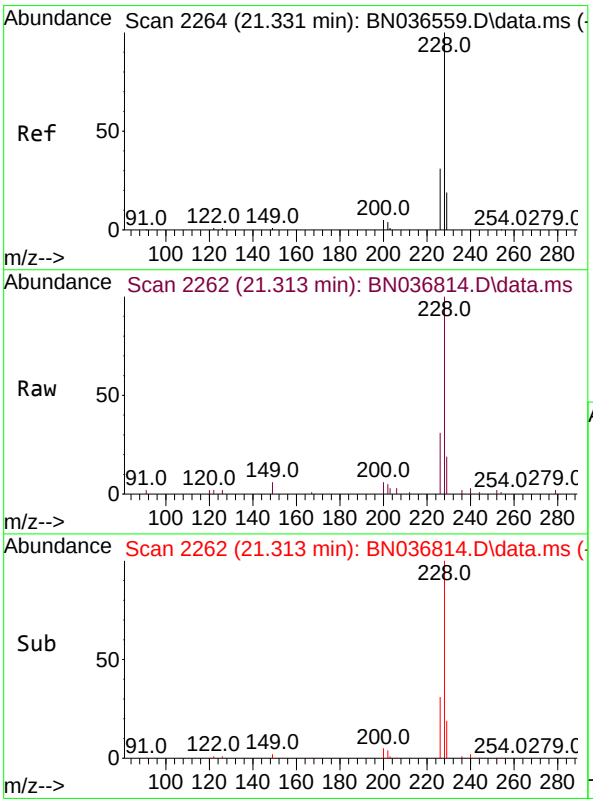

#32
Benzo(a)anthracene
Concen: 0.514 ng
RT: 21.259 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:228 Resp: 8542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.5 | 22.5 | 33.7 |
| 229 | 19.8 | 16.6 | 25.0 |

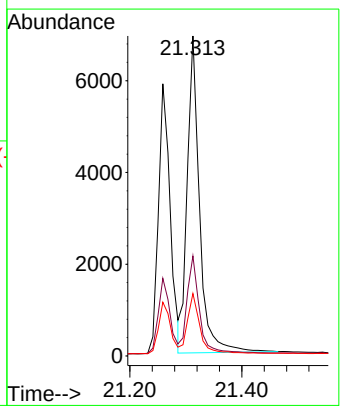


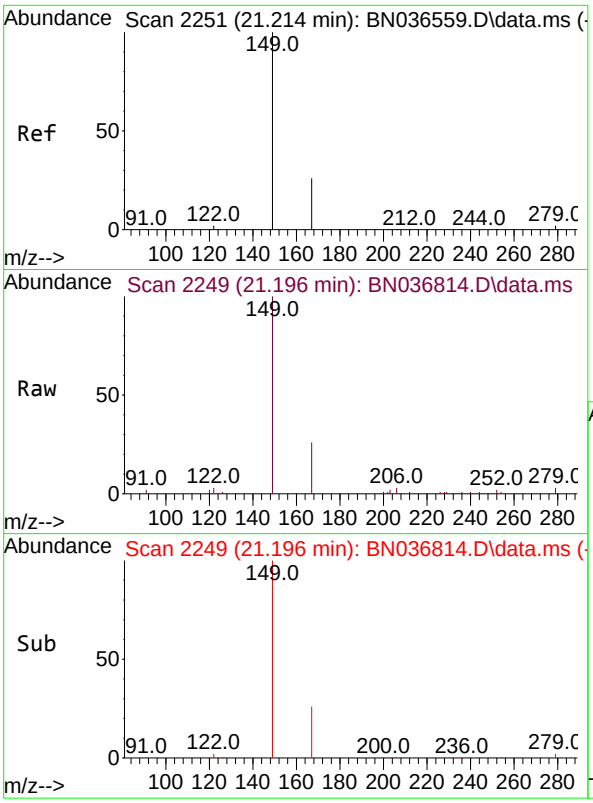




#33
Chrysene
Concen: 0.580 ng
RT: 21.313 min Scan# 2262
Delta R.T. -0.018 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:228 Resp: 10531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.3 | 25.3 | 37.9 |
| 229 | 19.5 | 15.8 | 23.8 |



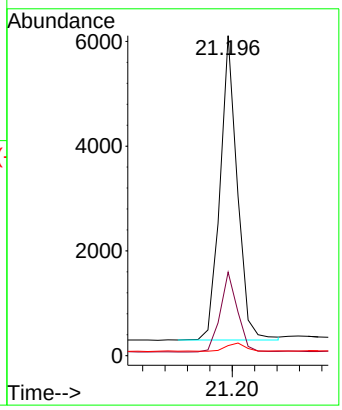


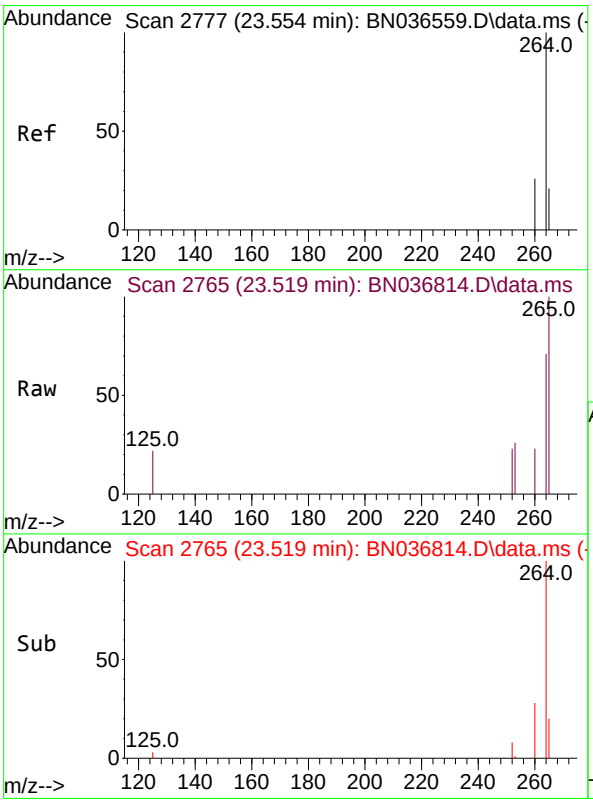

#34
Bis(2-ethylhexyl)phthalate
Concen: 0.526 ng
RT: 21.196 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:149 Resp: 6222

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.2 | 20.7 | 31.1 |
| 279 | 2.8 | 3.6 | 5.4# |

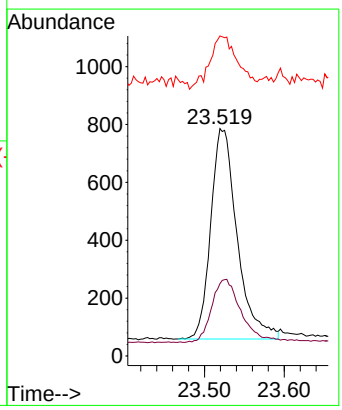


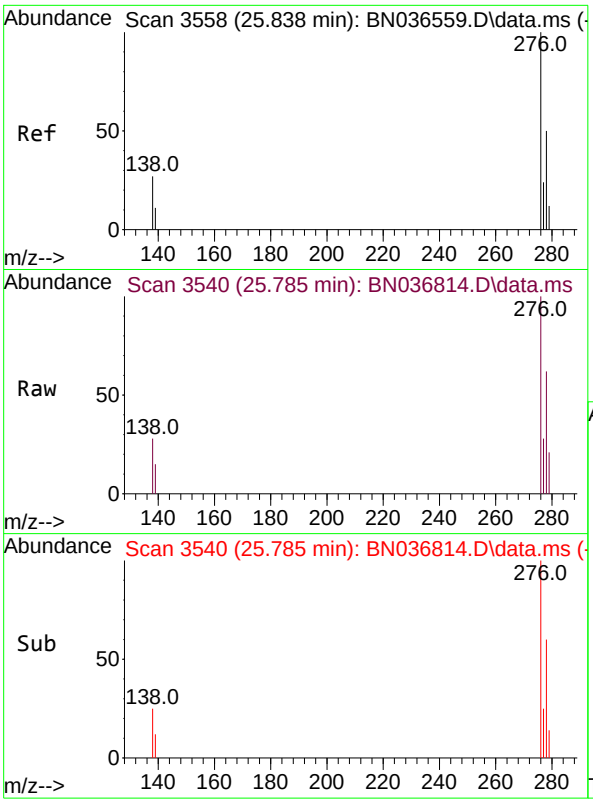




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.519 min Scan# 2765
Delta R.T. -0.035 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:264 Resp: 1670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 31.8 | 22.6 | 33.8 |
| 265 | 140.7 | 88.1 | 132.1# |



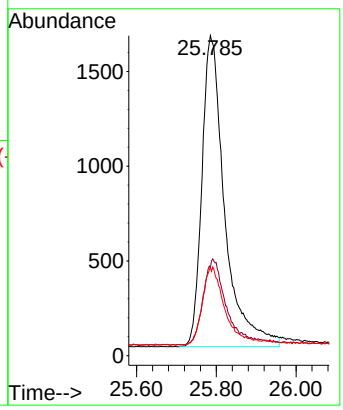


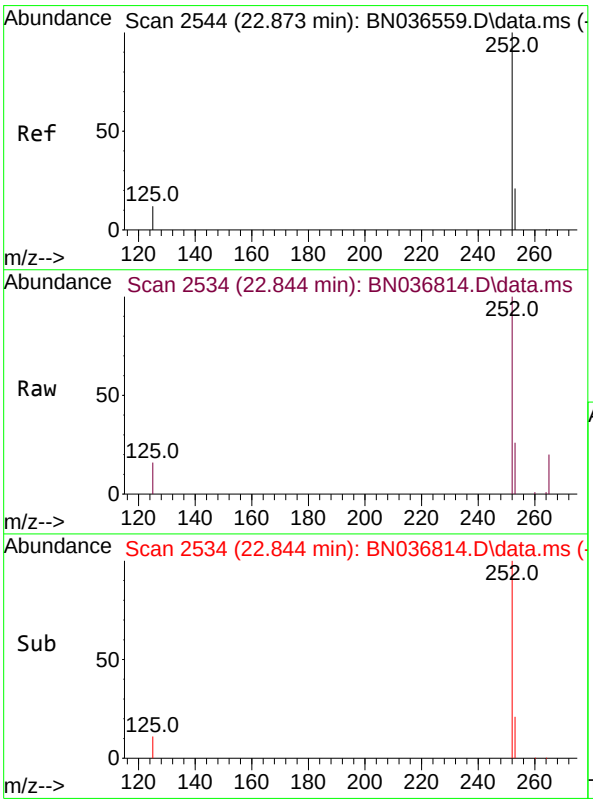

#36
Indeno(1,2,3-cd)pyrene
Concen: 1.081 ng
RT: 25.785 min Scan# 3
Delta R.T. -0.053 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:276 Resp: 6515

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.2 | 23.4 | 35.2 |
| 277 | 24.3 | 20.0 | 30.0 |

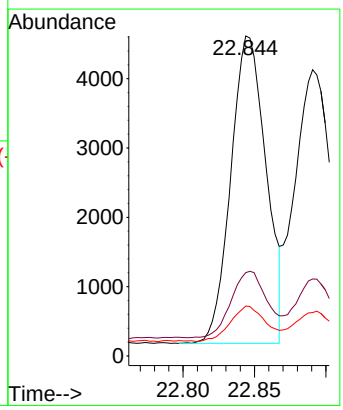


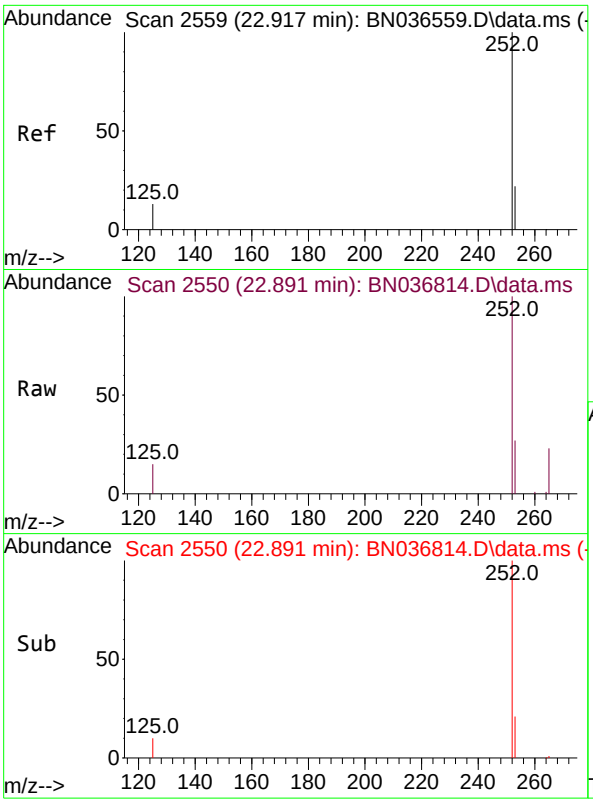




#37
Benzo(b)fluoranthene
Concen: 1.252 ng
RT: 22.844 min Scan# 2534
Delta R.T. -0.029 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:252 Resp: 7608

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 26.1 | 23.9 | 35.9 |
| 125 | 15.6 | 17.4 | 26.2# |



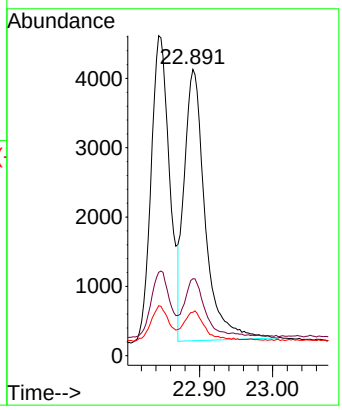


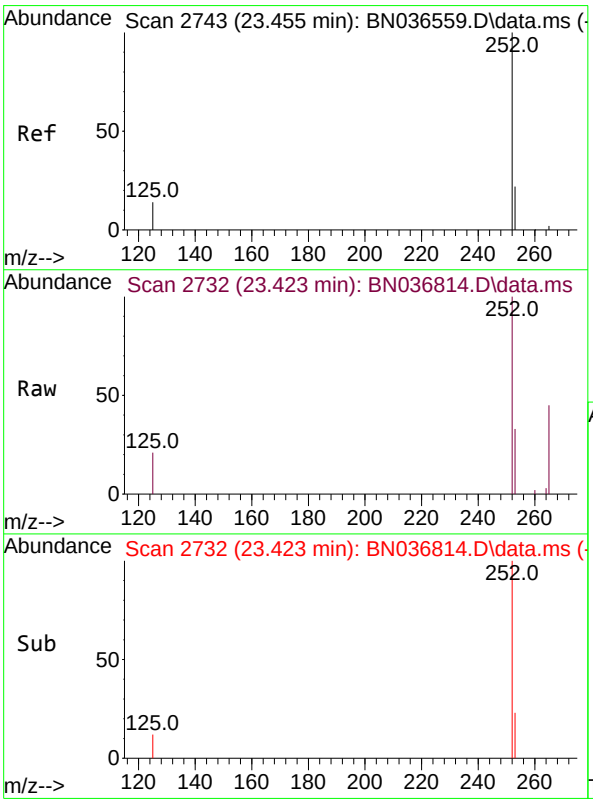

#38
Benzo(k)fluoranthene
Concen: 1.220 ng
RT: 22.891 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:252 Resp: 7777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 26.9 | 24.6 | 36.8 |
| 125 | 15.2 | 17.8 | 26.8# |

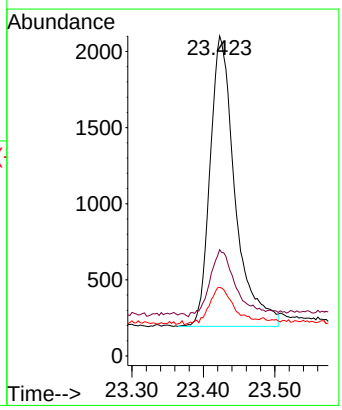


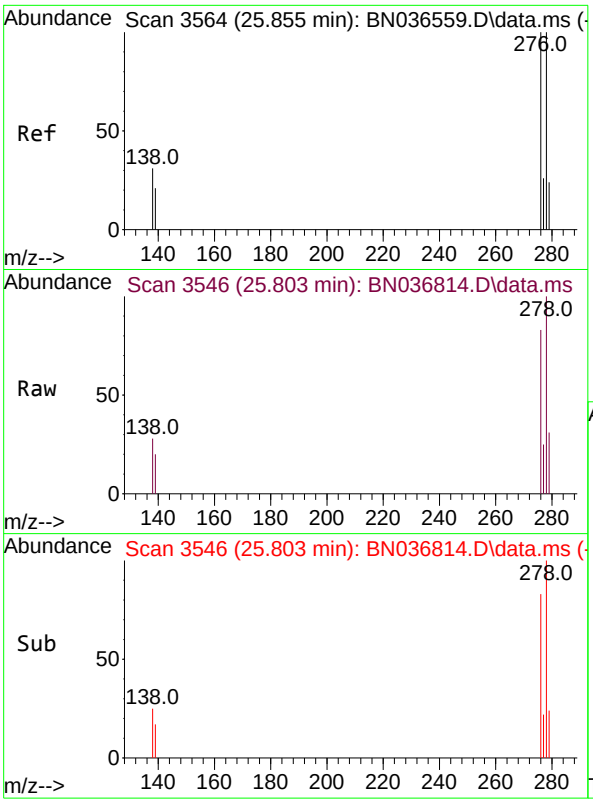




#39
Benzo(a)pyrene
Concen: 0.902 ng
RT: 23.423 min Scan# 2732
Delta R.T. -0.032 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:252 Resp: 4618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 33.2 | 27.8 | 41.8 |
| 125 | 21.5 | 22.7 | 34.1# |



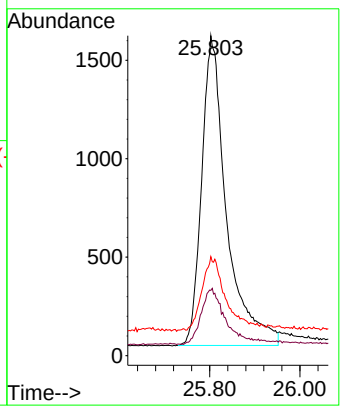


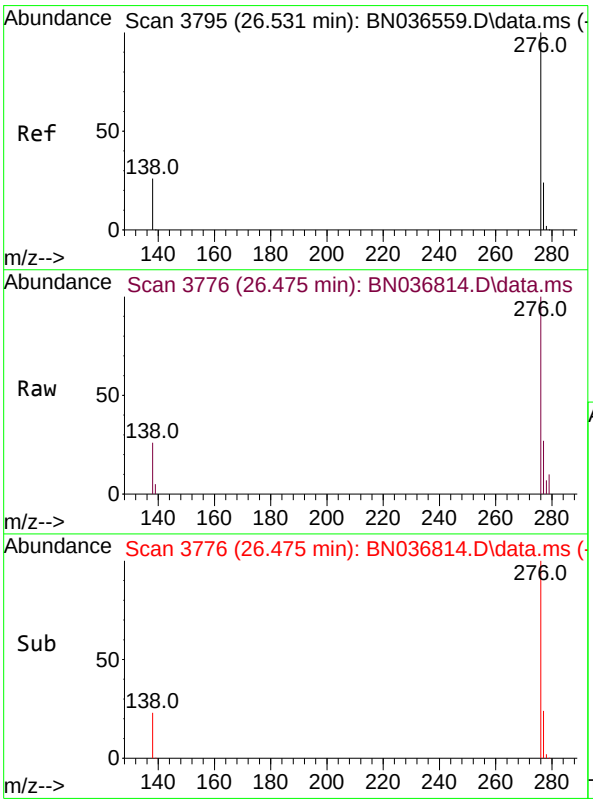

#40
Dibenzo(a,h)anthracene
Concen: 1.279 ng
RT: 25.803 min Scan# 3
Delta R.T. -0.053 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

**Instrument :**
BNA_N
**ClientSampleId :**
PB167269BSD

Tgt Ion:278 Resp: 6002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 20.4 | 20.8 | 31.2# |
| 279 | 31.0 | 28.8 | 43.2 |

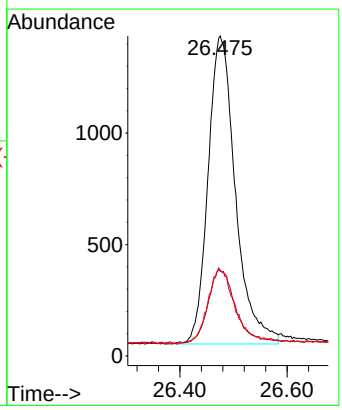



#41
Benzo(g,h,i)perylene
Concen: 0.915 ng
RT: 26.475 min Scan# 3776
Delta R.T. -0.056 min
Lab File: BN036814.D
Acq: 31 Mar 2025 14:16

Tgt Ion:276 Resp: 4911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.8 | 22.2 | 33.4 |
| 138 | 26.5 | 24.1 | 36.1 |



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# Manual Integration Report

| Sequence: | BN031025 | Instrument | BNA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| SSTDICC0.1 | BN036557.D | 1,4-Dioxane | anahy | 3/11/2025 9:18:29 AM | Jagrut | 3/11/2025 10:27:49 AM | Peak Integrated by Software |
| SSTDICC0.2 | BN036558.D | 1,4-Dioxane | anahy | 3/11/2025 9:19:12 AM | Jagrut | 3/11/2025 10:27:51 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036572.D | Benzo(k)fluoranthene | anahy | 3/11/2025 9:20:59 AM | Jagrut | 3/11/2025 10:27:55 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036572.D | Chrysene-d12 | anahy | 3/11/2025 9:20:59 AM | Jagrut | 3/11/2025 10:27:55 AM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | bn032725 | Instrument | BNA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| SSTDCCC0.4 | BN036736.D | Benzo(k)fluoranthene | anahy | 3/28/2025 11:44:03 AM | Jagrut | 4/1/2025 3:49:26 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036738.D | Benzo(k)fluoranthene | anahy | 3/28/2025 11:44:53 AM | Jagrut | 4/1/2025 3:49:29 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036755.D | Benzo(g,h,i)perylene | anahy | 3/28/2025 11:51:02 AM | Jagrut | 4/1/2025 3:49:38 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036755.D | Benzo(k)fluoranthene | anahy | 3/28/2025 11:51:02 AM | Jagrut | 4/1/2025 3:49:38 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036757.D | Benzo(k)fluoranthene | anahy | 3/28/2025 11:57:23 AM | Jagrut | 4/1/2025 3:49:40 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036771.D | Benzo(k)fluoranthene | anahy | 3/31/2025 10:10:02 AM | Jagrut | 4/1/2025 3:49:52 PM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | BN032825 | Instrument | BNA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| SSTDCCC0.4 | BN036789.D | Benzo(k)fluoranthene | anahy | 3/31/2025 12:00:29 PM | Jagrut | 3/31/2025 2:10:24 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036789.D | Dibenzo(a,h)anthracene | anahy | 3/31/2025 12:00:29 PM | Jagrut | 3/31/2025 2:10:24 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036791.D | Benzo(k)fluoranthene | anahy | 3/31/2025 12:01:09 PM | Jagrut | 3/31/2025 2:10:27 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036807.D | Benzo(k)fluoranthene | anahy | 3/31/2025 1:31:19 PM | Jagrut | 3/31/2025 2:10:38 PM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036807.D | Dibenzo(a,h)anthracene | anahy | 3/31/2025 1:31:19 PM | Jagrut | 3/31/2025 2:10:38 PM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | BN033125 | Instrument | BNA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| SSTDCCC0.4 | BN036809.D | Benzo(k)fluoranthene | Rahul | 3/31/2025 5:32:40 PM | Jagrut | 4/1/2025 10:17:11 AM | Peak Integrated by Software |
| SSTDCCC0.4 | BN036815.D | Benzo(k)fluoranthene | Rahul | 3/31/2025 5:32:48 PM | Jagrut | 4/1/2025 10:17:19 AM | Peak Integrated by Software |

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Fax : 908 789 8922

**Instrument ID: BNA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # BN031025

| | | | | | |
|---|---|---|---|---|---|
| Review By | anahy | Review On | 3/11/2025 9:36:11 AM | | |
| Supervise By | Jagrut | Supervise On | 3/11/2025 10:28:11 AM | | |
| SubDirectory | BN031025 | HP Acquire Method | BNA_N, 8270_SIM | HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | DFTPP | BN036556.D | 10 Mar 2025 11:03 | RC/JU | Ok |
| 2 | SSTDICC0.1 | BN036557.D | 10 Mar 2025 11:42 | RC/JU | Ok,M |
| 3 | SSTDICC0.2 | BN036558.D | 10 Mar 2025 12:18 | RC/JU | Ok,M |
| 4 | SSTDICCC0.4 | BN036559.D | 10 Mar 2025 12:54 | RC/JU | Ok |
| 5 | SSTDICC0.8 | BN036560.D | 10 Mar 2025 13:31 | RC/JU | Ok |
| 6 | SSTDICC1.6 | BN036561.D | 10 Mar 2025 14:07 | RC/JU | Ok |
| 7 | SSTDICC3.2 | BN036562.D | 10 Mar 2025 14:43 | RC/JU | Ok |
| 8 | SSTDICC5.0 | BN036563.D | 10 Mar 2025 15:19 | RC/JU | Ok |
| 9 | SSTDICV0.4 | BN036564.D | 10 Mar 2025 16:38 | RC/JU | Ok |
| 10 | PB167057BL | BN036565.D | 10 Mar 2025 17:14 | RC/JU | Ok |
| 11 | Q1531-03 | BN036566.D | 10 Mar 2025 17:50 | RC/JU | Ok |
| 12 | Q1531-04 | BN036567.D | 10 Mar 2025 18:26 | RC/JU | Ok |
| 13 | Q1531-05 | BN036568.D | 10 Mar 2025 19:02 | RC/JU | Ok |
| 14 | Q1531-06 | BN036569.D | 10 Mar 2025 19:38 | RC/JU | Ok,M |
| 15 | Q1531-13 | BN036570.D | 10 Mar 2025 20:14 | RC/JU | Ok |
| 16 | Q1531-14 | BN036571.D | 10 Mar 2025 20:50 | RC/JU | Ok |
| 17 | SSTDCCC0.4 | BN036572.D | 10 Mar 2025 21:26 | RC/JU | Ok,M |

M : Manual Integration

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**Instrument ID: BNA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032725

| | | | | | |
|---|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 10:10:21 AM | | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 2:23:07 PM | | |
| SubDirectory | BN032725 | HP Acquire Method | BNA_N, 8270_SIM | HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | DFTPP | BN036728.D | 27 Mar 2025 09:10 | RC/JU | Ok |
| 2 | SSTDCCC0.4 | BN036729.D | 27 Mar 2025 09:49 | RC/JU | Ok |
| 3 | PB167232BL | BN036730.D | 27 Mar 2025 10:25 | RC/JU | Ok |
| 4 | Q1608-01 | BN036731.D | 27 Mar 2025 11:01 | RC/JU | Ok |
| 5 | Q1608-02 | BN036732.D | 27 Mar 2025 11:38 | RC/JU | Ok |
| 6 | Q1621-01 | BN036733.D | 27 Mar 2025 12:14 | RC/JU | Dilution |
| 7 | Q1621-02 | BN036734.D | 27 Mar 2025 12:50 | RC/JU | ReRun |
| 8 | Q1621-03 | BN036735.D | 27 Mar 2025 13:26 | RC/JU | ReRun |
| 9 | SSTDCCC0.4 | BN036736.D | 27 Mar 2025 14:02 | RC/JU | Ok,NS |
| 10 | DFTPP | BN036737.D | 27 Mar 2025 14:38 | RC/JU | Ok |
| 11 | SSTDCCC0.4 | BN036738.D | 27 Mar 2025 15:38 | RC/JU | Ok,NS |
| 12 | PB167251BL | BN036739.D | 27 Mar 2025 16:14 | RC/JU | Ok |
| 13 | Q1621-02 | BN036740.D | 27 Mar 2025 16:50 | RC/JU | Ok |
| 14 | Q1621-03 | BN036741.D | 27 Mar 2025 17:26 | RC/JU | Ok |
| 15 | Q1621-01DL | BN036742.D | 27 Mar 2025 18:02 | RC/JU | Ok |
| 16 | Q1608-09 | BN036743.D | 27 Mar 2025 18:39 | RC/JU | Ok |
| 17 | Q1608-10 | BN036744.D | 27 Mar 2025 19:15 | RC/JU | Dilution |
| 18 | Q1608-03 | BN036745.D | 27 Mar 2025 19:51 | RC/JU | Ok,NS |
| 19 | Q1608-04 | BN036746.D | 27 Mar 2025 20:27 | RC/JU | Ok |
| 20 | Q1608-14 | BN036747.D | 27 Mar 2025 21:03 | RC/JU | Dilution |
| 21 | Q1608-15 | BN036748.D | 27 Mar 2025 21:39 | RC/JU | Dilution |

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**Instrument ID: BNA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032725

| | | | | | |
|---|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 10:10:21 AM | | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 2:23:07 PM | | |
| SubDirectory | BN032725 | HP Acquire Method | BNA_N, 8270_SIM | HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q1608-16 | BN036749.D | 27 Mar 2025 22:15 | RC/JU | Ok |
| 23 | Q1608-17 | BN036750.D | 27 Mar 2025 22:51 | RC/JU | Dilution |
| 24 | Q1608-18 | BN036751.D | 27 Mar 2025 23:27 | RC/JU | Dilution |
| 25 | Q1608-19 | BN036752.D | 28 Mar 2025 00:03 | RC/JU | Ok |
| 26 | Q1608-20 | BN036753.D | 28 Mar 2025 00:39 | RC/JU | Ok,NS |
| 27 | PB167232BS | BN036754.D | 28 Mar 2025 01:16 | RC/JU | Ok,NS |
| 28 | SSTDCCC0.4 | BN036755.D | 28 Mar 2025 01:52 | RC/JU | Ok,NS |
| 29 | DFTPP | BN036756.D | 28 Mar 2025 03:07 | RC/JU | Ok |
| 30 | SSTDCCC0.4 | BN036757.D | 28 Mar 2025 03:46 | RC/JU | Ok,NS |
| 31 | PB167269BL | BN036758.D | 28 Mar 2025 04:22 | RC/JU | Ok |
| 32 | Q1608-21 | BN036759.D | 28 Mar 2025 04:58 | RC/JU | Ok |
| 33 | Q1608-22 | BN036760.D | 28 Mar 2025 05:34 | RC/JU | Ok |
| 34 | Q1608-23 | BN036761.D | 28 Mar 2025 06:10 | RC/JU | Dilution |
| 35 | Q1608-24 | BN036762.D | 28 Mar 2025 06:46 | RC/JU | Ok |
| 36 | Q1608-25 | BN036763.D | 28 Mar 2025 07:22 | RC/JU | Ok,NS |
| 37 | Q1608-26 | BN036764.D | 28 Mar 2025 07:58 | RC/JU | Ok |
| 38 | Q1608-11 | BN036765.D | 28 Mar 2025 08:34 | RC/JU | Ok |
| 39 | Q1608-12MS | BN036766.D | 28 Mar 2025 10:22 | RC/JU | Ok,NS |
| 40 | Q1608-13MSD | BN036767.D | 28 Mar 2025 10:58 | RC/JU | Ok |
| 41 | Q1629-03 | BN036768.D | 28 Mar 2025 11:34 | RC/JU | Ok |
| 42 | Q1629-04MS | BN036769.D | 28 Mar 2025 12:47 | RC/JU | Ok,NS |
| 43 | Q1629-05MSD | BN036770.D | 28 Mar 2025 13:22 | RC/JU | Ok,NS |
| 44 | SSTDCCC0.4 | BN036771.D | 28 Mar 2025 13:58 | RC/JU | Ok,NS |

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**Instrument ID: BNA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032725

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 10:10:21 AM | | | | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 2:23:07 PM | | | | |
| SubDirectory | BN032725 | HP Acquire Method | BNA_N, 8270_SIM | HP Processing Method | bn031025 | | |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

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**Instrument ID: BNA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032825

| | | | | | |
|---|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 1:32:07 PM | | |
| Supervise By | Jagrut | Supervise On | 3/31/2025 2:10:59 PM | | |
| SubDirectory | BN032825 | HP Acquire Method | BNA_N, 8270_SIM | HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | DFTPP | BN036772.D | 28 Mar 2025 14:34 | RC/JU | Ok |
| 2 | SSTDCCC0.4 | BN036773.D | 28 Mar 2025 15:14 | RC/JU | Ok |
| 3 | PB167159BL | BN036774.D | 28 Mar 2025 15:49 | RC/JU | Ok |
| 4 | Q1608-10DL | BN036775.D | 28 Mar 2025 16:25 | RC/JU | Ok |
| 5 | Q1608-14DL | BN036776.D | 28 Mar 2025 17:02 | RC/JU | Ok |
| 6 | Q1608-15DL | BN036777.D | 28 Mar 2025 17:38 | RC/JU | Ok |
| 7 | Q1608-17DL | BN036778.D | 28 Mar 2025 18:14 | RC/JU | Ok |
| 8 | Q1608-18DL | BN036779.D | 28 Mar 2025 18:50 | RC/JU | Ok |
| 9 | Q1608-23DL | BN036780.D | 28 Mar 2025 19:26 | RC/JU | Ok |
| 10 | Q1608-27 | BN036781.D | 28 Mar 2025 20:02 | RC/JU | Ok |
| 11 | Q1608-28 | BN036782.D | 28 Mar 2025 20:38 | RC/JU | Ok,M |
| 12 | Q1608-05 | BN036783.D | 28 Mar 2025 21:14 | RC/JU | Ok |
| 13 | Q1608-06 | BN036784.D | 28 Mar 2025 21:51 | RC/JU | Ok |
| 14 | Q1608-07 | BN036785.D | 28 Mar 2025 22:26 | RC/JU | Ok |
| 15 | Q1608-08 | BN036786.D | 28 Mar 2025 23:02 | RC/JU | Ok |
| 16 | PB167251BS | BN036787.D | 28 Mar 2025 23:38 | RC/JU | Ok,M |
| 17 | PB167251BSD | BN036788.D | 29 Mar 2025 00:14 | RC/JU | Ok,M |
| 18 | SSTDCCC0.4 | BN036789.D | 29 Mar 2025 00:50 | RC/JU | Ok,M |
| 19 | DFTPP | BN036790.D | 29 Mar 2025 01:26 | RC/JU | Ok |
| 20 | SSTDCCC0.4 | BN036791.D | 29 Mar 2025 02:44 | RC/JU | Ok,M |
| 21 | PB167295BL | BN036792.D | 29 Mar 2025 03:20 | RC/JU | Ok |

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**Instrument ID: BNA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032825

| | | | | | |
|---|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 1:32:07 PM | | |
| Supervise By | Jagrut | Supervise On | 3/31/2025 2:10:59 PM | | |
| SubDirectory | BN032825 | HP Acquire Method | BNA_N, 8270_SIM | HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q1620-04 | BN036793.D | 29 Mar 2025 03:56 | RC/JU | Ok |
| 23 | Q1620-01 | BN036794.D | 29 Mar 2025 04:32 | RC/JU | Ok |
| 24 | Q1620-02 | BN036795.D | 29 Mar 2025 05:08 | RC/JU | Ok |
| 25 | Q1620-03 | BN036796.D | 29 Mar 2025 05:43 | RC/JU | Ok |
| 26 | Q1629-01 | BN036797.D | 29 Mar 2025 06:19 | RC/JU | Ok |
| 27 | Q1629-02 | BN036798.D | 29 Mar 2025 06:56 | RC/JU | Ok |
| 28 | Q1629-08 | BN036799.D | 29 Mar 2025 07:32 | RC/JU | Ok |
| 29 | Q1629-09 | BN036800.D | 29 Mar 2025 08:08 | RC/JU | Ok |
| 30 | Q1629-10 | BN036801.D | 29 Mar 2025 08:44 | RC/JU | Ok |
| 31 | Q1629-11 | BN036802.D | 29 Mar 2025 09:20 | RC/JU | Ok |
| 32 | Q1629-07 | BN036803.D | 29 Mar 2025 09:57 | RC/JU | Ok,M |
| 33 | PB167295BS | BN036804.D | 29 Mar 2025 10:33 | RC/JU | Ok,M |
| 34 | PB167269BSD | BN036805.D | 29 Mar 2025 11:09 | RC/JU | Not Ok |
| 35 | PB167269BS | BN036806.D | 29 Mar 2025 11:45 | RC/JU | Ok |
| 36 | SSTDCCC0.4 | BN036807.D | 29 Mar 2025 12:21 | RC/JU | Ok,M |

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**Instrument ID: BNA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # BN033125

| | | | | | |
|---|---|---|---|---|---|
| Review By | Rahul | Review On | 3/31/2025 5:33:01 PM | | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 10:28:33 AM | | |
| SubDirectory | BN033125 | HP Acquire Method | BNA_N, 8270_SIM | HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6757 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | DFTPP | BN036808.D | 31 Mar 2025 10:00 | RC/JU | Ok |
| 2 | SSTDCCC0.4 | BN036809.D | 31 Mar 2025 10:39 | RC/JU | Ok,M |
| 3 | PB167251BL | BN036810.D | 31 Mar 2025 11:15 | RC/JU | Ok |
| 4 | Q1629-14 | BN036811.D | 31 Mar 2025 11:51 | RC/JU | Ok |
| 5 | Q1629-15MS | BN036812.D | 31 Mar 2025 13:04 | RC/JU | Ok,M |
| 6 | Q1629-16MSD | BN036813.D | 31 Mar 2025 13:40 | RC/JU | Ok,M |
| 7 | PB167269BSD | BN036814.D | 31 Mar 2025 14:16 | RC/JU | Ok |
| 8 | SSTDCCC0.4 | BN036815.D | 31 Mar 2025 15:08 | RC/JU | Ok,M |

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**Instrument ID:** BNA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # BN031025

| | | | | |
|---|---|---|---|---|
| Review By | anahy | Review On | 3/11/2025 9:36:11 AM | |
| Supervise By | Jagrut | Supervise On | 3/11/2025 10:28:11 AM | |
| SubDirectory | BN031025 | HP Acquire Method | BNA_N, 8270_HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | DFTPP | DFTPP | BN036556.D | 10 Mar 2025 11:03 | | RC/JU | Ok |
| 2 | SSTDICC0.1 | SSTDICC0.1 | BN036557.D | 10 Mar 2025 11:42 | Compound #20 removed. | RC/JU | Ok,M |
| 3 | SSTDICC0.2 | SSTDICC0.2 | BN036558.D | 10 Mar 2025 12:18 | | RC/JU | Ok,M |
| 4 | SSTDICCC0.4 | SSTDICCC0.4 | BN036559.D | 10 Mar 2025 12:54 | | RC/JU | Ok |
| 5 | SSTDICC0.8 | SSTDICC0.8 | BN036560.D | 10 Mar 2025 13:31 | | RC/JU | Ok |
| 6 | SSTDICC1.6 | SSTDICC1.6 | BN036561.D | 10 Mar 2025 14:07 | Compound #20 kept on QR. | RC/JU | Ok |
| 7 | SSTDICC3.2 | SSTDICC3.2 | BN036562.D | 10 Mar 2025 14:43 | Method is good for DOD. | RC/JU | Ok |
| 8 | SSTDICC5.0 | SSTDICC5.0 | BN036563.D | 10 Mar 2025 15:19 | | RC/JU | Ok |
| 9 | SSTDICV0.4 | ICVBN031025 | BN036564.D | 10 Mar 2025 16:38 | | RC/JU | Ok |
| 10 | PB167057BL | PB167057BL | BN036565.D | 10 Mar 2025 17:14 | | RC/JU | Ok |
| 11 | Q1531-03 | RE122D1-20250305 | BN036566.D | 10 Mar 2025 17:50 | | RC/JU | Ok |
| 12 | Q1531-04 | RE126D1-20250306 | BN036567.D | 10 Mar 2025 18:26 | | RC/JU | Ok |
| 13 | Q1531-05 | RE126D2-20250306 | BN036568.D | 10 Mar 2025 19:02 | | RC/JU | Ok |
| 14 | Q1531-06 | DUP01-20250306 | BN036569.D | 10 Mar 2025 19:38 | | RC/JU | Ok,M |
| 15 | Q1531-13 | RE108D1-20250306 | BN036570.D | 10 Mar 2025 20:14 | | RC/JU | Ok |
| 16 | Q1531-14 | RE105D1-20250306 | BN036571.D | 10 Mar 2025 20:50 | | RC/JU | Ok |
| 17 | SSTDCCC0.4 | SSTDCCC0.4EC | BN036572.D | 10 Mar 2025 21:26 | | RC/JU | Ok,M |

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**Instrument ID:** BNA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032725

| | | | | |
|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 10:10:21 AM | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 2:23:07 PM | |
| SubDirectory | BN032725 | HP Acquire Method | BNA_N, 8270_HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | DFTPP | DFTPP | BN036728.D | 27 Mar 2025 09:10 | | RC/JU | Ok |
| 2 | SSTDCCC0.4 | SSTDCCC0.4 | BN036729.D | 27 Mar 2025 09:49 | | RC/JU | Ok |
| 3 | PB167232BL | PB167232BL | BN036730.D | 27 Mar 2025 10:25 | | RC/JU | Ok |
| 4 | Q1608-01 | TT172S1-20250317 | BN036731.D | 27 Mar 2025 11:01 | | RC/JU | Ok |
| 5 | Q1608-02 | RE139D1-20250317 | BN036732.D | 27 Mar 2025 11:38 | | RC/JU | Ok |
| 6 | Q1621-01 | RW5-SP100-20250320 | BN036733.D | 27 Mar 2025 12:14 | Internal Standard Fail, need 5X Dilution | RC/JU | Dilution |
| 7 | Q1621-02 | RW5-SP201-20250320 | BN036734.D | 27 Mar 2025 12:50 | Internal Standard Fail | RC/JU | ReRun |
| 8 | Q1621-03 | RW5-SP303-20250320 | BN036735.D | 27 Mar 2025 13:26 | Internal Standard Fail | RC/JU | ReRun |
| 9 | SSTDCCC0.4 | SSTDCCC0.4EC | BN036736.D | 27 Mar 2025 14:02 | | RC/JU | Ok,NS |
| 10 | DFTPP | DFTPP | BN036737.D | 27 Mar 2025 14:38 | | RC/JU | Ok |
| 11 | SSTDCCC0.4 | SSTDCCC0.4 | BN036738.D | 27 Mar 2025 15:38 | | RC/JU | Ok,NS |
| 12 | PB167251BL | PB167251BL | BN036739.D | 27 Mar 2025 16:14 | | RC/JU | Ok |
| 13 | Q1621-02 | RW5-SP201-20250320 | BN036740.D | 27 Mar 2025 16:50 | | RC/JU | Ok |
| 14 | Q1621-03 | RW5-SP303-20250320 | BN036741.D | 27 Mar 2025 17:26 | | RC/JU | Ok |
| 15 | Q1621-01DL | RW5-SP100-20250320 | BN036742.D | 27 Mar 2025 18:02 | | RC/JU | Ok |
| 16 | Q1608-09 | GM38-RW3-MW1-2025 | BN036743.D | 27 Mar 2025 18:39 | | RC/JU | Ok |
| 17 | Q1608-10 | DUP08-20250318 | BN036744.D | 27 Mar 2025 19:15 | Need 2X Dilution | RC/JU | Dilution |

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**Instrument ID:** BNA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032725

| | | | | |
|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 10:10:21 AM | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 2:23:07 PM | |
| SubDirectory | BN032725 | HP Acquire Method | BNA_N, 8270_HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | Q1608-03 | RE139D2-20250317 | BN036745.D | 27 Mar 2025 19:51 | | RC/JU | Ok,NS |
| 19 | Q1608-04 | TT205S1-20250317 | BN036746.D | 27 Mar 2025 20:27 | | RC/JU | Ok |
| 20 | Q1608-14 | RE132D2-20250318 | BN036747.D | 27 Mar 2025 21:03 | Need 2X Dilution | RC/JU | Dilution |
| 21 | Q1608-15 | RE132D3-20250318 | BN036748.D | 27 Mar 2025 21:39 | Need 2X Dilution | RC/JU | Dilution |
| 22 | Q1608-16 | RE132D4-20250318 | BN036749.D | 27 Mar 2025 22:15 | | RC/JU | Ok |
| 23 | Q1608-17 | RE132D5-20250318 | BN036750.D | 27 Mar 2025 22:51 | Need 2X Dilution | RC/JU | Dilution |
| 24 | Q1608-18 | RE132D6-20250318 | BN036751.D | 27 Mar 2025 23:27 | Need 2X Dilution | RC/JU | Dilution |
| 25 | Q1608-19 | RE132D7-20250318 | BN036752.D | 28 Mar 2025 00:03 | | RC/JU | Ok |
| 26 | Q1608-20 | RE117D2-20250319 | BN036753.D | 28 Mar 2025 00:39 | | RC/JU | Ok,NS |
| 27 | PB167232BS | PB167232BS | BN036754.D | 28 Mar 2025 01:16 | | RC/JU | Ok,NS |
| 28 | SSTDCCC0.4 | SSTDCCC0.4EC | BN036755.D | 28 Mar 2025 01:52 | | RC/JU | Ok,NS |
| 29 | DFTPP | DFTPP | BN036756.D | 28 Mar 2025 03:07 | | RC/JU | Ok |
| 30 | SSTDCCC0.4 | SSTDCCC0.4 | BN036757.D | 28 Mar 2025 03:46 | | RC/JU | Ok,NS |
| 31 | PB167269BL | PB167269BL | BN036758.D | 28 Mar 2025 04:22 | | RC/JU | Ok |
| 32 | Q1608-21 | TT101D2-20250319 | BN036759.D | 28 Mar 2025 04:58 | | RC/JU | Ok |
| 33 | Q1608-22 | TT161S1-20250319 | BN036760.D | 28 Mar 2025 05:34 | | RC/JU | Ok |
| 34 | Q1608-23 | TT189D2-20250319 | BN036761.D | 28 Mar 2025 06:10 | Need 2X Dilution | RC/JU | Dilution |
| 35 | Q1608-24 | RW8-MW01S-2025031 | BN036762.D | 28 Mar 2025 06:46 | | RC/JU | Ok |
| 36 | Q1608-25 | RW8-MW01D1-202503 | BN036763.D | 28 Mar 2025 07:22 | | RC/JU | Ok,NS |

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**Instrument ID:** BNA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032725

| | | | | |
|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 10:10:21 AM | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 2:23:07 PM | |
| SubDirectory | BN032725 | HP Acquire Method | BNA_N, 8270_HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 37 | Q1608-26 | RW8-MW01D2-202503 | BN036764.D | 28 Mar 2025 07:58 | | RC/JU | Ok |
| 38 | Q1608-11 | RE132D1-20250318 | BN036765.D | 28 Mar 2025 08:34 | | RC/JU | Ok |
| 39 | Q1608-12MS | RE132D1-20250318MS | BN036766.D | 28 Mar 2025 10:22 | | RC/JU | Ok,NS |
| 40 | Q1608-13MSD | RE132D1-20250318MS | BN036767.D | 28 Mar 2025 10:58 | | RC/JU | Ok |
| 41 | Q1629-03 | TT188S1-20250320 | BN036768.D | 28 Mar 2025 11:34 | | RC/JU | Ok |
| 42 | Q1629-04MS | TT188S1-20250320MS | BN036769.D | 28 Mar 2025 12:47 | | RC/JU | Ok,NS |
| 43 | Q1629-05MSD | TT188S1-20250320MS | BN036770.D | 28 Mar 2025 13:22 | | RC/JU | Ok,NS |
| 44 | SSTDCCC0.4 | SSTDCCC0.4EC | BN036771.D | 28 Mar 2025 13:58 | | RC/JU | Ok,NS |

M : Manual Integration

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**Instrument ID:** BNA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032825

| | | | | |
|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 1:32:07 PM | |
| Supervise By | Jagrut | Supervise On | 3/31/2025 2:10:59 PM | |
| SubDirectory | BN032825 | HP Acquire Method | BNA_N, 8270_HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | DFTPP | DFTPP | BN036772.D | 28 Mar 2025 14:34 | | RC/JU | Ok |
| 2 | SSTDCCC0.4 | SSTDCCC0.4 | BN036773.D | 28 Mar 2025 15:14 | | RC/JU | Ok |
| 3 | PB167159BL | PB167159BL | BN036774.D | 28 Mar 2025 15:49 | | RC/JU | Ok |
| 4 | Q1608-10DL | DUP08-20250318DL | BN036775.D | 28 Mar 2025 16:25 | | RC/JU | Ok |
| 5 | Q1608-14DL | RE132D2-20250318DL | BN036776.D | 28 Mar 2025 17:02 | | RC/JU | Ok |
| 6 | Q1608-15DL | RE132D3-20250318DL | BN036777.D | 28 Mar 2025 17:38 | | RC/JU | Ok |
| 7 | Q1608-17DL | RE132D5-20250318DL | BN036778.D | 28 Mar 2025 18:14 | | RC/JU | Ok |
| 8 | Q1608-18DL | RE132D6-20250318DL | BN036779.D | 28 Mar 2025 18:50 | | RC/JU | Ok |
| 9 | Q1608-23DL | TT189D2-20250319DL | BN036780.D | 28 Mar 2025 19:26 | | RC/JU | Ok |
| 10 | Q1608-27 | RW8-MW01D3-202503 | BN036781.D | 28 Mar 2025 20:02 | | RC/JU | Ok |
| 11 | Q1608-28 | DUP09-20250319 | BN036782.D | 28 Mar 2025 20:38 | | RC/JU | Ok,M |
| 12 | Q1608-05 | DUP07-20250317 | BN036783.D | 28 Mar 2025 21:14 | | RC/JU | Ok |
| 13 | Q1608-06 | TT163S1-20250317 | BN036784.D | 28 Mar 2025 21:51 | | RC/JU | Ok |
| 14 | Q1608-07 | RW11-MW01S-202503 | BN036785.D | 28 Mar 2025 22:26 | | RC/JU | Ok |
| 15 | Q1608-08 | RW11-MW01I-2025031 | BN036786.D | 28 Mar 2025 23:02 | | RC/JU | Ok |
| 16 | PB167251BS | PB167251BS | BN036787.D | 28 Mar 2025 23:38 | | RC/JU | Ok,M |
| 17 | PB167251BSD | PB167251BSD | BN036788.D | 29 Mar 2025 00:14 | | RC/JU | Ok,M |
| 18 | SSTDCCC0.4 | SSTDCCC0.4EC | BN036789.D | 29 Mar 2025 00:50 | | RC/JU | Ok,M |

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**Instrument ID:** BNA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # BN032825

| | | | | |
|---|---|---|---|---|
| Review By | anahy | Review On | 3/31/2025 1:32:07 PM | |
| Supervise By | Jagrut | Supervise On | 3/31/2025 2:10:59 PM | |
| SubDirectory | BN032825 | HP Acquire Method | BNA_N, 8270_HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6717 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | DFTPP | DFTPP | BN036790.D | 29 Mar 2025 01:26 | | RC/JU | Ok |
| 20 | SSTDCCC0.4 | SSTDCCC0.4 | BN036791.D | 29 Mar 2025 02:44 | | RC/JU | Ok,M |
| 21 | PB167295BL | PB167295BL | BN036792.D | 29 Mar 2025 03:20 | | RC/JU | Ok |
| 22 | Q1620-04 | RW7-SP303-20250320 | BN036793.D | 29 Mar 2025 03:56 | | RC/JU | Ok |
| 23 | Q1620-01 | RW7-SP100-20250320 | BN036794.D | 29 Mar 2025 04:32 | | RC/JU | Ok |
| 24 | Q1620-02 | RW7-SP201-20250320 | BN036795.D | 29 Mar 2025 05:08 | | RC/JU | Ok |
| 25 | Q1620-03 | RW7-SP302-20250320 | BN036796.D | 29 Mar 2025 05:43 | | RC/JU | Ok |
| 26 | Q1629-01 | TT174I1-20250320 | BN036797.D | 29 Mar 2025 06:19 | | RC/JU | Ok |
| 27 | Q1629-02 | TT162S1-20250320 | BN036798.D | 29 Mar 2025 06:56 | | RC/JU | Ok |
| 28 | Q1629-08 | RW09-MW01D2-20250 | BN036799.D | 29 Mar 2025 07:32 | | RC/JU | Ok |
| 29 | Q1629-09 | RW09-MW01D3-20250 | BN036800.D | 29 Mar 2025 08:08 | | RC/JU | Ok |
| 30 | Q1629-10 | TT150S1-20250320 | BN036801.D | 29 Mar 2025 08:44 | | RC/JU | Ok |
| 31 | Q1629-11 | FB03-20250321 | BN036802.D | 29 Mar 2025 09:20 | | RC/JU | Ok |
| 32 | Q1629-07 | RW09-MW01D1-20250 | BN036803.D | 29 Mar 2025 09:57 | | RC/JU | Ok,M |
| 33 | PB167295BS | PB167295BS | BN036804.D | 29 Mar 2025 10:33 | | RC/JU | Ok,M |
| 34 | PB167269BSD | PB167269BSD | BN036805.D | 29 Mar 2025 11:09 | Surrogate Fail | RC/JU | Not Ok |
| 35 | PB167269BS | PB167269BS | BN036806.D | 29 Mar 2025 11:45 | | RC/JU | Ok |
| 36 | SSTDCCC0.4 | SSTDCCC0.4EC | BN036807.D | 29 Mar 2025 12:21 | | RC/JU | Ok,M |

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**Instrument ID:** BNA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # BN033125

| | | | | |
|---|---|---|---|---|
| Review By | Rahul | Review On | 3/31/2025 5:33:01 PM | |
| Supervise By | Jagrut | Supervise On | 4/1/2025 10:28:33 AM | |
| SubDirectory | BN033125 | HP Acquire Method | BNA_N, 8270_HP Processing Method | bn031025 |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | SP6757 |
| Initial Calibration Stds | SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731 |
| CCC | SP6735 |
| Internal Standard/PEM | SP6740,1ul/100ul sample |
| ICV/I.BLK | SP6684 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | DFTPP | DFTPP | BN036808.D | 31 Mar 2025 10:00 | | RC/JU | Ok |
| 2 | SSTDCCC0.4 | SSTDCCC0.4 | BN036809.D | 31 Mar 2025 10:39 | | RC/JU | Ok,M |
| 3 | PB167251BL | PB167251BL | BN036810.D | 31 Mar 2025 11:15 | | RC/JU | Ok |
| 4 | Q1629-14 | RW09-MW01S-202503 | BN036811.D | 31 Mar 2025 11:51 | | RC/JU | Ok |
| 5 | Q1629-15MS | RW09-MW01S-202503 | BN036812.D | 31 Mar 2025 13:04 | | RC/JU | Ok,M |
| 6 | Q1629-16MSD | RW09-MW01S-202503 | BN036813.D | 31 Mar 2025 13:40 | | RC/JU | Ok,M |
| 7 | PB167269BSD | PB167269BSD | BN036814.D | 31 Mar 2025 14:16 | | RC/JU | Ok |
| 8 | SSTDCCC0.4 | SSTDCCC0.4EC | BN036815.D | 31 Mar 2025 15:08 | | RC/JU | Ok,M |

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Alliance TECHNICAL GROUP

**EXTRACTION LOGPAGE**

PB167269

**SOP ID:** M3510C,3580A-Extraction SVOC-20

**Clean Up SOP #:** N/A

**Matrix :** Water

**Weigh By:** N/A

**Balance check:** N/A

**Balance ID:** N/A

**pH Strip Lot#:** E3880

**Extraction By:** RJ

**Filter By:** RJ

**pH Meter ID:** N/A

**Hood ID:** 4,5,6,7

**Extraction Start Date :** 03/24/2025

**Extraction Start Time :** 08:15

**Extraction End Date :** 03/24/2025

**Extraction End Time :** 13:10

**Concentration By:** EH

**Supervisor By :** rajesh

**Extraction Method:** [√] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [ ] Soxhlet

| Standared Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---|---|---|---|
| Spike Sol 1 | 1.0ML | 0.4 PPM | SP6739 |
| Surrogate | 1.0ML | 0.4 PPM | SP6755 |
| N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---|---|---|
| Methylene Chloride | N/A | E3904 |
| Baked Na2SO4 | N/A | EP2595 |
| 10N NaoH | N/A | EP2559 |
| H2SO4 1:1 | N/A | EP2565 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

**Extraction Conformance/Non-Conformance Comments:**

1.5 ML Vial lot# 2210673. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

**KD Bath ID:** WATER BATH-1,2

**KD Bath Temperature:** 60 °C

**Envap ID:** NEVAP-02

**Envap Temperature:** 40 °C

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 03/24/25 | RP (Ext. Lab) | AE/SVOC |
| 13:15 | **Preparation Group** | **Analysis Group** |

Alliance TECHNICAL GROUP

**EXTRACTION LOGPAGE**

**PrepBatch ID : PB167269**

**Analytical Method:** M3510C,3580A-Extraction SVOC-20

**Concentration Date:** 03/24/2025

| Sample ID | Client Sample ID | Test | g / mL | PH | Surr/Spike By: | | Final Vol. (mL) | JarID | Comments | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AddedBy | VerifiedBy | | | | |
| PB167269BL | SBLK269 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | SEP-01 |
| PB167269BS | SLCS269 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | 2 |
| PB167269BSD | SLCSD269 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | 3 |
| Q1620-01 | RW7-SP100-20250320 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | 4 |
| Q1620-02 | RW7-SP201-20250320 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | 5 |
| Q1620-03 | RW7-SP302-20250320 | SVOC-SIMGroup1 | 990 | 6 | ritesh | rajesh | 1 | | | 6 |
| Q1620-04 | RW7-SP303-20250320 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | A | | 7 |
| Q1621-01 | RW5-SP100-20250320 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | 8 |
| Q1621-02 | RW5-SP201-20250320 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | 9 |
| Q1621-03 | RW5-SP303-20250320 | SVOC-SIMGroup1 | 1000 | 6 | ritesh | rajesh | 1 | | | 10 |

3/24/25

* **Extracts relinguished on the same date as received.**

Q1621-SVOC-SIMGroup1

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** Q1620 **WorkList ID :** 188462 **Department :** Extraction **Date :** 03-24-2025 08:10:37

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1620-01 | RW7-SP100-20250320 | Water | SVOC-SIMGroup1 | Cool 4 deg C | TETR06 | I41 | 03/20/2025 | 8270-Modified |
| Q1620-02 | RW7-SP201-20250320 | Water | SVOC-SIMGroup1 | Cool 4 deg C | TETR06 | I41 | 03/20/2025 | 8270-Modified |
| Q1620-03 | RW7-SP302-20250320 | Water | SVOC-SIMGroup1 | Cool 4 deg C | TETR06 | I41 | 03/20/2025 | 8270-Modified |
| Q1620-04 | RW7-SP303-20250320 | Water | SVOC-SIMGroup1 | Cool 4 deg C | TETR06 | I41 | 03/20/2025 | 8270-Modified |
| Q1621-01 | RW5-SP100-20250320 | Water | SVOC-SIMGroup1 | Cool 4 deg C | TETR06 | I31 | 03/20/2025 | 8270-Modified |
| Q1621-02 | RW5-SP201-20250320 | Water | SVOC-SIMGroup1 | Cool 4 deg C | TETR06 | I31 | 03/20/2025 | 8270-Modified |
| Q1621-03 | RW5-SP303-20250320 | Water | SVOC-SIMGroup1 | Cool 4 deg C | TETR06 | I31 | 03/20/2025 | 8270-Modified |

**Date/Time** 03/24/24 8:13

**Raw Sample Received by:** RJ (Ext 2037

**Raw Sample Relinquished by:** [signature]

**Date/Time** 03/24/24 8:40

**Raw Sample Received by:** [signature]

**Raw Sample Relinquished by:** RJ (Ext lab

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# Prep Standard - Chemical Standard Summary

**Order ID :** Q1621

**Test :** SVOC-SIMGroup1

**Prepbatch ID :** PB167269,

**Sequence ID/Qc Batch ID:** BN032725,BN032825,BN033125,

**Standard ID :**
EP2559,EP2565,EP2595,SP6682,SP6683,SP6684,SP6717,SP6730,SP6731,SP6732,SP6733,SP6734,SP6735,SP6736,SP6738,SP6739,SP6740,SP6755,SP6757,

**Chemical ID :**
1ul/100ul sample,E3551,E3657,E3828,E3871,E3873,E3874,E3902,E3904,M5173,S10104,S10246,S11074,S11495,S11650,S11785,S11831,S11832,S12114,S12142,S12189,S12195,S12208,S12216,S12270,S12328,S12469,S12478,S12517,S12525,S12577,S12651,S12791,S12966,W3112,

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# Extractions STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1874 | 10 N SODIUM HYDROXIDE SOLN | EP2559 | 11/14/2024 | 05/14/2025 | Rajesh Parikh | Extraction_SCALE_2 (EX-SC-2) | None | RUPESHKUMAR SHAH 11/14/2024 |

**FROM** 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 314 | 1.1 H2SO4 SOLN | EP2565 | 11/20/2024 | 05/20/2025 | Rajesh Parikh | None | None | RUPESHKUMAR SHAH 11/20/2024 |

**FROM** 1000.00000ml of M5173 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

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# Extractions STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3923 | Baked Sodium Sulfate | EP2595 | 03/17/2025 | 07/01/2025 | RUPESHKUMAR SHAH | Extraction_SCALE_2 (EX-SC-2) | None | Riteshkumar Patel 03/17/2025 |

**FROM** 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3493 | Internal Standard 0.4 PPM | SP6682 | 11/15/2024 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 12/03/2024 |

**FROM** 0.10000ml of S12328 + 4.90000ml of E3828 = Final Quantity: 5.000 ml

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# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3355 | 8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND SOURCE | SP6683 | 11/15/2024 | 04/10/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 12/03/2024 |

**FROM** 0.00630ml of S12189 + 0.01280ml of S12208 + 0.03200ml of S11074 + 0.03200ml of S11831 + 0.06400ml of S12142 + 0.06400ml of S12469 + 0.06400ml of S12517 + 19.72490ml of E3828 = Final Quantity: 20.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3356 | 8270-SIM MDL-0.4PPM CALIBRATION SOL ICV-2ND SOURCE | SP6684 | 11/15/2024 | 04/10/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 12/03/2024 |

**FROM** 0.87500ml of E3828 + 0.01000ml of SP6682 + 0.12500ml of SP6683 = Final Quantity: 1.010 ml

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# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3895 | 50 ug/ml DFTPP 8270E | SP6717 | 01/15/2025 | 03/31/2025 | Rahul Chavli | None | None | Yogesh Patel 01/16/2025 |

**FROM** 1.00000ml of S10246 + 19.00000ml of E3871 = Final Quantity: 20.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3339 | 8270 sim calibration stock 10ppm (CPI) | SP6730 | 02/04/2025 | 05/12/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.03350ml of S10104 + 0.05000ml of S11495 + 0.12500ml of S11832 + 0.12500ml of S12114 + 0.25000ml of S12270 + 0.25000ml of S12791 + 24.16650ml of E3874 = Final Quantity: 25.000 ml

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# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3361 | 8270-SIM MDL-5PPM CALIBRATION SOLUTION | SP6731 | 02/04/2025 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6730 = Final Quantity: 1.010 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3341 | 8270-SIM MDL-3.2PPM CALIBRATION SOLUTION | SP6732 | 02/04/2025 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.68000ml of E3874 + 0.01000ml of SP6682 + 0.32000ml of SP6730 = Final Quantity: 1.010 ml

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# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3344 | 8270-SIM MDL-1.6PPM CALIBRATION SOLUTION | SP6733 | 02/04/2025 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.84000ml of E3874 + 0.01000ml of SP6682 + 0.16000ml of SP6730 = Final Quantity: 1.010 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3342 | 8270-SIM MDL-0.8PPM CALIBRATION SOLUTION | SP6734 | 02/04/2025 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.92000ml of E3874 + 0.01000ml of SP6682 + 0.08000ml of SP6730 = Final Quantity: 1.010 ml

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Fax : 908 789 8922

# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3343 | 8270-SIM MDL-0.4PPM CALIBRATION SOLUTION | SP6735 | 02/04/2025 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.96000ml of E3874 + 0.01000ml of SP6682 + 0.04000ml of SP6730 = Final Quantity: 1.010 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3345 | 8270-SIM MDL-0.2PPM CALIBRATION SOLUTION | SP6736 | 02/04/2025 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6735 = Final Quantity: 1.010 ml

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# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3346 | 8270-SIM MDL-0.1PPM CALIBRATION SOLUTION | SP6738 | 02/04/2025 | 05/09/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.75000ml of E3874 + 0.01000ml of SP6682 + 0.25000ml of SP6735 = Final Quantity: 1.010 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3492 | 8270-SIM-Spike 0.4 PPM | SP6739 | 02/05/2025 | 07/29/2025 | Jagrut Upadhyay | None | None | Yogesh Patel 02/07/2025 |

**FROM** 0.00080ml of S11650 + 0.01000ml of S11785 + 0.02000ml of S12478 + 0.02000ml of S12525 + 0.02000ml of S12966 + 49.92920ml of E3873 = Final Quantity: 50.000 ml

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# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3493 | Internal Standard 0.4 PPM | SP6740 | 02/13/2025 | 07/30/2025 | Rahul Chavli | None | None | Yogesh Patel 02/28/2025 |

**FROM** 0.10000ml of S12651 + 4.90000ml of E3874 = Final Quantity: 5.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3491 | 8270-SIM-Surrogate 0.4 PPM | SP6755 | 03/20/2025 | 07/24/2025 | Jagrut Upadhyay | None | None | Rahul Chavli 04/01/2025 |

**FROM** 0.00400ml of S12195 + 0.00800ml of S12216 + 0.02000ml of S11832 + 99.96800ml of E3902 = Final Quantity: 100.000 ml

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# SVOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3895 | 50 ug/ml DFTPP 8270E | SP6757 | 03/31/2025 | 09/30/2025 | Rahul Chavli | None | None | Jagrut Upadhyay 04/01/2025 |

**FROM** 1.00000ml of S12577 + 19.00000ml of E3904 = Final Quantity: 20.000 ml

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1 | 313201 | 07/01/2025 | 01/03/2024 / Rajesh | 07/20/2023 / Rajesh | E3551 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4 | 23B1556310 | 12/31/2025 | 12/04/2023 / Rajesh | 12/01/2023 / Rajesh | E3657 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24G0862003 | 05/09/2025 | 11/09/2024 / Rajesh | 11/04/2024 / Rajesh | E3828 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24K1762005 | 07/14/2025 | 01/14/2025 / Rajesh | 12/27/2024 / Rajesh | E3871 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L) | 24H2762008 | 07/29/2025 | 01/29/2025 / Rajesh | 01/29/2025 / Rajesh | E3873 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 25A0262002 | 07/30/2025 | 01/30/2025 / Rajesh | 01/20/2025 / Rajesh | E3874 |

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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 | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L) | 24H2762008 | 09/18/2025 | 03/18/2025 / RUPESH | 02/12/2025 / RUPESH | E3902 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24K1762005 | 01/07/2026 | 03/13/2025 / RUPESH | 12/27/2024 / RUPESH | E3904 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L) | 0000281827 | 06/02/2025 | 06/01/2022 / RUPESH | 04/05/2022 / william | M5173 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| CPI International | Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml | 440246 | 07/30/2025 | 01/30/2025 / anahy | 12/09/2021 / Christian | S10104 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL, | A0182667 | 03/31/2025 | 01/15/2025 / Rahul | 03/18/2022 / Christian | S10246 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride | A0187043 | 05/15/2025 | 11/15/2024 / Jagrut | 02/06/2023 / Christian | S11074 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| CPI International | Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml | 506889 | 05/12/2025 | 11/12/2024 / Jagrut | 08/11/2023 / Yogesh | S11495 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555872 / Custom Standard, pentachlorophenol Std [CS 5328-5] | A0201728 | 07/29/2025 | 01/29/2025 / anahy | 11/09/2023 / Yogesh | S11650 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride | A0196453 | 07/29/2025 | 01/29/2025 / anahy | 11/21/2023 / Rahul | S11785 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM | A0201976 | 04/11/2025 | 10/11/2024 / Jagrut | 11/21/2023 / rahul | S11831 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM | A0201976 | 07/24/2025 | 01/24/2025 / anahy | 11/21/2023 / rahul | S11832 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| CPI International | z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml | 454157 | 05/12/2025 | 11/12/2024 / Jagrut | 03/08/2024 / Rahul | S12114 |

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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 | 31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2] | A0203726 | 04/30/2025 | 11/14/2024 / anahy | 03/15/2024 / Rahul | S12142 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul | A0206206 | 04/10/2025 | 10/10/2024 / anahy | 03/15/2024 / Rahul | S12189 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul | A0206206 | 09/18/2025 | 03/18/2025 / anahy | 03/15/2024 / Rahul | S12195 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml | A0206381 | 05/15/2025 | 11/15/2024 / Jagrut | 03/15/2024 / Rahul | S12208 |

| 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 # |
|---|---|---|---|---|---|---|
| CPI International | z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml | 520963 | 07/30/2025 | 01/30/2025 / anahy | 05/24/2024 / Rahul | S12270 |

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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 | 31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL | A0206540 | 05/13/2025 | 11/13/2024 / anahy | 05/30/2024 / Rahul | S12328 |

| 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] [CS 4978-1] | A0214021 | 05/14/2025 | 11/14/2024 / anahy | 07/23/2024 / RAHUL | S12469 |

| 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] [CS 4978-1] | A0214021 | 07/29/2025 | 01/29/2025 / anahy | 07/23/2024 / RAHUL | S12478 |

| 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] [CS 4978-2] | A0214017 | 05/14/2025 | 11/14/2024 / anahy | 07/23/2024 / RAHUL | S12517 |

| 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] [CS 4978-2] | A0214017 | 07/29/2025 | 01/29/2025 / anahy | 07/23/2024 / RAHUL | S12525 |

| 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 |

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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 | 31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL | A0212266 | 08/07/2025 | 02/07/2025 / anahy | 09/20/2024 / anahy | S12651 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| CPI International | Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days) | 414127 | 06/21/2025 | 01/30/2025 / anahy | 05/24/2024 / Rahul | S12791 |

| 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 | 07/29/2025 | 01/29/2025 / anahy | 12/11/2024 / anahy | S12966 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | DIW / DI Water | Daily Lab-Certified | 07/03/2029 | 07/03/2024 / Iwona | 07/03/2024 / Iwona | W3112 |

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by TUV USA to ISO 9001:2015

Date Received: _____

# Certificate of Analysis

Rev 0 

| Catalog No.: | Lot No.: | Storage: | Solvent: | Exp. Date: | Description: |
|---|---|---|---|---|---|
| Z-112090-04 | 440246 | ≤ -10 °C | Methylene Chloride | 2/16/2026 | CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL |

| Compound | CAS No. | Purity (%) | Compound Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| 2-chlorophenol-$d_4$ | 93951-73-6 | 99.3 | 248.12.7P | 7487 ± 17.2 |
| 2-fluorophenol | 367-12-4 | 99.8 | 10.7.3.3P | 7513 ± 17.26 |
| phenol-d6 | 13127-88-3 | 99.9 | 949.120.8P | 7481 ± 17.19 |
| 2,4,6-tribromophenol | 118-79-6 | 99.8 | 12.1.6P | 7469 ± 17.17 |

Received on
02/25/21
by
CG

S9236
to
S9240

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: Erica Castiglione
Erica Castiglione
**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 gravimetricly.

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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
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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.*

Received on 03/08/22 by CG S10242 to S10247

**Catalog No. :** 31615 **Lot No.:** A0182667

**Description :** GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** March 31, 2025 **Storage:** 10°C or colder

**Handling:** Contains carcinogen/reproductive toxin. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|---|
| 1 | Pentachlorophenol | | 1,003.6 | µg/mL | +/- 5.8897 | µg/mL | Gravimetric |
| | **CAS #** 87-86-5 | (Lot 211229RSR) | | | +/- 45.7132 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- 66.0037 | µg/mL | Stressed |
| 2 | DFTPP (Decafluorotriphenylphosphine) | | 1,006.6 | µg/mL | +/- 5.9074 | µg/mL | Gravimetric |
| | **CAS #** 5074-71-5 | (Lot Q117-147) | | | +/- 45.8508 | µg/mL | Unstressed |
| | **Purity** 95% | | | | +/- 66.2023 | µg/mL | Stressed |
| 3 | Benzidine | | 1,008.4 | µg/mL | +/- 5.9179 | µg/mL | Gravimetric |
| | **CAS #** 92-87-5 | (Lot 211228JLM) | | | +/- 45.9318 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- 66.3193 | µg/mL | Stressed |
| 4 | 4,4'-DDT | | 1,007.6 | µg/mL | +/- 5.9132 | µg/mL | Gravimetric |
| | **CAS #** 50-29-3 | (Lot 210916JLM) | | | +/- 45.8954 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- 66.2667 | µg/mL | Stressed |

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

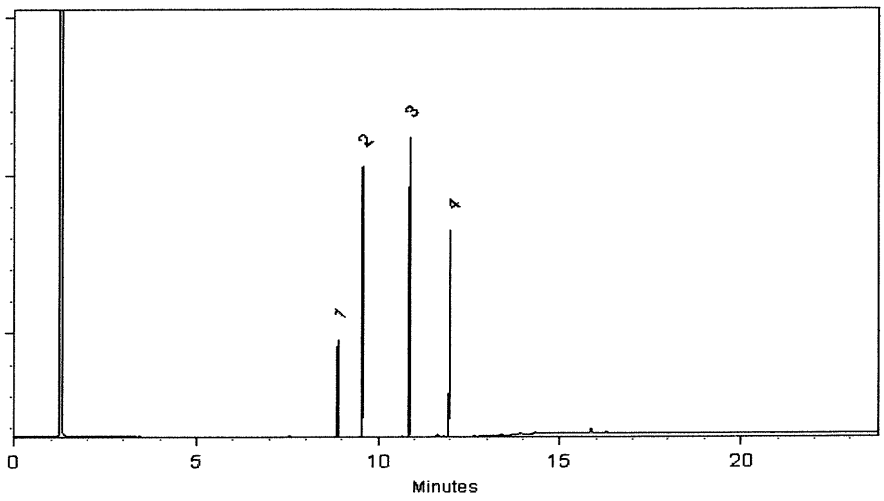
**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

**Date Mixed:** 08-Mar-2022 **Balance:** B345965662

Merlina Cowan - Operations Tech I

**Date Passed:** 10-Mar-2022

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## Certificate of Analysis

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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.*

Received on 02/06/23 by CG

S11071 to S11075

**Catalog No. :** 31853 **Lot No.:** A0187043

**Description :** 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 2,019.0 µg/mL | +/- 11.8486 | µg/mL | Gravimetric |
| | **CAS #** 123-91-1 (Lot SHBN5929) | | +/- 43.2570 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 44.5129 | µg/mL | Stressed |

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

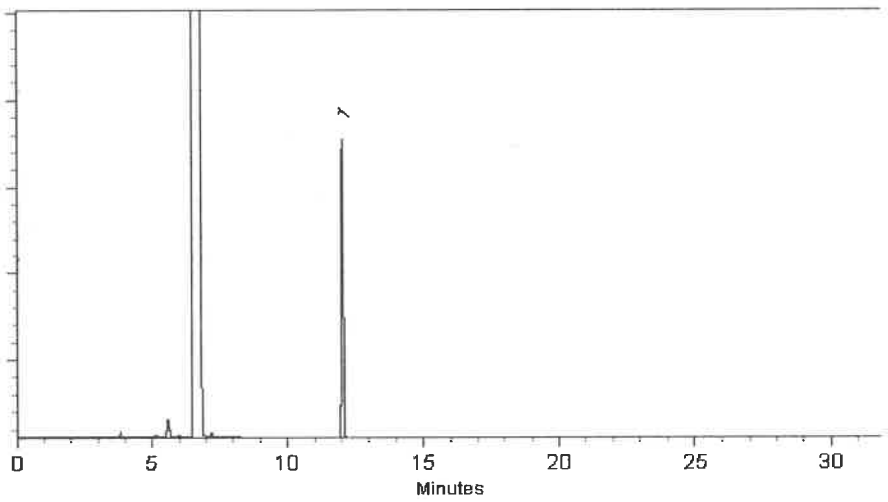
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I

**Date Mixed:** 07-Jul-2022 **Balance:** 1128360905

Marlina Cowan – Operations Tech II ARM QC

**Date Passed:** 12-Jul-2022

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| PRODUCT : | SODIUM SULFATE CRYSTALS ANHYDROUS | | |
| QUALITY : | ACS (CODE RMB3375) | FORMULA : | $Na_2SO_4$ |
| SPECIFICATION NUMBER : | 6399 | RELEASE DATE: | ABR/21/2023 |
| LOT NUMBER : | 313201 | | |

| TEST | SPECIFICATIONS | LOT VALUES |
|---|---|---|
| Assay ($Na_2SO_4$) | Min. 99.0% | 99.7 % |
| pH of a 5% solution at 25°C | 5.2 - 9.2 | 6.1 |
| Insoluble matter | Max. 0.01% | 0.005 % |
| Loss on ignition | Max. 0.5% | 0.1 % |
| Chloride (Cl) | Max. 0.001% | <0.001 % |
| Nitrogen compounds (as N) | Max. 5 ppm | <5 ppm |
| Phosphate ($PO_4$) | Max. 0.001% | <0.001 % |
| Heavy metals (as Pb) | Max. 5 ppm | <5 ppm |
| Iron (Fe) | Max. 0.001% | <0.001 % |
| Calcium (Ca) | Max. 0.01% | 0.002 % |
| Magnesium (Mg) | Max. 0.005% | 0.001 % |
| Potassium (K) | Max. 0.008% | 0.003 % |
| Extraction-concentration suitability | Passes test | Passes test |
| Appearance | Passes test | Passes test |
| Identification | Passes test | Passes test |
| Solubility and foreing matter | Passes test | Passes test |
| Retained on US Standard No. 10 sieve | Max. 1% | 0.1 % |
| Retained on US Standard No. 60 sieve | Min. 94% | 97.3 % |
| Through US Standard No. 60 sieve | Max. 5% | 2.5 % |
| Through US Standard No. 100 sieve | Max. 10% | 0.1 % |

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RG-02-01, Ed. 3

Recd. by RP on 7/24/23 E3551

VWR®

# 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

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

### Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

| | |
|---|---|
| E 3657 | E 3659 |
| E 3654 | E 3660 |

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 24J0862003
Manufactured Date: 2024-09-12
Expiration Date:2025-12-12
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL) | <= 5 | 2 |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL) | <= 10 | 1 |
| Assay ($CH_2Cl_2$) (by GC, exclusive of preservative, corrected for water) | >= 99.8 % | 100.0 % |
| Color (APHA) | <= 10 | 5 |
| Residue after Evaporation | <= 1.0 ppm | 0.2 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

E 3828

JCroak
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

12/9-1/24

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date:2026-01-07
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 ($CH_2Cl_2$) (by GC, exclusive of preservative, corrected for water) | >= 99.8 % | 100.0 % |
| Color (APHA) | <= 10 | 5 |
| Residue after Evaporation | <= 1.0 ppm | 0.5 ppm |
| Titrable Acid (µeq/g) | <= 0.3 | 0.0 |
| 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 3871

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™ | J.T.Baker

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 ($(CH_3)_2CO$) (by GC, corrected forwater) | >= 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 ($H_2O$) | <= 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

Recd. by RP on 1/29/25

E 3873

JCroak
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

PO: PO2-1178.2 PRODUCT CODE: SHIP DATE: 1/20/2025

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date:2026-02-20
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL) | <= 5 | 1 |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL) | <= 10 | 4 |
| Assay ($CH_2Cl_2$) (by GC, exclusive of preservative, corrected for water) | >= 99.8 % | 99.9 % |
| Color (APHA) | <= 10 | 10 |
| Residue after Evaporation | <= 1.0 ppm | 0.8 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

E 3874

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

PO: PO2-798 PRODUCT CODE: SHIP DATE: 12/9/2024

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor | J.T.Baker

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 ($(CH_3)_2CO$) (by GC, corrected forwater) | >= 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 ($H_2O$) | <= 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

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Material No.: 9530-33
Batch No.: 0000281827
Manufactured Date: 2021/03/30
Retest Date: 2026/03/29
Revision No: 1

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| ACS - Assay (as HCl) (by acid-base titrn) | 36.5 - 38.0 % | 37.6 |
| ACS - Color (APHA) | <= 10 | 5 |
| ACS - Residue after Ignition | <= 3 ppm | 1 |
| ACS - Specific Gravity at 60°/60°F | 1.185 - 1.192 | 1.189 |
| ACS - Bromide (Br) | <= 0.005 % | < 0.005 |
| ACS - Extractable Organic Substances | <= 5 ppm | < 1 |
| ACS - Free Chlorine (as $Cl_2$) | <= 0.5 ppm | < 0.5 |
| Phosphate ($PO_4$) | <= 0.05 ppm | < 0.03 |
| Sulfate ($SO_4$) | <= 0.5 ppm | < 0.3 |
| Sulfite ($SO_3$) | <= 0.8 ppm | 0.3 |
| Ammonium ($NH_4$) | <= 3 ppm | < 1 |
| Trace Impurities - Arsenic (As) | <= 0.010 ppm | < 0.003 |
| Trace Impurities - Aluminum (Al) | <= 10.0 ppb | 0.5 |
| Arsenic and Antimony (as As) | <= 5 ppb | < 3 |
| Trace Impurities - Barium (Ba) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Beryllium (Be) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Bismuth (Bi) | <= 10.0 ppb | < 1.0 |
| Trace Impurities - Boron (B) | <= 20.0 ppb | < 5.0 |
| Trace Impurities - Cadmium (Cd) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Calcium (Ca) | <= 50.0 ppb | 15.0 |
| Trace Impurities - Chromium (Cr) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Cobalt (Co) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Copper (Cu) | <= 1.0 ppb | < 0.1 |
| Trace Impurities - Gallium (Ga) | <= 1.0 ppb | < 0.2 |

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000281827

| Test | Specification | Result |
|---|---|---|
| Trace Impurities - Germanium (Ge) | <= 3.0 ppb | < 2.0 |
| Trace Impurities - Gold (Au) | <= 4.0 ppb | 3.0 |
| Heavy Metals (as Pb) | <= 100 ppb | < 50 |
| Trace Impurities - Iron (Fe) | <= 15.0 ppb | 1.0 |
| Trace Impurities - Lead (Pb) | <= 1.0 ppb | < 0.5 |
| Trace Impurities - Lithium (Li) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Magnesium (Mg) | <= 10.0 ppb | < 0.4 |
| Trace Impurities - Manganese (Mn) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Mercury (Hg) | <= 0.5 ppb | 0.2 |
| Trace Impurities - Molybdenum (Mo) | <= 10.0 ppb | < 5.0 |
| Trace Impurities - Nickel (Ni) | <= 4.0 ppb | < 0.3 |
| Trace Impurities - Niobium (Nb) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Potassium (K) | <= 9.0 ppb | < 2.0 |
| Trace Impurities - Selenium (Se), For Information Only | ppb | 1.0 |
| Trace Impurities - Silicon (Si) | <= 100.0 ppb | 18.0 |
| Trace Impurities - Silver (Ag) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Sodium (Na) | <= 100.0 ppb | < 5.0 |
| Trace Impurities - Strontium (Sr) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Tantalum (Ta) | <= 1.0 ppb | < 0.9 |
| Trace Impurities - Thallium (Tl) | <= 5.0 ppb | < 2.0 |
| Trace Impurities - Tin (Sn) | <= 5.0 ppb | < 0.8 |
| Trace Impurities - Titanium (Ti) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Vanadium (V) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Zinc (Zn) | <= 5.0 ppb | 0.4 |
| Trace Impurities - Zirconium (Zr) | <= 1.0 ppb | < 0.1 |

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

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

CPI INTERNATIONAL

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



| 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-$d_4$ | 2199-69-1 | 99.7 | 247.29.3P | 5035 ± 28.02 |
| 2-fluorobiphenyl | 321-60-8 | 99.69 | 8.286.1.1P | 4999 ± 103.66 |
| nitrobenzene-d5 | 4165-60-0 | 99.67 | 7.9.3P | 4988 ± 27.32 |
| p-terphenyl-d14 | 1718-51-0 | 99.3 | 9.120.8P | 5005 ± 27.85 |

511494 to 511498 } Y.P. 08/11/2023

*Not a certified value

Certified By: _____

Clint Tipton
**Chemist**

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*gravimetric*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED 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 25,000µg/mL, Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

511649 ↓ 511658 Y.P. 11/13/23

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Pentachlorophenol | 87-86-5 | RP230530RSR | 99% | 25,000.0 µg/mL | +/- 777.0837 |

**Solvent:** Methanol
**CAS #** 67-56-1
**Purity** 99%

Josh McCloskey - Operations Technician I

**Date Mixed:** 05-Sep-2023 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  *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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***chromatographic plus***

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED 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. :** 31853 **Lot No.:** A0196453

**Description :** 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** March 31, 2028 **Storage:** 0°C or colder

**Ship:** Ambient

S11749 ↓ S11794 RC 11/30/23

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 123-91-1 | SHBN3770 | 99% | 2,013.0 µg/mL | +/- 25.0521 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant flow 1.8 mL/min.

**Temp. Program:**
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

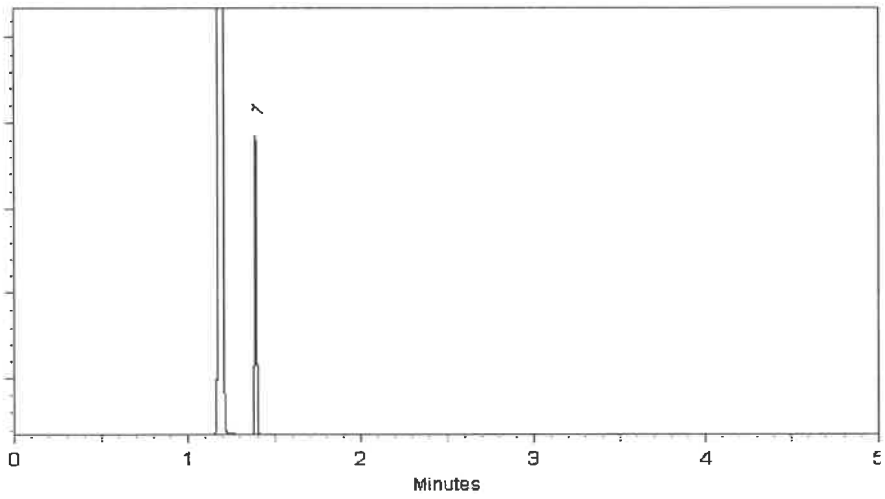
**Inj. Temp:**
250°C

**Det. Temp:**
340°C

**Det. Type:**
FID

**Split Vent:**
100 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

**Date Mixed:** 30-Mar-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 31-Mar-2023

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED 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. :** 33913 **Lot No.:** A0201976

**Description :** SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

S11828 ↓ S11832 RC/ 11/30/23

**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

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Methylnaphthalene-d10 | 7297-45-2 | EF-135 | 98% | 2,015.9 µg/mL | +/- 90.8098 |
| 2 | Fluoranthene-d10 | 93951-69-0 | PR-32557 | 99% | 2,020.0 µg/mL | +/- 90.9963 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

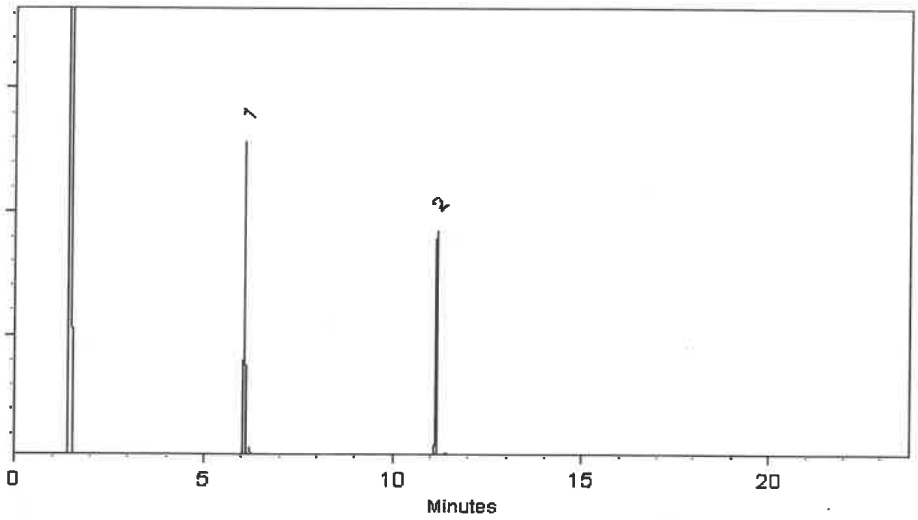
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I  **Date Mixed:** 13-Sep-2023  **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC  **Date Passed:** 28-Sep-2023

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ 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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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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**Catalog No. :** 33913 **Lot No.:** A0201976

**Description :** SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

S11828 ↓ S11832 RC/ 11/30/23

**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

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Methylnaphthalene-d10 | 7297-45-2 | EF-135 | 98% | 2,015.9 µg/mL | +/- 90.8098 |
| 2 | Fluoranthene-d10 | 93951-69-0 | PR-32557 | 99% | 2,020.0 µg/mL | +/- 90.9963 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

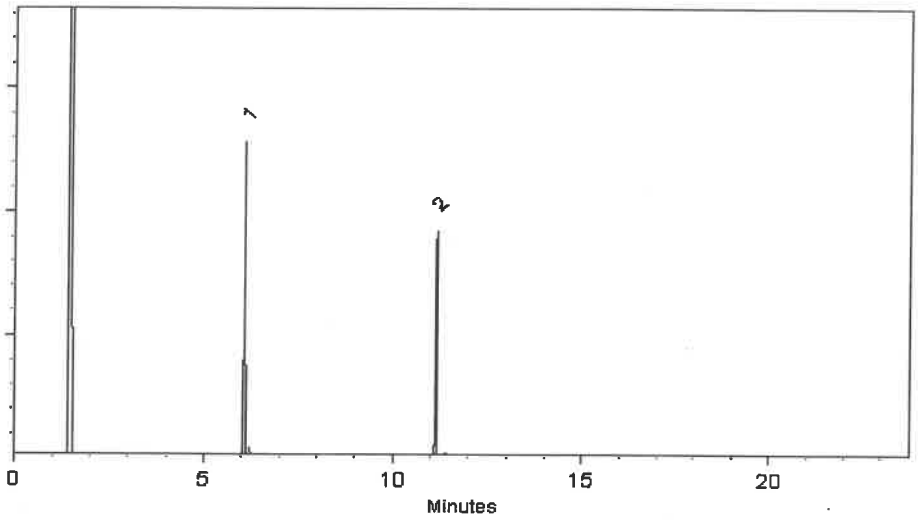
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I  **Date Mixed:** 13-Sep-2023  **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC  **Date Passed:** 28-Sep-2023

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ 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.

CPI INTERNATIONAL

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Santa Rosa, CA 95403

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(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



| Catalog No.: | Lot No.: | Storage: | Solvent: | Exp. Date: | Description: |
|---|---|---|---|---|---|
| Z-020223-01 | 454157 | ≤ -10 °C | P/T Methanol | 6/10/2026 | 1,4-Dioxane Solution, 2000 mg/L, 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 |

S12112 ↓ S12116 } RC/ 03/08/24

*Not a certified value

Certified By: Melissa Workoff

Melissa Workoff
**Chemist**

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850 **Lot No.:** A0203726

**Description :** 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025 **Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

S12117 ↓ S12146 RC/ 03/18/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Pyridine | 110-86-1 | SHBP6240 | 99% | 1,001.6 µg/mL | +/- 36.4412 |
| 2 | N-Nitrosodimethylamine | 62-75-9 | 230209JLM | 99% | 1,005.9 µg/mL | +/- 36.5968 |
| 3 | Phenol | 108-95-2 | MKCK1120 | 99% | 1,003.3 µg/mL | +/- 36.5038 |
| 4 | Aniline | 62-53-3 | X22F726 | 99% | 1,005.8 µg/mL | +/- 36.5928 |
| 5 | Bis(2-chloroethyl)ether | 111-44-4 | SHBL6942 | 99% | 1,008.1 µg/mL | +/- 36.6776 |
| 6 | 2-Chlorophenol | 95-57-8 | STBJ3909 | 99% | 1,001.8 µg/mL | +/- 36.4492 |
| 7 | 1,3-Dichlorobenzene | 541-73-1 | BCCD5315 | 99% | 1,002.3 µg/mL | +/- 36.4654 |
| 8 | 1,4-Dichlorobenzene | 106-46-7 | MKBS7929V | 99% | 1,003.7 µg/mL | +/- 36.5159 |
| 9 | Benzyl alcohol | 100-51-6 | SHBK5469 | 99% | 1,008.7 µg/mL | +/- 36.6979 |
| 10 | 1,2-Dichlorobenzene | 95-50-1 | SHBN3835 | 99% | 1,000.3 µg/mL | +/- 36.3926 |
| 11 | 2-Methylphenol (o-cresol) | 95-48-7 | SHBN7598 | 99% | 1,003.5 µg/mL | +/- 36.5099 |
| 12 | 2,2'-oxybis(1-chloropropane) | 108-60-1 | 29-MAR-45-5 | 99% | 1,007.3 µg/mL | +/- 36.6493 |
| 13 | 3-Methylphenol (m-cresol) | 108-39-4 | STBJ0710 | 99% | 504.3 µg/mL | +/- 18.3500 |
| 14 | 4-Methylphenol (p-cresol) | 106-44-5 | SHBN3411 | 99% | 503.6 µg/mL | +/- 18.3237 |
| 15 | N-Nitroso-di-n-propylamine | 621-64-7 | N63MG | 99% | 1,008.3 µg/mL | +/- 36.6857 |
| 16 | Hexachloroethane | 67-72-1 | QTORH | 99% | 1,007.5 µg/mL | +/- 36.6554 |
| 17 | Nitrobenzene | 98-95-3 | 10224044 | 99% | 1,008.6 µg/mL | +/- 36.6938 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 18 | Isophorone | 78-59-1 | MKCC9506 | 99% | 1,005.9 | µg/mL | +/- | 36.5988 |
| 19 | 2-Nitrophenol | 88-75-5 | RP230710 | 99% | 1,003.2 | µg/mL | +/- | 36.4998 |
| 20 | 2,4-Dimethylphenol | 105-67-9 | XW5GK | 99% | 1,003.8 | µg/mL | +/- | 36.5200 |
| 21 | Bis(2-chloroethoxy)methane | 111-91-1 | 13670200 | 99% | 1,002.1 | µg/mL | +/- | 36.4573 |
| 22 | 2,4-Dichlorophenol | 120-83-2 | BCBZ6787 | 99% | 1,003.7 | µg/mL | +/- | 36.5180 |
| 23 | 1,2,4-Trichlorobenzene | 120-82-1 | SHBP5900 | 99% | 1,007.6 | µg/mL | +/- | 36.6574 |
| 24 | Naphthalene | 91-20-3 | STBL1057 | 99% | 1,008.3 | µg/mL | +/- | 36.6837 |
| 25 | 4-Chloroaniline | 106-47-8 | BCCJ3217 | 99% | 1,001.3 | µg/mL | +/- | 36.4290 |
| 26 | Hexachlorobutadiene | 87-68-3 | RP230823RSR | 98% | 1,008.3 | µg/mL | +/- | 36.6829 |
| 27 | 4-Chloro-3-methylphenol | 59-50-7 | BCCD4461 | 99% | 1,003.1 | µg/mL | +/- | 36.4937 |
| 28 | 2-Methylnaphthalene | 91-57-6 | STBK0259 | 96% | 1,001.9 | µg/mL | +/- | 36.4505 |
| 29 | 1-Methylnaphthalene | 90-12-0 | 5234.00-8 | 98% | 1,000.0 | µg/mL | +/- | 36.3838 |
| 30 | Hexachlorocyclopentadiene | 77-47-4 | 099063I14L | 98% | 1,008.5 | µg/mL | +/- | 36.6909 |
| 31 | 2,4,6-Trichlorophenol | 88-06-2 | STBJ5914 | 99% | 1,004.4 | µg/mL | +/- | 36.5442 |
| 32 | 2,4,5-Trichlorophenol | 95-95-4 | FHN01 | 98% | 1,001.9 | µg/mL | +/- | 36.4512 |
| 33 | 2-Chloronaphthalene | 91-58-7 | RPN7O | 99% | 1,001.1 | µg/mL | +/- | 36.4230 |
| 34 | 2-Nitroaniline | 88-74-4 | RP230531 | 99% | 1,002.9 | µg/mL | +/- | 36.4876 |
| 35 | 1,4-Dinitrobenzene | 100-25-4 | RP230816 | 99% | 1,005.7 | µg/mL | +/- | 36.5887 |
| 36 | Acenaphthylene | 208-96-8 | p06V | 98% | 1,009.5 | µg/mL | +/- | 36.7265 |
| 37 | 1,3-Dinitrobenzene | 99-65-0 | 1-DXX-24-1 | 99% | 1,004.4 | µg/mL | +/- | 36.5422 |
| 38 | Dimethylphthalate | 131-11-3 | 358221L17K | 99% | 1,005.9 | µg/mL | +/- | 36.5968 |
| 39 | 2,6-Dinitrotoluene | 606-20-2 | BCCG1833 | 99% | 1,003.2 | µg/mL | +/- | 36.4998 |
| 40 | 1,2-Dinitrobenzene | 528-29-0 | RP230428 | 99% | 1,002.2 | µg/mL | +/- | 36.4634 |
| 41 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 1,009.3 | µg/mL | +/- | 36.7221 |
| 42 | 3-Nitroaniline | 99-09-2 | RP230822RSR | 99% | 1,003.9 | µg/mL | +/- | 36.5240 |
| 43 | 2,4-Dinitrophenol | 51-28-5 | DR230417RSR | 99% | 1,002.0 | µg/mL | +/- | 36.4553 |
| 44 | Dibenzofuran | 132-64-9 | MKCD9952 | 99% | 1,006.7 | µg/mL | +/- | 36.6251 |
| 45 | 2,4-Dinitrotoluene | 121-14-2 | MKAA0690V | 99% | 1,003.8 | µg/mL | +/- | 36.5220 |
| 46 | 4-Nitrophenol | 100-02-7 | RP230627 | 99% | 1,002.3 | µg/mL | +/- | 36.4674 |
| 47 | 2,3,4,6-Tetrachlorophenol | 58-90-2 | PR-30126 | 99% | 1,008.7 | µg/mL | +/- | 36.6979 |
| 48 | 2,3,5,6-Tetrachlorophenol | 935-95-5 | RP230919 | 99% | 1,006.3 | µg/mL | +/- | 36.6130 |
| 49 | Fluorene | 86-73-7 | 10241100 | 99% | 1,008.3 | µg/mL | +/- | 36.6857 |
| 50 | 4-Chlorophenyl phenyl ether | 7005-72-3 | MKCT7248 | 99% | 1,003.8 | µg/mL | +/- | 36.5220 |
| 51 | Diethylphthalate | 84-66-2 | MKCD2547 | 99% | 1,008.6 | µg/mL | +/- | 36.6958 |
| 52 | 4-Nitroaniline | 100-01-6 | RP230111 | 99% | 1,001.1 | µg/mL | +/- | 36.4230 |
| 53 | 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) | 534-52-1 | 230718JLM | 99% | 1,002.0 | µg/mL | +/- | 36.4553 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 54 | Diphenylamine | 122-39-4 | MKCH1042 | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 55 | Azobenzene | 103-33-3 | BCCK0887 | 99% | 1,005.8 | µg/mL | +/- 36.5928 |
| 56 | 4-Bromophenyl phenyl ether | 101-55-3 | STBH6361 | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 57 | Hexachlorobenzene | 118-74-1 | 14821700 | 99% | 1,007.5 | µg/mL | +/- 36.6554 |
| 58 | Pentachlorophenol | 87-86-5 | RP230530RSR | 99% | 1,008.8 | µg/mL | +/- 36.7019 |
| 59 | Phenanthrene | 85-01-8 | MKCQ8876 | 99% | 1,008.4 | µg/mL | +/- 36.6877 |
| 60 | Anthracene | 120-12-7 | MKCR0570 | 99% | 1,009.0 | µg/mL | +/- 36.7100 |
| 61 | Carbazole | 86-74-8 | 14351100 | 99% | 1,000.9 | µg/mL | +/- 36.4149 |
| 62 | Di-n-butylphthalate | 84-74-2 | MKCN4337 | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 63 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 1,009.6 | µg/mL | +/- 36.7302 |
| 64 | Pyrene | 129-00-0 | BCCG8479 | 98% | 1,007.2 | µg/mL | +/- 36.6453 |
| 65 | Benzyl butyl phthalate | 85-68-7 | X12I018 | 99% | 1,002.1 | µg/mL | +/- 36.4573 |
| 66 | Bis(2-ethylhexyl)adipate | 103-23-1 | MKCM1988 | 99% | 1,005.2 | µg/mL | +/- 36.5705 |
| 67 | Benz(a)anthracene | 56-55-3 | I220012022BAA | 99% | 1,002.2 | µg/mL | +/- 36.4614 |
| 68 | Chrysene | 218-01-9 | RP230601 | 99% | 1,008.3 | µg/mL | +/- 36.6837 |
| 69 | Bis(2-ethylhexyl)phthalate | 117-81-7 | MKCQ3468 | 99% | 1,001.8 | µg/mL | +/- 36.4472 |
| 70 | Di-n-octyl phthalate | 117-84-0 | 14382700 | 99% | 1,006.0 | µg/mL | +/- 36.6008 |
| 71 | Benzo(b)fluoranthene | 205-99-2 | 012013B | 99% | 1,002.8 | µg/mL | +/- 36.4836 |
| 72 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 1,003.0 | µg/mL | +/- 36.4917 |
| 73 | Benzo(a)pyrene | 50-32-8 | P54915-0703 | 99% | 1,002.3 | µg/mL | +/- 36.4674 |
| 74 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 1,009.4 | µg/mL | +/- 36.7243 |
| 75 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 1,007.6 | µg/mL | +/- 36.6595 |
| 76 | Benzo(g,h,i)perylene | 191-24-2 | RP231003RSR | 99% | 1,002.9 | µg/mL | +/- 36.4876 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

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# Certificate of Analysis

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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**Catalog No. :** 31087 **Lot No.:** A0206206

**Description :** Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2032 **Storage:** 10°C or colder

**Ship:** Ambient

S12187 ↓ S12206 } RC/ 03/18/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorophenol | 367-12-4 | STBK1705 | 99% | 10,005.3 µg/mL | +/- 302.5390 |
| 2 | Phenol-d6 | 13127-88-3 | PR-33287A | 99% | 10,005.5 µg/mL | +/- 302.5475 |
| 3 | 2,4,6-Tribromophenol | 118-79-6 | RP230831RSR | 99% | 10,006.6 µg/mL | +/- 302.5783 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

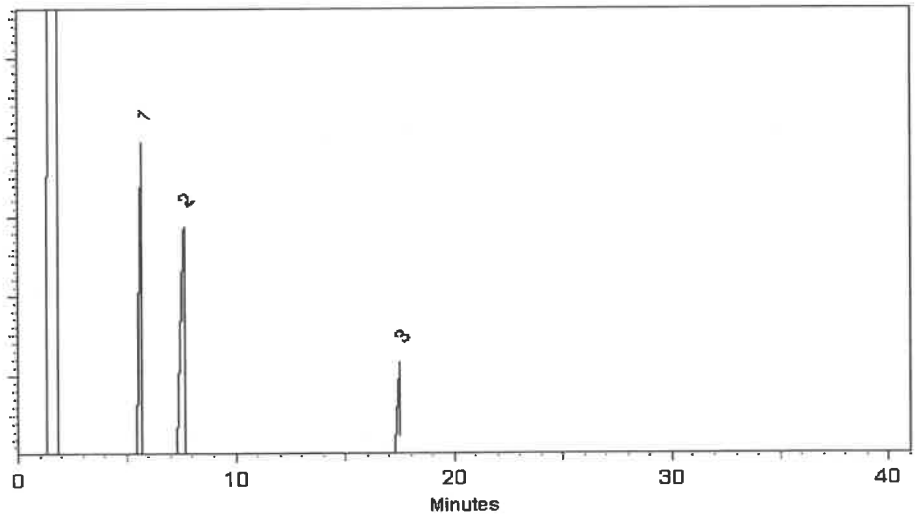
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

**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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110 Benner Circle
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31087 **Lot No.:** A0206206

**Description :** Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2032 **Storage:** 10°C or colder

**Ship:** Ambient

S12187 ↓ S12206 } RC/ 03/18/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorophenol | 367-12-4 | STBK1705 | 99% | 10,005.3 µg/mL | +/- 302.5390 |
| 2 | Phenol-d6 | 13127-88-3 | PR-33287A | 99% | 10,005.5 µg/mL | +/- 302.5475 |
| 3 | 2,4,6-Tribromophenol | 118-79-6 | RP230831RSR | 99% | 10,006.6 µg/mL | +/- 302.5783 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

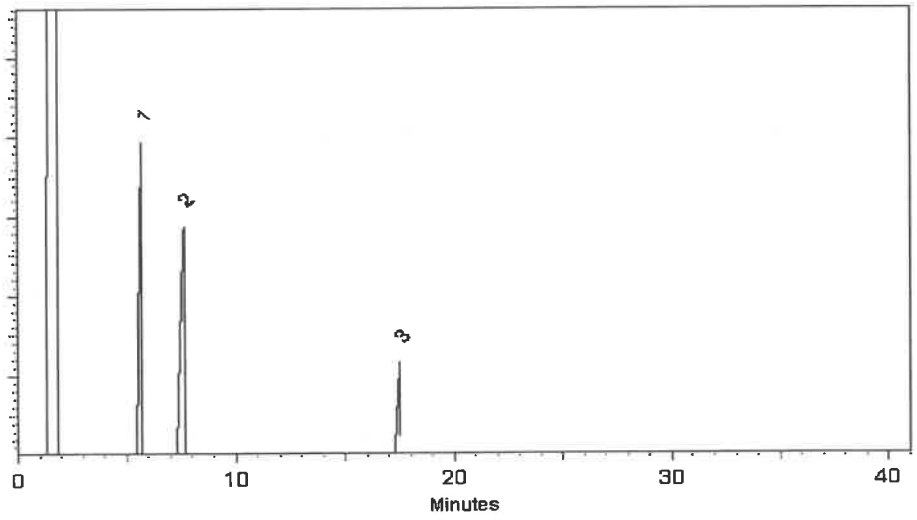
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

**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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA 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. :** 31086 **Lot No.:** A0206381

**Description :** B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

S12207 ↓ S12221 RC/ 03/18/24

**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

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Nitrobenzene-d5 | 4165-60-0 | I-25158 | 99% | 5,029.3 µg/mL | +/- 226.5204 |
| 2 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 5,030.9 µg/mL | +/- 226.5936 |
| 3 | p-Terphenyl-d14 | 1718-51-0 | PR-32599 | 99% | 5,026.4 µg/mL | +/- 226.3909 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

**Tech Tips:**
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

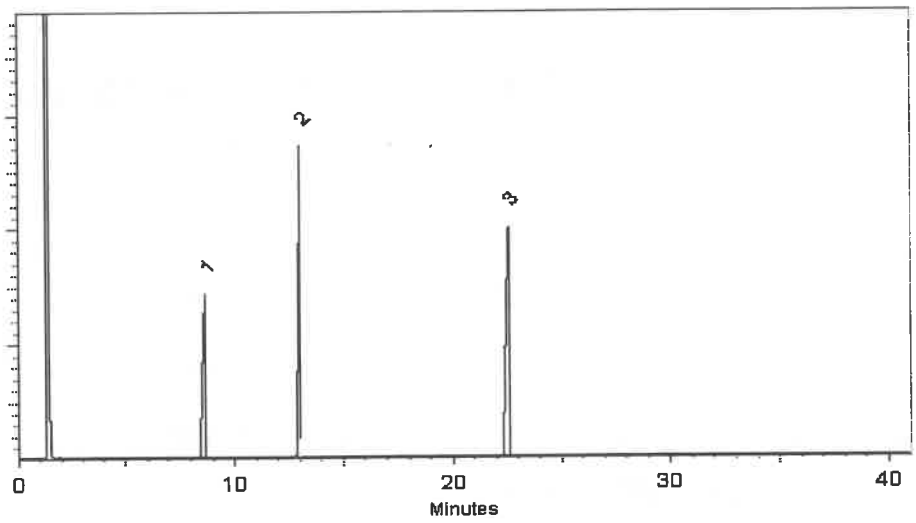
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

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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CERTIFIED REFERENCE MATERIAL

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ISO 17034 Accredited
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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. :** 31086 **Lot No.:** A0206381

**Description :** B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

S12207 ↓ S12221 RC/ 03/18/24

**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

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Nitrobenzene-d5 | 4165-60-0 | I-25158 | 99% | 5,029.3 µg/mL | +/- 226.5204 |
| 2 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 5,030.9 µg/mL | +/- 226.5936 |
| 3 | p-Terphenyl-d14 | 1718-51-0 | PR-32599 | 99% | 5,026.4 µg/mL | +/- 226.3909 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

**Tech Tips:**
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

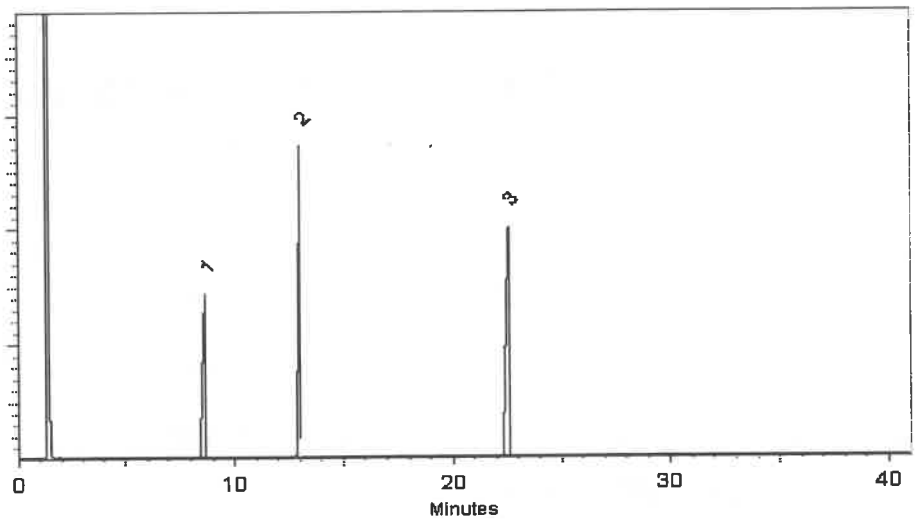
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

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**

CPI INTERNATIONAL

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



| 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 |

S12270 ↓ S12274 } RC 05/24/24

*Not a certified value

Certified By: Kerry E Kane

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 gravimetricly.

# Certificate of Analysis



**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 E Kane

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 gravimetricly.

# Certificate of Analysis



**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 E Kane

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 gravimetricly.

# Certificate of Analysis



**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 E Kane

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 gravimetricly.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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S12312 ↓ S12331 } RC/ 05/30/24

**Catalog No. :** 31206 **Lot No.:** A0206540

**Description :** SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2029 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,4-Dichlorobenzene-d4 | 3855-82-1 | PR-30447 | 99% | 2,007.1 µg/mL | +/- 90.4025 |
| 2 | Naphthalene-d8 | 1146-65-2 | M-2180 | 99% | 2,005.9 µg/mL | +/- 90.3454 |
| 3 | Acenaphthene-d10 | 15067-26-2 | PR-33507 | 99% | 2,007.9 µg/mL | +/- 90.4385 |
| 4 | Phenanthrene-d10 | 1517-22-2 | PR-32303 | 99% | 2,006.7 µg/mL | +/- 90.3845 |
| 5 | Chrysene-d12 | 1719-03-5 | PR-32210 | 99% | 2,015.5 µg/mL | +/- 90.7778 |
| 6 | Perylene-d12 | 1520-96-3 | PR-33205 | 99% | 2,014.7 µg/mL | +/- 90.7448 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

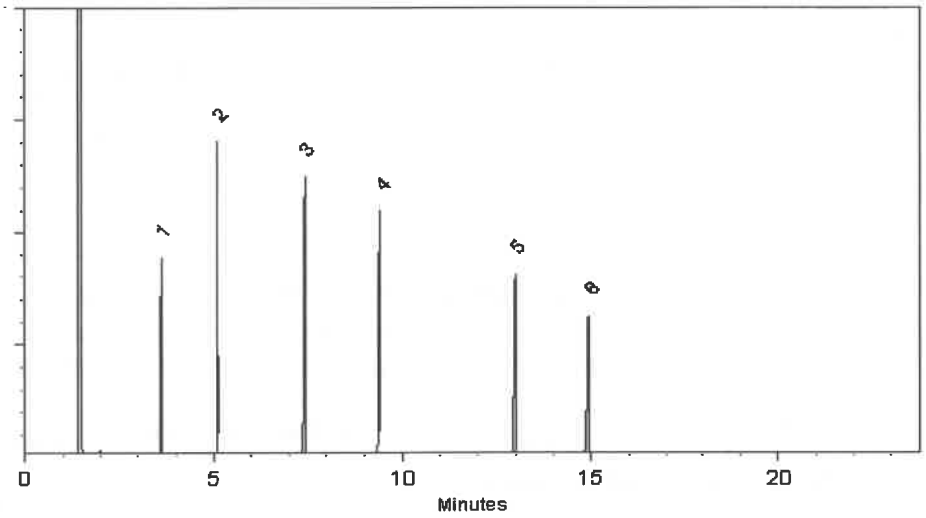
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Malina Homan - Operations Technician I

**Date Mixed:** 12-Jan-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 16-Jan-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

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CERTIFIED REFERENCE MATERIAL

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited 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. :** 555223 **Lot No.:** A0214021

**Description :** Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026 **Storage:** 10°C or colder

**Handling:** This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 3,3'-Dichlorobenzidine | 91-94-1 | S240326RSR | 99% | 1,004.0 µg/mL | +/- 23.0487 |
| 2 | Atrazine | 1912-24-9 | 5FYWL | 99% | 1,005.0 µg/mL | +/- 23.0717 |
| 3 | Benzidine | 92-87-5 | S240430RSR | 99% | 1,006.0 µg/mL | +/- 23.0947 |
| 4 | epsilon-Caprolactam | 105-60-2 | Y16H012 | 99% | 1,000.0 µg/mL | +/- 22.9569 |

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

S12449 ↓ S12508 } RC 7/24/24

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 18-Jul-2024 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*gravimetric*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED 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. :** 555223 **Lot No.:** A0214021

**Description :** Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026 **Storage:** 10°C or colder

**Handling:** This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 3,3'-Dichlorobenzidine | 91-94-1 | S240326RSR | 99% | 1,004.0 µg/mL | +/- 23.0487 |
| 2 | Atrazine | 1912-24-9 | 5FYWL | 99% | 1,005.0 µg/mL | +/- 23.0717 |
| 3 | Benzidine | 92-87-5 | S240430RSR | 99% | 1,006.0 µg/mL | +/- 23.0947 |
| 4 | epsilon-Caprolactam | 105-60-2 | Y16H012 | 99% | 1,000.0 µg/mL | +/- 22.9569 |

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

S12449 ↓ S12508 RC 7/24/24

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 18-Jul-2024 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ 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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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224 **Lot No.:** A0214017

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,4,5-Tetrachlorobenzene | 95-94-3 | MKCT9480 | 99% | 1,005.0 µg/mL | +/- 29.541899 |
| 2 | Acetophenone | 98-86-2 | STBH8205 | 99% | 1,005.0 µg/mL | +/- 29.541899 |
| 3 | Benzaldehyde | 100-52-7 | RD231129RSRA | 99% | 1,008.0 µg/mL | +/- 29.630084 |
| 4 | Benzoic acid | 65-85-0 | MKCR2694 | 99% | 1,010.0 µg/mL | +/- 29.688874 |
| 5 | Biphenyl | 92-52-4 | MKCS5928 | 99% | 1,008.0 µg/mL | +/- 29.630084 |

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

S12509 ↓ S12568 } 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.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

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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. :** 555224 **Lot No.:** A0214017

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,4,5-Tetrachlorobenzene | 95-94-3 | MKCT9480 | 99% | 1,005.0 µg/mL | +/- 29.541899 |
| 2 | Acetophenone | 98-86-2 | STBH8205 | 99% | 1,005.0 µg/mL | +/- 29.541899 |
| 3 | Benzaldehyde | 100-52-7 | RD231129RSRA | 99% | 1,008.0 µg/mL | +/- 29.630084 |
| 4 | Benzoic acid | 65-85-0 | MKCR2694 | 99% | 1,010.0 µg/mL | +/- 29.688874 |
| 5 | Biphenyl | 92-52-4 | MKCS5928 | 99% | 1,008.0 µg/mL | +/- 29.630084 |

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

S12509 ↓ S12568 } 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.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ 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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Testing Laboratory
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# Certificate of Analysis

*chromatographic plus*

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31615 **Lot No.:** A0212955

**Description :** GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2027 **Storage:** 10°C or colder

**Handling:** Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Pentachlorophenol | 87-86-5 | RP240517RSR | 99% | 1,004.5 µg/mL | +/- 44.8902 |
| 2 | DFTPP (Decafluorotriphenylphosphine) | 5074-71-5 | Q117-147 | 99% | 1,004.5 µg/mL | +/- 44.8902 |
| 3 | Benzidine | 92-87-5 | S240430RSR | 99% | 1,006.0 µg/mL | +/- 44.9572 |
| 4 | 4,4'-DDT | 50-29-3 | S240530RSR | 97% | 1,000.1 µg/mL | +/- 44.6922 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

S12577 ↓ S12579 RC 8/2/24

# Quality Confirmation Test

**Column:**
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

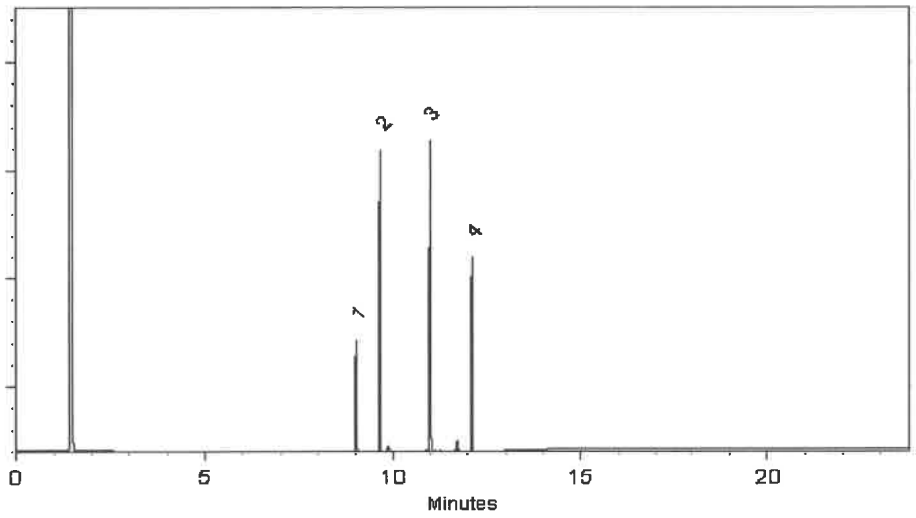
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 ml/min.

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

**Date Mixed:** 19-Jun-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 26-Jun-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

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# Certificate of Analysis

*chromatographic plus*

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31206 **Lot No.:** A0212266

**Description :** SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,4-Dichlorobenzene-d4 | 3855-82-1 | PR-30447 | 99% | 2,000.6 µg/mL | +/- 90.1075 |
| 2 | Naphthalene-d8 | 1146-65-2 | M-2180 | 99% | 2,000.3 µg/mL | +/- 90.0925 |
| 3 | Acenaphthene-d10 | 15067-26-2 | PR-33507 | 99% | 2,000.4 µg/mL | +/- 90.1000 |
| 4 | Phenanthrene-d10 | 1517-22-2 | PR-34099 | 99% | 2,000.5 µg/mL | +/- 90.1037 |
| 5 | Chrysene-d12 | 1719-03-5 | PR-33506 | 99% | 2,000.7 µg/mL | +/- 90.1112 |
| 6 | Perylene-d12 | 1520-96-3 | PR-33205 | 99% | 2,000.6 µg/mL | +/- 90.1075 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

S12645 ↓ S12674 AC 10/1/24

CPI INTERNATIONAL

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 

| Catalog No.: | Lot No.: | Storage: | Solvent: | Exp. Date: | Description: |
|---|---|---|---|---|---|
| Z-110816-01 | 414127 | ≤-10 °C | Methylene Chloride | 6/21/2025 | Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL |

| Compound | CAS No. | Purity (%) | Compound Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| atrazine | 1912-24-9 | 99.5 | 337.7.3P | 997 ± 5.81 |
| benzidine | 92-87-5 | 99.9 | 124.18.6.2P | 991.8 ± 5.77 |
| caprolactam | 105-60-2 | 99.9 | 271.1.6P | 999 ± 5.82 |

S12280 ↓ S12284 RCI 05/24/24

New numbers Generated.

S12790 ↓ S12794 RCI 11/12/24

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: _____
Shane Overcash
**Chemist**

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

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**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

S12963 ↓ S12992 AC 12/17/24

**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

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Pyridine | 110-86-1 | SHBP6240 | 99% | 1,008.3 µg/mL | +/- 36.6849 |
| 2 | N-Nitrosodimethylamine | 62-75-9 | S240313RSR | 99% | 1,008.6 µg/mL | +/- 36.6985 |
| 3 | Phenol | 108-95-2 | MKCK1120 | 99% | 1,003.5 µg/mL | +/- 36.5120 |
| 4 | Aniline | 62-53-3 | X22F726 | 99% | 1,002.9 µg/mL | +/- 36.4893 |
| 5 | Bis(2-chloroethyl)ether | 111-44-4 | 002891T24M | 99% | 1,003.0 µg/mL | +/- 36.4938 |
| 6 | 2-Chlorophenol | 95-57-8 | STBJ3909 | 99% | 1,005.6 µg/mL | +/- 36.5894 |
| 7 | 1,3-Dichlorobenzene | 541-73-1 | BCCD5315 | 99% | 1,004.1 µg/mL | +/- 36.5348 |
| 8 | 1,4-Dichlorobenzene | 106-46-7 | MKBS7929V | 99% | 1,002.1 µg/mL | +/- 36.4620 |
| 9 | Benzyl alcohol | 100-51-6 | SHBK5469 | 99% | 1,003.5 µg/mL | +/- 36.5120 |
| 10 | 1,2-Dichlorobenzene | 95-50-1 | SHBL6287 | 99% | 1,005.3 µg/mL | +/- 36.5757 |
| 11 | 2-Methylphenol (o-cresol) | 95-48-7 | SHBN7598 | 99% | 1,008.4 µg/mL | +/- 36.6894 |
| 12 | 2,2'-oxybis(1-chloropropane) | 108-60-1 | 29-MAR-45-5 | 99% | 1,004.6 µg/mL | +/- 36.5530 |
| 13 | 3-Methylphenol (m-cresol) | 108-39-4 | STBJ0710 | 99% | 502.1 µg/mL | +/- 18.2697 |
| 14 | 4-Methylphenol (p-cresol) | 106-44-5 | SHBN3411 | 99% | 503.8 µg/mL | +/- 18.3288 |
| 15 | N-Nitroso-di-n-propylamine | 621-64-7 | N63MG | 99% | 1,006.5 µg/mL | +/- 36.6212 |
| 16 | Hexachloroethane | 67-72-1 | DAXRI | 99% | 1,004.5 µg/mL | +/- 36.5484 |
| 17 | Nitrobenzene | 98-95-3 | 10224044 | 99% | 1,002.5 µg/mL | +/- 36.4757 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | Isophorone | 78-59-1 | MKCR3249 | 99% | 1,003.4 | µg/mL | +/- 36.5075 |
| 19 | 2-Nitrophenol | 88-75-5 | RP230710 | 99% | 1,002.5 | µg/mL | +/- 36.4757 |
| 20 | 2,4-Dimethylphenol | 105-67-9 | XW5GK | 99% | 1,006.5 | µg/mL | +/- 36.6212 |
| 21 | Bis(2-chloroethoxy)methane | 111-91-1 | 15705100 | 99% | 1,006.6 | µg/mL | +/- 36.6257 |
| 22 | 2,4-Dichlorophenol | 120-83-2 | 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.

# 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: Q1621

COC Number:

| CLIENT INFORMATION | PROJECT INFORMATION | BILLING INFORMATION |
|---|---|---|
| COMPANY: Tetra Tech | PROJECT NAME: NWIRP Bethpage | BILL TO: PO# |
| ADDRESS: 4433 Corporation Ln, Suite 300 | PROJECT #: 112G08005-WE13 LOCATION: RW5B | ADDRESS: |
| CITY: Virginia Beach STATE: VA ZIP: 23462 | PROJECT MANAGER: Ernie Wu | CITY: STATE: ZIP: |
| ATTENTION: Ernie Wu | E-MAIL: ernie,wu@tetratech.com | ATTENTION: PHONE: |
| PHONE: 757-466-4901 FAX: 757-461-4148 | PHONE: 757-466-4901 FAX: 757-461-4148 | |

**DATA TURNAROUND INFORMATION**

FAX: 10 DAYS*
HARD COPY: 10 DAYS*
EDD 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

**DATA DELIVERABLE INFORMATION**

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD Format
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other

**ANALYSIS**

| | 1,4-Dioxane SW846 8270 SIM | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # of Bottles | PRESERVATIVES 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | RW5-SP100-20250320 | GW | | x | 3/20/25 | 10:45 | 1 | x | | | | | | | | | |
| 2. | RW5-SP201-20250320 | GW | | x | 3/20/25 | 10:47 | 1 | x | | | | | | | | | |
| 3. | RW5-SP303-20250320 | GW | | x | 3/20/25 | 10:53 | 1 | x | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY**

| | DATE/TIME | | |
|---|---|---|---|
| 1. RELINQUISHED BY SAMPLER | 3/20/25/1120 | 1. RECEIVED BY | |
| 2. RELINQUISHED BY FedEx | 3-21-25 0944 | 2. RECEIVED BY | |
| 3. RELINQUISHED BY | DATE/TIME | 3. RECEIVED FOR LAB BY | |

**Conditions of bottles or coolers at receipt:** ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 2.3°C
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: Y
**Comments:**

Page ____ of ____

**SHIPPED VIA:** CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

**Shipment Complete** ☐ YES ☐ NO

**WHITE** - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# 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 |

Quantitation Report (Not Reviewed)

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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

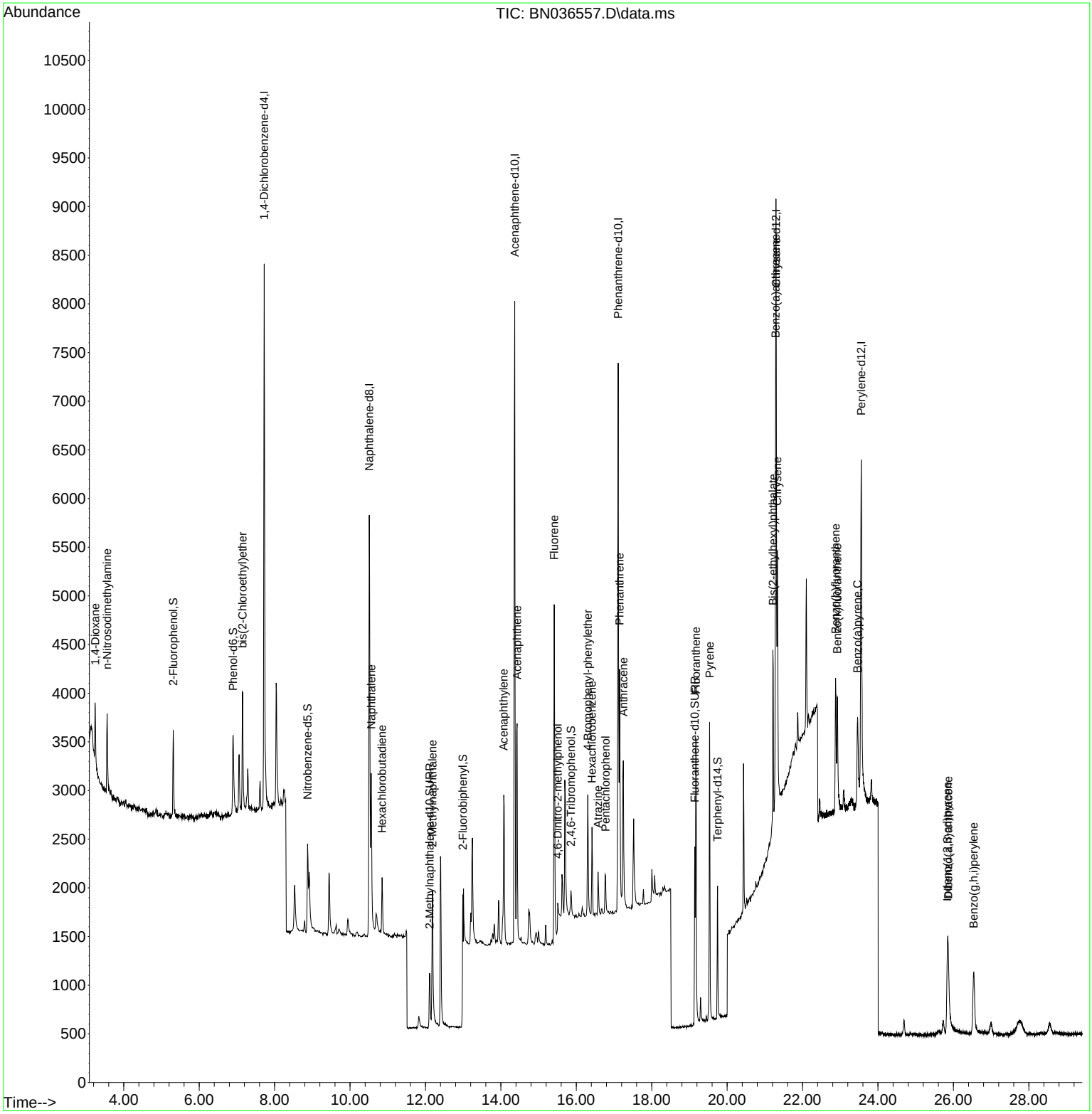
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 2755 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 6575 | 0.400 | ng | | 0.00 |
| 13) Acenaphthene-d10 | 14.366 | 164 | 3958 | 0.400 | ng | | 0.00 |
| 19) Phenanthrene-d10 | 17.111 | 188 | 8269 | 0.400 | ng | | 0.00 |
| 29) Chrysene-d12 | 21.295 | 240 | 5886 | 0.400 | ng | | 0.00 |
| 35) Perylene-d12 | 23.554 | 264 | 5207 | 0.400 | ng | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.312 | 112 | 641 | 0.100 | ng | | 0.00 |
| 5) Phenol-d6 | 6.901 | 99 | 856 | 0.108 | ng | | 0.00 |
| 8) Nitrobenzene-d5 | 8.875 | 82 | 940 | 0.131 | ng | | 0.00 |
| 11) 2-Methylnaphthalene-d10 | 12.111 | 152 | 1079 | 0.110 | ng | | 0.00 |
| 14) 2,4,6-Tribromophenol | 15.858 | 330 | 179 | 0.100 | ng | | 0.00 |
| 15) 2-Fluorobiphenyl | 12.993 | 172 | 2185 | 0.095 | ng | | 0.00 |
| 27) Fluoranthene-d10 | 19.141 | 212 | 2144 | 0.101 | ng | | 0.00 |
| 31) Terphenyl-d14 | 19.745 | 244 | 1416 | 0.100 | ng | | 0.00 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.247 | 88 | 534 | 0.175 | ng | # | 78 |
| 3) n-Nitrosodimethylamine | 3.557 | 42 | 766 | 0.124 | ng | # | 95 |
| 6) bis(2-Chloroethyl)ether | 7.154 | 93 | 982 | 0.120 | ng | | 98 |
| 9) Naphthalene | 10.562 | 128 | 2254 | 0.117 | ng | # | 94 |
| 10) Hexachlorobutadiene | 10.850 | 225 | 486 | 0.107 | ng | # | 100 |
| 12) 2-Methylnaphthalene | 12.187 | 142 | 1331 | 0.108 | ng | | 96 |
| 16) Acenaphthylene | 14.078 | 152 | 1862 | 0.100 | ng | | 99 |
| 17) Acenaphthene | 14.430 | 154 | 1244 | 0.102 | ng | | 99 |
| 18) Fluorene | 15.414 | 166 | 1612 | 0.097 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.510 | 198 | 122 | 0.204 | ng | # | 24 |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248 | 502 | 0.097 | ng | | 95 |
| 22) Hexachlorobenzene | 16.416 | 284 | 632 | 0.101 | ng | | 98 |
| 23) Atrazine | 16.578 | 200 | 400 | 0.096 | ng | # | 90 |
| 24) Pentachlorophenol | 16.776 | 266 | 290 | 0.102 | ng | | 98 |
| 25) Phenanthrene | 17.148 | 178 | 2459 | 0.099 | ng | | 99 |
| 26) Anthracene | 17.248 | 178 | 2121 | 0.095 | ng | | 100 |
| 28) Fluoranthene | 19.174 | 202 | 2772 | 0.099 | ng | | 97 |
| 30) Pyrene | 19.536 | 202 | 2862 | 0.099 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.286 | 228 | 2044 | 0.100 | ng | | 94 |
| 33) Chrysene | 21.331 | 228 | 2187 | 0.098 | ng | | 93 |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149 | 1760 | 0.121 | ng | | 96 |
| 36) Indeno(1,2,3-cd)pyrene | 25.841 | 276 | 1510 | 0.080 | ng | | 98 |
| 37) Benzo(b)fluoranthene | 22.876 | 252 | 1707 | 0.090 | ng | # | 62 |
| 38) Benzo(k)fluoranthene | 22.923 | 252 | 1958 | 0.098 | ng | # | 62 |
| 39) Benzo(a)pyrene | 23.458 | 252 | 1419 | 0.089 | ng | # | 51 |
| 40) Dibenzo(a,h)anthracene | 25.861 | 278 | 1163 | 0.079 | ng | # | 59 |
| 41) Benzo(g,h,i)perylene | 26.539 | 276 | 1482 | 0.089 | ng | # | 84 |

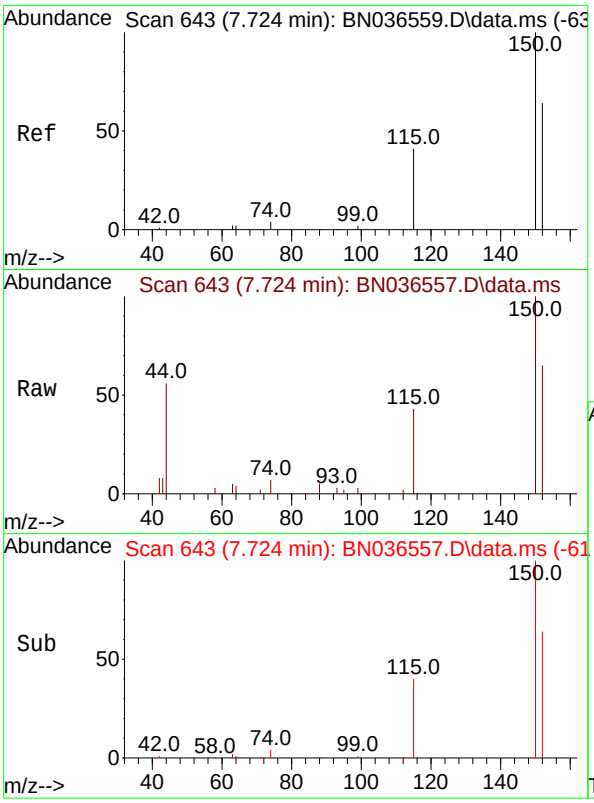
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

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



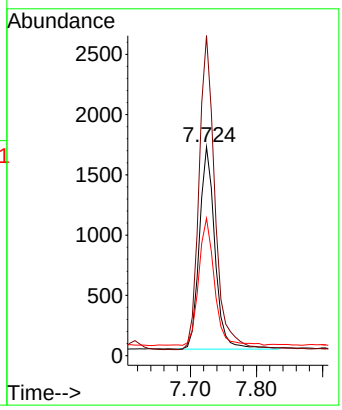


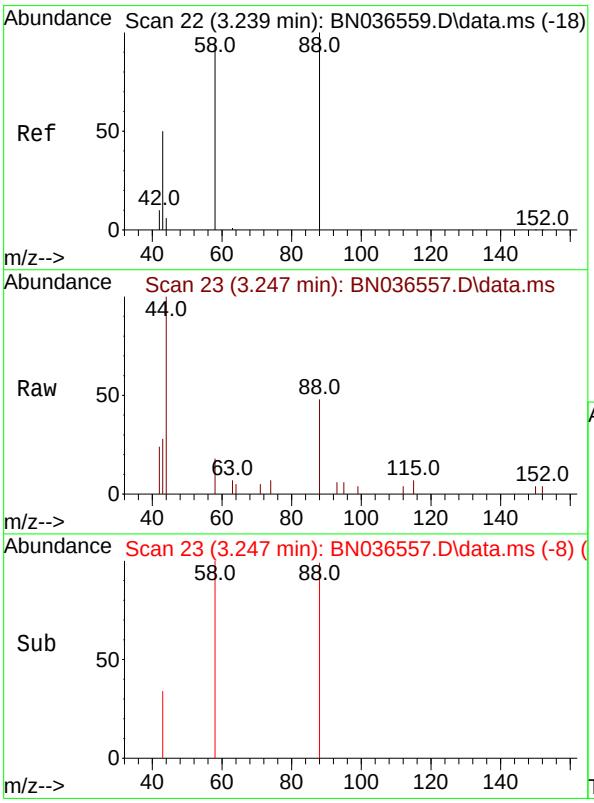

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:152 Resp: 2755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 153.3 | 123.7 | 185.5 |
| 115 | 65.8 | 54.3 | 81.5 |

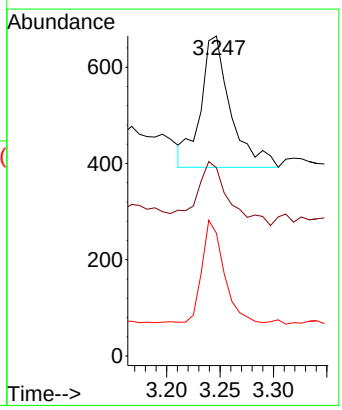


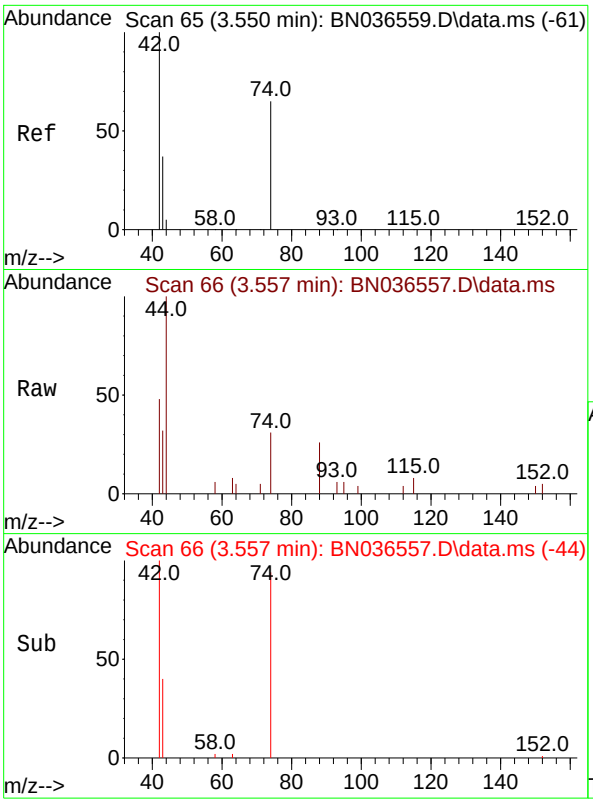




#2
1,4-Dioxane
Concen: 0.175 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 88 Resp: 534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 53.0 | 37.8 | 56.8 |
| 58 | 57.3 | 67.4 | 101.2# |



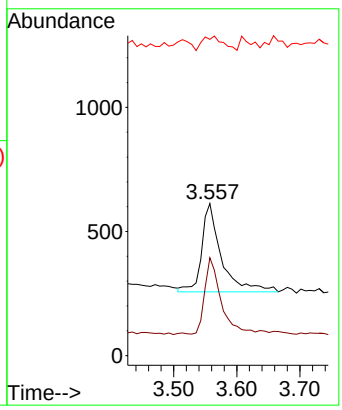


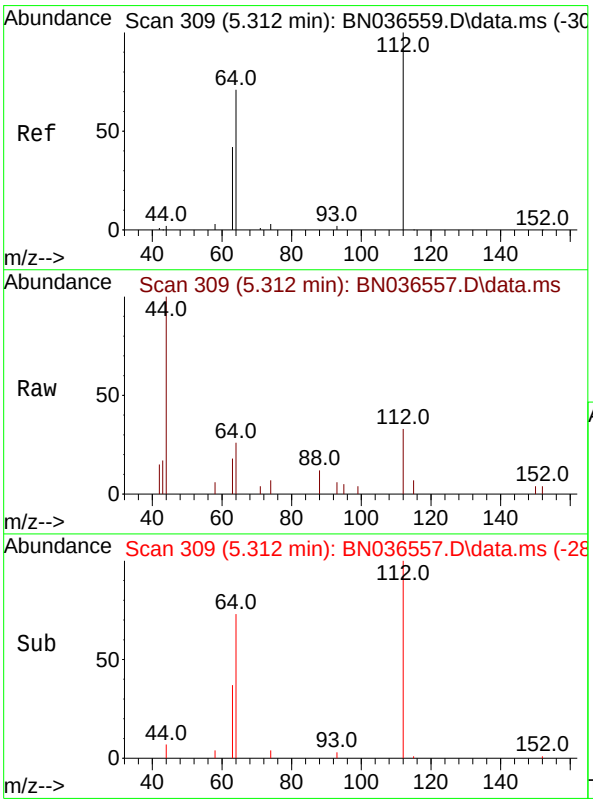

#3
n-Nitrosodimethylamine
Concen: 0.124 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion: 42 Resp: 766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 73.0 | 60.6 | 90.8 |
| 44 | 16.6 | 6.3 | 9.5# |

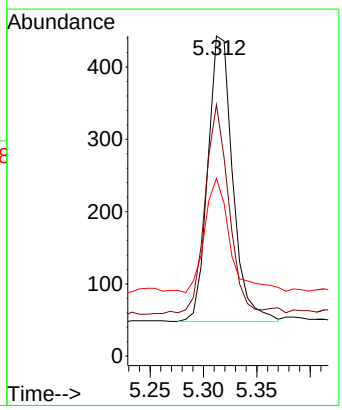


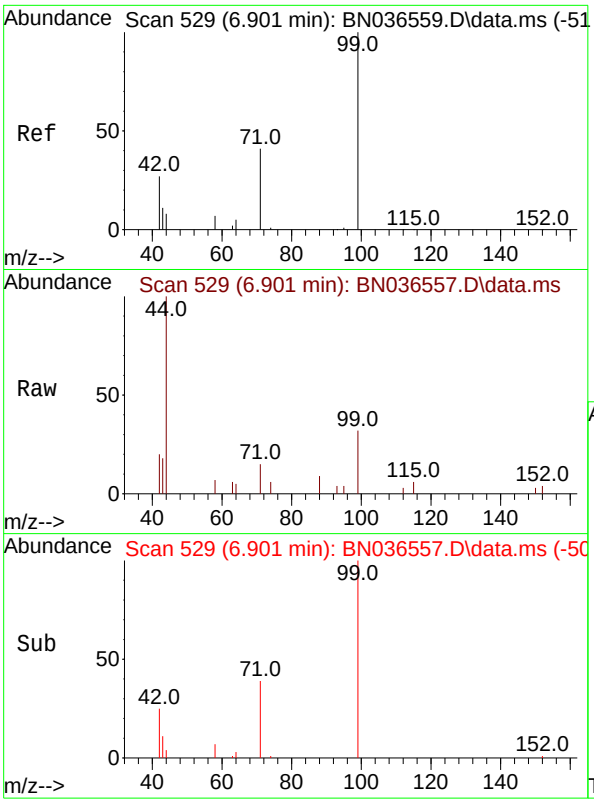




#4
2-Fluorophenol
Concen: 0.100 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:112 Resp: 641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 70.4 | 53.1 | 79.7 |
| 63 | 40.9 | 31.8 | 47.8 |



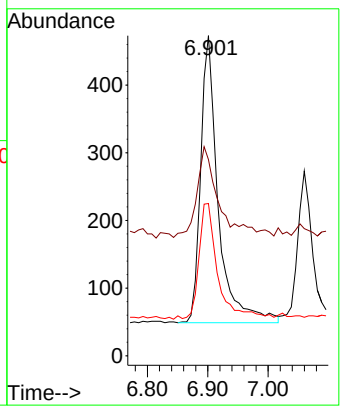


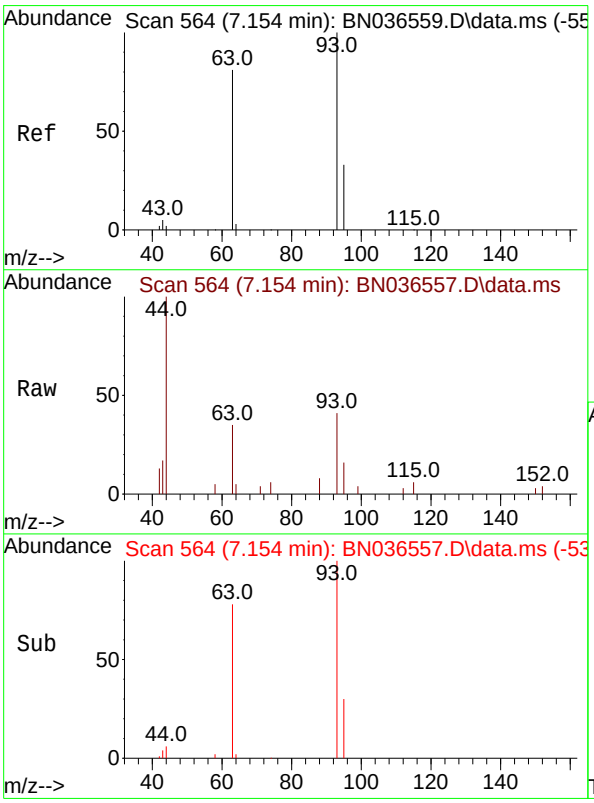

#5
Phenol-d6
Concen: 0.108 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion: 99 Resp: 856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 39.8 | 26.5 | 39.7# |
| 71 | 42.8 | 34.1 | 51.1 |

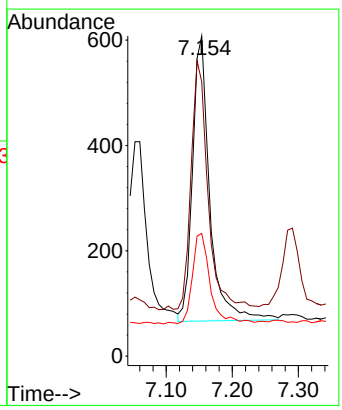


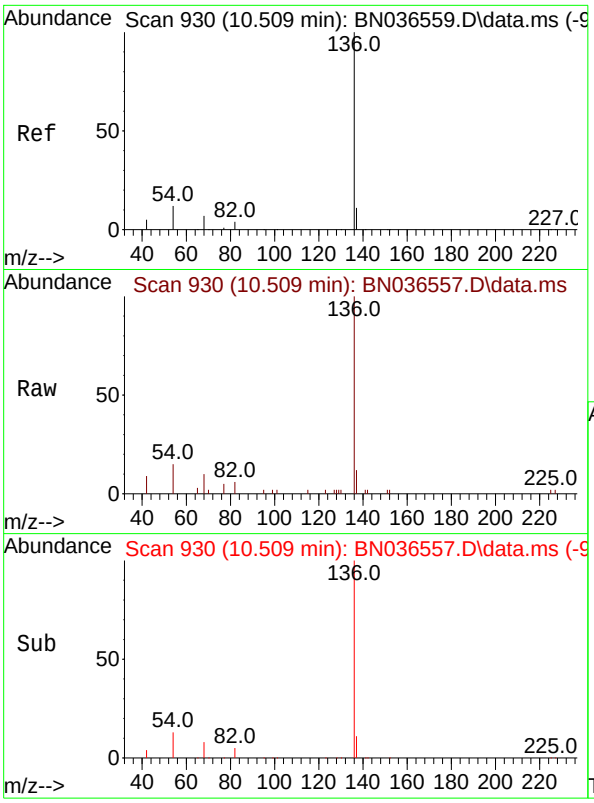




#6
bis(2-Chloroethyl)ether
Concen: 0.120 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 93 Resp: 982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 86.7 | 67.7 | 101.5 |
| 95 | 33.0 | 25.6 | 38.4 |



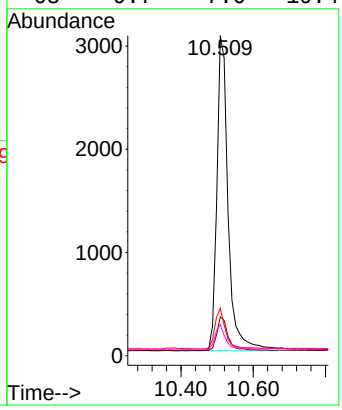


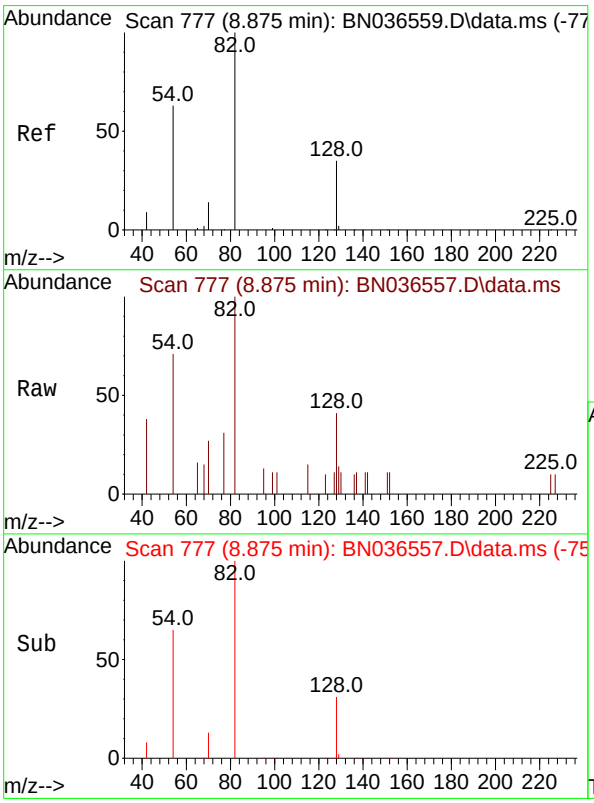

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:136 Resp: 6575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.1 | 10.3 | 15.5 |
| 54 | 14.8 | 11.5 | 17.3 |
| 68 | 9.7 | 7.0 | 10.4 |

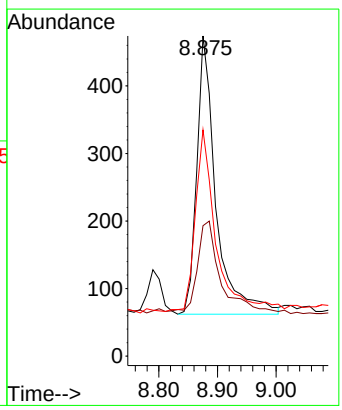


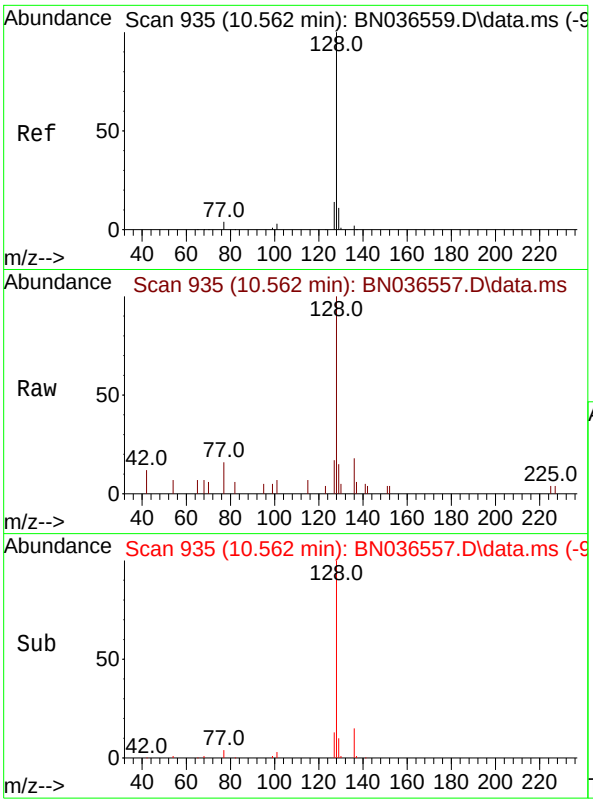




#8
Nitrobenzene-d5
Concen: 0.131 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 82 Resp: 940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.7 | 30.6 | 45.8 |
| 54 | 70.7 | 52.2 | 78.4 |



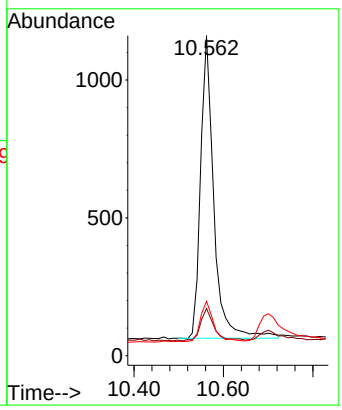


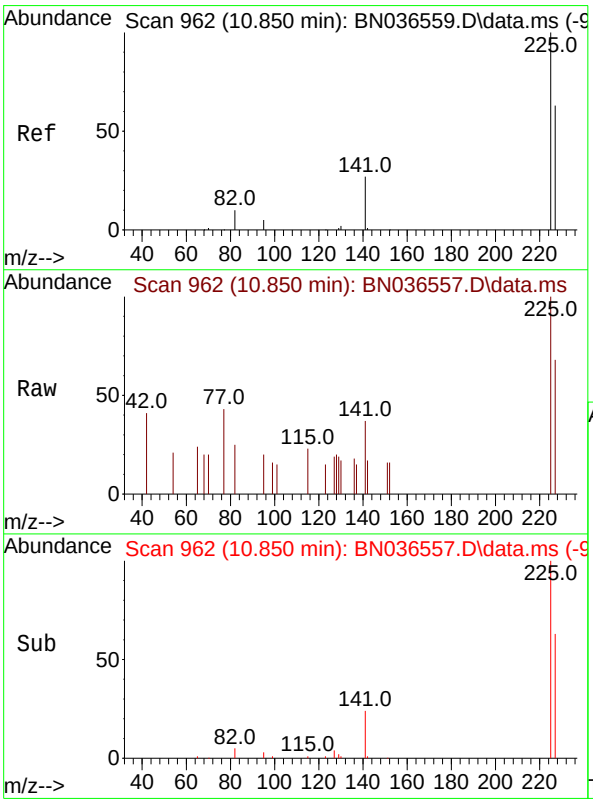

#9
Naphthalene
Concen: 0.117 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:128 Resp: 2254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 14.7 | 9.8 | 14.6# |
| 127 | 17.0 | 11.8 | 17.8 |

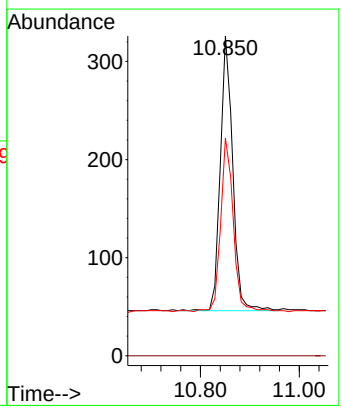


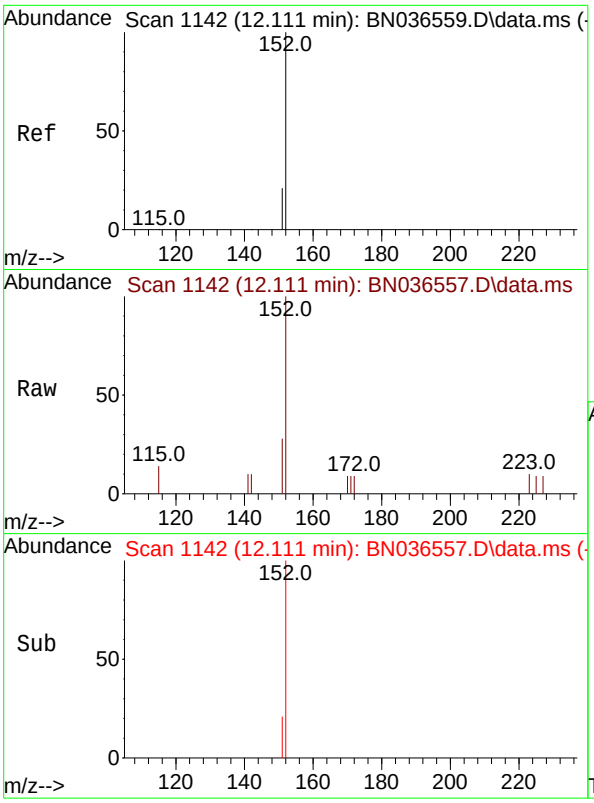




#10
Hexachlorobutadiene
Concen: 0.107 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:225 Resp: 486

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



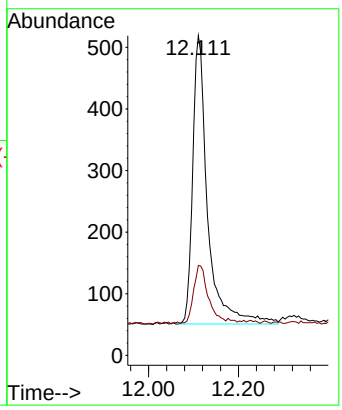


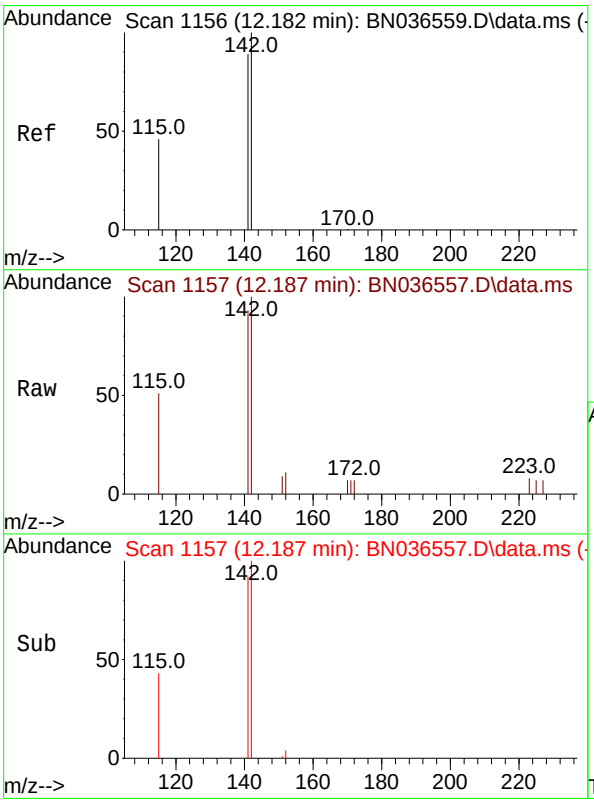

#11
2-Methylnaphthalene-d10
Concen: 0.110 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:152 Resp: 1079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.5 | 17.0 | 25.6 |

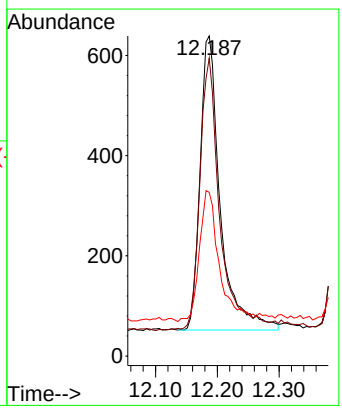


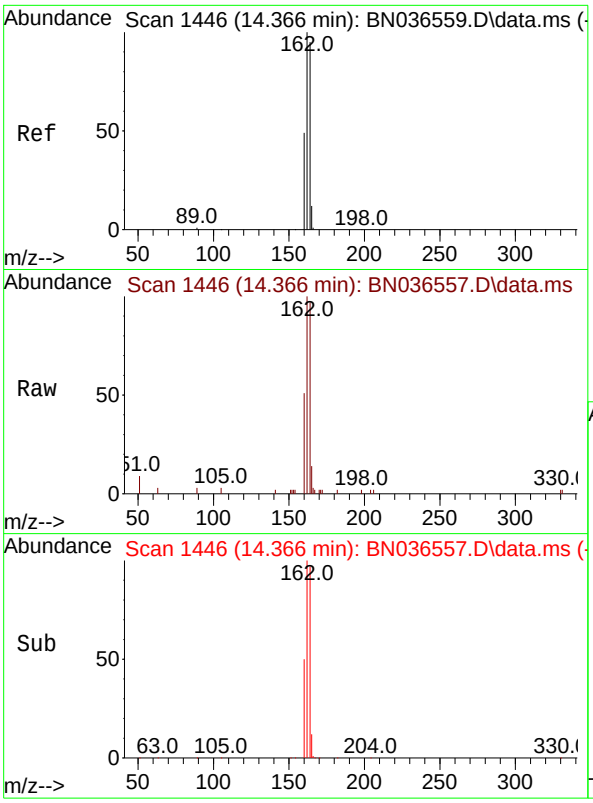




#12
2-Methylnaphthalene
Concen: 0.108 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:142 Resp: 1331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 93.1 | 71.7 | 107.5 |
| 115 | 51.2 | 38.3 | 57.5 |



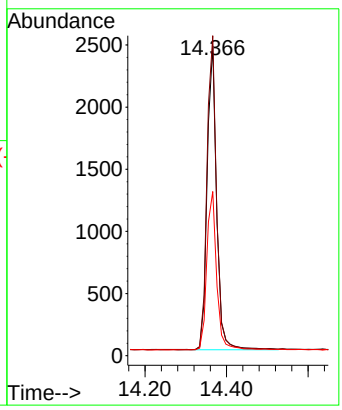


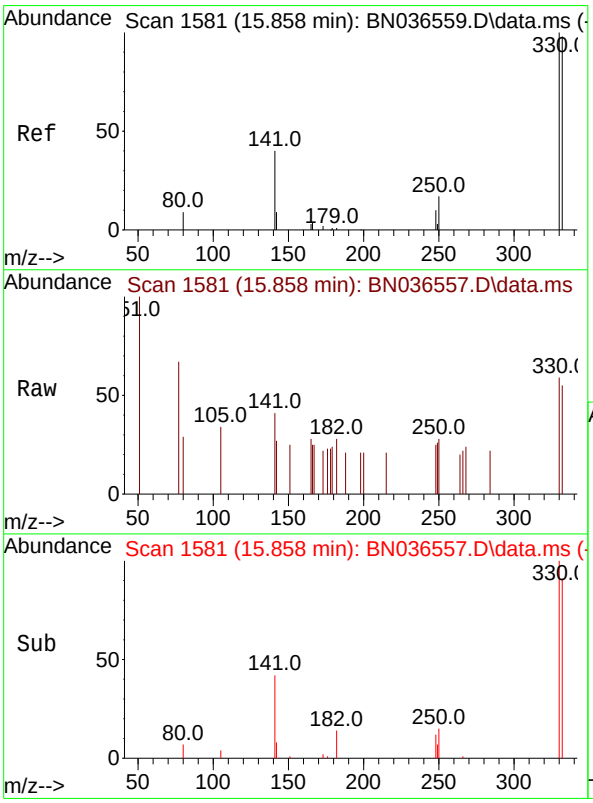

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:164 Resp: 3958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 103.3 | 84.2 | 126.2 |
| 160 | 53.0 | 42.2 | 63.2 |

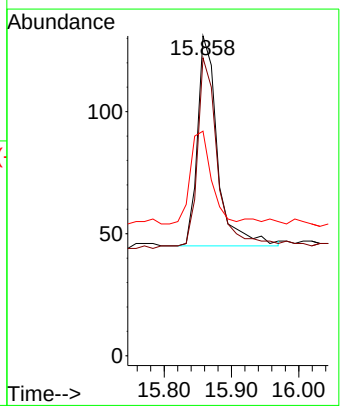


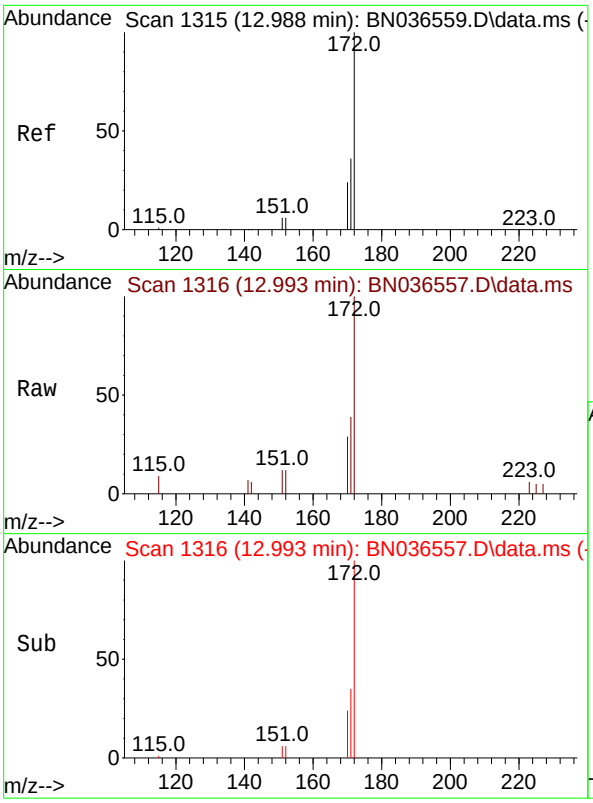




#14
2,4,6-Tribromophenol
Concen: 0.100 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:330 Resp: 179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 96.1 | 75.2 | 112.8 |
| 141 | 46.4 | 43.4 | 65.2 |



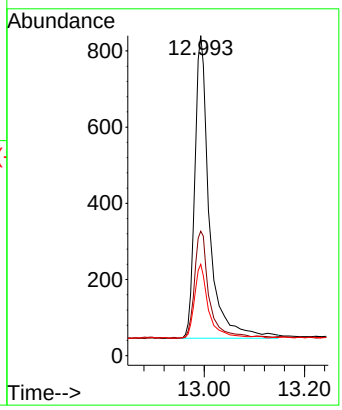


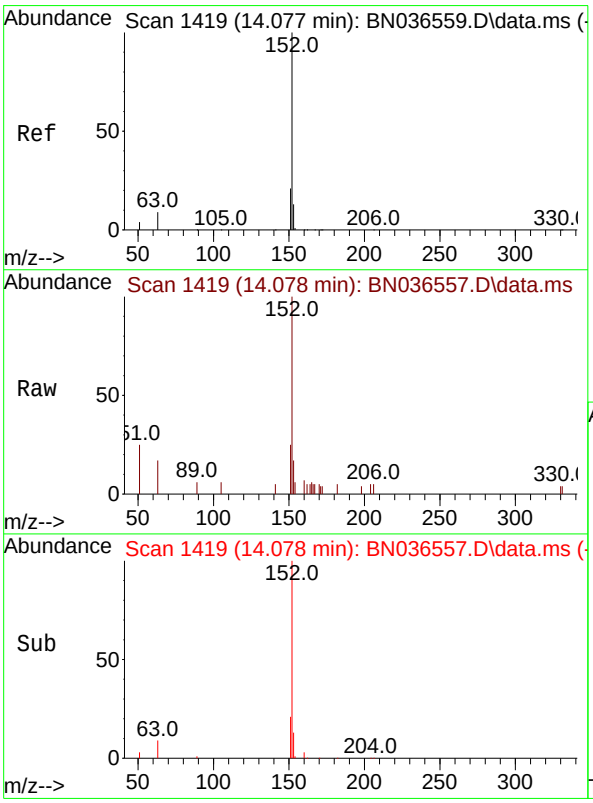

#15
2-Fluorobiphenyl
Concen: 0.095 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:172 Resp: 2185

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 38.9 | 29.5 | 44.3 |
| 170 | 28.6 | 20.2 | 30.4 |

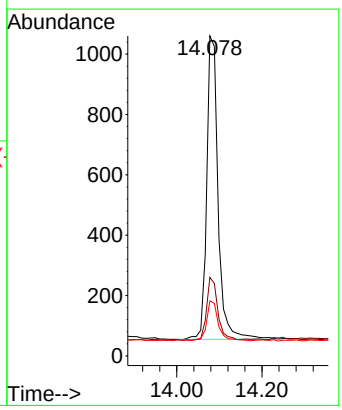


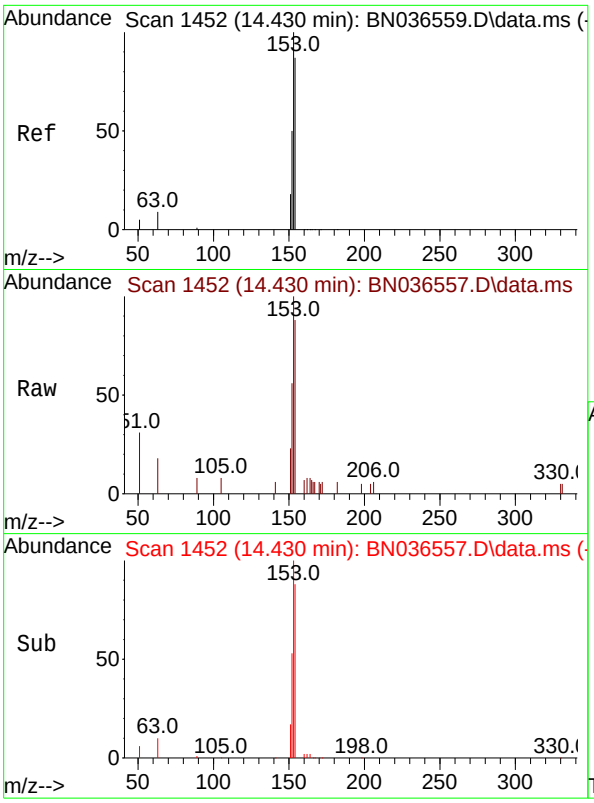




#16
Acenaphthylene
Concen: 0.100 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:152 Resp: 1862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.2 | 16.2 | 24.4 |
| 153 | 14.1 | 10.6 | 15.8 |



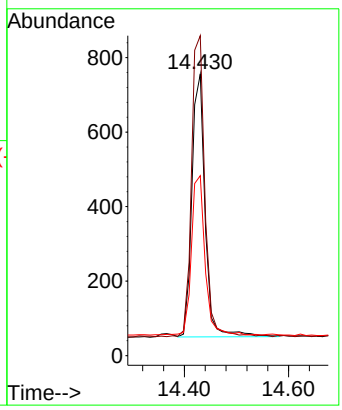


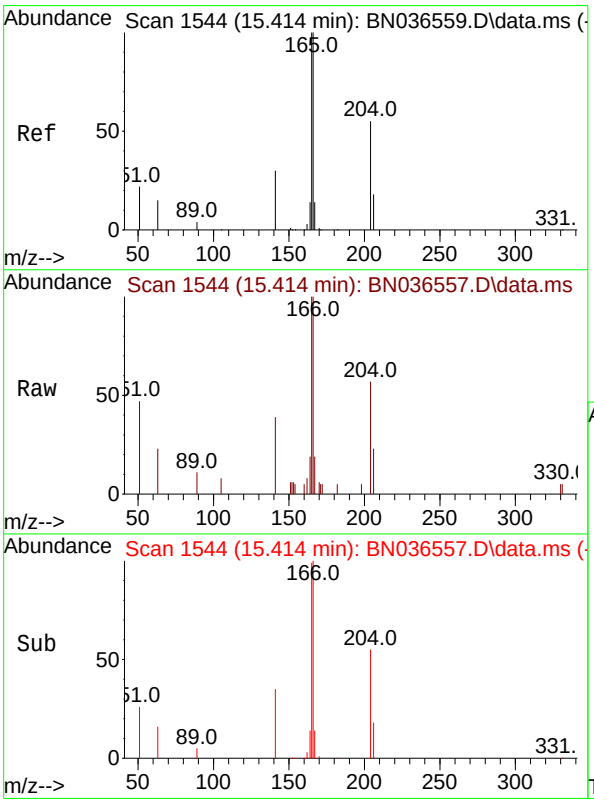

#17
Acenaphthene
Concen: 0.102 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:154 Resp: 1244

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

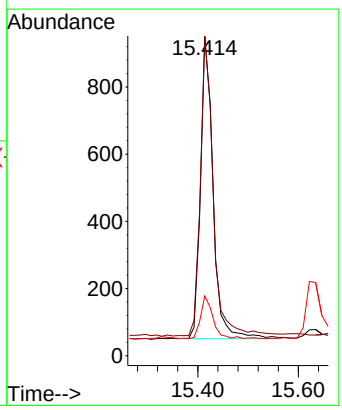


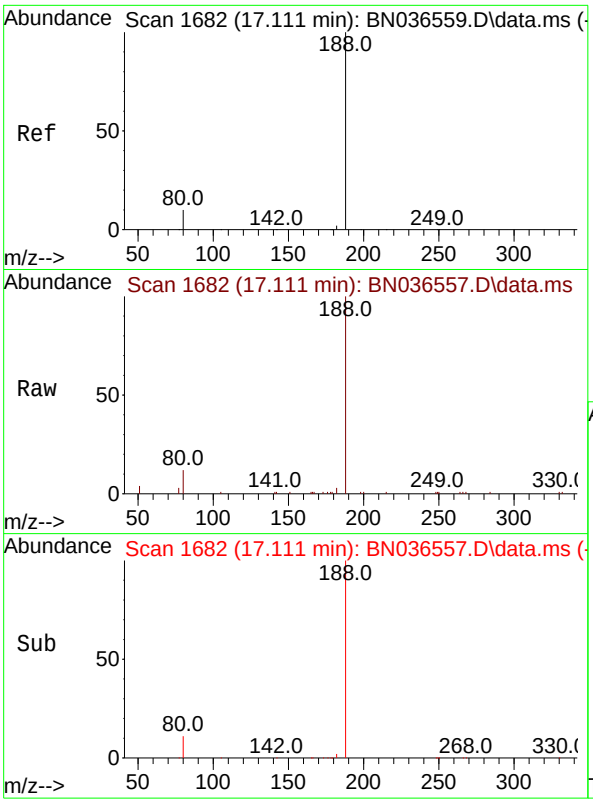




#18
Fluorene
Concen: 0.097 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:166 Resp: 1612

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



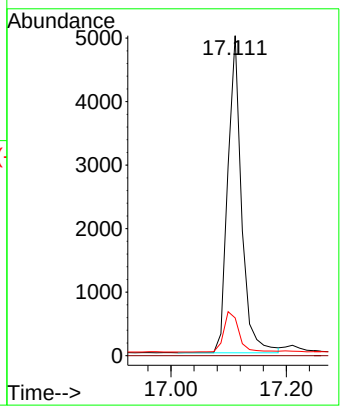


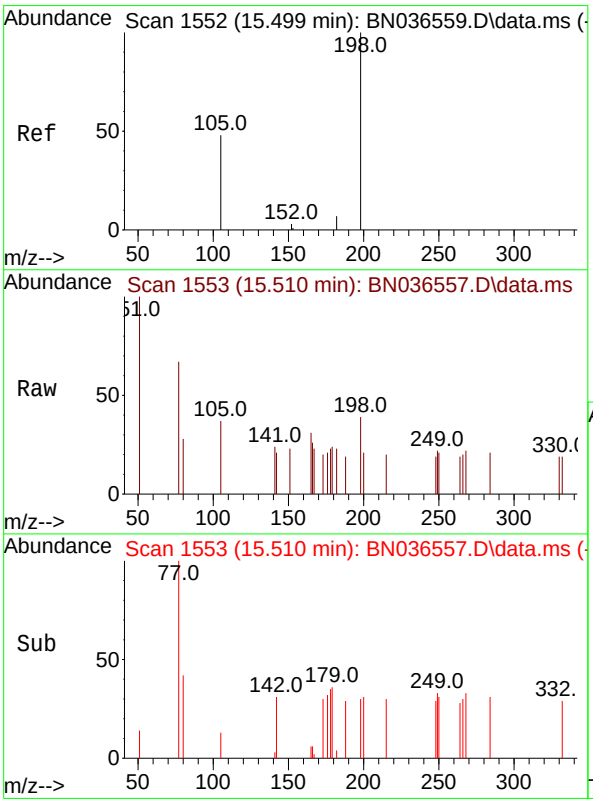

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:188 Resp: 8269

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.8 | 8.8 | 13.2 |

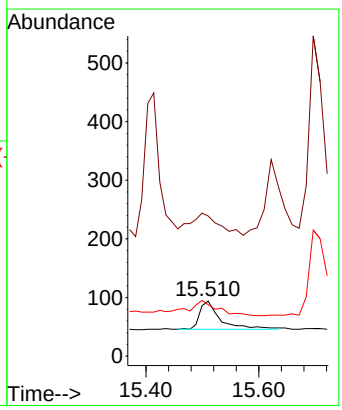


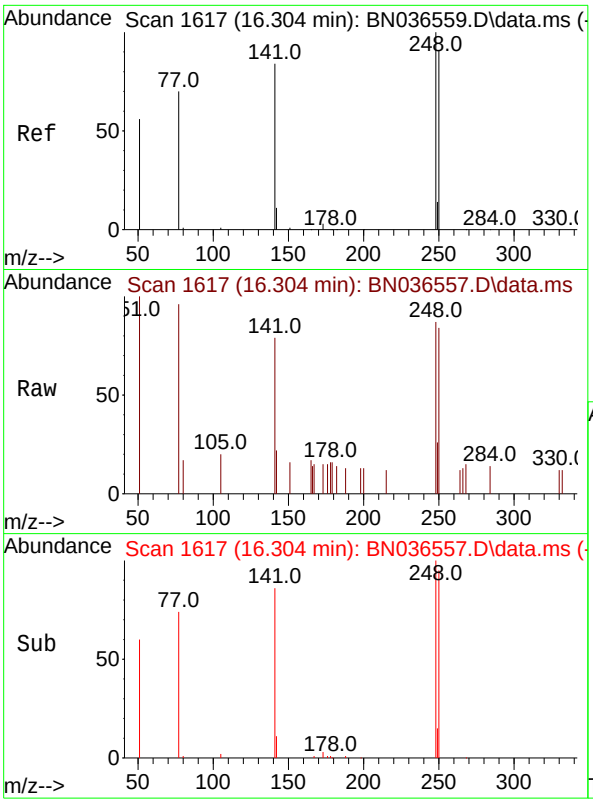




#20
4,6-Dinitro-2-methylphenol
Concen: 0.204 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:198 Resp: 122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 254.3 | 107.9 | 161.9# |
| 105 | 93.6 | 56.2 | 84.2# |



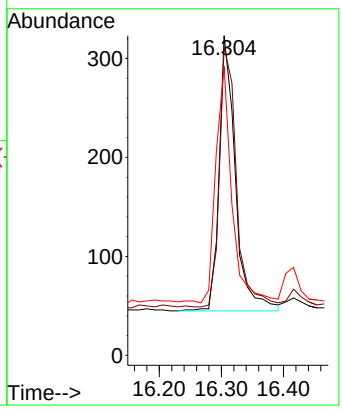


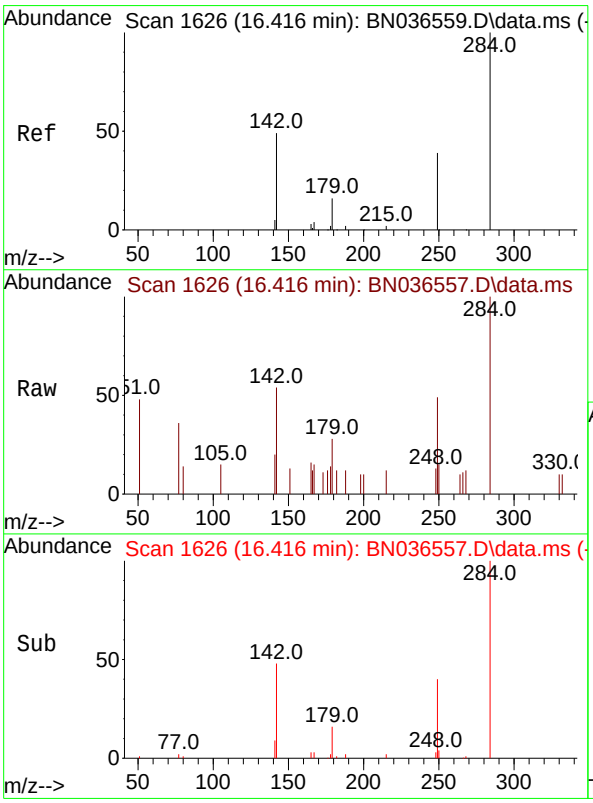

#21
4-Bromophenyl-phenylether
Concen: 0.097 ng
RT: 16.304 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:248 Resp: 502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 96.6 | 73.0 | 109.6 |
| 141 | 90.4 | 68.6 | 103.0 |

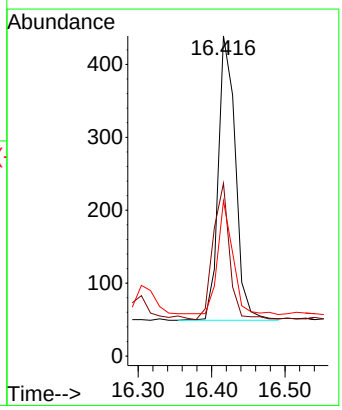


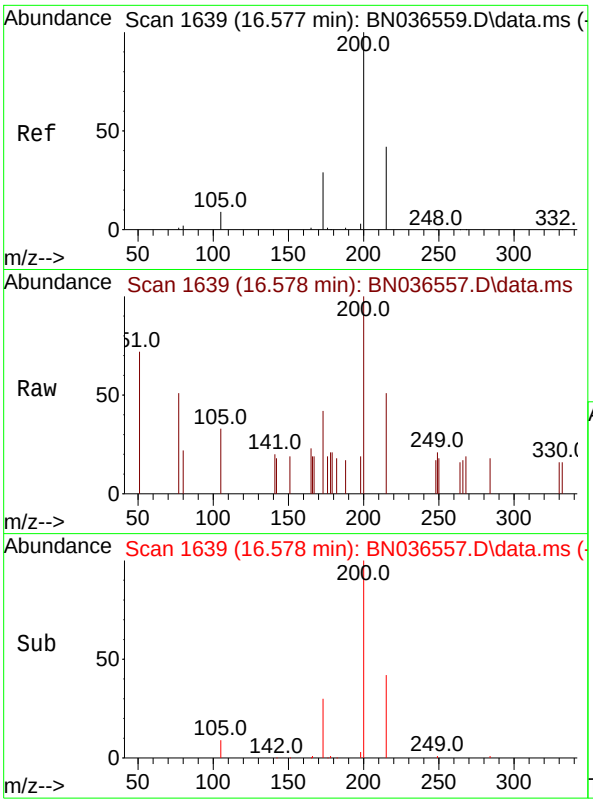




#22
Hexachlorobenzene
Concen: 0.101 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:284 Resp: 632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 45.7 | 37.0 | 55.4 |
| 249 | 37.2 | 28.1 | 42.1 |



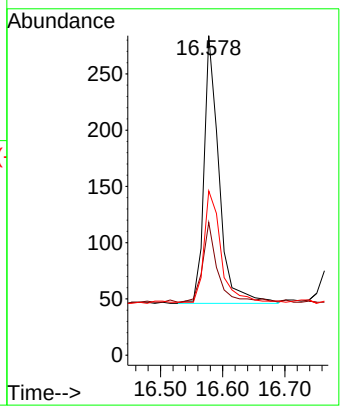


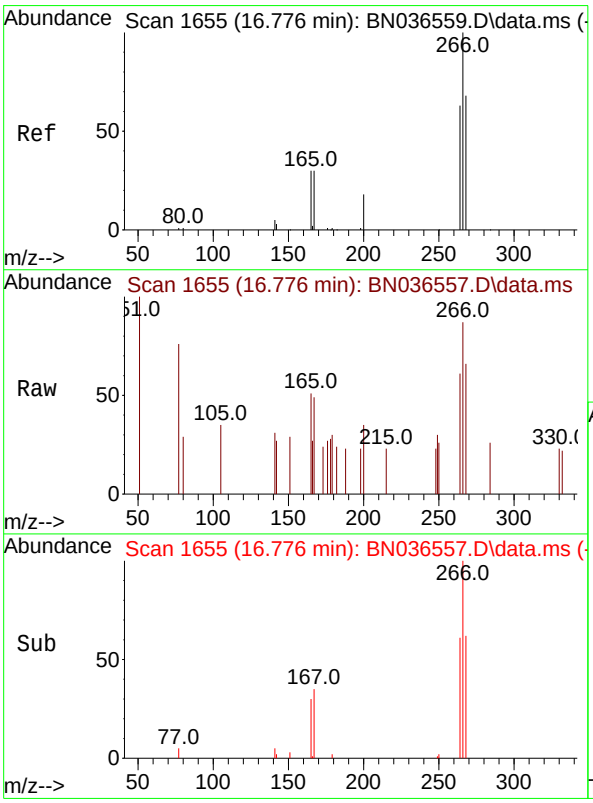

#23
Atrazine
Concen: 0.096 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:200 Resp: 400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 41.5 | 27.3 | 40.9# |
| 215 | 51.4 | 36.8 | 55.2 |

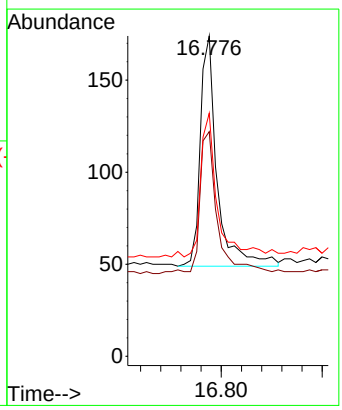


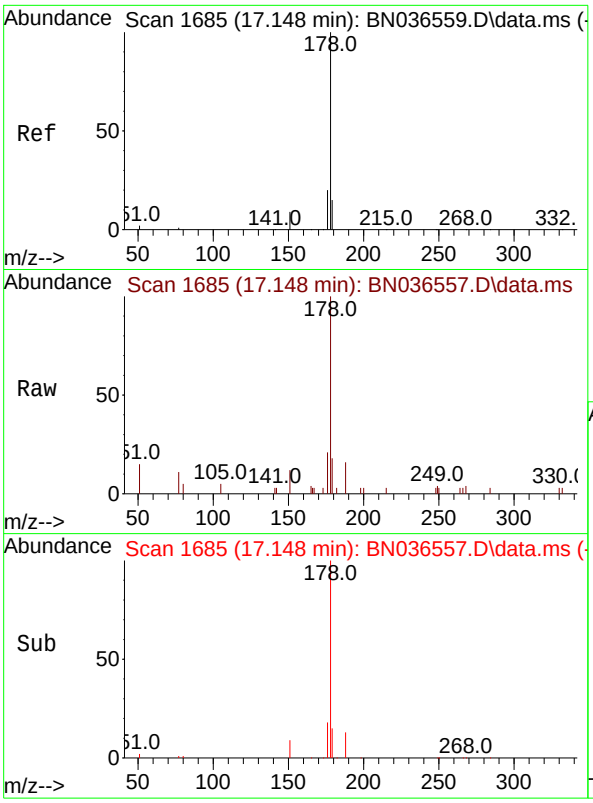




#24
Pentachlorophenol
Concen: 0.102 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:266 Resp: 290

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



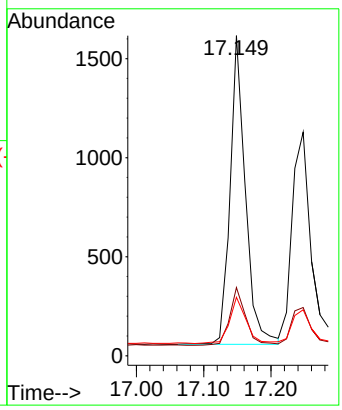


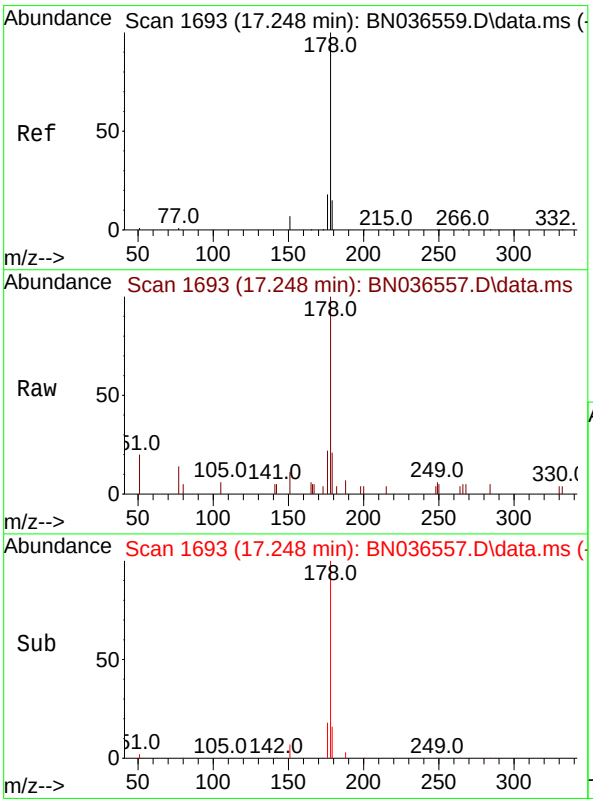

#25
Phenanthrene
Concen: 0.099 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:178 Resp: 2459

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

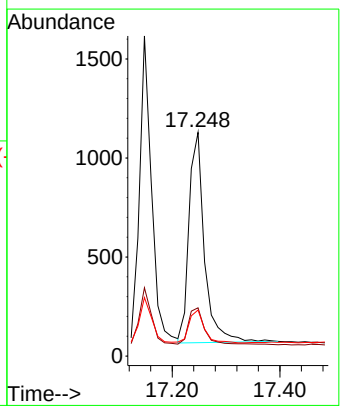


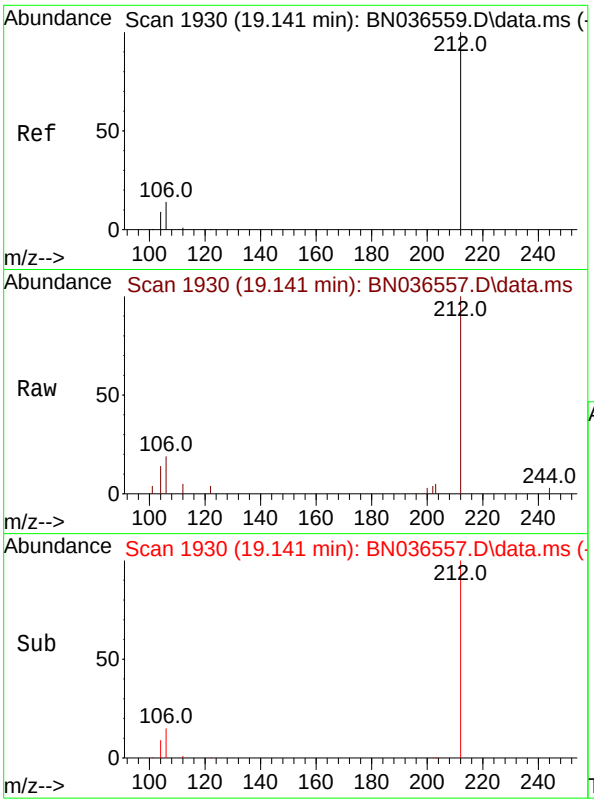




#26
Anthracene
Concen: 0.095 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:178 Resp: 2121

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.4 | 23.2 |
| 179 | 15.7 | 12.6 | 18.8 |



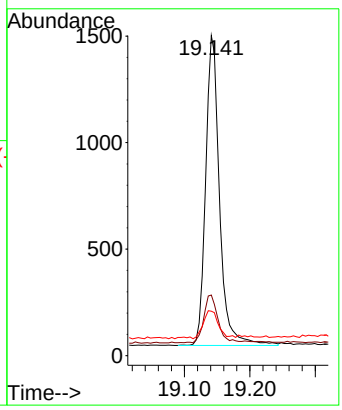


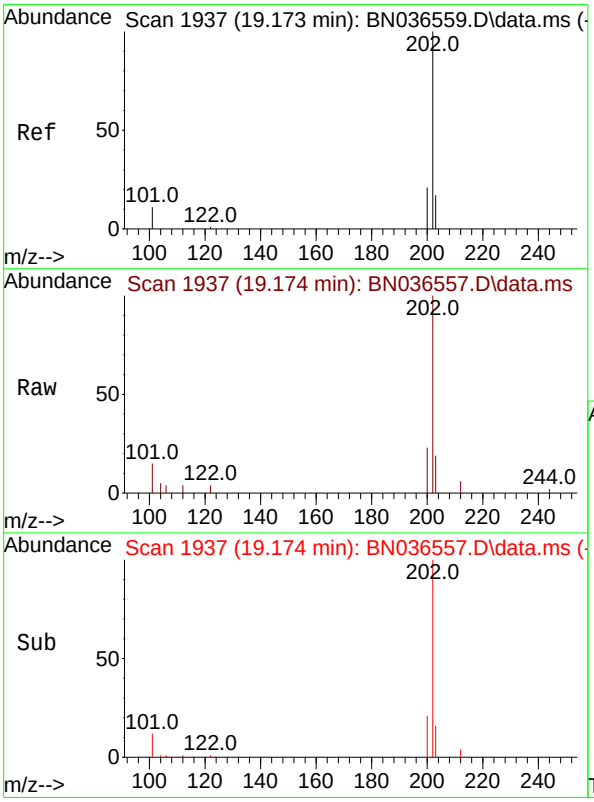

#27
Fluoranthene-d10
Concen: 0.101 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:212 Resp: 2144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.5 | 11.8 | 17.6 |
| 104 | 9.7 | 7.3 | 10.9 |

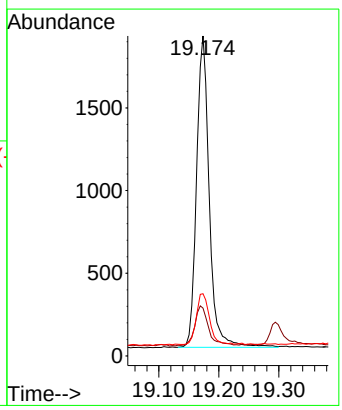


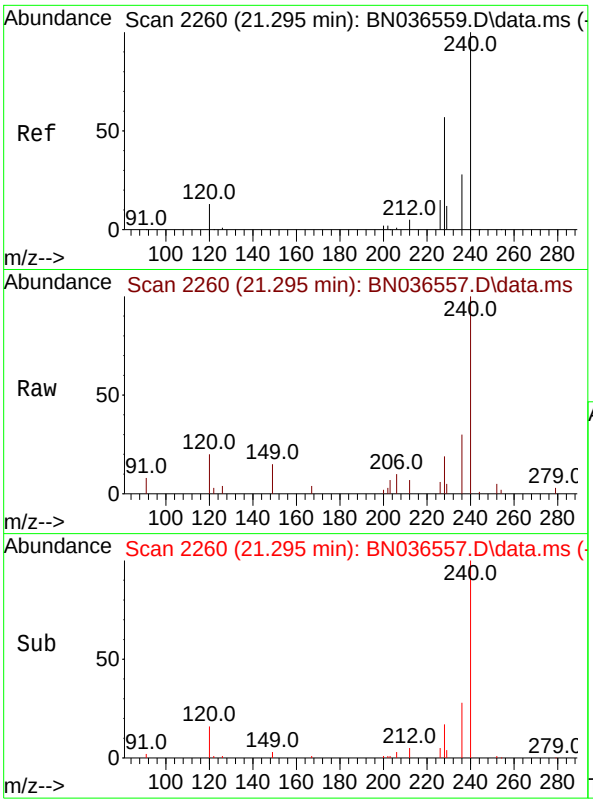




#28
Fluoranthene
Concen: 0.099 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 2772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 14.0 | 9.4 | 14.0 |
| 203 | 17.0 | 13.5 | 20.3 |



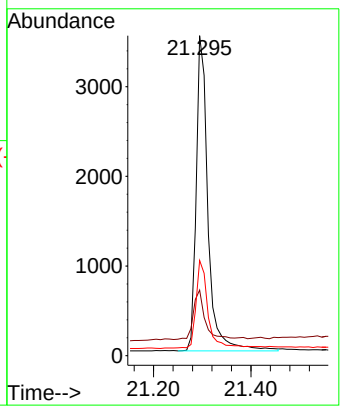


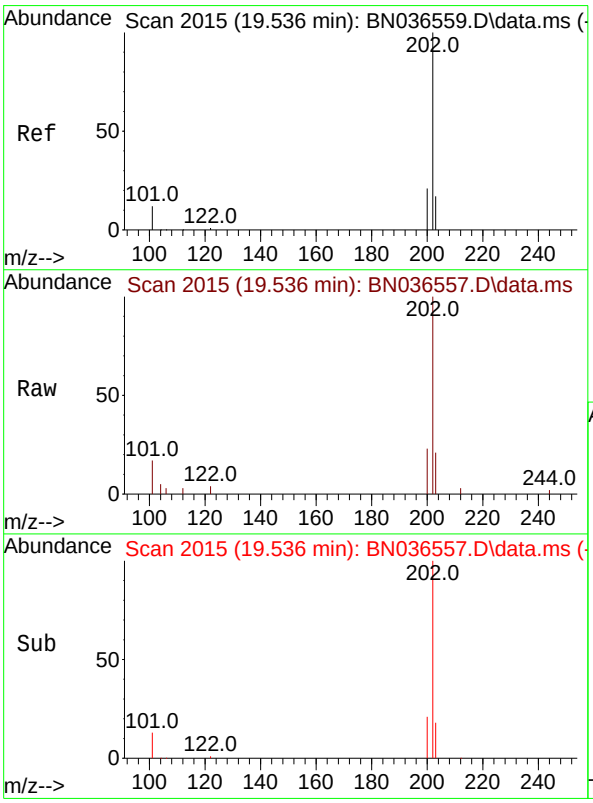

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:240 Resp: 5886

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

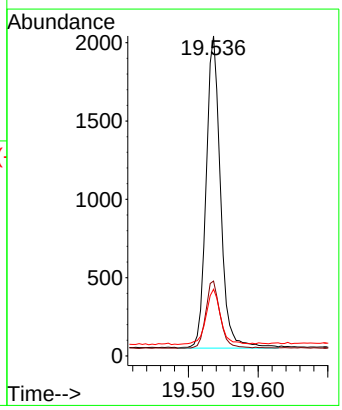


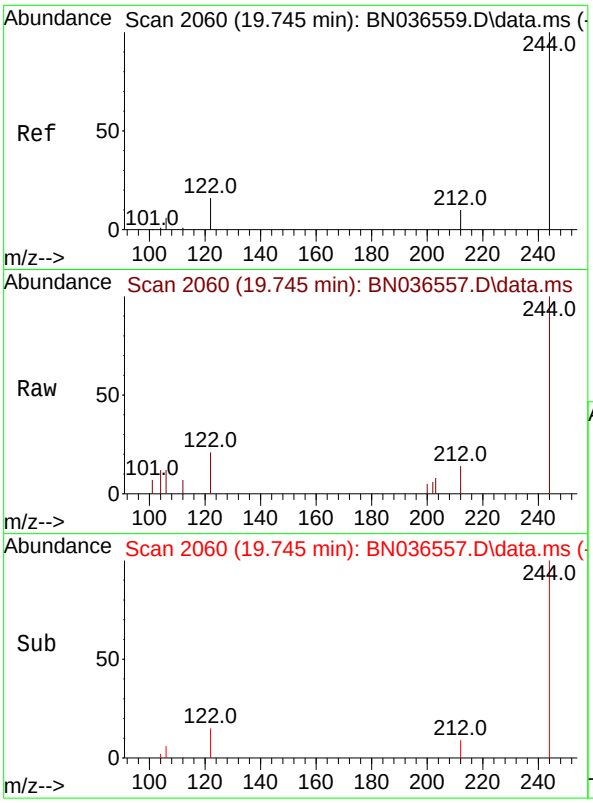




#30
Pyrene
Concen: 0.099 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 2862

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



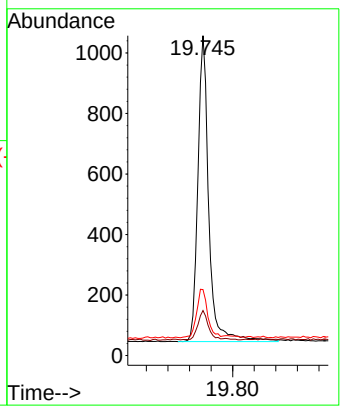


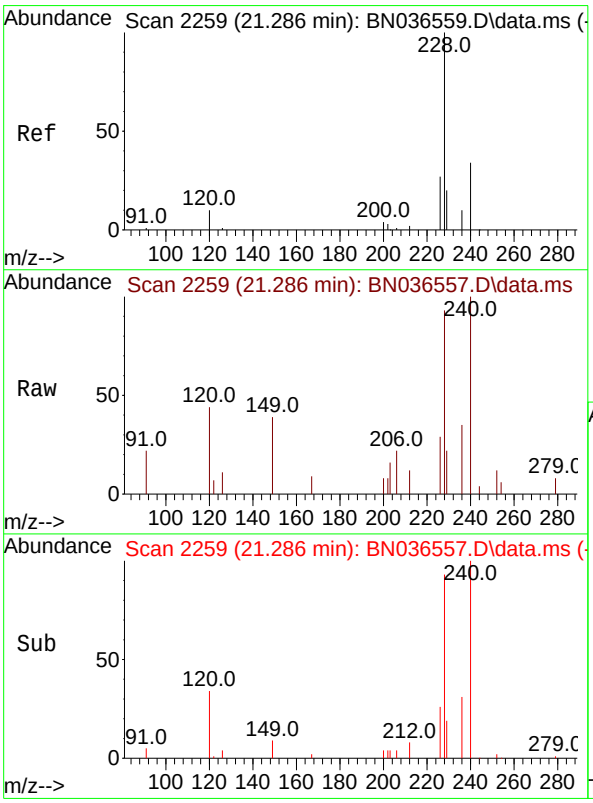

#31
Terphenyl-d14
Concen: 0.100 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:244 Resp: 1416

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

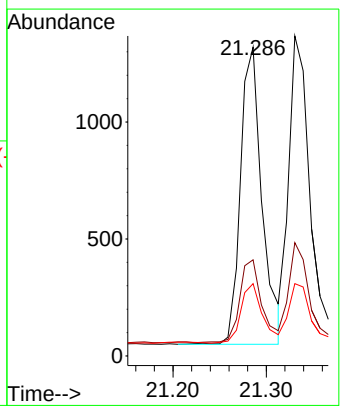


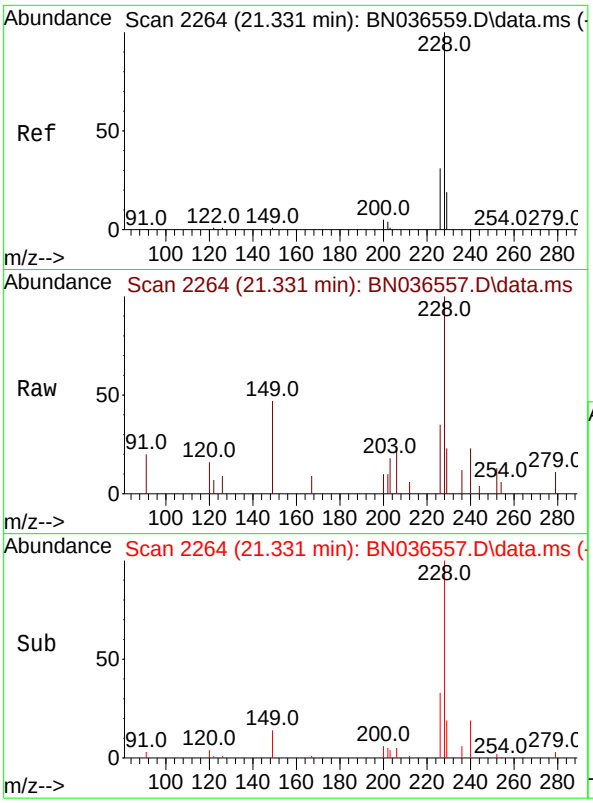




#32
Benzo(a)anthracene
Concen: 0.100 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:228 Resp: 2044

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



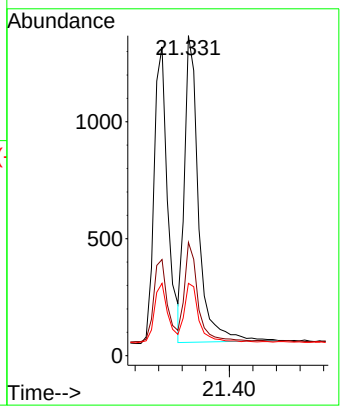


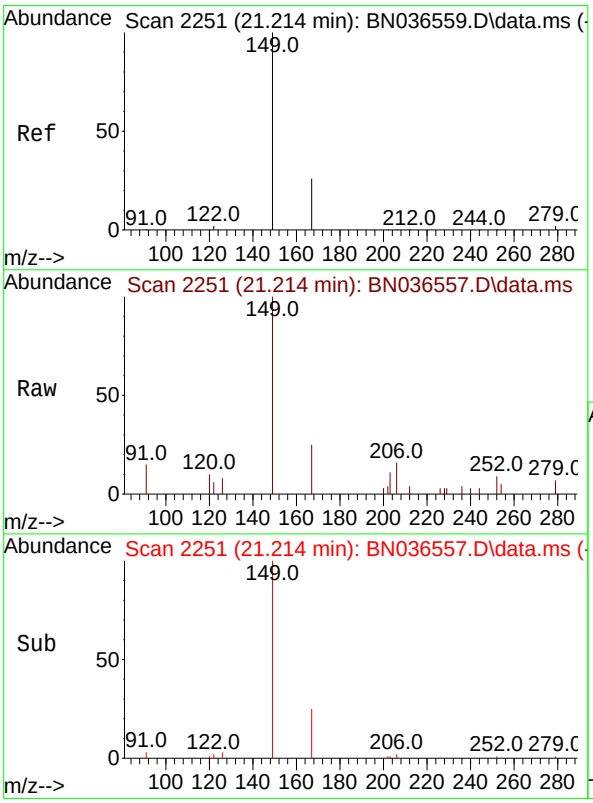

#33
Chrysene
Concen: 0.098 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:228 Resp: 2187

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

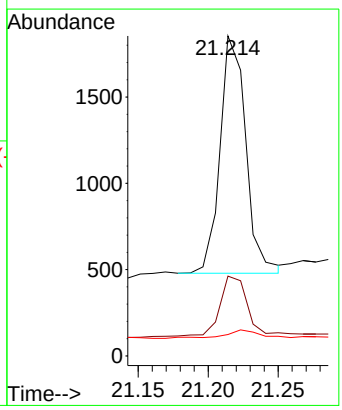


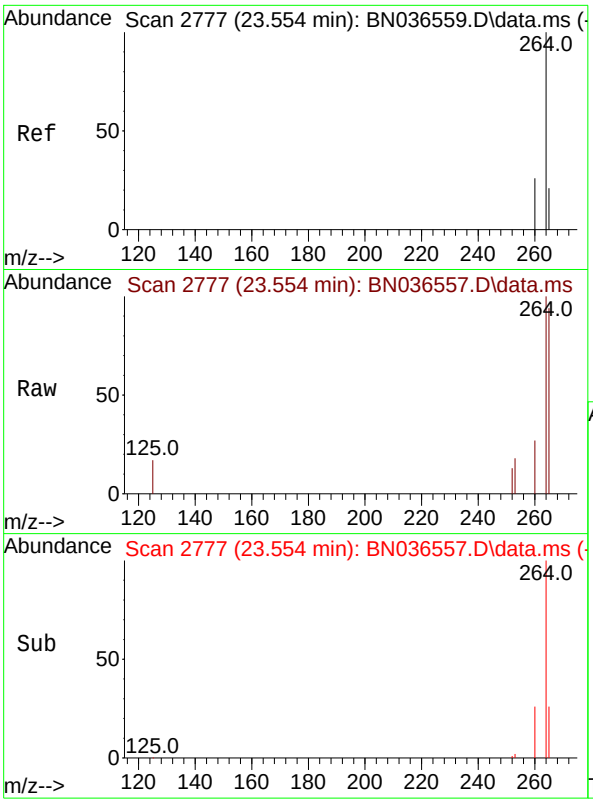




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.121 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:149 Resp: 1760

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



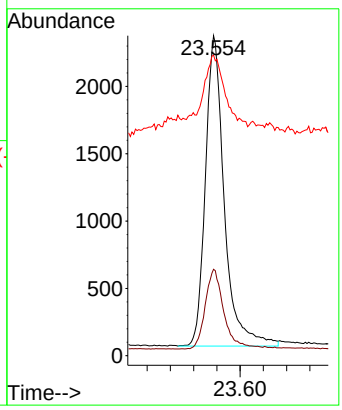


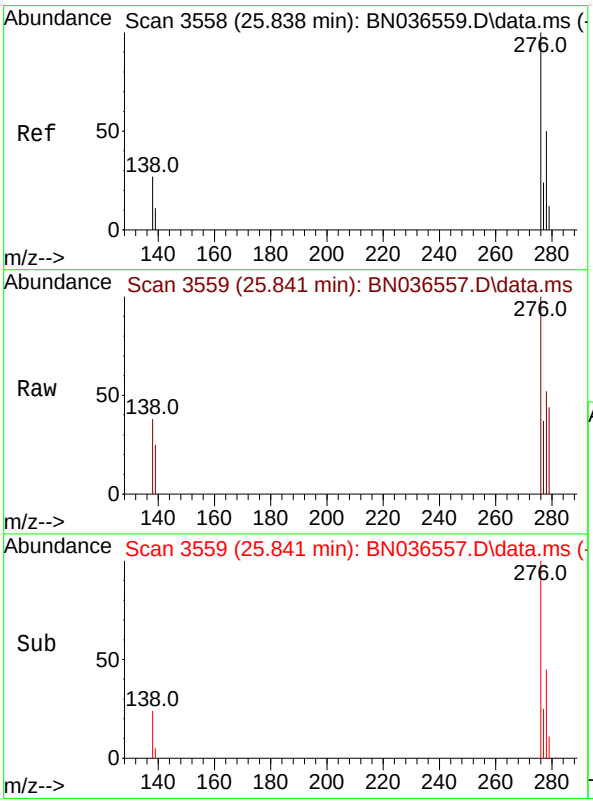

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:264 Resp: 5207

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

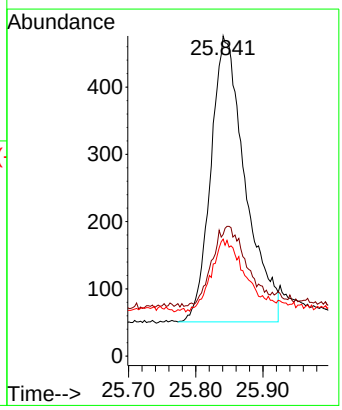


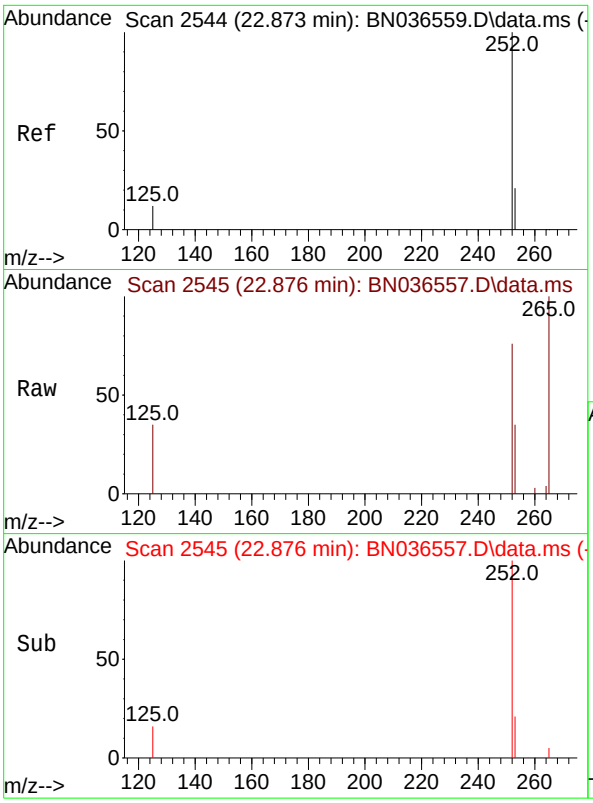




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.080 ng
RT: 25.841 min Scan# 3559
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:276 Resp: 1510

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.6 | 23.4 | 35.2 |
| 277 | 24.2 | 20.0 | 30.0 |



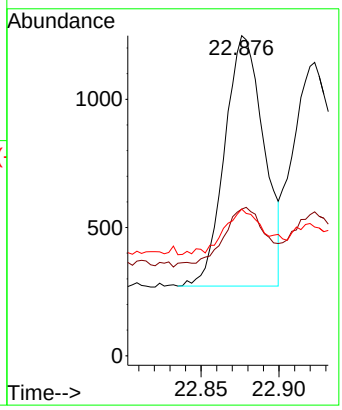


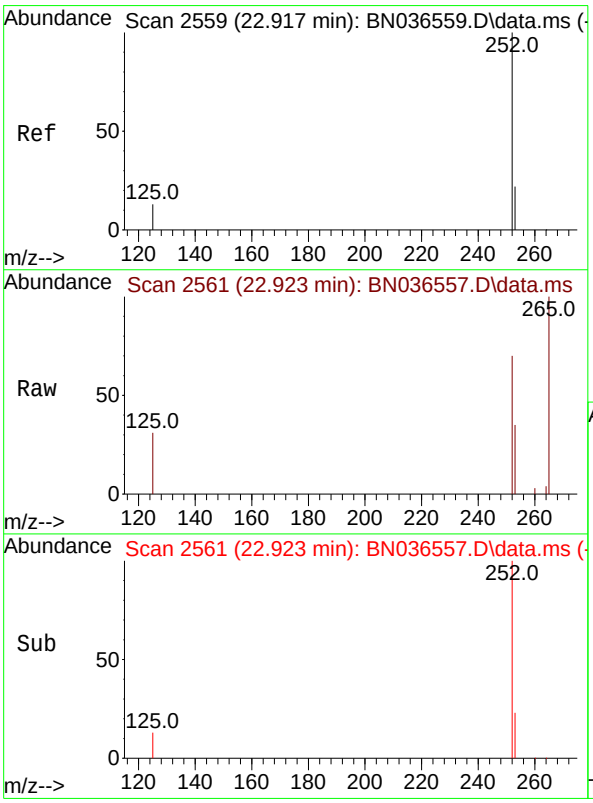

#37
Benzo(b)fluoranthene
Concen: 0.090 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:252 Resp: 1707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 45.8 | 23.9 | 35.9# |
| 125 | 45.8 | 17.4 | 26.2# |

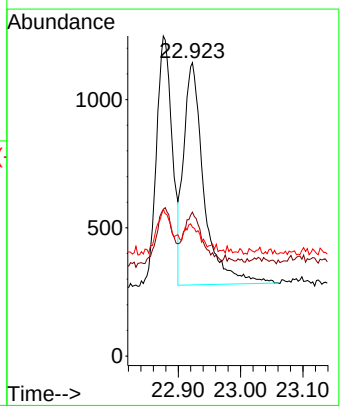


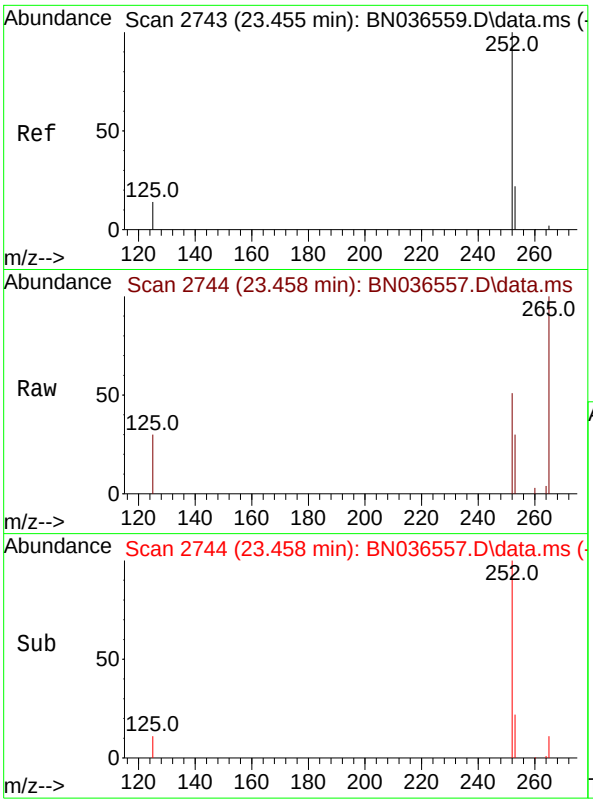




#38
Benzo(k)fluoranthene
Concen: 0.098 ng
RT: 22.923 min Scan# 2561
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 1958

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



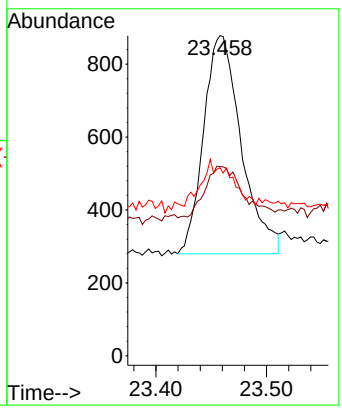


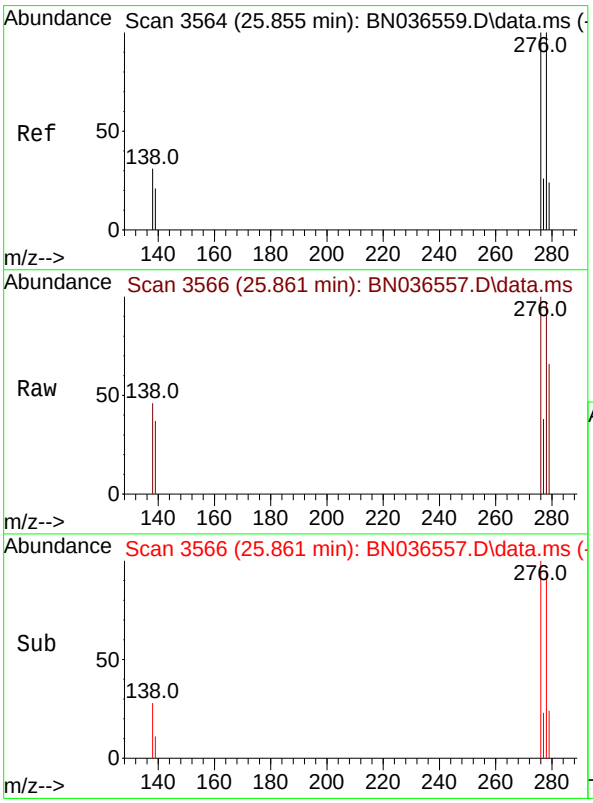

#39
Benzo(a)pyrene
Concen: 0.089 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:252 Resp: 1419

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

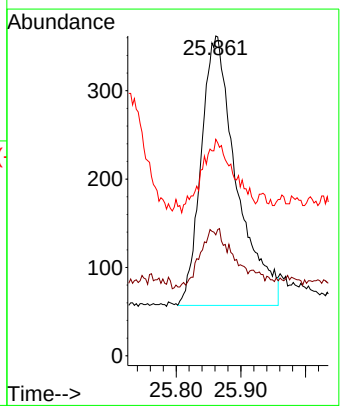


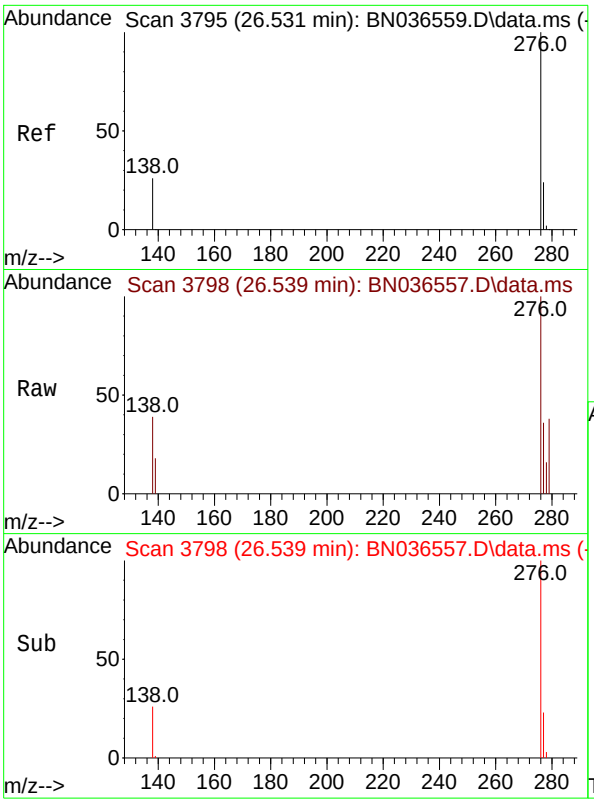




#40
Dibenzo(a,h)anthracene
Concen: 0.079 ng
RT: 25.861 min Scan# 3566
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:278 Resp: 1163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 37.8 | 20.8 | 31.2# |
| 279 | 67.7 | 28.8 | 43.2# |



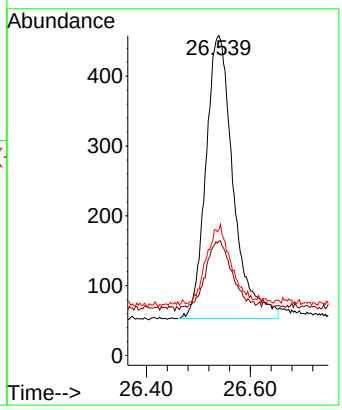



#41
Benzo(g,h,i)perylene
Concen: 0.089 ng
RT: 26.539 min Scan# 3
Delta R.T. 0.009 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.1

Tgt Ion:276 Resp: 1482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 35.8 | 22.2 | 33.4# |
| 138 | 39.3 | 24.1 | 36.1# |



Quantitation Report (Not Reviewed)

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

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

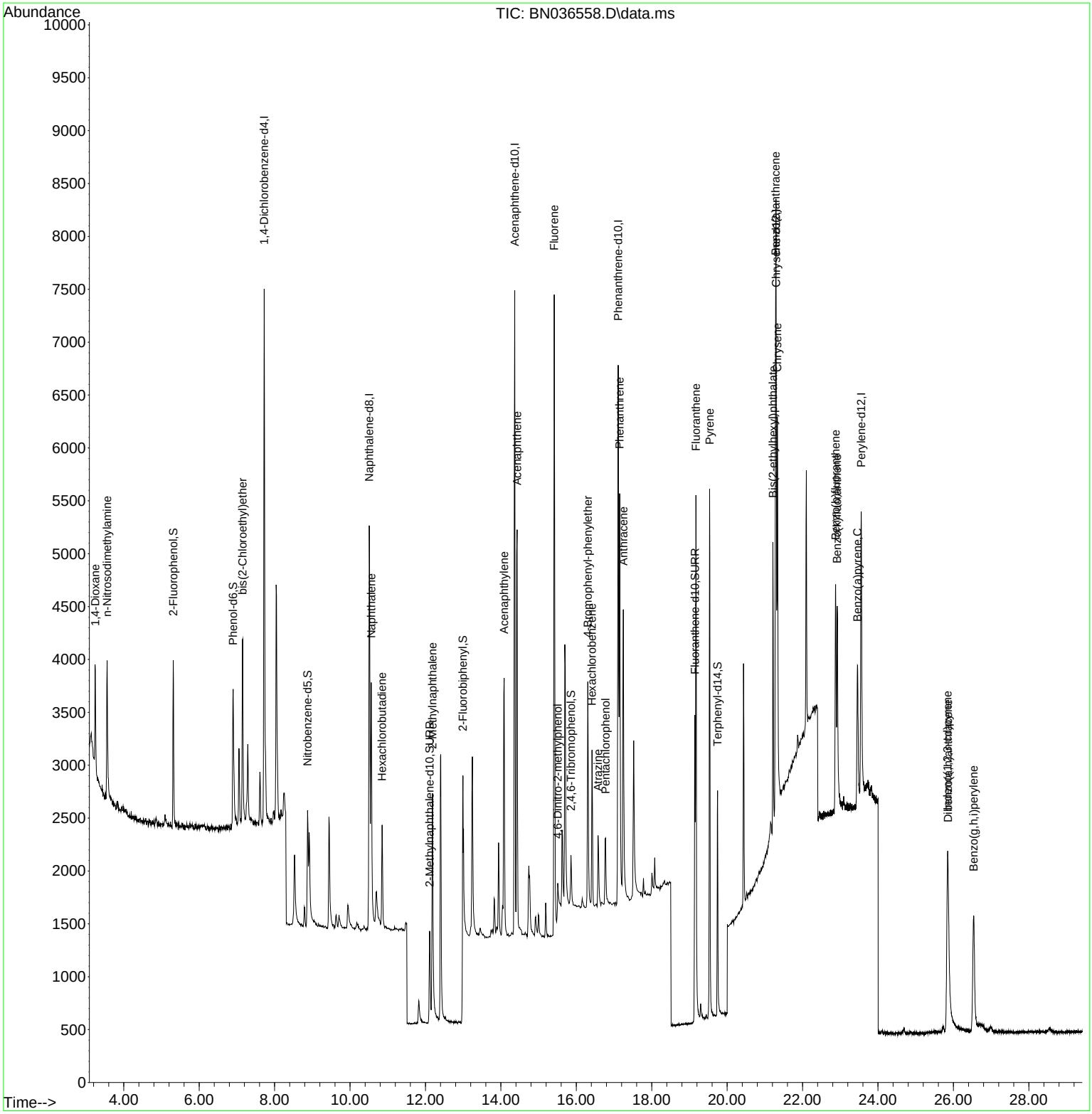
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.724 | 152 | 2504 | 0.400 | ng | | 0.00 |
| 7) Naphthalene-d8 | 10.509 | 136 | 5844 | 0.400 | ng | | 0.00 |
| 13) Acenaphthene-d10 | 14.366 | 164 | 3516 | 0.400 | ng | | 0.00 |
| 19) Phenanthrene-d10 | 17.111 | 188 | 7506 | 0.400 | ng | | 0.00 |
| 29) Chrysene-d12 | 21.295 | 240 | 4730 | 0.400 | ng | | 0.00 |
| 35) Perylene-d12 | 23.554 | 264 | 4241 | 0.400 | ng | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.312 | 112 | 1137 | 0.195 | ng | | 0.00 |
| 5) Phenol-d6 | 6.901 | 99 | 1323 | 0.184 | ng | | 0.00 |
| 8) Nitrobenzene-d5 | 8.875 | 82 | 1156 | 0.182 | ng | | 0.00 |
| 11) 2-Methylnaphthalene-d10 | 12.111 | 152 | 1603 | 0.184 | ng | | 0.00 |
| 14) 2,4,6-Tribromophenol | 15.858 | 330 | 282 | 0.177 | ng | | 0.00 |
| 15) 2-Fluorobiphenyl | 12.993 | 172 | 3485 | 0.170 | ng | | 0.00 |
| 27) Fluoranthene-d10 | 19.146 | 212 | 3583 | 0.186 | ng | | 0.00 |
| 31) Terphenyl-d14 | 19.745 | 244 | 2283 | 0.201 | ng | | 0.00 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.247 | 88 | 700 | 0.252 | ng | | 91 |
| 3) n-Nitrosodimethylamine | 3.557 | 42 | 1094 | 0.195 | ng | | 92 |
| 6) bis(2-Chloroethyl)ether | 7.154 | 93 | 1440 | 0.193 | ng | | 99 |
| 9) Naphthalene | 10.562 | 128 | 3286 | 0.191 | ng | | 97 |
| 10) Hexachlorobutadiene | 10.850 | 225 | 828 | 0.205 | ng | # | 97 |
| 12) 2-Methylnaphthalene | 12.187 | 142 | 2034 | 0.186 | ng | | 97 |
| 16) Acenaphthylene | 14.088 | 152 | 3087 | 0.186 | ng | | 100 |
| 17) Acenaphthene | 14.430 | 154 | 2038 | 0.188 | ng | | 99 |
| 18) Fluorene | 15.414 | 166 | 2813 | 0.191 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.510 | 198 | 214 | 0.258 | ng | # | 69 |
| 21) 4-Bromophenyl-phenylether | 16.304 | 248 | 853 | 0.181 | ng | | 93 |
| 22) Hexachlorobenzene | 16.416 | 284 | 1079 | 0.190 | ng | | 99 |
| 23) Atrazine | 16.578 | 200 | 716 | 0.190 | ng | | 97 |
| 24) Pentachlorophenol | 16.776 | 266 | 435 | 0.168 | ng | | 98 |
| 25) Phenanthrene | 17.148 | 178 | 4171 | 0.185 | ng | | 100 |
| 26) Anthracene | 17.248 | 178 | 3645 | 0.179 | ng | | 99 |
| 28) Fluoranthene | 19.174 | 202 | 4666 | 0.184 | ng | | 99 |
| 30) Pyrene | 19.536 | 202 | 4742 | 0.205 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.286 | 228 | 3111 | 0.189 | ng | | 97 |
| 33) Chrysene | 21.331 | 228 | 3568 | 0.199 | ng | | 97 |
| 34) Bis(2-ethylhexyl)phtha... | 21.214 | 149 | 2601 | 0.222 | ng | # | 97 |
| 36) Indeno(1,2,3-cd)pyrene | 25.844 | 276 | 2790 | 0.182 | ng | | 98 |
| 37) Benzo(b)fluoranthene | 22.876 | 252 | 2883 | 0.187 | ng | # | 83 |
| 38) Benzo(k)fluoranthene | 22.917 | 252 | 2962 | 0.183 | ng | # | 86 |
| 39) Benzo(a)pyrene | 23.458 | 252 | 2443 | 0.188 | ng | # | 76 |
| 40) Dibenzo(a,h)anthracene | 25.858 | 278 | 2080 | 0.175 | ng | # | 83 |
| 41) Benzo(g,h,i)perylene | 26.536 | 276 | 2573 | 0.189 | ng | | 95 |

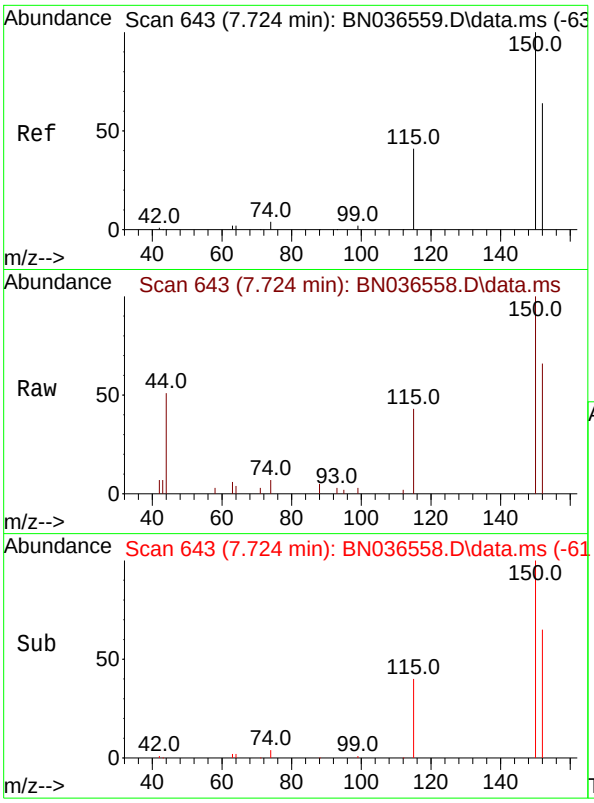
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

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



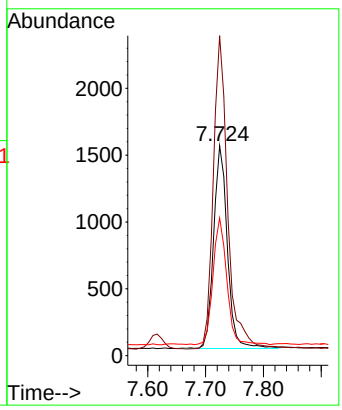


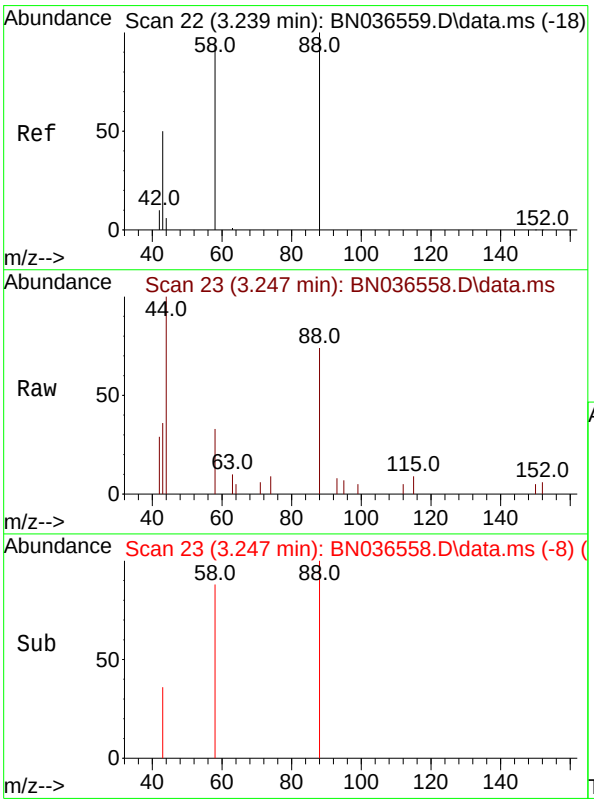

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:152 Resp: 2504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.3 | 123.7 | 185.5 |
| 115 | 65.5 | 54.3 | 81.5 |

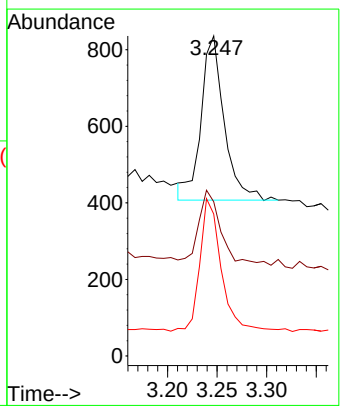


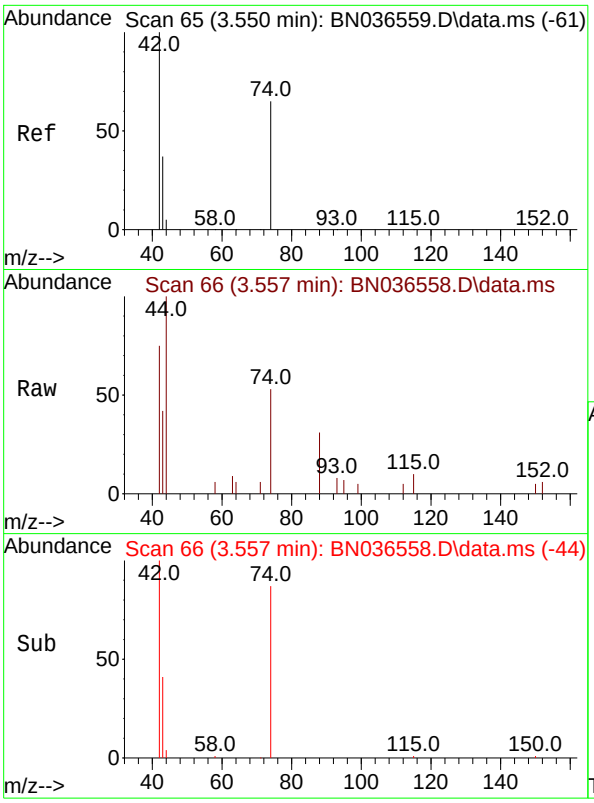




#2
1,4-Dioxane
Concen: 0.252 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 88 Resp: 700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 44.4 | 37.8 | 56.8 |
| 58 | 73.7 | 67.4 | 101.2 |



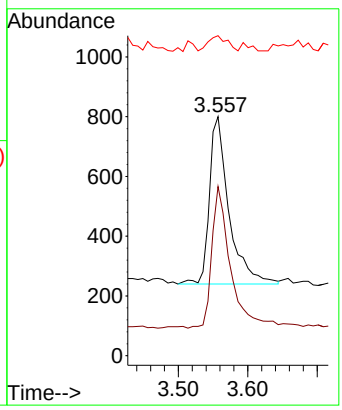


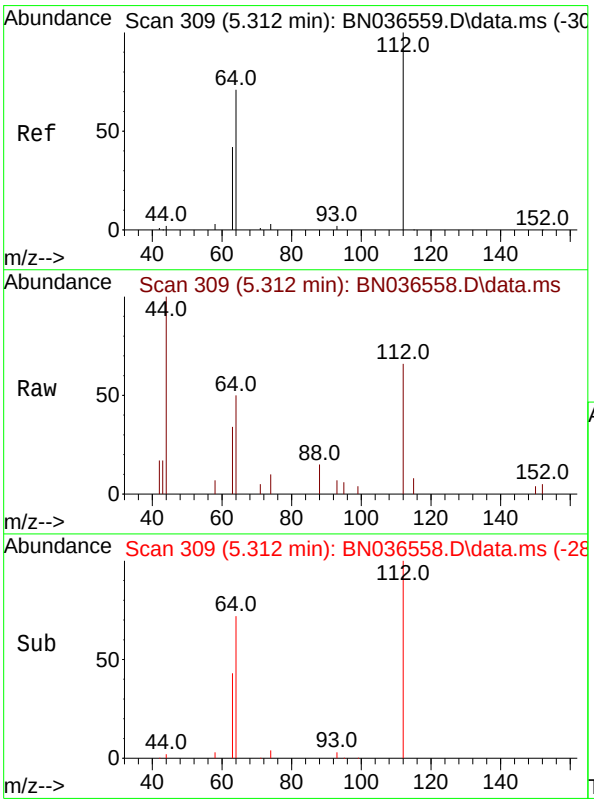

#3
n-Nitrosodimethylamine
Concen: 0.195 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion: 42 Resp: 1094

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 83.2 | 60.6 | 90.8 |
| 44 | 8.5 | 6.3 | 9.5 |

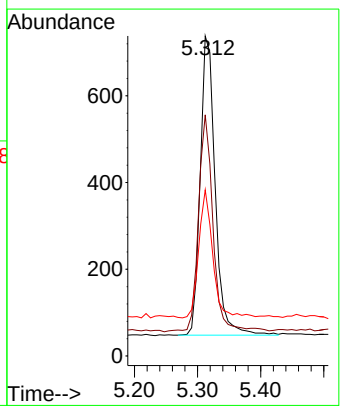


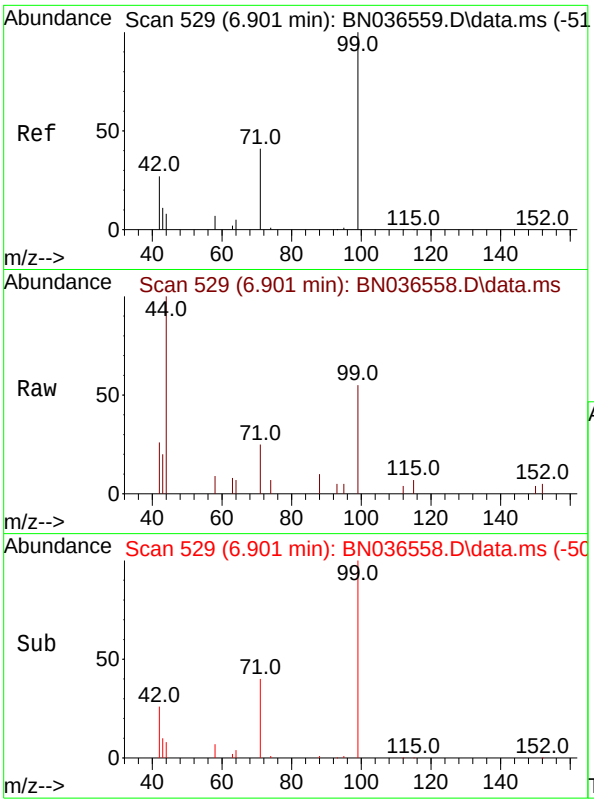




#4
2-Fluorophenol
Concen: 0.195 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:112 Resp: 1137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 70.6 | 53.1 | 79.7 |
| 63 | 40.3 | 31.8 | 47.8 |



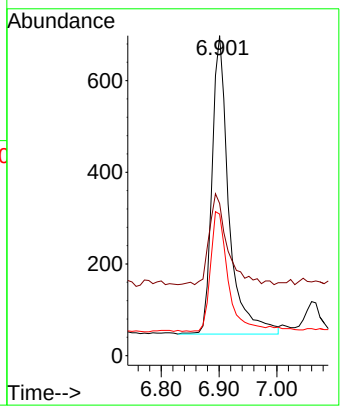


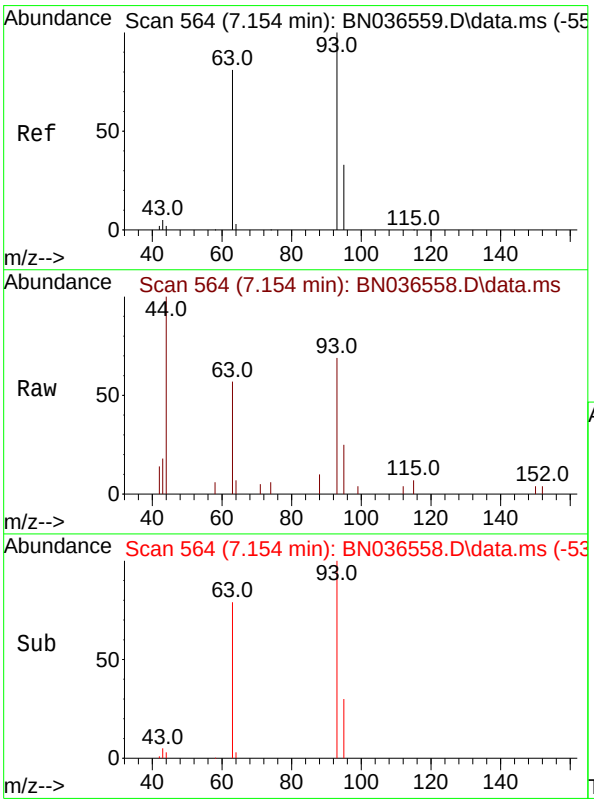

#5
Phenol-d6
Concen: 0.184 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion: 99 Resp: 1323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 32.7 | 26.5 | 39.7 |
| 71 | 41.3 | 34.1 | 51.1 |

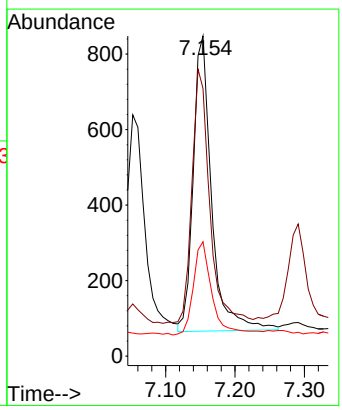


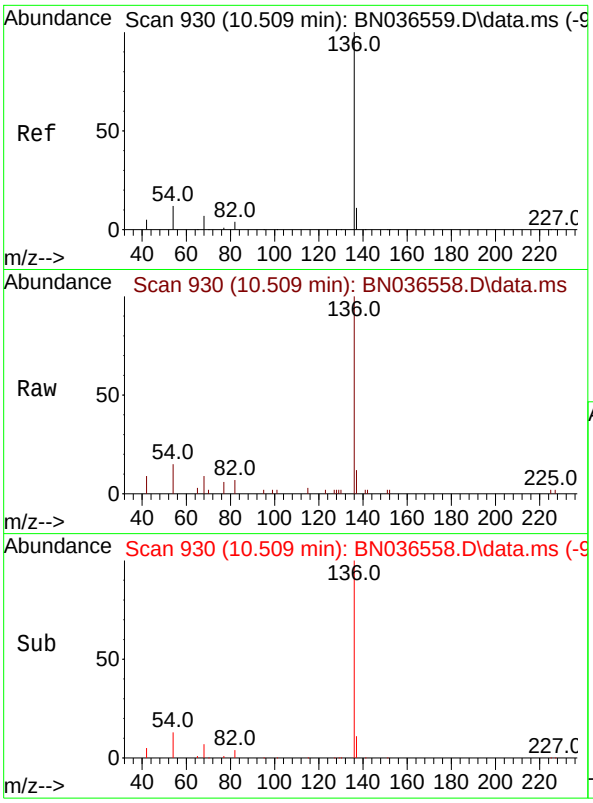




#6
bis(2-Chloroethyl)ether
Concen: 0.193 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 93 Resp: 1440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 82.9 | 67.7 | 101.5 |
| 95 | 31.9 | 25.6 | 38.4 |



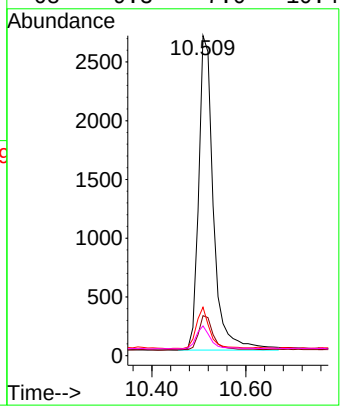


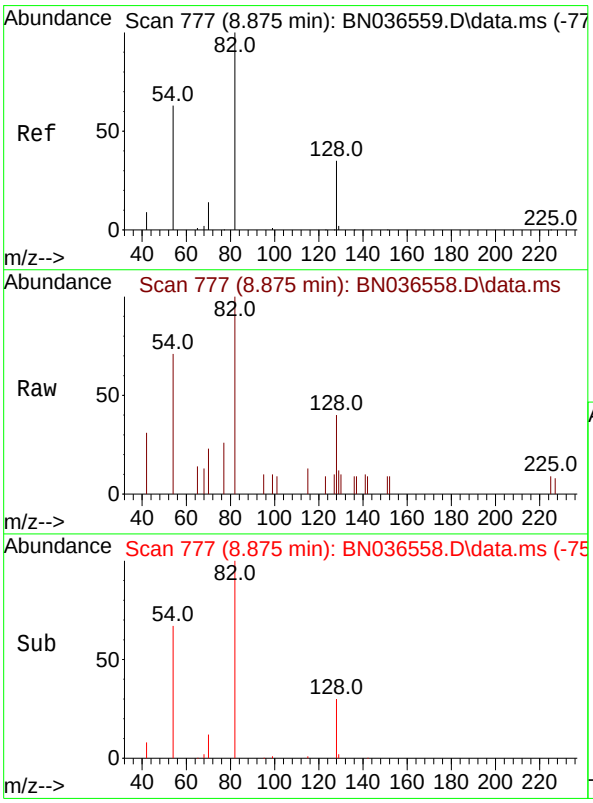

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:136 Resp: 5844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.5 | 10.3 | 15.5 |
| 54 | 15.1 | 11.5 | 17.3 |
| 68 | 9.3 | 7.0 | 10.4 |

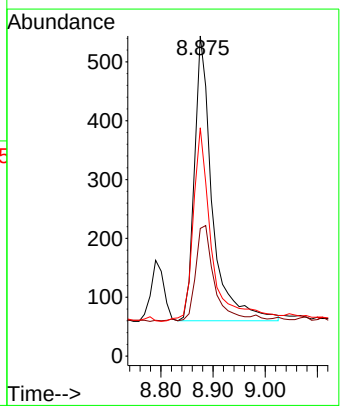


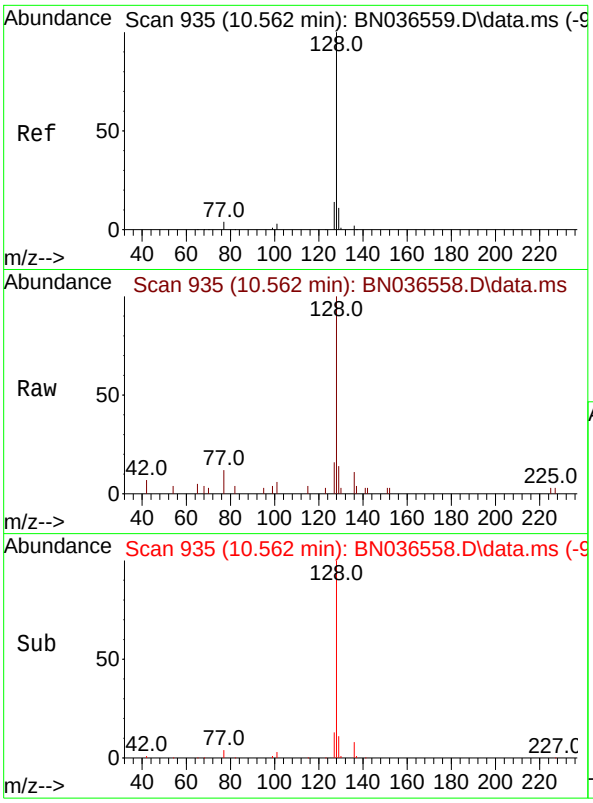




#8
Nitrobenzene-d5
Concen: 0.182 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 82 Resp: 1156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 39.9 | 30.6 | 45.8 |
| 54 | 71.3 | 52.2 | 78.4 |



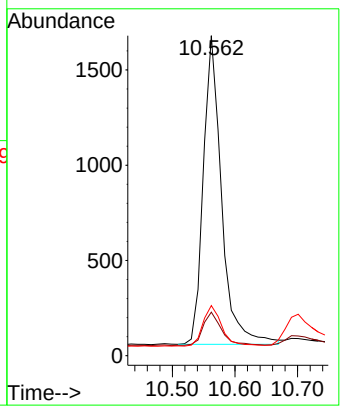


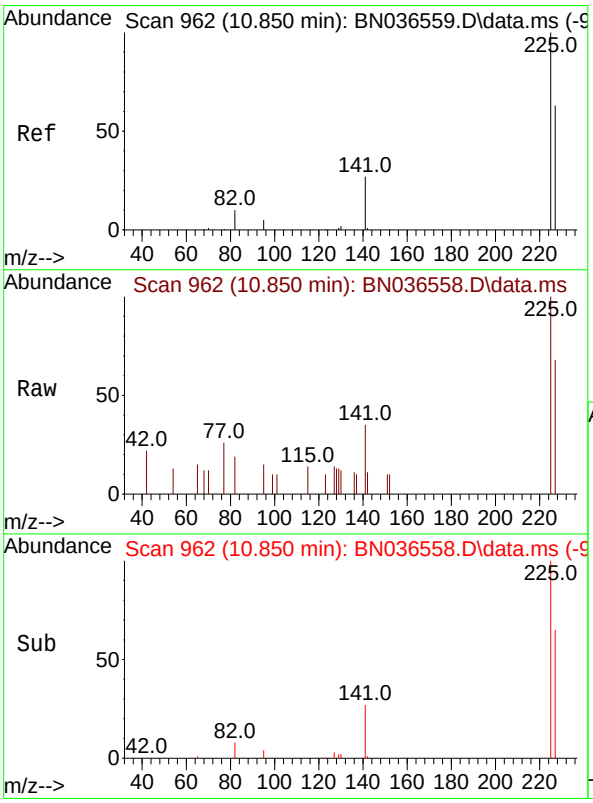

#9
Naphthalene
Concen: 0.191 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:128 Resp: 3286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 13.6 | 9.8 | 14.6 |
| 127 | 15.7 | 11.8 | 17.8 |

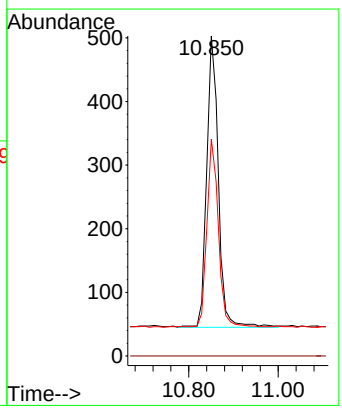


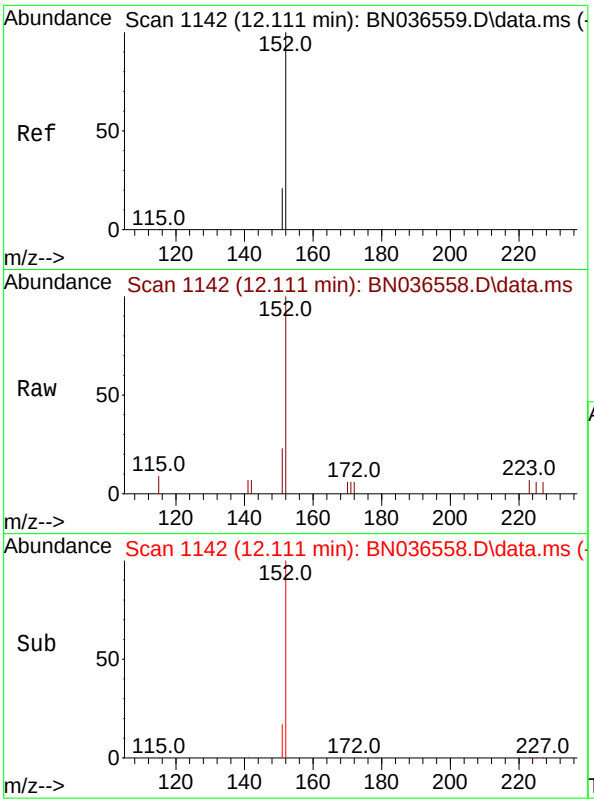




#10
Hexachlorobutadiene
Concen: 0.205 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:225 Resp: 828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 62.6 | 51.8 | 77.8 |



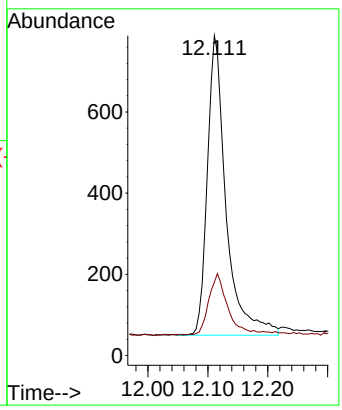


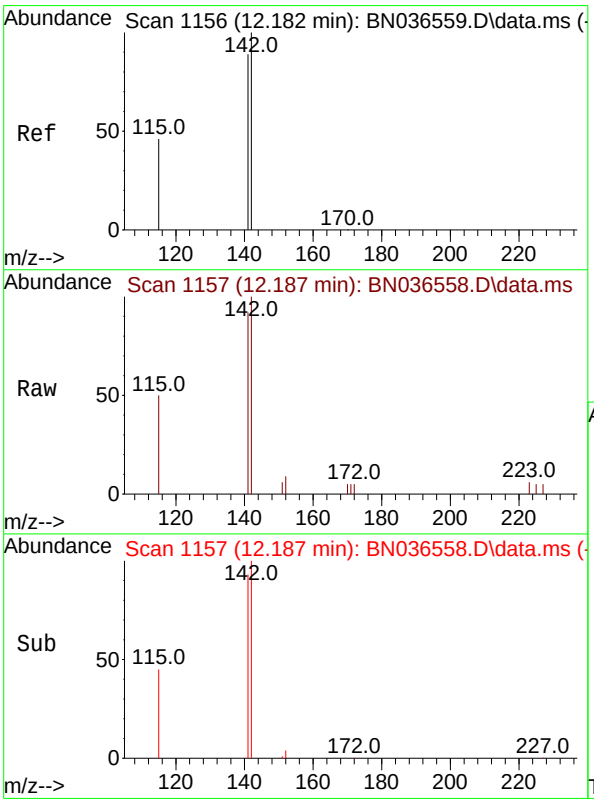

#11
2-Methylnaphthalene-d10
Concen: 0.184 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:152 Resp: 1603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.0 | 17.0 | 25.6 |

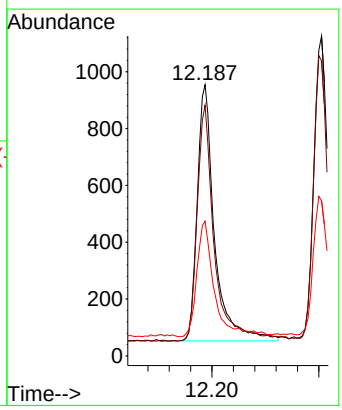


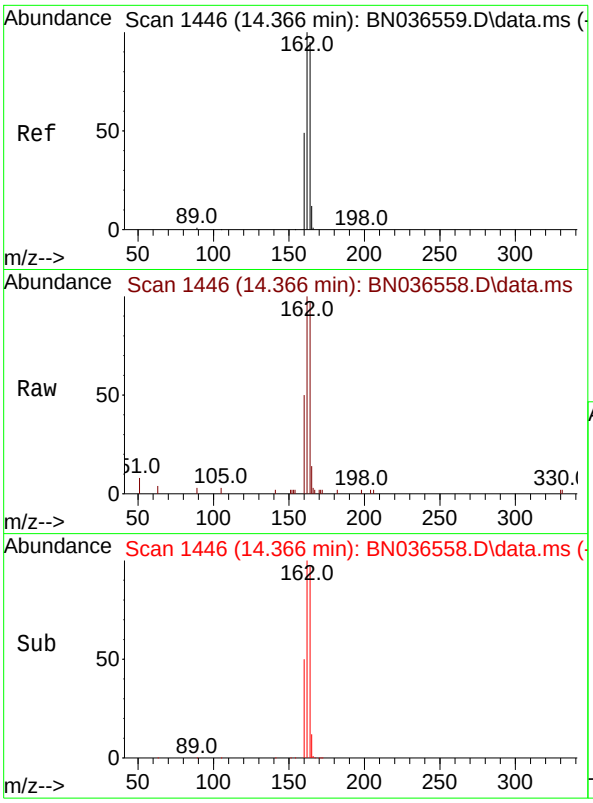




#12
2-Methylnaphthalene
Concen: 0.186 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:142 Resp: 2034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 92.5 | 71.7 | 107.5 |
| 115 | 49.7 | 38.3 | 57.5 |



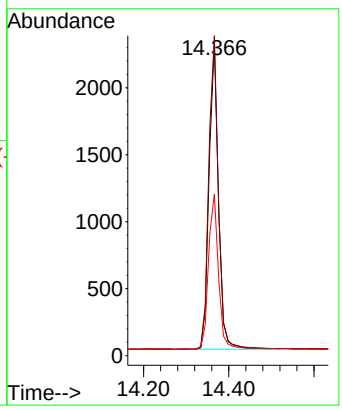


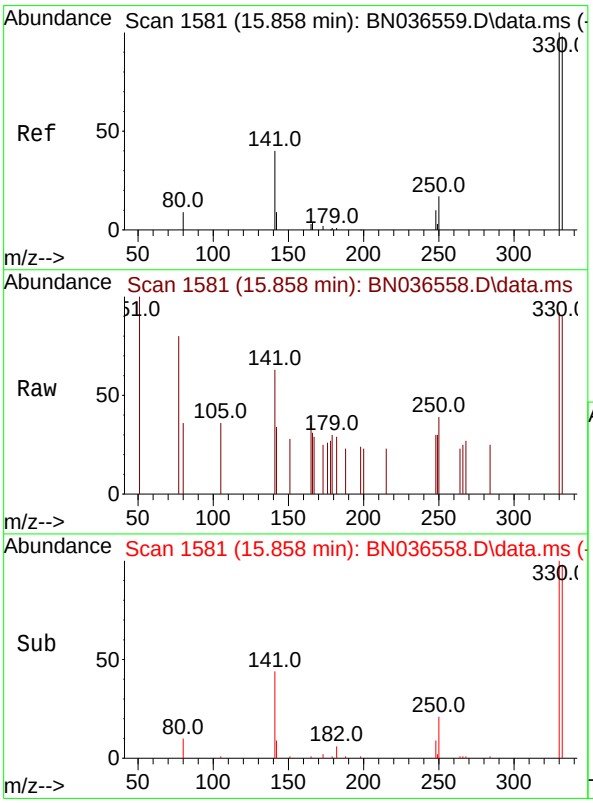

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:164 Resp: 3516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 102.6 | 84.2 | 126.2 |
| 160 | 51.8 | 42.2 | 63.2 |

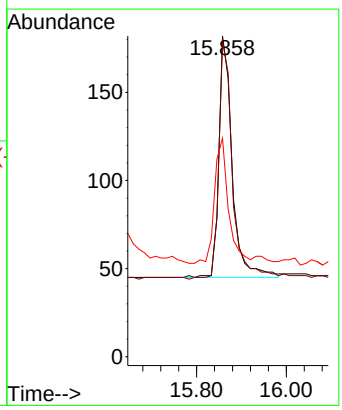


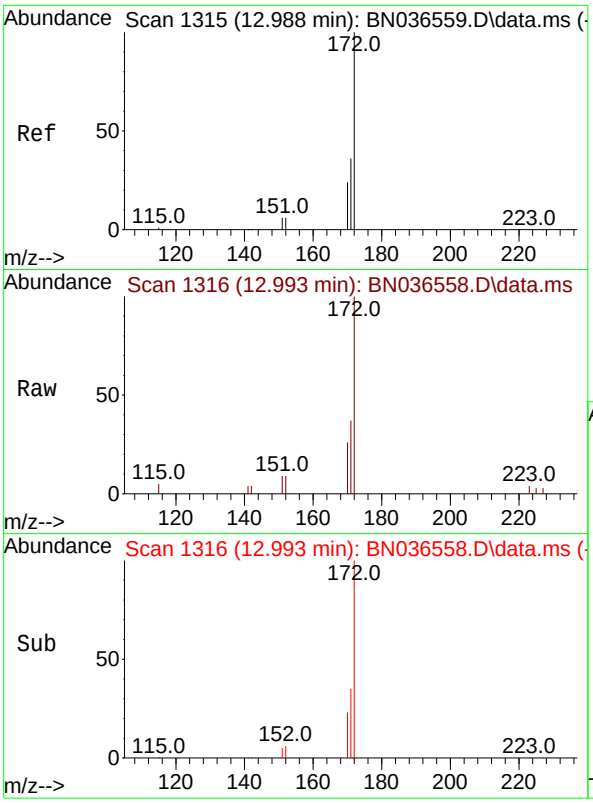




#14
2,4,6-Tribromophenol
Concen: 0.177 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:330 Resp: 282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 103.5 | 75.2 | 112.8 |
| 141 | 53.9 | 43.4 | 65.2 |



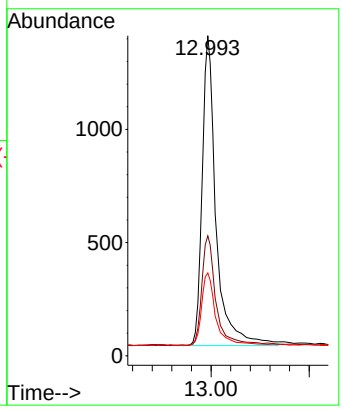


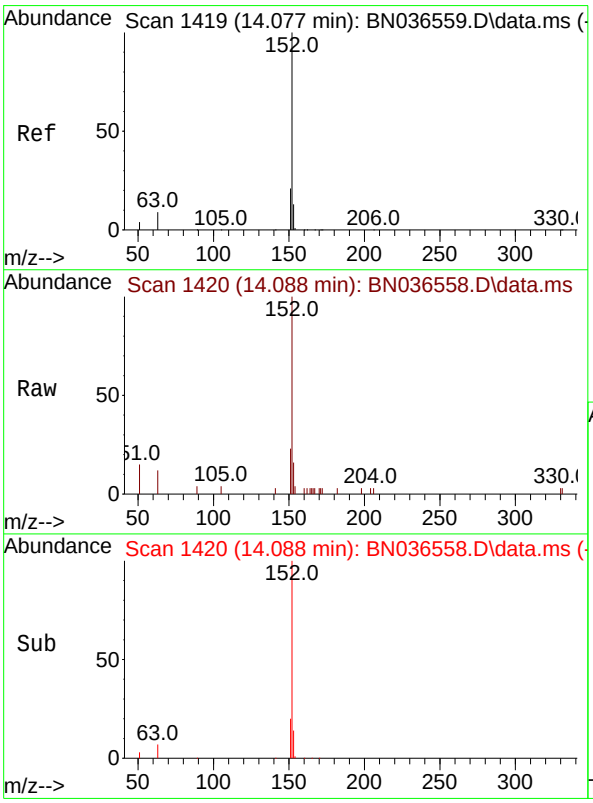

#15
2-Fluorobiphenyl
Concen: 0.170 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:172 Resp: 3485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.5 | 29.5 | 44.3 |
| 170 | 25.9 | 20.2 | 30.4 |

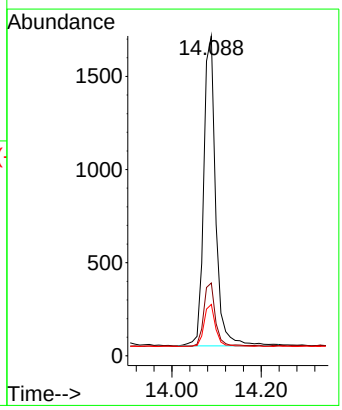


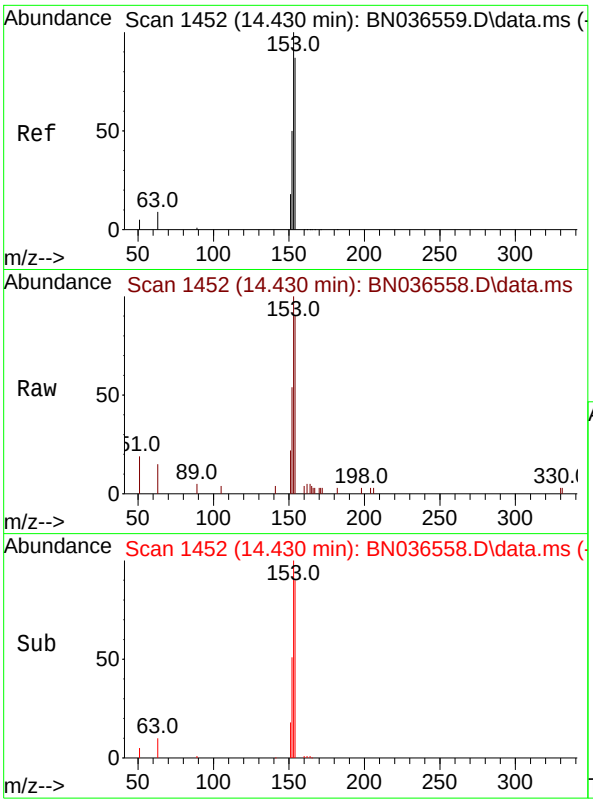




#16
Acenaphthylene
Concen: 0.186 ng
RT: 14.088 min Scan# 1420
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 3087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.4 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |



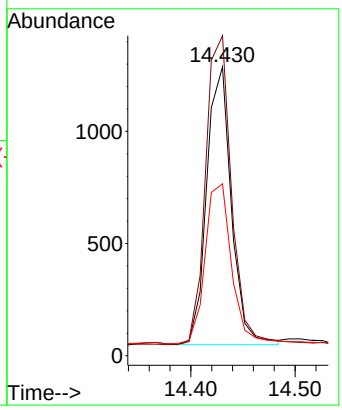


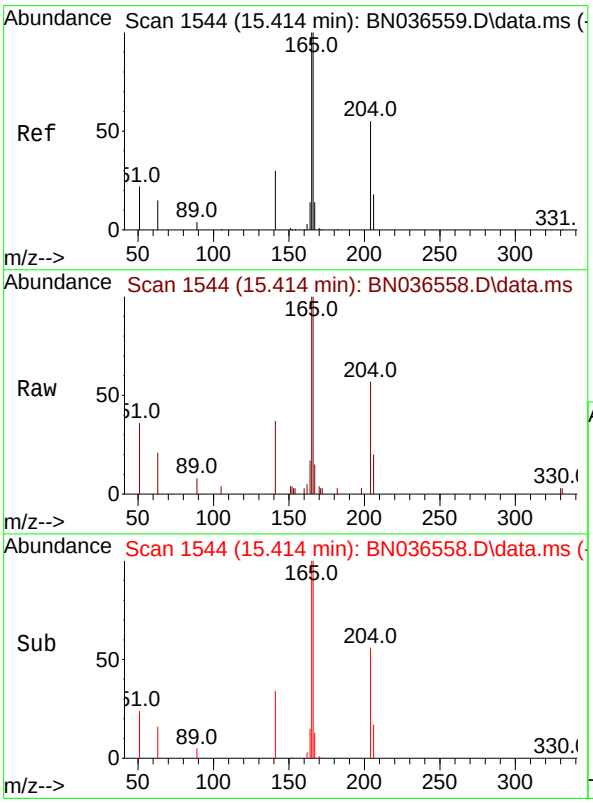

#17
Acenaphthene
Concen: 0.188 ng
RT: 14.430 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:154 Resp: 2038

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.8 | 94.1 | 141.1 |
| 152 | 63.1 | 49.8 | 74.6 |

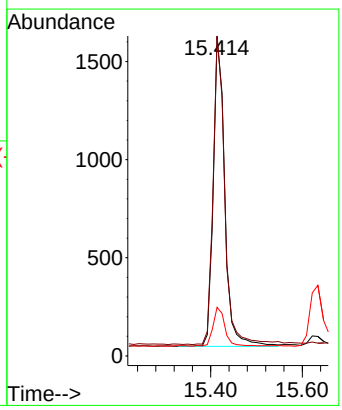


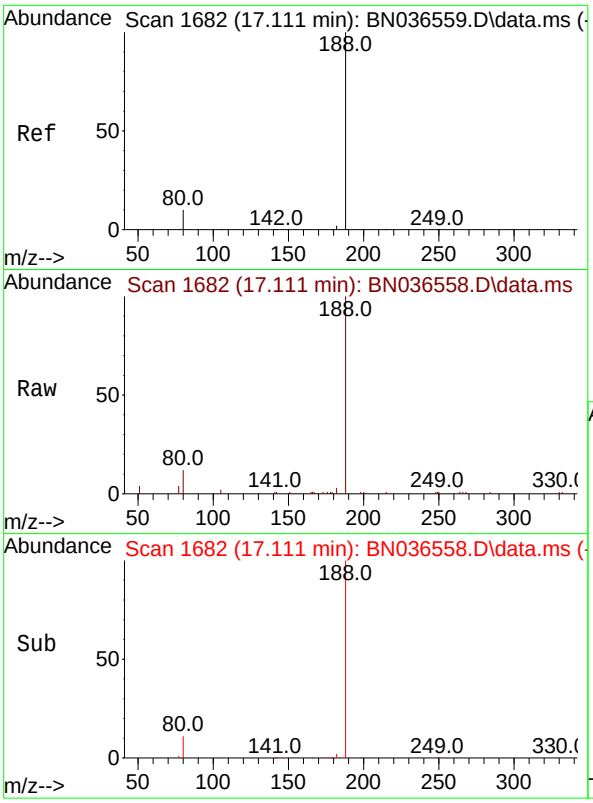




#18
Fluorene
Concen: 0.191 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:166 Resp: 2813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 101.1 | 79.8 | 119.8 |
| 167 | 12.6 | 10.6 | 15.8 |



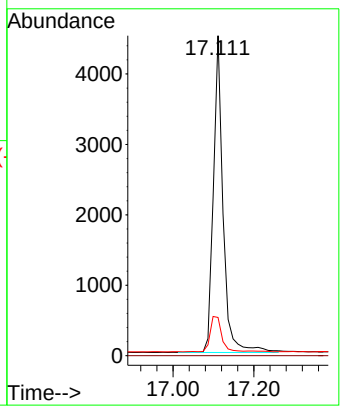


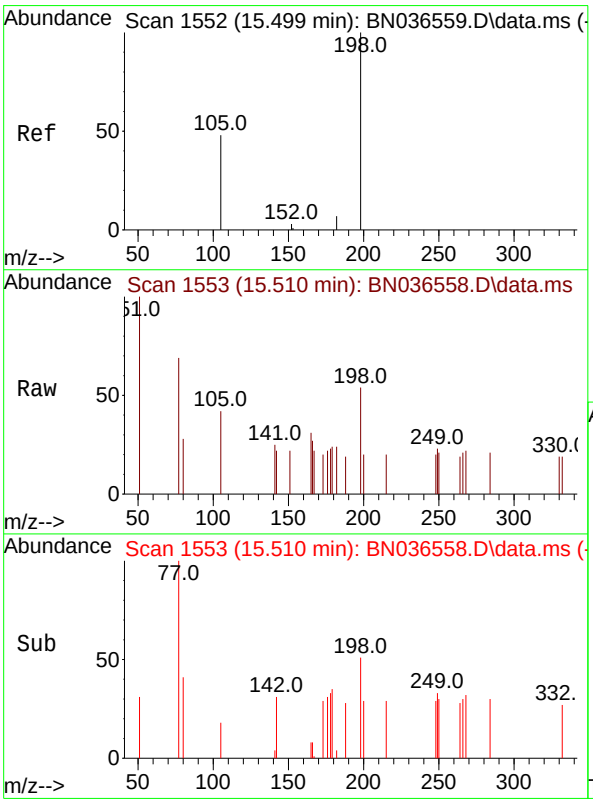

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:188 Resp: 7506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.9 | 8.8 | 13.2 |

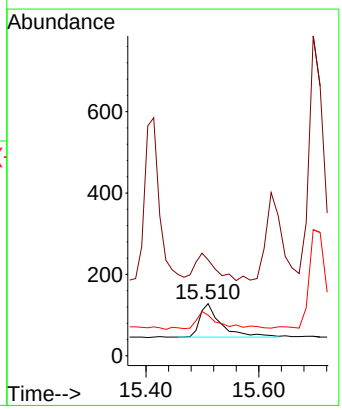


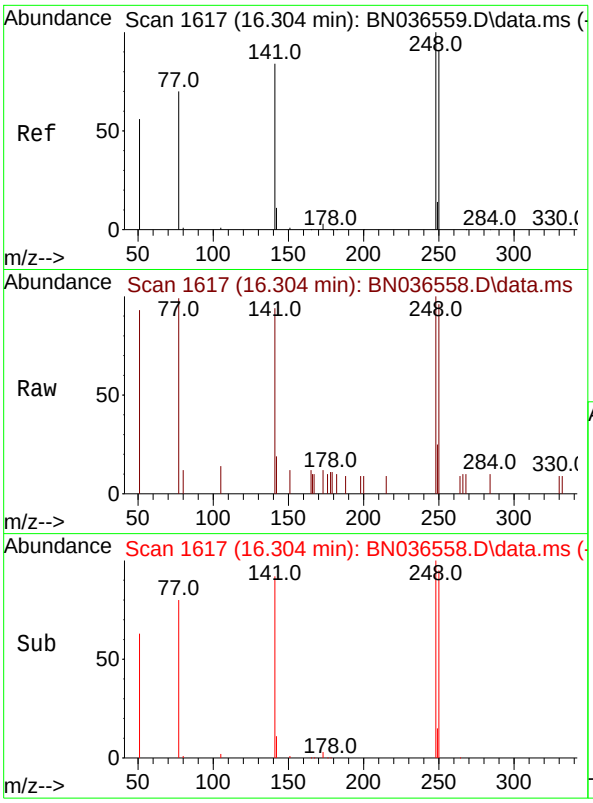




#20
4,6-Dinitro-2-methylphenol
Concen: 0.258 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:198 Resp: 214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 184.4 | 107.9 | 161.9# |
| 105 | 78.1 | 56.2 | 84.2 |



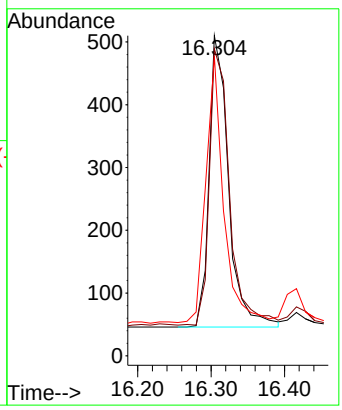


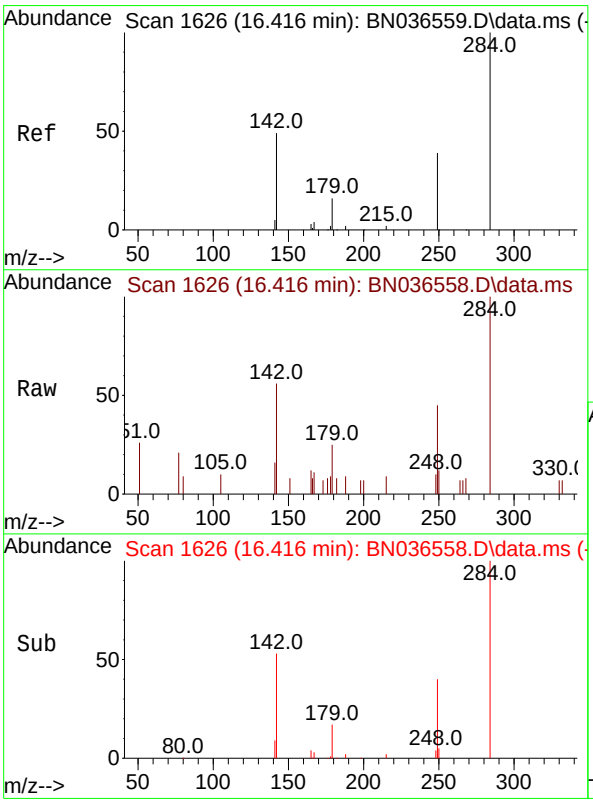

#21
4-Bromophenyl-phenylether
Concen: 0.181 ng
RT: 16.304 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:248 Resp: 853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 95.9 | 73.0 | 109.6 |
| 141 | 93.7 | 68.6 | 103.0 |

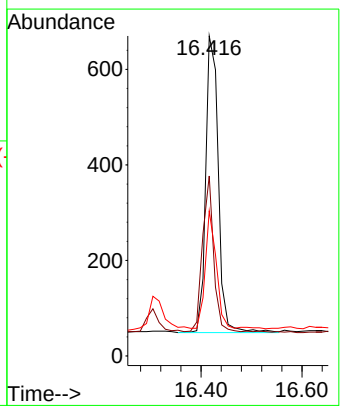


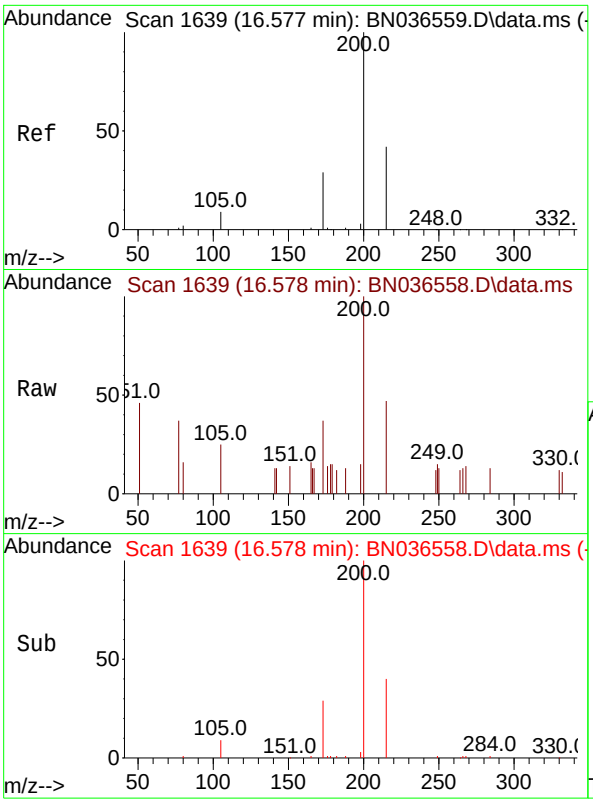




#22
Hexachlorobenzene
Concen: 0.190 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:284 Resp: 1079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 47.0 | 37.0 | 55.4 |
| 249 | 34.8 | 28.1 | 42.1 |



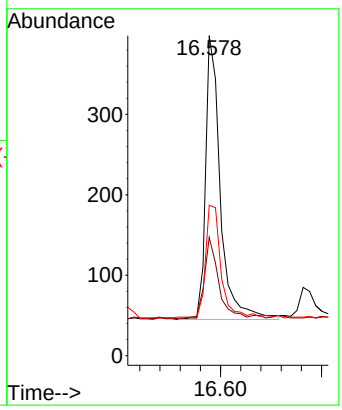


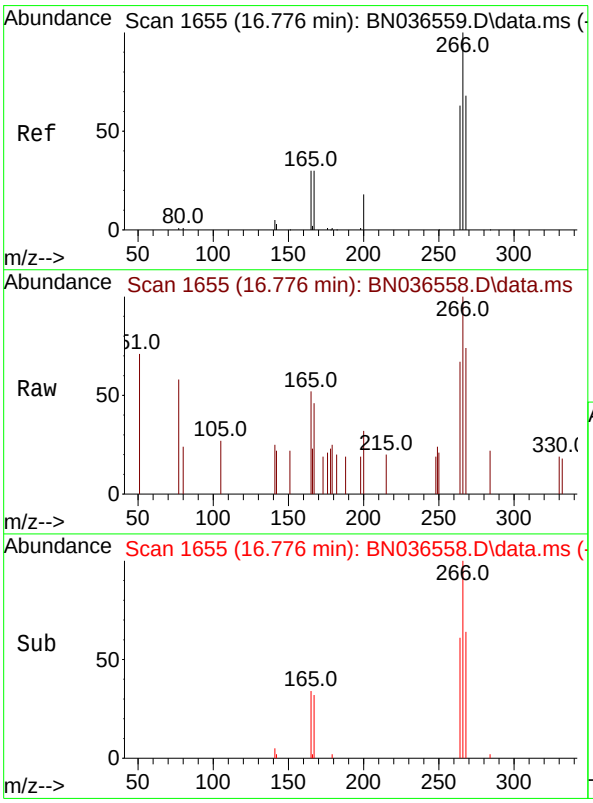

#23
Atrazine
Concen: 0.190 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:200 Resp: 716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.9 | 27.3 | 40.9 |
| 215 | 47.0 | 36.8 | 55.2 |

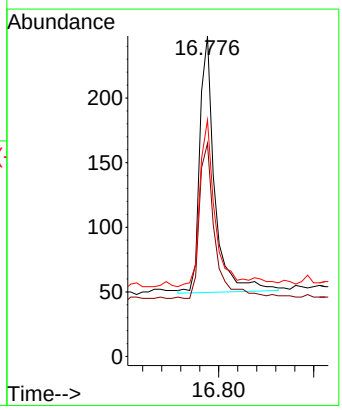


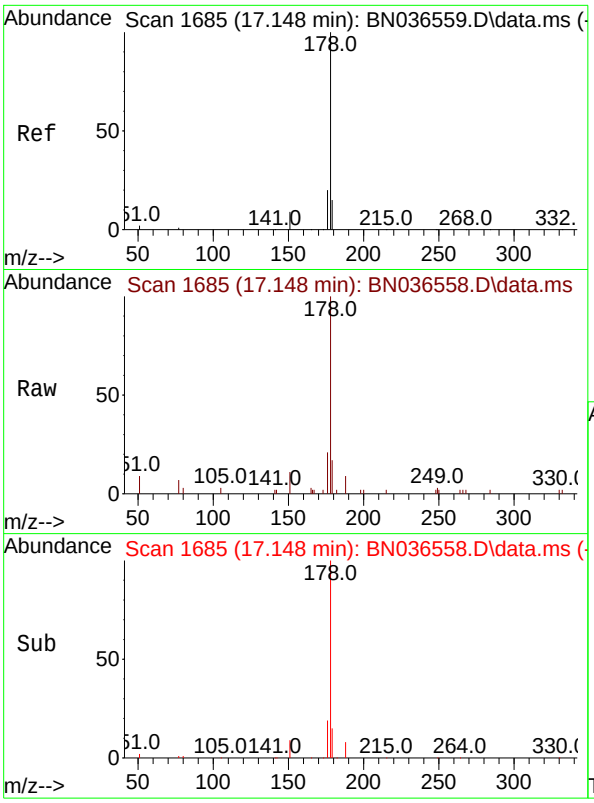




#24
Pentachlorophenol
Concen: 0.168 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:266 Resp: 435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.4 | 49.6 | 74.4 |
| 268 | 65.7 | 50.9 | 76.3 |



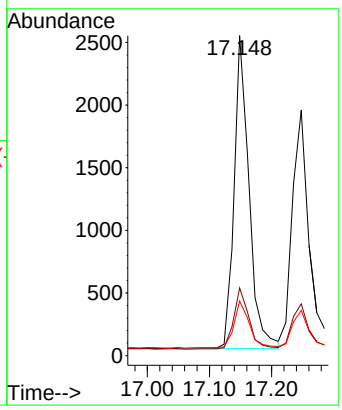


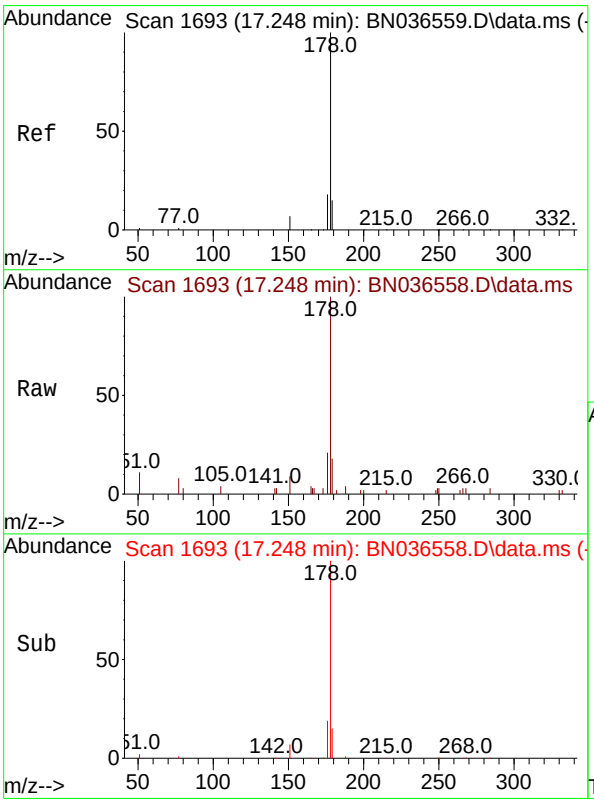

#25
Phenanthrene
Concen: 0.185 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:178 Resp: 4171

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 20.0 | 15.9 | 23.9 |
| 179 | 15.5 | 12.2 | 18.4 |

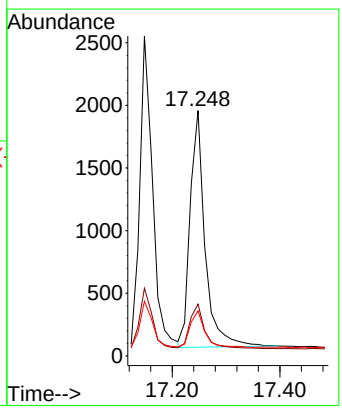


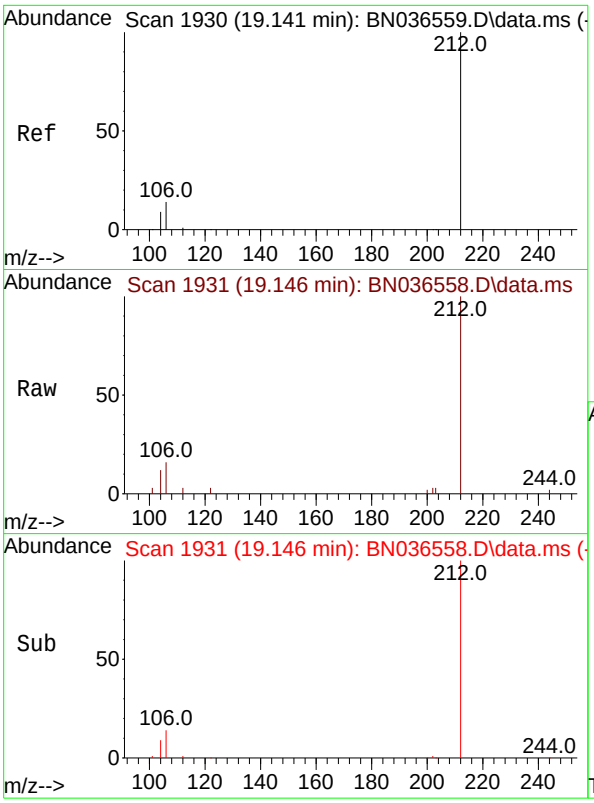




#26
Anthracene
Concen: 0.179 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:178 Resp: 3645

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.1 | 15.4 | 23.2 |
| 179 | 15.1 | 12.6 | 18.8 |



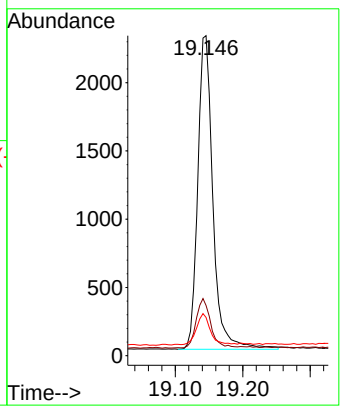


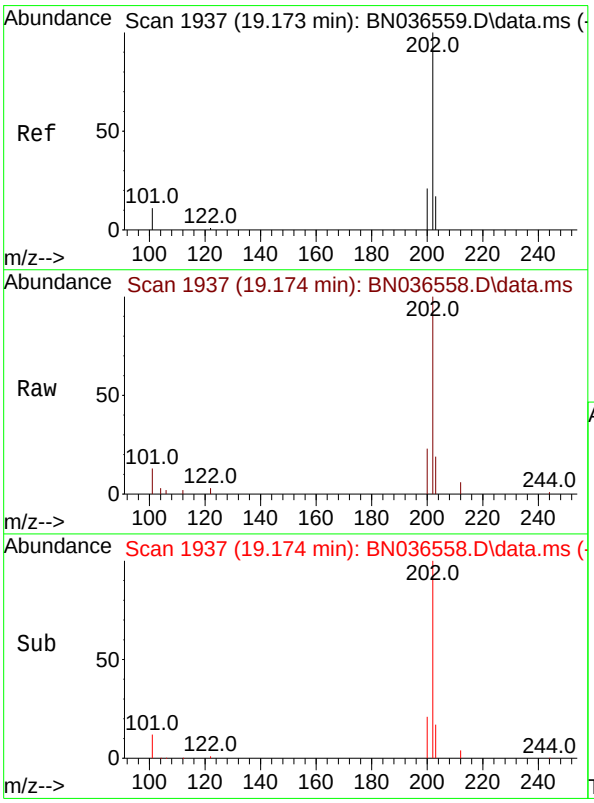

#27
Fluoranthene-d10
Concen: 0.186 ng
RT: 19.146 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:212 Resp: 3583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 15.0 | 11.8 | 17.6 |
| 104 | 9.3 | 7.3 | 10.9 |

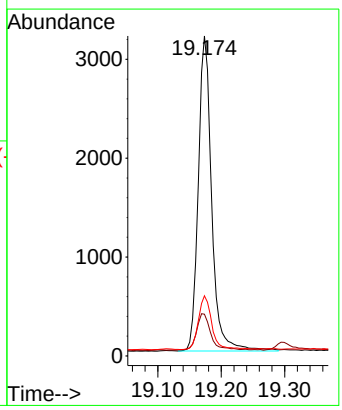


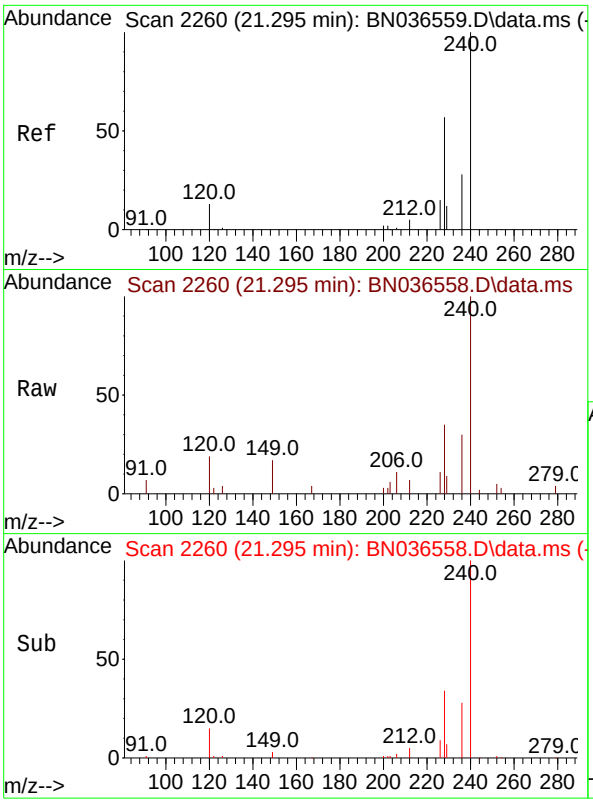




#28
Fluoranthene
Concen: 0.184 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4666

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.1 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |



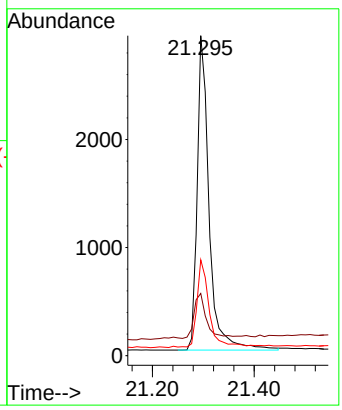


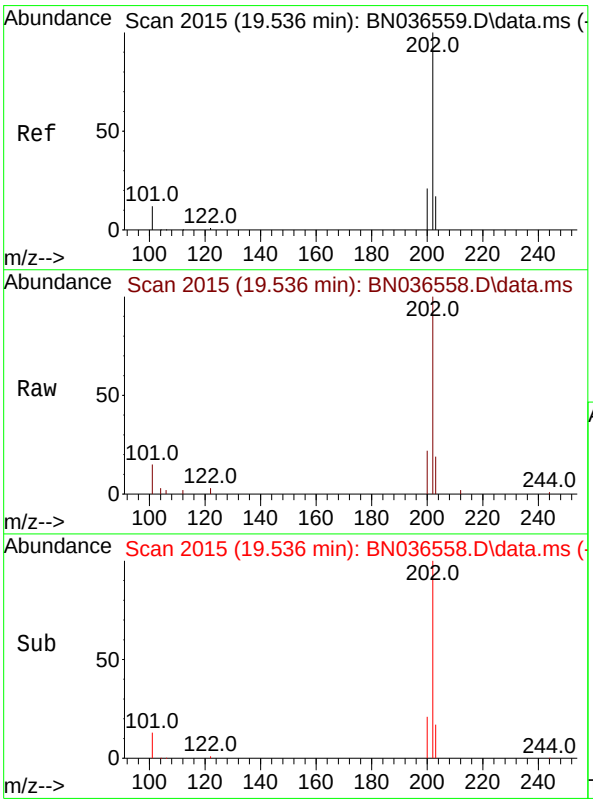

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:240 Resp: 4730

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

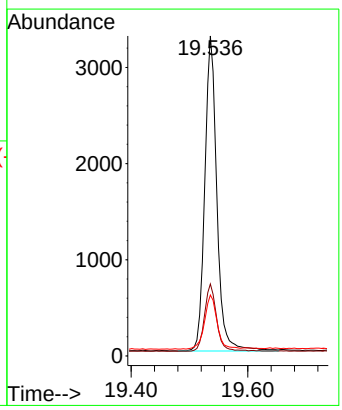


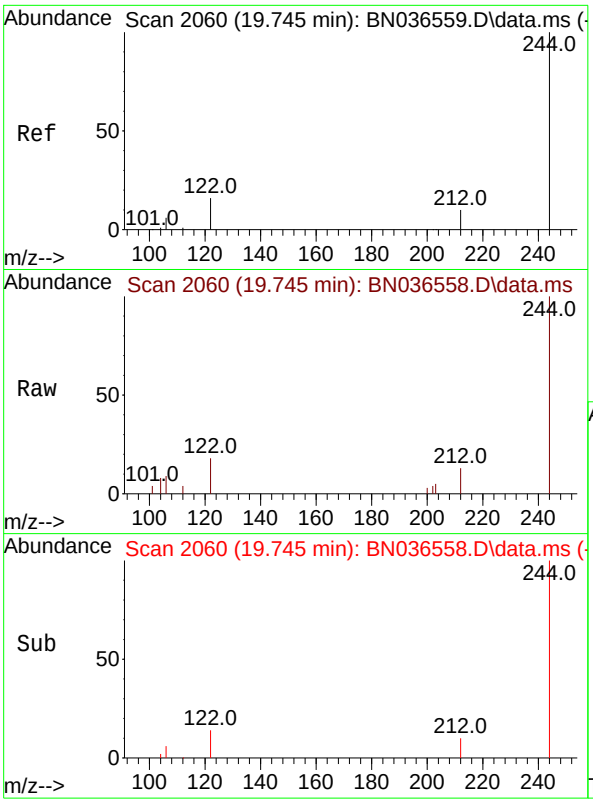




#30
Pyrene
Concen: 0.205 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4742

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.1 | 17.1 | 25.7 |
| 203 | 17.7 | 14.1 | 21.1 |



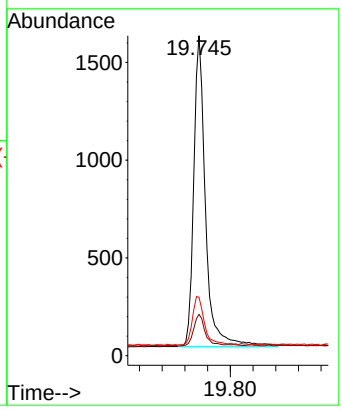


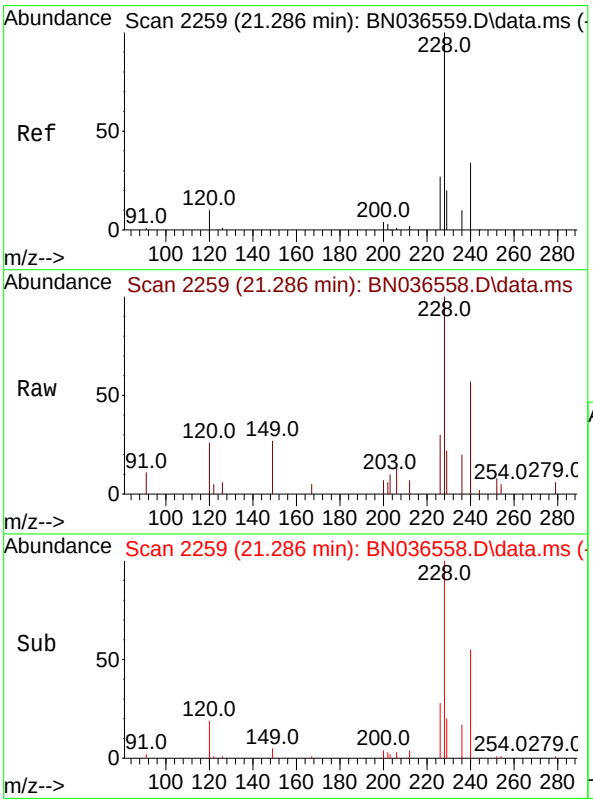

#31
Terphenyl-d14
Concen: 0.201 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:244 Resp: 2283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.9 | 9.6 | 14.4 |
| 122 | 18.3 | 13.9 | 20.9 |

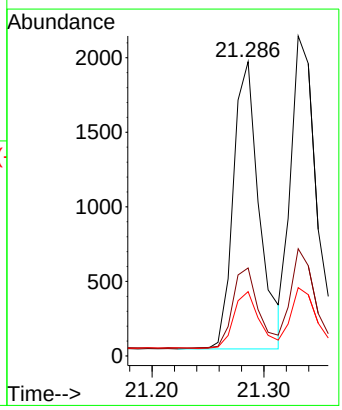


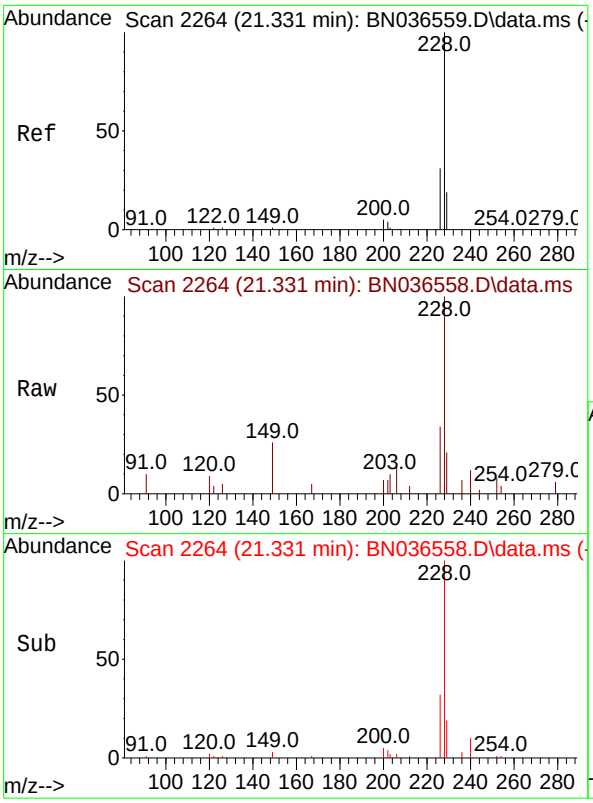




#32
Benzo(a)anthracene
Concen: 0.189 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:228 Resp: 3111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.9 | 22.5 | 33.7 |
| 229 | 21.9 | 16.6 | 25.0 |



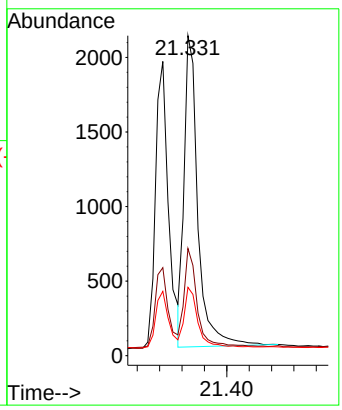


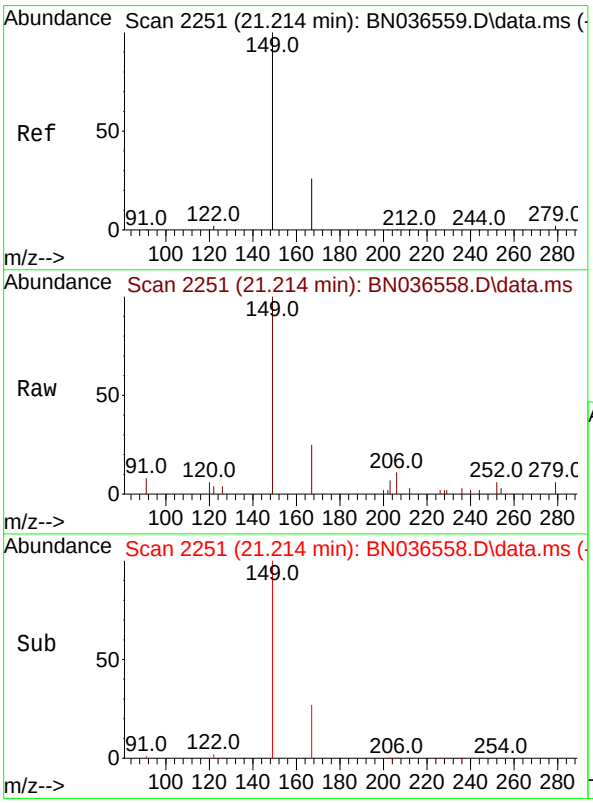

#33
Chrysene
Concen: 0.199 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:228 Resp: 3568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 33.5 | 25.3 | 37.9 |
| 229 | 21.4 | 15.8 | 23.8 |

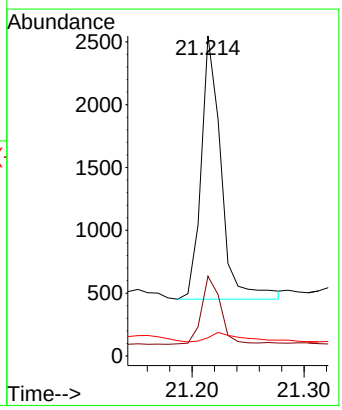


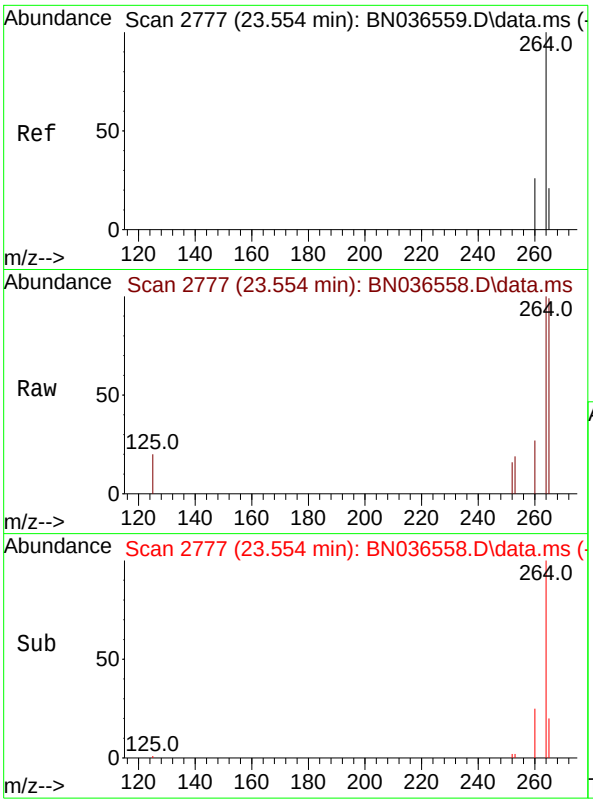




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.222 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:149 Resp: 2601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 24.7 | 20.7 | 31.1 |
| 279 | 5.7 | 3.6 | 5.4# |



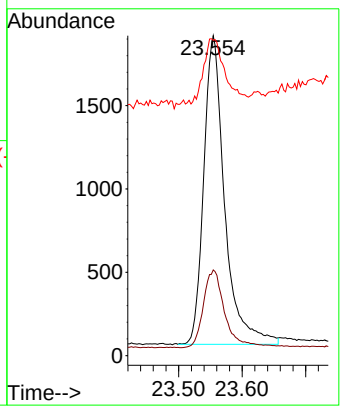


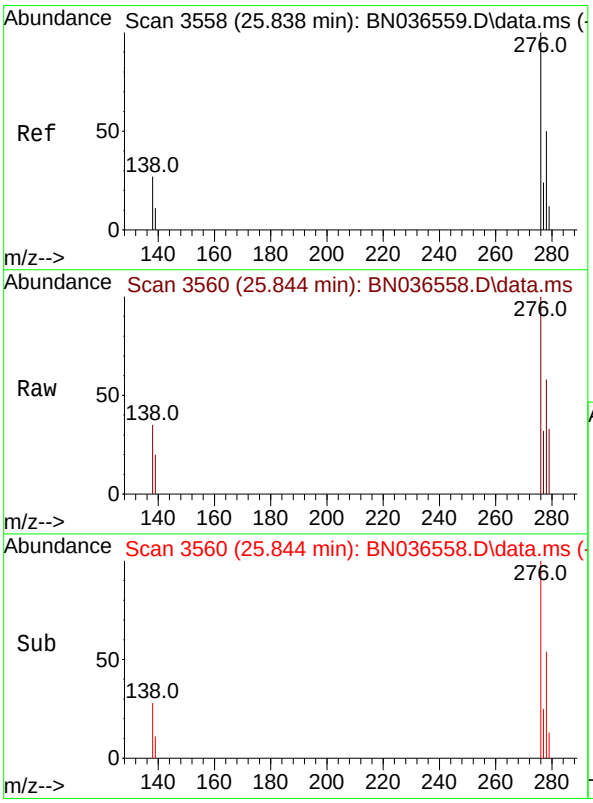

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:264 Resp: 4241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.8 | 22.6 | 33.8 |
| 265 | 98.5 | 88.1 | 132.1 |

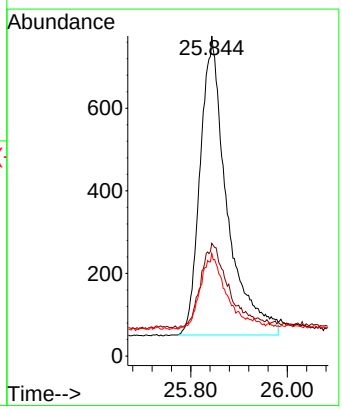


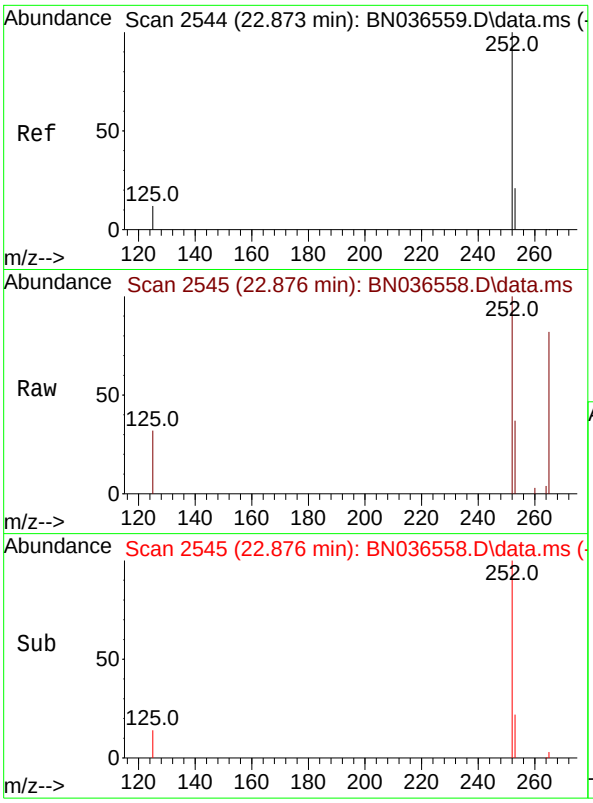




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.182 ng
RT: 25.844 min Scan# 3560
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:276 Resp: 2790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 29.1 | 23.4 | 35.2 |
| 277 | 23.4 | 20.0 | 30.0 |



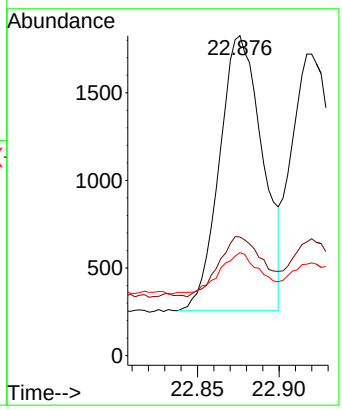


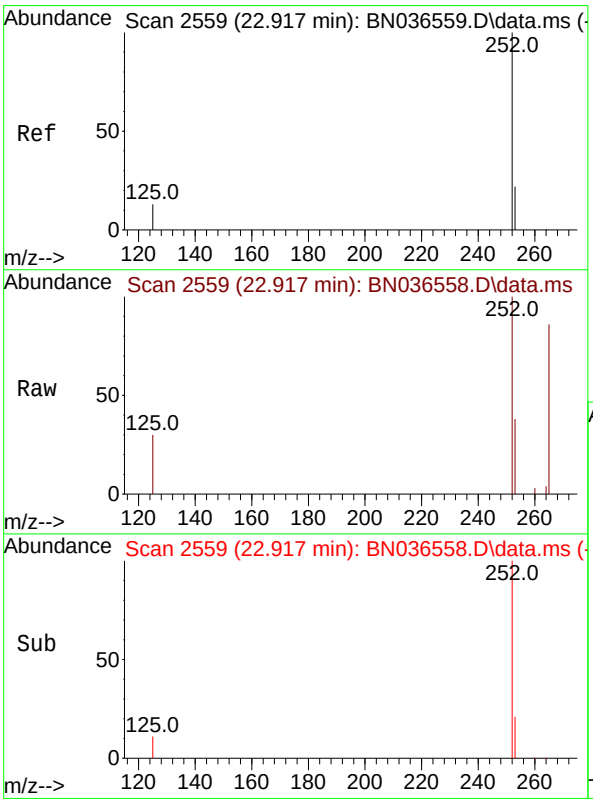

#37
Benzo(b)fluoranthene
Concen: 0.187 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:252 Resp: 2883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 37.1 | 23.9 | 35.9# |
| 125 | 32.2 | 17.4 | 26.2# |

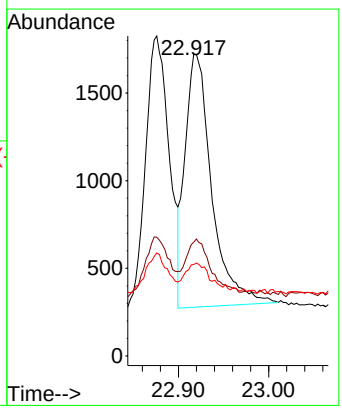


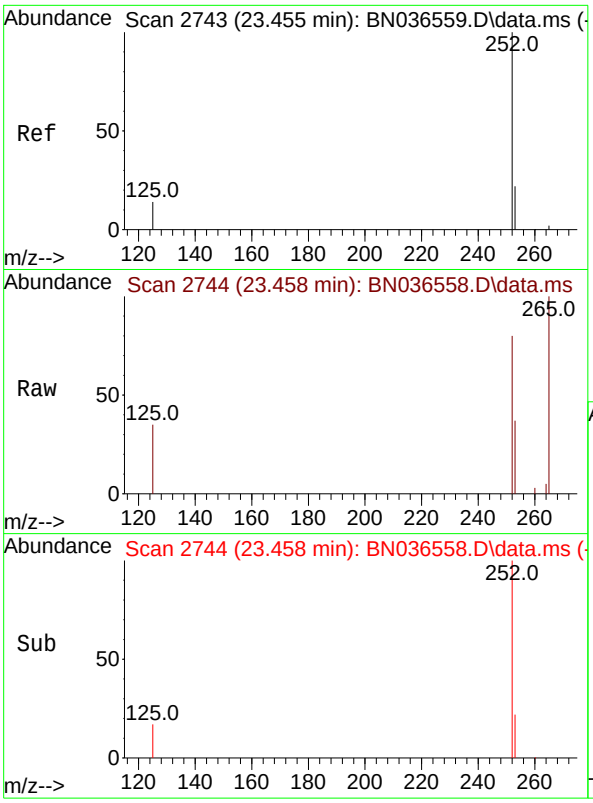




#38
Benzo(k)fluoranthene
Concen: 0.183 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:252 Resp: 2962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 37.7 | 24.6 | 36.8# |
| 125 | 30.3 | 17.8 | 26.8# |



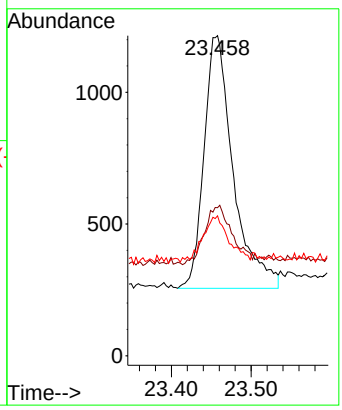


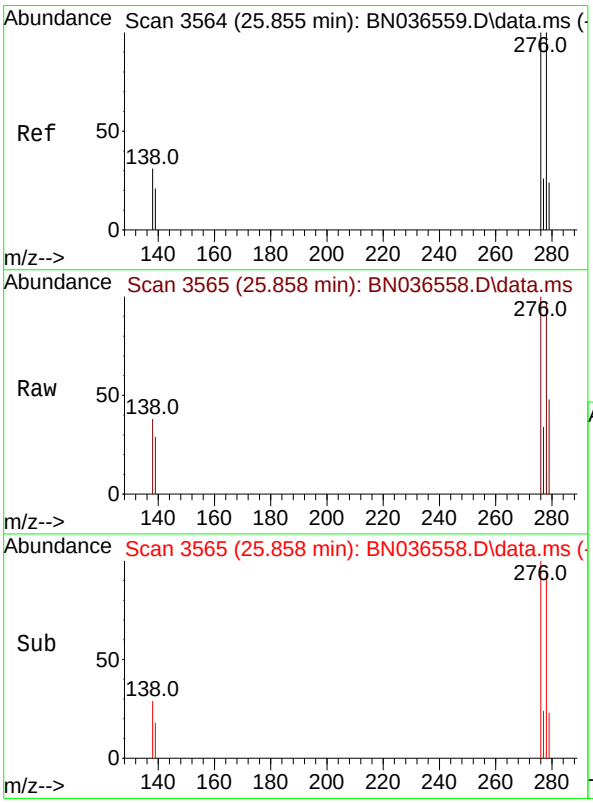

#39
Benzo(a)pyrene
Concen: 0.188 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:252 Resp: 2443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 46.3 | 27.8 | 41.8# |
| 125 | 43.7 | 22.7 | 34.1# |

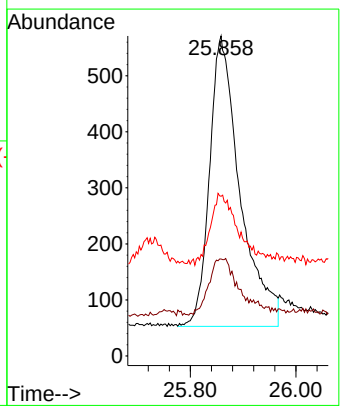


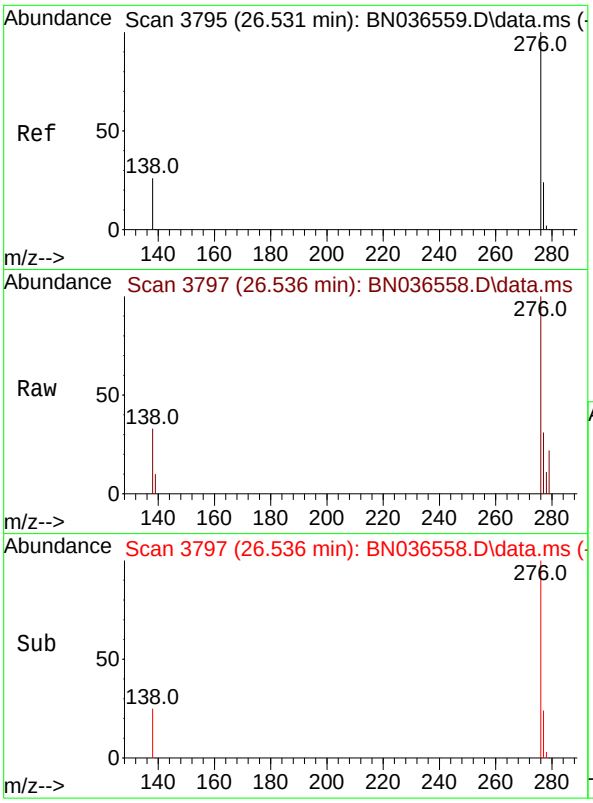




#40
Dibenzo(a,h)anthracene
Concen: 0.175 ng
RT: 25.858 min Scan# 3565
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:278 Resp: 2080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 30.3 | 20.8 | 31.2 |
| 279 | 49.9 | 28.8 | 43.2# |



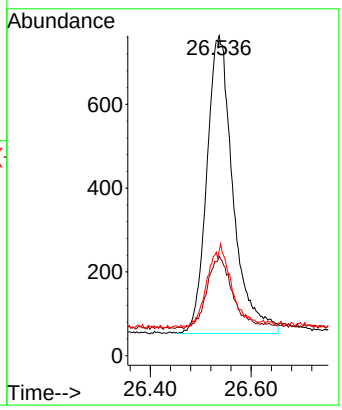



#41
Benzo(g,h,i)perylene
Concen: 0.189 ng
RT: 26.536 min Scan# 3
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDICC0.2

Tgt Ion:276 Resp: 2573

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 31.2 | 22.2 | 33.4 |
| 138 | 32.6 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036736.D
Acq On : 27 Mar 2025 14:02
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 27 19:15:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1995 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 4873 | 0.400 | ng | -0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2980 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 6276 | 0.400 | ng | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 5211 | 0.400 | ng | -0.02 |
| 35) Perylene-d12 | 23.525 | 264 | 4739 | 0.400 | ng | #-0.03 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1732 | 0.373 | ng | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 2011 | 0.350 | ng | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1760 | 0.332 | ng | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.085 | 152 | 2584 | 0.356 | ng | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 518 | 0.383 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.968 | 172 | 5972 | 0.344 | ng | -0.02 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 6412 | 0.399 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 4220 | 0.338 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 979 | 0.442 | ng | 93 |
| 3) n-Nitrosodimethylamine | 3.543 | 42 | 1688 | 0.377 | ng | 98 |
| 6) bis(2-Chloroethyl)ether | 7.132 | 93 | 2087 | 0.352 | ng | 99 |
| 9) Naphthalene | 10.530 | 128 | 5118 | 0.357 | ng | 99 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 1232 | 0.365 | ng | # 96 |
| 12) 2-Methylnaphthalene | 12.156 | 142 | 3238 | 0.355 | ng | 99 |
| 16) Acenaphthylene | 14.056 | 152 | 4782 | 0.340 | ng | 100 |
| 17) Acenaphthene | 14.398 | 154 | 3313 | 0.360 | ng | 100 |
| 18) Fluorene | 15.392 | 166 | 4544 | 0.365 | ng | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.489 | 198 | 478 | 0.444 | ng | # 75 |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248 | 1431 | 0.364 | ng | # 76 |
| 22) Hexachlorobenzene | 16.404 | 284 | 1682 | 0.354 | ng | 96 |
| 23) Atrazine | 16.565 | 200 | 1221 | 0.387 | ng | 95 |
| 24) Pentachlorophenol | 16.751 | 266 | 801 | 0.370 | ng | 98 |
| 25) Phenanthrene | 17.124 | 178 | 7195 | 0.382 | ng | 100 |
| 26) Anthracene | 17.223 | 178 | 6283 | 0.370 | ng | 100 |
| 28) Fluoranthene | 19.150 | 202 | 8617 | 0.407 | ng | 99 |
| 30) Pyrene | 19.513 | 202 | 8868 | 0.348 | ng | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 6412 | 0.354 | ng | 98 |
| 33) Chrysene | 21.313 | 228 | 7670 | 0.387 | ng | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4505 | 0.349 | ng | # 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.791 | 276 | 6199 | 0.362 | ng | 98 |
| 37) Benzo(b)fluoranthene | 22.847 | 252 | 6514 | 0.378 | ng | 95 |
| 38) Benzo(k)fluoranthene | 22.847 | 252 | 6514 | 0.360 | ng | 94 |
| 39) Benzo(a)pyrene | 23.426 | 252 | 5338 | 0.368 | ng | 94 |
| 40) Dibenzo(a,h)anthracene | 25.808 | 278 | 4803 | 0.361 | ng | 95 |
| 41) Benzo(g,h,i)perylene | 26.481 | 276 | 5667 | 0.372 | ng | 98 |

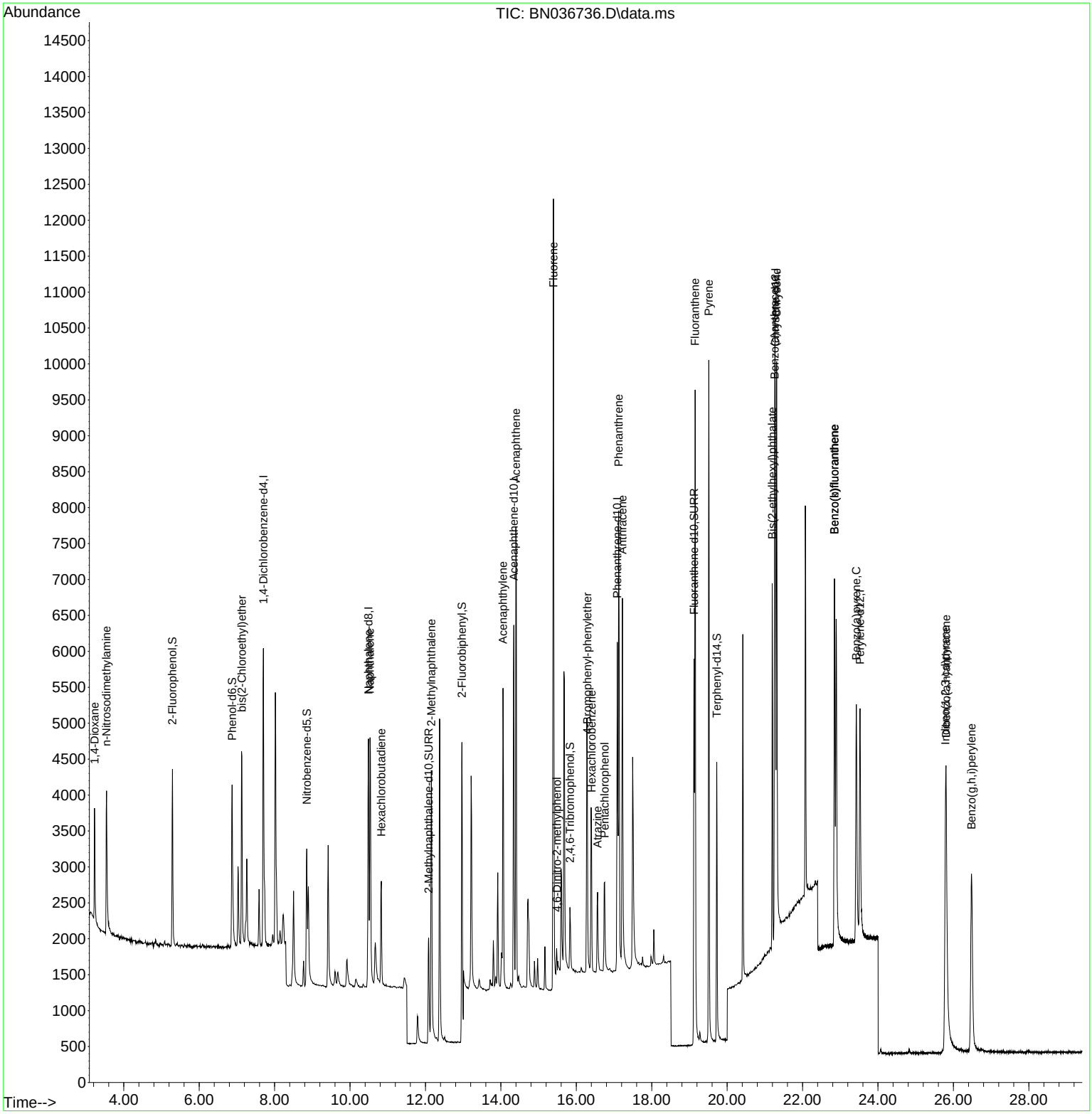
(#) = qualifier out of range (m) = manual integration (+) = signals summed

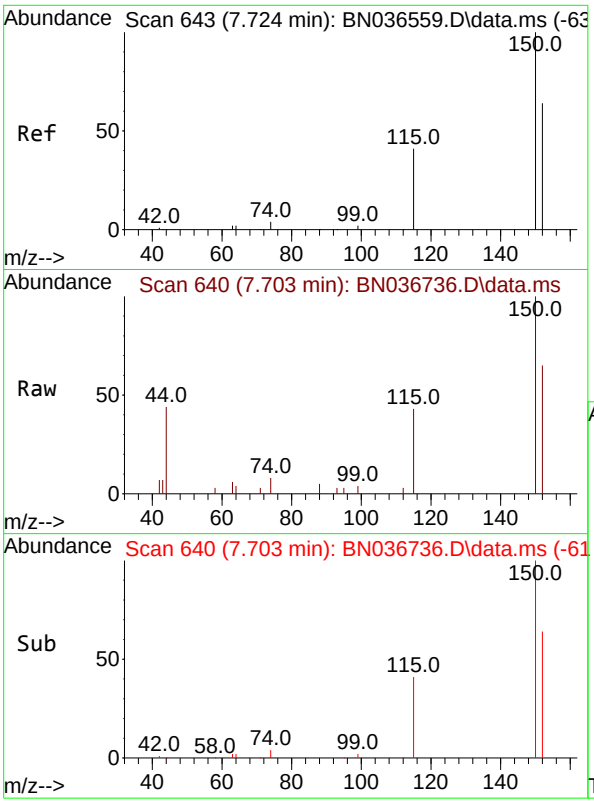
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036736.D
Acq On : 27 Mar 2025 14:02
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 27 19:15:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



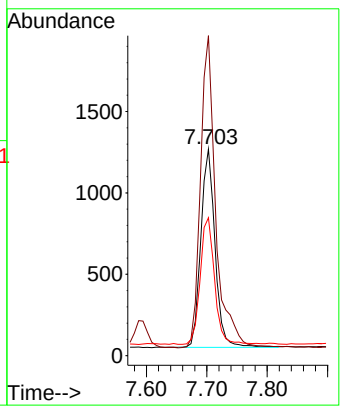


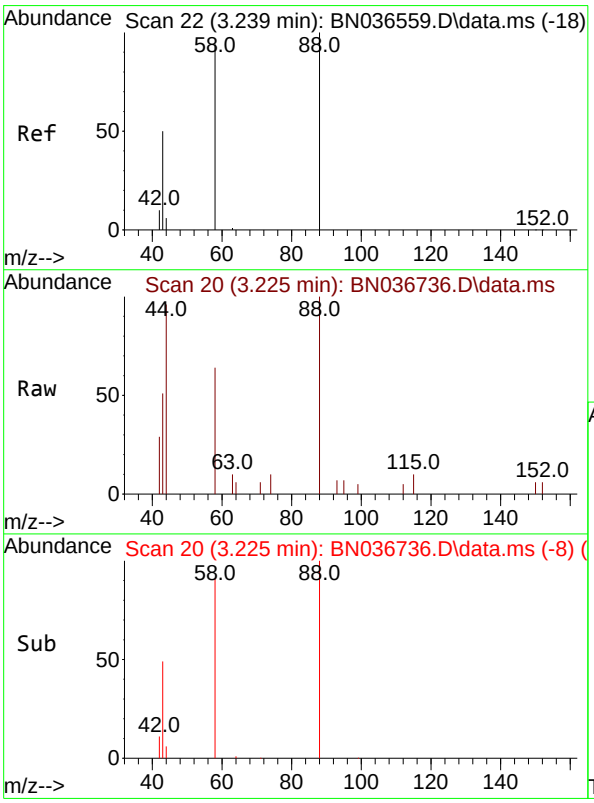

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 1995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.9 | 123.7 | 185.5 |
| 115 | 66.7 | 54.3 | 81.5 |

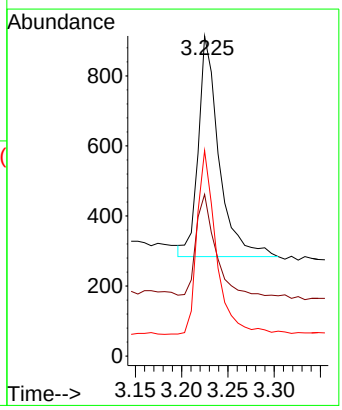


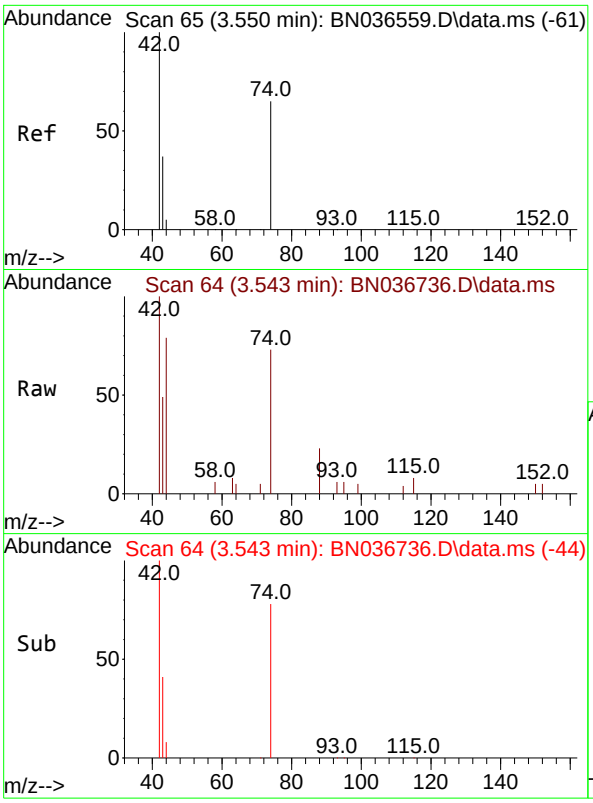




#2
1,4-Dioxane
Concen: 0.442 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 88 Resp: 979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 43.0 | 37.8 | 56.8 |
| 58 | 77.9 | 67.4 | 101.2 |



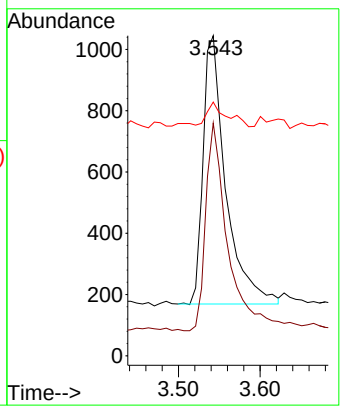


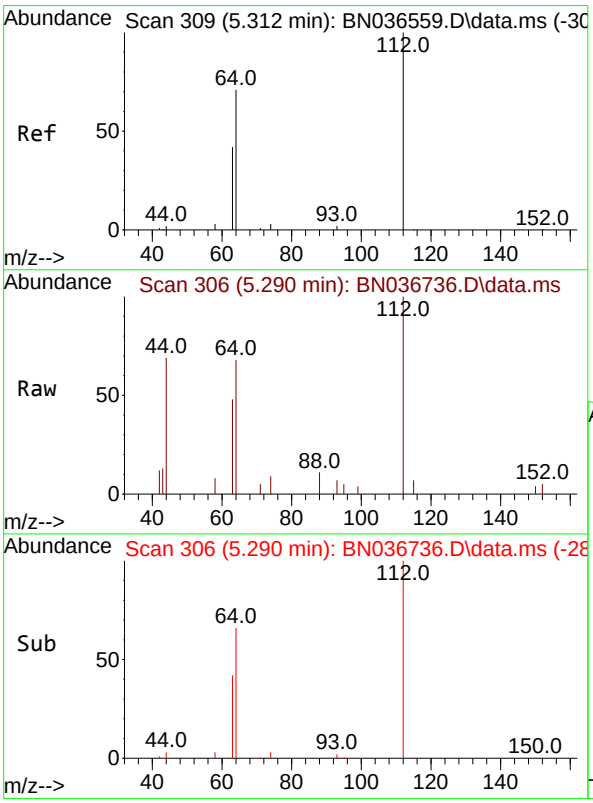

#3
n-Nitrosodimethylamine
Concen: 0.377 ng
RT: 3.543 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 77.4 | 60.6 | 90.8 |
| 44 | 7.9 | 6.3 | 9.5 |

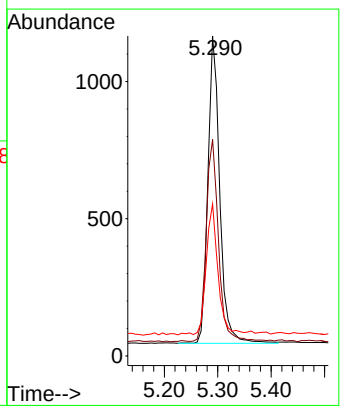


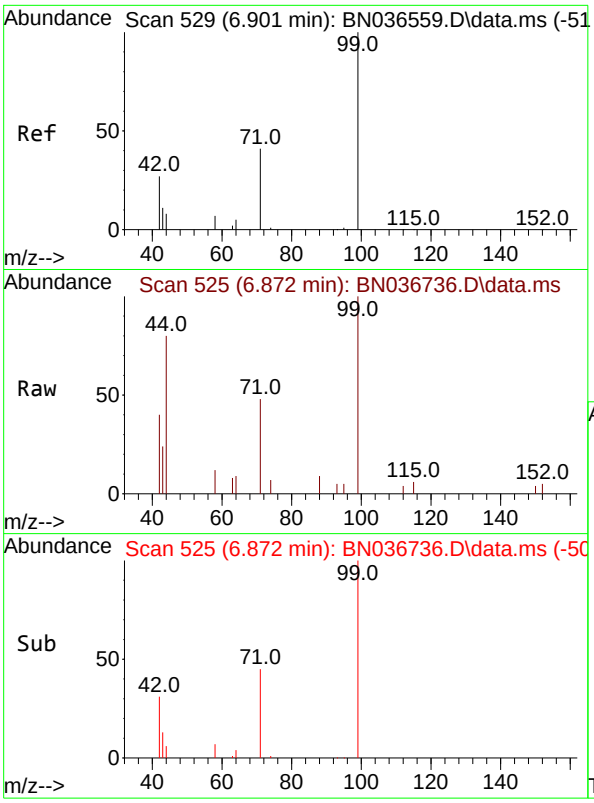




#4
2-Fluorophenol
Concen: 0.373 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:112 Resp: 1732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 67.9 | 53.1 | 79.7 |
| 63 | 42.6 | 31.8 | 47.8 |



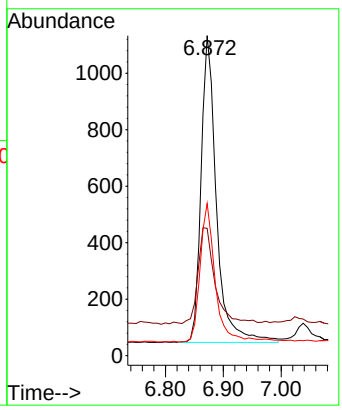


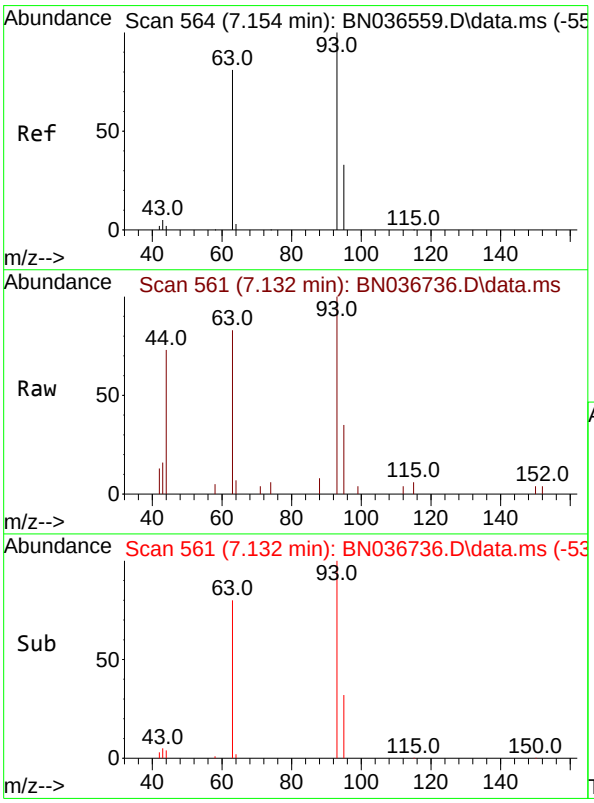

#5
Phenol-d6
Concen: 0.350 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 2011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.9 | 26.5 | 39.7 |
| 71 | 45.0 | 34.1 | 51.1 |

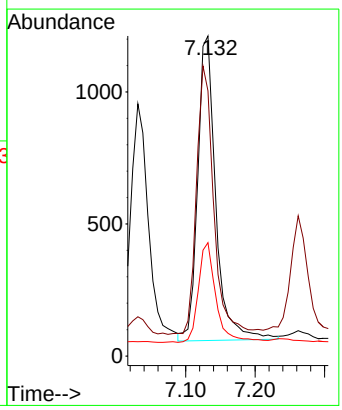


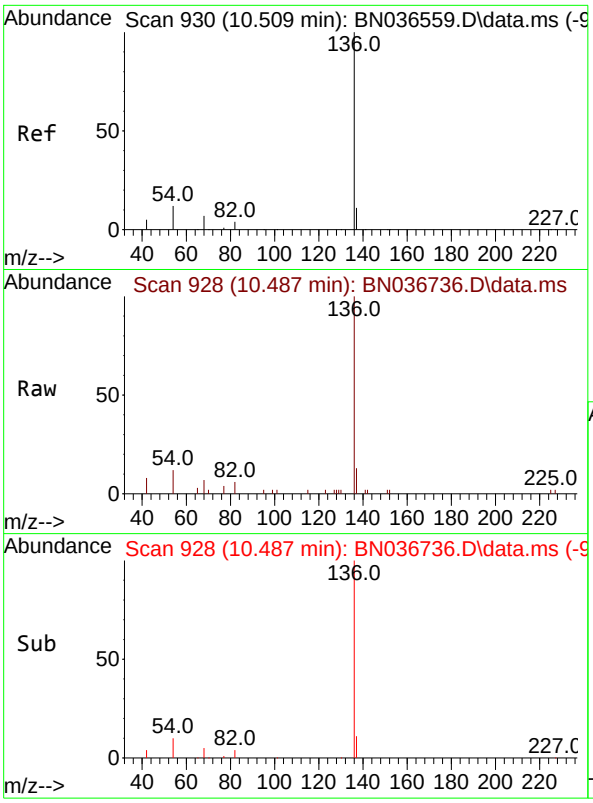




#6
bis(2-Chloroethyl)ether
Concen: 0.352 ng
RT: 7.132 min Scan# 561
Delta R.T. -0.022 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 93 Resp: 2087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 83.9 | 67.7 | 101.5 |
| 95 | 32.0 | 25.6 | 38.4 |



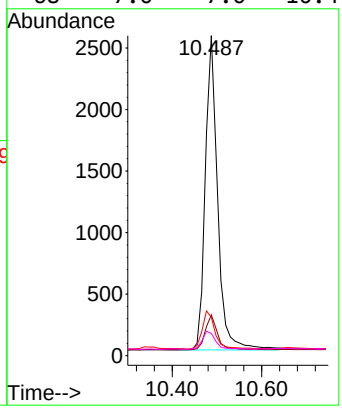


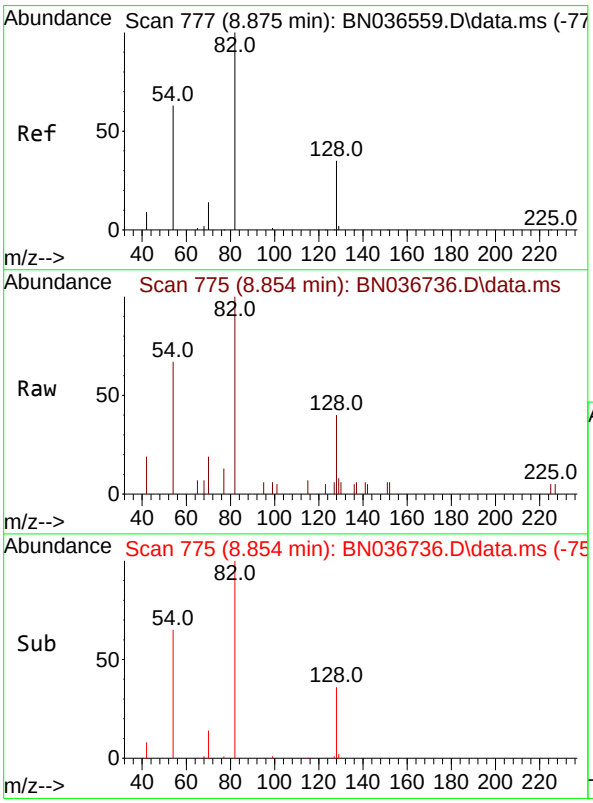

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.8 | 10.3 | 15.5 |
| 54 | 12.0 | 11.5 | 17.3 |
| 68 | 7.0 | 7.0 | 10.4 |

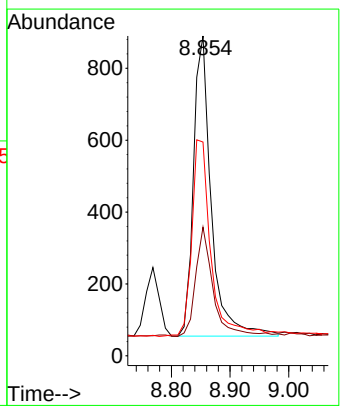


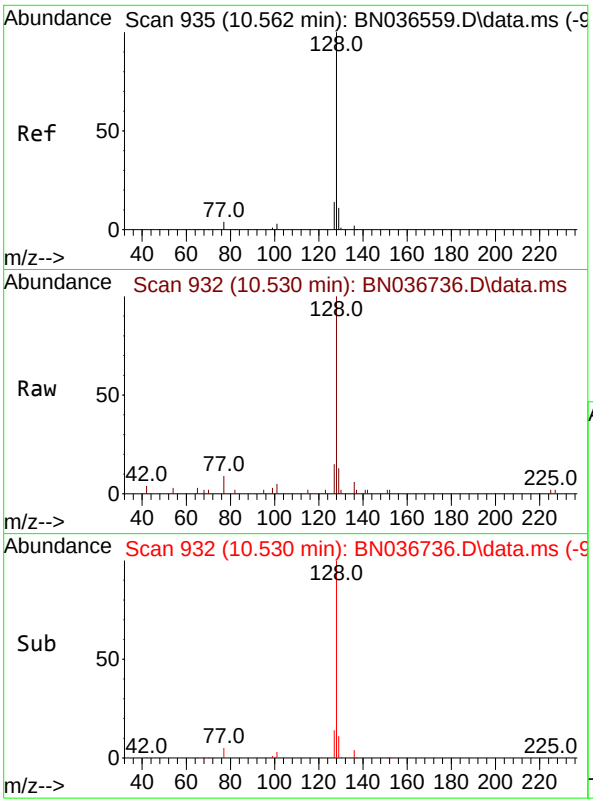




#8
Nitrobenzene-d5
Concen: 0.332 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion: 82 Resp: 1760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.2 | 30.6 | 45.8 |
| 54 | 66.9 | 52.2 | 78.4 |



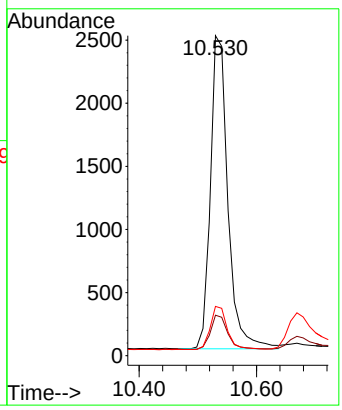


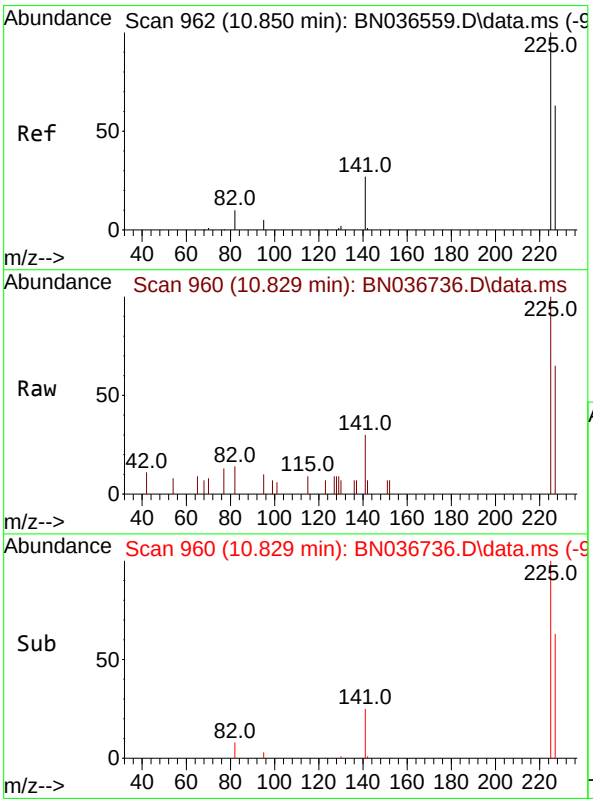

#9
Naphthalene
Concen: 0.357 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:128 Resp: 5118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.7 | 9.8 | 14.6 |
| 127 | 15.4 | 11.8 | 17.8 |

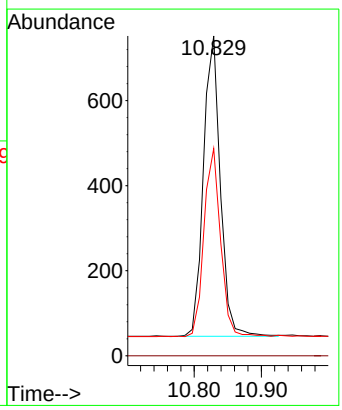


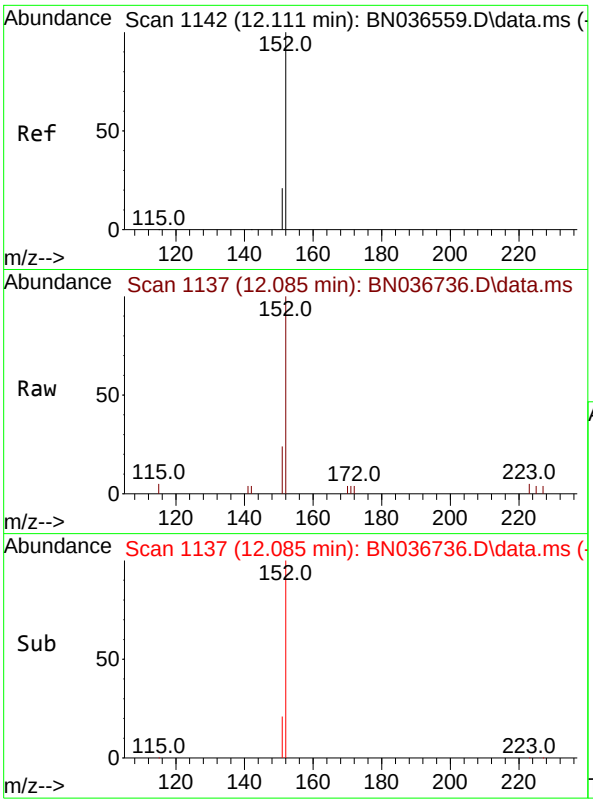




#10
Hexachlorobutadiene
Concen: 0.365 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:225 Resp: 1232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 61.7 | 51.8 | 77.8 |



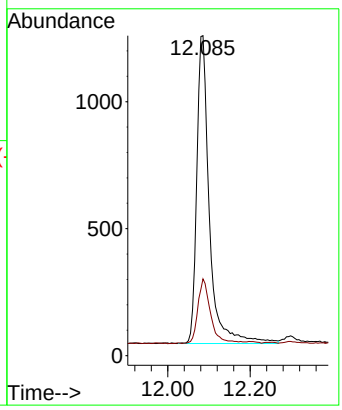


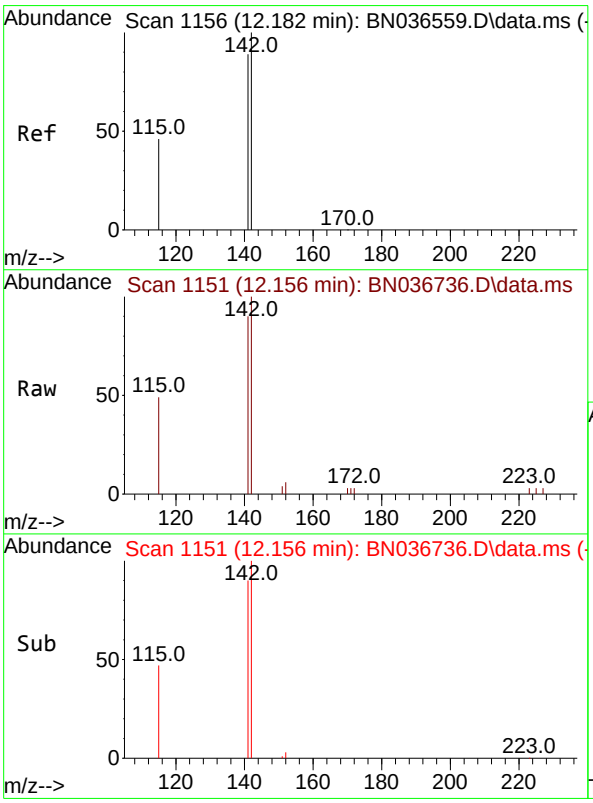

#11
2-Methylnaphthalene-d10
Concen: 0.356 ng
RT: 12.085 min Scan# 11
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.2 | 17.0 | 25.6 |

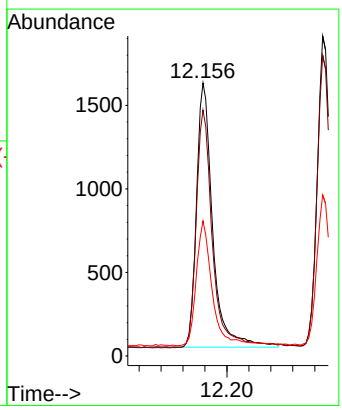


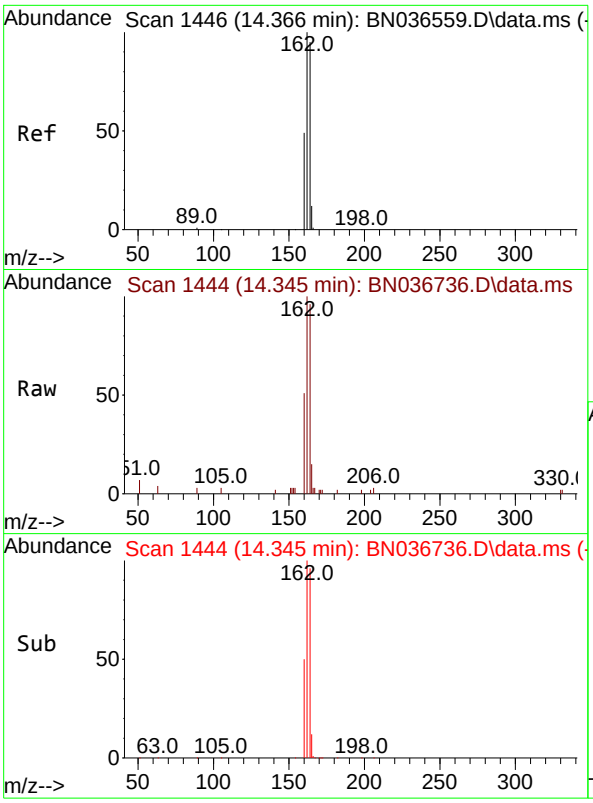




#12
2-Methylnaphthalene
Concen: 0.355 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:142 Resp: 3238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.1 | 71.7 | 107.5 |
| 115 | 49.4 | 38.3 | 57.5 |



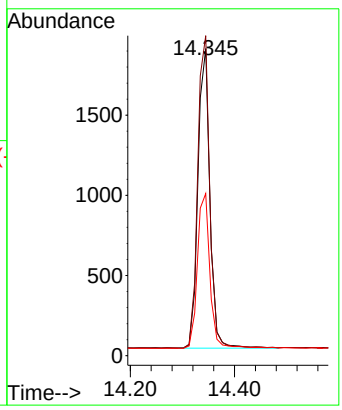


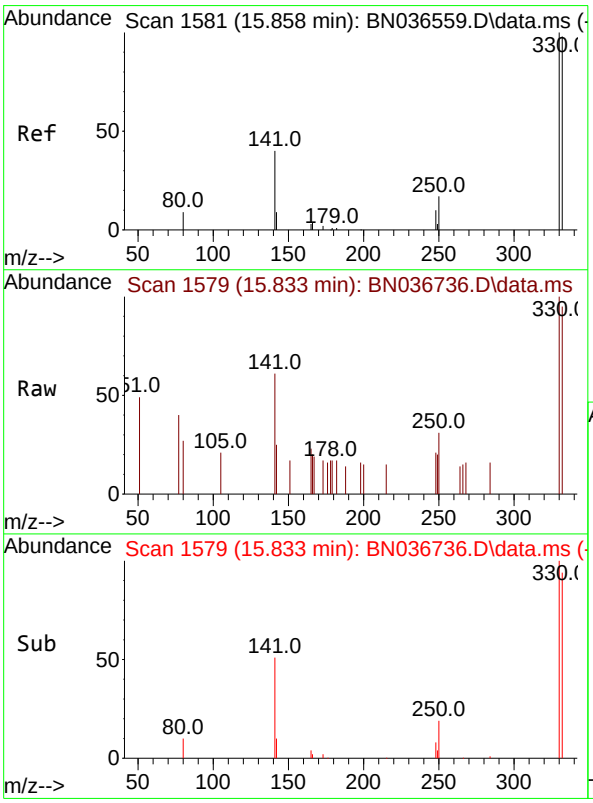

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:164 Resp: 2980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.2 | 84.2 | 126.2 |
| 160 | 52.8 | 42.2 | 63.2 |

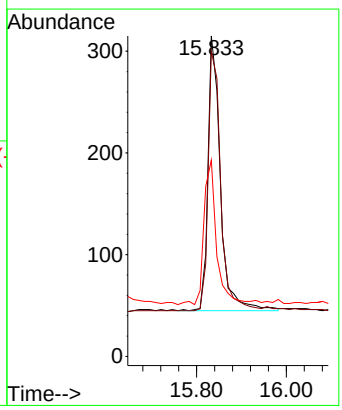


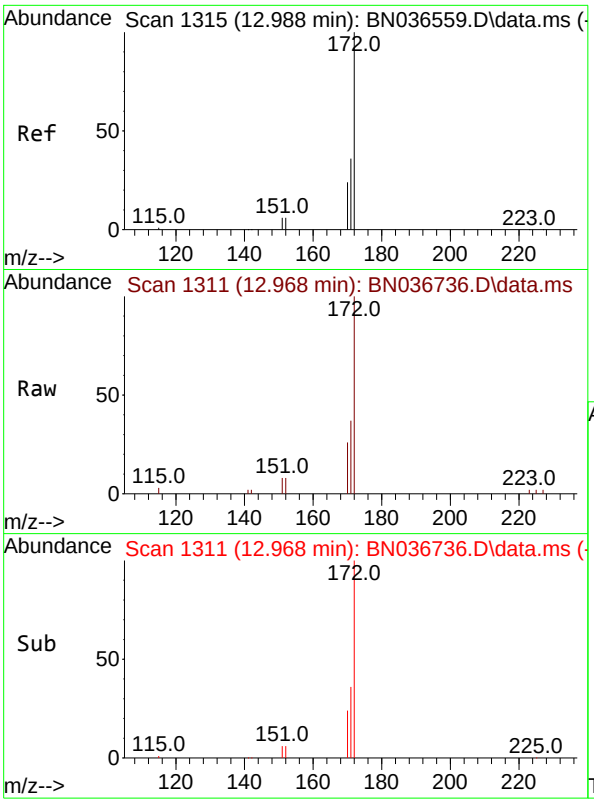




#14
2,4,6-Tribromophenol
Concen: 0.383 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:330 Resp: 518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 95.4 | 75.2 | 112.8 |
| 141 | 53.3 | 43.4 | 65.2 |



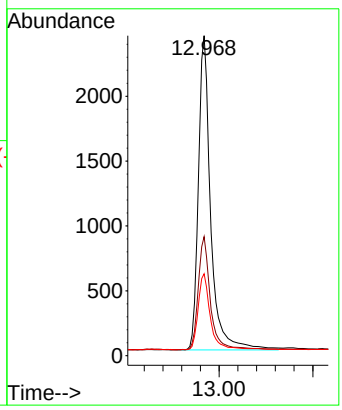


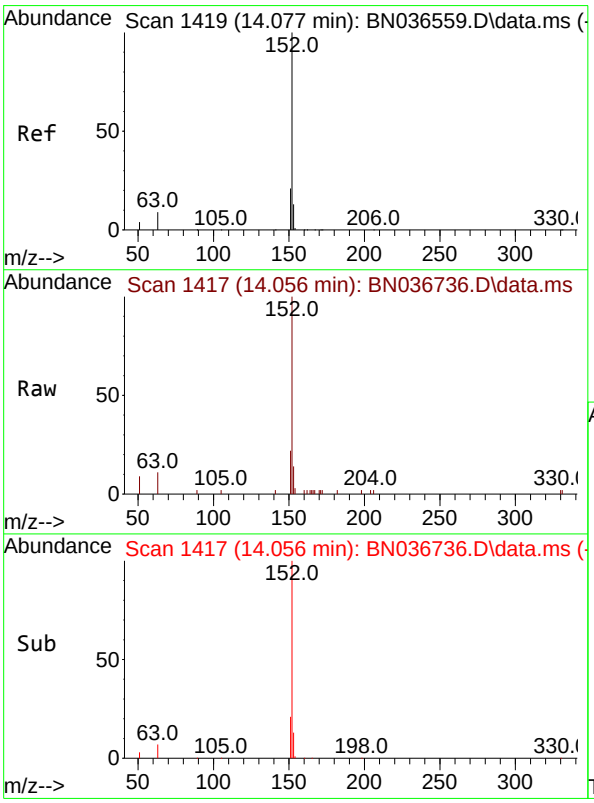

#15
2-Fluorobiphenyl
Concen: 0.344 ng
RT: 12.968 min Scan# 1
Delta R.T. -0.020 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:172 Resp: 5972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.2 | 29.5 | 44.3 |
| 170 | 25.6 | 20.2 | 30.4 |

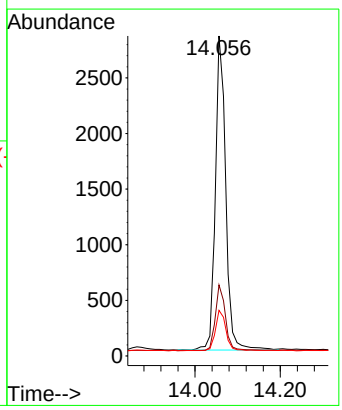


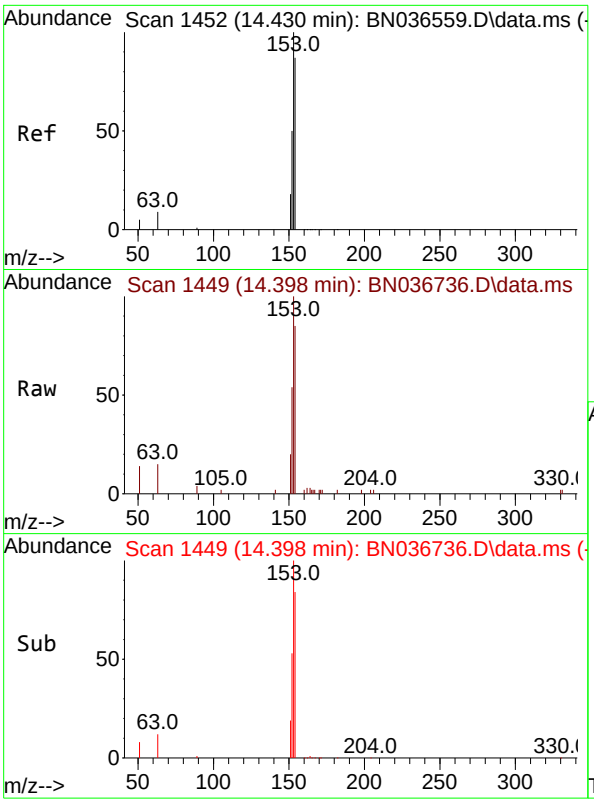




#16
Acenaphthylene
Concen: 0.340 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:152 Resp: 4782

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.5 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |



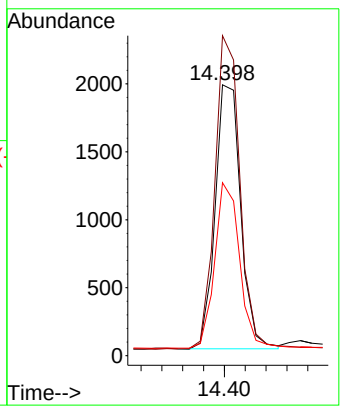


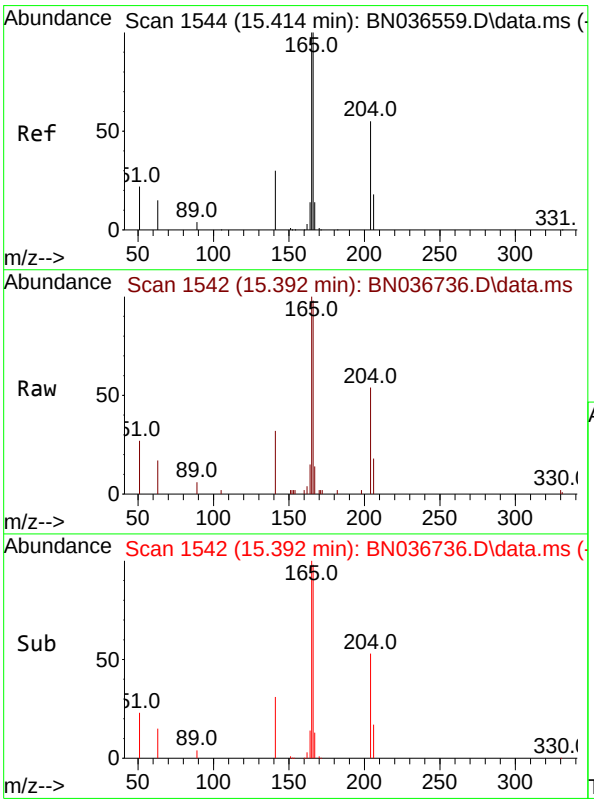

#17
Acenaphthene
Concen: 0.360 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:154 Resp: 3313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.1 | 94.1 | 141.1 |
| 152 | 62.4 | 49.8 | 74.6 |

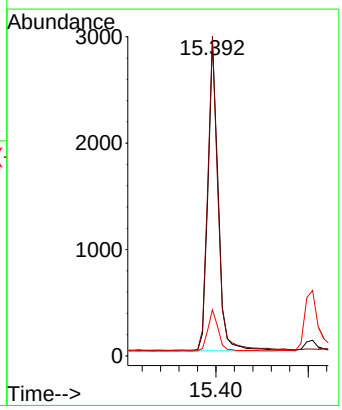


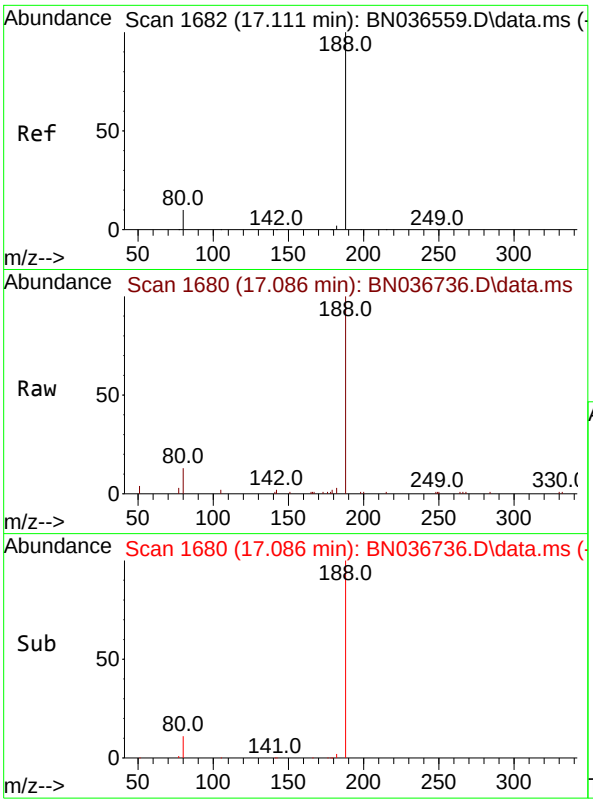




#18
Fluorene
Concen: 0.365 ng
RT: 15.392 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:166 Resp: 4544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.6 | 79.8 | 119.8 |
| 167 | 13.2 | 10.6 | 15.8 |



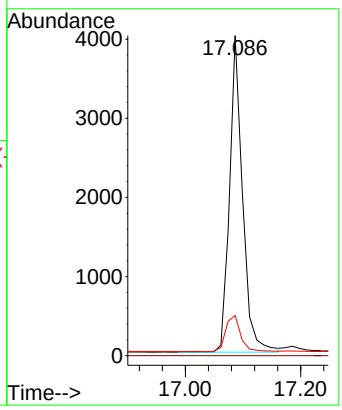


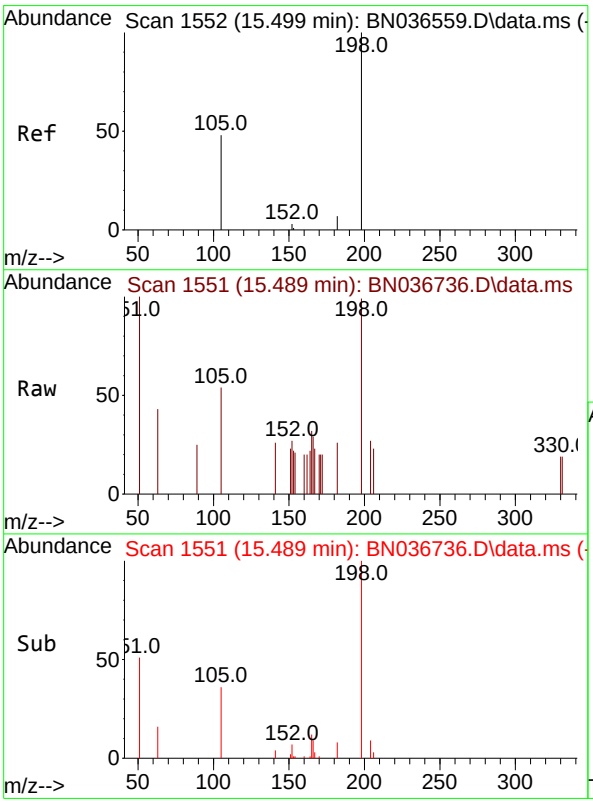

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:188 Resp: 6276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 12.6 | 8.8 | 13.2 |

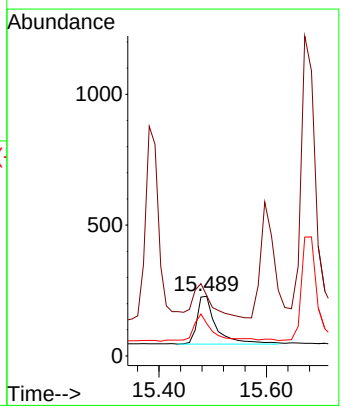


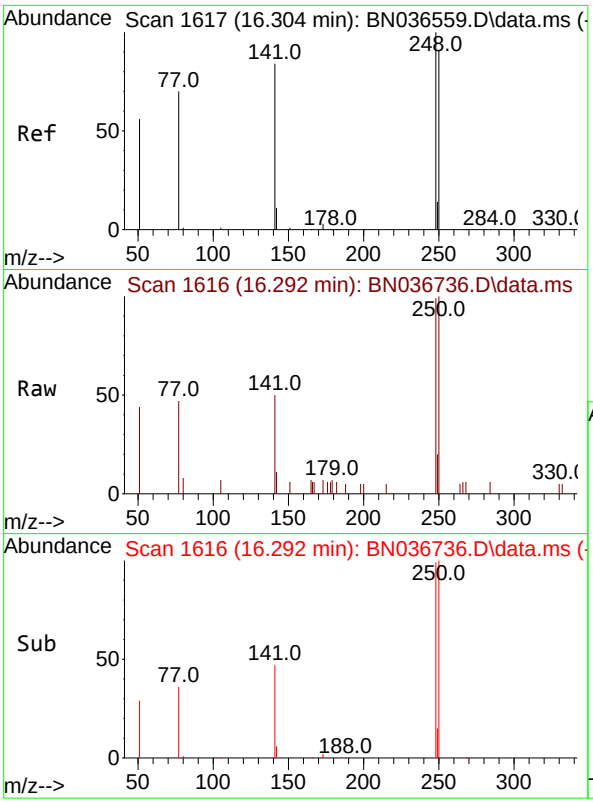




#20
4,6-Dinitro-2-methylphenol
Concen: 0.444 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:198 Resp: 478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 101.3 | 107.9 | 161.9# |
| 105 | 54.4 | 56.2 | 84.2# |



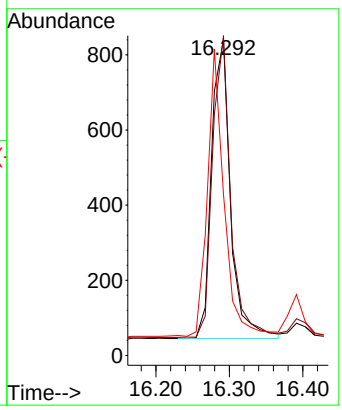


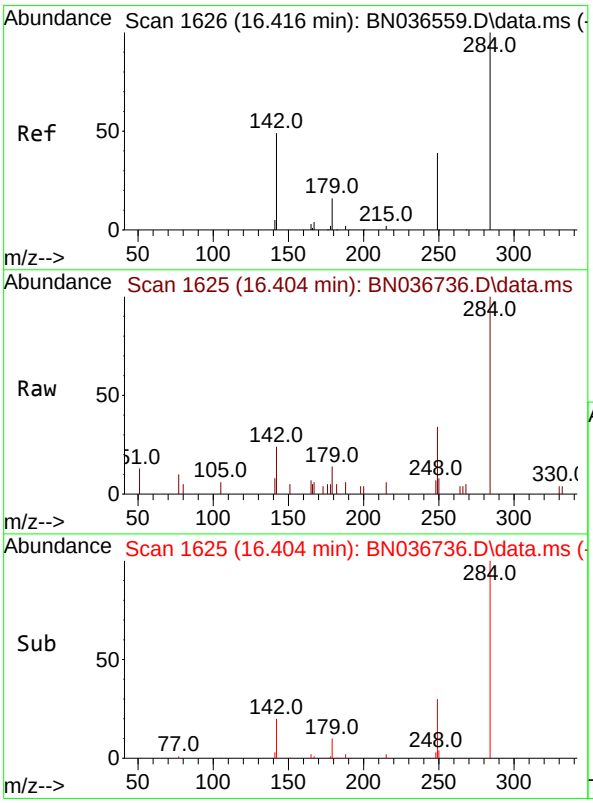

#21
4-Bromophenyl-phenylether
Concen: 0.364 ng
RT: 16.292 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 101.2 | 73.0 | 109.6 |
| 141 | 51.0 | 68.6 | 103.0# |

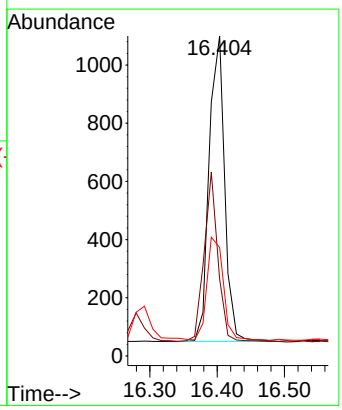


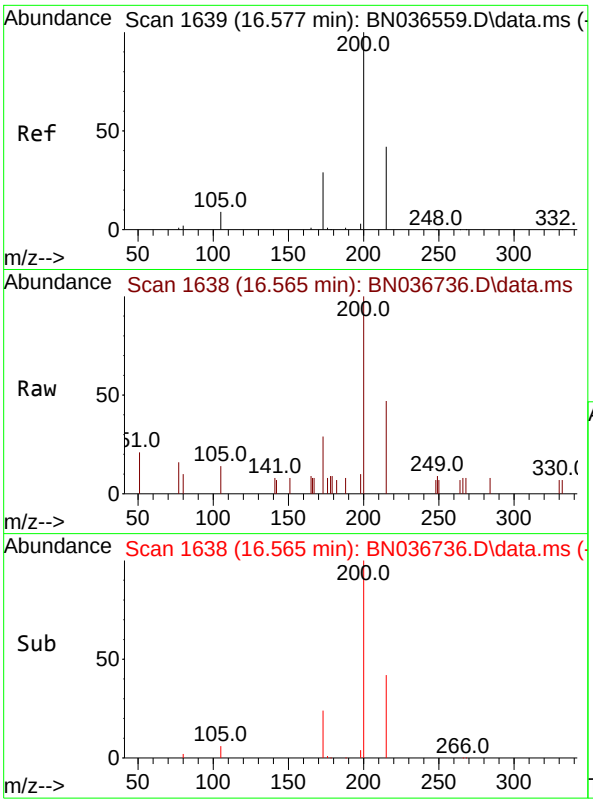




#22
Hexachlorobenzene
Concen: 0.354 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.012 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:284 Resp: 1682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 50.2 | 37.0 | 55.4 |
| 249 | 35.7 | 28.1 | 42.1 |



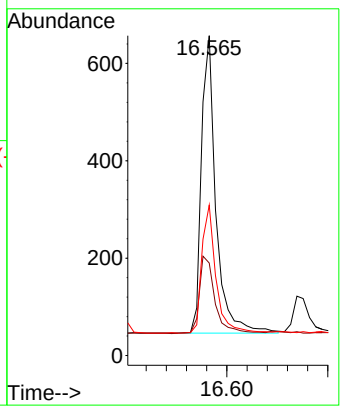


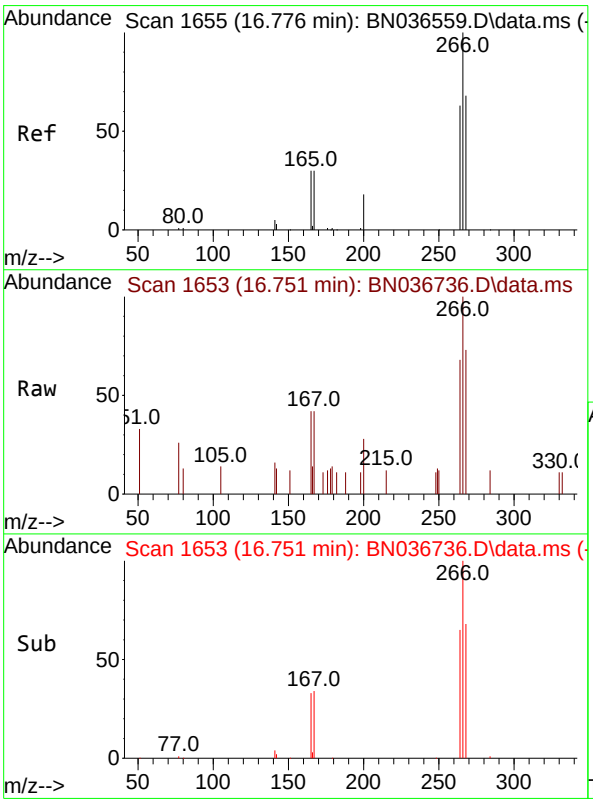

#23
Atrazine
Concen: 0.387 ng
RT: 16.565 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1221

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 28.9 | 27.3 | 40.9 |
| 215 | 47.0 | 36.8 | 55.2 |

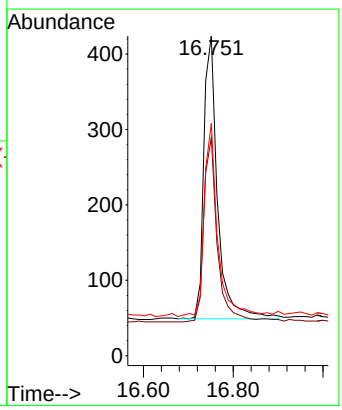


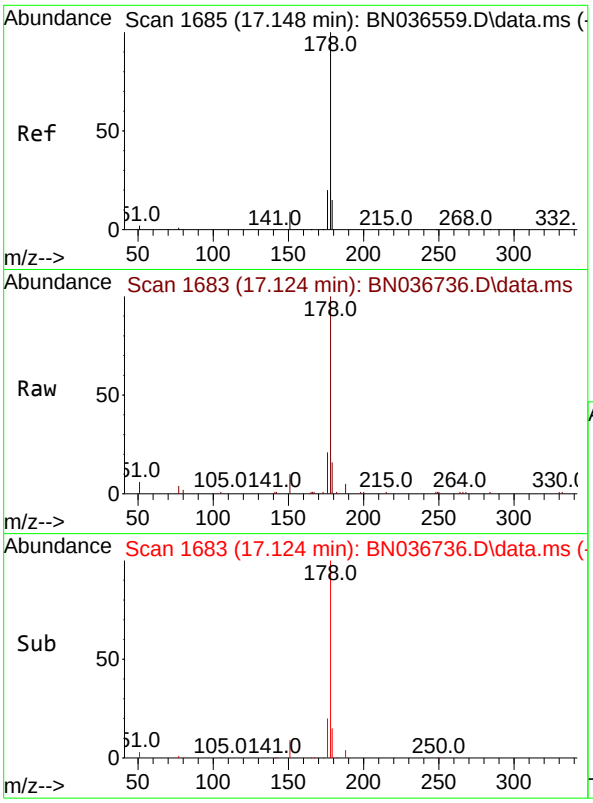




#24
Pentachlorophenol
Concen: 0.370 ng
RT: 16.751 min Scan# 1653
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:266 Resp: 801

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.7 | 49.6 | 74.4 |
| 268 | 66.5 | 50.9 | 76.3 |



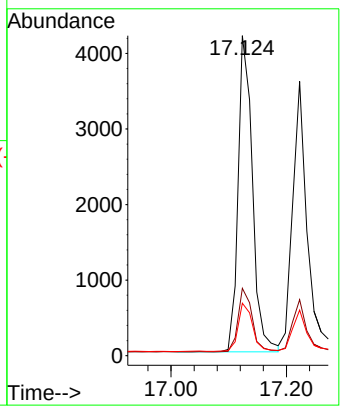


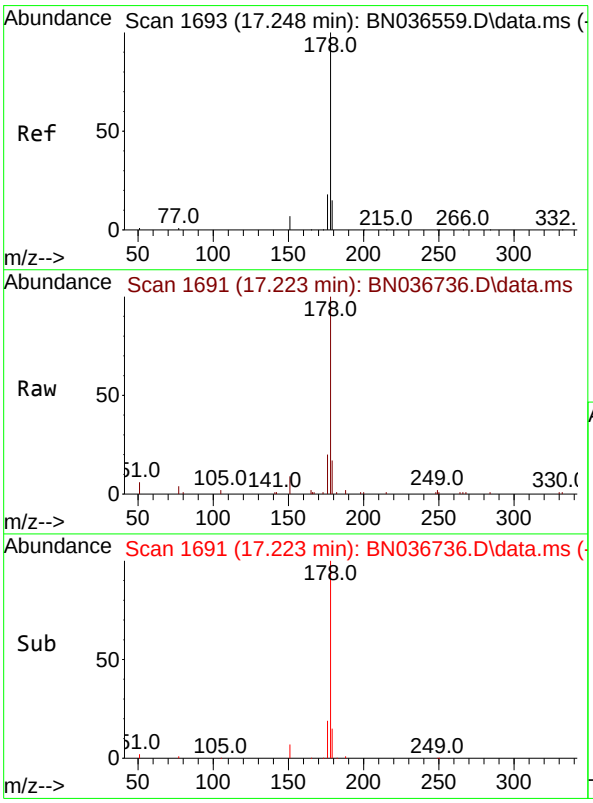

#25
Phenanthrene
Concen: 0.382 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:178 Resp: 7195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.8 | 15.9 | 23.9 |
| 179 | 15.3 | 12.2 | 18.4 |

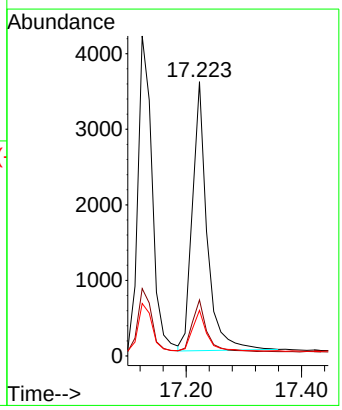


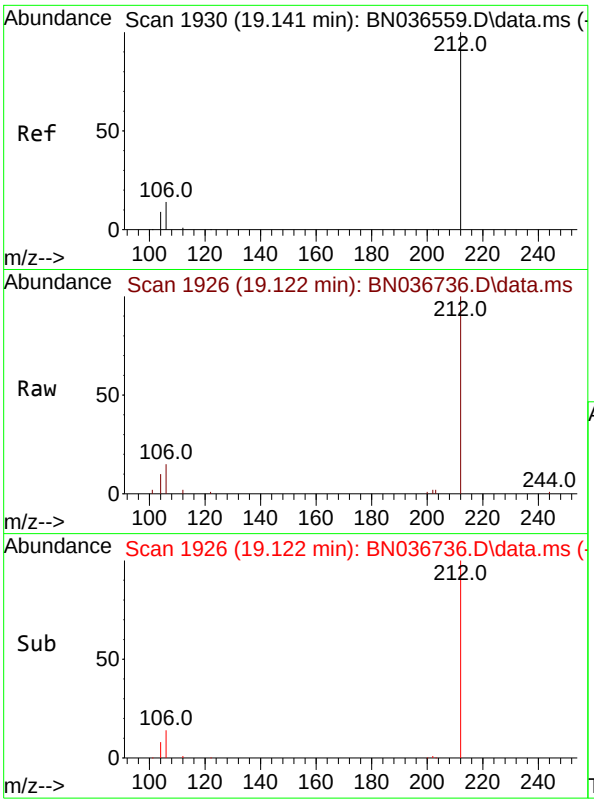




#26
Anthracene
Concen: 0.370 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:178 Resp: 6283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.2 | 15.4 | 23.2 |
| 179 | 15.8 | 12.6 | 18.8 |



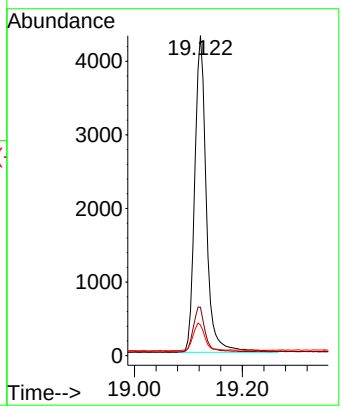


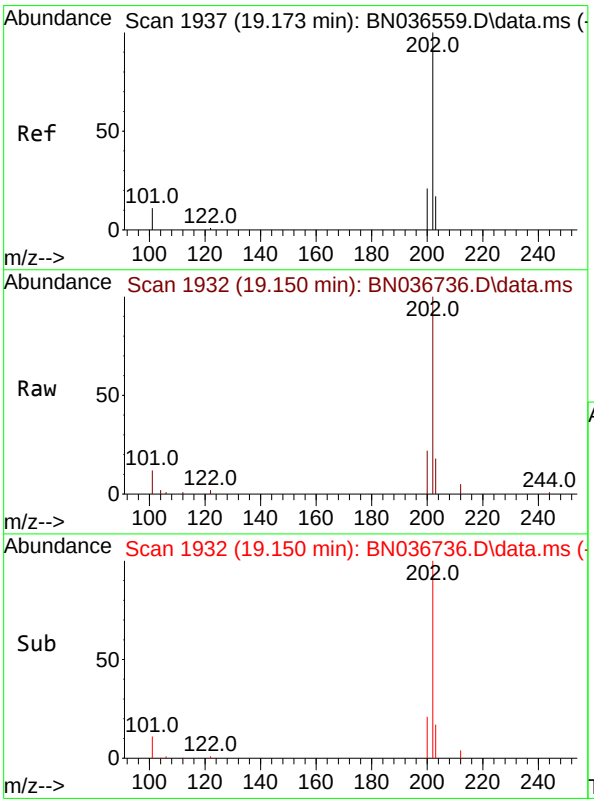

#27
Fluoranthene-d10
Concen: 0.399 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.019 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:212 Resp: 6412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.4 | 11.8 | 17.6 |
| 104 | 8.9 | 7.3 | 10.9 |

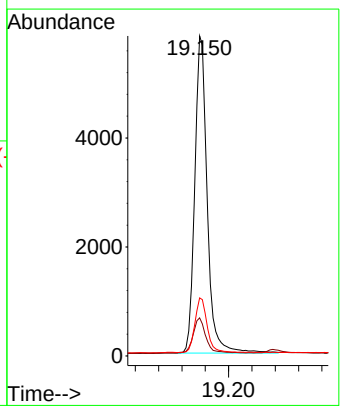


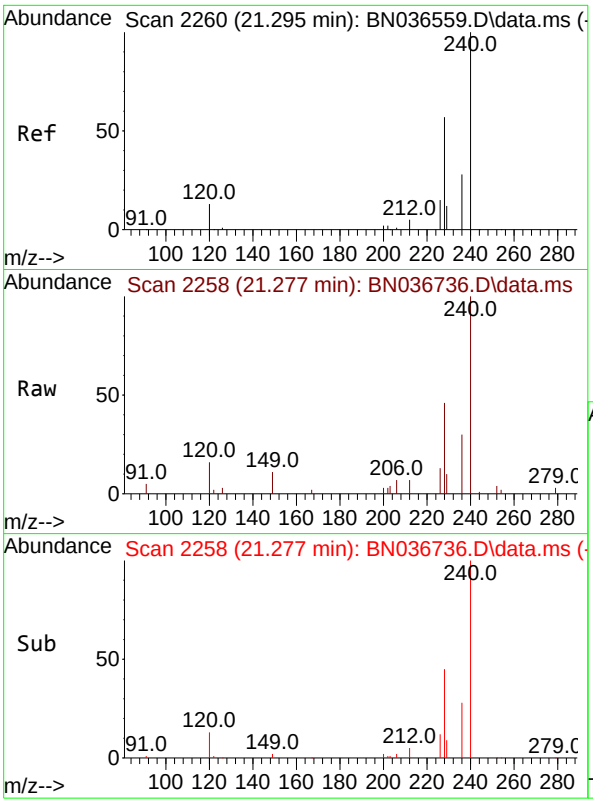




#28
Fluoranthene
Concen: 0.407 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:202 Resp: 8617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.2 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |



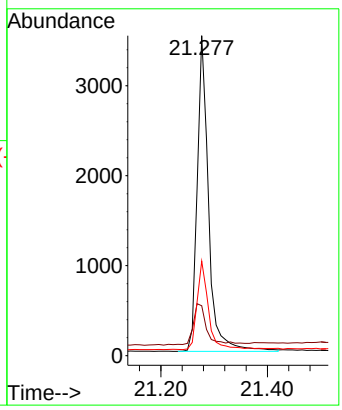


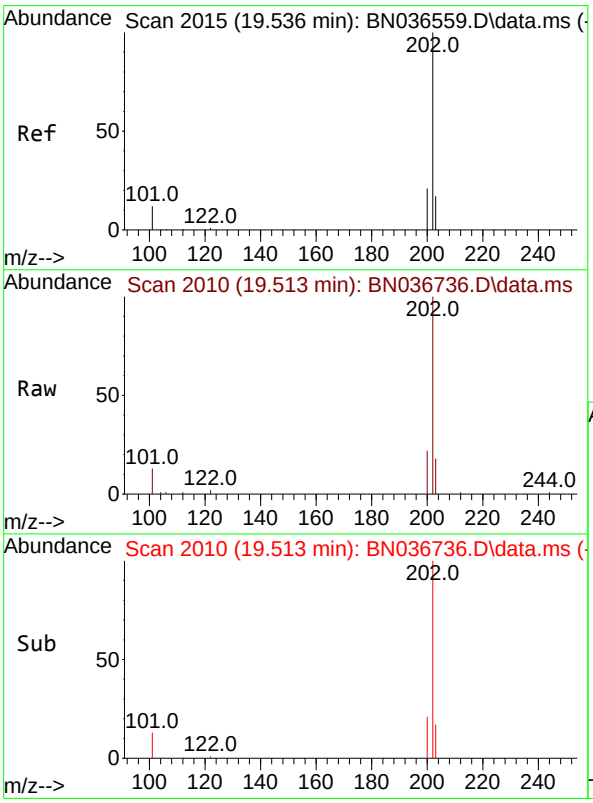

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:240 Resp: 5211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 15.6 | 14.6 | 22.0 |
| 236 | 29.6 | 24.1 | 36.1 |

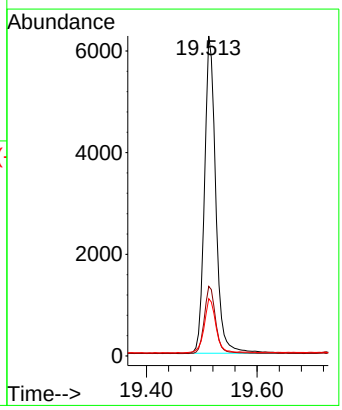


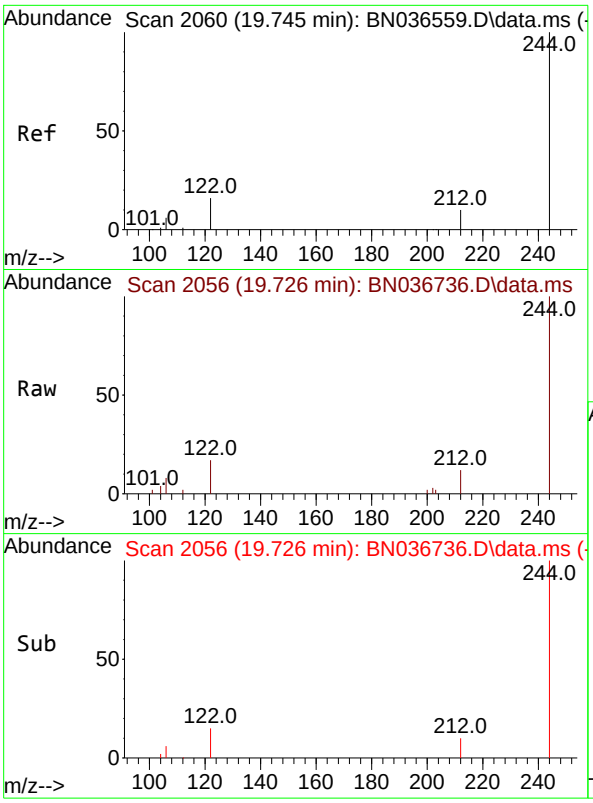




#30
Pyrene
Concen: 0.348 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:202 Resp: 8868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.3 | 17.1 | 25.7 |
| 203 | 17.4 | 14.1 | 21.1 |



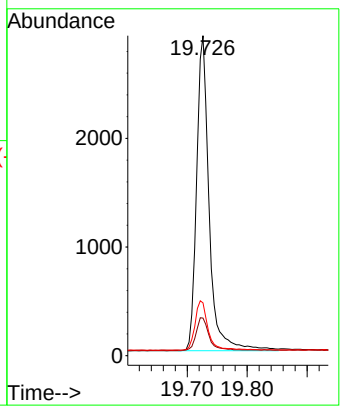


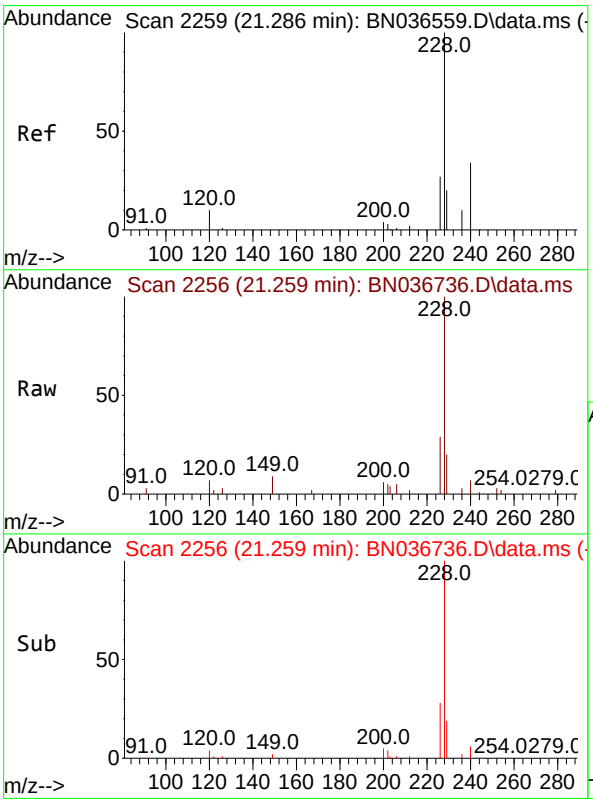

#31
Terphenyl-d14
Concen: 0.338 ng
RT: 19.726 min Scan# 2
Delta R.T. -0.019 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:244 Resp: 4220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.7 | 9.6 | 14.4 |
| 122 | 16.5 | 13.9 | 20.9 |

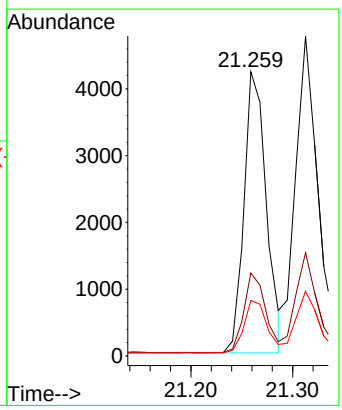


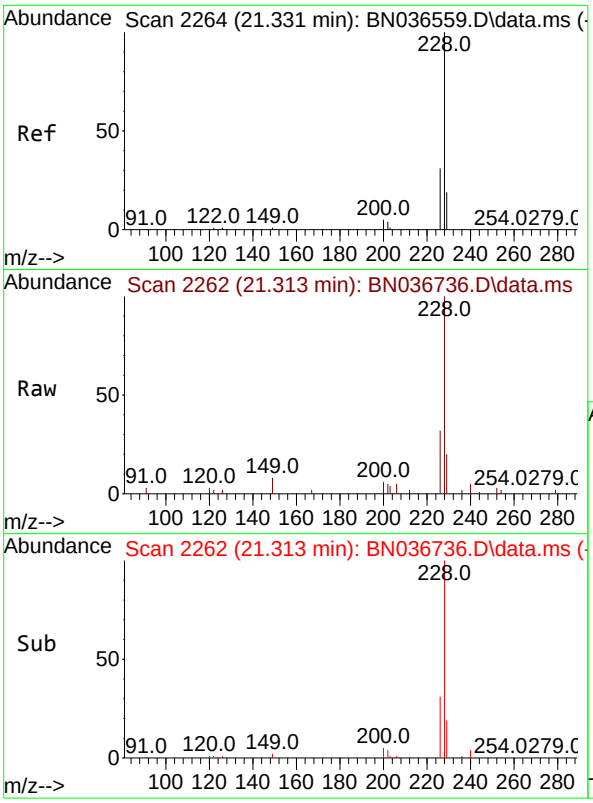




#32
Benzo(a)anthracene
Concen: 0.354 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:228 Resp: 6412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.2 | 22.5 | 33.7 |
| 229 | 19.5 | 16.6 | 25.0 |



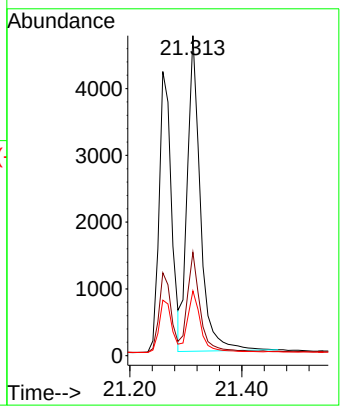


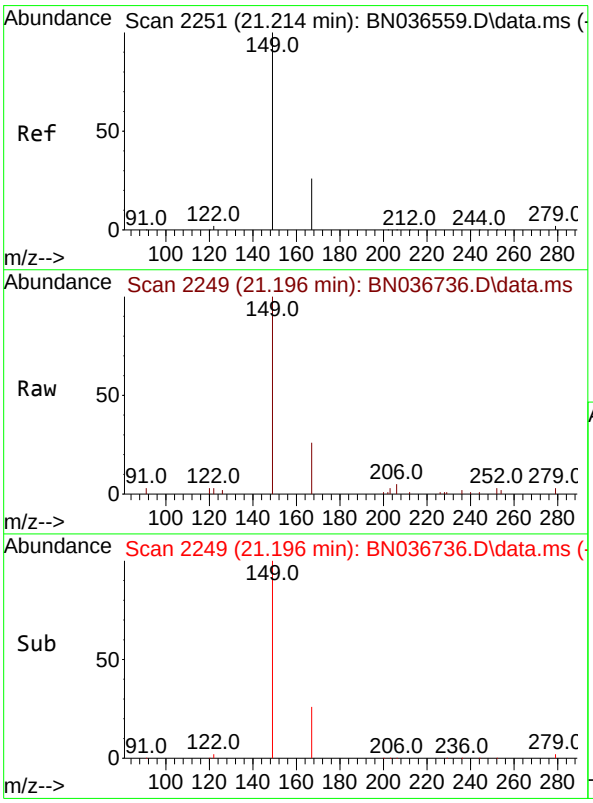

#33
Chrysene
Concen: 0.387 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:228 Resp: 7670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.3 | 25.3 | 37.9 |
| 229 | 20.2 | 15.8 | 23.8 |

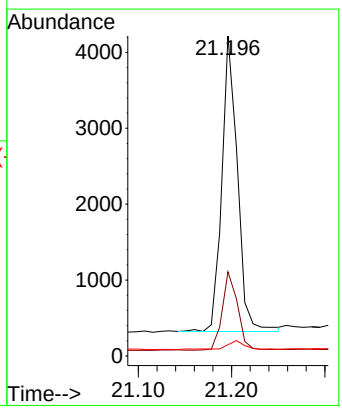


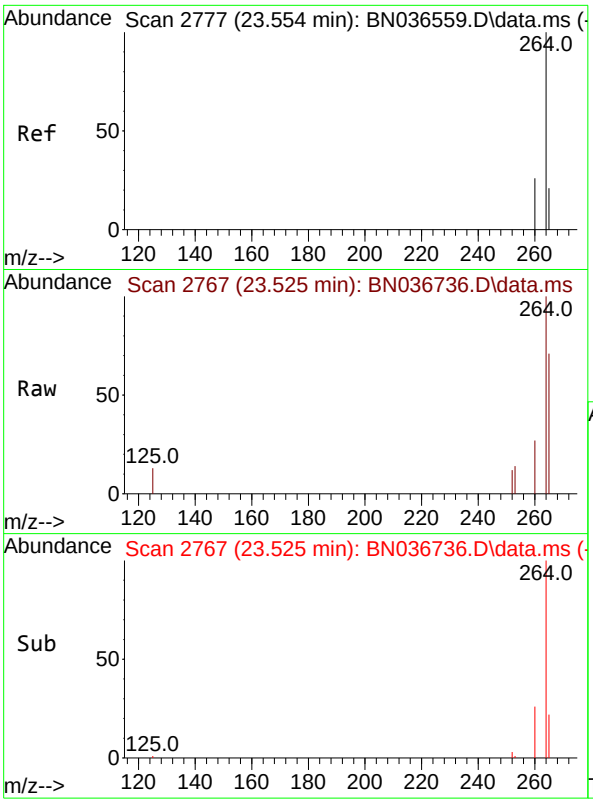




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.349 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:149 Resp: 4505

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.3 | 20.7 | 31.1 |
| 279 | 2.9 | 3.6 | 5.4# |



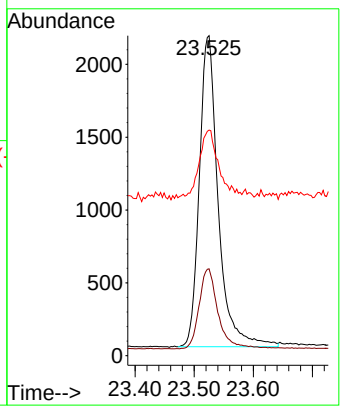


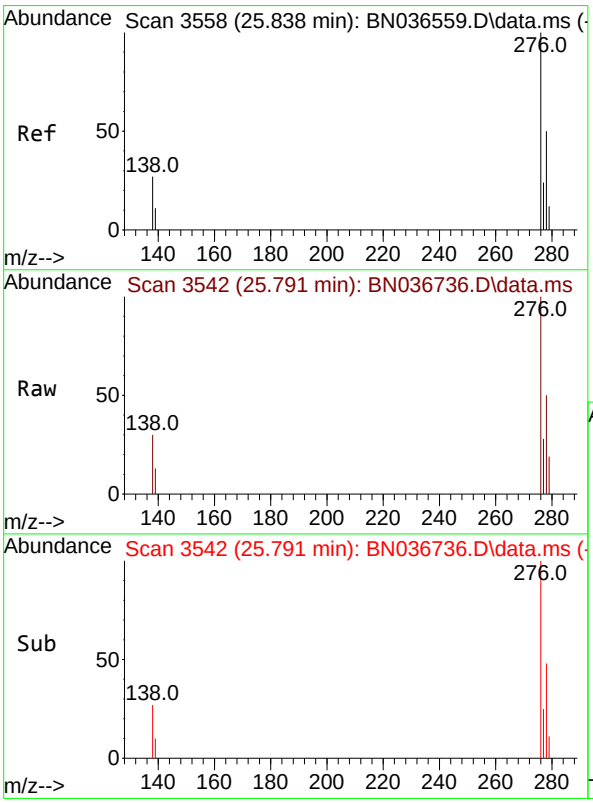

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:264 Resp: 4739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.1 | 22.6 | 33.8 |
| 265 | 70.5 | 88.1 | 132.1# |

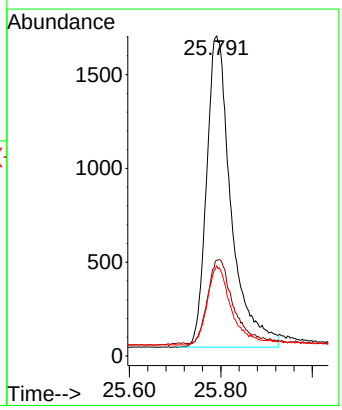


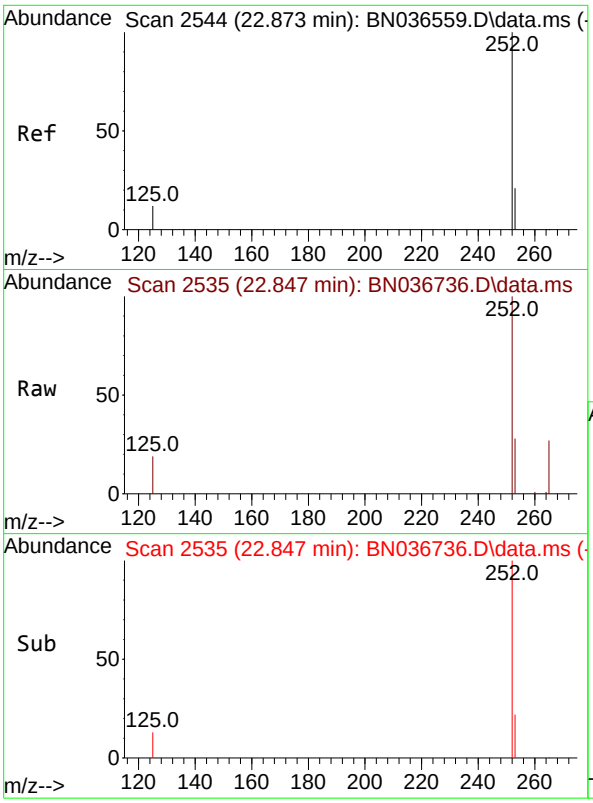




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.362 ng
RT: 25.791 min Scan# 3542
Delta R.T. -0.047 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:276 Resp: 6199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.5 | 23.4 | 35.2 |
| 277 | 24.9 | 20.0 | 30.0 |



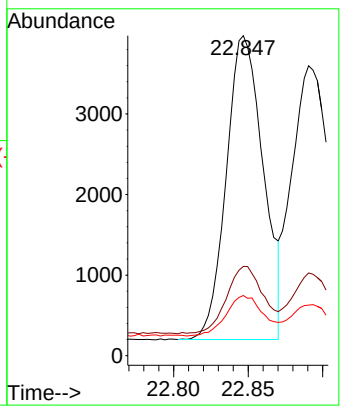


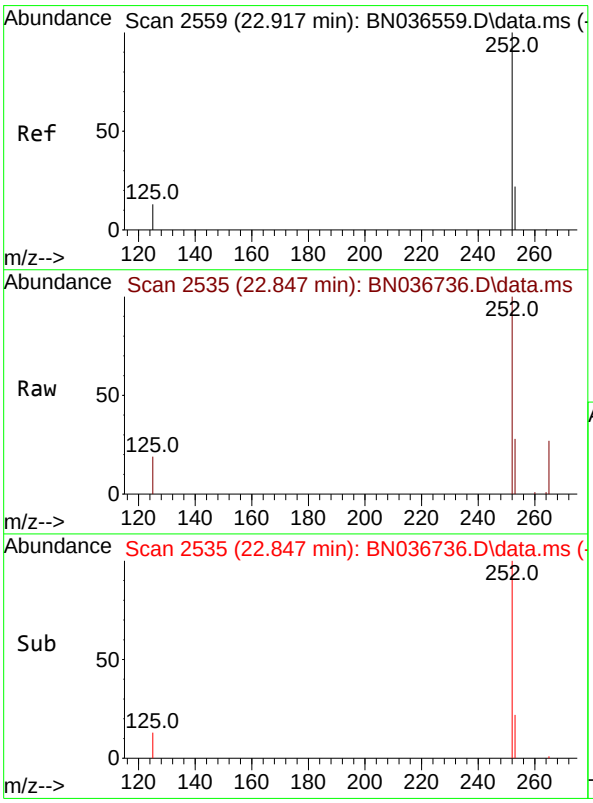

#37
Benzo(b)fluoranthene
Concen: 0.378 ng
RT: 22.847 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 6514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.9 | 23.9 | 35.9 |
| 125 | 18.8 | 17.4 | 26.2 |

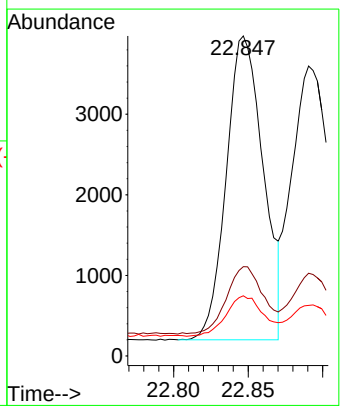


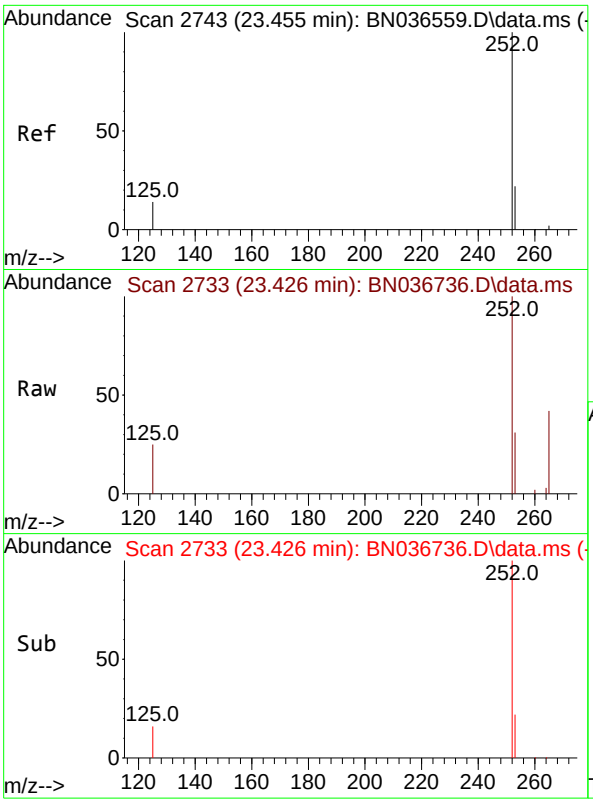




#38
Benzo(k)fluoranthene
Concen: 0.360 ng
RT: 22.847 min Scan# 2535
Delta R.T. -0.070 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:252 Resp: 6514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.9 | 24.6 | 36.8 |
| 125 | 18.8 | 17.8 | 26.8 |



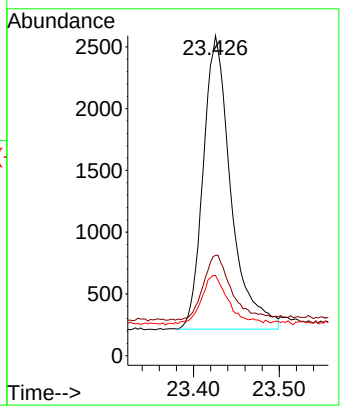


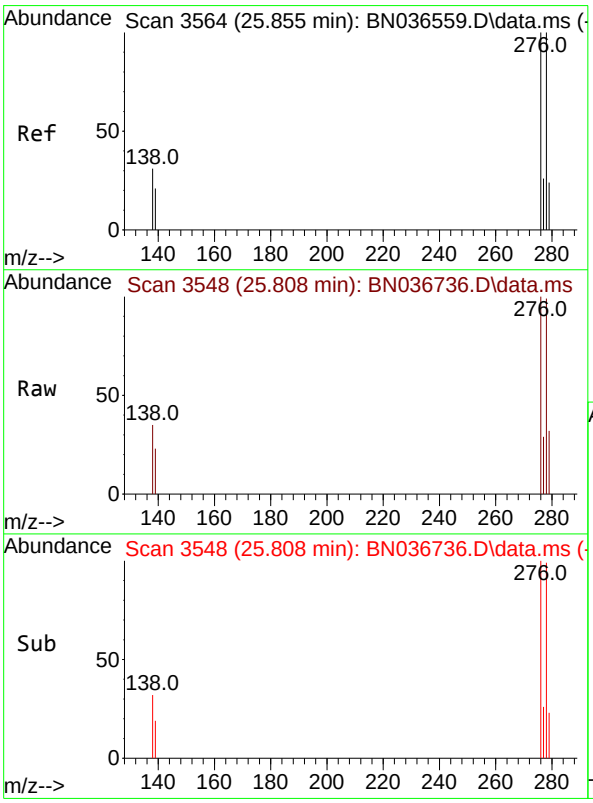

#39
Benzo(a)pyrene
Concen: 0.368 ng
RT: 23.426 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 5338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 31.3 | 27.8 | 41.8 |
| 125 | 25.1 | 22.7 | 34.1 |

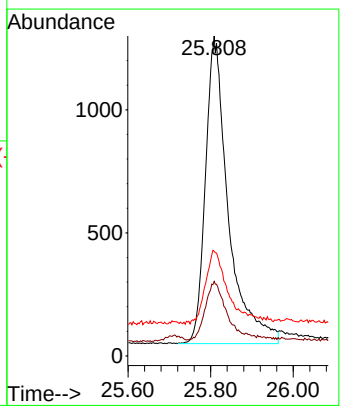


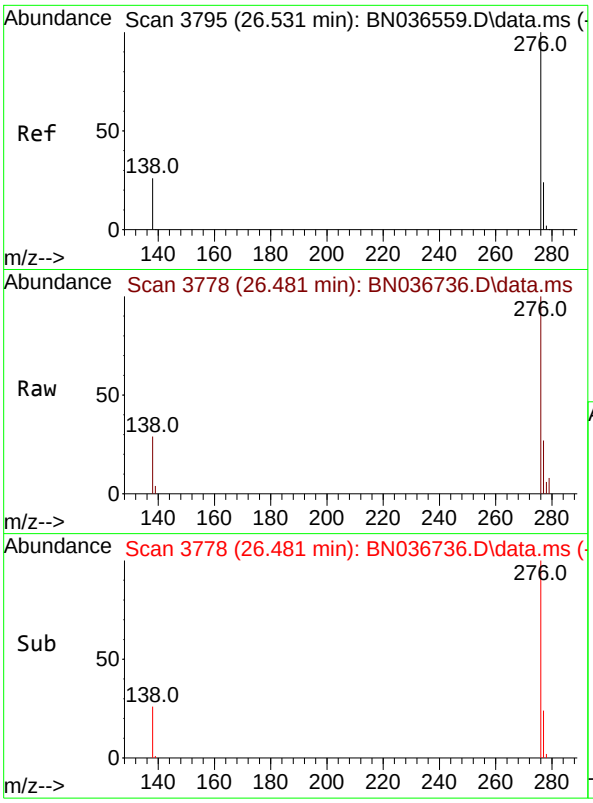




#40
Dibenzo(a,h)anthracene
Concen: 0.361 ng
RT: 25.808 min Scan# 3548
Delta R.T. -0.047 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

Tgt Ion:278 Resp: 4803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 23.3 | 20.8 | 31.2 |
| 279 | 32.7 | 28.8 | 43.2 |



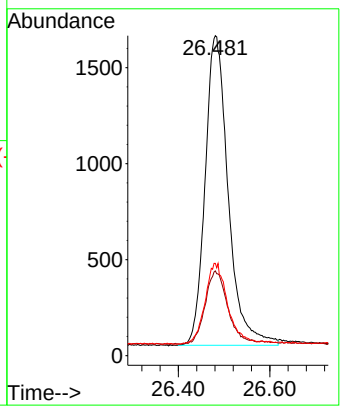



#41
Benzo(g,h,i)perylene
Concen: 0.372 ng
RT: 26.481 min Scan# 3
Delta R.T. -0.050 min
Lab File: BN036736.D
Acq: 27 Mar 2025 14:02

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:276 Resp: 5667

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.5 | 22.2 | 33.4 |
| 138 | 28.9 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036738.D
Acq On : 27 Mar 2025 15:38
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 16:33:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

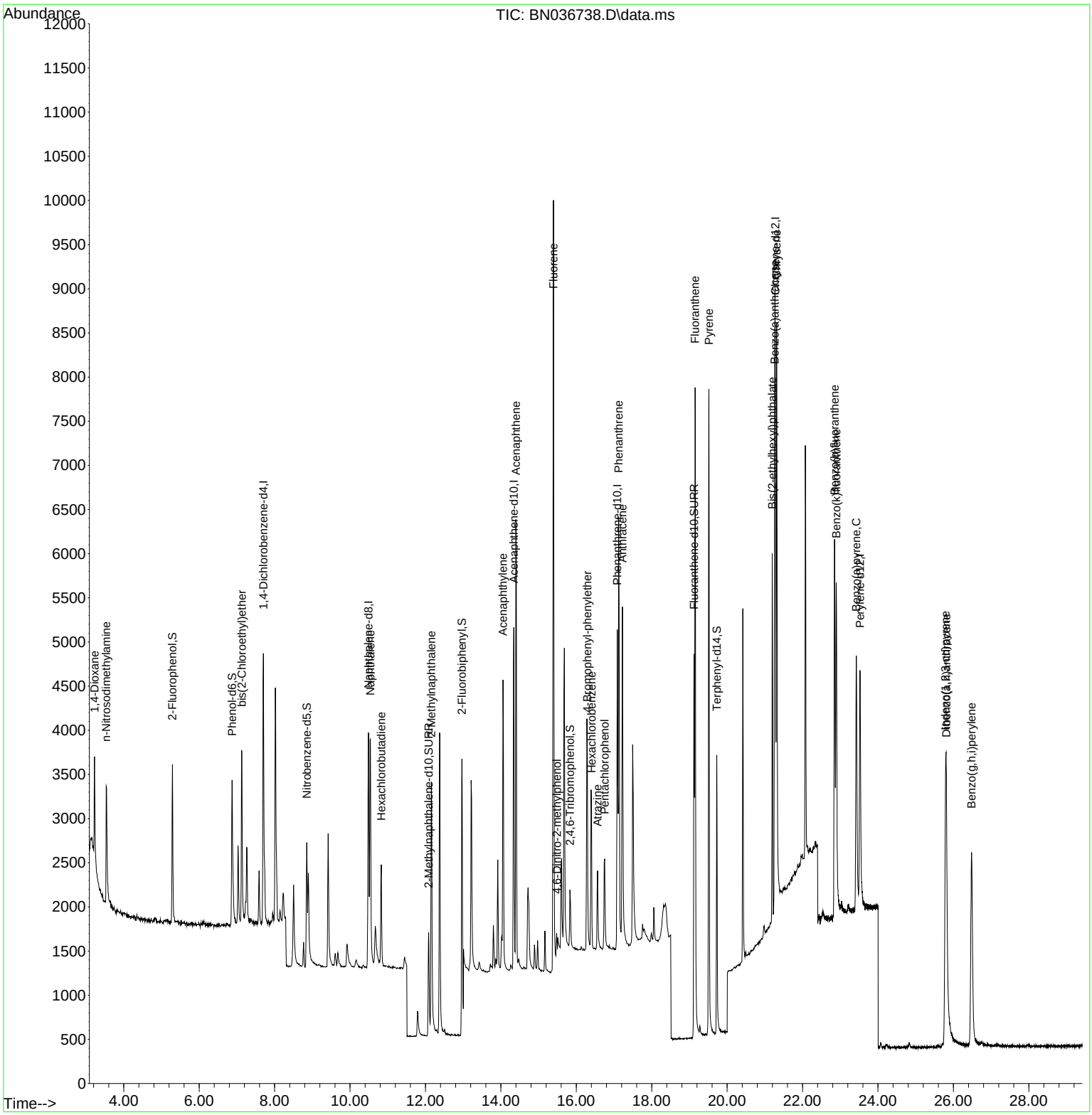
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1523 | 0.400 | ng | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 3803 | 0.400 | ng | -0.02 |
| 13) Acenaphthene-d10 | 14.345 | 164 | 2348 | 0.400 | ng | -0.02 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 4989 | 0.400 | ng | #-0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 4385 | 0.400 | ng | -0.02 |
| 35) Perylene-d12 | 23.525 | 264 | 4045 | 0.400 | ng | #-0.03 |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1294 | 0.365 | ng | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1536 | 0.350 | ng | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1363 | 0.329 | ng | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.085 | 152 | 2034 | 0.360 | ng | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 414 | 0.389 | ng | -0.02 |
| 15) 2-Fluorobiphenyl | 12.968 | 172 | 4725 | 0.346 | ng | -0.02 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 5220 | 0.408 | ng | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 3465 | 0.330 | ng | -0.02 |
| Target Compounds | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 721 | 0.427 | ng | 93 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1301 | 0.381 | ng | # 99 |
| 6) bis(2-Chloroethyl)ether | 7.132 | 93 | 1533 | 0.338 | ng | 95 |
| 9) Naphthalene | 10.541 | 128 | 4045 | 0.362 | ng | 98 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 955 | 0.363 | ng | # 98 |
| 12) 2-Methylnaphthalene | 12.156 | 142 | 2514 | 0.353 | ng | 96 |
| 16) Acenaphthylene | 14.056 | 152 | 3861 | 0.348 | ng | 100 |
| 17) Acenaphthene | 14.398 | 154 | 2582 | 0.356 | ng | 99 |
| 18) Fluorene | 15.392 | 166 | 3631 | 0.370 | ng | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.489 | 198 | 370 | 0.436 | ng | 81 |
| 21) 4-Bromophenyl-phenylether | 16.292 | 248 | 1147 | 0.367 | ng | # 80 |
| 22) Hexachlorobenzene | 16.404 | 284 | 1358 | 0.360 | ng | 97 |
| 23) Atrazine | 16.565 | 200 | 991 | 0.395 | ng | 95 |
| 24) Pentachlorophenol | 16.751 | 266 | 662 | 0.385 | ng | 95 |
| 25) Phenanthrene | 17.124 | 178 | 5704 | 0.381 | ng | 100 |
| 26) Anthracene | 17.223 | 178 | 4989 | 0.369 | ng | 99 |
| 28) Fluoranthene | 19.150 | 202 | 6959 | 0.414 | ng | 99 |
| 30) Pyrene | 19.517 | 202 | 7305 | 0.341 | ng | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5558 | 0.365 | ng | 98 |
| 33) Chrysene | 21.313 | 228 | 6163 | 0.370 | ng | 100 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 3633 | 0.335 | ng | # 98 |
| 36) Indeno(1,2,3-cd)pyrene | 25.791 | 276 | 5346 | 0.366 | ng | 98 |
| 37) Benzo(b)fluoranthene | 22.850 | 252 | 5508 | 0.374 | ng | 97 |
| 38) Benzo(k)fluoranthene | 22.893 | 252 | 5599 | 0.363 | ng | 96 |
| 39) Benzo(a)pyrene | 23.426 | 252 | 4841 | 0.391 | ng | 96 |
| 40) Dibenzo(a,h)anthracene | 25.814 | 278 | 4114 | 0.362 | ng | 95 |
| 41) Benzo(g,h,i)perylene | 26.481 | 276 | 4859 | 0.374 | ng | 97 |

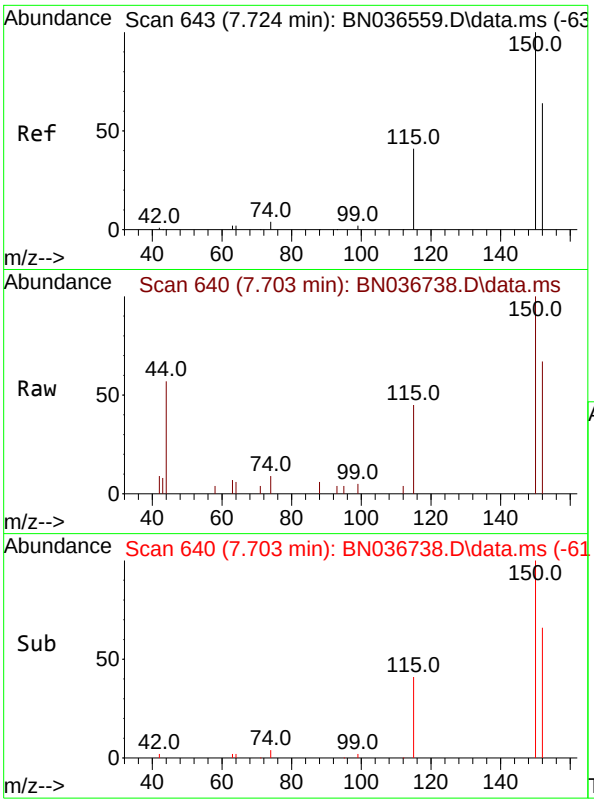
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036738.D
Acq On : 27 Mar 2025 15:38
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 27 16:33:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



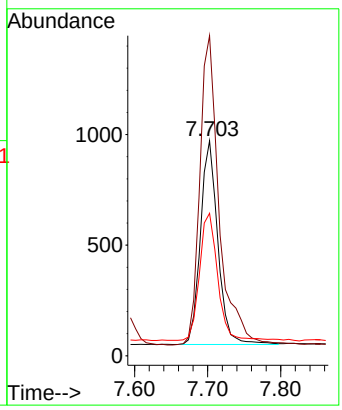


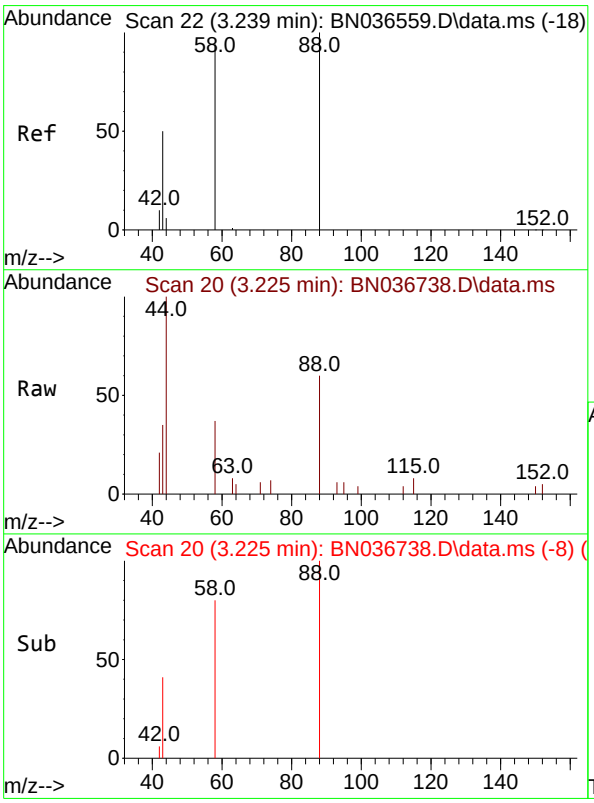

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 1523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 148.9 | 123.7 | 185.5 |
| 115 | 66.3 | 54.3 | 81.5 |

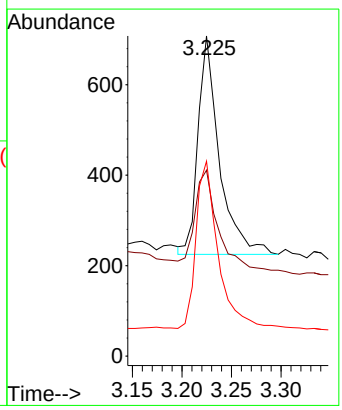


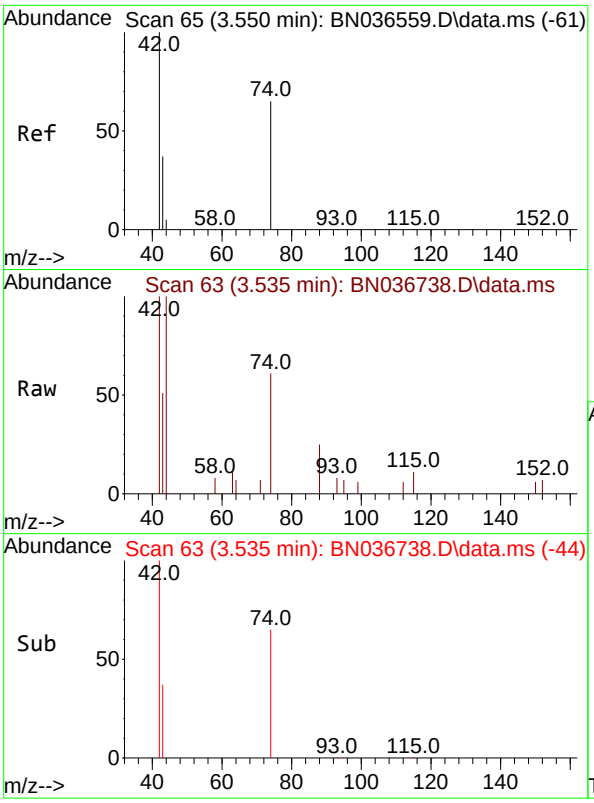




#2
1,4-Dioxane
Concen: 0.427 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 88 Resp: 721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 52.3 | 37.8 | 56.8 |
| 58 | 78.6 | 67.4 | 101.2 |



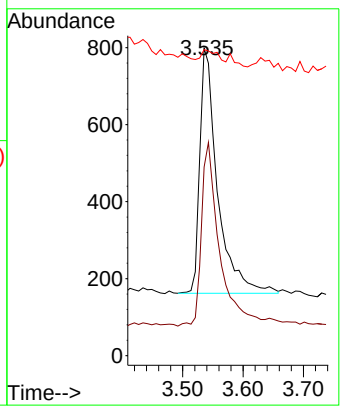


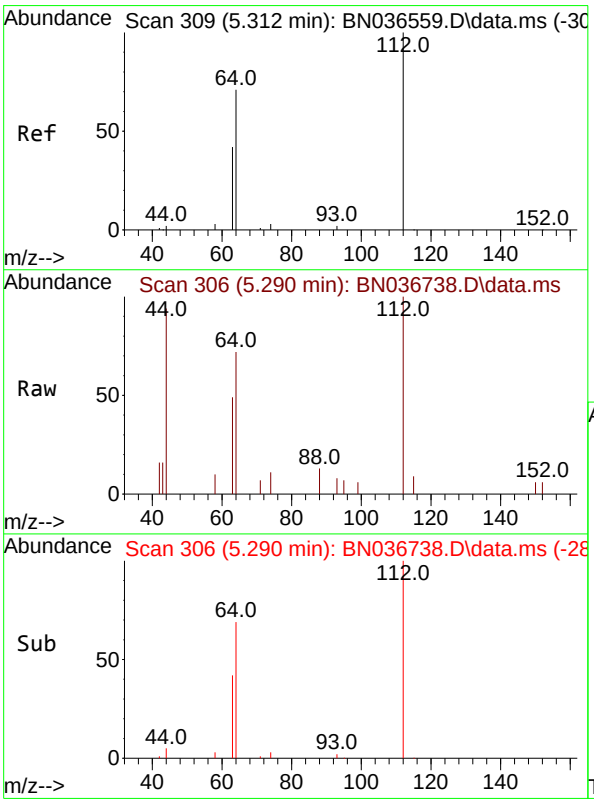

#3
n-Nitrosodimethylamine
Concen: 0.381 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 42 Resp: 1301

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 75.9 | 60.6 | 90.8 |
| 44 | 4.1 | 6.3 | 9.5# |

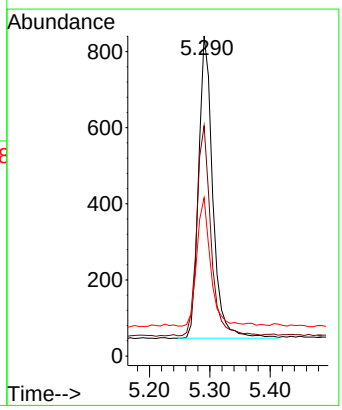


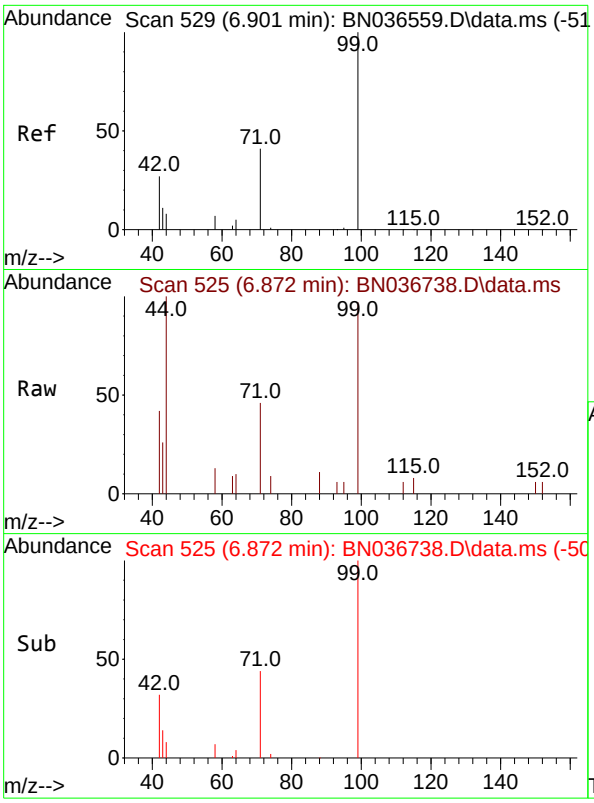




#4
2-Fluorophenol
Concen: 0.365 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:112 Resp: 1294

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.9 | 53.1 | 79.7 |
| 63 | 40.8 | 31.8 | 47.8 |



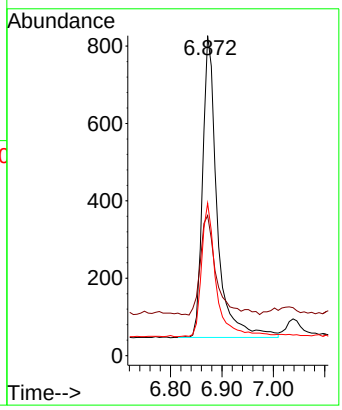


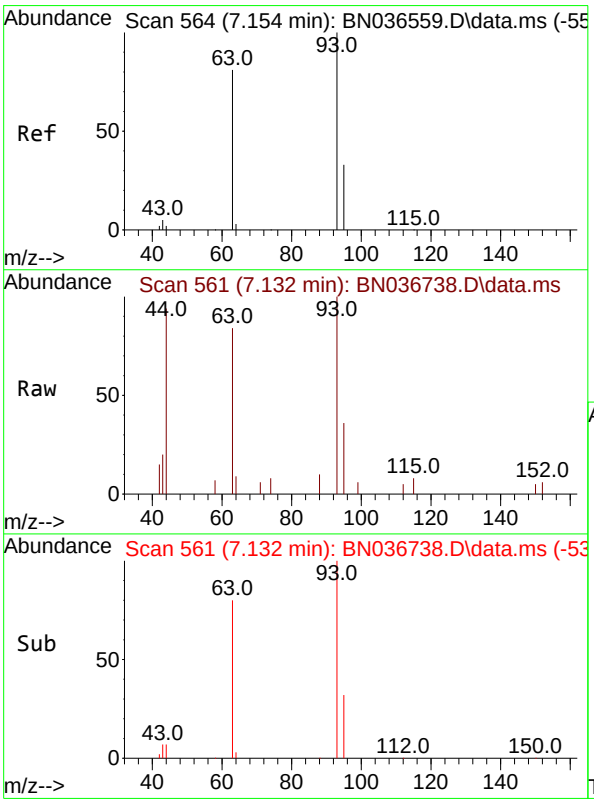

#5
Phenol-d6
Concen: 0.350 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 99 Resp: 1536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.2 | 26.5 | 39.7 |
| 71 | 44.3 | 34.1 | 51.1 |

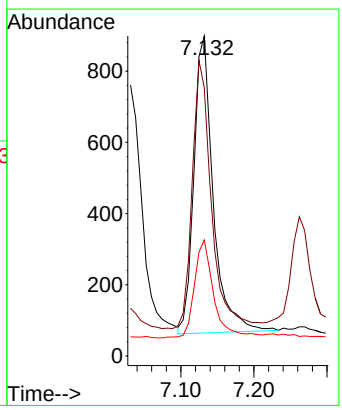


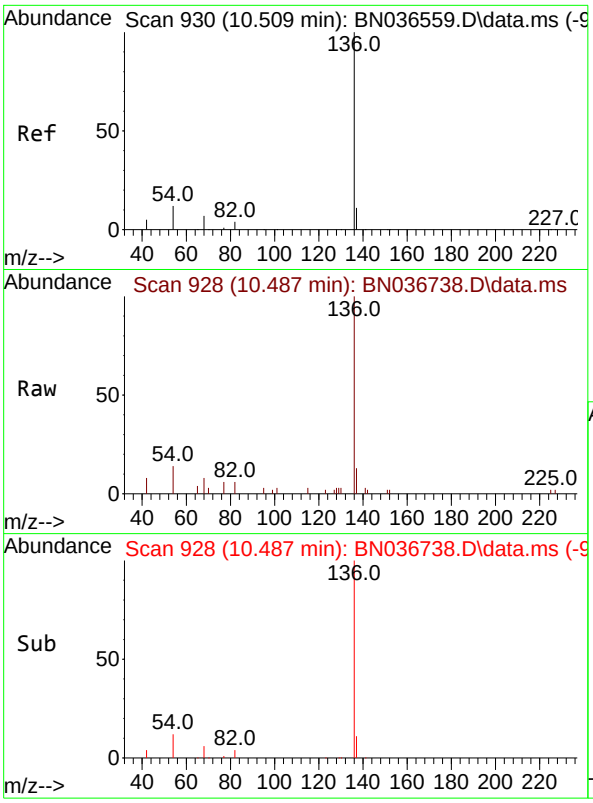




#6
bis(2-Chloroethyl)ether
Concen: 0.338 ng
RT: 7.132 min Scan# 561
Delta R.T. -0.022 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 93 Resp: 1533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 90.0 | 67.7 | 101.5 |
| 95 | 33.1 | 25.6 | 38.4 |



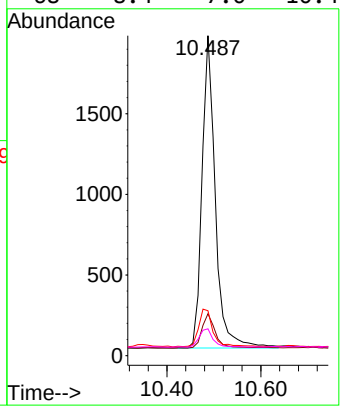


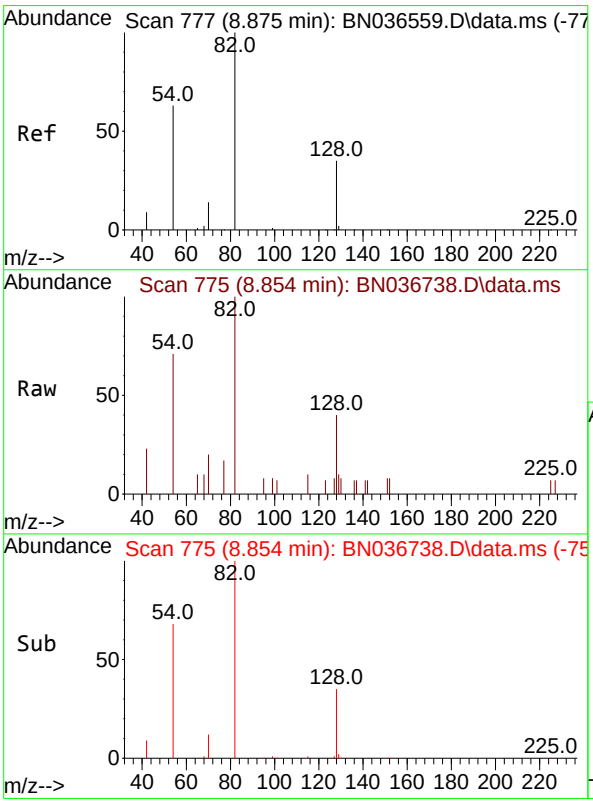

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:136 Resp: 3803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 13.1 | 10.3 | 15.5 |
| 54 | 14.0 | 11.5 | 17.3 |
| 68 | 8.4 | 7.0 | 10.4 |

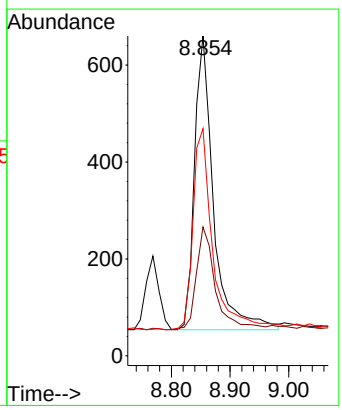


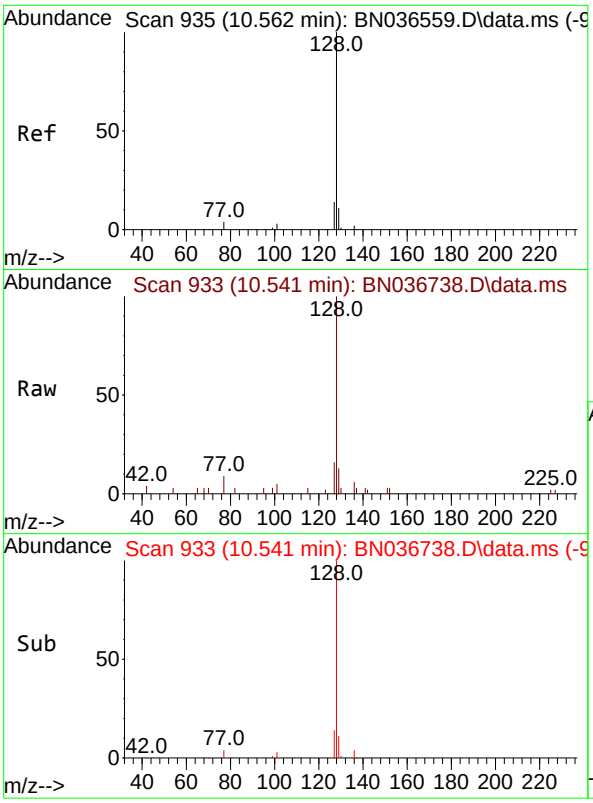




#8
Nitrobenzene-d5
Concen: 0.329 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion: 82 Resp: 1363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.3 | 30.6 | 45.8 |
| 54 | 71.1 | 52.2 | 78.4 |



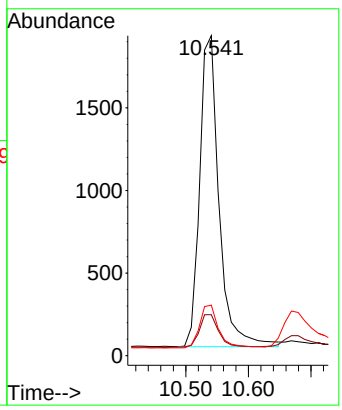


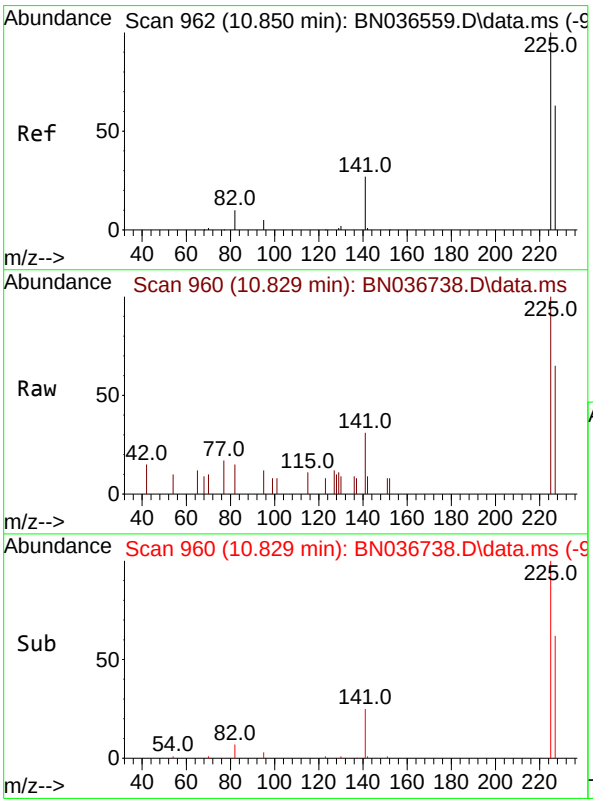

#9
Naphthalene
Concen: 0.362 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:128 Resp: 4045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.8 | 9.8 | 14.6 |
| 127 | 15.8 | 11.8 | 17.8 |

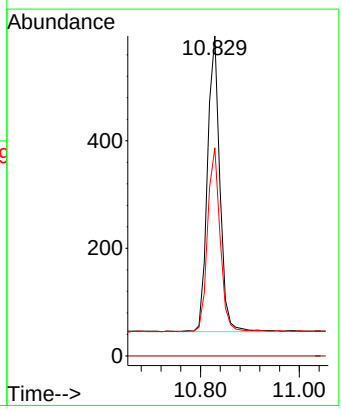


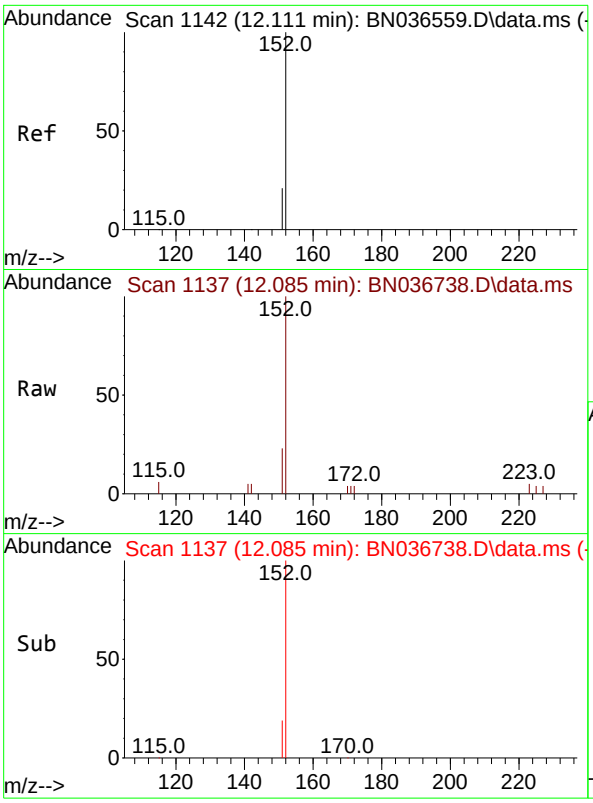




#10
Hexachlorobutadiene
Concen: 0.363 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:225 Resp: 955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.4 | 51.8 | 77.8 |



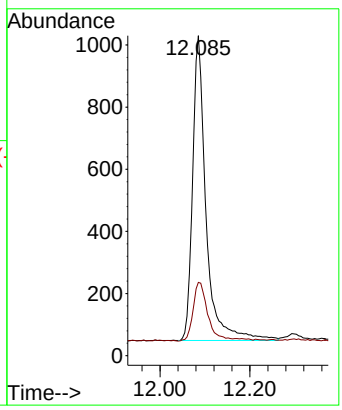


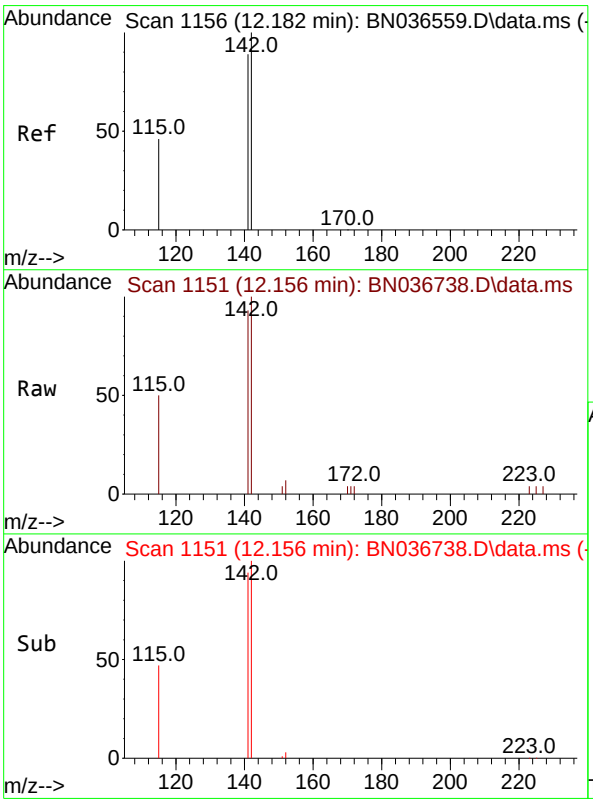

#11
2-Methylnaphthalene-d10
Concen: 0.360 ng
RT: 12.085 min Scan# 11
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 2034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.9 | 17.0 | 25.6 |

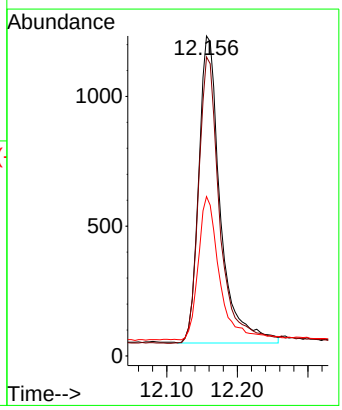


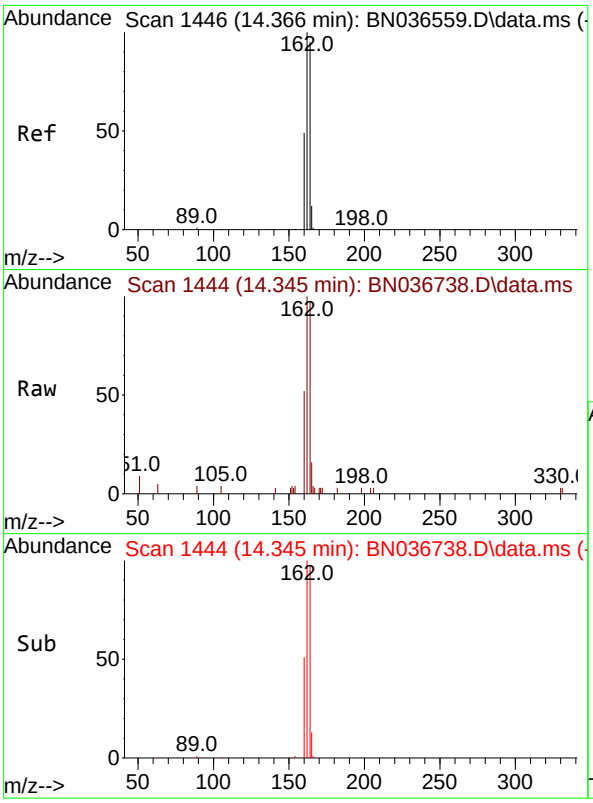




#12
2-Methylnaphthalene
Concen: 0.353 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:142 Resp: 2514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 93.4 | 71.7 | 107.5 |
| 115 | 49.8 | 38.3 | 57.5 |



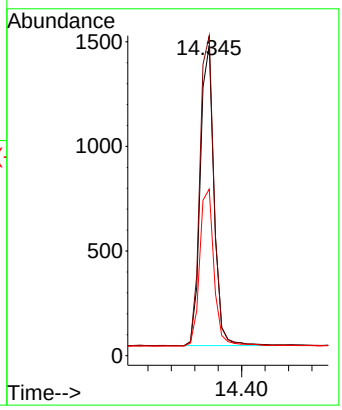


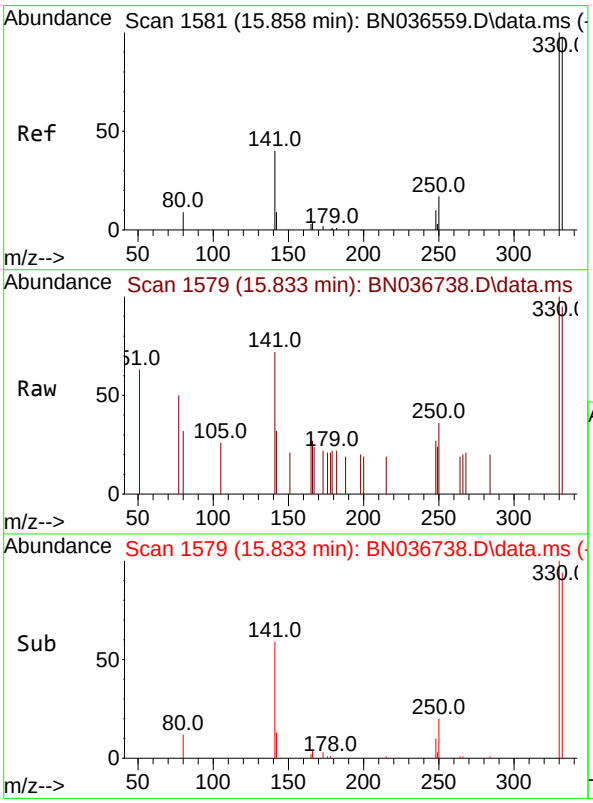

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:164 Resp: 2348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 103.1 | 84.2 | 126.2 |
| 160 | 53.7 | 42.2 | 63.2 |

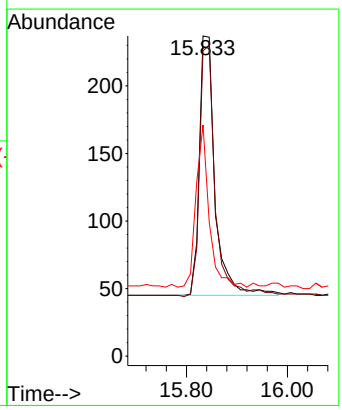


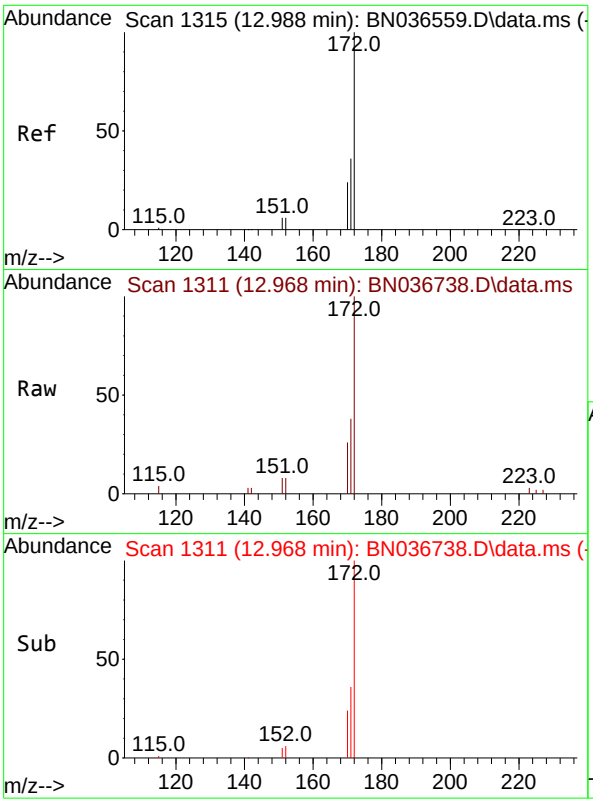




#14
2,4,6-Tribromophenol
Concen: 0.389 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:330 Resp: 414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 97.6 | 75.2 | 112.8 |
| 141 | 52.7 | 43.4 | 65.2 |



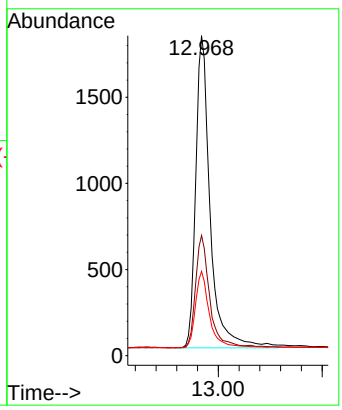


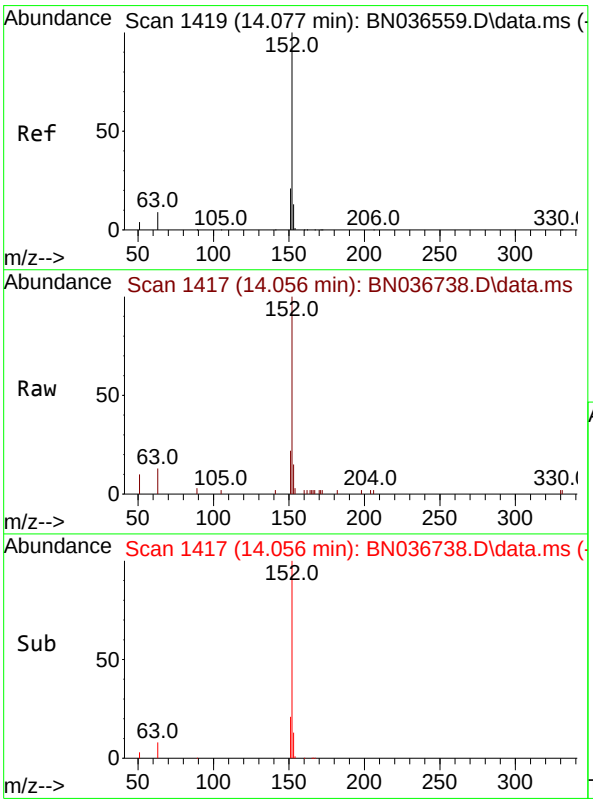

#15
2-Fluorobiphenyl
Concen: 0.346 ng
RT: 12.968 min Scan# 1
Delta R.T. -0.020 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:172 Resp: 4725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.6 | 29.5 | 44.3 |
| 170 | 26.3 | 20.2 | 30.4 |

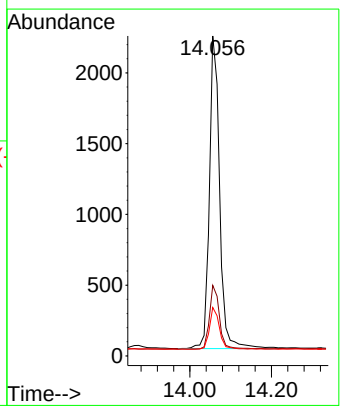


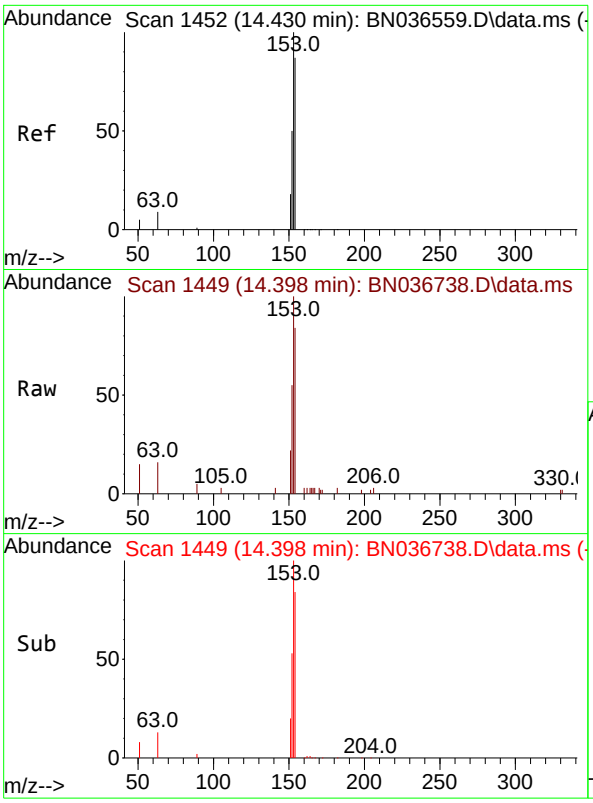




#16
Acenaphthylene
Concen: 0.348 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:152 Resp: 3861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.0 | 16.2 | 24.4 |
| 153 | 13.1 | 10.6 | 15.8 |



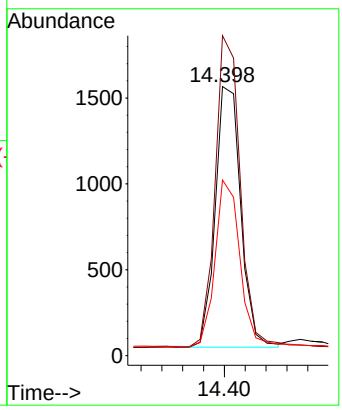


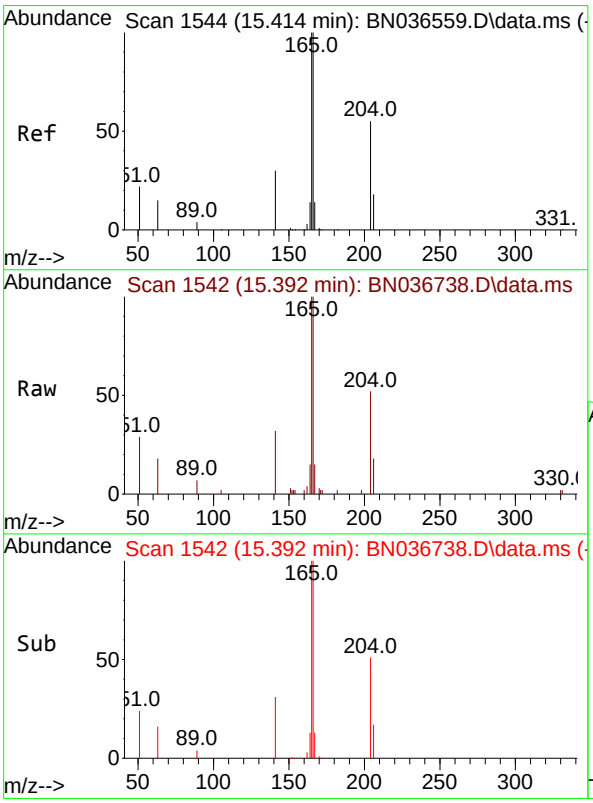

#17
Acenaphthene
Concen: 0.356 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:154 Resp: 2582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 119.8 | 94.1 | 141.1 |
| 152 | 62.5 | 49.8 | 74.6 |

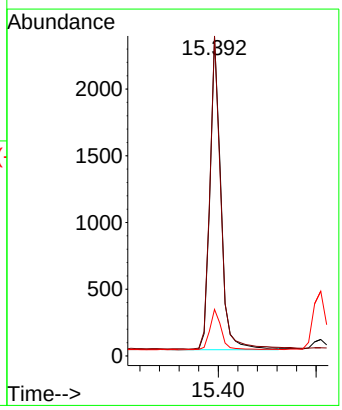


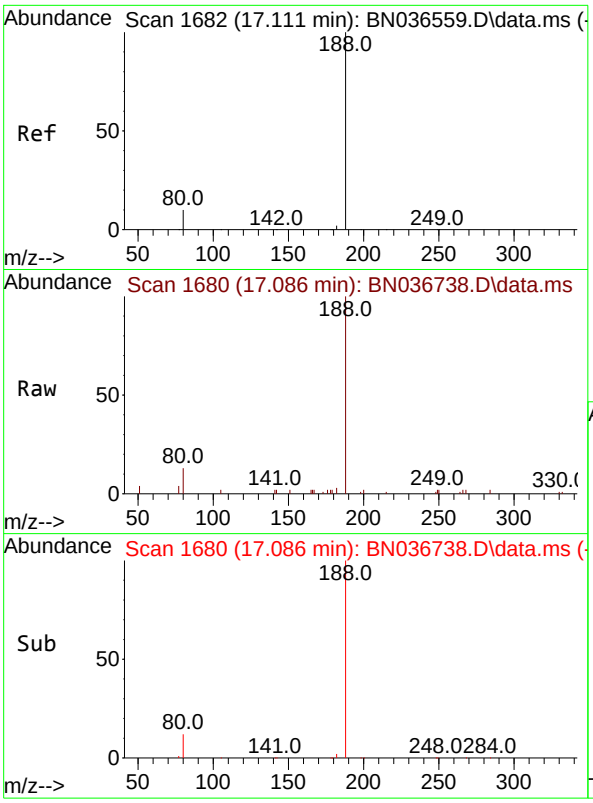




#18
Fluorene
Concen: 0.370 ng
RT: 15.392 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:166 Resp: 3631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.9 | 79.8 | 119.8 |
| 167 | 13.7 | 10.6 | 15.8 |



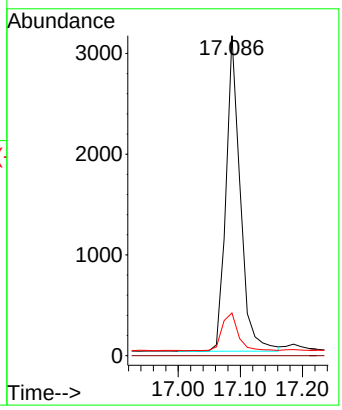


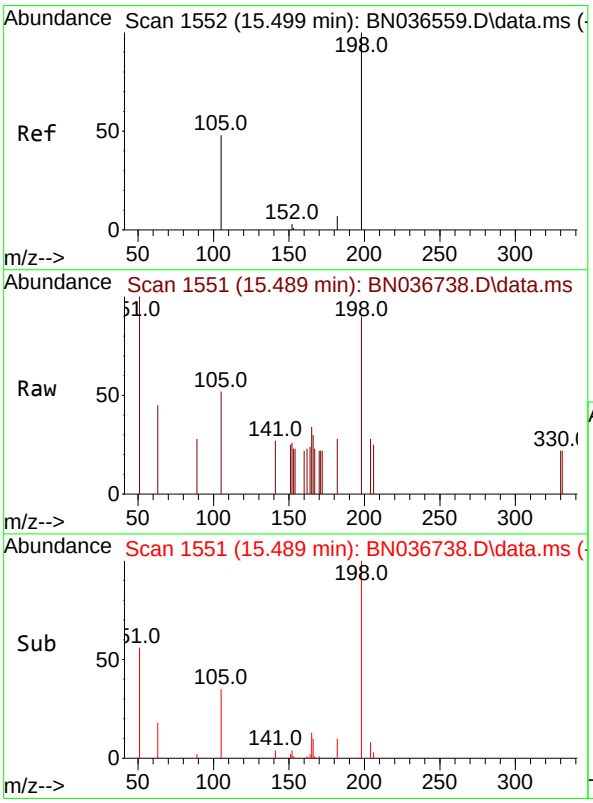

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:188 Resp: 4989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 13.4 | 8.8 | 13.2# |

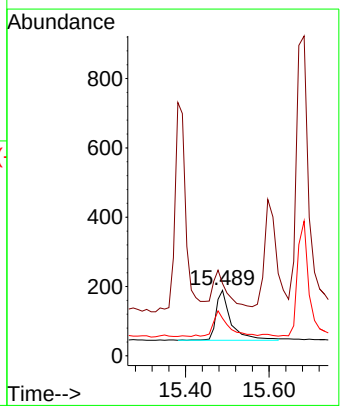


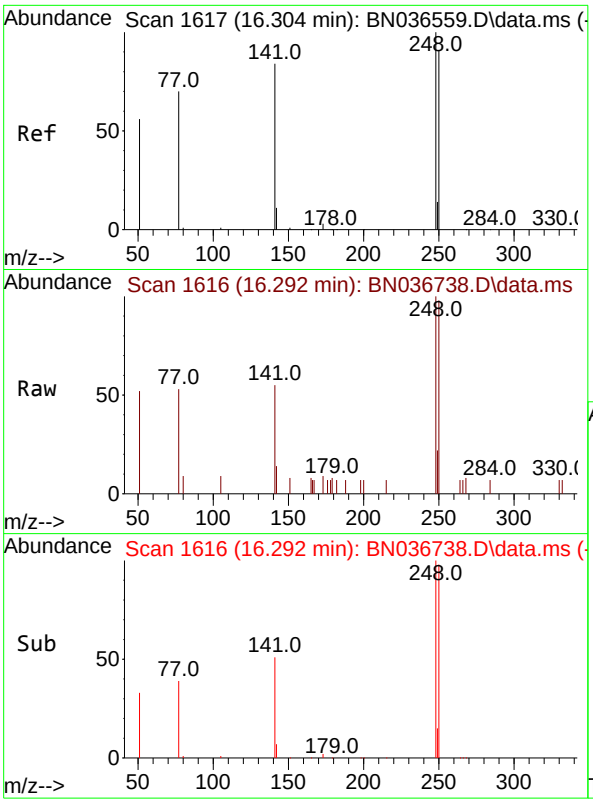




#20
4,6-Dinitro-2-methylphenol
Concen: 0.436 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:198 Resp: 370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 110.6 | 107.9 | 161.9 |
| 105 | 57.1 | 56.2 | 84.2 |



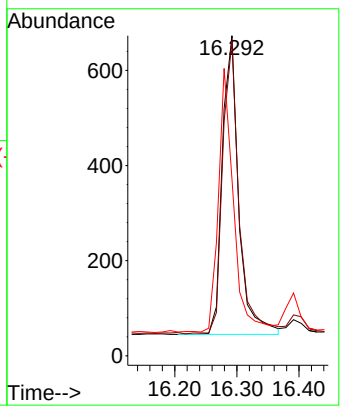


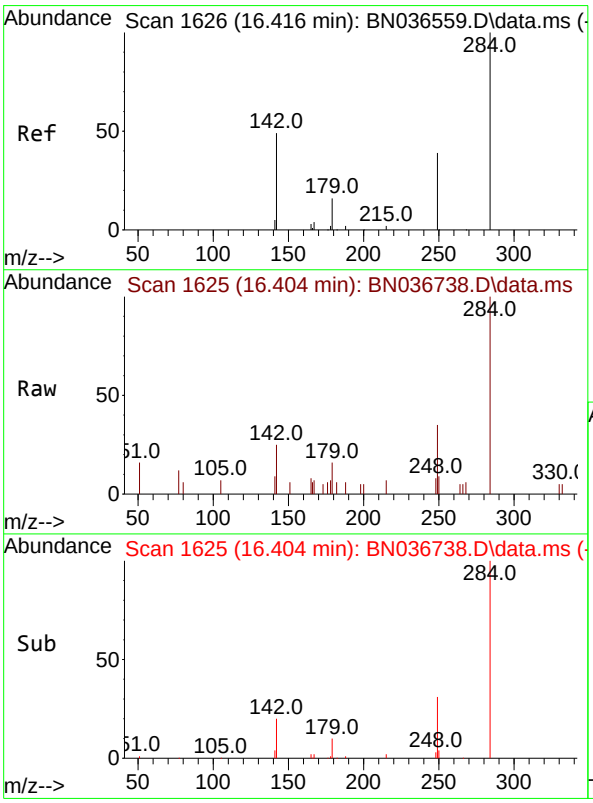

#21
4-Bromophenyl-phenylether
Concen: 0.367 ng
RT: 16.292 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:248 Resp: 1147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 98.4 | 73.0 | 109.6 |
| 141 | 55.3 | 68.6 | 103.0# |

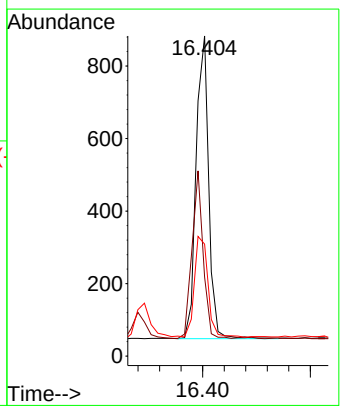


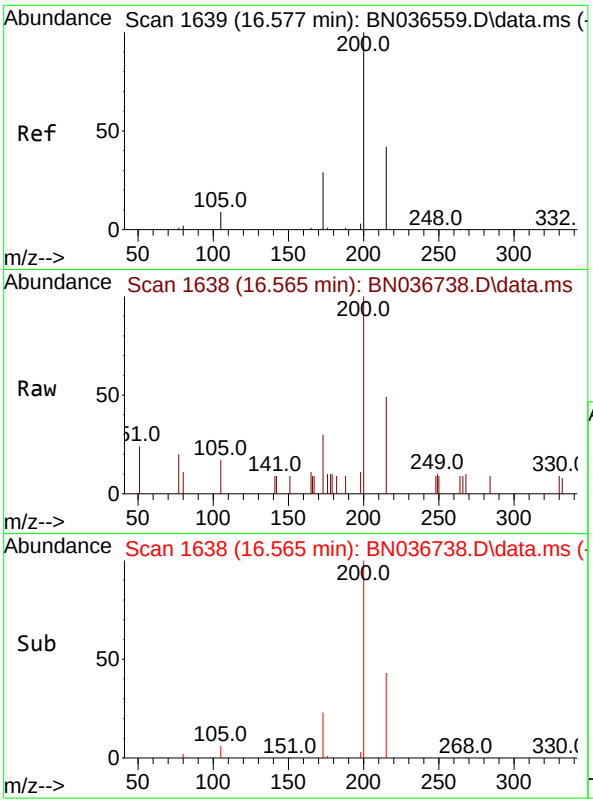




#22
Hexachlorobenzene
Concen: 0.360 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.012 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:284 Resp: 1358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 48.9 | 37.0 | 55.4 |
| 249 | 36.3 | 28.1 | 42.1 |



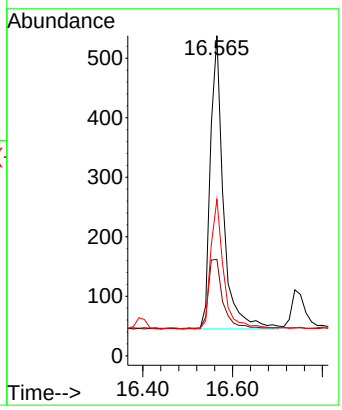


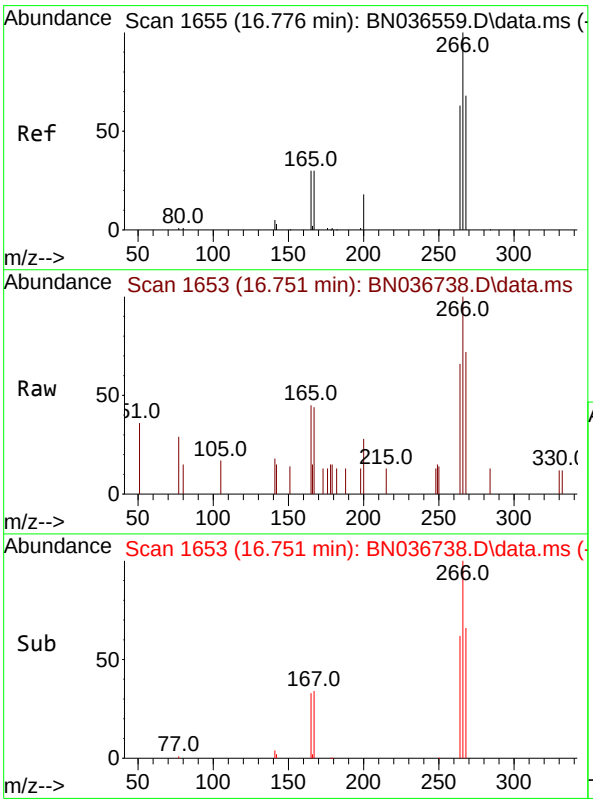

#23
Atrazine
Concen: 0.395 ng
RT: 16.565 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:200 Resp: 991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 30.1 | 27.3 | 40.9 |
| 215 | 48.9 | 36.8 | 55.2 |

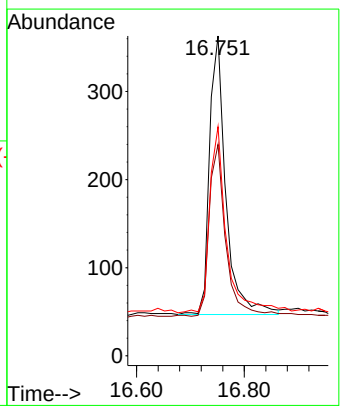


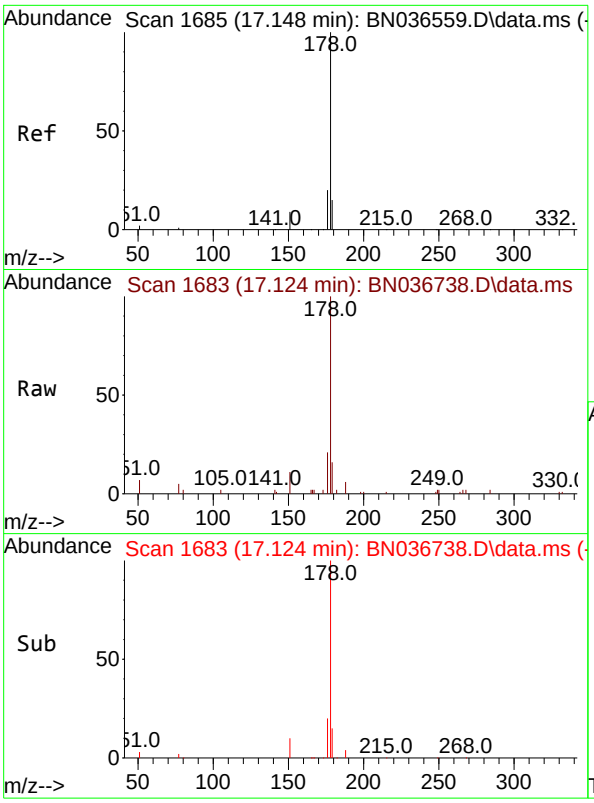




#24
Pentachlorophenol
Concen: 0.385 ng
RT: 16.751 min Scan# 1653
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:266 Resp: 662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.6 | 49.6 | 74.4 |
| 268 | 69.5 | 50.9 | 76.3 |



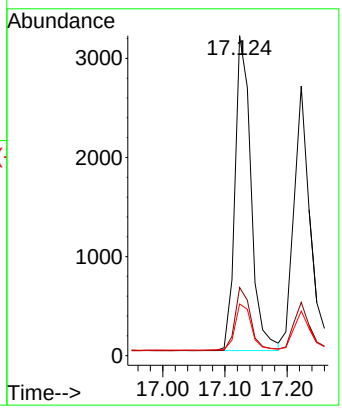


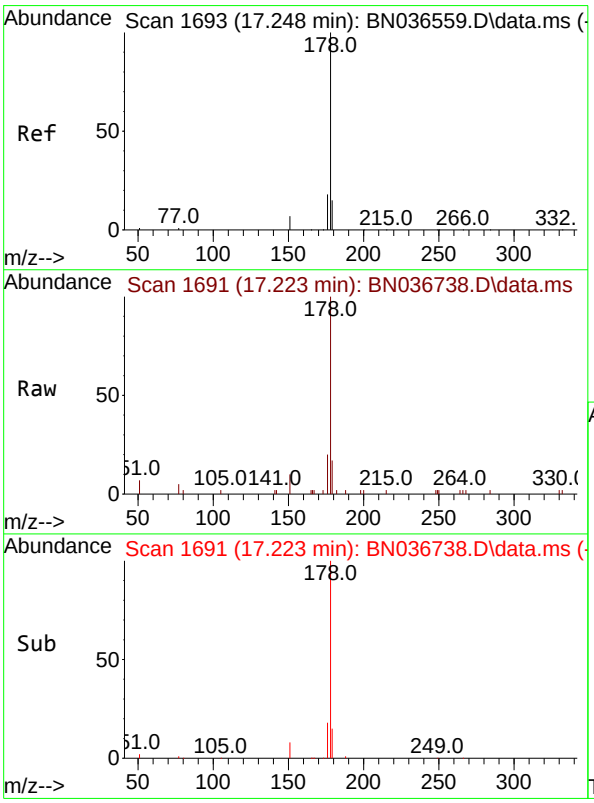

#25
Phenanthrene
Concen: 0.381 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:178 Resp: 5704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |

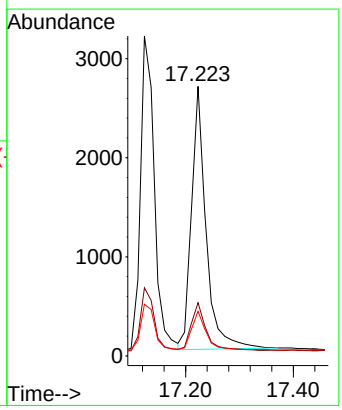


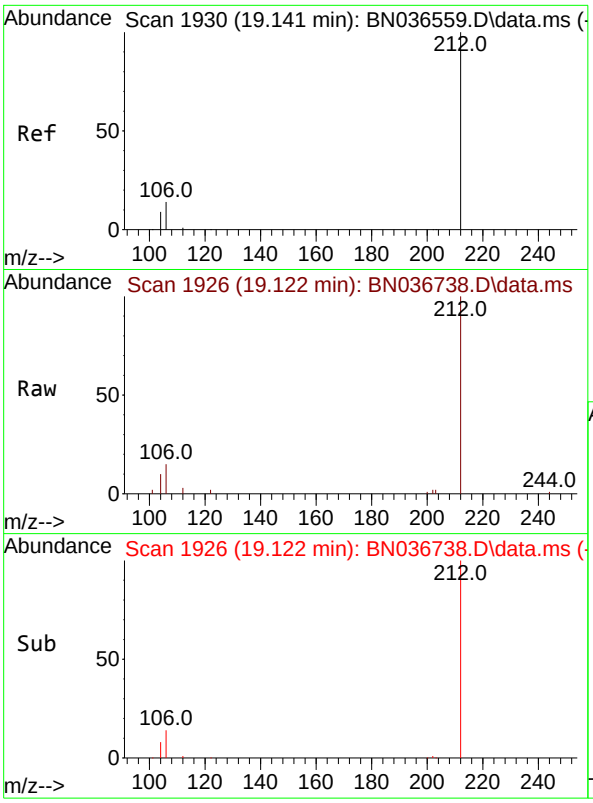




#26
Anthracene
Concen: 0.369 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:178 Resp: 4989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.6 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |



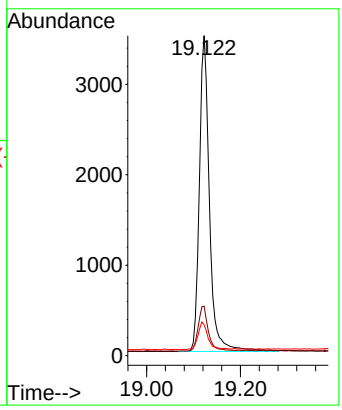


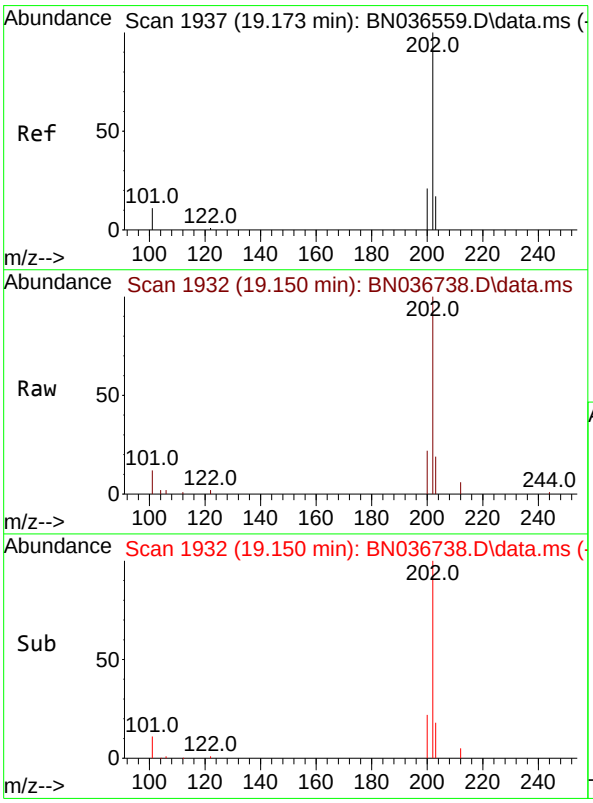

#27
Fluoranthene-d10
Concen: 0.408 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.019 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:212 Resp: 5220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.4 | 11.8 | 17.6 |
| 104 | 8.9 | 7.3 | 10.9 |

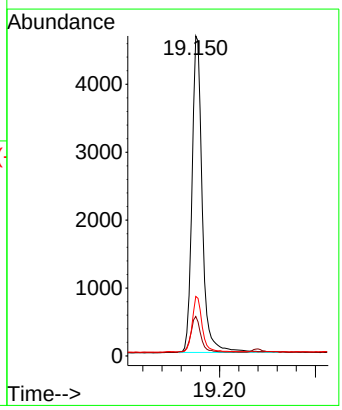


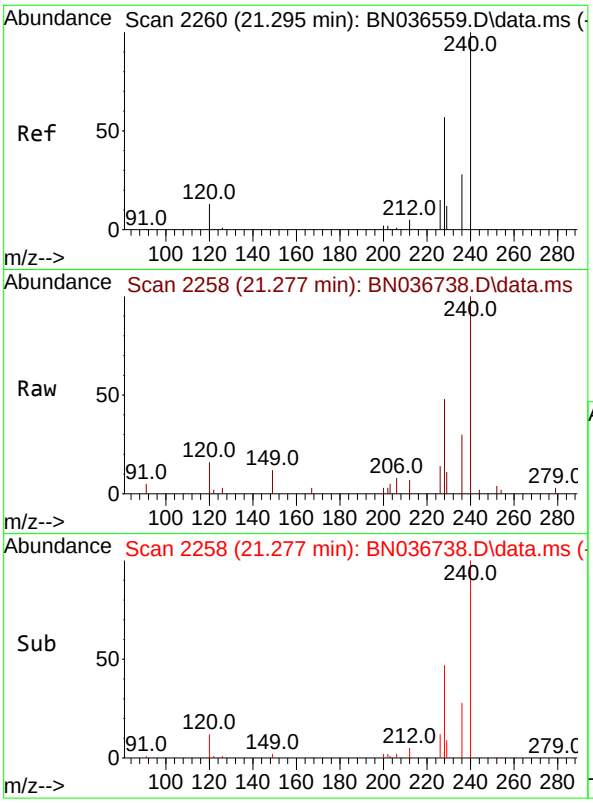




#28
Fluoranthene
Concen: 0.414 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:202 Resp: 6959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.2 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |



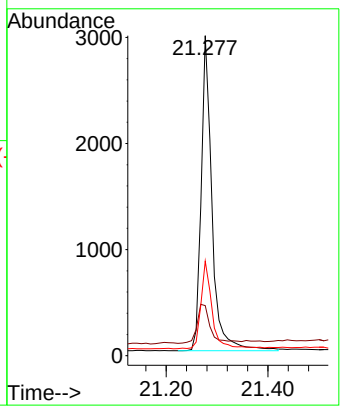


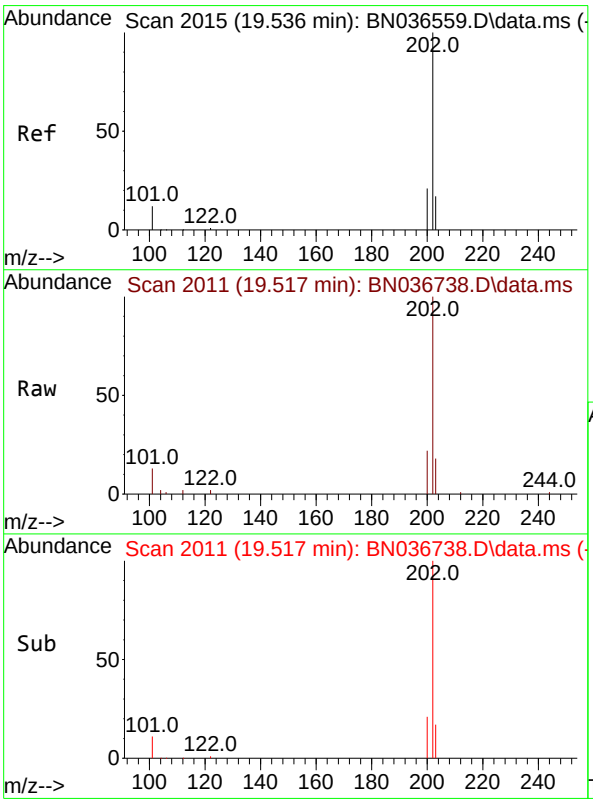

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:240 Resp: 4385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 15.7 | 14.6 | 22.0 |
| 236 | 29.5 | 24.1 | 36.1 |

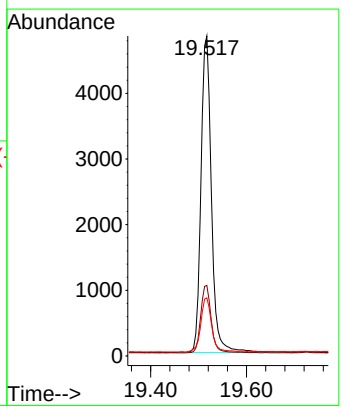


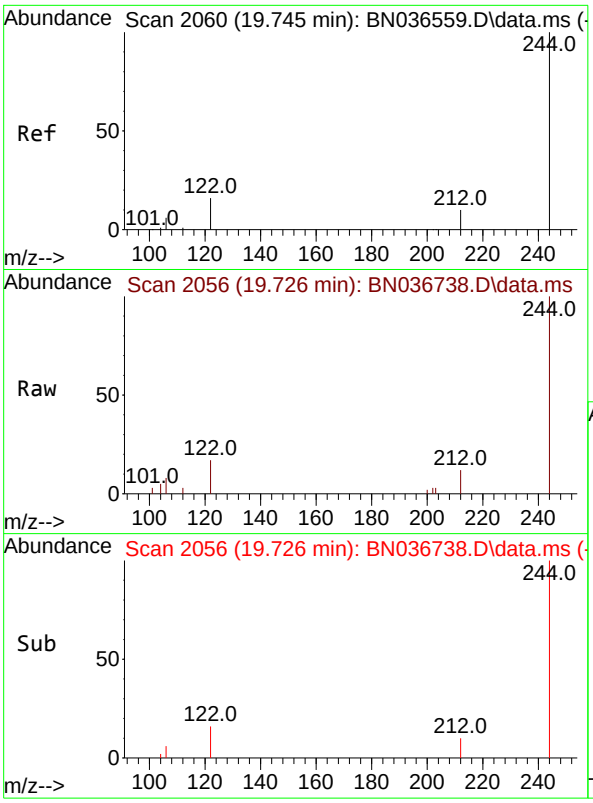




#30
Pyrene
Concen: 0.341 ng
RT: 19.517 min Scan# 2011
Delta R.T. -0.019 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:202 Resp: 7305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.8 | 14.1 | 21.1 |



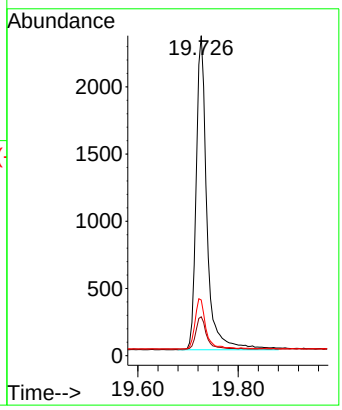


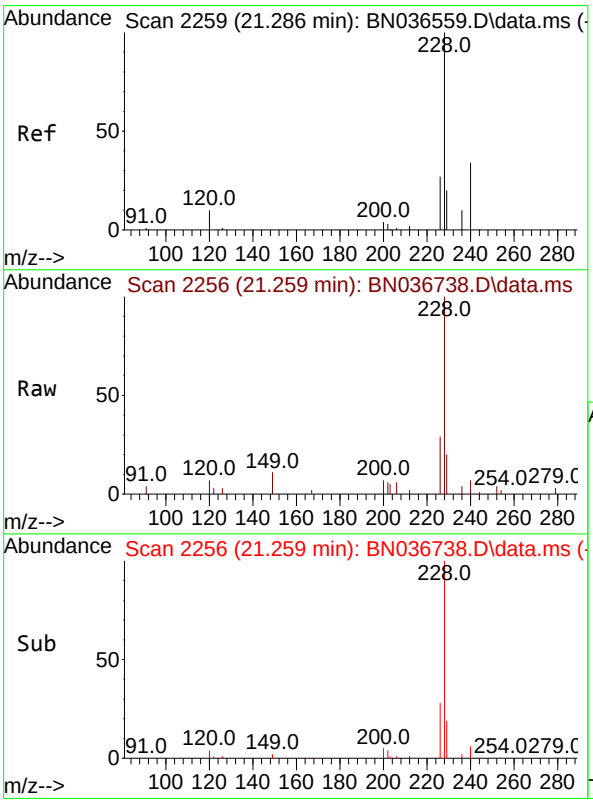

#31
Terphenyl-d14
Concen: 0.330 ng
RT: 19.726 min Scan# 2
Delta R.T. -0.019 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:244 Resp: 3465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.2 | 9.6 | 14.4 |
| 122 | 17.4 | 13.9 | 20.9 |

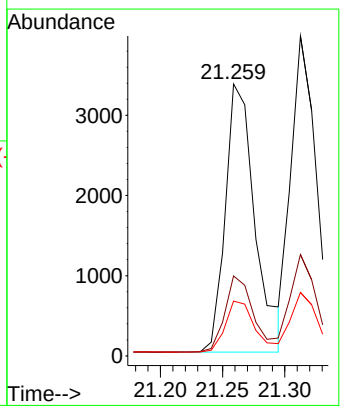


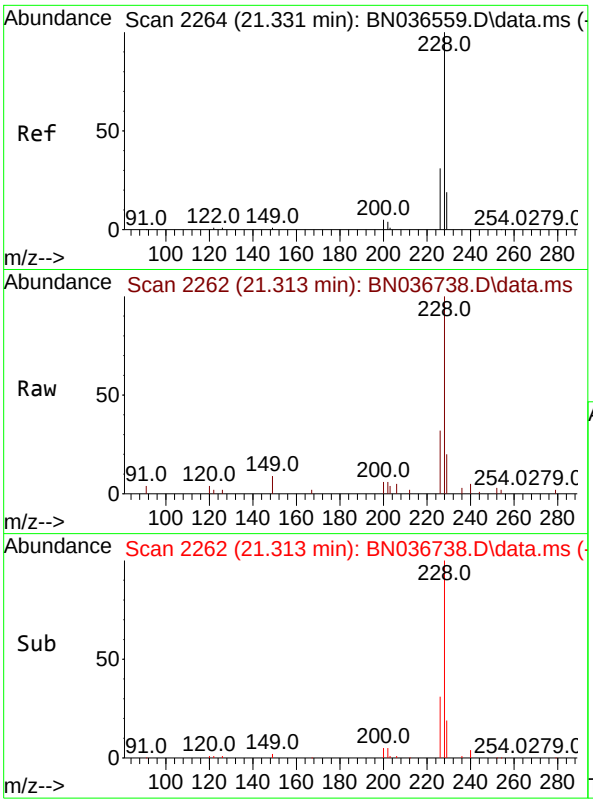




#32
Benzo(a)anthracene
Concen: 0.365 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:228 Resp: 5558

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.4 | 22.5 | 33.7 |
| 229 | 20.2 | 16.6 | 25.0 |



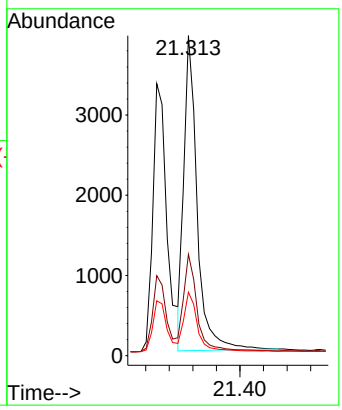


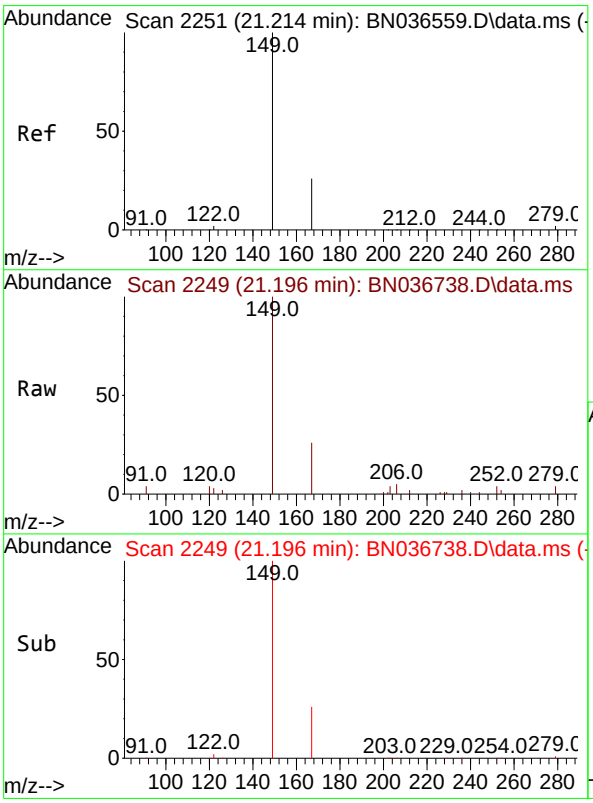

#33
Chrysene
Concen: 0.370 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:228 Resp: 6163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.7 | 25.3 | 37.9 |
| 229 | 19.8 | 15.8 | 23.8 |

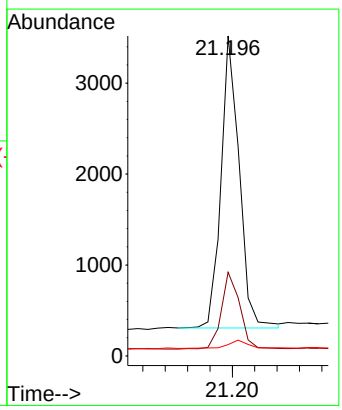


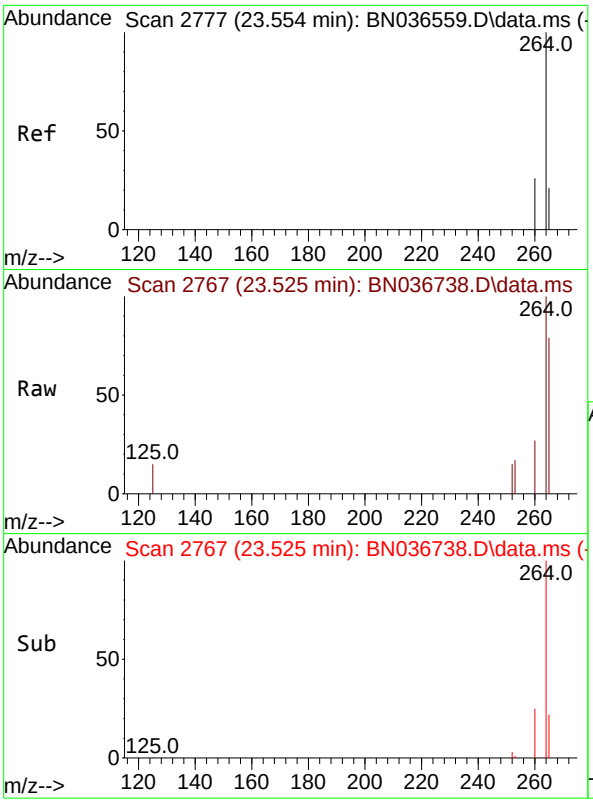




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.335 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:149 Resp: 3633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.6 | 20.7 | 31.1 |
| 279 | 3.2 | 3.6 | 5.4# |



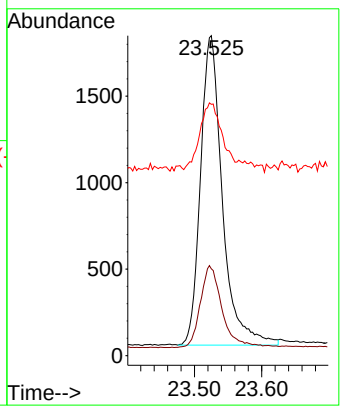


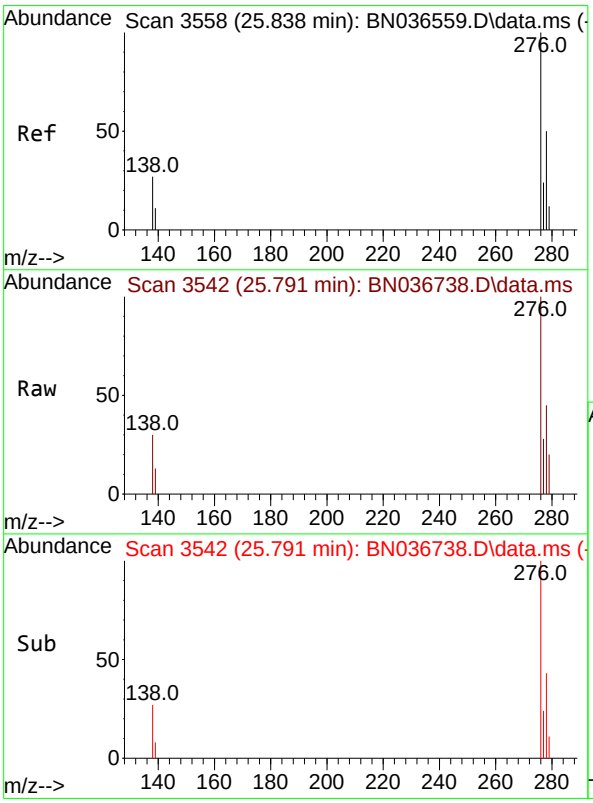

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:264 Resp: 4045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.1 | 22.6 | 33.8 |
| 265 | 78.5 | 88.1 | 132.1# |

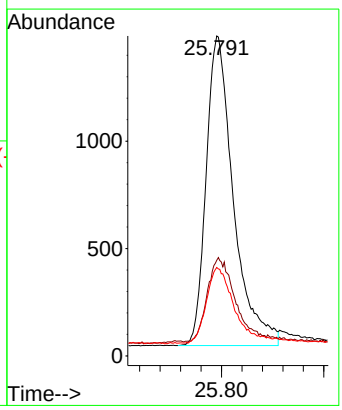


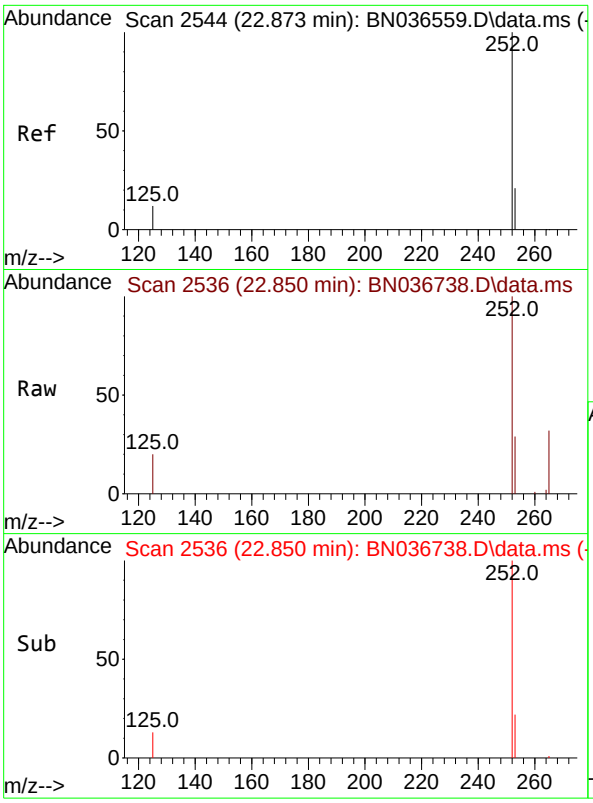




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.366 ng
RT: 25.791 min Scan# 3542
Delta R.T. -0.047 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:276 Resp: 5346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.7 | 23.4 | 35.2 |
| 277 | 24.9 | 20.0 | 30.0 |



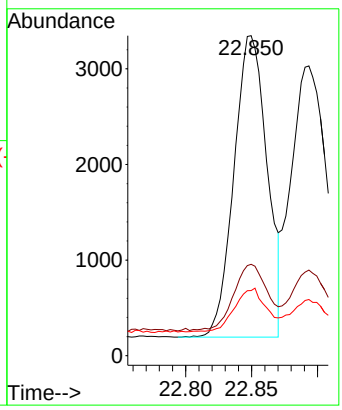


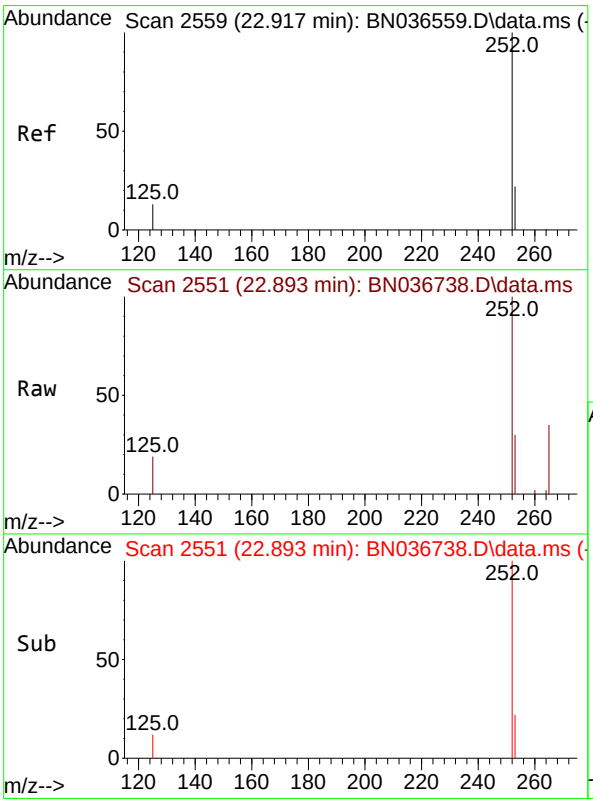

#37
Benzo(b)fluoranthene
Concen: 0.374 ng
RT: 22.850 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 5508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.6 | 23.9 | 35.9 |
| 125 | 20.3 | 17.4 | 26.2 |

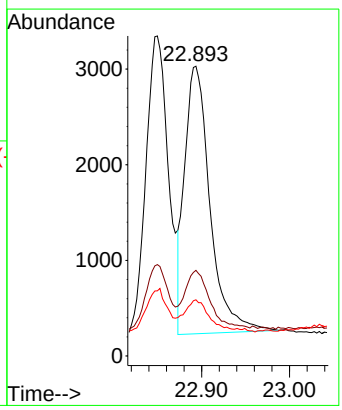


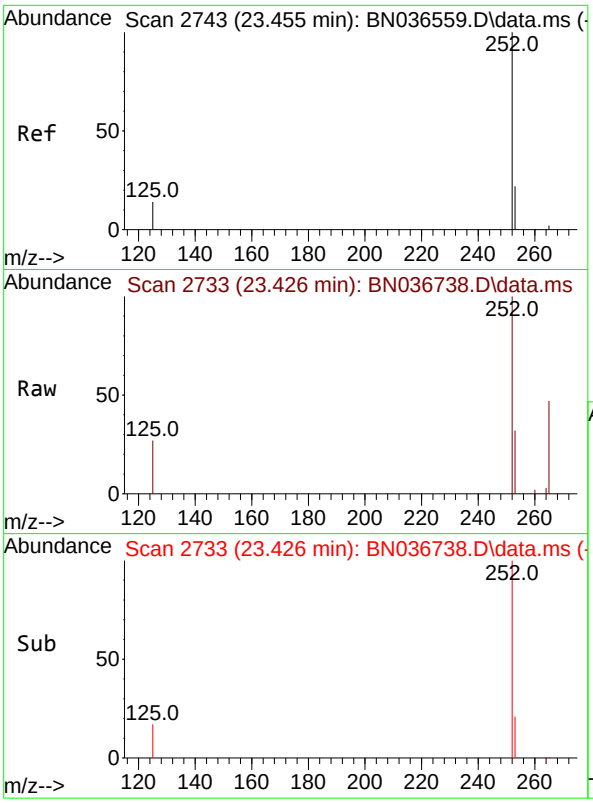




#38
Benzo(k)fluoranthene
Concen: 0.363 ng
RT: 22.893 min Scan# 2551
Delta R.T. -0.023 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:252 Resp: 5599

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.6 | 24.6 | 36.8 |
| 125 | 19.4 | 17.8 | 26.8 |



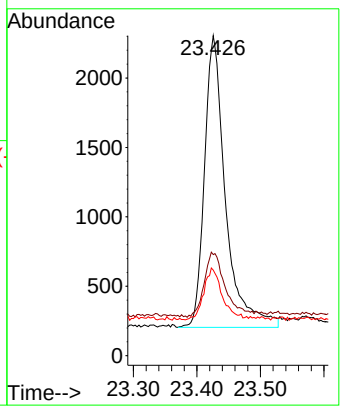


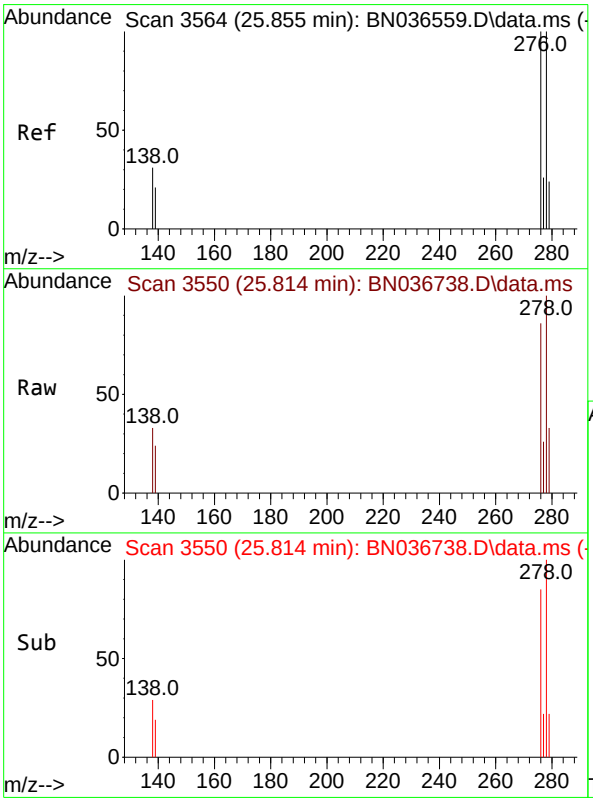

#39
Benzo(a)pyrene
Concen: 0.391 ng
RT: 23.426 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 4841

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 31.6 | 27.8 | 41.8 |
| 125 | 26.8 | 22.7 | 34.1 |

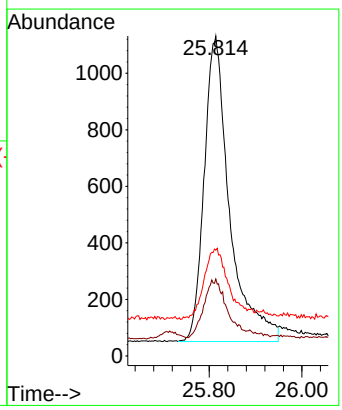


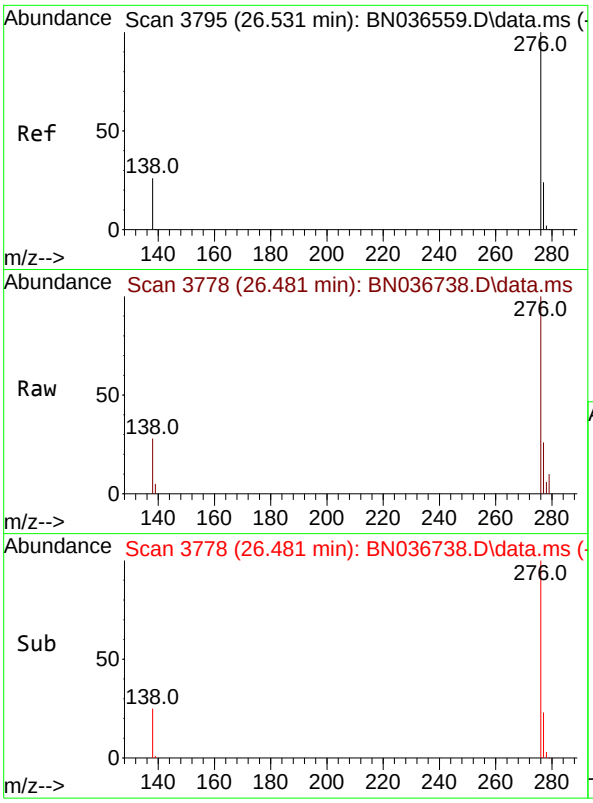




#40
Dibenzo(a,h)anthracene
Concen: 0.362 ng
RT: 25.814 min Scan# 3550
Delta R.T. -0.041 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

Tgt Ion:278 Resp: 4114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 24.0 | 20.8 | 31.2 |
| 279 | 33.0 | 28.8 | 43.2 |



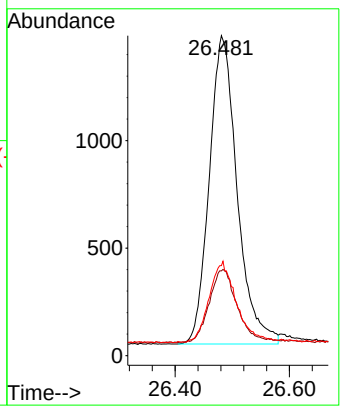



#41
Benzo(g,h,i)perylene
Concen: 0.374 ng
RT: 26.481 min Scan# 3
Delta R.T. -0.050 min
Lab File: BN036738.D
Acq: 27 Mar 2025 15:38

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:276 Resp: 4859

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.5 | 22.2 | 33.4 |
| 138 | 28.2 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036755.D
Acq On : 28 Mar 2025 01:52
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 28 05:36:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1902 | 0.400 | ng | | -0.02 |
| 7) Naphthalene-d8 | 10.487 | 136 | 4724 | 0.400 | ng | | #-0.02 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 3073 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 6417 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 5861 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.519 | 264 | 5647 | 0.400 | ng | | #-0.03 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.291 | 112 | 1596 | 0.360 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1912 | 0.349 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1688 | 0.328 | ng | | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 2439 | 0.347 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 523 | 0.375 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5695 | 0.319 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.122 | 212 | 6435 | 0.391 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 4447 | 0.317 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 882 | 0.418 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.536 | 42 | 1688 | 0.395 | ng | | 93 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1966 | 0.347 | ng | | 99 |
| 9) Naphthalene | 10.530 | 128 | 4933 | 0.355 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 1194 | 0.365 | ng | # | 100 |
| 12) 2-Methylnaphthalene | 12.157 | 142 | 3191 | 0.361 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 5054 | 0.349 | ng | | 100 |
| 17) Acenaphthene | 14.398 | 154 | 3383 | 0.356 | ng | | 99 |
| 18) Fluorene | 15.393 | 166 | 4678 | 0.364 | ng | | 100 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 489 | 0.444 | ng | | 88 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1456 | 0.362 | ng | | 93 |
| 22) Hexachlorobenzene | 16.404 | 284 | 1743 | 0.359 | ng | | 98 |
| 23) Atrazine | 16.553 | 200 | 1231 | 0.382 | ng | | 96 |
| 24) Pentachlorophenol | 16.739 | 266 | 837 | 0.378 | ng | | 96 |
| 25) Phenanthrene | 17.124 | 178 | 7451 | 0.387 | ng | | 100 |
| 26) Anthracene | 17.223 | 178 | 6503 | 0.374 | ng | | 99 |
| 28) Fluoranthene | 19.150 | 202 | 8702 | 0.402 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 9138 | 0.319 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 7209 | 0.354 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 8619 | 0.387 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 5036 | 0.347 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.785 | 276 | 7554 | 0.371 | ng | | 98 |
| 37) Benzo(b)fluoranthene | 22.847 | 252 | 7851 | 0.382 | ng | | 97 |
| 38) Benzo(k)fluoranthene | 22.847 | 252 | 7851 | 0.364 | ng | | 95 |
| 39) Benzo(a)pyrene | 23.420 | 252 | 6760 | 0.391 | ng | | 95 |
| 40) Dibenzo(a,h)anthracene | 25.806 | 278 | 5864 | 0.370 | ng | | 90 |
| 41) Benzo(g,h,i)perylene | 26.475 | 276 | 6596 | 0.363 | ng | | 96 |

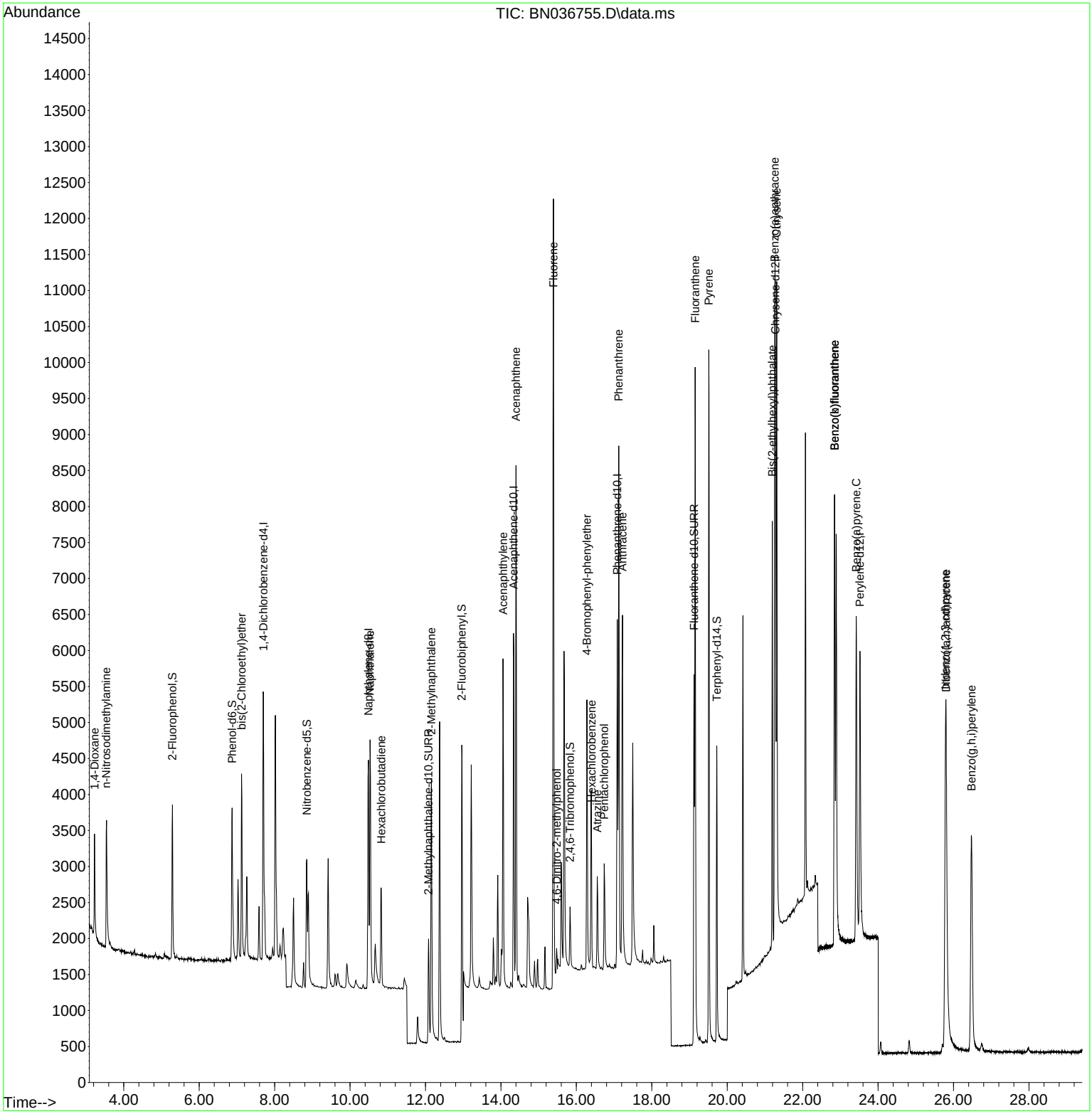
(#) = qualifier out of range (m) = manual integration (+) = signals summed

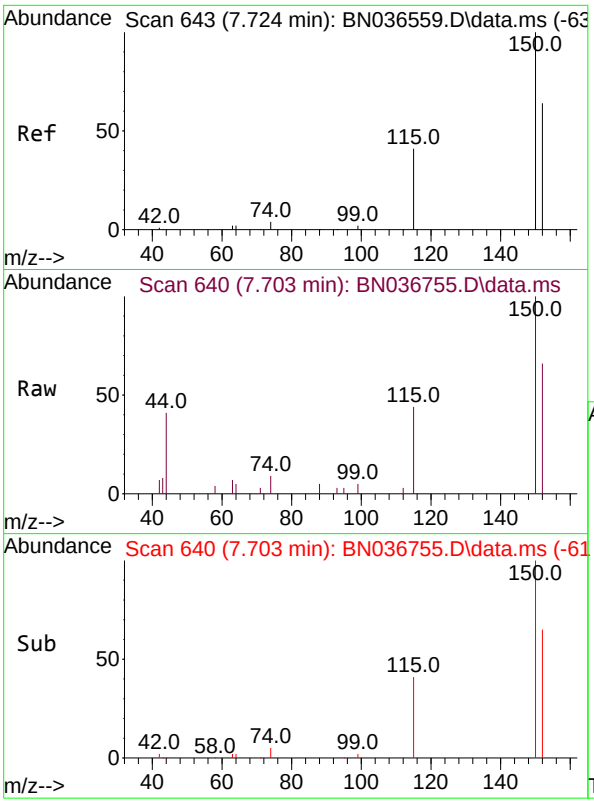
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036755.D
Acq On : 28 Mar 2025 01:52
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 28 05:36:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



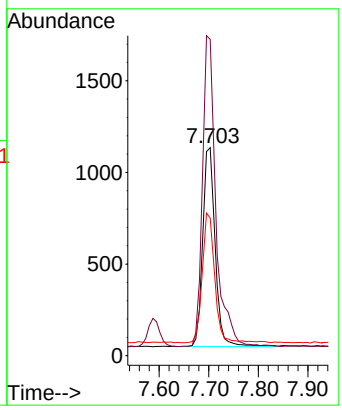


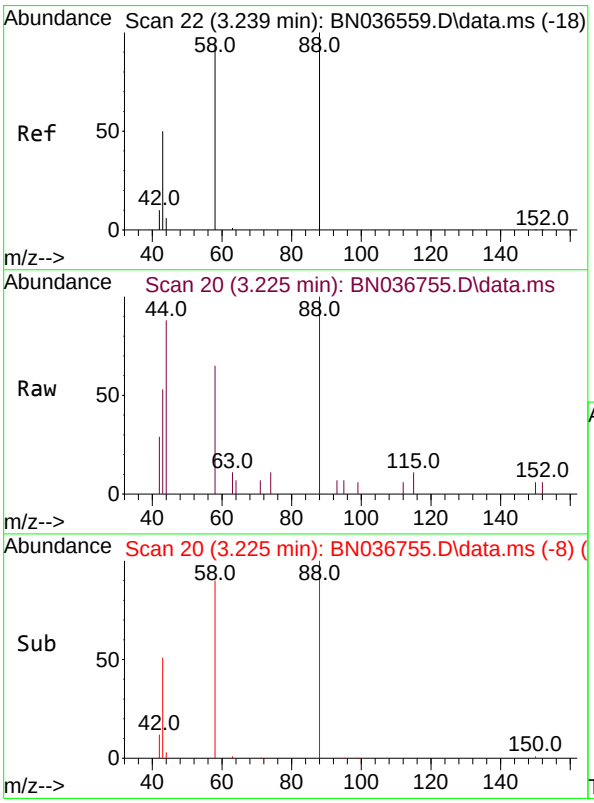

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 1902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.1 | 123.7 | 185.5 |
| 115 | 66.2 | 54.3 | 81.5 |

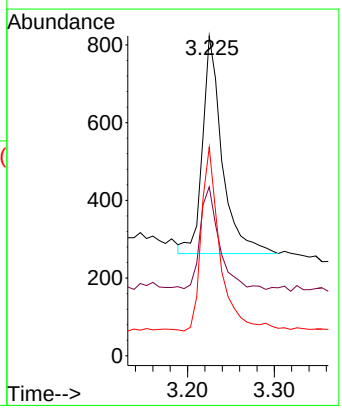


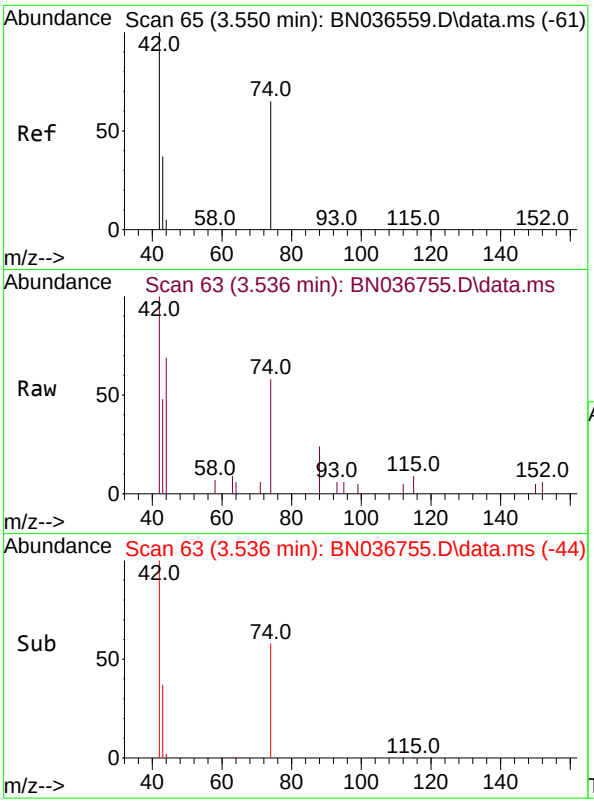




#2
1,4-Dioxane
Concen: 0.418 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 88 Resp: 882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 45.9 | 37.8 | 56.8 |
| 58 | 81.1 | 67.4 | 101.2 |



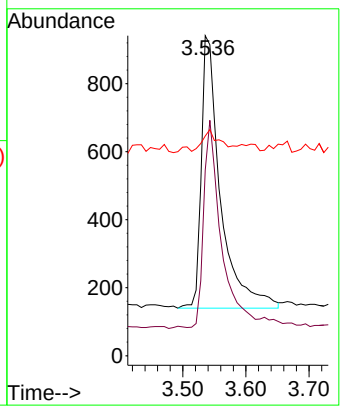


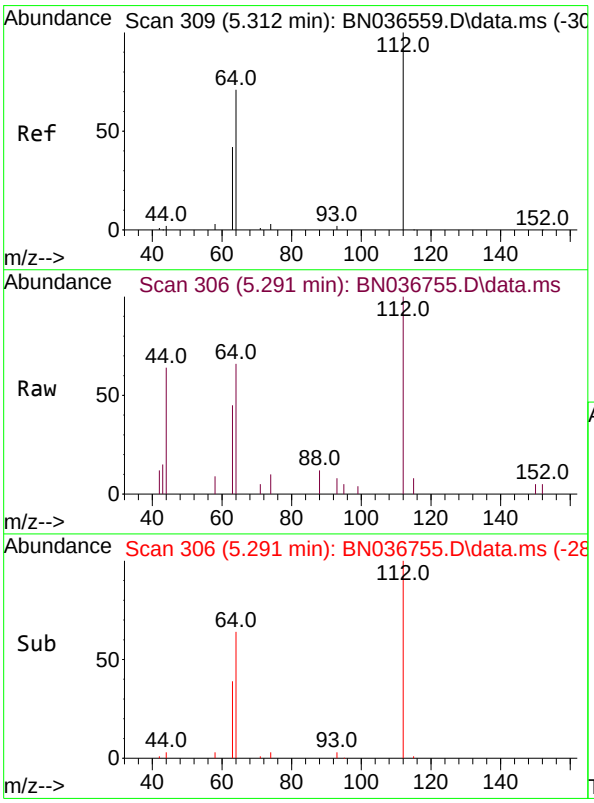

#3
n-Nitrosodimethylamine
Concen: 0.395 ng
RT: 3.536 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 68.9 | 60.6 | 90.8 |
| 44 | 7.1 | 6.3 | 9.5 |

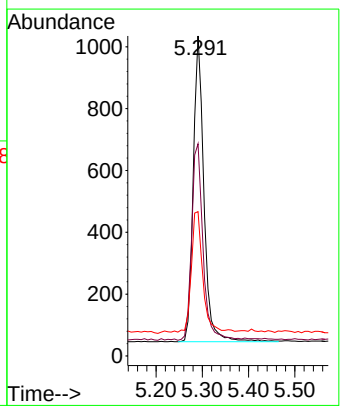


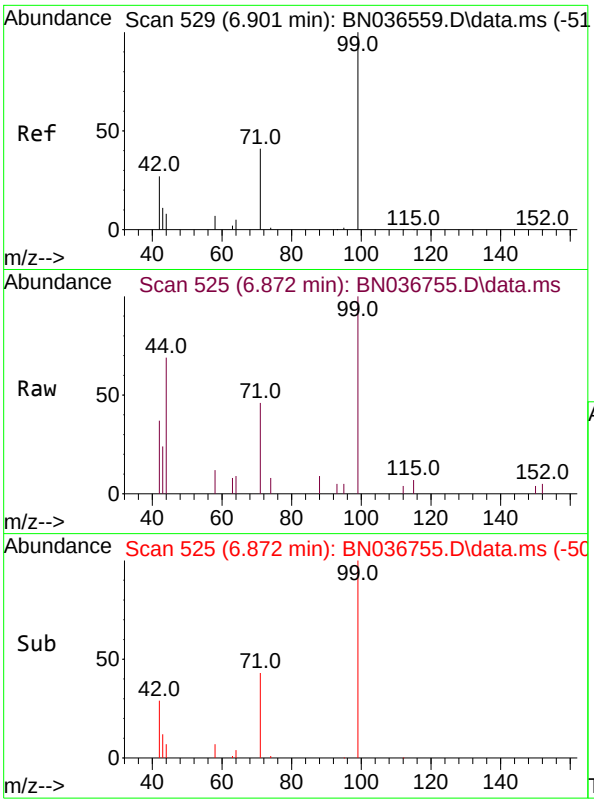




#4
2-Fluorophenol
Concen: 0.360 ng
RT: 5.291 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:112 Resp: 1596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.2 | 53.1 | 79.7 |
| 63 | 41.4 | 31.8 | 47.8 |



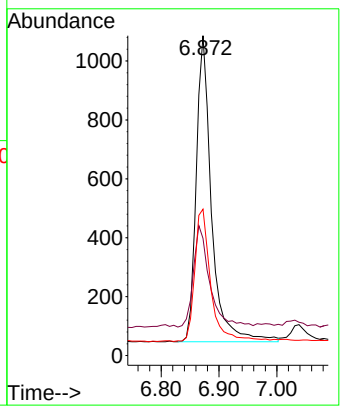


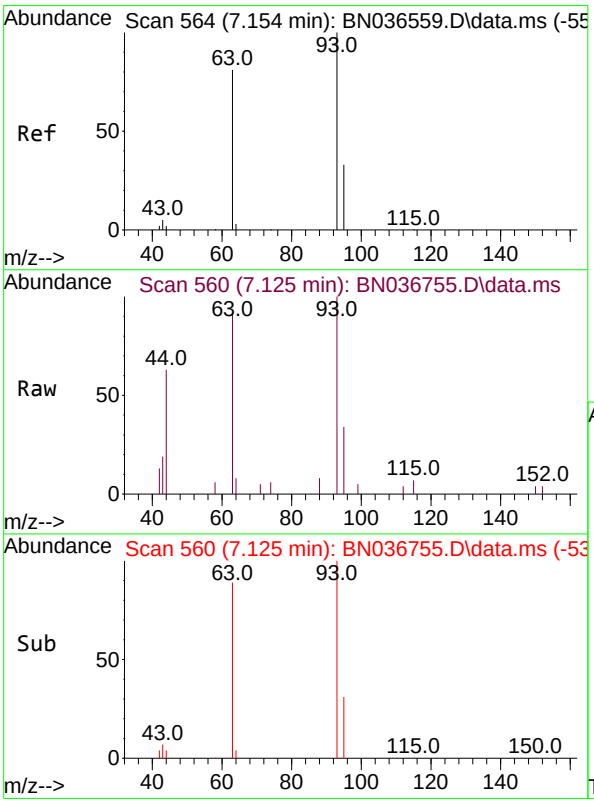

#5
Phenol-d6
Concen: 0.349 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 1912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.4 | 26.5 | 39.7 |
| 71 | 45.3 | 34.1 | 51.1 |

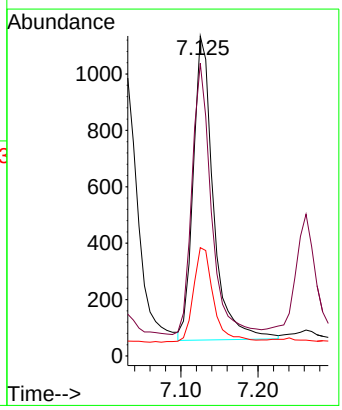


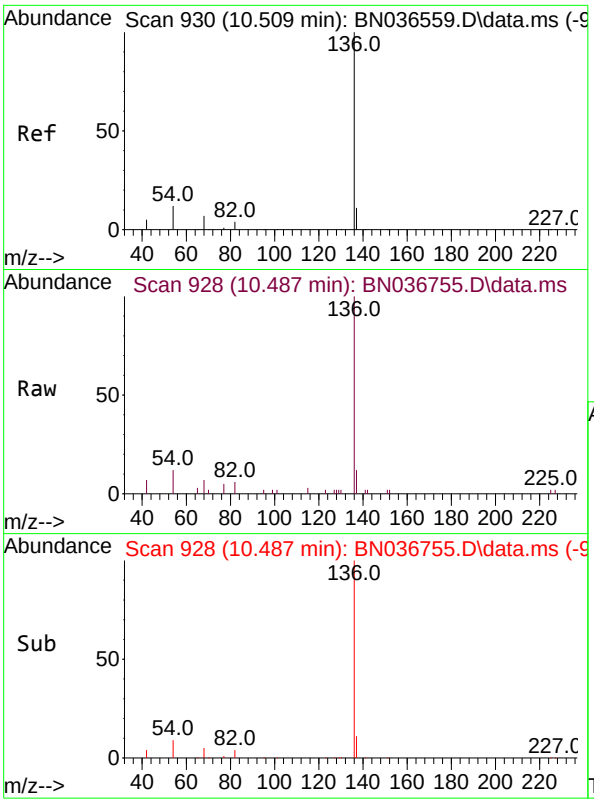




#6
bis(2-Chloroethyl)ether
Concen: 0.347 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 93 Resp: 1966

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.6 | 67.7 | 101.5 |
| 95 | 31.0 | 25.6 | 38.4 |



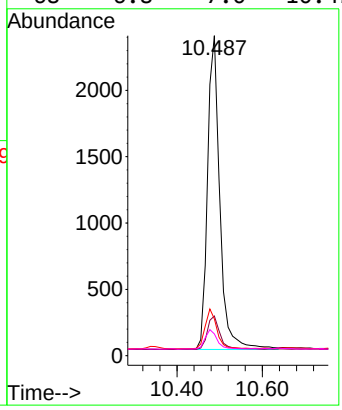


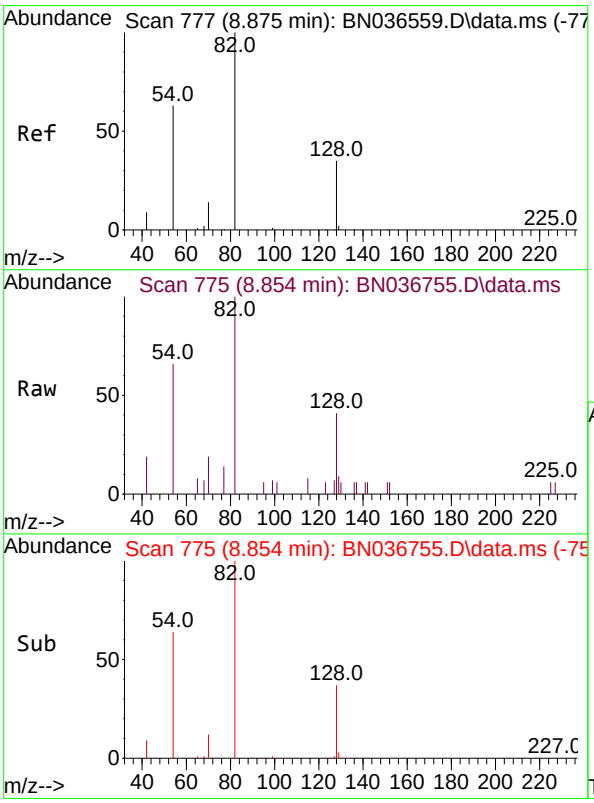

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4724

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 11.5 | 11.5 | 17.3 |
| 68 | 6.8 | 7.0 | 10.4# |

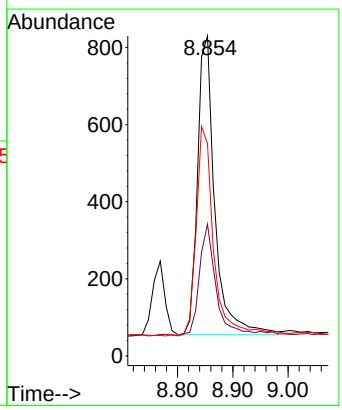


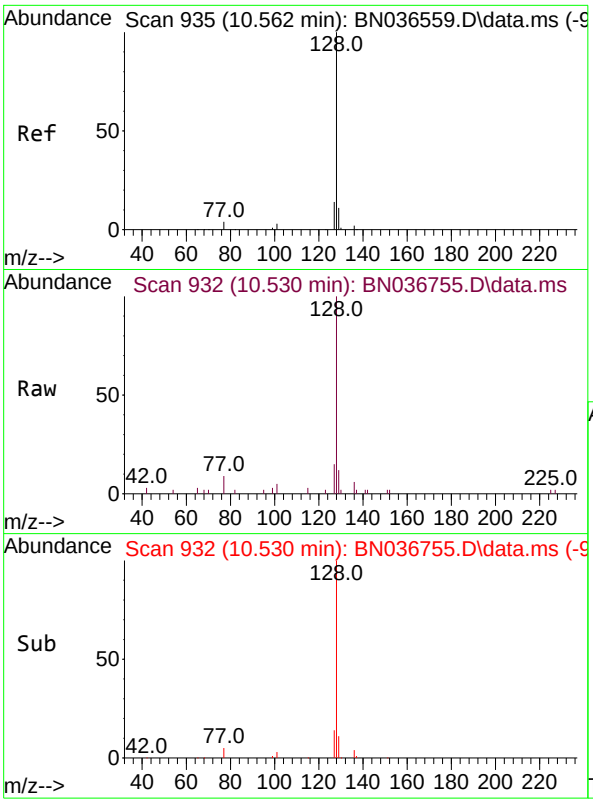




#8
Nitrobenzene-d5
Concen: 0.328 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion: 82 Resp: 1688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 41.2 | 30.6 | 45.8 |
| 54 | 66.4 | 52.2 | 78.4 |



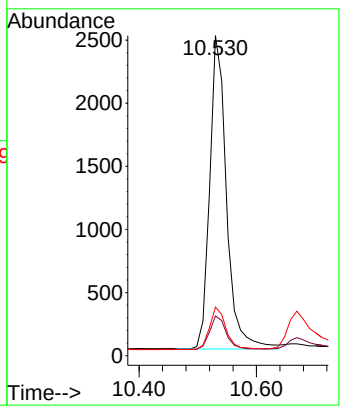


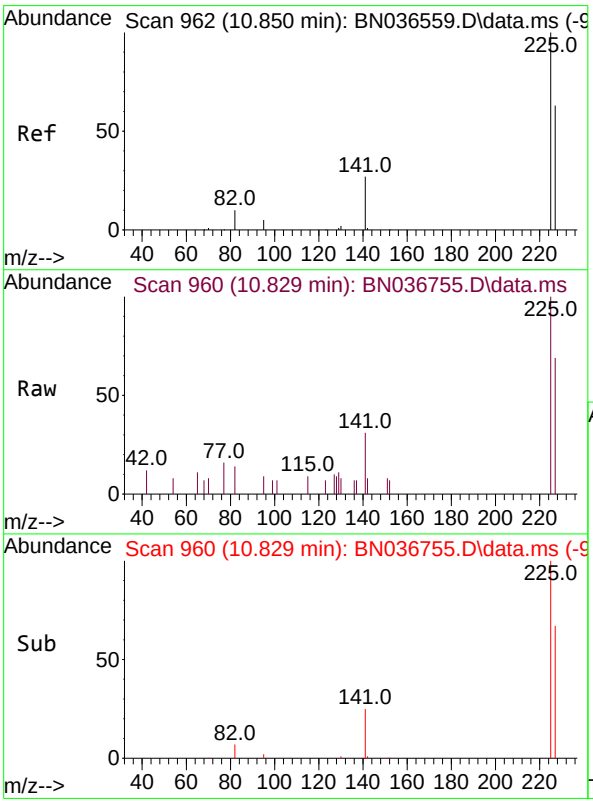

#9
Naphthalene
Concen: 0.355 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:128 Resp: 4933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.4 | 9.8 | 14.6 |
| 127 | 15.2 | 11.8 | 17.8 |

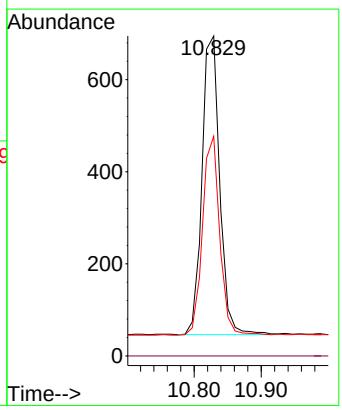


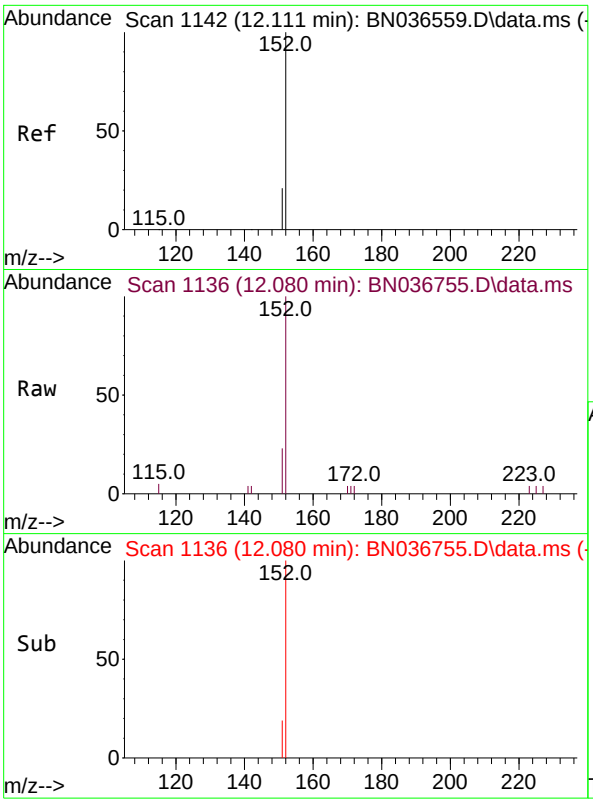




#10
Hexachlorobutadiene
Concen: 0.365 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:225 Resp: 1194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.6 | 51.8 | 77.8 |



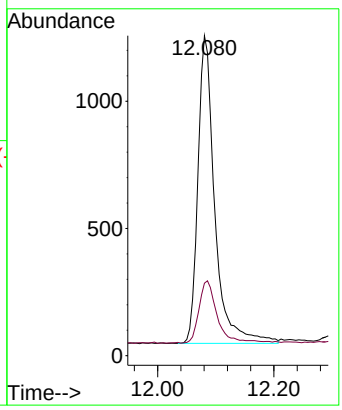


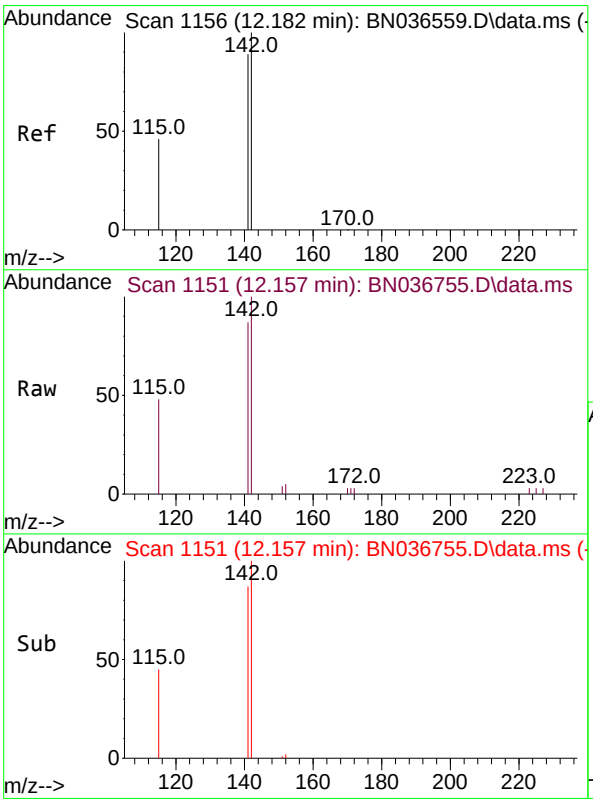

#11
2-Methylnaphthalene-d10
Concen: 0.347 ng
RT: 12.080 min Scan# 11
Delta R.T. -0.030 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 22.1 | 17.0 | 25.6 |

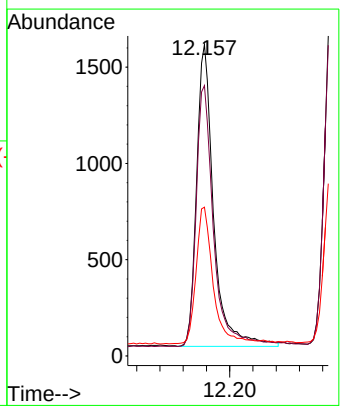


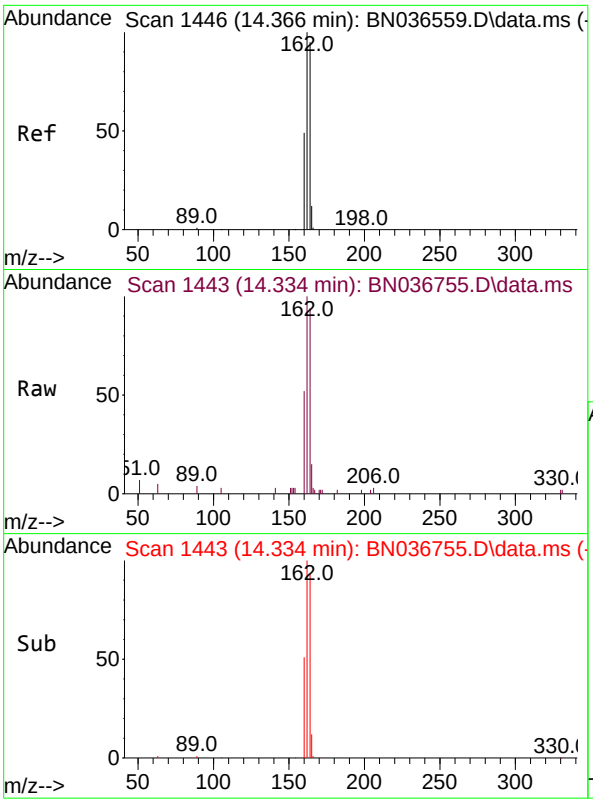




#12
2-Methylnaphthalene
Concen: 0.361 ng
RT: 12.157 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:142 Resp: 3191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 86.8 | 71.7 | 107.5 |
| 115 | 47.8 | 38.3 | 57.5 |



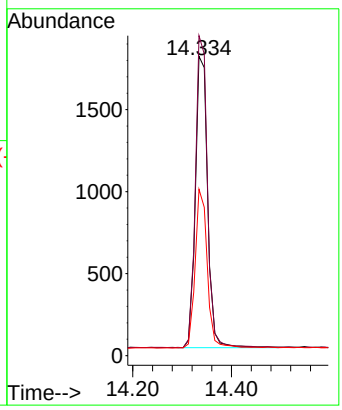


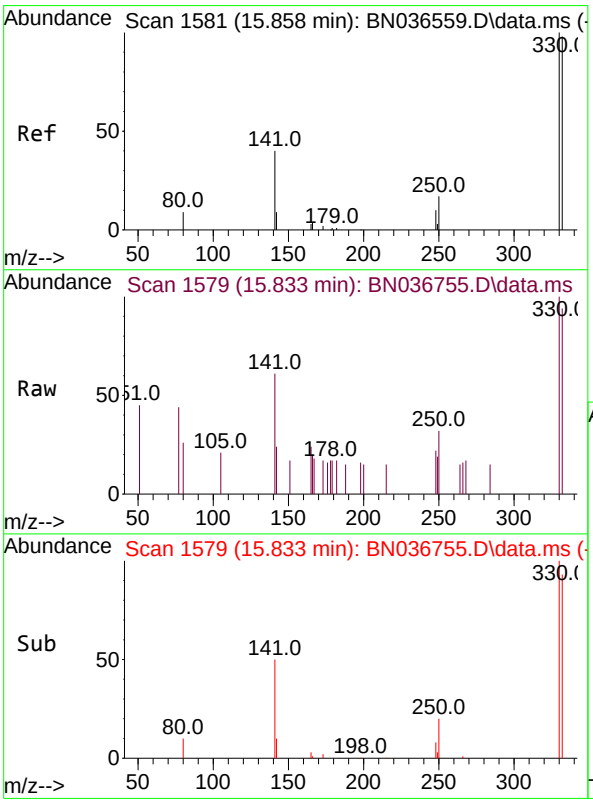

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:164 Resp: 3073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 106.9 | 84.2 | 126.2 |
| 160 | 55.6 | 42.2 | 63.2 |

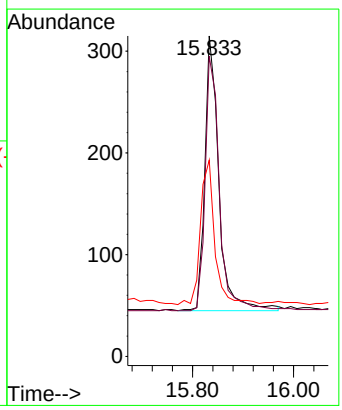


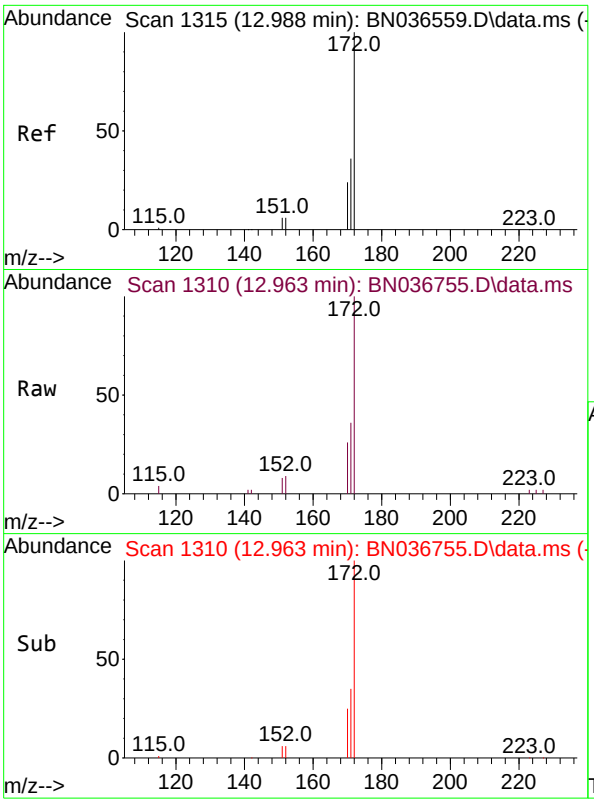




#14
2,4,6-Tribromophenol
Concen: 0.375 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:330 Resp: 523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 93.7 | 75.2 | 112.8 |
| 141 | 53.5 | 43.4 | 65.2 |



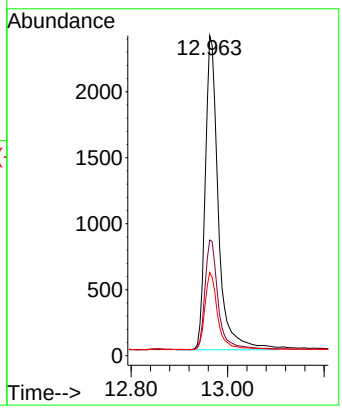


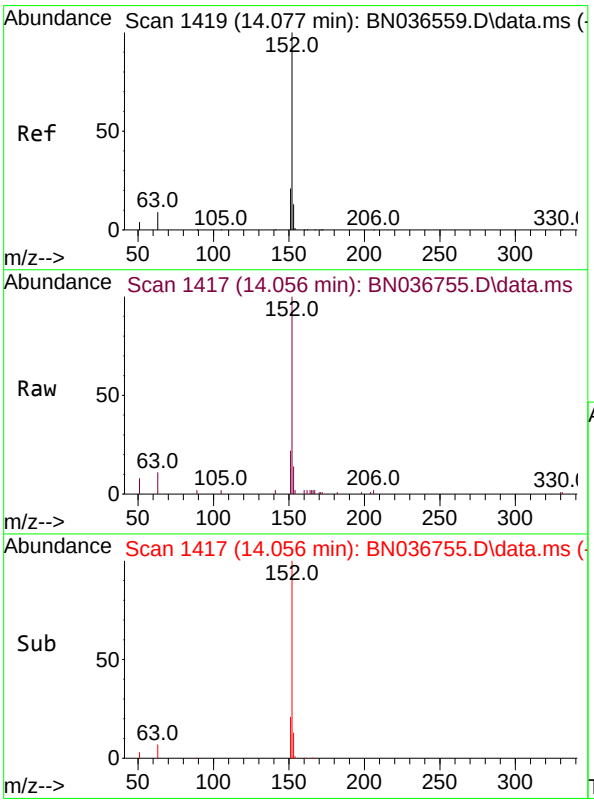

#15
2-Fluorobiphenyl
Concen: 0.319 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:172 Resp: 5695

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.2 | 29.5 | 44.3 |
| 170 | 26.0 | 20.2 | 30.4 |

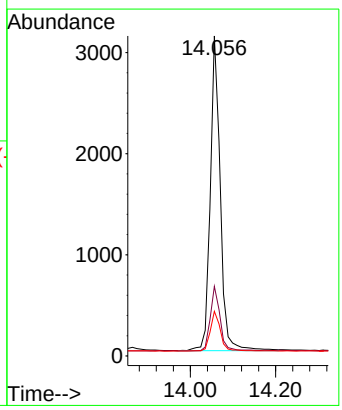


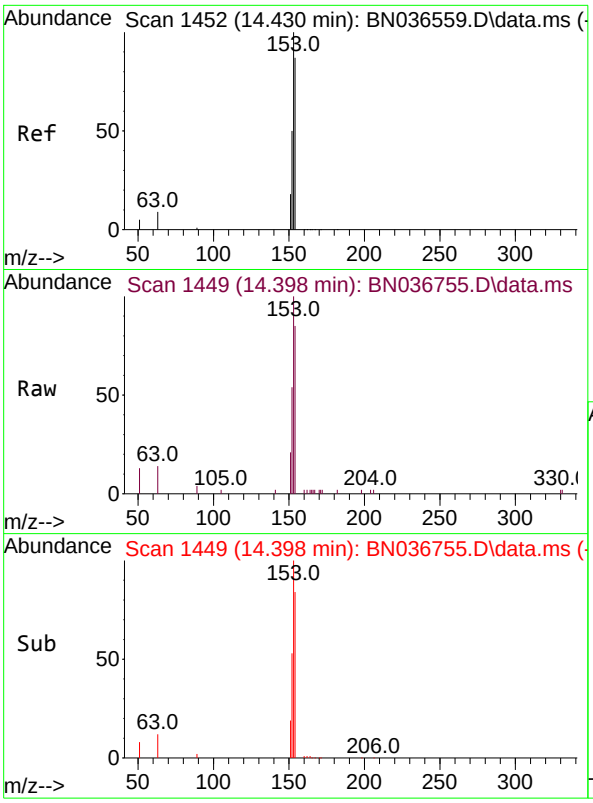




#16
Acenaphthylene
Concen: 0.349 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:152 Resp: 5054

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



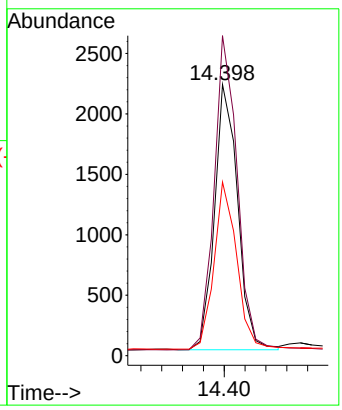


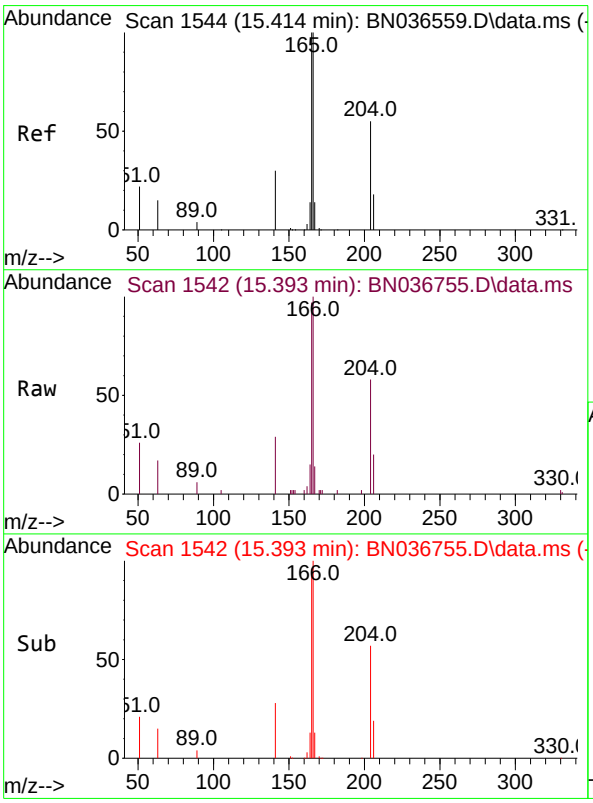

#17
Acenaphthene
Concen: 0.356 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:154 Resp: 3383

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 119.0 | 94.1 | 141.1 |
| 152 | 62.7 | 49.8 | 74.6 |

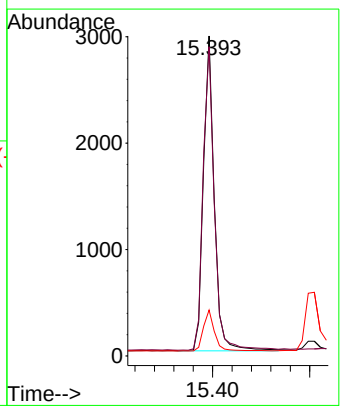


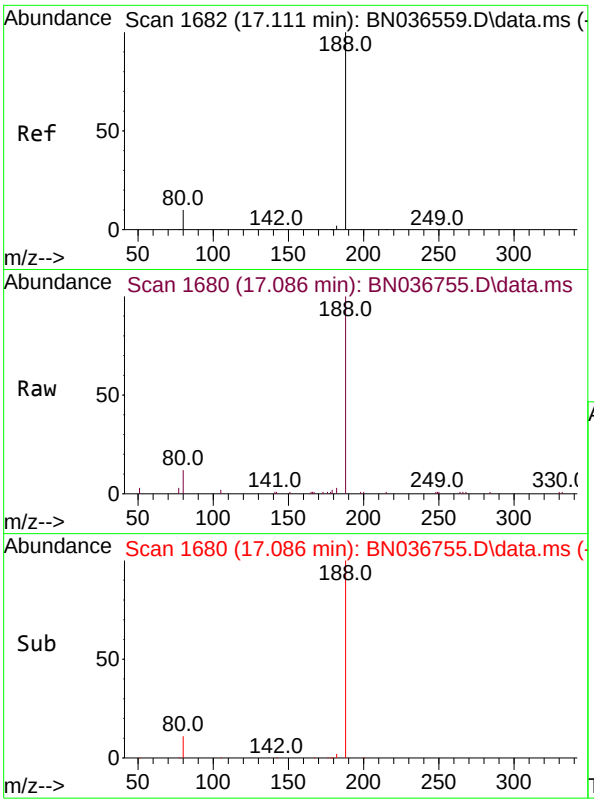




#18
Fluorene
Concen: 0.364 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:166 Resp: 4678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.5 | 79.8 | 119.8 |
| 167 | 13.0 | 10.6 | 15.8 |



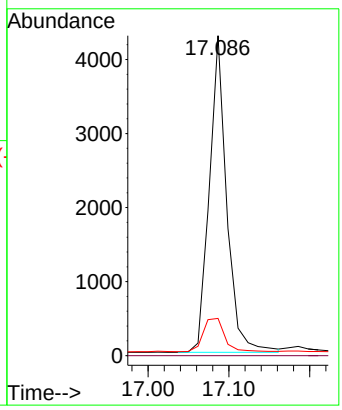


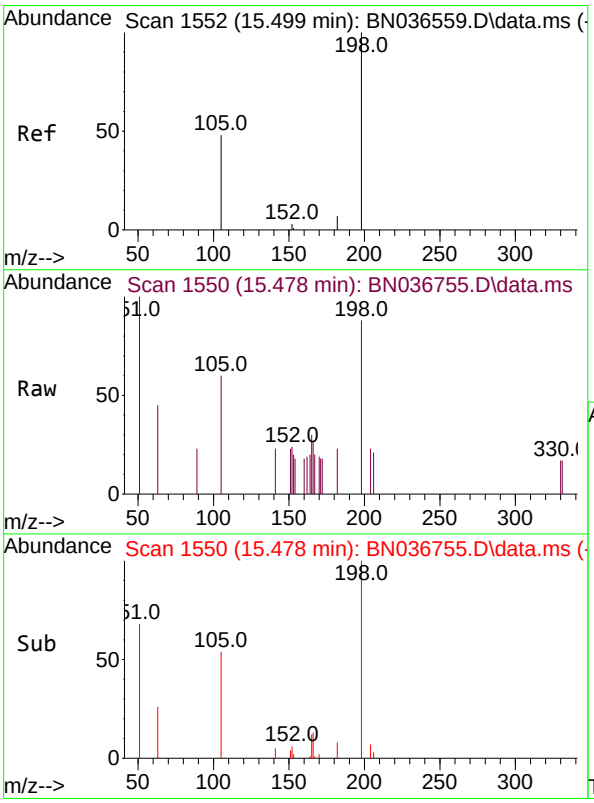

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:188 Resp: 6417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 11.6 | 8.8 | 13.2 |

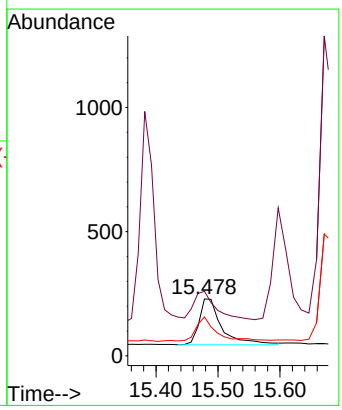


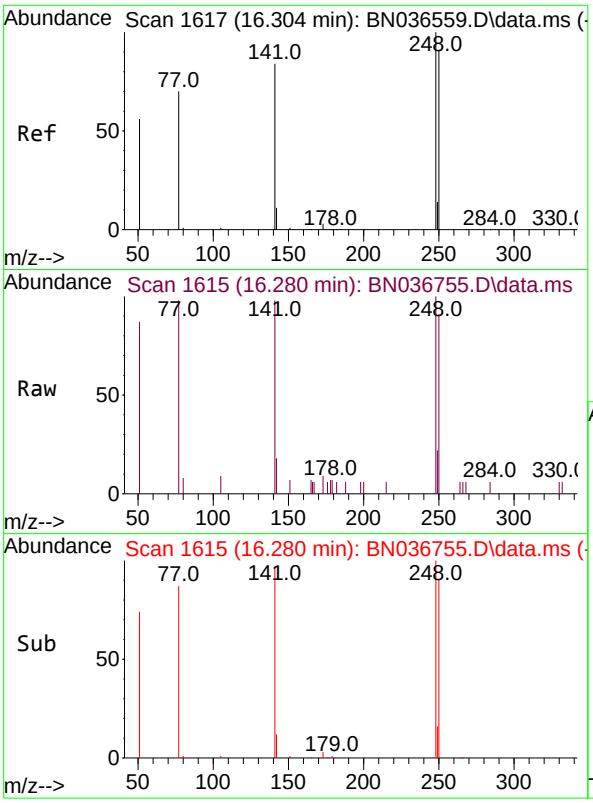




#20
4,6-Dinitro-2-methylphenol
Concen: 0.444 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:198 Resp: 489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 113.5 | 107.9 | 161.9 |
| 105 | 68.6 | 56.2 | 84.2 |



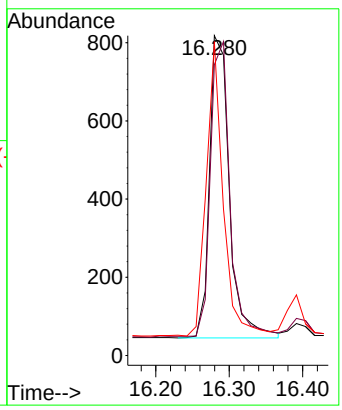


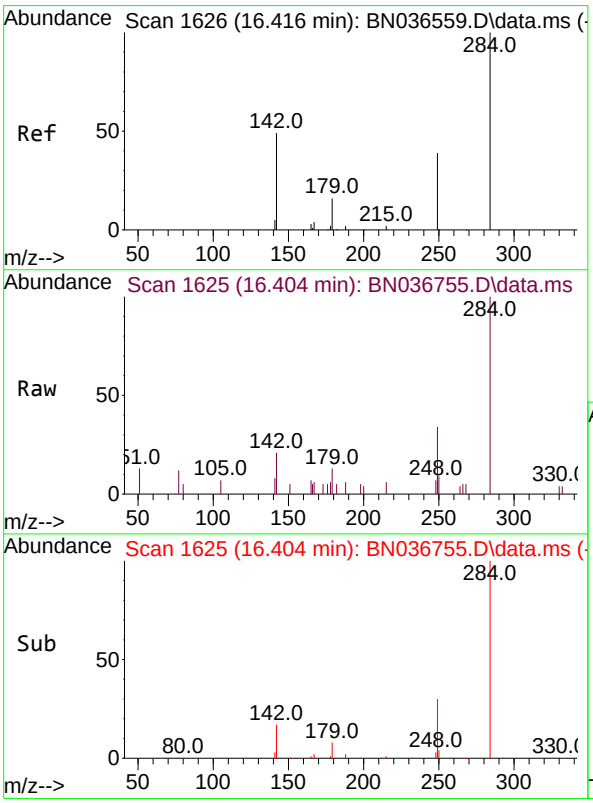

#21
4-Bromophenyl-phenylether
Concen: 0.362 ng
RT: 16.280 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 91.0 | 73.0 | 109.6 |
| 141 | 98.2 | 68.6 | 103.0 |

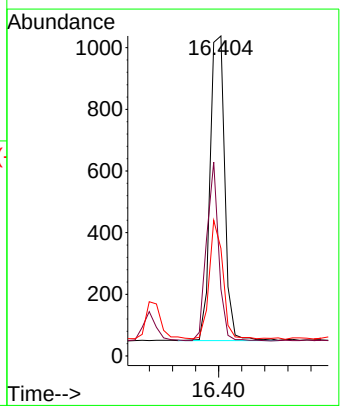


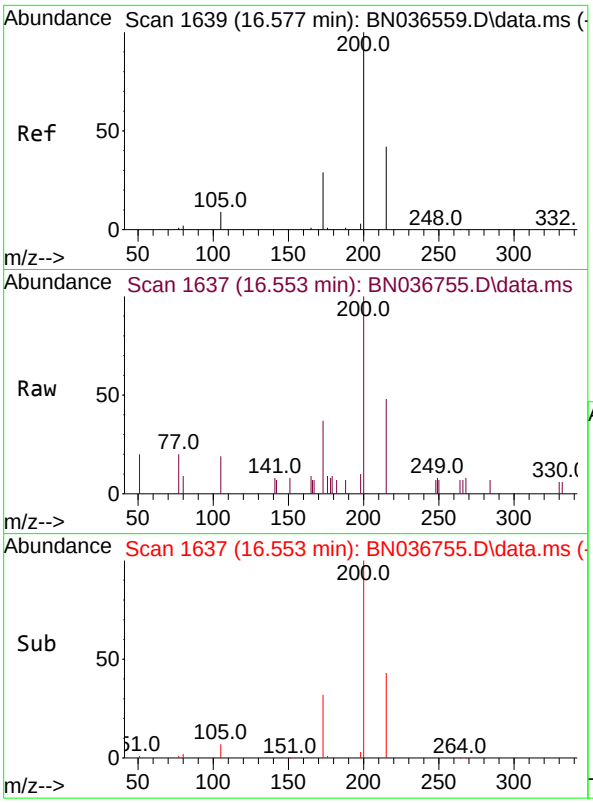




#22
Hexachlorobenzene
Concen: 0.359 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.012 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:284 Resp: 1743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 48.7 | 37.0 | 55.4 |
| 249 | 35.6 | 28.1 | 42.1 |



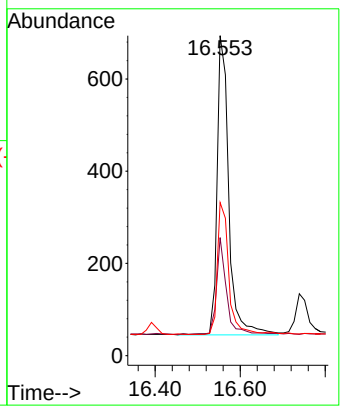


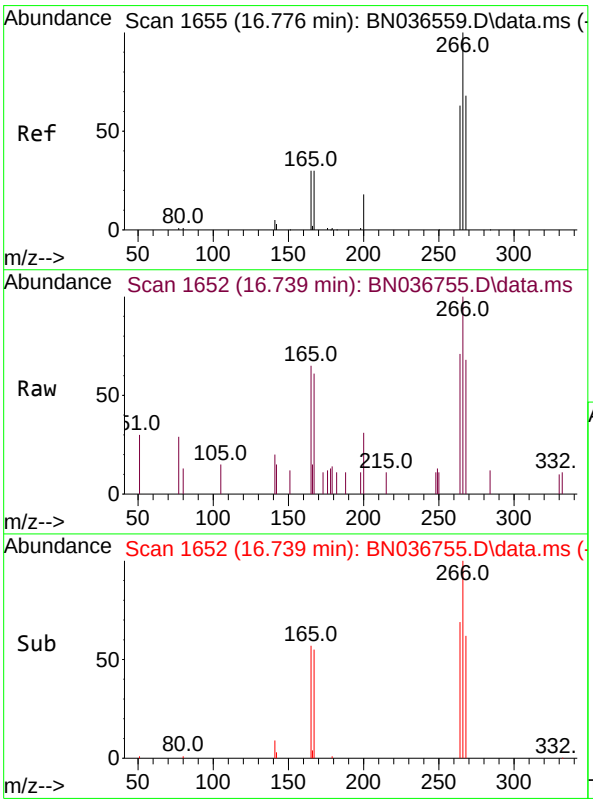

#23
Atrazine
Concen: 0.382 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.9 | 27.3 | 40.9 |
| 215 | 47.8 | 36.8 | 55.2 |

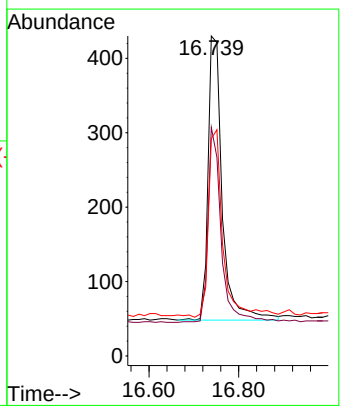


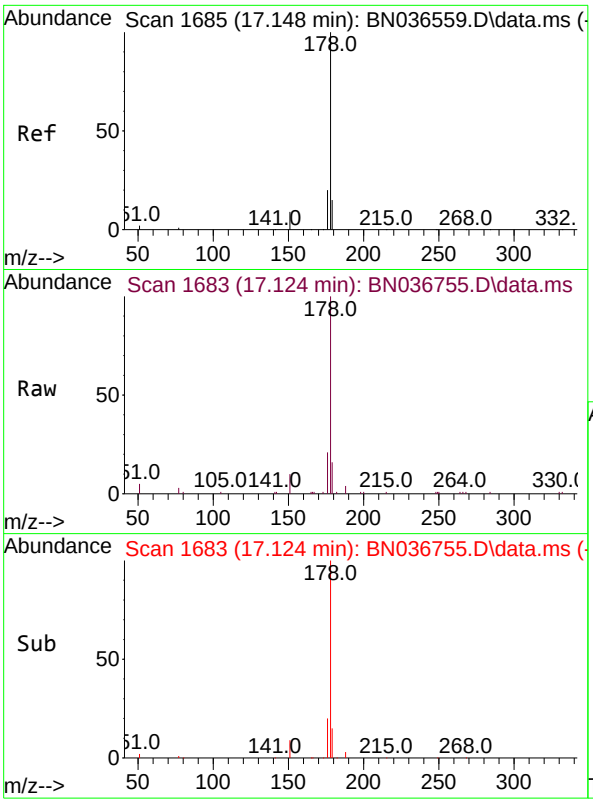




#24
Pentachlorophenol
Concen: 0.378 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:266 Resp: 837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.9 | 49.6 | 74.4 |
| 268 | 67.6 | 50.9 | 76.3 |



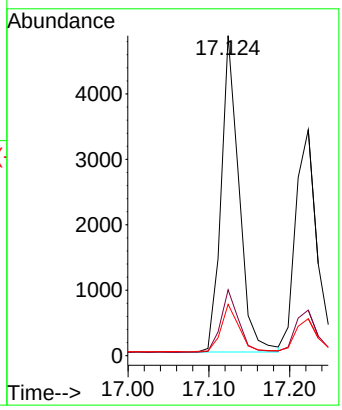


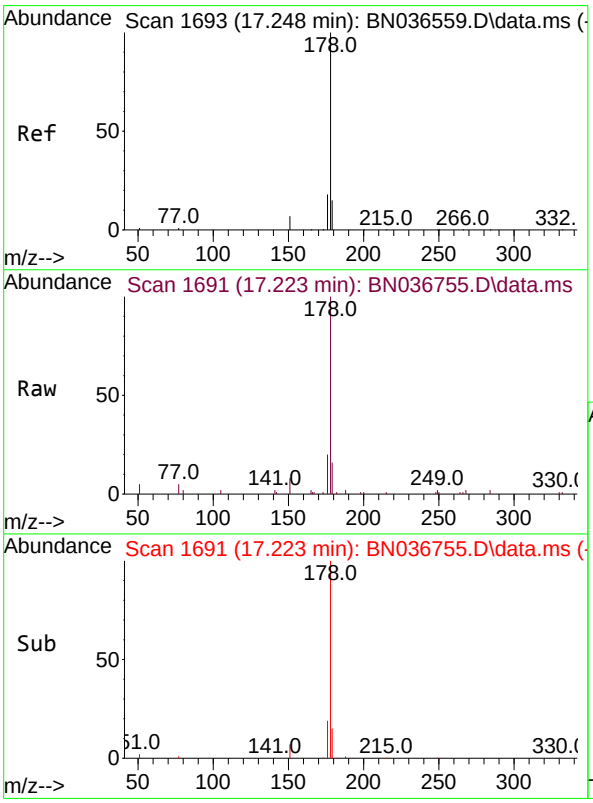

#25
Phenanthrene
Concen: 0.387 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:178 Resp: 7451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.4 | 12.2 | 18.4 |

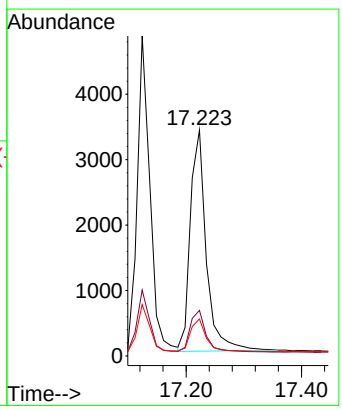


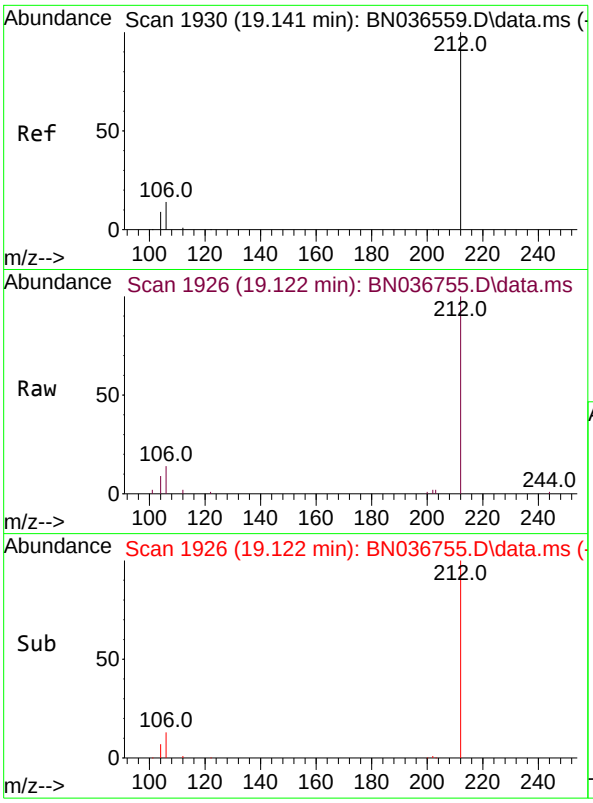




#26
Anthracene
Concen: 0.374 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:178 Resp: 6503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.4 | 23.2 |
| 179 | 15.2 | 12.6 | 18.8 |



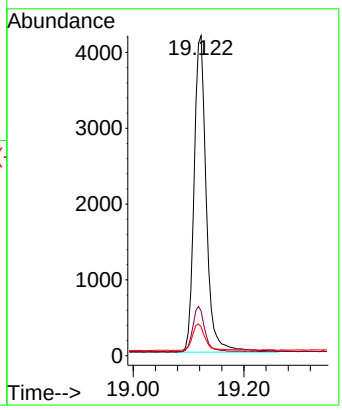


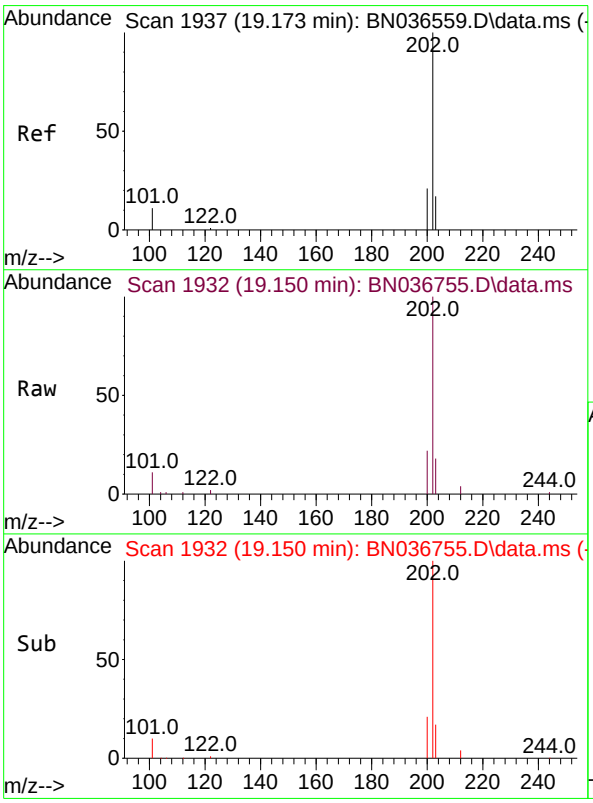

#27
Fluoranthene-d10
Concen: 0.391 ng
RT: 19.122 min Scan# 1
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:212 Resp: 6435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 14.1 | 11.8 | 17.6 |
| 104 | 8.9 | 7.3 | 10.9 |

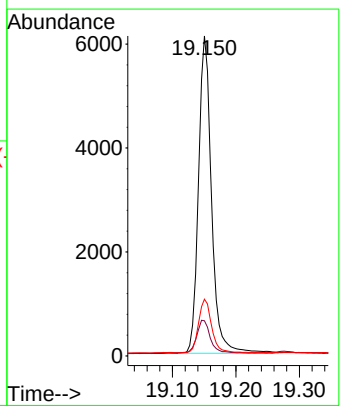


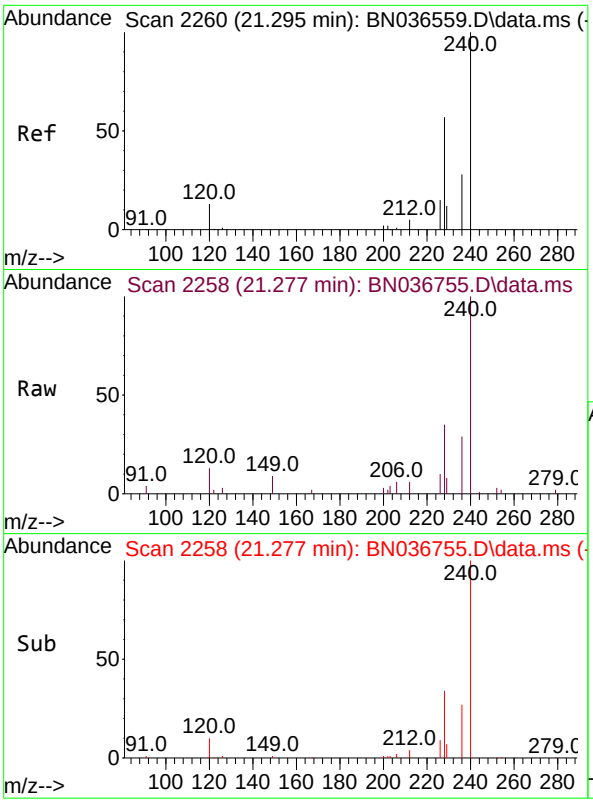




#28
Fluoranthene
Concen: 0.402 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:202 Resp: 8702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.8 | 9.4 | 14.0 |
| 203 | 17.0 | 13.5 | 20.3 |



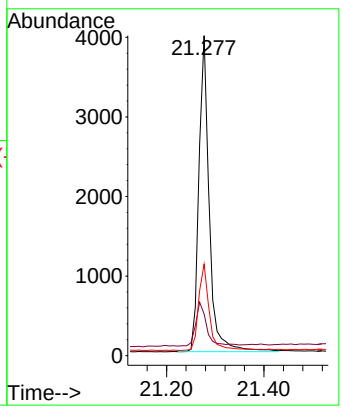


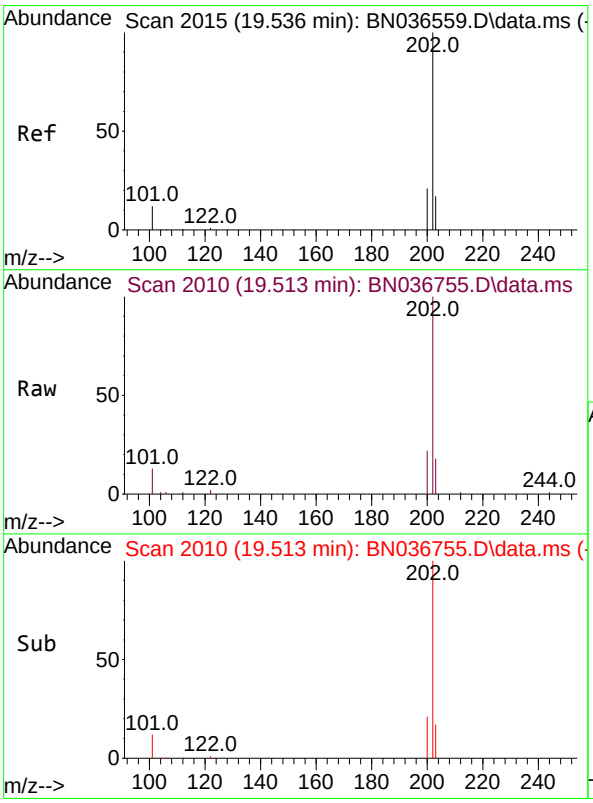

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:240 Resp: 5861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 13.0 | 14.6 | 22.0# |
| 236 | 28.6 | 24.1 | 36.1 |

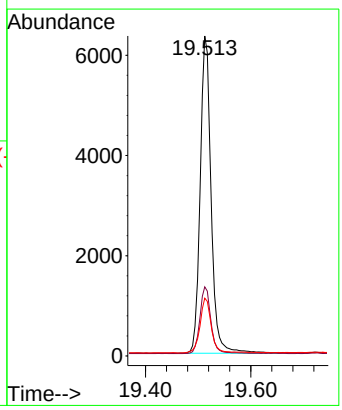


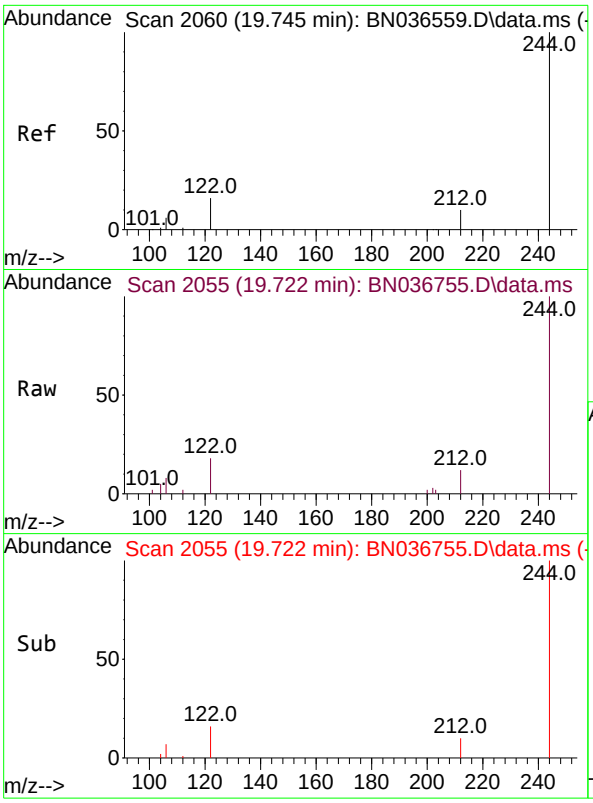




#30
Pyrene
Concen: 0.319 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:202 Resp: 9138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.3 | 17.1 | 25.7 |
| 203 | 17.8 | 14.1 | 21.1 |



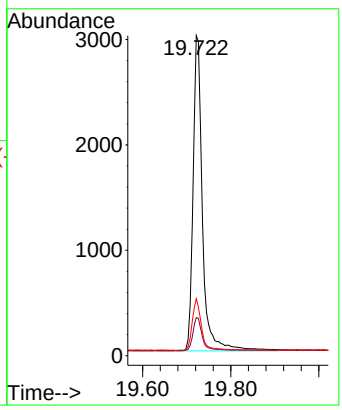


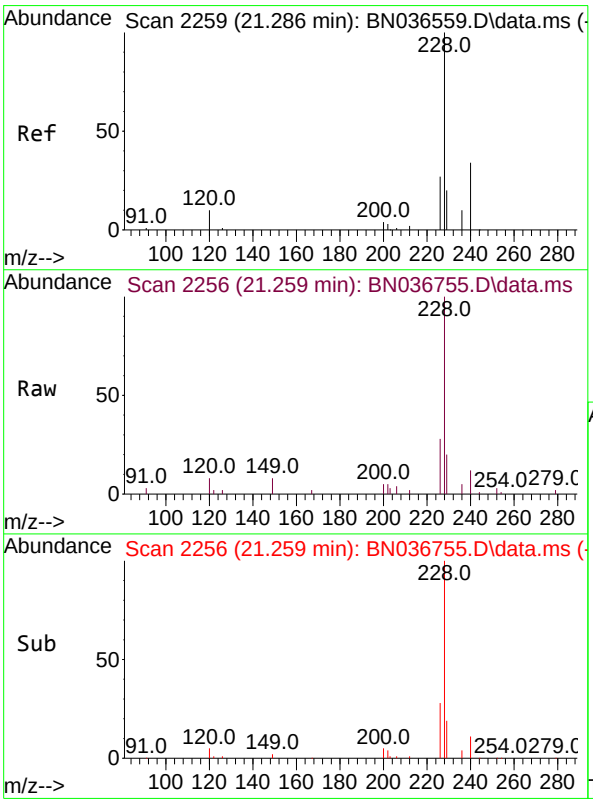

#31
Terphenyl-d14
Concen: 0.317 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:244 Resp: 4447

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 11.9 | 9.6 | 14.4 |
| 122 | 17.8 | 13.9 | 20.9 |

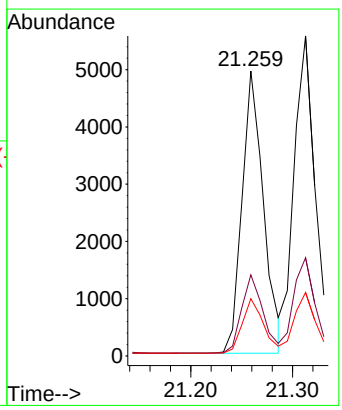


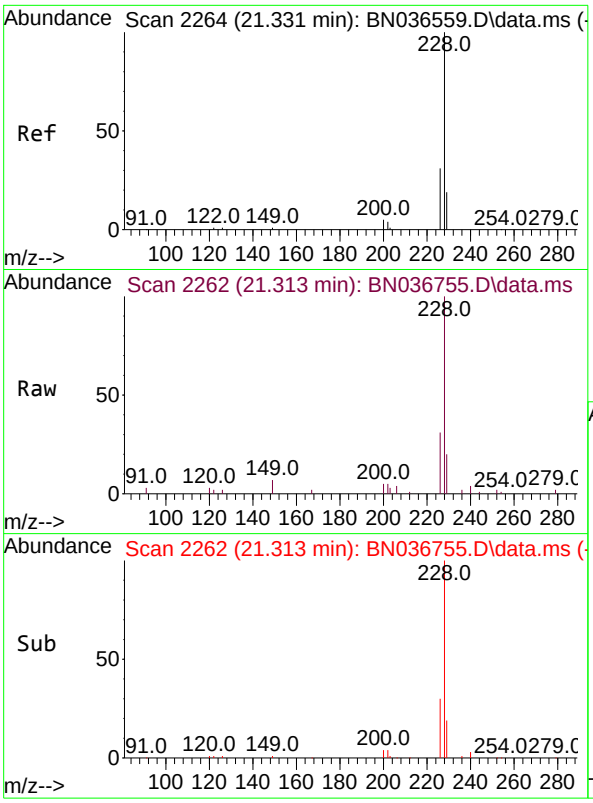




#32
Benzo(a)anthracene
Concen: 0.354 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:228 Resp: 7209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.5 | 22.5 | 33.7 |
| 229 | 20.1 | 16.6 | 25.0 |



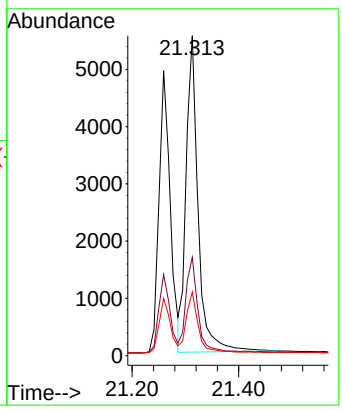


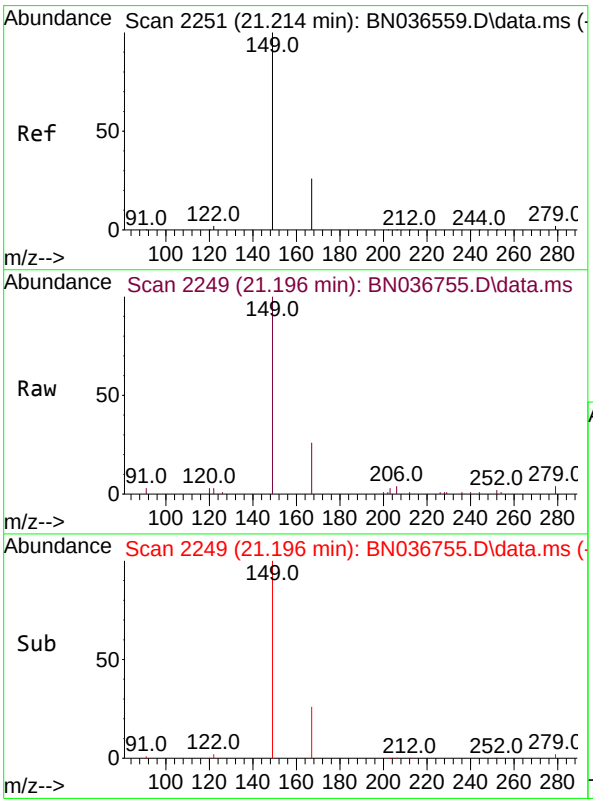

#33
Chrysene
Concen: 0.387 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:228 Resp: 8619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.7 | 25.3 | 37.9 |
| 229 | 19.8 | 15.8 | 23.8 |

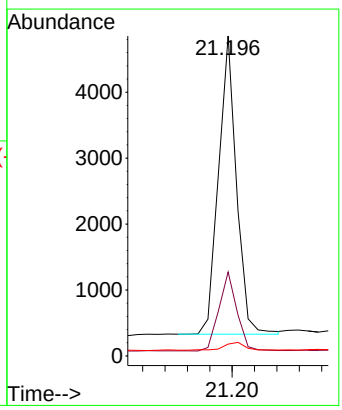


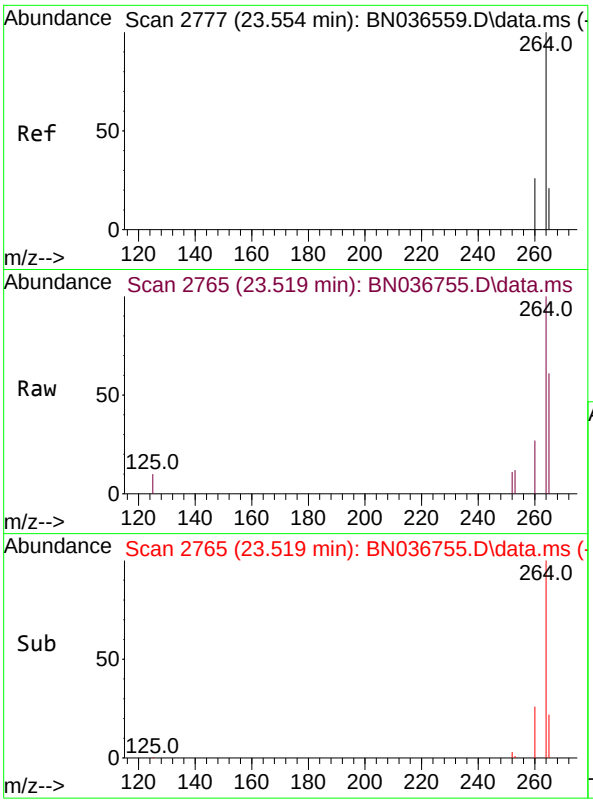




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.347 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:149 Resp: 5036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.3 | 20.7 | 31.1 |
| 279 | 2.9 | 3.6 | 5.4# |



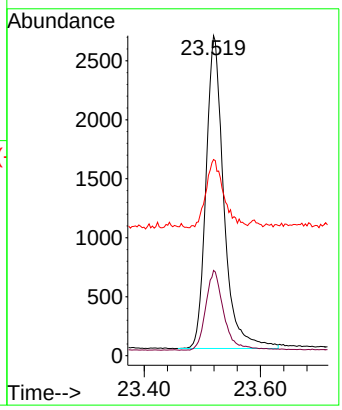


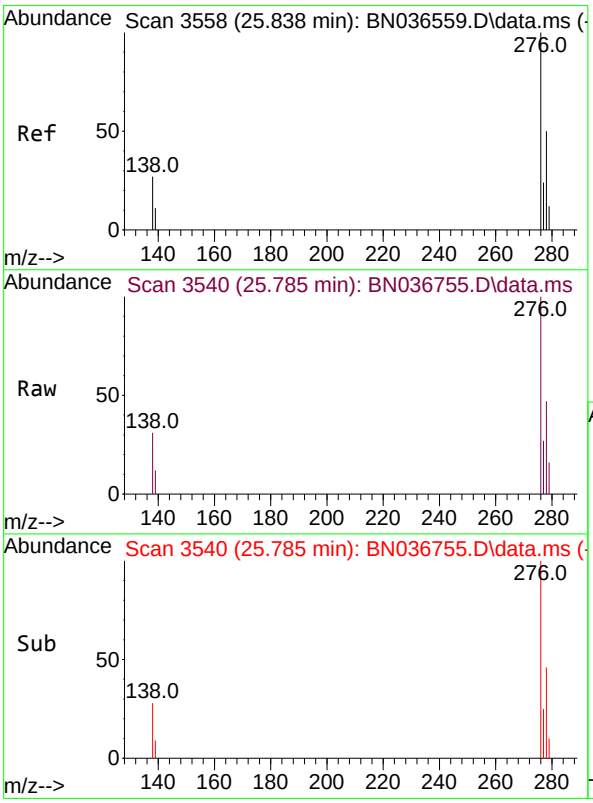

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.519 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:264 Resp: 5647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.7 | 22.6 | 33.8 |
| 265 | 61.3 | 88.1 | 132.1# |

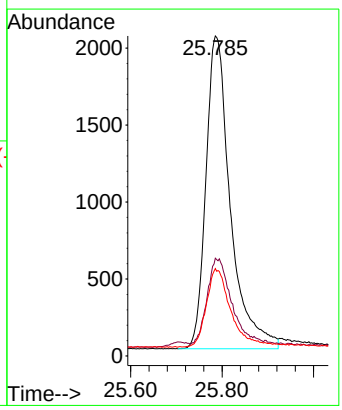


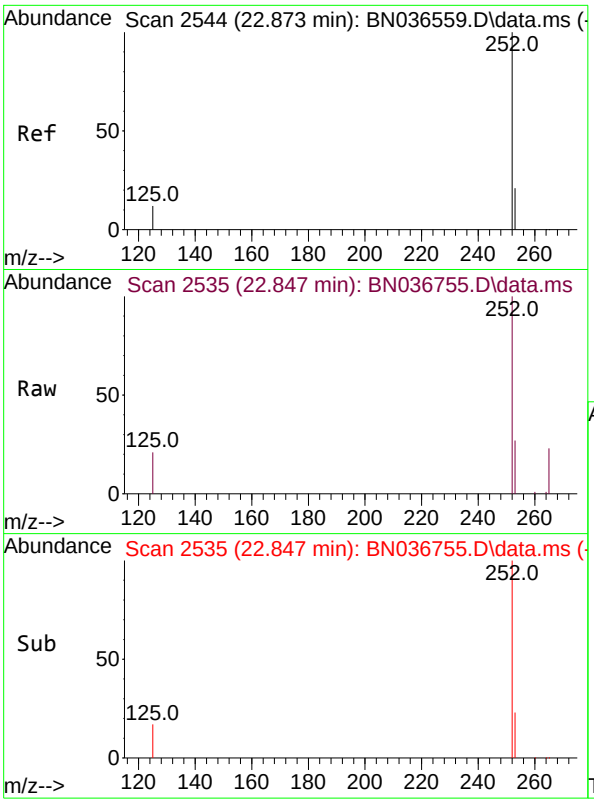




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.371 ng
RT: 25.785 min Scan# 3540
Delta R.T. -0.052 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:276 Resp: 7554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.5 | 23.4 | 35.2 |
| 277 | 24.8 | 20.0 | 30.0 |



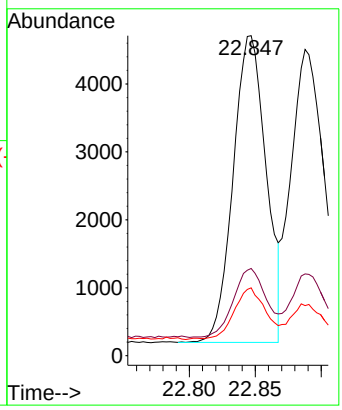


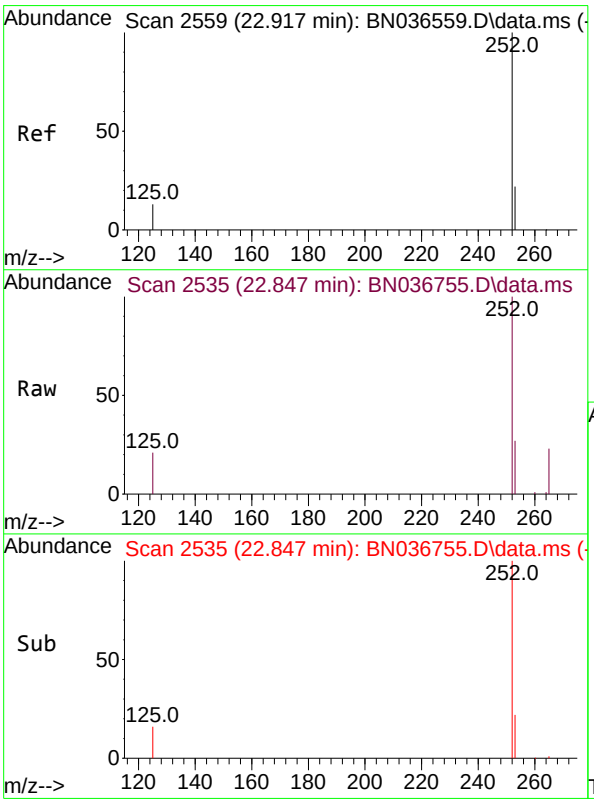

#37
Benzo(b)fluoranthene
Concen: 0.382 ng
RT: 22.847 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 7851

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.3 | 23.9 | 35.9 |
| 125 | 21.2 | 17.4 | 26.2 |

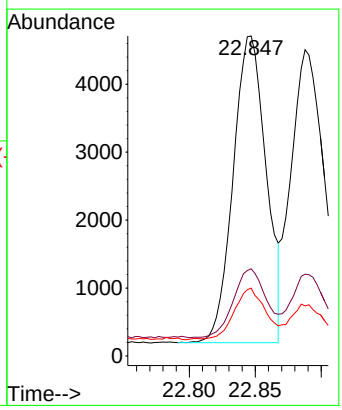


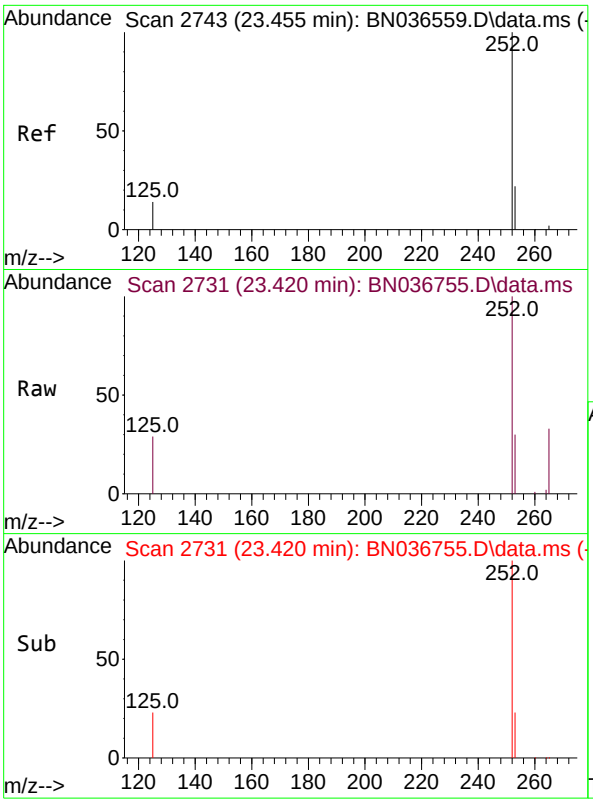




#38
Benzo(k)fluoranthene
Concen: 0.364 ng
RT: 22.847 min Scan# 2535
Delta R.T. -0.070 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:252 Resp: 7851

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.3 | 24.6 | 36.8 |
| 125 | 21.2 | 17.8 | 26.8 |



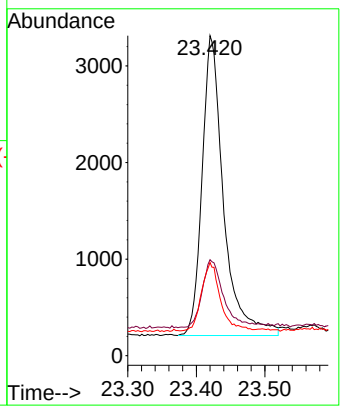


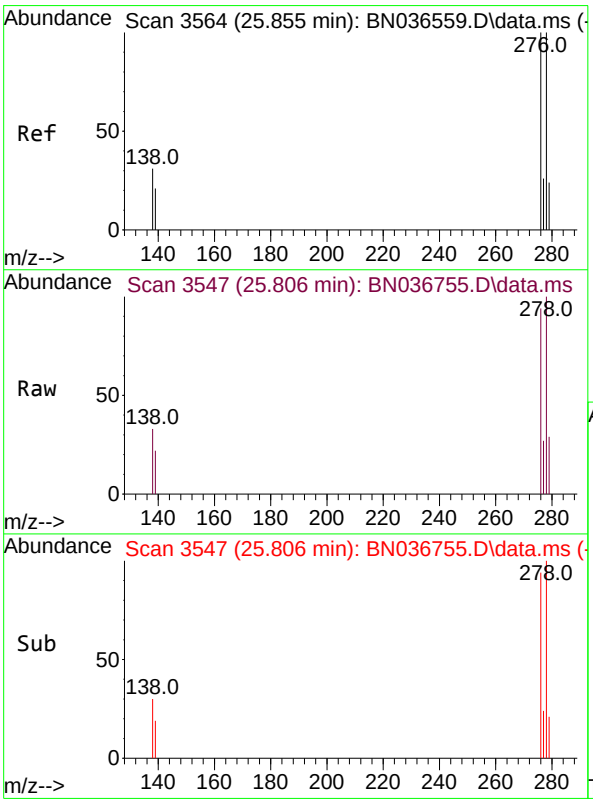

#39
Benzo(a)pyrene
Concen: 0.391 ng
RT: 23.420 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 6760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 30.0 | 27.8 | 41.8 |
| 125 | 29.1 | 22.7 | 34.1 |

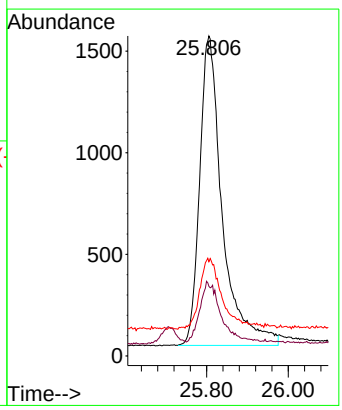


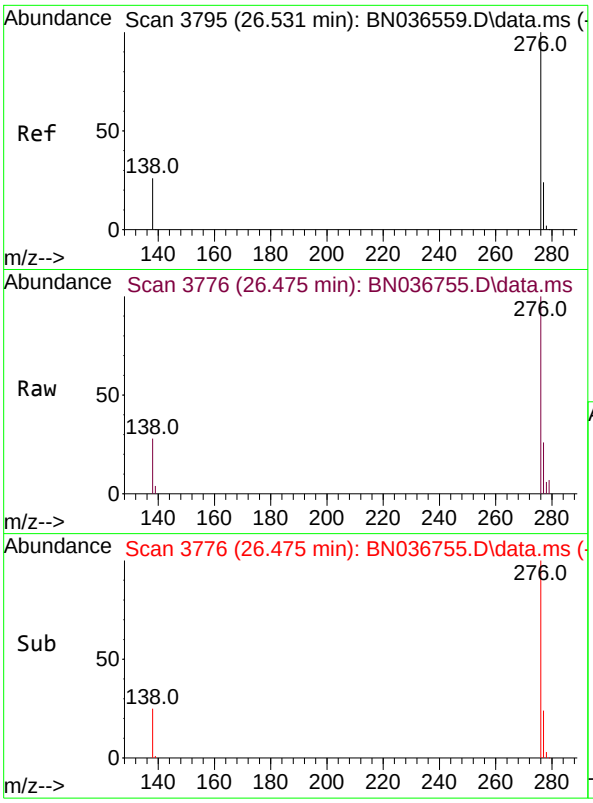




#40
Dibenzo(a,h)anthracene
Concen: 0.370 ng
RT: 25.806 min Scan# 3547
Delta R.T. -0.050 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

Tgt Ion:278 Resp: 5864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 21.8 | 20.8 | 31.2 |
| 279 | 29.5 | 28.8 | 43.2 |



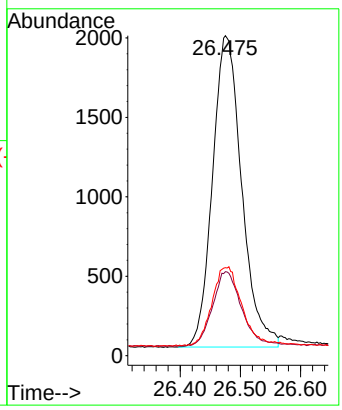



#41
Benzo(g,h,i)perylene
Concen: 0.363 ng
RT: 26.475 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036755.D
Acq: 28 Mar 2025 01:52

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:276 Resp: 6596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.3 | 22.2 | 33.4 |
| 138 | 27.5 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036757.D
Acq On : 28 Mar 2025 03:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 05:36:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

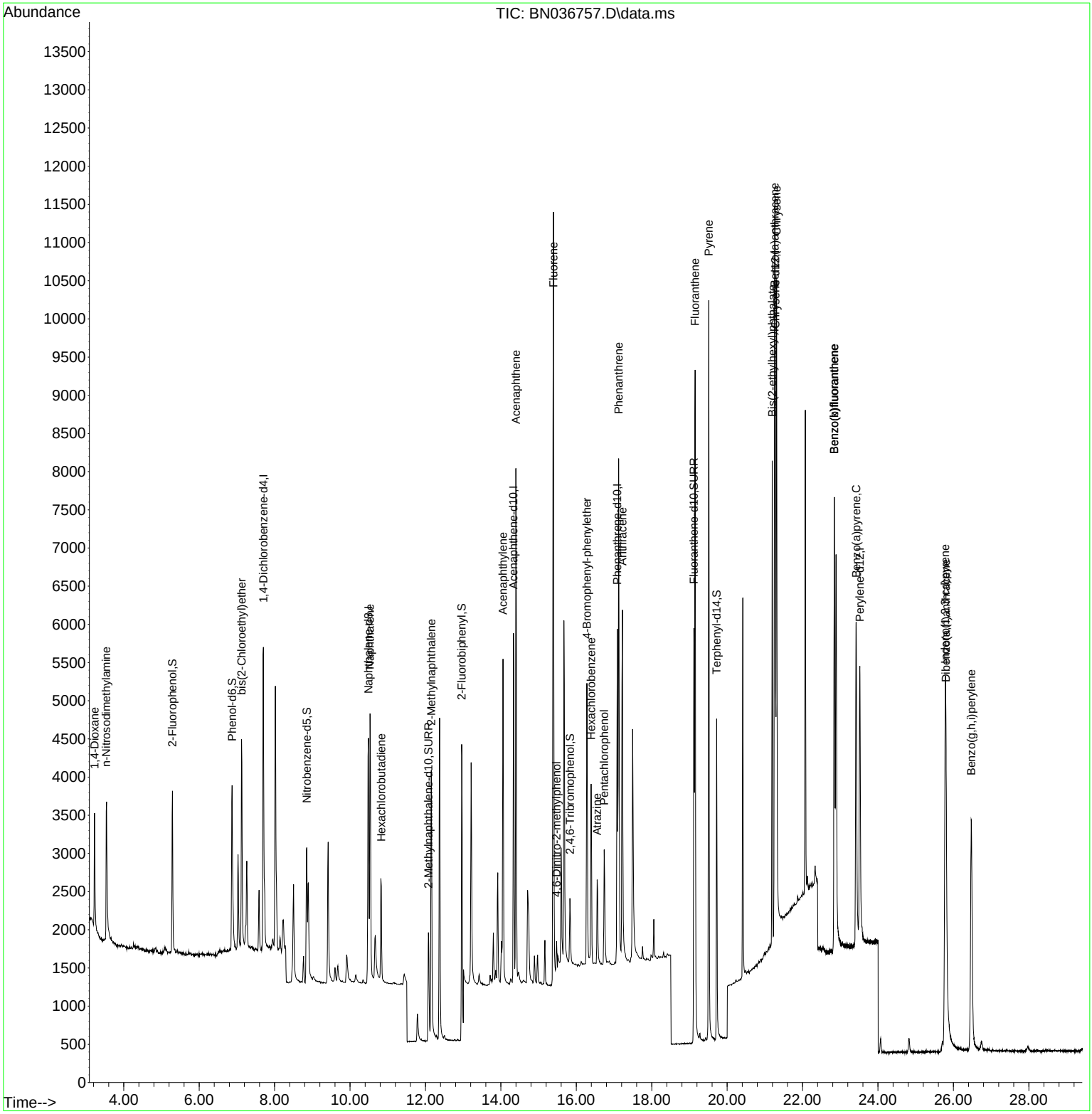
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.703 | 152 | 1974 | 0.400 | ng | | -0.02 |
| 7) Naphthalene-d8 | 10.488 | 136 | 4607 | 0.400 | ng | | -0.02 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2750 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.087 | 188 | 5937 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 5680 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.519 | 264 | 5140 | 0.400 | ng | | #-0.03 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.291 | 112 | 1543 | 0.335 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1947 | 0.343 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1705 | 0.340 | ng | | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 2347 | 0.342 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 507 | 0.406 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5537 | 0.346 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 6252 | 0.411 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 4254 | 0.313 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 873 | 0.399 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.536 | 42 | 1735 | 0.392 | ng | | 95 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 2072 | 0.353 | ng | | 98 |
| 9) Naphthalene | 10.530 | 128 | 4865 | 0.359 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.829 | 225 | 1140 | 0.357 | ng | # | 99 |
| 12) 2-Methylnaphthalene | 12.157 | 142 | 3049 | 0.354 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 4680 | 0.361 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3124 | 0.368 | ng | | 100 |
| 18) Fluorene | 15.393 | 166 | 4263 | 0.371 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 472 | 0.457 | ng | | 83 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1382 | 0.372 | ng | | 91 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1636 | 0.364 | ng | | 97 |
| 23) Atrazine | 16.553 | 200 | 1154 | 0.387 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 868 | 0.424 | ng | | 97 |
| 25) Phenanthrene | 17.124 | 178 | 6866 | 0.386 | ng | | 100 |
| 26) Anthracene | 17.223 | 178 | 6014 | 0.374 | ng | | 99 |
| 28) Fluoranthene | 19.150 | 202 | 8476 | 0.424 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 9024 | 0.325 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 7146 | 0.362 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 8272 | 0.383 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 5431 | 0.386 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.782 | 276 | 7314 | 0.394 | ng | | 95 |
| 37) Benzo(b)fluoranthene | 22.841 | 252 | 7293 | 0.390 | ng | | 95 |
| 38) Benzo(k)fluoranthene | 22.841 | 252 | 7293 | 0.372 | ng | | 94 |
| 39) Benzo(a)pyrene | 23.420 | 252 | 6291 | 0.399 | ng | | 95 |
| 40) Dibenzo(a,h)anthracene | 25.803 | 278 | 5522 | 0.382 | ng | | 91 |
| 41) Benzo(g,h,i)perylene | 26.475 | 276 | 6376 | 0.386 | ng | | 94 |

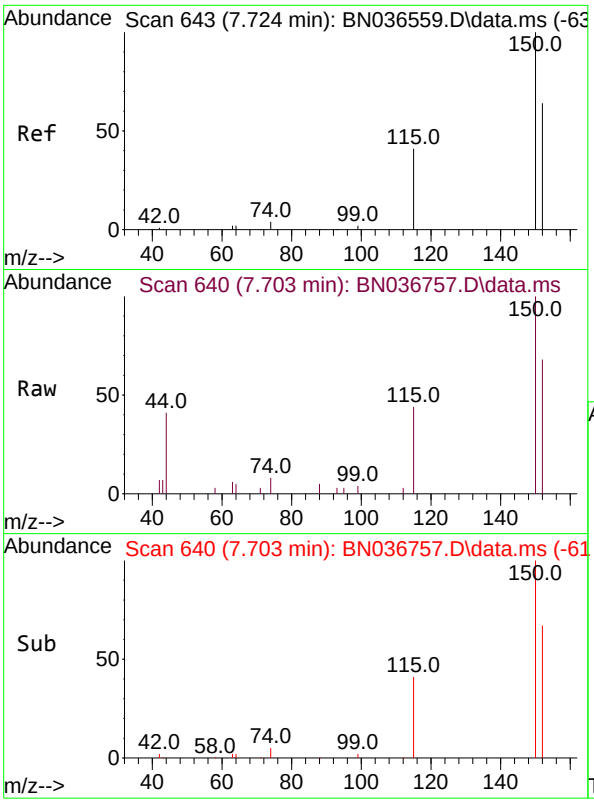
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036757.D
Acq On : 28 Mar 2025 03:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 28 05:36:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



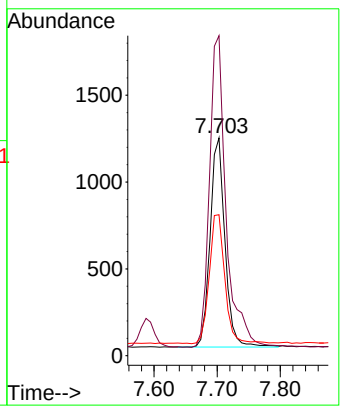


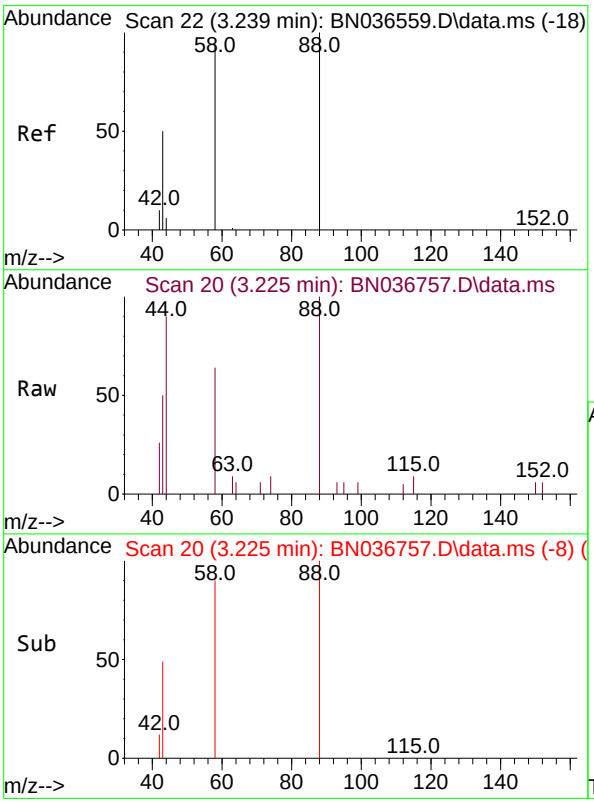

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.703 min Scan# 64
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 1974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 147.0 | 123.7 | 185.5 |
| 115 | 64.8 | 54.3 | 81.5 |

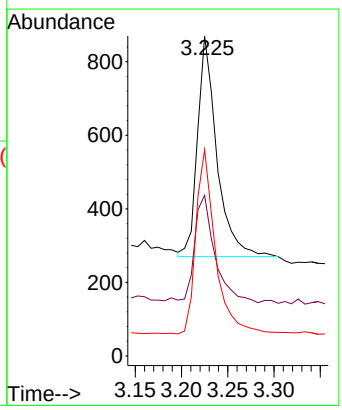


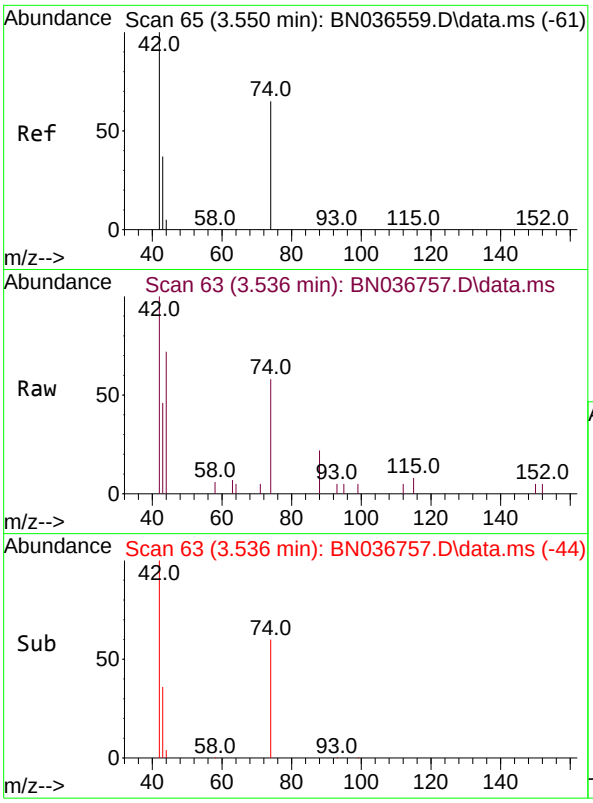




#2
1,4-Dioxane
Concen: 0.399 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 88 Resp: 873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 51.8 | 37.8 | 56.8 |
| 58 | 83.6 | 67.4 | 101.2 |



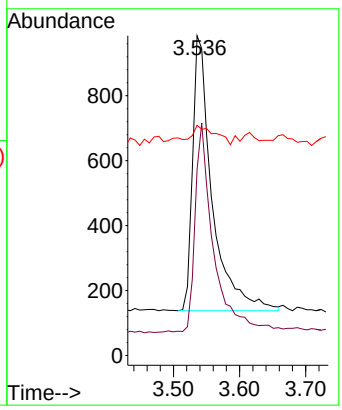


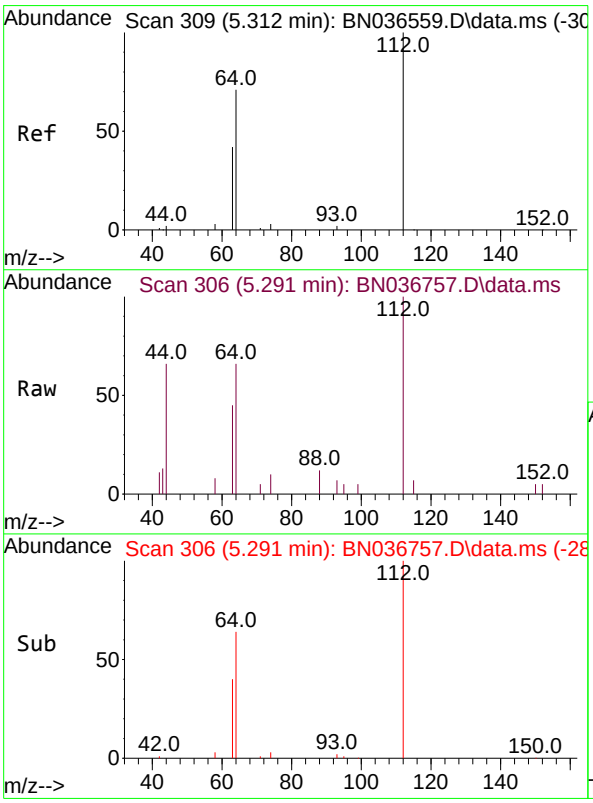

#3
n-Nitrosodimethylamine
Concen: 0.392 ng
RT: 3.536 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 42 Resp: 1735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 70.8 | 60.6 | 90.8 |
| 44 | 8.1 | 6.3 | 9.5 |

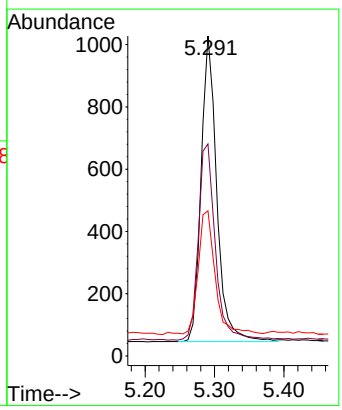


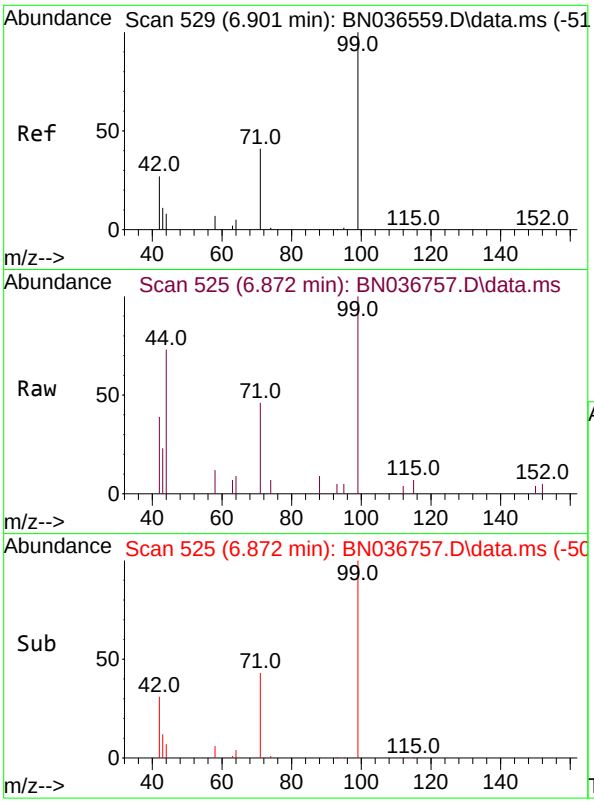




#4
2-Fluorophenol
Concen: 0.335 ng
RT: 5.291 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:112 Resp: 1543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.8 | 53.1 | 79.7 |
| 63 | 43.0 | 31.8 | 47.8 |



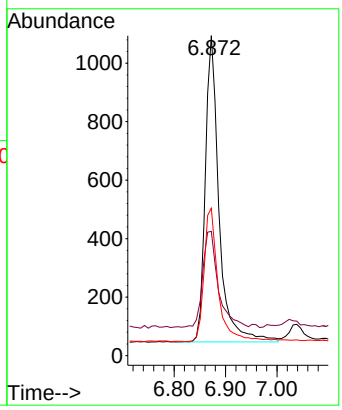


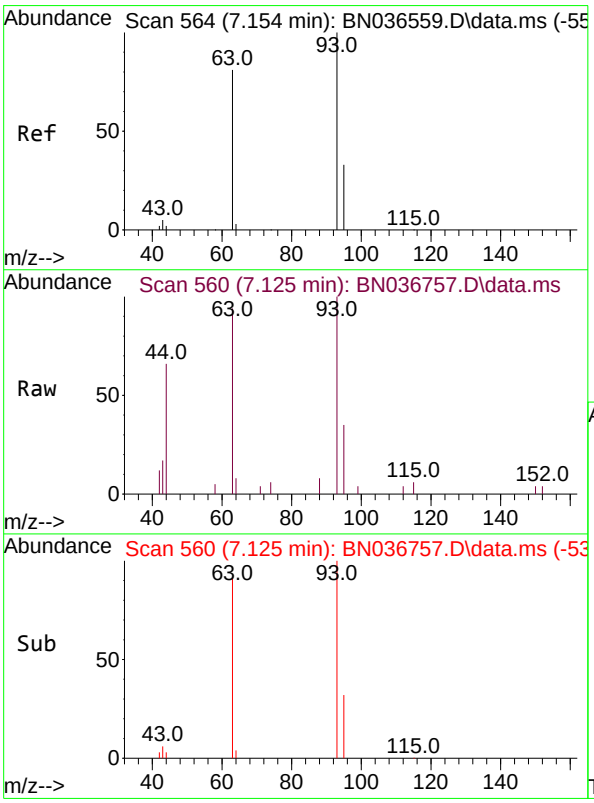

#5
Phenol-d6
Concen: 0.343 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 99 Resp: 1947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 35.4 | 26.5 | 39.7 |
| 71 | 46.1 | 34.1 | 51.1 |

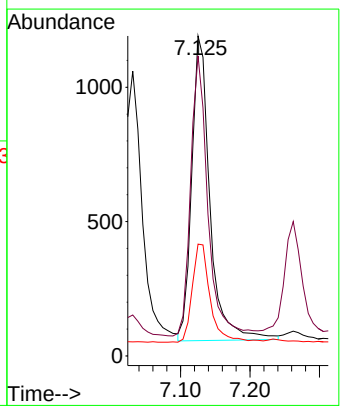


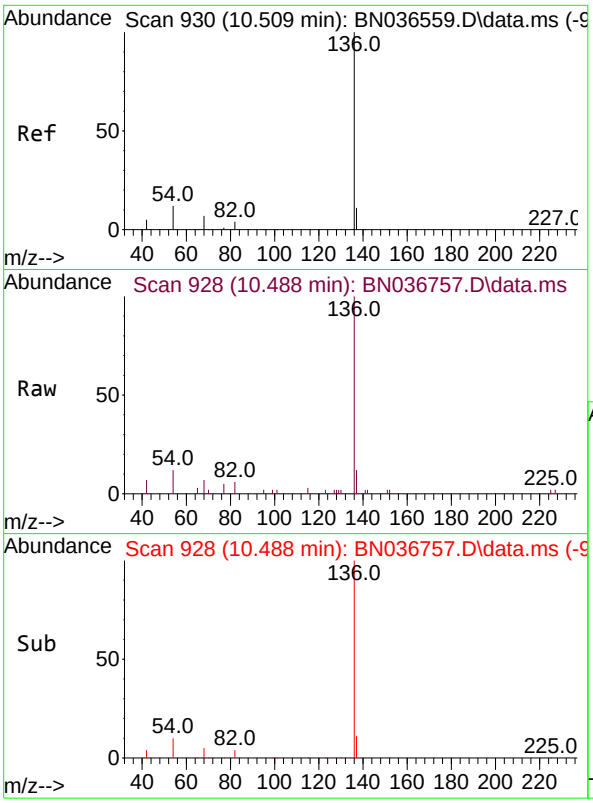




#6
bis(2-Chloroethyl)ether
Concen: 0.353 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 93 Resp: 2072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 86.9 | 67.7 | 101.5 |
| 95 | 31.7 | 25.6 | 38.4 |



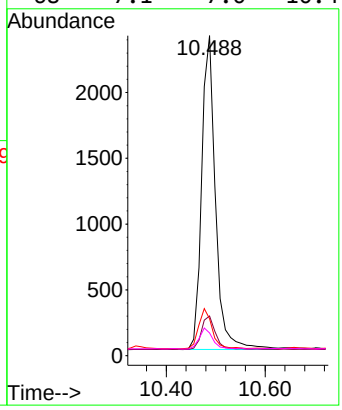


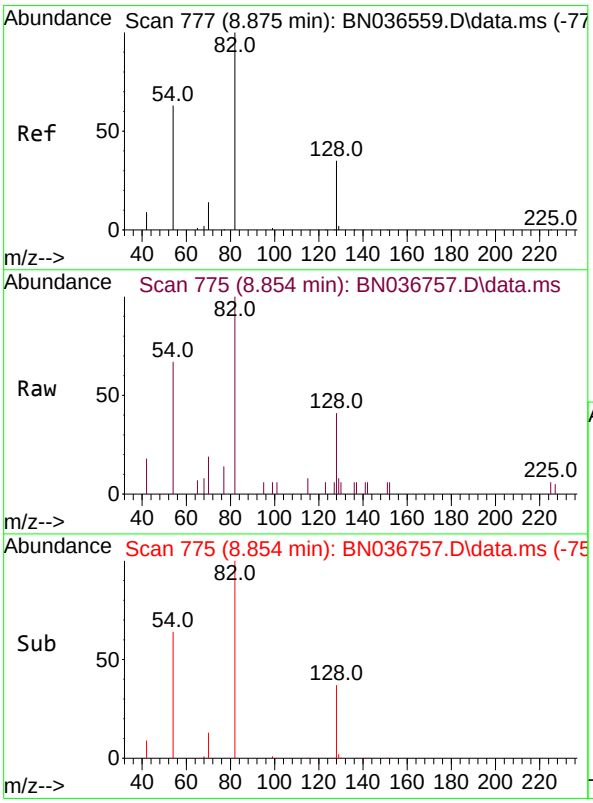

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.488 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:136 Resp: 4607

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 11.6 | 11.5 | 17.3 |
| 68 | 7.1 | 7.0 | 10.4 |

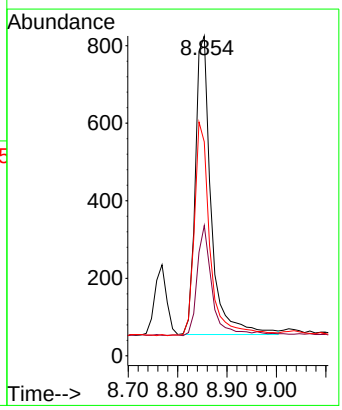


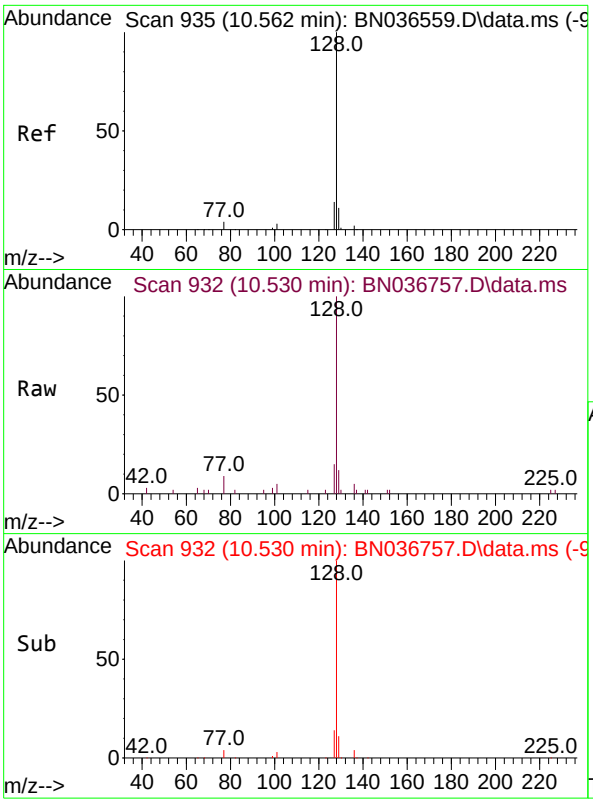




#8
Nitrobenzene-d5
Concen: 0.340 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion: 82 Resp: 1705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 40.7 | 30.6 | 45.8 |
| 54 | 66.9 | 52.2 | 78.4 |



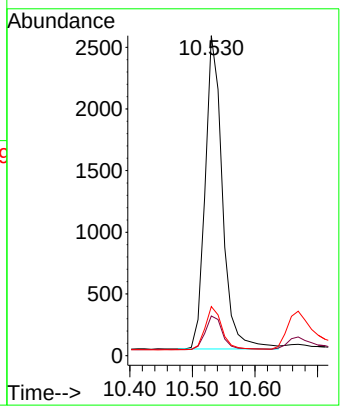


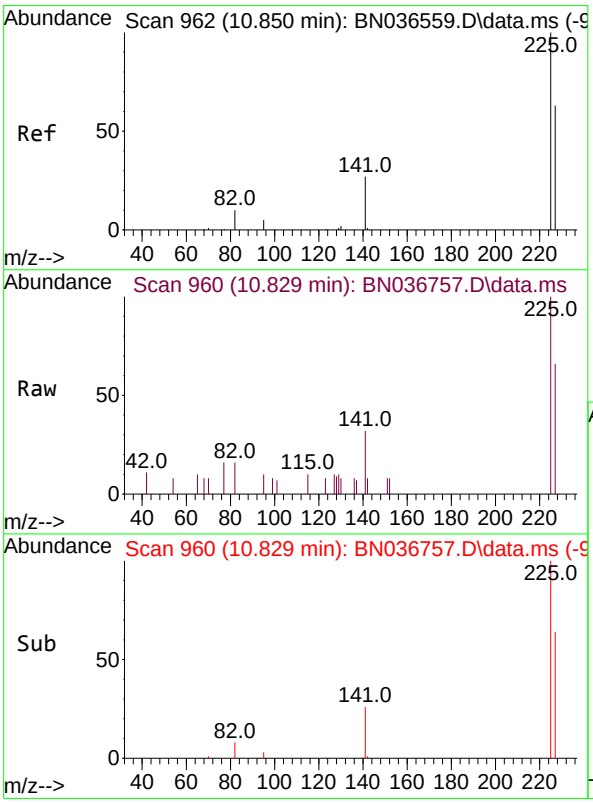

#9
Naphthalene
Concen: 0.359 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:128 Resp: 4865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.4 | 9.8 | 14.6 |
| 127 | 15.3 | 11.8 | 17.8 |

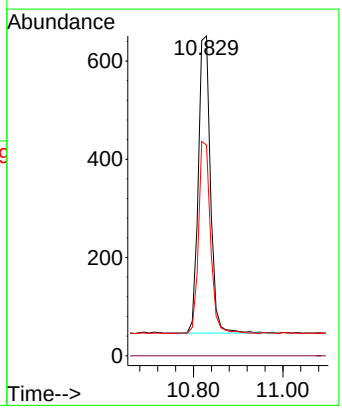


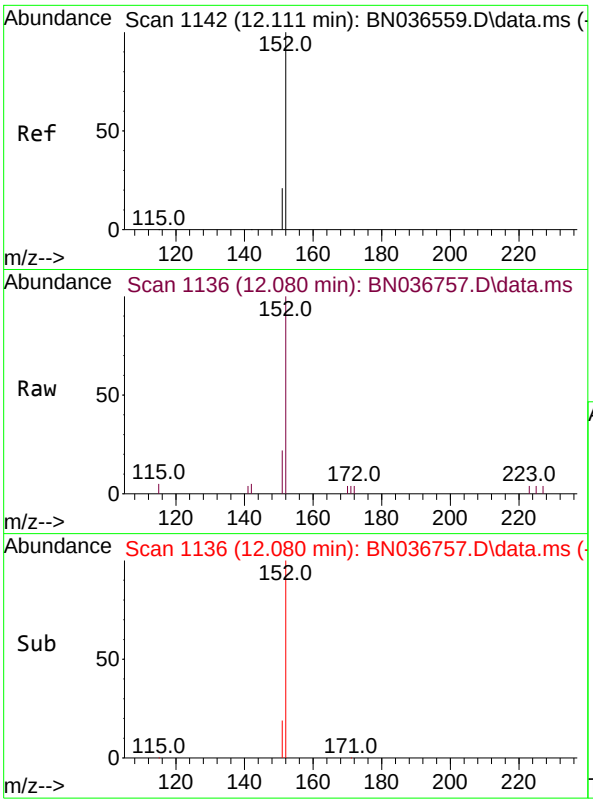




#10
Hexachlorobutadiene
Concen: 0.357 ng
RT: 10.829 min Scan# 960
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:225 Resp: 1140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.3 | 51.8 | 77.8 |



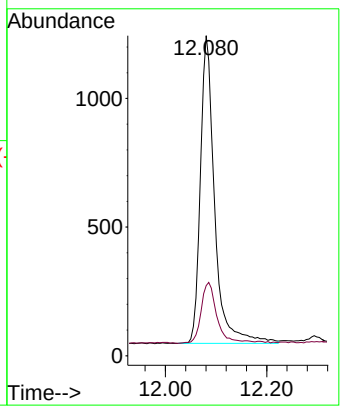


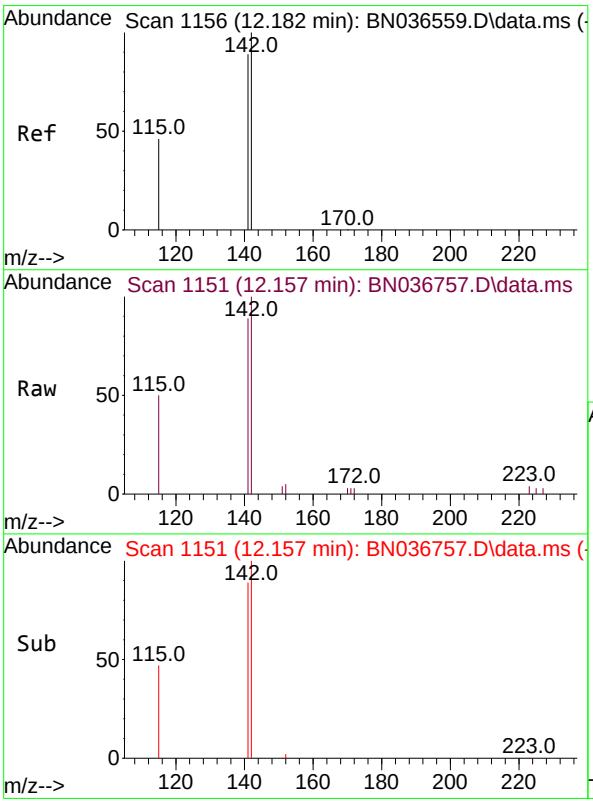

#11
2-Methylnaphthalene-d10
Concen: 0.342 ng
RT: 12.080 min Scan# 11
Delta R.T. -0.030 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 2347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.6 | 17.0 | 25.6 |

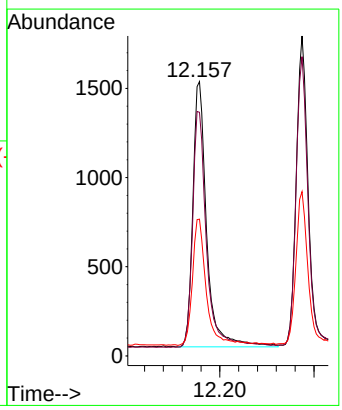


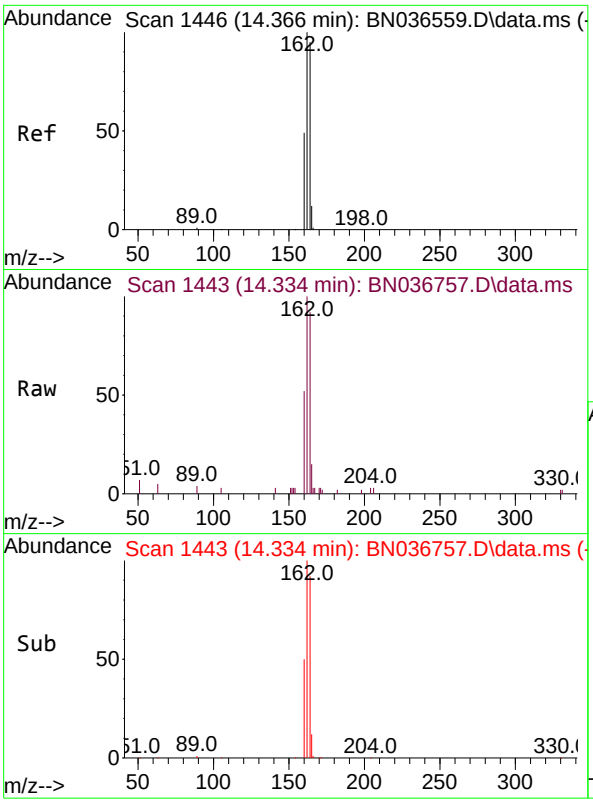




#12
2-Methylnaphthalene
Concen: 0.354 ng
RT: 12.157 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:142 Resp: 3049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 88.8 | 71.7 | 107.5 |
| 115 | 49.9 | 38.3 | 57.5 |



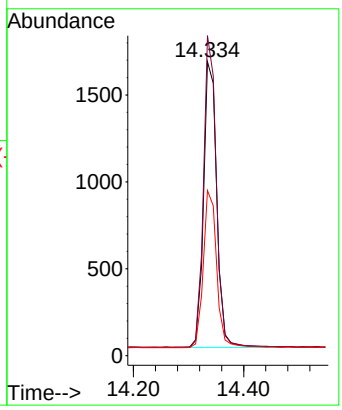


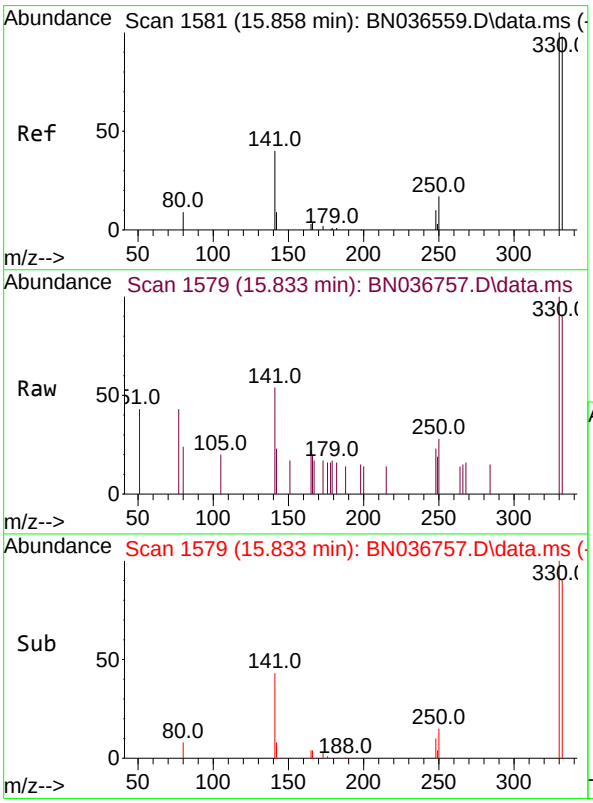

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:164 Resp: 2750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 108.9 | 84.2 | 126.2 |
| 160 | 56.2 | 42.2 | 63.2 |

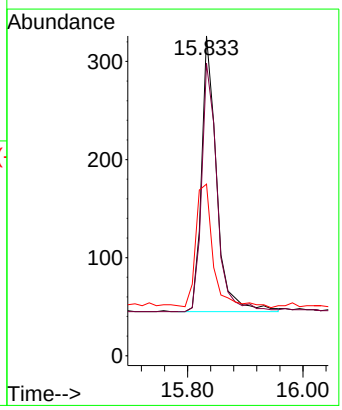


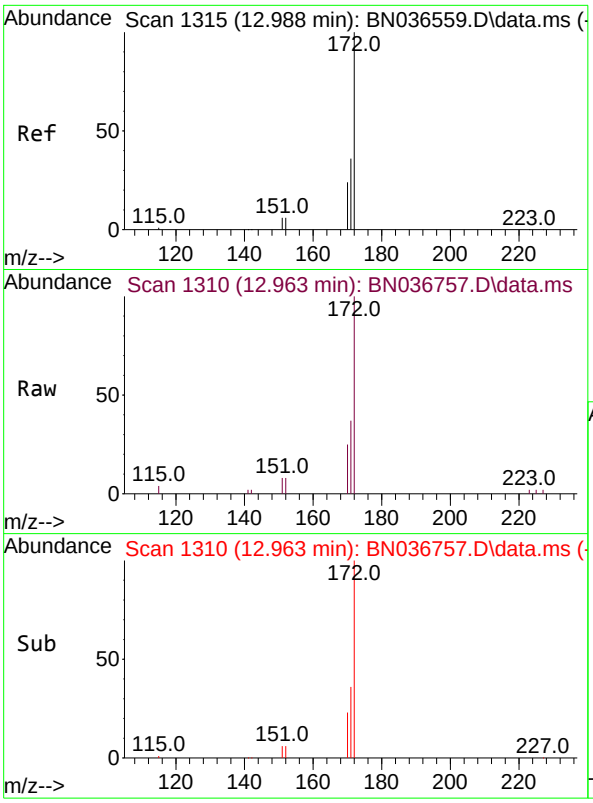




#14
2,4,6-Tribromophenol
Concen: 0.406 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:330 Resp: 507

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 92.9 | 75.2 | 112.8 |
| 141 | 52.3 | 43.4 | 65.2 |



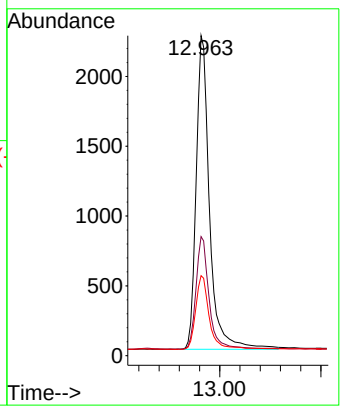


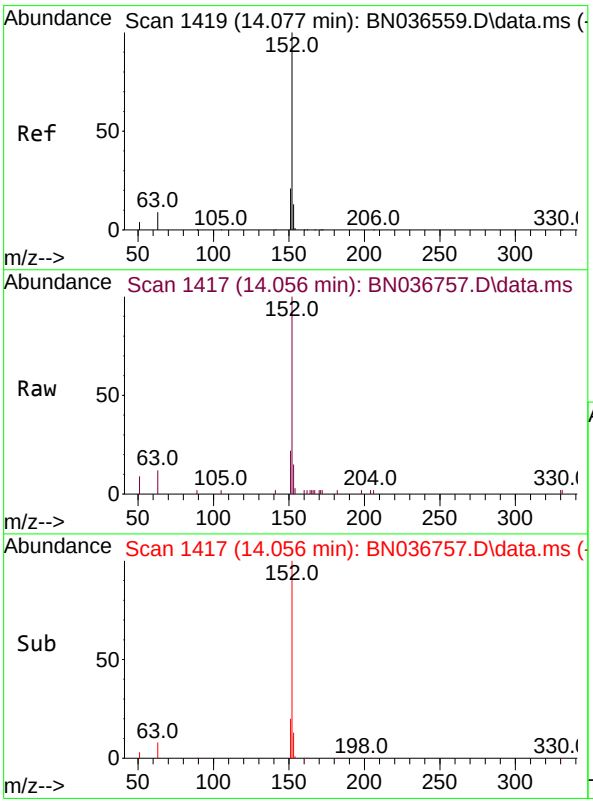

#15
2-Fluorobiphenyl
Concen: 0.346 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:172 Resp: 5537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.2 | 29.5 | 44.3 |
| 170 | 25.0 | 20.2 | 30.4 |

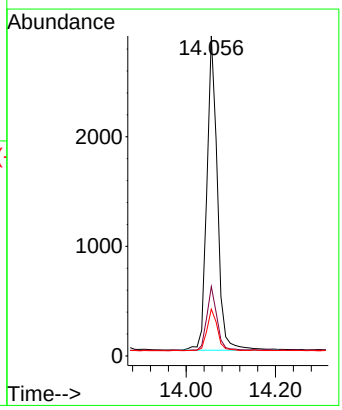


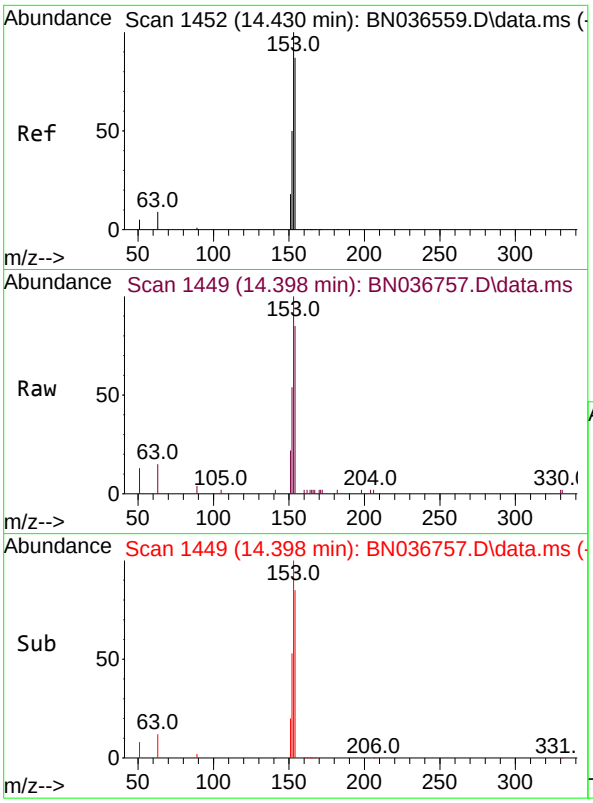




#16
Acenaphthylene
Concen: 0.361 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:152 Resp: 4680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.7 | 16.2 | 24.4 |
| 153 | 13.4 | 10.6 | 15.8 |



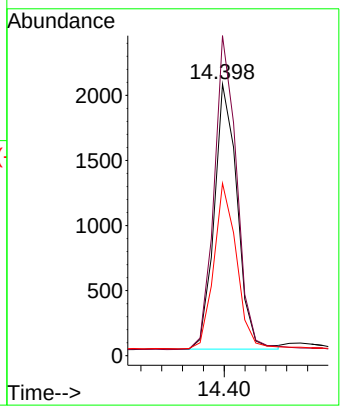


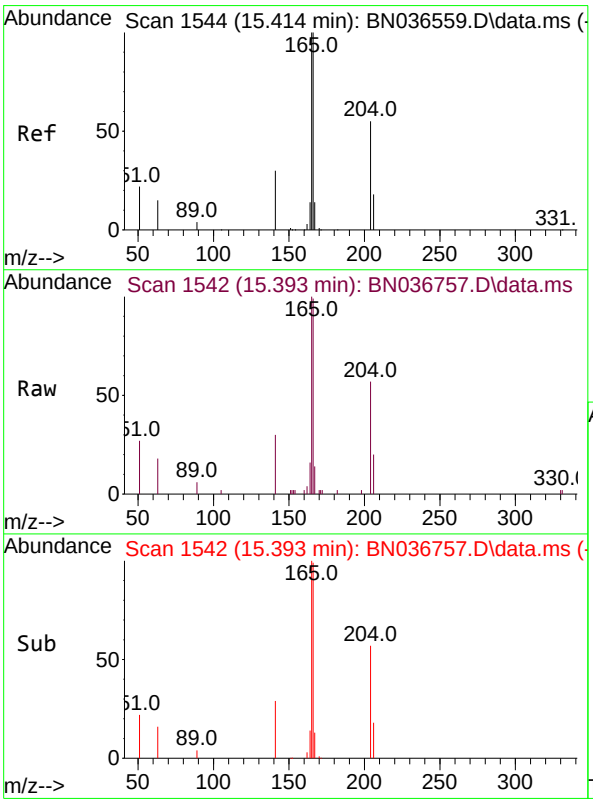

#17
Acenaphthene
Concen: 0.368 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:154 Resp: 3124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.8 | 94.1 | 141.1 |
| 152 | 62.6 | 49.8 | 74.6 |

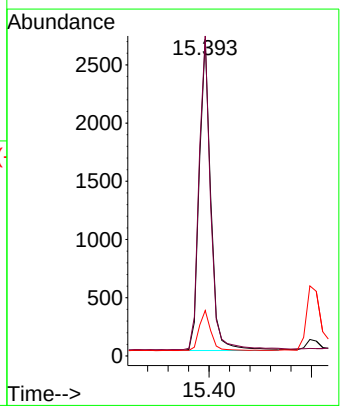


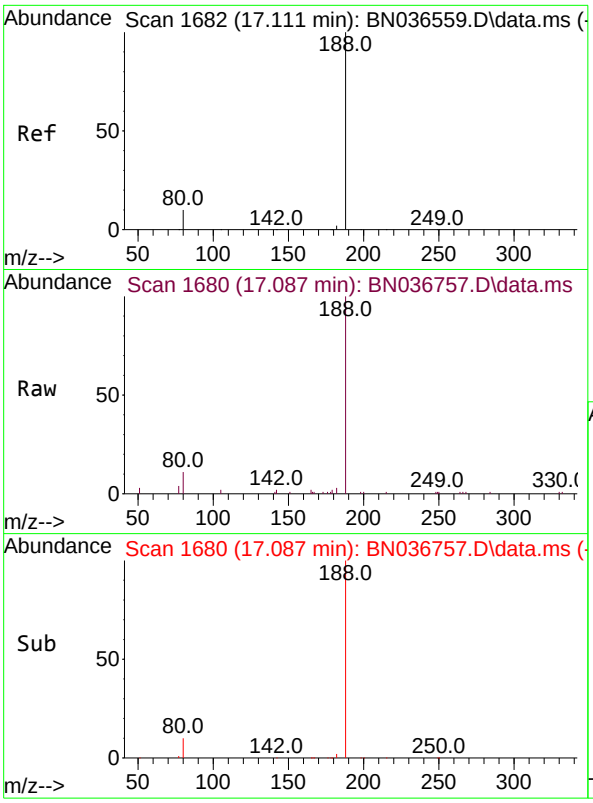




#18
Fluorene
Concen: 0.371 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:166 Resp: 4263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.3 | 79.8 | 119.8 |
| 167 | 12.7 | 10.6 | 15.8 |



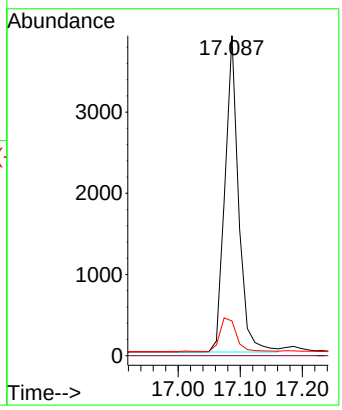


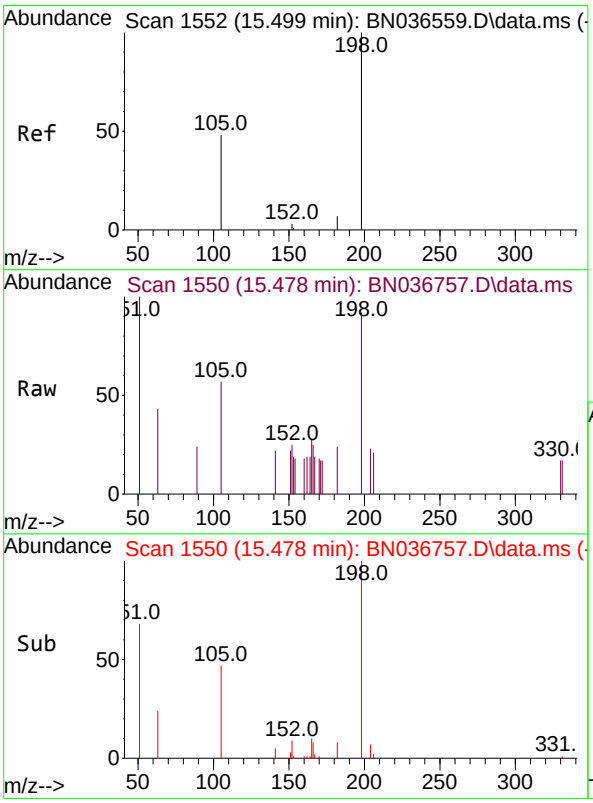

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:188 Resp: 5937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 10.8 | 8.8 | 13.2 |

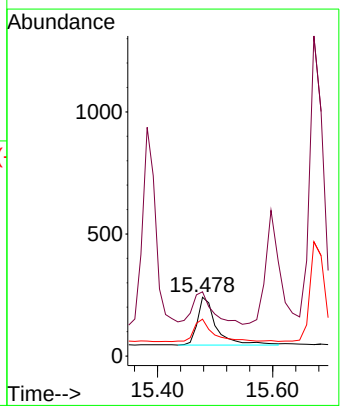


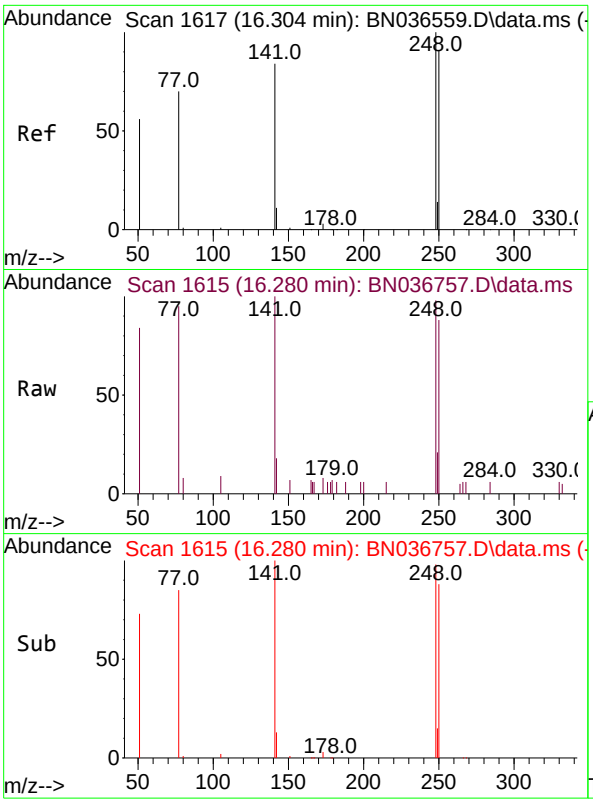




#20
4,6-Dinitro-2-methylphenol
Concen: 0.457 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:198 Resp: 472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 109.1 | 107.9 | 161.9 |
| 105 | 62.7 | 56.2 | 84.2 |



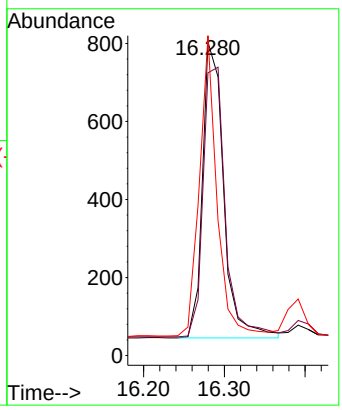


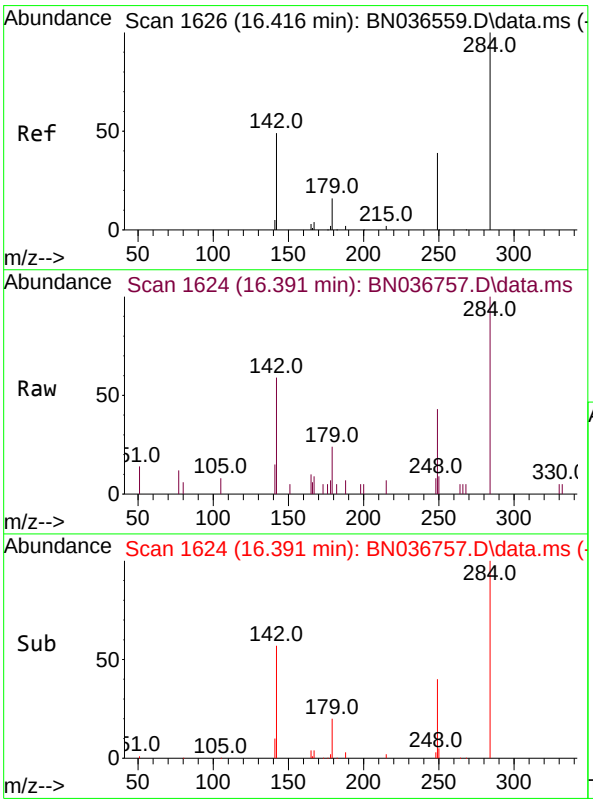

#21
4-Bromophenyl-phenylether
Concen: 0.372 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:248 Resp: 1382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 90.2 | 73.0 | 109.6 |
| 141 | 102.0 | 68.6 | 103.0 |

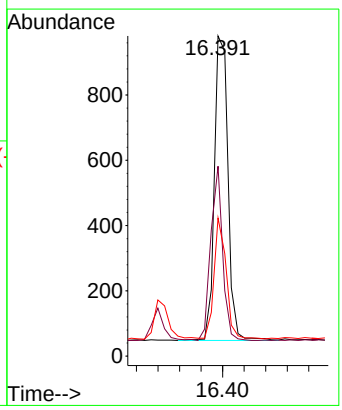


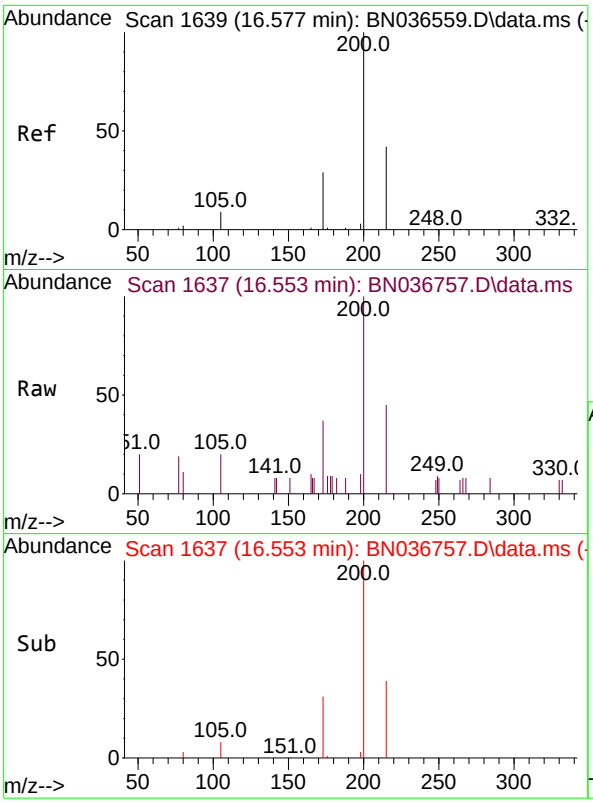




#22
Hexachlorobenzene
Concen: 0.364 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:284 Resp: 1636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.6 | 37.0 | 55.4 |
| 249 | 35.2 | 28.1 | 42.1 |



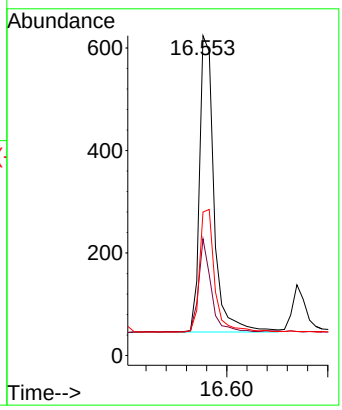


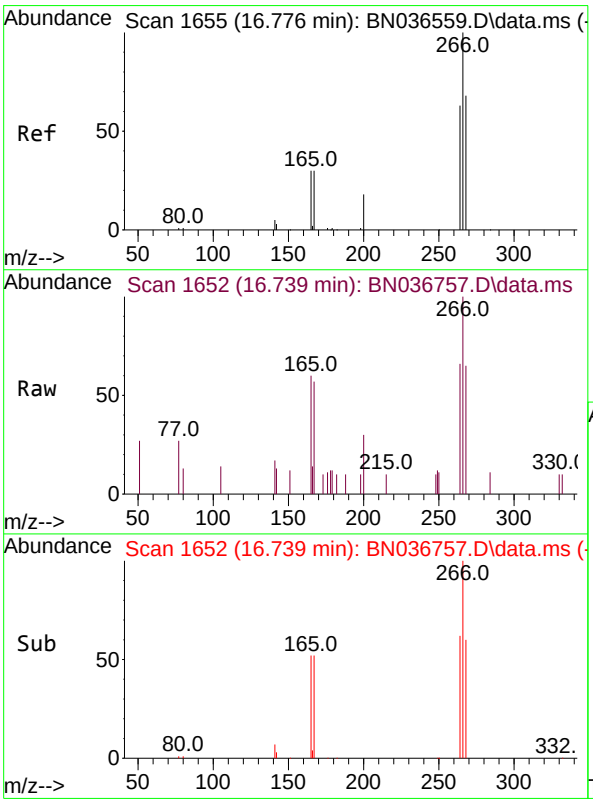

#23
Atrazine
Concen: 0.387 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:200 Resp: 1154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.5 | 27.3 | 40.9 |
| 215 | 44.9 | 36.8 | 55.2 |

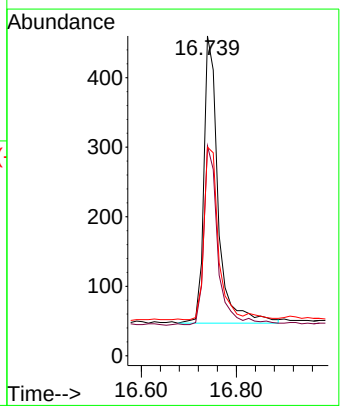


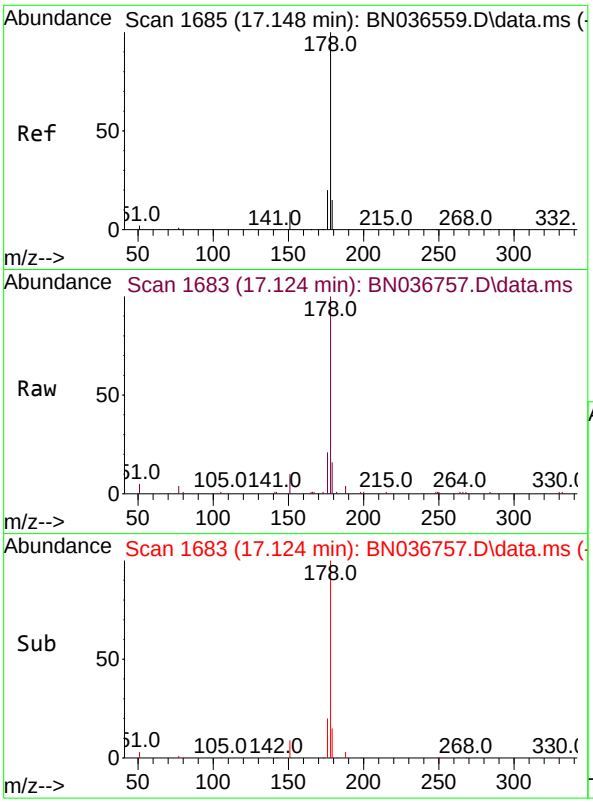




#24
Pentachlorophenol
Concen: 0.424 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:266 Resp: 868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.2 | 49.6 | 74.4 |
| 268 | 59.4 | 50.9 | 76.3 |



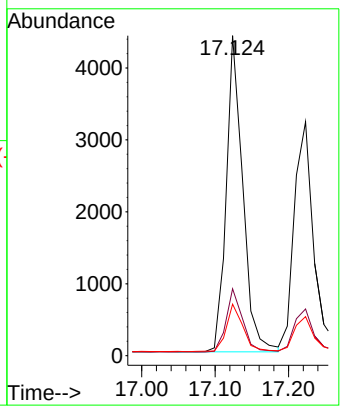


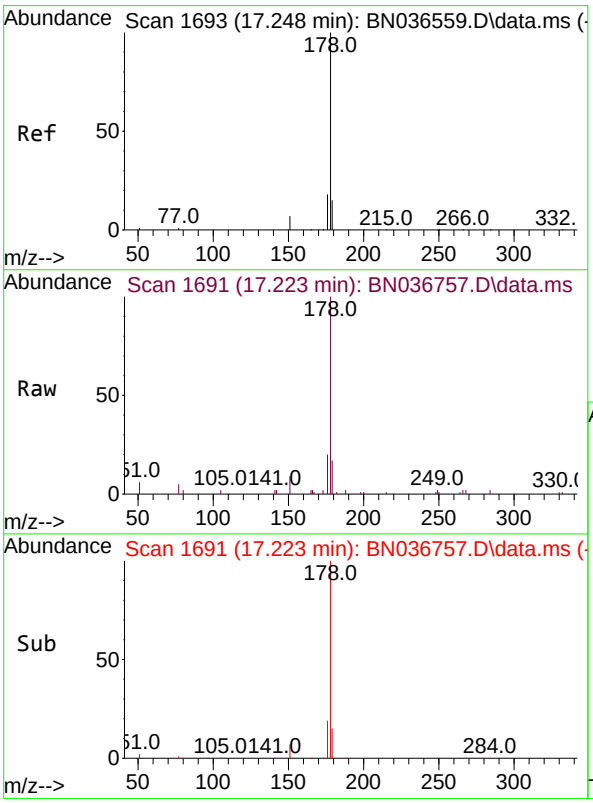

#25
Phenanthrene
Concen: 0.386 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:178 Resp: 6866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.3 | 12.2 | 18.4 |

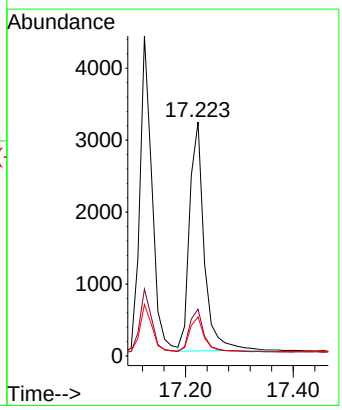


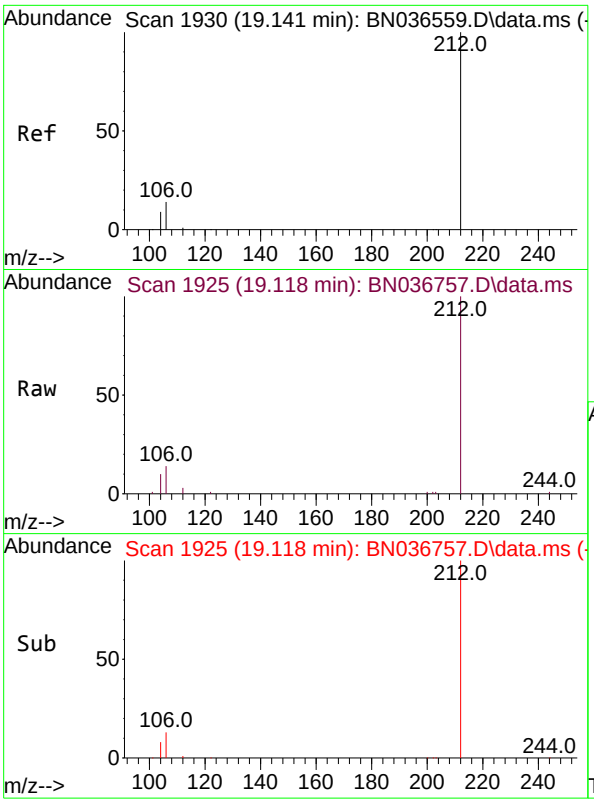




#26
Anthracene
Concen: 0.374 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:178 Resp: 6014

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.1 | 15.4 | 23.2 |
| 179 | 15.0 | 12.6 | 18.8 |



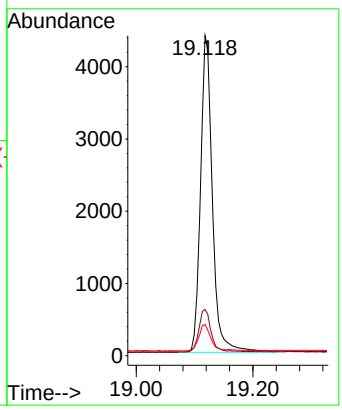


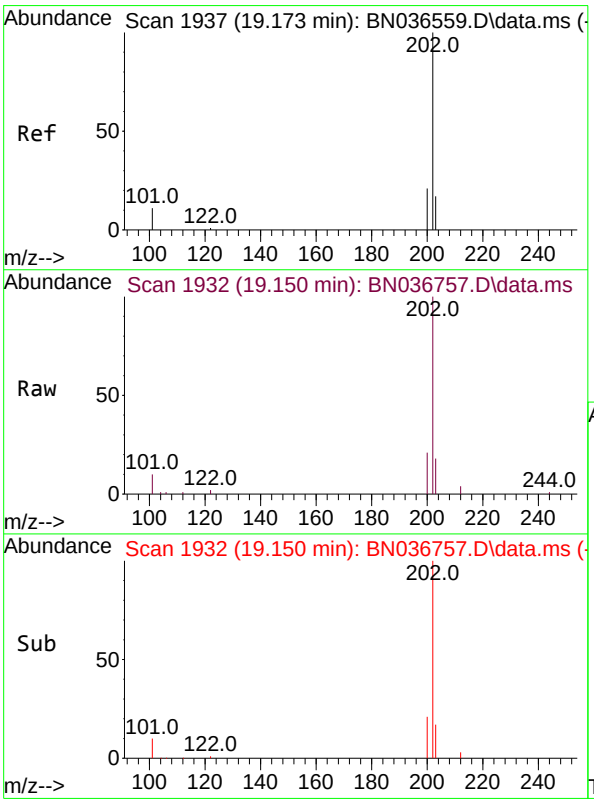

#27
Fluoranthene-d10
Concen: 0.411 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:212 Resp: 6252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.6 | 11.8 | 17.6 |
| 104 | 8.6 | 7.3 | 10.9 |

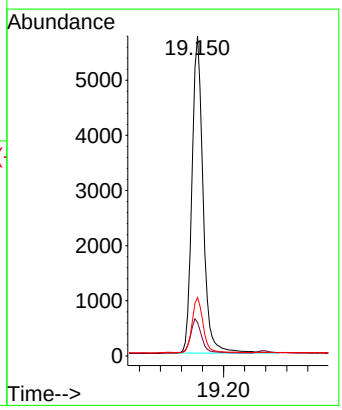


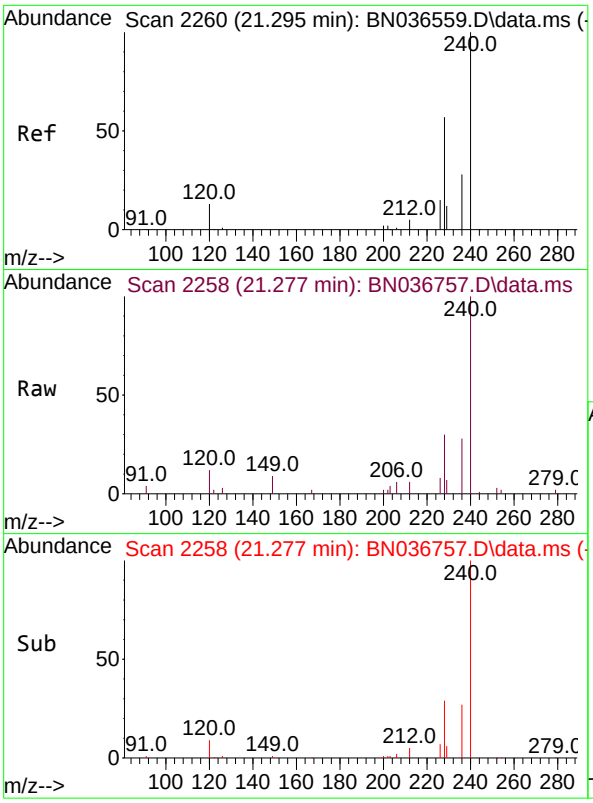




#28
Fluoranthene
Concen: 0.424 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:202 Resp: 8476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.0 | 9.4 | 14.0 |
| 203 | 17.2 | 13.5 | 20.3 |



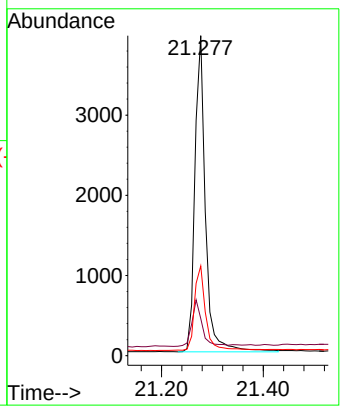


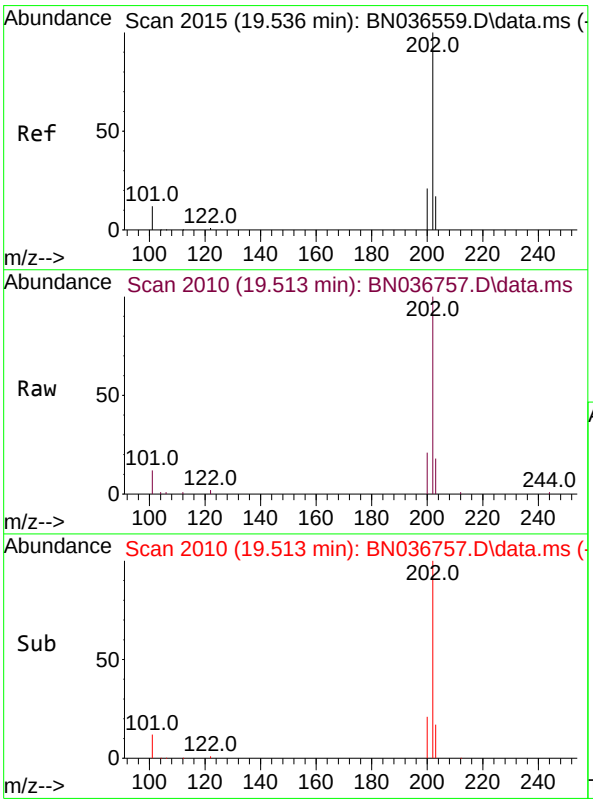

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:240 Resp: 5680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 11.6 | 14.6 | 22.0# |
| 236 | 28.0 | 24.1 | 36.1 |

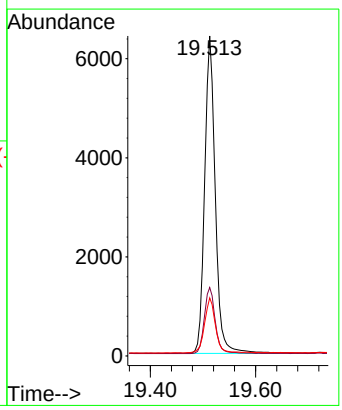


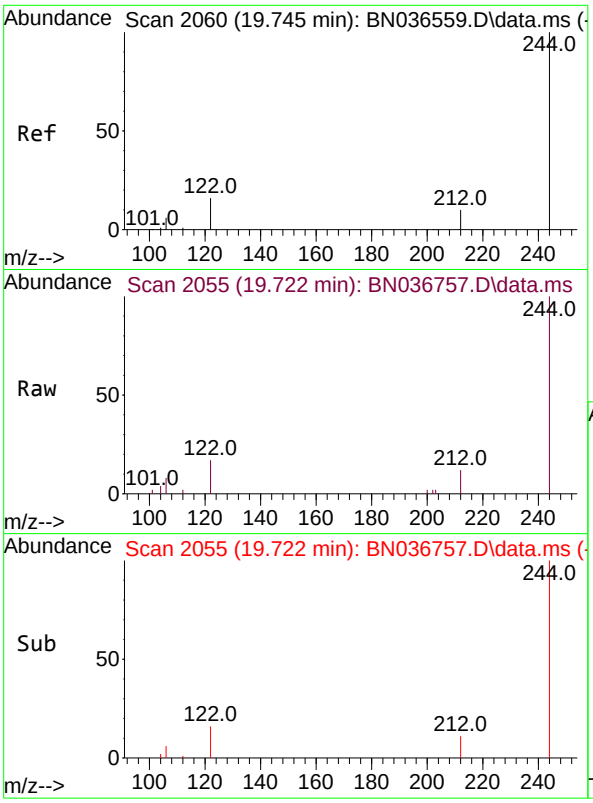




#30
Pyrene
Concen: 0.325 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:202 Resp: 9024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |



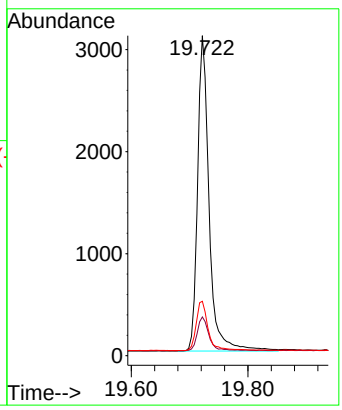


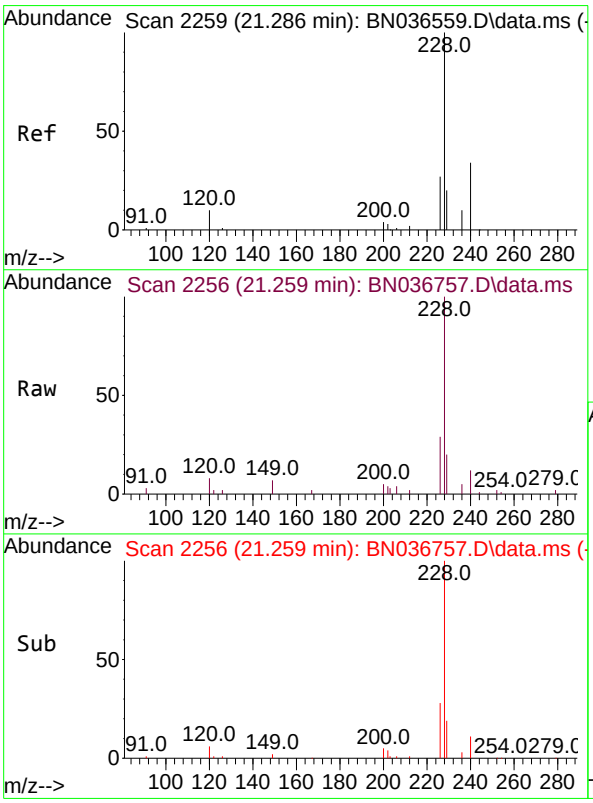

#31
Terphenyl-d14
Concen: 0.313 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:244 Resp: 4254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.1 | 9.6 | 14.4 |
| 122 | 17.0 | 13.9 | 20.9 |

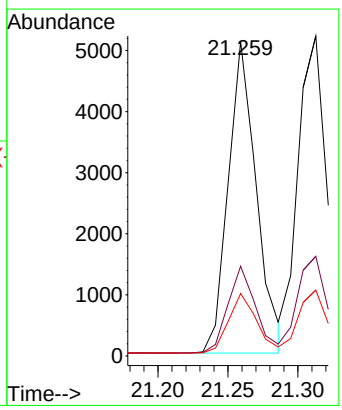


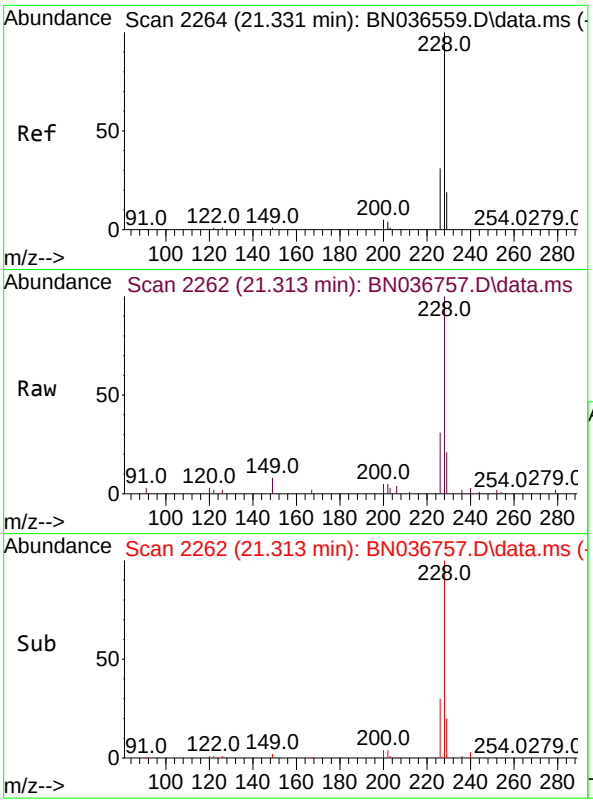




#32
Benzo(a)anthracene
Concen: 0.362 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:228 Resp: 7146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.5 | 22.5 | 33.7 |
| 229 | 19.8 | 16.6 | 25.0 |



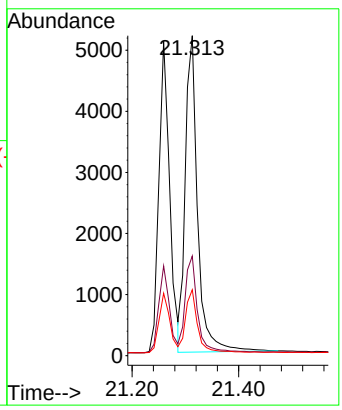


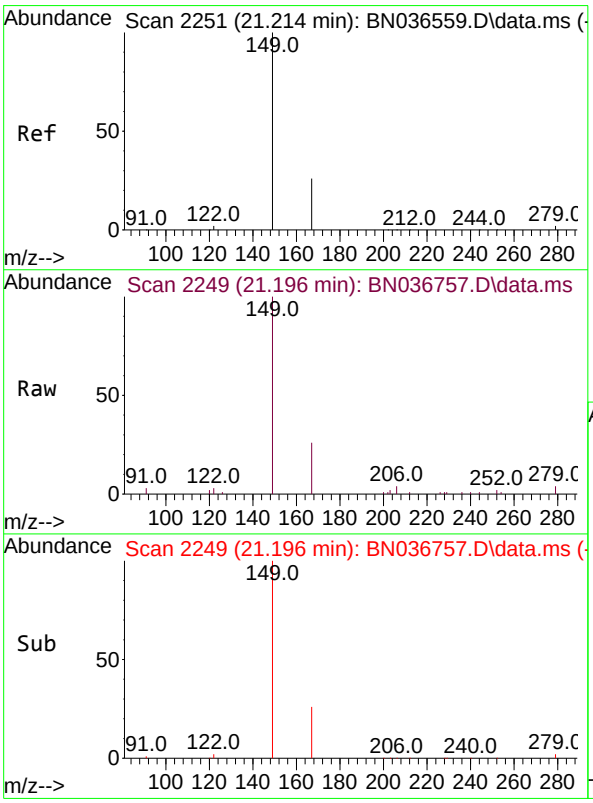

#33
Chrysene
Concen: 0.383 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:228 Resp: 8272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.1 | 25.3 | 37.9 |
| 229 | 20.6 | 15.8 | 23.8 |

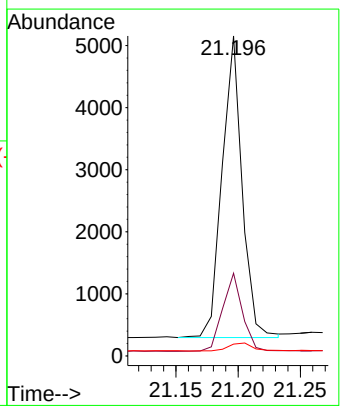


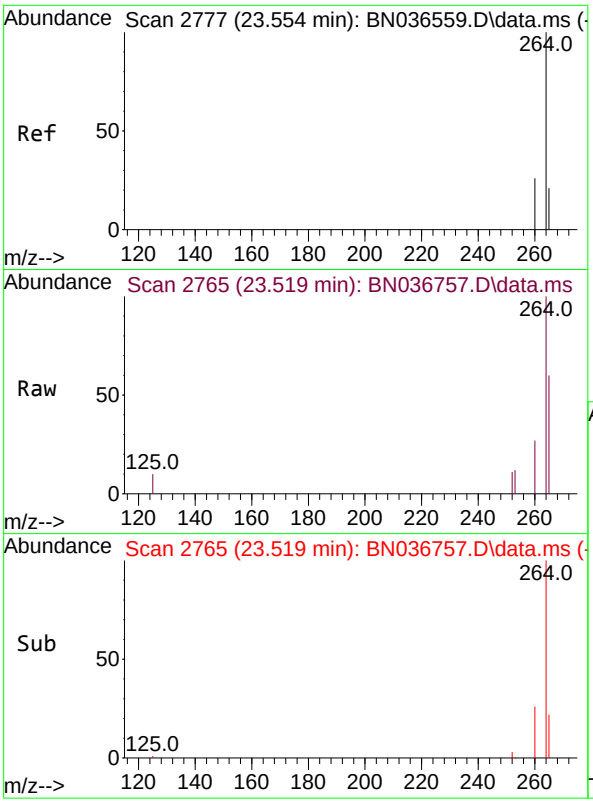




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.386 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:149 Resp: 5431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 25.8 | 20.7 | 31.1 |
| 279 | 3.4 | 3.6 | 5.4# |



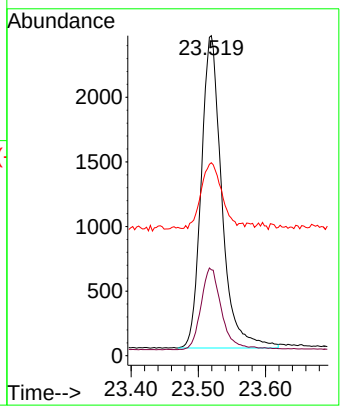


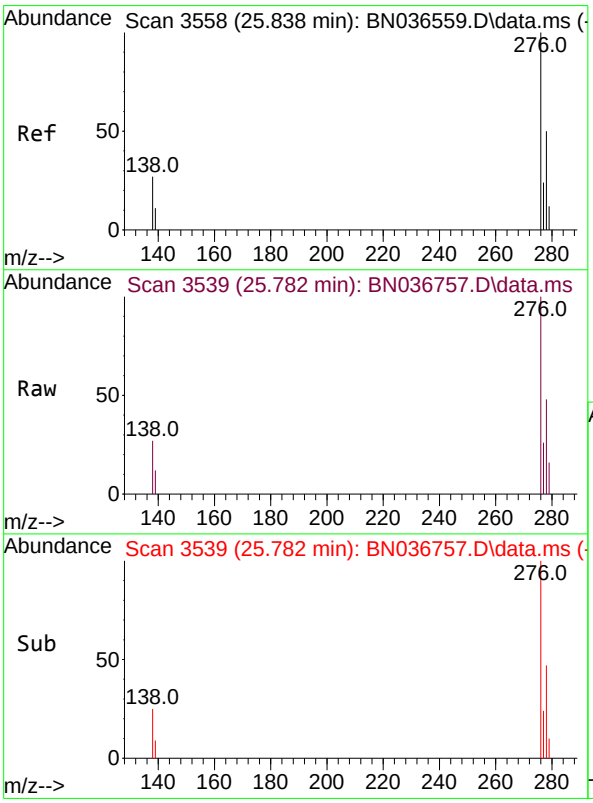

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.519 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:264 Resp: 5140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.8 | 22.6 | 33.8 |
| 265 | 60.3 | 88.1 | 132.1# |

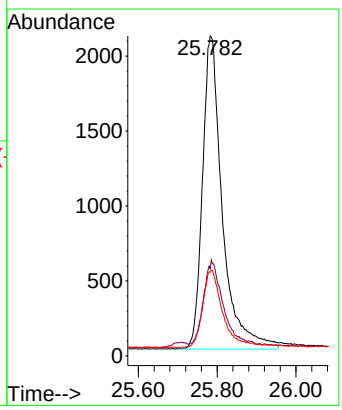


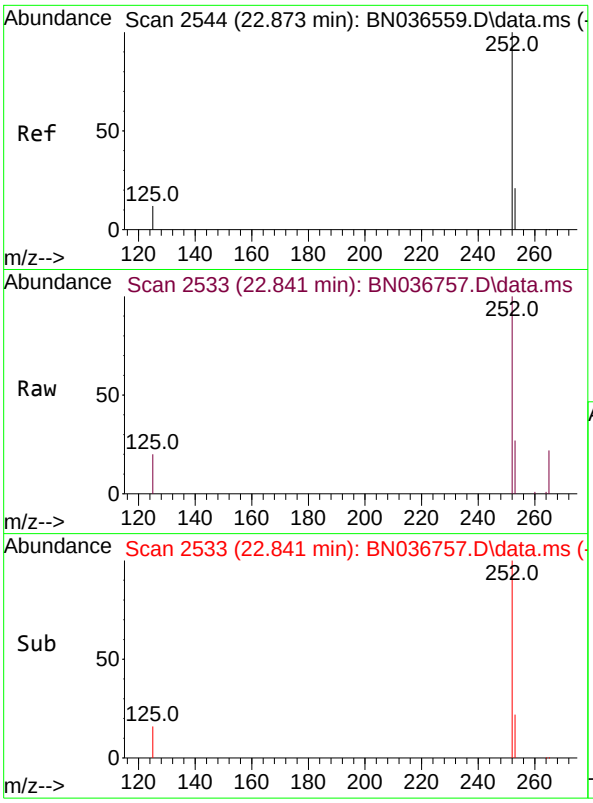




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.394 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.055 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:276 Resp: 7314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.9 | 23.4 | 35.2 |
| 277 | 24.6 | 20.0 | 30.0 |



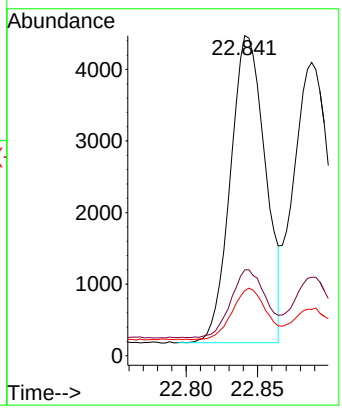


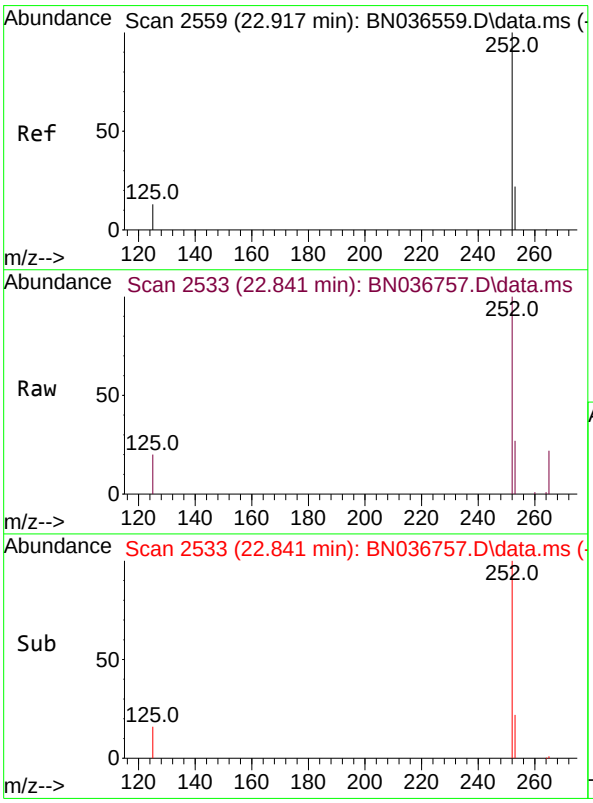

#37
Benzo(b)fluoranthene
Concen: 0.390 ng
RT: 22.841 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 7293

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 26.8 | 23.9 | 35.9 |
| 125 | 20.4 | 17.4 | 26.2 |

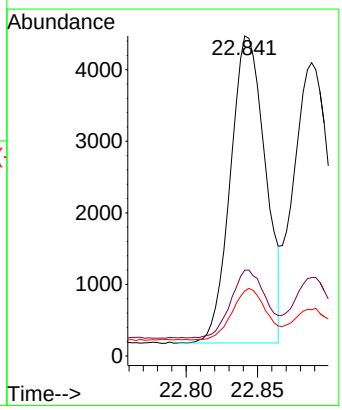


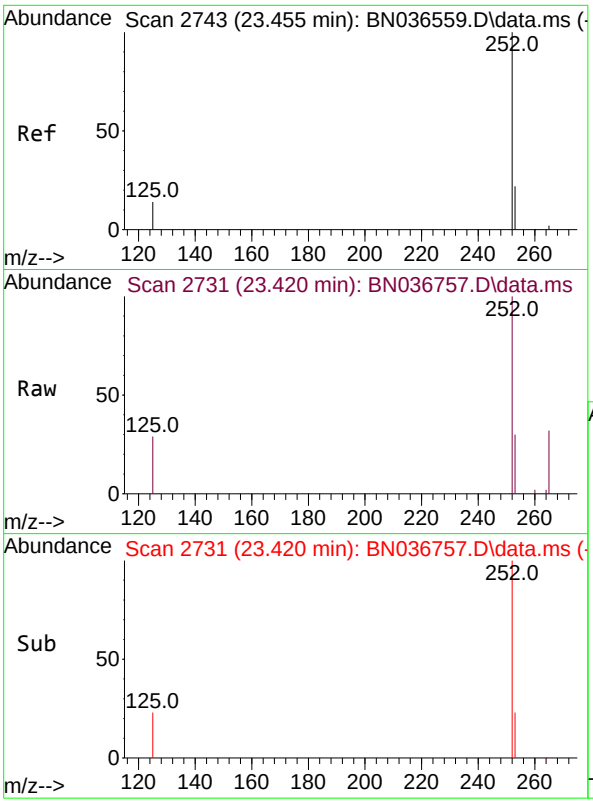




#38
Benzo(k)fluoranthene
Concen: 0.372 ng
RT: 22.841 min Scan# 2533
Delta R.T. -0.076 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:252 Resp: 7293

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 26.8 | 24.6 | 36.8 |
| 125 | 20.4 | 17.8 | 26.8 |



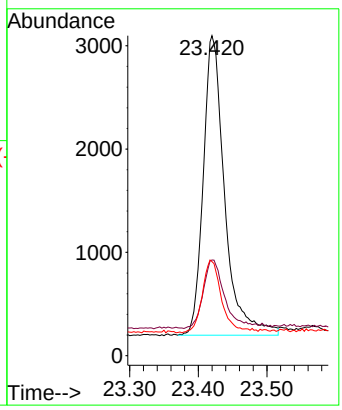


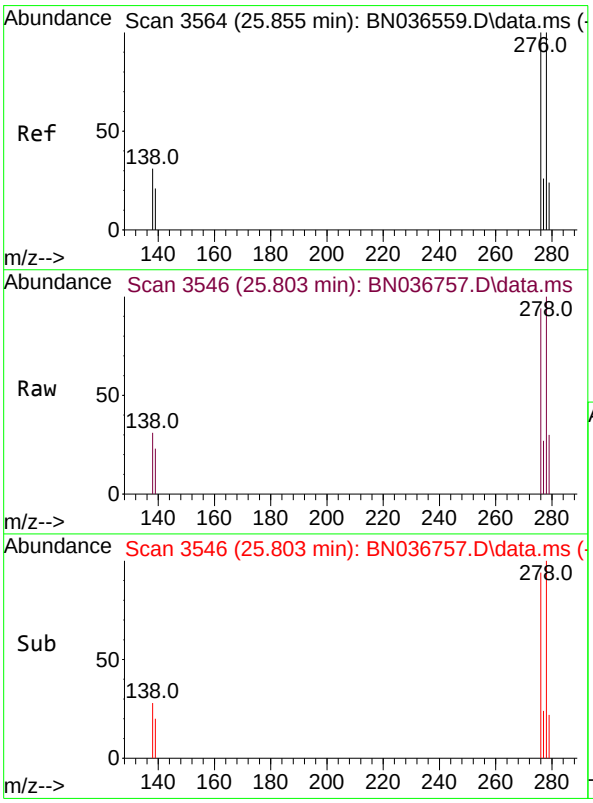

#39
Benzo(a)pyrene
Concen: 0.399 ng
RT: 23.420 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 6291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.9 | 27.8 | 41.8 |
| 125 | 29.4 | 22.7 | 34.1 |

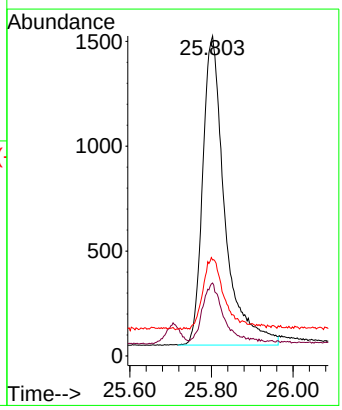


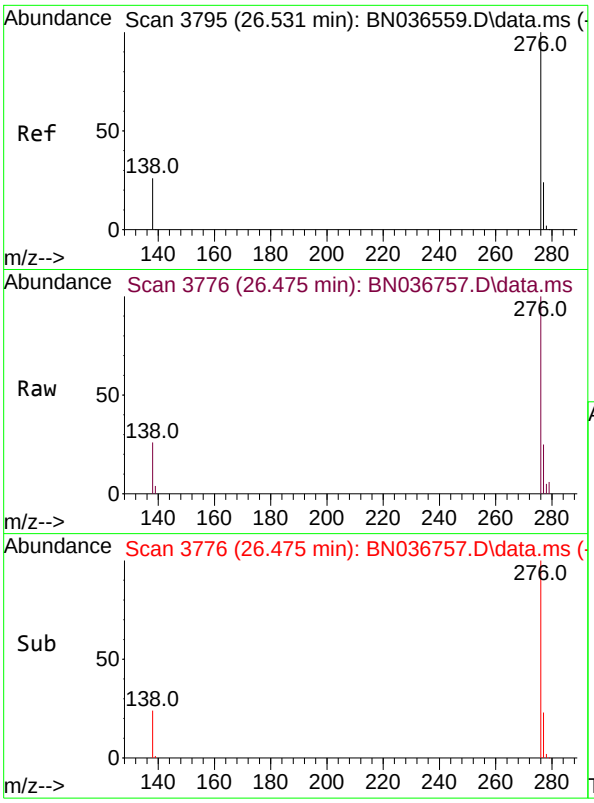




#40
Dibenzo(a,h)anthracene
Concen: 0.382 ng
RT: 25.803 min Scan# 3546
Delta R.T. -0.052 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

Tgt Ion:278 Resp: 5522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 22.8 | 20.8 | 31.2 |
| 279 | 30.0 | 28.8 | 43.2 |



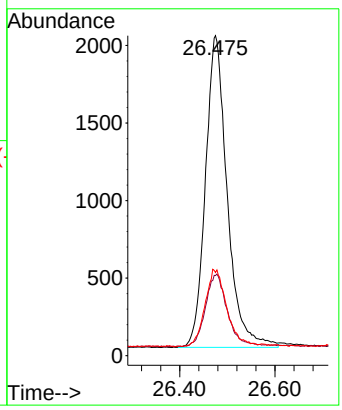



#41
Benzo(g,h,i)perylene
Concen: 0.386 ng
RT: 26.475 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036757.D
Acq: 28 Mar 2025 03:46

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:276 Resp: 6376

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.1 | 22.2 | 33.4 |
| 138 | 26.0 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036771.D
Acq On : 28 Mar 2025 13:58
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 28 14:23:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

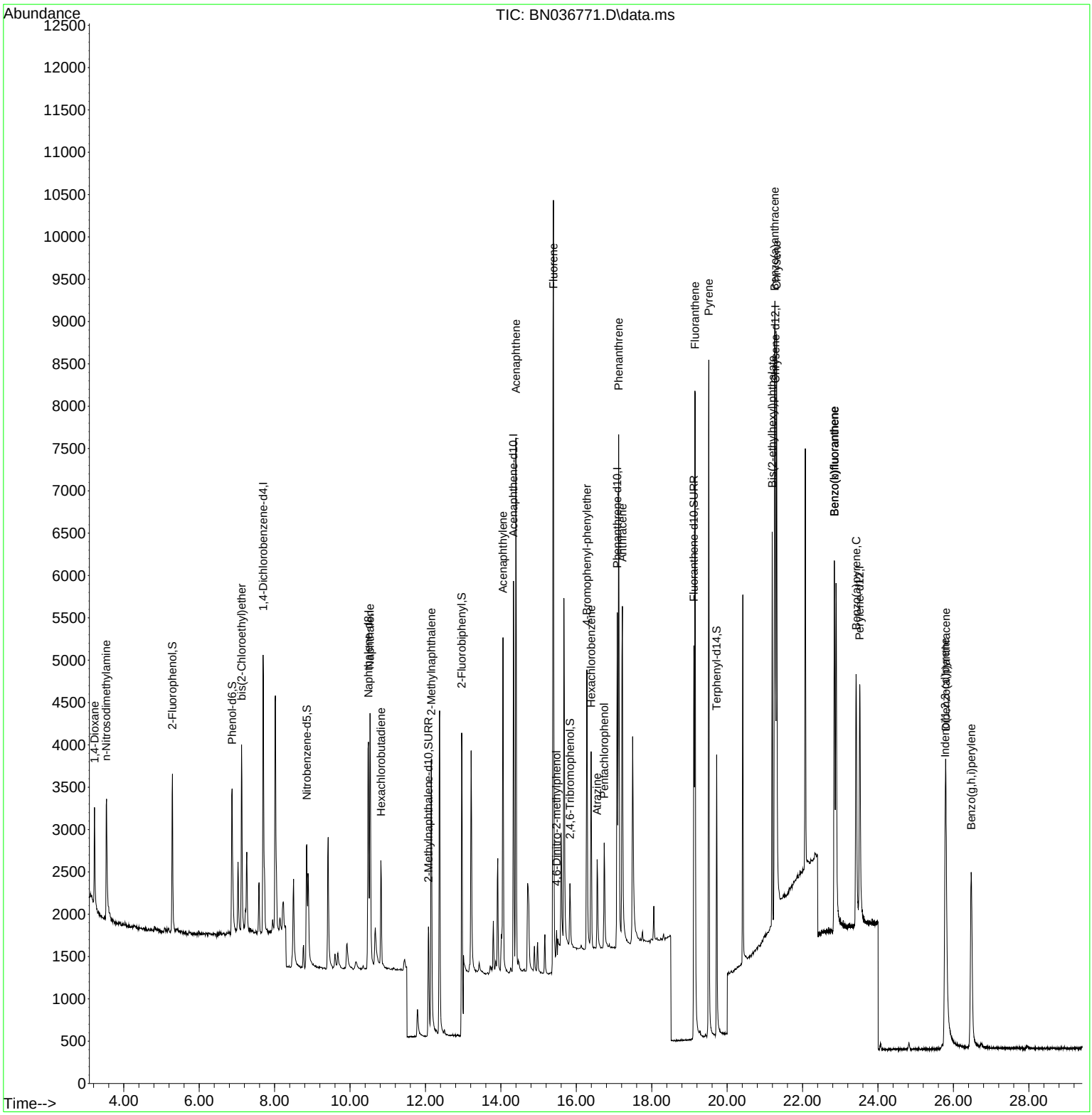
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.695 | 152 | 1636 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.487 | 136 | 4177 | 0.400 | ng | | #-0.02 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2615 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 5571 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 4555 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.516 | 264 | 4167 | 0.400 | ng | | #-0.04 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1384 | 0.363 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1653 | 0.351 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.854 | 82 | 1480 | 0.326 | ng | | -0.02 |
| 11) 2-Methylnaphthalene-d10 | 12.080 | 152 | 2256 | 0.363 | ng | | -0.03 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 464 | 0.391 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5285 | 0.347 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5637 | 0.395 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3716 | 0.341 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 752 | 0.414 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1423 | 0.388 | ng | | 97 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1671 | 0.343 | ng | | 98 |
| 9) Naphthalene | 10.530 | 128 | 4359 | 0.355 | ng | | 98 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 1044 | 0.361 | ng | # | 99 |
| 12) 2-Methylnaphthalene | 12.156 | 142 | 2874 | 0.368 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 4358 | 0.353 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 2946 | 0.365 | ng | | 100 |
| 18) Fluorene | 15.393 | 166 | 4111 | 0.376 | ng | | 98 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 428 | 0.446 | ng | | 87 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1300 | 0.372 | ng | | 96 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1537 | 0.365 | ng | | 96 |
| 23) Atrazine | 16.553 | 200 | 1063 | 0.380 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 702 | 0.365 | ng | | 95 |
| 25) Phenanthrene | 17.124 | 178 | 6367 | 0.381 | ng | | 99 |
| 26) Anthracene | 17.223 | 178 | 5569 | 0.369 | ng | | 100 |
| 28) Fluoranthene | 19.150 | 202 | 7617 | 0.406 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 7795 | 0.350 | ng | | 99 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5566 | 0.351 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 6726 | 0.389 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 3968 | 0.352 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.782 | 276 | 5233 | 0.348 | ng | | 96 |
| 37) Benzo(b)fluoranthene | 22.844 | 252 | 5720 | 0.377 | ng | | 97 |
| 38) Benzo(k)fluoranthene | 22.844 | 252 | 5720 | 0.360 | ng | | 96 |
| 39) Benzo(a)pyrene | 23.420 | 252 | 4867 | 0.381 | ng | | 96 |
| 40) Dibenzo(a,h)anthracene | 25.800 | 278 | 3914 | 0.334 | ng | | 96 |
| 41) Benzo(g,h,i)perylene | 26.475 | 276 | 4758 | 0.355 | ng | | 95 |

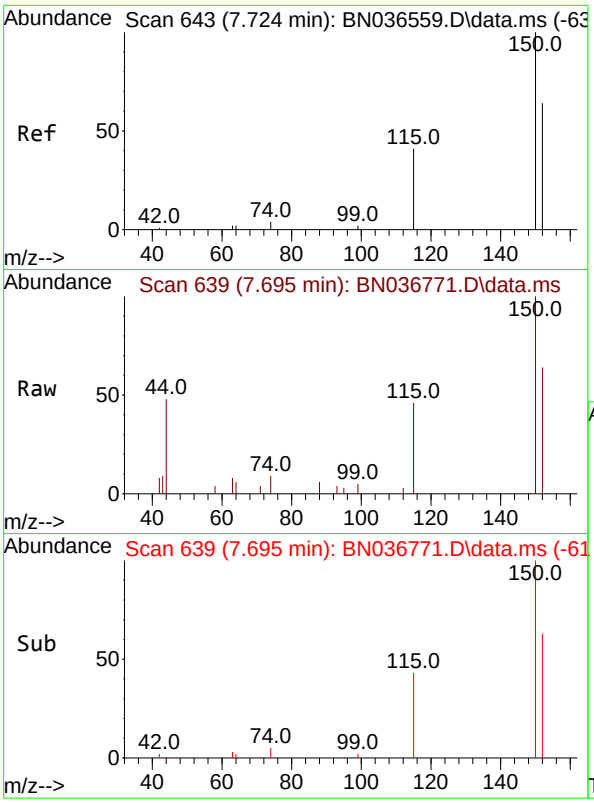
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032725\
Data File : BN036771.D
Acq On : 28 Mar 2025 13:58
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 28 14:23:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



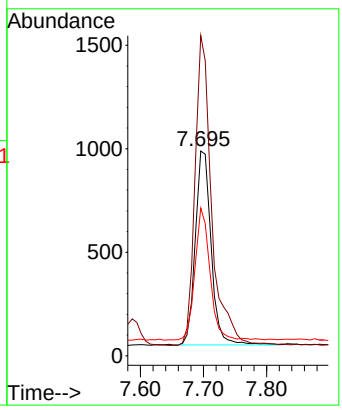


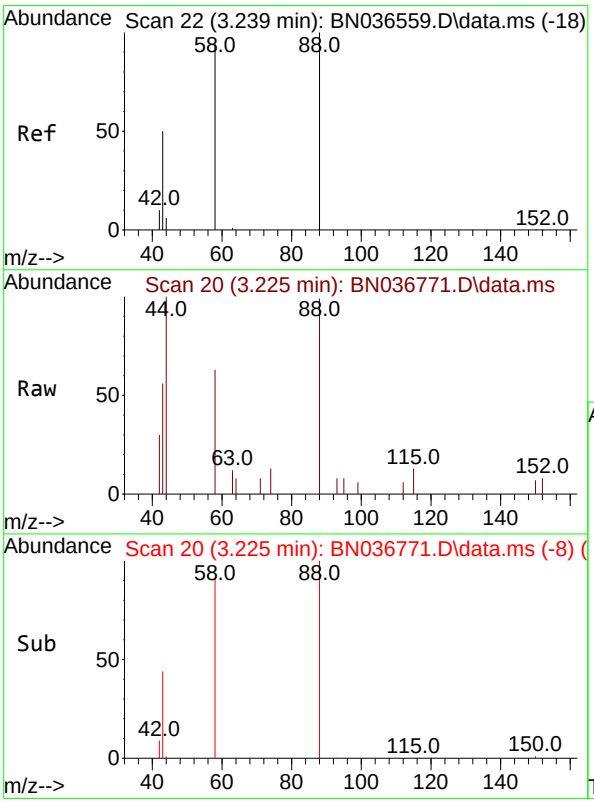

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.695 min Scan# 6
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 1636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 156.3 | 123.7 | 185.5 |
| 115 | 72.2 | 54.3 | 81.5 |

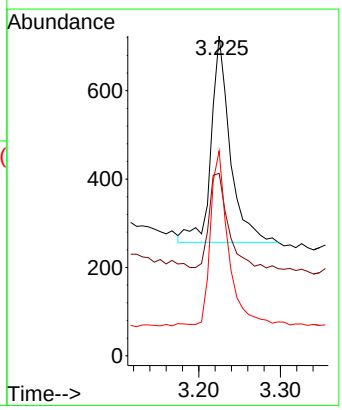


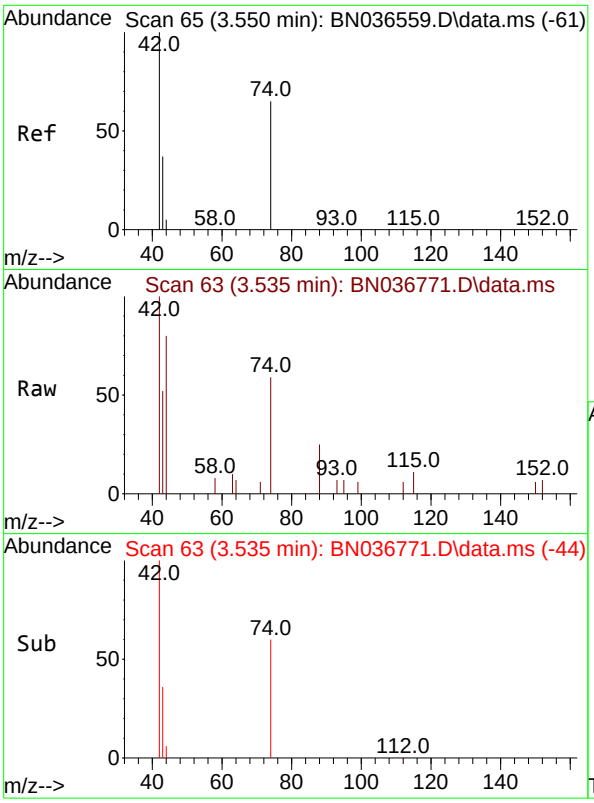




#2
1,4-Dioxane
Concen: 0.414 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 88 Resp: 752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 47.5 | 37.8 | 56.8 |
| 58 | 80.9 | 67.4 | 101.2 |



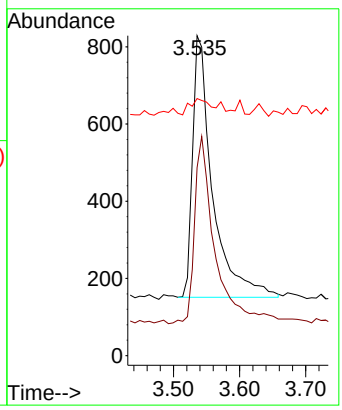


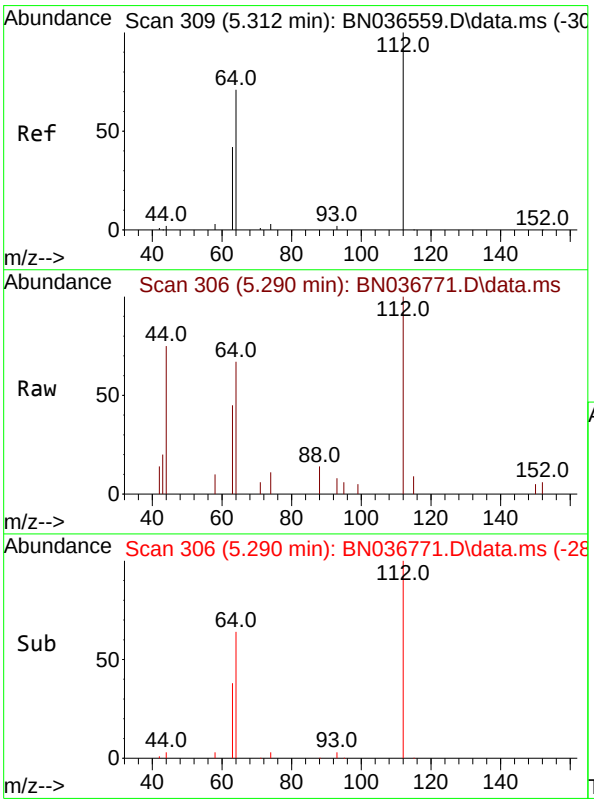

#3
n-Nitrosodimethylamine
Concen: 0.388 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 72.9 | 60.6 | 90.8 |
| 44 | 6.7 | 6.3 | 9.5 |

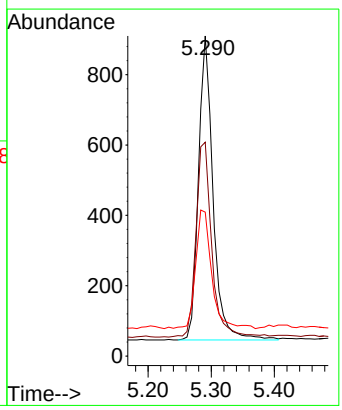


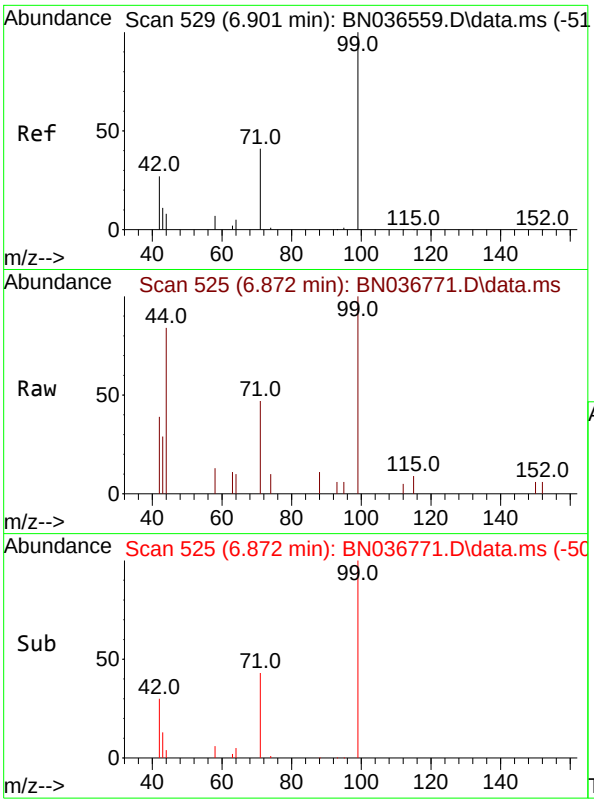




#4
2-Fluorophenol
Concen: 0.363 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:112 Resp: 1384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.4 | 53.1 | 79.7 |
| 63 | 42.8 | 31.8 | 47.8 |



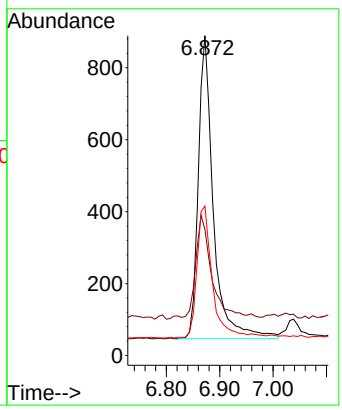


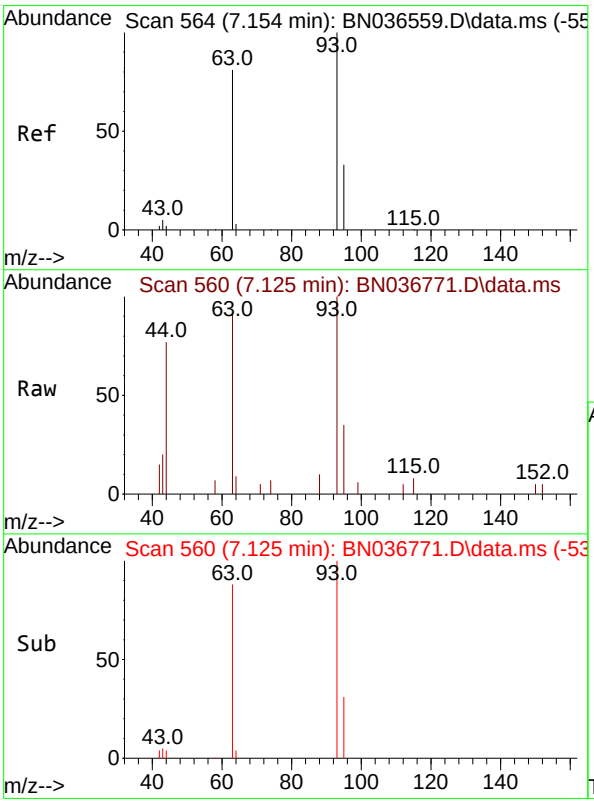

#5
Phenol-d6
Concen: 0.351 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 1653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 37.9 | 26.5 | 39.7 |
| 71 | 45.1 | 34.1 | 51.1 |

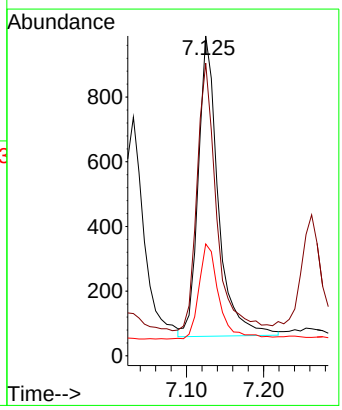


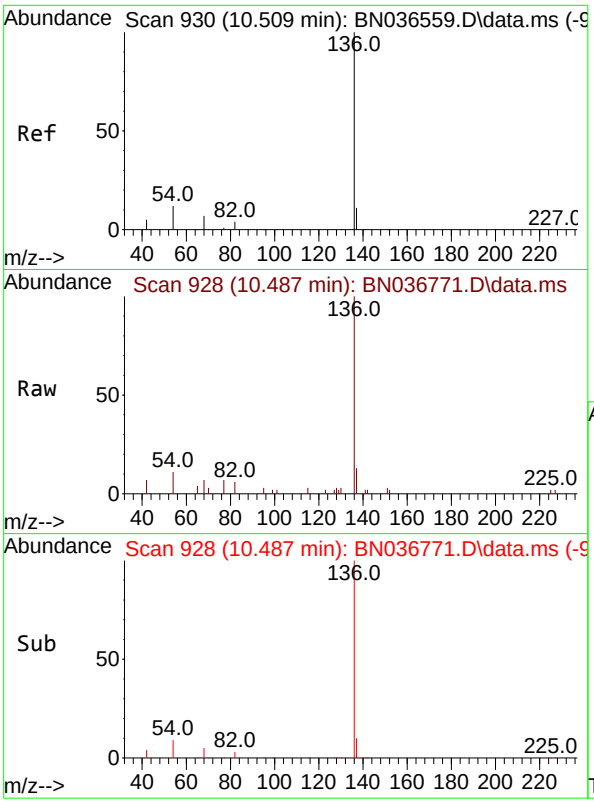




#6
bis(2-Chloroethyl)ether
Concen: 0.343 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 93 Resp: 1671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 87.3 | 67.7 | 101.5 |
| 95 | 31.8 | 25.6 | 38.4 |



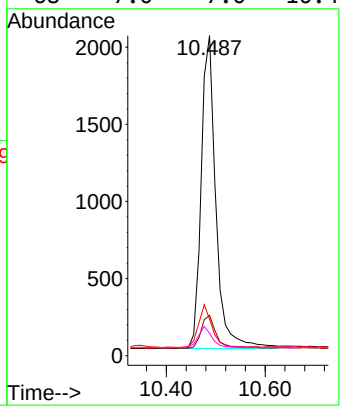


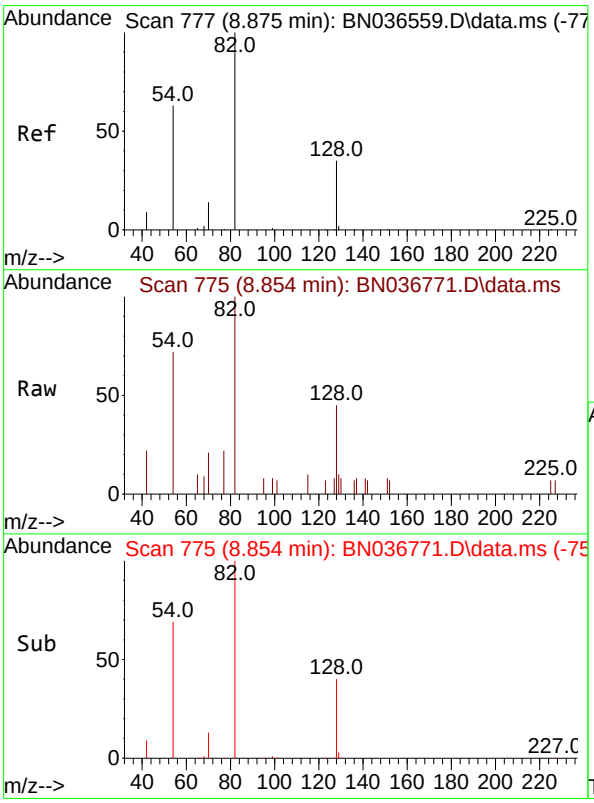

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.487 min Scan# 9
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.6 | 10.3 | 15.5 |
| 54 | 11.4 | 11.5 | 17.3# |
| 68 | 7.0 | 7.0 | 10.4 |

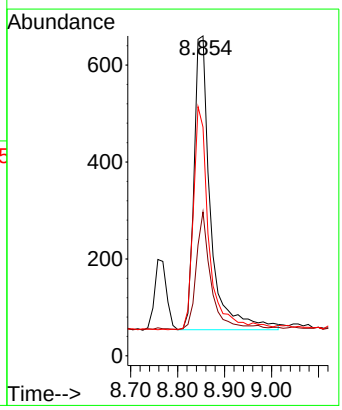


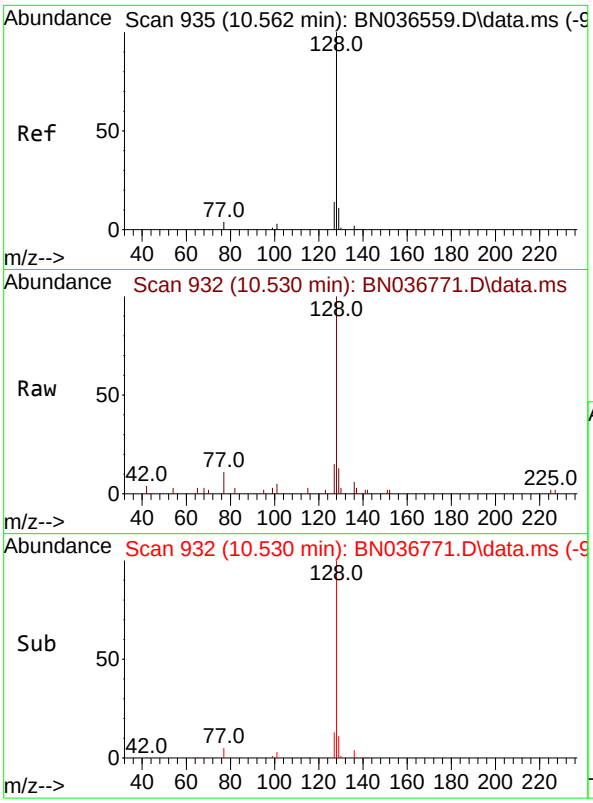




#8
Nitrobenzene-d5
Concen: 0.326 ng
RT: 8.854 min Scan# 775
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion: 82 Resp: 1480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 45.0 | 30.6 | 45.8 |
| 54 | 71.5 | 52.2 | 78.4 |



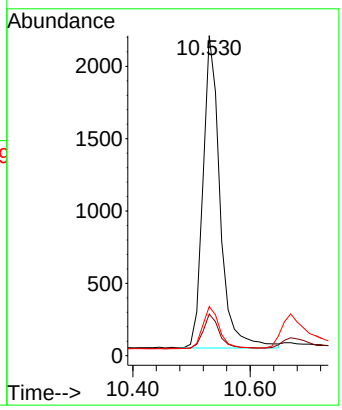


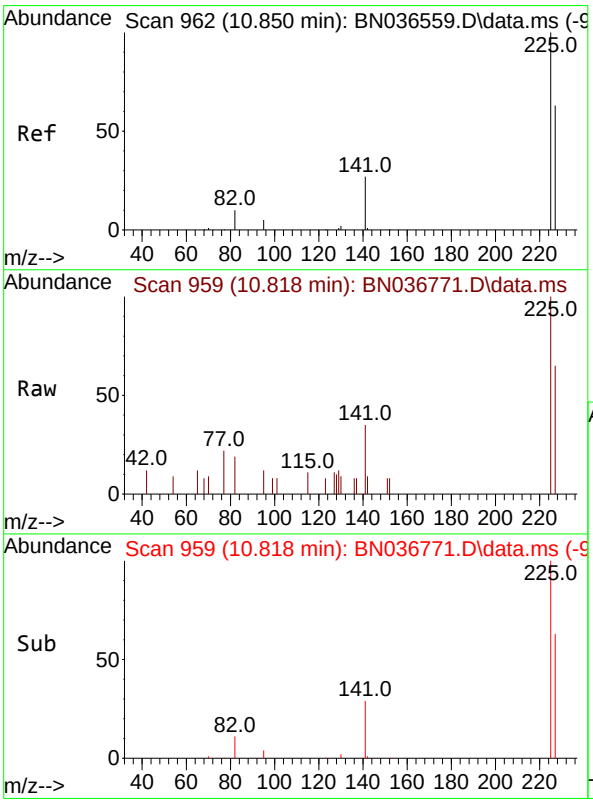

#9
Naphthalene
Concen: 0.355 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:128 Resp: 4359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 13.0 | 9.8 | 14.6 |
| 127 | 15.4 | 11.8 | 17.8 |

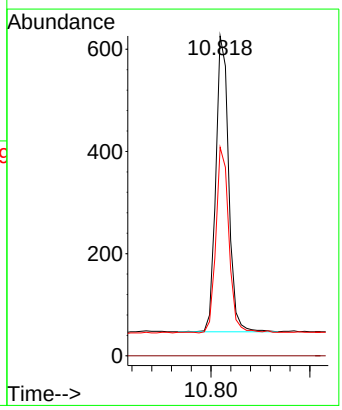


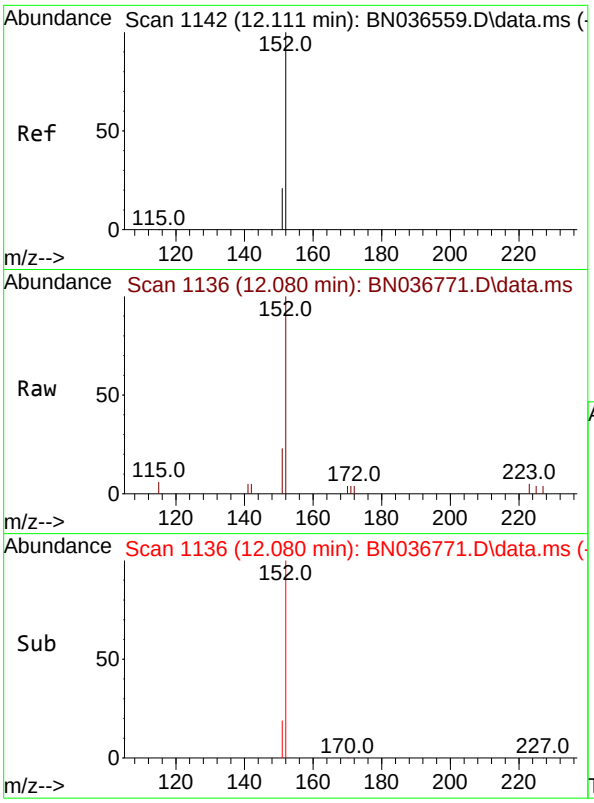




#10
Hexachlorobutadiene
Concen: 0.361 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:225 Resp: 1044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.8 | 51.8 | 77.8 |



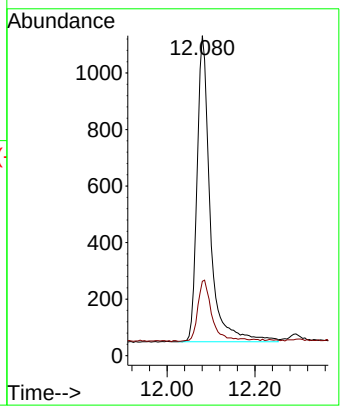


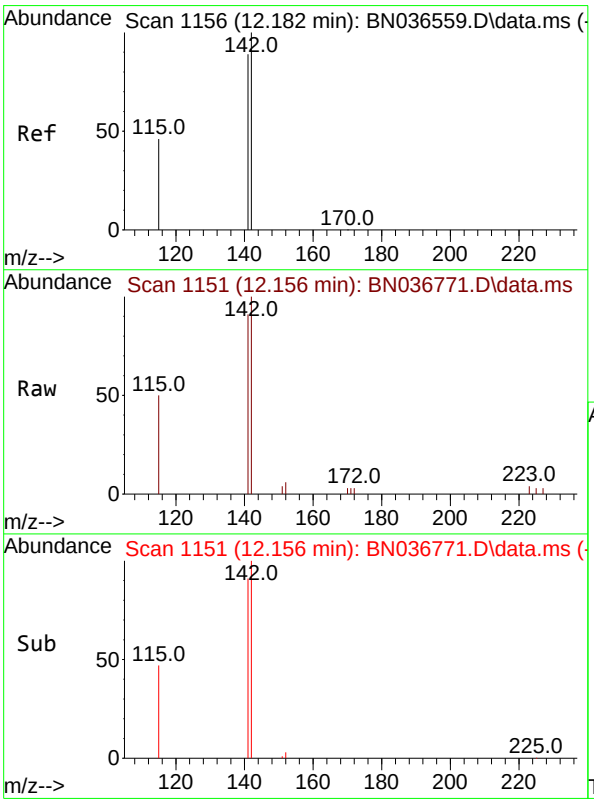

#11
2-Methylnaphthalene-d10
Concen: 0.363 ng
RT: 12.080 min Scan# 11
Delta R.T. -0.030 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.0 | 17.0 | 25.6 |

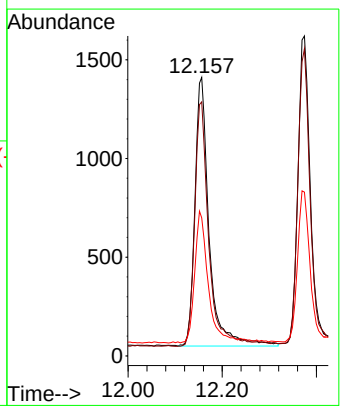


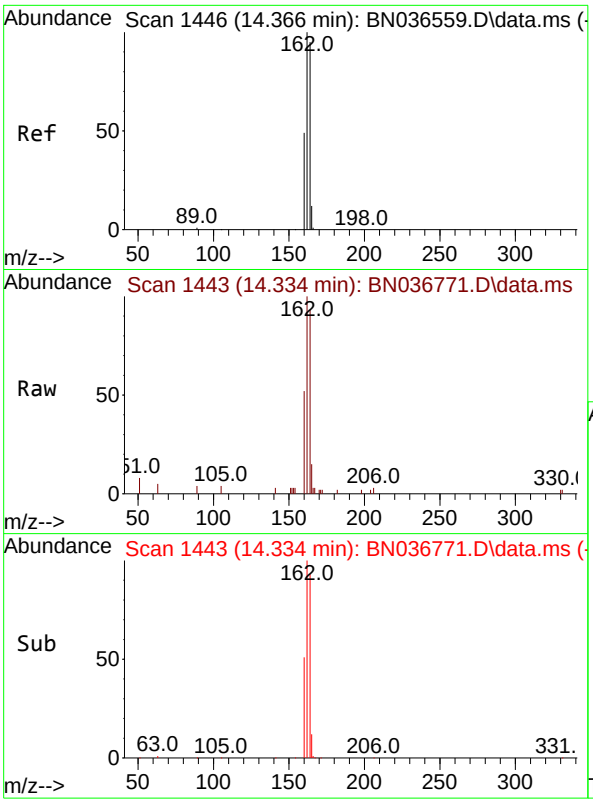




#12
2-Methylnaphthalene
Concen: 0.368 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:142 Resp: 2874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.2 | 71.7 | 107.5 |
| 115 | 49.5 | 38.3 | 57.5 |



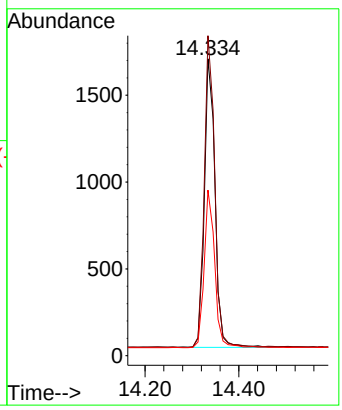


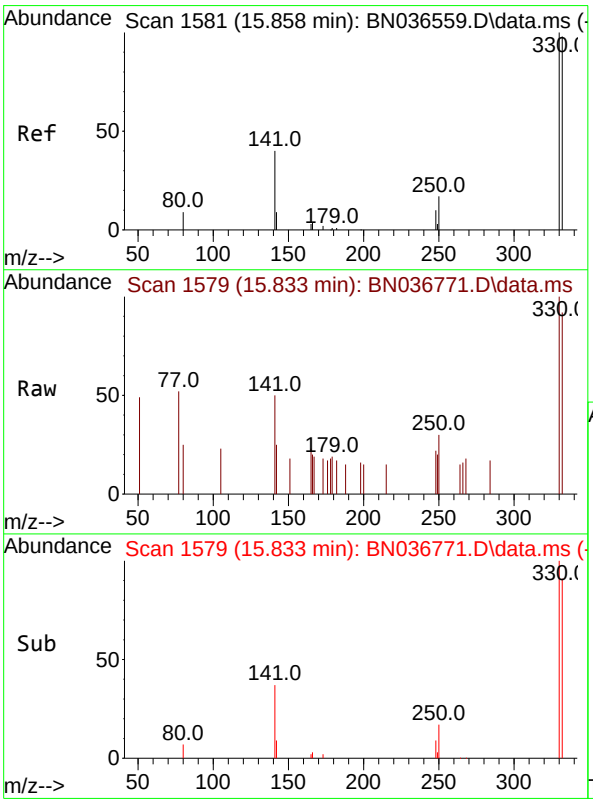

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:164 Resp: 2615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 107.8 | 84.2 | 126.2 |
| 160 | 55.8 | 42.2 | 63.2 |

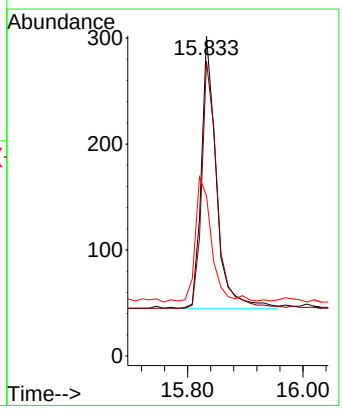


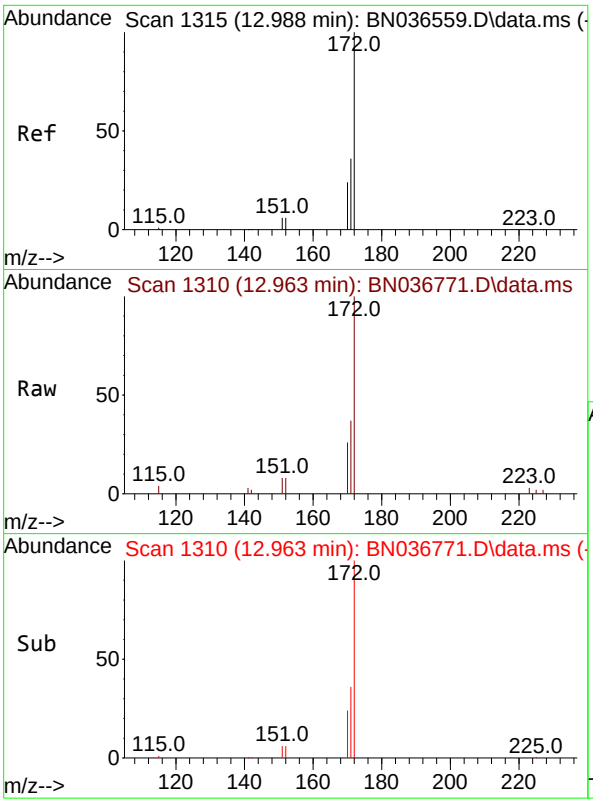




#14
2,4,6-Tribromophenol
Concen: 0.391 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:330 Resp: 464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 93.3 | 75.2 | 112.8 |
| 141 | 49.1 | 43.4 | 65.2 |



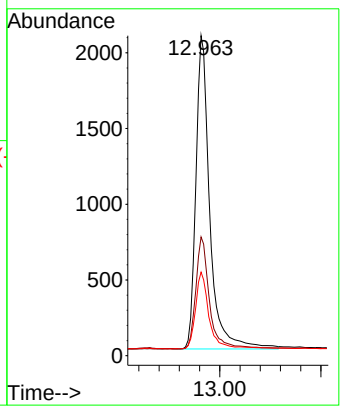


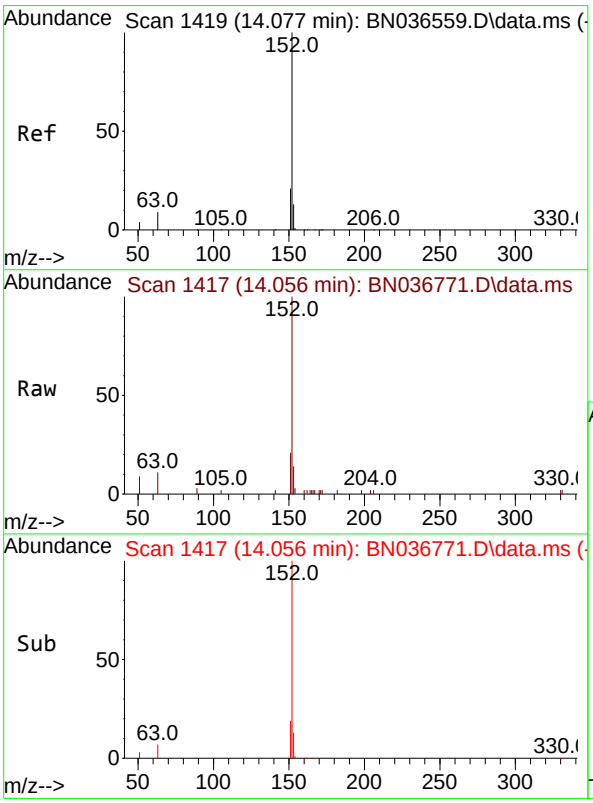

#15
2-Fluorobiphenyl
Concen: 0.347 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:172 Resp: 5285

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.1 | 29.5 | 44.3 |
| 170 | 26.1 | 20.2 | 30.4 |

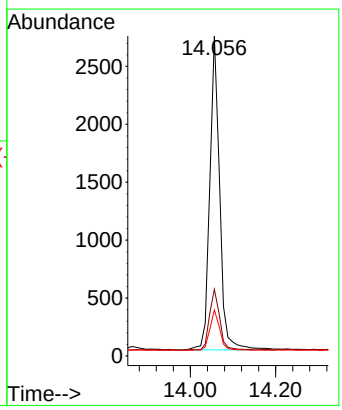


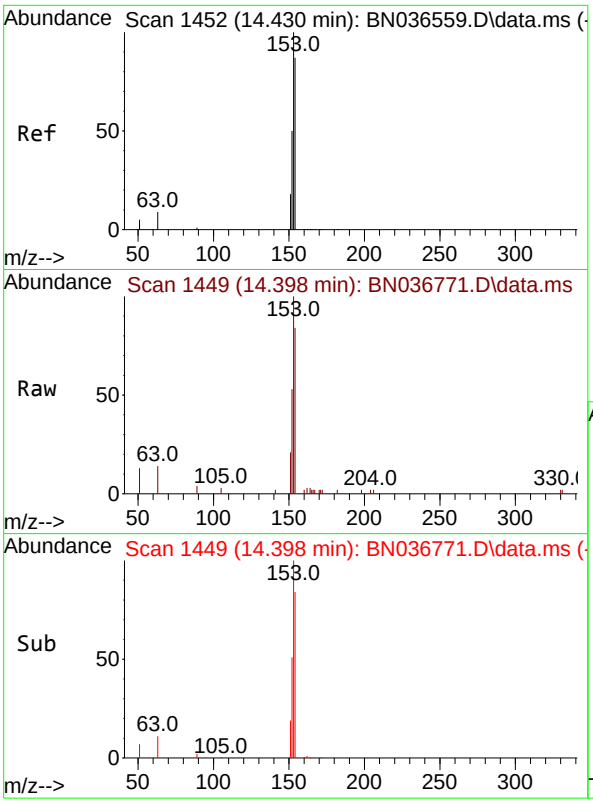




#16
Acenaphthylene
Concen: 0.353 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:152 Resp: 4358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.5 | 16.2 | 24.4 |
| 153 | 13.1 | 10.6 | 15.8 |



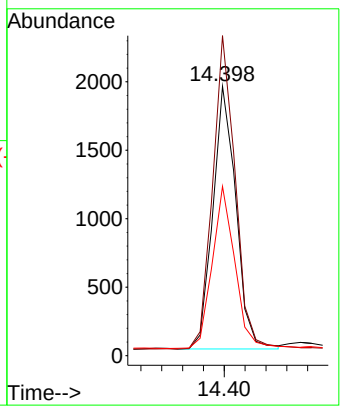


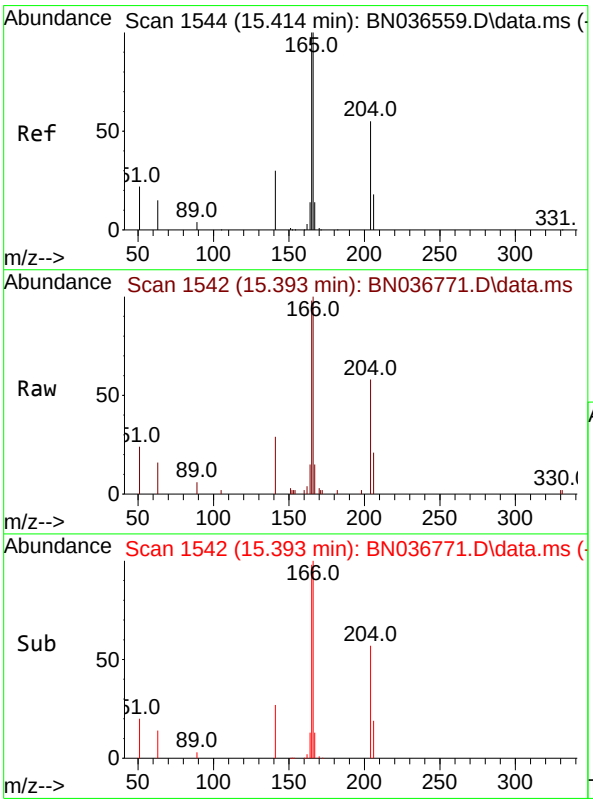

#17
Acenaphthene
Concen: 0.365 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:154 Resp: 2946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 117.7 | 94.1 | 141.1 |
| 152 | 61.6 | 49.8 | 74.6 |

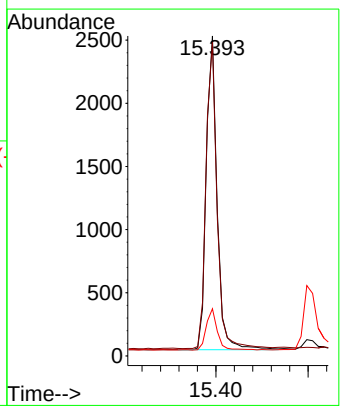


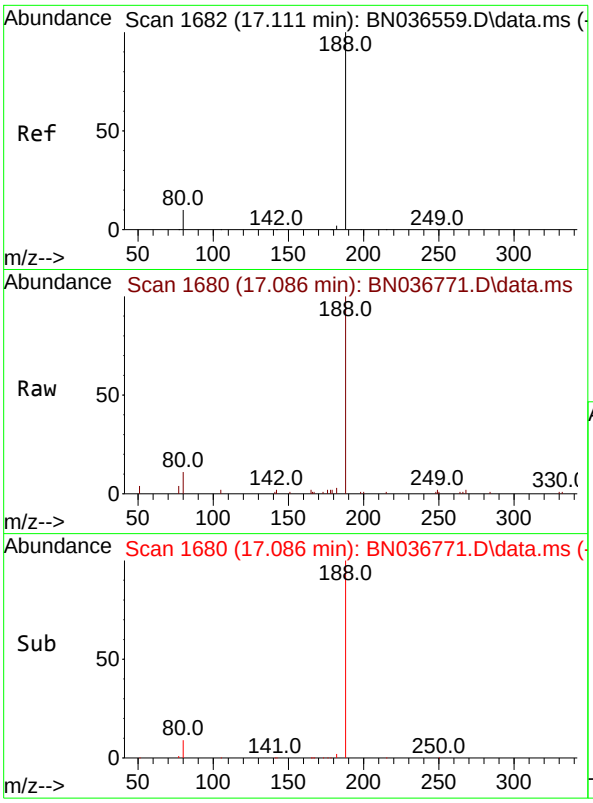




#18
Fluorene
Concen: 0.376 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:166 Resp: 4111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 97.9 | 79.8 | 119.8 |
| 167 | 13.4 | 10.6 | 15.8 |



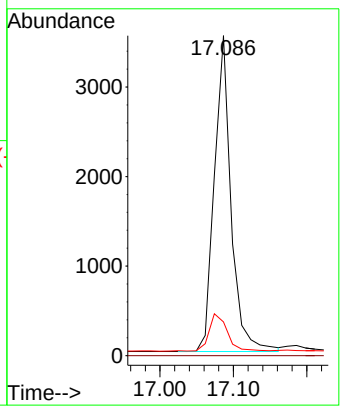


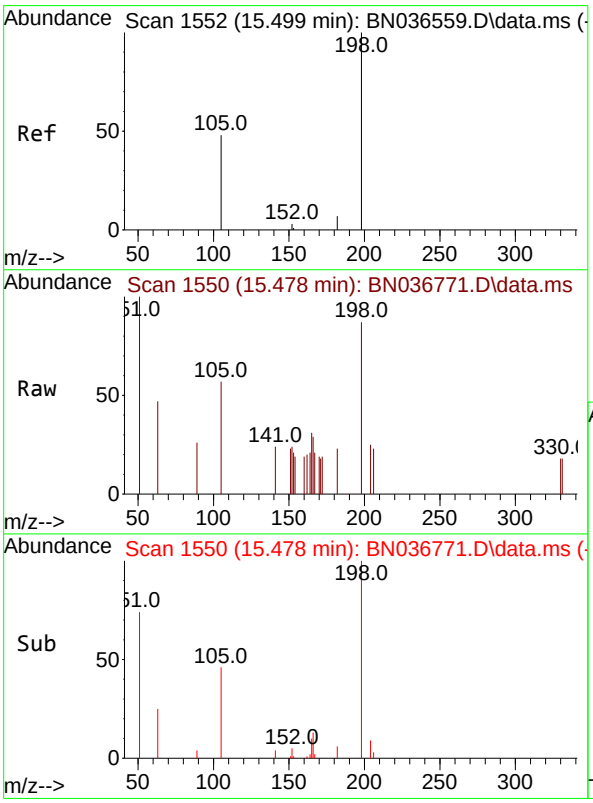

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:188 Resp: 5571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 10.6 | 8.8 | 13.2 |

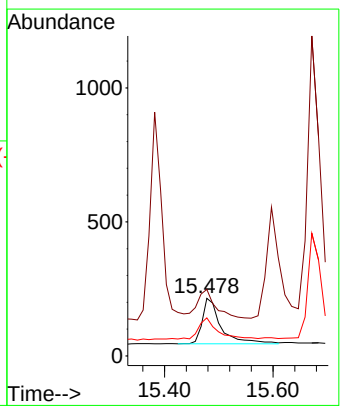


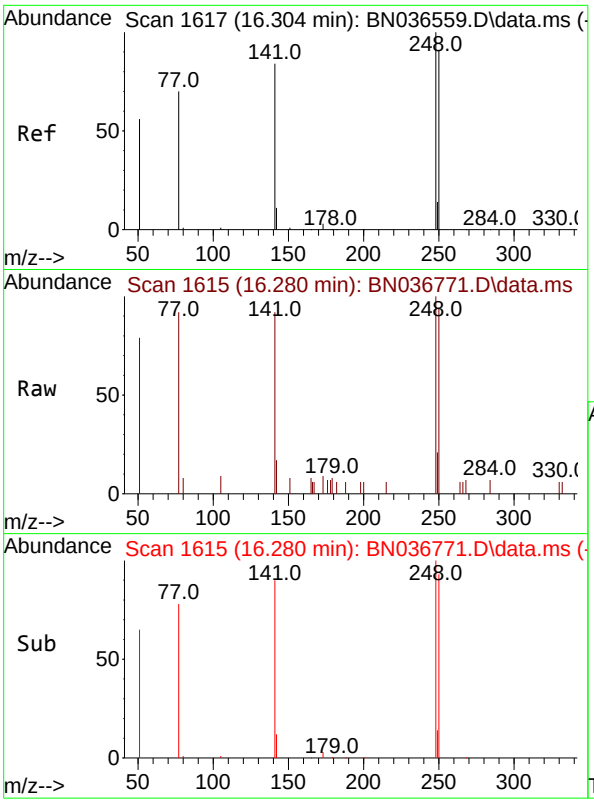




#20
4,6-Dinitro-2-methylphenol
Concen: 0.446 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:198 Resp: 428

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 115.3 | 107.9 | 161.9 |
| 105 | 66.0 | 56.2 | 84.2 |



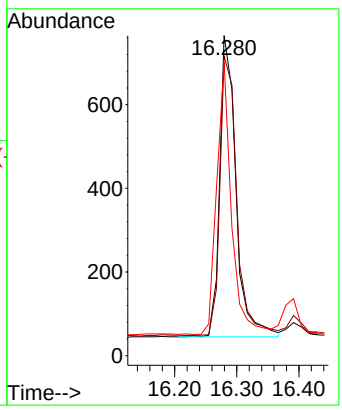


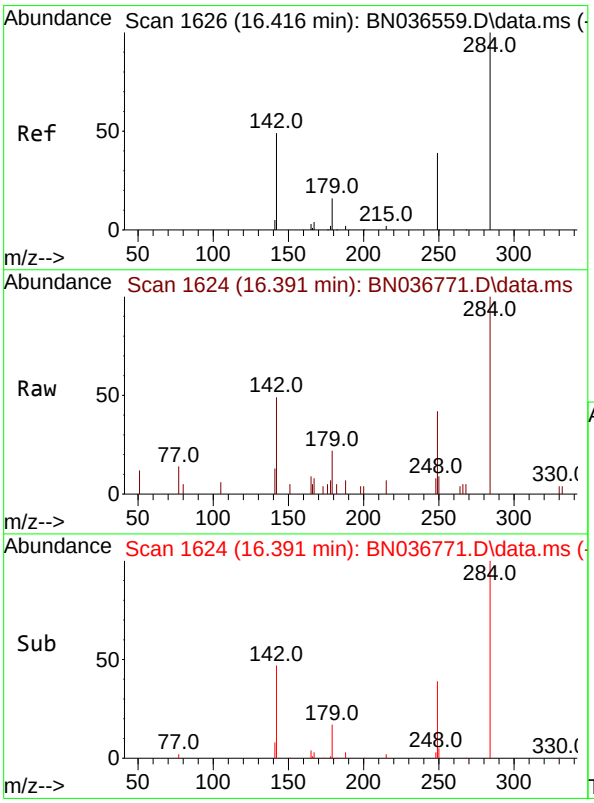

#21
4-Bromophenyl-phenylether
Concen: 0.372 ng
RT: 16.280 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1300

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 93.6 | 73.0 | 109.6 |
| 141 | 91.8 | 68.6 | 103.0 |

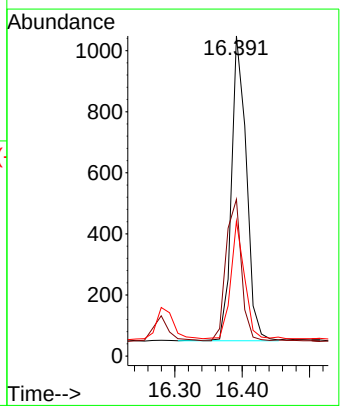


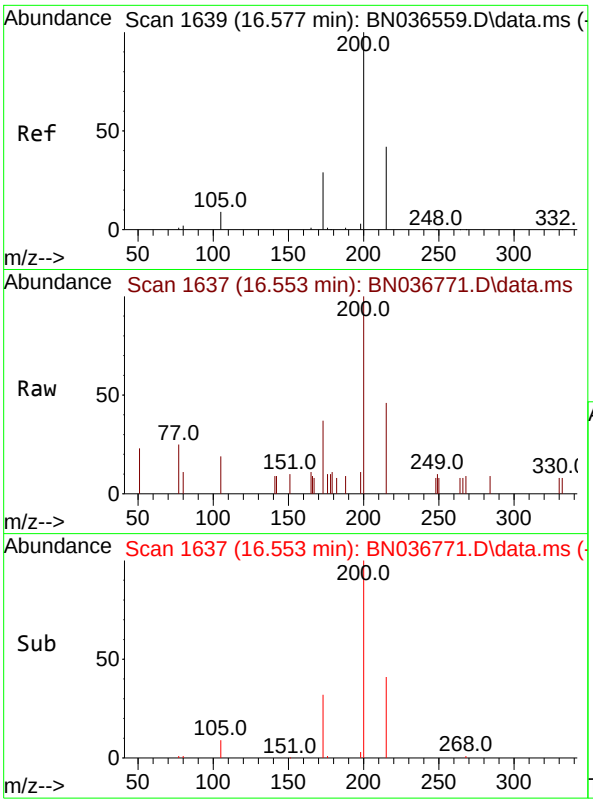




#22
Hexachlorobenzene
Concen: 0.365 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:284 Resp: 1537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.5 | 37.0 | 55.4 |
| 249 | 36.2 | 28.1 | 42.1 |



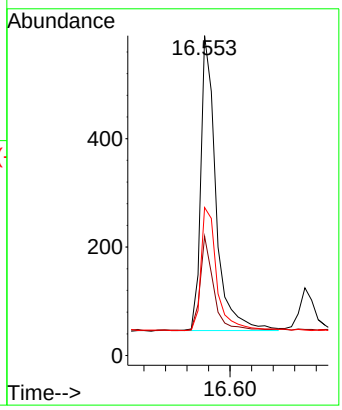


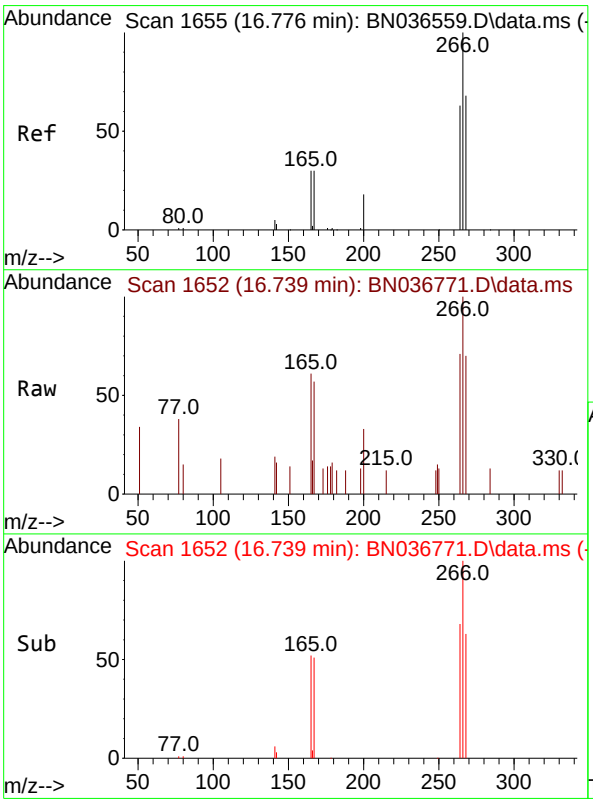

#23
Atrazine
Concen: 0.380 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1063

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 37.3 | 27.3 | 40.9 |
| 215 | 46.3 | 36.8 | 55.2 |

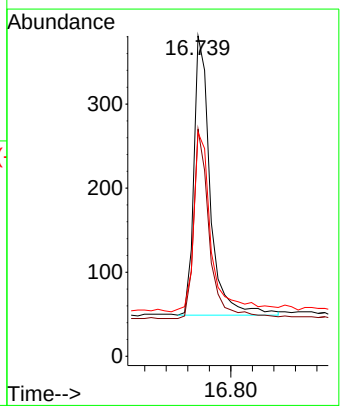


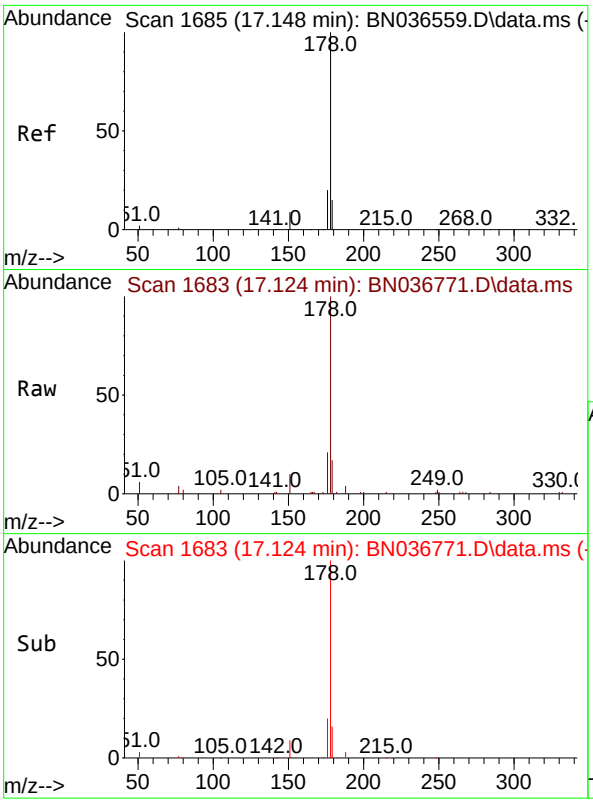




#24
Pentachlorophenol
Concen: 0.365 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:266 Resp: 702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 64.8 | 49.6 | 74.4 |
| 268 | 69.2 | 50.9 | 76.3 |



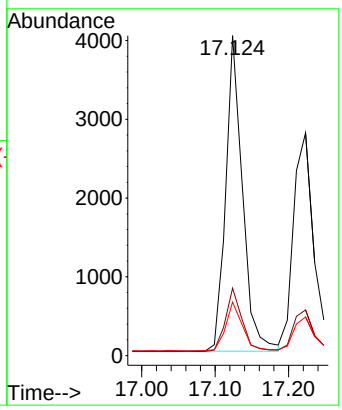


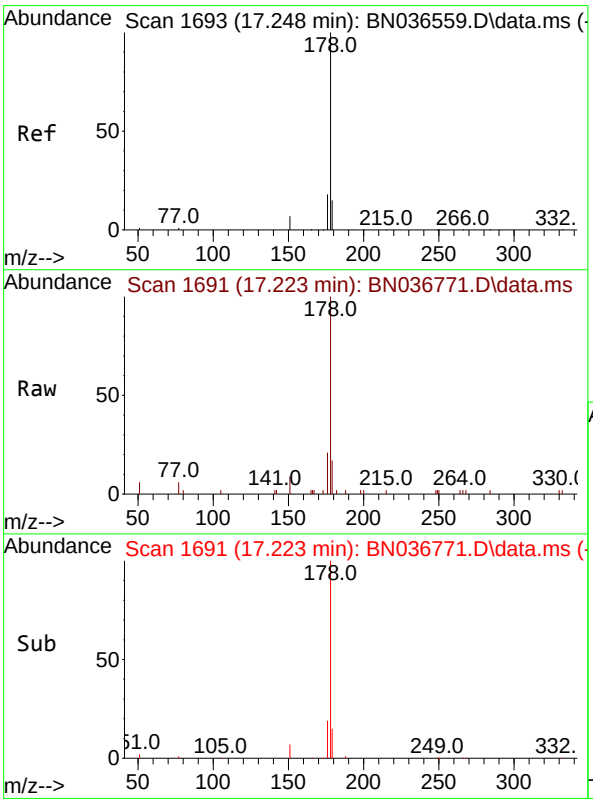

#25
Phenanthrene
Concen: 0.381 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:178 Resp: 6367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 20.0 | 15.9 | 23.9 |
| 179 | 15.8 | 12.2 | 18.4 |

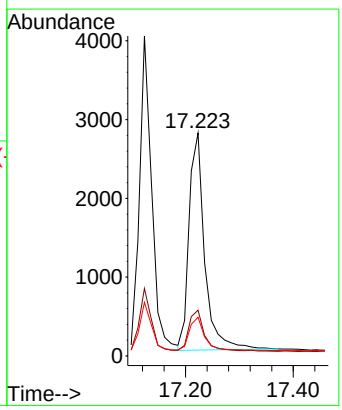


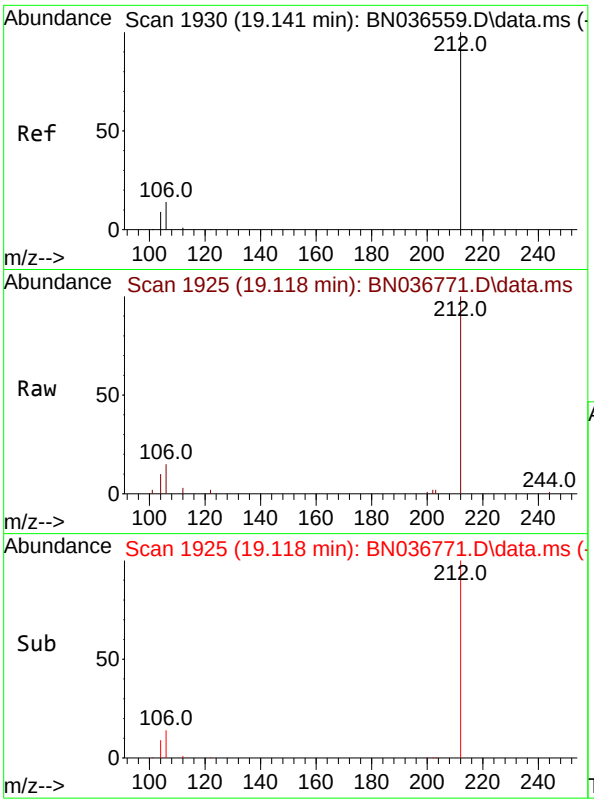




#26
Anthracene
Concen: 0.369 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:178 Resp: 5569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.4 | 15.4 | 23.2 |
| 179 | 15.4 | 12.6 | 18.8 |



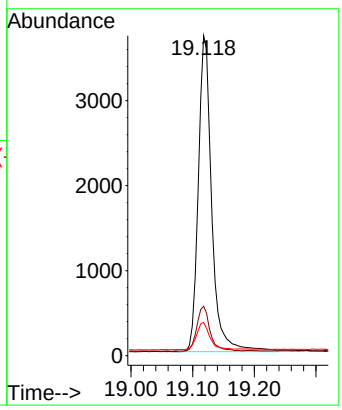


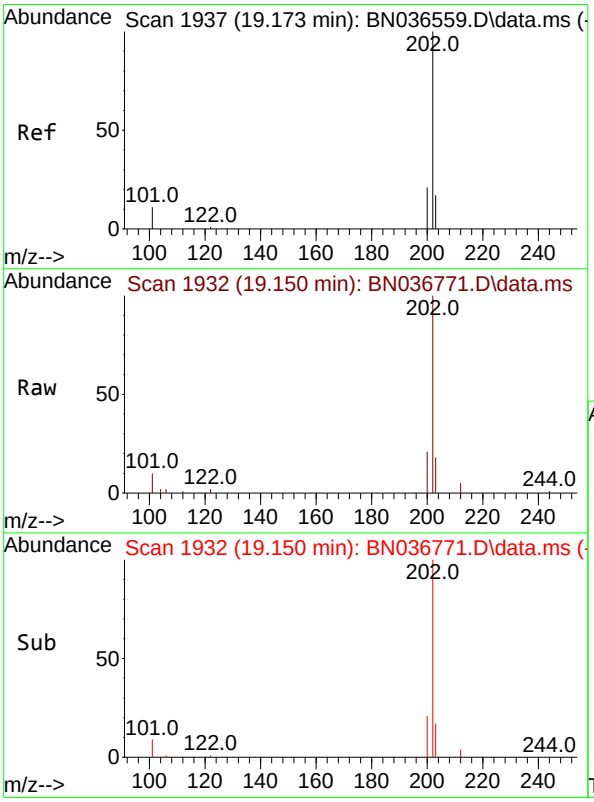

#27
Fluoranthene-d10
Concen: 0.395 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:212 Resp: 5637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.8 | 11.8 | 17.6 |
| 104 | 8.6 | 7.3 | 10.9 |

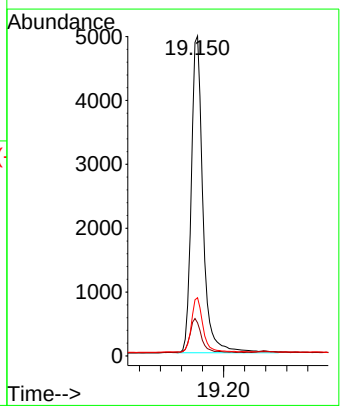


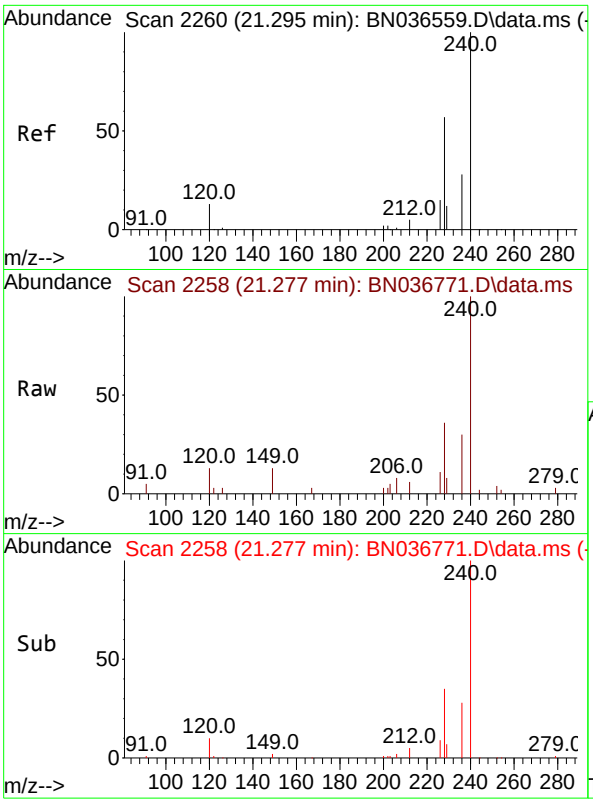




#28
Fluoranthene
Concen: 0.406 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:202 Resp: 7617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.0 | 9.4 | 14.0 |
| 203 | 16.8 | 13.5 | 20.3 |



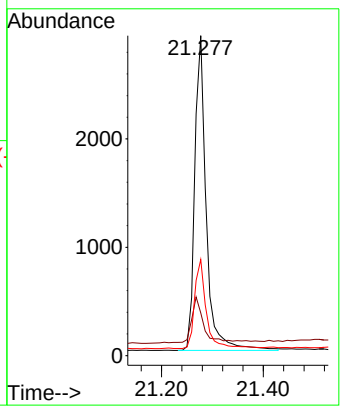


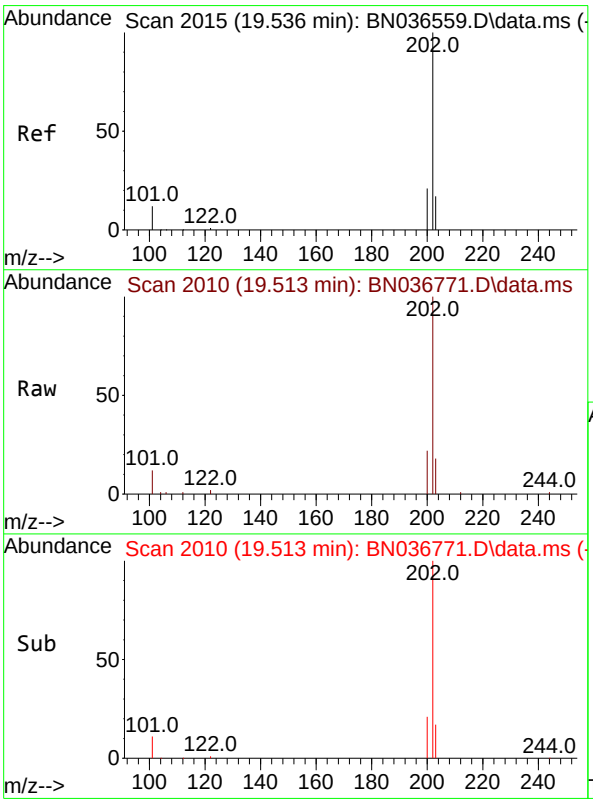

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:240 Resp: 4555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 13.3 | 14.6 | 22.0# |
| 236 | 30.0 | 24.1 | 36.1 |

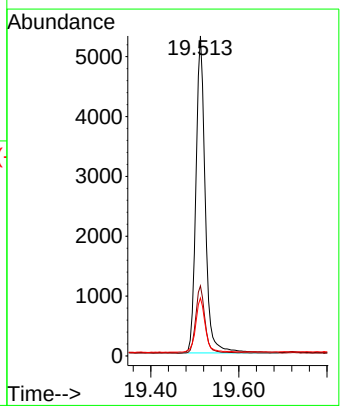


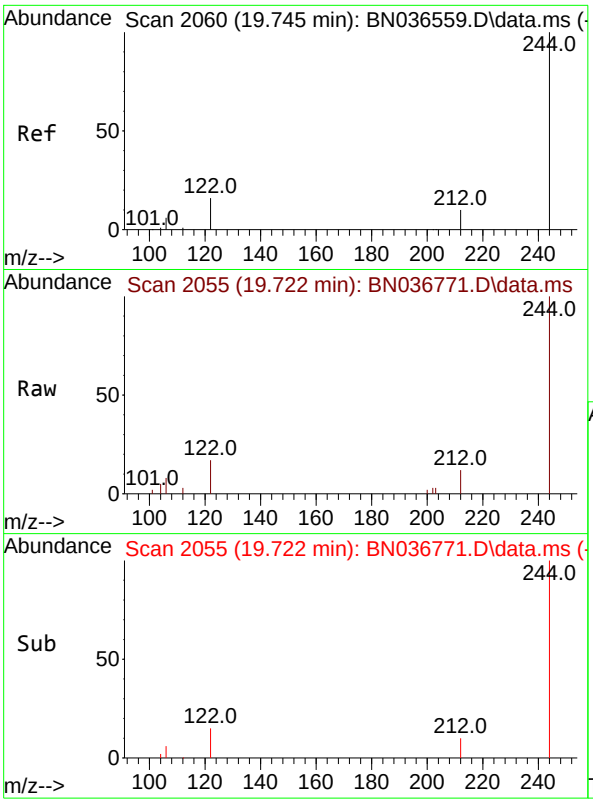




#30
Pyrene
Concen: 0.350 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:202 Resp: 7795

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 17.1 | 25.7 |
| 203 | 17.3 | 14.1 | 21.1 |



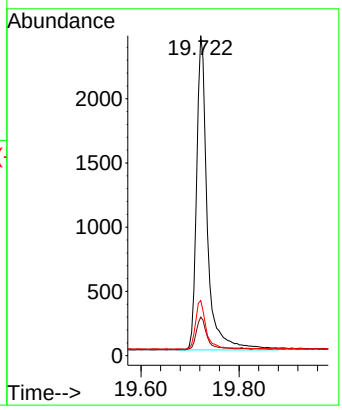


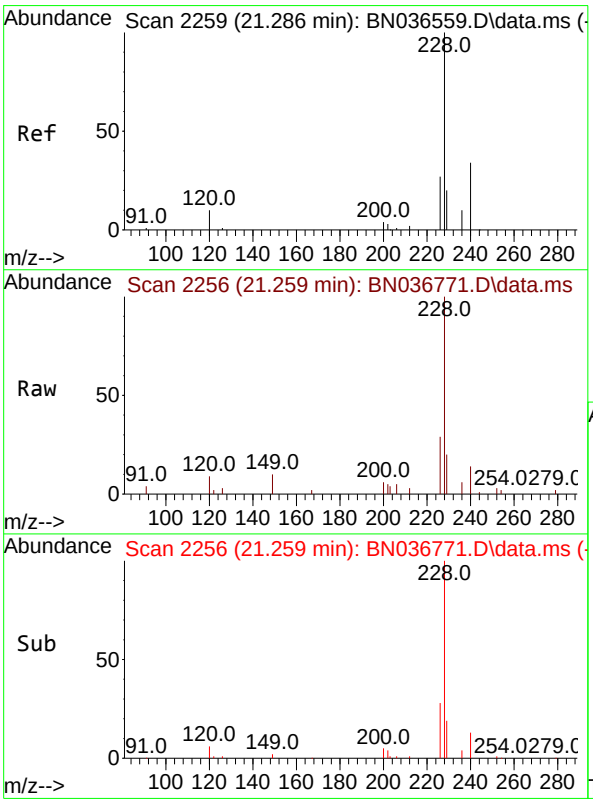

#31
Terphenyl-d14
Concen: 0.341 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:244 Resp: 3716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.0 | 9.6 | 14.4 |
| 122 | 17.2 | 13.9 | 20.9 |

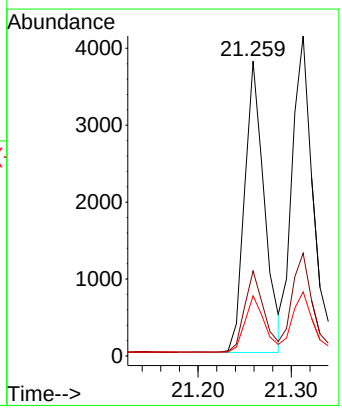


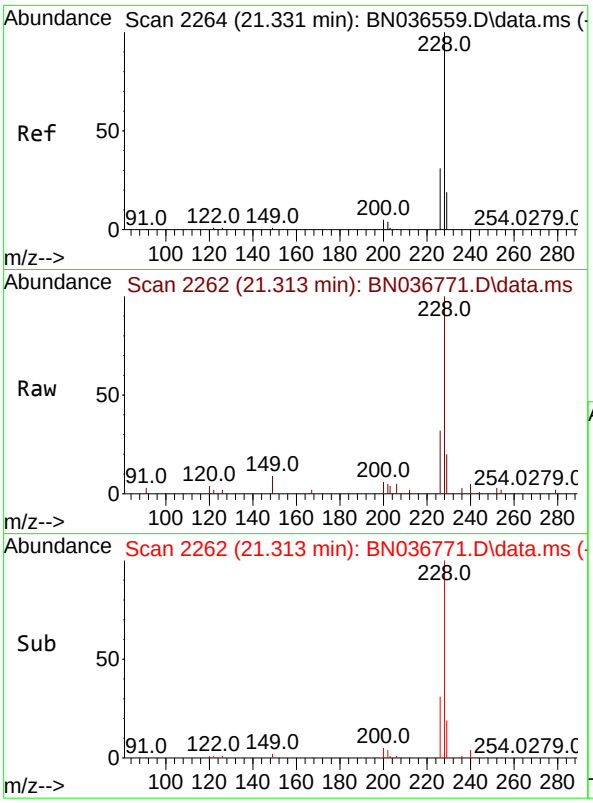




#32
Benzo(a)anthracene
Concen: 0.351 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:228 Resp: 5566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.8 | 22.5 | 33.7 |
| 229 | 20.4 | 16.6 | 25.0 |



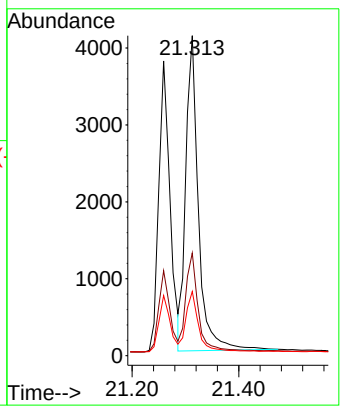


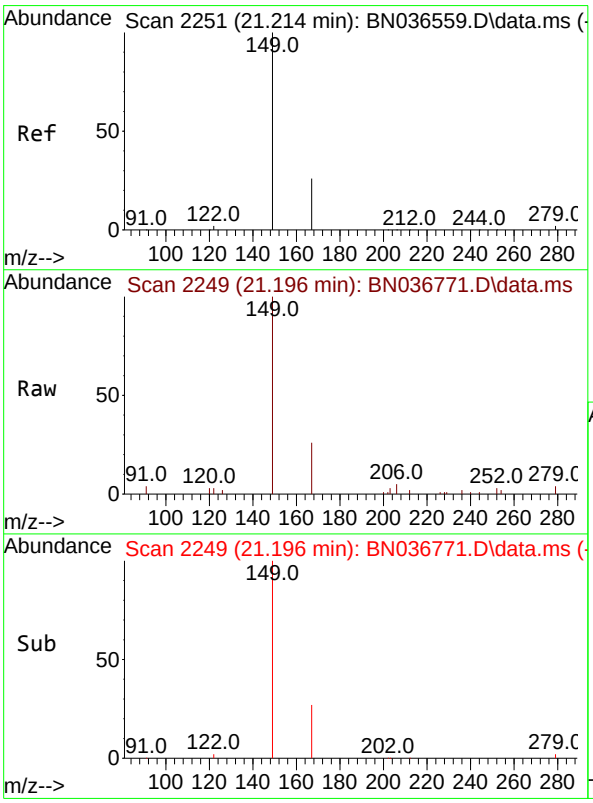

#33
Chrysene
Concen: 0.389 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:228 Resp: 6726

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.1 | 25.3 | 37.9 |
| 229 | 20.0 | 15.8 | 23.8 |

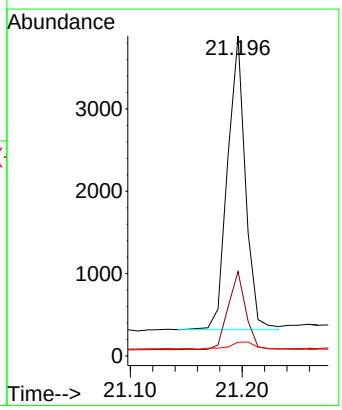


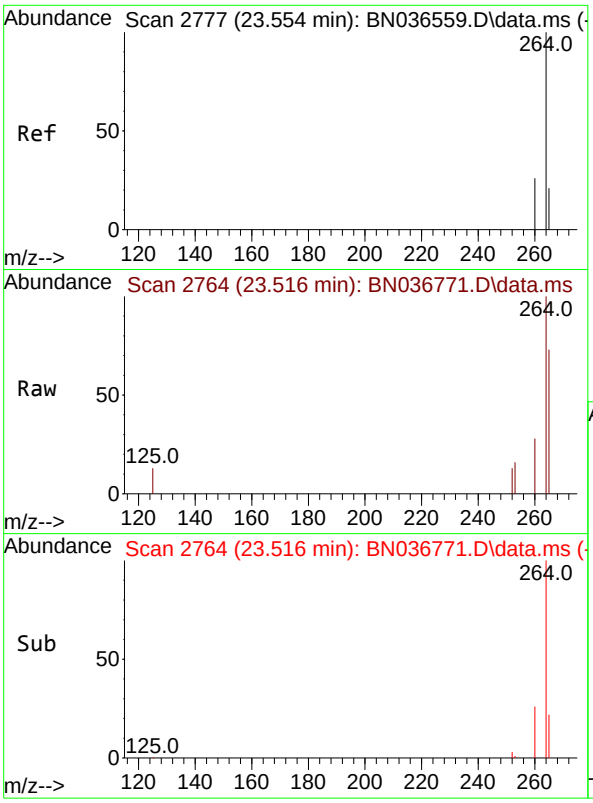




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.352 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:149 Resp: 3968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.1 | 20.7 | 31.1 |
| 279 | 3.3 | 3.6 | 5.4# |



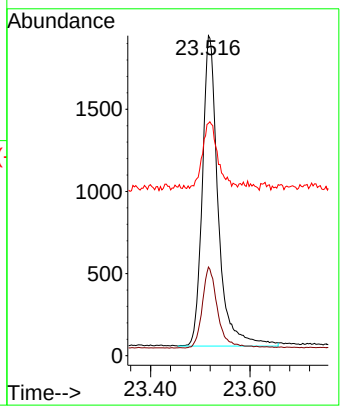


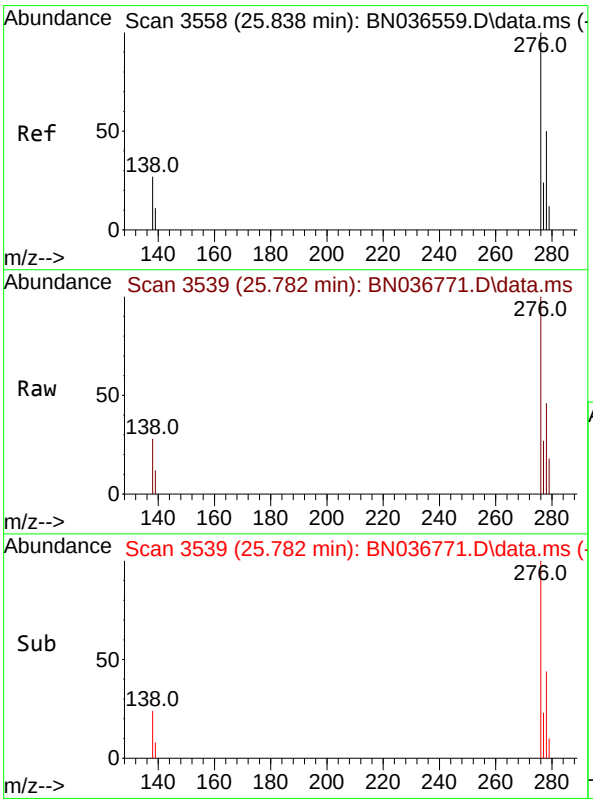

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.516 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:264 Resp: 4167

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.7 | 22.6 | 33.8 |
| 265 | 72.6 | 88.1 | 132.1# |

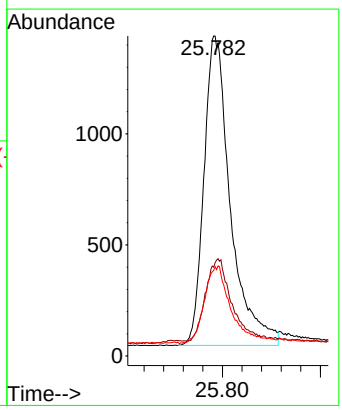


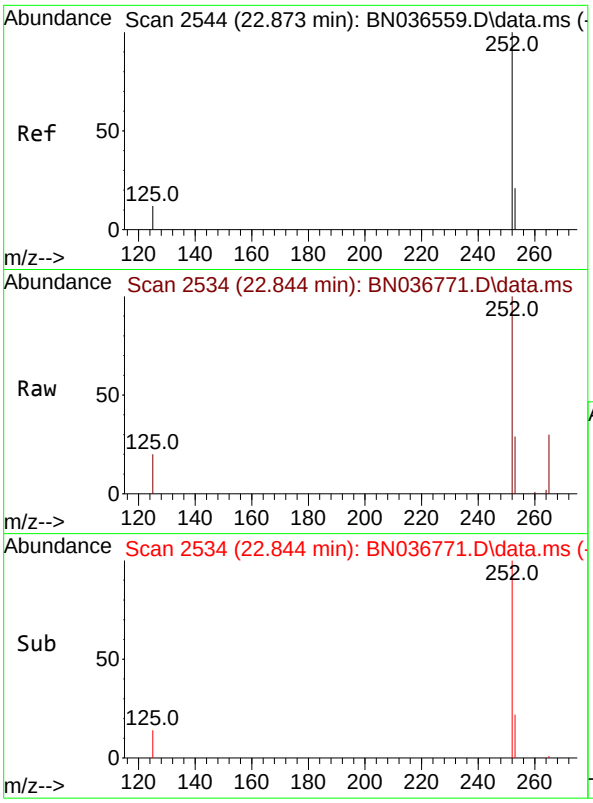




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.348 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.055 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:276 Resp: 5233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 25.8 | 23.4 | 35.2 |
| 277 | 25.2 | 20.0 | 30.0 |



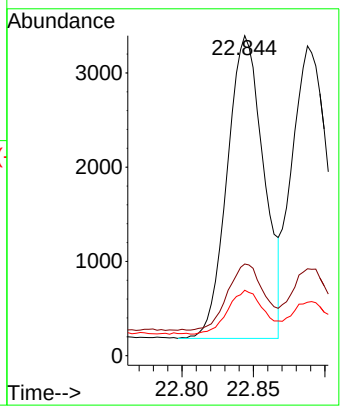


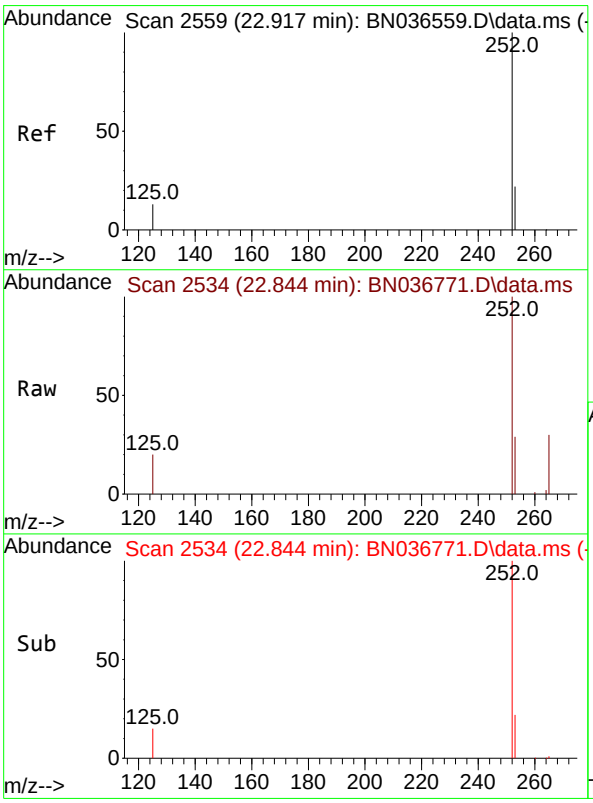

#37
Benzo(b)fluoranthene
Concen: 0.377 ng
RT: 22.844 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 5720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.6 | 23.9 | 35.9 |
| 125 | 20.5 | 17.4 | 26.2 |

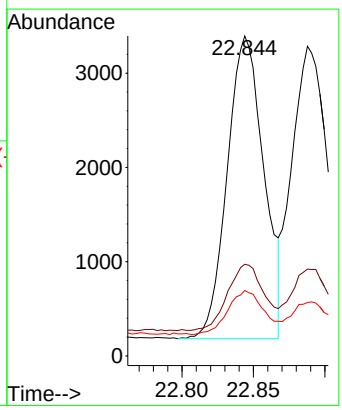


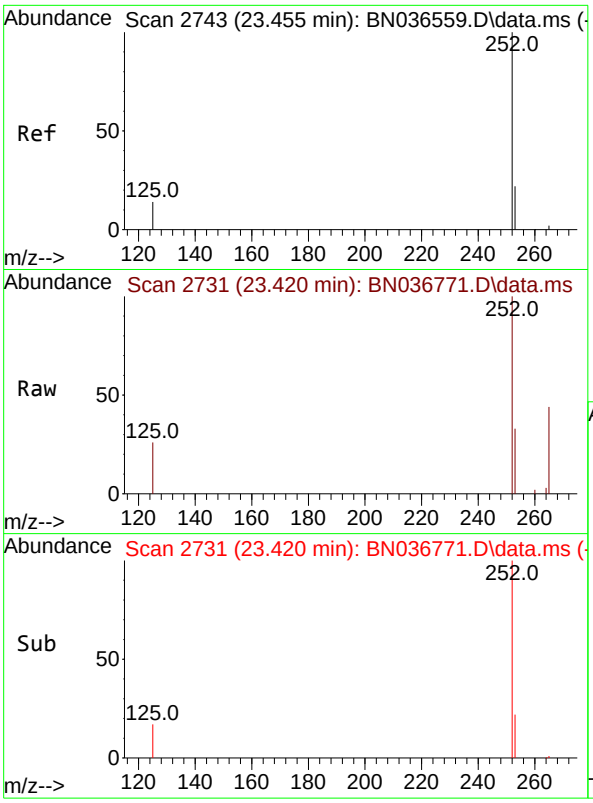




#38
Benzo(k)fluoranthene
Concen: 0.360 ng
RT: 22.844 min Scan# 2534
Delta R.T. -0.073 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:252 Resp: 5720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.6 | 24.6 | 36.8 |
| 125 | 20.5 | 17.8 | 26.8 |



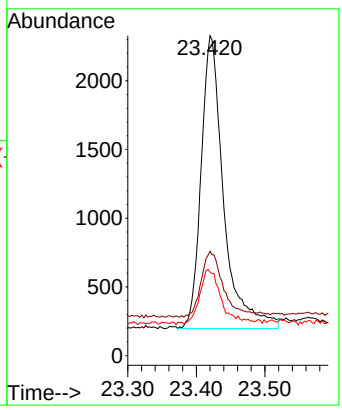


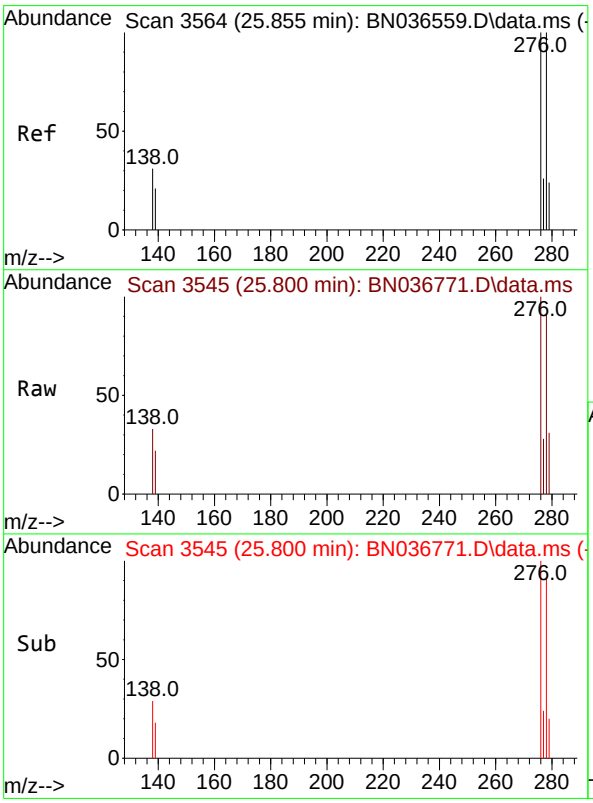

#39
Benzo(a)pyrene
Concen: 0.381 ng
RT: 23.420 min Scan# 2
Delta R.T. -0.035 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 4867

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 32.6 | 27.8 | 41.8 |
| 125 | 26.1 | 22.7 | 34.1 |

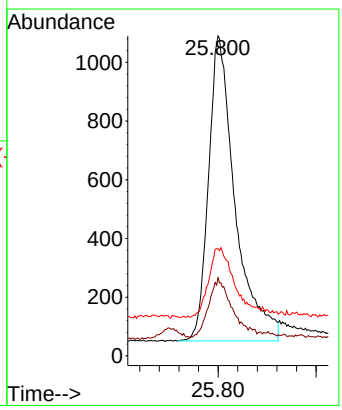


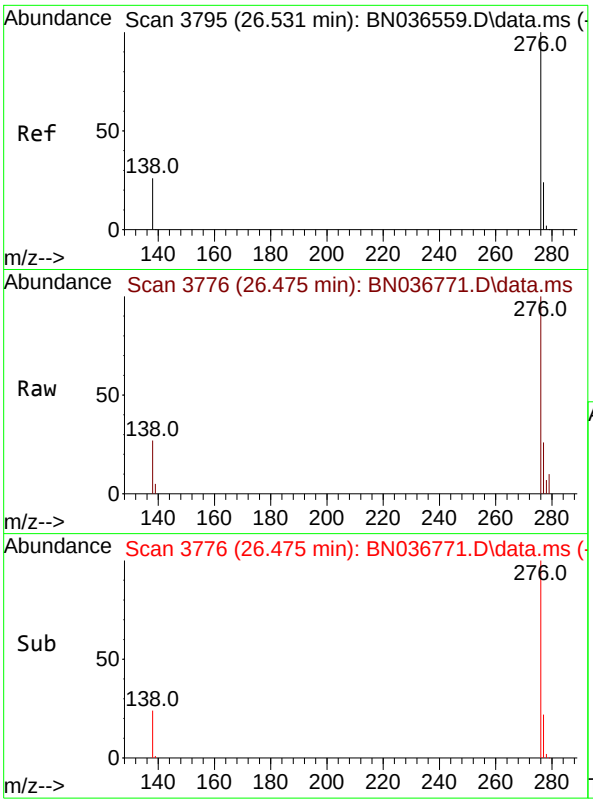




#40
Dibenzo(a,h)anthracene
Concen: 0.334 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.055 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

Tgt Ion:278 Resp: 3914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 24.4 | 20.8 | 31.2 |
| 279 | 33.5 | 28.8 | 43.2 |



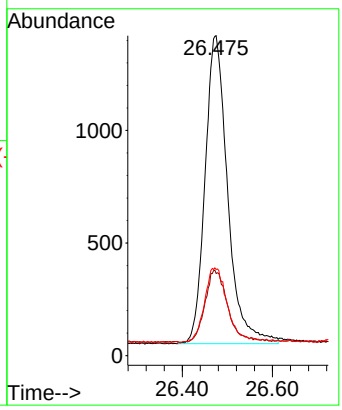



#41
Benzo(g,h,i)perylene
Concen: 0.355 ng
RT: 26.475 min Scan# 3
Delta R.T. -0.055 min
Lab File: BN036771.D
Acq: 28 Mar 2025 13:58

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:276 Resp: 4758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.7 | 22.2 | 33.4 |
| 138 | 27.0 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036791.D
Acq On : 29 Mar 2025 02:44
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 29 04:28:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

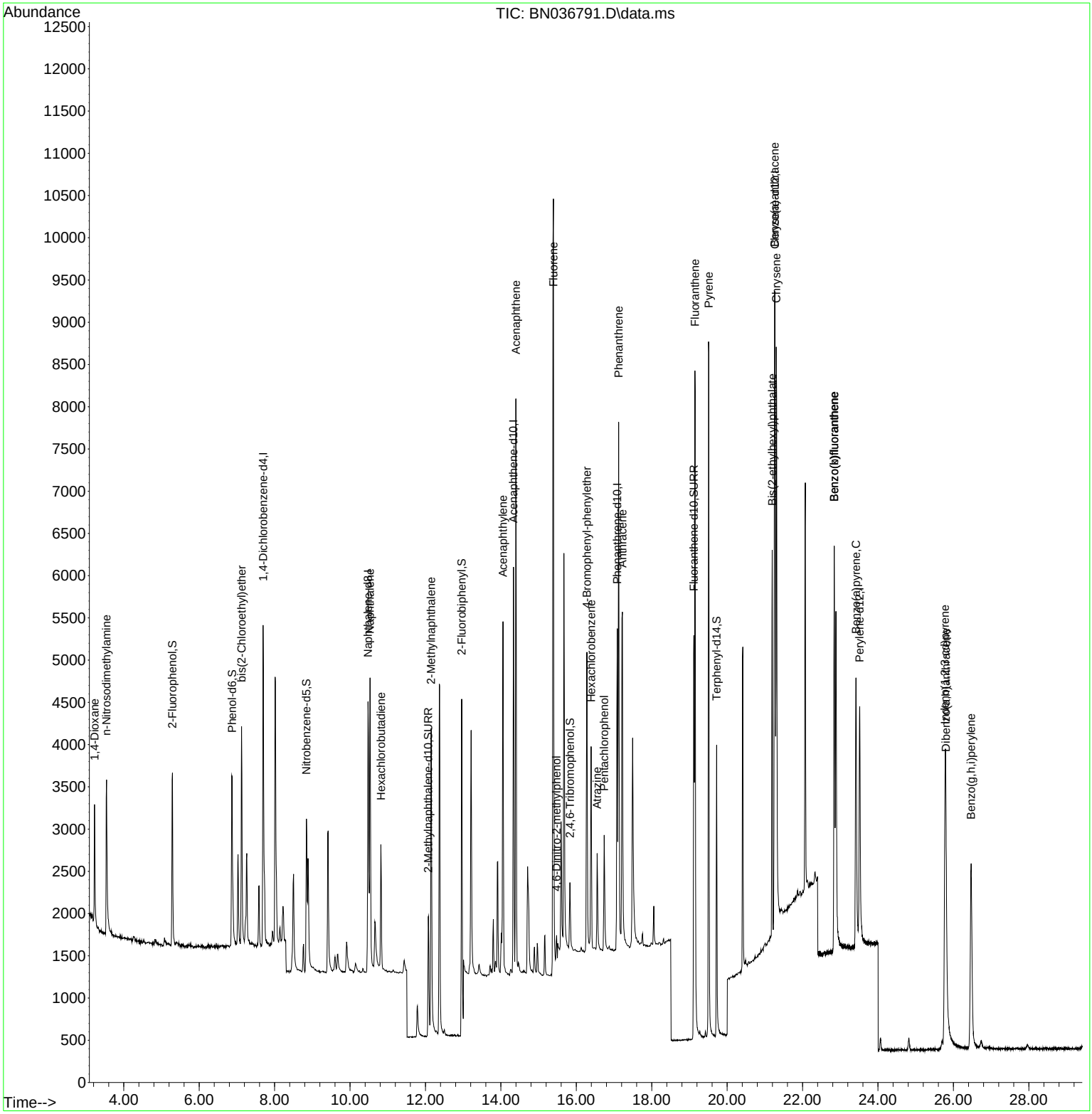
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.696 | 152 | 1826 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4490 | 0.400 | ng | | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2701 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.087 | 188 | 5571 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.268 | 240 | 4634 | 0.400 | ng | | -0.03 |
| 35) Perylene-d12 | 23.516 | 264 | 4032 | 0.400 | ng | | #-0.04 |
| **System Monitoring Compounds** | | | | | | | |
| 4) 2-Fluorophenol | 5.291 | 112 | 1521 | 0.357 | ng | | -0.02 |
| 5) Phenol-d6 | 6.872 | 99 | 1838 | 0.350 | ng | | -0.03 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1689 | 0.346 | ng | | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2363 | 0.354 | ng | | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 481 | 0.392 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 5513 | 0.351 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5751 | 0.403 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3623 | 0.326 | ng | | -0.02 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 827 | 0.408 | ng | | 98 |
| 3) n-Nitrosodimethylamine | 3.543 | 42 | 1757 | 0.429 | ng | | 91 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1880 | 0.346 | ng | | 99 |
| 9) Naphthalene | 10.530 | 128 | 4740 | 0.359 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.819 | 225 | 1160 | 0.373 | ng | # | 98 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 3044 | 0.362 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 4532 | 0.356 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3064 | 0.367 | ng | | 99 |
| 18) Fluorene | 15.393 | 166 | 4209 | 0.373 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 395 | 0.423 | ng | # | 76 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1353 | 0.388 | ng | | 96 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1582 | 0.375 | ng | | 97 |
| 23) Atrazine | 16.553 | 200 | 1090 | 0.389 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 740 | 0.385 | ng | | 98 |
| 25) Phenanthrene | 17.124 | 178 | 6416 | 0.384 | ng | | 99 |
| 26) Anthracene | 17.223 | 178 | 5669 | 0.376 | ng | | 100 |
| 28) Fluoranthene | 19.146 | 202 | 7784 | 0.415 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 7947 | 0.351 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5842 | 0.363 | ng | | 100 |
| 33) Chrysene | 21.304 | 228 | 6781 | 0.385 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4355 | 0.380 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.779 | 276 | 5407 | 0.372 | ng | | 94 |
| 37) Benzo(b)fluoranthene | 22.841 | 252 | 5627 | 0.383 | ng | | 97 |
| 38) Benzo(k)fluoranthene | 22.841 | 252 | 5627 | 0.366 | ng | | 96 |
| 39) Benzo(a)pyrene | 23.417 | 252 | 4993 | 0.404 | ng | | 95 |
| 40) Dibenzo(a,h)anthracene | 25.800 | 278 | 4150 | 0.366 | ng | | 93 |
| 41) Benzo(g,h,i)perylene | 26.469 | 276 | 4876 | 0.376 | ng | | 95 |

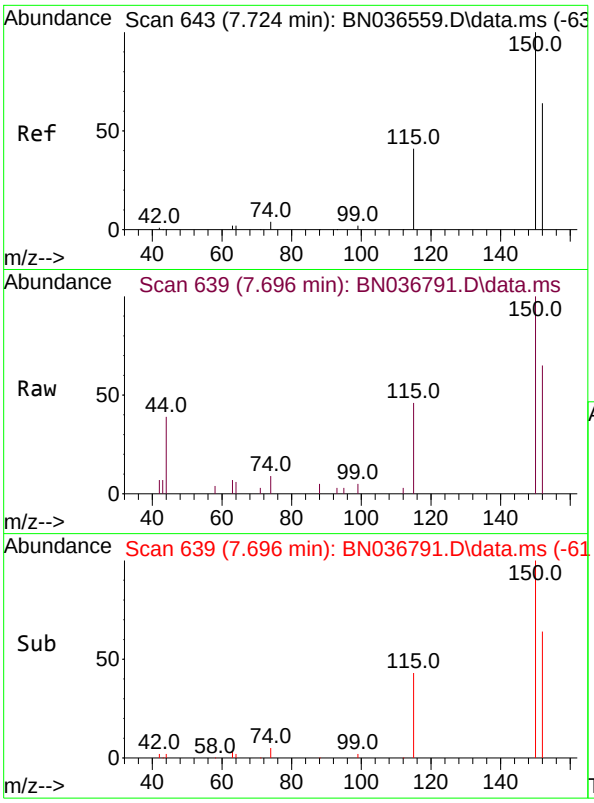
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036791.D
Acq On : 29 Mar 2025 02:44
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 29 04:28:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



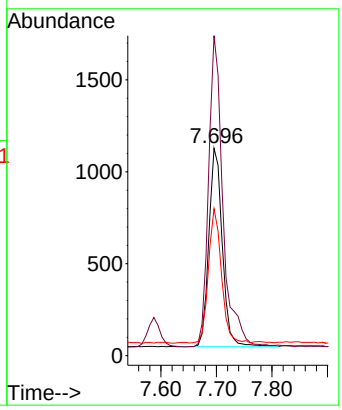


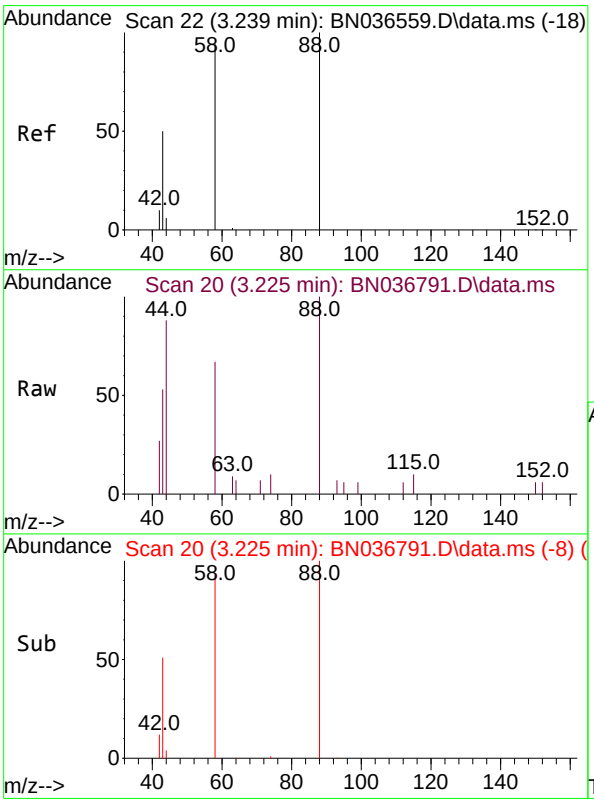

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.696 min Scan# 6
Delta R.T. -0.028 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 1826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.3 | 123.7 | 185.5 |
| 115 | 70.9 | 54.3 | 81.5 |

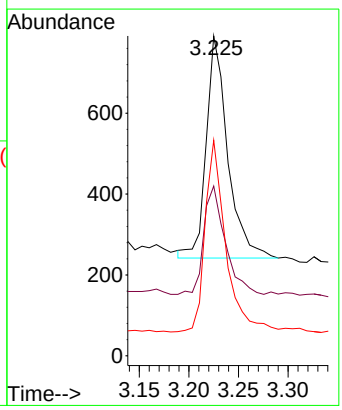


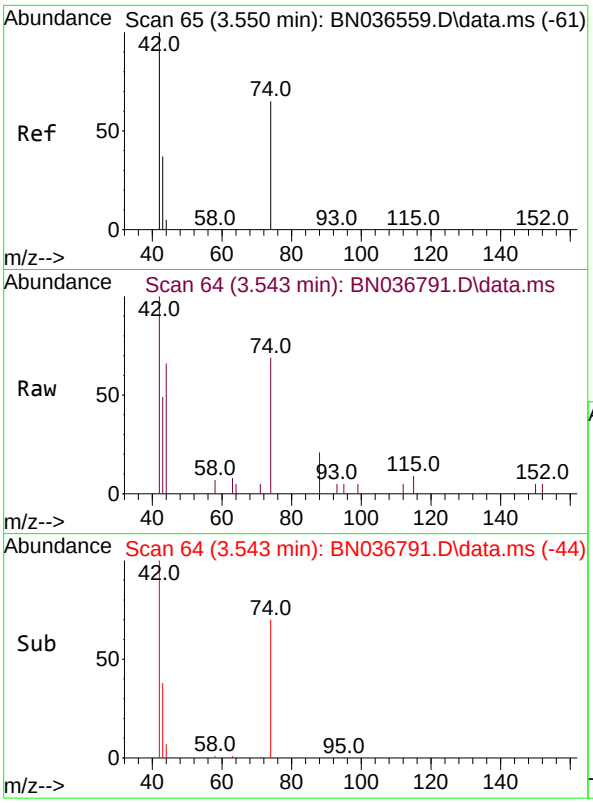




#2
1,4-Dioxane
Concen: 0.408 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 88 Resp: 827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 48.5 | 37.8 | 56.8 |
| 58 | 83.0 | 67.4 | 101.2 |



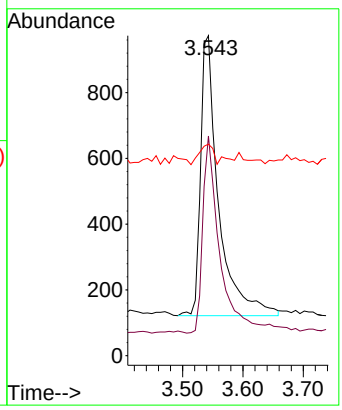


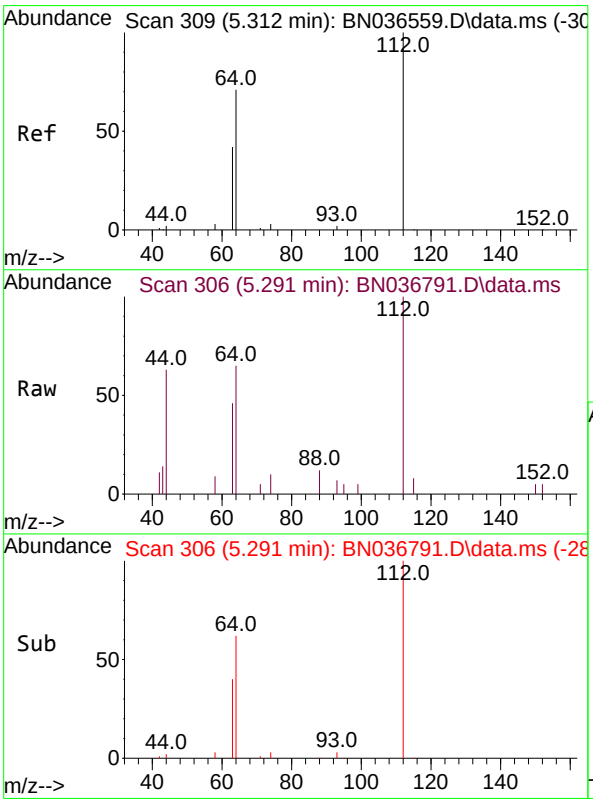

#3
n-Nitrosodimethylamine
Concen: 0.429 ng
RT: 3.543 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 42 Resp: 1757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 67.4 | 60.6 | 90.8 |
| 44 | 6.6 | 6.3 | 9.5 |

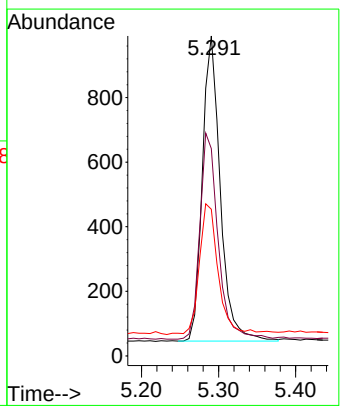


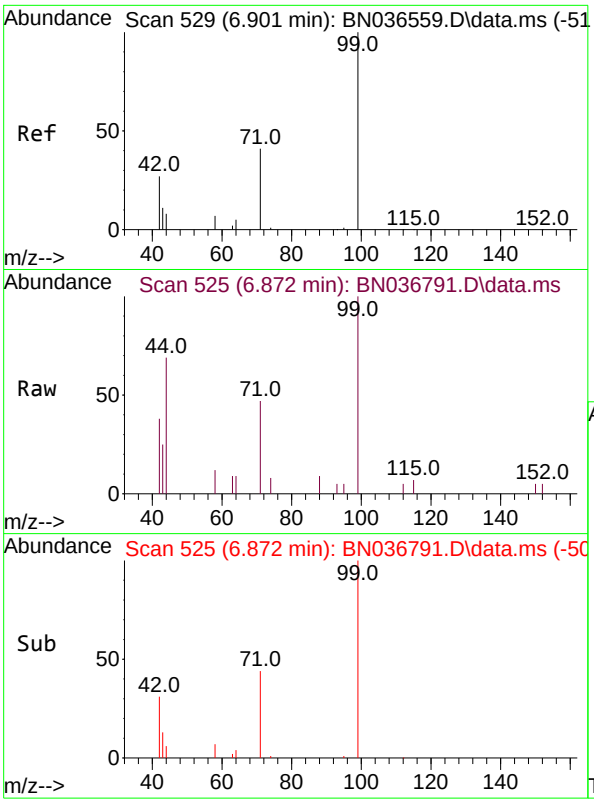




#4
2-Fluorophenol
Concen: 0.357 ng
RT: 5.291 min Scan# 306
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:112 Resp: 1521

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.8 | 53.1 | 79.7 |
| 63 | 46.2 | 31.8 | 47.8 |



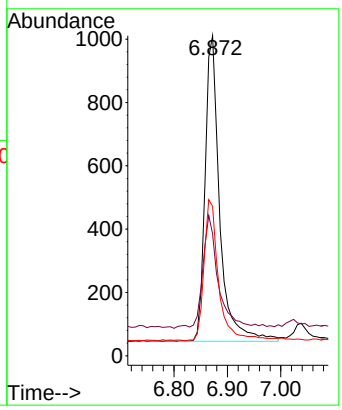


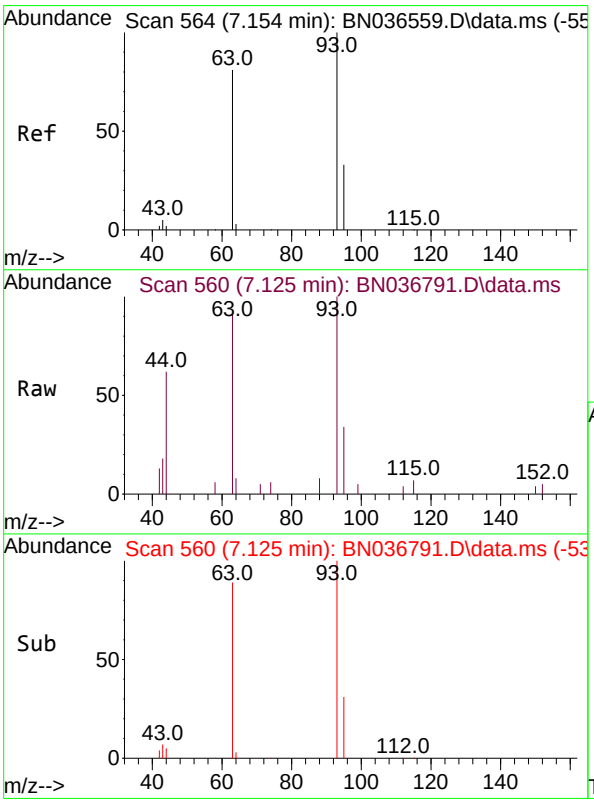

#5
Phenol-d6
Concen: 0.350 ng
RT: 6.872 min Scan# 5
Delta R.T. -0.029 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 99 Resp: 1838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 38.7 | 26.5 | 39.7 |
| 71 | 46.1 | 34.1 | 51.1 |

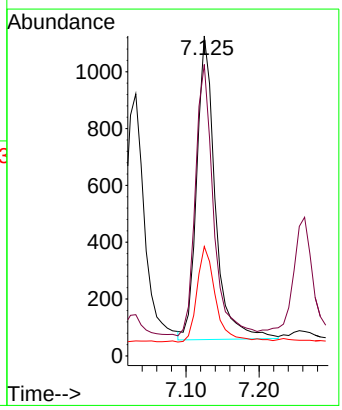


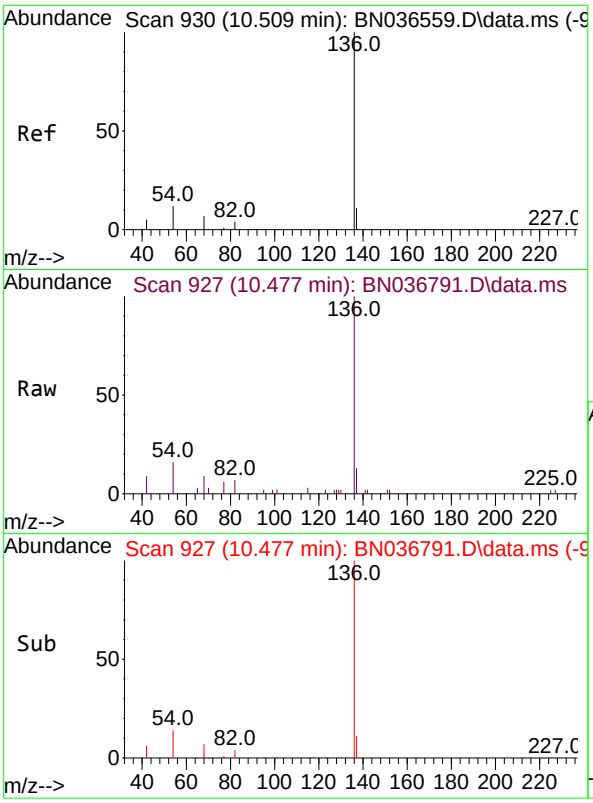




#6
bis(2-Chloroethyl)ether
Concen: 0.346 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 93 Resp: 1880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 85.9 | 67.7 | 101.5 |
| 95 | 31.5 | 25.6 | 38.4 |



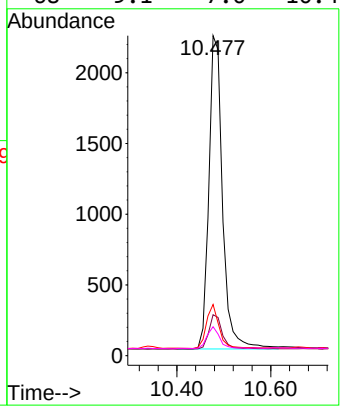


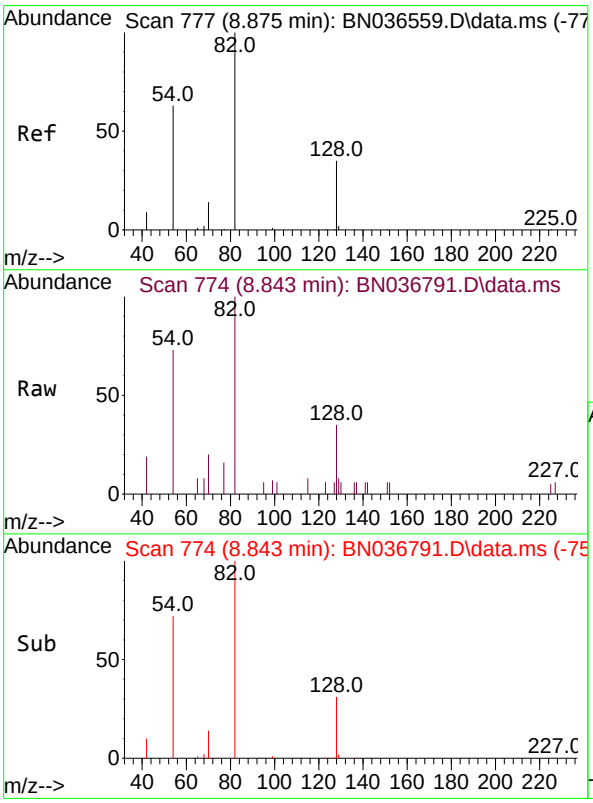

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:136 Resp: 4490

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.8 | 10.3 | 15.5 |
| 54 | 16.0 | 11.5 | 17.3 |
| 68 | 9.1 | 7.0 | 10.4 |

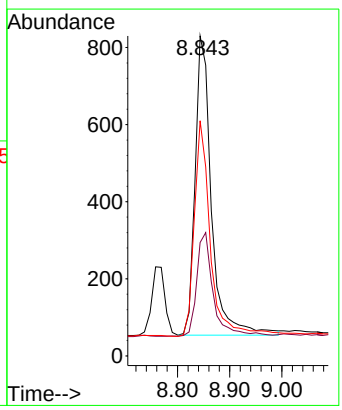


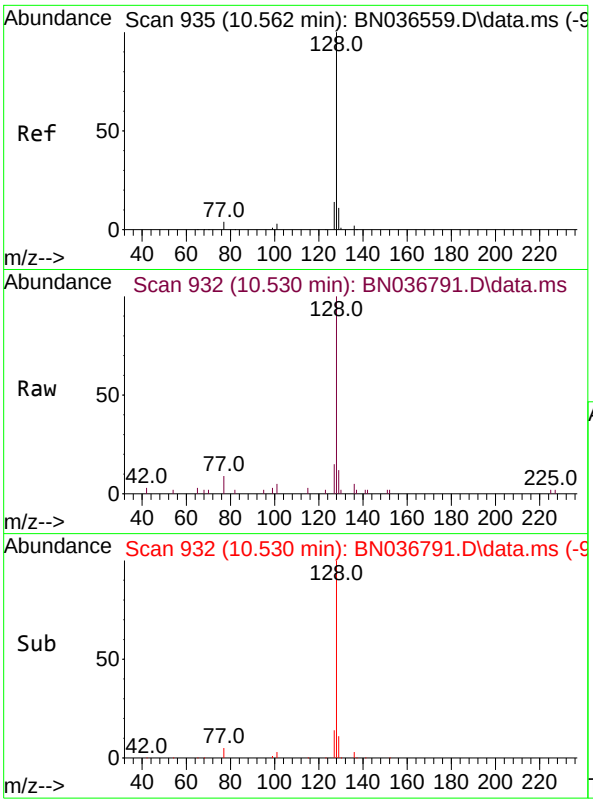




#8
Nitrobenzene-d5
Concen: 0.346 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion: 82 Resp: 1689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 35.4 | 30.6 | 45.8 |
| 54 | 73.5 | 52.2 | 78.4 |



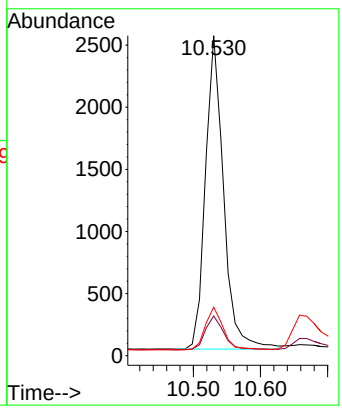


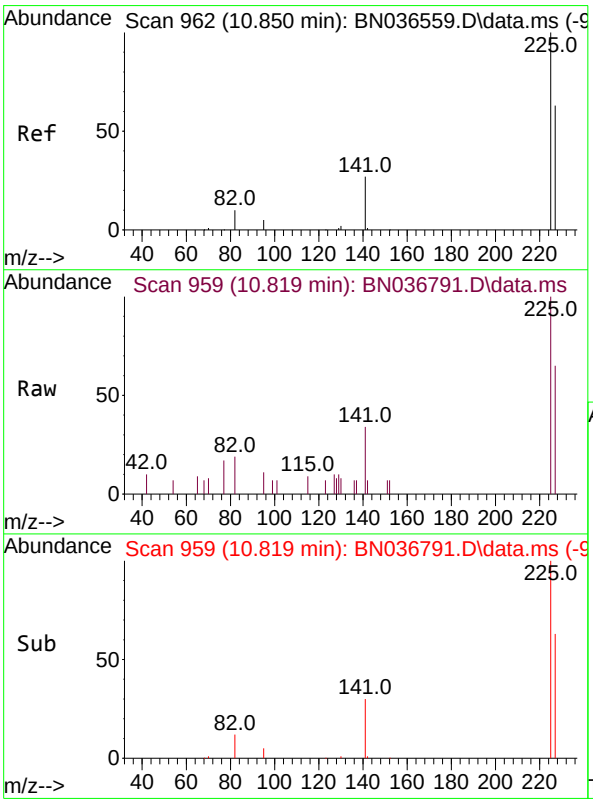

#9
Naphthalene
Concen: 0.359 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:128 Resp: 4740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.4 | 9.8 | 14.6 |
| 127 | 15.2 | 11.8 | 17.8 |

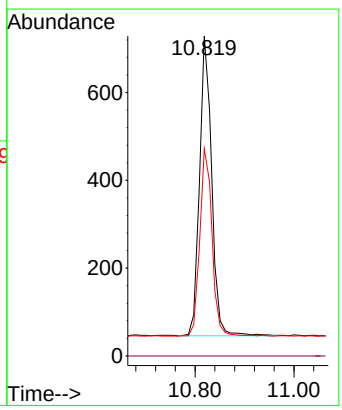


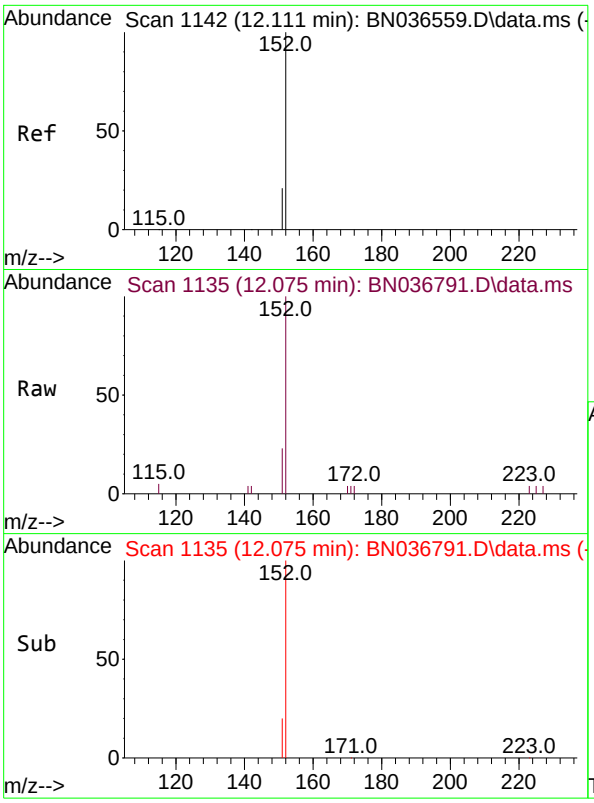




#10
Hexachlorobutadiene
Concen: 0.373 ng
RT: 10.819 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:225 Resp: 1160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.4 | 51.8 | 77.8 |



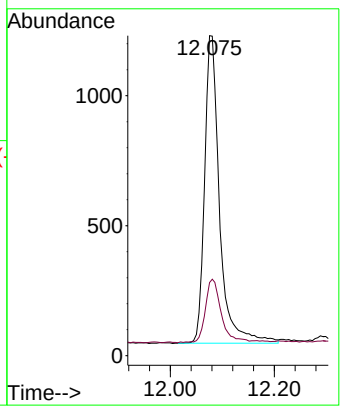


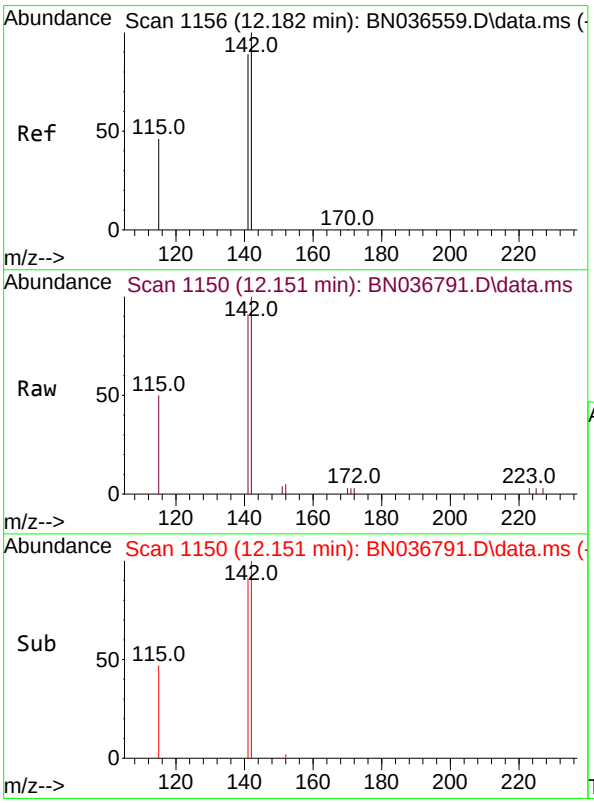

#11
2-Methylnaphthalene-d10
Concen: 0.354 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 2363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.9 | 17.0 | 25.6 |

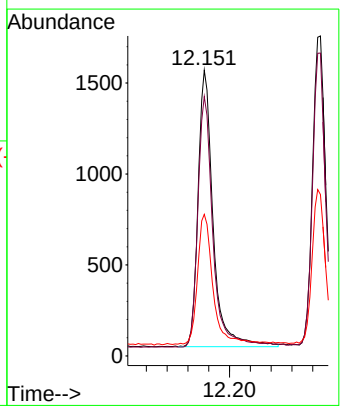


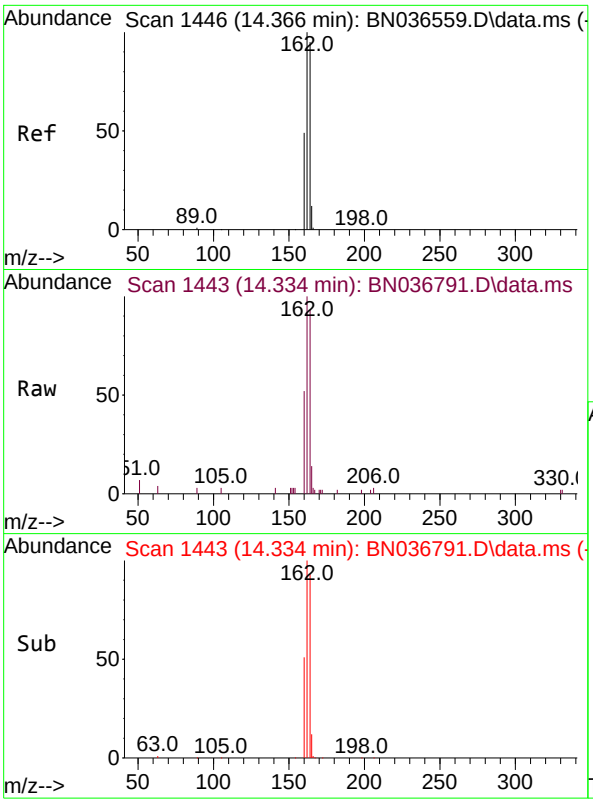




#12
2-Methylnaphthalene
Concen: 0.362 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:142 Resp: 3044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.8 | 71.7 | 107.5 |
| 115 | 49.5 | 38.3 | 57.5 |



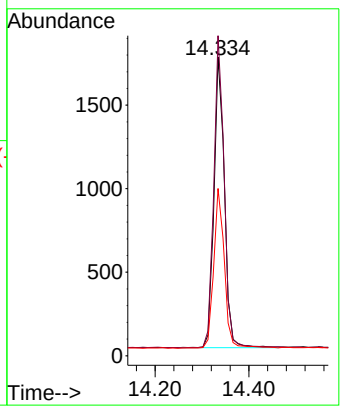


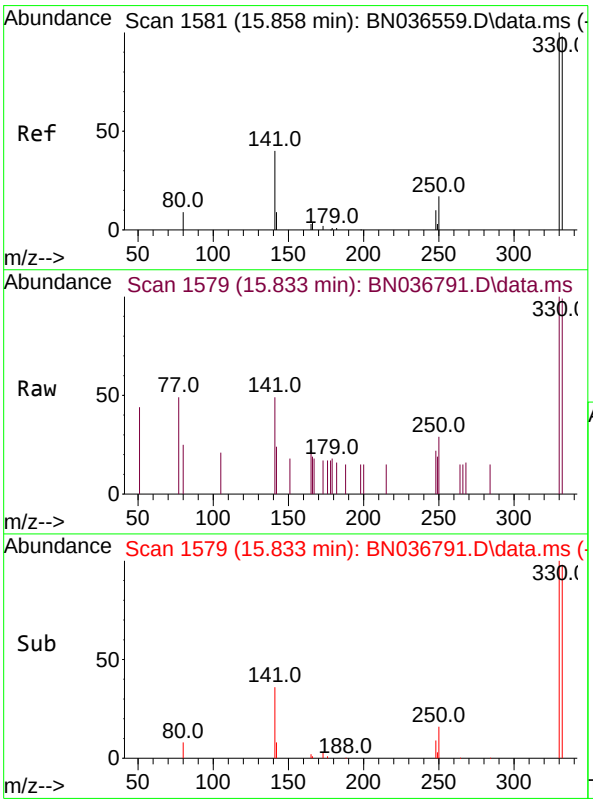

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:164 Resp: 2701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 107.1 | 84.2 | 126.2 |
| 160 | 56.0 | 42.2 | 63.2 |

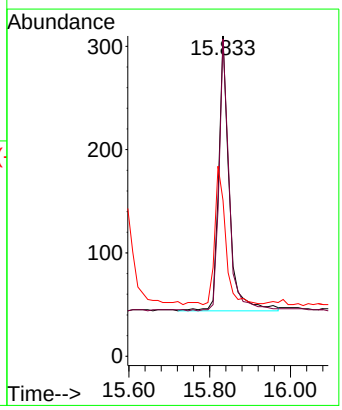


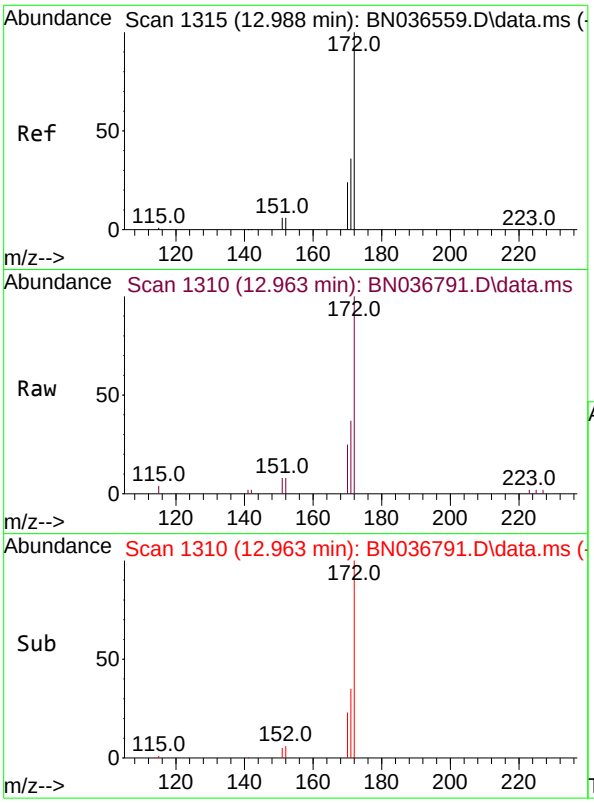




#14
2,4,6-Tribromophenol
Concen: 0.392 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:330 Resp: 481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 94.4 | 75.2 | 112.8 |
| 141 | 51.4 | 43.4 | 65.2 |



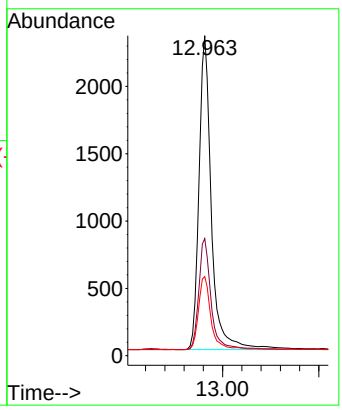


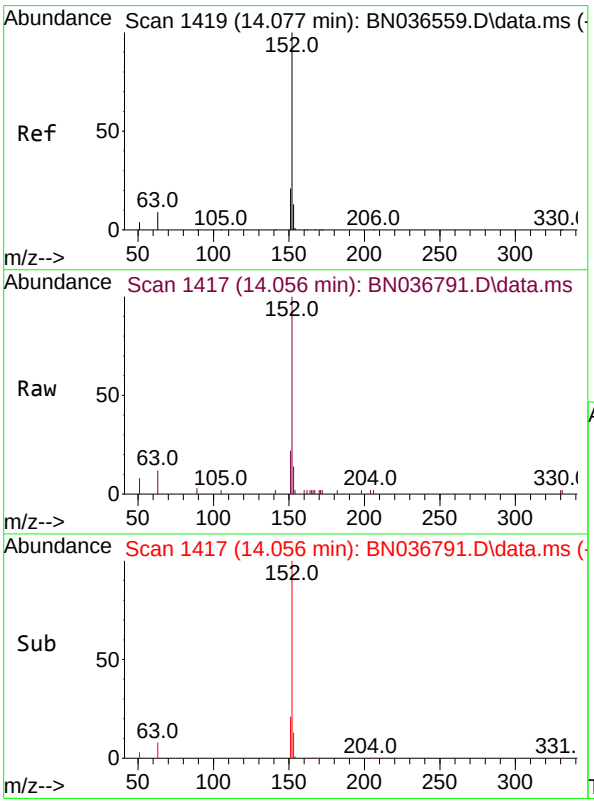

#15
2-Fluorobiphenyl
Concen: 0.351 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:172 Resp: 5513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.6 | 29.5 | 44.3 |
| 170 | 24.7 | 20.2 | 30.4 |

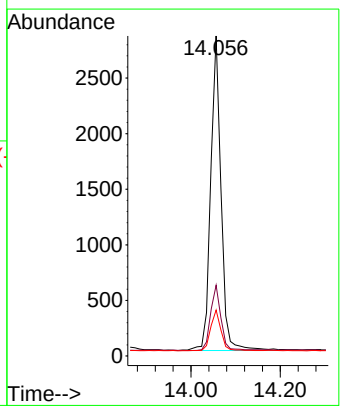


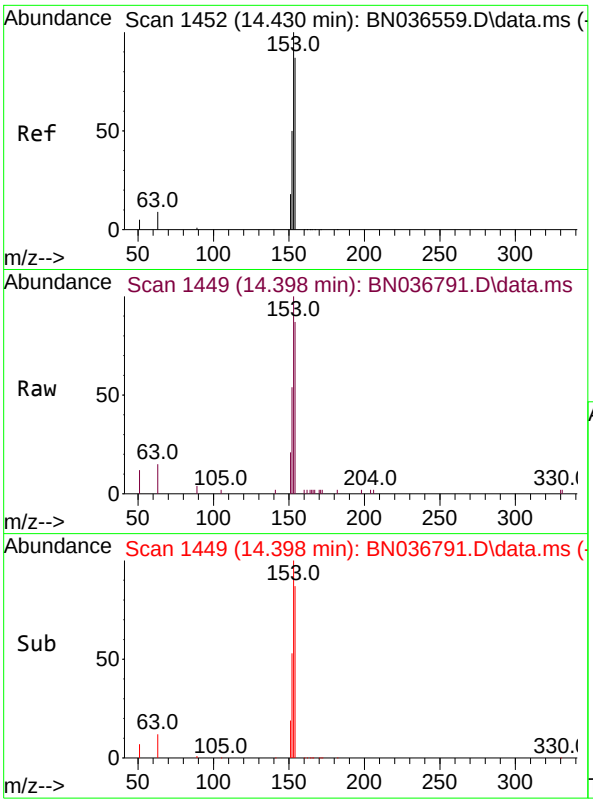




#16
Acenaphthylene
Concen: 0.356 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:152 Resp: 4532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.1 | 16.2 | 24.4 |
| 153 | 13.0 | 10.6 | 15.8 |



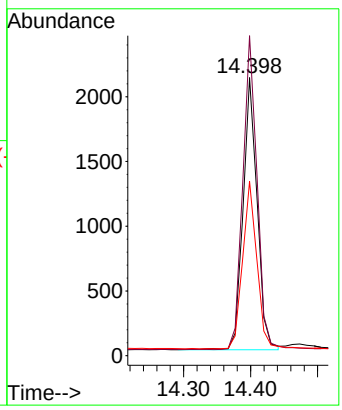


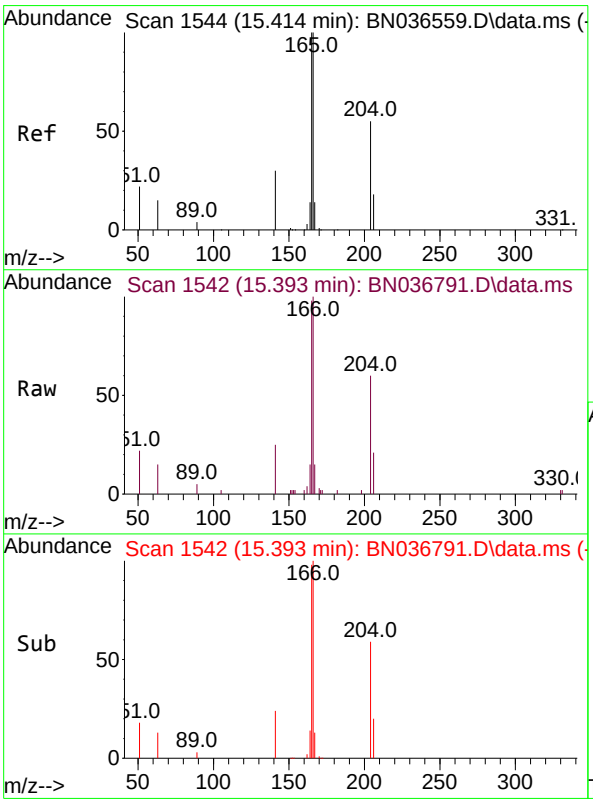

#17
Acenaphthene
Concen: 0.367 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:154 Resp: 3064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.0 | 94.1 | 141.1 |
| 152 | 62.9 | 49.8 | 74.6 |

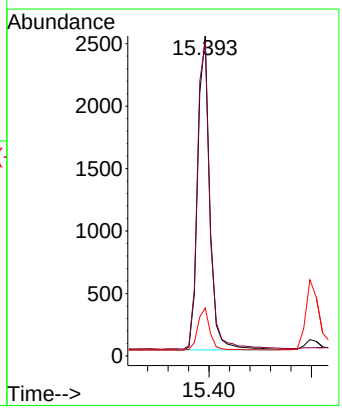


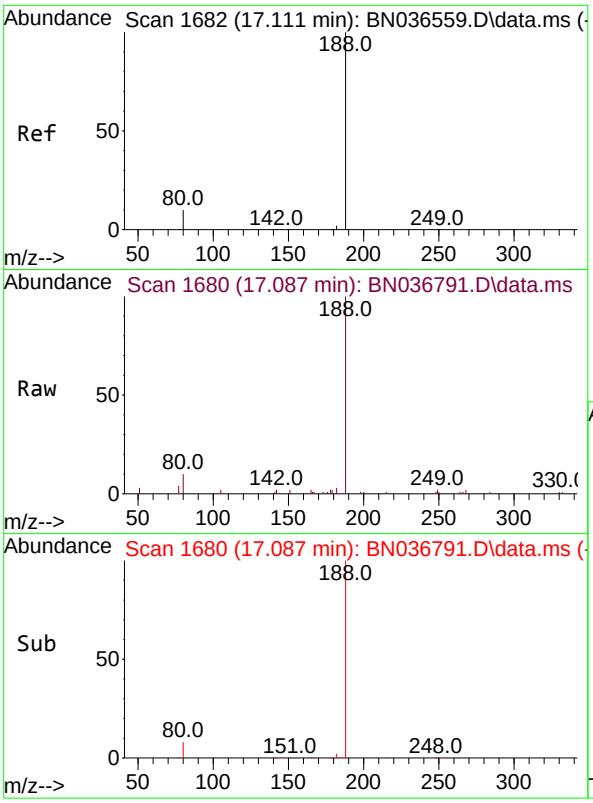




#18
Fluorene
Concen: 0.373 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:166 Resp: 4209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 101.0 | 79.8 | 119.8 |
| 167 | 13.4 | 10.6 | 15.8 |



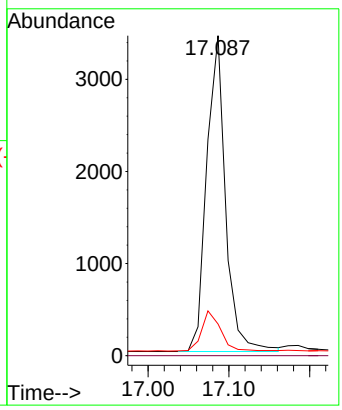


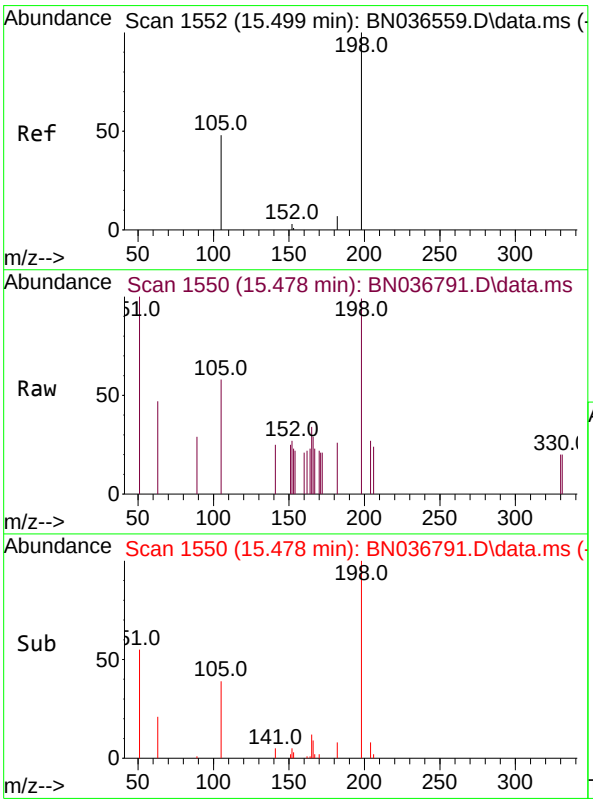

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:188 Resp: 5571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 9.9 | 8.8 | 13.2 |

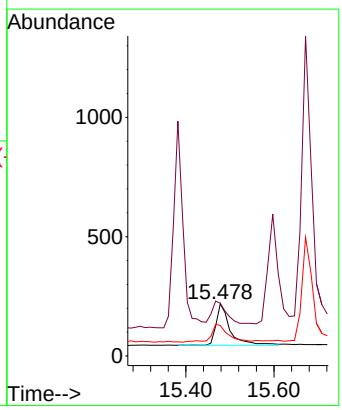


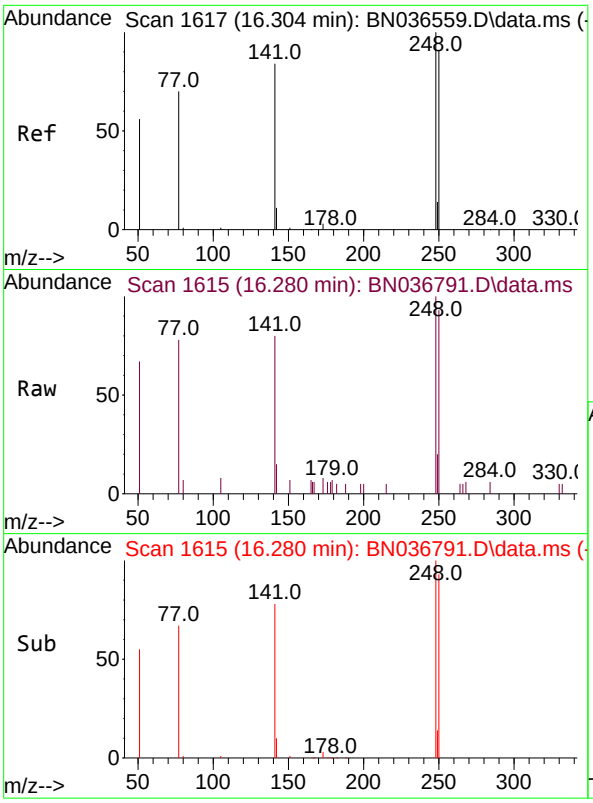




#20
4,6-Dinitro-2-methylphenol
Concen: 0.423 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:198 Resp: 395

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 100.9 | 107.9 | 161.9# |
| 105 | 58.4 | 56.2 | 84.2 |



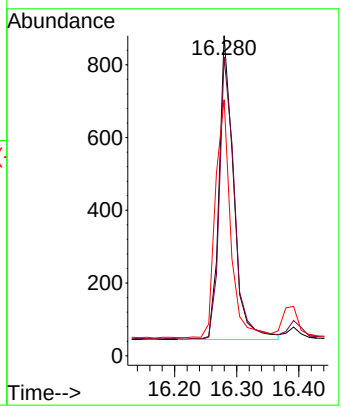


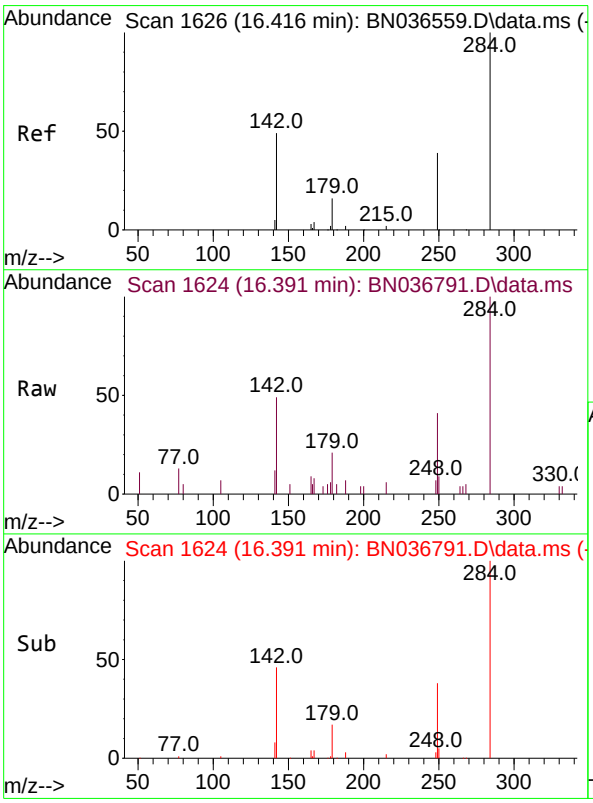

#21
4-Bromophenyl-phenylether
Concen: 0.388 ng
RT: 16.280 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:248 Resp: 1353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 93.4 | 73.0 | 109.6 |
| 141 | 80.0 | 68.6 | 103.0 |

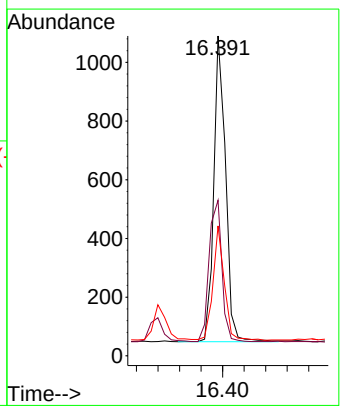


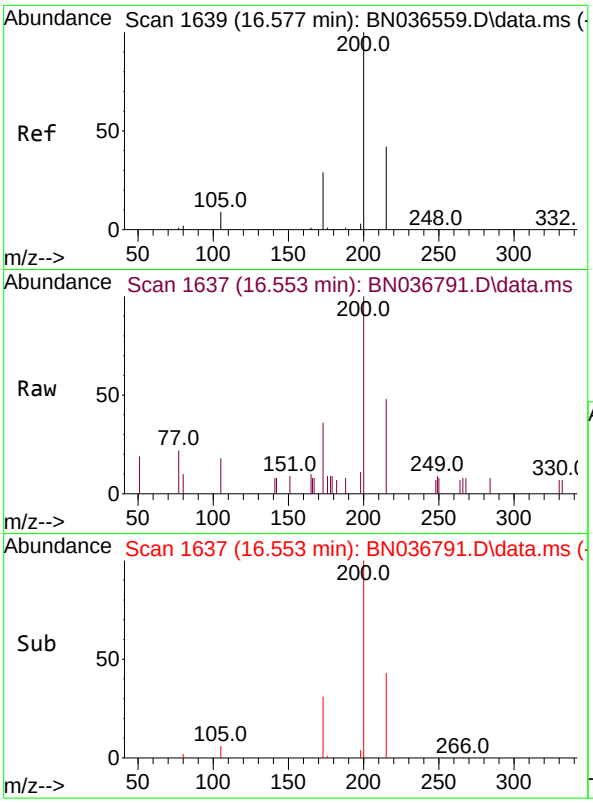




#22
Hexachlorobenzene
Concen: 0.375 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:284 Resp: 1582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.7 | 37.0 | 55.4 |
| 249 | 35.6 | 28.1 | 42.1 |



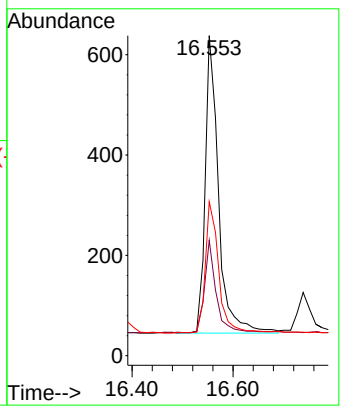


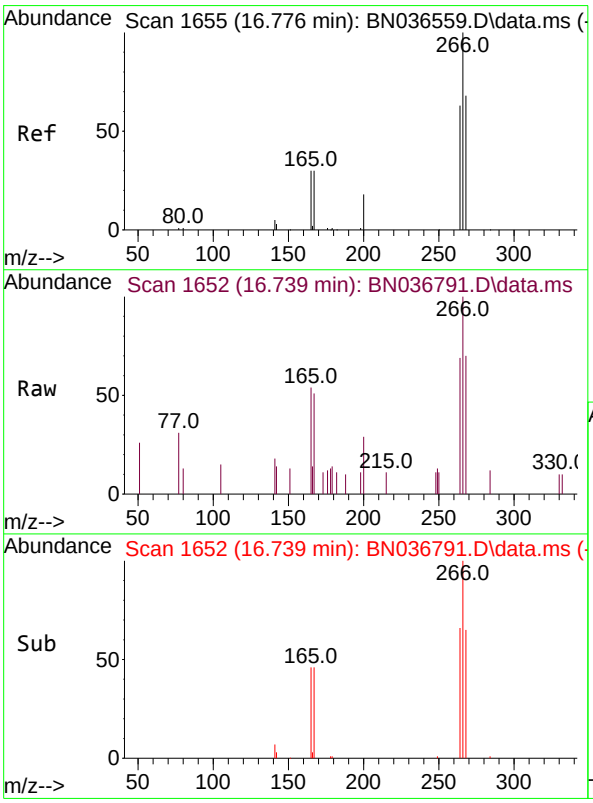

#23
Atrazine
Concen: 0.389 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:200 Resp: 1090

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.1 | 27.3 | 40.9 |
| 215 | 48.1 | 36.8 | 55.2 |

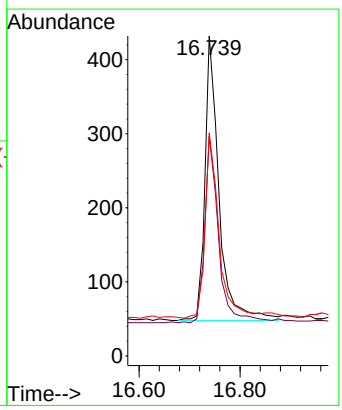


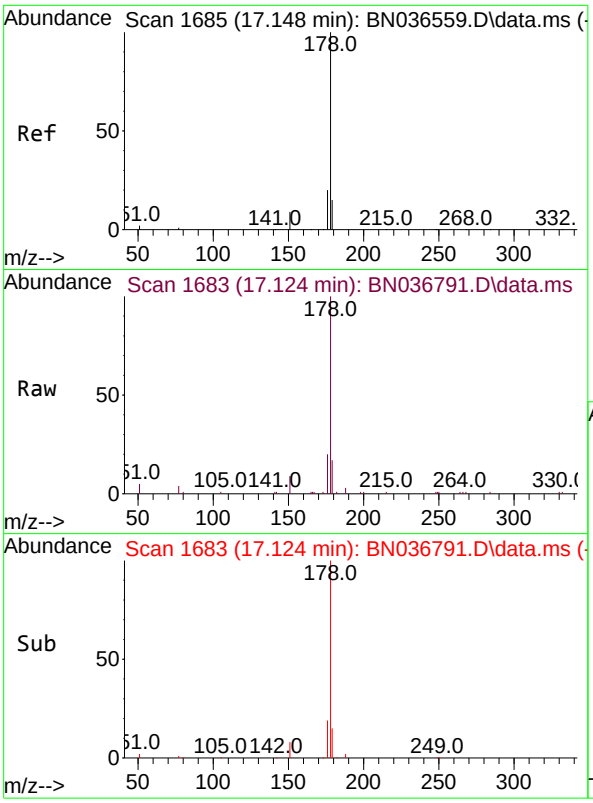




#24
Pentachlorophenol
Concen: 0.385 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:266 Resp: 740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 64.5 | 49.6 | 74.4 |
| 268 | 64.9 | 50.9 | 76.3 |



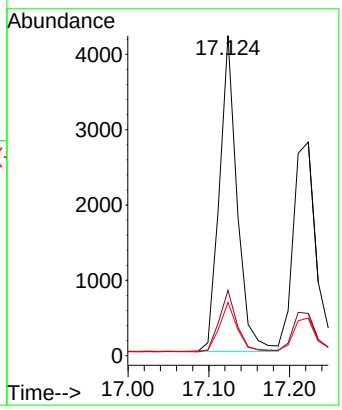


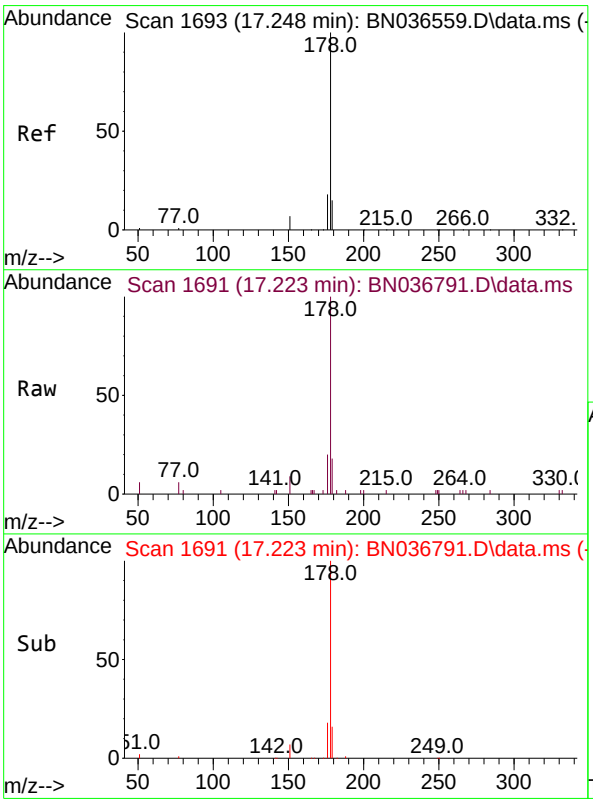

#25
Phenanthrene
Concen: 0.384 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:178 Resp: 6416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.9 | 23.9 |
| 179 | 16.0 | 12.2 | 18.4 |

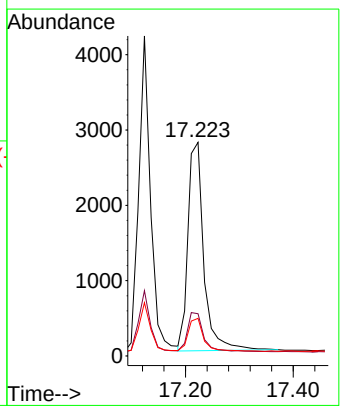


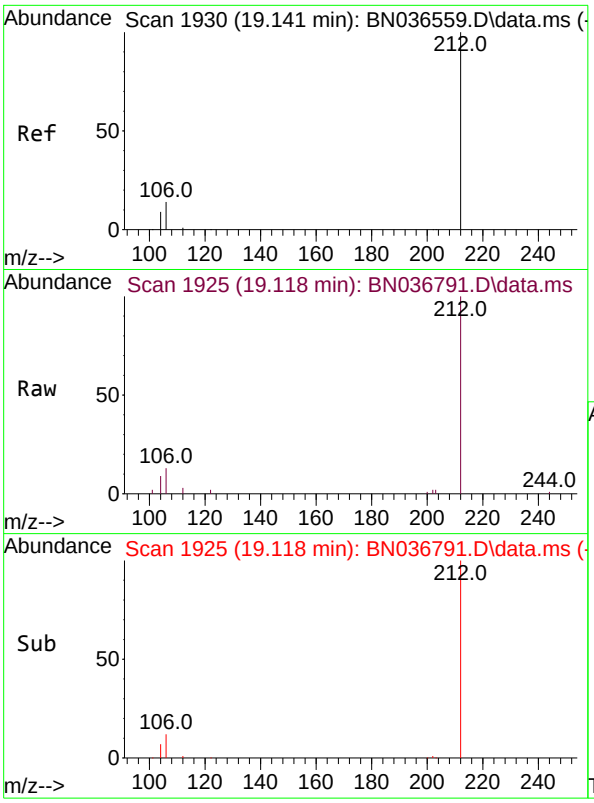




#26
Anthracene
Concen: 0.376 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:178 Resp: 5669

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.2 | 15.4 | 23.2 |
| 179 | 15.5 | 12.6 | 18.8 |



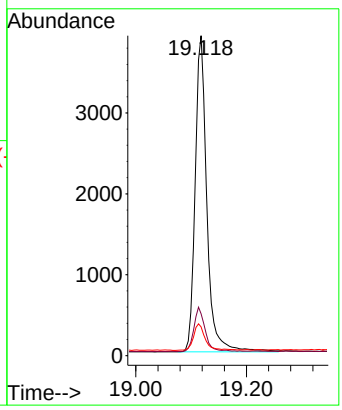


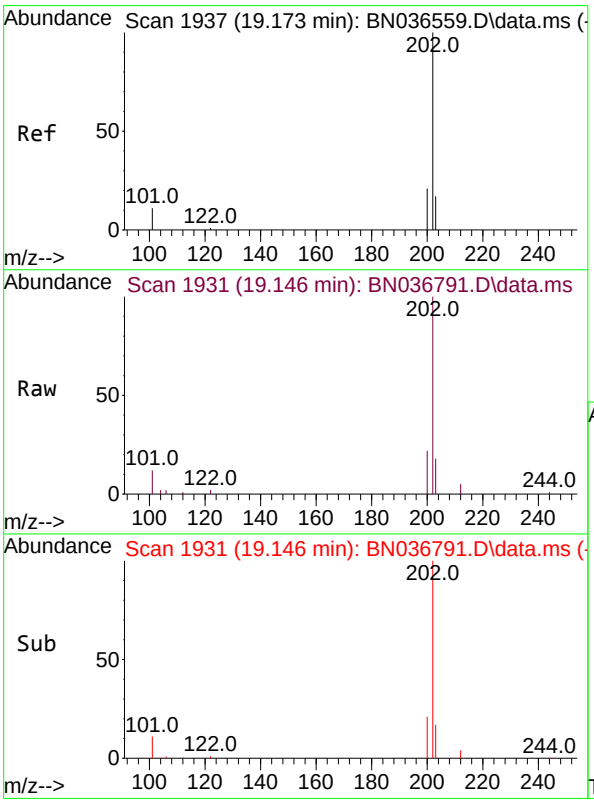

#27
Fluoranthene-d10
Concen: 0.403 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:212 Resp: 5751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.2 | 11.8 | 17.6 |
| 104 | 8.6 | 7.3 | 10.9 |

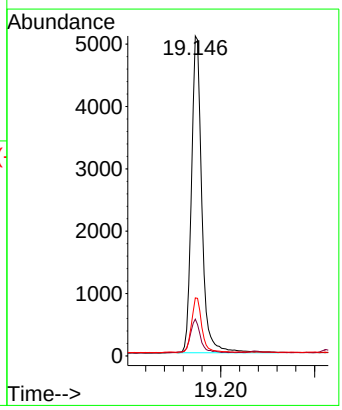


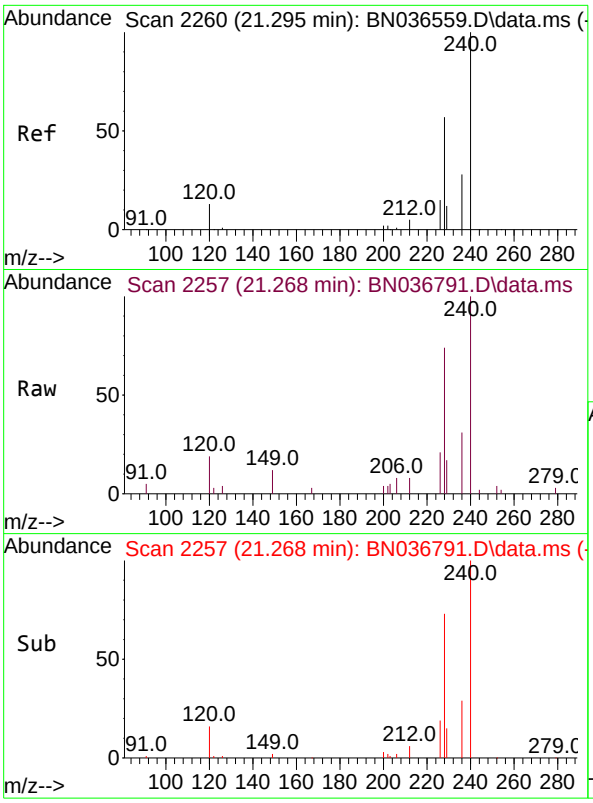




#28
Fluoranthene
Concen: 0.415 ng
RT: 19.146 min Scan# 1931
Delta R.T. -0.028 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:202 Resp: 7784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.4 | 9.4 | 14.0 |
| 203 | 16.9 | 13.5 | 20.3 |



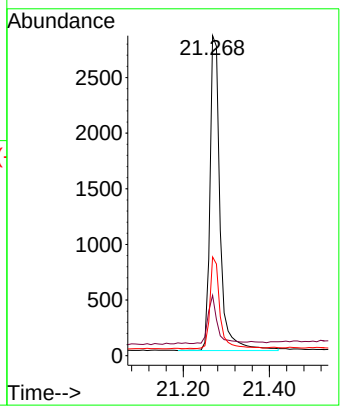


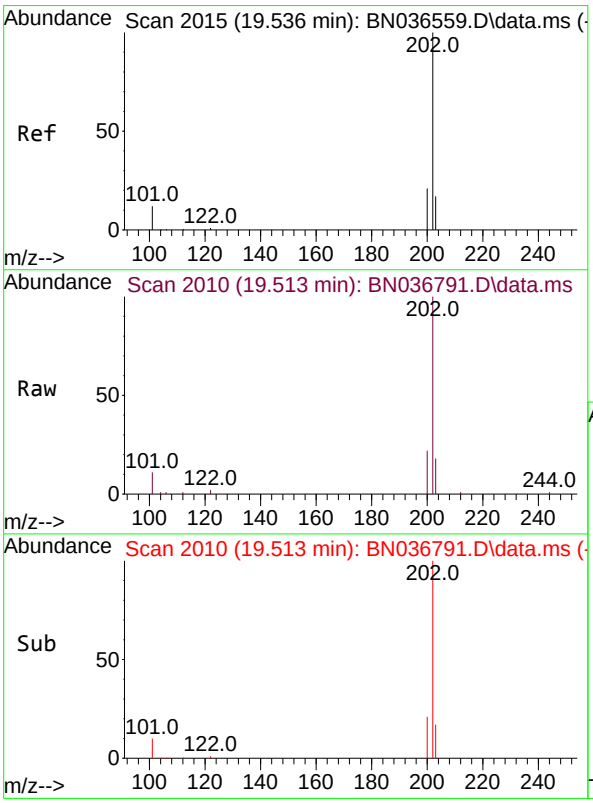

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:240 Resp: 4634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 18.8 | 14.6 | 22.0 |
| 236 | 30.8 | 24.1 | 36.1 |

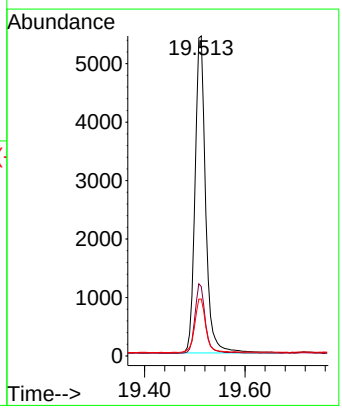


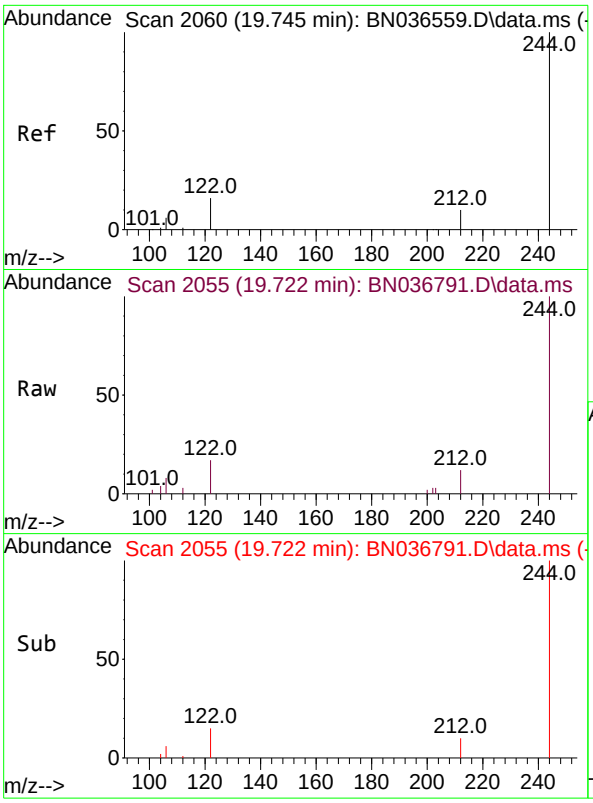




#30
Pyrene
Concen: 0.351 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:202 Resp: 7947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |



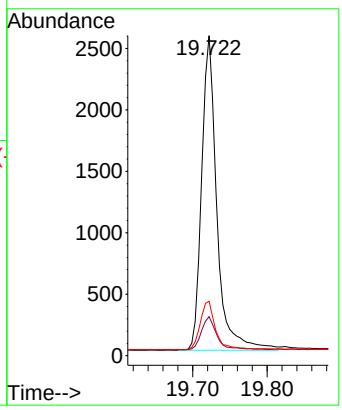


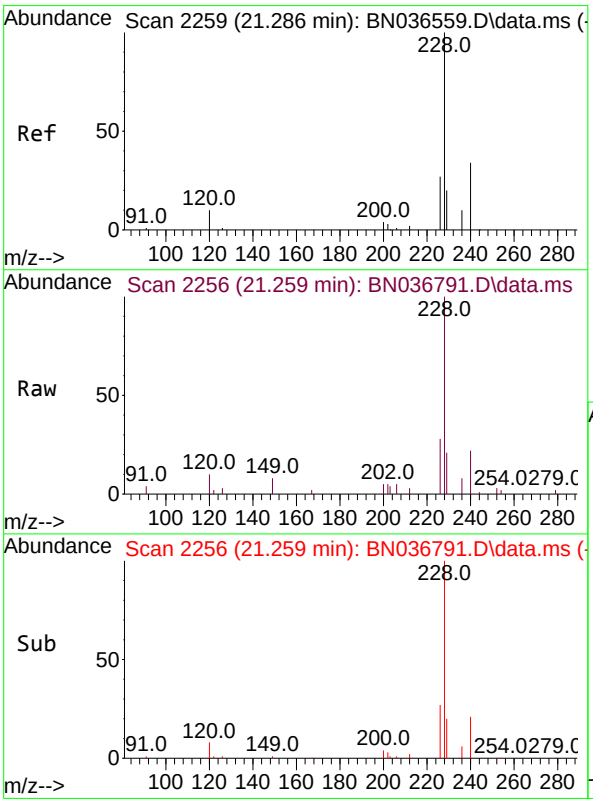

#31
Terphenyl-d14
Concen: 0.326 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:244 Resp: 3623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.2 | 9.6 | 14.4 |
| 122 | 17.0 | 13.9 | 20.9 |

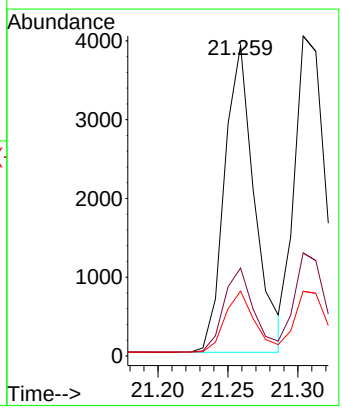


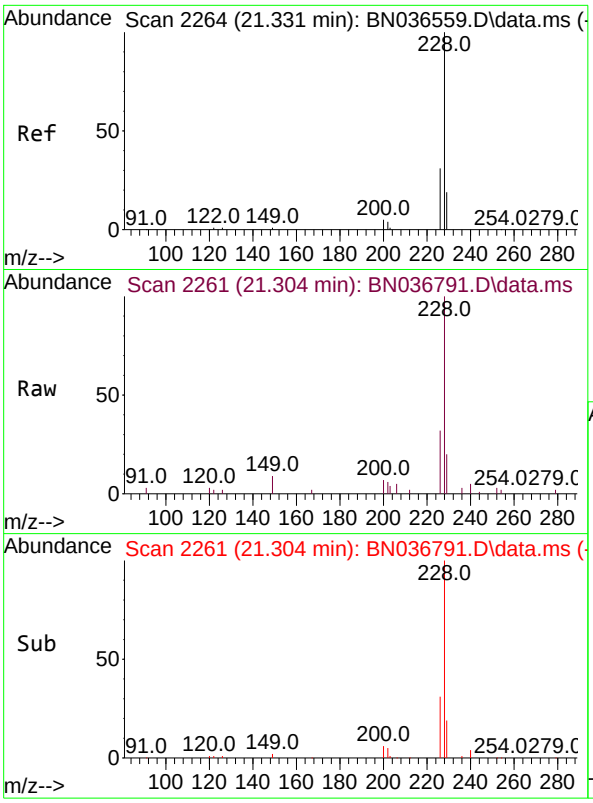




#32
Benzo(a)anthracene
Concen: 0.363 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:228 Resp: 5842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.3 | 22.5 | 33.7 |
| 229 | 20.9 | 16.6 | 25.0 |



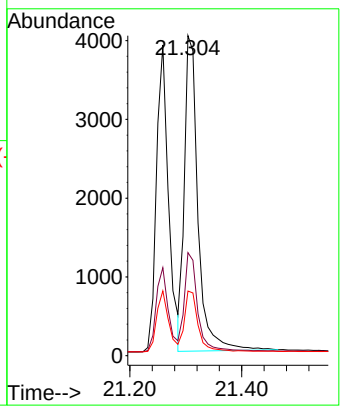


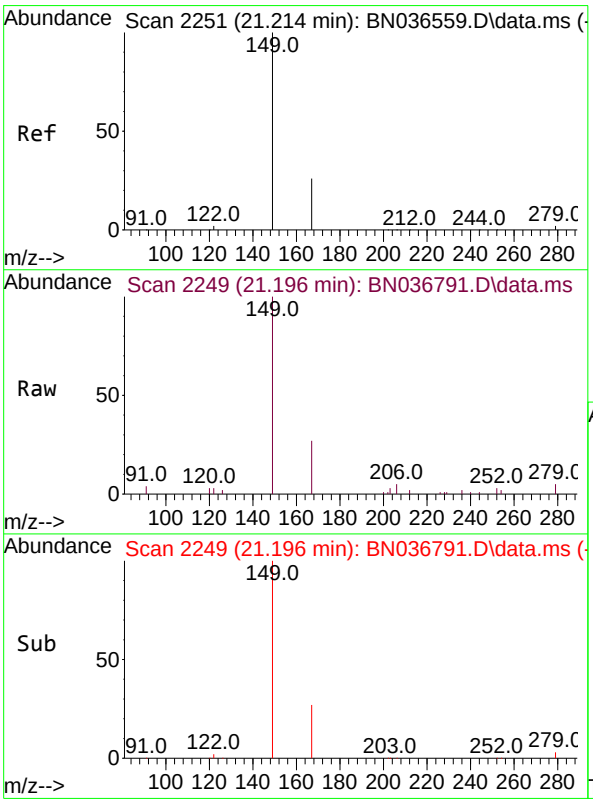

#33
Chrysene
Concen: 0.385 ng
RT: 21.304 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:228 Resp: 6781

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.2 | 25.3 | 37.9 |
| 229 | 20.2 | 15.8 | 23.8 |

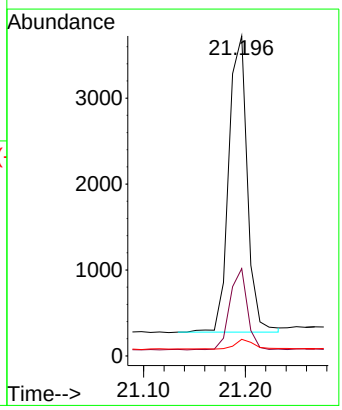


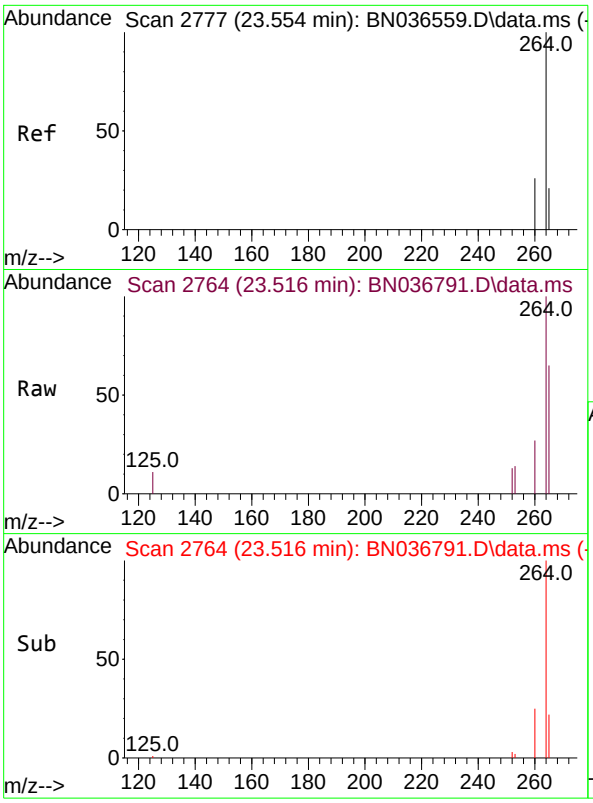




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.380 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:149 Resp: 4355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 25.9 | 20.7 | 31.1 |
| 279 | 3.3 | 3.6 | 5.4# |



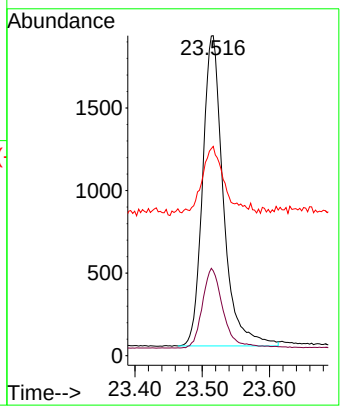


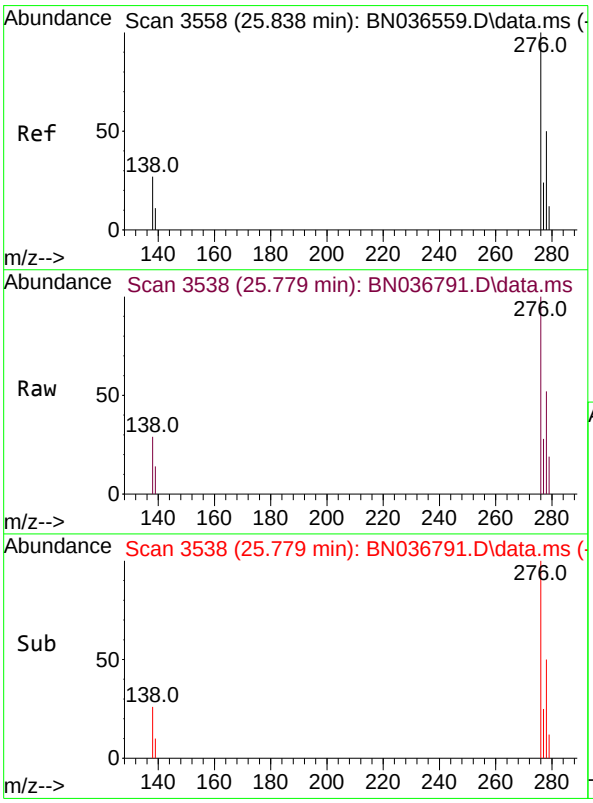

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.516 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:264 Resp: 4032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.5 | 22.6 | 33.8 |
| 265 | 65.4 | 88.1 | 132.1# |

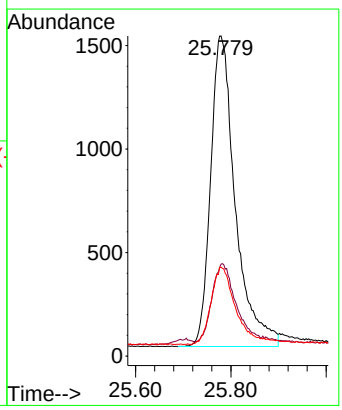


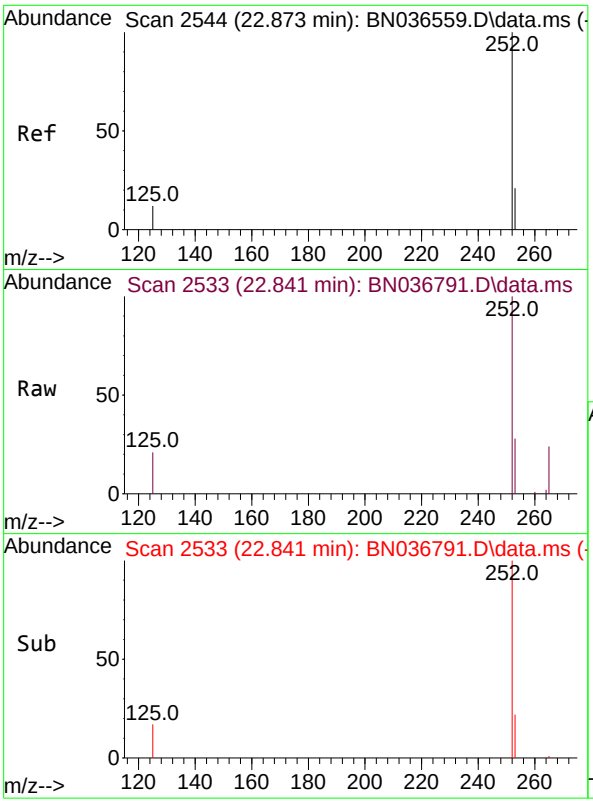




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.372 ng
RT: 25.779 min Scan# 3538
Delta R.T. -0.058 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:276 Resp: 5407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.1 | 23.4 | 35.2 |
| 277 | 25.4 | 20.0 | 30.0 |



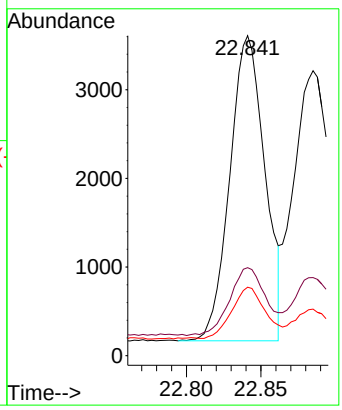


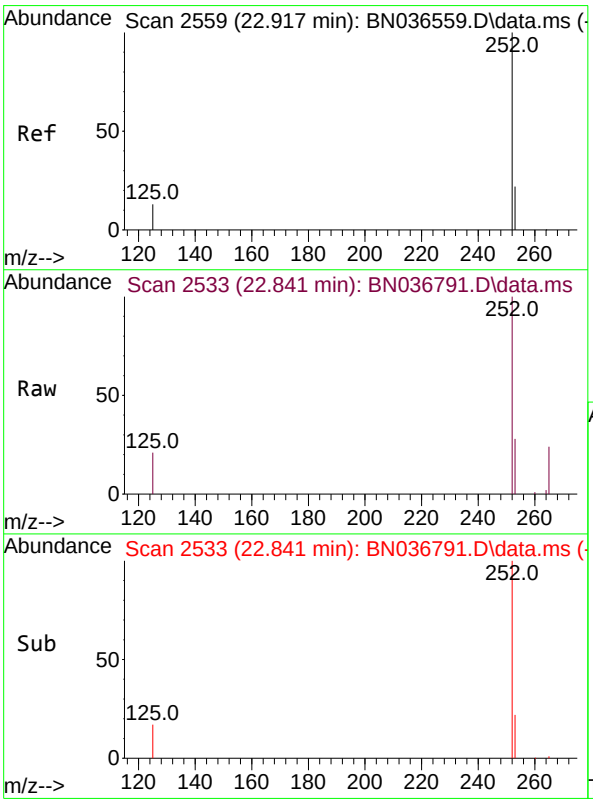

#37
Benzo(b)fluoranthene
Concen: 0.383 ng
RT: 22.841 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 5627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.5 | 23.9 | 35.9 |
| 125 | 21.4 | 17.4 | 26.2 |

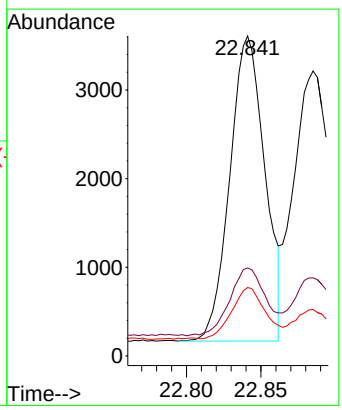


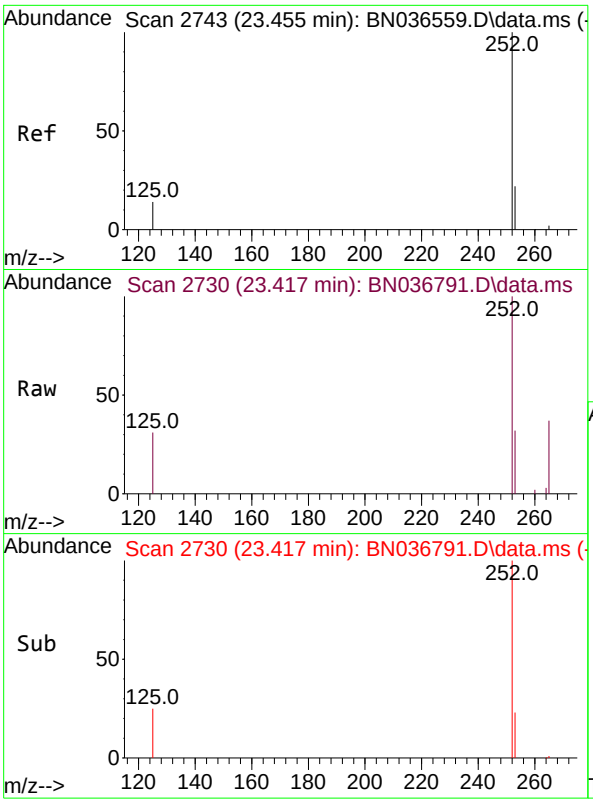




#38
Benzo(k)fluoranthene
Concen: 0.366 ng
RT: 22.841 min Scan# 2533
Delta R.T. -0.076 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:252 Resp: 5627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 27.5 | 24.6 | 36.8 |
| 125 | 21.4 | 17.8 | 26.8 |



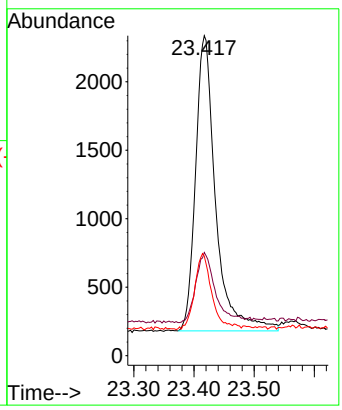


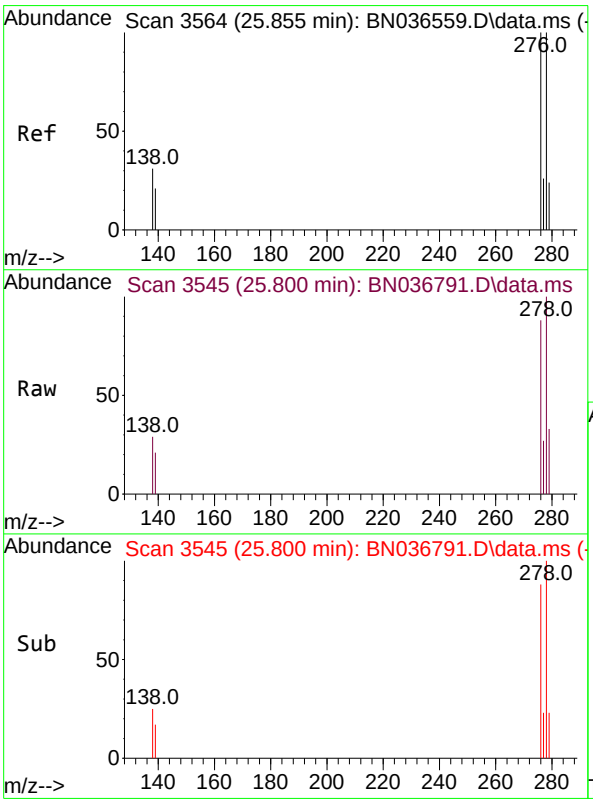

#39
Benzo(a)pyrene
Concen: 0.404 ng
RT: 23.417 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 4993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 32.3 | 27.8 | 41.8 |
| 125 | 31.1 | 22.7 | 34.1 |

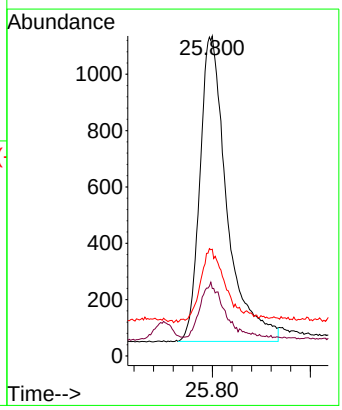


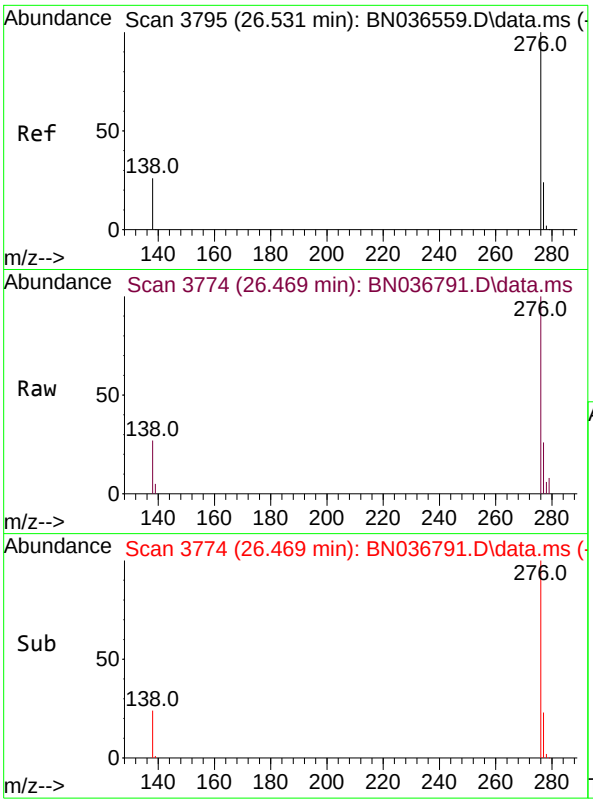




#40
Dibenzo(a,h)anthracene
Concen: 0.366 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.055 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

Tgt Ion:278 Resp: 4150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 21.1 | 20.8 | 31.2 |
| 279 | 33.4 | 28.8 | 43.2 |



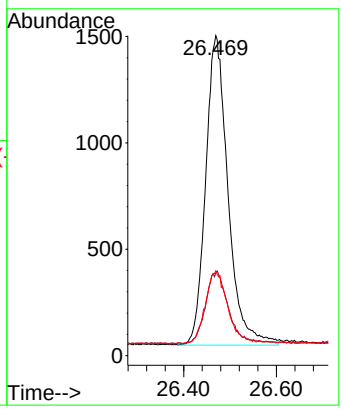



#41
Benzo(g,h,i)perylene
Concen: 0.376 ng
RT: 26.469 min Scan# 3
Delta R.T. -0.061 min
Lab File: BN036791.D
Acq: 29 Mar 2025 02:44

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:276 Resp: 4876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.9 | 22.2 | 33.4 |
| 138 | 26.5 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036807.D
Acq On : 29 Mar 2025 12:21
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 31 02:01:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

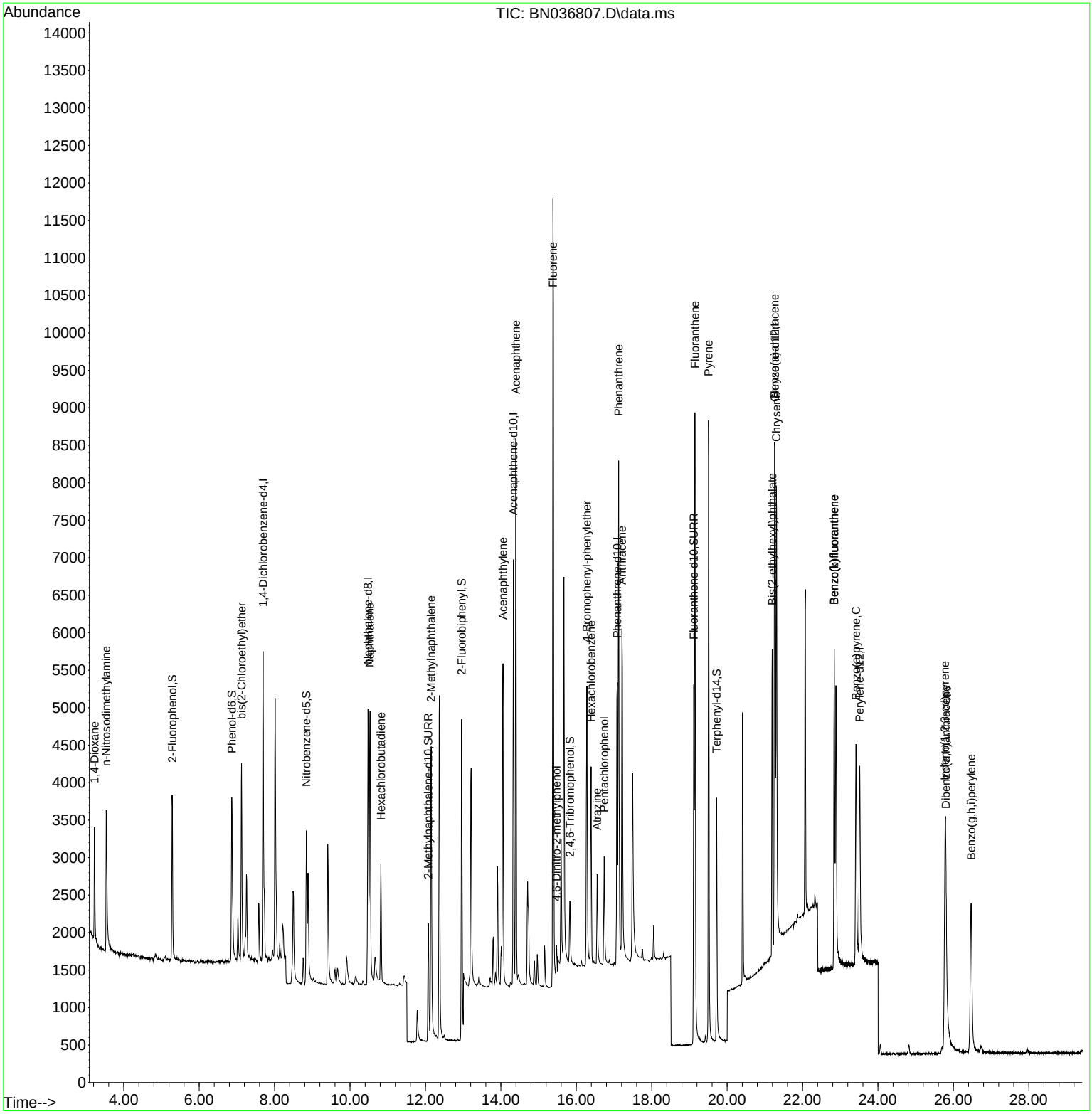
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.695 | 152 | 1976 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4956 | 0.400 | ng | | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 3044 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 6169 | 0.400 | ng | | #-0.02 |
| 29) Chrysene-d12 | 21.268 | 240 | 4366 | 0.400 | ng | | -0.03 |
| 35) Perylene-d12 | 23.516 | 264 | 3818 | 0.400 | ng | | #-0.04 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.290 | 112 | 1649 | 0.358 | ng | | -0.02 |
| 5) Phenol-d6 | 6.865 | 99 | 1932 | 0.340 | ng | | -0.04 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1802 | 0.334 | ng | | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2608 | 0.354 | ng | | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 513 | 0.371 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.958 | 172 | 5830 | 0.329 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 6077 | 0.384 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3821 | 0.365 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 902 | 0.411 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1839 | 0.415 | ng | | 92 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1990 | 0.338 | ng | | 99 |
| 9) Naphthalene | 10.530 | 128 | 5183 | 0.356 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 1228 | 0.358 | ng | # | 100 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 3312 | 0.357 | ng | | 98 |
| 16) Acenaphthylene | 14.056 | 152 | 5001 | 0.348 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3395 | 0.361 | ng | | 99 |
| 18) Fluorene | 15.382 | 166 | 4624 | 0.364 | ng | | 100 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 475 | 0.447 | ng | # | 73 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1424 | 0.368 | ng | | 93 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1729 | 0.371 | ng | | 97 |
| 23) Atrazine | 16.553 | 200 | 1168 | 0.377 | ng | | 96 |
| 24) Pentachlorophenol | 16.739 | 266 | 792 | 0.372 | ng | | 99 |
| 25) Phenanthrene | 17.124 | 178 | 6985 | 0.377 | ng | | 100 |
| 26) Anthracene | 17.211 | 178 | 6251 | 0.374 | ng | | 98 |
| 28) Fluoranthene | 19.146 | 202 | 8157 | 0.392 | ng | | 98 |
| 30) Pyrene | 19.508 | 202 | 8270 | 0.387 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5377 | 0.354 | ng | | 100 |
| 33) Chrysene | 21.304 | 228 | 6263 | 0.378 | ng | | 99 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4162 | 0.385 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.779 | 276 | 5188 | 0.376 | ng | | 93 |
| 37) Benzo(b)fluoranthene | 22.841 | 252 | 5191 | 0.374 | ng | | 98 |
| 38) Benzo(k)fluoranthene | 22.841 | 252 | 5191 | 0.356 | ng | | 97 |
| 39) Benzo(a)pyrene | 23.417 | 252 | 4547 | 0.389 | ng | | 96 |
| 40) Dibenzo(a,h)anthracene | 25.800 | 278 | 3712 | 0.346 | ng | | 96 |
| 41) Benzo(g,h,i)perylene | 26.472 | 276 | 4558 | 0.371 | ng | | 95 |

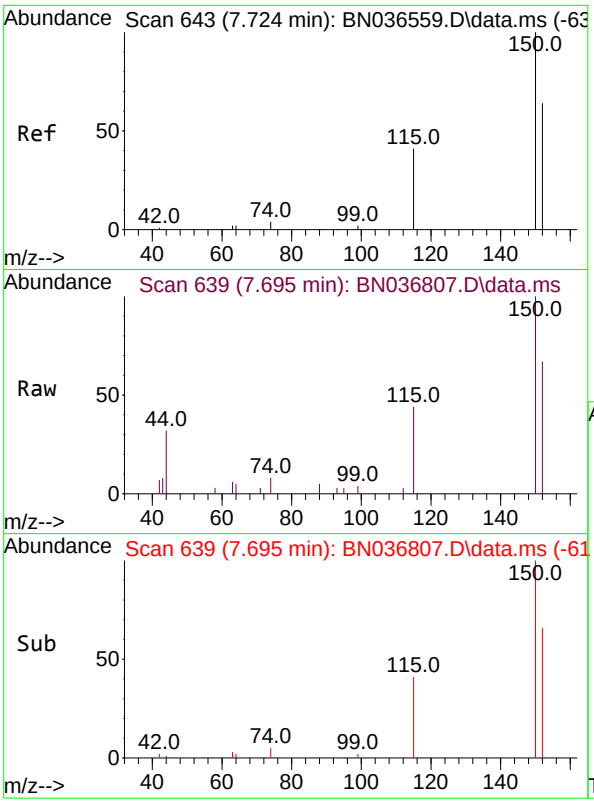
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN032825\
Data File : BN036807.D
Acq On : 29 Mar 2025 12:21
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 31 02:01:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



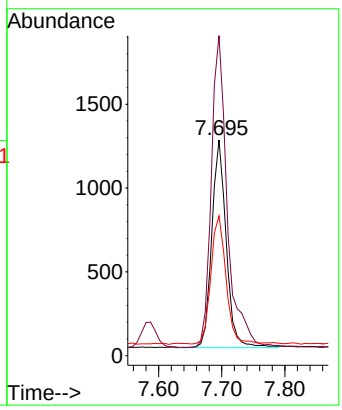


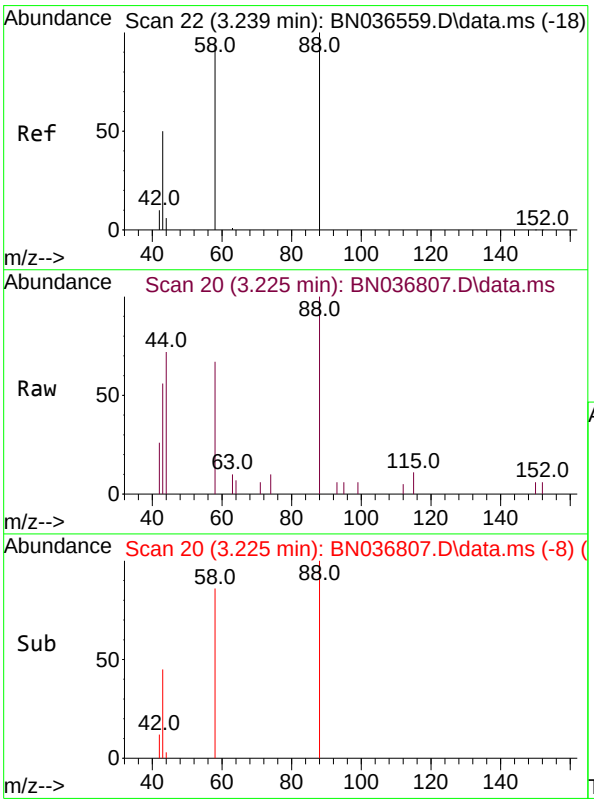

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.695 min Scan# 6
Delta R.T. -0.029 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 1976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 148.3 | 123.7 | 185.5 |
| 115 | 64.8 | 54.3 | 81.5 |

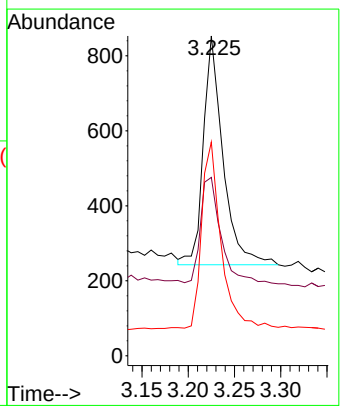


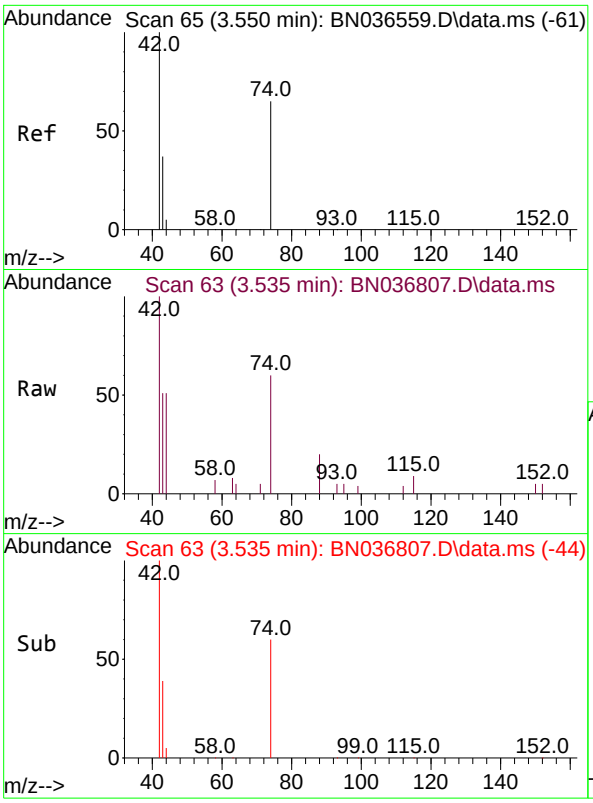




#2
1,4-Dioxane
Concen: 0.411 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 88 Resp: 902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 48.6 | 37.8 | 56.8 |
| 58 | 81.3 | 67.4 | 101.2 |



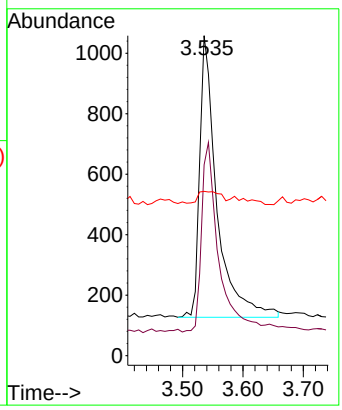


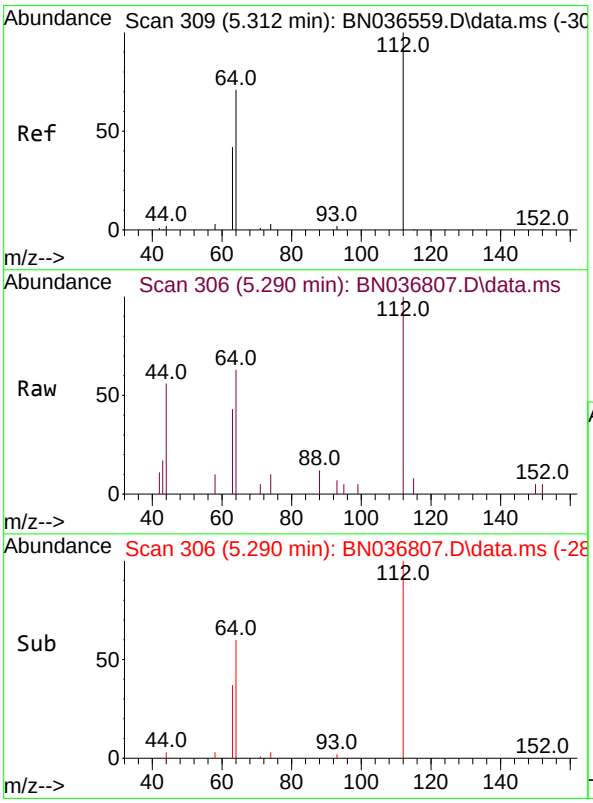

#3
n-Nitrosodimethylamine
Concen: 0.415 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 68.4 | 60.6 | 90.8 |
| 44 | 6.7 | 6.3 | 9.5 |

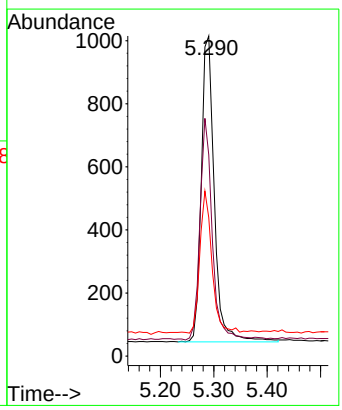


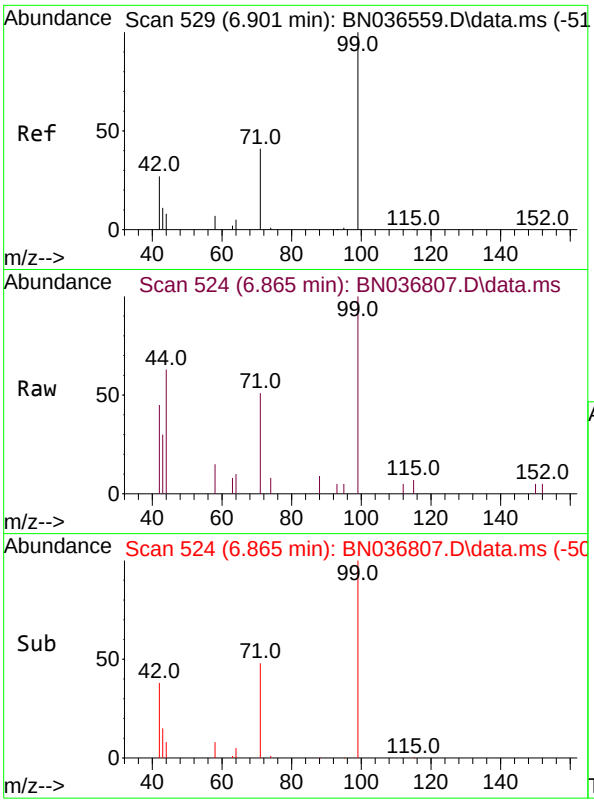




#4
2-Fluorophenol
Concen: 0.358 ng
RT: 5.290 min Scan# 306
Delta R.T. -0.022 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:112 Resp: 1649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 68.3 | 53.1 | 79.7 |
| 63 | 42.4 | 31.8 | 47.8 |



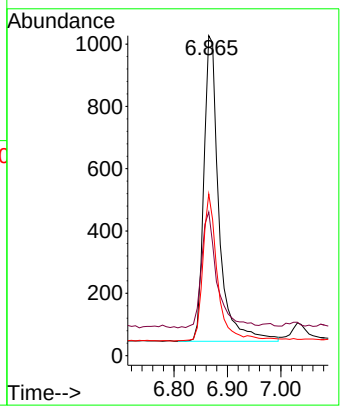


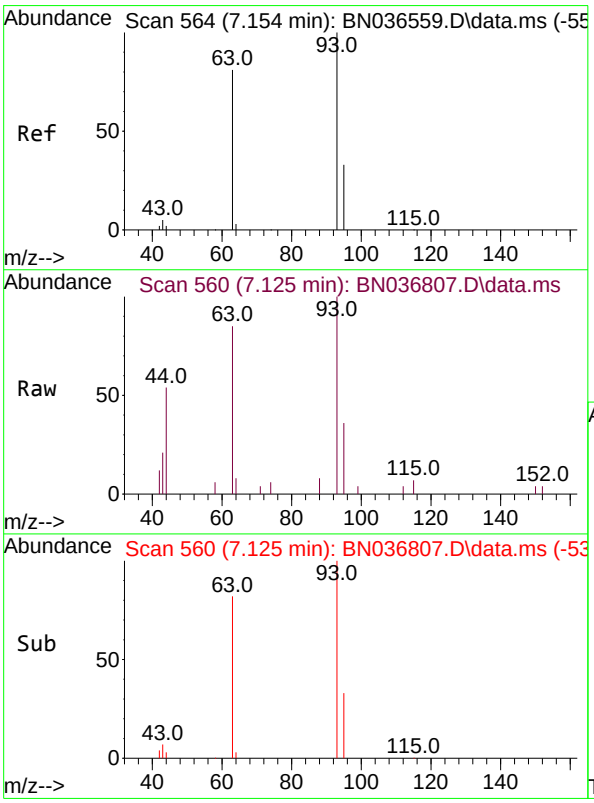

#5
Phenol-d6
Concen: 0.340 ng
RT: 6.865 min Scan# 5
Delta R.T. -0.036 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 1932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 39.4 | 26.5 | 39.7 |
| 71 | 46.4 | 34.1 | 51.1 |

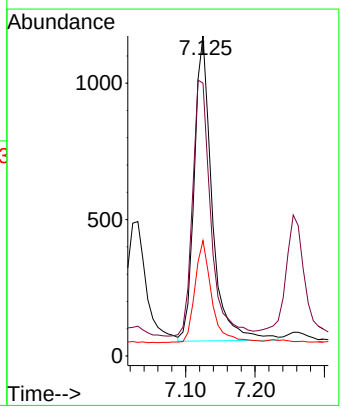


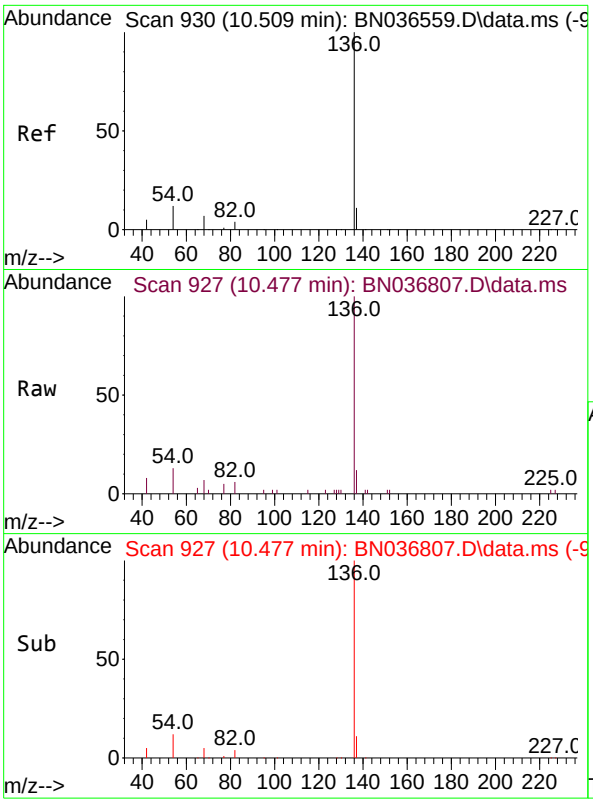




#6
bis(2-Chloroethyl)ether
Concen: 0.338 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 93 Resp: 1990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 86.3 | 67.7 | 101.5 |
| 95 | 31.9 | 25.6 | 38.4 |



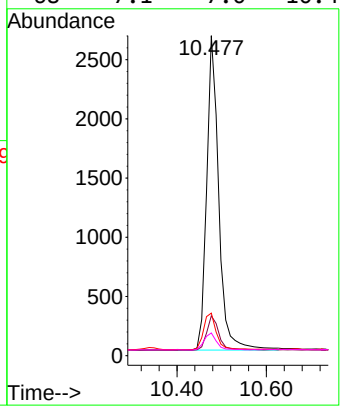


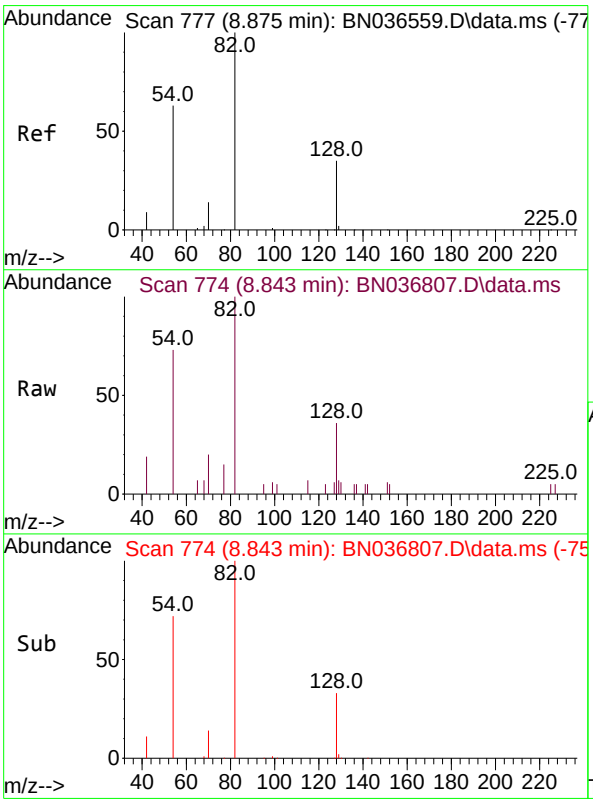

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4956

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.4 | 10.3 | 15.5 |
| 54 | 13.3 | 11.5 | 17.3 |
| 68 | 7.1 | 7.0 | 10.4 |

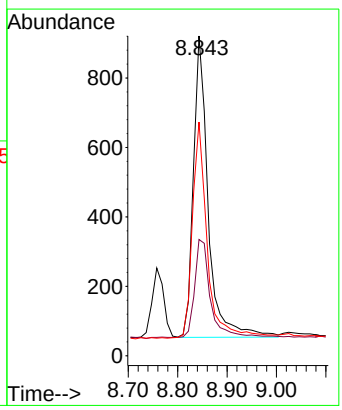


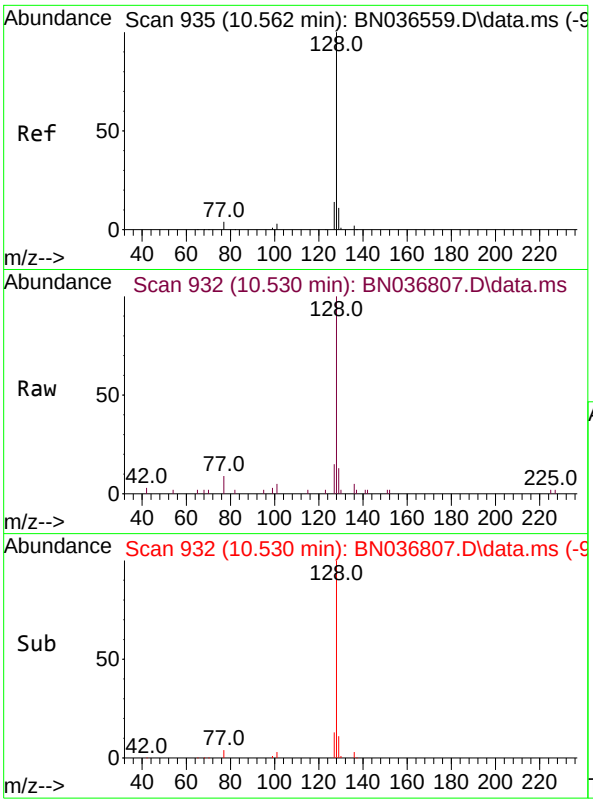




#8
Nitrobenzene-d5
Concen: 0.334 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion: 82 Resp: 1802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 36.4 | 30.6 | 45.8 |
| 54 | 73.1 | 52.2 | 78.4 |



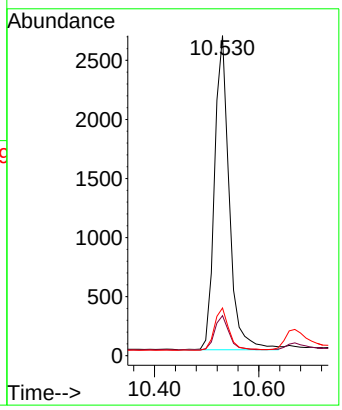


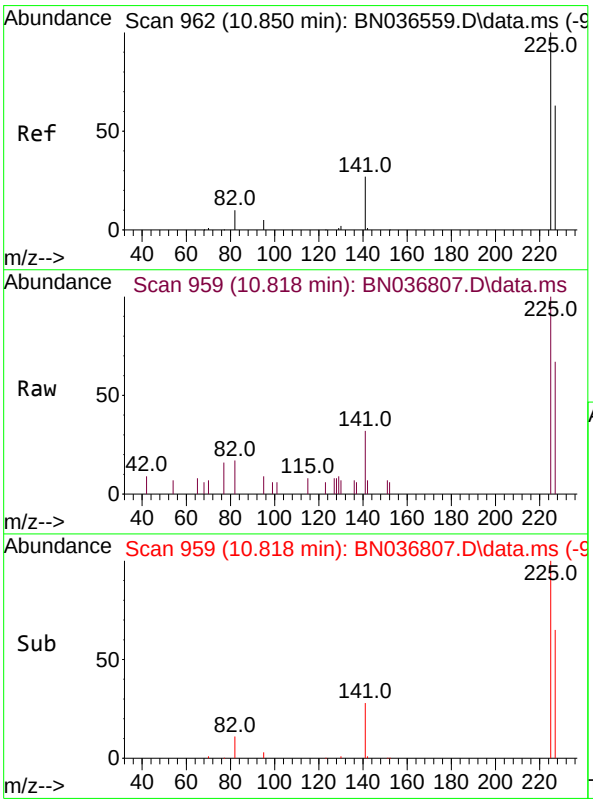

#9
Naphthalene
Concen: 0.356 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:128 Resp: 5183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.5 | 9.8 | 14.6 |
| 127 | 14.9 | 11.8 | 17.8 |

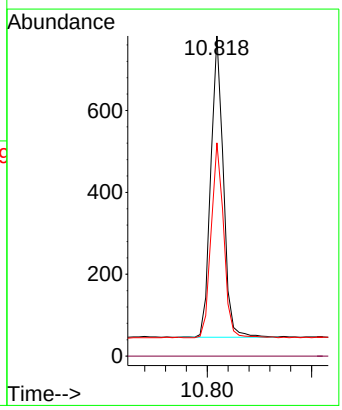


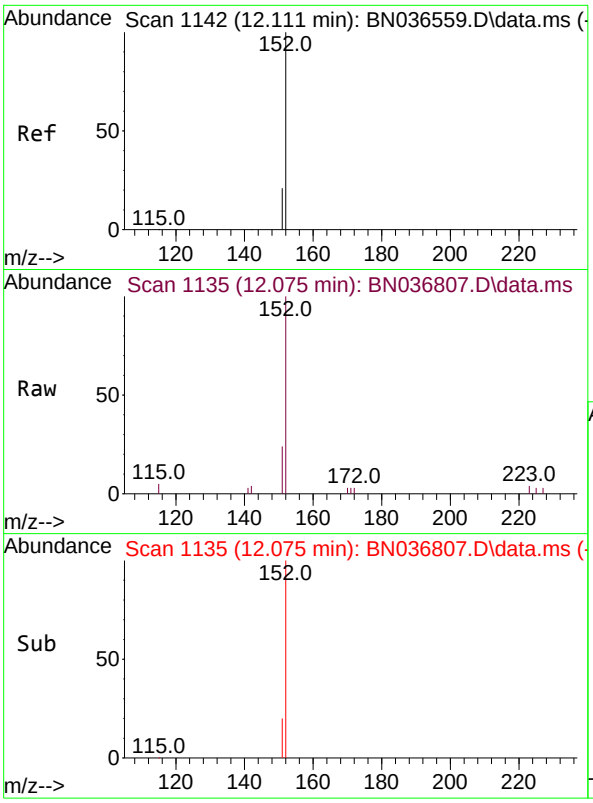




#10
Hexachlorobutadiene
Concen: 0.358 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:225 Resp: 1228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.7 | 51.8 | 77.8 |



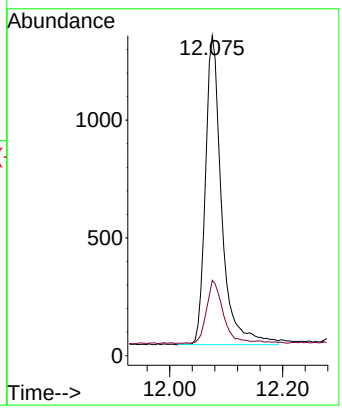


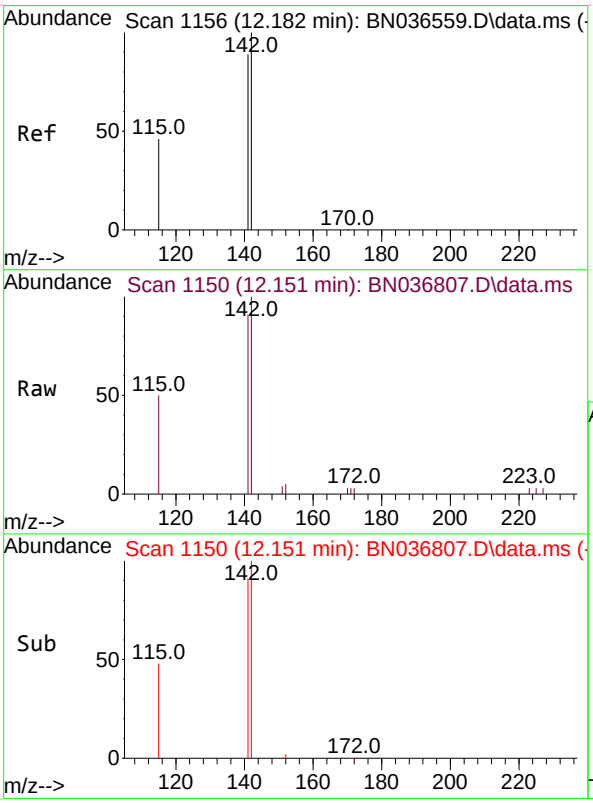

#11
2-Methylnaphthalene-d10
Concen: 0.354 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2608

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.6 | 17.0 | 25.6 |

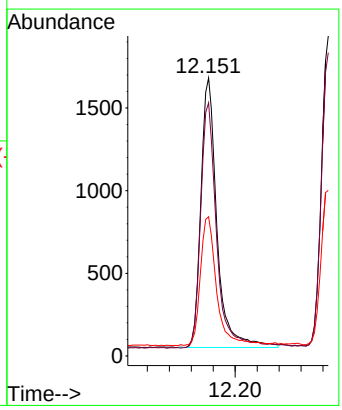


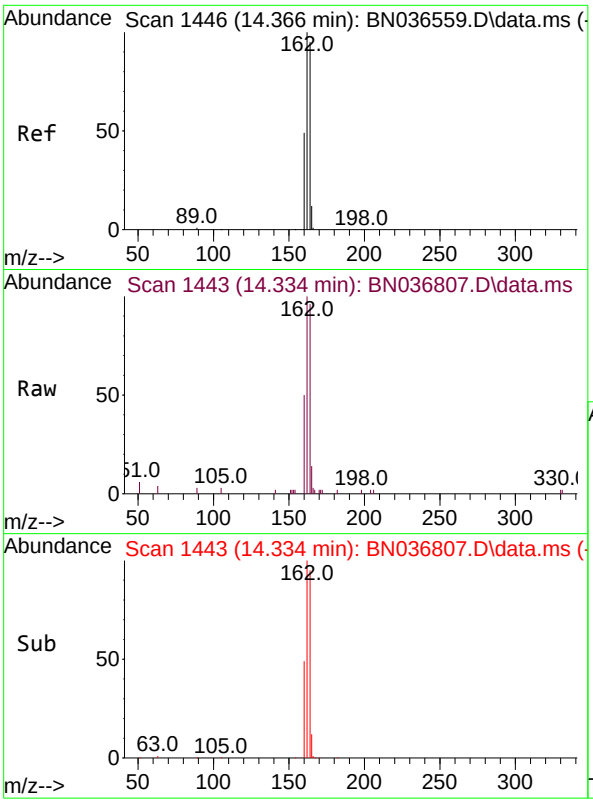




#12
2-Methylnaphthalene
Concen: 0.357 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:142 Resp: 3312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.0 | 71.7 | 107.5 |
| 115 | 50.1 | 38.3 | 57.5 |



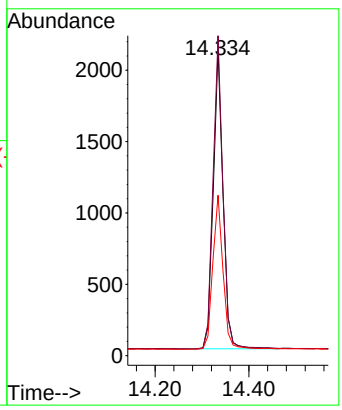


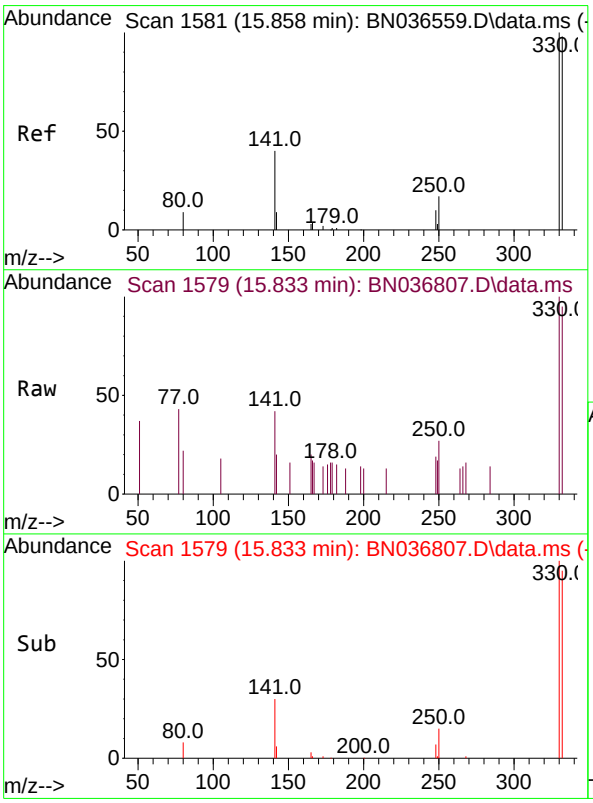

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:164 Resp: 3044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.5 | 84.2 | 126.2 |
| 160 | 52.4 | 42.2 | 63.2 |

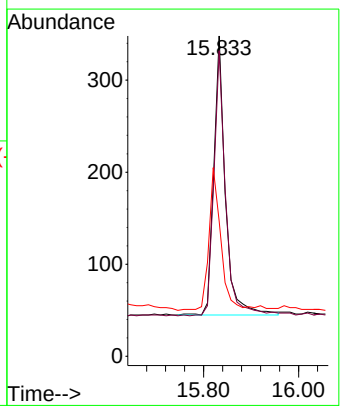


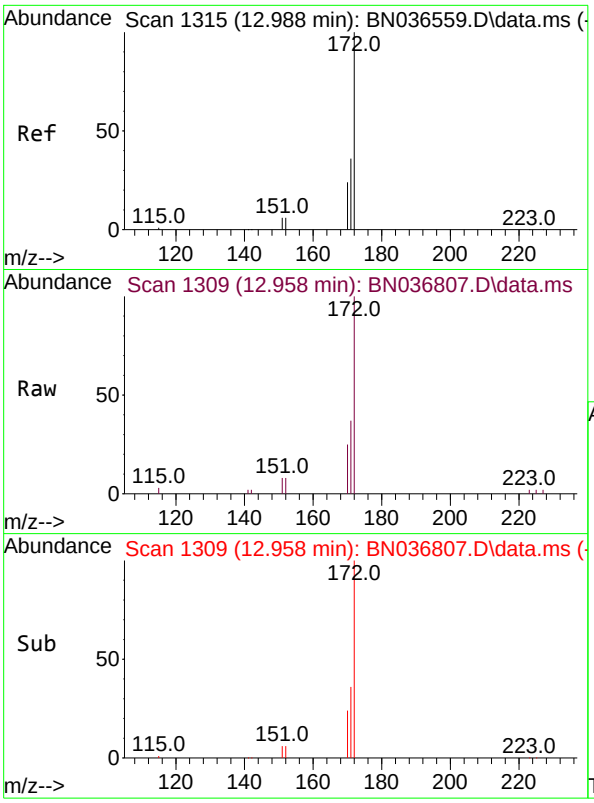




#14
2,4,6-Tribromophenol
Concen: 0.371 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:330 Resp: 513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 96.9 | 75.2 | 112.8 |
| 141 | 52.4 | 43.4 | 65.2 |



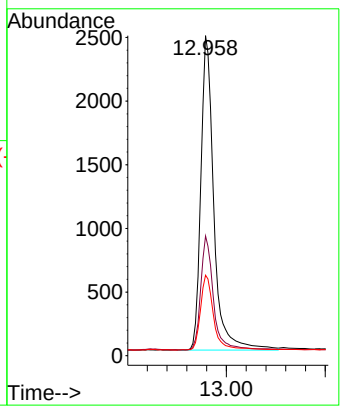


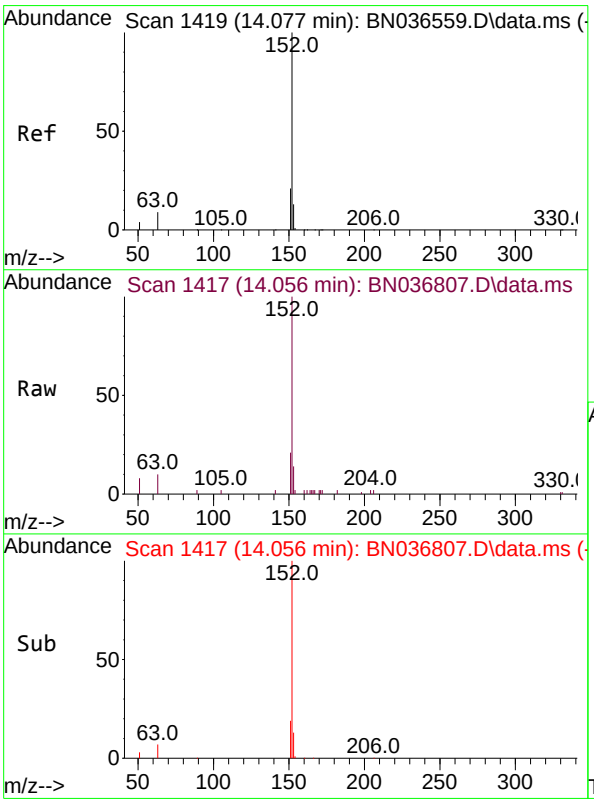

#15
2-Fluorobiphenyl
Concen: 0.329 ng
RT: 12.958 min Scan# 1
Delta R.T. -0.030 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:172 Resp: 5830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.4 | 29.5 | 44.3 |
| 170 | 25.2 | 20.2 | 30.4 |

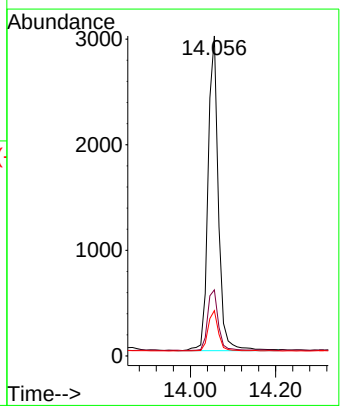


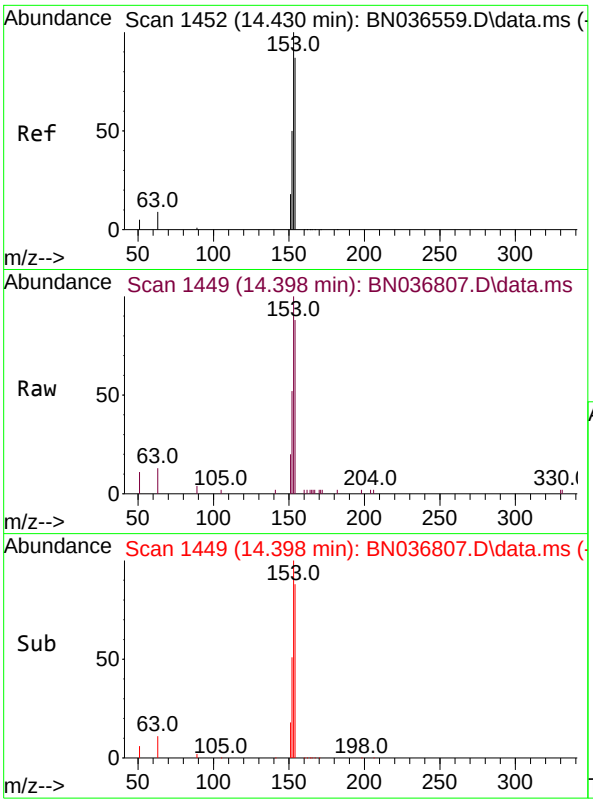




#16
Acenaphthylene
Concen: 0.348 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:152 Resp: 5001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.7 | 16.2 | 24.4 |
| 153 | 12.6 | 10.6 | 15.8 |



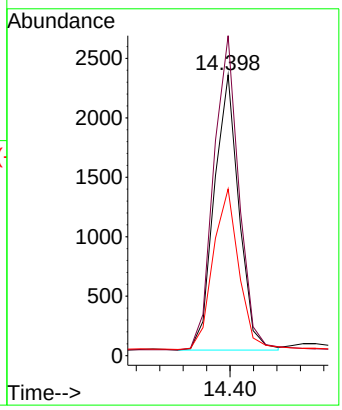


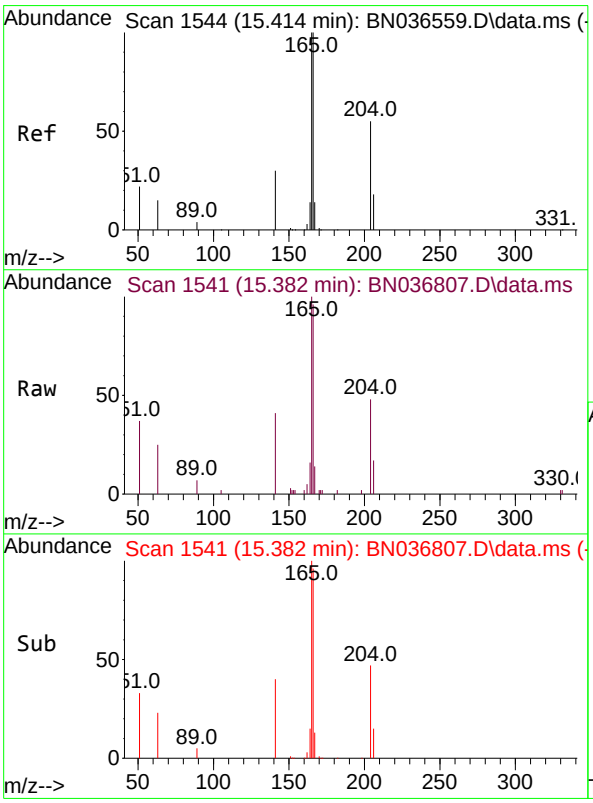

#17
Acenaphthene
Concen: 0.361 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:154 Resp: 3395

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 116.8 | 94.1 | 141.1 |
| 152 | 61.6 | 49.8 | 74.6 |

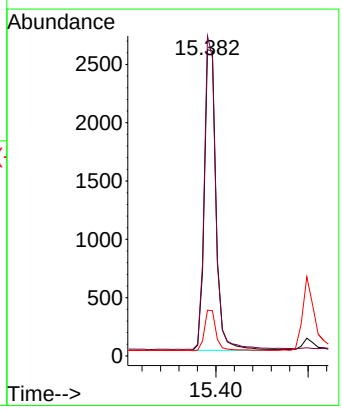


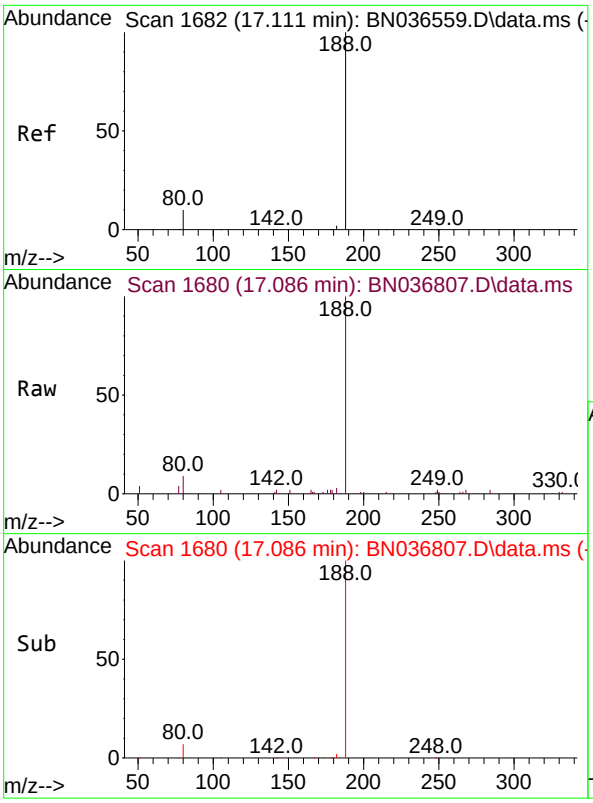




#18
Fluorene
Concen: 0.364 ng
RT: 15.382 min Scan# 1541
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:166 Resp: 4624

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.9 | 79.8 | 119.8 |
| 167 | 13.3 | 10.6 | 15.8 |



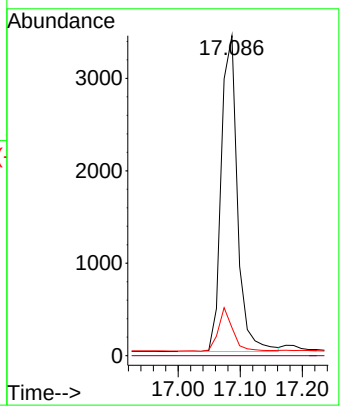


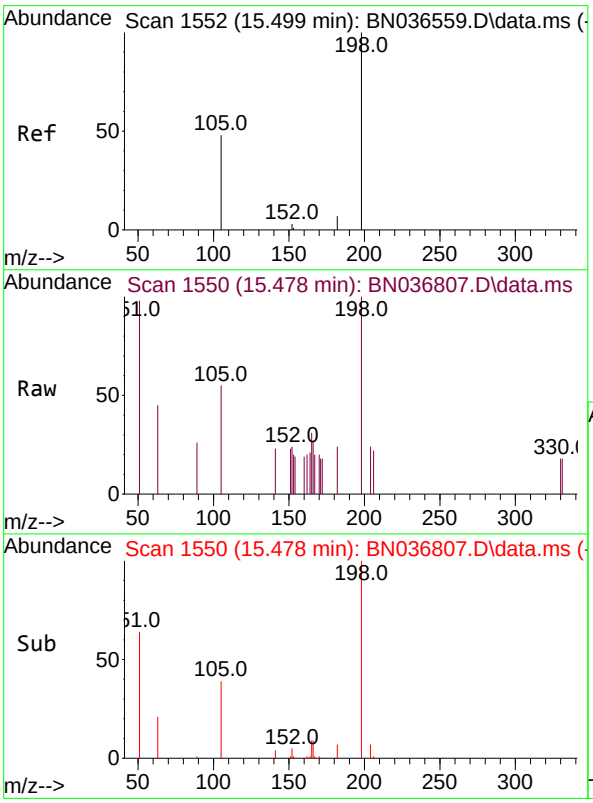

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:188 Resp: 6169

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 8.7 | 8.8 | 13.2# |

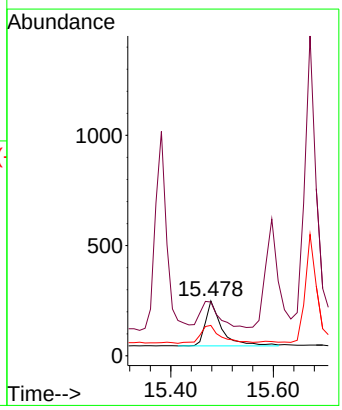


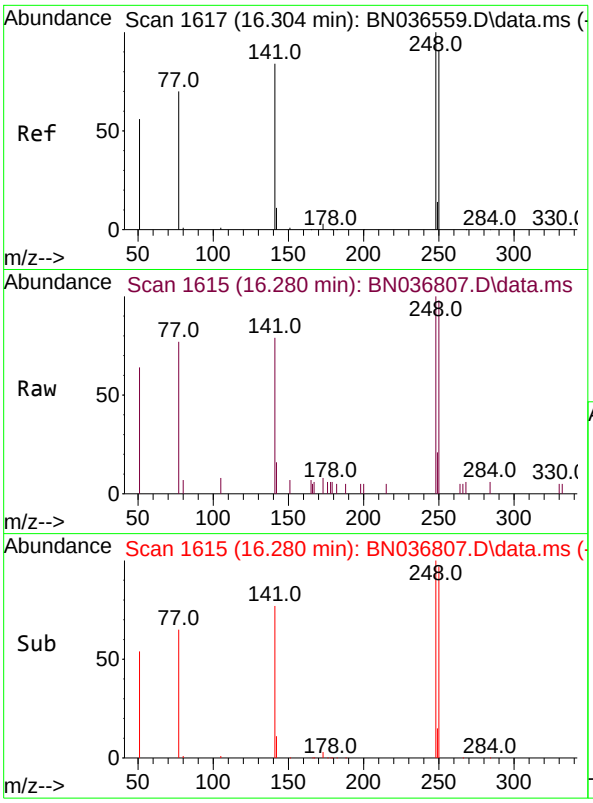




#20
4,6-Dinitro-2-methylphenol
Concen: 0.447 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:198 Resp: 475

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 98.0 | 107.9 | 161.9# |
| 105 | 55.4 | 56.2 | 84.2# |



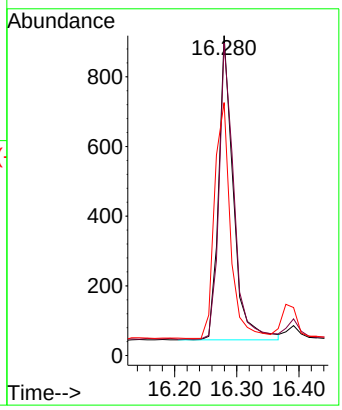


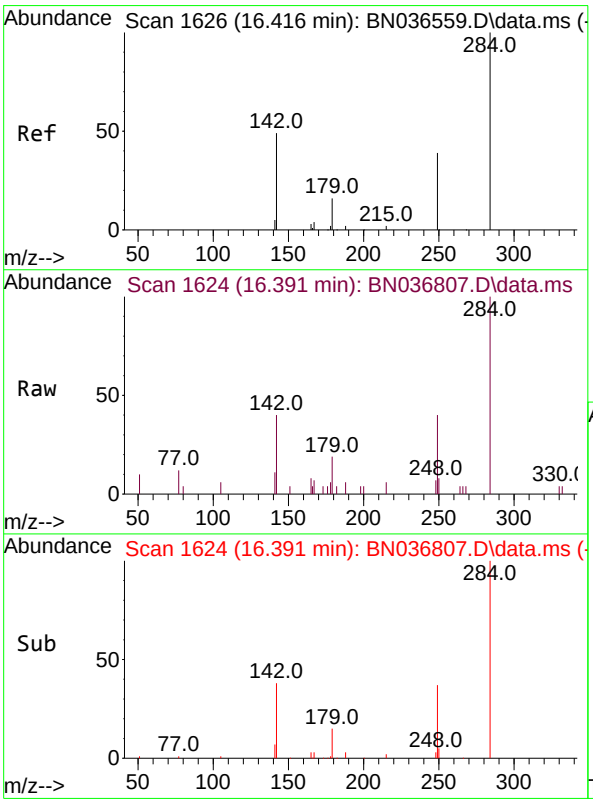

#21
4-Bromophenyl-phenylether
Concen: 0.368 ng
RT: 16.280 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 97.7 | 73.0 | 109.6 |
| 141 | 79.1 | 68.6 | 103.0 |

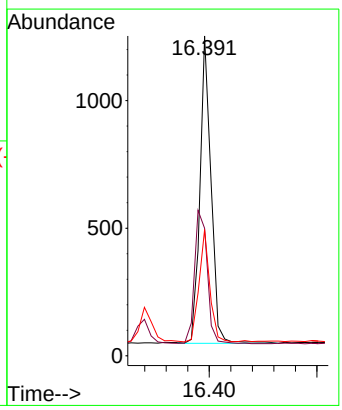


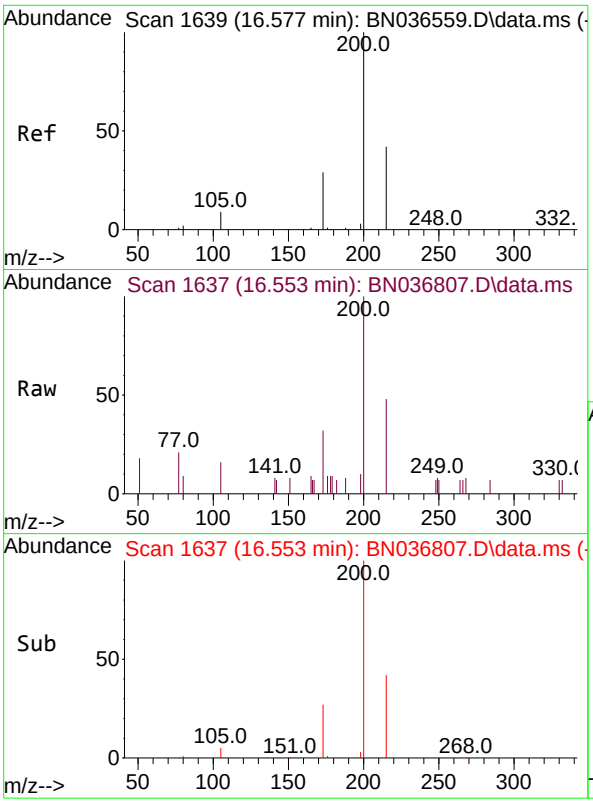




#22
Hexachlorobenzene
Concen: 0.371 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:284 Resp: 1729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.7 | 37.0 | 55.4 |
| 249 | 35.3 | 28.1 | 42.1 |



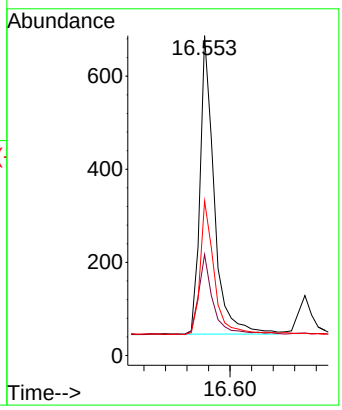


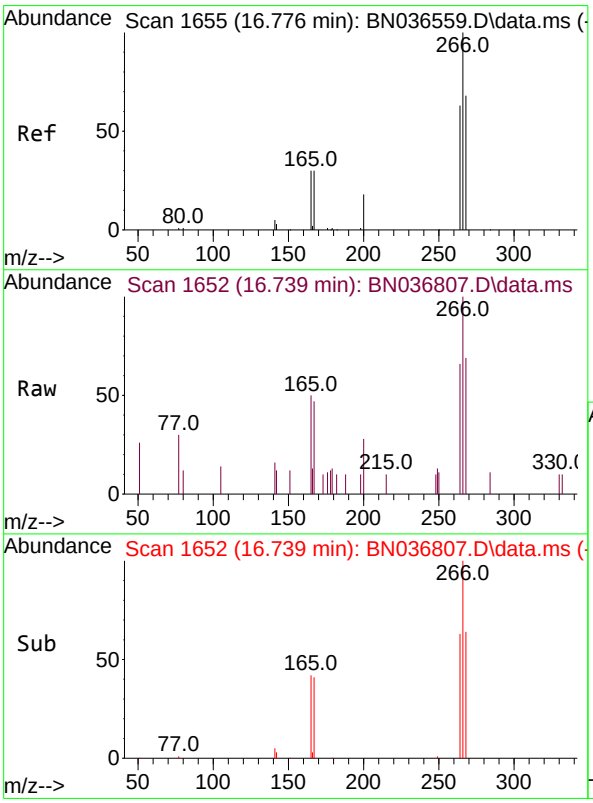

#23
Atrazine
Concen: 0.377 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1168

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 31.6 | 27.3 | 40.9 |
| 215 | 48.3 | 36.8 | 55.2 |

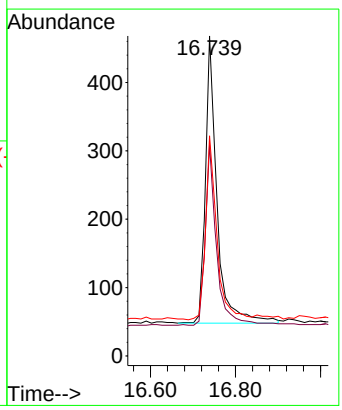


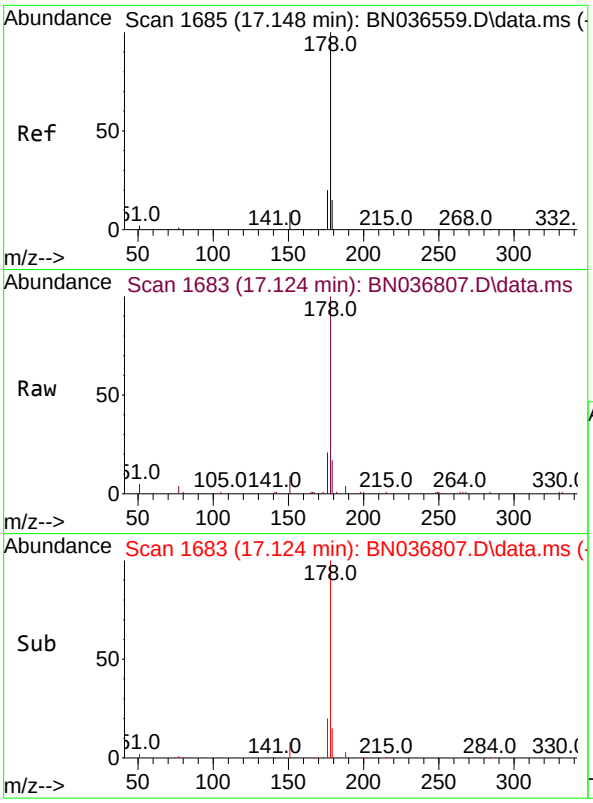




#24
Pentachlorophenol
Concen: 0.372 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:266 Resp: 792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 61.1 | 49.6 | 74.4 |
| 268 | 62.4 | 50.9 | 76.3 |



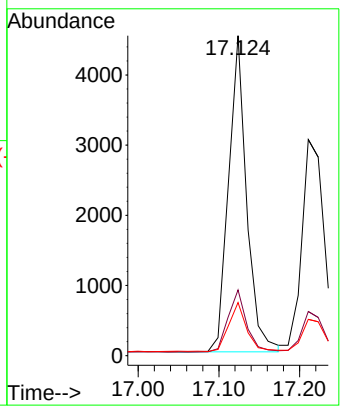


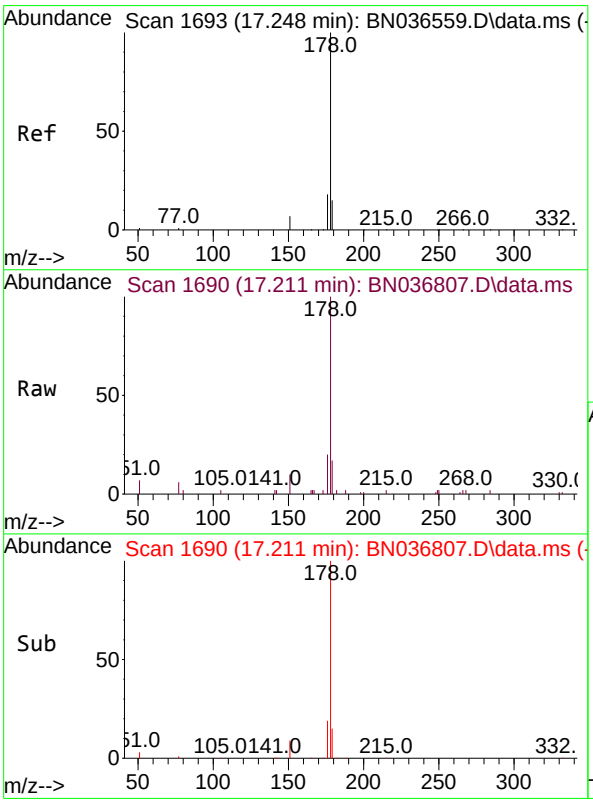

#25
Phenanthrene
Concen: 0.377 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:178 Resp: 6985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.3 | 12.2 | 18.4 |

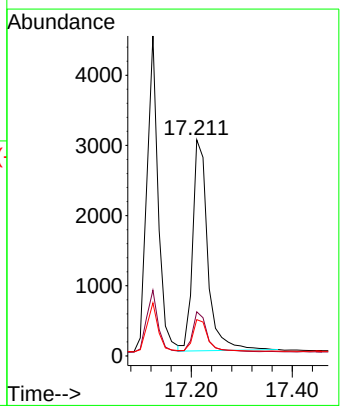


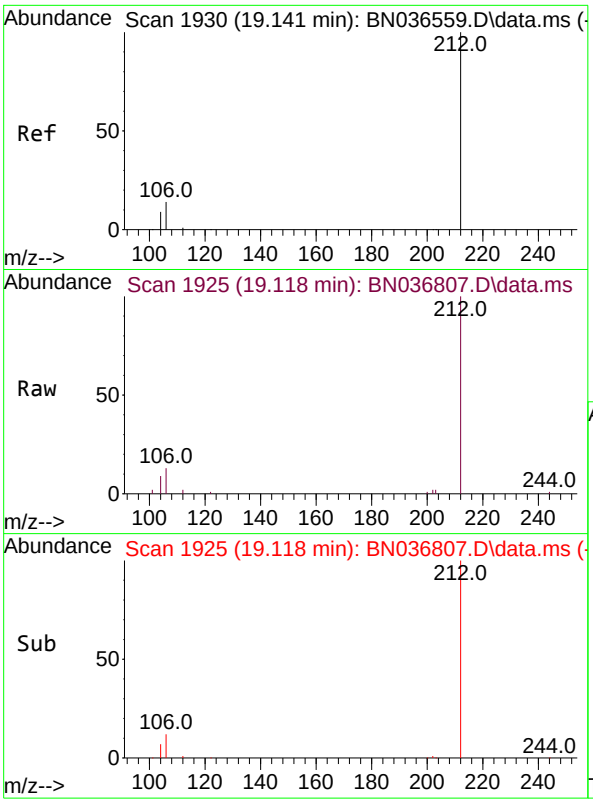




#26
Anthracene
Concen: 0.374 ng
RT: 17.211 min Scan# 1690
Delta R.T. -0.037 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:178 Resp: 6251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.3 | 15.4 | 23.2 |
| 179 | 15.1 | 12.6 | 18.8 |



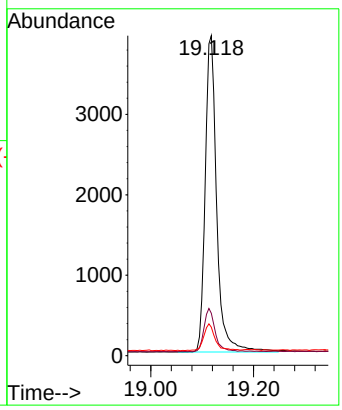


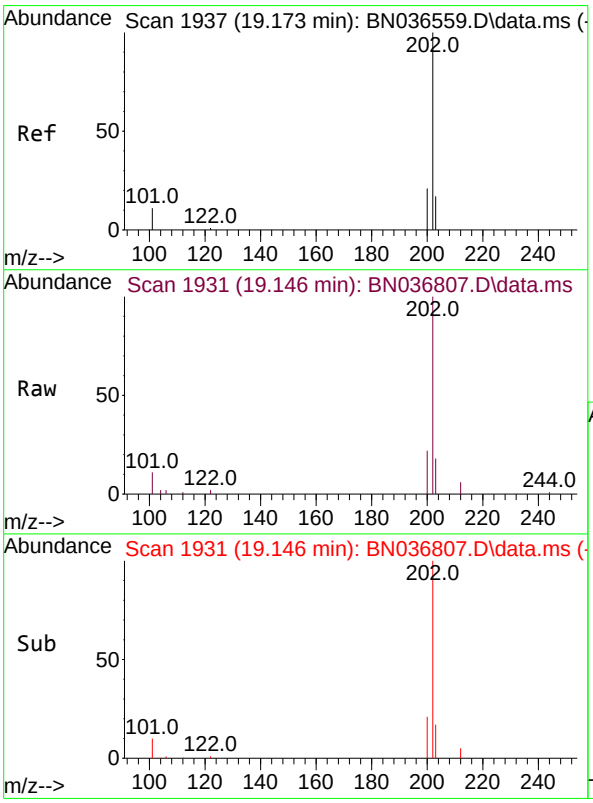

#27
Fluoranthene-d10
Concen: 0.384 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:212 Resp: 6077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.2 | 11.8 | 17.6 |
| 104 | 8.4 | 7.3 | 10.9 |

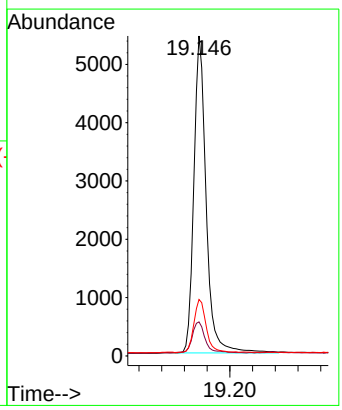


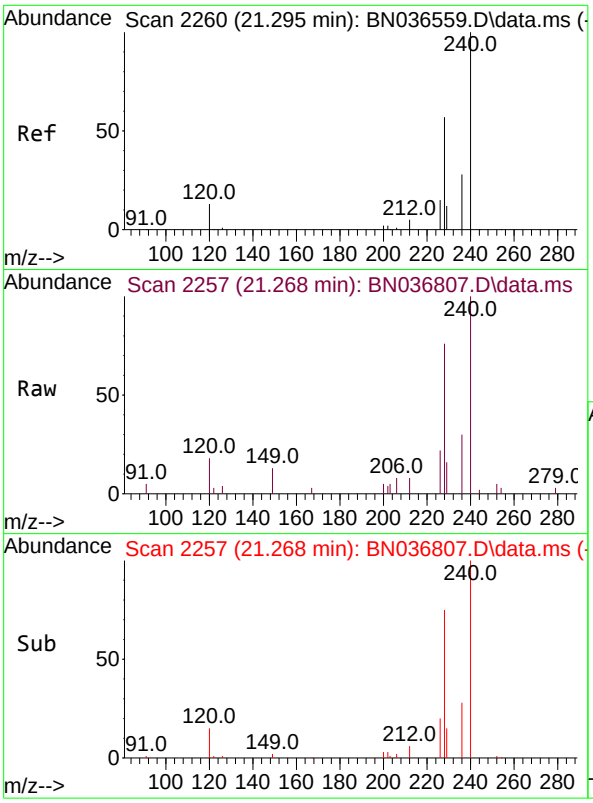




#28
Fluoranthene
Concen: 0.392 ng
RT: 19.146 min Scan# 1931
Delta R.T. -0.028 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:202 Resp: 8157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.2 | 9.4 | 14.0 |
| 203 | 16.8 | 13.5 | 20.3 |



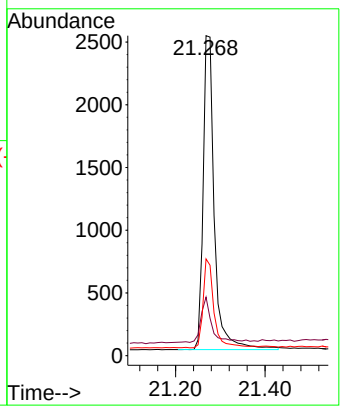


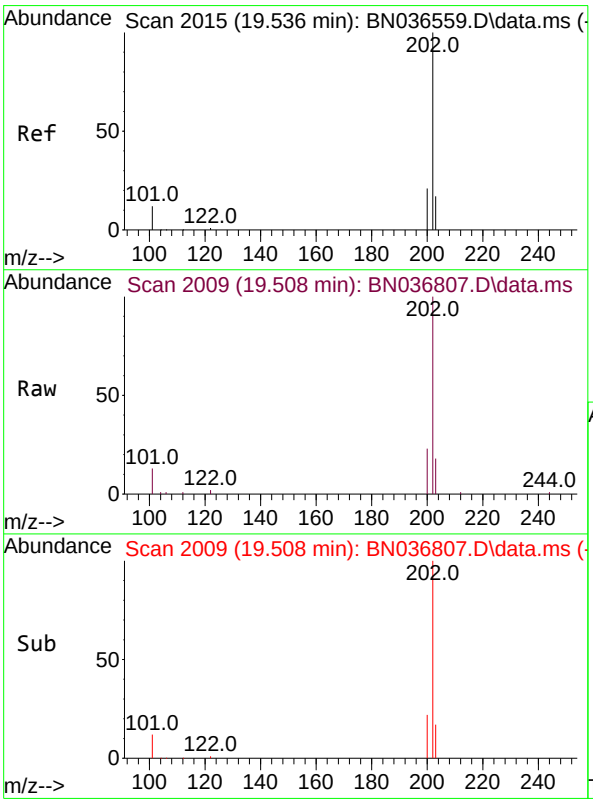

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:240 Resp: 4366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 18.3 | 14.6 | 22.0 |
| 236 | 30.3 | 24.1 | 36.1 |

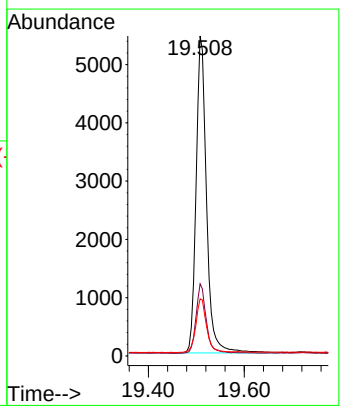


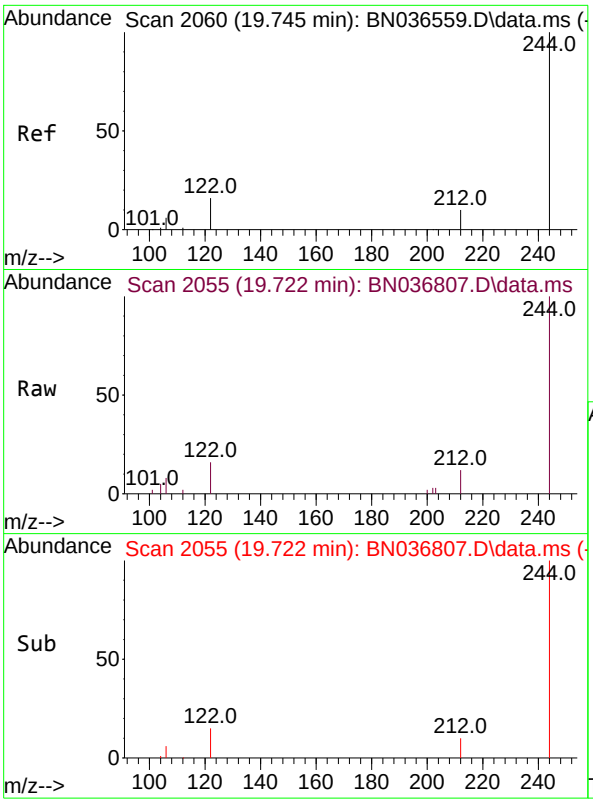




#30
Pyrene
Concen: 0.387 ng
RT: 19.508 min Scan# 2009
Delta R.T. -0.028 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:202 Resp: 8270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 17.1 | 25.7 |
| 203 | 17.4 | 14.1 | 21.1 |



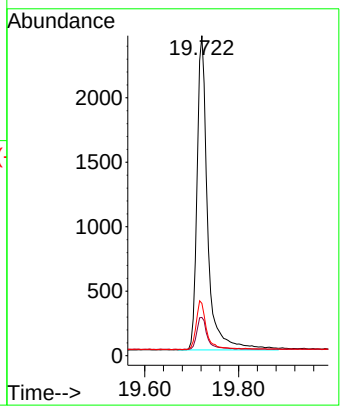


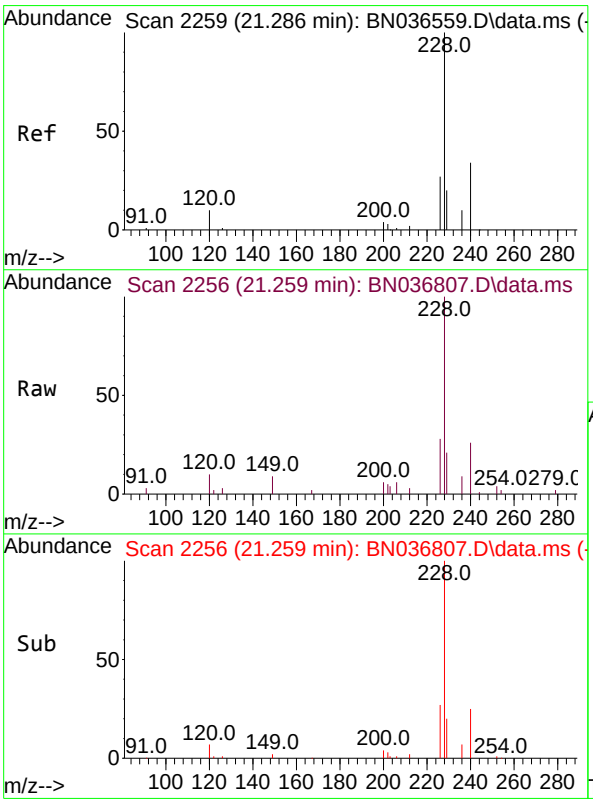

#31
Terphenyl-d14
Concen: 0.365 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:244 Resp: 3821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.0 | 9.6 | 14.4 |
| 122 | 16.4 | 13.9 | 20.9 |

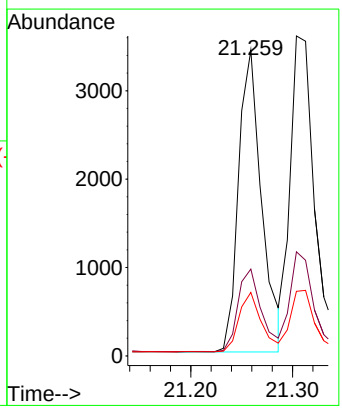


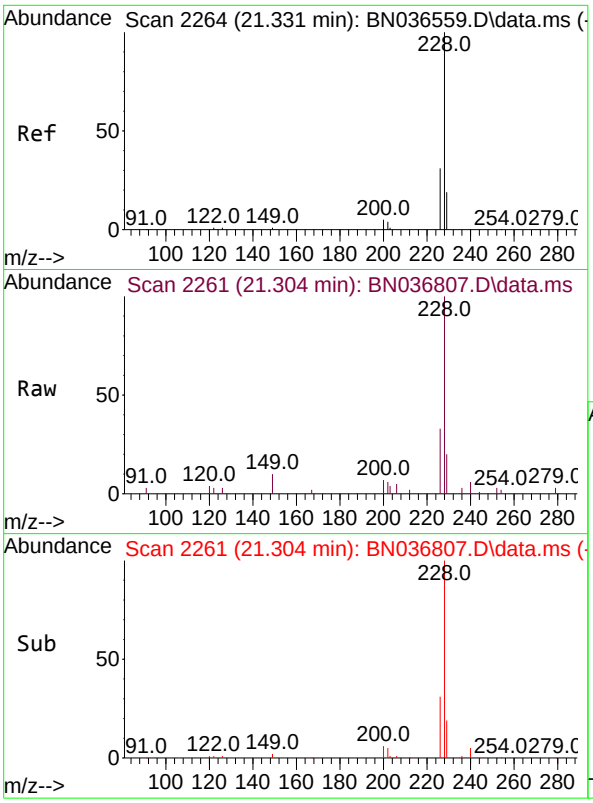




#32
Benzo(a)anthracene
Concen: 0.354 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:228 Resp: 5377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.4 | 22.5 | 33.7 |
| 229 | 20.8 | 16.6 | 25.0 |



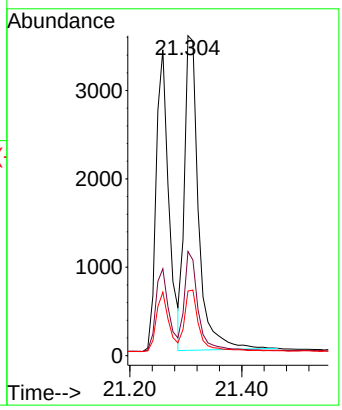


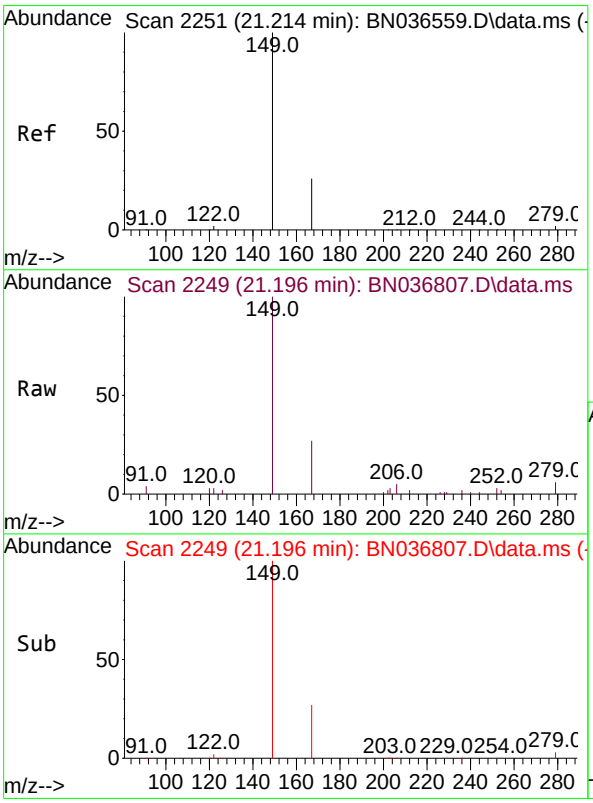

#33
Chrysene
Concen: 0.378 ng
RT: 21.304 min Scan# 2
Delta R.T. -0.027 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:228 Resp: 6263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.6 | 25.3 | 37.9 |
| 229 | 20.2 | 15.8 | 23.8 |

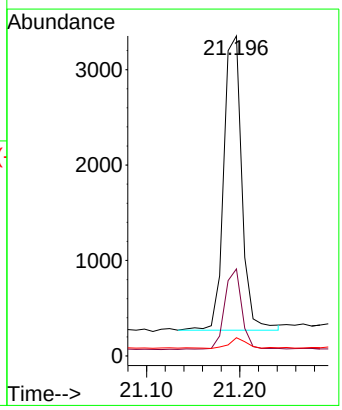


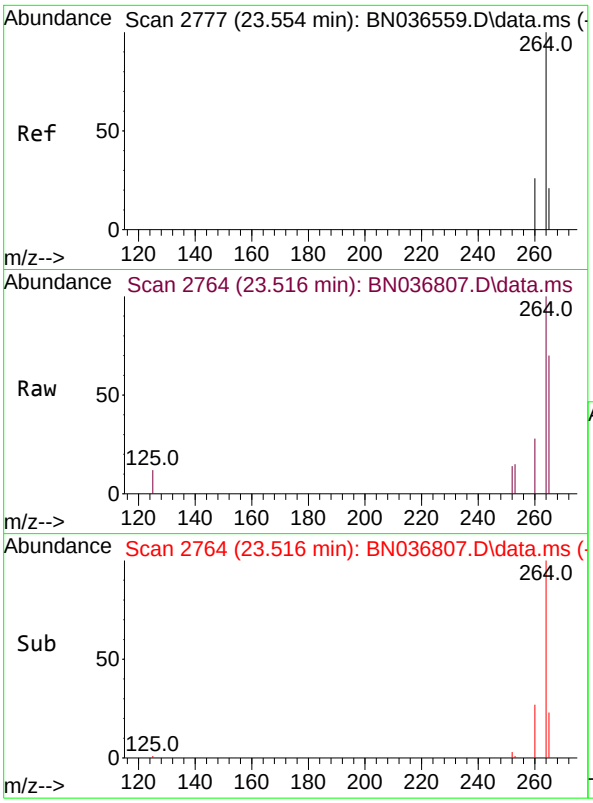




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.385 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:149 Resp: 4162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.1 | 20.7 | 31.1 |
| 279 | 3.6 | 3.6 | 5.4# |



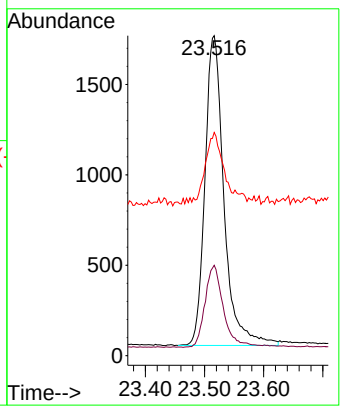


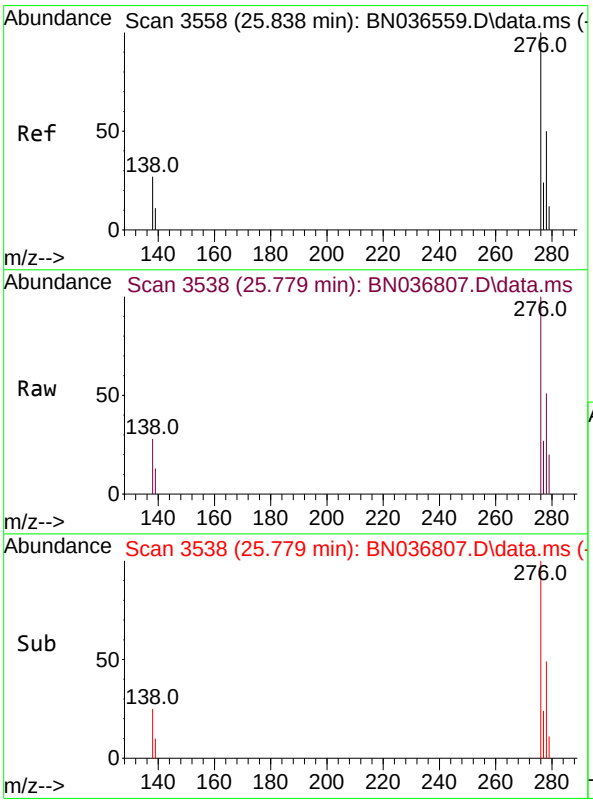

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.516 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:264 Resp: 3818

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 28.2 | 22.6 | 33.8 |
| 265 | 69.8 | 88.1 | 132.1# |

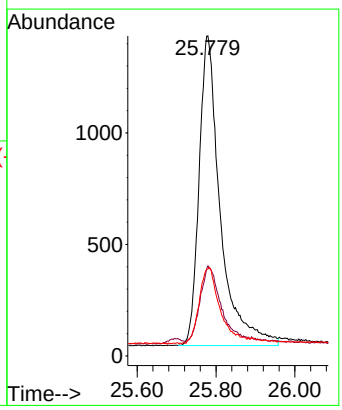


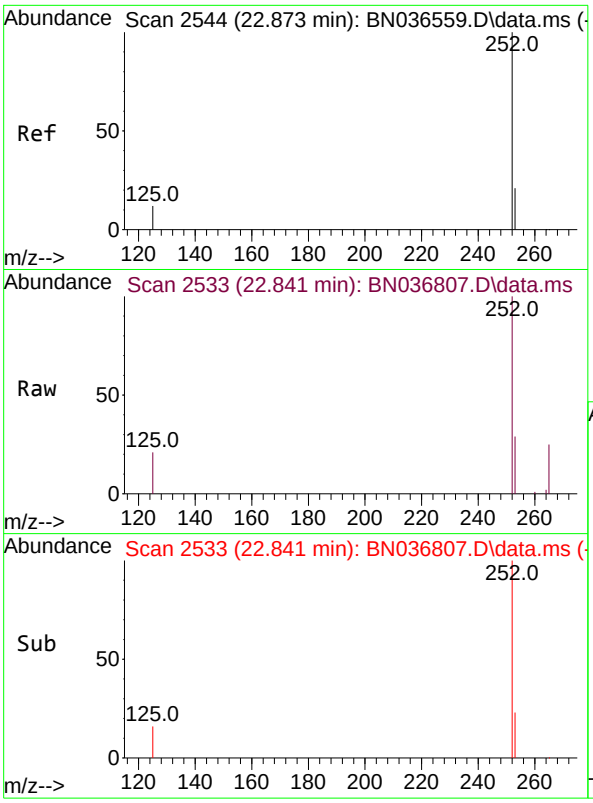




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.376 ng
RT: 25.779 min Scan# 3538
Delta R.T. -0.058 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:276 Resp: 5188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.1 | 23.4 | 35.2 |
| 277 | 23.0 | 20.0 | 30.0 |



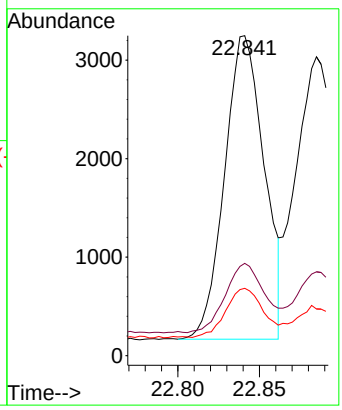


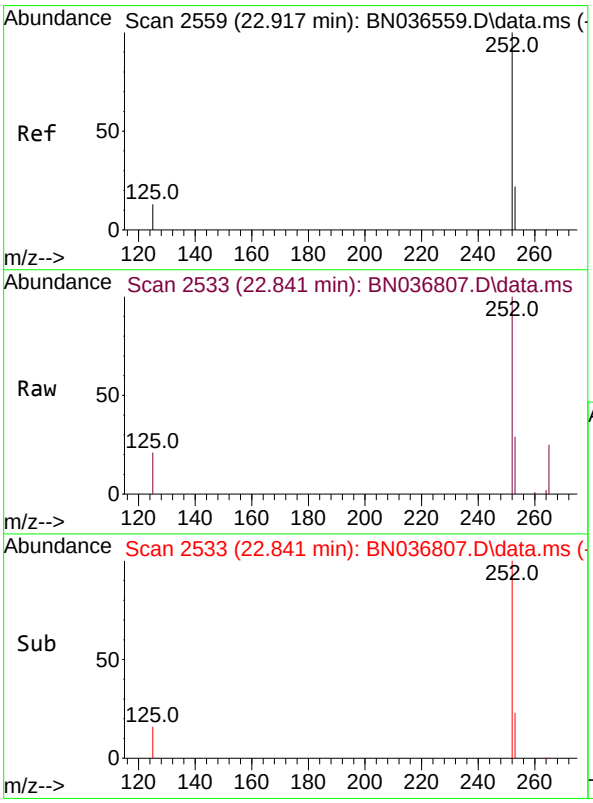

#37
Benzo(b)fluoranthene
Concen: 0.374 ng
RT: 22.841 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 5191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.9 | 23.9 | 35.9 |
| 125 | 21.1 | 17.4 | 26.2 |

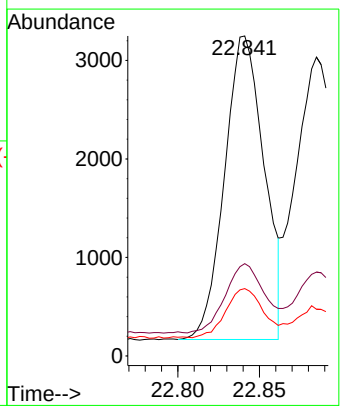


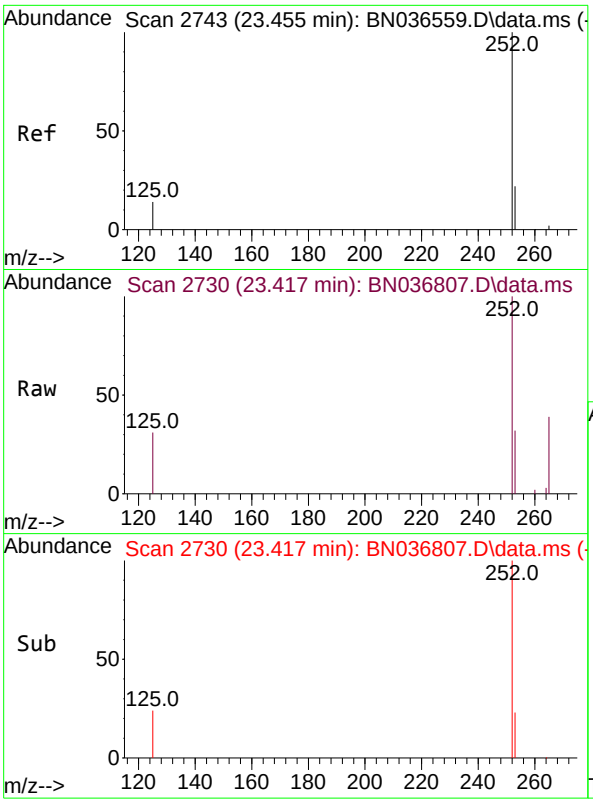




#38
Benzo(k)fluoranthene
Concen: 0.356 ng
RT: 22.841 min Scan# 2533
Delta R.T. -0.076 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:252 Resp: 5191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.9 | 24.6 | 36.8 |
| 125 | 21.1 | 17.8 | 26.8 |



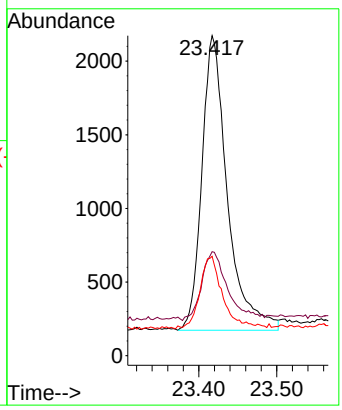


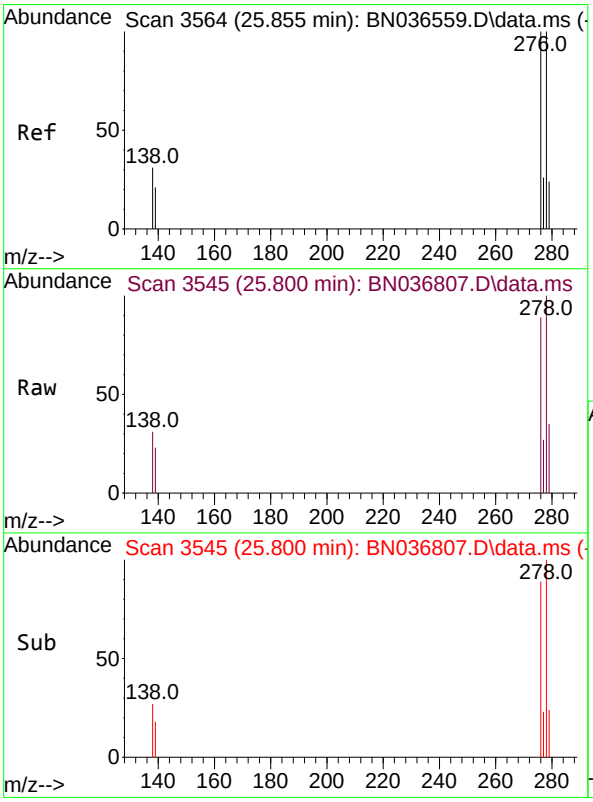

#39
Benzo(a)pyrene
Concen: 0.389 ng
RT: 23.417 min Scan# 2
Delta R.T. -0.038 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 4547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 32.5 | 27.8 | 41.8 |
| 125 | 31.1 | 22.7 | 34.1 |

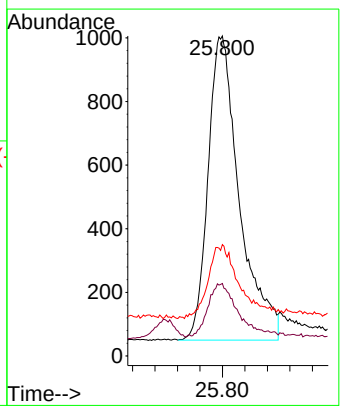


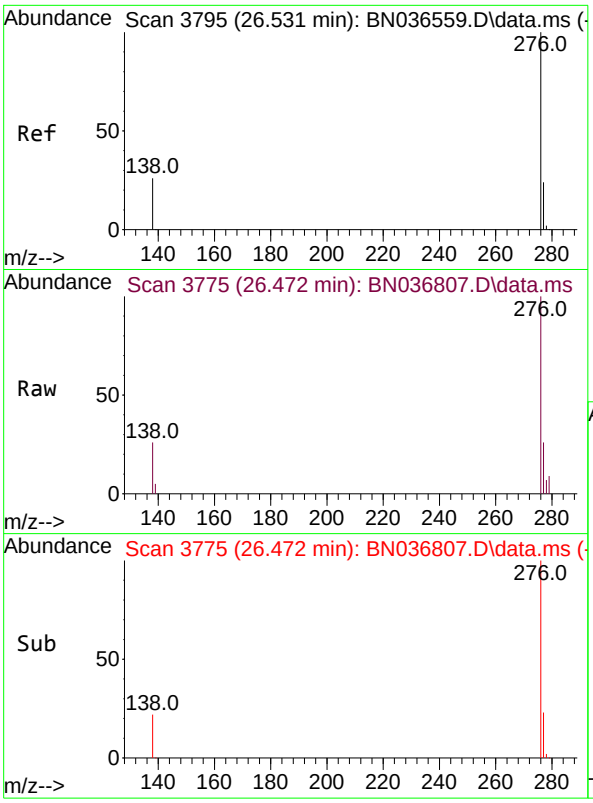




#40
Dibenzo(a,h)anthracene
Concen: 0.346 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.055 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

Tgt Ion:278 Resp: 3712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 22.7 | 20.8 | 31.2 |
| 279 | 34.8 | 28.8 | 43.2 |



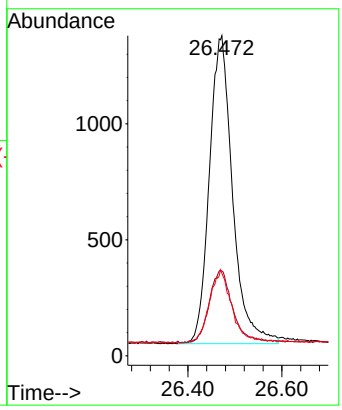



#41
Benzo(g,h,i)perylene
Concen: 0.371 ng
RT: 26.472 min Scan# 3
Delta R.T. -0.058 min
Lab File: BN036807.D
Acq: 29 Mar 2025 12:21

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:276 Resp: 4558

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.4 | 22.2 | 33.4 |
| 138 | 25.8 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036809.D
Acq On : 31 Mar 2025 10:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 12:10:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.695 | 152 | 1888 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4656 | 0.400 | ng | | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2798 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.086 | 188 | 5809 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 4586 | 0.400 | ng | | #-0.02 |
| 35) Perylene-d12 | 23.522 | 264 | 3945 | 0.400 | ng | | #-0.03 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.283 | 112 | 1544 | 0.351 | ng | | -0.03 |
| 5) Phenol-d6 | 6.865 | 99 | 1799 | 0.331 | ng | | -0.04 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1689 | 0.333 | ng | | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2501 | 0.361 | ng | | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 451 | 0.355 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.958 | 172 | 5537 | 0.340 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5750 | 0.386 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.722 | 244 | 3660 | 0.333 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 857 | 0.409 | ng | | 96 |
| 3) n-Nitrosodimethylamine | 3.535 | 42 | 1677 | 0.396 | ng | | 93 |
| 6) bis(2-Chloroethyl)ether | 7.125 | 93 | 1889 | 0.336 | ng | | 98 |
| 9) Naphthalene | 10.530 | 128 | 4851 | 0.354 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 1142 | 0.354 | ng | # | 98 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 3144 | 0.361 | ng | | 99 |
| 16) Acenaphthylene | 14.056 | 152 | 4617 | 0.350 | ng | | 99 |
| 17) Acenaphthene | 14.398 | 154 | 3162 | 0.366 | ng | | 99 |
| 18) Fluorene | 15.382 | 166 | 4232 | 0.362 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 405 | 0.419 | ng | | 86 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1292 | 0.355 | ng | | 93 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1587 | 0.361 | ng | | 97 |
| 23) Atrazine | 16.553 | 200 | 1096 | 0.376 | ng | | 98 |
| 24) Pentachlorophenol | 16.739 | 266 | 743 | 0.371 | ng | | 98 |
| 25) Phenanthrene | 17.124 | 178 | 6581 | 0.378 | ng | | 100 |
| 26) Anthracene | 17.211 | 178 | 5583 | 0.355 | ng | | 100 |
| 28) Fluoranthene | 19.150 | 202 | 7591 | 0.388 | ng | | 99 |
| 30) Pyrene | 19.513 | 202 | 7799 | 0.348 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.259 | 228 | 5377 | 0.337 | ng | | 98 |
| 33) Chrysene | 21.313 | 228 | 6640 | 0.381 | ng | | 98 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 4143 | 0.365 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.782 | 276 | 5019 | 0.352 | ng | | 94 |
| 37) Benzo(b)fluoranthene | 22.844 | 252 | 5495 | 0.383 | ng | | 98 |
| 38) Benzo(k)fluoranthene | 22.844 | 252 | 5495 | 0.365 | ng | | 97 |
| 39) Benzo(a)pyrene | 23.423 | 252 | 4679 | 0.387 | ng | | 96 |
| 40) Dibenzo(a,h)anthracene | 25.805 | 278 | 3655 | 0.330 | ng | | 99 |
| 41) Benzo(g,h,i)perylene | 26.472 | 276 | 4543 | 0.358 | ng | | 97 |

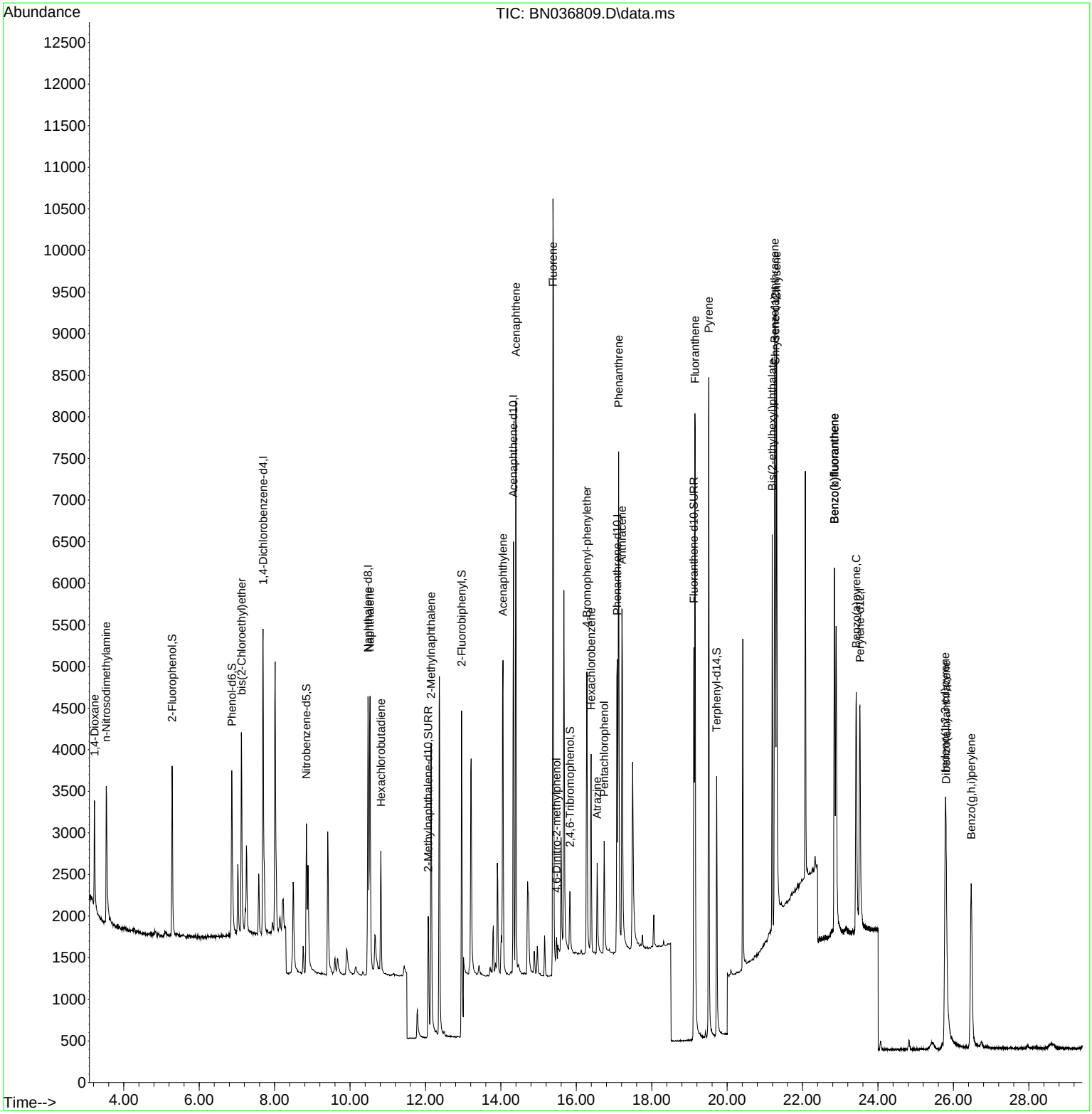
(#) = qualifier out of range (m) = manual integration (+) = signals summed

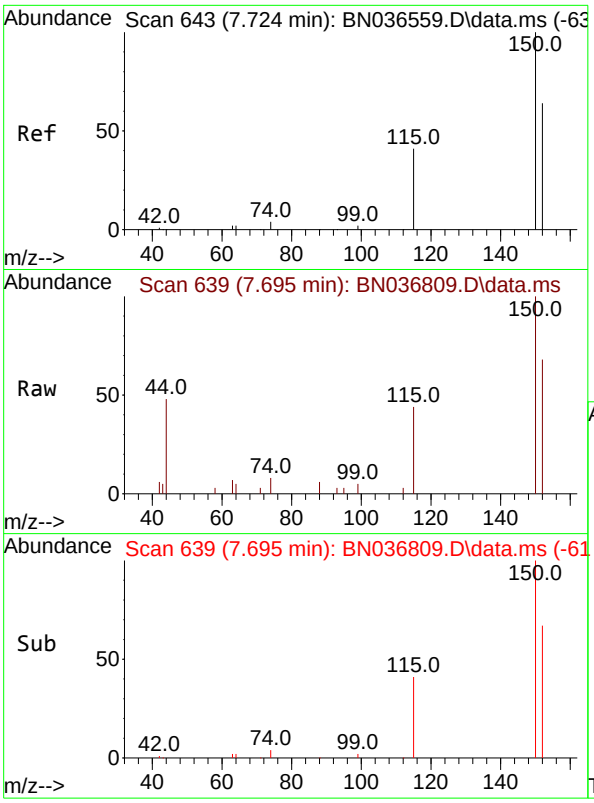
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036809.D
Acq On : 31 Mar 2025 10:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Quant Time: Mar 31 12:10:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



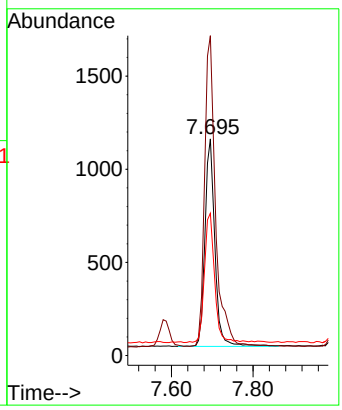


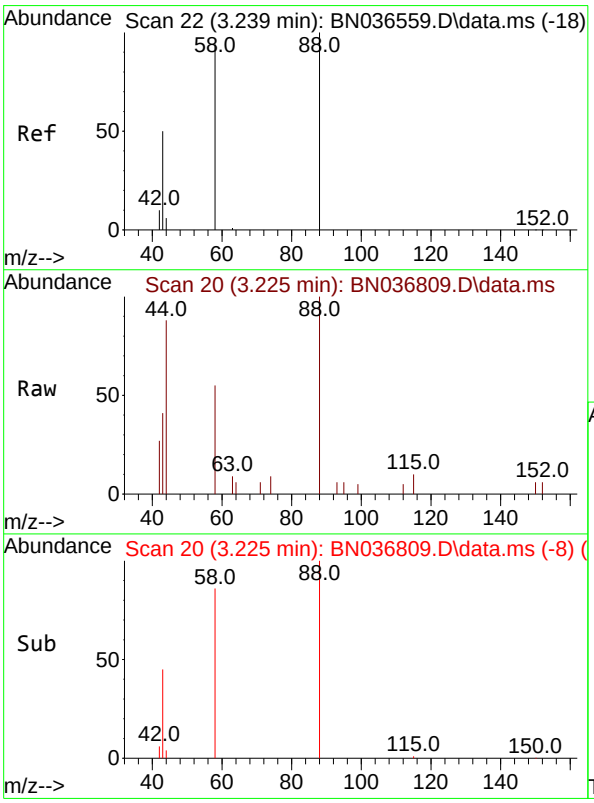

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.695 min Scan# 6
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 1888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 147.6 | 123.7 | 185.5 |
| 115 | 65.7 | 54.3 | 81.5 |

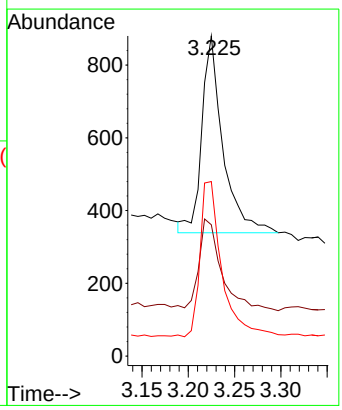


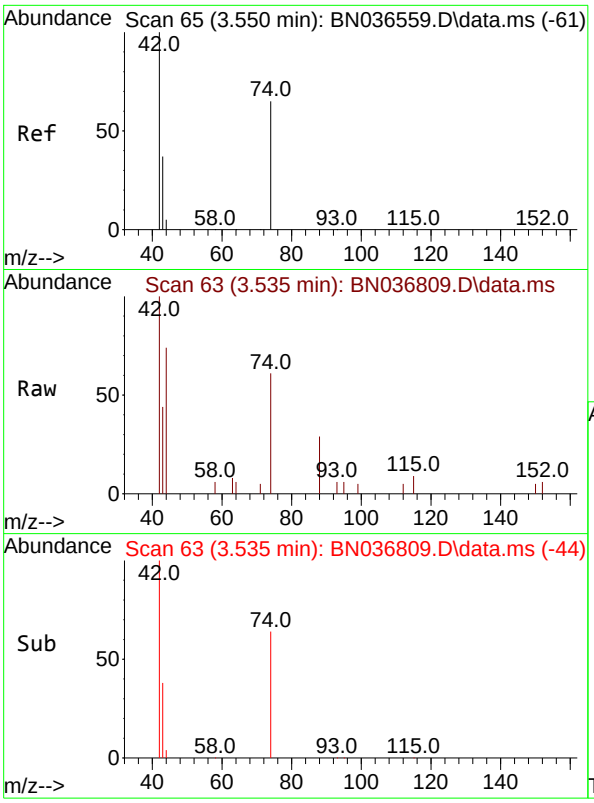




#2
1,4-Dioxane
Concen: 0.409 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 88 Resp: 857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 50.1 | 37.8 | 56.8 |
| 58 | 80.6 | 67.4 | 101.2 |



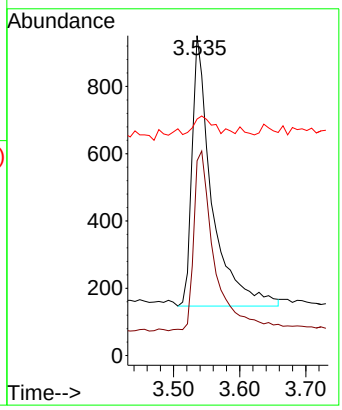


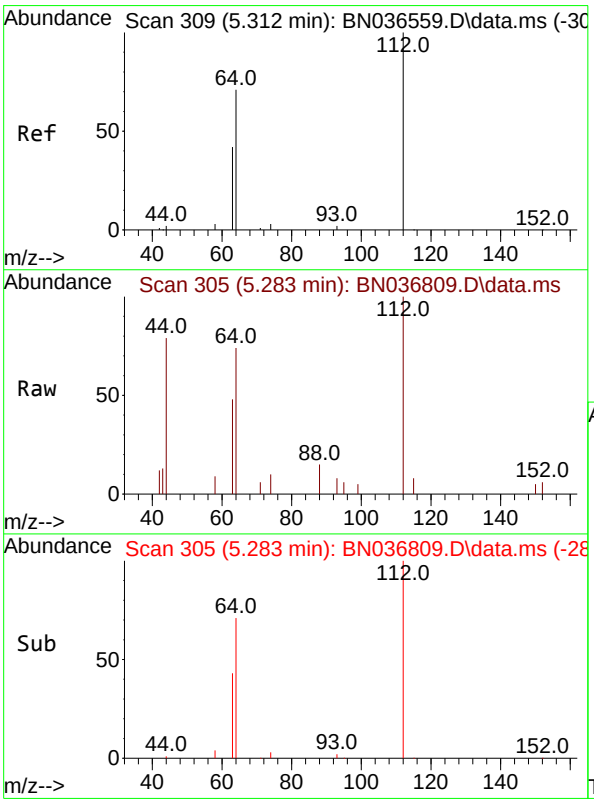

#3
n-Nitrosodimethylamine
Concen: 0.396 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 42 Resp: 1677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 69.2 | 60.6 | 90.8 |
| 44 | 8.2 | 6.3 | 9.5 |

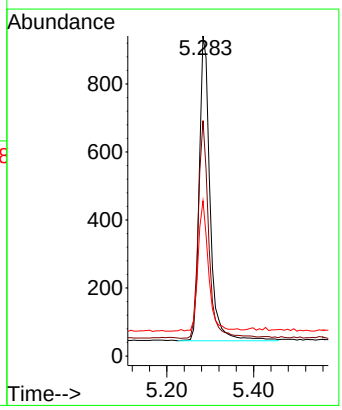


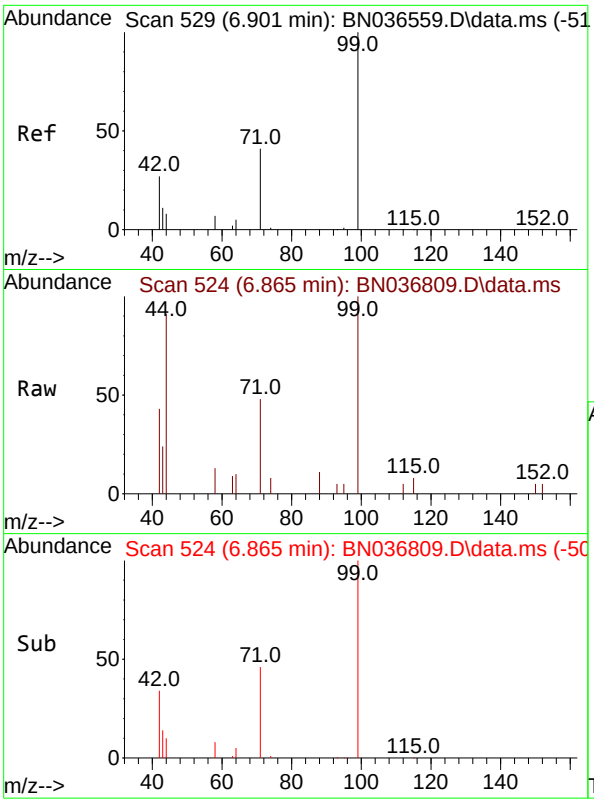




#4
2-Fluorophenol
Concen: 0.351 ng
RT: 5.283 min Scan# 305
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:112 Resp: 1544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.6 | 53.1 | 79.7 |
| 63 | 40.8 | 31.8 | 47.8 |



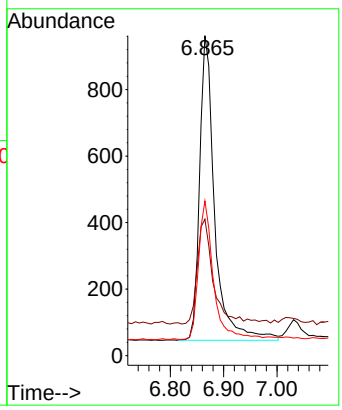


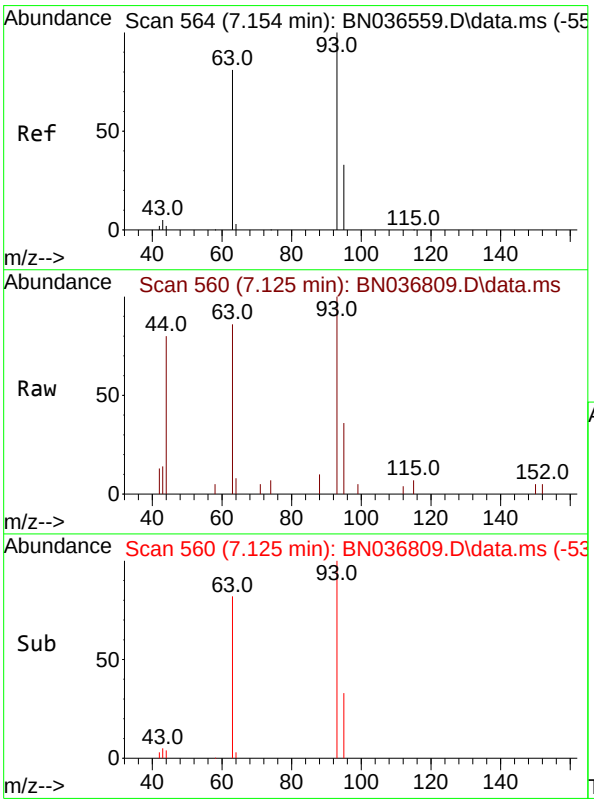

#5
Phenol-d6
Concen: 0.331 ng
RT: 6.865 min Scan# 5
Delta R.T. -0.036 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion: 99 Resp: 1799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 37.9 | 26.5 | 39.7 |
| 71 | 44.8 | 34.1 | 51.1 |

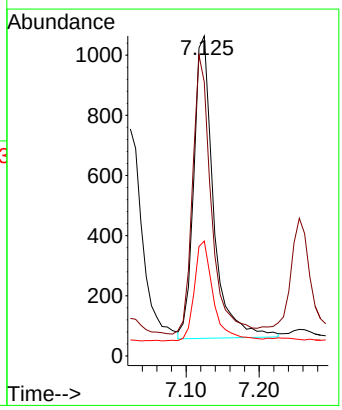


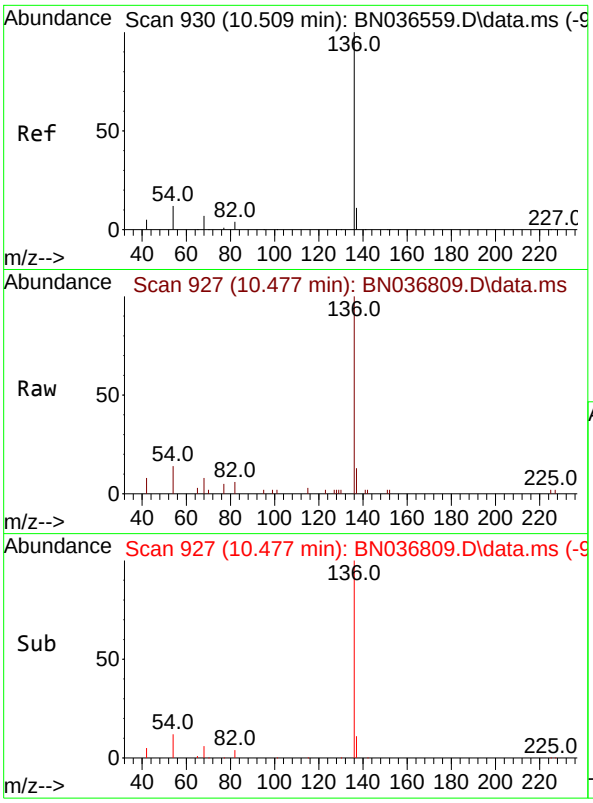




#6
bis(2-Chloroethyl)ether
Concen: 0.336 ng
RT: 7.125 min Scan# 560
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 93 Resp: 1889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 87.3 | 67.7 | 101.5 |
| 95 | 31.9 | 25.6 | 38.4 |



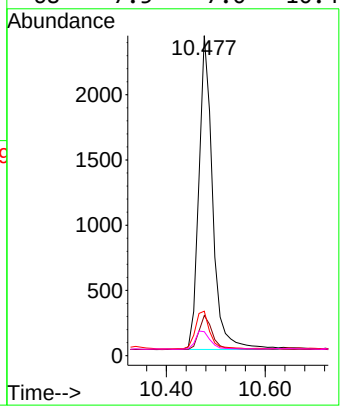


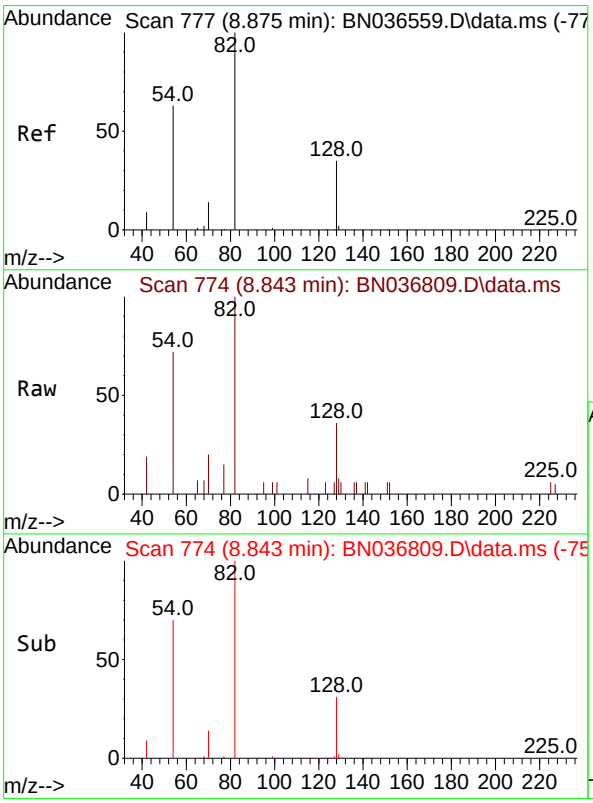

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:136 Resp: 4656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 12.5 | 10.3 | 15.5 |
| 54 | 13.9 | 11.5 | 17.3 |
| 68 | 7.5 | 7.0 | 10.4 |

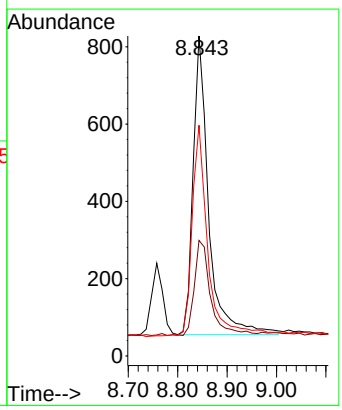


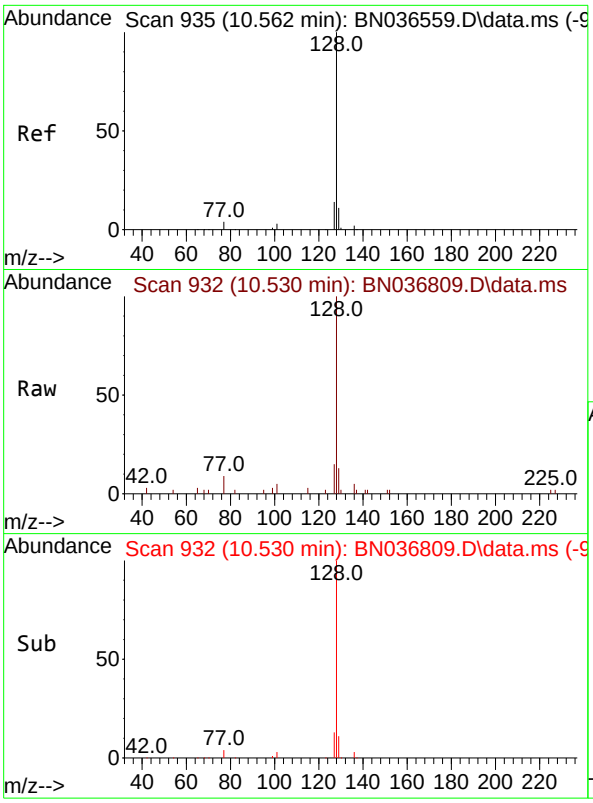




#8
Nitrobenzene-d5
Concen: 0.333 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion: 82 Resp: 1689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 36.1 | 30.6 | 45.8 |
| 54 | 72.1 | 52.2 | 78.4 |



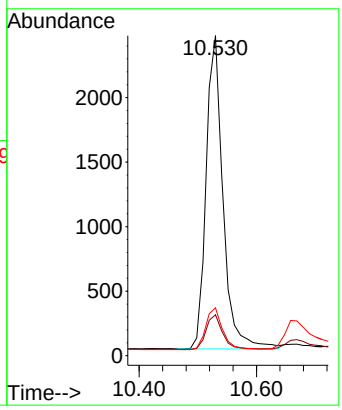


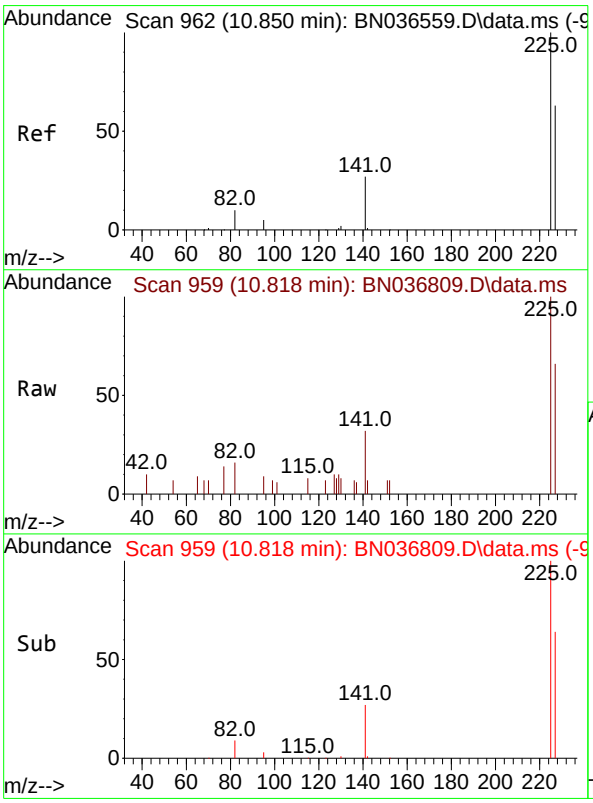

#9
Naphthalene
Concen: 0.354 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:128 Resp: 4851

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 12.8 | 9.8 | 14.6 |
| 127 | 15.0 | 11.8 | 17.8 |

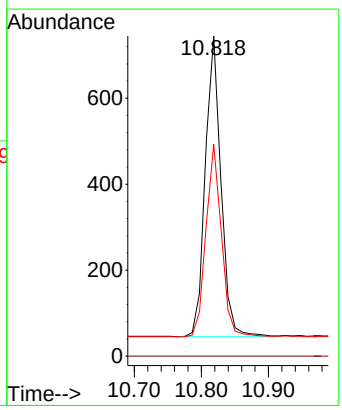


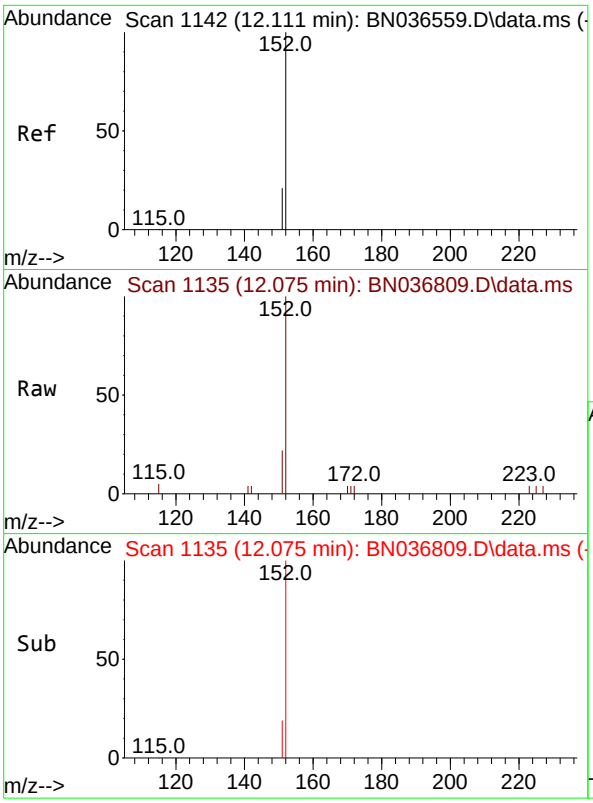




#10
Hexachlorobutadiene
Concen: 0.354 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:225 Resp: 1142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 63.1 | 51.8 | 77.8 |



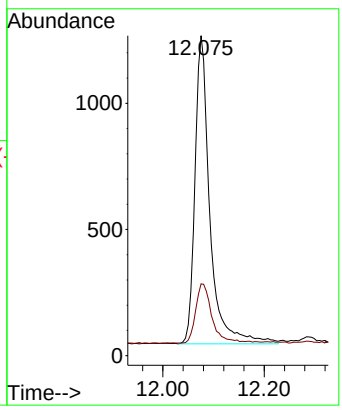


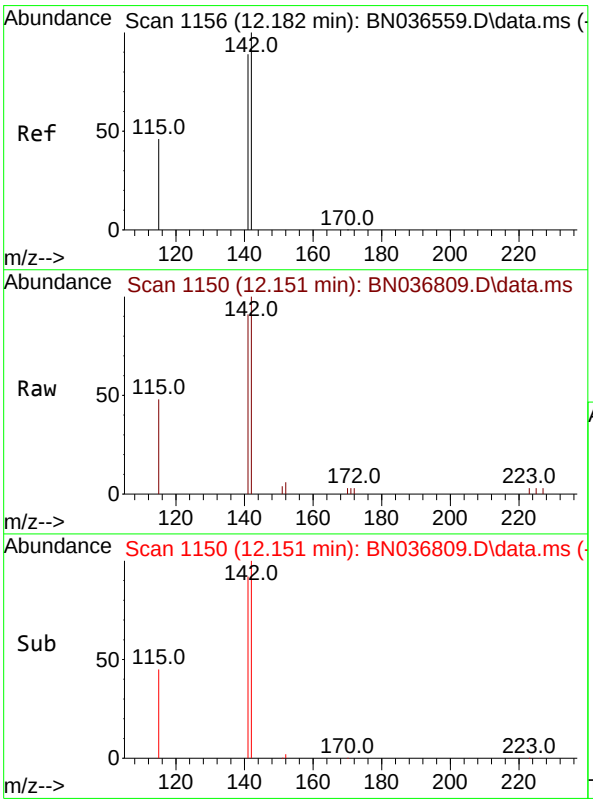

#11
2-Methylnaphthalene-d10
Concen: 0.361 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:152 Resp: 2501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.8 | 17.0 | 25.6 |

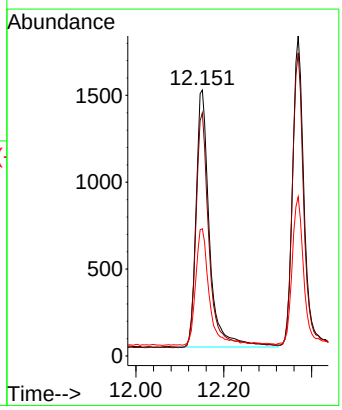


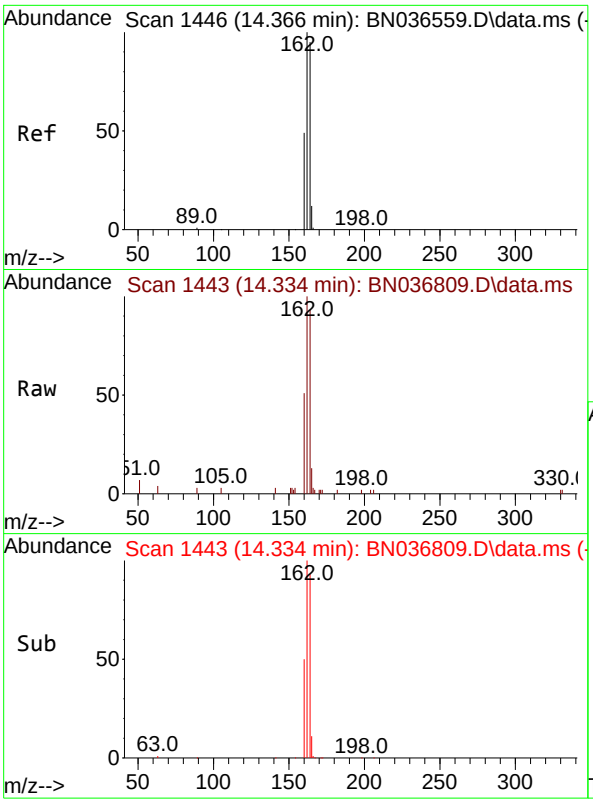




#12
2-Methylnaphthalene
Concen: 0.361 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:142 Resp: 3144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.4 | 71.7 | 107.5 |
| 115 | 47.8 | 38.3 | 57.5 |



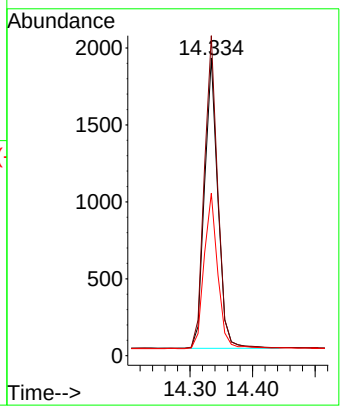


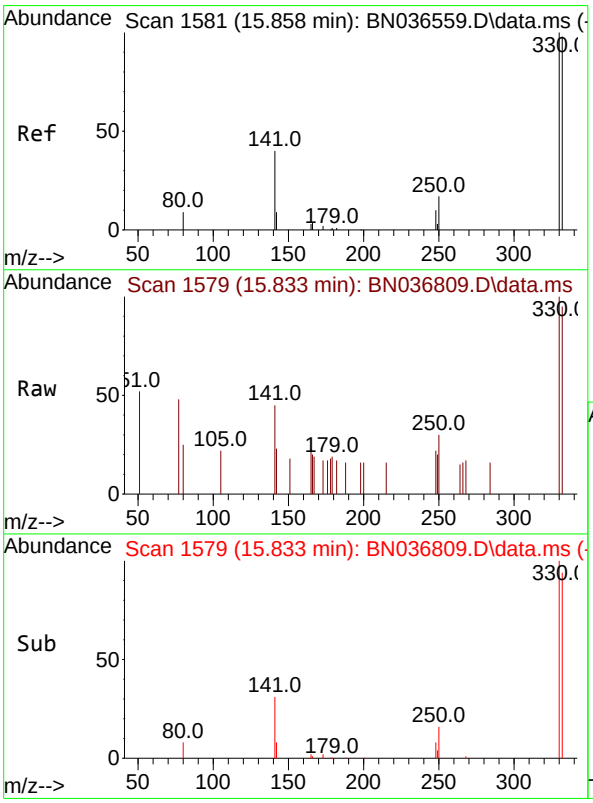

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:164 Resp: 2798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 107.5 | 84.2 | 126.2 |
| 160 | 54.6 | 42.2 | 63.2 |

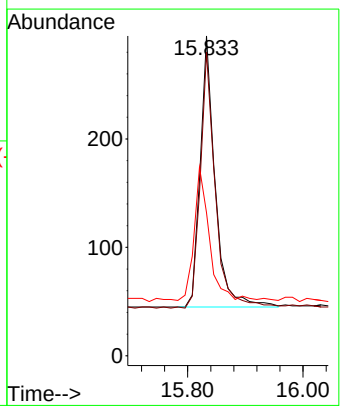


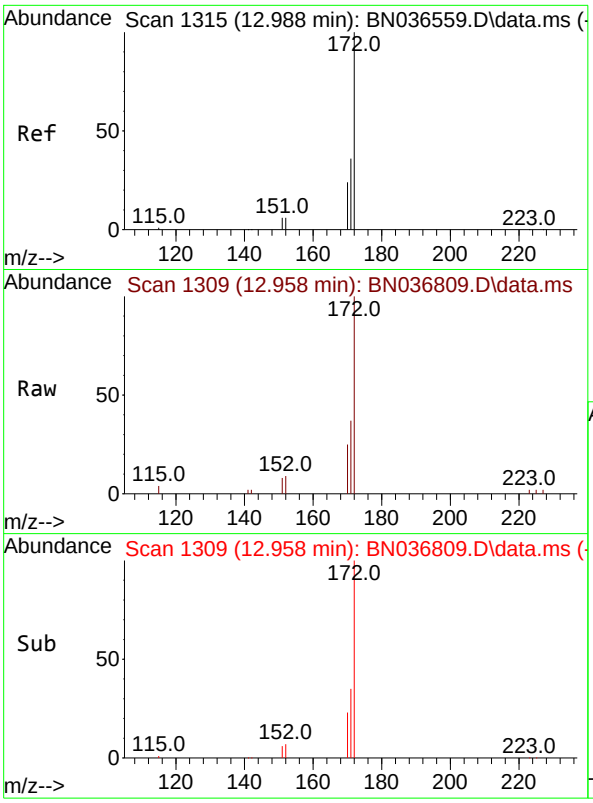




#14
2,4,6-Tribromophenol
Concen: 0.355 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:330 Resp: 451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 95.3 | 75.2 | 112.8 |
| 141 | 53.9 | 43.4 | 65.2 |



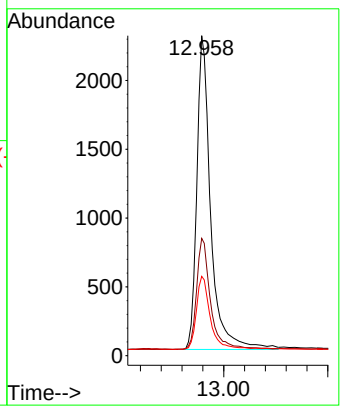


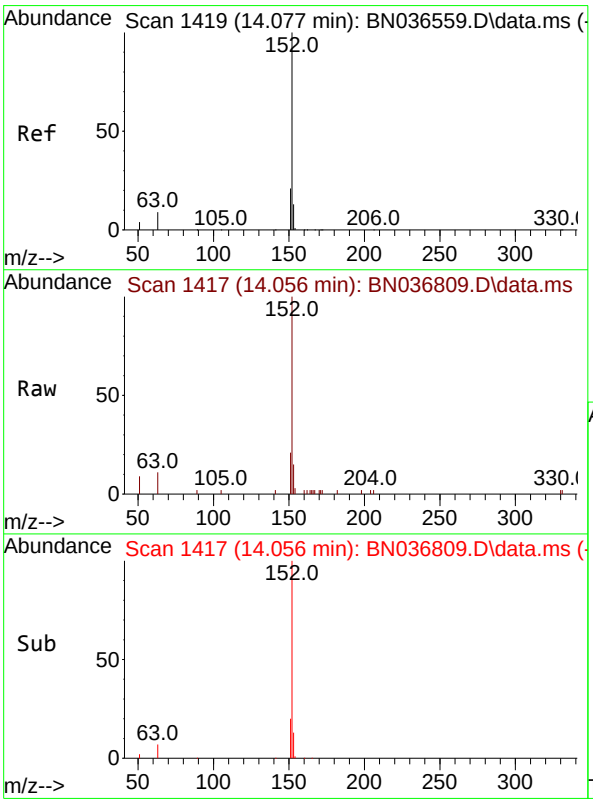

#15
2-Fluorobiphenyl
Concen: 0.340 ng
RT: 12.958 min Scan# 1
Delta R.T. -0.030 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:172 Resp: 5537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 36.6 | 29.5 | 44.3 |
| 170 | 24.8 | 20.2 | 30.4 |

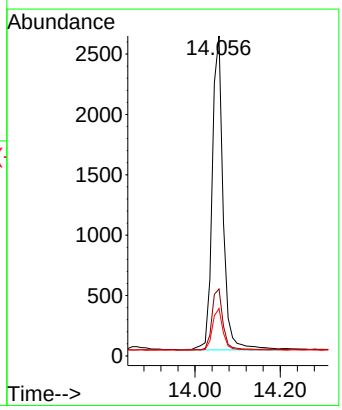


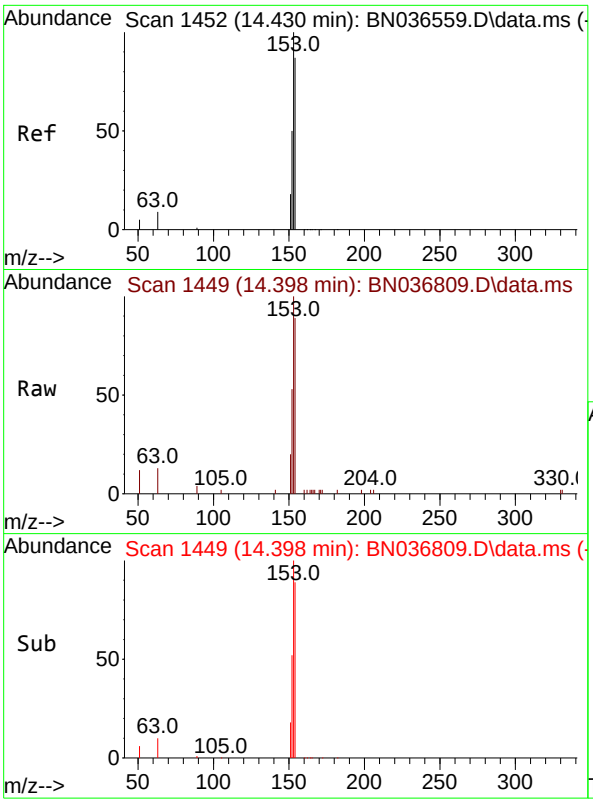




#16
Acenaphthylene
Concen: 0.350 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:152 Resp: 4617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.5 | 16.2 | 24.4 |
| 153 | 13.2 | 10.6 | 15.8 |



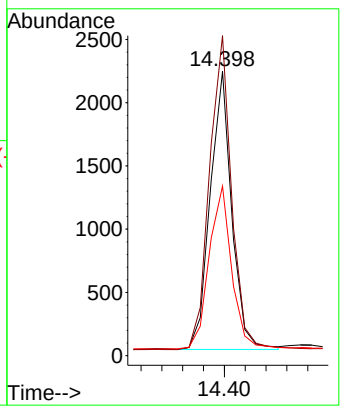


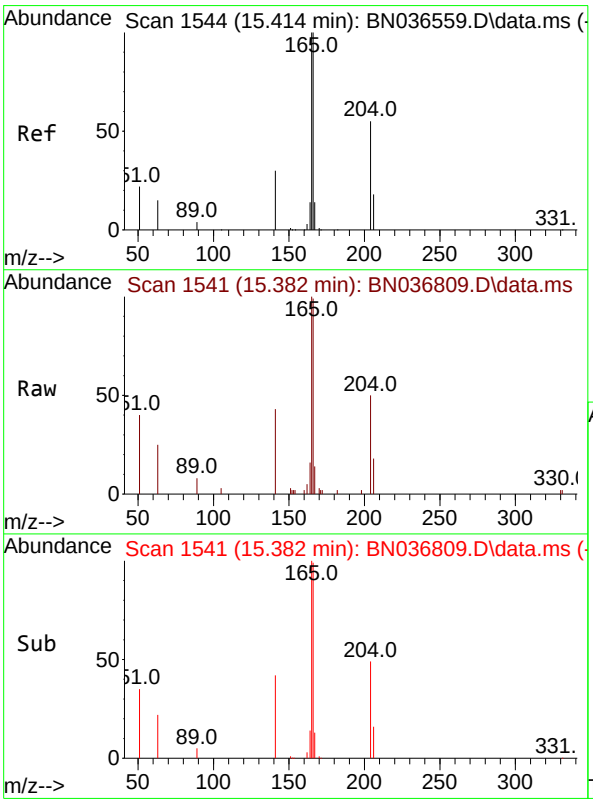

#17
Acenaphthene
Concen: 0.366 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:154 Resp: 3162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 116.9 | 94.1 | 141.1 |
| 152 | 62.4 | 49.8 | 74.6 |

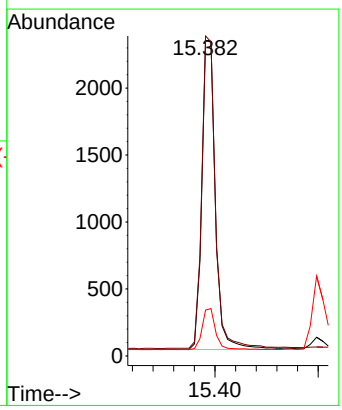


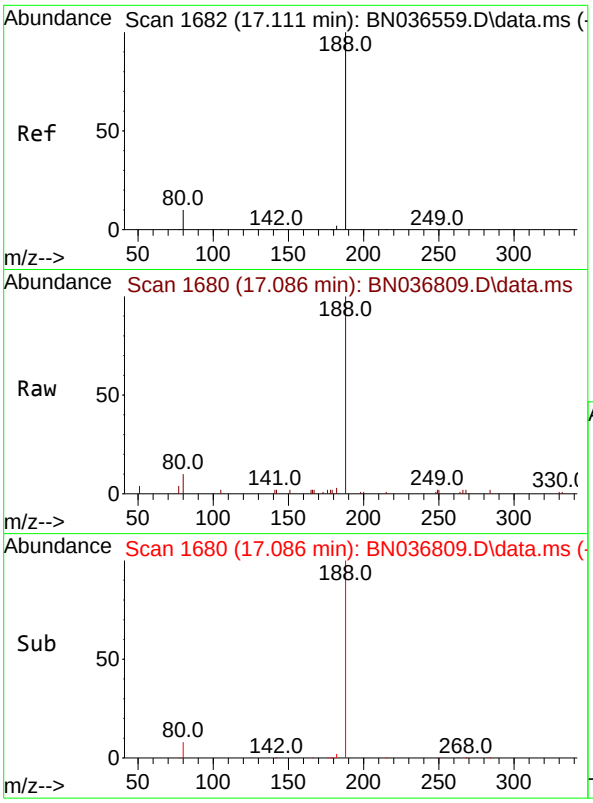




#18
Fluorene
Concen: 0.362 ng
RT: 15.382 min Scan# 1541
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:166 Resp: 4232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.4 | 79.8 | 119.8 |
| 167 | 13.2 | 10.6 | 15.8 |



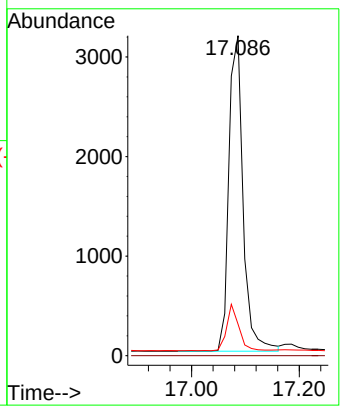


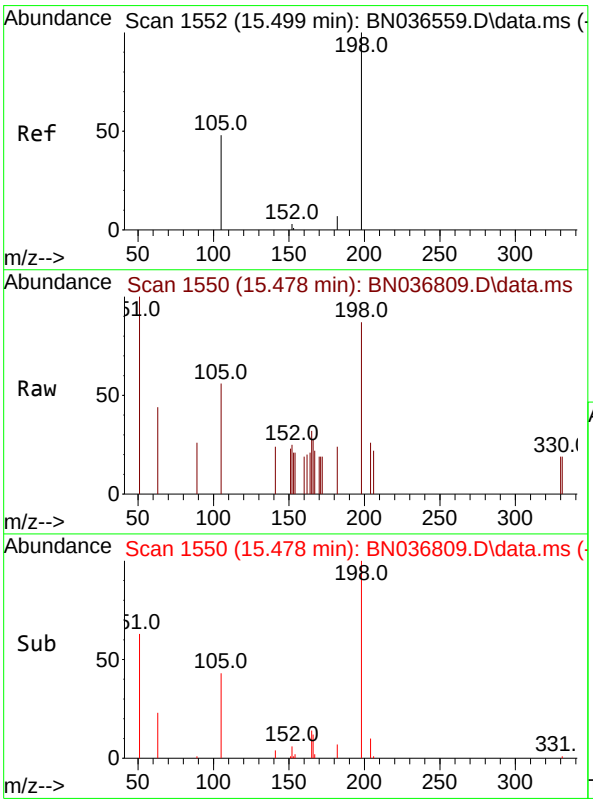

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:188 Resp: 5809

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 9.9 | 8.8 | 13.2 |

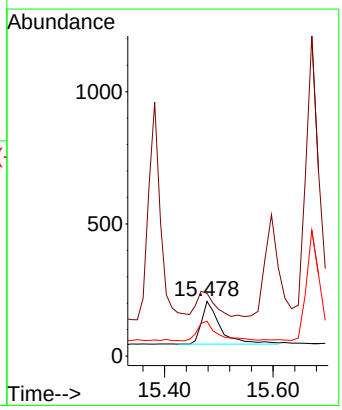


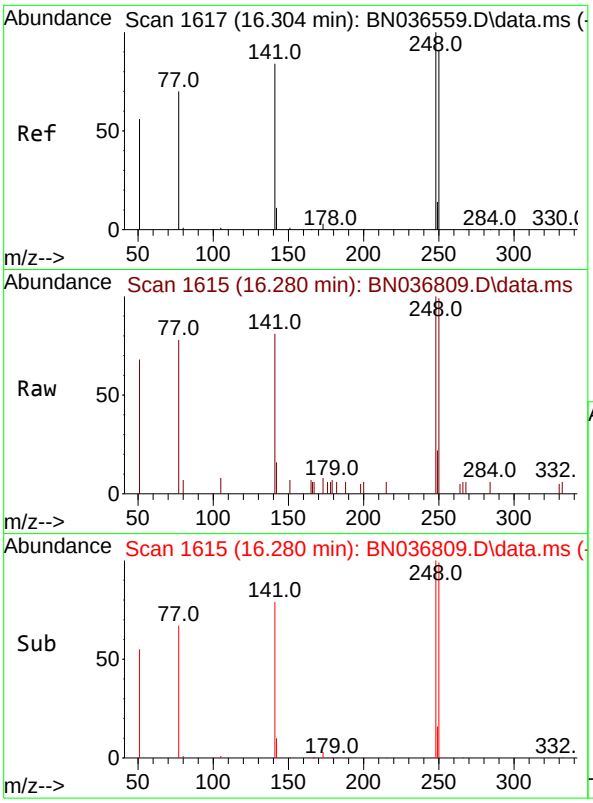




#20
4,6-Dinitro-2-methylphenol
Concen: 0.419 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:198 Resp: 405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 114.5 | 107.9 | 161.9 |
| 105 | 63.8 | 56.2 | 84.2 |



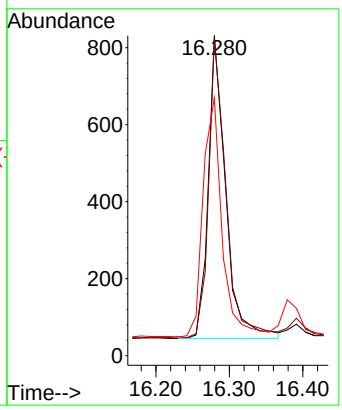


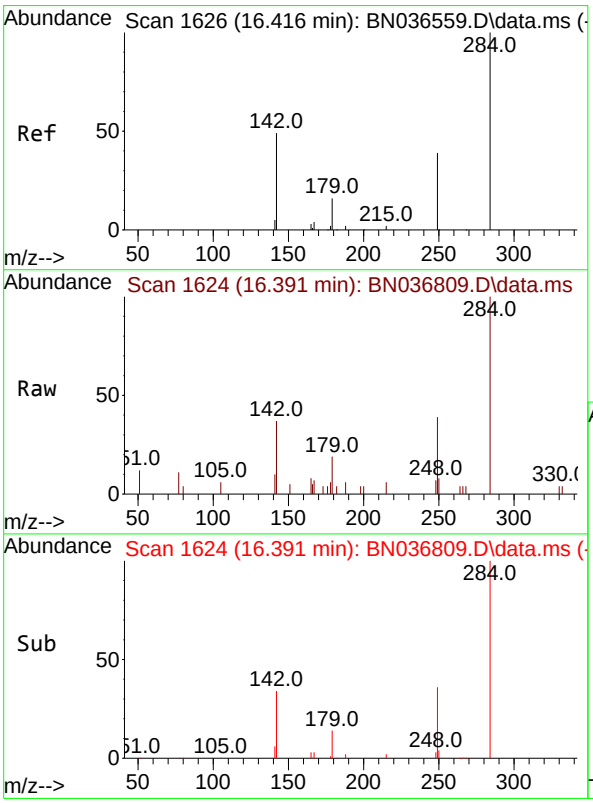

#21
4-Bromophenyl-phenylether
Concen: 0.355 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:248 Resp: 1292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 99.2 | 73.0 | 109.6 |
| 141 | 80.5 | 68.6 | 103.0 |

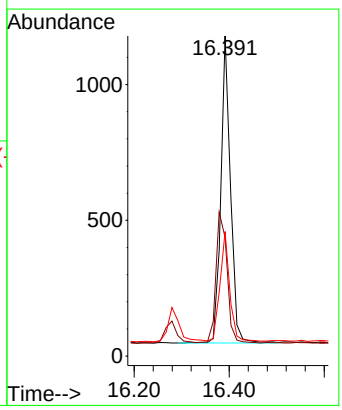


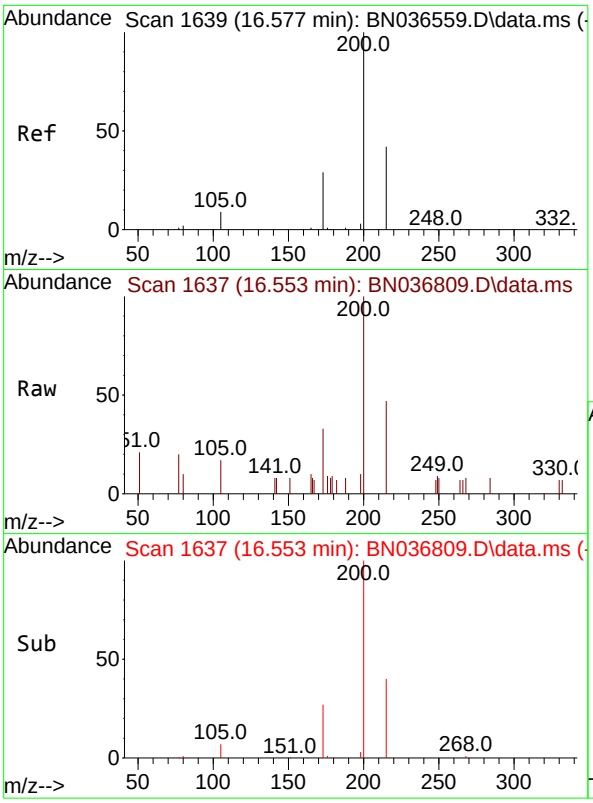




#22
Hexachlorobenzene
Concen: 0.361 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:284 Resp: 1587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 49.0 | 37.0 | 55.4 |
| 249 | 35.5 | 28.1 | 42.1 |



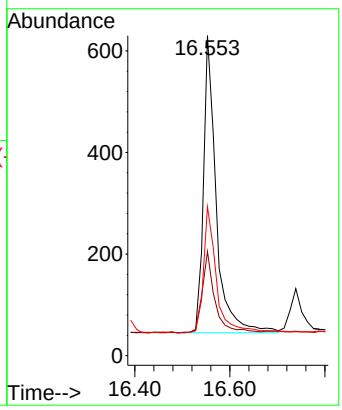


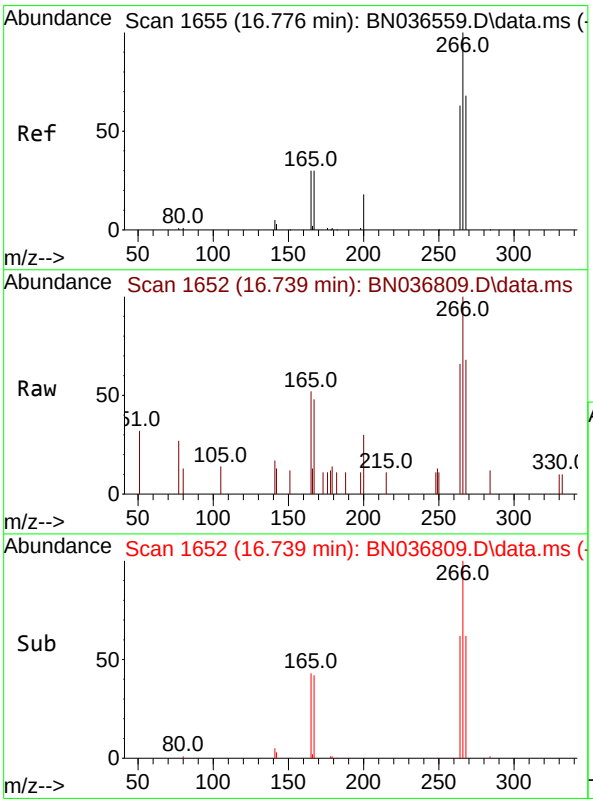

#23
Atrazine
Concen: 0.376 ng
RT: 16.553 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:200 Resp: 1096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 32.5 | 27.3 | 40.9 |
| 215 | 46.5 | 36.8 | 55.2 |

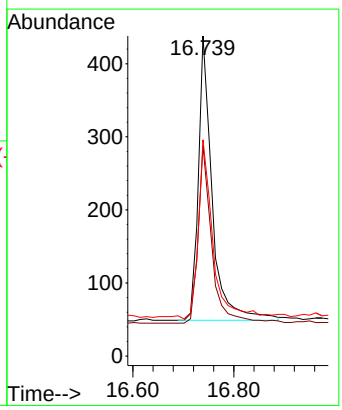


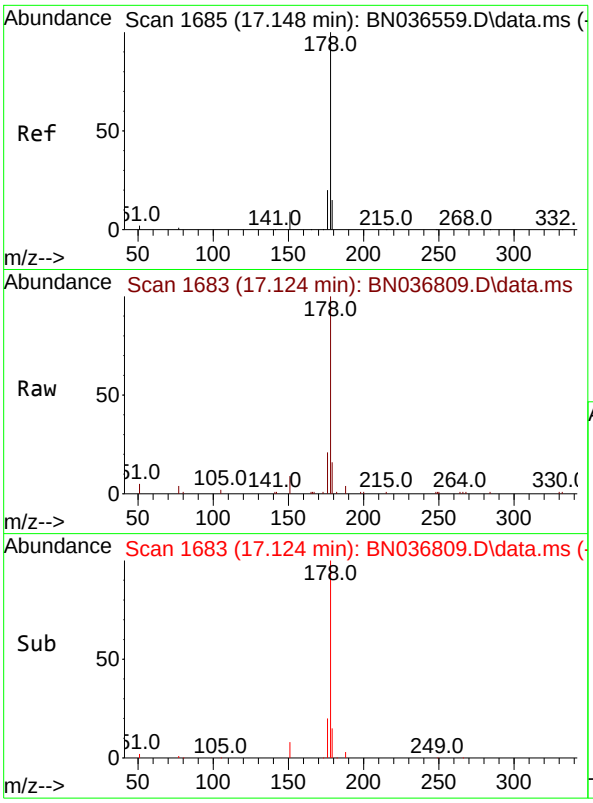




#24
Pentachlorophenol
Concen: 0.371 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:266 Resp: 743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 61.8 | 49.6 | 74.4 |
| 268 | 66.6 | 50.9 | 76.3 |



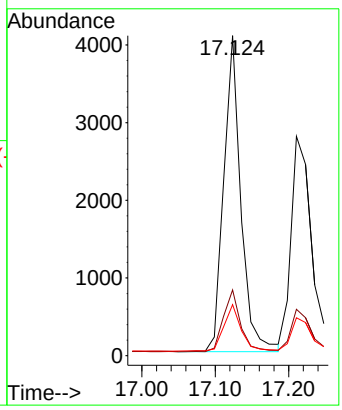


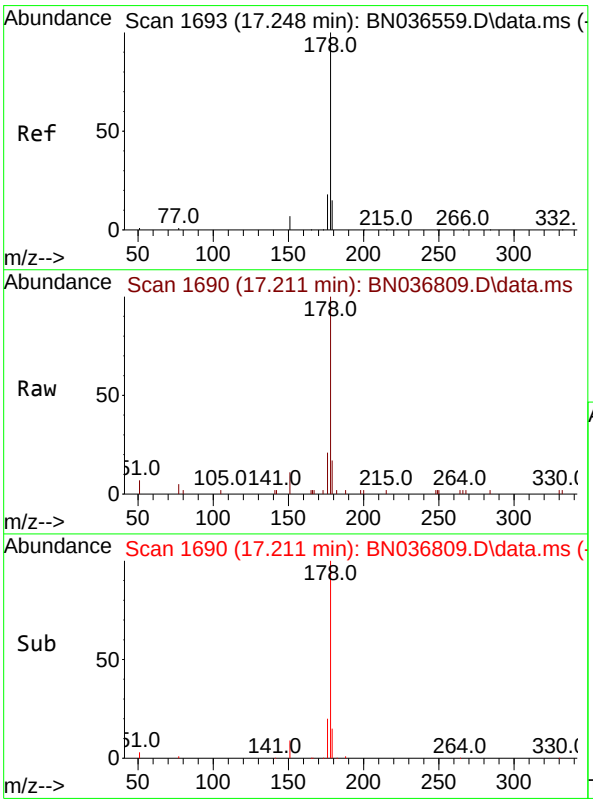

#25
Phenanthrene
Concen: 0.378 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:178 Resp: 6581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.7 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |

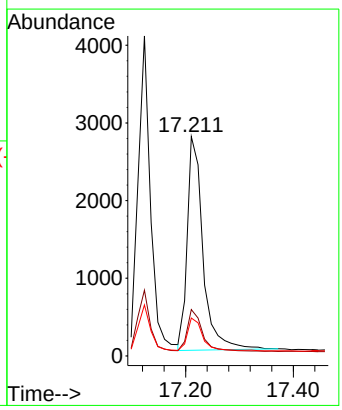


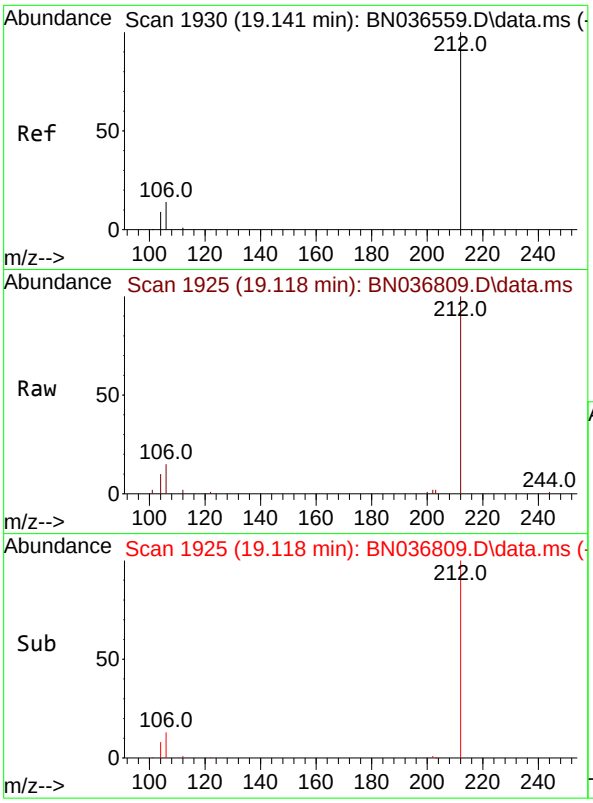




#26
Anthracene
Concen: 0.355 ng
RT: 17.211 min Scan# 1690
Delta R.T. -0.037 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:178 Resp: 5583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.4 | 23.2 |
| 179 | 15.3 | 12.6 | 18.8 |



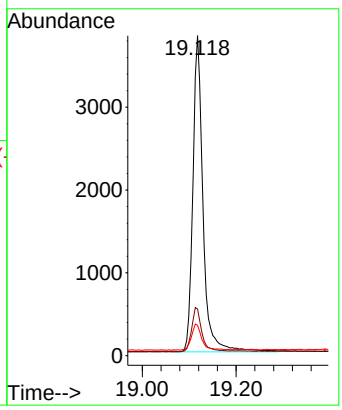


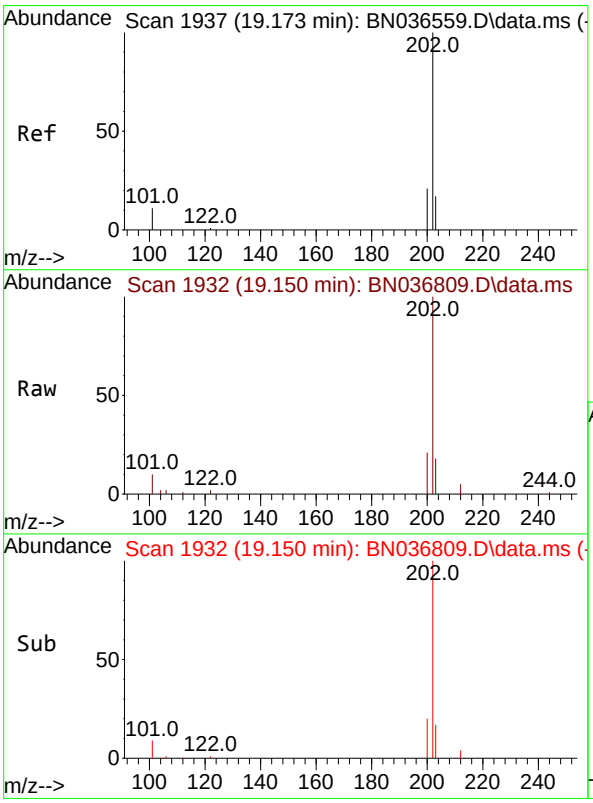

#27
Fluoranthene-d10
Concen: 0.386 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:212 Resp: 5750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.6 | 11.8 | 17.6 |
| 104 | 8.5 | 7.3 | 10.9 |

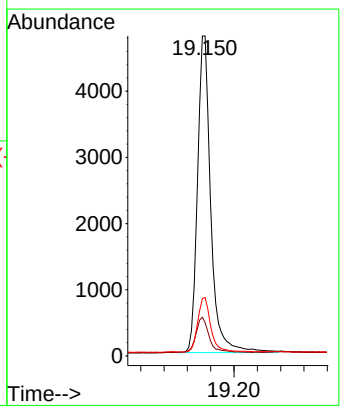


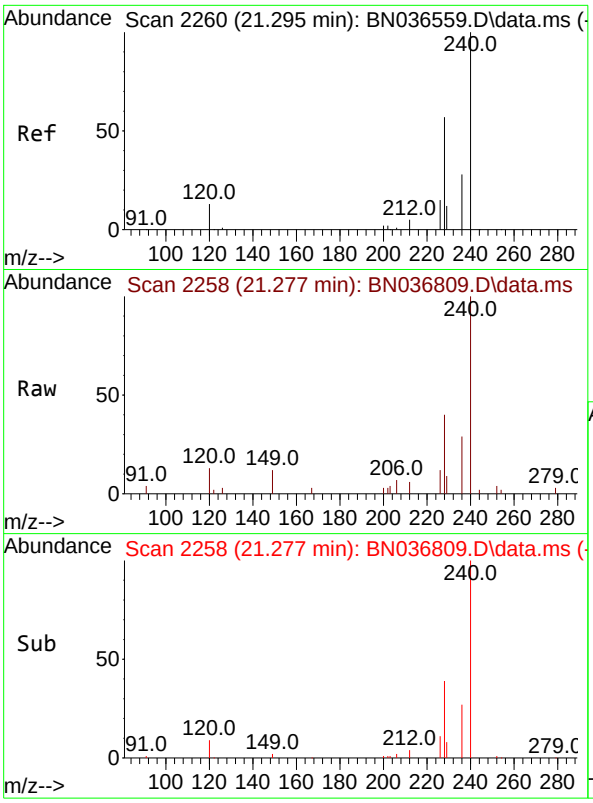




#28
Fluoranthene
Concen: 0.388 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:202 Resp: 7591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.2 | 9.4 | 14.0 |
| 203 | 17.1 | 13.5 | 20.3 |



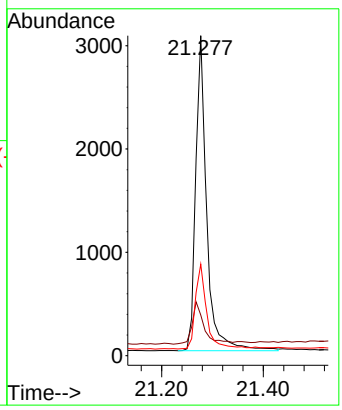


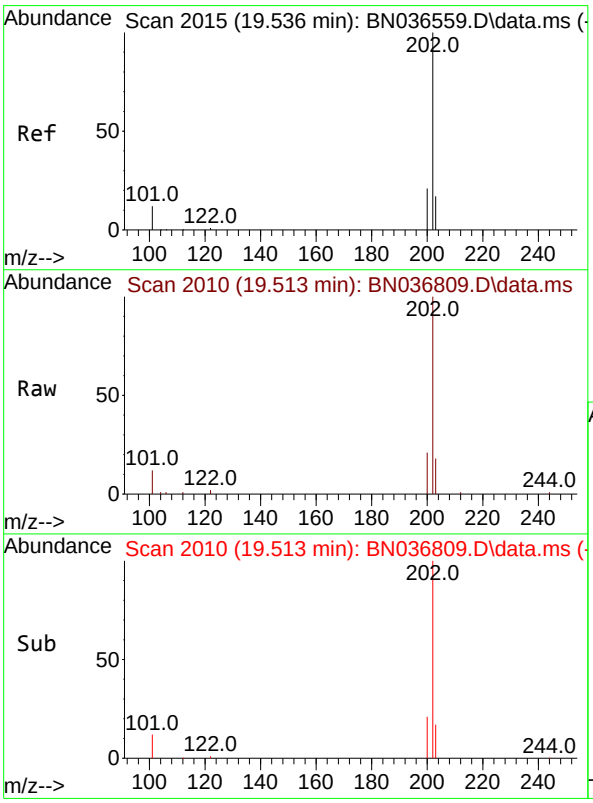

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:240 Resp: 4586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 12.7 | 14.6 | 22.0# |
| 236 | 28.6 | 24.1 | 36.1 |

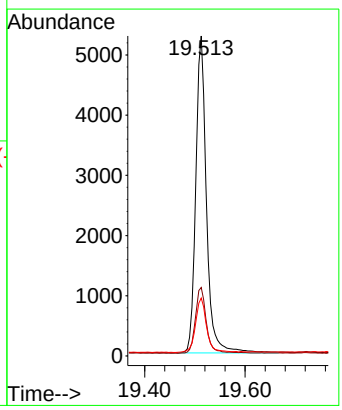


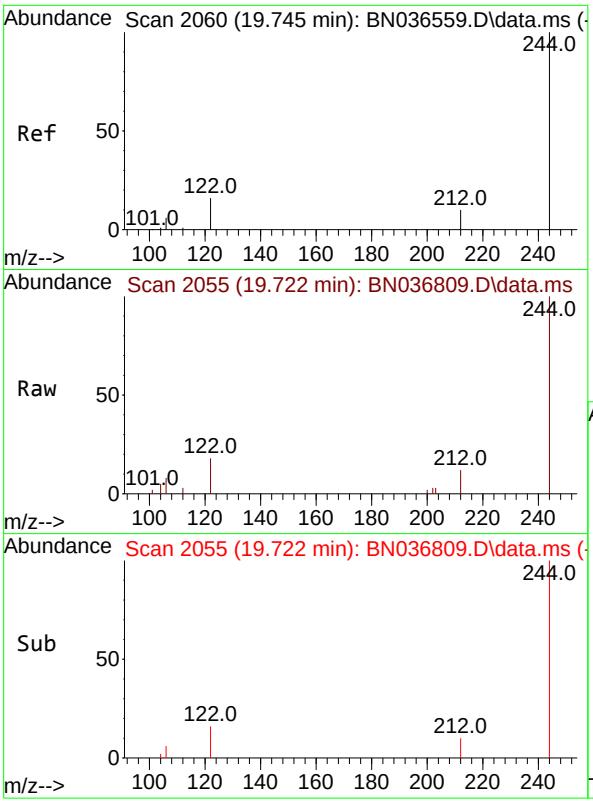




#30
Pyrene
Concen: 0.348 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:202 Resp: 7799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.1 | 17.1 | 25.7 |
| 203 | 17.5 | 14.1 | 21.1 |



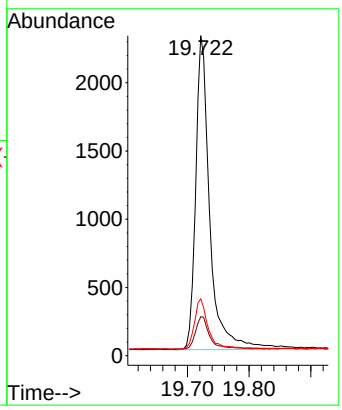


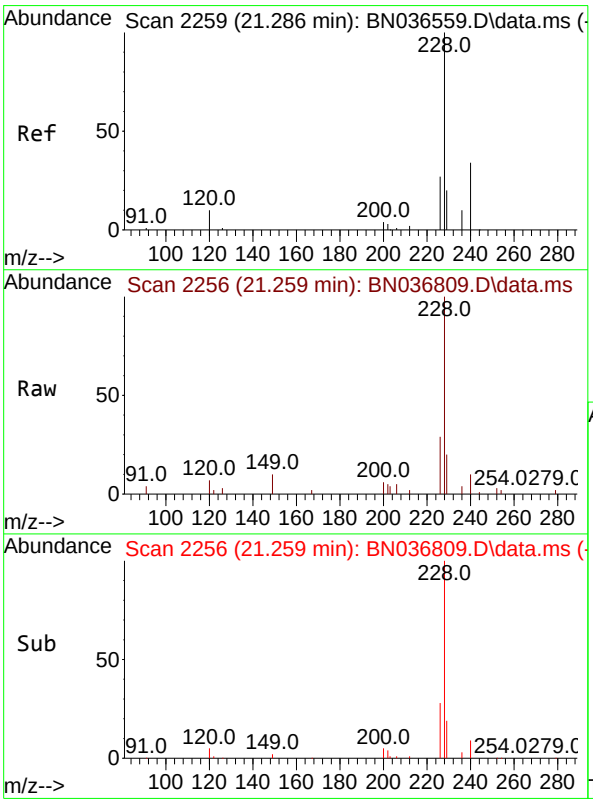

#31
Terphenyl-d14
Concen: 0.333 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:244 Resp: 3660

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.2 | 9.6 | 14.4 |
| 122 | 17.7 | 13.9 | 20.9 |

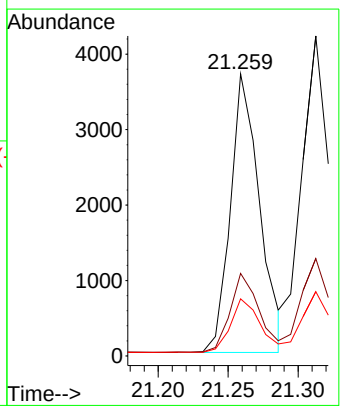


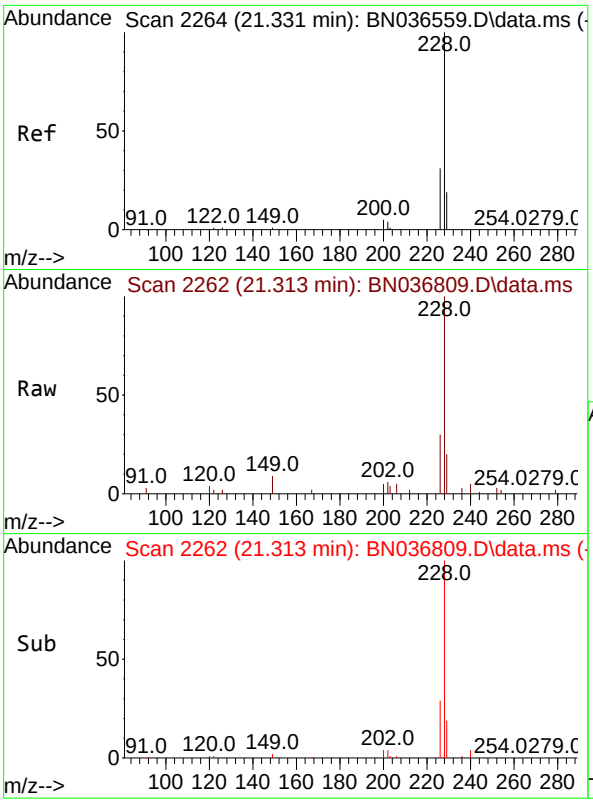




#32
Benzo(a)anthracene
Concen: 0.337 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.027 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:228 Resp: 5377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.3 | 22.5 | 33.7 |
| 229 | 20.2 | 16.6 | 25.0 |



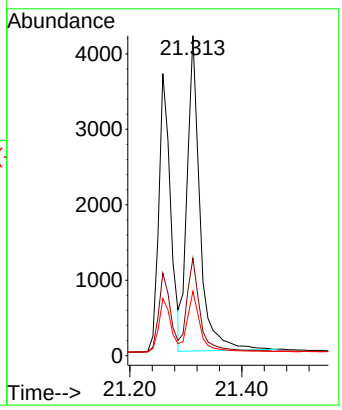


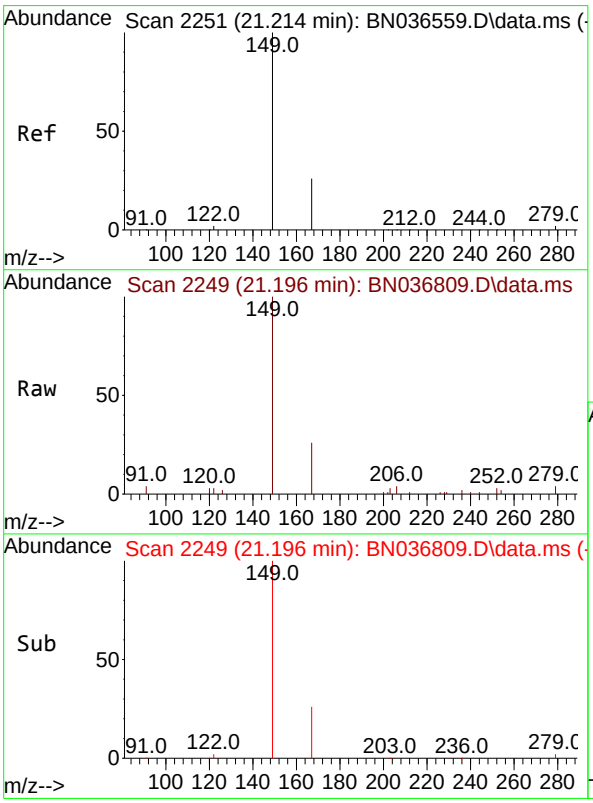

#33
Chrysene
Concen: 0.381 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:228 Resp: 6640

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.4 | 25.3 | 37.9 |
| 229 | 20.1 | 15.8 | 23.8 |

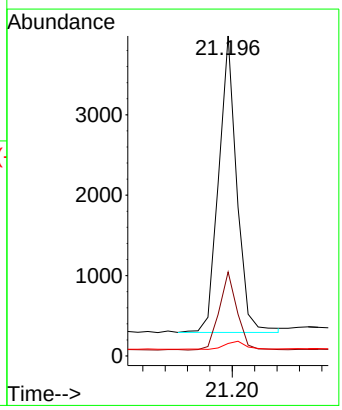


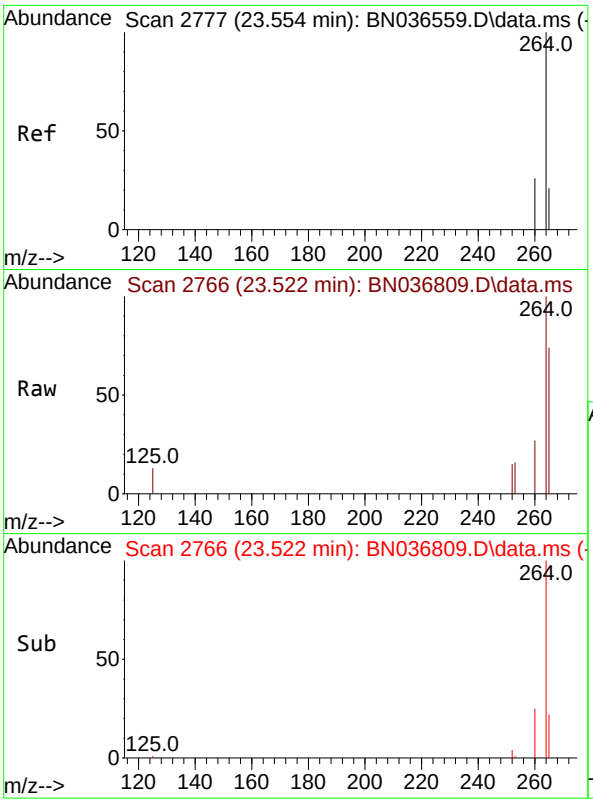




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.365 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:149 Resp: 4143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.0 | 20.7 | 31.1 |
| 279 | 3.0 | 3.6 | 5.4# |



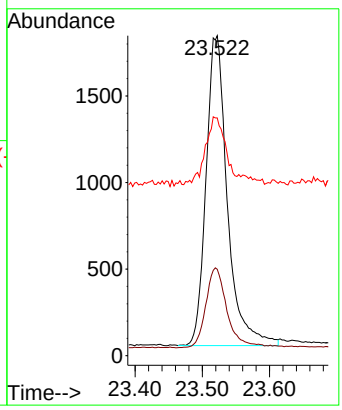


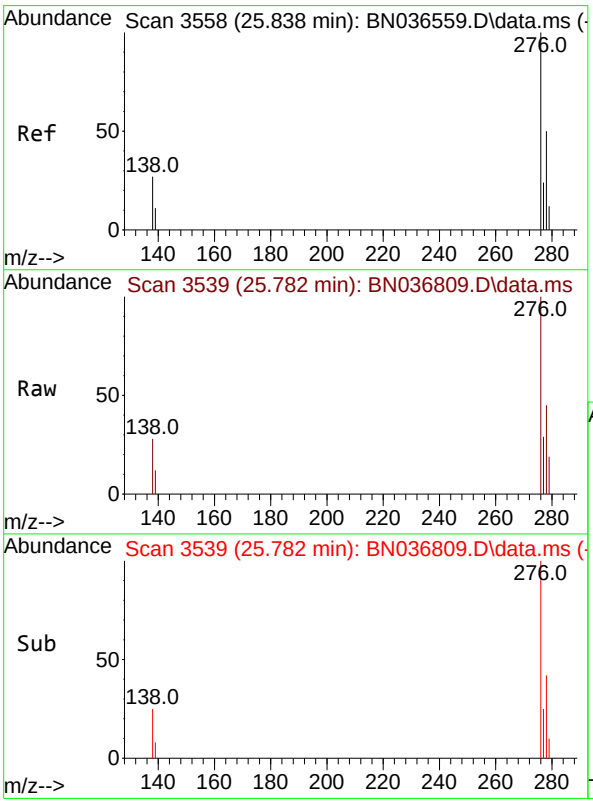

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.522 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:264 Resp: 3945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 27.0 | 22.6 | 33.8 |
| 265 | 74.3 | 88.1 | 132.1# |

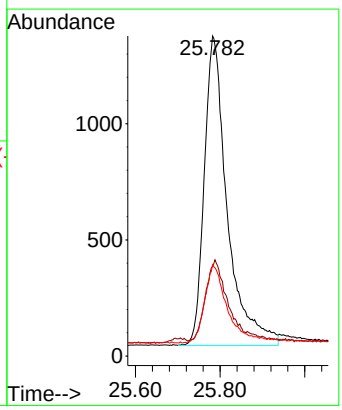


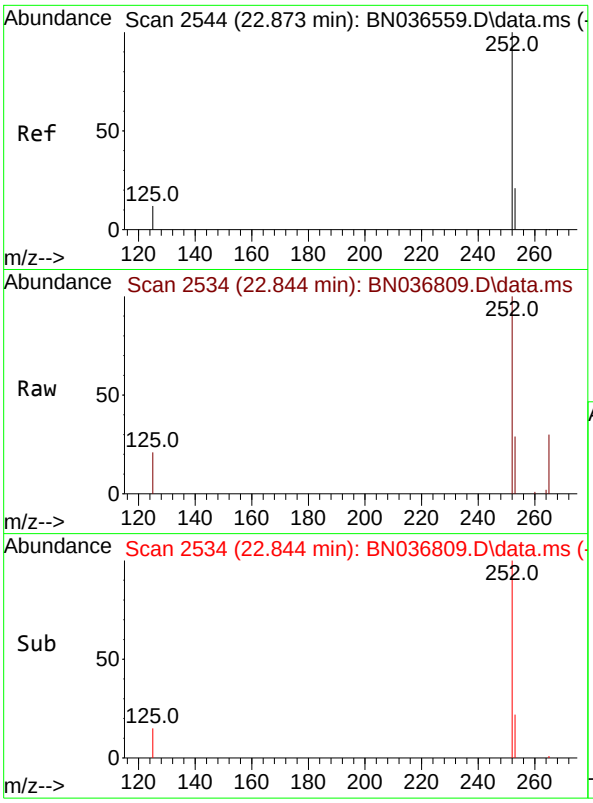




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.352 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.056 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:276 Resp: 5019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.2 | 23.4 | 35.2 |
| 277 | 24.6 | 20.0 | 30.0 |



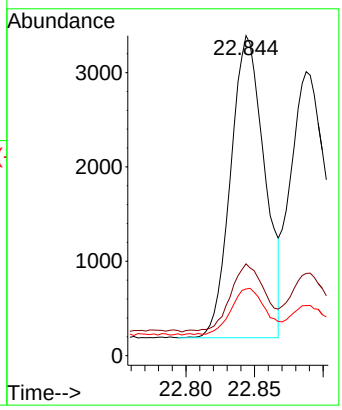


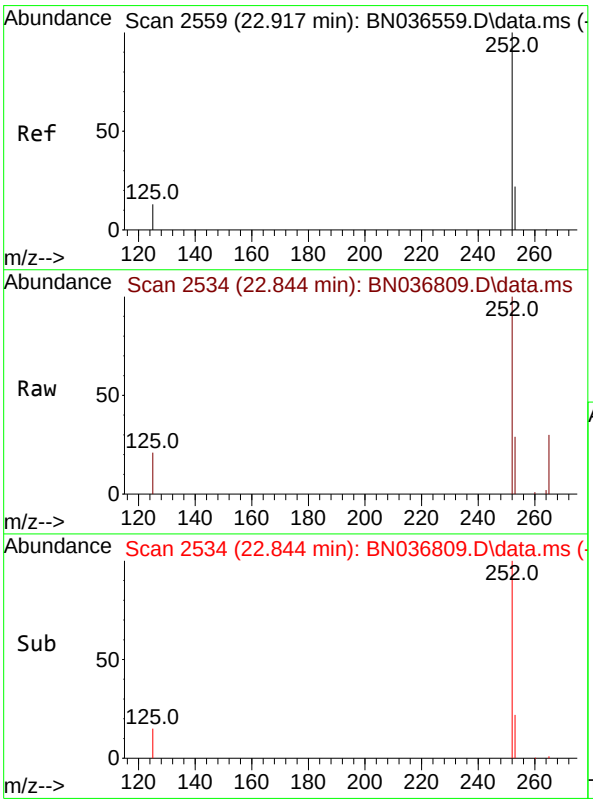

#37
Benzo(b)fluoranthene
Concen: 0.383 ng
RT: 22.844 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 5495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.7 | 23.9 | 35.9 |
| 125 | 20.8 | 17.4 | 26.2 |

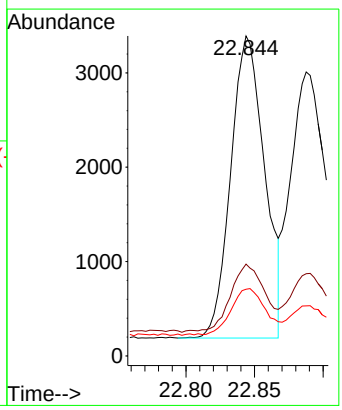


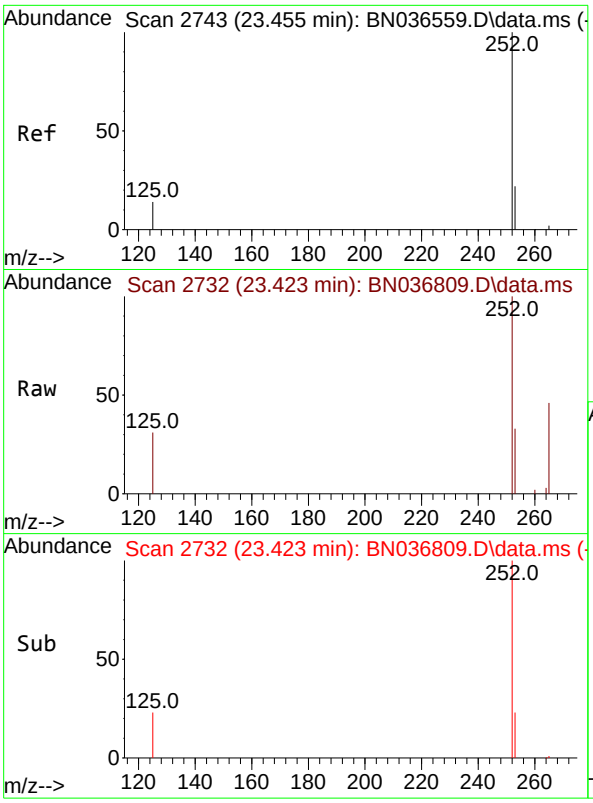




#38
Benzo(k)fluoranthene
Concen: 0.365 ng
RT: 22.844 min Scan# 2534
Delta R.T. -0.073 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:252 Resp: 5495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.7 | 24.6 | 36.8 |
| 125 | 20.8 | 17.8 | 26.8 |



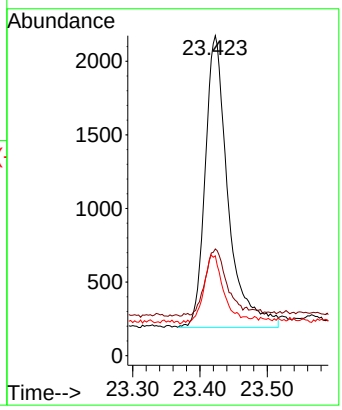


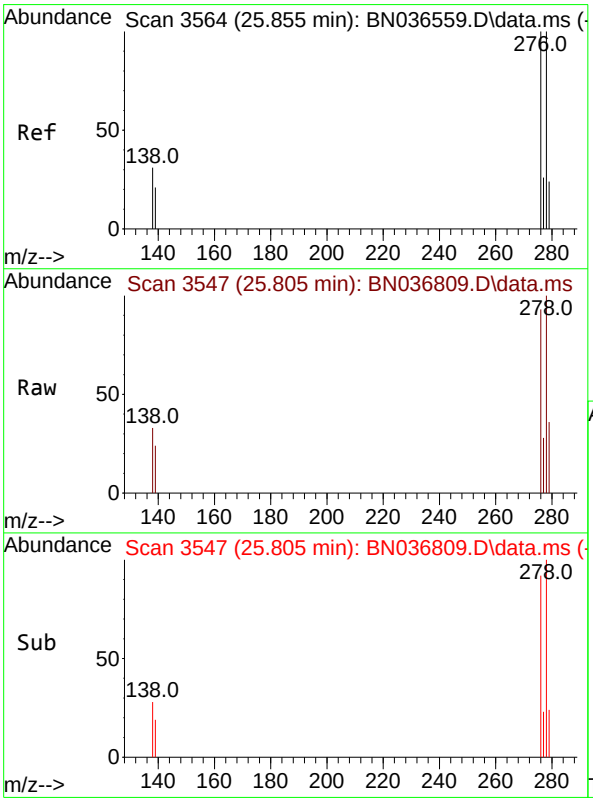

#39
Benzo(a)pyrene
Concen: 0.387 ng
RT: 23.423 min Scan# 2
Delta R.T. -0.032 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:252 Resp: 4679

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 33.3 | 27.8 | 41.8 |
| 125 | 31.2 | 22.7 | 34.1 |

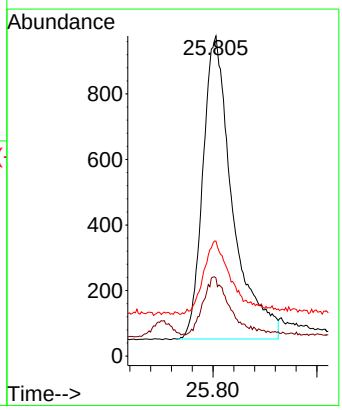


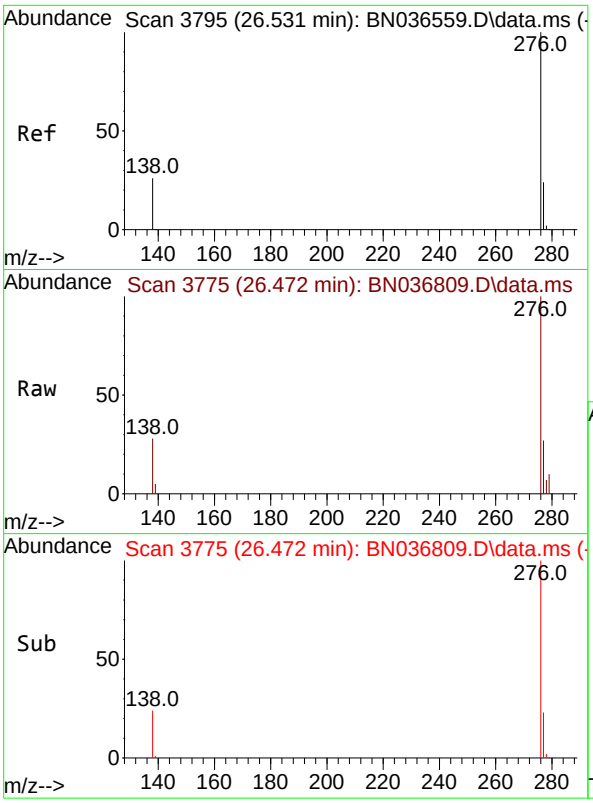




#40
Dibenzo(a,h)anthracene
Concen: 0.330 ng
RT: 25.805 min Scan# 3547
Delta R.T. -0.050 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

Tgt Ion:278 Resp: 3655

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 24.4 | 20.8 | 31.2 |
| 279 | 35.9 | 28.8 | 43.2 |



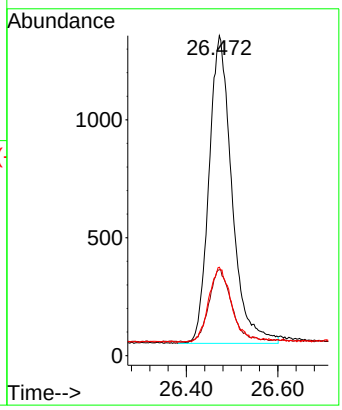



#41
Benzo(g,h,i)perylene
Concen: 0.358 ng
RT: 26.472 min Scan# 3
Delta R.T. -0.058 min
Lab File: BN036809.D
Acq: 31 Mar 2025 10:39

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4

Tgt Ion:276 Resp: 4543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 26.8 | 22.2 | 33.4 |
| 138 | 27.6 | 24.1 | 36.1 |



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036815.D
Acq On : 31 Mar 2025 15:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 31 15:30:13 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

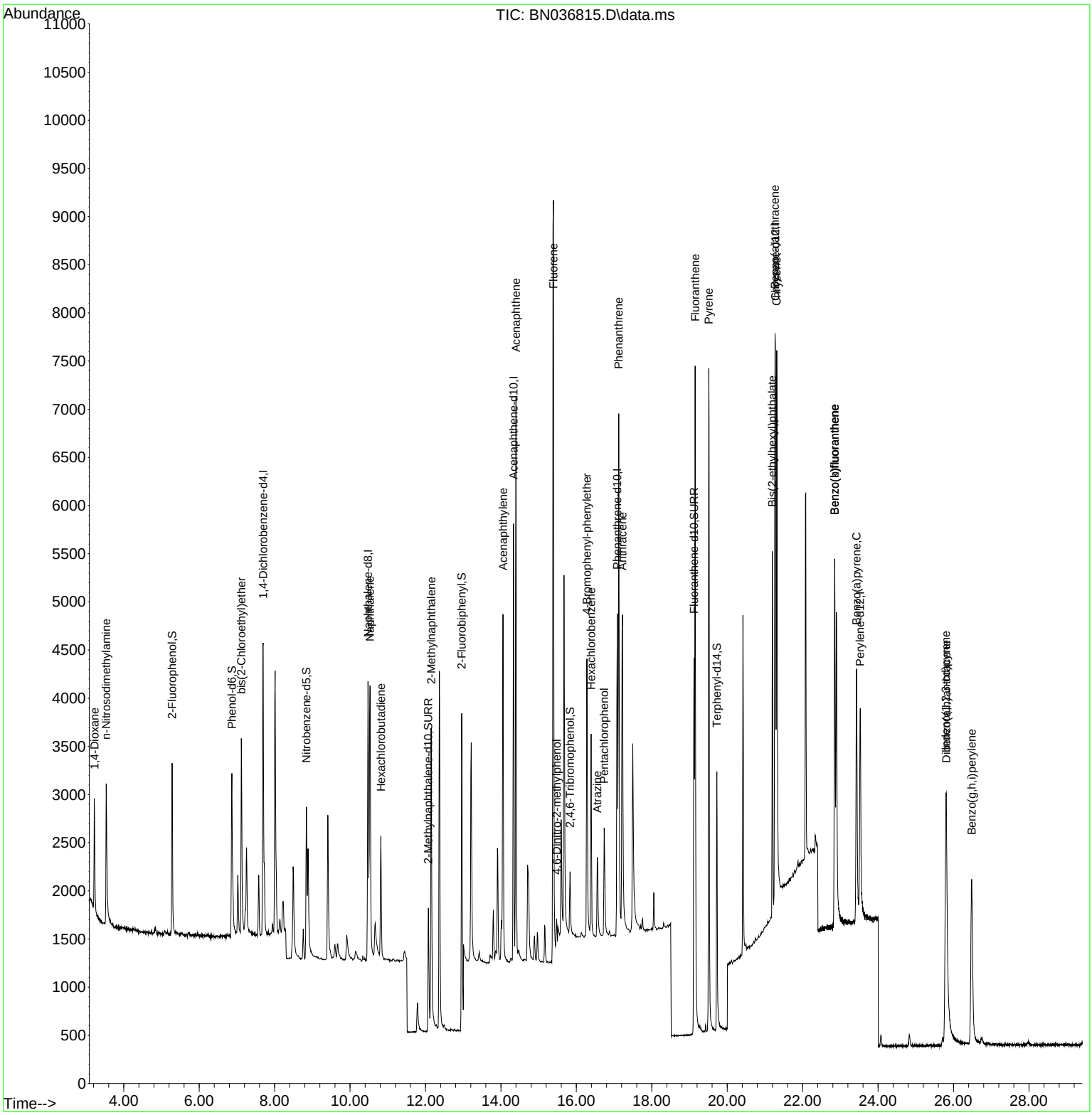
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 7.696 | 152 | 1563 | 0.400 | ng | | -0.03 |
| 7) Naphthalene-d8 | 10.477 | 136 | 4089 | 0.400 | ng | | -0.03 |
| 13) Acenaphthene-d10 | 14.334 | 164 | 2524 | 0.400 | ng | | -0.03 |
| 19) Phenanthrene-d10 | 17.087 | 188 | 5032 | 0.400 | ng | | -0.02 |
| 29) Chrysene-d12 | 21.277 | 240 | 3863 | 0.400 | ng | | -0.02 |
| 35) Perylene-d12 | 23.525 | 264 | 3435 | 0.400 | ng | | #-0.03 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 5.283 | 112 | 1311 | 0.360 | ng | | -0.03 |
| 5) Phenol-d6 | 6.865 | 99 | 1525 | 0.339 | ng | | -0.04 |
| 8) Nitrobenzene-d5 | 8.843 | 82 | 1424 | 0.320 | ng | | -0.03 |
| 11) 2-Methylnaphthalene-d10 | 12.075 | 152 | 2219 | 0.365 | ng | | -0.04 |
| 14) 2,4,6-Tribromophenol | 15.833 | 330 | 402 | 0.351 | ng | | -0.02 |
| 15) 2-Fluorobiphenyl | 12.963 | 172 | 4939 | 0.336 | ng | | -0.03 |
| 27) Fluoranthene-d10 | 19.118 | 212 | 5000 | 0.388 | ng | | -0.02 |
| 31) Terphenyl-d14 | 19.726 | 244 | 3254 | 0.352 | ng | | -0.02 |
| Target Compounds | | | | | | | Qvalue |
| 2) 1,4-Dioxane | 3.225 | 88 | 698 | 0.403 | ng | | 97 |
| 3) n-Nitrosodimethylamine | 3.536 | 42 | 1430 | 0.408 | ng | | 93 |
| 6) bis(2-Chloroethyl)ether | 7.118 | 93 | 1597 | 0.343 | ng | | 98 |
| 9) Naphthalene | 10.530 | 128 | 4210 | 0.350 | ng | | 99 |
| 10) Hexachlorobutadiene | 10.818 | 225 | 998 | 0.352 | ng | # | 99 |
| 12) 2-Methylnaphthalene | 12.151 | 142 | 2722 | 0.356 | ng | | 99 |
| 16) Acenaphthylene | 14.056 | 152 | 4054 | 0.340 | ng | | 100 |
| 17) Acenaphthene | 14.398 | 154 | 2777 | 0.356 | ng | | 99 |
| 18) Fluorene | 15.393 | 166 | 3732 | 0.354 | ng | | 99 |
| 20) 4,6-Dinitro-2-methylph... | 15.478 | 198 | 396 | 0.454 | ng | | 85 |
| 21) 4-Bromophenyl-phenylether | 16.280 | 248 | 1144 | 0.363 | ng | | 94 |
| 22) Hexachlorobenzene | 16.391 | 284 | 1380 | 0.363 | ng | | 95 |
| 23) Atrazine | 16.553 | 200 | 954 | 0.377 | ng | | 97 |
| 24) Pentachlorophenol | 16.739 | 266 | 651 | 0.375 | ng | | 97 |
| 25) Phenanthrene | 17.124 | 178 | 5703 | 0.378 | ng | | 100 |
| 26) Anthracene | 17.223 | 178 | 4933 | 0.362 | ng | | 99 |
| 28) Fluoranthene | 19.150 | 202 | 6761 | 0.399 | ng | | 98 |
| 30) Pyrene | 19.513 | 202 | 6826 | 0.361 | ng | | 100 |
| 32) Benzo(a)anthracene | 21.268 | 228 | 4715 | 0.351 | ng | | 99 |
| 33) Chrysene | 21.313 | 228 | 5650 | 0.385 | ng | | 100 |
| 34) Bis(2-ethylhexyl)phtha... | 21.196 | 149 | 3477 | 0.364 | ng | # | 99 |
| 36) Indeno(1,2,3-cd)pyrene | 25.800 | 276 | 4428 | 0.357 | ng | | 94 |
| 37) Benzo(b)fluoranthene | 22.850 | 252 | 4732 | 0.379 | ng | | 98 |
| 38) Benzo(k)fluoranthene | 22.850 | 252 | 4732 | 0.361 | ng | | 98 |
| 39) Benzo(a)pyrene | 23.429 | 252 | 4200 | 0.399 | ng | | 97 |
| 40) Dibenzo(a,h)anthracene | 25.811 | 278 | 3277 | 0.340 | ng | | 97 |
| 41) Benzo(g,h,i)perylene | 26.484 | 276 | 4006 | 0.363 | ng | | 97 |

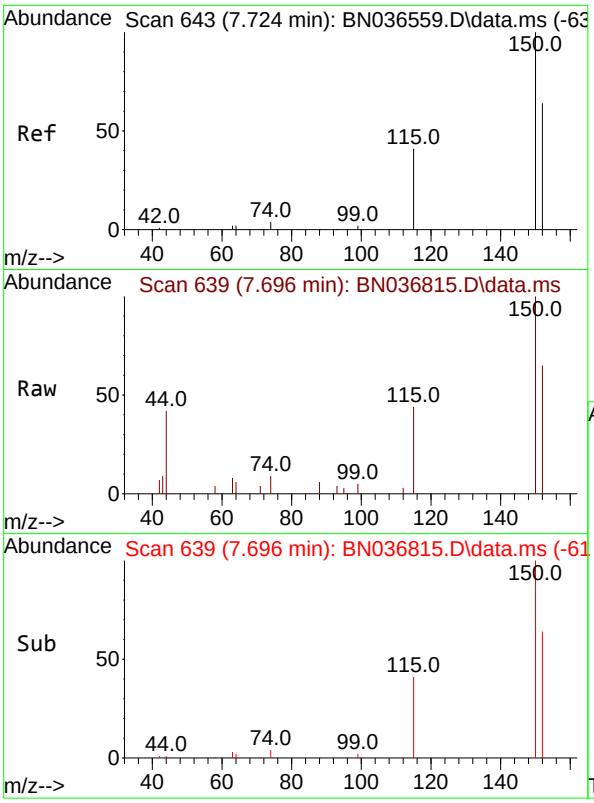
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN033125\
Data File : BN036815.D
Acq On : 31 Mar 2025 15:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Quant Time: Mar 31 15:30:13 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



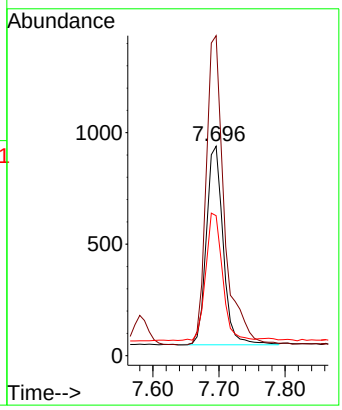


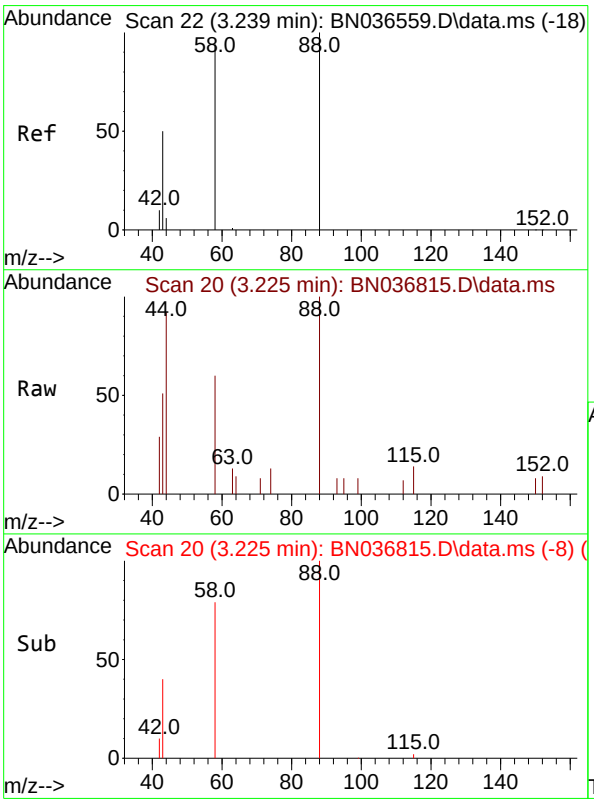

#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.696 min Scan# 6
Delta R.T. -0.028 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 1563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.8 | 123.7 | 185.5 |
| 115 | 66.9 | 54.3 | 81.5 |

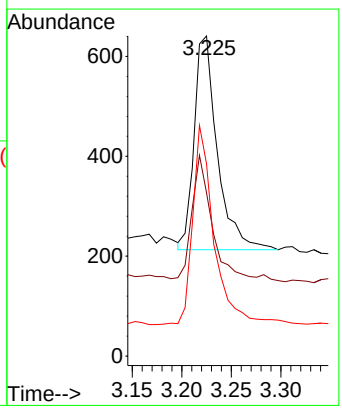


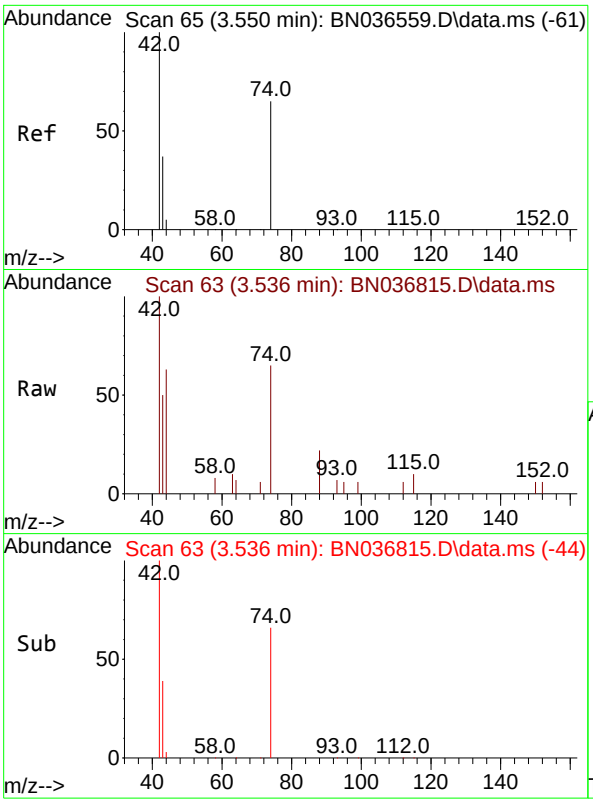




#2
1,4-Dioxane
Concen: 0.403 ng
RT: 3.225 min Scan# 20
Delta R.T. -0.014 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 88 Resp: 698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 51.7 | 37.8 | 56.8 |
| 58 | 85.5 | 67.4 | 101.2 |



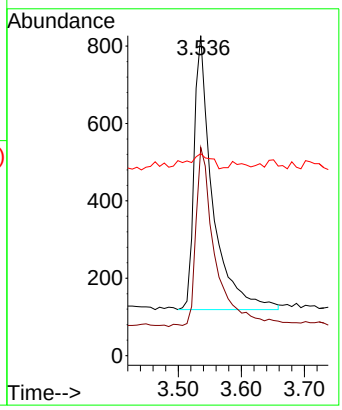


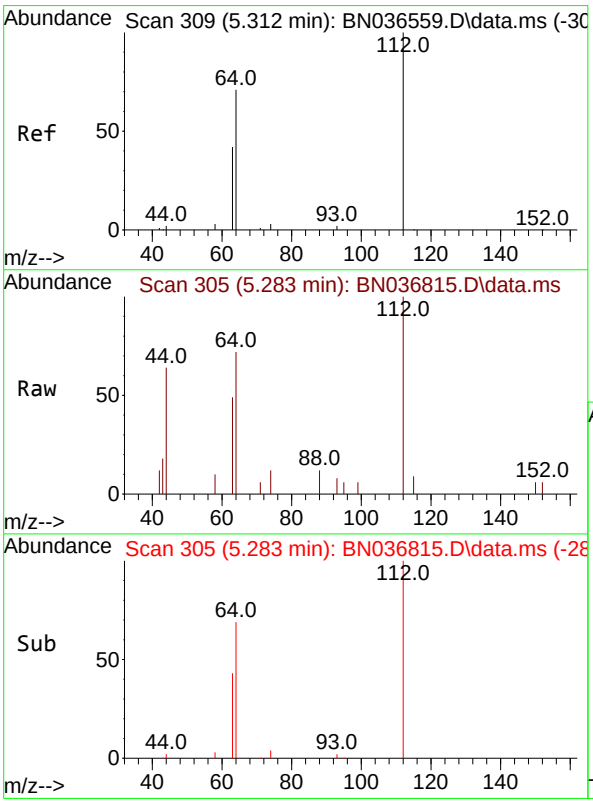

#3
n-Nitrosodimethylamine
Concen: 0.408 ng
RT: 3.536 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1430

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 74 | 69.3 | 60.6 | 90.8 |
| 44 | 6.6 | 6.3 | 9.5 |

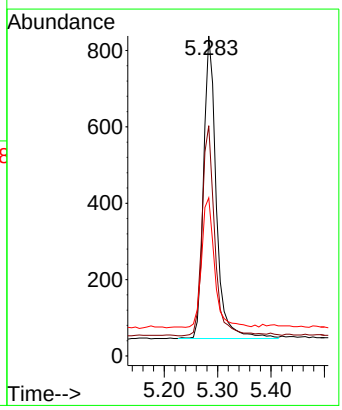


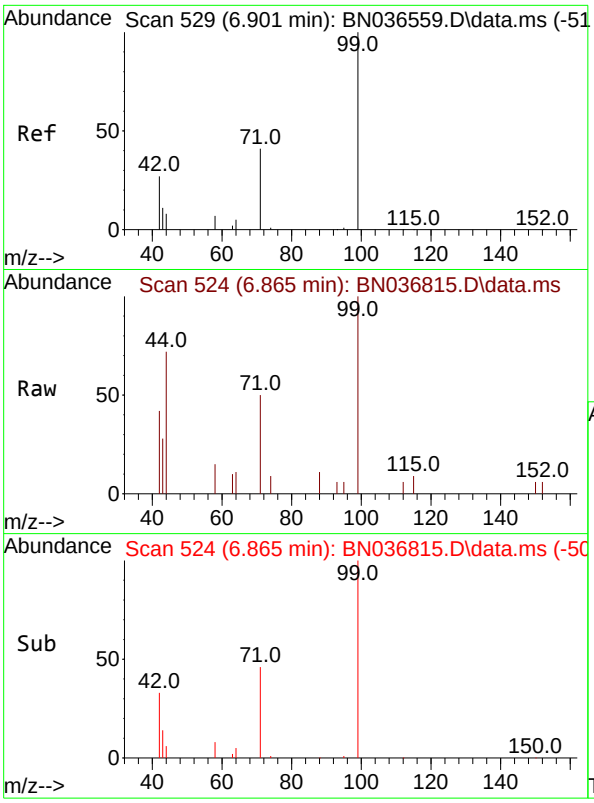




#4
2-Fluorophenol
Concen: 0.360 ng
RT: 5.283 min Scan# 305
Delta R.T. -0.029 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:112 Resp: 1311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 69.4 | 53.1 | 79.7 |
| 63 | 43.9 | 31.8 | 47.8 |



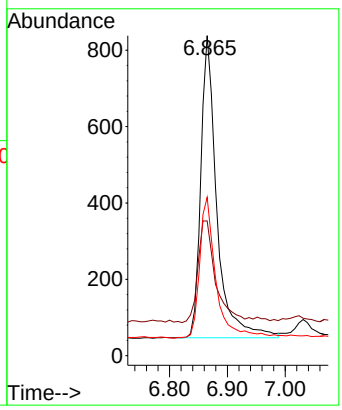


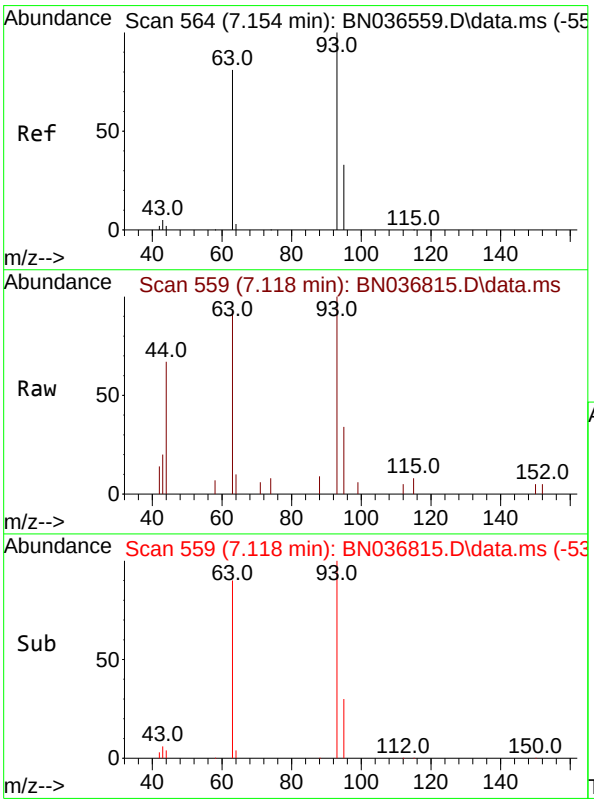

#5
Phenol-d6
Concen: 0.339 ng
RT: 6.865 min Scan# 5
Delta R.T. -0.036 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 1525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 37.5 | 26.5 | 39.7 |
| 71 | 48.4 | 34.1 | 51.1 |

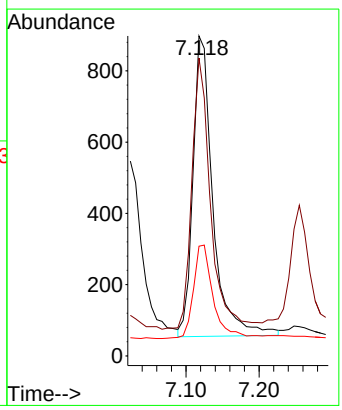


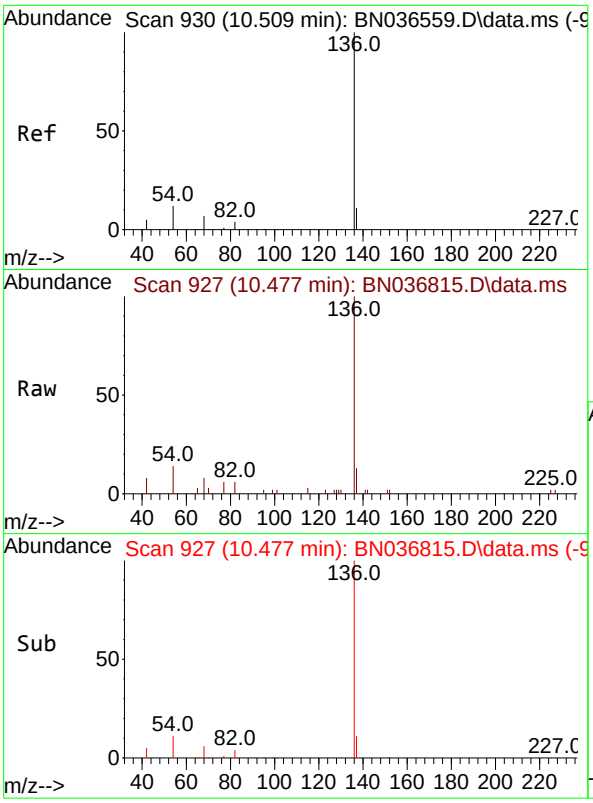




#6
bis(2-Chloroethyl)ether
Concen: 0.343 ng
RT: 7.118 min Scan# 559
Delta R.T. -0.036 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 93 Resp: 1597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 82.9 | 67.7 | 101.5 |
| 95 | 30.6 | 25.6 | 38.4 |



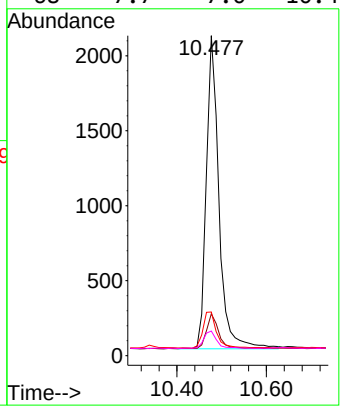


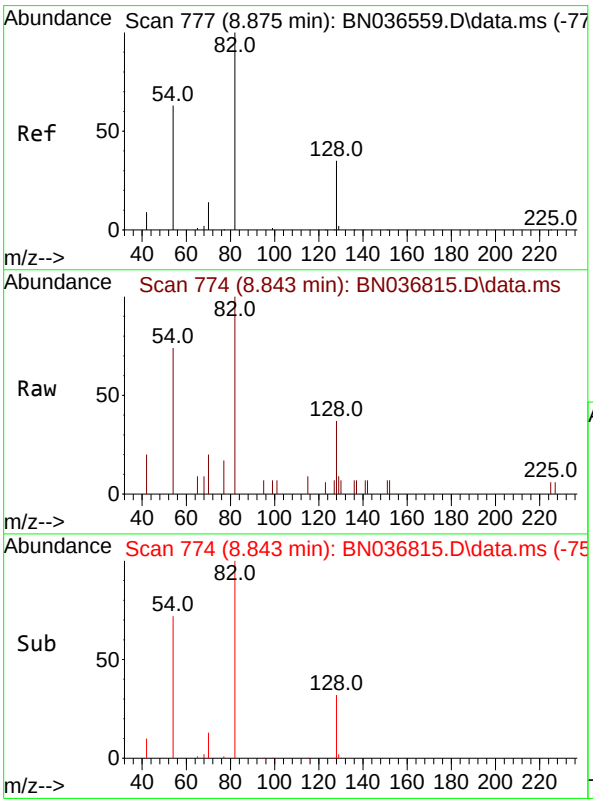

#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.477 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 13.1 | 10.3 | 15.5 |
| 54 | 13.6 | 11.5 | 17.3 |
| 68 | 7.7 | 7.0 | 10.4 |

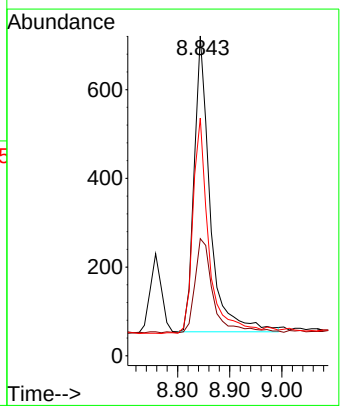


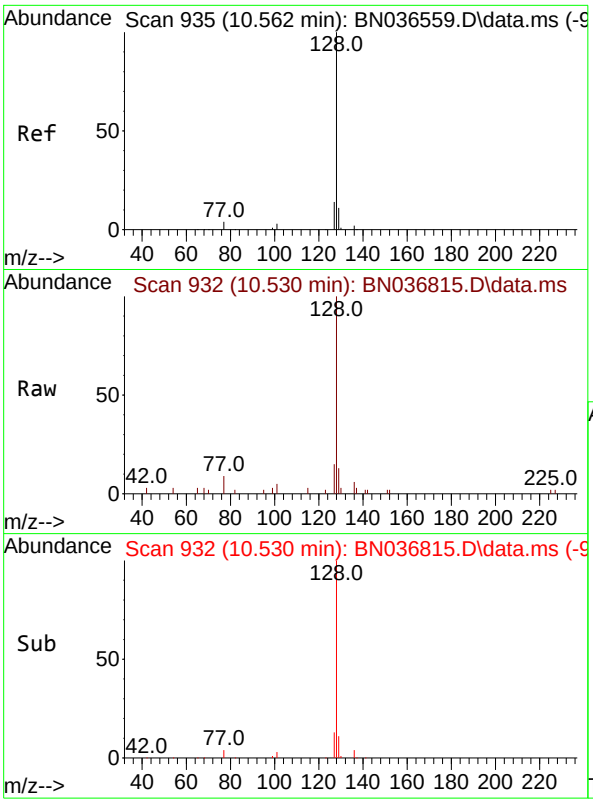




#8
Nitrobenzene-d5
Concen: 0.320 ng
RT: 8.843 min Scan# 774
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion: 82 Resp: 1424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 36.6 | 30.6 | 45.8 |
| 54 | 74.3 | 52.2 | 78.4 |



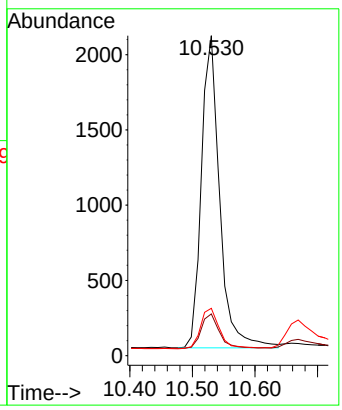


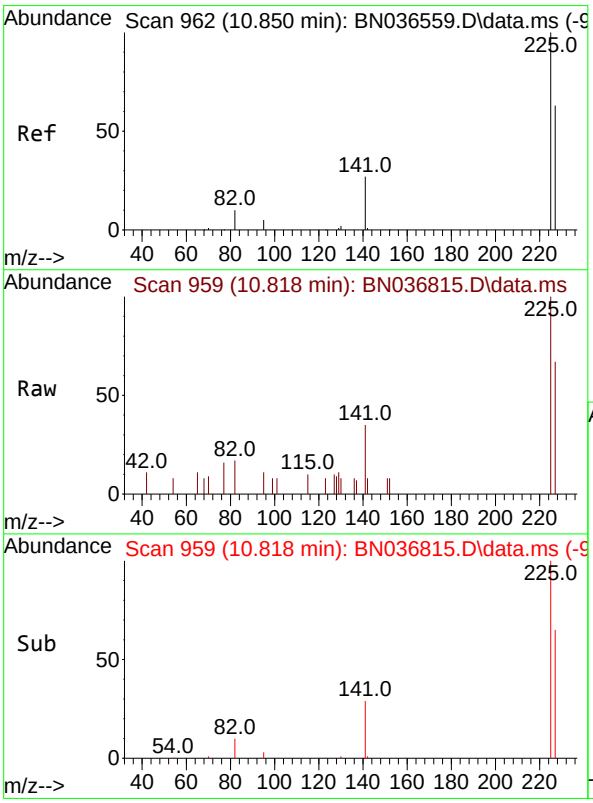

#9
Naphthalene
Concen: 0.350 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:128 Resp: 4210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 13.0 | 9.8 | 14.6 |
| 127 | 14.8 | 11.8 | 17.8 |

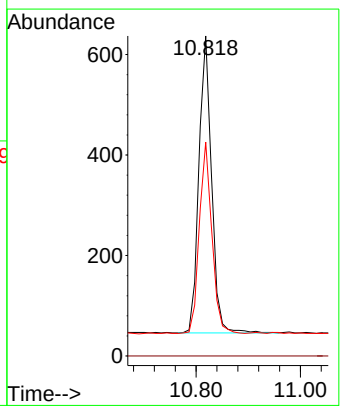


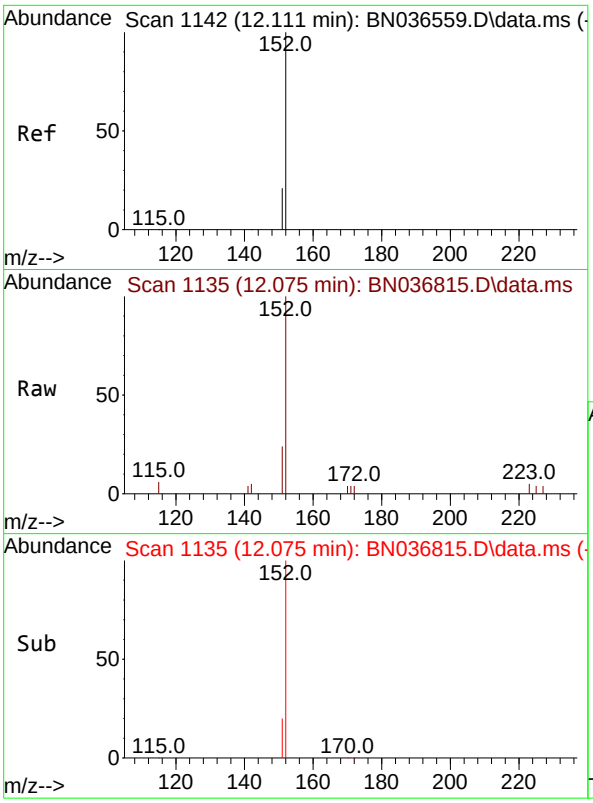




#10
Hexachlorobutadiene
Concen: 0.352 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:225 Resp: 998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 0.0 | 0.0 | 0.0 |
| 227 | 64.0 | 51.8 | 77.8 |



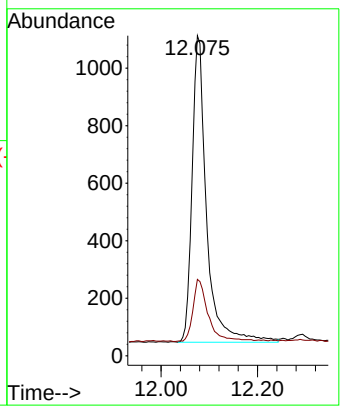


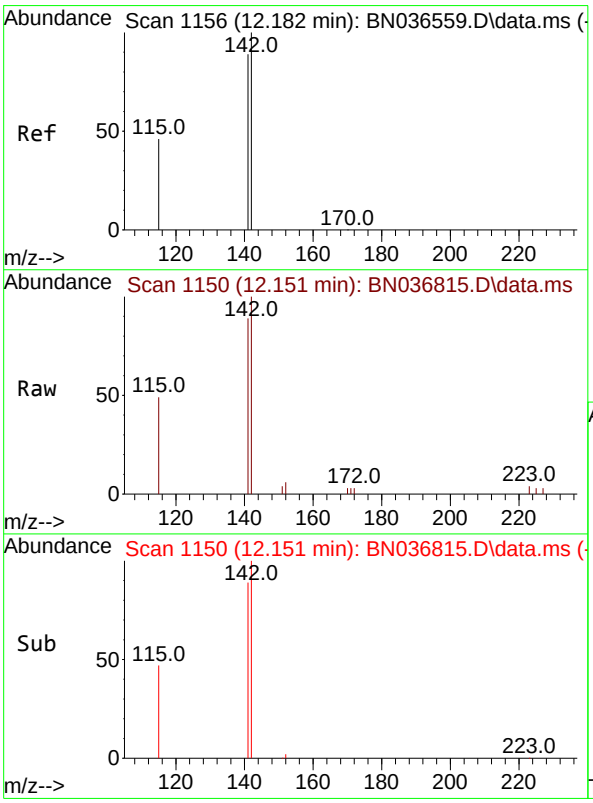

#11
2-Methylnaphthalene-d10
Concen: 0.365 ng
RT: 12.075 min Scan# 11
Delta R.T. -0.035 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 21.2 | 17.0 | 25.6 |

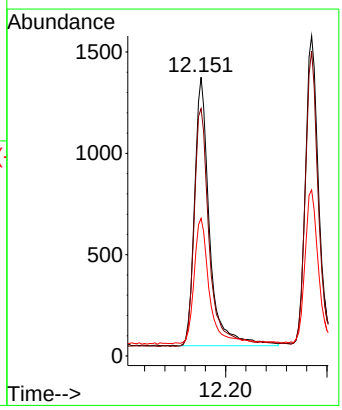


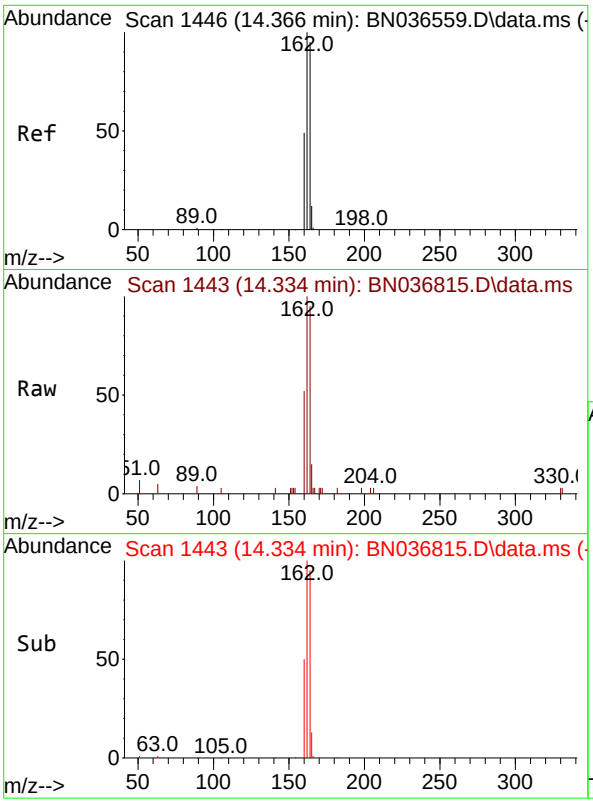




#12
2-Methylnaphthalene
Concen: 0.356 ng
RT: 12.151 min Scan# 1150
Delta R.T. -0.030 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:142 Resp: 2722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 88.8 | 71.7 | 107.5 |
| 115 | 49.4 | 38.3 | 57.5 |



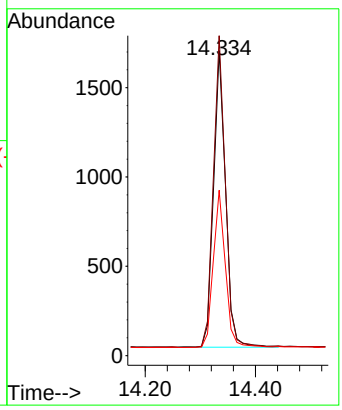


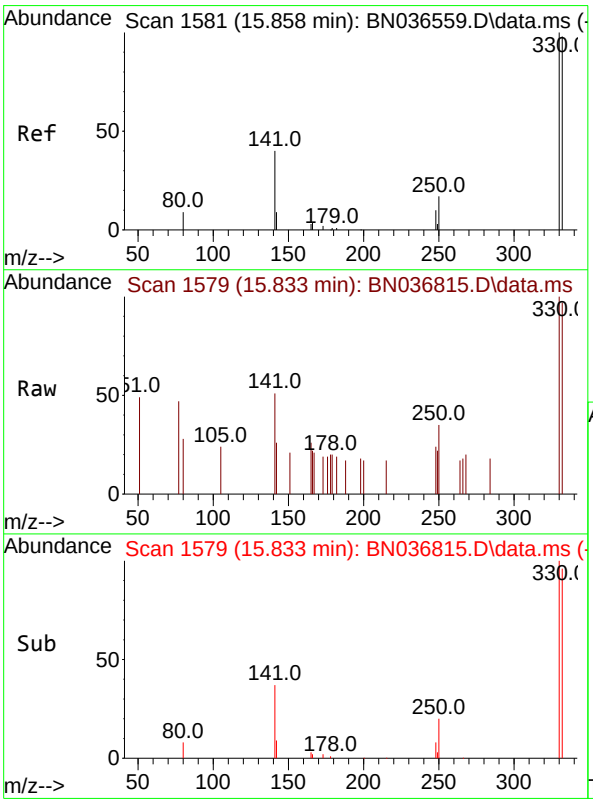

#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.334 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:164 Resp: 2524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.9 | 84.2 | 126.2 |
| 160 | 54.2 | 42.2 | 63.2 |

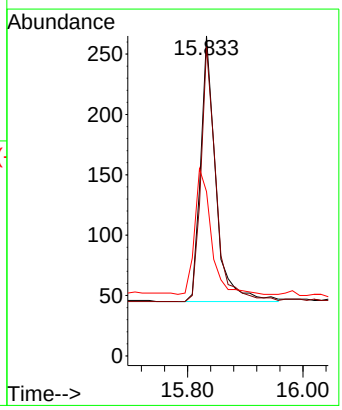


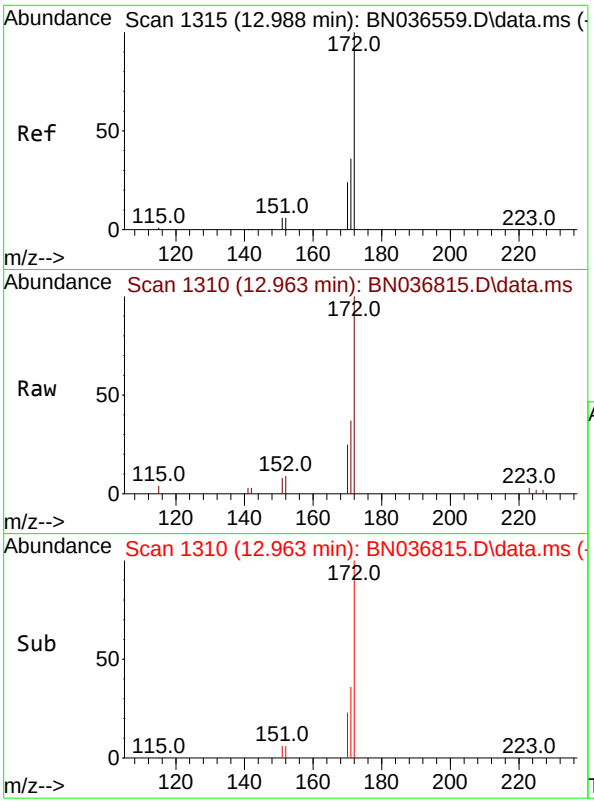




#14
2,4,6-Tribromophenol
Concen: 0.351 ng
RT: 15.833 min Scan# 1579
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:330 Resp: 402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 94.8 | 75.2 | 112.8 |
| 141 | 51.0 | 43.4 | 65.2 |



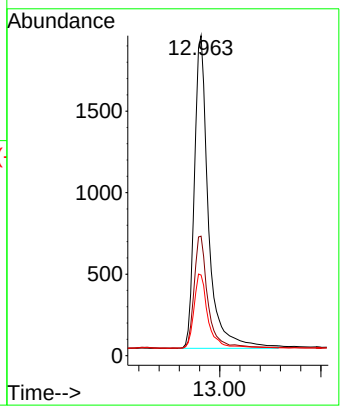


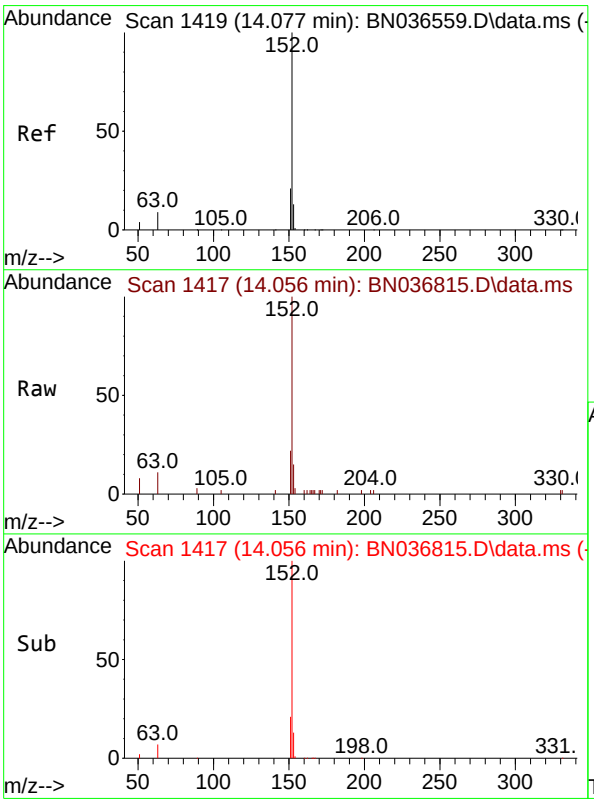

#15
2-Fluorobiphenyl
Concen: 0.336 ng
RT: 12.963 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:172 Resp: 4939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 37.3 | 29.5 | 44.3 |
| 170 | 25.2 | 20.2 | 30.4 |

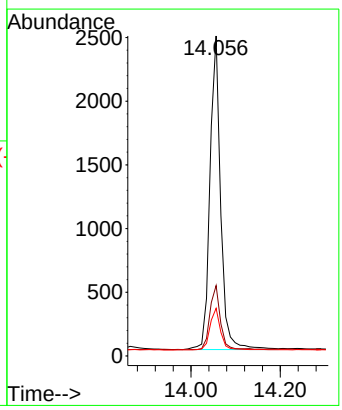


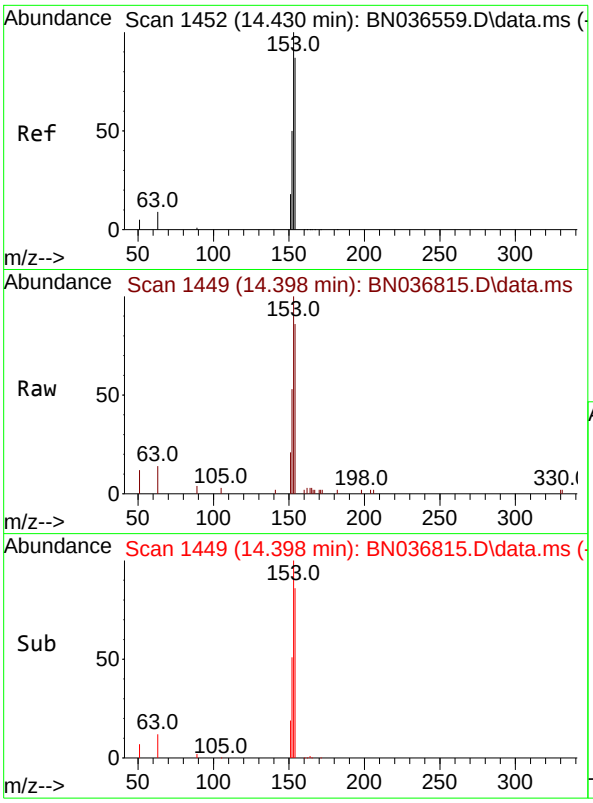




#16
Acenaphthylene
Concen: 0.340 ng
RT: 14.056 min Scan# 1417
Delta R.T. -0.021 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:152 Resp: 4054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.2 | 16.2 | 24.4 |
| 153 | 13.5 | 10.6 | 15.8 |



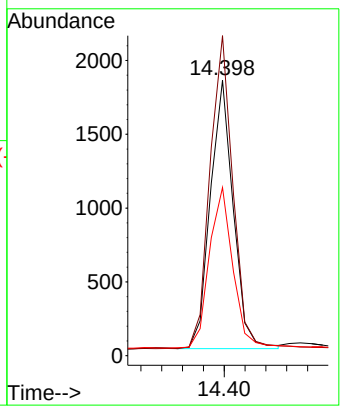


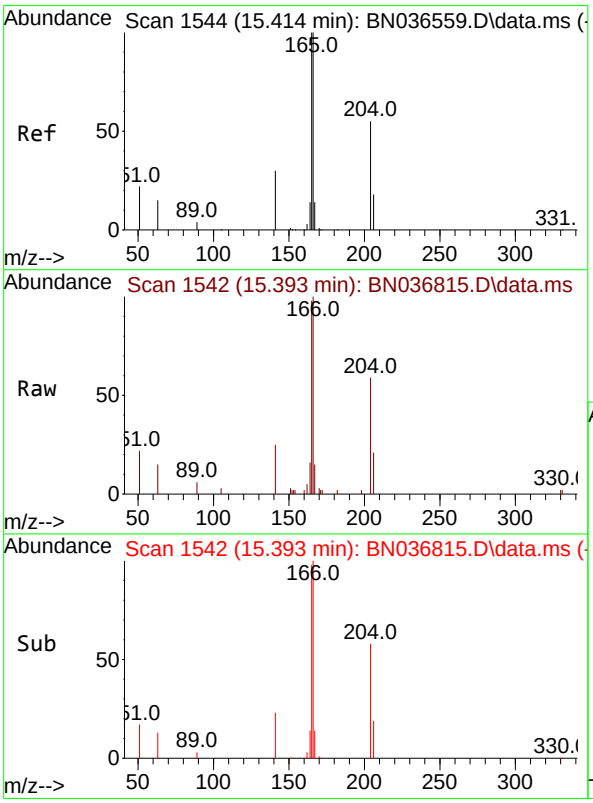

#17
Acenaphthene
Concen: 0.356 ng
RT: 14.398 min Scan# 14
Delta R.T. -0.032 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:154 Resp: 2777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.7 | 94.1 | 141.1 |
| 152 | 62.5 | 49.8 | 74.6 |

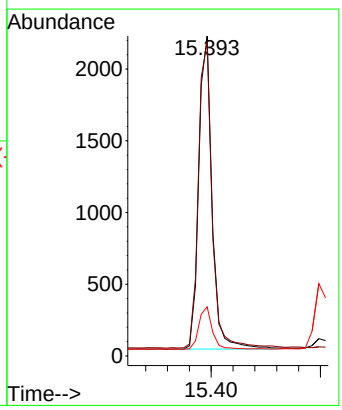


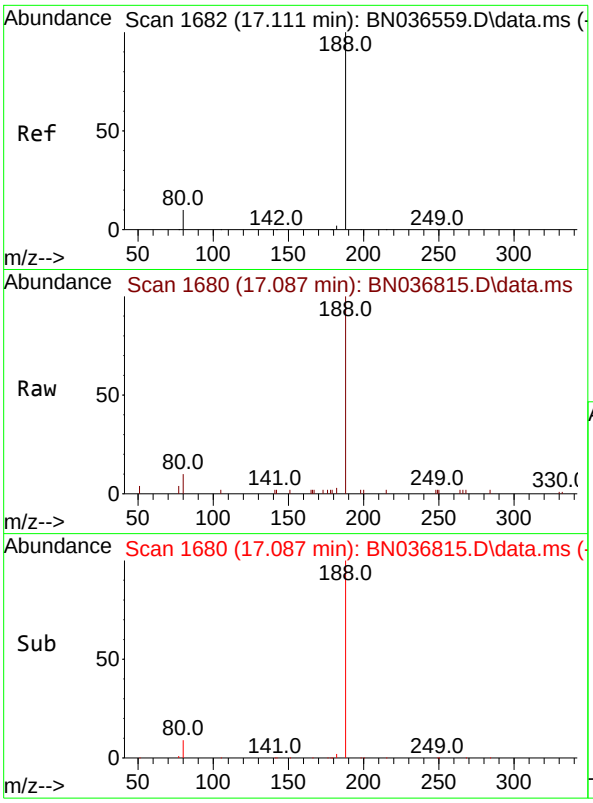




#18
Fluorene
Concen: 0.354 ng
RT: 15.393 min Scan# 1542
Delta R.T. -0.021 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:166 Resp: 3732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.8 | 79.8 | 119.8 |
| 167 | 13.4 | 10.6 | 15.8 |



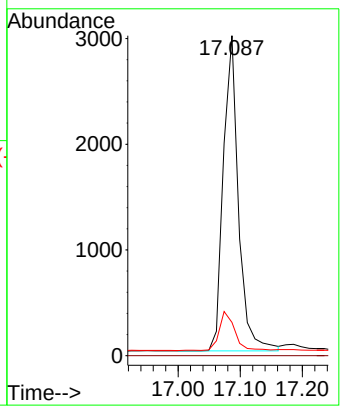


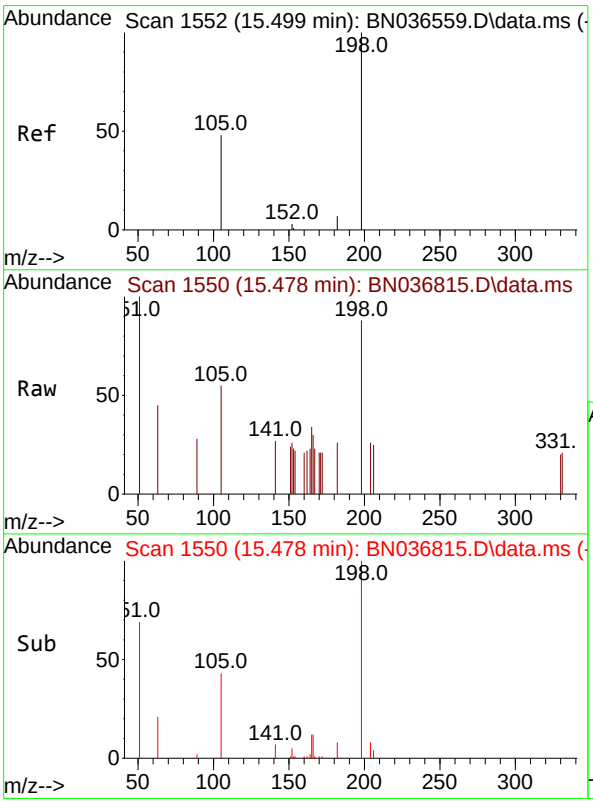

#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:188 Resp: 5032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 0.0 | 0.0 | 0.0 |
| 80 | 10.4 | 8.8 | 13.2 |

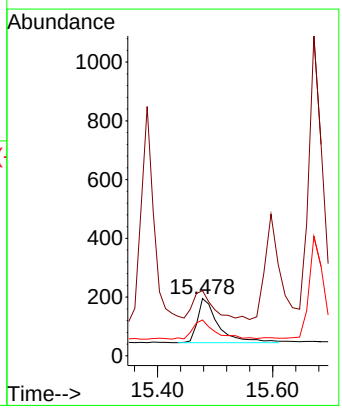


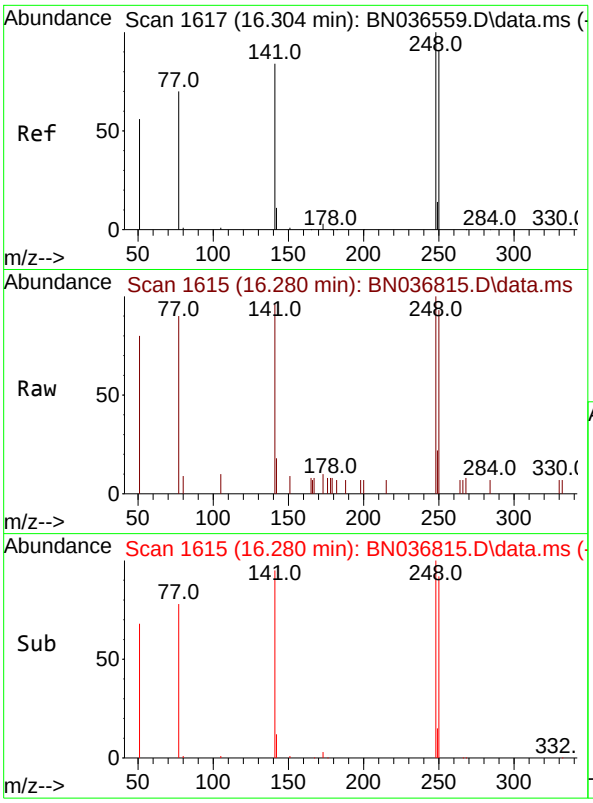




#20
4,6-Dinitro-2-methylphenol
Concen: 0.454 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.021 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:198 Resp: 396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 113.8 | 107.9 | 161.9 |
| 105 | 62.6 | 56.2 | 84.2 |



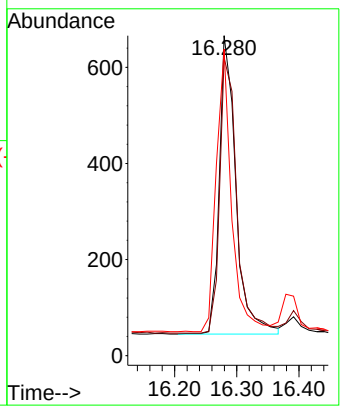


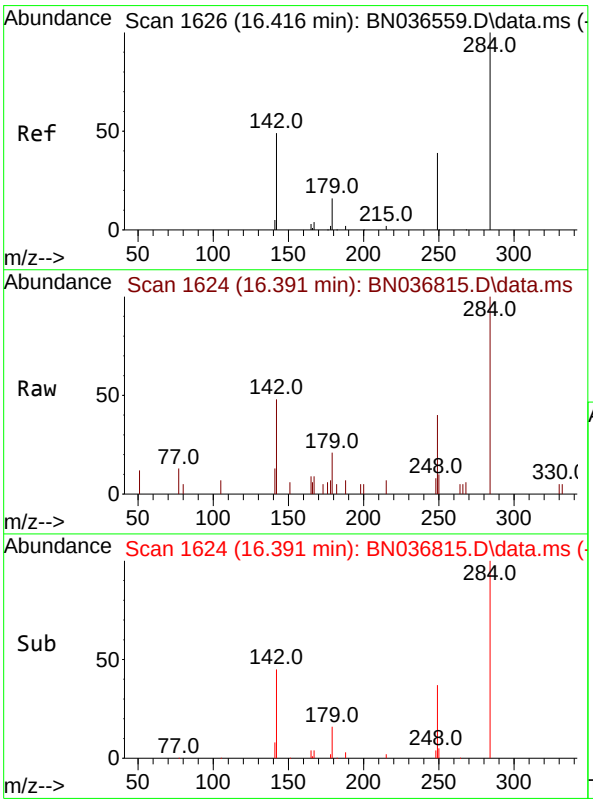

#21
4-Bromophenyl-phenylether
Concen: 0.363 ng
RT: 16.280 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 250 | 93.1 | 73.0 | 109.6 |
| 141 | 95.8 | 68.6 | 103.0 |

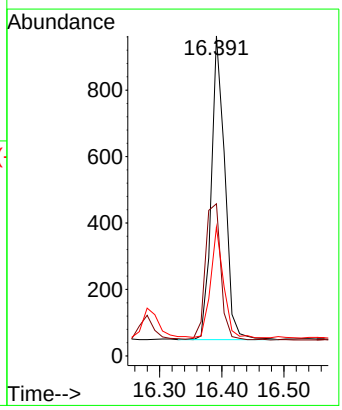


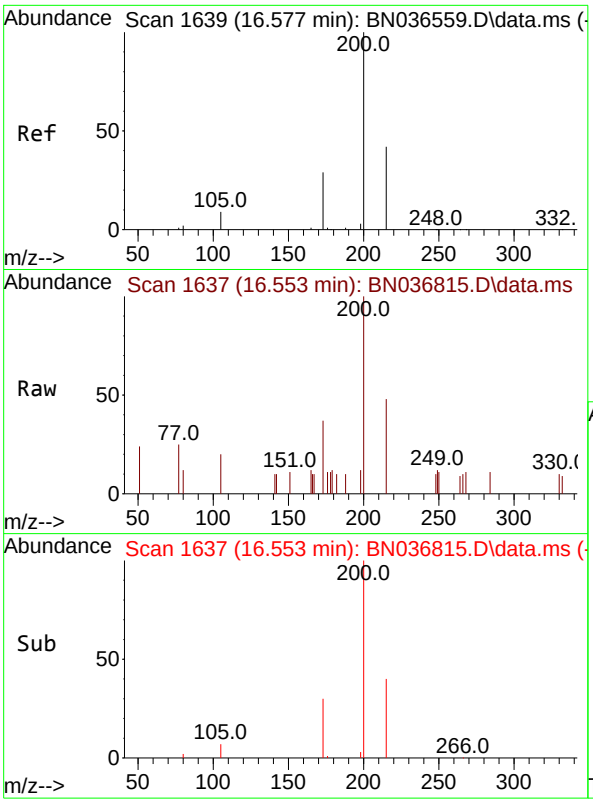




#22
Hexachlorobenzene
Concen: 0.363 ng
RT: 16.391 min Scan# 1624
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:284 Resp: 1380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 51.9 | 37.0 | 55.4 |
| 249 | 34.7 | 28.1 | 42.1 |



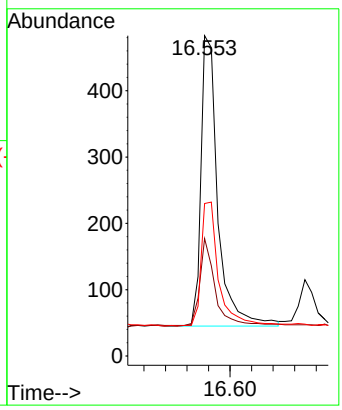


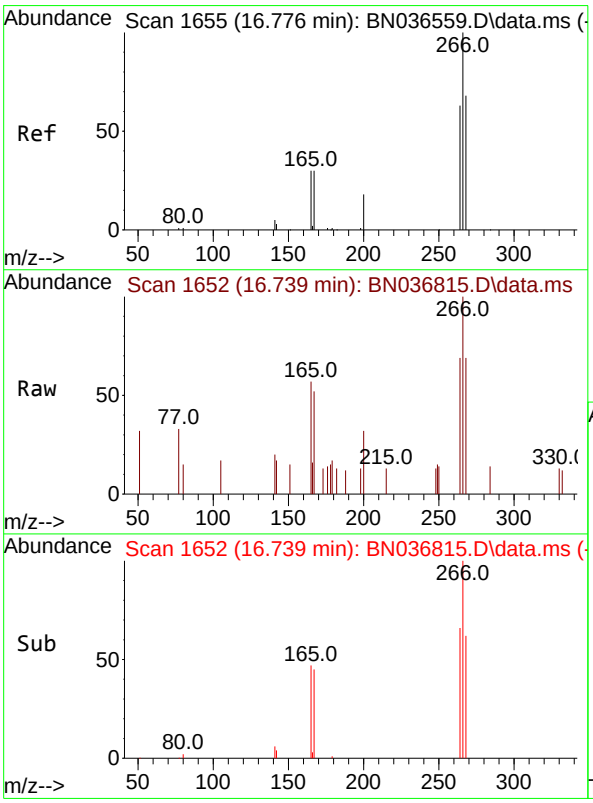

#23
Atrazine
Concen: 0.377 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:200 Resp: 954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 173 | 36.6 | 27.3 | 40.9 |
| 215 | 47.6 | 36.8 | 55.2 |

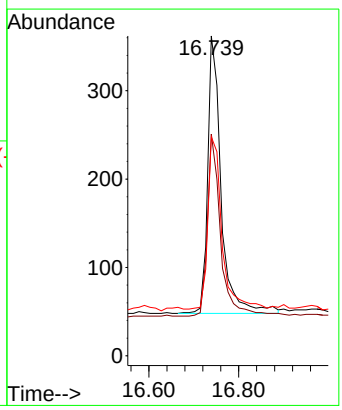


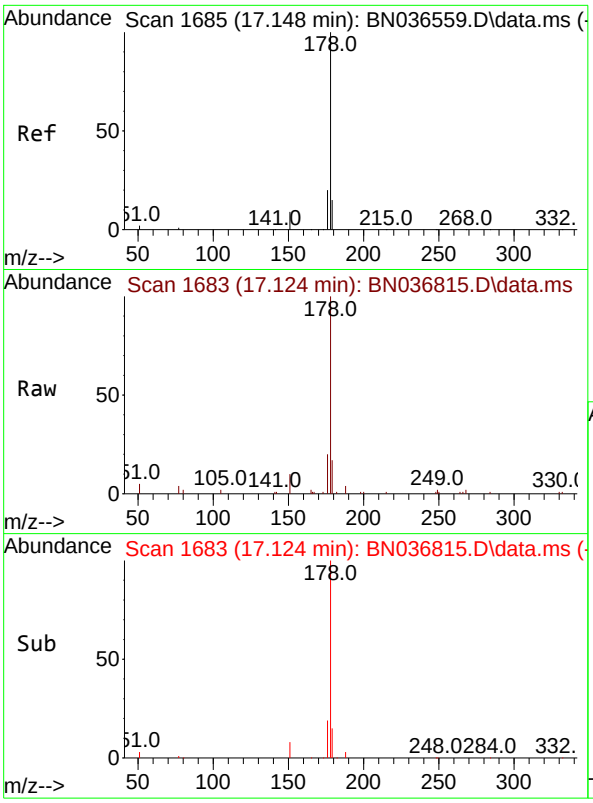




#24
Pentachlorophenol
Concen: 0.375 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.037 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:266 Resp: 651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 64.8 | 49.6 | 74.4 |
| 268 | 65.4 | 50.9 | 76.3 |



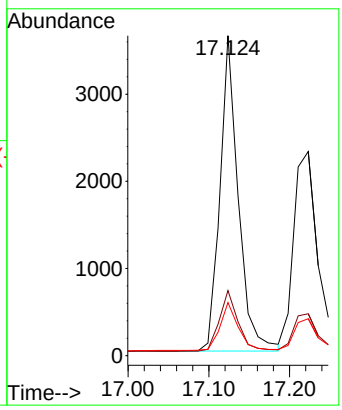


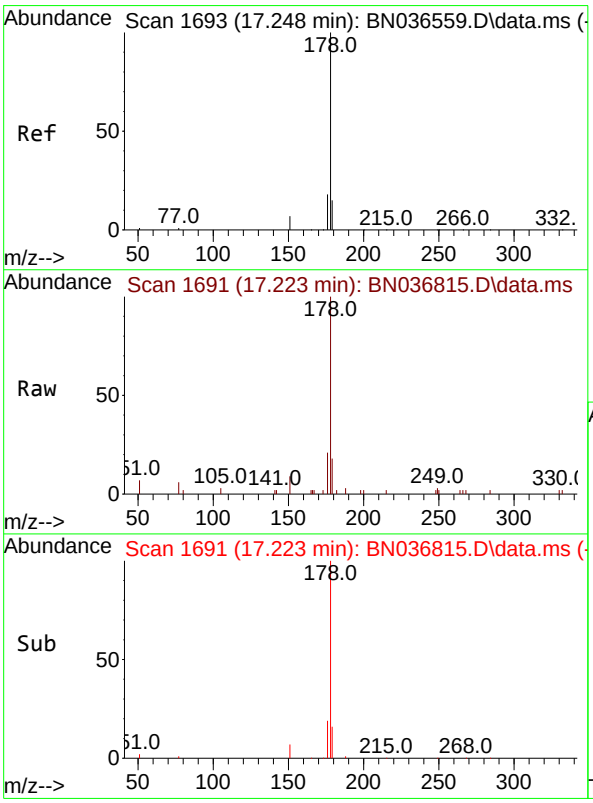

#25
Phenanthrene
Concen: 0.378 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:178 Resp: 5703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.7 | 12.2 | 18.4 |

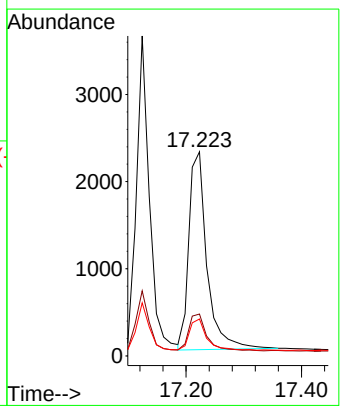


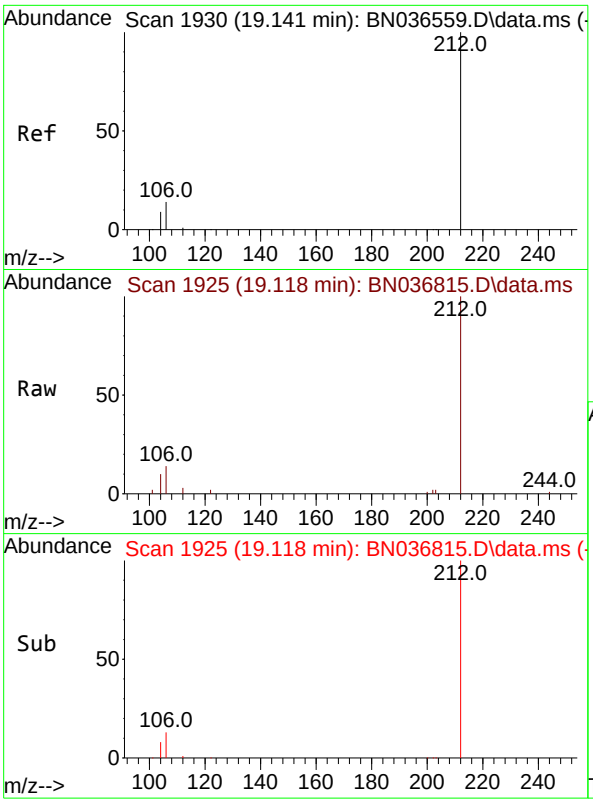




#26
Anthracene
Concen: 0.362 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.025 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:178 Resp: 4933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.9 | 15.4 | 23.2 |
| 179 | 15.6 | 12.6 | 18.8 |





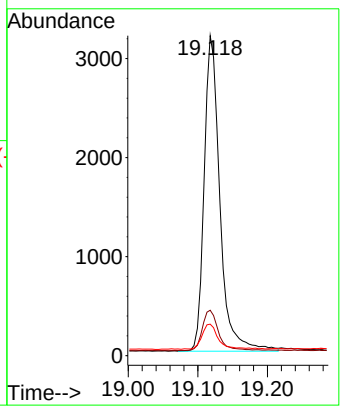

#27
Fluoranthene-d10
Concen: 0.388 ng
RT: 19.118 min Scan# 1

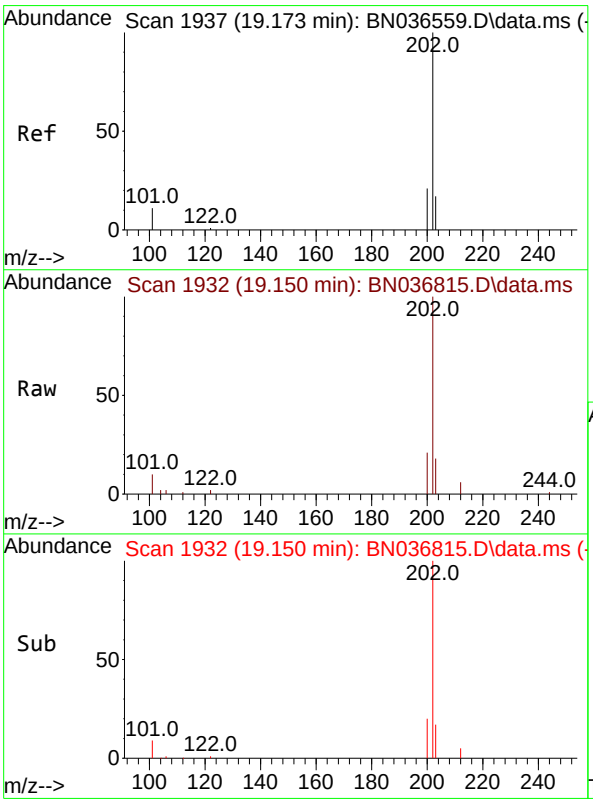
**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:212 Resp: 5000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 106 | 13.2 | 11.8 | 17.6 |
| 104 | 8.4 | 7.3 | 10.9 |

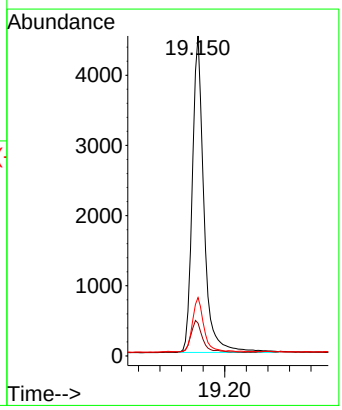


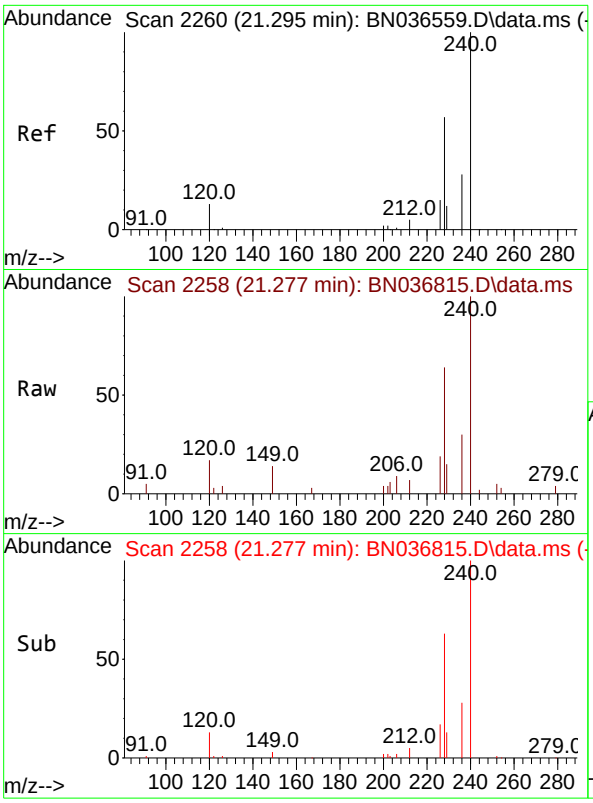




#28
Fluoranthene
Concen: 0.399 ng
RT: 19.150 min Scan# 1932
Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:202 Resp: 6761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.4 | 9.4 | 14.0 |
| 203 | 16.5 | 13.5 | 20.3 |



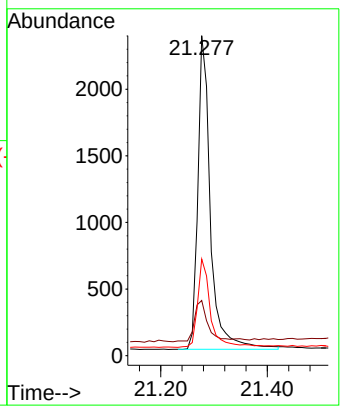


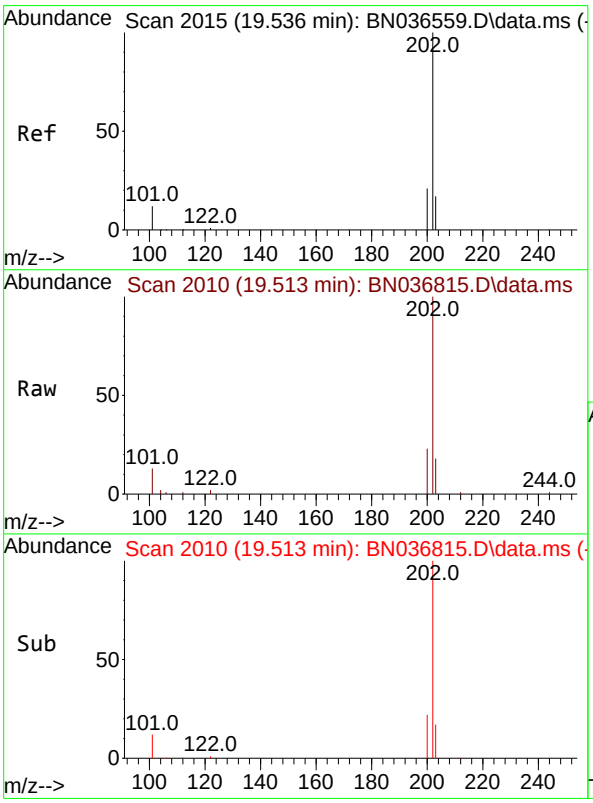

#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:240 Resp: 3863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 17.3 | 14.6 | 22.0 |
| 236 | 30.2 | 24.1 | 36.1 |

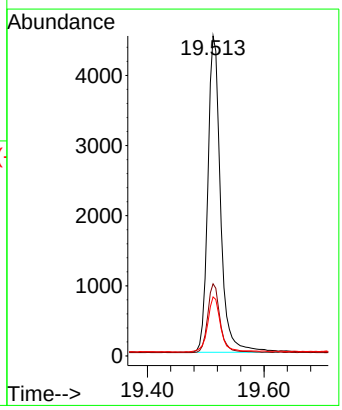


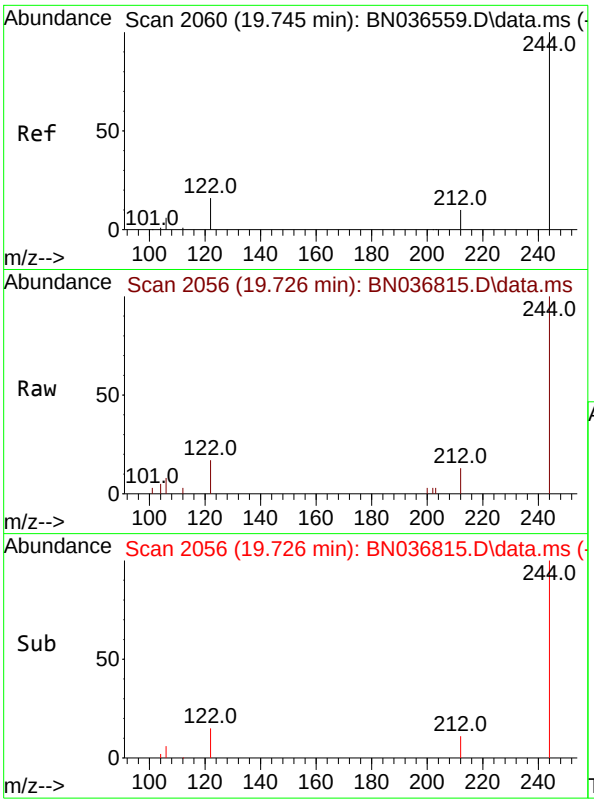




#30
Pyrene
Concen: 0.361 ng
RT: 19.513 min Scan# 2010
Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:202 Resp: 6826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.6 | 17.1 | 25.7 |
| 203 | 17.8 | 14.1 | 21.1 |



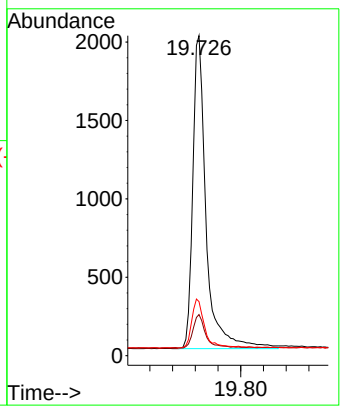


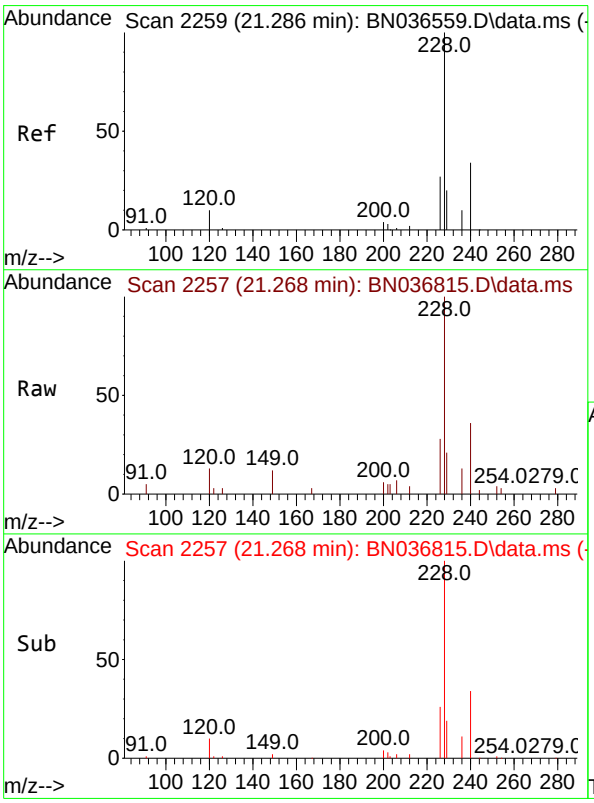

#31
Terphenyl-d14
Concen: 0.352 ng
RT: 19.726 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:244 Resp: 3254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 12.9 | 9.6 | 14.4 |
| 122 | 16.9 | 13.9 | 20.9 |

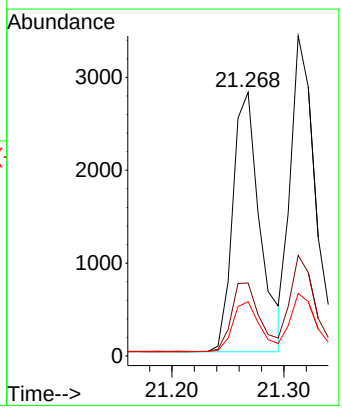


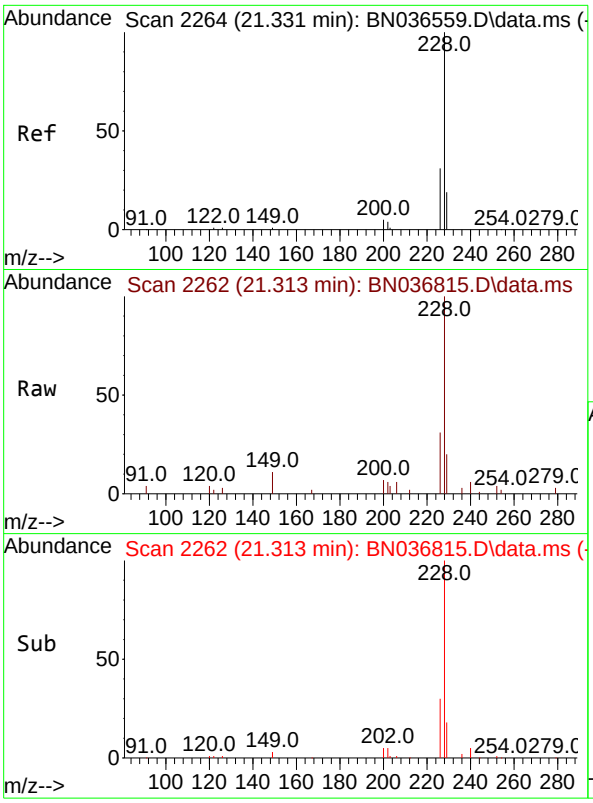




#32
Benzo(a)anthracene
Concen: 0.351 ng
RT: 21.268 min Scan# 2257
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:228 Resp: 4715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 27.7 | 22.5 | 33.7 |
| 229 | 20.6 | 16.6 | 25.0 |



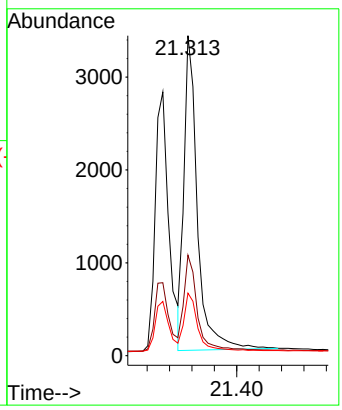


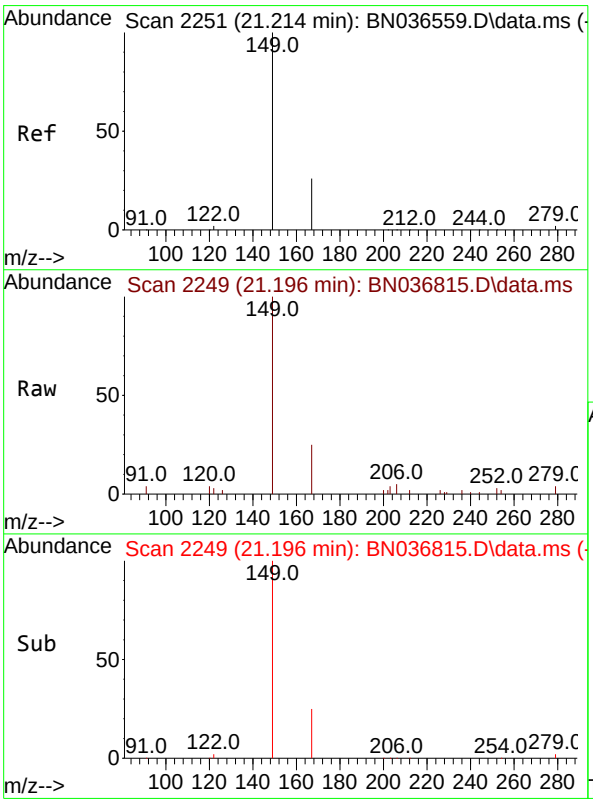

#33
Chrysene
Concen: 0.385 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:228 Resp: 5650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.4 | 25.3 | 37.9 |
| 229 | 19.6 | 15.8 | 23.8 |

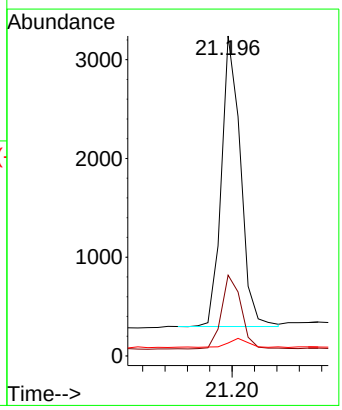


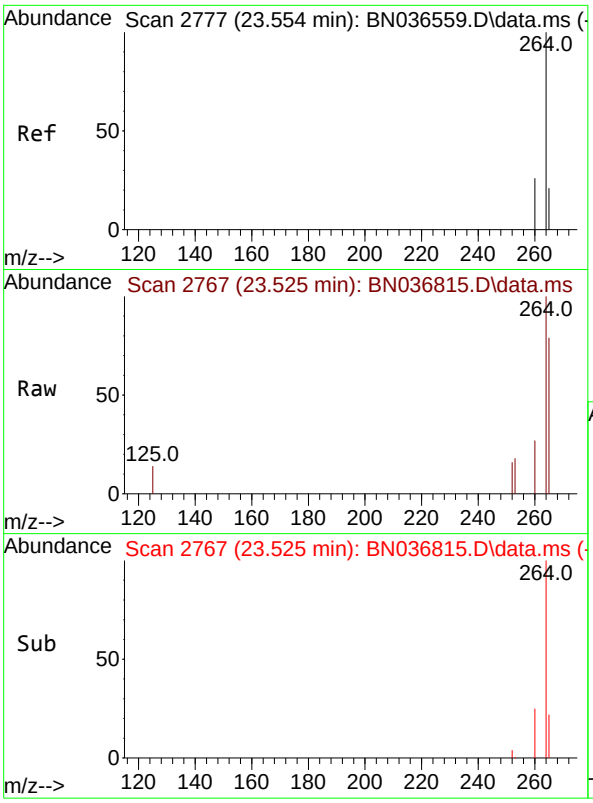




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.364 ng
RT: 21.196 min Scan# 2249
Delta R.T. -0.018 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:149 Resp: 3477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 26.4 | 20.7 | 31.1 |
| 279 | 3.1 | 3.6 | 5.4# |



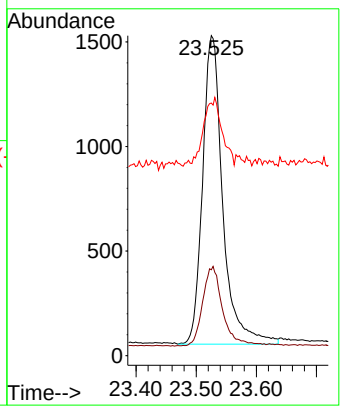


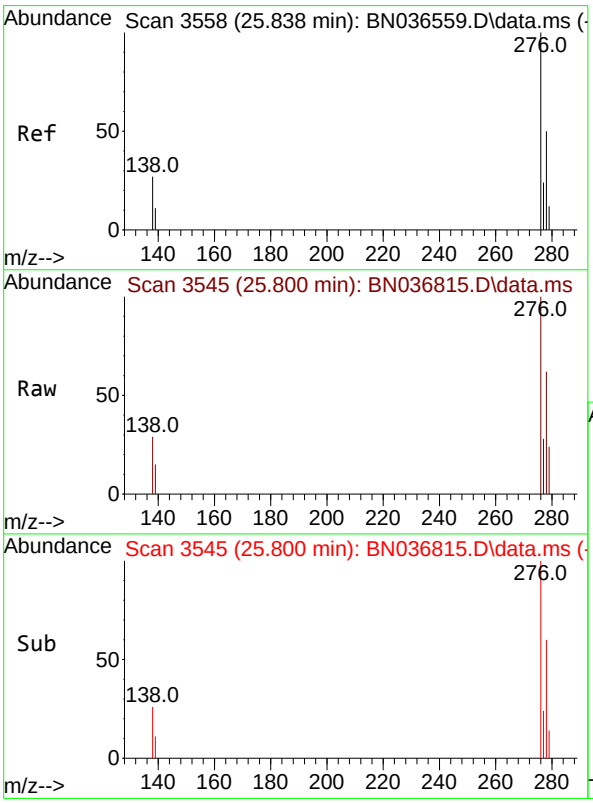

#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 2
Delta R.T. -0.029 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:264 Resp: 3435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 26.9 | 22.6 | 33.8 |
| 265 | 79.0 | 88.1 | 132.1# |

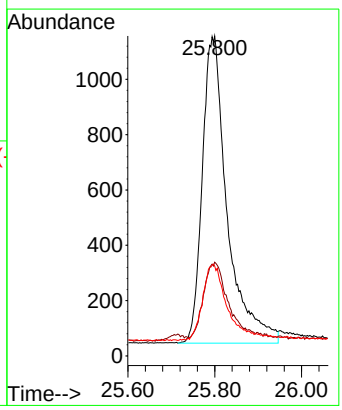


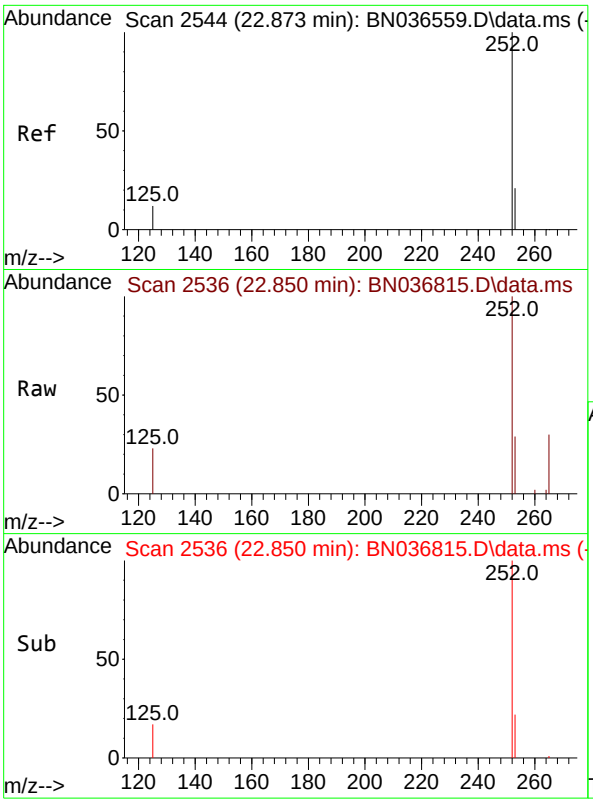




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.357 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.038 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:276 Resp: 4428

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 24.1 | 23.4 | 35.2 |
| 277 | 23.9 | 20.0 | 30.0 |



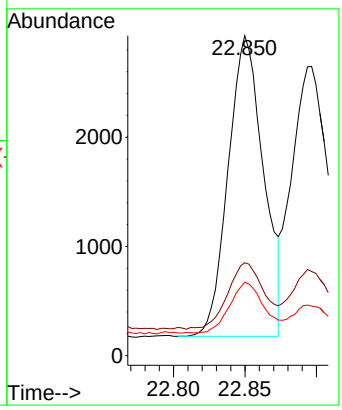


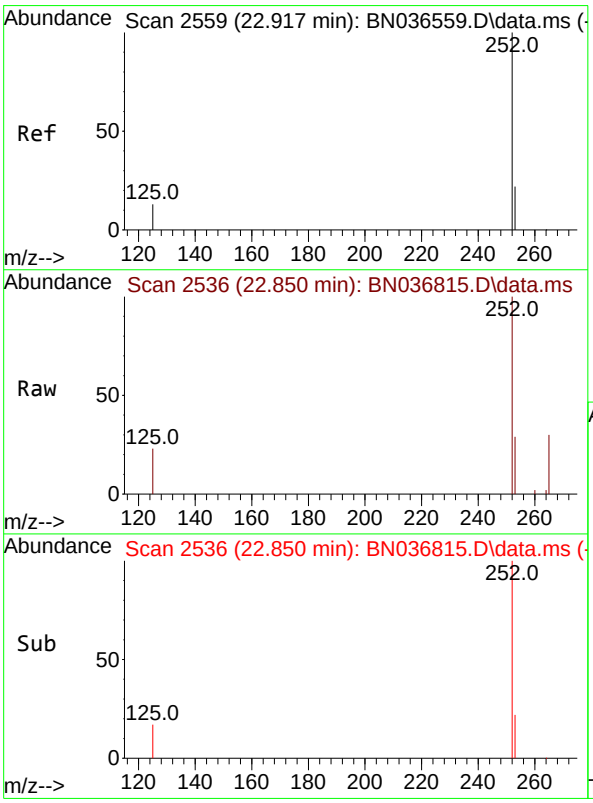

#37
Benzo(b)fluoranthene
Concen: 0.379 ng
RT: 22.850 min Scan# 2
Delta R.T. -0.023 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 4732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.0 | 23.9 | 35.9 |
| 125 | 22.9 | 17.4 | 26.2 |

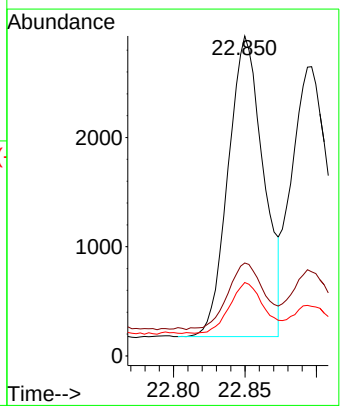


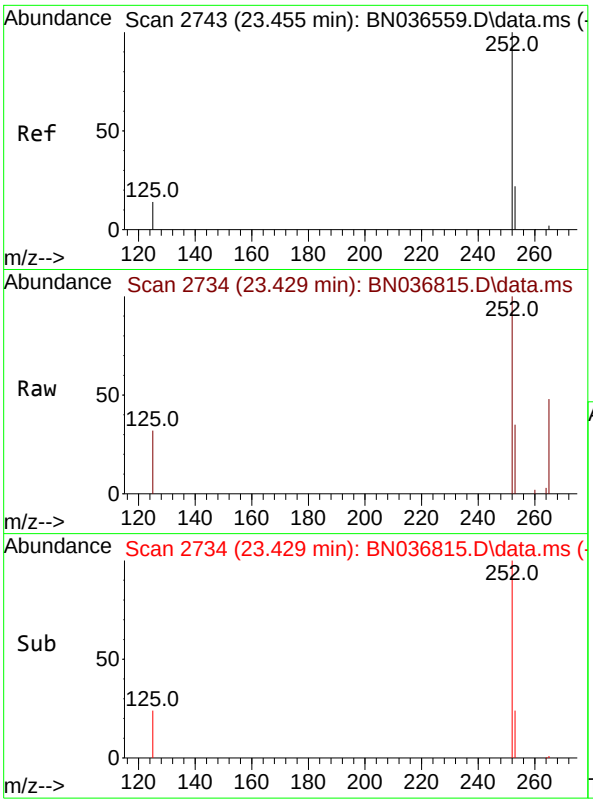




#38
Benzo(k)fluoranthene
Concen: 0.361 ng
RT: 22.850 min Scan# 2536
Delta R.T. -0.067 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:252 Resp: 4732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 29.0 | 24.6 | 36.8 |
| 125 | 22.9 | 17.8 | 26.8 |



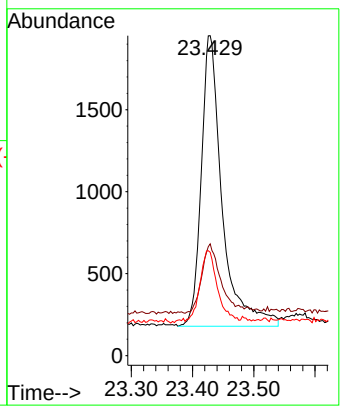


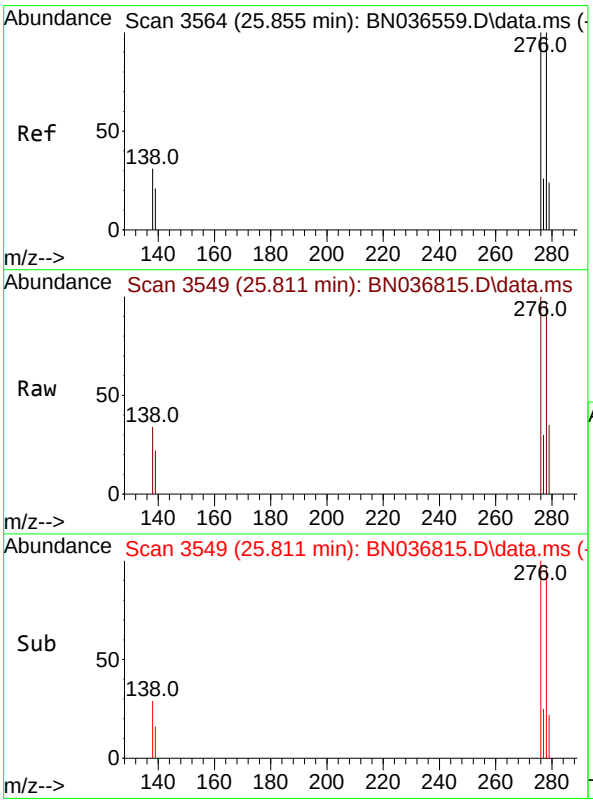

#39
Benzo(a)pyrene
Concen: 0.399 ng
RT: 23.429 min Scan# 2
Delta R.T. -0.026 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:252 Resp: 4200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 34.9 | 27.8 | 41.8 |
| 125 | 32.3 | 22.7 | 34.1 |

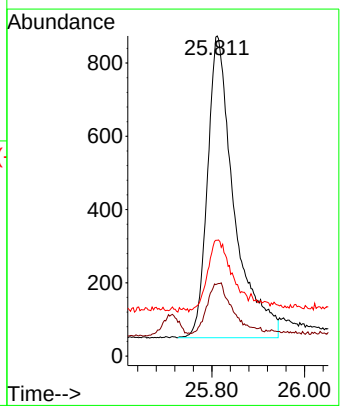


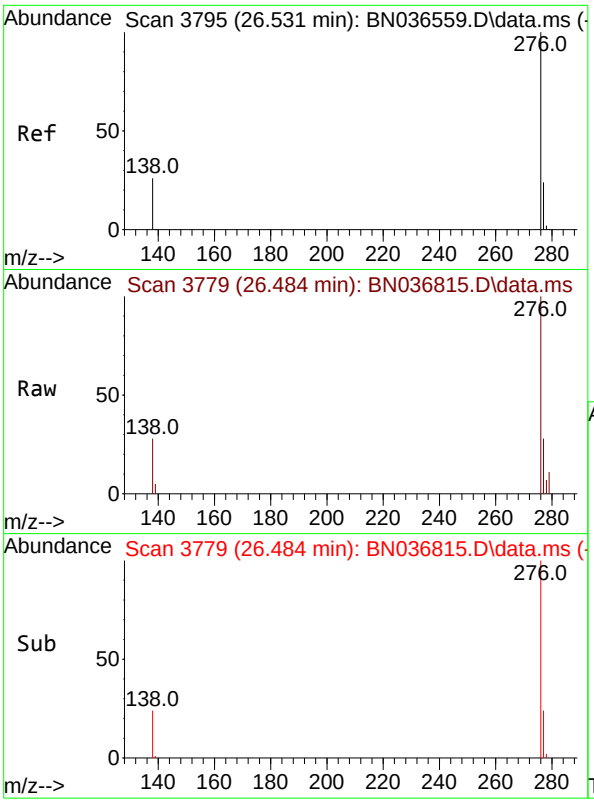




#40
Dibenzo(a,h)anthracene
Concen: 0.340 ng
RT: 25.811 min Scan# 3549
Delta R.T. -0.044 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

Tgt Ion:278 Resp: 3277

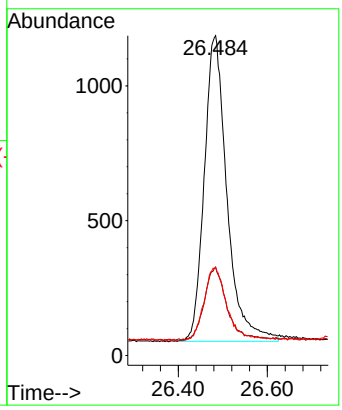
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 22.5 | 20.8 | 31.2 |
| 279 | 36.2 | 28.8 | 43.2 |






#41
Benzo(g,h,i)perylene
Concen: 0.363 ng
RT: 26.484 min Scan# 3
Delta R.T. -0.047 min
Lab File: BN036815.D
Acq: 31 Mar 2025 15:08

**Instrument :**
BNA_N
**ClientSampleId :**
SSTDCCC0.4EC

Tgt Ion:276 Resp: 4006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 27.7 | 22.2 | 33.4 |
| 138 | 27.6 | 24.1 | 36.1 |